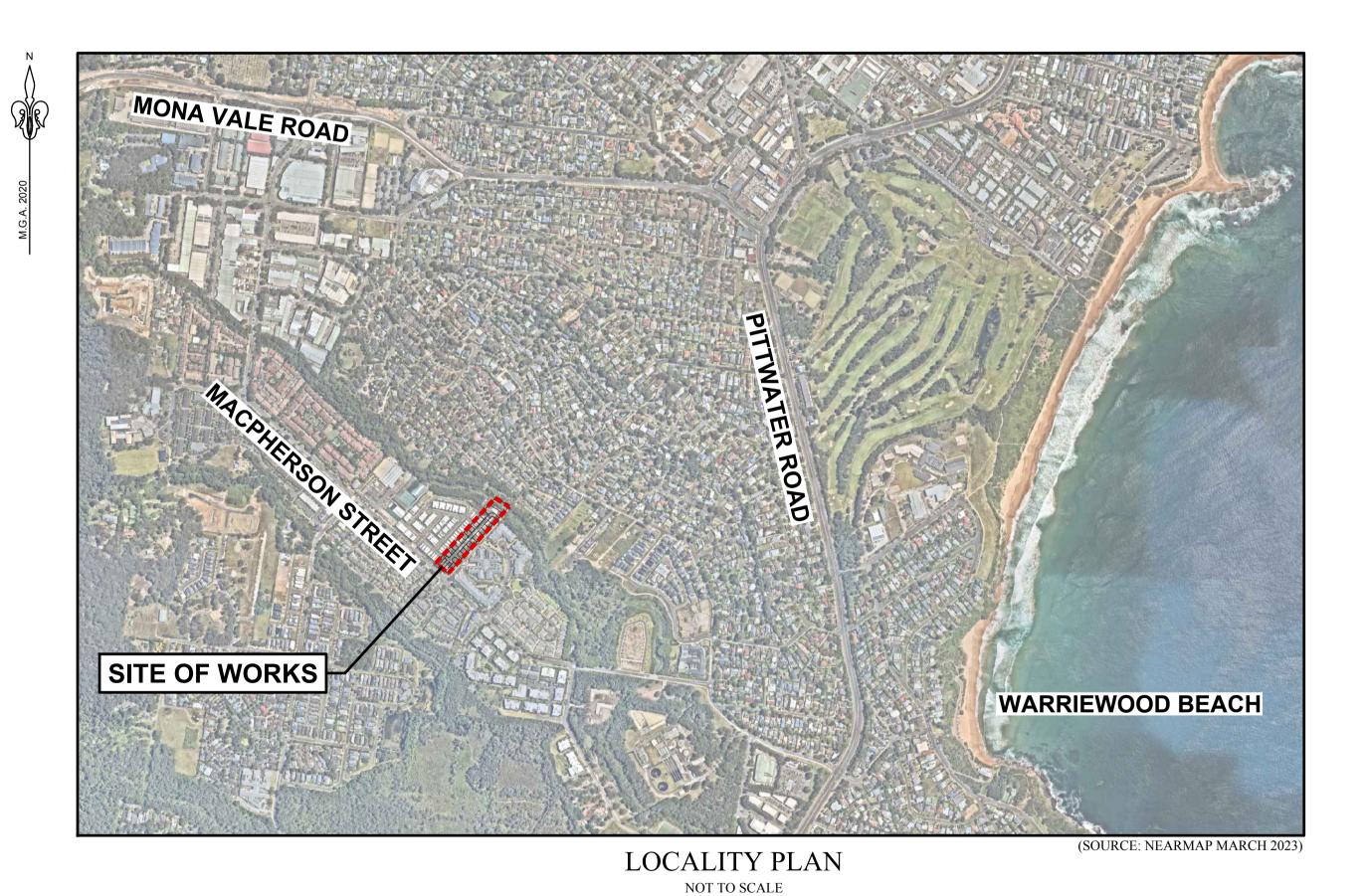
# PROPOSED SUBDIVISION OF LOT 4 D.P. 553816 16 MACPHERSON STREET, WARRIEWOOD

CIVIL WORKS DEVELOPMENT APPLICATION



| DRAWING No.                  | DRAWING TITLE  | REV.   |
|------------------------------|--|--|
| 048-22C-DA-0001              | COVER SHEET, LOCALITY PLAN & INDEX                               | G  |
| 048-22C-DA-0002              | GERNERAL NOTES   | TE OF THE PROPERTY OF THE PROP |
| 048-22C-DA-0003              | GENERAL LEGEND   | E  |
| 048-22C-DA-0004              | KEY PLAN   | E  |
| 048-226-DA-0021              | DEMOLITION-PLAN  |  |
| 048-22C-DA-0051              | BULK EARTHWORKS PLAN & CALCULATIONS                              | G  |
| 048-22C-DA-0061              | BULK EARTHWORKS SITE SECTIONS SHEET 1 of 2                       | G  |
| 048-22C-DA-0062              | BULK EARTHWORKS SITE SECTIONS SHEET 2 of 2                       | G  |
| 048-22C-DA-0101              | ROAD & DRAINAGE PLAN SHEET 1 of 2                                | G  |
| 048-22C-DA-0102              | ROAD & DRAINAGE PLAN SHEET 1 of 2                                | G  |
| 0 <del>48-</del> 220-0A-0151 | TYPICAL ROAD CROSS SECTIONS                                      | $\langle \langle \rangle \rangle$  |
| 048-22C-DA-0201              | ROAD LONGITUDINAL SECTIONS MacPHERSON STREET & ROAD No. 01       | G  |
| 048-22C-DA-0202              | ROAD LONGITUDINAL SECTIONS BRANDS LANE ROAD No. 02 & ROAD No. 03 | G  |
| 048-22C-DA-0501              | PAVEMENT PLAN  | G  |
| 648-220 DA 6601              | SICKADE & DIMENARK NO PRIANCE                                    |  |
| 048-22C-DA-0701              | CATCHMENT PLAN   | F  |
| 046-22C-DA 0711              | STORMWATER DRAMAGE LONGITUDINAL SECTIONS                         |  |
| 048-22C-DA-0712              | STORMWATER DRAINAGE LONGITUDINAL SECTIONS                        | F  |
| 048-22C-DA-0751              | WSUD BASIN & OSD TANK PLAN AND CALCULATIONS                      | G  |
| 048-226-DA-0752              | WSDD BASHN & OSD TANK DETAILS                                    |  |
| 048-220-DA 0753              | DRAINAGE DETAILS   | \  |
| 048-22C-DA-0801              | RETAINING WALL PLAN (INDICATIVE HEIGHTS)                         | F  |
| 048-22C-DA-0901              | SEDIMENT & EROSION CONTROL PLAN                                  | G  |
| 048-226-DA 0902              | SEDIMENT & EROSION CONTROL DETAILS                               |  |

AMENDMENT DESCRIPTION











IPM PROPERTIES NORTHERN BEACHES COUNCIL AS SHOWN

PROPOSED SUBDIVISION OF LOT 4 D.P. 553816 16 MACPHERSON STREET, WARRIEWOOD



ABN 77 050 209 991 ACN 050 209 993 Suite 7.01, Level 7, 3 Rider Boulevard Rhodes, NSW, 2138 PO Box 3220, Rhodes NSW 21 Tel. (02) 9869-185 reception@crhodes.com.a www.craigandrhodes.com.au © Craig & Rhodes Pty Ltd

COVER SHEET, LOCALITY PLAN & INDEX C&R Ref. Drawing Ref. 048-22 048-22C-DA-0001

## STRENGTH OF 32MPA. STEEL REINFORCING BARS SHALL COMPLY WITH THE REQUIREMENTS OF IPM PROPERTIES PROPOSED SUBDIVISION OF LOT 4 D.P. 553816 NORTHERN BEACHES COUNCIL

ABN 77 050 209 991 ACN 050 209 991 **GERNERAL NOTES** Rhodes, NSW, 213 PO Box 3220, Rhodes NSW 213 Tel. (02) 9869-185 reception@crhodes.com.a www.craigandrhodes.com.au

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OF EACH DAYS WORK.

VEGETATED BUFFER STRIP.

TOPSOIL SHALL BE RESPREAD ON THE COMPLETION OF EARTHWORKS.

14. THE CONTRACTOR MUST ENSURE THE SUITABILITY AND INTEGRITY OF ALL WORKS AT THE END

15. PUBLIC ROADS ARE TO BE SWEPT FREE OF DEBRIS RESULTING FROM CONSTRUCTION

16. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE LOCATED ON EXISTING ACCESS

17. PROVIDE TOPSOIL WITH TURF OR GRASS SEEDING ON ALL BATTERS & DISTURBED AREAS.

18. TURFED AREAS ADJACENT TO CONSTRUCTION AREA ARE TO BE MAINTAINED TO PROVIDE A

19. THE CONTRACTOR SHALL STRIP AND STOCKPILE TOPSOIL PRIOR TO EXCAVATION OR FILLING.

20. THE CONTRACTOR SHALL STABILISE ALL DISTURBED AREAS AND STOCKPILES WITHIN 14 DAYS.

TRACKS OR ROADWAYS SO AS NOT TO ENCROACH ON TRAFFIC. ALL EROSION CONTROL

COORDINATED WITH THE CONTRACTORS TRAFFIC MANAGEMENT PLANS IN ORDER TO LIMIT

MEASURES PLACED SHALL BE CLEARLY IDENTIFIABLE. EROSION CONTROL MEASURES SHALL BE

ACTIVITIES. SWEEPING SHALL BE UNDERTAKEN AT A MINIMUM TWICE WEEKLY.

Suite 7.01, Level 7, 3 Rider Boulevard

COUNCIL'S ENGINEER FOR ALL INSPECTIONS.

CONSTRUCTION PERIOD.

THE OPERATING HOURS. NOTICES COMPLYING WITH A.S. 1319 AND DISPLAYING THE WORDS AT APPROPRIATE PLACES TO WARN THE PUBLIC.

29. ALL NEW WORKS SHALL MAKE SMOOTH CONNECTION WITH THE EXISTING INTERFACE.

27. DETAILS OF ALL SOIL TESTS AND THE PAVEMENT DESIGN ARE TO BE SUBMITTED TO PRINCIPAL

FOOTPATH. THE PATHWAY IS TO BE KEPT IN A CLEAN, TIDY & SAFE CONDITION DURING THE

28. NO BUILDING MATERIALS, MACHINERY OR THE LIKE ARE TO BE STORED ON THE ROAD OR

DEPTH OF 300mm BELOW THE FINISHED SUB-GRADE LEVEL

CERTIFYING AUTHORITY (PCA) PRIOR TO INSPECTION OF SUBGRADE.

30. THE SITE IS TO BE SURROUNDED BY A SECURITY FENCE & THE GATE MUST BE LOCKED OUTSIDE "DANGER - DEMOLITION IN PROGRESS", OR SIMILAR MESSAGE SHALL BE FIXED TO THE FENCING

31. THE CONTRACTOR SHALL PROVIDE A MINIMUM 24 HOURS NOTICE TO SUPERINTENDENT OR

32. THE CONTRACTOR SHALL UNDERTAKE TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH COUNCIL'S TRAFFIC MANAGEMENT POLICY AND SHALL DISPLAY ALL APPROPRIATE WARNING SIGNS THROUGHOUT THE DURATION OF CONSTRUCTION.

16. BACKFILL MATERIAL SHALL BE INSPECTED AND APPROVED BY THE SUPERINTENDENT PRIOR TO PLACING AND COMPACTION.

17. ALL BACKFILL FOR STORMWATER DRAINAGE WORKS IS TO BE COMPACTED IN LAYERS NOT EXCEEDING 300mm LOOSE THICKNESS AND COMPACTED WITHOUT DAMAGING OR DISPLACING

THE PIPEWORK. 18. BACKFILL FOR STORMWATER PITS AND PIPES SHALL BE COMPACTED TO AT LEAST 95% (98%

UNDER ROADS) OF THE MAXIMUM DRY DENSITY AT -2% TO +2% OF OPTIMAL MOISTURE CONTENT AND GRADED IN ACCORDANCE WITH AS 3500.3 (LATEST EDITION). 19. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER

AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED

WITH AN EPOXY GROUT TO ENSURE A SMOOTH FINISH. 20. STEP IRONS ARE TO BE PROVIDED IN DRAINAGE PITS MORE THAN 1.2m DEEP.

21. PROVIDE A MINIMUM OF 3.0m LENGTH OF 100 DIA. SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK AT UPSTREAM END OF EACH COUNCIL PIT.

22. UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT, ALL DRAINAGE PITS TO BE CAST INSITU, THE GRADE OF CONCRETE TO BE USED SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE 21. THE CONTRACTOR SHALL INSTALL A STRIP OF TURF BEHIND THE KERB IN ACCORDANCE WITH

700mm

750mm

22. THE CONTRACTOR SHALL PROVIDE TURFING AROUND ALL SURFACE INLET PITS

23. THE CONTRACTOR IS TO IMPLEMENT SEDIMENT AND EROSION CONTROL MEASURES

1. PRIOR TO SPREADING, STOCKPILED SITE SUBGRADE MATERIAL AND/OR IMPORTED TOPSOIL SHALL BE INSPECTED AND APPROVED BY THE SUPERINTENDENT.

2. UNLESS NOTED OTHERWISE, ALLOW FOR CLEARING AND REMOVING STONES EXCEEDING 25 mm AND ANY RUBBISH BROUGHT TO THE SURFACE DURING THE CULTIVATION OF THE SUBGRADE.

AFTER PREPARATION OF THE SUBGRADE SURFACE, PLACE TOPSOIL AS APPROPRIATE FOR THE SPECIFIED LANDSCAPE TREATMENTS AND AS INDICATED BY THE DRAWINGS.

4. THE FINISHED SURFACE OF THE TOPSOIL SHALL BE SMOOTH, FREE OF LUMPS OF SOIL AND LEFT

5. WHERE TOPSOILING IS CARRIED OUT ADJACENT TO KERBS, FOOTPATHS, MOWING STRIPS OR OTHER HARD PAVED SURFACES, THE TOPSOIL SHALL BE FINISHED FLUSH WITH THOSE

1. ALL TURF AND OTHER MATERIALS SPECIFIED SHALL BE SUBJECT TO INSPECTION AND APPROVAL

2. SUBSTITUTION OF SPECIES SHALL ONLY OCCUR WITH THE PRIOR APPROVAL OF THE

PROTECT THE NEWLY PLANTED AREAS AGAINST TRESPASS AND TRAFFIC UNTIL THE GRASS IS WELL ESTABLISHED. FENCING, WHERE USED, SHALL BE 1.2m HIGH STAR PICKET TYPE, WITH

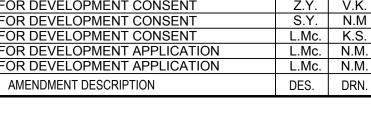
ALLOW FOR MAKING OVER AND RE-TURFING ALL AREAS WHERE THE GRASS FAILS TO GROW WITHIN ONE MONTH FROM THE DATE OF ORIGINAL PLANTING.

1. THE BOUNDARY LINEWORK IN THIS DRAWING SET IS FOR INFORMATION ONLY AND SHOULD NOT BE RELIED UPON. THE CONTRACTOR IS TO ENSURE THAT ALL WORKS ASSOCIATED WITH THE PROPERTY BOUNDARIES ARE TO BE SETOUT OR VERIFIED BY A REGISTERED SURVEYOR.

DRAWING REFERENCE: 048-22 TOPO MGA2020.DWG

LOT CALCULATIONS (INDICATIVE)

10.11.23 ISSUED FOR DEVELOPMENT CONSENT 26.05.23 ISSUED FOR DEVELOPMENT CONSENT 18.05.23 ISSUED FOR DEVELOPMENT CONSENT B 04.05.23 ISSUED FOR DEVELOPMENT APPLICATION A 14.04.23 ISSUED FOR DEVELOPMENT APPLICATION REV. DATE











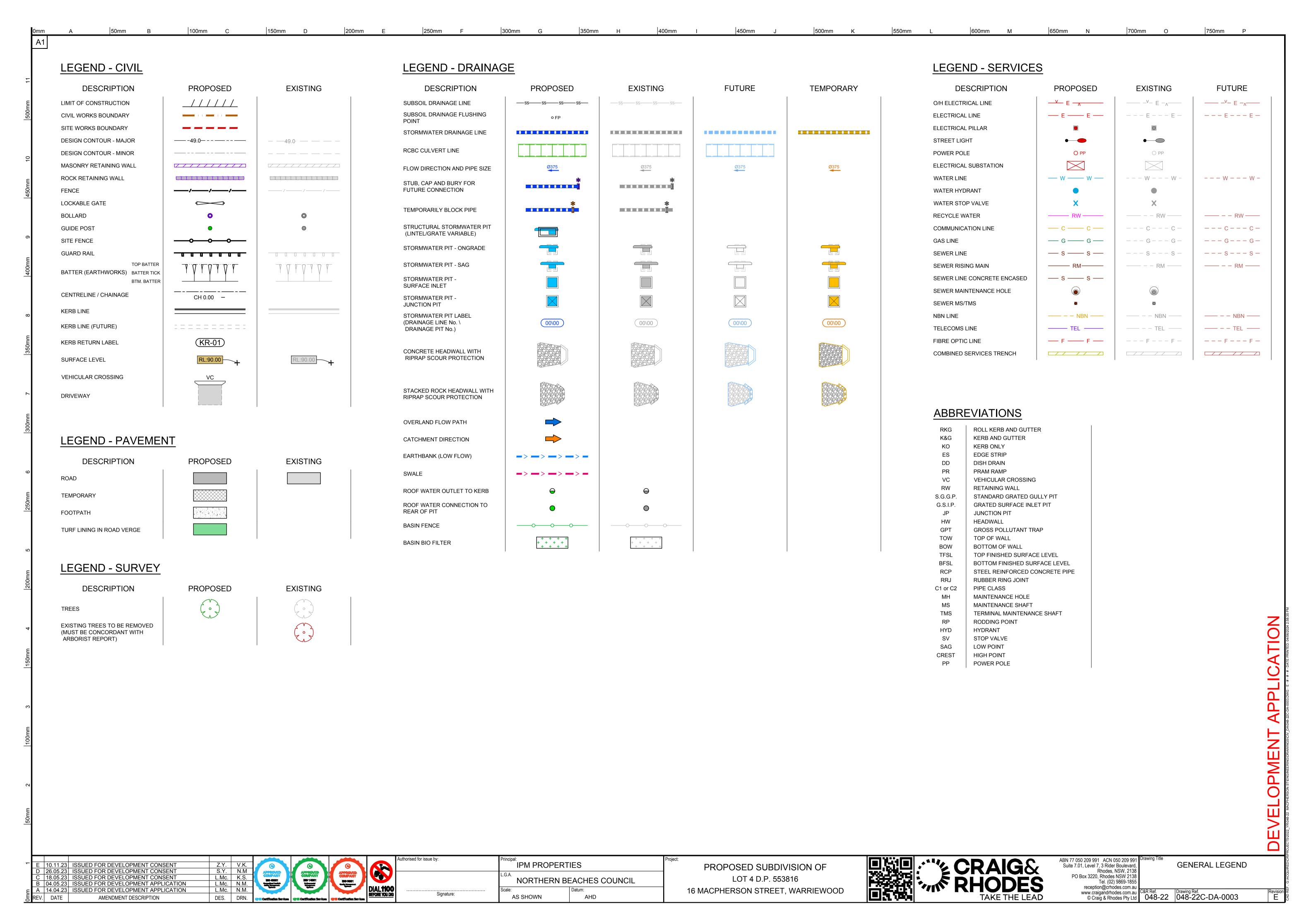
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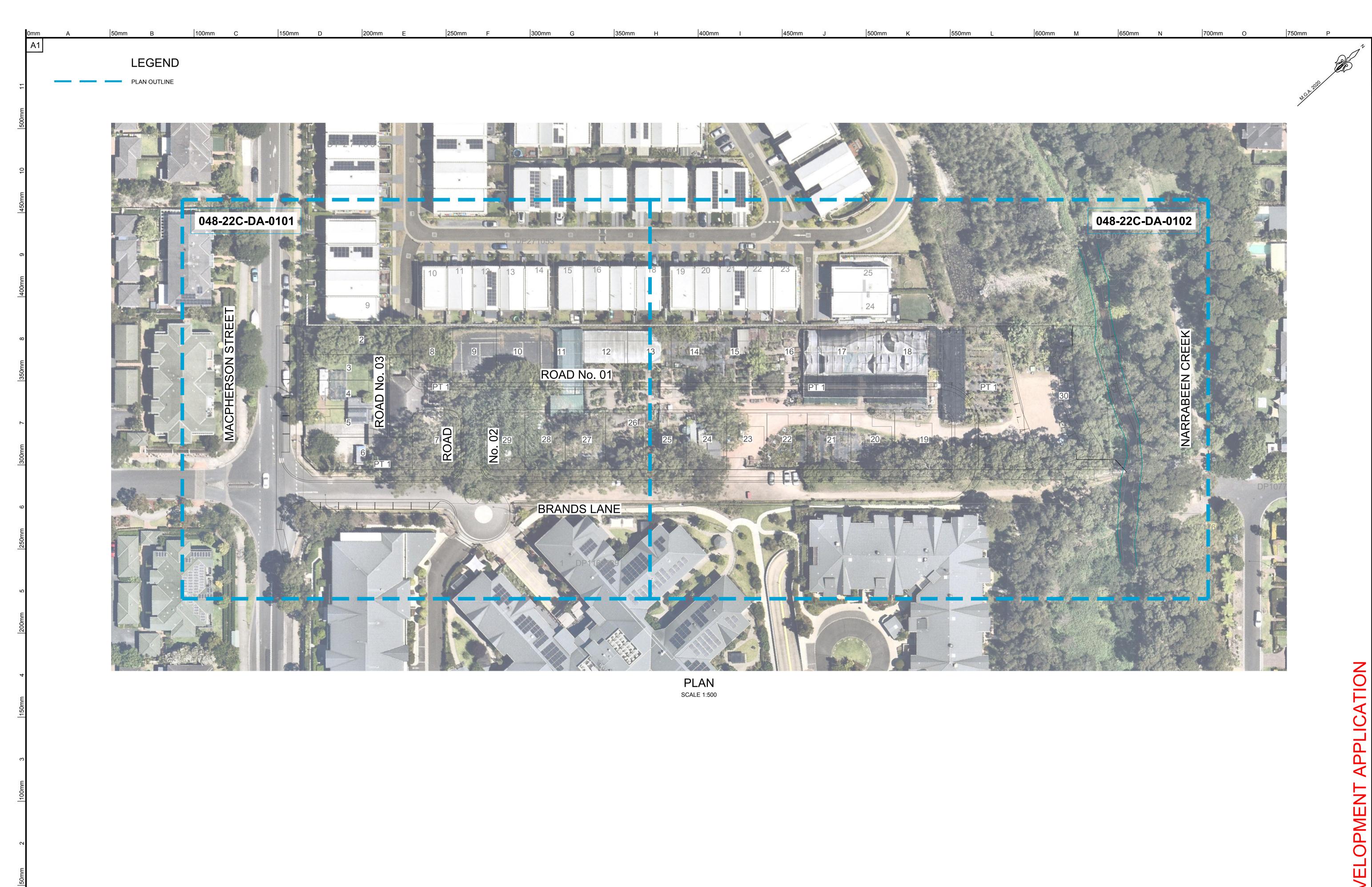
**AS SHOWN** AHD

16 MACPHERSON STREET. WARRIEWOOD

'CLUTTERING' OF THE EXISTING TRAFFICABLE AREAS.

048-22 | 048-22C-DA-0002



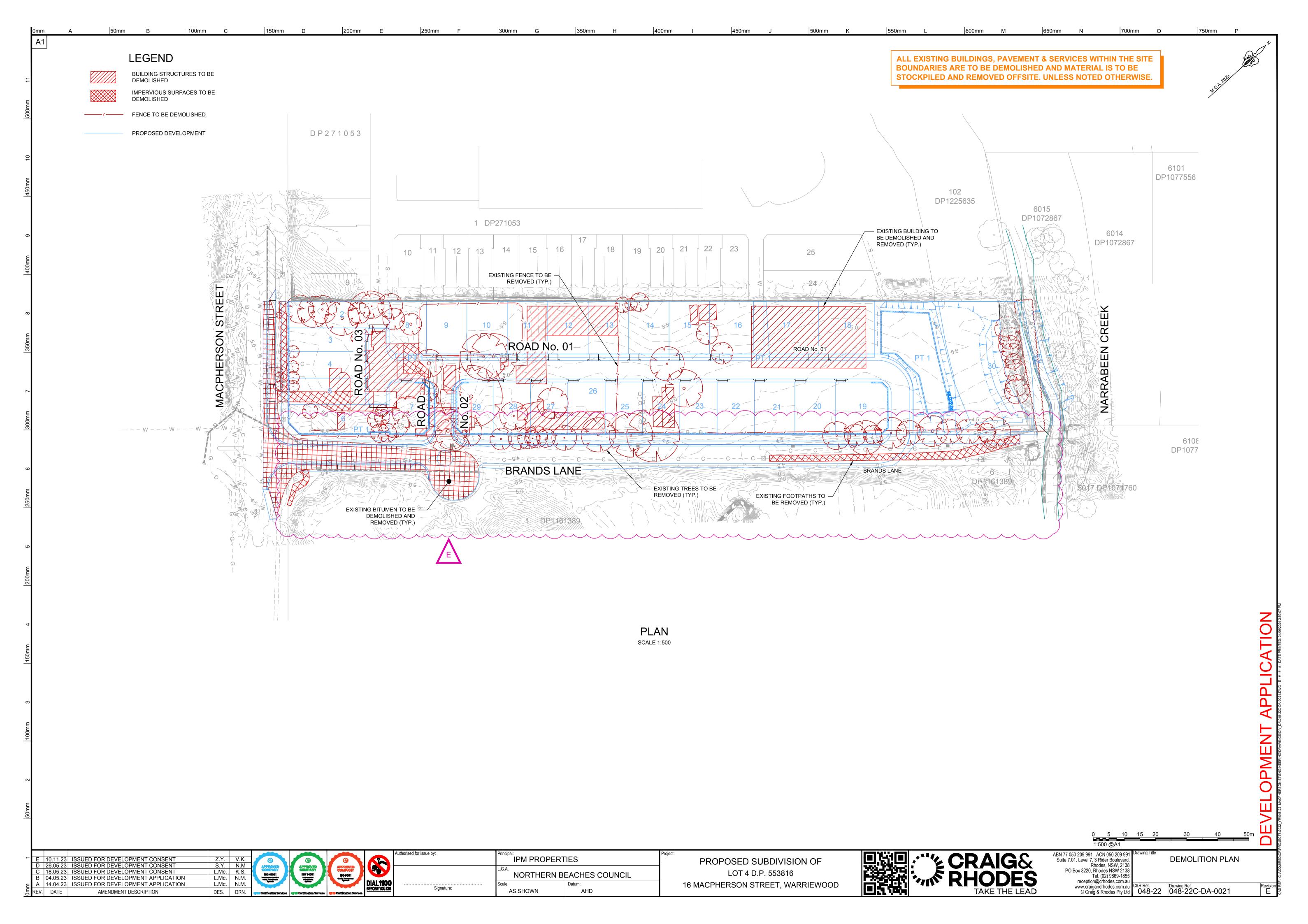


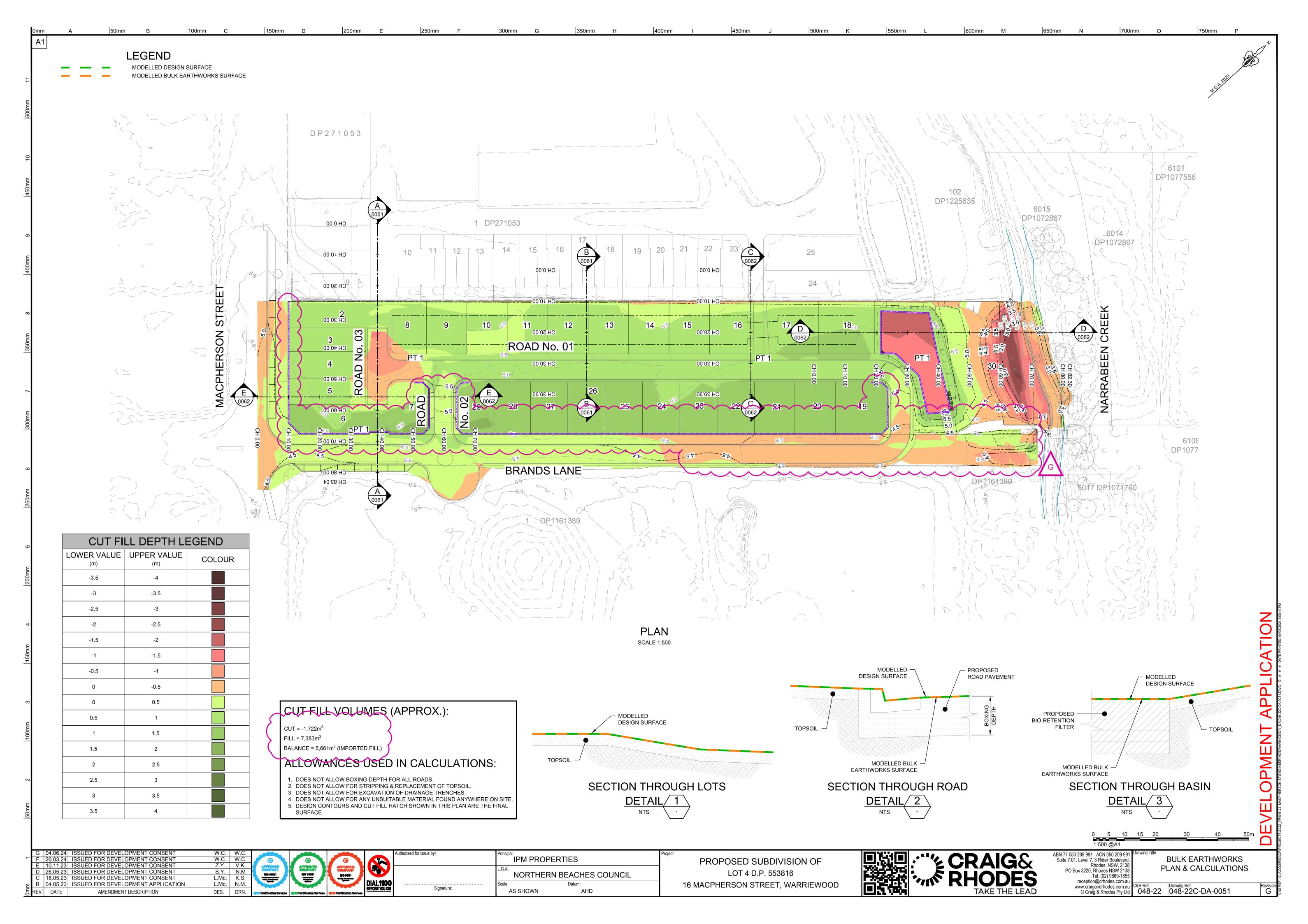
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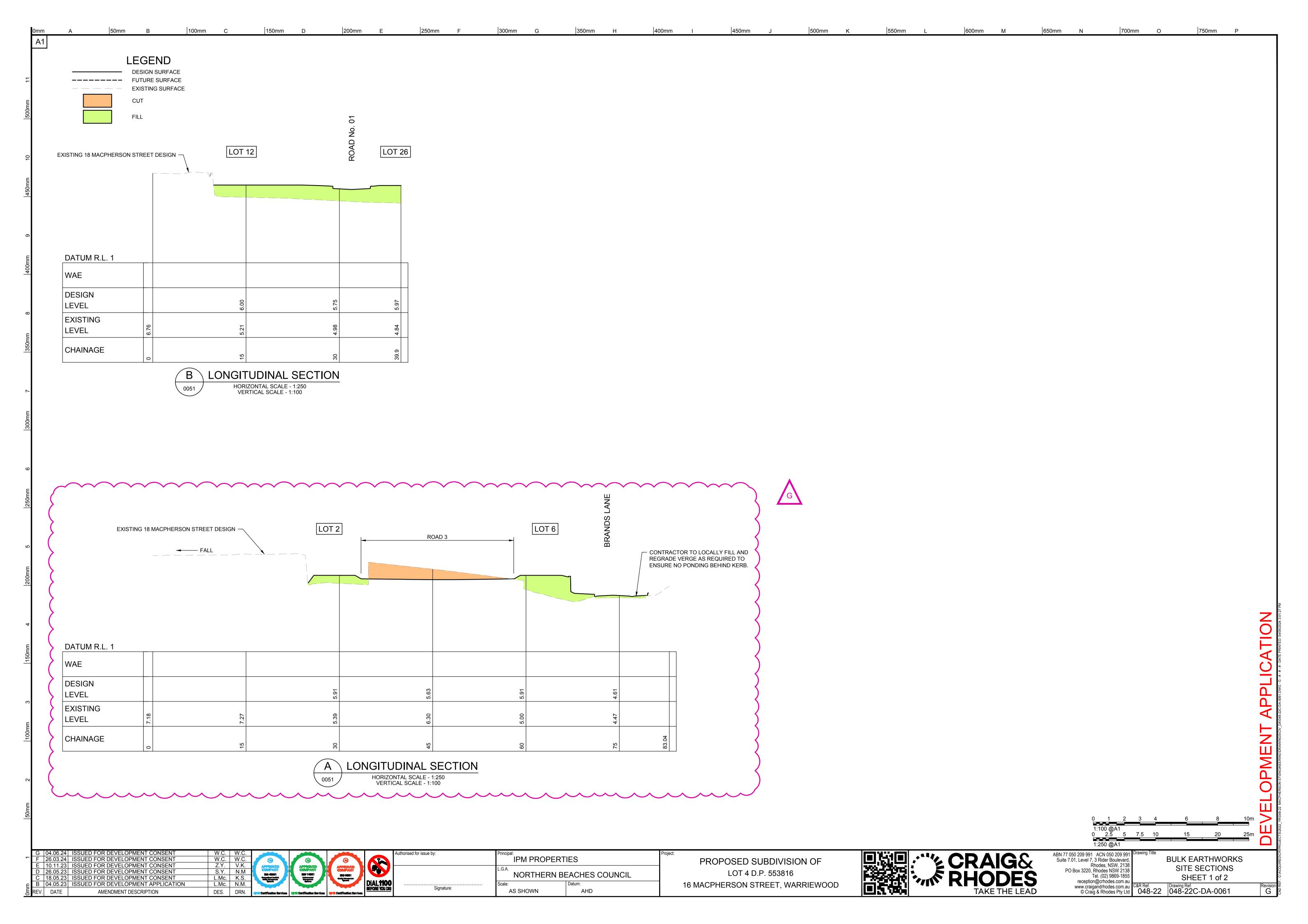
PROPOSED SUBDIVISION OF LOT 4 D.P. 553816 16 MACPHERSON STREET, WARRIEWOOD

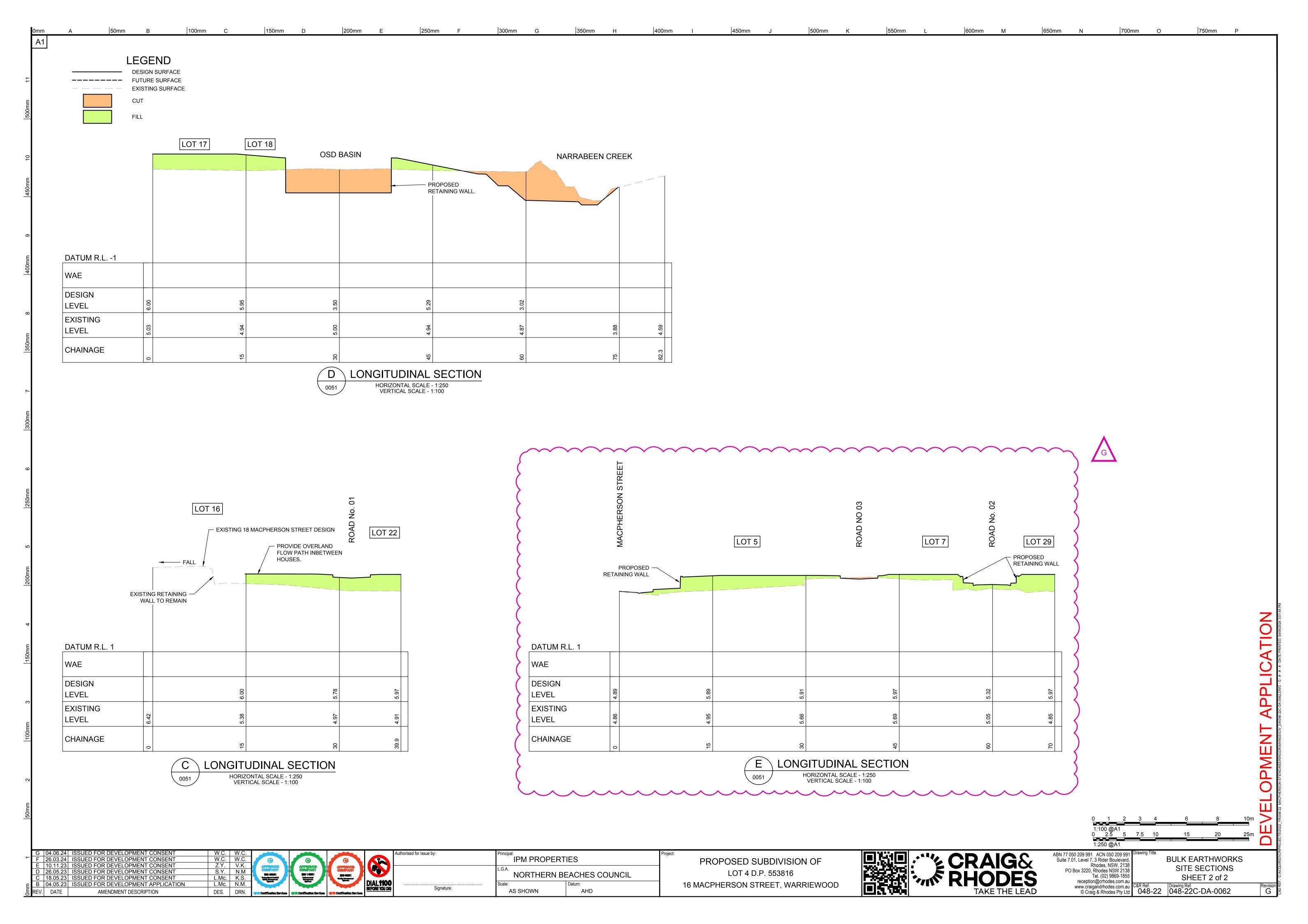


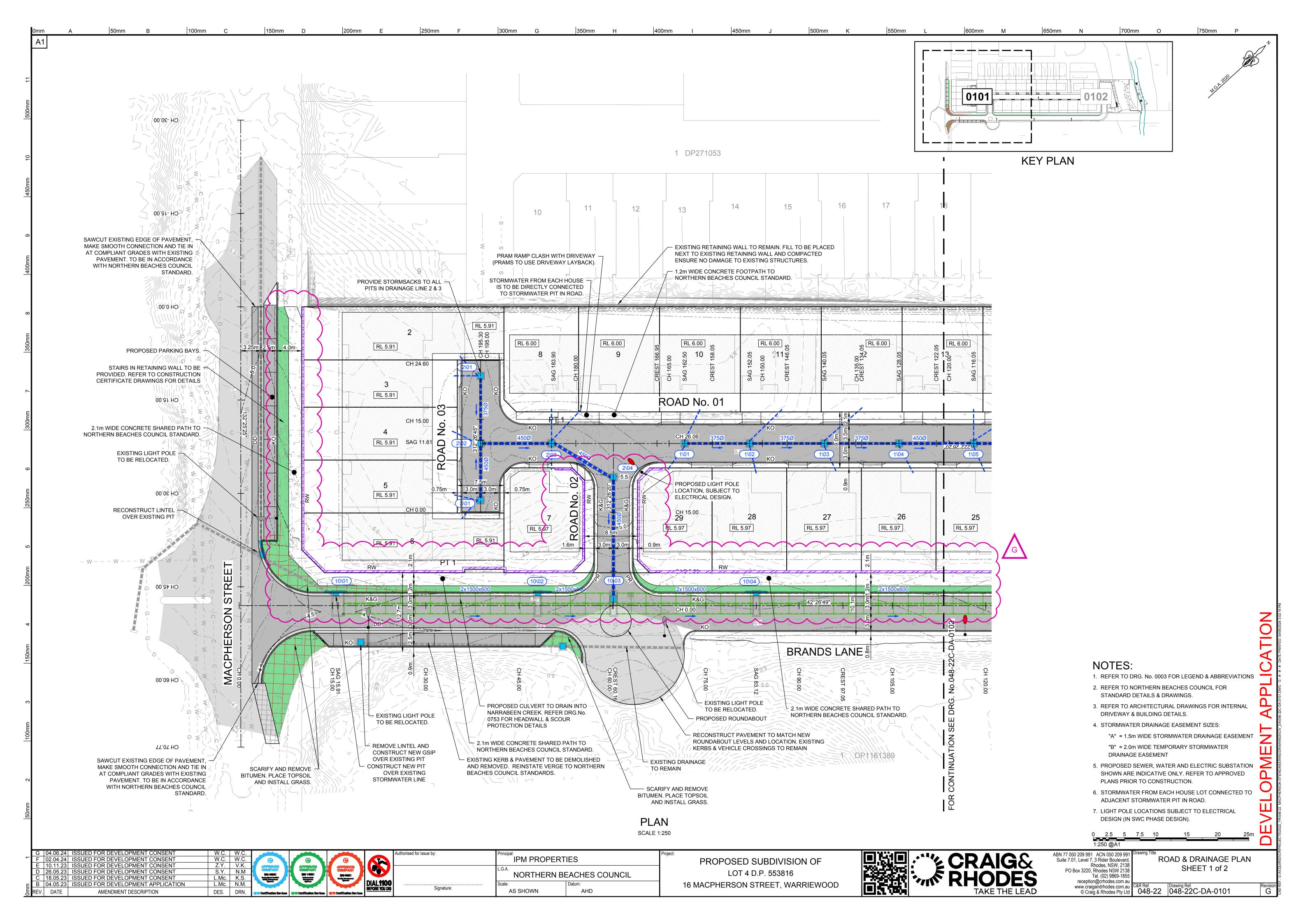
| 1:500 @A1   |               |                                 |  |
|---|---------------|---------------------------------|--|
| ABN 77 050 209 991 ACN 050 209 991<br>Suite 7.01, Level 7, 3 Rider Boulevard,<br>Rhodes, NSW, 2138<br>PO Box 3220, Rhodes NSW 2138<br>Tel. (02) 9869-1855<br>reception@crhodes.com.au | Drawing Title | KEY PLAN                        |  |
| www.craigandrhodes.com.au<br>© Craig & Rhodes Pty Ltd   |               | Drawing Ref.<br>048-22C-DA-0004 |  |
|   |               |                                 |  |

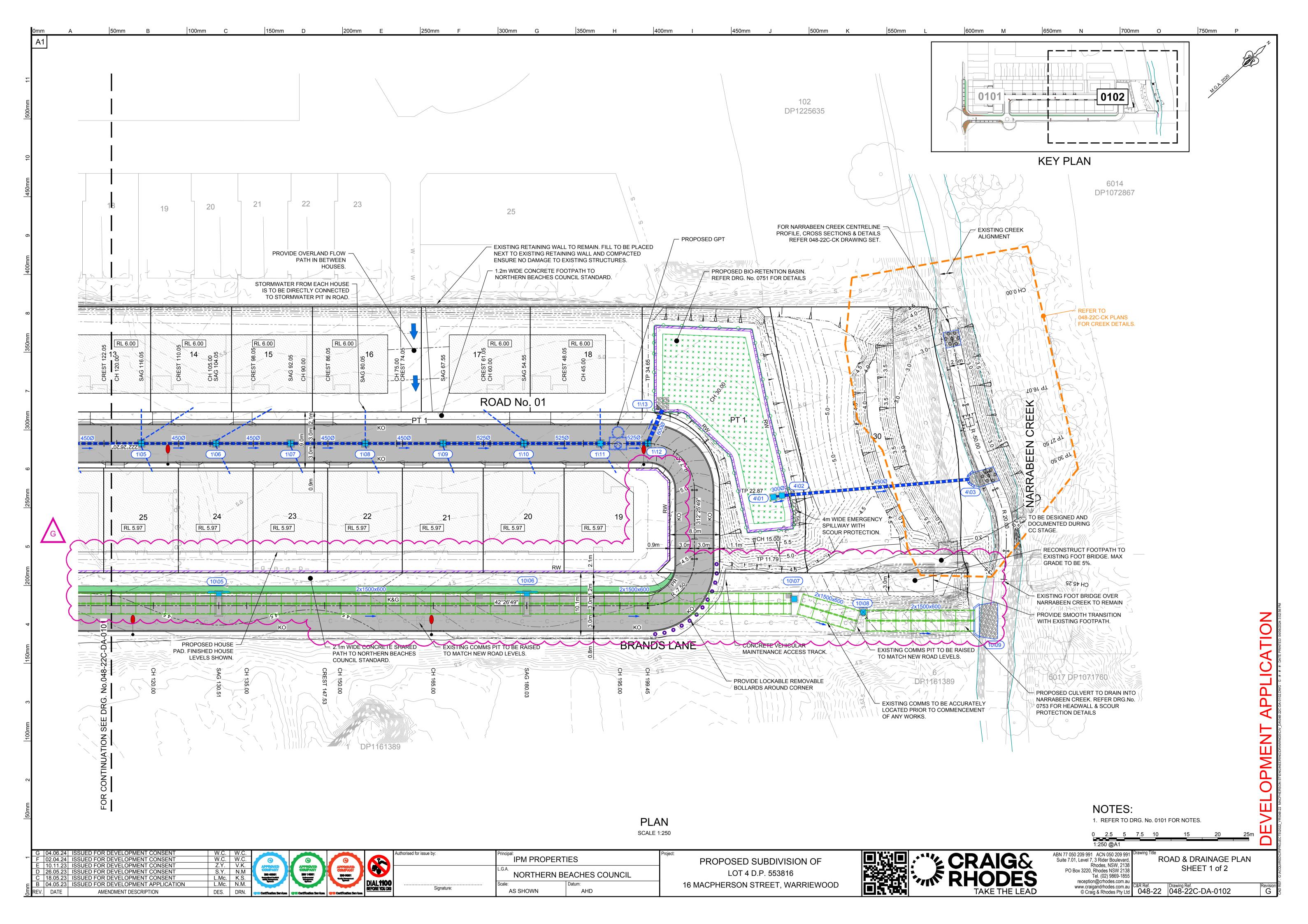


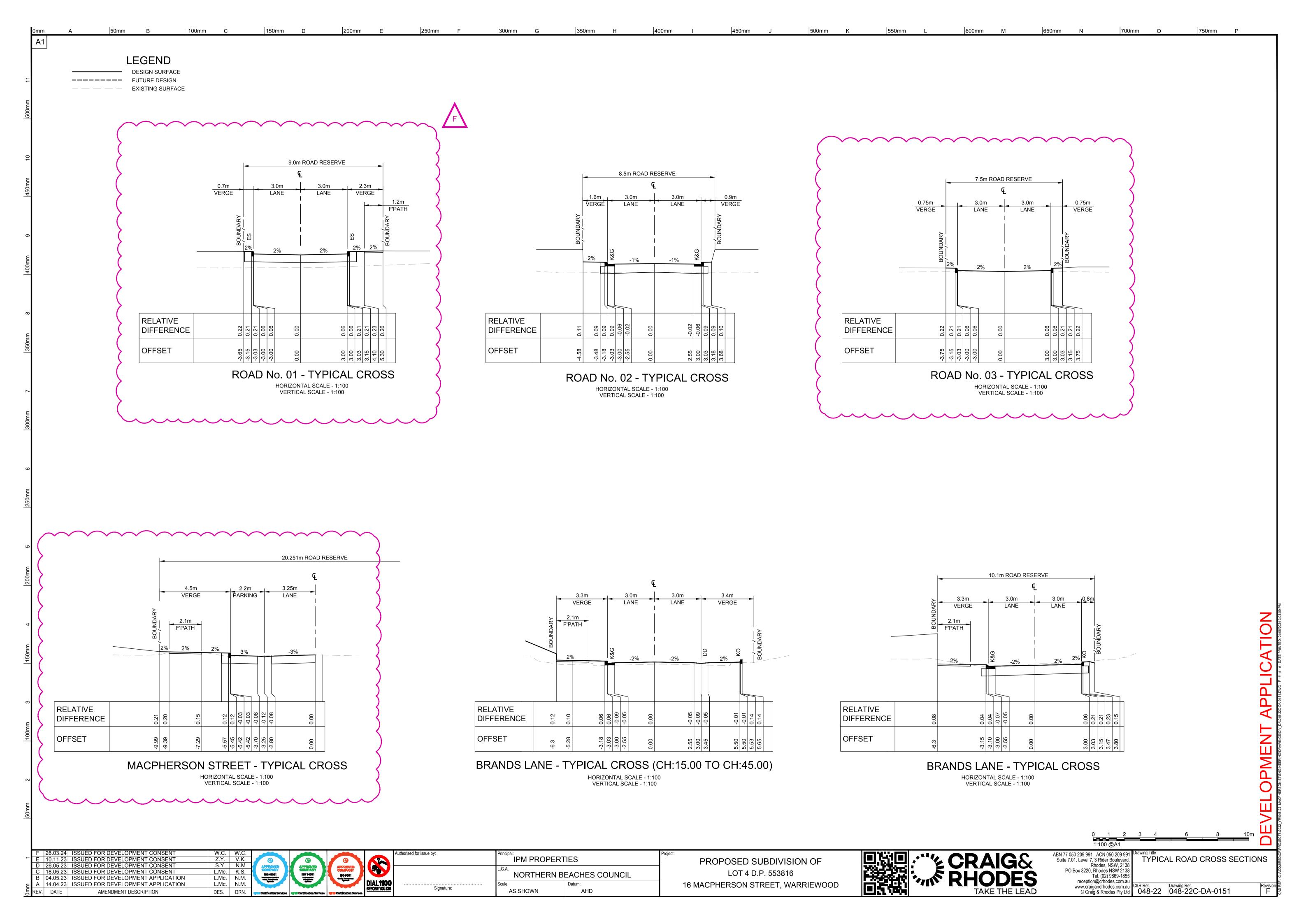


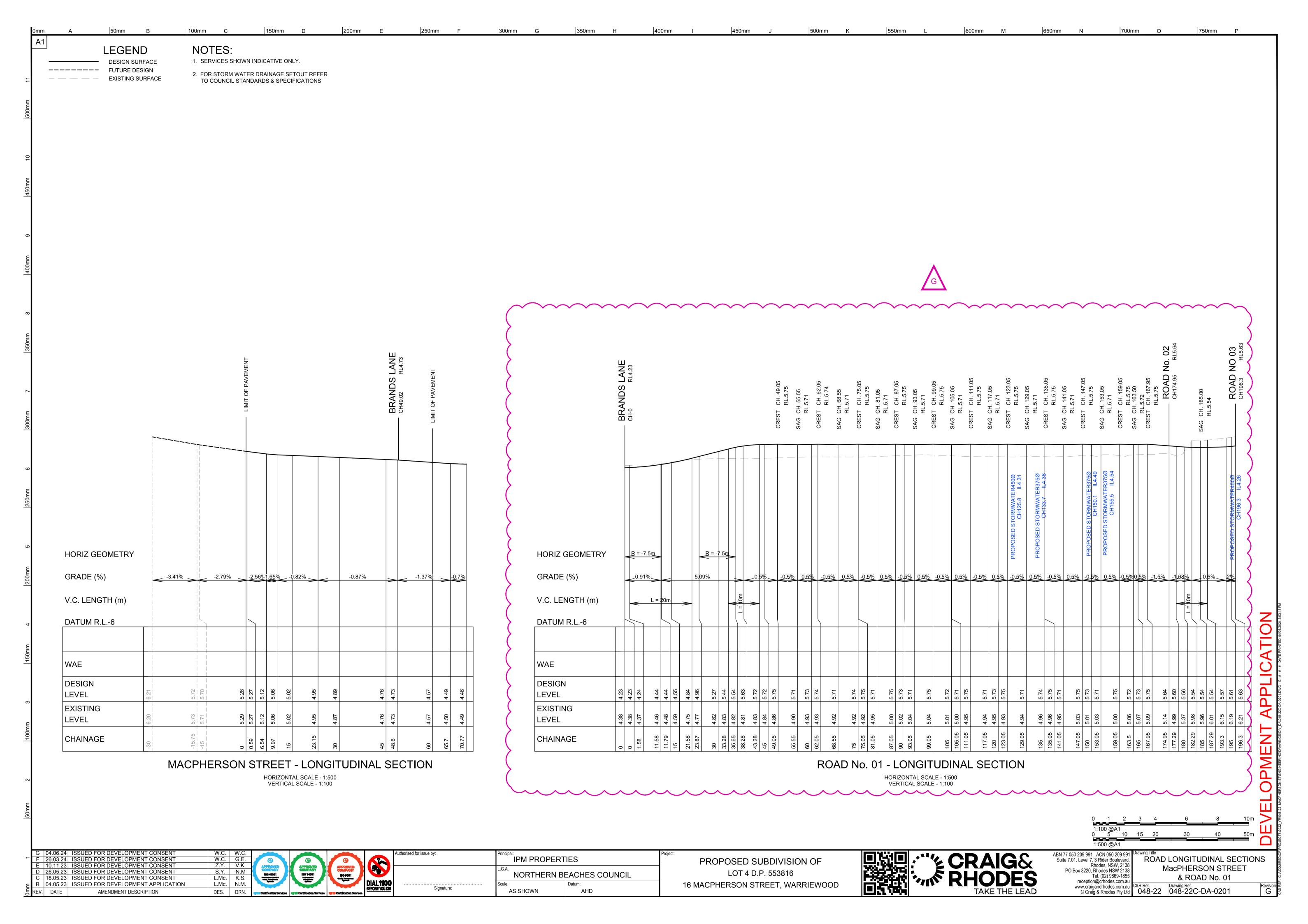


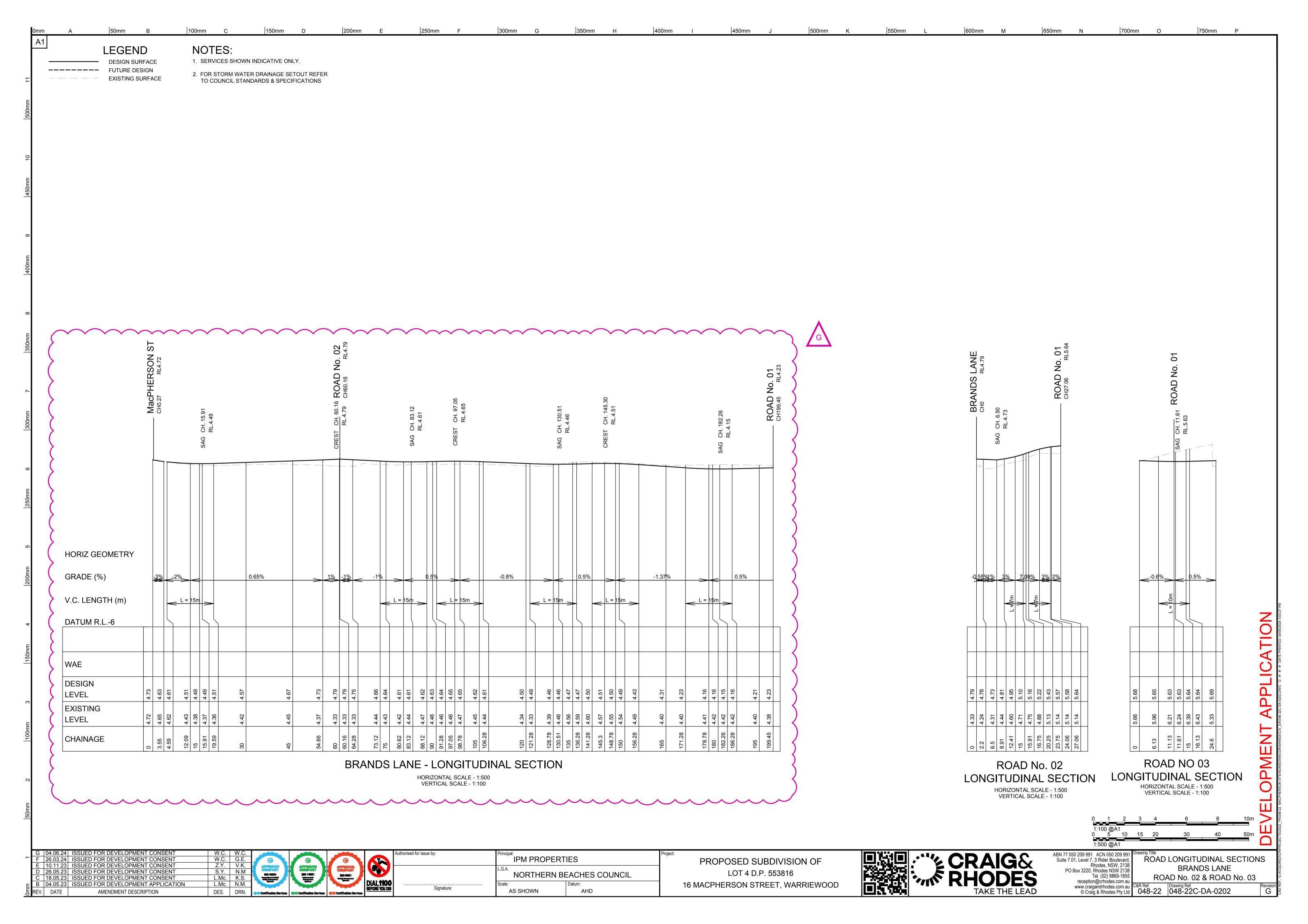


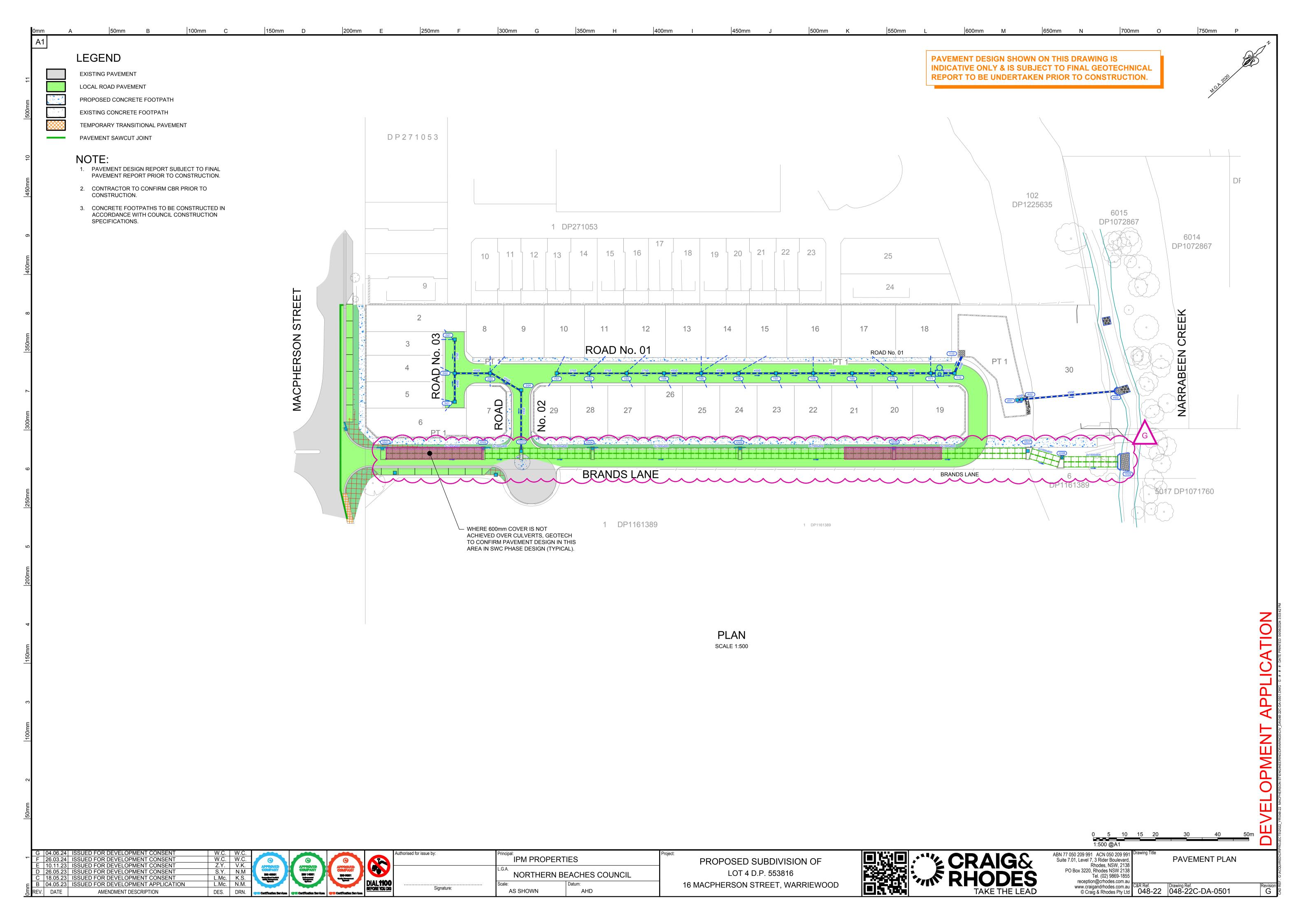


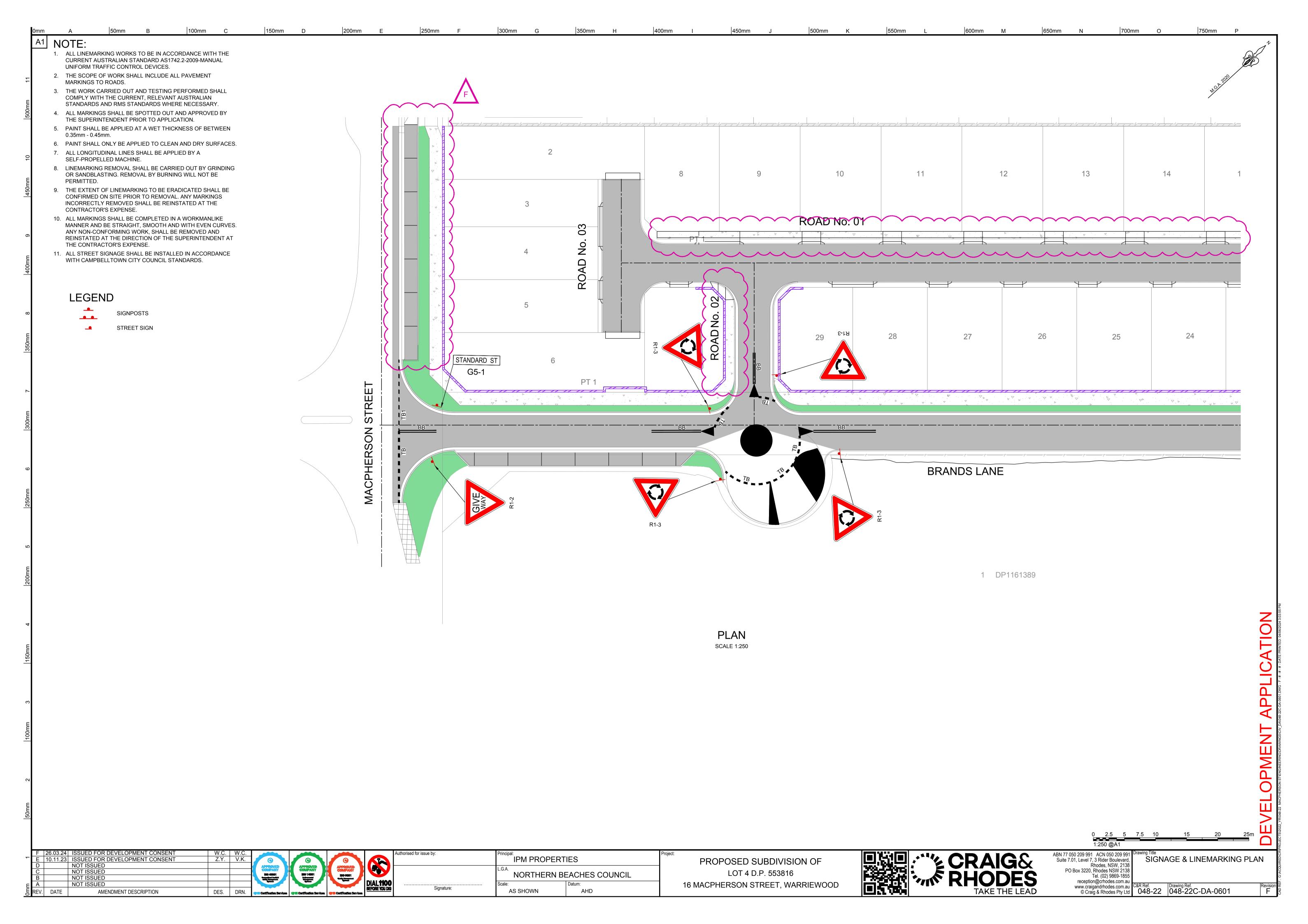


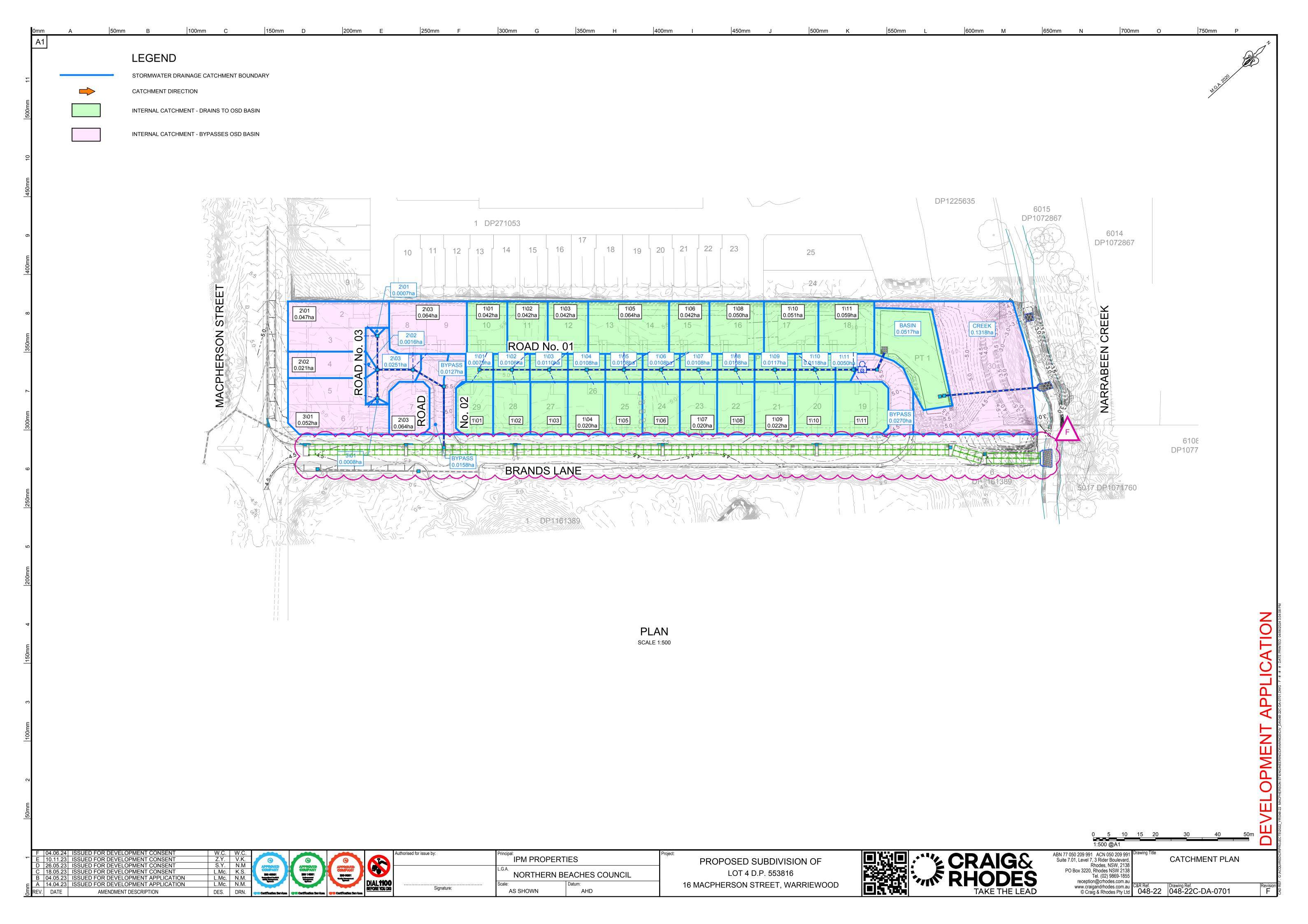


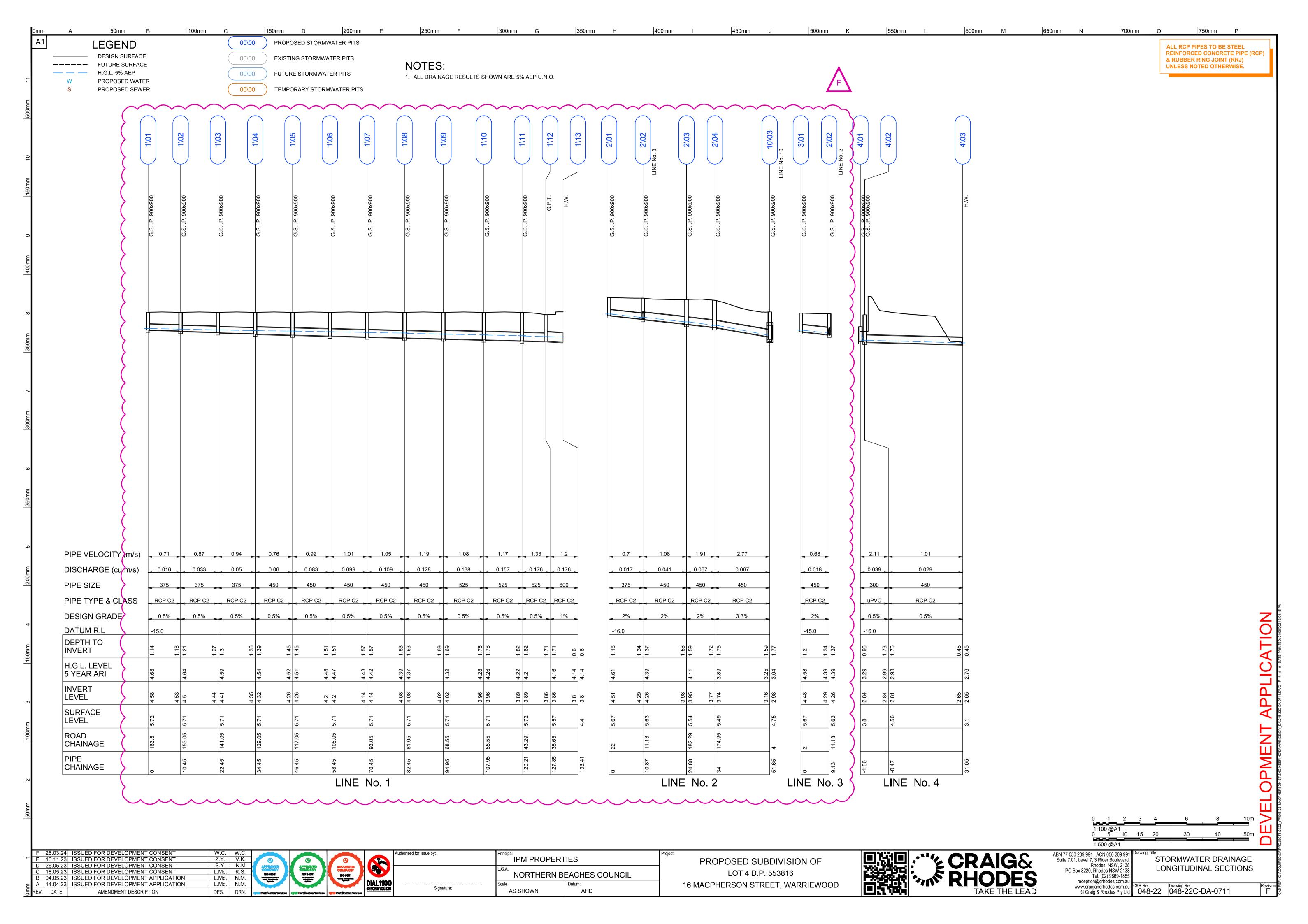


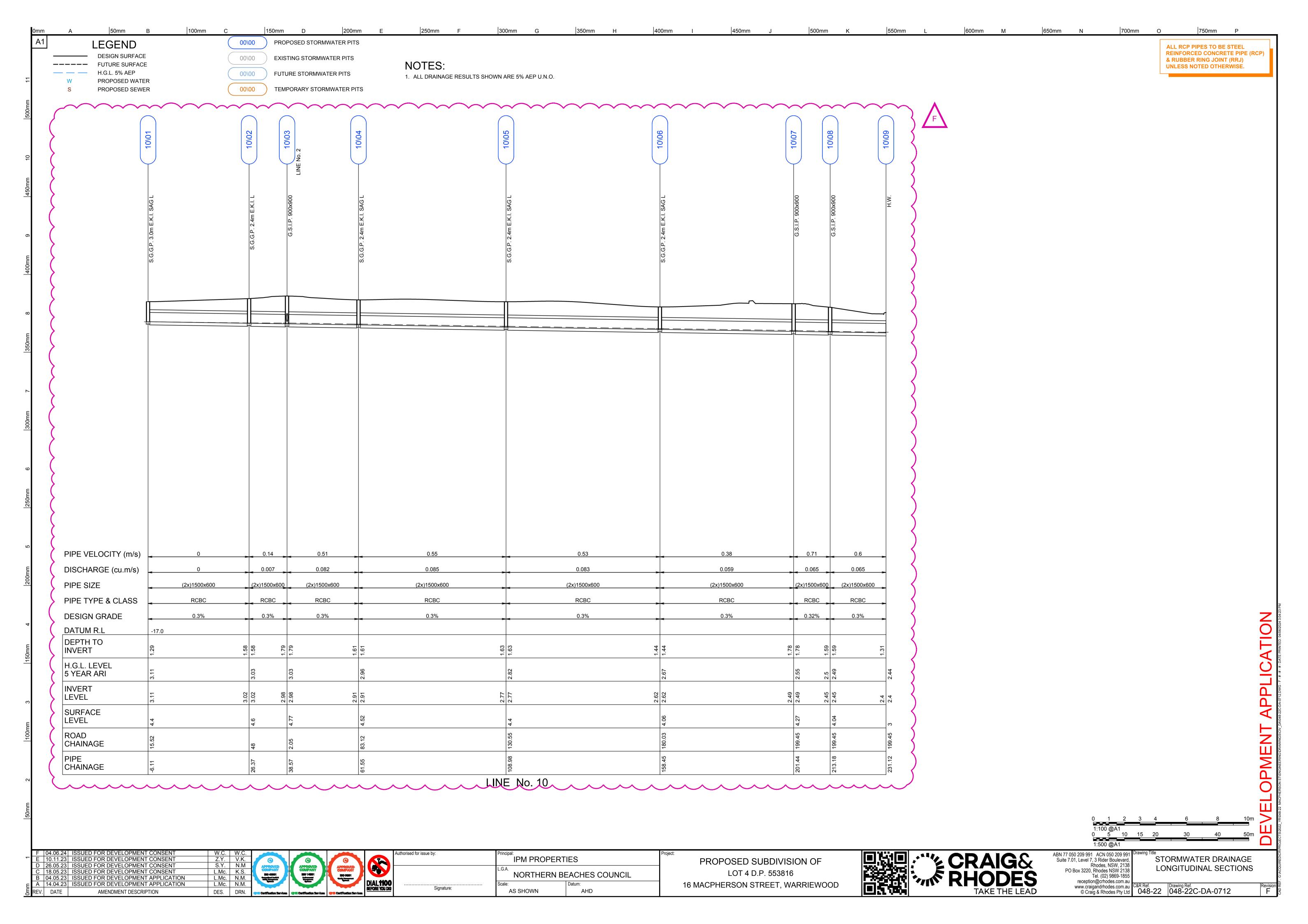


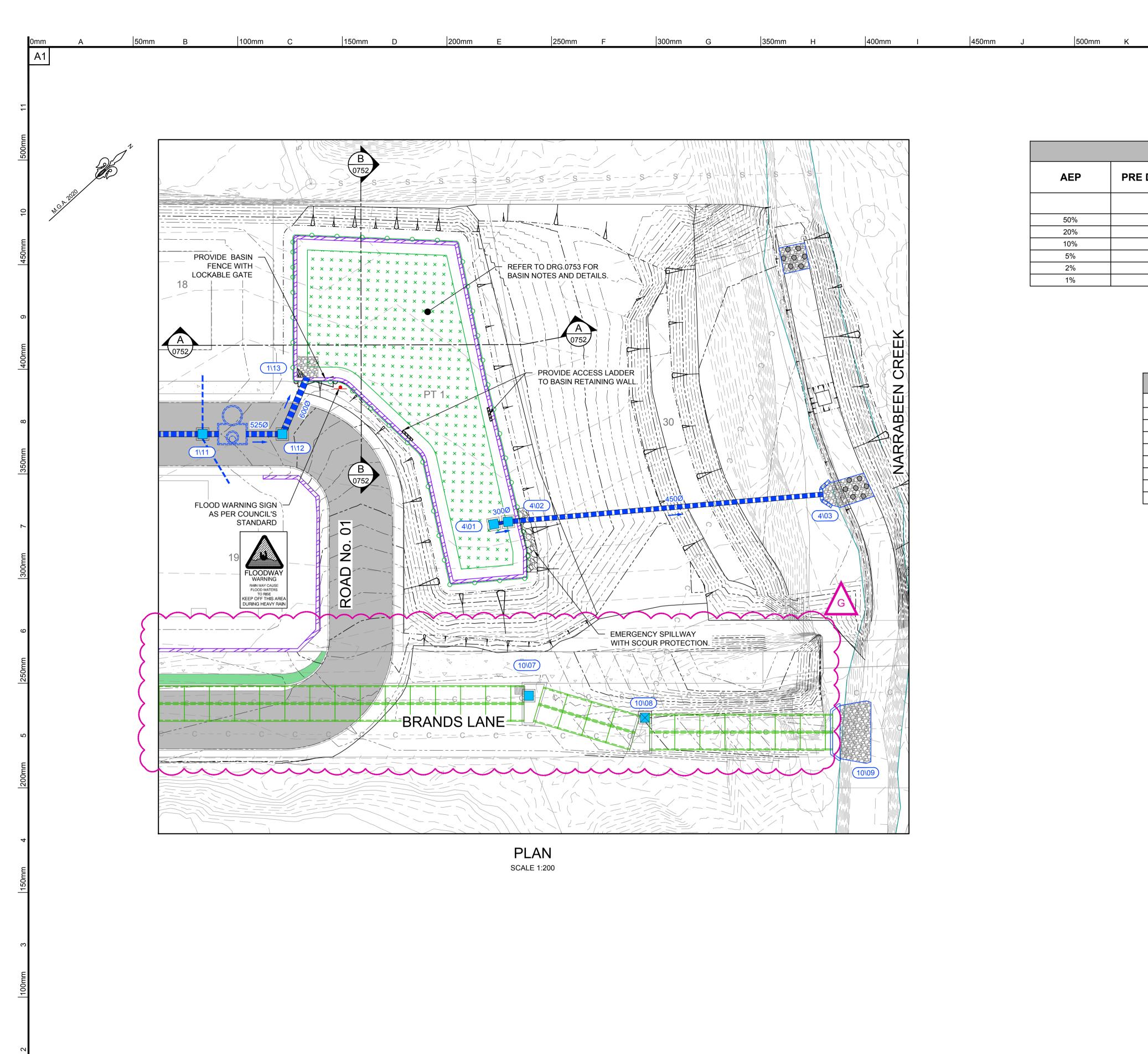












| SITE DISCHARGE |                      |                       |                       |  |  |
|----------------|----------------------|-----------------------|-----------------------|--|--|
| AEP            | PRE DEVELOPMENT FLOW | POST DEVELOPMENT FLOW | BASIN TOP WATER LEVEL |  |  |
|                | (m3/s)               | (m3/s)                | TWL (m AHD)           |  |  |
| 50%            | 0.14                 | 0.11                  | 3.75                  |  |  |
| 20%            | 0.24                 | 0.14                  | 3.88                  |  |  |
| 10%            | 0.30                 | 0.17                  | 3.99                  |  |  |
| 5%             | 0.36                 | 0.20                  | 4.10                  |  |  |
| 2%             | 0.44                 | 0.23                  | 4.26                  |  |  |
| 1%             | 0.70                 | 0.49                  | 4.44                  |  |  |

600mm M

650mm N

700mm O

750mm P

550mm L

| BASIN DETAILS                                       |       |     |  |  |
|---|-------|-----|--|--|
| Developed Catchment Area To OSD                     | 1.017 | ha  |  |  |
| Developed Catchment Area Bypassing OSD              | 0.397 | ha  |  |  |
| Top of Berm Level                                   | 5.75  | mRL |  |  |
| Emergency Weir Level                                | 5.75  | mRL |  |  |
| Extended Detention Level (ED)                       | 3.80  | mRL |  |  |
| Top of Filter Level                                 | 3.50  | mRL |  |  |
| Design Detention Volume Required (to 100yr ARI TWL) | 362   | m³  |  |  |
| Total Basin Volume Provided (to emergency weir)     | 819   | m³  |  |  |
| Filter Media Area (min)                             | 277   | m2  |  |  |

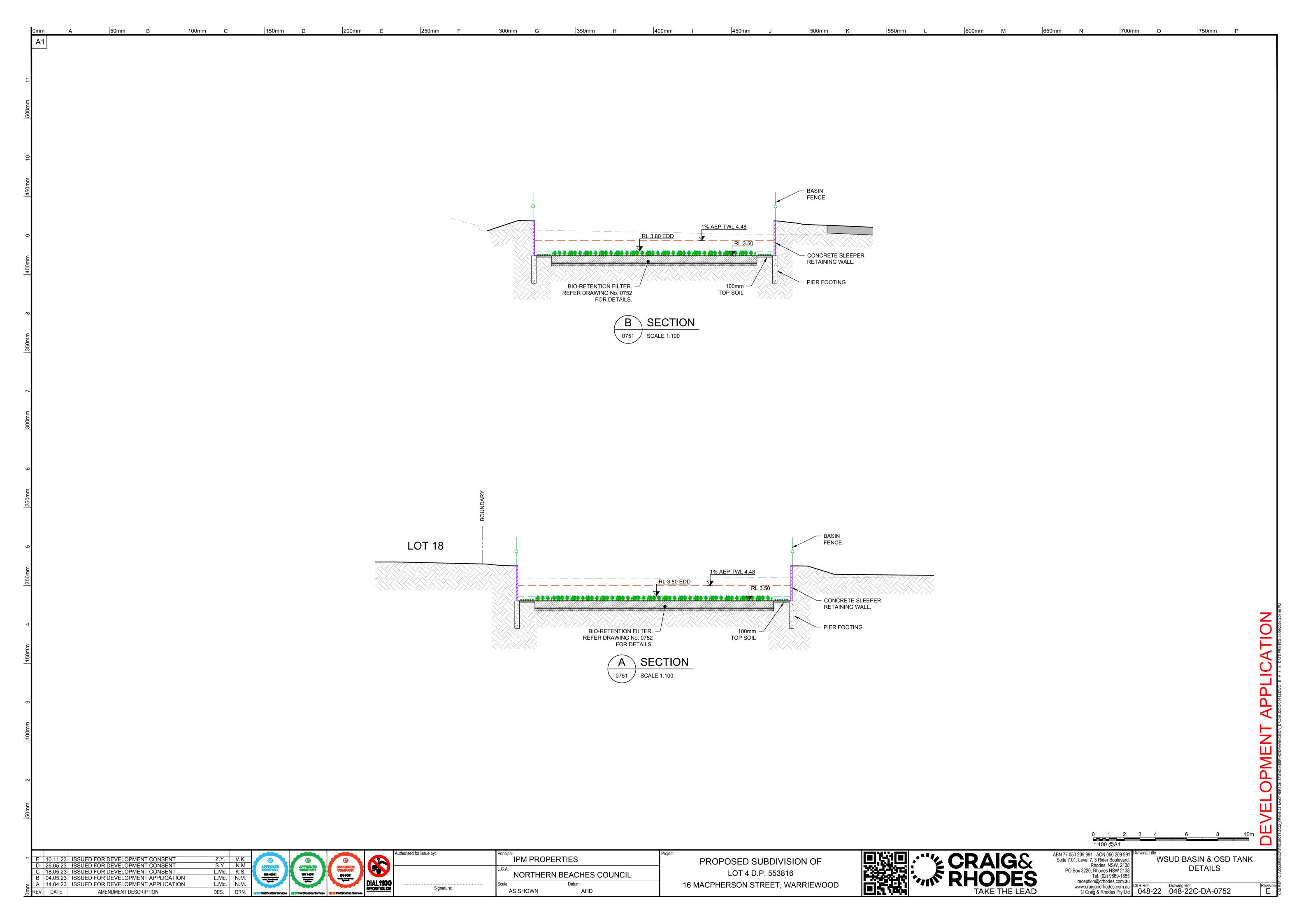
CRAIG& RHODES
TAKE THE LEAD

F 02.04.24 ISSUED FOR DEVELOPMENT CONSENT
E 10.11.23 ISSUED FOR DEVELOPMENT CONSENT
D 26.05.23 ISSUED FOR DEVELOPMENT CONSENT
C 18.05.23 ISSUED FOR DEVELOPMENT CONSENT
B 04.05.23 ISSUED FOR DEVELOPMENT APPLICATION

AMENDMENT DESCRIPTION

W.C. W.C.
Z.Y. V.K.
S.Y. N.M
L.Mc. K.S.
L.Mc. N.M.

DES. DRN.



# PLAN VIEW

# TYPICAL HEADWALL TREATMENT SCALE NTS

| TABLE 1 |               |             |       |         |                      |
|---------|---------------|-------------|-------|---------|----------------------|
| PIT     | PIPE SIZE (Ø) | 1% AEP + CC | L (m) | W (m)   | D <sub>50</sub> (mm) |
| 1\13    | 600           | 1.610       | 2.40  | 2.20    | 250                  |
| 4\03    | 450           | NA          | 2.00  | CHANNEL | 250                  |
| 10\09   | 1800x900      | NA          | 5.00  | CHANNEL | 250                  |

- 1. A 100mm THICK COARSE SAND TRANSITION LAYER IS TO BE INSTALLED OVER THE GRAVEL DRAINAGE LAYER TO COMPLY WITH THE FOLLOWING PARTICLE SIZE
- 2. FILTER MEDIA IS TO BE FREE OF RUBBISH AND DELETERIOUS MATERIAL AND LIGHTLY COMPACTED ONLY (TO 90% STANDARD COMPACTION)
- 3. FILTER MEDIA SATURATED HYDRAULIC CONDUCTIVITY TO BE 180mm/hr. PERMEABILITY IS TO BE TESTED USING THE A.S.4419 (LATEST EDITION) (SOILS FOR LANDSCAPING AND

750mm

- THE COMBINED PERCENTAGE OF CLAY & SILT MAY NOT EXCEED 12% UNDER ANY
- a. BULK DENSITY AS SPECIFIED FOR 'NATURAL SOILS AND SOIL BLENDS' > 0.7 kg/L
- c. WETTABILITY AS SPECIFIED FOR 'NATURAL SOILS AND SOIL BLENDS' > 5 mm/min.
- e. ELECTRICAL CONDUCTIVITY (EC) AS SPECIFIED FOR 'NATURAL SOILS AND SOIL
- g. NITROGEN DRAWDOWN (NDI) AS SPECIFIED FOR 'NATURAL SOILS AND SOIL BLENDS'
- h. TOXICITY AS SPECIFIED FOR 'NATURAL SOILS AND SOIL BLENDS'
- j. PERMEABILITY SATURATED HYDRAULIC CONDUCTIVITY 80mm/hr ±20% AT 90%
- I. LARGE PARTICLES AS SPECIFIED FOR 'NATURAL SOILS AND SOIL BLENDS'
- 6. ESTABLISHMENT OF BIO-RETENTION SYSTEM IN ACCORDANCE WITH CONSTRUCTION & ESTABLISHMENT GUIDELINES: SWALES, BIO-RETENTION SYSTEMS & WETLANDS (WATER
- 7. BASIN/FILTER MEDIA TO BE CONSTRUCTED WHEN 80% OF DWELLINGS ARE

- 1. THE CONTRACTOR SHALL PROVIDE PROPER FENCING, GUARDING & LIGHTING AND OBSERVATION OF ALL EARTHWORKS, TEMPORARY ROADWAYS, FOOTWAYS, GUARDS & FENCES AS MAY BE RENDERED NECESSARY FOR THE ACCOMMODATION AND PROTECTION OF PEDESTRIANS, VEHICLES, ANIMALS & THE PUBLIC
- 2. ALL EARTHWORKS SHALL BE CARRIED OUT IN THE LOCATIONS SHOWN AND TO THE LEVELS, WIDTHS AND BATTER SLOPES INDICATED ON THE DRAWINGS
- 3. EXCAVATED MATERIAL NOT MEETING THE SPECIFICATIONS FOR FILL MATERIAL SHALL
- 4. WHERE EARTHWORKS ARE REQUIRED IN THE VICINITY OF EXISTING SERVICES. THE
- 5. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, DO ALL THINGS NECESSARY TO DIVERT ANY WATER INTERFERING WITH THE PROCESS OF WORKS, KEEP THE EXCAVATIONS AND TRENCHES FREE FROM WATER WHILE THE WORKS ARE IN
- PROGRESS AND PREVENT ANY DAMAGE TO THE WORKS BY WATER DUE TO FLOODS OR OTHER CAUSES. THE CONTRACTOR SHALL HAVE PUMPING EQUIPMENT FOR KEEPING THE EXCAVATION OR TRENCHES CONSTANTLY DEWATERED DURING THE TIMES THE WORKS ARE IN PROGRESS. ANY WORK OR MATERIAL DAMAGED BY WATER SHALL BE
- 6. WHERE DIRECTED BY THE SUPERINTENDENT THE BOTTOM OF TRENCHES OR EXCAVATIONS SHALL BE COMPACTED PRIOR TO THE PLACING OF ANY BEDDING OR CONCRETE MATERIALS. SHOULD, IN THE OPINION OF THE SUPERINTENDENT, THE FOUNDATION MATERIAL BE INCAPABLE OF EFFECTIVE COMPACTION, THE MATERIAL SHALL BE REMOVED AND REPLACED WITH APPROPRIATE MATERIAL
- 7. MATERIAL SHALL BE INSPECTED & APPROVED BY THE SUPERINTENDENT PRIOR TO USE. RELEVANT MATERIAL SPECIFICATION SHEETS ARE TO BE PROVIDED BY THE
- 8. SUBSOIL DRAINAGE PIPES WITHIN THE BIORETENTION SYSTEM ARE TO BE SLOTTED 100mm uPVC CONSISTENT WITH AS/NZS 1254. JOINTS ARE TO BE SOLVENT CEMENT GLUED AND BENDS ARE TO BE 45° TO MINIMISE BLOCKAGE.

# **EXCAVATIONS - BASINS**

- 1. ALL TOPSOIL TO BE STRIPPED AND STOCKPILED FOR FUTURE USE. STRIPPED SURFACES ARE TO BE ROLLED AND INSPECTED BY A GEOTECHNICAL ENGINEER PRIOR TO CONTINUING WORKS. DEPTH OF TOPSOIL STRIPPING TO BE BETWEEN 125mm AND 200mm (TO BE CONFIRMED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION)
- 2. WHERE ROCK IS EXPOSED DURING EXCAVATION, THE CONTRACTOR SHALL CEASE EXCAVATION AT THIS LOCATION AND CONTACT THE SUPERINTENDENT WHO WILL THEN ADVISE ON THE LEVEL TO WHICH THE EXCAVATION IS TAKEN.

10.11.23 ISSUED FOR DEVELOPMENT CONSENT 26.05.23 ISSUED FOR DEVELOPMENT CONSENT ISSUED FOR DEVELOPMENT CONSENT 3 04.05.23 ISSUED FOR DEVELOPMENT APPLICATION A | 14.04.23 | ISSUED FOR DEVELOPMENT APPLICATION

REV. DATE

AMENDMENT DESCRIPTION

PROVIDE TRENCH CUT-OFF HEEL

FOR Ø600mm PIPES AND LARGER.



STACKED ROCK HEADWALL & RIP RAP SPILLWAY

**SECTION** 

SCALE NTS

BIDIM A44 GEOTEXTILE -

ROCKS OF VARYING DIAMETER -

D<sub>50</sub> = 250mm MIN FOR TEMPORARY

FLOODWAY ARMOUR. PACKED IN

SACRIFICIAL ZONE INVERT

OUTLETS & D<sub>90</sub> = 400mm-450mm FOR

DES.

OR EQUIVALENT





400mm APART

COARSE GRAVEL BED 200mm DEPTH

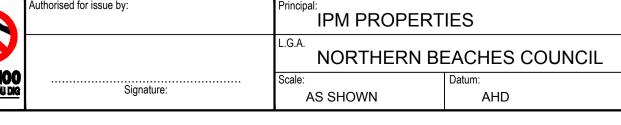
PROVIDE STILLING BLOCKS TO FORWARD

(800mm-1000mm DIA. MIN.) AND ANCHORED

AT LEAST 300mm BELOW BASE OF PLUNGE

POOL-LARGER ROCKS ARE TO SET A MIN.

EDGE OF DROP USING LARGER ROCKS



150mm THICK

CENTRAL

CONCRETE

PROPOSED SUBDIVISION OF LOT 4 D.P. 553816 16 MACPHERSON STREET, WARRIEWOOD

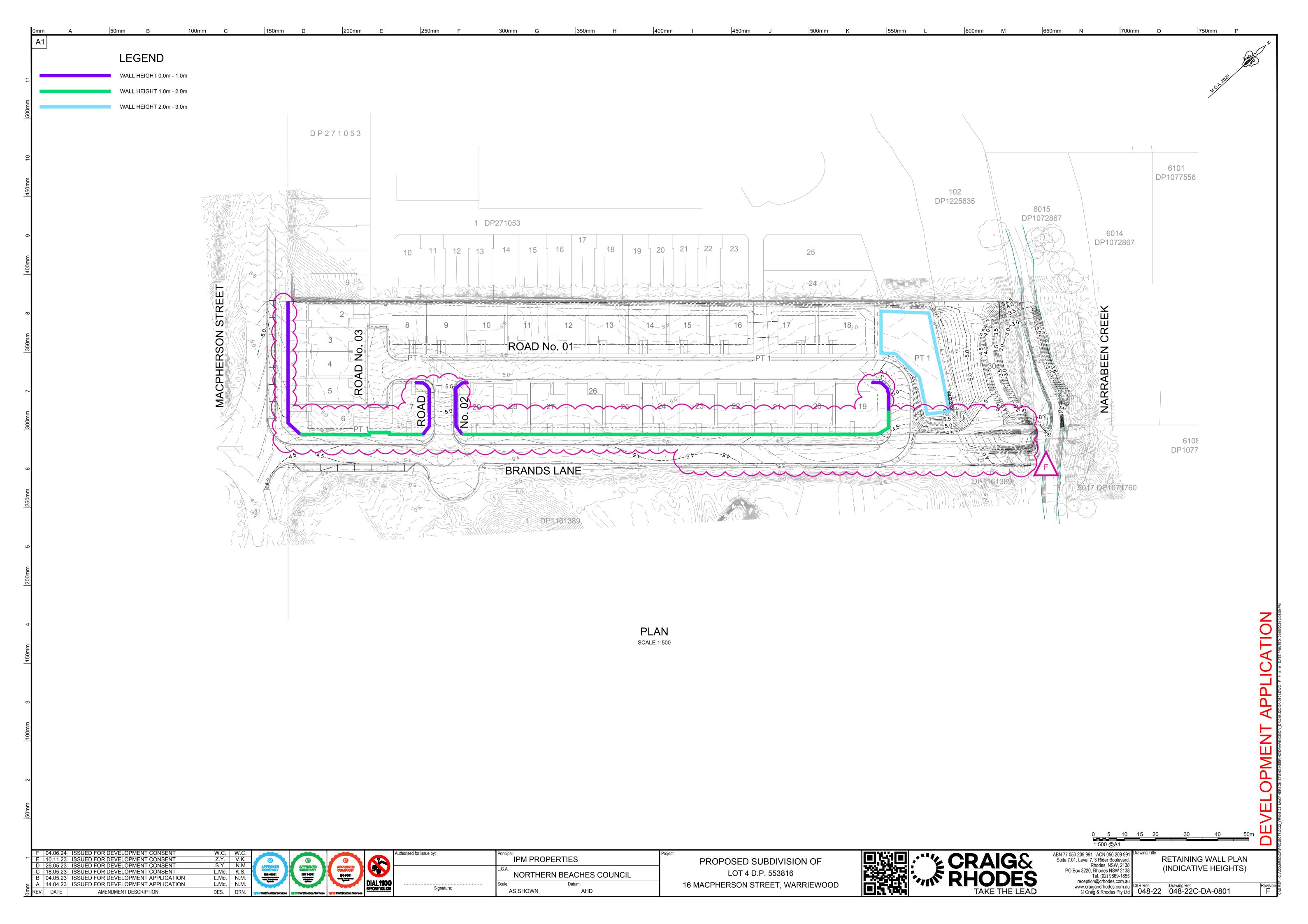


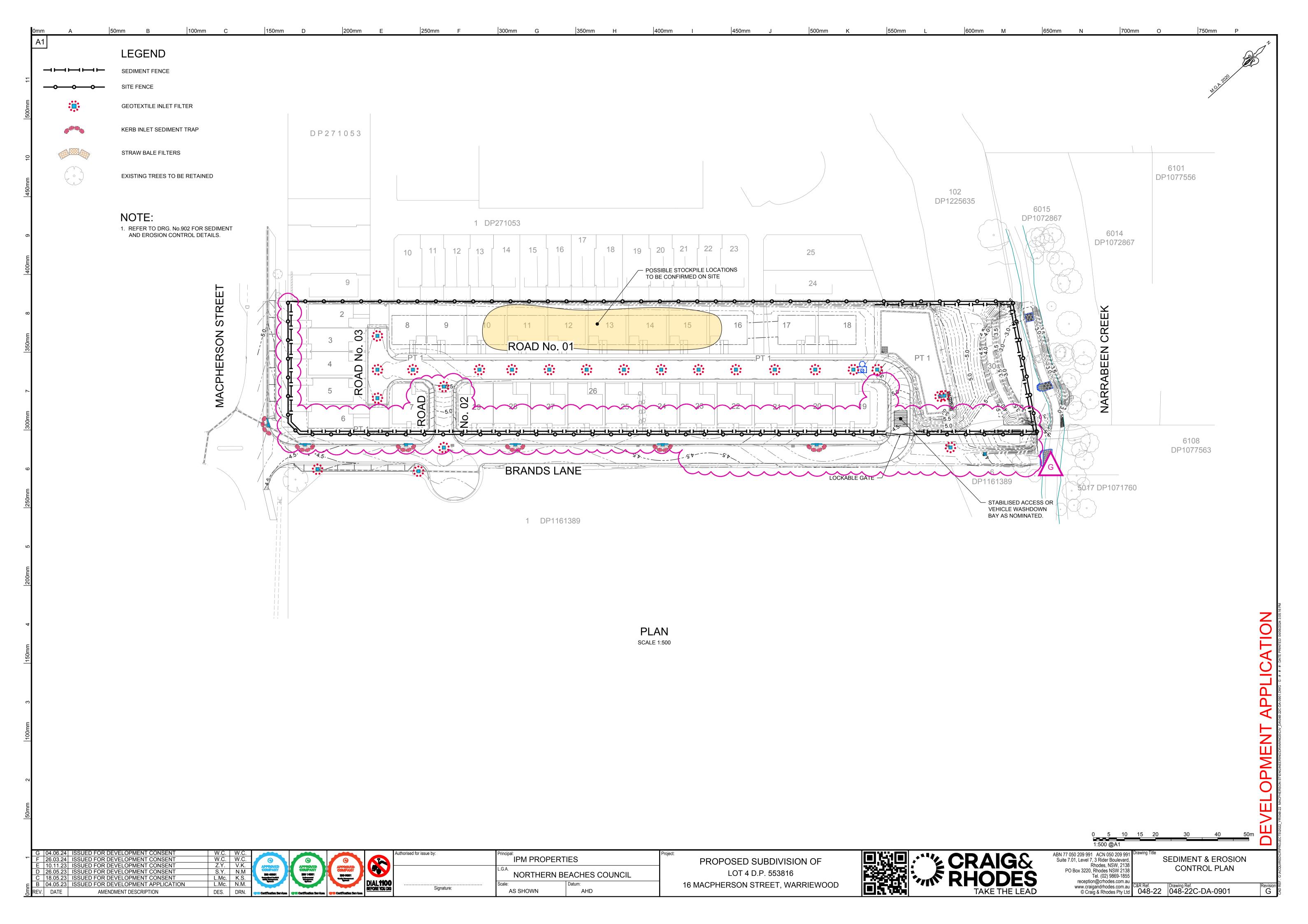
ABN 77 050 209 991 ACN 050 209 991 Suite 7.01, Level 7, 3 Rider Boulevard Rhodes, NSW, 213 PO Box 3220, Rhodes NSW 213 Tel. (02) 9869-185 reception@crhodes.com.a www.craigandrhodes.com.au

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DRAINAGE DETAILS

048-22 | 048-22C-DA-0753





KERB INLET SEDIMENT FILTER

(ON GRADE)

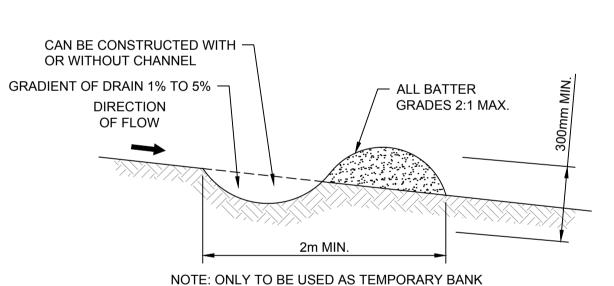
**GAP BETWEEN BAGS** 

**ACT AS SPILLWAY** 

- LARGE STONE OR FOREIGN MATERIAL.

# KERBSIDE TURF STRIP

- 2. LAY 1.4m LONG TURF STRIPS NORMAL TO THE KERB EVERY 10m.
- 3. REHABILITATE DISTURBED SOIL BEHIND THE TURF STRIP FOLLOWING THE



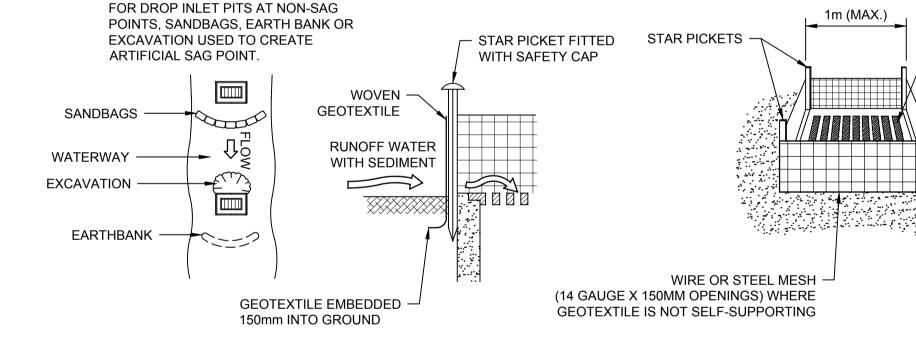
**EARTHBANK** 

NTS

WHERE MAXIMUM UPSLOPE LENGTH IS 80 METRES

- 3. SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.

INSTALL A 400mm MINIMUM WIDE ROLL OF TURF ON THE FOOTPATH NEXT TO THE KERB AND AT THE SAME LEVEL AS THE TOP OF THE KERB.



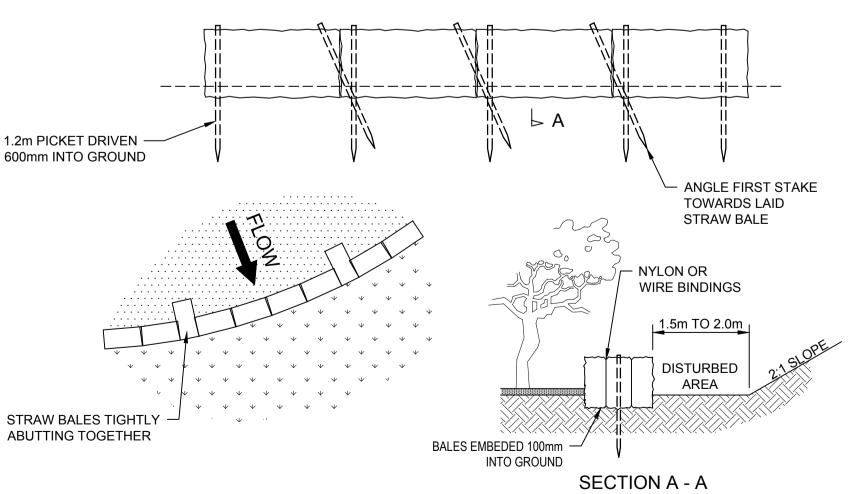
# DROP INLET FILTER

KERB INLET SEDIMENT FILTER

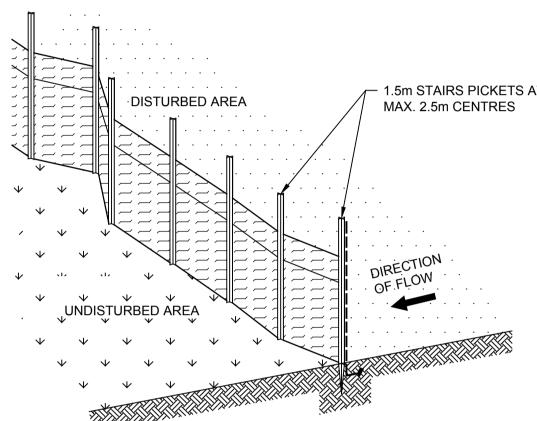
(SAG)

- DROP INLET

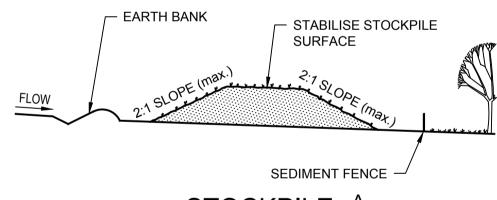
WITH GRATE



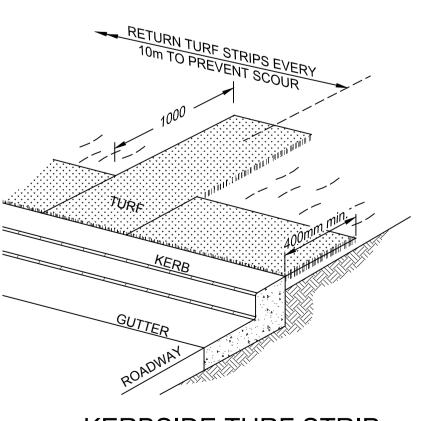
STRAW BALE FILTERS



SEDIMENT FENCE - DETAIL



STOCKPILE A



# KERBSIDE TURF STRIP

# DROP INLET FILTERS

THE SIDE-ENTRY INLET.

THE STRUCTURE

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OF STRAW BALES.

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

BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT

REFER TO APPROVED PLANS FOR LOCATION AND INSTALLATION DETAILS. IF

METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE

ENSURE THAT THE INSTALLATION OF THE SEDIMENT TRAP WILL NOT CAUSE

ENSURE THE SEDIMENT TRAP IS CONSTRUCTED UP-SLOPE OF AN ON-GRADE KERB INLET. THE SEDIMENT TRAP MUST NOT SURROUND THE KERB INLET

APPROPRIATE SPACERS TO ENSURE THE SEDIMENT TRAP DOES NOT BLOCK

TAKE ALL NECESSARY MEASURE TO MINIMISE THE SAFETY RISK CAUSED BY

INSTALL SEDIMENT TRAP IN ACCORDANCE WITH STANDARD DRAWING

SUPPLIED WITH THE APPROVED PLAN, OR AS DIRECTED BY THE SITE

ENSURE THE SEDIMENT TRAP FULLY ENCLOSES THE KERB INLET. USE

UNLESS SPECIFICALLY DIRECTED BY THE SITE SUPERVISOR.

THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS, OR

THOROUGHLY OVER THE GEOTEXTILE.

ON-SITE OFFICER FOR ASSISTANCE.

SUPERVISOR.

KERB INLET SEDIMENT FILTER

UNDESIRABLE SAFETY OR FLOODING ISSUES.

- 2. FOLLOW STANDARD DRAWINGS OF STRAW BALE FILTERS AND SEDIMENT FENCES FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1m CENTRES.
- IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
- DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS

# EARTHBANK (LOW FLOW)

ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

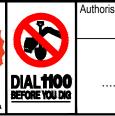
- 1. BUILD WITH GRADIENTS BETWEEN 1% AND 5%.
- AVOID REMOVING TREES AND SHRUBS IF POSSIBLE WORK AROUND THEM.
- 3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
- BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
- ENSURE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
- COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

0.11.23 ISSUED FOR DEVELOPMENT CONSENT ISSUED FOR DEVELOPMENT CONSENT ISSUED FOR DEVELOPMENT CONSENT 04.05.23 ISSUED FOR DEVELOPMENT APPLICATION L.Mc. N.M. A | 14.04.23 | ISSUED FOR DEVELOPMENT APPLICATION L.Mc. N.M AMENDMENT DESCRIPTION DES. DRN

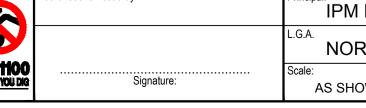
198 45001 Salek Maranani Salek Maranani











IPM PROPERTIES NORTHERN BEACHES COUNCIL AS SHOWN AHD

PROPOSED SUBDIVISION OF LOT 4 D.P. 553816 16 MACPHERSON STREET, WARRIEWOOD



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SEDIMENT & EROSION CONTROL DETAILS

O48-22 O48-22C-DA-0902