

# ATTACHMENTS DISTRIBUTED UNDER SEPARATE COVER

# CCL 26/04/2022 - ADOPTION OF PLANNING PROPOSAL FOR 41 AND 47 THROSBY STREET, WICKHAM

PAGE 3	ITEM-35	Attachment A:	Planning Proposal - 41 and 47 Throsby Street, Wickham
PAGE 83	ITEM-35	Attachment B:	Planning Agreement - 41 and 47 Throsby Street, Wickham
PAGE 115	ITEM-35	Attachment C:	Submission table - 41 and 47 Throsby Street, Wickham



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### CCL 26/04/2022 - ADOPTION OF PLANNING PROPOSAL FOR 41 AND 47 THROSBY STREET, WICKHAM

ITEM-35 Attachment A: Planning Proposal - 41 and 47 Throsby Street, Wickham



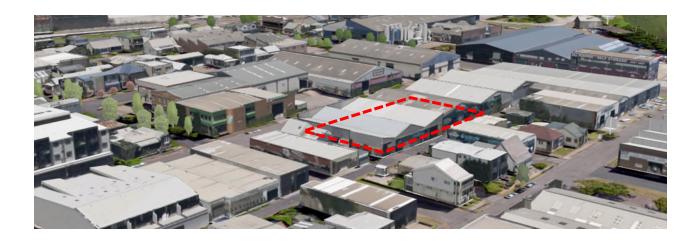
# **Planning Proposal**



PP-2021-328 (formerly PP\_2020\_NEWCA\_001\_00)

Proposed Amendment to Newcastle Local Environmental Plan 2012

# 41 and 47 Throsby Street Wickham



Version	Description	Date
1.	Council endorsement	28/07/2020
2.	DPIE requested changes –	9/09/2020
	Pre-Gateway Determination	2/10/2020
3.	Public exhibition	1/10/2021
4.	Final adoption	ТВА

# CONTENTS

Overview1
Part 1 - Objectives or intended outcomes
Part 2 - Explanation of provisions4
Part 3 - Justification
Section A - Need for the planning proposal
Section B - Relationship to strategic planning framework 10
Section C - Environmental, social and economic impact 20
Section D - State and Commonwealth interests
Part 4 - Mapping21
Part 5 - Community consultation22
Part 6 - Project timeline23
Appendices23

Appendix A - Mines Subsidence Assessment

# Overview

Land application	<ul> <li>41 Throsby Street, Wickham</li> <li>Lot 63 DP 579890</li> <li>Lots 1 and 2 DP 112816</li> <li>Lot 200 DP 534787</li> <li>47 Throsby Street, Wickham</li> <li>Lot 62 DP 579890</li> </ul>
Proposed amendment to Newcastle LEP 2012	<ul> <li>Amend Height of Building (HOB) map by:</li> <li>Increasing HOB on part of 41 Throsby Street (i.e. Lots 1 and 2 DP 112816 and Lot 200 DP 534787) from 10m to 14m</li> <li>Increasing HOB on part of 41 Throsby Street (i.e. Lot 63 DP 579890) and on 47 Throsby Street (Lot 62 DP 579890 from 10m to 28m)</li> <li>Amend Floor Space Ratio (FSR) map by:</li> <li>Increasing FSR applying to both 41 and 47 Throsby Street from 1.5:1 to 3:1</li> </ul>
Initiated by	Fidem Property Group on behalf of the current landowner FPG Wickham Pty Ltd

# Figure 1 and 2 shows the land to which the proposed LEP amendment applies within the local context.



Figure 1

Subject land at 41 and 47 Throsby Street Wickham

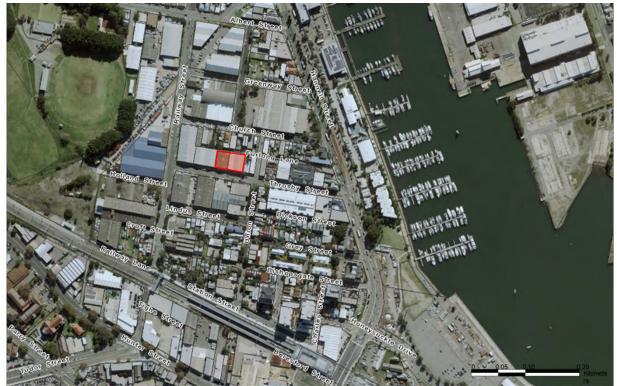


Figure 2 Local context for 41 and 47 Throsby Street Wickham (site shown in red)

The proposed LEP amendment was assessed having regard of the following matters:

- Section 3.33 of the Environmental Planning and Assessment Act 1979
- The Department of Planning and Environment's *Local Environmental Plan Making Guideline*
- The strategic merit of the proposed amendments to Newcastle LEP 2012 with respect to the provision of additional GFA within the B4 Mixed Use Zone to enable additional housing and/or employment uses within this part of the Newcastle City Centre
- Consistency with the intent of the adopted Wickham Master Plan (WMP) 2017 and WMP 2021 to unlock potential redevelopment of land and facilitating feasible delivery of local infrastructure including improved connectivity from Throsby Street to Furlong Lane
- The public interest

PPs are not intended as static documents. As such, changes and updates have been made at various stages of the amendment process.

This is the final version of the PP which has been amended post-exhibition. It will be forwarded to the Department of Planning and Environment for finalisation once it is reported to Council.

# Part 1 - Objectives or intended outcomes

The intent of this PP is to amend *Newcastle Local Environmental Plan 2012* to enable an increase in the potential gross floor area (GFA) on land at 41 and 47 Throsby Street, Wickham.

# Part 2 - Explanation of provisions

The intended outcome will be achieved by the following amendments to Newcastle LEP 2012:

#### Floor space ratio

Amend the Floor Space Ratio (FSR) map with respect to the land as follows:

1. Increase the maximum FSR on 41 and 47 Throsby Street from S (1.5:1) to V (3:1)

The proposed amendment to FSR is shown in **Figure 3** *Existing FSR on the land* and **Figure 4** *Proposed FSR on the land*.



Figure 3 Existing FSR on the land – 1.5:1



Figure 4 Proposed FSR on the land – 3:1

#### Height of buildings

Amend the Height of Building (HOB) map with respect to the land as follows:

- 1. Increase the maximum HOB on part of 41 Throsby Street from K 10 (meters) to N 14 (meters)
- Increase the maximum HOB on part of 41 Throsby Street, and all of 47 Throsby Street from K 10 (meters) to T 28 (meters)

The proposed amendments to HOB are shown in **Figure 5** *Existing HOB on the land* and **Figure 6** *Proposed HOB on the land*.





# Part 3 - Justification

### Section A - Need for the planning proposal

1. Is the planning proposal a result of any strategic study or report?

#### Wickham Master Plan 2017

The proposal was initiated by the proponent following the endorsement of the Wickham Masterplan (WMP) in November 2017. The WMP was prepared as a recommendation of the NSW Government's *Newcastle Urban Renewal Strategy* which identified Wickham as an area requiring further planning to inform future redevelopment decisions.

WMP identified strategies and actions to implement the key objectives:

- 1. Improve accessibility and connectivity within Wickham and to adjoining areas
- 2. Create safe, attractive, and inclusive public places
- 3. Ensure built environment is functional, responsive, and resilient

The WMP 2017 identified six interconnecting character precincts. The intent of the precincts is to determine the envisaged character for different parts of Wickham based on their location, physical attributes, density and redevelopment potential.

The PP area, spans across the hypothetical boundary of two precincts as shown in Figure 7:

- The eastern portion (41 Throsby Street) is within the Village Hub where re-development is envisaged to include a mix of residential apartment buildings and shop top housing (mixed-use development) and terrace style housing. The scale in this precinct is limited by a consistent street wall height similar to existing development in Throsby Street.
- The western portion (47 Throsby Street) being within the Emerging Industry Quarter, which generally has larger development sites allowing redevelopment of a much larger scale than the Village Hub but maintaining a consistent street wall height and setback through the provision in the *Newcastle Development Control Plan 2012* (NDCP 2012).



Figure 7 - Proposed transition of redevelopment densities

#### Wickham Masterplan (2021 Update)

The Urban Precinct mapping was updated in the WMP (2021 Update) to better reflect the interconnected nature of the precincts, particularly where these transition along the street. The site is shown in red in Figure 8.

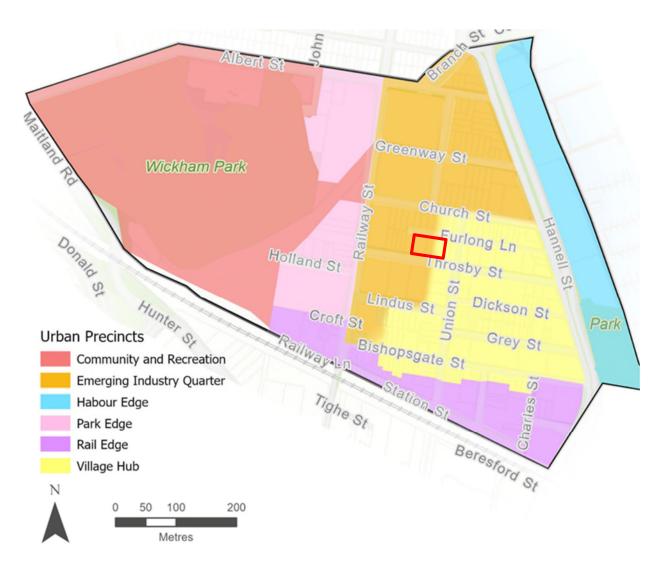


Figure 8 – Wickham Urban Precincts as per WMP 2021 Update

The WMP 2021 also includes strategies and actions for achieving the provision of community infrastructure through developer incentives (i.e. an increase in development standards within in NLEP 2012). The provision of improved connectivity and public domain improvements between Throsby Street and Furlong Lane is nominated as a community infrastructure project within the WMP 2021. *Draft Planning Proposal – Community Infrastructure Incentives in Wickham* was endorsed by Council at the March 2022 meeting and is discussed in the next section.

The PP is accompanied by a draft Planning Agreement between the proponent and Council, which will provide for a laneway along the western boundary of 47 Throsby Street. The WMP had originally identified the proposed laneway to be provided within the adjoining land at 55 Throsby Street, however CN has identified a greater benefit in supporting the delivery of a laneway within 47 Throsby Street while maintaining the opportunity to widen this laneway should 55 Throsby Street redevelop in the future. This would provide the opportunity for an additional parking lane and public domain fronting. The further widening of the laneway will ensure greater

building separation between 47 and 55 Throsby Street and would increase solar access and amenity between Furlong Lane and Throsby Street.

The variation in densities proposed in this PP from the general development standards set for Area D in the WMP 2021, based on Council's Community Infrastructure Incentives Policy (adopted 27 July 2021) is suitably justified. Notwithstanding, it is noted that this PP is subject to a separate planning pathway given that the PP was initiated and lodged prior to the preparation and endorsement of Council's Community Infrastructure Incentives Policy, and any changes to the LEP to implement community infrastructure incentives in Wickham.

The Planning Agreement is generally consistent with the principles of the endorsed Community Infrastructure Incentives Policy. While the Planning Proposal varies from the HOB standards proposed in the WMP 2021 it is consistent with the mechanisms described in the Policy in that the increased HOB and FSR corresponds with an agreed GFA rate (\$/m<sup>2</sup>), having regard for the value of the laneway offered as community infrastructure per the Planning Agreement.

The proposed max HOB for part 41 Throsby Street has been amended post-exhibition. Notwithstanding, the maximum FSR for the site has not changed, meaning the resulting development will have the same gross floor area (GFA). It has been updated to reflect the amended HOB controls contained within the Planning Proposal.

The increase in density and scale on the site is also suitably justified regarding the potential for mines subsidence. WMP 2021 identifies the site as within Zone D, meaning that it is not within the area of influence. Notwithstanding, Council engaged with Subsidence Advisory NSW (SANSW) per the Gateway Determination and the proponent undertook further geotechnical assessment prior to the public exhibition to confirm the site can achieve the density and scale proposed. SANSW advised that the further geotechnical assessment was sufficient to allow the Draft Planning Proposal to proceed with further assessment required at the development application stage.

The increase in density and scale is suitably justified on planning grounds having regard to potential impacts and envisaged future character. The proponent previously provided an initial design analysis prepared by EJE Architects, based on a HOB of 28m being applied across the entire PP area. The design analysis demonstrated that the PP could result in a development compliant with:

- Council's DCP
- SEPP 65 Residential Apartment Design Guidelines
- WMP by achieving the transition in character and scale, as nominated, through provision of development setbacks and suitable design treatment along Throsby Street.

The HOB for part 41 Throsby Street has been reduced from 22m to 14m post-exhibition, reflective of its siting within the Village Hub Urban Precinct. The HOB for 47 and part 41 Throsby Street has remained at 28m, as exhibited. The max FSR of 3:1 across the site has not changed since public exhibition. The proponent has undertaken high level modelling that demonstrates that the proposal can achieve the maximum GFA while being compliant with the Apartment Design Guide and the draft DCP controls contained within WMP 2021 and Draft DCP Wickham.

While the HOB of 28m for 47 and part 41 Throsby Street is above what is envisaged in the WMP 2021 (24m), this variation is considered acceptable, particularly as the maximum incentive building height limit to the west and south of the site is 35m. The proposal is subject to a separate planning pathway given that it was initiated and lodged prior to the endorsement of the WMP 2021 and Community Infrastructure Incentives Policy. 47 Throsby Street is located within the

Emerging Industry Quarter which has a higher density future character envisaged per the WMP 2021.

In conclusion the PP aligns with the WMP 2021 with respect to nominated location of the new laneway. The PP varies with respect to the redevelopment incentives originally envisaged in WMP 2017, but these variations are justified having regard to Council's Community Infrastructure Incentives Policy, the intent of the WMP, the envisaged future character of the Emerging Industry Quarter and Village Hub precincts, and consideration of the potential impacts of the proposal.

# Draft Wickham Masterplan (2021 Update) (2022 Amendment) & Draft Planning Proposal – Community Infrastructure Incentives in Wickham

Council resolved at the March 2022 Council meeting to publicly exhibit the Draft Wickham Masterplan (2021 Update) (2022 Amendment). Council also resolved to forward Draft Planning Proposal – Community Infrastructure Incentives in Wickham to the Department of Planning and Environment for Gateway Determination and the proposal's subsequent public exhibition.

The WMP 2021 (2022 Amendment) was prepared following further analysis and monitoring of the WMP 2021. The proposed changes outlined in draft WMP 2021 (2022 Amendment) better reflects the desired future character of the Village Hub Urban Precinct and its lower-scale urban mixed-use typologies. The proposed change reduces the incentive height limit at 37, 39 and 41 Throsby Street from 24m to 14m, should these sites develop in the future in-line with the changes.

The incentive heights contained within WMP 2021 (2022 Amendment) are reflected in Draft Planning Proposal – Community Infrastructure Incentives in Wickham, which has been submitted to the Department of Planning and Environment for Gateway Determination. The Draft Planning Proposal aims to expedite the delivery of community infrastructure projects in Wickham, while incentivising development through changes to HOB and FSR controls to deliver new housing and commercial floorspace.

Notwithstanding, this Planning Proposal is subject to a separate planning pathway in that it is a standalone Planning Proposal with a voluntary planning agreement (VPA) for community infrastructure in the form of a new laneway between Throsby Street and Furlong Lane.

The WMP 2021 (2022 Amendment) is currently on public exhibition and the public exhibition of Draft Planning Proposal – Community Infrastructure Incentives in Wickham is expected later in 2022 following Gateway Determination.

# 2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

Yes, amending the HOB and FSR maps in the Newcastle LEP 2012 is considered the best means of achieving the objectives of the PP. The PP will provide certainty of the scale and density of development that may be achieved through subsequent development on the land.

The changes made post-exhibition will ensure that community concerns about the impact of the proposal on the Village Hub are addressed.

# Section B - Relationship to strategic planning framework

3. Is the planning proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

#### Hunter Regional Plan 2036

The *Hunter Regional Plan 2036* is the NSW government's plan to guide land use planning and infrastructure priorities and decisions over the next 20 years.

The plan identifies regionally important natural resources, transport networks and social infrastructure and provides a framework to guide more detailed land use plans, development proposals and infrastructure funding decisions. The plan includes overarching directions, goals, and actions as well as specific priorities for each local government area in the Hunter region.

The PP is consistent with the Goals and Directions of this plan. The PP area is located within the Newcastle City Centre and is consistent with *Direction 3: Revitalise Newcastle City Centre*, particularly *Action 3.1: Promote the growth and renewal of Newcastle City Centre through local strategies and controls*. The proposed increase in HOB and FSR will result in an increase in GFA and thus facilitate the growth and renewal of this part of the Newcastle City Centre.

The PP is also considered to be consistent with *Direction 16: Increase resilience to hazards and climate change*. Resilience to potential hazards from sea level rise is being addressed at a broader scale through CN's *Strategic Position for the Management of Low-Lying Areas of Newcastle - Wickham - Maryville - Carrington – Islington*, which supports the ongoing redevelopment of these areas combined with various mitigation measures. In the case of this PP, suitable mitigation measures have been considered, such as raising the ground level floor height. This additional height (up to 1m) above natural ground level has been considered in determining the HOB to ensure no further variation under clause 4.6 of NLEP2012 is required (in relation to this issue) in any subsequent DA on the land.

The PP is also consistent with *Direction 20: Revitalise existing communities* and *Direction 21: Create a compact settlement*, as it will facilitate urban development and renewal, as well as new housing opportunities in an existing urban area with existing services and infrastructure. The PP is consistent with the following actions:

- <u>Action 21.2</u>: Focus development to create compact settlements in locations with established services and infrastructure, including the Maitland Corridor growth area; Newcastle–Lake Macquarie Western Corridor growth area; the emerging growth area around Cooranbong, Morisset, and Wyee; and in existing towns and villages and sites identified in an endorsed regional or local strategy.
- <u>Action 21.3</u>: Identify opportunities for urban redevelopment or renewal in urban locations with access to public transport and services in the Greater Newcastle metropolitan area and where there may no longer be a need for employment land.
- <u>Action 21.4</u>: Create a well-planned, functional, and compact settlement pattern that responds to settlement planning principles and does not encroach on sensitive land uses, including land subject to hazards, on drinking water catchments or on areas with high environmental values.
- <u>Action 21.5</u>: Promote small-scale renewal in existing urban areas, in consultation with the community and industry to ensure that this occurs in the right locations.

- <u>Action 21.6</u>: Provide greater housing choice by delivering diverse housing, lot types and sizes, including small-lot housing in infill and greenfield locations.
- <u>Action 21.7</u>: Promote new housing opportunities in urban areas to maximise the use of existing infrastructure.

Moreover, the PP is also consistent with *Direction 22: Promote housing diversity*, particularly *Action 22,2: Encourage housing diversity, including studios and one and two-bedroom dwellings, to match forecast changes in household sizes*. In addition, the PP is consistent with *Direction 23: Grow centres and renewal corridors*, particularly *Action 23.1: Concentrate growth in strategic centres, local centres and urban renewal corridors to support economic and population growth and a mix of uses*. In doing so, the PP will help to provide diverse housing options and mixed-use development in a strategic centre; helping to support economic and population growth in the right location.

#### Draft Hunter Regional Plan 2041

The *draft Hunter Regional Plan 2041* is the 20-year strategic planning blueprint to ensure the ongoing prosperity of the region's vibrant and connected communities. It builds on the *Hunter Regional Plan 2036* as its first five-yearly review to reset its priorities and extend its reach to 2041.

The draft Hunter Regional Plan 2041 includes 8 key objectives to meet support the delivery of the vision. The following objectives are relevant to the proposal:

- <u>Objective 3:</u> Create a 15-minute region made up of mixed, multi-modal, inclusive and vibrant local communities
- <u>Objective 4:</u> Plan for "Nimble Neighbourhoods", diverse housing and sequenced development
- <u>Objective 5:</u> Increase green infrastructure and quality public spaces and improve the natural environment
- <u>Objective 7:</u> Plan for businesses and services at the heart of healthy, prosperous and innovative communities

The draft Hunter Regional Plan 2041 was on public exhibition between 6 December 2021 and 4 March 2022. It is expected to be finalised in late 2022.

#### **Greater Newcastle Metropolitan Plan 2036**

The *Greater Newcastle Metropolitan Plan 2036* (GNMP) helps to achieve the vision set in the Hunter Regional Plan 2036 – for the Hunter to be the leading regional economy in Australia with a vibrant new metropolitan city at its heart. The GNMP sets out four outcomes to be achieved and identifies catalyst area, including Newcastle City Centre. The Plan also provides specific directions for the 'Wickham Precinct', which aligns with the PP area and sets out the following:

Newcastle City Council will align local plans to:

- facilitate the long-term expansion of the City Centre towards Wickham
- increase opportunities for transit-oriented development around Newcastle Interchange
- respond to development constraints including mine subsidence and flooding
- provide floor space for emerging new economy industries and businesses.

The PP is consistent with the above-mentioned outcomes of the GNMP in that it:

- seeks to facilitate redevelopment to support and complement the emerging city centre
- increases density of mixed-use development around the Newcastle interchange

- responds to development constraints, including flooding and mine subsidence (as outlined under Section B – No 6 Ministerial Directions)
- ensuring sufficient FSR to ensure feasibility of mixed-use development.

The PP also aims to facilitate the revitalisation of Wickham, which is part of the Newcastle City Centre, and is therefore consistent with *Strategy 1: Reinforce the revitalisation of Newcastle city centre and expand transformation along the waterside*, particularly *Action 1.3: Newcastle City Council will align local plans to enable continued investment in Newcastle City Centre that is consistent with this Plan.* 

In addition, the PP is also consistent with *Strategy 9: Plan for jobs closer to homes in the metro frame*, more particularly *Action 9.2: Greater Newcastle councils will: amend local plans to promote more shared workspaces for start-ups in strategic centres; enable small business growth in residential zones close to centres and transport connections*. The increase in HOB and FSR will result in additional GFA, which could potentially be used to accommodate shared workspaces for start-ups. Although the second point of Action 9.2 is not applicable to this PP, as the land is zoned B4 Mixed Use and is not zoned residential, the existing zoning of the land does enable small business growth close to centres and transport connection.

Moreover, the PP will facilitate infill housing within a strategic centre and is thus also consistent with *Strategy 16: Prioritise the delivery of infill housing opportunities within existing urban areas,* especially *Action 16.1: Greater Newcastle councils will focus new housing in existing urban areas, particularly within strategic centres and along urban renewal corridors.* 

Furthermore, the PP will help to achieve the desired role of Newcastle City Centre as an urban renewal precinct, meeting demand for medium and high-density housing that contributes to the heritage character of the city.

4. Is the planning proposal consistent with a council's local strategy or other local strategic plan?

#### Newcastle 2030 Community Strategic Plan

The Newcastle Community Strategic Plan (2017) identifies the community's vision for the city, outlines actions and strategies for Council to achieve, as well as indicators for monitoring implementation.

Compliance with the LEP amendment process, ensures consistency with the strategic direction 'Open and Collaborative Leadership' and the strategic objective to 'consider decision-making based on collaborative, transparent and accountable leadership'.

Furthermore, the PP is consistent with the remaining strategic directions and objectives:

- Connected city
- Vibrant and activated public places
- Protected and enhanced environments
- Caring and inclusive community
- Liveable and distinctive built environment
- Smart and innovative city.

#### Newcastle Local Strategic Planning Statement

The Newcastle Local Strategic Planning Statement (LSPS) was adopted by Council and endorsed by the Secretary of the Department of Planning and Environment in 2020. It provides a comprehensive guide for the future growth and development of Newcastle consistent with the GNMP.

The LSPS advocates redevelopment in Wickham, as part of the Newcastle City Centre Catalyst Area. This PP supports an increase in provision of housing and jobs close to public transport and supporting urban renewal.

#### Wickham Masterplan

The WMP was adopted by Council in November 2017 and updated in 2021. The WMP identifies potential future development densities based on both envisaged character precincts and potential developer incentives to deliver critical infrastructure, land for improvement of the public domain and critical connections for traffic management and ease of pedestrian movement.

This PP is consistent with the intent of the WMP in that it will enable the dedication of a laneway to Council between the end of Furlong Lane and Throsby Street. The provision of the laneway on 47 Throsby Street preserves the opportunity to widen the laneway in the future, should 55 Throsby Street redevelop in the future. The proposed HOB and FSR is generally consistent with the envisaged density of the character precincts. The increase in GFA has been calculated in line with the endorsed Community Infrastructure Incentives Policy.

Amendments to the proposal post-exhibition addresses community concerns relating to the Village Hub.

#### **Community Infrastructure Incentives Policy**

CN adopted the Community Infrastructure Incentives Policy in July 2021. The Policy sets out the intent and mechanisms to enhance the delivery of community infrastructure to support urban renewal in the City of Newcastle through the provision of development incentives (i.e. increased HOB and FSR).

CN has prepared a separate Planning Proposal to implement this Policy in Wickham. The Planning Proposal identifies the areas applicable for development incentives should future development provide community infrastructure. The Draft Planning Proposal was endorsed at the March 2022 Ordinary Council Meeting, with Council resolving to forward the Planning Proposal to the Department of Planning and Environment for Gateway Determination and its subsequent public exhibition.

For clarity, this Planning Proposal will vary from the general standards but is consistent with the mechanisms described in the Community Infrastructure Incentives Policy in that the increased HOB and FSR correspond with an agreed GFA rate, having regard for the value of the laneway offered as community infrastructure. The proponent has prepared a Planning Agreement setting out the terms to deliver the agreed community infrastructure.

5. Is the planning proposal consistent with applicable State Environmental Planning Policies?

The table below provides an assessment of the PP against each State Environmental Planning Policy (SEPP) applying at the time of its preparation. The table has been updated since public exhibition to address the consolidation of 45 existing SEPPs into 11 new SEPPs, which took effect on 1 March 2022.

The assessment undertaken firstly identified which SEPP applies to the proposal, determined by the SEPP applying to both:

- a. the land; and
- b. the preparation of environmental planning instruments.

Where applicable, the table identifies how the PP addresses the requirements of the SEPP.

State Environmental Planning Policy (SEPP)	Applicable	Consistency and Implications
SEPP (Primary Production) 2021	No	
SEPP (Resources and Energy) 2021	No	
SEPP (Resilience and Hazards) 2021	Yes	SEPP (Resilience and Hazards) 2021 consolidates SEPP (Coastal Management) 2018, SEPP 33 – Hazardous and Offensive Development and SEPP 55 – Remediation of Land. No policy changes were made during the consolidation.In regard to the remediation of land, the SEPP requires Council to consider potential land contamination when preparing an Environmental Planning Instrument. It also requires Council to obtain and consider a report on the findings of a preliminary investigation of the land (carried out in accordance with the contaminated land planning guidelines) where the amendment will permit certain land uses to be permitted. This PP does not result in a change of zoning from the current B4 Mixed Use zone, which already permits the uses specified in the SEPP. The coastal management provisions of the SEPP also apply to the PP area. Most of the PP area is situated within the Coastal Environment Area, with only the north-eastern part of 41 Throsby Street being situated within the Coastal Use Area. Council is satisfied that the proposed LEP amendments will not result in subsequent development proposals being inconsistent with the aims of this SEPP.

Table 1 - Relevant State Environmental Planning Policies (SEPPs)

State Environmental Planning Policy	Applicable	Consistency and Implications
(SEPP)		
SEPP (Industry and Employment)	No	
2021		
SEPP (Transport and Infrastructure) 2021	No	
SEPP (Biodiversity and Conservation) 2021	Yes	<ul> <li>SEPP (Biodiversity and Conservation)</li> <li>2021 consolidates a number of SEPPs including SEPP (Koala Habitat</li> <li>Protection) 2020 and SEPP (Koala Habitat Protection) 2021. No policy changes were made during the consolidation.</li> <li>Whilst this SEPP applies to the land, there is no potential koala habitat within the vicinity of the PP area hence the requirements of this SEPP are not applicable.</li> </ul>
SEPP (Planning Systems) 2021	No	
SEPP (Precincts – Eastern Harbour City) 2021	No	
SEPP (Precincts – Central River City) 2021	No	
SEPP (Precincts – Western Parkland City) 2021	No	
SEPP (Precincts – Regional) 2021	No	
SEPP (Housing) 2021	No	
SEPP (Exempt and Complying Development Codes) 2008	No	
Draft SEPP (Design and Place) 2021	Yes	Draft SEPP (Design and Place) 2021incorporates provisions from the previousSEPP 65 – Design Quality of ResidentialApartment Development. It also includesan updated Apartment Design Guide.The PP area is zoned B4 Mixed Usewhich permits the land to developed foruses to which this SEPP applies(residential apartment development).Council is satisfied that the proposedamendments will enable developmentthat is compliant with the draft SEPP andassociated Apartment Design Guide.Council has not sought advice from itsDesign Review Panel at this stage. Anysubsequent development proposal will bereferred to this panel as a matter of duecourse.

6. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

The table below documents Council's assessment of the PP against the relevant Ministerial Directions made under Section 9.1 of the EP&A Act 1979 (formerly known as Section 117 Directions). The table has been updated since public exhibition to address the most recent Local Planning Directions that commenced on 1 March 2022.

Relevant Section 9.1 Directions	Applicable	Consistency and implications
Focus area 1: Planning Systems		
1.1 Implementation of Regional Plans	Yes	The PP is consistent with the Hunter Regional Plan 2036 as outlined in Section B.
1.2 Development of Aboriginal Land Council land	N/A	
1.3 Approval and Referral Requirements	Yes	The PP does not include any provisions that will require subsequent development applications to seek approval or referral from any other public authority.
		Council consulted with public authorities prior to public exhibition in accordance with the Gateway Determination.
1.4 Site Specific Provisions	N/A	
Focus Area 1: Planning Systems	– Place-base	ed
1.5 Parramatta Road Corridor Urban Transformation Strategy	N/A	
1.6 Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	N/A	
1.7 Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N/A	
1.8 Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N/A	
1.9 Implementation of Glenfield to Macarthur Urban Renewal Corridor	N/A	
1.10 Implementation of the Western Sydney Aerotropolis Plan	N/A	
1.11 Implementation of Bayside West Precincts 2036 Plan	N/A	

Table 2 - Relevant Ministerial Directions

Relevant Section 9.1 Directions	Applicable	Consistency and implications
1.12 Implementation of Planning Principles for the Cooks Cove Precinct	N/A	
1.13 Implementation of St Leonards and Crows Nest 2036 Plan	N/A	
1.14 Implementation of Greater Macarthur 2040	N/A	
1.15 Implementation of the Pyrmont Peninsula Place Strategy	N/A	
1.16 North West Rail Link Corridor Strategy	N/A	
1.17 Implementation of Bays West Place Strategy	N/A	
Focus Area 2: Design and Place		
[This Focus Area was blank when	n the Directio	ns were made]
Focus Area 3: Biodiversity and C	onservation	
3.1 Conservation Zones	N/A	
3.2 Heritage Conservation	N/A	
3.3 Sydney Drinking Water Catchments	N/A	
3.4 Application of C2 and C3 Zones and Environmental Overlays in Far North Coast LEPs	N/A	
3.5 Recreation Vehicle Areas	N/A	
Focus Area 4: Resilience and Ha	zards	
4.1 Flooding	Yes	The PP applies to land identified as being within a flood planning area in the <i>Newcastle City-wide Floodplain</i> <i>Risk Management Study and Plan 2012</i> . However, the land does not consist of a floodway or flood storage but is in the flood fringe. This Direction does not apply given that the PP will not result in changes to flood prone land.
4.2 Coastal Management	Yes	The PP area is within the coastal zone as defined under the <i>Coastal Management Act 2016</i> . The PP is consistent with clause 1 of this Direction. Clauses 2, 3 and 4 of this Direction do not apply to this PP. The PP is therefore considered to be consistent with this Direction.
4.3 Planning for Bushfire Protection	N/A	

Relevant Section 9.1 Directions	Applicable	Consistency and implications
4.4 Remediation of Contaminated Land	Yes	This Direction applies to the PP, since it is possible that development for a purpose referred to in Table 1 of the <i>Managing Land Contamination – Planning Guidelines –</i> <i>SEPP 55 – Remediation of Land</i> may have been carried out on the land as it had previously been zoned to allow light industry in the past, despite the site not being identified on Council's contaminated land register. Notwithstanding, the Planning Proposal only aims to amend the FSR and HOB and not the zoning of the land or allow changes to the permissibility of land uses. Hence, Council has not sought to obtain a preliminary investigation in accordance with the contaminated land planning guidelines.
4.5 Acid Sulfate Soils	Yes	The land is located within Category 3 of the Acid Sulfate Soils map in NLEP 2012. Notwithstanding, the PP does not include provisions or amendments that will increase the risk or hazard from the current potential, hence it is of minor significance and does not require any further study.
4.6 Mine Subsidence and Unstable Land		The Land is in a proclaimed Mine Subsidence District. Furthermore, the land is subject to Subsidence Advisory NSW Guidelines 2, which places general restrictions on development, unless it can be demonstrated that larger developments can be designed to accommodate the mine impacts. Council has formally consulted with Subsidence Advisory NSW per condition 2 of the Gateway Determination and the proponent has undertaken further studies. Further assessment will be required at the development application (DA) stage. Council's consultation with Subsidence Advisory NSW is outlined in Section D of this PP.
Focus Area 5: Transport and Infr	astructure	
5.1 Integrating Land Use and Transport	Yes	The PP does not propose the rezoning of land. The PP seeks to increase density on existing B4 Mixed Use zoned land subject within the Newcastle City Centre Area boundary and in proximity to local walking, cycling and public transport networks. The PP is consistent with this Direction.
5.2 Reserving Land for Public Purposes	N/A	This Direction is not applicable to the PP. Notwithstanding, it is noted that the PP is accompanied by a Planning Agreement for the provision of land and the construction of a new laneway along the western boundary of the site.
5.3 Development Near Regulated Airports and Defence Airfields	N/A	

Relevant Section 9.1 Directions	Applicable	Consistency and implications
5.4 Shooting Ranges	N/A	
Focus Area 6: Housing		
6.1 Residential Zones	Yes	This Direction applies to the PP as the B4 Mixed Use zone permits residential development. No changes are proposed to the zoning of the land. The PP will not reduce the permissibility of residential uses on the site but rather increase future development feasibility due to an increase in FSR and HOB.
6.2 Caravan Parks and Manufactured Home Estates	N/A	
Focus Area 7: Industry and Empl	oyment	
7.1 Business and Industrial Zones	N/A	This Direction applies to the PP as the B4 Mixed Use zone permits commercial development. No changes are proposed to the zoning of the land. Proposed increases to FSR would provide for more GFA for permitted uses including commercial uses.
7.2 Reductions in Non-Hosted Short-Term Rental Accommodation Period	N/A	
7.3 Commercial and Retail Development along the Pacific Highway, North Coast	N/A	
Focus Area 8: Resources and Er	nergy	
8.1 Mining, Petroleum Production and Extractive Industries	N/A	
Focus Area 9: Primary Productio	n	
9.1 Rural Zones	N/A	
9.2 Rural Lands	N/A	
9.3 Oyster Aquaculture	N/A	
9.4 Farmland of State and Regional Significance on the NSW Far North Coast	N/A	

# Section C - Environmental, social and economic impact

7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The land subject to the proposal does not contain critical habitat or threatened species, populations or ecological community, or their habitats.

8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

The Planning Proposal will not result in any other environmental effects not already considered above.

9. Has the planning proposal adequately addressed any social and economic effects?

Newcastle has undergone significant economic change over the past decade evolving beyond its industrial and manufacturing origins towards a more economically diverse regional city. The renewal of Newcastle has become a major undertaking of the NSW government. The 'Revitalising Newcastle' program included the rollout of new transport infrastructure, incorporating a new light rail extending from Newcastle East to Wickham. The positioning of Wickham adjacent to the new CBD at Newcastle West and the Newcastle Interchange has strengthened Wickham's importance to achieving the aims of the urban renewal program.

CN prepared the Wickham Master Plan 2017 and Wickham Masterplan (2021 Update) in recognition of the need to incorporate flexibility into the planning framework and allow Wickham to grow and develop over time having regard to changes in population and lifestyle characteristics, trends in employment, retail, and community service provision. CN's master planning process identified opportunities and constraints of redevelopment within Wickham and included feasibility testing.

The urban renewal of inner Newcastle is well underway along with the transition to medium and higher density living. The economic analysis undertaken as part of the WMP and the evidence report underpinning CN's draft Local Housing Strategy identified demographic shifts, including an ageing population and rising land values creating affordability issues. With shrinking family sizes no longer requiring large single dwellings, the analysis revealed a trend in residents relocating from the outer suburbs and hinterlands to the inner-Newcastle apartment market.

The PP will facilitate an increase in residential density and housing choice in walkable distance to the emerging commercial centre of the city and in vicinity to public transport, as well as to other amenities, such as Wickham Park and Throsby Creek. Moreover, the increase in the number of residents facilitated by the proposal will also likely result in economic benefits for businesses in the area, due to increased demand for goods and services.

Furthermore, the PP will also facilitate an increase in the provision of a range of employment and business opportunities. In this regard, the PP is also consistent with the planning principles for remnant industrial sites outlined in the Newcastle Employment Lands Strategy, as it will facilitate an increase in the provision of employment-generating floorspace and will also facilitate the redevelopment of remnant industrial uses in an urban area with high levels of amenity to creative employment space.

The PP will support increased residential densities as well as economic and employment generating uses that complement and support the adjoining emerging commercial core of the Newcastle City Centre located within Newcastle West.

# Section D - State and Commonwealth interests

10. Is there adequate public infrastructure for the planning proposal?

Existing public infrastructure within the Newcastle city centre and surrounds is adequate to support the PP.

11. What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

#### Subsidence Advisory NSW

Council engaged with Subsidence Advisory NSW per the Gateway Determination. Subsidence Advisory NSW required the proponent to undertake further investigations per their letter to Council dated 10 February 2021.

Further investigation regarding mine subsidence has been undertaken by the Proponent in the form of a Mine Subsidence Assessment prepared by consultants Tetra Tech Coffey. SANSW has advised that this assessment is sufficient to allow the Draft Planning Proposal to proceed.

Further assessment will be required at the development application (DA) stage including a peer review of the Tetra Tech Coffey report to confirm the geotechnical uncertainty factor is low to moderate in accordance with Subsidence Advisory NSW's Merit Assessment Policy.

As a result of the above, CN is satisfied that the PP can proceed and has advised the Department of Planning and Environment of this together with a copy of the relevant correspondence and the report included in Appendix A, per condition 3 of the Gateway Determination.

# Part 4 - Mapping

The PP seeks to amend the following map sheets within Newcastle LEP 2012:

- ✓ Height of Buildings Map HOB\_004FA
- ✓ Floor Space Ratio Map FSR\_004FA

Amended HOB and FSR maps will be provided to the Department of Planning and Environment as part of the finalisation of the plan.

# Part 5 - Community consultation

The Gateway Determination (dated 1 January 2021) supported CN exhibiting the PP for 28 days, under condition 1(a). The Planning Proposal was publicly exhibited between 1 October 2021 and 29 November 2021. Council received 76 submissions during the public exhibition period. Of these, 71 were in opposition to the Planning Proposal in its current form, and 5 were in support.

Key points raised relate to the proposed building heights within the Village Hub Urban Precinct, objection to variation to the Wickham Masterplan and the benefit of the proposed laneway. Other points raised relate to amenity impacts of the subsequent development and other issues that have been addressed in Council's submissions table. Council's submissions table is provided as an attachment to the April 2022 Council report – CCL 26/04/2022 – Adoption of Planning Proposal for 41 and 47 Throsby Street, Wickham.

Council considers that the amendments made to the PP post-exhibition will achieve the best planning outcome for the site. The amended PP reduces the maximum HOB of part 41 Throsby Street from 22m to 14m to reduce the impact the proposal may have on the Village Hub. It is also noted that the WMP 2021 includes additional setback controls to land within and adjoining the Village Hub. These setback controls are included in the draft DCP for Wickham which was endorsed for public exhibition at the March 2022 Council meeting. These controls will apply to any subsequent DA on the site, meaning that any built form above 10m at 41 Throsby Street will be setback 8m from the side boundary and 6m to the front and rear boundaries.

Higher built forms in the Emerging Industry Quarter Urban Precinct are consistent with the desired future character of the area as outlined in the WMP 2021. Other sites within the Emerging Industry Quarter have incentive height limits of 35m, including developments to the south of the site on Throsby Street.

The laneway was identified in the *Wickham Master Plan Traffic and Transport Assessment* (2017) prepared by Bitzios Consulting. A laneway connection between Throsby Street and Furlong Lane was identified in the WMP 2017 and WMP 2021 and supported by community consultation undertaken as part of the finalisation of these projects. Per the Planning Agreement, the intersections to both Throsby Street and Furlong Lane will be designed to accommodate the travel and turning path of larger vehicles including Council garbage trucks and delivery vehicles.

Other amenity impacts will be considered as part of the subsequent development application (DA) process.

# Part 6 - Project timeline

Task	Status	Dates
Council endorsement	Complete	28 July 2020
Gateway determination	Determined	1 January 2021
	Alteration (1st)	20 May 2021
	Alteration (2nd)	6 September 2021
Consultation with required	Letter sent	19 January 2021
government agency:	Response received	10 February 2021
<ul> <li>Subsidence Advisory NSW</li> </ul>	Matters resolved	28 July 2021
Public exhibition period	Complete	1 October – 29 November 2021
Timeframe for reporting submissions	Current	April 2022
Plan making	Expected	May-June 2022

# Appendices

Appendix A Mine Subsidence Assessment - Proposed Redevelopment 41- 47 Throsby Street Wickham (dated 28 June 2021) prepared by Tetra Tech Coffey



# Proposed Redevelopment 41- 47 Throsby Street Wickham

#### Mine Subsidence Assessment

Fidem Property Group



#### Reference: 754-NTLGE286549-AB.Rev1

28 June 2021

# PROPOSED REDEVELOPMENT 41-47 THROSBY STREET WICKHAM

Mine Subsidence Assessment

Report reference number: 754-NTLGE286549-AB.Rev1

28 June 2021

# PREPARED FOR

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# QUALITY INFORMATION

#### **Revision history**

Revision	Description	Date	Author	Reviewer	Approver
v1 draft	Draft Report	04/05/2021	Simon Baker	Ching Dai	Simon Baker
Revision 1	Report	28/06/20201	Simon Baker	Ching Dai/ Jules Darras	Simon Baker

#### Distribution

Report Status	No. of copies	Format	Distributed to	Date
v1 draft	1	PDF	Neil Petherbridge	04/05/2021
Revision 1	1	PDF	Neil Petherbridge	28/06/2021

# EXECUTIVE SUMMARY<sup>1</sup>

Fidem Property Group commissioned Tetra Tech Coffey Pty Ltd (Tetra Tech) to carry out a mine subsidence desktop study and numerical modelling for the proposed re-development of 41-47 Throsby Street Wickham, NSW.

This report addresses the scope outlined in Coffey proposal 754-NTLGE286549-AA.Rev1 dated 31 March 2021 it present results of a desk study as well as numerical modelling using FLAC3D. The agreement was signed on 27 April 2021 by Michael Ghobrial.

Although not directly undermined, the area around the site to the north east and west is known to be located over abandoned mine workings within the Borehole Seam, by the Ferndale Colliery from their Wickham Mine. The mine workings are assessed to be located a minimum of 17m to the north west and 13m to the north east. Using nearby boreholes, the workings are estimated to be at a depth of approximately 55m to 58m below the ground surface.

Pillar stability was assessed using empirical and numerical analysis. Sensitivity analysis was completed by two methods decreasing modulus of the coal, and by increased the magnitude of convergence at seem level.

Using numerical analysis, the global Factor of Safety (FoS) is estimated to be 1.4.

From the analysis the maximum surface subsidence parameters are estimated be:

- Subsidence of 140mm along Section A and 100mm along Section B
- Tensile strains 3mm/m across the whole building and 5mm/m for the northern 10m.
- Across the building the tensile strain of 1.5mm and 2.5mm/m for the whole site and the northern 10m respectively is applicable.
- The radius of curvature is estimated to be 10km at the southern side increasing to 4km for the northern 20m.
- Tilts ranging from 2mm/m up to 7mm/m at the northern end

An appropriate 'safe' design profile was provided allowing for an additional 40% increase in subsidence with up to the following parameters:

- Subsidence of 180mm along Section A and 130mm along Section B
- Tensile strains 3.3mm/m across the whole building and 6mm/m for the northern 10m.
- Across the building the tensile strain of 1.5mm and 3mm/m for the whole site and the northern 10m respectively is applicable.
- The radius of curvature is estimated to be 3km at the southern side increasing to 1.6km for the northern 20m.
- Tilts ranging from 2mm/m up to 10mm/m at the northern end

These values are believed to be within economical design for buildings, however should be discussed with the project structural engineer/s about any setbacks that may be recommended.

<sup>&</sup>lt;sup>1</sup> This executive summary must be read in the context of the full report and the attached limitations.

# CONTENTS

1.	INTR	ODUCTION	1	
2.	SCO	PE OF WORK	1	
3.	SITE CONDITIONS			
	3.1	Surface Conditions	2	
	3.2	Reigonal Geology	2	
	3.3	Subsurface Conditions	2	
4.	FAC	rual information on the mine workings	3	
	4.1	History	3	
	4.2	Pillar Dimensions	4	
	4.3	Roof of the mine workings	5	
	4.4	Floor of the mine workings	5	
	4.5	Location of mine workings	5	
5.	EMP	IRICAL ASSESSMENT OF MINE WORKINGS	5	
	5.1	State of mine workings	5	
	5.2	Empirical Stability Assessment	6	
		5.2.1 Pillar Factor of Safety Methodology	6	
		5.2.2 Preliminary Stability Calculations	7	
	5.3	Estimating maximum subsidence	8	
		5.3.1 Estimating Crush from Volume Exchange Method	8	
		5.3.2 Estimating Crush from Borehole Data of Historical Crushes	9	
6.	NUM	ERICAL ASSESSMENT OF MINE WORKINGS	10	
	6.1	Approach	10	
	6.2	Geometry and Mesh	10	
	6.3	Geotechnical Model	11	
	6.4	Calibration of coal pillars	13	
	6.5	Results of numerical modelling	17	
		6.5.1 Excavation of Bords	17	
		6.5.2 Gradual Degradation of Coal Strength	18	
		6.5.3 Sensitivity Analysis Option 1 Degrading Modulus of Coal with Strength loss	22	
		6.5.4 Sensitivity Analysis Option 2 Increasing Maximum Convergence at Level	24	
		6.5.5 Model Sections	29	
7.	DISC	USSION	32	
	7.1	Discussion on risk from ingress of Sand	32	

	7.2 Reference to SA NSW	32
8.	RECOMMENDATIONS	34
9.	CONCLUSION	35
10.	BIBLIOGRAPHY	36

# LIST OF TABLES

Table 1: Summary of Geotechnical Units	3
Table 2: Summary of preliminary pillar stability calculations	
Table 3: Geotechnical model of layers used for FLAC3D analyses	12
Table 4: Geotechnical model of coal pillars used for FLAC3D analyses	16
Table 5: Geotechnical model of interfaces within coal pillars used for the three-dimensional FLAC3D a	nalysis
	17
Table 6: SA NSW uncertainty factors	34

# LIST OF FIGURES

Figure 1: Working Section reproduced from Royal Commission on Collieries Third Report (Robertson, et al	
1886)	
Figure 2: Tributary model	
Figure 3: Summary of crush at mine level data encountered in Boreholes completed beneath the Newcastl	le
Area	
Figure 4: Grouping at coal pillar level	
Figure 5: Pillar load versus displacement chart for 3.0m wide Ferndale Colliery Pillars	14
Figure 6: Pillar load versus displacement chart for 4.5m wide Linwood Colliery Pillars	15
Figure 7: Pillar load versus displacement chart for 5.4m wide 6.0m tall W&BIC Pillars	15
Figure 8: Pillar load versus displacement chart for 10.0m wide Pillars	16
Figure 9: Vertical stress at completion of initial mining (assuming zero pore pressure, fully drained) units in	i
Pascals	18
Figure 10: Degradation of peak coal strength	18
Figure 11: Conceptual total vertical displacement at surface level with pillar coal at 77% strength	19
Figure 12: Conceptual total vertical displacement at surface level with pillar coal at 60% strength	19
Figure 13: Conceptual total vertical displacement at surface level with pillar coal at 46% strength	20
Figure 14: Conceptual total vertical displacement at surface level with pillar coal at 36% strength	20
Figure 15: Conceptual total vertical displacement at surface level with pillar coal at 25% strength	21
Figure 16: Conceptual total vertical convergence at mine level with pillar coal at 77% strength	21
Figure 17: Conceptual total vertical displacement at surface level with pillar coal at 77% strength	22
Figure 18: Conceptual total vertical displacement at surface level with pillar coal at 60% strength	23
Figure 19: Conceptual total vertical displacement at surface level with pillar coal at 46% strength	23
Figure 20: Conceptual total vertical displacement at surface level with pillar coal at 36% strength	24
Figure 21: Conceptual total vertical displacement at surface level with pillar coal at 25% strength	24
Figure 22: Revised pillar load versus displacement chart for Ferndale Pillars (Stress versus strain)	25
Figure 23: Conceptual total vertical displacement at surface level with pillar coal at 77% strength allowing f	
900mm convergence at mine level.	
-	

Figure 24: Conceptual total vertical displacement at surface level with pillar coal at 60% strength allowing fo 900mm convergence at mine level.	
Figure 25: Conceptual total vertical displacement at surface level with pillar coal at 46% strength allowing fo 900mm convergence at mine level.	or
Figure 26: Conceptual total vertical displacement at surface level with pillar coal at 36% strength allowing fo 900mm convergence at mine level.	or
Figure 27: Conceptual total vertical displacement at surface level with pillar coal at 25% strength allowing fo 900mm convergence at mine level.	
Figure 28: Conceptual total vertical displacement at surface level with pillar coal at 60% strength scale limite to 200mm	
Figure 29: Conceptual total vertical displacement at surface level with pillar coal at 60% strength scale limite to 200mm allowing for 900mm convergence at mine level	
Figure 30: Conceptual vertical settlement through Section A (630mm of crush)	.30
Figure 31: Conceptual vertical settlement through Section A (900mm of crush)	.30
Figure 32: Conceptual horizontal movement through Section A (630mm of crush)	.31
Figure 33: Conceptual horizontal movement through Section A (900mm of crush)	.31
Figure 34: Comparison of FLAC3D Subsidence profile to Holla idealised profile	.32

# APPENDICES

Acronyms/Abbreviations	Definition
FOS	Factor of Safety
Tetra Tech	Tetra Tech Coffey Pty Ltd
W&BIC	Wickham & Bullock Island Colliery
SA NSW	Subsidence Advisory NSW

### 1. INTRODUCTION

Fidem Property Group commissioned Tetra Tech Coffey Pty Ltd (Tetra Tech) to carry out a mine subsidence desktop study and numerical modelling for the proposed re-development of 41-47 Throsby Street Wickham, NSW.

This report addresses the scope outlined in Coffey proposal 754-NTLGE286549-AA.Rev1 dated 31 March 2021 it present results of a desk study as well as numerical modelling using FLAC3D. The agreement was signed on 27 April 2021 by Michael Ghobrial.

The proposed development is in the planning phase with key features of the development likely dependant on the results of this assessment.

Although not directly undermined, the area around the site is known to be located over abandoned mine workings within the Borehole Seam by the Ferndale Colliery from their Wickham Mine. The mine workings, by nearby boreholes, are estimated to be at a depth of approximately 55m to 58m below the ground surface.

The following report presents the steps followed in the desktop study and numerical analysis of the mine workings, the data used in this assessment, and the resultant findings and recommendations for design. This report does not include assessment of potential movements from the construction of the building itself (i.e. consolidation of soil layers) and does not address footing design parameters.

### 2. SCOPE OF WORK

This mine subsidence assessment has included:

- A review of previous reports in the area including:
  - o Proposed Residential Development 25 Throsby Street (Coffey Geotechnics Pty Ltd, 2015)
  - o Proposed Blackwoods Site Development (Coffey Geotechnics Pty Ltd, 2015)
- A review of Record Tracing and mine survey plans within the Borehole Seam supplied by Department of Primary Industries – Mineral Resources including:
  - o RT455 Plan of the Ferndale Colliery at Wickham
  - o M12116 Plan showing coal extracted by the Ferndale Colliery at Wickham
  - o RT579 W&BIC Sheets 1 to 3
  - o Delta Collieries Overview plans
- A review of historical borehole logs from the Ferndale Shaft (Wickham Bore) and Linwood Shaft (S1)
- 1:100,000 Scale Newcastle Coalfield Regional Geology Sheet
- SANSW Merit Policy document 2018
- Assessment of coal pillars stability using rectangular pillar theories, incorporated in the Modified UNSW Power Law strength equation as presented in (Galvin, et al., 1998).
- Numerical modelling of the mine workings in the area of the site with the following stages:
  - Development of a large scale numerical model using the three dimensional analysis software FLAC3D with the geological features of the area, including ground elevation and mine workings based on RT455, RT579 and Delta Colliery overview plans
  - Calibrate pillar strengths to Modified UNSW Power Law strength equation as presented in (Galvin, et al., 1998).
  - o Trigger collapses and assess pillar creeps
  - o Assessment of Consequent ground deformations causes by Pillar Collapse.

## 3. SITE CONDITIONS

0

#### 3.1 SURFACE CONDITIONS

The site is located five lots, Lot 62 and Lot 63 DP579890, Lot 1 and Lot 2 DP112816, Lot 200 DP534787, 41 to 47 Throsby Street Wickham as shown on Drawing 2. This area is situated on top of an estuarine flood plain associated with the Hunter River with Newcastle Harbour 240m to the east. Ground surface levels have been raised with fill (most likely dredged sand from the harbour) with surface gradients generally near level.

The surrounding area land use comprises a mixture of light industrial, commercial and residential with large sheds currently onsite.

### 3.2 REIGONAL GEOLOGY

Based on the 1:100,000 scale Newcastle Coalfield Geology map sheet 9231, the site is underlain by Quaternary aged soils, typically sand and clay. This is in-turn underlain by the late Permian aged Lambton Subgroup of the Newcastle Coal Measures comprising interbedded and interlaminated siltstone, sandstone and coal. The site is judged to be underlain by the following geotechnical units:

- Quaternary aged alluvial deposits comprising gravel, sand, silt and clay, underlain in turn by
- Lambton subgroup of the Newcastle Coal Measures group consisting of sandstone, siltstone, claystone, coal and tuff. This subgroup includes the Borehole Seam. This seam is underlain in turn by
- Waratah Sandstone.

The strata above the Borehole Seam belong to the Tighes Hill formation which typically comprise of interbedded siltstones and sandstones. The Borehole Seam using nearby boreholes is estimated to dip at 1 in 40 to the south east. A large fault zone 30m wide is located 125m west of the site.

### 3.3 SUBSURFACE CONDITIONS

The overburden units at the site based on nearby boreholes are shown in Table 1.

**Table 1: Summary of Geotechnical Units** 

Subgroup	Formation	Approximate Depth to Base of Unit (m)	Comments
Fill	Fill	2	Concrete pavements Dredged sand, fine to medium dark grey and brown, trace of organic components
Quaternary	Estuarine	12	Sands, fine to medium grained dark grey, trace of carbonaceous material, trace of sea shells.
	Estuarine	30	Clays, dark grey with brown zones firm to stiff
Lambton	Residual	35	Clay
	Tighes Hill	52	Interbedded and interlaminated siltstone, carbonaceous silty shale and sandstone, medium to high strength to 40m becoming high to very high
	Borehole Seam	58	Mined near the site by the Ferndale Colliery, mining only the bottoms from the Morgan Stone and below.
Waratah Sandstone		> 60	Sandstone: fine to coarse grained grey, high to very high strength

### 4. FACTUAL INFORMATION ON THE MINE WORKINGS

#### 4.1 HISTORY

The Borehole Seam was discovered in 1848 by the AACo. Initially mining was carried out under the Hamilton and Newcastle West areas.

There are two main Ferndale Collieries in the Newcastle area,

- Tighes Hill
- Wickham.

The most well-known and original was located at Tighes Hill. It suffered an inrush of water in March 1886 which resulted in the pits closure (Robertson, et al., 1886) and (Tonks, 1985). These workings are shown on RT456.

In 1887 the owners of the original Ferndale Colliery began sinking a shaft at Wickham that was to become known as New Ferndale Colliery. These workings are shown on record tracing RT455 and reproduced in part in Drawing 4. RT455 shows three areas of subsidence, that occurred in August 1890, west of Railway Street and beneath the current day Wickham Park.

Two shafts were sunk, with both kept open near the surface by cast iron tubbing to depths of approximately 39m (steel cylinders were used to keep the shaft from collapsing in unstable ground, sand and clay in this case). Mining began in late 1887 and continued through to December 1894 with water and roof fall difficulties reported. Peak employment of 140 was in 1890.

In 1898 noxious gases were reported to be escaping from the shafts due to an underground fire. In response, the tubbing was removed, and the two shafts allowed to collapse with sand and debris used to fill the shafts.

#### 4.2 PILLAR DIMENSIONS

Scaling from RT455, the regular pillars are rectangular and approximately 30m to 35m long and 3m to 4m wide. Bords are approximately 5m to 7m wide and cut-throughs approximately 3m wide.

Small narrow pillars exist within the heading drawn to be approximately 2m wide and 40m to 60m long. Two larger triangular pillars are located to the north and north east of the site which may control the subsidence.

No seam sections for the eastern portion of the Ferndale Colliery workings were identified, however seven seam sections were produced on survey plan M12116 of the western portion. These sections only show the bottom portion of the Borehole Seam with heights ranging from 4'11" (1.5m) up to 6'4" (1.9m) the nearest being Section D with 5'5" (1.65m) 220m to the south east of the site.

The mine workings for the Wickham portion of the Wickham and Bullock Island Colliery (later to become Linwood Colliery, at the north eastern boundary of the Ferndale Colliery had a 5'9" (1.75m) (refer to Figure 1). The Little Tops were deliberately left in place to support the roof (Robertson, et al., 1886). It is understood the New Ferndale Colliery adopted a similar working profile.

5'	0"	Coal	
2'	0"	Morgan	
0'	6″	Little Tops	
1' 0'	3″ 6″	Jerry	
4'	0"	Bottom Coal	Working

Figure 1: Working Section reproduced from Royal Commission on Collieries Third Report (Robertson, et al., 1886).

Two boreholes have been drilled into open mine workings near the site, BHM2 and BHM4 (GEOTWARA22279AA-AH dated 23 March 2015), 110m and 95m north of the site respectively. These boreholes were drilled into the eastern portion critical for the site. BHM2 encountered a small 0.3m void and

1.7m of rubble suggesting only a 0.9m working height. This small height indicates BHM2 likely hitting the edge of a coal pillar. However, BHM4 encountered 1.6m void and 1.7m rubble indicating a mined height of about 2.2m using a rubble bulking factor of 1.5. This second height from BHM4 is greater than other heights from the area as from BHM1 (GEOTWARA22259AA-AD dated 4 March 2015) located 128m east of the site, the bottom portion of the Borehole Seam exists at a depth of 61.1m to 63.1m with the Jerry band from 61.8m to 62.1m suggested a mined height less than 2m and more likely 1.85m allowing for the 'Little Tops' to remain in place.

#### 4.3 ROOF OF THE MINE WORKINGS

On the eastern side of the fault in close proximity of the site, the roof off the mine workings comprises coal from the upper portion of the Borehole Seam (Refer to Figure 1). This is overlain by 22.1m of generally high strength sandstone at BHM1 and 10.3m of sandstone at BHM4. West of the fault, the overburden was found to punch into the mine workings (M12116) with three surface subsidence zones in 1890 with widths of 40m 50m and 75m. Based on this, punching would be a likely scenario west of the fault but not east where the site is located.

#### 4.4 FLOOR OF THE MINE WORKINGS

The Waratah Sandstone forms the flor of the mine workings around the site. Point loads from BHM1 (GEOTWARA22259AA-AD dated 4 March 2015) had point load  $I_{s50}$  values ranging from 2.2MPa to 3.7MPa equating to approximately 40MPa to 70MPa using an  $I_{s50}$  to UCS conversion factor of 18. As such, punching into the floor below the workings is not a credible failure mechanism.

### 4.5 LOCATION OF MINE WORKINGS

The interpreted location of mine workings relative to the site is shown on Drawing 4. From this the mine workings are a minimum of 17m to the north west and 13m to the north east. This location was developed using the survey data from M12116 to assess the approximate bearing of the main heading running as well as features including BHM2 being close proximity of a coal pillar and BHM4 being on the north western side with coal identified to the south in CCTV. It is noted to fit the pillar the alignment of the heading was rotated 2° to the south of that provided on survey plan M12116. As such this is considered a worst case for the site with the workings potentially northward by 8m.

## 5. EMPIRICAL ASSESSMENT OF MINE WORKINGS

#### 5.1 STATE OF MINE WORKINGS

The mine workings are believed to have the following features:

- The panel is approximately 120m to 360m east west by 220m north south.
- The pillars when mined has a width to height ratio of 1.5 to 2 with widths of 3.0m to 4.0m and a mined height of about 2m.
- The roof has started to fall into the mine with a current pillar height of about 3.3m with 1.7m of rubble.
- The mine workings are flooded with the shafts filled with sand.
- From this the mine workings are a minimum of 17m to the north west and 13m to the north east of the site.

#### 5.2 EMPIRICAL STABILITY ASSESSMENT

#### 5.2.1 Pillar Factor of Safety Methodology

In order to quantify pillar stability, a factor of safety (FOS) is used. The FOS of an individual pillar is the ratio of pillar strength to pillar load. There are many published methods in practice around the world to estimate pillar strength. All are simplifications and, thus have limitations. In Australia, the UNSW Pillar Design method (Galvin, et al., 1998) is commonly used. This approach is based on semi-empirical relationships, derived from a database of failed and un-failed pillars. It is only valid where roof and floor conditions are good and where full pillar yield does not exist. In general, as discussed above based on core drilling of the seam, this appears to be the case in this area.

The strength of the pillars with a width to height ratio <5 (S<sub>p</sub> in MPa) can be estimated using Equation 1.

$$S_p = \frac{8.6(Q \times w)^{0.51}}{h^{0.84}} \tag{1}$$

Where:

- w = width of pillar (m)
- h = height of pillar (m).

Where the width to height ratio is >5, the equation is modified to Equation 2.

$$S_p = \frac{27.63(Q)^{0.51}}{w^{0.22}h^{0.11}} \left\{ 0.29 \left[ \left( \frac{w}{5h} \right)^{2.5} - 1 \right] + 1 \right\}$$
(2)

Where: Q = shape factor:

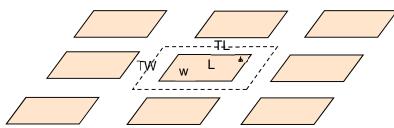
• For width greater than 6: 
$$Q = \frac{2L}{L+w}$$
 (3)

• For width less than 6: 
$$Q = \left(\frac{2L}{L+w}\right)^{\frac{K-3}{3}}$$

Where: R = width/height

The assessed load applied to the coal pillars is obtained by the weight of all the overburden layers within the tributary area, expressed as a vertical pressure on the top of the pillar. The tributary area is typically taken the midway along bords and cut throughs surrounding a pillar, as shown in Figure 2.

Where: 'TW' is the tributary width and 'TL' is the tributary length.



#### Figure 2: Tributary model

Transfer of load from secondary worked or crushed areas to adjacent pillars was assessed using the procedures in the Australian Coal Association Research program (ACARP) Final Report – Chain Pillar Design (Calibration of ALPS) (Colwell, et al., 1998). In this approach, the load transferred from the retreat mined area is distributed over a zone of adjacent pillars based on empirical equations developed from longwall mining. In this case the abutment angle of 21° was adopted as per the report.

New Pillar Strees = 
$$\sigma_p = \frac{(Tributary \ load + R_p A)}{w}$$

(5)

6

(4)

Using the following formula for abutment loading

$$A = \rho g \left(\frac{1}{2} H W - \frac{1}{8} W^2 tan \emptyset\right) < \rho g \left(\frac{1}{2} H^2 tan \emptyset\right)$$
(6)

And

Proportion ratio = 
$$R_p = 1 - \left[ (D - w - w_e)/D \right]^3$$
 (7)

Where

W = width of long wall panel (or in this case width of failed panel)

H = height of overburden

 $W_e$  = width of bord

#### 5.2.2 Preliminary Stability Calculations

Stability assessment has been undertaken for the pillars indicated on Drawing 4. For these calculations we have adopted three heights:

- 1. Mined height of 2.0m
- 2. Current pillar height of 3.3m

3. Current pillar height plus 0.5m bringing the total to 3.8m

For the pillar plan dimensions, we have adopted two widths:

- 1. Actually drawn plan dimensions
- 2. Less 0.5m to the drawn plan widths to model potential robbing of the pillars and/or spalling

For the overburden stress we have adopted two states:

- 1. Total overburden stress ('Dry state') equivalent to during mining under the site assuming 55m cover
- 2. Total overburden stress ('Dry state') equivalent to during mining under the site assuming 55m cover

These variations provide 'what if' scenarios so that an assessment can be made on how stable the workings are, even if the pillars aren't as expected.

The results of the analysis are presented in Table 2 for the Borehole Seam workings within the angle of draw under the site. The locations of the pillars assessed are indicated in Drawing 4.

Pillar	Width (m)	Length (m)	Scaled Tributary Width (m)	Tributary Length (m)	Abutment Loading	Factor of Safety		ty
Height (m)						2.0	3.3	3.8
Pillar 1	3.4	59.9	10.0	62.6	No Abutment	2.4	1.6	1.5
					With Abutment	1.5	1.0	0.9
	2.9				No Abutment	1.9	1.3	-
					With Abutment	1.2	0.8	-
Pillar 2	1.9	44.1	5.4	46.3	No Abutment	1.9	1.2	1.1
					With Abutment	1.1	0.7	0.7
	1.4				No Abutment	1.2	0.8	-
					With Abutment	0.7	0.5	-
Pillar 3	3.8	19.8	11.0	24.5	No Abutment	2.2	1.5	1.3
		3.3			With Abutment	1.4	0.9	0.8
	3.3				No Abutment	1.8	1.2	-
					With Abutment	1.1	0.7	-
Pillar 4	5.6	18.1	10.2	25.35	No Abutment	3.8	2.5	2.3
					With Two Way Abutment	1.6	1.1	1.0
	5.1				No Abutment	3.3	2.2	-
					With Two Way Abutment	1.4	0.9	-
Pillar 5	2.7	36.0	10.1	39.05	No Abutment	1.6	1.1	1.0
					With Abutment	1.0	0.7	0.6
	2.2				No Abutment	1.2	0.8	-
					With Abutment	0.7	0.5	-
Pillar 6	3.9	35.9	11.4	38.95	No Abutment	2.5	1.7	1.5
				-	With Abutment	1.6	1.1	1.0
	3.4				No Abutment	2.0	1.4	-
					With Abutment	1.3	0.9	-

The above assessment is conservative due to the flooded nature, reducing the effective overburden. However, the factors of safety are so low the workings can't be considered as long term stable. With limited larger pillars, as soon as some pillars fail, the failure is likely to run through to the limit of the eastern portion of the mine.

#### 5.3 ESTIMATING MAXIMUM SUBSIDENCE

#### 5.3.1 Estimating Crush from Volume Exchange Method

To estimate the amount of potential crush at mine level, the following formula has been adopted.

(8)

 $Crush = \frac{[(H_v \times W_{(B+P)}) - W_P \times H_{Crush} \times B_F_p]}{W_{(B+P)}}$ 

Where:

- H<sub>v</sub> = height of void remaining (assumed to be 2.8m based on the nearby voids encountered during drilling
- W<sub>(B+P)</sub> = width of bord and pillar (taken as 22.8 based on Pillar 4 nominated on Drawing 3)
- W<sub>P</sub> = width of pillar (taken as 15.2 based on Pillar 4 pillars nominated on Drawing 3)
- H<sub>Crush</sub> = Height of pillar being mobilised by the crush (taken as the void height of 2.8m)
- BF<sub>P</sub> = bulking factor of pillar crushing (assumed to be 1.2 to 1.3)

Using this information and using dimension from Pillars 3 and 5 it is estimated that the maximum convergence (crush) of the seam at the base of the trough may be between 0.85m and 1.0m.

#### 5.3.2 Estimating Crush from Borehole Data of Historical Crushes

As an alternative method to assess the likely magnitude of crushing, Coffey developed a database of crush (seam convergence) magnitude encountered in boreholes drilled into collapsed first workings in the Newcastle Area.

Generally, the surface subsidence is reported over longwall mining as smax/t versus W/H (Holla, 1987).

Where:

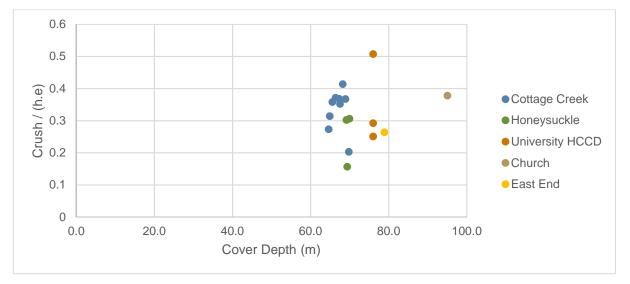
- s<sub>max</sub> = maximum surface subsidence at centre of trough
- t = thickness of seam extracted
- W = Width of longwall panel
- H = Height of overburden

To account for extraction ratio, the height of extraction typically adopted for  $s_{max}/t$  in references (Holla, 1987) was multiplied by the extraction ratio of the pillars at the borehole location scaled from the RT at the borehole location.

$$\frac{Crush}{h.e}$$
 refers to  $\frac{Cruh at mined level (m)}{mined height (m) \times extraction ratio}$ 

(9)

The results for five different areas are provided in Figure 3.



## Figure 3: Summary of crush at mine level data encountered in Boreholes completed beneath the Newcastle Area

Based on the above, it may be estimated the amount of crush at seam level would be in the order of 30% to 40% (with an upper bound value of 50%) of the mined height multiplied by the extraction ratio. This low ratio (Figure 2) was evident in historical mine workings following crush events where the collapse did not fill the entire void space (754-NTLEN213472-R13.Rev1 dated 06 March 2020).

Using Figure 4 data and the scaled extraction ratio of 68% to 75% shown on the RT455, the amount of crush at mine level would be between

- 1.75 (lower bound mined height) x 0.68 x 0.3 (lower bound value Figure 3) = 0.36m
- 2.2 (upper bound mined height) x 0.75 x 0.5 (upper bound value Figure 3) = 0.825m

With the average extraction ratio around 70% and the more likely mined height of 2.0m and the upper 0.5 multiplier value reduces to 0.7m.

## 6. NUMERICAL ASSESSMENT OF MINE WORKINGS

#### 6.1 APPROACH

This assessment included the following steps:

- Development of a large scale 450m wide by 400m deep numerical model with the geological features of the area, and mine workings based on RT455, RT579 and Delta Collieries Overview Plan
- Trigger pillar collapses and assess paths of pillar creeps, recalibrate as necessary
- Assessment of consequent ground deformations caused by pillar collapse.

To assess the FOS of the workings and resultant surface deflection, the three-dimensional numerical analyses commercial software FLAC3D was used to simulate a pillar collapse of the workings.

The model was returned to previous state, with two sensitivity calculations completed

- The modulus of coal reducing at the same rate of pillar strength
- The limit of crush was increased to 900mm.

#### 6.2 GEOMETRY AND MESH

A pillar run that impacts the site may be initiated from weaker pillars outside of the immediate area. As such, a large area of mine workings was modelled to assess potential surface response behaviours at the site and to reduce the impact of edge effects in the model affecting the ground response assessed at the site.

For the site, the model extended over an area of 450m by 400m. This elemental 'mesh' adopted extends sufficiently broadly to recognise and reduce the impact of enable boundary fixities at The Site. This included:

- Extending to the west minimum 60m (depth of working) beyond the small panel south west of the heading.
- Similar extension was completed to the south of the main panel
- Extended to the north east to assess if a collapse would propagate from the Linwood Colliery
- Extended to the east to assess if a collapse would propagate from the collapsed Wickham and bullock Island Colliery

The outlines of pillars within the workings were first digitised using polylines in AutoCAD based on the layout of pillars from RT455, RT579 and Delta Collieries Overview Plan.

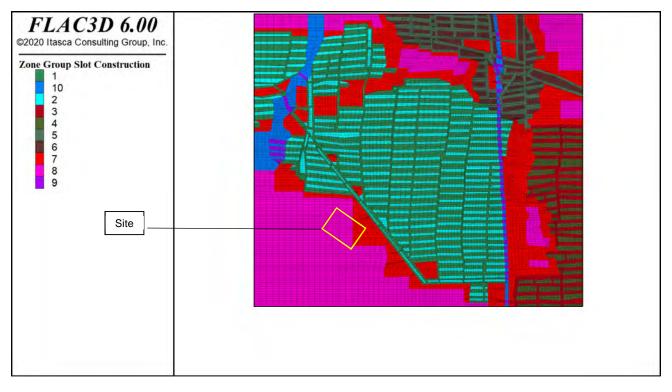
The workings were rotated so that a principal stress corresponded with the x axis (generally along the pillars). The digitised geometry of the pillars was imported into FLAC3D, with the remaining irregular shapes

converted to primitives before subdivision into pillars with four elements across and eight to sixteen elements along the length to create generally squarish shaped elements.

To allow for easier identification in later stages, primitives of similar units were grouped together.

- Group 1 Bords Ferndale
- Group 2 Pillars Ferndale
- Group 3 Bords Wickham and Bullock Island Company
- Group 4 Pillars Wickham and Bullock Island Co
- Group 5 Bord Linwood
- Group 6 Pillar Linwood
- Group 7 Large
- Group 8 Unmined
- Group 9 Fault Mined
- Group 10 Fault Unmined

Figure 4 shows this layout.



#### Figure 4: Grouping at coal pillar level

To build the vertical depth to the model, the Borehole Seam was assumed to be horizontal with the surface modified to resemble the additional overburden.

The grid was then extruded in three stages, with the mesh refined at each stage to reduce the total number of elements to z equals 0m (i.e. the maximum depth to working at the south eastern corner of the model.

#### 6.3 GEOTECHNICAL MODEL

The FLAC3D strain hardening/softening model with a Mohr-Coulomb failure criterion was adopted for most materials used in the analyses to allow softening after reaching failure. To model planes of weakness into the rock mass in the attempt to simulate bedding and allow some separation along these joints, the ubiquitous

joint variant of the model was used for the main rock unit (interbedded siltstone and sandstone). Material parameters were assessed with assistance from RocLab software using rock strength testing from boreholes as well as the bedding observed in the boreholes and published historical data.

The material parameters used for the overburden materials are summarised below in Table 3.

Table 3: Geotechnical model of layers used for FLAC3D analyses

Material	Sand	Clay Units	Interbedded Siltstone and Sandstone	Waratah Sandstone
Depth (m bgl)	0 to 14	14 to 41	41 to 53	Below 59
Density (γ kN/m³)	18	18	25.5	25.5
Youngs Modulus (E GPa)	0.03	0.02	1.8	8
Poisson's Ratio (v)	0.35	0.4	0.25	0.25
Effective cohesion (c' kPa)	1	5	750	1200
Friction angle ( $\phi^{\circ}$ )	35	28	45	54
Dilation angle ( $\psi^{\circ}$ )	5	3	10	10
Tension (kPa)	0.5	1	25	150
Joint dip (°)	-	-	0	-
Joint friction angle (°)	-		35	-
Joint cohesion (kPa)	-	-	20	-
Joint dilation angle (°)	-	-	4 (reducing to 0 at 20% shear)	-
Joint tension (kPa)	-	-	0	-

The boundaries of the units were determined using drilling data from:

- Drilling within the former Blackwoods site GEOTWARA22279AA-AH dated 23 March 2015
- Drilling on Throsby St, GEOTWARA22259AA-AD dated 4 March 2015
- Historical drill log from Ferndale Shaft
- Historical drill log from Linwood Shaft (Formally Wickham Shaft).

The Borehole Seam in the area has a dip locally of up to 1 in 40 to the south east. To simplify the construction of the model the seam was assumed to be level with the additional depth to workings modelled by a higher ground surface level.

The site model includes several faults as can be seen in Figure 3. The fault material was assumed to have has reached its residual strength state (i.e. effective cohesion approximately 10% of peak strength for rock units).

Material parameters for the coal pillars were calibrated to published empirical data and derivation of these parameters is presented in Section 6.4.

For the model, the horizontal stress in the major principal direction (north east to south west) has been assumed to be 9kPa/m depth similar to a coefficient of earth pressure at rest ( $k_0$ ) of the soil to the base of the mine workings, increasing by 25kPa/m depth below the mine workings. Although higher stresses are believed to be present within the Newcastle Coal Measures at depth, previous model calibrations to historical crush events indicate the lower value of stress may be applicable in this area, potentially resulting from:

- Historical crushing of area;
- The number of faults nearby; and
- The proximity of the Newcastle Harbour

All these above may result in stress relief of the mine overburden strata.

This low value was adopted for the area as the conservative case. Low horizontal stresses will act to increase potential movements by allowing more plastic deformation, which will occur while the rock is in tension, simulating joints opening within the rock mass.

The density of 18kN/m<sup>3</sup> adopted for the soil units is a flooded density. However, the workings are considered without pore pressure which is a conservative state. Pore pressure within the mine workings will reduce the effective load by approximately 30% to 40%.

#### 6.4 CALIBRATION OF COAL PILLARS

A critical factor in understanding the stability of the workings is the strength of the coal pillars. The strength of a coal pillar relies on three aspects:

- The intact coal strength;
- The effect of discontinuities controlling the rock mass behaviour; and,
- The coal pillar geometry, affecting the degree of confinement within the coal pillar core.

Average pillar sizes for each of the mines were calibrated to the pillar strength estimated by Equation 1 (Galvin, et al., 1998) provided in Section 5.2.1.

Where Sp = pillar strength, w = width and h = height in metres.

 $S_p = 8.6 \times 3.0^{0.51}/3.8^{0.84} = 4.91$  Mpa for the 3.0m wide pillar, (typical of the Ferndale Colliery)

 $S_{p} = 8.6 \ x \ 5.4^{0.51}/6.0^{0.84} = 4.51 \ \text{Mpa} \ \text{for the 5.4m pillar, (typical of the Wickham and Bullock Island Colliery workings in the area}$ 

- $S_p = 8.6 \times 4.5^{0.51}/3.8^{0.84} = 6.03$ Mpa for the 5m pillar, (typical of the Linwood Colliery).
- $S_p$  = 8.6 x 10<sup>0.51</sup>/3.8 <sup>0.84</sup> = 9.07Mpa for the 5m pillar, (larger 10m wide pillars).

The coal pillars have been modelled with:

- A peak strength as per Equation 1 above, when the pillar remains in its elastic range
- A plastic phase that decreases in strength due to plastic deformation. Once the load on the pillar reaches its ultimate strength a strain softening phase is implemented at a volumetric plastic shear strain of 0.004 (0.4%)
- An after crush phase where the rubble within the bord provides confinement of the pillar calculated in accordance with Section 5.3.2. This is estimated to be
  - 0.7m for the typical sized 3.0m wide pillars (0.7 (extraction ratio) x 0.5 (factor from Figure 3) x 2.0 (assessed mined height))

- 0.6m for the Linwood Colliery (0.6 (extraction ratio) x 0.5 (factor from Figure 3) x 1.8 (assessed mined height))
- 1.0m for Wickham and Bullock Island Colliery pillars (0.5 (extraction ratio) x 0.5 (factor from Figure 3) x 4 (assessed mined height of tops plus bottoms) from Wickham shaft)
- 0.3m for the large pillars. (0.3 (extraction ratio) x 0.5 (factor from Figure 3) x 2.0 (assessed mined height))

#### (For more information refer to 5.3.2)

The results of the pillar calibrations, with a course mesh similar to that used for the pillars within the model, are shown below in Figures 5 to 8 with the final parameters given in Table 4 and Table 5.

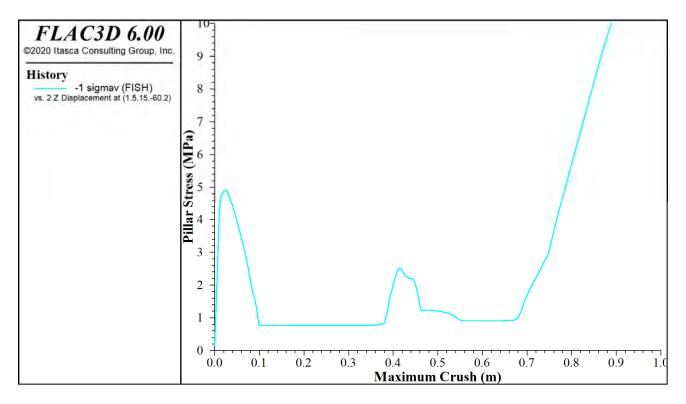


Figure 5: Pillar load versus displacement chart for 3.0m wide Ferndale Colliery Pillars.

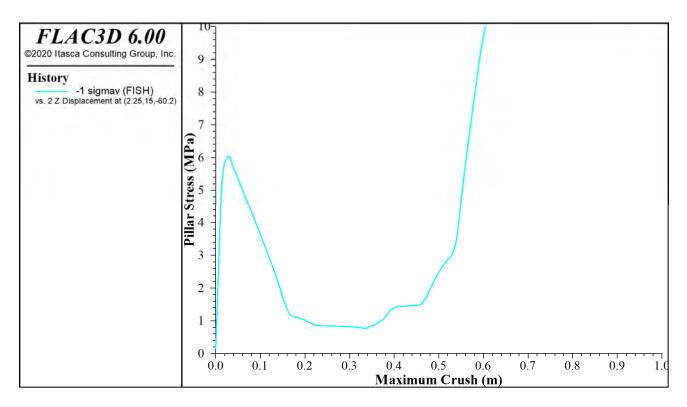


Figure 6: Pillar load versus displacement chart for 4.5m wide Linwood Colliery Pillars.

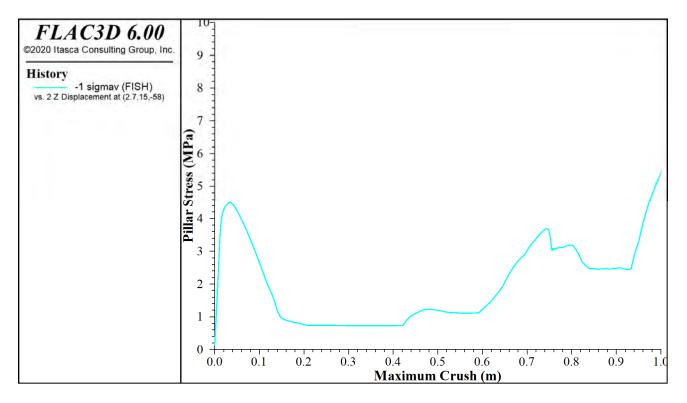


Figure 7: Pillar load versus displacement chart for 5.4m wide 6.0m tall W&BIC Pillars.

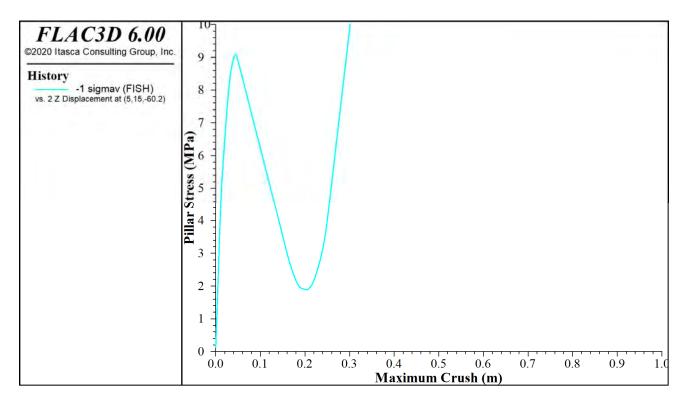


Figure 8: Pillar load versus displacement chart for 10.0m wide Pillars.

Material	Ferndale Colliery	Linwood Colliery	W&BIC	Large
Density (γ kN/m3)	15	15	15	15
Youngs Modulus (E GPa)	2	2	2	2
Poisson's Ratio (v)	0.3	0.3	0.3	0.3
Effective cohesion (c' MPa)	1.13	1.145	0.95	0.84
Friction angle ( $\phi^{\circ}$ )	30	30	30	30
Dilation angle ( $\psi^{\circ}$ )	5	5	5	5
Tension (kPa)	10	10	10	10

A series of three interfaces have been included in the model:

- At the top of coal (top of pillar for W&BIC)
- At the base of Morgan Stone (top of pillar for Ferndale and Linwood Collieries)
- At the base of the Borehole Seam

Table 5: Geotechnical model of interfaces within coal pillars used for the three-dimensional FLAC3D analysis

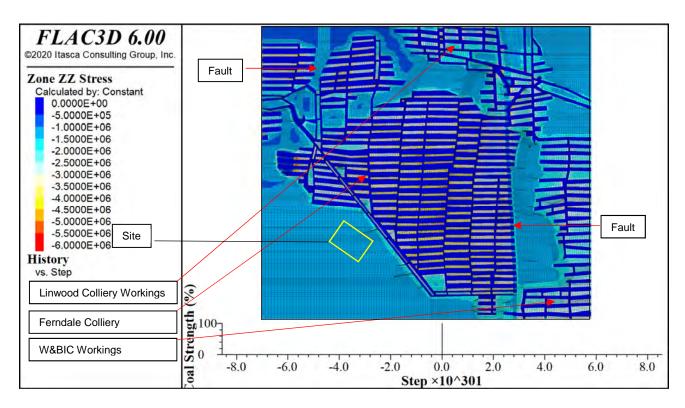
Unit	Peak Effective Cohesion (c' MPa)	Peak Friction Angle Adopted φ°)	Residual Effective Cohesion (c' MPa)	Residual Friction Angle Adopted (७्र°)	Tension (kPa)	Stiffness Normal (E GPa)	Stiffness Shear (G GPa)
Top Coal	0.2	16	0.05	15	1	20	20
Top Pillar	0.2	16	0.02	15	1	20	20
Bottom Pillar	0.2	16	0.02	15	1	20	20

#### 6.5 RESULTS OF NUMERICAL MODELLING

#### 6.5.1 Excavation of Bords

After application of in situ field stresses, the bords were excavated in stages in the model, as is required to prevent numerical instability during the analyses.

An output that summarises the final vertical stress after excavation (at completion of initial mining) is given below in Figure 9. This provides an image of the layout of workings, showing overburden stress being distributed between pillars' cores and the extent of mining.



## Figure 9: Vertical stress at completion of initial mining (assuming zero pore pressure, fully drained) units in Pascals

From the above, the outer slightly larger pillars with smaller bords within the Ferndale eastern panel are loaded to 3.0MPa to 3.5MPa while the middle two rows of pillars are loaded to 3.5MPa to 4.5MPa.

#### 6.5.2 Gradual Degradation of Coal Strength

To allow for the possible/conceivable slow degradation of coal strength, the coal strength in the numerical model was reduced by approximately 5% for each stage solved by the modelling. This is demonstrated in Figure 9.

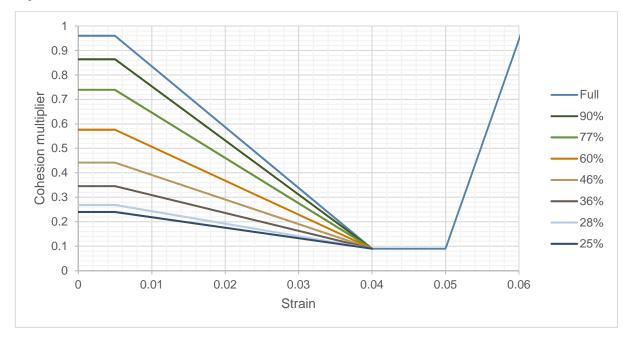
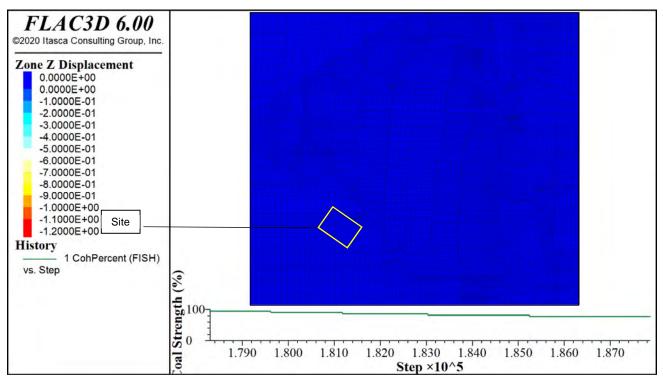
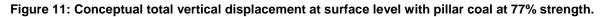


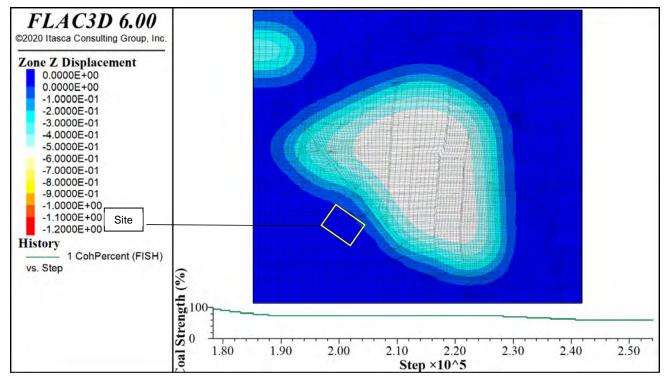
Figure 10: Degradation of peak coal strength

Although the pillar crushing causes several forms of displacements, we have chosen to output the vertical displacement (settlement) and its distribution at the surface to demonstrate the effect of the pillar collapse.

A sequence of the vertical displacement at surface level for the global model is shown in the following Figures 11 to 15 for the cases where the coal pillar strength is progressively reduced to 77%, 60%, 46%, 36% and 25% of its initial strength. Values are shown in metres.









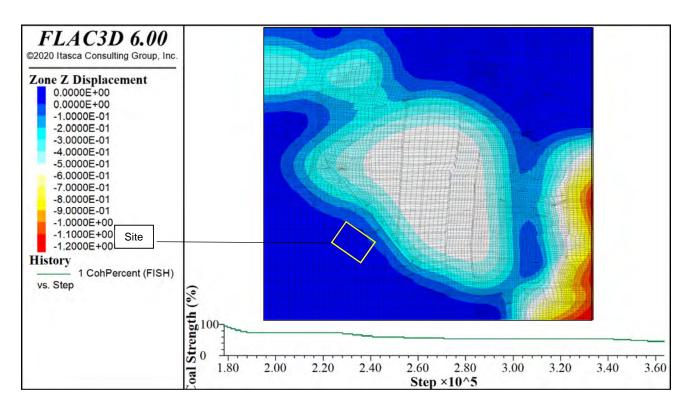


Figure 13: Conceptual total vertical displacement at surface level with pillar coal at 46% strength.

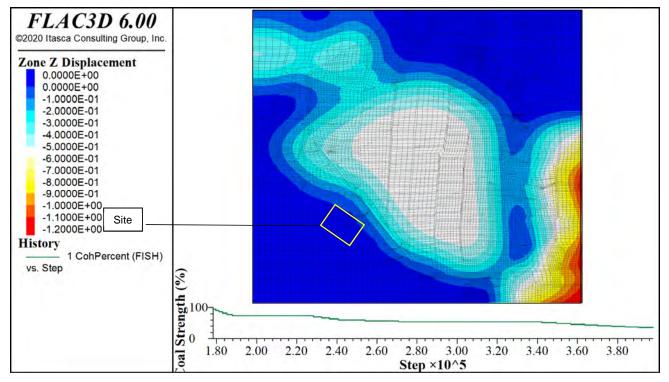
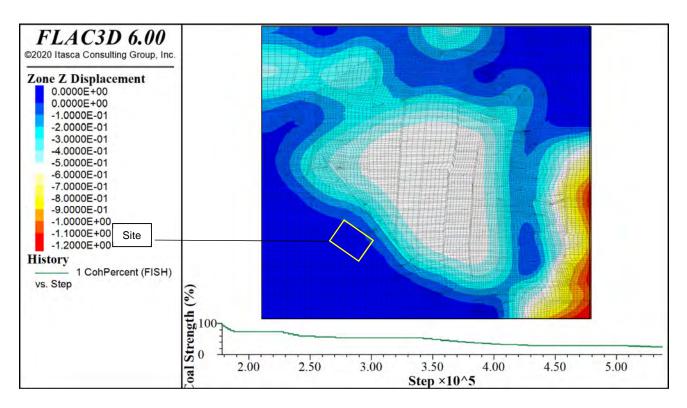


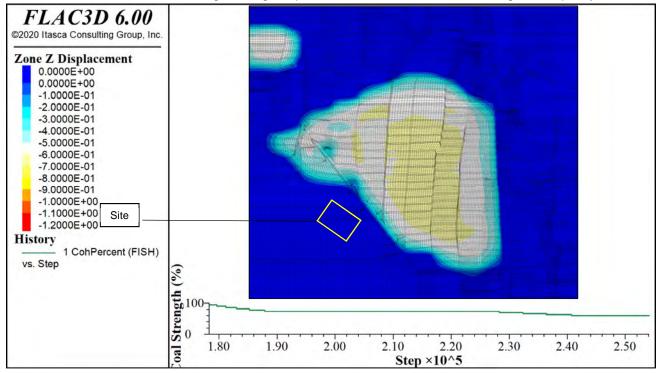
Figure 14: Conceptual total vertical displacement at surface level with pillar coal at 36% strength.



#### Figure 15: Conceptual total vertical displacement at surface level with pillar coal at 25% strength.

The data indicates that the Ferndale Colliery pillars will fail after reduction to 74% of the original meaning the overall factor of safety for the Ferndale Colliery is approximately '1.4' (ignoring pore pressures). Similarly the Wickham and Bullock Island Colliery fail after a reduction to 54% (approximate factor of safety of '1.8') although this does not include abutment loading from the crushed workings nearby.

From the above the site is subjected to most of the movement during the initial failure with only a small additional movement should the larger triangular pillars fail due to their limited convergence capacity.





The above indicates approximately 90% of the displacement at mine level is transferred to the surface level (0.63m at surface level versus 0.69m convergence at mine level).

It is noted that although the coal pillars were calibrated to have a convergence of 700mm at the approximate stress within the mine, a lower subsidence actually resulted in the numerical model believed to be due to

- The slightly larger pillars in some areas of the mine
- The volume of rubble within the mine

# 6.5.3 Sensitivity Analysis Option 1 Degrading Modulus of Coal with Strength loss

For the first sensitivity analysis, the degradation phase is repeated with decreasing modulus with the reduction of peak coal strength. This generally has the effect of lowering the strength at which the pillars fail, however does not affect the site substantially as shown in Figures 17 to 21.

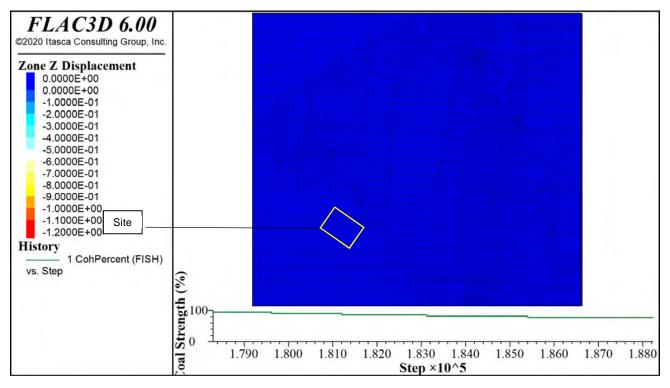


Figure 17: Conceptual total vertical displacement at surface level with pillar coal at 77% strength.

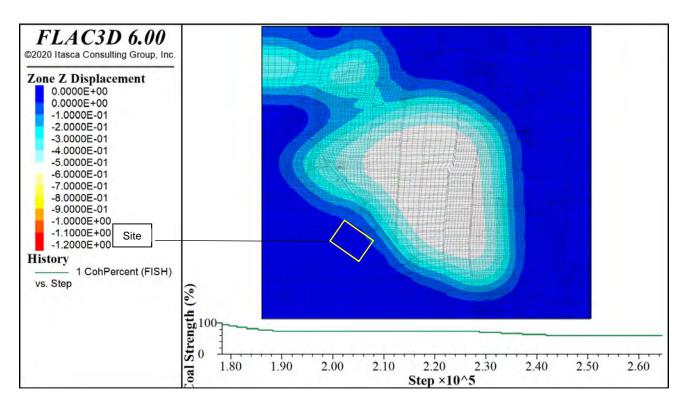


Figure 18: Conceptual total vertical displacement at surface level with pillar coal at 60% strength.

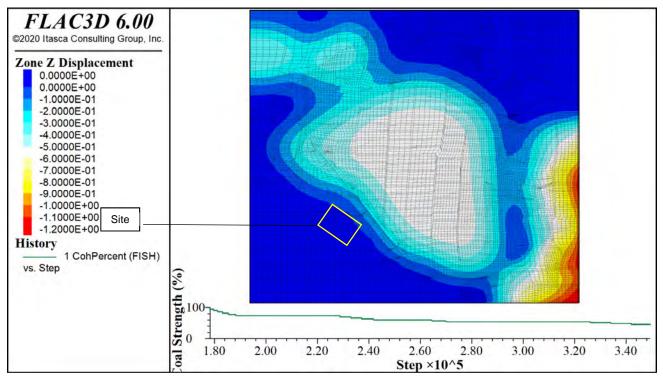


Figure 19: Conceptual total vertical displacement at surface level with pillar coal at 46% strength.

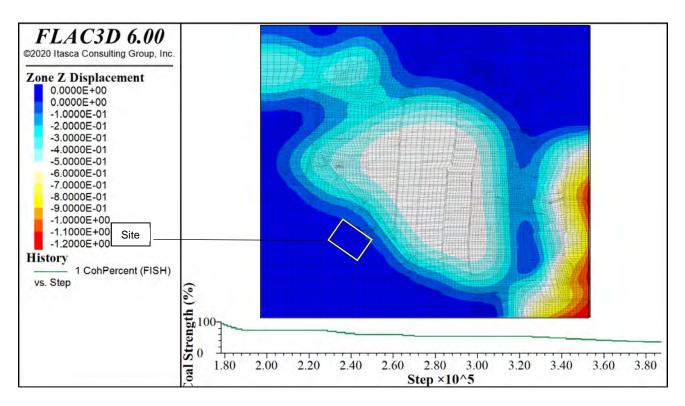


Figure 20: Conceptual total vertical displacement at surface level with pillar coal at 36% strength.

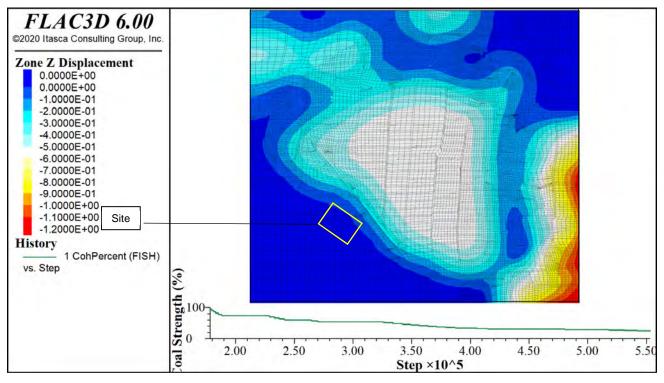
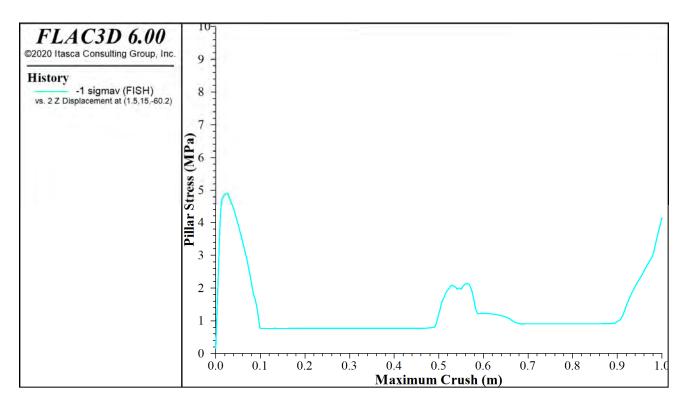


Figure 21: Conceptual total vertical displacement at surface level with pillar coal at 25% strength.

#### 6.5.4 Sensitivity Analysis Option 2 Increasing Maximum Convergence at Level

For the second option the pillar failure curve was modified to increase the magnitude the pillars can convergence before supporting load again. This revised pillar failure curve is provided in Figure 22.



#### Figure 22: Revised pillar load versus displacement chart for Ferndale Pillars (Stress versus strain)

This revised subsidence represents an increase of 40%. The revised surface subsidence is provided in Figures 23 to 27.

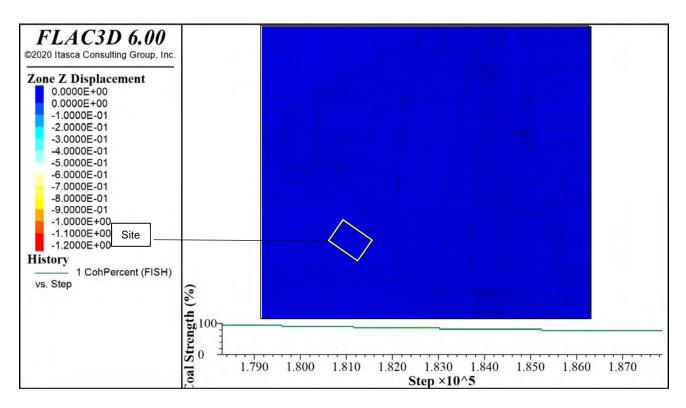


Figure 23: Conceptual total vertical displacement at surface level with pillar coal at 77% strength allowing for 900mm convergence at mine level.

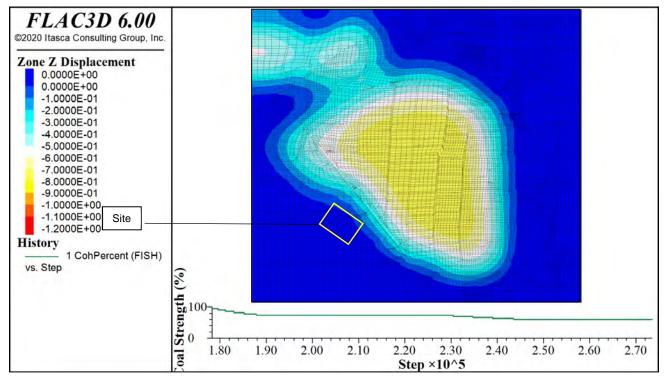


Figure 24: Conceptual total vertical displacement at surface level with pillar coal at 60% strength allowing for 900mm convergence at mine level.

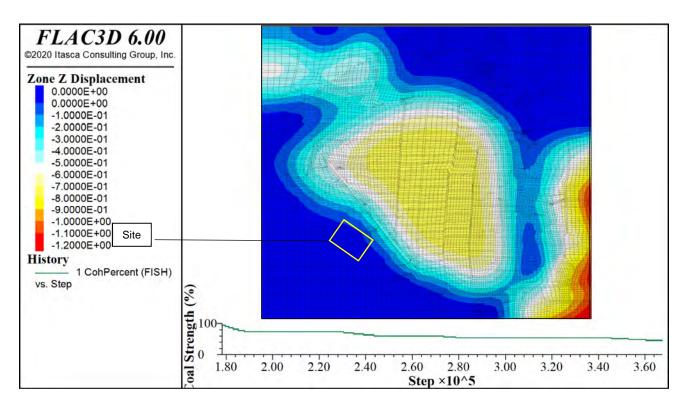


Figure 25: Conceptual total vertical displacement at surface level with pillar coal at 46% strength allowing for 900mm convergence at mine level.

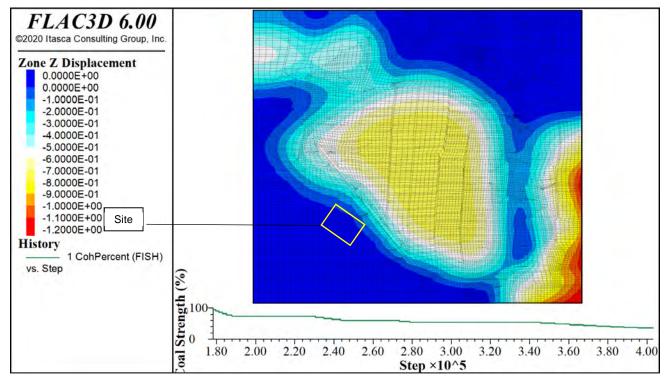
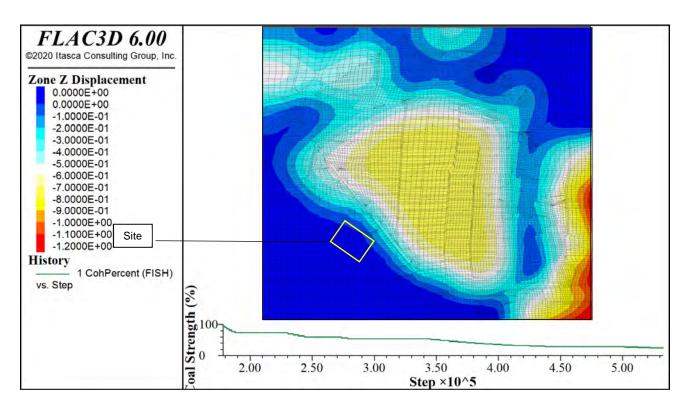
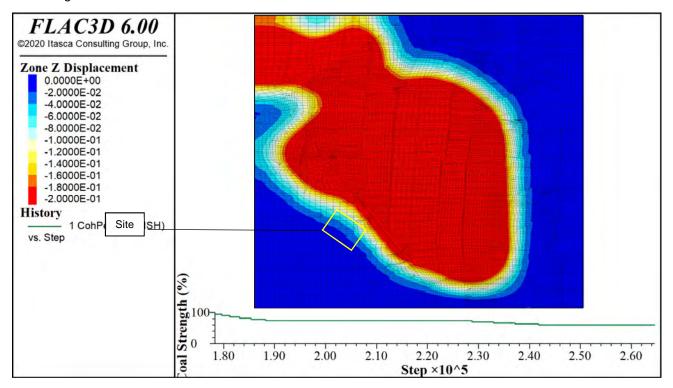


Figure 26: Conceptual total vertical displacement at surface level with pillar coal at 36% strength allowing for 900mm convergence at mine level.

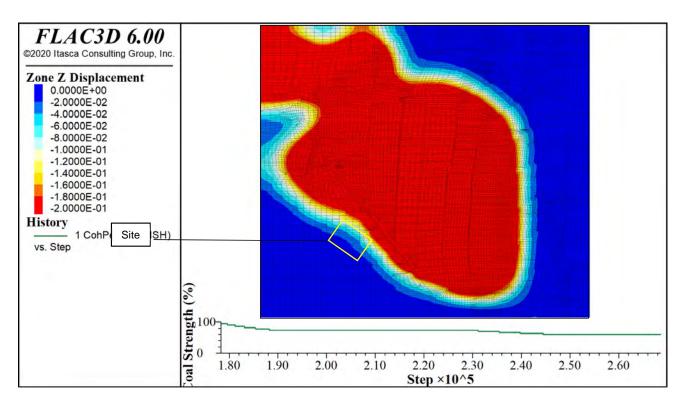


## Figure 27: Conceptual total vertical displacement at surface level with pillar coal at 25% strength allowing for 900mm convergence at mine level.

Using a scale limited at 200mm rather than 1.2m the difference between the two options is slightly more visible Figures 28 and 29.



## Figure 28: Conceptual total vertical displacement at surface level with pillar coal at 60% strength scale limited to 200mm



## Figure 29: Conceptual total vertical displacement at surface level with pillar coal at 60% strength scale limited to 200mm allowing for 900mm convergence at mine level.

From the above the maximum subsidence with approximately 630mm of convergence at mine level is 140mm at the north eastern corner and 95mm at the north western corner. Allowing for an additional 40% of convergence at mine level, this increases to 180mm and 125mm for north east and north west respectively representing a 30% to 33% increase less than the percent difference of convergence.

#### 6.5.5 Model Sections

To assess the effect of subsidence on foundation a section running perpendicular to the site has been developed as shown in Figures 30 to 33.

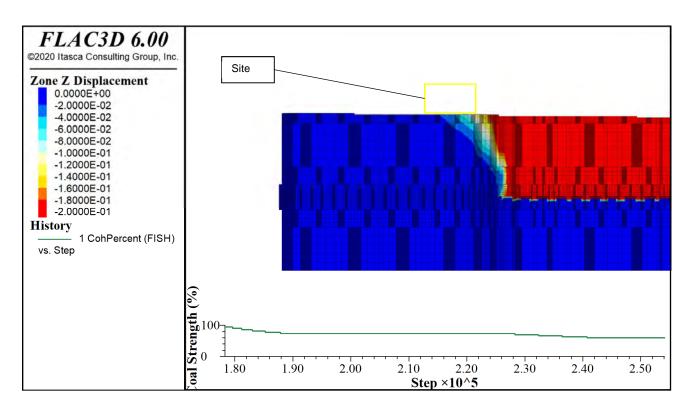
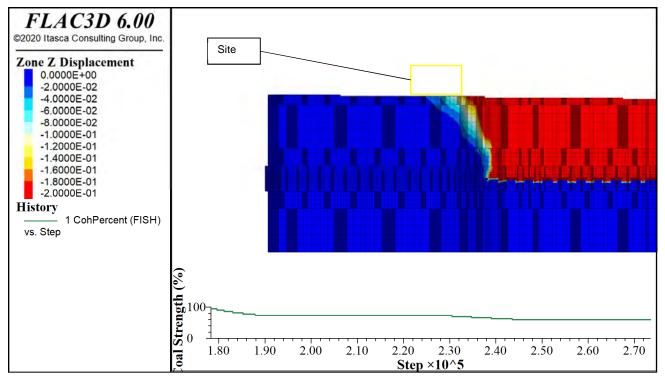


Figure 30: Conceptual vertical settlement through Section A (630mm of crush)



#### Figure 31: Conceptual vertical settlement through Section A (900mm of crush)

From the above figures, the angle of draw acts at approximately 10° within the rock units increasing to approximately 45° within the soil units.

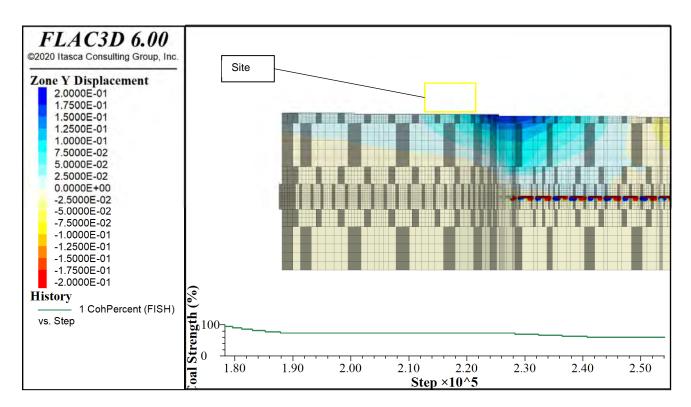
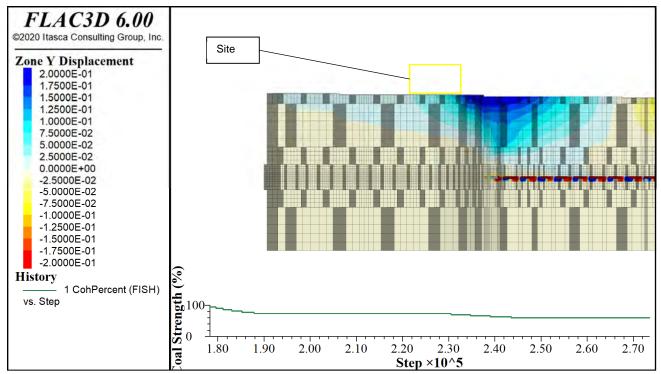


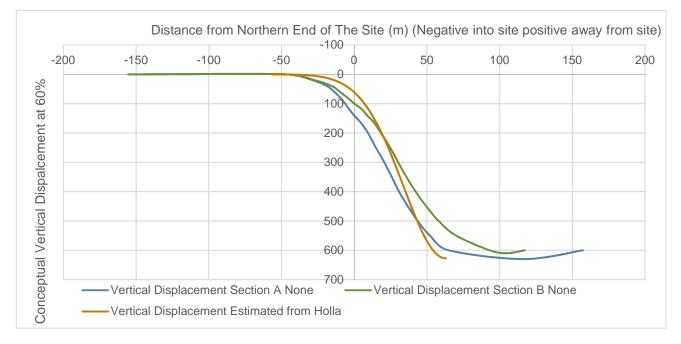
Figure 32: Conceptual horizontal movement through Section A (630mm of crush)



#### Figure 33: Conceptual horizontal movement through Section A (900mm of crush)

In the above Figure 31, the horizontal movement is 30mm at the south eastern corner and 125mm at the north eastern corner representing 3mm/m tension across the whole building with 50mm occurring in the final 10m representing a tensile strain of 5mm/m in this area.

Similarly, Figure 32 indicates if the seam convergence is 900mm, the horizontal movement is 25mm at the south eastern corner and 150mm at the north eastern corner representing 3.3mm/m tension across the whole building with 50mm occurring in the final 9m representing a tensile strain of 6mm/m in this area.



## Comparing the above subsidence profiles to an idealised curve using subsidence data from over long wall panels (Holla, 1987) is given below in Figure 34.

#### Figure 34: Comparison of FLAC3D Subsidence profile to Holla idealised profile.

From the above, due to the presence of deep alluvial/estuarine soils including sand beneath the site, the potential subsidence assessed for the site, shown in the above analysis, is significantly larger than would normally be expected based on traditional estimates for the site (Holla, 1987). As well as a larger angle of draw, pillars within the mine, particularly larger triangular ones, are shown in the above analysis to have the effect of increasing the radius of compressive curvature within the mine footprint limits away from the site.

### 7. DISCUSSION

#### 7.1 DISCUSSION ON RISK FROM INGRESS OF SAND

The risk of large-scale subsidence, that affects the site in question, from ingress of water is not a credible failure mechanism for the following reasons:

- The site is located over a large barrier of mine workings. As such loss of sand into mine workings directly beneath the site is not credible.
- The workings are now flooded meaning large scale ingress of water as occurred into the Ferndale Colliery from Tighes Hill (Robertson, et al., 1886) can no longer occur. Should a failure of the roof occur to punch into the mine workings, the sand will fall vertically and choke the workings as the void height is less than 1m in height.
- Should trough subsidence occur causing tensile cracking of the rock overburden, the clay that overlies the rock between 14m and 33m is considered likely to deform plasticly rather than developing joints / fissures that could form pathways for the overlying sand to migrate into the rock units or to the workings.

#### 7.2 REFERENCE TO SA NSW

For buildings over standard guidelines, the SA NSW assesses projects based on merit as set out in a document entitled *Development Application - Merit Assessment Policy* (Version 1, 25 May 2018). Attachment

C to the Policy outlines the procedure used to assess surface development on merit. The purpose of the procedure is to:

- Provide a consistent approach when assessing development applications
- Provide guidance on the type of engineering mitigation measures and geotechnical reporting that may be required to facilitate assessment of a development application

SA NSW applies different conditions of approval based on building category. With reference to Table C1 in Appendix C of the SA NSW Merit Assessment Policy, the building is classed B3 with more than 4 storeys.

The uncertainty factor is used by SANSW to determine the levels of conservatism and allowed assumptions required when assessing the likelihood of a trough subsidence event. The level of geotechnical uncertainty is categorised as low, medium or high based on the level of confidence and understanding of the:

- Geological environment (R1)
- Level of geotechnical investigation (R2)
- Type of coal mine plans and records (R3)
- Method used to assess stability and impact (R4)

The weighting applied to each factor is:

- R1 = 2
- R2 = 2
- R3 = 3
- R4 = 3

An uncertainty value of either ranging from 1 to 3 is assigned for each category (R1 to R4) based on the descriptions in Table C2 of Appendix C of the SANSW Merit Assessment Policy (attached in Appendix B of this report). The uncertainty values (U) are:

- Low uncertainty = 1
- Moderate uncertainty = 2
- High uncertainty = 3

Once these have been determined, the Uncertainty Factor can be determined by applying the following formula:

#### Uncertainty Factor (UF) = (R1xU)+(R2xU)+(R3xU)+(R4xU) -10

The Uncertainty Factor is used to rate project uncertainty for a project is rated as low, medium or high uncertainty based on the following values:

- Low uncertainty UF <= 5
- Moderate uncertainty UF > 5 and <=10</li>
- High uncertainty UF >10

The SA NSW Assessment Policy is attached to this report for reference in Appendix A.

A summary of uncertainty factors for the subject site is provided below in Table 6.

Item	Weighting	Uncertainty Value	Uncertainty Factor	Comments
Geological Environment (R1)	2	1	2	Mining records show a number of faults in area but none are present beneath the site with a seam dip less than 10°. Faults are more than 50m from the site.
Level of geotechnical Investigation (R2)	2	3	6	No site specific borehole data, with three boreholes confirming voids approximately 100m from the site.
Coal Mine Plans and Records (R3)	3	2	6	Hand worked, some boreholes confirming accuracy but not enough to verify low risk
Method used to assess stability and impact (R4)	3	1	3	Multiple methods used to assess the area, including numerical modelling and empirical the pillar stability calculations.
Total			17	
Uncertainty Factor (UF)			7	

Based on the above, the site has moderate uncertainty.

### 8. **RECOMMENDATIONS**

The pillars within the angle of draw do not meet the required width to height ratio of 4 for moderate uncertainty. As such it is recommended the building be designed to be safe, serviceable and repairable for the subsidence profile provided in Drawing 5 with up to the following:

- Subsidence of 140mm along Section A and 100mm along Section B
- Tensile strains 3mm/m across the whole building and 5mm/m for the northern 10m.
- Across the building the tensile strain of 1.5mm and 2.5mm/m for the whole site and the northern 10m respectively is applicable.
- The radius of curvature is estimated to be 10km at the southern side increasing to 4km for the northern 20m.
- Tilts ranging from 2mm/m up to 7mm/m at the northern end

Allowing for a 40% increase in subsidence for a safe design case the revised profile is provided in Drawing 6, with up to the following:

- Subsidence of 180mm along Section A and 130mm along Section B
- Tensile strains 3.3mm/m across the whole building and 6mm/m for the northern 10m.
- Across the building the tensile strain of 1.5mm and 3mm/m for the whole site and the northern 10m respectively is applicable.
- The radius of curvature is estimated to be 3km at the southern side increasing to 1.6km for the northern 20m.
- Tilts ranging from 2mm/m up to 10mm/m at the northern end

The implications and suggested setbacks from boundaries (if any are required) should be discussed with the project structural engineer/s to allow for economical design of the development.

### 9. CONCLUSION

An assessment of the mine workings has been completed using empirical and numerical analysis has been completed to assess current ground movements for the site. The location of the mine is based on drilling data and survey data from mine plan M12116.

Based on the empirical analysis the FOS is in the order of 1.1 to 1.7 with a maximum crush at the centre of panel of about 0.75m.

Using numerical analysis, the global FOS for the main panel was estimated to be 1.4. with subsidence up to 140mm assessed. The recommended design parameters a provided in Section 7. Sensitivity analysis was completed by two methods

- Decreasing modulus of the coal
- By increased the magnitude of convergence at seem level.

The upper bound may be used to assess an ultimate (safe only) design profile for the building.

Guidance on the uses and limitations of this report is presented in the attached sheet, *'Important Information about your Tetra Tech Coffey Report'*, which should be read in conjunction with this report.

If you have any questions regarding this report or should you require further assistance on this project, please contact the undersigned.

Signature:	Stal
Full name:	Simon Baker
Title:	Senior Geotechnical Engineer
Date:	28 June 2021

# 10. BIBLIOGRAPHY

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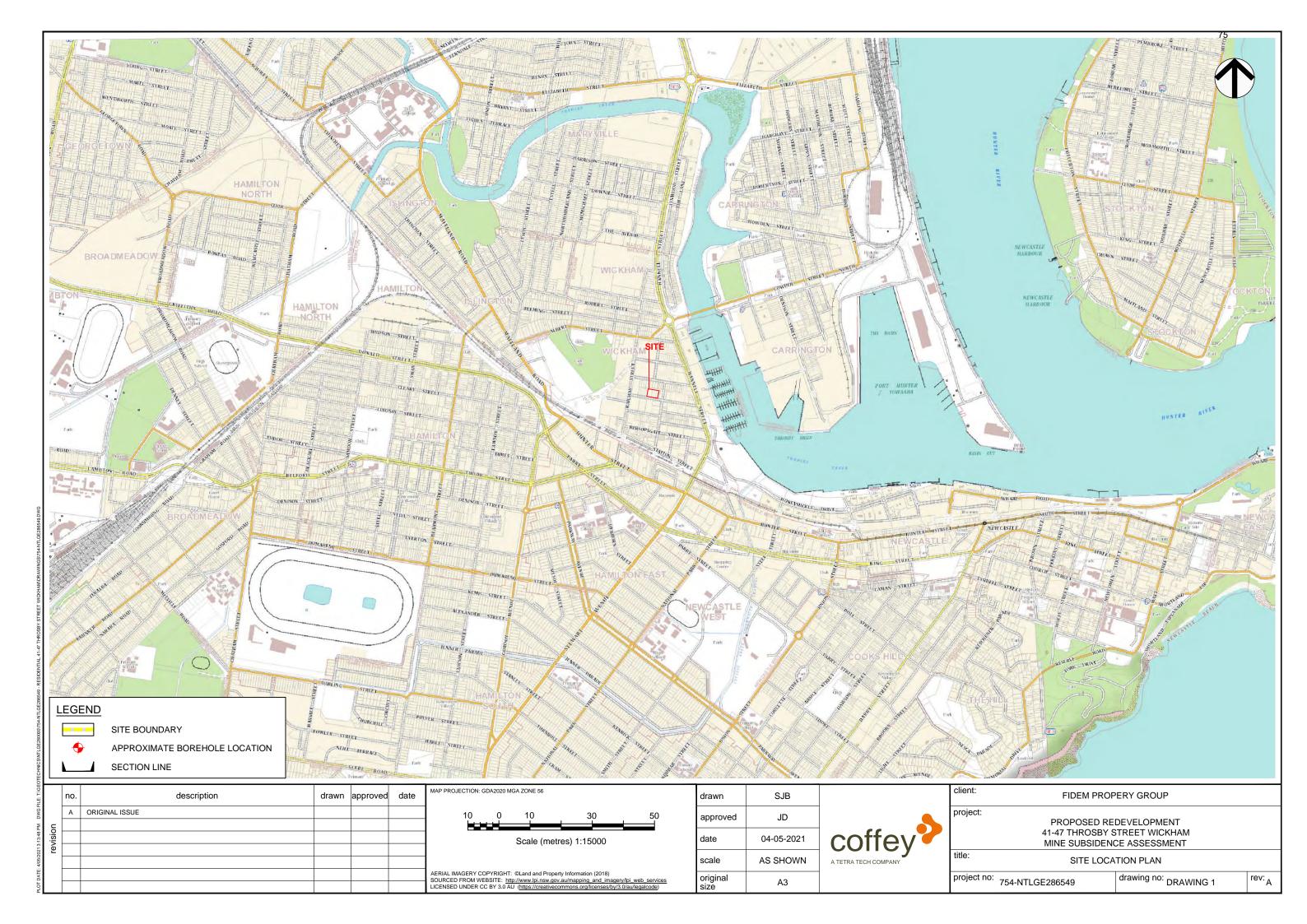
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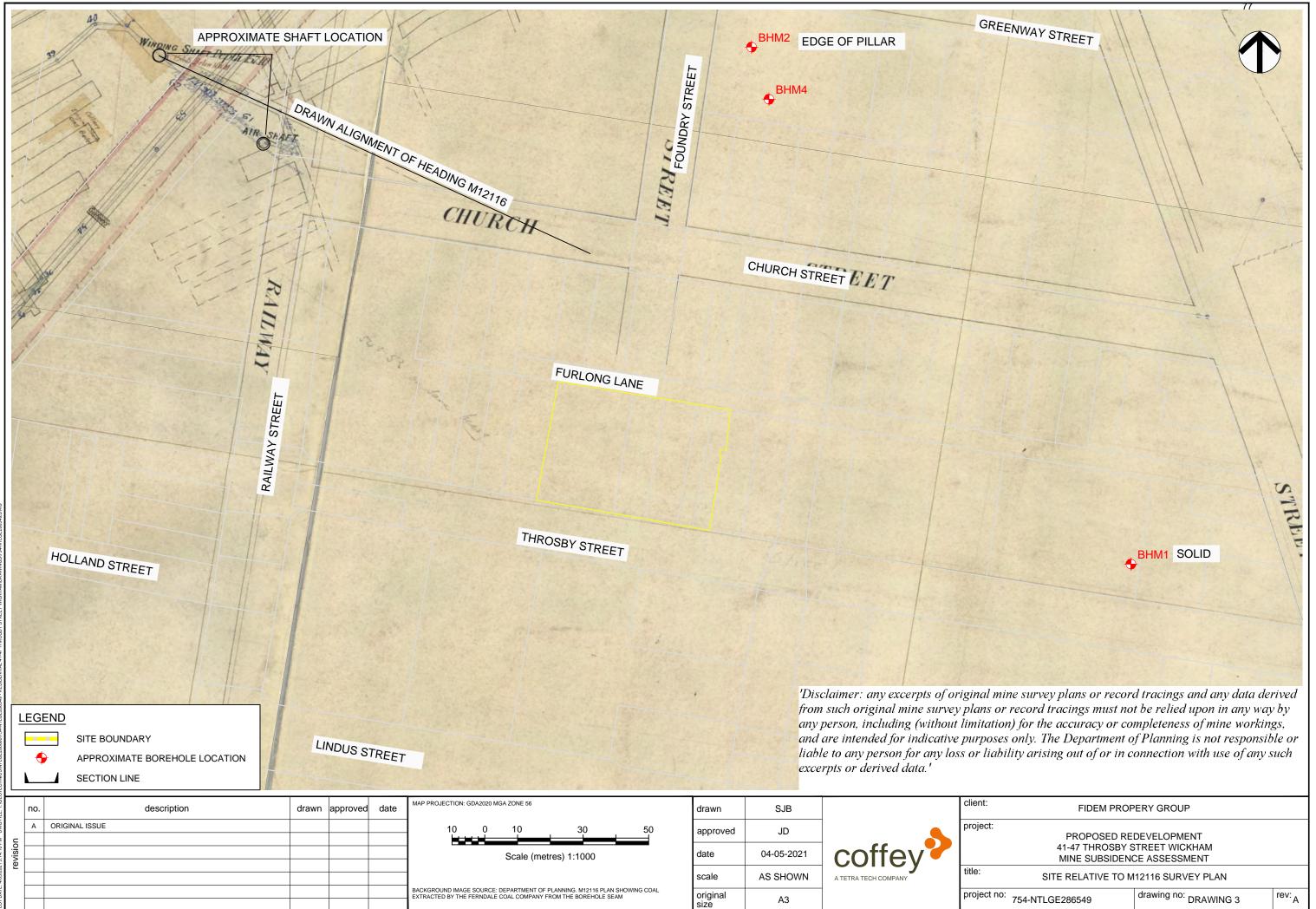
**Robertson, James R. M., et al. 1886.** New South Wales Royal Commisson on Collieries Report on the Accidents at Ferndale Colliery. Sydney : Thomas Richards Government Printer, 1886.

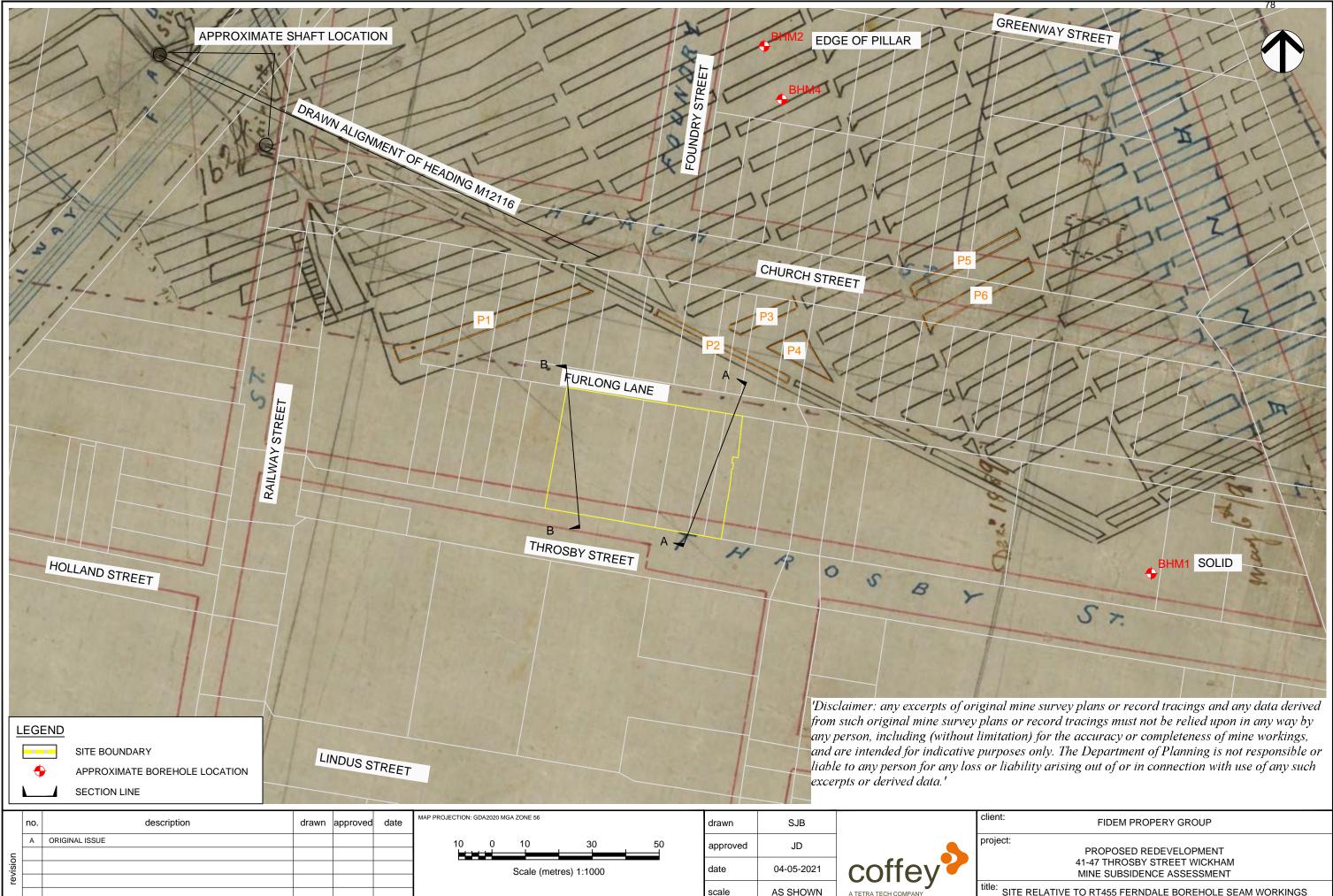
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# **APPENDIX A: DRAWINGS**









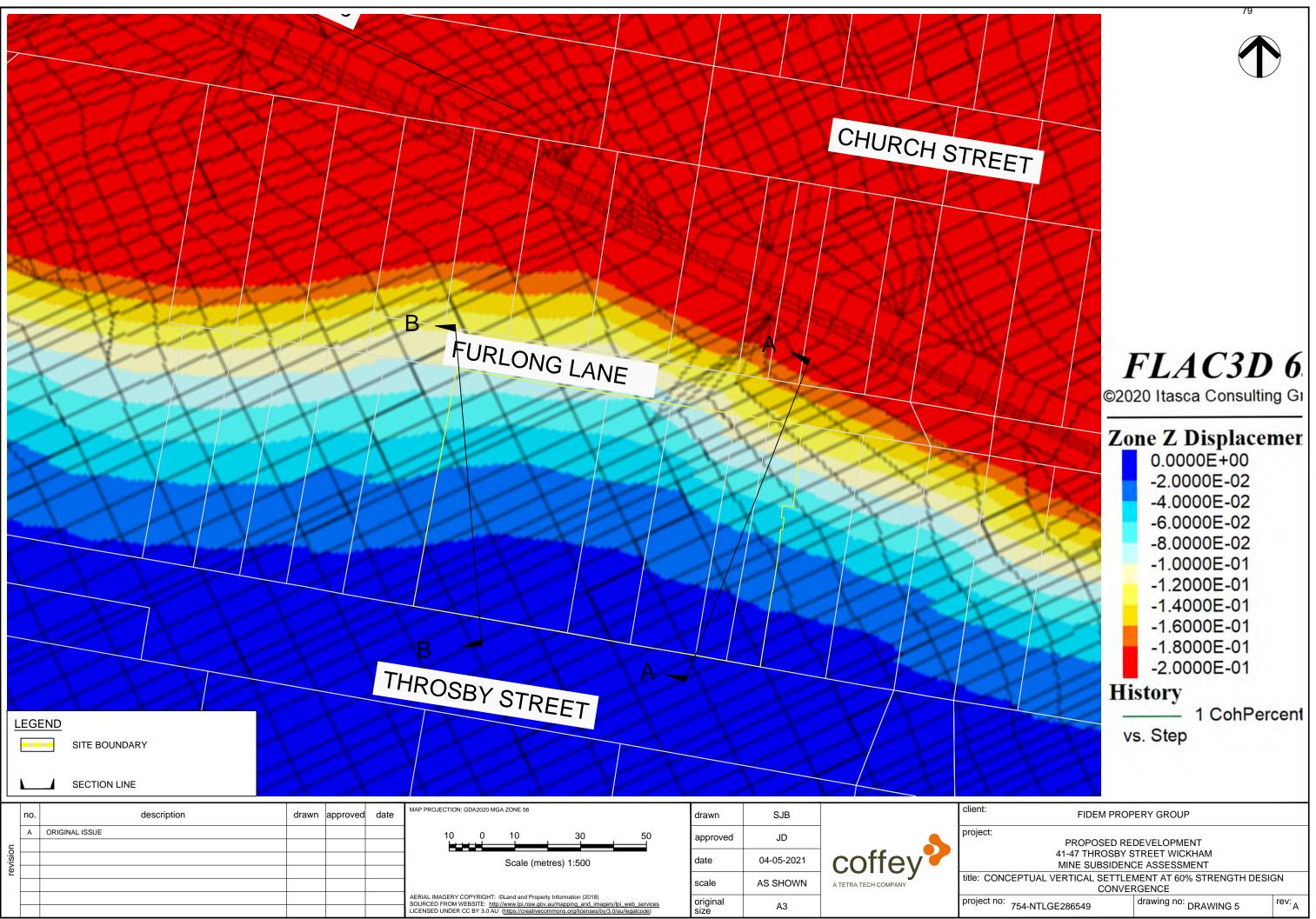
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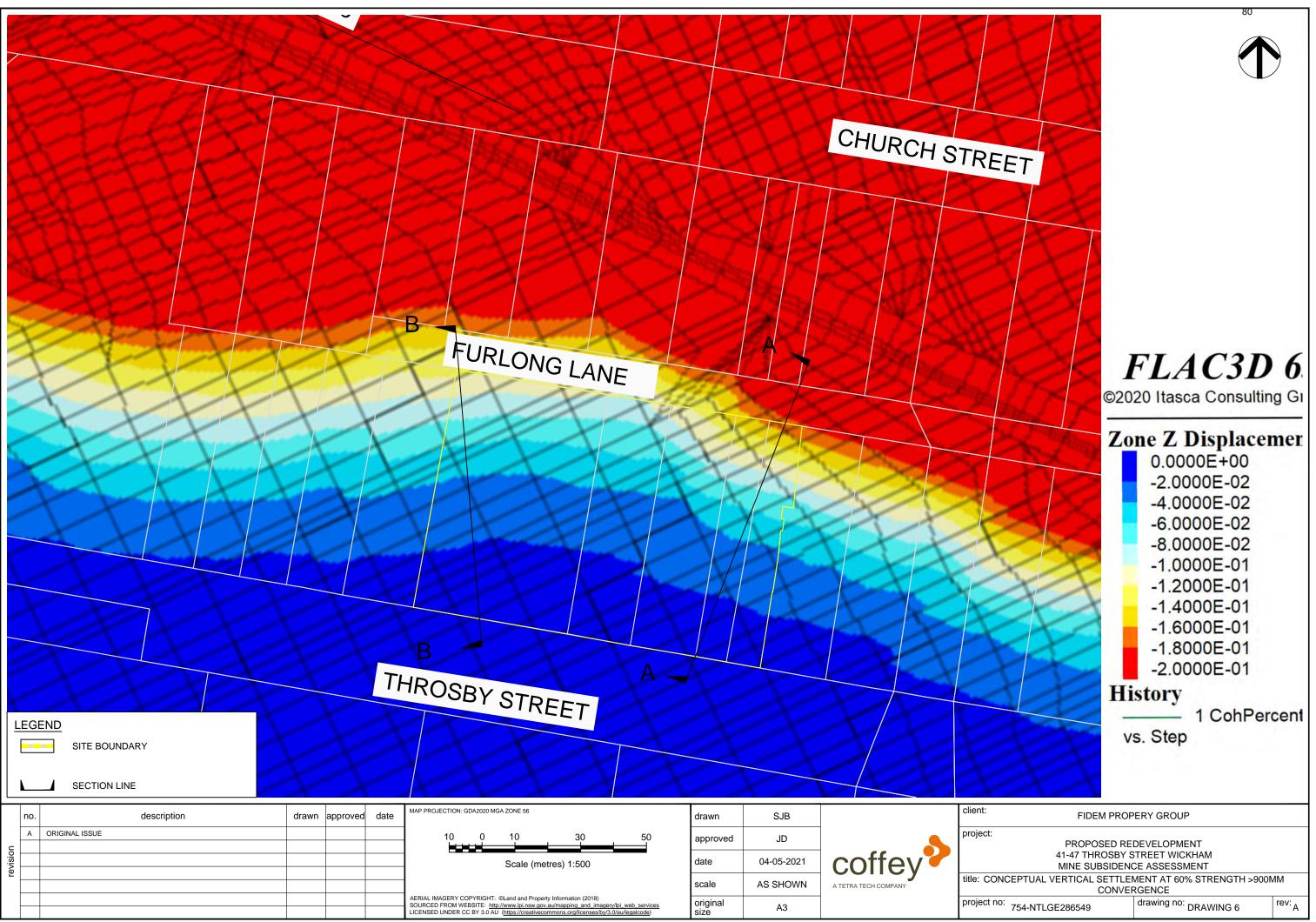
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BACKGROUND IMAGE SOURCE: DEPARTMENT OF PLANNING. RT455 PLAN OF THE FERNDALE COLLIERY WICKHAM

title: SITE RELATIVE TO RT455 FERNDALE BOREHOLE SEAM WORKINGS drawing no: DRAWING 4 project no: 754-NTLGE286549

A TETRA TECH COMPAN





754-NTLGE286549	drawing no: DRAWING 6	

# IMPORTANT INFORMATION ABOUT YOUR TETRA TECH COFFEY REPORT

As a client of Tetra Tech Coffey you should know that site subsurface conditions cause more construction problems than any other factor. These notes have been prepared byTetra Tech Coffey to help you interpret and understand the limitations of your report.

#### Your report is based on project specific criteria

Your report has been developed on the basis of your unique project specific requirements as understood by Tetra Tech Coffey and applies only to the site investigated. Project criteria typically include the general natureof the project; its size and configuration; the location of any structures on the site; other site improvements; the presence of underground utilities; and the additional risk imposed by scope-of-service limitations imposedby the client. Your report should not be used if there are any changes to the project without first asking Tetra Tech Coffey to assess how factors that changed subsequent to the date of the report affect the report's recommendations. Tetra Tech Coffey cannot accept responsibility for problems that may occur due to changed factors if they are not consulted.

#### Subsurface conditions can change

Subsurface conditions are created by natural processes and the activity of man. For example, water levels can vary with time, fill may be placed on a site and pollutants may migrate with time. Because a report is based on conditions which existed at the time of subsurface exploration, decisions should not be based on areport whose adequacy may have been affected by time. Consult Tetra Tech Coffey to be advised how timemay have impacted on the project.

#### Interpretation of factual data

Site assessment identifies actual subsurface conditions only at those points where samples are taken and when they are taken. Data derived from literature and external data source review, sampling and subsequent laboratory testing are interpreted by geologists, engineers or scientists to provide an opinion about overall siteconditions, their likely impact on the proposed development and recommended actions. Actual conditions maydiffer from those inferred to exist, because no professional, no matter how qualified, can reveal what is hiddenby earth, rock and time. The actual interface between materials may be far more gradual or abrupt than assumed based on the facts obtained. Nothing can be done to change the actual site conditions which exist, but steps can be taken to reduce the impact of unexpected conditions. For this reason, owners should retain the services of Tetra Tech Coffey through the development stage, to identify variances, conduct additional tests if required, and recommend solutions to problems encountered on site.

### Your report will only give preliminary recommendations

Your report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until project implementation has commenced and therefore your report recommendations can only be regarded as preliminary. Only Tetra Tech Coffey, who prepared the report, is fully familiar with the background information needed to assess whether or not the report's recommendations are valid and whether or not changes should be considered as the project develops. If another party undertakes the implementation of the recommendations of this report there is a risk that the report will be misinterpreted and Tetra Tech Coffey cannot be held responsible for such misinterpretation.

#### Your report is prepared for specific purposes and persons

To avoid misuse of the information contained in your report it is recommended that you confer with Tetra Tech Coffey before passing your report on to another party who may not be familiar with the background and the purpose of the report. Your report should not be applied to any project other than that originally specified at the time the report was issued. Insert disclaimer here. If disclaimer statement is long, or if there are multiple disclaimers, text will flow to second page.

#### Interpretation by other design professionals

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a report. To help avoid misinterpretations, retain Tetra Tech Coffey to work with other project design professionals who are affected by the report. Have Tetra Tech Coffey explain the report implications to designprofessionals affected by them and then review plans and specifications produced to see how they incorporate the report findings.

#### Data should not be separated from the report

The report as a whole presents the findings of the site assessment and the report should not be copied in partor altered in any way. Logs, figures, drawings, etc. are customarily included in our reports and are developed by scientists, engineers or geologists based on their interpretation of field logs (assembled by field personnel) and laboratory evaluation of field samples. These logs etc. should not under any circumstances be redrawn for inclusion in other documents or separated from the report in any way.

#### Geoenvironmental concerns are not at issue

Your report is not likely to relate any findings, conclusions, or recommendations about the potential for hazardous materials existing at the site unless specifically required to do so by the client. Specialist equipment, techniques, and personnel are used to perform a geoenvironmental assessment. Contamination can create major health, safety and environmental risks. If you have no information about the potential for your site to be contaminated or create an environmental hazard, you are advised to contact Tetra Tech Coffeyfor information relating to geoenvironmental issues.

#### Rely on Tetra Tech Coffey for additional assistance

Tetra Tech Coffey is familiar with a variety of techniques and approaches that can be used to help reduce risks for all parties to a project, from design to construction. It is common that not all approaches will be necessarily dealt with in your site assessment report due to concepts proposed at that time. As the project progresses through design towards construction, speak with Tetra Tech Coffey to develop alternative approaches to problems that may be of genuine benefit both in time and cost.

#### Responsibility

Reporting relies on interpretation of factual information based on judgement and opinion and has a level of uncertainty attached to it, which is far less exact than the design disciplines. This has often resulted in claimsbeing lodged against consultants, which are unfounded. To help prevent this problem, a number of clauses have been developed for use in contracts, reports and other documents. Responsibility clauses do not transfer appropriate liabilities from Tetra Tech Coffey to other parties but are included to identify where Tetra Tech Coffey's responsibilities begin and end. Their use is intended to help all parties involved to recognise their individual responsibilities. Read all documents from Tetra Tech Coffey closely and do not hesitate to askany questions you may have.



## ATTACHMENTS DISTRIBUTED UNDER SEPARATE COVER

## CCL 26/04/2022 - ADOPTION OF PLANNING PROPOSAL FOR 41 AND 47 THROSBY STREET, WICKHAM

ITEM-35 Attachment B: Planning Agreement - 41 and 47 Throsby Street, Wickham



# **Planning Agreement**

Newcastle City Council ABN 25 242 068 129

FPG Wickham Pty Limited ACN 620 785 293

# Contents

Part	ties		1		
Bac	kgrou	und	1		
Оре	erative	e part	2		
1	Defin	nitions	2		
2	Inter	pretation	4		
3	Plani	ning Agreement under the Act	6		
4	Appli	Application of this agreement 6			
5	Oper	Operation of this agreement			
6	Cont	ributions to be made under this agreement	6		
	6.1	Works	6		
	6.2	Dedication of Land	7		
	6.3	Maintenance of Works	7		
7	Appli	ication of s 7.11, s 7.12 and s 7.24 of the Act to the L	Development 8		
8	Regi	stration of this agreement	8		
	8.1	Developer Interest	8		
	8.2	Registration of this agreement	8		
	8.3	Removal from Register	9		
9	Revie	ew of this agreement	9		
10	Disp	ute Resolution	9		
	10.1	Reference to Dispute	9		
	10.2	Notice of Dispute	9		
	10.3	Representatives of Parties to Meet	10		
	10.4	Further Notice if Not Settled	10		
	10.5	Mediation	10		
	10.6	Expert determination	11		
	10.7	Litigation	11		
	10.8	No suspension of contractual obligations	12		
11	Enfo	rcement	12		
	11.1	Default	12		
	11.2	Security	12		
	11.3	Compulsory Acquisition	13		
	11.4	Restriction on the issue of Certificates	13		
	11.5	General Enforcement	13		

12	Assia	nment and Dealings	14
12	12.1	Transfer of Land	14
13		vals and consents	14
14	No fet		14
	14.1	Discretion	14
	14.2	No fetter	14
15	Notice	2S	15
	15.1	Notices	15
16	Gener	ral	15
	16.1	Relationship between parties	15
	16.2	Time for doing acts	16
	16.3	Further assurances	16
	16.4	Variation	16
	16.5	No assignment	16
	16.6	Counterparts	16
	16.7	Legal expenses and stamp duty	16
	16.8	Entire agreement	16
	16.9	Representations and warranties	16
	16.10	Severability	16
	16.11	Invalidity	17
	16.12	Waiver	17
	16.13	GST	17
	16.14	Governing law and jurisdiction	17
Sche	edule	1 Summary of requirements (section 7.4)	18
Ann	exure	A Plan showing Dedication Land	21
Ann	exure	B Works Documents	24

# Agreement

# Date

## Parties

First party

Name	Newcastle City Council (Council)
ABN	25 242 068 129
Contact	ТВА
Telephone	[party to insert]
Second party	
Name	FPG Wickham Pty Limited (Developer)
ACN	620 785 293
Contact	ТВА
Telephone	[party to insert]

# Background

- A. The Developer owns the Land.
- B. The Developer proposes to carry out the Development which will include a multi-storey mixed use development on the Land.
- C. To facilitate the Development, the Developer has lodged a Planning Proposal seeking the following amendments to LEP 2012:
  - a. an amendment to the Height of Buildings Map to allow a maximum building height of 14m for part of 41 Throsby Street;
  - an amendment to the Height of Buildings Map to allow a maximum building height of 28m for the remaining part of 41 Throsby Street and all of 47 Throsby Street; and
  - c. an amendment to the Floor Space Ratio Map to allow for a maximum floor space ratio for the Land of 3:1.
- D. The Developer has made an offer to enter into this agreement to provide public benefits in connection with the Planning Proposal and future Development of the Land, including:
  - a. dedication to Council of that part of Lot 62 DP 579890 shown as "LANE" on the draft Plan of Subdivision at Annexure A, for the purpose of constructing a new public laneway, including footpath; and
  - b. construction of a new public laneway, including footpath on the Dedication Land, generally in accordance with the Works Documents set out in Annexure B.

# Operative part

1 Definitions

In this agreement, unless the context indicates a contrary intention:

Act means the Environmental Planning and Assessment Act 1979 (NSW);

Address means a party's address set out in the Notices clause of this agreement;

**Approval** means any certificate, licence, consent, permit, approval or other requirement of any Authority having jurisdiction in connection with the activities contemplated by this agreement;

**Authority** means any government, semi-governmental, statutory, administrative, fiscal or judicial body, department, commission, authority, tribunal, public or other person; agency or entity and includes a certifier accredited under the *Building Professionals Act 2005* (NSW);

**Bank Guarantee** means an irrevocable and unconditional undertaking that is not limited in time and does not expire by one of the following trading banks:

- (a) Australia and New Zealand Banking Group Limited,
- (b) Commonwealth Bank of Australia,
- (c) Macquarie Bank,
- (d) National Australia Bank,
- (e) St George Bank Limited,
- (f) Westpac Banking Corporation, or
- (g) Other financial institution approved by the Council,

to pay an amount or amounts of money to the Council on demand and containing terms and conditions reasonably acceptable to the Council;

Bond means an insurance bond from an AAA credit rated party;

**Business Day** means a day on which banks are open for general banking business in Sydney, excluding Saturdays and Sundays;

**Claim** means any claim, loss, liability, damage, proceeding, order, judgment or expense arising out of the operation of this agreement;

**Compliance Certificate** means a compliance certificate as defined under section 6.4 of the Act;

**Construction Certificate** means a construction certificate as defined under section 6.4 of the Act;

Contributions Plan has the same meaning as under the Act;

**CPI** means the All Groups Consumer Price Index applicable to Sydney published by the Australian Bureau of Statistics;

**Damages** means all liabilities, losses, damages, costs and expenses, including legal fees and disbursements and costs of investigation, litigation, settlement, judgment, interest and penalties;

٩N

**Dealing**, in relation to the Land, means, without limitation, selling, transferring, assigning, mortgaging, charging, encumbering or otherwise dealing with the Land;

**Dedication Land** means that part of the Land to be dedicated to Council in accordance with this agreement, shown as "LANE" on the plan at Annexure A, which may be dedicated as a stratum lot if required in accordance with the design of the approved Development;

**Development** means a proposed multi-storey mixed use development on the Land as modified from time to time, including commercial or retail uses, and residential apartments permitted as a consequence of the Instrument Change;

Development Application has the same meaning as in the Act;

Development Consent has the same meaning as in the Act;

Encumbrance means any:

- (a) security for the payment of money or performance of obligations, including a mortgage, charge, lien, pledge, trust, power or title retention;
- right, interest or arrangement which has the effect of giving another person a preference, priority or advantage over creditors including any right of set-off;
- (c) easement, restrictive or positive covenant, lease, or licence to use or occupy; or
- (d) third party right or interest or any right arising as a consequence of the enforcement of a judgment,

or any agreement to create any of them or allow them to exist.

Floor Space Ratio Map means the Floor Space Ratio Map in LEP 2012;

GFA means gross floor area, as defined in LEP2012;

**GST** has the same meaning as in the GST Law;

**GST Law** has the meaning given to that term in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and any other Act or regulation relating to the imposition of or administration of the GST;

Height of Buildings Map means the Height of Buildings Map in LEP 2012;

**Instrument Change** means an amendment to LEP 2012 in response to the Planning Proposal;

**Land** means Lot 63 in Deposited Plan 579890, Lots 1 and 2 in Deposited Plan 112816, Lot 200 in Deposited Plan 534787 and Lot 62 in Deposited Plan 579890 known as 41 and 47 Throsby Street, Wickham;

Law means:

- (a) any law applicable including legislation, ordinances, regulations, by-laws and other subordinate legislation;
- (b) any Approval, including any condition or requirement under it; and
- (c) any fees and charges payable in connection with the things referred to in paragraphs (a) and (b);

LEP 2012 means the Newcastle Local Environmental Plan 2012;

**Modification Application** means any application to modify the Development Consent under section 4.55 of the Act;

**Occupation Certificate** means an occupation certificate as defined under section 6.4 of the Act, and includes an Occupation Certificate for a part of a building;

Permitted Encumbrance means each of:

- (a) easements benefiting statutory authorities or network providers, encroachments authorised by Approvals, and environmental management requirements; and
- (b) any of the following:
  - (i) an Encumbrance or other agreement or arrangement the Council (acting reasonably) agrees in writing are permitted encumbrances; and
  - (ii) any Encumbrance that does not prevent the future use of the relevant land for the public purpose for which it is to be dedicated under this agreement.

**Planning Proposal** means PP\_2020\_NEWCA\_001\_00 lodged with the Council on or about 26 May 2020, as amended from time to time, seeking to amend LEP 2012:

- to increase the building height control applying to part of 41 Throsby Street from 10m to 14m;
- (b) to increase the building height control applying to part of 41 Throsby Street and all of 47 Throsby Street from 10m to 28m; and
- (c) to establish an overall maximum floor space ratio control applying to the Land of 3:1.

**Register** means the Torrens Title register maintained under the *Real Property Act 1900* (NSW);

**Regulation** means the *Environmental Planning and Assessment (Development Certificate and Fire Safety) Regulation 2021;* 

**Related Body Corporate** has the meaning given to that term in s 9 of the *Corporations Act 2001* (Cth);

Security means a Bank Guarantee or Bond; and

**Works** means the construction of a new public laneway, including footpath, on the Dedication Land in accordance with the Works Documents; and

**Works** Documents means the Design Intent Statement, Technical Specifications and Concept Design showing the Laneway and Laneway Section in Annexure B.

#### 2 Interpretation

In this agreement, unless the context indicates a contrary intention:

- (documents) a reference to this agreement or another document includes any document which varies, supplements, replaces, assigns or novates this agreement or that other document;
- (references) a reference to a party, clause, paragraph, schedule or annexure is a reference to a party, clause, paragraph, schedule or annexure to or of this agreement;

- (c) (headings) clause headings and the table of contents are inserted for convenience only and do not affect interpretation of this agreement;
- (d) (person) a reference to a person includes a natural person, corporation, statutory corporation, partnership, the Crown and any other organisation or legal entity and their personal representatives, successors, substitutes (including persons taking by novation) and permitted assigns;
- (e) (party) a reference to a party to a document includes that party's personal representatives, executors, administrators, successors, substitutes (including persons taking by novation) and permitted assigns;
- (f) (**president, CEO or managing director**) the president, CEO or managing director of a body or Authority means any person acting in that capacity;
- (requirements) a requirement to do any thing includes a requirement to cause that thing to be done, and a requirement not to do any thing includes a requirement to prevent that thing being done;
- (h) (**including**) including and includes are not words of limitation, and a list of examples is not limited to those items or to items of a similar kind;
- (i) (corresponding meanings) a word that is derived from a defined word has a corresponding meaning;
- (j) (singular) the singular includes the plural and vice-versa;
- (k) (gender) words importing one gender include all other genders;
- (parts) a reference to one or more things includes each part and all parts of that thing or group of things but nothing in this clause implies that part performance of an obligation constitutes performance of that obligation;
- (m) (rules of construction) neither this agreement nor any part of it is to be construed against a party on the basis that the party or its lawyers were responsible for its drafting;
- (legislation) a reference to any legislation or provision of legislation includes all amendments, consolidations or replacements and all regulations or instruments issued under it;
- (o) (time and date) a reference to a time or date in connection with the performance of an obligation by a party is a reference to the time and date in Sydney, Australia, even if the obligation is to be performed elsewhere;
- (p) (joint and several) an agreement, representation, covenant, right or obligation:
  - (i) in favour of two or more persons is for the benefit of them jointly and severally; and
  - (ii) on the part of two or more persons binds them jointly and severally;
- (writing) a reference to a notice, consent, request, approval or other communication under this agreement or an agreement between the parties means a written notice, request, consent, approval or agreement;
- (replacement bodies) a reference to a body (including an institute, association or Authority) which ceases to exist or whose powers or functions are transferred

to another body is a reference to the body which replaces it or which substantially succeeds to its power or functions;

- (s) (Australian currency) a reference to dollars or \$ is to Australian currency;
- (t) (month) a reference to a month is a reference to a calendar month; and
- (u) (**year**) a reference to a year is a reference to twelve consecutive calendar months.
- 3 Planning Agreement under the Act
  - (a) The parties agree that this agreement is a planning agreement within the meaning of section 7.4 of the Act.
  - (b) Schedule 1 of this agreement summarises the requirements for planning agreements under section 7.4 of the Act and the way this agreement addresses those requirements.

#### 4 Application of this agreement

This agreement applies to:

- (a) the Land;
- (b) the Development; and
- (c) the Instrument Change.
- 5 Operation of this agreement

This agreement commences on and from the date it is executed by all parties.

6 Contributions to be made under this agreement

#### 6.1 Works

- (a) The Developer will carry out the Works in accordance with:
  - (i) this agreement;
  - (ii) any Development Consent or other Approval granted for the Works; and
  - (iii) the Works Documents.
- (b) The Works or any part of the Works required under this agreement will be taken to have been completed for the purposes of this agreement when a Compliance Certificate has been issued for those Works.
- (c) The Works or any part of the Works required under this agreement will be taken to have been delivered to Council when the land on which those Works are located is dedicated to Council.
- (d) The Works must be delivered to the Council prior to the issue of an Occupation Certificate for the Development or any part of the Development.

(e) The parties agree and acknowledge that the Works serve the public purposes of providing and improving pedestrian and traffic access in the vicinity of the Development.

#### 6.2 Dedication of Land

- (a) The Developer must dedicate or cause to be transferred to the Council, at no cost to the Council, the Dedication Land freed and discharged from all Encumbrances except Permitted Encumbrances.
- (b) The obligation to dedicate the Dedication Land will be taken to have been satisfied when either a Certificate of Title is issued by NSW Land Registry Services for the whole of the Dedication Land identifying the Council as the registered proprietor of that land or when the Dedication Land is dedicated to Council as a public road by operation of the registration of a plan of subdivision in accordance with section 9 of the *Roads Act 1993*.
- (c) The Dedication Land must be dedicated or transferred to Council prior to the issue of an Occupation Certificate for the Development or any part of the Development.
- (d) The parties agree and acknowledge that dedication of the Dedication Land serves the public purpose of providing land for public roads.
- 6.3 Maintenance of Works
  - (a) In this clause, the following definitions apply:

**Maintain** means works to bring an item to a state of reasonable condition and in accordance with relevant standards applicable at the time of construction of the item, including repairing any defects due to use of poor materials or due to poor workmanship, but does not include repairing normal wear and tear, repairing damage caused by a user of the Dedication Land that is outside of the Developer's control, removing graffiti or repairing any item damaged as a consequence of vandalism.

Maintained and Maintenance have corresponding meanings.

**Maintenance Period** in relation to a particular item of Work, is the period of twelve (12) months from the time that item of Work is delivered to Council in accordance with this agreement.

- (b) The Works or any part of the Works, must be Maintained by the Developer to the reasonable satisfaction of the Council for the Maintenance Period in accordance with a Maintenance Schedule, which must be provided to Council prior to the issue of a Compliance Certificate for the Works.
- (c) The Developer must follow relevant Council policies and obtain all Approvals necessary to carry out the Maintenance required under this clause.
- (d) Forty (40) Business Days prior to the end of any Maintenance Period, the Developer must request Council to carry out an inspection of the Works or any part of those Works.
- (e) The Council must carry out the inspection as requested by the Developer within five (5) Business Days of the request.

- (f) The Council may, within five (5) Business Days of carrying out the inspection notify the Developer of any Maintenance work required, including any Maintenance required in addition to the work set out in the Maintenance Schedule.
- (g) If the Developer is issued with a notice to carry out Maintenance work under paragraph (f) of this clause, the Developer must, at the Developers' cost, carry out the Maintenance work as specified in the notice and in the timeframe specified by the notice.
- (h) If the Developer fails to substantially comply with an approved Maintenance Schedule and does not rectify that failure within twenty-one (21) Business Days of being notified of that failure or within a reasonable period of time agreed between the parties, or if the Developer fails to comply with a notice issued under paragraph (f) of this clause, the Council may, by itself, its employees, contractors or agents, carry out the required works and may recover as a debt due to the Council by the Developer in a court of competent jurisdiction, the costs incurred by the Council in carrying out the maintenance work.

### 7 Application of s 7.11, s 7.12 and s 7.24 of the Act to the Development

- (a) This agreement does not exclude the application of section 7.11 of the Act to the Development.
- (b) This agreement does not exclude the application of section 7.12 of the Act to the Development.
- (c) This agreement does not exclude the application of section 7.24 of the Act to the Development.
- (d) The benefits provided by the Developer under this agreement are not to be taken into account when determining any condition to be imposed on the Development under section 7.11 of the Act.

#### 8 Registration of this agreement

#### 8.1 Developer Interest

The Developer represents and warrants to the Council that on the date of this agreement it is the registered proprietor of the Land.

- 8.2 Registration of this agreement
  - (a) The Developer agrees to procure the registration of this agreement under the *Real Property Act 1900* (NSW) in the relevant folios of the Register of the Land in accordance with section 7.6 of the Act.
  - (b) The Developer at its own expense will, promptly after the execution of this agreement, take all practical steps, and otherwise do anything that the Council reasonably requires to procure:
    - (i) the consent of each person who:
      - (A) has an estate or interest in the Land registered under the *Real Property Act 1900* (NSW); or
      - (B) is seized or possessed of an estate or interest in the Land,

- (ii) the execution of any documents; and
- (iii) the production of the relevant duplicate certificates of title,

to enable the registration of this agreement in accordance with clause 8.2.

- (c) The Developer consents to the registration of the agreement in accordance with this clause 8.2.
- (d) The Developer, at its own expense, will take all practical steps, and otherwise do anything that the Council reasonably requires:
  - to procure the lodgement of this agreement with the Registrar-General as soon as reasonably practicable after this agreement comes into operation, but in any event, no later than twenty (20) Business Days after that date; and
  - to procure the registration of this agreement by the Registrar-General in the relevant folios of the Register for the Land as soon as reasonably practicable after this agreement is lodged for registration.

#### 8.3 Removal from Register

The Council will provide a release and discharge of this agreement so that it may be removed from the folios of the Register for the Land (or any part of it) provided the Council is satisfied the Developer has duly fulfilled its obligations under this agreement, and is not otherwise in default of any of the obligations under this agreement.

#### 9 Review of this agreement

- (a) This agreement may be reviewed or modified. Any review or modification of this agreement will be conducted in the circumstances and in the manner determined by the parties.
- (b) No modification or review of this agreement will be of any force or effect unless it is in writing and signed by the parties to this agreement.
- (c) A party is not in breach of this agreement if it does not agree to an amendment to this agreement requested by a party in, or as a consequence of, a review.

#### 10 Dispute Resolution

#### 10.1 Reference to Dispute

If a dispute arises between the parties in relation to this agreement, the parties must not commence any court proceedings relating to the dispute unless the parties have complied with this clause, except where a party seeks urgent interlocutory relief.

#### 10.2 Notice of Dispute

The party wishing to commence the dispute resolution process must give written notice (**Notice of Dispute**) to the other parties of:

- (a) the nature of the dispute;
- (b) the alleged basis of the dispute; and
- (c) the position which the party issuing the Notice of Dispute believes is correct.

#### 10.3 Representatives of Parties to Meet

- (a) The representatives of the parties must promptly (and in any event within fourteen (14) Business Days of the Notice of Dispute) meet in good faith to attempt to resolve the notified dispute.
- (b) The parties may, without limitation:
  - (i) resolve the dispute during the course of that meeting;
  - (ii) agree that further material or expert determination in accordance with clause 10.6 about a particular issue or consideration is needed to effectively resolve the dispute (in which event the parties will, in good faith, agree to a timetable for resolution); or
  - (iii) agree that the parties are unlikely to resolve the dispute and, in good faith, agree to a form of alternative dispute resolution (including expert determination, arbitration or mediation) which is appropriate for the resolution of the relevant dispute.

#### 10.4 Further Notice if Not Settled

If the dispute is not resolved within fourteen (14) Business Days after the nominated representatives have met, either party may give to the other a written notice calling for determination of the dispute (**Determination Notice**) by mediation under clause 10.5 or by expert determination under clause 10.6.

#### 10.5 Mediation

If a party gives a Determination Notice calling for the dispute to be mediated:

- (a) The parties must agree to the terms of reference of the mediation within fifteen (15) Business Days of the receipt of the Determination Notice (the terms shall include a requirement that the mediation rules of the Institute of Arbitrators and Mediators Australia (NSW Chapter) apply;
- (b) The mediator will be agreed between the parties, or failing agreement within fifteen (15) Business Days of receipt of the Determination Notice, either Party may request the President of the Institute of Arbitrators and Mediators Australia (NSW Chapter) to appoint a mediator;
- (c) The mediator appointed pursuant to this clause 10.5 must:
  - (i) have reasonable qualifications and practical experience in the area of the dispute; and
  - (ii) have no interest or duty which conflicts or may conflict with his or her function as a mediator he or she being required to fully disclose any such interest or duty before his or her appointment;
- (d) The mediator shall be required to undertake to keep confidential all matters coming to his or her knowledge by reason of his or her appointment and performance of his or her duties;
- (e) The parties must within fifteen (15) Business Days of receipt of the Determination Notice notify each other of their representatives who will be involved in the mediation;

- (f) The parties agree to be bound by a mediation settlement and may only initiate judicial proceedings in respect of a dispute which is the subject of a mediation settlement for the purpose of enforcing that mediation settlement; and
- (g) In relation to costs and expenses:
  - (i) each party will bear its own professional and expert costs incurred in connection with the mediation; and
  - (ii) the costs of the mediator will be shared equally by the parties unless the mediator determines that a party has engaged in vexatious or unconscionable behaviour in which case the mediator may require the full costs of the mediation to be borne by that party.

#### 10.6 Expert determination

If the dispute is not resolved under clause 10.3 or clause 10.5, or the parties otherwise agree that the dispute may be resolved by expert determination, the parties may refer the dispute to an expert, in which event:

- (a) The dispute must be determined by an independent expert in the relevant field:
  - (i) agreed upon and appointed jointly by the parties; and
  - (ii) in the event that no agreement is reached or no appointment is made within twenty (20) Business Days of the agreement to refer the dispute to an expert, appointed on application of a party by the then President of the Law Society of New South Wales;
- (b) The expert must be appointed in writing and the terms of the appointment must not be inconsistent with this clause;
- (c) The determination of the dispute by such an expert will be made as an expert and not as an arbitrator and will be in writing and contain the reasons for the determination;
- (d) The expert will determine the rules for the conduct of the process but must conduct the process in accordance with the rules of natural justice;
- (e) Each party will bear its own costs in connection with the process and the determination by the expert and will share equally the expert's fees and costs; and
- (f) Any determination made by an expert pursuant to this clause is final and binding upon the parties except unless:
  - (i) within twenty (20) Business Days of receiving the determination, a party gives written notice to the other party that it does not agree with the determination and commences litigation; or
  - (ii) the determination is in respect of, or relates to, termination or purported termination of this agreement by any party, in which event the expert is deemed to be giving a non-binding appraisal.

#### 10.7 Litigation

If the dispute is not *finally* resolved in accordance with this clause 10, then either party is at liberty to litigate the dispute.

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#### 10.8 No suspension of contractual obligations

Subject to any interlocutory order obtained under clause 10.1, the referral to or undertaking of a dispute resolution process under this clause 10 does not suspend the parties' obligations under this agreement.

#### 11 Enforcement

- 11.1 Default
  - (a) In the event a party considers another party has failed to perform and fulfil an obligation under this agreement, it may give notice in writing to the other party (**Default Notice**) giving all particulars of the matters in respect of which it considers default has occurred and by such notice require the default to be remedied within a reasonable time not being less than twenty-one (21) days.
  - (b) In determining a reasonable time, regard must be had to both the nature of the default and the work or other action required to remedy it and whether or not the continuation of the default constitutes a public nuisance or raises other circumstances of urgency or emergency.
  - (c) If a party disputes the Default Notice it may refer the dispute to dispute resolution under clause 10 of this agreement.
- 11.2 Security
  - (a) Prior to the issue of a Construction Certificate for the Development the Developer must provide to the Council a Security in the amount of \$328,171.00 to secure the completion of the Works.
  - (b) The Council may call on a Security provided under this clause if:
    - the Developer is in material or substantial breach of this agreement and has failed to rectify the breach within a reasonable period of time after having been given reasonable notice (which must not be less than twentyone (21) Business Days) in writing to do so in accordance with clause 11.1 of this agreement; or
    - (ii) the Developer becomes insolvent.
  - (c) Subject to clause 11.2(b) and the provisions of this agreement, the Council may apply the proceeds of a Security in satisfaction of any obligation of the Developer under this agreement to carry out the Works, and may after giving reasonable notice to the Developer enter the Land for the purpose of carrying out the Works.
  - (d) At any time following the provision of a Security under this clause, the Developer may provide the Council with one or more replacement Securities totalling the amount of all Securities required to be provided under this clause for the time being. On receipt of such replacement Security, the Council must release and return to the Developer, as directed, the Security or Securities which it holds that have been replaced as soon as reasonably practicable.

- (e) The Council must promptly return a Security provided under this clause if requested by the Developer and a Compliance Certificate has been issued for the item of Works to which the Security relates.
- (f) Nothing in this clause 11.2 prevents or restricts the Council from taking any enforcement action in relation to:
  - (i) any obligation of the Developer under this agreement; or
  - (ii) any associated liability, loss, cost, charge or expense directly or indirectly incurred by the Council because of the failure by the Developer to comply with this agreement,

that is not or cannot be satisfied by calling on a Security.

- 11.3 Compulsory Acquisition
  - (a) If the Developer does not dedicate the Dedication Land to Council as required by this agreement, the Council may compulsorily acquire the relevant land, in which case the Developer consents to the Council compulsorily acquiring that land for compensation in the amount of \$1.00 without having to follow the pre-acquisition procedures in the Land Acquisition (Just Terms Compensation) Act 1991 and may recover any costs, including legal costs, incurred by the Council on acquisition of the land as a debt due from the Developer.
  - (b) Clause 11.3(a) constitutes an agreement for the purposes of section 30 of the *Land Acquisition (Just Terms Compensation) Act 1991.*
  - (c) The Developer indemnifies and keeps indemnified the Council against all Claims made against the Council as a result of any acquisition by the Council of the whole or any part of the Dedication Land under clause 11.3(a).
- 11.4 Restriction on the issue of Certificates
  - (a) For the purposes of section 6.8 of the Act and clause 21 of the Regulation the obligation to provide a Security under clause 11.2. must be satisfied prior to the issue of a Construction Certificate for the Development or any part of the Development.
  - (b) In accordance with section 6.10(2) of the Act and clause 48 of the Regulation the obligations to:
    - (i) carry out the Works; and
    - (ii) dedicate the Dedication Land,

must be satisfied prior to the issue of an Occupation Certificate for the Development or any part of the Development.

#### 11.5 General Enforcement

- (a) Without limiting any other remedies available to the parties, this agreement may be enforced by any party in any Court of competent jurisdiction.
- (b) Nothing in this agreement prevents:
  - a party from bringing proceedings in the Land and Environment Court to enforce any aspect of this agreement or any matter to which this agreement relates; and

(ii) the Council from exercising any function under the Act or any other Act or law relating to the enforcement of any aspect of this agreement or any matter to which this agreement relates.

## 12 Assignment and Dealings

#### 12.1 Transfer of Land

- (a) The Developer may not transfer, assign or dispose of the whole or any part of its right, title or interest in the Land (present or future) or in the Development to another person (**Transferee**) unless before it sells, transfers or disposes of that right, title or interest:
  - the Transferee delivers to the Council a novation deed signed by the Transferee in a form and of such substance as is acceptable to the Council containing provisions under which the Transferee agrees to comply with all the outstanding obligations of the Developer under this agreement;
  - (ii) any default under any provisions of this agreement has been remedied or waived by the Council, on such conditions as the Council may determine, and
  - (iii) the Developer and the Transferee pay the Council's reasonable costs in relation to the assignment.

### 13 Approvals and consents

Except as otherwise set out in this agreement, and subject to any statutory obligations, a party may give or withhold an approval or consent to be given under this agreement in that party's absolute discretion and subject to any conditions determined by the party. A party is not obligated by this agreement to give its reasons for giving or withholding consent or for giving consent subject to conditions, but may be so obligated by law.

- 14 No fetter
- 14.1 Discretion

This agreement is not intended to operate to fetter, in any manner, the exercise of any statutory power or discretion of the Council, including, but not limited to, any statutory power or discretion of the Council relating to the Instrument Change or the Development (all referred to in this agreement as a "**Discretion**").

#### 14.2 No fetter

No provision of this agreement is intended to constitute any fetter on the exercise of any Discretion. If, contrary to the operation of this clause, any provision of this agreement is held by a court of competent jurisdiction to constitute a fetter on any Discretion, the parties agree:

- (a) they will take all practical steps, including the execution of any further documents, to ensure the objective of this clause is substantially satisfied,
- (b) in the event that (a) cannot be achieved without giving rise to a fetter on the exercise of a Discretion, the relevant provision is to be severed and the remainder of this agreement has full force and effect, and

- (c) to endeavour to satisfy the common objectives of the parties in relation to the provision of this agreement which is to be held to be a fetter on the extent that is possible having regard to the relevant court judgment.
- 15 Notices
- 15.1 Notices

Any notice given under or in connection with this agreement (Notice):

- (a) must be in writing and signed by a person duly authorised by the sender;
- (b) must be addressed as follows and delivered to the intended recipient by hand, by prepaid post or by email at the address below, or at the address last notified by the intended recipient to the sender after the date of this agreement:

(i)	(i) to Newcastle City Council:	TBA Email: TBA
		Attention: TBA
( )	to FPG Wickham Pty	TBA
	Limited:	Email: TBA
		Attention: TBA

- (c) is taken to be given or made:
  - (i) in the case of hand delivery, when delivered;
  - (ii) in the case of delivery by post, three (3) Business Days after the date of posting (if posted to an address in the same country) or seven (7) Business Days after the date of posting (if posted to an address in another country); and
  - (iii) when the sender receives an email acknowledgement from the recipient's information system showing the Notice has been delivered to the email address stated above or when the Notice is first opened or read by the recipient, whichever occurs first; and
- (d) if under clause (c) a Notice would be taken to be given or made on a day that is not a Business Day in the place to which the Notice is sent, or later than 4.00 pm (local time), it is taken to have been given or made at the start of business on the next Business Day in that place.
- 16 General
- 16.1 Relationship between parties
  - (a) Nothing in this agreement:
    - (i) constitutes a partnership between the parties; or
    - (ii) except as expressly provided, makes a party an agent of another party for any purpose.
  - (b) A party cannot in any way or for any purpose:
    - (i) bind another party; or
    - (ii) contract in the name of another party.

(c) If a party must fulfil an obligation and that party is dependent on another party, then that other party must do each thing reasonably within its power to assist the other in the performance of that obligation.

#### 16.2 Time for doing acts

- (a) If the time for doing any act or thing required to be done or a notice period specified in this agreement expires on a day other than a Business Day, the time for doing that act or thing or the expiration of that notice period is extended until the following Business Day.
- (b) If any act or thing required to be done is done after 5.00 pm on the specified day, it is taken to have been done on the following Business Day.

#### 16.3 Further assurances

Each party must promptly execute all documents and do all other things reasonably necessary or desirable to give effect to the arrangements recorded in this agreement.

#### 16.4 Variation

A provision of this agreement can only be varied by a later written document executed by or on behalf of all parties and in accordance with the provisions of the Act.

#### 16.5 No assignment

A party cannot assign or otherwise transfer its rights under this agreement without the prior written consent of the other party.

#### 16.6 Counterparts

This agreement may be executed in any number of counterparts. All counterparts taken together constitute one instrument.

#### 16.7 Legal expenses and stamp duty

Each party will pay their own legal costs and disbursements in connection with the negotiation, preparation and execution of this agreement.

#### 16.8 Entire agreement

The contents of this agreement constitute the entire agreement between the parties and supersede any prior negotiations, representations, understandings or arrangements made between the parties regarding the subject matter of this agreement, whether orally or in writing.

#### 16.9 Representations and warranties

The parties represent and warrant that they have the power and authority to enter into this agreement and comply with their obligations under the agreement and that entry into this agreement will not result in the breach of any law.

#### 16.10 Severability

If a clause or part of a clause of this agreement can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it must be read in the latter way. If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this agreement, but the rest of this agreement is not affected.

#### 16.11 Invalidity

- (a) A word or provision must be read down if:
  - (i) this agreement is void, voidable, or unenforceable if it is not read down;
  - (ii) this agreement will not be void, voidable or unenforceable if it is read down; and
  - (iii) the provision is capable of being read down.
- (b) A word or provision must be severed if:
  - despite the operation of clause (a), the provision is void, voidable or unenforceable if it is not severed; and
  - (ii) this agreement will be void, voidable or unenforceable if it is not severed.
- (c) The remainder of this agreement has full effect even if clause 16.11(b) applies.
- 16.12 Waiver
  - (a) A right or remedy created by this agreement cannot be waived except in writing signed by the party entitled to that right. Delay by a party in exercising a right or remedy does not constitute a waiver of that right or remedy, nor does a waiver (either wholly or in part) by a party of a right operate as a subsequent waiver of the same right or of any other right of that party.
  - (b) The fact that a party fails to do, or delays in doing, something the party is entitled to do under this agreement, does not amount to a waiver of any obligation of, or breach of obligation by, another party. A waiver by a party is only effective if it is in writing. A written waiver by a party is only effective in relation to the particular obligation or breach in respect of which it is given. It is not to be taken as an implied wavier of any other obligation or breach or as an implied wavier of that obligation or breach in relation to any other occasion.
- 16.13 GST
  - (a) Words and expressions which are not defined in this agreement but which have a defined meaning in GST Law have the same meaning as in the GST Law.
  - (b) Unless otherwise expressly stated, all prices or other sums payable or consideration to be provided under this agreement are exclusive of GST.
  - (c) If GST is imposed on any supply made under or in accordance with this agreement, the consideration payable or to be provided for that supply under this agreement but for the application of this clause is increased by, and the recipient of the supply must also pay to the supplier, an amount equal to the GST payable by the supplier on that supply.
- 16.14 Governing law and jurisdiction
  - (a) The laws applicable in New South Wales govern this agreement.
  - (b) The parties submit to the non-exclusive jurisdiction of the courts of New South Wales and any courts competent to hear appeals from those courts.

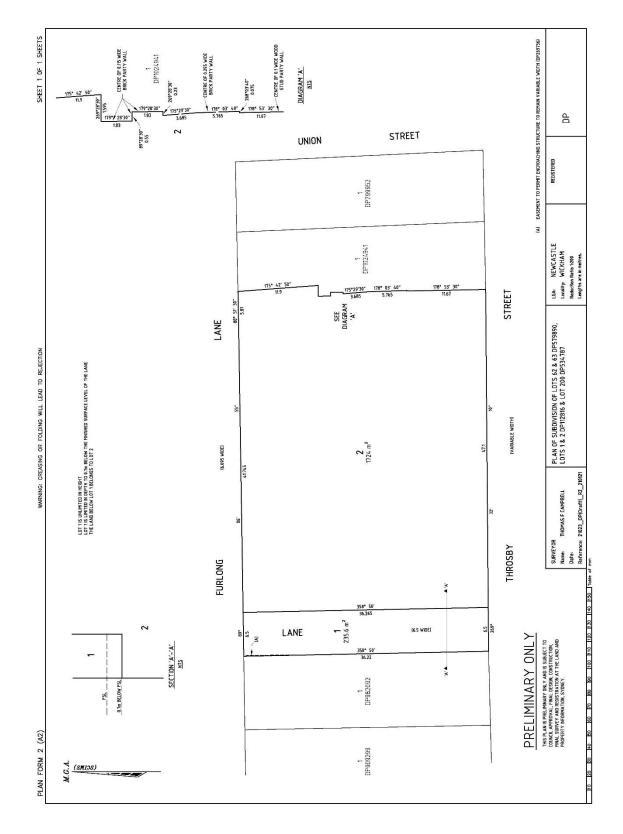
# Schedule 1 Summary of requirements (section 7.4)

Subje	ect and subsection of the Act	Planning Agreement	
Planning instrument and/or Development Application – Section 7.4(1)			
The D	Developer has:		
(a)	Sought a change to an environmental planning instrument	⊠ Yes □ No	
(b)	Made, or proposes to make a Development Application	⊠ Yes □ No	
(c)	Entered into an agreement with, or are otherwise associated with, a person to whom paragraph (a) or (b) applies	□ Yes ⊠ No	
	ription of the public purpose to which the ning Agreement applies – Section 7.4(2)	The public purpose served by the Planning Agreement is the provision of public roads. Land will be dedicated and works carried out to provide a new public laneway, including footpath. See clauses 6.1(e) and 6.2(d).	
<b>Description of the land to which the planning</b> <b>Agreement applies</b> – Section 7.4(3)(a)		Lot 63 in Deposited Plan 579890, Lots 1 and 2 in Deposited Plan 112816, Lot 200 in Deposited Plan 534787 and Lot 62 in Deposited Plan 579890 also known as 41 and 47 Throsby Street, Wickham.	
plann	ription of the change to the environmental ning instrument to which the agreement es – Section 7.4(3)(b)	See the definition of Planning Proposal in clause 1.	
Nature and extent of the provision to be made by the developer under the agreement, the time or times by which the provision is to be made and the manner by which the provision is to be made – Section $7.4(3)(c)$		See clauses 6.1, 6.2 and 6.3, and Annexures A and B.	
Applicability of section 7.11 of the Act – Section 7.4(3)(d)		The application of section 7.11 of the Act is not excluded in respect of the Development.	
Applicability of section 7.12 of the Act – Section 7.4(3)(d)		The application of section 7.12 of the Act is not excluded in respect of the Development.	
Applicability of section 7.24 of the Act – Section 7.4(3)(d)		The application of section 7.24 of the Act is not excluded in respect of the Development.	

Mechanism for dispute resolution – Section 7.4(3)(f)	See clause 10.
Enforcement of the Planning Agreement – Section 7.4(3)(g)	See clause 11.
<b>Registration of the Planning Agreement</b> – Section 7.4(3)(g)	See clause 8.2.
No obligation to grant consent or exercise functions – Section 7.4(9)	See clause 14 (no fetter).

# Executed as an agreement

<b>Executed</b> by <b>Newcastle City Council</b> by its duly appointed officer in the presence of:	) ) )	
Witness		Officer
Name of Witness (print)		Name of Officer (print)
<b>Executed</b> by <b>FPG Wickham Pty Limited</b> ACN 620 785 293 in accordance with section 127 of the <i>Corporations Act 2001</i> (Cth) by:	) ) )	
Director		Director/Secretary
Name of Director (print)		Name of Director/Secretary (print)



# Annexure A Plan showing Dedication Land

				1
PLAN FORM 6 (2019)	DEPOSITED PLAN AD	MINISTRATI	ION SHEET	Sheet 1 of 2 sheet(s)
Registered: Title System:	THIS PLAN IS PRE COUNCIL APPROV FINAL SURVEY AI	MINARY ELIMINARY ONLY AND IS ALL, FINAL DESIGN, CONS' NO REGISTRATION AT TH RMATION, SYDNEY.	SUBJECT TO TRUCTION,	
PLAN OF SUBDIVIS	NON OF LOTS 62 8	LGA:	NEWCASTLE	
63 DP579890, LOTS				-
LOT 200 DP534787		,	WICKHAM	_
		Parish:	NEWCASTLE	
		County:	NORTHUMB	ERLAND
Survey THOMAS F of Delfs Lascelles Pty Ltd, 260 a surveyor registered under the Su 2002, certify that.	I, approving this the allocation o	plan certify that all r of the land shown he	tern Lands Office Approval (Authorised Officer) in necessary approvals in regard to erein have been given.	
	as surveyed in accordance with the tion Regulation 2017, is accurate and 			
-*(b) The part of the land shown in	the plan (*being/*excluding **	File Number:		
was surveyed in accordance w Information Regulation 2017, th survey was completed on compiled in accordance with th	with the Surveying and Spatial he part surveyed is accurate and the 	Office:		
*(c) The land shown in this plan wa	as compiled in accordance with the			
Datum Line:'X''Y'. Type: *Urban/ <del>*Rural-</del>	Surveying and Spatial Information Regulation 2017. Datum Line:X' 'Y'			ager/*Registered Certifier, certify that e Environmental Planning and satisfied in relation to the proposed et out herein.
Signature:	Dated:			
Surveyor Identification No:				
Surveyor registered under the		Subdivision Ce	ertificate number:	
Surveying and Spatial information	Act 2002	File number:		
<ul> <li>Strike through if inapplicable.</li> <li>Specify the land actually surveyed or sy the subject of the survey.</li> </ul>	pecify any land shown in the plan that is not	* Strike through if i	inapplicable	
Plans used in the preparation of survey/compilation. DP 112816 DP 534787 DP 579890			intention to dedicate frainage reserves, ad	public roads, create public
		IT IS INTE PUBLIC A EXISTING	NDED TO DE S PUBLIC RO EASEMENT CHING STRU	DICATE LOT 1 TO THE DAD SUBJECT TO THE
Surveyor's Reference: 2102	3_DP(Draft)_R2_210121	Signatures, Se		B Statements should appear on ORM 6A

PLAN FORM 6A (2017)	DEPOS	ITED PLAN AD	MINISTRATION S	SHEET S	Sheet 2 of 2 sheet(s)	
Registered:	Office Use Only Registered:			PRELIMINARY ONLY Office Use Only		
	PLAN OF SUBDIVISION OF LOTS 62 & 63 DP579890, LOTS 1 & 2 DP112816 & LOT 200 DP534787			Y ONLY AND IS SUBJECT L DESIGN, CONSTRUCTIO TRATION AT THE LAND SYDNEY.	IN,	
Subdivision Certificate number :			<ul> <li>A schedule of lots</li> <li>Statements of inter accordance with se</li> <li>Signatures and sea</li> </ul>	and addresses - Se ntion to create and r ection 88B <i>Convey</i> als - See 195D <i>Con</i> nich cannot fit in the	e 60(c) SSI Regulation 2017 release affecting interests in	
					X	
	REET No.			LOCALIT		
1 2		THROSBY THROSBY	STREET STREET	WICKHA WICKHA		
EXECUTED by ) FPG WICKHAM PTY LIMITED ) (ACN 620 785 293) ) in accordance with Section 127 of ) the Corporations Act )						
Name:			Name:			
Position:			Position:			
If space is insufficient use additional annexure sheet						
Surveyor's Reference: 21023	B_DP(Draft)_	R2_210121				

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architectur

# Works Documents

#### **Design Intent Statement**

Annexure B

Design Intent Statement - Throsby St Wickham Mixed Use Development

## DESIGN INTENT STATEMENT New Laneway 41-47 THROSBY ST WICKHAM

Issue	Description	Date	Checked	Authorised	
В	Concept Phase	12/04/2021	GCS	KMG	

#### DRAFT PLANNING AGREEMENT REQUIREMENTS

This document has been provided in response to the letter from City of Newcastle to Fidem Property Group dated 18 March 2021. Background item (b) in this letter requested a Statement of Design Intent for the proposed Laneway Works.

#### VERIFICATION OF QUALIFICATIONS

Kathy Marie Gresham is a Registered Architect of New South Wales and Director of EJE Architecture, with 30 years architectural practice experience. She is registered with the NSW Architects Registration Board with the registration number 5493.

#### THE PROPOSAL

The project is a mixed use development including Residential Units, Commercial space, and basement carparking spaces, on the site 41-47 Throsby St Wickham. Associated with the project is the creation of a new 6.5metre Laneway, which is the subject of this statement.

#### DESIGN INTENT STATEMENT

EJE Architecture are the design Architects for the project, having been involved with the design since 2018.

As part of the design development of the project, EJE and specialist consultants will undertake schematic and detailed design for the Laneway construction, on behalf of Fidem Property Group.

EJE will work with Civil, Stormwater and Traffic consultants, and in consultation with City of Newcastle, will prepare the necessary documentation for authority approvals and construction.

All works will be designed and constructed to the standards applicable at the time of issuing the Construction Certificate, including relevant AUS-SPEC Technical Specifications, standard drawings as published on City of Newcastle's website, and/or City of Newcastle's public domain technical manual.

Registered Architect, Reg No. 5493

Signed:

EJE Architecture 412 King Street NEWCASTLE NSW 2353 412 king street newcastle nsw 2300

p 02 4929 2353 f 02 4926 3069 e mail@eje.com.au

> ACN 002 912 843 ABN 82 644 649 849

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## Technical Specifications

## <u>Relevant Standards</u>

All Works will be designed and constructed to the standards applicable at the time of issuing the Construction Certificate, including relevant AUS-SPEC Technical Specifications, standard drawings as published on Council's website, and / or Councils public domain technical manual. These may include the following:

## Relevant City Standards

- Engineering Specification for Development Design and Construction
- City Centre Public Domain Technical Manual
- Newcastle Urban Forest Technical Manual
- Standard Drawings and relevant Specifications
- CN DCP and Policies

# Relevant Australian Standards and Industry Standards for Roads, Verge Works and Public Links

The list below is some relevant referenced standards, however other Standards and Industry Specific standards may be applicable.

- Austroads Publications
- Transport for NSW (TfNSW) Supplements and Technical Directions
- AS 1725 Geotechnical Site investigations
- AS 4455 Masonry Units and segmental pavers
- AS 4678 Earth Retaining Structures
- AS 3600 Concrete Structures
- AS 2876 Concrete kerbs and channels
- AS 1158 Road Lighting
- AS 1743 Road signs
- AS 4282 Control of the Obtrusive Effects of Outdoor lighting
- AS 3500 Plumbing and Drainage
- AS 3700 Masonry Structures
- AS 2890 Parking Facilities
- AS 1428 Design for Access and Mobility
- AS 4454 Composts, soil conditioners and mulches Relevant Australian Standards Roads (including pedestrian areas)
- AS 1742 Manual of uniform traffic control devices
- AS 1743 Road Signs

The above list of Standards is included for information purposes only, and as a guide to the relevant standards for the general nature of the Works identified in this document. Council makes no representation or warranty as to the currency of the standards identified, or their application on the final design of the Works. The Developer must make its own enquiries regarding whether any standard has been replaced or supplemented. In the event that an Australian Standard prescribed a different level of material, finish, work or workmanship than those contained in a Council standard, then the higher of the two standards will apply. If there is a conflict between Council then the Developer must request Council to nominate the correct and applicable Council standard. The Council's decision as to the applicable standard is final.

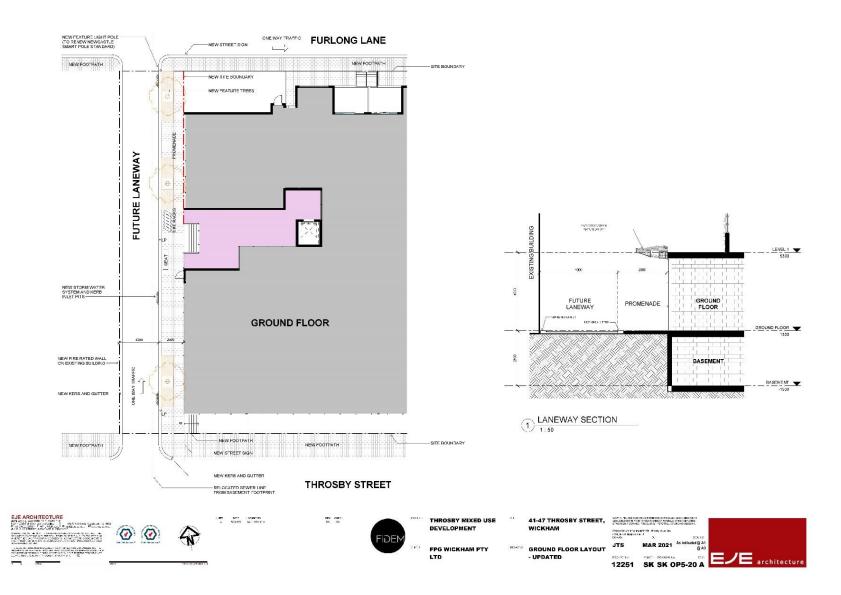
#### General Specifications

Works will include the following:

1. Kerb and gutter abutting the boundary building wall of 55 Throsby Street, with finished levels and grade designed to manage stormwater flows.

- 2. Carriageway of up to 4m wide accommodating a 1m wide shoulder off the western boundary to 55 Throsby Street delineated with line marking and a one-way travel path supporting vehicle flows in a northerly direction from Throsby Street to Furlong Lane.
- 3. The intersections to both Throsby Street and Furlong Lane will be designed to accommodate the travel and turning path of larger vehicles including Council garbage trucks and delivery vehicles.
- 4. Finished levels and cross grade will be designed to enable the future envisaged widening of the laneway (i.e. when 55 Throsby Street is redeveloped).
- 5. Kerb and gutter along the eastern side of the carriageway with finished levels and grade designed to manage stormwater flows.
- 6. A 2.5m wide footpath area, designed with a finished level and grade compliant to allow universal accessibility provided at a continuous minimum width of 1.5m along the eastern boundary and connecting seamlessly to adjoining footpaths and the pedestrian areas on adjoining private property.
- 7. The footpath area adjacent to the kerb (up to 1m) will incorporate:
  - a. streetlighting (three poles)
  - b. street trees (three with selected surrounds or landscape areas)
  - c. street furniture (one bench seat, one bicycle parking racks)d. Street Signage

#### Concept Design





# ATTACHMENTS DISTRIBUTED UNDER SEPARATE COVER

# CCL 26/04/2022 - ADOPTION OF PLANNING PROPOSAL FOR 41 AND 47 THROSBY STREET, WICKHAM

ITEM-35 Attachment C: Submission table - 41 and 47 Throsby Street, Wickham

DISTRIBUTED UNDER SEPARATE COVER



DISTRIBUTED UNDER SEPARATE COVER

## ATTACHMENT C - SUBMISSIONS TABLE - 41 AND 47 THROSBY ST PLANNING PROPOSAL

The table below captures key matters raised within the 76 written submissions received by City of Newcastle (CN) during the extended public exhibition of the Planning Proposal and draft Planning Agreement for 41 and 47 Throsby Street, Wickham.

The proposal was exhibited Friday 1 October – Monday 29 November 2021. A total of 76 submissions were received. Of these:

- 70 were resident submissions.
- 71 were in objection to the proposal.
- 3 were from local community groups (in objection)
- 1 submission was from the development industry (property lobby group)
- 2 submissions were from neighbouring businesses

Theme/issue	No. times raised	Key matters	Council response
WICKHAM MASTE	RPLAN		
Objection to variation to WMP after years of community consultation	33 total submissions	The WMP was prepared in consultation with the community and encourages local character and amenity of this suburb. The WMP established the 'Village Hub' in keeping with the new and historical streetscape of this area. Residents chose to purchase properties and live in this location because of the local character and the look and function of the Village Hub. The proposed variation will have a negative impact on the Village Hub.	Council acknowledges concerns raised during the public exhibition regarding the Village Hub precinct. The post- exhibition changes to the PP addresses community concerns regarding higher built forms in the Village Hub area. The max HOB for part 41 Throsby Street has been reduced to 14m, reflective of its siting within the Village Hub. This responds to the envisaged scale and future character of the Village Hub as set out in WMP 2021. The HOB for 47 and part 41 Throsby Street remains at 28m as previously exhibited. Draft DCP controls as set out in the WMP 2021 will apply to the development, meaning that development at 41 Throsby Street above 10m HOB will have an 8m side setback to 39 Throsby Street, as well as a 6m front and rear setback. No changes are proposed to the overall FSR for the amalgamated site (3:1) meaning that the proposed laneway (to be delivered via the Planning Agreement) can still be delivered as part of a viable future development on the site. While the HOB of 28m at 47 and part 41 Throsby Street is above what is envisaged for the site in the WMP 2021 (24m),

Theme/issue	No. times raised	Key matters	Council response
			this variation is considered acceptable. 47 Throsby Street is located within the Emerging Industry Quarter which has an envisaged higher density future character per the WMP 2021.
			It is noted that the Planning Proposal is subject to a separate planning process as it was initiated before the drafting and endorsement of the WMP 2021 and Community Infrastructure Incentives Policy.
			The final design of the built form will require detailed assessment during the DA process to ensure consistency with the planning controls.
Precedent	10 total submissions	Varying the WMP may create a precedent to allow other developers to rewrite the WMP to serve their own financial gain.	The PP aligns with the WMP as it facilitates the provision of community infrastructure (proposed laneway) between Throsby Street and Furlong Lane.
		First time that the Community Infrastructure Incentives Policy is used, uplift provided without sufficient community benefit.	The Planning Agreement is generally consistent with the principles of the endorsed Community Infrastructure Incentives Policy. While the Planning Proposal varies from the HOB standards proposed in the WMP 2021 it is consistent with the mechanisms described in the endorsed Community Infrastructure Incentives Policy in that the increased HOB and FSR corresponds with an agreed GFA rate, having regard for the value of the laneway offered as community infrastructure per the Planning Agreement.
			This development will not set a 'precedent' in the area as the policy mechanism/approach exists independently and is available for any future proposals (PP and VPA). Any future PP and VPA for land within the City of Newcastle will be considered on its merits.
			Draft Planning Proposal – Community Infrastructure Incentives in Wickham (separate to this Planning Proposal) sets out the development incentives applicable to land that provides community infrastructure in future development.

Theme/issue	No. times raised	Key matters	Council response
<b>BUILDING HEIGHT I</b>			
Inconsistent with Wickham Village Hub in Wickham Masterplan (WMP)	59 total submissions	The height increase is inconsistent with the Wickham Village Hub and the Wickham Masterplan (WMP). The development will increase building heights within the Village Hub, which has been described in the Wickham Masterplan as 'terrace style housing, shop top housing and smaller residential apartments with a street wall height of up to three storeys along each street frontage setback, which incorporate design elements that complements that of existing housing stock. The proposed height increases more than doubles the existing height control. This is considered an inappropriate built form in this location. The proposed height increase will further encroach into the Village Hub beyond the high-rise apartments around the rail corridor. Opportunity for high rise apartments exists elsewhere. The development is inconsistent with the aims, strategy and spirit of the WMP and has the potential to jeopardise liveability for the residents. The PP and PA were drafted well before the WMP 2021 update and before the impact of mine subsidence were made public. As such WMP 2017 should be the relevant local instrument of which the	Noted. Council has made amendments to the PP post- exhibition that addresses community concerns about higher built forms at 41 Throsby Street which is within the Village Hub area. The max HOB for part 41 Throsby Street has been reduced to 14m, reflective of its siting within the Village Hub. This responds to the envisaged scale and future character of the Village Hub as set out in WMP 2021. The HOB for 47 and part 41 Throsby Street remains at 28m as previously exhibited. This area of the site sits within the Emerging Industry Quarter. Furthermore, as stated, draft DCP controls as set out in the WMP 2021 will apply to future development at the site. The subsequent development application (DA) process will identify and manage impacts arising from development at the site including overshadowing and privacy. The proposed increase in development is consistent with the <i>Hunter Regional Plan 2036</i> and the <i>Greater Newcastle</i> <i>Metropolitan Plan 2036</i> and reflects Wickham's positioning adjacent to the new CBD at Newcastle West and in proximity to the Newcastle Interchange. The PP aligns with the WMP in that it will facilitate the provision of community infrastructure (proposed laneway) as part of the future
PROPOSED LANEW	AY	PP does not align.	redevelopment and urban renewal of the Wickham area.
Inconsistent with WMP: laneway not identified	11 total submissions	The laneway being offered in return for this huge uplift is not mentioned in the WMP.	The WMP 2017 had originally identified the proposed laneway to be provided within the adjoining land at 55 Throsby Street. This is reflected on Council's Land Reservation Acquisition Map.
			Notwithstanding, CN has identified a greater benefit in supporting the delivery of a laneway within 47 Throsby Street

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Theme/issue	No. times	Key matters	Council response
	raised		
			while maintaining the opportunity to widen this laneway when 55 Throsby Street redevelops in the future. The provision of the laneway is consistent with the Wickham Local Area Traffic Management Plan (LATM) prepared and adopted together with the WMP 2017.
Laneway benefit	26 total submissions	No laneway offset will make up for drastically altering the intended character of the Village Hub. The laneway is a small improvement in comparison to the developer's uplift. The laneway provides benefit to the developer as it provides separation to the adjacent dwelling at 55 Throsby Street and will improve sale value. With regards to improved traffic access, the one-way flow and inability of any vehicles larger than a passenger car to use the lane will have a large, negative community benefit.	<ul> <li>The need for a laneway between Throsby Street and Furlong Lane was identified in the <i>Wickham Master Plan Traffic and Transport Assessment</i> (2017) which was prepared and endorsed as part of the WMP 2017. It is one of three 'circulation laneways' identified to alleviate traffic management and safety concerns in the Wickham area.</li> <li>Council acknowledges that the proposed laneway will benefit the development in that it provides building separation between the site and the adjoining 55 Throsby Street.</li> <li>The laneway will provide direct vehicle access to the site and will benefit other properties in the area as these are redeveloped in the future. Furthermore, the laneway will also serve to:</li> <li>Reduce the number of vehicle crossovers along Throsby Street, improving pedestrian safety in the area</li> <li>Improve vehicle circulation in the area and alleviate some local traffic pressure along Throsby Street</li> <li>Allow waste collection services to service the site and properties fronting Church Street without having to rely on reverse manoeuvres along Furlong Lane and Union Street</li> <li>The land acquisition existing on the adjoining 55 Throsby Street will allow for the future. This could allow for an additional parking lane and public domain fronting as well as increased building separation and solar amenity.</li> </ul>

Theme/issue	No. times raised	Key matters	Council response
Laneway design	11 total submissions	The laneway will only benefit the residents of the building. Further, it is single lane and one-way traffic. Questions where the community can walk safely through this lane. The proposed laneway is only suitable for passenger vehicles without a trailer. The inability of trucks to negotiate the laneway has many negative effects on community amenity The developer has stated that this new laneway is designed "to accommodate the travel and turning path of larger vehicles including Council garbage trucks and delivery vehicles". However, careful examination of the developer's documentation shows that their proposed laneway, is nowhere near wide enough for those large vehicles to use Widening of Furlong Lane is not possible due number of small allotments adjoining it The developer's drawings show that the laneway could not be used for larger vehicles – does not meet relevant AS regarding turning circles etc.	The conceptual laneway and adjacent public domain has been designed in accordance with City of Newcastle's specifications. All laneway works will be designed and constructed to relevant Australian and Industry Standards for Roads, Verge Works and Public Links applicable at the time of issuing the Construction Certificate, including relevant AUS-SPEC Technical Specifications, standard drawings as published on City of Newcastle's website, and/or City of Newcastle's public domain technical manual. Per the Planning Agreement, the 6.5m wide laneway will consist of a roadway of up to 4m wide supporting one-way travel in a northerly direction from Throsby Street to Furlong Lane. The intersections to both Throsby Street and Furlong Lane will be designed to accommodate the travel and turning path of larger vehicles including Council garbage trucks and delivery vehicles. As stated, the land acquisition existing on the adjoining 55 Throsby Street will allow for the future widening of the laneway to 6.5m. This could allow for an additional parking lane and public domain fronting as well as increase building separation and increase solar amenity. No widening to Furlong Lane is proposed as part of the development. Further information regarding the benefits of the laneway is provided above.
<b>EXTERNAL IMPACT</b>	S		
Increase in traffic congestion	37 total submissions	The proposal will create unacceptable congestion. The ability of the proposed laneway to ameliorate existing congestion is questioned due to the existing narrow street network. Throsby Street is already struggling with the narrow 2 way driving lanes being shared with cyclists, cars, trucks and semi-trailers.	It is acknowledged that the PP will facilitate a higher development yield than is currently available. Notwithstanding, the increase in development is consistent with the <i>Hunter Regional Plan 2036</i> and the <i>Greater</i> <i>Newcastle Metropolitan Plan 2036</i> and reflects Wickham's positioning adjacent to the new CBD at Newcastle West and in proximity to the Newcastle Interchange.

Theme/issue	No. times raised	Key matters	Council response
			The WMP 2017 and 2021 also identify Wickham as a location for increased residential densities.
Increase in on-street parking	11 total submissions	The number of proposed apartments will further congest our narrow streets and laneways as the new residents seek out places to park their second vehicle. A high percentage of 2-bedroom apartments have 2 vehicles but only 1 car space. These need these vehicles to travel to work as there are not that many jobs available in the Newcastle City area. Many people who work in the CBD park in Wickham and with developers providing 1 car space per unit, any further developments will see additional cars without allotted carparking, adding to what is currently a parking nightmare. The development will provide approximately 50 units which could mean an additional 25 cars or more requiring on-street parking.	The WMP 2021 includes an action to "investigate and plan for the provision of public car parking and other complementary uses within the formal rail corridor to cater for users of Wickham Park and the broader area". These investigations will proceed independently to this Planning Proposal. The carparking requirements of the proposed development will be considered as part of the development application process. This will include an assessment against the relevant carparking controls set out in Newcastle Development Control Plan (DCP) 2012. Subsequent development on the site will reduce the need for vehicle crossovers along Throsby Street which may alleviate some local carparking pressures. Further, the potential future widening of the proposed laneway through the redevelopment of 55 Throsby Street will include a row of parallel parking spaces that also may alleviate some local carparking pressures.
Increase pressure on services/public utilities	21 total submissions	The development will create extra pressure on service delivery in this location.	It is acknowledged that the PP will facilitate a higher development yield than is currently available. Notwithstanding, the increase in development is consistent with the <i>Hunter Regional Plan 2036</i> and the <i>Greater</i> <i>Newcastle Metropolitan Plan 2036</i> . The capacity for local infrastructure and services to cater for additional development has been considered at a strategic level when the WMP was originally adopted in 2017.
Garbage collection	6 total submissions	Garbage bin collection is already a major oversight of the many apartments around Railway St, Bishopsgate Street and so on.	Noted. The waste management requirements of the proposed development will be considered as part of the development application process.
<b>INCENTIVES POLIC</b>	Y		
Proposal does not demonstrate community benefit	16 total submissions	The proposal does not provide community infrastructure and should not be considered in the	The need for a laneway between Throsby Street and Furlong Lane was identified in the <i>Wickham Master Plan Traffic and Transport Assessment</i> (2017) which was prepared and

Theme/issue	No. times raised	Key matters	Council response
		<ul> <li>context of the Community Infrastructure Incentives Policy.</li> <li>The proposed laneway is for the use of service vehicles and residents of the proposed development. The laneway is for the benefit of a few residents.</li> <li>Community benefit should benefit the whole community and be spent on public domain and improvements such as cycleways, footpaths, parks and green spaces.</li> <li>The land acquisition map should also be updated as part of the PP, if supported to ensure that the laneway is still provided if something goes wrong in the execution of the PA.</li> </ul>	<ul> <li>endorsed as part of the WMP 2017. It is one of three</li> <li>'circulation laneways' identified to alleviate traffic</li> <li>management and safety concerns in the Wickham area. The</li> <li>benefits of the proposed laneway are discussed above.</li> <li>The Planning Agreement is generally consistent with the</li> <li>principles of the endorsed Community Infrastructure</li> <li>Incentives Policy. While the Planning Proposal varies from</li> <li>the HOB standards proposed in the WMP 2021 it is</li> <li>consistent with the mechanisms described in the Community</li> <li>Infrastructure Incentives Policy in that the increased HOB</li> <li>and FSR corresponds with an agreed GFA rate, having</li> <li>regard for the value of the laneway offered as community</li> <li>infrastructure per the Planning Agreement.</li> <li>The Planning Agreement will legally require any future</li> <li>redevelopment of the site to deliver the laneway. As such,</li> <li>there is no requirement to amend the land acquisition map.</li> <li>As discussed, the land acquisition will remain on 55 Throsby</li> <li>Street which will allow for the future widening of the laneway</li> </ul>
<b>ENVIRONMENTAL I</b>	SSUES		
Proximity to water table/site on floodplain	5 total submissions	Site has a shallow water table at only +/- 4m. Everyone else around them has been limited to 2-3 storeys. Requests CN review the required environmental and geotechnical reports, including the engagement of an independent consultant for peer reviews.	<ul> <li>The Planning Proposal was exhibited with a geotechnical report undertaken as part of further engagement regarding potential mine subsidence.</li> <li>Being within a water table does not limit height. The proposed heights are in keeping with the future vision for Wickham as identified in the WMP.</li> <li>The existing water table will be considered as part of the development application process and additional studies will be undertaken, if required.</li> </ul>
Potential for mine subsidence	5 total submissions	Questions whether NSW Mine Subsidence considers it acceptable to build to the proposed increased height.	Council engaged with Subsidence Advisory NSW per the Gateway Determination. Subsidence Advisory NSW required the proponent to undertake further investigations per their letter to Council dated 10 February 2021.

Theme/issue	No. times raised	Key matters	Council response
		Requests CN review the required environmental and geotechnical reports, including the engagement of an independent consultant for peer reviews.	Further investigation regarding mine subsidence has been undertaken by the Proponent in the form of a Mine Subsidence Assessment prepared by consultants Tetra Tech Coffey. SANSW advised that this assessment is sufficient to
		Questions how higher and heavier building increases the feasibility of managing mine	allow the Draft Planning Proposal to proceed.
		subsidence for this site.	Further assessment will be required at the development application (DA) stage including a peer review of the Tetra
		Requests Dilapidation Report to protect surrounding development in Church and Throsby Streets.	Tech Coffey report to confirm the geotechnical uncertainty factor is low to moderate in accordance with the SANSW Merit Assessment Policy.
Heritage precinct	1 total submission	The Wickham Village Hub should be a heritage precinct.	Council has undertaken the holistic master planning of Wickham as part of the WMP 2017 and WMP 2021. These documents do not identify that the Wickham Village Hub should be a heritage area.
Aboriginal cultural significance	1 total submission	Believes the importance of this locality to the First Nations People is reflected in the WMP and the Village Hub should be maintained.	The potential Aboriginal cultural heritage impacts of the proposed development will be considered as part of the development application process. Statutory processes exist regarding the identification and
			management of Aboriginal cultural heritage values, should this arise during any subsequent redevelopment of the site.
Increase in wind tunnel effects	3 total submissions	Another high building will increase the wind tunnel effect along Throsby Street.	Noted. The potential wind tunnelling impacts of the proposed development will be considered as part of the development application process.
SPECIFIC AMENITY	CONCERNS		
Loss of air quality	1 total submission	Increase in traffic onto the signalised intersection at Throsby/Hannell Streets will lead to a loss in air quality for residents of Throsby Street	Noted. The air quality impacts of the proposed development will be considered as part of the development application process.
Potential overshadowing	5 total submissions	The height increase will lead to overshadowing.	Noted. The potential overshadowing impacts of the proposed development will be considered as part of the development application process.
Potential loss of views	3 total submissions	The height increase will lead to loss of views.	Noted. The potential view impacts for neighbouring dwellings as a result of the proposed development will be considered as part of the development application process.

Theme/issue	No. times raised	Key matters	Council response
Potential loss of privacy	5 total submissions	The height increase will lead to a loss of privacy in neighbouring yards.	Noted. The potential privacy impacts of the proposed development will be considered as part of the development application process.
Potential increase in noise	4 total submissions	Additional high rise will lead to increased loss of acoustic privacy.	Noted. The potential acoustic privacy impacts of the proposed development will be considered as part of the development application process.
Transitional heights/ inconsistent built form	7 total submissions	Inappropriate built form and poor transition to adjoining low density dwellings as part of the village precinct A concentrated tower development 8 stories high	This block has been identified for increased densities as part of the WMP 2017 and WMP 2021. The post-exhibition changes to the PP addresses community
		isolated amongst predominately 2 & 3 storey buildings does not represent an orderly or logical	concerns regarding higher built forms in the Village Hub area.
		urban built form	The max HOB for part 41 Throsby Street has been reduced to 14m, reflective of its siting within the Village Hub. This responds to the envisaged scale and future character of the Village Hub as set out in WMP 2021.
			The HOB for 47 and part 41 Throsby Street remains at 28m as previously exhibited. 47 Throsby Street is located within the Emerging Industry Quarter which has an envisaged higher density future character per the WMP 2021 and as such 28m is considered satisfactory.
Pedestrian safety	1 total submission	Increases in foot traffic from development without increase in connectivity of pedestrian areas.	Noted. The WMP 2021 contains principles and actions to improve accessibility and connectivity within Wickham and to adjoining areas. The implementation of these actions is currently underway.
			The draft DCP for Wickham includes new mapping to reduce the number of vehicle crossover points in the Wickham area. The proposed laneway as part of the Planning Proposal will reduce the number of vehicle crossovers along Throsby Street.
Impact on local character of the area	6 total submissions	Inconsistent with the existing character of the area and the WMP future character	The PP has been amended post-exhibition to address concerns regarding the Village Hub.
			It is considered that 28m HOB in the Emerging Industry Quarter is acceptable and in keeping with the broader vision

Theme/issue	No. times	Key matters	Council response
	raised		
			for the Wickham area. The stepped approach over the site will achieve a softer built form.
Impact on local sewerage system	2 total submissions	The ability of the local sewerage system to cope with increased demand is overlooked in the local area. The carpark in the Verve complex leaks raw sewerage in big weather events, which is not conducive to public confidence.	<ul> <li>Noted. The ability of the Wickham area to cater for additional development densities has been considered as part of the WMP 2017 and WMP 2021 and is aligned with the strategic directions for the area as set out in the <i>Hunter Regional Plan 2036</i> and the <i>Greater Newcastle Metropolitan Plan 2036</i>.</li> <li>Furthermore, it is noted that the overall capacity for additional development in Wickham is likely to be lower than originally envisaged due to site constraints in other areas including mine subsidence.</li> <li>The sewage issues at the Verve complex will be referred to</li> </ul>
Additional density not required	3 total submissions	Oversupply of properties will impact the existing property values and potential rental returns. The proposal seeks to increase FSR but there is no identified need for that increase in density.	the relevant team for investigation and actioning. The WMP 2017 and WMP 2021 were prepared in recognition of the need to allow Wickham to grow and develop over time having regards to changes in population and lifestyle characteristics, trends in employment, retail and community service provision.
			The approach set out in the WMP 2017 and WMP 2021 aligns with the strategic directions for the area as set out in the <i>Hunter Regional Plan 2036</i> and the <i>Greater Newcastle Metropolitan Plan 2036</i> .
			Furthermore, as stated, the overall capacity for additional development in Wickham is likely to be lower than originally envisaged due to site constraints in other areas including mine subsidence.
SUPPORT FOR TH	E PROPOSAL		
	1 total submission	The development will enhance the community values of the Wickham area and should be welcomed to transform this suburb from an industrial suburb to a vibrant community hub as envisaged by the Master Plan.	Noted.

Theme/issue	No. times raised	Key matters	Council response
	1 total submission	Supports the Planning Agreement in principle as it provides a balance of community infrastructure paid for by the developer and is in line with the WMP.	Noted.
	1 total submission	Supports higher density for all Newcastle, including Wickham.	Noted.
	1 total submission	Will deliver better commercial amenities for the community by activating a key laneway ahead of the WMP. The laneway will alleviate congestion along Throsby Street.	Noted.
	1 total submission	Supports Planning Proposal and draft PA as appropriate use of the Community Infrastructure Incentives Policy.	Noted.
		The delivery of a new laneway which will improve connectivity for the community is a great example of how the CIIP can deliver positive outcomes for the community.	