FIDDLER'S FERRY

Density Assessment Prepared for: Scottish and Southern Energy Plc

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1.0 Introduction

SLR Consulting is acting on behalf of SSE Plc at Fiddler's Ferry in relation to giving advice on planning, masterplanning and urban design, landscape and transport, and forms part of a wider team advising on other technical matters and viability. The masterplan design process has been informed by these other inputs, and this note provides a brief summary of the main factors that have informed the average net density that has been applied to the housing areas identified on the Preferred Option Plan included within this report.

This work has been prepared by an experienced masterplanner and urban designer, Jonathan Reynolds BA(Hons) DipTP MAUD MRTPI, acting as Technical Director for Masterplanning and Urban Design at SLR Consulting and as the lead masterplanner and urban designer for the Fiddler's Ferry scheme. Jonathan has extensive experience of designing and successful delivery large scale mixed-use and housing-led schemes for over 20 years across the UK. This report is supported with reference to other input by the wider Fiddler's Ferry team and represents a collaborative approach to the conceptual design of the proposals thus far.

2.0 Housing Parcel Locations

The site is located within the Borough of Warrington on the boundary with Halton Borough to the west. The current 'power island' that forms the main built area of the former power station occupies the majority of land to the north of the railway line and is allocated as such for employment uses. This area extends along the western boundary and to the railway and canal in the south and the main road to the north. Proposals include the redevelopment for new employment uses of this employment allocation area and as an ongoing extension to the existing employment area within Widnes immediately to the west. Adjacent to this area in the east, and encompassing some of the land allocated for employment and forming part of the brownfield area of the former power station, is the northern housing site. This comprises both brownfield and greenfield land, extending towards the western boundary and south of the woodland on the site towards the railway. The greenfield part of this land is currently within Green Belt and this matter is addressed by a separate report prepared by SLR Consulting as part of this submission.

The northern housing site will therefore form part of the wider redevelopment proposal to the west, and as an extension to, Widnes. The housing site, by virtue of its location, has been designed as a relatively self-sustained community or neighbourhood, with supporting facilities in the form of a primary school, mixed use local centre, sports pitches and extensive open space areas, together with the extensive employment area to the west providing job opportunities. In essence, this housing area forms a small urban village set within landscape and adjacent to employment land.

The southern housing area is separated from the proposed uses to the north by the railway, with a bridge crossing connecting it to the northern area. This housing area is surrounded by extensive open space, which will ultimately form part of an extensive parkland area for public recreation and wildlife. The housing site is located on the current 'ash lagoon' which forms a large brownfield area currently in operation for ash extraction. This housing area can also be viewed in context of a relatively self-sustained neighbourhood or community, with its own sports pitches to the south and mixed-use local centre. Primary education will be provided by the northern housing area.

In summary, due to the location of the proposed housing areas in relation to the wider area, the scheme needs to give due consideration to more recent housing proposals, and associated densities, both within Widnes and Warrington. In Warrington, this would relate to recent urban housing extensions on the western, southwest and northwest side of Warrington. In relation to Widnes and immediately to the west, the proposals represent an urban extension to the town, and reference to neighbouring housing areas is also important. This includes the Widnes Waterfront area immediately to the southwest of the site and which adjoins the site boundary.

To avoid repetition and for concise reporting, the proposals are more fully described in Draft Confidential Briefing Note: Green Belt Assessment by SLR Consulting, and are not repeated here.

The development of these proposals has been informed by an extensive masterplanning exercise, working with developers and taking into account consultation by interested parties. This work has resulted in a 'Local Plan Concept Drawing' which shows a clear division of the space and the 'Concept Masterplan' for the 'Preferred Option' which includes additional details relating to circulation and the quantum of development. These plans are included below for reference purposes.

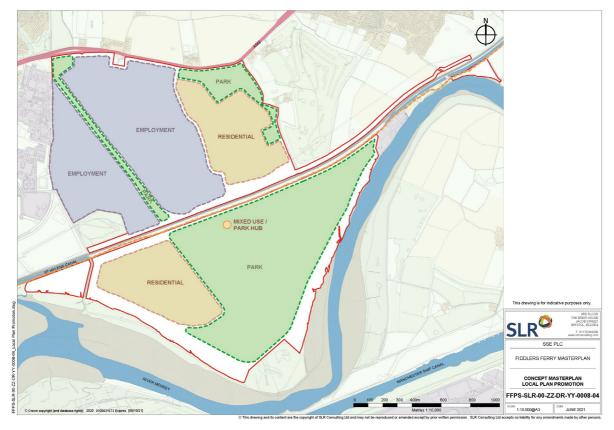


Figure 2.1 – Local Plan Concept Drawing

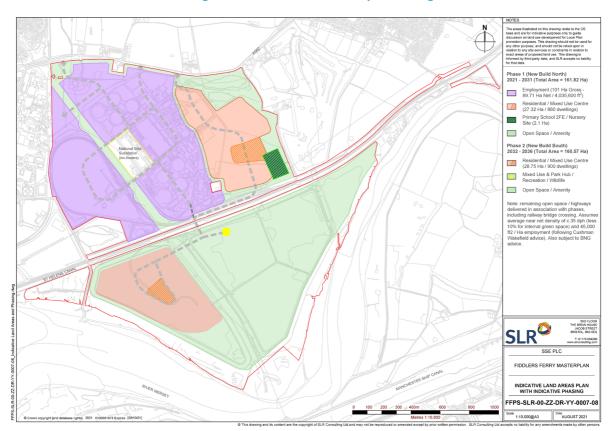


Figure 2.2 - 'Concept Masterplan' for the 'Preferred Option'

3.0 **Density Comparison**

Following on from the above commentary, SLR has undertaken some research in relation to recent planning applications, many of which are consented. These are summarised in relation to housebuilder / applicant, location, decision, housing number, and net density in the following two tables. Reference to housing developer is important because with a site the scale of Fiddler's Ferry with a proposal for approximately 2,120 dwellings, it is likely that larger housing providers will take the development on at least in part, and therefore reference to what they have recently sought consent for is important as this reflects market demand and affordable housing need. Reference to the current thinking on market demand and affordable housing need is also outlined below in Section 4 of this report.

| Applicant / Site | Planning Application Ref. | | No. of Homes | Density per hectare |
|--|---------------------------------|-------------------|--------------|---|
| Countryside - Spectra Park, Warrington | 2019/35711 | Pending | 513 | 41.7 Near Net (stated) – includes green space |
| Macbryde Homes - Omega South | 2020/38148 | Pending | 145 | 31.6 Net (started) |
| Omega Warrington Ltd. - Phase 4-7, Omega South | 2019/36241 (Outline) | Consented 2020 | 617 | 33.0 Net (stated) |
| Taylor Wimpey - Phase 3A, Zone 6, Omega South | 2019/35721 | Consented 2019 | 180 | 33.8 Net (stated) |
| Miller Homes - Omega South | 2017/29537 | Consented 2017 | 200 | 31.6 Net (stated) |
| Barratt Homes - Saviours Place, Stretton | 2018/32672 – Warrington | Consented 2018 | 180 | 33 Net (stated) |

Table 1: Warrington Borough Council – Recent Housing Applications / Consents

Table 2: Halton Borough Council – Recent Housing Applications / Consents

| Applicant / Site | Planning Application Ref. | | No. of Homes | Density per hectare |
|--|---------------------------------|-------------------------------|--------------|---|
| Mulbury Homes - Widnes Waterfront | , | Consented March 2020 | 243 | 45 Net (stated) |
| Halton Housing Trust - Page Lane, Widnes | , | Consented August 2014 | 39 | 56 Net (stated) |
| Halton Housing & Russell Homes - Bower Brook Gardens, Widnes | _ , , | Consented December 2014 | 176 | 46 (near net – includes village green space) |

From this research we can identify some key features:

- 1. Larger urban extensions to Warrington vary from circa 32 dph to circa 42 dph;
- 2. These larger urban extensions are generally 'suburban' in character, with a relatively high proportion of three and four bed detached and semi-detached homes;
- 3. The higher density scheme by Countryside (Spectra) includes a slightly higher proportion of apartments and village green type areas, which effectively makes the net density higher than 42 dph; and
- 4. Developments in Widnes are much higher in density, being more urban in form and akin to town centre type schemes. These schemes include a higher proportion of terraced units and smaller affordable dwellings (including 1 and 2 bed units).

4.0 Housing Market Considerations

SLR, as part of the technical and viability appraisal team, has also received advice from Aspinall Verdi on the potential housing mix. This is summarised in their report which also forms part of this submission. The advice we have received is as follows.

Market houses, with an average floor area of 1,045sq.ft and based on market research and local housing need, should be weighted towards standard unit types and have sold well locally. Affordable dwellings, with an average floor area of 727sq.ft, is considered appropriate. This is based on the following mix:

| Number of Beds | Unit Floor Area | Mix | Number |
|----------------|-----------------|------|--------|
| 2 bed semi | 725 | 15% | 90 |
| 3 bed semi | 875 | 25% | 151 |
| 3 bed detached | 1025 | 25% | 151 |
| 4 bed detached | 1325 | 30% | 181 |
| 3 bed detached | 1200 | 2.5% | 15 |
| 4 bed detached | 1350 | 2.5% | 15 |
| Total | 1045 (average) | 100% | 602 |

Table 3: Indicative Market Housing Indicative Mix for Northern Housing Area

Table 4: Indicative Affordable Housing Indicative Mix for Northern Housing Area

| Number of Beds | Unit Floor Area | Mix | Number |
|---------------------|-----------------|------|--------|
| 1 bed apartment | 580 | 7.5% | 19 |
| 2 bed apartment | 650 | 7.5% | 19 |
| 2 bed semi-detached | 700 | 45% | 116 |
| 3 bed semi-detached | 800 | 40% | 103 |
| Total | 727 (average) | 100% | 258 |

This identifies that 60% of the affordable houses, which comprise 30% of the housing, will be 1 and 2 bed together with 15% of the market provision being 2 bed as smaller semi-detached units. As part of this 60% affordable provision, it identifies that 15% will be apartments. This indicative mix suggests that a density of 33 dph or in the low 30s per hectare would not reflect market or affordable demand and would be too low as an average net density in this location.

5.0 Average Net and Gross Density Proposals

This report has identified local densities on both urban extensions and more urban schemes in proximity to the site. This report also summarises the assumptions used for market and affordable housing demand, which forms an integral component of the viability assessment for the site.

This would lead towards a logical conclusion that a density in the mid to high 30s as an average net density would be appropriate for the housing land identified on the Preferred Option Plan. In order to allow for amenity green space within the housing areas, allowance for a further 10% of green space is considered appropriate for the residential area identified on the Concept Masterplan (Figure 2-2). Applying an average net density therefore of approximately 35 dwellings per hectare, produces two housing neighbourhoods of minimum 1,760 dwellings in total.

It is also worth noting at this point that these are near net average densities. A gross average density would be considerably different, taking into account the extensive green space areas also provided, in addition to the housing land, for enjoyment by those residents.

To the north of the railway line, and the open space area would include: the existing woodland to the northwest; proposed sports pitch area; informal green space and other parkland including the linear park; canal side greenways; and landscape buffers. For purposes of this calculation, it excludes the green space for the primary school and allows for circa 1 Ha for highways access crossing green space. This area is circa 36.5 Ha. Adding this area to the 27.3 Ha housing area gives a total area of 63.8 Ha. **This equates to a gross density of just 13.5 dwellings per Ha with minimum 860 dwellings.**

To the south of the railway line, and the open space area would include: the proposed sports pitch area; informal green space and other parkland; landscape buffers; wildlife and recreational lagoons; other wildlife areas; and the foreshore area. Allowing for circa 1 Ha of land for highways within green space to access the residential area, and for the mixed-use hub within the parkland, this gives an area of circa 130.8 Ha. Adding this area to the 28.75 Ha housing area gives a total area of 159.57 Ha. **This equates to a gross density of just 6 dwellings per Ha with minimum 900 dwellings.**

Overall, this gives an average gross density across the site of just 8 dwellings per Ha, and is indisputably very generous on open space provision compared to housing density and numbers. Further, such generous open space provision needs to be taken into account when considering the open space provisions within the housing land itself, which should be minimal due to the ease of access to open space all around the neighbourhoods. Applying a net density to the entire housing area is therefore justified.

6.0 Place-Making Considerations

Applying average densities reflecting a housing mix that meets local housing demand and reflects more recent schemes is not the whole picture however. Density is also a key driver of character and urban form, as it determines the type of housing and the building heights, albeit to a lesser extent when dealing with densities under say 55 dph with regards to building heights.

The points made at the beginning of this report about developing largely self-contained neighbourhoods is an important point in this regard too. SLR views these neighbourhoods similar to small urban villages, each with their own mixed-use core set within the surrounded by landscape as described in the supporting submission on Green Belt Assessment.

By creating mixed use urban villages, there is an opportunity to have an urban form and fabric that reflects a logical and positive range of densities to create interest and character and place proportionately more people at the centre of the neighbourhoods where there will be local facilities and bus service access. Applying an approach that has more density at the centre of the neighbourhoods, with lower densities towards the periphery, especially along the western and northern edges of the northern neighbourhood and around the entire periphery of the southern neighbourhood, will create the desired variation in character across the scheme. It will also allow for slightly taller development in the centres for example, decreasing to two storey on these edges.

With regards to unit type, this would translate into lower density peripheral edges fronting green space, comprising a higher proportion of detached and semi-detached three and four bed dwellings for example, with slightly larger landscaped plots. Moving towards the mixed-use centres, this would be translated into a higher proportion of smaller units, in semi-detached and terraced or town housing form, with some apartments. Within the mixed-use centres themselves, we envisage apartment living above ground floor mixed-uses such as retail. It is for this reason at this conceptual stage, we have included the mixed-use areas within the Preferred Option Plan as having residential use as well as non-residential mixed uses.

With regards to densities applied at this next level of detail, it is envisaged that the peripheral areas fronting onto green space would be more reflective of the lower 30s dph such as those identified within the urban extensions to Warrington. The higher density cores would be more reflective of the proposals for Widnes Waterfront and higher density 'town centre' proposals within Widnes. These could be as high as 55 dph for example.

The centre of the northern neighbourhood is also collocated with the primary school, reinforcing the core area as the heart of the community. It is also envisaged, as with many of the schemes reviewed and identified within Section 3 of this report, that the area classified as residential and mixed-use will also include green spaces in the form of pocket parks alongside public realm spaces including urban squares.

The next stage of the masterplanning process will involve a more detailed masterplanning exercise, where these matters will be illustrated and the scheme 'brought to life' in more detail. This will illustrate how the development parcels work with frontage overlooking streets and spaces, together with street hierarchy and linkages. The Preferred Option Plan forms the basis to such future work, setting a framework for housing and supporting uses.

An overall density of 35 dph as a net average density is in summary identified as an appropriate density for the neighbourhoods at Fiddler's Ferry. It is also important to add that 35 dph represents an average density, and if during more detailed design it becomes evident that slightly lower average densities should be applied, and / or more land becomes available through detailed site analysis, then this may affect the number being promoted through a planning application process. A degree of flexibility is therefore required when it comes to density and the resulting housing number specifically delivered or exact land area required. This report has demonstrated the extensive open space areas for example that are proposed around the housing areas, and this allows for such flexibility in future.

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