Waste and Recycling Management Plan
Armidale Secondary College

Armidale, NSW

Prepared for:
NBRS Architecture

Prepared by:
MEtech Consulting Pty Ltd

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This document is issued in confidence to NBRS Architecture for the purposes of providing a Waste and Recycling Management Plan for the Armidale Secondary College located at Butler Street, Armidale, NSW, limited to the scope and objectives as outlined in Section 1. It must not be used for any other purpose.

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1 Introduction

1.1 Preamble

MEtech Consulting Pty Ltd was commissioned to prepare a Waste and Recycling Management Plan (WMP) for the Armidale Secondary College Project.

The Department of Education (DoE) has engaged NBRS Architecture as Head Design Consultant for the Armidale Secondary College Project. The project will consolidate the students from Armidale High School and Duval High School on the Armidale High School site located at Butler Street, Armidale, NSW (hereafter referred to as "the Site").

The location of the Site is shown in **Figure 1** with the existing site layout shown in **Figure 2**.

Broadly, the redevelopment comprises the construction of new, larger school buildings to accommodate both schools and allow for future growth.

It is understood that the project will have a capital investment value over $20 million and therefore has been classified as State Significant Development (SSD). SSD projects require the preparation of an Environmental Impact Statement (EIS).

It is understood that as part of the Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the redevelopment, the NSW Department of Planning and Environment have required that a Waste Management Plan (WMP) be developed for the Site.

This WMP has been prepared to address the requirements of the SEARs for inclusion as part of the EIS as well as SSD condition B24.

1.2 Scope

This WMP applies to the overall construction and on-going operation of the project.

This WMP has been prepared making reference to architectural drawings supplied by NBRS Architecture (Ref. 17352 – NBRS-DA-082 Rev 1, 10 October 2018).

This WMP has been divided into Design and Management (refer **Section 3**), and Generation and Avoidance (refer **Section 4**).

1.3 Objectives

The objectives of this WMP are to:

- Identify potential wastes likely to be generated at the Site during the construction and operational phases of the redevelopment, including a description of how waste would be handled, processed and disposed of (or re-used/recycled), in accordance with local and State requirements;
- Encourage the minimisation of waste production and maximisation of resource recovery;
- Ensure the appropriate management of contaminated/hazardous waste;
- Identify procedures and chain of custody records for waste management; and
- Assist in ensuring that any environmental impacts during the development comply with the requirements of NSW Department of Planning and Environment and other relevant authorities.

1.4 Project Description

The overall project scope is for an upgrade and expansion of the current Armidale High School including the addition of new teaching spaces and upgrades to core facilities. The project will consolidate the students from Armidale High School and Duval High School. The redeveloped Armidale Secondary College will accommodate 110 full-time equivalent staff and 1580 students (an increase of 1000).

The Site contains the 'Armidale High School – Original Circa 1921, 2-Storey Building, Grounds' heritage item, as listed on the NSW State Heritage Inventory (refer **Figure 2**). It is proposed to retain the structure of the building and redevelop the interior of the building with an all-new fit out.

The proposed development will comprise: three new buildings forming an arc around the heritage-listed building; new games courts; an extension to the existing gymnasium; and re-landscaping of the area surrounding the new buildings (refer **Figure 3**).

Demolition of the existing building and preliminary construction are to take place prior to the works addressed in this WMP. Waste minimisation strategies for this phase of works are outlined in *Waste Management Plan: Early Works, Armidale Secondary College, Armidale, NSW* (MEtech Consulting, 2018).

2 Waste Management and Recycling

2.1 Waste Management Hierarchy

This WMP aims to meet the principles of the waste management hierarchy by promoting waste as a resource through the following in order of preference:

- *Waste avoidance* through prevention or reduction of waste generation. Noting that waste avoidance is best achieved through better design and purchasing choices.
- *Waste reuse*, without substantially changing the form of waste.
- *Waste recycling* through the treatment of waste that is no longer usable in its current form to produce new products.
- *Energy recovery* through thermal treatment of residual waste materials and from green waste processing.
- *Waste disposal*, in a manner that causes the least harm to the natural environment.

2.2 Benefits of Implementing Better Practice for Waste Management and Recycling

The primary benefits of implementing a WMP strategy include:

- Enhanced social and environmental reputation of an organisation;
- Reduced costs associated with waste disposal;
- Benefits to all stakeholders and the wider community; and
- Improved environmental outcomes.

2.3 Waste Legislation and Guidance

The legislation and guidance outlined in **Table 2.1** forms the basis for the waste management strategies and requirements outlined in this WMP.

Table 2.1: Waste Legislation and Guidance

Legislation	Objectives
Waste Avoidance and Resource Recovery Act 2001	To promote extended producer responsibility in place of industry waste reduction plans. Specific objectives include: • To encourage efficient use of resources. • To minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste. • To ensure that industry shares with the community the responsibility for reducing and dealing with waste. • To ensure the efficient funding of waste and resource management planning, programs and service delivery.
Protection of the Environment Operations Act (POEO) 1997 & Amendment Act 2011	Administered by the Environmental Protection Authority (EPA) to enable the Government to establish instruments for setting environmental standards, goals, protocols and guidelines. *Important note*: The owner of a premises, the employer or any person carrying on the activity which causes a pollution incident is to immediately notify the relevant authorities. A list of each relevant authority is provided in the POEO Amendment Act and will be noted in the Site's incident register.
POEO (Waste) Regulation 2014	Contains provisions relating to the waste levy, waste tracking, management requirements for certain waste types, payment schemes for councils, consumer packaging recycling and other miscellaneous provisions.
NSW EPA's Waste Classification Guidelines (Part 1) 2014	To assist waste generators to effectively classify, manage, treat and dispose of waste to ensure the environmental and human health risks associated with waste are managed appropriately and in accordance with the POEO Act and is associated regulations.
Building Code of Australia (BCA) and relevant Australian Standards (AS)	The BCA (and AS) have the aim of achieving nationally consistent, minimum necessary standards of relevant health and safety, amenity and sustainability objectives efficiently.
EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012	The NSW EPA's Better Practice Guidelines 2012 provides advice to help architects, developers, council staff and building managers to incorporate better waste management practice into the design, establishment, operation and ongoing management of waste services in commercial and industrial developments.
NSW EPA's Waste Avoidance and Resource Recovery (WARR) Strategy 2014-21	A key component of the State Government's vision for the environmental and economic future of the state that will be supported financially by the *Waste Less, Recycle More* funding initiative providing long-term targets for 6 key result areas including reduced illegal dumping.

3 Design and Operation

This section outlines waste considerations in the design of the development and addresses operational waste management considerations, including arrangements for ongoing waste service collection.

3.1 Construction Design

Facilities for garbage and recycling are essential aspects of a building that are often overlooked. A small amount of planning in the design stage saves a great deal of difficulty and inconvenience for future occupiers, building managers and collection crews throughout the future life of the building.

The proposed development is designed to generate comparatively small amounts of waste and minimise off-site disposal. It is intended that much of the new works will utilize prefabricated components and finishes to minimise waste that would typically be produced in a traditional onsite construction process. When off-site disposal is required, it will be done so with careful consideration of any reuse or recycling opportunities (outlined in **Section 4.6**).

The following have been considered in the design of the proposed development:

- The appropriate location of waste management facilities.
- Design to standard material sizes to reduce potential generation of waste.
- Use of pre-cut/prefabricated material.
- Use of basic designs to reduce the need for off-cuts.
- Use of resource efficient building materials.
- Use of glazed windows to improve thermal performance and reduce energy input.
- Potential re-use off-cuts in building design.

3.2 Ongoing Management

The proposed development is a secondary education facility with capacity for up to 1,580 students. This section outlines typical waste generation rates that may be experienced during active school year and relevant waste management procedures to accommodate.

Upon redevelopment, Armidale Secondary College should adhere to the WMP for compliance, in consultation with direction from the Management's Representative (refer **Section 3.2.5**).

3.2.1 Operational Waste Generation Rates

The NSW EPA's *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* provides estimates for waste generation rates based on types of premises.

The guidelines do not provide generation rates for high schools. However based on an evaluation of the proposed development and with reference to the parameters of the premise types identified in these guidelines, the following comparison premises have been adopted for this WMP:

- Primary education.

- Tertiary education.
- Offices.

Details of the estimated waste generation rates for each type of premise are outlined in **Table 3.1**.

Table 3.1: Guideline Waste Generation Rates

Type of Premises	Average L per 100 m^2 per Week [A]		Maximum L per 100 m^2 per Week [A]	
	Waste Generation	Recycling Generation	Waste Generation	Recycling Generation
Primary education	35	0	35	0
Tertiary education	125	15	200	35
Offices	40	30	80	60

A. Guideline waste generation rates are reported per day. Guideline rates have been multiplied by a factor of 5 to estimate weekly generation rates.

Reported waste generation rates from the current Armidale High School, as well as examples of reported waste generation rates from other schools in NSW, were also considered, as outlined in **Table 3.2.**

Table 3.2: Examples of Comparable School Waste Generation Rates

School	Students (Approx.)	Estimated Maximum L per Week [A]		Estimated Maximum L per Week per Student	
		Waste Generation	Recycling Generation	Waste Generation	Recycling Generation
Existing Armidale High School	700	5,750	750 + 840 = 1,590 [B]	8.21	2.27
Parramatta Public School [C]	600	6,000	2,400	10.0	4.00
Parramatta High School [C]	1600	15,000	3,360	9.38	2.10

A. Based on reported waste bin sizes and collection frequencies.
B. Sum of various recycling streams. Armidale High school currently employs multiple collection services, including community initiatives such as Challenge community recycling services and commercial recycling collection.
C. The Mack Group Waste Management Consultants, 11 October 2017, *Waste Management Plan (WMP) for Operational Waste – General Waste and Recyclable Waste DA Submission – Quakers East Hill Public School*.

3.2.2 Estimation of Operational Waste Volumes

The proposed development is a secondary education facility with capacity for up to 1,580 students and a total floor area of approximately 16,890 m^2.

With reference to the guideline waste generation rates provided in **Table 3.1** and the comparable school waste generation rates in **Table 3.2** it is estimated that the waste generation will likely fall somewhere between those provided for tertiary and primary education.

Based on the proposed student capacity and floor areas provided for the development, an estimate of typical weekly waste generation volumes for the proposed development are provided below in **Table 3.3**.

Table 3.3: Anticipated Operational Waste Generation Rates

School	Anticipated Size		Estimated Maximum L per Week	
	Students (capacity)	Total Floor Area (m^2)	Waste Generation	Recycling Generation
Armidale Secondary College	1,580	16,890	14,500	4,100

Note: All waste generation rates are approximate only.

3.2.3 Waste and Recycling Storage

The proposed development is to include designated waste and recycling storage areas designed in accordance with Appendix F (Waste Management Plan Checklists - Design Phase) of the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities*.

Space is to be provided for the storage of all waste and recycling generated by the development in the designated bin areas.

The proposed areas for waste storage during the ongoing use of the premises are shown in **Figure 3** with the proposed areas for waste storage during the construction phase shown in **Figure 4**.

Interim waste storage locations will comprise small bins placed throughout the school. A schoolgrounds caretaker or nominated waste collector will collect and transport this waste to the central waste enclosure, that is open to the sky, located adjacent to the agriculture loading zone, shown in **Figure 3**.

The waste/recycling storage areas must be designed to accommodate bins that are of sufficient volume to contain the estimated quantity of waste generated between collections (refer **Table 3.2**).

Table 3.4 offers suggested bin arrangements that are of sufficient volume to contain the estimated quantities of waste generated in between collection times (see **Table 3.4**) in typical conditions.

Table 3.4: Suggested Bin Arrangements

Suggested Type of Bin	Bin footprints	Total bin storage area required	Area required considering maneuvering space
Garbage: 3 x $3m^2$ Recycling: • Commercial: 1 x $3m^2$	$3m^3$ - $2.7m^2$	Garbage: $8.1m^2$ Recycling: $2.7m^2$	($8.1m^2$ + $2.7m^2$) x 2 = $21.6m^2$
Recycling: • Challenge (community initiative): 6 x 240L	240L – $0.43m^2$	Recycling: $0.43m^2$	($0.43m^2$) x 2 = $0.86m^2$

Bin sizes and specifications vary according to type of equipment and manufacturer. A full list of bin types and dimensions is available in Appendix B (Waste Management Equipment) of the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities.*

Upon redevelopment, Armidale Secondary College must establish and/or maintain a valid contract with a licensed waste contractor for the regular collection and disposal of the waste and recyclables that are generated on site. The redeveloped Armidale Secondary College should keep written evidence of these contracts on site.

Arrangements must be in place for all parts of the development for the separation of recyclable materials from general waste. The type and volume of containers used to hold waste and recyclable materials must be compatible with the collection practices of the nominated waste contractor.

Table 3.5 offers suggested collection frequencies to accommodate the estimated quantities of waste generated in between collection times in typical conditions, based on the bin arrangements listed in **Table 3.4**.

Table 3.5: Suggested Collection Frequency

Suggested Type of Bin	Frequency
Garbage: 3 x $3m^2$ Recycling: • Commercial: 1 x $3m^2$	Garbage: 2 x per week Recycling: 1 x per week
Recycling: • Challenge (community initiative): 6 x 240L	Recycling: 1 x per week

3.2.4 Signage

Waste management measures must be clearly communicated to building managers, administration and cleaners. The following communication strategies are recommended to achieve this:

- Use of consistent signage and colour coding throughout the development in accordance with the requirements of Appendix E of the NSW EPA's *Better Practice Guidelines Waste Management and Recycling in Commercial and Industrial Facilities*.
- Training of all staff in correct waste separation and management procedures.
- Provision of directional signage to show location of and routes to waste storage areas in accordance with the requirements of Appendix E of the NSW EPA's *Better Practice Guidelines Waste Management and Recycling in Commercial and Industrial Facilities*.
- Clear labelling of co-mingled and general waste bins to ensure no cross contamination.

3.2.5 Responsibilities

The responsibilities for the implementation of the WMP are outlined in **Table 3.6**, noting that the Management Representative is ultimately responsible for compliance with local and State requirements.

Table 3.6: Waste Management Responsibility Allocation

Responsible Person	General Tasks
Management Representative	Ensure the WMP is implemented during the ongoing use of the premises.
	Update the WMP on a regular basis (e.g. annually) to ensure the Plan remains applicable.
	Undertake liaison and management of waste collections during the ongoing use of the premises.
	Manage any waste-related complaints and non-compliances reported through waste audits etc.
	Prepare and implement operational and maintenance plans to ensure: • Waste storage areas and equipment are kept clean and in good condition; • Bins are not overfilled; • Signage remains clean, clear and applicable; and • Interim garbage holding areas are kept tidy.
	Establish and/or maintain contracts for the management of all waste management equipment, cleaning requirements, waste transfer and collection arrangements.
	Retain a copy of this WMP and copies of all waste disposal receipts.
Caretaker / Nominated Waste Collector	Transport of bins to and from the bin holding areas as required.
	Cleaning of bins and waste and recycling rooms on a weekly basis or as required.
Caretaker / cleaners	Removal of general waste, recyclables, cardboard waste, bulk waste and e-waste, and hazardous waste from interim collection areas around the Site to the waste and recycling storage areas on a daily basis or as required.
Gardening Contractor	Removal of all garden organics waste generated during gardening maintenance activities for recycling at an offsite location or reuse as organic mulch on landscaped gardens.
Building Contractor	Ensure the WMP is implemented during the construction and demolition phases of the development.
	Update the WMP as necessary as further details of building plans become available to ensure the Plan remains applicable.
	Undertake liaison and management of waste collections during the construction and demolition phases of the development.
	Inform employees and subcontractors of Site waste management procedures.
	Keep a copy of this WMP and copies of all waste disposal dockets onsite.

4 Construction

The demolition and construction phases of developments have the greatest potential for waste minimisation. This section outlines waste estimates and management of site wastes during the construction phase of the redevelopment.

Waste estimates and management of site wastes during the demolition phase of the redevelopment can be found in *Waste Management Plan: Early Works, Armidale Secondary College, Armidale, NSW* (MEtech Consulting, 2018).

4.1 Waste Avoidance

The Building Contractor must identify opportunities for waste avoidance including the following:

- Appropriate sorting and segregation of construction wastes to ensure efficient recycling of wastes;
- Selecting construction materials taking into consideration their lifespan and potential for reuse;
- Ordering materials to size and ordering pre-cut and prefabricated materials;
- Planned work staging;
- Reducing packaging waste on-site by returning packaging to suppliers where possible, purchasing in bulk, requesting cardboard or metal drums rather than plastics;
- Careful on-site storage and source separation; and
- Subcontractors informed of Site waste management procedures.

4.2 Waste Generation Rates

The Building Contractor should record the types and quantities (including the volume and weight) of wastes produced during the construction phase of the development, and on this basis, the numbers and capacity of skips/bins can be determined.

A guide/estimate of the potential waste percentages is provided based on “rule of thumb” waste generation rates for construction projects, as indicated in **Table 4.1**.

Table 4.1: Guideline Waste Generation Rates

Guideline Waste Generation Rates for Construction[A]	
Material	**Estimated Waste**
Timber	5-7% of material ordered
Plasterboard	5-20% of material ordered
Concrete	3-5% of material ordered
Bricks	5-10% of material ordered

Guideline Waste Generation Rates for Construction[A]	
Material	**Estimated Waste**
Tiles	2-5% of material ordered

A. Inner Sydney Waste Board, 1998, *Waste Planning Guide for Development Application.*

4.3 Construction

The estimated volumes of waste materials generated by the construction of new buildings at the Site has been calculated using the waste generation rates (refer **Table 4.1**).

It is noted that all waste generation rates are approximate only.

Table 4.4: Estimated Quantities of Waste Construction Materials

Material	Estimated Volume (m^3)			Details
	Reuse	Recycle	Disposal	
Timber	70		-	Any additional timber will be assessed for potential reuse elsewhere onsite or removed for resale or recycling.
Concrete	-	400	-	Removed from site, crushed and on sold as drainage media and road base.
Bricks/pavers	-	300	-	Removed from site, crushed and on sold as drainage media and road base.
Plasterboard	-	55	-	Removal for recycling, return to suppliers.
Tiles	-	55	-	Separated onsite and removed for recycling.
Metal	-	1.5	-	Separated onsite, removed and returned as scrap metal for reprocessing.
Glass	-	1.5	-	Removed from site, crushed and recycled.
Fixtures & fittings	<1		-	Reused elsewhere onsite if possible or removed for resale or recycling.
Floor coverings	-	1	-	Separated onsite and removed for recycling or waste.
Plastics	-	1	-	Separated onsite and removed for recycling or waste.
Garden organics	-	-	-	Mulched for reuse on site.
Paper/cardboard	-	1	-	May be reused as mulch or recycled.
Residual waste	-	-	-	-
Hazardous wastes	-	-	-	Should any hazardous material be discovered during the construction works it is to be disposed of according to relevant guidelines and regulations. Refer **Section 4.4**.
Other	-	-	20	Separated onsite and removed for recycling or waste.

4.4 Hazardous Materials Removal

Prior to the commencement of any alterations, additions or demolition works on a building, all hazardous materials shall be removed from the subject building. Hazardous materials may include:

- Asbestos Containing Material (ACM);
- Lead-based paint;
- Class of compounds known as Polychlorinated Biphenyls (PCBs); and
- Contaminated dust and combustible materials.

Before starting any demolition works, all areas of the workplace, including basements, cellars, vaults and waste dumps, should be examined to determine whether:

- There are any items which could present a fire and explosion risk;
- Any previous use of the site might cause a risk because of the nature of and/or degradation of materials; and
- There are any toxic or hazardous chemicals present.

The Building Contractor (refer **Section 3.2.5**) should inform all workers and other persons at the workplace of the presence of hazardous chemicals and the control measures for exposure and safe disposal. Safety Data Sheets (SDS) for hazardous chemicals must be made readily available for reference.

Appropriate, clean facilities and amenities must be provided for workers to minimise risks where there are hazardous materials present.

4.4.1 Asbestos

Management and removal of ACM must be undertaken in accordance the requirements of:

- Safe Work Australia (December 2011) *Code of Practice – How to Manage and Control Asbestos in the Workplace*;
- Safe Work Australia (December 2011) *Code of Practice – How to Safely Remove Asbestos*; and
- *Work Health and Safety Regulations 2011.*

Any construction work including demolition work that involves or is likely to involve the disturbance of asbestos is defined by the WHS Regulations as high risk construction work and a SWMS must be prepared before this work commences.

Non-friable asbestos materials that are intact and structurally sound may remain in place provided that they are not disturbed (e.g. sawn, drilled, abraded or the like).

However where demolition, refurbishment, maintenance or other works are likely to disturb ACM, then the ACM must be removed in accordance with the *Asbestos Management Plan* (Richard Crookes Constructions, February 2019), refer **Appendix A.**

All asbestos waste must be disposed at a waste collection facility licensed to receive asbestos waste (refer **Section 4.4.4**). All tipping dockets should be retained.

4.4.2 Lead Paint

If it is suspected that the structure contains lead based paint, a test for the presence of lead should be conducted. Testing can recognise dried paint film with more than 1 per cent (by weight) to be lead-containing paint.

If lead is present in paint that is still in good condition and it is not a friction or impact surface, it is not likely to present a health hazard unless disturbed by sanding or mechanical or water damage. However, if the paint is in poor condition, such as flaking, peeling or badly chalking, it may present a risk.

Precautions which should be undertaken when demolishing materials containing lead are as follows:

- Minimising the generation of lead dust and fumes;
- Cleaning work areas properly during and after work;
- Wearing the appropriate PPE, such as dust masks, overalls, etc.; and
- Maintaining good personal hygiene.

All works must be carried out in accordance with the requirements of *AS4361: Guide to Lead Paint Management.*

4.4.3 Polychlorinated Biphenyls (PCBs)

Prior to the commencement of any alterations, additions or demolition works on a building, fluorescent light and fan fittings should be isolated by a licenced electrician and disassembled to confirm the presence/absence of metal type capacitors that may contain PCBs.

Appropriate control measures should be implemented when handling damaged capacitors to ensure that any spillage does not contact workers and is appropriately cleaned up and disposed of.

If PCBs are identified in fluorescent light fitting capacitators, they should be safely removed and disposed of by a competent electrician in accordance with:

- Australian and New Zealand Environment and Conservation Council (ANZECC, 1997) *Identification of PCB Containing Capacitators;*
- *WHS Regulation 2011;*
- NSW EPA (1997) *Polychlorinated Biphenyl (PCB) Chemical Control Order*; and
- ANZECC (2003) *Polychlorinated Biphenyls Management Plan, Revised Edition.*

Any equipment or parts containing PCBs should be placed in a polyethylene bag and then placed into a marked sealable metal container.

If PCBs cannot be transported immediately for disposal, all containers should be stored in a protected area which prevents any discharge of PCBs to the environment.

PPE including gloves made of materials that are resistant to PCBs (for example polyethylene, nitrile rubber or neoprene), should be provided to workers and worn when there is any likelihood of exposure to PCBs.

4.4.4 Hazardous Materials Disposal

Hazardous and/or contaminated material that is not suitable to remain onsite shall be transported for offsite disposal to a suitably licensed facility.

Hazardous materials waste should be assessed and classified for disposal in accordance with the NSW EPA (2014) *Waste Classification Guidelines: Part 1 – Classifying Waste*.

At the time of the preparation of this WMP, the Armidale Waste Management Facility is licensed to accept asbestos waste under EPL 5860 (refer **Table 4.5**).

4.5 Re-use, Recycling and Disposal of General Materials

Effective management of construction materials and construction waste, including options for reuse and recycling where applicable and practicable, must be conducted. Only project wastes that cannot be practicably and cost effectively reused or recycled are to be sent to landfill or appropriate disposal facilities.

The following specific procedures are to be implemented:

- Waste materials such as timber, metal, brick, concrete to be recycled by an appropriately licensed recycling facility for processing and reuse;
- All solid waste timber, brick, concrete, rock that cannot be reused or recycled to be taken to an appropriate landfill site and disposed of in an approved manner; and
- All garbage to be disposed of via a council-approved system.

4.6 General Materials Waste Storage and Servicing

The number and capacity of skips and bins will be determined by the Building Contractor and must be able to accommodate the estimated quantities of waste produced during construction activities (refer **Table 4.1**). Sufficient space is to be provided for waste storage ensuring local council requirements are complied with, particularly in relation to the placement of skips and traffic control, if necessary.

All building waste generated on site, when it is not able to be directly deposited into the skip bins, is to be placed in designated stockpile areas within the site for transfer to the skip bins by bobcat or other means.

The Building Contractor will be responsible for establishing on-site waste sorting and segregation systems to ensure efficient recycling of waste, including appropriate signage for recycling areas/skip bins. This must include measures to prevent the migration of waste from the Site, damage by the elements and odour and health risks, and may include bunding, skip covers, asbestos rated enclosures or other appropriate controls, as needed.

4.7 Probable Destinations for Off-Site Disposal

The nearest waste management centres to the Site are provided below in **Table 4.5**.

Table 4.5: Waste Management Centres

Location	Address	Distance from Site	Phone	Mon-Fri	Sat-Sun
Armidale Waste Management Facility	108 Long Swamp Road, Armidale	Approx. 5 km	(02) 6772 7090	7:30am-5pm	12pm-5pm
Armidale Recycling Centre	108 Long Swamp Road, Armidale	Approx. 5 km	(02) 6772 2033	7:30am-5pm	12pm-5pm
Guyra Recycling & Transfer Station	Everett Street, Guyra	Approx. 40 km	(02) 6779 2377	9am-5pm (closed Mon, Wed, Fri)	9am-5pm

Note: Not all waste types are accepted at each facility. Please refer to Armidale Regional Council website for waste types, terms and conditions.

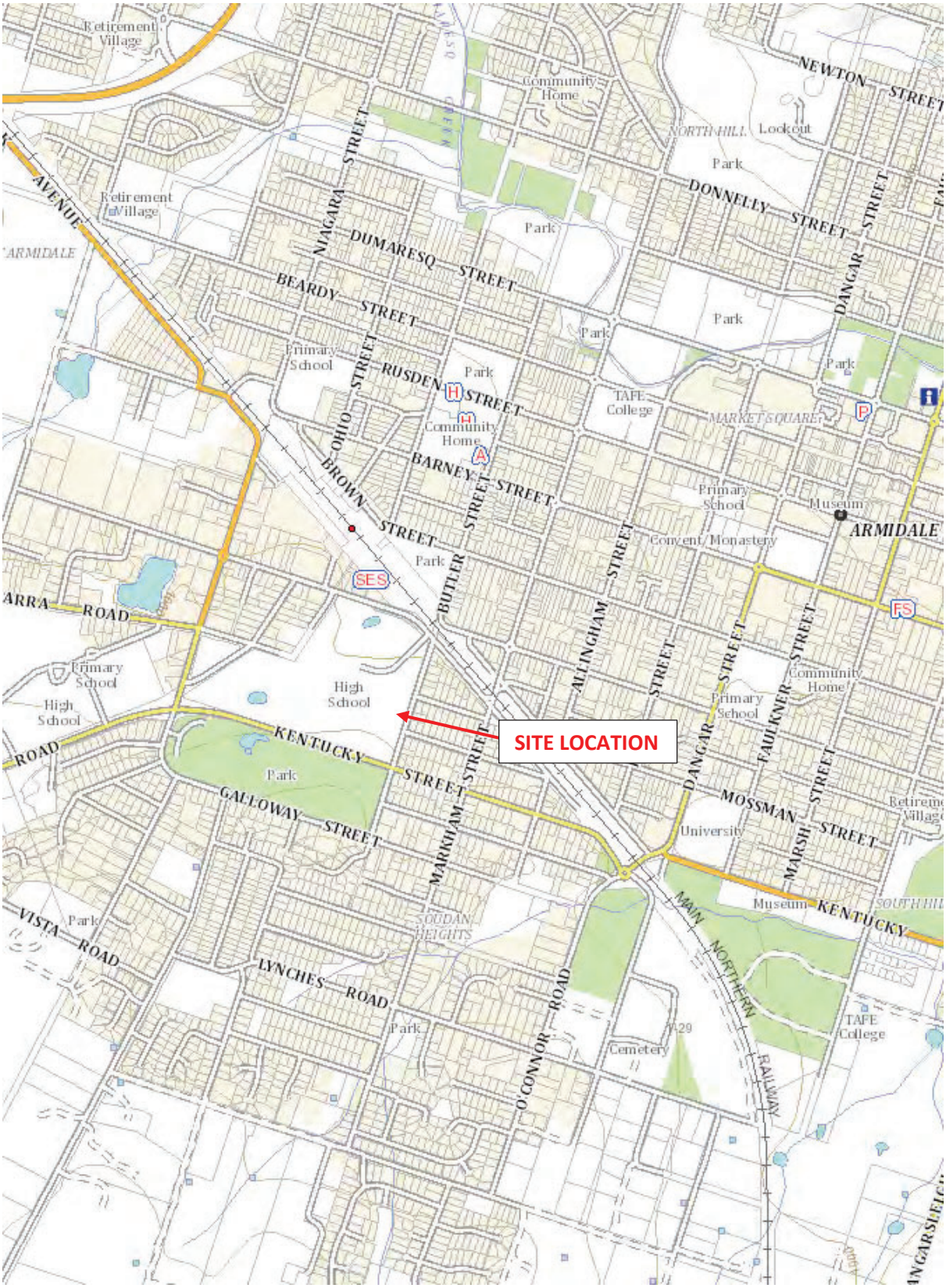
Records demonstrating lawful disposal of waste must be retained and kept readily accessible.

Armidale Waste Management Facility: https://www.armidaleregional.nsw.gov.au/environment/waste-and-recycling/waste-facilities

Armidale Recycling Centre: http://www.armidalerecycling.com.au/

Guyra Recycling & Transfer Station: No wesbite

Figures



Source: SIX Maps (2018)

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TITLE: Figure 1 – Site Location
PROJECT: Waste and Recycling Management Plan
Armidale Secondary College
Armidale, NSW
CLIENT: NBRS Architecture

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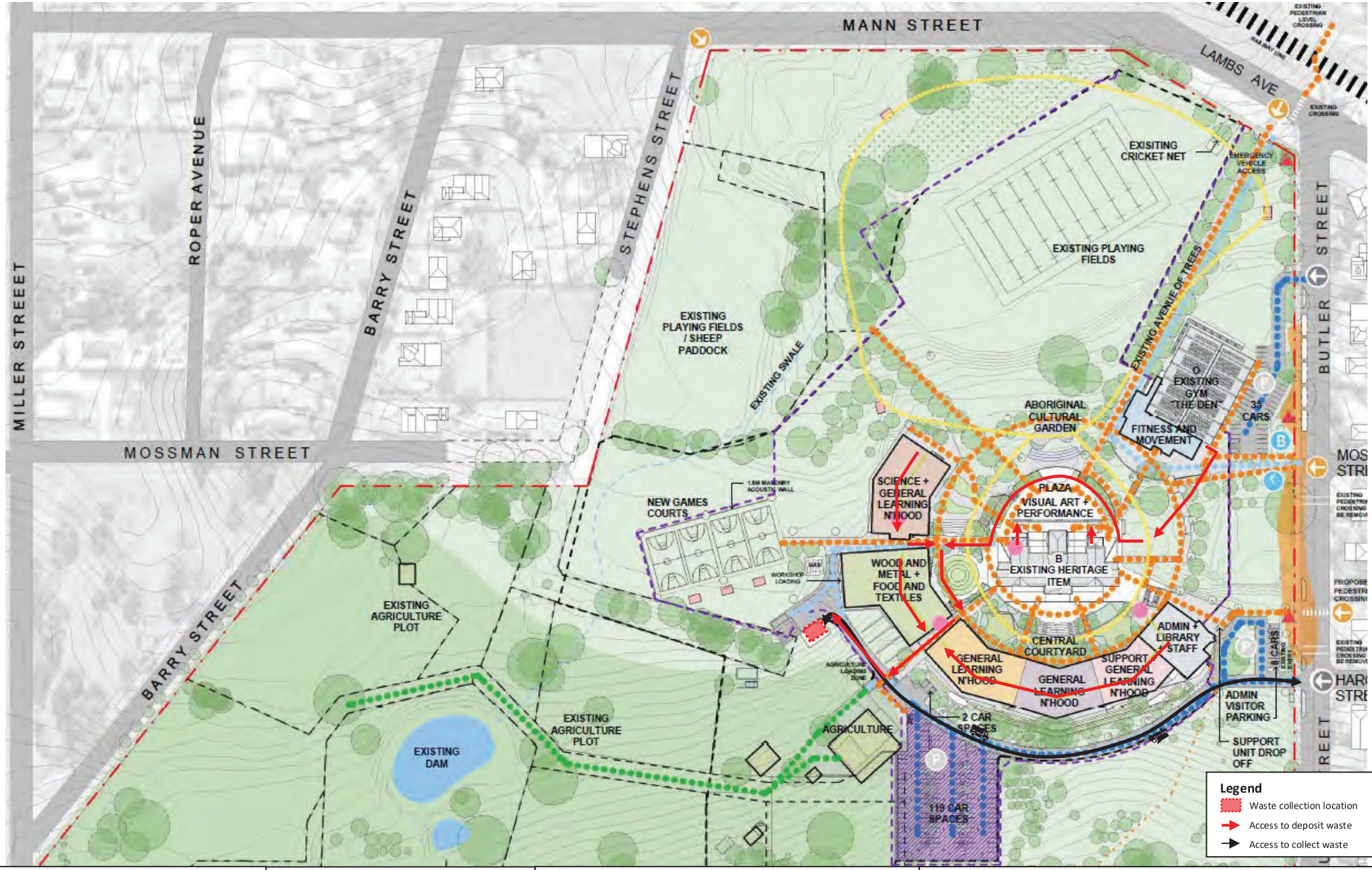
Project Number:	EP98
Source:	NBRS Architecture – Demolition Site Plan (Ref. 17352-NBRS-DA-006 Rev 1)
Date:	15 October 2018
Approved by:	MM

TITLE:	Figure 2 – Existing Facilities Site Layout
PROJECT:	Waste & Recycling Management Plan Armidale Secondary College, Armidale, NSW
CLIENT:	NBRS Architecture



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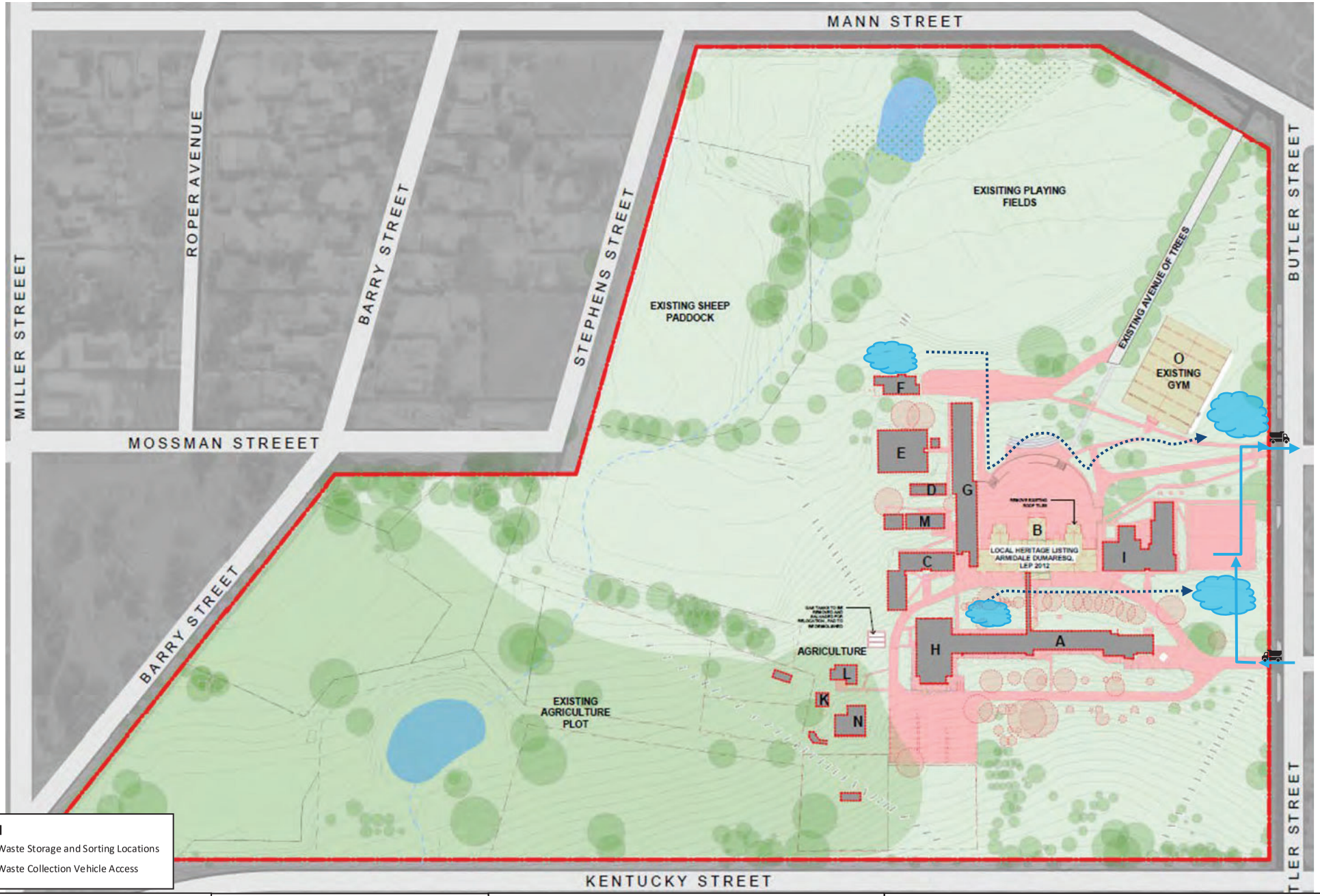
Project Number:	EP98
Source:	NBRS Architecture – Site Circulation, Vehicle & Pedestrian Plan (Ref. 17352-NBRS-DA-082 Rev 1)
Date:	12 October 2018
Approved by:	MM

TITLE:	Figure 3 – Suggested Operational Waste Management Arrangements
PROJECT:	Waste & Recycling Management Plan Armidale Secondary College, Armidale, NSW
CLIENT:	NBRS Architecture



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Project Number:	EP98
Source:	NBRS Architecture – Demolition Site Plan (Ref. 17352-NBRS-011 Rev A July 2018)
Date:	11 October 2018
Approved by:	MM

TITLE:	Figure 4 – Suggested Construction Waste Management Arrangements
PROJECT:	Waste & Recycling Management Plan Armidale Secondary College, Armidale, NSW
CLIENT:	NBRS Architecture