

22 September 2017

DEXUS Wholesale Management Limited (ACN 159 301 907)
as trustee for DEXUS Quarry West Subtrust (ABN 65 043 801 812)

Attention: Mr Andrew Needham

Australia Square, Level 25
264-278 George Street
SYDNEY NSW 2000

Dear Sir

**Re: Lot 18 DP 270644, Greystanes Southern Employment Land (Boral Land)
Section 96 Application SSD_6801**

We provide this letter relating to a proposed Section 96 application to the Greystanes Southern Quarry West project approved under SSD_6801. Specifically this letter covers the civil engineering aspects of the amendment.

The Section 96 Application is for an amendment to the approved layout defined in SSD_6801, and to the previous three Section 96 Applications dated 29 April 2016, 20 September 2016 and 13 February 2017. The main component of the current amendment is for an adjustment to the approved masterplan lot layout in Precinct C & D.

A set of civil engineering drawings were completed by Costin Roe Consulting during 2015 and subsequently during 2016 as noted above. The following drawings have now been updated to show the new masterplan layout and adjustments to the engineering design:

- Co10529.42-DA40 [B] Site Masterplan
- Co10529.42-DA41 [B] Civil Works Plan Sheet 1
- Co10529.42-DA42 [B] Civil Works Plan Sheet 2
- Co10529.42-DA46 [B] Stormwater Management/Water Quality

We have also provided a summary of the engineering components of the development which will change from, or remain consistent with, the approved SSD_6801 development, and previous Section 96 Application of 13 February 2017. The summary of design elements are as follows:

1. Development Layout:

The development layout differs from the previous submission in that the arrangement of the development lots on the eastern side of Dolorite Close within Precincts C & D have been adjusted.

Adjustments to the masterplan relate to Warehouse C, Warehouse D1 and Warehouse D2. The lot layouts to the west and north of the estate road are generally consistent with the previous application. The building layout for Warehouse C has also changed. The floor

level Warehouse C, D1 & D2 have been amended to suit access from Dolerite Close, to meet flood planning requirements and to achieve cut to fill of earthworks over the site. It is noted that the final building level will be subject to detail geotechnical and earthwork volume assessment and may vary +/-500mm from the nominated level.

2. Stormwater Management & Layout:

The Stormwater Management Strategy for the site will remain generally consistent with the approved configuration produced by Costin Roe in 2015 and the overall Quarry Estate Management defined by GHD in 2006. The overall impervious surface area also remains generally consistent with the approved masterplan layout, hence stormwater runoff rates remain consistent with the approval and overall Quarry Estate Management Plan.

Minor adjustments to the locations of the bio-retentions within the site have been made. Basins within Precinct C have been adjusted to suit the proposed layout. Basin locations within Precinct D remain generally consistent with the previous application. It can be confirmed that the minimum required 3000m² of bio retention, as defined in SSD_6801, has been provided.

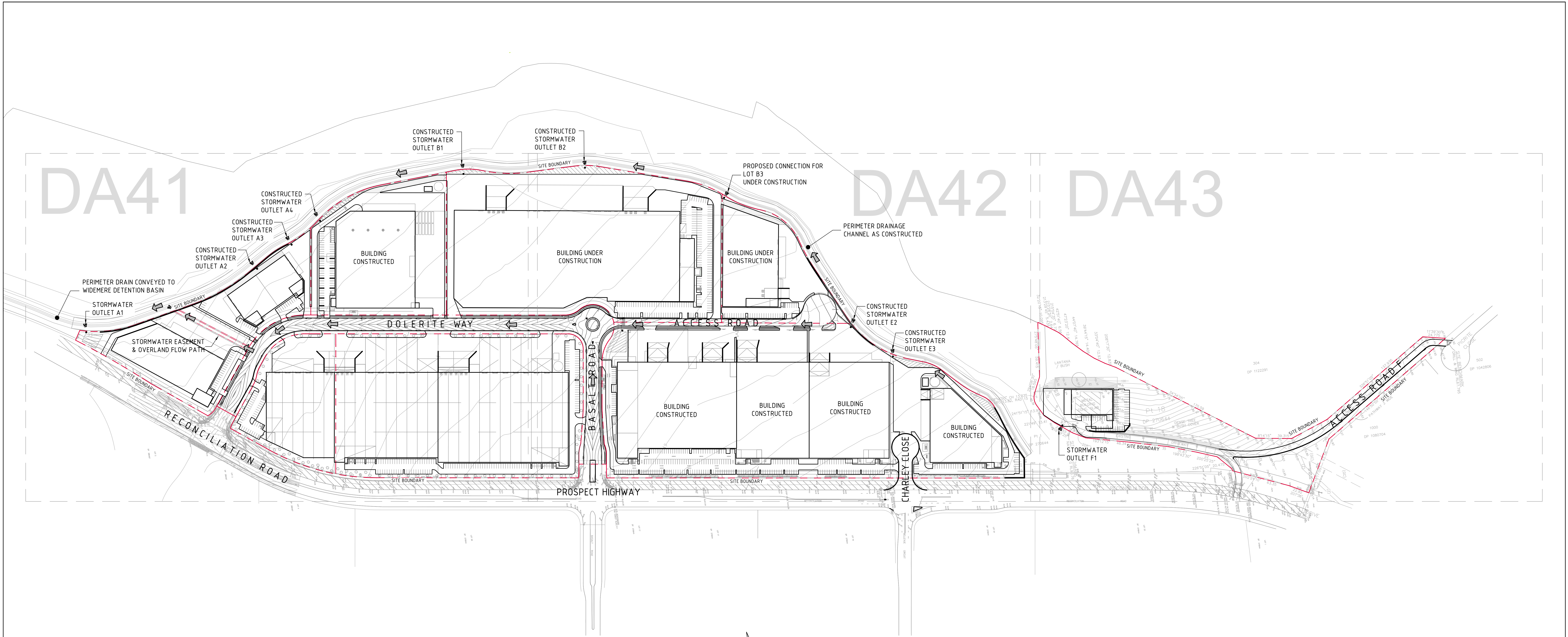
All stormwater runoff will remain being directed to the perimeter drainage channel on the western boundary of the development which ultimately conveys stormwater to the estate level detention basin provided off site and known as the Widemere East basin.

We trust the above information meets your current needs. Please do not hesitate in contacting the undersigned if any further clarification is required.

Yours faithfully,
COSTIN ROE CONSULTING PTY LTD



MARK WILSON MIEAust CPEng NER
Director



LEGEND:

LEVELS DATUM IS AHD.
EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY
INFORMATION PROVIDED BY LAND PARTNERS DATED 11.05.14

- SGGP, SINGLE GRATED GULLY PIT
- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- DRAINAGE LINE
- FINISHED PAVEMENT CONTOUR (MAJOR)
0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR)
0.1m INTERVALS

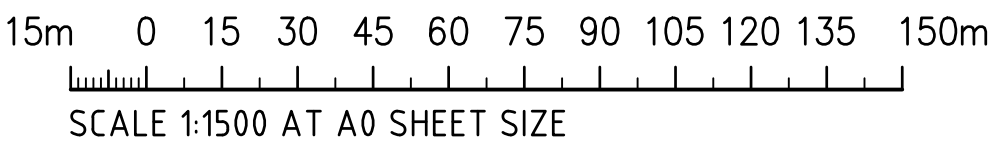
WATER QUALITY NOTE:

ALL DEVELOPMENT SITES TO PROVIDE AN END-OF-LINE GROSS POLLUTANT TRAP
PRIOR TO CONNECTION TO ESTATE INFRASTRUCTURE SYSTEM OR TO PERIMETER
DRAINAGE CHANNELS.



SITE MASTERPLAN
SCALE 1:1500

FOR S96 MODIFICATION



								ARCHITECT				CLIENT				PROJECT								Costin Roe Consulting Pty Ltd. Consulting Engineers 423 80 80 88 Level 1, 8 Windmill Street Wahbi Bay, Sydney NSW 2000 Tel: (02) 9251-7899 Fax: (02) 9241-3731 email: mail@costinroe.com.au @				Costin Roe Consulting PRECISION COMMUNICATION ACCOUNTABILITY				DRAWING TITLE SITE MASTERPLAN															
ISSUED FOR \$96 MODIFICATION				22 09 17				B								PROPOSED DEVELOPMENT LOT C & D, QUARRY ESTATE GREYSTANES NSW																															
AMENDMENTS FOR \$96 MODIFICATION				05 09 17				A																																							
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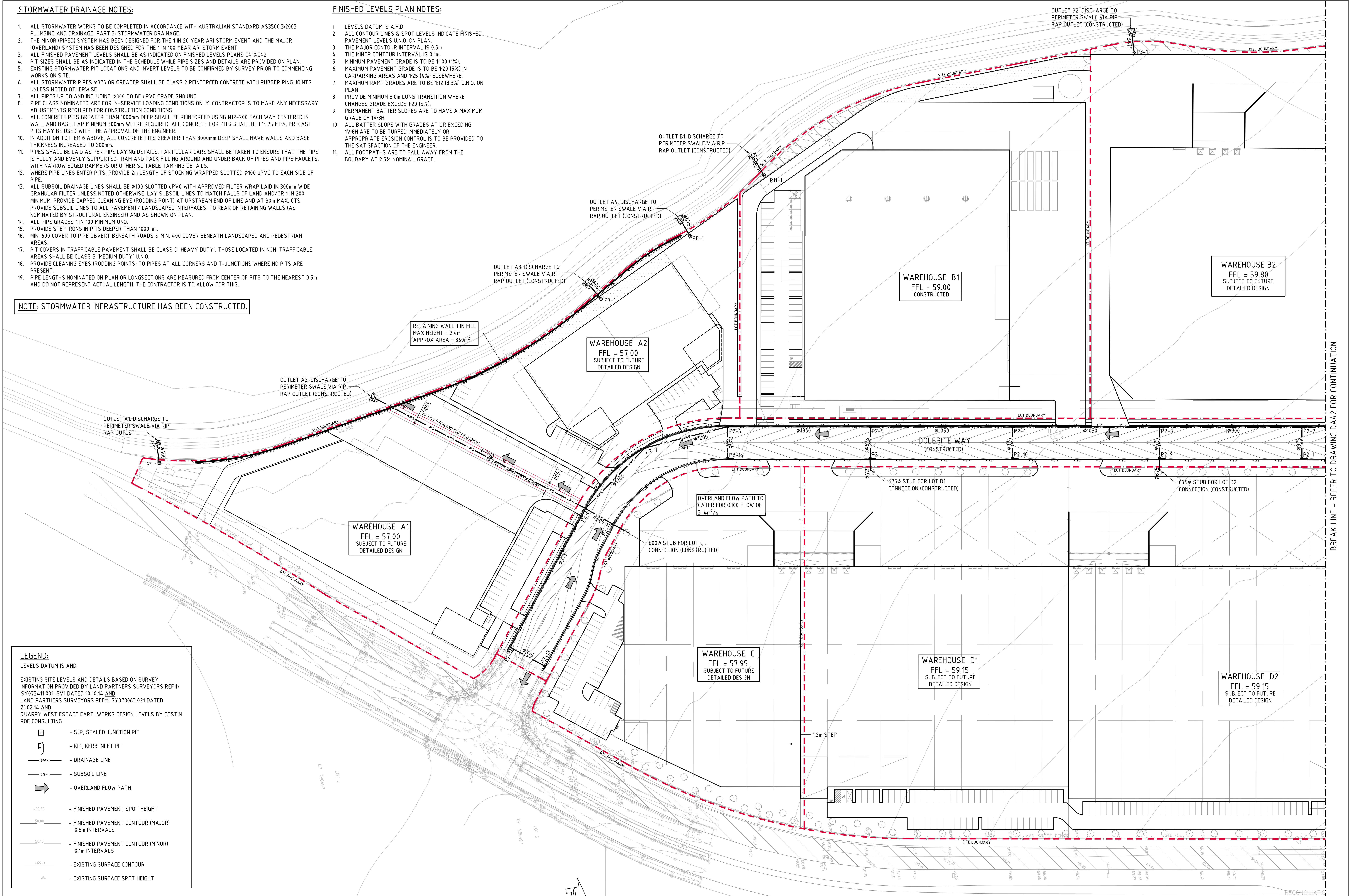
STORMWATER DRAINAGE NOTES:

1. ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3:2003 PLUMBING AND DRAINAGE, PART 3: STORMWATER DRAINAGE.
2. THE MINOR (PIPED) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 20 YEAR ARI STORM EVENT AND THE MAJOR (OVERLAND) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 100 YEAR ARI STORM EVENT.
3. ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLANS C4.1&C4.2
4. PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN.
5. EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON SITE.
6. ALL STORMWATER PIPES Ø375 OR GREATER SHALL BE CLASS 2 REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
7. ALL PIPES UP TO AND INCLUDING Ø300 TO BE uPVC GRADE SN8 UNO.
8. PIPE CLASS NOMINATED ARE FOR IN-SERVICE LOADING CONDITIONS ONLY. CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS REQUIRED FOR CONSTRUCTION CONDITIONS.
9. ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTERED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE F'c 25 MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
10. IN ADDITION TO ITEM 6 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
11. PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED. RAY AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMMERS OR OTHER SUITABLE TAMPING DETAILS.
12. WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED Ø100 uPVC TO EACH SIDE OF PIPE.
13. ALL SUBSOIL DRAINAGE LINES SHALL BE Ø100 SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM. PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/ LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN.
14. ALL PIPE GRADES 1 IN 100 MINIMUM UNO.
15. PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
16. MIN. 600 COVER TO PIPE OBVERT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
17. PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY', THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' UNO.
18. PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
19. PIPE LENGTHS NOMINATED ON PLAN OR LONGSECTIONS ARE MEASURED FROM CENTER OF PITS TO THE NEAREST 0.5m AND DO NOT REPRESENT ACTUAL LENGTH. THE CONTRACTOR IS TO ALLOW FOR THIS.

NOTE: STORMWATER INFRASTRUCTURE HAS BEEN CONSTRUCTED.

FINISHED LEVELS PLAN NOTES:

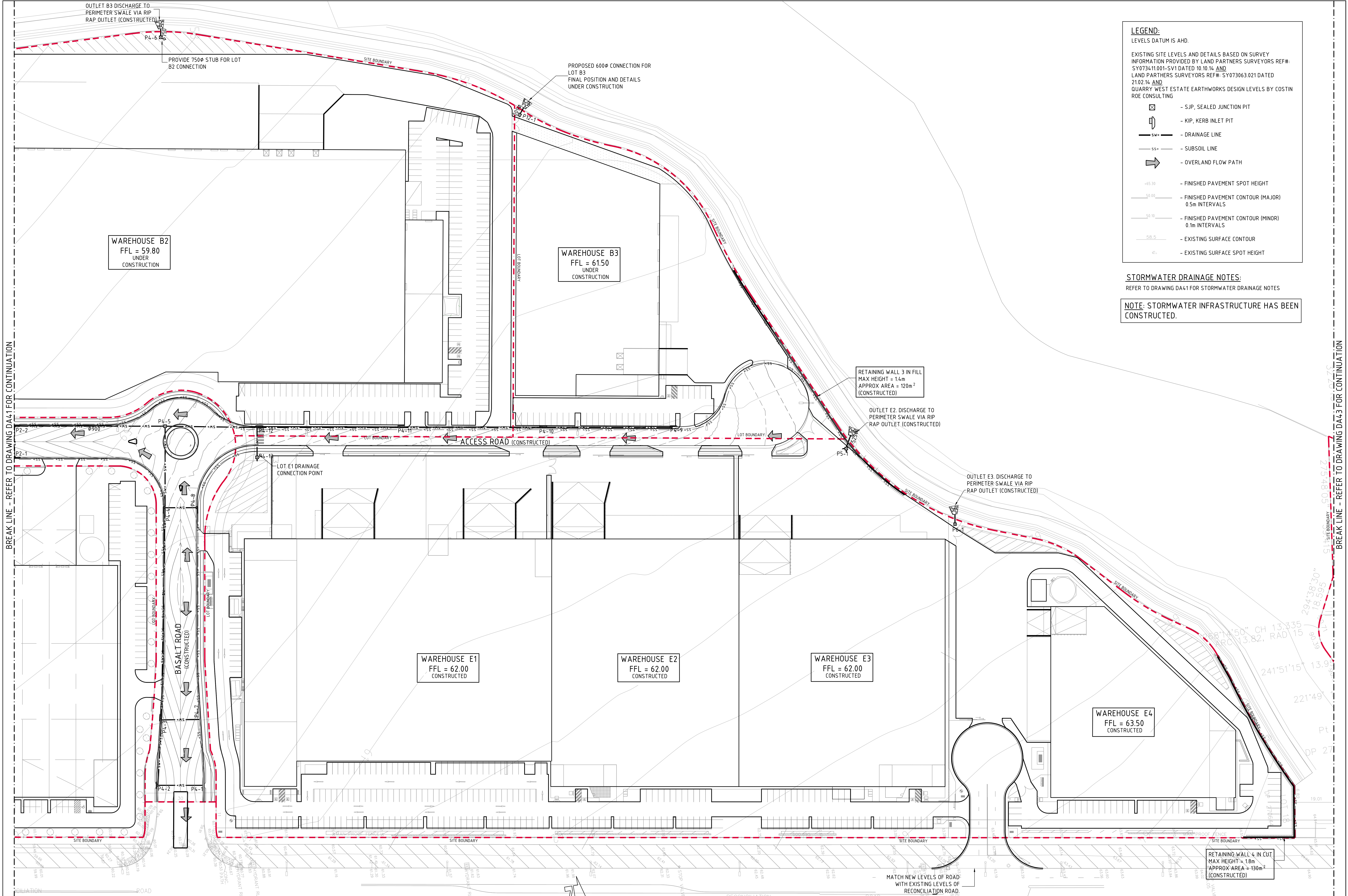
1. LEVELS DATUM IS A.H.D.
2. ALL CONTOUR LINES & SPOT LEVELS INDICATE FINISHED.
3. PAVEMENT LEVELS U.N.O. ON PLAN.
4. THE MAJOR CONTOUR INTERVAL IS 0.5m
5. THE MINOR CONTOUR INTERVAL IS 0.1m.
6. MINIMUM PAVEMENT GRADE IS TO BE 1:100 (1%).
7. MAXIMUM PAVEMENT GRADE IS TO BE 1:20 (5%) IN CARPARKING AREAS AND 1:25 (4%) ELSEWHERE.
8. MAXIMUM RAMP GRADES ARE TO BE 1:12 (8.3%) U.N.O. ON PLAN.
9. PROVIDE MINIMUM 3.0m LONG TRANSITION WHERE CHANGES GRADE EXCEED 1:20 (5%).
10. PERMANENT BATTER SLOPES ARE TO HAVE A MAXIMUM GRADE OF 1V:3H.
11. ALL BATTER SLOPE WITH GRADES AT OR EXCEEDING 1V:6H ARE TO BE TURFED IMMEDIATELY OR APPROPRIATE EROSION CONTROL IS TO BE PROVIDED TO THE SATISFACTION OF THE ENGINEER.
12. ALL FOOTPATHS ARE TO FALL AWAY FROM THE BOUNDARY AT 2.5% NOMINAL. GRADE.



FOR S96 MODIFICATION

CIVIL WORKS PLAN - SHEET 1
SCALE 1:500

PROJECT PROPOSED DEVELOPMENT LOT C & D, QUARRY ESTATE GREYSTANES, NSW				CLIENT dexus				ARCHITECT concept[y] Architecture				COSTIN ROE CONSULTING PTY LTD. Consulting Engineers Level 1, 8 Windmill Street Wahia Bay, Sydney NSW 2000 Tel: (02) 8251-7899 Fax: (02) 8241-3721 email: mail@costinroe.com.au ©				DRAWING TITLE CIVIL WORKS PLAN SHEET 1			
ISSUED FOR S96 MODIFICATION 22.09.17 B				ISSUED FOR S96 MODIFICATION 05.09.17 A				AMENDMENTS				PRECISION COMMUNICATION ACCOUNTABILITY				DRAWING No C010529.42 -DA41			
AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS				AMENDMENTS			
DATE				DATE				DATE				DATE				DATE			
ISSUE				ISSUE				ISSUE				ISSUE				ISSUE			



LEGEND:
LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LAND PARTNERS SURVEYORS REF#: SY073411001-SV1 DATED 10.10.14 AND LAND PARTNERS SURVEYORS REF#: SY073063.021 DATED 21.02.14 AND QUARRY WEST ESTATE EARTHWORKS DESIGN LEVELS BY COSTIN ROE CONSULTING

- SJP, SEALED JUNCTION PIT
- KIP, KERB INLET PIT
- DRAINAGE LINE
- SUBSOIL LINE
- OVERLAND FLOW PATH
- FINISHED PAVEMENT SPOT HEIGHT
- FINISHED PAVEMENT CONTOUR (MAJOR) 0.5m INTERVALS
- FINISHED PAVEMENT CONTOUR (MINOR) 0.1m INTERVALS
- EXISTING SURFACE CONTOUR
- EXISTING SURFACE SPOT HEIGHT

STORMWATER DRAINAGE NOTES:
REFER TO DRAWING DA41 FOR STORMWATER DRAINAGE NOTES

NOTE: STORMWATER INFRASTRUCTURE HAS BEEN CONSTRUCTED.

BREAK LINE - REFER TO DRAWING DA4.1 FOR CONTINUATION

BREAK LINE - REFER TO DRAWING DA4.3 FOR CONTINUATION

FOR S96 MODIFICATION

CIVIL WORKS PLAN - SHEET 2
SCALE 1:500

ISSUED FOR S96 MODIFICATION 22.09.17 B ISSUED FOR S96 MODIFICATION 05.09.17 A AMENDMENTS				ARCHITECT concept[y] Architecture				CLIENT dexus				PROJECT PROPOSED DEVELOPMENT LOT C & D, QUARRY ESTATE GREYSTANES NSW				COSTIN ROE CONSULTING Costin Roe Consulting Pty Ltd. Consulting Engineers 435 HILL ST Level 1, 8 Windmill Street Waleah Bay, Sydney NSW 2000 Tel: (02) 9251-7899 Fax: (02) 9241-3721 email: mail@costinroe.com.au				CIVIL WORKS PLAN SHEET 2 PRECISION COMMUNICATION ACCOUNTABILITY				DRAWING NO C010529.42-DA42				ISSUE B			
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