Form A (version 2)

INDIVIDUAL EXPERT REPORT OF MARILYN (MIM) WOODLAND

COURT DETAILS	
Court	Land and Environment Court of New South Wales
Class	1
Case number	2016/159652 (formerly 2015/10898) & 2016/157848 (formerly 2015/10951)

TITLE OF PROCEEDINGS PROCEEDINGS 2016/159652	
Applicant	**Liverpool City Council**
First respondent	**Moorebank Recyclers Pty Ltd**
Second respondent	**Minister for Planning**

PROCEEDINGS 2016/157848	
First applicant	**Benedict Industries Pty Limited**
Second applicant	**Tanlane Pty Limited**
First respondent	**Minister for Planning**
Second respondent	**Moorebank Recyclers Pty Limited**

PREPARATION DETAILS	
Prepared for	**Moorebank Recyclers Pty Ltd,** First respondent in proceedings 2016/159652 and Second respondent in proceedings 2016/157848
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Legal representative reference	MGM 01/246
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Liverpool City Council V Moorebank Recyclers Pty Ltd & The Minister for Planning

and Benedict Industries Pty Ltd & Tanlane Pty Ltd V Minister for Planning & Moorebank Recyclers Pty Ltd

NSW Land and Environment Court Proceedings
No. 2016/159652 and
No. 2016/157848

Landscape as it influences Visual Impact

Evidence of Marilyn (Mim) Gaye Woodland

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1.Purpose

1.1 The purpose of this report is to inform and assist the Land and Environment Court in the proceedings commenced by the Applicants Liverpool City Council & Ors and Benedict Industries Pty Ltd & Ors.

The property is identified as follows:
Lot 6 in DP 1065574, being land at Newbridge
Road, Moorebank (the Site).

2.Introduction

2.1 My qualifications consist of:
Bachelor of Environmental Science (Environmental Management) 2000
A.Diploma of Applied Science - (Landscape Design, Horticulture) 1993
Certificate IV - Assessment and Workplace Training BSZ41898 TAFE 2003
Bush Regeneration Supervision Certificate -1994
Bushland Weed Control Certificate - 1993
Advanced Mosquito Control Certificate – QUT - 1994
Erosion and Sediment Control Certificate 1999

Over 23 years of professional practice I have exercised a practical commitment to improving natural and landscaped designs and water control practices in our environment.

I have completed practical and design work on many large projects and I have managed the natural environment and constructed landscape over a period of 13 years at the University of Newcastle. My work is highly regarded by my peers, as is demonstrated by multiple awards, including the following:

> **2005 – Newcastle City Council *Community Service Award*** (an award made to an individual in recognition of outstanding community service) for an:
>
> *'Outstanding contributions to ambassadorship for the natural environment and local biodiversity'.*
>
> **2004 - Hunter Regional *Landcare Award of Excellence*** (individual)
> Recognizing *'Innovation – Persistence and Dedication'*

I have also worked in partnerships where I collaborated as designer as well as providing the practical implementation of the designs, and have received multiple awards in the areas of landscape, water management and environmental achievement. (CV attached)

2.2 Instructions
I have been instructed by Mark McDonald and Associates Lawyers to prepare an "Expert Report" addressing the following issues which are relevant to my expertise:

To prepare a report which addresses 1. Landscaping to effectively screen the acoustic walls and mounds for the Moorebank Recyclers development, and to comment on the likely growth rates of

plantings, and 2. Prepare a landscape proposal for the reinstatement of appropriate areas within the easement for access to Lot 6 and and bridge to Lot 7 off Brickmakers drive.

2.2.1 The contentions I have addressed in respect to the amended Liverpool City Council's (**Council**'s) Amended Statement of Facts and Contentions (SOFACs) are as follows:

5 Urban Design and Views:
Particulars

d. There is insufficient information on the extent to which vegetation will either be retained or added between the roadway and the barriers and ramps indicated to assess any visual impact.

e. The following pieces of information in particular are required in order to fully assess the impact of the proposed noise barriers:
(vi) Plans showing landscaping proposed to be removed from around the ramps and between Brickmakers Drive and the ramps
(vii) Landscaping plan showing any new planting at its maturity
(vii) Visual montage showing the impact of the ramps and barriers with vegetation after 3 years

2.2.2 Contention 8 in the amended SOFAC of Benedict/Tanlane is:

"There is insufficient information on urban design and views for a proper assessment of the Development".

Particulars

a. The applicant's repeat particulars (a)-(g) under this heading in the Council's Statement of Facts and Contentions."

Paragraph 5d. of the Council's Amended SOFAC is as follows:

d. There is insufficient information on the extent to which vegetation will either be retained or added between the roadway and the barriers and ramps indicated to assess any visual impact.

2.3 I have read and, agree to be bound by, Division 2 of Part 31 of the NSW Uniform Civil Procedure Rules 2005 and the Expert Witness Code of Conduct in Schedule 7 of the Uniform Civil Procedure Rules.

2.4 As part of my evidence three documents have been provided as appended documents for the court:

a) A VMP (a Vegetation Management Plan) for the Moorebank Recycling Site
b) A Landscape Report on Proposed Landscape Measures for the Moorebank Recycling and Acoustic Ramp Areas
c) Typical Planting Layout Concept Schematics document

3. Description of the PAC approved proposal

3.1 The Site

3.1.1 The Site is known as Lot 6 in DP 1065574 located within the Liverpool City Council (**Council**) local government area (see Figure 1). The Site takes up approximately 20.5 hectares and is situated on the western bank of the Georges River. It is accessed at present via an 800m long "Panhandle" access road from Newbridge Road Moorebank.

The main, area of the site is cleared and capped to approximately a rectangular in shape, although the Site's eastern boundary is formed by the river and includes a substantial stand of riparian forest. The southern boundary is formed by a narrow strip of remnant vegetation adjoining the New Brighton Golf Course, which is currently undergoing a redevelopment, involving a rearrangement of the course and construction of a new clubhouse, with substantial former areas of fairways and open space now to be dedicated to residential development. To the west of the site is a remnant natural forest which previously formed an undeveloped section of the former Boral Brickworks site. The main body of the former brick quarry has been redeveloped for residential housing and is now known as *Georges Fair*.

3.1.2 Brickmakers Drive is a fairly new roadway constructed as part of the Georges Fair brickworks redevelopment which forms the eastern and south-eastern edge of the new residential area. This remnant forest is known as Wirrungwuri Reserve, which continues between Brickmakers Drive and the subject Site's western boundary. To the north of the Site is the property known as the Tanlane site (Lot 7), which is used as a sand and gravel quarry and recycling business, and which had heavy earthmoving machinery operating on it on the day I visited the site. I understand it may be intended to wind down this industrial operation and that the site is currently the subject of a Development Application for a Marina.

3.1.3 There is an 18 metre wide, strip of land within the Council reserve located towards the northern end of the 'panhandle' road, over which an easement has been granted for the construction of ramps connecting with the panhandle road, which will provide access to the Site from Brickmakers Drive. This easement also is designated for a bridge access to the Tanlane site, the bridge ramp being located between the "in" and "out" ramps from the subject Site.

3.2 The Approved Development

I am instructed that details of the 2015 PAC approved development are as follows:

The Site is a materials recycling facility with an intended capacity of 500,000 tonnes per annum. The facility is to receive concrete, brick, asphalt, sandstone and sand from the building and construction industry in the Sydney metropolitan area.

Under the approval, 1.5m high acoustic walls were to be erected in the locations shown in the *Figure 3* to reduce noise from trucks emitted to the Georges Fair residences.

Figure 5. shows the layout of the site as per the PAC approval, including acoustic mounds to the northern end of the main site, of 6m in height, western side 6m/4m in height, eastern side 4m height, and southern side 1-2m high.

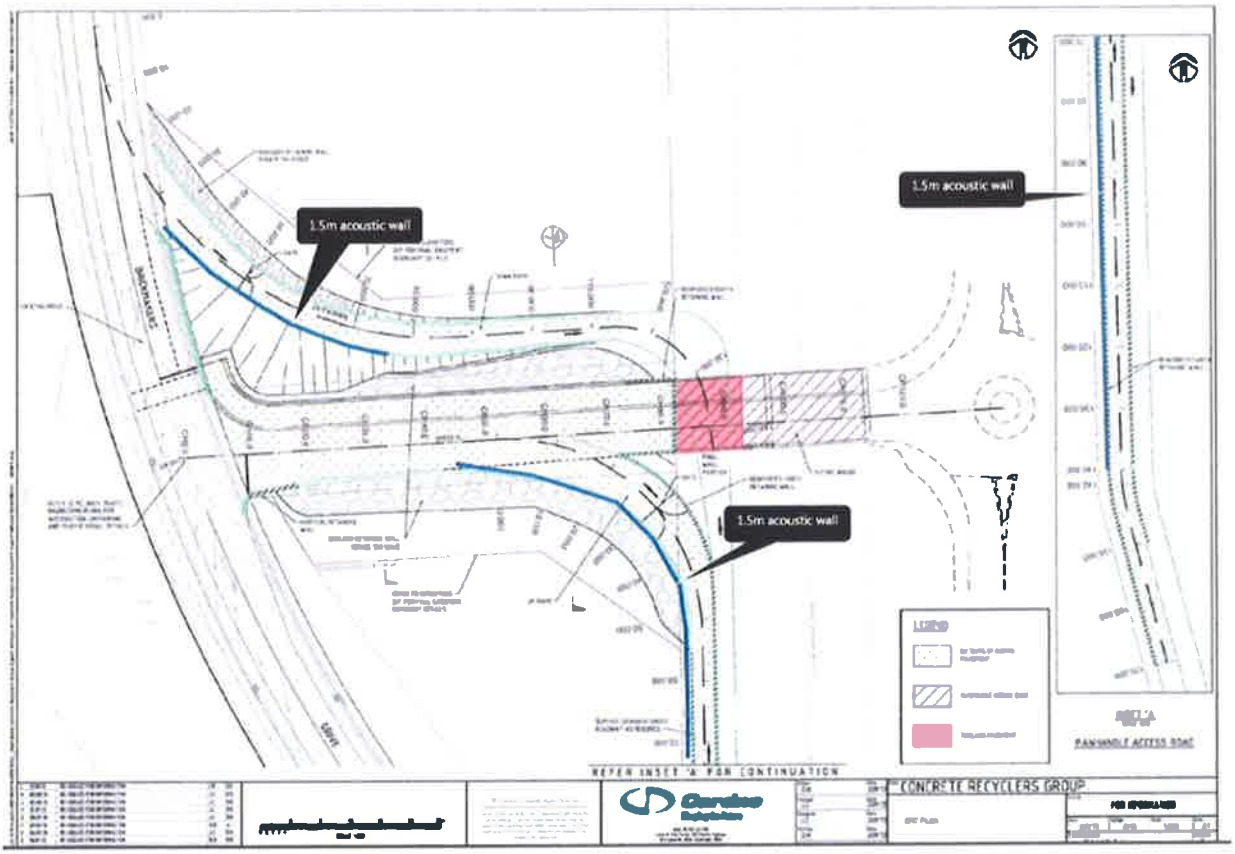

Figure 1: Plan of entry/ exit ramps and bridge as per the PAC approval 2015 (Source Cardno 2015)

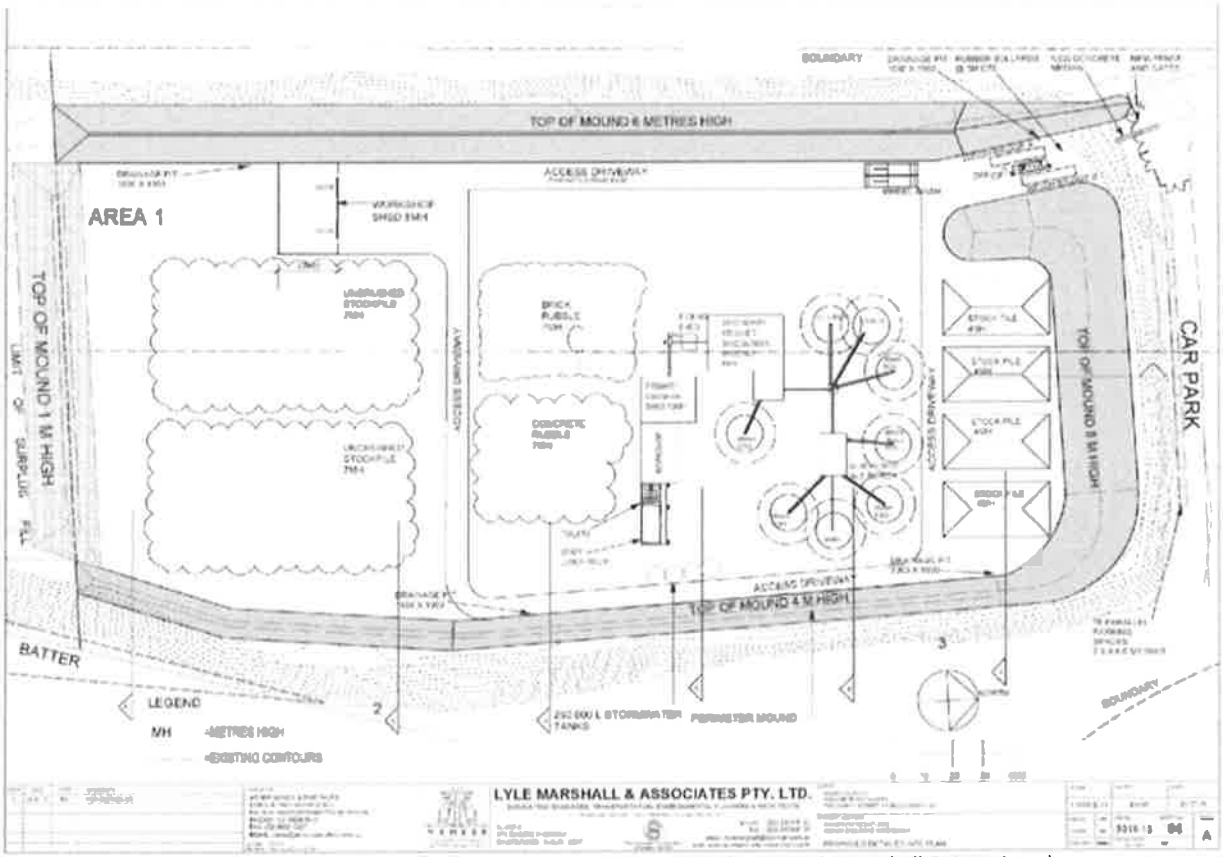

Figure 2: Plan of Main Recycling area of the Site as approved by the PAC 2015 (Source Lyle Marshall & Associates)

Approved Main Site Layout Plan

3.3. The Proposed revised acoustic treatments of the site

Revised acoustic protection of the site as per Renzo Tonin's August 2016 advice, is reflected in the following plans

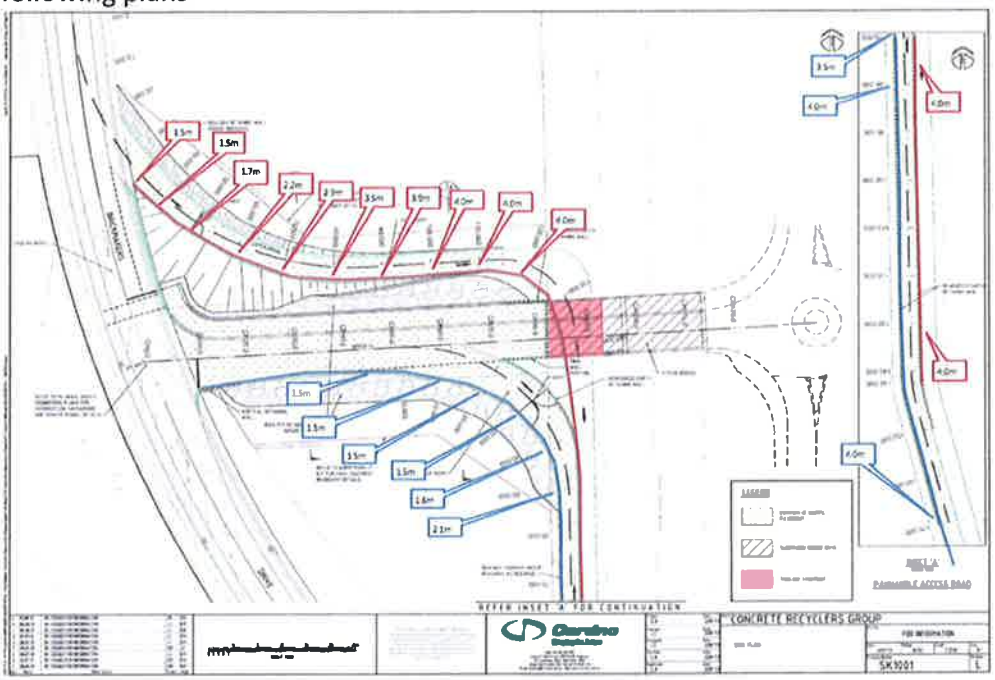

Figure 3: Proposed revised acoustic treatment of the entry and exit ramps to The Site

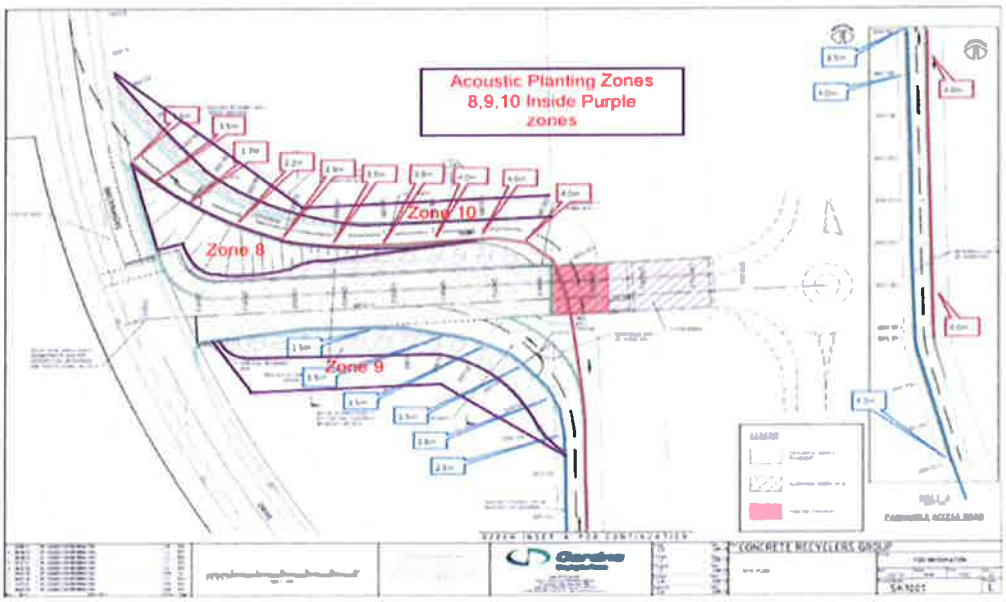

Figure 4: Proposed acoustic treatment Landscape Planting Zones for the entry and exit ramps to The Site(Base Source Cardno 2015)

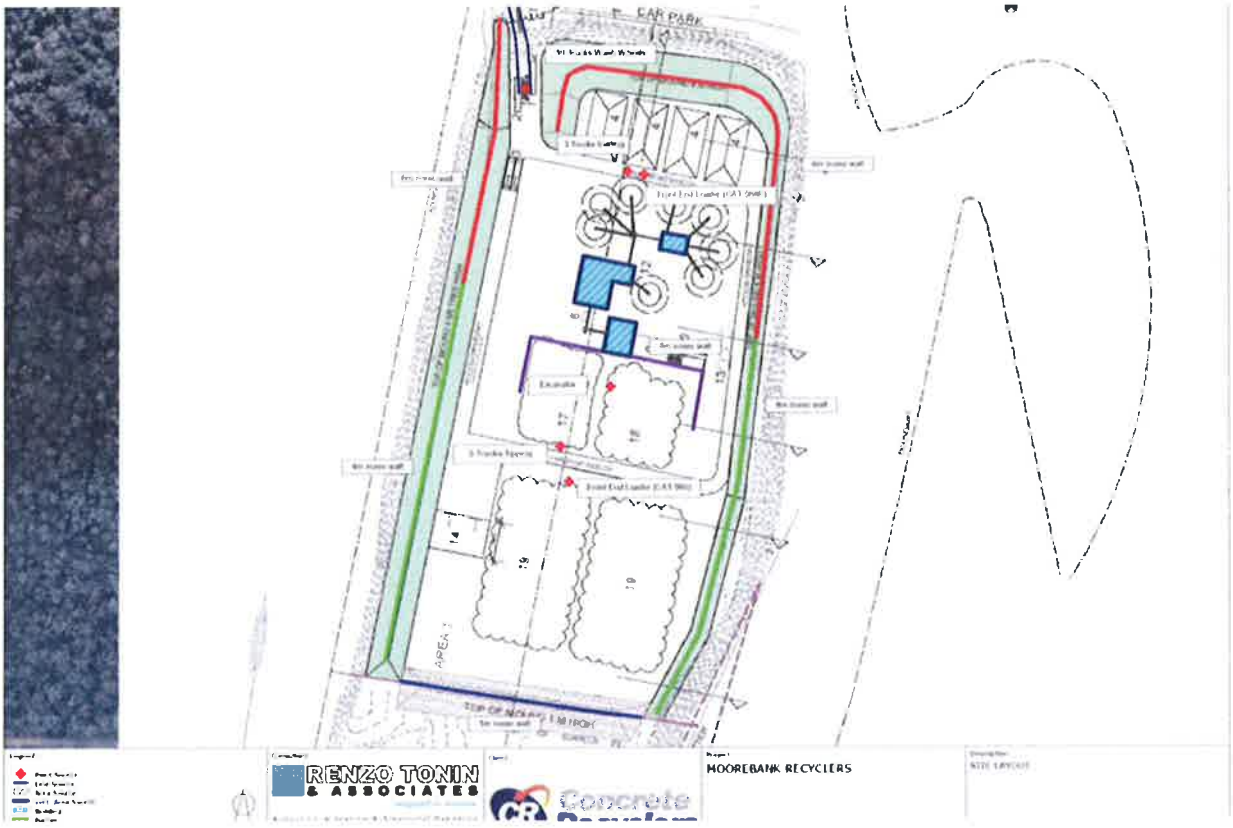

Figure 5: Proposal a showing possible location of mounds below acoustic screens (Note the nominated height reflects the overall combined height of acoustic barrier structures and any additional mounding.) Source Renzo Tonin 2016)

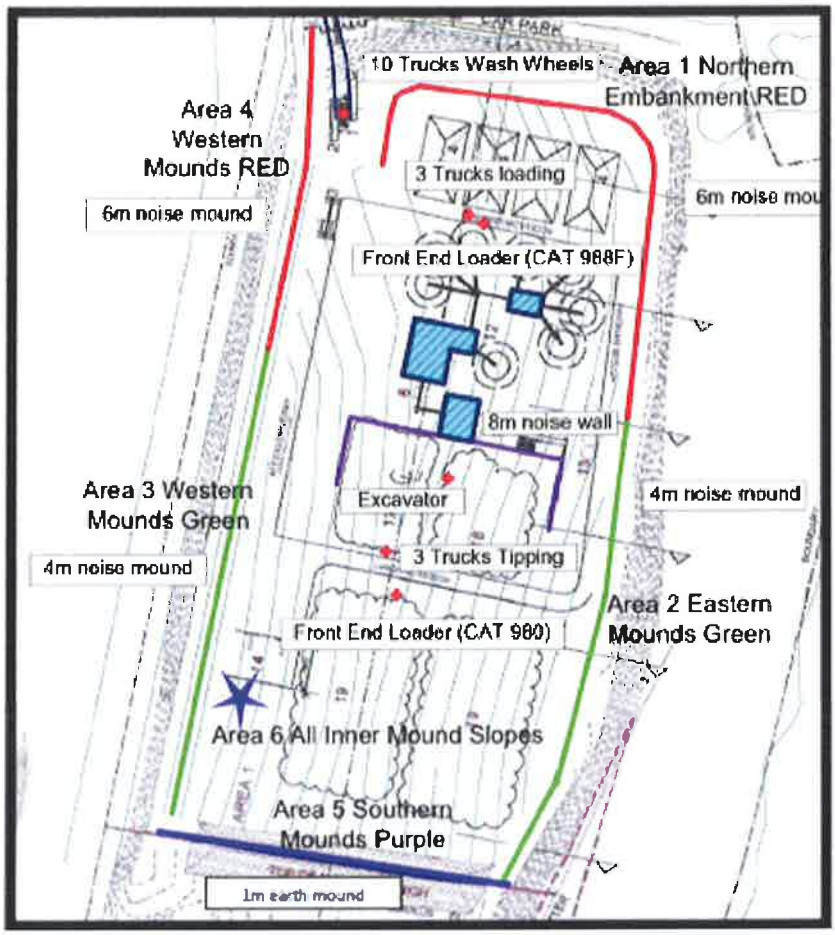

Figure 6: Proposed Landscape Mound Zones on Moorebank Recycling Site Areas 1-6 (Source Renzo Tonin Report August 2016), showing Landscape Areas 1 to 5.

3.3.1 Areas in which landscape screening is applied for visual screening of the acoustic mounds and panels, as viewed from areas outside the subject Site:

I have conferred with Dr. Philip Pollard in respect to which areas of the development and its revised acoustic treatments might form part of the visual catchment as viewed from outside the site. Dr. Pollard has been engaged by Moorebank Recyclers Pty Ltd to provide evidence in respect to Visual Impact and Urban Design. I have inspected the site and its surrounds with him, and have familiarized myself with the proposed acoustic treatments. I concur with Dr. Pollard's identification of the following locations around the site from which acoustic mounds and acoustic barrier structures could potentially be visible from outside the Site:

1. The area at the northern end of the main site adjacent to the proposed Marina site (The **Northern Embankment** nominated on landscape zone site plan Figure 5 as area 1);

2. The area in the easement dedicated for the access ramps to and from the Site and the bridge to the Proposed Marina / Tanlane sites (**Access Ramps**). Nominated on the landscape area layouts as zones 8,9,10;

3. The roadway area opposite the **Sewer Station** / Wirrungwuri Reserve identified as Area 7 in the Landscape Planting Layout Schematics.(Figure 13)

3.4 Selected Native Species for Project Area and their likely Growth Rates

The following selected species are proposed for the nominated sites. Note that a number of the listed areas will not be visible from areas outside of the site, but planting is recommended on the exterior side of any newly-formed mounds to avoid weed inundation near the Reserve and to prevent erosion of the bank slopes.

3.4.1 Typical Plant Species List for **Northern Embankment** - Moorebank Recyclers Area 1

Species List for Area 1 Northern Embankment - Moorebank Recycling Site

Symbol	Botanical Name	Common Name	Height & Width	Container Size	Growth Potential
Trees					
C	*Casuarina glauca*	Swamp Oak	20m H 6m W	5 Litre	Fast
CC	*Casuarina Cunninghamiana*	River Oak	15-30m H 10m W	5 Litre	Fast/ Moderate
AD	*Acacia decurrens*	Sydney Green Wattle	12m H 3m W	Tube stock	Extremely Fast
MN	*Melaleuca nodosa*	Prickly Leafed Paperbark	1-4m H 2m W	5 Litre	Moderate
ML	*Melaleuca linarifolia*	Snow in Summer	8m H 3-8W	5 Litre	Moderate
MS	*Melaleuca styphelioides*	Prickly Paperback	20m H 6m W	5 Litre	Moderate
AI	*Acacia implexa*	Hickory Wattle	5-10 H 2-3m W	Tube stock	Extremely Fast
Shrubs					
AM	*Acacia myrtifolia*	Red Stem Wattle	2.5m H 1m W	Tube stock	Extremely Fast
BS	*Bursaria spinosa*	Sweet Bursaria	3-5m H 2m W	Tube stock	Extremely Fast
L	*Leptospermum polygalifolia*	Tantoon	1-3m H 1-3mW	Tube stock	Moderate
	Upright / Ground Cover Plants				
CA	*Carex appressa*	Tall sedge	1m H 1m W	Tube stock	Fast
GS	*Ghania sieberiana*	Red Fruit Saw Sedge	1.5- 2 H 1.5-2m W	Tube stock	Fast
JU	*Juncus usitatus*	Common Rush	1m H 50cm W	Tube stock	Fast

*Figure 7 – Typical plant species list for **Northern Embankment** – Note that the two nominated vine species, Clematis aristata and Stephania japonica are also to be utilized on the acoustic barrier structures in this location. (Source M Woodland 2016)*

3.4.2 Typical Species List for Areas nominated 8,9 -10 (Easement Around Bridge / Access Ramps)

as described in the Landscape Planting Layout Schematic Concept document.

Species List for Area 8 - Moorebank Recycling Site

Symbol	Botanical Name	Common Name	Height & Width	Container Size	Growth Potential
Trees					
MN	*Melaleuca nodosa*	Prickly Leafed Paperbark	1-4m H 2m W	5 Litre	Moderate
ML	*Melaleuca linarifolia*	Snow in Summer	8m H 3-8W	5 Litre	Moderate
AI	*Acacia implexa*	Hickory Wattle	5-10 H 2-3m W	Tube stock	Extremely Fast
Shrubs					
AM	*Acacia myrtifolia*	Red Stem Wattle	2.5m H 1m W	Tube stock	Extremely Fast
BS	*Bursaria spinosa*	Sweet Bursaria	3-5m H 2m W	Tube stock	Extremely Fast
L	*Leptospermum polygalifolia*	Tantoon	1-3m H 1-3mW	Tube stock	Moderate
	Upright / Ground Cover Plants				
CA	*Carex appressa*	Tall sedge	1m H 1m W	Tube stock	Fast
GS	*Ghania sieberiana*	Red Fruit Saw Sedge	1.5- 2 H 1.5-2m W	Tube stock	Fast
JU	*Juncus usitatus*	Common Rush	1m H 50cm W	Tube stock	Fast

Species List for Areas 9,10

Symbol	Botanical Name	Common Name	Height & Width	Container Size	Growth Potential
Trees					
CG	*Casuarina glauca*	Swamp Oak	20m H 6m W	5 Litre	Fast
MN	*Melaleuca nodosa*	Prickly Leafed Paperbark	1-4m H 2m W	5 Litre	Moderate
ML	*Melaleuca linarifolia*	Snow in Summer	8m H 3-8W	5 Litre	Moderate
AI	*Acacia implexa*	Hickory Wattle	5-10 H 2-3m W	Tube stock	Extremely Fast
Shrubs					
AM	*Acacia myrtifolia*	Red Stem Wattle	2.5m H 1m W	Tube stock	Extremely Fast
BS	*Bursaria spinosa*	Sweet Bursaria	3-5m H 2m W	Tube stock	Extremely Fast
L	*Leptospermum polygalifolia*	Tantoon	1-3m H 1-3mW	Tube stock	Moderate
	Upright / Ground Cover Plants				
CA	*Carex appressa*	Tall sedge	1m H 1m W	Tube stock	Fast
GS	*Ghania sieberiana*	Red Fruit Saw Sedge	1.5- 2 H 1.5-2m W	Tube stock	Fast
JU	*Juncus usitatus*	Common Rush	1m H 50cm W	Tube stock	Fast

Figure 8 - Species Lists for Areas 8,9-10. Note: A Species List for each nominated area may be found in the site Landscape Report, VMP and Landscape Planting Layout Concept Schematics documents for Moorebank Recycling.
(Source M Woodland 2016)

3.4.3 Typical Plant Species List (Rushes & Sedges) for the Mounded areas on Eastern and Western edges of the rectangular main area – Moorebank Recyclers nominated Areas 2-4.

3.4.3.1 The typical plant species for the external side of any new mounds or disturbed existing embankments are as listed above, and relate to the *Areas 2,3 and 4 as designated in Figure 6. Species* were selected on the basis that these plant species are found in the local ecological communities present on this site area in wet as well as drier sections of the local forest system. The constructed mounds will experience a drier soil system compared to the lower level landscape adjacent on the existing ground level of the recycling site.

Species List for Area 2,3,4 Eastern & Western Mounds - Moorebank Recycling Site

Symbol	Botanical Name	Common Name	Height & Width	Container Size	Growth Potential
	Upright / Ground Cover Plants				
CA	*Carex appressa*	Tall sedge	1m H 1m W	Tube stock	Fast
JU	*Juncus usitatus*	Common Rush	1m H 50cm W	Tube stock	Fast
LL	*Lomandra longifolia*	Mat Rush	1m H 1m W	Tube stock	Fast

Figure 9 Typical Plant Species List for the mounded areas on Eastern and Western edges of the rectangular main area – nominated Areas 2-4 (Source M Woodland 2016)

3.4.4 Probable Growth Rates of Screening Plants

3.4.4.1 In addition to the listed species being found in the local ecological community, the majority of the species were also selected on their ability for reasonably fast growth in a short period of time. The planting sizes are not excessively advanced as the selected plants, especially the Acacia species, have an extremely fast growth rate in a short period of time. In terms of precedents for juvenile plant use, the RMS on large highway projects regularly use seeded "hydro-mulch" which generally achieves excellent screening on the motorway bank systems within a year of seeding. Naturally, species that grow at a fast rate will not have the extended life span of slower growing species. The selection of different species with differing growth rates will ensure that the fast growers will provide screening in a short period of time, whilst the slower growers will still be present after a much longer period of time, to allow substantial screening over a lengthy period. This method of mixed planting then allows for a secondary planting scheme after a ten-year period, to again ensure the density of the screening process.

3.4.4.2 In my experience on many native-plant screening and planting projects, the acacia species will in a year reach a screening height of between 2 to 3 metres, as will the *Casuarina glauca*, especially if they are planted at ground level towards the bottom of the mound system. Casuarina root systems have the ability to "search out" moisture at depth, and when planted in a 5 litre pot size, I have witnessed this species reach 3m within one year, and in a three-year period reach 9-10 metres in height - especially if they are in an environment where a water table is close by, as it is in this instance.

3.4.4.3 From the list of species proposed to be planted in the easements associated with the ramps and acoustic barriers, two out of the three shrub species selected have extremely fast growth from tube stock size.

3.4.4.4 Establishing appropriate growing conditions on the mounds

From my experience with the soil types associated with capping of former land fill sites, I would recommend a layer of industry-standard topsoil, with compost included, be an addition to any already existing embankment mounds and all mounding to be completed. The topsoil layer need only be of a depth of between 150mm to 300mm and should be applied to the existing soil layer after a "keying" event has occurred to both the top and selected alternate bench planting selected slope areas of the mounds. Where mounds are to be created above the ground levels existing, then the ground level soils should also be keyed before any additional mound soils are added. The keying action aids in the combination of both soil types, without allowing a slip zone to occur where water can slide through beneath any additional soils. Adding new soils without keying the layer beneath would not allow for effective penetration of water to the plant zone and may also cause a slippage of the top soil layer on the sloping ground.

3.4.5 Probable Growth Rates of the Vines nominated for Acoustic Barrier structures

3.4.5.1 The two vine species selected for the acoustic barrier screening in all three areas nominated, (the Northern Embankment, Sewer Pumping Station and Storm-water Pond Area - Roadway Opposite Wurrungwuri Reserve and the Access Ramps) are fast growing, especially the *Clematis aristata* which is very prolific, but lightweight in its growth pattern.
Note that the two nominated vine species, *Clematis aristata* and *Stephania japonica* are to be utilized on stainless steel climbing framing attached to the acoustic barrier structures in all three of the nominated locations: the Northern Embankment, Roadway opposite the Sewer Station / Wirrungwuri Reserve and the Access Ramps.

3.4.5.2 Within a three-year period, the clematis species, from my experience with the growth pattern of this particular vine, I estimate should cover a 3 metre width and would come close to topping over a 4m barrier height. I would suggest that the vines be planted at a 2 to 1 ratio of two Clematis to 1 Stephania species along the barrier sections. Stephania once established, will fill the gap between the Clematis and add a darker colour and shape leaf to add interest to the wire planting.

3.4.5.3 Both vines will require to be trained upward in the initial stages of their establishment, to their sections of the wires. Liberal mulching with leaf litter would be beneficial to give the depth and moisture required to initiate growth in the growing seasons.

Figure 10: Image of growth pattern of Clematis aristata Climbing Vine

Figure 11: Image of growth pattern of Stephania japonica climbing Vine

Figure 12: Section through the ***Northern Embankment*** *showing planting patterns and 3 to 4 year height estimates*

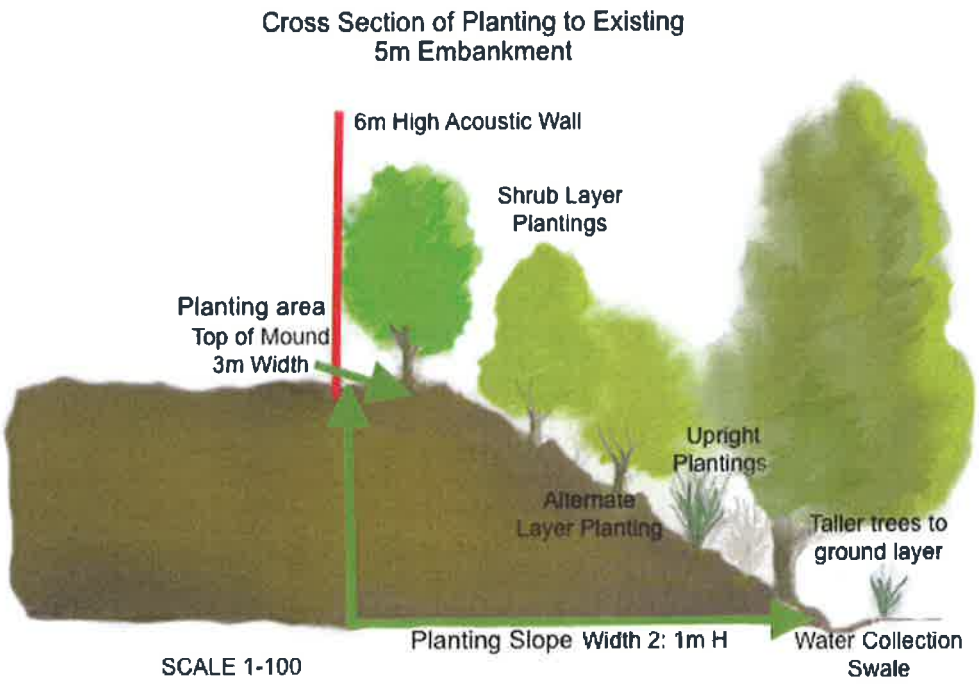

Figure 12 (above) Section through the existing Northern Embankment showing proposed plantings and acoustic screen: Note*: the* ***6m*** *height of the Acoustic Wall is shown as being achieved in full as a structure, but this may be reduced in lieu of increasing the base height of the wall by raising the ground level with a mound. A 3m wide level area would be provided for planting at the top of the existing bank in areas in which additional mounding forms part of the Acoustic barrier. (NOT TO SCALE IN THIS DOCUMENT)*

Figure 13 (below) The roadway area opposite the Sewer Station / Wirrungwuri Reserve/ Stormwater pond, identified as ***Area 7*** *in the Landscape Planting Layout Concept Schematics*

(Image Source Google Earth 2016)

4. Conclusion

4.1 In respect to the potential visual impact of the acoustic mounds and AAC acoustic barriers as proposed by Renzo Tonin (August 11, 2016) for the Site, as viewed from public and private property external to the Site, I am of the view that the nominated landscape screening has the capacity to largely screen the proposed acoustic devices within a relatively short period of time, as outlined above.

4.2 The nominated vines *Clematis aristata* and *Stephania japonica* are not intended to create a hedge-like appearance over the Acoustic Barrier structures in the nominated areas, but rather would provide an attractive pattern of vegetation and shadow that will visually soften the barriers.

4.3 In the area of the Access Ramps, the nominated shrubs and trees to be planted in the easement to supplement the existing vegetation to be retained, will provide a useful level of filtering of views to the structures.

4.4 In the area around the Brickmakers Drive sewer pumping station and northern stormwater outlet: The Panhandle road is quite a long distance removed and at a lower level from Brickmakers Drive at this point, and the vine-clad acoustic barriers adjacent to it, would not in my view be visually intrusive without any additional screen planting within the Reserve. However, this area of the Wurrungwuri Reserve near the Sewer Pumping Station, is currently fairly degraded and barren of vegetation, and if it were re-planted by Council with appropriate indigenous species, would be visually enhanced.

4.5 In the area of the Northern Embankment, because the lower level of the existing embankment is quite close to the water table, fast growing casuarina trees may be planted on these lower levels, that will have ready access to the water table and will therefore very quickly screen the embankment. The trees will at semi-maturity fully screen the acoustic barrier structure as well, but in the shorter term, the nominated variety of trees, shrubs and groundcovers will quickly provide a vegetated screen that filters any views to the acoustic barrier. In the relatively short period that the barrier may be exposed, the climbing structure and the vines growing on it will soften any areas of the structure that might potentially be visible from outside the Site.

Marilyn Woodland (Mim)
Mim Woodland

8th September 2016

MIM WOODLAND

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Mobile 0418 627914
Email: mim-w@netspace.net.au

QUALIFICATIONS

Bachelor of Environmental Science (Environmental Management) 2000
A.Diploma of Applied Science - (Landscape Design, Horticulture) 1993
Certificate IV - Assessment and Workplace Training BSZ41898 TAFE 2003
Bush Regeneration Supervision Certificate -1994
Bushland Weed Control Certificate - 1993
Advanced Mosquito Control Certificate – QUT - 1994
Erosion and Sediment Control Certificate 1999

EMPLOYMENT

2007/2016 **Trees in Newcastle**
Hunter Institute of TAFE
Part time Teacher:
Natural Resource/Bushland Regeneration to Asoc. Dip. Level
Terra Aqua Sustainable Solutions (Consultancy)

2005 to 2007 **Hunter Region Organisations of Councils (HROC)**
Environmental /Horticultural Training Consultant.

1992 -2005 **The University of Newcastle**
Initially appointed as *Bush Regeneration Manager.*
Subsequently appointed as *Manager - Campus Environment*

Responsible for landscape design, catchment management, new landscape works, landscape rehabilitation - and ongoing maintenance of 6 sporting ovals and 140Ha remnant bushland, accommodating a community of over 22,000 people.

1995 - 2005 **Hunter Institute of TAFE**
Part time Teacher:
Natural Resource/Bushland Regeneration.

Prior to 1992 **Daracon Engineering**
Nursery Manager
Landscape Rehabilitation (Projects included: Chain Valley Bay,

State Highway 23, RTA Swansea By-Pass)

CONSULTANCY via ***Terra Aqua Sustainable Solutions:***

[Mim Woodland – *principal*]

NSW Land and Environment Court

Engaged as *expert witness* for several matters in the areas of landscape design and landscape implementation, and in relation to the viability of native trees on development sites

Hunter Region of Councils (HROC)

Trainer / Teacher: Roadside Revegetation
Biodiversity /Water Control: - Newcastle & NSW South Coast

Pasminco Lead Smelter

Honorary Consultant, for 2 years - site remediation

NSW Department of Public Works (Honeysuckle DC)

Quality Assurance Supervisor- Hannell Street Landscape

Kooragang Island Project

Initial Bush Regeneration Consultant /Supervisor

NPWS - Royal National Park, Sydney

Stormwater / Bush Regeneration
Workshops for NPWS staff –
course material and site workshops

Newcastle City Council

Consultant / Trainer / Designer
Biodiversity Project 2001/02
NCC – Principal Author - Council's
Biodiversity Planting & Maintenance Manual

Auckland City Council and
Auckland University, New Zealand
Commissioned as Specialist Consultant
2001 and again in 2002
Biodiversity / Natural Water Solutions: design and implementation on site(s)

Hunter Water Corporation
Projects on Natural Water Controls
2001/02

Hunter Valley Open Cut Coal Mining
Honorary Consultant: Rehabilitation 2001/02

COMMUNITY WORK

Member of the Newcastle City Council *Biodiversity Strategy Team*

Trees in Newcastle (TIN) - Former Vice President / and Life Member

NCC / TIN Biodiversity Plantings 2001/02

Hunter Water Corporation / TIN Plantings 2001/02

Local Public and Private Schools
Landscape design, participatory educational plantings and frog pond Installations

Community work with Local Aboriginal Groups, Environmental Groups and Hunter Valley Landcare Groups

NETWORKS

Founding Member - AILDM (National) *Australian Institute of Landscape Designers and Managers*

Member - Newcastle City Council *Environmental Advisory Panel* (NEAP) 10 years

Associate Member TEFMA (Assoc. of Higher Education Facilities Managers)

AWARDS

2005 – Newcastle City Council *Community Service Award* (award made to an individual in recognition of outstanding community service) for

'Outstanding contributions to ambassadorship for the natural environment and local biodiversity'.

2004 - Hunter Regional *Landcare Award of Excellence* (individual)
Recognizing '*Innovation – Persistence and Dedication'*

2003 – Civic Design Awards - Alfred Sharpe Landscape Award –
Birabahn Sustainable Landscape Design

2003 – RAIA *Sir Zelman Cowan* National Award – Public Buildings - *Birabahn*
Richard Lepastrier, Peter Stutchbury and Sue Harper Architects

2002 - National 'Banksia Award' - buildings category – recognizing a decade of Sustainable Design and environmental management at Callaghan Campus

2001 - Certificate of Achievement for *'Outstanding Contribution to Design of Innovative Water Cycle Practices'* in the Hunter Region

1999 – Lower Hunter Civic Design Awards for *Resource Recovery – Water Management* – Callaghan Campus

1998 – The Newcastle City Council Awards - Winner – *Public / Private Enterprise Resource Conservation Category* Project: Nursing Building

1998 – Newcastle City Council *Environmental Achievement Award* Winner – Perpetual *Environmental Excellence* in the Public/Private Enterprise Category, in recognition of *Exemplary Environmental Excellence Initiatives* at the Callaghan Campus

1997 – Newcastle City Council *Environmental Achievement Award* - Winner –
Site Enhancement Category -
Landscape Treatment and innovative water catchment management system surrounding the Forum Sports and Aquatic Centre

1997 – Lower Hunter Civic Design Awards - Alfred Sharpe Award *for Excellence in the development incorporating Urban Design and Landscape:*
Don Morris Walk - University Wetlands (co-designer and team leader, implementation)

1997 – Lower Hunter Civic Design Awards - Alfred Sharpe Award – *for Excellence in the Design of a Development incorporating Urban Design and Landscape:*
Project: GP Building Courtyard

AWARDS (continued)

1994 – Lower Hunter Civic Design Awards - Alfred Sharpe Merit Award (With Stutchbury Pape Architects and Landscape Architects) – for *Excellence in the Design in a Development incorporating Outstanding Landscape and Urban Design* in the Open Category.
Project: The Design Building.

1994 – Newcastle City Council Environmental Achievement Award – Winner:
Site Enhancement Category

1992 – Lower Hunter Civic Design Awards - Alfred Sharpe Merit Award – (with Peter Stevens) for *Excellence in the Design of a Development incorporating Outstanding Landscape*
(Open Category) Project: Chancellery Building