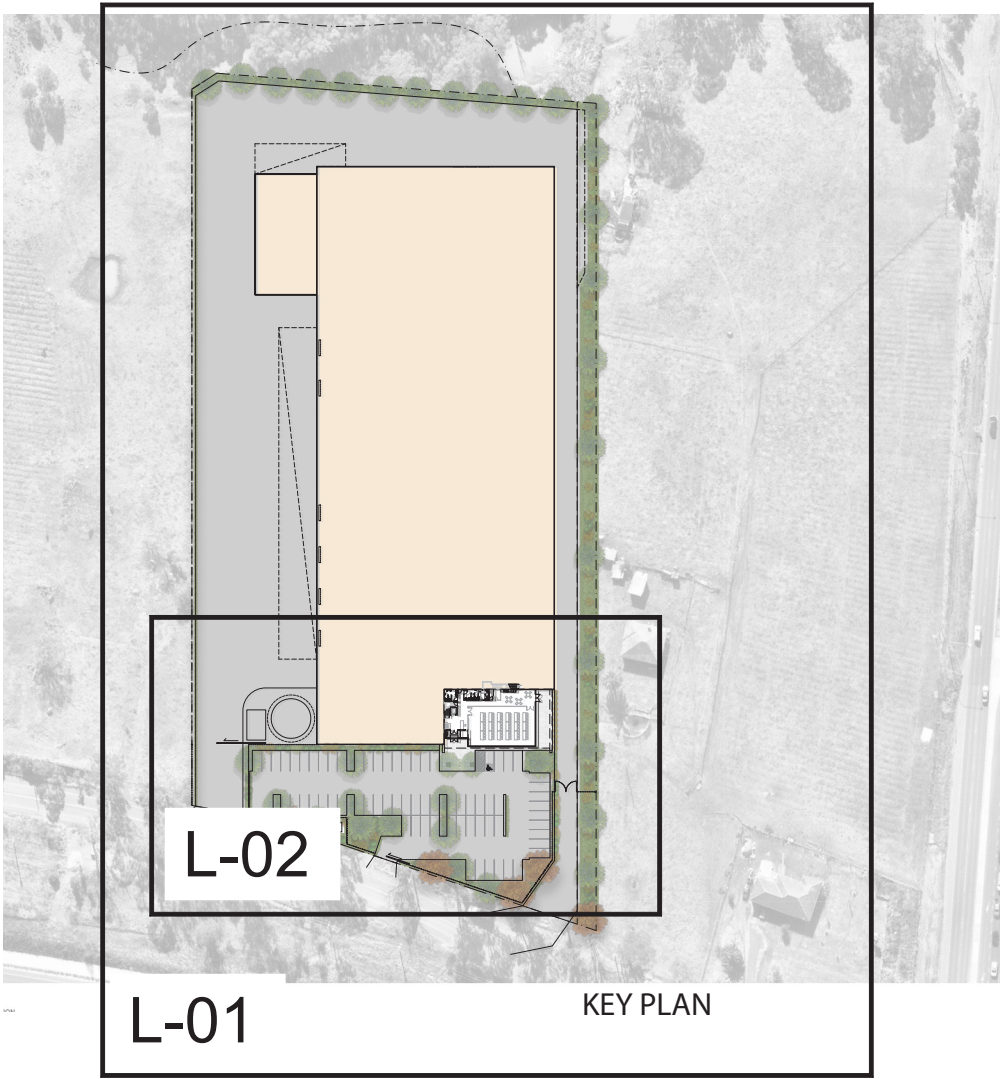


NULON MOTOR OILS WAREHOUSE

BRINGELLY ROAD, BUSINESS HUB NSW



DRAWING REGISTER

L-00	COVERSHEET
L-01	SITE PLAN
L-02	DETAIL PLAN
L-03	LANDSCAPE DETAILS & SPECIFICATION NOTES

LEGEND

	PLANTING
	ROAD/PARKING
	TREE
	SHRUBS & GROUNDCOVERS



Acmena smithii



Waterhousia floribunda



Elaeocarpus obovatus



Melaleuca quinquenervia



Doryanthes palmeri



Liriope muscari



Carex appressa



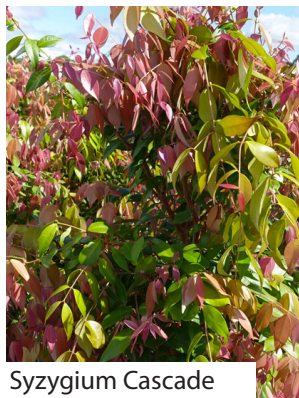
Dianella caerulea



Callistemon citrinus



Grevillea Robyn Gordon



Syzygium Cascade



Westringia fruticosa

INDICATIVE PLANTING SCHEDULE

GROUNDCOVERS		
Code	Botanical name	Common Name
GBR	GREVILLEA 'Bronze Rambler'	Bronze Rambler Grevillea
LT	LOMANDRA longifolia 'Tanika'	Lomandra Tanika
LM	LIRIOPE muscari	Lily Turf
LEG	LIRIOPE 'Evergreen Giant'	Evergreen Giant Liriope
MPA	MYOPORUM parvifolium	Creeping Boobialla

SHRUBS		
Code	Botanical name	Common Name
CC	CALLISTEMON citrinus	Crimson Bottlebrush
DEX	DORYANTHES excelsa	Gynea Lily
GRE RB	GREVILLEA 'Robyn Gordon'	Robyn Gordon Grevillea
SYZ CAS	SYZYGIVM 'Cascade'	Cascade Lilly Pilly
SYZ SF	SYZYGIVM australe 'Southern Form'	Southern Form Lilly Pilly
WFR	WESTRINGIA fruticosa	Coastal Rosemary

TREES		
Code	Botanical name	Common Name
ASM	ACMENA smithii	Lilly Pilly
CUP ana	CUPANIOPSIS anacardioides	Tuckeroo
PYR cal	PYRUS calleryana	Callery Pear
WFL	WATERHOUSIA floribunda	Weeping Lilly Pilly

RIPARIAN PLANTING		
Code	Botanical name	Common Name
TREES		
ELA obo	ELAEOCARPUS obovatus	Hard Quandong
LOP con	LOPHOSTEMON confertus	Brush Box
MEL qui	MELALEUCA quinquenervia	Broad-leafed Paperbark
GRASSES		
CAR apr	CAREX appressa	Tall Sedge
DIA cae	DIANELLA caerulea	Blue Flax Lily
LOM lon	LOMANDRA longifolia	Mat Rush

ISSUE	DATE	PURPOSE
A	16.11.2017	DA SUBMISSION
B	22.11.2017	DA SUBMISSION

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PROJECT
NULON MOTOR OILS
BRINGELLY ROAD, BUSINESS HUB,
WEST HOXTON, NSW

DRAWING TITLE
COVERSHEET



SCALE
1:1000 @ A3 / 1:2000 @ A1

DRAWN IB	CHECKED DV
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PROJECT NO. 17-0787L	DRAWING NO. L-00	REVISION B
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LEGEND

- 1. FEATURE SHADE TREE
- 2. SITE MARKER TREES
- 3. SMALL TREES IN ENTRY FORECOURT
- 4. LANDSCAPE BUFFER PLANTING
- 5. RIPERIAN PLANTING
- 6. HEDGING TO BOUNDARY
- 7. STAFF COURTYARD AREA
- 8. DRIVEWAY ENTRY
- 9. VEHICLE CIRCULATION
- 10. PARKING



ISSUE	DATE	PURPOSE
A	16.11.2017	DA SUBMISSION
B	22.11.2017	DA SUBMISSION

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Charter Hall



PROJECT
NULON MOTOR OILS
BRINGELLY ROAD, BUSINESS HUB,
WEST HOXTON, NSW

DRAWING TITLE
SITE PLAN



SCALE
1:500@A1, 1:1000@A3

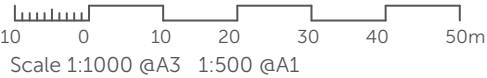
DRAWN IB	CHECKED DV
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PROJECT NO. 17-0787L	DRAWING NO. L-01	REVISION B
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NOTE:
LANDSCAPE ARCHITECT TO APPROVE ALL PLANT SETOUT PRIOR TO INSTALLATION

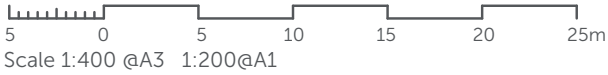


LEGEND

- 1. FEATURE SHADE TREE
- 2. SITE MARKER TREES
- 3. SMALL TREES IN ENTRY FORECOURT
- 4. LANDSCAPE BUFFER PLANTING
- 5. HEDGING TO BOUNDARY
- 6. STAFF COURTYARD AREA
- 7. DRIVEWAY ENTRY
- 8. VEHICLE CIRCULATION
- 9. PARKING
- 10. WAREHOUSE SIGNAGE
- 11. SITE FENCE - TO ARCHITECT'S DETAIL



LANDSCAPE DETAILED PLAN



ISSUE	DATE	PURPOSE
A	16.11.2017	DA SUBMISSION
B	22.11.2017	DA SUBMISSION

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PROJECT
NULON MOTOR OILS
BRINGELLY ROAD, BUSINESS HUB,
WEST HOXTON, NSW

DRAWING TITLE
DETAIL PLAN & ELEVATION



SCALE
1:200@A1, 1:400@A3

DRAWN IB	CHECKED DV	REVISION
PROJECT NO. 17-0787L	DRAWING NO. L-02	REVISION B

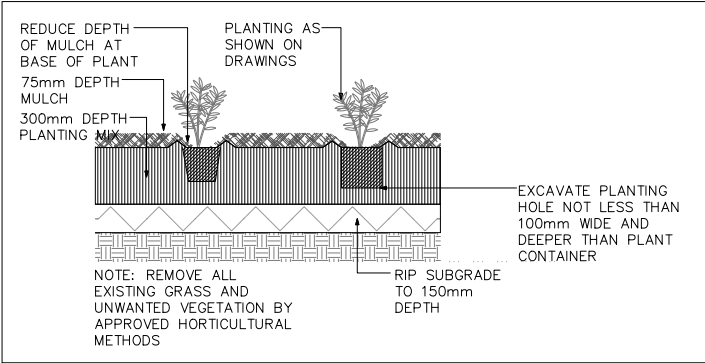
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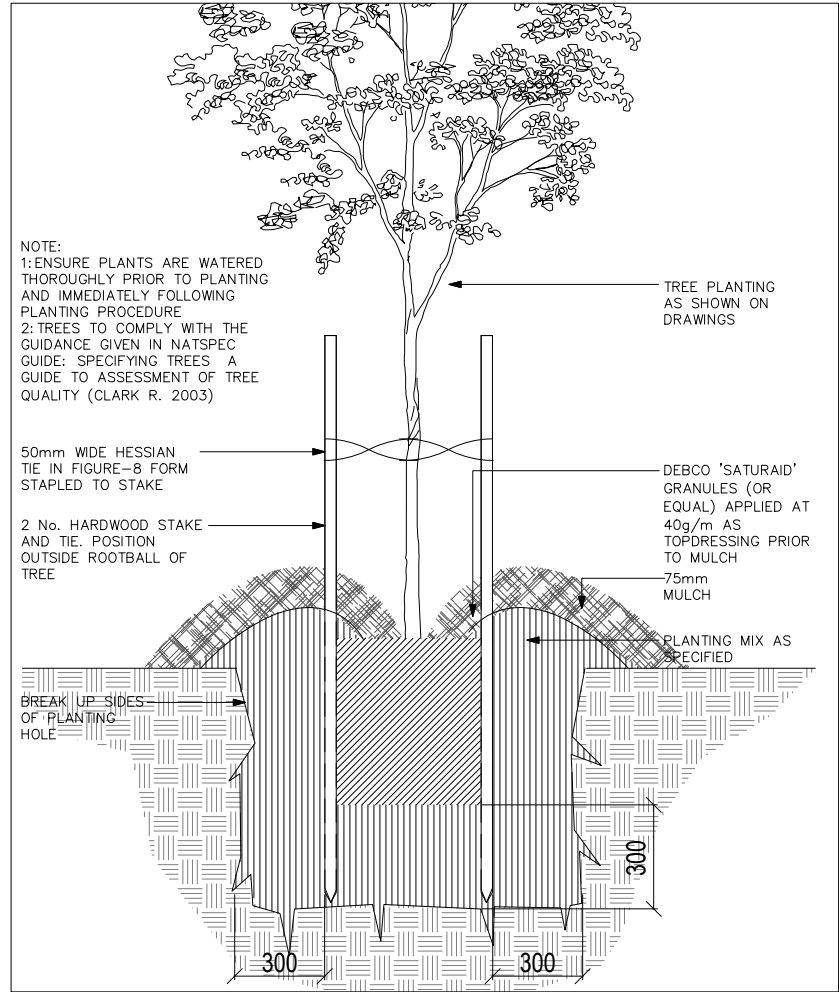
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ABN: 19 164 285 250

NOTE:
LANDSCAPE ARCHITECT TO APPROVE ALL PLANT SETOUT PRIOR TO INSTALLATION



01 TYPICAL PLANTING DETAIL
1:5



02 TYPICAL TREE DETAIL
1:10

SPECIFICATION NOTES

SERVICES
Before landscape work is commenced the Landscape Contractor is to establish the position of all service lines and ensure tree planting is carried out at least 3 metres away from these services. Service lids, vents and hydrants shall be left exposed and not covered by any landscape finishes (turfing, paving, garden beds etc.) Finish adjoining surfaces flush with pit lids.

TOPSOIL
Where possible existing topsoil in landscape areas is to be used if it can meet performance standards. Existing topsoil is to be tested by SESL Australia (1 300 30 40 80) or similar. Existing topsoil may be reused if it meets the performance standards set forth in AS 4419 and is free from: Stones >25mm diameter; Clay lumps >75mm diameter;weeds and tree roots; sticks and rubbish; material toxic to plants. If existing topsoil does not meet performance standards, contractors are to allow for reconditioning of existing topsoil to meet the performance standards or import new topsoil that meets AS 4419 requirements and meets Planting Mixture specifications.
Top soil to be laid at 300mm depth for garden beds and 150mm for turf areas.

PLANTING MIXTURE - OPTION A (Confirm with Project Manager)
Shall be homogenous blend of soil and additives in the following proportions:
Existing site soil if suitable or Imported Topsoil 50%
Compost 30%
D/W Sand 20%
Soil testing of existing site soil is to be undertaken to assess suitability of use as planting topsoil and compliance with Australian Standards.
PLANTING MIXTURE - OPTION B (Confirm with Project Manager)
Imported Garden Mix.
Type: Premium
Available: Australian Native Landscapes (ANL)

MULCH
APPLICATION: Place mulch to the required depth, (refer to drawings) clear of plant stems, and rake to an even surface finishing 25mm below adjoining levels. Ensure mulch is watered in and tamped down during installation.
MULCH TYPE:
Type 1 (Mass planting):
Pine bark: From mature trees, graded in size from 15mm to 30mm, free from wood slivers. Dark brown in colour and texture.

COMPOST
Shall be "GO Compost" as available from Solico or approved equal.

PLANT MATERIAL
All plants supplied are to conform with those species listed in the Plant Schedule on the drawings. Generally plants shall be vigorous, well established, hardened off, of good form consistent with species or variety, not soft or forced, free from disease or insect pests with large healthy root systems and no evidence of having been restricted or damaged. Trees shall have a leading shoot. Immediately reject dried out, damaged or unhealthy plant material before planting. All stock is to be container grown for a minimum of six (6) months prior to delivery to site.

FERTILISER
MASS PLANTING AREAS: Fertiliser shall be 'Nutricote' or approved equivalent in granule form intended for slow release of plant nutrients over a period of approximately nine months. Thoroughly mix fertiliser with planting mixture at the recommended rate, prior to installing plants.
TURF: Shall be Shirleys No. 17 or approved equal thoroughly mixed into the topsoil prior to placing turf.
TREES IN GRASS AND SUPER ADVANCED TREES: Pellets shall be in the form intended to uniformly release plant food elements for a period of approximately nine months equal to Shirleys Kokei pellets, analysis 6.3:1.8:2.9. Kokei pellets shall be placed at the time of planting to the base of the plant, 50mm minimum from the root ball at a rate of two pellets per 300mm of top growth to a maximum of 8 pellets per tree.

STAKING AND TYING
Stakes shall be straight hardwood, free from knots and twists, pointed at one end and sized according to size of plants to be staked.
a. 5-15 litre size plant 1x(1200x25x25mm)
b. 35-75 litre size plant 2x(1500x38x38mm)
c. 100-greater than 200litre 3x(1800x50x50mm)
Ties shall be 50mm wide hessian webbing or approved equivalent nailed or stapled to stake. Drive stakes a minimum one third of their length, avoiding damage to the root system, on the windward side of the plant.

LANDSCAPE MAINTENANCE PROGRAM

Maintenance shall mean the care and maintenance of the landscape works by accepted horticultural practice as rectifying any defects that become apparent in the landscape works under normal use. This shall include, but shall not be limited to, watering, mowing, fertilising, re-seeding, returfing, weeding, pest and disease control, staking and tying, replanting, cultivation, pruning, aerating, renovating, top dressing, maintaining the site in a neat and tidy condition as follows:-

GENERAL
The landscape contractor shall maintain the landscape works for the term of the maintenance (or Plant establishment) period to the satisfaction of the council. The landscape contractor shall attend to the site on a weekly basis. Landlord to maintain all landscape areas in perpetuity (life of the development).

WATERING
Grass, trees and garden areas shall be watered regularly so as to ensure continuous healthy growth.

RUBBISH REMOVAL
During the term of the maintenance period the landscape contractor shall remove rubbish that may occur and reoccur throughout the maintenance period. This work shall be carried out regularly so that at weekly intervals the area may be observed in a completely clean and tidy condition.

REPLACEMENTS
The landscape contractor shall replace all plants that are missing, unhealthy or dead at the Landscape Contractor's cost. Replacements shall be of the same size, quality and species as the plant that has failed unless otherwise directed by the Landscape Architect. Replacements shall be made on a continuing basis after the plant has died or is seen to be missing.

STAKES AND TIES
The landscape contractor shall replace or adjust plant stakes, and tree guards as necessary or as directed by the Landscape Architect. Remove stakes and ties at the end of the maintenance period if so directed.

PRUNING
General: Prune to reflect the natural growth flowering and regrowth habit of the individual species. Shrubs: Prune after flowering - Spring and Summer and on a spot basis as required.
Hedge trimming: Schedule trimming at times which will maintain the character and design of hedges. Allow up to three times per season.
Tip pruning: To encourage development of new shoots during the active growing season. Do not remove buds before the flowering season in those plants that have terminal flowers.
Radical pruning: To maintain a hedge or formal shape or when a particular problem, growth habit, damage, or disease requires branch removal.
Trees: Prune to eliminate diseased or damaged growth, avoid inter-branch contact and thin out crowns in a natural manner, maintain sight lines to signs and lights, or maintain visibility for personal security. Tree branch removal to AS 4373. Give notice and engage a suitably qualified 'arborist'.

MULCHED SURFACES
All mulched surfaces shall be maintained in a clean and tidy condition and be reinstated if necessary to ensure that a depth of 75mm is maintained. Ensure mulch is kept clear of plant stems at all times. Remove all mulching materials off lawn or paved areas and maintain a clean and tidy appearance when viewed on a weekly basis.

PEST AND DISEASE CONTROL
The landscape contractor shall spray against insect and fungus infestation with all spraying to be carried out in accordance with the manufacturer's directions. Report all instances of pests and diseases (immediately that they are detected) to the Landscape Architect.

GRASS AND TURF AREAS
The landscape contractor shall maintain all grass and turf areas by watering, weeding, re-seeding, rolling, mowing, trimming or other operations as necessary. Seed and turf species shall be the same as the original specified mixture. Grass and turf areas shall be sprayed with approved selective herbicide against broad leafed weeds as required by the Landscape Architect and in accordance with the manufacturer's directions. Grass and turf areas shall be fertilised once a year in autumn with "Dynamic Lifter" for lawns at a rate of 20kg per 100m2. Fertiliser shall be watered in immediately after application. Irregularities in the grass and turf shall be watered in immediately after application.
Grass and turf areas shall be kept mown to maintain a healthy and vigorous sward. Mowing height: 30-50mm.

WEED ERADICATION
Eradicate weeds by environmentally acceptable methods using a non-residual glyphosate herbicide (eg. 'Roundup') in any of its registered formulae, at the recommended maximum rate. Regularly remove by hand, weed growth that may occur or recur throughout grassed, planted and mulched areas. Remove weed growth from an area 750mm diameter around the base of trees in grassed areas. Continue eradication throughout the course of the works and during the maintenance period.

SOIL SUBSIDENCE
Any soil subsidence or erosion which may occur after the soil filling and preparation operations shall be made good by the landscape contractor at no cost to the client.

IRRIGATION NOTES

IRRIGATION OVERVIEW - Confirm with irrigation contractor at tender stage

EXTENT
All mass planting landscape areas and trees are to have full coverage by a fully automatic irrigation system. The design, materials and installation are to be in accordance with Sydney Water Codes and all relevant Australian Standards.

1. An automatic irrigation system is to be installed to all turf and garden bed areas.
2. The irrigation system shall be designed and installed by a licensed contractor to relevant Australian standards and Sydney water guidelines.
3. The irrigation system shall be connected into the rainwater tank system and pump

DRIPLINE
Provide 13mm dripline to all garden bed areas with appropriate 13mm joiners. Dripline to be Toro drip or similar with 400mm centre drippers. Install line at 500mm spacings with the first line to be 150mm in from edge. Install dripline after planting and prior to mulching to allow for an adequate mulch cover. Anchor at 1.5m maximum intervals with u-shaped stakes. Dripline pattern to suit planting.

CONTROL VALVES
24v solenoid actuated hydraulic valve with flow control. Control valves to be Toro ezflow series solenoids 25mm or approved equal. Provide a gate valve of the same size immediately upstream of each valve. House both valves in a high impact plastic valve box with a high impact plastic cover at finished ground level. Support the box with bricks on each side. Controller to be Toro greenkeeper or approved equal with a rain switch.
Install a master valve/pressure regulating valve equal to Toro p220 with exreg pressure regulation valve. Filter to be installed equal to Toro y filter 75mm screen filter.

CONTROL WIRES
Connect the control valves and soil moisture sensor to the controller with double insulated underground cables laid alongside piping where possible. Lay intertwined for their full length without joints except at the valves and branches off common wires. Provide waterproof connectors.

Provide a backflow prevention device to Sydney water standards AS 3500.

DEFECTS LIABILITY PERIOD
The irrigation system shall be subject to a 12month defects and liability period.

RELEVANT AUSTRALIAN STANDARDS

Soil: AS4419, AS3743, AS4454.
Mulch: AS4454.
Tree Stock: AS2303.
Pruning: AS4373.
Tree Protection: AS4970.
Contractors to comply with the above Australian Standards.

ISSUE	DATE	PURPOSE
A	16.11.2017	DA SUBMISSION
B	22.11.2017	DA SUBMISSION

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PROJECT
NULON MOTOR OILS
BRINGELLY ROAD, BUSINESS HUB,
WEST HOXTON, NSW

DRAWING TITLE
LANDSCAPE DETAILS &
SPECIFICATION NOTES

SCALE
AS SHOWN

DRAWN IB	CHECKED DV
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PROJECT NO.	DRAWING NO.	REVISION
17-0787L	L-03	B

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