

# URBAN DESIGN COMMISSION APPLICATION

# UDC

City of Madison  
Planning Division  
Madison Municipal Building, Suite 017  
215 Martin Luther King, Jr. Blvd.  
P.O. Box 2985  
Madison, WI 53701-2985  
(608) 266-4635



## FOR OFFICE USE ONLY:

Paid \_\_\_\_\_ Receipt # \_\_\_\_\_  
Date received \_\_\_\_\_  
Received by \_\_\_\_\_  
Aldermanic District \_\_\_\_\_  
Zoning District \_\_\_\_\_  
Urban Design District \_\_\_\_\_  
Submission reviewed by \_\_\_\_\_  
Legistar # \_\_\_\_\_

Complete all sections of this application, including the desired meeting date and the action requested.

*If you need an interpreter, translator, materials in alternate formats or other accommodations to access these forms, please call the phone number above immediately.*

## 1. Project Information

Address: 650 Forward Drive, Madison WI 53711

Title: Exact Sciences - Nexus One Clinical Lab Expansion

## 2. Application Type (check all that apply) and Requested Date

UDC meeting date requested January 15, 2020

- New development       Alteration to an existing or previously-approved development  
 Informational       Initial approval       Final approval

## 3. Project Type

- Project in an Urban Design District  
 Project in the Downtown Core District (DC), Urban Mixed-Use District (UMX), or Mixed-Use Center District (MXC)  
 Project in the Suburban Employment Center District (SEC), Campus Institutional District (CI), or Employment Campus District (EC)  
 Planned Development (PD)  
     General Development Plan (GDP)  
     Specific Implementation Plan (SIP)  
 Planned Multi-Use Site or Residential Building Complex

### Signage

- Comprehensive Design Review (CDR)  
 Signage Variance (i.e. modification of signage height, area, and setback)

### Other

- Please specify \_\_\_\_\_

## 4. Applicant, Agent, and Property Owner Information

**Applicant name** Jody Shaw  
Street address 749 University Row Suite 300  
Telephone 608 274-2741

Company Potter Lawson  
City/State/Zip Madison, WI 53705  
Email jodys@potterlawson.com

**Project contact person** Jeremy Hulsey  
Street address 441 Charmany Drive  
Telephone 608 284-5700

Company Exact Sciences  
City/State/Zip Madison, WI 53719  
Email jhulsey@exactsciences.com

**Property owner (if not applicant)** Exact Sciences  
Street address 441 Charmany Drive  
Telephone 608 284-5700

City/State/Zip Madison, WI 53719  
Email \_\_\_\_\_

**5. Required Submittal Materials**

- Application Form**
- Letter of Intent**
  - If the project is within an Urban Design District, a summary of how the development proposal addresses the district criteria is required
  - For signage applications, a summary of how the proposed signage is consistent with the applicable CDR or Signage Variance review criteria is required.
- Development plans** (Refer to checklist on Page 4 for plan details)
- Filing fee**
- Electronic Submittal\***

Each submittal must include fourteen (14) 11" x 17" **collated** paper copies. Landscape and Lighting plans (if required) must be **full-sized and legible**. Please refrain from using plastic covers or spiral binding.

Both the paper copies and electronic copies must be submitted prior to the application deadline before an application will be scheduled for a UDC meeting. Late materials will not be accepted. A completed application form is required for each UDC appearance.

For projects also requiring Plan Commission approval, applicants must also have submitted an accepted application for Plan Commission consideration prior to obtaining any formal action (initial or final approval) from the UDC. All plans must be legible when reduced.

*\*Electronic copies of all items submitted in hard copy are required. Individual PDF files of each item submitted should be compiled on a CD or flash drive, or submitted via email to [udcapplications@cityofmadison.com](mailto:udcapplications@cityofmadison.com). The email must include the project address, project name, and applicant name. Electronic submittals via file hosting services (such as Dropbox.com) are not allowed. Applicants who are unable to provide the materials electronically should contact the Planning Division at (608) 266-4635 for assistance.*

**6. Applicant Declarations**

1. Prior to submitting this application, the applicant is required to discuss the proposed project with Urban Design Commission staff. This application was discussed with           Matt Tucker and Jenny Kirchgatter           on           October 15, 2019          .
2. The applicant attests that all required materials are included in this submittal and understands that if any required information is not provided by the application deadline, the application will not be placed on an Urban Design Commission agenda for consideration.

Name of applicant           Jody Shaw           Relationship to property           Architect          

Authorizing signature of property owner           *J. Shaw*           Date           11/06/2019          

**7. Application Filing Fees**

Fees are required to be paid with the first application for either initial or final approval of a project, unless the project is part of the combined application process involving the Urban Design Commission in conjunction with Plan Commission and/or Common Council consideration. Make checks payable to City Treasurer. Credit cards may be used for application fees of less than \$1,000.

Please consult the schedule below for the appropriate fee for your request:

- Urban Design Districts: \$350 (per §35.24(6) MGO).
- Minor Alteration in the Downtown Core District (DC) or Urban Mixed-Use District (UMX) : \$150 (per §33.24(6)(b) MGO)
- Comprehensive Design Review: \$500 (per §31.041(3)(d)(1)(a) MGO)
- Minor Alteration to a Comprehensive Sign Plan: \$100 (per §31.041(3)(d)(1)(c) MGO)
- All other sign requests to the Urban Design Commission, including, but not limited to: appeals from the decisions of the Zoning Administrator, requests for signage variances (i.e. modifications of signage height, area, and setback), and additional sign code approvals: \$300 (per §31.041(3)(d)(2) MGO)

A filing fee is not required for the following project applications if part of the combined application process involving both Urban Design Commission and Plan Commission:

- Project in the Downtown Core District (DC), Urban Mixed-Use District (UMX), or Mixed-Use Center District (MXC)
- Project in the Suburban Employment Center District (SEC), Campus Institutional District (CI), or Employment Campus District (EC)
- Planned Development (PD): General Development Plan (GDP) and/or Specific Implementation Plan (SIP)
- Planned Multi-Use Site or Residential Building Complex

## Introduction

The City of Madison's Urban Design Commission (UDC) has been created to:

- Encourage and promote high quality in the design of new buildings, developments, remodeling, and additions so as to maintain and improve the established standards of property values within the City.
- Foster civic pride in the beauty and nobler assets of the City, and in all other ways possible assure a functionally efficient and visually attractive City in the future.

## Types of Approvals

There are three types of requests considered by the UDC:

- Informational Presentation. Applicants may, at their discretion, request to make an Informational Presentation to the UDC prior to seeking any approvals to obtain early feedback and direction before undertaking detailed design. Applicants should provide details on the context of the site, design concept, site and building plans, and other relevant information to help the UDC understand the proposal and provide feedback. (Does not apply to CDR's or Signage Variance requests)
- Initial Approval. Applicants may, at their discretion, request initial approval of a proposal by presenting preliminary design information. As part of their review, the Commission will provide feedback on the design information that should be addressed at Final Approval stage.
- Final Approval. Applicants may request Final Approval of a proposal by presenting all final project details. Recommendations or concerns expressed by the UDC in the initial approval must be addressed at this time.

## Presentations to the Commission

Primarily, the UDC is interested in the appearance and design quality of projects. Emphasis should be given to the site plan, landscape plan, lighting plan, building elevations, exterior building materials, color scheme, and graphics.

When presenting projects to the UDC, applicants must fill out a registration slip provided in the meeting room and present it to the Secretary. Presentations should generally be limited to 5 minutes or as extended by motion by consent of the Commission. The Commission will withhold questions until the end of the presentation.

Applicants are encouraged to consider the use of various graphic presentation material including a locator map, photographs, renderings/model, scale drawings of the proposal in context with adjacent buildings/uses/signs, etc., as may be deemed appropriate to describe the project and its surroundings. Graphics should be mounted on rigid boards so that they may be easily displayed. **Applicants/presenters are responsible for all presentation materials, AV equipment and easels.**

# URBAN DESIGN DEVELOPMENT PLANS CHECKLIST

The items listed below are minimal application requirements for the type of approval indicated. Please note that the UDC and/or staff may require additional information in order to have a complete understanding of the project.

## 1. Informational Presentation

- Locator Map
- Letter of Intent (If the project is within an Urban Design District, a summary of how the development proposal addresses the district criteria is required)
- Contextual site information, including photographs and layout of adjacent buildings/structures
- Site Plan
- Two-dimensional (2D) images of proposed buildings or structures.

Providing additional information beyond these minimums may generate a greater level of feedback from the Commission.

### Requirements for All Plan Sheets

1. Title block
2. Sheet number
3. North arrow
4. Scale, both written and graphic
5. Date
6. Fully dimensioned plans, scaled at 1"= 40' or larger

*\*\* All plans must be legible, including the full-sized landscape and lighting plans (if required)*

## 2. Initial Approval

- Locator Map
- Letter of Intent (If the project is within a Urban Design District, a summary of how the development proposal addresses the district criteria is required)
- Contextual site information, including photographs and layout of adjacent buildings/structures
- Site Plan showing location of existing and proposed buildings, walks, drives, bike lanes, bike parking, and existing trees over 18" diameter
- Landscape Plan and Plant List (*must be legible*)
- Building Elevations in both black & white and color for all building sides (include material callouts)
- PD text and Letter of Intent (if applicable)

Providing additional information beyond these minimums may generate a greater level of feedback from the Commission.

## 3. Final Approval

All the requirements of the Initial Approval (see above), **plus:**

- Grading Plan
- Proposed Signage (if applicable)
- Lighting Plan, including fixture cut sheets and photometrics plan (*must be legible*)
- Utility/HVAC equipment location and screening details (with a rooftop plan if roof-mounted)
- PD text and Letter of Intent (if applicable)
- Samples of the exterior building materials (presented at the UDC meeting)

## 4. Comprehensive Design Review (CDR) and Variance Requests (*Signage applications only*)

- Locator Map
- Letter of Intent (a summary of how the proposed signage is consistent with the CDR or Signage Variance criteria is required)
- Contextual site information, including photographs of existing signage both on site and within proximity to the project site
- Site Plan showing the location of existing signage and proposed signage, dimensioned signage setbacks, sidewalks, driveways, and right-of-ways
- Proposed signage graphics (fully dimensioned, scaled drawings, including materials and colors, and night view)
- Perspective renderings (emphasis on pedestrian/automobile scale viewsheds)
- Illustration of the proposed signage that meets Ch. 31, MGO compared to what is being requested.
- Graphic of the proposed signage as it relates to what the Ch. 31, MGO would permit



December 11, 2019

City of Madison  
Urban Design Commission  
126 South Hamilton Street  
Madison, WI 53703

Re: 650 Forward Drive, Madison WI 53711  
Exact Sciences - Nexus One Clinical Lab Expansion

Dear Commission Members:

Please accept this Letter of Intent, Application and attachments as our submittal for an initial and final presentation on the Nexus One Clinical Lab Expansion for Exact Sciences.

**Project Team**

Owner:

Exact Sciences  
441 Charmany Drive  
Madison, WI 53719  
(608) 284-5700

Owner's Representative:

Exact Sciences  
Jeremy Hulsey  
441 Charmany Drive  
Madison, WI 53719  
(608) 284-5700  
[jhulsey@exactsciences.com](mailto:jhulsey@exactsciences.com)

Architect:

Jody Shaw  
Potter Lawson, Inc.  
749 University Avenue, Suite 300  
Madison, Wisconsin 53705  
(608) 274-2741  
[Jodys@Potterlawson.com](mailto:Jodys@Potterlawson.com)

Civil Engineer:

Justin Zampardi  
Vierbicher Associates Inc.  
999 Fourier Dr # 201,  
Madison, WI 53717  
(608) 826-0532  
[jam@vierbicher.com](mailto:jam@vierbicher.com)

Landscape Architect:

Suzanne Vincent  
Vierbicher Associates Inc.  
999 Fourier Dr # 201,  
Madison, WI 53717  
(608) 826-0532  
[svin@vierbicher.com](mailto:svin@vierbicher.com)

Contractor:

Bob Hougard  
J.H. Findorff & Son  
300 S. Bedford St.  
Madison, WI 53703  
(608) 257-5321  
[bhougard@findorff.com](mailto:bhougard@findorff.com)

### **The Existing Conditions**

The Nexus One Clinical Lab Expansion is an addition to the Phase 1 Clinical Lab building and the Phase 2 Production Lab building. The addition flanks both the East and West sides of the existing building. The Nexus One Clinical Lab Expansion extends the entire length of the existing building and provides an activated corner along Watts Rd.

### **Staff and Neighborhood Input**

The Development Team has met with the City Staff on October 15, 2019 to review the project and schedule. The Development Team has also met with the DAT on October 31, 2019 to discuss the site plan. The Development Team has notifying Alder Keith Furman and has requested the owner to coordinate a meeting to review the design and timeline.

### **Project Overview**

Exact Sciences Corporation is a molecular diagnostics company focused on the early detection and prevention of the deadliest forms of cancer. The company has exclusive intellectual property protecting Cologuard, its non-invasive, molecular screening technology for the detection of colorectal cancer.

As described in previous submittals, the first phase of the Clinical Processing Center creates the Specimen Processing lab for the Cologuard test. The second phase Production Lab creates the lab space used to produce the materials and solutions required in the Clinical Lab to perform the Cologard test. This project will expand on both the first phase and the second adding additional processing capacity for Exact Sciences and add shell space for a future office build-out.

The site is listed as an "SE" zoning district and the proposed uses are allowed, so no zoning conditional uses or variances are being requested.

The East expansion of Nexus One is a single story Facility that matches the height of the previous phase. The West expansion is a two story Facility that matches the height of the previous phase while adding a second story to the North half of the addition. The second story of the north half provides shell space for a future office build-out. Both expansions continue the material language using precast concrete, translucent and transparent glazing, perforated metal panels, curtain wall, and fiber cement panels.

The Nexus One Expansion includes approximately 283,930 GSF of processing laboratory, storage and office space. This includes:

West Expansion	229,430 SF
East Expansion	54,500 SF

The Nexus One Expansion will share the same address as the existing building with the main public entry remaining on Forward Drive. The main employee entry at the north of the development will remain, while an additional employee only entries will get integrated into the Southwest, Northeast and Northwest corner of the expansion. The Southwest employee entry ties back to the walking path that occurs throughout the site. This entry will provide direct access to the outdoors for the facility while simultaneously creating a terraced patio activating the corner.

An existing parking lot at the Southeast corner of the East expansion will be reconfigured. Due to the employee hour shifts no additional parking will be needed. The shelled office space will not be occupied until additional site parking is

developed. 7 loading docks will be added to the South of the West expansion. Adjacent to the new loading docks will be a screened mechanical yard used to house electrical generators and transformers.

## **Working within the Urban Design District Number 2**

**Grading:** The UDD2 requires positive drainage that allows for natural vegetation growth and appears natural. Due to the length of the building, and the necessity to have a continuous floor level, the building will be set into the grade of the site. The north side of the Nexus One Clinical Lab Expansion is set into the grades approximately 10', matching the Clinical Lab. The new grades will be sloped to the existing grades where ever possible to reduce the potential for site retaining walls, and maintain a natural appearance.

**Landscape:** Shall be used to frame attractive views from roadways and to screen different uses from each other and to complement the architectural massing of the building. Species will be as prescribed by the Urban Design District Number 2. There are a number of existing walking paths through the southern portion of the site. The proposed Terrace patio will provide a link to those paths so that employees can use the pathways for "walking meetings" or lunch time exercise.

**Structures:** Buildings will be placed on the site to reinforce the natural contours of the site with the natural slope of the site towards the south. Buildings will be within scale of the existing neighborhood development, staying within one story height of the Amenities building, and matching the height of the Phase 1 and 2 Labs. This is consistent with the low profile nature of the community.

**Lighting:** Building lighting will meet City of Madison ordinances and the Urban Design District Number 2 guidelines by providing glare free lighting in a minimal and attractive manner.

**Screening:** Parking has been approved in previous projects and additional parking will not be needed. Mechanical units are being placed within the mass of the building behind a mechanical screen while electrical units will occur in a screened mechanical yard. Some of the lab functions will require exhaust stacks that will extend 10' above the roof any screening. These stacks will be groups as much as possible to provide an orderly image in keeping with the aesthetics of the building.

**Building Design:** Exterior building materials will use natural concrete, curtain wall, fiber cement panels and metal panels to create a façade that works within the context of the existing community, and set the tone for future additions to the campus. The building itself will be set into the slope of the site, reducing the overall mass of the building and keeping in context with the low profile character of the existing development

**Sustainability:** The Expansion will be an addition to a LEED site but the Expansion will not seek LEED Certification. Due to the nature of the laboratory building, the building will have reduced glazing levels while the ventilation demands require the most Focus on Energy saving strategies. Variable flow fans throughout, energy recovery and variable flow exhaust stacks are some of the strategies being pursued. The facility will be built to high energy efficiency standards, including insulation, HVAC, and LED lighting. The Development Team will consult with Focus on Energy to ensure the project capitalizes on any other available technologies.

The Nexus One Clinical Lab Expansion will take advantage of the existing Stormwater Reclamation system for the use of non-potable water where allowed. An extensive wet pond and infiltration pond was designed as part of the Phase 1 Clinical Lab and it accounts for all of the stormwater collection for this facility.

**Requested Approval**

With this submittal, the Nexus One Clinical Lab Expansion Development Team is requesting both initial and final approval.

Regards,

A handwritten signature in black ink, appearing to read "Jody Shaw". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Jody Shaw, AIA LEED AP  
Potter Lawson, Inc.



**UDC Initial - Final Submittal**  
Exact Sciences - Nexus One Clinical Lab Expansion  
2017.01.14  
December 11, 2019



## Site Locator Map

Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14

December 11, 2019



Site Locator Map

Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14

December 11, 2019



Site Context Images

Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14  
December 11, 2019



Site Context Images

Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14

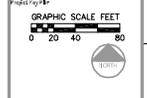
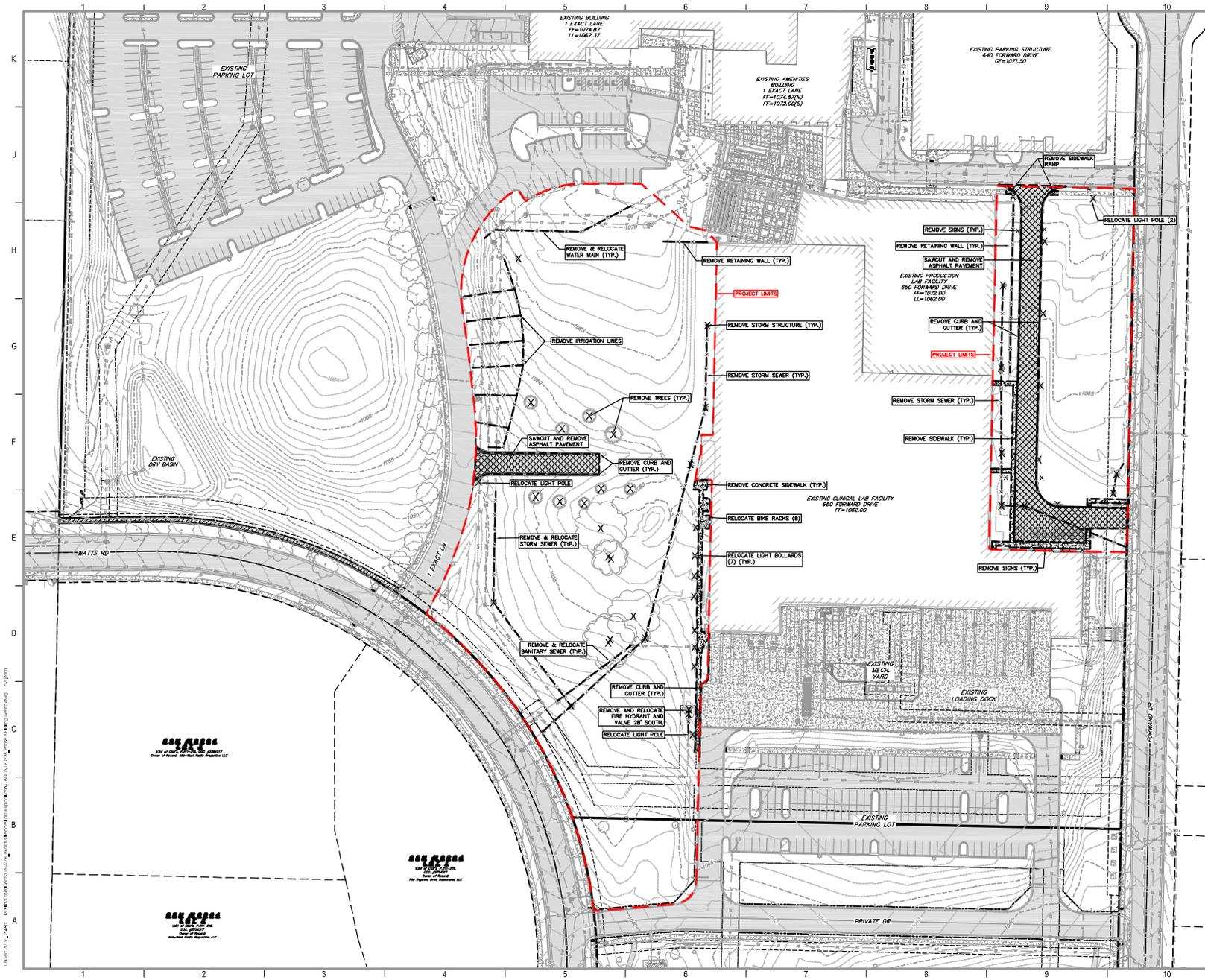
December 11, 2019



Existing Building  
Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14  
December 11, 2019







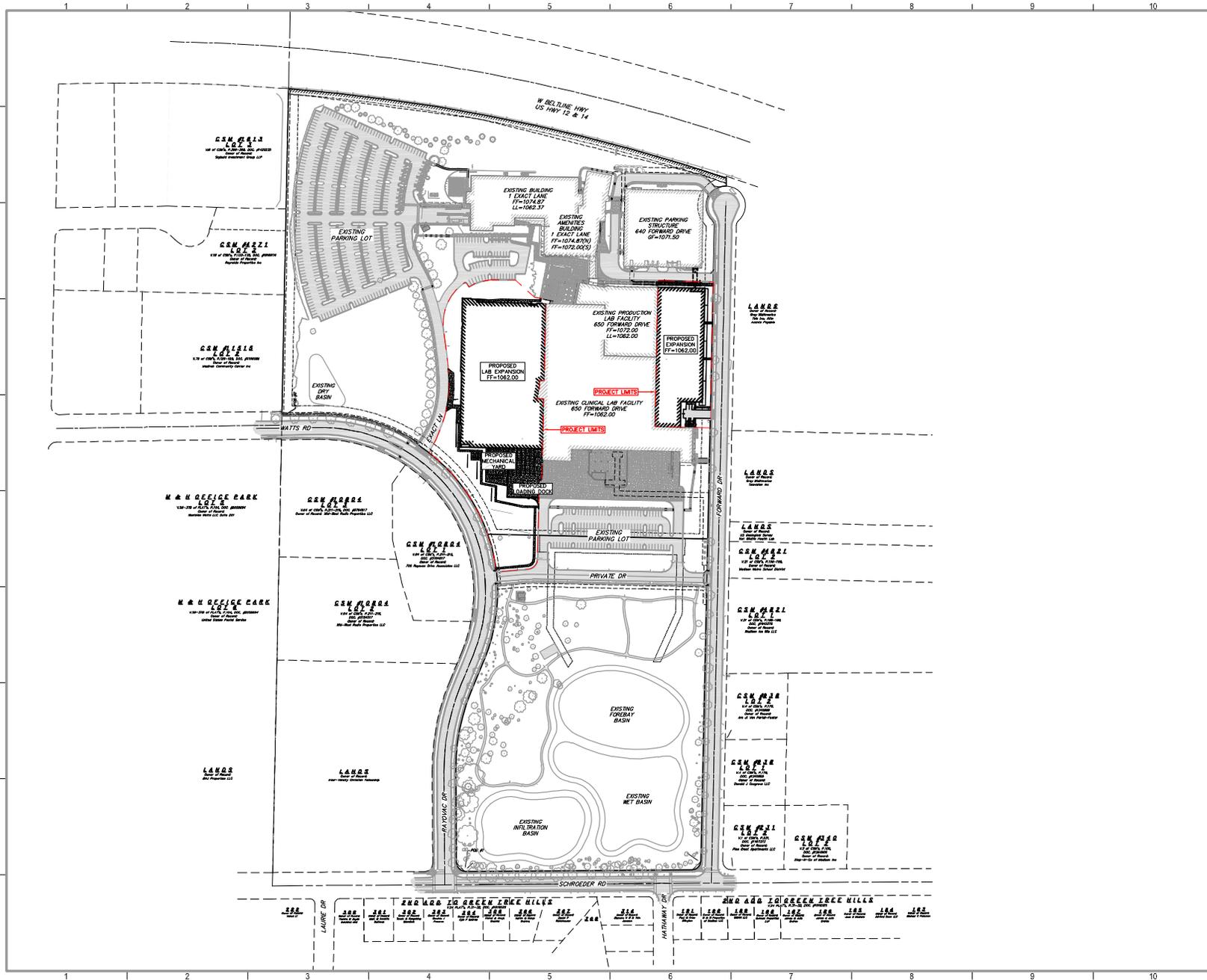
**NOT FOR CONSTRUCTION**

**EXACT SCIENCES**  
Clinical Lab Expansion

Project Name		Exact Sciences Clinical Lab Expansion	
Site #		Eg 6	
Address		650 Forward Dr., Madison, WI 53711	
Project Package		Design Package D	
Rev	Date	By	Check
01	12/15/2019	NAH	
02	01/06/2020	JAM	
Sheet #			
DEMOLITION PLAN			
Sheet Number		6C200	
Sheet Code		A	

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11/10/2017 1:45:20 -\\nas01\proj\170222\_001\proj\170222\_001\170222\_001\_001.dwg - Project: 170222\_001 - 170222\_001.dwg - 170222\_001.dwg

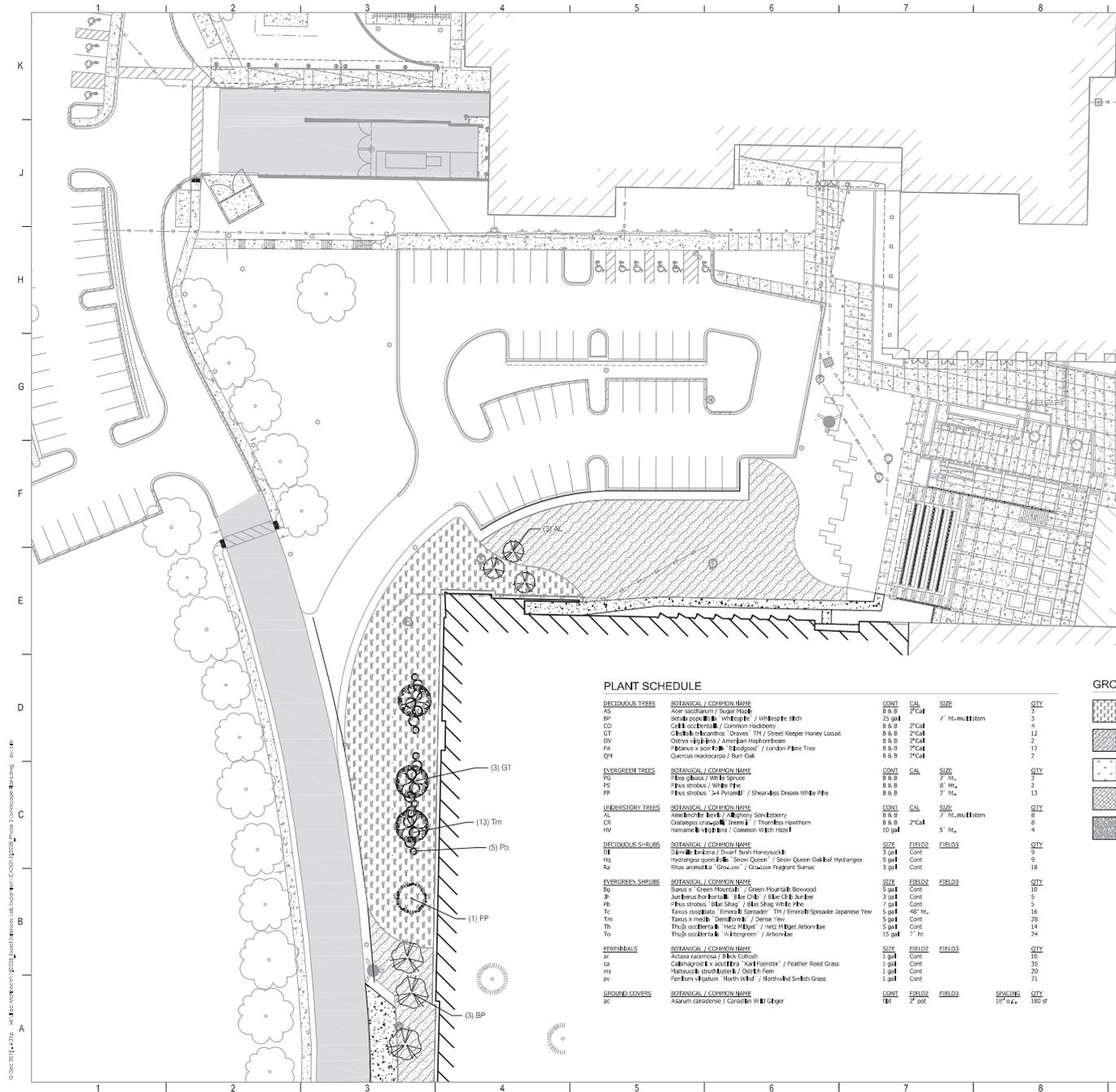


**Exact Sciences**  
**Exact Sciences**  
  
  
  
  
 Project No. \_\_\_\_\_  
 GRAPHIC SCALE FEET  
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 North Arrow  
 North is Approx. \_\_\_\_\_  
**NOT FOR CONSTRUCTION**  
 Project Name: **EXACT SCIENCES**  
**Clinical Lab Expansion**  
 Site: Bldg 6  
 650 Forward Dr.,  
 Madison, WI 53711  
 Project No. 170222-001  
 Revision: 0  
 Date: 11/10/2017  
 Project Name: EXACT SCIENCES  
 Project No. 170222-001  
 Revision: 0  
 Date: 11/10/2017  
**OVERALL SITE PLAN**  
 Sheet Number: **6C300**      Site No.: **A**

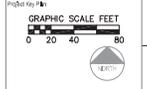






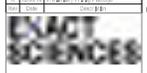


- NOTES:**
- All plantings shall conform to quality requirements as per ANSI Z601.
  - All plant material shall be true to the species, variety and size specified, nursery grown in accordance with good horticultural practices, and under climatic conditions similar to those of the project site.
  - Contact Landscape Architect, in writing, to request and plant material substitutions due to availability issues.
  - Areas shown as Meadow Seeding to be seeded with Low Growing Meadow for Medium Soil by Prairie Nursery, or equal. Areas shown as Prairie Mix to be seeded with Prairie Mix for Medium Soil by Prairie Nursery, or equal. All other disturbed areas, unless otherwise noted, to be seeded with Madson Parks Mix by GBS Seed Company or equivalent per manufacturer's specified application rates. All seeded areas are to be watered daily to maintain adequate soil moisture for proper germination. After vigorous growth is established, apply 1/2" water twice weekly until final acceptance.
  - All plants shall be guaranteed to be healthy and flourishing condition during the growing season following installation. All plant material shall be guaranteed for one year from the time of installation.
  - Contractor shall provide a suitable amended topsoil for all planting areas where soil conditions are unsuitable for plant growth. Topsoil shall conform to quality requirements as per Section 025-21(1) of the Standard Specifications for Highway Construction. Provide a minimum of 12" of topsoil in planting areas and 4" of topsoil in areas to be seeded/sodded.
  - Landscape beds to be matched with unground shaded hardwood bark mulch to 2" depth min. Edge with commercial grade aluminum landscape edging. Permeable curb or equal 4" depth x 2" Min. min.
  - Install 24" wide stone maintenance strip around perimeter of building where no landscape beds are shown. Match with 1" washed stone to 3" depth over weed barrier fabric. Edge with commercial grade aluminum landscape edging. Permeable curb or equal 5.5" depth x 2" Min. min.



Shades & Symbols

**NOT FOR CONSTRUCTION**



**CLINICAL LAB EXPANSION**

650 FORWARD DR.

Project No. \_\_\_\_\_

Design Package 0

Date: 12/10/2019

Project Name: 19955-00 (190228)

Sheet No. \_\_\_\_\_

**LANDSCAPE PLAN - WEST EXPANSION**

Sheet Title: **6L100**

**PLANT SCHEDULE**

DECIDUOUS TREES		BOTANICAL / COMMON NAME	CONT.	CAL.	SIZE	QTY	
AS	Acer saccharum / Sugar Maple	8.8.8	2	2' Cal	7' Ht.	3	
BP	Betula populifolia / White Birch / White Birch	25 gal	2	2' Cal	7' Ht. multi stem	4	
CO	Cornus florida / Common Highberry	8.8.8	2	2' Cal	7' Ht.	4	
CT	Crataegus baccata / Drives TM / Street Keeper Honey Locust	8.8.8	2	2' Cal	7' Ht.	12	
OW	Quercus prinus / American Hophornbeam	8.8.8	2	2' Cal	7' Ht.	2	
PA	Platanus x acerifolia / London Plane Tree	8.8.8	2	2' Cal	7' Ht.	12	
QH	Quercus macrocarpa / Bur Oak	8.8.8	2	2' Cal	7' Ht.	2	
EVERGREEN TREES		BOTANICAL / COMMON NAME	CONT.	CAL.	SIZE	QTY	
PE	Pinus strobus / White Pine	8.8.8	2	2' Cal	8' Ht.	2	
PS	Pinus strobus / White Pine	8.8.8	2	2' Cal	7' Ht.	13	
PP	Pinus strobus 'Jack Pyramidal' / Shear-Biss Dream White Pine	8.8.8	2	2' Cal	7' Ht.	13	
HERNANDIARIA TREES		BOTANICAL / COMMON NAME	CONT.	CAL.	SIZE	QTY	
AL	Ailanthus glandulosa / Tree of Heaven	8.8.8	2	2' Cal	7' Ht. multi stem	8	
CR	Crataegus crugata / Thornless Hawthorn	8.8.8	2	2' Cal	7' Ht.	8	
HW	Hamelis virginiana / Common Witch Hazel	10 gal	2	2' Cal	5' Ht.	4	
DECIDUOUS SHRUBS		BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3	QTY	
DL	Dwarf Limonia / Dwarf Bush Honeyuckle	3 gal	Cont.			9	
Hg	Hydrangea quercifolia / Snow Queen / Snow Queen Oakleaf Hydrangea	9 gal	Cont.			9	
Ra	Rhus aromatica / Greenow / Greenow Fragrant Gum	3 gal	Cont.			18	
EVERGREEN SHRUBS		BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3	QTY	
Bg	Buxus 'Green Mountain' / Green Mountain Boxwood	5 gal	Cont.			10	
Jh	Juniperus horizontalis 'Blue Chip' / Blue Chip Juniper	3 gal	Cont.			5	
Pb	Pinus strobus 'Blue Ship' / Blue Ship White Pine	7 gal	Cont.			5	
Tc	Taxus canadensis 'Emerald Spreader' TM / Emerald Spreader Japanese Yew	5 gal	Cont.			16	
Tm	Taxus media 'Densiformis' / Dense Yew	5 gal	Cont.			28	
Th	Thuja occidentalis 'Heiz Midjet' / Heiz Midjet Arborvitae	5 gal	Cont.			14	
To	Thuja occidentalis 'Vigorstreet' / Astorbee	15 gal	Cont.			24	
PERENNIALS		BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3	QTY	
ar	Acorus racemosus / Black Cohosh	1 gal	Cont.			10	
ca	Calamagrostis canadensis / Cana Foxtail / Feather Reed Grass	1 gal	Cont.			35	
ms	Muhlenbergia longiflora / Conchifern	1 gal	Cont.			20	
pv	Panicum virgatum 'North Wind' / Northwind Switch Grass	1 gal	Cont.			71	
GROUNDCOVERS		BOTANICAL / COMMON NAME	CONT.	FIELD2	FIELD3	SPACING	QTY
tc	Asarum canadense / Canadian Wild Ginger	1 BT	2' pot			10' x 2'	180 sf

**GROUNDCOVER SCHEDULE**

	PRAIRIE MIX	17,844 sf
	MEADOW MIX	46,100 sf
	TURFGRASS LAWN MIX	11,436 sf
	PAVERS	994 sf
	NO-GRASS TURF MIX	1,410 sf

11/02/2019 10:45 AM - Flat Acres Architects - 650 FORWARD DR. CLINICAL LAB EXPANSION - LANDSCAPE PLAN - WEST EXPANSION







- NOTES:**
1. All plantings shall conform to quality requirements as per ANSI Z60.1.
  2. All plant material shall be true to the species, variety and size specified, nursery grown, in accordance with good horticultural practices, and under climatic conditions similar to those of the project site.
  3. Contact Landscape Architect, in writing, to request and plant material substitutions due to availability issues.
  4. Areas shown as "Meadow Seeding" to be seeded with "Low Growing Meadow for Medium Soil" by Prairie Nursery, or equal. Areas shown as "Prairie Mix" to be seeded with Diverse Prairie for Medium Soil by Prairie Nursery, or equal. All other disturbed areas, unless otherwise noted, to be seeded with Madison Parks Mix by OES Seed Company or equivalent, per manufacturer's specified application rates. All seeded areas are to be watered daily to maintain adequate soil moisture for proper germination. After vigorous growth is established, apply 1/2" water twice weekly until final acceptance.
  5. All plants shall be guaranteed to be in healthy and flourishing condition during the growing season following installation. All plant material shall be guaranteed for one year from the time of installation.
  6. Contractor shall provide a suitable amended topsoil blend for all planting areas where soil conditions are unsuitable for plant growth. Topsoil shall conform to quality requirements as per Section 625.21(1) of the Standard Specifications for Highway Construction. Provide a minimum of 12" of topsoil in all planting areas and 6" of topsoil in areas to be seeded/sodded.
  7. Landscape beds to be mulched with undyed shredded hardwood bark mulch to 3" depth min. Edge with commercial grade aluminum landscape edging, Permabac Cleanline or equal 4" depth x 2" M finish.
  8. Install 24" wide stone maintenance strip around perimeter of building where no landscape beds are shown. Mulch with 1.5" washed stone to 3" depth over weed barrier fabric. Edge with commercial grade aluminum landscape edging, Permabac Cleanline or equal 5.5" depth x 2" M finish.

Project Key Plan  
 GRAPHIC SCALE FEET  
 0 20 40 80  
 NORTH

Status: Approved  
**NOT FOR CONSTRUCTION**

**PLANT SCHEDULE**

DECIDUOUS TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
AS	Acer saccharum / Sugar Maple	8 8 8	2" cal	7' ht., multi stem	3
BP	Betula pumila / Whitespire Birch	25 gal			3
CO	Cornus occidentalis / Common Hockberry	8 8 8	2" cal		4
GT	Gleditsia triacanthos 'Savara' TM / Street Keeper Honey Locust	8 8 8	2" cal		12
OV	Ostrya virginiana / American Hophornbeam	8 8 8	2" cal		2
PA	Platanus x acerifolia 'Bloodgood' / London Plane Tree	8 8 8	2" cal		12
QM	Quercus macrocarpa / Bur Oak	8 8 8	2" cal		2
EVERGREEN TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
PG	Picea glauca / White Spruce	8 8 8		7' ht.	3
PS	Pinus strobus / White Pine	8 8 8		8' ht.	3
PP	Pinus strobus 'Jel Dymalf' / Short-Loss Dream White Pine	8 8 8		7' ht.	13
UNDERSTORY TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
AL	Alexandria hirsuta / Ashgrove Serviceberry	8 8 8		7' ht., multi stem	8
CR	Crataegus crus-galli 'Thornle' / Thornless Hawthorn	8 8 8	2" cal		8
HW	Hamelia virginiana / Common Witch-hazel	10 gal		5' ht.	4
DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME	SIZE	FIELD	FIELD	QTY
DI	Dicentra spectabilis / Sweet Blood Honeycreeper	3 gal	Cont		9
Hq	Hydrangea quercifolia 'Snow Queen' / Snow Queen Oakleaf Hydrangea	5 gal	Cont		9
Ra	Rhus aromatica 'Gro-Low' / Grow-Low Fragrant Sumac	3 gal	Cont		18
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	SIZE	FIELD	FIELD	QTY
Sg	Saxifraga 'Green Mountain' / Green Mountain Saxifrage	5 gal	Cont		10
Jh	Juniperus horizontalis 'Blue Chip' / Blue Chip Juniper	3 gal	Cont		5
Pb	Pinus strobus 'Blue Shag' / Blue Shag White Pine	2 gal	Cont		5
TC	Taxus canadensis 'Emerald Spreader' TM / Emerald Spreader Japanese Yew	5 gal	Cont		16
Tm	Taxus x media 'Densiformis' / Dense Yew	5 gal	Cont		28
Th	Thuja occidentalis 'Hetz Midjet' / Hetz Midjet Arborvitae	5 gal	Cont		14
to	Thuja occidentalis 'Virenspress' / Arborvitae	15 gal	Cont		24
PERENNIALS	BOTANICAL / COMMON NAME	SIZE	FIELD	FIELD	QTY
cl	Clivia nutans / Black Crocus	1 gal	Cont		10
ca	Callirhoe x scouleri 'Karl Foerster' / Feather Reed Grass	1 gal	Cont		35
ms	Muhlenbergia straminea / Blue Chip	1 gal	Cont		20
pv	Parthenocissum vitacea / Northwind Switch Grass	1 gal	Cont		71
GROUND COVERS	BOTANICAL / COMMON NAME	CONT	FIELD	SPACING	QTY
ac	Asarum canadense / Canadian Wild Ginger	1 qt	2" pot	18" o.c.	180 sf

**GROUND COVER SCHEDULE**

	PRAIRIE MIX	17,844 sf
	MEADOW MIX	45,983 sf
	TURFGRASS LAWN MIX	11,533 sf
	PAVERS	954 sf
	NO-LOW TURF MIX	1,410 sf

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10/20/2019 10:48:08 AM  
 User: m  
 Job: 1000410020  
**EXACT SCIENCES**  
 Clinical Lab Expansion  
 Built by G  
 650 Forward Dr.  
 Madison, WI 53711  
 Project Phase: Design Package 0  
 Date: 12/10/2019  
 Project Number: 19162-00 (190228)  
 Drawn By: SVI  
 Checked By: JZM  
 Scale: 1/8" = 1'-0"  
**LANDSCAPE PLAN - WEST EXPANSION**  
 Sheet Number: **6L100** Rev. No.: -







Southeast Aerial



Southwest Aerial



Northwest Aerial



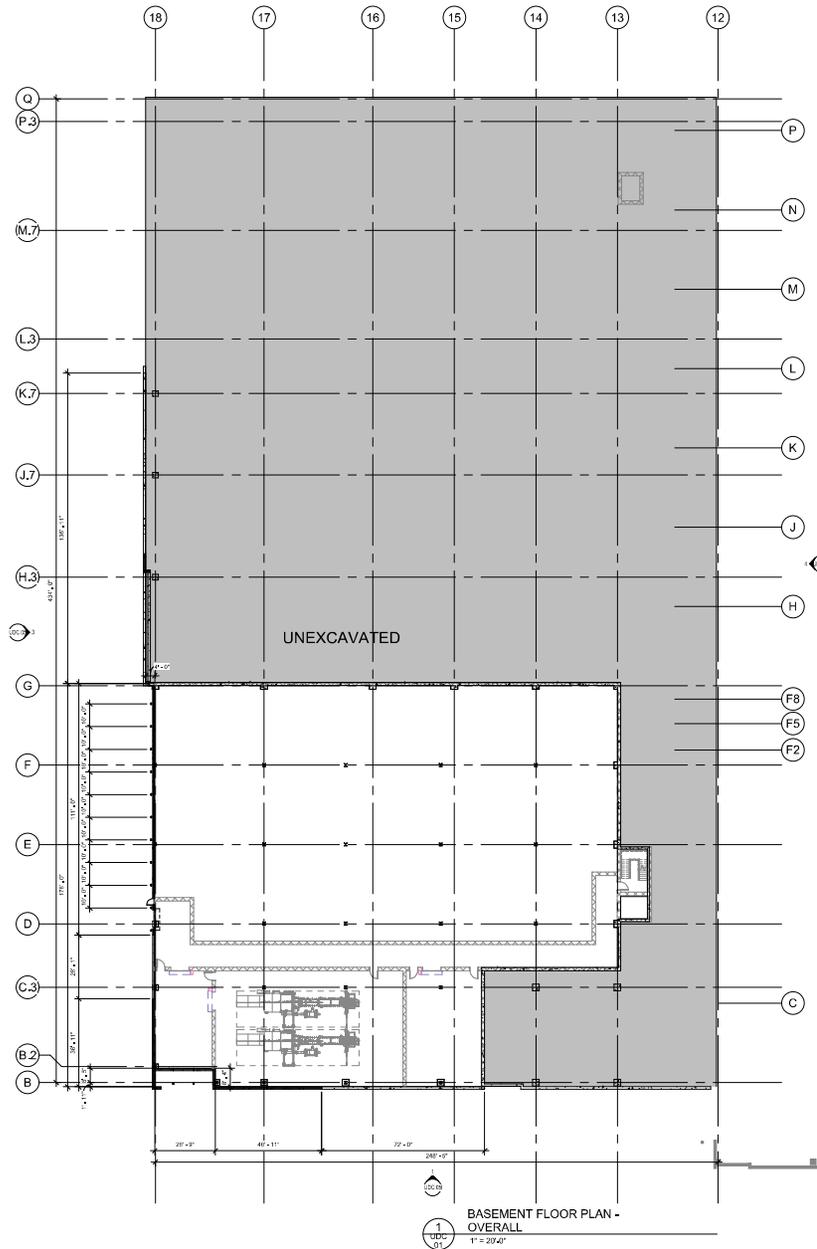
Northeast Aerial

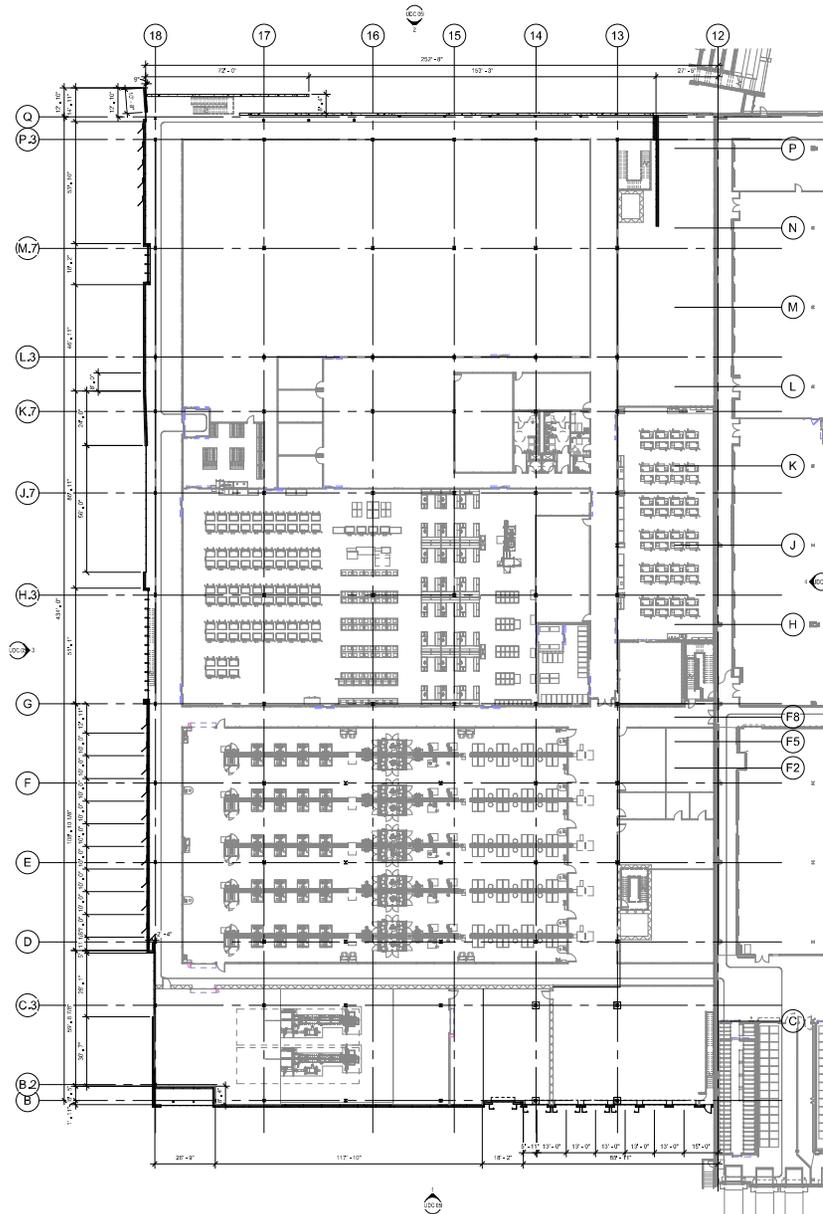
## Aerials

Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14

December 11, 2019

**BASEMENT PLAN**  
Clinical Lab Expansion  
12/11/19

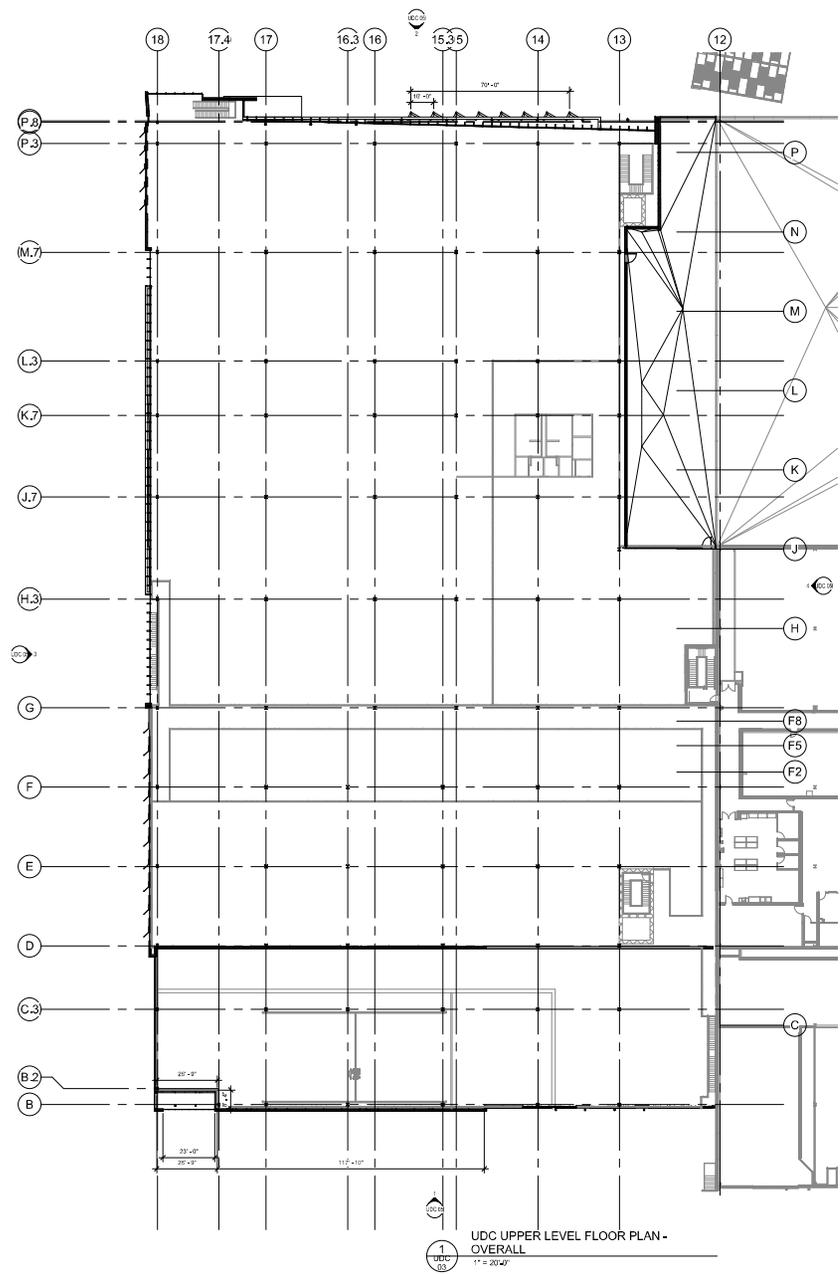




FIRST FLOOR PLAN  
 Clinical Lab Expansion  
 12/11/19

UDC FIRST FLOOR PLAN - OVERALL  
 1" = 20'-0"

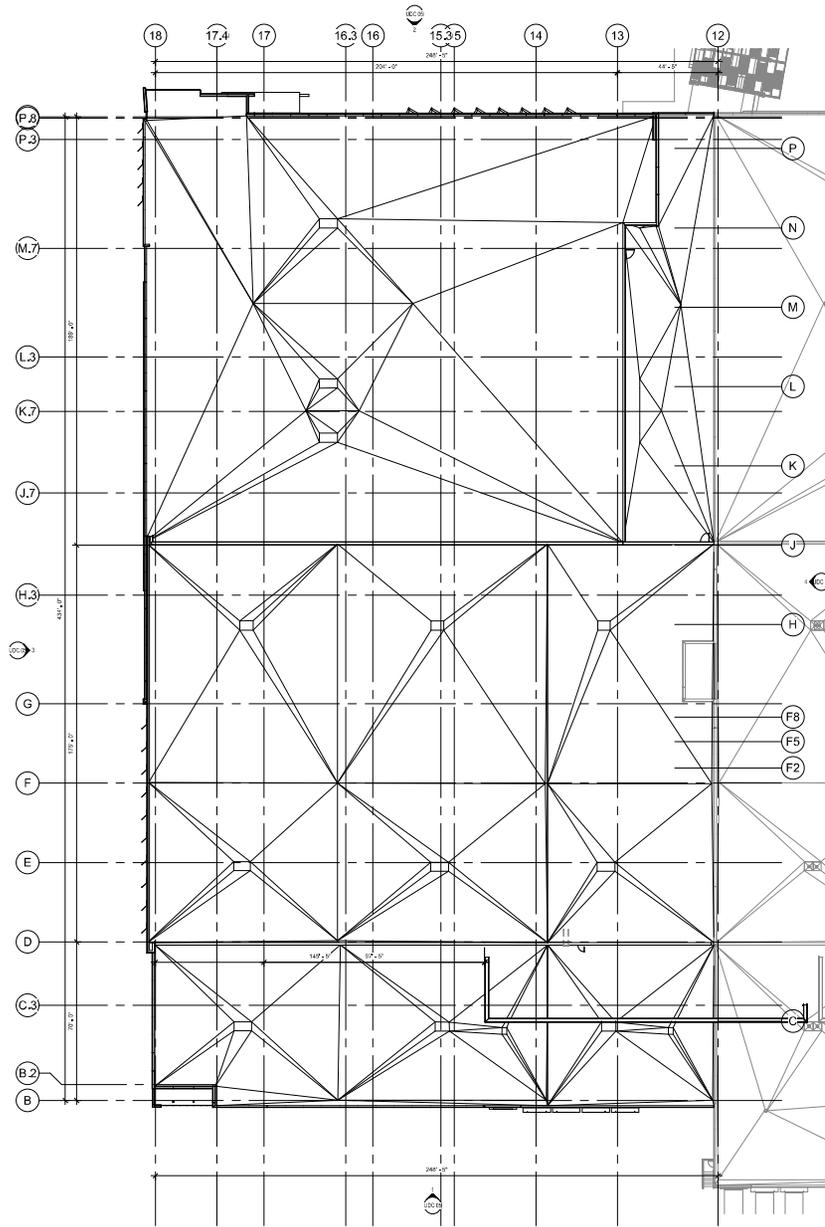




UPPER LEVEL PLAN  
 Clinical Lab Expansion  
 12/11/19

UDC UPPER LEVEL FLOOR PLAN -  
 OVERALL  
 1" = 20'-0"

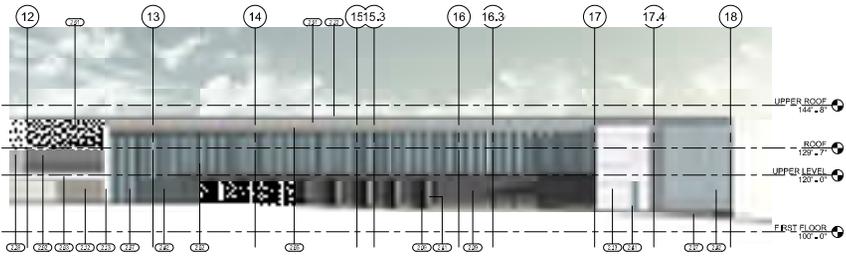




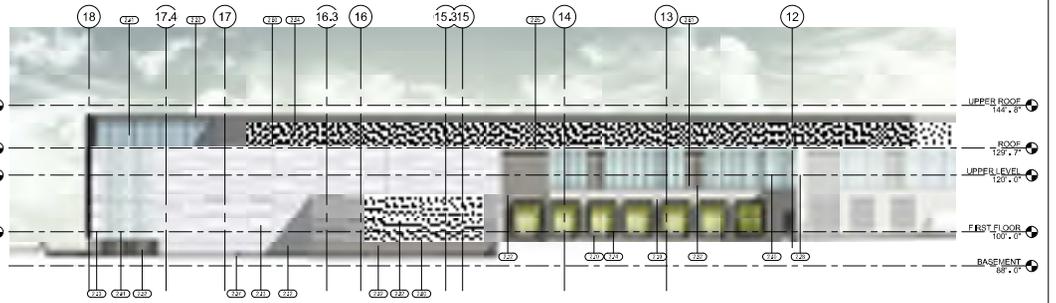
ROOF PLAN  
 Clinical Lab Expansion  
 12/11/19

1 ROOF PLAN - OVERALL  
 1" = 20'-0"

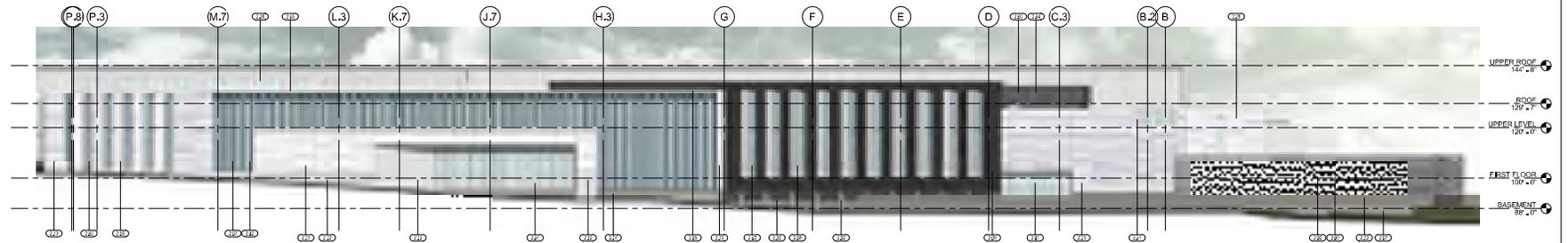




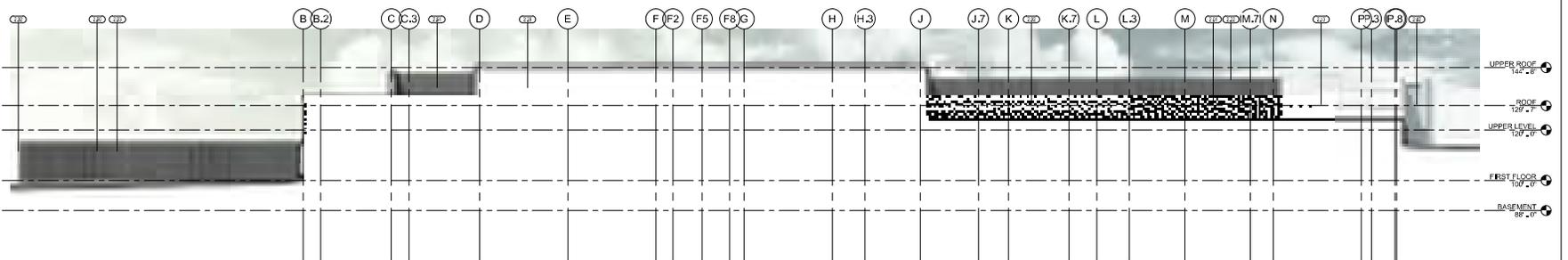
2 NORTH ELEVATION  
1/16" = 1/32"



1 SOUTH ELEVATION  
1/16" = 1/32"



3 WEST ELEVATION  
1/16" = 1/32"

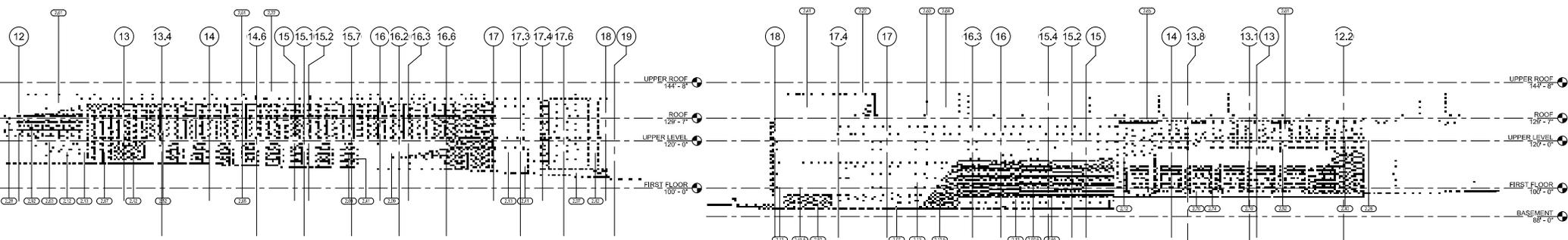


4 EAST ELEVATION  
1/16" = 1/32"

**BUILDING ELEVATIONS**  
Clinical Lab Expansion  
12/11/19

- KEYNOTES
- 220 CAST-IN-PLACE CONCRETE FOUNDATION WITH STEM WALL
  - 220B RANDOLPH PATENT CONCEALED FASTENER WITH CONCRETE PANEL RAINSCREEN SYSTEM (TYPE 1)
  - 220C PRECAST CONCRETE WALL PANEL ASSEMBLY
  - 220D ALUMINUM BRIMMER BRUSH FINISH WALL PANEL ASSEMBLY
  - 220E ALUMINUM BRIMMER BRUSH FINISH WALL PANEL ASSEMBLY
  - 220F PRECAST CONCRETE WALL PANEL ASSEMBLY
  - 220G EXTERIOR BUILDING
  - 220H PERFORATED ALUMINUM MECHANICAL SCREEN WALL
  - 241 8" CURTAIN WALL ASSEMBLY
  - 242 10 1/4" CURTAIN WALL ASSEMBLY
  - 243 10 1/4" CURTAIN WALL ASSEMBLY
  - 244 STEEL STRUCTURE ASSEMBLY
  - 245 METAL PANEL CURTAIN WALL ASSEMBLY
  - 246 METAL PANEL CURTAIN WALL ASSEMBLY
  - 247 METAL PANEL CURTAIN WALL ASSEMBLY
  - 248 METAL PANEL CURTAIN WALL ASSEMBLY
  - 249 METAL PANEL CURTAIN WALL ASSEMBLY
  - 250 METAL PANEL CURTAIN WALL ASSEMBLY
  - 251 ANODIZED FINISH BRUSHED VERTICAL ALUMINUM SUNSHADE
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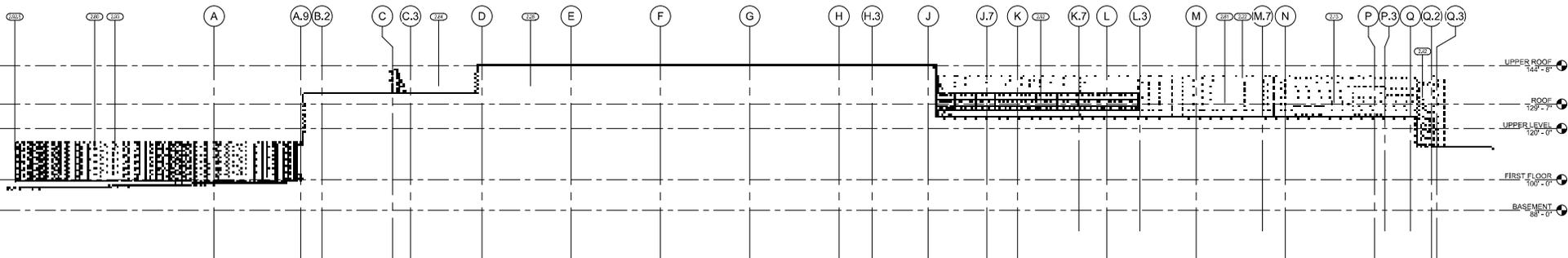


2 NORTH ELEVATION  
1/16" = 1'-0"

1 SOUTH ELEVATION  
1/16" = 1'-0"



3 WEST ELEVATION  
1/16" = 1'-0"



4 EAST ELEVATION  
1/16" = 1'-0"

- KEYNOTES
- 2.07 CAST IN PLACE CONCRETE FOUNDATION
  - 2.09 RANDOM PATTERN CONGEALED FASTNER FIBER CEMENT PANEL RAINSCREEN SYSTEM-TYPE 1
  - 2.10 EQUITONE NATURA N 251
  - 2.12 PRECAST CONCRETE WALL PANEL - DARK GRAY CONCRETE - LIGHT SANDBLAST
  - 2.13 PRECAST CONCRETE WALL PANEL W/ FORM LINER FINISH - DARK GRAY CONCRETE
  - 2.12.5 PRECAST CONCRETE WALL PANEL W/ FORM LINER FINISH - WHITE CONCRETE
  - 2.13 PRECAST CONCRETE WALL PANEL W/ RANDOM REVEAL - WHITE CONCRETE
  - 2.22 PREFINISHED METAL COPING - MUSKET GRAY
  - 2.28 EXISTING BUILDING
  - 2.40 FIBERGLASS SANDWICH PANEL SYSTEM
  - 2.41 6" CURTAIN WALL SYSTEM - CLEAR ANODIZED
  - 2.41.5 6" CURTAIN WALL SYSTEM - CLEAR ANODIZED - CUSTOM FRIT PATTERN ON GLAZING
  - 2.42 10 1/4" CURTAIN WALL SYSTEM - CLEAR ANODIZED
  - 2.52 HSS EXTERIOR COLUMN - PAINTED - PEPPERCORN
  - 2.60 STEEL STRUCTURE AS SCHEDULED - PEPPERCORN
  - 2.61 METAL PANEL (MP3) CLADDING - MUSKET GRAY
  - 2.63 METAL PANEL (MP3) FACIA - SANDSTONE
  - 2.64 METAL PANEL (MP4) CLADDING - MUSKET GRAY
  - 2.65 METAL PANEL (MP3) FACIA - SANDSTONE
  - 2.86 CLEAR ANODIZED, FOLDED PERFORATED, VERTICAL ALUMINUM SUNSHADE
  - 2.67 CLEAR ANODIZED, PERFORATED, VERTICAL ALUMINUM SUNSHADE
  - 2.70 LOADING DOCK LEVER
  - 2.74 LOADING DOCK EQUIPMENT
  - 2.97 ARCHITECTURAL LOUVERS - MUSKET GRAY
  - 2.92.5 ARCHITECTURAL LOUVER - BONE WHITE W/ PEPPERCORN ACCENT
  - 2.93 PERFORATED ALUMINUM MECHANICAL SCREEN WALL - PEPPERCORN

**BUILDING ELEVATIONS**  
Clinical Lab Expansion  
12/23/2019





Perspective  
Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14  
December 11, 2019

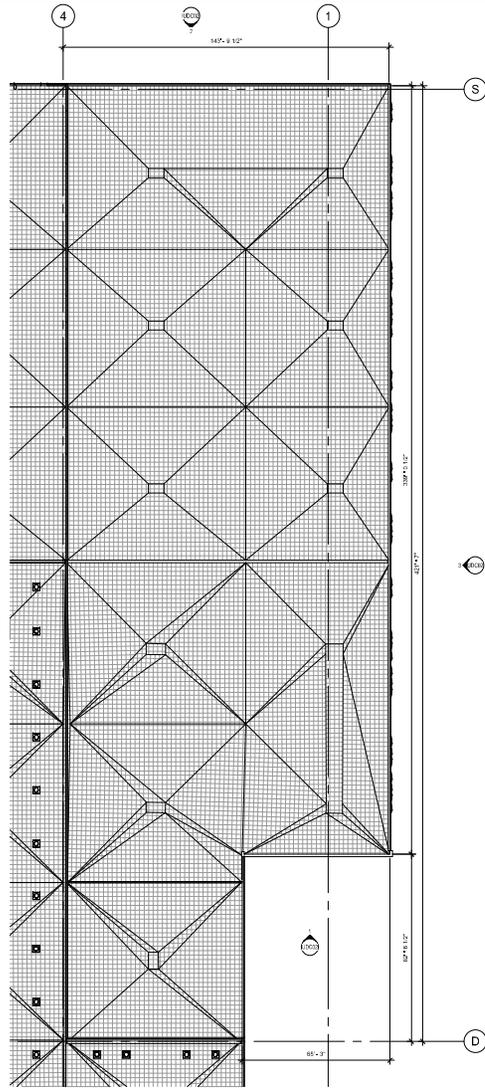


Perspective  
Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14  
December 11, 2019

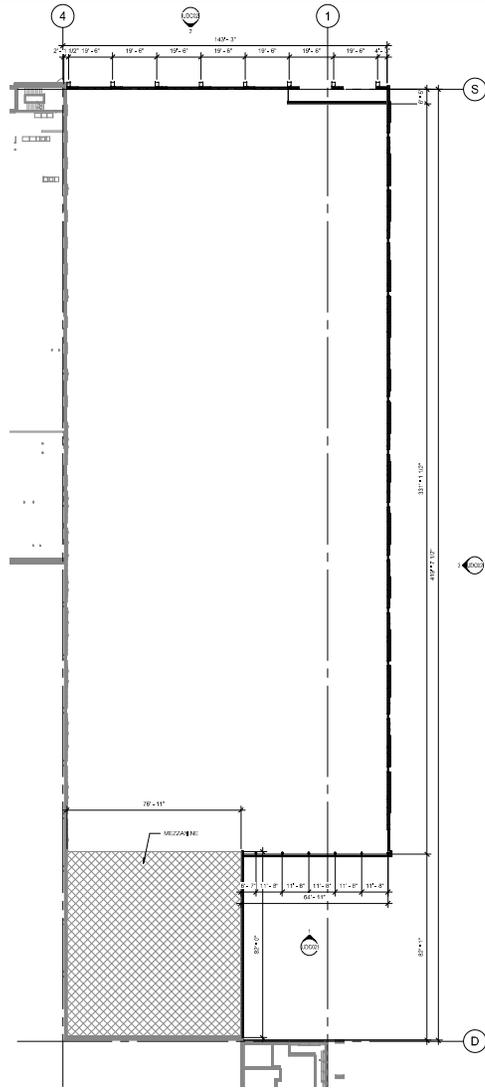




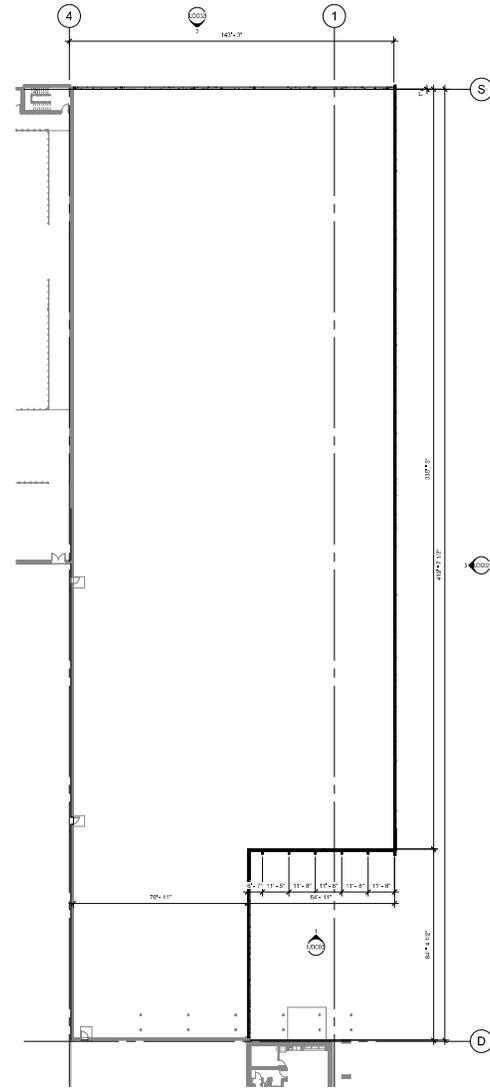
Perspectives  
Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14  
December 11, 2019



3 ROOF PLAN  
1" = 20'-0"

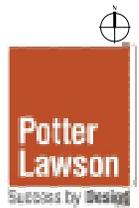


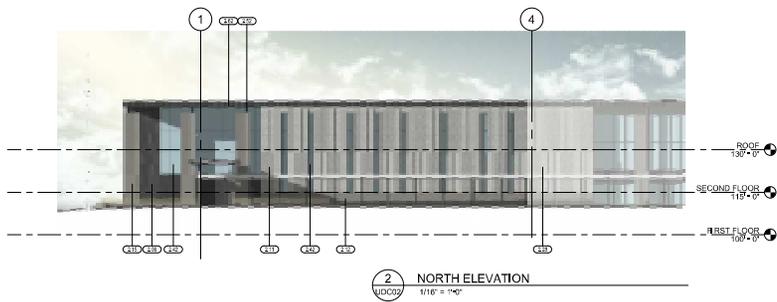
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1" = 20'-0"



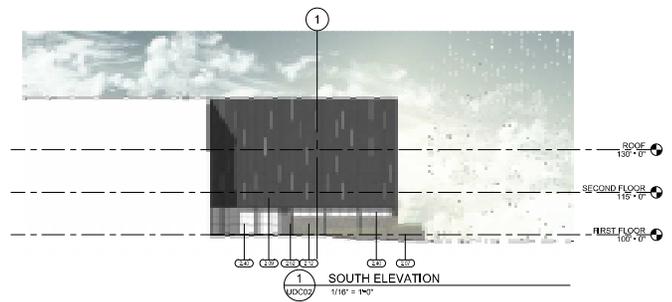
1 FIRST FLOOR PLAN  
1" = 20'-0"

FLOOR PLANS  
Clinical Lab Warehouse Expansion  
12/11/19

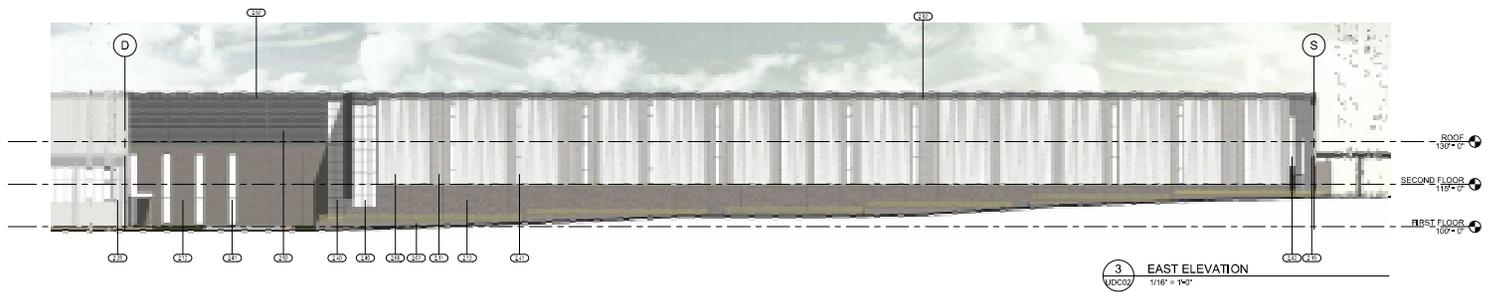




2 NORTH ELEVATION  
1/16" = 1'-0"



1 SOUTH ELEVATION  
1/16" = 1'-0"



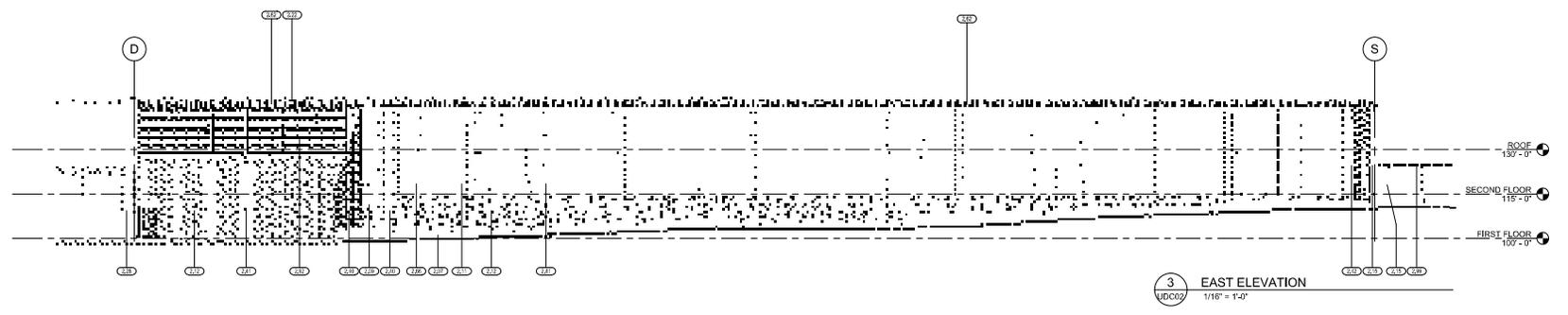
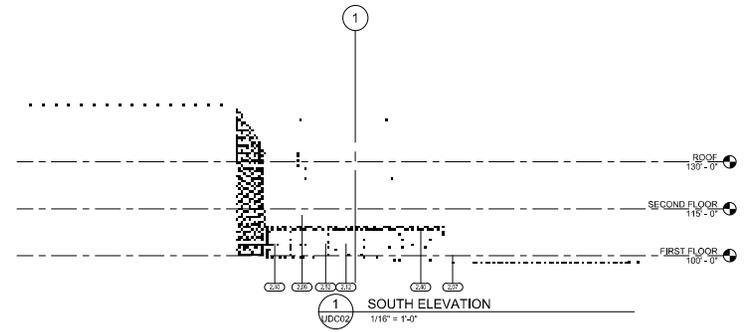
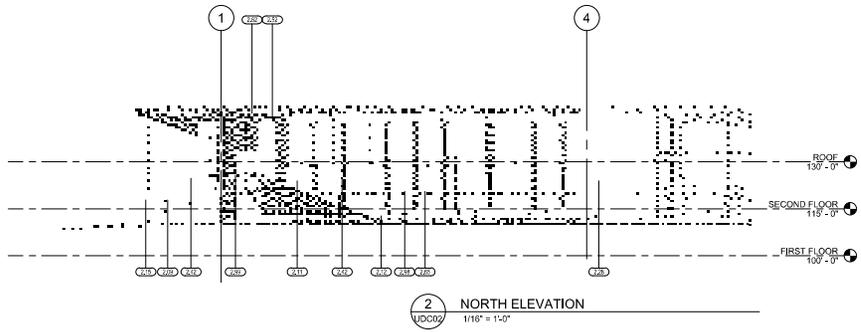
3 EAST ELEVATION  
1/16" = 1'-0"

**BUILDING ELEVATIONS**  
Clinical Lab Warehouse Expansion  
12/11/19

KEYNOTES

2-07	CAS	PLACE CONCRETE FOUNDATION STEM WALL
2-08	BRAND	PATTERN CONCRETE PATTERNS PER CEMENT PANEL REINFORCING SYSTEM (TYPE 1)
2-10	PC	PRECAST CONCRETE WALL PANEL ASSEMBLY
2-11	PC	PRECAST CONCRETE TRUSS
2-12	PC	FORM BACK BUSH OF PRECAST WALL PANEL ASSEMBLY
2-13	PC	REGULAR FINISH PRECAST CONCRETE WALL PANEL
2-16	PC	PRECAST COLUMN ASSEMBLY
2-22	PC	PRECAST METAL CORNER
2-28	PC	PRECAST METAL CORNER
2-41	PC	PRECAST METAL CORNER
2-42	PC	PRECAST METAL CORNER
2-43	PC	PRECAST METAL CORNER
2-44	PC	PRECAST METAL CORNER
2-45	PC	PRECAST METAL CORNER
2-46	PC	PRECAST METAL CORNER
2-47	PC	PRECAST METAL CORNER
2-48	PC	PRECAST METAL CORNER
2-49	PC	PRECAST METAL CORNER
2-50	PC	PRECAST METAL CORNER
2-51	PC	PRECAST METAL CORNER
2-52	PC	PRECAST METAL CORNER
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2-67	PC	PRECAST METAL CORNER
2-68	PC	PRECAST METAL CORNER
2-69	PC	PRECAST METAL CORNER
2-70	PC	PRECAST METAL CORNER





- KEYNOTES
- 2.07. CAST IN PLACE CONCRETE PLANTER - LIGHT SANDBLAST
  - 2.09. RANDOM PATTERN CONCEALED FASTENER FIBER CEMENT PANEL RAINSCREEN SYSTEM-TYPE 1
  - EQUITONE NAUTRA N 251
  - 2.10. PRECAST CONCRETE WALL PANEL - DARK GRAY CONCRETE
  - 2.11. PRECAST CONCRETE WALL PANEL W/ TAPERED FN - DARK GRAY CONCRETE
  - 2.12. PRECAST CONCRETE WALL PANEL W/ FORMLINER FINISH - DARK GRAY CONCRETE
  - 2.15. PRECAST CONCRETE COLUMN - DARK GRAY CONCRETE
  - 2.22. PREFINISHED METAL COPING - MUSKET GRAY
  - 2.28. EXISTING BUILDING
  - 2.40. FIBERGLASS SANDWICH PANEL SYSTEM
  - 2.41. 6" CURTAIN WALL SYSTEM - BLACK ANODIZED
  - 2.42. 10 1/4" CURTAIN WALL SYSTEM - BLACK ANODIZED
  - 2.52. HSS EXTERIOR COLUMN - GALVANIZED, PRIMED AND PAINTED - PEPPERCORN
  - 2.62. METAL PANEL (MP2A) CLADDING - MUSKET GRAY
  - 2.65. METAL PANEL (MP5A) FASCIA - SANDSTONE
  - 2.66. CLEAR ANODIZED, FOLDED, PERFORATED, VERTICAL ALUMINUM SUNSHADE
  - 2.92. ARCHITECTURAL LOUVERS - MUSKET GRAY
  - 2.98. COVERED WALKWAY, GALVANIZED PRIME AND PAINTED STEEL STRUCTURE
  - 2.99. COVERED WALKWAY, GALVANIZED PRIME AND PAINTED STEEL STRUCTURE W/ DARK CONCRETE PIERS, POLYCARBONATE CANOPY

**BUILDING ELEVATIONS**  
 Clinical Lab Warehouse Expansion  
 12/23/19





Perspective  
Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14  
December 11, 2019

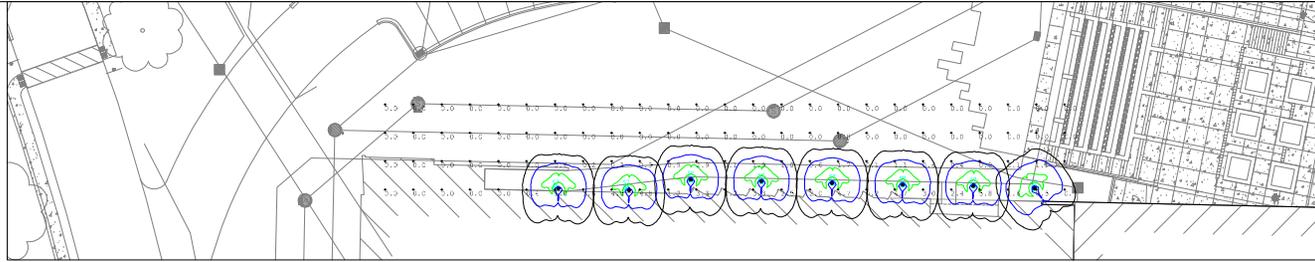


Perspective  
Exact Sciences Nexus One Clinical Lab Expansion - 2017.01.14  
December 11, 2019

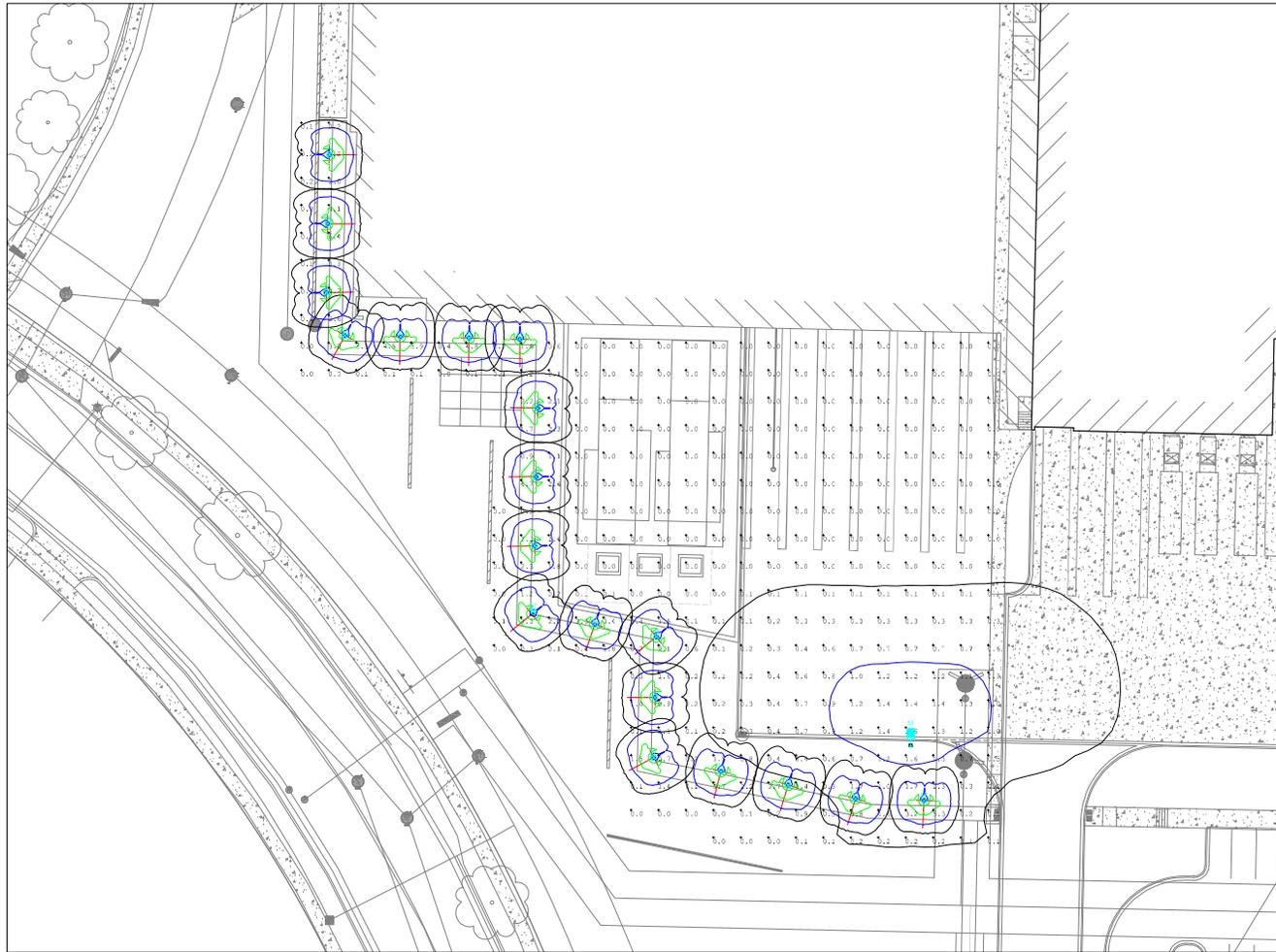








1 Nexus One North Side Lighting  
Scale: 1/8" = 1'-0"



2 Nexus One South Side Lighting  
Scale: 1/8" = 1'-0"

- 0.1 Footcandle
- 1.0 Footcandle
- 5.0 Footcandle



One Research Center Building  
201 Massachusetts Avenue, Suite 200  
Boston, MA 02115  
www.fathinc.com

Exact Sciences  
Nexus One  
Site Lighting Photometrics

PROJECT NUMBER: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
SCALE: \_\_\_\_\_

PROJECT NUMBER: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
SCALE: \_\_\_\_\_  
SHEET  
Photometrics





# KBR8 LED

## LED Specification Bollard

Catalog  
Number

Notes

Type

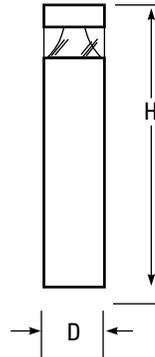
Hit the Tab key or mouse over the page to see all interactive elements.

### Specifications

8" Round  
(20.3 cm)

**Height:** 40"  
(101.6 cm)

**Weight (max):** 27 lbs  
(12.25 kg)



### Introduction

The KBR8 Bollard is a stylish, fully integrated LED solution for walkways. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 70% in energy savings over comparable 100W metal halide luminaires, the KBR8 Bollard is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

### Ordering Information

**EXAMPLE:** KBR8 LED 16C 700 40K SYM MVOLT DDBXD

KBR8 LED												
Series	LEDs	Drive current		Color temperature		Distribution		Voltage	Control options	Other options	Finish <i>(required)</i>	
KBR8 LED	Asymmetric 12C 12 LEDs <sup>1</sup>	350	350 mA	30K	3000 K	ASY	Asymmetric <sup>1</sup>	MVOLT <sup>5</sup>	<b>Shipped installed</b> PE Photoelectric cell, button type DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ELCW Emergency battery backup <sup>6</sup>	<b>Shipped installed</b> SF Single fuse (120, 277, 347V) <sup>4,7</sup> DF Double fuse (208, 240V) <sup>4,7</sup> H24 24" overall height H30 30" overall height H36 36" overall height FG Ground-fault festoon outlet L/AB Without anchor bolts (3 bolt base) L/AB4 4 bolt retrofit base without anchor bolts <sup>8</sup>	DWHXD	White
		450	450 mA <sup>3,4</sup>	40K	4000 K	SYM	Symmetric <sup>2</sup>	120 <sup>5</sup>			DNAXD	Natural aluminum
		530	530 mA	50K	5000 K			208 <sup>5</sup>			DDBXD	Dark bronze
	Symmetric 16C 16 LEDs <sup>2</sup>	700	700 mA	AMBPC	Amber phosphor converted			240 <sup>5</sup>			DBLXD	Black
				AMBLW	Amber limited wavelength <sup>3,4</sup>			277 <sup>5</sup>			DDBTXD	Textured dark bronze
								347 <sup>4</sup>			DBLBXD	Textured black
								DNATXD	Textured natural aluminum			
									DWHGXD	Textured white		

### Accessories

Ordered and shipped separately.

MRAB U Anchor bolts for KBR8 LED<sup>8</sup>

### NOTES

- 1 Only available in the 12C, ASY version.
- 2 Only available in the 16C, SYM version.
- 3 Only available with 450 AMBLW version.
- 4 Not available with ELCW.
- 5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
- 6 Not available with 347V. Not available with fusing. Not available with 450 AMBLW.
- 7 Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
- 8 MRAB U not available with L/AB4 option.



## Performance Data

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%.

Light Engines	Drive Current	System Watts	3000 K					4000 K					5000 K					Limited Wavelength Amber					
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	
Asymmetric 3 Engines (12 LEDs)	350	16	641	40	1	1	1	809	51	1	1	1	870	54	1	1	1						
	530	22	947	43	1	1	1	1,191	54	1	1	1	1,282	58	1	1	1						
	700	31	1,214	40	1	1	1	1,527	51	1	1	1	1,646	55	1	1	1						
	Amber 450	16																324	20	0	1	0	
Symmetric 4 Engines (16 LEDs)	350	20	888	44	1	0	0	1,116	56	1	0	0	1,203	60	1	0	0						
	530	28	1,254	45	1	0	0	1,598	57	1	0	1	1,719	61	1	0	1						
	700	39	1,608	41	1	0	1	2,022	52	1	0	1	2,180	56	2	0	1						
	Amber 450	20																374	19	0	0	0	

**Note:** Available with phosphor-converted amber LED's (nomenclature AMBPC). These LED's produce light with 97+% >530 nm. Output can be calculated by applying a 0.7 factor to 4000 K lumen values and photometric files.

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	0.98	0.97	0.95

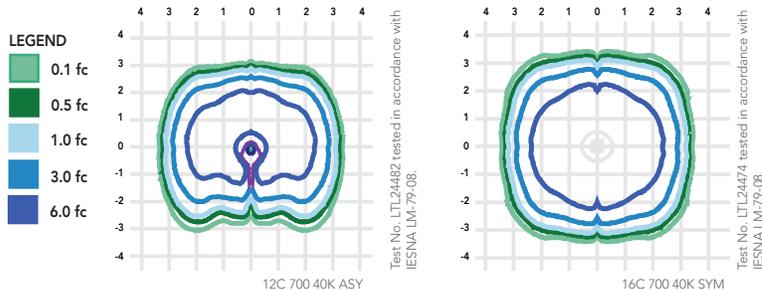
## Electrical Load

Light Engines	Drive Current (mA)	System Watts	Current (A)				
			120	208	240	277	347
12C	350	16W	0.158	0.118	0.114	0.109	0.105
	530	22W	0.217	0.146	0.136	0.128	0.118
	700	31W	0.296	0.185	0.168	0.153	0.139
	Amber 450	16W	0.161	0.120	0.115	0.110	0.106
16C	350	20W	0.197	0.137	0.128	0.121	0.114
	530	28W	0.282	0.178	0.162	0.148	0.135
	700	39W	0.385	0.231	0.207	0.185	0.163
	Amber 450	20W	0.199	0.139	0.130	0.123	0.116

## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [KBR8 Bollard homepage](#).

Isofootcandle plots for the KB LED Bollards. Distances are in units of mounting height (3').



## FEATURES & SPECIFICATIONS

### INTENDED USE

The rugged construction and clean lines of the KBA bollard is ideal for illuminating building entryways, walking paths, and pedestrian plazas, as well as any other location requiring a low mounting height light source with fully cutoff illumination.

### CONSTRUCTION

One-piece 8-inch round extruded aluminum shaft with thick side walls for extreme durability, a high-impact clear acrylic lens and welded top cap. Die-cast aluminum mounting ring allows for easy leveling even in sloped locations and a full 360-degree rotation for precise alignment during installation. Three 1/2" x 11" anchor bolts with double nuts and washers and 3/4" bolt circle template ensure stability. Overall height is 42" standard.

### FINISH

Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering for maximum retention of gloss and luster. A tightly controlled multi-stage process ensures a minimum 3-mil thickness for a finish that can withstand the elements without cracking or peeling. Available in both textured and non-textured finishes.

### OPTICS

Two fully cutoff optical distributions are available: symmetrical and asymmetrical. IP66 sealed LED light engine provides smoothly graduated illumination without any uplight. Light engines are available in standard 4000 K (>70 CRI) or optional 3000 K (>80 CRI) or 5000 K (67 CRI). Limited-wavelength amber LEDs are also available.

### ELECTRICAL

Light engines consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (L95/100,000 hours at 700mA at 25°C). Class 2 electronic drivers are designed for an expected life of 100,000 hours with < 1% failure rate. Electrical components are mounted on a removable power tray.

### LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated. Rated for -40°C minimum ambient. Cold-weather emergency battery backup rated for -20°C minimum ambient.

### WARRANTY

Five-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx).

**Note:** Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.





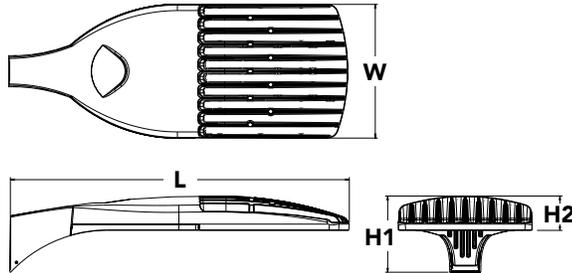
# D-Series Size 1 LED Area Luminaire

d#series



## Specifications

<b>EPA:</b>	1.01 ft <sup>2</sup> (0.09 m <sup>2</sup> )
<b>Length:</b>	33" (83.8 cm)
<b>Width:</b>	13" (33.0 cm)
<b>Height H1:</b>	7-1/2" (19.0 cm)
<b>Height H2:</b>	3-1/2"
<b>Weight (max):</b>	27 lbs (12.2 kg)



Catalog  
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

## Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

A+ Capable options indicated by this color background.

## Ordering Information

**EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD**

DSX1 LED							
Series	LEDs	Color temperature	Distribution	Voltage	Mounting		
<b>DSX1 LED</b>	<b>Forward optics</b> P1 P4 P7 P2 P5 P8 P3 P6 P9 <b>Rotated optics</b> P10 <sup>1</sup> P12 <sup>1</sup> P11 <sup>1</sup> P13 <sup>1</sup>	<b>30K</b> 3000 K 40K 4000 K 50K 5000 K	T1S Type I short T5VS Type V very short T2S Type II short T5S Type V short T2M Type II medium T5M Type V medium <b>T3S</b> Type III short T5W Type V wide T3M Type III medium BLC Backlight control <sup>2</sup> T4M Type IV medium LCCO Left corner cutoff <sup>2</sup> TFTM Forward throw medium RCCO Right corner cutoff <sup>2</sup>	<b>MVOLT</b> <sup>3</sup> 120 <sup>4</sup> 208 <sup>4</sup> 240 <sup>4</sup> 277 <sup>4</sup> 347 <sup>4</sup> 480 <sup>4</sup>	<b>Shipped included</b> <b>SPA</b> Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor <sup>5</sup> RPUMBA Round pole universal mounting adaptor <sup>5</sup> <b>Shipped separately</b> KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) <sup>6</sup>		
Control options				Other options	Finish (required)		
<b>Shipped installed</b> NLTAIR2 nLight AIR generation 2 enabled <sup>7</sup> PIRHN Network, high/low motion/ambient sensor <sup>8</sup> PER NEMA twist-lock receptacle only (controls ordered separate) <sup>9</sup> PER5 Five-pin receptacle only (controls ordered separate) <sup>9,10</sup> PER7 Seven-pin receptacle only (controls ordered separate) <sup>9,10</sup> DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) <sup>11</sup> DS Dual switching <sup>12,13,14</sup>				PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc <sup>15,16</sup> PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc <sup>15,16</sup> PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc <sup>15,16</sup> PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc <sup>15,16</sup> FAO Field adjustable output <sup>14</sup>			
				<b>Shipped installed</b> <b>HS</b> House-side shield <sup>17</sup> SF Single fuse (120, 277, 347V) <sup>4</sup> DF Double fuse (208, 240, 480V) <sup>4</sup> L90 Left rotated optics <sup>1</sup> R90 Right rotated optics <sup>1</sup> <b>Shipped separately</b> BS Bird spikes <sup>18</sup> EGS External glare shield <sup>18</sup>		DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white	



## Ordering Information

### Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>19</sup>
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>19</sup>
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>19</sup>
DSHORT SBK U	Shorting cap <sup>19</sup>
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5 <sup>17</sup>
DSX1HS 40C U	House-side shield for P6 and P7 <sup>17</sup>
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12 <sup>17</sup>
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) <sup>20</sup>
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) <sup>6</sup>

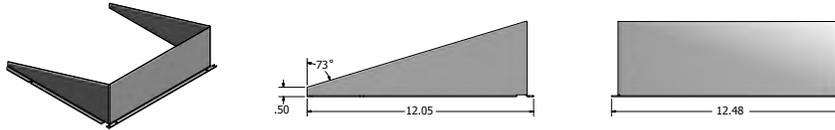
For more control options, visit [DTL](#) and [ROAM](#) online.

### NOTES

- P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
- Not available with HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31.
- Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
- Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
- Must be ordered with NLTAIR2. For more information on nLight Air 2 visit [this link](#).
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
- If ROAM<sup>®</sup> node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
- DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V.
- Provides 50/50 fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
- Requires (2) separately switched circuits with isolated neutral. See Outdoor Control Technical Guide for details.
- Reference Motion Sensor table on page 4.
- Reference controls options table on page 4 to see functionality.
- Not available with other dimming controls options
- Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table on page 3.
- For retrofit use only.

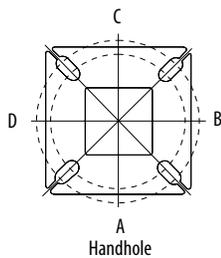
## Options

### EGS - External Glare Shield



## Drilling

### HANDHOLE ORIENTATION

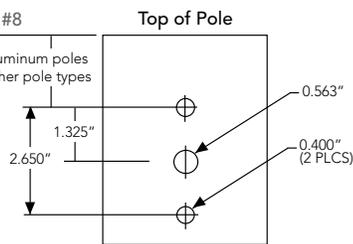


### Tenon Mounting Slipfitter\*\*

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
2-3/8"	SPA/RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
	SPUMBA	AS3-5 190	AS3-5 280	AS4-5 290	AS3-5 320	AS4-5 390	AS4-5 490
	RUPUMBA	AS3-5 190	AS3-5 280		AS3-5 320		
2-7/8"	SPA/RPA	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
	SPUMBA	AST25-190	AST25-280		AST25-320		
	RUPUMBA	AST25-190	AST25-280		AST25-320		
4"	SPA/RPA	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490
	SPUMBA	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490
	RUPUMBA	AST35-190	AST35-280		AST35-320		

### Template #8

1.75" for aluminum poles  
2.75" for other pole types



Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

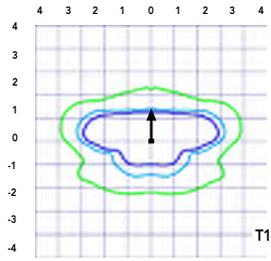
# Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [D-Series Area Size 1 homepage](#).

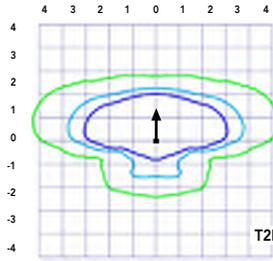
Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').

### LEGEND

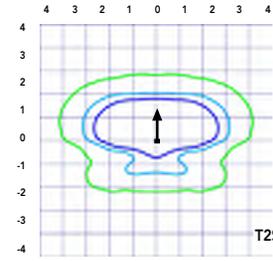
- 0.1 fc
- 0.5 fc
- 1.0 fc



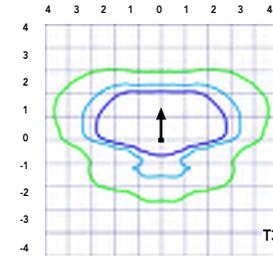
T1S  
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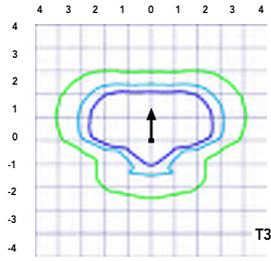
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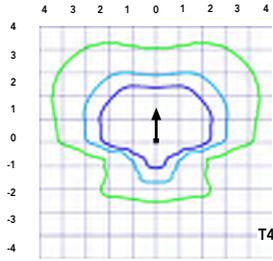
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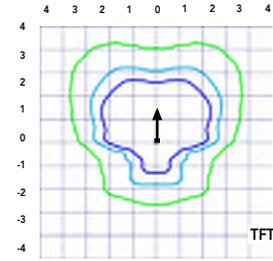
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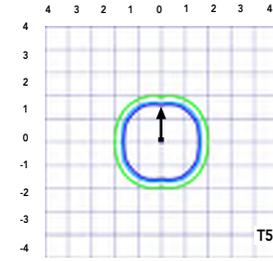
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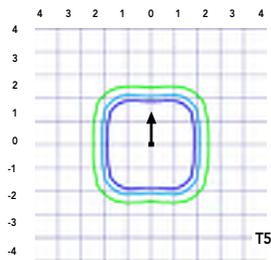
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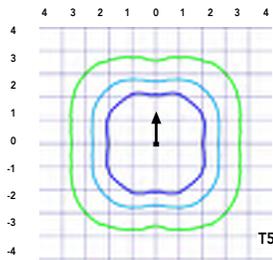
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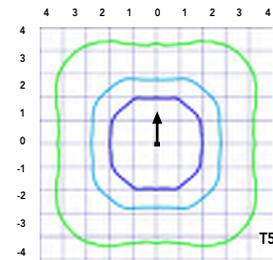
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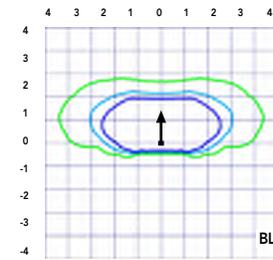
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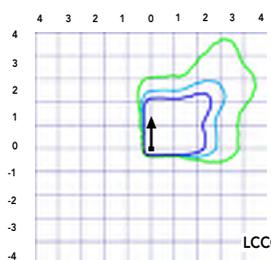
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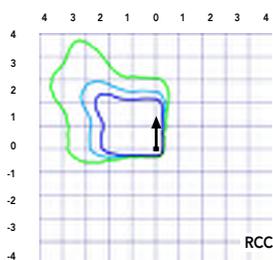
T5W  
Test No. LT.L23222 tested in accordance with IESNA LM-79-08.



BLC  
Test No. LT.L23271 tested in accordance with IESNA LM-79-08.



LCCO  
Test No. LT.L23211 tested in accordance with IESNA LM-79-08.



RCCO  
Test No. LT.L23164B tested in accordance with IESNA LM-79-08.

## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
<b>25°C</b>	<b>77°F</b>	<b>1.00</b>
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.96
50,000	0.92
100,000	0.85

#### Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

\*for use when motion sensor is used as dusk to dawn control.

### Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A)					
					120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

#### Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FA0	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FA0 device	Cannot be used with other controls options that need the 0-10V leads
DS	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclipse.	nLight Air rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

# Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts Contact factory for performance data on any configurations not shown here.

Forward Optics																			
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				TSVS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				TSW	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				TSVS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				TSW	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				TSVS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				TSW	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				TSVS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				TSW	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				TSVS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				TSW	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71



# Performance Data

## Lumen Output

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Forward Optics																			
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	P6	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				TSVS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				TSW	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	P7	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				TSVS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				TSW	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	P8	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				TSVS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				TSW	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	P9	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				TSVS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				TSW	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

Lumen Output

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Rotated Optics																			
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	P10	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				TSVS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				TSW	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	P11	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				TSVS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				TSW	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	P12	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				TSVS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				TSW	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	P13	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				TSVS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				TSW	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

## A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability<sup>1</sup>
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background<sup>1</sup>

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)

## FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft<sup>2</sup>) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### STANDARD CONTROLS

The DSX1 LED area luminaire has a number of control options. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programming and are suitable for mounting heights up to 30 feet.

### nLIGHT AIR CONTROLS

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found here.

### INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

### LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product.

Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.



## FEATURES & SPECIFICATIONS

**INTENDED USE** — These specifications are for USA standards only. Check with factory for Canadian specifications. Square Straight Steel is a general purpose light pole for up to 39-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

**CONSTRUCTION** — **Pole Shaft:** The pole shaft is of uniform dimension and wall thickness and is made of a weldable-grade, hot-rolled, commercial-quality steel tubing with a minimum yield of 55 KSI (11-gauge, .1196"), or 50 KSI (7-gauge, .1793"). Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4", 5" and 6".

**Pole Top:** A flush non-metallic black top cap is provided for all poles that will receive drilling patterns for side-mount luminaire arm assemblies or when ordered with PT option.

**Handhole:** A reinforced handhole with grounding provision is provided at 18" from the base on side A. Positioning the handhole lower may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal dimension of 2.5" x 5".

**Base Cover:** A durable ABS plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

**Anchor Base/ Bolts:** Anchor base is fabricated from steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Top threaded portion (nominal 12") is hot-dipped galvanized per ASTM A-153.

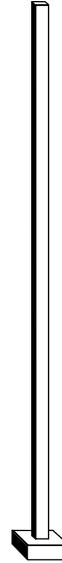
**HARDWARE** — All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

**FINISH** — Extra durable standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory-applied primer paint finish is available for customer field-paint applications.

**WARRANTY** — 1-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**NOTE:** Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Catalog Number
Notes
Type



Anchor Base Poles

**SSS**

**SQUARE STRAIGHT STEEL**

# SSS Square Straight Steel Poles

## ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example:** SSS 20 5C DM19 DDB

SSS Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness <sup>1</sup>	Mounting <sup>2</sup>	Options	Finish <sup>10</sup>	
SSS	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.)  See technical information table for complete ordering information.)	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793")  See technical information table for complete ordering information.)	<b>Tenon mounting</b> PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) <u>KAC/KAD/KSE/KSF/KVR/KVF Drill mounting<sup>3</sup></u> DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° <u>CSX/DSX/AERIS™/OMERO™/HLA/KAX Drill mounting<sup>3</sup></u> DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90°	<u>AERIS™ Suspend drill mounting<sup>3,4</sup></u> DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° <u>OMERO™ Suspend drill mounting<sup>3,4</sup></u> DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	<b>Shipped installed</b> L/AB Less anchor bolts (Include when anchor bolts are not needed) VD Vibration damper TP Tamper resistant handhole cover fasteners HAxy Horizontal arm bracket (1 fixture) <sup>5,6</sup> FDLxy Festoon outlet less electrical <sup>5</sup> CPL12/xy 1/2" coupling <sup>5</sup> CPL34/xy 3/4" coupling <sup>5</sup> CPL1/xy 1" coupling <sup>5</sup> NPL12/xy 1/2" threaded nipple <sup>5</sup> NPL34/xy 3/4" threaded nipple <sup>5</sup> NPL1/xy 1" threaded nipple <sup>5</sup> EHHxy Extra handhole <sup>7</sup> MAEX Match existing <sup>8</sup> USPOM United States point of manufacture <sup>9</sup> IC Interior coating <sup>10</sup> UL UL listed with label (Includes NEC compliant cover) NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled)  <b>Shipped separately (replacement kit available)</b> (blank) FBC Full base cover (plastic) (blank) TC Top cap (blank) HHC Handhole cover	<b>Standard colors</b> DDBXD Dark bronze DWHXD White DBLXD Black DMBXD Medium bronze DNAXD Natural aluminum  <b>Classic colors</b> DSS Sandstone DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue  <b>Architectural Colors and Special Finishes<sup>11</sup></b> Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

### NOTES:

- Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
- PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole.
- Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
- Insert "1" or "2" to designate fixture size; e.g. DM19AST2.

- Specify location and orientation when ordering option.  
For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".  
Example: 5ft = 5 and 20ft 3in = 20-3  
For "y": Specify orientation from handhole (A,B,C,D)  
Refer to the Handhole Orientation diagram below.  
Example: 1/2" coupling at 5' 8", orientation C = CPL12/S-8C
- Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxy. Example: HA20BD.

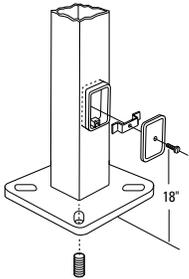
- Combination of tenon-top and drill mount includes extra handhole.
- Must add original order number of existing pole(s).
- Use when mill certifications are required.
- Provides enhanced corrosion resistance.
- Additional colors available; see [www.lithonia.com/archcolors](http://www.lithonia.com/archcolors) or Architectural Colors brochure (Form No. 794.3). Available by formal quote only, consult factory for details.

**TECHNICAL INFORMATION — EPA (ft<sup>2</sup>) with 1.3 gust**

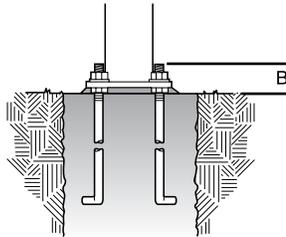
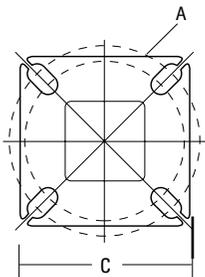
Catalog Number	Nominal Shaft Length (ft.)*	Pole Shaft Size (Base in. x Top in. x ft.)	Wall thick (in)	Gauge	EPA (ft <sup>2</sup> ) with 1.3 gust						Bolt circle (in)	Bolt size (in. x in. x in.)	Approximate ship weight (lbs.)
					80 MPH	Max. weight	90 MPH	Max. weight	100 MPH	Max. weight			
SSS 10 4C	10	4.0 x 10.0	0.1196	11	30.6	765	23.8	595	18.9	473	8-9	3/4 x 18 x 3	75
SSS 12 4C	12	4.0 x 12.0	0.1196	11	24.4	610	18.8	470	14.8	370	8-9	3/4 x 18 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.1196	11	19.9	498	15.1	378	11.7	293	8-9	3/4 x 18 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.1196	11	15.9	398	11.8	295	8.9	223	8-9	3/4 x 18 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.1196	11	12.6	315	9.2	230	6.7	168	8-9	3/4 x 18 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.1196	11	9.6	240	6.7	167	4.5	150	8-9	3/4 x 18 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.1793	7	14	350	11	275	8	200	8-9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.1196	11	17.7	443	12.7	343	9.4	235	10-12	1 x 36 x 4	185
SSS 20 5G	20	5.0 x 20.0	0.1793	7	28.1	703	21.4	535	16.2	405	10-12	1 x 36 x 4	265
SSS 25 4C	25	4.0 x 25.0	0.1196	11	4.8	150	2.6	100	1	50	8-9	3/4 x 18 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.1793	7	10.8	270	7.7	188	5.4	135	8-9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.1196	11	9.8	245	6.3	157	3.7	150	10-12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.1793	7	18.5	463	13.3	333	9.5	238	10-12	1 x 36 x 4	360
SSS 30 4G	30	4.0 x 30.0	0.1793	7	6.7	168	4.4	110	2.6	65	8-9	3/4 x 30 x 3	295
SSS 30 5C	30	5.0 x 30.0	0.1196	11	4.7	150	2	50	--	--	10-12	1 x 36 x 4	265
SSS 30 5G	30	5.0 x 30.0	0.1793	7	10.7	267	6.7	167	3.9	100	10-12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.1793	7	19	475	13.2	330	9	225	11-13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.1793	7	5.9	150	2.5	100	--	--	10-12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.1793	7	12.4	310	7.6	190	4.2	105	11-13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.1793	7	7.2	180	3	75	--	--	11-13	1 x 36 x 4	605

\* EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

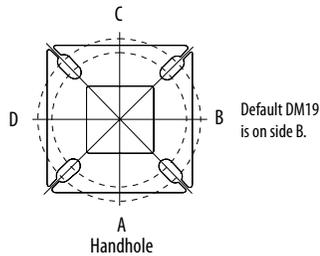
## BASE DETAIL



POLE DATA								
Shaft base size	Bolt circle A	Bolt projection B	Base diameter C	Base plate thickness	Template description	Anchor bolt description	Anchor bolt and template number	Anchor bolt description
4"C	8" - 9"	3.25" - 3.75"	8" - 8.25"	0.75"	ABTEMPLATE PJ50004	AB18-0	ABSSS-4C	3/4"x18"x3"
4"G	8" - 9"	3.38" - 3.75"	8" - 8.25"	0.875"	ABTEMPLATE PJ50004	AB30-0	ABSSS-4G	3/4"x30"x3"
5"	10" - 12"	3.5" - 4"	11"	1"	ABTEMPLATE PJ50010	AB36-0	ABSSS-5	1"x36"x4"
6"	11" - 13"	4" - 4.50"	12.5"	1"	ABTEMPLATE PJ50011	AB36-0	N/A	1"x36"x4"



### HANDHOLE ORIENTATION



### IMPORTANT INSTALLATION NOTES:

- Do not erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.