Our ref: 8572-ltr-024-LMCC.doc Date: 20 December 2010

Development Planner
Development Assessment and Compliance
Lake Macquarie City Council
Box 1906 HRMC NSW 2310

Attention: Michelle Bisson

Dear Michelle,

RE: DA/886/2010 - Retirement Village - Staged Development

Lot 11 DP 830292, Lot 12 DP 830292

40 Burton Road, MOUNT HUTTON NSW 2290, 48 Burton Road, MOUNT HUTTON NSW 2290

This letter is in response to your letter to the Applicant dated 22 November 2010 requesting additional information to support the application. This response involves the amendments to some drawings as well as the provision of additional drawings.

The following drawings are submitted:

ARCHITECTURAL (six sets of B1 size drawings submitted with this letter):

- A00(Rev 3) Title Sheet
- A01(Rev 3) Site Plan 1:500
- A01a(Rev 3) Notification Plan
- A02(Rev 3) Site Elevations 1:200
- A03(Rev 3) Block 1 Floor Plans and Elevations 1:100
- A04(Rev 3) Block 2 Floor Plans and Elevations 1:100
- A05(Rev 3) Block 3 Floor Plans and Elevations 1:100
- A06(Rev 3) Block 4 Floor Plans and Elevations 1:100
- A07(Rev 3) Block 5 Floor Plans and Elevations 1:100
- A08(Rev 3) Block 6 Floor Plans and Elevations 1:100
- A09(Rev 3) Block 7 Floor Plans and Elevations 1:100
- A10(Rev 3) Block 8 Floor Plans and Elevations 1:100
- A11(Rev 3) Block 9 Floor Plans and Elevations 1:100
- A12(Rev 3) Block 10 Floor Plans and Elevations 1:100
- A13(Rev 3) Block 11 Floor Plans and Elevations 1:100
- A14(Rev 3) Block 12 Floor Plans and Elevations 1:100
- A15(Rev 3) Block 13 Floor Plans and Elevations 1:100
- A16(Rev 3) Block 14 and Community Centre Floor Plans and Elevations 1:100
- A17(Rev 3) Block 15 Floor Plans and Elevations 1:100
- A18(Rev 3) Block 16 Floor Plans and Elevations 1:100
- A19(Rev 3) Block 17 Floor Plans and Elevations 1:100
- A20(Rev 3) Maintenance Shed, Men's Shed and Bin Enclosure Floor Plans and Elevations 1:100
- A21(Rev 3) Site Sections 1:100
- A22(Rev 3) Staging Plan 1:500
- A23(Rev 3) Vehicle Sweep Path Plan 1:200
- A24(Rev 3) Vehicle Sweep Path Plan 1:200
- A25(Rev 3) Shadow Diagram June 22<sup>nd</sup> 9am 1:200
- A26(Rev 3) Shadow Diagram June 22<sup>nd</sup> 9am 1:200
- A27(Rev 3) Shadow Diagram June 22<sup>nd</sup> 12pm 1:200
- A28(Rev 3) Shadow Diagram June 22<sup>nd</sup> 12pm 1:200
- A29(Rev 3) Shadow Diagram June 22<sup>nd</sup> 3pm 1:200

412 King Street Newcastle NSW 2300

> ph 02 4929 2353 fx 02 4926 3069 mail@eje.com.au

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#### DIRECTORS

Peter Johnson Board reg. 3700, RAIA

Peter Campbell Board reg. 4294, RAIA

Douglas White Board reg. 4394, RAIA

Bernard Collins Board reg. 4438, RAIA

Kathy Gresham Board reg. 5493, RAIA

Michael Rodgers Board reg. 6961, RAIA

John Streeter Board reg. 6964, RAIA

Glen Spicer Board reg. 7113. RAIA

#### ASSOCIATES

Michael Craig Board reg. 5888, RAIA

Bruce Bow Board reg. 6397, RAIA

Grant Shultz Board reg. 7472, RAIA

Jason Condon Board reg. 8124, RAIA

Holly Nyquist Board reg. 7584, RAIA

Shane Smede Board reg. 8138, RAIA





- A30(Rev 3) Shadow Diagram June 22<sup>nd</sup> 3pm 1:200
- A31(Rev 3) Shadow Diagram Mar/Sept 22<sup>nd</sup> 9am 1:200
- A32(Rev 3) Shadow Diagram Mar/Sept 22<sup>nd</sup> 9am 1:200
- A33(Rev 3) Shadow Diagram Mar/Sept 22<sup>nd</sup> 12pm 1:200
- A34(Rev 3) Shadow Diagram Mar/Sept 22<sup>nd</sup> 12pm 1:200
- A35(Rev 3) Shadow Diagram Mar/Sept 22<sup>nd</sup> 3pm 1:200
- A36(Rev 3) Shadow Diagram Mar/Sept 22<sup>nd</sup> 3pm 1:200

#### LANDSCAPE ARCHITECTURE (six sets of B1 size drawings submitted with this letter):

- 8572.5/08 Masterplan (Rev F)
- 8572.5/09 Typical Rear Yard: Sun/Shade Detail (Rev F)
- 8572.5/10 Community Centre Detail (Rev F)
- 8572.5/11 Southern Boundary Typical Detail (Rev F)
- 8572.5/12 Communal Area Typical Detail (Rev F)
- 8572.5/13 Northern Setback Typical Detail (Rev F)
- 8572.5/14 Plant Schedules (Rev F)
- 8572.5/15 Plant Schedules (Rev F)

#### CIVIL ENGINEERING (six sets of A1 size drawings submitted with this letter):

- C00 DA(Rev D) Cover Sheet & Drawing Index
- C01 DA(Rev D) Sediment & Erosion Control Plan
- C02 DA(Rev D Concept Stormwater & Levels Site Plan
- C03 DA(Rev D) Concept Stormwater & Levels Part Plan Sheet 1 of 3
- C04 DA(Rev D) Concept Stormwater & Levels Part Plan Sheet 2 of 3
- C05 DA(Rev D) Concept Stormwater & Levels Part Plan Sheet 3 of 3
- C06 DA(Rev D) Civil Details Sheet 1
- C07 DA(Rev C) Civil Details Sheet 2
- C08 DA(Rev B) Civil Details Sheet 3
- C09 DA(Rev B) Flooding Extents Plan

The following headings are as per the headings in Council's letter dated 22 November 2010 for clarity.

#### Relationship to Adjoining Land

Enclosed as Attachment 1 is a plan of the broader area indicating how the subject site will relate to the surrounding area in consideration of the future capabilities of surrounding sites. Also enclosed in Attachment 1 is a more detailed plan indicating how the subject site relates to adjacent sites also capable of being further developed for purposes other than large lot housing or limited "rural" activities. These plans indicate the surrounding area that has limited future potential as it is flood-prone or is a riparian zone to South Creek. The plan shows that whilst there are zones that promote rural style living predominately to the north of the site there is extensive residential zoning to the south. The properties to the north have further development potential due to being relatively unconstrained and already developed for the purpose of large dwellings on large lots. The subject site falls between these two zonings. The residences proposed for the subject site are compatible with the residential character of the existing residences to the south while the extensive open space within the proposed development is a transition between the residential zone to the south and the rural living zone to the north.

There is potential for the adjacent site to the south (Duck's Crossing) to be developed for aged living as well as the site on the opposite side of Burton Road. There would be considerable synergies if this were to happen allowing easy pedestrian access between the sites and maximising the use of footpaths and bus shelters. The proximity of these sites to the existing residential zoning allows the aged living to be integrated into the local community. The proposed Community Centre could be a venue for this interaction.

#### Neighbourhood Land Use Plan

Enclosed as Attachment 2 is an existing Land Use Plan showing the subject site in context with the surrounding environment. This plan shows that the subject site is located on the fringe of the Rural Residential zone and close to extensive Residential 2(1) zoning allowing it to be a transition development.

#### **Staged Development**

The following staging is indicative only as construction is market driven by sales. There has however been extensive interest from persons wanting to know when units will be available as they are keen to purchase this type of unit in the area.

It is intended that the road network on site will be constructed in stages. This is facilitated with all roads being two way.

Services infrastructure will need to be predominantly associated with Stage 1 to facilitate connection to Authority services for Stage 1.

Refer to architectural drawing A22 - Staging Plan.

**Stage 1** – Consists of landscape works and Units 1 to 14 which includes a temporary Community Centre in Unit 7. Also included is the landscape buffers to Burton Road and the northern boundary as well as the rear of the site.

Construction of Stage 1 will commence within 18 months of DA approval and will take 10 months to complete. Stage 1 will include sewer connection to Hunter Water sewer. This connection will be designed and constructed to cope with all stages of the development. Stage 1 will include power connection to the EnergyAustralia power grid including the construction of a substation if required. Stage 1 will also include the construction of the entry road off Burton Road and the on-site roads required to gain entry to the Stage 1 dwellings. Portion of the detention basin will be provided in Stage 1 with the Stage 1 stormwater connected to it.

#### Stage 2 – Consists of Units 15 to 19.

Construction of Stage 2 will commence within 3 months of the completion of Stage 1 and will take 7 months to complete. Stage 2 will include roads to service Units 15 and 16 as well as associated stormwater and landscaping. In Stage 2 the detention basin will be completed.

Stage 3 - Consists of Units 20 to 27 and the permanent Community Centre.

Construction of Stage 3 will commence within 3 months of the completion of Stage 2 and will take 9 months to complete. Stage 3 will also include the conversion of the temporary Community Centre in Unit 7 to a residential unit. Stage 3 will include the construction of the road network to service Units 20 to 27 including associated stormwater infrastructure including the culvert crossing and the northern swale and drainage channel. Landscaping for this stage will be included.

#### Stage 4 - Consists of Units 28 to 30 and Units 37 to 41.

Construction of Stage 4 will commence within 3 months of the completion of Stage 3 and will take 9 months to complete. Stage 4 will include the construction of the road network to service Units 28 to 30 and Units 37 to 41 including associated stormwater infrastructure of the southern boundary swale and connection into the Stage 3 stormwater. Landscaping for this stage will be included. The Men's Shed and the Maintenance Shed will also be constructed in this stage.

Stage 5 – Consists of Units 31 to 36 and Units 42 to 51.

Construction of Stage 5 will commence within 3 months of the completion of Stage 4 and will take 9 months to complete. Stage 5 will include the construction of the completion of the road network including associated stormwater infrastructure and landscaping for this stage.

#### **Plans**

Enclosed please find six copies of the complete set of plans at B1 size as requested.

#### DCP No.1: Section 2.1.1 - Ecological Values

The project has been lodged with the Catchment Management Authority for approval and their process is on-going. They have asked for additional information which has been provided to them by RPS Australia East Pty Ltd. As at the date of this letter there has been no feedback from them. Notwithstanding, we understand this can be dealt with as a condition of any consent granted.

#### DCP No.1: Section 2.1.3 - Scenic Value

Colour and Finishes boards have been submitted with this letter. There are six colour boards representing the colour and finishes options for the project. These options allow for a significant colour and finishes variation throughout the project to add to the scenic value of the project and to individualise units whilst uniting individual unit blocks.

#### DCP No.1: Section 2.1.4 – Tree Preservation and Management

The Angophra constata currently in the location of Unit 3 has been able to be retained. To be able to achieve this outcome and to retain unit yield the block of units containing Unit 3 has been relocated approximately 7.metres further to the north to allow this tree to have a Tree Protection Zone of 5.5 metres and a Structural Root Zone of 2.5 metres as required. The block of units containing Unit 3 has also been moved approximately 2 metres towards Burton Road to accommodate the requirement for two way roads. Refer architectural drawing A01 – Site Plan.

#### DCP No.1: Section 2.1.11 - Erosion Prevention & Sediment Control

Enclosed as Attachment 4 is a revised Sediment and Erosion Control Plan prepared by Northrop Engineers in accordance with 'The Blue Book' and DCP No.1.

#### DCP No.1: Section 2.2 - Social Impact

Enclosed as Attachment 7 is a Social Impact Assessment prepared by BBC Consulting Planners.

## DCP No.1: Section 2.5.3 and 2.5.4 – Stormwater Management/On-Site Stormwater Harvesting

Details of the overflow from the underground rainwater tanks are shown on the revised Northrop Engineers drawings. Refer Attachment 5.

We have been advised by Graham Swain from Australian Bushfire Protection Planners who prepared the bushfire assessment for the project that the Fire Trail in the north-west corner of the site was required by the Rural Fire Service in his discussions with them. In consideration of Council's concerns about the structural integrity of the fire trail as well as its aesthetic quality it is proposed that the fire trail will be constructed with an all-weather drained sub-grade with a turfed surface. This design will cope with infrequent water inundation and add to its aesthetic appearance. This design has been successfully used in other developments. Enclosed as Attachment 8 is a letter from Australian Bushfire Protection Planners advising on the requirements of the proposed fire trails to the north and south of the site.

Revised floor levels to suit the 100 year flood flows are shown on the attached architectural and civil engineering plans.

The details of the proposed drainage swales, Probable Maximum Flood (PMF) details and proposed floor levels are shown on the attached revised Northrop Engineers report and drawings. Refer Attachment 5.

Flood Modelling has been prepared by Cardno Engineers. Refer Attachments 5 and 6.

#### DCP No.1: Section 2.5.5 - Waste Management

The details of the proposed waste bin store are shown on architectural drawing A20.

As discussed in the 'Staged Development' section above, the completion of construction of Stage 1 of the proposed development is proposed 28 months after receipt of the DA approval. As this is over two years from now it is too early for the developer to enter into an agreement with a commercial waste collector. Enclosed however as Attachment 3 is a letter from Veolia Environmental Services indicating that they would be prepared to enter into a commercial agreement to remove waste from the site.

The design of the bin enclosure and the roadway for the Burton Road entrance to the bin enclosure allows for the large waste collection vehicles used by most commercial waste organisations. The turning path for this type of vehicle is shown on architectural drawing A23 – Vehicle Sweep Path Plan. This turning path requires use of both sides of the roadway which is considered acceptable due to the very low volumes of traffic using these roads combined with the infrequency of the waste collection (maximum of twice per week).

Individual dwellings will have two half sized bins. One of the bins is for general waste and the other is for recyclable waste. The location of these bins are shown on the floor plans on architectural drawings A03 to A19. The retirement village will employ a manager and one of the roles of that person will be to collect these bins from the individual dwellings and empty them into the appropriate commercial bin in the bin store ready for collection by the commercial contractor. The frequency of the bin collection from the central bin enclosure will be variable dependent on the staging and demand but it is considered that the maximum collection will be twice per week.

#### DCP No.1: Section 2.6.3 - Road Design

Comments regarding kerb and guttering are noted and agreed.

The road network has been redesigned so that all roads are two way. This is shown on the revised architectural plans and widths are shown on those plans.

The road design for Units 3 to 14 has been redesigned so that the southern portion of the roadway has been deleted. The original road design was driven by Graham Swain from Australian Bushfire Protection Planners following his meeting with the Rural Fire Service. The RFS will not allow dead-end roads as they do not want fire trucks having to reverse out of dead-end roadways. If 'T' heads are to be provided to facilitate fire truck turning the heads will be required to be 11 metres in length and this is not practical in this situation. The revised design has two way dead-end roads with 'T' heads designed for normal vehicle traffic but they remain linked to the other dead-end roads by a turfed trail with structural drained subgrade similar to the construction of the fire trail discussed above. This turfed trail will be visually integrated into the landscaping. This is shown on the revised architectural and landscape drawings.

The 'Relationship to Adjoining Land' plan shown in Attachment 1 identifies that the subject site has potential links to the site immediately to the south (Ducks Crossing) and to the site directly opposite across Burton Road. These sites are capable of aged living developments. Road and pedestrian linkages are possible between the sites if this type of development is to occur. The proposed design of the subject site can accommodate both pedestrian and vehicle connectivity between these sites in the future.

#### DCP No.1: Section 2.6.4 – Pedestrian and Cycle Paths

Comments regarding extension of the footpath to connect to Glad Gunson Drive are noted and agreed.

As discussed above there are possible adjacent sites that could be developed for aged living. These sites will be able to directly connect to the developed footpath and cycleway in the futue.

#### DCP No.1: Section 2.6.5 - Public Transport

Comments regarding bus stop upgrades are noted and agreed.

A village bus service will be available to the residents.

#### DCP No.1: Section 2.616- Vehicle Parking Provision

Visiting parking has been amended as requested. The revised visitor parking is shown on the revised architectural drawings.

#### DCP No.1: Section 2.6.7 – Car Parking Areas and Structures

The revised architectural drawing show at a larger scale the vehicle access turning in relation to garages. The road accessing Units 10 to 14 has now been widened to 6.0m allowing additional turning space into the garages for these units.

#### DCP No.1: Section 2.6.10 - Vehicle Access

Comments relating to a Dilapidation Report are noted and agreed.

#### DCP No.1: Section 2.6.12 – Non-Discriminatory Access and Use

Comments relating to Access Audit recommendations are noted and agreed.

The temporary Community Centre will be located within Unit 7.

#### DCP No.1: Section 2.7.1 and 2.7.2 – Streetscape and Landscape

The landscape documentation has been altered to include detailed planting plans for setbacks, communal open spaces and other significant landscaping areas. A detailed landscape plan of the three rear yard types has been included as requested.

Council's letter states that 'planting in setback and landscaped buffer areas will be required to be completed and **established** prior to the issue of the first Occupation Certificate'. As the meaning of the word 'established' is open to individual interpretation we cannot agree to this wording as sales cannot take place until the issue of an Occupation Certificate. We understand that Council is trying to establish the buffer zones and communal landscaping early in the project and we request that Council agree to the provision of the Burton Road and northern boundary buffer landscaping as part of the Stage 1 works with the condition of the implementation of a six month maintenance plan as adequate insurance to ensure that the landscaping becomes 'established' over that period with any dead plants replaced. It is proposed that the remainder of the landscaping will be completed Stage by Stage as per the Staging plan.

Lighting has been shown on the landscape drawings to pedestrian paths and car parking areas. This lighting will take the form of low bollard style lights to allow adequate lighting of the paving surface without providing a glare source for dwellings on and off the site. The lighting shown on the landscape plan is indicative at this stage and we invite a DA condition requiring that it be designed to comply with AS 1158 with details to be provided prior to the issue of a Construction Certificate.

#### DCP No.1: Section 2.7.3 - Public Open Space

Comments relating to Section 94 are noted.

#### DCP No.1: Section 2.7.4 - Pedestrian Networks and Places

On-site pathways have been amended in line with the comments received from Council. These are shown on the revised architectural and landscape drawings.

#### DCP No.1: Section 2.7.7 - Signage

Site signage for the development will be limited but suitable to avoid confusion.

Site signage will include the following signs:

- Development identification signage. This signage is shown on the perspective images submitted with the DA.
- There will be a sign identifying the 'Community Centre' together with direction signage to the Community Centre.
- There will be directional signage throughout the site showing the way to individual units as well as identifying the fire trails and conditions of their usage.
- There will be identification signage on each unit.

The exact detail such as location, size, construction and lettering type will be developed with the Construction Certificate drawings.

#### DCP No.1: Section 2.7.8 - Fencing

The fencing details are shown on the revised architectural and landscape drawings.

#### DCP No.1: Section 3.4 and 3.5 - Housing

The landscape architectural drawings show the location of the proposed swale to the southern boundary and proposed integration of the swale into the private open space of each dwelling. The swale is required to have a block wall between it and the dwelling private open space to permit the required water flows. The planting within the swale is designed to accommodate water flows and water treatment. It is intended that the swale will be visually incorporated into the individual dwelling private open space and the block wall delineates between the active and visual spaces. A section of rural style fencing has been provided to separate the private open spaces but maintain the visual and rural ambience.

Shadow diagrams have been provided as requested. The north and south facing type units (type 2.1, 2.2, 2.3) are provided with both northern and southern courtyards in order to provide outdoor spaces that enjoy solar access in winter as well as alternative more shaded areas in the hotter months. These spaces are accessed off the main living areas and offer a high degree of amenity for the residents with the opportunity to enjoy the outdoor areas in most weather conditions. Living spaces and the north facing courtyards achieve appropriate solar access as shown in architectural drawings A25 to A36.

The west and east facing units (unit types 1.1 and 1.2) are provided with a single rear courtyard to the north of the living spaces. All living rooms receive appropriate solar access as shown in architectural drawings A25 to A36. In relation to the private outdoor spaces Units 2,3,8,9,14 and 15: the nominated 4m x 4m courtyard space will receive adequate sunlight from 9am to 12pm. Units 4,5,10,11: the courtyard space will receive 3 hours of sunlight from 11am to 2pm.

As shown in architectural drawings A25 to A36 no overshadowing of adjoining properties is created by the proposed development.

The roof forms for the project are varied in form. A second roof sheeting colour has been introduced to add further variety to the project. Additional drawings have been prepared at 1:100 scale showing the floor plans and elevations of each unit block. These additional drawings show the detail of the roof form for each block. Council has expressed particular concern regarding the southern elevation. It is pointed out that this elevation cannot be viewed in totality from any vantage point in reality. The views from the south are broken forms that include gable roofs, hip roofs, skillion roofs as well as height variation and now colour variation has been added as well. It is considered that the visual appearance and broken forms of the southern side of the project is architecturally appropriate.

Garage door colours are shown on the Colour and Finishes boards submitted with this letter.

The architectural drawings have been amended to show locations of hot water units, waste bins and air conditioning condenser units for each dwelling.

The Maintenance Shed is a building that will allow the site maintenance contractor to store equipment and products required to carry out the maintenance works for the site. It is envisaged that site maintenance will be carried out through a private contractor (who is yet to be determined) so the exact equipment and products are not yet known but the facility is provided.

The Men's Shed is a place where residents of the village (usually men) are able to meet and do various activities. The Men's Shed is provided as a venue and it is up to the users what activities are carried out in the facility. Activities that have occurred in Men's Sheds in other similar retirement villages include social activities such as card games, the making of children's wooden toys, wood turning, leather work and even home brewing of beers and wines. It is located at the eastern end of the village so that its users have some privacy and that it relates to the landscaping at the eastern end of the site.

The plan and elevation details of the Maintenance Shed and the Men's Shed are shown on architectural drawing A20.

#### **External Authorities**

It is noted that the external authorities have no objections to the proposed development.

#### Conclusion

The applicant does not wish to withdraw the proposal.

We have taken note of your requirement for further amendment to the proposal and the provision of further detail. We have sought to provide this detail as comprehensively as possible with a view to the project going to the JRPP in February 2011.

Yours faithfully EJE ARCHITECTURE

Peter Johnson **DIRECTOR** *Architect* 

#### Attachments:

Attachment 1 - Relationship with adjoining land

Attachment 2 – Neighbourhood land use plan

Attachment 3 – Letter from waste management contractor

Attachment 4 – Revised Sediment and Erosion Control Plan

Attachment 5 - Concept Stormwater Management Plan & Flooding Assessment

Attachment 6 - Flooding Report

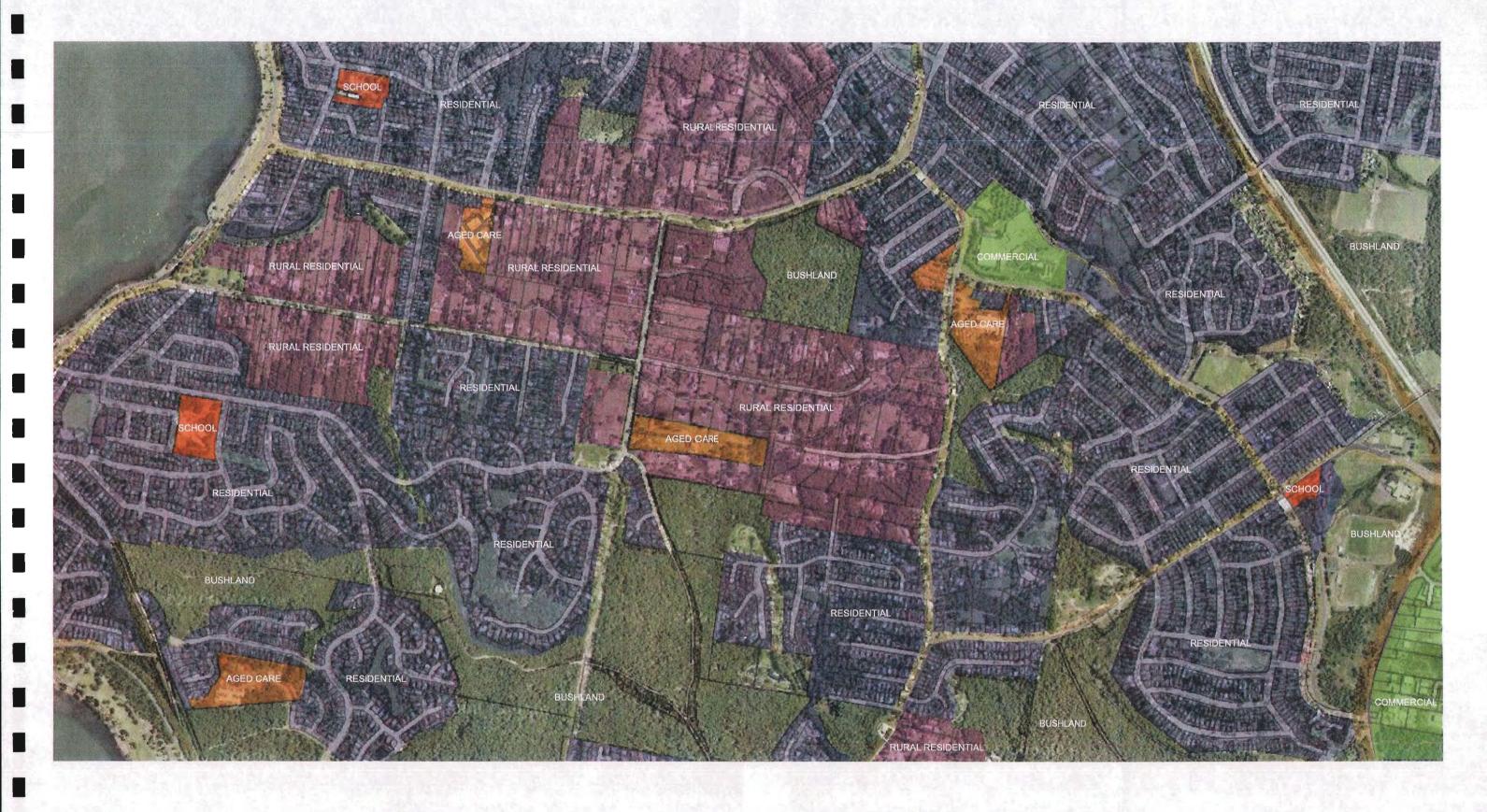
Attachment 7 - Social Impact Assessment

Attachment 8 - Letter from Australian Bushfire Protection Planners

Attachment 9 – Revised Landscape Drawings and Visual Impact Assessment

**ATTACHMENT No.1** 

RELATIONSHIP WITH ADJOINING LAND



NEIGHBOURHOOD LAND USE PLAN

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**RURAL RESIDENTIAL 7(5)** 

RURAL RESIDENTIAL 1(2) LIVESTOCK PERMITTED

RESIDENTIAL 2(2)

RESIDENTIAL 2(1)

RIPARIAN CORRIDOR

EXTERNAL NOISE SOURCES (EXCLUDES HORSE STABLES/ CHICKEN PENS ON SITE)

**EXISTING SENIORS LIVING** 

BUSHLAND

NATIONAL PARK

LAND AQUISITION BY COUNCIL

VIEWS TO/FROM SITE

1 & 2 STORY DWELLINGS

DETAIL LAND USE PLAN

SCALE 100 200m

KENDEL PARK ENVIRONMENTAL VILLAGE





**ATTACHMENT No.2** 

**NEIGHBOURHOOD LAND USE PLAN** 



PROPOSED FUTURE RELATIONSHIP PLAN



KENDEL PARK ENVIRONMENTAL VILLAGE



POSSIBLE CYCLE PATH



POSSIBLE FOOTPATH



POSSIBLE BUSHLAND TRACK



INCREMENTAL CHANGE OVER TIME - COULD BECOME HIGHER DENSITY RESIDENTIAL



COUNCIL OWNED RESERVES



LAND AQUISITION BY COUNCIL



POSSIBLE FLORA & FAUNA CORRIDOR



POSSIBLE LOW DENSITY RESIDENTIAL.



POSSIBLE SENIORS LIVING OR MEDIUM DENSITY RESIDENTIAL



100 YR FLOOD EXTENT



AREA ACCESSIBLE ONLY FROM VIOLET TOWN ROAD - NO VEHICULAR ACCESS/IMPACT ON NEIGHBOURHOOD



EXISTING & FUTURE LOW DENSITY RESIDENTIAL



ENVIRONMENTAL PROTECTION



**EXISTING RURAL LIVING - LIVESTOCK** PERMITTED



IMPORTANT FLORA & FAUNA CORRIDOR ROAD CROSSING



OPPORTUNITY FOR TREE PLANTING TO ENHANCE CORRIDOR



CLOSE TO EXISTING MEDIUM DENSITY RESIDENTIAL



CLOSE TO ADJACENT SITES THAT ARE POS-SIBLE FOR AGED CARE USAGE WITH POSSIBLE FUTURE PEDESTRIAN/VEHICLE CONNECTIVITY



PEDESTRIAN FACILITY





rev 1

LANDSCAPING ENHANCES EXISTING ENVIRONMENT, WHILST THE PROPOSED SETBACKS DO NOT DETRACT FROM THE EXISTING NATURAL AND BUILT FORM.

PROPOSED LANDSCAPING, WHEN MATURE, WILL IMPROVE

DRAINAGE DEVICES THROUGHOUT TO ENSURE MINIMAL IMPACTS ON

CURRENT RESIDENTS & IMPROVED STORMWATER SITUATION FOR FUTURE DEVELOPMENTS.

AN ENTRANCE STATEMENT COULD

ACROSS BURTON ROAD TO OTHER

POTENTIAL DEVELOPMENT SITES

PROPOSED PEDESTRIAN FACILITY WILL BENEFIT EXISTING RESIDENTS AND

WILL BE LOCATED ON POTENTIAL

FOOTPATH ROUTE.

PROVIDE A VISUAL CONNECTION

DENSITY PROPOSED WILL INCREASE LIKELY PATRONAGÉ OF POTENTIAL FUTURE INFRASTRUCTURE AND IMPROVE FEASIBILITY. FOR EXAMPLE, PEDESTRIAN AND CYCLE CONNECTIONS IN THE AREA.

ONLY SINGLE STORY DWELLINGS ARE PROPOSED TO REDUCE VISUAL IMPACT ON SURROUNDING AREA. ONE & TWO STORY DWELLINGS ARE THE LIKELY FUTURE DWELLING TYPOLOGY. SETBACKS, LANDSCAPING, & POST & RAIL FENCING ENHANCE THE LIMITED RURAL ATTRIBUTES OF THE AREA.

POST & RAIL FENCING WILL NOT POTENTIAL DRAINAGE FLOW PATHS AND ENABLE NATIVE FAUNA TO MOVE ACCROSS SITES.

MATERIAL SELECTION WILL REDUCE VISUAL IMPACT OF THE FUTURE DEVELOPMENT FROM THE EXISTING DWELLINGS IN THE NORTH. IN ADDITION, FUTURE RIPARIAN WORKS IN THE NORTH WILL FURTHER REDUCE IMPACTS.

THE REAL PROPERTY.

BUFFER PROVIDED TO EXISTING CREEK, REDUCING POTENTIAL VISUAL IMPACT TO THE EAST.

FURTHERMORE, THE PROPOSED RIPARIAN IMPROVEMENTS WILL FACILITATE ADDITIONAL REHABILITATION DOWNSTREAM.

BUFFER PROVIDED TO EXISTING CREEK,

100 YR FLOOD EXTENT

AREA ACCESSIBLE ONLY FROM VIOLET TOWN ROAD

POSSIBLE CYCLE PATH

POSSIBLE FOOTPATH

INCREMENTAL CHANGE OVER TIME - COULD BECOME HIGHER DENSITY RESIDENTIAL

POSSIBLE BUSHLAND TRACK

GOUNCIL OWNED RESERVES

LAND AQUISITION BY COUNCIL

POSSIBLE FLORA & FAUNA CORRIDOR

POSSIBLE LOW DENSITY RESIDENTIAL

POSSIBLE SENIORS LIVING OR MEDIUM DENSITY RESIDENTIAL

EXISTING & FUTURE LOW DENSITY RESIDENTIAL

ENVIRONMENTAL PROTECTION

EXISTING RURAL LIVING

IMPORTANT FLORA & FAUNA CORRIDOR ROAD CROSSING

OPPORTUNITY FOR TREE PLANTING TO ENHANCE CORRIDOR

CLOSE TO EXISTING MEDIUM DENSITY RESIDENTIAL

CLOSE TO ADJACENT SITES
THAT ARE POSSIBLE FOR
AGED CARE USAGE WITH

POSSIBLE FUTURE
PEDESTRIAN/VEHICLE
CONNECTIVITY

PEDESTRIAN FACILITY

NATIVE GRASSES AND SWALES USED FOR STORMWATER CONTROL, THIS IMPROVES EXISTING WATER QUALITY & COULD ASSIST DRAINAGE OF ADJOINING SITES IN THE FUTURE. THE PROPOSED DRAINAGE LINE AND INFRASTRUCTURE BETWEEN THE TWO SITES CAN BENEFIT FUTURE DEVELOPMENT.

PROPOSED FUTURE RELATIONSHIP PLAN

SETBACKS & BUFFER PROVIDED TO POTENTIAL NOISE SOURCES. THE PROPOSED LANDSCAPING REDUCES VISUAL IMPACT & FURTHER IMPROVES AMENITY.

OPPORTUNITY TO PROVIDE FUTURE CONNECTION BETWEEN RIPARIAN AREAS EXISTS

POTENTIAL CONNECTION BETWEEN PROPOSED LAND USE & ADJOINING POTENTIAL FUTURE LAND USE EXISTS.





KENDEL PARK ENVIRONMENTAL VILLAGE

**ATTACHMENT No.3** 

LETTER FROM WASTE MANAGEMENT CONTRACTOR



**NEW SOUTH WALES** 

17 December 2010

Mr Ken Delforce C/O de Witt Consulting Po Box 850 Charlestown NSW 2290

ATTENTION: Matt de Witt

Dear Matt, REF: De Witt Burton Road

### RE: WASTE COLLECTION FOR PROPOSED SENIORS LIVING, 40-48 BURTON ROAD, MOUNT HUTTON.

Following on from our discussion regarding your Client's proposed Seniors Living development at the subject site for approximately 51 new dwellings I have reviewed the supplied site plan prepared by EJE Architecture with relation to "Kendel Park Environmental Village".

Veolia undertakes private waste collection at a large number of apartment buildings, strata properties and community title subdivisions utilising vehicles of varying size. This proposed development situation appears no different to other sites whereby Veolia provides this collection service. In addition, there are adequate provisions identified with regard civil works and roadway to enable access by our vehicles to assist with servicing the site from one central location.

At this stage, subject to the appropriate agreements, I would envisage that once the development is underway and there are new residents on site, Veolia would be willing to provide a waste collection service similar to other developments.

Should you have any further questions or wish to discuss the options regarding servicing options, please do not hesitate to contact me on 4961 9100.

Yours sincerely,

George McIntosh

Veolia Environmental Services Stenhouse Drive Cameron Park NSW 2285



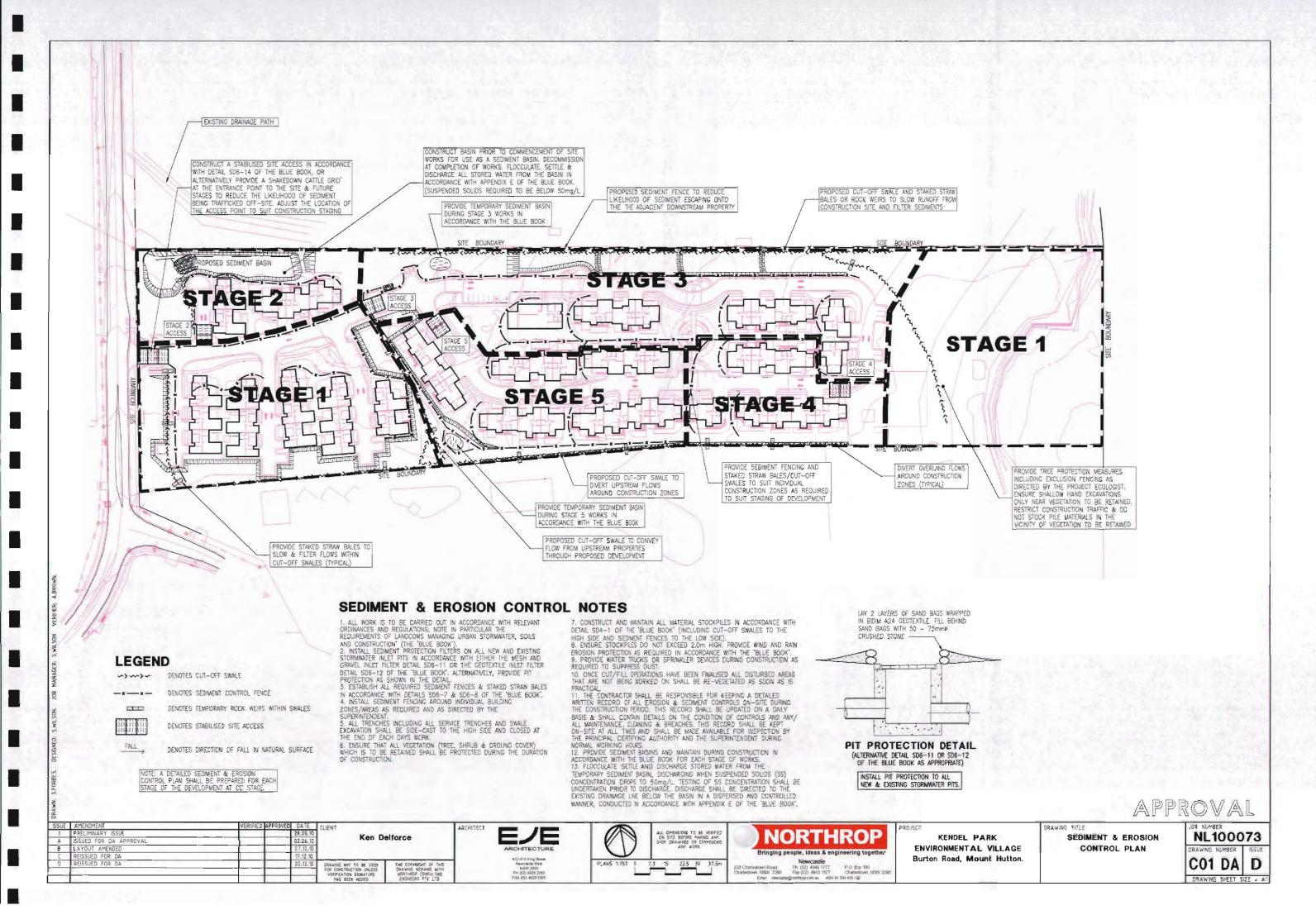


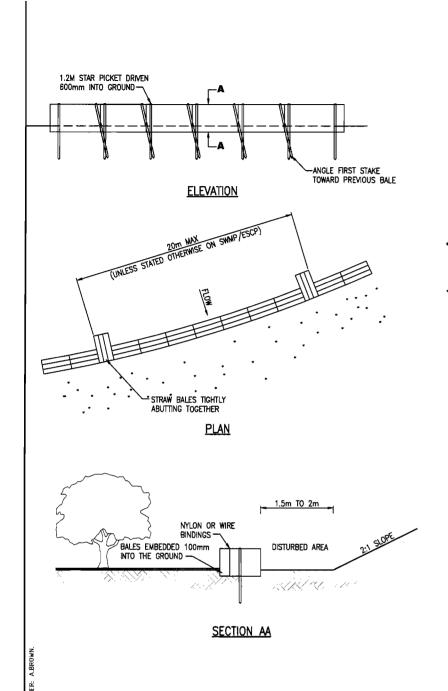




**ATTACHMENT No.4** 

REVISED SEDIMENT AND EROSION CONTROL PLAN Prepared by Northrop Engineers





#### STRAW BALE FILTER SD 6-7

NOTES

1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.

2. PLACE BALES LENGTHMSE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO THE GROUND.

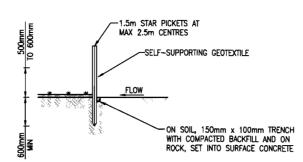
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.

4. EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 1.2m STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFTY CAPS.

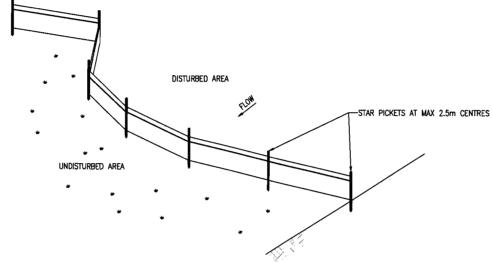
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWN SLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2m DOWNSLOPE FROM THE TOE.

6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED — THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

RETAINED — THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

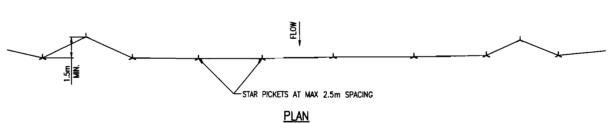


SECTION DETAIL



ISOMETRIC VIEW

20m MAX
(UNLESS STATED OTHERWISE BY SWMP/ESCP)



## **SEDIMENT FENCE SD 6-8**

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA DF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50L/SEC IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.

2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FARRIC TO BE ENTRENCHED.

3. DRIVE 1.5m LONG STAR PICKETS INTO THE GROUND AT 2.5m INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITTLE SECTOR OF THE TRENCH.

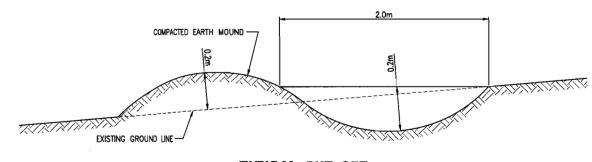
AT THE DUWNSLOPE BUSE OF THE INTENCH. ENSURE ANT STAR FIGHTS AND FITTED WITH SAFETY CAPS.

4. FIX SELF—SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH THE WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR

THIS PURPOSE IS NOT SATISFACTORY.

5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH 150mm OVERLAP.

6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.



TYPICAL CUT OFF **SWALE DETAIL** 

APPROVAL

ISSUE AMENDMENT
A DETAILS ADDED
B REISSUED FOR DA
C REISSUED FOR DA





KENDEL PARK ENVIRONMENTAL VILLAGE Burton Road, Mount Hutton. DRAWING TITLE CIVIL DETAILS SHEET 2

NL100073 DRAWING NUMBER ISSUE CO7 DA C

DRAWING SHEET SIZE = A1

#### **ATTACHMENT No.5**

# CONCEPT STORMWATER MANAGEMENT PLAN & FLOODING ASSESSMENT Prepared by Northrop Engineers

- C00 DA(Rev D) Cover Sheet & Drawing Index
- C01 DA(Rev D) Sediment & Erosion Control Plan
- C02 DA(Rev D Concept Stormwater & Levels Site Plan
- C03 DA(Rev D) Concept Stormwater & Levels Part Plan Sheet 1 of 3
- C04 DA(Rev D) Concept Stormwater & Levels Part Plan Sheet 2 of 3
- C05 DA(Rev D) Concept Stormwater & Levels Part Plan Sheet 3 of 3
- C06 DA(Rev D) Civil Details Sheet 1
- C07 DA(Rev C) Civil Details Sheet 2
- C08 DA(Rev B) Civil Details Sheet 3
- C09 DA(Rev B) Flooding Extents Plan

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# Concept Stormwater Management Plan and Flooding Assessment

for

Kendel Park Environmental Village Burton Road, Mount Hutton

Project Reference: NL100073

## **Report Transmittal**

Rev	Author	Verified	Issued to		Date
1	Shallov Milson	Andrew Brown	Shane Smede of	Matthew de Witt of	28.05.10
draft	Shelley Wilson	Andrew Brown	EJE Architecture	de Witt Consulting	28.05.10
A	Shelley Wilson	Andrew Brown	Shane Smede of	Matthew de Witt of	02.06.10
			EJE Architecture	de Witt Consulting	
В	Shelley Wilson	Andrew Brown	Matthew de Witt of	Shane Smede of	07.10.10
			de Witt Consulting	EJE Architecture	
С	Ben Clark	Andrew Brown	Matthew de Witt of	Shane Smede of	18.12.10
			de Witt Consulting	EJE Architecture	

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Appendix A - Detention Modelling Results

Appendix B- Concept Plans

Appendix C - Table Drain Calculations, Burton Road