

# Waste Management Plan

Prepared by:

# DEM (Aust) Pty Ltd

on behalf of:

**Homes NSW** 

Project:

# 38 – 42 Gerathy Street, Goulburn General Housing Development

**Part 5 Submission** 



| Site Address:  | Applicant's Name:  |
|--|--|
| 38 – 42 Gerathy Street, Goulburn   | Homes NSW – Rod Garrett  |
| Lots 63, 64 & 65 in Deposited Plan 23679   |  |
| Building and other structures existing on site:  | Address:   |
| Three (3) single storey weatherboard houses with associated metal roofs on concrete slabs.   | 4 PSQ 12 Darcy Street, Parramatta NSW 2150   |
|  | Tel No. 0407 526 921 email.: Rodney.Garrett@homes.nsw.gov.au   |
| Description of Proposal:   |  |
| Fourteen (14) general housing units over two (2) storeys and consolidation into one single lot with on-grade car park. Associated landscape and civil works will also form part of the Part 5 application. | The details provided within this plan are indicative only and intended as a guide to<br>managing waste related to this project.<br>Final waste management procedures will be subject to selected building/civil<br>works contractor input/confirmation and final community housing provider<br>requirements. |

| Issue | Date       | Amendments              | Prepared by | Checked by | Signed |
|-------|------------|-------------------------|-------------|------------|--------|
| -01   | 14/01/2025 | Draft Part 5 Submission | ML          | ΨJ         | ΙW     |
| A01   | 28/02/2025 | Part 5 Submission       | ML          | ΨJ         | ΙW     |
|       |            |                         |             |            |        |



| Materials On-site                                  |                     | Re-use and Recycl  | Disposal   |   |  |
|--|---------------------|--|--|---|--|
| Type of MaterialEstimatedVolume (m³)TBC by builder |                     | On-site<br>Proposed Re-use of On-site Recycling Methods  | Off-site<br>Contractor and recycling outlet  | Contractor and landfill site  |  |
| Excavation<br>Material                             | 1090 m <sup>3</sup> | Keep and re-use topsoil for landscaping. Store on-site.<br>Use some behind retaining walls             | Expressions of interest will be sought<br>from contractors for acceptance of<br>certified fill as recyclable material.<br>Contractor and recycling outlet to be<br>confirmed | Excess excavated material not<br>recycled elsewhere will be<br>transported by a certified<br>contractor to an approved landfill<br>site to be confirmed |  |
| Green Waste  | 20 m³               | All trees noted on the landscape drawing that to be removed will be mulched and removed from the site. | Expressions of interest will be sought<br>from contractors, landscape<br>suppliers for acceptance of mulch<br>as recyclable material. Contractor<br>and recycling outlet TBC | Nil   |  |
| Bricks   | 15 m <sup>3</sup>   | Nil  | To be transported to a suitable<br>crushing plant. Contractor and<br>recycling plant to be confirmed   | Nit   |  |
| Concrete   | 20 m <sup>3</sup>   | Crush concrete for temporary driveway  | Remainder to be transported to a suitable crushing plant. Contractor and recycling plant to be confirmed   | Nil   |  |
| Timber   | 40 m <sup>3</sup>   | Re-use for formwork and studwork. Chip for use in landscaping  | Remainder to be transported to<br>suitable recycling yard for<br>reprocessing. Contractor and<br>recycling yard to be confirmed  | Nil   |  |
| Plasterboard                                       | 30 m <sup>3</sup>   | Nil  | To be transported to suitable recycling yard for reprocessing.   | Nil   |  |



|   |  | Destination   |   |  |  |  |
|---|--|---|---|--|--|--|
| Materials                                 | on-site                                    | Re-use and Recyc  | Disposal  |  |  |  |
| Type of Material                          | Estimated<br>Volume (m³)<br>TBC by builder | On-site<br>Proposed Re-use of On-site Recycling Methods | Off-site<br>Contractor and recycling outlet   | Contractor and landfill site   |  |  |
|   |  |   | Contractor and recycling yard to be confirmed   |  |  |  |
| Metals                                    | 70 m³                                      | Nil   | To be transported to suitable<br>recycling yard for reprocessing.<br>Contractor and recycling yard to be<br>confirmed | Nil  |  |  |
| Asbestos /<br>Hazardous<br>/special waste | N/A  | N/A   | N/A   | If found, asbestos to be<br>transported to an approved landfill<br>site by a certified contractor in<br>accordance with EPA requirements<br>and relevant Council and<br>Australian Standards |  |  |
| Other waste                               | N/A  | N/A   | N/A   | Excess material to be transported<br>to an approved landfill site by a<br>certified contractor   |  |  |

Note: Refer **Appendix 1** for on-site storage during demolition and construction



## **Construction Stage**

| Materials                          | s On-site                             | Re-use and Recycli  | Disposal   |  |
|------------------------------------|---------------------------------------|---|--|--|
| Type of Material                   | Estimated<br>Volume (m <sup>3</sup> ) | On-site<br>Proposed Re-use of On-site Recycling Methods   | Off-site<br>Contractor and recycling outlet  | Contractor and landfill site   |
| Detailed<br>Excavation<br>Material | TBC by builder                        | Detailed excavated material to be re-used on site as fill<br>and levelling materials under RC slabs and landscape<br>areas. |  | Excess material to be transported to an approved landfill site by a certified contractor |
| Green Waste                        | 0.3m <sup>3</sup>                     |   | Expressions of interest will be sought<br>from contractors, landscape<br>suppliers for acceptance of mulch<br>as recyclable material. Contractor<br>and recycling outlet TBC |  |
| Masonry                            | 2m³                                   |   | To be transported to a suitable<br>crushing plant. Contractor and<br>recycling plant to be confirmed   |  |
| Concrete                           | 1.5m <sup>3</sup>                     |   | To be transported to a suitable<br>crushing plant. Contractor and<br>recycling plant to be confirmed   |  |
| Timber                             | 0.3m <sup>3</sup>                     |   | Timber used on site would be mainly<br>for formwork. To be re-used on next<br>project by building sub-contractor   | Excess material to be transported to an approved landfill site by a certified contractor |
| Plasterboard /<br>Fibre Cement     | 0.7m³                                 |   | To be transported to suitable<br>recycling yard for reprocessing.<br>Contractor and recycling yard to be<br>confirmed  |  |



# **Construction Stage**

| Materials On-site                                   |                   | Re-use and Recyc  | Disposal  |  |  |
|---|-------------------|---|---|--|--|
| Type of Material Estimated Volume (m <sup>3</sup> ) |                   | On-site<br>Proposed Re-use of On-site Recycling Methods                       | Off-site<br>Contractor and recycling outlet   | Contractor and landfill site   |  |
| Glass   | Nil               | Windows manufactured off site to predetermined openings – no wastage expected |   | Excess material to be transported to an approved landfill site by a certified contractor   |  |
| Metals  | 0.7m <sup>3</sup> |   | Metal off-cuts to be transported to<br>suitable recycling yard for<br>reprocessing. Contractor and<br>recycling plant to be confirmed |  |  |
| Paper and<br>Cardboard                              | 0.7m <sup>3</sup> |   | Arrangements to be made by builder<br>to transfer material to accredited<br>recycling site  | Arrangements to be made by builder to transfer material to accredited recycling site   |  |
| Other Waste   | 0.3m³             |   |   | Excess material to be transported<br>to an approved landfill site by a<br>certified contractor   |  |
| Hazardous<br>/special waste                         | N/A               |   |   | If found, to be transported to an<br>approved landfill site by a certified<br>contractor in accordance with EPA<br>requirements and relevant Council<br>and Australian Standards |  |

Note: Refer Appendix 1 for on-site storage during demolition and construction



#### **Construction Stage**

#### **Construction design**

The following measures have been incorporated into the design to minimise construction waste.

Design and order only what you need

- Walls and openings setout to brick dimensions to avoid cutting and reduce construction time
- Walls to be face brick or compressed pre-finished FC cladding to minimise ongoing maintenance and to compliment adjacent buildings
- Standardise external door and window sizes (minimise the number of window and door types)
- Pre-finished feature facade cladding fabricated offsite with pre-cut profiled prefinished metal profile
- Steel framing/plasterboard lining proposed for internal wall partitions to units
- Negotiate with suppliers to take back unused materials, packaging or offcuts
- Provide separate waste containers for recycling if space permits on site.

#### Lifecycle

- Materials to be used in the project are ecological sustainable and exhibit good to excellent environmental qualities
- The chart below highlights the ecological sustainability of the materials chosen

| Ecological sustainability of building materials |                              |                                    |                               |                  |                             |                             |                           |
|---|------------------------------|------------------------------------|-------------------------------|------------------|-----------------------------|-----------------------------|---------------------------|
| Materials                                       | Environmental factors        |                                    |                               |                  |                             |                             |                           |
|   | Raw material<br>availability | Minimal<br>environmental<br>impact | Embodied energy<br>efficiency | Product lifespan | Freedom from<br>maintenance | Potential for product reuse | Material<br>recyclability |
| Aluminium                                       | Very good                    | Poor                               | Fair                          | Excellent        | Very good                   | Very good                   | Excellent                 |
| Concrete and concrete products                  | Good                         | Good                               | Very good                     | Excellent        | Excellent                   | Poor                        | Very good                 |
| Plasterboard                                    | Very good                    | Fair                               | Very good                     | Good             | Fair                        | Poor                        | Good                      |
| Steel   | Very good                    | Fair                               | Fair                          | Very good        | Fair                        | Fair                        | Very good                 |
| Glass   | Good                         | Good                               | Good                          | Excellent        | Very good                   | Good                        | Very good                 |
| Timber  | Very good                    | Very good                          | Very good                     | Very good        | Fair                        | Fair                        | Fair                      |





| Type of Waste to be Generated   | Expected volume per<br>week, number and size of<br>bins   | Proposed on-site Storage and Waste Management<br>Strategy   | Destination and contractor   |
|---|---|---|--|
| GENERAL WASTE<br>Generation rates for Residential Flat<br>Buildings per week are:<br>80 litres per 1 Bed unit<br>100 litres per 2 Bed unit<br>Collection: Weekly<br>Waste includes soft plastics, nappies,<br>hoses, takeaway coffee cups,<br>drinkware and crockery.<br>Items that cannot go into general<br>waste bin:<br>Food waste<br>Garden waste, recyclable<br>items<br>Batteries, light globes, mobile<br>phones<br>Hazardous material<br>Motor oil | Required No. of 140L Red<br>Bins as per EPA:<br>80 litres x 6 Units<br>= 480 litres / 140L<br>= 3.4 Bins<br>100 litres x 8 Units<br>= 800 litres / 140L<br>= 5.7 Bins<br>= 10 Bins<br>Proposed/Total No. of<br>140L Red Bins in Garbage<br>Room:<br>= 10 Bins | Communal waste and recycling storage area will be located<br>on the ground level and conveniently located in close<br>proximity and easy access to the users, Signage will clearly<br>define the recyclable areas within the storage facility.<br>The area will be constructed in accordance with BCA and<br>Council requirements. The floor waste will drain to the<br>sewer. Bin washing facilities will also be provided.<br>The waste generation rate is based on the NSW EPA "Better<br>Practice Guide for Resource Recovery in Residential<br>Developments".<br>The garbage rooms are located approximately 30m away<br>from the kerb for pick up on collection days.<br>Garbage chute is not provided as requested by Homes NSW<br>due to pass experience of on-going maintenance and<br>management issues.<br>Along Gerathy street, loading signs will be installed to allow<br>kerb side pickup arrangement. | Bins to be placed out for kerbside<br>collection on designated collection<br>day.<br>Refer <b>Appendix 2</b> for communal<br>storage locations and <b>Appendix 3</b><br>for collection area. |





| Type of Waste to be Generated  | Expected volume per<br>week, number and size of<br>bins   | Proposed on-site Storage and Waste Management<br>Strategy  | Destination and contractor   |
|--|---|--|--|
| RECYCLING<br>Generation rates for Residential Flat<br>Buildings per week are:<br>• 80 litres per 1 Bed unit<br>• 100 litres per 2 Bed unit<br>Collection: Fortnightly<br>Recyclable bin can be used for the<br>following recyclables:<br>- Paper & carboard<br>- Glass bottles & Cans<br>- Aluminium foil<br>- Milk & juice cartons<br>- Hard plastics marked 1 to 5<br>Items that cannot go into recycling<br>bin:<br>- Plastic bags & soft plastics<br>- Polystyrene/ foam<br>- Takeaways coffee cups<br>- Crockery<br>- Broken glass<br>- Food<br>- Nappies<br>- Batteries, light globes, mobile<br>phones<br>- Hazardous material<br>- Motor oil | Required No. of 240L<br>Yellow Bins as per EPA:<br>80 litres x 6 Units<br>= 480 litres / 240L<br>= 2 Bins x 2 (Fortnightly)<br>= 4 Bins<br>100 litres x 8 Units<br>= 800 litres / 240L<br>= 3.3 Bins x 2 (Fortnightly)<br>= 6.6 Bins<br>Total = 10.6 Bins<br>Proposed/Total No. of<br>240L Yellow Bins in<br>Garbage Room:<br>= 11 Bins | Communal waste and recycling storage area will be located<br>on the ground level and conveniently located in close<br>proximity and easy access to the users, Signage will clearly<br>define the recyclable areas within the storage facility.<br>The area will be constructed in accordance with BCA and<br>Council requirements. The floor waste will drain to the<br>sewer. Bin washing facilities will also be provided.<br>The waste generation rate is based on the NSW EPA "Better<br>Practice Guide for Resource Recovery in Residential<br>Developments".<br>The garbage rooms are located approximately 30m away<br>from the kerb for pick up on collection days<br>Garbage chute is not provided as requested by Homes NSW<br>due to pass experience of on-going maintenance and<br>management issues.<br>Along Gerathy street, loading signs will be installed to allow<br>kerb side pickup arrangement. | Bins to be placed out for kerbside<br>collection on designated collection<br>day.<br>Refer <b>Appendix 2</b> for communal<br>storage locations and <b>Appendix 3</b><br>for collection area. |





| Type of Waste to be Generated   | Expected volume per<br>week, number and size of<br>bins   | Proposed on-site Storage and Waste Management<br>Strategy   | Destination and contractor   |
|---|---|---|--|
| ORGANIC WASTE<br>Generation rates for Residential Flat<br>Buildings per week are:<br>• 25 litres per 1 Bed unit<br>• 25 litres per 2 Bed unit<br>Collection: Fortnightly<br>Organic waste bin can be used for:<br>- Any raw or cooked food,   | binsRequired No. of 240L<br>Green Bins as per EPA:25 litres x 14 Units= 700 litres / 240L= 3 BinsProposed/Total No. of<br>240L Green Bins in<br>Garbage Room:= 3 Bins | Communal waste and recycling storage area will be located<br>on the ground level and conveniently located in close<br>proximity and easy access to the users, Signage will clearly<br>define the recyclable areas within the storage facility.<br>The area will be constructed in accordance with BCA and<br>Council requirements. The floor waste will drain to the<br>sewer. Bin washing facilities will also be provided.<br>The waste generation rate is based on the NSW EPA "Better<br>Practice Guide for Resource Recovery in Residential<br>Developments".<br>Garbage area is located approximate 30m away from the<br>korb for pick up on collection days. | Bins to be placed out for kerbside<br>collection on designated collection<br>day.<br>Refer <b>Appendix 2</b> for communal<br>storage locations and <b>Appendix 3</b><br>for collection area. |
| <ul> <li>leftover food (no containers)</li> <li>Fruit &amp; vegetables</li> <li>Dairy &amp; eggshells</li> <li>Paper towels &amp; used tissue</li> <li>Leaves, weeds, prunings,<br/>flowers, twigs, small<br/>branches</li> <li>Items that cannot go into organic<br/>waste bin: <ul> <li>Garbage</li> <li>Recyclables</li> <li>Plastic bags &amp; soft plastics</li> <li>Plant pots</li> <li>Hoses</li> <li>Polystyrene/ foam</li> </ul> </li> </ul> |   | kerb for pick up on collection days.<br>Garbage chute is not provided as requested by Homes NSW<br>due to pass experience of on-going maintenance and<br>management issues.<br>Along Gerathy street, loading signs will be installed to allow<br>kerb side pickup arrangement.<br>Homes NSW to engage private contractor to manage the<br>landscaping of the development and removal of any green<br>waste from the site after gardening/ landscape<br>maintenance works.   |  |



# **Design of Facilities**

| Type of Waste to be Generated     | Expected volume per<br>week, number and size of<br>bins | Proposed on-site Storage and Waste Management<br>Strategy | Destination and contractor |
|-----------------------------------|---|---|----------------------------|
| - Takeaways coffee cups           |   |   |                            |
| - Crockery                        |   |   |                            |
| - Broken glass                    |   |   |                            |
| - Nappies                         |   |   |                            |
| - Batteries, light globes, mobile |   |   |                            |
| phones                            |   |   |                            |
| - Hazardous material              |   |   |                            |
| - Motor oil                       |   |   |                            |

#### **On-going Management**

#### **On-going Management of Waste On-site**

Residents will be instructed by way of a Waste Management Information Pack provided by Homes NSW, outlining how to recycle and use the bins that are to be stored in the garbage areas located on ground level. The information pack will also inform residents of proposed collection days and alert them to the fact that the designated loading bay or kerb side loading will be occupied at certain time. In addition, Residents are to refer council webpage for information that related to bin collection day and requirement.

Refer **Appendix 2** for specification and proposed layout of the garbage area.

Refer Appendix 3 for path to kerbside collection area.

Residents will be responsible for disposing of their daily waste and recycling by placing it in the clearly marked bins within the garbage areas located on ground level. The garbage areas are in close proximity to the units to provide ready and easy access for the residents. Signage will clearly define the waste areas and recyclable areas within the garbage room facility with clear instructions on how to use the facilities.

The bins in garbage area will be collected by a contractor through prior arrangement with Homes NSW before Council pickup on the designated collection days. The bins will be wheeled manually from the area to the kerb for pickup. The contractor will also be responsible for washing and returning the bins to garbage rooms immediately after collection. They will also be responsible for removing, emptying and replacing the garbage, recycling, and organics bins from garbage rooms.

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#### Appendices

Appendix 1 - On site waste management during demolition and construction phase

- Contractor to provide staff training.
- Signs are clearly labelled at the location where the waste is stored.
- For detailed sediment control plan refer to civil drawings prepared by ENTEC Consultants Pty Ltd.



38 - 42 Gerathy Street, Goulburn - General Housing Development

#### Waste Management Plan

#### **Appendices**

#### Appendix 2 – Common Waste Storage Area





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#### Floor

- Concrete- towelled to a smooth and even surface with fall to waste connected to sewer.
- Waste to be fitted with an approved infloor dry basket arrestor.

#### Walls

- 450mm high brick wall with Aluminium batten screening on top.
- Natural ventilation is provided.

#### **Roof/Ceiling**

- Metal roof with 3 degree fall.
- FC (Fibre Cement) ceiling with paint finish.

#### Services

- Cold and hot water mixed tap and hose connection.
- Artificial lighting with sensor control is provided.

#### Sign

• Clear signage describing how to use the waste facilities correctly.



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