

## Appendix 1: Infrastructure Delivery Plan

### 1. Introduction

This Infrastructure Delivery Plan (IDP) sets out the main infrastructure items necessary to facilitate the level and distribution of growth set out in the Core Strategy. It also identifies other items of infrastructure necessary to achieve the plan's wider objectives and those of its partners. It is a working document that will be kept up to date as infrastructure planning progresses.

A Schedule of Infrastructure Projects is provided at the end of the IDP. This comprises three Tables:

Table 1 – Main Schedule;

Table 2 – Infrastructure Trajectory for Gaydon/Lighthorne Heath New Settlement and JLR Employment; and

Table 3 – Infrastructure Trajectory for Canal Quarter and Related Employment Sites.

The main schedule describes individual projects, where these are known, and broad descriptions of the type of infrastructure that might be needed where individual projects have not been identified. Where the infrastructure is essential to support the growth outlined in the Core Strategy, it is shown as 'critical' on the Schedule.

Physical infrastructure that will be delivered on site as a normal part of a development, and that will be paid for by the developer as a normal part of development costs, is not generally included in this IDP. The infrastructure items shown will generally be financed through developer contributions (S106 and the Community Infrastructure Levy), as well as through the capital programmes of the District Council, County Council, their key partners and other agencies.

Similarly, small local projects that will be determined by Town and Parish Councils through the Neighbourhood Development Plan process are not identified in the IDP. They may, however, be indirectly funded by the Community Infrastructure Levy (CIL), via the proportion of the levy that is passed to Town and Parish Councils.

As background evidence for CIL, a further document will be produced setting out details of which items of infrastructure will be funded through S106 and which will be funded in whole or part through the levy (the 'Regulation 123' list).

### 2. Transport Infrastructure

Work to identify the transport infrastructure required as part of the Core Strategy has been led by Warwickshire County Council as the Local Highways Authority. It draws upon:

- the Stratford on Avon District Strategic Transport Assessment completed by Warwickshire County Council (WCC) with assistance from Arup in October 2012;
- the Strategic Transport Assessment Phase 2 Modelling Report, WCC/Arup (June 2013);
- the Stratford (Canal Quarter) Regeneration Zone Scenario Analysis, WCC/Arup (November 2013);
- the Strategic Transport Assessment Options Analysis Report, WCC/Arup (April 2014);
- the Strategic Transport Assessment Cumulative Assessment, WCC/Arup (April 2014);
- the Local Transport Plan for Warwickshire (2011-2026) and other sources.

Infrastructure improvements identified include highways infrastructure, public transport and pedestrian and cycle routes. Some schemes are critical to enable the development of specific sites – these are generally to be provided by the developer either as part of the development using S278/S38, or as an associated planning obligation secured through S106 (for example as part of the proposed new settlement at Gaydon/Lighthorne Heath or the Stratford Canal Quarter Regeneration Zone). Other projects, such as the various measures referred to as the Stratford Transport Package, will be wholly or partly CIL funded as they will deal with the cumulative impacts of development across a number of sites. EBD

The transport infrastructure required to 2031 also includes some strategic schemes of regional or sub-regional significance such as the improvements to the A46(T), M40 and M42, led by the Highways Agency with support from Warwickshire County Council and neighbouring highway authorities. Some contribution may be sought from developers but these projects will be mostly delivered with external agency funding.

Other public transport projects will be determined as plans evolve during the Core Strategy period, especially the detail of a possible new Park & Ride and express bus services in conjunction with a new settlement at Gaydon/Lighthorne Heath.

The IDP also includes enhanced pedestrian and cycle routes in Stratford at Birmingham Road/Guild Street and a number of minor cycle infrastructure improvements to help deliver the Cycle Strategy within the Local Transport Plan. As with highways infrastructure, the creation of new or enhanced pedestrian and cycle links will generally be funded as part of the development package where they relate to specific sites, or with a contribution from CIL if they deal with the cumulative impact of a number of developments.

Community transport initiatives and other local projects may be identified in Neighbourhood and Parish Plans and may secure a share of CIL funding indirectly from Town and Parish Councils. These small local projects are not identified in the IDP.

Local pedestrian and cycle links, including off-road schemes that improve access to or the amenity value of open space, will generally either be negotiated as part of a S106 package in lieu of on-site open space contributions (if the need can be linked to a particular development), or they will be identified through the Neighbourhood Development Plan process.

### **3. Education**

The relatively dispersed pattern of growth outlined in the Core Strategy may help ensure the continuing financial viability of many small village schools that currently have declining pupil numbers. Any proposals for new housing in the Main Rural Centres will present some challenges in terms of providing school places but in most cases these can be overcome with investment in existing schools.

It is more difficult to accommodate an increase in pupils within Stratford-upon-Avon where there is currently no forecast surplus capacity. In addition to the proposed development at Shottery, which will provide a new primary school and a contribution towards the cost of secondary provision, a significant amount of development is proposed in the Core Strategy at the Canal Quarter Regeneration Zone. This will require the provision of additional primary and secondary school places which will be delivered where possible through the expansion of existing schools. The two councils will keep under review the need to plan for the development of wholly new schools.

At primary age, WCC needs to consider how best to meet additional pressure in Stratford, Wellesbourne, Welford on Avon, Fenny Compton, Lighthorne Heath, Tanworth in Arden, Studley, Alcester, Napton, Southam, Ilmington, Shipston, Quinton, Henley in Arden, Harbury, Great Alne, Bidford on Avon, Ettington and Long Compton. This will not see expansions of all of the named schools but will require discussions with all local providers to ensure a sustainable solution. An indicative list of those schools more likely to be expanded is provided in the Schedule of Infrastructure Projects. Similarly, there will be a need for additional secondary school places across the District and discussions will be held with all schools to determine the most appropriate way of meeting the forecast additional demand. An indicative only list is provided in the Schedule.

A new settlement at Gaydon/Lighthorne Heath will include new primary provision and a financial contribution towards secondary provision.

An initial estimate of the overall costs of making the necessary provision is £60.5m. This represents £18.5 for primary, £7.5m for special educational needs (SEN), and £34.5m for secondary and post 16. This includes the requirements of the new settlement.

These costs do not include the provision of land for new schools or any element for pre school provision which should be provided with any new primary provision.

## **4. Primary and Acute & Community Health Care Infrastructure**

### **4.1 Primary Care**

The District is served by 19 GP practices, 5 of which have branch surgeries, making a total of 24 premises. This section outlines the anticipated impact of the growth outlined in the Core Strategy in terms of the built physical capacity needed to ensure the delivery of primary health care, as assessed by the Arden, Herefordshire & Worcestershire Area Team of NHS England.

#### **Stratford-upon-Avon**

The future development of the Canal Quarter and other currently unidentified sites in the town will result in an estimated 900 houses which will generate a population increase of 1,980 residents using the Census 2011 average household size of 2.2 residents per dwelling. However, these proposals are part of the overall development of Stratford-upon-Avon which will in total comprise 2,590 additional homes with an increased population of around 5,700. There are four practices situated in the town whose total average list size per whole time equivalent (wte) GP is greater than the national average of 1,750. Therefore, these practices currently have no capacity to increase their list sizes. Three of the practices have some under-utilisation in their premises and a fourth has stated that they could undertake internal modifications to their premises to create additional clinical rooms. The requirement is therefore for two additional clinical rooms and associated infrastructure to accommodate additional clinical sessions and associated non-clinical staff. The cost of this is estimated at £60,690, excluding externals, furniture & equipment, telephones/data, fees and VAT.

#### **Wellesbourne**

Hastings House Surgery in Wellesbourne has capacity for an additional 130 patients based on the average national list size of 1,750 patients per wte GP. This capacity will be utilised by residents moving into houses that already have planning permission so a capital contribution will be required from any further development.

#### **Other Main Rural Centres**

The practices in the other Main Rural Centres have sufficient capacity to accommodate the planned increases in population. This is either because new purpose built premises have recently been developed, current premises are under-utilised and/or individual practices' list sizes are currently sufficiently below the national average of 1,750 patients per wte GP.

#### **Local Service Villages and Other Rural Locations**

Further analysis is required to establish any infrastructure requirements arising from these developments. In total 1,574 additional houses are planned which will result in an increased population of 3,463 residents. The maximum requirement would therefore be for two clinical rooms at a cost of £60,690, excluding externals, furniture & equipment, telephones/ data, fees and VAT.

#### **Gaydon/Lighthorne Heath**

This site is for 2,500 houses by 2031, ultimately rising to 3,000 houses. This will generate a population increase of 5,500 residents by 2031 using the ratio of 2.2 residents per dwelling, eventually rising to 6,600. There are three practices situated near this development whose total average list size per wte GP is greater than the national average of 1,750. Therefore, these practices currently have no capacity to increase their list sizes. One of the practices has stated that they could provide additional GP sessions by utilising available rooms in their existing premises and this will be sufficient to increase capacity to provide services to the additional population generated by other planned development in the area.

The requirement for this strategic site is therefore ultimately for new premises to accommodate the equivalent of a 4 GP surgery to provide services to its residents. The precise timing of the likely phased provision of this facility is to be determined.

## 4.2 Acute and Community Health Services

South Warwickshire NHS Foundation Trust (the "Trust") is the major provider of acute and community health services to the population of South Warwickshire.

The Trust provides a range of planned and emergency services to patients from its sites across the District as well as from patients' homes. *Acute care* is delivered from a hospital setting and encompasses a range of clinical health-care functions, including emergency medicine, trauma care, pre-hospital emergency care, acute care surgery, critical care, urgent care and short-term inpatient stabilization. Community health-care services are responsible for delivering health services in the community - in people's homes, health centres and community-based clinics - and include district nurses, health visitors and therapists delivering out-of-hospital rehabilitation.

The Trust's acute services sites include:

Warwick Hospital – this site houses the majority of the Trust's Acute Services including; Accident and Emergency services, Diagnostic and Pathology departments, Maternity and SCBU (Special Care Baby Unit), Main and Day Surgery Theatres together with an Intensive Care Unit and Coronary Care Unit.

Stratford-upon-Avon Hospital - this is one of the Trust's community hospitals and it includes a minor injuries unit, outpatients department, radiology department and an intermediate care ward.

These hospitals are now at full capacity. Over the past three years the Trust has made good progress in establishing out-of-hospital services and pathways to deliver care closer to patients' homes to avoid unnecessary hospital admissions and shorten stays in hospital. These changes have enabled the Trust to make better use of hospital capacity. However, there are now limited opportunities to further improve hospital capacity utilisation. This means that additional healthcare infrastructure will be needed to support future population growth.

It is not sensible to plan further infrastructure on a piecemeal basis as applications for each new development come forward. The cost and planning implications of so doing are impracticable. Instead, the Trust has considered the anticipated housing growth across the South Warwickshire area and looked at the overall impact of the proposed increased population to develop an infrastructure strategy to serve the future healthcare needs of the growing population. This strategy takes into account the trend for the increased delivery of healthcare out of hospital and into the community and the impact of an ageing population on the provision of acute healthcare.

The Trust has used Strategic Needs Population Projections ("SNPP") data to identify the population growth projected for Warwick and Stratford localities over a 20 year plan period. These SNPP projections identify a 39,818 growth in population between 2011 and 2031 for Warwick and Stratford on Avon District Councils. This growth will be met by 20,972 new homes. Stratford on Avon District Council's Core Strategy proposes 10,800 new homes over the plan period, equivalent to a population of 15,960.

The healthcare needs of the anticipated demographic profile of the new population will generate hospital demand equivalent to 15,000 admissions and 53,000 outpatient appointments per year by the end of the plan period. This will require about 160 acute hospital beds, 16 outpatient clinic suites, associated diagnostic and intervention facilities, maternity and support service infrastructure. This indicates the additional capacity the Trust will need to provide to meet the healthcare needs of the new population and excludes any additional healthcare capacity it will need to provide in future to meet the needs of the ageing resident population.

The Trust proposes to meet these infrastructure requirements through 3 development projects, including 2 new ward blocks at Warwick Hospital Site which will deliver circa 96 beds and a new

Stratford Hospital which will provide circa 50 beds, 16 new outpatient clinic suites, associated diagnostic and intervention facilities and support service infrastructure.

The full costs of these developments are estimated at around £68 million and the Trust will seek a contribution for the £35.7 million costs associated with the growth in housing. Until CIL is adopted, SWFT will seek a contribution towards Acute and Community Care from large sites through S106 agreements.

The Trust expects to borrow to raise the primary funding for both projects. They also expect to raise charitable donations towards the projects and will request a CIL contribution from Stratford and Warwick District Councils to reflect the additional demands on healthcare arising from growth in housing.

## **5. Green Infrastructure, Open Space & Sports Provision**

### **5.1 Introduction**

The green infrastructure, open space and sports provision package put forward in the Schedule of Infrastructure Projects has a number of purposes:

- To enhance ecology and biodiversity;
- To address climate change;
- To improve the provision of and public access to open space;
- To foster health and wellbeing through participation in sports and recreation; and
- Related to this, to encourage active ageing.

### **5.2 Biodiversity**

The Warwickshire Coventry and Solihull Local Biodiversity Action Plan (LBAP) identifies the costs of achieving the LBAP habitat requirements to 2026. The costs of creating, restoring and enhancing habitats across the District to meet LBAP targets are estimated to be £792,000 per annum.

It is further estimated by Warwickshire County Council (Ecology) that around 90% of the £792,000 will be delivered through partners, including agri-environment schemes, Environment Agency schemes, biodiversity offsetting and public open space provision and enhancement delivered through S106.

This leaves a deficit of £79,200 per annum to deliver local green infrastructure needs. These will predominately be identified in Neighbourhood and Parish Plans and be funded by Town and Parish Councils' CIL receipts and other sources.

### **5.3 Open Space Strategy and Active Communities Strategy**

Open space and active communities infrastructure proposed in this IDP is underpinned by an assessment of open space and sports needs undertaken in September 2011 and updated in April 2014, undertaken by Arup on behalf of the Council. It is supported by the District Council's Open Space Strategy and Active Communities Strategy and is in line with guidance from Sport England, Fields in Trust, Natural England and CABI.

Future development and associated population growth will create a need for new and improved public open spaces including urban and village green infrastructure (e.g. street trees, pocket parks and other amenity green spaces), parks and gardens, play areas, allotments and improved access to the countryside. There will also be a need for new and improved indoor and outdoor sport and recreation facilities to support the health and wellbeing agenda of an increased population, including measures to improve levels of physical activity, mental wellbeing and social inclusion.

In addition the management of open spaces and recreational facilities will need to change to mitigate and adapt to climate change, including facilitating community food production (reducing air miles on food), planting drought and flood resistant species, planting to reduce surface water run-off and the introduction of water efficiency measures and low carbon energy usage at leisure facilities across the District.

The Schedule of Infrastructure Projects presents an assessment of the types of open space and sports provision required to meet needs, by broad settlement or type of settlement, to reflect the level and distribution of growth set out in the Core Strategy. The open space will mostly be provided on-site and secured through S106 contributions although higher order facilities (such as the indoor sports provision) would generally be funded through CIL.

The Schedule also includes an indicative list of projects to further the aims and objectives of the Open Space and Active Communities Strategies and meet some of the requirements and/or shortfalls identified in the needs assessment. The more strategic projects listed could receive CIL funding. The smaller, more local projects could utilise S106 funding where this is paid in lieu of on-site provision (and subject to the limits on pooling S106 contributions). Developer contributions would be used to fund new or enhanced facilities to the extent that these are meeting the needs of the Core Strategy's additional population.

## **6. Emergency Services**

### **6.1 Police**

This section is based on a paper from Warwickshire Police in response to the Further Focussed Consultation (March 2014). The Police response is the latest in a positive dialogue maintained throughout the preparation of the Core Strategy.

The direct and additional impacts of new development in the District on local policing will be manifested in demand and responses in the following areas:

- Additional calls and responses per year via the control centre;
- Attendance to additional emergency events within the locality each year;
- Additional non-emergency events to follow up with public contact each year;
- Additional recorded crimes in the locality;
- Additional need for custody facilities;
- Additional anti-social behaviour incidents each year;
- Demand for increased patrol cover;
- Additional vehicle use;
- Additional calls on the Airwaves system;
- Additional use of the Police National Database (PND) systems to process and store crime records and intelligence;
- Additional demand for deployment of Mobile CCTV technologies;
- Additional demand for local access to beat staff from local neighbourhood teams;
- Additional policing cover and interventions in all the areas described when considering staffing and functions above and for additional accommodation from which to deliver these.

Where there is a large concentration of new homes, as in the case of the new settlement at Gaydon/Lighthorne Heath, Warwickshire Police estimate that they will require a new Safer Neighbourhood Team (SNT) to be set up. This will require a Safer Neighbourhood Office to be secured through S106. It is estimated to cost around £450,000 (including fixtures and fittings but excluding police equipment) if provided on a 'freestanding' basis. Warwickshire Police would, however, be keen to explore the possibilities of multi-agency / shared service provision and this would be likely to reduce that cost.

In addition the Police will seek a contribution from Stratford District Council's CIL receipts to help fund the additional general infrastructure requirements associated with meeting increased needs across the District. This would cover costs including police vehicles and custody provision.

A provisional figure in excess of £0.5m has been allowed for this in the IDP pending a comprehensive review of service requirements later in 2014.

## **6.2 Warwickshire Fire and Rescue Service**

The current objectives of the Warwickshire Fire & Rescue Service (WFRS) are to:

- Reduce the incidence of fires;
- Reduce loss of life in fires and accidents;
- Reduce the number and severity of injuries from fires and other emergencies;
- Safeguard the environment and protect the national heritage; and
- Provide communities with value for money.

In new developments these objectives would be supported by the provision of fire hydrants, sprinklers and smoke detector alarms.

The WFRS consultation on proposals to change the way front line services are delivered in the future proposes a new service delivery point at Jaguar Land Rover in Gaydon. This is intended to improve response times for the community and bring benefits to the site occupiers. The new station is critical to WFRS's proposed response model. The service will review feedback from the ongoing public consultation (due to end in June 2014) before proceeding with any implementation plan.

The WFRS is reviewing its position on 'low water areas' and may seek CIL funding to increase water availability to such areas in the future.

## **6.3 Ambulance Service**

The West Midlands Ambulance Service has largely completed its 'Make Ready' project for Coventry and Warwickshire with the provision of two new service hubs in Coventry and Warwick and a network of Community Ambulance Stations across the sub-region. These include stations at Stratford, Wellesbourne, Shipston and Southam. There is also a standby point in Alcester. There are no outstanding requirements known during the plan period.

# **7. Water and Utility Services**

## **7.1 Water Supply and Waste Water**

Over most of the District, Severn Trent Water (STW) is responsible for water supply, the foul drainage network and wastewater treatment. A small part of the District (the south-eastern corner) is covered by Thames Water.

Every five years each water company is obliged to publish a 25 year 'Water Resources Management Plan' setting out its overall strategy. STW are currently developing a plan to cover the period 2015-2040 that will be finalised in 2014. STW's current plan covers the period 2010 – 2035 and aims to:

- Reduce water demand by cutting leakage, encouraging household metering and increasing water efficiency;
- Improve supply resilience by investing in aqueducts, a quifer storage and recovery, providing new groundwater sources and improving the supply network; and
- Improve water quality by treating nitrates and preventing loss of deployable output due to worsening water quality.

Under the Flood and Water Management Act (2010), new development will no longer have the automatic right to connect surface water drainage to sewers. This, combined with water efficiency measures and metering of all new development, will reduce the new net burden on the wastewater network and at the treatment works (WwTWs).

Within the District there is generally capacity in the waste water treatment works to deal with the proposed level and distribution of growth set out in the Core Strategy. However, some works will require investment and development will need to be phased accordingly. STW request that they are consulted at an early stage of development proposals. Those WwTW likely to need upgrading during the Core Strategy period are listed in the Schedule of Infrastructure Projects. Some upgrading of the foul drainage network will also be required.

Site based infrastructure and network connections for water supply and collection of waste water will be provided by developers. STW will generally meet the cost of any upgrades to water supply and foul drainage networks and waste water treatment facilities.

The water supply network is only likely to need significant upgrading in relation to the proposed new settlement at Gaydon/Lighthorne Heath. Discussions will continue with the developers of the new settlement as the implications of adding this scale of development to the rural water supply and foul drainage networks are very significant.

STW analysis shows that the most significant risk to long term supply and water quality is the impact of climate change. Policies in the Core Strategy address water conservation and the appropriate use of Sustainable Urban Drainage Systems to reduce pressure on water supply and treatment works.

## **7.2 Flood Risk Assessment and Flood Alleviation and Defences**

### **River Flood Management**

The Environment Agency is the lead agency on management of river flooding. Almost the entire District is covered by the River Severn Catchment Flood Management Plan (CFMP) with just the north west corner falling into the Trent's catchment. The CFMP is a high level document produced by the Environment Agency with strategic policies designed to plan flood risk management in the catchment over the next 50-100 years. The CFMP for the River Severn was published in September 2008.

The River Avon and its tributaries run through the District. A large number of settlements are located within existing Flood Zones 2 and 3 and are therefore already at risk from fluvial flooding. The Core Strategy specifies that new development must not increase risk to existing development.

Support will be given to flood alleviation measures under consideration by the Environment Agency by safeguarding possible sites for storage and other channel works where necessary. The Environment Agency is currently planning flood alleviation works in Shipston-on-Stour, Henley-in-Arden and along the Racecourse Brook in Stratford.

The works in Shipston-on-Stour (estimated to cost £500-800k) would benefit the heart of the town, mainly the Church Street, Mill Street, West Street and Telegraph Street area. The works in Henley-in-Arden would benefit the High Street/Beaudesert Lane and Prince Harry Road area and would cost approximately £800k-£1.2m. Whilst these schemes would offer protection to existing properties they would also significantly reduce the risk of flooding of central areas. This would encourage regeneration of currently disused units as well as opening up additional areas for commercial and residential redevelopment.

The Environment Agency is also planning an alleviation scheme along the Racecourse Brook to the north-west of Stratford-upon-Avon. This will provide additional storage to protect commercial and residential properties against flooding on the eastern side of Birmingham Road (including Tesco and land to the north west of that site). Adjacent fields in the upstream catchment have

been identified as a potential location for the storage. This project is anticipated to cost approximately £750-900k.

The main sources of funding for these projects are likely to be the Environment Agency's Flood Defence Grant in Aid (FDGiA) and Local Levy, contributions from local businesses and land owners, and Severn Trent Water for the scheme on the Racecourse Brook. CIL or S106 funding will also be sought to contribute to the cost of works where they facilitate growth. The Environment Agency states that it will only be able to deliver the above schemes through partnership funding. It understands that it is essential to seek opportunities to work with developers and local communities to enable new developments to make a positive contribution to reducing flood risk.

Level 1 Strategic Flood Risk Assessments (SFRAs) provide information on current and future flood risk from all sources, taking into account climate change. They are designed to enable decision makers to allocate development and infrastructure where risks are minimised. They also seek to identify where flood alleviation measures are required to protect existing properties. Stratford District updated its flood risk assessment in September 2013 and will do so approximately every five years to ensure that the risks are properly understood. A contribution may be sought from CIL for this purpose.

The 2013 SFRA highlights a number of potential future (fluvial) flood alleviation schemes in the District, which have been identified by the Environment Agency as potentially benefiting local communities. These comprise the following locations:

- Bell Brook, Snitterfield;
- Lot Brook, Southam;
- Cherington, near Shipston on Stour; and
- Fenny Compton.

A contribution towards these flood alleviation measures could be sought from CIL or S106 where the works would enable new properties to be built without unacceptable risk of flooding. There is also a single case of surface water flooding identified in the SFRA (at Gaydon) – see below.

### **Surface Water Flood Management**

As surface water flooding is a known issue in Stratford-on-Avon District, a Surface Water Management Plan is required to enable opportunities to reduce existing risk through new development to be maximised. This is the responsibility of Warwickshire County Council as the Lead Local Flood Authority.

Some areas suffer from surface water flooding from artificial drainage, surface water and field runoff, particularly at times of heavy and prolonged rainfall. The Core Strategy locates new development in areas of lowest flood risk and specifies that new development must not increase risk to existing development. Contributions may be sought from strategic sites to contribute to flood risk management facilities where there is flooding downstream of a development.

The case of surface water flooding identified in the SFRA at Gaydon will be alleviated by works planned as part of the Gaydon/Lighthorne Heath new settlement proposal.

Under the Flood and Water Management Act (2010), new development will no longer have the automatic right to connect surface water drainage to sewers. Developers will be required to put Sustainable Drainage Systems (SUDS) in place in new developments. These should ensure that the effect of surface water runoff is consistent with green field rates on green field sites and that runoff rates are attenuated on brownfield sites, as required by the Environment Agency.

Further detail is provided in the Warwickshire Sub-Regional Water Cycle Study (Halcrow, 2010) and the Water Cycle Study Updates (URS, 2012 and 2014).

### 7.3 Electricity, Gas and Renewable/Low Carbon Energy

#### Electricity

National Grid owns, maintains and operates the electricity transmission network in England and supplies energy from generating stations to local distribution companies. The local distribution company in Stratford on Avon District is Western Power distribution. It is their role to provide electricity to homes and businesses.

Western Power Distribution has stated that the electricity distribution networks can cope with the scale of growth predicted in the plan. They would wish to be consulted, however, at an early stage, on the development of any strategic sites.

On any individual site, connection to the network is the responsibility of the developer.

Policies in the Core Strategy aim to improve energy efficiency and encourage the use of renewable energy, thereby reducing pressure on the grid.

#### Gas

National Grid owns and operates the gas distribution networks through which gas is transported to users. It also is the gas supplier in the West Midlands. It has reported that it can cope with the scale of growth predicted in the Core Strategy.

On any individual site, connection to the network is the responsibility of the developer.

#### Renewable and Low Carbon Energy

Policy CS.2 Climate Change and Sustainable Construction encourages the development of renewable and low carbon energy infrastructure.

The mechanism of 'Allowable Solutions', whereby payment is made into a fund to offset carbon reduction targets that cannot be met on site, is potentially a significant source of funding for low and zero carbon energy projects. Work is ongoing within central Government to establish a definition of zero carbon and the scope, governance and implementation of Allowable Solutions Funds.

The District Council is committed to establishing an Allowable Solutions Fund for local projects. It could top this up with CIL revenues, or Town and Parish Councils could contribute a share of their CIL monies, for individual projects that meet local priorities.

### 7.4 Broadband

For the short to medium term, growth in broadband services across the District will be realised through a combination of:

- Commercial expansion of 'next generation' broadband services in the more densely populated areas; and
- participation in the Coventry Solihull and Warwickshire Superfast Broadband Project, supported by BDUK, which is working in partnership with British Telecom to roll out superfast broadband to those areas that are not commercially viable.

This project, commenced in March 2011 and running until December 2015, aims to deliver the Government's 2015 targets, as set out in the December 2010 strategy document *Britain's Superfast Broadband Future*, that everyone should be able to access broadband at speeds of at least 2Mbps and that superfast broadband (minimum 24 Mbps) should be available to 90% of premises in each upper tier authority. It is expected to exceed these targets to provide the following benefits:

- By 2016 all domestic and business premises will have access to broadband speeds of at least 2Mbps, with 91% of premises in the sub-region able to access superfast services;
- Improved access to broadband in rural and non-rural areas for small and medium enterprises (SMEs) and citizens through the delivery of increased speeds to more areas in the sub-region;

- An opportunity for community groups and SMEs to develop broadband facilities further still on a “Big Society” basis if their areas are not fully covered by the proposals; and
- An enabling of E-service delivery across the public sector.

The Core Strategy looks beyond the aims of the sub-regional broadband project and seeks all new development to have connections enabling download speeds of 30Mbps in accordance with the Government’s commitment to the EU2020 Digital Agenda. Where no strategic telecommunications infrastructure is available, developers should provide suitable ducting to the premises for later connection.

## **8. Other Social Infrastructure**

### **8.1 Libraries and Cultural Facilities**

Discussions are on-going with Warwickshire County Council about appropriate developer contributions to enable the library service to serve the expanded population.

A new library is likely to be required at the new settlement at Gaydon/Lighthorne Heath, funded via a S106 payment from the developer. This is likely to be collocated with other community facilities. A provisional cost of £1.9 m has been allowed.

Money may also be sought from CIL to support community libraries (to fund stock and E-services, for example) and to support the mobile library service. An initial estimate from WCC based on Department for Culture, Media and Sport (DCMS) guidelines, updated by SDC, suggests that a CIL contribution of around £115,000 might be appropriate over the Core Strategy period.

## Schedule of Infrastructure Projects

Note: Phase 1:2011/12 – 2015/16; Phase 2: 2016/17 -2020/21; Phase 3: 2021/22 – 2025/26; Phase 4: 2026/27 – 2030/31

**Table 1 – Main Schedule**

Costs are indicative only as schemes are not yet defined in detail

1 - Transport & Highways						
Infrastructure Type / Project	Lead Delivery	Other Partner Organisations	Timescale	Estimated Costs (£)	Funding	Critical to Delivery?
<b>Stratford Transport Package</b>						
(01) Tiddington Road/Banbury Road/ Shipston Road 'Alveston Manor' junction including improvements to Banbury Road/Shipston Road roundabout – traffic signalisation to co-ordinate with the Bridgeway Gyratory scheme			Phase 1 or 2	£1.03 m	CIL, other	Critical
(02) Bridgefoot/Bridgeway Gyratory – further co-ordinated traffic signalisation of Bridgeway/Bridgefoot and Bridge Street entry arms			Phase 1 or 2	£0.83 m	CIL, other	Critical
Schemes (01) and (02) now being promoted as a single project						
(03) Evesham Road/Evesham Place roundabout – reconfiguration to a traffic signalised junction	WCC	Developers, SDC	Phase 3	£0.8 m	CIL, other	Critical
(04) and (05) deleted as not viable						
(06) Improvements to Shipston Road/ Clifford Lane Roundabout	WCC	Developers, SDC	Phases 3 & 4	£0.55 m	CIL	Critical
(07) Improvements to Shipston Road/Severn Meadows Road/ Trinity Way Roundabout	WCC	Developers, SDC	Phases 3 & 4	£0.55 m	CIL	Critical
Schemes (06) and (07) now being promoted as a single project						

(08) Birmingham Road widening between Regal Road and Hamlet Way	WCC D	Developers, SDC	Phase 3 or 4	£1.7 m	CIL	Critical
<b>Birmingham Road Study Schemes</b>			Phases 1-4	£185,000+	CIL, other	Some critical
<b>Short Term (next 5 years)</b>						
(a) Inbound slip lane into Tesco car park (developer funded)						
(b) Improvements to strategic signing – approx. £50,000						
(c) Pedestrian and cycle route improvements (not covered by SRZ)						
(d) Birmingham Road/Justins Avenue junction improvements - approx. £50,000						
(e) CCTV to improve operation of traffic signals on Birmingham Road corridor – approx. £85,000						
<b>Medium Term (5-10 years subject to further feasibility assessment)</b>						
(a) Maybird Shopping Park access improvements – scheme yet to be developed						
(09) Improvements to Birmingham Road/A46 'Bishopton Roundabout'	Highways Agency	WCC, Developers, SDC	Phases 3 & 4	£2.50 m	CIL, Highways Agency	Critical
(10) Improvements to Alcester Road/A46 'Wildmoor Roundabout'	Highways Agency	WCC, Developers, SDC	Phases 3 & 4	£ 2.50 m	CIL, Highways Agency	Critical
(11) Shakespeare Street/Mulberry Street one-way	WCC D	Developers, SDC	Phase 3 or 4	£0.20 m	CIL	Critical
(12) Guild Street/Great William Street traffic signals	WCC D	Developers, SDC	Phase 3 or 4	£0.20 m	CIL	Critical
Schemes (11) and (12) being promoted as a single project						
(13) Improvements to Warwick Road/A46 'Marraway Roundabout'	Highways Agency	WCC, Developers, SDC	Phase 3 or 4	£0.40 m	CIL, Highways Agency	Critical
(14) Bridgeway/Warwick Road traffic signals	WCC D	Developers, SDC	Phase 3 or 4	£0.20 m	CIL	Critical

<b>Warwick Road Dynamic Signage Strategy</b>	WCC High	ways Agency, Developers, SDC	Phase 2 or 3	£1.0 m	CIL, Highways Agency	Critical
<b>On and off road pedestrian and cycle projects, including:</b> (a) minor cycle infrastructure improvements contributing towards delivery of the Cycle Strategy within Local Transport Plan 2011-2026; (b) other projects to facilitate walking and cycling across the district	WCC or landowner/ developer	SDC, Sustrans, WCC, landowner/ developer	Lifetime of Core Strategy	(a) £30,000  (b) n/a	CIL (cumulative impacts and completing strategic routes);  S106/ part of development (S278/ S38) where related to specific sites	Some critical
<b>Canal Quarter Regeneration Zone localised mitigation package, including:</b> (a) Enhanced pedestrian and cycle link on Birmingham Road & Alcester Road including spurs to Masons Road and town railway station (section to the south of the canal falls within the site and so is part of the development package); (b) Pedestrian/ cycle bridge across the canal (c) Road/junction improvements	Developers	WCC, SDC	Phases 3 & 4	(a) + (b) pedestrian/ cycle links (incl canal bridge) estimated at £0.8 m  (c) n/a	S106/ part of development (S278/ S38)	Critical
<b>Stratford Western Relief Road</b> (Evesham Road to Alcester Road)	Developer	WCC	Phases 2-4	£8.0 m	Part of development (S278/38)	Critical

<p><b>Transport and highways infrastructure for proposed new settlement at Gaydon/Lighthorne Heath:</b></p> <p><u>A. Strategic Highways Infrastructure</u> See separate schedule at Table 2 (Infrastructure Trajectory for Gaydon/Lighthorne Heath and JLR Employment)</p> <p><u>B. Localised traffic mitigation/management measures</u> Contingency sum of £1,000 per dwelling allowed for schemes yet to be identified</p> <p><u>C. Public Transport</u> TBC – likely to include Park &amp; Ride and express bus service</p> <p><u>D. Pedestrian and Cycle Links</u> TBC – likely to include at least the following schemes</p> <p>i) Priority: Link to Leamington via B4100 / Chesterton / Whitnash: approx £800k - 1m Link north from site over M40 via existing bridleways / new bridge: approx £500k</p> <p>ii) Other: Other minor improvements to road network to provide connections to existing leisure routes / local destinations: approx £500k</p>	<p>A. Developers</p> <p>B. Developer</p> <p>C. Developer</p> <p>D. Developer</p>	<p>A. Highways Agency, WCC, SDC</p> <p>B. Highways Agency, WCC, SDC</p> <p>C. Bus Operator, WCC</p> <p>D. WCC, Highways Agency, SDC, other</p>	<p>A. Phase 2</p> <p>B. Phase 2</p> <p>C. TBC</p> <p>D. TBC</p>	<p>A. £20.75 m including some costs to be shared with Warwick District Council Local Plan</p> <p>B. £2.5 m</p> <p>C. n/a</p> <p>D. n/a</p>	<p>A. – D. Developer (S278/38 and S106); Highways Agency</p> <p>B. Developer (S278/38 and S106); Highways Agency</p> <p>C. Developer/ other</p> <p>D. Developer/ other</p>	<p>A. - D. Most provision critical</p>
<p><b>Widening of M42 north of Junction 3A</b> Highways Agency has retained this route protection as widening may be required in future</p>	<p>Highways Agency</p>		<p>Possible Phase 3 or 4 (or longer term)</p>	<p>n/a High</p>	<p>ways Agency</p>	

<b>Improving the A46(T) between Alcester and Stratford-upon-Avon</b> (long term aspiration in LTP3)	Highways Agency	WCC	Possible Phase 3 or 4 (or longer term)	n/a High	ways Agency	
<b>Improving M40 Junction 12</b> Includes capacity for an additional 5,000 jobs at JLR/Aston Martin (excludes further improvements associated with a new settlement at Gaydon/Lighthorne Heath)	Highways Agency/WCC	Land owner/ JLR	Phase 2 (due for completion 2015)	£12 m	Highways Agency, WCC, Regional Growth Fund, Local Pinch Point Funding	Critical
<b>Stratford Parkway Station</b>	Network Rail	WCC, SDC, private contractor	Completed and opened 2013	£8.8 m	UK Government's Local Sustainable Transport Fund, WCC, other	

## 2 - Education

Infrastructure Type / Project	Lead Delivery	Other Partner Organisations	Timescale	Estimated Costs (£)	Funding	Critical to Delivery?
<b>Primary Schools</b> Investment likely to be needed to increase capacity at the following: <ul style="list-style-type: none"> <li>• Stratford primary schools (new schools and investment in existing provision)</li> <li>• Southam primary schools</li> <li>• St Nicholas CE Primary, Alcester</li> <li>• Bidford Primary</li> <li>• Ettington Primary</li> <li>• Temple Herdewycke Primary</li> <li>• The Dasset CE Primary, Fenny Compton</li> <li>• Quinton Primary</li> <li>• Shipston Primary</li> </ul>	Various	WCC, other education providers, SDC, private sector	Lifetime of Core Strategy	£12.2m (excl cost of pre-school provision)	CIL, S106, Government	Critical
New settlement at Gaydon/Lighthorne Heath: <ul style="list-style-type: none"> <li>• new primary school (3 FE) with co-located nursery</li> </ul>	Developer	WCC, other education providers	Phases 2-3	£ 6.3 m	S106	Critical

<b>Secondary Schools</b> Investment may be needed to increase capacity at the following: <ul style="list-style-type: none"> <li>• Stratford (expansion of existing provision or possible new school)</li> <li>• Southam College</li> <li>• Henley High</li> <li>• Kineton High (with possible upgrade in facilities)</li> <li>• Alcester Academy</li> <li>• Grammar schools and Catholic High Schools</li> <li>• Shipston High Academy (6<sup>th</sup> Form provision)</li> </ul> New settlement at Gaydon/Lighthorne Heath: <ul style="list-style-type: none"> <li>• Upgrading and expansion of Kineton High School</li> </ul>	Various	WCC, Academy, Foundation and other Schools, SDC, private sector	Lifetime of Core Strategy	£27.8 m	CIL, S106, Academy Funding, other	Critical
	Developer	WCC	Phases 2-4	£6.7 m	S106	Critical
<b>Special Needs Provision (primary and secondary)</b>	WCC Other	education providers, developers	Lifetime of Core Strategy	£380,000	S106	Critical

### 3 – Primary and Acute & Community Health Services' Infrastructure

Infrastructure Type / Project	Lead Delivery	Other Partner Organisations	Timescale	Estimated Costs (£)	Funding	Critical to Delivery?
<b>Primary Health Care</b>						
a) Stratford-upon-Avon: approx. 2 clinical rooms and associated infrastructure	South Warwickshire Core Commissioning Group (CCG)	Developers, Public Health Warks, NHS England, NHS Property Services, GPs and other private sector, SDC	Lifetime of Core Strategy	a) £61,000 +	a) S106 and/or CIL	Critical
b) LSVs and other rural: approx. 2 clinical rooms and associated infrastructure				b) £61,000 +	b) S106 and/or CIL	Critical
c) New 4GP practice facilities at Gaydon/Lighthorne Heath				c) £2.2 m (gross)	c) S106	Critical

<p><b>Community and Acute Hospital Services' Infrastructure</b></p> <p>a) A new ward block at the Warwick Hospital site - the main acute hospital services site</p> <p>b) A new hospital at the Stratford Hospital site including outpatient, diagnostic, treatment and inpatient facilities and a hub for community healthcare teams</p>	<p>South Warwickshire NHS Foundation Trust</p>	<p>WCC, SDC, primary health organisations</p>	<p>Lifetime of Core Strategy</p>	<p>a) £24m of which some £17m sought from CIL or S106</p> <p>b) £44m of which some £18.7m sought from CIL or S106</p>	<p>Private borrowing, charitable donations, S106, CIL</p>	<p>Critical</p>
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4 –Green Infrastructure, Open Space and Sports Provision						
Infrastructure Type / Project	Lead Delivery	Other Partner Organisations	Timescale	Estimated Costs (£)	Funding	Critical to Delivery?
<p><b>Green Infrastructure (biodiversity aspects)</b></p> <p>The Coventry Solihull and Warwickshire Biodiversity Action Plan for Stratford-upon-Avon District. Projects to be identified on an on-going basis; including on-site and off-site measures by developers; agri-environment schemes; local projects identified by Town and Parish Councils in Neighbourhood Development Plans and Parish Plans etc.</p>	<p>Various</p>	<p>WCC, SDC, Parish and Town Councils, land owners, others</p>	<p>Lifetime of Core Strategy</p>	<p>Biodiversity Action Plan estimated to cost £792 per annum in Stratford District</p>	<ul style="list-style-type: none"> <li>• Grants (landfill tax, HLF etc.</li> <li>• Developers/ land owners with on-site green infrastructure;</li> <li>• Biodiversity offsetting;</li> <li>• CIL;</li> <li>• Agri-environment schemes;</li> <li>• Environment Agency;</li> <li>• Voluntary sources;</li> <li>• Town &amp; Parish Councils (CIL monies)</li> </ul>	<p>Some provision critical</p>

<b>Open Space and Sports Provision (Details in Open Space Needs Assessment)</b>						
<b>Stratford-upon-Avon</b> <ul style="list-style-type: none"> <li>• Parks, Gardens and Amenity Greenspace (PGA)</li> <li>• Provision for Children and Young People (CYP)</li> <li>• Accessible Natural/Semi Natural Greenspace (ANG)</li> <li>• Allotments/Community Orchards (ACO)</li> </ul> <p>Includes provision at Shottery Fields, Canal Quarter Linear Park and upgrading of Stratford Leisure Centre</p>	Developer	SDC, Town Council, other	Phase 1 to 4	n/a	<ul style="list-style-type: none"> <li>• Shottery and Canal Quarter S106 (on-site provision or financial payment for off-site provision or enhancement of existing facilities)</li> <li>• Else where S106//CIL</li> </ul>	Some provision critical
<b>Gaydon/Lighthorne Heath New Settlement</b> <ul style="list-style-type: none"> <li>• PGA</li> <li>• CYP</li> <li>• ANG</li> <li>• ACO</li> </ul> <p>Also</p> <ul style="list-style-type: none"> <li>• Outdoor and Indoor Sports (OIS), including provision of a community sports facility including a swimming pool and sports hall, to serve this and surrounding villages, on or off-site</li> </ul>	Developer	SDC, Parish Council, other	Phase 2 to 4	n/a	<ul style="list-style-type: none"> <li>• S106 (on-site provision)</li> </ul> <p>S106/CIL/Other</p>	Critical
<b>Main Rural Centres</b> <p>Various requirements across the MRCs (details in Needs Assessment) including all the following typologies in at least one centre:</p> <ul style="list-style-type: none"> <li>• PGA</li> <li>• CYP</li> <li>• ANG</li> <li>• ACO</li> <li>• OIS</li> </ul>	Developers	Town and Parish Councils	Phase 1 to 4	n/a	<ul style="list-style-type: none"> <li>• S106/CIL</li> <li>• Town &amp; Parish Councils</li> </ul>	Some provision critical
<b>Local Service Villages</b> <p>Various requirements across the LSVs (details in Needs Assessment):</p> <ul style="list-style-type: none"> <li>• PGA (especially in category 1 LSVs)</li> <li>• CYP</li> <li>• ACO (especially in categories 2, 3 and 4 LSVs)</li> </ul>	Developers	Parish Councils	Phase 1 to 4	n/a	<ul style="list-style-type: none"> <li>• S106/CIL</li> <li>• Parish Councils</li> </ul>	Some provision critical

<b>Indicative Projects (to meet future needs [using CIL/S106] and address shortfalls/other objectives [using other sources of funding])</b>						
a) Improvement to pathways, new signage and seating at the Recreation Ground and ground reinstatement to redevelop existing surfaces at North Recreation Ground and Bancroft Gardens (PGA)	SDC	Public Health Warwickshire	Lifetime of Core Strategy	£550,000	<ul style="list-style-type: none"> <li>• Lottery Funds</li> <li>• CIL/S106</li> <li>• Capital/ Revenue Budgets</li> </ul>	
b) Tree planting on all existing sites to mitigate climate change through provision of greater shade and tree species suited to changing weather patterns (PGA)	SDC Public	Health Warwickshire, WCC Ecology	Lifetime of Core Strategy	£31,000	<ul style="list-style-type: none"> <li>• The Landscape Group Carbon Offsetting</li> <li>• The Tree Council</li> <li>• Landfill Tax Credits</li> </ul>	
c) 3 Outdoor Gyms to be installed in Stratford Town and the main rural centres across the District (PGA/CYP)	SDC or Town/ Parish Council	SDC or Town/ Parish Councils, Public Health Warwickshire	Lifetime of Core Strategy	£15k per facility	<ul style="list-style-type: none"> <li>• CIL/S106</li> <li>• External play space related grants</li> <li>• Town &amp; Parish Councils</li> </ul>	
d) Creation of pathways and some signage and seating at Shottery Fields and Bridgetown Meadowlands (ANG)	SDC Public	Health Warwickshire	Lifetime of Core Strategy	£50,000	<ul style="list-style-type: none"> <li>• S106/CIL</li> <li>• Capital and Revenue Budgets</li> </ul>	
e) Enhancement and development of the Warwick Road Lands, Stratford-upon-Avon, to include pathway improvements, information boards to improve accessibility to nature and education on the site (ANG)	SDC Public	Health Warwickshire, WCC Ecology	Lifetime of Core Strategy	£100,000	<ul style="list-style-type: none"> <li>• Landfill Tax Credits</li> <li>• Lottery Funds</li> <li>• CIL/S106</li> </ul>	
f) Creation of landscaped wildflower meadow within Stratford-on-Avon (ANG)	SDC or Town/ Parish Council	Public Health Warwickshire, WCC Ecology, Parish/Town Councils	Lifetime of Core Strategy	£20,000	<ul style="list-style-type: none"> <li>• Town &amp; Parish Councils</li> <li>• Prince Charles fund</li> <li>• CIL/S106</li> </ul>	
g) 7 Multi Use Games Areas (MUGA's) to be installed in Stratford Town and the Main Rural Centres across the District (CYP)	SDC or Town/ Parish Councils	Public Health Warwickshire	Lifetime of Core Strategy	£100k per facility	<ul style="list-style-type: none"> <li>• CIL/S106</li> <li>• External health related grants</li> <li>• Town &amp; Parish Councils</li> </ul>	

h) 5 Measured Miles (400 metre loop) and improved signage (Rural & urban) to be installed in Stratford Town and the Main Rural Centres across the District	SDC or Town/ Parish Council	SDC or Town/ Parish Councils, Public Health Warwickshire	Lifetime of Core Strategy	Rural £50k per facility £10k Urban signage	<ul style="list-style-type: none"> <li>• CIL/S106</li> <li>• External health related grants</li> <li>• Town &amp; Parish Councils</li> </ul>	
i) Enhancement of destination play spaces – recreation ground and skate park (play equipment) (CYP)	SDC or Stratford Town Council	Town/ Parish Councils, Public Health Warwickshire	Lifetime of Core Strategy	£1m per facility	<ul style="list-style-type: none"> <li>• CIL</li> <li>• SDC Capital /Revenue Budgets</li> <li>• External health related grants</li> </ul>	
j) Enhancement of local play spaces arising from greater use linked to the new development. To include play equipment and landscaping to create contours ('lumps and bumps') to promote increased and different usage (CYP)	SDC or Town/ Parish Council	SDC or Town/ Parish Council, Public Health Warwickshire	Lifetime of Core Strategy	£20k per facility	<ul style="list-style-type: none"> <li>• S106</li> <li>• SDC Capital Revenue Budgets</li> <li>• External health related grants</li> </ul>	
k) Enhancement of the 3 District Council leisure centres outside of Stratford Town (including possible provision of a sports hall at Shipston to serve the town and surrounding villages including Brailes, Treddington and Long Compton) (OIS).	SDC or WCC or Town & Parish Councils	Public Health Warwickshire	Lifetime of Core Strategy	£150k per facility (more if incl new sports hall)	<ul style="list-style-type: none"> <li>• CIL</li> <li>• SDC Capital/ Revenue Budgets</li> <li>• External health related grants</li> </ul>	
l) Creation of new allotments/community orchards across the District (ACO)	Town & Parish Councils	Public Health Warwickshire SDC	Lifetime of Core Strategy	£50,000	<ul style="list-style-type: none"> <li>• CIL/S106</li> <li>• Town &amp; Parish Councils</li> <li>• Lottery Funds</li> <li>• Capital / Revenue Budgets</li> <li>• The Tree Council</li> <li>• Natural England</li> <li>• Landfill Tax Credits</li> <li>• DEFRA</li> </ul>	

### 5 - Emergency Services

Infrastructure Type / Project	Lead Delivery	Other Partner Organisations	Timescale	Estimated Costs (£)	Funding	Critical to Delivery?
<b>Police</b>						
a) Custody provision : additional cells	Warwickshire Police	Developers, WCC, SDC	Lifetime of Core Strategy	TBC	CIL, other sources	
b) Other police equipment and costs including vehicles, communications technology and surveillance equipment	Warwickshire Police	Developers, WCC, SDC	Lifetime of Core Strategy	£0.5 m	CIL	
c) A Safer Neighbourhoods Unit is likely to be required at the new settlement at Gaydon/Lighthorne Health	Warwickshire Police	Developers, WCC, SDC	Phase 3	£450,000	S106	Critical
<b>Ambulance Service</b>						
The service has recently implemented a premises review. There are no further requirements known during the plan period.	West Midlands Ambulance Service	n/a	n/a	n/a	n/a	
<b>Fire &amp; Rescue</b>						
Proposed new service delivery point at Jaguar Land Rover	Warwickshire Fire & Rescue Service (WRFS)	Jaguar Land Rover	Phase 1	£0.5 m	CLG Transformation Funding Application	Critical to proposed response model
Provision of hydrants	Developers	WFRC	Lifetime of Core Strategy	n/a	S106/ development costs	Some critical
Possible future project for Low Water Areas	WFRS	Private sector, WCC, SDC	TBC	n/a	CIL, other sources	

## 6 – Water and Utility Services

Infrastructure	Lead Delivery	Other Partner Organisations	Timescale	Estimated Costs (£)	Funding	Critical to Delivery?
<p><b>Water Supply and Waste Water Treatment</b></p> <p>1. Water Supply – development of a new settlement at Gaydon/ Lighthorne Heath will require upgrading of the water supply infrastructure.</p> <p>2. Waste Water The following Waste Water Treatment Works are likely to need upgrading:</p> <ul style="list-style-type: none"> <li>• Wellesborne</li> <li>• Cherington</li> <li>• Gaydon</li> <li>• Priors Marston</li> <li>• Tysoe</li> </ul> <p>This list derives from the Council's Water Cycle Study Update 2014 which assessed the capacity of the District's WwTWs to accommodate the Core Strategy's proposed level and distribution of growth. There may be additional WwTWs that require further work over the plan period but these were not identified in that study.</p> <p>Certain areas of the foul drainage network will also need upgrading, especially in relation to the proposed new settlement at Gaydon/ Lighthorne Heath.</p>	Severn Trent Water	Private developers, Environment Agency, SDC	Phases 2- 4	n/a	Severn Trent Water (private developers for on-site works and local connections)	Critical
<p><b>Strategic Flood Risk Assessment (SFRA)</b></p>	SDC WCC,	other districts and boroughs, Environment Agency	Every 5 years during lifetime of Core Strategy	£8,000 per SFRA; 3 further FRAs are likely to be needed by 2031	Capital Reserves, CIL	Critical
<p><b>Flood Alleviation and Defences</b></p> <p>The Environment Agency is currently planning flood alleviation works in Shipston-on-Stour, Henley-in-Arden and along the upper reaches of Racecourse Brook, Stratford. (The flood alleviation works on the Racecourse Brook would reduce flood risk to existing properties and</p>	Environment Agency	Defra, WCC, SDC, STW, landowners/ developers,	Phases 2-3	£2.0 - £2.9 m	Environment Agency (FDGiA, Local Levy), commercial	Critical

<p>alleviate flood risk on the Birmingham Road and at the Maybird Centre. This scheme will require partnership funding to secure delivery.)</p> <p>The 2014 SFRA identified potential further works to flood defences at Snitterfield, Southam, Cherington and Fenny Compton but these will not generally be related directly to new growth (use of SUDS and water recycling measures will ensure no developments increase flood risk). CIL/S106 may be sought where the works will facilitate further growth. S106 may also be required to deal with on-site or downstream flooding on large developments (e.g. to deal with surface water flooding at Gaydon as part of the new settlement proposals).</p> <p>Improvements to the Alveston Manor Junction may provide an opportunity to alleviate flood risk along the Shipston Road and should be investigated as part of these works</p> <p>School re-development or expansion may provide opportunities to install SuDS features to mitigate against loss of green areas. SuDS features such as ponds can provide educational benefit.</p>	<p>Environment Agency</p> <p>Environment Agency</p> <p>Various</p>	<p>Town and Parish Councils</p> <p>Defra, WCC, SDC, landowners/ developers, Town and Parish Councils</p> <p>WCC/ Highways Agency/ Local Community</p> <p>WCC (education)/ Academy schools/ EA</p>	<p>Phases 3-4</p> <p>Phase 2</p> <p>Lifetime of Core Strategy</p>	<p>n/a</p> <p>n/a</p> <p>n/a</p>	<p>contributions, STW at Racecourse Brook</p> <p>Environment Agency (FDGiA, Local Levy), STW, commercial contributions, S106/CIL</p> <p>Food Defence Grant in Aid Funding from EA</p> <p>EA, WCC, S106/CIL</p>	
<p><b>Surface Water Management Plan and Local Flood Risk Management Strategy</b></p>	<p>WCC EA,</p>	<p>SDC, landowners/ developers, Town and Parish Councils</p>	<p>Lifetime of Core Strategy</p>	<p>n/a WCC</p>		<p>Critical</p>
<p><b>Gas and Electricity</b></p>	<p>National Grid</p>	<p>Western Power Distribution, private developers, SDC</p>	<p>Lifetime of Core Strategy</p>	<p>n/a Utility</p>	<p>(power) companies and developers</p>	<p>Critical</p>
<p><b>Renewable/Low Carbon Energy Projects</b></p>	<p>Various Various</p>		<p>Lifetime of Core Strategy</p>	<p>n/a Allowabl</p>	<p>e solutions fund, CIL, other</p>	

<p><b>Improving Telecommunications</b> Stratford-on-Avon District Local Broadband Plan (part of the Coventry, Solihull and Warwickshire Superfast Broadband Project)</p>	<p>Coventry Solihull and Warwickshire Broadband Partnership (CSWBP) and private contractor (British Telecom)</p>	<p>SDC, LEP, Parish and Town Councils, Coventry University, DEFRA, European Commission</p>	<p>Government funds to be spent by 2015; Overall plan to be complete by 2018.</p>	<p>£14.47 million across the CSW partnership area</p>	<p>Central government; CSWBP, European Regional Development Fund (ERDF), Lottery Funds, DEFRA, CIL, British Telecom</p>	
<p>Further development of strategic network after completion of the Coventry, Solihull and Warwickshire Superfast Broadband Project</p>	<p>Various</p>	<p>Private contractors of telecom services, SDC, Town &amp; Parish Councils</p>	<p>Lifetime of Core Strategy</p>	<p>n/a</p>	<p>Government Grants, CIL, Town and Parish Councils, commercial sources, other</p>	
<p>Connections to the strategic network (or ducting to the public highway/other suitable location) to be made by developers of all new premises.</p>	<p>Developers</p>	<p>Various</p>	<p>Lifetime of Core Strategy</p>	<p>n/a</p>	<p>Part of normal development costs</p>	

### 7 – Other Social Infrastructure

Infrastructure Type / Project	Lead Delivery	Other Partner Organisations	Timescale	Estimated Costs (£)	Funding	Critical to Delivery?
<p><b>Libraries</b> a) support to library service including community libraries (stock purchase and E-services)  b) new library and community meeting space at Gaydon/Lighthorne Heath new settlement</p>	<p>a) WCC or Town &amp; Parish Councils  b) developer</p>	<p>a) SDC, WCC/Town &amp; Parish Councils  b) WCC, SDC, PC</p>	<p>a) Lifetime of Core Strategy  b) Phase 3</p>	<p>a) 115,000  b) £1.9 m</p>	<p>a) CIL, Town &amp; Parish Councils  b) S106</p>	

**Table 2: Infrastructure Trajectory for Gaydon/Lighthorne Heath New Settlement and JLR Employment**

SCENARIO 2 - JLR extant plus Gaydon Lighthorne Heath housing and JLR employment	Phasing	0	0	120	170	170	170	170	170	170	170	170	170	170	170	170	170	170
	Cum Total	0	0	120	290	460	630	800	970	1140	1310	1480	1650	1820	1990	2160	2330	2500
Scheme Reference/Infrastructure Requirement	Cost (£ m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
<b>Transport</b>																		
1. M40 Junction 12 northbound on-slip lane	3.00					3.00												
2. Extended right turn lane at Gaydon junction (< 100m)	0.10							0.10										
3. B4100 widening (Heritage Motor Centre to M40 Junction 12) (extra lane s'bound)	1.00							1.00										
4. M40 capacity enhancements - lane gains/lane drops between Jn 12 and 13	5.00							5.00										
5. Signalisation of M40 Junction 13 northbound off-slip	0.30							0.30										
6. Widening of Fosse Way/Southam Road roundabout	0.50							0.50										
7. Contingency for localised traffic impacts in villages only	2.50							2.50										
8. Fosse Way/Chesterton Road/Harbury Lane junction improvements	0.40							0.40										
9. Right turn bay into Meadow Close/Spinney Close off B4100 Chesterton Hill	0.10				0.10													
10. Signalisation of Greys Mallory	0.15							0.15										
11. Dualling of A452 Europa Way corridor	8.50							8.50										
12. Widening of A452 Europa Way/Harbury Lane Roundabout	0.75							0.75										
13. A452 Banbury Road/Gallows Hill northbound flare/Warwick Tech Park roundabt	0.45							0.45										
14. A425 Myton Road/Banbury Road signals	0.50							0.50										
<b>Other Infrastructure</b>																		
15. New primary school (3 FE) with co-located nursery	3.5								3.50									
16. Contribution to Kineton Secondary School	13.0						6.5					6.5						
17. New 4 GP Facility (646 sqm)	2.30							2.30										
18. Safer Neighbour Team Premise (potentially co-located)	0.45										0.45							

19. Provision of public open space, children's play space and leisure.	0.00																	
20. Provision or improvement of libraries and community facilities	1.90										1.9							
21. Public open space and play/recreation and sport	tbc																	
<b>Total S106/278 costs including items shared with WDC Local Plan</b>	<b>44.4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.35</b>	<b>3.0</b>	<b>6.5</b>	<b>22.45</b>	<b>3.5</b>	<b>0</b>	<b>2.35</b>	<b>0</b>	<b>6.5</b>	<b>3.5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Notes:-

(a) Also funded by WDC Local Plan

(b) JLR extant planning permission assumed to be fully built-out by 2015/16

(c) The transport estimates of when mitigation would be required are based on a high-level assessment of predicted highway network conditions in relation to the proposed housing trajectory

(d) Assuming (b) no more than 500 houses could be accommodated without Scheme 1

(e) Scheme 9 would be required with 200 - 500 dwellings

(f) It is assumed that all JLR employment would be built-out before 2021 - the full mitigation package would therefore be required by 2021 and may be required prior to this depending on the actual employment trajectory

(g) Scheme 7 provides a contingency sum for schemes yet to be identified and is based on a rate of £1,000 per dwelling as adopted at the former Rugby Radio Station Site

(h) Costs related solely to the new settlement and not the expansion of JLR ('Scenario 1') are reported in the report: Viability and Delivery of Strategic Sites, Peter Brett Associates, April 2014

**Table 3: Infrastructure Trajectory for Canal Quarter (SUA 1) and Related Employment Sites (SUA 2 and SUA 3)**

		Phasing	0	0	0	0	40	55	55	55	55	55	55	55	55	55	55	55	55
Scheme Reference/Infrastructure Requirement		Cum Total	0	0	0	0	40	95	150	205	260	315	370	425	480	535	590	645	700
Canal Quarter SUA 1	CIL or S106/S278	Cost (£ m)	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1. A4390/B493 Evesham Place Roundabout	S106/S278	0.23										0.23							
2. A3400 Birmingham Road	S106/S278	0.49																0.49	
3. A46/A3400 Bishopton Roundabout	S106/S278	0.73										0.73							
4. A46/A422 Wildmoor Roundabout	S106/S278	0.73											0.73						
5. Extension/modernisation of existing health premises	S106	0.06											0.06						
6. Improvements to Community Centre and Library Provision	S106	0.35											0.35						
7. New 1 FE primary provision (off site)	S106	2.25													2.25				
8. Secondary School Place contributions	S106	1.50													1.5				
<b>Total S106/278 Cost</b>		<b>6.34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.96</b>	<b>1.14</b>	<b>0</b>	<b>3.75</b>	<b>0</b>	<b>0</b>	<b>0.49</b>	<b>0</b>
<b>Stratford Transport Package (+ contingency)</b>																			
9. A3400 Alveston Manor and Shipston Rd/A422 Banbury Rd Roundabt	CIL	0.30																	
10. A3400 Bridgefoot/Bridgeway Gyrotory	CIL	0.24																	
11. A3400 Shipston Road/B4632 Clifford Lane Roundabout	CIL	0.32																	
12. A3400 Shipston Road/A4390 Seven Meadows Road Roundabout																			
13. Strategic Signing Improvements	CIL	0.29																	
14. Shakespeare Street/Mulberry Street one-way	CIL	0.06																	
15. Guild Street/Gt. William Street traffic signals	CIL	0.06																	
16. A46/A4239 Marraway Roundabout	CIL	0.04																	
17. A3400 Bridgeway/A439 Warwick Road	CIL	0.04																	
18. Contingency for unforeseen traffic impacts	CIL	0.70																	
<b>Total Cost (S106/278 + potential CIL funded items)</b>		<b>8.39</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.96</b>	<b>1.14</b>	<b>0</b>	<b>3.75</b>	<b>0</b>	<b>0</b>	<b>0.49</b>	<b>0</b>

<b>Employment sites SUA 2 and SUA 3</b>																			
20. A46/A3400 Bishopton Roundabout	S106/S278	0.4										0.4							
21. A46/A422 Wildmoor Roundabout	S106/S278	0.4										0.4							
<b>Total Cost SUA 2 and SUA 3 (S106/278)</b>		<b>0.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.4</b>	<b>0.4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Notes:-**

NB. This schedule includes details of transportation (highways) infrastructure, health, education and other community facilities. Additional S106 may be sought in relation to provision and maintenance of open space and other aspects. The Stratford Transport Package is shown as CIL funded as while critical to the delivery of the Canal Quarter, this is also required to deal with growth elsewhere in the District. CIL may also be spent on mitigating other cumulative impacts besides those transportation items listed.

- (a) The estimates of when mitigation would be required are based on a high-level assessment of predicted highway network conditions in relation to the proposed housing trajectory.
- (b) Scheme 1 would be required with 250 - 500 dwellings.
- (c) Scheme 2 would be required with 500 - 1,000 dwellings.
- (d) Scheme 3 is also required to accommodate the effects of change in traffic movements at this junction following the delivery of the Stratford Western Relief Road (SWRR) which will exacerbate issues which are likely to occur as a result of the overall growth within the area.
- (e) Schemes 4 and 5 are intrinsically linked and should be delivered as a single scheme. Implementation would need to follow the capacity improvements provided by Schemes 1 to 3.
- (f) Scheme 6 is required to accommodate the additional vehicle demands released onto the network by Schemes 1 to 5.
- (g) Schemes 7 and 8 should be considered for early implementation due to the strategic nature of the trips that are affected by development impact coupled with the need to ensure the operation of the A46 Strategic Road Network is maintained throughout the Core Strategy period.
- (h) Scheme 9 would encourage traffic to use the A439 Warwick Road for inbound trips as an alternative to A3400 Birmingham Road where capacity is constrained.
- (i) Scheme 14 provides a contingency sum for schemes yet to be identified and is based on a rate of £1,000 per dwelling as adopted at the former Rugby Radio Station site.