



**Publication Stage Representation Form
LB Ealing Council New Local Plan
Consultation dates: 28 February to 6pm 10 April 2024**

Name of Organisation:

Ealing Front Gardens Project in collaboration with London National Park City

<https://frontgardens.nationalparkcity.org/>

Part B (Please use a separate sheet for each representation).

3. To which part of the Local Plan does this representation relate?

Paragraph:

Policy: SP2.2 Climate action: B. Making the best use of land and investing in sustainable connectivity by....

Policies Map:

4. Do you consider the Local Plan is: (please tick)

4.(1) Legally compliant

4.(2) Sound

5. Please give details of why you consider the Local Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

If you wish to support the legal compliance or soundness of the Local Plan or its compliance with the duty to co-operate, please set out your comments below.

The measures listed in SP2.2B are unsound because they omit the installation of in-pavement charging gullies. These are an established method of electric vehicle home-charging for households without driveways and offer a reasonable alternative to parking in front gardens. The latter approach is costly and involves extensive hard surfacing, climate change risks and loss of urban greening.

The list at SP2. B does include installing more on-street electric vehicle charge points, but these are of limited use to residents because (a) it is difficult for electric vehicle owners to tell in advance if the points are in use or not and (b) they are financially disadvantageous to residents: charging via the domestic electricity supply is considerably cheaper than on-street because the household supply attracts a lower rate of VAT and the electricity companies may also offer cheaper household deals e.g. overnight.

Charging gullies are an established method and the evidence for their successful use is accumulating all the time. It is therefore unjustifiable that they are omitted from a Local Plan with a 15 year time horizon.

6. Please set out the modification(s) you consider necessary to make the Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified at 5 above.

You will need to say why each modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Please note: In your representation you should provide succinctly all the evidence and supporting information necessary to support your representation and your suggested modification(s). You should not assume that you will have a further opportunity to make submissions.

To make the Local Plan sound, the following should be added to the list of policies at SP2.2 B Making the best use of land and investing in sustainable connectivity by.....:

- Installing in-pavement charging gullies in those parts of the borough where houses have no pre-existing driveways.

Evidence base:

Our 2005 research estimated that 32,800, i.e. 44%, of the borough total of 74,300 front gardens had a pavement crossover for vehicle access (either a pre-existing driveway or installed with direct access to the front garden). That means that over half (56%) of the borough’s front gardens, at that time, did not have vehicle access.

That figure will be less now because more crossovers have been installed, but it is still a sizeable share of the borough’s total front gardens and an indication of how many front gardens could be saved from paving over by the installation of charging gullies.

While many of these front gardens may be too small to qualify for a crossover under Ealing Council’s current restrictions, it is possible that these could be weakened due to pressure from residents if an alternative home charging option is not available. This has recently happened in LB Richmond upon Thames where the permitted size of a front garden where a crossover would be considered has been reduced by 83%. This will clearly increase the number of paved over front gardens in that borough substantially, with all the detrimental effects that this will bring.¹

Extensive paved / concreted hard surfaces are creating major challenges to the climate resilience of urban and suburban areas, especially wrt. surface water flooding (see National Infrastructure Commission report 2022). The Local Plan’s policies should set out to reduce, rather than allow these surfaces to increase yet further over the next 15 years. These challenges include (see references at end for further evidence):

1. Surface water flooding: “porous” surfaces and “drainage channels” can fail in increasingly-common torrential downpours and in any case drainage is often poorly installed, blocked or completely absent.
2. Over-heating: heat island effect in built-up areas: hard surfaces absorb heat and release at night. There is no plant cooling (evapotranspiration)
3. Increased risk of local and widespread subsidence as soil beneath hard surfacing dries out

¹ (Footnote added after sending, just for reference):

The current minimum front garden size in Richmond upon Thames is

	Current minimum	Proposed minimum
Width of garden required	7.2m	4.8m
Depth of garden required	6m	4.8m

The Council is proposing to reduce the current minimum size width 7.2m x depth 6m = 43 sq m area to width and depth both 4.8m = 23 sq m. This nearly halves the size of front garden area - an 87% reduction.

4. Biodiversity loss – of plants and in soil – and reduced food supply for pollinators
5. Increased air pollution – more dust, no pollution-absorbing hedges and trees
6. Increased water pollution – run-off picking up contamination, not cleaned by percolation through soil
7. Less CO₂ absorption – both by plants and by soil sequestration
8. Loss of boundary structures and unattractive neighbourhoods create societal problems and encourage vandalism
9. Loss of green space has adverse effects on mental health

References:

1. The domestic garden – its contribution to urban green infrastructure, Cameron R W F, Blanusa T, Taylor J E, Salisbury A, Halstead A J, Henricot B and Thompson K, Urban Forestry & Urban Greening, 2012
2. Electric Vehicle Charging market study, Competition and Markets Authority, Final report, 23 July 2021
3. From green to grey; observed changes in garden vegetation structure in London, 1998-2008, Smith, C., Dawson, D., Archer, J., Davies, M., Frith, M., Hughes, E. and Massini, P., London Wildlife Trust, Greenspace Information for Greater London, and Greater London Authority, 2011
4. The extent of hard surfacing of front gardens in the London Borough of Ealing – a report on a community survey research project, Ealing’s Local Agenda 21 Pollution & Public Health Project Group, 2005 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
5. Town and Country Planning (General Permitted Development) (Amendment) (No.2) (England) Order 2008
6. What happens to front gardens when pavement crossovers (kerb drops) are approved? A report on research conducted in 2017, Ealing Front Gardens Project, 2019 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
7. “Research shows half of UK front gardens could be paved over to accommodate an electric vehicle”, August 23, 2023, <https://transportandenergy.com/2023/08/23/research-shows-half-of-uk-front-gardens-could-be-paved-over-to-accommodate-an-ev/>
8. Impact of paved front gardens on current and future urban flooding, D.A. Kelly, The Water Academy, Heriot-Watt University, Edinburgh, Journal of Flood Risk Management 11 S434 – S443, 2018
9. House of Commons Environmental Audit Committee, Heatwaves: adapting to climate change, Ninth Report of Session 2017–19, 2018
10. Urban hedges: A review of plant species and cultivars for ecosystem service delivery in north-west Europe, Tijana Blanusa, Michael Garratt, Margaret Cathcart-James, Leigh Hunt, Ross W.F. Cameron, Urban Forestry & Urban Greening, 44, 2019
11. Quantifying nectar production by flowering plants in urban and rural landscapes, Tew, N. E., Memmott, J., Vaughan, I. P., Bird, S., Stone, G. N., Potts, S. G., & Baldock, K. C. R., Journal of Ecology, 109(4), 1747–1757, 2021
12. “It made me feel brighter in myself”- The health and well-being impacts of a residential front garden horticultural intervention, Lauriane Suyin Chalmin-Pui, Jenny Roe, Alistair Griffiths, Nina Smyth, Timothy Heaton, Andy Clayden, Ross Cameron, Landscape and Urban Planning 205, 2021

13. Research shows half of UK front gardens could be paved over to accommodate an electric vehicle, August 2023, <https://transportandenergy.com/2023/08/23/research-shows-half-of-uk-front-gardens-could-be-paved-over-to-accommodate-an-ev/>
14. The myth of permeable paving, Ealing Front Gardens Project, September 2023 (<https://frontgardens.nationalparkcity.org/blog/the-myth-of-permeable-paving/>)
15. Rain runs off impermeable surfaces despite regulations, Ealing Front Gardens Project, November 2023 (accessible at <https://frontgardens.nationalparkcity.org/blog/rain-runs-off-impermeable-surfaces-despite-regulations/>)
16. Reducing the risk of surface water flooding, National Infrastructure Commission, November 2022 (recognises that paved front gardens contribute to flooding)
17. Government response to the National Infrastructure Commission's study: Reducing the risk of surface water flooding, published 13 March 2024 (accessible at <https://www.gov.uk/government/publications/government-response-to-the-national-infrastructure-commissions-study-reducing-the-risk-of-surface-water-flooding/government-response-to-the-national-infrastructure-commissions-study-reducing-the-risk-of-surface-water-flooding>)
18. LB Richmond upon Thames Environment, Sustainability, Sports and Culture Committee, 16 January 2024, report on Garden parking and vehicle (pavement) crossovers

7. If your representation is seeking a modification to the plan, do you consider it necessary to participate in examination hearing session(s)?

No, I do not wish to participate in hearing session(s)

Yes, I wish to participate in hearing session(s)

Please note that while this will provide an initial indication of your wish to participate in hearing session(s), you may be asked at a later point to confirm your request to participate.

8. If you wish to participate in the hearing session(s), please outline why you consider this to be necessary:

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate in hearing session(s). You may be asked to confirm your wish to participate when the Inspector has identified the matters and issues for examination.

More and more householders anticipate needing to accommodate electric vehicle charging – see for example a poll by EO Charging in early 2023 of 2,000 UK homeowners which found that nearly half (49%) were considering paving over their front gardens to accommodate an electric vehicle in the future.

It is likely that there will be more research and knowledge about home charging, the use of charging gullies as a charging mechanism, and possibly on the avoidance of front garden parking as a result, by the time of the hearing. There may also be additional research and Government responses to the wider issue of front garden hard surfacing. These should be taken into consideration in the 15 year plan.

Part B (Please use a separate sheet for each representation).

3. To which part of the Local Plan does this representation relate?

Paragraph:

Policy: **SP2.2 Climate action: F. Building resilience and adapting to a changing environment by.....**

Policies Map:

4. Do you consider the Local Plan is: (please tick)

4.(1) Legally compliant

4.(2) Sound

5. Please give details of why you consider the Local Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

Not legally compliant because the list of measures does not include London Plan policy S1 13: Sustainable Drainage, which states: *“Development proposals for impermeable surfacing should normally be resisted unless they can be shown to be unavoidable, including on small surfaces such as front gardens and driveways.”*

Unsound because the list of measures does not include any measure specifically relating to mitigating the risks of flooding and overheating caused by the extensive and widespread hard surfacing of the borough’s front gardens.

6. Please set out the modification(s) you consider necessary to make the Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified at 5 above.

You will need to say why each modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Please note: *In your representation you should provide succinctly all the evidence and supporting information necessary to support your representation and your suggested modification(s). You should not assume that you will have a further opportunity to make submissions.*

1. To make the Local Plan legally compliant, it should include the London Plan Policy specified above.
2. To make the Local Plan sound, add the following to the list of measures in Policy 2.2: F (Building resilience and adapting to a changing environment by.....): **Promoting**

design measures which minimise hard standing and maximise planting in front gardens used for vehicle parking.

Evidence base (see also list of references below):

There are about 74,300 front gardens in the London Borough of Ealing, taking up over 3 million square metres, about 5.5% of its total area. The average front garden in the borough is 41 square metres.

Since 1995, when pavement crossovers became “permitted development”, householders have been able to completely pave or concrete their front gardens. Before 2008 there were no controls at all on the hard surfacing used. Since 2008 some provision for runoff has been required but is often inadequate in practice.

In 2005 our research found that a quarter (18,300) of the borough’s front gardens were completely hard surfaced. Six out of 10 (44,600) had 70% or more of their area hard surfaced. Since then, amounts have steadily increased, and drainage provision is often inadequate or non-existent.

In the last few years, home charging of electric vehicles has further increased demand for extensive front garden parking. Paved front gardens on both sides of a road doubles or trebles the amount of hard surfacing – effectively widening the road surface 2 or 3 times.

These extensive paved / concreted hard surfaces are creating major challenges to the climate resilience of the Borough. The Local Plan’s policies should set out to reduce, rather than allow to increase yet further over the next 15 years. These challenges include (see references at end for evidence):

1. Surface water flooding: “porous” surfaces and “drainage channels” can fail in increasingly-common torrential downpours and in any case drainage is often poorly installed, blocked or completely absent.
2. Over-heating: heat island effect in built-up areas: hard surfaces absorb heat and release at night. There is no plant cooling (evapotranspiration)
3. Increased risk of local and widespread subsidence as soil beneath hard surfacing dries out
4. Biodiversity loss – of plants and in soil – and reduced food supply for pollinators
5. Increased air pollution – more dust, no pollution-absorbing hedges and trees
6. Increased water pollution – run-off picking up contamination, not cleaned by percolation through soil
7. Less CO2 absorption – both by plants and by soil sequestration
8. Loss of boundary structures and unattractive neighbourhoods create societal problems and encourage vandalism
9. Loss of green space has adverse effects on mental health

Relevant references:

1. The domestic garden – its contribution to urban green infrastructure, Cameron R W F, Blanusa T, Taylor J E, Salisbury A, Halstead A J, Henricot B and Thompson K, Urban Forestry & Urban Greening, 2012

2. Electric Vehicle Charging market study, Competition and Markets Authority, Final report, 23 July 2021
3. From green to grey; observed changes in garden vegetation structure in London, 1998-2008, Smith, C., Dawson, D., Archer, J., Davies, M., Frith, M., Hughes, E. and Massini, P., London Wildlife Trust, Greenspace Information for Greater London, and Greater London Authority, 2011
4. The extent of hard surfacing of front gardens in the London Borough of Ealing – a report on a community survey research project, Ealing’s Local Agenda 21 Pollution & Public Health Project Group, 2005 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
5. Town and Country Planning (General Permitted Development) (Amendment) (No.2) (England) Order 2008
6. What happens to front gardens when pavement crossovers (kerb drops) are approved? A report on research conducted in 2017, Ealing Front Gardens Project, 2019 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
7. Impact of paved front gardens on current and future urban flooding, D.A. Kelly, The Water Academy, Heriot-Watt University, Edinburgh, Journal of Flood Risk Management 11 S434 – S443, 2018
8. House of Commons Environmental Audit Committee, Heatwaves: adapting to climate change, Ninth Report of Session 2017–19, 2018
9. Urban hedges: A review of plant species and cultivars for ecosystem service delivery in north-west Europe, Tijana Blanusa, Michael Garratt, Margaret Cathcart-James, Leigh Hunt, Ross W.F. Cameron, Urban Forestry & Urban Greening, 44, 2019
10. Quantifying nectar production by flowering plants in urban and rural landscapes, Tew, N. E., Memmott, J., Vaughan, I. P., Bird, S., Stone, G. N., Potts, S. G., & Baldock, K. C. R., Journal of Ecology, 109(4), 1747–1757, 2021
11. “It made me feel brighter in myself”- The health and well-being impacts of a residential front garden horticultural intervention, Lauriane Suyin Chalmin-Pui, Jenny Roe, Alistair Griffiths, Nina Smyth, Timothy Heaton, Andy Clayden, Ross Cameron, Landscape and Urban Planning 205, 2021
12. Research shows half of UK front gardens could be paved over to accommodate an electric vehicle, August 2023, <https://transportandenergy.com/2023/08/23/research-shows-half-of-uk-front-gardens-could-be-paved-over-to-accommodate-an-ev/>
13. The myth of permeable paving, Ealing Front Gardens Project, September 2023 (<https://frontgardens.nationalparkcity.org/blog/the-myth-of-permeable-paving/>)
14. Rain runs off impermeable surfaces despite regulations, Ealing Front Gardens Project, November 2023 (accessible at <https://frontgardens.nationalparkcity.org/blog/rain-runs-off-impermeable-surfaces-despite-regulations/>)
15. Reducing the risk of surface water flooding, National Infrastructure Commission, November 2022 (recognises that paved front gardens contribute to flooding)
16. Government response to the National Infrastructure Commission’s study: Reducing the risk of surface water flooding, published 13 March 2024 (accessible at <https://www.gov.uk/government/publications/government-response-to-the-national-infrastructure-commissions-study-reducing-the-risk-of-surface-water-flooding/government-response-to-the-national-infrastructure-commissions-study-reducing-the-risk-of-surface-water-flooding>)

7. If your representation is seeking a modification to the plan, do you consider it necessary to participate in examination hearing session(s)?

No, I do not wish to participate in hearing session(s)

Yes, I wish to participate in hearing session(s)

8. If you wish to participate in the hearing session(s), please outline why you consider this to be necessary:

Concerns, research and evidence about the effects of front garden hard surfacing are accumulating all the time, and more may have been generated by the time of the hearing. This may include follow-ups on recent statements from important bodies such as the Committee on Climate Change and OFWAT.

In addition, the Government announced in March 2024 that it has accepted the recommendations of the National Infrastructure Commission wrt the role of 'unplanned' hard surfacing on surface water flooding, and has asked DEFRA to carry out a review. This review may have produced an interim or final report by the time of the hearing session, and should be taken into account.

Part B (Please use a separate sheet for each representation).

3. To which part of the Local Plan does this representation relate?

Paragraph:

Policy: SP2.2 Climate action G. Maintaining, enhancing and expanding the network of green infrastructure by.....

Policies Map:

4. Do you consider the Local Plan is: (please tick)

4.(1) Legally compliant

4.(2) Sound

5. Please give details of why you consider the Local Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

If you wish to support the legal compliance or soundness of the Local Plan or its compliance with the duty to co-operate, please set out your comments below.

Not legally compliant because the measures listed do not include London Plan Policy H2: "Impacts on existing biodiversity or green space, as a result of minor housing developments, should be minimised and mitigated through measures such as returning hard standing to green space, the installation of green roofs and green walls, or the provision of landscaping that facilitates sustainable urban drainage in order to achieve the principle of no net loss of overall green cover".

Unsound because SP2.2 G does not include measures to promote the depaving and restoration of hard surfaced front gardens. It therefore omits to provide the opportunity for widespread greening and greater biodiversity throughout the borough by expanding the green spaces along the borough's residential roads.

6. Please set out the modification(s) you consider necessary to make the Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified at 5 above.

You will need to say why each modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Please note: *In your representation you should provide succinctly all the evidence and supporting information necessary to support your representation and your suggested modification(s). You should not assume that you will have a further opportunity to make submissions.*

After this stage, further submissions may only be made if invited by the Inspector, based on the matters and issues he or she identifies for examination.

1. To make the Local Plan legally compliant, include the London Plan Policy specified above.
2. To make the Local Plan sound, add the following to the list of measures in SP2.2 Climate action G (Maintaining, enhancing and expanding the network of green infrastructure): **Promoting the depaving and restoration of hard surfaced front gardens (while still allowing parking if necessary).**

Evidence base (see also list of references):

There are about 74,300 front gardens in the London Borough of Ealing, taking up over 3 million square metres, about 5.5% of its total area. The average front garden in the borough is 41 square metres.

Since 1995, when pavement crossovers became “permitted development”, householders have been able to completely pave or concrete their front gardens. Before 2008 there were no controls at all on the hard surfacing used. Since 2008 some provision for runoff has been required but is often inadequate in practice.

In 2005 our research found that a quarter (18,300) of the borough’s front gardens were completely hard surfaced. Six out of 10 (44,600) had 70% or more of their area hard surfaced. Since then, amounts have steadily increased, and drainage provision is often inadequate or non-existent.

In the last few years, overnight charging of electric vehicles has further increased demand for extensive front garden parking. It looks set to increase still further. Paved front gardens on both sides of a road doubles or trebles the amount of hard surfacing – effectively widening the road surface 2 or 3 times.

In a joint project with the Royal Horticultural Society in 2017, we demonstrated that a fully bricked over front garden in Greenford can be restored to a green space while still allowing parking. See <https://frontgardens.nationalparkcity.org/article/a-real-life-restoration-2017/>

In the 2021 London Plan, sealed surfaces (e.g. concrete, asphalt, waterproofing, stone) are at the bottom of Table 8.2 Urban Greening Factors with an urban greening factor of zero, and ‘permeable’ paving (which our observations show can fail in heavy downpours) have an urban greening factor of 0.1.

But in the absence of any change in policy from Government, these extensively paved / concreted hard surfaces look set to expand still further, and are and will continue to create major challenges to the greenness and the climate resilience of the Borough. The Local Plan’s policies should set out to reduce, rather than allow these to increase yet further over the next 15 years.

These challenges include (see references at end for detailed evidence):

1. Biodiversity loss – of plants and in soil – and reduced food supply for pollinators
2. Increased air pollution – more dust, no pollution-absorbing hedges and trees
3. Increased water pollution – run-off picking up contamination, not cleaned by percolation through soil
4. Less CO2 absorption – both by plants and by soil sequestration
5. Surface water flooding: “porous” surfaces and “drainage channels” can fail in increasingly-common torrential downpours and in any case drainage is often poorly installed, blocked or completely absent.
6. Over-heating: heat island effect in built-up areas: hard surfaces absorb heat and release at night. There is no plant cooling (evapotranspiration)
7. Increased risk of local and widespread subsidence as soil beneath hard surfacing dries out
8. Loss of boundary structures and unattractive neighbourhoods create societal problems and encourage vandalism
9. Loss of green space has adverse effects on mental health

Relevant references:

1. The domestic garden – its contribution to urban green infrastructure, Cameron R W F, Blanusa T, Taylor J E, Salisbury A, Halstead A J, Henricot B and Thompson K, Urban Forestry & Urban Greening, 2012
2. Electric Vehicle Charging market study, Competition and Markets Authority, Final report, 23 July 2021
3. From green to grey; observed changes in garden vegetation structure in London, 1998-2008, Smith, C., Dawson, D., Archer, J., Davies, M., Frith, M., Hughes, E. and Massini, P., London Wildlife Trust, Greenspace Information for Greater London, and Greater London Authority, 2011
4. The extent of hard surfacing of front gardens in the London Borough of Ealing – a report on a community survey research project, Ealing’s Local Agenda 21 Pollution & Public Health Project Group, 2005 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
5. Town and Country Planning (General Permitted Development) (Amendment) (No.2) (England) Order 2008
6. What happens to front gardens when pavement crossovers (kerb drops) are approved? A report on research conducted in 2017, Ealing Front Gardens Project, 2019 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
7. Impact of paved front gardens on current and future urban flooding, D.A. Kelly, The Water Academy, Heriot-Watt University, Edinburgh, Journal of Flood Risk Management 11 S434 – S443, 2018
8. House of Commons Environmental Audit Committee, Heatwaves: adapting to climate change, Ninth Report of Session 2017–19, 2018
9. Urban hedges: A review of plant species and cultivars for ecosystem service delivery in north-west Europe, Tijana Blanusa, Michael Garratt, Margaret Cathcart-James, Leigh Hunt, Ross W.F. Cameron, Urban Forestry & Urban Greening, 44, 2019
10. Quantifying nectar production by flowering plants in urban and rural landscapes, Tew, N. E., Memmott, J., Vaughan, I. P., Bird, S., Stone, G. N., Potts, S. G., & Baldock, K. C. R., Journal of Ecology, 109(4), 1747–1757, 2021
11. “It made me feel brighter in myself”- The health and well-being impacts of a residential front garden horticultural intervention, Lauriane Suyin Chalmin-Pui, Jenny Roe,

Alistair Griffiths, Nina Smyth, Timothy Heaton, Andy Clayden, Ross Cameron, Landscape and Urban Planning 205, 2021

12. Research shows half of UK front gardens could be paved over to accommodate an electric vehicle, August 2023, <https://transportandenergy.com/2023/08/23/research-shows-half-of-uk-front-gardens-could-be-paved-over-to-accommodate-an-ev/>

13. The myth of permeable paving, Ealing Front Gardens Project, September 2023 (<https://frontgardens.nationalparkcity.org/blog/the-myth-of-permeable-paving/>)

14. Rain runs off impermeable surfaces despite regulations, Ealing Front Gardens Project, November 2023 (accessible at <https://frontgardens.nationalparkcity.org/blog/rain-runs-off-impermeable-surfaces-despite-regulations/>)

15. Reducing the risk of surface water flooding, National Infrastructure Commission, November 2022 (recognises that paved front gardens contribute to flooding)

16. Government response to the National Infrastructure Commission's study: Reducing the risk of surface water flooding, published 13 March 2024 (accessible at <https://www.gov.uk/government/publications/government-response-to-the-national-infrastructure-commissions-study-reducing-the-risk-of-surface-water-flooding/government-response-to-the-national-infrastructure-commissions-study-reducing-the-risk-of-surface-water-flooding>)

7. If your representation is seeking a modification to the plan, do you consider it necessary to participate in examination hearing session(s)?

No, I do not wish to participate in hearing session(s)

Yes, I wish to participate in hearing session(s)

Please note that while this will provide an initial indication of your wish to participate in hearing session(s), you may be asked at a later point to confirm your request to participate.

8. If you wish to participate in the hearing session(s), please outline why you consider this to be necessary:

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate in hearing session(s). You may be asked to confirm your wish to participate when the Inspector has identified the matters and issues for examination.

Concerns, research and evidence about the effects of front garden hard surfacing are accumulating all the time, and more may have been generated by the time of the hearing. This may include follow-ups on recent statements from bodies such as the Committee on Climate Change and OFWAT.

Ealing Front Gardens Project is in the process of undertaking plant species counts on a matrix-paved car park in the borough with a view to evidencing the biodiversity offered by such parking surfaces. A report on this may be available by the time of the hearing.

In addition, the Government announced in March 2024 that it has accepted the recommendations of the National Infrastructure Commission wrt the role of 'unplanned'

hard surfacing on surface water flooding, and has asked DEFRA to carry out a review. This review may have produced an interim or final report by the time of the hearing session, and should be taken into account.

Part B (Please use a separate sheet for each representation).

3. To which part of the Local Plan does this representation relate?

Paragraph:

Policy: SP3.3 Healthy lives: H Mitigating the effects of climate change, particularly the urban heat island effect, and improving the existing housing stock to limit impacts upon general health and particularly more vulnerable parts of the population.

Policies Map:

4. Do you consider the Local Plan is: (please tick)

4.(1) Legally compliant

4.(2) Sound

5. Please give details of why you consider the Local Plan is not legally compliant or is unsound or fails to comply with the duty to co-operate. Please be as precise as possible.

If you wish to support the legal compliance or soundness of the Local Plan or its compliance with the duty to co-operate, please set out your comments below.

It is positive that the Policy focuses specifically on improving existing, as opposed to new, housing stock. But it is unsound because it does not include any reference to a major contributor to the urban heat island effect, especially in poorer communities – the paving over of front, and to a lesser extent back, gardens and elimination of all plants and green heat-absorbing surfaces.

The paving over of front gardens is mentioned specifically in the Local Plan on Page 149 as an adverse effect of conversions into Houses of Multiple Occupation (HMOs), but only in consideration of loss of heritage and townscape. The heat island effect due to front garden paving is not mentioned in the Plan, and in this respect the Plan is unsound.

6. Please set out the modification(s) you consider necessary to make the Local Plan legally compliant and sound, in respect of any legal compliance or soundness matters you have identified at 5 above.

You will need to say why each modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Please note: *In your representation you should provide succinctly all the evidence and supporting information necessary to support your representation and your suggested modification(s). You should not assume that you will have a further opportunity to make submissions.*

After this stage, further submissions may only be made if invited by the Inspector, based on the matters and issues he or she identifies for examination.

To make the Local Plan sound, amend Policy: SP3.3 Healthy lives: H to read: Mitigating the effects of climate change, particularly the urban heat island effect, and improving the **existing stock of housing and associated garden space** to limit impacts upon general health and particularly more vulnerable parts of the population.

Evidence base:

It is well established that gardens and green space contribute significantly to improved wellbeing and mental health.

The urban heat island effect created by extensive paving and hard surfacing is also well established and recognised by Government – see for example House of Commons Environmental Audit Committee, Heatwaves: adapting to climate change, Ninth Report of Session 2017–19, 2018

Our 2005 research on the extent of hard surfacing of front gardens in the Borough suggested that, even then, hard surfacing was more widespread in some parts of the Borough than others, including in the more vulnerable and highly trafficked areas. It follows that adverse effects on health could be more prevalent in the areas.

References:

1. The domestic garden – its contribution to urban green infrastructure, Cameron R W F, Blanus T, Taylor J E, Salisbury A, Halstead A J, Henricot B and Thompson K, Urban Forestry & Urban Greening, 2012
2. From green to grey: observed changes in garden vegetation structure in London, 1998-2008, Smith, C., Dawson, D., Archer, J., Davies, M., Frith, M., Hughes, E. and Massini, P., London Wildlife Trust, Greenspace Information for Greater London, and Greater London Authority, 2011
3. The extent of hard surfacing of front gardens in the London Borough of Ealing – a report on a community survey research project, Ealing’s Local Agenda 21 Pollution & Public Health Project Group, 2005 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
4. What happens to front gardens when pavement crossovers (kerb drops) are approved? A report on research conducted in 2017, Ealing Front Gardens Project, 2019 (accessible at <https://frontgardens.nationalparkcity.org/Our-Research>)
5. House of Commons Environmental Audit Committee, Heatwaves: adapting to climate change, Ninth Report of Session 2017–19, 2018
6. Urban hedges: A review of plant species and cultivars for ecosystem service delivery in north-west Europe, Tijana Blanus, Michael Garratt, Margaret Cathcart-James, Leigh Hunt, Ross W.F. Cameron, Urban Forestry & Urban Greening, 44, 2019
7. “It made me feel brighter in myself”- The health and well-being impacts of a residential front garden horticultural intervention, Lauriane Suyin Chalmin-Pui, Jenny Roe, Alistair Griffiths, Nina Smyth, Timothy Heaton, Andy Clayden, Ross Cameron, Landscape and Urban Planning 205, 2021

7. If your representation is seeking a modification to the plan, do you consider it necessary to participate in examination hearing session(s)?

No, I do not wish to participate in hearing session(s)

Yes, I wish to participate in hearing session(s)

Please note that while this will provide an initial indication of your wish to participate in hearing session(s), you may be asked at a later point to confirm your request to participate.

8. If you wish to participate in the hearing session(s), please outline why you consider this to be necessary:

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate in hearing session(s). You may be asked to confirm your wish to participate when the Inspector has identified the matters and issues for examination.