SEA ENVIRONMENTAL REPORT

APPENDIX II – NON-TECHNICAL SUMMARY

FOR THE

CAHIR LOCAL AREA PLAN 2021-2027

for: Tipperary County Council

Civic Offices Nenagh County Tipperary



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APRIL 2021

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Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for the Cahir Local Area Plan 2021-2027. The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan.

What is an SEA?

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic, social and other considerations.

Why is it needed?

The SEA has been carried out in order to comply with the provisions of the Planning and Development (SEA) Regulations and in order to improve planning and environmental management within Cahir. The output of the process is an Environmental Report that should be read in conjunction with the Plan.

How does it work?

All of the main environmental issues in the area were assembled and considered by the team who prepared the Plan. This helped them to devise a Plan that protects whatever is sensitive in the environment. It also helped to identify wherever potential conflicts between the Plan and the environment exist and enabled these conflicts to be mitigated.

The SEA was scoped in consultation with designated environmental authorities.

What is included in the Environmental Report that accompanies the Plan?

The Environmental Report contains the following information:

- A description of the environment and the key environmental issues;
- A description and assessment of alternatives for the Plan;
- An assessment of the provisions of the Plan; and,
- Mitigation measures which set out to aid compliance with important environmental protection legislation e.g. the Water Framework Directive, the Habitats Directive and which will avoid/reduce the environmental effects of implementing the Plan.

No significant difficulties were encountered during the undertaking of the assessment.

What happens at the end of the process?

An SEA Statement is prepared which summarises, inter alia, how environmental considerations have been integrated into the Plan.

Section 2 The Plan

2.1 Introduction

Tipperary County Council has made a new Local Area Plan (LAP) for Cahir under Section 20 of the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2021-2027.

LAPs are required to be consistent with the policies and objectives of the County Development Plan and its Core Strategy, as well as the National Planning Framework and Regional Spatial Economic Strategies.

The LAP should be read in conjunction with the South Tipperary County Development Plan 2009 (as varied and extended) and the emerging County Development Plan for the amalgamated County Tipperary (initiated in September 2020), which will set out the overarching development strategy for the County. Where any provisions of the LAP conflict with the provisions of the County Development Plan, the provisions of the LAP shall cease to have effect.

2.2 Content of the Plan

The Plan comprises a Written Statement (including written policies and objectives) and associated maps (including land use zoning). The Plan will contribute towards the proper planning and sustainable development of the area.

Chapters 1 to 3 of the Plan (*Introduction, Cahir in Context* and *Development Strategy*) provide an overview of the LAP. Chapters 4 to 10 cover the specific subject areas as follows:

- Town Centre
- Sustainable Communities
- Economic Development and Tourism
- Transport and Movement
- Natural and Built Heritage
- Infrastructure and Utilities
- Land Use Zoning Framework

Appendices include the Town Centre Opportunity Sites, Infrastructure Assessment, this SEA Environmental Report, an Appropriate Assessment Natura Impact Report and a Strategic Flood Risk Assessment.

2.3 Strategic Vision and Aims

The Plan's Strategic Vision is that:

"Cahir will continue to harness its unique cultural and natural heritage and its strategic location in the Southern Region, by facilitating balanced sustainable growth and promoting a vibrant, living town centre, building on its potential as a tourism area of excellence, while diversifying its employment base and tackling climate change. Cahir will continue to be a town where its community has immense civic pride and work in partnership to develop a town with an enhanced quality of life for its residents and future generations."

The Plan's Strategic Aims are as follows:

- Strategic Aim 1: Town Centre
- To facilitate the development of the town centre as a place to live, work, visit and enjoy by harnessing the rich architectural heritage of the town, enhancing the quality of the environment and facilitating high quality new development.

Strategic Aim 2: Sustainable Communities

• To facilitate the development of sustainable and socially inclusive communities, where quality housing is provided and integrated with the delivery of community and social infrastructure to support a high a quality of life for the residents of the town.

Strategic Aim 3: Economic Development and Tourism

 To facilitate the sustainable economic growth of Cahir, by capitalising on high quality tourism attractions, and innovating in all sectors of the local economy to provide new and diverse employment opportunities.

Strategic Aim 4: Transport & Movement

 To promote sustainable transport patterns and infrastructure in the town and to safeguard and develop the strategic road and rail network to enhance connectivity to national and regional towns and cities.

Strategic Aim 5: Natural and Built Heritage

• To safeguard, showcase and support the sustainable development of the natural and built heritage of the town; enhancing amenity and providing a high quality environment for locals, visitors and future generations.

Strategic Aim 6: Infrastructure & Utilities

• To facilitate the development of infrastructure and utilities that will support sustainable socioeconomic growth and protect the quality of the environment of the town.

2.4 Relationship with other relevant Plans and Programmes

The Plan sits within a hierarchy of strategic actions such as plans and programmes and is subject to a number of high-level environmental protection policies and objectives with which it must comply.

The Plan must comply with relevant higher-level strategic actions and may, in turn, guide lower level strategic actions. In this regard, Appendix I includes statutory provisions, plans, policies and strategies that set the context within which the Plan is framed and which have influenced the provisions of the Plan.

Relevant planning plans and programmes forming the context for the Local Area Plan include:

- The National Planning Framework 2018 that sets out a high-level strategic plan for shaping the future growth of Ireland and provides 10 National Strategic Outcomes for realising the vision of the Plan.
- The Southern Regional Spatial and Economic Strategy 2020 that provides a long-term strategic planning and economic framework for the Southern Region in order to support the implementation of the National Planning Framework.
- The South Tipperary County Development Plan, adopted in 2009 and subsequently varied, most recently in December 2015, that contains a suite of policies and objectives, and appendices to guide development in the southern part of the county.

Section 3 The Environmental Baseline

3.1 Introduction

The summary of the environmental baseline of Cahir is described in this section. This baseline together with the Strategic Environmental Objectives, which are identified in Section 3.12, is used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Plan and in order to determine appropriate monitoring measures. The environmental baseline is described in line with the legislative requirements encompassing the following components: biodiversity, flora and fauna, population, human health, soil, water, air and climatic factors, material assets, cultural heritage, landscape and the interrelationship between these components.

3.2 Likely Evolution of the Environment in the Absence of the Plan

By not preparing a new Local Area Plan to replace the existing Cahir Local Area Plan 2011-2017 (as extended), the local planning framework for the town would not be updated to take account of the higher level planning framework and associated requirements (much of which was published or updated following adoption of the Plan in 2011, including the National Planning Framework, the Southern Regional Spatial and Economic Strategy and the Tipperary County Development Plans) and environmental information and requirements, including that related to flood risk.

In the absence of a new Plan there would be a decreased likelihood in the extent, magnitude and frequency of the positive effects identified by this assessment (see summary at Section 5) occurring.

Further, as a result of the less up-to-date planning framework, there would be an increased likelihood in the extent, magnitude and frequency of adverse effects identified by this assessment (see summary at Section 5) occurring.

3.3 Biodiversity and Flora and Fauna

Key ecological sensitivities within the Plan area include those relating to:

- The Lower River Suir, which flows through the town and supports aquatic and riverine ecology including otter, white claw crayfish and salmonid species. The importance of the Lower River Suir is recognised by a Special Area of Conservation designation.
- Parts of Cahir Park Woodland in the south of the Plan area. The importance of the woodland is recognised by a proposed Natural Heritage Area designation.
- Mature treelines, hedgerows and woodland.

European Sites comprise:

- Special Areas of Conservation¹ (SACs); and
- Special Protection Areas² (SPAs).

¹ SACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

² SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - due to their conservation value for birds of importance in the EU.

There are two European Sites within 15 km of the Plan boundary:

- Lower River Suir SAC (Site code: 002137)³ stretching from north to south across the Plan area; and
- Galtee Mountains SAC (Site code: 000646)⁴ located c.7.5 km to the east from the Plan area.

European Sites within the wider region, including those downstream of the Plan area, such as River Barrow and River Nore SAC (Site code: 002162)⁵, are mapped on Figure 3.1.

Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs (pNHAs) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. There are no NHAs designated within the Plan area or within 15 km of the Plan area. One pNHA, Cahir Park Woodland, occurs partially within the south of the Plan area.

The River Aherlow (tributary of the River Suir, to the north-east of the Plan area) is designated as a salmonid river under Regulations and the River Suir also supports salmonid species.

Existing Problems

Previous changes in land uses arising from human development have resulted in a loss of biodiversity and flora and fauna however, legislative objectives governing biodiversity and fauna were not identified as being conflicted with.

3.4 Population and Human Health

Population

In the 2016 Census, Cahir was identified as having a population of 3,593 persons, which equates to 2.3% of County Tipperary population. The projected population growth for the town is 3,952 persons by 2027. Cahir is one of four towns in South Tipperary (the others being Carrick On Suir, Clonmel and Tipperary Town) that form a network of settlements identified by the Regional Spatial and Economic Strategy for the Southern Region as having the potential to strategically drive growth at sub-regional level.

Potential interactions with other environmental components:

- Recreational and development pressure on habitats and landscapes;
- Contribution towards increase in demand for waste water treatment at the municipal level;
- Contribution towards increase in demand for water supply and associated potential impact of water abstraction;
- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

Human Health

Human health has the potential to be impacted upon by environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

³ Sensitive features include: Atlantic salt meadows; Mediterranean salt meadows; floating river vegetation; old oak woodlands; alluvial forests; yew woodlands; freshwater pearl mussel; white-clawed crayfish; sea lamprey; brook lamprey; river lamprey; twaite shad; Atlantic salmon; and otter.

⁴ Sensitive features include: wet heath; dry heath; alpine and subalpine heaths; species-rich nardus grassland; blanket bogs; siliceous scree; calcareous rocky slopes; and siliceous rocky slopes.

⁵ Sensitive features include: estuaries; tidal mudflats and sandflats; dry heath; petrifying springs; and old oak woodlands.

Appendix II: Non-Technical Summary

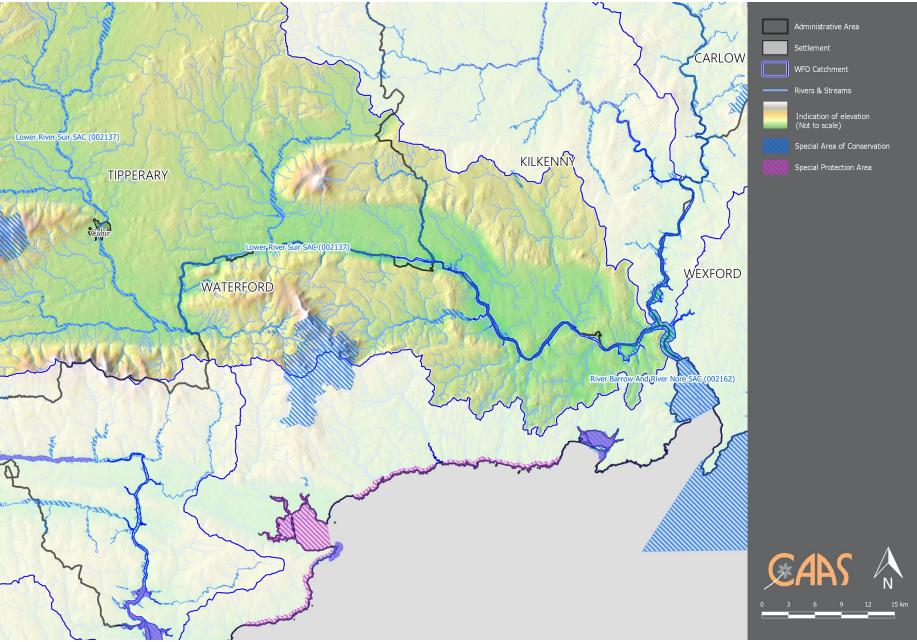


Figure 3.1 European Sites within 15km buffer of Cahir Plan area

3.5 Soil

Luvisols⁶ (occurring mainly in the south-east and south-west) and alluvial soils⁷ (in the flood plains of the River Suir) are two most dominant soil types across the Plan area. Other soil types identified include: podzols⁸ in the north-west of the Plan area; and brown earths⁹ in the north-east of the Plan area.

Peat soils are often indicative of areas that are the most sensitive to development due ecological sensitivities and impeded drainage issues. There is no peat occurring within the Plan area, however there is an area of blanket peat found c. 3 km to the south-west of Cahir.

Geological Survey Ireland coordinate the Irish Geological Heritage Programme, whereby an objective has been set to identify and select sites of geological interest within each county across the country. The audit of County Geological Sites in County Tipperary was completed in 2019. There is one County Geological Site partially located within the north of the Plan area: Bansha and Castle Mary Moraine and Outwash. Features at the site were formed during deglaciation at the end of the last Ice Age (c. 14,000 years ago). This limestone-rich sand and gravel moraine follows the River Suir and extends north-west to south-east between Bansha and Cahir for a distance of 11 km.

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species.

As is the case with other urban and semi-urban areas across the country, there is potential for contamination at sites within the Plan area, especially where land uses occurred in the past in the absence of environmental protection legislation.

3.6 Water

Water Status

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving *good status*.

Cahir is located in the Suir catchment with the main River Suir flowing through the centre of the town, from north to south. The town is located downstream of the Golden Vale and the northern facing slopes of the Galtee Mountains. The River Suir is joined by the River Aherlow 1.5 km upstream, to the north of the Plan area. The banks of the River Suir have been modified at various locations and the channel is culverted under a number of roads. The main channel is joined by two tributaries within the Plan area, by the Outeragh (Stream) to the south of the Cahir Bypass in the north of the Plan area and by the Raheen Stream in the south of the Plan area.

The current WFD (2013-2018) status of the section of Suir River in the Plan area is *moderate*. This is also the status of the Outeragh Stream in the north-east fringes of the Plan area and the Raheen Stream in the south of the Plan area. Subject to exemptions provided for by Article 4 of the WFD, these water bodies will need improvement in order to comply with the objectives of the WFD. The status of the River Suir downstream of the Plan area improves to *good status* at Ardfinnan.

The WFD status (2013-2018) of all groundwater underlying the Plan area and is currently identified as being of *good status*, meeting the objectives of the WFD.

⁶ Luvisols are generally fertile, widely used for agriculture and associated with significant accumulation of clay.

⁷ These are associated with alluvial (clay, silt or sand) river deposits.

⁸ Podzols are acidic and generally infertile, suitable for rough grazing and forestry.

⁹ Brown earths are well drained mineral soils, associated with high levels of natural fertility.

Figure 3.2 illustrates the WFD surface water and groundwater status within and surrounding the Plan area.

Aquifer Vulnerability

The Geological Survey of Ireland (GSI) rates groundwaters according to both their productivity and vulnerability to pollution. Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The aquifers underlying most the Plan area are generally classified as being of:

- *High vulnerability*, in most of the Plan area;
- *Extreme vulnerability* and Extreme (*Rock at or near surface or karst),* in the central parts and south of the Plan area; and
- Moderate vulnerability, in the south-west and north-west of the Plan area.

Flooding

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the Plan. The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG, 2009).

The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA.

Historical and predictive indicators of flood risk were taken into account by the SFRA. The SFRA identified the parts of the Plan area that are at risk of flooding including lands along the river Suir, flowing through the centre of the Plan area, and its tributaries.

3.7 Air and Climatic Factors

Total emissions of greenhouse gases by humans come from various sectors including transport, agriculture, energy industries, manufacturing combustion, industrial processes, residential developments, commercial services developments, waste management processes and fluorinated gases equipment (such as refrigeration and fire protection systems). Ireland's National Policy position is to reduce CO₂ emissions in 2050 by 80% on 1990 levels across the Energy Generation, Built Environment and Transport sectors, with a goal of Climate neutrality in the Agriculture and Land-Use sector. For 2017, total national greenhouse gas emissions are estimated to be 0.9% lower than emissions in 2016.

The National Mitigation Plan (Department of Communications, Climate Action and Environment, 2017), represents an initial step to set Ireland on a pathway to achieve the level of decarbonisation required. It is a whole-of-Government Plan, reflecting in particular the central roles of the key Ministers responsible for the sectors covered by the Plan – Electricity Generation, the Built Environment, Transport and Agriculture, as well as drawing on the perspectives and responsibilities of a range of other Government Departments. The National Adaptation Framework Department of Communications, Climate Action and Environment, 2018), sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework, a number of Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for.

The National Climate Action Plan 2019 is an all of Government plan to tackle climate change and bring about a step change in Irelands climate ambition over the coming years. The plan sets out an ambitious course of action over the coming years to address the diverse and wide-ranging impacts climate disruption is having on Ireland's environment, society, economic and natural resources. The Climate Action Plan sets out clear 2030 targets for each sector with the ultimate objective of achieving a transition to a competitive, low-carbon, climate-resilient, and environmentally sustainable society and economy by 2050.

The Climate Change Advisory Council's Annual Review 2019 identifies that the most recent projections demonstrate that, under different assumptions, Ireland will not meet its emissions reduction targets, even with the additional policies and measures included in the National Development Plan. The projections also show that progress on reducing emissions is sensitive to the future path of fuel prices. A significant and sustained rate of emissions reduction of approximately -2.5% per year is required to meet our objectives for 2050. However, it must be noted that additional measures within the recent Climate Action Plan are not included in the analysis to date.

The Tipperary County Council Climate Change Adaptation Strategy 2019-2024 features a range of actions across sectors including: seafood; agriculture; forestry; biodiversity; built and archaeological heritage; transport infrastructure; electricity and gas networks; communication networks; flood risk management; water quality; water services infrastructure; and health. The Strategy seeks to:

- Ensure a proper understanding of the key risks and vulnerabilities of climate change;
- Advance the implementation of climate resilient actions in a planned and proactive manner; and
- Ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of the local authority.

The EPA's (2019) Air Quality in Ireland 2018 identifies that:

- Levels at monitoring sites in Ireland were below the EU legislative limit values in 2018;
- Ireland was above World Health Organization (WHO) air quality guideline value levels at a number of monitoring sites for fine particulate matter, ozone and nitrogen dioxide;
- Ireland was above the European Environment Agency reference level for PAH, a toxic chemical, at three monitoring sites.

In order to apply with European Directives relating to air quality, the EPA manages the National Ambient Air Quality Network and measures the levels of a number of atmospheric pollutants at locations across the country. The current¹⁰ air quality at both monitoring stations closest to the Plan area, at Tipperary to the north west and Clonmel to the south east, is identified by the EPA as being *good*.

¹⁰ 03/09/2020 (http://www.epa.ie/air/quality/)

Appendix II: Non-Technical Summary

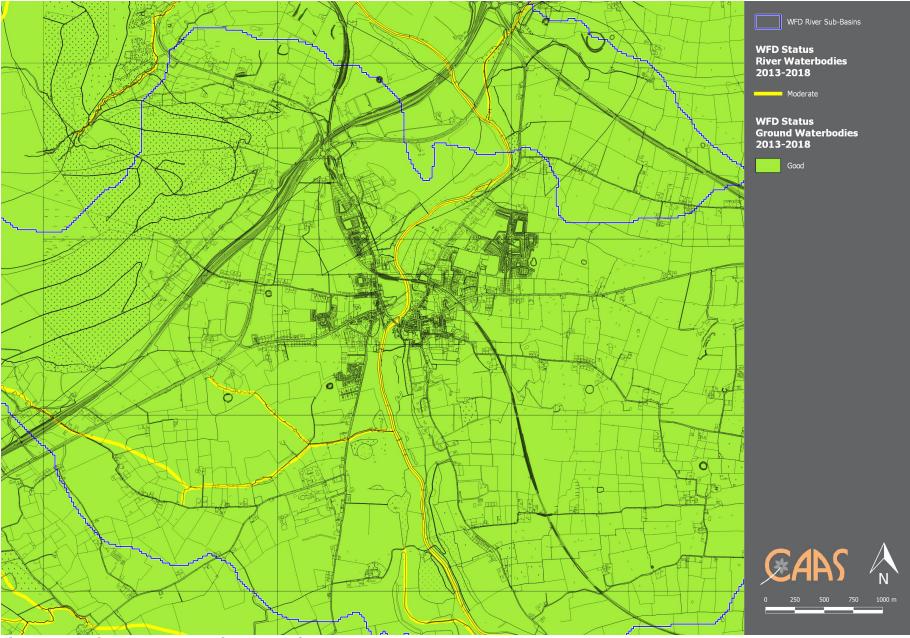


Figure 3.2 Surface Water Status (2013-2018)

3.8 Material Assets

Energy Infrastructure

Cahir is on the crossroads of the 110 kV transmission systems and is also served by a natural gas pipeline.

Land

The Plan has the potential to assist with the reuse and regeneration of brownfield sites thereby contributing towards sustainable mobility and reducing the need to develop greenfield lands and associated potential adverse environmental effects. Brownfield lands are generally located within urban/suburban areas.

Transport

Cahir is situated at the junction of two national routes: the M8 Cork to Dublin Motorway and the N24 Limerick to Waterford National Primary Road to the north-east of town. The town is also served by local and national bus services (services to Tipperary Town, Cashel, Waterford, Dublin and Cork) and rail (services to Limerick via Limerick Junction and Waterford).

Waste Water

Cahir is served by the Cahir Waste Water Treatment Plant (WWTP), which currently has a limited additional capacity (c. 200-300 population equivalent or PE¹¹). Irish Water is in the process of designing an upgrade of the Cahir WWTP from a capacity of 5,000 PE to 5,500 PE, which is programmed to be completed in 2024.¹² The delivery of this infrastructure would ensure adequate waste water services for the projected level of growth. Large volume users will be required to provide on-site water treatment before discharging to the network.

The most recent available information on waste water treatment plant performance sourced from the EPA's Waste Water Discharge Licence Audit Report (July 2019) has shown that the WWTP environmental performance was satisfactory and in compliance with the waste water discharge limits licence.

Water Supply

Irish Water is responsible for providing and maintaining adequate public water supply infrastructure throughout County Tipperary.

Cahir is part of the Arfinnnan regional water area, receiving its water supply from a number of sources. There is adequate water supply to cater for the future demands generated during the lifetime of the Plan.

Under Section 58 of the Environmental Protection Agency Act 1992, the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above. The most recent EPA Remedial Action List (Q2 of 2020) does not include any water scheme that supplies the Plan area.

¹¹ As identified in Irish Water's Water Services Strategic Plan, wastewater treatment plants are described in terms of their designed treatment capacity, which is generally expressed as population equivalent (PE). This is a measurement of total organic biodegradable load, including industrial, institutional, commercial and domestic organic load, on a wastewater treatment plant, converted to the equivalent number of PEs. One person is considered to generate 60g of five day Biochemical Oxygen Demand (BOD) per day. 1 PE is defined as being equivalent to 60g of BOD per day. ¹² Waste Water Treatment Capacity Register for County Tipperary (Irish Water, April 2020)

3.9 Cultural Heritage

Archaeological Heritage

Archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts. The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. It is available from the National Monuments Service and at archaeology.ie.

Figure 3.3 shows the spatial distribution of recorded monuments within and beyond the Plan area. Clusters of monuments are located within the centre of the Plan area at Cahir's historic core. Cahir contains number of archaeological monuments including 24 entries to the RMP such as: the Cahir Castle complex; a stone sculpture; a weir; a bridge; a church; a ritual site-holy well; and a ringfort-rath.

There are four National Monuments in State Care within the Plan area:

- Cahir Castle;
- Cahir Castle Cottage;
- Cahir Abbey; and
- Swiss Cottage.

Architectural Heritage

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all: structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social, or technical interest. Protected Structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social, archaeological, artistic, cultural, scientific, social, archaeological, artistic, cultural, scientific, social, archaeological, artistic, cultural, scientific, social or technical or technical point of view.

Similar to the general spatial spread of archaeological heritage, clusters of architectural heritage are indicated within the town's centre as shown on Figure 3.4. There are over 200 entries to the Record of Protected Structures in Cahir¹³ including many buildings of character and historical and architectural significance. These include: the 18th century cut stone Train Station; the Library; Cahir House Hotel; Fleury's Antiques; and numerous other retail premises fronting onto the William Tinsley designed Square.

The character of Cahir is largely defined by the River Suir and its built heritage. The most notable buildings within the Plan area are Cahir Castle (Anglo-Norman masonry castle situated on a small island in the River Suir) and the Swiss Cottage (early 19th century ornamental cottage). The town's industrial heritage is represented by the former mills on Church Street, Bridge Street and Barnora whilst residential units on the Mall are indicative of living condition of high-class society in the area c.1800.

Architectural Conservation Areas (ACAs). An ACA is a place, area or group of structures or townscape that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. There is one ACA designated in the town centre of Cahir, extending from the train station to the north, to Ardfinnan Road and from the convent on Pearse Street to Cahir Park in the west (as shown on Figure 3.4).

¹³ Cahir Electoral Area: Record of Protected Structures 2010 (South Tipperary County Development Plan 2009-2015, as varied).

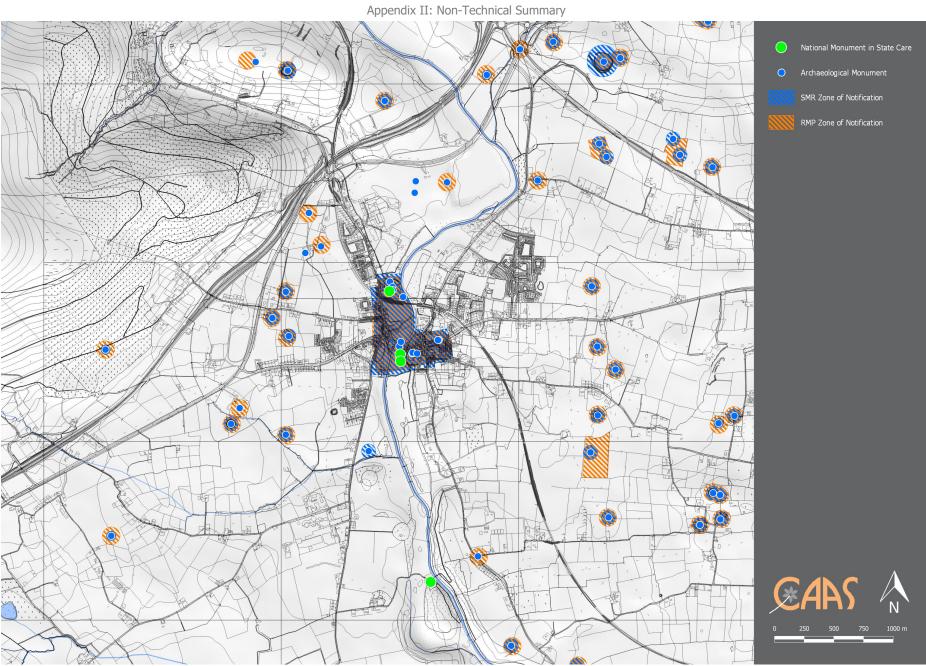


Figure 3.3 Archaeological Heritage

CAAS for Tipperary County Council

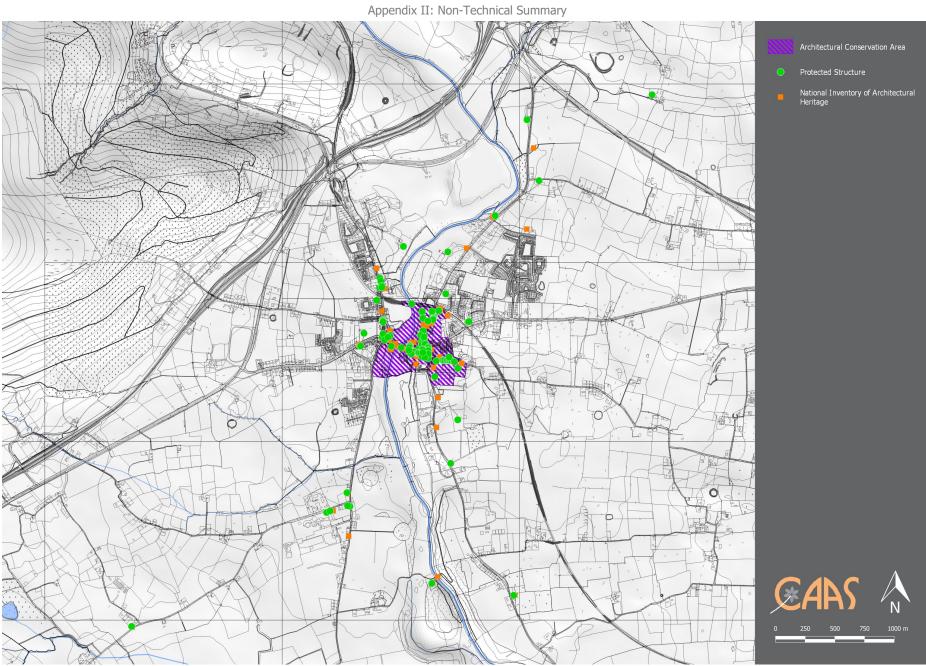


Figure 3.4 Architectural Heritage

CAAS for Tipperary County Council

3.10 Landscape

Landscape Character Assessment

The purpose of landscape character assessment is to provide the foundation for policy formulation and decision making for landscape management. The Landscape Character Assessment for County Tipperary identifies 7 Landscape Character Types and 23 Landscape Character Areas.

Most of the Plan area is located within the Town and Urban Fringes (Sub-Area of River Suir Central Plain) Landscape Character Area (LCA 1) and River Suir Central Plain (including Sub-Areas) Landscape Character Area (LCA 4). It is also adjacent to the Mountain and Upland Landscape Character Type in the north-western fringes of the Plan area, which includes Galtee Mountain Mosaic Landscape Character Area (LCA 21) and Glen of Aherlow Marginal and Farmland Mosaic Landscape Character Area (LCA 20).

This landscape of the Galtee Mountain Mosaic LCA and Glen of Aherlow Marginal and Farmland Mosaic LCA are classified as having a dominantly vulnerable sensitivity 'Rating of Class 5: Unique'.

Protected Views and Prospects

Views listed and protected in County Tipperary through the County Development Plan (as varied) include views of key heritage sites and along scenic tourism routes. There is one Protected Route and three Protected Views within the Plan area:

- Views to the south and to the west at the junction of Old Church Street and Market Street, Cahir (V090);
- View to the west up Castle Street from The Square, Cahir (V091);
- Views to the north and south from Bridge Street, Cahir (V092); and
- Protected route to the north-west of the Plan area, including Views of the Galtee Mountains along Cahir Kilbehenny Road (V017) and Views west along Cahir-New Inn Road N8 (V021).

High Amenity Areas

The County Development Plan identifies various Amenity Areas in the County. These areas consist of landscapes of special value where inappropriate development would contribute to a significant reduction in the landscape setting of the County. There is one such area located along the Galtee Mountain's to the west of the Plan area.

3.11 Appropriate Assessment and Flood Risk Assessment

Stage 2 Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) have been undertaken alongside the preparation of the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The AA assesses the effects of the Plan on European Sites designated for certain habitats and species. The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network¹⁴.

SFRA is required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG and OPW, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA.

¹⁴ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

⁽a) no alternative solution available;

⁽b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and

⁽c) adequate compensatory measures in place.

3.12 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies that generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives that have been transposed into Irish law and that are required to be implemented.

The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan and the alternatives are evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

The SEOs are linked to indicators that can facilitate monitoring the environmental effects of the Plan as well identifying targets that the Plan can help work towards.

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the town's natural capital 	
Population and Human Health	РНН	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	 Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the town's citizens from environment-related pressures and risks to health and well-being 	
Soil (and Land)	S	Ensure the long-term sustainable management of land	 Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield within the town Safeguard areas of prime agricultural land and designated geological sites 	
Water	w	Protection, improvement and sustainable management of the water resource	 Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive Ensure water resources are sustainably managed to deliver proposed growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals 	
Material Assets	MA	Sustainable and efficient use of natural resources	 Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the town Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, wave solar, tidal, biomass, energy from waste and traditional fossil fuels Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids 	

Table 3.1 Strategic Environmental Objectives

Appendix II: Non-Technical Summary

Environmental	SEO	Guiding Principle	Strategic Environmental Objectives	
Component	Code	j	······································	
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels 	
Climatic Factors	С	Achieving transition to a competitive, low carbon, climate- resilient economy that is cognisant of environmental impacts	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into the town's infrastructure (e.g. energy efficient buildings; green infrastructure) Contribute towards the reduction of greenhouse gas emissions in line with national targets Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased 	
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	architectural heritage	
Landscape	L	Protect and enhance the landscape character	 To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention 	

Section 4 Alternatives

4.1 Introduction

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment.

4.2 Limitations in Available Alternatives

The Plan is required to be prepared by the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan.

The alternatives available for the Plan are limited by the provisions of higher-level planning objectives, including those of the land use policy, plans and programmes (e.g. the National Planning Framework, the Southern Regional Spatial and Economic Strategy and the Tipperary County Development Plans). These documents set out various requirements for the content of the Plan.

4.3 Summary of Description and Assessment of Available Reasonable Alternatives

4.3.1 Tier 1: Prepare a Plan or not

(Tier 1) Alternative A: Prepare a New Plan for Cahir¹⁵

This alternative involves preparing the Local Area Plan in order to provide a six-year framework for the planned, co-ordinated and sustainable development of Cahir Town and in order to replace the existing Cahir Local Area Plan 2011-2017 (as extended).

By preparing a new Local Area Plan to replace the existing Cahir Local Area Plan 2011-2017 (as extended), this alternative would allow for the local planning framework for the town to be updated to take account of the higher level planning framework and associated requirements (much of which was published or updated following adoption of the Plan in 2011, including the National Planning Framework, the Southern Regional Spatial and Economic Strategy and the Tipperary County Development Plans) and environmental information and requirements, including that related to flood risk. This approach would benefit each environmental component the most and would provide the highest levels of certainty and coherency to both decision makers and stakeholders, including residents and potential developers. Applications for developments would be more likely to be successful and residual adverse effects would be least likely.

(Tier 1) Alternative B: Do Not Prepare a New Local Area Plan for Cahir

This alternative involves not preparing the Local Area Plan and allowing the existing Cahir Local Area Plan 2011-2017 (as extended) guide development in the town.

By not preparing a new Local Area Plan to replace the existing Cahir Local Area Plan 2011-2017 (as extended), this alternative would not allow for the local planning framework for the town to be updated to take account of the higher level planning framework and associated requirements (much of which was published or updated following adoption of the Plan in 2011, including the National Planning Framework, the Southern Regional Spatial and Economic Strategy and the Tipperary County Development Plans) and environmental information and requirements, including that related to flood risk. This approach would benefit each environmental component the least and would provide the lowest levels of

¹⁵ This is the selected alternative

certainty and coherency to both decision makers and stakeholders, including residents and potential developers. Applications for developments would be less likely to be successful and residual adverse effects would be most likely.

4.3.2 Tier 2: Serviced Land and Infrastructure Assessment Alternatives

(Tier 2) Alternative A: A Plan prepared using a Serviced Land and Infrastructure Assessment approach¹⁶

This alternative involves preparing the Plan using a Serviced Land and Infrastructure Assessment approach. It is noted that methodologies for this approach are set out in higher level documents, including the National Planning Framework and the 2013 Local Area Plan Guidelines for Planning Authorities, however this tier of alternatives is being considered by the assessment in order to demonstrate its environmental benefits.

Relevant sites were identified that could contribute towards the population growth to be provided for. They were comparatively assessed against infrastructural requirements (relating to water supply and waste water) and planning issues (relating to compact growth, public transport and co-ordinated development). More detail on this approach is provided in Appendix 2 to the Plan.

The serviced land and infrastructure assessment approach under this alternative would allow for water supply, waste water, compact growth, public transport and co-ordinated development considerations to be integrated into the Plan to the highest degree. This approach would benefit the protection of various environmental components. Although potentially adverse effects associated with land use development would exist, they would be mitigated to a significant degree.

(Tier 2) Alternative B: A Plan prepared not using a Serviced Land and Infrastructure Assessment approach

This alternative involves preparing the Plan while not using the Serviced Land and Infrastructure Assessment approach.

By not following a serviced land and infrastructure assessment approach, this alternative would not allow for water supply, waste water, compact growth, public transport and coordinated development considerations to be integrated into the Plan to the highest degree. An opportunity to mitigate potentially adverse effects arising from land use development to a significant degree would have been missed.

4.3.3 Tier 3: Growth Model Alternatives

(Tier 3) Alternative A: Consolidated Growth Model¹⁷

This Growth Model focuses development on the town centre, promoting the re-use of existing properties and the targeted re-development of infill and strategic brownfield site for residential, commercial, and community uses. Complimentary 'edge-of-centre' new residential sites will support the developed of additional options to meet the housing needs of the town. Proportionate growth of employment and industry would also be supported adjacent to existing employment sites in the town. This alternative growth model directly aligns with the National Planning Framework and the Southern Region and Spatial and Economic Strategy in terms of supporting compact growth development, sustainable land management and regeneration of town centres.

By consolidating land use zoning and reducing unnecessary land use zoning this Growth Model would provide for a more compact form of development that would help to maximise

¹⁶ This is the selected alternative

¹⁷ This is the selected alternative

benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl, this alternative would: increase the likelihood of brownfield development; contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health); and would benefit the protection of multiple environmental components.

This alternative is the most sustainable of the three growth model alternatives and would be likely to contribute towards environmental protection and management the most.

(Tier 3) Alternative B: Western Expansion of the Town

This Growth Model would promote the development of the town centre, alongside the development of new node of residential development to the west of the town on the Mitchelstown Road. Proportionate growth of employment and industry would also be supported adjacent to existing employment sites in the town.

Development of the new node of residential development to the west of the town on the Mitchelstown Road would be unnecessary given the population growth for the town and available lands within and closer to the centre. It is premature and would not wholly align with objectives relating to sequential development.

A new centre for convenience goods and services would serve the existing and new communities to the west of the town. Although this alternative would promote town centre development too, the new centre would adversely affect the vibrancy of the town centre, diluting the primacy of the town centre as a focus for new development. New development in this location would require new infrastructure and services, particularly road infrastructure.

The greenfield development of the western secondary centre and associated development of roads infrastructure would result in unnecessary and avoidable potential impacts upon various environmental components.

(Tier 3) Alternative C: Selection of New Growth Areas

This Growth Model would promote the development of the town centre, and the development of individual plots of land on the radial routes within the town. Proportionate growth of employment and industry would also be supported adjacent to existing employment sites in the town.

The development of individual plots of land adjacent to the radial routes out of the town centre would facilitate new housing estates, however this would be unnecessary given the population growth for the town and available lands within and closer to the centre. It is premature and would not wholly align with objectives relating to sequential development.

Although this alternative would support the regeneration of the town centre too, facilitating the new radial housing estates would make infill and brownfield development less likely. The new estates would be distant from the primary amenity areas for the town, public services, and shopping, and would therefore adversely affect the vibrancy of the town centre. The new estates would not be as aligned with efforts to improve sustainable mobility as town centre or edge of centre development would be.

The greenfield development of these estates would result in unnecessary and avoidable potential impacts upon various environmental components. New development at these locations would also require new water services infrastructure.

Section 5 Summary of Effects arising from the Plan

Tipperary County Council have integrated various recommendations arising from the SEA, AA and SFRA processes into the Plan (see Section 6). Table 5.1 summarises the overall environmental effects arising from Plan provisions.

The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation – see Section 6.

Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Strategic Environmental Objective (SEO) codes are taken from Table 3.1.

Environmental Component	the second s			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects	
Biodiversity and Flora and Fauna	 Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the town and beyond. Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats. Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna and fauna – including terrestrial and aquatic biodiversity and flora and fauna. 	 Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds and bats. 	 Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation). 	BFF

Environmental Component	I Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plans and adjacent Development Plans and lower-tier land use plans.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects	
Population and Human Health	 Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the town and beyond. Contribution towards the protection of human health by facilitating development of lands that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the town and beyond. Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water. 	 Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	 Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below. 	Ð
Soil	 Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the town and beyond. Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land. 	 Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank erosion. 	 Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. 	S

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plans and adjacent Development Plans and lower-tier land use plans.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects	
Water	 Contribution towards the protection of water by facilitating development of lands that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the town and beyond. Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations. Contribution towards flood risk management and appropriate drainage. 	 Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	 Any increased loadings as a result of development to comply with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan. 	W
Material Assets	 Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the town and beyond. Contribution towards compliance with national and regional water services and waste management policies. Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. Contribution towards reductions in average energy consumption per capita including promoting energy efficient buildings. 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. 	 Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan. Residual wastes to be disposed of in line with higher-level waste management policies. Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework. 	MA

Environmental Component	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plans and adjacent Development Plans and lower-tier land use plans.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Significant Effects	
Air and Climatic Factors	 Contribution towards climate mitigation and adaptation by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the town and beyond. In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to: Sustainable compact growth; Drainage, flood risk management and resilience; Sustainable infrastructure design solutions including energy efficient buildings; green infrastructure. 	 Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. Potential conflicts between transport emissions, including those from cars, and air quality. Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. Potential conflicts with climate adaptation measures including those relating to flood risk management. 	 An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable compact growth and sustainable mobility. Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised. 	AC
Cultural Heritage	 Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within the town. Contributes towards protection of cultural heritage within existing settlements by facilitating brownfield development and regeneration. 	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	 Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	СН
Landscape	 Contributes towards protection of wider landscape and landscape designations by facilitating development within the town. 	 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures.	L

Section 6 Mitigation and Monitoring Measures

6.1 Mitigation

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes.

By integrating SEA recommendations into the Plan, the Council has helped to ensure that:

- The potential significant adverse effects of implementing the Plan are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan are maximised.

By integrating various recommendations into the Plan, the Council is helping to ensure that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation was achieved through the:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan;
- Integration of environmental considerations into zoning provisions of the Plan; and
- Integration of written environmental measures into the text of the Plan.

Table 6.1 shows the measures that will mitigate the potential significant adverse environmental effects of implementing the Plan, if unmitigated.

6.2 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures that will be used in order to monitor the likely significant effects of implementing the Plan. Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

Monitoring is based around indicators that allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 3.12 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) that were identified with regard to the relevant strategic actions.

Table 6.1 shows the indicators that have been selected for monitoring.

The Monitoring Programme may be updated to deal with specific environmental issues - including unforeseen effects - as they arise. Such issues may be identified by the Council or identified to the Council by other agencies.

Appendix II: Non-Technical Summary Table 6.1 Summary of Mitigation Measures and Indicators for Monitoring Topic Recommendations interacted into the Day included

All SD2. Ensure all proposals comply with the policies, objectives and development management standards of the Sou review thereof). TC1. Ensure the vitality and viability of the town centre is maintained and to strengthen its function by facilitating tourism services, subject to compliance with the policies and development management standards of the County Developm TC2. Facilitate the re-development of Town Centre Opportunity Sites (as identified in Figure 10) in accordance with the development management standards of the County Developm TC3. Seek to develop and improve areas within the town that are in need of regeneration, renewal and redevelopm the provisions of the Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Orders employment opportunities and provide community facilities TC4. Ensure the enhancement and protection of building and streetscapes within the ACA. In the assessment of development and streetscapes within the ACA.	g the development of residential, retail, community and ment Plan h the guidance set out Appendix 1 and compliance with ment. The Council will seek to apply, where appropriate, rs to facilitate regeneration, increase housing supply,	n/a
TC1. Ensure the vitality and viability of the town centre is maintained and to strengthen its function by facilitating tourism services, subject to compliance with the policies and development management standards of the County Development TC2. Facilitate the re-development of Town Centre Opportunity Sites (as identified in Figure 10) in accordance with the development management standards of the County Development Plan TC3. Seek to develop and improve areas within the town that are in need of regeneration, renewal and redevelopment the provisions of the Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Orders employment opportunities and provide community facilities	nent Plan h the guidance set out Appendix 1 and compliance with nent. The Council will seek to apply, where appropriate, rs to facilitate regeneration, increase housing supply,	
tourism services, subject to compliance with the policies and development management standards of the County Developm TC2. Facilitate the re-development of Town Centre Opportunity Sites (as identified in Figure 10) in accordance with the development management standards of the County Development Plan TC3. Seek to develop and improve areas within the town that are in need of regeneration, renewal and redevelopm the provisions of the Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Orders employment opportunities and provide community facilities	nent Plan h the guidance set out Appendix 1 and compliance with nent. The Council will seek to apply, where appropriate, rs to facilitate regeneration, increase housing supply,	
 TC2. Facilitate the re-development of Town Centre Opportunity Sites (as identified in Figure 10) in accordance with the development management standards of the County Development Plan TC3. Seek to develop and improve areas within the town that are in need of regeneration, renewal and redevelopment the provisions of the Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Orders employment opportunities and provide community facilities 	h the guidance set out Appendix 1 and compliance with nent. The Council will seek to apply, where appropriate, rs to facilitate regeneration, increase housing supply,	
the development management standards of the County Development Plan TC3. Seek to develop and improve areas within the town that are in need of regeneration, renewal and redevelopm the provisions of the Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Orders employment opportunities and provide community facilities	nent. The Council will seek to apply, where appropriate, rs to facilitate regeneration, increase housing supply,	
TC3. Seek to develop and improve areas within the town that are in need of regeneration, renewal and redevelopm the provisions of the Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Orders employment opportunities and provide community facilities	rs to facilitate regeneration, increase housing supply,	
the provisions of the Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Order employment opportunities and provide community facilities	rs to facilitate regeneration, increase housing supply,	
employment opportunities and provide community facilities		
I I I I I I I I I I I I I I I I I I I	velopment proposals the Council will have regard to:	
a) The impact of the proposed development on the character and appearance of the ACA in terms of compatibility of layou		
built form & architecture;	ary arban grain, accigit, colour and misrico, massing or	
b) The impact of the proposed development on the existing amenities, character and heritage of these areas; and,		
c) The need to retain important architectural and townscape elements such as shopfronts, sash windows, gutters and down	vn pipes, decorative plasterwork, etc	
TCO4.1 Continue to develop and implement the Town Centre Regeneration Strategy in partnership with the Rural Rege		
as may be available.		
TCO4.2 Prepare a plan for the improvement of the public realm in Cahir, including proposals for redesign of the squar	are, improving the pedestrian environment for residents	
and visitors, and traffic management in the town		
TCO4.3 Work with landowners and other stakeholders to seek the redevelopment of the identified Opportunity Sites for	r town centre uses over the lifetime of the Plan.	
TCO4.4 Prepare an Architectural Conservation Area Character Statement for the Town Centre to support landowners	and community in the protection and enhancement of	
properties.		
TCO4.5 Encourage and facilitate the regeneration and reuse of vacant, disused and derelict sites and to take action, where the regeneration are set of vacant, disused and derelict sites and to take action, where the regeneration are set of vacant, disused and derelict sites are set of vacant.		
TCO4.5 Maintain a Vacant Site Register for the town and to apply the provision of the Urban Housing Regeneration and	d Development Act 2015 (as may be amended) for land	
activation purposes.		
TCO4.6 Support the development of tourism infrastructure and to enhance linkages with walking and cycle routes and to		
TCO4.7 Work in partnership with community groups in the development of regeneration initiatives and public realm en	nancement projects and to seek funding for projects as	
opportunities arise. TCO4.8 Support the provision of cycle parking facilities and electric vehicle charging points in the town centre subject to	to analyzing traffic and pedactrian cafety	
TCO4.8 Support the provision of cycle parking facilities and electric vehicle charging points in the town centre subject to Vacant Site Register for the town and to apply the provision of the Urban Housing Regeneration and Development Act 201.		
SC1. Promote and facilitate new residential development within the town centre on opportunity sites, infill and brow		
appropriate to support their development	which sites and to use land activation measures where	
ED06.1 Seek to redevelop Market House as a Business Development Centre to support and foster enterprise in the tow	vn	
ED06.4 Develop Catir as 'Destination Town' and to seek funding to realise this objective in accordance with failte Irela		
Biodiversity Strategic Aim 5: Natural and Built Heritage - To safeguard, showcase and support the sustainable development of the nat		 Condition of European sites
and flora and providing a high quality environment for locals, visitors and future generations.		Number of spatial plans that have
and fauna Natural and Built Heritage Policy		included ecosystem services content,
NBH1. Protect and conserve the integrity and ecological and biodiversity value of the Lower River Suir SAC and the	Cahir Woodlands NHA. Ensure that any development	mapping and policy to protect ecosystem
proposals within or adjacent to the Lower River Suir SAC are appropriately screened, and assessed if necessary, in accorda	ance with the Habitats Directive	services when their relevant plans are
NBH2. Seek to ensure that new plans or projects would not result in significant climatic impacts on European site	tes because of their scale, resource or transportation	either revised or drafted
requirements, operation or emissions, either cumulatively or in combination with other development.		SEA and AA as relevant for new Council
NBH3. Ensure the setting and character of Cahir Castle safeguarded and enhanced in the assessment of new development		policies, plans, programmes etc.
NBH5. Require, where the presence of non-native species is identified at the site of proposed development, new developm	nent to detail how invasive species will be managed and	• Status of water quality in the town's
controlled.	di anti and anno 10 ann	water bodies
NBH08.2 Support the community-led projects to develop the blue and green infrastructure in the town to enhance the bio		Compliance of planning permissions with
ED3. Monitor and manage any increases in visitor numbers in order to avoid significant effects including loss infrastructure. Visitor / habitat management plans will be required for proposed tourism projects as relevant and appropri		Plan measures providing for the protection of Biodiversity and flora and
County Development Plan Provisions, including	nate.	fauna – see Chapter 8 "Natural and Built
Policy LH8: Inland Waters and Riparian Zones It is the policy of the Council to protect the ecological status and quality of the	watercourses. In order to maintain the natural function	Heritage"
of existing ecosystems associated with water courses and their riparian zones and to encourage sustainable public access		nentage
edge or buffer zone to be maintained, where appropriate, between new developments and riparian zones of water bodies.		
Policy LH12: Water Framework Directive and River Basin Management Plans: It is the policy of the Council to protect and		
integrated and collaborative approach to local catchment management in order to ensure the successful implementation		

Appendix II: Non-Technical Summary

Topic	Recommendations integrated into the Plan, included in:	Indicators for Monitoring
	thereof) TI12: Noise Emissions: It is the policy of the Council to ensure that new development does not result in significant noise disturbance and to ensure that all new developments are designed and constructed to minimise noise disturbance in accordance with the provisions of the Noise Action Plan 2013, the Development Management Standards set out in Chapter 10 and relevant standards and guidance that refer to noise management ¹⁸ . Policy TI13: Light Pollution It is the policy of the Council to ensure that new development does not result in significant disturbance as a result of light pollution and to ensure that all new developments are designed and constructed to minimise the impact of light pollution on the visual, environmental and residential amenities of surrounding areas in accordance with the provisions of the Development Management Standards set out in Chapter 10 ¹⁹ .	
Population and human health	Also see measures under other environmental components including Soil, Water and Air and Climatic Factors. SD1. Facilitate and support the sustainable growth of residential, employment and social development in Cahir in accordance with the National Planning Framework, the Southern Regional Spatial Economic Strategy 2020, and the South Tipperary County Development Plan 2009 (and any review thereof). IU2. Support the sustainable and efficient use of existing capacity in water services in the planning of new development and compliance with the European Union (Drinking Water) Regulations Drinking Water Regulations 2014 (as amended)	 Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 "Economic Development and Tourism" Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures Number of spatial plans that include specific green infrastructure mapping
Soil	See measures under other environmental components including Water and Plan provisions relating to compact development.	 Proportion of population growth occurring on infill and brownfield lands compared to greenfield Volume of contaminated material generated from brownfield and infill Number of AA determinations and environmental assessments undertaken to support applications for brownfield and infill development prior to planning permission
Water	Also see measures under other environmental components including Soil and Material Assets. IU1. Ensure that adequate and appropriate water services infrastructure is provided in accordance with the requirement of Irish Water and as part of new development proposals. IU3. Require that all development proposals demonstrate that appropriate Sustainable Urban Drainage Systems (SuDS) are examined and were feasible provided; IU3. Require proposals for development to comply with requirements of the Planning System and Flood Risk Assessment Guidelines (DEHLG, 2009) and any up-dated thereof) including providing detailed design specifications as may be required to facilitate the impact of development. (a) Extensions of existing uses or minor development within flood risk areas will be supported, provided they do not: obstruct important flow paths; introduce a number of people into flood risk areas; entail the storage of hazardous substances; have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities; or increase the risk of flooding elsewhere. (b) Applications for development on previously developed lands within Flood Zones A or B, shall be subject to site specific flood risk assessment and shall provide details of structural and non-structural flood risk management measures, such as those relating to floor levels, internal layout, flood-resistant construction, flood-resilient construction, emergency response planning and access and egress during flood events. IU6. Require the submission of site-specific Flood Risk Assessments for developments undertaken within Flood Zones A & B and on lands subject to the mid-range future scenario floods extents, as published by the Office of Public Works. These Flood Risk Assessments shall consider climate change impacts and adaptation measures including details of structural and non-structural flood risk management measures, such as those relating to floor levels, internal layout, flood-resistant construction, flood-r	 Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD Number of incompatible developments permitted within flood risk areas

¹⁸ The Council will require new developments to submit a Noise Impact Assessment and appropriate mitigation measures as part of their planning application. This provision will apply to the following: a. For new developments that are likely to generate noise nuisance or an unacceptable impact on sensitive receptors, b. For new developments within the current Action Planning Area as set out in the Tipperary Council Noise Action Plan, 2014 or c. For developments near major roads (i.e. traffic volumes in excess of 3 million vehicles per annum or otherwise on a case by case basis.) Where developments are planned adjacent to major roads, the planning application shall incorporate acoustical planning into the development design e.g. designing the development so that the access road is adjacent to the major road noise source. It may also involve the use of buffer zones and/or noise barriers and traffic calming measures. In permitting new development outside of the Action Planning Areas identified in the Noise Action Plan 2013, the Council will refer to the appropriate regulations and guidance in place,

¹⁹ All new public lighting shall be designed and installed to meet minimum design standards and will also incorporate the principles of Energy-Efficient Design into the design process. Proposals for new development including or likely to require external lighting shall include details of lighting schemes to comply with minimum standards and best practice in energy efficient design. All new multi-unit residential and commercial development shall identify the following on a site layout plan to an appropriate scale at planning application stage: • The appropriate lighting specification to perform the lighting task necessary to the most energy efficient standard. • Include measures to minimise light spillage and pollution through design, layout and specification. • Avoid dazzle or distract of drivers on nearby public roads to the standards of TII.

Appendix II: Non-Technical Summary

Торіс	Recommendations integrated into the Plan, included in:	Indicators for Monitoring
Air and Climatic Factors	 IUD9.1 Support and work in co-operation with Irish Water to up-grade the public waste water treatment plant in the town. IUD9.2 Support with and work in co-operation with the Office of Public Works in the implementation of the Cahir Flood Relief Scheme. <i>County Development</i> Plan Provisions, including Policy LHB: Inland Waters and Riparian Zones It is the policy of the Council to protect the ecological status and quality of watercourses. In order to maintain the natural function of existing ecosystems associated with water courses and their riparian zones of under bodies. Policy LHB: Inland Waters and Riparian Zones and their riparian zones of water bodies. Policy LHB: Inland Waters and Riparian Zones and their riparian zones of water bodies. Policy LHB: Inland Waters and Riparian Zones and their riparian zones of water bodies. Policy LHB: Inland Waters and Riparian Zones and their riparian zones of water bodies. Policy LHB: Inland Waters and Riparian Zones and their riparian zones of water bodies. Policy CHB: Inland Waters and Riparian Zones and their riparian zones of water bodies. Policy CHB: Rinds Risk Management – Guidelines for Planning Authorities, (DEHLG 2009), seek to ensure that future development is considered and assessed against the risk of flooding. The Council, in accordance with these guidelines will adopt a precautionary approach to flord risk management. Where proposals for new development are located in areas at high or moderate risk of flooding, the applicant will be required to demonstrate that the development complex with the Justification Test at a divelopment of a sustainability provided by the Plans. Strategi Zim A: K of flooding Sim All be subject to a Flood Risk Assessment in accordance with The Planning Authorities, (DEHLG 2009). Policy CHB: Management of flood Risk Nanagement Full and Kaskasessment in accordance with	 Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NOx, SOx, PM10 and PM2.5 as part of Ambient Air Quality Monitoring Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions including those provided for and referenced in Chapter 3 "Development Strategy" Proportion of journeys made by private fossil fuel-based car compared to 2016 levels Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
Material Assets	Also see measures under CEMP requirement, other environmental components including Population and Human Health and various Land Use and Phasing provisions from the Plan. Strategic Aim 6: Infrastructure and Utilities To develop the required infrastructure and utilities to support the sustainable development and growth of the town. Chapter 9: Infrastructure and Utilities: Strategic Aim: To develop the required infrastructure and utilities to support the sustainable development and growth of the town. IU1. Ensure that adequate and appropriate water services infrastructure is provided in accordance with the requirement of Irish Water and as part of new development proposals. IU2. Support the sustainable and efficient use of existing capacity in water services in the planning of new development and compliance with the European Union (Drinking Water) Regulations Drinking Water Regulations 2014 (as amended) IU3. Require that all development proposals demonstrate that appropriate Sustainable Urban Drainage Systems (SuDS) are examined and were feasible provided; IU5. Promote and encourage the use of renewable energy technologies in residential, commercial and community developments. IU09.1 Support and work in co-operation with Irish Water to up-grade the public waste water treatment plant in the town.	 Programmed delivery of Irish Water infrastructure in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan Proportion of population within who report regular cycling / walking to school and work above 2016 CSO figures

²⁰ Flood Risk Assessments will be required, as appropriate, in areas identified to be of risk of flooding. CAAS for Tipperary County Council

Appendix II: Non-Technical Summary

Торіс	Recommendations integrated into the Plan, included in:	Indicators for Monitoring
Cultural	Strategic Aim 5: Natural and Built Heritage - To safeguard, showcase and support the sustainable development of the natural and built heritage of the town; enhancing amenity	 Percentage of entries to the Record of
Heritage	and providing a high quality environment for locals, visitors and future generations.	Monuments and Places, and the context
	 Chapter 4: Town Centre: Strategic Aim: To facilitate the development of the town centre as a place to live, work, visit and enjoy by harnessing the rich architectural heritage of the town, enhancing the quality of the environment and facilitating high quality new development. TC4. Ensure the enhancement and protection of building and streetscapes within the ACA. In the assessment of development proposals, the Council will have regard to: a) The impact of the proposed development on the character and appearance of the ACA in terms of compatibility of layout, urban grain, design, colour and finishes, massing of built form & architecture; b) The impact of the proposed development on the existing amenities, character and heritage of these areas; and, c) The need to retain important architectural and townscape elements such as shopfronts, sash windows, gutters and down pipes, decorative plasterwork, etc TCO4.2 Prepare a plan for the improvement of the public realm in Cahir, including proposals for redesign of the square, improving the pedestrian environment for residents and visitors, and traffic management in the town TCO4.4 Prepare an Architectural Conservation Area Character Statement for the Town Centre to support landowners and community in the protection and enhancement of properties. TCO4.7 Work in partnership with community groups in the development of regeneration initiatives and public realm enhancement projects and to seek funding for projects as 	 these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan
	opportunities arise. TCO4.8 Support the provision of cycle parking facilities and electric vehicle charging points in the town centre subject to ensuring traffic and pedestrian safety. NBH3. Ensure the setting and character of Cahir Castle safeguarded and enhanced in the assessment of new development proposals.	
Landscape	Strategic Aim 5: Natural and Built Heritage - To safeguard, showcase and support the sustainable development of the natural and built heritage of the town; enhancing amenity and providing a high quality environment for locals, visitors and future generations. NBH3. Ensure the setting and character of Cahir Castle safeguarded and enhanced in the assessment of new development proposals. NBH4. Safeguard sites, features and objects of archaeological interest (in situ where practicable or as a minimum, preservation by record) included in the Record of Monuments and Places and sites. NBH5. Require, where the presence of non-native species is identified at the site of proposed development, new development to detail how invasive species will be managed and controlled.	 Number of developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan