

Strategic Biodiversity Contributions

Feasibility Analysis

NSW Department of
Planning and Environment

August 2023

Document Control

Project Director: Esther Cheong
Email: esther.cheong@atlaseconomics.com.au
Telephone: +61 1300 149 151

Job ID: J323
Job Name: SBC Feasibility Analysis

Client: Department of Planning and Environment
Client Contact: Steve Hartley

Document Name: Strategic Biodiversity Contributions Feasibility Analysis final
Last Saved: 17/08/2023 10:43 AM

| Version | Date | Prepared by | Reviewed by |
|---------|----------------|-------------|---------------|
| Draft | 10 August 2023 | LC, EC | Esther Cheong |
| Final | 14 August 2023 | LC, EC | Esther Cheong |

Liability limited by a scheme approved under Professional Standards Legislation

All care and diligence has been exercised in the preparation of this report. Forecasts or projections developed as part of the analysis are based on adopted assumptions and can be affected by unforeseen variables. Consequently, Atlas Urban Economics Pty Ltd does not warrant that a particular outcome will result and accepts no responsibility for any loss or damage that may be suffered as a result of reliance on this information

Executive Summary

BACKGROUND

The Cumberland Plain Conservation Plan (CPCP) protects large areas of regionally important habitat while enabling urban development. The CPCP was finalised with NSW approvals in place in August 2022.

The CPCP provides biodiversity approvals to enable urban development while protecting the region's native plants and animals. The CPCP is the first strategic biodiversity certification under the *NSW Biodiversity Conservation Act 2016*.

The CPCP identifies several categories of land, with different planning arrangements for each:

- **Certified urban capable land** is where future development is likely to occur. Landowners will not need further biodiversity approvals before developing their land (other than planning and environmental approvals required).
- **Avoided land** has important biodiversity values.
- **Excluded land** is generally land that has an existing development approval or is under a different pathway for biodiversity approvals, and therefore outside the scope of the CPCP.
- **Strategic conservation area** represents areas with strategic biodiversity value that include threatened ecological communities and species and have important connectivity across the landscape and ecological restoration potential.

The CPCP will protect biodiversity by purchasing land to establish new national parks/ reserves and biodiversity stewardship sites, constructing crossings for koala movement and restoring habitats and implementing various management strategies.

The CPCP biodiversity offsetting program will be funded through developer contributions on certified urban capable land:

- Greater Penrith to Eastern Creek Area (GPEC).
- Greater Macarthur Growth Area (GMac).
- Wilton Growth Area.
- Western Sydney Aerotropolis.

Housing and Productivity Contributions

The *Environmental Planning and Assessment Amendment (Housing and Productivity Contributions) Bill 2023* passed both Houses of Parliament in June 2023. Housing and Productivity Contributions (HPC) will be phased-in from 1 October 2023.

Two other charges apply in specific areas:

- A transport project component (TPC) which is imposed on land identified in the Ministerial planning order as an area that benefits, or will benefit, from the provision of specified transport infrastructure.
- A **strategic biodiversity component (SBC)** which is imposed on development on biodiversity certified land.

SBC Contributions

The NSW Department of Planning and Environment (DPE) is implementing biodiversity contributions and will set SBC rates to apply to development on certified urban capable land in the CPCP area. The SBC will apply across all certified land commencing 1 October 2023 except in the Western Sydney Aerotropolis which will transition from 1 July 2026.

A set of contribution rates has been produced to support delivery and cost recovery of the CPCP's conservation program:

- \$10,000 per dwelling (residential).
- \$60 per sqm new GFA (commercial).
- \$30 per sqm new GFA (industrial).

Atlas Economics (Atlas) is engaged by DPE to carry out a Feasibility Analysis (**the Study**) to assist DPE understand the implications of the proposed SBC rates on development feasibility in the CPCP's certified urban capable land.

SCOPE OF FEASIBILITY ANALYSIS

The overarching objective of the Study is to identify the implications of the proposed SBC rates on development feasibility in the CPCP's certified urban capable land (**the Study Area**). The Study Area is comprised of:

- Land that is already zoned for urban uses; and
- Land that is rural, not yet zoned for urban development.

The viability of any contributions or charge in the Precinct depends on the base feasibility of development. If development is not viable in the first instance, that development will not occur and the issue of fees and charges is academic.

Tested Scenarios

The Study develops a series of notional land use scenarios to test the impact of the proposed SBC contributions in locations within the Study Area. The Study Area excludes the Western Sydney Aerotropolis which will be subject to longer transition.

Table ES-1 describes a selection of locations (suburbs) in the Study Area, their existing land use zones and land use scenarios assumed for the purposes of testing the feasibility impact of the proposed SBC rates.

Table ES-1: Land Use Scenarios in Study Area

| Suburb | Site Area | Zone | Land Use | Notional Development and Yields | Density |
|---------------|-----------|------|-------------|--|-----------|
| Glenmore Park | 5,100 | RU2 | Residential | 22 dwellings (terraces) | 35dw/ ha |
| Mulgoa | 23,000 | RU2 | Residential | 58 dwellings (detached, semi-detached, terraces) | 25dw/ ha |
| Rooty Hill | 3,300 | R3 | Residential | 60 dwellings (apartments) | 4 storeys |
| Penrith | 9,100 | E4 | Industrial | Light industrial | 2 storeys |
| Menangle Park | 350,000 | RU2 | Mixed use | 700 dwellings (detached, semi-detached), 2,000sqm commercial | 20dw/ ha |
| Gilead | 700,000 | RU2 | Mixed use | 1,750 dwellings (detached, semi-detached, terraces), 5,000sqm retail/ commercial | 25dw/ ha |
| Appin | 330,000 | RU2 | Residential | 1,155 dwellings (detached, semi-detached, terraces, units) | 35dw/ ha |
| Glen Alpine | 20,000 | C4 | Residential | 70 dwellings (detached, semi-detached, terraces, units) | 35dw/ ha |
| Wilton | 100,000 | RU2 | Residential | 200 dwellings (detached, semi-detached) | 20dw/ ha |

Source: Atlas

Contribution and Timing Assumptions

The following development contributions and other statutory charges are assumed as a 'given'.

- Assumed s7.11 or s7.12 contributions plans (or other precinct-specific contributions plan)*.
- Housing and Productivity Contributions (as adopted).

*The Study adopts a reference s7.11 contribution rate of \$80,000 per dwelling in areas not yet rezoned. For zoned land, the applicable s7.11 or s7.12 contribution rates are assumed.

The Study tests the impact of the proposed SBC charge in two scenarios:

1. The proposed SBC (only) as an additional contribution.
2. The proposed SBC *and* proposed DSP infrastructure as additional contributions.

The new contributions are tested in the order of assumed implementation timeframes in **Table ES-2**.

Table ES-2: Assumed Phasing-in Timeline

| Charge | 1 Oct 2023 | 1 July 2024 | 1 July 2025 | 1 July 2026 |
|---|------------|-------------|-------------|-------------|
| Local infrastructure contributions (s7.11, s7.12) | 100% | 100% | 100% | 100% |
| Housing and Productivity contributions (HPC) | 50% | 75% | 100% | 100% |
| Proposed Strategic biodiversity component (SBC) | 50% | 75% | 100% | 100% |
| Proposed DSP charges | | 25% | 50% | 100% |

KEY FINDINGS

Impact to Development Feasibility

The SBC rates of \$10,000 per dwelling and \$60/sqm of retail/ commercial GFA and \$30/sqm of industrial GFA are proposed to be introduced over a three-year period, commencing at 50% in Year 1. As a proportion of overall contributions liability the SBC is relatively modest, particularly as they are gradually implemented.

The Study finds that if land is *already* purchased and if:

- The SBC is introduced (in the absence of the proposed DSP charges) - the impact to development feasibility is generally tolerated, particularly as it is phased-in over three years.
- The SBC is introduced concurrently with the proposed DSP charges - unless the DSP rates are low (e.g. \$7,400/ ET in Glen Alpine), development feasibility is adversely impacted.

In circumstances where land has *not yet* been purchased and if developers pay a price for land that is reflective of the SBC contribution obligations, development feasibility could conceivably not be affected if an appropriate price for land is paid.

The Study highlights that the feasibility testing examines the 'worst case' where land has already been purchased for development and the price paid did not contemplate the new SBC contributions.

Planning Status of Land

Land that is still rural (with no precinct planning) has the best tolerance to new charges. In contrast, land already zoned urban (and purchased by developers) has the least tolerance to new changes as land values already reflect urban potential.

Gradual introduction provides notice to the market so that developers can factor-into their due diligence investigations/ negotiations and pay an appropriate price. However, in areas that are already zoned (or advanced in precinct planning), land can already be purchased and take more than three years to be 100% delivered. In these circumstances, impact to feasibility will be inevitable. The gradual introduction of the SBC rates over three years will assist to mitigate this impact.

Special Infrastructure Contributions

At present, contributions for biodiversity offsets under the CPCP are collected through Special Infrastructure Contributions (SIC) or through state voluntary planning agreements. Several draft and implemented SICs apply within the Study Area, all of which include a component to cover the costs of delivering the CPCP's biodiversity offsetting program.

The HPC and proposed SBC rates will replace draft SICs from 1 October 2023. A comparison of the draft SICs against the sum of HPC and SBC rates when fully implemented shows that in all cases the draft SIC rates are significantly higher.

Biodiversity Offsets

The Study notes that in the absence of the CPCP biodiversity certification, landowners would need to secure biodiversity offsets or pursue standalone certification.

Generally, development of land that has biodiversity values and is not certified will need to be accompanied by offsets.

- The *Biodiversity Conservation Act 2016* applies where land is not certified for development. A BDAR (biodiversity development assessment report) is required to demonstrate how impacts from development will be avoided, minimised and offset. Biodiversity offsets could be secured or a Biodiversity Stewardship Agreement where land is retained by the landowner who commits to an annual spend for preserving and conserving vegetation.
- Standalone certification could be pursued to secure conservation outcomes.

There are State and Commonwealth requirements to be satisfied, with the cost of assessment, conservation commitments, offset credits, etc. well in excess of the proposed SBC contributions at \$10,000 per dwelling.

Compared to arrangements under the current environment, the proposed SBC rates represent a cost avoided. The Study finds the rates can be gradually introduced to mitigate impact of feasibility and in the 'best case' provide a signal to the market when negotiating site purchase. If the SBC is implemented together with the proposed DSP charges, the cumulative impact to feasibility is significant.

Glossary of Terms and Abbreviations

Terms

| | |
|----------------------|---|
| Economic Price/ rent | The price or rent necessary to provide an adequate return on development |
| Greater Sydney | Greater Sydney Region as defined by the Australian Bureau of Statistics |
| Greenfield Area | An undeveloped area typically used for agricultural or non-urban uses. Greenfield areas are typically not serviced by essential infrastructure such as water, sewerage, gas and electricity |
| Growth Area | An area earmarked for future housing development and formally defined under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 |
| Infill Area | An existing urban area with development opportunities within existing lot patterns |
| Planning Uplift | Increase in development capacity following a rezoning |

Abbreviations

| | |
|-------|--|
| DPE | Department of Planning and Environment |
| DSP | Development servicing plan |
| ET | Equivalent tenement |
| GFA | Gross Floor Area |
| GMac | Greater Macarthur Growth Area |
| GPEC | Greater Penrith to Eastern Creek |
| HPC | Housing and Productivity contributions |
| IRR | Internal Rate of Return |
| IPART | Independent Pricing and Regulatory Tribunal |
| LEP | Local Environmental Plan |
| LGA | Local Government Area |
| NDA | Net Developable Area |
| PPI | Producer Price Index |
| RIC | Regional Infrastructure Contributions (no longer used) |
| SBC | Strategic biodiversity component |
| SIC | Special Infrastructure Contributions |
| TPC | Transport project component |

Table of Contents

| | |
|--|----|
| Executive Summary | i |
| Glossary of Terms and Abbreviations | iv |
| Table of Contents..... | v |
| 1. Introduction..... | 1 |
| 1.1 Background..... | 1 |
| 1.2 Scope of Feasibility Analysis..... | 3 |
| 1.3 Methodology, Assumptions and Limitations | 3 |
| 2. Parameters of the Analysis..... | 5 |
| 2.1 Cumberland Plain Conservation Plan | 5 |
| 2.2 Scenarios Tested..... | 6 |
| 2.3 Contributions and Timing Assumptions..... | 7 |
| 2.4 Measure of Feasibility Impact | 9 |
| 3. Feasibility Analysis..... | 10 |
| 3.1 Contribution Impact Testing..... | 10 |
| 3.2 Observations of Impact | 15 |
| 4. Summary of Findings | 17 |
| 4.1 Comparison against Business-as-usual | 17 |
| 4.2 Impact of Strategic Biodiversity Contributions on Feasibility..... | 17 |
| References | 18 |
| | |
| Schedules | |
| 1 Feasibility Testing Assumptions..... | 20 |

1. Introduction

1.1 Background

The *Environmental Planning and Assessment Amendment (Housing and Productivity Contributions) Bill 2023* passed both Houses of Parliament on 28 June 2023. Housing and Productivity Contributions (HPC) will be gradually phased-in from 1 October 2023. The object of the HPC is to facilitate the provision of regional infrastructure, which is defined to mean:

- Public amenities or public services including infrastructure that enhances public open space or the public domain.
- Affordable housing.
- Public housing within the meaning of the *Housing Act 2001*.
- Transport infrastructure.
- Regional or state roads.
- Measures to conserve or enhance the natural environment.

Two other charges apply in specific areas:

- A transport project component (TPC) which is imposed on land identified in the Ministerial planning order as an area that benefits, or will benefit, from the provision of specified transport infrastructure.
- A strategic biodiversity component (SBC) which is imposed on development on biodiversity certified land.

These contributions are subject to indexation - identified in the Department of Planning and Environment (DPE)'s guide as being to the Producer Price Index (PPI). DPE's guide does not identify which PPI; though when the NSW Productivity Commissioner issued his report on the review of infrastructure contributions in NSW, he recommended that the Producer Price Index - (Road and Bridge Construction NSW) be used to ensure contribution rates remain in line with the development costs.

Strategic Biodiversity Component (SBC)

The SBC has its origins in the Productivity Commissioner's recommendation for a new category of contributions specific to biodiversity. The Productivity Commissioner noted the importance of biodiversity protection as an important environmental objective for the State, also noting that biodiversity loss is specific to particular areas and therefore was inappropriate for inclusion in regional contributions plans.

An efficient biodiversity contributions system would discourage developments in areas with higher biodiversity values and therefore the costs of the biodiversity offsets would act as a 'market signal' for high-value biodiversity areas that should be conserved.

A separate biodiversity contribution was recommended for specific places, subject to biodiversity certification, and be additional and separate to the regional contribution (now known as the HPC). A state-coordinated approach to biodiversity offsetting would avoid costs associated with individual approvals and purchases of offsets.

The HPC Bill enables a contribution component to be imposed on development on biodiversity certified land.

The HPC comes into effect from 1 October 2023 as follows:

- Initial period (1 October 2023 to June 2024) - 50% payable.
- Second year (July 2024 to June 2025) - 75% payable.
- Third year onwards (July 2025+) - 100% payable.

Cumberland Plain Conservation Plan (CPCP)

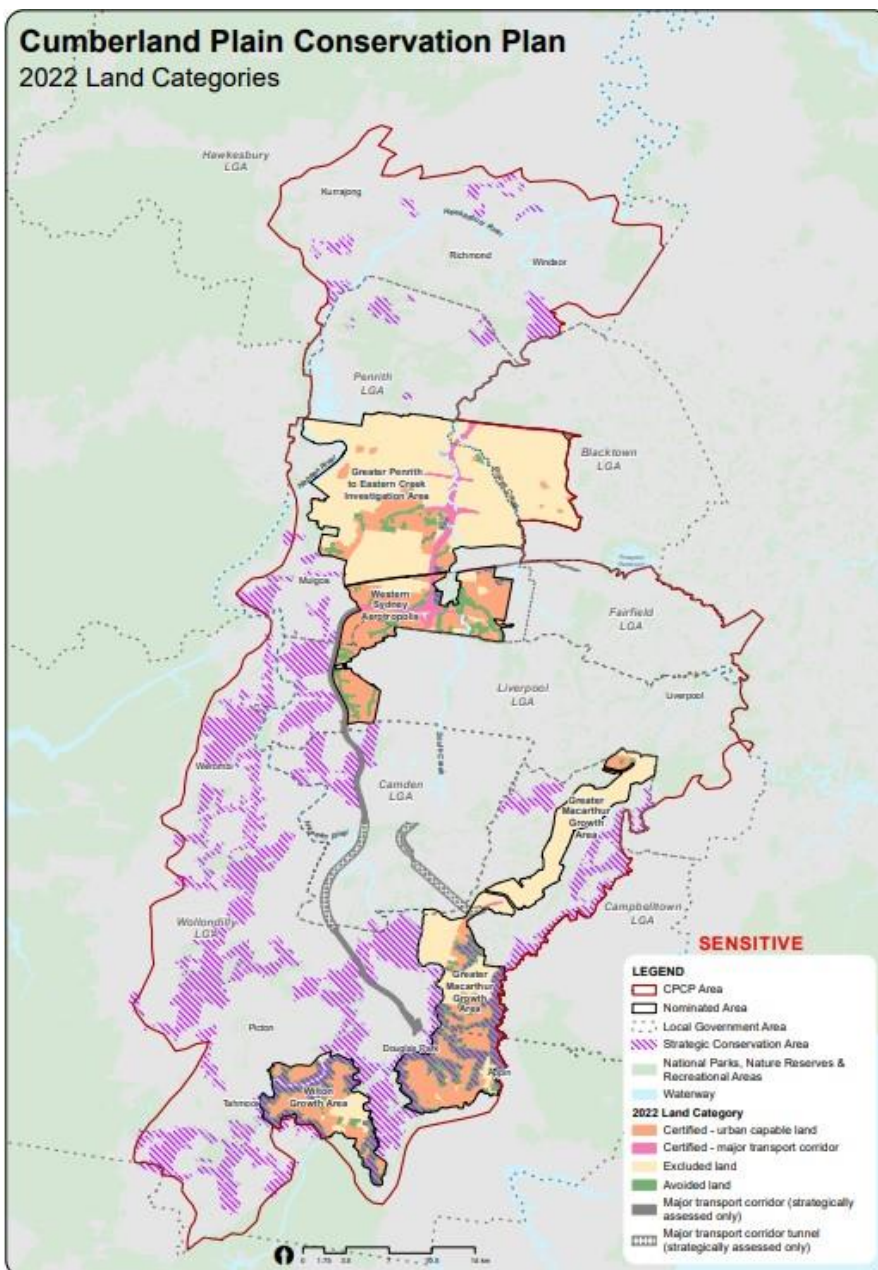
The Cumberland Plain Conservation Plan (CPCP) protects large areas of regionally important habitat while enabling urban development. The CPCP was finalised with NSW approvals in place in August 2022. Commonwealth approvals are understood to be pending.

The CPCP identifies several categories of land, with different planning arrangements for each:

- **Certified urban capable land** is where future development is likely to occur. The CPCP provides biodiversity approvals for around 11,000 hectares of land. Landowners will not need further biodiversity approvals before developing their land (other than planning and environmental approvals required under other legislation).
- **Avoided land** has important biodiversity values.
- **Excluded land** is generally land that has an existing development approval or is under a different pathway for biodiversity approvals, and therefore outside the scope of the CPCP.
- **Strategic conservation area** represents areas with strategic biodiversity value that include threatened ecological communities and species and have important connectivity across the landscape and ecological restoration potential. Their biodiversity value means there may be opportunities for landowners to set up a biodiversity stewardship agreement or sell their lands to form part of a new future reserve.

The certified urban capable land falls within the Western Sydney Aerotropolis, Greater Macarthur Growth Area, Greater Penrith to Eastern Creek Area and Wilton Growth Area. **Figure 1-1** illustrates.

Figure 1-1: Cumberland Plain Conservation Plan Land Categories



Source: DPE (2022)

1.2 Scope of Feasibility Analysis

The NSW Department of Planning and Environment (DPE) is implementing biodiversity contributions and will set SBC rates to apply to development on certified urban capable land in the CPCP.

An updated set of biodiversity contribution rates has been produced, using updated data to ensure the rates will support delivery and cost recovery of the CPCP's conservation program.

Atlas Economics (**Atlas**) is engaged by DPE to carry out a Feasibility Analysis (**the Study**) to assist DPE understand:

- The viability of the proposed SBC rates, in particular the implications for development feasibility.
- Appropriateness of the SBC rates and their implications on the feasibility of different development types.
- Considerations for phasing-in and implementation of the SBC charge.

The overarching objective of the Study is to identify the implications of the proposed SBC rates on development feasibility in the CPCP's certified urban capable land (**the Study Area**). The Study Area excludes the Western Sydney Aerotropolis as the application of the HPC and SBC rates are not envisaged to be transitioned until 1 July 2026.

The review of impact on feasibility in the Study Area is undertaken in the context of other fees and charges applicable (including local contribution rates, HPC rates and proposed water/ DSP infrastructure charges).

The Study notes that in the absence of biodiversity certification in the CPCP, development in the Study Area would require landowners to secure biodiversity offsets or pursue standalone certification.

1.3 Methodology, Assumptions and Limitations

The Study carries out contribution impact testing in areas certified to be 'urban capable' to ascertain the impact of the proposed SBC charges on feasibility.

As a basic premise, for any (additional) contributions to be viable, development without the contribution needs to be feasible in the first instance. If development is not feasible (regardless of contributions), the development will not occur. Therefore, to test the impact of the SBC charges, the analysis presumes that the development scenarios tested are feasible in the first instance without the SBC charges.

Methodology and Assumptions

The contribution impact testing is undertaken in three steps.

1. Step 1 - Identification of areas and notional development yields for testing

This step develops notional development yields which are then tested in Step 3.

2. Step 2 - Identification of fees and charges that are a 'given' (local contributions, HPC)

Step 2 identifies and develops a set of assumptions for all applicable statutory fees and charges that are payable including local contributions and the HPC.

3. Step 3 - Impact testing of additional contributions (proposed SBC)

- Step 3a tests the SBC rates (provided by DPE) to examine impact on feasibility (when included over and above the fees and charges identified in Step 2).
- Step 3b tests the SBC rates and the proposed water/ DSP infrastructure charges to examine impact on feasibility.

The HPC and SBC charges are applied in stages in line with the implementation timeframe commencing 1 October 2023. The proposed DSP charges are applied according to Sydney Water's proposed implementation timeframe commencing 1 July 2024, to be fully implemented by 1 July 2026.

The Study reiterates that if development is not feasible in the first instance (whether due to lack of market demand or planning controls that are not feasible), the issue of additional contributions (SBC) is moot.

Limitations

The Study is a generic assessment which makes observations at an aggregate level across the tested locations. The following limitations are highlighted:

- It is not possible to examine the impact of the SBC charges on every land use or subset of that land use. Notional development typologies (considered to be representative of future development activity) are nominated for the purposes of contribution impact testing. Hypothetical development yields are formulated for testing - they are notional only; they have not been urban design or engineering tested.
- Case study areas are selected for the purposes of examining the impact of the SBC rates by land use, utilising notionally assumed development typologies and yields.
- Generic feasibility testing is based on high-level revenue and cost assumptions and does not consider site-specific nuances typically considered in detailed feasibility analysis.
- A desktop appraisal of 'as is' or existing property values is carried out without the benefit of site inspections or property financial information (i.e. rental income and investment returns).

Despite the assumptions made and limitations of generic feasibility testing, the analysis is considered to be appropriate in examining the impacts of the proposed SBC charges at a strategic and generic level in the tested locations.

2. Parameters of the Analysis

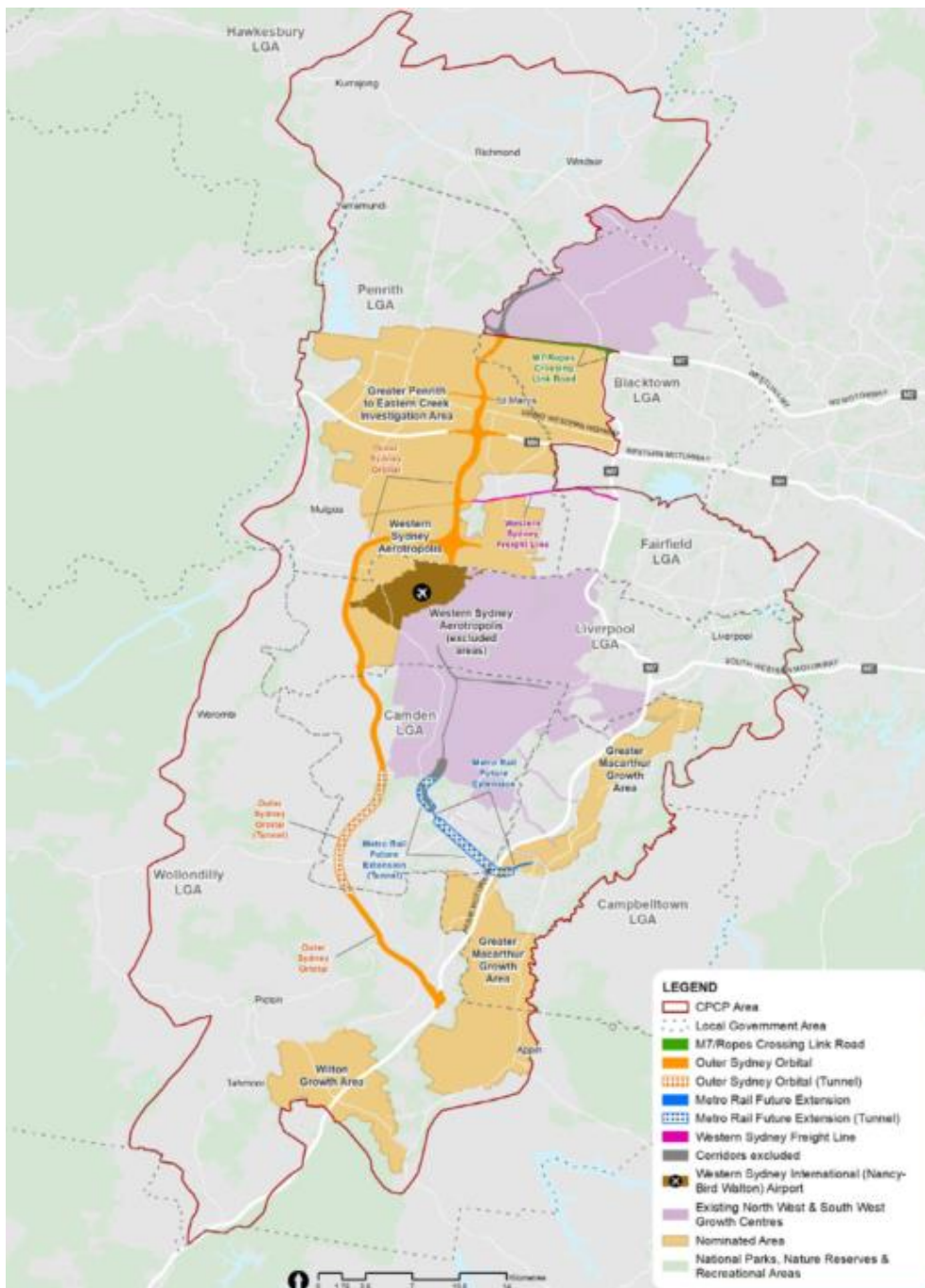
2.1 Cumberland Plain Conservation Plan

The CPCP provides biodiversity approvals to enable urban development in parts of Western Sydney while protecting the region's native plants and animals. The CPCP is the first strategic biodiversity certification to be undertaken under the NSW *Biodiversity Conservation Act 2016*.

The CPCP will protect biodiversity by purchasing land to establish new national parks/ reserves and biodiversity stewardship sites, constructing crossings for koala movement and restoring habitats and implementing various management strategies.

The cost of the CPCP's biodiversity offsetting program will be funded through developer contributions in certified urban capable areas (the Study Area) indicated in **Figure 2-1**.

Figure 2-1: CPCP Contributions Area



Source: DPE (2022)

At present, NSW Government collects contributions for biodiversity offsets under the CPCP through Special Infrastructure Contributions (SIC) or through state voluntary planning agreements. Several draft and implemented SICs apply within the Study Area, all of which include a component to cover the costs of delivering the CPCP's biodiversity offsetting program.

The HPC and proposed SBC rates will replace SICs in the Study Area from 1 October 2023 except the Western Sydney Aerotropolis SIC which will be replaced from 1 July 2026. **Table 2-1** outlines draft SICs applicable in the Study Area by their initial rate (December 2019) and indexed rate assuming indexation to CPI (June 2023).

Table 2-1: Draft SICs in the Study Area

| Growth Area | Precinct | Initial Rate (Dec 2019) | Indexed at CPI (to June 2023) |
|-------------------|--|-------------------------|-------------------------------|
| Greater Macarthur | • Greater Macarthur North | • \$39,710/ dwelling | • \$45,441/ dwelling |
| | • Greater Macarthur Central | • \$43,985/ dwelling | • \$50,333/ dwelling |
| | • Greater Macarthur South | • \$43,432/ dwelling | • \$49,700/ dwelling |
| Wilton | • Wilton town centre, Wilton North West Wilton South East Wilton, Maldon | • \$59,274/ dwelling | • \$67,828/ dwelling |

Source: DPE

Table 2-2 lists the HPC and proposed SBC contribution rates.

Table 2-2: HPC and Proposed SBC Contribution Rates

| Development Type | HPC | SBC Contribution Rate |
|--------------------|---|-----------------------|
| Residential | \$12,000 per dwelling (House) \$10,000 per dwelling (Unit) | \$10,000 per dwelling |
| Commercial/ Retail | \$30/sqm GFA | \$60 per sqm new GFA |
| Industrial | \$15/sqm GFA | \$30 per sqm new GFA |

2.2 Scenarios Tested

2.2.1 Land Use Scenarios

The Study develops a series of notional land use scenarios to test the contribution impact of the proposed SBC contributions in locations within the Study Area. The Study Area is comprised of:

- Land that is already zoned for urban uses; and
- Land that is rural, not yet zoned for urban development.

Land within the Western Sydney Aerotropolis is not subject to testing given its delayed transition from 1 July 2026.

Table 2-3 describes a selection of locations (suburbs) in the Study Area, their existing land use zones and land use scenarios assumed for the purposes of testing the feasibility impact of the proposed SBC rates.

Table 2-3: Land Use Scenarios in Study Area

| Suburb | Site Area | Zone | Land Use | Notional Development and Yields | Density |
|---------------|-----------|------|-------------|---|-----------|
| Glenmore Park | 5,100 | RU2 | Residential | 22 dwellings (terraces) | 35dw/ ha |
| Mulgoa | 23,000 | RU2 | Residential | 58 dwellings (detached, semi-detached, terraces) | 25dw/ ha |
| Rooty Hill | 3,300 | R3 | Residential | 60 dwellings (apartments) | 4 storeys |
| Penrith | 9,100 | E4 | Industrial | Light industrial | 2 storeys |
| Menangle Park | 350,000 | RU2 | Mixed use | 700 dwellings (detached, semi-detached), 2,000sqm commercial | 20dw/ ha |
| Gilead | 700,000 | RU2 | Mixed use | 1,750 dwellings (detached, semi-det, terraces), 5,000sqm commercial | 25dw/ ha |
| Appin | 330,000 | RU2 | Residential | 1,155 dwellings (detached, semi-detached, terraces, units) | 35dw/ ha |
| Glen Alpine | 20,000 | C4 | Residential | 70 dwellings (detached, semi-detached, terraces, units) | 35dw/ ha |
| Wilton | 100,000 | RU2 | Residential | 200 dwellings (detached, semi-detached) | 20dw/ ha |

Source: Atlas

Where land is zoned urban, the cost of land (to a developer) will be reflective of the existing uses and development potential. Where land is still zoned rural, the cost of land will be reflective of its likely future urban potential and the costs (including fees and charges) expected to deliver that development.

2.3 Contributions and Timing Assumptions

All new/ additional development contributions have the potential to have a cumulative impact on development feasibility. The Study makes assumptions on other contributions (other than the SBC) in examining the impact of the SBC on feasibility.

2.3.1 Contribution Assumptions

The following development contributions and other statutory charges are assumed as a 'given'.

- Assumed s7.11 or s7.12 contributions plans (or other precinct-specific contributions plan)*.
- Housing and Productivity contributions (as adopted).

*Where land is zoned rural and there is no local contribution plan in place, the Study undertook a review of contributions plans in a range of greenfield release areas. This enables the adoption of s7.11 contribution rates considered realistic.

Table 2-4: s7.11 Contribution Rates in Select Greenfield Release Areas

| Contributions Plan (council) | 3b Detached Dwelling | 2b Dwelling/ Unit | Status |
|---|----------------------|-------------------|---|
| Lowes Creek Maryland (Camden Growth Areas CP Amendment 3) | \$75,763 | \$55,417 | Council endorsed, currently capped at \$30,000. Plan undergoing IPART review. |
| Leppington (Camden Growth Areas CP) | \$90,000 | \$71,000 | IPART approved, uncapped |
| Austral Leppington North (Liverpool) | \$60,000 | \$52,000 | Undergoing IPART review |
| Riverstone Alex Avenue (Blacktown) | \$75,000 | \$52,000 | IPART approved |
| West Dapto (Wollongong) | \$59,499 | \$40,905 | IPART approved |
| Box Hill (The Hills Shire) | \$75,439 | \$39,938 | IPART approved |

Source: various

The Study adopts a reference s7.11 contribution rate of \$80,000 per dwelling in areas not yet rezoned. For zoned land, the applicable s7.11 or s7.12 contribution rates are assumed.

The Study tests the impact of the proposed SBC charge in the following scenarios:

- The proposed SBC (only) as an additional contribution.
- The proposed SBC **and** proposed DSP infrastructure as additional contributions.

The new contributions are tested in the order of assumed implementation timeframes in **Table 2-5**.

Table 2-5: Assumed Phasing-in Timeline

| Charge | Fully Implemented Rate | 1 Oct 23 | 1 July 24 | 1 July 25 | 1 July 26 |
|---|--|----------|-----------|-----------|-----------|
| Local infrastructure contributions (s7.11, s7.12) | <ul style="list-style-type: none"> • \$80,000/ dwelling (not rezoned) • \$9,557/ dwelling (Penrith City) • 1% development cost (non-resi) | 100% | 100% | 100% | 100% |
| Housing and Productivity contributions (HPC) | <ul style="list-style-type: none"> • \$12,000/ dwelling (House) • \$10,000/ dwelling (Unit) | 50% | 75% | 100% | 100% |
| Proposed Strategic biodiversity component (SBC) | <ul style="list-style-type: none"> • \$10,000/ dwelling • \$60/sqm commercial/ retail GFA • \$30/sqm industrial GFA | 50% | 75% | 100% | 100% |
| Proposed DSP charges, growth area (suburb) | | | 25% | 50% | 100% |
| <ul style="list-style-type: none"> • GPEC (Glenmore Pk, Mulgoa, Rooty Hill, Penrith) • GMac (Menangle Park, Gilead, Appin) • GMac (Glen Alpine) • Wilton (Wilton) | <ul style="list-style-type: none"> • \$26,587/ ET • \$46,093/ ET • \$7,371/ ET • \$46,093/ ET | | | | |

2.3.2 Timing Assumptions

Table 2-6 and **Table 2-7** list the scenarios tested and contribution assumptions assuming introduction of the SBC only and introduction of the SBC *and* proposed DSP charges concurrently.

Introduction of SBC only

The contribution impact testing is carried out to show the impact of the new SBC charges (only) under the timing assumptions in **Table 2-6**.

The staggered application of SBC rates tests if natural market growth can assist with mitigation of impact. Revenue levels are assumed to be flat for the first two years (recognising the current economic headwinds and inflationary cost environment). In Year 3 onwards a modest 1% per annum growth in revenue assumption is assumed.

Table 2-6: Testing Scenarios and Contributions Assumptions (Introduction of SBC only)

| Year | Contributions Assumptions |
|-------------------|---|
| Year 1 FY 2024 | <ul style="list-style-type: none"> All applicable fees and charges (including s7.11 or s7.12 contributions) HPC (50%) SBC (50%) |
| Year 2 FY 2025 | <ul style="list-style-type: none"> All baseline fees and charges (including s7.11 or s7.12 contributions) HPC (75%) SBC (75%) |
| Year 3 FY 2026 | <ul style="list-style-type: none"> All baseline fees and charges (including s7.11 or s7.12 contributions) HPC (100%) SBC (100%) 1% pa net market growth |

Source: Atlas

Introduction of SBC and Water (DSP) Charges

Contribution impact testing is also carried out to test the impact of the new SBC charges in the context of currently proposed DSP infrastructure charges.

Similar to the assumptions in **Table 2-6**, revenue is assumed to be flat for the first two years. In Year 3 onwards a modest 1% per annum growth in revenue assumption is assumed.

Table 2-7: Testing Scenarios and Contributions Assumptions (Introduction of SBC and DSP Charges)

| Year | Contributions Assumptions |
|-------------------|---|
| Year 1 FY 2024 | <ul style="list-style-type: none"> All applicable fees and charges (including s7.11 or s7.12 contributions) HPC (50%) SBC (50%) |
| Year 2 FY 2025 | <ul style="list-style-type: none"> All baseline fees and charges (including s7.11 or s7.12 contributions) HPC (75%) SBC (75%) DSP charges (25%) |
| Year 3 FY 2026 | <ul style="list-style-type: none"> All baseline fees and charges (including s7.11 or s7.12 contributions) HPC (100%) SBC (100%) DSP charges (50%) 1% pa net market growth |
| Year 4 FY 2027 | <ul style="list-style-type: none"> All baseline fees and charges (including s7.11 or s7.12 contributions) HPC (100%) SBC (100%) DSP charges (100%) 1% pa net market growth |

Source: Atlas

2.4 Measure of Feasibility Impact

The objective of the testing is to assess if, after the SBC contributions, hurdle rates are within acceptable range.

Key performance indicators relied upon are hurdle rates (development margin¹ and project IRR²). Benchmark hurdle rates and their 'feasible' ranges by land use typology are indicated in **Table 2-8**.

Table 2-8: Benchmark Hurdle Rates

| Performance Indicator | Commercial and Residential | | | Industrial | | |
|-----------------------|----------------------------|----------------------|--------------|------------|----------------------|--------------|
| | Feasible | Marginal to Feasible | Not Feasible | Feasible | Marginal to Feasible | Not Feasible |
| Development Margin | >20% | 18%-20% | <18% | >18% | 16%-18% | <16% |
| Project Return (IRR) | >18% | 17%-18% | <17% | >18% | 16%-18% | <16% |

Source: Atlas

The adopted benchmark hurdle rates align with industry/ market expectations and are consistent with Atlas' previous work.

¹ Development Margin is profit divided by total costs (including selling costs)

² Project IRR is the project return on investment, the discount rate where the cash inflows and cash outflows are equal

3. Feasibility Analysis

3.1 Contribution Impact Testing

In this section a series of graphs illustrates the impact of *the proposed SBC contributions* if implemented on its own (without the proposed DSP charges) and implemented together with the proposed DSP charges. The contribution impact testing is carried out in the scenarios described in **Table 2-3** assuming the various contribution rates listed in **Table 2-5**.

The testing outcomes are described by growth area:

- GPEC (Glenmore Park, Mulgoa, Rooty Hill, Penrith)
- GMac (Menangle Park, Gilead, Appin, Glen Alpine)
- Wilton Growth Area (Wilton).

3.1.1 Greater Penrith to Eastern Creek (GPEC)

Three locations are selected and assumed for residential. Two of the locations are zoned rural, with one already zoned for medium density residential. A fourth location is selected to test the impact of the SBC charge on industrial development.

Residential

Figure 3-1 and **Figure 3-2** illustrate the impact to project return (IRR) in land use scenarios in Glenmore Park and Mulgoa respectively on land *not currently zoned* urban. The following observations are made on impact of the proposed SBC (only):

- When the SBC (and HPC) are implemented at 50% in Year 1, the contributions are generally tolerated.
- In Year 2, the SBC (and HPC) are implemented at 75%, the impact to feasibility is relatively minor, with development remaining feasible.
- In Year 3, the SBC (and HPC) are fully implemented, with their impact to feasibility offset by natural market growth.
- In Year 4, the SBC (and HPC) are further offset by natural market growth and development remains feasible.

The following observations are made when the SBC contributions are implemented concurrently with the DSP charges.

- In Year 2, the DSP charges are introduced at 25% alongside the proposed SBC and HPC (at 75%). Project return falls and development is marginal-to-feasible.
- In Year 3, when the SBC and HPC are fully implemented, the DSP charges are at 50%. Development is no longer feasible - natural market growth is insufficient to offset the cumulative impact of the new charges.
- In Year 4, all charges are fully implemented and development is still not feasible.

Figure 3-1: Impact of SBC Contributions (SBC only and SBC+DSP charges), Glenmore Park

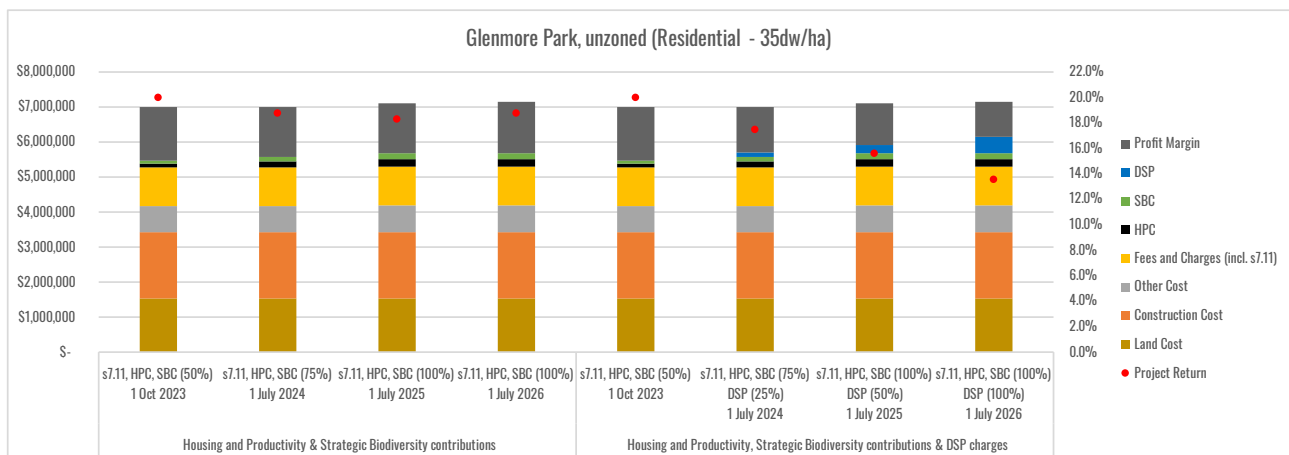
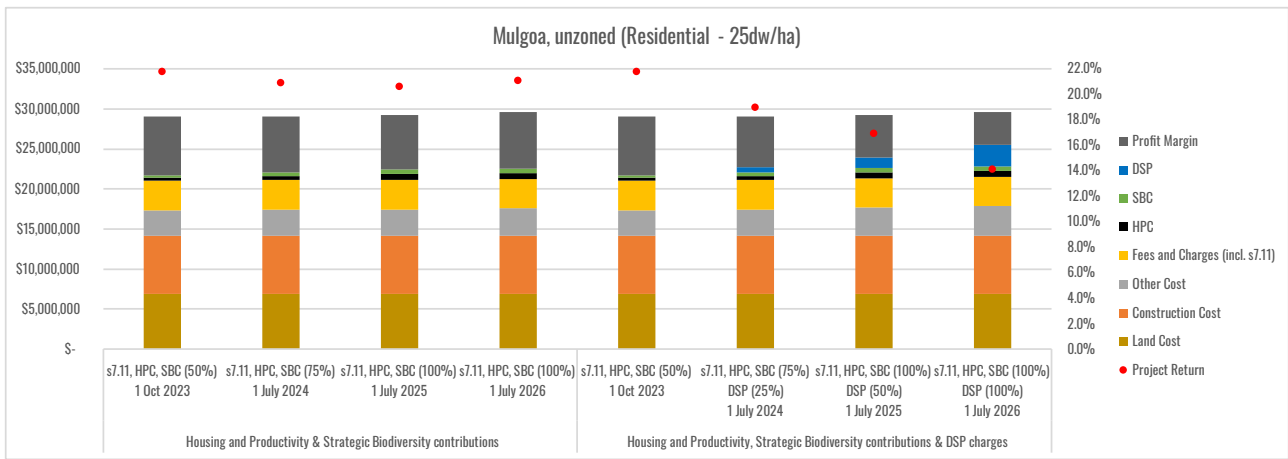


Figure 3-2: Impact of SBC Contributions (SBC only and SBC+DSP charges), Mulgoa



Source: Atlas

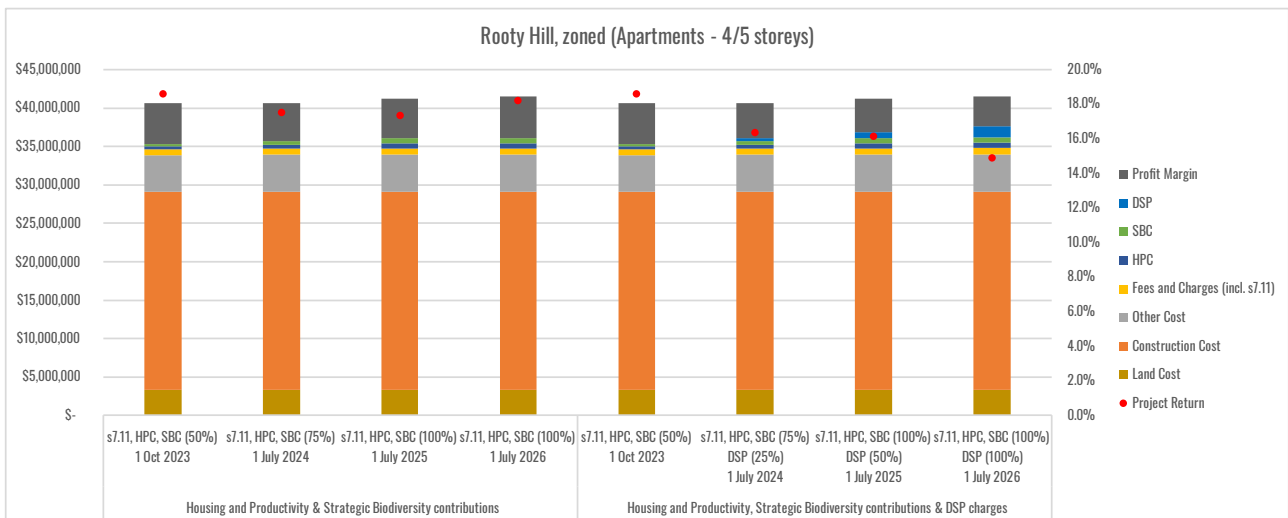
Figure 3-3 illustrates the impact to project return (IRR) in an assumed land use scenario in Rooty Hill on land *already zoned* for residential. The following observations are made on the impact of the proposed SBC (assuming no DSP charges):

- When the SBC (and HPC) are implemented at 50% in Year 1, the contributions are generally tolerated.
- In Year 2, the SBC (and HPC) are implemented at 75%, the impact to feasibility is relatively minor, with development remaining feasible.
- In Year 3, the SBC (and HPC) are fully implemented, with their impact to feasibility offset by natural market growth.
- In Year 4, the SBC (and HPC) are further offset by natural market growth and development remains feasible.

The following observations are made when the SBC contributions are implemented concurrently with the DSP charges.

- In Year 2, the DSP charges are introduced at 25% alongside the proposed SBC and HPC (at 75%). Project return falls and is marginal-to-feasible.
- In Year 3, when the SBC and HPC are fully implemented, the DSP charges are at 50%. Development is marginal - natural market growth is insufficient to offset the cumulative impact of the new charges.
- In Year 4, all charges are fully implemented and development is not feasible.

Figure 3-3: Impact of SBC Contributions (SBC only and SBC+DSP charges), Rooty Hill

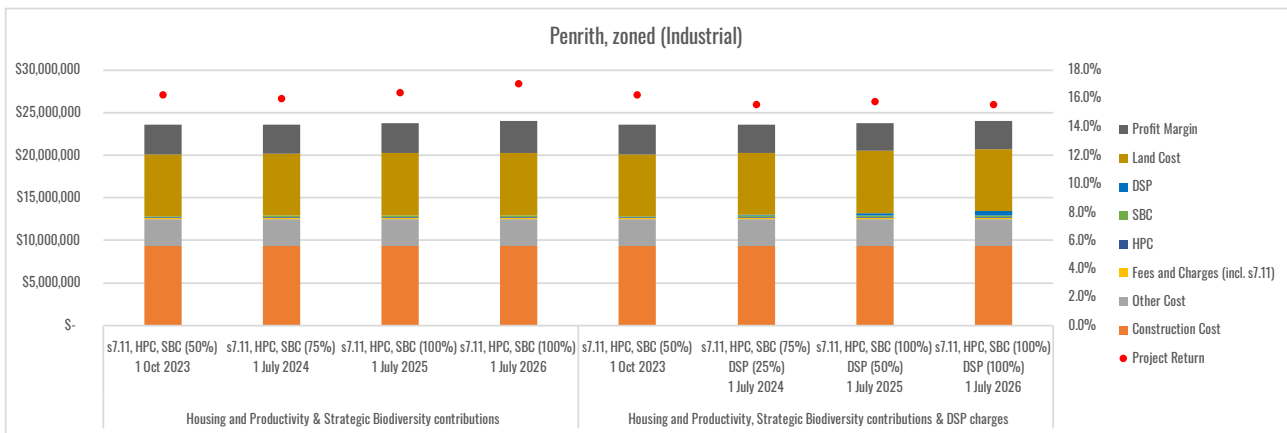


Source: Atlas

Industrial

Figure 3-4 illustrates the impact to project return in a land use scenario in Penrith on land *already zoned* industrial.

Figure 3-4: Impact of SBC Contributions (SBC only and SBC+DSP charges), Penrith



Source: Atlas

The following observations are made on the impact of the proposed SBC (assuming no DSP charges):

- When the SBC (and HPC) are implemented at 50% in Year 1, the contributions are generally tolerated.
- In Year 2, the SBC (and HPC) are implemented at 75%, the impact to feasibility is marginal-to-feasible.
- In Year 3, the SBC (and HPC) are fully implemented, with their impact to feasibility offset by natural market growth.
- In Year 4, the SBC (and HPC) are further offset by natural market growth and development is feasible.

The following observations are made when the SBC contributions are implemented concurrently with the DSP charges.

- In Year 2, the DSP charges are introduced at 25% and the SBC and HPC (at 75%). Project return falls and is not feasible.
- In Year 3, when the SBC and HPC are fully implemented, the DSP charges are at 50%. Development is still not feasible – as natural market growth is insufficient to offset the cumulative impact of the new charges.
- In Year 4, all charges are fully implemented and development is still not feasible.

3.1.2 Greater Macarthur Growth Area

Four locations are selected for testing - two assumed to be developed for mixed use (residential, commercial/ retail) and two locations assumed for residential. All the locations are still zoned rural.

Mixed Use Residential

Figure 3-5 and Figure 3-6 illustrates the impact to project return (IRR) in assumed land use scenarios in Menangle Park and Gilead respectively on land *not currently zoned* urban. The following observations are made on the impact of the proposed SBC (assuming no DSP charges):

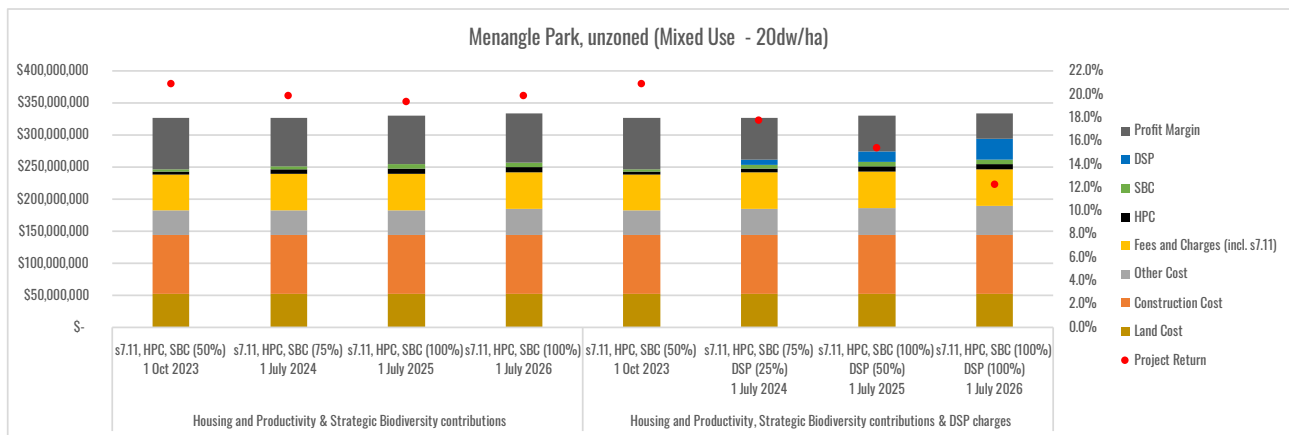
- When the SBC (and HPC) are implemented at 50% in Year 1, the contributions are generally tolerated.
- In Year 2, the SBC (and HPC) are implemented at 75%. Development feasibility marginal-to-feasible.
- In Year 3, the SBC (and HPC) are fully implemented, with their impact to feasibility partially offset by natural market growth and development remaining marginal-to-feasible.
- In Year 4, the SBC (and HPC) are further offset by natural market growth and development is feasible.

The following observations are made when the SBC contributions are implemented concurrently with the DSP charges.

- In Year 2, the DSP charges are introduced at 25% alongside the proposed SBC and HPC (at 75%). Project return falls and development is not feasible.
- In Year 3, when the SBC and HPC are fully implemented, the DSP charges are at 50%. Development is not feasible - natural market growth is insufficient to offset the cumulative impact of the new charges.

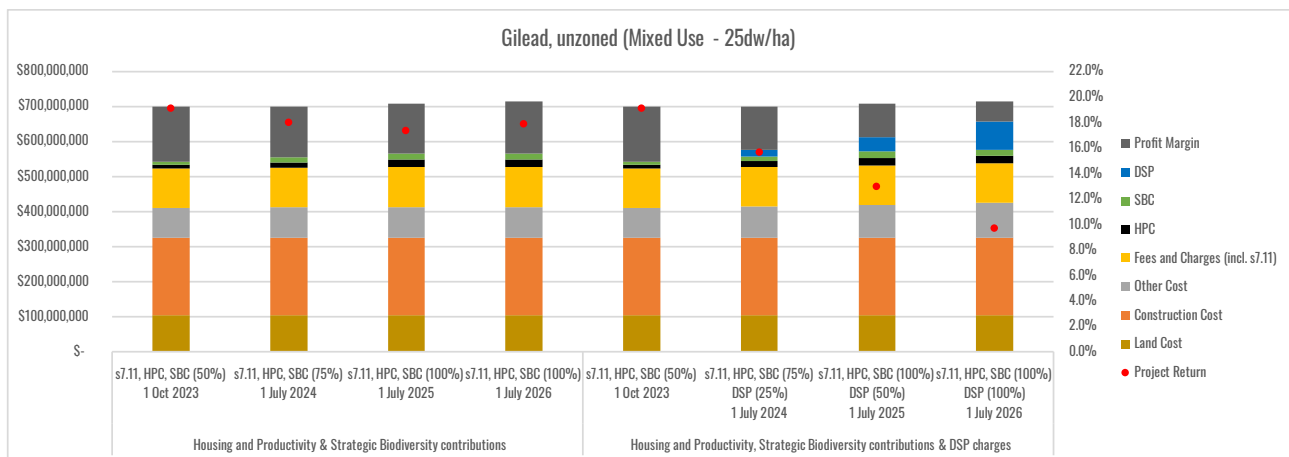
- In Year 4, all charges are fully implemented and development is still not feasible.

Figure 3-5: Impact of SBC Contributions (SBC only and SBC+DSP charges), Menangle Park



Source: Atlas

Figure 3-6: Impact of SBC Contributions (SBC only and SBC+DSP charges), Gilead



Source: Atlas

Residential

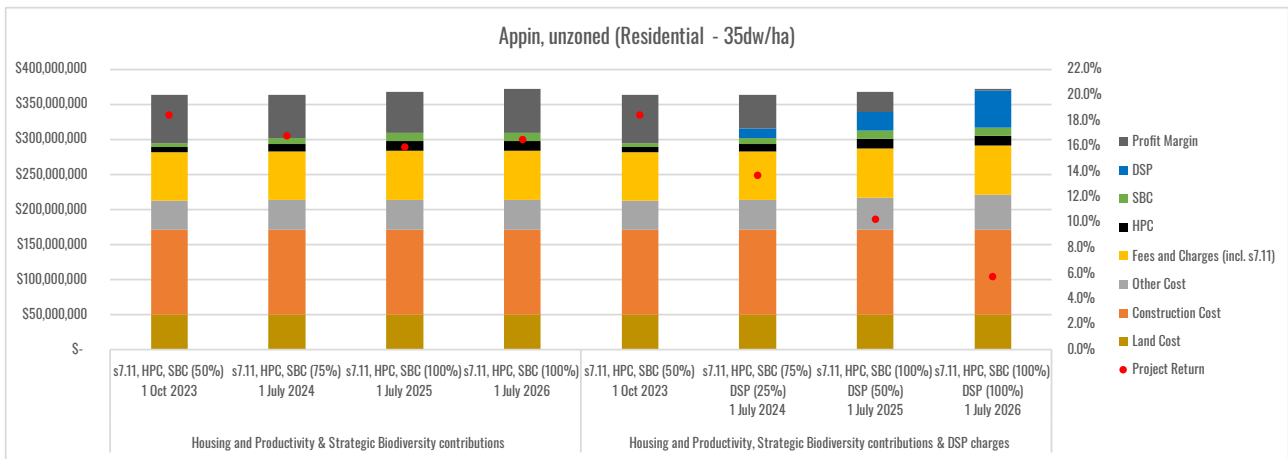
Figure 3-7 illustrates the impact to project return (IRR) in an assumed land use scenario in Appin on land *not currently zoned* urban. The following observations are made on the impact of the proposed SBC (assuming no DSP charges):

- When the SBC (and HPC) are implemented at 50% in Year 1, the contributions are generally tolerated.
- In Year 2, the SBC (and HPC) are implemented at 75%. Development feasibility becomes marginal-to-feasible.
- In Year 3, the SBC (and HPC) are fully implemented, with their impact to feasibility partially offset by natural market growth and development remaining marginal-to-feasible.
- In Year 4, the SBC (and HPC) are further offset by natural market growth and development feasibility improving.

The following observations are made when the SBC contributions are implemented concurrently with the DSP charges.

- In Year 2, the DSP charges are introduced at 25% alongside the proposed SBC and HPC (at 75%). Project return falls and development is not feasible.
- In Year 3, when the SBC and HPC are fully implemented, the DSP charges are at 50%. Development is not feasible - natural market growth is insufficient to offset the cumulative impact of the new charges.
- In Year 4, all charges are fully implemented and development is still not feasible.

Figure 3-7: Impact of SBC Contributions (SBC only and SBC+DSP charges), Appin



Source: Atlas

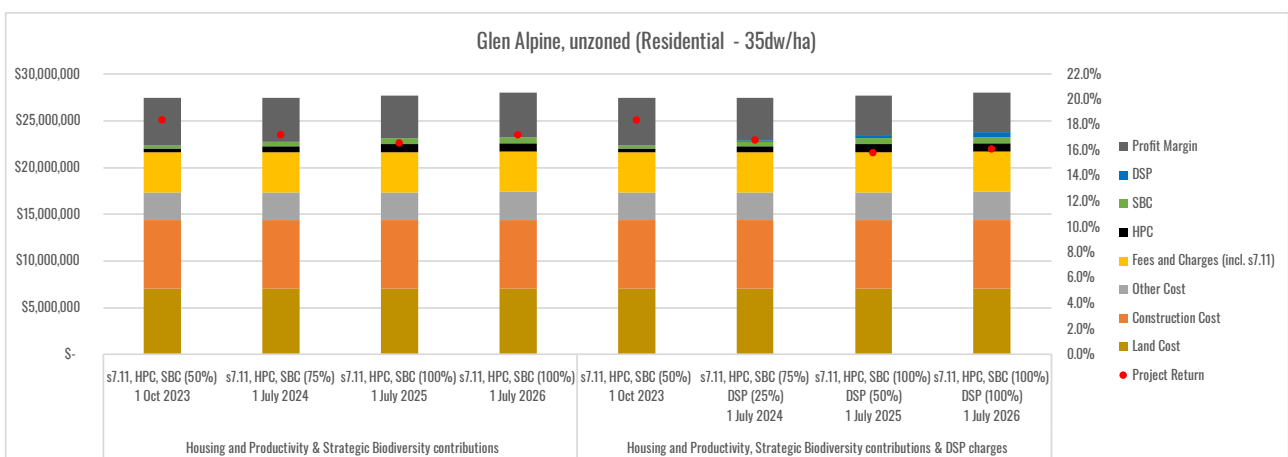
Figure 3-8 illustrates the impact to project return (IRR) in an assumed land use scenario in Glen Alpine on land *not currently zoned* urban. The following observations are made on the impact of the proposed SBC (assuming no DSP charges):

- When the SBC (and HPC) are implemented at 50% in Year 1, the contributions are generally tolerated.
- In Year 2, the SBC (and HPC) are implemented at 75%. There is an impact to feasibility, with development becoming marginal-to-feasible.
- In Year 3, the SBC (and HPC) are fully implemented, with their impact to feasibility partially offset by natural market growth and development remaining marginal-to-feasible.
- In Year 4, the SBC (and HPC) are further offset by natural market growth and development feasibility improving.

The following observations are made when the SBC contributions are implemented concurrently with the DSP charges.

- In Year 2, the DSP charges are introduced at 25% alongside the proposed SBC and HPC (at 75%). Project return falls and development becomes marginal-to-feasible.
- In Year 3, when the SBC and HPC are fully implemented, the DSP charges are at 50%. Development is not feasible - natural market growth is insufficient to offset the cumulative impact of the new charges.
- In Year 4, all charges are fully implemented and development feasibility improves and is marginal-to-feasible.

Figure 3-8: Impact of SBC Contributions (SBC only and SBC+DSP charges), Glen Alpine



Source: Atlas

Compared to the rest of the Study Area, the proposed DSP charges in Glen Alpine are relatively low at \$7,371/ET. Consequently, even when the SBC is implemented together with the DSP charges, the impact to development feasibility is not as severe.

3.2 Observations of Impact

The Western Sydney region and Study Area are generally comparable in terms of their:

- Economic drivers and market dynamics (which is reflected in demand and pricing).
- Historical growth and future growth expectations.

The impacts to development feasibility from implementation of the proposed SBC contributions is generally tolerated when phased-in over three years (50% in Year 1, 75% in Year 2 and fully implemented by Year 3). This is in scenarios where the SBC is additional to the HPC and local developer contributions.

In a scenario where the SBC contributions are implemented concurrently with proposed DSP charges, the SBC contributions are not tolerated. In locations where the proposed DSP charges are lower (e.g. Glen Alpine at ~\$7,400/ ET compared to \$26,600/ ET in GPEC and \$46,100/ ET most of GMac and in Wilton) the impact to feasibility is much more minor.

Residential markets can be differentiated by accessibility and proximity to established centres and employment opportunities, while commercial, retail and industrial markets can be differentiated by accessibility and service catchment.

The Study highlights that the feasibility testing examines the 'worst case' where land has already been purchased for development and the price paid did not contemplate the new SBC contributions.

The contribution impact testing makes the following critical observations:

- If implemented without the proposed DSP charges, the phasing-in of the proposed SBC contribution in Year 1 at 50% (\$5,000 per dwelling) results in a relatively minor impact on feasibility. In subsequent years, natural market growth helps to offset any impact as the SBC is assumed to be fully implemented by Year 3.
- If implemented concurrently with the proposed DSP charges, except in a small portion of the Study Area (i.e. Glen Alpine where the contemplated DSP charges are low - \$7,400/ ET), development is not able to tolerate concurrent implementation of the SBC and DSP charges.

When applied in the absence of the proposed DSP charges, the staggered implementation of the SBC and HPC is generally tolerated by development (in circumstances where land has already been purchased). However concurrent implementation of all the new charges, in particular where the contemplated DSP charges are significant - >\$20,000/ ET) is tested to result in development that is not feasible.

However, in circumstances where land has not been purchased yet (e.g. in parts of the Study Area that are still zoned rural), with notice, developers have the opportunity to pay a price for land that reflects the various fees and charges that are payable. The rationale for staggered and gradual implementation is so that land values (and landowner expectations) adjust gradually. If developers pay a price for land that is reflective of the various contribution obligations, development feasibility could conceivably not be affected if an appropriate price for land is paid.

Influencing Factors of Contribution Impact

The impact of new development contributions will differ based on a range of market and economic factors. There is a myriad of factors that influence whether a development will be feasible. The Study highlights the following factors, which are considered to be directly relevant to the issue of feasibility impact:

- **Gradual Phasing-in of Contributions**

A gradual phasing-in of new contributions avoids 'shocking' the market and allows for a gradual take-up of the new charges. Where land is not purchased for development yet, a gradual introduction allows landowner expectations to adjust and developers to pay a price for land that is fully informed by new charges that are contemplated.

Where sites have already been purchased and being progressed for development, gradual introduction helps mitigate impact to feasibility from a charge that was not expected or contemplated when the site was initially purchased.

- **Market/ Natural Growth**

Areas expected to be beneficiaries of significant and/ or deepening market demand are better placed to tolerate new contributions than areas subject to declining market demand (e.g. in areas experienced declining population growth).

Market/ pricing growth associated with natural property market cycles assists to offset the impact from new contributions that are implemented over time.

- **Planning Status of Land**

Land in the Study Area that is still rural (with no precinct planning) has the best tolerance to new charges. In contrast, land that is already zoned urban (and purchased by developers) has the least tolerance to new changes as land values already reflect their urban potential.

Gradual introduction provides notice to the market so that developers can factor-into their due diligence investigations/ negotiations and pay an appropriate price. However, in greenfield areas that are already zoned (or advanced in precinct planning), land can already be purchased and take more than three years to be 100% delivered. In these circumstances, impact to feasibility will be inevitable. The gradual introduction of the SBC rates (at 50% in Year 1) will assist to mitigate this impact.

- **Other Developer Contributions**

When introduced concurrently with the proposed DSP charges (which are significant in most parts of the Study Area, in excess of \$26,000/ ET), where sites are already purchased for development, feasibility is subject to notable impact. In areas still zoned rural and precinct planning has not yet occurred, impact is arguably of lower risk.

- **Price Paid for Land**

The price paid for a development site is a critical input to development feasibility. Developers pay a price for land based on their expectations of revenue and cost. Where they expect new development contributions, they will negotiate a price for land that is reflective of the new cost. If an appropriate price is paid for land, development feasibility is preserved.

The Productivity Commissioner's final report and recommendations were published in November 2020 and in March 2021 DPE accepted all the recommendations. In that report, potential HPC (then RIC), SBC and DSP rates were suggested. The proposed DSP and SBC rates are each higher than the ranges indicated in the Productivity Commissioner's final report. This underscores even more the importance of gradual implementation.

4. Summary of Findings

4.1 Comparison against Business-as-usual

SIC v HPC/ SBC Contributions

In parts of the Study Area, draft SIC rates were proposed in December 2019. These were not finalised, but provide a signal about the level of state/ regional contributions that could be applicable in the absence of the recently legislated HPC Bill.

Table 4-1 shows a comparison of the draft SICs in the Study Area (the initial rates at December 2019 and indexed rates to June 2023) against the sum of the HPC and SBC rates when fully implemented. In all cases the draft SIC rates are many times more the HPC and SBC rates when fully implemented.

Table 4-1: Draft SICs v HPC/ SBC parts of the Study Area

| Growth Area | Precinct | Initial Rate (Dec 2019) | Indexed at CPI (to June 2023) | HPC and SBC (fully implemented) |
|-------------------|---------------------------|-------------------------|-------------------------------|---------------------------------|
| Greater Macarthur | Greater Macarthur North | • \$39,710/ dwelling | • \$45,441/ dwelling | • \$22,000 (House) |
| | Greater Macarthur Central | • \$43,985/ dwelling | • \$50,333/ dwelling | • \$20,000 (Unit) |
| | Greater Macarthur South | • \$43,432/ dwelling | • \$49,700/ dwelling | |
| Wilton | Wilton town centre | • \$59,274/ dwelling | • \$67,828/ dwelling | • \$22,000 (House) |
| | Wilton North | | | • \$20,000 (Unit) |
| | West Wilton | | | |
| | South East Wilton | | | |
| | Maldon | | | |

Source: DPE

Biodiversity Offsets

Generally, development of land that has biodiversity values and is not certified will need to be accompanied by offsets.

- The *Biodiversity Conservation Act 2016* applies where land is not certified for development. A BDAR (biodiversity development assessment report) is required to demonstrate how impacts from development will be avoided, minimised and offset. Biodiversity offsets could be secured or a Biodiversity Stewardship Agreement where land is retained by the landowner who commits to an annual spend for preserving and conserving vegetation.
- Standalone certification could be pursued to secure conservation outcomes.

There are State and Commonwealth requirements to be satisfied, with the cost of assessment, conservation commitments, offset credits, etc. well in excess of the proposed SBC contributions at \$10,000 per dwelling.

4.2 Impact of Strategic Biodiversity Contributions on Feasibility

The SBC rates of \$10,000 per dwelling and \$60/sqm of retail/ commercial GFA and \$30/sqm of industrial GFA are proposed to be introduced over a three-year period, commencing at 50% in Year 1. As a proportion of overall contributions liability the SBC is relatively modest, particularly as they are gradually implemented.

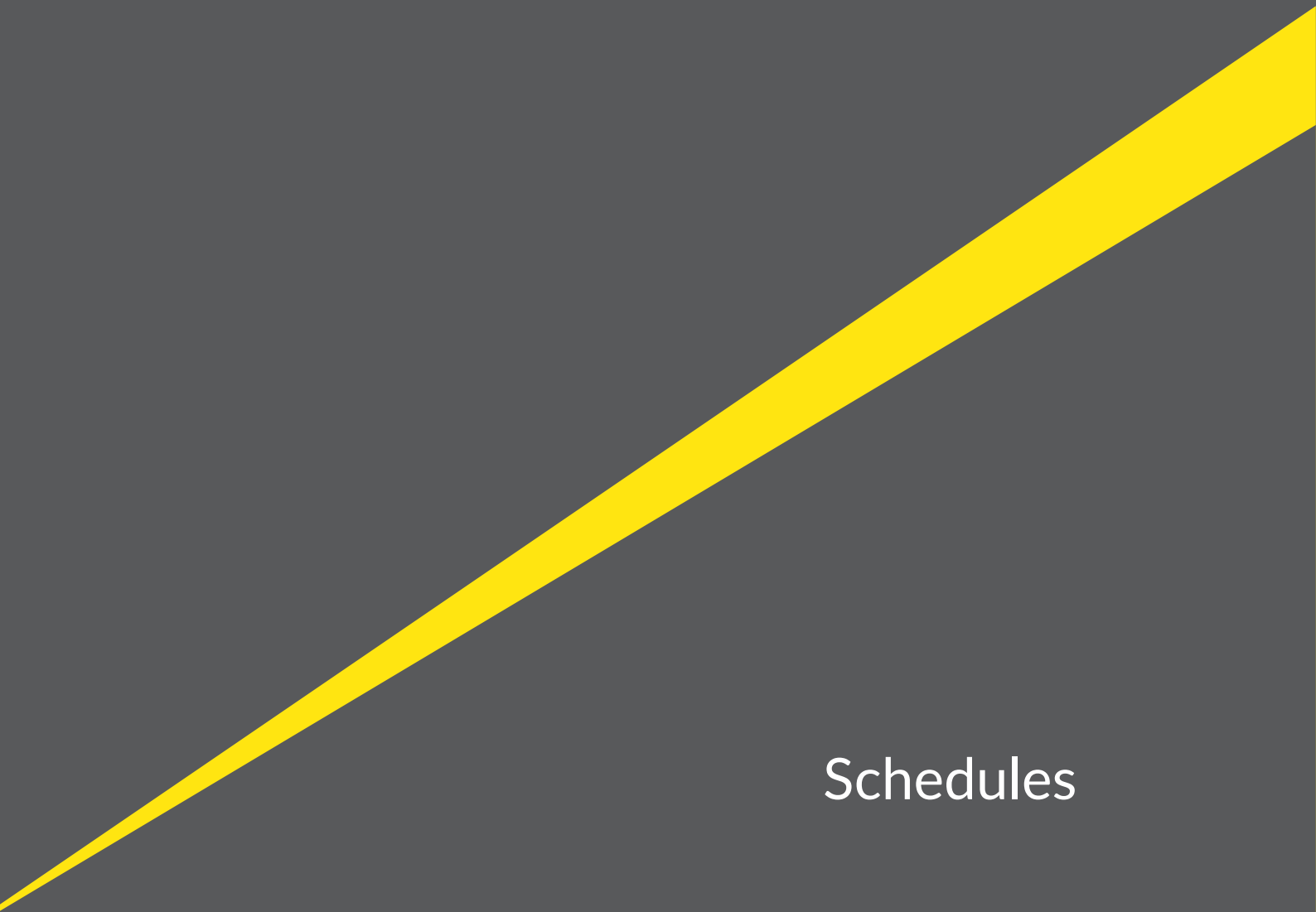
The Study finds that if land is already purchased and if:

- The SBC is introduced (in the absence of the proposed DSP charges) - the impact to development feasibility is generally tolerated, particularly as it is phased-in over three years.
- The SBC is introduced concurrently with the proposed DSP charges - unless the DSP rates are low (e.g. \$7,400/ ET in Glen Alpine), development feasibility is adversely impacted.

Where land may not have been purchased yet (e.g. in parts of the Study Area that are still zoned rural), with notice, developers have the opportunity to factor the new SBC contributions into their due diligence and negotiations. If developers pay a price for land that is reflective of the SBC contribution obligations, development feasibility could conceivably not be affected if an appropriate price for land is paid.

References

- NSW Department of Planning and Environment (2023). *Housing and Productivity Contribution*. Available here: <https://www.planning.nsw.gov.au/sites/default/files/2023-05/housing-and-productivity-contribution.pdf>
- NSW Department of Planning and Environment (2022). *The Cumberland Plain Conservation Plan. A conservation plan for Western Sydney to 2056*. Available from: https://shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com/master-test/fapub_pdf/Lisa+Drupal+Documents/Cumberland-Plain-Conservation-Plan-202208.pdf
- NSW Government (2023). *Environmental Planning and Assessment Amendment (Housing and Productivity Contributions) Bill 2023*. Available here: <https://www.parliament.nsw.gov.au/bill/files/18435/Passed%20by%20both%20Houses.pdf>
- NSW Productivity Commission (2020). *Review of Infrastructure Contributions in New South Wales. Final report. November 2020*. Available here: <https://www.productivity.nsw.gov.au/sites/default/files/2020-12/Final%20Infrastructure%20Contributions%20Review%20Report.pdf>



Schedules

Feasibility Testing Assumptions

Development Typologies and Yields

Land use scenarios are developed in locations within the Study Area (the urban capable land in the CPCP) for the purposes of examining the impact of an SBC contribution in the context of other contributions which may be payable. The tested land use scenarios are summarised in Table S1-1.

Table S1-1: Land Use Scenarios Tested

| Suburb | Site Area | Zone | Land Use | Notional Development and Yields | Density |
|---------------|-----------|------|-------------|--|-----------|
| Glenmore Park | 5,100 | RU2 | Residential | 22 dwellings (terraces) | 35dw/ ha |
| Mulgoa | 23,000 | RU2 | Residential | 58 dwellings (detached, semi-detached, terraces) | 25dw/ ha |
| Rooty Hill | 3,300 | R3 | Residential | 60 dwellings (apartments) | 4 storeys |
| Penrith | 9,100 | E4 | Industrial | Light industrial | 2 storeys |
| Menangle Park | 350,000 | RU2 | Mixed use | 700 dwellings (detached, semi-detached), 2,000sqm commercial | 20dw/ ha |
| Gilead | 700,000 | RU2 | Mixed use | 1,750 dwellings (detached, semi-detached, terraces), 5,000sqm retail/ commercial | 25dw/ ha |
| Appin | 330,000 | RU2 | Residential | 1,155 dwellings (detached, semi-detached, terraces, units) | 35dw/ ha |
| Glen Alpine | 20,000 | C4 | Residential | 70 dwellings (detached, semi-detached, terraces, units) | 35dw/ ha |
| Wilton | 100,000 | RU2 | Residential | 200 dwellings (detached, semi-detached) | 20dw/ ha |

Source: Atlas

We highlight that development types tested are **not** urban design or capacity tested. They are developed from observations of development activity in the Study Area and broader Western Sydney region for the purposes of testing the impact of the proposed SBC contribution rates.

Development Timing and Staging

In many of the locations in the Study Area, land is still zoned rural and is not progressed for precinct planning. The objective of the feasibility testing is to examine the implications of the proposed SBC contributions on future development. Accordingly and for the purposes of testing, land that is not currently zoned for urban uses is assumed to be capable of development into residential and mixed use residential.

A DA is assumed to be progressed immediately upon settlement. Pre-commitments and/ or pre-sales is assumed to occur shortly thereafter, as relevant to the land use scenario tested.

Construction is assumed to commence in Month 15-24 and span for 12-24 months depending on scale and pre-commitment take-up.

Revenue Assumptions

Revenue assumptions are developed based on a market appraisal undertaken for each of the selected locations.

Table S1-2: Revenue Assumptions

| Suburb | Notional Development and Yields | End Sale Values |
|---------------|--|--|
| Glenmore Park | • 22 dwellings (terraces) | \$2,000/sqm to \$2,200/sqm serviced land |
| Mulgoa | • 58 dwellings (detached, semi-detached, terraces) | \$1,800/sqm to \$2,200/sqm serviced land |
| Rooty Hill | • 60 dwellings (apartments) | \$7,000/sqm to \$8,000/sqm internal area |
| Penrith | • Light industrial | \$3,800/sqm to \$4,200/sqm lettable area |
| Menangle Park | • 700 dwellings (detached, semi-detached), 2,000sqm commercial | \$1,400/sqm to \$1,800/sqm serviced residential land, \$600/sqm serviced commercial land |

| Suburb | Notional Development and Yields | End Sale Values |
|-------------|---|---|
| Gilead | • 1,750 dwellings (detached, semi-detached, terraces), 5,000sqm retail/ commercial | \$1,400/sqm to \$1,800/sqm serviced residential land, \$600/sqm serviced commercial land |
| Appin | • 1,155 dwellings (detached, semi-detached, terraces, units) | \$1,400/sqm to \$1,800/sqm serviced residential land |
| Glen Alpine | • 70 dwellings (detached, semi-detached, terraces, units) | \$1,400/sqm to \$1,800/sqm serviced residential land |
| Wilton | • 200 dwellings (detached, semi-detached) | \$1,500/sqm to \$1,900/sqm serviced residential land |

Source: Atlas

Other revenue assumptions:

- 50% of dwellings are pre-sold prior to construction and the balance sold on completion at a rate of 2-8 dwellings per month (depending on location).
- For the non-residential components in a mixed use development, sale is assumed to occur as development nears completion.
- GST is included on the residential sales but excluded on non-residential sales.
- Marketing costs are assumed at 1% of gross sales revenue and legal costs at \$1,500 per dwelling.
- Sales commission on sales included at 2.5% of gross residential sales and 1.5% of non-residential sales.

Cost Assumptions

Cost assumptions are generic in nature and based on a review of DAs, past experience and industry cost publications.

- Legal and due diligence costs assumed at 0.5% of land cost and is assumed to be paid on exchange in Month 1.
- The site is assumed to be appropriately zoned with design and development planning immediately upon settlement.
- Building areas (where applicable) are calculated by applying a generic 110%-115% ratio to GFA to which construction costs are applied.
- Construction costs are estimated with reference to past experience and cost publications:
 - Residential construction assumed at \$2,500/sqm to \$3,000/sqm of building area, balconies at \$1,000/sqm.
 - Industrial construction assumed at \$1,000/sqm to \$1,500/sqm of building area.
 - Basement car parking at \$60,000 per car space.
- Provisional allowance for servicing costs at \$300/sqm to \$350/sqm of site area.
- Professional fees at 6%-9% of construction costs depending on land use scenario.
- Development management fee of 1%.
- Construction contingency at 5%.
- Statutory fees:
 - DA fees of 1% and CC fees of 0.5% of construction costs.
 - Long service levy of 0.35% of construction costs.
 - Local contributions based on existing s7.11 or s7.12 rates. Where land is not zoned for urban development, a reference s7.11 rate of \$80,000 per dwelling. The reference rate is assumed in a low density land use scenario (25dw/ha) and marginally reduced in higher density scenarios - \$64,000 (25dw/ha) and \$60,000 (35dw/ha).
- Holding costs including land tax, Council and water rates.
- 100% debt funded with interest capitalised monthly (nominal 5.5% per annum)
- Finance establishment cost of 0.35% of peak debt.

Hurdle Rates and Performance Indicators

Target hurdle rates are subject to perceived risk of a project (planning, market, financial and construction risk)., The higher the project risk, the higher the hurdle rate. The following performance indicators are relied upon:

- Development margin is profit divided by total development costs (including selling costs).
- Discount rate refers to the project internal rate of return (IRR) where net present values of an investment is zero.
- Residual Land Value is arrived at by assessing the maximum land value a developer is willing to pay based on both hurdles of development margin and discount rate being met.

The following benchmark hurdle rates are assumed.

Table S1-3: Performance Indicators and Target Hurdle Rates

| Performance Indicator | Commercial and Residential | | | Industrial | | |
|-----------------------|----------------------------|----------------------|--------------|------------|----------------------|--------------|
| | Feasible | Marginal to Feasible | Not Feasible | Feasible | Marginal to Feasible | Not Feasible |
| Development Margin | >20% | 18%-20% | <18% | >18% | 16%-18% | <16% |
| Project Return (IRR) | >18% | 17%-18% | <17% | >18% | 16%-18% | <16% |

Source: Atlas

The adopted benchmark hurdle rates align with industry/ market expectations and are consistent with Atlas' previous work.

SYDNEY

Level 12, 179 Elizabeth Street
Sydney NSW 2000

MELBOURNE

Level 7, 333 Collins Street
Melbourne VIC 3000

T: 1300 149 151

E: info@atlaseconomics.com.au

W: www.atlaseconomics.com.au

