

23-25 CHARLES STREET, LIVERPOOL  
PROPOSED RESIDENTIAL FLAT BUILDING



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**Schedule of BASIX commitments**

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

**1. Commitments for Residential flat buildings - 23-25 Charles**

**(a) Dwellings**

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	✓
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.			✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install: <ul style="list-style-type: none"> <li>(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and</li> <li>(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.</li> </ul>	✓	✓	✓
(f) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓		
(g) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(h) The pool or spa must be located as specified in the table.	✓	✓	
(i) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

Dwelling no.	Fixtures		Appliances		Individual pool			Individual spa						
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 6 but <= 7.5 L/min)	4 star	5 star	5 star	no	-	-	-	4 star	-	-	-	-	-

Alternative water source									
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up	
None	-	-	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/or at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.	✓	✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: <ul style="list-style-type: none"> <li>(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and</li> <li>(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.</li> </ul>		✓	✓
(h) The applicant must install in the dwelling: <ul style="list-style-type: none"> <li>(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances &amp; other efficiency measures" column of the table below;</li> <li>(bb) each appliance for which a rating is specified for that dwelling in the "Appliances &amp; other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and</li> <li>(cc) any clothes drying line specified for the dwelling in the "Appliances &amp; other efficiency measures" column of the table.</li> </ul>		✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

Dwelling no.	Hot water		Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control	
All dwellings	gas instantaneous 5.5 star	individual fan, ducted to facade or roof	interlocked to light	individual fan, ducted to facade or roof	manual switch on/off	individual fan, ducted to facade or roof	manual switch on/off	

Dwelling no.	Cooling		Heating		Artificial lighting			Natural lighting	
	living areas areas	bedroom areas	living areas areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry
1, 3, 4, 5, 7, 8, 9, 11, 12, 22, 23	1-phase airconditioning 1 star (average zone)	-	1-phase airconditioning 1 star (average zone)	-	2	1	yes	yes	yes
All other dwellings	1-phase airconditioning 1 star (average zone)	-	1-phase airconditioning 1 star (average zone)	-	1	1	yes	yes	yes

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	no	2.5 star	-	1.5 star	no	no

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: <ul style="list-style-type: none"> <li>(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab, or</li> <li>(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.</li> </ul>	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate.	✓	✓	✓
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

Thermal loads		
Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
1	61.4	35.8
2	62.3	16.4
3	42.7	16.7
4	36.7	28.1
5	50.4	27.2
6	53.4	21.5
7	29.0	17.4

Thermal loads		
Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
8	27.2	28.1
9	58.7	33.9
10	59.5	24.1
11	45.2	18.6
12	30.1	25.0
13	34.0	21.0
14	22.5	27.0
15	22.0	38.9
16	31.5	21.6
17	21.5	27.9
18	22.2	39.1
19	30.4	21.7
20	20.7	28.6
21	23.3	39.0
22	61.9	27.0
All other dwellings	37.3	34.6

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.	✓	✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.	✓	✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	4 star

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Common area ventilation system			Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park area	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No
Lift car (No.1)	-	-	light-emitting diode	connected to lift call button	No
Service room	no mechanical ventilation	-	compact fluorescent	manual on / manual off	No
Pump Room	ventilation (supply + exhaust)	thermostatically controlled	compact fluorescent	manual on / manual off	No
WC (G/F)	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
WC (Roof)	ventilation exhaust only	time clock or BMS controlled	light-emitting diode	motion sensors	No
Ground floor lobby	no mechanical ventilation	-	light-emitting diode	daylight sensor and motion sensor	No
Hallway/Lobby (L1-L7)	no mechanical ventilation	-	light-emitting diode	daylight sensor and motion sensor	No
Stairs	no mechanical ventilation	-	compact fluorescent	motion sensors	No

Central energy systems	Type	Specification
Lift (No. 1)	geared traction with V V A C motor	Number of levels (including basement): 9

**4. Commitments for common areas and central systems/facilities for the development (non-building specific)**

(b) Common areas and central systems/facilities	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(i) Water			
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.	✓	✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	4 star	5 star	4 star

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Central energy systems	Type	Specification
Alternative energy supply	Photovoltaic system	Rated electrical output (min): 20.0 peak kW

- Notes**
- In these commitments, "applicant" means the person carrying out the development.
  - The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
  - This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
  - If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
  - If a star or other rating is specified in a commitment, this is a minimum rating.
  - All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

- Legend**
- Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
  - Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
  - Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfillment it is required to monitor in relation to the building or part, has been fulfilled).

### Assessor Certificate

Multiple Dwellings

Non-Regulatory Document

**Assessor**  
Name: Raymond Stalman    Company: Taylor Smith Consulting    DMN #: 12/1472  
Address: PO Box 5044 Kingsdene NSW 2118    Phone: 02 9890 8002    Email: r.stalman@taylorsmith.com.au

**Client**  
Name: Michael Trinh    Company: Ighat Group Pty Ltd  
Address: Unit 43, 2 Slough Avenue, Silverwater NSW 2128    Phone: 02 9648 8848    Email: michael@i9at.com.au

**Project**  
Address: 23-25 Charles St, Liverpool NSW 2170  
Applicant: Hume Community Housing    LGA: Liverpool

**Assessment**  
Date: 08/12/2020    File ref: 2020410    Software: AccuRate    Version: 2.4.3.21    Climate Zone: 2B

**Documentation**  
Drawings: (Title, Ref & Revision, Issue date, etc)  
28705\_11-12-2020\_DA Issue A

Assessor Certificate # 12/1472    Certificate # 0005484000    Issued: 09/12/20					
Thermal performance specifications					
Unit number(s)	Floor area (m <sup>2</sup> )	Predict. loads (MJ/M <sup>2</sup> /yr)	Heat	Cool	Star Rating
1	69.2	0.0	61.4	35.8	5.6
2	48.6	0.0	62.3	16.4	6.4
3	68.9	0.0	42.7	16.7	7.3
4	68.3	0.0	36.7	28.1	7.1
5	69.2	0.0	50.4	27.2	6.9
6	48.6	0.0	53.4	21.5	6.6
7	68.9	0.0	29.0	17.4	7.9
8	68.3	0.0	27.2	28.1	7.4
9	69.2	0.0	63.2	43.8	5.2
10	48.6	0.0	59.5	24.1	6.2
11	68.9	0.0	45.1	16.8	7.1
12	68.3	0.0	30.1	25.0	7.4
13	52.4	0.0	34.0	21.0	7.5
14	51.6	0.0	22.5	27.0	7.7
15	48.2	0.0	22.0	38.9	7.2
16	52.4	0.0	31.5	21.6	7.8
17	51.6	0.0	21.5	27.9	7.8
18	48.2	0.0	22.2	39.1	7.2
19	52.4	0.0	30.4	21.7	7.8
20	51.6	0.0	20.7	28.6	7.8
21	48.2	0.0	23.3	39.0	7.2
22	74.6	0.0	61.9	27.0	5.9
23	75.4	0.0	37.3	34.6	6.7

**DMN Assessor # 12/1472    Certificate # 0005484000    Issued: 09/12/20**

**Thermal Performance Specifications**

These are the Specifications upon which the Certified Assessment is based. It details individual or these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If any one specification option is selected for a building element, that specification must apply to all instances of that element for the project. If alternate specifications are desired for a building element, the location and extent of alternate specifications must be detailed below and/or clearly indicated on referenced documents.

Windows	Product ID	Class	Frame	U value	SHGC	Area M <sup>2</sup>	Detail
Double Low-E		Aluminium		3.1	0.39	As per plans	As per plans
Double Low-E		Aluminium		3.1	0.49	Sliding	Fixed
Double Low-E		Aluminium		4.3	0.47	As per plans	As per plans
Double Low-E		Aluminium		4.3	0.53	Sliding	Fixed
Single Low-E		Aluminium		5.4	0.49	As per plans	As per plans
Single Low-E		Aluminium		5.4	0.58	Sliding	Fixed

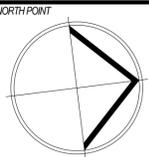
Doors	
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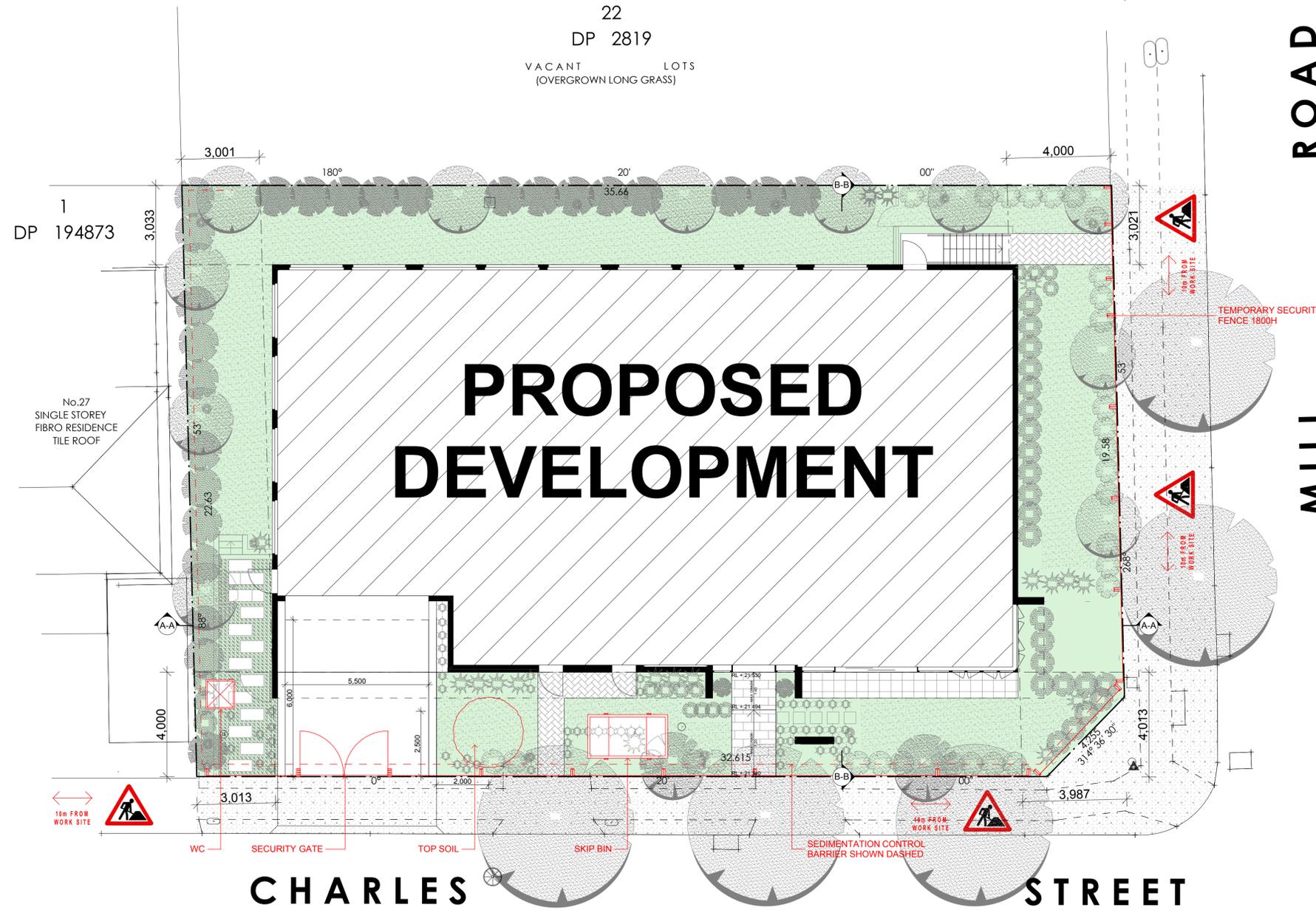




All work to be carried out in accordance with BCA AS 1546 conditions.  
 Copyright: The concepts & information contained in these drawings are the copyright of Idrift Group Pty Ltd. Use or duplication in part or in full without written permission of Idrift Group Pty Ltd constitutes an infringement of copyright. Do not scale off architectural drawings. These notes must be read in conjunction with current editions for additional details on appliances, FC items & shower screens shown on plan are made to dimensions shown on plan to be fitted in place of hot tub/bathrooms may be required to accommodate drainage lines & steel beams position to be determined on site. Use liquid dimensions (DL) do not scale. Finished ground levels shown on plans are subject to site conditions. All calculated dimensions are subject to site measure during construction & no allowance has been made for shrinkage or mixing position of electrical meter to be determined on site in accordance to the latest position from garden tap on meter.  
 Energy Smart Design: AAA rated water conservation devices include shower heads, shower heads, water tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

NOTES

REV	DATE	DESCRIPTION
REV 2	21/07/20	ISSUE
REV 1	21/07/20	REVISD CONCEPT BASED ON DRS AND PRE DA COMMENTS
		DRAWING DESCRIPTION



Sedimentation Control Plan LEVEL G  
 scale 1:100 Area: 30 m2

23-25 Charles Street, Liverpool



Nominated Architect  
 Member of the NSW Architects Registration Board (AR) 21568 (001) - www.idraft.com.au, PO Box 67, Liverpool NSW 2157

project:  
 Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP

client:  
 Hume Community Housing Council  
 Liverpool City Council

drawing title:  
**Sedimentation Control Plan**

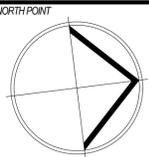
designed + drawn:  
 M. Trinh & P. Revollar

Issue/Stage:  
**DA - ISSUE A**

paper/scale:  
 A2/1:100

date:  
 10/12/2020

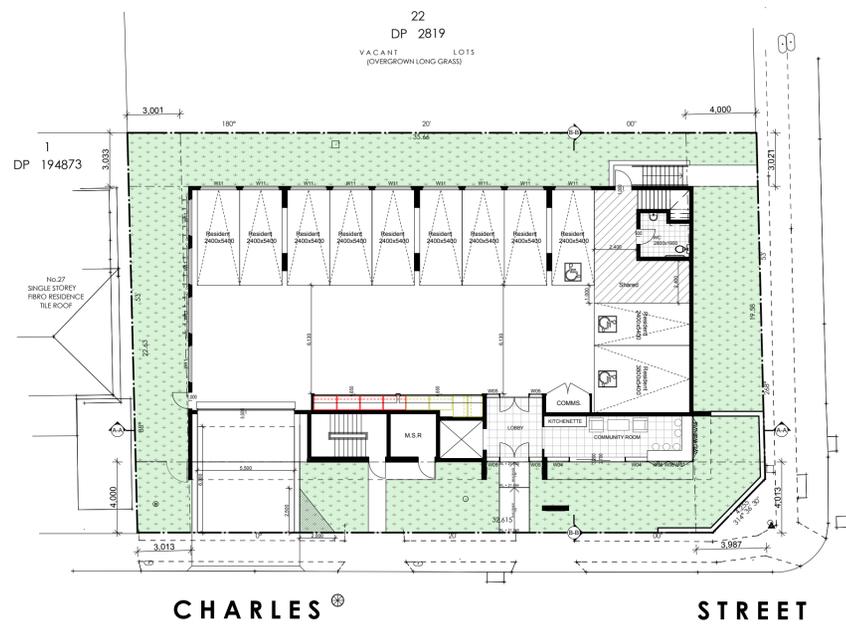
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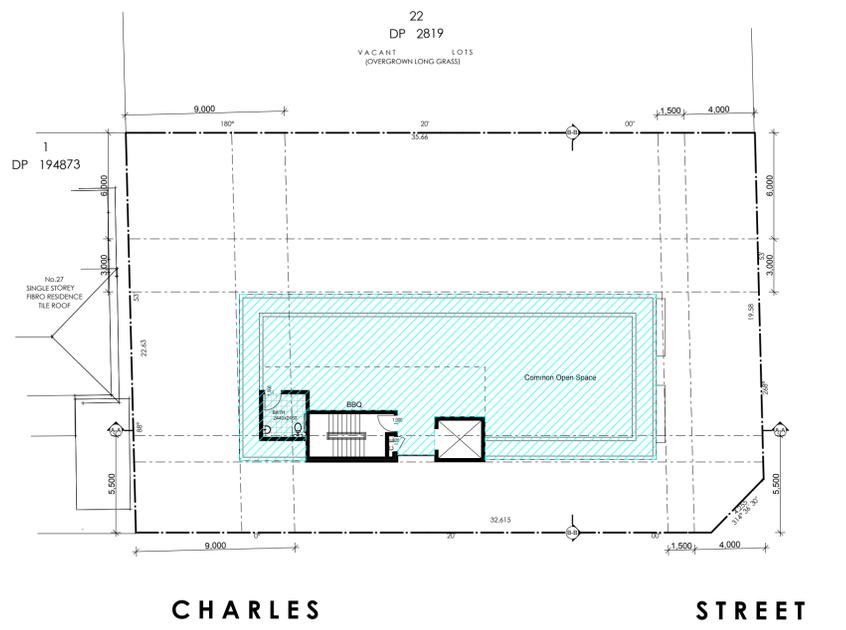
All work to be carried out in accordance with BCA AS 1538 conditions.  
 Copyright: The concepts & information contained in these drawings are the copyright of Idrift Group Pty Ltd. Use or duplication in part or in full without written permission of Idrift Group Pty Ltd constitutes an infringement of copyright. Do not scale off architectural drawings. These notes must be read in conjunction with current editions for additional details on appliances, FC items & shower seats shown on plan are made for construction shower screens to be fitted on inside of wall. (shower seats may be required to accommodate drainage lines & steel beams position to be determined on site. Use figure dimensions ONLY do not scale. Finished ground levels shown on plans are subject to site conditions, all calculated dimensions are subject to the measure during construction & no allowance has been made for wastage or milling position of electrical meter to be determined on site in accordance to the latest position from gaspin top on meter.  
 Energy Smart Design: AAA rated water conservation fixtures include: shower heads, shower basins, toilet, tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

NOTES

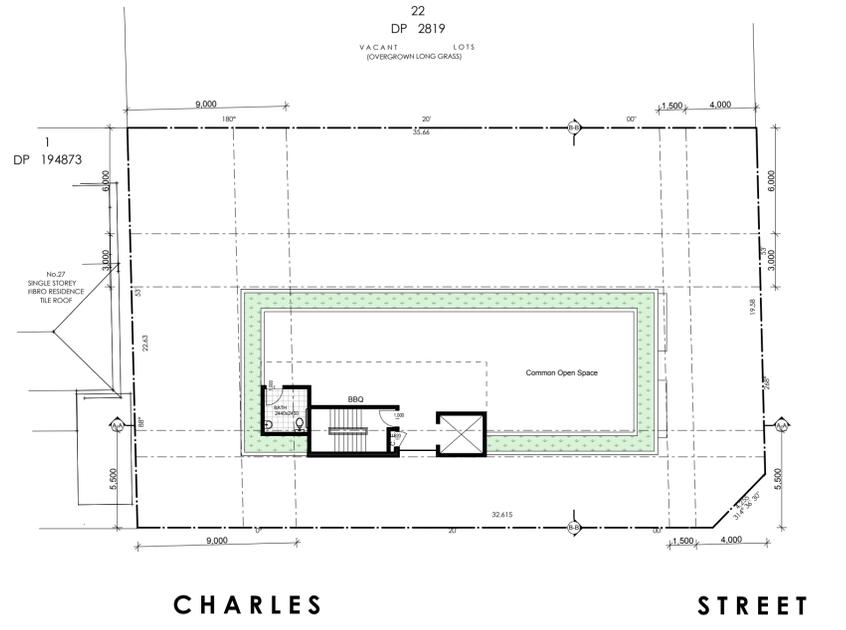
REV	DATE	DESCRIPTION
REV/2 <td>ISSUE <td></td> </td>	ISSUE <td></td>	
		REVISED CONCEPT BASED ON LDRP AND PRE-DA COMMENTS
		DRAWING DESCRIPTION



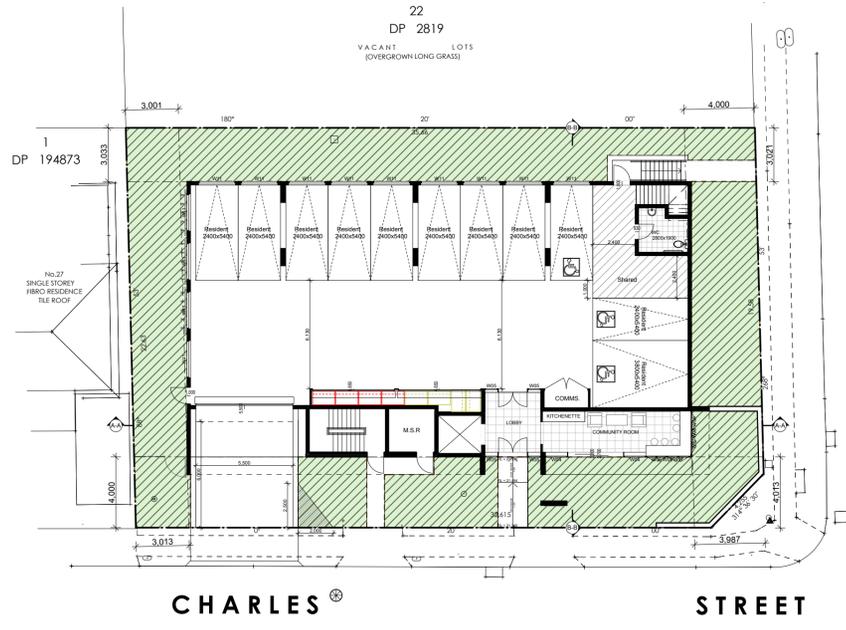
**Landscape Zone Plan - L0**  
 scale 1:200  
 Landscaping Area: 307 m<sup>2</sup>  
 Potential for Fully Accessible LHG - Silver level LHG - Platinum level



**COS - L8**  
 scale 1:200  
 Communal Open Space Area: 199 m<sup>2</sup>  
 Potential for Fully Accessible LHG - Silver level LHG - Platinum level



**Landscape Zone Plan - L8**  
 scale 1:200  
 Landscaping Area: 45 m<sup>2</sup>  
 Potential for Fully Accessible LHG - Silver level LHG - Platinum level



**Deep Soil Zone Plan - L0**  
 scale 1:200  
 Deep Soil Area: 307 m<sup>2</sup>  
 Potential for Fully Accessible LHG - Silver level LHG - Platinum level

23-25 Charles Street, Liverpool

**IDRAFT ARCHITECTS**  
 Nominated Architect  
 Member of the NSW Architects Registration Board  
 Project:  
 Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP  
 client:  
 Hume Community Housing Council  
 council  
 Liverpool City Council  
 drawing title:  
**Site Zones**  
 designed + drawn:  
 M. Trinh & P. Revollar  
 Issue/Stage:  
**DA - ISSUE A**  
 paper/scale:  
 A2/1:200  
 date:  
 10/12/2020  
 job #: 28705 dwg #: 0009













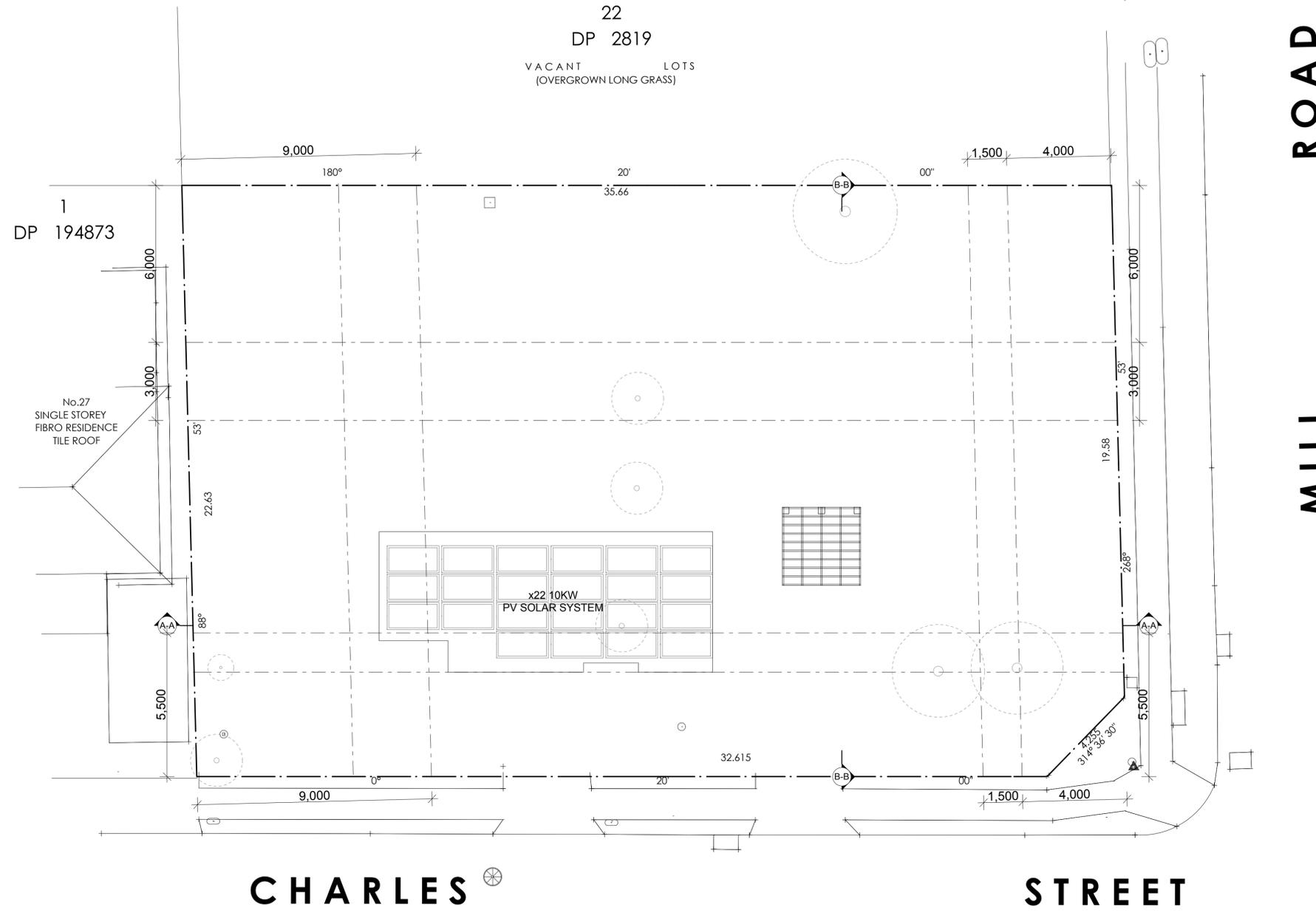












Roof  
scale 1:100

Potential for Fully Accessible   LHG - Silver level   LHG - Platinum level

NORTH POINT

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Energy Smart Design: AAA rated water conservation devices include shower heads, shower heads, toilet tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

NOTES

21/07/20	DATE	REVISED CONCEPT BASED ON LRP AND PRE DA COMMENTS	REV/2	ISSUE
		DRAWING DESCRIPTION		

**IDRAFT ARCHITECTS**  
Nominated Architect  
Nominating Member NSW Architects Registration Board (AR) 25966 (096) [www.idraft.com.au](http://www.idraft.com.au) PO Box 627, Liverpool NSW 2170

project:  
Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP

client:  
Hume Community Housing Council  
Liverpool City Council

drawing title:  
**Roof Plan**

designed + drawn:  
M. Trinh & P. Revollar

Issue/Stage:  
**DA - ISSUE A**

paper/scale:  
A2/1:100

date:  
10/12/2020

job #:  
28705

dwg #:  
1011

**23-25 Charles Street, Liverpool**

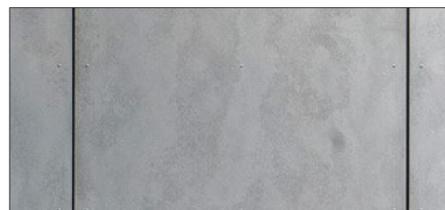








West Elevation  
scale 1:100



CEMINTEL CLADDING TO EXT. WALL & FEATURE BLADE WALL



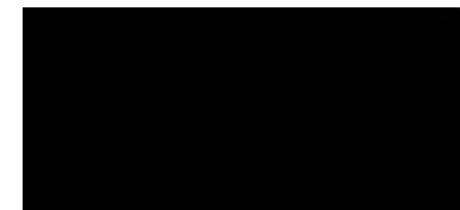
FACEBRICK - PGH - SANDSTOCKS BALMAIN TO EXT. WALLS



WHITE RENDER TO EXT. WALLS



COLORBOND WOODLAND GREY - METAL DECK ROOF & COLUMNS



COLORBOND NIGHT SKY - WINDOW & DOOR FRAMES

23-25 Charles Street, Liverpool

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Energy Smart Design: AAA rated water conservation devices include shower screens, shower heads, water tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

NOTES

REV	DATE	DESCRIPTION	REV	ISSUE
1	21/07/20	REVISED CONCEPT BASED ON LDRS AND PRE-DA COMMENTS		
2		DRAWING DESCRIPTION		

**IDRAFT ARCHITECTS**  
 Nominated Architect  
 Member Western NSW Architects Registration Board (WRNSW)  
 2/100 West Street, Liverpool NSW 2157  
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 www.idraft.com.au | PO Box 427, Liverpool NSW 2157

project:  
 Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP

client:  
 Hume Community Housing  
 council:  
 Liverpool City Council

drawing title:  
**West Elevation**

designed + drawn:  
 M. Trinh & P. Revollar

Issue/Stage:  
**DA - ISSUE A**

paper/scale:  
 A2/1:100

date:  
 10/12/2020

job #:  
 28705

dwg #:  
 2004







WINDOW SCHEDULE												
ID	W01	W02	W02	W03	W04	W05	W06	W07	W08	W08	W09	W10
NAME	W Awning 15	W Awning 15	W Awning 15	W Awning 15	W Direct Glazed 15	W Direct Glazed 15	W Double Sash 15	W Double Sash 15	W Direct Glazed 15	W Direct Glazed 15	W Awning 15	W Glass Block Wall 15
QUANTITY	43	1	41	14	2	4	2	2	1	2	6	9
HEIGHT	2,700	1,800	2,700	2,700	2,700	2,700	1,800	1,800	900	900	600	600
WIDTH	900	900	900	1,050	1,245	730	1,195	1,295	2,590	2,490	2,100	1,500
HEAD HEIGHT	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	900	900	2,700	2,700
SILL HEIGHT	0	900	0	0	0	0	900	900	0	0	2,100	2,100
PLAN												
ELEVATION												

DOOR SCHEDULE					
ID	D01	D02	D03	D04	D05
NAME	D2 Sliding 15				
QUANTITY	12	9	3	6	3
HEIGHT	2,700	2,700	2,700	2,700	2,700
WIDTH	3,250	3,000	2,700	1,800	1,480
PLAN					
ELEVATION					

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 Energy Smart Design: AAA rated water conservation fixtures include shower heads, shower tracks, water tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

NOTES

REV	DATE	DESCRIPTION	ISSUE
REV 2	21/07/20	REVISED CONCEPT BASED ON DRE AND PRE DA COMMENTS	ISSUE
		DRAWING DESCRIPTION	

**23-25 Charles Street, Liverpool**

**IDRAFT ARCHITECTS**  
 Nominated Architect  
 Member of the NSW Architects Registration Board (ARB)  
 2/266 West Street, Liverpool NSW 2157  
 Phone: 02 9339 4444 Fax: 02 9339 4444 Email: info@idraft.com.au  
 project:  
 Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP  
 client:  
 Hume Community Housing Council  
 council:  
 Liverpool City Council  
 drawing title:  
**Window & Door Schedule**  
 designed + drawn:  
 M. Trinh & P. Revollar  
 Issue/Stage:  
**DA - ISSUE A**  
 paper/scale:  
 A2/1:1  
 date:  
 10/12/2020  
 job #: 28705 dwg #: 4001



# SCHEDULE OF FEATURES FOR ADAPTABLE HOUSING

## ADAPTABLE HOUSE CLASS C

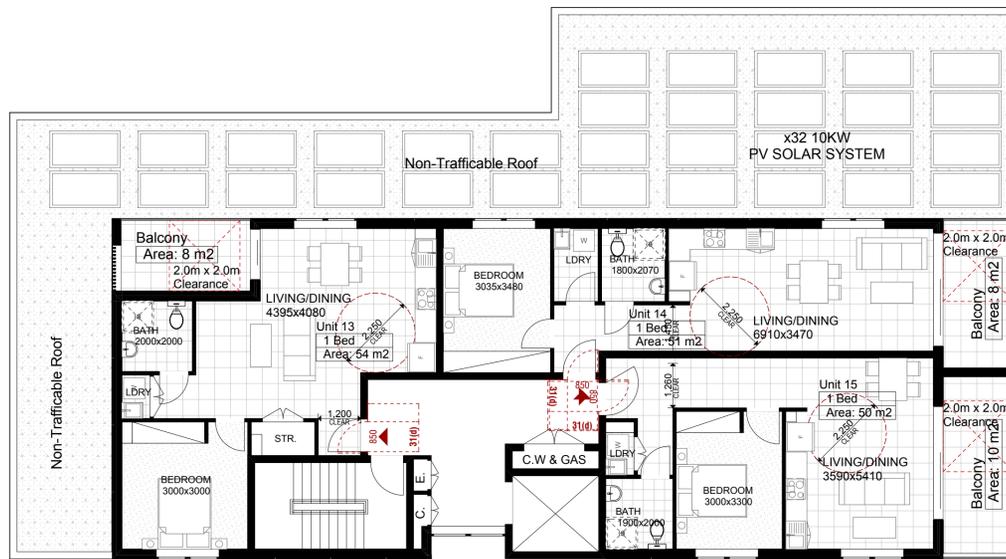
All essential features incorporated.

DRAWINGS	CLAUSE
1 Provision of drawings showing the housing unit in its pre-adaption and post-adaption stages SITING	2.3
3 A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1	3.3.2
11 LETTERBOXES IN ESTATE DEVELOPMENTS Letterboxes to be on hard standing area connected to accessible pathway PRIVATE CAR ACCOMMODATION	3.8
14 Carparking space or garage min. area 6.0m x 3.8m	3.7.2
20 ACCESSIBLE ENTRY	4.3.1
22 Accessible entry to be level (i.e. max. 1:40 slope)	4.3.2
23 Threshold to be low-level	4.3.2
24 Landing to enable wheelchair manoeuvrability	4.3.2
25 Accessible entry door to have 850mm min clearance	4.3.1
27 Door lever handles and hardware to AS 1428.1	4.3.4
32 INTERIOR GENERAL Internal doors to have 820 mm min clearance	4.3.3
33 Internal corridors min. width of 1000mm	4.3.7
34 Provision for compliance with AS 1428.1 for door approaches	4.3.7
36 LIVING ROOM & DINING ROOM Provision for circulation space of min 2250mm diameter	4.7.1
38 Telephone adjacent to GPO	4.7.4
41 Potential illumination level min 300 lux	4.10
42 KITCHEN Minimum width 2.7m (1550mm clear between benches)	4.5.2
43 Provision for circulation at doors to comply with AS 1428.1	4.5.1
44 Provision for benches planned to include at least one work surface of 800mm length, adjustable in height from 750mm to 850mm or replaceable. refer to Figure 4.8	4.5.5
45 Refrigerator adjacent to work surface	4.5.5
46 Kitchen sink adjustable to heights from 750mm to 850mm or replaceable	4.5.6
47 Kitchen sink bowl max 150mm deep	4.5.6
48 Tap set capstan or lever handles or lever mixer	4.5.6 (e)
49 Tap set located within 300mm of front of sink	4.5.6 (e)
51 Cooktops to include either front or side controls with raised cross bars	4.5.7
52 Cooktops to include isolation switch	4.5.7
53 Work surface min 800mm length adjacent to cooktop at same height	4.5.7
54 Oven located adjacent to an adjustable height or replaceable work surface	4.5.8
59 GPOs to comply with AS 1428.1. At least one double GPO with 300mm of front of work surface	4.5.11
60 GPO for refrigerator to be easily reachable when the refrigerator is in its operating position	4.5.11
61 Slip-resistant floor surface	4.5.4
62 MAIN BEDROOM At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS 1428.2	4.6.1
75 BATHROOM Provision for bathroom area to comply with AS 1428.1	4.4.1
76 Slip-resistant floor surface	4.4.2
77 Shower recess - no hob. Minimum size 1160 x 1100 to comply with AS 1428.1.	4.4.4 (f)
78 Shower area waterproofed to AS 3740 with floor to fall to waste	4.4.4 (f)
79 Recessed soap holder	4.4.4 (f)
80 Shower taps positioned for easy reach to access side of shower sliding track	4.4.4 (f)
82 Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall-strengthening provision)	4.4.4 (h)
83 Provision for grabrail in shower to comply with AS 1428.1	4.4.4 (h)
86 Tap sets to be capstan or lever handles with single outlet	4.4.4 (c)
88 Provision for washbasin with clearance to comply with AS 1428.1	4.4.4 (g)
90 Double GPO beside mirror	4.4.4 (d)
92 TOILET Provision of either 'visitable toilet' or accessible toilet	4.4.3
93 Provision to comply with AS 1428.1	4.4.1
94 Location of WC pan at correct distance from fixed walls	4.4.3
95 Provision for grab rail zone.	4.4.4 (h)
96 Slip resistant floor surface (Vitreous tiles or similar).	4.4.2
98 LAUNDRY Circulation at doors to comply with AS 1428.1	4.8
99 Provision for adequate circulation space in front of or beside appliances (min 1550 mm depth)	4.8
100 Provision for automatic washing machine	4.8 (e)
102 Where clothes line is provided an accessible path of travel to this	4.8 (a)
105 Double GPO	4.8 (g)
108 Slip-resistant floor surface	4.9.1
DOOR LOCKS	
110 Door hardware operable with one hand, located 900-1100mm above floor.	4.3.

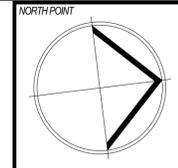
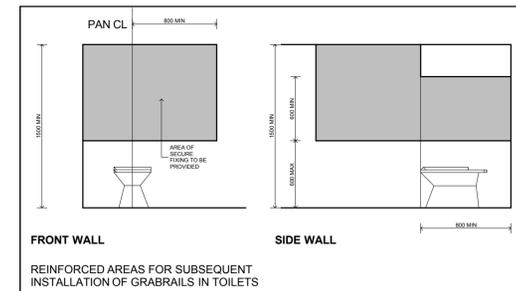
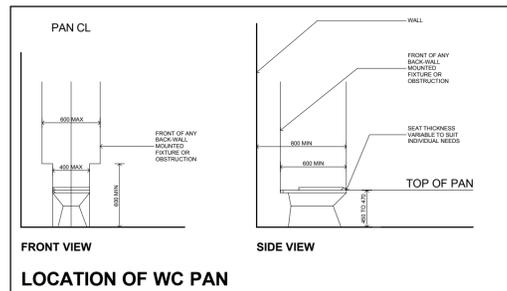
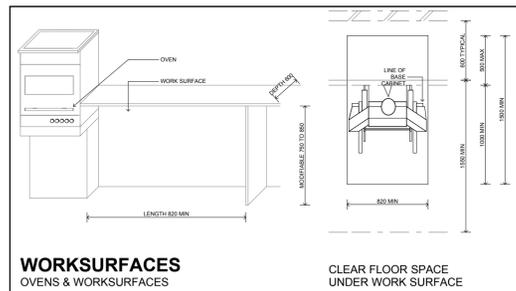
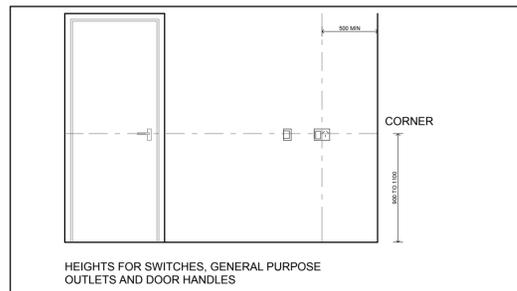
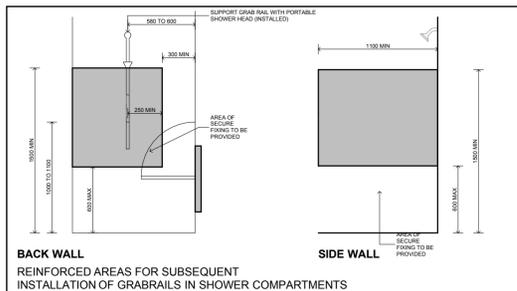
# TYPICAL L4 - L6 - ADAPTATION DETAILS

ADAPTABLE UNITS REQUIRED 10% - 3 UNITS

ADAPTABLE UNITS PROVIDED 10% - 3 UNITS (UNIT 01, UNIT 02, UNIT 05)



LEVEL 4  
Area: 176 m2



All work to be carried out in accordance with BCA, AS & Council conditions.  
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Energy Smart Design: AAA rated water conservation devices include rimless shower heads, water tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

REV	DATE	DESCRIPTION
REV/2 <td></td> <td>ISSUE</td>		ISSUE
		REVISED CONCEPT BASED ON DRE AND PRE-DA COMMENTS
		DRAWING DESCRIPTION
21/07/20		DATE

**23-25 Charles Street, Liverpool**

**IDRAFT ARCHITECTS**

Nominated Architect  
Member Western NSW Architects Registration Board (WNSWARB)  
2/100 West Street, Liverpool NSW 2157  
02 9608 0000  
www.idraft.com.au  
Project:  
Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP  
Client:  
Hume Community Housing Council  
Liverpool City Council  
Drawing title:  
Adaptation Details  
Typical L4 - L6  
Designed & drawn:  
M. Trinh & P. Revollar  
Issue/Stage:  
DA - ISSUE A  
Paper/Scale:  
A2/1:100  
Date:  
10/12/2020  
Job #:  
28705  
Dwg #:  
4003

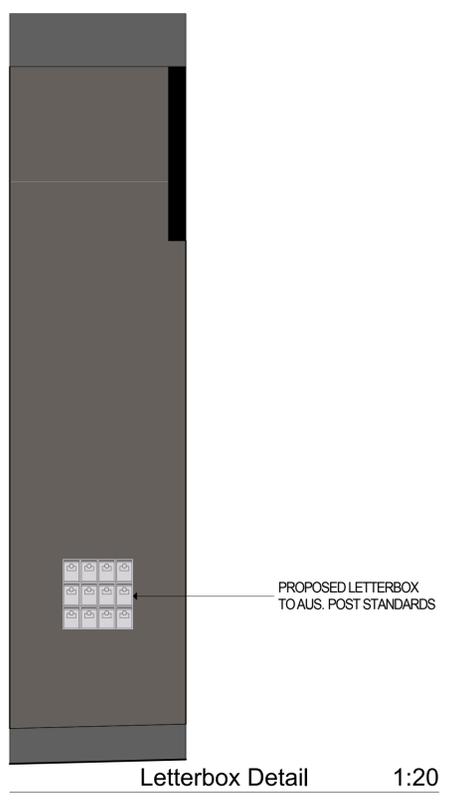
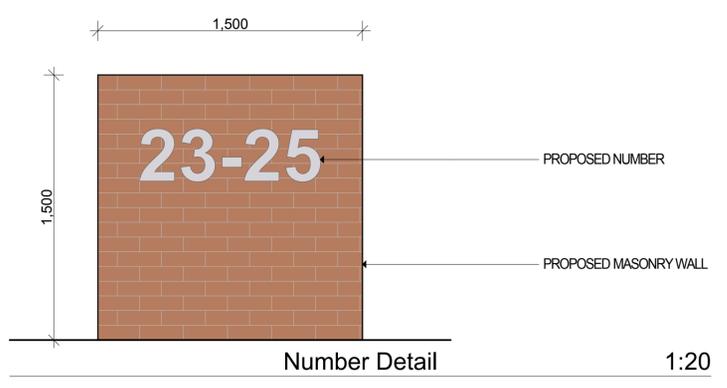
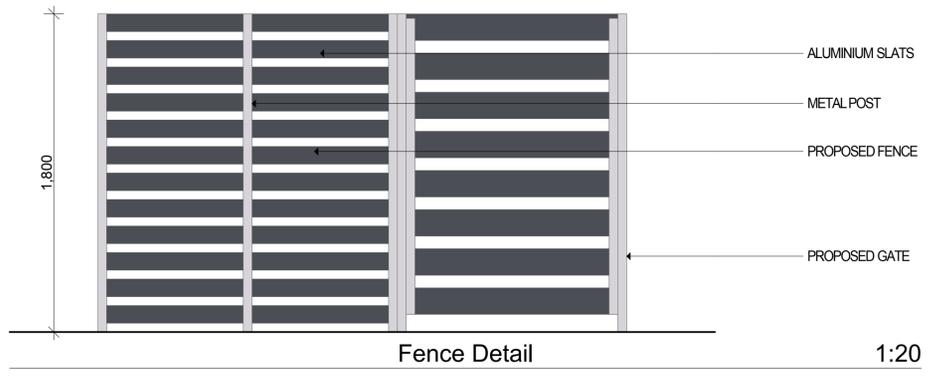












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 Energy Smart Design: AAA rated water conservation devices include rimless toilet shower heads, water tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

NOTES

REV	DATE	DESCRIPTION	ISSUE
2	21/07/20	REVISED CONCEPT BASED ON LDRS AND PRE-DA COMMENTS	ISSUE
1		DRAWING DESCRIPTION	

23-25 Charles Street, Liverpool

**IDRAFT ARCHITECTS**  
 Nominated Architect  
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project:  
 Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP

client:  
 Hume Community Housing Council  
 Liverpool City Council

drawing title:  
**Details**

designed + drawn:  
 M. Trinh & P. Revollar

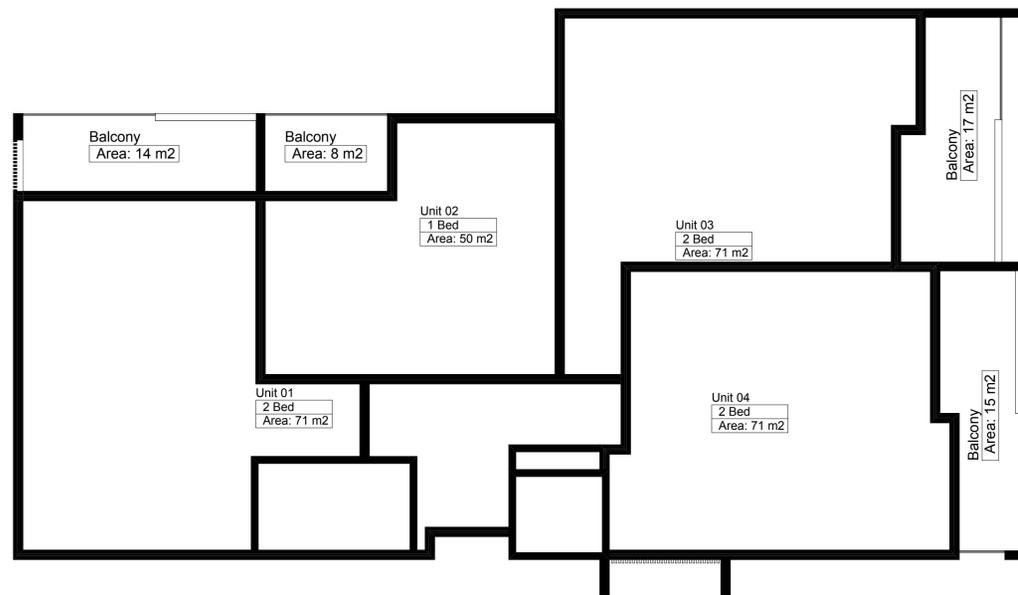
Issue/Stage:  
**DA - ISSUE A**

paper/scale:  
 A2/1:20

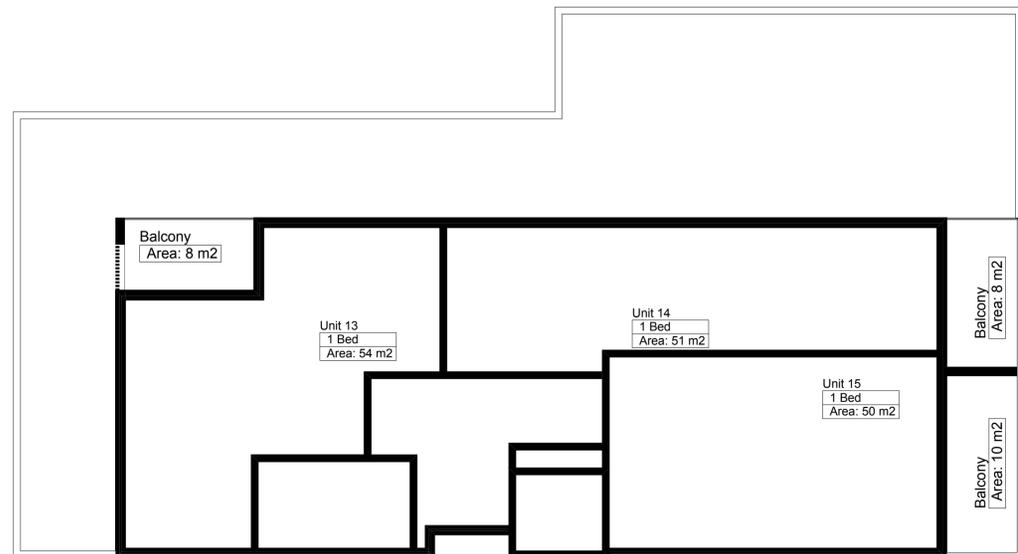
date:  
 10/12/2020

job #: 28705 dwg #: 4009

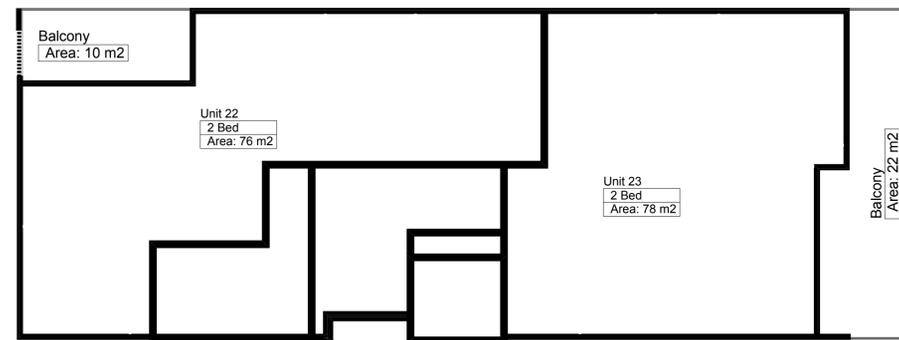




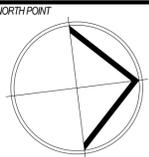
TYPICAL L1 - L3  
UNIT 01 - 12



TYPICAL L4 - L6  
UNIT 13 - 21



TYPICAL L7  
UNIT 22 & 23



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 Energy Smart Design: AAA rated water conservation devices include: rimless tanks, shower heads, water tap flow regulators, dual flush toilets & cisterns & compliant hot water systems with minimum green house score of 3.5 stars are to be used in this development. All occupants are encouraged to use AAA rated dish washing machines with front loading where possible.

NOTES

NO.	DATE	REVISION	ISSUE
	21/07/20	REVISED CONCEPT BASED ON DRA AND PRE-DA COMMENTS	
		DRAWING DESCRIPTION	

23-25 Charles Street, Liverpool



Nominated Architect  
 Member of the NSW Architects Registration Board (ARAB)  
 Project:  
 Demolition & construction of a eight (8) storey Residential development containing 23 units under ARHSEPP  
 client:  
 Hume Community Housing Council  
 council:  
 Liverpool City Council  
 drawing title:  
 Strata Subdivision Plan  
 designed + drawn:  
 M. Trinh & P. Revollar  
 Issue/Stage:  
 DA - ISSUE A  
 paper/scale:  
 A2/1:100  
 date:  
 10/12/2020  
 job #:  
 28705  
 dwg #:  
 4011