



**ADMINISTRATIVE SERVICES DEPARTMENT
Purchasing and Contracts Division**

**CONFIRMATION FORM
for
RECEIPT OF RFP NO. 604067-16**

If you are interested in this invitation, immediately upon receipt please fax this confirmation form to the fax number provided at the bottom of this page.

Failure to do so means you are not interested in the project and do not want any associated addenda mailed to you.

SUPPLIER ACKNOWLEDGES RECEIVING THE FOLLOWING RFP DOCUMENT:

PROJECT NO. RFP NO. 604067-16 RFP PAGES: 22

DESCRIPTION: LED LIGHTING QUALIFIED PRODUCT LIST

SUPPLIER MUST COMPLETE THE FOLLOWING INFORMATION:

Company Name: _____

Company Address: _____

City / State / Zip: _____

Name / Title: _____

Area Code/Phone Number: _____

Area Code/Fax Number: _____

Email Address: _____

FAX THIS CONFIRMATION FORM TO: (702) 386-4914

TYPE or PRINT CLEARLY

CLARK COUNTY, NEVADA REQUEST FOR PROPOSAL

RFP NO. 604067-16 LED LIGHTING QUALIFIED PRODUCT LIST

The RFP package is available as follows:

- Internet – Visit the Clark County Purchasing and Contracts Division website at <http://www.ClarkCountyNV.gov/Purchasing>. Click on “Current Opportunities” and locate Document No. 604067 in the list of current solicitations.
- Mail – Please fax a request to (702) 386-4914 specifying project number and description. Be sure to include company address, phone and fax numbers.
- Pick up - Clark County Government Center, 500 South Grand Central Parkway, Purchasing and Contracts Division, Fourth Floor, Las Vegas, NV 89106.

A Mandatory Pre-Proposal Conference will be held on **JULY 20, 2016** at **9:00 a.m.**, at the address specified above in the Gold Conference Room. If your firm is unfamiliar with the County Request for Proposal (RFP) procedures and would like to obtain training on the submittal process for this RFP, please contact Thomas Boldt, Senior Purchasing Analyst, at tboldt@clarkcountynv.gov no later than **TUESDAY, JULY 19, 2016**, and a training session will be provided immediately following the pre-proposal conference referenced above.

Proposals will be accepted at the Clark County Government Center address specified above, on or before **AUGUST 12, 2016** at **3:00:00 p.m.**, based on the time clock at the Clark County Purchasing and Contracts front desk.

PUBLISHED:
Las Vegas Review Journal
July 1, 2016

GENERAL CONDITIONS

RFP NO. 604067-16 LED LIGHTING QUALIFIED PRODUCT LIST

1. TERMS

The term "COUNTY," as used throughout this document will mean the County of Clark, Nevada. The term "BCC" as used throughout this document will mean the Board of County Commissioners which is the Governing Body of Clark County. The term "CHIEF FINANCIAL OFFICER" as used throughout this document will mean the Clark County Chief Financial Officer or her designee responsible for the Purchasing and Contracts Division. The term "PROPOSER" as used throughout this document will mean the respondents to this Request for Proposal. The term "RFP" as used throughout this document will mean Request for Proposal. The term "QPL" as used throughout this document will mean Qualified Product List.

2. INTENT

County is soliciting proposals to evaluate Light Emitting Diode (LED) street lighting fixtures for 60', 80', and 100' right-of-way streets that meet lighting levels in conformance with the ANSI/IESNA RP-08-14 Roadway Lighting Guide. Additionally County is soliciting proposals to establish a QPL of approved fixtures for use in the replacement of existing HPS fixtures and for future new street lighting installations.

3. SCOPE OF PROJECT

The scope of the project is to verify proposals for LED street lighting fixtures for 60', 80', and 100' right-of-way streets and to establish a QPL for each size street. The evaluation will be done in two phases.

During the first phase, the proposer may submit a proposal for each fixture for any or all size streets that they would like to be considered for inclusion in the QPL. The proposal(s) will be reviewed to verify whether the submitted proposal(s) for the fixtures meets the specifications required for this RFP. Note that supporting documentation showing that the proposed fixtures meet the specifications must be provided with the accompanying specification form.

The second phase shall be an evaluation of the proposed fixtures that met all specifications from the first phase. The proposer shall supply one (1) test fixture, for each product submitted, for testing and evaluation at no cost to the County. Only the proposals that are accepted during the first phase will be required to supply the test fixtures.

Proposals that pass both phases of the evaluation process shall be included in the QPL.

4. DESIGNATED CONTACTS

COUNTY'S representative will be Jim Benoit, Project Manager, Clark County Department of Public Works Traffic Management Division, email jbenoit@clarkcountynv.gov. This representative will respond to questions concerning the scope of work of this RFP. Questions regarding the selection process for this RFP may be directed to Thomas Boldt, Senior Purchasing Analyst, Clark County Administrative Services Department, Purchasing and Contracts Division, email tboldt@clarkcountynv.gov.

5. CONTACT WITH COUNTY DURING RFP PROCESS

Communication between a PROPOSER and a member of the BCC or between a PROPOSER and a non-designated COUNTY contact regarding the selection of a proponent or inclusion to the QPL is prohibited from the time the RFP is advertised until the item is posted on an approved QPL. Questions pertaining to this RFP shall be addressed to the designated contact(s) specified in the RFP document. Failure of a PROPOSER, or any of its representatives, to comply with this paragraph may result in their proposal being rejected.

6. TENTATIVE DATES AND SCHEDULE

Phase I

Mandatory Pre-Proposal Meeting: July 20, 2016, 9:00 a.m. Pacific, Gold Conference Room

Last Day to Ask Questions: July 27, 2016

Last Day County Will Provide Addendum: July 29, 2016

Proposal Due Date: August 12, 2016, 3:00:00 p.m. Pacific

Review of proposals [30 days]

Phase II

Request of Test Fixtures: September 2016

Delivery time of test fixture: [10 days]

Evaluation of test fixtures: [14 days]

QPL Established: November 2016

7. METHOD OF EVALUATION AND AWARD

The evaluation will be done in two phases. In the first phase the proposals will be submitted and then reviewed for compliance with the technical specifications for 60', 80' and 100' right-of-way streets as appropriate. For proposals that pass the first phase of the evaluation the County will require the proposers to provide one (1) test fixture for each product proposed, at no cost to the County, within 10 calendar days from notification by County. During the second phase of the evaluation the fixtures will be tested and evaluated to ensure that the submitted fixtures perform and meet the specifications as required. The performance characteristics and components of the test fixtures submitted for evaluation shall represent the product proposed and intended for inclusion on the QPL. Any product supplied and found not meeting the specifications shall be rejected and will not be considered for inclusion on the QPL. Test fixtures may be retained by County until QPL is established. Proposer shall guarantee that the product provided to County shall be new, and of the latest and most improved model of current production, and shall be of first quality as to workmanship and materials used in said units. A new product is defined as a product that is made up of unused, genuine, original parts. The product shall not have been operated for any purpose other than routine operational testing. A demonstrator product does not meet this definition and is not acceptable. Proposals that pass the two phases of evaluation shall be placed on the QPL.

The proposals will be reviewed by Clark County Department of Public Works. COUNTY reserves the right to establish the QPL based on objective and/or subjective evaluation criteria. The QPL will be established based on those proposals that pass both phases of the evaluation process. COUNTY also reserves the right not to establish a QPL if it is deemed that no single proposal fully meets the requirements of this RFP.

8. DEVIATIONS TO TECHNICAL SPECIFICATIONS

Any deviation taken at the time of or after proposal submittal may render the proposal non-responsive.

9. SUBMITTAL REQUIREMENTS

All proposals shall be bound with tabbed dividers labeled by section to correspond with the evaluation information requested. The ideal proposal will be 3-hole punched and bound with a binder clip. Binders or spiral binding is not preferred or required.

Proposers may submit a proposal for each fixture for any or all size streets that they would like to be considered for inclusion in the QPL.

Proposals shall include the Proposal Form, Attachments 1 through 2, and supporting documentation for the Technical Specifications. These documents, together, comprise a proposal. Omission of, or failure to complete, any portion of the required documents at the time of proposal opening may be cause to reject the entire proposal.

All proposals must be submitted on the Proposal Form provided in this document. **All figures must be written in ink or typed.** Figures written in pencil or containing erasures are not acceptable and may be rejected. However, mistakes may be crossed out and corrections may be inserted adjacent thereto and initialed in ink by the person signing the proposal form.

Proposers may submit more than one proposal as long as all such proposals comply with, or exceed, the proposal terms, conditions and specifications.

Any additional agreements, terms, conditions, or exceptions to the proposal requirements or specifications that are submitted with Proposer's Proposal Form may be considered substantial deviations from the proposal requirements and be cause for rejection.

The PROPOSER shall submit one (1) clearly labeled original, one (1) copy of their proposal, and one (1) CD or flash drive with an electronic copy of their proposal, preferably in .pdf format. A single .pdf document of the entire proposal is preferred. The name of the PROPOSER'S firm shall be indicated on the CD or flash drive label.

All proposals must be submitted in a sealed envelope plainly marked with the name and address of the PROPOSER and the RFP number and title. No responsibility will attach to COUNTY or any official or employee thereof, for the pre-opening of, post-opening of, or the failure to open a proposal not properly addressed and identified. Proposals are time-stamped upon receipt. Proposals time-stamped after 3:00:00 p.m. based on the time clock at the Clark County Purchasing and Contracts front desk will be recorded as late, remain unopened and be formally rejected. FAXED OR ELECTRONIC SUBMITTALS ARE NOT ALLOWED AND WILL NOT BE CONSIDERED.

The following are detailed delivery/mailling instructions for proposals:

Hand Delivery

Clark County Government Center
Purchasing and Contracts Division
500 South Grand Central Parkway, 4th Fl
Las Vegas, Nevada 89106

U.S. Mail Delivery

Clark County Government Center
Attn: Purchasing and Contracts, 4th Fl
500 South Grand Central Parkway
P.O. Box 551217
Las Vegas, Nevada 89155-1217

Express Delivery

Clark County Government Center
Attn: Purchasing and Contracts, 4th Fl
500 South Grand Central Parkway
Las Vegas, Nevada 89106

Regardless of the method used for delivery, PROPOSER(S) shall be wholly responsible for the timely delivery of submitted proposals.

10. WITHDRAWAL OF PROPOSAL

PROPOSER(S) may request withdrawal of a posted, sealed proposal prior to the scheduled proposal opening time provided the request for withdrawal is submitted to the Purchasing Analyst in writing or a proposal release form has been properly filled out and submitted to the Purchasing and Contracts Division reception desk. Proposals must be re-submitted and time-stamped in accordance with the RFP document in order to be accepted.

No proposal may be withdrawn for a period of 90 calendar days after the date of proposal opening. All proposals received are considered firm during this period. The PROPOSER'S proposal(s) will expire after 90 calendar days.

If a PROPOSER intended for consideration withdraws their proposal, that PROPOSER may be deemed non-responsible if responding to future solicitations.

11. REJECTION OF PROPOSAL

COUNTY reserves the right to reject any and all proposals received by reason of this request.

12. PROPOSAL COSTS

There shall be no obligation for COUNTY to compensate PROPOSER(S) for any costs of responding to this RFP.

13. ALTERNATE PROPOSALS

Alternate proposals are defined as those that do not meet the requirements of this RFP. Alternate proposals will not be considered.

14. ADDENDA AND INTERPRETATIONS

A. If it becomes necessary to revise any part of this RFP, a written addendum will be provided to all PROPOSERS from the Purchasing Analyst. COUNTY is not bound by any oral representations, clarifications, or changes made in the written requirements or specifications by COUNTY'S employees, unless such clarification or change is provided to PROPOSERS in written addendum form from the Purchasing and Contracts Division.

B. Proposer(s) shall take no advantage of any apparent error or omission in the Proposal Documents. In the event Proposer(s) discover such an error or omission, they shall immediately notify County. County will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Proposal Documents through the issuance of an addendum.

C. Addenda shall be available via mail, certified mail, fax, online or pick up by all prospective proposers.

D. Prior to submission of the proposal, Proposer shall ascertain that it has received all Addenda issued. Proposer shall acknowledge receipt of each Addendum by completing the acknowledgement space provided on the Proposal Form. Failure to acknowledge receipt of all addenda and use of the correct proposal form as required may result in rejection of proposal.

15. PUBLIC RECORDS

COUNTY is a Public Agency as defined by State Law, and as such, is subject to the Nevada Public Records Law (Chapter 239 of the Nevada Revised Statutes). Under the law, all of COUNTY'S records are public records (unless otherwise declared by law to be confidential) and are subject to inspection and copying by any person. However, in accordance with NRS 332.061(2), a proposal that requires negotiation or evaluation by COUNTY may not be disclosed until the proposal is recommended for award of a Contract.

16. PROPOSALS ARE NOT TO CONTAIN CONFIDENTIAL / PROPRIETARY INFORMATION

Proposals must contain sufficient information to be evaluated and a contract written without reference to any confidential or proprietary information. PROPOSER(S) shall not include any information in their proposal that they would not want to be released to the public. Any proposal submitted that is marked "Confidential" or "Proprietary," or that contains materials so marked, will be returned to the PROPOSER and will not be considered for award.

17. COLLUSION AND ADVANCE DISCLOSURES

Pursuant to 332.165 evidence of agreement or collusion among PROPOSER(S) and prospective PROPOSER(S) acting to illegally restrain freedom of competition by agreement to bid a fixed price, or otherwise, shall render the offers of such PROPOSER(S) void.

Advance disclosures of any information to any particular PROPOSER(S) which gives that particular PROPOSER any advantage over any other interested PROPOSER(S), in advance of the opening of proposals, whether in response to advertising or an informal request for proposals, made or permitted by a member of the governing body or an employee or representative thereof, shall operate to void all proposals received in response to that particular request for proposals.

18. EVALUATION CRITERIA

Proposals should contain the following information:

A. **Organizational Information**

- i. Provide your organization's name, address, internet URL (if any), telephone and fax numbers, include the name, title, direct phone number and address, and E-mail address of the individual who will serve as your organization's primary contact as outlined in Attachment 1.
- ii. Indicate if your firm is a minority-owned business, women-owned business, physically challenged business, small business, or a Nevada business enterprise as defined in Attachment 2.
- iii. The proposer shall provide the latest printed specifications, advertising literature, test data, and exhibits on the product(s) offered on its proposal.

B. **Rejection of Proposal**

County reserves the right to reject any and all proposals received by reason of this RFP. County reserves the right to waive any minor informality or irregularity.

C. **Disqualification of Proposers**

Proposers may be disqualified and their proposals may be rejected for any of, but not limited to, the following causes:

- i. Failure to use the specified Proposal Form furnished by County.
- ii. Lack of signature by an authorized representative.
- iii. Failure to properly complete the Proposal Form.
- iv. Evidence of collusion among Proposers.
- v. Unauthorized alteration to content of the Proposal Form.
- vi. Failure to acknowledge all addenda issued.

D. **Proposal Fee**

All costs incurred in the preparation and submission of responses to this invitation to propose shall be the responsibility of the Proposer. There will be no payment for any test fixture submitted for evaluation, all test fixtures will be supplied to the County for evaluation free of charge. The Proposer shall pay for shipping all test fixtures to the County and for return of the fixtures to supplier after evaluation. Upon notification by the County that the fixtures are ready to be returned the Proposer shall arrange for pickup, and shall provide for postage and shipping labels for all fixtures.

E. **Notice of Inclusion in QPL**

County will notify all proposers, whose proposals pass the two phases of the evaluation, in writing of "Inclusion to QPL." This notice will confirm County's determination that the proposals listed have passed the two phases of the evaluation process. The County does not guarantee that any product listed on the QPL will be purchased for use.

County will notify all proposers, whose proposals do not pass any one of the two phases of the evaluation, in writing of County's rejection of proposal. This notice will confirm County's determination that the proposals listed have not passed one of the evaluation phases.

F. **Term of QPL**

The initial term of the QPL shall be two (2) years from the date of notice of inclusion in QPL. During the term of the QPL, any product that has been altered from the original specifications as outlined in this proposal or has been discontinued from production shall be removed from the County's QPL. Should a proposer submit a newer fixture as an equivalent replacement for a fixture that is about to be discontinued and removed, then the County shall be the sole judge as to whether the proposed equivalent replacement fixture is considered by the County as equivalent because it either meets or exceeds the requirements as set forth in these specifications. The responsibility to qualify an equivalent replacement fixture as being an equal product lies with the proposer to provide the County with all necessary data, and line by line comparison of compliance with the technical specifications, certifications, testing and compliance requirements from various state, federal testing laboratories and agencies as required by the County. Any proposer that proposes equivalent replacement fixtures must submit the complete comparison documentation with the submittal for substitution or the County will reject that proposer's entire submittal. Proposer may only submit one replacement fixture proposal for each one fixture that is being discontinued. During the initial term only manufacturer's fixtures that are submitted as replacements for fixtures that they currently have on the QPL will be considered for inclusion to the QPL, no new proposals will be accepted.

G. QPL Renewal

County reserves the option to renew the QPL for up to an additional three (3), one (1) year periods from its expiration date. The current proposals shall remain in effect through the proposal renewal periods. During the terms of QPL renewals, any product that has been altered from the original specifications as outlined in this proposal or has been discontinued from production shall be removed from the County's QPL. Should a proposer submit a newer fixture as an equivalent replacement for a fixture that is about to be discontinued and removed, then the County shall be the sole judge as to whether the proposed equivalent replacement fixture is considered by the County as equivalent because it either meets or exceeds the requirements as set forth in these specifications. The responsibility to qualify an equivalent replacement fixture as being an equal product lies with the proposer to provide the County with all necessary data, and line by line comparison of compliance with the technical specifications, certifications, testing and compliance requirements from various state, federal testing laboratories and agencies as required by the County. Any proposer that proposes equivalent replacement fixtures must submit the complete comparison documentation with the submittal for substitution or the County will reject that proposer's entire submittal. Proposer may only submit one replacement fixture proposal for each one fixture that is being discontinued. During the renewal periods only manufacturer's fixtures that are submitted as replacements for fixtures that they currently have on the QPL will be considered for inclusion to the QPL, no new proposals will be accepted.

60' - TECHNICAL SPECIFICATIONS

ROADWAY LED FIXTURES FOR 60' R/W

Name of Firm

PROJECT NAME

INTENT:

The intent of these specifications is to provide a minimum standard for Light Emitting Diode (LED) outdoor lighting on roadways with 60 foot or less, right of way. Each LED fixture shall be replacing a 100W HPS mounted at a height of 32 feet. The roadway luminaires offered shall be new and unused.

These specifications shall be construed as minimum requirements. Should the manufacturer's current published data or specifications exceed these, as determined and approved by the Owner, they shall be considered as minimum specifications and be furnished by the Bidder.

BIDDERS MUST RETURN THE ORIGINAL OR A PHOTOCOPY OF THIS FORM AND MAKE AN ENTRY FOR EACH SPECIFICATION IN THE SPACE PROVIDED OPPOSITE THE SPECIFICATIONS, INDICATING ANY VARIANCES IN THE SPECIFICATION. IF THERE IS NOT ENOUGH SPACE, ATTACH AN ADDITIONAL SHEET OF PAPER. BIDDER SHALL PROVIDE DOCUMENTATION IN THE FORM OF MANUFACTURERS CUT SHEETS, PHOTOMETRIC EXHIBITS, OR TEST DATA THAT SHOWS COMPLIANCE FOR EACH SPECIFICATION.

LOT A – LED FIXTURES (MATERIALS ONLY)

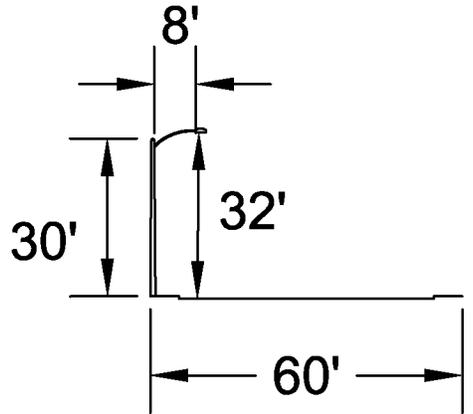
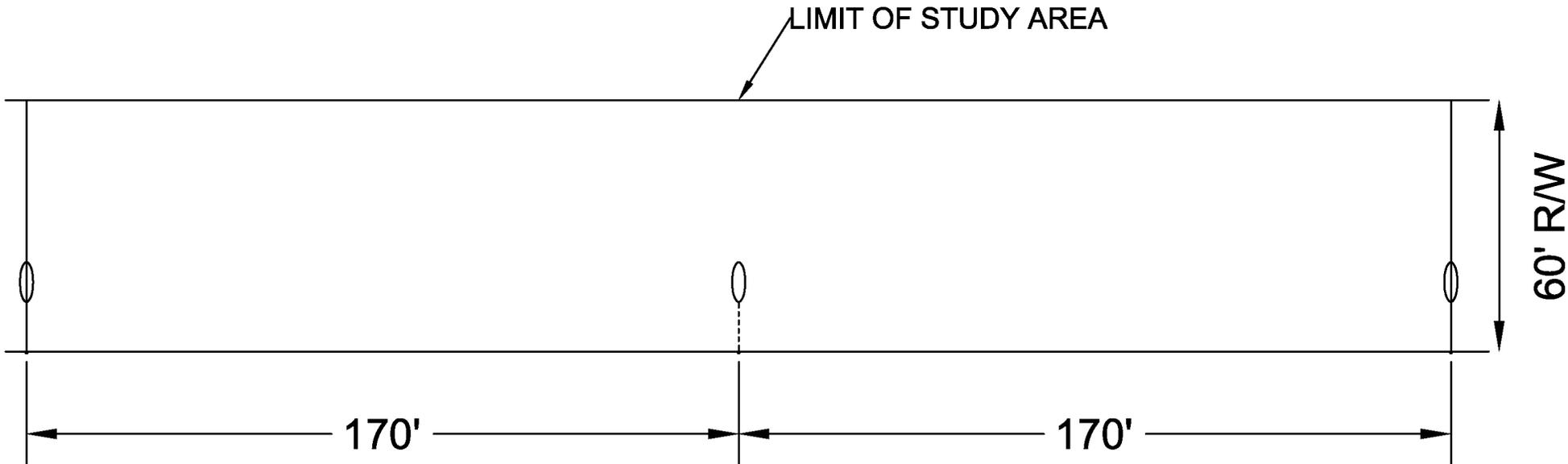
	SPECIFICATION NO. 1 – PHOTOMETRIC:	YES	NO	IF NO, SPECIFY
1.1	A normal Correlated Color Temperature (CCT) of 4000°K ±300°K.			
1.2	A Color Rendering Index (CRI) ≥ 65.			
1.3	A minimum luminaire efficacy ≥ 85 lumen/watts.			
1.4	Photometric measurement to be documented by test lab report according to IESNA specification.			
1.5	LED light distribution shall be in accordance with IESNA Type II distribution with a cutoff lens.			
1.6	Luminaire must operate at 77°F (25°C) for a minimum of 60,000 hours before the LED light output has decreased to 80% of initial output (L80).			
1.7	Fixtures installed for typical local roadway lighting on a local 60' R/W shall achieve average minimum cd/m ² as outlined in IESNA RP-8 (latest edition), table 3 (High and L _{avg} /L _{min}) within the given limits of the roadway shown in Exhibit R-60. Lighting luminaire arms are 8 foot in length, with fixtures at the mounting height of 32 feet. Supplier must provide a luminance study that proves that lighting luminaire standards are met per IESNA RP-8, with a minimum light loss factor of 0.84.			
1.8	Per IESNA TM-15-2007 (Revised) Backlight, Uplight, and Glare (BUG) rating shall be B2 U0 G2 or better. Fixture should be Dark Sky compliant. A means for the control of backlight, in the form of a physical shield, shall be provided with each fixture.			

	SPECIFICATION NO. 2 – ELECTRICAL:	YES	NO	IF NO, SPECIFY
2.1	Power factor of ≥ 0.90.			
2.2	Maximum LED forward current of ≤ 530 mA.			
2.3	Class 1 or class 2 power supply.			
2.4	Fixture shall be certified by a Nationally Recognized Testing Laboratory.			

2.5	Operating temperature range shall be a least 0°F to 120°F (-18°C to 49°C).			
2.6	Transient voltage/surge suppression protection must meet or exceed the requirements of ANSI/IEEE C.62.41-1991 Class A operation, which consists of seven strikes of a 100 HZ ring wave, 6 KV level, for both common mode and differential mode.			
2.7	Class A sound rating for power supply per ANSI C63.4.			
2.8	Power supply shall meet FCC 47 CFR 15/18.			
2.9	Nominal operating voltage within a range of 120 to 277 volts at 60 HZ ± 3 HZ.			
2.10	Output operating frequency must be ≥ 120 HZ, when not using direct current output.			
2.11	Fixture shall have a prewired heavy-duty barrier type terminal block, capable of terminating #14 AWG through #10 AWG wire. Internal fuse holder to be optional.			
2.12	Total power consumption of the fixture, including driver shall not exceed 70 Watts.			
SPECIFICATION NO. 3 – HOUSING:		YES	NO	IF NO, SPECIFY
3.1	Luminaires shall be painted with 2 finish coats of high gloss gray enamel or polyurethane powder coating, free of lead and mercury.			
3.2	Constructed of die cast aluminum. Stamped and formed aluminum housings shall not be accepted.			
3.3	Driver(s) mounted internally.			
3.4	All parts to be corrosion resistant.			
3.5	Fixture shall have heat sink integrated into fixture body, and be resistant to debris buildup that may cause degraded heat dissipation. No fans, pumps or liquids are allowed. Light engines with integrated heat sinks will not be accepted.			
3.6	Fixture weight ≤ 30 Lbs.			
3.7	Fixture must withstand a minimum vibration of 2Gs per ANSI C136.31-2001.			
3.8	The fixture shall have a slip-fitter capable of accepting up to 2.375-inch outside diameter pipe without rearrangement of parts and be adjustable ±5° degrees from horizontal. There shall be no more than four (4) 9/16-inch hex bolts to secure fixture to pipe. Bolts shall be secured from bottom of fixture and mounted internally. At no point shall wires be exposed to the outside.			
3.9	The optical assembly of the fixture shall have a minimum IP-65 rating to protect internal components.			
3.10	The maximum effective projected area (calculated from either side) shall not exceed 1.0 square foot. (slim, low profile design to optimize for wind loading).			
3.11	Maximum dimension 29" long X 20" wide X 8" tall, and shall be of a Cobra Head configuration.			
3.12	Fixture shall have bird guard or wildlife intrusion protection. Knockout panels on fixture housing will not be accepted.			
SPECIFICATION NO. 4 – FIXTURE IDENTIFICATION:		YES	NO	IF NO, SPECIFY
4.1	Each fixture shall have the manufacturer's name, trademark, model number, serial number, power rating in Watts, date of manufacture (month/year), and lot number permanently marked on inside of each unit.			
4.2	The wattage of the fixture shall be able to be detected visibly from an observer standing at ground elevation at base of pole. Sticker to be consistent with American National Standard for Roadway Lighting Equipment, ANSI C136.15.			

4.3	Operating characteristics should be permanently marked inside each unit: Voltage rating, and fixture efficiency rating (LER).			
4.4	Each LED light source should be permanently marked with correlated color temperature (CCT) rating in Kelvin, color rendering index (CRI) and wattage driver current.			
SPECIFICATION NO. 5 – MEASUREMENTS AND PERFORMANCE:		YES	NO	IF NO, SPECIFY
5.1	IESNA LM-79-08 Approved method for electrical and photometric measurements of solid-state lighting products. Documentation shall be provided with the shop drawing submittals.			
5.2	IESNA LM-80-08 Approved method for measuring lumen maintenance of LED lighting sources. Documentation shall be provided with the shop drawing submittals.			
5.3	IESNA data files shall be submitted for each fixture type, and also must include photometric test results for 32 foot mounting height.			
SPECIFICATION NO. 6 – WARRANTY:		YES	NO	IF NO, SPECIFY
<p>A warranty must be provided for the replacement or repair of the fixture due to any electrical failure (including light source and power supplies/drivers) for a minimum of five (5) years after final acceptance. All other components shall have a warranty for a minimum of one (1) year after final acceptance of the materials. Contractor shall provide all warranty documents to Clark County Public Works Traffic Management Divisions at time of product delivery. Documents shall contain project name, bid number of the project, manufacturer, brand, model, contact information for warranty claim, and quantity of fixtures delivered. Warranty replacement of fixture shall be delivered within sixty (60) calendar days upon notification by Clark County Public Works.</p>				
Enter cost of one fixture: note that price will not be used to evaluate fixture for consideration as a qualified product.				\$

EXHIBIT R-60



LIMIT OF STUDY AREA TO BE BOUND BY THE RIGHT OF WAY AND ALIGNED WITH THE OUTERMOST STREET LIGHT POLES 60'X340' AS SHOWN, LUMINANCE POINTS PROVIDED SHALL BE ON A 5'X5' GRID THROUGHOUT THE STUDY AREA.

80' - TECHNICAL SPECIFICATIONS

ROADWAY LED FIXTURES FOR 80' R/W

Name of Firm

PROJECT NAME

INTENT:

The intent of these specifications is to provide a minimum standard for Light Emitting Diode (LED) outdoor lighting on roadways with 80 foot, right of way. Each LED fixture shall be replacing a 250W HPS mounted at a height of 32 feet. The roadway luminaires offered shall be new and unused.

These specifications shall be construed as minimum requirements. Should the manufacturer's current published data or specifications exceed these, as determined and approved by the Owner, they shall be considered as minimum specifications and be furnished by the Bidder.

BIDDERS MUST RETURN THE ORIGINAL OR A PHOTOCOPY OF THIS FORM AND MAKE AN ENTRY FOR EACH SPECIFICATION IN THE SPACE PROVIDED OPPOSITE THE SPECIFICATIONS, INDICATING ANY VARIANCES IN THE SPECIFICATION. IF THERE IS NOT ENOUGH SPACE, ATTACH AN ADDITIONAL SHEET OF PAPER. BIDDER SHALL PROVIDE DOCUMENTATION IN THE FORM OF MANUFACTURERS CUT SHEETS, PHOTOMETRIC EXHIBITS, OR TEST DATA THAT SHOWS COMPLIANCE FOR EACH SPECIFICATION.

LOT A – LED FIXTURES (MATERIALS ONLY)

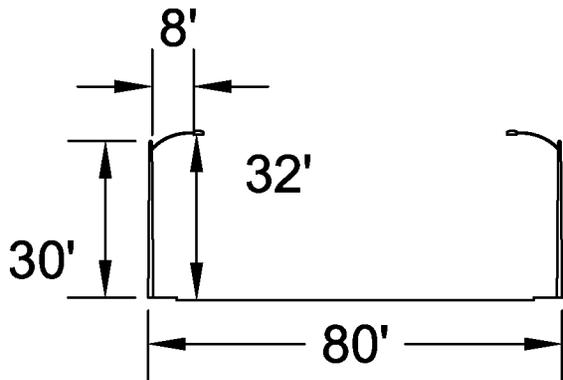
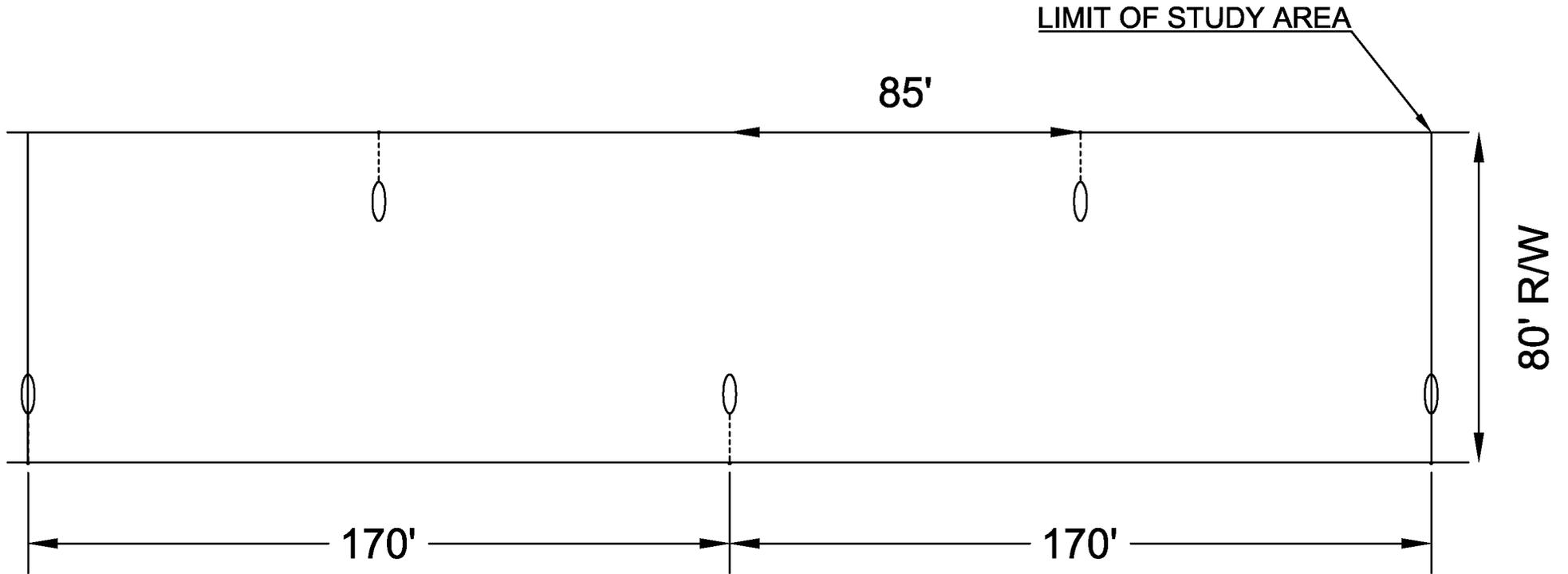
	SPECIFICATION NO. 1 – PHOTOMETRIC:	YES	NO	IF NO, SPECIFY
1.1	A normal Correlated Color Temperature (CCT) of 4000°K ±300°K.			
1.2	A Color Rendering Index (CRI) ≥ 65.			
1.3	A minimum luminaire efficacy ≥ 85 lumen/watts.			
1.4	Photometric measurement to be documented by test lab report according to IESNA specification.			
1.5	LED light distribution shall be in accordance with IESNA Type II distribution with a cutoff lens.			
1.6	Luminaire must operate at 77°F (25°C) for a minimum of 60,000 hours before the LED light output has decreased to 80% of initial output (L80).			
1.7	Fixtures installed for typical collector roadway lighting on a local 80' R/W shall achieve average minimum cd/m ² as outlined in IESNA RP-8 (latest edition), table 3 (High and L _{avg} /L _{min}) within the given limits of the roadway shown in Exhibit R-80. Lighting luminaire arms are 8 foot in length, with fixtures at the mounting height of 32 feet. Supplier must provide a luminance study that proves that lighting luminaire standards are met per IESNA RP-8, with a minimum light loss factor of 0.84.			
1.8	Per IESNA TM-15-2007 (Revised) Backlight, Uplight, and Glare (BUG) rating shall be B3 U0 G3 or better. Fixture should be Dark Sky compliant. A means for the control of backlight, in the form of a physical shield, shall be provided with each fixture.			

	SPECIFICATION NO. 2 – ELECTRICAL:	YES	NO	IF NO, SPECIFY
2.1	Power factor of ≥ 0.90.			
2.2	Maximum LED forward current of ≤ 530 mA.			
2.3	Class 1 or class 2 power supply.			
2.4	Fixture shall be certified by a Nationally Recognized Testing Laboratory.			

2.5	Operating temperature range of 0°F to 120°F (-18°C to 49°C).			
2.6	Transient voltage/surge suppression protection must meet or exceed the requirements of ANSI/IEEE C.62.41-1991 Class A operation, which consists of seven strikes of a 100 HZ ring wave, 6 KV level, for both common mode and differential mode.			
2.7	Class A sound rating for power supply per ANSI C63.4.			
2.8	Power supply shall meet FCC 47 CFR 15/18.			
2.9	Nominal operating voltage within a range of 120 to 277 volts at 60 HZ ± 3 HZ.			
2.10	Output operating frequency must be ≥ 120 HZ, when not using direct current output.			
2.11	Fixture shall have a prewired heavy-duty barrier type terminal block, capable of terminating #14 AWG through #10 AWG wire. Internal fuse holder to be optional.			
2.12	Total power consumption of the fixture, including driver shall not exceed 138 Watts.			
SPECIFICATION NO. 3 – HOUSING:		YES	NO	IF NO, SPECIFY
3.1	Luminaires shall be painted with 2 finish coats of high gloss gray enamel or polyurethane powder coating, free of lead and mercury.			
3.2	Constructed of die cast aluminum. Stamped and formed aluminum housings shall not be accepted.			
3.3	Driver(s) mounted internally.			
3.4	All parts to be corrosion resistant.			
3.5	Fixture shall have heat sink integrated into fixture body, and be resistant to debris buildup that may cause degraded heat dissipation. No fans, pumps or liquids are allowed. Light engines with integrated heat sinks will not be accepted.			
3.6	Fixture weight ≤ 46 Lbs.			
3.7	Fixture must withstand a minimum vibration of 2Gs per ANSI C136.31-2001.			
3.8	The fixture shall have a slip-fitter capable of accepting up to 2.375-inch outside diameter pipe without rearrangement of parts and be adjustable ±5° degrees from horizontal. There shall be no more than four (4) 9/16-inch hex bolts to secure fixture to pipe. Bolts shall be secured from bottom of fixture and mounted internally. At no point shall wires be exposed to the outside.			
3.9	The optical assembly of the fixture shall have a minimum IP-65 rating to protect internal components.			
3.10	The maximum effective projected area (calculated from either side) shall not exceed 1.1 square foot. (slim, low profile design to optimize for wind loading).			
3.11	Maximum dimension 37.5" long X 20" wide X 8" tall, and shall be of a Cobra Head configuration.			
3.12	Fixture shall have bird guard or wildlife intrusion protection. Knockout panels on fixture housing will not be accepted.			
SPECIFICATION NO. 4 – FIXTURE IDENTIFICATION:		YES	NO	IF NO, SPECIFY
4.1	Each fixture shall have the manufacturer's name, trademark, model number, serial number, power rating in Watts, date of manufacture (month/year), and lot number permanently marked on inside of each unit.			
4.2	The wattage of the fixture shall be able to be detected visibly from an observer standing at ground elevation at base of pole. Sticker to be consistent with American National Standard for Roadway Lighting Equipment, ANSI C136.15.			

4.3	Operating characteristics should be permanently marked inside each unit: Voltage rating and fixture efficiency rating (LER).			
4.4	Each LED light source should be permanently marked with correlated color temperature (CCT) rating in Kelvin, color rendering index (CRI) and wattage driver current.			
SPECIFICATION NO. 5 – MEASUREMENTS AND PERFORMANCE:		YES	NO	IF NO, SPECIFY
5.1	IESNA LM-79-08 Approved method for electrical and photometric measurements of solid-state lighting products. Documentation shall be provided with the shop drawing submittals.			
5.2	IESNA LM-80-08 Approved method for measuring lumen maintenance of LED lighting sources. Documentation shall be provided with the shop drawing submittals.			
5.3	IESNA data files shall be submitted for each fixture type, and also must include photometric test results for 32 foot mounting height.			
SPECIFICATION NO. 6 – WARRANTY: A warranty must be provided for the replacement or repair of the fixture due to any electrical failure (including light source and power supplies/drivers) for a minimum of five (5) years after final acceptance of the materials. All other components shall have a warranty for a minimum of one (1) year after final acceptance of the materials. Contractor shall provide all warranty documents to Clark County Public Works Traffic Management Divisions at time of product delivery. Documents shall contain project name, bid number of the project, manufacturer, brand, model, contact information for warranty claim, and quantity of fixtures delivered. Warranty replacement of fixture shall be delivered within sixty (60) calendar days upon notification by Clark County Public Works.		YES	NO	IF NO, SPECIFY
Enter cost of one fixture: note that price will not be used to evaluate fixture for consideration as a qualified product.				\$

EXHIBIT R-80



LIMIT OF STUDY AREA TO BE BOUND BY THE RIGHT OF WAY AND ALIGNED WITH THE OUTERMOST STREET LIGHT POLES 80'X340' AS SHOWN, LUMINANCE POINTS PROVIDED SHALL BE ON A 5'X5' GRID THROUGHOUT THE STUDY AREA.

100' - TECHNICAL SPECIFICATIONS

ROADWAY LED FIXTURES FOR 100' R/W

Name of Firm

PROJECT NAME

INTENT:

The intent of these specifications is to provide a minimum standard for Light Emitting Diode (LED) outdoor lighting on roadways with 100 foot, right of way with light poles alongside of roadway in a staggered configuration and light poles in the median in a non-staggered arrangement. Each LED fixture shall be replacing a 250W HPS mounted at heights between 32 foot and 35.75 foot. The roadway luminaires offered shall be new and unused.

These specifications shall be construed as minimum requirements. Should the manufacturer's current published data or specifications exceed these, as determined and approved by the Owner, they shall be considered as minimum specifications and be furnished by the Bidder.

BIDDERS MUST RETURN THE ORIGINAL OR A PHOTOCOPY OF THIS FORM AND MAKE AN ENTRY FOR EACH SPECIFICATION IN THE SPACE PROVIDED OPPOSITE THE SPECIFICATIONS, INDICATING ANY VARIANCES IN THE SPECIFICATION. IF THERE IS NOT ENOUGH SPACE, ATTACH AN ADDITIONAL SHEET OF PAPER. BIDDER SHALL PROVIDE DOCUMENTATION IN THE FORM OF MANUFACTURERS CUT SHEETS, PHOTOMETRIC EXHIBITS, OR TEST DATA THAT SHOWS COMPLIANCE FOR EACH SPECIFICATION.

LOT A – LED FIXTURES (MATERIALS ONLY)

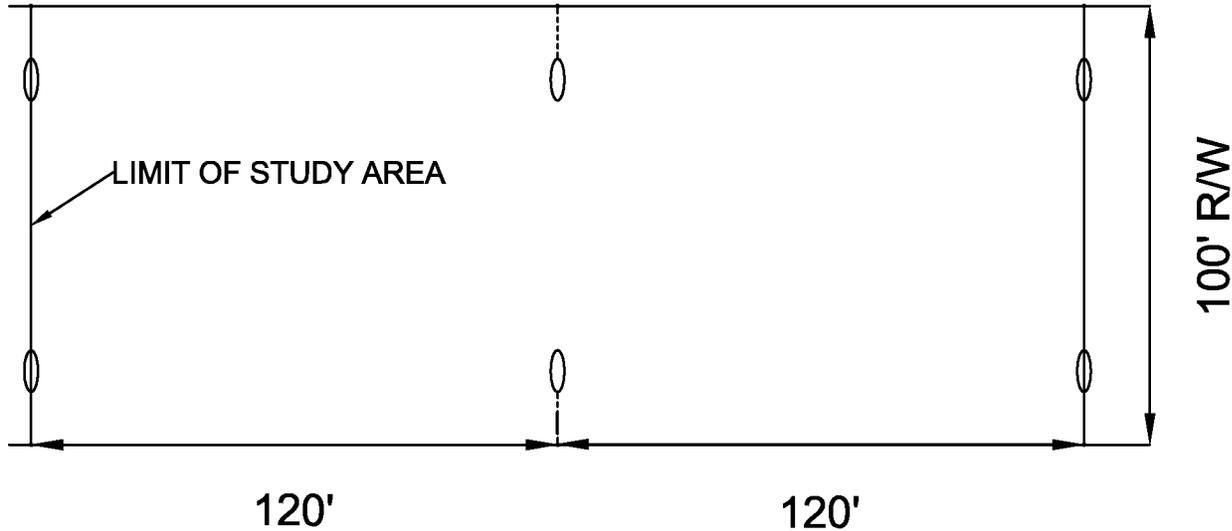
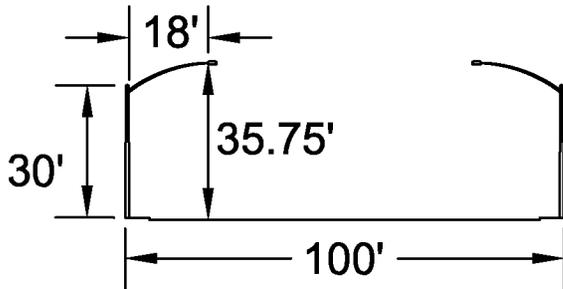
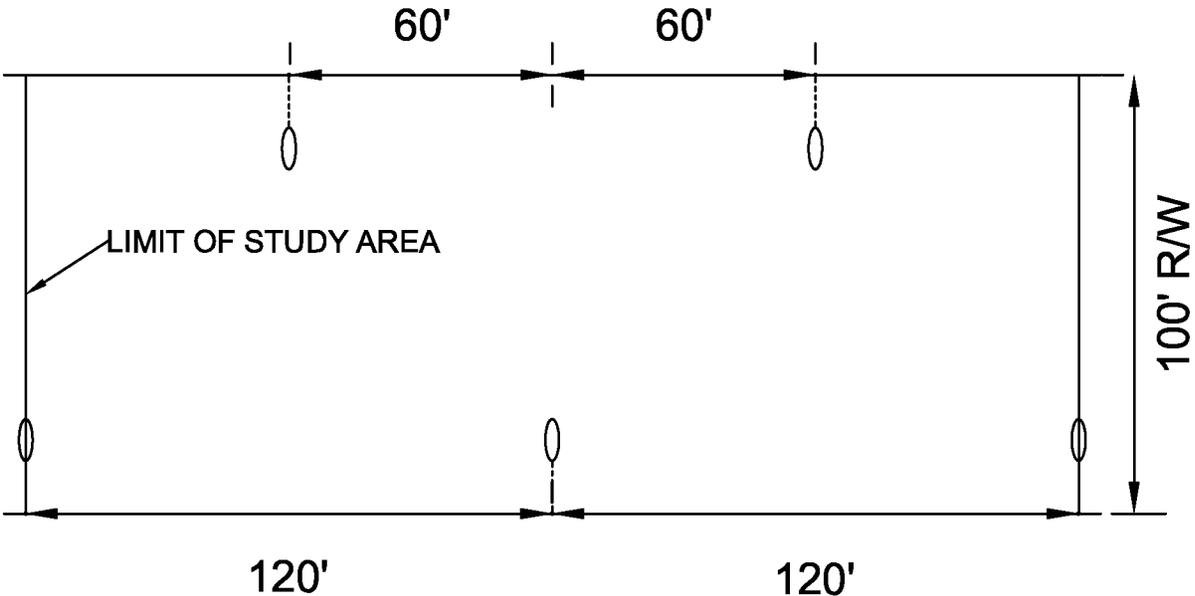
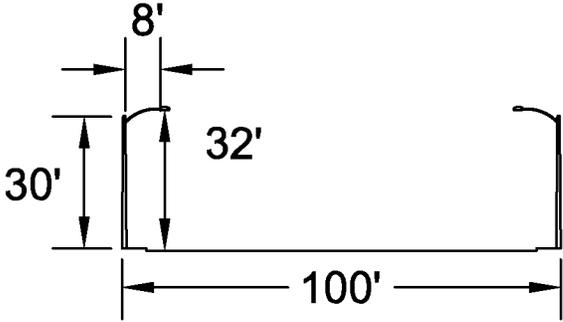
	SPECIFICATION NO. 1 – PHOTOMETRIC:	YES	NO	IF NO, SPECIFY
1.1	A normal Correlated Color Temperature (CCT) of 4000°K ±300°K.			
1.2	A Color Rendering Index (CRI) ≥ 65.			
1.3	A minimum luminaire efficacy ≥ 85 lumen/watts.			
1.4	Photometric measurement to be documented by test lab report according to IESNA specification.			
1.5	LED light distribution shall be in accordance with IESNA Type II distribution with a cutoff lens.			
1.6	Luminaire must operate at 77°F (25°C) for a minimum of 60,000 hours before the LED light output has decreased to 80% of initial output (L80).			
1.7	Fixtures installed for typical major roadway lighting on a local 100' R/W shall achieve average minimum cd/m ² as outlined in IESNA RP-8 (latest edition), table 3 (High and L _{avg} /L _{min}) within the given limits of the roadways shown in Exhibit R-100. The fixture shall achieve the lighting levels for luminaire arms that are 8 foot in length at 32 foot mounting height and 18 foot in length at 35.75 foot mounting height. Supplier must provide a luminance study that proves that lighting luminaire standards are met per IESNA RP-8 for both staggered and opposing configurations using both 8 foot and 18 foot luminaire arms as shown [total of four (4) exhibits], with a minimum light loss factor of 0.84.			
1.8	Per IESNA TM-15-2007 (Revised) Backlight, Uplight, and Glare (BUG) rating shall be B3 U0 G3 or better. Fixture should be Dark Sky compliant. A means for the control of backlight, in the form of a physical shield, shall be provided with each fixture.			

	SPECIFICATION NO. 2 – ELECTRICAL:	YES	NO	IF NO, SPECIFY
2.1	Power factor of ≥ 0.90.			
2.2	Maximum LED forward current of ≤ 530 mA.			

2.3	Class 1 or class 2 power supply.			
2.4	Fixture shall be certified by a Nationally Recognized Testing Laboratory.			
2.5	Operating temperature range of 0°F to 120°F (-18°C to 49°C).			
2.6	Transient voltage/surge suppression protection must meet or exceed the requirements of ANSI/IEEE C.62.41-1991 Class A operation, which consists of seven strikes of a 100 HZ ring wave, 6 KV level, for both common mode and differential mode.			
2.7	Class A sound rating for power supply per ANSI C63.4.			
2.8	Power supply shall meet FCC 47 CFR 15/18.			
2.9	Nominal operating voltage within a range of 120 to 277 volts at 60 HZ ± 3 HZ.			
2.10	Output operating frequency must be ≥ 120 HZ, when not using direct current output.			
2.11	Fixture shall have a prewired heavy-duty barrier type terminal block, capable of terminating #14 AWG through #10 AWG wire. Internal fuse holder to be optional.			
2.12	Total power consumption of the fixture, including driver/ballast, shall not exceed 138 Watts.			
SPECIFICATION NO. 3 – HOUSING:		YES	NO	IF NO, SPECIFY
3.1	Luminaires shall be painted with 2 finish coats of high gloss gray enamel or polyurethane powder coating, free of lead and mercury.			
3.2	Constructed of die cast aluminum. Stamped and formed aluminum housings shall not be accepted.			
3.3	Driver(s) mounted internally.			
3.4	All parts to be corrosion resistant.			
3.5	Fixture shall have heat sink integrated into fixture body, and be resistant to debris buildup that may cause degraded heat dissipation. No fans, pumps or liquids are allowed. Light engines with integrated heat sinks will not be accepted.			
3.6	Fixture weight ≤ 46 Lbs.			
3.7	Fixture must withstand a minimum vibration of 2Gs per ANSI C136.31-2001.			
3.8	The fixture shall have a slip-fitter capable of accepting up to 2.375-inch outside diameter pipe without rearrangement of parts and be adjustable ±5° degrees from horizontal. There shall be no more than four (4) 9/16-inch hex bolts to secure fixture to pipe. Bolts shall be secured from bottom of fixture and mounted internally. At no point shall wires be exposed to the outside.			
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3.10	The maximum effective projected area (calculated from either side) shall not exceed 1.1 square foot. (slim, low profile design to optimize for wind loading).			
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SPECIFICATION NO. 4 – FIXTURE IDENTIFICATION:		YES	NO	IF NO, SPECIFY
4.1	Each fixture shall have the manufacturer's name, trademark, model number, serial number, power rating in Watts, date of manufacture (month/year), and lot number permanently marked on inside of each unit.			
4.2	The wattage of the fixture shall be able to be detected visibly from an observer standing at ground elevation at base of pole. Sticker to be			

	consistent with American National Standard for Roadway Lighting Equipment, ANSI C136.15.			
4.3	Operating characteristics should be permanently marked inside each unit: Voltage rating, power rating (in watts and volt-ampere) and fixture efficiency rating (LER).			
4.4	Each LED light source should be permanently marked with correlated color temperature (CCT) rating in Kelvin, color rendering index (CRI) and wattage driver current.			
SPECIFICATION NO. 5 – MEASUREMENTS AND PERFORMANCE:		YES	NO	IF NO, SPECIFY
5.1	IESNA LM-79-08 Approved method for electrical and photometric measurements of solid-state lighting products. Documentation shall be provided with the shop drawing submittals.			
5.2	IESNA LM-80-08 Approved method for measuring lumen maintenance of LED lighting sources. Documentation shall be provided with the shop drawing submittals.			
5.3	IESNA data files shall be submitted for each fixture type, and also must include photometric test results for 32 foot and 35.75 foot mounting heights on both sections of roadway in exhibit R-100.			
SPECIFICATION NO. 6 – WARRANTY: A warranty must be provided for the replacement or repair of the fixture due to any electrical failure (including light source and power supplies/drivers) for a minimum of five (5) years after final acceptance of the materials. All other components shall have a warranty for a minimum of one (1) year after final acceptance of the materials. Contractor shall provide all warranty documents to Clark County Public Works Traffic Management Divisions at time of product delivery. Documents shall contain project name, bid number of the project, manufacturer, brand, model, contact information for warranty claim, and quantity of fixtures delivered. Warranty replacement of fixture shall be delivered within sixty (60) calendar days upon notification by Clark County Public Works.		YES	NO	IF NO, SPECIFY
Enter cost of one fixture: note that price will not be used to evaluate fixture for consideration as a qualified product.				\$

EXHIBIT R-100



LIMIT OF STUDY AREA TO BE BOUND BY THE RIGHT OF WAY AND ALIGNED WITH THE OUTERMOST STREET LIGHT POLES 100'X240' AS SHOWN, LUMINANCE POINTS PROVIDED SHALL BE ON A 5'X5' GRID THROUGHOUT THE STUDY AREA.

**ATTACHMENT 1
FIRM INFORMATION**

1. Name of Firm:
2. Name and Title of Contact Person:
3. Telephone Number:
4. Fax Number:
5. Contact Person's e-mail Address:
6. Local Office Address:
7. Year Local Office Established:
8. Main Office Address:
9. Year Firm Established:
10. Firms affiliated/joint ventured with (list names and addresses, use separate paper if needed):
11. Employment (Number of Current Employees):

Company	Number
Local Office	
Firm	

12. Check yes or no to the following:

YES

NO

This firm maintains a full-time office locally, and this local office is able to legally execute all contracts with Clark County.

This firm possesses an active Clark County business license.

This firm is a (circle one) LBE, NBE, MBE, WBE, PBE, SBE, VET, DVET or ESB as described in the definitions listed in Attachment 2.

The above information is correct and true as stated.

Name (Print): _____

Date: _____

Signed: _____ Title: _____

ATTACHMENT 2
SUBCONTRACTOR INFORMATION

No MBE, WBE, PBE, SBE, VET, DVET or ESB subcontractors will be used.

It is our intent to utilize the following MBE, WBE, PBE, SBE, VET, DVET and ESB subcontractors in association with CONTRACT:

1. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

2. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

3. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

4. Subcontractor Name: _____
Contact Person: _____ Telephone Number: _____
Description of Work: _____
Estimated Percentage of Total Dollars: _____
Business Type: MBE WBE PBE SBE VET
 DVET ESB

FOR INFORMATIONAL PURPOSES ONLY:

LARGE BUSINESS ENTERPRISE (LBE):

An independent and continuing business based outside of Nevada for profit which performs a commercially useful function.

NEVADA BUSINESS ENTERPRISE (NBE):

An independent and continuing Nevada business for profit which performs a commercially useful function.

MINORITY OWNED BUSINESS ENTERPRISE (MBE):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more minority persons of Black American, Hispanic American, Asian-Pacific American or Native American ethnicity.

WOMEN OWNED BUSINESS ENTERPRISE (WBE):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more women.

PHYSICALLY-CHALLENGED BUSINESS ENTERPRISE (PBE):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51% owned and controlled by one or more disabled individuals pursuant to the federal Americans with Disabilities Act.

SMALL BUSINESS ENTERPRISE (SBE):

An independent and continuing Nevada business for profit which performs a commercially useful function, is not owned and controlled by individuals designated as minority, women, or physically-challenged, and where gross annual sales does not exceed \$2,000,000.

VETERAN OWNED BUSINESS ENTERPRISE (VET):

An independent and continuing Nevada business for profit which performs a commercially useful function and is at least 51 percent owned and controlled by one or more U.S. Veterans.

DISABLED VETERAN OWNED BUSINESS ENTERPRISE (DVET):

A Nevada business at least 51 percent owned/controlled by a disabled veteran.

EMERGING SMALL BUSINESS (ESB):

Certified by the Nevada Governor's Office of Economic Development effective January, 2014. Approved into Nevada law during the 77th Legislative session as a result of AB294.