November 15, 2021

Plainfield Planning Board

Re: Kimball Union Academy Application for Relocation of the Kimball Barn

Executive Summary:

The Kimball Barn is located on the Kimball Union Academy campus between the Miller Bicentennial Hall and the Alumni Gym at the north end of the Gym Parking Lot. The Kimball Barn is believed to be one of the oldest buildings in Meriden, and it's timber frame construction methods date it prior to 1820. The Kimball Barn is currently used for storage and previously housed the School's Facilities Office. In the years prior, it has been used as a woodshop for a school work working program, and a "snack bar" for student socializing.

The building is approximately 30 x 40 feet and framed with hand-hewn timbers. In it's original configuration, it had an open first floor with a hayloft above. Approximately 10-15 years ago, structural reinforcements were added in the loft to support the roof under snow loads.

KUA plans to dismantle the building and reconstruct it on a site on the west side of Route 120 in the approximate location of where the old Penniman House once stood. The planned use of the building will be to house two athletic team rooms on the east side of the building to be used by visiting athletic teams during the Fall and Spring athletic seasons (approximately 650 s.f.). A 24 car parking lot will be constructed to the north of the building to accommodate vans and an occasional coach bus dropping off visiting team players, as well as spectator cars. By providing parking in this location, car and van traffic in the center of the campus will be reduced, and parking along the shoulder of Route 120 will be diverted into this new lot. The parking lot will use the existing curb cut/driveway entrance that remains from the Penniman House.

In addition to the athletic team rooms, the west side of the building will provide an open space (approximately 550 s.f.) for functions relating to athletic events and other small school related events. This space will also be used to highlight the School's history and provide marketing information for the School.

Utilities:

The project will utilize the existing sewer connection from the Penniman house that has a 6" main line running across the athletic fields. A new connection will be made to the water main which runs along the west side of Route 120 in the shoulder of the road. The Meriden Village Water District Commission has given preliminary approval for these utility connections.

Office of Operations & Planning

PO Box 188 • Meriden, NH 03770-0188
Tel 603-469-2158 • hulf@kua.org • www.kua.org

Site Design:

The Kimball Barn will be located approximately 113 feet to the south of the existing old Penniman House and 340 feet to the north of the centerline of Main Street. A 24 car parking area will be constructed to the north of the Kimball Barn with access by one entrance which re-uses the existing Penniman House driveway. The new parking lot will be able to accommodate coach bus drop-off, and have three appropriately sized spaces for the smaller 14-passenger vans.

The existing white fence and row of oak trees will be retained. New low hedges will be added to the east side of the parking lot to provide a visual barrier from Route 120. Existing crabapple trees will be removed to accommodate the parking area.

One to two porta-johns will be located at the north-west corner of the parking lot for public use. These will have a landscape screen to make them less visible from the parking lot and Route 120.

Drainage:

The parking surface will be graded to sheet drain to the south and west where it will disperse onto the athletic fields and follow the drainage pattern of the athletic fields. A curb will be placed across the south end of the parking lot to act as a barrier and divert water toward the athletic fields.

The Kimball Barn roof will drain onto drip edges on the eave sides of the building.

Site Lighting:

Area lighting for the parking lot will be accomplished with 5 small LED area lights mounted on 10 foot high poles. The fixtures produce approximately 3,700 lumens of “warm” light. The number of fixtures and their spacing will come close to replicating the light level of the full moon. There will be some exterior lighting on the Kimball Barn to highlight entries on the east and west side.

Intensity of Use:

The Kimball Barn and parking area will be used primarily for visiting team and guest parking during athletic events during the Fall and Spring seasons. There would be very little to no use during the Winter and Summer seasons. Athletic events take place primarily on Wednesday and Saturday afternoons, with occasional games taking place on Fridays. The highest possible vehicle number would be 6-8 14-passenger vans, and possibly enough cars to fill the remaining spaces. Although, typical volume would half of that number.

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Steve Halleran

From: Hunter Ulf [hulf@kua.org]
Sent: Monday, January 03, 2022 10:26 AM
To: Steve Halleran
Subject: KUA Kimball Barn Site
Attachments: SD Illustrative Site Plan - REVISED - 12-29-21[50].pdf

Hi Steve –

Hope your new year is off to a good start and you had a nice holiday!

I have a revised site plan for the Kimball Barn relocation. Please let me know how best to proceed with the site plan review. I assume that I will need to get on the agenda for the January meeting??

I have attached a copy of the revised site plan. It now shows two driveways with one-way traffic for each, and is fully engineered for coach buses.

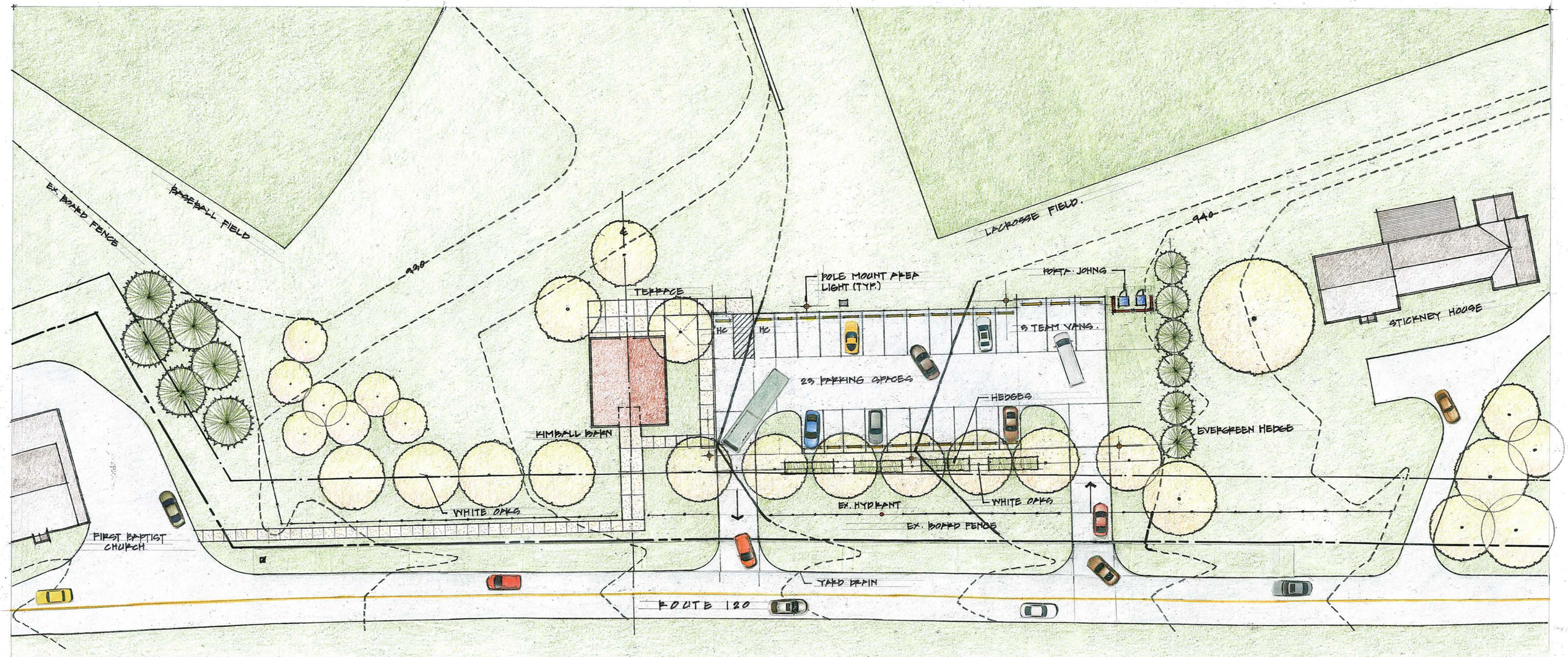
I spoke with Ross Wood at NH DOT a few weeks ago and explained to him that there were concerns raised by the Planning Board during site plan review and that a revised site plan was in the works. I indicated to him that I thought it might be best to make sure the planning board signs off on this before resubmitting it to NH DOT. He agreed and told me that there was not anything relating to the curb cuts as I described them, that concerned them. He also advised on driveway widths (18') and parking lot isle width (24').

Let me know how best to proceed.

Thanks,
Hunter

1813 Kimball Union Academy

M. Hunter Ulf, AIA
Chief Operating Officer
(603)469-2158
www.kua.org



0' 10' 30' 60' 90' 120'

ROUTE 120 · ATHLETIC FIELDS PARKING FACILITY

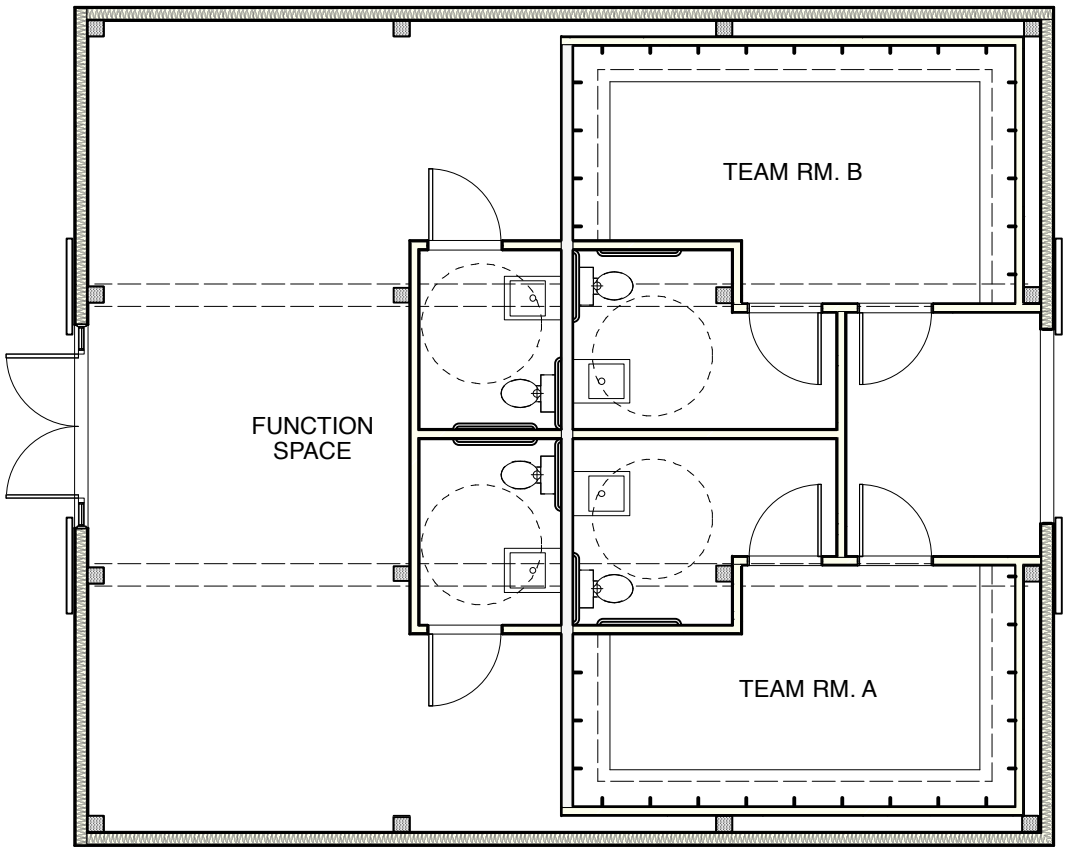
KIMBALL UNION ACADEMY, MERIDEN, NEW HAMPSHIRE

SCHEMATIC SITE PLAN

PATHWAYS CONSULTING, LLC

DECEMBER 21, 2021

REVISED: DECEMBER 29, 2021

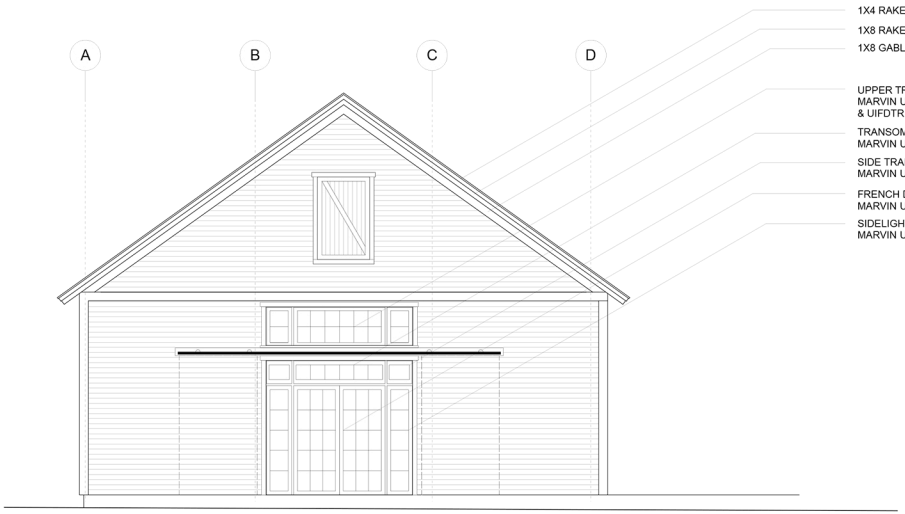


FLOOR PLAN

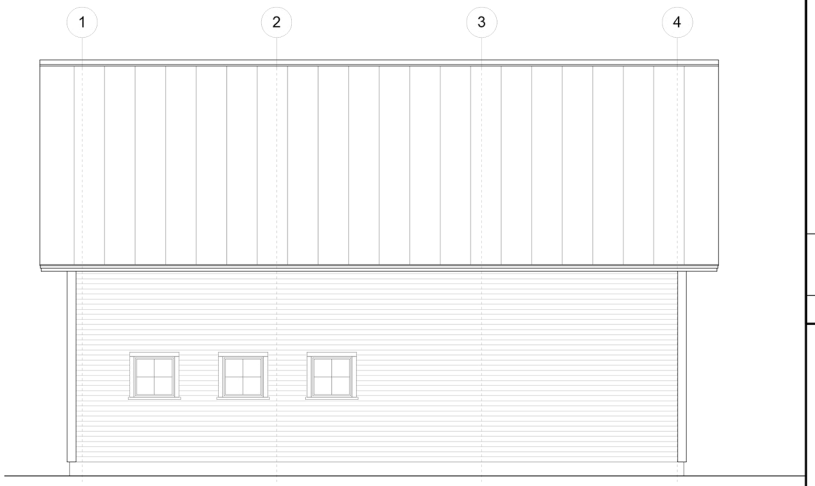
1/8" = 1' - 0"

N

KIMBALL BARN RENOVATION
KIMBALL UNION ACADEMY



21 WEST ELEVATION
Scale: 1/4" = 1'-0"



11 SOUTH ELEVATION
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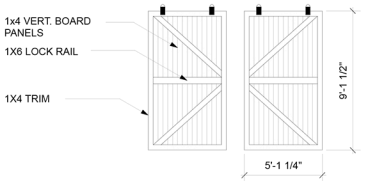
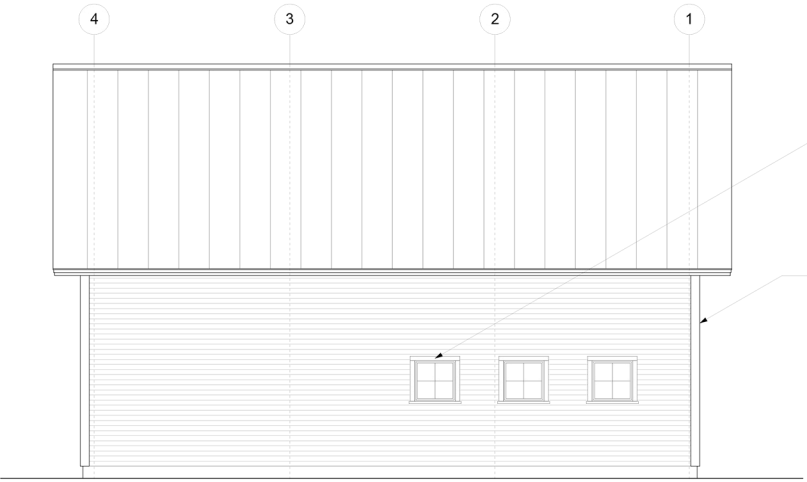
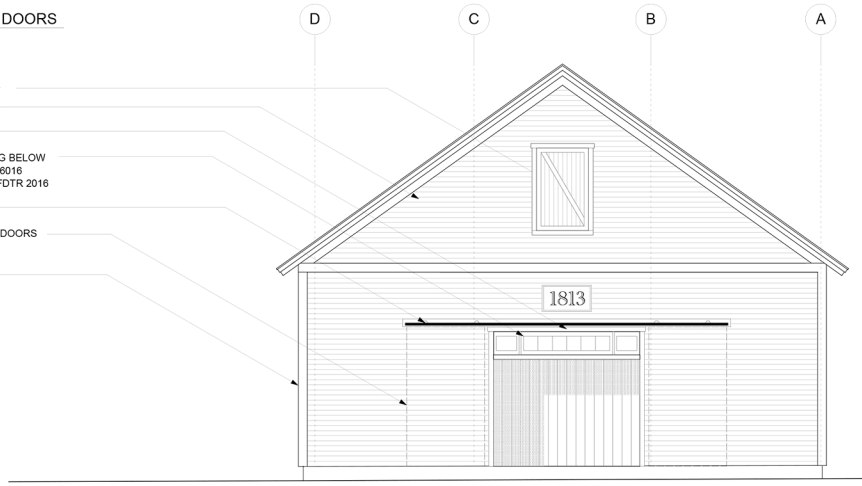


A ROLLING BARN DOORS
Scale: 1/4" = 1'-0"



20 NORTH ELEVATION
Scale: 1/4" = 1'-0"



10 EAST ELEVATION
Scale: 1/4" = 1'-0"

No.	Date.	Revision Description

Project: Kimball Barn Relocation & Renovation

Scale: 1/4" = 1' - 0"

1813 Kimball Union Academy
OFFICE OF FACILITIES & PLANNING

A3-01

ALED26Y/PC

Color: Bronze

Weight: 5.8 lbs

Project:	**Type:**
Prepared By:	**Date:**

Driver Info

Type	Constant Current
120V	0.22A
208V	0.13A
240V	0.11A
277V	0.10A
Input Watts	29.1W

LED Info

Watts	26W
Color Temp	3000K (Warm)
Color Accuracy	70 CRI
L70 Lifespan	100,000 Hours
Lumens	3,749
Efficacy	128.8 lm/W

Technical Specifications

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 0.22A, 208V: 0.13A, 240V: 0.11A, 277V 0.10A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

10.77% at 120V, 11.79% at 277V

Power Factor:

98.2% at 120V, 95.6% at 277V

ALED26 wtih Photocell:

120V Photocell included. Photocell is only compatible with 120V.

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Dark Sky Conformance:

Conforms to (allows for conformance to) the requirements for the IDA's "Fixture Seal of Approval" as of March 1, 2016.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.
DLC Product Code: P0000175Q

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Housing:

Precision die-cast aluminum housing, lens frame

Gaskets:

High-temperature silicone

Effective Projected Area:

EPA = 0.27.

Technical Specifications (continued)

Construction

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

LED Characteristics

Lumen Maintenance:

The LED will deliver 70% of its initial lumens at 100,000 hours of operation

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Patents:

The ALED design is protected by U.S. PATENT D608,040 and patents pending in the U.S., Canada, China, Taiwan and Mexico.

Equivalency:

Equivalent to 125W Pulse Start Metal Halide

Buy American Act Compliance:

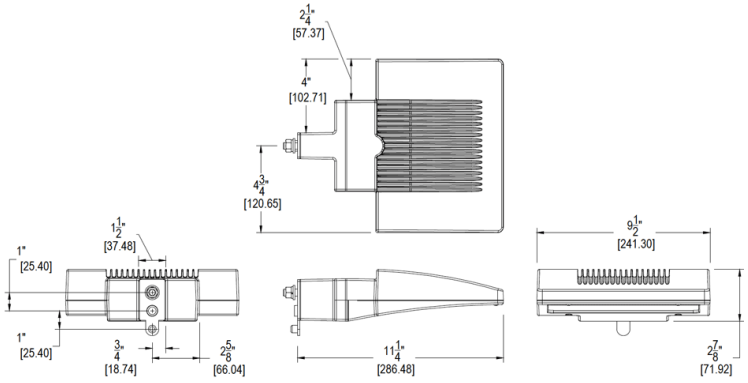
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G0

Dimensions



Features

- High output LED light engine
- Maintains 70% of initial lumens at 100,000-hours
- Weatherproof high temperature silicone gaskets
- Superior heat sinking with die cast aluminum housing and external fins