

5.0 Human Beings

5.1 Introduction

This Chapter assesses the potential impacts that the development of the new National Maternity Hospital at St. Vincent's University Hospital Campus may have on human beings (the existence, activities and health of people) in the receiving environment in both qualitative and quantitative terms. As human beings form one of the most important aspects of the environment to be considered, any potential, significant impact on the character and environment of human beings and human health must be comprehensively assessed. This Chapter considers the human environment in the vicinity of the St. Vincent's University Hospital Campus in terms of population profile and trends, employment, and community (including human health).

As per the *Advice Notes for Preparing Environmental Impact Statements (Draft)*¹, this section cross-references other specialist sections of this EIS.

5.2 Methodology

The methodology for this Chapter involves the analysis, examination and compilation of baseline population and socio-economic data collected by the Central Statistics Office. As there is only limited data available from the 2016 Census to date, both the 2011 Census and the 2016 Census have also been used in this assessment. The figures for population have been taken from the preliminary data released by the 2016 Census, while the figures relating to age cohorts and employment have been taken from the 2011 Census. The Live Register is updated monthly and as such its data is used in order to assist in identifying more recent trends in employment. In addition, planning and land-use documents for the area including the Dublin City Development Plan, 2016-2022, the Regional Planning Guidelines for the Greater Dublin Area, 2010-2022, and additional relevant documents have all been examined.

Following the examination of the baseline information on the existing population and socio-economic situation in the area, this Chapter provides an assessment of the potential impacts of the proposed development. In this regard, two types of socio-economic impacts can typically arise; direct and indirect impacts and these can be positive and negative with respect to their effects. Direct impacts typically occur at a local level, through changes in the immediate environment that arise as a result of the physical works.

¹ Environmental Protection Agency, September 2015, Section 4.2.1

Indirect impacts typically arise outside the immediate area where the physical works take place. They generally occur at a regional level often relating to changes in population and economic patterns that will arise as a result of the development. In the current case, given the role of the new National Maternity Hospital as part of the Ireland East Hospital Group together with its national remit, the indirect impact will extend from regional to the national level. Therefore, this assessment will examine the impact of the proposed new National Maternity Hospital on human beings, which given its scale of importance will range from national, to regional and local level impacts. The impact at each level is addressed in turn under the sections below. In order to ensure a comprehensive analysis of each of the areas examined, information on population, employment and community is assessed to determine the potential impacts at each of these three levels. Where ameliorative/mitigation measures are required to minimise impacts, these are noted.

5.3 Receiving Environment

St. Vincent's University Hospital Campus, which measures c.11.9 hectares, is located south-east of and c. 5km from Dublin City Centre (General Post Office). The Campus is set within an urban context and is surrounded by lands which generally portray a mix of uses common to an edge of centre location including *inter alia* residential, commercial and recreational uses. The lands on St. Vincent's University Hospital Campus that will accommodate the development of the new National Maternity Hospital are currently in use by St. Vincent's University Hospital but are considered to be of low density and underutilised.

The immediate surroundings of the site comprise a variety of land uses, including *inter alia* residential, institutional, commercial and recreational. Herbert Avenue and Estate Avenue are the closest residential areas located to the immediate east of the site. Herbert Avenue comprises a mix of dwelling types including two storey houses and an apartment development located close to the junction with Merrion Road. A mix of commercial uses is also present on Herbert Avenue including a Montessori, a medical consultancy and car showrooms. Further east, Estate Avenue is a narrow road of single storey dwelling houses that are listed as Protected Structures in the Dublin City Development Plan, 2016–2022. To the north and north-west of the Campus on the opposite side of Nutley Lane is a mix of land uses that include *inter alia* the Merrion Centre, the Brooklands apartment complex and the residential area of Nutley Avenue. To the north and north-east of the Campus on the opposite side of the Merrion Road is a mix of neighbourhood services (church / petrol filling station / pub), a nursing home and residential areas. To the south of the Hospital Campus is the Elm Park Golf and Sports Club.

St. Vincent's University Hospital Campus is well connected with its immediate Dublin hinterland, the wider Metropolitan Region and the rest of the Country via a variety of modes of transportation including the Dart line (a 4-5 minute walk from the Hospital) and a number of Dublin Bus routes that stop on both Nutley Lane and Merrion Road. Chapter 6 "*Traffic and Transportation*", outlines the high level of public transport connectivity to and from St. Vincent's University Hospital Campus.

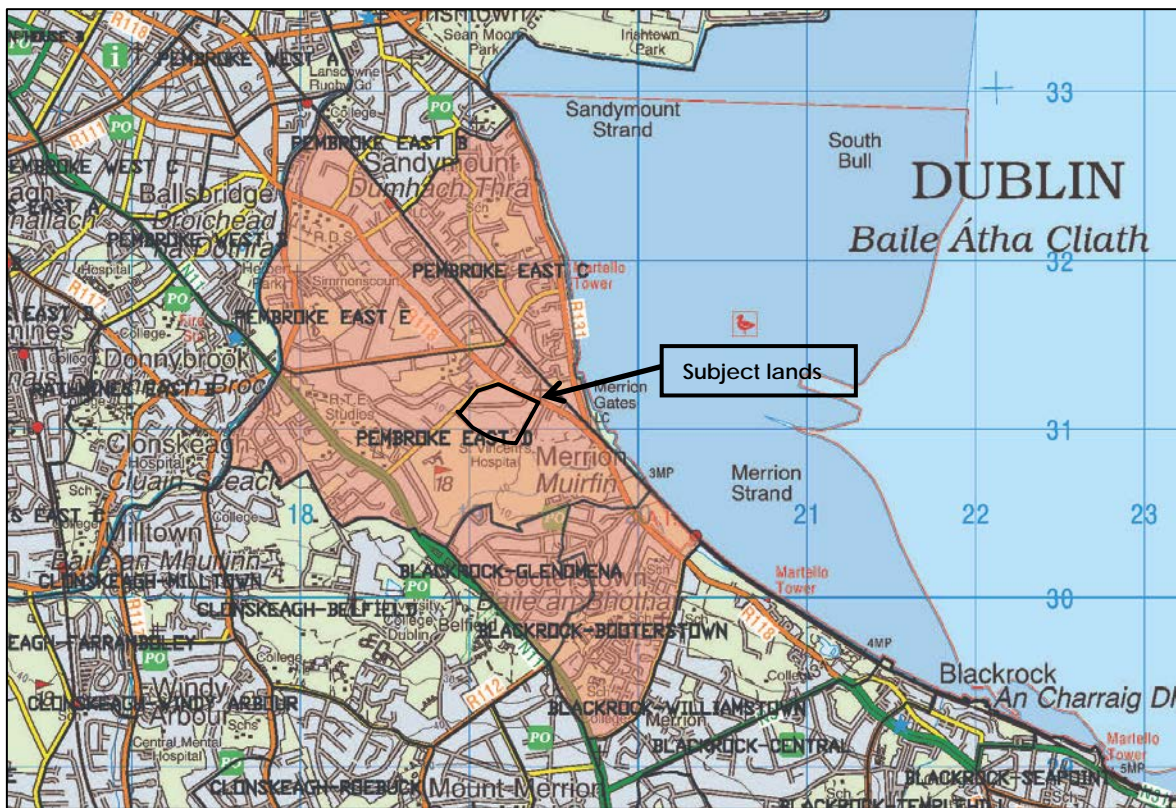
In relation to the local level impact, the development proposal lies within the Pembroke East D Electoral Division of the Dublin City Area. A study area / local area catchment of 5 no. Electoral Divisions has been chosen and includes persons residing in lands between Booterstown Avenue to the south, the River Dodder to the west, Newgrove Avenue, Sandymount to the north and Strand Road to the east.

The catchment area was selected based on the following factors: the catchment area studied in the planning application for the St. Vincent's Private Hospital (Dublin City Council Reg. Ref. 5120/06 / An Bord Pleanála Ref. PL29S.223111); the area pertaining to the junction analysis as part of the Traffic Impact Assessment included in this EIS; and, the area studied as part of the Visual Impact Assessment. As such, the immediate catchment encompasses the following Electoral Divisions:

- Blackrock-Boooterstown
- Blackrock-Glenomena
- Pembroke East D (includes the St. Vincent's Hospital Complex and the Elm Park Golf Course)
- Pembroke East E
- Pembroke East C

The subject site and study area are displayed in their local context in Figure 5.1 below.

Figure 5.1: Electoral Division Study Area



5.4 Characteristics of the Proposed Development

The proposed development comprises the redevelopment of The National Maternity Hospital at St. Vincent's University Hospital campus, Elm Park, Dublin 4. The proposed new National Maternity Hospital building will be located at the eastern side of the Hospital Campus and comprises the construction of a building that rises to 5 and 6 storeys above ground level, with one partial basement level, plus additional ancillary plant areas at the roof level. The proposed development also includes an extension to the existing multi-storey car park at the north of the Campus. The proposed development will be constructed in a sequential manner that allows for the continual operation of the Hospital Campus and, as such, includes the phased demolition of existing buildings at St. Vincent's University Hospital Campus to facilitate clearing the site for the proposed development and the construction of temporary accommodation to facilitate construction sequencing (including a single storey temporary canteen, catering staff changing facilities, household services store and carpenters workshop). The full detail of the nature and extent of the proposed development is set out in Chapter 2 of this EIS and the Draft Construction Management Plan is appended to same.

5.5 Population – Receiving Environment

The Census data from 2016, published by the Central Statistics Office, provides the most up to date information on population numbers in the study area. Age profile information has not yet been released for the 2016 Census, and as such, the data used in the Age Profile Section is from the 2011 Census. Data generated by the Census is compared in order that an analysis of demographic trends may be presented. In addition, and in order to contextualise the local area statistics, figures for the local catchment area are compared with those for the wider catchment area (Dublin City and Dun Laoghaire-Rathdown), the Greater Dublin Area, and the State. A detailed examination of the local population is set out below.

5.5.1 Historical Population Trends

Over the 25 year period between 1961 and 1986 the combined population of Dublin City and County increased by c.42%, from 718,322 to 1,021,449 persons. Similar growth trends were experienced throughout Leinster during the 1960's to the mid 1980's, representing a growth rate of almost double that of the State during this period. However, the easing of migratory trends towards the capital and declining birth rates led to a reduction in the rate of population growth during the 1980's and 1990's. During this period, the State as a whole experienced a decline in population of -0.4%, although Dublin City and County maintained a positive rate of growth (+0.4%), with the largest proportion of this growth occurring in the City (+5.4%).

By the early 1990's population growth had returned, with the population of the State rising by c. +2.85% between 1991 and 1996. This population growth, which could in large part be attributed to significant levels of in-migration fuelled by a buoyant economy, continued into the early 2000's, with a national population increase of c.+8% or 291,116 persons between 1996 and 2002. The Dublin City area also experienced growth during this period but at a lower rate of c. +6%.

5.5.2 Population Change 2006 - 2016

As shown in Table 5.1 below, between 2006 and 2016, the population of the State increased by 12.2% from 4,239,848 to 4,757,976 people. This growth can be attributed to a range of factors including *inter alia* significant levels of in-migration, an increase in birth rates and an increase in life expectancy. While the Greater Dublin Area experienced population growth between 2006 and 2016, at a slightly higher rate than that of the State at 14.5%, Dublin City and Dun Laoghaire-Rathdown County experienced relatively lower

growth rates of 9.2% and 11.9% respectively, over the same period.

The demographic changes which took place within the Greater Dublin Area, outside of Dublin, are indicative of the increasing urban expansion of the Greater Dublin Area which has resulted in the spread of commuter towns into Counties Kildare and Meath in particular. This expansion was fuelled by insufficient housing supply to meet demand which when combined with high house prices forced many of those working in the Dublin area to locate in the urban periphery and commuter belt of the Greater Dublin Area. These factors also explain why the Dublin City area, already being the most densely populated area, grew at a slower rate than the Greater Dublin Area and the State.

At the Electoral Division level, St. Vincent's University Hospital Campus is located within the Electoral Division of Pembroke East D. Between 2006 and 2016 Pembroke East D experienced a comparatively high rate of population growth of +21.3%. This rate of growth contrasts with that experienced in the Greater Dublin Area (+14.5%) and the State (+12.2%) over the same period. The high rate of population growth in the study area may be indicative of new high density residential developments such as that at Elm Park, Merrion Road, Dublin 4.

Table 5.1: Population Growth 2006 – 2016*

Area	2006	2011	2016	2006-2011	2011-2016	2006-2016
Pembroke East D	4,369	4,680	5,302	+7.1%	+13.3%	+21.3%
Study Area	16,601	17,410	18,580	+4.9%	+6.7%	+11.9%
Dublin City	506,211	527,612	553,165	+4.2%	+4.8%	+9.2%
Dun Laoghaire – Rathdown	194,038	206,261	217,274	+6.3%	+5.3%	+11.9%
Greater Dublin Area	1,662,536	1,804,156	1,904,806	+8.5%	+5.5%	+14.5%
State	4,239,848	4,588,252	4,757,976	+8.2%	+3.7%	+12.2%

Source: Central Statistics Office

* The figures contained in Table 5.1 have been rounded to one decimal place for presentation purposes.

5.5.3 Age Profile

The age profile of the area is an important consideration in the provision of healthcare, education and employment. Utilising the Small Area Population Statistics produced by the Central Statistics Office from the 2011 Census², three factors were looked at in analysing

² Please note that updated data from the 2016 Census has not yet been made public and therefore, 2011

the population structure of the receiving environment:

- The dependent population (i.e. those persons within the 0-14 and 65+ age cohorts).
- The working / independent population (i.e. those persons in the 15-64 year age cohorts).
- The childbearing age cohorts, aged 25-44.

The dependant population is categorised by the youngest age cohort of 0-14 years and the oldest age cohort of 65+ years. Both of these cohorts may be financially or physically dependent on the independent/working age cohort. Thus, if the proportion of individuals in the dependent age cohorts is relatively high, this may place additional pressure on the working/independent age cohort to fund childcare, education or healthcare services, either privately or publicly provided. On the other hand, a high percentage of the population in the working / independent cohort of 15 to 64 years age group would indicate a requirement for employment and housing, as this sector of the population are more likely to seek employment and form new households. These age categories at the national, regional and local level are shown in Table 5.2 below.

Table 5.2: Age Profile at State, County and Local level*

Area	0-14		15-24		25-44		45-64		65+	
	2006	2011	2006	2011	2006	2011	2006	2011	2006	2011
Pembroke East D	10.3%	10.7%	14.2%	12.6%	28.2%	29.3%	23.5%	23.4%	23.8%	24%
Study Area	13.6%	14.2%	14.3%	14%	33.9%	33.6%	23%	22.3%	15.3%	15.9%
Dublin City	15%	15.2%	16.9%	14.5%	35.7%	37.2%	19.7%	20.5%	12.7%	12.6%
Dun Laoghaire – Rathdown	18.2%	18.2%	15.7%	14%	29.4%	29.5%	23.4%	23.8%	13.4%	14.5%
Greater Dublin Area	19.6%	20.8%	15.6%	13.1%	34.4%	34.3%	20.7%	21.5%	9.7%	10.4%
State	20.4%	21.4%	14.9%	12.7%	31.7%	31.6%	21.9%	22.7%	11%	11.7%

Source: Central Statistics Office

* The figures contained in Table 5.2 have been rounded to one decimal place for presentation purposes

5.5.3.1 Dependent Age Cohorts (0-14 and 65+)

The statistics show that there is an older population living in the immediate catchment area. The proportion of dependants (0-14 and 65+) within the population of the Electoral Division of Pembroke East D at the time of the last Census in 2011 is recorded at c.34.7%,

up c.0.6% since the 2006 Census. This is moderately higher than the dependency rate figures recorded in 2011 for the study area (30.1%), the Dublin City area (27.8%), the Dun Laoghaire Rathdown area (32.7%) and the State (33.1%).

An analysis of the figures shown in Table 5.2 above shows that historically the Pembroke East D Electoral Division has remained significantly below all other areas examined in terms of the percentage of its population in the 0-14 age cohort and on the other hand is well above, more than double in some cases, in terms of the percentage of its population in the 65+ age cohort reflecting the long term settled nature of parts of the area. Given the relatively large percentage of the population in the 65+ age cohort, it is logical that this would impact on the percentage of children and young people i.e. the 0-14 age cohort. The percentage of the population of the study area in the 65+ age cohort is greater than the State and other comparative figures, albeit not as marked as that of the Pembroke East D Electoral Division. The study area has a noticeably lower percentage of the population in the 0-14 cohort at 14.2% in 2011 compared to that of the State at 21.4% over the same period.

An analysis of the age profile of the local population indicates that in comparison to the Greater Dublin Area and the State, the Pembroke East Electoral Division and the study area has a disproportionately large adult population i.e. 15+ years. This profile is similarly reflected, albeit to a lesser extent, in both the Dublin City area and the Dun Laoghaire Rathdown area.

5.5.3.2 Independent / Working Age Cohort (15-64)

The independent/working age group is defined as those persons residing within the 15-64 year age cohorts. Census 2011 provides the working age (15-64 years) profile for the State at 67% and the Greater Dublin Area at 68.9% which represents a decrease in the percentage population in this category in both instances when compared to the 2006 Census figures. This trend is reflected in a corresponding slight increase in the dependant age cohorts over the same period. The percentage population in the working age cohort remained relatively constant in Dublin City at c.72% between 2006 and 2011, however, the Study Area decreased by 1.3% over this period from c. 71.2% to c.69.9%. This change is evenly reflected in a 0.6% increase in both of the dependant age cohorts (0-14 years and 65 years+) over the same period.

5.5.3.3 Childbearing Age Cohort (25-44)

The childbearing age cohort of the study area was 33.6% in 2011, broadly in line with that of the Greater Dublin Area at 34.3% and above the State at 31.6%. This indicates that although the proportion of children in the study area is significantly lower than that of the State and the Greater Dublin Area this may change in the future as the 25-44 contains the child bearing (female) age group. This is relevant when considering requirements for housing, employment and childcare facilities.

5.6 Potential Impact of the Proposed Development on Population

5.6.1 Construction Phase

5.6.1.1 National

It is anticipated that the construction of the new National Maternity Hospital will take approximately 56 months to complete and will have a peak employment requirement of 500-600 workers on site. Given the temporary nature of the construction phase it is considered that this phase of development will not have any significant impact on the national population.

5.6.1.2 Regional

It is anticipated that the proposed development will have a peak employment requirement of 500-600 workers on site during the construction phase and that those employed during the construction phase will for the most part travel from their existing residence. It is not anticipated that the construction phase will result in the relocating of workers to the region due to its finite and transient nature. Any such relocating would be limited and transient.

5.6.1.3 Local

It is considered that the construction phase of the proposed development may have a temporary impact on the population profile of the area with increased demand for residential properties to accommodate workers staying proximate to the site. It is expected, however, that those employed during the construction phase will for the most part travel from their existing residence rather than taking temporary accommodation in the area. Thus, should the proposed development proceed to construction, it is anticipated that the potential impacts for the population, such as any growth or decline, arising from the construction phase would be negligible and transient.

5.6.2 Operational Phase

5.6.2.1 National

In its operational phase, the new National Maternity Hospital will cater for patients from all over Ireland who require access to its services. However, given the transient nature of hospital stays, this would not result in population redistribution at a national level.

5.6.2.2 Regional

The new National Maternity Hospital involves the relocation of the existing National Maternity Hospital from Holles Street, Dublin 2. While the majority of employees would already be resident in the region, their relocation to St. Vincent's University Hospital Campus may result in a redistribution of a small portion of the population within the region. It is expected that any such redistribution would be limited due to the accessibility of St. Vincent's University Hospital Campus by public transportation and due to connections with existing places of residence. Therefore, the impact on population at a regional level is likely to be negligible.

5.6.2.3 Local

The proposed development will represent a significant addition to St. Vincent's University Hospital Campus both in terms of the creation of a world class healthcare facility and the associated increase in staff and patients at the Campus. As such, it is anticipated that the new National Maternity Hospital will impact the population profile of the local area due to the relocation of jobs to the Campus which will result in associated demands for residential properties in the area.

It is anticipated that any increase in demand for houses in the study area in the short term, as a result of the relocation of employees, will be limited, especially given the proximity of the existing National Maternity Hospital at Holles Street (which is situated only c. 3.5km from St. Vincent's University Hospital Campus), ties to existing places of residence and ease of transport access from the DART and bus services. However, in the medium to long term it is anticipated that many staff may choose to live in reasonable proximity and accessibility to their place of work and over time the residential distribution of the new National Maternity Hospital staff will be reflective of this.

The new National Maternity Hospital will also result in increased patient numbers to St. Vincent's University Hospital Campus that is expected to give rise to limited demand for temporary accommodation in the area from families. This will have an insignificant impact

on the level of population in the area, which at an individual level will be transient, but overall will be continuous.

5.7 Mitigation Measures - Population

5.7.1 Construction Phase

5.7.1.1 National

The construction phase of the proposed development is unlikely to generate any significant adverse impact on the population nationally. As such, no mitigation measures are identified.

5.7.1.2 Regional

The construction phase of the proposed development is unlikely to generate any significant adverse impact on demographics regionally. As such, no mitigation measures are identified.

5.7.1.3 Local

The construction phase of the proposed development is unlikely to generate any significant adverse impact on the demography of the local area. As such, no mitigation measures are identified.

5.7.2 Operational Phase

5.7.2.1 National

The operational phase is unlikely to have any significant impact on the population nationally. Consequently, no ameliorative, remedial or reductive measures are identified.

5.7.2.2 Regional

The impact on the population at a regional level attributable to the operational phase is limited and unlikely to be significant. As a result no ameliorative, remedial or reductive measures are identified.

5.7.2.3 Local

The operational phase may impact upon the population living in the surrounding area as staff that are relocated to the St. Vincent's University Hospital Campus choose to locate

close to their place of work over the medium to long term. Such impact is considered to be positive in nature and therefore, no ameliorative, remedial or reductive measures are required.

5.8 Predicted Impact of the Proposed Development on Population

5.8.1 Construction Phase

5.8.1.1 National

It is not envisaged that there will be any significant impact on the national population during the construction phase.

5.8.1.2 Regional

It is not envisaged that there will be any significant impact on the regional population during the construction phase.

5.8.1.3 Local

It is not envisaged that any significant increase or decrease in the population of the local area will occur during the construction phase as it is anticipated that construction workers employed during this phase will travel from their existing residence rather than taking temporary accommodation in the local area. A short term, transient increase in the local working population on-site will be generated by construction employment. This phase is unlikely to generate any significant adverse impact on the demography of the area.

5.8.2 Operational Phase

5.8.2.1 National

It is not envisaged that there will be any significant impact on the national population during the operational phase.

5.8.2.2 Regional

It is not envisaged that there will be any significant impact on the regional population during the operational phase.

5.8.2.3 Local

An impact on the population of the local area is envisaged in terms of population growth

as staff who are relocated to the St. Vincent's University Hospital Campus choose to live in reasonable proximity and accessibility to their place of work. However, it is predicted that this will not be significant as it will occur over the medium to long term and will be positive in nature.

5.8.3 “Do Nothing” Scenario

5.8.3.1 National

The “do nothing” scenario at a national level would result in national maternity care services continuing to be provided at its existing location at Holles Street, Dublin 2. The impact at a national level would thus relate primarily to the failure to provide improved maternity care, with no predicted impact on the overall national permanent residential population.

5.8.3.2 Regional

The “do nothing” scenario at a regional level would result in national maternity care services continuing to be provided at its existing location at Holles Street, Dublin 2. The impact at a regional level would thus relate primarily to the failure to improve on the provision of maternity care, with no predicted impact on the overall regional permanent residential population.

5.8.3.3 Local

Under the “do nothing” scenario it is envisaged that St. Vincent's University Hospital Campus would remain in its current state for the immediate future. Thus, no impact on the residential population is predicted at a local level.

5.8.4 “Worst Case” Scenario

As no mitigation measures are deemed necessary the potential impacts as set out above in Section 5.6 are considered to be equivalent to the “worst case” scenario on population demographics. The failure of the proposed development to proceed will have an impact in terms of the quality of provision of maternity care to mothers and their babies.

5.9 Cumulative Impact of the Proposed Development on Population

5.9.1 National

The proposed development in association with other significant developments in the area such as the RTE developments (Dublin City Council Reg. Ref. 4057/09 and 3094/16) and the full occupancy of Elm Park is unlikely to have any significant cumulative impact on the national population during the construction or operational phase.

5.9.2 Regional

The proposed development in association with other significant developments in the area such as the RTE developments (as above) and Elm Park is unlikely to have any significant cumulative impact on the regional population during the construction or operational phase. In its role as the local maternity hospital for the Ireland East Hospital Group it will impact the regional population positively through the provision of improved healthcare facilities for the area.

5.9.3 Local

The proposed development in association with other significant developments in the area such as the RTE developments (as above) may impact the population profile of the local area due to the relocation and increase of jobs in the area which will result in associated demands for residential properties. However, given the proximity of the existing National Maternity Hospital at Holles Street and the public transport servicing the St. Vincent's University Hospital and RTE Campuses any population redistribution is not anticipated to be of significance to the extent of causing any cumulative impacts.

5.10 Employment – Receiving Environment

The Census data from 2011, published by the Central Statistics Office, provides the most up to date socio-economic information on the numbers of persons at work, sectors of employment, occupations, and unemployment statistics³. Data generated by the Census is compared in order that an analysis of socio-economic trends may be presented. Statistics for the study area are compared with those for the wider catchment area (Dublin City and Dun Laoghaire-Rathdown), the Greater Dublin Area and the State, in order to contextualise the local area statistics. A detailed examination of the socio-economic

³ Employment data from the 2016 Census has not yet been made available, however, the Live Register and the Monthly Unemployment Rate for the State have been updated to December 2016 and as such for unemployment data these figures have been used.

statistics is set out below.

5.10.1 Trends in the Number of Persons in Work 2002 - 2011

Given the positive economic climate over the period 2002 – 2006, all of the areas analysed, bar the Pembroke East D Electoral Division, experienced growth in the numbers of people at work. Over this period the number of persons at work in the State grew by 17.6% with the Greater Dublin Area experiencing growth of 16.1%. Contrasting the significant growth being experienced at national and regional level the number of persons working in the study area grew at a significantly lower rate of 4.8%, while the Pembroke East D Electoral Division experienced a decline of 1.7%.

Table 5.3: Number of Persons at Work in 2002, 2006 and 2011*

Area	2002	2006	2002 - 2006	2011	2006 - 2011
Pembroke East D	1,941	1,908	-1.7%	1,908	No Change
Study Area	8,000	8,386	+4.8%	8,241	-1.7%
Dublin City	224,300	245,007	+9.2%	227,429	-7.2%
Dun Laoghaire – Rathdown	81,930	87,815	+7.2%	87,490	-0.4%
Greater Dublin Area	689,157	800,240	+16.1%	753,565	-5.8%
State	1,641,587	1,930,042	+17.6%	1,807,360	-6.4%

Source: Central Statistics Office

* The figures contained in Table 5.3 have been rounded to one decimal place for presentation purposes.

Between 2006 and 2011 there was a decrease in those at work in all of the areas analysed, except for the Pembroke East D Electoral Division that experienced no change. The decrease in the numbers of people at work is reflective of the significant downturn in the economy nationwide experienced over this period. In this context the total number of people at work in the State and the Greater Dublin Area declined by 6.4% and 5.8% respectively.

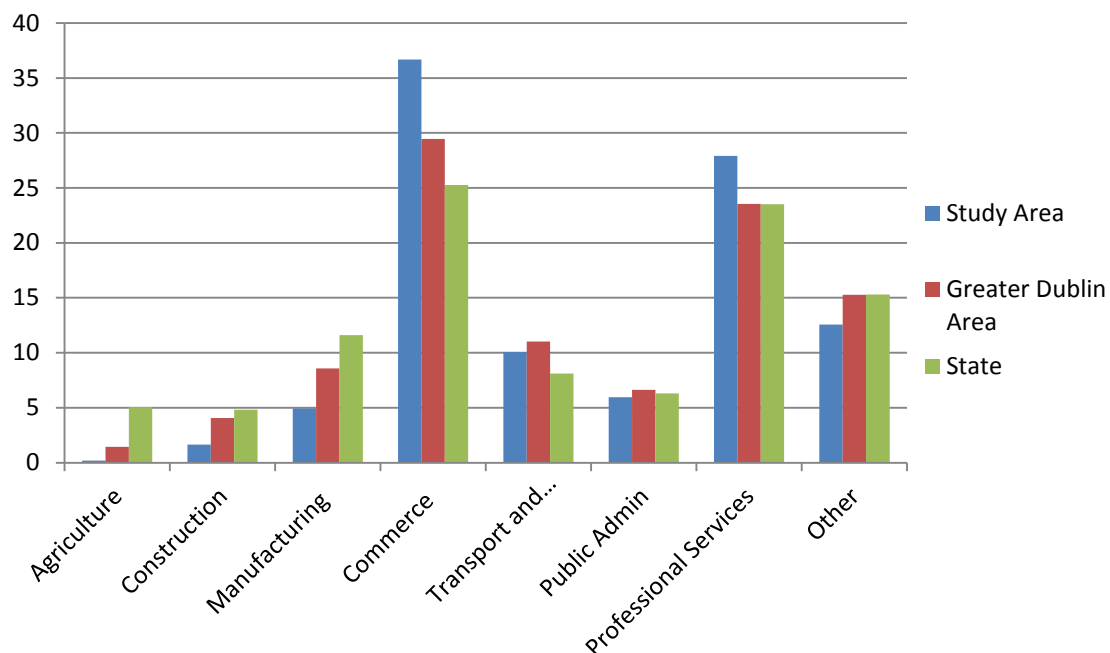
Having experienced a comparatively low increase in the number of persons at work over the period 2002-2006, the study area subsequently experienced a low rate of decline of 1.7% in the number of persons at work over the period 2006-2011. The Pembroke East D Electoral Division demonstrated similar inelastic change over the same periods experiencing a 1.7% decrease in the number of persons of work between 2002 and 2006 and no change in the numbers of those at work between 2006 and 2011.

This indicates that the study area and the Pembroke East D Electoral Division has not been as susceptible to general economic trends in comparison to that experienced at the national and regional level and the numbers of persons at work has remained relatively stable. The occupational composition as detailed below in Section 5.10.2 in the Pembroke East D Electoral Division and the study area may be a contributing factor to this trend. While employment data for 2016 is not yet available for Electoral Divisions, it could be expected that the Pembroke East D Electoral Division will likely follow the national trend of employment increase between 2011 and 2016.

5.10.2 Employment and Occupations in the Local Area

The Census 2011 provides information on the sectors within which residents of the study area are employed. Figure 5.2 below compares sectoral shares of employment in the study area with those of the Greater Dublin Area and the State.

Figure 5.2 Sector of Employment, 2011



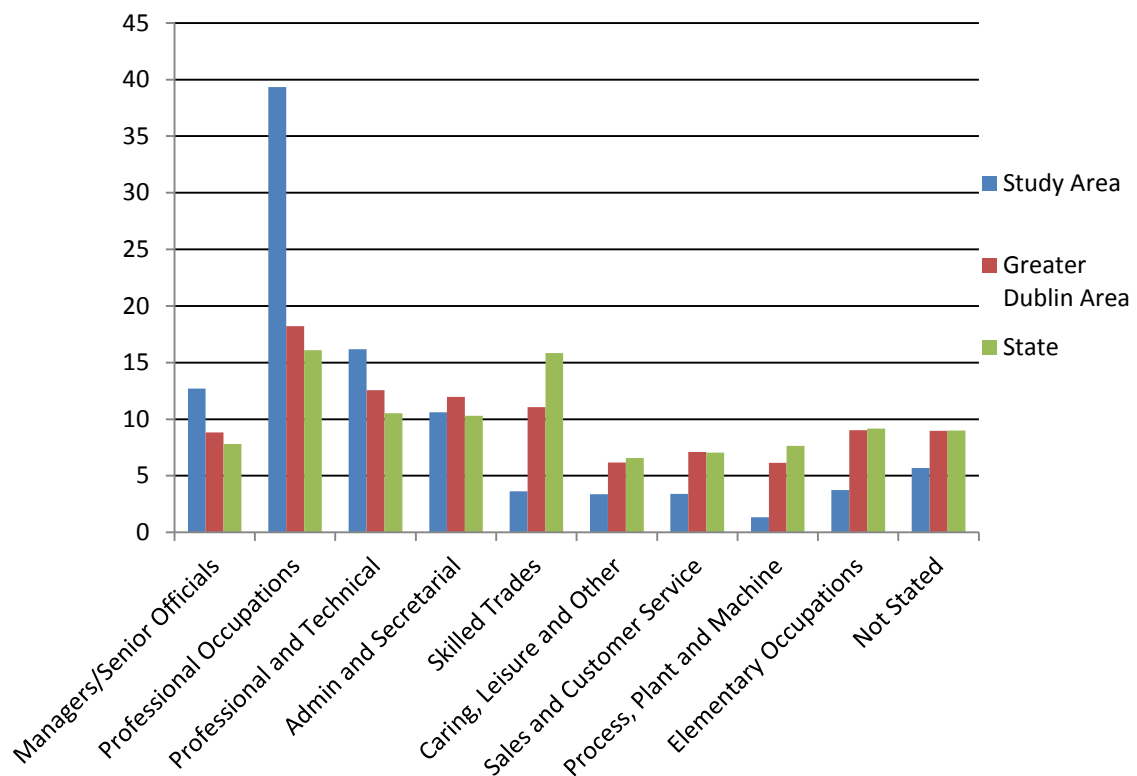
Source: Central Statistics Office

As would be expected the percentage of those employed in agriculture in the study area is well below that of the Greater Dublin Area and the State, along with a lower percentage of workers in the construction and manufacturing sectors. The comparatively low percentage of residents in the study area working in the construction sector, one of the worst hit sectors during the years 2006 – 2011, is in part reflected in the comparatively

inelastic change in the numbers at work over this period, as shown in Table 5.3. As a source of employment, the commerce and professional services sectors of employment are significantly over-represented in the study area, compared to both the Greater Dublin Area and the State.

As shown in Figure 5.3 below, an analysis of the 2011 Census statistics show a mixture of occupations in the study area, with a significantly higher than average proportion of residents working in manager / senior official occupations, professional occupations, and professional and technical occupations. On the other hand, the study area has a significantly lower than average proportion of residents working in the skilled trades, customer services and elementary occupational sectors.

Figure 5.3 Occupations, 2011



Source: Central Statistics Office

5.10.3 Unemployment Trends

To better understand the employment situation and establish a balanced picture it is necessary to examine trends in unemployment, see Figure 5.4 below⁴. An analysis of the figures over the period 2002 – 2006 show that there was a 3.5% increase in the number of

⁴ Please note that area-based unemployment data for Census 2016 has not yet been released.

persons unemployed in the study area. This is a comparatively low rate of increase when set against a 16.1% increase in unemployment in the Greater Dublin Area and an overall 8.6% increase in unemployment at State level. It is worth noting that while the number of persons unemployed in the study area over the 2002 – 2006 period grew by 3.5% (an additional 10 persons) the real increase in those working in the study area over the same period was some 386 persons or 4.8% of the study area population, see Table 5.3 above. This can in part be explained by the increase in the population of the study area experienced over the same period.

Over the period between 2006 and 2011 the number of those unemployed in the study area increased by 346 no. persons, an increase of 117.7% on 2006 data. Dublin City experienced an 89.7% increase in the number of those unemployed over the same period indicating that Dublin City was not hit by the economic downturn to the same extent in comparative terms. Unemployment in the Greater Dublin Area and the State increased significantly experiencing a 138.5% and a 160.3% increase in the numbers unemployed over the same period. Again, while the number of those unemployed in the study area increased over the 2006 – 2011 period (+117.7%), the number of persons at work remained relatively stable decreasing by -1.7%, see Table 5.3 above. The relative stability in the number of persons at work is primarily explained by the comparatively high number of persons employed in senior official and professional occupations. In addition, it can in part be explained by the increase in population of the study area over the same period by 809 persons or 4.9% of the total study area population.

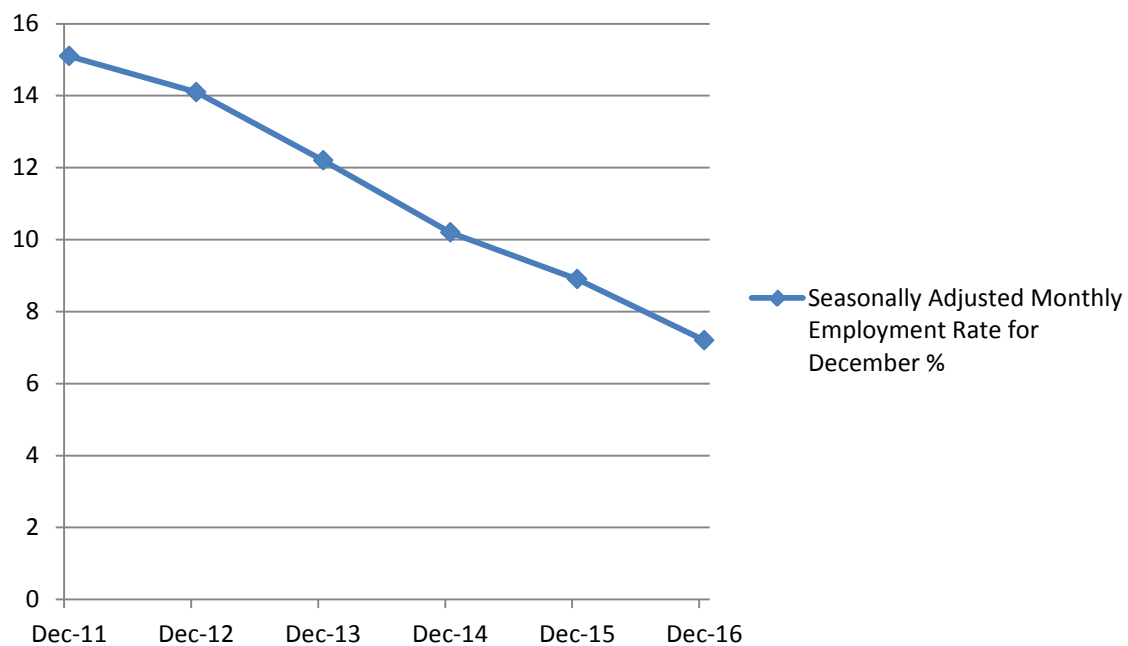
Table 5.4: Number of Persons Looking for First Job & Unemployed having lost or given up previous job in 2002, 2006 & 2011

Area	2002		2006		2011		2002-2006 (%)		2006-2011 (%)	
	1 st Job	Unempl	1 st Job	Unempl	1 st Job	Unempl	1 st Job	Unempl	1 st Job	Unempl
Pembroke East D	19	91	28	113	24	235	47.4%	24.2%	-14.3%	108%
Study Area	64	284	75	294	76	640	17.2%	3.5%	1.3%	117.7%
Dublin City	3,232	22,798	4,726	24,577	5,086	46,613	46.2%	7.8%	7.6%	89.7%
Dun Laoghaire – Rathdown	734	4,232	763	4,258	1,007	10,064	4%	0.6%	32%	136.4%
Greater Dublin Area	8,146	52,373	11,942	60,827	13,975	145,079	46.6%	16.1%	17%	138.5%
State	21,147	138,199	29,372	150,084	34,166	390,677	38.9%	8.6%	16.3%	160.3%

Source: Central Statistics Office

* The figures contained in Table 5.4 have been rounded to one decimal place for presentation purposes.

While the Census 2011 provides statistics on employment, including number of persons at work, employment sector, occupation and unemployment, this data is somewhat dated being c.5 years old. This is emphasised in the significant differences in the socio-economic data experienced between the periods 2002 – 2006 and 2006 – 2011 intercensal periods. In addition, there has been a positive shift in economic indicators since 2011 that have brought the seasonally adjusted unemployment rate at State level for December 2016 down to 7.2% from 15.1% in December 2011, see Figure 5.4 below.

Figure 5.4: Seasonally Adjusted Unemployment Rate for the State

Source: Central Statistics Office

The Live Register is used to provide a monthly series of the numbers of people registering for unemployment assistance / benefit or for various other statutory entitlements. While the Live Register is primarily an administrative count and not a specific measure of unemployment, one of its main uses is as a short-term trend indicator of unemployment. Table 5.5 below sets out the most recent Live Register figures available for Dublin County, Dun Laoghaire (local social welfare area), and the State⁵. The reduction in the numbers of people on the Live Register correlates with the fall in the unemployment rate and a general improvement in economic conditions as a whole.

Table 5.5: Number of Persons on the Live Register 2011 – 2016*

Area	December 2011	December 2012	December 2013	December 2014	December 2015	December 2016	2011 – 2016 % Change
Dublin County	102,269	100,324	94,395	84,707	76,220	66,124	-35.3%
Dun Laoghaire	7,049	6,804	6,012	5,343	4,900	4,185	-40.6%
State	434,784	423,733	395,411	356,112	321,616	276,701	-36.3%

Source: Central Statistics Office

* The figures contained in Table 5.5 have been rounded to one decimal place for presentation purposes

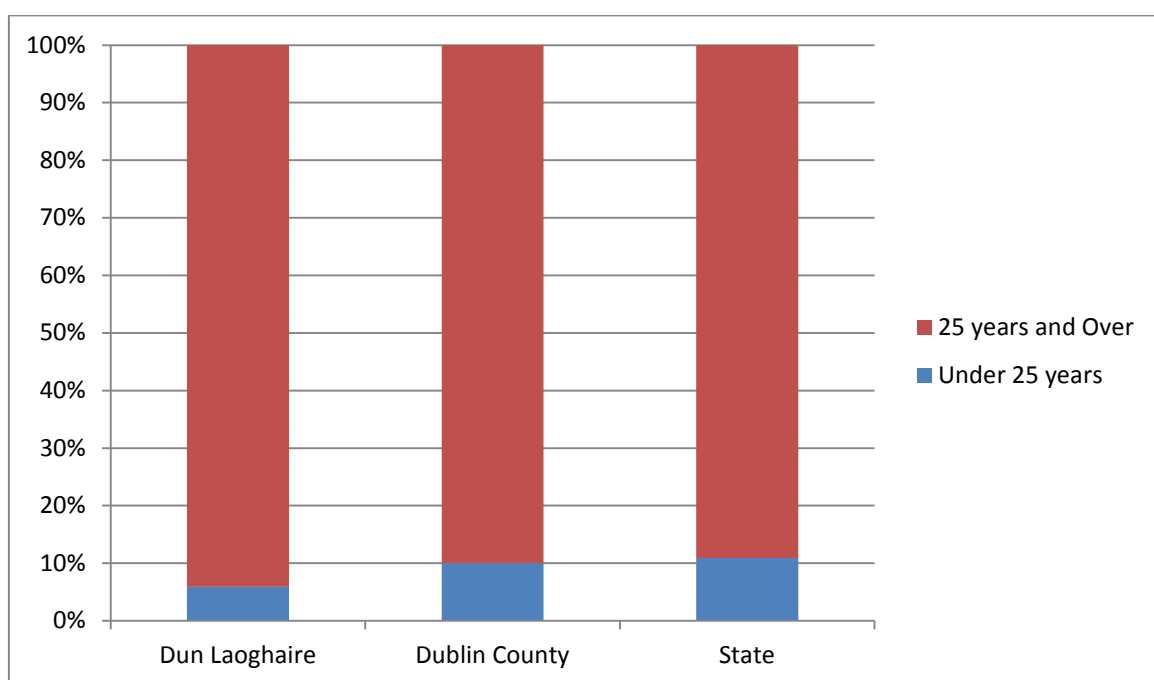
The statistics show that the number of persons on the Live Register has been consistently

⁵ Data for the Live Register is not reliant on Census information and therefore data is available up to December 2016.

falling since 2011, with a notable increased rate of change since 2013. The rate of change of Dublin County is broadly consistent with that experienced at State level while the Dun Laoghaire social welfare area has fared slightly better with a 40.6% reduction in the number of persons on the Live Register since December 2011.

The rate of youth unemployment (those on the Live Register and under 25 years) in the Dun Laoghaire local social welfare area at 5.9% is considerably lower than that of Dublin County at 10% and the State at 10.9%.

Figure 5.5: Youth Unemployment, December 2016



Source: Central Statistics Office

5.11 Potential Impact of the Proposed Development on Employment

5.11.1 Construction Phase

5.11.1.1 National

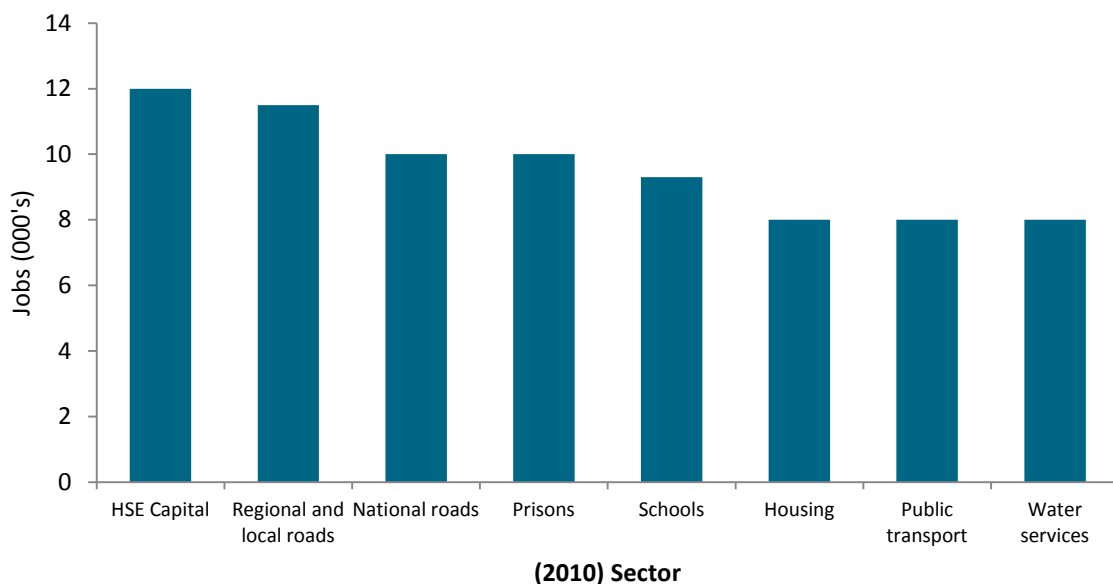
It is anticipated that the construction of the new National Maternity Hospital at St. Vincent's University Hospital Campus will take 56 months to complete.

There are three distinct employment effects of capital investment projects during the construction phase and these include direct, indirect and induced employment effects. Direct employment effects include employment generated specifically as part of the project, indirect employment effects include employment generated by the intermediate

products and services used in the construction of the project and induced employment effects include employment generated in the economy as a whole as a result of the increases in employment (from the direct and indirect effects).

In terms of employment impacts, policy in Ireland has recognised that some types of infrastructure investment are more labour intensive than others. Analysis undertaken by the Department of Finance in 2010 shows that the Health Service Executive creates 12,132 direct employment (job years) per €1 billion invested, more than any other sector of capital investment, see Figure 5.6 below. It should be noted that the numbers in Figure 5.6 pertain to direct employment only and do not include either indirect or induced employment effects.

Figure 5.6: Job-years per €1 billion invested through the public capital programme



Source: Department of Finance

A separate study published by the National Roads Authority entitled *“The Employment Benefits of Investment Projects”* analysed a variety of infrastructure investment projects and found that the direct job creation effect per €1 billion invested in hospitals brought about 7,286 direct, 5,303 indirect and 1,933 induced jobs years.

The delivery of the new National Maternity Hospital will be a demand-side stimulus, which has the potential to provide benefits in terms of total economic output, employment and contribution to Gross Domestic Product. These positive impacts will also go beyond the direct effects from construction and have knock-on benefits through related supply chains in the wider economy.

5.11.1.2 Regional

Given the scale of the new National Maternity Hospital development it is not envisaged that the peak requirement of 500-600 on-site construction workers would be sourced in their totality from the study area or immediate environs, however, it is anticipated that the construction workers required to fill these positions would come from within the region. Thus the jobs created by the new National Maternity Hospital would bring new employment to the region as opposed to displacing existing employment outside of the region.

In addition, the development of the new National Maternity Hospital represents a major stimulus to the regional economy that can bring a range of indirect employment effects that includes employment generated by the intermediate products and services used in the construction of the Hospital and induced employment effects that include employment generated in the region as a whole as a result of the increases in employment.

5.11.1.3 Local

The above benefits of the development of the new National Maternity Hospital in terms of economic output and employment apply most directly to the local area. This indicates that there is potential for employment at a local level arising from the development of the new National Maternity Hospital at St. Vincent's University Hospital Campus. In addition, the proposed development represents a potential stimulus to the local area economy which can bring a range of positive impacts including indirect and induced employment effects.

5.11.2 Operational Phase

5.11.2.1 National

At the national level, the impacts associated with the operational phase will relate primarily to the enhanced healthcare delivered by the new hospital and the associated economic and social benefits. As the new National Maternity Hospital at St. Vincent's University Hospital Campus comprises the relocation of the existing National Maternity Hospital from Holles Street it is anticipated that staff will primarily be existing employees that are relocated to the Campus. Thus, it is not anticipated that the operation of the new National Maternity Hospital will have a significant impact on employment nationally.

5.11.2.2 Regional

The new National Maternity Hospital involves the relocation of the existing National Maternity Hospital from Holles Street, Dublin 2. It is expected that staff at the new National Maternity Hospital will primarily comprise of the relocation of staff from Holles Street. The staff transport surveys (set out in Chapter 6 of this EIS '*Traffic and Transportation*') indicate that the staff comes from the wider City and as such, in the short term they'll be coming from there. Thus, it is not anticipated that the operation of the new National Maternity Hospital will have a significant impact on employment at a regional level.

5.11.2.3 Local

While staff at the new National Maternity Hospital will primarily be existing staff from the National Maternity Hospital at Holles Street, the natural processes of resignations and retirements will mean that there will be a continual need for employment in the medium and long term. In addition, the relocation of predominantly high-value staff to the Campus offers potential for the existing community including small and medium enterprises that can take advantage of an increase in economic activity in the area. Other potential local employment benefits include improving the area as an attractor for internationally trading companies for whom the hospital may act as a magnet.

5.12 Mitigation Measures - Employment

5.12.1 Construction Phase

5.12.1.1 National

The delivery of the new National Maternity Hospital will be a demand-side stimulus, which has the potential to provide benefits in terms of total economic output and employment during the construction phase. Thus, this phase of development is not predicted to have any adverse impact on employment at a national level and as such, no mitigation measures are identified.

5.12.1.2 Regional

The jobs created by the new National Maternity Hospital during the construction phase would bring new employment to the region as opposed to displacing existing employment outside of the region. In addition, the development of the new National Maternity Hospital represents a stimulus to the regional economy that can bring a range of indirect and induced employment effects. Thus, this phase of development is not predicted to have any adverse impact on employment at a regional level and as such, no mitigation

measures are identified.

5.12.1.3 Local

The impacts of the construction phase of the new National Maternity Hospital in terms of economic output and employment at a local level will generally be positive. This phase of development is unlikely to generate any significant adverse impact on employment at a local level and as such, no mitigation measures are identified.

5.12.2 Operational Phase

5.12.2.1 National

As the new National Maternity Hospital at St. Vincent's University Hospital Campus comprises the relocation of the existing National Maternity Hospital from Holles Street it is anticipated that staff will primarily be existing employees that are relocated to the Campus. It is not envisaged that the operation of the new National Maternity Hospital will have a significant impact on employment nationally and as such, no remedial or reductive measures are identified.

5.12.2.2 Regional

It is expected that staff at the new National Maternity Hospital will be primarily comprised of the relocation of staff within the region from the existing National Maternity Hospital, Holles Street. Thus, at the regional level the relocation of staff is predicted to be self-balancing. No remedial or reductive measures are therefore, considered necessary with respect to employment at a regional level during the operational phase.

5.12.2.3 Local

The operational phase of development offers potential for longer-term positive economic impacts in the local area through the employment offered directly and indirectly by the Hospital. No remedial or reductive measures are therefore, considered necessary in this regard.

5.13 Predicted Impact of the Proposed Development on Employment

5.13.1 Construction Phase

5.13.1.1 National

The delivery of the new National Maternity Hospital will be a demand-side stimulus, which has the potential to provide benefits in terms of total economic output, employment and contribution to Gross Domestic Product. It is predicted that the proposed development will be a significant contributor to direct, indirect and induced employment effects that has the potential to have a positive impact at national level.

5.13.1.2 Regional

The proposed development is predicted to be capable of providing important direct temporary construction employment, with 500 to 600 construction personnel on site during the most labour intensive phases of the construction programme. It is predicted that the jobs created would bring new employment to the region as opposed to displacing existing employment.

In addition, the construction phase of the development of the new National Maternity Hospital is predicted to be a stimulus to the regional economy that can bring a range of indirect employment effects that includes employment generated by the intermediate products and services used in the construction of the Hospital and induced employment effects that include employment generated in the region as a whole as a result of the increases in employment.

5.13.1.3 Local

The benefits of the development of the new National Maternity Hospital in terms of economic output and employment apply most directly to the local area. Given the number of construction-related workers on the Live Register in the Dun Laoghaire local social welfare area and the overall Dublin area it is predicted that there is potential for employment during the construction phase at a local level. In addition, the construction phase of the proposed development is predicted to be a stimulus to the local economy which can bring a range of positive impacts including indirect and induced employment effects.

5.13.2 Operational Phase

5.13.2.1 National

At the national level, the impacts associated with the operational phase will relate primarily to the enhanced health care delivered by the new Hospital and the associated economic and social benefits. As the development of the new National Maternity Hospital at St. Vincent's University Hospital Campus comprises the relocation of the existing National Maternity Hospital from Holles Street it is anticipated that staff will primarily be existing employees that are relocated to the Campus. Thus, it is predicted that the operation of the new National Maternity Hospital will not have a significant impact on employment nationally.

5.13.2.2 Regional

It is expected that staff at the new National Maternity Hospital will be primarily comprised of the relocation of staff from the existing National Maternity Hospital at Holles Street. Thus, it is predicted that the operation of the new National Maternity Hospital will not have a significant impact on employment at a regional level.

5.13.2.3 Local

While staff at the new National Maternity Hospital will primarily be transferred from the existing National Maternity Hospital at Holles Street, the natural processes of resignations and retirements will mean that there will be a continual need for employment in the medium and long term. Thus, it is predicted that the operational phase offers potential for longer-term positive economic impacts in the local area through the employment offered directly by the Hospital. In addition, the relocation of predominantly high-value staff to the Campus offers potential for the existing community including small and medium enterprises. It is predicted that the proposed development will have a positive economic impact on local businesses whose services may be availed of by staff, patients and visitors.

5.13.3 "Do Nothing" Scenario

5.13.3.1 National

The "*do nothing*" scenario at the national level would mean that a substantial capital investment and a demand-side stimulus would be removed from the national economy. The result of this would be that the direct, indirect and induced employment effects as outlined above would not be realised.

5.13.3.2 Regional

The “do nothing” scenario at the regional level would mean that a substantial capital investment and a demand-side stimulus would be removed from the regional economy. The result of this would be that the direct, indirect and induced employment effects as outlined above would not be realised.

5.13.3.3 Local

The “do nothing” scenario at the local level would mean that a substantial capital investment and a demand-side stimulus would be removed from the local economy. The result of this would be that the direct, indirect and induced employment effects as outlined above would not be realised.

5.13.4 “Worst Case” Scenario

As impacts on employment are generally positive and no mitigation measures are deemed necessary the “do nothing” scenario as set out above in Section 5.13.3 above would be considered to be equivalent to the “worst case” scenario.

5.14 Cumulative Impact of the new National Maternity Hospital on Employment

5.14.1 National

During the construction phase, the proposed development will be a demand-side stimulus, which has the potential to provide benefits in terms of total economic output, employment and contribution to Gross Domestic Product. Given that the operational phase of development primarily comprises the relocation of workers from the existing National Maternity Hospital at Holles Street it is unlikely to have any significant cumulative impact on employment at a national level in the medium to long term.

5.14.2 Regional

The proposed development will have a significant positive impact on direct employment at regional level during the construction phase as well as indirect and induced employment. Given that the operational phase of development primarily comprises the relocation of workers from the existing National Maternity Hospital at Holles Street it is unlikely to have any significant cumulative impact on employment at a regional level in the medium to long term.

5.14.3 Local

The cumulative impact of the proposed development in association with other significant permitted developments in the area including the RTE development (Dublin City Council Reg. Ref. 4057/09) and Elm Park are anticipated to have a positive impact on local employment and provide opportunities for those currently unemployed.

During the operational phase, it is anticipated that the new National Maternity Hospital will impact the employment profile of the local area due to the relocation of jobs to the Campus which will result in associated demands for residential properties in the area. However, given the proximity of the existing National Maternity Hospital at Holles Street and the public transport servicing the St. Vincent's University Hospital Campus any change to the employment profile of the area is anticipated to take place over the medium to long term and not to be of significance to the extent of causing any cumulative impacts in association with other large scale permitted developments. The permitted extension to St. John's House nursing home (Dublin City Council Reg. Ref. 3704/14) on the Merrion Road will serve to further enhance health related industries in the area and employment in the health sector.

5.15 Community – Receiving Environment

St. Vincent's University Hospital Campus as a healthcare campus is a well-established facility. The new National Maternity Hospital will form part of and contribute to the range of healthcare services offered at the Campus. The lands surrounding St. Vincent's University Hospital Campus are urban in nature and comprise a mixture of land uses typical of such a location including *inter alia* residential, commercial, industrial and recreational uses. The receiving environment from a community perspective, therefore, is comprised of three principal elements as follows:

- The resident community
- The working community
- The visiting community

The impacts likely to be experienced by the community relate to the physical enjoyment of the local area and accessibility to local amenities. As such they are likely to be sensitive to the following types of impacts:

- Traffic / access
- Loss of amenity (noise, dirt, dust etc.)

- Visual amenities
- Community severance

5.15.1 The Residential Community

The resident community in the first instance includes the patients residing temporarily in the hospital itself. These inpatients, which will come from all over Ireland, will be aware of the proposed development during the construction and operational phases.

Beyond the Campus boundary the proposed development adjoins established residential areas at Herbert Avenue and Estate Avenue with further residential areas across the Merrion Road and Nutley Lane. While these surrounding residential communities will be familiar with the current operations of the established facilities on the Hospital Campus, they are also likely to become aware of any additional adverse impacts on their residential amenities arising from the proposed development.

5.15.2 The Working Community

The working community includes the staff at the St. Vincent's University Hospital Campus, the existing staff of the National Maternity Hospital at Holles Street that are expected to be relocated, and the working community who are resident in the surrounding residential areas. Thereafter there are a number of local commercial premises proximate to St. Vincent's University Hospital Campus, including the Merrion Shopping Centre, the Elm Park Golf and Sports Club, The Merrion Inn, Topaz petrol filling station, St. John's nursing home and a mix of commercial uses on Herbert Avenue including a Montessori, Gowan Merrion Motors and medical consultancies.

5.15.3 The Visiting Community

Given the range of facilities provided at the St. Vincent's University Hospital Campus, including *inter alia* an inpatient hospital, there is an associated visiting community to the site. The visiting community also includes out-patients attending the Hospital to avail of follow up appointments and services.

5.16 Potential Impacts of the Proposed Development on Community

5.16.1 Construction Phase

5.16.1.1 The Resident Community

As St. Vincent's University Hospital provides in-patient care, it has a resident population on site. However, the majority of the resident population in the vicinity of the proposed development site are located outside the Hospital Campus, thus the 'resident community' primarily refers to the surrounding residential community outlined above.

Potential impacts on the resident community during the construction phase may include: temporary impacts arising from construction noise and vibration emissions, assessed in Chapter 11 of this EIS *"Noise and Vibration"*; impacts arising from construction traffic emissions, dirt and dust emissions and aspergillus and asbestos impacts arising from demolition and excavation works, and proposed mitigation for same, assessed in Chapter 12 of this EIS *"Air Quality and Climate"*; the potential impact of improper management of construction waste assessed in Chapter 10 *"Waste Management"* and the potential impact on the local road network assessed in Chapter 6 of this EIS *"Traffic and Transportation"*. In addition, the resident community is likely to experience visual impact attributable to a change to the existing visual environment. Such impacts arise due to changes in the site to facilitate the proposed development and the new build within the site. These impacts are described in detail and comprehensively assessed in Chapter 14 *"Visual Impact Assessment"*.

5.16.1.2 The Working Community

The impacts of the proposed development during the construction phase will also be experienced by the working population at St. Vincent's University Hospital Campus. The working community on site will increase during the construction period, having regard to the circa 500-600 construction workers (during the most labour intensive phases of the construction programme) which will be on site over the course of the build. The potential impact on the local road network and Campus car parking is assessed in Chapter 6 of this EIS *"Traffic and Transportation"*.

In addition, further potential amenity impacts described in this EIS in relation to *"Noise and Vibration"* (Chapter 11) and *"Air Quality and Climate"* (Chapter 12) are likely to temporarily negatively impact both existing staff and temporary construction staff. Potential visual impacts during the construction phase are set out in Chapter 14 *"Visual Impact Assessment"*. The wider working community in the area will be more detached to

the changes to the physical environment in comparison to those working on St. Vincent's Hospital Campus. On the other hand, the proposed development of the Hospital may bring a range of positive impacts by serving as a stimulus to the local area economy. At construction stage there may be positive economic spin off for local businesses as the construction workers avail of local services.

5.16.1.3 The Visiting Community

The impacts of the construction phase of the proposed development will be experienced by out-patients and other visitors to the Hospital. In this regard the loss of amenity issues described in this EIS including *inter alia* "Traffic and Transportation" (Chapter 6), "Noise and Vibration" (Chapter 11) and "Air Quality and Climate" (Chapter 12) are likely to be significant but temporary in nature. The wider visiting community will experience the construction phase of the proposed development in a more detached manner.

5.16.2 Operational Phase

5.16.2.1 The Resident Community

The completion of the new National Maternity Hospital and the commencement of its operation will have a significant positive impact for mothers and babies by providing quality maternity care on a co-located site with an adult acute hospital. The development of the new National Maternity Hospital at St. Vincent's University Hospital Campus will provide the best possible services for women and infants in Ireland and is particularly important for high-risk mothers and babies.

Potential impacts on the resident community during the operational phase may relate to impacts upon the local road network, addressed in Chapter 6 of this EIS "Traffic and Transportation", the potential for traffic related air emissions are assessed in Chapter 12 "Air Quality and Climate", and potential impacts relating to noise associated with building services plant, additional vehicles on the existing road system, car parking activity and waste/service yard activities are addressed in Chapter 11 of this EIS "Noise and Vibration". It is expected, however, that any impacts will be negligible in the context of the receiving environment conditions.

In addition, during the operational phase the resident community is likely to experience visual impacts attributable to a change to the visual environment. Such potential impacts would be attributable to the change to the site itself in providing the proposed development. These impacts are described in detail and comprehensively assessed in

Chapter 14 "*Visual Impact Assessment*". The potential for impact on daylight, sunlight and overshadowing with regard to the resident community including residences on Herbert Avenue, Merrion Road and Nutley Lane is considered in Chapter 13 "*Microclimate*".

5.16.2.2 The Working Community

The completion of the proposed development and commencement of the operation of the new National Maternity Hospital is likely to be experienced as a significant positive impact by the staff working within the Hospital. Many of these staff will come from the existing out-dated facilities at Holles Street, Dublin 2 and the new National Maternity Hospital will represent a significant improvement to their working environment. In addition, there may be positive economic spin off for local businesses during the operational phase, where staff, patients and visitors avail of local services.

In comparison the wider working community in the area will perceive potential impacts to the physical environment with less intensity, and in a more detached manner in comparison. Potential impacts on the working community during the operational phase may include loss of amenity and accessibility issues and these are described in greater detail in other Chapters of this EIS including *inter alia* "*Traffic and Transportation*" (Chapter 6), "*Noise and Vibration*" (Chapter 11), "*Air Quality and Climate*" (Chapter 12) and "*Visual Impact Assessment*" (Chapter 14).

5.16.2.3 The Visiting Community

The completion of the new National Maternity Hospital and the commencement of the operational stage is likely to be experienced as a significant positive impact by out-patients and visitors to the Hospital. The development of the new National Maternity Hospital at St. Vincent's University Hospital Campus sets out to create a fully integrated, state-of-the-art, women and new-born baby focused Hospital that will facilitate excellence in the delivery of clinical services.

In common with the wider working population, the wider visiting community will experience the proposed development in a more detached manner. Potential impacts on the visiting community during the operational phase may include loss of amenity and accessibility issues and these are described in greater detail in other chapters of this EIS including *inter alia* "*Traffic and Transportation*" (Chapter 6), "*Noise and Vibration*" (Chapter 11) and "*Air Quality and Climate*" (Chapter 12).

5.17 Mitigation Measures - Community

5.17.1 Construction Phase

The scale of the proposed development will inevitably lead to some adverse localised impacts during the construction phase. It is expected that these adverse impacts would be experienced mainly by the patients and staff at the St. Vincent's University Hospital Campus, the surrounding residential areas and to a lesser extent by the visiting community. The potential adverse impacts likely to be experienced during the construction phase relate to loss of amenity in relation to noise, vibration, dust, dirt, construction traffic and visual impacts. All of these potential impacts, and associated mitigation measures where necessary, are discussed in greater detail in other chapters of this EIS.

A Draft Construction Management Plan, see Appendix 2.1 of the EIS, has been prepared to mitigate any disruption as far as possible during the construction phase. In relation to asbestos, in order to protect against any negative impacts as a result of the removal of same, prior to commencement of the demolition works, all asbestos containing materials identified will be removed by a suitably trained and competent person. Additional mitigation measures will also be implemented by the Main Contractor to reduce the potential risks of dust and aspergillus through the implementation of a Dust Minimisation Plan and an Aspergillus Prevention Plan. Construction noise and vibration impacts will be ameliorated through mitigation measures set out including *inter alia* a noise monitoring programme and noise control audits. A detailed Construction Traffic Management Plan incorporating the traffic management measures contained in the Draft Construction Management Plan will be finalised for the construction phase of the proposed development by the Main Contractor.

5.17.2 Operational Phase

During the operational phase potential adverse impacts include loss of amenity in relation to traffic, noise and visual impacts. Impact on visual amenities is a more subjective experience which will differ depending on the viewpoint. All of these potential impacts, and associated mitigation measures where necessary, are discussed in greater detail in other chapters of this EIS. Traffic impacts and mitigation are set out in Chapter 6 "*Traffic and Transportation*" and include *inter alia* limiting the staff car parking on the Campus, improving cycle facilities, improving the existing Hospital entrances and the adoption of a Mobility Management Strategy. A number of mitigation measures are set out in Chapter 11 to address the issue of "Noise and Vibration", for the operational phase of the proposed development.

5.18 Predicted Impact of the Proposal on Community

5.18.1 Construction Phase

5.18.1.1 The Resident Community

Impacts from the construction phase of the development will be temporary in nature and will result in some loss of amenity to the resident community. Predicted impacts include *inter alia* an increase in the daytime noise levels in the locality, albeit not excessively intrusive, dirt and dust emissions arising from demolition and excavation works, impact on the local road network and visual impact attributable to a change to landscape and visual amenities. However, through the implementation of the remedial and reductive measures contained in this EIS proposed during the construction period, such impacts from the proposed development on the wider resident communities in the area will not be significant and any impact will only be temporary in nature. Specific mitigations measures in relation to aspergillus prevention will be employed to protect the health of the resident population on the Campus.

5.18.1.2 The Working Community

Impacts from the construction phase of the development will be temporary in nature and will result in some loss of amenity primarily for the employees and patients at St. Vincent's University Hospital Campus. In this regard loss of amenity, air particulates and accessibility issues described in this EIS in relation to "*Traffic and Transportation*" (Chapter 6), "*Noise and Vibration*" (Chapter 11) and "*Air Quality and Climate*" (Chapter 12) are likely to negatively impact both existing staff and temporary construction staff. However, through the implementation of the remedial and reductive measures contained in this EIS proposed during the construction period, the overall impacts from the proposed development on the working community may be perceived to be moderate and slightly negative for a temporary period.

The wider working community in the area will be more detached to the changes to the physical environment in comparison to those working on St. Vincent's Hospital Campus. On the other hand, the proposed development of the Hospital is predicted to bring positive economic spin off for local businesses as the construction workers avail of local services, thus acting as a temporary stimulus to the local area economy.

5.18.1.3 The Visiting Community

Impacts from the construction phase of the development will be temporary in nature and will primarily affect out-patients and other visitors to the Hospital insofar as it will generate general loss of amenity impacts. The wider visiting community will experience the construction phase of the proposed development in a more detached manner. Loss of amenity and accessibility issues are described in this EIS including *inter alia* "Traffic and Transportation" (Chapter 6), "Noise and Vibration" (Chapter 11) and "Air Quality and Climate" (Chapter 12). With the implementation of the remedial and reductive measures contained in this EIS during the construction period, the impact of the proposed development on the visiting community will be moderate and any impact will only be temporary.

5.18.2 Operational Phase

5.18.2.1 The Resident Community

The completion of the new National Maternity Hospital and the commencement of its operation is predicted to be experienced as a significant positive impact by in-patients, as the quality of maternity care improves and the care environment is significantly enhanced and thus has a direct and positive impact on human health. Potential impacts on the resident community during the operational phase relating to an increase in traffic and impact upon the local road network are subject to mitigation proposals included as part of the Transport Strategy included in Chapter 6 "Traffic and Transportation". In relation to noise it is predicted that subject to the implementation of appropriate noise and vibration control measures, the existing noise climate will not increase sufficiently or with such frequency so as to be likely to cause disturbance. Taking into consideration the significant improvement in healthcare services that the proposed development provides, the overall impact on the resident community during the operational phase of development is positive and significant.

The impacts with regard to the microclimate are set out in Chapter 13 of the EIS "Microclimate". Following construction of the new development, loss of daylight to dwellings on Herbert Avenue, Merrion Road and Nutley Lane would be limited, within the BRE guidelines and the impact is classed as negligible. Loss of sunlight to dwellings on Merrion Road and Nutley Lane would also be limited and within the BRE guidelines, and classed as negligible. Loss of sunlight to gardens would be classed as a negligible impact. The proposed building's shadow would not encroach onto the gardens at Herbert Avenue until the late afternoon, and these gardens would receive ample sunlight at other times. Rear gardens of dwellings on Nutley Lane and Merrion Road would be unaffected by the

proposed development. Sunlight to the Elm Park golf course would not be affected because the proposed development lies to the north of it.

5.18.2.2 The Working Community

It is predicted that the staff of the new National Maternity Hospital, many of which will have transferred from the existing National Maternity Hospital at Holles Street, will experience a significant positive impact in relation to working conditions and the quality of facilities provided. In addition, there may be positive economic spin off for local businesses during the operational phase, where staff, patients and visitors avail of local services. Potential amenity impacts on the wider working community relating to impacts upon the local road network and noise are subject to mitigation measures as set out in this EIS. There will be a significant positive impact arising from the landscaping and amenity proposals that will directly benefit the working population on the campus. Taking into consideration the significant improvement in the working environment of the new National Maternity Hospital it is predicted that the overall impact on the working community during the operational phase of development will be positive and significant.

5.18.2.3 The Visiting Community

It is predicted that those visiting the new National Maternity Hospital, will experience a significant positive impact in relation to the quality of the facilities and the range of clinical specialities provided and thus will have a positive impact on human health. Given that the wider visiting community will experience the proposed development in a more detached manner, and taking into consideration the mitigation measures set out in this EIS, potential amenity impacts are not predicted to be of a level as to cause significant disturbance. Thus, taking into consideration the significant improvement in health care services at the Hospital it is predicted that the overall impact on the visiting community during the operational phase will be positive and significant.

5.18.3 “Do Nothing” Scenario

5.18.3.1 The Resident Community

If the proposed new National Maternity Hospital were not to proceed, the perceptions of the resident community would remain unchanged. This is of concern given that the existing National Maternity Hospital at Holles Street is an outdated building which is no longer fit for purpose. The “do nothing” scenario would represent a missed opportunity to provide a state of the art, custom built, modern co-located maternity hospital which would significantly improve the care environment provided to mothers and babies.

5.18.3.2 The Working Community

If the proposed new National Maternity Hospital were not to proceed, the perceptions of the working community would remain unchanged. The “*do nothing*” scenario would represent a missed opportunity to significantly improve upon existing facilities and the quality of care environment within which staff at the existing National Maternity Hospital work. In addition, the surrounding working community would not avail of any potential spin off business associated with the development of the new National Maternity Hospital.

5.18.3.3 The Visiting Community

If the proposed new National Maternity Hospital were not to proceed, the perceptions of the visiting community would remain unchanged. The “*do nothing*” scenario would represent a missed opportunity to significantly improve upon existing facilities and the quality of the care environment provided to out-patients at the Hospital and visitors to the Hospital.

5.18.4 “Worst Case” Scenario

If the mitigation measures set out in the respective EIS Chapters were not implemented this would constitute the “*worst case*” scenario in terms of potential impacts on the community. Further to the mitigation measures set out in the Chapters of the EIS, the Draft Construction Management Plan has been prepared to mitigate any disruption as far as possible during the construction phase.

5.19 Cumulative Impact of the new National Maternity Hospital development on Community

5.19.1 Construction Phase

The proposed development in association with other significant developments in the area such as the RTE developments (Dublin City Council Reg. Ref. 4057/09 and Reg. Ref. 3094/16), the AIB office scheme (Dublin City Council Reg. Ref. 2221/16) and the finishing out of the Elm Park Business Campus is unlikely to have any significant cumulative impact on the community during the construction phase. The potential cumulative traffic impact of other planned developments together with the new National Maternity Hospital is considered to be negligible. All potential cumulative impacts on residential amenity are addressed in the each relevant Chapter of this EIS.

5.19.2 Operational Phase

The proposed development in association with other significant developments in the area such as the RTE developments (Dublin City Council Reg. Ref. 4057/09 and Reg. Ref. 3094/16), the AIB office scheme (Dublin City Council Reg. Ref. 2221/16) and the finishing out of the Elm Park Business Campus is unlikely to have any significant cumulative impact on the community during the construction phase considering the various mitigations measures proposed. Should these projects all have concurrent construction programmes, in addition to any works associated with the NTA's Merrion Gates Strategy, there may be moderate negative impacts experienced during construction arising from noise, transport delays and other construction related impacts. Any identified impacts are likely to be temporary in nature. The potential cumulative traffic impact of other planned developments together with the new National Maternity Hospital is considered to be slight or positive when viewed from a public transport perspective (should the NTA's Merrion Gates Strategy be implemented). All potential cumulative impacts on residential amenity are addressed in the each relevant Chapter of this EIS.

5.20 Monitoring

No monitoring measures are deemed necessary to address the impact of the proposed development on human beings at the local, regional and national level.

5.21 Reinstatement

The new National Maternity Hospital has an important role to play in the delivery of a world class maternity healthcare service and reinstatement is therefore, not considered as an option.