14.0 Public Space & Nature 14.1 Supplimentary Area-wide and Area Type Guidance

Information provided is up to date as of summer 2023 – where appropriate, please ensure to always refer to the latest guidance available.

Play

Breakdown of Open Space Typologies (based on current Local Plan)

Туроlоду	Medway standard (hectare per 1000 people)
Parks & Gardens	0.4/1000
Play	0.08/1000
Amenity Greenspace	0.74/1000
Natural Greenspace	1.35/1000
Outdoor Sport	0.5/1000
Allotments	0.18/1000
Total	3.26/1000

Fields in Trust, Guidance for Outdoor Sport and Play: Beyond the Six Acre Standard (England)

- Extract from Fields in Trust Planning and Design for Outdoor Sport & Play (2008): NEAPs & LEAPs
- https://www.fieldsintrust.org/Upload/file/guidance/Guidance-for-Outdoor-Sport-and-Play-England.pdf

SUDS

Ciria, The SuDS Manual (C753)

https://www.ciria.org/CIRIA/CIRIA/Item_Detail.aspx?iProductCode=C753

Trees Selection

Trees and Design Action Group 'Tree Species Selection for Green Infrastructure: A Guide for Specifiers'

- This guide offers a comprehensive, research-based decision-making tool on selecting appropriate species for a range of contrasting planting scenarios. The guide and its companion database are available below:
- https://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_ treespeciesquidev1.3.pdf

British Standard BS 8545 'Trees: from nursery to independence in the landscape – recommendations

 This British Standard gives recommendations for transplanting young trees successfully from the nursery, through to achieving their eventual independence in the landscape, specifically covering the issues of planning, design, production, planting and management.

Tree pit soil volume calculator & Tree pit design

- Adequate soil volume is one of the most critical aspects of the design. Soil volume requirements are proportional to the mature size of tree species. In a hard landscape situation, the required soil volume/root growing environment for trees will be provided through the use of underground load bearing root zone technology.
- Geotextiles to surround the cell installation will not be supported if the membrane is a barrier to root growth beyond the planting pit thereby preventing trees exploiting adjacent native soil. This will adversely affect long term survival.
- Until such time as Medway Council produces its own guidance, please refer to Leeds City Council Guidance: Urban Tree Planting, or any revisions thereof found via the following link.
- https://www.leeds.gov.uk/docs/Guidance%20Urban%20Tree%20Planting. pdf

Target soil volume calculator

Mature Canopy	Canopy Area	Target Soil Volume
Large (8m dia+)	50m ²	30m ³
Medium (5m-8m dia)	19.6m²	12m ³ (11.8m ³)
Small (3m-5m dia)	7.1m ²	5m ³ (4.24m ³)
Small to Medium	-	8.5m ³

Notes:

- The soil volume formula (0.6 m3 of soil per 1m2 of mature crown area) does not apply to fastigiated or columnar habit trees. Soil volume requirements for these narrower trees should be based on the canopy diameter of the parent species.
- Permitting roots to extend beyond the pit into adjacent soil areas, e.g., into grass verges, gardens etc., can count towards soil volume provision.
- Trees planted in a lower volume of soil than that calculated will not reach their full potential and will have a shortened life span. Consequently, lower soil volume will not be accepted unless the shortfall can be mitigated, or if there is an overriding justification/ special circumstances.
- Tree pits to preferably be connected.
- Geotextiles installed around tree planting areas will not be supported if the membrane is a barrier to natural root growth beyond the planting pit into adjacent areas that support tree root growth. Preventing root spread or unnaturally constraining incremental increase in root diameter will adversely affect long term survival of trees.

- The use of sand-based structural soils (also referred to as tree soil/ Amsterdam tree soil) are not accepted. These soils are not conducive to root growth due to the high levels of compaction required and low levels of organic matter present.
- Developers are required to design tree planting and landscape schemes in a manner which allows ease of access for future maintenance to underground services, such as gas and water pipes and electricity cables.
- Where possible services must be designed, locally protected or diverted to accommodate new trees and their soil volume requirements. Guidance can be found in British Standard 5837 and in the National Joint Utilities Group guidelines (currently NJUG Vol 4, source: http://streetworks.org.uk/wp-content/uploads/2016/09/V4-Trees-Issue-2-16-11-2007.pdf).
- Trees planted in hard surfaced areas with high footfall, or where vehicles pass close to are vulnerable to damage. In these circumstances it is often preferable to incorporate tree guards, raised curbs or street furniture such as seating to protect them.
- It is not always practical or desirable to maintain a soft landscape area around trees planted in hard surfaced areas. Designers must take account of the imperative to provide an environment suited to the successful establishment of trees that are independent in the landscape. Guidance on various surfacing options can be found on the London Tree Officers Association website, see 'Further Information on Trees'
- New building foundations or tree pit must be designed appropriately to enable tree planting. An appropriate distance between tree trunk to facade must be ensured will allow for a significant canopy spread, contributing to the overall coverage targets.

Further information on trees

- 'The England Trees Action Plan 2021 to 2024'
 - This document sets out the government's long-term vision for the treescape it wants to see in England by 2050 and beyond. Planting and establishing the right tree in the right place will deliver benefits for people, for wildlife and the economy.
 - https://www.gov.uk/government/publications/england-trees-action-plan-2021-to-2024
- Information on Selecting Urban Trees for Ecosystem Service Provision
 - The ecosystem service benefits of trees. Urban trees provide benefits or ecosystem services to people. The size, condition, and species of urban trees determine their ability to provide these benefits.
 - https://www.forestresearch.gov.uk/research/quantification-and-valuationof-benefits-provided-by-urban-trees/selecting-urban-trees-for-ecosystemservice-provision/
- Diversity in Urban Tree Populations.
 - Resilient tree populations are important if our trees are to cope better with changing environmental conditions and threats from pests and diseases. Native/non-native - diversity in the urban environment cannot be achieved using native species alone.
 - Urban tree population should include no more than 10% of any one species, 20% of any one genus, or 30% of any family. Resilience of urban tree populations can be increased by the diversification of those populations. This diversity can be achieved through species diversity, age and size diversity, and genetic diversity.
 - https://www.treeconomics.co.uk/wp-content/uploads/2020/09/P82-84.pdf
- Selection of Surface Materials
 - Guidance on the selection of surface materials around trees in hard landscapes is available in 'Surface Materials Around Trees in Hard Landscapes' by the London Tree Officers Association
 - https://www.ltoa.org.uk/surface-materials-around-trees-document/ file#:~:text=Resin%2Dbound%20gravel%20can%20be,early%20growth%20 is%20not%20impeded.

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Further Information on Tree Canopy Cover

Can be found via the following sources:

- London Tree Canopy Cover
 - https://apps.london.gov.uk/canopy-cover/?_gl=1*73zgew*_ga*MzgxMDgy MjYzLjE2OTA5NjUzNjU.*_ga_PY4SWZN1RJ*MTY5MDk2NTM2NC4xLjAuMTY 5MDk2NTM2NS42MC4wLjA
- Tree canopy cover leaflet (Forest Research)
 - https://www.forestresearch.gov.uk/tools-and-resources/fthr/tree-canopycover-leaflet/
- ICF The Canopy Cover of England's Towns and Cities: baselining and setting targets to improve human health and well-being
 - https://www.charteredforesters.org/wp-content/uploads/2019/01/Doicket-al_Canopy-Cover-of-Englands-Towns-and-Cities_revised220317_ combined.pdf
- England's Urban Forests Using tree canopy cover data to secure the benefits of the urban forest
 - https://assets.publishing.service.gov.uk/government/uploads/system/ uploads/attachment_data/file/709464/FR_FC_TreeCanopyData_leaflet.pdf
- Cambridge Canopy Project
 - https://www.cambridge.gov.uk/cambridge-canopy-project
- KCC Canopy Cover Assessment
 - o https://www.kent.gov.uk/__data/assets/pdf_file/0012/111360/Canopycover-report.pdf
- Colchester City Council Canopy Cover Assessment Guidance o https://www.colchester.gov.uk/canopy-cover-assessment/
- What is Urban Tree Canopy?
 - https://www.edmondok.gov/1403/What-is-Urban-Tree-Canopy
- University of Leeds Tree canopy cover across Leeds what do we have, and what do we need?
 - https://leaf.leeds.ac.uk/news/tree-canopy-cover-across-leeds-what-do-wehave-and-what-do-we-need/

- ICF Canopy Cover Targets in Planning Policy: Increasing the Quantity and Quality of Tree Cover in New Developments.
 - https://www.charteredforesters.org/wp-content/uploads/2016/11/Philip-Simpkin-Canopy-Cover-Targets-in-Planning-Policy-2016.pdf
- Wycombe District Council Tree Canopy Cover
 - https://urbantreecover.org/location/high-wycombe/
- Supplementary Planning Document: Biodiversity Net Gain
 - https://www.buckinghamshire.gov.uk/planning-and-building-control/ planning-policy/local-development-plans-and-guidance/local-planningguidance/supplementary-planning-document-biodiversity-net-gain/4appendix/
- Wycombe District Council Canopy Cover Supplementary Planning Document
 - https://buckinghamshire-gov-uk.s3.amazonaws.com/documents/Canopy-Cover-SPD_3qAkk4z.pdf

15.0 Sustainable Development Goals 15.1 Supplimentary Area-wide and Area Type Guidance

The United Nations has developed 17 Sustainable Development Goals (SDGs) to promote "peace and prosperity for people and the planet..." whilst addressing climate change and working to preserve the natural environment. With Medway Council declaring a Climate Emergency, Chatham Centre Design Code aims to contribute to the SDGs and contribute to more sustainable development.

SDG 11 is most relevant to the Chatham Centre Design Code, which focuses on making cities and human settlements inclusive, safe, resilient and sustainable. The design code can primarily contribute the following SDG11 sub-goals:

- 11.1 Reduce UK greenhouse gas emissions to net zero by 2050 >
- 11.3 Enhance the cohesiveness of our communities and nations > including through major events and ceremonial occasions, and reduce inequalities of participation in society, particularly among young people
- 11.5 Build confidence in the transport network as the country > recovers from Covid-19 and improve transport users' experience, ensuring that the network is safe, reliable, and inclusive
- 11.6 Tackle climate change and improve air quality by decarbonising >transport
- 11.7 Improve the environment through cleaner air and water, > minimised waste, and thriving plants and terrestrial and marine wildlife
- 11.8 Reduce the likelihood and impact of flooding and coastal >erosion on people, businesses, communities and the environment
- 11.13 Raise productivity and empower places so that everyone > across the country can benefit from levelling up
- 11.14 More, better quality, safer, greener and more affordable homes >
- 11.16 A sustainable and resilient local government sector that > delivers priority services and empowers communities

Chatham Centre Design Code also contributes to many other SDGs, including:

- Goal 3: Ensure healthy lives and promote well-being for all at all > ages
- Goal 4: Ensure inclusive and equitable quality education and >promote lifelong learning opportunities for all
- Goal 5: Achieve gender equality and empower all women and girls >
- Goal 6: Ensure availability and sustainable management of water > and sanitation for all
- Goal 7: Ensure access to affordable, reliable, sustainable and > modern energy for all
- Goal 8: Promote sustained, inclusive and sustainable economic > growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and > sustainable industrialisation and foster innovation
- Goal 10. Reduce inequality within and among countries >
- Goal 12. Ensure sustainable consumption and production patterns >
- Goal 13. Take urgent action to combat climate change and its > impacts
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial > ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable > development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

