ENGINEERS ■ SURVEYORS ■ PLANNERS
LANDSCAPE ARCHITECTS ■ ENVIRONMENTAL SCIENTISTS

TriWest Plaza, 3030 LBJ Freeway, Suite 100
Dallas, TX 75234
(972) 488-3737   Fax (972) 488-6732

www.ceieng.com

October 24, 2016

City of McKinney
221 N. Tennessee St.
McKinney, Texas 75069

RE: SUP submittal: Proposed 7 Eleven – SWC of Wilmeth Road & Lake Forest Drive

Dear SIR/Madam:

Enclosed is the SUP submittal for the proposed 7 Eleven project located on the SWC or Wilmeth Road and Lake Forest Drive. The property is currently a non-platted vacant site of approximately 2.618 acres. 7 Eleven is proposing to develop approximately 1.20 acres on the corner.

Currently the site is zoned as PD-Planned Development District Ordinance No. 2003-06-060 and follows the BN-Neighborhood business district regulations.

We are requesting an approval of a specific use permit to allow for motor vehicle fuel sales of 12 fueling positions at a time within 350 feet of the intersection.

The proposed 7 Eleven development will only consist of a gasoline service station with a convenience store. 7 Eleven does not conduct major automotive repairs, body and fender work, or automobile painting services and does not provide stock of goods displayed out of the doors, except for lubricants and additives for frequent sales. A solid enclosure for waste material will be provided at the dumpster area.

The dumpster area was relocated closer to the building and away from the residential properties to south.
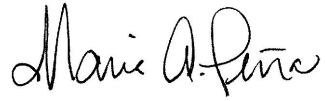
No lighting will be constructed to shine on the residential neighboring properties. 7 Eleven typically provides lighting fixtures that can control the light distribution. The package includes a Photometric Lighting Study. It includes some illustrations of 3D modeling showing how the light distribution is being controlled.

Along the south property line, adjacent to the residential properties, Verdad, the developer for the 7 Eleven, is proposing to have an 8 foot masonry wall instead of the city required 6 foot masonry wall. They are also providing an additional 3 canopy trees to the required landscape buffer tree count requirement of 7 canopy trees, so that the trees are spaced 24 foot on center instead of the required 40 foot on center per city landscape ordinance.

A 7 Eleven at this location will provide a convenience for the residential neighborhoods north and south of this site as well as the north and south bound customers. A 12 vehicle fueling station will allow the customers to experience a less congested service area.

Should you have any questions or comments please feel free to give me call.

Sincerely,

Maria A. Peña, Project Manager
CEI Engineering associates, INC.

Lighting level study

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
 www.gelighting.com

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

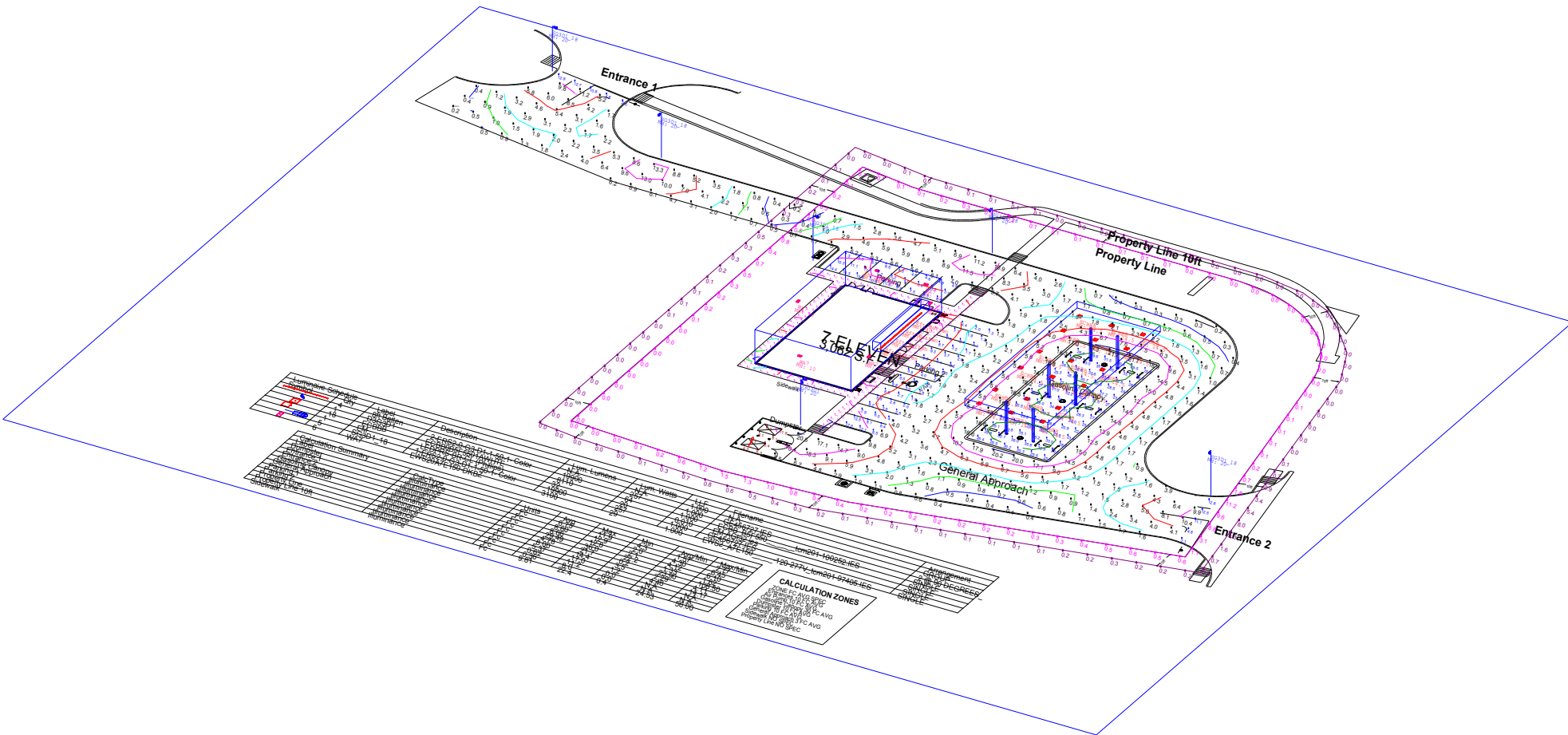| Project name : 7-11 site 523		Date:9/28/2016
Prepared for: 7 Eleven		AGi32 Version 17.2.12
Filename: 7-11 site 523.AGI		Total Time (Hrs.): 13.95
By : Maxime Moldvar	Units:	**Page 1 of 12**

GE Lighting

Entrance 1

Property Line 10ft

Property Line

7-ELEVEN
3,062 S.F.

Parking 1

Parking 2

Gasoline Canopy

Sidewalk

Dumpster

General Approach

Entrance 2

Luminaire Schedule

Symbol	Qty	Label	Description	Lum. Lumens	Lum. Watts	LLF	Filename	Arrangement
	4	8ft Batten		N.A.	N.A.	1.000	N.A.	GROUP
	1	D3G3D1	2-ERS2-0-G3-D1-1-50-1- Color	19900	257	1.000	GE456727.IES	2 @ 90 DEGREES_
	18	ECBBB	ECBB0B5F5501AWHTE	8110	64	1.000	ECBB_B5F550_____tcm201-100252.IES	SINGLE
	1	EM	LEDPRS-BR-CL (Phillips)	32	20	0.010	EM-AGI32.ies	SINGLE
	5	SG3D1_18	1-ERS2-0-G3-D1-1-50-1- Color	19900	257	1.000	GE456727.IES	SINGLE
	6	WA7	EWS20A7E150-DKBZ	3100	29	1.000	EWS2_A7E150_____-120-277V_tcm201-97405.IES	SINGLE

Calculation Summary

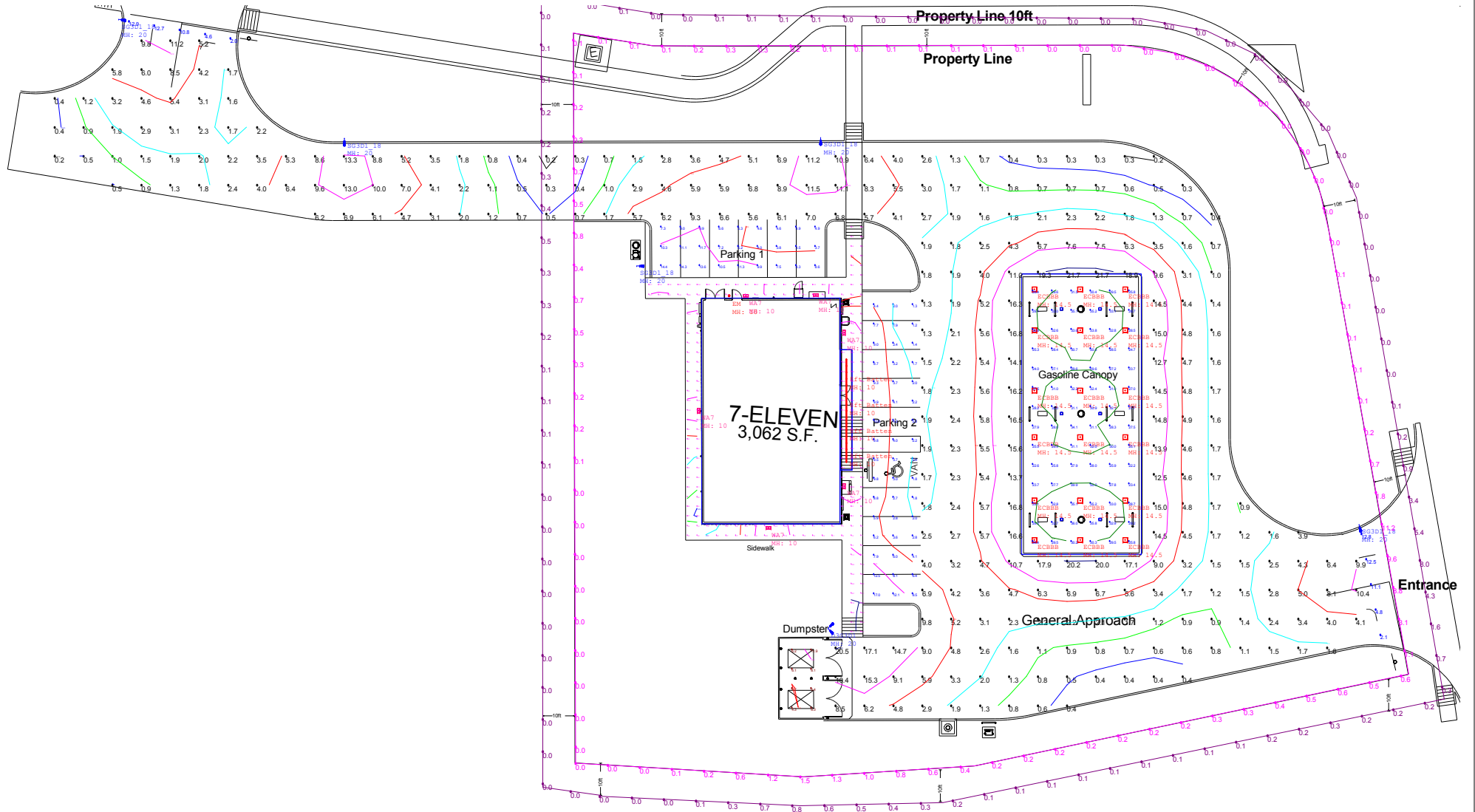| Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Dumpster	Illuminance	Fc	6.75	11.9	4.3	1.57	2.77
Entrance 1	Illuminance	Fc	8.60	12.9	2.0	4.30	6.45
Entrance 2	Illuminance	Fc	8.66	12.8	2.1	4.12	6.10
Gasoline Canopy	Illuminance	Fc	29.49	36.0	22.2	1.33	1.62
General Approach	Illuminance	Fc	4.78	21.7	0.2	23.90	108.50
Parking 1	Illuminance	Fc	8.00	14.4	3.5	2.29	4.11
Parking 2	Illuminance	Fc	5.37	17.0	1.2	4.48	14.17
Property Line	Illuminance	Fc	0.62	11.2	0.0	N.A.	N.A.
Property Line 10ft	Illuminance	Fc	0.36	8.0	0.0	N.A.	N.A.
Sidewalk	Illuminance	Fc	9.81	22.4	0.4	24.53	56.00

CALCULATION ZONES

ZONE FC AVG SPEC
Entrances 10 FC AVG
Air Pump 10 FC AVG
Gasoline Canopy 30 FC AVG
Dumpster 10 FC AVG
Parking 10 FC AVG
General Approach 3 FC AVG
Sidewalk NO SPEC
Property Line NO SPEC

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
 www.gelighting.com

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and calculation conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

By : Maxime Moldvar   Units:

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95

Page 2 of 12

Entrance 1

Property Line 10ft
Property Line

7 ELEVEN
3,065 S.F.

General Approach

Entrance 2

Luminaire Schedule

Calculation Summary

CALCULATION ZONES

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

By : Maxime Moldvar   **Units:**

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95

Page 3 of 12

MEEBE628

MEBB4.5 MEBB4.5 MEBB4.5

WA7 10 EM: WA7 10 WA7 10 WA7 10 WM10 Batten

VAN

7-ELEVEN Parking 4 Property Line or General Approach

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523	Date:9/28/2016
Prepared for: 7 Eleven	AGi32 Version 17.2.12
Filename: 7-11 site 523.AGI	Total Time (Hrs.): 13.95
By : Maxime Moldvar	Units:	Page 4 of 12

GE Lighting

Property Line 10ft

Property Line

Parking 1

7-ELEVEN
3,062 S.F.

Parking 2

Gasoline Canopy

General Approach

Entrance

Dumpster

Sidewalk

Luminaire Schedule

Symbol	Qty	Label	Description	Lum. Lumens	Lum. Watts	LLF	Filename	Arrangement
	4	8ft Batten		N.A.	N.A.	1.000	N.A.	GROUP
	1	D3G3D1	2-ERS2-0-G3-D1-1-50-1- Color	19900	257	1.000	GE456727.IES	2 @ 90 DEGREES
	18	ECBBB	ECBB2B5E5501AWHITE	2418	34	1.000	ECBB-B5E550	SINGLE

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

By : Maxime Moldvar   Units:

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95

Results summary

Luminaire Schedule

Symbol	Qty	Label	Description	Lum. Watts	Lum. Lumens	LLF	Filename	Arrangement
	4	8ft Batten		N.A.	N.A.	1.000	N.A.	GROUP
	1	D3G3D1	2-ERS2-0-G3-D1-1-50-1- Color	257	19900	1.000	GE456727.IES	2 @ 90 DEGREES_1
	18	ECBBB	ECBB0B5F5501AWHTE	64	8110	1.000	ECBB_B5F550_____tcm201-100252.IES	SINGLE
	1	EM	LEDPRS-BR-CL (Phillips)	20	32	0.010	EM-AGI32.ies	SINGLE
	5	SG3D1_18	1-ERS2-0-G3-D1-1-50-1- Color	257	19900	1.000	GE456727.IES	SINGLE
	6	WA7	EWS20A7E150-DKBZ	29	3100	1.000	EWS2_A7E150_____-120-277V_tcm201-97405.IES	SINGLE

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Dumpster	Illuminance	Fc	6.75	11.9	4.3	1.57	2.77
Entrance 1	Illuminance	Fc	8.60	12.9	2.0	4.30	6.45
Entrance 2	Illuminance	Fc	8.66	12.8	2.1	4.12	6.10
Gasoline Canopy	Illuminance	Fc	29.49	36.0	22.2	1.33	1.62
General Approach	Illuminance	Fc	4.78	21.7	0.2	23.90	108.50
Parking 1	Illuminance	Fc	8.00	14.4	3.5	2.29	4.11
Parking 2	Illuminance	Fc	5.37	17.0	1.2	4.48	14.17
Property Line	Illuminance	Fc	0.62	11.2	0.0	N.A.	N.A.
Property Line 10ft	Illuminance	Fc	0.36	8.0	0.0	N.A.	N.A.
Sidewalk	Illuminance	Fc	9.81	22.4	0.4	24.53	56.00

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

By : Maxime Moldvar | **Units:**

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95

Page 6 of 12

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

By : Maxime Moldvar   Units:

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95

Page 7 of 12

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

By : Maxime Moldvar   Units:

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com
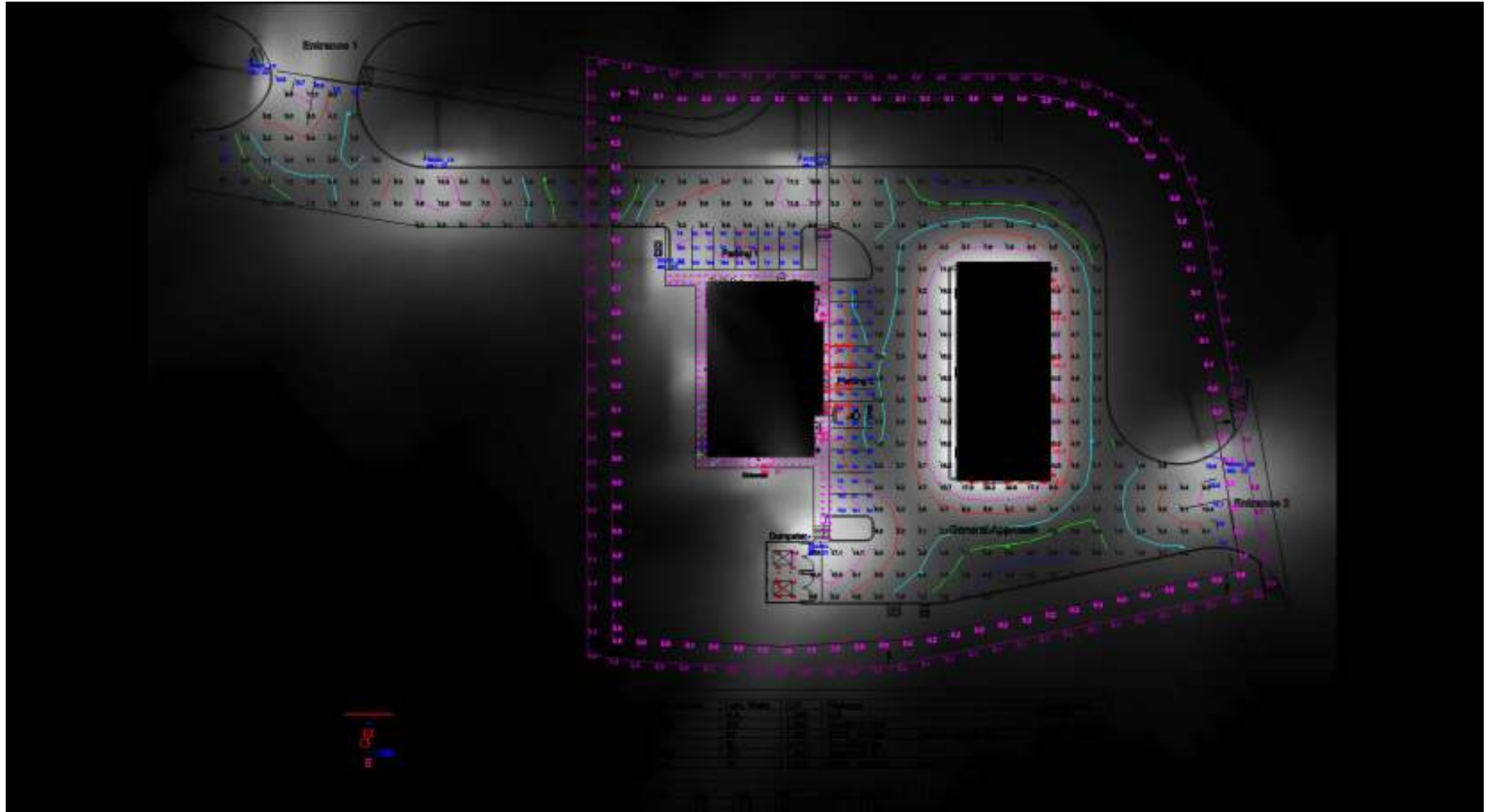
DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523		Date:9/28/2016
Prepared for: 7 Eleven		AGi32 Version 17.2.12
Filename: 7-11 site 523.AGI		Total Time (Hrs.): 13.95
By : Maxime Moldvar	Units:	**Page 9 of 12**

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and goodpractice. Some differences between measured values and calculated results may occurdue to tolerances in calculation methods, testing procedures, component performance,measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lightingcalculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523
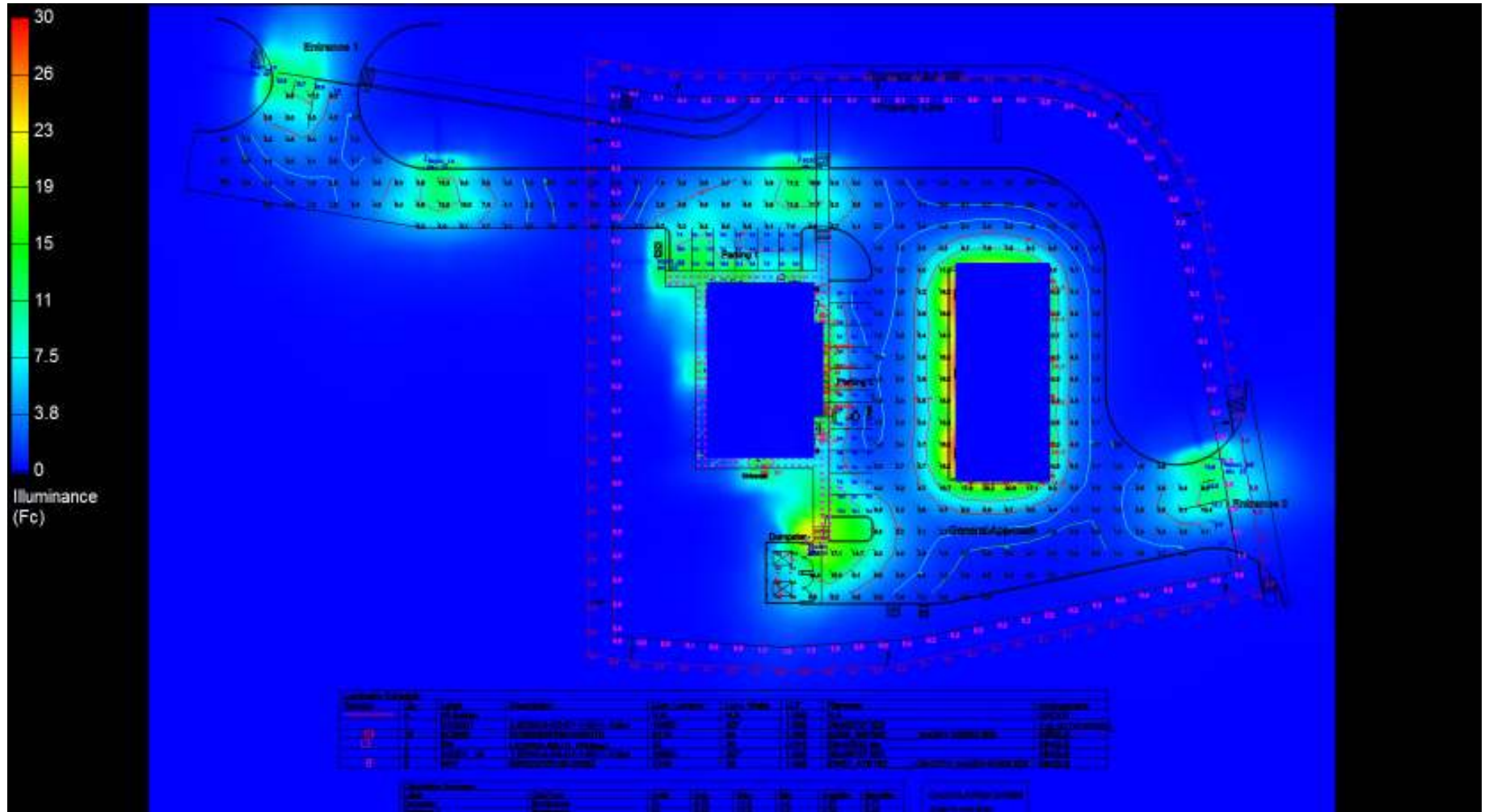
Prepared for: 7 Eleven
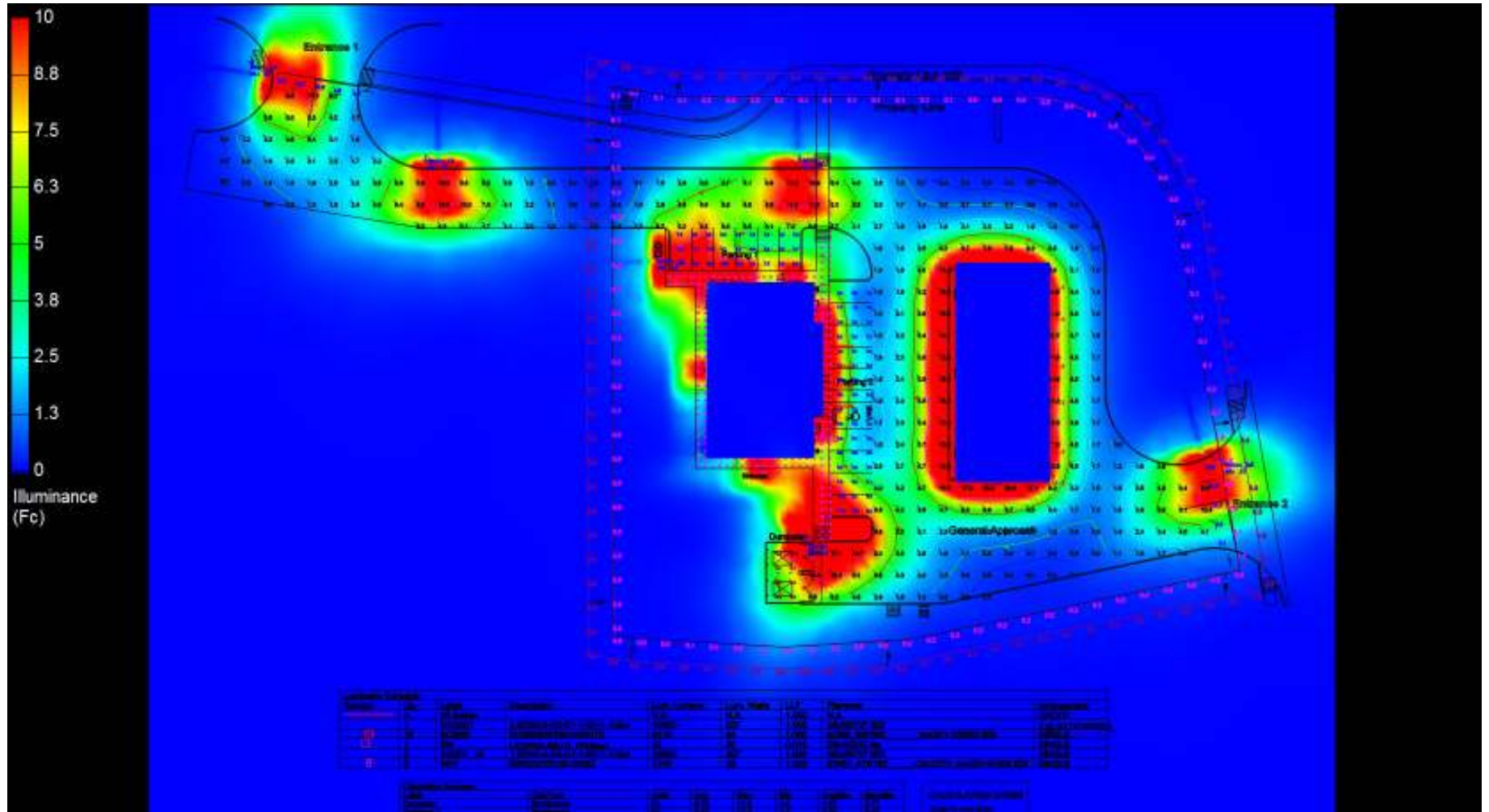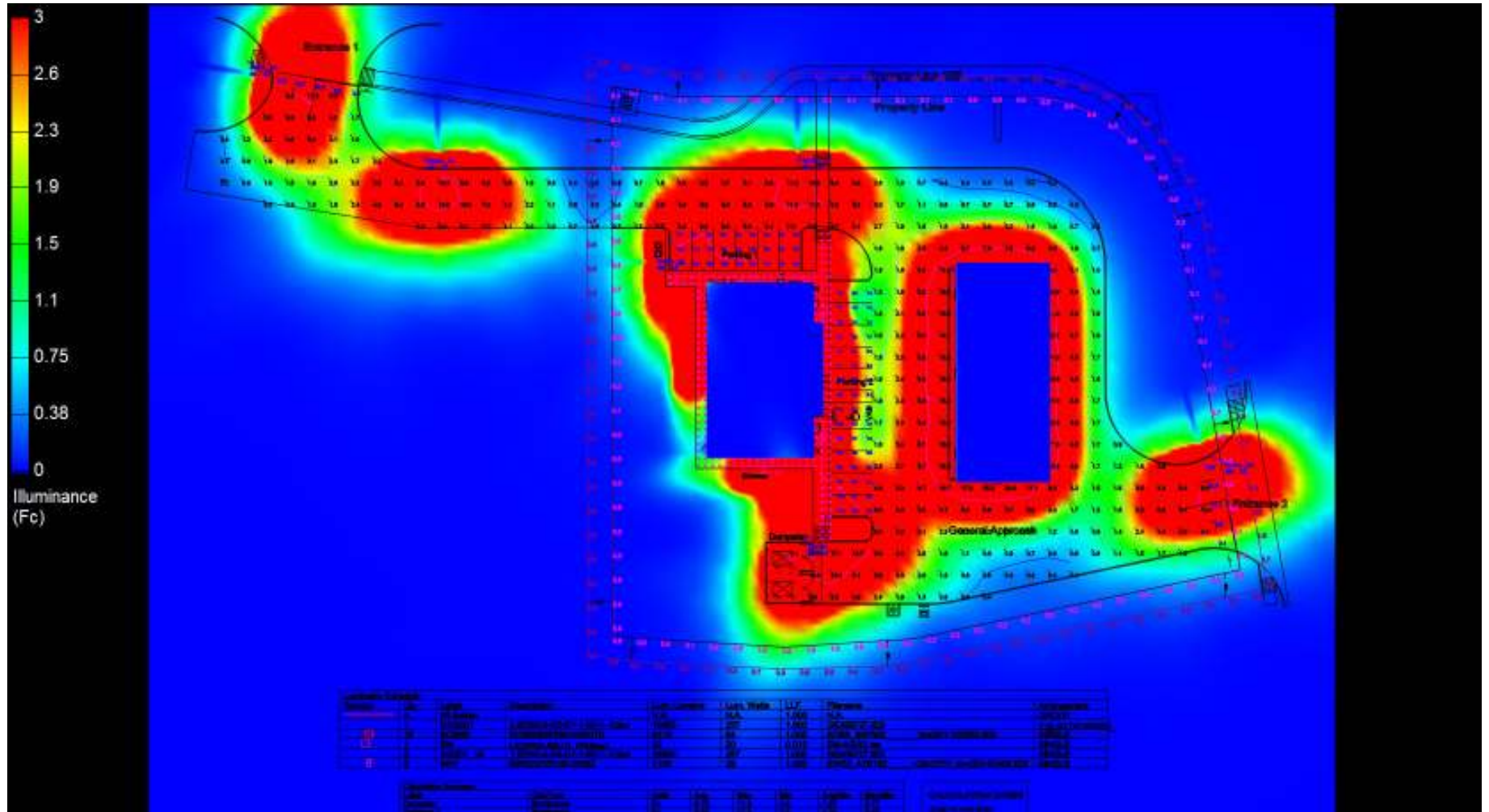
Filename: 7-11 site 523.AGI

By : Maxime Moldvar

Units:

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95

Page 10 of 12

GE Lighting Solution ,1975 Noble Road B328-R229, East Cleveland, OH 44112-6300
www.gelighting.com

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

By : Maxime Moldvar   Units:

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95

Page 11 of 12

DISCLAIMER: Calculations have been performed according to IESNA & CIE standards and good practice. Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

Project name : 7-11 site 523

Prepared for: 7 Eleven

Filename: 7-11 site 523.AGI

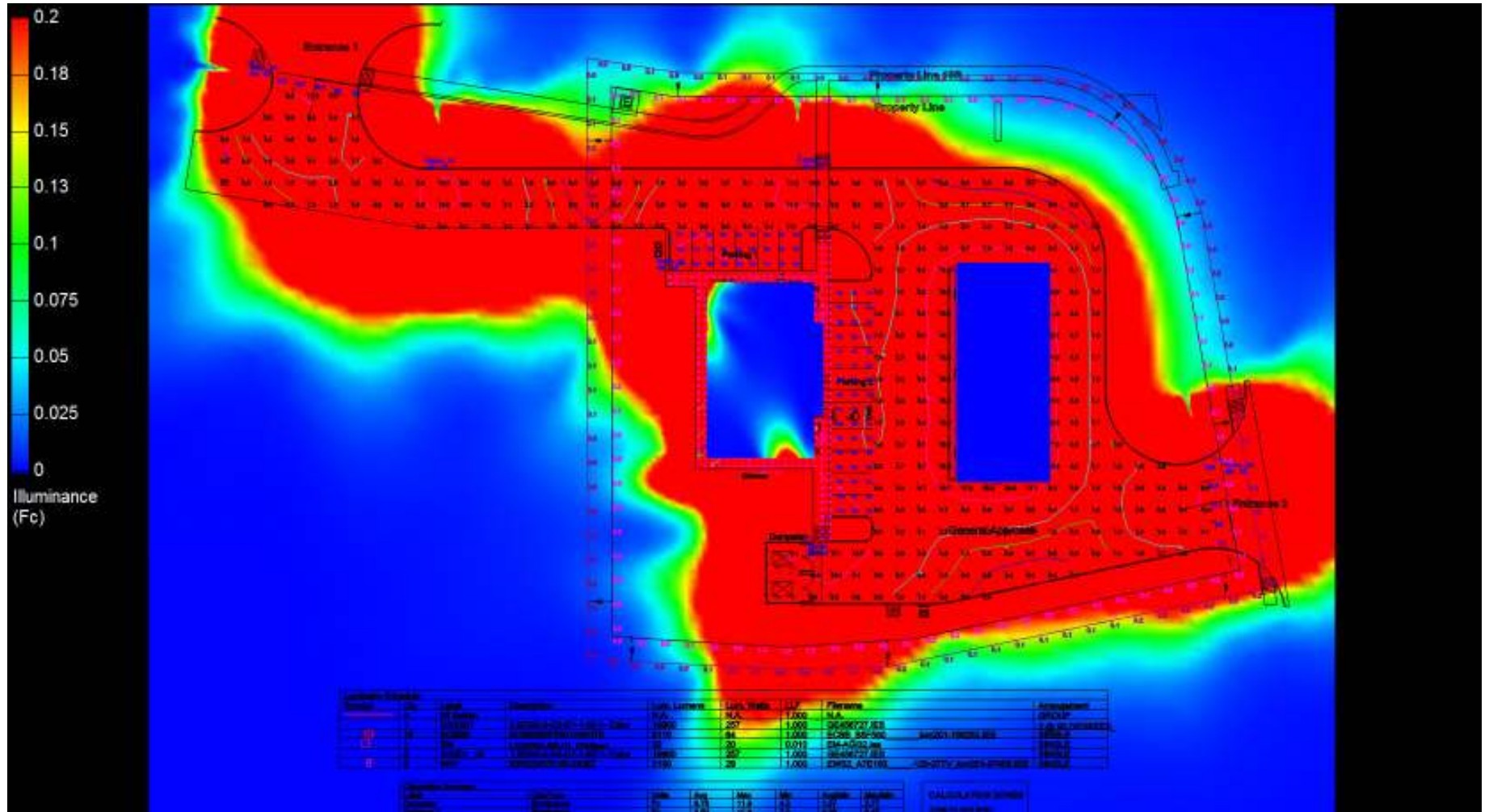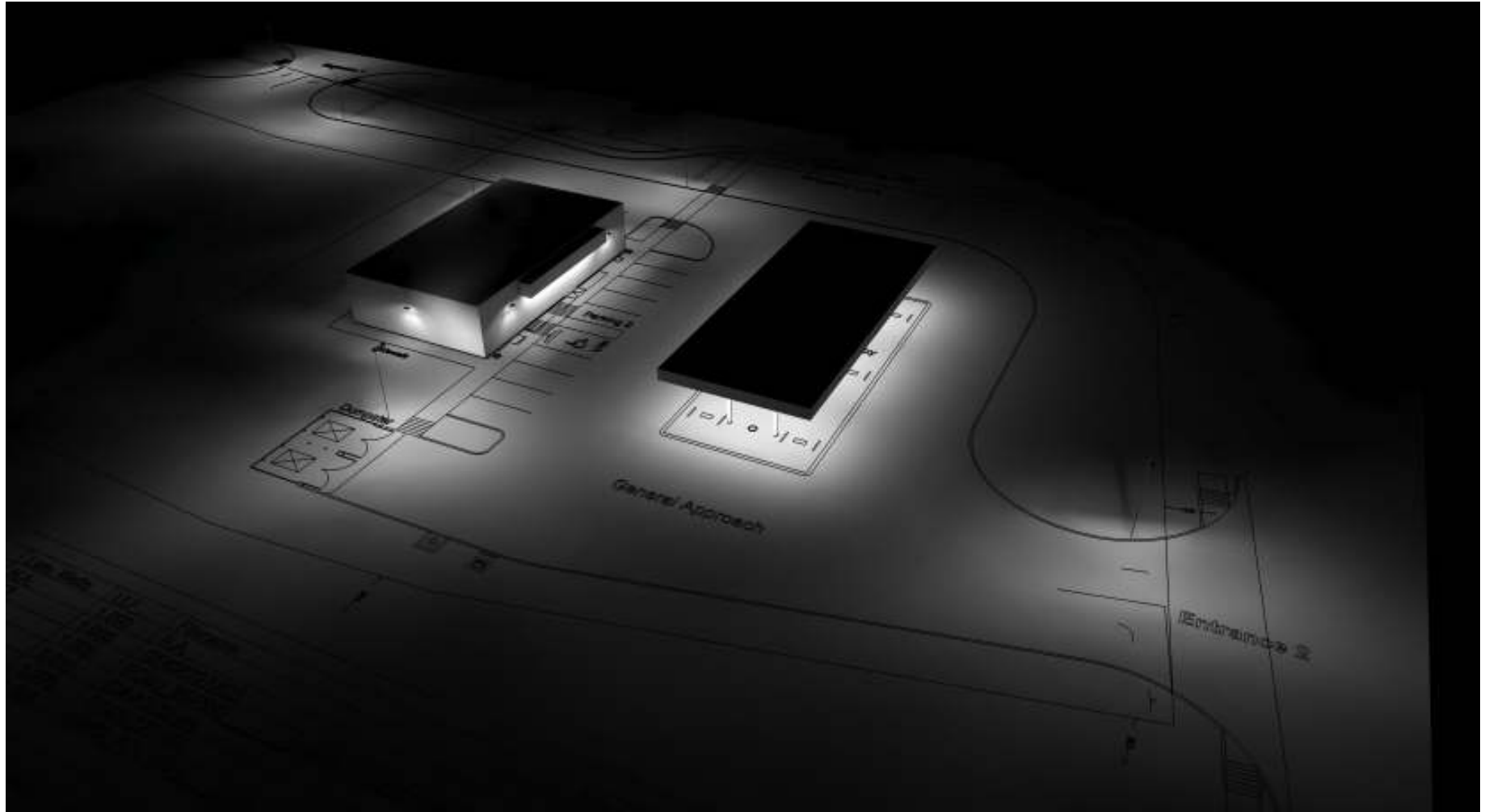**By : Maxime Moldvar**   **Units:**

Date:9/28/2016

AGi32 Version 17.2.12

Total Time (Hrs.): 13.95