SPD1: Planning Obligations
Technical Note 4:
Green Infrastructure & Recreation

February 2012
If you need help to understand this information, please ask someone to phone 0161 912-2000 to let us know how we can best provide this information.

أنا كنت في حاجة إلى مساعدة لفهم هذه المعلومات الرجاء طلب من شخص الاتصال برقم الهاتف: 0000-912 161 لأخبارنا عن كيفية تقديم هذه المعلومات بأحسن طريقة.

ARABIC

如果您需要帮助才能看懂这份资料，可以请人致电：
0161 912-2000，告诉我们如何最好是给您 提供这些信息。

CHINESE

Si vous avez besoin d’aide pour comprendre ces informations, veuillez demander à quelqu'un de téléphoner au 0161 912-2000 pour nous informer de la meilleure façon pour fournir ces informations.

FRENCH

श्रेष्ठ आपने आ माहितीली समजें भरे मद्दत करू शकतो ता कुछ करू एरून्हुन करू शकते. आ माहितीली अभ्यस्त केली सारी शीते पूरी पाती सहकर ते बाहर आपले जडणवण माध्यम, 0161 912-2000 कंब्र फर होल करे.

GUJARATI

Jesli potrzebujesz pomocy aby zrozumieć ta informacje, popros kogos, aby zadzwonił pod numer 0161 912-2000 aby nas poinformował, w jaki sposób najlepiej możemy ci ja przekazać.

POLISH

ने जुगाड़ रिच नाटवणी महत्त्व लक्ष्य मंगलित नाटकी ते दं दिवस वचवे विशेषतः टूटे, 0161 912-2000 स्त्रोत दे टेलीफोन वचवे रिच टेले कल चलू जि अभ्यस्त रिच नाटवणी घट दे आटे चला राजस्व विवाद दे मरे उंग।

PUNJABI

Haddii aad dooneeyso in lagaa taageero garashada macluumaadkaani, fadan qof uun ka cods inuu waco telefoonka 0161 912-2000 oo noo sheego sida ugu fiican oo aanu macluumaadkaani kuugu soo gudbin karno.

SOMALI

اکر آ کو بی معلومات کمپینہ مزین ہوگئی ضرورت سے ہو تو برادر مہریان کسے کہیں کہو تھی 0161 912-2000-9161 کوئی بھی معلومات کھبر کرے کہا کا آکھرین سرگرم کرے کا ابتدائی طور پر یہے۔

URDU
CONTENTS

INTRODUCTION .............................................................................................................1
A. GM GREEN INFRASTRUCTURE FRAMEWORK AND ASSETS MAP FOR SALFORD, TRAFFORD AND MANCHESTER .........................................................2
B. TDC5 - SPECIFIC GREEN INFRASTRUCTURE APPLYING TO ALL DEVELOPMENT ..................................................................................................................5
C. TDC6A - LOCAL OPEN SPACE ..............................................................................6
D. TDC6B - SEMI NATURAL GREEN SPACE .................................................................8
E. TDC6C - CHILDREN’S EQUIPPED PLAY SPACE .......................................................8
F. TDC6D - OUTDOOR SPORTS FACILITIES ...............................................................9
G. TDC7A - SWIMMING POOLS ..................................................................................10
H. TDC7B - HEALTH AND FITNESS ........................................................................10
I. AMOUNTS TO PAY AND EXAMPLES OF CALCULATIONS .............................10
J. PRIORITY AREAS TO SPEND CONTRIBUTIONS ....................................................12
K. DETAILED CALCULATIONS ..................................................................................13
L. WORKED EXAMPLE – DEVELOPMENT OF 10 APARTMENTS USED FOR PURPOSE OF THIS EXAMPLE .................................................................14
INTRODUCTION

This Technical note is intended to be read alongside the Planning Obligations Supplementary Planning Document (SPD1) and provides more detailed information, maps, costings and worked examples to support section 3.5 on Green Infrastructure, Open Space, Sport and Recreation.

Information is organised into sections below which are referenced in the Planning Obligations SPD. Although the justification and evidence base work is detailed, reference is also made to the specific documents which contain a much more comprehensive statement of the background to the development of standards, methodologies and priorities for improvements.

This Technical Note is a ‘living document’ and will be updated regularly to reflect the latest guidance and data.
A. GM GREEN INFRASTRUCTURE FRAMEWORK AND ASSETS MAP FOR SALFORD, TRAFFORD AND MANCHESTER

Greater Manchester Green Infrastructure Framework
Investment to Support Growth

Reference should also be made to the following documents which inform the Green Infrastructure Framework:
- Greater Manchester Ecological Framework
- Strategic Flood Risk Assessment
- Climate Change Action Plan
- Real Rosi & Perimetre Edge Forest Plans

DRAFT for CONSULTATION (2019)
LUM data © Copyright CURE
GJEGIE EPHEC GR/19/233/01
University of Manchester, 2005
Data Source: AGMA
© Crown copyright. All rights reserved
OS Licence No: LA 100023108
G987.852c (7.02.19)
B. **TDC5 - SPECIFIC GREEN INFRASTRUCTURE APPLYING TO ALL DEVELOPMENT**

B.1. The Towards a GI Framework Document in 2008 resulted in the drawing up of the GM Framework map above to show the strategic importance of the GI network across Manchester. During 2009, further evidence about biodiversity, flood risk, climate change and the economic value of green infrastructure emerged and a further report was commissioned called “Next Steps to a GI Framework in GM”. This sets out how a framework should be produced, with detailed recommendations in relation to evidence-gathering, objective-setting, governance, delivery, action-planning and advocacy. One of its outcomes was the assets and opportunities map shown above. The report is due for publication in 2012.

B.2. The multiple benefits for people and nature provided by green infrastructure are well documented and can be demonstrated across areas as diverse as climate change adaptation and mitigation; biodiversity; air and water quality; economic growth; land and property values; sustainable development; health and well-being; community cohesion; active travel and sport. However, more generally evidence exists to show trees can perform functions that improve the aesthetics and image of an area, improve permeability, filter air particulates, provide biodiversity benefits and combat the effects of wind and heat. The standard is a guide to an appropriate contribution. Work is being undertaken to take the GM work down to a Trafford level. Red Rose Forest have used a wide range of research material to analyse priority areas for GI. These specific Green Infrastructure requirements in particular locations will be identified on the Trafford Green Infrastructure Plan / Trafford Forest Plan due for publication in 2012. The Plan will be continually updated as new research becomes available and data can be interrogated to give more guidance on which type of GI and where the priority locations for implementation are.
C. **C.TDC6A - LOCAL OPEN SPACE**

C.1. The standard has been developed based on the existing amounts of local open space audited in the borough as part of the PPG 17 assessment, and Greenspace Strategy. The June 2009 Greenspace audit showed there to be an average borough wide provision of 1.35 ha per 1000 population. This has been taken as the standard for new development to achieve. Existing open space is not distributed equally across the borough, and quality of provision varies greatly between areas. Details of wards that are sufficient or deficient can be found in the Trafford Green and Open Spaces – An Assessment of Need Update (June 2009). The Greenspace Strategy (2010) contains a sufficiency/deficiency assessment of existing provision on an area basis. However each proposed development will be assessed individually on its GI needs and whether there is sufficient quantity and quality of open space against the standards (see section L).

C.2. Local deficiencies in quality are identified in the Greenspace Strategy and are informed by the Councils annual Greenspace Awards programme which involves independent external assessment and internal inspection via greenspace staff. This system is proposed to change in 2012, linked to service reorganisation and performance management, but will be replaced by a similar quality assessment. Information will be updated as this becomes available. At present Parks are currently rated as either no award, bronze, silver or gold within this assessment. Depending on the status of the Park within Trafford’s published greenspace hierarchy (Greenspace Strategy 2010), there are associated minimum expected standards of quality to be attained. More information for the 2010 Awards is set out in the table below:
C.3. A Greenspace Strategy Action Plan, broken down into relevant geographic areas will describe the interventions necessary in different areas of Trafford in order to bring about sustained improvements in quality, which is regarded as the overriding factor in greenspace provision.
D. **TDC6B - SEMI NATURAL GREEN SPACE**

D.1. On a borough wide basis, semi natural greenspace accounts for a large proportion of accessible greenspace. The actual amount equates to 2 hectares per 1000 population and is in line with the Natural England Standard. It is therefore considered appropriate to adopt it as a local standard. However the distribution of semi natural greenspace across the borough is very uneven with residents of Trafford’s very urban areas having very limited access to sites near to them. Given the very urban character in the north of the borough it was considered that a target of having semi natural greenspace sites within 300m of resident’s homes although desirable was not realistic or achievable. Semi natural greenspace also includes woodlands and The Woodland Trust has adopted a recommended national standard of 2ha of woodland within 500m of residents. However, although improving, Trafford performs poorly against this standard due to its urban character. Therefore, a more appropriate and achievable accessibility standard of 1200m is adopted.

D.2. Quality of semi natural greenspace is evidenced by the results of the inspection regime carried out for the Trafford Greenspace Awards. Only a representative sample of sites are inspected each year so this information will be regularly updated. Further information can be obtained from the Greenspace Strategy Team.

E. **TDC6C - CHILDREN’S EQUIPPED PLAY SPACE**

E.1. The quantity and accessibility standard reflects national standards and is appropriate in line with local use. The Trafford Open Space Assessment of Need 2005 consultation showed that of the sites surveyed, 52% of greenspaces were considered good in terms of the quality of the access criteria. The study also highlighted a desire by residents for more provision for teenagers and this is reflected in the establishment of a separate standard for this provision. Further information can be found in the Assessment Report.

E.2. The following table sets out the different levels of play area that should be provided for particular numbers of residents and the type of equipment appropriate to provide.
Table D1 - Summary of Children’s Play Space Categories LAP LEAP NEAP

<table>
<thead>
<tr>
<th>Facility</th>
<th>Time</th>
<th>Walking Distance</th>
<th>Straight Line Distance</th>
<th>Minimum Size</th>
<th>Character</th>
<th>Additional Resident Numbers Provided For</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAP - (Local Area for Play)</td>
<td>1 Min</td>
<td>100m</td>
<td>60m</td>
<td>100m²</td>
<td>400m² (0.04ha)</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Informal recreation, landscaping, fencing, seating, and may include a low key games area for toddlers</td>
<td></td>
</tr>
<tr>
<td>LEAP - (Local Equipped Area for Play)</td>
<td>5 Min</td>
<td>400m</td>
<td>240m</td>
<td>400m²</td>
<td>3,600m² (0.36ha)</td>
<td>450</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Informal recreation, landscaping, fencing, seating and junior play area (5 types of equipment)</td>
<td></td>
</tr>
<tr>
<td>NEAP - (Neighbourhood Equipped Area for Play)</td>
<td>15 Min</td>
<td>1,000m</td>
<td>600m</td>
<td>1,000m²</td>
<td>8,500m² (0.85ha)</td>
<td>1062</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Informal recreation, landscaping, fencing, seating, play areas for all age groups (8 types of equipment), wheeled play and ball game opportunities</td>
<td></td>
</tr>
</tbody>
</table>

F. TDC6D - OUTDOOR SPORTS FACILITIES

F.1. The Outdoor Sports Facility Study (March 2009) concludes that the quantity of outdoor sports facilities can meet present demand and that although it is envisaged there will be an increase in sports teams there is spare capacity on school fields that have the potential to meet this demand. The audit found the present ratio of facilities to population to be 1 hectare to 1000 population therefore it is considered appropriate to adopt this as a standard.

F.2. However the quality of several facilities is poor across the borough and of the 32 sites for football provision 5 are classed as poor and 25% have no changing facilities.

F.3. An accessibility standard of 1800m has been adopted in line with Sport England’s recognized Sports Facilities Toolkit. Trafford’s own community consultation as part of the PPG17 Assessment of Need (2005) concluded that 85.3% of sports groups travel less than 2 miles to facilities.
G. TDC7A - SWIMMING POOLS

G.1. The Leisure Review has indicated a predicted over provision of swimming pools of 804 m² for Trafford using modelling based on the Sport England supply and demand methods. However much of this provision is within private members clubs and so in terms of pay to play there is a deficiency of 921.5m². In order to address this deficiency there has been a need identified for 10.2m² of new swimming pool per 1000 population. New residential development will put pressure on this deficiency and so a contribution towards providing new facilities or improving existing will help meet the needs of this new population.

G.2. This has been calculated using methods based on the Sport England modelling toolkit. An accessibility standard of 1800m has been adopted in line with Sport England’s recognized Sports Facilities Toolkit.

G.3. In terms of quantity the majority of areas are within 1800m of a public pool. The main areas deficient are in the west and north of the borough. However, the quality of public swimming pools is an issue in Trafford with all 3 main pools at Stretford, Sale and Altrincham in need of refurbishment.

H. TDC7B - HEALTH AND FITNESS

H.1. Trafford’s Leisure Review has indicated a predicted over provision of health and fitness facilities of 155 stations for Trafford using modelling based on the Sport England supply and demand methods. However much of this provision is within private members club and so in terms of pay to play there is a deficiency of 346 stations. In order to address this deficiency a need for 3.6 stations per 1000 population has been identified. This has been calculated using methods based on the Sport England modelling toolkit. An accessibility standard of 1800m has been adopted in line with Sport England’s recognized Sports Facilities Toolkit.

I. AMOUNTS TO PAY AND EXAMPLES OF CALCULATIONS

Specific Green Infrastructure Contribution

I.1. Cost per tree

• Containerised tree (14cm - 16cm heavy standard) - £80

• Stakes and weld mesh guards - £30

• Planting costs - £75

• Maintenance (5 years) £125

• Total £ 310.00
I.2. Cost of layout out 1.35 Ha (13500) of local open space, excluding play area and MUGA costs, which are dealt with separately:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard surfaces/pathways/drainage (1,215 sqm)</td>
<td>£63,059</td>
</tr>
<tr>
<td>Fencing (£70/linear metre)</td>
<td>£37,800</td>
</tr>
<tr>
<td>Access Gates (x4)</td>
<td>£3,600</td>
</tr>
<tr>
<td>Maintenance Gates (x2)</td>
<td>£3,200</td>
</tr>
<tr>
<td>Grassed Area (12,150 sqm)</td>
<td>£3,324</td>
</tr>
<tr>
<td>Shrubs (135 sqm)</td>
<td></td>
</tr>
<tr>
<td>Supply (200)</td>
<td>£1,000</td>
</tr>
<tr>
<td>Planting</td>
<td>£400</td>
</tr>
<tr>
<td>Supply and planting of bulbs</td>
<td>£500</td>
</tr>
<tr>
<td>Supply and installation of benches (10)</td>
<td>£7,500</td>
</tr>
<tr>
<td>Supply and installation of litter and dog bins (10)</td>
<td>£4000</td>
</tr>
<tr>
<td>Total per 1.35 Ha</td>
<td>£124,383</td>
</tr>
<tr>
<td>Cost per square metre</td>
<td>£9.21</td>
</tr>
<tr>
<td>Cost per person</td>
<td><strong>£124.30</strong></td>
</tr>
</tbody>
</table>

Play area/teenager provision contribution

I.3. This has been calculated from recent schemes using 0.1Ha as teen/youth calculated from MUGA/skate park costs and 0.04 from LEAP play areas activity zones.

Cost per person is **£291.50**

Semi natural Greenspace contribution

I.4. Costs have been worked out from recent countryside improvement schemes that include woodland creation, access works and Local Nature Reserve creation.

Costs are £5.80/sqm which equates to £58,000 per hectare.
The standard is 2 hectares per 1000 population therefore the cost per person is 58,000 divided by 1000 x 2 = £116.

Outdoor Sports Contribution

I.5. The outdoor sports figures have been calculated according to Sport England's toolkit using 2010 figures for grass pitches and changing facilities. Figures are based on a 2 team changing facility per pitch. A pitch is taken as 0.64Ha however a 2 team changing facility per hectare is deemed to be adequate.

The cost of a 2 team changing facility is £275,000

The cost of a pitch is £12.50/sqm which totals £80 for the pitch. Therefore this equates to £125,000 (80x0.64) per hectare.

The standard is 1 hectare per 1000 population therefore the cost per person is (275,000 divided by 1000 = 275) + (125,000 divided by 1000 = 125) = £400

Swimming Pool Contribution

I.6. The Sport England Facility Calculator has been used to calculate the requirements for new facilities arising from growth in population.

The calculator assesses the cost per square metre of pool at £10,007.63

Trafford has a deficiency of 10.2m per 1000 population.

Therefore the cost per 1000 population is 10,007.63 x 10.2 = £102,077.83 therefore the cost per person is therefore £102

Health & Fitness Facilities Contribution

I.7. Trafford Community Leisure Trust estimate the cost of an average gym station to be £5,000.

Trafford has a deficiency of 3.6 stations per 1000 population

Therefore the cost per 1000 population is 5,000 x 3.6 = £18,000

The cost per person is therefore £18

J. PRIORITY AREAS TO SPEND CONTRIBUTIONS

I.1 The Council will spend contributions in the catchment zone of the development for the benefit of the new residents. However where there are strategic sites/facilities e.g. Longford Park, Sale Water Park and Stretford Meadows outside the catchment area that will benefit residents, a proportion of contributions may be spent on these identified sites. Priorities for
schemes will be identified in the Greenspace Action Plan, Leisure Review Action Plan and Trafford Forest Plan.

K. DETAILED CALCULATIONS

K.1. The method to calculate contributions is within the main Planning Obligations SPD. This section details how the residential capacity rate for a development is calculated and goes through a potential development as a worked example to assess how to calculate contributions and what they will be.

Residential Capacity Rates

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bedroom</td>
<td>1.2 persons</td>
</tr>
<tr>
<td>2 bedrooms</td>
<td>1.9 persons</td>
</tr>
<tr>
<td>3 bedrooms</td>
<td>2.7 persons</td>
</tr>
<tr>
<td>4 bedrooms or more</td>
<td>3.2 persons</td>
</tr>
</tbody>
</table>

Other types of accommodation* 1 person per bed space
Source – Census data 1991

*This takes account of open plan studio type accommodation where a mezzanine sleeping area may replace an actual bedroom.

NB If the application is for outline planning permission and the number of dwellings are not known an estimate is calculated using the formula of 30 dwellings per hectare and an average household size of 2.33. The calculated figure can be updated at reserved matters when exact numbers are known.
L. WORKED EXAMPLE – DEVELOPMENT OF 10 APARTMENTS USED FOR PURPOSE OF THIS EXAMPLE
L.1. With reference to the above map the address point of the development is mapped and the existing facilities within the relevant 1km and 3km catchment zones are shown. Firstly the needs of the development are calculated by working out the residential capacity and the number of dwellings (specifically for calculating tree numbers). This is then used to work out whether there are sufficient existing facilities compared to required standards to meet the development needs. Where facilities are found to be deficient in quantity or quality financial contributions have been calculated. The following sections detail each calculation and then add these up to give a total contribution required for the development.

<table>
<thead>
<tr>
<th>Number of bedrooms</th>
<th>2 Bedroom</th>
<th>3 Bedroom</th>
<th>4 Bedroom +</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartment split</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Residential capacity</td>
<td>7.6</td>
<td>10.8</td>
<td>6.4</td>
<td>24.8</td>
</tr>
</tbody>
</table>

Population within 1km - 9,844.25*
Population within 3km - 44,510*

*Populations calculated using Council Tax data from September 2010.

Contribution calculated using the following formula:

\[ \text{Residential Capacity} \times \text{Standard Cost per person} = \text{contribution required}. \]

L.2. Green Infrastructure

Standard 1 tree per dwelling.

10 apartments = 10 trees required to be planted

If planting is not possible onsite then the contribution required = £3,100.00

**Quality standard not applicable

L.3. Local Open Space (1km)

Cost per person = £124.30 (Quantity), £93.23 (Quality)
Standard 1.35ha per 1000 population.

To calculate required LOS, 1.35ha (standard) \times 9.844 \text{ (population)} = 13.29ha required.

Existing LOS within 1km of the development = zero, therefore an onsite quantity contribution is required.

24.8 (Residential Capacity) \times £124.30 \text{ (Cost pp)} = £3,082.64
L.4. Outdoor Sports (3km)

Cost per person £400.00 (Quantity), £300 (Quality)
Standard 1ha per 1000 population.
To calculate required Outdoor Sports provision, 1ha (standard) x 44.51 (population) = 44.51ha required.

Existing outdoor sports within 3km of the development = 45.12ha meaning the proposed development is sufficient. However the existing provision is not up to the required quality standard therefore an onsite quality contribution is required.

24.8 (Residential Capacity) x £300.00 (Cost pp) = £7,440.00

L.5. Semi-natural Greenspace(SNG) (3km)

Cost per person £116.00 (Quantity), £87.00 (Quality)
Standard 2ha per 1000 population.
To calculate SNG required, 2ha (standard) x 44.51 (population) = 89.02ha required.

Existing SNG within 3km of the development = 127.96ha meaning the proposed development is sufficient. At present there is no quality information for this area therefore an onsite quality contribution is not required.

L.6. Provision for children/young people, including equipped play and teenage provision (1km)

Cost per person £291.50 (Quantity), £218.63 (Quality)
Standard 0.14ha per 1000 population.
To calculate required CYP provision 0.14ha (standard) x 9.844 (population) = 1.38ha required.

Existing provision within 1km of the development = 0.24ha meaning the proposed development is deficient in the standard 0.14ha per 1000 population required; therefore an onsite quantity contribution is required.

24.8 (Residential Capacity) x 291.50 (Cost pp) = £7,229.20

L.7. Swimming Pools (3km)

Cost per person = £99.57 (based on Sports England Tool Kit and a population of 212,800), £74.68 (Quality)
Standard 10.2square meters per 1000 population.
To calculate required Swimming Pool provision 10.2sqm (standard) x 44.51 (population) = 454.31sqm required.
Existing Swimming Pool provision within 3km of the development = 1,079sqm meaning the proposed development is sufficient therefore an onsite quantity contribution is not required. However the existing provision at Altrincham is not up to quality standards so a contribution to quality is required.

24.8 (Residential Capacity) x 74.68 (Cost pp) = £1,852.06

L.8. Health and Fitness (3km)

Cost per person = £18.00 (Quantity), £13.50 (Quality)
Standard 3.6 stations per 1000 population.
To calculate required Health and Fitness provision 3.6 (standard) x 44.51 (population) = 160.24 stations required.

Existing Health and Fitness provision within 3km of the development = 202.6 stations, meaning the proposed development is sufficient; therefore an onsite quantity contribution is not required. Quality information on gym stations is not available at this time therefore a contribution to quality is not required.

L.9. Total contributions required for this example

<table>
<thead>
<tr>
<th>Facility</th>
<th>Contribution required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Infrastructure</td>
<td>£3,100.00</td>
</tr>
<tr>
<td>Local open Space</td>
<td>£3,082.64</td>
</tr>
<tr>
<td>Semi-natural greenspace</td>
<td>N/A</td>
</tr>
<tr>
<td>Provision for children/ young people, including equipped play and teenage provision</td>
<td>£7,229.20</td>
</tr>
<tr>
<td>Outdoor sports</td>
<td>£7,440.00</td>
</tr>
<tr>
<td>Swimming pools</td>
<td>£1,852.06</td>
</tr>
<tr>
<td>Health and fitness</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total contribution required</strong></td>
<td><strong>£15,263.91</strong></td>
</tr>
</tbody>
</table>