

Thursday 18 May 2017

NSW Department of Planning and Environment (the Department)

Level 22, 320 Pitt St, Sydney 2000

Via email

Attention: Secretary General

Dear Sir/Madam,

This summary letter has been prepared by EMKC the project architect and submitted in support of a Section 96 (2) application to SSDA 6799 which pertains to the erection of a cold storage warehouse facility within the Marsden Park Industrial Precinct. The facility, if approved will represent the third major advanced logistics facility for NewCold in the Asia Pacific region and the second in Australia. EMKC exclusively represents NewCold throughout Asia Pacific and is NewCold's appointed architect and development manager for the project. The proposed Marsden Park facility will provide for storage and processing of temperature controlled goods for a range of quality clients. The facility will provide for multiple frozen and chilled temperature zones, catering to the diverse requirements of NewCold's client.

Design Requirements

There are a number of design matters which must be considered for the construction and operation of a cold storage facility such as that which is being proposed that require explanation and clarification to ensure that resulting design outcomes can be understood and appreciated.

The proposed NewCold Sydney facility will have a total floor space of 37,682m². Around 42 percent (15,792m²) is characterised as standard height warehouse with a maximum height of 21 metres at the ridgeline. This warehouse, is characterised by typical design features for similar buildings throughout Western Sydney, including steel portal frame construction, clad with PIR panels.

The proposed automated high bay warehouse represents 47 percent of total floor space (17,690m²) and is positioned as part of the broader building as illustrated below:

The installation of multiple Automatic Storage and Retrieval Systems (ASRS) within the high bay warehouse presents significant benefits for the operational capacity and energy efficiency of the NewCold facility. The system is designed to more efficiently store and retrieve the product range stored by NewCold and is only made viable within a high bay warehouse such as that proposed. High bay warehouses, such as this are common throughout Europe with only a few examples located in the Sydney basin.

The automated system's structural requirements limit options available for altering or articulating the built form. PIR panels are the only suitable material to ensure temperature control of the product stored in the facility and to minimise environmental impact through reduced energy consumption.

Key Design Material: PIR Panels

The Kingspan PIR panels selected provide a highly attractive finish that is far superior to standard colorbond metal cladding and other lower grade panels, however the above physical constraints must be taken into account to ensure the design is buildable. The proposed design ("Option 2") is similar to the design that has been adopted for the NewCold Melbourne facilities, which benefit from direct motorway and major arterial road exposure.



Figure 1: NewCold MB01 and MB02 projects as at 28 March 2017 (view from Middle Rd, Truganina).



Figure 2: NewCold MB01 projects as at 28 March 2017 (view from construction access trail).

NewCold's facilities throughout the USA and Europe are comprised of an 'all white' colour scheme which creates the most energy efficient outcome, thereby reducing the carbon footprint and environmental impact of the facilities. The designs EMKC have produced for NewCold in Australia, including the "Option 1" Sydney design, provide significant aesthetical advantages over the NewCold global standard ('all white') design, whilst ensuring the design is still able to be constructed without compromising the physical constraints of the PIR panels. A sample PIR panel offcut, manufactured by Kingspan in St Marys, was provided to Blacktown Council by EMKC during the second design meeting 5 April 2017.



Figure 3: NewCold 'all white' colour scheme (NewCold Wakefield, UK).

Design Options and Analysis

In keeping with guidance provided from the NSW Department of Planning and Environment and industry best practise EMKC has carefully considered the constraints of the site and prepared multiple design options for consideration. This section considers the four options produced by EMKC as the appointed architect for the NewCold Sydney project. We have outlined these options in the order they were produced, providing the design rationale for each option. A copy of each design option plan is attached as Appendix A of this report.

Initial design: Option 2 (40m ridge height)

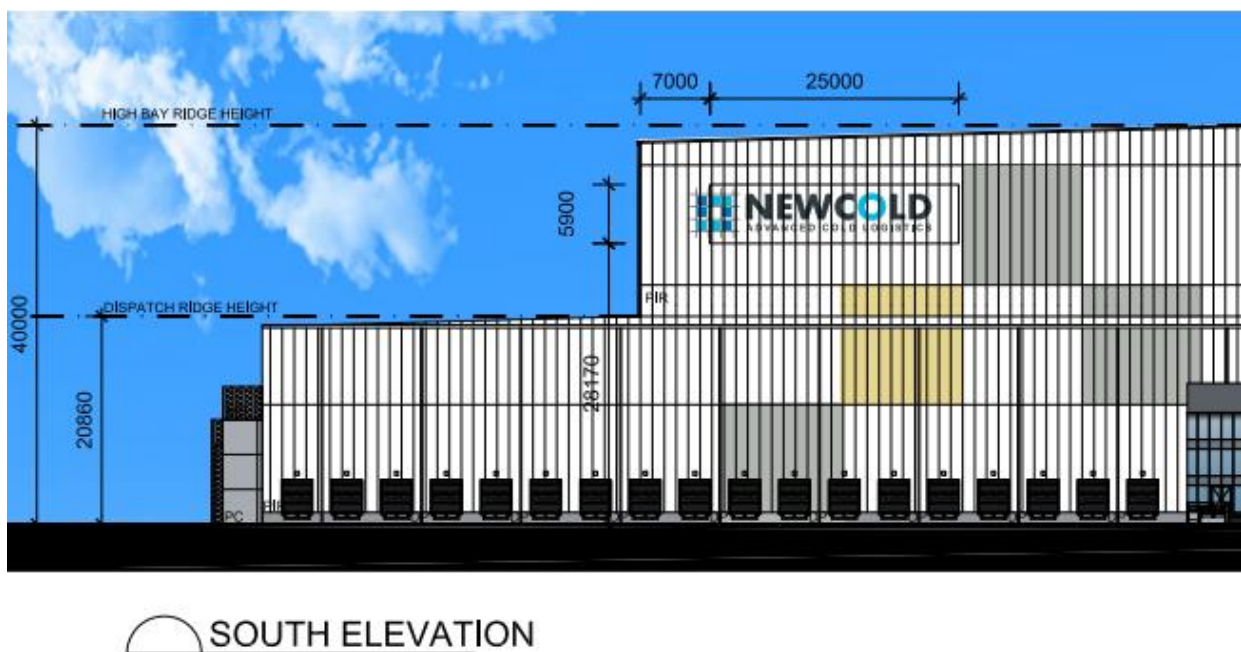


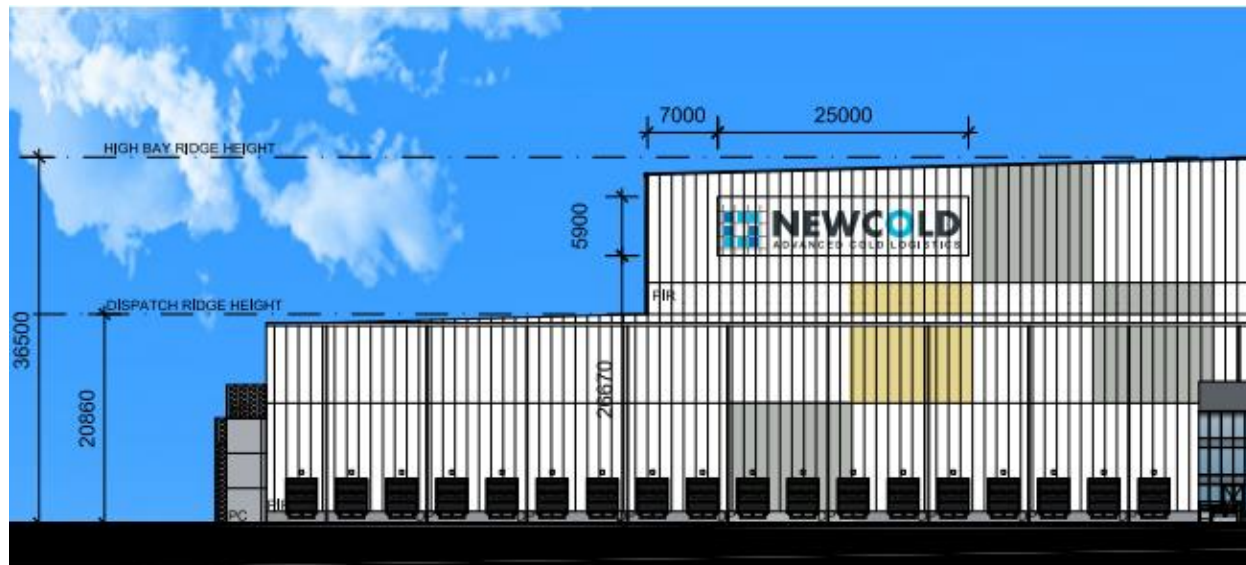
Figure 4: "Option 2" elevation extract.

This option was produced as NewCold's desired design option. A non-coloured version was provided to Nathan Burbridge of Blacktown Council by Urbis via email 22 March 2017. EMKC and Urbis met with Blacktown Council 24 March 2017 and subsequently provided coloured plans to Blacktown Council via email 25 March 2017.

Blacktown Council responded to EMKC's plans issued 25 March 2017, responding via email 29 March 2017 with high level commentary that was carefully reviewed and considered.

Option 2 maintained the NewCold desired elevations (inc. 40m ridge height) and was subsequently modified to create Option 1 in order to take into account the feedback received by Blacktown Council.

Revised design: Option 1 (36.5m ridge height)



 SOUTH ELEVATION

Figure 5: “Option 1” elevation extract.

This option is nominated as the selected elevation in the s96 application, taking into account a compromised position to accommodate the feedback received from Blacktown Council. A concept version of Option 1 was submitted to Blacktown Council ahead of the meeting between EMKC, Urbis and Blacktown Council 5 April 2017. During the meeting, Blacktown Council noted the consideration of the design amendments and did not respond to EMKC/Urbis’ request for detailed design review comments subsequent to the meeting.

EMKC believes Option 1 is a well-considered design option that balances addressing Blacktown Council’s initial feedback with NewCold’s operational requirements and the physical constraints of the PIR panels (refer *Key Design Material: PIR Panels*).

Alternative Design A: Option 3 (36.5m ridge height)

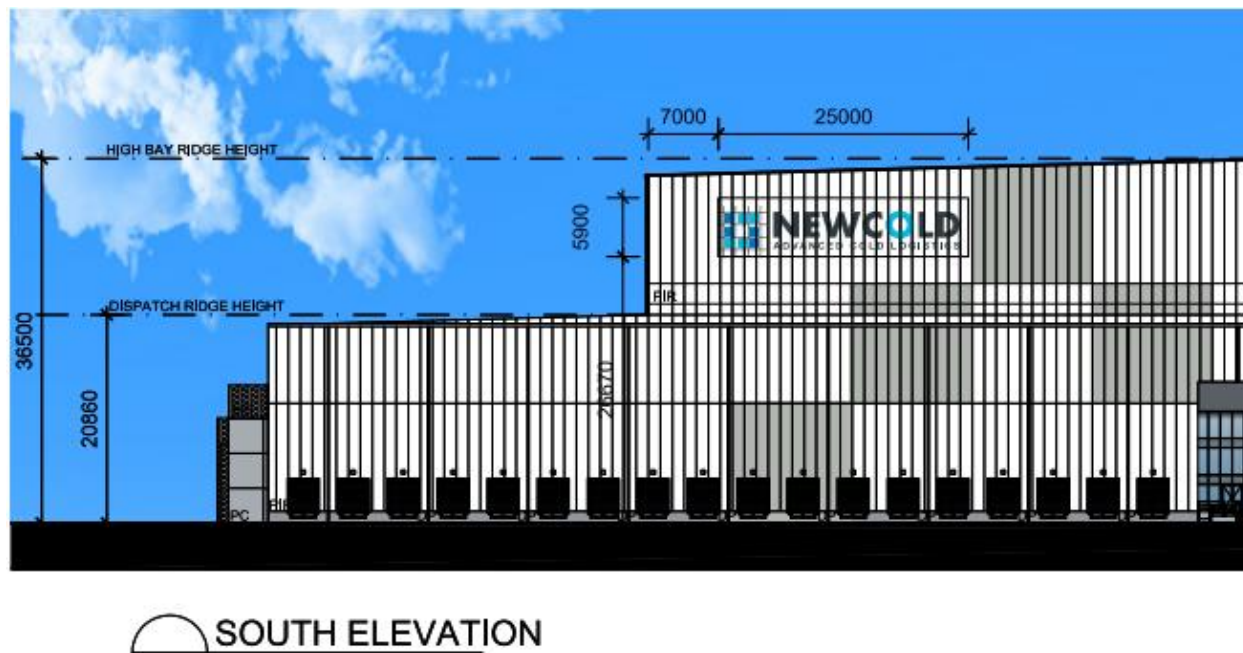


Figure 6: "Option 3" elevation extract.

A monochromatic elevation based around a square pattern configuration, created at the request of the department prior to finalisation of the s96 application. EMKC believes that this is an inferior design to "Option 1" given the reduced colour diversity, however it does provide what EMKC believes to be a lesser visual impact in terms of colour visibility.

Alternative Design B: Option 4 (36.5m ridge height)



Figure 7: “Option 4” elevation extract.

A rectangular colour pattern elevation that departs from the square pattern configuration of “Option 1” through to “Option 3”, created at the request of the department prior to finalisation of the s96 application. EMKC believes that this is an inferior design to “Option 1” given the increase in ‘white space’, however it does provide a significantly different presentation to the other design options submitted in the s96 application.

Prior to the production of the options included within the s96 application, EMKC prioritised reduction in visual impact of the high bay warehouse whilst taking into account the physical constraints of the essential PIR panel construction, namely:

1. The inability to penetrate the surface of the PIR panels with any fixings. NewCold adopts a start of the art energy management system which uses less than 50% of the energy of other cold storage facilities. To do this NewCold requires an airtight warehouse environment, making the addition of ‘feature finishes’ to the PIR panels unfeasible.
2. The restriction of PIR panel manufacturing to light colours and distribution of patterns to ensure panels do not deflect due to extreme surface temperature differences between the inside and outside surfaces of the panels

Conclusion

This Response to Submissions Report has been prepared on behalf of NewCold as proponent of State Significant Development Application SSD_ The application was lodged 24 April 2017 and involves the construction of a new automated warehouse facility within the Sydney Business Park at Marsden Park.

This report responds to each of the matters raised by various government agencies, providing additional information, further justification, revisions to the proposed development or more detailed mitigation measures to satisfy concerns where possible.

The proposed variation in permitted height has been thoroughly examined as part of both the Environmental Impact Statement and this report. The proposed variation is considered acceptable for the following reasons:

- Minimal environmental impacts are anticipated. The automated high bay warehouse will not overshadow adjoining properties. Its simplistic design will mitigate distant visual impacts of the structure;
- The proposed ASRS and frozen/chilled environment limits opportunities to express the built form through changes in shape, use of alternative material (other than PIR panels) or significant structural articulations; and
- Design changes have been incorporated to set the warehouse back further from Hollinsworth Road in comparison to the approved SSDA in order to minimise visual impact

Yours Sincerely,



Karen Choi
Director | EMKC
+61 414 525 347 | Karen.Choi@em-kc.com



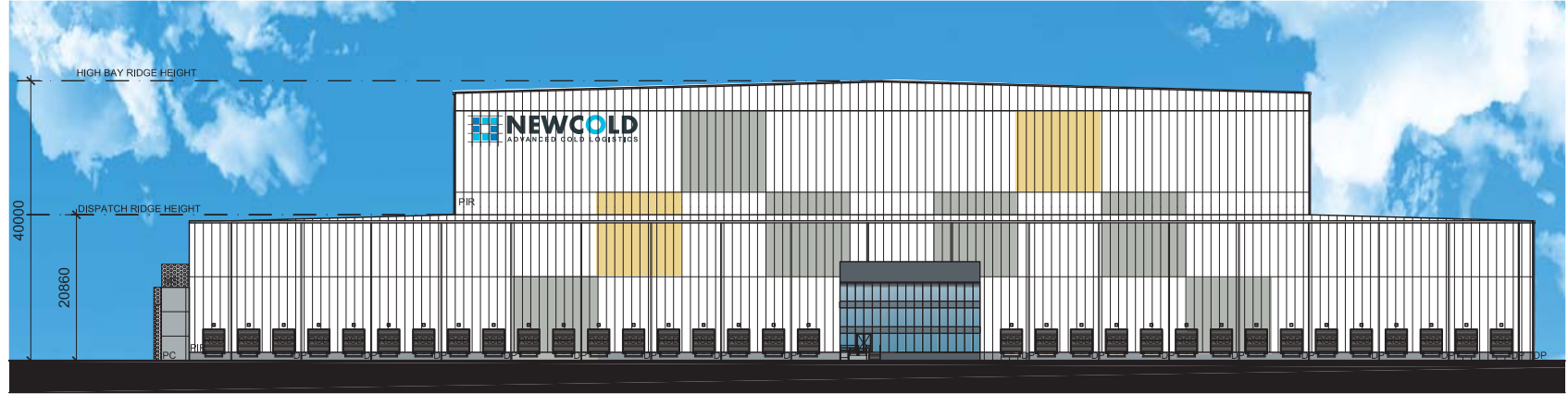
Edward McKenna
Director | EMKC
+61 405 446 410 | Edward.McKenna@em-kc.com

Appendix A: Design Options

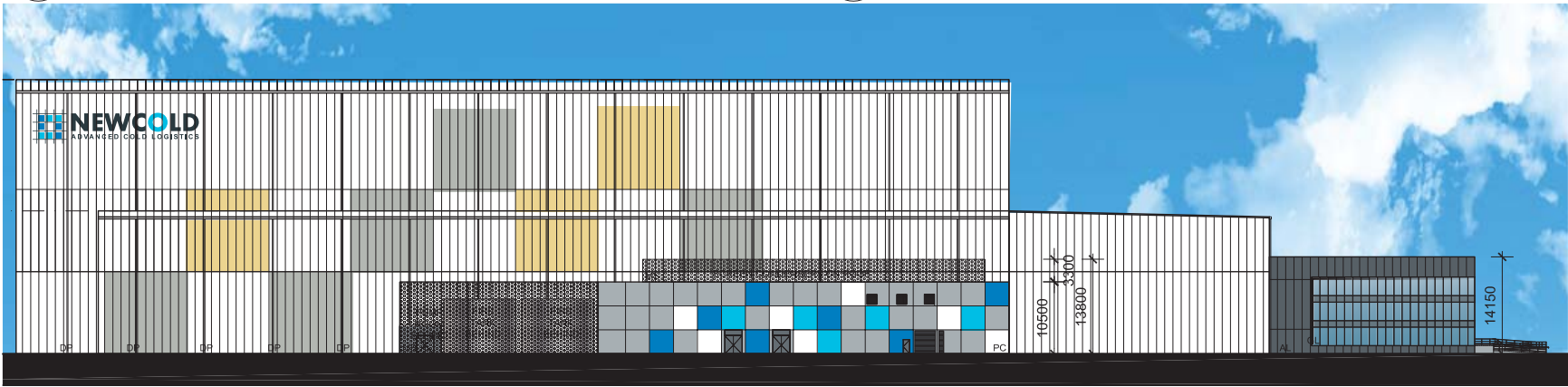
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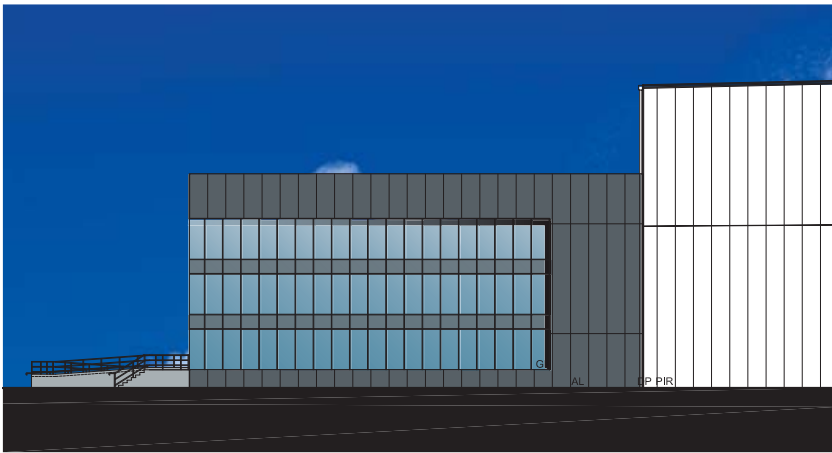
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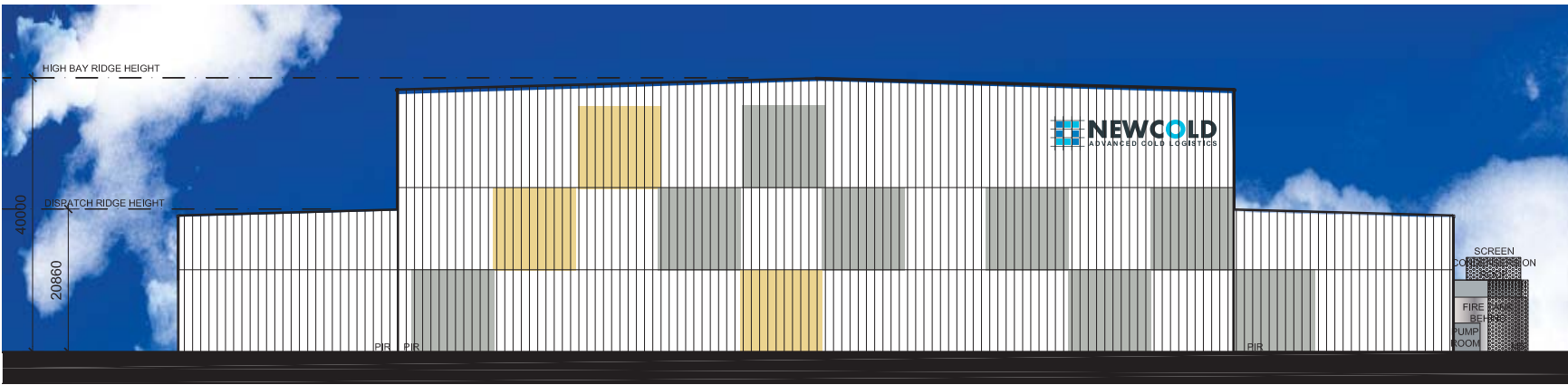
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Scale 1:1000



WEST OFFICE ELEVATION
Scale 1:500



EAST OFFICE ELEVATION
Scale 1:500



NORTH ELEVATION
Scale 1:1000

LEGEND:	
AL	ALUMINIUM CLADDING
COL	COLUMN
DP	DOWN PIPE
FC	FIBRE CEMENT
GL	GLASS
MC	METAL CLADDING
MS	METAL SCREEN
PC	PRECAST CONCRETE
PIR	PIR INSULATED PANEL
RSD	ROLLER SHUTTER DOOR
RS	ROOF SHEETING
TS	TRANSLUCENT SHEETING



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PROJECT
NEWCOLD SYDNEY
HARRIS AVE
MARSDEN PARK, NSW

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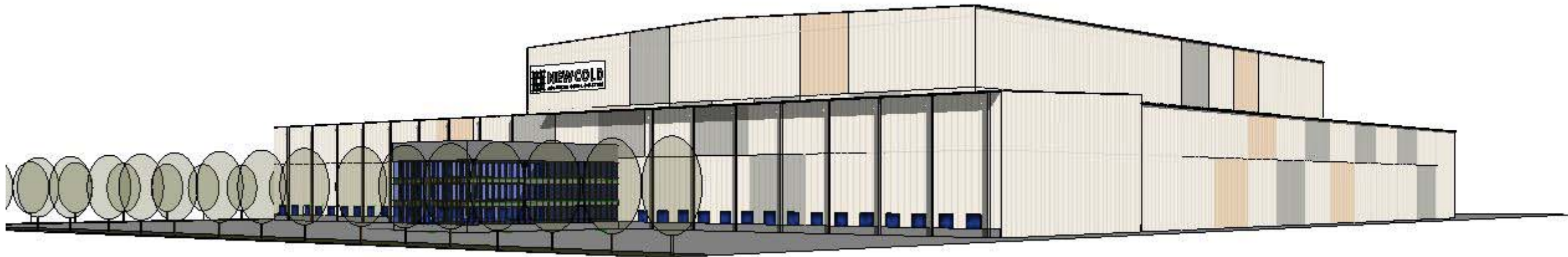
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AU0012 MDP FS10 OPT 1 200 B

REVISIONS

A PRELIMINARY 18.04.17



*INDICATIVE PERSPECTIVE BASED ON LEVEL SITE

OPTION 1 PERSPECTIVE
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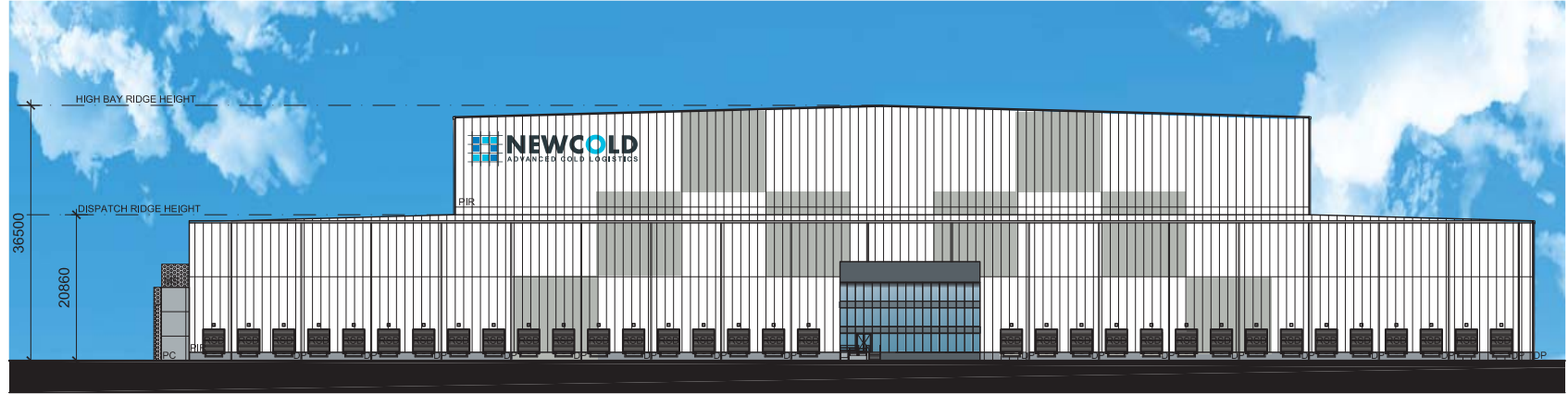
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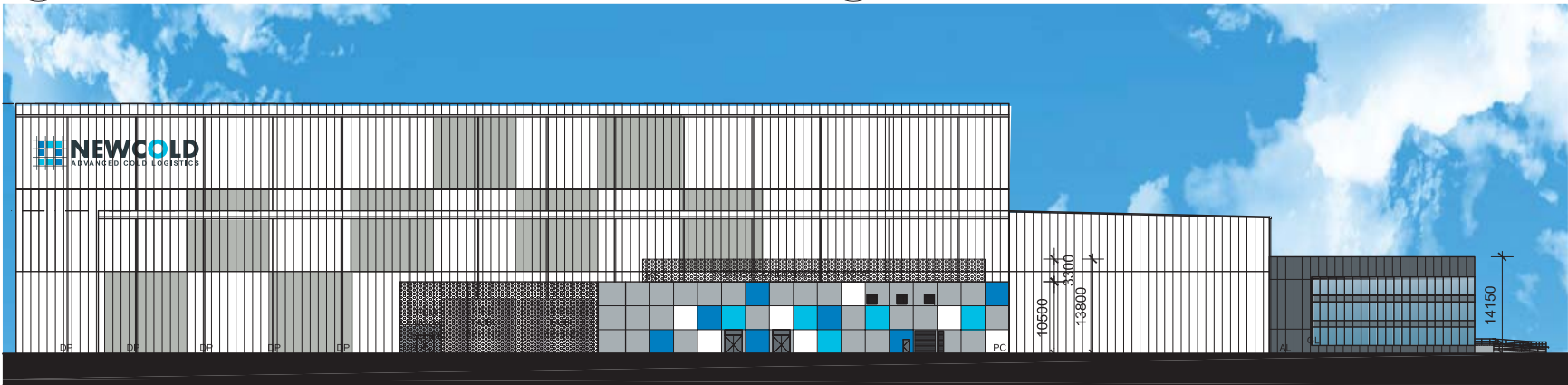
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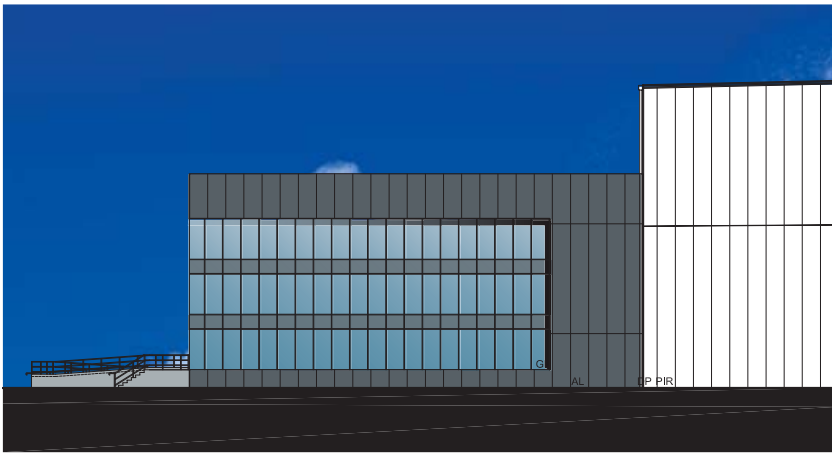
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WEST ELEVATION
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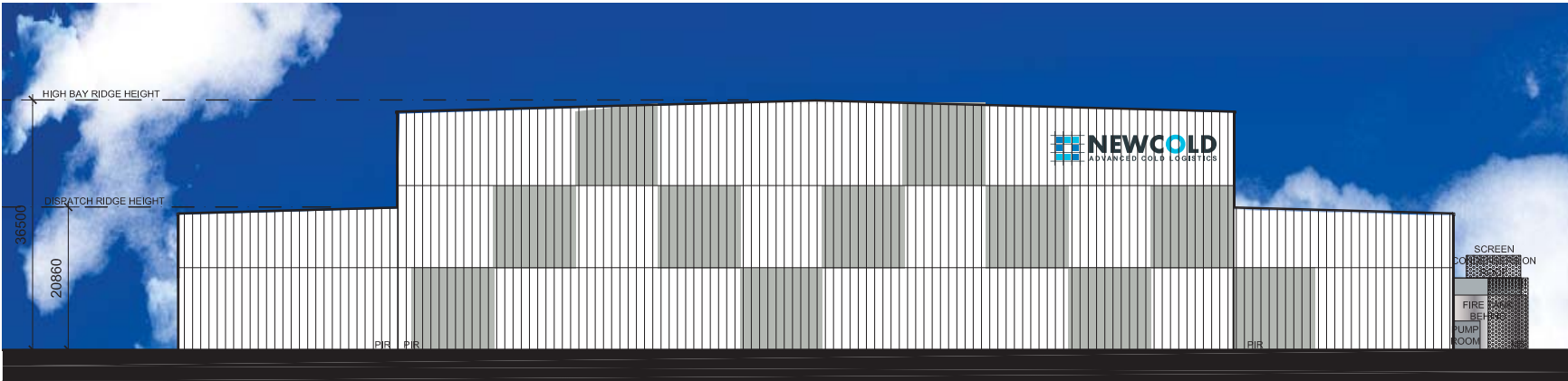
WEST OFFICE ELEVATION
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EAST OFFICE ELEVATION
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EAST ELEVATION
Scale 1:1000



NORTH ELEVATION
Scale 1:1000

LEGEND:	
AL	ALUMINIUM CLADDING
COL	COLUMN
DP	DOWN PIPE
FC	FIBRE CEMENT
GL	GLASS
MC	METAL CLADDING
MS	METAL SCREEN
PC	PRECAST CONCRETE
PIR	PIR INSULATED PANEL
RSD	ROLLER SHUTTER DOOR
RS	ROOF SHEETING
TS	TRANSLUCENT SHEETING

	RAL 9010 OR COLORBOND SURFMIST
	RAL 1015 OR COLORBOND EVENING HAZE
	RAL 7038 OR COLORBOND SHALE GREY



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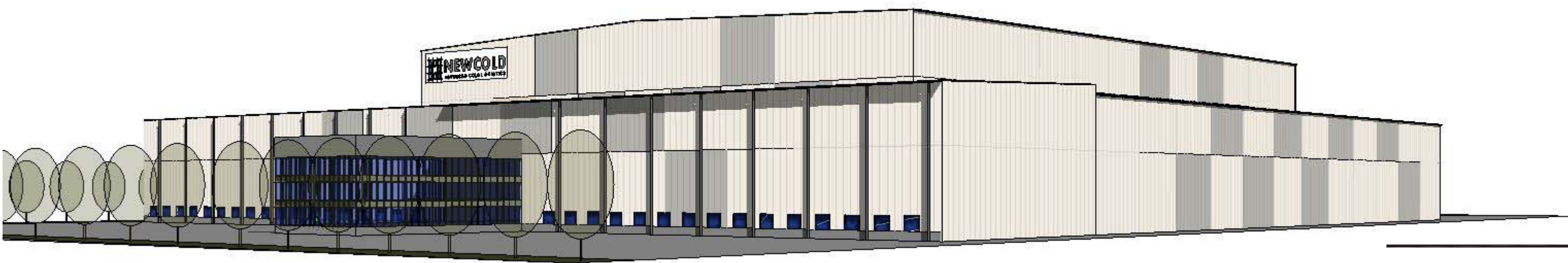
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*INDICATIVE PERSPECTIVE BASED ON LEVEL SITE

OPTION 2 PERSPECTIVE
Scale 1:



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DRAWING TITLE

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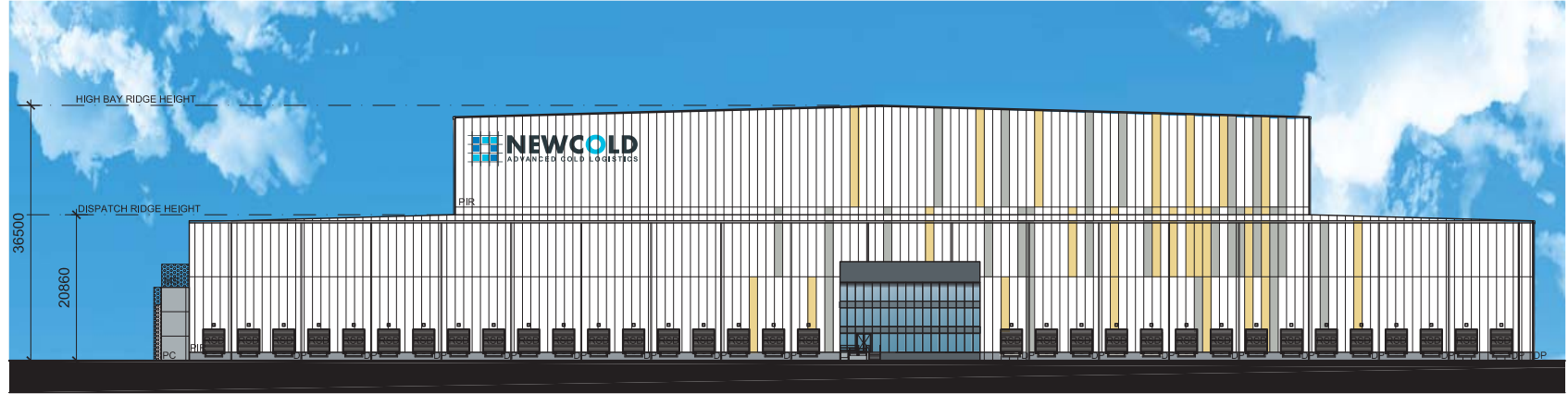
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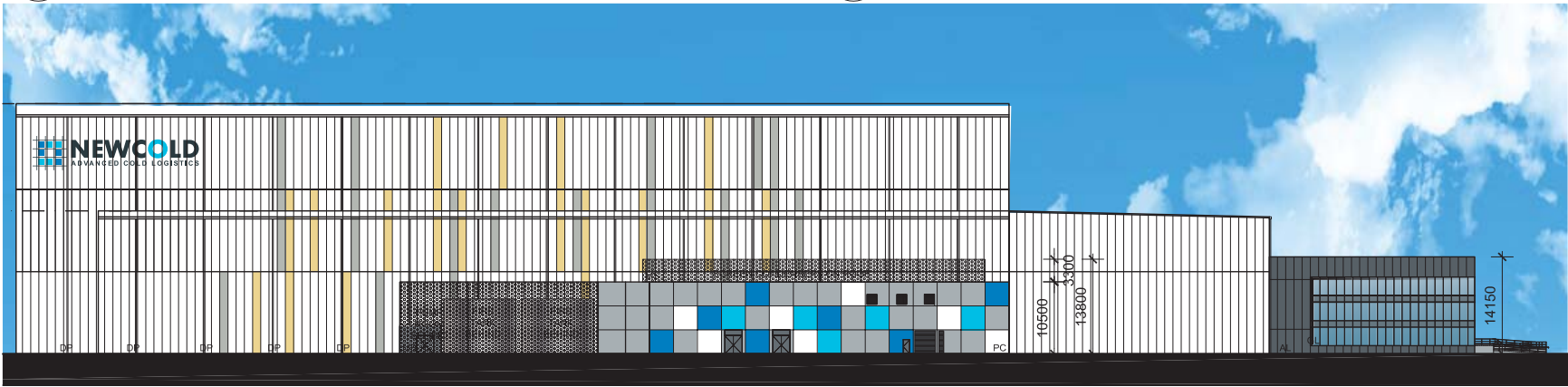
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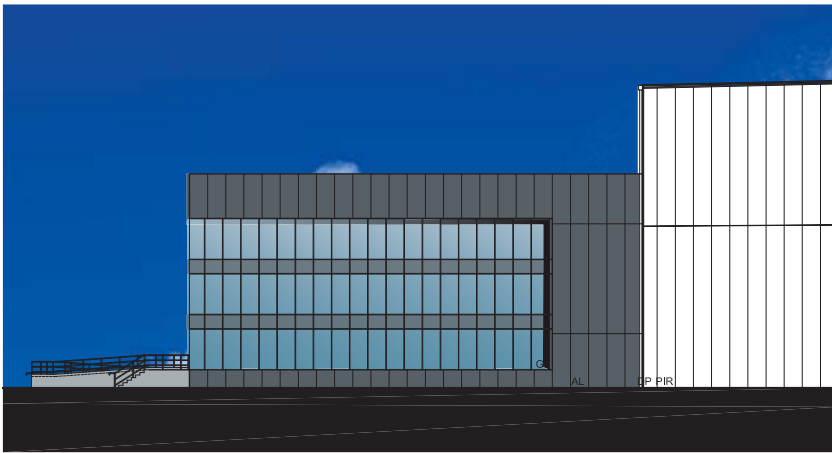
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WEST ELEVATION
Scale 1:1000



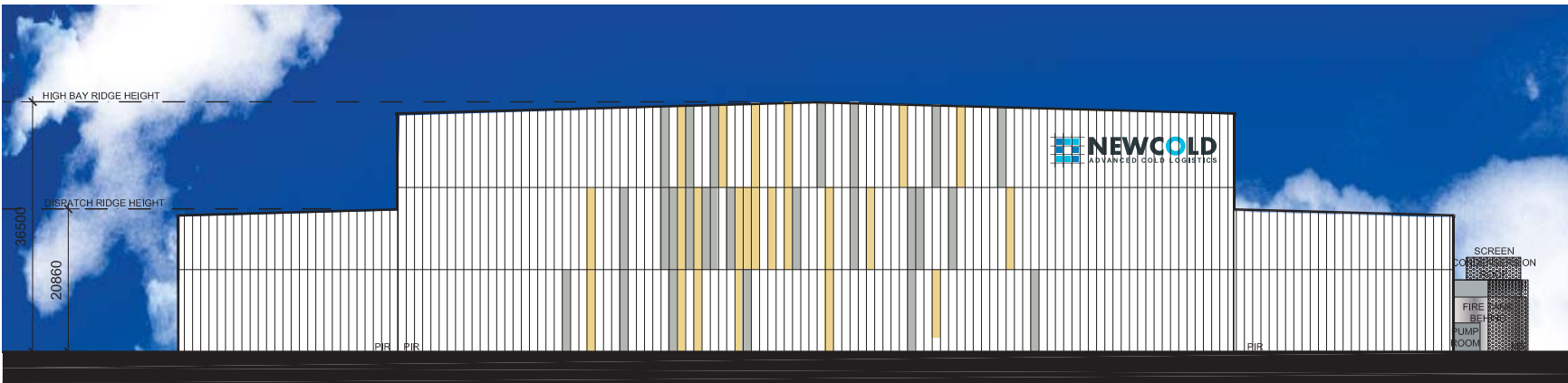
WEST OFFICE ELEVATION
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EAST OFFICE ELEVATION
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EAST ELEVATION
Scale 1:1000



NORTH ELEVATION
Scale 1:1000

LEGEND:	
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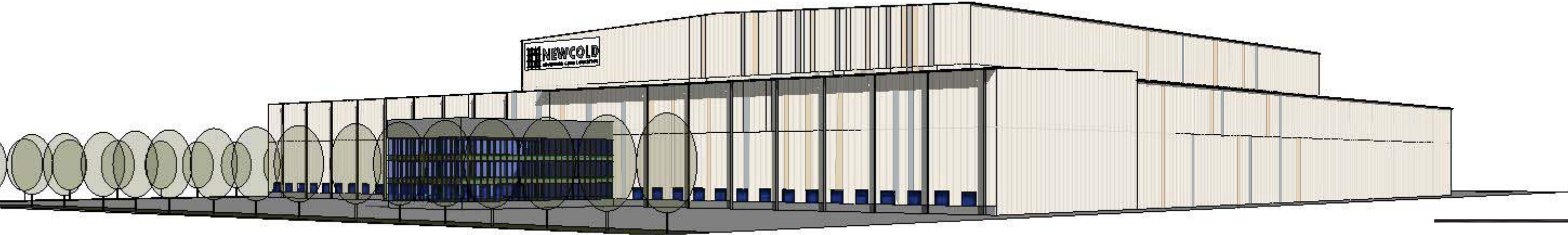
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*INDICATIVE PERSPECTIVE BASED ON LEVEL SITE

OPTION 3 PERSPECTIVE
Scale 1:



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