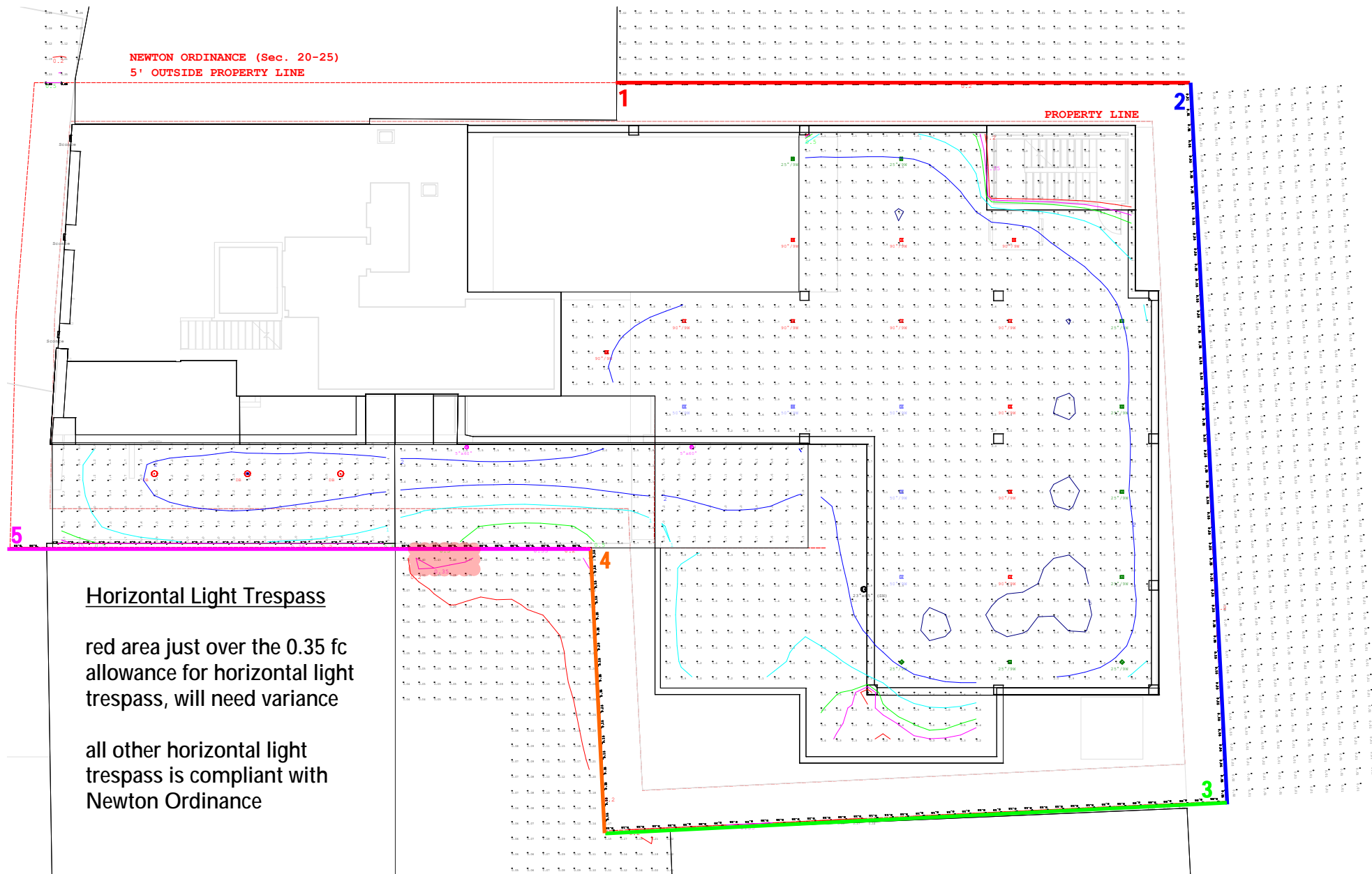


Newton Parkview Residences

Site Photometrics and Light Trespass Calculations

June 15, 2021





NEWTON ORDINANCE (Sec. 20-25)
5' OUTSIDE PROPERTY LINE

PROPERTY LINE

Horizontal Light Trespass

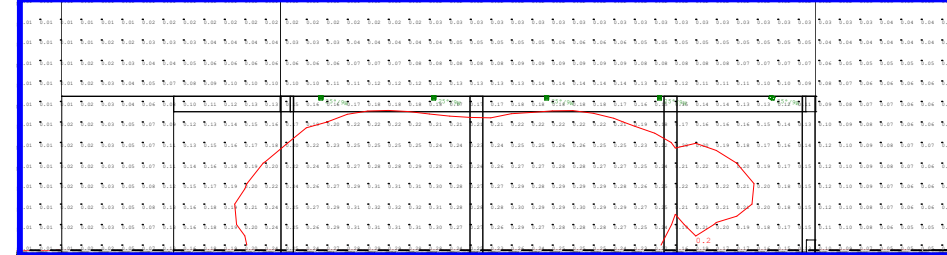
red area just over the 0.35 fc allowance for horizontal light trespass, will need variance

all other horizontal light trespass is compliant with Newton Ordinance

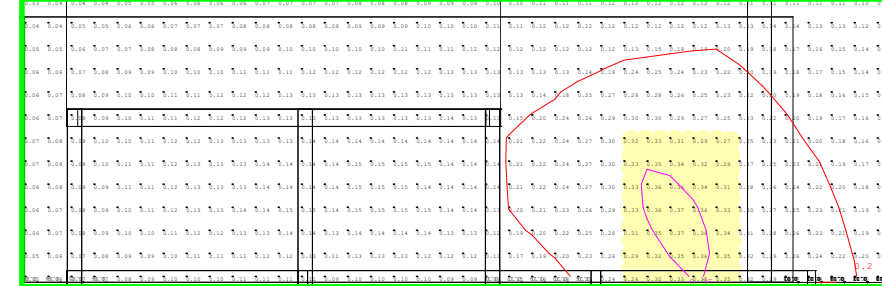
1 - North Vertical Light Trespass - COMPLIANT



2 - East Vertical Light Trespass - COMPLIANT

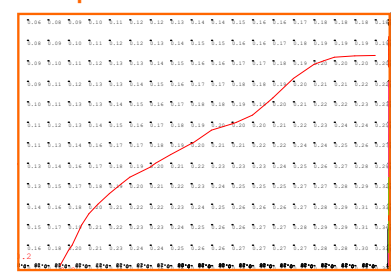


3 - South Vertical Light Trespass

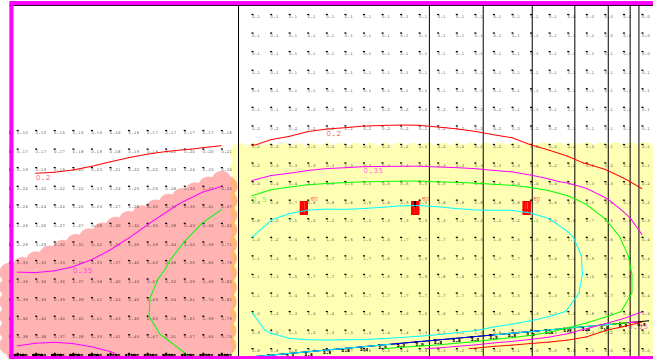


yellow area > 0.35fc occurs against adjacent building, no fenestrations along wall of adjacent building for light to penetrate

4 - West Vertical Light Trespass - COMPLIANT



5 - South Vertical Light Trespass



yellow area > 0.35fc occurs against adjacent building, no fenestrations along wall of adjacent building for light to penetrate
red area > 0.35fc occurs along rear parking area of adjacent property, will need variance for 1/3 fc over allowance

Luminaire Schedule				
Scene: Exterior Lighting				
Symbol	Tag	Qty	Description	Lum. Lumen/hlf
□	90°/9W	11	USAI: BeveLED Square - 9W - 90°	723
□	25°/9W	9	USAI: BeveLED Square - 9W - 25°	838
□	50°/9W	5	USAI: BeveLED Square - 9W - 50°	823
□	Sconce	3	Modern Forms: Urban 22	332
○	DB	3	Selux: Lanova - Diffuse - 1300lm	1327
○	5°x60°	2	Lumenpulse: Lumenbeam - 12.5W - 5°x60° - Snoot	526
○	23°x65° (SN)	1	Lumenpulse: Lumenbeam - 25W - 23°x65° - Snoot	1831

adjusted to 600 delivered lumens

adjusted to 1,000 delivered lumens

Calculation Summary							
Scene: Exterior Lighting							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Adjacent Building Facade Along Alley	Illuminance	Fc	0.60	1.9	0.0	N.A.	N.A.
Alley Drive Planar	Illuminance	Fc	1.45	3.2	0.4	3.63	8.00
Alley Ramp 2 Planar	Illuminance	Fc	2.53	4.4	0.9	2.81	4.89
Alley Ramp Planar	Illuminance	Fc	1.64	2.7	0.3	5.47	9.00
Light Trespass Horizontal (E)	Illuminance	Fc	0.03	0.12	0.00	N.A.	N.A.
Light Trespass Horizontal (N)	Illuminance	Fc	0.05	0.35	0.00	N.A.	N.A.
Light Trespass Horizontal (S)	Illuminance	Fc	0.14	0.43	0.01	14.00	43.00
Light Trespass Vertical (E)	Illuminance	Fc	0.12	0.32	0.01	12.00	32.00
Light Trespass Vertical (N)	Illuminance	Fc	0.08	0.62	0.00	N.A.	N.A.
Light Trespass Vertical (S1)	Illuminance	Fc	0.33	0.82	0.03	11.00	27.33
Light Trespass Vertical (S2)	Illuminance	Fc	0.15	0.37	0.03	5.00	12.33
Light Trespass Vertical (W3)	Illuminance	Fc	0.20	0.34	0.06	3.33	5.67
Parking Surface Planar	Illuminance	Fc	2.66	6.2	0.0	N.A.	N.A.

