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7.3.6.3	<i>'Do Nothing' Scenario</i>
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7.3.8	<i>Monitoring</i>
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**Hydrogeology and Hydrology****8.0 Introduction****8.1 St. James's Hospital**

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- 8.1.2 Methodology
  - 8.1.2.1 Guidelines
  - 8.1.2.2 Approach
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- 8.1.3 Receiving Environment
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  - 8.1.3.3 Flood Risk
  - 8.1.3.4 Local Hydrology, Current Drainage and CSOs
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  - 8.1.5.3 'Do Nothing' Scenario
- 8.1.6 Ameliorative, Remedial or Reductive Measure
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- 8.1.7 Predicted Impact of the Proposed Development
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- 8.1.8 Monitoring
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- 8.1.10 References and Bibliography

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- 8.2.2 Methodology
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- 8.3.1 Introduction
- 8.3.2 Methodology
- 8.3.3 Receiving Environment
  - 8.3.3.1 Hydrological Setting
  - 8.3.3.2 Hydrogeological Setting
- 8.3.4 Characteristics of the Proposed Development
- 8.3.5 Potential Impact of the Proposed Development
  - 8.3.5.1 Construction Phase
  - 8.3.5.2 Operational Phase
  - 8.3.5.3 'Do Nothing' Scenario
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- 8.3.6.1 Construction Phase
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- 8.3.7 *Predicted Impact of Proposed Development*
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## 9 **Flora and Fauna**

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#### 9.1 **St. James's Hospital, including Davitt Road Construction Compound site**

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- 9.1.2 *Methodology*
  - 9.1.2.1 *Guidelines, Legislation, policies and plans*
  - 9.1.2.2 *Desk Study*
  - 9.1.2.3 *Field Study*
  - 9.1.2.4 *Consultation*
  - 9.1.2.5 *Evaluation of ecological features and impact assessment methodology*
- 9.1.3 *Receiving Environment*
  - 9.1.3.1 *Study area*
  - 9.1.3.2 *General description of the receiving environment*
  - 9.1.3.3 *Designated conservation areas*
  - 9.1.3.4 *Rare and protected species*
  - 9.1.3.5 *Ecological sites and habitats*
  - 9.1.3.6 *Overall evaluation of the proposed development site*
  - 9.1.3.7 *Key Ecological Receptors*
- 9.1.4 *Characteristics of the Proposed Development*
- 9.1.5 *Potential Impacts of the Proposed Development*
  - 9.1.5.1 *Construction Phase – St. James's Hospital including the Children's Research and Innovation Centre and Davitt Road Compound Site.*
  - 9.1.5.2 *Operational Phase – St. James's Hospital including the Children's Research and Innovation Centre and Davitt Road Compound Site.*
  - 9.1.5.3 *'Do Nothing' Scenario*
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- 9.1.6 *Ameliorative, Remedial or Reductive Measures*
  - 9.1.6.1 *Construction Phase*
  - 9.1.6.2 *Operational Phase*
- 9.1.7 *Predicted Impact of Proposed Development*
  - 9.1.7.1 *Construction Phase*
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- 9.1.8 *Monitoring*
- 9.1.9 *Reinstatement*

#### 9.2 **Tallaght Hospital**

- 9.2.1 *Introduction*
- 9.2.2 *Methodology*
  - 9.2.2.1 *Guidelines, Legislation, policies and plans*
  - 9.2.2.2 *Desk Study*
  - 9.2.2.3 *Field Study*
  - 9.2.2.4 *Consultation*
  - 9.2.2.5 *Evaluation of ecological features and impact assessment methodology*
  - 9.2.2.6 *Difficulties encountered*
- 9.2.3 *Receiving Environment*
  - 9.2.3.1 *Study Area*
  - 9.2.3.2 *General description of the receiving environment*
  - 9.2.3.3 *Designated conservation areas*
  - 9.2.3.4 *Rare and Protected species*
  - 9.2.3.5 *Ecological sites and habitats*
  - 9.2.3.6 *Overall evaluation of the proposed development site*
  - 9.2.3.7 *Key Ecological Receptors*
- 9.2.4 *Characteristics of the Proposed Development*
- 9.2.5 *Potential Impact of the Proposed Development*
  - 9.2.5.1 *Construction Phase*
  - 9.2.5.2 *Operational Phase*
  - 9.2.5.3 *'Do Nothing' Scenario*



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	9.2.5.4	Summary of predicted impacts
9.2.6		Ameliorative, Remedial or Reductive Measures
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	9.3.3.1	Study Area
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	9.3.3.3	Designated conservation areas
	9.3.3.4	Rare and Protected species
	9.3.3.5	Ecological sites and habitats
	9.3.3.6	Overall evaluation of the proposed development site
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	9.3.5.1	Construction Phase
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	9.3.6.1	Construction Phase
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9.3.7		Predicted Impact of Proposal
	9.3.7.1	Construction Phase
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	9.3.9	Reinstatement

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<b>10.1</b>		<b>St. James's Hospital Campus</b>
	10.1.1	Introduction
	10.1.2	Methodology
	10.1.3	Receiving Environment
	10.1.4	Characteristics of the Proposed Development
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	10.1.4.2	Operational Phase
10.1.5		Potential Impact of the Proposed Development
	10.1.5.1	Construction Phase
	10.1.5.2	Operational Phase
	10.1.5.3	'Do Nothing' Scenario
10.1.6		Ameliorative, Remedial or Reductive Measures
	10.1.6.1	Construction Phase
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	10.1.6.3	'Do Nothing' Scenario
10.1.7		Predicted Impact of the Proposed Development
	10.1.7.1	Construction Phase
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10.1.8		Monitoring
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- 10.2 Tallaght Hospital**
  - 10.2.1 Introduction
  - 10.2.2 Methodology
  - 10.2.3 Receiving Environment
  - 10.2.4 Characteristics of the Proposed Development
    - 10.2.4.1 Construction Phase
    - 10.2.4.2 Operational Phase
  - 10.2.5 Potential Impact of the Proposed Development
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    - 10.2.5.3 'Do Nothing' Scenario
  - 10.2.6 Ameliorative, Remedial or Reductive Measures
    - 10.2.6.1 Construction Phase
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    - 10.2.6.3 'Do Nothing' Scenario
  - 10.2.7 Predicted Impact of the Proposed Development
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    - 10.2.7.2 Operational Phase
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- 10.3 Connolly Hospital**
  - 10.3.1 Introduction
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  - 10.3.4 Characteristics of the Proposed Development
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  - 10.3.5 Potential Impact of the Proposed Development
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    - 10.3.5.2 Operational Phase
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  - 10.3.7 Predicted Impact of the Proposed Development
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- 11.0 Introduction**
  - 11.0.1 Fundamentals of Acoustics
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- 11.1 St. James's Hospital**
  - 11.1.1 Introduction
  - 11.1.2 Methodology
  - 11.1.3 Receiving Environment
    - 11.1.3.1 External Survey
    - 11.1.3.2 Internal Survey
    - 11.1.3.3 Davitt Road Survey
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  - 11.1.6 Ameliorative, Remedial or Reductive Measures
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11.1.8		<i>Monitoring</i>
11.1.9		<i>Reinstatement</i>
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	11.2.2	<i>Methodology</i>
	11.2.3	<i>Receiving Environment</i>
	11.2.3.1	<i>Survey Locations</i>
	11.2.3.2	<i>Survey Periods</i>
	11.2.3.3	<i>Personnel &amp; Instrumentation</i>
	11.2.3.4	<i>Results &amp; Discussion</i>
11.2.4		<i>Characteristics of the Proposed Development</i>
11.2.5		<i>Potential Impact of the Proposed Development</i>
	11.2.5.1	<i>Construction Phase</i>
	11.2.5.2	<i>Operational Phase</i>
	11.2.5.3	<i>'Do Nothing' Scenario</i>
11.2.6		<i>Ameliorative, Remedial or Reductive Measures</i>
	11.2.6.1	<i>Construction Phase</i>
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	11.2.6.3	<i>'Do Nothing' Scenario</i>
11.2.7		<i>Predicted Impact of Proposed Development</i>
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<b>11.3</b>		<b>Connolly Hospital</b>
	11.3.1	<i>Introduction</i>
	11.3.2	<i>Methodology</i>
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	11.3.3.3	<i>Personnel &amp; Instrumentation</i>
	11.3.3.4	<i>Results &amp; Discussion</i>
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	11.3.5.1	<i>Construction Phase</i>
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	11.3.5.3	<i>'Do Nothing' Scenario</i>
11.3.6		<i>Ameliorative, Remedial or Reductive Measures</i>
	11.3.6.1	<i>Construction Phase</i>
	11.3.6.2	<i>Operational Phase</i>
	11.3.6.3	<i>'Do Nothing' Scenario</i>
11.3.7		<i>Predicted Impact of Proposed Development</i>
	11.3.7.1	<i>Construction Phase</i>
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	11.3.7.3	<i>'Do Nothing' Scenario</i>
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**Air Quality and Climate****12.0 Introduction****12.1 St. James's Hospital**

## 12.1.1 Introduction

## 12.1.2 Methodology

## 12.1.2.1 Ambient Air Quality Standards

## 12.1.2.2 Climate Agreements

## 12.1.2.3 Methodology

## 12.1.2.4 Receiving Environment

## 12.1.2.5 Trends in Air Quality

## 12.1.2.6 Baseline Conditions – Air Quality

## 12.1.2.7 Baseline Conditions – Climate

## 12.1.3 Receiving Environment

## 12.1.4 Characteristics of the Proposed Development

## 12.1.5 Potential Impact of the Proposed Development

## 12.1.5.1 Construction Phase

## 12.1.5.2 Operational Phase

## 12.1.6 Ameliorative, Remedial or Reductive Measures

## 12.1.6.1 Construction Phase

## 12.1.6.2 Operational Phase

## 12.1.6.3 'Do Nothing' Scenario

## 12.1.7 Predicted Impact of Proposed Development

## 12.1.7.1 Construction Phase

## 12.1.7.2 Operational Phase

## 12.1.7.3 'Do Nothing' Scenario

## 12.1.7.4 Emissions Due to Energy Requirements of Site

## 12.1.8 Monitoring

## 12.1.9 Reinstatement

**12.2 Tallaght Hospital**

## 12.2.1 Introduction

## 12.2.2 Methodology

## 12.2.3 Receiving Environment

## 12.2.4 Characteristics of the Proposed Development

## 12.2.5 Potential Impact of the Proposed Development

## 12.2.5.1 Construction Phase

## 12.2.5.2 Operational Phase

## 12.2.6 Ameliorative, Remedial or Reductive Measures

## 12.2.6.1 Construction Phase

## 12.2.6.2 Operational Phase

## 12.2.6.3 'Do Nothing' Scenario

## 12.2.7 Predicted Impact of Proposed Development

## 12.2.7.1 Construction Phase

## 12.2.7.2 Operational Phase

## 12.2.7.3 'Do Nothing' Scenario

## 12.2.8 Monitoring

## 12.2.9 Reinstatement

**12.3 Connolly Hospital**

## 12.3.1 Introduction

## 12.3.2 Methodology

## 12.3.3 Receiving Environment

## 12.3.4 Characteristics of the Proposed Development

## 12.3.5 Potential Impact of the Proposed Development

## 12.3.5.1 Construction Phase

## 12.3.5.2 Operational Phase

## 12.3.6 Ameliorative, Remedial or Reductive Measures

## 12.3.6.1 Construction Phase

## 12.3.6.2 Operational Phase

## 12.3.6.3 'Do Nothing' Scenario

## 12.3.7 Predicted Impact of Proposed Development

## 12.3.7.1 Construction Phase

## 12.3.7.2 Operational Phase

## 12.3.7.3 'Do Nothing' Scenario

## 12.3.8 Monitoring

## 12.3.9 Reinstatement



## 13 **Micro Climate**

### 13.0 **Introduction**

#### 13.1 **St. James's Hospital Campus**

- 13.1.1 *Sunlight, Daylight and Overshadowing*
  - 13.1.1.1 *Introduction*
  - 13.1.1.2 *Methodology*
  - 13.1.1.3 *Receiving Environment*
  - 13.1.1.4 *Characteristics of the Proposed Development*
  - 13.1.1.5 *Potential Impact of the Proposed Development*
  - 13.1.1.6 *Ameliorative, Remedial or Reductive Measures*
  - 13.1.1.7 *Predicted Impact of Proposed Development*
  - 13.1.1.8 *Shadow Plans for 21<sup>st</sup> March / September*
  - 13.1.1.8 *Monitoring*
  - 13.1.1.9 *Reinstatement*
- 13.1.2 *Wind*
  - 13.1.2.1 *Introduction*
  - 13.1.2.2 *Methodology*
  - 13.1.2.3 *Receiving Environment*
  - 13.1.2.4 *Characteristics of the Proposed Development*
  - 13.1.2.5 *Potential Impact of the Proposed Development*
  - 13.1.2.6 *Ameliorative, Remedial or Reductive Measures (mitigation)*
  - 13.1.2.7 *Predicted Impact of Proposed Development*
  - 13.1.1.8 *Monitoring*
  - 13.1.1.9 *Reinstatement*

#### 13.2 **Tallaght Hospital**

- 13.2.1 *Sunlight, Daylight and Overshadowing*
  - 13.2.1.1 *Introduction*
  - 13.2.1.2 *Methodology*
  - 13.2.1.3 *Receiving Environment*
  - 13.2.1.4 *Characteristics of the Proposed Development*
  - 13.2.1.5 *Potential Impact of the Proposed Development*
  - 13.2.1.6 *Ameliorative, Remedial or Reductive Measures*
  - 13.2.1.7 *Predicted Impact of Proposed Development*
  - 13.2.1.8 *Monitoring*
  - 13.2.1.9 *Reinstatement*
- 13.2.2 *Wind*
  - 13.2.2.1 *Introduction*
  - 13.2.2.2 *Methodology*
  - 13.2.2.3 *Receiving Environment*
  - 13.2.2.4 *Characteristics of the Proposed Development*
  - 13.2.2.5 *Potential Impact of the Proposed Development*
  - 13.2.2.6 *Ameliorative, Remedial or Reductive Measures*
  - 13.2.2.7 *Predicted Impact of Proposed Development*
  - 13.2.2.8 *Monitoring*
  - 13.2.2.9 *Reinstatement*

#### 13.3 **Connolly Hospital**

- 13.3.1 *Sunlight, Daylight and Overshadowing*
  - 13.3.1.1 *Introduction*
  - 13.3.1.2 *Methodology*
  - 13.3.1.3 *Receiving Environment*
  - 13.3.1.4 *Characteristics of the Proposed Development*
  - 13.3.1.5 *Potential Impact of the Proposed Development*
  - 13.3.1.6 *Ameliorative, Remedial or Reductive Measures*
  - 13.3.1.7 *Predicted Impact of Proposed Development*
  - 13.3.1.8 *Monitoring*
  - 13.3.1.9 *Reinstatement*
- 13.3.2 *Wind*
  - 13.3.2.1 *Introduction*
  - 13.3.2.2 *Methodology*
  - 13.3.2.3 *Receiving Environment*
  - 13.3.2.4 *Characteristics of the Proposed Development*
  - 13.3.2.5 *Potential Impact of the Proposed Development*
  - 13.3.2.6 *Ameliorative, Remedial or Reductive Measures*
  - 13.3.2.7 *Predicted Impact of Proposed Development*
  - 13.3.2.8 *Monitoring*
  - 13.3.2.9 *Reinstatement*

## 14 Landscape and Visual Impact Assessment

### 14.0 Introduction

### 14.1 St. James's Hospital

- 14.1.1 Introduction
  - 14.1.2 Methodology
    - 14.1.2.1 Guidelines, legislation, policies and plans
    - 14.1.2.2 Assessment Approach and Significance Criteria
    - 14.1.2.3 Photomontages
  - 14.1.3 Receiving Environment
    - 14.1.3.1 Study area
    - 14.1.3.2 General description of the receiving environment
    - 14.1.3.3 St James's Hospital – Site for new children's hospital and Family Accommodation Unit
    - 14.1.3.4 St. James's Hospital – Site for Children's Research and Innovation Centre
    - 14.1.3.5 St. James's Hospital – Davitt Road Construction Compound site
  - 14.1.4 Characteristics of the Proposed Development
    - 14.1.4.1 Characteristics of the Proposed Development – new children's hospital and Family Accommodation Unit.
    - 14.1.4.2 Characteristics of the Proposed Development – Children's Research and Innovation Centre
    - 14.1.4.3 Characteristics of the Proposed Development – Davitt Road Construction Compound
  - 14.1.5 Potential Impact of the Proposed Development
    - 14.1.5.1 Construction Phase – St. James's Hospital: new children's hospital, including associated Family Accommodation Unit, and Children's Research and Innovation Centre
    - 14.1.5.2 Operational Phase – St. James's Hospital Campus: new children's hospital, including associated Family Accommodation Unit, and Children's Research and Innovation Centre
    - 14.1.5.3 'Do Nothing' Scenario
    - 14.1.5.4 Construction Phase – Davitt Road Construction Compound site
    - 14.1.5.5 Operational Phase – Davitt Road Construction Compound site
    - 14.1.5.6 'Do Nothing' Scenario
  - 14.1.6 Ameliorative, Remedial or Reductive Measures
    - 14.1.6.1 Construction Phase – St. James's Hospital: new children's hospital and associated Family Accommodation Unit
    - 14.1.6.2 Operational Phase – St. James's Hospital: new children's hospital and associated Family Accommodation Unit
    - 14.1.6.3 Construction Phase – St. James's Hospital: Children's Research and Innovation Centre
    - 14.1.6.4 Operational Phase – St. James's Hospital: Children's Research and Innovation Centre
    - 14.1.6.5 Construction Phase – St. James's Hospital: Davitt Road Construction Compound
    - 14.1.6.6 Operational Phase – St. James's Hospital: Davitt Road Construction Compound
    - 14.1.6.7 'Do Nothing' Scenario
  - 14.1.7 Predicted Impact of Proposed Development
    - 14.1.7.1 Construction Phase – St. James's Hospital: new children's hospital and associated Family Accommodation Unit
    - 14.1.7.2 Operational Phase – St. James's Hospital: new children's hospital and associated Family Accommodation Unit
    - 14.1.7.3 Construction Phase – St. James's Hospital: Children's Research and Innovation Centre
    - 14.1.7.4 Operational Phase – St. James's Hospital: Children's Research and Innovation Centre
    - 14.1.7.5 Construction Phase – St. James's Hospital: Davitt Road Construction Compound
    - 14.1.7.6 Operational Phase – St. James's Hospital: Davitt Road Construction Compound
    - 14.1.7.7 'Do Nothing' Scenario
  - 14.1.8 Monitoring
    - 14.1.8.1 Monitoring – St. James's Hospital Campus
    - 14.1.8.2 Monitoring – Davitt Road Construction Compound Site
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- ### 14.2 Tallaght Hospital
- 14.2.1 Introduction
  - 14.2.2 Methodology



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