

APPERLY VILLAGE

CPTED Report

4A Vardon Road
Fern Bay
NSW 2295

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ACKNOWLEDGMENT OF COUNTRY

Studio 26 Urban Design acknowledge the Australian Aboriginal and Torres Strait Islander peoples of this nation. We acknowledge the Worimi People as the Traditional Owners and Custodians of the land within the Port Stephens Council Local Government Area.

We pay our respects to Aboriginal Elders, past and present. Studio 26 Urban Design are committed to honouring the Australian Aboriginal and Torres Strait Islander peoples unique cultural and spiritual relationships to the land, waters and seas and their rich contribution to society.

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DOCUMENT CONTROL

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Prepared for Principle Living and Newcastle Golf Club

For Approval

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INTRODUCTION

This Crime Prevention Through Environmental Design (CPTED) Assessment has been undertaken to assess the potential opportunities for crime and the perceived fear of crime that may be associated with the proposed over 55 seniors living housing development called Apperly Village 4A Vardon Road, Fern Bay NSW 2295 (Lot4 DP 823114 and Lot 105 DP 614883. (the Site).

This assessment aims to identify the potential opportunities of crime created by the proposed development by assessing the development in accordance with design and place management of CPTED principles. Studio 26 Urban Design has prepared this assessment in accordance with the methods and resources of the NSW Police Force Safer by Design Course and has been completed by experienced CPTED professionals, who have completed the NSW Police Force Safer by Design Course training.

The assessment is based on a site inspection carried out on the 3rd of September 2021 and 22 October 2024 review of the documents outlined below. The report details the result of the fieldwork, documents the evaluation of the landscape design and surrounding setting and assesses potential CPTED risks and mitigations associated with the proposal. This information is provided to assist Port Stephens City Council in understanding the likely impact and how that may be managed to ensure that the positive experience of the proposed design are not overly diminished.

DOCUMENTS CONSULTED

In the preparation of this assessment report, the following documents were reviewed:

- Architectural plans prepared by EJE Architecture dated December 2024 including design perspectives of the villas and community centre, floor plans, elevations and sections.
- Engineering plans prepared by Northrop Engineering dated December 2024.
- Landscape Plan prepared by Studio 26 Urban Design (Studio 26) dated December 2024 including overall plan, community centre and typical villa plans, elevations and planting and surface finishes palette.
- Newcastle Golf Club Aboriginal Cultural Heritage Assessment Report and Aboriginal Test Excavation Report prepared by Extend Heritage Advisors.
- Village Operational Plan Apperly Village Newcastle Golf Club prepared by Principle Living dated November 2023.
- Apperly Village Resident Handbook prepared by Principle Living dated November 2023.
- Traffic and Parking Study prepared by SECA Solutions dated December 2024.

CRIME PREVENTION THROUGH ENVIRONMENTAL PRINCIPLES

When applied CPTED principles use design and place management that reduce the likelihood of essential crime elements from intersecting in time and space. Predatory offenders often make a cost-benefit assessment of potential victims and locations before committing a crime. CPTED aims to create the reality (or perception) that the costs of committing a crime are higher than the anticipated benefits, increasing the likelihood of detection, challenge and apprehension.

This report uses qualitative and quantitative measures to analyse the physical and social environment in which the proposed development is located and recommends actions to mitigate crime opportunity in accordance with the Australian and New Zealand Risk Management Standard AS/NZS 31000:2009. In accordance with the NSW Department of Planning and Environment's guidelines (2001) and State Environmental Planning Policy (Housing) 2021 clause 103 Crime prevention for Senior Housing. The aim of the CPTED strategy is to influence the design of buildings and places by:

- Maximising the effort required to commit crime by increasing the time, energy and resources required to commit crime.
- Reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'.
- Minimising excuse-making opportunities (removing conditions that encourage/facilitate rationalisation of inappropriate behaviour).
- Removing conditions that create confusion about required norms of behaviour.
- Considerations for the design and planning of seniors housing with a focus on crime prevention and security. This contributes to increased resident awareness and security and participation in passive surveillance of public space.
- In summary, the outlined principles emphasise a holistic approach to seniors housing design, incorporating environmental design principles, personal property security measures, and specific strategies for crime prevention through thoughtful site planning and dwelling design. The aim of this CPTED report is to influence overall design for Apperly Village. The Architectural drawings prepared by EJE Architecture, and the landscape drawings prepared by Studio 26 have been reviewed as part of this assessment. In addition, the following tasks were undertaken in the preparation of this assessment.
- Reviewed crime prevention strategies to promote good design principles, in accordance with NSW Police Force policy and practice and any future design-based planning controls.
- Review of the Safer by Design Manual by the NSW Police Force.
- Collection and analysis of local and NSW State crime statistics from the Bureau of Crime Statistics and Research (BOCSAR).
- The Crime Risk Rating considers the development as proposed in the Architectural Drawings prepared by EJE Architecture and Landscape Drawings prepared by Studio 26 Urban Design within the site's environment. The following tasks were undertaken in the preparation of this assessment.

A crime risk assessment, in accordance with the current NSW policy and practice, of the following regulation and assessment principles:

- Surveillance Through Design, Definition and Designation
- Lighting and Technical Supervision
- Territorial reinforcement
- Space and Environmental Management
- Access control

PORT STEPHENS COUNCIL - CRIME PREVENTION PLAN 2017 - 2020

Port Stephens Council has adopted a comprehensive Crime Prevention Plan (CPP) for the period 2017-2020. This plan reflects a commitment to addressing and reducing crime, re-offending, and anti-social behaviour throughout the Local Government Area (LGA). Some key points are:

- **Adoption of Crime Prevention Plan:** Port Stephens Council has formally adopted a Crime Prevention Plan for the specified period, demonstrating a commitment to pro-actively addressing crime-related issues.
- **Goals of the CPP:** The overarching goals of the CPP include preventing or reducing crime, re-offending, and anti-social behaviour within the Port Stephens LGA.
- **Localised Nature of Crime:** Acknowledgment that local government is in the best position to implement crime reduction strategies due to the localised nature of many crimes and anti-social behaviours.
- **Compliance with Guidelines:** The CPP has been developed in accordance with the NSW Department of Police and Justice's 'Guidelines for developing a Crime Prevention Strategy,' ensuring that the plan aligns with established standards and best practices.
- **Focus Areas:** The CPP focuses on specific types of crimes within the Port Stephens LGA, including incidents of malicious damage (graffiti), theft from motor vehicles, and fraud. This targeted approach allows for more effective and efficient implementation of crime prevention strategies.
- **Inclusion in Operational Plan:** The CPP is integrated into the Operational Plan, highlighting its importance and positioning it as a key element within the strategic hierarchy of documents used by local governments in New South Wales.
- **Strategic Collaboration:** The recognition that collaboration and cooperation are essential elements in successfully implementing crime reduction strategies, emphasising the need for a coordinated effort from various stakeholders.

By adopting and implementing the CPP, Port Stephens Council is taking proactive steps to create a safer and more secure community for its residents. This approach aligns with best practices in crime prevention and emphasises the importance of local government in addressing specific issues within its jurisdiction.

THE SITE

SITE CONTEXT

The Site is located within the Port Stephens LGA and approximately 20 minutes from Newcastle City Centre. Newcastle Airport is located approximately 9.6km (10 min drive) to the north of the site, Stockton Beach is approximately 1 km to the east and the North Channel Hunter River and Hunter Wetlands are to the west. Overall, Port Stephens LGA is defined by low density development with large infrastructure developments such as Newcastle Airport, Tomago smelter and the Newcastle Airforce Base. The landscape is characterised by low open pastures interspersed with pockets of native vegetation on low surrounding ranges and sand dunes. Large sections of the LGA have been cleared of native vegetation due to the region's European history of land clearing for timber, mining and urban development, with the fertile soil of the floodplains suitable for crops and grazing.

The proposed development of Apperly Village is located just west of the existing Newcastle Golf Course Club house and carpark within the existing foot print of the 18th hole of Newcastle Golf Course with low-density residential dwellings on medium to small size lots, as illustrated in Figure 1 - Proposed Site Locality Plan. The site is zoned RE2 Private Recreation in the Port Stephen Local Environmental Plan (LEP) 2013. The understanding of the site's context, its connection to country, ecological history, and the existing land use are essential considerations for any development project. It's also noteworthy that the proposed design for Apperly Village considers not only security and surveillance but also integrates with the existing landscape and strives to create a safe and visually open environment.

SITE DESCRIPTION

Within the immediate vicinity of the development there are key natural landmarks and culturally significant land within the Worimi Regional Park that is approximately 1km east of the site and within the site itself. The Worimi people are the traditional owners of the land and the surrounding area of the proposed site. Acknowledging and respecting their connection to the land is an important aspect of any development in the area.

The Site occupies a parcel of land and is formally identified as Lot 41 in a subdivision of Lot 4 DP823114 & Lot 105 DP614883. See Figure 1. The Site has a non-descript shape that reflects the existing vegetation of the golf course, with the western boundary planting that adjoins Nelson Bay Road providing a straight and long boundary. The primary orientation of the Site is north to south, and movement will match this orientation for vehicle paths of travel. Pedestrian paths of travel will move through the side in north – south and east west directions connecting residents to the outdoor active areas, community centre and Newcastle Golf Course.

Apperly Village landscape design principles aim to protect and preserve the existing landscape in areas of high scenic quality and ecological significance. This will be further enhanced by improving existing remnant vegetation and the value and extent of native and indigenous vegetation, with the aim of the re-establishment of natural vegetation communities where appropriate and to improve biodiversity, habitat values, aesthetics, and water quality of the site.

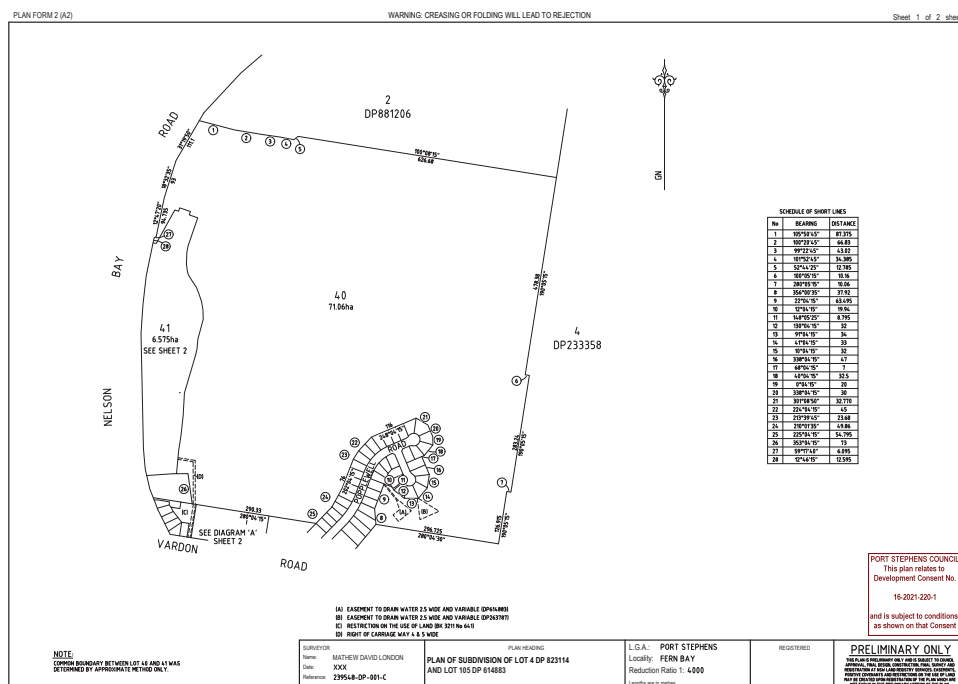


Figure 1 - Plan of subdivision of Lot 4 DP 823114 and Lot 105 DP 614883

The land is described as active golf course land that is largely vacant of built form and predominately cleared land in the development footprint. The Site has a gentle slope towards the north with a minor ridge that extends to the western edge of the development that follows the north south golf course direction. There is an existing low lying water body that has been utilised as part of the existing golf course.



Figure 2 - Proposed Site Locality Plan (Image Source Six Maps November 2023)

THE PROPOSED DEVELOPMENT

This Development Application seeks redevelopment of the site for the purposes of a seniors living estate that includes the following key components:

- Site preparation & establishment activities – clearing existing vegetation, demolition of existing golf course 18th hole via bulk earthworks.
- Construction and occupancy of a seniors living development comprising:
 - Thirty-five (35) Golf Frontage Villas;
 - Twelve (12) Duplex Units;
 - Three (3) apartment blocks, totalling One Hundred and twenty-five (125) apartments. The overall design of the buildings will be reflective of the Australian architectural vernacular that essentially reflects the established building typology of the area; and
 - Two hundred and ninety-five (295) car parking spaces across the site with each villa being provided with a double garage (94 spaces) and 201 basement carparking spaces within the three apartment buildings.
- Construction of a Community Centre comprising:
 - On-site kitchen and ancillary services including café/bar, gym, and multipurpose rooms;
 - Office for on-site manager and administration staff;
 - 20 parking spaces for visitors and staff have been located within the internal road network; and
 - The community centre main entry to comprise of a drop off/pick up zone for deliveries and an allocated parking area zoned for emergency services.
- Building identification signage and wayfinding:
 - To be provided for clear direction for residents and visitors. This will be referenced on the architectural plans during the design development phase.
- Associated landscaping and public domain works comprising:
 - Pedestrian links through the site to create connectivity between the villas, apartment buildings and community centre, keeping place and active and passive recreational spaces;
 - Outdoor passive recreational spaces including picnic tables, public art and open lawn areas;
 - Active recreational areas that will have outdoor exercise equipment, pickleball courts and lawn bowls green.
 - Connection to Country Open recreational space called the 'Keeping Place'; and
 - Revegetation and vegetation removal.
- Civil Works:
 - Roadworks including the establishment of vehicular access from Vardon Road;
 - Infill and removal of bulk earthworks; and
 - Installation of utilities and associated infrastructure.

ACCESS TO SITE

The proposed development will be an enclosed community, meaning that the areas will be secure, and entry/exit will only be via controlled access points for vehicles and pedestrians. An on-site manager will be employed who will monitor day to day operations of the facility as well as coordinate access to the site by external service providers (delivery, tradespeople, etc.).

Access and Egress for Vehicles and Pedestrians comprising:

- Main entry vehicle entry/exit from Vardon Road.
- Shared Path for vehicles and pedestrian southeast of the site connecting Apperly Village to the existing Newcastle Golf Course Carpark.
- Access for emergency services will be located at the north of the site to create a direct link to Newcastle Golf Course.
- Two (2) Pedestrian entry points from Nelson Bay Road and connecting to Newcastle bound bus stop.
- Five (5) pedestrian entry points connecting Apperly Village residents to Newcastle Golf Course existing carpark and greens.
- Pedestrian access for the Worimi People to access the Keeping Place will be from Newcastle Golf Club.

The master plan for Apperly Village (Refer to Figure 3 - Overall Plan) shows the layout of the public domain, facilities and villas and the incorporation of open space and recreational areas that will promote active living within the development.

OVERALL LANDSCAPE PLAN



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APPERLY VILLAGE | LANDSCAPE PLAN

Figure 3 - Overall Plan

NATURE OF RECORDED CRIME

Crime statistics obtained from the NSW Bureau of Crime Statistics and Research (BOCSAR) represents criminal incidents recorded by NSW Police. A review of the local statistics over the last 12 months to September 2023 found that the most commonly occurring crimes relevant to CPTED within the suburb of Fern Bay in no particular order were:

- Assault – non-domestic violence related
- Assault – domestic violence related
- Break and enter – dwelling
- Break and enter – non-dwelling
- Motor vehicle theft
- Steal from motor vehicle
- Steal from dwelling
- Malicious damage to property

The frequency of the above crimes at a NSW state level, Port Stephens LGA and Fern Bay Scale, between October 2019 and September 2024 are detailed below in Tale 1, Pages 11 and 12.

Table 1 BOCSAR reported incidents in NSW vs Port Stephens LGA vs Fern Bay

October 2019 - September 2024

(The rate illustrates the relative rate of crime per 100,000 people of the residential population)

Incident	Year to Sept 2020	Year to Sept 2021	Year to Sept 2022	Year to Sept 2023	Year to Sept 2024	60 month Trend
Incidents of Homicide (Murder) NSW	0.9	0.7	0.7	0.7	0.9	Stable
Incidents of Homicide (Murder) Port Stephens LGA	1.3	1.3	0	0	1.3	n.c.
Incidents of Homicide (Murder) Fern Bay	0	24.7	0	0	0	n.c.
Incidents of Homicide (Attempted murder) NSW	0.4	0.3	0.2	0.2	0.2	n.c.
Incidents of Homicide (Attempted murder) Port Stephens LGA	0	0	0	0	0	n.c.
Incidents of Homicide (Attempted murder) Fern Bay	0	0	0	0	0	n.c.
Incidents of Assault (Domestic assault) NSW	395.6	400.5	409.4	434.8	463.5	Up 4.0% per year
Incidents of Assault (Domestic assault) Port Stephens LGA	497.2	501.2	485.9	568.7	661.3	Up 7.4% per year
Incidents of Assault (Domestic assault) Fern Bay	278.9	386.3	421.5	393.3	536.3	Stable
Incidents of Assault (Non-domestic assault) NSW	369	357.9	371.2	414.7	426.8	Up 3.7% per year
Incidents of Assault (Non-domestic assault) Port Stephens LGA	374	373.2	400.8	477.4	447.4	Up 4.6% per year
Incidents of Assault (Non-domestic assault) Fern Bay	380.7	212.6	181	190.7	262.2	n.c.

Table 1 BOCSAR reported incidents in NSW vs Port Stephens LGA vs Fern Bay

October 2019 - September 2024

(The rate illustrates the relative rate of crime per 100,000 people of the residential population)

Incident	Year to Sept 2020	Year to Sept 2021	Year to Sept 2022	Year to Sept 2023	Year to Sept 2024	60 month Trend
Incidents of Theft (Motor vehicle theft) NSW	149.4	134.8	143	170.3	178.6	Up 4.6% per year
Incidents of Theft (Motor vehicle theft) Port Stephens LGA	176.9	128	133.6	187.8	212.6	Stable
Incidents of Theft (Motor vehicle theft) Fern Bay	88.8	111.2	131.5	274.1	214.5	n.c.
Incidents of Theft (Steal from motor vehicle) NSW	376.1	345.6	335.8	351.4	335	Stable
Incidents of Theft (Steal from motor vehicle) Port Stephens LGA	298.4	302.3	302.2	290.8	281.7	Stable
Incidents of Theft (Steal from motor vehicle) Fern Bay	406	424.4	324.9	214.5	369.4	n.c.
Incidents of Theft (Break & enter dwelling) NSW	259.4	230.9	224.4	242.8	239.4	Stable
Incidents of Theft (Break & enter dwelling) Port Stephens LGA	206.8	223.7	142.8	212.6	234.8	Stable
Incidents of Theft (Break & enter dwelling) Fern Bay	355	137.4	169.1	274.1	262.2	n.c.
Incidents of Theft (Break & enter non-dwelling) NSW	99.7	88.8	89.1	101.9	101.8	Up 0.5% per year
Incidents of Theft (Break & enter non-dwelling) Port Stephens LGA	125.7	106.6	137.4	180	113.5	Stable
Incidents of Theft (Break & enter non-dwelling) Fern Bay	152.4	98.9	35.8	47.7	59.6	n.c.
Incidents of Theft (Steal from dwelling) NSW	213	203.9	188.9	193.4	198.9	Down 1.7% per year
Incidents of Theft (Steal from dwelling) Port Stephens LGA	228.3	234.7	166.4	168.2	143.5	Down 11.0% per year
Incidents of Theft (Steal from dwelling) Fern Bay	355	148.3	241	190.7	154.9	n.c.
Incidents of Malicious damage to property NSW	668.7	625.5	600	602.8	606.5	Down 2.4% per year
Incidents of Malicious damage to property Port Stephens LGA	823.5	679.8	792.5	915.6	703	Stable
Incidents of Malicious damage to property Fern Bay	621.6	932.6	623.3	643.5	572	Stable

* n.c. - Trend information is not calculated if at least one 12-month period in the selected time frame has less than 20 incidences

Table 1 - The frequency of the above crimes within the State of NSW, Port Stephens LGA and Fern Bay, between October 2019 and September 2024

MATTERS FOR CONSIDERATION

ASSESSMENT AGAINST CPTED PRINCIPLES

The Crime Prevention Through Environmental Design (CPTED) assessment for Apperly Village has been conducted in consideration of crime statistics obtained from BOCSAR, incorporating hotspot mapping and incident graphs. Identifying opportunities for crime or anti-social behaviour within a 15km radius is a comprehensive approach to ensuring the security and safety of the proposed development.

The report and approach acknowledge that any design strategy proposed cannot operate effectively in isolation and is one element of a broader approach to a crime prevention strategy that includes social and community inputs and complementary strategies.

The following subsections of this report discuss these principles and matters for consideration in greater detail in the context of the proposed Apperly Village development.

SURVEILLANCE

Surveillance seeks to deter potential offenders, through both natural and passive surveillance methods to limit the opportunity for crime to occur. Proper surveillance can be achieved by adequate lighting of public spaces and streets and clear sightlines within the landscape and between public and private spaces.

The proposed design seeks to enhance surveillance through a combination of natural and passive methods. The use of security gates and intercom access, orientation of residential buildings, clear visibility from the community centre, and accessible and well-lit pathways, all contribute to improved surveillance. The design of the buildings and landscape minimises concealment opportunities and enhances natural surveillance through the use of appropriate lighting, landscape treatments, and retention of the existing landscape. The objective is to deter potential offenders and create a safe environment for residents and visitors.

The proposed design for Apperly Village features effective natural and passive surveillance methods through the following means;

- **Vehicle Access:** Formal access control through the installation of security gates located at Vardon Road, the use of swipe cards for residents and intercom access for visitors. The intercom access will have codes for individual villa or units and a general number for service vehicles to speak to the desired person. The intercom system will be monitored via CCTV.
- **Pedestrian Access:** Formal access control through the installation of security gates located at each pedestrian entry point. Residents and staff will have use of swipe cards for access. Visitors to the site will utilise the intercom to Community Centre Manager/Admin or directly to person the visitor is meeting. The intercom access will have codes for individual villa or units. The intercom system will be monitored via CCTV.
- **Golf Course Access:** Access to the Golf Course playing areas is to be from the Newcastle Golf Course Pro-Shop.
- **Building Orientation:** Residential buildings are oriented toward the internal street with good visibility on all roadways internal and external. The Villa located on the eastern boundary will have good visibility towards the existing Newcastle Golf Course and Club.
- **Community Centre Visibility and Operational Hours:** The community centre has one main entrance that will be open during the standard operating hours of 8:00am to 6:00pm, all other entrances to the Community Centre will be via swipe card access. Residents will have access to the Community Centre after hours via the use of swipe cards.
- **Visibility of Green Spaces:** Picnic areas and footpaths designed for visibility from internal road network, community facilities, and residential apartment building and villas to improve natural surveillance. The active green space has pickle ball courts and outdoor exercise facilities visible to the adjoining club house, Apartment Block 2 and villas to the east of the space.

- **Visibility of Keeping Place:** The community centre has direct visibility toward the Newcastle Golf Course and the Villa and Apartment Buildings located north of the Keeping Place. Access to this site for the Worimi People will be via the shared path that connects Apperly Village to Newcastle Golf Course Carpark.
- **Pathway Network:** The proposed layout encourages regular movement with a network of accessible and well illuminated pathways throughout and around the Site. The pathways connect the passive green spaces and active recreational areas including the pocket parks, exercise equipment, outdoor picnic areas and dog off leash area. This activation will result in improved natural surveillance of the recreational areas. Concealment and entrapment opportunities are minimised with the pathways network having minimal dead ends and well-lit pathways throughout and around the site to encourage regular movement. Encouraging pedestrian use of the overall site, connecting passive green spaces and active recreational areas improve natural surveillance.
- **Landscaping Elements:** Use of major landscaping elements with upper canopy species for good sightlines and minimal mid-storey species to reduce concealment opportunities. Proposed vegetation with a minimum 1800mm -600mm clear site line. This space to have minimal mid-storey species that will inhibit sightlines and minimising opportunities for concealment and obstruction of sight lines.
- **Lighting Standards:** Installation of lighting meeting Australian and New Zealand Standard AS/NZS 1158.
- **Villas Landscape Treatment:** Landscape treatment between villas (private land) and streetscape is designed to encourage natural surveillance. Ensuring that the design of the Villas and landscape encourage natural surveillance to occur. Retention of existing landscape and tree canopy to maintain Crime Prevention Through Environmental Design (CPTED) principles and in conjunction with the AEP Arborist and Bush Fire Management Plan.

The proposed design comprehensively addresses various aspects of natural and passive surveillance to create a secure and visually open environment for the future residents and visitors to the site. These measures align with principles commonly associated with Crime Prevention Through Environmental Design (CPTED).

LIGHTING AND SUPERVISION

Effective lighting and use of discrete CCTV supervision can reduce fear, increase community perceived sense of security, through improved visibility and increase the likelihood of offenders being detected. Lighting and supervision through CCTV at key access locations and public open space are integral in increasing safety. All proposed lighting within Apperly should meet Australian Lighting Standard AS/NZ 1158 for public streets, car parks and pedestrian areas, specifically addressing crime and fear reduction.

- **Vehicle and Pedestrian Entry/Exit:** Bright and well-distributed lighting should be installed at all building entrances, egress points and throughout the basement including the lift lobbies.
- **Ground Floor Building Areas:** Bright and well-distributed lighting should be installed at all building entrances, egress points and throughout the basement including the lift lobbies. At the ground plane of the community centre and the apartments buildings, where the lobby and reception areas are, the placement of CCTV should address areas where multiple user groups share space or points of access.
- **Building External Lighting:** External building lighting and associated open space and access points to incorporate bright and well-distributed lighting and be installed at all building entrances, egress points and places where people may gather.
- **Apartment Basement Car Park:** As with the basement levels proposed, the placement of CCTV within the basement areas should address areas where multiple user groups share space or points of access as well as address spaces that incorporate blind corners or restricted access. It is recommended that CCTV be installed to address areas of circulation and congregation such as waste disposal rooms, lift lobbies and general areas where paths of travel are facilitated but are not always activated.
- **Bin Enclosure:** The site has numerous bin enclosures evenly distributed throughout the site. These enclosures will be utilised by the residents on a regular occurrence, consideration for lighting to be installed to meet Australian Lighting Standard AS/NZ 1158 for public use and to have a sensor light from 8pm of a night to minimise antisocial behaviour occurring.
- **Landscape Pathway Network:** The landscaped pathway network throughout the site has considered lighting to provide good visibility, reduce fear and create safe public areas at all times. Furthermore, the landscaping along the public footpaths should be selected and positioned to ensure that sightlines are not inhibited, and concealment opportunities are minimised. These areas are to meet Australian Lighting Standard AS/NZ 1158 for public use from dusk the lights will be sensor driven to allow for night-time access to the pathway network that are not associated with the streetscape.
- **Landscape Open Space:** Apperly has a number of active and passive open space areas. These areas should meet Australian Lighting Standard AS/NZ 1158 for public use and be turned off at 8pm of a night to minimise antisocial behaviour occurring. Lighting types should be of a high quality and vandal resistant. With all lighting to be designed and managed in the context of the open space location to maximise effectiveness.

The combination of effective lighting and discreet technical supervision in the form of CCTV showcases a proactive approach to security. Complying with lighting standards and focusing on crime and fear reduction will contribute significantly to creating a secure and comfortable living environment in Apperly Village.

TERRITORIAL REINFORCEMENT

The proposed design for Apperly Village incorporates elements of territorial reinforcement, aiming to define public and private spaces, promote a sense of ownership, and reduce the likelihood of crime. Below is an overview of the key features related to territorial reinforcement:

- **Entry Points:** The main entry point to the site is clearly defined with a gated entry, distinguishing between private and public access. This measure is intended to reduce illegitimate entry and enhance security.
- **Security Access Gates:** The second pedestrian entry point is equipped with a security access gate accessible only by residents, further reinforcing the distinction between private and public access and reducing the potential for unauthorised entry.
- **Building Design and Materials:** Use of high-quality building design, landscape materials, plantings, and green spaces to foster ownership of open space areas. The community centre, villas and apartment buildings and other community facilities, adds to the overall appeal of the development.
- **Clearly Marked Villas and Community Building:** Individual villas, apartment buildings and the community centre will have clearly marked numbers or names, contributing to clear wayfinding cues and helping limit potential offenders from inappropriate actions within the site.
- **Wayfinding Signage:** The use of wayfinding signage aims to minimise uncertainty, confusion, and vulnerability for legitimate visitors to the site. Installation of wayfinding signage at the entrance of the community centre, along with visitor parking located east of the building. The design indicates that there will be pedestrian wayfinding signage throughout the public open space.
- **Landscaping and Boundary Features:** Clearly delineated public and private areas through the strategic use of landscaping, boundary walls, or screens around courtyards and similar spaces. This approach is aimed at discouraging potential offenders from engaging in inappropriate actions within these areas.
- **Landscape Planting:** High-quality landscape planting in private and open space areas to define individual and public areas, fostering a sense of ownership. The commitment to maintain these areas by the village management contributes to their ongoing appeal.
- **Clearly Marked Villas and Community Building:** Individual villas and the community building will have clearly marked numbers or names, contributing to clear wayfinding cues and helping limit potential offenders from inappropriate actions within the site.
- **Diverse User Experiences:** The inclusion of a diverse range of user experiences through community facilities like the community centre, pocket parks, and open green spaces contribute to a sense of community ownership and encourage regular use, which, in turn, helps reduce crime opportunities.
- **Ongoing Maintenance Program:** Implementation of an ongoing maintenance program by Apperly Village management to ensure visual appeal for both residents and visitors. Well-maintained spaces are often associated with a sense of community pride and ownership.

The proposed design for Apperly Village design clearly defines the purpose of the private and public spaces and therefore, clearly delineates who should be there and who should not. This makes it difficult for potential offenders to make excuses about their presence and actions. The mitigation measures recommendations collectively contribute to creating a well-integrated and secure environment, aligning with CPTED principles and addressing specific aspects to further enhance safety within the proposed development.

SPACE MANAGEMENT AND ENVIRONMENTAL MAINTENANCE

The proposed development design emphasises the importance of activity/space and environmental maintenance to positively influence perceptions of safety, encourage Apperly Village residents to actively create community engagement, and in doing so enhance the overall quality of the environment.

Key to this occurring is the design and consideration of activities and space management within the development. The overall design has clearly demonstrated this will occur with the design of the community centre catering for a variety of uses and flexible spaces for its residents and visitors. While the open space and pedestrian networks cater for passive and active uses.

The proposed design for Apperly Village features effective space management and environmental maintenance methods through the following;

- **High-Quality Materials:** Utilise high-quality materials for construction and established planting to minimise the likelihood of damage. This approach not only contributes to the durability of the development but also helps reduce maintenance costs over time.
- **Ongoing Maintenance Program:** Establish an ongoing maintenance program for the community centre, individual villas, apartments buildings, and associated outdoor active and passive spaces and overall development landscape. The maintenance program is crucial for balancing safety and aesthetics, displaying clarity of ownership, and promoting positive community experiences.
- **Pedestrian Connectivity and Open Space:** As the areas surrounding the development including the public landscaped walkway have been designed to encourage moderate levels of activity and encourage pedestrian movement, effective environmental maintenance around site will be critical to the perceived safety of the environment. In addition to the walkways are the open spaces designed for different activities to cater for pedestrian connections to Nelson Bay Road and Newcastle Golf Course. The inclusion of BBQ facilities, fenced dog off-leash area and active recreational spaces encourage passive surveillance of these open spaces. Maintenance of this area will need to consider the effect of this space and its operational needs. This design encourages residents to use and explore different parts of the development, whilst providing opportunities for residents to notify the site manager of any maintenance concerns or issues.
- **Site Maintenance by Village Manager:** Entrust the on-site village manager with the responsibility of site maintenance, including coordination of space management and prompt repair of broken building and landscape infrastructure. This ensures a well-maintained environment for residents.
- **Village Management of Open Spaces:** Entrust village management with the responsibility of overseeing open spaces to foster a sense of ownership among residents. This encourages active participation in the maintenance and care of communal areas.

The overall approach to the proposed design emphasises creating a vibrant and well-maintained environment that encourages residents to actively participate in the community, fosters a sense of ownership over its public spaces, and contributes to a positive atmosphere of the built surrounds and the variety of open spaces available to the residents and their visitors. The proposed strategies align with the idea that a well-maintained and actively used space can positively impact feelings of safety and encourage community engagement.

ACCESS TO CONTROL

Entry control aims to decrease access opportunities for criminals through the use of physical and symbolic barriers. Access barriers can be created through building configuration, pathways and landscaping, as well as more direct forms such as fences, gates and the use of intercoms. These elements will help to reduce opportunistic criminals who will often exploit areas with unclear spatial boundaries.

The design of Apperly Village focuses on effective entry control measures, with the goal of decreasing access opportunities for potential criminals. The proposed elements aim to create clear spatial boundaries, discourage uninvited guests, and enhance security throughout the development. A breakdown of the key entry control features are:

- **Boundary Perimeter Fencing:** Different types of fencing based on location, including open timber post and railing, spear-topped palisade security fencing, powder-coated aluminium slat screen, and timber lap and capped fence with planting. Fence heights are 1200mm, 1600mm and 1800mm depending on the location within the development.
- **Vehicle Entry Points:** Main vehicle entry from Vardon Road with an internal shared pathway connecting to the existing Newcastle Golf Course car park.
- **Pedestrian Entry Points:** Two external pedestrian access points from Nelson Bay Road and internal pedestrian access points through residential public open spaces, all equipped with security gates accessible by residents via key cards.
- **Wayfinding and Entrance Features:** Clearly marked entrance points with wayfinding features, including pathways, lighting, and signage. The Apperly Entry statement for the development is on Vardon Road. It will have feature distinctive landscape planting, lighting, and public art to define the entry point and discourage illegitimate entry.
- **Formal Access:** Installation of security gates at entry vehicle and pedestrian points to be accessible by residents through swipe cards and intercom access for visitors. There will be clearly defined pedestrian entry points adjacent to the entry gate. The community centre access will be open during operational hours and will include a village manager's office and admin support office to minimise any illegitimate and/or unsolicited entry into the Site.
- **Access Control for Apartment Buildings:** Installation of swipe card access to underground carpark for the residents to the apartment block.
- **Villa Design:** Villas have been designed to allow residents to see who approaches their dwellings without the need to open the front door.
- **Passive Surveillance:** Pocket parks and open space areas are visible from nearby residences for passive surveillance. Footpath networks allowing pedestrians to move through the site with ease, creating a connected community that have access to various amenities and facilities, visible from nearby residents and users of community facilities.
- **Layout of Residential Areas:** Clear definition of private residential areas from communal facilities. Numbering of villas and naming of community facilities for increased wayfinding cues.
- **Emergency Vehicle Access:** Emergency vehicles are provided access through an entrance on Nelson Bay Road, a secure gate located at the far north-eastern boundary adjoining Newcastle Golf Course and the shared pathway west of Newcastle Golf Club.

The proposed measures collectively contribute to a well-designed entry control system, considering both physical and symbolic barriers to enhance the security and liveability of Apperly Village residents and visitors. The features outlined align with principles of Crime Prevention Through Environmental Design (CPTED) and are intended to create a safe and secure environment for residents.

ENTRY POINTS

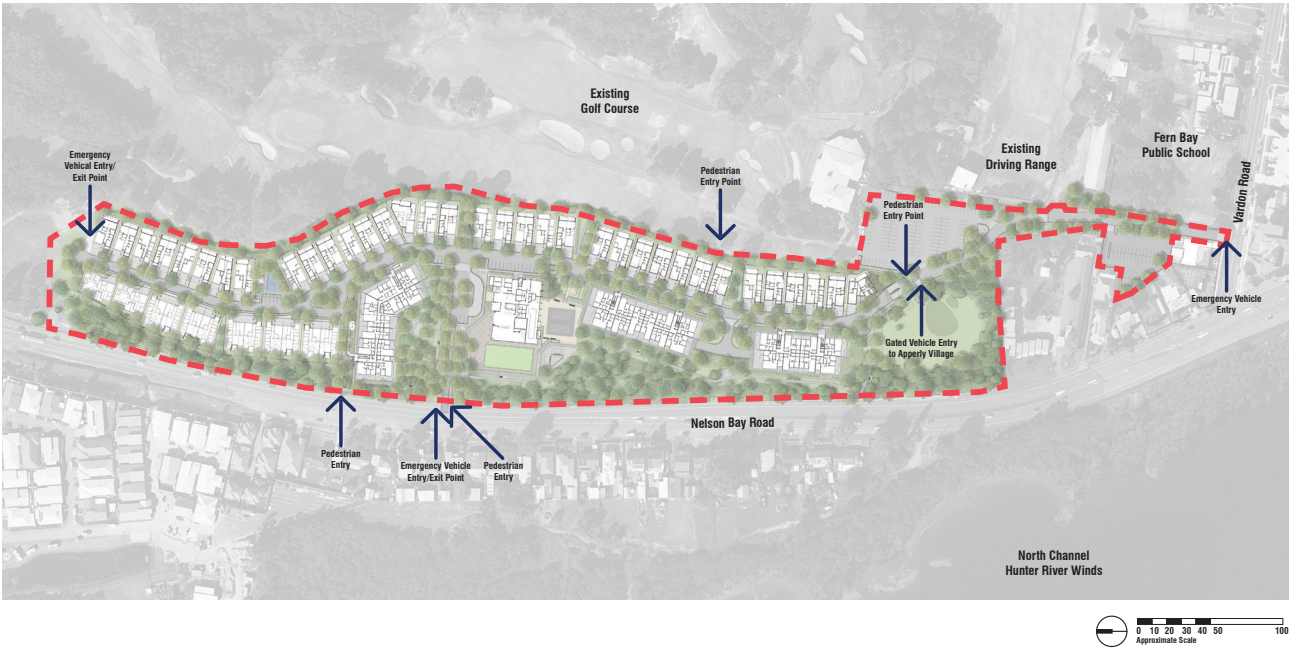


Figure 4 - Entry Points

RECOMMENDATIONS & MITIGATION MEASURES

The recommendations aim to improve the visual integration of Crime Prevention through Environmental Design (CPTED) measures in the proposed development by considering the context and nature of the development and its surrounding area. According to the assessment of the report, the crime risk of the proposed development is low, as indicated by stable or decreasing incidents of theft, assault, and homicide over the past 5 years. The design of the development clearly defines private and public spaces, making it difficult for potential offenders to justify their presence and actions, and further reducing the crime risk. The Appendix A BOCSAR Mapping provides hotspot maps and graphs for reference.

The recommendations provided aim to further enhance the safety and security of the proposed Apperly Village by refining Crime Prevention Through Environmental Design (CPTED) measures. Below is a summary of the key mitigation measures recommendations:

- **Vardon Road Driveway Entry Design:** Design of the driveway entry point at Vardon Road and Shared Pathway access to Newcastle Golf Club Carpark to maximise natural surveillance opportunities to and from this area, improving visibility and deterring potential criminal activities. In addition to CCTV camera located at the intercom.
- **Additional Building Identification Signage:** Provide additional building identification signage where appropriate to reinforce perceptions of safety, improve legibility within the development, and support territorial reinforcement.
- **Community Centre Operational Hours:** Appropriate signage should be implemented that identifies the operating hours for public access (if a shared use agreement is reached with Centre Manager/Management). Consideration of digital surveillance should be made between the Community Centre and Immediate Open Space Area in the event the facility is used at night, after hours or by the public. With all intended outdoor areas to be used at night to have external lighting design to ensure compliance with AS4282 in order to minimise any spill onto neighbours or to the night sky.
- **Residential Building:** layout of building and dwelling entry from inside each dwelling and general observation of public areas, driveways and streets from a dwelling that adjoins the area, driveway or street. The dwellings are designed to allow residents to see who approaches their dwellings without the need to open the front door.
- **High-Quality Construction Materials for Building and Landscape Areas:** Use high-quality materials for construction to reduce the likelihood of damage, ensuring durability and lowering maintenance costs.
- **Wayfinding and Identification Signage:** Implement appropriate wayfinding and identification signage within and around the village to enhance legibility, promote territorial reinforcement, and assist in defining private and public spaces. The use of signage and transition cues should be carefully considered primarily around the Community Centre and the open green spaces to avoid confusion of this space with the use of appropriate landscaping, pavement finishes and fencing to reinforce clearly define the transition from the public to private realm within the development.
- **Public Art as Wayfinding:** Utilise public art within the site as a means of wayfinding and area identification for various public spaces and buildings within the development.
- **Apartment Carpark Access and Egress:** Apartment Carpark Entries and carpark should be illuminated at night-time in accordance with the relevant standards. Obtrusive lighting should be carefully considered in the external lighting design to ensure compliance with AS4282 in order to minimise any spill onto neighbours or to the night sky.
- **External Pedestrian Pathway Connectivity:** All pathways should be clearly illuminated with external lighting that is compliant with AS1158.1 and AS4282. External lighting should be designed to avoid light spill to surrounding neighbours and the night sky.
- **Clear Sightlines:** Maintain clear sightlines between the development and the public domain, especially around the entry point from Vardon Road and connections to the Newcastle Golf Course, to enhance visibility and reduce concealment opportunities.

- **Concealment and Entrapment Areas:** Minimise possible concealment or entrapment areas in the design to prevent opportunities for illicit activities.
- **Lighting Design:** Design lighting to meet Australian Lighting Standards AS1158 to maximise surveillance opportunities, improve visibility, and enhance overall safety.
- **Vandalism Prevention:** Graffiti management measures should be incorporated into the maintenance plan/strategy for the building. Research has shown that the most effective strategy for reducing graffiti attacks is the quick removal of graffiti within a 48-hour period.
- **Tree Species Selection:** Use tree species with high canopies to provide clear sightlines at eye level. With low level shrubs interspersed with canopy trees. This allows for sightlines between heights from the ground of 600mm and 1800mm to be maintained to minimise opportunities for hiding, particularly where level changes are significant. Implement a strict maintenance regime for low and mid-canopy species to preserve clear sightlines.
- **Vegetation Management:** Maintain clear sightlines within existing retained vegetation by removing vegetation growth between heights of 600mm and 1800mm from the ground. With the building maintenance plan/strategy should also maintain landscaping to ensure the site displays strong ownership.
- **Maintenance Plan:** Develop a comprehensive maintenance plan for ongoing upkeep, including rapid removal of vandalism and graffiti, maintenance of perimeter landscaping, public furniture, access pathways, and public recreational areas.
- **Collaboration with Local Authorities:** Consider collaboration with local law enforcement agencies and other relevant authorities to address potential concerns highlighted in the CPTED assessment.
- **Emergency Response Planning:** Develop and communicate emergency response plans that involve collaboration with local emergency services, ensuring a coordinated approach in the event of security-related incidents.
- **Emergency Services Access:** Hold discussions with emergency services regarding access to fire trail gates to ensure coordination and efficient emergency response.
- **Apartment and Community Fire Egress:** Fire exit doors should be fitted with measures to restrict unauthorised access from the outside;
- **Security Measures Beyond the Immediate Area:** Given the identified opportunities for crime within a 15km radius, consider extending security measures beyond the immediate boundaries of Apperly Village. This may involve coordination with neighbouring communities and relevant stakeholders.
- **Ongoing Monitoring and Adaptation:** Establish a system for ongoing monitoring and adaptation of security measures based on changes in crime patterns, community dynamics, and other relevant factors.
- **Integration with Design Elements:** Integrate recommended security measures seamlessly into the design of Apperly Village, ensuring they enhance the aesthetics of the development while promoting safety.

These recommendations for enhancing safety and security at Apperly Village through CPTED principles are comprehensive and aligned with industry best practices. By focusing on natural surveillance, clear sight lines, effective lighting, CCTV surveillance, thoughtful landscaping, and signage, the proposal aims to create a secure and inviting environment for residents, staff, and visitors alike. Addressing integration with plan of management will further enhance the effectiveness and longevity of these security measures.

APPENDIX A - BOCSAR MAPPING

BOCSAR INCIDENT MAPS

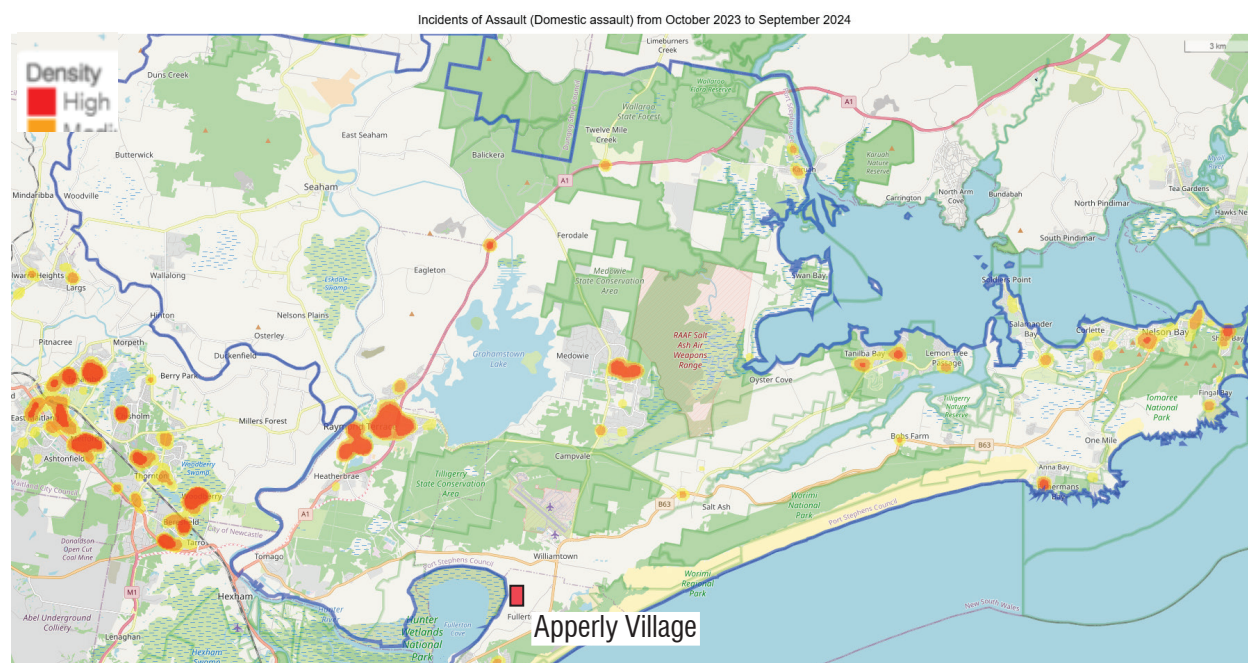


Figure 5 - Recorded Crime incidents of assault (domestic assault) in Port Stephens Local Government Area (October 2023 - September 2024)

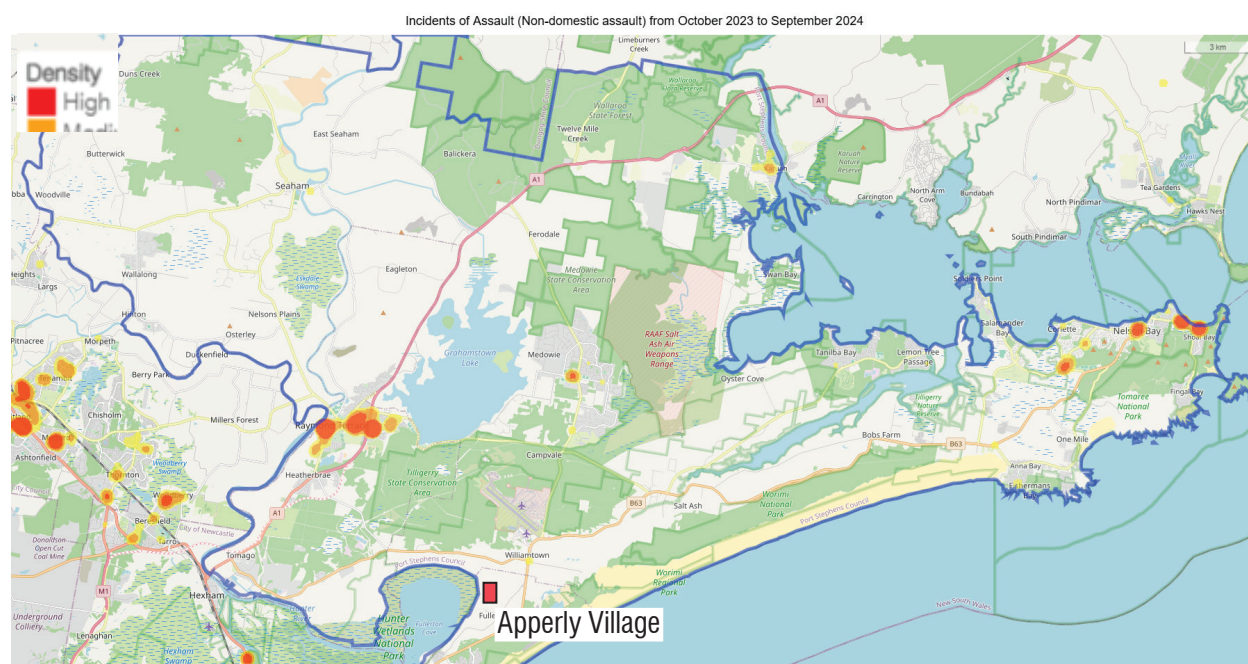


Figure 6 - Recorded Crime incidents of assault (non-domestic assault) in Port Stephens Local Government Area (October 2023 - September 2024)

BOCSAR INCIDENT MAPS

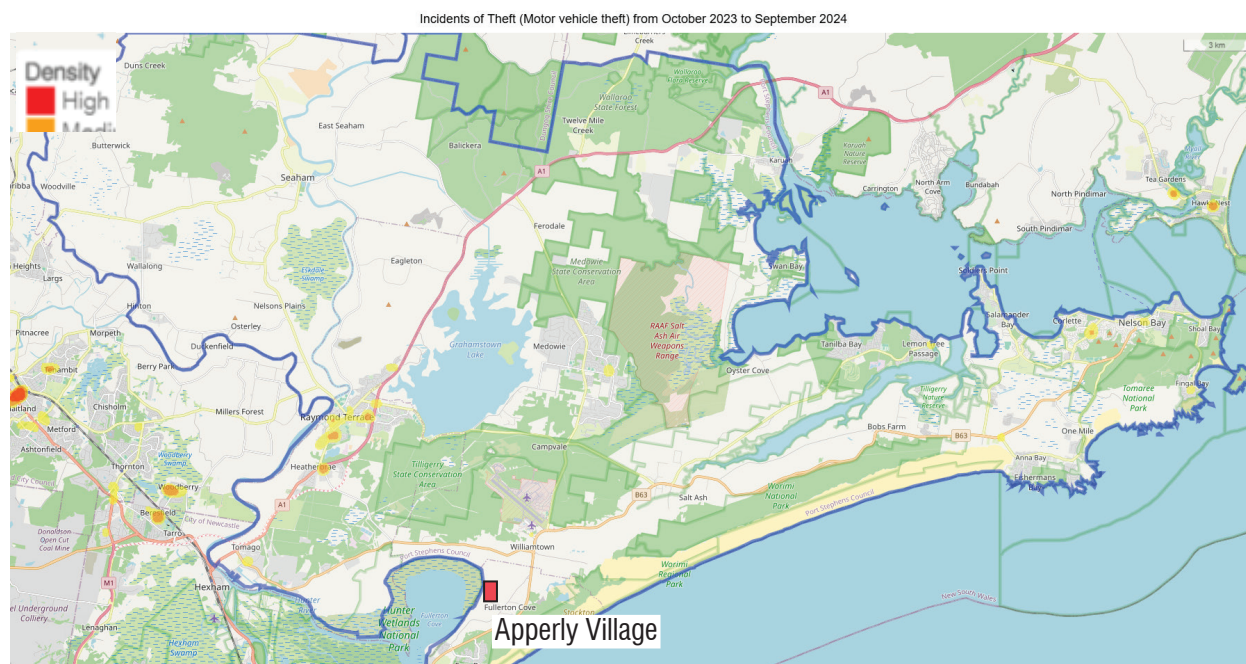


Figure 7 - Recorded crime incidents of theft (Motor vehicle theft) in Port Stephens Local Government Area (October 2019 - September 2024)

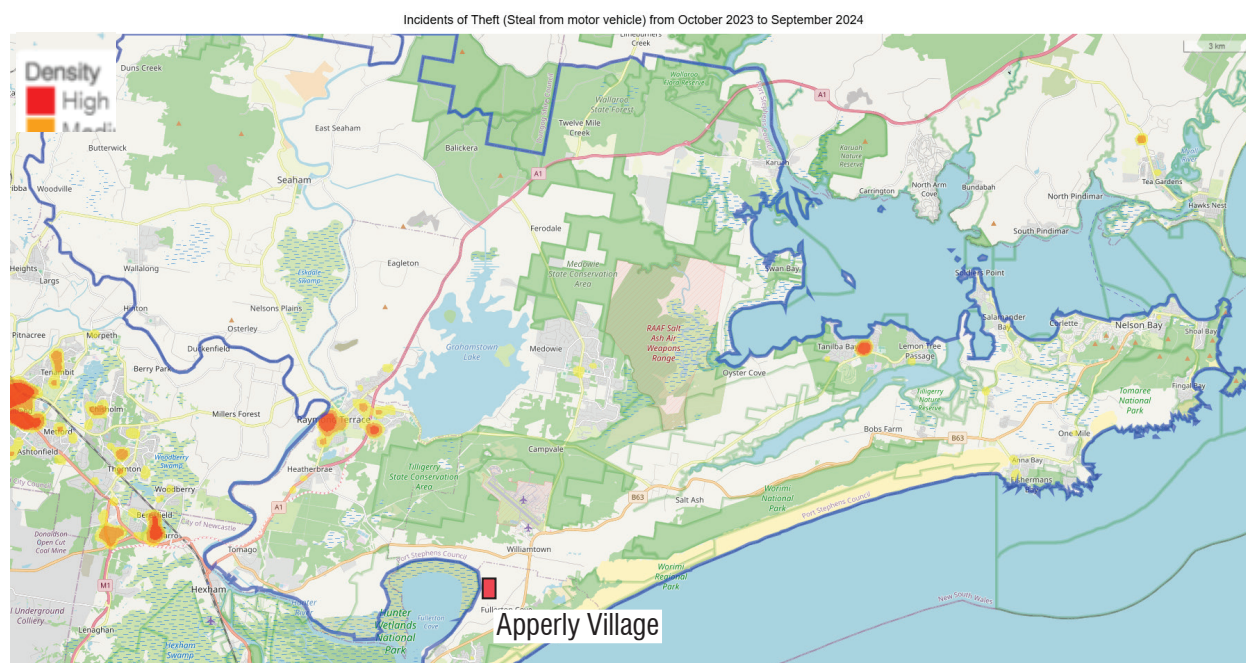


Figure 8 - Recorded crime incidents of theft (Steal from motor vehicle) in Port Stephens Local Government Area (October 2019 - September 2024)

BOCSAR INCIDENT MAPS

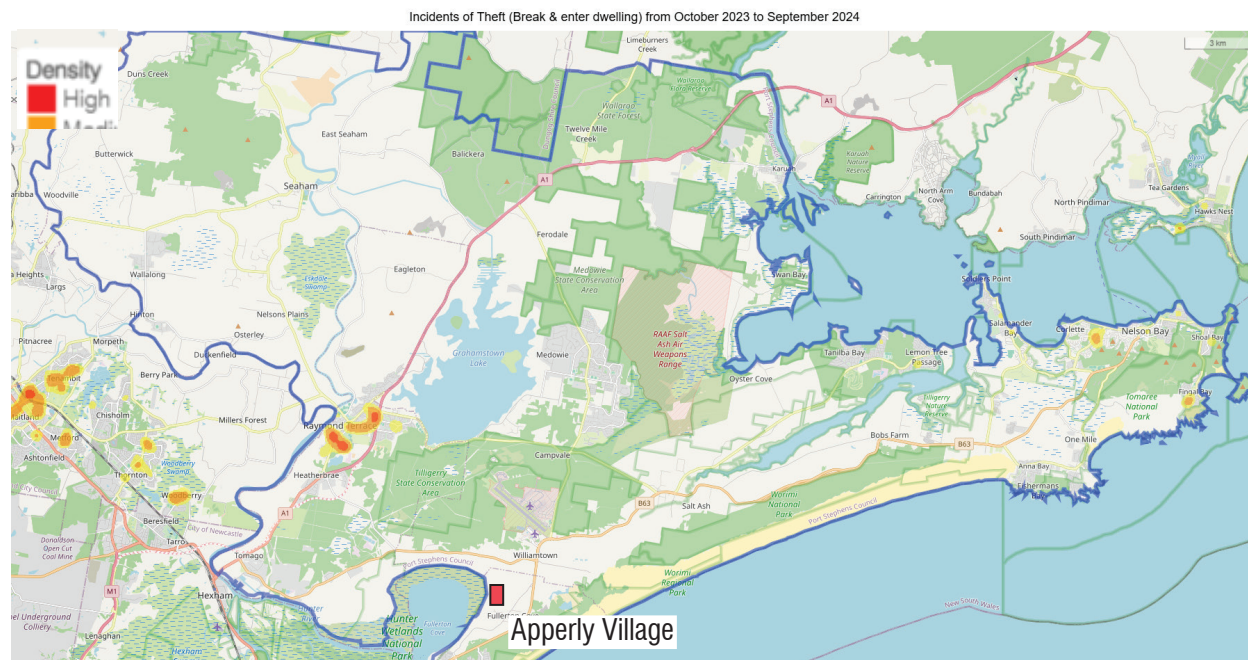


Figure 9 - Recorded Crime incidents of theft (break and enter dwelling) in Port Stephens Local Government Area (October 2023- September 2024)

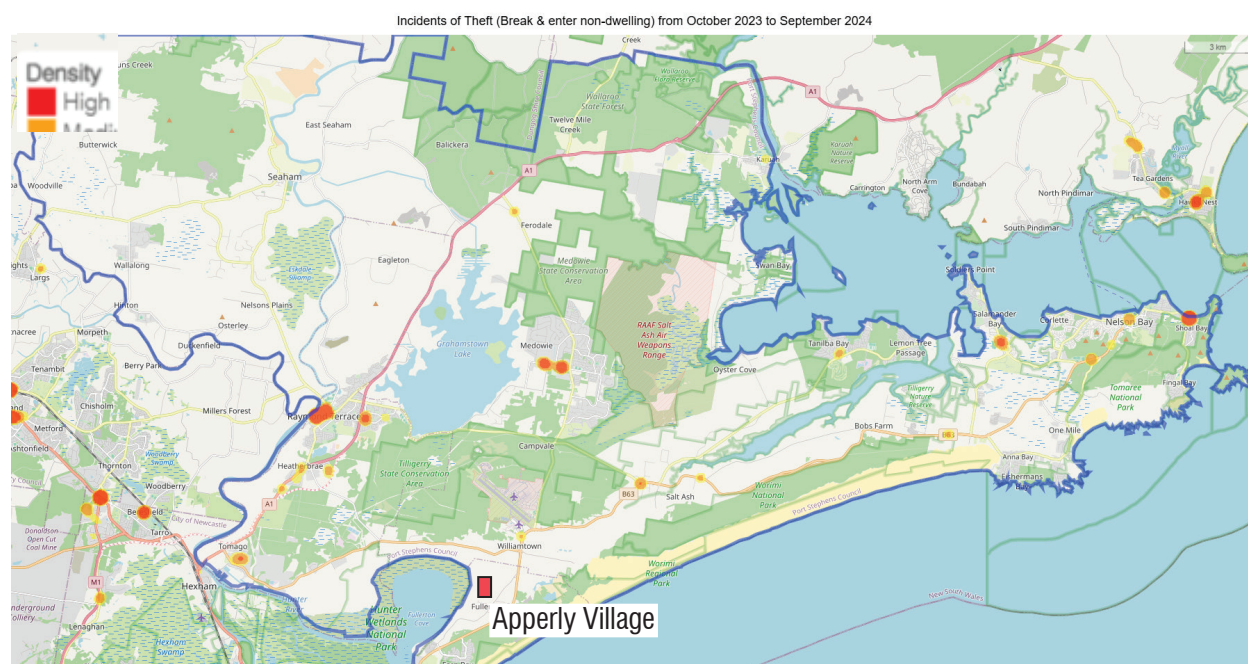


Figure 10 - Recorded Crime incidents of theft (break and enter non-dwelling) in Port Stephens Local Government Area (October 2023 - September 2024)

BOCSAR INCIDENT MAPS

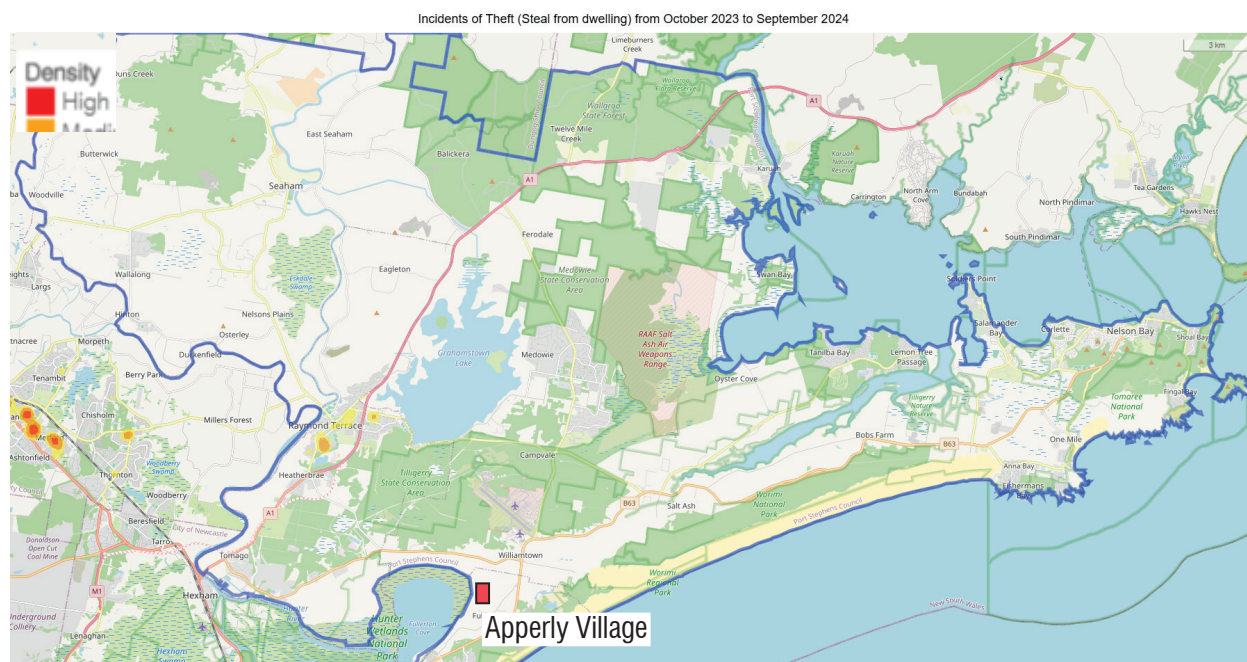


Figure 11 - Recorded crime incidents of theft (Steal from dwelling) in Port Stephens Local Government Area (October 2019 - September 2024)

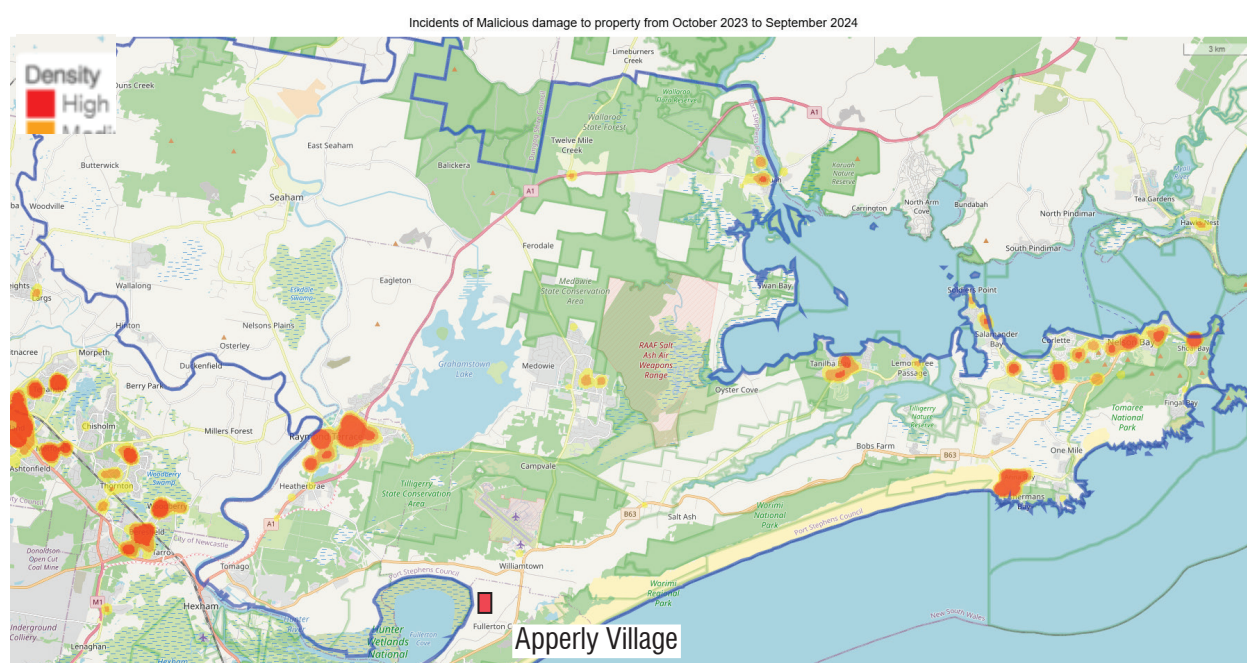


Figure 12 - Recorded crime incidents of Malicious damage to property in Port Stephens Local Government Area (October 2019 - September 2024)

BOCSAR INCIDENT GRAPHS

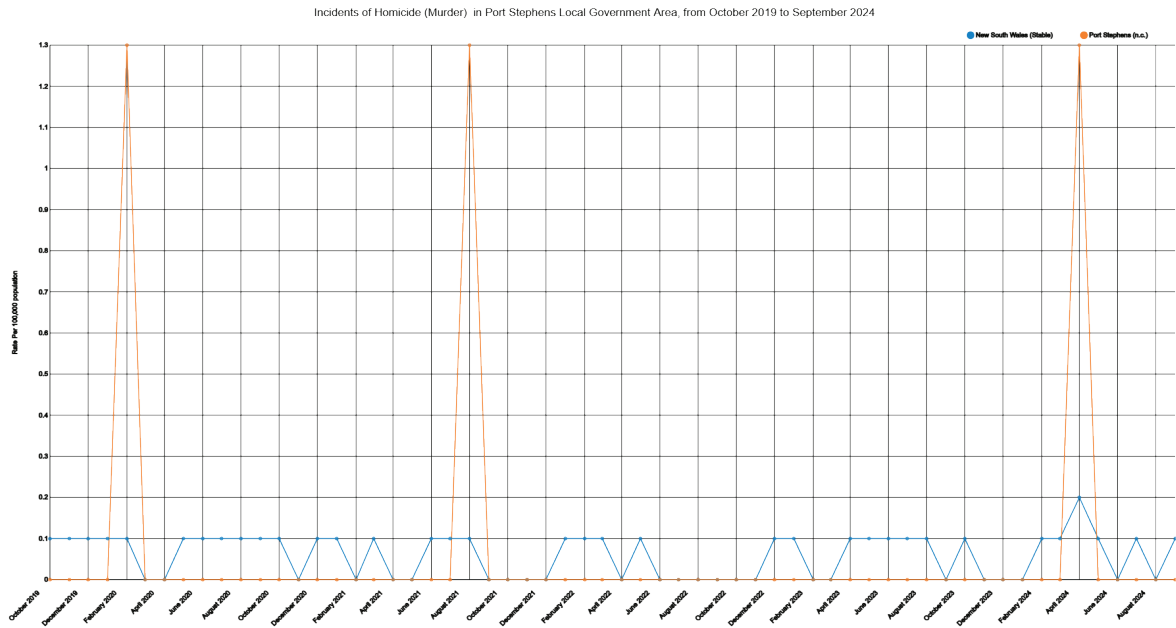


Figure 13 - Recorded Crime incidents of Homicide (murder) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Stable Port Stephens LGA – n.c.

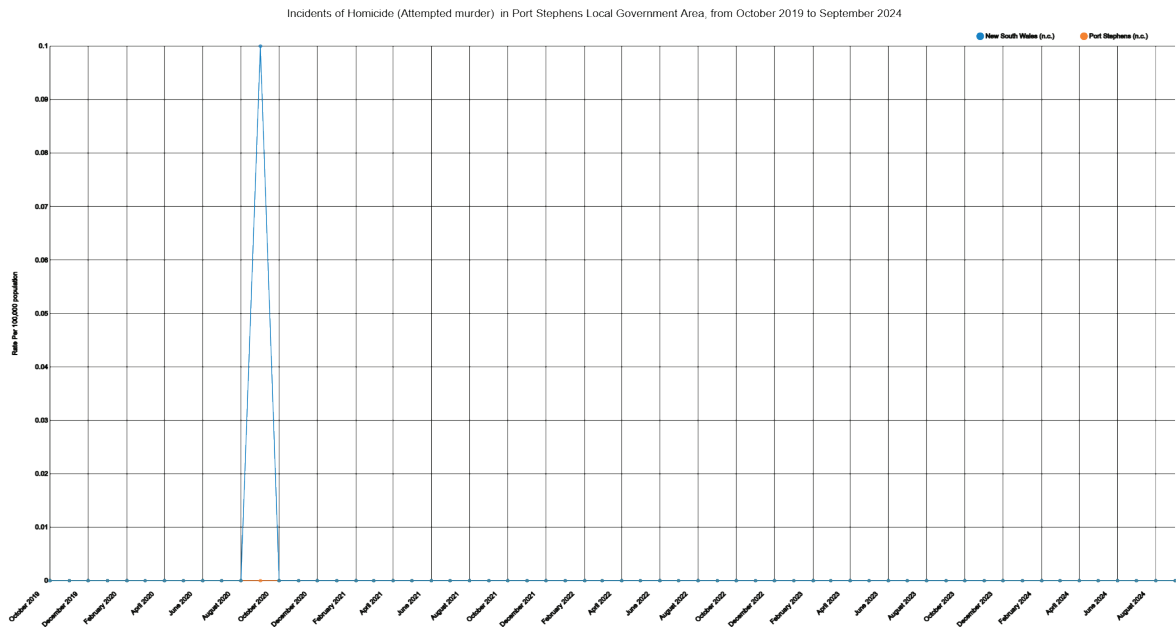


Figure 14 - Recorded Crime incidents of Homicide (attempted murder) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – n.c. Port Stephens LGA – n.c.

BOCSAR INCIDENT GRAPHS

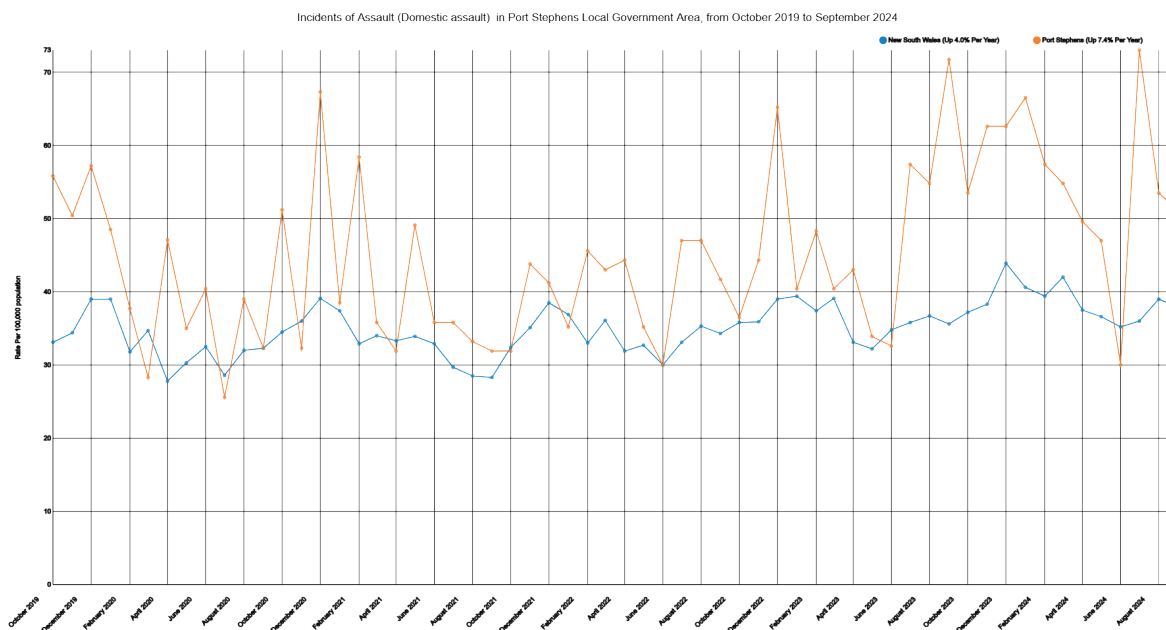


Figure 15 - Recorded crime incidents of assaults (domestic) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Up 4.0% per year

Port Stephens LGA – Up 7.4% per year

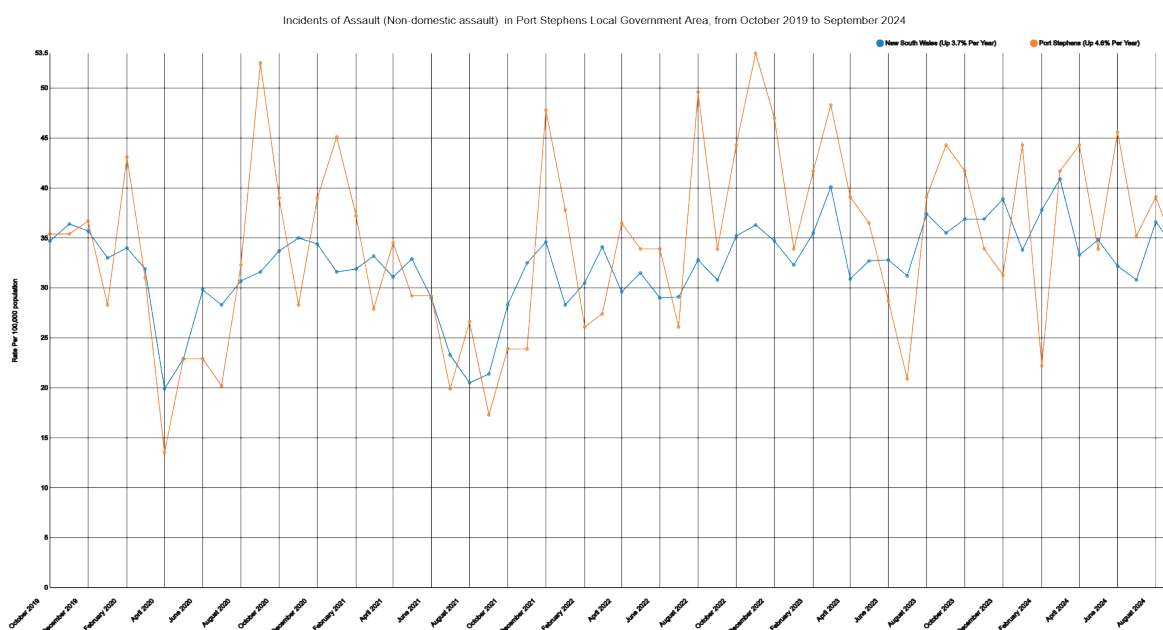


Figure 16 - Recorded crime incidents of assaults (non-domestic) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Up 3.7% per year

Port Stephens LGA – Up 4.6% per year

BOCSAR INCIDENT GRAPHS

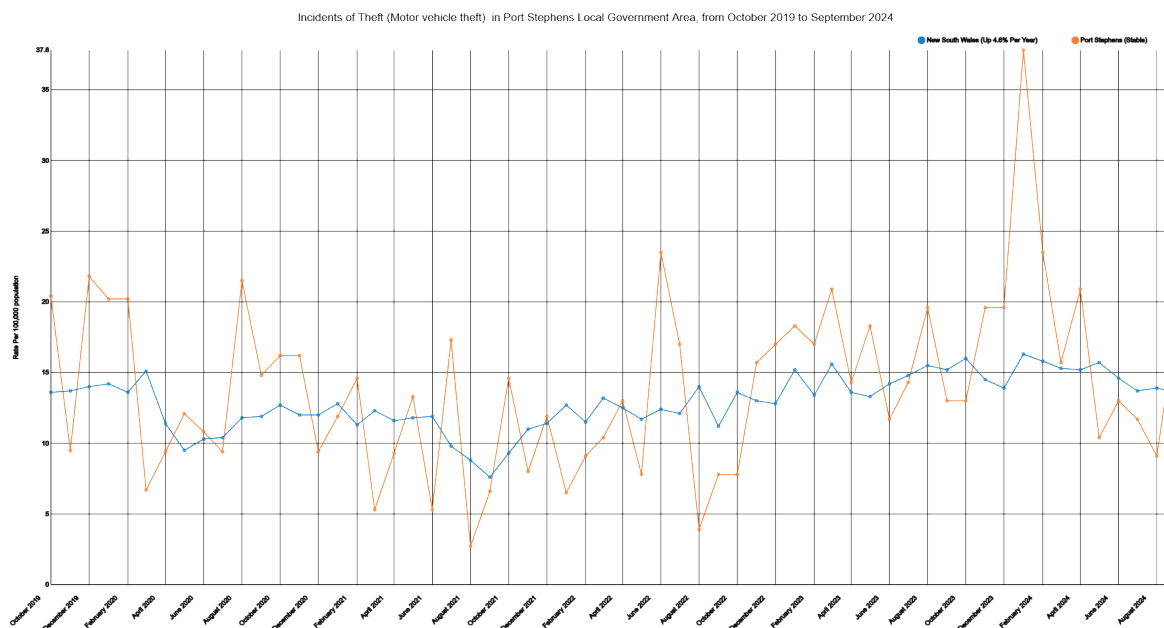


Figure 17 - Recorded crime incidents of theft (Motor vehicle theft) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Up 4.6% per year

Port Stephens LGA – Stable

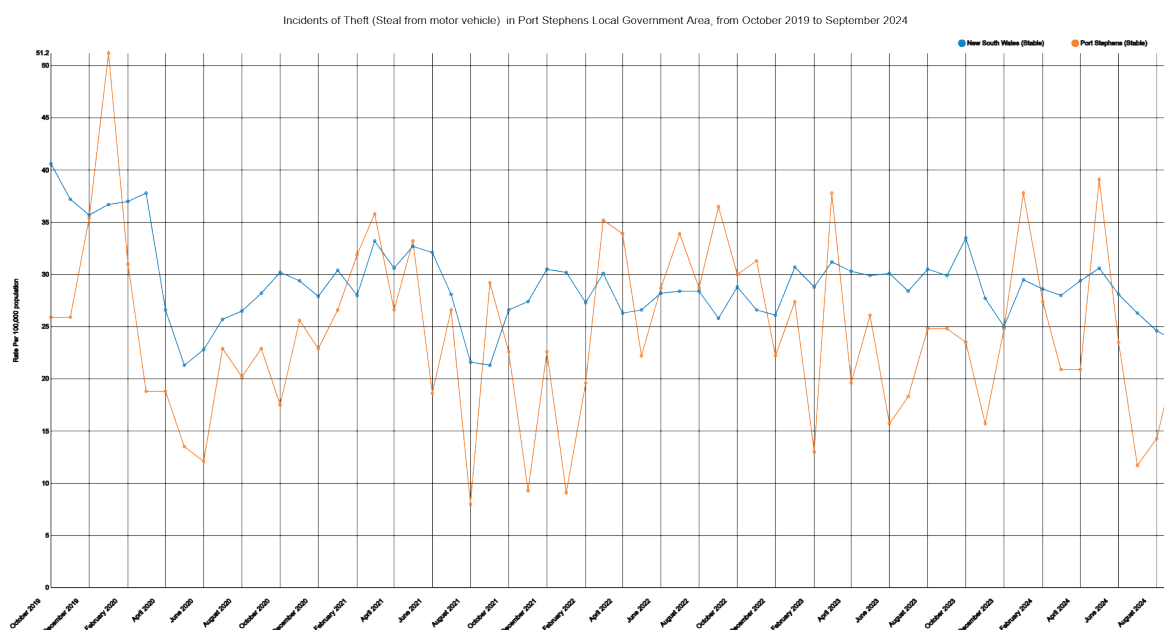


Figure 18 - Recorded crime incidents of theft (Steal from motor vehicle) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Stable

Port Stephens – Stable

BOCSAR INCIDENT GRAPHS

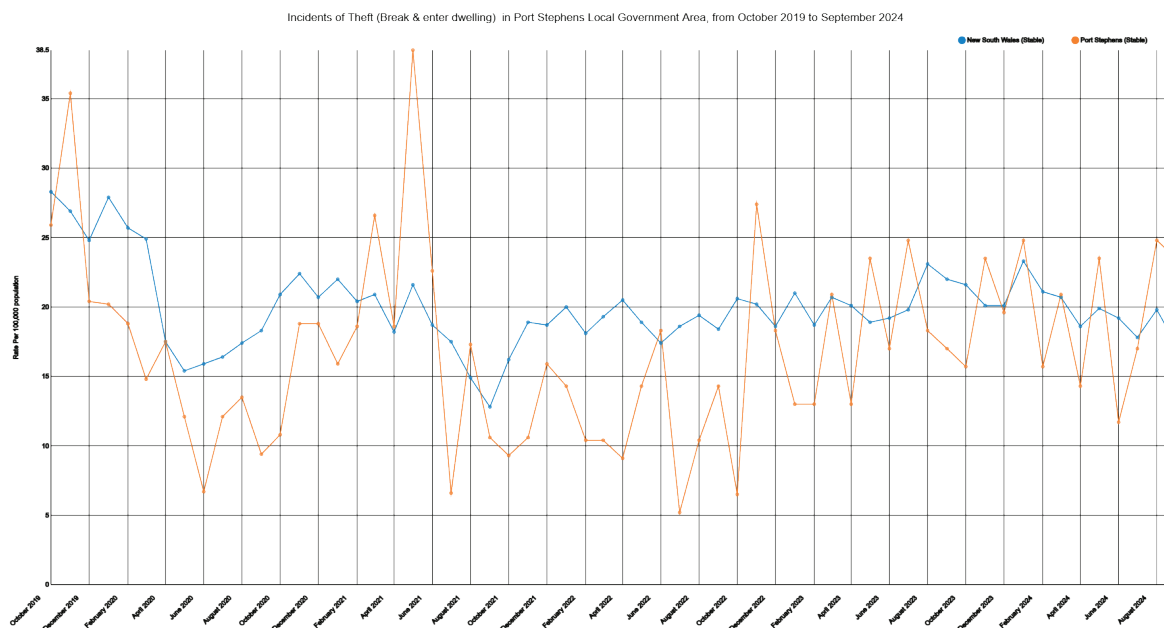


Figure 19 - Recorded crime incidents of theft (break and entering of dwelling) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Stable

Port Stephens – Stable

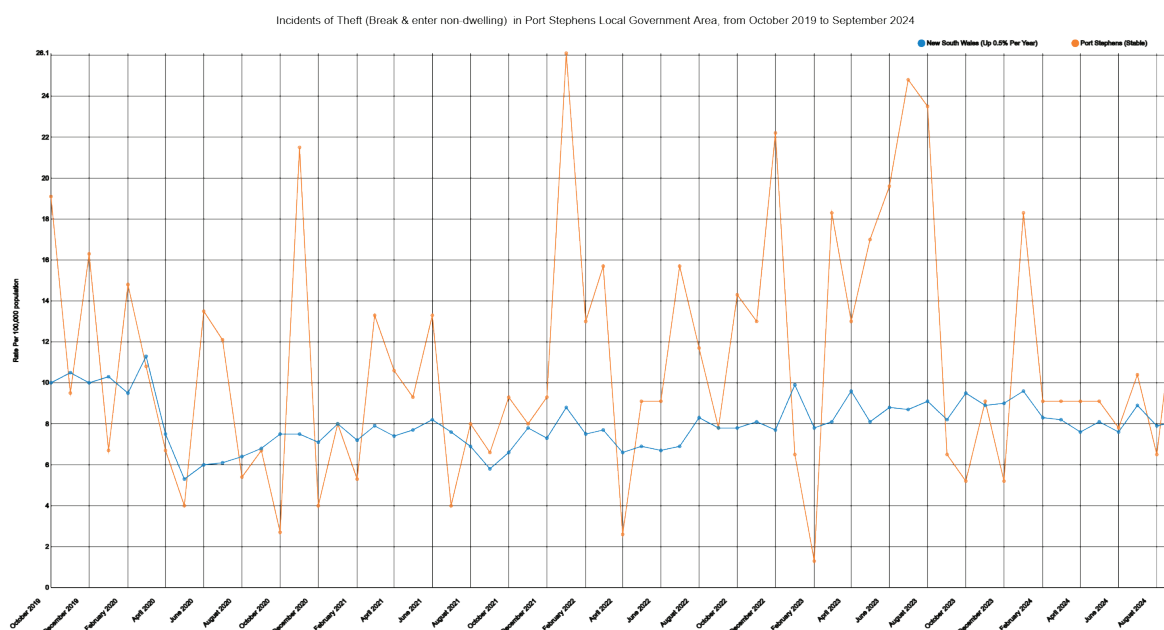


Figure 20 - Recorded crime incidents of theft (break and entering of non-dwelling) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Up 0.5% per year

Port Stephens LGA – Stable

BOCSAR INCIDENT GRAPHS

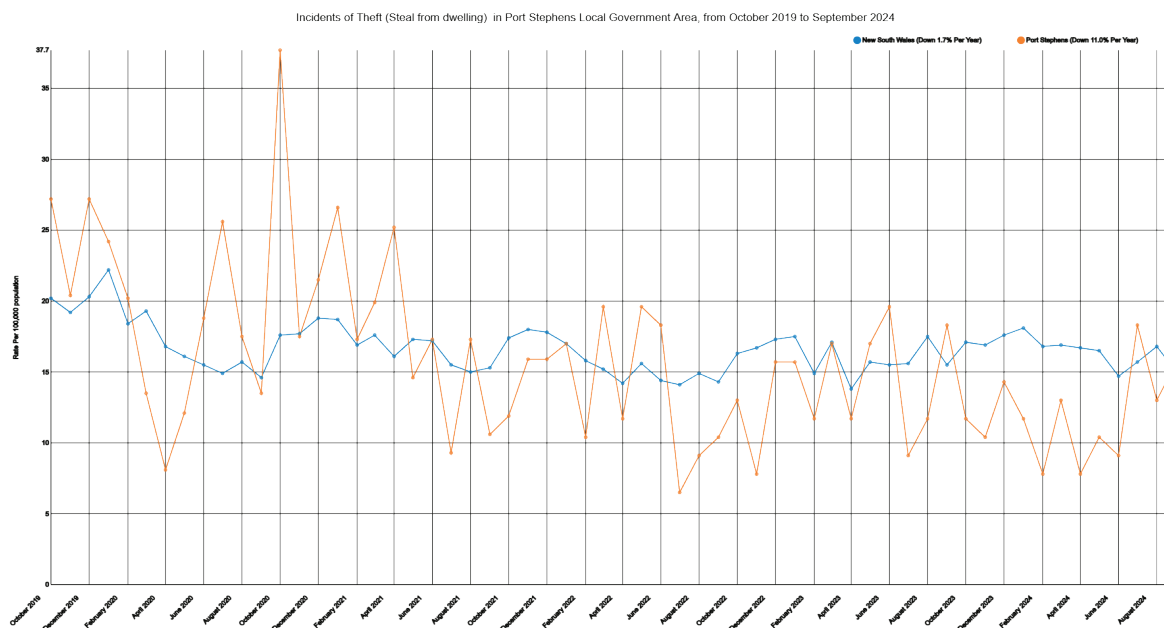


Figure 21 - - Recorded crime incidents of theft (Steal from dwelling) in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Down 1.7% per year

Port Stephens LGA – Down 11.0% per year

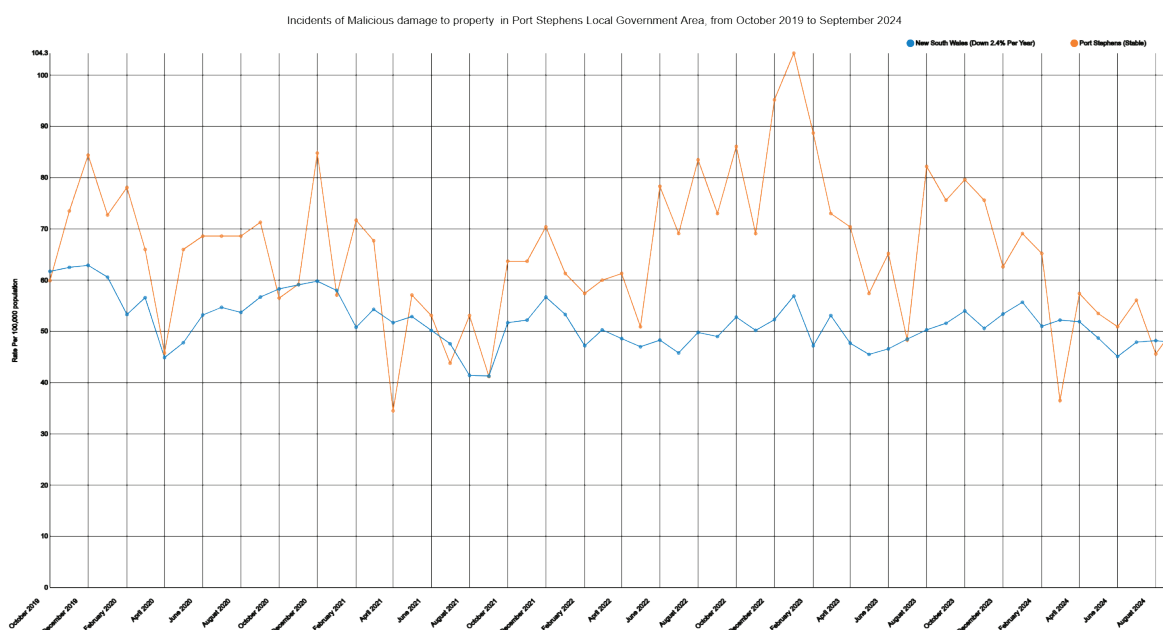


Figure 22 - Recorded crime incidents of Malicious damage to property in Port Stephens Local Government Area (October 2019 - September 2024)

New South Wales – Down 2.4% per year

Port Stephens LGA – Stable

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