



AGENDA

**REGULAR MEETINGS OF THE SANTA FE SPRINGS
PUBLIC FINANCING AUTHORITY
WATER UTILITY AUTHORITY
HOUSING SUCCESSOR
SUCCESSOR AGENCY
AND CITY COUNCIL**

**June 15, 2021
6:00 P.M.**

Council Chambers
11710 Telegraph Road
Santa Fe Springs, CA 90670

**Jay Sarno, Councilmember
Juanita Trujillo, Councilmember
Joe Angel Zamora, Councilmember
Annette Rodriguez, Mayor Pro Tem
John M. Mora, Mayor**

Public Comment: The public is encouraged to address City Council on any matter listed on the agenda or on any other matter within its jurisdiction. If you wish to address the City Council, please complete the card that is provided at the rear entrance to the Council Chambers and hand the card to the City Clerk or a member of staff. City Council will hear public comment on items listed on the agenda during discussion of the matter and prior to a vote. City Council will hear public comment on matters not listed on the agenda during the Oral Communications period.

Pursuant to provisions of the Brown Act, no action may be taken on a matter unless it is listed on the agenda, or unless certain emergency or special circumstances exist. The City Council may direct staff to investigate and/or schedule certain matters for consideration at a future City Council meeting.

Americans with Disabilities Act: In compliance with the ADA, if you need special assistance to participate in a City meeting or other services offered by this City, please contact the City Clerk's Office. Notification of at least 48 hours prior to the meeting or time when services are needed will assist the City staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

Please Note: Staff reports, and supplemental attachments, are available for inspection at the office of the City Clerk, City Hall, 11710 E. Telegraph Road during regular business hours 7:30 a.m.-5:30 p.m., Monday-Thursday and every other Friday. Telephone: (562) 868-0511.

City of Santa Fe Springs

Regular Meetings

June 15, 2021

1. **CALL TO ORDER**

2. **ROLL CALL**

Jay Sarno, Councilmember
Juanita Trujillo, Councilmember
Joe Angel Zamora, Councilmember
Annette Rodriguez, Mayor Pro Tem
John M. Mora, Mayor

3. **INVOCATION**

4. **PLEDGE OF ALLEGIANCE**

5. **PUBLIC COMMENTS** *This is the time when comments may be made by citizens on matters under the jurisdiction of the City Council, on the agenda and not on the agenda. Each citizen is limited to three (3) minutes.*

PUBLIC FINANCING AUTHORITY

6. **CONSENT AGENDA**

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Public Financing Authority.

a. Minutes of the May 18, 2021 Public Financing Authority Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

b. Monthly Report on the Status of Debt Instruments Issued through the City of Santa Fe Springs Public Financing Authority (PFA) (Finance)

Recommendation:

- Receive and file the report.

WATER UTILITY AUTHORITY

7. **CONSENT AGENDA**

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Water Utility Authority.

a. Minutes of the May 18, 2021 Water Utility Authority Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

b. Monthly Report on the Status of Debt Instruments Issued through the City of Santa Fe Springs Water Utility Authority (WUA) (Finance)

Recommendation:

- Receive and file the report.

- c. Status Update of Water-Related Capital Improvement Projects (Public Works)

Recommendation:

- Receive and file the report.

HOUSING SUCCESSOR

8. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Housing Successor.

Minutes of the May 18, 2021 Housing Successor Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

NEW BUSINESS

- 9. 2020 City of Santa Fe Springs General Plan Housing Element Annual Progress Report (Planning)**

Recommendation:

- Find and determine that the Annual Progress Report is exempt from The California Environmental Quality Act (CEQA), pursuant to Section 15061(b) (3). The 2020 Annual Report was assessed in accordance with the authority and criteria contained in CEQA and the State CEQA Guidelines. It can be seen with certainty that there is no possibility that the report may have a significant effect on the environment. The report does not authorize construction and any future development proposed pursuant to the programs in the City's Housing Element will require separate environmental analysis when details of those proposals are known.
- Authorize staff to forward the 2020 General Plan Housing Element Annual Progress Report to the California Department of Housing and Community Development (HCD) and the Governor's Office of Planning and Research (OPR).

SUCCESSOR AGENCY

10. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Successor Agency.

Minutes of the May 18, 2021 Successor Agency Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

CITY COUNCIL

11. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the City Council.

- a. Minutes of the May 18, 2021 Regular and Special City Council Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

- b. Horseshoe Pit Improvements – Award of Contract (Public Works)

Recommendation:

- Appropriate \$22,000 from the Utility Users Tax (UUT) Capital Improvements Fund to the Horseshoe Pit Improvements (PW 200101);
- Accept the bids; and
- Award a contract to Corral Construction of Commerce, California, in the amount of \$41,410.00.

- c. Interior and Exterior Painting Park Facilities (Little Lake Park, Los Nietos Park, Santa Fe Springs Park) – Award of Contract (Public Works)

Recommendation:

- Accept the bids; and
- Award a contract to Innovation Painting, Inc. of Ontario, California, in the amount of \$43,000.00.

NEW BUSINESS

12. Introduction and Discussion of City's Proposed Fiscal Year 2021-22 Budget (Finance)

Recommendation:

- Provide staff direction regarding revenue and expenditure matters included in the Fiscal Year 2021-22 proposed budget.

13. Approval of In-kind Services Agreement between the City of Santa Fe Springs and Southeast Area Social Services Funding Authority (SASSFA) for FY 2021-2022 (Community Services)

Recommendation:

- Approve In-kind Services Agreement between the City of Santa Fe Springs and Southeast Area Social Services Funding Authority (SASSFA) for FY 2021-2022; and
- Authorize the Mayor to execute the In-kind Services Agreement

14. Street and Parking Lot Lighting LED Retrofit Evaluation Report (Public Works)

Recommendation:

- Receive and File Street and Parking Lot Lighting LED Retrofit Evaluation Report; and
- Provide direction for financing options.

15. Status Update of Capital Improvement Projects (Public Works)

Recommendation:

- Receive and file the report.

City of Santa Fe Springs

Regular Meetings

June 15, 2021

16. On-Call Professional Engineering Services for the Design of City Parks Parking Lot Rehabilitation Project (Los Nietos, Santa Fe Springs and Little Lake Parks) – Award of Contracts (Public Works)

Recommendation:

- Accept the Request For Quotes;
- Award Contracts to JMDiaz, Inc. from the City of Industry, California for the Design of Los Nietos Park and Santa Fe Springs Park Parking Lots in the following amounts respectively: \$70,502 and \$79,068;
- Award a Contract to Coory Engineering from Orange, California for the Design of Little Lake Park Parking Lot in the amount of \$91,040; and
- Authorize the Director of Public Works to execute the task order with JMDiaz, Inc. and Coory Engineering.

17. Adoption of the City's Fiscal Year 2021-22 Investment Policy (Finance)

Recommendation:

- Adopt the Investment Policy for Fiscal Year 2021-22

18. **CITY MANAGER'S AND EXECUTIVE TEAM REPORTS**

19. **APPOINTMENTS TO BOARDS, COMMITTEES, COMMISSIONS**

20. **COUNCIL COMMENTS**

CLOSED SESSION

21. CONFERENCE WITH LABOR NEGOTIATORS

(Pursuant to California Government Code Section 54957.6)

Agency Designated Representatives: City Manager, Labor Negotiator Colin Tanner.

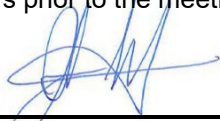
Employee Organizations: Santa Fe Springs City Employees' Association, Santa Fe Springs Firefighters' Association, and Santa Fe Springs Executive, Management and Confidential Employees' Association

22. **CLOSED SESSION REPORT**

23. **ADJOURNMENT**

Americans with Disabilities Act: In compliance with the ADA, if you need special assistance to participate in a City meeting or other services offered by this City, please contact the City Clerk's Office. Notification of at least 48 hours prior to the meeting or time when services are needed will assist the City staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

I, Janet Martinez, City Clerk for the City of Santa Fe Springs, do hereby certify under penalty of perjury under the laws of the State of California, that the foregoing agenda was posted at the following locations; city's website at www.santafesprings.org; and the Town Center Plaza (Kiosk), 11740 Telegraph Road, not less than 72 hours prior to the meeting.


Janet Martinez, CMC, City Clerk

June 10, 2021
Date Posted

**FOR ITEM NO. 6A
PLEASE SEE ITEM NO. 11A**



CONSENT CALENDAR

Monthly Report on the Status of Debt Instruments Issued through the City of Santa Fe Springs Public Financing Authority (PFA)

RECOMMENDATION

Receive and file the report.

BACKGROUND

The Santa Fe Springs Public Financing Authority (PFA) is a City entity that has periodically issued debt for the benefit of the Santa Fe Springs community. The following is a brief status report on the debt instruments currently outstanding that were issued through the PFA.

Consolidated Redevelopment Project 2006-A Tax Allocation Bonds

Financing proceeds available for appropriation at 5/31/2021

None

Outstanding principal at 5/31/2021

\$41,001,082

Bond Repayment

The former Community Development Commission (CDC) issued a number of tax allocation bonds before it was dissolved by State law effective February 1, 2012 which are administered by the City acting as Successor Agency under the oversight of the appointed Oversight Board. The Successor Agency no longer receives tax increment. Instead, distributions from the Redevelopment Property Tax Trust Fund (RPTTF) are received based on approved obligations. It is anticipated that sufficient allocations from the RPTTF will continue to be made to the Successor Agency to meet ongoing debt service obligations.

Unspent Bond Proceeds

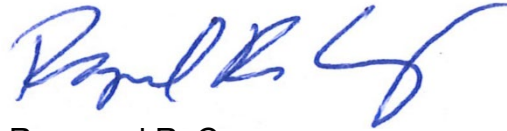
Under an approved Bond Expenditure Agreement, unspent bond proceeds of the former CDC in the amount of approximately \$19 million were transferred to the City in July 2014. The funds are to be spent in accordance with the original bond documents. The unspent proceeds continue to be a source of funding within the City's capital improvement program (CIP).

2016 Bond Refunding

In July 2016, the Successor Agency issued its 2016 Tax Allocation Refunding Bonds, which paid off several bond issuances of the former CDC. The bonds were originally issued through the Public Financing Authority and included the 2001 Series A, 2002 Series A, 2003 Series A, the current interest portion of the 2006 Series A, and 2006 Series B bond issuances.

2017 Bond Refunding

In December 2017, the Successor Agency issued its 2017 Tax Allocation Refunding Bonds, which paid off the 2007 Tax Allocation Bonds of the former CDC. The 2007 Bonds were originally issued through the Public Financing Authority.



Raymond R. Cruz
City Manager/Executive Director

FOR ITEM NO. 7A
PLEASE SEE ITEM NO. 11A



City of Santa Fe Springs

Water Utility Authority Meeting

ITEM NO. 7B

June 15, 2021

CONSENT CALENDAR

Monthly Report on the Status of Debt Instruments Issued through the City of Santa Fe Springs Water Utility Authority (WUA)

RECOMMENDATION

Receive and file the report.

BACKGROUND

The Santa Fe Springs Water Utility Authority (WUA) is a City entity that has issued debt for the benefit of the Santa Fe Springs community. The following is a brief status report on the debt instruments currently outstanding that were issued through the WUA.

Water Revenue Bonds, 2013

Financing proceeds available for appropriation at 5/31/2021

None

Outstanding principal at 5/31/2021

\$6,890,000

Water Revenue Bonds, 2018

Financing proceeds available for appropriation at 5/31/2021

None

Outstanding principal at 5/31/2021

\$1,025,000

In May 2013 the Water Utility Authority issued the 2013 Water Revenue Bonds in the amount of \$6,890,000. The bonds refunded the existing 2003 Water Revenue Bonds (issued through the Public Financing Authority) and provided additional funds for water improvement projects in the amount of \$2,134,339. The funds were restricted for use on water system improvements. In August 2013 the Water Utility Authority Board appropriated the proceeds for the Equipping Water Well No. 12 Project and all proceeds were since used on this project.

In January 2018 the Water Utility Authority issued the 2018 Water Revenue Bonds in the amount of \$1,800,000. The bonds refunded the existing 2005 Water Revenue Bonds (issued through the Public Financing Authority). No additional funds were raised through the issuance of the 2018 Water Revenue Bonds.

The City budget includes sufficient appropriations and adequate revenues are expected to be collected to meet the debt service obligations associated with the 2013 and 2018 Water Revenue Bonds.

The WUA was formed in June of 2009. Water revenue bonds issued prior to this date were issued through the City of Santa Fe Springs Public Financing Authority.


Raymond R. Cruz

City Manager/Executive Director

Report Submitted By: Travis Hickey
Finance and Administrative Services

Date of Report: June 10, 2021



CONSENT AGENDA

Status Update of Water-Related Capital Improvement Projects

RECOMMENDATION

- Receive and file the report.

BACKGROUND

This report is for informational purposes only. The following is a listing of current active water projects.

Water Storage Tank Cathodic Protection Systems

The Water Utility Authority owns and operates two 4-million gallon water storage tanks which were constructed in 1973 of welded steel. In September 2016 staff had a corrosion engineering evaluation performed on both tanks, which found the tanks to be in overall good condition with minor to moderate corrosion in certain areas. The evaluation recommended the replacement of the old, inoperable Cathodic Protection (CP) systems currently installed, to prevent further corrosion and prolong the usable life of the two water storage tanks. A Purchase Order has been issued to CorrPro of Santa Fe Springs for replacement CP systems.

On-Call Emergency Water Repair Services

Staff at times must perform emergency pipeline repair and replacement work that exceeds staff's ability and capacity to address internally. Representative projects typically consist of larger diameter pipelines (i.e. greater than 12" diameter), pipelines located in congested thoroughfares, and deeper installations requiring protective shoring. A Request for Proposals (RFP) is currently being advertised.

Water Well No. 2 Assessment Status Update

Constructed in 1963, Water Well No. 2 has been inactive since 2006 due to a change in water quality requirements from the State Water Board. City staff is evaluating whether this well has the potential to be brought back online at a reduced cost as compared to the water treatment for Water Well No. 12. A Request for Proposals (RFP) is currently being advertised.

FISCAL IMPACT

The cost for emergency water repair services will be budgeted in the Fiscal Year 2021/22 Water Operation and Maintenance Budget. An amount of \$40,000 will be budgeted.

Staff will request the WUA to appropriate funding from the Water Reserve / Capital Improvement Plan (CIP) Fund for the Water Well No.2 assessment when the contract award is approved. The total project cost including assessment, well pump removal, inspection, and contingency is \$112,000.

INFRASTRUCTURE IMPACT

Replacing the Cathodic Protection Systems at both water storage tanks will help prevent corrosion and premature failure. The CP systems are a cost-effective approach to maximizing the useful life and preventing possible water quality issues.

Having an On-Call Emergency Water Repair Services contract in place with multiple pipeline contractors to perform emergency and routine work provides the City with the ability to augment staff with experienced and capable contractors in emergencies. Having contracts in place also provides a consistent framework for pricing and ensures timely repairs and minimal water outages.

A comprehensive assessment of Well No. 2 will provide Staff the information needed to determine if the well can be rehabilitated and if treatment is necessary. This project has the potential to allow the City to once again deliver high-quality groundwater and reduce the City's dependence on costly imported water from the Metropolitan Water District of Southern California.



Raymond R. Cruz
Executive Director

Attachments:

None

**FOR ITEM NO. 8
PLEASE SEE ITEM NO. 11A**



NEW BUSINESS

2020 Santa Fe Springs General Plan Housing Element Annual Progress Report

RECOMMENDATIONS:

- Find and determine that the Annual Progress Report is exempt from The California Environmental Quality Act (CEQA), pursuant to Section 15061(b) (3). The 2020 Annual Report was assessed in accordance with the authority and criteria contained in CEQA and the State CEQA Guidelines. It can be seen with certainty that there is no possibility that the report may have a significant effect on the environment. The report does not authorize construction and any future development proposed pursuant to the programs in the City's Housing Element will require separate environmental analysis when details of those proposals are known.
- Authorize staff to forward the 2020 General Plan Housing Element Annual Progress Report to the California Department of Housing and Community Development (HCD) and the Governor's Office of Planning and Research (OPR).

BACKGROUND

The purpose of this item is for the City Council to consider the status of the General Plan Housing Element Annual Progress Report (APR) for 2020, and the progress of its implementation, which needs to be reported to the California Department of Housing Community Development (HCD) and the Governor's Office of Planning and Research (OPR). Government Code Section 65400 establishes the requirement that each city and county prepare an annual report on the status of the Housing Element, and the actions taken towards completion of the programs and status of the local government's compliance with the deadlines in its Housing Element.

Except for the Land Use Element of the City's General Plan which was adopted in 1993, all other elements (Open Space/Conservation, Safety Element, Circulation Element, Noise Element, and Environmental Element) of the General Plan were adopted in 1994. Local governments are required to keep their General Plans current and internally consistent. There is no specific requirement that a local government update its General Plan on any particular timeline, with the exception of the Housing Element, which is required to be updated as prescribed by State Law. Notwithstanding, the City recently hired MIG for a General Plan and Targeted Zoning Code update.

The City of Santa Fe Springs Housing Element 2014-2021(5th Cycle) was adopted by the City Council on January 30, 2014 and certified by HCD on February 18, 2014. The Housing Element establishes the City's strategy for meeting community housing needs and is one of seven integral and interrelated elements of the General Plan.

The 2020 Annual Report reflects the City's progress during the fifth year of the Regional Housing Need Allocation (RHNA) planning period (January 1, 2014 - October 1, 2021)

for the 5th cycle Housing Element. The RHNA allocates the amount of housing growth each jurisdiction must plan for in their housing element by providing "adequate sites" through zoning. So long as a jurisdiction provides sufficient sites and does not impose constraints to development, it is not penalized for falling short of its RHNA target. However, pursuant to Government Code Section 65863, jurisdictions are required to maintain an adequate sites inventory throughout the planning period¹. For example, to the extent that high density sites identified as accommodating the lower income RHNA are developed with fewer units or developed with market rate units, the jurisdiction will need to make up any shortfall on other sites at suitable densities to accommodate lower income units, including rezoning as necessary.

As presented in Table 1 below, Santa Fe Springs was allocated a total RHNA of 324 units for the planning period. It should be noted for the 6th cycle Housing Element, the City was allocated 952 units for the planning period from 2021 through 2029. The Housing Element must be adopted by the City Council no later than October 2021. Notwithstanding, during 2020, the City received applications for eleven Accessory Dwelling Units (ADU). Of the eleven applications received, two were finalized; one is still under construction; six are in plan check; one has not submitted plans for plan check and the other is on-hold. Ten accessory dwelling units were issued building permits in 2019, and was counted towards the City's RHNA. The ADUs completed in 2020 will also be counted towards the City's RHNA. A survey of guest houses and studio apartments for rent in Santa Fe Springs and surrounding communities indicates that market rents for accessory dwelling units fall within the level of affordability for low income households.

During 2020, a total of 130 residential building permits were issued in Santa Fe Springs, with all but eleven ADUs addressing the City's above moderate income needs. As depicted in the last column of the Table below, while the City has fulfilled its RHNA needs for above moderate income households, it has an unmet need for a total of 172 lower and moderate income units. The current proposal for approximately 138 affordable units on City-owned land at 13231 Lakeland Road and three adjacent City-owned properties, will make an important contribution towards addressing Santa Fe Springs' outstanding RHNA needs, especially in the Very Low and Low income categories.

¹ "No Net Loss" planning law (Gov Code 65863) requires an adequate sites inventory to be maintained throughout the RHNA planning period. Jurisdictions are not permitted to approve projects at a lower residential density or at a higher income level than identified in the sites inventory unless the remaining sites in the housing element are adequate to address the outstanding RHNA by income category.

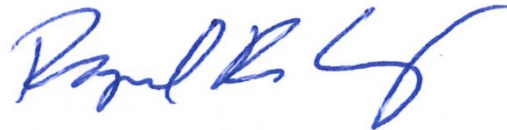
Table 1: Regional Housing Needs Allocation Progress

Income Level	RHNA Allocation	Remaining RHNA by Income Level
Very Low	82	82
Low	50	37
Moderate	53	53
Above Moderate	138	0
Total	324	172

The City of Santa Fe Springs continues to actively implement the policies of the General Plan including the goals, policies and programs of the Housing Element. The APR represents the progress the City has made towards implementing the General Plan and Housing Element during the Calendar Year 2020 reporting period.

FISCAL IMPACT

No fiscal impacts are associated with the submittal of the 2020 General Plan Housing Element Annual Progress Report to HCD and OPR.



Raymond R. Cruz
Executive Director

Attachment(s):

1. 2020 APR

Jurisdiction	Santa Fe Springs	
Reporting Year	2020	(Jan. 1 - Dec. 31)

ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation
 (CCR Title 25 §6202)

This table is auto-populated once you enter your jurisdiction name and current year data. Past year information comes from previous APRs.
 Please contact HCD if your data is different than the material supplied here

Table B													
Regional Housing Needs Allocation Progress													
Permitted Units Issued by Affordability													
		1	2									3	4
Income Level		RHNA Allocation by Income Level	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total Units to Date (all years)	Total Remaining RHNA by Income Level
Very Low	Deed Restricted	82											82
	Non-Deed Restricted												
Low	Deed Restricted	50					1	2	10			13	37
	Non-Deed Restricted												
Moderate	Deed Restricted	53											53
	Non-Deed Restricted												
Above Moderate		138		156	51		14			128		349	
Total RHNA		324		156	51		15	2	10	128		362	172
Total Units				156	51		15	2	10	128		362	172

Note: units serving extremely low-income households are included in the very low-income permitted units totals
 Cells in grey contain auto-calculation formulas

ANNUAL ELEMENT PROGRESS REPORT

Housing Element Implementation

(CCR Title 25 §6202)

Jurisdiction		Santa Fe Springs	
Reporting Year		2020 (Jan. 1 - Dec. 31)	
Table D			
Program Implementation Status pursuant to GC Section 65583			
Housing Programs Progress Report			
Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.			
1	2	3	4
Name of Program	Objective	Timeframe in H.E	Status of Program Implementation
Home Improvement Rebate Program	Pursue outside funding to support re-initiation of program. Seek to assist 100 homeowners.	Re-initiate program in 2014	When redevelopment was dissolved, the Home Improvemnt Rebate Program was eliminated. Given funding constraints, the City has not re-initiated the program but has continued to re-evaluate the long-term viability of the program, including the possible use of CDBD funding.
Property Maintenance Program	Continue to bring properties into compliance; provide information on available rehabilitation assistance. Seek to complete 60 residential inspections on an annual basis.	2014-2021	During calendar year 2020, the City processed a total of 114 residential code enforcement cases.
Residential Rental Inspection Program	Continue the annual inspection of rental units; bring substandard units into compliance.	2014-2021	The Residential Rental Inspection Program was suspended in February 2016. There has been ongoing discussion about reinitiating the program.
Sale of HARP Properties	Transfer ownership of HARP properties to a non-profit for provision of first-time homebuyer units. Seek to provide two moderate income units.	2014-2015	In January 2019, a home at 9735 Bartley Avenue was sold to a very low income household. The City has a vacat lot at 9257 Millergrove Drive. City staff has been working with Habitat For Humanity to gift them the land for construction of a low-income housing unit.
County Homeownership Program (HOP)	Advertise the availability of the HOP program and LACDA bi-lingual homebuyer seminars.	Update advertising materials by 2014	The City provides a description of the HOP program on its website, along with a link to the program on the Los Angeles County Development Authority (LACDA) website with program application information and dates for homebuyer seminars.
Southern California Home Financing Authority (SCHFA)	Advertise the availability of the SCHFA program, along with a listing of participating lenders.	Update advertising materials by 2014	The City provides a description of the SCHFA program on its website, along with a link to the program on the LACDA website with program application information.

Mortgage Credit Certificate (MCC) Program	Advertise the availability of the MCC program, along with a listing of participating lenders.	Update advertising materials by 2014	The City provides a description of the MCC program on its website, along with a link to the program on the LACDA website with program application information.
Affordable Housing Development Assistance	Enter into a DDA(s) on two City-owned sites for development of affordable housing. Seek to achieve a minimum of 100 affordable units, and waive application processing fees for projects with 10% ELI units.	For the Lakeland/Laurel site, enter into a DDA in 2014 and complete construction by 2016. For 10934 Laurel, enter into a DDA by 2015 and complete construction by 2017.	City entered into an Exclusive Negotiating Agreement (ENA) with The Whole Child, Habitat for Humanity and The Richman Group (collectively, Lakeland Collaborative) on March 28, 2019 for a term of 365 days. By late 2020 the City was in the process of entering into a Purchase and Sales Agreement with the Richman Group and The Whole Child to acquire 3.94 acres on which the Richman Group would develop 102 units (apartments) of intergenerational, affordable housing and The Whole Child would develop 19 units of interim housing with supportive services. The City Council was also prepared to approve a predevelopment loan of \$200,000 to assist the project. The City will continue to work with Habitat for Humanity to develop three remaining parcels with 18 for-sale units. The City would gift the land to the collaborative.
Housing Element Monitoring/Annual Report	Submit an annual Housing Element progress report to HCD. Monitor to ensure adequate sites to address RHNA throughout the planning period. Monitor redevelopment of R-3 properties.	First annual report due April 1, 2014. Ongoing monitoring of sites and R-3 properties in conjunction with project applications.	City has submitted its Annual Report for each year of the 2014-2021 Housing Element planning period. City has been monitoring development applications for its R-3 properties to ensure adequate site capacity to meet its RHNA allocation.
Second Dwelling Unit Program	Implement City's ordinance to accommodate second units. Seek to achieve at least 3 new second units.	2014-2021	The City issued permits for 11 ADU's in 2020.
Sustainability and Green Building	Provide education/outreach to residents and development community on CALGREEN. Advertise available energy conservation programs to residents.	Update advertising materials by 2014	The City website provides information on CALGREEN, along with links to a number of websites for sustainability tips and resources, including information about recycling, proper disposal of electronic waste, and energy and water conservation rebates.
Section 8 Rental Assistance	Continue participation in program administered by the LACDA and advertise through the City Newsletter and dissemination of brochures; encourage landlords to register units.	Advertise program quarterly in City newsletter. Discuss with landlords in conjunction with annual rental inspections.	The City does not administer its own Section 8 Program, but instead, the City provides a description of the Section 8 Program on its website, along with a link to the program on the LACDA website with program application information.
Preservation of Assisted Rental Housing	Monitor at-risk properties; as necessary, pursue alternative funding for rent subsidies and provide tenant education.	Contact at-risk property owners within one year of potential expiration.	No projects are at-risk of conversion to market rate, with the earliest potential expiration not until 2025.

Zoning Ordinance Revisions	Amend the Zoning Code to make explicit provisions for transitional & supportive housing, emergency shelters, manufactured housing, community care facilities, and SROs.	Adopt SB 2 related amendments in 2013, with the balance of Code amendments in 2014.	In March 2017, the City adopted a package of Zoning Code amendments to address zoning for a variety of housing types, as specified in the Housing Element. The City intends to further update its Zoning Code to become fully compliant with more recent changes in State law.
Density Bonus	Adopt and maintain a density bonus ordinance and advertise on the City's website.	Adopt a local density bonus ordinance in 2013.	City Council adopted a local density bonus ordinance in December 2013. The City amended its ordinance in 2017 for consistency with changes in State density bonus law, effective January 1, 2017. The City intends to further update the ordinance to become fully compliant with more recent changes in the State density bonus law.
CEQA Exemptions for Infill Projects	Continue to utilize CEQA categorical exemptions where appropriate, on a case-by-case basis.	2014-2021	No categorical exemptions were used for residential infill projects during 2020.
Fee Deferrals and/or Waivers for Affordable Housing	Inform affordable housing developers that fee deferrals, reductions and waivers may be requested as an incentive. Amend the Zoning Code to waive application processing fees for projects with 10% ELI units.	Provide information on available fee incentives in conjunction with affordable projects. By the end of 2014, amend Zoning Code for ELI units.	City's density bonus ordinance identifies fee reductions as an eligible incentive. In addition, Section 155.739 of the Municipal Code provides for a waiver of Planning Department entitlement fees for projects with a minimum of 10% extremely low income units.
Zoning for Small Employee Housing (6 or fewer)	Amend Zoning Code consistent with Employee Housing Act (H&S 17021.5).	Within two years of Housing Element adoption.	The City's Zoning Code provides zoning for small employee housing, consistent with the Employee Housing Act.
Fair Housing Programs	Promote Fair Housing programs through advertisement in the City newsletter, and through program brochures placed at public locations.	Advertise in City newsletter quarterly.	Brochures about fair housing services provided in Santa Fe Springs through the Housing Rights Center are provided at City Hall. In addition, the City provides links to the following fair housing resources on its website: California Department of Fair Employment and Housing; Los Angeles County Housing Resource Center; The Housing Rights Center; Neighborhood Legal Services of Los Angeles County; and Inner City Law Center.
Social Service Programs for Special Needs Groups	Maintain proactive social service programs; augment services as directed by the Social Services and Senior Citizens Advisory Committees.	2014-2021	The City has maintained active social services programs for its residents.

**FOR ITEM NO. 10
PLEASE SEE ITEM NO. 11A**



City of Santa Fe Springs

City Council Meeting

ITEM NO. 11A

June 15, 2021

CONSENT AGENDA

Minutes of the May 18, 2021 Regular and Special City Council Meetings

RECOMMENDATION(S)

- Approve the minutes as submitted.

BACKGROUND

Staff has prepared minutes for the following meeting:

- May 18, 2021 Special Meeting Minutes
- May 18, 2021 Regular Meeting Minutes

Staff hereby submits the minutes for Council's approval.

A handwritten signature in blue ink, appearing to read "Raymond R. Cruz".

Raymond R. Cruz
City Manager

Attachments:

1. May 18, 2021 Special Meeting Minutes
2. May 18, 2021 Regular Meeting Minutes



APPROVED:

MINUTES OF THE SPECIAL MEETING OF THE CITY COUNCIL

May 18, 2021

1. **CALL TO ORDER**

Mayor Mora called the meeting to order at 5:05 p.m.

2. **ROLL CALL**

Members present: Councilmembers Sarno, Trujillo, Zamora, Mayor Pro Tem Rodriguez, and Mayor Mora.

Members absent: None.

City Clerk, Janet Martinez announced that the teleconference location of Councilmember Joe Angel Zamora was not necessary as he attended the meetings in person.

3. **PUBLIC COMMENTS:** None

CITY COUNCIL

4. **CONSENT AGENDA**

Santa Fe Springs Park Recreation Building – New Cabinets - Authorization to Advertise for Construction Bids (Public Works)

Recommendation:

- Approve the Plans and Specifications; and
- Authorize the City Engineer to advertise for construction bids.

It was moved by Council Member Trujillo, seconded by Council Member Sarno, to approve the Plans and Specifications, and authorize the City Engineer to advertise for construction bids, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

STUDY SESSION

5. General Plan Update Presentation (Planning)

Recommendation:

- Receive presentation from the City's General Plan consultant, MIG, and provide feedback as desired.

Director of Planning, Wayne Morrell called upon Jose Rodriguez, consultant from MIG, Inc. to provide a presentation on Item No. 5.

Mayor Mora inquired about the noise specialist and if they would check for traffic and train noise. Mr. Rodriguez stated that part of the environmental impact report which looks at the changes of

land usage would require noise monitoring, including existing and projected conditions due to new traffic. Train traffic would not be included as it is not part of the general plan.

It was moved by Council Member Zamora, seconded by Mayor Pro Tem Rodriguez, to receive the presentation from the City's General Plan consultant, MIG, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

6. ADJOURNMENT

Mayor Mora adjourned the meeting at 5:53 p.m.

John M. Mora
Mayor

ATTEST:

Janet Martinez
City Clerk

Date



APPROVED:

MINUTES OF THE MEETINGS OF THE CITY COUNCIL

May 18, 2021

1. **CALL TO ORDER**

Mayor Mora called the meeting to order via teleconference at 6:10 p.m.

2. **ROLL CALL**

Members present: Councilmembers/Directors: Sarno, Trujillo, Zamora, Mayor Pro Tem/Vice Chair Rodriguez and Mayor/Chair Mora.

Members absent: None.

3. **INVOCATION**

Councilmember Sarno led the invocation.

4. **PLEDGE OF ALLEGIANCE**

The Youth Leadership Committee led the Pledge of Allegiance.

5. **PUBLIC COMMENTS**

The following people spoke during Public Comments: Joseph Trevizy, and Eddie Pardo.

City Clerk, Janet Martinez announced that a total number of 71 emails were received from citizens in favor of Item Number 20, Resolution No. 9713.

Mayor Mora requested to move Item No. 20 to the beginning of the agenda:

CITY COUNCIL

20. Consideration of a Resolution Expressing a Vote of No Confidence in Los Angeles County District Attorney George Gascón's Special Directives (City Manager)

Recommendation:

- Discussion and consideration of Resolution No. 9713, A Resolution Expressing a Vote of No Confidence in Los Angeles County District Attorney George Gascón's Special Directives.

City Manager, Raymond R. Cruz, provided a brief presentation on Item No. 20.

Council Members expressed their support for law enforcement.

Mayor Mora added that not supporting the approval of such Resolution is almost the same as defunding the police.

Council Member Zamora acknowledged public speaker Joseph Trevizy.

It was moved by Council Member Trujillo, seconded by Council Member Sarno, to approve Resolution No. 9713, expressing a Vote of No Confidence in Los Angeles County District Attorney George Gascon's Special Directives, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nays: None

Absent: None

PUBLIC FINANCING AUTHORITY

6. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Public Financing Authority.

- a. Minutes of the April 20, 2021 Public Financing Authority Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

- b. Monthly Report on the Status of Debt Instruments Issued through the City of Santa Fe Springs Public Financing Authority (PFA) (Finance)

Recommendation:

- Receive and file the report.

It was moved by Council Member Zamora, seconded by Mayor Pro Tem Rodriguez to approve Items No. 6A and 6B, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nays: None

Absent: None

WATER UTILITY AUTHORITY

7. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Water Utility Authority.

- a. Minutes of the April 20, 2021 Water Utility Authority Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

- b. Monthly Report on the Status of Debt Instruments Issued through the City of Santa Fe Springs Water Utility Authority (WUA) (Finance)

Recommendation:

- Receive and file the report.

- c. Status Update of Water-Related Capital Improvement Projects (Public Works)

Recommendation:

- Receive and file the report.

It was moved by Council Member Sarno, seconded by Council Member Trujillo, to approve Items No. 7A through 7C, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

NEW BUSINESS

8. Water Well No. 2 Assessment – Request for Proposal (Public Works)

Recommendation:

- Authorize the Director of Public Works to issue a Request for Proposal for Water Well No. 2 Assessment.

Director of Public Works, Noe Negrete, introduced Water Utility Services Manager, Jesse Sira, to provide a brief presentation on Item No. 8.

Councilmember Sarno asked about the treatment for arsenic.

Councilmember Zamora asked if the City is working with any other cities or treatment centers that have worked with similar issues.

Manager Sira provided additional information.

It was moved by Council Member Zamora, seconded by Mayor Pro Tem Rodriguez, to authorize the Director of Public works to issue a Request for Proposal for Water Well No. 2 Assessment, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

9. On-Call Emergency Water Repair Services – Issue a Request or Proposal (Public Works)

Recommendation:

- Authorize the Director of Public Works to issue a Request for Proposal for On-Call Emergency Water Repair Services.

Director of Public Works, Noe Negrete, introduced Water Utility Services Manager, Jesse Sira, to provide a brief presentation on Item No. 9.

Director Negrete stated locking in a rate and contract would assist in case of emergency services.

Councilmember Sarno inquired if the City would accept bids from local contractors; Manager Sira confirmed the City would accept bids from local contractors.

Councilmember Zamora inquired about previous response times, and if there would be a fee associated with the on-call services.

Director Negrete said there would be no fee for the contract and provided additional information on previous occurrences.

It was moved by Mayor Pro Tem Rodriguez, seconded by Council Member Zamora, to authorize the Director of Public Works to issue a Request for Proposal for On-Call Emergency Water Repair Services, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nays: None

Absent: None

10. Water Storage Tank Cathodic Protection Systems – Issue a Purchase Order (Public Works)

Recommendation:

- Add the Water Storage Tank Cathodic Protection Systems to the Capital Improvement Plan (CIP);
- Appropriate \$21,854 from the Water Reserve/CIP Funds to the Water Storage Tank Cathodic Protection Systems;
- Accepts the bids; and
- Authorize the Director of Purchasing to issue a Purchase Order for Cathodic Protection Systems for Two Water Storage Tanks for \$21,854.00.

Director of Public Works, Noe Negrete, introduced Water Utility Services Manager, Jesse Sira, to provide a brief presentation on Item No. 10.

It was moved by Council Member Sarno, seconded by Council Member Zamora, to add the Water Storage Tank Cathodic Protection Systems to the Capital Improvement Plan (CIP), appropriate \$21,854 from the Water Reserve/CIP Funds to the Water Storage Tank Cathodic Protection Systems, accept the bids, and authorize the Director of Purchasing to issue a Purchase Order for Cathodic Protection Systems for Two Water Storage Tanks for \$21,854.00, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nays: None

Absent: None

HOUSING SUCCESSOR

11. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Housing Successor.

Minutes of the April 20, 2021 Housing Successor Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

It was moved by Council Member Zamora, seconded by Council Member Sarno, to approve the minutes as submitted, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nays: None

Absent: None

SUCCESSOR AGENCY

12. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the Successor Agency.

Minutes of the April 20, 2021 Successor Agency Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

It was moved by Councilmember Trujillo, seconded by Mayor Pro Tem Rodriguez to approve the minutes as submitted, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nays: None

Absent: None

CITY COUNCIL

13. CONSENT AGENDA

Consent Agenda items are considered routine matters which may be enacted by one motion and vote. Any item may be removed from the Consent Agenda and considered separately by the City Council.

- a. Minutes of the May 2, 2021 and April 20, 2021 Regular and Special City Council Meetings (City Clerk)

Recommendation:

- Approve the minutes as submitted.

- b. Quarterly Treasurer's Report of Investments for the Quarter Ended March 31, 2021 (City Clerk)

Recommendation:

- Receive and file the report.

- c. Approval of the Memorandum of Understanding (MOU) between the City of Santa Fe Springs and the Santa Fe Springs City Employees' Association (SFSCEA) and the Santa Fe Springs Firemens' Association (SFSFA), effective July 1, 2020 – June 30, 2021 (Finance)

Recommendation:

- Approve the Fiscal Year 2020-21 MOU between the City of Santa Fe Springs and the Santa Fe Springs City Employees' Association (SFSCEA), effective July 1, 2020 - June 30, 2021.
- Approve the Fiscal Year 2020-21 MOU between the City of Santa Fe

Springs and the Santa Fe Springs Firemens' Association, Inc. (SFSFA), effective July 1, 2020 – June 30, 2021.

It was moved by Council Member Sarno, seconded by Mayor Pro Tem Rodriguez, to approve Item Nos. 13A through 13C, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

NEW BUSINESS

14. Heritage Arts Advisory Committee (HAAC) Recommendation for Cancellation of 2021 SFS Art Fest Event (Community Services)

Recommendation:

- Approve the cancellation of the Professional Services Agreement and Amendment Number One to the Professional Services Agreement with Crepes & Grapes, LLC. for 2021 SFS Art Fest.

Director of Library Services, Joyce Ryan provided a presentation on Item No. 14.

It was moved by Mayor Pro Tem Rodriguez, seconded by Council Member Trujillo, to approve the cancellation of the Professional Services Agreement and Amendment Number One to the Professional Services Agreement with Crepes & Grapes, LLC. for 2021 SFS Art Fest,, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

15. Approval of Memorandum of Understanding between the City of Santa Fe Springs and Empowered 4 Life Foundation (Community Services)

Recommendation:

- Approve a two-year Memorandum of Understanding with Empowered 4 Life to provide no cost meals for the City's Teen Program and Summer Free Lunch Program at the parks.

Community Services Manager, Wayne Bergeron provided a presentation on Item No. 15.

Councilmember Zamora asked if monthly menus would be provided.

Mr. Bergeron responded that menus would be provided.

It was moved by Council Member Sarno, seconded by Mayor Pro Tem Rodriguez, to approve a two-year Memorandum of Understanding with Empowered 4 Life to provide no cost meals for the City's Teen Program and Summer Free Lunch Program at the parks, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

16. New Proposed Locations for Fitness Court at Los Nietos Park (Community Services)

Recommendation:

- Provide staff with direction in regards to a new location for the Fitness Court previously approved for Los Nietos Park.

Parks and Recreation Manager, Gustavo Hernandez provided a presentation on Item No. 16. Discussion ensued amongst Council on the proposed locations.

It was moved by Council Member Zamora, seconded by Council Member Trujillo, to select Fitness Court Site - Option 1, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

17. Approval of Modified Agreement with Active Network for Recreation Management Software (Community Services)

Recommendation:

- Approve the Modified Agreement with Active Network in a final form approved by the City Attorney's office.
- Authorize the City Manager to sign the agreement on behalf of the City.

Parks and Recreation Manager, Gustavo Hernandez provided a presentation on Item No. 17.

It was moved by Mayor Pro Tem Rodriguez, seconded by Council Member Trujillo, to approve the Modified Agreement with Active Network in a final form approved by the City Attorney's office, and authorize the City Manager to sign the agreement on behalf of the City, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

18. Approve the Purchase of Additional Audio and Visual Equipment and Installation for the City Council Chamber Audio Visual System (Finance)

Recommendation:

- Issue a Purchase Order to Western Audio Visual in the amount of \$41,974.87;
- Appropriate \$41,974.87 from the General Fund Unassigned Reserve to the Finance Nonrecurring budget account; and
- Authorize the Director of Purchasing to execute the Purchase Order.

Director of Finance and Administrative Services, Travis Hickey provided a presentation on Item No. 18.

It was moved by Council Member Sarno, seconded by Council Member Zamora, to issue a Purchase Order to Western Audio Visual in the amount of \$41,974.87, appropriate \$41,974.87 from the General Fund Unassigned Reserve to the Finance

Nonrecurring budget account, and authorize the Director of Purchasing to execute the Purchase Order, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

19. Approve the Purchase of a Replacement for the City's Core Networking Switch (Finance)

Recommendation:

- Issue a Purchase Order to Lanair Group, LLC in the amount of \$49,363.67;
- Authorize the Director of Purchasing to execute the Purchase Order.

It was moved by Council Member Sarno, seconded by Council Member Zamora, to issue a Purchase Order to Lanair Group, LLC in the amount of \$49,363.67, and authorize the Director of Purchasing to execute the Purchase Order, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

20. Consideration of a Resolution Expressing a Vote of No Confidence in Los Angeles County District Attorney George Gascón's Special Directives (City Manager)

Recommendation:

- Discussion and consideration of Resolution No. 9713, A Resolution Expressing a Vote of No Confidence in Los Angeles County District Attorney George Gascón's Special Directives.

Item No. 20 was moved to be considered at the beginning of the Council Meeting

21. Little Lake Park Bus Stop Improvements - Authorization to Advertise for Construction Bids (Public Works)

Recommendation:

- Approve the Plans and Specifications; and
- Authorize the City Engineer to advertise for construction bids.

Director of Public Works, Noe Negrete provided a brief presentation on Item No. 21.

It was moved by Council Member Zamora, seconded by Council Member Sarno, to approve the Plans and Specifications, and authorize the City Engineer to advertise for construction bids, by the following vote:

Ayes: Sarno, Trujillo, Zamora, Rodríguez, Mora

Nayes: None

Absent: None

22. CITY MANAGER AND EXECUTIVE TEAM REPORTS

- City Manager, Raymond R. Cruz spoke about welcoming City employees back into the office, and stated that City facilities would be reopening to the public on a limited basis on June 14th, 2021. He also spoke about the groundbreaking event for the Town Center Plaza Parking Lot Improvement Project scheduled to be completed in November 2021.
- Director of Public Works, Noe Negrete talked about the opening of the southbound entrance to the I-5 Freeway. He also mentioned the removal of the trees corresponding to the Town Center Parking Lot project would commence tomorrow. Lastly, he spoke about the replacement of lights at a dual-arm light pole at Los Nietos Park.
- Director of Planning, Wayne Morrell thanked Community Services and City Manager staff for the welcoming decorations and goodies.
- Director of Police Services, Dino Torres talked about the cancellation of the “Every 15 Minutes” event at Santa Fe High School and mentioned that a separate video would be shown to highlight previous year’s events.
- Fire Chief, Brent Hayward provided an update on COVID-19 cases within the City and across the County. He also spoke about Whittier PD Fireworks seizures and about the safety guidelines for the fireworks booth.
- Director of Finance and Administrative Services, Travis Hickey spoke about continuing work on the budget for the next fiscal year about the ongoing labor negotiations.
- Director of Library Services, Joyce Ryan spoke about the reopening of the Library on May 17th with social distancing guidelines. She spoke about registration opening on May 20th for the 4th of July celebration event, and also announced that registration for Summer Camp is now open. She spoke about registration being open for summer sport activities such as soccer and adult softball, and spoke about a baseball skill showcase which will require free registration. Lastly, she talked about virtual orientation and on-boarding for the new parks and program hires.

23. PRESENTATIONS

- a. Proclamation - Proclaiming May 9-15, 2021 as “Law Enforcement Week” (Police Services)

24. APPOINTMENTS TO BOARDS, COMMITTEES, COMMISSIONS

There were no appointments.

25. COUNCIL COMMENTS

Councilmember Sarno expressed his excitement at returning to the office and thanked law enforcement for their work. He also welcomed back staff and thanked Director of Public Works, Noe Negrete for his work for advocating for the City in regards to the I-5 Project.

Councilmember Trujillo stated she was glad to return to the office, and thanked staff for

their help. She thanked first responders, and was happy to hear the additional staff being hired to assist with the summer programs.

Councilmember Zamora echoed the sentiments of his colleagues, and spoke about the L.A. CADA event for teens. He thanked law enforcement for their continued work, and spoke about the “Every 15 Minutes” event. He thanked everyone in attendance.

Mayor Pro Tem Rodriguez thanked first responders and expressed her gratitude at the ground breaking event. She also thanked Director of Public Works, Noe Negrete for his work and also thanked the Department of Police Services for their assistance with the “Every 15 Minutes” program. Lastly, she thanked the Santa Fe Springs Women’s Club for continuing to serve the youth.

Mayor Mora thanked law enforcement for their work, and thanked staff for the preparations taken to ensure a safe and welcoming environment work. Lastly, he thanked Public Works staff and Councilmember Sarno for their work with Caltrans.

CLOSED SESSION

26. CONFERENCE WITH LABOR NEGOTIATORS

(Pursuant to California Government Code Section 54957.6)

Agency Designated Representatives: City Manager, Labor Negotiator Colin Tanner.

Employee Organizations: Santa Fe Springs City Employees’ Association, Santa Fe Springs Firefighters’ Association, and Santa Fe Springs Executive, Management and Confidential Employees’ Association

Mayor Mora recessed the meeting at 7:54 p.m.

Mayor Mora reconvened the meeting at 8:43 p.m.

27. CLOSED SESSION REPORT

City Attorney, Ivy M. Tsai provided a report on Closed Session Items: Direction was given to staff and no reportable action was taken.

28. ADJOURNMENT

Mayor Mora adjourned the meeting at 8:44 p.m. in memory in memory of Harvey Berg.

ATTEST:

Janet Martinez
City Clerk

John M. Mora
Mayor

Date



City of Santa Fe Springs

City Council Meeting

ITEM NO. 11B

June 15, 2021

CONSENT AGENDA

Horseshoe Pit Improvements – Award of Contract

RECOMMENDATION

- Appropriate \$22,000 from the Utility Users Tax (UUT) Capital Improvements Fund to the Horseshoe Pit Improvements (PW 200101);
- Accept the bids; and
- Award a contract Corral Construction of Commerce, California, in the amount of \$41,410.00.

BACKGROUND

District Member Ian Calderon of the 57th Assembly District pledged financial assistance in the amount of \$2,520,000 to the City for improvements to existing City parks. On January 23, 2020, the City approved the California Natural Resources Agency to process the collection of grant funding related to the various park improvement projects.

The Horseshoe Pit Improvements project is located at Santa Fe Springs Park with two existing courts, Little Lake Park with two existing courts and Los Nietos Park with four existing courts. The scope of work will consist of the removal and replacement of all wood backboards, removal/replacement and regrading of all stabilized decomposed granite (Court Surface), removal and replacement of all wood foul lines and stake box, repair of game boundary chain link fence and the installation of steel bollards at Santa Fe Springs Park adjacent to the parking lot. The steel bollards will protect the easterly chain link fence from vehicular traffic.

Bids were opened on June 01, 2021, and a total of six bids were received. City staff reviewed the proposals and determined that all bid proposals comply with the project specifications. The low bidder for the project was Corral Construction of Commerce, California, with a bid totaling \$41,410.00. The bid proposal for the following bidders reflects the bid amount read publicly during the bid opening held on June 01, 2021, and staff audited corrected results.

Company Name	Publicly Read Bid	Audited Bid
1. Corral Construction	\$41,410.00	\$41,410.00
2. RS Construction & Development	\$47,412.00	\$47,412.00
3. Noble E&C, Inc.	\$54,333.00	\$54,333.00
4. New Building Const. & Restoration, Inc.	\$79,555.00	\$79,555.00
5. CEM Construction Corp.	\$127,261.00	*\$127,456.00
6. Organic Scapes	\$200,660.00	\$200,660.00

The bid proposal submitted by Corral Construction in the amount of \$41,410.00, is approximately 17.67% below the Engineer's Estimate of \$50,300.00.

Report Submitted By: Noe Negrete
Director of Public Works

A handwritten signature in blue ink, appearing to be "N Negrete", is written over the printed name of the Director of Public Works.

Date of Report: June 10, 2021

The Department of Public Works has reviewed the bids and determined the low bid submitted by Corral Construction to be responsive and responsible.

LEGAL REVIEW

The City Attorney's office has reviewed the proposed agreement.

FISCAL IMPACT

The Horseshoe Pit Improvements project will require an appropriation in the amount of \$22,000 from the Utility Users Tax (UUT) Capital Improvement Fund to the Horseshoe Pit Improvements project account number (PW200101). Upon the project's completion, the approved California Natural Resources Agency Grant Fund will reimburse the City in the amount of \$45,000.

The total project cost breakdown is as follows:

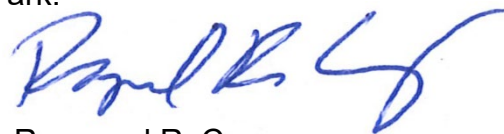
<u>ITEM</u>	<u>BUDGET</u>
Construction	\$ 41,410
Design	\$ 2,590
Engineering	\$ 7,000
Inspection	\$ 6,000
Contingency	\$ 10,000
Total Project Cost	\$ 67,000

Project Funding Sources

	<u>Amount</u>
Grant Revenue	(\$45,000)
Anticipated Expenditures	<u>\$67,000</u>
Budget Shortfall	(\$22,000)

INFRASTRUCTURE IMPACT

The various Horseshoe Pit Improvements projects will improve the structural condition and reduce maintenance costs for existing horseshoe pits at Los Nietos Park, Santa Fe Springs Park, and Little Lake Park. In addition, the horseshoe pit improvement projects will improve the aesthetic look of exterior infrastructures at Los Nietos Park, Santa Fe Springs Park and Little Lake Park.



Raymond R. Cruz
City Manager

Attachments:

Attachment No. 1: Agreement

CITY OF SANTA FE SPRINGS
CONTRACT AGREEMENT
FOR
HORSESHOE PIT IMPROVEMENTS
(LITTLE LAKE PARK – LOS NIETOS PARK – SANTA FE SPRINGS PARK)
IN THE CITY OF SANTA FE SPRINGS

This Contract Agreement is made and entered into the above-stated project this 15th of June 2021, BY AND BETWEEN the City of Santa Fe Springs, as AGENCY, and Corral Construction as CONTRACTOR in the amount of \$41,410.00.

WITNESSETH that AGENCY and CONTRACTOR have mutually agreed as follows:

ARTICLE I

The contract documents for the aforesaid project shall consist of the Notice Inviting Sealed Bids, Instructions to Bidders, Proposal, General Specifications, Standard Specifications, Special Provisions, Plans, and all referenced specifications, details, standard drawings, CDBG contract provisions and forms, and appendices; together with this Contract Agreement and all required bonds, insurance certificates, permits, notices, and affidavits; and also including any and all addenda or supplemental agreements clarifying, or extending the work contemplated as may be required to ensure its completion in an acceptable manner. All of the provisions of said contract documents are made a part hereof as though fully set forth herein.

ARTICLE II

For and in consideration of the payments and agreements to be made and performed by AGENCY, CONTRACTOR agrees to furnish all materials and perform all work required for the above-stated project, and to fulfill all other obligations as set forth in the aforesaid contract documents.

ARTICLE III

CONTRACTOR agrees to receive and accept the prices set forth in the Proposal as full compensation for furnishing all materials, performing all work, and fulfilling all obligations hereunder. Said compensation shall cover all expenses, losses, damages, and consequences arising out of the nature of the work during its progress or prior to its acceptance including those for well and faithfully completing the work and the whole thereof in the manner and time specified in the aforesaid contract documents; and also including those arising from actions of the elements, unforeseen difficulties or obstructions encountered in the prosecution of the work, suspension or discontinuance of the work, and all other unknowns or risks of any description connected with the work.

ARTICLE IV

AGENCY hereby promises and agrees to employ, and does hereby employ, CONTRACTOR to provide the materials, do the work and fulfill the obligations according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions set forth in the contract documents. No work or portion of the work shall be paid for until it is approved for payment by the City Engineer. Payment made for completed portions of the work shall not constitute final acceptance of those portions or of the completed project.

ARTICLE V

CONTRACTOR acknowledges the provisions of the State Labor Code requiring every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that code and certifies compliance with such provisions. Contractor further acknowledges the provisions of the State Labor Code requiring every employer to pay at least the minimum prevailing rate of per diem wages for each craft classification or type of workman needed to execute this contract as determined by the Director of Labor Relations of the State of California. The Contractor is required to pay the higher of either the State or Federal Wages.

ARTICLE VI

Except as to the sole or active negligence or willful misconduct of the AGENCY and notwithstanding the existence of insurance coverage required of CONTRACTOR pursuant to this contract, CONTRACTOR shall save, keep defend, indemnify, hold free and harmless AGENCY, its officers, officials, employees, agents and volunteers from and against any and all damages to property or injuries to or death of any person or persons, and shall defend, indemnify, save and hold harmless AGENCY, its officers, officials, employees, agents and volunteers from any and all claims, demands, suits, actions or proceedings of any kind or nature, including, but not by way of limitation, all civil claims, workers' compensation claims, and all other claims resulting from or

arising out of the acts, errors or omissions of CONTRACTOR, its employees and/or authorized subcontractors, whether intentional or negligent, in the performance of this Agreement.

This indemnification provision is independent of and shall not in any way be limited by the Insurance Requirements of this Agreement. AGENCY approval of the Insurance contracts required by this Agreement does not in any way relieve the CONTRACTOR from liability under this section.

AGENCY shall notify CONTRACTOR of the receipt of any third party claim related to this Agreement within seven (7) business days of receipt. The City is entitled to recover its reasonable costs incurred in providing the notification. (Pubic Contracts Code Section 9201)

ARTICLE VII

AGENCY shall comply with Pub Cont. Code §20104.50 as follows:

20104.50.

(a) (1) It is the intent of the Legislature in enacting this section to require all local governments to pay their contractors on time so that these contractors can meet their own obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is, instead, a matter of statewide concern.

(2) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.

(b) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

(c) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:

(1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

(2) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the contractor as soon as practicable, but not later than seven days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.

(d) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subdivision (c).

(e) For purposes of this article:

(1) A “local agency” includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.

(2) A “progress payment” includes all payments due contractors, except that portion of the final payment designated by the contract as retention earnings.

(3) A payment request shall be considered properly executed if funds are available for payment of the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

(f) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

ARTICLE VIII

CONTRACTOR affirms that the signatures, titles and seals set forth hereinafter in execution of this Contract Agreement represent all individuals, firm members, partners, joint ventures, and/or corporate officers having principal interest herein.

IN WITNESS WHEREOF, the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Contract Agreement to be executed in triplicate by setting hereunto their name, titles, hands, and seals as of the date noted above.

CONTRACTOR

By:

NAME, TITLE

ADDRESS

THE CITY OF SANTA FE SPRINGS

By:

JOHN M. MORA, MAYOR

ATTEST:

JANET MARTINEZ, CITY CLERK

APPROVED AS TO FORM:

IVY M. TSAI, CITY ATTORNEY

(Contractor signature must be notarized with proper acknowledgement attached.)



City of Santa Fe Springs

City Council Meeting

ITEM NO. 11C

June 15, 2021

CONSENT AGENDA

Interior and Exterior Painting Park Facilities (Little Lake Park, Los Nietos Park, Santa Fe Springs Park) – Award of Contract

RECOMMENDATION

- Accept the bids; and
- Award a contract to Innovation Painting, Inc. of Ontario, California, in the amount of \$43,000.00.

BACKGROUND

District Member Ian Calderon of the 57th Assembly District pledged financial assistance in the amount of \$2,520,000 to the City for improvements to existing City parks. On January 23, 2020, the City approved the California Natural Resources Agency to process the collection of grant funding related to the various park improvement projects.

The Interior and Exterior Painting Facilities project will include the interior and exterior of the recreation building and the formal picnic shelter shade cover located at Santa Fe Springs Park, the interior and exterior of the recreation building at Little Lake Park, and the gym building interior ground floor staff office, break room and upstairs offices at Los Nietos Park. The scope of work will consist of the surface preparation, application of primer and the application of paint on Concrete Masonry Units (CMU), Exterior Portland Cement Plaster (stucco), exterior gypsum board, concrete, wood, steel, galvanized metal and flashing, steel/pipe railing and hand rails, stainless steel flashing, plastic trim and aluminum.

Bids were opened on June 01, 2021, and a total of six bids were received. City staff reviewed the proposals and determined that all bid proposals comply with the project specifications. The low bidder for the project was Innovation Painting, Inc., of Ontario, California, with a bid totaling \$43,000.00. The bid proposal for the following bidders reflects the bid amounts.

Company Name	Bid Amount
1. Innovation Painting Inc.	\$43,000.00
2. Corral Construction & Development Inc.	\$50,500.00
3. Stolie Painting	\$59,298.00
4. GDL Painters, Inc.	\$68,000.00
5. Color New Co.	\$77,000.00
6. CTG Construction	\$78,000.00

The bid proposal submitted by Innovation Painting, Inc., in the amount of \$43,000, is approximately 47% below the Engineer's Estimate of \$81,400.00

Report Submitted By: Noe Negrete
Director of Public Works

A handwritten signature in blue ink, appearing to be "N. Negrete", is placed over the printed name of the Director of Public Works.

Date of Report: June 10, 2021

The Department of Public Works has reviewed the bids and determined the low bid submitted by Innovation Painting, Inc. to be responsive and responsible.

LEGAL REVIEW

The City Attorney's office has reviewed the proposed agreement.

FISCAL IMPACT

The revenues for the California Natural Resources Agency Grant Fund will cover the project expenditures. Sufficient funding is available from the grant; therefore, no appropriation will be necessary.

The total project cost breakdown is as follows:

<u>ITEM</u>	<u>BUDGET</u>
Construction	\$ 43,000
Design	\$ 10,800
Engineering	\$ 9,000
Inspection	\$ 10,000
Contingency	\$ 20,000
Total Project Cost:	\$ 92,800

INFRASTRUCTURE IMPACT

The Interior and Exterior Painting Park Facilities projects will improve the aesthetic look of exterior infrastructures at Little Lake Park, Los Nietos Park, and Santa Fe Springs Park.

Raymond R. Cruz
City Manager

Attachments:

Attachment No. 1: Agreement

CITY OF SANTA FE SPRINGS
CONTRACT AGREEMENT
FOR
INTERIOR AND EXTERIOR PAINTING
PARK FACILITIES
(Little Lake Park – Los Nietos Park – Santa Fe Springs Park)
IN THE CITY OF SANTA FE SPRINGS

This Contract Agreement is made and entered into the above-stated project this 15th of June 2021, BY AND BETWEEN the City of Santa Fe Springs, as AGENCY, and Innovation Painting, Inc. as CONTRACTOR in the amount of \$43,000.00.

WITNESSETH that AGENCY and CONTRACTOR have mutually agreed as follows:

ARTICLE I

The contract documents for the aforesaid project shall consist of the Notice Inviting Sealed Bids, Instructions to Bidders, Proposal, General Specifications, Standard Specifications, Special Provisions, Plans, and all referenced specifications, details, standard drawings, CDBG contract provisions and forms, and appendices; together with this Contract Agreement and all required bonds, insurance certificates, permits, notices, and affidavits; and also including any and all addenda or supplemental agreements clarifying, or extending the work contemplated as may be required to ensure its completion in an acceptable manner. All of the provisions of said contract documents are made a part hereof as though fully set forth herein.

ARTICLE II

For and in consideration of the payments and agreements to be made and performed by AGENCY, CONTRACTOR agrees to furnish all materials and perform all work required for the above-stated project, and to fulfill all other obligations as set forth in the aforesaid contract documents.

ARTICLE III

CONTRACTOR agrees to receive and accept the prices set forth in the Proposal as full compensation for furnishing all materials, performing all work, and fulfilling all obligations hereunder. Said compensation shall cover all expenses, losses, damages, and consequences arising out of the nature of the work during its progress or prior to its acceptance including those for well and faithfully completing the work and the whole thereof in the manner and time specified in the aforesaid contract documents; and also including those arising from actions of the elements, unforeseen difficulties or obstructions encountered in the prosecution of the work, suspension or discontinuance of the work, and all other unknowns or risks of any description connected with the work.

ARTICLE IV

AGENCY hereby promises and agrees to employ, and does hereby employ, CONTRACTOR to provide the materials, do the work and fulfill the obligations according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions set forth in the contract documents. No work or portion of the work shall be paid for until it is approved for payment by the City Engineer. Payment made for completed portions of the work shall not constitute final acceptance of those portions or of the completed project.

ARTICLE V

CONTRACTOR acknowledges the provisions of the State Labor Code requiring every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that code and certifies compliance with such provisions. Contractor further acknowledges the provisions of the State Labor Code requiring every employer to pay at least the minimum prevailing rate of per diem wages for each craft classification or type of workman needed to execute this contract as determined by the Director of Labor Relations of the State of California. The Contractor is required to pay the higher of either the State or Federal Wages.

ARTICLE VI

Except as to the sole or active negligence or willful misconduct of the AGENCY and notwithstanding the existence of insurance coverage required of CONTRACTOR pursuant to this contract, CONTRACTOR shall save, keep defend, indemnify, hold free and harmless AGENCY, its officers, officials, employees, agents and volunteers from and against any and all damages to property or injuries to or death of any person or persons, and shall defend, indemnify, save and hold harmless AGENCY, its officers, officials, employees, agents and volunteers from any and all claims, demands, suits, actions or proceedings of any kind or nature, including, but not by way of limitation, all civil claims, workers' compensation claims, and all other claims resulting from or

arising out of the acts, errors or omissions of CONTRACTOR, its employees and/or authorized subcontractors, whether intentional or negligent, in the performance of this Agreement.

This indemnification provision is independent of and shall not in any way be limited by the Insurance Requirements of this Agreement. AGENCY approval of the Insurance contracts required by this Agreement does not in any way relieve the CONTRACTOR from liability under this section.

AGENCY shall notify CONTRACTOR of the receipt of any third party claim related to this Agreement within seven (7) business days of receipt. The City is entitled to recover its reasonable costs incurred in providing the notification. (Pubic Contracts Code Section 9201)

ARTICLE VII

AGENCY shall comply with Pub Cont. Code §20104.50 as follows:

20104.50.

(a) (1) It is the intent of the Legislature in enacting this section to require all local governments to pay their contractors on time so that these contractors can meet their own obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is, instead, a matter of statewide concern.

(2) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.

(b) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

(c) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:

(1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

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(d) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subdivision (c).

(e) For purposes of this article:

(1) A “local agency” includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.

(2) A “progress payment” includes all payments due contractors, except that portion of the final payment designated by the contract as retention earnings.

(3) A payment request shall be considered properly executed if funds are available for payment of the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

(f) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

ARTICLE VIII

CONTRACTOR affirms that the signatures, titles and seals set forth hereinafter in execution of this Contract Agreement represent all individuals, firm members, partners, joint ventures, and/or corporate officers having principal interest herein.

IN WITNESS WHEREOF, the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Contract Agreement to be executed in triplicate by setting hereunto their name, titles, hands, and seals as of the date noted above.

CONTRACTOR

By:

NAME, TITLE

ADDRESS

THE CITY OF SANTA FE SPRINGS

By:

JOHN M. MORA, MAYOR

ATTEST:

JANET MARTINEZ, CITY CLERK

APPROVED AS TO FORM:

IVY M. TSAI, CITY ATTORNEY

(Contractor signature must be notarized with proper acknowledgement attached.)



City of Santa Fe Springs

City Council Meeting

ITEM NO. 12

June 15, 2021

NEW BUSINESS

Introduction and Discussion of City's Proposed Fiscal Year 2021-22 Budget

RECOMMENDATION

Provide staff direction regarding revenue and expenditure matters included in the Fiscal Year 2021-22 proposed budget.

BACKGROUND

We are pleased to present the proposed operating budget for the City of Santa Fe Springs for the fiscal year 2021-22. This past year and a half not only upended our personal lives, it upended our organization's budget, services, and programs. But, we have persevered and we are beginning to see shades of normalcy during the most unprecedented event in recent history. Our financial position is the strongest it has been over the last several years; public services remained uninterrupted, even during the height of the pandemic; and while programs were delivered in an innovative manner during the Stay-at-Home orders, our in-person programs will return in the near future. Under the direction of the City Council, we also welcomed our employees back on site full time and are now preparing to start welcoming our community members back at certain City facilities starting June 14, 2021. However, life may not look like it did prior to the pandemic and that will be reflected in everything we do, including this budget.

Nonetheless, we must now begin to shift our focus to realizing our long-term goals – such as, bridging the digital divide in our community; restoring staffing levels to where they need to be in order to provide effective and efficient services; addressing our pension and OPEB unfunded liabilities; establishing an effective training program for our employees (Santa Fe Springs University); seeking alternative sources of revenue to establish a reliable and consistent funding source for our capital improvement projects; enhancing and modernizing our IT infrastructure for our community and for our employees; and, lastly, seeking alternative and more reliable water resources. These are the challenges that we, as an organization, are facing. As such, we will remain steadfast and proactive in addressing them. The FY 2021-22 proposed operating budget has dedicated resources to begin to address each challenge in this upcoming fiscal year.

FY 2020-21 Year-End Projection

Although this current fiscal year was overshadowed by the pandemic and its effects on the general economy, our City was fortunate that our Sales Tax base was relatively unaffected by the pandemic as it had little to no effect on our revenue stream. The Stay-at-Home orders also generated greater than anticipated online sales, which our City benefitted from immensely. While the Sales Tax generated the previous fiscal year (FY19-20) was the highest the City has ever generated, staff anticipates this



City of Santa Fe Springs

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current fiscal year's Sales Tax will be greater than what was generated in previous fiscal years. The Sales Tax revenue/growth is critical to our finances as it represents nearly half of all our City's General Fund revenues.

Additionally, this is the second full year of collecting the voter-approved Transaction & Use Tax (Measure Y) and its trend is very favorable for the City. Measure Y has alleviated some of the financial burdens that have threatened our strong financial position. Even during a global pandemic, Measure Y was a consistent and reliable stream of revenue for our City. The Sales Tax and Measure Y combined represent over two-thirds (68%) of our General Fund revenues.

As such, staff is anticipating ending this current fiscal year with a \$5.0-\$7.0 million operating surplus. While this is extraordinary news, there are still certain financial challenges we need to address moving forward. Under the direction of the City Council, we established and funded multiple set-aside funds (i.e., Capital Improvement Projects, Unfunded Liability, Economic Contingency, Equipment Replacement, Employee Benefits, Risk Management and Unassigned Reserves) several years ago to begin addressing some of these challenges. For the previous two fiscal years, staff has recommended allocating operating surpluses to these funds and once this fiscal year's financials are completed, staff will provide a recommendation on allocating the anticipated surplus to the City Council.

The City's Water Utility fund is anticipated to have an operating surplus of approximately \$1.0 million at year end. This is primarily due to the approved new water rates phased in beginning June 1, 2020. Although, the FY 2020-21 budget projected an operating deficit for the fund, higher than anticipated revenues and lower expenditures than budget have contributed to the fund's projected surplus. Over the last several years, there has been a continuing need for Capital Improvement Projects related to the source of water to aid in stabilizing the growing cost of water from outside sources. The cost to have an operating well in both of the City's water zones is expected to be approximately \$10 million. Other options for water supply sources are also being considered, but all come with a capital investment requirement. Once the fiscal year is completed, staff will recommend setting aside the operating surplus to add to the Water CIP reserve.

FY 2021-22 Proposed Budget Highlights

The proposed General Fund budget has an estimated \$2.8 million budget surplus primarily due to an 18.3% (or \$10.1 million) increase in the City's General Fund revenues, when compared to the Adopted Budget revenue figures for FY 2020-21 (\$64.9 million vs. \$54.8 million). These increases represent staff's cautious approach to budgeting revenues - especially during the development of the FY 2020-21 budget when the pandemic was in its infancy – but it also reflects an expected general growth



City of Santa Fe Springs

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and recovery in the economy. Given that our CalPERS unfunded liability continues to grow and there is still some uncertainty as to what the pandemic impact will be to PERS' investments, staff is recommending to budget a transfer of the \$2.8 million budget surplus into the Unfunded Liability Reserve for FY 2021-22.

Included in this proposed operating budget are resources for several organizational needs including:

- Funding for various Capital Improvement Projects;
- Replacement of large and specialized City vehicles;
- Funding for twenty-five (25) proposed position adjustments;
- Funding for labor-related increases resulting from labor negotiations;
- Cost increases related to the City of Whittier's police services contract;
- Several IT upgrades/enhancements;
- Funding for non-recurring expenditures, which include replacements of furniture in public facilities, refurbishments of public facilities, and internal process improvements;
- Funding for various contracts including finance and IT related, environmental cleanup, increases in park facility utilities and maintenance.

The following table summarizes the proposed sources and uses for FY 2021-22:

	Actual FY 2018-19	Actual FY 2019-20	Adopted FY 2020-21	Proposed FY 2021-22
Sources				
Estimated General Revenues	\$ 52,837,291	\$ 66,019,464	\$ 54,809,500	\$ 64,864,570
Total Sources	52,837,291	66,019,464	54,809,500	64,864,570
Uses				
Department Expenditures	44,896,086	46,162,541	52,616,850	55,584,620
Non-Recurring Expenditures	643,482	1,161,379	1,287,900	1,668,600
Vehicle/Equipment Acquisition	-	-	-	-
Proposed Positions for FY 2021-22	-	-	-	1,000,000
Labor Negotiations for FY 2021-22	-	-	-	1,000,000
Capital Improvement Program Funding	3,800,000	2,800,000	2,800,000	2,800,000
Total Uses	49,339,569	50,123,920	56,704,750	62,053,220
Operating Surplus / (Deficit)	\$ 3,497,722	\$ 15,895,544	\$ (1,895,250)	\$ 2,811,350



City of Santa Fe Springs

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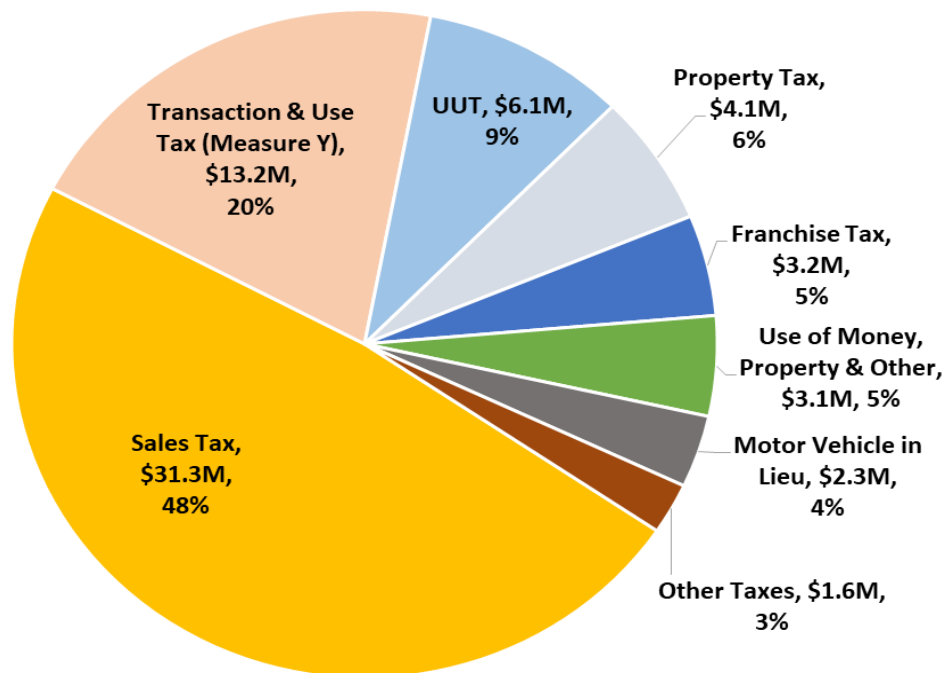
Revenues / Sources

During FY 2021-22, General Fund revenues (not including the Water Utility Fund) are expected to total \$64.9 million. This does not include "applied" General Fund revenues (an additional \$12.2 million) that are derived from the operations of specific departments and allocated to offset those same departmental expenditures.

As stated, the most significant increases are to the City's largest revenue sources: sales tax (23.2%) and the transaction and use tax (28.3%), which is an approximately \$8.8 million increase. Sales tax and the transaction and use tax are proposed at \$31.3 million and \$13.2 million, respectively. These figures are budgeted based on projections provided by the City's consultants along with historical trend analysis. Staff will continue to closely monitor the City's revenues and any adverse fluctuations in expected trends.

The chart below illustrates an overall view of the City's revenues for the next fiscal year.

FY 2021-22 GF Revenue Sources: \$64.9M





City of Santa Fe Springs

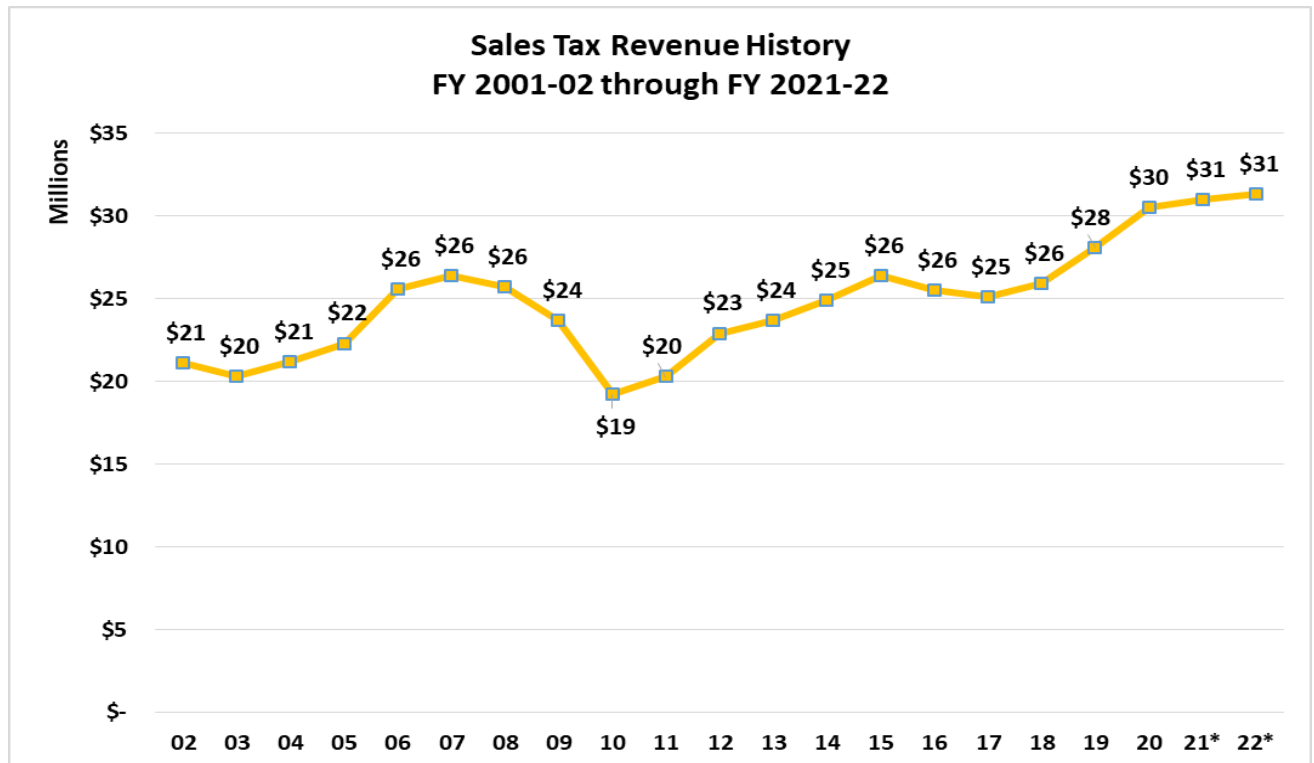
City Council Meeting

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Sales Tax Revenue

The State of California's Department of Tax and Fee Administration (CDTFA) disburses monies to counties and cities on a quarterly basis with advances paid monthly. Quarterly adjustments are made to reflect the actual funds collected. The Sales Tax is charged by the retailers who sell tangible property in the state. The tax is measured by gross receipts from retail sales at a rate of 10.5%. Effective April 1, 2019 the distribution of the tax of 10.5% is as follows: 8.5% to other governmental agencies and 2.0% to the City of Santa Fe Springs – 1% for Bradley-Burns and 1% for the Transaction & Use Tax (Measure Y).

Historically, the City has benefitted greatly from the large business community and the sales tax revenue generated. During the Great Recession, however, the City's revenues were disproportionately impacted by the downturn in the economy. Since then, modest gains have generally provided for a slow but steady rise. In FY 2014-15 sales tax revenue reached the pre-recession high of \$26.4 million followed by two years of declines to \$25.1 million in FY 2016-17 and followed by consistent growth into FY 2018-19. Sales tax received in FY 2019-20 (\$30.5 million) was the highest ever recorded and now it is anticipated that at year-end (FY 2020-21) the sales tax will experience an increase of approximately \$500,000.



*Estimate

Report Submitted By: Travis Hickey and Alvaro Castellon
Finance and Administrative Services

Date of Report: June 10, 2021



City of Santa Fe Springs

City Council Meeting

June 15, 2021

Transactions & Use Tax

In November 2018, the City of Santa Fe Springs voters approved a 1% transactions and use tax. The tax became effective April 1, 2019 with the first payment to the City beginning in June 2019. Transaction and use tax is essentially the same as the sales tax except that it is only subject to transactions delivered to customers within the City (i.e. point-of-destination) whereas sales tax applies to transactions originating within the City (i.e. point-of-sale).

Utility Users' Tax

The Utility Users' Tax (UUT) is imposed on every individual or entity using a utility within the City. Utilities subject to the tax include electricity, gas, and telephone (including cellular telephones). Individuals and entities using these utility services pay a tax rate of 5.0% on all charges made for such services. As the third largest revenue source, the UUT is projected to account for 11% of the General Fund revenues.

A declining trend has been observed for the UUT in the past several months extending back to last fiscal year. This decline is due to numerous reasons including shift in consumer behavior, reduction in consumption, and the California Climate Credit part of the state's Cap-and-Trade Program. Consequently, the UUT revenue is anticipated to remain relatively flat for the next several years. The projected UUT revenue is \$6.1 million for FY 2021-22.

Expenditures

Overall, General Fund expenditures and operating fund transfers are expected to total approximately \$62.1 million in FY 2021-22, or about \$5.4 million greater than the FY 2020-21 Adopted Budget of \$56.7 million. Departmental expenditures, net of applied revenues (approximately \$12.2 million), are estimated at \$55.6 million in FY 2021-22 compared to the FY 2020-21 Adopted Budget of \$52.6 million. The increase of 5.6% is due to a variety of factors including: general rise in labor related costs – CalPERS contributions, step increases, health care increases, and minimum wage increases – and other recommended operating needs previously mentioned at the beginning of this report.

Additionally, the proposed budget also includes funding for twenty-five position adjustments in order to begin to address needed staffing levels. The proposed budget also has funding for labor cost increases resulting from the labor negotiations with the City's bargaining units. As these costs are currently pending, an estimate of \$1.0 million each for position adjustments and labor negotiations is included separately and not a part of the departmental total noted above.



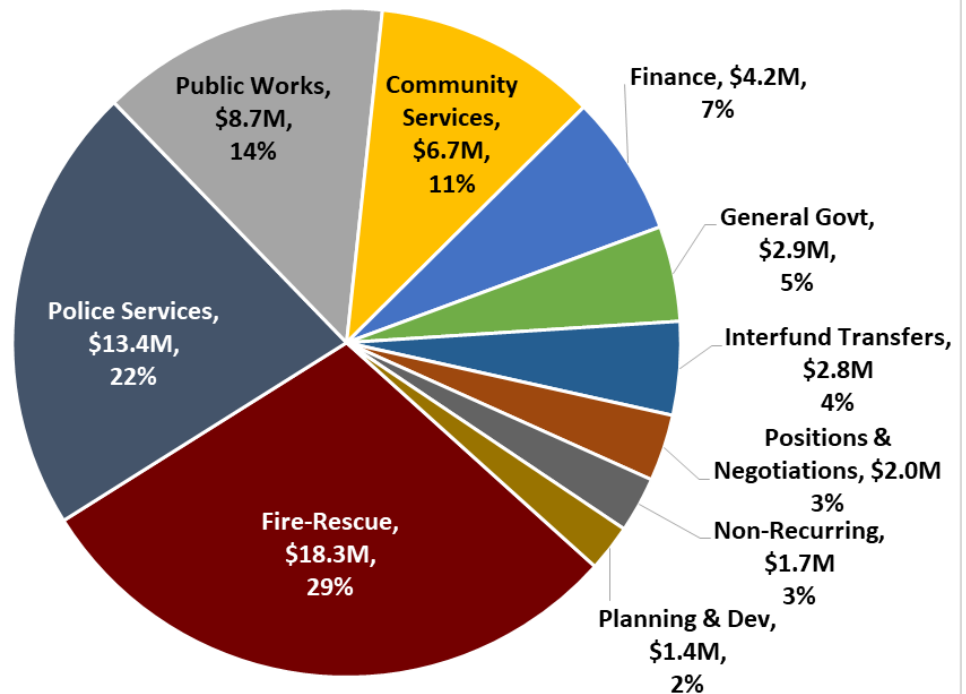
City of Santa Fe Springs

City Council Meeting

June 15, 2021

The following chart illustrates the relative departmental expenditures:

FY 2021-22 GF Proposed Expenditures: \$62.1M



Community Organization Activity (attachment #2)

Included as part of the attachments to this report is a schedule reflecting actual contributions made by the City to several organizations over the last five fiscal years. Staff met with the Council subcommittees to review and discuss the funding levels for the upcoming fiscal year and based on the discussion and direction provided in the subcommittees, there are some allocations for FY 2021-22 included in the schedule. Further direction and approval from the City Council is needed to finalize all the allocations included in the Community Organization Activity for FY 2021-22.

FY 2021-22 Water Utility Proposed Budget

The proposed budget for FY 2021-22 has an approximate \$1.3 million budget surplus, primarily due to increased revenues as a result of the new water rates. Total revenues are expected to increase by \$3.0 million, while expenditures are expected to increase by approximately \$340,000 or 2.4%. The proposed budget includes a recommendation to transfer the \$1.3 million budget surplus into the Water CIP Reserve in order to start accumulating funding to explore alternative and reliable water sources.

Report Submitted By: Travis Hickey and Alvaro Castellon
Finance and Administrative Services

Date of Report: June 10, 2021



City of Santa Fe Springs

City Council Meeting

June 15, 2021

The following table summarizes the proposed sources and uses for FY 2021-22:

Activity Name	Actual FY 2018-19	Actual FY 2019-20	Adopted FY 2020-21	Proposed FY 2021-22
Sources				
Estimated General Revenues	\$ 12,785,529	\$ 12,584,132	\$ 12,756,200	\$ 15,756,200
Uses				
Department Expenditures	11,381,568	12,145,066	14,126,640	14,469,200
Capital Improvement Projects	761,300	-	-	1,287,000
Total Uses	12,142,867	12,145,066	14,126,640	15,756,200
Surplus / (Deficit)	\$ 642,662	\$ 439,066	\$ (1,370,440)	\$ -

Next Steps

The proposed FY 2021-22 is presented to the City Council for further input and direction. There will be a special City Council meeting scheduled prior to June 30th to formally adopt the FY 2021-22 operating budget, which will incorporate any further direction and input provided by the City Council.

As we move forward, there is a lot more to accomplish together. Navigating a global pandemic is not an easy feat and we were able to do so through the City Council's leadership and our dedicated staff. This upcoming fiscal year will mark a change of focus for our organization. In spite of this, we will continue the constant pursuit of our City's mission to deliver exemplary public services responsive to our entire community and consistent with our history, culture and unique character.

A handwritten signature in blue ink, appearing to read "Raymond R. Cruz".

Raymond R. Cruz
City Manager

Attachments:

1. Proposed FY 2021-22 Operating Budget
2. FY 2021-22 Community Organization Support Schedule

ATTACHMENT 1
AVAILABLE UNDER SEPARATE
LINK ON CITY WEBSITE

City of Santa Fe Springs
Community Organization Support Funding
Attachment #2

Organizations	FY 16-17 Final Budget	FY 16-17 Actuals	FY 17-18 Final Budget	FY 17-18 Actuals	FY 18-19 Final Budget	FY 18-19 Actuals	FY 19-20 Final Budget	FY 19-20 Actuals	FY 20-21 Adopted Budget	FY 20-21 Actuals (through May)	FY 21-22
Chamber Annual Funding	\$ 98,500	\$ 98,500	\$ 98,500	\$ 98,500	\$ 98,500	\$ 98,500	\$ 98,500	\$ 98,500	\$ 98,500	98,500	
The Whole Child	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	
SASSFA	20,000	20,000	30,000	30,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Lake Center School Washington D.C. Trip	14,000	14,000	14,000	14,000	14,000	14,000	-	14,000	14,000	-	14,000
LACADA	2,500	2,500	2,500	2,500	2,500	-	2,500	-	12,500	12,500	
Youth Enrichment Fund	6,500	-	6,500	-	6,500	-	6,500	-	6,500	6,500	6,500
Interfaith Food Bank	5,000	5,000	5,000	5,000	5,000	-	5,000	-	5,000	5,000	5,000
Santa Fe High Foundation	5,000	5,000	5,000	5,000	5,000	-	5,000	-	5,000	5,000	
Rio Hondo Charter Red Cross	4,500	4,500	4,500	4,500	4,500	-	4,500	-	4,500	-	-
Miscellaneous Funding	1,500	5,000	3,500	1,416	3,500	1,000	3,500	-	3,500	-	-
Los Nietos Washington D.C. Trip	2,800	-	2,800	-	2,800	-	2,800	2,500	2,800	-	
Los Nietos Middle School After School Sports	2,500	2,500	2,500	2,500	2,500	-	2,500	2,500	2,500	-	
Silver Shield Award	2,500	-	2,500	-	2,500	2,500	2,500	2,500	2,500	-	2,500
Destiny Dinner Sponsorship	-	2,500	-	-	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Miss Santa Fe Springs Pageant	2,000	-	2,000	447	2,000	-	2,000	-	2,000	-	
Hispanic Outreach Task Force Scholarship	1,500	1,500	1,500	1,500	1,500	-	1,500	-	1,500	1,500	
Burn Quest	1,500	-	1,500	-	1,500	-	1,500	-	1,500	-	1,500
Salvation Army/Knott's Berry Farm	1,500	-	1,500	-	1,500	-	1,500	-	1,500	-	
Soroptomist International	-	-	-	-	-	-	1,000	500	1,000	1,500	
Little Lake - Leaf Invitational Golf Tournament	-	1,000	-	1,000	-	1,000	-	400	-	-	
TOTAL	\$ 211,800	\$ 204,294	\$ 223,800	\$ 209,928	\$ 212,300	\$ 176,775	\$ 199,300	\$ 180,275	\$ 223,300	\$ 188,000	52,000

Organizations	NOTES
Chamber Annual Funding	Additional \$2,000 given in October 2020 to assist the Chamber due to low membership as a result of COVID.
The Whole Child	Serving over 200 Santa Fe Springs residents
SASSFA	Provides senior services, which include over 11,000 congregate meals served at the GVC and over 10,000 home delivered meals to Santa Fe Springs residents
Lake Center School Washington D.C. Trip	Funding is reserved for 85 (on average) Santa Fe Springs students
LACADA	Serving over 400 Santa Fe Springs residents
Youth Enrichment Fund	Annual contribution to the scholarship
Interfaith Food Bank	Serve over 5,500 individuals within the service area of our City and unincorporated areas of Whittier and La Mirada
Santa Fe High Foundation	Funds are used for various items. This year the funding will be used for improvement of athletic equipment
Rio Hondo Charter Red Cross	Organization no longer exist
Miscellaneous Funding	City Manager recommendation is to eliminate Misc. Funding
Los Nietos Washington D.C. Trip	Per Principal, \$2,500 is divided amongst all students attending trip (approx. 10-30). Is open to distributing funds amongst SFS residents moving forward.
Los Nietos Middle School After School Sports	Funding is used for intermural league and sports and covers buses and uniforms
Destiny Dinner Sponsorship	Moving the funding to the Community Promotion activity
Hispanic Outreach Task Force Scholarship	Funding assists in their annual backpack giveaway, scholarship celebrations and Choices conference for young people at risk for dropping out of High School
Burn Quest	Provide support for burn victims - the contirbution is a match to the Fire Association's contribution
Salvation Army/Knott's Berry Farm	Event is no longer offered



City of Santa Fe Springs

City Council Meeting

ITEM NO. 13

June 15, 2021

NEW BUSINESS

Approval of In-kind Services Agreement between the City of Santa Fe Springs and Southeast Area Social Services Funding Authority (SASSFA) for FY 2021-2022

RECOMMENDATIONS

- Approve In-kind Services Agreement between the City of Santa Fe Springs and Southeast Area Social Services Funding Authority (SASSFA) for FY 2021-2022; and
- Authorize the Mayor to execute the In-kind Services Agreement

BACKGROUND

The City of Santa Fe Springs partners with the Southeast Area Social Services Funding Authority (SASSFA) to provide a daily congregate and homebound delivered meal program to its senior citizen population. The meal programs are funded in part by a grant from the Los Angeles County Area Agency on Aging (AAA) acquired by SASSFA. The SASSFA congregate meal program also obtains some funding from the City. Lastly, the participant donations significantly decreased since the start of the pandemic. The meal programs provide daily nutritious lunches to older adults at the Gus Velasco Neighborhood Center (GVNC), and also prepares, packages, and delivers meals to homebound frail elderly, and disabled residents in the community. During Covid -19, under the Safer-at-Home Order and temporary closure of the senior center at the GVNC, SASSFA has been delivering frozen meals Monday through Thursday. These meals are delivered to both, registered congregate meal senior citizens and homebound meal recipients. SASSFA continues to prepare and package deliveries in the GVNC kitchen for both meal programs. SASSFA has informed City staff that they will continue to deliver frozen meals until October or November of 2021.

The renewal of the In-kind Services Agreement between SASSFA and the City of Santa Fe Springs occurs annually. This agreement will allow SASSFA the continued use of kitchen space at the GVNC for the preparation and delivery of the meals, and will support all services listed in the agreement once the GVNC is reopened for regular older adult services and activities. SASSFA operates at the GVNC Monday through Friday between the hours of 8:00 a.m. and noon. Furthermore, the In-kind Services Agreement serves as required documentation for SASSFA's auditing purposes and fulfills the Los Angeles County AAA grant requirement.

The term of the agreement is July 1, 2021 through June 30, 2022. The agreement is categorized by type of service - facility, office space, utilities, equipment and custodial services, which are all provided regularly to SASSFA by the City at the GVNC. The services are broken down by monthly rates, with an estimated usage space of 3,100 sq. ft., totaling an estimated value of \$34,734.



City of Santa Fe Springs

City Council Meeting

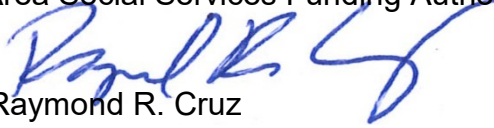
June 15, 2021

FISCAL IMPACT

The In-kind Services Agreement has no direct fiscal impact to the general fund. The agreement allows for additional resources to be offered to community residents.

LEGAL REVIEW

The City Attorney's office has reviewed the In-kind Services Agreement between the City of Santa Fe Springs and Southeast Area Social Services Funding Authority.


Raymond R. Cruz
City Manager

Attachment:

Attachment No. 1 - In-kind Services Agreement "A"



10400 Pioneer Blvd., Suite 9, Santa Fe Springs, CA 90670 Phone: 562-699-3231 Fax: 562-699-5688

May 27, 2021

Mr. Ed Ramirez
Family and Human Services Manager
City of Santa Fe Springs
9255 S. Pioneer Blvd.
Santa Fe Springs, CA 90670

Re: In-Kind Service Agreement for fiscal year 2021-2022

Dear Mr. Ramirez,

Attached please find the In-Kind Services Agreements for fiscal year 2021-2022. In compliance with the County of Los Angeles, Area Agency on Aging Contracts, the in-kind agreement is required from each site we conduct programs. The agreement indicates the Gus Velasco Neighborhood Center will be furnishing space for us to conduct our senior nutrition and social services programs.

I have enclosed two originals of the agreements signed by SASSFA Executive Director, Kirk Kain. Please send back one original signed agreement for the City of Santa Fe Springs. Your assistance is appreciated. Please feel free to call me at (562) 699-3231 ext. 240 or e-mail at vcervantes@sassfa.org if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Vilma", written over a horizontal line.

Vilma Cervantes
Program Manager

IN-KIND SERVICES AGREEMENT "A"

(Between the Applicant Agency and a Second Party)

Effective July 1, 2021 through June 30, 2022

City of Santa Fe Springs agrees to provide
(In-Kind Agency)


SASSFA with the following
(Applicant Agency)

in-kind services:

PROGRAM CATEGORY	TYPE OF SERVICE PROVIDED	RATE PER MONTH	SQ/FOOTAGE (OR TIME/MO)	TOTAL ANNUAL \$ VALUE
Senior Services that include: Congregate & Home Delivered Meals, Caregiver Support, Home Based Care Services	Facility	\$859	3,000	\$10,308
	Office Space	\$156	100	\$1,872
	Utilities	\$516		\$6,192
	Equipment	\$724.50		\$8,694
	Custodial	\$639		\$7,668
TOTAL				\$34,734

AGREEMENT SUMMARY:

The City of Santa Fe Springs agrees to provide SASSFA with space at the Gus Velasco Neighborhood Center to provide elderly nutrition by means of congregare and home delivered meals.

In-Kind Agency: Name /Title: Date:	<u>City of Santa Fe Springs</u>	Applicant Agency: Name /Title: Date:	<u>SASSFA</u> <u>Kirk Kain, Executive Director</u> <u>July 1, 2021</u>
Signature:	_____	Signature:	<u></u>



NEW BUSINESS

Street and Parking Lot Lighting LED Retrofit Evaluation Report

RECOMMENDATION

- Receive and File Street and Parking Lot Lighting LED Retrofit Evaluation Report; and
- Provide direction for financing options.

BACKGROUND

On September 27, 2018, the City Council, at the meeting authorized the Director of Public Works to advertise for proposals from qualified consultants to evaluate replacing existing City Street and Parking Lot Lighting with Energy Efficient Light Emitting Diodes (LED) equivalents. At the Council Meeting on December 13, 2018, the Contract was awarded to Tanko Lighting to perform the Street and Parking Lot Lighting LED retrofit evaluation.

The report consisted of the following activities: a review of the light study, identification of LED luminaires, Installation of pilot LED's, photometric measurements, lifecycle energy costs, identification of financial incentives, and technical and financial analyses.

The evaluation was intended to establish whether retrofitting the City's Street and Parking Lot Lights to LED will reduce energy consumption and maintenance costs without compromising current lighting levels. The attached report has established that retrofitting to LED Street and Parking Lot Lights will not compromise current light levels, in actuality the lighting levels were improved. Staff recommends moving forward with converting the existing High-Pressure Sodium (HPS) street lights to LED street lights as part of a multi-phase project. The parking lot lights can also be retrofitted as a multi-phase project and can be done simultaneously or independently of the street lighting retrofit project. Staff recommends prioritizing the street lights over the parking lot lights due to the risk of the street lights versus the parking lot lighting.

The retrofit of the series street lights, approximately 400 street lights city wide, are not included in this study. The infrastructure for these street lights will need to be upgraded before the retrofit can take place. A separate item for the series street lights will be brought to Council at a later date.

The retrofit of SCE owned street lights, approximately 382, are not included in this project. Currently staff is working with SCE to determine proper course of action. An item will be brought to Council at a later date to address this issue.

FISCAL IMPACT

The total cost to retrofit all City-owned street lights is approximately \$966,000. There are no funds appropriated for this project. One alternative is to use UUT/CIP Funds to cover this cost. Another option is to take out a loan to cover the project expenditures.

Report Submitted By: Noe Negrete
Director of Public Works

Date of Report: June 10, 2021

Attachment 2 is from Fifth Third Bank displaying the financial terms of a loan to cover the project costs. Loan payments can be made by the savings gained through less energy consumption costs once the retrofit project has been completed. The general terms are either a 7 year or 10-year term. Both terms are at an interest rate of 2.99%. Staff requests direction from Council on which financing option should be further evaluated.

INFRASTRUCTURE IMPACT

The evaluation has established that retrofitting the City's Street and Parking Lot Lighting with LED Luminaires will reduce energy consumption and maintenance costs with, in all cases, much-improved lighting levels were achieved.



Raymond R. Cruz
City Manager

Attachments:

Attachment No. 1: Street and Parking Lot Lighting LED Retrofit Evaluation Report

Attachment No. 2: Funding option provided by Fifth Third Bank

A photograph of a street scene featuring a modern, curved streetlight. The background shows trees with autumn foliage and a cloudy sky.

EXECUTIVE SUMMARY OF STREET AND PARKING LOT LIGHTING LED RETROFIT EVALUATION PROJECT FOR THE CITY OF SANTA FE SPRINGS, CA



Submitted by:

Emily Danko
Project Manager
Tanko Streetlighting, Inc.
220 Bayshore Boulevard
San Francisco, CA 94124

Submitted to:

Kevin Periman
Municipal Services Manager
City of Santa Fe Springs
12363 Emmens Way
Santa Fe Springs, CA 90670

January 22, 2021

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Introduction

The City of Santa Fe Springs recently contracted with Tanko Lighting to evaluate the feasibility of the City retrofitting its street and parking lot lighting to Light Emitting Diode (LED) fixtures. This Executive Summary outlines the activities that Tanko Lighting conducted as part of this project and the deliverables reported to the City.

Scope of Work

Tanko Lighting performed the following activities for this project:

- Task 1.0 – Review of Light Study
Tanko Lighting produced a report indicating feedback and recommendations for the City's Street Light Survey and identification of any inadequate data.
- Task 2.0 – Identification of LED Luminaires
Recommended a minimum of three (3) different LED luminaires for the City to review, including product technical specifications (cut sheets).
- Task 3.0 – Installation of Pilot LEDs
Submitted a project schedule, installation maps, and installation report. The pilot installation was completed with a total of 18 lights: 6 neighborhood cobra heads, 6 arterial cobra heads, 3 flood lights, and 3 shoebox luminaires.
- Task 4.0 – Photometric Measurements
Provided light measurement reports. These included pre and post-conversion photopic/scotopic field light measurements and manufacturer-provided photometric analyses.
- Task 5.0 – Lifecycle Energy Costs
Tanko Lighting created a comparison of lifecycle energy costs to operate and maintain the HPS lights vs. LED luminaires. This deliverable was integrated into the final Technical and Financial Analysis (see task 7.0).
- Task 6.0 – Identification of Financial Incentives
Conducted an investigation into financing options that meet the City's needs at the most competitive price possible. Documentation was submitted outlining the financing incentives available for the City's project.
- Task 7.0 – Technical and Financial Analysis
Submitted a report that outlined baseline conditions based on the City's streetlighting bills from SCE, as well as estimated project costs and savings associated with retrofitting the City's streetlights with LED luminaires.

Deliverables

Tanko Lighting provided the following deliverables to the City for this project:

- Street Light Survey Analysis
- Fixture Recommendations
- Project Schedule
- Installation Maps
- Installation Report
- Light Measurement Reports
- Financial Incentives Report
- Financing Assistance Options
- Financial Analysis and Life Cycle Energy Cost Analysis



Memo: Street Light Survey Analysis

To: Kevin Periman, City of Santa Fe Springs
From: Emily Danko, Tanko Lighting
CC: Maeve Hanafin, Tanko Lighting
Date: April 17, 2020
Re: Santa Fe Springs Street Light Survey Review

Introduction

Tanko Lighting has reviewed and assessed the existing data provided by the City of Santa Fe Springs from their 2016 street light survey. This memo provides our feedback, highlighting areas of inadequate data and next step recommendations. As stated in Tanko Lighting's Proposal, if the City would like additional review, our team can provide an additional scope of work and pricing upon request. Please note that we have extensive experience conducting in-field GIS street light audits – particularly in Southern California – and can dispatch staff to the field to augment existing data if desired. We also have significant experience with data reconciliation and can provide an additional scope of work and pricing for a comprehensive comparison of the existing data with Southern California Edison's data, upon request.

Data Gaps and Barriers

Clean, reliable streetlight data is the basis for all retrofit and improvement projects. At Tanko, we rely on our audit team to provide us with detailed information on existing systems in the field. After reviewing the City's data, we have concluded that the information currently available to the City is incomplete. This is likely to cause issues with reconciling against SCE's inventory, design, and installation. . Please see below for a detailed description of the dataset's current shortcomings and recommendations with how to move forward.

Data Errors

The 2016 survey data includes numerous data input errors. Many of these inaccuracies are typographic as a result of human entry errors. Consequently, the survey data cannot be grouped, sorted and analyzed effectively. This is a significant barrier to the usefulness and versatility of the current data. Tanko Lighting needed to assess each characteristic field and apply standardized language for each data point. For example, the existing fields referring to Arm Configuration and Quantity of Fixture Arms contain a variety of shorthand notes which are difficult to interpret and understand. These notes sometimes contain arm lengths, sometimes street names, and sometimes neither. This lack of consistency makes it especially difficult to draw reliable conclusions from the data. In addition, there are currently 24 distinct values for pole height in the data, and 49 points in the data with pole height listed as below 4 feet. This is likely a consequence of human error and the lack of pre-determined categories for pole height, which makes the data difficult to analyze.

Missing City-Owned Property

The 2016 survey was limited to public street-facing fixtures, which includes the vast majority of the cobrahead fixtures installed in the City. However, City-owned parking lots and other properties were not surveyed, resulting in incomplete data. This will make any reconciliation against SCE's data especially difficult, as not all City-owned lights will have existing data points to compare against.

Incomplete Pole IDs

The pole ID survey field is incomplete. A large portion of the fixtures do not have a pole ID included. Where pole ID numbers should have been listed for safety traffic lights, the data only records them as "Safety." There is a category present in the Pole ID field for "None," so the many blank fields do not necessarily correspond to pole numbers being absent.

Lamp Type

Lamp type, such as high pressure sodium (HPS), metal halide (MH), or LED, was not record in the 2016 survey. This data is critical for a proper LED retrofit design, as each lamp type provides a different lumen output, even at the same wattage. For example, a typical 100W HPS fixture provides 9,500 lumens, whereas a 100W metal halide fixture provides 8,500 lumens.

Roadway Width, Type and Condition

The 2016 survey did not record roadway characterizes such as roadway width, type, or conditions such as intersections or crosswalks. Tanko Lighting's preliminary design is very limited due to this lack of data. This directly impacts the distribution type for each fixture. Average roadway widths in the County of Los Angeles were used to set the preliminary distribution type for residential and arterial roadways.

Recommendations

Based on our in-depth review and assessment of the existing 2016 street light survey data, we recommend the following:

GIS Investment Grade Audit

We recommend conducting a Geographic Information System (GIS) investment grade audit for this project, inclusive of the 3,200+ streetlights within the City's boundaries.

In Tanko Lighting's experience, a proper GIS investment grade audit is essential for equipping the City with a comprehensive and accurate understanding of its existing infrastructure, and is pivotal for enabling appropriate design and product procurement. GIS audits result in streamlined installations, as it identifies potential obstructions and other on-site challenges. This high quality audit will also include many fields that were not present in the original streetlight survey, increasing the utility of the data.

Data Entry Standardization

Drop down options are preferred. Manual data entry is subject to a higher risk of human error. By collecting street light audit data via dedicated GPS data collation devices with built in fixture characteristic options, we have been able to minimize the risk of incorrect data.

Data Reconciliation

Simultaneously with the GIS audit, we recommend conducting a thorough and detailed investigation of any available City and/or SCE records, including billing records and maps. Reconciling these records with the data from the citywide GIS audit will confirm such aspects as ownership and LS-1 and LS-2 billing record accuracy. In Tanko Lighting's experience, cross referencing these various data sources results in extremely precise and clean data.

Audit Attributes Comparison

Provided below is a table comparing the list of attributes collected by the City during their 2016 street light survey to Tanko Lighting's standard audit attributes. The attributes listed for Tanko's process take into account both the field audit and data review process, which is standard practice for every project. As evidence below, the City's current audit data covers only a fraction of the field's covers by Tanko's standard audit process.

Audit Fields	City Survey	Tanko Audit Data
Data Entry Date	Yes	Yes
Data Entry Update	Yes	Yes
Street Name	Yes	Yes
Pole Height	Yes	Yes
Fixture Wattage	Yes	Yes
Fixture Arm Length	Yes	Yes
Survey Field Notes	Yes	Yes
Latitude	Yes	Yes
Longitude	Yes	Yes
Pole Type	Yes	Yes
Quantity of Fixture Arms	Yes	Yes
Unique Owner ID (104288 or 104287)	Yes	No
City District	Yes	No
Fixture Photo	Limited	Limited
Pole Attachments	Limited	Limited
Fixture Type	Limited	Yes
Photocell or Shorting Cap	Limited	Yes
Arm Configuration	Limited	Yes
House-Side Shield	Limited	Yes
Infrastructure Repairs Needed	Limited	Yes
Number of Heads on Pole	Limited	Yes
Decorative Classification	Limited	Yes

Pole Number	Limited	Yes
Additional Pole Numbers	No	Yes
Decorative Sub-Classification	No	Yes
Shoebox Pole Shape	No	Yes
Flood Mounting Type	No	Yes
Multiple Head Number	No	Yes
Common Head ID	No	Yes
Lamp Type	No	Yes
Other Wattage	No	Yes
Standalone or Distribution	No	Yes
Feed Type	No	Yes
Pole Distance to Street	No	Yes
Street Width	No	Yes
Intersection, Cul-de-sac, Safety Light	No	Yes
Crosswalk	No	Yes
Field Notes	No	Yes
Auditor	No	Yes
GPS Start Time	No	Yes
GPS Stop Time	No	Yes
Approximate Address	No	Yes
Tanko UID	No	Yes
Utility UID	No	Yes
Additional Scope Location Name	No	Yes
Additional Scope Location Type	No	Yes
Additional Fixture Photo	No	Limited
As-Built Drawing Number	No	No

Conclusion

The data currently available to the City of Santa Fe Springs from the 2016 street light survey, while providing some helpful information, is not thorough or accurate enough to serve as a basis for a larger scale retrofit project. A combination of human error, skipped lights, and insufficient audit fields contribute to making the data both difficult to analyze and unreliable. To increase the accuracy and depth of this information, we recommend the City invest in a GIS grade audit.

Alternative Options for Moving Forward

If the City still prefers to move forward with a retrofit conversion project using the 2016 street light survey data, we can provide a few recommendations that will assist with this process. The first is to comb through and standardize the data. The City will need to execute a significant data cleanup process, either internally or by contracting out this work. By standardizing values and correcting human errors, the data will become more manageable and easier to reconcile against SCE's. The second recommendation is to complete the data



Bringing passion to light.

collection process by auditing all City-owned parking lots and non-street facing lights. A complete dataset will allow for an easier reconciliation process against SCE's inventory. It will not be easy to move forward with the data as-is, but if these steps are completed, working with the City's data will become much more manageable.

Provided below are the recommended pilot LED cobrahead fixtures for the City of Santa Fe Springs.

Table 1: Pilot LED Cobrahead Recommendations

Existing HPS Cobrahead	GE LED Retrofit	Philips LED Retrofit	Eaton LED Retrofit
Residential			
100W	31W Type B	35W Type II	42W Type II
150W	47W Type B	54W Type II	63W Type II
Arterial			
200W	71W Type C	73W Type III	74W Type III
250W	84W Type C	81W Type III	83W Type III

Retrofit recommendations take into consideration numerous roadway and existing light conditions.

Using the City-provided streetlight survey, Tanko Lighting identified four unique wattage groups, herein referred to as “Low Wattage”, Low-Medium Wattage”, “Medium- High Wattage, and “High Wattage”, which represent the following high-pressure sodium (HPS) wattages: 100W, 150W, 200W, and 250W, respectively.

Three LED recommendations was determined for each of these wattage groups.

The distribution type was adjusted for each LED recommendation to account for the significantly wider arterial roadways vs. residential roadways.

Please note, average roadway widths in the County of Los Angeles was used to determine the preliminary distribution type for residential and arterial roadways. Unfortunately, the existing street lighting survey does not include roadway width, type, or conditions such as intersections.

Attached is a lumen output table, digital photometrics, and product technical specifications (cutsheets).

Table 2: Lumen Output

Existing			GE LED Retrofit		
Wattage	Fixture Qty	HPS Lumens	Description	Part Number	LED Lumens
Residential					
100	338	9,500	31W Type B	ERL1-0-04-B3-30-A-GRAY	3,900
150	1,056	16,000	47W Type B	ERL1-0-06-B3-30-A-GRAY	5,800
Arterial					
200	846	19,800	71W Type C	ERL1-0-08-C3-30-A-GRAY	7,800
250	122	27,000	84W Type C	ERL1-0-09-C3-30-A-GRAY	8,800

Existing			Philips LED Retrofit		
Wattage	Fixture Qty	HPS Lumens	Description	Part Number	LED Lumens
Residential					
100	338	9,500	35W Type II	RFS-35W16LED3K-G2-R2M-UNV-DMG-API-RCD7-GY3	4,310
150	1,056	16,000	54W Type II	RFS-54W16LED3K-G2-R2M-UNV-DMG-API-RCD7-GY3	5,674
Arterial					
200	846	19,800	73W Type III	RFM-72W32LED3K-G2-R3M-UNV-DMG-API-RCD7-GY3	8,033
250	122	27,000	81W Type III	RFM-80W48LED3K-G2-R3M-UNV-DMG-API-RCD7-GY3	9,518

Existing			Eaton LED Retrofit		
Wattage	Fixture Qty	HPS Lumens	Description	Part Number	LED Lumens
Residential					
100	338	9,500	42W Type II	ARCH-AF16-40-D-U-T2U-4N7-AP-7030	4,210
150	1,056	16,000	63W Type II	ARCH-AF16-60-D-U-T2U-4N7-AP-7030	5,935
Arterial					
200	846	19,800	74W Type III	ARCH-AF24-70-D-U-T3-4N7-AP-7030	7,502
250	122	27,000	83W Type III	ARCH-AF24-80-D-U-T3-4N7-AP-7030	8,107

Table 3: Digital Photometric Distributions


Residential, Low Wattage				
Description	Street Width (x-axis), ft		Street Length (y-axis), ft	
	Distance @ 0.5 fc	Distance @ 0.2 fc	Distance @ 0.5 fc	Distance @ 0.2 fc
Existing 100W	30	35	30	60
GE 31W Type B	30	40	25	65
Philips 35W Type II	25	35	37	67
Eaton 42W Type II	33	40	35	62

Residential, Low-Medium Wattage				
Description	Street Width (x-axis), ft		Street Length (y-axis), ft	
	Distance @ 0.5 fc	Distance @ 0.2 fc	Distance @ 0.5 fc	Distance @ 0.2 fc
Existing 150W	35	40	45	75
GE 47W Type B	35	45	45	75
Philips 54W Type II	28	37	45	80
Eaton 63W Type II	40	45	45	65

Arterial, Medium-High Wattage				
Description	Street Width (x-axis), ft		Street Length (y-axis), ft	
	Distance @ 0.5 fc	Distance @ 0.2 fc	Distance @ 0.5 fc	Distance @ 0.2 fc
Existing 200W	37	47	50	85
GE 71W Type C	44	61	50	80
Philips 73W Type III	35	45	45	80
Eaton 74W Type III	46	62	50	75

Arterial, High Wattage				
Description	Street Width (x-axis), ft		Street Length (y-axis), ft	
	Distance @ 0.5 fc	Distance @ 0.2 fc	Distance @ 0.5 fc	Distance @ 0.2 fc
Existing 250W	40	50	62	93
GE 84W Type C	45	62	58	87
Philips 81W Type III	37	46	50	85
Eaton 83W Type III	45	62	50	75



Transmittal		
ID#	Project Name	Date
B19SAN001– S1	Street and Parking Lot Lighting Retrofit Evaluation	4/15/2020
To:		From:
Kevin Periman, Municipal Services Manager City of Santa Fe Springs 11710 Telegraph Rd. Santa Fe Springs, CA 90670		Tanko Lighting 220 Bayshore Blvd San Francisco, CA 94124
Product Specifications:		Description of Contents:
<ul style="list-style-type: none"> • GE 31W Type B <ul style="list-style-type: none"> ○ ERL1-0-04-B3-30-A-GRAY • GE 84W Type C <ul style="list-style-type: none"> ○ ERL1-0-09-C3-30-A-GRAY • Philips 38W Type II <ul style="list-style-type: none"> ○ RFS-35W16LED3K-G2-R2M-UNV-DMG-API-RCD7-GY3 • Philips 81W Type III <ul style="list-style-type: none"> ○ RFM-80W48LED3K-G2-R3M-UNV-DMG-API-RCD7-GY3 • Eaton 42W Type II <ul style="list-style-type: none"> ○ ARCH-AF16-40-D-U-T2U-7030-4N7-AP • Eaton 83W Type III <ul style="list-style-type: none"> ○ ARCH-AF24-80-D-U-T3-7030-4N7-AP • Sun-tech Photocell with 6 Year Warranty <ul style="list-style-type: none"> ○ PX124-1.5-PTW 		Product details for: 1. LED Cobra Head Pilot 2. Photocells
Prepared By:		Client Approval:
Tanko Lighting I hereby certify that each document contained herein is complete and accurate as submitted. Name: Jason Tanko Title: President Signature / Date:  4/15/2020		Name: Title: Signature / Date:
Client Disposition:		Client Comments:
<input type="checkbox"/> Approved <input type="checkbox"/> Conditionally approved, resubmission not required (see comments) <input type="checkbox"/> Disapproved, resubmission required <input type="checkbox"/> Other:		



GE Evolve[®]
LED Roadway Lighting
ERL1-ERLH-ERL2



current
powered by GE



GE Evolve®

LED Roadway Lighting

ERL1-ERLH-ERL2



The **Evolve®** LED Roadway Luminaire is optimized for customers requiring a LED solution for local, collector and major roadways. GE's unique reflective optics are designed to optimize application efficiency and minimize glare. The modern design incorporates the heat sink directly into the unit for heat transfer to prolong LED life. This reliable unit has a 100,000 hour design life, significantly reducing maintenance needs and expense over the life of the fixture. This efficient solution lowers energy consumption compared to a traditional HID fixture for additional operating cost savings.

Features:

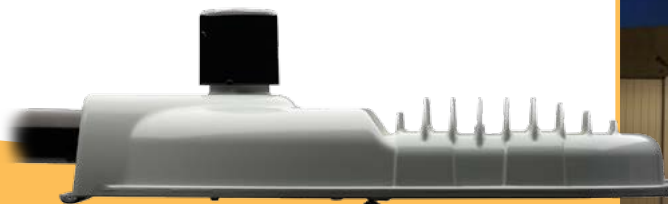
- Optimized roadway photometric distributions
- **Evolve®** light engine consisting of reflective technology designed to optimize application efficiency and minimize glare
- 70 CRI at 2700K, 3000K and 4000K typical.
- -40°C to 50°C UL Ambient Typical.
- ULOR = 0 (zero uplight)
- Designed & Assembled in USA

Applications:

- Local Roadways
- Collector Roadways
- Major Roadway/Streets



Compatible with **LightGrid** Outdoor Wireless Control System



To learn more about **GE Evolve®** LED Roadway Lighting, go to: www.currentbyge.com



GE Evolve®

LED Roadway Lighting

ERL1-ERLH-ERL2

Typical Specifications: ERL1-ERLH-ERL2

LED & Optical

- **Output Range:** 1900 – 30000 lm
- **Photometric Options:** Type II Narrow, Type II Wide, Type III, Type IV
- **System Efficacy:** 100 - 145 LPW
- **CCT:** 2700K, 3000K, 4000K; LEDs @ 70 CRI

Lumen Maintenance Tables

Projected Lxx per IES TM-21 at 25°C for reference:

ERL1 LUMEN OUTPUT CODES	LXX(10K)@HOURS		
	25,000 HR	50,000 HR	60,000 HR
02,03,04,05,06	L96	L95	L94
07,08,09	L95	L91	L89
10	L89	L80	L76

ERLH LUMEN OUTPUT CODES	LXX(10K)@HOURS		
	25,000 HR	50,000 HR	60,000 HR
10, 11	L97	L96	L96
13, 14	L95	L93	L92
15, 16	L94	L91	L91

ERL2 LUMEN OUTPUT CODES	LXX(10K)@HOURS		
	25,000 HR	50,000 HR	60,000 HR
16, 18, 19, 21, 23	L96	L94	L95
25, 27, 28	L95	L93	L92
30	L94	L91	L90


Note: Projected Lxx based on LM80 (10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements.

Electrical

- **Input Voltage:** 120-277 volt and 347-480 volt
- **Input Frequency:** 50/60Hz
- **Power Factor (PF)*:** >90%
- **Total Harmonic Distortion (THD)*:** <20%

*Power factor and THD tolerance exceptions: ERL1 "02" Lumen output: PF and THD within tolerances above only at 120 volt. ERL1 "03" Lumen output: @120 volt PF~0.89; @ 480 volt THD~26% ERL1 "04" Lumen output: @480 volt THD~22%

Ratings

- **Surge Protection:** per ANSI C136.2-2015: (Driver Internal):
 - 6kV/3kA "Basic: (120 Strikes)" - Standard on ERL1 (02-06)
 - 10kV/5kA "Enhanced: (40 Strikes)" - Standard on ERL1 (07 - 10), ERLH, ERL2
- **(Additional Separate Secondary SPD)**
 - 10kV/5kA "Enhanced: (40 Strikes)" - Option "R"
 - 20kV/10kA "Elevated" (40 Strikes) - Option "T"
- **Safety:** UL/cUL Listed. UL 1598 listed, suitable for wet locations 
- **Environmental:** Compliant with the materials restrictions of RoHS
- **EMI:** Title 47 CFR Part 15 Class A
- **Vibration:** 3G per ANSI C136.31-2010
- LM-79 testing in accordance with IESNA Standards
- Std. Optical enclosure rated per ANSI C136.25-2009:
 - ERL1/ERLH/ERL2 = IP65, Optional: IP66



International Dark Sky Association listed. 2700K or 3000K must be selected to meet IDA certification and approval.



Project name _____

Date _____

Type _____

Operating Temperature:

PRODUCT ID	LUMEN OUTPUT	AMBIENT READING
ERL1	02-10	-40°C to 50°C
ERLH	10-11, 13	-40°C to 50°C
ERLH	14-16	-40°C to 45°C
ERL2	16-28	-40°C to 50°C
ERL2	30	-40°C to 45°C

Delayed start may be experienced < -35°C

Construction & Finish

- **Housing:**
 - Die Cast Enclosure
 - Casting-integral heat sink for maximum heat transfer
- **Lensing:** Impact resistant tempered glass, standard
- **Paint:** Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
 - Standard Colors: Dark Bronze, Black, & Gray
 - RAL & custom colors available
 - Optional coastal finish available.
- **Weight:** 12.4lbs (5.6kg) – 24lbs (10.9kg)

Warranty

- **System Warranty:** 5 Year Standard, 10 Year Optional

Controls

- **Dimming:**
 - Standard: 0-10V; Optional: DALI (120-277V Only)
- **Sensors:**
 - Photo electric sensors (PE) available.
- LightGrid™ compatible

Mounting

- Slipfitter with +/- 5 degree of adjustment for leveling.
- Integral die cast mounting pipe stop.
- Adjustable for 1.25 in. or 2 in. mounting pipe.

Suggested HID Replacement Lumen Levels

- ~4,000–5,000 lumens to replace 100W HPS Cobra-head
- ~7,000–8,800 lumens to replace 150W HPS Cobra-head
- ~8,500–11,500 lumens to replace 200W HPS Cobra-head
- ~11,500–14,000 lumens to replace 250W HPS Cobra-head
- ~21,000–30,000 lumens to replace 400W HPS Cobra-head

Note: Actual replacement lumens may vary based upon mounting height, pole spacing, design criteria, etc.

CONVERSION FROM PREVIOUS GENERATION OPTICS TO CURRENT GENERATION OPTICS**			
PREVIOUS	DESCRIPTION	CURRENT	DESCRIPTION
A1, B1	Extra Narrow/Narrow Asymmetric	A3	Type II Narrow
C1, E1	Asymmetric Short/Medium	B3	Type II Wide
D1, G1	Asymmetric Forward/Extra Wide	C3	Type III
F1	Asymmetric Wide	D3	Type IV
		E3	Type II Enhanced Back Light

**The information above is designed to provide a guideline to select the correct luminaire for a roadway application. The best and most accurate way to ensure the proper design is do a lighting layout Utilizing AGI.

GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2



Project name _____
Date _____
Type _____

ERL 1

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION*	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local 1 = Single Module	0 = 120-277V* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480*# * Not available with Fusing. Must choose a discrete voltage with F option. # Not available with E controls option.	02* 03 04 05 06 07 08 09 10 See Table *120V only, not compatible with 0-10V dimming.	A3 = Type II Narrow B3 = Type II Wide C3 = Type III D3 = Type IV E3 = Type II Enhanced Back Light See Table *Nominal IES Type classing subject to typical variation, individual units may differ.	27 = 2700K < 30 = 3000K < 40 = 4000K < Select 2700K or 3000K CCT for IES approved units.	A = ANSI C136.41 7-pin D = ANSI C136.41 7-pin with Shorting Cap E = ANSI C136.41 7-pin with non-Dimming PE Control.* *PE Control Only available for 120-277V or 480V Discrete. Not available for 347-480V or 347V Discrete. NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze	A = 4 Bolt Splitter † F = Fusing G = Internal Bubble Level I = IP66 Optical L = Tool-Less Entry R = Secondary 10kV/5kA SPD T = Secondary 20kV/10kA SPD U = DALI Programmable +^ V1 = Variable Output via Field Adjustable Module** X = Single Package # Y = Coastal Finish* XXX = Special Options † Contact manufacturer for Lead-Time. # "X" option provides single pack box per fixture. Std Packaging = 20 units per Magna pak container. * Recommended for installations within 750 ft. from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ^ Not available in 347V, 480V or 347-480V for Lumen Output Levels 07, 08, 09, and 10. ** Not available with DALI (U) option.

LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE		BUG RATING			IES FILE NUMBER								
		4000K	3000K	2700K	120-277V	347-480V	4000K	3000K	2700K	120-277V	4000K	347-480V	120-277V	3000K	347-480V	120-277V	2700K	347-480V
02	A3	2000	1900	1900	14	N/A	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02A340_-120VIES	N/A	ERL1_02A330_-120VIES	N/A	ERL1_02A327_-120VIES	N/A	ERL1_02A327_-120VIES	N/A	N/A
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02B340_-120VIES	N/A	ERL1_02B330_-120VIES	N/A	ERL1_02B327_-120VIES	N/A	ERL1_02B327_-120VIES	N/A	N/A
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02C340_-120VIES	N/A	ERL1_02C330_-120VIES	N/A	ERL1_02C327_-120VIES	N/A	ERL1_02C327_-120VIES	N/A	N/A
	D3						B0-U0-G1	B0-U0-G1	B0-U0-G1	ERL1_02D340_-120VIES	N/A	ERL1_02D330_-120VIES	N/A	ERL1_02D327_-120VIES	N/A	ERL1_02D327_-120VIES	N/A	N/A
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02E340_-120VIES	N/A	ERL1_02E330_-120VIES	N/A	ERL1_02E327_-120VIES	N/A	ERL1_02E327_-120VIES	N/A	N/A
03	A3	3000	2900	2800	22	26	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03A340_-120-277VIES	ERL1_03A330_-347-480VIES	ERL1_03A330_-120-277VIES	ERL1_03A330_-347-480VIES	ERL1_03A327_-120-277VIES	ERL1_03A327_-347-480VIES	ERL1_03A327_-120-277VIES	ERL1_03A327_-347-480VIES	ERL1_03A327_-347-480VIES
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03B340_-120-277VIES	ERL1_03B330_-347-480VIES	ERL1_03B330_-120-277VIES	ERL1_03B330_-347-480VIES	ERL1_03B327_-120-277VIES	ERL1_03B327_-347-480VIES	ERL1_03B327_-120-277VIES	ERL1_03B327_-347-480VIES	ERL1_03B327_-347-480VIES
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03C340_-120-277VIES	ERL1_03C330_-347-480VIES	ERL1_03C330_-120-277VIES	ERL1_03C330_-347-480VIES	ERL1_03C327_-120-277VIES	ERL1_03C327_-347-480VIES	ERL1_03C327_-120-277VIES	ERL1_03C327_-347-480VIES	ERL1_03C327_-347-480VIES
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03D340_-120-277VIES	ERL1_03D330_-347-480VIES	ERL1_03D330_-120-277VIES	ERL1_03D330_-347-480VIES	ERL1_03D327_-120-277VIES	ERL1_03D327_-347-480VIES	ERL1_03D327_-120-277VIES	ERL1_03D327_-347-480VIES	ERL1_03D327_-347-480VIES
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03E340_-120-277VIES	ERL1_03E330_-347-480VIES	ERL1_03E330_-120-277VIES	ERL1_03E330_-347-480VIES	ERL1_03E327_-120-277VIES	ERL1_03E327_-347-480VIES	ERL1_03E327_-120-277VIES	ERL1_03E327_-347-480VIES	ERL1_03E327_-347-480VIES
04	A3	4000	3900	3800	31	34	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04A340_-120-277VIES	ERL1_04A330_-347-480VIES	ERL1_04A330_-120-277VIES	ERL1_04A330_-347-480VIES	ERL1_04A327_-120-277VIES	ERL1_04A327_-347-480VIES	ERL1_04A327_-120-277VIES	ERL1_04A327_-347-480VIES	ERL1_04A327_-347-480VIES
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04B340_-120-277VIES	ERL1_04B330_-347-480VIES	ERL1_04B330_-120-277VIES	ERL1_04B330_-347-480VIES	ERL1_04B327_-120-277VIES	ERL1_04B327_-347-480VIES	ERL1_04B327_-120-277VIES	ERL1_04B327_-347-480VIES	ERL1_04B327_-347-480VIES
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04C340_-120-277VIES	ERL1_04C330_-347-480VIES	ERL1_04C330_-120-277VIES	ERL1_04C330_-347-480VIES	ERL1_04C327_-120-277VIES	ERL1_04C327_-347-480VIES	ERL1_04C327_-120-277VIES	ERL1_04C327_-347-480VIES	ERL1_04C327_-347-480VIES
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04D340_-120-277VIES	ERL1_04D330_-347-480VIES	ERL1_04D330_-120-277VIES	ERL1_04D330_-347-480VIES	ERL1_04D327_-120-277VIES	ERL1_04D327_-347-480VIES	ERL1_04D327_-120-277VIES	ERL1_04D327_-347-480VIES	ERL1_04D327_-347-480VIES
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04E340_-120-277VIES	ERL1_04E330_-347-480VIES	ERL1_04E330_-120-277VIES	ERL1_04E330_-347-480VIES	ERL1_04E327_-120-277VIES	ERL1_04E327_-347-480VIES	ERL1_04E327_-120-277VIES	ERL1_04E327_-347-480VIES	ERL1_04E327_-347-480VIES
05	A3	5000	4900	4700	39	43	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_05A340_-120-277VIES	ERL1_05A330_-347-480VIES	ERL1_05A330_-120-277VIES	ERL1_05A330_-347-480VIES	ERL1_05A327_-120-277VIES	ERL1_05A327_-347-480VIES	ERL1_05A327_-120-277VIES	ERL1_05A327_-347-480VIES	ERL1_05A327_-347-480VIES
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_05B340_-120-277VIES	ERL1_05B330_-347-480VIES	ERL1_05B330_-120-277VIES	ERL1_05B330_-347-480VIES	ERL1_05B327_-120-277VIES	ERL1_05B327_-347-480VIES	ERL1_05B327_-120-277VIES	ERL1_05B327_-347-480VIES	ERL1_05B327_-347-480VIES
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_05C340_-120-277VIES	ERL1_05C330_-347-480VIES	ERL1_05C330_-120-277VIES	ERL1_05C330_-347-480VIES	ERL1_05C327_-120-277VIES	ERL1_05C327_-347-480VIES	ERL1_05C327_-120-277VIES	ERL1_05C327_-347-480VIES	ERL1_05C327_-347-480VIES
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_05D340_-120-277VIES	ERL1_05D330_-347-480VIES	ERL1_05D330_-120-277VIES	ERL1_05D330_-347-480VIES	ERL1_05D327_-120-277VIES	ERL1_05D327_-347-480VIES	ERL1_05D327_-120-277VIES	ERL1_05D327_-347-480VIES	ERL1_05D327_-347-480VIES
	E3						B2-U0-G2	B2-U0-G1	B1-U0-G1	ERL1_05E340_-120-277VIES	ERL1_05E340_-347-480VIES	ERL1_05E330_-120-277VIES	ERL1_05E330_-347-480VIES	ERL1_05E327_-120-277VIES	ERL1_05E327_-347-480VIES	ERL1_05E327_-120-277VIES	ERL1_05E327_-347-480VIES	ERL1_05E327_-347-480VIES
06	A3	6000	5800	5700	47	52	B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_06A340_-120-277VIES	ERL1_06A330_-347-480VIES	ERL1_06A330_-120-277VIES	ERL1_06A330_-347-480VIES	ERL1_06A327_-120-277VIES	ERL1_06A327_-347-480VIES	ERL1_06A327_-120-277VIES	ERL1_06A327_-347-480VIES	ERL1_06A327_-347-480VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_06B340_-120-277VIES	ERL1_06B330_-347-480VIES	ERL1_06B330_-120-277VIES	ERL1_06B330_-347-480VIES	ERL1_06B327_-120-277VIES	ERL1_06B327_-347-480VIES	ERL1_06B327_-120-277VIES	ERL1_06B327_-347-480VIES	ERL1_06B327_-347-480VIES
	C3						B1-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_06C340_-120-277VIES	ERL1_06C340_-347-480VIES	ERL1_06C330_-120-277VIES	ERL1_06C330_-347-480VIES	ERL1_06C327_-120-277VIES	ERL1_06C327_-347-480VIES	ERL1_06C327_-120-277VIES	ERL1_06C327_-347-480VIES	ERL1_06C327_-347-480VIES
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_06D340_-120-277VIES	ERL1_06D340_-347-480VIES	ERL1_06D330_-120-277VIES	ERL1_06D330_-347-480VIES	ERL1_06D327_-120-277VIES	ERL1_06D327_-347-480VIES	ERL1_06D327_-120-277VIES	ERL1_06D327_-347-480VIES	ERL1_06D327_-347-480VIES
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_06E340_-120-277VIES	ERL1_06E340_-347-480VIES	ERL1_06E330_-120-277VIES	ERL1_06E330_-347-480VIES	ERL1_06E327_-120-277VIES	ERL1_06E327_-347-480VIES	ERL1_06E327_-120-277VIES	ERL1_06E327_-347-480VIES	ERL1_06E327_-347-480VIES
07	A3	7000	6800	6600	58		B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_07A340_-120-277VIES	ERL1_07A330_-120-277VIES	ERL1_07A330_-120-277VIES	ERL1_07A330_-120-277VIES	ERL1_07A327_-120-277VIES	ERL1_07A327_-120-277VIES	ERL1_07A327_-120-277VIES	ERL1_07A327_-120-277VIES	ERL1_07A327_-120-277VIES
	B3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_07B340_-120-277VIES	ERL1_07B330_-120-277VIES	ERL1_07B330_-120-277VIES	ERL1_07B330_-120-277VIES	ERL1_07B327_-120-277VIES	ERL1_07B327_-120-277VIES	ERL1_07B327_-120-277VIES	ERL1_07B327_-120-277VIES	ERL1_07B327_-120-277VIES
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_07C340_-120-277VIES	ERL1_07C330_-120-277VIES	ERL1_07C330_-120-277VIES	ERL1_07C330_-120-277VIES	ERL1_07C327_-120-277VIES	ERL1_07C327_-120-277VIES	ERL1_07C327_-120-277VIES	ERL1_07C327_-120-277VIES	ERL1_07C327_-120-277VIES
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_07D340_-120-277VIES	ERL1_07D330_-120-277VIES	ERL1_07D330_-120-277VIES	ERL1_07D330_-120-277VIES	ERL1_07D327_-120-277VIES	ERL1_07D327_-120-277VIES	ERL1_07D327_-120-277VIES	ERL1_07D327_-120-277VIES	ERL1_07D327_-120-277VIES
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_07E340_-120-277VIES	ERL1_07E330_-120-277VIES	ERL1_07E330_-120-277VIES	ERL1_07E330_-120-277VIES	ERL1_07E327_-120-277VIES	ERL1_07E327_-120-277VIES	ERL1_07E327_-120-277VIES	ERL1_07E327_-120-277VIES	ERL1_07E327_-120-277VIES
08	A3	8000	7800	7600	71		B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_08A340_-120-277VIES	ERL1_08A330_-120-277VIES	ERL1_08A330_-120-277VIES	ERL1_08A330_-120-277VIES	ERL1_08A327_-120-277VIES	ERL1_08A327_-120-277VIES	ERL1_08A327_-120-277VIES	ERL1_08A327_-120-277VIES	ERL1_08A327_-120-277VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_08B340_-120-277VIES	ERL1_08B330_-120-277VIES	ERL1_08B330_-120-277VIES	ERL1_08B330_-120-277VIES	ERL1_08B327_-120-277VIES	ERL1_08B327_-120-277VIES	ERL1_08B327_-120-277VIES	ERL1_08B327_-120-277VIES	ERL1_08B327_-120-277VIES
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_08C340_-120-277VIES	ERL1_08C330_-120-277VIES	ERL1_08C330_-120-277VIES	ERL1_08C330_-120-277VIES	ERL1_08C327_-120-277VIES	ERL1_08C327_-120-277VIES	ERL1_08C327_-120-277VIES	ERL1_08C327_-120-277VIES	ERL1_08C327_-120-277VIES
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_08D340_-120-277VIES	ERL1_08D330_-120-277VIES	ERL1_08D330_-120-277VIES	ERL1_08D330_-120-277VIES	ERL1_08D327_-120-277VIES	ERL1_08D327_-120-277VIES	ERL1_08D327_-120-277VIES	ERL1_08D327_-120-277VIES	ERL1_08D327_-120-277VIES
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_08E340_-120-277VIES	ERL1_08E330_-120-277VIES	ERL1_08E330_-120-277VIES	ERL1_08E330_-120-277VIES	ERL1_08E327_-120-277VIES	ERL1_08E327_-120-277VIES	ERL1_08E327_-120-277VIES	ERL1_08E327_-120-277VIES	ERL1_08E327_-120-277VIES
09	A3	9000	8800	8500	84		B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_09A340_-120-277VIES	ERL1_09A330_-120-277VIES	ERL1_09A330_-120-277VIES	ERL1_09A330_-120-277VIES	ERL1_09A327_-120-277VIES	ERL1_09A327_-120-277VIES	ERL1_09A327_-120-277VIES	ERL1_09A327_-120-277VIES	ERL1_09A327_-120-277VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_09B340_-120-277VIES	ERL1_09B330_-120-277VIES	ERL1_09B330_-120-277VIES	ERL1_09B330_-120-277VIES	ERL1_09B327_-120-277VIES	ERL1_09B327_-120-277VIES	ERL1_09B327_-120-277VIES	ERL1_09B327_-120-277VIES	ERL1_09B327_-120-277VIES
	C3						B2-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_09C340_-120-277VIES	ERL1_09C330_-120-277VIES	ERL1_09C330_-120-277VIES	ERL1_09C330_-120-277VIES	ERL1_09C327_-120-277VIES	ERL1_09C327_-120-277VIES	ERL1_09C327_-120-277VIES	ERL1_09C327_-120-277VIES	ERL1_09C327_-120-277VIES
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_09D340_-120-277VIES	ERL1_09D330_-120-277VIES	ERL1_09D330_-120-277VIES	ERL1_09D330_-120-277VIES	ERL1_09D327_-120-277VIES	ERL1_09D327_-120-277VIES	ERL1_09D327_-120-277VIES	ERL1_09D327_-120-277VIES	ERL1_09D327_-120-277VIES
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_09E340_-120-277VIES	ERL1_09E330_-120-277VIES	ERL1_09E330_-120-277VIES	ERL1_09E330_-120-277VIES	ERL1_09E327_-120-277VIES	ERL1_09E327_-120-277VIES	ERL1_09E327_-120-277VIES	ERL1_09E327_-120-277VIES	ERL1_09E327_-120-277VIES
10	A3	9800	9600	9250	97		B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10A340_-120-277VIES	ERL1_10A330_-120-277VIES	ERL1_10A330_-120-277VIES	ERL1_10A330_-120-277VIES	ERL1_10A327_-120-277VIES	ERL1_10A327_-120-277VIES	ERL1_10A327_-120-277VIES	ERL1_10A327_-120-277VIES	ERL1_10A327_-120-277VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10B340_-120-277VIES	ERL1_10B330_-120-277VIES	ERL1_10B330_-120-277VIES	ERL1_10B330_-120-277VIES	ERL1_10B327_-120-277VIES	ERL1_10B327_-120-277VIES	ERL1_10B327_-120-277VIES	ERL1_10B327_-120-277VIES	ERL1_10B327_-120-277VIES
	C3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10C340_-120-277VIES	ERL1_10C330_-120-277VIES	ERL1_10C330_-120-277VIES	ERL1_10C330_-120-277VIES	ERL1_10C327_-120-277VIES	ERL1_10C327_-120-277VIES	ERL1_10C327_-120-277VIES	ERL1_10C327_-120-277VIES	ERL1_10C327_-120-277VIES
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_10D340_-120-277VIES	ERL1_10D330_-120-277VIES	ERL1_10D330_-120-277VIES	ERL1_10D330_-120-277VIES	ERL1_10D327_-120-277VIES	ERL1_10D327_-120-277VIES	ERL1_10D327_-120-277VIES	ERL1_10D327_-120-277VIES	ERL1_10D327_-120-277VIES
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10E340_-120-277VIES	ERL1_10E330_-120-277VIES	ERL1_10E330_-120-277VIES	ERL1_10E330_-120-277VIES	ERL1_10E327_-120-277VIES	ERL1_10E327_-120-277VIES	ERL1_10E327_-120-277VIES	ERL1_10E327_-120-277VIES	ERL1_10E327_-120-277VIES

Photometrics:

Evolve® LED Streetlight (ERL1)

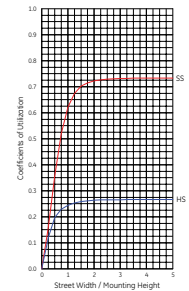
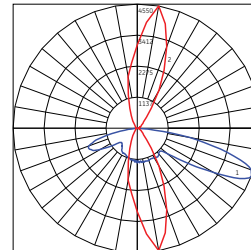
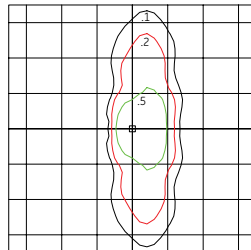
ERL1

Type II Narrow
(05A340)

5,000 Lumens

4000K

ERL1_05A340____.IES



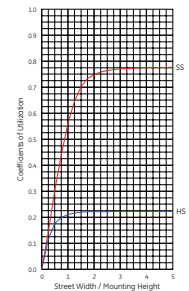
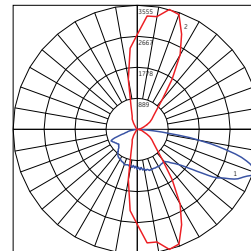
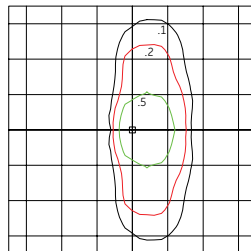
ERL1

Type II Wide
(05B340)

5,000 Lumens

4000K

ERL1_05B340____.IES



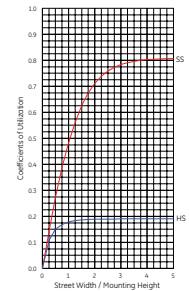
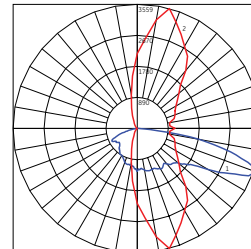
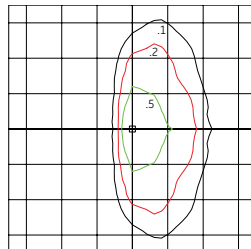
ERL1

Type III
(05C340)

5,000 Lumens

4000K

ERL1_05C340____.IES



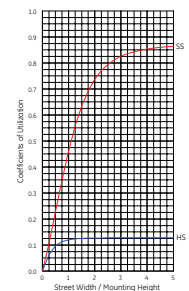
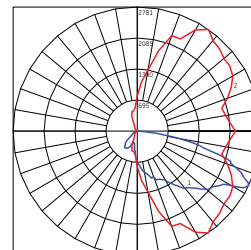
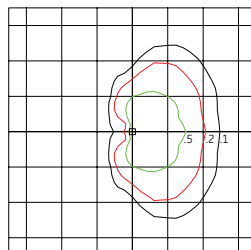
ERL1

Type IV
(05D340)

5,000 Lumens

4000K

ERL1_(05D340)____.IES



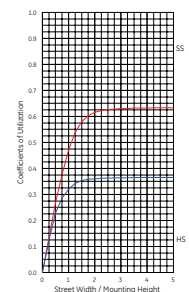
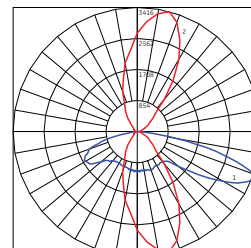
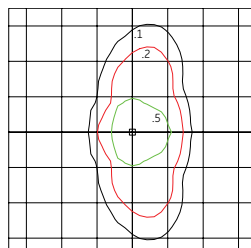
ERL1

Type II Enhanced Back Light
(05E340)

5,000 Lumens

4000K

ERL1_(05E340)____.IES



GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2



Project name _____
Date _____
Type _____

ERLH

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION*	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local H = High Output	0 = 120-277V* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480*# * Not available with Fusing. Must choose a discrete voltage with F option. # Not available with E controls option.	10 11 13 14 15 16 See Table	A3 = Type II Narrow B3 = Type II Wide C3 = Type III D3 = Type IV E3 = Type II Enhanced Back Light See Table *Nominal IES Type clossing subject to typical variation, individual units may differ.	27 = 2700K< 30 = 3000K< 40 = 4000K < Select 2700K or 3000K CCT for IES approved units.	A = ANSI C136.41 7-pin D = ANSI C136.41 7-pin with Shorting Cap E = ANSI C136.41 7-pin with non-Dimming PE Control.* *PE Control Only available for 120-277V or 480V Discrete. Not available for 347-480V or 347V Discrete. NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze	A = 4 Bolt Slipfitter † F = Fusing G = Internal Bubble Level I = IP66 Optical L = Tool-Less Entry R = Secondary 10kV/5kA SPD T = Secondary 20kV/10kA SPD U = DALI Programmable +^ V1 = Variable Output via Field Adjustable Module** X = Single Package # Y = Coastal Finish* XXX = Special Options † Contact manufacturer for Lead-Time. # "X" option provides single pack box per fixture. Std Packaging = 20 units per Magna pak container. * Recommended for installations within 750 ft. from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ^ Not available in 347V, 480V or 347-480V. ** Not available with DALI (U) option.

LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE			BUG RATING			IES FILE NUMBER		
		4000K	3000K	2700K	120-277V	347-480V		4000K	3000K	2700K	4000K	3000K	2700K
10	A3	10000	9600	9300	82			B2-U0-G2	B2-U0-G2	B2-U0-G2	ERLH_10A340	ERLH_10A330	ERLH_10A327
	B3							B2-U0-G2	B2-U0-G2	B2-U0-G2	ERLH_10B340	ERLH_10B330	ERLH_10B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_10C340	ERLH_10C330	ERLH_10C327
	D3							B1-U0-G3	B1-U0-G3	B1-U0-G3	ERLH_10D340	ERLH_10D330	ERLH_10D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_10E340	ERLH_10E330	ERLH_10E327
11	A3	11500	11000	10700	98			B3-U0-G3	B2-U0-G2	B2-U0-G2	ERLH_11A340	ERLH_11A330	ERLH_11A327
	B3							B3-U0-G3	B2-U0-G2	B2-U0-G2	ERLH_11B340	ERLH_11B330	ERLH_11B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_11C340	ERLH_11C330	ERLH_11C327
	D3							B1-U0-G3	B1-U0-G2	B1-U0-G2	ERLH_11D340	ERLH_11D330	ERLH_11D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_11E340	ERLH_11E330	ERLH_11E327
13	A3	13000	12500	12100	111			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_13A340	ERLH_13A330	ERLH_13A327
	B3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_13B340	ERLH_13B330	ERLH_13B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_13C340	ERLH_13C330	ERLH_13C327
	D3							B2-U0-G3	B2-U0-G3	B1-U0-G3	ERLH_13D340	ERLH_13D330	ERLH_13D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_13E340	ERLH_13E330	ERLH_13E327
14	A3	14000	13400	13000	122			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_14A340	ERLH_14A330	ERLH_14A327
	B3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_14B340	ERLH_14B330	ERLH_14B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_14C340	ERLH_14C330	ERLH_14C327
	D3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_14D340	ERLH_14D330	ERLH_14D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_14E340	ERLH_14E330	ERLH_14E327
15	A3	15000	14400	13900	136			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_15A340	ERLH_15A330	ERLH_15A327
	B3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_15B340	ERLH_15B330	ERLH_15B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_15C340	ERLH_15C330	ERLH_15C327
	D3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_15D340	ERLH_15D330	ERLH_15D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_15E340	ERLH_15E330	ERLH_15E327
16	A3	16000	15300	14900	149			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_16A340	ERLH_16A330	ERLH_16A327
	B3							B3-U0-G3	B3-U0-G3	B2-U0-G3	ERLH_16B340	ERLH_16B330	ERLH_16B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_16C340	ERLH_16C330	ERLH_16C327
	D3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_16D340	ERLH_16D330	ERLH_16D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_16E340	ERLH_16E330	ERLH_16E327

Photometrics:

Evolve® LED Streetlight (ERLH)

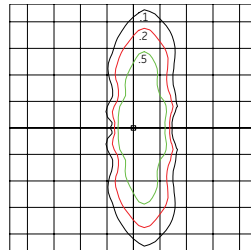
ERLH

Type II Narrow
(13A340)

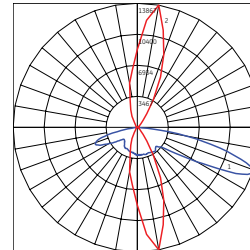
13,000 Lumens

4000K

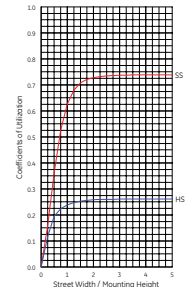
ERLH_13A340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 80°
— Horizontal cone through vertical angle of Max. Cd at 69°



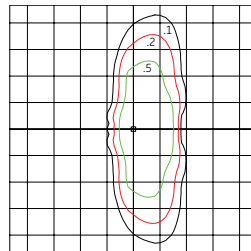
ERLH

Type II Wide
(13B340)

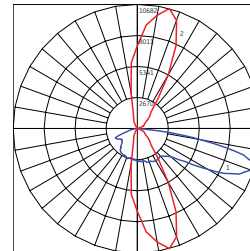
13,000 Lumens

4000K

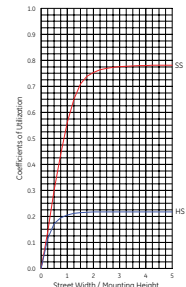
ERLH_13B340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 72°



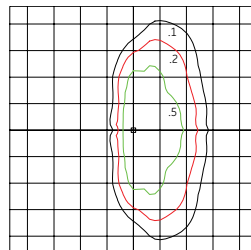
ERLH

Type III
(13C340)

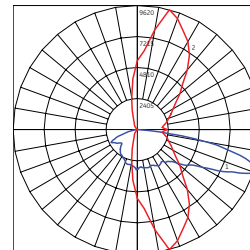
13,000 Lumens

4000K

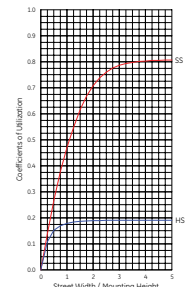
ERLH_13C340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 71°



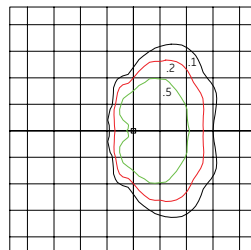
ERLH

Type IV
(13D340)

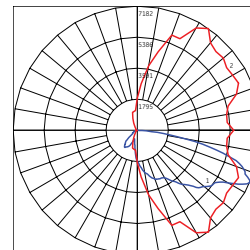
13,000 Lumens

4000K

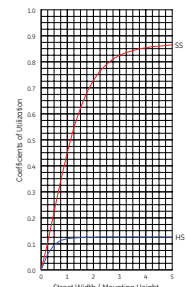
ERLH_13D340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 65°



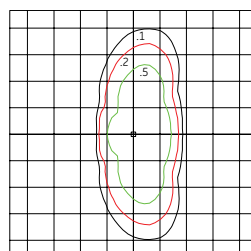
ERLH

Type II Enhanced Back Light
(13E340)

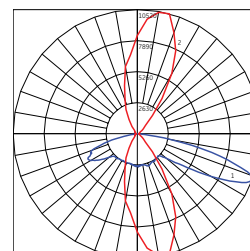
13,000 Lumens

4000K

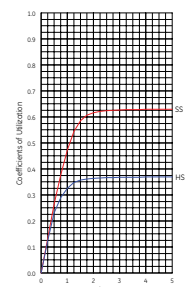
ERLH_13E340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 69°



GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2



Project name _____
Date _____
Type _____

ERL2

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION*	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local 2 = Double Module	0 = 120-277V* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480*# * Not available with Fusing. Must choose a discrete voltage with F option. # Not available with E controls option.	16 18 19 21 23 25 27 28 30 See Table	A3 = Type II Narrow B3 = Type II Wide C3 = Type III D3 = Type IV E3 = Type II Enhanced Back Light See Table *Nominal IES Type classing subject to typical variation, individual units may differ.	27 = 2700K < 30 = 3000K > 40 = 4000K <> Select 2700K or 3000K CCT for IES approved units.	A = ANSI C136.41 7-pin D = ANSI C136.41 7-pin with Shorting Cap E = ANSI C136.41 7-pin with non-Dimming PE Control.* *PE Control Only available for 120-277V or 480V Discrete. Not available for 347-480V or 347V Discrete. NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze	A = 4 Bolt Slipfitter † F = Fusing G = Internal Bubble Level I = IP66 Optical L = Tool-Less Entry M1 = Magnapack*** R = Secondary 10kV/5kA SPD T = Secondary 20kV/10kA SPD U = DALI Programmable ^ V1 = Variable Output via Field Adjustable Module** Y = Coastal Finish* XXX = Special Options † Contact manufacturer for Lead-Time. * Recommended for installations within 750 ft. from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ^ Not available in 347V, 480V or 347-480V. ** Not available with DALI (U) option. *** 20 fixtures per Magnapack.



LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE		BUG RATING			IES FILE NUMBER							
		4000K	3000K	2700K	120-277V	347-480V	4000K	3000K	2700K	120-277V	4000K	347-480V	120-277V	3000K	347-480V	120-277V	2700K
16	A3	16000	15300	14900	120		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_16A340_IES			ERL2_16A330_IES			ERL2_16A327_IES	
	B3						B3-U0-G3	B3-U0-G3	B2-U0-G3	ERL2_16B340_IES			ERL2_16B330_IES			ERL2_16B327_IES	
	C3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_16C340_IES			ERL2_16C330_IES			ERL2_16C327_IES	
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_16D340_IES			ERL2_16D330_IES			ERL2_16D327_IES	
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_16E340_IES			ERL2_16E330_IES			ERL2_16E327_IES	
18	A3	18000	17300	16700	140		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_18A340_IES			ERL2_18A330_IES			ERL2_18A327_IES	
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_18B340_IES			ERL2_18B330_IES			ERL2_18B327_IES	
	C3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_18C340_IES			ERL2_18C330_IES			ERL2_18C327_IES	
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_18D340_IES			ERL2_18D330_IES			ERL2_18D327_IES	
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_18E340_IES			ERL2_18E330_IES			ERL2_18E327_IES	
19	A3	19000	18200	17700	149		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_19A340_IES			ERL2_19A330_IES			ERL2_19A327_IES	
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_19B340_IES			ERL2_19B330_IES			ERL2_19B327_IES	
	C3						B3-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_19C340_IES			ERL2_19C330_IES			ERL2_19C327_IES	
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_19D340_IES			ERL2_19D330_IES			ERL2_19D327_IES	
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_19E340_IES			ERL2_19E330_IES			ERL2_19E327_IES	
21	A3	21000	20100	19500	174	177	B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_21A340_-120-277VIES	ERL2_21A340_-347-480VIES	ERL2_21A330_-120-277VIES	ERL2_21A330_-347-480VIES	ERL2_21A327_-120-277VIES	ERL2_21A327_-347-480VIES	ERL2_21A327_-120-277VIES	ERL2_21A327_-347-480VIES
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_21B340_-120-277VIES	ERL2_21B340_-347-480VIES	ERL2_21B330_-120-277VIES	ERL2_21B330_-347-480VIES	ERL2_21B327_-120-277VIES	ERL2_21B327_-347-480VIES	ERL2_21B327_-120-277VIES	ERL2_21B327_-347-480VIES
	C3						B3-U0-G4	B3-U0-G3	B3-U0-G3	ERL2_21C340_-120-277VIES	ERL2_21C340_-347-480VIES	ERL2_21C330_-120-277VIES	ERL2_21C330_-347-480VIES	ERL2_21C327_-120-277VIES	ERL2_21C327_-347-480VIES	ERL2_21C327_-120-277VIES	ERL2_21C327_-347-480VIES
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_21D340_-120-277VIES	ERL2_21D340_-347-480VIES	ERL2_21D330_-120-277VIES	ERL2_21D330_-347-480VIES	ERL2_21D327_-120-277VIES	ERL2_21D327_-347-480VIES	ERL2_21D327_-120-277VIES	ERL2_21D327_-347-480VIES
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_21E340_-120-277VIES	ERL2_21E340_-347-480VIES	ERL2_21E330_-120-277VIES	ERL2_21E330_-347-480VIES	ERL2_21E327_-120-277VIES	ERL2_21E327_-347-480VIES	ERL2_21E327_-120-277VIES	ERL2_21E327_-347-480VIES
23	A3	23000	22100	21400	194	196	B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_23A340_-120-277VIES	ERL2_23A340_-347-480VIES	ERL2_23A330_-120-277VIES	ERL2_23A330_-347-480VIES	ERL2_23A327_-120-277VIES	ERL2_23A327_-347-480VIES	ERL2_23A327_-120-277VIES	ERL2_23A327_-347-480VIES
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_23B340_-120-277VIES	ERL2_23B340_-347-480VIES	ERL2_23B330_-120-277VIES	ERL2_23B330_-347-480VIES	ERL2_23B327_-120-277VIES	ERL2_23B327_-347-480VIES	ERL2_23B327_-120-277VIES	ERL2_23B327_-347-480VIES
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_23C340_-120-277VIES	ERL2_23C340_-347-480VIES	ERL2_23C330_-120-277VIES	ERL2_23C330_-347-480VIES	ERL2_23C327_-120-277VIES	ERL2_23C327_-347-480VIES	ERL2_23C327_-120-277VIES	ERL2_23C327_-347-480VIES
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G3	ERL2_23D340_-120-277VIES	ERL2_23D340_-347-480VIES	ERL2_23D330_-120-277VIES	ERL2_23D330_-347-480VIES	ERL2_23D327_-120-277VIES	ERL2_23D327_-347-480VIES	ERL2_23D327_-120-277VIES	ERL2_23D327_-347-480VIES
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_23E340_-120-277VIES	ERL2_23E340_-347-480VIES	ERL2_23E330_-120-277VIES	ERL2_23E330_-347-480VIES	ERL2_23E327_-120-277VIES	ERL2_23E327_-347-480VIES	ERL2_23E327_-120-277VIES	ERL2_23E327_-347-480VIES
25	A3	25000	24000	23300	214		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_25A340_IES			ERL2_25A330_IES			ERL2_25A327_IES	
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_25B340_IES			ERL2_25B330_IES			ERL2_25B327_IES	
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_25C340_IES			ERL2_25C330_IES			ERL2_25C327_IES	
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_25D340_IES			ERL2_25D330_IES			ERL2_25D327_IES	
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_25E340_IES			ERL2_25E330_IES			ERL2_25E327_IES	
27	A3	27000	25900	25100	237		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_27A340_IES			ERL2_27A330_IES			ERL2_27A327_IES	
	B3						B3-U0-G4	B3-U0-G4	B3-U0-G3	ERL2_27B340_IES			ERL2_27B330_IES			ERL2_27B327_IES	
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_27C340_IES			ERL2_27C330_IES			ERL2_27C327_IES	
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_27D340_IES			ERL2_27D330_IES			ERL2_27D327_IES	
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_27E340_IES			ERL2_27E330_IES			ERL2_27E327_IES	
28	A3	28000	26900	26100	251		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_28A340_IES			ERL2_28A330_IES			ERL2_28A327_IES	
	B3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_28B340_IES			ERL2_28B330_IES			ERL2_28B327_IES	
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_28C340_IES			ERL2_28C330_IES			ERL2_28C327_IES	
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_28D340_IES			ERL2_28D330_IES			ERL2_28D327_IES	
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_28E340_IES			ERL2_28E330_IES			ERL2_28E327_IES	
30	A3	30000	28800	27900	278		B4-U0-G4	B4-U0-G4	B3-U0-G3	ERL2_30A340_IES			ERL2_30A330_IES			ERL2_30A327_IES	
	B3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_30B340_IES			ERL2_30B330_IES			ERL2_30B327_IES	
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_30C340_IES			ERL2_30C330_IES			ERL2_30C327_IES	
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_30D340_IES			ERL2_30D330_IES			ERL2_30D327_IES	
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_30E340_IES			ERL2_30E330_IES			ERL2_30E327_IES	

Photometrics:

Evolve® LED Streetlight (ERL2)

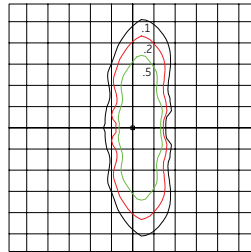
ERL2

Type II Narrow
(23A340)

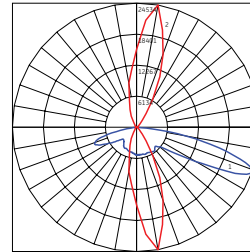
23,000 Lumens

4000K

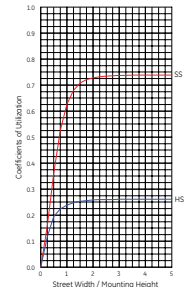
ERL2_23A340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 80°
— Horizontal cone through vertical angle of Max. Cd at 69°



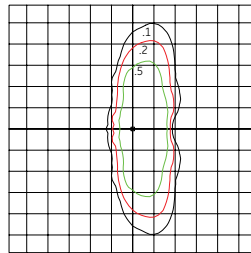
ERL2

Type II Wide
(23B340)

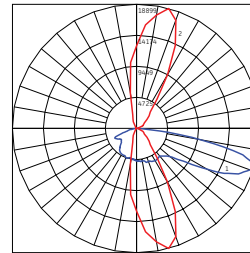
23,000 Lumens

4000K

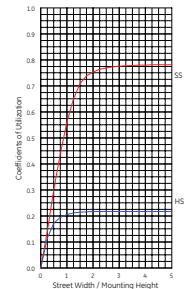
ERL2_23B340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 72°



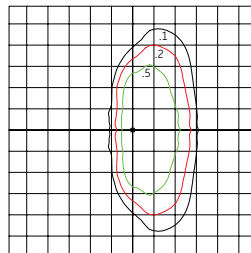
ERL2

Type III
(23C340)

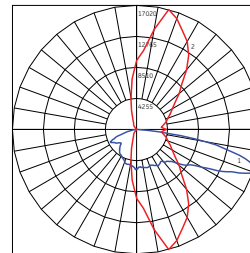
23,000 Lumens

4000K

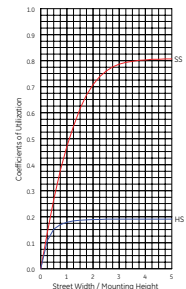
ERL2_23C340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 71°



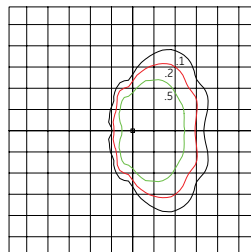
ERL2

Type IV
(23D340)

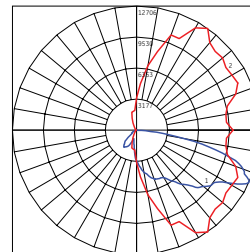
23,000 Lumens

4000K

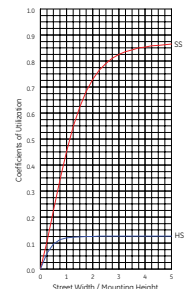
ERL2_23D340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 55°
— Horizontal cone through vertical angle of Max. Cd at 65°



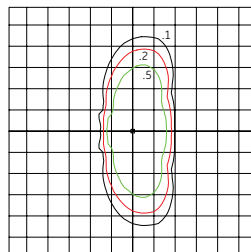
ERL2

Type II Enhanced Back Light
(23E340)

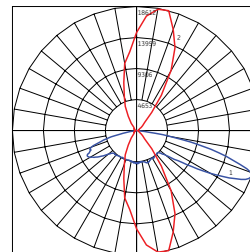
23,000 Lumens

4000K

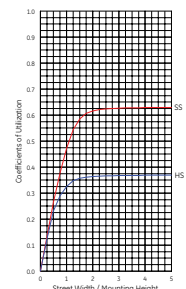
ERL2_23E340____.IES




Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 69°



Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: ERL1-0-04-B3-30-A-GRAY Notes:	Type: 31W
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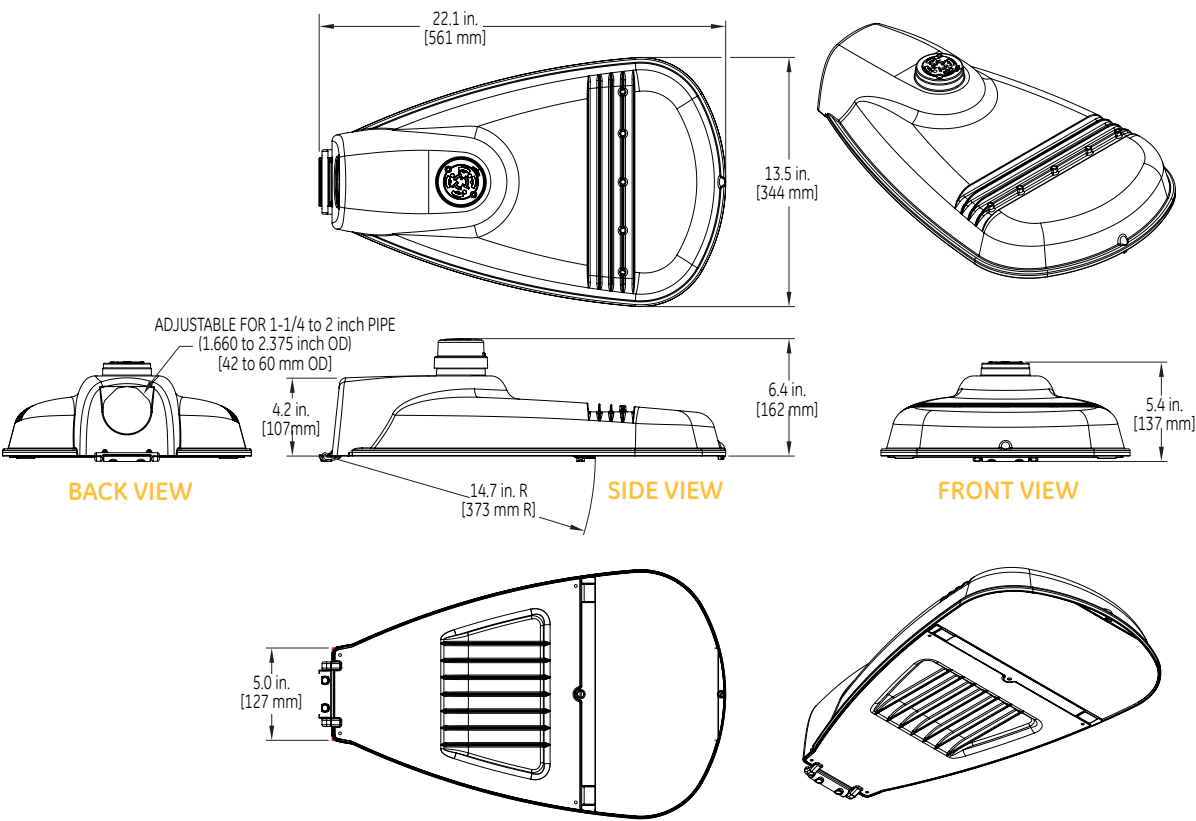
GE Evolve®

LED Roadway Lighting

ERL1-ERLH-ERL2

Product Dimensions:

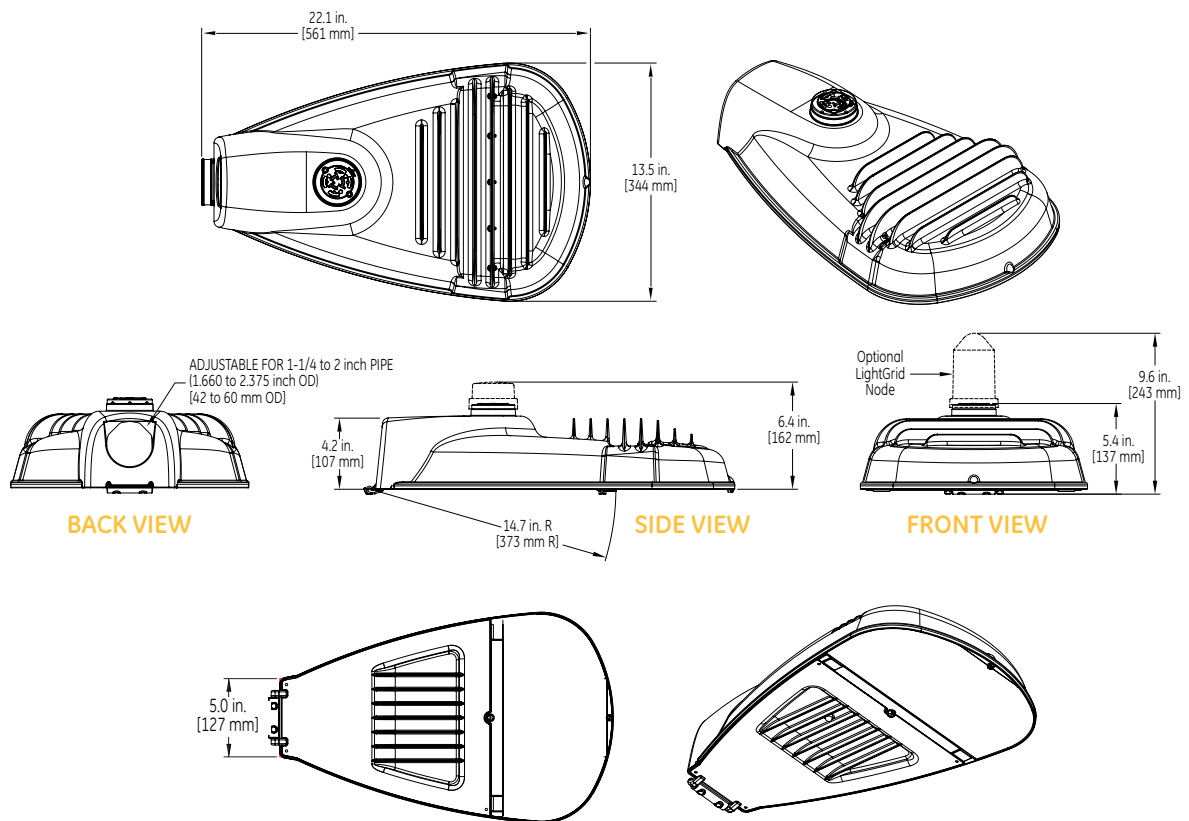
Evolve® LED Streetlight (ERL1)




DATA	<ul style="list-style-type: none"> • Approximate net weight: 12.4 lbs (5.6kgs) - 15.5 lbs (7.0kgs) with XFMR • Effective Projected Area (EPA): 0.5 sq ft max (0.046 sq m)
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GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

Product Dimensions:
Evolve® LED Streetlight (ERLH)

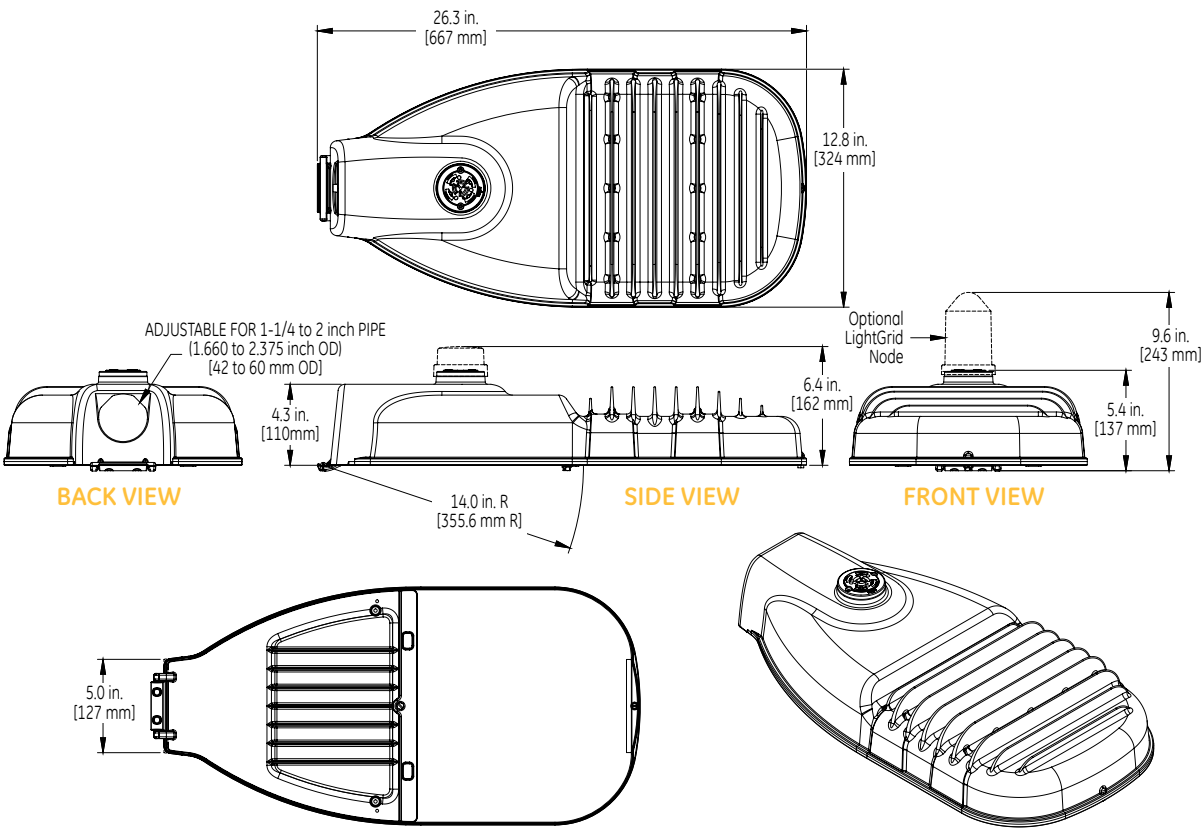
**DATA**

- Approximate net weight: 15.15 lbs (6.9 kgs) - 2 Bolt Slipfitter
- Approximate net weight: 15.85 lbs (7.2 kgs) - 4 Bolt Slipfitter
- Effective Projected Area (EPA): 0.5 sq ft max (0.046 sq m)

Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: ERL1-0-04-B3-30-A-GRAY Notes:	Type: 31W
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GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

Product Dimensions:
Evolve® LED Streetlight (ERL2)



DATA

- Approximate net weight: 24.0 lbs (10.9 kgs)
Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA): 0.57 sq ft max (0.053 sq m)



GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2



current
powered by GE



GE Evolve® LED Roadway Lighting

ERL1-ERLH-ERL2



The **Evolve®** LED Roadway Luminaire is optimized for customers requiring a LED solution for local, collector and major roadways. GE's unique reflective optics are designed to optimize application efficiency and minimize glare. The modern design incorporates the heat sink directly into the unit for heat transfer to prolong LED life. This reliable unit has a 100,000 hour design life, significantly reducing maintenance needs and expense over the life of the fixture. This efficient solution lowers energy consumption compared to a traditional HID fixture for additional operating cost savings.

Features:

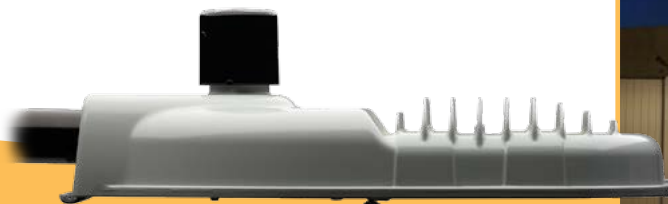
- Optimized roadway photometric distributions
- **Evolve®** light engine consisting of reflective technology designed to optimize application efficiency and minimize glare
- 70 CRI at 2700K, 3000K and 4000K typical.
- -40°C to 50°C UL Ambient Typical.
- ULOR = 0 (zero uplight)
- Designed & Assembled in USA

Applications:

- Local Roadways
- Collector Roadways
- Major Roadway/Streets



Compatible with **LightGrid** Outdoor Wireless Control System



To learn more about **GE Evolve®** LED Roadway Lighting, go to: www.currentbyge.com



GE Evolve®

LED Roadway Lighting

ERL1-ERLH-ERL2

Typical Specifications: ERL1-ERLH-ERL2

LED & Optical

- **Output Range:** 1900 – 30000 lm
- **Photometric Options:** Type II Narrow, Type II Wide, Type III, Type IV
- **System Efficacy:** 100 - 145 LPW
- **CCT:** 2700K, 3000K, 4000K; LEDs @ 70 CRI

Lumen Maintenance Tables

Projected Lxx per IES TM-21 at 25°C for reference:

ERL1 LUMEN OUTPUT CODES	LXX(10K)@HOURS		
	25,000 HR	50,000 HR	60,000 HR
02,03,04,05,06	L96	L95	L94
07,08,09	L95	L91	L89
10	L89	L80	L76

ERLH LUMEN OUTPUT CODES	LXX(10K)@HOURS		
	25,000 HR	50,000 HR	60,000 HR
10, 11	L97	L96	L96
13, 14	L95	L93	L92
15, 16	L94	L91	L91

ERL2 LUMEN OUTPUT CODES	LXX(10K)@HOURS		
	25,000 HR	50,000 HR	60,000 HR
16, 18, 19, 21, 23	L96	L94	L95
25, 27, 28	L95	L93	L92
30	L94	L91	L90


Note: Projected Lxx based on LM80 (10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements.

Electrical

- **Input Voltage:** 120-277 volt and 347-480 volt
- **Input Frequency:** 50/60Hz
- **Power Factor (PF)*:** >90%
- **Total Harmonic Distortion (THD)*:** <20%

*Power factor and THD tolerance exceptions: ERL1 "02" Lumen output: PF and THD within tolerances above only at 120 volt. ERL1 "03" Lumen output: @120 volt PF~0.89; @ 480 volt THD~26% ERL1 "04" Lumen output: @480 volt THD~22%

Ratings

- **Surge Protection:** per ANSI C136.2-2015: (Driver Internal):
 - 6kV/3kA "Basic: (120 Strikes)" - Standard on ERL1 (02-06)
 - 10kV/5kA "Enhanced: (40 Strikes)" - Standard on ERL1 (07 - 10), ERLH, ERL2
- **(Additional Separate Secondary SPD)**
 - 10kV/5kA "Enhanced: (40 Strikes)" - Option "R"
 - 20kV/10kA "Elevated" (40 Strikes)" - Option "T"
- **Safety:** UL/cUL Listed. UL 1598 listed, suitable for wet locations 
- **Environmental:** Compliant with the materials restrictions of RoHS
- **EMI:** Title 47 CFR Part 15 Class A
- **Vibration:** 3G per ANSI C136.31-2010
- LM-79 testing in accordance with IESNA Standards
- Std. Optical enclosure rated per ANSI C136.25-2009:
 - ERL1/ERLH/ERL2 = IP65, Optional: IP66



International Dark Sky Association listed. 2700K or 3000K must be selected to meet IDA certification and approval.



Project name _____

Date _____

Type _____

Operating Temperature:

PRODUCT ID	LUMEN OUTPUT	AMBIENT READING
ERL1	02-10	-40°C to 50°C
ERLH	10-11, 13	-40°C to 50°C
ERLH	14-16	-40°C to 45°C
ERL2	16-28	-40°C to 50°C
ERL2	30	-40°C to 45°C

Delayed start may be experienced < -35°C

Construction & Finish

- **Housing:**
 - Die Cast Enclosure
 - Casting-integral heat sink for maximum heat transfer
- **Lensing:** Impact resistant tempered glass, standard
- **Paint:** Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
 - Standard Colors: Dark Bronze, Black, & Gray
 - RAL & custom colors available
 - Optional coastal finish available.
- **Weight:** 12.4lbs (5.6kg) – 24lbs (10.9kg)

Warranty

- **System Warranty:** 5 Year Standard, 10 Year Optional

Controls

- **Dimming:**
 - Standard: 0-10V; Optional: DALI (120-277V Only)
- **Sensors:**
 - Photo electric sensors (PE) available.
- LightGrid™ compatible

Mounting

- Slipfitter with +/- 5 degree of adjustment for leveling.
- Integral die cast mounting pipe stop.
- Adjustable for 1.25 in. or 2 in. mounting pipe.

Suggested HID Replacement Lumen Levels

- ~4,000–5,000 lumens to replace 100W HPS Cobra-head
- ~7,000–8,800 lumens to replace 150W HPS Cobra-head
- ~8,500–11,500 lumens to replace 200W HPS Cobra-head
- ~11,500–14,000 lumens to replace 250W HPS Cobra-head
- ~21,000–30,000 lumens to replace 400W HPS Cobra-head

Note: Actual replacement lumens may vary based upon mounting height, pole spacing, design criteria, etc.

CONVERSION FROM PREVIOUS GENERATION OPTICS TO CURRENT GENERATION OPTICS**			
PREVIOUS	DESCRIPTION	CURRENT	DESCRIPTION
A1, B1	Extra Narrow/Narrow Asymmetric	A3	Type II Narrow
C1, E1	Asymmetric Short/Medium	B3	Type II Wide
D1, G1	Asymmetric Forward/Extra Wide	C3	Type III
F1	Asymmetric Wide	D3	Type IV
		E3	Type II Enhanced Back Light

**The information above is designed to provide a guideline to select the correct luminaire for a roadway application. The best and most accurate way to ensure the proper design is do a lighting layout Utilizing AGI.

GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2



Project name _____
Date _____
Type _____

ERL1

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION*	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local 1 = Single Module	0 = 120-277V* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480*#	02* 03 04 05 06 07 08 09 10	A3 = Type II Narrow B3 = Type II Wide C3 = Type III D3 = Type IV E3 = Type II Enhanced Back Light See Table	27 = 2700K < 30 = 3000K < 40 = 4000K Select 2700K or 3000K CCT for IES file.	A = ANSI C136.41 7-pin D = ANSI C136.41 7-pin with Shorting Cap E = ANSI C136.41 7-pin with non-Dimming PE Control.* *PE Control Only available for 120-277V or 480V Discrete. Not available for 347-480V or 347V Discrete. NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze	A = 4 Bolt Splitter † F = Fusing G = Internal Bubble Level I = IP66 Optical L = Tool-Less Entry R = Secondary 10kV/5kA SPD T = Secondary 20kV/10kA SPD U = DALI Programmable +^ V1 = Variable Output via Field Adjustable Module** X = Single Package # Y = Coastal Finish* XXX = Special Options † Contact manufacturer for Lead-Time. # "X" option provides single pack box per fixture. Std Packaging = 20 units per Magna pak container. * Recommended for installations within 750 ft. from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ^ Not available in 347V, 480V or 347-480V for Lumen Output Levels 07, 08, 09, and 10. ** Not available with DALI (U) option.

LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE		BUG RATING			IES FILE NUMBER								
		4000K	3000K	2700K	120-277V	347-480V	4000K	3000K	2700K	120-277V	4000K	347-480V	120-277V	3000K	347-480V	120-277V	2700K	347-480V
02	A3	2000	1900	1900	14	N/A	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02A340-120VIES	N/A	ERL1_02A330-120VIES	N/A	ERL1_02A327-120VIES	N/A	N/A	N/A	N/A
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02B340-120VIES	N/A	ERL1_02B330-120VIES	N/A	ERL1_02B327-120VIES	N/A	N/A	N/A	
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02C340-120VIES	N/A	ERL1_02C330-120VIES	N/A	ERL1_02C327-120VIES	N/A	N/A	N/A	
	D3						B0-U0-G1	B0-U0-G1	B0-U0-G1	ERL1_02D340-120VIES	N/A	ERL1_02D330-120VIES	N/A	ERL1_02D327-120VIES	N/A	N/A	N/A	
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_02E340-120VIES	N/A	ERL1_02E330-120VIES	N/A	ERL1_02E327-120VIES	N/A	N/A	N/A	
03	A3	3000	2900	2800	22	26	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03A340-120-277VIES	ERL1_03A330-120-277VIES	ERL1_03A330-347-480VIES	ERL1_03A327-120-277VIES	ERL1_03A327-347-480VIES	ERL1_03A327-120-277VIES	ERL1_03A327-347-480VIES	ERL1_03A327-120-277VIES	ERL1_03A327-347-480VIES
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03B340-120-277VIES	ERL1_03B330-120-277VIES	ERL1_03B330-347-480VIES	ERL1_03B327-120-277VIES	ERL1_03B327-347-480VIES	ERL1_03B327-120-277VIES	ERL1_03B327-347-480VIES		
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03C340-120-277VIES	ERL1_03C330-120-277VIES	ERL1_03C330-347-480VIES	ERL1_03C327-120-277VIES	ERL1_03C327-347-480VIES	ERL1_03C327-120-277VIES	ERL1_03C327-347-480VIES		
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03D340-120-277VIES	ERL1_03D330-120-277VIES	ERL1_03D330-347-480VIES	ERL1_03D327-120-277VIES	ERL1_03D327-347-480VIES	ERL1_03D327-120-277VIES	ERL1_03D327-347-480VIES		
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_03E340-120-277VIES	ERL1_03E330-120-277VIES	ERL1_03E330-347-480VIES	ERL1_03E327-120-277VIES	ERL1_03E327-347-480VIES	ERL1_03E327-120-277VIES	ERL1_03E327-347-480VIES		
04	A3	4000	3900	3800	31	34	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04A340-120-277VIES	ERL1_04A330-120-277VIES	ERL1_04A330-347-480VIES	ERL1_04A327-120-277VIES	ERL1_04A327-347-480VIES	ERL1_04A327-120-277VIES	ERL1_04A327-347-480VIES	ERL1_04A327-120-277VIES	ERL1_04A327-347-480VIES
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04B340-120-277VIES	ERL1_04B330-120-277VIES	ERL1_04B330-347-480VIES	ERL1_04B327-120-277VIES	ERL1_04B327-347-480VIES	ERL1_04B327-120-277VIES	ERL1_04B327-347-480VIES		
	C3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04C340-120-277VIES	ERL1_04C330-120-277VIES	ERL1_04C330-347-480VIES	ERL1_04C327-120-277VIES	ERL1_04C327-347-480VIES	ERL1_04C327-120-277VIES	ERL1_04C327-347-480VIES		
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04D340-120-277VIES	ERL1_04D330-120-277VIES	ERL1_04D330-347-480VIES	ERL1_04D327-120-277VIES	ERL1_04D327-347-480VIES	ERL1_04D327-120-277VIES	ERL1_04D327-347-480VIES		
	E3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_04E340-120-277VIES	ERL1_04E330-120-277VIES	ERL1_04E330-347-480VIES	ERL1_04E327-120-277VIES	ERL1_04E327-347-480VIES	ERL1_04E327-120-277VIES	ERL1_04E327-347-480VIES		
05	A3	5000	4900	4700	39	43	B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_05A340-120-277VIES	ERL1_05A330-120-277VIES	ERL1_05A330-347-480VIES	ERL1_05A327-120-277VIES	ERL1_05A327-347-480VIES	ERL1_05A327-120-277VIES	ERL1_05A327-347-480VIES	ERL1_05A327-120-277VIES	ERL1_05A327-347-480VIES
	B3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_05B340-120-277VIES	ERL1_05B330-120-277VIES	ERL1_05B330-347-480VIES	ERL1_05B327-120-277VIES	ERL1_05B327-347-480VIES	ERL1_05B327-120-277VIES	ERL1_05B327-347-480VIES		
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_05C340-120-277VIES	ERL1_05C330-120-277VIES	ERL1_05C330-347-480VIES	ERL1_05C327-120-277VIES	ERL1_05C327-347-480VIES	ERL1_05C327-120-277VIES	ERL1_05C327-347-480VIES		
	D3						B1-U0-G1	B1-U0-G1	B1-U0-G1	ERL1_05D340-120-277VIES	ERL1_05D330-120-277VIES	ERL1_05D330-347-480VIES	ERL1_05D327-120-277VIES	ERL1_05D327-347-480VIES	ERL1_05D327-120-277VIES	ERL1_05D327-347-480VIES		
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_05E340-120-277VIES	ERL1_05E330-120-277VIES	ERL1_05E330-347-480VIES	ERL1_05E327-120-277VIES	ERL1_05E327-347-480VIES	ERL1_05E327-120-277VIES	ERL1_05E327-347-480VIES		
06	A3	6000	5800	5700	47	52	B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_06A340-120-277VIES	ERL1_06A330-120-277VIES	ERL1_06A330-347-480VIES	ERL1_06A327-120-277VIES	ERL1_06A327-347-480VIES	ERL1_06A327-120-277VIES	ERL1_06A327-347-480VIES	ERL1_06A327-120-277VIES	ERL1_06A327-347-480VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_06B340-120-277VIES	ERL1_06B330-120-277VIES	ERL1_06B330-347-480VIES	ERL1_06B327-120-277VIES	ERL1_06B327-347-480VIES	ERL1_06B327-120-277VIES	ERL1_06B327-347-480VIES		
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_06C340-120-277VIES	ERL1_06C330-120-277VIES	ERL1_06C330-347-480VIES	ERL1_06C327-120-277VIES	ERL1_06C327-347-480VIES	ERL1_06C327-120-277VIES	ERL1_06C327-347-480VIES		
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_06D340-120-277VIES	ERL1_06D330-120-277VIES	ERL1_06D330-347-480VIES	ERL1_06D327-120-277VIES	ERL1_06D327-347-480VIES	ERL1_06D327-120-277VIES	ERL1_06D327-347-480VIES		
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_06E340-120-277VIES	ERL1_06E330-120-277VIES	ERL1_06E330-347-480VIES	ERL1_06E327-120-277VIES	ERL1_06E327-347-480VIES	ERL1_06E327-120-277VIES	ERL1_06E327-347-480VIES		
07	A3	7000	6800	6600	58	63	B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_07A340-120-277VIES	ERL1_07A330-120-277VIES	ERL1_07A330-347-480VIES	ERL1_07A327-120-277VIES	ERL1_07A327-347-480VIES	ERL1_07A327-120-277VIES	ERL1_07A327-347-480VIES	ERL1_07A327-120-277VIES	ERL1_07A327-347-480VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_07B340-120-277VIES	ERL1_07B330-120-277VIES	ERL1_07B330-347-480VIES	ERL1_07B327-120-277VIES	ERL1_07B327-347-480VIES	ERL1_07B327-120-277VIES	ERL1_07B327-347-480VIES		
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_07C340-120-277VIES	ERL1_07C330-120-277VIES	ERL1_07C330-347-480VIES	ERL1_07C327-120-277VIES	ERL1_07C327-347-480VIES	ERL1_07C327-120-277VIES	ERL1_07C327-347-480VIES		
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_07D340-120-277VIES	ERL1_07D330-120-277VIES	ERL1_07D330-347-480VIES	ERL1_07D327-120-277VIES	ERL1_07D327-347-480VIES	ERL1_07D327-120-277VIES	ERL1_07D327-347-480VIES		
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_07E340-120-277VIES	ERL1_07E330-120-277VIES	ERL1_07E330-347-480VIES	ERL1_07E327-120-277VIES	ERL1_07E327-347-480VIES	ERL1_07E327-120-277VIES	ERL1_07E327-347-480VIES		
08	A3	8000	7800	7600	71	76	B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_08A340-120-277VIES	ERL1_08A330-120-277VIES	ERL1_08A330-347-480VIES	ERL1_08A327-120-277VIES	ERL1_08A327-347-480VIES	ERL1_08A327-120-277VIES	ERL1_08A327-347-480VIES	ERL1_08A327-120-277VIES	ERL1_08A327-347-480VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_08B340-120-277VIES	ERL1_08B330-120-277VIES	ERL1_08B330-347-480VIES	ERL1_08B327-120-277VIES	ERL1_08B327-347-480VIES	ERL1_08B327-120-277VIES	ERL1_08B327-347-480VIES		
	C3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_08C340-120-277VIES	ERL1_08C330-120-277VIES	ERL1_08C330-347-480VIES	ERL1_08C327-120-277VIES	ERL1_08C327-347-480VIES	ERL1_08C327-120-277VIES	ERL1_08C327-347-480VIES		
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_08D340-120-277VIES	ERL1_08D330-120-277VIES	ERL1_08D330-347-480VIES	ERL1_08D327-120-277VIES	ERL1_08D327-347-480VIES	ERL1_08D327-120-277VIES	ERL1_08D327-347-480VIES		
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_08E340-120-277VIES	ERL1_08E330-120-277VIES	ERL1_08E330-347-480VIES	ERL1_08E327-120-277VIES	ERL1_08E327-347-480VIES	ERL1_08E327-120-277VIES	ERL1_08E327-347-480VIES		
09	A3	9000	8800	8500	84	89	B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_09A340-120-277VIES	ERL1_09A330-120-277VIES	ERL1_09A330-347-480VIES	ERL1_09A327-120-277VIES	ERL1_09A327-347-480VIES	ERL1_09A327-120-277VIES	ERL1_09A327-347-480VIES	ERL1_09A327-120-277VIES	ERL1_09A327-347-480VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_09B340-120-277VIES	ERL1_09B330-120-277VIES	ERL1_09B330-347-480VIES	ERL1_09B327-120-277VIES	ERL1_09B327-347-480VIES	ERL1_09B327-120-277VIES	ERL1_09B327-347-480VIES		
	C3						B2-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_09C340-120-277VIES	ERL1_09C330-120-277VIES	ERL1_09C330-347-480VIES	ERL1_09C327-120-277VIES	ERL1_09C327-347-480VIES	ERL1_09C327-120-277VIES	ERL1_09C327-347-480VIES		
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_09D340-120-277VIES	ERL1_09D330-120-277VIES	ERL1_09D330-347-480VIES	ERL1_09D327-120-277VIES	ERL1_09D327-347-480VIES	ERL1_09D327-120-277VIES	ERL1_09D327-347-480VIES		
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_09E340-120-277VIES	ERL1_09E330-120-277VIES	ERL1_09E330-347-480VIES	ERL1_09E327-120-277VIES	ERL1_09E327-347-480VIES	ERL1_09E327-120-277VIES	ERL1_09E327-347-480VIES		
10	A3	9800	9600	9250	97	102	B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10A340-120-277VIES	ERL1_10A330-120-277VIES	ERL1_10A330-347-480VIES	ERL1_10A327-120-277VIES	ERL1_10A327-347-480VIES	ERL1_10A327-120-277VIES	ERL1_10A327-347-480VIES	ERL1_10A327-120-277VIES	ERL1_10A327-347-480VIES
	B3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10B340-120-277VIES	ERL1_10B330-120-277VIES	ERL1_10B330-347-480VIES	ERL1_10B327-120-277VIES	ERL1_10B327-347-480VIES	ERL1_10B327-120-277VIES	ERL1_10B327-347-480VIES		
	C3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10C340-120-277VIES	ERL1_10C330-120-277VIES	ERL1_10C330-347-480VIES	ERL1_10C327-120-277VIES	ERL1_10C327-347-480VIES	ERL1_10C327-120-277VIES	ERL1_10C327-347-480VIES		
	D3						B1-U0-G2	B1-U0-G2	B1-U0-G2	ERL1_10D340-120-277VIES	ERL1_10D330-120-277VIES	ERL1_10D330-347-480VIES	ERL1_10D327-120-277VIES	ERL1_10D327-347-480VIES	ERL1_10D327-120-277VIES	ERL1_10D327-347-480VIES		
	E3						B2-U0-G2	B2-U0-G2	B2-U0-G2	ERL1_10E340-120-277VIES	ERL1_10E330-120-277VIES	ERL1_10E330-347-480VIES	ERL1_10E327-120-277VIES	ERL1_10E327-347-480VIES	ERL1_10E327-120-277VIES	ERL1_10E327-347-480VIES		

Photometrics:

Evolve® LED Streetlight (ERL1)

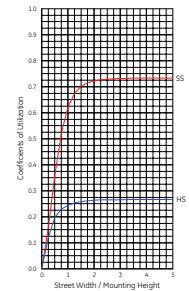
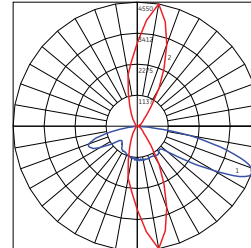
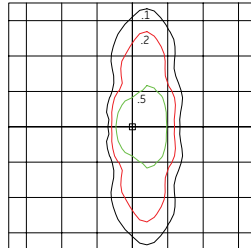
ERL1

Type II Narrow
(05A340)

5,000 Lumens

4000K

ERL1_05A340____.IES



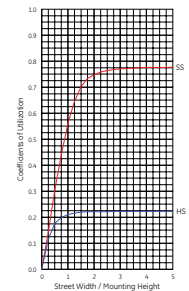
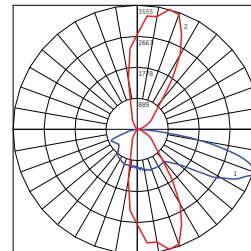
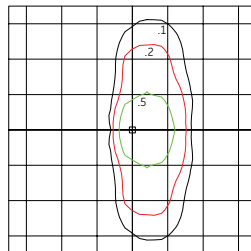
ERL1

Type II Wide
(05B340)

5,000 Lumens

4000K

ERL1_05B340____.IES



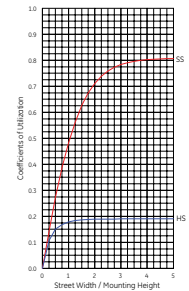
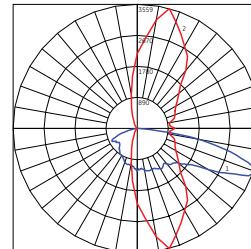
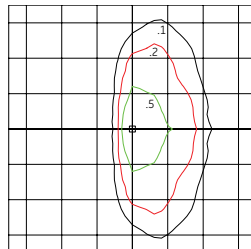
ERL1

Type III
(05C340)

5,000 Lumens

4000K

ERL1_05C340____.IES



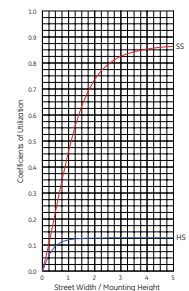
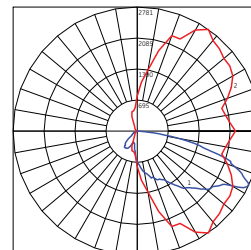
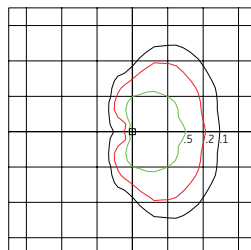
ERL1

Type IV
(05D340)

5,000 Lumens

4000K

ERL1_(05D340)____.IES



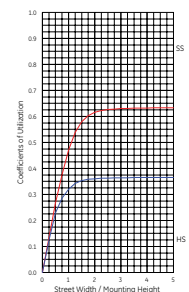
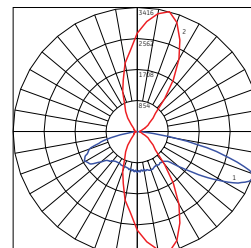
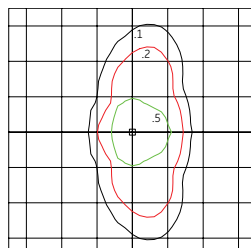
ERL1

Type II Enhanced Back Light
(05E340)

5,000 Lumens

4000K

ERL1_(05E340)____.IES



GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2



Project name _____
Date _____
Type _____

ERLH

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION*	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local H = High Output	0 = 120-277V* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480*# * Not available with Fusing. Must choose a discrete voltage with F option. # Not available with E controls option.	10 11 13 14 15 16 See Table	A3 = Type II Narrow B3 = Type II Wide C3 = Type III D3 = Type IV E3 = Type II Enhanced Back Light See Table *Nominal IES Type clossing subject to typical variation, individual units may differ.	27 = 2700K< 30 = 3000K< 40 = 4000K < Select 2700K or 3000K CCT for IES approved units.	A = ANSI C136.41 7-pin D = ANSI C136.41 7-pin with Shorting Cap E = ANSI C136.41 7-pin with non-Dimming PE Control.* *PE Control Only available for 120-277V or 480V Discrete. Not available for 347-480V or 347V Discrete. NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze	A = 4 Bolt Slipfitter † F = Fusing G = Internal Bubble Level I = IP66 Optical L = Tool-Less Entry R = Secondary 10kV/5kA SPD T = Secondary 20kV/10kA SPD U = DALI Programmable +^ V1 = Variable Output via Field Adjustable Module** X = Single Package # Y = Coastal Finish* XXX = Special Options † Contact manufacturer for Lead-Time. # "X" option provides single pack box per fixture. Std Packaging = 20 units per Magna pak container. * Recommended for installations within 750 ft. from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ^ Not available in 347V, 480V or 347-480V. ** Not available with DALI (U) option.

LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE			BUG RATING			IES FILE NUMBER		
		4000K	3000K	2700K	120-277V	347-480V		4000K	3000K	2700K	4000K	3000K	2700K
10	A3	10000	9600	9300	82			B2-U0-G2	B2-U0-G2	B2-U0-G2	ERLH_10A340	ERLH_10A330	ERLH_10A327
	B3							B2-U0-G2	B2-U0-G2	B2-U0-G2	ERLH_10B340	ERLH_10B330	ERLH_10B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_10C340	ERLH_10C330	ERLH_10C327
	D3							B1-U0-G3	B1-U0-G3	B1-U0-G3	ERLH_10D340	ERLH_10D330	ERLH_10D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_10E340	ERLH_10E330	ERLH_10E327
11	A3	11500	11000	10700	98			B3-U0-G3	B2-U0-G2	B2-U0-G2	ERLH_11A340	ERLH_11A330	ERLH_11A327
	B3							B3-U0-G3	B2-U0-G2	B2-U0-G2	ERLH_11B340	ERLH_11B330	ERLH_11B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_11C340	ERLH_11C330	ERLH_11C327
	D3							B1-U0-G3	B1-U0-G2	B1-U0-G2	ERLH_11D340	ERLH_11D330	ERLH_11D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_11E340	ERLH_11E330	ERLH_11E327
13	A3	13000	12500	12100	111			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_13A340	ERLH_13A330	ERLH_13A327
	B3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_13B340	ERLH_13B330	ERLH_13B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_13C340	ERLH_13C330	ERLH_13C327
	D3							B2-U0-G3	B2-U0-G3	B1-U0-G3	ERLH_13D340	ERLH_13D330	ERLH_13D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_13E340	ERLH_13E330	ERLH_13E327
14	A3	14000	13400	13000	122			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_14A340	ERLH_14A330	ERLH_14A327
	B3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_14B340	ERLH_14B330	ERLH_14B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_14C340	ERLH_14C330	ERLH_14C327
	D3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_14D340	ERLH_14D330	ERLH_14D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_14E340	ERLH_14E330	ERLH_14E327
15	A3	15000	14400	13900	136			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_15A340	ERLH_15A330	ERLH_15A327
	B3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_15B340	ERLH_15B330	ERLH_15B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_15C340	ERLH_15C330	ERLH_15C327
	D3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_15D340	ERLH_15D330	ERLH_15D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_15E340	ERLH_15E330	ERLH_15E327
16	A3	16000	15300	14900	149			B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_16A340	ERLH_16A330	ERLH_16A327
	B3							B3-U0-G3	B3-U0-G3	B2-U0-G3	ERLH_16B340	ERLH_16B330	ERLH_16B327
	C3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_16C340	ERLH_16C330	ERLH_16C327
	D3							B2-U0-G3	B2-U0-G3	B2-U0-G3	ERLH_16D340	ERLH_16D330	ERLH_16D327
	E3							B3-U0-G3	B3-U0-G3	B3-U0-G3	ERLH_16E340	ERLH_16E330	ERLH_16E327

Photometrics:

Evolve® LED Streetlight (ERLH)

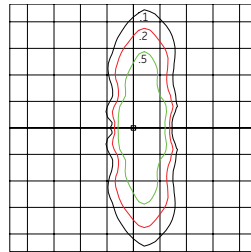
ERLH

Type II Narrow
(13A340)

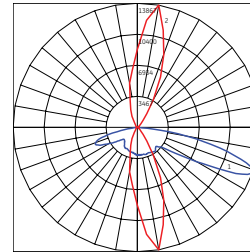
13,000 Lumens

4000K

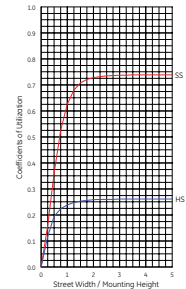
ERLH_13A340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 80°
— Horizontal cone through vertical angle of Max. Cd at 69°



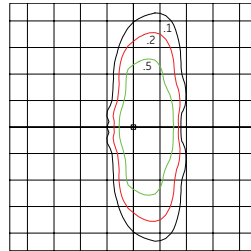
ERLH

Type II Wide
(13B340)

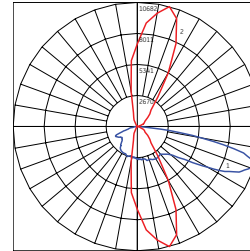
13,000 Lumens

4000K

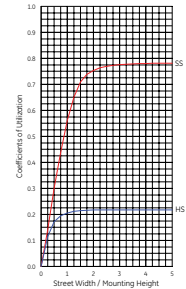
ERLH_13B340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 72°



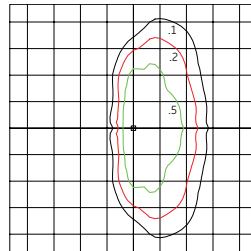
ERLH

Type III
(13C340)

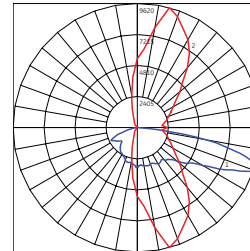
13,000 Lumens

4000K

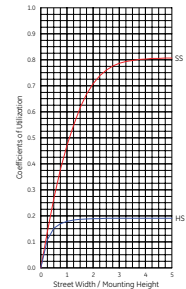
ERLH_13C340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 71°



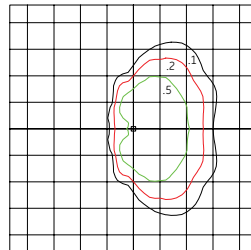
ERLH

Type IV
(13D340)

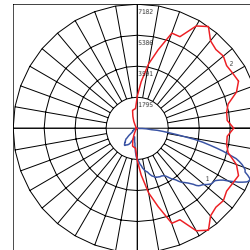
13,000 Lumens

4000K

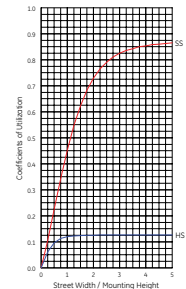
ERLH_13D340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 65°



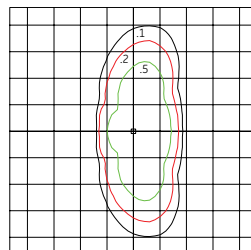
ERLH

Type II Enhanced Back Light
(13E340)

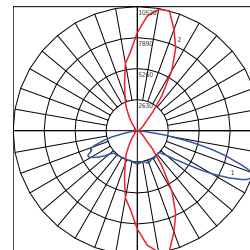
13,000 Lumens

4000K

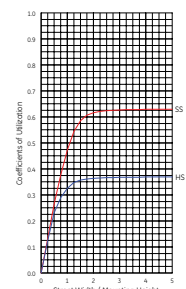
ERLH_13E340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 69°



GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2



Project name _____
Date _____
Type _____

ERL2

PROD. ID	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION*	CCT	CONTROLS	COLOR	OPTIONS
E = Evolve R = Roadway L = Local 2 = Double Module	0 = 120-277V* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480*# * Not available with Fusing. Must choose a discrete voltage with F option. # Not available with E controls option.	16 18 19 21 23 25 27 28 30 See Table	A3 = Type II Narrow B3 = Type II Wide C3 = Type III D3 = Type IV E3 = Type II Enhanced Back Light See Table *Nominal IES Type classing subject to typical variation, individual units may differ.	27 = 2700K <> 30 = 3000K <> 40 = 4000K <> Select 2700K or 3000K CCT for IES approved units.	A = ANSI C136.41 7-pin D = ANSI C136.41 7-pin with Shorting Cap E = ANSI C136.41 7-pin with non-Dimming PE Control.* *PE Control Only available for 120-277V or 480V Discrete. Not available for 347-480V or 347V Discrete. NOTE: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze	A = 4 Bolt Slipfitter † F = Fusing G = Internal Bubble Level I = IP66 Optical L = Tool-Less Entry M1 = Magnapack*** R = Secondary 10kV/5kA SPD T = Secondary 20kV/10kA SPD U = DALI Programmable ^ V1 = Variable Output via Field Adjustable Module** Y = Coastal Finish* XXX = Special Options † Contact manufacturer for Lead-Time. * Recommended for installations within 750 ft. from the coast. Contact Factory for Lead-Time. + Compatible with LightGrid 2.0 nodes. ^ Not available in 347V, 480V or 347-480V. ** Not available with DALI (U) option. *** 20 fixtures per Magnapack.



LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE		BUG RATING			IES FILE NUMBER								
		4000K	3000K	2700K	120-277V	347-480V	4000K	3000K	2700K	120-277V	4000K	347-480V	120-277V	3000K	347-480V	120-277V	2700K	347-480V
16	A3	16000	15300	14900	120		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_16A340_IES			ERL2_16A330_IES			ERL2_16A327_IES		
	B3						B3-U0-G3	B3-U0-G3	B2-U0-G3	ERL2_16B340_IES			ERL2_16B330_IES			ERL2_16B327_IES		
	C3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_16C340_IES			ERL2_16C330_IES			ERL2_16C327_IES		
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_16D340_IES			ERL2_16D330_IES			ERL2_16D327_IES		
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_16E340_IES			ERL2_16E330_IES			ERL2_16E327_IES		
18	A3	18000	17300	16700	140		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_18A340_IES			ERL2_18A330_IES			ERL2_18A327_IES		
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_18B340_IES			ERL2_18B330_IES			ERL2_18B327_IES		
	C3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_18C340_IES			ERL2_18C330_IES			ERL2_18C327_IES		
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_18D340_IES			ERL2_18D330_IES			ERL2_18D327_IES		
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_18E340_IES			ERL2_18E330_IES			ERL2_18E327_IES		
19	A3	19000	18200	17700	149		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_19A340_IES			ERL2_19A330_IES			ERL2_19A327_IES		
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_19B340_IES			ERL2_19B330_IES			ERL2_19B327_IES		
	C3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_19C340_IES			ERL2_19C330_IES			ERL2_19C327_IES		
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_19D340_IES			ERL2_19D330_IES			ERL2_19D327_IES		
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_19E340_IES			ERL2_19E330_IES			ERL2_19E327_IES		
21	A3	21000	20100	19500	174	177	B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_21A340_-120-277VIES	ERL2_21A340_-347-480VIES	ERL2_21A330_-120-277VIES	ERL2_21A330_-347-480VIES	ERL2_21A327_-120-277VIES	ERL2_21A327_-347-480VIES	ERL2_21A327_-120-277VIES	ERL2_21A327_-347-480VIES	
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_21B340_-120-277VIES	ERL2_21B340_-347-480VIES	ERL2_21B330_-120-277VIES	ERL2_21B330_-347-480VIES	ERL2_21B327_-120-277VIES	ERL2_21B327_-347-480VIES	ERL2_21B327_-120-277VIES	ERL2_21B327_-347-480VIES	
	C3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_21C340_-120-277VIES	ERL2_21C340_-347-480VIES	ERL2_21C330_-120-277VIES	ERL2_21C330_-347-480VIES	ERL2_21C327_-120-277VIES	ERL2_21C327_-347-480VIES	ERL2_21C327_-120-277VIES	ERL2_21C327_-347-480VIES	
	D3						B2-U0-G3	B2-U0-G3	B2-U0-G3	ERL2_21D340_-120-277VIES	ERL2_21D340_-347-480VIES	ERL2_21D330_-120-277VIES	ERL2_21D330_-347-480VIES	ERL2_21D327_-120-277VIES	ERL2_21D327_-347-480VIES	ERL2_21D327_-120-277VIES	ERL2_21D327_-347-480VIES	
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_21E340_-120-277VIES	ERL2_21E340_-347-480VIES	ERL2_21E330_-120-277VIES	ERL2_21E330_-347-480VIES	ERL2_21E327_-120-277VIES	ERL2_21E327_-347-480VIES	ERL2_21E327_-120-277VIES	ERL2_21E327_-347-480VIES	
23	A3	23000	22100	21400	194	196	B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_23A340_-120-277VIES	ERL2_23A340_-347-480VIES	ERL2_23A330_-120-277VIES	ERL2_23A330_-347-480VIES	ERL2_23A327_-120-277VIES	ERL2_23A327_-347-480VIES	ERL2_23A327_-120-277VIES	ERL2_23A327_-347-480VIES	
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_23B340_-120-277VIES	ERL2_23B340_-347-480VIES	ERL2_23B330_-120-277VIES	ERL2_23B330_-347-480VIES	ERL2_23B327_-120-277VIES	ERL2_23B327_-347-480VIES	ERL2_23B327_-120-277VIES	ERL2_23B327_-347-480VIES	
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_23C340_-120-277VIES	ERL2_23C340_-347-480VIES	ERL2_23C330_-120-277VIES	ERL2_23C330_-347-480VIES	ERL2_23C327_-120-277VIES	ERL2_23C327_-347-480VIES	ERL2_23C327_-120-277VIES	ERL2_23C327_-347-480VIES	
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G3	ERL2_23D340_-120-277VIES	ERL2_23D340_-347-480VIES	ERL2_23D330_-120-277VIES	ERL2_23D330_-347-480VIES	ERL2_23D327_-120-277VIES	ERL2_23D327_-347-480VIES	ERL2_23D327_-120-277VIES	ERL2_23D327_-347-480VIES	
	E3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_23E340_-120-277VIES	ERL2_23E340_-347-480VIES	ERL2_23E330_-120-277VIES	ERL2_23E330_-347-480VIES	ERL2_23E327_-120-277VIES	ERL2_23E327_-347-480VIES	ERL2_23E327_-120-277VIES	ERL2_23E327_-347-480VIES	
25	A3	25000	24000	23300	214		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_25A340_IES			ERL2_25A330_IES			ERL2_25A327_IES		
	B3						B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_25B340_IES			ERL2_25B330_IES			ERL2_25B327_IES		
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_25C340_IES			ERL2_25C330_IES			ERL2_25C327_IES		
	D3						B4-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_25D340_IES			ERL2_25D330_IES			ERL2_25D327_IES		
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_25E340_IES			ERL2_25E330_IES			ERL2_25E327_IES		
27	A3	27000	25900	25100	237		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_27A340_IES			ERL2_27A330_IES			ERL2_27A327_IES		
	B3						B3-U0-G4	B3-U0-G4	B3-U0-G3	ERL2_27B340_IES			ERL2_27B330_IES			ERL2_27B327_IES		
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_27C340_IES			ERL2_27C330_IES			ERL2_27C327_IES		
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_27D340_IES			ERL2_27D330_IES			ERL2_27D327_IES		
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_27E340_IES			ERL2_27E330_IES			ERL2_27E327_IES		
28	A3	28000	26900	26100	251		B3-U0-G3	B3-U0-G3	B3-U0-G3	ERL2_28A340_IES			ERL2_28A330_IES			ERL2_28A327_IES		
	B3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_28B340_IES			ERL2_28B330_IES			ERL2_28B327_IES		
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_28C340_IES			ERL2_28C330_IES			ERL2_28C327_IES		
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_28D340_IES			ERL2_28D330_IES			ERL2_28D327_IES		
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_28E340_IES			ERL2_28E330_IES			ERL2_28E327_IES		
30	A3	30000	28800	27900	278		B4-U0-G4	B4-U0-G4	B3-U0-G3	ERL2_30A340_IES			ERL2_30A330_IES			ERL2_30A327_IES		
	B3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_30B340_IES			ERL2_30B330_IES			ERL2_30B327_IES		
	C3						B3-U0-G4	B3-U0-G4	B3-U0-G4	ERL2_30C340_IES			ERL2_30C330_IES			ERL2_30C327_IES		
	D3						B2-U0-G4	B2-U0-G4	B2-U0-G4	ERL2_30D340_IES			ERL2_30D330_IES			ERL2_30D327_IES		
	E3						B4-U0-G4	B4-U0-G4	B4-U0-G4	ERL2_30E340_IES			ERL2_30E330_IES			ERL2_30E327_IES		

Photometrics:

Evolve® LED Streetlight (ERL2)

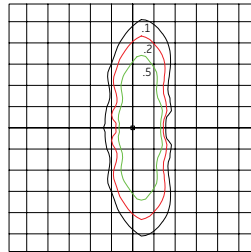
ERL2

Type II Narrow
(23A340)

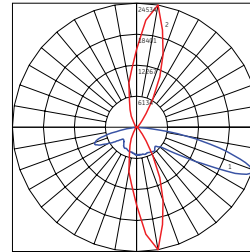
23,000 Lumens

4000K

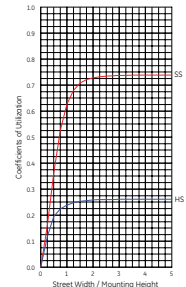
ERL2_23A340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 80°
— Horizontal cone through vertical angle of Max. Cd at 69°



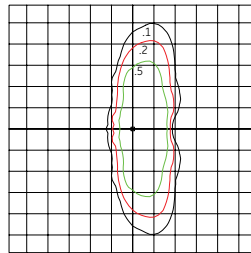
ERL2

Type II Wide
(23B340)

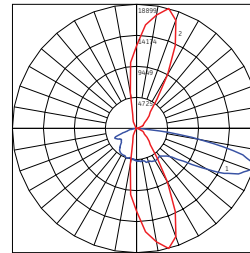
23,000 Lumens

4000K

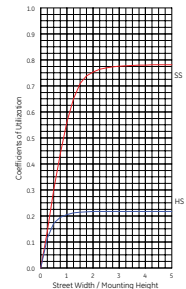
ERL2_23B340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 72°



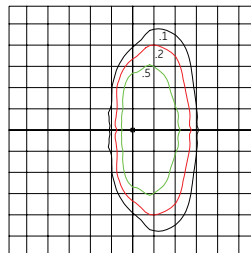
ERL2

Type III
(23C340)

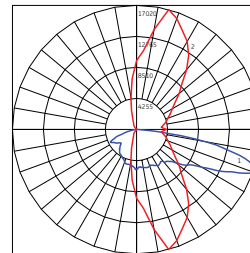
23,000 Lumens

4000K

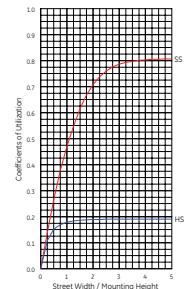
ERL2_23C340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 71°



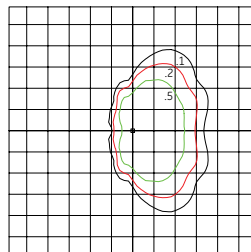
ERL2

Type IV
(23D340)

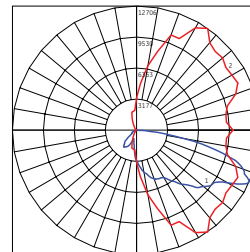
23,000 Lumens

4000K

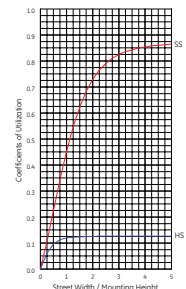
ERL2_23D340____.IES



Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of Max. Cd at 55°
— Horizontal cone through vertical angle of Max. Cd at 65°



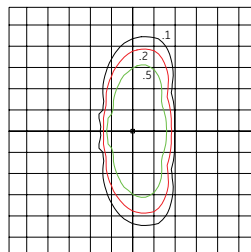
ERL2

Type II Enhanced Back Light
(23E340)

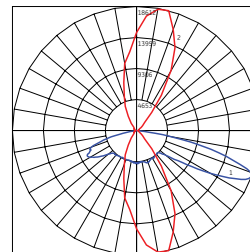
23,000 Lumens

4000K

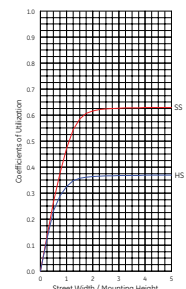
ERL2_23E340____.IES




Grid Distance in Units of Mounting Height at 30'
Initial Footcandle Values at Grade



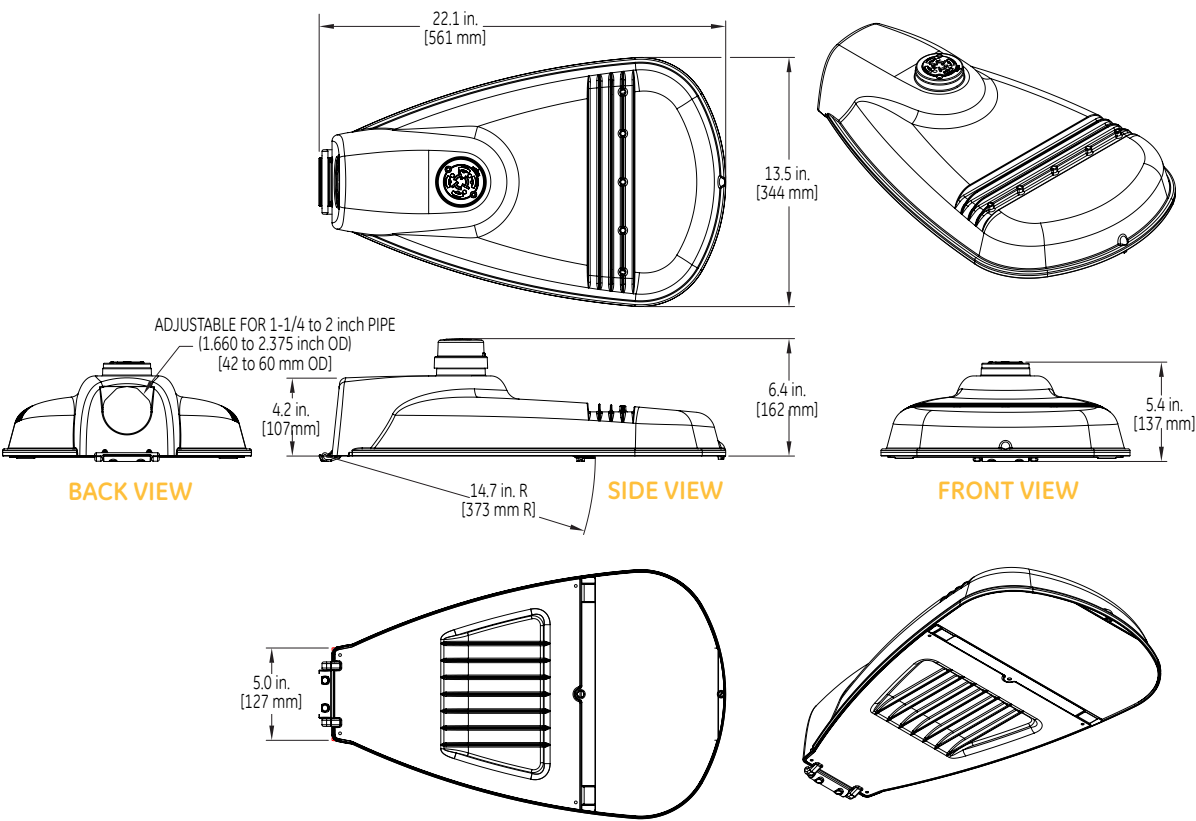
— Vertical plane through horizontal angle of Max. Cd at 75°
— Horizontal cone through vertical angle of Max. Cd at 69°



Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: ERL1-0-09-C3-30-A-GRAY Notes:	Type: 84W
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GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

Product Dimensions:
Evolve® LED Streetlight (ERL1)



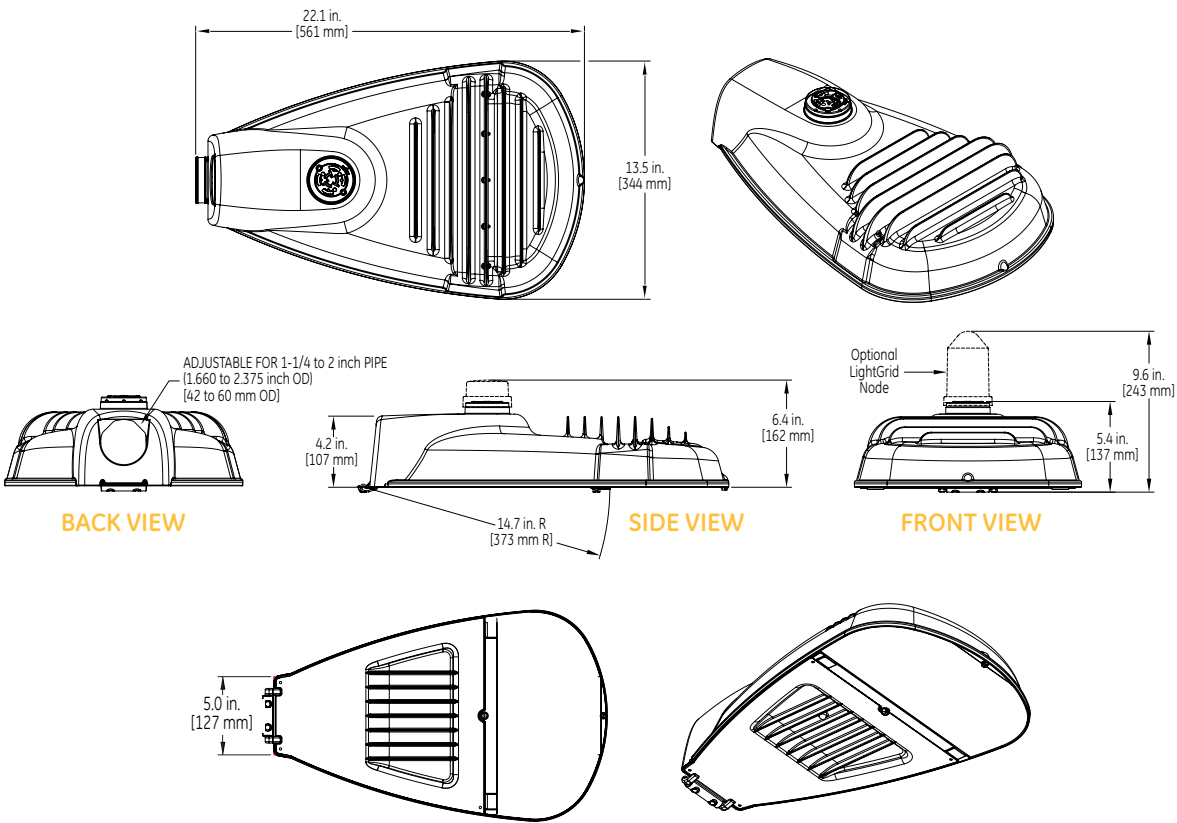
DATA

- Approximate net weight: 12.4 lbs (5.6kgs) - 15.5 lbs (7.0kgs) with XFMR
- Effective Projected Area (EPA): 0.5 sq ft max (0.046 sq m)

Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: ERL1-0-09-C3-30-A-GRAY Notes:	Type: 84W
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GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

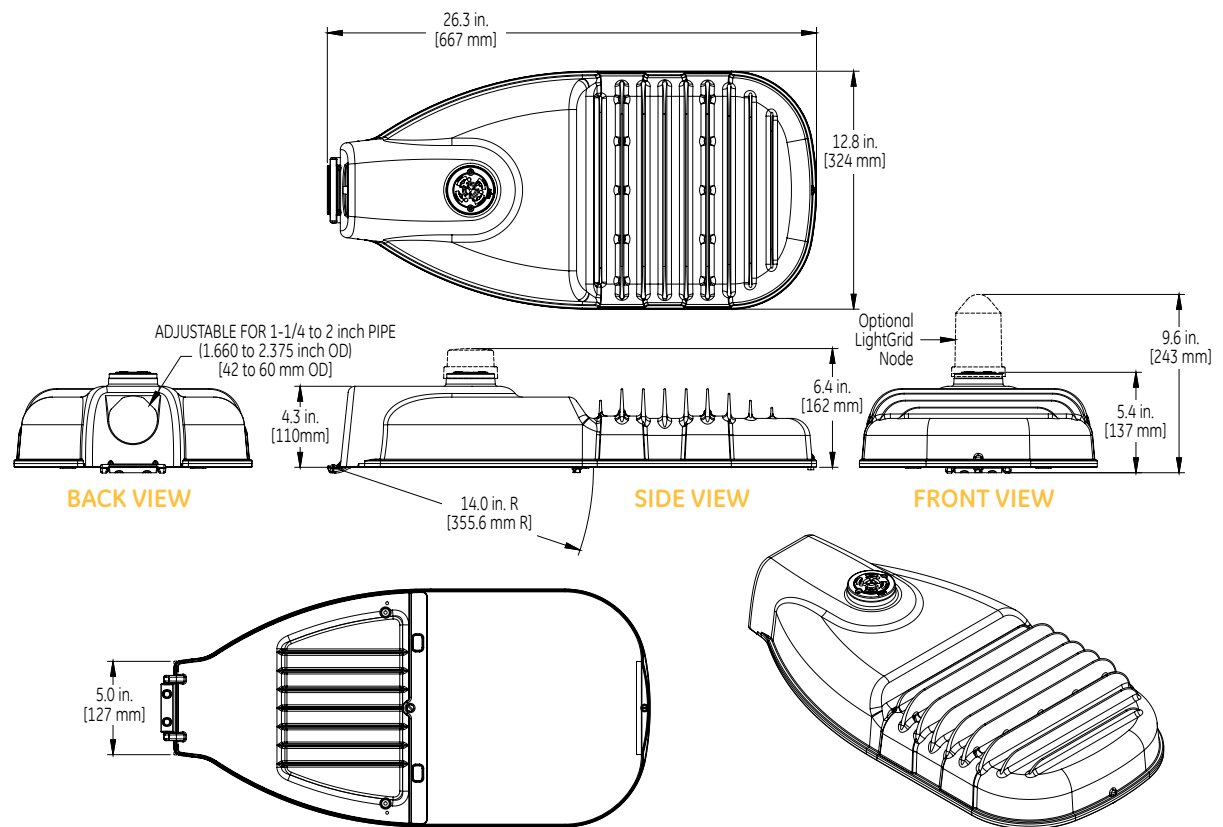
Product Dimensions:
Evolve® LED Streetlight (ERLH)




DATA	<ul style="list-style-type: none"> • Approximate net weight: 15.15 lbs (6.9 kgs) - 2 Bolt Slipfitter • Approximate net weight: 15.85 lbs (7.2 kgs) - 4 Bolt Slipfitter • Effective Projected Area (EPA): 0.5 sq ft max (0.046 sq m)
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GE Evolve®
LED Roadway Lighting
ERL1-ERLH-ERL2

Product Dimensions:
Evolve® LED Streetlight (ERL2)

**DATA**

- Approximate net weight: 24.0 lbs (10.9 kgs)
Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA): 0.57 sq ft max (0.053 sq m)

Submitted by Graybar		Catalog Number: RFS-35W16LED3K-G2-R2M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 38W
 works to your advantage	Job Name: SANTA FE SPRINGS, CA		

LUMEC
by @signify

Roadway

RoadFocus

RFS Cobra head (small)



LumeC RoadFocus LED cobra head luminaires feature a sleek design that provides seamless replacement of existing HID luminaires. RoadFocus is available in three sizes, offers multiple lumen packages, and a complete array of optical distributions, making it an outstanding solution for all types of roadway applications. Includes Service Tag, innovative way to provide assistance throughout the life of the product.

Project: _____
Location: _____
Cat. No: _____
Type: _____
Lumens: _____ Qty: _____
Notes: _____

Ordering guide

example: RFS-35W16LED4K-G2-R2M-UNV-DMG-HS-PH8-RCD7-GY3

Series	LED module	CCT	Generation	Distribution	Voltage	Options		Finish
						Controls ⁴	Options	
RFS			G2					
RFS RoadFocus small	15W12LED	4K 4000K	G2 Generation 2	Type 2	UNV 120-277V	DALI¹ Digitally addressable lighting interface	API Factory installed NEMA label, ANSI C136.15-2015 compliant	BK Black
	20W12LED	3K 3000K		R2S Type II short (ASYM)	HVU 347-480V			BR Bronze
	25W12LED	2.7K ¹¹ 2700K						GY3 Gray
	25W16LED			R2M Type II Medium (ASYM)		DMG⁶ 0-10V	FAWS⁷ Field adjustable wattage selector	WH White
	30W16LED					SRD¹ Sensor ready driver, standard configuration	HS House Side Shield, 1 per 16 LED light engine	
	35W16LED			Type 3		SRD1¹ Sensor ready driver, alternate configuration	NRC⁸ No receptacle	
	45W16LED			R3S Type III short (ASYM)			NYBC 4-position terminal block	
	50W16LED						PH8^{1,10} Twist-lock photoelectric cell, UNV (120-277VAC)	
	54W16LED			R3M Type III Medium (ASYM)			PH8/347^{10,12} Twist-lock photoelectric cell (347VAC)	
	60W16LED ⁷			Type 4			PH8/480^{10,12} Twist-lock photoelectric cell (480VAC)	
	20W20LED ¹³			4 Type IV (ASYM)			PHXL^{1,10} Twist-lock photoelectric cell, extended life, UNV (120-277VAC)	
	40W20LED ¹³			Type 5			PH9¹⁰ Shorting cap	
	65W20LED ¹³			5² Type V (SYMM)			RCD^{3,9} Tool less receptacle for twist-lock photocell or shorting cap, 5-pin (optional)	
	35W32LED						RCD7^{3,5} Tool less receptacle for twist-lock photocell or shorting cap, 7-pin (standard)	
	55W32LED						SP2 20kV / 10kA Surge protector	
	60W32LED						TLRSR⁶ SR receptacle	
	72W32LED							
	108W32LED ⁷							
	35W40LED ¹³							
	50W40LED ¹³							
	55W40LED ¹³							
	65W40LED ¹³							
	80W40LED ¹³							
	100W40LED ^{7,13}							

¹ Not available with HVU.

² Not available with HS option.

³ Use of photoelectric cell or shorting cap is required to ensure proper illumination.

⁴ Select either **DALI** or **DMG** or **SRD** or **SRD1** mandatory option.

⁵ Please note this integrated feature come standard with RoadFocus.

⁶ Only available with **SRD** or **SRD1** Driver Options.

⁷ Only available with **DMG** Driver Options.

⁸ Not available with **PH8**, **PH8/347**, **PH8/480**, **PHXL**, **PH9**, **DALI**, **SRD** or **SRD1** Driver Options.

⁹ Not available with **SRD** Driver Options.

¹⁰ Either **RCD** or **RCD7** must be selected for this option.

¹¹ Extended lead-time may apply. Consult factory.

¹² Not available with **UNV**.


¹³ Only available with R2M or R3M distributions.

Accessories (must be ordered as separate line item - quickly and easily installed in the field)

Interact City connector node *

*Contact the factory for additional support when connected lighting or additional services are desired.



Submitted by Graybar		Catalog Number: RFS-35W16LED3K-G2-R2M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 38W
	Job Name: SANTA FE SPRINGS, CA		

RFS RoadFocus

LED Cobra head (small)

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11 Addendum B. Published L70 hours limited to 6 times actual LED test hours.

Ambient Temperature °C	L70 per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	>60,000 hours	>97.6%

LED Wattage values

Ordering Code	Total LEDs	Average System Watts ¹⁴	Wattage label ¹⁵
RFS-15W12LED	12	14	10
RFS-20W12LED	12	19	20
RFS-25W12LED	12	25	20
RFS-25W16LED	16	24	20
RFS-30W16LED	16	29	30
RFS-35W16LED	16	38	40
RFS-45W16LED	16	45	50
RFS-50W16LED	16	50	50
RFS-54W16LED	16	53	50
RFS-60W16LED	16	61	60
RFS-20W20LED	20	20	20
RFS-40W20LED	20	40	40
RFS-65W20LED	20	64	60

Ordering Code	Total LEDs	Average System Watts ¹⁴	Wattage label ¹⁵
RFS-35W32LED	32	37	40
RFS-55W32LED	32	53	50
RFS-60W32LED	32	59	60
RFS-72W32LED	32	73	70
RFS-108W32LED	32	108	110
RFS-35W40LED	40	35	40
RFS-50W40LED	40	49	50
RFS-55W40LED	40	54	50
RFS-65W40LED	40	66	70
RFS-80W40LED	40	79	80
RFS-100W40LED	40	101	100

14. Typical values, rounded.


15. As per ANSI C136.15-2015. Consult factory for other labeling needs.

4000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	4000	1,863	132	B1-U0-G1	1,940	138	B1-U0-G1	1,858	132	B1-U0-G1	1,882	134	B1-U0-G1	1,849	131	B1-U0-G1	1,924	137	B1-U0-G1
RFS-20W12LED	4000	2,525	130	B1-U0-G1	2,629	136	B1-U0-G1	2,518	130	B1-U0-G1	2,552	132	B1-U0-G1	2,506	129	B1-U0-G1	2,606	134	B1-U0-G1
RFS-25W12LED	4000	2,887	116	B1-U0-G1	3,005	121	B1-U0-G1	2,878	116	B1-U0-G1	2,916	117	B1-U0-G1	2,864	115	B1-U0-G1	2,979	120	B1-U0-G1
RFS-25W16LED	4000	3,323	137	B1-U0-G1	3,458	143	B1-U0-G1	3,312	137	B1-U0-G1	3,357	139	B1-U0-G1	3,296	136	B1-U0-G1	3,429	142	B1-U0-G1
RFS-30W16LED	4000	3,764	130	B1-U0-G1	3,918	136	B1-U0-G1	3,752	130	B1-U0-G1	3,802	132	B1-U0-G1	3,735	129	B1-U0-G1	3,884	135	B1-U0-G1
RFS-35W16LED	4000	4,810	127	B1-U0-G1	5,007	132	B1-U0-G1	4,795	126	B1-U0-G1	4,859	128	B1-U0-G1	4,772	126	B1-U0-G1	4,964	131	B1-U0-G1
RFS-45W16LED	4000	5,497	121	B1-U0-G1	5,722	126	B1-U0-G1	5,480	121	B1-U0-G1	5,554	123	B1-U0-G1	5,454	121	B1-U0-G1	5,673	125	B1-U0-G1
RFS-50W16LED	4000	5,825	116	B2-U0-G1	6,064	121	B2-U0-G1	5,807	116	B2-U0-G1	5,885	117	B2-U0-G1	5,780	115	B2-U0-G1	6,012	120	B2-U0-G1
RFS-54W16LED	4000	6,356	120	B2-U0-G1	6,616	125	B2-U0-G1	6,336	120	B2-U0-G1	6,421	121	B2-U0-G1	6,306	119	B2-U0-G1	6,560	124	B2-U0-G1
RFS-60W16LED	4000	6,929	113	B2-U0-G1	7,213	118	B2-U0-G1	6,907	113	B2-U0-G1	7,000	115	B2-U0-G1	6,875	113	B2-U0-G1	7,151	117	B2-U0-G1
RFS-20W20LED	4000	2,553	130	B1-U0-G1	N/A	N/A	N/A	2,567	131	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	4000	5,083	128	B1-U0-G1	N/A	N/A	N/A	5,110	129	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	4000	7,827	122	B2-U0-G2	N/A	N/A	N/A	7,869	123	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	4000	5,197	141	B1-U0-G1	5,410	146	B1-U0-G1	5,181	140	B1-U0-G1	5,250	142	B1-U0-G1	5,156	139	B1-U0-G1	5,364	145	B1-U0-G1
RFS-55W32LED	4000	7,528	141	B2-U0-G1	7,836	147	B2-U0-G1	7,504	140	B2-U0-G1	7,605	142	B2-U0-G1	7,469	140	B2-U0-G1	7,770	145	B2-U0-G1
RFS-60W32LED	4000	7,630	130	B2-U0-G1	7,943	136	B2-U0-G1	7,607	130	B2-U0-G1	7,709	132	B2-U0-G1	7,571	129	B2-U0-G1	7,875	134	B2-U0-G1
RFS-72W32LED	4000	9,408	129	B2-U0-G2	9,794	134	B2-U0-G2	9,379	128	B2-U0-G2	9,505	130	B2-U0-G2	9,336	128	B2-U0-G2	9,711	133	B2-U0-G2
RFS-108W32LED	4000	13,025	121	B3-U0-G2	13,559	126	B3-U0-G2	12,984	120	B3-U0-G2	13,158	122	B3-U0-G2	12,924	120	B3-U0-G2	13,443	124	B3-U0-G2
RFS-35W40LED	4000	5,472	155	B1-U0-G1	N/A	N/A	N/A	5,502	156	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	4000	7,319	150	B2-U0-G2	N/A	N/A	N/A	7,359	151	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	4000	7,675	141	B2-U0-G2	N/A	N/A	N/A	7,716	142	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	4000	9,024	137	B2-U0-G2	N/A	N/A	N/A	9,073	137	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	4000	10,546	133	B2-U0-G2	N/A	N/A	N/A	10,603	134	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	4000	12,861	127	B3-U0-G3	N/A	N/A	N/A	12,930	128	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

Submitted by Graybar		Catalog Number: RFS-35W16LED3K-G2-R2M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 38W
 works to your advantage	Job Name: SANTA FE SPRINGS, CA		

RFS RoadFocus

LED Cobra head (small)

3000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	3000	1,748	124	B1-U0-G1	1,820	129	B1-U0-G0	1,743	124	B1-U0-G1	1,766	125	B0-U0-G0	1,735	123	B0-U0-G1	1,805	128	B1-U0-G0
RFS-20W12LED	3000	2,369	122	B1-U0-G1	2,466	127	B1-U0-G0	2,362	122	B1-U0-G1	2,394	123	B1-U0-G1	2,351	121	B1-U0-G1	2,445	126	B2-U0-G1
RFS-25W12LED	3000	2,708	109	B1-U0-G1	2,819	113	B1-U0-G0	2,700	108	B1-U0-G1	2,736	110	B1-U0-G1	2,687	108	B1-U0-G1	2,795	112	B2-U0-G1
RFS-25W16LED	3000	3,117	129	B1-U0-G1	3,244	134	B1-U0-G0	3,107	128	B1-U0-G1	3,149	130	B1-U0-G1	3,092	128	B1-U0-G1	3,217	133	B2-U0-G1
RFS-30W16LED	3000	3,531	122	B1-U0-G1	3,676	127	B1-U0-G0	3,520	122	B1-U0-G1	3,567	124	B1-U0-G1	3,504	121	B1-U0-G1	3,644	126	B2-U0-G1
RFS-35W16LED	3000	4,512	119	B1-U0-G1	4,697	124	B1-U0-G1	4,498	118	B1-U0-G1	4,558	120	B1-U0-G1	4,477	118	B1-U0-G1	4,657	123	B3-U0-G1
RFS-45W16LED	3000	5,157	114	B1-U0-G1	5,368	119	B1-U0-G1	5,141	114	B1-U0-G1	5,210	115	B1-U0-G1	5,117	113	B1-U0-G2	5,322	118	B3-U0-G1
RFS-50W16LED	3000	5,465	109	B1-U0-G1	5,689	113	B1-U0-G1	5,448	109	B1-U0-G1	5,521	110	B1-U0-G1	5,422	108	B1-U0-G2	5,640	112	B3-U0-G1
RFS-54W16LED	3000	5,963	113	B2-U0-G1	6,207	117	B2-U0-G1	5,944	112	B1-U0-G1	6,024	114	B1-U0-G1	5,916	112	B1-U0-G2	6,154	116	B3-U0-G1
RFS-60W16LED	3000	6,500	106	B2-U0-G1	6,767	111	B2-U0-G1	6,480	106	B2-U0-G1	6,567	107	B1-U0-G2	6,450	106	B1-U0-G2	6,709	110	B3-U0-G1
RFS-20W20LED	3000	2,427	124	B1-U0-G1	N/A	N/A	N/A	2,440	124	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	3000	4,833	122	B1-U0-G1	N/A	N/A	N/A	4,859	122	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	3000	7,442	116	B2-U0-G2	N/A	N/A	N/A	7,482	117	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	3000	4,875	132	B1-U0-G1	5,075	137	B1-U0-G1	4,860	131	B1-U0-G1	4,925	133	B1-U0-G1	4,837	131	B1-U0-G1	5,032	136	B3-U0-G1
RFS-55W32LED	3000	7,062	132	B2-U0-G1	7,351	137	B2-U0-G1	7,040	132	B2-U0-G1	7,134	133	B1-U0-G2	7,007	131	B1-U0-G2	7,289	136	B3-U0-G1
RFS-60W32LED	3000	7,158	122	B2-U0-G1	7,452	127	B2-U0-G1	7,136	122	B2-U0-G1	7,232	123	B1-U0-G2	7,103	121	B1-U0-G2	7,388	126	B3-U0-G1
RFS-72W32LED	3000	8,826	121	B2-U0-G2	9,188	126	B2-U0-G1	8,799	121	B2-U0-G2	8,917	122	B1-U0-G2	8,758	120	B2-U0-G2	9,110	125	B3-U0-G2
RFS-108W32LED	3000	12,219	113	B3-U0-G2	12,720	118	B3-U0-G2	12,181	113	B2-U0-G2	12,344	114	B2-U0-G2	12,124	112	B2-U0-G2	12,611	117	B4-U0-G2
RFS-35W40LED	3000	5,203	147	B1-U0-G1	N/A	N/A	N/A	5,231	148	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	3000	6,959	143	B2-U0-G2	N/A	N/A	N/A	6,996	144	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	3000	7,297	134	B2-U0-G2	N/A	N/A	N/A	7,336	135	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	3000	8,580	130	B2-U0-G2	N/A	N/A	N/A	8,626	131	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	3000	10,027	127	B2-U0-G2	N/A	N/A	N/A	10,081	128	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	3000	12,228	121	B3-U0-G3	N/A	N/A	N/A	12,294	122	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2700K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFS-15W12LED	2700	1,603	114	B1-U0-G1	1,669	119	B1-U0-G0	1,598	113	B1-U0-G1	1,619	115	B0-U0-G0	1,591	113	B0-U0-G1	1,655	118	B1-U0-G0
RFS-20W12LED	2700	2,172	112	B1-U0-G1	2,261	117	B1-U0-G0	2,166	112	B1-U0-G1	2,195	113	B1-U0-G1	2,156	111	B1-U0-G1	2,242	116	B2-U0-G1
RFS-25W12LED	2700	2,483	100	B1-U0-G1	2,585	104	B1-U0-G0	2,476	99	B1-U0-G1	2,509	101	B1-U0-G1	2,464	99	B1-U0-G1	2,563	103	B2-U0-G1
RFS-25W16LED	2700	2,858	118	B1-U0-G1	2,975	123	B1-U0-G0	2,849	118	B1-U0-G1	2,888	119	B1-U0-G1	2,835	117	B1-U0-G1	2,950	122	B2-U0-G1
RFS-30W16LED	2700	3,238	112	B1-U0-G1	3,371	117	B1-U0-G0	3,228	112	B1-U0-G1	3,271	113	B1-U0-G1	3,213	111	B1-U0-G1	3,342	116	B2-U0-G1
RFS-35W16LED	2700	4,138	109	B1-U0-G1	4,307	113	B1-U0-G1	4,125	109	B1-U0-G1	4,180	110	B1-U0-G1	4,105	108	B1-U0-G1	4,271	112	B3-U0-G1
RFS-45W16LED	2700	4,729	104	B1-U0-G1	4,923	109	B1-U0-G1	4,714	104	B1-U0-G1	4,778	106	B1-U0-G1	4,692	104	B1-U0-G2	4,880	108	B3-U0-G1
RFS-50W16LED	2700	5,012	100	B1-U0-G1	5,217	104	B1-U0-G1	4,996	100	B1-U0-G1	5,063	101	B1-U0-G1	4,972	99	B1-U0-G2	5,172	103	B3-U0-G1
RFS-54W16LED	2700	5,468	103	B2-U0-G1	5,692	107	B2-U0-G1	5,451	103	B1-U0-G1	5,524	104	B1-U0-G1	5,425	102	B1-U0-G2	5,643	106	B3-U0-G1
RFS-60W16LED	2700	5,961	98	B2-U0-G1	6,205	102	B2-U0-G1	5,942	97	B2-U0-G1	6,022	99	B1-U0-G2	5,915	97	B1-U0-G2	6,152	101	B3-U0-G1
RFS-20W20LED	2700	2,218	113	B1-U0-G1	N/A	N/A	N/A	2,230	114	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-40W20LED	2700	4,416	111	B1-U0-G1	N/A	N/A	N/A	4,440	112	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W20LED	2700	6,800	106	B2-U0-G2	N/A	N/A	N/A	6,837	107	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-35W32LED	2700	4,470	121	B1-U0-G1	4,654	126	B1-U0-G1	4,457	121	B1-U0-G1	4,516	122	B1-U0-G1	4,436	120	B1-U0-G1	4,614	125	B3-U0-G1
RFS-55W32LED	2700	6,476	121	B2-U0-G1	6,741	126	B2-U0-G1	6,456	121	B2-U0-G1	6,542	122	B1-U0-G2	6,426	120	B1-U0-G2	6,684	125	B3-U0-G1
RFS-60W32LED	2700	6,564	112	B2-U0-G1	6,834	117	B2-U0-G1	6,544	112	B2-U0-G1	6,632	113	B1-U0-G2	6,514	111	B1-U0-G2	6,775	116	B3-U0-G1
RFS-72W32LED	2700	8,094	111	B2-U0-G2	8,426	115	B2-U0-G1	8,069	111	B2-U0-G2	8,177	112	B1-U0-G2	8,031	110	B2-U0-G2	8,354	114	B3-U0-G2
RFS-108W32LED	2700	11,205	104	B3-U0-G2	11,664	108	B3-U0-G2	11,170	103	B2-U0-G2	11,320	105	B2-U0-G2	11,118	103	B2-U0-G2	11,565	107	B4-U0-G2
RFS-35W40LED	2700	4,754	135	B1-U0-G1	N/A	N/A	N/A	4,780	135	B1-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-50W40LED	2700	6,359	131	B2-U0-G2	N/A	N/A	N/A	6,393	131	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-55W40LED	2700	6,667	123	B2-U0-G2	N/A	N/A	N/A	6,703	123	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-65W40LED	2700	7,840	119	B2-U0-G2	N/A	N/A	N/A	7,882	119	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-80W40LED	2700	9,162	116	B2-U0-G2	N/A	N/A	N/A	9,211	117	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFS-100W40LED	2700	11,173	111	B2-U0-G2	N/A	N/A	N/A	11,233	111	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved.

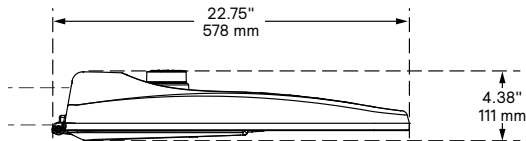
Note: Some data may be scaled based on tests of similar but not identical luminaires.

RFS RoadFocus

LED Cobra head (small)

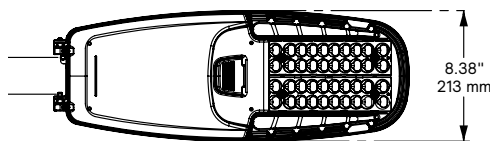
Dimensions

Side View



Weight: 9.4 lbs
EPA: 0.52 sq. feet

Bottom View



Field Adjustable Wattage (FAWS) Multiplier Chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage
1	0.31	0.28
2	0.53	0.50
3	0.62	0.58
4	0.70	0.67
5	0.78	0.75
6	0.83	0.81
7	0.89	0.87
8	0.92	0.91
9	0.96	0.95
10	1.00	1.00

Note: Typical value accuracy +/- 5%

Specifications

Housing

Made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 5 1/2" (140mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. A clearance of 13" (330mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders and an ANSI label as per C136.15-2015 to identify wattage and source (both included in box). Housing (including electrical compartment) rated IP54 per ANSI C136.37.


Light Engine

Composed of 4 main components: LED Module / Optical System / Heat Sink / Driver.
Electrical components are RoHS compliant, IP66 sealed light engine equipped LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.
LED Module: Composed of high-performance white LEDs. Color temperature as per ANSI/ NEMA bin 2700 Kelvin nominal (2725 ±145K), 3000 Kelvin nominal (3045K +/- 175K) or 4000 Kelvin nominal (3985K +/- 275K). CRI 70 Min. 75 Typical. Other CCT/CRI also available, consult factory.

Optical System: Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. 0% uplight and U0 per IESNA TM-15.
Heat Sink: Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimising their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +50°C / +122°F.
Driver: High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I or 2, THD of 20% max.
DMG: Dimming compatible 0-10 volts. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

DMG: Dimmable driver 0-10V.
RCD7*: Tool less orientable receptacle with 7 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock Interact City node or photoelectric cell or a shorting cap.
Please note: Additional hardware will be required to utilize the additional 2 pins on this receptacle.
SP1: Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/ IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA.
Please note that these integrated features always come with RoadFocus luminaire.
* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

Integrated Features

Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: RFS-35W16LED3K-G2-R2M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 38W
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RFS RoadFocus

LED Cobra head (small)

Specifications (continued)

Driver and Luminaire Options

DAL: Pre-set driver compatible with the DALI control system.

SRD: Sensor Ready Driver including SR communication (used for dimming and other functionalities), 24V auxiliary supply and a logical signal input (LSI) connected to the top NEMA twist lock receptacle and bottom TLRSR receptacle, if this option included/ chosen. This configuration is compatible with Interact City controllers.

SRDI: Sensor Ready Driver including SR communication (used for dimming and other functionalities) but with 24V auxiliary supply and a logical signal input (LSI) not connected to the top NEMA twist lock receptacle option included, standard SR communication, 24V auxiliary supply and LSI are connected to the TLRSR receptacle.

FAWS: Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level – see the FAWS multiplier chart for more details.

Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.

NRC: No Receptacle. Fixture is shipped with a cap instead of a receptacle.

NYBC: 4-position terminal block

SP2: 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

RCD*: Tool Less orientable receptacle with 5 pins enabling dimming, can be used with a twist lock Interact City or photoelectric cell or a shorting cap.

TLRSR: SR Sensor connector, installed in fixture door. Shipped with protective cover.

HS: House side shield, 1 per 16 LED light engine.

PH8: Twist-lock photoelectric cell, UNV (120-277VAC).

PH8/347: Twist-lock photoelectric cell, UNV (120-277VAC).

PH8/480: Twist-lock photoelectric cell, UNV (120-277VAC).

PHXL: Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC).

PH9*: Shorting cap.

API: Factory Installed NEMA label, ANSI C136.15-2015 compliant. Consult factory for other labeling needs.

* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool, Advance data and LED manufacturer LM-80/ TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/ off cycles, burning hours and corrosion.

Wiring

The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2 14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time-delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

Hardware

All exposed screws shall be complete with Ceramic primer seal to reduce seizing of the parts, also offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance

The RFS meets the ANSI C136.31-2018, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G over 100,000 cycles by independent lab)

Certifications and Compliance

cULus Listed for Canada and USA. Luminaire meets DOE and MSLC Model Specification for LED Roadway Luminaires. Most versions of RoadFocus LED Cobrahead luminaires are DesignLights Consortium qualified, consult DLC QPL to confirm your specific fixture selection is approved. CCTs 3000K and warmer are Dark Sky Approved. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away.

For more details visit: signify.com/servicetag


Limited Warranty

10-year limited warranty. See signify.com/warranties for details and restrictions.

Brackets/Arms

For brackets / arms available with this luminaire, see Lumec 3D for details.



Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: RFM-80W48LED3K-G2-R3M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 81W
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LUMEC
by 

Roadway

RoadFocus

RFM Cobra head (medium)



LumeC RoadFocus LED cobra head luminaires feature a sleek design that provides seamless replacement of existing HID luminaires. RoadFocus is available in three sizes, offers multiple lumen packages, and a complete array of optical distributions, making it an outstanding solution for all types of roadway applications. Includes Service Tag, innovative way to provide assistance throughout the life of the product.

Project: _____
Location: _____
Cat. No: _____
Type: _____
Lumens: _____ Qty: _____
Notes: _____

Ordering guide

example: RFM-108W32LED3K-G2-R2M-UNV-DMG-HS-PH8-RCD7-GY3

Series	LED module	CCT	Generation	Distribution	Voltage	Options		Finish					
	RFM		G2			Controls ⁴	Options						
RFM RoadFocus medium	130W32LED ⁷	4K 4000K	G2 Generation 2	Type 2	UNV 120-277V	DALI ¹	Digitally addressable lighting interface	2C	Two clamp with 4 bolts	BK	Black		
	135W40LED ¹⁴	3K 3000K		R2S	Type II short (ASYM)	HVV 347-480V			API	Factory installed NEMA label, ANSI C136.15-2015 compliant	BR	Bronze	
	55W48LED ¹²	2.7K ¹¹ 2700K		R2M	Type II Medium (ASYM)		DMG ⁵	0-10V	FAWS ⁷	Field adjustable wattage selector	GY3	Gray	
	80W48LED				Type 3		SRD ¹	Sensor ready driver, standard configuration	HS	House Side Shield, 1 per 16 LED light engine	WH	White	
	108W48LED			R3S	Type III short (ASYM)				NRC ⁸	No receptacle			
	160W48LED				Type 4		SRD1 ¹	Sensor ready driver, alternate configuration	NYBC	4-position terminal block			
	50W60LED ¹⁴			R3M	Type III Medium (ASYM)				PH8 ^{1,10}	Twist-lock photoelectric cell, UNV (120-277VAC)			
	75W60LED ¹⁴				Type 5				PH8/347 ^{10,12}	Twist-lock photoelectric cell (347VAC)			
	100W60LED ¹⁴								PH8/480 ^{10,13}	Twist-lock photoelectric cell (480VAC)			
	120W60LED ¹⁴				4	Type IV (ASYM)				PHXL ^{1,10}	Twist-lock photoelectric cell, extended life, UNV (120-277VAC)		
	150W60LED ¹⁴				5 ²	Type V (SYMM)				PH9 ¹⁰	Shorting cap		
	170W60LED ¹⁴									RCD ^{3,9}	Tool less receptacle for twist-lock photocell or shorting cap, 5-pin (optional)		
								RCD7 ^{3,5}	Tool less receptacle for twist-lock photocell or shorting cap, 7-pin (standard)				
								SP2	20kV / 10kA Surge protector				
								TLRSR ⁶	SR receptacle				

¹ Not available with HVU.

² Not available with HS option.

³ Use of photoelectric cell or shorting cap is required to ensure proper illumination.

⁴ Select either DALI or DMG or SRD or SRD1 mandatory option.

⁵ Please note this integrated feature come standard with RoadFocus.

⁶ Only available with SRD or SRD1 Driver Options.

⁷ Only available with DMG Driver Options

⁸ Not available with PH8, PH8/347, PH8/480, PHXL, PH9, DALI, SRD or SRD1 Driver Options.

⁹ Not available with SRD Driver Options.

¹⁰ Either RCD or RCD7 must be selected for this option.

¹¹ Extended lead-time may apply. Consult factory.

¹² FAWS table accuracy +/- 15% on these models.

¹³ Not available with UNV.


¹⁴ Only available with R2M or R3M distributions.

Accessories (must be ordered as separate line item - quickly and easily installed in the field)

Interact City connector node.*

* Contact the factory for additional support when connected lighting or additional services are desired.



Submitted by Graybar		Catalog Number: RFM-80W48LED3K-G2-R3M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 81W
 GraybaR. works to your advantage	Job Name: SANTA FE SPRINGS, CA		

RFM RoadFocus

LED Cobra head (medium)

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11 Addendum B. Published L₇₀ hours limited to 6 times actual LED test hours.

Ambient Temperature °C	L70 per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	>60,000 hours	>97.6%

LED Wattage values

Ordering Code	Total LEDs	Average System Watts ¹⁵	Wattage label ¹⁶
RFM-130W32LED	32	129	130
RFM-135W40LED	40	135	140
RFM-55W48LED	48	55	60
RFM-80W48LED	48	81	80
RFM-108W48LED	48	106	110
RFM-160W48LED ¹⁷	48	161	160
RFM-50W60LED	60	52	50
RFM-75W60LED	60	77	80
RFM-100W60LED	60	99	100
RFM-120W60LED	60	122	120
RFM-150W60LED	60	149	150
RFM-170W60LED ¹⁷	60	170	170

15. Typical values, rounded.

16. As per ANSI C136.15-2015. Consult factory for other labeling needs.


17. Rated for +40°C / +104°F.

4000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFM-130W32LED	4000	14,913	116	B3-U0-G2	15,633	121	B3-U0-G2	14,971	116	B3-U0-G2	15,172	118	B2-U0-G2	14,901	116	B2-U0-G3	15,500	120	B4-U0-G2
RFM-135W40LED	4000	15,954	118	B3-U0-G3	N/A	N/A	N/A	16,040	119	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-55W48LED	4000	7,747	141	B2-U0-G1	8,123	147	B2-U0-G1	7,778	141	B2-U0-G1	7,883	143	B1-U0-G2	7,742	141	B1-U0-G2	8,053	146	B3-U0-G1
RFM-80W48LED	4000	11,109	138	B2-U0-G2	11,647	145	B2-U0-G2	11,153	138	B2-U0-G2	11,302	140	B2-U0-G2	11,101	138	B2-U0-G2	11,546	143	B4-U0-G2
RFM-108W48LED	4000	14,024	132	B3-U0-G2	14,702	139	B3-U0-G2	14,079	133	B3-U0-G2	14,268	135	B2-U0-G2	14,013	132	B2-U0-G2	14,576	138	B4-U0-G2
RFM-160W48LED	4000	19,412	121	B3-U0-G3	20,351	127	B3-U0-G2	19,489	121	B3-U0-G3	19,750	123	B2-U0-G3	19,397	121	B3-U0-G3	20,176	126	B4-U0-G2
RFM-50W60LED	4000	8,038	154	B2-U0-G2	N/A	N/A	N/A	8,081	155	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-75W60LED	4000	10,979	143	B2-U0-G2	N/A	N/A	N/A	11,038	143	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-100W60LED	4000	13,615	138	B3-U0-G3	N/A	N/A	N/A	13,688	138	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-120W60LED	4000	16,094	132	B3-U0-G3	N/A	N/A	N/A	16,181	133	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-150W60LED	4000	19,078	128	B3-U0-G3	N/A	N/A	N/A	19,180	129	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-170W60LED	4000	21,037	124	B3-U0-G3	N/A	N/A	N/A	21,150	124	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved.

Note: Some data may be scaled based on tests of similar but not identical luminaires.

Submitted by Graybar		Catalog Number: RFM-80W48LED3K-G2-R3M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 81W
 Graybar works to your advantage	Job Name: SANTA FE SPRINGS, CA		

RFM RoadFocus

LED Cobra head (medium)

3000K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFM-130W32LED	3000	13,990	109	B3-U0-G2	14,666	114	B3-U0-G2	14,045	109	B3-U0-G2	14,233	111	B2-U0-G2	13,979	109	B2-U0-G3	14,541	113	B4-U0-G2
RFM-135W40LED	3000	15,169	112	B3-U0-G3	N/A	N/A	N/A	15,251	113	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-55W48LED	3000	7,268	132	B2-U0-G1	7,620	138	B2-U0-G1	7,297	132	B2-U0-G1	7,395	134	B1-U0-G2	7,263	132	B1-U0-G2	7,555	137	B3-U0-G1
RFM-80W48LED	3000	10,422	129	B2-U0-G2	10,926	136	B2-U0-G2	10,463	130	B2-U0-G2	10,603	132	B2-U0-G2	10,414	129	B2-U0-G2	10,832	134	B4-U0-G2
RFM-108W48LED	3000	13,156	124	B3-U0-G2	13,792	130	B3-U0-G2	13,208	125	B3-U0-G2	13,385	126	B2-U0-G2	13,146	124	B2-U0-G2	13,674	129	B4-U0-G2
RFM-160W48LED	3000	18,211	113	B3-U0-G3	19,092	119	B3-U0-G2	18,283	114	B3-U0-G3	18,528	115	B2-U0-G3	18,197	113	B3-U0-G3	18,928	118	B4-U0-G2
RFM-50W60LED	3000	7,643	146	B2-U0-G2	N/A	N/A	N/A	7,684	147	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-75W60LED	3000	10,439	136	B2-U0-G2	N/A	N/A	N/A	10,495	136	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-100W60LED	3000	12,945	131	B3-U0-G2	N/A	N/A	N/A	13,015	131	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-120W60LED	3000	15,302	125	B3-U0-G3	N/A	N/A	N/A	15,384	126	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-150W60LED	3000	18,139	122	B3-U0-G3	N/A	N/A	N/A	18,237	122	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-170W60LED	3000	20,002	118	B3-U0-G3	N/A	N/A	N/A	20,110	118	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

2700K LED Lumen values

Ordering Code	Color Temp.	Type R2M			Type R2S			Type R3M			Type R3S			Type 4			Type 5		
		Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
RFM-130W32LED	2700	12,829	100	B3-U0-G2	13,449	104	B3-U0-G2	14,045	109	B3-U0-G2	13,052	109	B2-U0-G2	12,819	100	B2-U0-G3	13,334	104	B4-U0-G2
RFM-135W40LED	2700	13,860	103	B3-U0-G3	N/A	N/A	N/A	13,935	103	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-55W48LED	2700	6,665	121	B2-U0-G1	6,988	127	B2-U0-G1	7,297	132	B2-U0-G1	6,781	132	B1-U0-G2	6,660	121	B1-U0-G2	6,928	126	B3-U0-G1
RFM-80W48LED	2700	9,557	119	B2-U0-G2	10,019	124	B2-U0-G2	10,560	131	B2-U0-G2	9,723	131	B2-U0-G2	9,550	119	B2-U0-G2	9,933	123	B4-U0-G2
RFM-108W48LED	2700	12,064	114	B3-U0-G2	12,648	119	B3-U0-G2	13,208	125	B3-U0-G2	12,274	125	B2-U0-G2	12,055	114	B2-U0-G2	12,539	118	B4-U0-G2
RFM-160W48LED	2700	16,700	104	B3-U0-G3	17,508	109	B3-U0-G2	18,283	114	B3-U0-G3	16,991	114	B2-U0-G3	16,687	104	B3-U0-G3	17,357	108	B4-U0-G2
RFM-50W60LED	2700	6,983	134	B2-U0-G2	N/A	N/A	N/A	7,021	134	B2-U0-G1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-75W60LED	2700	9,538	124	B2-U0-G2	N/A	N/A	N/A	9,589	125	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-100W60LED	2700	11,828	119	B2-U0-G2	N/A	N/A	N/A	11,892	120	B2-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-120W60LED	2700	13,982	115	B3-U0-G3	N/A	N/A	N/A	14,057	115	B3-U0-G2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-150W60LED	2700	16,574	111	B3-U0-G3	N/A	N/A	N/A	16,663	112	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RFM-170W60LED	2700	18,276	108	B3-U0-G3	N/A	N/A	N/A	18,374	108	B3-U0-G3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires. Consult DLC QPL to confirm your specific fixture selection is DLC approved.

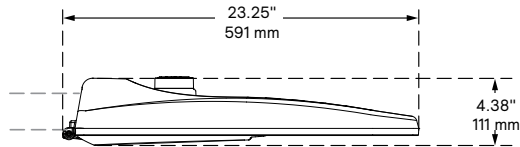
Note: Some data may be scaled based on tests of similar but not identical luminaires.

RFM RoadFocus

LED Cobra head (medium)

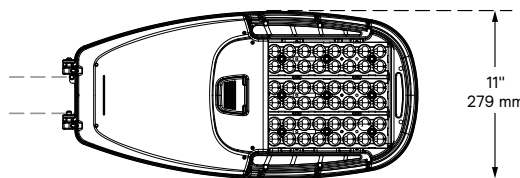
Dimensions

Side View



Weight: 12.2 Lbs
EPA: 0.53 sq. ft.

Bottom View



Field Adjustable Wattage (FAWS) Multiplier Chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage
1	0.31	0.28
2	0.53	0.50
3	0.62	0.58
4	0.70	0.67
5	0.78	0.75
6	0.83	0.81
7	0.89	0.87
8	0.92	0.91
9	0.96	0.95
10	1.00	1.00

Note: Typical value accuracy +/- 5%

Specifications

Housing

Made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 5 1/2" (140mm) minimum long tenon. Comes with a zinc plated clamp fixed by 2 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. A clearance of 13" (330mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders and an ANSI label as per C136.15-2015 to identify wattage and source (both included in box). Housing (including electrical compartment) rated IP54 per ANSI C136.37.

Light Engine

Composed of 4 main components: LED Module / Optical System / Heat Sink / Driver.
Electrical components are RoHS compliant, IP66 sealed light engine LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.
LED Module: Composed of high-performance white LEDs. Color temperature as per ANSI/ NEMA bin 2700 Kelvin nominal (2725 ±145K), 3000 Kelvin nominal (3045K +/- 175K) or 4000 Kelvin nominal (3985K +/- 275K), CRI 70 Min. 75 Typical. Other CCT/CRI also available, consult factory.

Optical System: Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. 0% uplight and U0 per IESNA TM-15.

Heat Sink: Built in the housing, designed to ensure high efficacy and superior cooling by natural vertical convection air flow pattern always close to LEDs and driver optimizing their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Wide openings enable natural cleaning and removal of dirt and debris. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +50°C / +122°F unless otherwise specified, refer to LED Wattages Values Table.

Driver: High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max.

DMG: Dimming compatible 0-10 volts. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Integrated Features

DMG: Dimmable driver 0-10V.
RCD7: Tool less orientable receptacle with 7 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock Interact City node or photoelectric cell or a shorting cap.

SP1: Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/ IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA.

Please note that these integrated features always come with RoadFocus luminaire.
* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

Driver and Luminaire Options


DALI: Pre-set driver compatible with the DALI control system.

SRD: Sensor Ready Driver including SR communication (used for dimming and other functionalities), 24V auxiliary supply and a logical signal input (LSI) connected to the top NEMA twist lock receptacle and bottom TLRSR receptacle, if this option included/chosen. This configuration is compatible with Interact City controllers.

SRD1: Sensor Ready Driver including SR communication (used for dimming and other functionalities) but with 24V auxiliary supply and a logical signal input (LSI) not connected to the top NEMA twist lock. If TLRSR receptacle option included, standard SR communication, 24V auxiliary supply and LSI are connected to the TLRSR receptacle.

FAWS: Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level - see the FAWS multiplier chart for more details.

Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the

Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: RFM-80W48LED3K-G2-R3M-UNV-DMG-API-RCD7-GY3 Notes:	Type: 81W
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RFM RoadFocus

LED Cobra head (medium)

Specifications (continued)

other dimming or controls.

SP2: 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

NRC: No Receptacle. Fixture is shipped with a cap instead of a receptacle.

NYBC: 4-position terminal block

RCD*: Tool Less orientable receptacle with 5 pins enabling dimming, can be used with a twist lock Interact City or photoelectric cell or a shorting cap.

TLRSR: SR Sensor connector, installed in fixture door. Shipped with protective cover.

HS: House side shield, 1 per 16 LED light engine.

PH8: Twist-lock photoelectric cell, UNV (120-277VAC).

PH8/347: Twist-lock photoelectric cell, HVU (347VAC).

PH8/480: Twist-lock photoelectric cell, HVU (480VAC).

PHXL: Twist-lock photoelectric cell, extended life, UNV (120-277VAC).

PH9: Shorting cap.

API: Factory Installed NEMA label, ANSI C136.15-2015 compliant. Consult factory for other labeling needs.

* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool, Advance data and LED manufacturer LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

Wiring

The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2 14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time-delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

Hardware

All exposed screws shall be complete with Ceramic primer seal to reduce seizing of the parts, also offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 5000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance

The RFM meets the ANSI C136.31-2018, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G over 100,000 cycles by independent lab)

Certifications and Compliance

cULus Listed for Canada and USA. Luminaire meets DOE and MSSLSC Model Specification for LED Roadway Luminaires. Most versions of RoadFocus LED Cobrahead luminaires are DesignLights Consortium qualified, consult DLC QPL to confirm your specific fixture selection is approved. CCTs 3000K and warmer are Dark Sky Approved. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away.

For more details visit: philips.com/servicetag


Limited Warranty

10-year limited warranty. See signify.com/warranties for details and restrictions.

Brackets/Arms

For brackets / arms available with this luminaire, see Lumec 3D for details.



Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: ARCH-AF16-40-D-U-T2U-7030-4N7-AP Notes:	Type: 42W
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Streetworks

DESCRIPTION

The Archeon™ Small LED roadway luminaire delivers all the performance benefits of the latest Eaton LED platforms and technologies with a modern, yet familiar cobrahead form factor. This discrete LED solution with the patented, high-efficiency AccuLED Optics™ system, provides uniform and energy conscious illumination for municipal streets and highways. Our customer focused features include single latch tool-less entry, industry leading surge protection options and superior lumen maintenance and performance, all in an economical design. Available in 14 standard lumen packages per optic making it the ideal LED replacement for any application of 50W to 150W HPS cobraheads.

SPECIFICATION FEATURES

Construction

Heavy-duty die-cast aluminum housing and door. Tool-less entry, hinged removable door for easy maintenance. 3G vibration rated.

Optics

Choice of four patented, high-efficiency AccuLED Optics . Available in Type IIR, IIU, III, IV wide and V square wide the optics are precisely designed to shape the distribution maximizing efficiency and application spacing. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K CCT. For the ultimate level of spill light control, an optional house side shield accessory is available and can be field or factory installed. The house side shield is designed to seamlessly integrate with the T2R, T3, and T4W optics. Optics are IP66 enclosure rated.

Electrical

120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Standard 0-10V dimming and 10kV/10kA common- and differential- mode surge protection available. Thermal management transfers heat away from the LED source for optimal efficiency, light output and lumen maintenance. Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available. Standard with three-position tunnel type compression terminal block. Greater than 90% lumen maintenance expected at 60,000 hours.

Mounting

Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5° leveling steps. Fixed-in-place bird guard seals around 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mounting arms. Optional 15" pole mount arm

available with round pole adapter and mounting hardware included.

Finish

Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your lighting representative at Eaton for a complete selection of standard colors.

Warranty

Standard five-year warranty. Optional ten-year warranty, please see your Eaton Streetworks sales representative for more information.

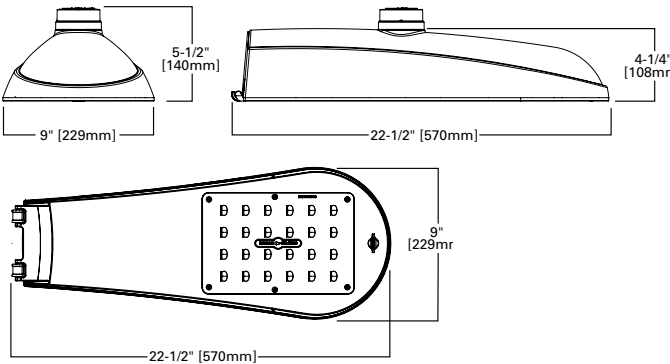


ARCH ARCHEON SMALL

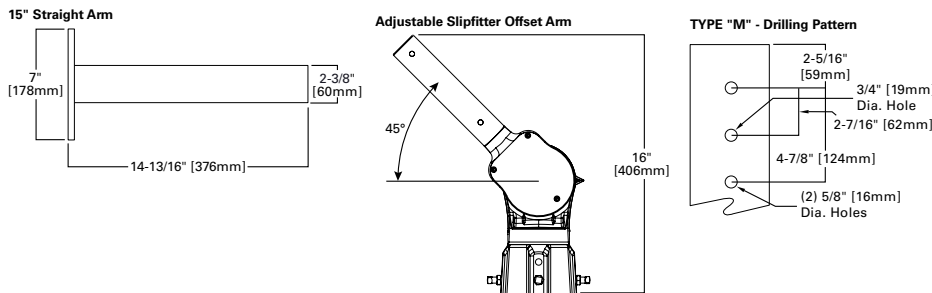
LED

ROADWAY LUMINAIRE

DIMENSIONS



OPTIONAL ARM



CERTIFICATION DATA
UL/cUL Wet Location Listed
IP66-Rated Optics
3G Vibration Rated
ISO 9001
DesignLights Consortium® Qualified*
Dark Sky Approved (3000K and warmer CCTs only)

ENERGY DATA
Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

EPA
Effective Projected Area (Sq. Ft.): 0.5

SHIPPING DATA
Approximate Net Weight:
12 lbs. (5.4 kgs.)




*www.designlights.org



TD521020EN
December 4, 2019 9:03 AM

POWER AND LUMENS (AF16 LIGHT ENGINE)

Light Engine - AF16		AF16-20	AF16-30	AF16-40	AF16-50	AF16-60
Power (Watts)		24	32	42	53	63
Wattage Label		20	30	40	50	60
Input Current @ 120V (A)		0.202	0.266	0.346	0.446	0.529
Input Current @ 277V (A)		0.098	0.124	0.158	0.21	0.241
Input Current @ 347V(A)		--	0.101	0.128	0.159	0.187
Input Current @ 480V (A)		--	0.074	0.094	0.126	0.145
Optics						
T2R	4000K/5000K Lumens	3,065	3,890	4,894	6,148	6,900
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	3000K Lumens	2,898	3,678	4,627	5,813	6,524
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
T2U	4000K/5000K Lumens	3,046	3,867	4,865	6,111	6,859
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
	3000K Lumens	2,880	3,656	4,600	5,778	6,485
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
T3	4000K/5000K Lumens	3,050	3,872	4,871	6,119	6,867
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	3000K Lumens	2,884	3,660	4,605	5,785	6,492
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
T4W	4000K/5000K Lumens	3,040	3,860	4,855	6,099	6,845
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
	3000K Lumens	2,875	3,649	4,590	5,767	6,471
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
5WQ	4000K/5000K Lumens	3,107	3,943	4,961	6,232	6,994
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	3000K Lumens	2,937	3,728	4,690	5,892	6,612
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2

Submitted by Graybar		Catalog Number: ARCH-AF16-40-D-U-T2U-7030-4N7-AP Notes:	Type: <div>42W</div>
	Job Name: SANTA FE SPRINGS, CA		

POWER AND LUMENS (AF24 LIGHT ENGINE)

Light Engine - AF24		AF24-20	AF24-30	AF24-40	AF24-50	AF24-60	AF24-70	AF24-80	AF24-90	AF24-100
Power (Watts)		21	31	40	54	64	74	83	94	96
Wattage Label		20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)		0.179	0.257	0.338	0.450	0.534	0.619	0.695	0.783	0.798
Input Current @ 277V (A)		--	0.122	0.155	0.212	0.244	0.279	0.312	0.347	0.354
Input Current @ 347V(A)		--	0.100	0.125	0.161	0.187	0.217	0.244	0.275	0.280
Input Current @ 480V (A)		--	0.073	0.094	0.127	0.145	0.165	0.184	0.205	0.209
Optics										
T2R	4000K/5000K Lumens	2,925	4,094	5,283	6,811	7,819	8,718	9,420	10,097	10,201
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	3000K Lumens	2,531	3,543	4,571	5,894	6,766	7,544	8,152	8,737	8,827
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
T2U	4000K/5000K Lumens	2,914	4,080	5,263	6,787	7,793	8,687	9,388	10,062	10,166
	Bug Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	3000K Lumens	2,522	3,530	4,554	5,873	6,743	7,517	8,123	8,707	8,797
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
T3	4000K/5000K Lumens	2,908	4,071	5,253	6,773	7,776	8,670	9,368	10,041	10,145
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	2,517	3,523	4,546	5,861	6,729	7,502	8,107	8,689	8,779
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
T4W	4000K/5000K Lumens	2,890	4,046	5,219	6,731	7,727	8,614	9,309	9,978	10,081
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	3000K Lumens	2,501	3,501	4,516	5,825	6,687	7,454	8,055	8,634	8,724
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
5WQ	4000K/5000K Lumens	2,972	4,160	5,367	6,921	7,946	8,859	9,573	10,260	10,367
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	3000K Lumens	2,572	3,600	4,645	5,989	6,876	7,666	8,284	8,879	8,971
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2


LUMEN MAINTENANCE

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
AF16-20 to AF16-50 & AF24-20 to AF24-80	Up to 50°C	>95%	416,000
AF16-60 & AF24-90 & AF24-100	Up to 40°C	>90%	205,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

Submitted by Graybar



GraybaR.
works to your advantage

Job Name:
SANTA FE SPRINGS, CA

Catalog Number:
ARCH-AF16-40-D-U-T2U-7030-4N7-AP
Notes:

Type:
42W

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ARCH ARCHEON SMALL

ORDERING INFORMATION


Sample Number: ARCH-AF16-40-D-U-T2R-4N7-AP

Product Family ^{1,2}	Light Engine ³	Wattage Bucket	Driver	Voltage	Distribution	Options (Add as Suffix)	Color
ARCH=Archeon Small	AF16	20 ⁴ 30 40 50 60	D=Dimming (0-10V)	U=Universal (120-277V) 2=120V ⁵ 8=480V ^{6,7} 9=347V ⁶	T2R=Type II Roadway T2U=Type II Urban T3=Type III T4W=Type IV Wide 5WQ=Type V Square Wide	7027=70 CRI / 2700K ⁸ 8027=80 CRI / 2700K ^{8,9} 7030=70 CRI / 3000K ⁸ 7050=70 CRI / 5000K ⁸ 4=NEMA 3-PIN Twistlock Photocontrol Receptacle ¹⁰ 4N7=NEMA 7-PIN Twistlock Photocontrol Receptacle 10K=10kV UL 1449 Surge Protective Device 10MSP=10kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature ¹¹ HS-ARCH-16=Factory Install ARCH House Side Shield for AF16 ¹² HS-ARCH-24=Factory Install ARCH House Side Shield for AF24 ¹² A15=Arm Included (15" Straight Arm) ¹³ ASJS15=Adjustable slipfitter (Factory set at 15 degrees) ASJS25=Adjustable slipfitter (Factory set at 25 degrees) ASJS45=Adjustable slipfitter (Factory set at 45 degrees)	AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
	AF24	20 ⁵ 30 40 50 60 70 80 90 100					

Accessories (Order Separately)

OA/RA1013=Photocontrol Shorting Cap
OA1223=10kV Surge Module Replacement
HS-ARCH-16=Field Install ARCH House Side Shield for AF16 ¹²
HS-ARCH-24=Field Install ARCH House Side Shield for AF24 ¹²
OA/RA1014=NEMA Photocontrol - 120V
OA/RA1016=NEMA Photocontrol - Multi-Tap
OA/RA1027=NEMA Photocontrol - 480V
OA/RA1201=NEMA Photocontrol - 347V
A15-XX=Arm (15" Straight Arm) ^{13,14}
ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) ¹⁴
ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) ¹⁴
ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) ¹⁴

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Standard 4000K CCT and 70 CRI.
4. AF16-20 only available in Universal (120V-277V).
5. AF24-20 only available in 120V.
6. Not available with AF16-20 or AF24-20.
7. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
8. Use dedicated IES files for 2700K, 3000K, and 5000K when performing layouts. These files are published on the ARCH Archeon luminaire product page on the website.
9. Extended lead times may apply.
10. If "4" selected, dimming functionality not available, dimming leads will be capped.
11. Option not available with AF24-90 or AF24-100.
12. HS-ARCH not available with 5WQ and T2U distribution.
13. Round pole adapter and mounting hardware included. "M" drill pattern.
14. Replace XX with color designation.



COOPER
Lighting Solutions


Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Canada Sales
5925 McLaughlin Road
Mississauga, Ontario L5R 1B8
P: 905-501-3000
F: 905-501-3172

Specifications and dimensions subject to change without notice.

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December 4, 2019 9:03 AM

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Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: ARCH-AF24-80-D-U-T3-7030-4N7-AP Notes:	Type: 83W
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Streetworks

DESCRIPTION

The Archeon™ Small LED roadway luminaire delivers all the performance benefits of the latest Eaton LED platforms and technologies with a modern, yet familiar cobrahead form factor. This discrete LED solution with the patented, high-efficiency AccuLED Optics™ system, provides uniform and energy conscious illumination for municipal streets and highways. Our customer focused features include single latch tool-less entry, industry leading surge protection options and superior lumen maintenance and performance, all in an economical design. Available in 14 standard lumen packages per optic making it the ideal LED replacement for any application of 50W to 150W HPS cobraheads.

SPECIFICATION FEATURES

Construction
Heavy-duty die-cast aluminum housing and door. Tool-less entry, hinged removable door for easy maintenance. 3G vibration rated.

Optics
Choice of four patented, high-efficiency AccuLED Optics . Available in Type IIR, IIU, III, IV wide and V square wide the optics are precisely designed to shape the distribution maximizing efficiency and application spacing. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K CCT. For the ultimate level of spill light control, an optional house side shield accessory is available and can be field or factory installed. The house side shield is designed to seamlessly integrate with the T2R, T3, and T4W optics. Optics are IP66 enclosure rated.

Electrical
120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Standard 0-10V dimming and 10kV/10kA common- and differential- mode surge protection available. Thermal management transfers heat away from the LED source for optimal efficiency, light output and lumen maintenance. Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available. Standard with three-position tunnel type compression terminal block. Greater than 90% lumen maintenance expected at 60,000 hours.

Mounting
Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5° leveling steps. Fixed-in-place bird guard seals around 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mounting arms. Optional 15" pole mount arm

available with round pole adapter and mounting hardware included.

Finish
Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your lighting representative at Eaton for a complete selection of standard colors.

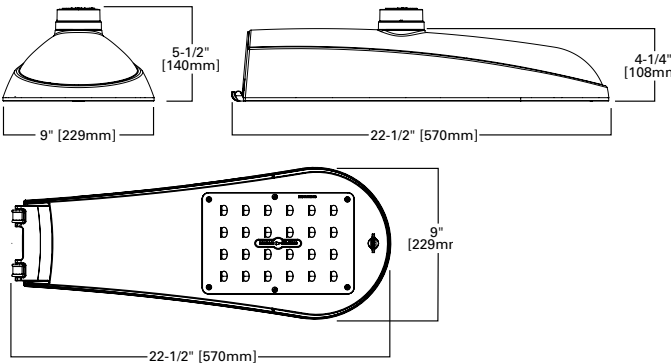
Warranty
Standard five-year warranty. Optional ten-year warranty, please see your Eaton Streetworks sales representative for more information.



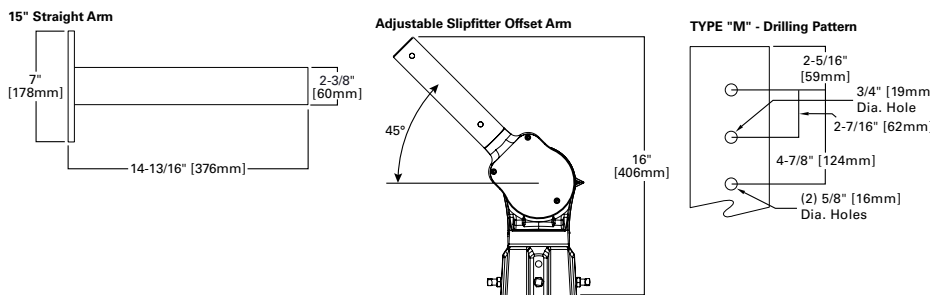
ARCH ARCHEON
SMALL

LED
ROADWAY LUMINAIRE

DIMENSIONS



OPTIONAL ARM



CERTIFICATION DATA
UL/cUL Wet Location Listed
IP66-Rated Optics
3G Vibration Rated
ISO 9001
DesignLights Consortium® Qualified*
Dark Sky Approved (3000K and warmer CCTs only)

ENERGY DATA
Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

EPA
Effective Projected Area (Sq. Ft.): 0.5

SHIPPING DATA
Approximate Net Weight:
12 lbs. (5.4 kgs.)




page 2

ARCH ARCHEON SMALL

POWER AND LUMENS (AF16 LIGHT ENGINE)

Light Engine - AF16		AF16-20	AF16-30	AF16-40	AF16-50	AF16-60
Power (Watts)		24	32	42	53	63
Wattage Label		20	30	40	50	60
Input Current @ 120V (A)		0.202	0.266	0.346	0.446	0.529
Input Current @ 277V (A)		0.098	0.124	0.158	0.21	0.241
Input Current @ 347V(A)		--	0.101	0.128	0.159	0.187
Input Current @ 480V (A)		--	0.074	0.094	0.126	0.145
Optics						
T2R	4000K/5000K Lumens	3,065	3,890	4,894	6,148	6,900
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	3000K Lumens	2,898	3,678	4,627	5,813	6,524
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
T2U	4000K/5000K Lumens	3,046	3,867	4,865	6,111	6,859
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
	3000K Lumens	2,880	3,656	4,600	5,778	6,485
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
T3	4000K/5000K Lumens	3,050	3,872	4,871	6,119	6,867
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	3000K Lumens	2,884	3,660	4,605	5,785	6,492
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
T4W	4000K/5000K Lumens	3,040	3,860	4,855	6,099	6,845
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
	3000K Lumens	2,875	3,649	4,590	5,767	6,471
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
5WQ	4000K/5000K Lumens	3,107	3,943	4,961	6,232	6,994
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	3000K Lumens	2,937	3,728	4,690	5,892	6,612
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2

Submitted by Graybar 	Job Name: SANTA FE SPRINGS, CA	Catalog Number: ARCH-AF24-80-D-U-T3-7030-4N7-AP Notes:	Type: <div>83W</div>
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ARCH ARCHEON SMALL

POWER AND LUMENS (AF24 LIGHT ENGINE)

Light Engine - AF24		AF24-20	AF24-30	AF24-40	AF24-50	AF24-60	AF24-70	AF24-80	AF24-90	AF24-100
Power (Watts)		21	31	40	54	64	74	83	94	96
Wattage Label		20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)		0.179	0.257	0.338	0.450	0.534	0.619	0.695	0.783	0.798
Input Current @ 277V (A)		--	0.122	0.155	0.212	0.244	0.279	0.312	0.347	0.354
Input Current @ 347V(A)		--	0.100	0.125	0.161	0.187	0.217	0.244	0.275	0.280
Input Current @ 480V (A)		--	0.073	0.094	0.127	0.145	0.165	0.184	0.205	0.209
Optics										
T2R	4000K/5000K Lumens	2,925	4,094	5,283	6,811	7,819	8,718	9,420	10,097	10,201
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	3000K Lumens	2,531	3,543	4,571	5,894	6,766	7,544	8,152	8,737	8,827
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
T2U	4000K/5000K Lumens	2,914	4,080	5,263	6,787	7,793	8,687	9,388	10,062	10,166
	Bug Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	3000K Lumens	2,522	3,530	4,554	5,873	6,743	7,517	8,123	8,707	8,797
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
T3	4000K/5000K Lumens	2,908	4,071	5,253	6,773	7,776	8,670	9,368	10,041	10,145
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	2,517	3,523	4,546	5,861	6,729	7,502	8,107	8,689	8,779
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
T4W	4000K/5000K Lumens	2,890	4,046	5,219	6,731	7,727	8,614	9,309	9,978	10,081
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	3000K Lumens	2,501	3,501	4,516	5,825	6,687	7,454	8,055	8,634	8,724
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
5WQ	4000K/5000K Lumens	2,972	4,160	5,367	6,921	7,946	8,859	9,573	10,260	10,367
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	3000K Lumens	2,572	3,600	4,645	5,989	6,876	7,666	8,284	8,879	8,971
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2

LUMEN MAINTENANCE

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
AF16-20 to AF16-50 & AF24-20 to AF24-80	Up to 50°C	>95%	416,000
AF16-60 & AF24-90 & AF24-100	Up to 40°C	>90%	205,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97




Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TD521020EN
December 4, 2019 9:03 AM

Submitted by Graybar



GraybaR.
works to your advantage

Job Name:
SANTA FE SPRINGS, CA

Catalog Number:
ARCH-AF24-80-D-U-T3-7030-4N7-AP
Notes:

Type:
83W

page 4

ARCH ARCHEON SMALL

ORDERING INFORMATION


Sample Number: ARCH-AF16-40-D-U-T2R-4N7-AP

Product Family ^{1,2}	Light Engine ³	Wattage Bucket	Driver	Voltage	Distribution	Options (Add as Suffix)	Color
ARCH=Archeon Small	AF16	20 ⁴ 30 40 50 60	D=Dimming (0-10V)	U=Universal (120-277V) 2=120V ⁵ 8=480V ^{6,7} 9=347V ⁶	T2R=Type II Roadway T2U=Type II Urban T3=Type III T4W=Type IV Wide 5WQ=Type V Square Wide	7027=70 CRI / 2700K ⁸ 8027=80 CRI / 2700K ^{8,9} 7030=70 CRI / 3000K ⁸ 7050=70 CRI / 5000K ⁸ 4=NEMA 3-PIN Twistlock Photocontrol Receptacle ¹⁰ 4N7=NEMA 7-PIN Twistlock Photocontrol Receptacle 10K=10kV UL 1449 Surge Protective Device 10MSP=10kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature ¹¹ HS-ARCH-16=Factory Install ARCH House Side Shield for AF16 ¹² HS-ARCH-24=Factory Install ARCH House Side Shield for AF24 ¹² A15=Arm Included (15" Straight Arm) ¹³ ASJS15=Adjustable slipfitter (Factory set at 15 degrees) ASJS25=Adjustable slipfitter (Factory set at 25 degrees) ASJS45=Adjustable slipfitter (Factory set at 45 degrees)	AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
	AF24	20 ⁵ 30 40 50 60 70 80 90 100					

Accessories (Order Separately)

OA/RA1013=Photocontrol Shorting Cap
OA1223=10kV Surge Module Replacement
HS-ARCH-16=Field Install ARCH House Side Shield for AF16 ¹²
HS-ARCH-24=Field Install ARCH House Side Shield for AF24 ¹²
OA/RA1014=NEMA Photocontrol - 120V
OA/RA1016=NEMA Photocontrol - Multi-Tap
OA/RA1027=NEMA Photocontrol - 480V
OA/RA1201=NEMA Photocontrol - 347V
A15-XX=Arm (15" Straight Arm) ^{13,14}
ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) ¹⁴
ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) ¹⁴
ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) ¹⁴

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Standard 4000K CCT and 70 CRI.
4. AF16-20 only available in Universal (120V-277V).
5. AF24-20 only available in 120V.
6. Not available with AF16-20 or AF24-20.
7. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
8. Use dedicated IES files for 2700K, 3000K, and 5000K when performing layouts. These files are published on the ARCH Archeon luminaire product page on the website.
9. Extended lead times may apply.
10. If "4" selected, dimming functionality not available, dimming leads will be capped.
11. Option not available with AF24-90 or AF24-100.
12. HS-ARCH not available with 5WQ and T2U distribution.
13. Round pole adapter and mounting hardware included. "M" drill pattern.
14. Replace XX with color designation.



COOPER
Lighting Solutions

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

Canada Sales
5925 McLaughlin Road
Mississauga, Ontario L5R 1B8
P: 905-501-3000
F: 905-501-3172

Specifications and dimensions subject to change without notice.

TD521020EN
December 4, 2019 9:03 AM

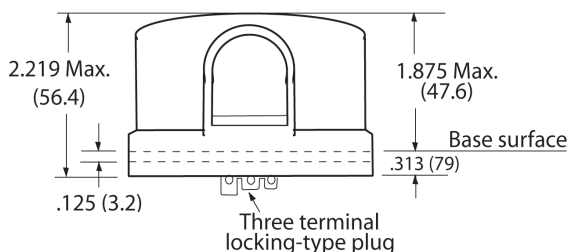
Index Page

P Series

Phototransistor sensor
solid state photocontrols



"Optimum Performance Without Operational Drift"



P Series Photocontrols

P Series electronic photocontrols utilize a phototransistor light sensor. The photo sensor holds its original operating parameters throughout its life. It is not susceptible to operational "drift" caused by cadmium sulfide breakdown caused by harsh environments or breakdown caused by over heating (a condition of AC electromechanical designs). Extended life is achieved through a non-chatter load break from a low power consumption DC circuit.

Features

- Meets or exceeds ANSI C136.10
- Proven DC circuit design
- Close 1:1.5 On to Off operating ratio
- Non-chatter load break
- Electronic phototransistor light sensor maintains operational levels throughout its life
- Heavy duty construction

Benefits

- 12 year expected life
- Low power consumption and extended life from "cool" operating DC circuit
- Close ratio reduces burning hours at sunrise
- Reduced burning from consistent operating levels throughout its life
- Significantly reduced energy and maintenance costs

Specifications

Housing:	UV stabilized, impact resistant polypropylene
Base:	High temperature ABS
Contact Blades:	Solid brass, three prong, locking type
Gasket:	Cross linked polyethylene
Packaging:	Individual units are sealed in water resistant plastic
Weight:	3.0 oz. each, 20 lbs. per 100 unit carton
Size:	16" x 16" x 12" per 100 unit carton

Operating Voltage

Load Rating:	1000 Watt tungsten, 1800 VA
Life at rated load:	5,000 Operations (13.7 Years)
Power Consumption:	1.0 watts average @ 120 volts 1.6 watts average @ 208 volts 1.9 watts average @ 240 volts 2.1 watts average @ 277 volts
Moisture Resistance:	100% RH
Standard Surge Protections:	90 Joule (4,500 Amps) MOV 190 Joule (6,500 Amps) MOV 2 190 Joule (13,000 Amps) MOV 380 Joule (10,000 Amps) MOV
Operating Light Levels:	+/- 0.1 fc. from specified turn-on level 1:1.5 Average turn-on to turn-off ratio
Photosensor:	Encapsulated phototransistor
Dielectric Strength:	5,000 Volts between any current carrying part
Ambient Temperature Range:	-40°C to +70°C (-40°F to + 158°F)

Ordering Information

P120 - 1.0 - P - T - M - BR

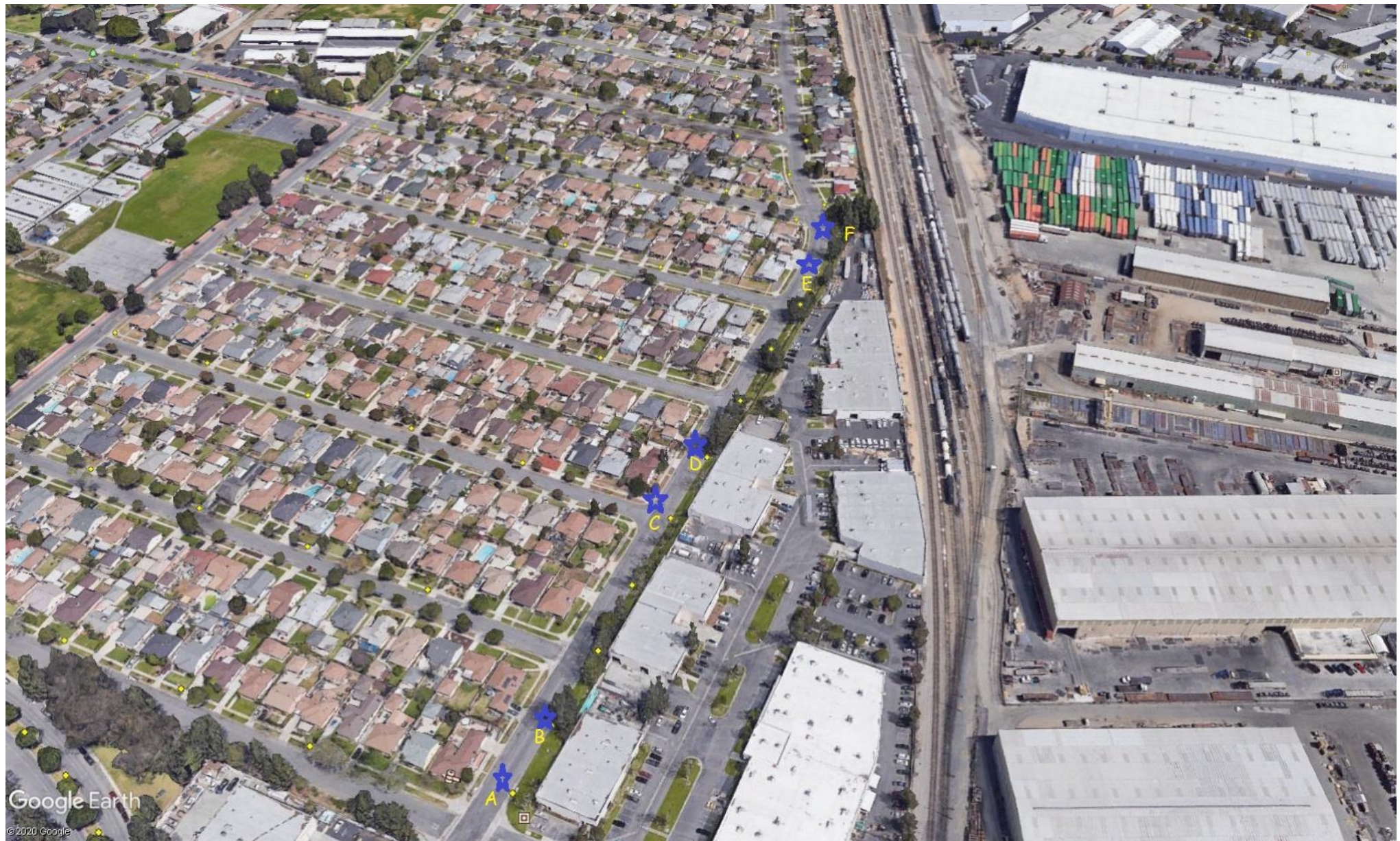
Model #	Turn On	Photosensor	Time Delay	Surge Protection	Color
P120 (105-130V)	1.0 fcs. On	P Phototransistor	_ No Delay**	_ 90J MOV**	_ Per ANSI**
P124 (105-305V)	1.5 fcs. On		T 3-5 Second Delay	M 190 MOV	BR Brown
P240 (195-305V)	2.0 fcs On			Y 2 190 MOV's	BK Black
P480 (420-530V)	2.5 fcs. On			W 380 MOV	Other Colors Available upon Request

PX - standard grade electronics FAIL OFF Version Available

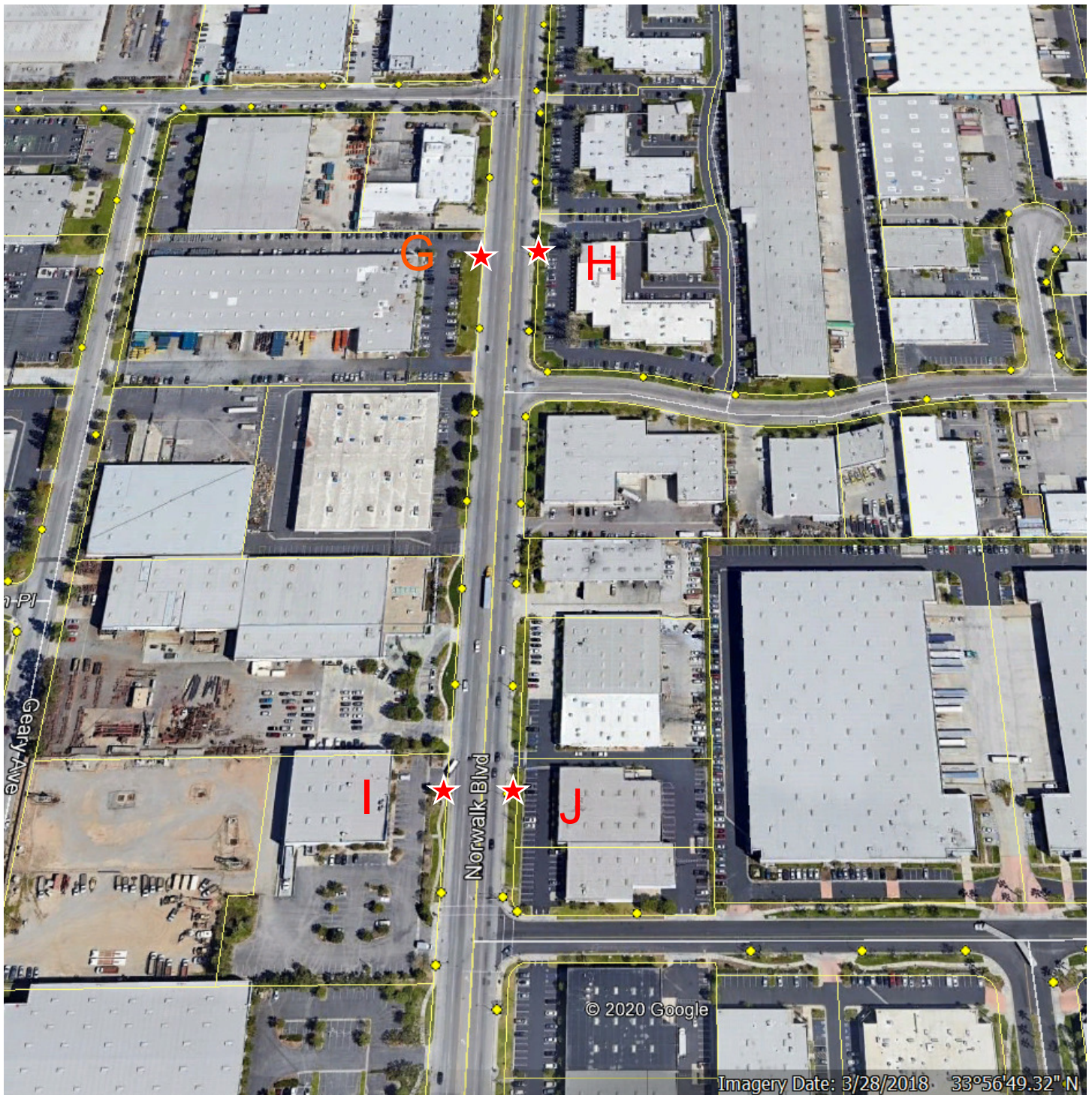
** No Letter

Santa Fe Springs Pilot Installation



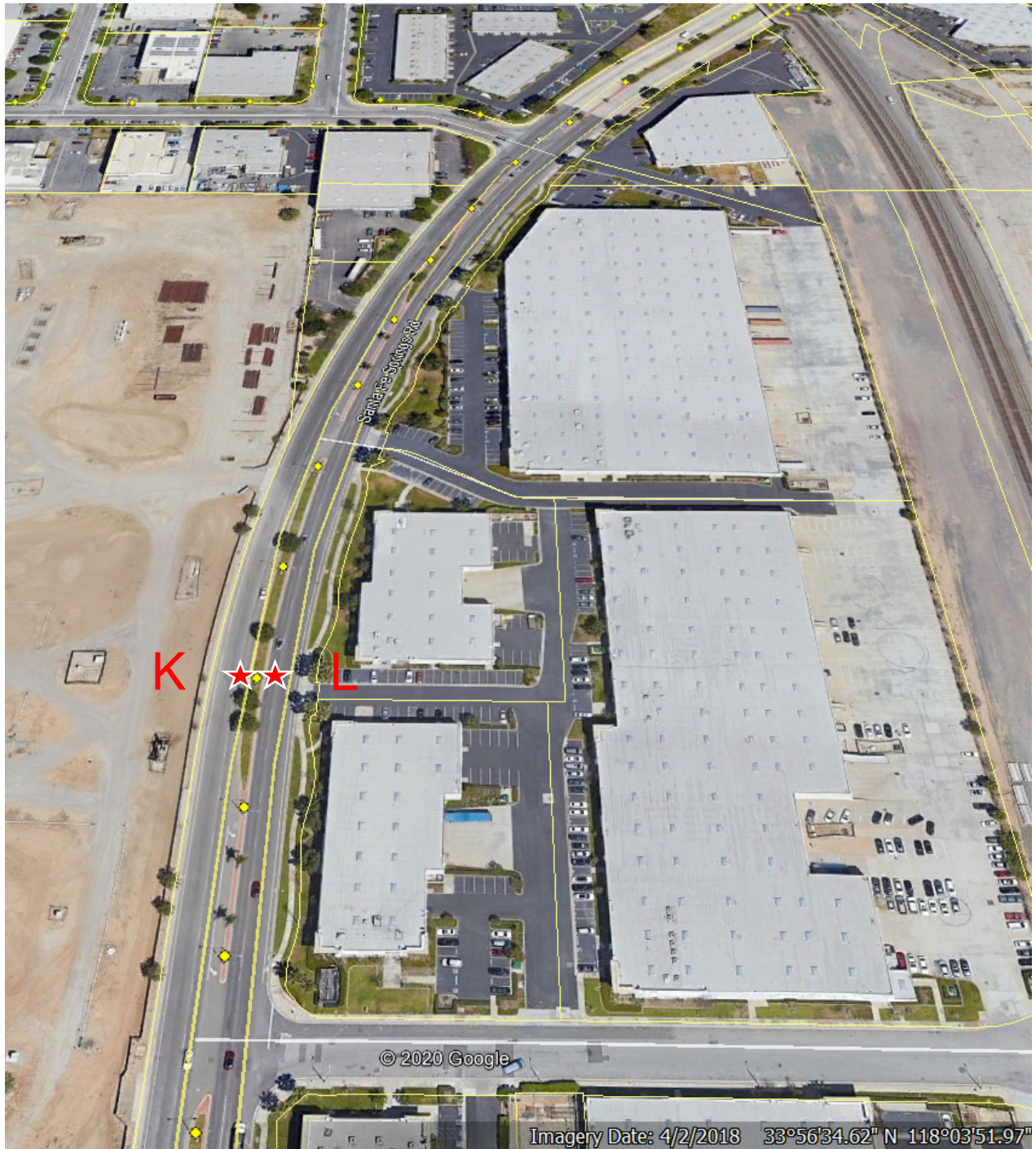


Existing 100W locations on Arlee Ave, between Smith and Charlesworth Rd



LED STREET LIGHT TEST LOCATIONS (4-200W)

Norwalk Blvd at Hawkins and McCann Dr



LED STREET LIGHT TEST LOCATIONS (2-250W)

Santa Fe Springs Rd at Cisneros Ln



Shoebox location: 9255 Pioneer Rd, parking lot at the Gus Velasco Neighborhood Center

Install shoebox LEDs on the side facing away from the building



Flood location: 12636 Emmens Way, City Yard



PHOTOMETRIC REPORT FOR THE CITY OF SANTA FE SPRINGS, CA



Submitted by:

Emily Danko
Project Manager
Tanko Streetlighting, Inc.
220 Bayshore Boulevard
San Francisco, CA 94124

Submitted to:

Kevin Periman
Municipal Services Manager
City of Santa Fe Springs
12363 Emmens Way
Santa Fe Springs, CA 90670

September 16, 2020

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What are Photometric Readings?

- Photometric readings measure the brightness and quality of visible light emitted by a light source. Tanko Lighting records scotopic and photopic measurements for a comprehensive measurement.

Scotopic Values

- Scotopic values refer to how light is perceived under poorly-lit conditions, such as in a dimly lit room, and represent the sensitivity of the rods in the human eye to the light. Higher scotopic readings indicate better quality of light and an increased ability to perceive the full spectrum in darker conditions.

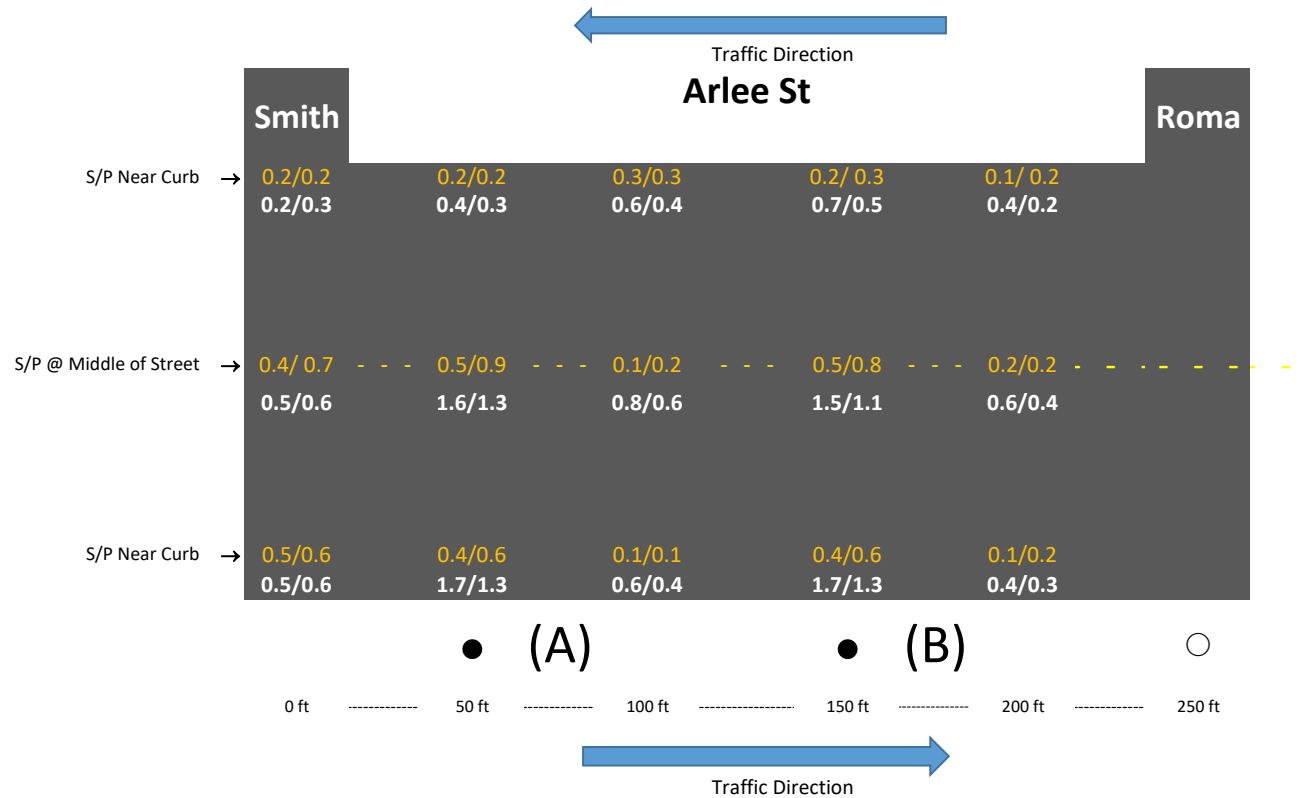
Photopic Values

- Photopic values refer to how light is perceived under well-lit conditions, such as in daylight, and represent the sensitivity of the cones in the human eye to the light. Higher photopic readings indicate higher lumen output, but not necessarily better quality light.



Photometric Report

Arlee and Smith - Existing 100W HPS



Legend



Fixture not included in pilot installation

Scotopic/Photopic Reading pre-LED pilot installation

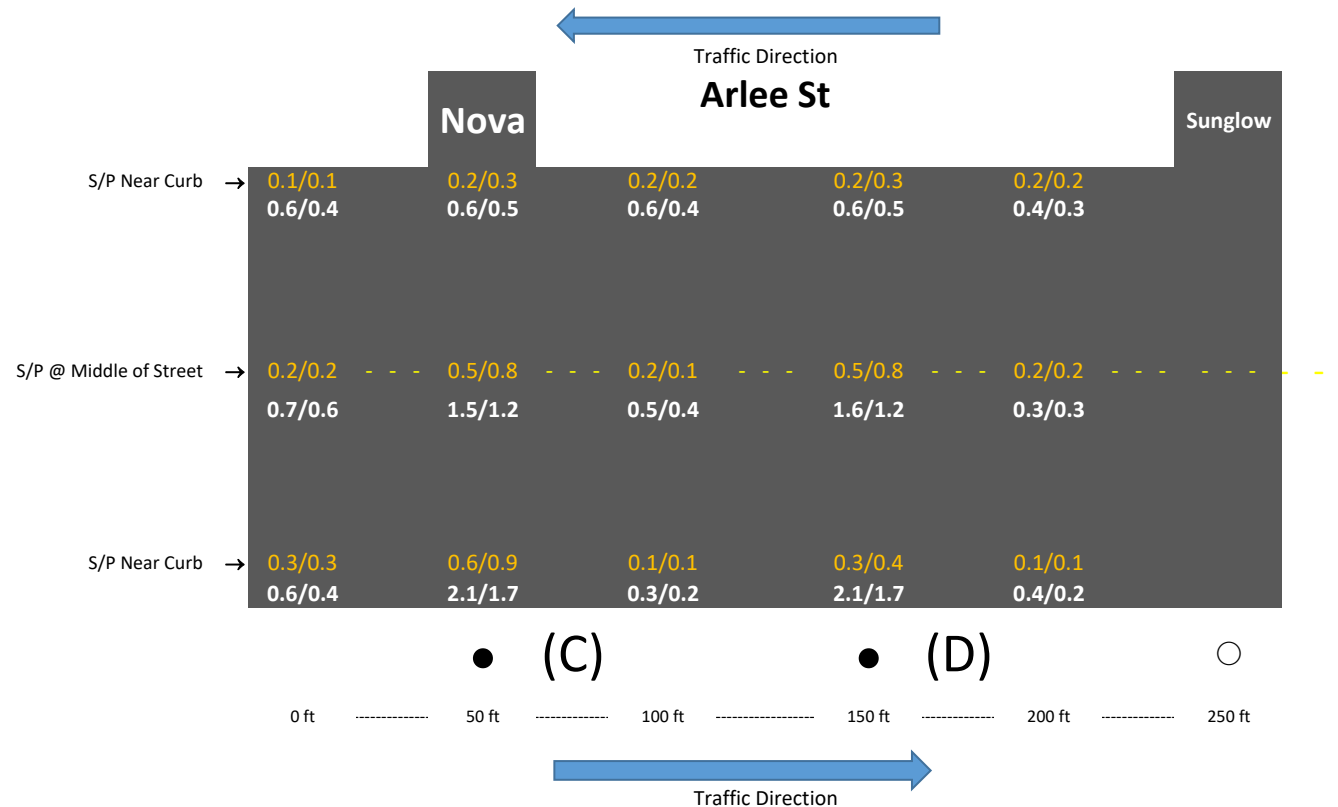


Existing 100W HPS/
GE 31W LED Pilot

Scotopic/Photopic Reading post-LED pilot installation

Photometric Report

Arlee and Nova - Existing 100W HPS



Legend



Fixture not included in pilot installation

Scotopic/Photopic Reading pre-LED pilot installation

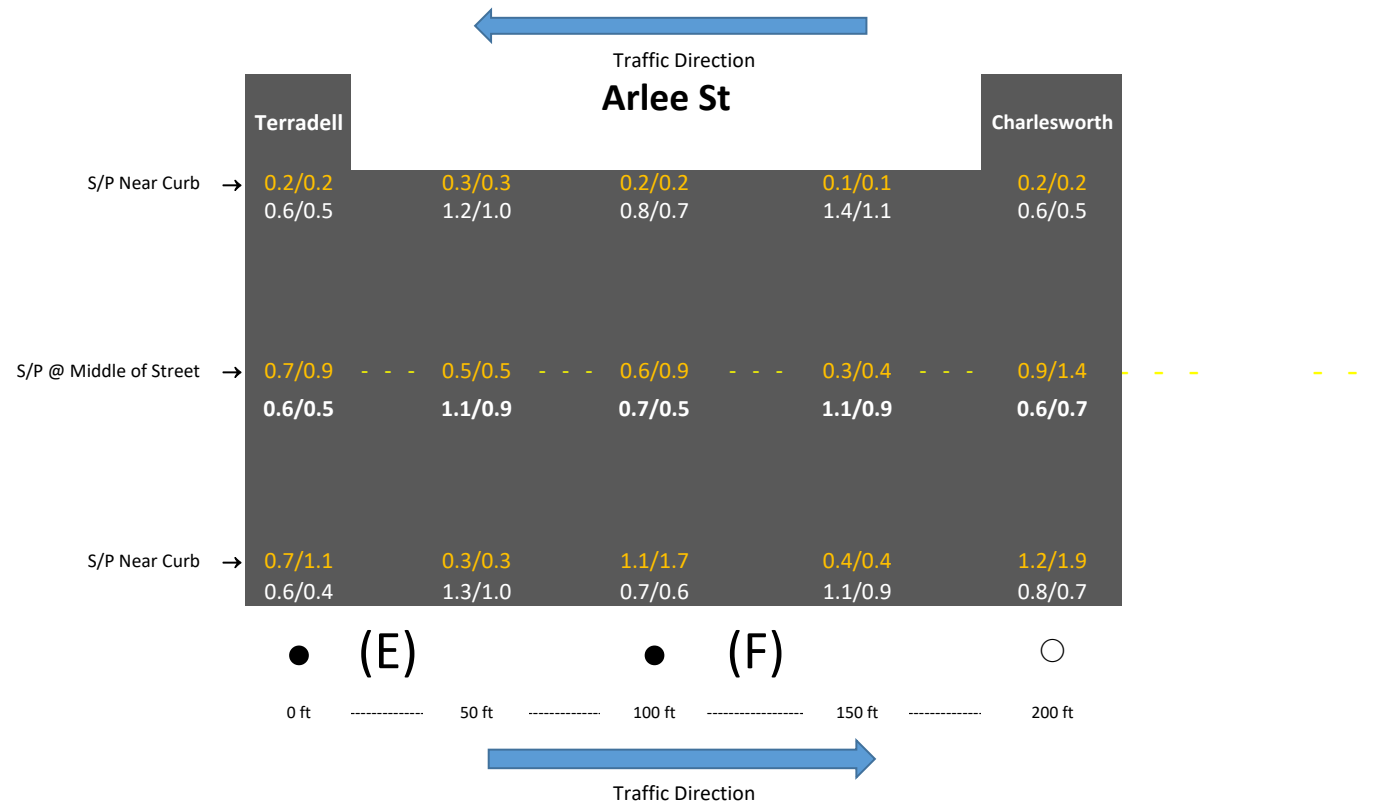


Existing 100W HPS/
Philips 38W LED Pilot

Scotopic/Photopic Reading post-LED pilot installation

Photometric Report

Arlee and Terradell - Existing 100W HPS



Legend



Fixture not included in pilot installation

Scotopic/Photopic Reading pre-LED pilot installation

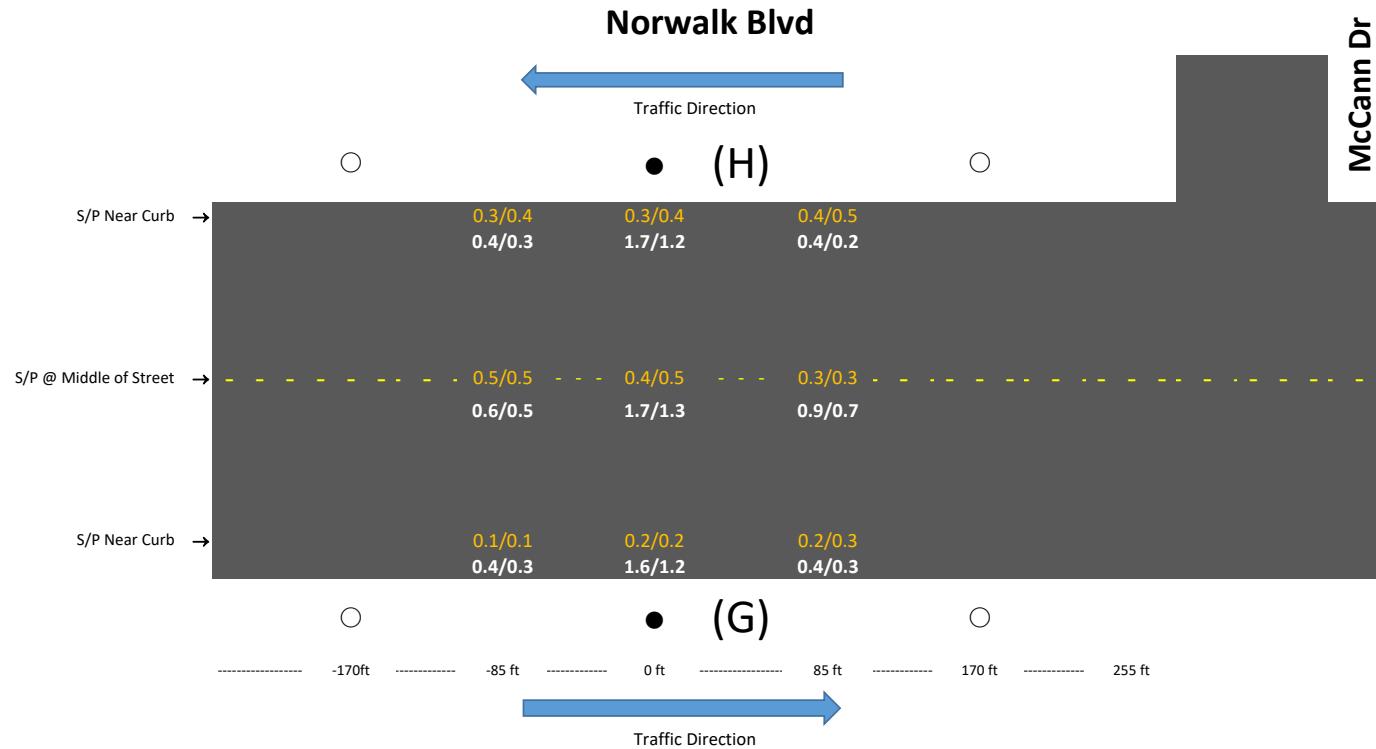


Existing 100W HPS/
Cooper 42W LED Pilot

Scotopic/Photopic Reading post-LED pilot installation

Photometric Report

Norwalk Blvd @ McCann Dr

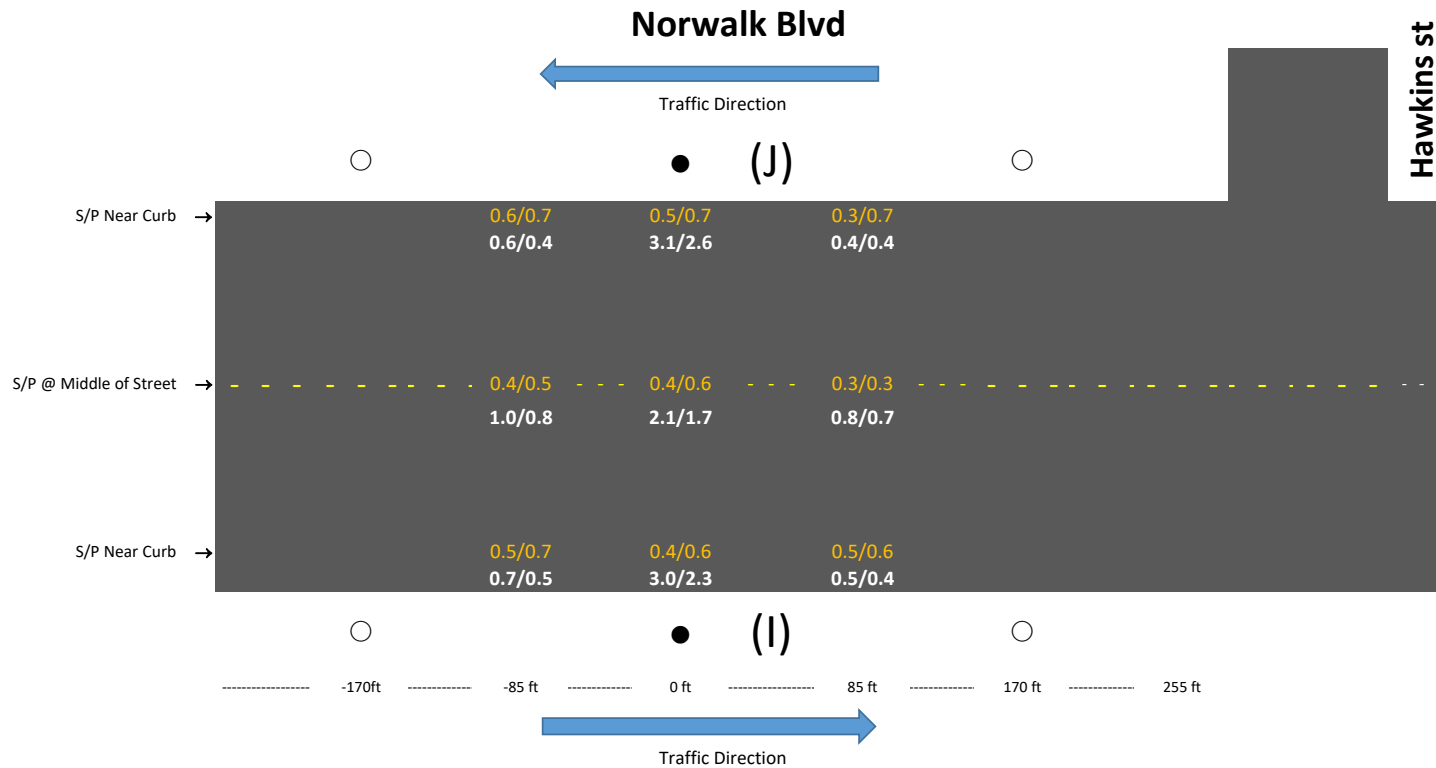


Legend	
○	Fixture not included in pilot installation
●	Existing 200W HPS/ GE 84W LED Pilot*

*Installation data notes 0 voltage at locations G and H

Photometric Report

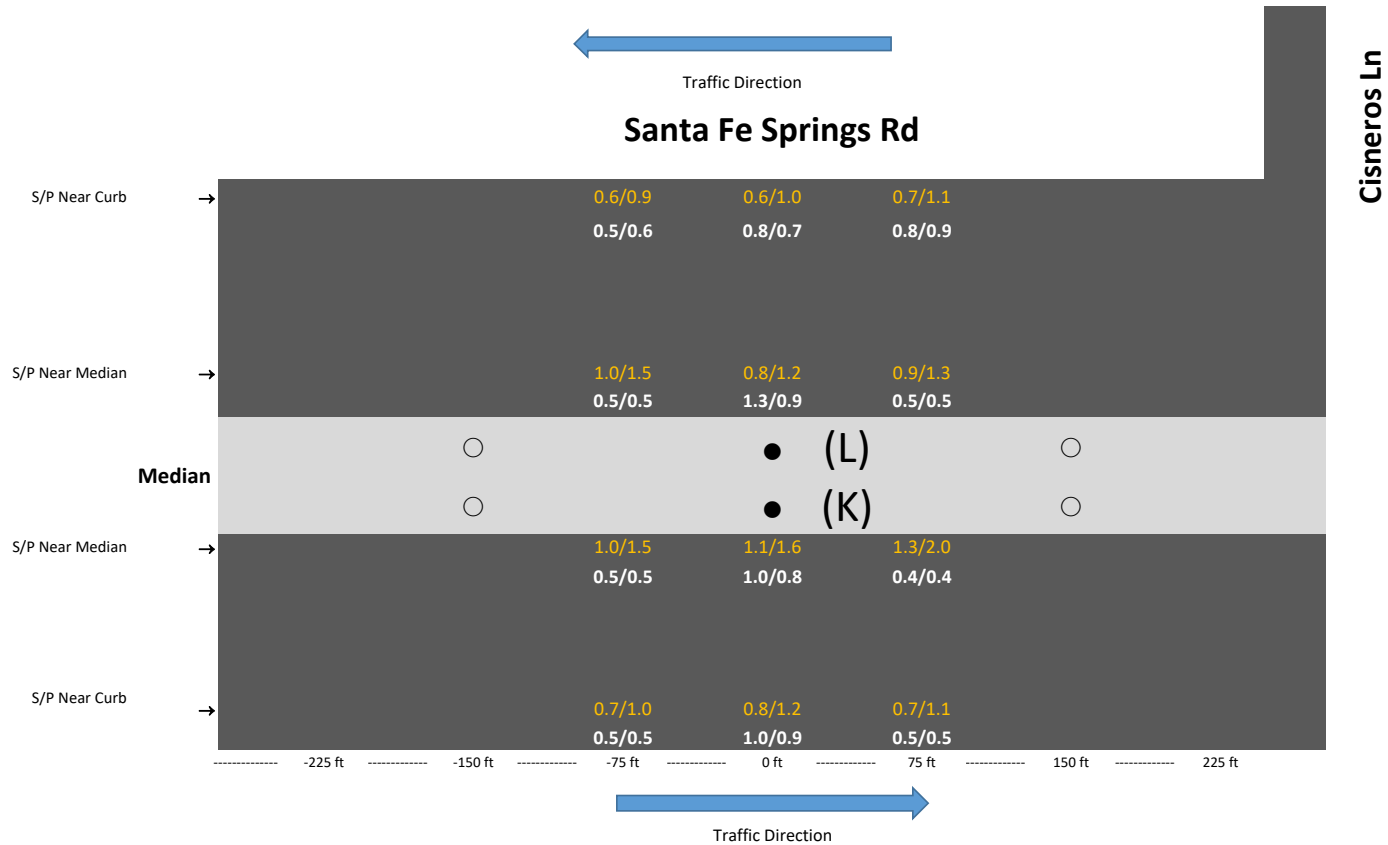
Norwalk Blvd @ Hawkins St



Legend	
○	Fixture not included in pilot installation
●	Existing 200W HPS/ Philips 81W LED Pilot*
	Scotopic/Photopic Reading pre-LED pilot installation
	Scotopic/Photopic Reading post-LED pilot installation

*Installation data notes 0 voltage at location I

Photometric Report Santa Fe Springs Rd



Legend



Fixture not included in pilot

Scotopic/Photopic Reading pre-LED pilot installation

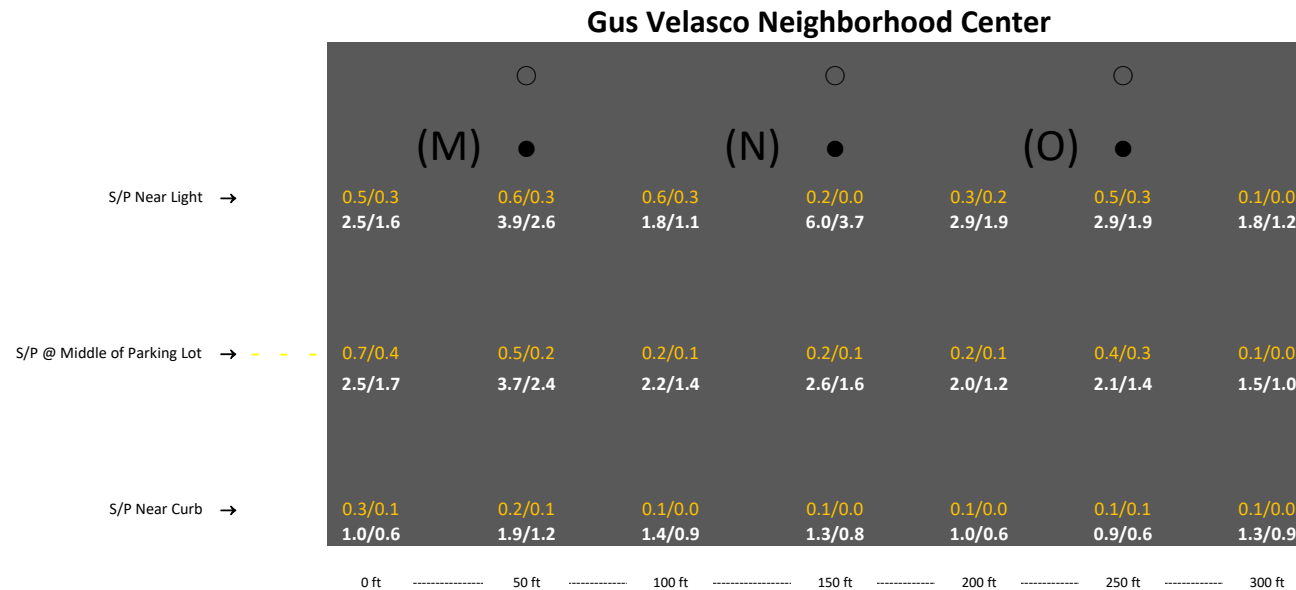


Existing 250W HPS/
Cooper 83W LED Pilot

Scotopic/Photopic Reading post-LED pilot installation

Photometric Report

Gus Velasco Center - Existing Shoeboxes



San Gabriel River Fwy

Legend	
○	Fixture Not Included in Pilot
Existing 250W Metal Halide Shoebox/	
●	M: GE 140W LED Pilot
	N: Philips 150W LED Pilot*
	O: Cooper 153W LED Pilot

S/P Reading pre-LED pilot installation

S/P Reading post-LED pilot installation

*Audit data notes location N is not functioning. Newly installed LED marked functioning properly at time of install



PHOTOMETRIC REPORT 2 FOR THE CITY OF SANTA FE SPRINGS, CA



Submitted by:

Emily Danko
Project Manager
Tanko Streetlighting, Inc.
220 Bayshore Boulevard
San Francisco, CA 94124

Submitted to:

Kevin Periman
Municipal Services Manager
City of Santa Fe Springs
12363 Emmens Way
Santa Fe Springs, CA 90670

November 30, 2020

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What are Photometric Readings?

- Photometric readings measure the brightness and quality of visible light emitted by a light source. Tanko Lighting records scotopic and photopic measurements for a comprehensive measurement.

Scotopic Values

- Scotopic values refer to how light is perceived under poorly-lit conditions, such as in a dimly lit room, and represent the sensitivity of the rods in the human eye to the light. Higher scotopic readings indicate better quality of light and an increased ability to perceive the full spectrum in darker conditions.

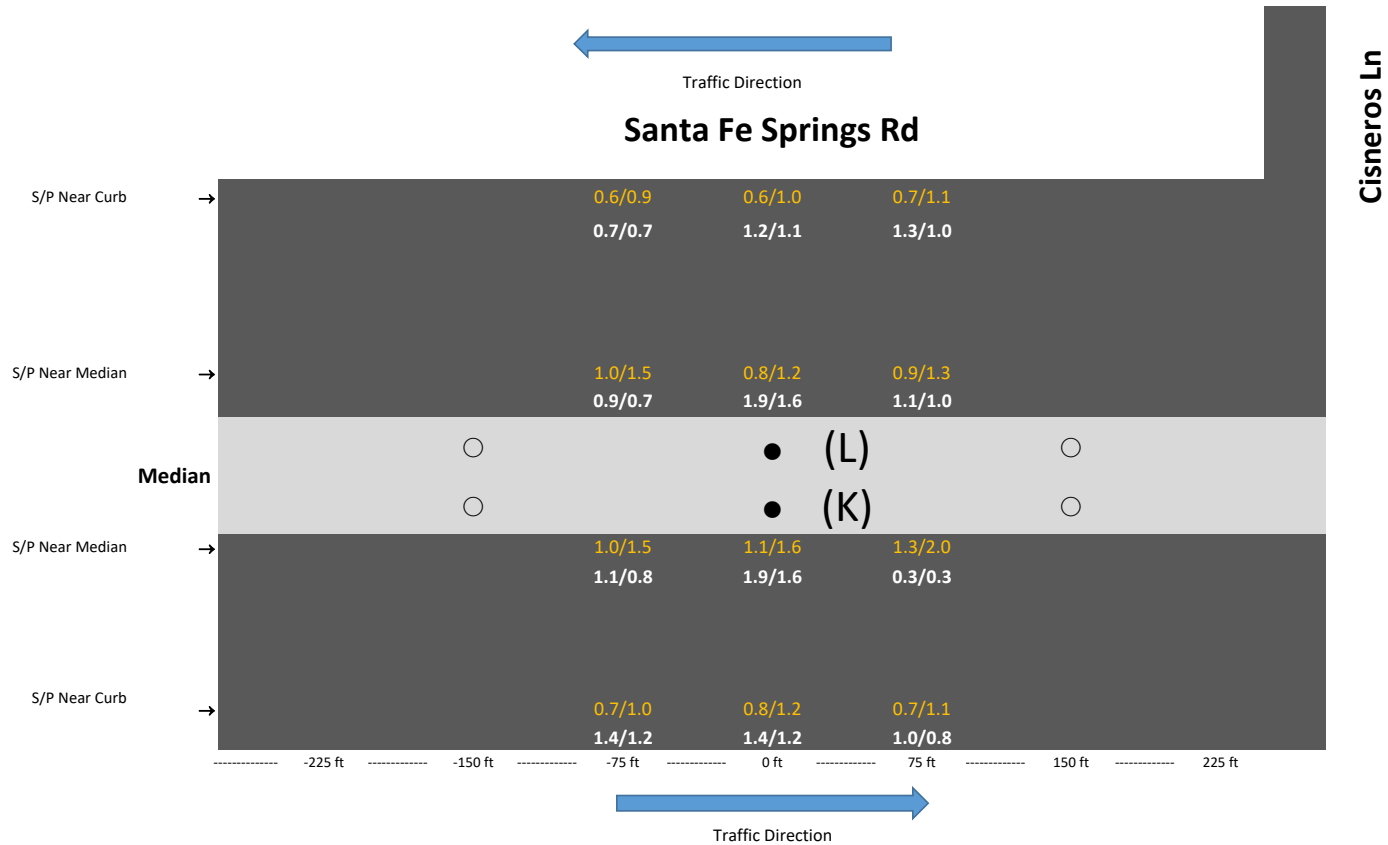
Photopic Values

- Photopic values refer to how light is perceived under well-lit conditions, such as in daylight, and represent the sensitivity of the cones in the human eye to the light. Higher photopic readings indicate higher lumen output, but not necessarily better quality light.



Photometric Report

Santa Fe Springs Rd

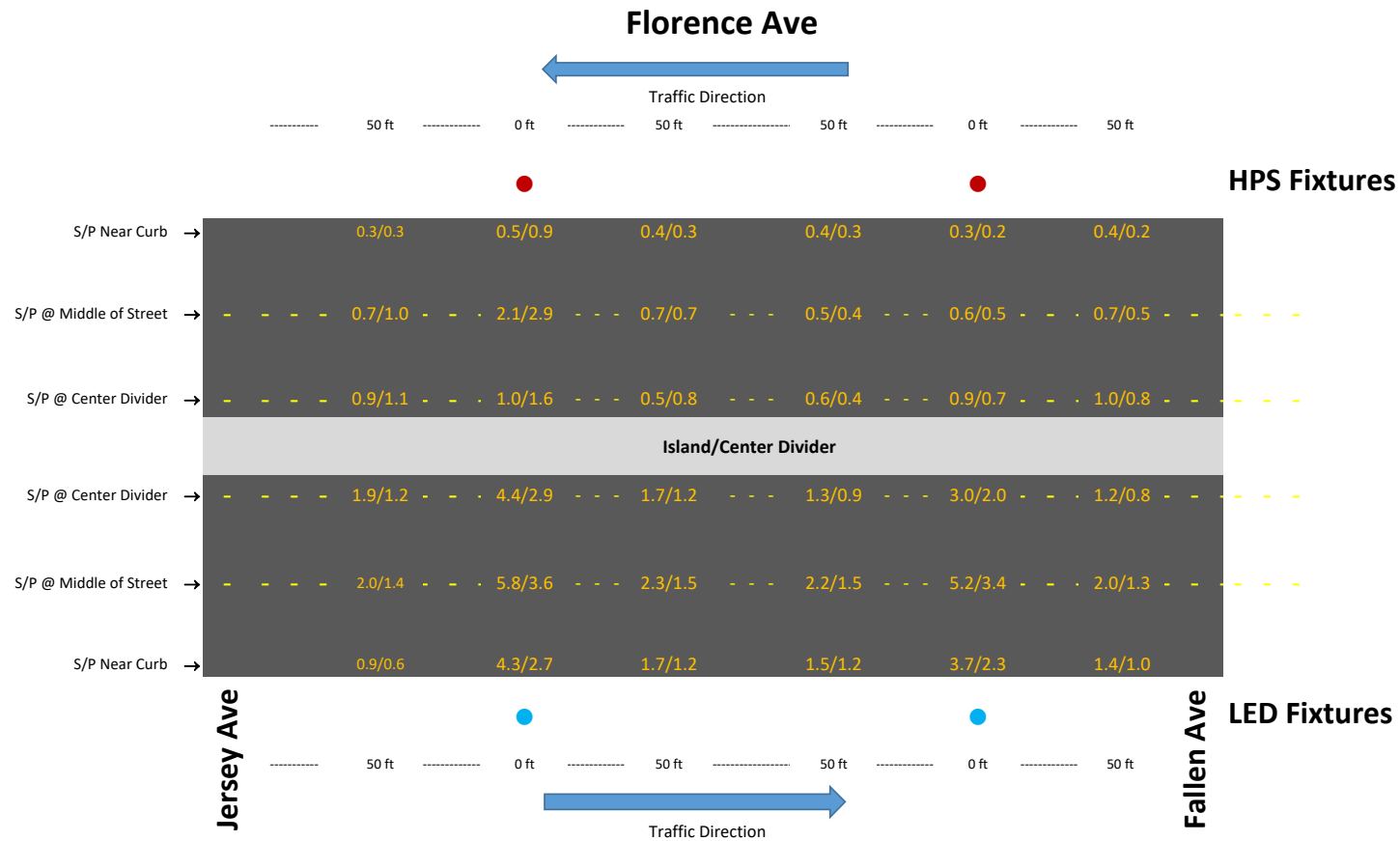


Legend

- Fixture not included in pilot
- Existing 250W HPS/Cooper 102W LED Pilot

Photometric Report

Florence Ave



Legend

LED Fixture - GE 90W Cobrahead
ERLH-0-10-B3-40-A-Gray

Existing HPS Fixture

Scotopic/Photopic Reading



GE Public Finance

GE Government Finance, Inc.
3 Capital Drive
Eden Prairie, MN 55344
USA

Samuel Clineff
Senior Vice President
Samuel.clineff@ge.com
T +1 949 838 3010
C +1 714 335 6042

11/17/2020

City of Santa Fe Springs
11710 Telegraph Rd
Santa Fe Springs, CA 90670

RE: Energy Saving Street Light Conversion Project

GE Government Finance, Inc. ("GEGF") is pleased to confirm its interest in providing financing in the approximate amount of \$965,936.00, with reference to the above transaction. A general outline of the terms and conditions and economics of our proposal is enclosed (the "Term Sheet").

As with any proposal, this letter and Term Sheet (the "Proposal") do not constitute a commitment to provide financing. This Proposal is not intended to create a binding legal obligation by either party; rather, it confirms our interest in working with you. If the Proposal is satisfactory, please acknowledge your acceptance by signing the Term Sheet in the space provided and returning the executed copy to GEGF. Upon receipt of the information as detailed in the Term Sheet, we will proceed with our review.

GEGF is a unit of General Electric Company. We have provided over \$1 Billion of tax-exempt transactions for energy related projects (including lighting / LED). GEGF has been an industry leader in providing tax-exempt financing to state and local governments, universities, ports and school districts across the country since 1985. GEGF is headquartered in Minnesota and provides focused customer service and regional expertise.

We look forward to your response. Please call me at 949-838-3010 with any questions you may have. We appreciate having the opportunity to present this Proposal to you and look forward to working with you.

Sincerely,

Samuel Clineff

Samuel Clineff
Senior Vice President



GE Public Finance, a division of GE Government Finance, Inc. is pleased to submit the following Tax-Exempt Proposal for your consideration:

Structure:	Tax-exempt equipment lease-purchase financing.
Lessee:	City of Santa Fe Springs
Lessor:	GE Government Finance, Inc. ("GEGF") and/or one or more of its affiliates and/or assigns.
Documentation:	Documentation shall include a Master Lease Agreement ("MLA"), one or more Equipment Schedules thereto (each such Equipment Schedule, together with the terms and conditions of the MLA incorporated by reference therein, a "Lease"), an opinion of Lessee's counsel and certificates as are reasonably necessary to evidence and carry out the transaction and, at Lessee's option, an Escrow Agreement. Lessor will prepare the documentation.
Equipment	Energy Saving Street Light Conversion Project.
Funding Amount:	\$965,936.00
Estimated Closing Date:	TBD
Lease Term:	Option 1: 7 Years Option 2: 10 Years
Fixed Interest Rate:	<p>The Fixed Interest Rate as of the date of this proposal is 2.99%.</p> <p>The Fixed Interest Rate set forth above reflects the current 10-year Swap Rate¹ of 0.89% (the "Initial Rate") as of November 13, 2020 (the "Initial Quote Date") and Lessor will adjust the Fixed Interest Rate Three (3) days prior to the funding date. Also, Lessor has the right to make an additional adjustment prior to the funding date to preserve the net economic return assumed by Lessor. Interest rate floor of 2.99%</p> <p>¹ "Swap Rate" means the interest rate for swaps that most closely approximates the average term of the financing term as published by the Intercontinental Exchange (NYSE: ICE) in its Ice Benchmark Administration Report entitled "ICE Swap Rate Historical Rates" currently available online at https://www.theice.com/marketdata/reports/180 (Series /Run USD Rates 1100) or such other nationally recognized reporting source or publication as Lender may specify.</p>
Monthly Payments:	<p>Lessee will be required to make annual payments, each in arrears, comprised of principal and interest.</p> <p>Option 1: \$154,980.44 Option 2: \$113,179.38</p>

**Ownership for Tax
Purposes and Grant of
Security Interest:**

For federal income tax purposes, Lessee and Lessor agree that it is their mutual intention that Lessee shall be considered the owner of the Equipment.

A first priority security interest in all of the Equipment will be granted to Lessor and the Equipment may be subject to no other liens. If the Equipment is deemed to be a fixture, Lessor will require a legal description of the premises where the Equipment is located in order that the necessary fixture filings may be made to create and preserve Lessor's first priority security interest. Lessor may also require that a landlord or mortgagee waiver be executed, as applicable.

Lessee hereby irrevocably authorizes Lessor and its assigns at any time and from time to time to file in any jurisdiction any initial financing statements and amendments thereto that identify the Equipment, facility or any other assets of Lessee subject to the financing described herein.

Net Lease:

All obligations, costs and responsibilities associated with ownership of the Equipment will be borne by Lessee, including insurance, maintenance, and applicable taxes. Lessee will be responsible for making payments in all circumstances (except in the event of abatement, if applicable).

Escrow Structure:

At Lessee's request, Lessor will deposit the Funding Amount into an escrow account with an escrow agent selected by Lessee and approved by Lessor. Lessee will be responsible for any escrow agent fees and any other expenses associated with the establishment of the escrow account. Lessor shall be granted a first priority security interest in the escrow account. Interest accrual under each Lease will commence upon deposit of the Funding Amount into escrow. Interest earnings on investments in the escrow account will inure to the benefit of Lessee.

Legal Opinion:

Counsel to Lessee shall provide an opinion as to the legality, enforceability, authority, title and execution and effect of all transaction documents in form and substance satisfactory to Lessor. A tax opinion may be required, depending on the specifics of the transaction.

Abatement:

During any period in which, by reason of material damage or destruction or taking under the power of eminent domain (or sale to any entity threatening the use of such power) with respect to the Equipment, there is substantial interference with Lessee's use and possession of the Equipment, the Lease payments due under the Lease with respect to such Equipment shall be abated proportionately in whole or in part, in accordance with lease abatement provisions to be set forth in each Lease.

Prepayment:

Lessee shall have the right to prepay in full, but not in part, the entire principal balance of the Lease, plus interest and any other additional charges due under the Lease, upon payment of an additional sum as a premium equal to five percent (5%) in year one, four percent (4%) in year two, three percent (3%) in year three, two percent (2%) in year four, and one percent (1%) thereafter of the unpaid principal balance.

Assignment:

Lessor may assign its rights to enter into a Lease and its rights as Lessor under a Lease without the consent of Lessee.

Conditions:

Any funding is further conditioned upon (i) the execution by Lessee and all

other parties involved in the proposed transaction of all documentation required by Lessor in form and substance satisfactory to Lessor, each in its sole discretion; (ii) in cases where any or all Equipment has not been specifically identified herein, Lessor retains the right to, in its sole discretion, accept or reject any Equipment, once it is identified, for financing under the proposed Transaction; and (iii) the accuracy and completeness of all financial and operating information delivered to Lessor regarding Lessee.

Lessee Identifying Documents:

To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify and record information that identifies each person who enters into a transaction with Lessor. What this means for the Lessee, any guarantor or other Lessee is that when a transaction contemplated hereunder is consummated, Lessor will ask for the name, address, and other information of the Lessee, any guarantor or such other Lessee that will allow Lessor to identify such parties. Lessor may also ask to see identifying documents.

This Proposal is an expression by us of our interest in considering a transaction on the general terms and conditions outlined above (the "Transaction"). This Proposal does not create any binding legal obligation on the part of either party. **THIS PROPOSAL IS NOT, AND IS NOT TO BE CONSTRUED AS, A COMMITMENT BY US OR ANY OF OUR AFFILIATES, SUBSIDIARIES OR ASSIGNEES TO ENTER INTO THE PROPOSED TRANSACTION.** This Proposal is delivered at a time when we have not undertaken our full business, credit, investment and legal due diligence and analysis nor obtained the approval of our internal credit, pricing, financial, investment and other authorities. Accordingly, this Proposal is to be used only as the basis for continued discussion and, except for the provisions concerning confidentiality set forth herein, does not constitute a commitment of ours or our affiliates, subsidiaries or assignees, nor shall it be deemed to obligate us or our affiliates, subsidiaries or assignees in any manner whatsoever, it being understood that this Proposal may be modified, withdrawn, terminated, or made subject to additional terms and conditions not set forth in this Proposal as a result of our continuing due diligence, changes to the proposed Transaction, changes in market conditions, changes in applicable laws, changes to the business, operations, prospects or condition (financial or otherwise) of Lessee or any guarantor or any other lessee or otherwise. This Proposal supersedes all prior discussions, writings, indications of interest and proposals previously delivered to you or your representatives with respect to the proposed Transaction. You acknowledge that should a commitment be issued by us for the proposed Transaction, it would be in a separate writing explicitly identified as a commitment (subject to the terms set forth therein), and without in any way limiting the foregoing, any subsequent communication of credit approval for the proposed Transaction, which is not explicitly identified as a commitment, shall not be construed as a commitment. **WE DO NOT COMMUNICATE COMMITMENTS ORALLY, AND YOU SHOULD NOT RELY ON ANY ORAL COMMUNICATION OF COMMITMENT.**

The information contained in this Proposal is confidential and proprietary and may not be distributed to any person or entity without our prior written consent (other than Lessee's employees, officers, directors or advisors who have a need to know such information for purposes of evaluating the Transaction proposed hereunder and are obligated to keep such information confidential).

Neither Lessor nor its affiliates are acting as "municipal advisors" within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the rules and regulations promulgated thereunder. In this regard, Lessee hereby acknowledges and agrees that: (i) Lessor is proposing to provide financing, and any information or services related thereto, to Lessee solely as an **arm's length counterparty** and, as such, Lessor has interests that may differ from the interests of Lessee, including the amount or nature of interest rates, amortization schedules and covenants applicable to the proposed Transaction; (ii) if the proposed Transaction closes, Lessor will receive interest or other payments from Lessee, as outlined in the foregoing terms and conditions, as compensation for providing the proposed financing to Lessee;

(iii) **neither Lessor nor any of its affiliates are an advisor or fiduciary** to Lessee with respect to the proposed Transaction; (iv) in connection with the provision of any services pursuant to the proposed Transaction, there is **no agreement**, direct or indirect, between Lessee (including the officials, management, employees or agents thereof) and Lessor or any of its affiliates for Lessor or any of its affiliates to provide advice to Lessee; (v) **neither Lessor nor any of its affiliates is acting for direct or indirect compensation to solicit** Lessee on behalf of an unaffiliated broker, dealer, municipal securities dealer, municipal advisor, or investment adviser for the purpose of obtaining or retaining an engagement by Lessee for or in connection with municipal financial products, the issuance of municipal securities, or of an investment adviser to provide investment advisory services to or on behalf of Lessee; and (vi) nothing herein is to be construed as constituting tax, accounting, financial or legal advice by Lessor or any of its affiliates to Lessee. Lessee should consult with its financial, accounting and legal advisors regarding any services proposed to be provided by Lessor or any of its affiliates, and, if not currently advised, Lessee is urged to seek independent advisors in connection with the proposed Transaction.

We look forward to your favorable review and response. Upon receipt of an executed copy of this Proposal, together with your check for the Proposal Deposit, we shall promptly proceed with our investment approval process. For the investment review, please submit the following:

- Audited financial statements for the past three fiscal years;
- Comparative interim financial statements for the current fiscal year

By accepting this Proposal, Lessee acknowledges that this letter contains the entire proposal (superseding all previous representations and agreements, either oral or written) and that there are no promises, agreements or understandings outside of this letter.

Thank you for your consideration of GE Government Finance, Inc. If you have any questions, please call me at 949-838-3010.

Sincerely yours,
GE Government Finance, Inc.

By: *Samuel Clineff*

Name: Samuel Clineff
Title: Senior Vice President

NOTICE

The Federal Equal Credit Opportunity Act prohibits creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age (provided the applicant has the capacity to enter into a binding contract), because all or part of the applicant's income derives from any public assistance program, or because the applicant has in good faith exercised any right under the Consumer Credit Protection Act. The federal agency that administers compliance with this law is the Federal Trade Commission, Equal Credit Opportunity, Washington, DC 20580.



Summary of Financial Analysis - Santa Fe Springs, CA

November 18, 2020

Project Overview

Total Cost (<i>Ownership + Conversion</i>)	\$965,936
20 Year Savings	\$5,719,134
Payback Period (<i>Energy Savings Only</i>)	5.23 years
Payback Period (<i>Energy + Maintenance Savings</i>)	4.12 years

Project Costs

LED Conversion Cost (<i>estimated costs for turnkey services, including labor/material</i>)	\$965,936
---	-----------

Year 1 Analysis	Existing	New	Savings
Energy Usage [kWh]	2,853,292	1,105,467	1,747,825
Energy Usage Cost	\$463,732	\$263,159	\$200,573
Maintenance Cost	\$127,428	\$72,816	\$54,612
Total	\$591,160	\$335,975	\$255,185

20 Year Analysis	Existing	New	Savings
Energy Usage [kWh]	57,065,843	22,109,339	34,956,504
Energy Cost	\$10,210,918	\$5,794,504	\$4,416,414
Maintenance Cost	\$3,794,561	\$2,491,842	\$1,302,719
Total	\$14,005,479	\$8,286,346	\$5,719,134

Finance Option

Loan Payments	\$1,071,743
Total Interest Paid	\$105,807
Financing Rate (APR)	2.99%
Financing Term (Years)	7 years

Assumptions

Quantity of Lights Included in Analysis	3,412
Buyout Cost per Pole	\$0
Tariff Rate of Old System	LS-2
Tariff Rate of New System	LS-2



LEASE PROPOSAL PREPARED FOR

The City Santa Fe Springs

IS PRESENTED ON THIS DATE

05/20/2021

BY

FIFTH THIRD BANK, NATIONAL ASSOCIATION

500 Newport Center Drive

Suite 750

Newport Beach, CA 92660

Phone: (714) 335-6042

e-mail: Samuel.clineff@53.com

Proposal Prepared

BY: Samuel Clineff

Samuel Clineff

Vice President

Fifth Third Bank, National Association

05/20/2021

City of Santa Fe Springs
11710 Telegraph Rd
Santa Fe Springs, CA 90670

Fifth Third Bank, National Association, its participants, or assigns (“Fifth Third Bank” or “Lessor”) present the following lease proposal for the lease of Equipment, specified at locations in the United States, to The City of Santa Fe Springs (“Lessee”) in an amount up to \$965,936.00 (“Equipment Cost”). This Proposal is subject to the terms and conditions described in this letter and the attached Exhibit “A” (“Lease Facility” or “Lease”).

In today’s complex business environment, the demand for a strong financial partner is tremendous. Fifth Third Bank’s, Fifth Third Equipment Finance ranks among the top Equipment Finance Companies in the United States.

With a full service bank in excess of \$110 Billion in assets behind us, and over \$5 Billion in leased assets, our team can assess your needs and provide a comprehensive financial package - something few independent leasing companies can provide! Our “Pledge of Service”: guarantee our clients prompt, professional service and reliability, allowing you to take care of business. Our list of Products and their benefits are many.

Products		Benefits	
○ Municipal leases	○ Tax exempt leases for non-profits	○ Reduces Issuance cost	○ Longer and more flexible terms
○ Bank Qualified	○ Escrow Feature	○ Conserves capital	○ 100% financing
○ Syndicated - Non-Bank Qualified	○ Land and Building Financing Available	○ Fixed and Variable payments	○ Expands capital budgets
○ QTE True leases		○ Firm Term & Non-Appropriation	○ Creates liquidity

Finding solutions to your equipment finance needs is what Fifth Third Equipment Finance does best. Whether its computers, transportation, production equipment or office furniture, let the professionals at the Fifth Third Equipment Finance be your partner, and we’ll work hard to be **The only bank you’ll ever need for Equipment Financing!**

This letter is not a commitment to undertake this financing. The appropriate officers of Lessor can issue a commitment only after full credit and economic review and subsequent approval. Lessor reserves the right to decline the issuance of a commitment for any reason whatsoever. If Lessor issues a commitment, it may modify the terms of this proposal and may add such additional requirements (including, but not limited to, financial covenants, requirements of guaranties or other credit support, and/or special equipment maintenance and return conditions), as Lessor may deem advisable. A commitment shall not be binding on Lessor unless it is in writing and signed by Lessor. Lessor will have the sole right to assign this proposal or any lease between Lessee and Lessor. The terms and conditions outlined herein are not all inclusive. Any approval of the Lease Facility described herein is subject to no material adverse change in the Lessee's financial or business condition. If this proposal letter is satisfactory to Lessee, please sign this proposal and initial the Exhibit(s).

Your acceptance of this proposal represents your intent to exclusively move forward with Lessor in order to expedite this transaction. Please feel free to contact me at 714-335-6042 or samuel.clineff@53.com if you have any questions, or would like to discuss this proposal in greater detail. Upon notification of acceptance, we will promptly begin the approval process so that we may be in a position to finalize this transaction with you. Thank you for allowing us the opportunity to submit this proposal to you.

Yours very truly,

FIFTH THIRD BANK, NATIONAL ASSOCIATION

Samuel Clineff, Vice President

Leasing Officer Name, Title

Accepted: _____

By: _____

Title: _____

Exhibit 'A'

Lease Structure:	Municipal Lease
Lessor:	Fifth Third Bank, National Association, its affiliates and/or assigns Transaction to be documented through Pinnacle Public Finance.
Lessee:	Municipal Entity
Equipment:	Street Lighting Project
Equipment Cost:	Not to exceed \$965,936.00
Delivery And Acceptance Date:	TBD
Base Term Commencement Date:	TBD
Base Term:	7 Year or 10 years
Rent:	7 Years - \$154,980.44 10 Years - \$113,179.38
Escrow Period:	Lessee will be required to make payments during the Escrow Period, which is based on the Interest Rate pricing illustrated below.
Base Term:	Lessee will be required to make consecutive annual payments, due in arrears.
Interest Rate:	7 Year Term - Currently, the rate as of May 20, 2021 is 2.99%, which is the product of 225bps over the Bloomberg weighted average life Swap Rate; then modified for tax-exempt status. Interest rate floor of 2.99%. 10 Year Term - Currently, the rate as of May 20, 2021 is 2.99%, which is the product of 191bps over the Bloomberg weighted average life Swap Rate;

then modified for tax-exempt status. Interest rate floor of 2.99%.

End Of Term:

The lease is considered to be fully-amortizing, in that, the Lessee will retain ownership of the equipment upon full performance of the terms and conditions of the lease.

Prepayment:

Lessee shall be allowed to prepay the lease in accordance with the Termination Schedule provided at the time of lease commencement. Lessee may prepay all, but not less than all, of the remaining principal balance plus a prepayment fee equal to: 5% in year one, 4% in year two, 3% in year three, 2% in year four, and 1% thereafter.

Type Of Lease:

The Lease will be net, with all Lease payment obligations absolute, unconditional, and all payments from Lessee will not be subject to any right of set-off. The Lessee will be responsible for (i) any and all costs, fees, charges and expenses in connection with the Equipment, including those related to acquisition, use, possession, operation, insuring, maintenance, repair and return of the Equipment, and (ii) all taxes, duties, charges and other levies of any type.

Tax Benefits:

During the term of the Lease, Lessor agrees that it shall not claim depreciation benefits or other benefits of being owner of the Equipment under the Internal Revenue

Code of 1986 or any state income tax laws.

Documentation:

It is anticipated that the required Lease documentation will include but not be limited to an Equipment Lease Agreement, Delivery and Acceptance Certificate, Board Resolutions, Incumbency Certificates, Legal Opinions, and other documents as required by Lessor. The Lease documentation will contain terms and conditions as are customary for transactions of this type and under the structure reviewed in this letter.

Non-Appropriation:

In the event that funds are not appropriated for each fiscal year, the Lease is subject to termination by the Lessee.

Bank Qualification:

The Lessee will be required to certify that it does not reasonably expect to issue more than \$10,000,000 in tax-exempt debt during the current calendar year as defined in Section 265 (b)(3) of the Internal Revenue Code.

Cost And Expenses:

The Lessee agrees to pay all costs and expenses incurred in connection with the due diligence review, documentation, and closing of this Lease including, but not limited to, counsel fees, appraisal(s), lien searches, filing fees, and all other out-of-pocket expense relating to the Lease.

Processing Fee:

Lessor shall charge a Processing Fee of \$800.00 per schedule, and will be

Insurance:

invoice at each Lease commencement.

The Lessee will provide a certificate of insurance as evidence of all required physical damage, business interruption, and liability insurance coverage in an amount and by an insurance carrier satisfactory to the Lessor. The Lessor must be listed on the policy as sole loss payee and additional insured on the certificate of insurance, which is to be provided to the Lessor prior to closing.

Acceptance Of Proposal:

Lessee is asked to acknowledge its acceptance of this Lease proposal and its application to Lessor by signing and returning the enclosed copy of this letter to Lessor by 05/24/2021.

Reporting:

Lessee will be required to provide the Lessor with such financial and operating information as Bank may request from time to time on Lessee. As a minimum, Lessee shall provide within one-hundred-twenty (120) days of yearend audited financial statements (including cash flow statements) and within thirty (30) days of quarter end internally prepared financial statements.

Proposal Only:

This letter is not a commitment to undertake this financing. A commitment can be issued only after full credit and economic review and subsequent approval by the appropriate officers of Lessor. Lessor reserves

the right to decline the issuance of a commitment for any reason whatsoever. If a commitment is issued by Lessor, it may modify the terms of this proposal and may add such additional requirements as Lessor may deem advisable. A commitment shall not be binding on Lessor unless it is in writing and signed by Lessor.

Customer Identification Program:

In accordance with the USA PATRIOT Act, Federal law requires all financial institutions to obtain, verify and record information that identifies each individual or entity opening an account. This includes all personal and commercial accounts including loan and deposit accounts, as well as trust, brokerage, insurance and investment management accounts.

What This Means To Our Customers – When you open an account, a Fifth Third employee will ask for your name, address, date of birth (if applicable) and other information that will allow Fifth Third to identify you. You will also be asked to show your driver's license or other identifying documents. We are required to follow this procedure each time an account is opened, even if you are a current customer of Fifth Third.



City of Santa Fe Springs

City Council

ITEM NO. 15

June 15, 2021

NEW BUSINESS

Status Update of Capital Improvement Projects

RECOMMENDATION

- Receive and file the report.

BACKGROUND

This report is for informational purposes only. Staff will make a presentation highlighting a listing of current active projects. The projects will be separated into two groups: in construction and under design. The project details will include the estimated start and completion dates as well.

A handwritten signature in blue ink, appearing to read "Raymond R. Cruz".

Raymond R. Cruz
City Manager

Attachments:

1. Exhibit A: Capital Improvement Projects Update 2021
2. Exhibit B: Gantt Chart of CIP estimated schedule

Report Submitted By:

Noe Negrete
Director of Public Works

A handwritten signature in purple ink, appearing to read "Noe Negrete".

Date of Report: June 10, 2021

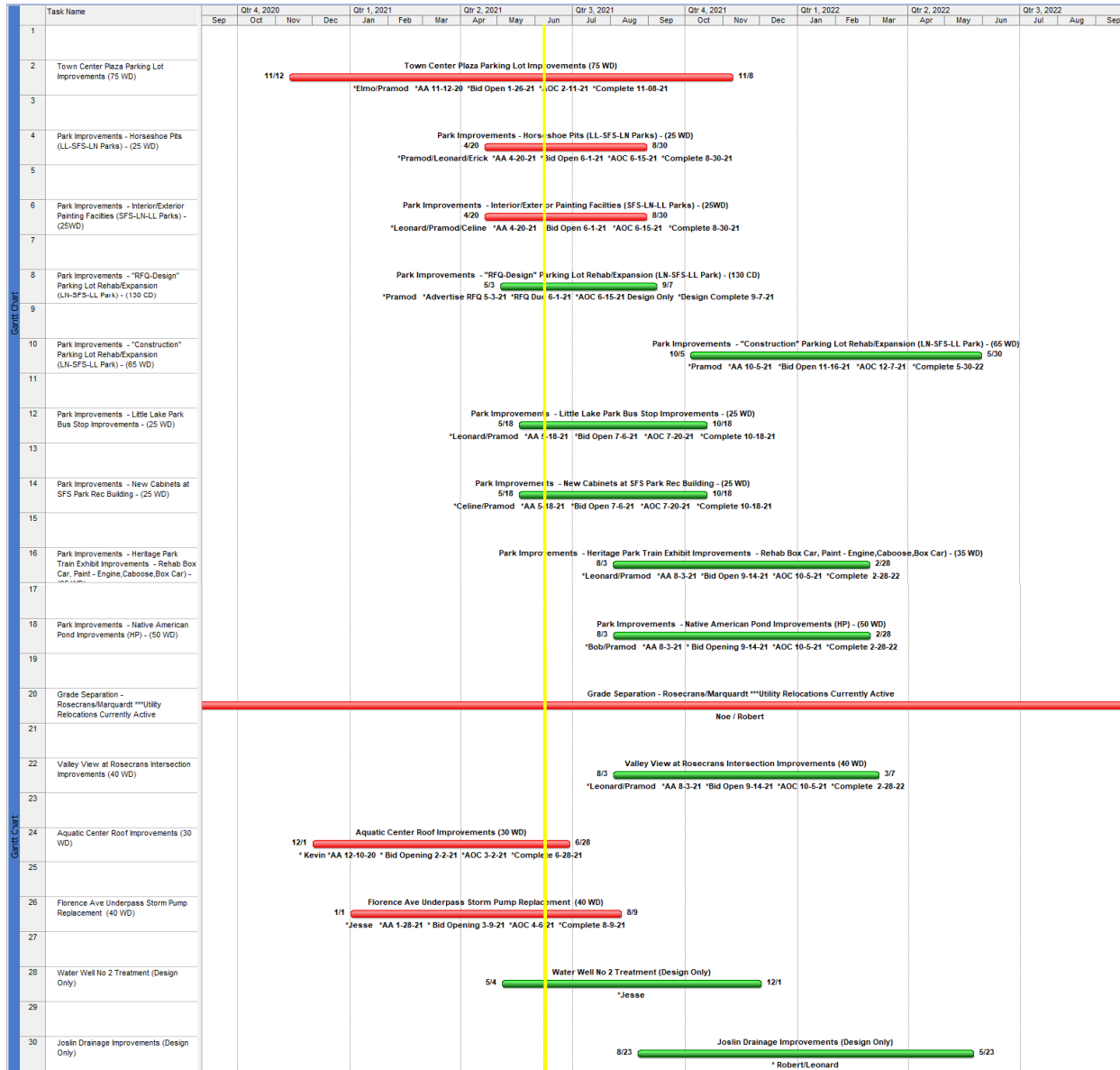
Capital Improvement Projects Update 2021

Capital Improvement Projects in Construction 2021

- 1 Town Center Plaza Parking Lot Improvements (75 WD)
- 2 Park Improvements - Horseshoe Pits (LL-SFS-LN Parks) - (25 WD)
- 3 Park Improvements - Interior/Exterior Painting Facilities (SFS-LN-LL Parks) - (25WD)
- 4 Grade Separation - Rosecrans/Marquardt ***Utility Relocations Currently Active
- 5 Aquatic Center Roof Improvements (30 WD)
- 6 Florence Ave Underpass Storm Pump Replacement (40 WD)
- 7 Park Improvements - "RFQ-Design" Parking Lot Rehab/Expansion (LN-SFS-LL Park) - (130 WD)

Capital Improvement Projects in Design or Out to Bid 2021

- 1 Park Improvements - "Construction" Parking Lot Rehab/Expansion (LN-SFS-LL Park) - (65 WD)
- 2 Park Improvements - Little Lake Park Bus Stop Improvements - (25 WD)
- 3 Park Improvements - New Cabinets at SFS Park Rec Building - (25 WD)
- 4 Park Improvements - Heritage Park Train Exhibit Improvements - Rehab Box Car, Paint - Engine,Caboose,Box Car) - (35 WD)
- 5 Park Improvements - Native American Pond Improvements (HP) - (50 WD)
- 6 Valley View at Rosecrans Intersection Improvements (40 WD)
- 7 Water Well No 2 Treatment (Design Only)
- 8 Joslin Drainage Improvements (Design Only)



CIP Update 6-8-21



City of Santa Fe Springs

City Council Meeting

ITEM NO. 16

June 15, 2021

NEW BUSINESS

On-Call Professional Engineering Services for the Design of City Parks Parking Lot Rehabilitation Project (Los Nietos, Santa Fe Springs and Little Lake Parks) – Award of Contracts

RECOMMENDATION

- Accept the Request For Quotes;
- Award Contracts to JMDiaz, Inc. from the City of Industry, California for the Design of Los Nietos Park and Santa Fe Springs Park Parking Lots in the following amounts respectively: \$70,502 and \$79,068;
- Award a Contract to Coory Engineering from Orange, California for the Design of Little Lake Park Parking Lot in the amount of \$91,040; and
- Authorize the Director of Public Works to execute the task order with JMDiaz, Inc. and Coory Engineering.

BACKGROUND

The City Council at their April 6, 2021 meeting awarded contracts to each of the twenty-one (21) Engineering Consulting Firms for the On-Call Professional Engineering Services.

The Public Works Engineering staff solicited a Request For Quote (RFQ) from the approved list of qualified Engineering firms (Consultants) to provide On-Call Professional Engineering Services for the design of the Parking Lot Rehabilitations located at Los Nietos Park, Santa Fe Springs Park and Little Lake Park.

On June 1, 2021, a total of four (4) proposals were received. A three-member evaluation team reviewed each proposal based on project-specific criteria, such as the firm's and project managers experience with similar projects, project team qualifications, understanding of the work to be done and firm's relevant project references, and cost proposal. As a reminder, cost is a factor, but professional services are awarded to the consultant(s) deemed most qualified.

The City received RFQ's from the following Engineering Consulting Firms and their cost proposals are shown accordingly.

	<u>Little Lake Park</u>	<u>SFS Park</u>	<u>Los Nietos Park</u>
1. JMDiaz, Inc.	\$87,508	\$79,068	\$70,502
2. Coory Engineering	\$91,040	\$69,710	\$54,770
3. BKF Engineers	\$118,000	\$98,000	\$94,000
4. PSOMAS	\$195,875	\$163,565	\$141,715

Report Submitted By:

Noe Negrete
Director of Public Works

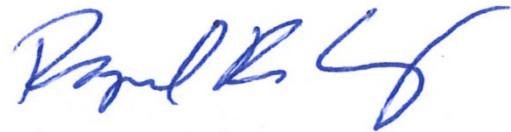
A handwritten signature in blue ink, appearing to be "N Negrete", is written over the printed name and title.

Date of Report: June 10, 2021

The evaluation team consisted of Robert Garcia (Capital Improvement Projects Manager), and Leonard Lui (Assistant Civil Engineer) and Cecilia Amaya (Management Analyst). Attached is a summary of the evaluation teams' rankings of the proposals. The proposals submitted to the City and the evaluation score sheets are on file with the Public Works Department. Upon evaluating the proposals, the evaluation team recommends awarding contracts to JMDiaz, Inc. and Coory Engineering due to each of the firms being most qualified, scoring well above average and each having a specialized strength in designing parking lots. JMDiaz, Inc. will design both the Los Nietos and Santa Fe Springs Park parking lots. Coory Engineering will design the Little Lake Park parking lot.

FISCAL IMPACT

District Member Ian Calderon of the 57th Assembly District pledged financial assistance in the amount of \$2,520,000 to the City for improvements to existing City parks. On January 23, 2020, the City approved the California Natural Resources Agency to process the collection of grant funding related to the various park improvement projects. The revenues for the California Natural Resources Agency Grant Fund will cover the project design expenditures. Sufficient funding is available from the grant; therefore, no appropriation will be necessary.



Raymond R. Cruz
City Manager

Attachments:

1. Evaluation of Firm Proposals
2. Sample Task Order



Written Qualifications	1			2			3			4		
On-call Engineering Services City Parks - Parking Lots Rehabilitation	JMDiaz, Inc.			Coory Engineering			BKF			Psomas		
Criteria	Reviewer #1	Reviewer #2	Reviewer #3	Reviewer #1	Reviewer #2	Reviewer #3	Reviewer #1	Reviewer #2	Reviewer #3	Reviewer #1	Reviewer #2	Reviewer #3
Experience and Capability of the Firm	13	15	14	13	15	8	12	12	12	12	15	8
Project Manager	16	19	18	16	15	10	13	15	10	10	10	15
Project Team	19	18	13	16	15	16	10	15	10	10	17	15
Project Understanding and Approach	20	16	18	20	18	15	10	18	15	20	18	13
Past Experience and References	10	10	10	8	5	6	7	5	8	8	5	5
Pricing	12	10	15	13	10	15	10	8	10	8	6	5
Subtotal scores	90	88	88	86	78	70	62	73	65	68	71	61
Average Score, Written Prop.:	89			78			67			67		

Firms Written Final Rankings by Average Score	
1 JMDiaz, Inc.	89
2 Coory Engineering	78
3 BKF	67
4 Psomas	67

"Total Score" equals the average scores of the written Qualifications (100 points available)

SCORING RANGES		
FAIL (0-60) Category evaluated non-responsive.	AVERAGE (71-80) Qualifications/Pricing fully satisfy requirements.	EXCEPTIONAL (91-100) Qualifications/Pricing far exceed requirements.
BELOW AVERAGE (61-70) Below minimally acceptable.	ABOVE AVERAGE (81-90) Qualifications/Pricing more than satisfy requirements.	

**ON-CALL PROFESSIONAL ENGINEERING SERVICES
TASK ORDER No. 1**

In accordance with the Contract Agreement dated April 6, 2021 as executed by the City of Santa Fe Springs (CITY), a municipal corporation and JMDiaz, Inc. (CONSULTANT), Task Order No.1 – Design Services for the Los Nietos Park Parking Lot Rehabilitation project.

Authorized Representative: **Noe Negrete, Director of Public Works/City Engineer**
Address: 11710 Telegraph Road
 City of Santa Fe Springs, California 90670
 Telephone No.: (562) 868-0511

JMDiaz, INC.:

Authorized Representative: **Juan M. Diaz, President/CEO**
Address: 18645 East Gale Avenue, Suite 212
 City of Industry, CA 91748-1363
 Telephone No.: (626) 820-1137

SERVICES/SCOPE OF WORK: The CITY of Santa Fe Springs desires Design Services for the Los Nietos Park Parking Lot Rehabilitation project.

The following is the scope of work, schedule, and fee.

The Consultant will prepare the PS&E for the Los Nietos park parking lots. The City would like to expand the width of the existing parking lot at Los Nietos Park. The intent is to increase the overall size of the parking lot to accommodate parking on both sides of the drive isle, add pedestrian drop zone in front of gymnasium and increase the total number of parking stalls. The City would like to mirror the adjacent school parking lot.

APPROXIMATE DESIGN SCHEDULE

Kick-off Meeting & Notice to Proceed	June 21, 2021
Submit 75% PS&E	July 23, 2021
Submit 90% PS&E	August 13, 2021
Submit 100% PS&E	August 27, 2021

FEE:

The Design Services for the Los Nietos Park Parking Lot Rehabilitation will be based on a Lump Sum Fee of \$70,502 per the JMDIAZ Inc. Request for Quote dated June 1, 2021.

ACCEPTANCE of the terms of Task Order No. 1 is acknowledged by the following signatures of the Authorized Representatives.

SUBMITTED BY:
CITY OF SANTA FE SPRINGS

ACCEPTED BY:
JMDIAZ Inc,

Noe Negrete, Director of Public Works

Juan M. Diaz, President/CEO

Date

Date



NEW BUSINESS

Adoption of the City's Fiscal Year 2021-22 Investment Policy

RECOMMENDATION

Adopt the Investment Policy for Fiscal Year 2021-22.

BACKGROUND

Prior to January 1, 2005, State statute required the City Treasurer to render to the City Council an annual Investment Policy ("Policy"). Although the law changed to eliminate this requirement, an annual review of the Policy for legal compliance and subsequent submittal to the City Council is a good fiscal practice.

Ms. Sarah Meacham, Director with PFM Asset Management, LLC ("PFMAM"), along with her staff, regularly meet with Staff and the City Council Finance Subcommittee to review the City's investment portfolio performance, including discussion on compliance with the City's Policy and any recommended changes to the Policy.

The Policy was originally adopted on June 25, 2015. Minor updates have been made since that time to ensure compliance with changes to the California Government Code ("Code").

At this time, PFMAM recommends two Policy updates related to Senate Bill 998, which took effect on January 1, 2021. This updates Section 8: Authorized and Suitable Investments and Section 9: Prohibited Investments. First, the Code eliminated the 10% cap of the outstanding commercial paper of any single issuer. Secondly, the Code makes reference to the California Government Code Section 53601.6. This allows the local agencies to investment up to 40% of commercial paper (prior limit was 25%), and also allows to invest in securities issued or backed by the U.S. Government that could result in zero or negative interest accrual if held to maturity, in the event of, and for the duration of, a period of negative market interest rates. Both of these changes are recommended to be incorporated into the City's Policy.

The current Policy with recommended changes along with the final version and memo from PFMAM outlining the recommended changes are attached to this report.

The current policy is in compliance with the requirements of the Code and are modeled after the recommended language endorsed by the California Municipal Treasurer's Association ("CMTA"). The proposed policy retains the existing overall investment objectives, in priority order, to be (1) safety (2) liquidity and (3) return on investment:

Safety — Safety of principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure preservation of capital in the portfolio.



City of Santa Fe Springs

City Council Meeting

June 15, 2021

Liquidity — The investment portfolio will remain sufficiently liquid to enable the City to meet its cash flow requirements.

Return on Investment — The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration with the investment risk constraints of safety and liquidity needs.

Raymond R. Cruz
City Manager

Attachment(s)

1. City Investment Policy (current Policy with revisions)
2. City Investment Policy (final version)
3. Memo from PFMAM

City of Santa Fe Springs

Investment Policy

~~June 25, 2020~~ June 15, 2021

1. Policy

The intent of the Investment Policy of City of Santa Fe Springs is to define the parameters within which funds are to be managed. In methods, procedures and practices, the policy formalizes the framework for the City's investment activities that must be exercised to ensure effective and judicious fiscal and investment management of the City's funds. The guidelines are intended to be broad enough to allow the investment officer to function properly within the parameters of responsibility and authority, yet specific enough to adequately safeguard the investment assets.

The City will invest its funds in such a manner as to comply with applicable state laws (California Government Code Section 53600, et seq. and 53630, et seq.), ensure prudent money management, provide for daily cash flow needs, and meet the City's investment objectives.

2. Scope

The Investment Policy applies to all funds and investment activities of the City except for the investment of bond proceeds, which are governed by the appropriate bond documents, and any pension or other post-employment benefit funds held in a trust that has a separate investment policy.

Except for funds in certain restricted and special funds, the City commingles its funds to maximize investment earnings and to increase efficiencies with regard to investment pricing, safekeeping and administration.

3. Prudence

The standard of prudence to be used by those authorized to invest on behalf of the City will be the "prudent investor" standard and will be applied in the context of managing an overall portfolio. The "prudent investor" standard states that:

"When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency."

4. Objectives

The primary objectives, in priority order, of the investment activities of the City are:

1. **Safety** — Safety of principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure preservation of capital in the portfolio.
2. **Liquidity** — The investment portfolio will remain sufficiently liquid to enable the City to meet its cash flow requirements.
3. **Return on Investment** — The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration with the investment risk constraints of safety and liquidity needs.

5. Delegation of Authority

The City Council's management responsibility for the investment program is hereby delegated for a one-year period to the City Treasurer. Subject to review, the City Council may renew the delegation of authority pursuant to this section each year. The City Treasurer, and the Treasurer's designees, will monitor and review all investments for consistency with this Investment Policy. The City Treasurer may delegate day-to-day investment decision making and execution authority to an investment advisor. Eligible investment advisors must be registered with the Securities and Exchange Commission (SEC) under the Investment Advisors Act of 1940. The advisor will follow the Policy and such other written instructions as are provided.

6. Ethics and Conflict of Interest

Officers and employees involved in the investment process will refrain from personal business activities that could conflict with proper execution of the investment program, or which could impair their ability to make impartial decisions. Employees and investment officials will disclose to the City Manager any material financial interests in financial institutions that conduct business within their jurisdiction, and they will further disclose any large personal financial/investment positions that could be related to the performance of the City's portfolio.

7. Authorized Financial Dealers and Institutions

The City Treasurer will maintain a list of financial dealers and institutions qualified and authorized to transact business with the City.

The purchase by the City of any investment other than those purchased directly from the issuer, will be purchased either from an institution licensed by the State as a broker-dealer, as defined in Section 25004 of the Corporations Code, who is a member of Financial Industry Regulatory Authority (FINRA), or a member of a Federally regulated securities exchange, a National or State Chartered Bank a Federal or State Association (as defined by Section 5102 of the Financial Code), or a brokerage firm designated as a Primary Government Dealer by the Federal Reserve Bank.

The City Treasurer will investigate all institutions that wish to do business with the City, in order to determine if they are adequately capitalized, make markets in securities appropriate to the City's needs, and agree to abide by the conditions set forth in the City's Investment Policy and any other guidelines that may be provided. This

will be done annually by having the financial institutions submit in writing that they have read and will abide by the City's Investment Policy and submit its most recent audited Financial Statement within 120 days of the institution's fiscal year end.

If the City has an investment advisor, the investment advisor may use its own list of authorized broker/dealers to conduct transactions on behalf of the City.

Purchase and sale of securities will be made on the basis of competitive bids and offers with a minimum of three quotes being obtained, whenever possible.

8. Authorized and Suitable Investment

The City will limit investments in any one issuer, except U.S. Treasuries, Federal Agencies, supranationals, and pooled funds (i.e., money market funds, local government investment pools, and LAIF), to no more than 5% regardless of security type.

Where this section specifies a percentage limitation for a particular security type, that percentage is applicable only at the date of purchase. Credit criteria listed in this section refers to the credit rating category (inclusive of modifiers) at the time the security is purchased. If an investment's credit rating falls below the minimum rating required at the time of purchase, the City Treasurer will perform a timely review and decide whether to sell or hold the investment.

1. **U.S. Treasuries.** United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the full faith and credit of the United States are pledged for the payment of principal and interest.
2. **U.S. Agency Obligations.** Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises.
3. **California State and Local Agency Obligations.** Obligations of the State of California or any local agency within the state, including bonds payable solely out of revenues from a revenue producing property owned, controlled or operated by the state or any local agency or by a department, board, agency or authority of the state or any local agency. Obligations eligible for investment under this subdivision with maturities in excess of one year must be rated in a rating category of "A," its equivalent, or better by a nationally recognized statistical rating organization (NRSRO). Obligations eligible for investment under this subdivision with maturities under one year must be rated in a rating category of "A-1," its equivalent, or better by a NRSRO. No more than 30% of the City's portfolio may be invested in municipal obligations (includes 4. Other State Obligations).
4. **Other State Obligations.** Registered treasury notes or bonds of any of the other 49 United States in addition to California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by a state or by a department, board, agency, or authority of any of the other 49 United States, in addition to California. Obligations eligible for investment under this subdivision with maturities in excess of one year must be rated in a rating category of "A," its equivalent, or better by a NRSRO. Obligations eligible for investment under this subdivision with maturities under one year

must be rated in a rating category “A-1,” its equivalent, or better by a NRSRO. No more than 30% of the City's portfolio may be invested in municipal obligations (includes 3. California State and Local Agency Obligations).

5. **Bankers' Acceptances.** Purchases of bankers' acceptances will have a maximum maturity of 180 days. No more than 40% of the City's portfolio may be invested in bankers' acceptances. Eligible bankers' acceptances must be rated in a rating category of “A-1,” its equivalent, or better by a NRSRO.
6. **Commercial Paper.** Commercial paper of “prime” quality of the highest ranking or of the highest letter and number rating as provided for by a NRSRO. The entity that issues the commercial paper will meet all of the following conditions in either paragraph a or paragraph b:
 - a. The entity meets the following criteria: (i) Is organized and operating in the United States as a general corporation. (ii) Has total assets in excess of five hundred million dollars (\$500,000,000). (iii) Has debt other than commercial paper, if any, that is rated in a rating category of “A,” its equivalent or higher by a NRSRO.
 - b. The entity meets the following criteria: (i) Is organized within the United States as a special purpose corporation, trust, or limited liability company. (ii) Has program wide credit enhancements including, but not limited to, over collateralization, letters of credit, or surety bond. (iii) Has commercial paper that is rated in a rating category of “A-1,” its equivalent or higher, or the equivalent, by a NRSRO.

Eligible commercial paper will have a maximum maturity of 270 days or less. No more than 25% of the City's portfolio may be invested in commercial paper. ~~The City may purchase no more than 10% of the outstanding commercial paper of any single issuer.~~

7. **Medium-Term Notes.** Medium-term notes, defined as all corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the U.S. or any state, and operating within the U.S. Medium-term notes must be rated in a rating category of “A,” its equivalent, or better by a NRSRO. No more than 30% of the City's portfolio may be invested in medium-term notes.
8. **Bank Deposits.** FDIC-insured or fully collateralized demand deposit accounts, savings accounts, market rate accounts, time certificates of deposits (“TCDs”) and other types of bank deposits in a state or national bank, savings association or federal association, federal or state credit union in California. The amount on deposit in any financial institution shall not exceed the shareholder's equity. In accordance with California Government Code Section 53635.2, to be eligible to receive City deposits, a financial institution will have received an overall rating of not less than “satisfactory” in its most recent evaluation by the appropriate federal financial supervisory agency of its record of meeting the credit needs of California's communities. The City will have a signed agreement with any depository accepting City funds per Government Code Section 53649.

The maturity of TCDs may not exceed three years. No more than 30% of the City's portfolio may be invested in TCDs.

9. **Deposit Placement Services.** The City may invest a portion of its portfolio in deposits at a commercial bank, savings bank, savings and loan association, or credit union in the State of California (the selected depository) that uses a private sector entity that assists in the placement of deposits in the United States. The full amount of each deposit placed and the interest that may accrue on each such deposit will at all times be insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration. Additional required criteria for this investment type can be found in California Government Code Section 53601.8.

No more than 30% of the City's investment portfolio may be invested in deposit placement service deposits. No more than 10% of the City's portfolio may be invested with any one selected depository for placement services.

The City will monitor the financial institutions selected by deposit placement services to ensure that the City does not deposit more than the amount eligible for FDIC insurance in a single financial institution through non-negotiable CDs and deposit placement services.

10. **Negotiable Certificates of Deposit.** Negotiable certificates of deposit issued by a nationally or state-chartered bank, a savings association or a federal association (as defined by Section 5102 of the Financial Code), a state or federal credit union, or by a federally- or state-licensed branch of a foreign bank. Eligible negotiable CDs with maturities in excess of one year must be rated in a rating category of "A," its equivalent, or better by a NRSRO. Eligible negotiable CDs with maturities under one year must be rated in a rating category of "A-1," its equivalent, or better by a NRSRO. No more than 30% of the City's investment portfolio may be invested in negotiable CDs.
11. **State of California's Local Agency Investment Fund (LAIF).** The State Treasurer established LAIF for the benefit of local agencies. The City can invest up to the maximum amount permitted by the State Treasurer.
12. **Los Angeles County Pooled Fund.** The Los Angeles County Treasurer manages a Pooled Fund, in which the City can invest funds that are needed for short-term liquidity.
13. **Money Market Funds.** Shares of beneficial interest issued by diversified management companies that are money market funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940 (15 U.S.C. Sec. 80a-1, et seq.). To be eligible for investment pursuant to this subdivision these companies will either:
- Attain the highest-ranking letter or numerical rating provided by not less than two of the three largest NRSRO or
 - Have an investment advisor registered or exempt from registration with the Securities and Exchange Commission with not less than five years' experience managing money market mutual funds and with assets under management in excess of \$500,000,000.

No more than 20% of the City's portfolio may be invested in money market funds.

14. **Local Government Investment Pools (LGIPs).** Shares of beneficial interest issued by a joint powers authority organized pursuant to Government Code Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (q) of Government Code Section 53601, inclusive. Each share will represent an equal proportional interest in the underlying pool of securities owned by the joint powers authority. To be eligible under this section, the joint powers authority issuing the shares will have retained an investment adviser that meets all of the following criteria:
- a. The adviser is registered or exempt from registration with the Securities and Exchange Commission.
 - b. The adviser has not less than five years of experience investing in the securities and obligations authorized in subdivisions (a) to (q) California Government Code Section 53601, inclusive.
 - c. The adviser has assets under management in excess of five hundred million dollars (\$500,000,000).
15. **Supranationals.** United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), or Inter-American Development Bank (IADB), with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision must be rated in a rating category of “AA,” its equivalent or better by a NRSRO. No more than 30% of the City’s portfolio may be invested in supranationals.
16. **Asset-Backed Securities (ABS).** Any mortgage pass-through security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-back certificate, consumer receivable pass-through certificate, or consumer receivable-backed bond of a maximum remaining maturity of five years or less. Eligible securities must be rated, by a NRSRO, in a rating category of “AA,” its equivalent or higher. No more than 20% of the City's portfolio may be invested in ABS.

9. Prohibited Investments

Investments not described herein, including but not limited to stocks, inverse floaters, range notes, mortgage-derived, interest-only strips, or any security that could result in zero interest accrual if held to maturity are prohibited for purchased by the City, except as authorized by California Government Code Section 53601.6. The City will not leverage or borrow money for the purpose of investing.

10. Local Investment

The City will strive to make investments that benefit the local area. Placing monies in local commercial banks is one method of promoting this goal. Deposits may be placed with local commercial banks up to the amount insured by the FDIC.

11. Non-Discrimination

The City has an obligation to be aware of the social and political impacts of its investments and to act responsibly in making its investment decisions. The City will not knowingly make any investments in any institution, company, corporation, subsidiary or affiliate that practices or supports directly or indirectly through its actions, discrimination on the basis of race, religion, color, creed, national or ethnic origin, age, sex, sexual preference, or physical disability.

12. Review of Investment Portfolio

California Government Code requires compliance be measured only at the time of purchase. Balance fluctuations can cause sector and issuer percentages to rise above the limits described above and changes in the financial environment can cause ratings to fall below minimum requirements. While these situations do not constitute non-compliance, the City Treasurer will monitor for these situations and decide whether they warrant making changes to the portfolio. Instances of non-compliance will be reported to the City Council at least quarterly, if any arise.

13. Investment Pools

The City will complete due diligence for any pooled investments the City invests in. The City Treasurer will collect and evaluate the following information for each pool/fund:

- Permitted investments and objectives
- Description of interest calculations
- Method/frequency of interest distribution
- Treatment of gains and losses
- Method/frequency of audits
- Description of eligible investors
- Limits/minimum account sizes, type of assets, transaction sizes, and number of transactions
- Limits on withdrawals
- Frequency of statements and reporting of underlying investments
- Reserves or retained earnings
- Fee schedules

14. Collateralization

Collateralization is required for deposits. Deposits must be collateralized as specified under Government Code Section 53630, et seq. The City, at its discretion, may waive the collateralization requirements for any portion that is covered by federal deposit insurance. Funds may be deposited in active or inactive accounts, but may not exceed the total paid-up capital and surplus in any depository.

15. Safekeeping and Custody

All deliverable securities owned by the City, will be kept in safekeeping/custody by a third-party bank's trust department. All trades of marketable securities will be executed (cleared and settled) on a delivery vs. payment (DVP) basis to ensure that securities are deposited in the City's safekeeping/custody bank prior to the release of funds.

16. Maximum Maturities

Maturities will be based on a review of cash flow forecasts. Maturities will be scheduled to permit the City to meet all projected obligations.

The City may not invest in a security that exceeds five years from the date of purchase unless the City Council has provided at least 90 days prior approval for a specific purpose.

17. Internal Controls

The City Treasurer will establish an annual process of independent review by an external auditor. This review will provide internal control by assuring compliance with policies and procedures.

18. Performance Standards

The City Treasurer will establish a performance benchmark consistent with the City's investment strategy and supportive of the City's investment objectives.

19. Reporting Requirements

The City Treasurer will render a quarterly report to the City Council and City Manager within 30 days following the end of the quarter covered. The report will include at least:

- List of all investments owned by the City
- List transactions as required by California Government Code 53607 when City Council has delegated authority
- Investment type
- Issuer
- Maturity date
- Total par and dollar amount invested
- Description of any funds, investments, or programs managed by an advisor or other outside party
- Market value of the investment portfolio as of the date of the report, and the source of this valuation
- Statement as to whether the City's investments comply with the Investment Policy, and if not, why not
- Statement denoting the ability of the City to meet its expenditure requirements for the next six months

20. Investment Policy Adoption

The City's Investment Policy will be adopted by resolution of the City Council. The Policy will be reviewed annually by the City Council and any modifications made thereto must be approved by the Council.

21. Glossary

See attached Appendix A.

APPENDIX A

GLOSSARY

AGENCIES: Federal agency securities and/or Government-sponsored enterprises.

BENCHMARK: A comparative base for measuring the performance or risk tolerance of the investment portfolio. A benchmark should represent a close correlation to the level of risk and the average duration of the portfolio's investments.

BROKER: A broker brings buyers and sellers together for a commission.

CERTIFICATE OF DEPOSIT (CD): A deposit with a specific maturity evidenced by a Certificate. Large-denomination CDs are typically negotiable.

COLLATERAL: Securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR): The official annual report of the City. It includes five combined statements for each individual fund and account group prepared in conformity with GAAP. It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

DEALER: A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

DELIVERY VERSUS PAYMENT: There are two methods of delivery of securities: delivery versus payment and delivery versus receipt. Delivery versus payment is delivery of securities with an exchange of money for the securities. Delivery versus receipt is delivery of securities with an exchange of a signed receipt for the securities.

DIVERSIFICATION: Dividing investment funds among a variety of securities offering independent returns.

DURATION: A measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices.

FEDERAL DEPOSIT INSURANCE CORPORATION (FDIC): A federal agency that insures bank deposits, currently up to \$250,000 per entity.

LIQUIDITY: A liquid asset is one that can be converted easily and rapidly into cash without a substantial loss of value. In the money market, a security is said to be liquid if the spread between bid and asked prices is narrow and reasonable size can be done at those quotes.

MATURITY: The date upon which the principal or stated value of an investment becomes due and payable.

MONEY MARKET: The market in which short-term debt instruments (bills, commercial paper, bankers' acceptances, etc.) are issued and traded.

PORTFOLIO: Collection of securities held by an investor.

APPENDIX A

PRIMARY DEALER: A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission (SEC)-registered securities broker-dealers, banks, and a few unregulated firms.

RATE OF RETURN: The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond the current income return.

SAFEKEEPING: A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank's vaults for protection.

SECURITIES & EXCHANGE COMMISSION: Agency created by Congress to protect investors in securities transactions by administering securities legislation.

SEC RULE 15(C)3-1: See Uniform Net Capital Rule.

UNIFORM NET CAPITAL RULE: Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of indebtedness to liquid capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness covers all money owed to a firm, including margin loans and commitments to purchase securities, one reason new public issues are spread among members of underwriting syndicates. Liquid capital includes cash and assets easily converted into cash.

City of Santa Fe Springs

Investment Policy

June 15, 2021

1. Policy

The intent of the Investment Policy of City of Santa Fe Springs is to define the parameters within which funds are to be managed. In methods, procedures and practices, the policy formalizes the framework for the City's investment activities that must be exercised to ensure effective and judicious fiscal and investment management of the City's funds. The guidelines are intended to be broad enough to allow the investment officer to function properly within the parameters of responsibility and authority, yet specific enough to adequately safeguard the investment assets.

The City will invest its funds in such a manner as to comply with applicable state laws (California Government Code Section 53600, et seq. and 53630, et seq.), ensure prudent money management, provide for daily cash flow needs, and meet the City's investment objectives.

2. Scope

The Investment Policy applies to all funds and investment activities of the City except for the investment of bond proceeds, which are governed by the appropriate bond documents, and any pension or other post-employment benefit funds held in a trust that has a separate investment policy.

Except for funds in certain restricted and special funds, the City commingles its funds to maximize investment earnings and to increase efficiencies with regard to investment pricing, safekeeping and administration.

3. Prudence

The standard of prudence to be used by those authorized to invest on behalf of the City will be the "prudent investor" standard and will be applied in the context of managing an overall portfolio. The "prudent investor" standard states that:

"When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency."

4. Objectives

The primary objectives, in priority order, of the investment activities of the City are:

1. **Safety** — Safety of principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure preservation of capital in the portfolio.
2. **Liquidity** — The investment portfolio will remain sufficiently liquid to enable the City to meet its cash flow requirements.
3. **Return on Investment** — The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into consideration with the investment risk constraints of safety and liquidity needs.

5. Delegation of Authority

The City Council's management responsibility for the investment program is hereby delegated for a one-year period to the City Treasurer. Subject to review, the City Council may renew the delegation of authority pursuant to this section each year. The City Treasurer, and the Treasurer's designees, will monitor and review all investments for consistency with this Investment Policy. The City Treasurer may delegate day-to-day investment decision making and execution authority to an investment advisor. Eligible investment advisors must be registered with the Securities and Exchange Commission (SEC) under the Investment Advisors Act of 1940. The advisor will follow the Policy and such other written instructions as are provided.

6. Ethics and Conflict of Interest

Officers and employees involved in the investment process will refrain from personal business activities that could conflict with proper execution of the investment program, or which could impair their ability to make impartial decisions. Employees and investment officials will disclose to the City Manager any material financial interests in financial institutions that conduct business within their jurisdiction, and they will further disclose any large personal financial/investment positions that could be related to the performance of the City's portfolio.

7. Authorized Financial Dealers and Institutions

The City Treasurer will maintain a list of financial dealers and institutions qualified and authorized to transact business with the City.

The purchase by the City of any investment other than those purchased directly from the issuer, will be purchased either from an institution licensed by the State as a broker-dealer, as defined in Section 25004 of the Corporations Code, who is a member of Financial Industry Regulatory Authority (FINRA), or a member of a Federally regulated securities exchange, a National or State Chartered Bank a Federal or State Association (as defined by Section 5102 of the Financial Code), or a brokerage firm designated as a Primary Government Dealer by the Federal Reserve Bank.

The City Treasurer will investigate all institutions that wish to do business with the City, in order to determine if they are adequately capitalized, make markets in securities appropriate to the City's needs, and agree to abide by the conditions set forth in the City's Investment Policy and any other guidelines that may be provided. This

will be done annually by having the financial institutions submit in writing that they have read and will abide by the City's Investment Policy and submit its most recent audited Financial Statement within 120 days of the institution's fiscal year end.

If the City has an investment advisor, the investment advisor may use its own list of authorized broker/dealers to conduct transactions on behalf of the City.

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must be rated in a rating category “A-1,” its equivalent, or better by a NRSRO. No more than 30% of the City's portfolio may be invested in municipal obligations (includes 3. California State and Local Agency Obligations).

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 - b. The entity meets the following criteria: (i) Is organized within the United States as a special purpose corporation, trust, or limited liability company. (ii) Has program wide credit enhancements including, but not limited to, over collateralization, letters of credit, or surety bond. (iii) Has commercial paper that is rated in a rating category of “A-1,” its equivalent or higher, or the equivalent, by a NRSRO.

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The maturity of TCDs may not exceed three years. No more than 30% of the City's portfolio may be invested in TCDs.

9. **Deposit Placement Services.** The City may invest a portion of its portfolio in deposits at a commercial bank, savings bank, savings and loan association, or credit union in the State of California (the selected depository) that uses a private sector entity that assists in the placement of deposits in the United States. The full amount of each deposit placed and the interest that may accrue on each such deposit will at all times be insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration. Additional required criteria for this investment type can be found in California Government Code Section 53601.8.

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The City will monitor the financial institutions selected by deposit placement services to ensure that the City does not deposit more than the amount eligible for FDIC insurance in a single financial institution through non-negotiable CDs and deposit placement services.

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 - Have an investment advisor registered or exempt from registration with the Securities and Exchange Commission with not less than five years' experience managing money market mutual funds and with assets under management in excess of \$500,000,000.

No more than 20% of the City's portfolio may be invested in money market funds.

14. **Local Government Investment Pools (LGIPs).** Shares of beneficial interest issued by a joint powers authority organized pursuant to Government Code Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (q) of Government Code Section 53601, inclusive. Each share will represent an equal proportional interest in the underlying pool of securities owned by the joint powers authority. To be eligible under this section, the joint powers authority issuing the shares will have retained an investment adviser that meets all of the following criteria:
- a. The adviser is registered or exempt from registration with the Securities and Exchange Commission.
 - b. The adviser has not less than five years of experience investing in the securities and obligations authorized in subdivisions (a) to (q) California Government Code Section 53601, inclusive.
 - c. The adviser has assets under management in excess of five hundred million dollars (\$500,000,000).
15. **Supranationals.** United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), or Inter-American Development Bank (IADB), with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision must be rated in a rating category of “AA,” its equivalent or better by a NRSRO. No more than 30% of the City’s portfolio may be invested in supranationals.
16. **Asset-Backed Securities (ABS).** Any mortgage pass-through security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-back certificate, consumer receivable pass-through certificate, or consumer receivable-backed bond of a maximum remaining maturity of five years or less. Eligible securities must be rated, by a NRSRO, in a rating category of “AA,” its equivalent or higher. No more than 20% of the City's portfolio may be invested in ABS.

9. Prohibited Investments

Investments not described herein, including but not limited to stocks, inverse floaters, range notes, mortgage-derived, interest-only strips, or any security that could result in zero interest accrual if held to maturity are prohibited for purchased by the City, except as authorized by California Government Code Section 53601.6. The City will not leverage or borrow money for the purpose of investing.

10. Local Investment

The City will strive to make investments that benefit the local area. Placing monies in local commercial banks is one method of promoting this goal. Deposits may be placed with local commercial banks up to the amount insured by the FDIC.

11. Non-Discrimination

The City has an obligation to be aware of the social and political impacts of its investments and to act responsibly in making its investment decisions. The City will not knowingly make any investments in any institution, company, corporation, subsidiary or affiliate that practices or supports directly or indirectly through its actions, discrimination on the basis of race, religion, color, creed, national or ethnic origin, age, sex, sexual preference, or physical disability.

12. Review of Investment Portfolio

California Government Code requires compliance be measured only at the time of purchase. Balance fluctuations can cause sector and issuer percentages to rise above the limits described above and changes in the financial environment can cause ratings to fall below minimum requirements. While these situations do not constitute non-compliance, the City Treasurer will monitor for these situations and decide whether they warrant making changes to the portfolio. Instances of non-compliance will be reported to the City Council at least quarterly, if any arise.

13. Investment Pools

The City will complete due diligence for any pooled investments the City invests in. The City Treasurer will collect and evaluate the following information for each pool/fund:

- Permitted investments and objectives
- Description of interest calculations
- Method/frequency of interest distribution
- Treatment of gains and losses
- Method/frequency of audits
- Description of eligible investors
- Limits/minimum account sizes, type of assets, transaction sizes, and number of transactions
- Limits on withdrawals
- Frequency of statements and reporting of underlying investments
- Reserves or retained earnings
- Fee schedules

14. Collateralization

Collateralization is required for deposits. Deposits must be collateralized as specified under Government Code Section 53630, et seq. The City, at its discretion, may waive the collateralization requirements for any portion that is covered by federal deposit insurance. Funds may be deposited in active or inactive accounts, but may not exceed the total paid-up capital and surplus in any depository.

15. Safekeeping and Custody

All deliverable securities owned by the City, will be kept in safekeeping/custody by a third-party bank's trust department. All trades of marketable securities will be executed (cleared and settled) on a delivery vs. payment (DVP) basis to ensure that securities are deposited in the City's safekeeping/custody bank prior to the release of funds.

16. Maximum Maturities

Maturities will be based on a review of cash flow forecasts. Maturities will be scheduled to permit the City to meet all projected obligations.

The City may not invest in a security that exceeds five years from the date of purchase unless the City Council has provided at least 90 days prior approval for a specific purpose.

17. Internal Controls

The City Treasurer will establish an annual process of independent review by an external auditor. This review will provide internal control by assuring compliance with policies and procedures.

18. Performance Standards

The City Treasurer will establish a performance benchmark consistent with the City's investment strategy and supportive of the City's investment objectives.

19. Reporting Requirements

The City Treasurer will render a quarterly report to the City Council and City Manager within 30 days following the end of the quarter covered. The report will include at least:

- List of all investments owned by the City
- List transactions as required by California Government Code 53607 when City Council has delegated authority
- Investment type
- Issuer
- Maturity date
- Total par and dollar amount invested
- Description of any funds, investments, or programs managed by an advisor or other outside party
- Market value of the investment portfolio as of the date of the report, and the source of this valuation
- Statement as to whether the City's investments comply with the Investment Policy, and if not, why not
- Statement denoting the ability of the City to meet its expenditure requirements for the next six months

20. Investment Policy Adoption

The City's Investment Policy will be adopted by resolution of the City Council. The Policy will be reviewed annually by the City Council and any modifications made thereto must be approved by the Council.

21. Glossary

See attached Appendix A.

APPENDIX A

GLOSSARY

AGENCIES: Federal agency securities and/or Government-sponsored enterprises.

BENCHMARK: A comparative base for measuring the performance or risk tolerance of the investment portfolio. A benchmark should represent a close correlation to the level of risk and the average duration of the portfolio's investments.

BROKER: A broker brings buyers and sellers together for a commission.

CERTIFICATE OF DEPOSIT (CD): A deposit with a specific maturity evidenced by a Certificate. Large-denomination CDs are typically negotiable.

COLLATERAL: Securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR): The official annual report of the City. It includes five combined statements for each individual fund and account group prepared in conformity with GAAP. It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

DEALER: A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

DELIVERY VERSUS PAYMENT: There are two methods of delivery of securities: delivery versus payment and delivery versus receipt. Delivery versus payment is delivery of securities with an exchange of money for the securities. Delivery versus receipt is delivery of securities with an exchange of a signed receipt for the securities.

DIVERSIFICATION: Dividing investment funds among a variety of securities offering independent returns.

DURATION: A measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices.

FEDERAL DEPOSIT INSURANCE CORPORATION (FDIC): A federal agency that insures bank deposits, currently up to \$250,000 per entity.

LIQUIDITY: A liquid asset is one that can be converted easily and rapidly into cash without a substantial loss of value. In the money market, a security is said to be liquid if the spread between bid and asked prices is narrow and reasonable size can be done at those quotes.

MATURITY: The date upon which the principal or stated value of an investment becomes due and payable.

MONEY MARKET: The market in which short-term debt instruments (bills, commercial paper, bankers' acceptances, etc.) are issued and traded.

PORTFOLIO: Collection of securities held by an investor.

APPENDIX A

PRIMARY DEALER: A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission (SEC)-registered securities broker-dealers, banks, and a few unregulated firms.

RATE OF RETURN: The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond the current income return.

SAFEKEEPING: A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank's vaults for protection.

SECURITIES & EXCHANGE COMMISSION: Agency created by Congress to protect investors in securities transactions by administering securities legislation.

SEC RULE 15(C)3-1: See Uniform Net Capital Rule.

UNIFORM NET CAPITAL RULE: Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of indebtedness to liquid capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness covers all money owed to a firm, including margin loans and commitments to purchase securities, one reason new public issues are spread among members of underwriting syndicates. Liquid capital includes cash and assets easily converted into cash.



May 25, 2021

Memorandum

To: Travis Hickey, Director of Finance & Administrative Services
Lana Dich, MBA, CPA, Finance Manager/Assistant City Treasurer
City of Santa Fe Springs

From: Sarah Meacham, Managing Director
Richard Babbe, CCM, Senior Managing Consultant
PFM Asset Management LLC

Re: 2021 Investment Policy Review

At your request, we reviewed the City of Santa Fe Spring's (the "City") Investment Policy (the "Policy"). The current Policy is in compliance with the California Government Code (the "Code") statutes regulating the investment of public funds. We are, however, recommending several Policy updates related to Senate Bill 998, which took effect on January 1, 2021. Our recommendations are summarized below. In addition, we have attached a blacklined version of the Policy illustrating our recommendations.

The Bill's amendments to Code and our recommendations are described below. As revised, the Code:

- Eliminates the 10% limit on the outstanding commercial paper of any one issuer and establishes a combined 10% per issuer limit on commercial paper and corporate notes. We recommend that the City eliminate the 10% limit on the outstanding commercial paper as it is no longer in the Code. There is no need for the City to incorporate the new 10% combined per issuer limit on commercial paper and corporate notes as the City already has a more restrictive 5% per issuer limit that applies across all corporate sectors.
- Allows local agencies that have more than \$100 million of investment assets under management to invest up to 40% in commercial paper (the prior limit was 25% for all agencies other than a county or a city and county). As the City does not meet this threshold, this Code revision does not apply to the City.
- Allows local agencies to invest in securities issued or backed by the U.S. government that could result in zero or negative interest accrual if held to maturity, in the event of, and for the duration of, a period of negative market interest rates. While we do not anticipate negative market interest rates, we recommend the City incorporate this provision into the Policy so the City has the flexibility to invest if market rates were to go negative. This provision will remain in effect only until January 1, 2026.

- Allows federally recognized Indian tribes to invest and participate in investment JPAs. This seaprovision does not apply to the City.

Please let us know if you have any questions or if would like to discuss our recommendations in more detail. For your reference, I have also attached an analysis of Senate Bill 998.



City of Santa Fe Springs
City Council Meeting

ITEM NO. 19
June 15, 2021

APPOINTMENTS TO COMMITTEES AND COMMISSIONS

Committee	Vacancies	Councilmember
Beautification and Historical	1	Mora
Beautification and Historical	3	Zamora
Beautification and Historical	1	Sarno
Beautification and Historical	2	Rodriguez
Beautification and Historical	1	Trujillo
Family & Human Svcs	1	Mora
Heritage Arts	1	Zamora
Parks & Recreation	3	Zamora
Parks & Recreation	1	Sarno
Parks & Recreation	1	Trujillo
Senior	3	Mora
Senior	3	Zamora
Senior	4	Trujillo
Sister City	5	Zamora
Sister City	3	Sarno
Sister City	3	Rodriguez
Sister City	2	Trujillo
Youth Leadership Committee	2	Mora
Youth Leadership Committee	1	Rodriguez

Applications Received: None

Recent Actions: None

A handwritten signature in blue ink, appearing to read "Raymond R. Cruz".

Raymond R. Cruz
City Manager

Attachment(s):

1. Prospective Members
2. Committee Lists

Prospective Members for Various Committees/Commissions

Beautification and Historical* (*pending name change)

Phillip Gonzalez

Family & Human Services

Heritage Arts

Personnel Advisory Board

Parks & Recreation

Danielle Pavageau

Planning Commission

Senior Citizens Advisory

Sister City

Traffic Commission

Youth Leadership

BEAUTIFICATION AND HISTORICAL ADVISORY COMMITTEE*

*(pending name)

Meets the fourth Wednesday of each month

9:30 a.m., Library Community Room

Qualifications: 18 Years of age, reside or active in the City

Membership: 20 Residents appointed by City Council

Council Liaison: Sarno

APPOINTED BY**NAME****TERM EXPIRES
DEC 31, 2022****Mora**Doris Yarwood
Guadalupe Placencia
Irma Huitron
Vacant**Zamora**Annette Ramirez
Vacant
Vacant
Vacant**Sarno**Jeannette Lizarraga
Mary Arias
Linda Vallejo
Vacant

Rodriguez		Vacant	
		Sally Gaitan	
		Mark Scoggins	
		Vacant	
Trujillo		Jacqueline Martinez	
		Kay Gomez	
		Vacant	
		Merrie Hathaway	

FAMILY & HUMAN SERVICES ADVISORY COMMITTEE

Meets the third Wednesday of the month, except Jun., Sept., and Dec., at 5:45 p.m.,
Gus Velasco Neighborhood Center

Qualifications: 18 Years of age, reside or active in the City

Membership: 15 Residents Appointed by City Council
 5 Social Service Agency Representatives Appointed by the
 Committee

Council Liaison: Rodriguez

APPOINTED BY	NAME	TERM EXPIRES
		DEC 31, 2022

Mora	Martha Villanueva*	
	Vacant	
	Miriam Herrera	

Zamora	Gaby Garcia	
	Christina J. Colon	
	Gilbert Aguirre	

Sarno	Dolores Duran	
	Janie Aguirre	
	Peggy Radoumis	

Rodriguez		Shamsher Bhandari	
		Elena Lopez	
		Hilda Zamora	

Trujillo	Dolores Romero	
	Laurie Rios*	
	Bonnie Fox	

Organizational Representatives:	Nancy Stowe
(Up to 5)	Evelyn Castro-Guillen
	Elvia Torres
	(SPIRITT Family Services)

**Indicates person currently serves on three committees*

HERITAGE ARTS ADVISORY COMMITTEE

Meets the Last Tuesday of the month, except Dec., at 9:00 a.m., at the Gus Velasco Neighborhood Center Room 1

Qualifications: 18 Years of age, reside or active in the City

Membership: 9 Voting Members
6 Non-Voting Members

APPOINTED BY	NAME	TERM EXPIRES DEC 31, 2022
Mora	Maria Salazar-Jaramillo	
Zamora	Vacant	
Sarno	William K. Rounds	
Rodriguez	Francis Carbajal*	
Trujillo	Laurie Rios*	

Committee Representatives

Family and Human Services Committee
Beautification and Historical Committee
Planning Commission
Chamber of Commerce

Vacant

Sally Gaitan
Gabriel Jimenez
Debbie Baker

Council/Staff Representatives

Council Liaison	Annette Rodriguez
Council Alternate	Vacant
City Manager	Ray Cruz
Director of Community Services	Maricela Balderas
Director of Planning	Wayne Morrell

**Indicates person currently serves on three committees*

PARKS & RECREATION ADVISORY COMMITTEE

Meets the First Wednesday of the month, except Jul., Aug., and Dec., 7:00 p.m.,
Town Center Hall, Meeting Room #1

Subcommittee Meets at 6:00 p.m.

Qualifications: 18 Years of age, reside or active in the City

Membership: 25

Council Liaison: Mora

APPOINTED BY	NAME	TERM EXPIRES
Mora	Joe Avila	DEC 31, 2022
	Eddie Barrios	
	William Logan	
	Ralph Aranda	
	Kurt Hamra	
Zamora	Gina Hernandez	
	Blake Carter	
	Vacant	
	Vacant	
Sarno	Kenneth Arnold	
	Mary Anderson	
	Jeannette Lizarraga	
	Vacant	
	Mark Scoggins	
Rodriguez	Kayla Perez	
	Priscilla Rodriguez	
	Lisa Garcia	
	Sylvia Perez	
	David Diaz-Infante	
Trujillo	Dolores Romero	
	Andrea Lopez	
	Elizabeth Ford	
	Nancy Krueger	
	Vacant	

**Indicates person currently serves on three committees*

PERSONNEL ADVISORY BOARD

Meets Quarterly on an As-Needed Basis

Membership: 5 (2 Appointed by City Council, 1 by Personnel Board, 1 by Firemen's Association, 1 by Employees' Association)

Terms: Four Years

APPOINTED BY	NAME	TERM EXPIRES DEC 31, 2022
Council	Angel Munoz Ron Biggs	
Personnel Advisory Board	Neal Welland	
Firemen's Association	Jim De Silva	
Employees' Association	Johnny Hernandez	

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PLANNING COMMISSION

Meets the second Monday of every Month at 4:30 p.m.,
Council Chambers

Qualifications: 18 Years of age, reside or active in the City

Membership: 5

APPOINTED BY

NAME

Mora	Ken Arnold
Sarno	Johnny Hernandez
Rodriguez	Francis Carbajal*
Trujillo	William K. Rounds
Zamora	Gabriel Jimenez

SENIOR ADVISORY COMMITTEE

Meets the Second Tuesday of the month, except Jun., Sep., and Dec., at 9:30 a.m.,
Gus Velasco Neighborhood Center

Qualifications: 18 Years of age, reside or active in the City

Membership: 25

Council Liaison: Sarno

APPOINTED BY	NAME	TERM EXPIRES DEC 31, 2022
Mora	Paul Nakamura	
	Astrid Shesterkin	
	Vacant	
	Vacant	
	Vacant	
Zamora	Vacant	
	Elena Lopez Armendariz	
	Josefina Lara	
	Vacant	
	Vacant	
Sarno	Sally Gaitan	
	Bonnie Fox	
	Gilbert Aguirre	
	Lorena Huitron	
	Janie Aguirre	
Rodriguez	Yoko Nakamura	
	Linda Vallejo	
	Hilda Zamora	
	Martha Villanueva*	
	Nancy Krueger	
Trujillo	Dolores Duran	
	Vacant	
	Vacant	
	Vacant	
	Vacant	

**Indicates person currently serves on three committees*

SISTER CITY COMMITTEE

Meets the First Monday of every month, except Dec., at 6:45 p.m., Town Center Hall, Mtg. Room #1. If the regular meeting date falls on a holiday, the meeting is held on the second Monday of the month.

Qualifications: 18 Years of age, reside or active in the City

Membership: 25

Council Liaison: Mora

APPOINTED BY	NAME	TERM EXPIRES
Mora	Martha Villanueva*	DEC 31, 2022
	Doris Yarwood	
	Laurie Rios*	
	Peggy Radoumis	
	Francis Carbajal*	
Zamora	Vacant	
	Vacant	
	Vacant	
	Vacant	
	Vacant	
Sarno	Manny Zevallos	
	Vacant	
	Jacqueline Martinez	
	Vacant	
	Vacant	
Rodriguez	Jeannette Wolfe	
	Shamsher Bhandari	
	Vacant	
	Vacant	
	Vacant	
Trujillo	Charlotte Zevallos	
	Andrea Lopez	
	Vacant	
	Marcella Obregon	
	Vacant	

**Indicates person currently serves on three committees*

TRAFFIC COMMISSION

Meets the Third Thursday of every month, at 6:00 p.m., Council Chambers

Membership: 5

Qualifications: 18 Years of age, reside or active in the City

APPOINTED BY

NAME

Mora

Bryan Collins

Sarno

Johana Coca

Rodriguez

Felix Miranda

Trujillo

Linda Vallejo

Zamora

Christina J. Colon

YOUTH LEADERSHIP COMMITTEE

Meets the First Monday of every month, at 6:30 p.m., Gus Velasco Neighborhood Center

Qualifications: Ages 13-18, reside in Santa Fe Springs

Membership: 20

Council Liaison: Zamora

APPOINTED BY

NAME

**TERM EXPIRES
DEC 31, 2022**

Mora

Kharisma Ruiz
Jilliana Casillas
Vacant
Vacant

Zamora

Joseph Casillas
Savanna Aguayo
Valerie Melendez
Christian Zamora

Sarno

Abraham Walters
Aaron D. Doss
Valerie Bojorquez
Maya Mercado-Garcia

Rodriguez

Jasmine Rodriguez
Angelique Duque
Felix Miranda Jr.
Vacant

Trujillo

Bernardo Landin
Isaac Aguilar
Andrew Bojorquez
Alan Avalos