

MARCH 2015

LOT 746-545 BALDIVIS ROAD MIRVAC

Local Structure Plan Rev H



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FIGURE 1 - LANDSCAPE STRATEGY



PUBLIC OPEN SPACE SUMMARY



FEATURE PARK

- Large expansive turf area for active recreation
- Centrally located and easily accessible to the entire community
- Large gathering spaces to cater for community events
- Large play space and fitness nodes catering for all ages
- Pedestrian/Cycle Path network links into adjacent development.



NEIGHBOURHOOD INFORMAL

- Balance of native planted pockets and open turf areas
- Large gathering nodes with BBQ/picnic facilities
- Nature play and fitness nodes (to selected POS only)
- Pedestrian/Cycle path network links into adjacent developments
- Informal active recreation space



LOCAL INFORMAL

- Predominantly native planted areas with pockets of turf
- Small gathering nodes and basic picnic/BBQ facilities
- Path network which links into adjacent developments & POS
- Primary focus on passive recreation



TRAMWAY TYPOLOGY

- Retain and protect all existing native vegetation
- Pocket planting of revegetation species
- Informal path network links to development & greater Tramway path system.

ONGOING MAINTENANCE

All Public Open Space within 746-545 are to be maintained as managed Parklands. Imagery of maintained parkland is as shown and referenced on pages POS C&D. Refer to Bushfire Hazard Assessment for further detail.



LEGEND

- EXTENT OF WORK
- ... GREENLINKS/WIDENED VERGE/DUP
- DRAINAGE STORAGE AREAS
- PLAY ELEMENTS
- SHELTER
- POTENTIAL ARTWORK /SIGNAGE
- (A) PUBLIC OPEN SPACE

FIGURE 2 - LANDSCAPE MASTER PLAN



PLAYFUL



COMFORTABLE



CONSIDERED



CONNECTED

LEGEND

- ① ENTRY AREA
- ② WIDENED LANDSCAPE VERGE
- ③ PROPOSED GATHERING SPACE
- ④ OPEN KICKABOUT SPACE
- ⑤ BIO-RETENTION AREAS
- ⑥ PRIMARY SCHOOL OVAL
- ⑦ DESIGN TO ADJACENT POS



FIGURE 3 - STREET TREE MASTER PLAN



Agonis flexuosa -
WA Peppermint



Eucalyptus leucoxylon 'Rosea' -
Pink Flowering gum



Corymbia ficifolia -
Red Flowering Gum



Tipuana tipu -
Rosewood



Melaleuca quinquernervia -
Broad Leaved Paperbark



Note:

Street trees located in Public Open Space areas with Building Protection Zone considerations are to apply to the relevant tree canopy separation requirements

FIGURE 4 - POS TREE PLANTING PALETTE



Agonis flexuosa



Banksia attenuata



Casuarina obesa



Corymbia ficifolia



Banksia grandis



Banksia menziesii



Eucalyptus gomphocephala



Eucalyptus rudis



Melaleuca quinquernervia



Melaleuca lanceolata



Melaleuca preissiana



Xanthorrhoea preissii

FIGURE 5 - POS A CONCEPT



POS TYPOLOGY

- Feature Park (A)

SIZE (excluding verges)

- 1.36 Hectares

CONCEPT

- Provide a large active turf space for the broader community
- Large accessible play space with interest for all ages
- Provide safe pedestrian and cycle linkages
- Exercise circuit linking the functions within the POS
- Provide shaded picnic facilities & bbqs
- Community focal area with space for small events/ markets

FUNCTIONS

- Turf - Larger turf areas for informal recreation
- Native waterwise planting with areas of dry gardens
- Maximise shade trees
- Picnic Facilities for family/friend & community gatherings
- Play elements for all age groups
- Path network connecting into broader path network and green-ways.
- Drainage

ENVIRONMENTAL CONSIDERATIONS

- Waterwise native planting
- Planting design to be zoned according to irrigation requirement, with full irrigation requirements to the informal turf playing area
- Dry gardens - gravel mulch, clumping plants & limited irrigation
- Source local materials where possible
- Consider the long term maintenance requirements for all materials

DRAINAGE CONSIDERATIONS

- 1:1 1608 m2 storage required
- 1:5 1830 m2 storage required
- 1:10 1840 m2 storage required
- 1:100 4100 m2 storage required

Note: Drainage figures as per project civil engineering (DEC) drawings dated February 2015.

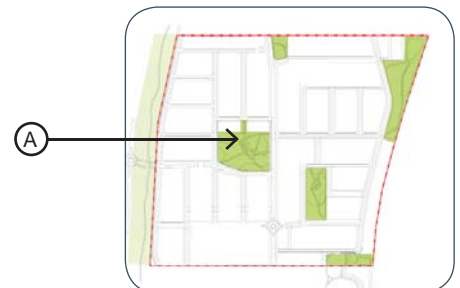
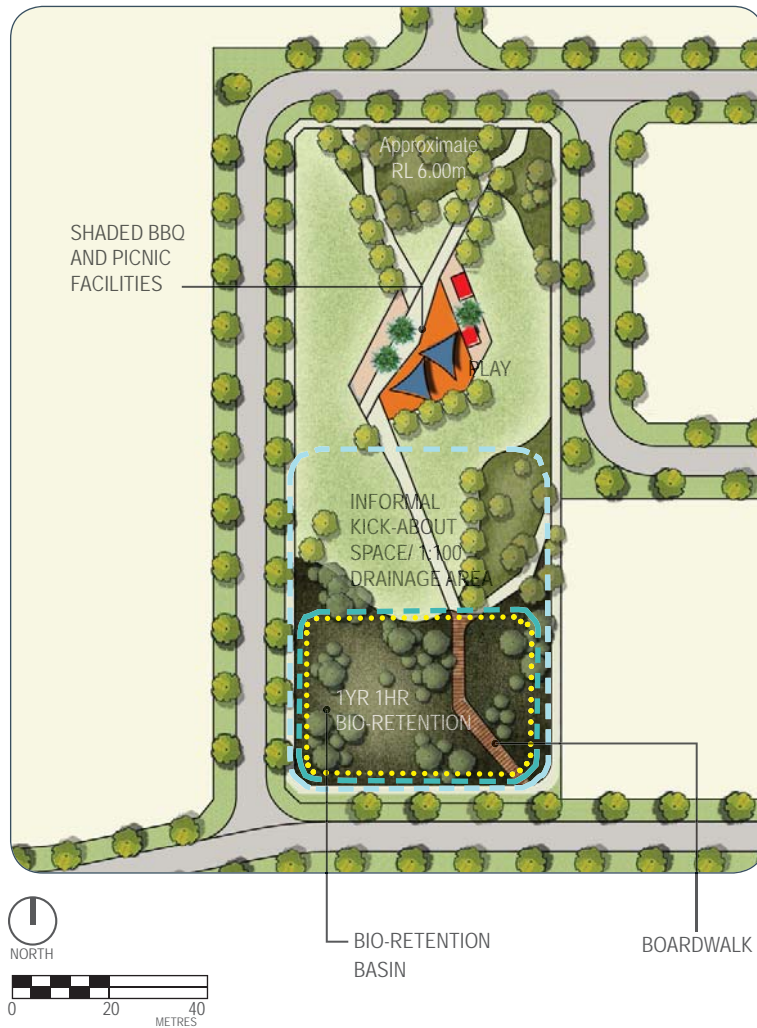


FIGURE 6- POS B CONCEPT



POS TYPOLOGY

- Neighbourhood Informal
- SIZE (excluding verges)
- .74 Hectares

CONCEPT

- Provide a Neighbourhood Park to cater for residents within a 200-400m walkable catchment
- Provide a park with a balance of native planting and open turf areas for recreation.
- Provide connection through the site via a cycle/pedestrian pathway which also links to the broader POS network.

FUNCTIONS

- Turf - informal kick-about areas
- Native waterwise vegetation
- Maximise shade trees
- Picnic facilities for family/friend gatherings
- Play elements for all ages
- Path network connecting into broader path network
- Drainage

ENVIRONMENTAL CONSIDERATIONS

- Waterwise native planting
- Planting design to be zoned according to irrigation requirement, with full irrigation requirements to the informal turf playing area
- Dry garden with gravel mulch, clumping plants and limited irrigation
- Source local materials where possible
- Consider the long term maintenance requirements for all materials

DRAINAGE CONSIDERATIONS

- 1:1 1352 m2 storage required
- 1:5 1556 m2 storage required
- 1:10 --- 1556 m2 storage required
- 1:100 --- 3465 m2 storage required

Note: Drainage figures as per project civil engineering (DEC) drawings dated February 2015.

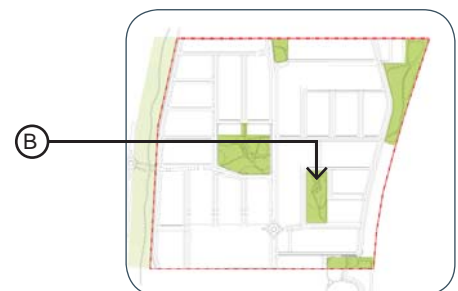
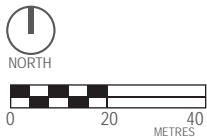


FIGURE 7 - POS C CONCEPT



MINOR LEVEL CHANGE TO BE ACCOMMODATED THROUGH SOFT PLANTED / TURFED BATTERS



BIO-RETENTION BASIN

BIO RETENTION AREA

C



POS TYPOLOGY

- Neighbourhood Informal
- SIZE (excluding verges)
- .37 Hectares (Mirvac land holding)
- 2.5 Hectares total area

CONCEPT

- Provide a northern extension of a large neighbourhood park to cater for residents within a 150m-300m catchment
- Deliver a fully integrated design response ensuring that the broader area of open space is seamless in its transition between the two residential estates
- Provide large areas of useable kick-about space that is not compromised by drainage infrastructure
- Create a safe local park which is intended to be heavily planted with shade trees and provides low key picnic facilities, recreational facilities and nodes for exercise.
- Provide safe pedestrian and cycle linkages to broader path network linkages.

FUNCTIONS

- Connecting expanses of turf
- Native, water wise planting.
- Maximise shade trees with emphasis on native species
- Retain existing vegetation where possible
- Limited picnic facilities
- Internal path network
- Path network connecting into the broader path network

ENVIRONMENTAL CONSIDERATIONS

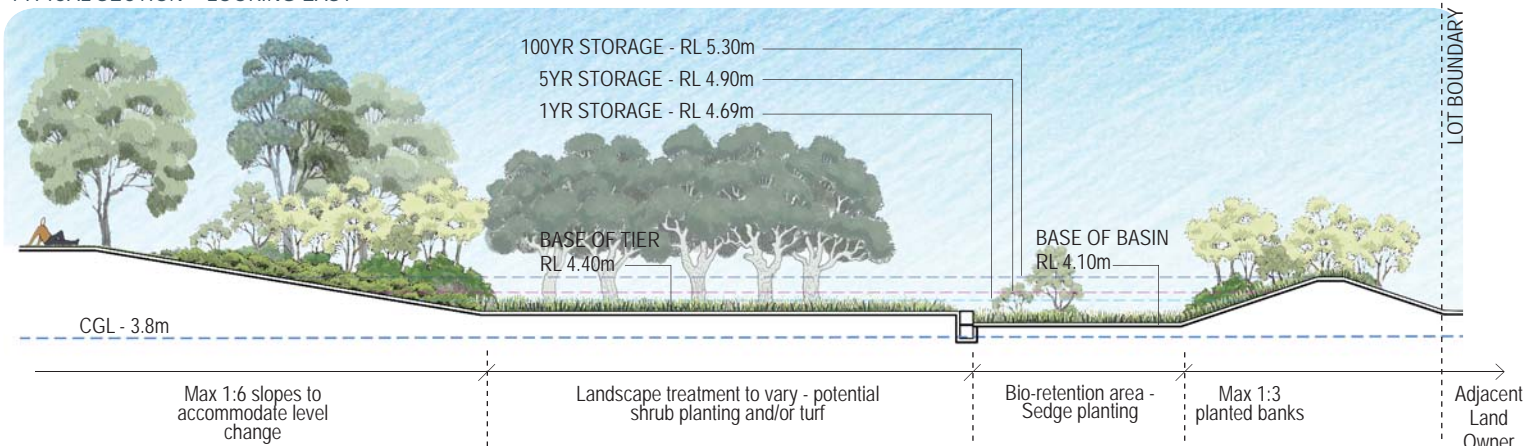
- Waterwise native planting
- Planting design to be zoned according to irrigation requirements
- Dry gardens with gravel mulch, clumping plants and limited irrigation
- Source local materials where possible
- Consider the long term maintenance requirements for all materials

DRAINAGE CONSIDERATIONS

- 1:1 676 m2 storage required
- 1:5 744 m2 storage required
- 1:10 761 m2 storage required
- 1:100 2028m2 storage required

Note: Drainage figures as per project civil engineering (DEC) drawings dated February 2015.

TYPICAL SECTION - LOOKING EAST



LOT 746-545 BALDIVIS ROAD, MIRVAC

LOCAL STRUCTURE PLAN

MI-01 REV H (MARCH 2015)

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FIGURE 8 - POS D CONCEPT



POS TYPOLOGY

- Local Informal
- SIZE (excluding verges)
- 1.44 Hectares

CONCEPT

- Provide a Neighbourhood Park to cater for residents within a 200-400m walkable catchment
- Provide a park with a balance of native planting and open turf areas for recreation.
- Provide connection through the site via a cycle/pedestrian pathway which also links to the broader POS network.

FUNCTIONS

- Turf - informal kick-about areas
- Native waterwise vegetation
- Maximise shade trees
- Path network connecting into broader path network
- Drainage

ENVIRONMENTAL CONSIDERATIONS

- Waterwise native planting
- Planting design to be zoned according to irrigation requirement, with full irrigation requirements to the informal turf playing area
- Planting within Building Protection Zone to be considered. Refer to the FESA planting guidelines for possible species within the BPZ
- Dry garden with gravel mulch, clumping plants and limited irrigation
- Source local materials where possible
- Consider the long term maintenance requirements for all materials

DRAINAGE CONSIDERATIONS

- 1:1 1919 m2 storage required
- 1:5 2163 m2 storage required
- 1:10 2187 m2 storage required
- 1:100 5151 m2 storage required

Note: Drainage figures as per project civil engineering (DEC) drawings dated February 2015.

It is anticipated that the basin will be proportionally divided between the Lot 746 and 545 based on their respective internal catchment areas. Refer to the LWMS for further details.

D



Drainage areas shown to represent top of water level area. Actual formation to be determined through detail design.

BIO-RETENTION BASIN CULVERT



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FIGURE 9 - POS E CONCEPT



POS TYPOLOGY

- Local Informal
- SIZE (excluding verges)
- .10 Hectares

CONCEPT

- Provide a Neighbourhood Park to cater for residents within a 200-400m walkable catchment
- Provide a park with a balance of native planting and open turf areas for recreation.
- Provide connection through the site via a cycle/pedestrian pathway which also links to the broader POS network.

FUNCTIONS

- Turf - for passive surveillance
- Native waterwise vegetation
- Maximise shade trees
- Path network connecting into broader path network

ENVIRONMENTAL CONSIDERATIONS

- Waterwise native planting
- Planting design to be zoned according to irrigation requirement, with full irrigation requirements to the informal turf playing area
- Planting within Building Protection Zone to be considered. Refer to the FESA planting guidelines for possible species within the BPZ
- Dry garden with gravel mulch, clumping plants and limited irrigation
- Source local materials where possible
- Consider the long term maintenance requirements for all materials



FIGURE 10 - TRAMWAY TYPOLOGY PLAN



CONCEPT

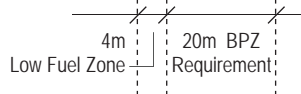
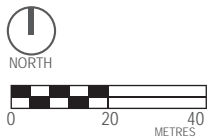
- Maintain and protect all existing vegetation within tramway reserve
- Meandering dual use path runs the length of the tramway and links to greater tramway path networks.
- Limestone Bridal trail runs adjacent to boundary
- Planting pockets of native re-vegetation

FUNCTIONS

- Native re-vegetation planting
- Crushed limestone bridal path
- Dual use path
- Entry Statement at Baldivis Road
- Provide linkages to pedestrian networks within and outside of the development area

ENVIRONMENTAL CONSIDERATIONS

- No irrigation
- Re-vegetation of native plant communities to strategic nodes. Locations to be determined in detailed design
- Removal of weed species



TYPICAL TRAMWAY INTERFACE SECTION

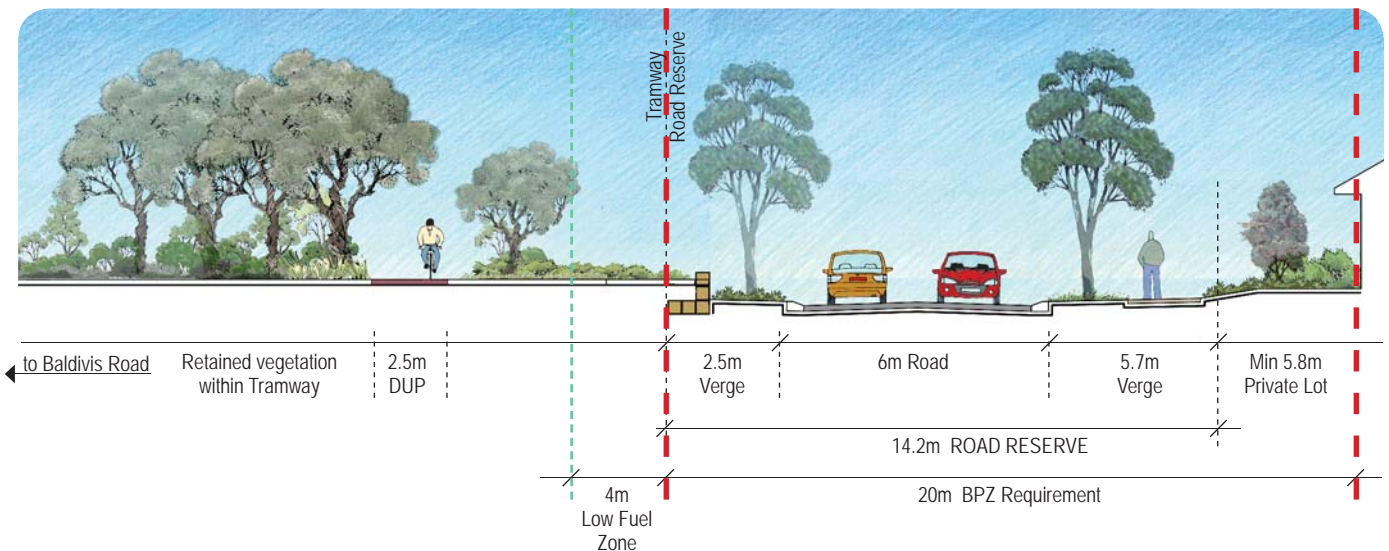
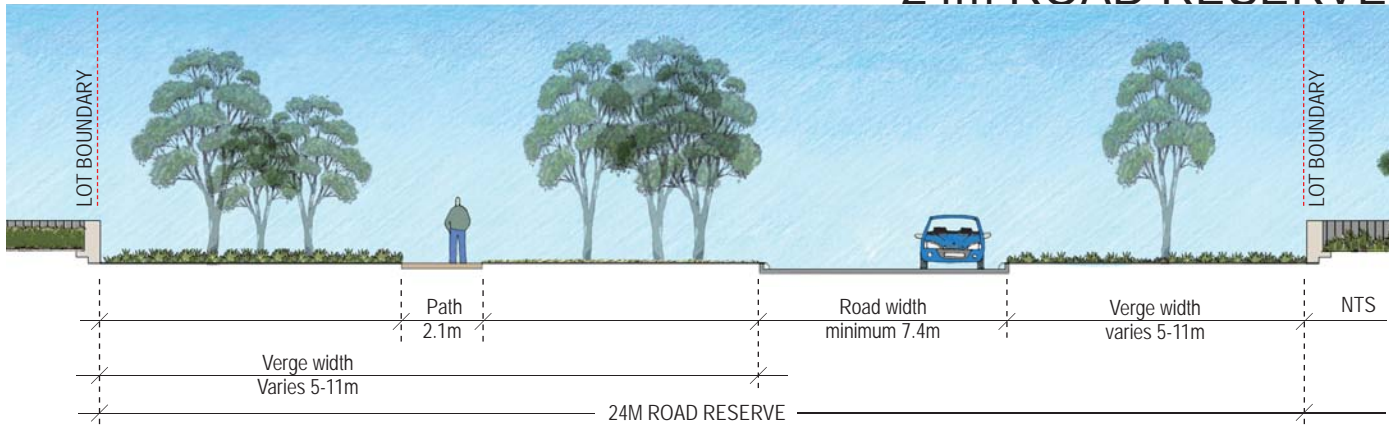
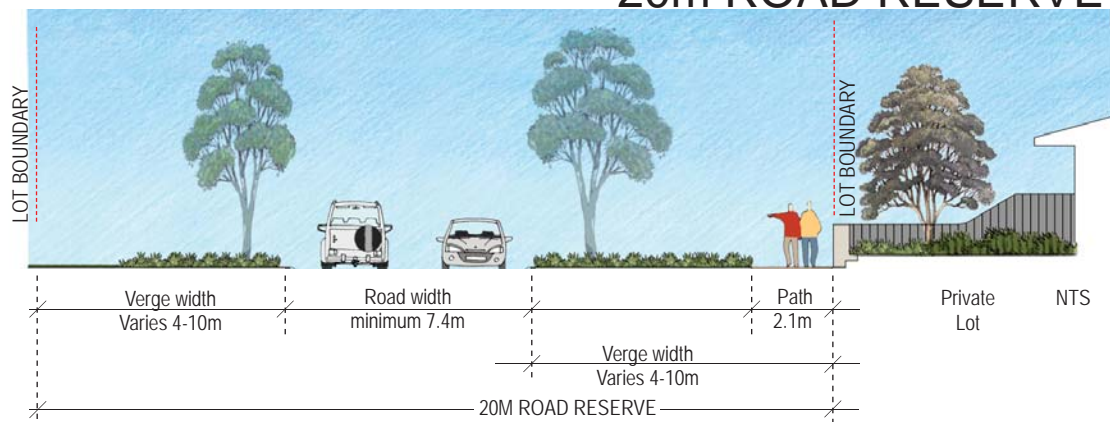


FIGURE 11 - ROAD TYPOLOGY SECTIONS

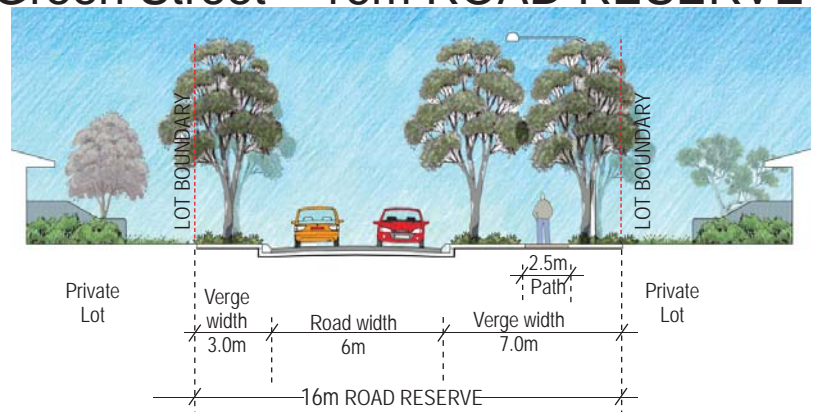
24m ROAD RESERVE



20m ROAD RESERVE



'Green Street' - 16m ROAD RESERVE



15m ROAD RESERVE

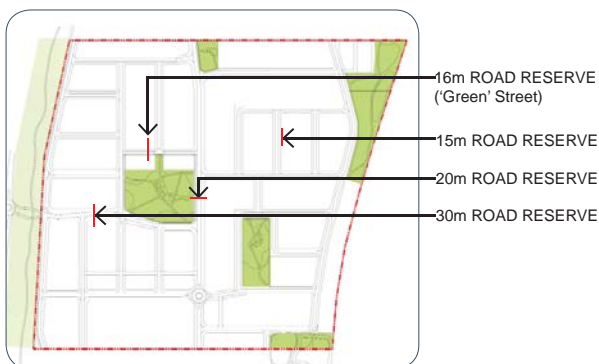
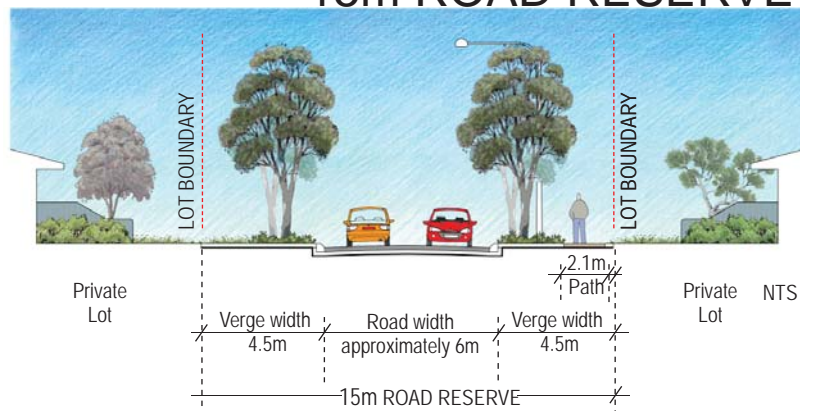
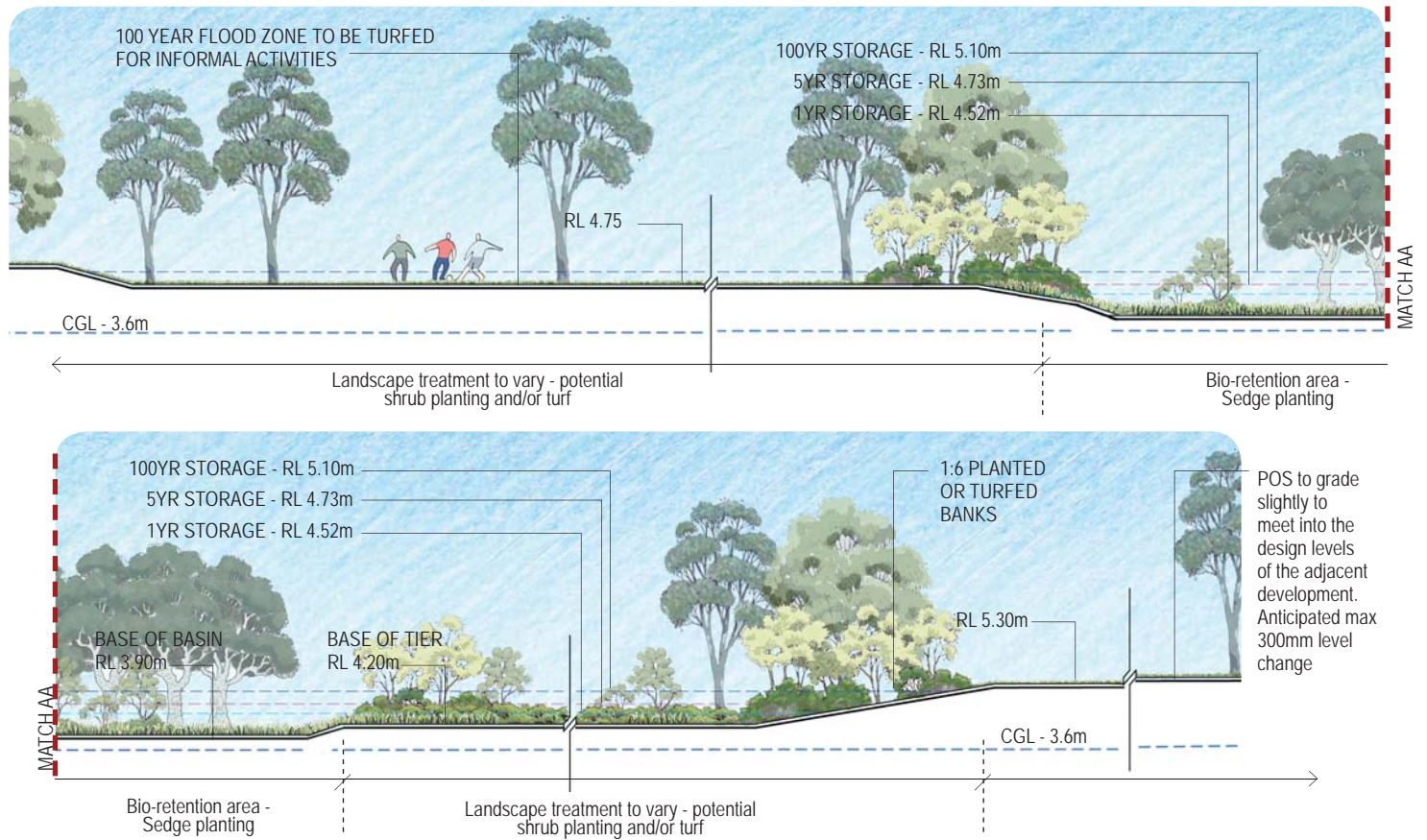


FIGURE 12 - LWMS TYPICAL SECTIONS

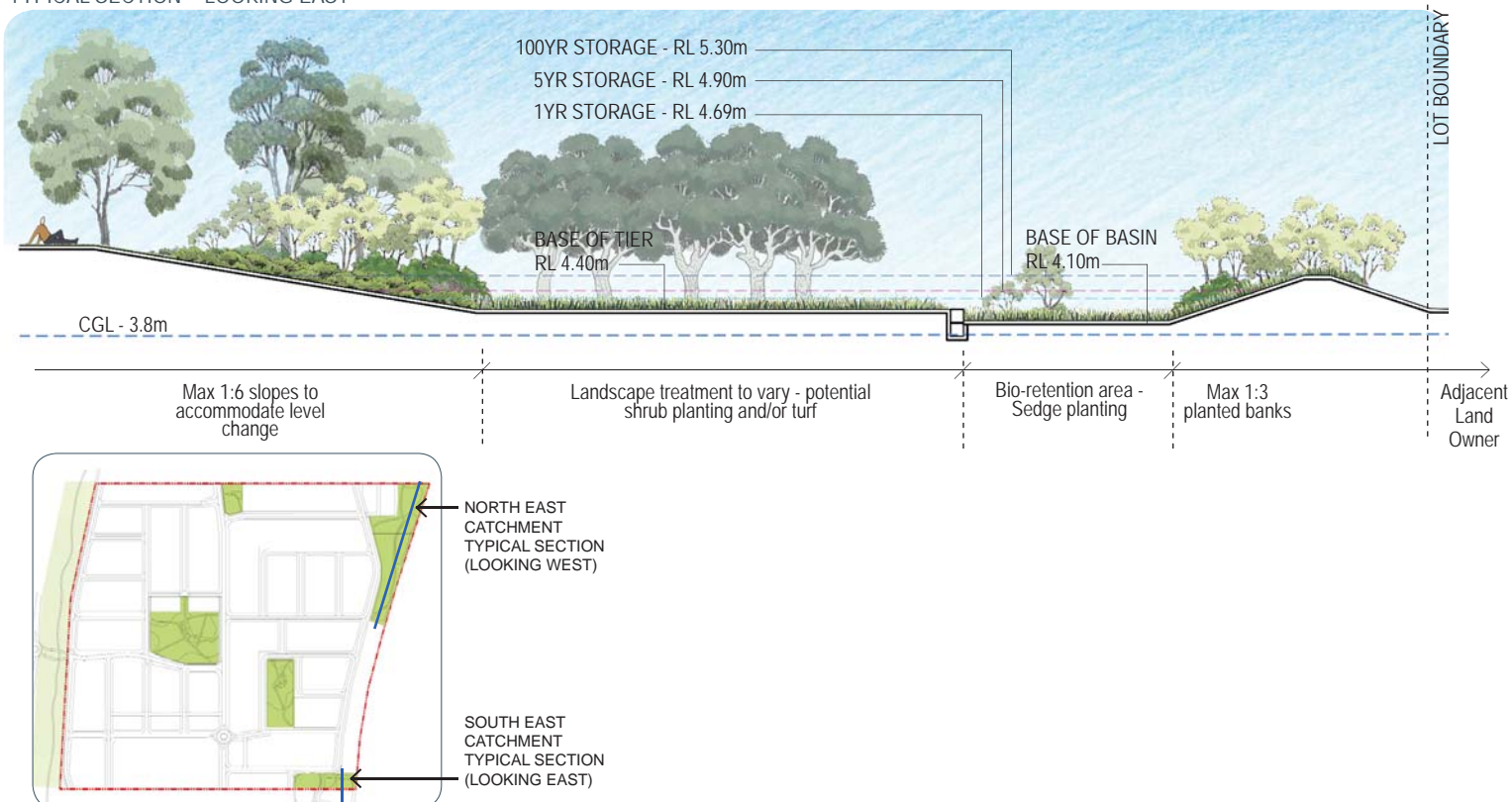
NORTH EAST CATCHMENT - TYPICAL BASIN SECTION

TYPICAL SECTION - LOOKING WEST



SOUTH EAST CATCHMENT - TYPICAL BASIN SECTION

TYPICAL SECTION - LOOKING EAST



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