

City of Providence Zoning Board of Review
Application for a Dimensional Variance Amendment #1
280 Melrose Street
Providence, Rhode Island

GZA Job No. 05.0045179.00

July 1, 2021

The Narragansett Electric Company d/b/a National Grid submits this amendment to its City of Providence Zoning Board of Review Application for a Dimensional Variance to revise its request for relief from the exterior lighting requirements. Figure LL-101 has been revised and is attached. Appendix A Application for Variances, Number 8 Paragraph 2 and 3 has been revised and the revised text is below.

Existing exterior lighting at the Site is high intensity discharge lighting mounted on utility poles and various types of building mounted lighting and does not conform with the ordinance. All fixtures will be replaced with cut off LED lights. The majority of the proposed lighting will meet the ordinance, however select fixtures will not because of the existing use of the Site as a utility, existing building heights at the Site, aerial hazards with use of certain areas of the Site and several light poles on the Property along Cadillac Drive that are also utilized for street lighting owned by the City of Providence. The following fixtures will remain as non-conforming lights:

1. Four (4) out of a total of sixty-seven (67) building mounted fixtures will remain at a non-conforming height of approximately 30 to 35 feet above the ground surface (above an existing fire escape and garage doors).
2. Thirteen (13) out of a total of fifty-one (51) pole mounted light fixtures will remain non-conforming for the following reasons:
 - a. Three (3) pole mounted fixtures on the Property along Cadillac Drive with non-conforming fixtures and street lights (owned by the City of Providence) will remain non-conforming because light levels will be greater than one foot-candle at property line. These poles cannot be relocated because of the existing street lights and aerial hazards associated with use of the area (equipment and utility pole storage).
 - b. Two (2) pole mounted fixtures on the Property along Cadillac Drive with non-conforming fixtures and street lights (owned by the City of Providence) will be replaced at a non-conforming height of 35 feet above ground surface with light levels at the property line will be greater than one-foot candle. These poles cannot be relocated because of the existing street lights and aerial hazards associated with use of the area (utility pole storage).
 - c. Two (2) pole mounted fixtures on the Property along Melrose Street will remain non-conforming because light levels will be greater than one-foot candle at the property line. These poles cannot be relocated because of the aerial hazards associated with use of the area (utility pole storage).
 - d. Six (6) pole mounted fixtures on the Property within the outdoor storage yard will be installed at non-conforming heights of 30 to 35 feet.

The total number of non-conforming fixtures on the site will decrease by thirteen (13). All proposed exterior lighting is designed as cut off LED luminaires. The maximum foot-candle at any lot line will be less than one-foot candle with the exception of the five (5) replacement lights along Cadillac Drive and two (2) replacement lights along Melrose Street necessary to light a portion of the outdoor storage yard. Exterior lighting (including select non-conforming features) is necessary in order to maintain a secure, safe and well-lit parking lot, outdoor storage yard and vehicle operations facility. Employees access the outdoor storage yard 24 hours per day (in all weather conditions) and it must remain well-lit for safety and security purposes.



Documents produced by Abernathy Lighting Design are intended to convey the lighting design intent to the Contractor, who will in turn, supply any support wiring or electrical engineering required to achieve said design. These documents do NOT constitute electrical engineering or wiring construction documents.
Scales as stated herein are valid on the original drawing only. Contractor shall carefully review all dimensions and conditions shown herein and at once report to the Lighting Designer any error, inconsistency or omission they may discover.

Design Drawings
FOR REFERENCE ONLY
These documents are not for construction

Submittal Dates

06-18-2021
-
-
-
-
-
-
-
-
-

Approved
 Approved as Noted
 Not Approved
By: _____ Date: _____

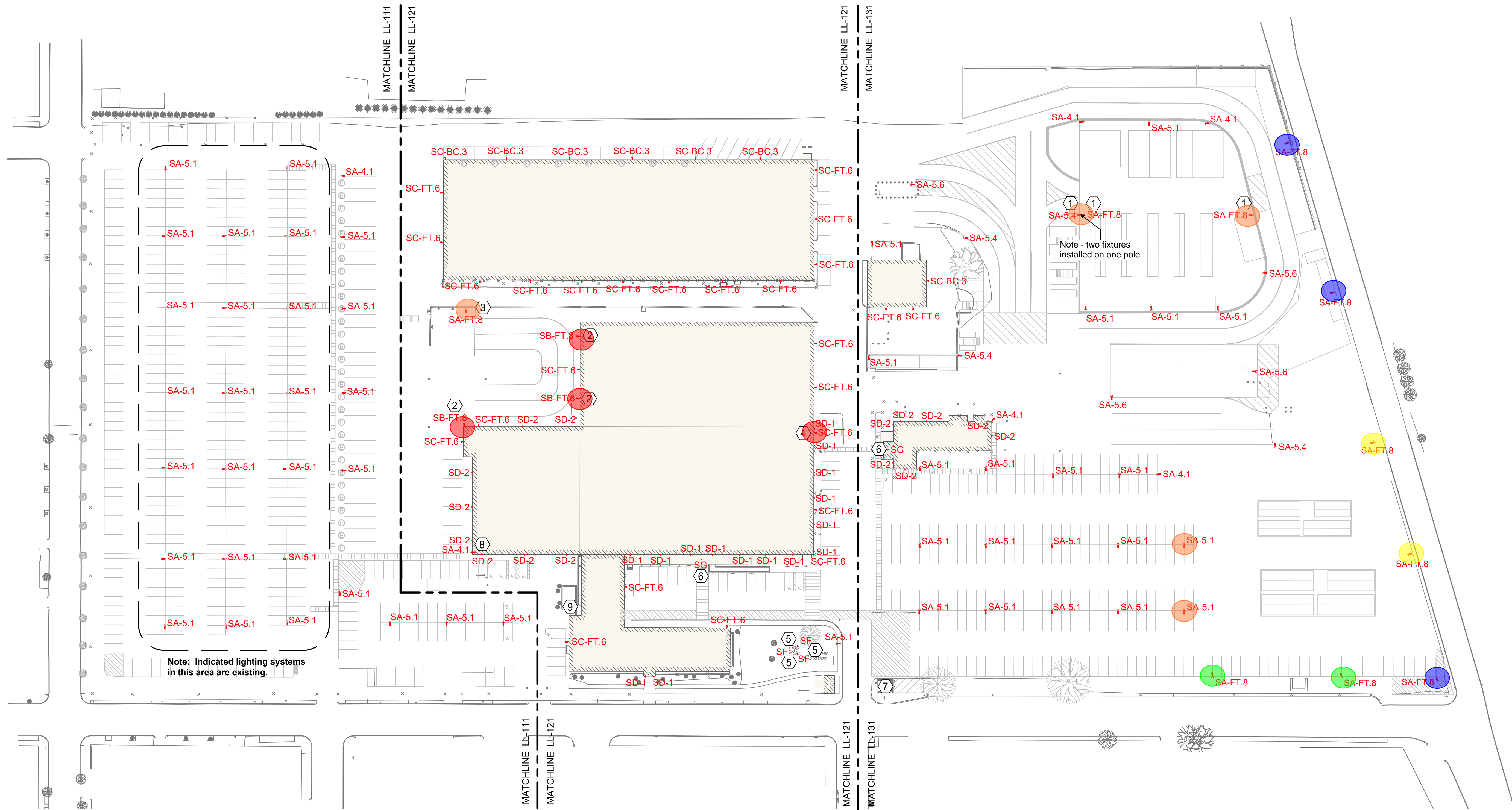
Drawn By: JJR
Cad File: _____

Project No. 19.150.15

Area Name: Site Lighting Plan
Overall

Sheet No.

LL-101



Note: Indicated lighting systems in this area are existing.

Note - two fixtures installed on one pole

Specific Lighting Notes:

1. Indicated pole mounted Type SA-5.4 and SA-FT.8 luminaires mount at 35'-0" AFG to the top of the luminaire to remove the need for a stand alone light pole located in the center of the lay-down yard. These pole mounted locations will require approval by the local Authority.
2. Indicated building mounted Type SB-FT.8 luminaire mounts at 30'-0" AFG to the top of the luminaire to adequately light the center of the west turn-around area during both normal and event conditions.
3. Indicated pole mounted Type SA-FT.8 luminaire mounts at 30'-0" AFG to top of luminaire to adequately light the center of the west turn-around area during both normal and event conditions.
4. Indicated building mounted Type SC-FT.6 luminaire mounts at approximately 35'-0" AFG to provide high level lighting down the length of the emergency fire escape located adjacent to this location.
5. Indicated Type SF in-ground uplight luminaires mount 120 degrees apart around base of flagpole, 1/5th the height of the flagpole away from the flagpole center to the center of the luminaire. Exact location to be confirmed in the field prior to rough-in.
6. Indicated Type SG luminaire replaces existing surface mounted area light one-for-one. Exact mounting to be confirmed by electrical contractor prior to final order.
7. Existing historical lantern luminaire at indicated location to be carefully removed, refurbished, and reinstalled by Electrical Contractor. The luminaire shall be internally cleaned, all exterior metal components are to be cleaned, sanded, and repainted with exterior rated black paint, internal electrical components are to be removed and replaced with a simple line voltage medium screw base lamp socket rated for enclosed exterior use, and the luminaire is to be re-lamped with a 2700K LED A19/A21 (Soraa: SA19-11-OMNI-927-01 or similar) lamp. Restored luminaire shall be controlled by local daylight sensor for simple dusk-to-dawn operation. Daylight specification and location to be coordinated by Electrical Contractor with Engineer and Owner.

8. Indicated pole mounted Type SA-4.1 luminaire mounts atop the corner of the existing building to remove the need for a large concrete base on the adjacent sidewalk area. Exact mounting system and all structural requirements for this lighting pole to be coordinated by Engineer and Electrical Contractor in the field prior to rough-in. Final luminaire mounting height shall remain 25'-0" AFG to the top of the luminaire.
9. All existing lighting systems associated with visitor entrance and handicapped ramp access are to be cleaned, repaired, and re-lamped as needed with appropriate LED replacement lamps. Exact repair and re-lamping requirements for these lighting systems to be coordinated by the Electrical Contractor on site prior to final order.
10. Power to existing exterior signage to be tested, repaired if required, made safe, and appropriately capped at grade to allow for the reuse of the power when a new branded sign is installed at some point in the future. Electrical Contractor's as-built documentation shall reflect the nature and location of this power feed for easy reference in the future.

Zoning Ordinance Non-Conforming Features Highlighting:

- Replacement building mounted LED cut off fixtures (mounted at more than 25 feet above the ground surface)
- Replacement pole mounted LED cut off fixtures and street lights (more than 1 footcandle at the property line)
- Replacement pole mounted LED cut off fixtures (more than 1 footcandle at the property line)
- New pole mounted LED cut off fixtures (mounted at more than 25 feet above the ground surface)
- Replacement pole mounted LED cut off fixtures and street lights (mounted at more than 25 feet above the ground surface and more than 1 footcandle at the property line)

General Lighting Notes:

- All pole mounted luminaires mount at 25'-0" AFG to top of luminaire unless otherwise noted. See expanded lighting plans LL-111, LL-121, and LL-131 for additional mounting information.
- All luminaires mount to standard 5" x 5" square aluminum pole of appropriate height. Pole height must account for height of pre-cast base by others in order to ensure proper luminaire mounting height. Pole must meet all applicable local wind load requirements. Final pole specification by Contractor.
- Luminaires to be provided with Manufacturer's standard Glare Shield.
- Any variations from "Basis of Design" luminaire specification or the above indicated luminaire locations and orientations shall require Contractor to re-verify photometric compliance with the illumination and uniformity requirements of IESNA Recommended Practice RP-8-18 and the light trespass requirements of the Providence, Rhode Island Zoning Code Section 1301.