



Memorandum

April 12, 2018

TO: Planning and Zoning Commission
Julie Couch, Town Manager

FROM: Israel Roberts, AICP
Planning Manager

SUBJECT: **CONDITIONAL USE PERMIT FOR A SPORT COURT (TENNIS)**
(CASE #CUP2018-2)

BACKGROUND: This is a request for approval of a conditional use permit (CUP) for the construction of a sports court (tennis). The 1.18-acre site is located at 761 N. Creekwood Drive and is zoned for the (RE-1) One-Acre Ranch Estate District. Owner/Applicant: Tom and Nancy Lacey (Case #CUP2018-02).

STATUS OF ISSUE: The applicant is proposing to construct a 49'x115' tennis court (full size) in the backyard of a homesite that is currently under reconstruction. The court will be partially enclosed by a 10' tall vinyl coated chain link fence and screened on the western edge by a combination of a small retaining wall, a decorative metal fence and landscaping. The proposed court will be lighted with a series of LED, full-cutoff light fixtures mounted on a 20' tall pole.

The proposed tennis court will replace an existing lighted sand volleyball court.

Staff Analysis

- In the (RE-1) One-acre Ranch Estate District:
 - Setback for an accessory use is 30.' *The proposed tennis court is directly adjacent to the side property line, but will be separated by a small retaining wall and decorative metal fencing with growing vines for screening.*
 - Maximum lot coverage is 35%. *Including the proposed tennis court, the lot coverage is 34%, meeting the lot coverage requirement.*

- Lighting:
 - The applicant proposes to install a LED light fixture on a 20-foot tall pole. According to the lighting specifications and photometric plan provided, the light will produce a maximum of 50 foot-candles of light near the center of the proposed court. According to the US Tennis and Track Builders Association a minimum of 50 foot-candles is the minimum amount of light necessary for recreational tennis. Previously, the highest amount of light approved with a CUP has been 23-24 foot-candles on a multi-use sport court, in 2012.
 - As shown on the photometric plan, *without additional shielding*, a small amount of amount of light reaches the adjoining property lines. To prevent light trespass onto the adjacent property, shielding should be provided along the southwestern edge of the light fixtures.

- Screening:
 - To visually screen the proposed court from the adjacent property, the applicant has proposed a combination of a small retaining wall with a decorative metal fence planted with vines. To ensure year-round screening, the proposed vines should be a hardy to the area and be of an evergreen variety. According to the Texas A&M Agrilife Extension office, the best evergreen vine for North Central Texas is English Ivy. English Ivy provides small green leaves, is easy to grow at a moderate rate, and is self-clinging vine that is ideal for climbing walls and fences.

History

Since the adoption of the sport court ordinance in 2012, there have been six (6) requests for CUPs for sports court. Of the five that were approved, four had lighting. Most recently, in November 2017, the Town Council approved a CUP for a full size tennis court with lighting on Stallion Drive.

Public Input

The town has notified 24 adjacent property owners within 500 feet of the subject property, and to date, have not received any correspondence.

STAFF RECOMMENDATION: Staff recommends **APPROVAL** of the proposed conditional use permit with the following conditions:

1. Use, location and design of the proposed multi-use sport court generally conforms with the submitted site/landscape plan.
2. English Ivy shall be used for the screening ivy along the southwestern fence line. A hedgerow of Nelly R. Steven Holly shrubs, minimum 6-feet tall at the time of planting shall be installed along the southeastern edge of the proposed court to screen it form the street.
2. Light fixtures shall be mounted parallel to the ground. Additional mounted shielding is required on the southwest and southeast sides of the light fixtures to prevent light trespass onto adjacent properties.

ATTACHMENTS:

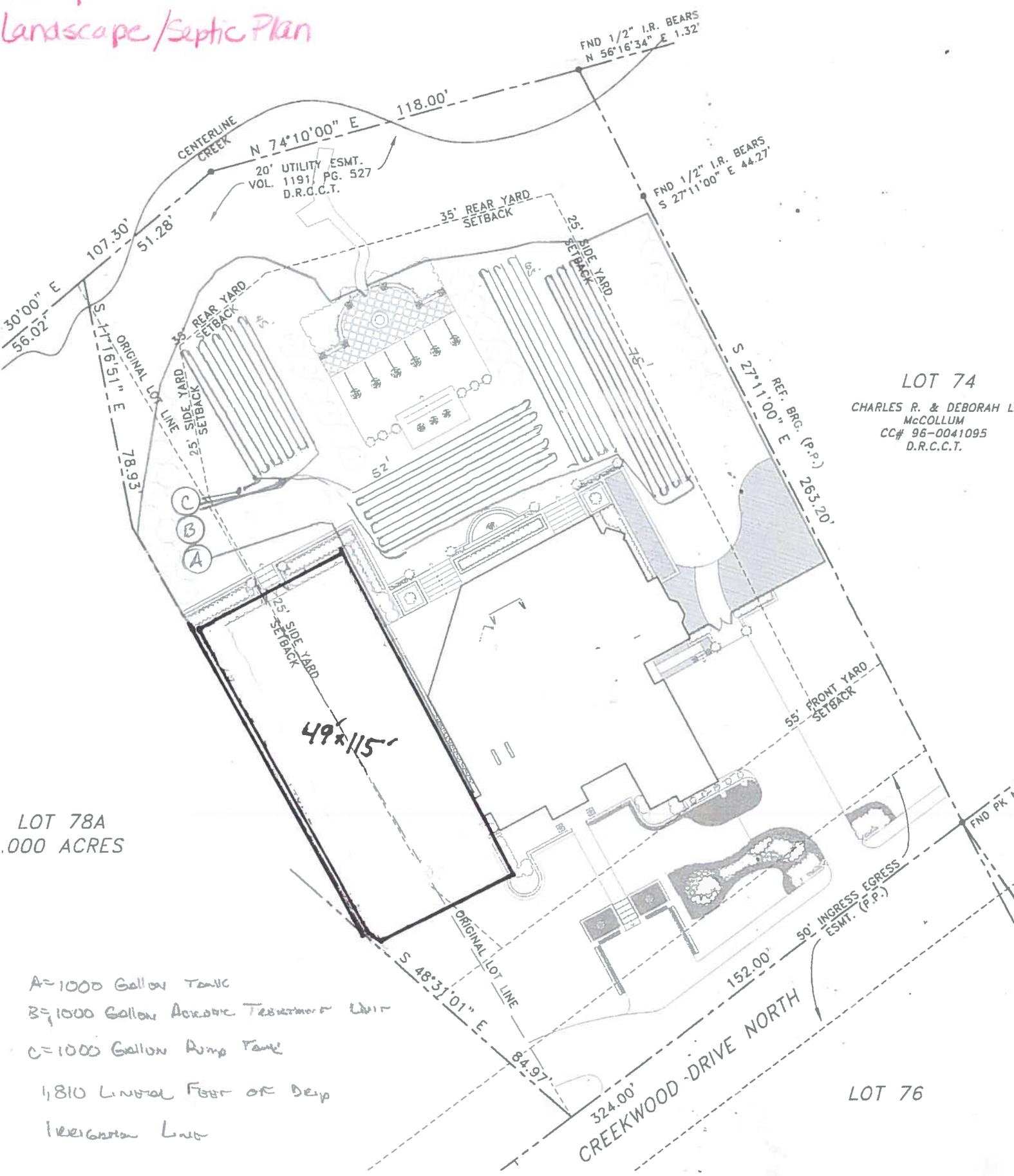
- Locator
- Exhibits



Subject

Creekwood Dr N

Lacey
Landscape/Septic Plan

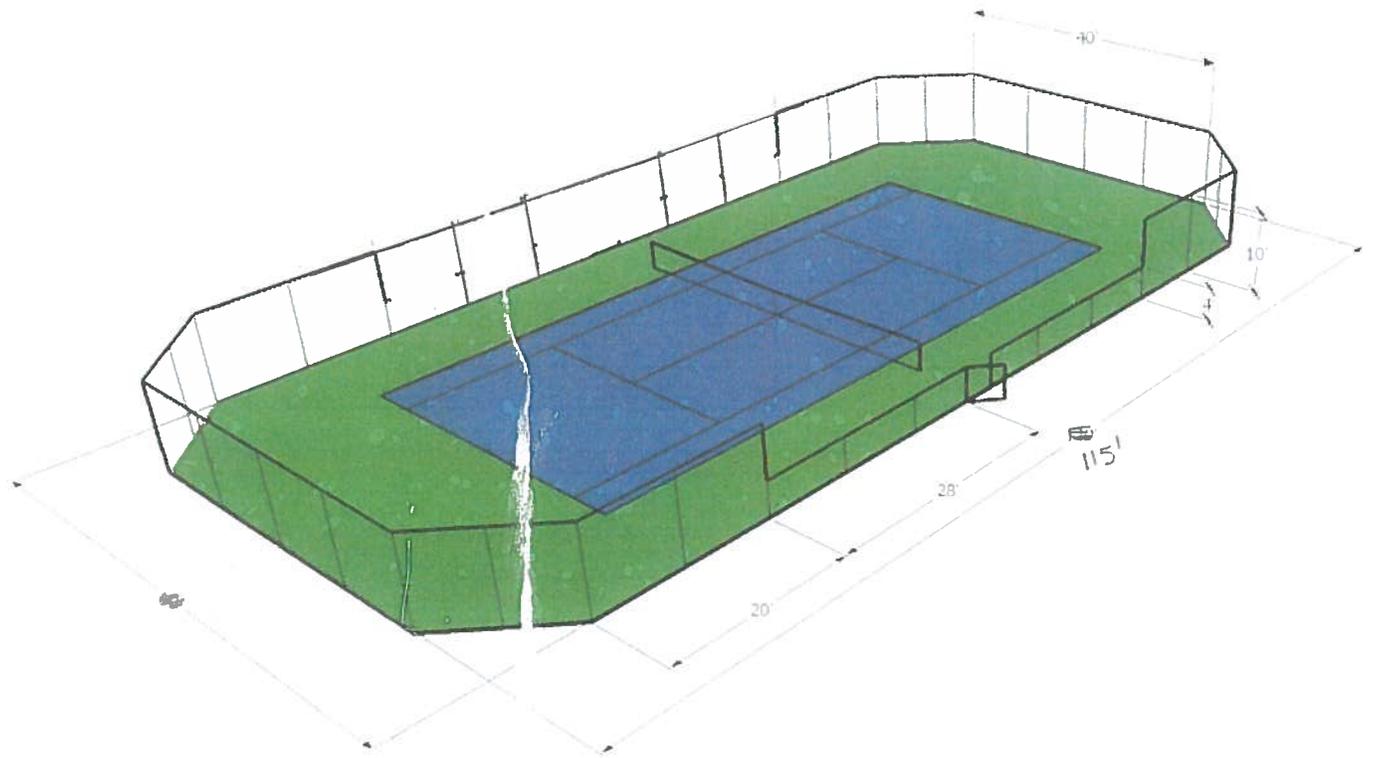


LOT 74
CHARLES R. & DEBORAH L. McCOLLUM
CC# 96-0041095
D.R.C.C.T.

LOT 78A
0.000 ACRES

- A=1000 Gallon Tank
- B=1000 Gallon Aerobic Treatment Unit
- C=1000 Gallon Pump Tank
- 1,810 Linear Feet of Deep Irrigation Line

761 CREEKWOOD DRIVE NORTH
FAIRVIEW, TX 75069



Fencing: graduated stone retaining wall (6ft to 3ft) around perimeter of court. Rod iron fencing placed on top of stone not to exceed 10 ft.

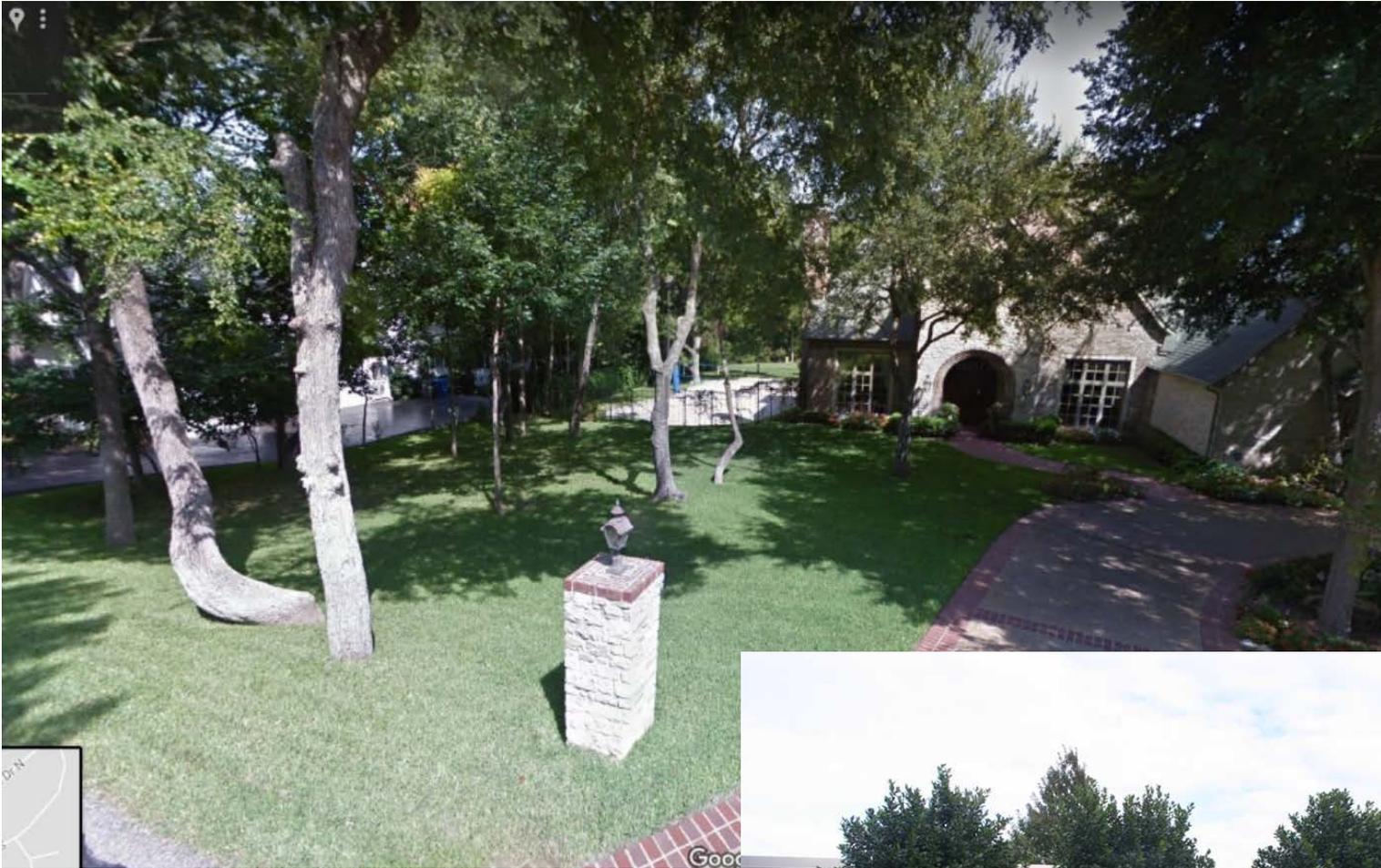


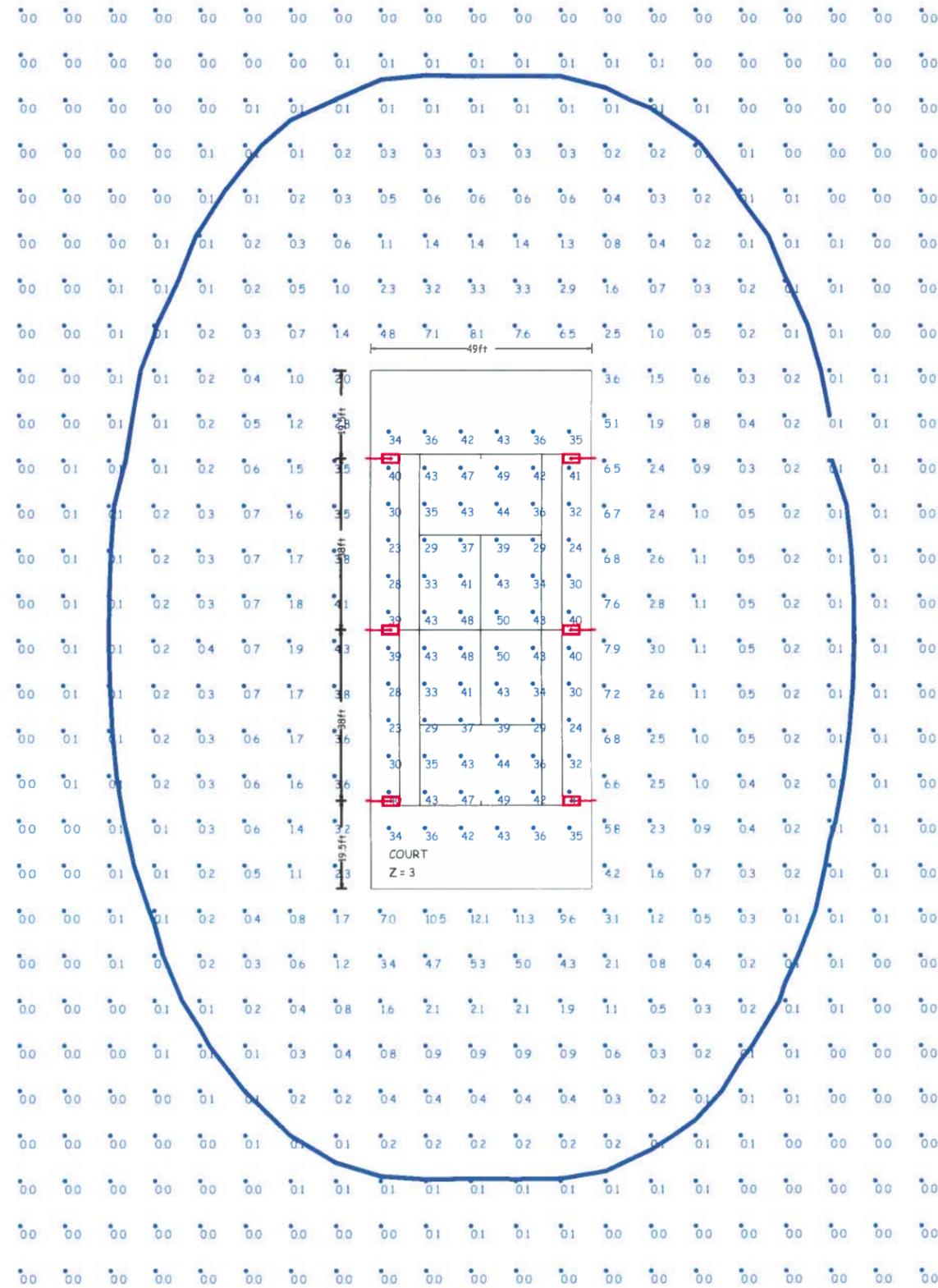
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Lighting: 6 LSI Court Blade Sports lighting-18 feet in height









Luminaire Schedule								
Project: LACEY								
Symbol	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Lum. Watts	Total Watts
	6	A	SINGLE	41895	0.900	XARL-FT-LED-HO-CW-HSS (COURTBLADE) @ 20' MTG. HT.	543.8	3262.8

Calculation Summary						
Project: LACEY						
Label	CalcType	Units	Avg	Max	Min	Max/Min
COURT	Illuminance	Fc	37.81	50	23	2.17
SPILL	Illuminance	Fc	0.71	12.1	0.0	N.A.

The light levels shown are maintained using a 90 light loss factor (LLF). Light loss factors are used to adjust the light output of a luminaire operating in a controlled laboratory environment to the output obtained under actual field conditions. The LLF used in these calculations includes both recoverable and non-recoverable factors. Recoverable factors include luminaire dirt depreciation (LDD). Non-recoverable factors include optical system variations and depreciation in initial luminaire lumen output. The use of the light loss factor shown requires making certain assumptions about the lighting system, the specific application, and the maintenance of the system over time. Therefore, actual light levels measured in the field may vary from the calculated values, especially in regards to individual location measurements.

Calculations use a LED Maintained Lamp Lumen factor based upon 50,000 hours of life, derived from IES TM21-11, and based upon an In-situ case temperature of 55°C.

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and / or architect must determine applicability of the layout to existing or future field conditions.

LSI INDUSTRIES
 10000 ALLIANCE ROAD
 CINCINNATI, OH 45242
 Voice Number: 513-666-4242
 Fax Number:
 Email Address: courtsider@lsi-industries.com



Filename: LACEY1.AGI
 Date: 3/26/2018

LED COURTBLADE (XARL)



DOE LIGHTING FACTS

Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

LIGHT OUTPUT - XARL			
		Lumens (Nominal) Type FT	Watts (Nominal)
Cool White	HO	58977 ¹	528
Neutral White	HO	56960 ²	528

LED Chips are frequently updated therefore values may increase.

- 1- Verified by ITL Report
ITL 86921 (Available upon request)
2- Verified by ITL Report
ITL 86920 (Available upon request)

US patent D726,947 7,828,456 8,002,428 8,177,386 8,434,893 8,567,983 and US & Int'l. patents pending

SMARTTEC™ - LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceed rated temperature.

ENERGY SAVING CONTROL OPTION - DIM - 0-10 volt dimming enabled with controls by others.

EXPECTED LIFE - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

LEDS - Select high-brightness LEDs in Cool White (5000K), or Neutral White (4000K) color temperature, 70 CRI.

DISTRIBUTION/PERFORMANCE - High performance, multi-faceted, reflector provides uniform Forward Throw (FT) distribution with sharp backlight cutoff. Photometric data is tested in accordance with IESNA guidelines

HOUSING - One-piece, die-formed aluminum housing contains factory prewired driver in a gasketed, weather-resistant wiring compartment. Hinged wiring access door (with safety lanyard) located underneath. Fixture is IP65 rated.

OPTICAL UNIT - Clear tempered optical-grade flat glass lens permanently sealed to weather-tight aluminum optic frame (includes pressure-stabilizing breather).

MOUNTING - The fixture is furnished with installed stainless steel, threaded mounting studs protruding from the rear of the housing. Stainless steel nuts and washers used to secure the fixture to the bracket are also included.

ELECTRICAL - Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277VAC (50/60Hz input) and 347-480 VAC.

DRIVER - Available in HO (High Output) drive current. Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can be easily accessed.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F)

FINISH - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.

WARRANTY - LSI LED fixtures carry a limited 5-year warranty.

PHOTOMETRICS - Please visit our web site at www.lsi-industries.com for detailed photometric data.

SHIPPING WEIGHT (in carton) - 55 lbs./24.9Kg

LISTING - UL listed to US and international safety standards. Suitable for wet locations.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



Fixtures comply with ANSI C136.31-2010 American National Standard for Roadway Lighting Equipment - Luminaire Vibration 1.5G requirements.



Project Name _____ Fixture Type _____
Catalog # _____

07/28/16
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