



it does
LIGHTING

Bringing Ideas to *Light.*

health
wellness
sleep

Lighting for trees, nature and safety

Lorraine Calcott IEng FILP MSLL IALD CLD MBSS

Call 0345 034 2026 for further information

- Trees are literally essential parts of the infrared delivery system of nature and are the rarest most valuable things in the universe.
- The best red-light therapy comes from plants and trees
- Mitochondrial health relies on infrared light exposure however, the unregulated blue part of the spectrum in LED reduces human cell activity and results in early cell death
- Trees protect us from the blue end of the spectrum but give off far more in the infrared than we even receive directly from the sun
- Treat your cells to a recharge and get out in daylight every day and sit under a tree with your breakfast/lunch.



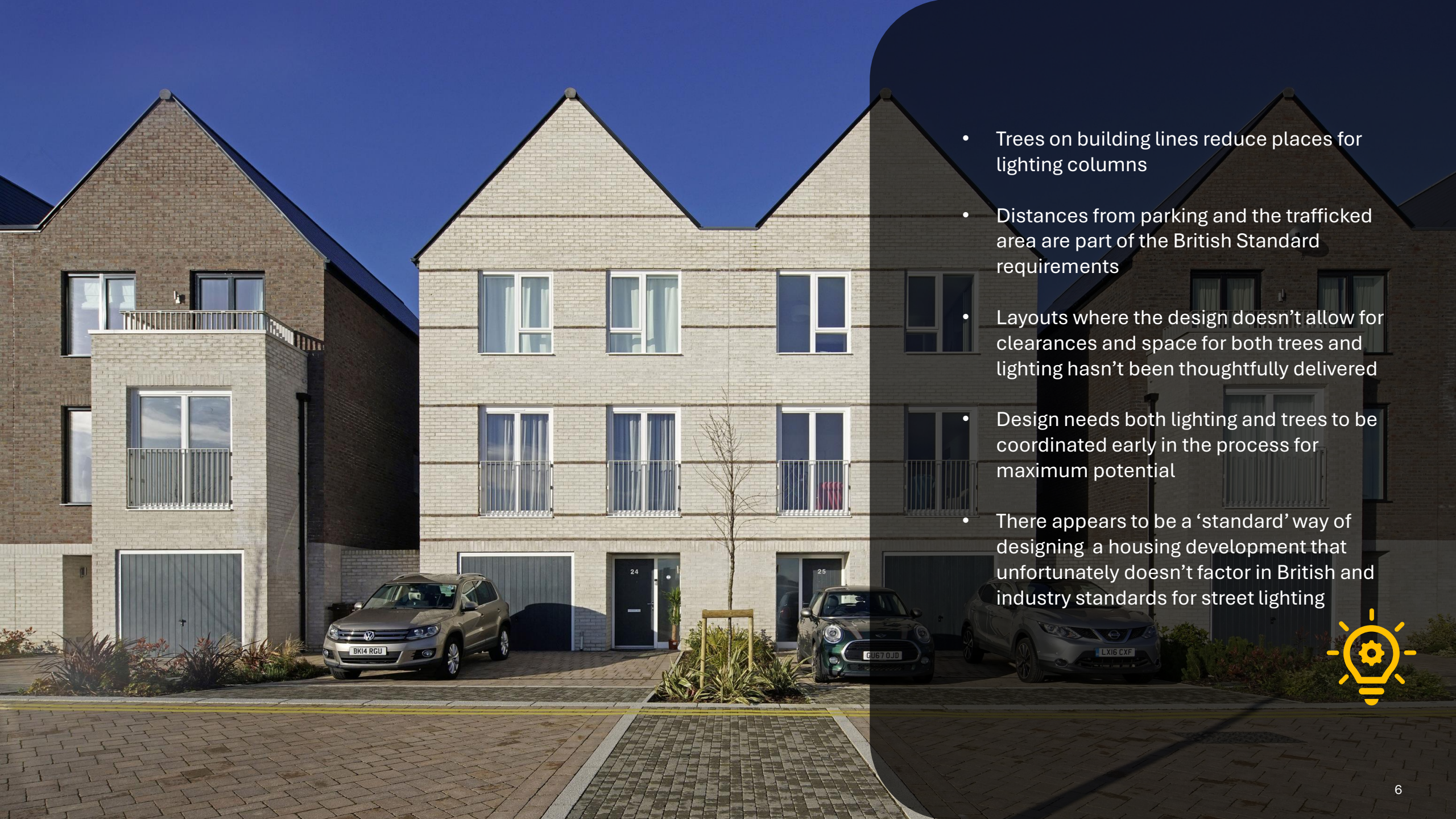


- 30 minutes minimum of daylight exposure in nature should be the first medication prescribed by doctors but obviously there is no profit in that, so they reach for medication
- Treat your cells to a recharge and get out in daylight every day, ideally two hours after sunrise.
- Heliotherapy was used not that long ago to successfully treat people in hospital. It is now becoming a popular noninvasive form of medicine again in the private sector.
- Bear in mind that those in hospital who have beds near to windows with plenty of natural light recover and leave hospital on average 3-4 days faster than those at the other end of the ward.
- Trees and natural light should always be a priority in design.

- Trees are vital – no question
- Human safety and sense of place is equally important
- Ecology and environment underpin the success of any development
- However, standards need to be met
- The right placement of trees and lighting improves outcomes for both







- Trees on building lines reduce places for lighting columns
- Distances from parking and the trafficked area are part of the British Standard requirements
- Layouts where the design doesn't allow for clearances and space for both trees and lighting hasn't been thoughtfully delivered
- Design needs both lighting and trees to be coordinated early in the process for maximum potential
- There appears to be a 'standard' way of designing a housing development that unfortunately doesn't factor in British and industry standards for street lighting

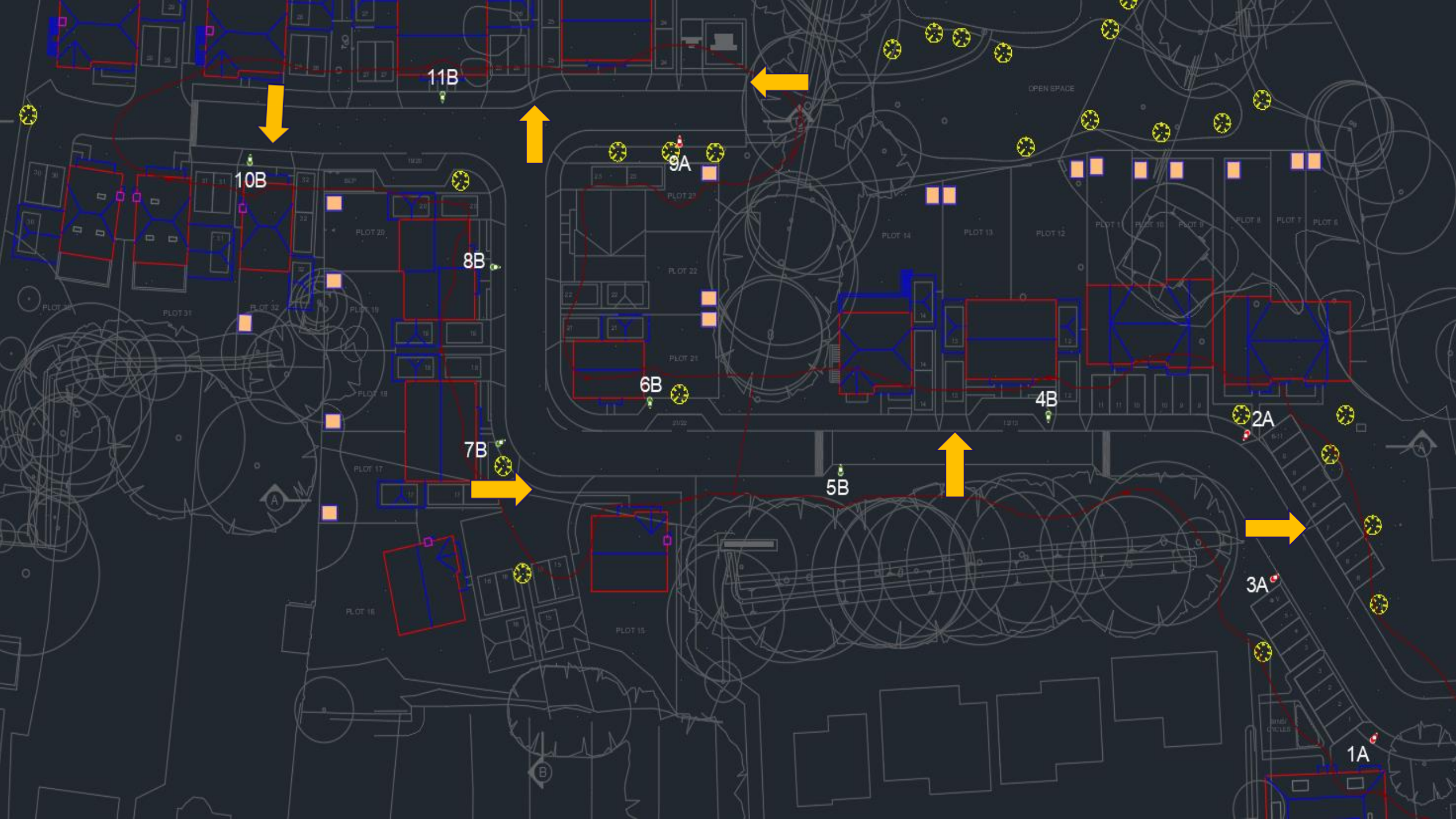


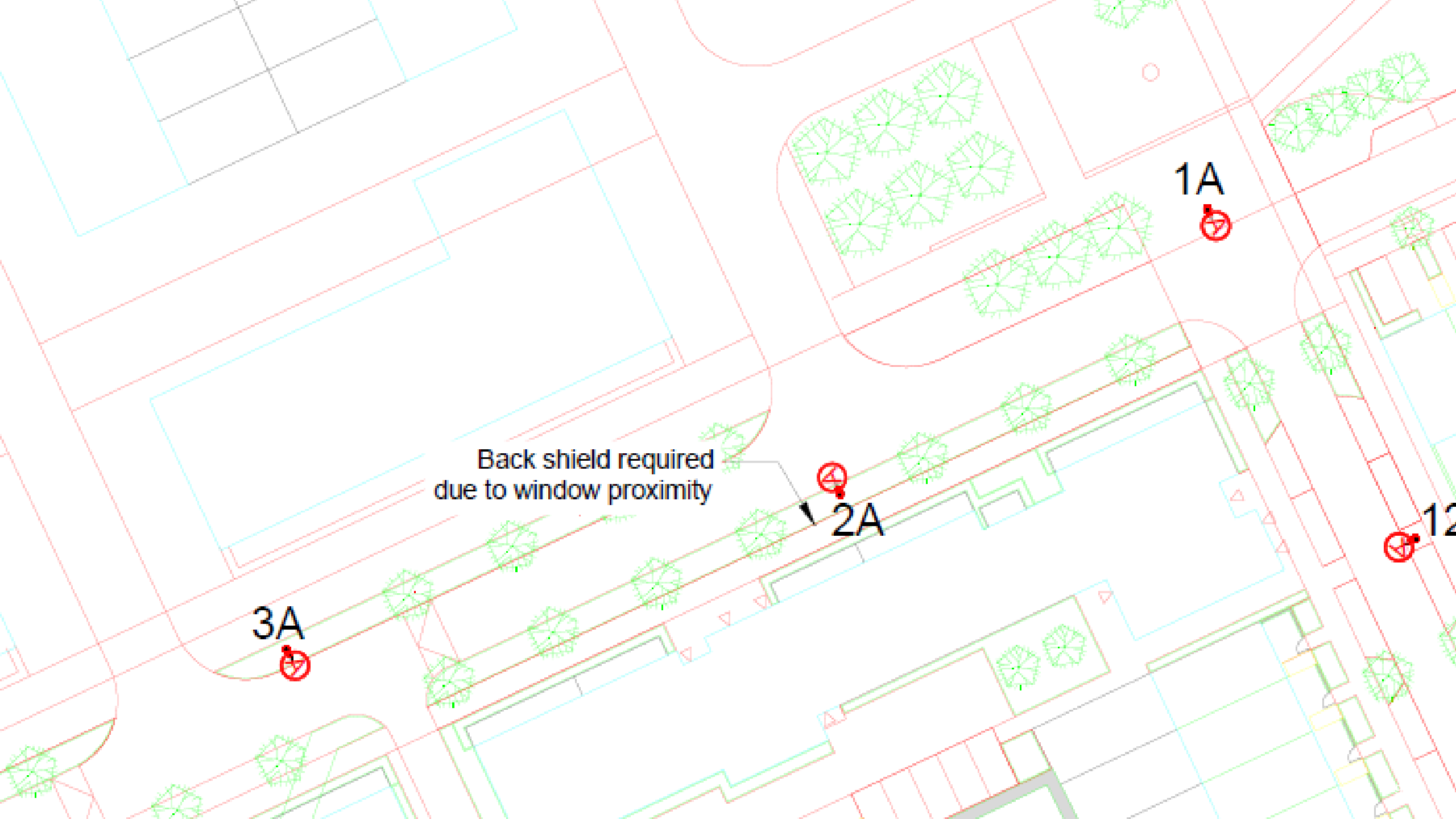
- Spot the lighting column?



- Trees grow
- Lights in trees are redundant and harmful to the tree and any ecology living there
- Maintenance and cutting back of trees, even when planned, rarely happens or continues after installation.
- Existing trees are often harder to avoid however new trees can certainly not experience this fate.
- No one wins with this situation







1A



2A

3A



12

Back shield required
due to window proximity



Its not just roads where trees and lighting intersect





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**Thank you for your
attention**

Questions?

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