

Dated 3/4/17

Planning Agreement

Parties

City of Ryde Council (Council)
(ABN 81 621 292 610)

Goodman Property Services (Aust) Pty Ltd (Developer)
(ACN 088 981 793)

The Trust Company Limited (Owner)
(ACN 004 027 749)

Goodman Funds Management Australia Limited (Trustee)
(ACN 113 249 595)

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Planning agreement dated

3/4/17

Parties

City of Ryde Council ABN 81 621 292 610
of 1 Devlin Street, Ryde, NSW 2112
(Council)

Goodman Property Services (Aust) Pty Limited ACN 088 981 793
of Level 17, 60 Castlereagh Street, Sydney NSW 2000
(Developer)

The Trust Company Limited ACN 004 027 749 of Level 12, 123 Pitt Street,
Sydney NSW 2000
(Owner)

Goodman Funds Management Australia Limited ACN 113 249 595 of Level 17,
60 Castlereagh Street Sydney NSW 2000
(Trustee)

Introduction

- A On 5 April 2013 the Developer lodged the Development Application with Council for the Development of Khartoum Road, Macquarie Park, NSW, Lot 1 DP 582794.
- B The Developer is, from time to time, engaged by the Owner to undertake developments on its behalf.
- C The Owner is the owner of the Land and, subject to securing a tenant for the Land, proposes to enter into a development agreement with the Developer to carry out the Development on the Land.
- D As part of the Development, the Owner proposes to engage the Developer to carry out works and provide public benefits comprising the Development Contribution as described in this Agreement.
- E The Development Application seeks approval for development with a Floor Space Ratio of 1.99:1, which exceeds Council's applicable controls.
- F The Development Application was accompanied by an offer by the Developer on behalf of the Owner to enter into this Agreement to make the Development Contribution if the Development Consent is granted and other matters are satisfied.
- G The Development Consent was granted on 5 December 2013 and commenced on 16 September 2014.
- H This Agreement describes the works and public benefits comprising the Development Contribution and provides for the manner in which, and the terms upon which, the Owner is to provide the Development Contribution.



It is agreed

1. Definitions and Interpretation

1.1 Definitions

In this Agreement:

- (a) **Act** means the Environmental Planning and Assessment Act 1979 (NSW).
- (b) **Agreement** means this document, including any schedule or annexure to it, signed by the parties.
- (c) **Approval** means any approvals, consents, certificates, permits, endorsements, licences, conditions or requirements (and any modifications or variations to them) which may be required by Law for the commencement and carrying out of the Works or the Development generally and includes a development consent or other approval under the Act.
- (d) **Authority** means any governmental, semi-governmental, administrative, fiscal or judicial body, department, commission, authority, tribunal, agency or entity and includes an accredited certifier accredited under the *Building Professionals Act 2005*.
- (e) **Business Day** means a day that is not a Saturday, Sunday or any other day which is a public holiday or a bank holiday in the place where an act is to be performed or a payment is to be made.
- (f) **Claim** means any claim, loss, liability, damage, proceedings, order, judgment or expense arising out of the operation of this Agreement.
- (g) **Compliance Certificate** means a compliance certificate within the meaning of section 109C(1)(a)(i) of the Act to the effect that work has been completed as specified in the certificate and complies with the plans and specifications for the Development.
- (h) **Confidential Information** means any information and all other knowledge at any time disclosed (whether in writing or orally) by the parties to each other, or acquired by the parties in relation to the other's activities or services which is not already in the public domain and which:
 - (i) is by its nature confidential;
 - (ii) is designated, or marked, or stipulated by either party as confidential (whether in writing or otherwise);
 - (iii) any party knows or ought to know is confidential; or
 - (iv) is information which may reasonably be considered to be of a confidential nature.
- (i) **Construction Terms** means the terms set out in Schedule 2.

- (j) **CPI** means the Sydney Consumer Price Index (All Groups) published by the Commonwealth statistician, or if that index no longer exists, any similar index which the Council determines in its sole discretion.
- (k) **Council** means the City of Ryde Council.
- (l) **Council's Discretion** means:
 - (i) the Council's power to make any law; or
 - (ii) the Council's exercise of any statutory power or discretion.
- (m) **Defects Liability Period** means the period of 365 days beginning on the date on which the Developer Works are delivered to Council in accordance with this Agreement.
- (n) **Development** means the development described in Item 2, Schedule 1.
- (o) **Development Application** means LDA2013/106;
- (p) **Development Consent** means the deferred commencement development consent granted on 5 December 2013 by the Joint Regional Planning Panel and commencing on 16 September 2014, which authorises the carrying out of the Development on the Land..
- (q) **Development Contribution** means:
 - (i) the construction by the Owner and the Developer of the Developer Works;
 - (ii) the dedication of the Road Works in favour of Council; and
 - (iii) the granting of the Right of Way in favour of the Council over the Pedestrian Link (unless clause 8 applies in which case the Owner is not required to grant the Right of Way).
- (r) **Developer Works** means the construction by the Owner and the Developer of the Road Works and the Pedestrian Link, in accordance with this Agreement.
- (s) **FSR** means the ratio of the Gross Floor Area of all buildings within the Land to the Land area.
- (t) **Gross Floor Area or GFA** means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:
 - (i) the area of a mezzanine; and
 - (ii) habitable rooms in a basement or an attic; and
 - (iii) any shop, auditorium, cinema, and the like, in a basement or attic,
 but excludes:
 - (iv) any area for common vertical circulation, such as lifts and stairs; and
 - (v) any basement:

- (A) storage; and
 - (B) vehicular access, loading areas, garbage and services; and
 - (vi) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting; and
 - (vii) car parking to meet any requirements of the consent authority (including access to that car parking); and
 - (viii) any space used for the loading or unloading of goods (including access to it); and
 - (ix) terraces and balconies with outer walls less than 1.4 metres high; and
 - (x) voids above a floor at the level of a storey or storey above.
- (u) **Governmental Agency** means any government and any governmental body whether:
- (i) legislative, judicial or administrative;
 - (ii) a department, commission, authority, tribunal, agency or entity;
 - (iii) commonwealth, state, territorial or local;
- but does not include a governmental body in respect of any service or trading functions as distinguished from regulatory or fiscal functions.
- (v) **Land** means the land described in Item 1, Schedule 1.
- (w) **Law** means:
- (i) the common law including principles of equity; and
 - (ii) the requirements of all statutes, rules, ordinances, codes, regulations, proclamations, by-laws or consents by an Authority.
- (x) **Legislation** means the Act and the *Local Government Act 1993* (NSW).
- (y) **LPI** means Land and Property Information, New South Wales.
- (z) **Occupation Certificate** means any occupation certificate issued under the Environmental Planning and Assessment Act 1979 by the Principal Certifying Authority.
- (aa) **Party or Parties** means a party or the parties to this agreement including their successors and assigns.
- (bb) **Pedestrian Link** means the construction of a shared pedestrian link and associated landscaping, of 3m total width along the western boundary of the Land, in accordance with the Pedestrian Link Specifications as depicted in the final design drawings at 0 (**Pedestrian Link Final Design**) being those works approved in the Development Consent.
- (cc) **Pedestrian Link Specifications** means the specifications and controls contained in Macquarie Park Review Options Paper 27 March 2013 and Part 4.5, Chapter 4 "Access Networks" Section 4.2 (Pedestrian Connections) of the Ryde DCP 2014

and [Section 3.2.2 (Typical footpath) OR Section 3.3.2 (Typical footpath detail) of the Macquarie Park Public Domain Technical Manual 2008, as applicable to the construction of the Pedestrian Link.

- (dd) **Rectification Certificate** means a compliance certificate within the meaning of section 109C(1)(a)(v) of the Act to the effect that work the subject of a Rectification Notice has been completed as specified in the notice.
- (ee) **Rectification Notice** means a written notice that identifies a breach of this Agreement in respect of any work required to be carried out by the Owner as Developer Works, containing sufficient detail of the work to be done to enable the Council to issue a Rectification Certificate and requiring the breach to be rectified within a reasonable specified time.
- (ff) **Regulations** means the Environmental Planning and Assessment Regulation 2000 (NSW).
- (gg) **Right of Way** means a right of footway in favour of the Council for the benefit of the public to go, pass and repass on foot at all times and for all purposes, without animals or vehicles over the Pedestrian Link.
- (hh) **Road Works** means the construction of a 20.4m wide road, comprising a total area of 1,774 square metres along the southern boundary of the Land connecting to Khartoum Road and public domain works, in accordance with the Road Work Specifications and as depicted in the final design drawings at Annexure A (**Road Works Final Design**).
- (ii) **Road Works Specifications** means the specifications and controls for a Type 2 road set out in Part 4.5, Chapter 5 "Public Domain" Section 5.1.3 (Type 2 Streets) of the Ryde DCP 2014 and Section 2.2 "Type 2 Streets" of the Macquarie Park Public Domain Technical Manual 2008, as applicable to the construction of the Road Works.
- (jj) **Ryde DCP** means the City of Ryde Development Control Plan 2014 adopted by Council on 12 September 2014.
- (kk) **Type 2 Road** means a road to the dimensions, specifications, requirements and controls contained in Part 4.5, Chapter 5 "Public Domain" of the Ryde DCP.
- (ll) **Works** means the Pedestrian Link and the Road Works.

1.2 Interpretation

- (a) Reference to:
 - (i) one gender includes the others;
 - (ii) the singular includes the plural and the plural includes the singular;
 - (iii) a person includes a body corporate;
 - (iv) a party includes the party's executors, administrators, successors and permitted assigns;
 - (v) a thing includes the whole and each part of it separately;
 - (vi) a statute, regulation, code or other law or a provision of any of them includes:

- (A) any amendment or replacement of it; and
- (B) another regulation or other statutory instrument made under it, or made under it as amended or replaced;
- (vii) dollars means Australian dollars unless otherwise stated; and
- (viii) an Item is to an item in the Schedule.
- (b) "Including" and similar expressions are not words of limitation.
- (c) Where a word or expression is given a particular meaning, other parts of speech and grammatical forms of that word or expression have a corresponding meaning.
- (d) Headings and any table of contents or index are for convenience only and do not form part of this Agreement or affect its interpretation.
- (e) A provision of this Agreement must not be construed to the disadvantage of a party merely because that party was responsible for the preparation of the Agreement or the inclusion of the provision in the Agreement.
- (f) If an act must be done on a specified day which is not a Business Day, it must be done instead on the next Business Day.
- (g) An agreement, representation or warranty on the part of or in favour of two or more persons binds or is for the benefit of them jointly and severally.

2. Planning agreement under the Act

The parties agree that this Agreement is a planning agreement governed by Subdivision 2 of Division 6 of Part 4 of the Act.

3. Application of this Agreement

This Agreement applies to the Land and to the Development.

4. Operation of this Agreement

4.1 This document, when unsigned by the parties and attached to the Development Application for the Development lodged by the Developer with the Council, is an irrevocable offer from the Owner and the Developer to the Council to enter into this Agreement if the Council grants Development Consent on conditions acceptable to the Developer, acting reasonably.

4.2 This Agreement commences on the latest date on which any of the following occur:

- (a) each of the following occurs:
 - (i) the Council grants Development Consent on conditions acceptable to the Developer, acting reasonably;
 - (ii) public notice of the granting of the Development Consent has been given in accordance with the Act and the Regulations;
 - (iii) 3 months have elapsed since the date on which that public notice was given; and

- (iv) the date the Developer notifies the Council in writing that it intends to commence the Development;
 - (b) any Class 4 action in respect of the validity of the Development Consent has been finally determined;
 - (c) the carrying out of any part of the Development is subject to a condition of that Development Consent, imposed under section 93I(3) of the Act, requiring this Agreement to be entered into; and
 - (d) all the parties have signed this Agreement.
- 4.3 The Council must notify the Development Consent in accordance with the Act and Regulations in a timely manner.

5. Developer's & Owner's warranties as to capacity

- 5.1 In addition to and despite all other warranties, express or implied, in this Agreement, the Developer and Owner warrant and covenant that:
- (a) they are empowered to enter into this Agreement and to do all things that will be required by this Agreement;
 - (b) all things have been done or will be done as may be necessary to render this Agreement legally enforceable in accordance with its terms and fully valid and binding on them; and
 - (c) all authorisations by any Governmental Agency that are required or will be required in connection with the execution and delivery of, the performance of obligations under or the validity or enforceability of, this Agreement have been obtained or effected and are or will be fully operative.

6. Road Works

6.1 Construction of Road Works

- (a) The Owner and the Developer must construct the Road Works in accordance with the Road Works Final Design, the Construction Terms and any relevant Approvals.
- (b) The Owner and the Developer must obtain all necessary Approvals to carry out the Road Works.
- (c) The Owner and the Developer must complete the construction of the Road Works prior to dedication of the land on which the Road Works are located under clause 9.1.

6.2 Certification of the Road Works

- (a) Within 20 Business Days of the Owner or the Developer advising Council that the Road Works have been completed, the Council must inspect the Road Works and issue to the Owner or the Developer either a Compliance Certificate for the Road Works or a notice requiring further work to be undertaken before a Compliance Certificate is issued.
- (b) The Owner and the Developer must carry out any additional work specified in the notice provided under clause 6.2(a) to the Council's satisfaction, acting reasonably.

- (c) The Road Works will be taken to have been completed for the purposes of this Agreement once a Compliance Certificate is issued for those works by the Council and the Council will take over the responsibility for those Road Works as at the date the land is dedicated to the Council under clause 9.1, subject to any defects liability period as required by the Construction Terms.

7. Pedestrian Link

7.1 Construction of Pedestrian Link

- (a) The Owner and the Developer shall construct the Pedestrian Link in accordance with the Pedestrian Link Final Design, the Construction Terms and any relevant Approvals.
- (b) The Owner and the Developer must obtain all necessary Approvals to carry out the Pedestrian Link.
- (c) The construction of the Pedestrian Link is to be completed prior to the creation of the Right of Way as required by clause 9.2.

7.2 Certification of Pedestrian Link

- (a) Within 14 days of the Owner advising Council that the Pedestrian Link is complete, the Council must issue to the Owner or the Developer, a Compliance Certificate for the Pedestrian Link or a notice requiring further work to be undertaken before a Compliance Certificate is issued.
- (b) The Owner and the Developer must carry out any additional work specified in the notice provided under clause 7.3(a) to the Council's satisfaction, acting reasonably.
- (c) The Pedestrian Link will be taken to have been completed for the purposes of this Agreement once a Compliance Certificate is issued for those works by the Council, and Council will, subject to the terms of the Right of Way and any defects liability period as required by the Construction Terms, take over responsibility for the Pedestrian Link as at the date the Right of Way is created.

8. Realignment of Pedestrian Link

- 8.1 The parties acknowledge that Council may in its absolute discretion decide to realign the Pedestrian Link due to the redevelopment of sites adjoining the Land, so that the Pedestrian Link is located wholly off the Land (the **Realignment**). The Realignment is at Council's expense.
- 8.2 The Council must give the Owner and the Developer written notice of its decision in respect of the Realignment as soon as is practicably possible, and in any event within 7 days of reaching its decision.
- 8.3 If the Realignment occurs, the parties acknowledge that neither the Owner nor the Developer is:
 - (a) entitled to any reduction or credit when calculating contributions or levies payable by the Owner under section 94 or section 94A of the Act in respect of the Development, nor any refund of such moneys already paid;
 - (b) entitled to any compensation for the realignment of the Pedestrian Link;

- (c) liable for the cost of the relocation or reconstruction of the Pedestrian Link in accordance with the Realignment; or
- (d) liable for or required to undertake the restoration of the land where the Pedestrian Link was partially or wholly constructed.

8.4 If the Realignment occurs, Council must promptly surrender the Right of Way over the Pedestrian Link, if the Right of Way has been registered. Council shall, upon submission by the Owner to Council of documentation necessary to surrender the Right of Way, execute the said documentation.

9. Dedication

9.1 Dedication of the Road Works

- (a) The Owner agrees to dedicate the land on which the Road Works are constructed as a public road, and Council agrees to accept the dedication subject to the completion of the Road Works in accordance with this Agreement.
- (b) On or before the date on which the Owner or the Developer advises Council that the Road Works are complete, the Developer must prepare a plan of subdivision to dedicate the land on which the Road Works are constructed as a public road, in accordance with section 9 of the *Roads Act 1993*.
- (c) Council must, if a Compliance Certificate has been issued for the Road Works and provided any other relevant statutory requirements are complied with, issue the subdivision certificate for the plan of subdivision referred to under clause 9.1(b) within 21 days of being requested to do so by the Owner or the Developer.
- (d) The Owner must lodge the plan of subdivision referred to under clause 9.1(b) at the LPI prior to the issue of an Occupation Certificate for the Development, or at a later date agreed by the parties.

9.2 Creation of the Right of Way

- (a) The Owner must grant the Right of Way over the Pedestrian Link (unless a Realignment of the Pedestrian Link occurs in accordance with clause 8 in which case the provisions of that clause apply) and the Council agrees to accept the Right of Way subject to the completion of the Pedestrian Link.
- (b) On or before the completion of the Pedestrian Link, the Developer must prepare all documents, including survey plans, necessary to create and register a Right of Way over the Pedestrian Link in accordance with Section 88B of the *Conveyancing Act 1919*.
- (c) The Owner must lodge the documents referred to under clause 9.2(b) at the LPI and establish that the Right of Way has been registered, prior to the issue of an Occupation Certificate for the Development, or at a later date agreed by the parties.
- (d) The parties acknowledge that the documents referred to in clause 9.1(b) and clause 9.2(b) may be dealt with in the same plan of subdivision.

9.3 Acquisition of Land to be Dedicated

- (a) If the Owner does not transfer or grant to the Council the interests in land as required by this Agreement the Council may compulsorily acquire the relevant land or interest, in which case:

- (i) the Owner consents to the Council compulsorily acquiring that land for compensation in the amount of \$1.00 without having to follow the pre-acquisition procedures in the *Land Acquisition (Just Terms Compensation) Act 1991*; and
 - (ii) Council may call upon the Bank Guarantee provided under clause 29 to cover the Council's costs (including survey costs, registration fees and legal costs) of the acquisition.
- (b) Clause 9.3(a) constitutes an agreement for the purposes of s30 of the *Land Acquisition (Just Terms Compensation) Act 1991*.
 - (c) Except as otherwise agreed between the Owner and the Council, the Developer must ensure that the land to be acquired under this clause 9.3 is free of all encumbrances and affectations (including any charge or liability for rates, Taxes and charges), on the date that the Council will acquire the land.
 - (d) The Owner indemnifies and keeps indemnified the Council against all Claims made against the Council as a result of any acquisition by the Council of the whole or any part of the relevant interest in land under this clause 9.3.
 - (e) The Owner must pay the Council, promptly on demand, an amount equivalent to all costs (including survey costs, registration fees and legal costs) incurred by the Council in acquiring the whole or any part of the relevant interest in the land.

10. Not used

11. Cost of Road Works

11.1 Cost of Works

- (a) The parties acknowledge and agree that as at the date of this Deed the cost of the Road Works and Pedestrian Link is \$1,506,000 excluding GST as estimated by Wilde & Woollard Quantity Surveyors in a report dated 1 February 2017.
- (b) The Developer is solely responsible for the cost of constructing the Road Works and the Pedestrian Link including where the actual cost of that construction exceeds the amount referred to in clause 11.1(a).

12. Application of s94, s94A and s94EF of the Act to the Development

- 12.1 This Agreement does not exclude the application of Sections 94, 94A or 94EF of the Act to the Development.
- 12.2 The Development Contribution delivered under this Agreement is not to be taken into consideration when determining a development contribution under section 94 of the Act.

13. Registration of this Agreement

- 13.1 If the Council notifies the Owner that it requires this Agreement to be registered on the title to the Land, the parties must take all practicable steps to enable registration of this Agreement by the LPI on the title to the Land, including executing any documents.
- 13.2 Council shall within 14 days of the Owner's and the Developer's compliance with this Agreement and submission by the Owner and the Developer to Council of documentation

necessary to remove this agreement from the title to the Land, execute the said documentation.

14. Rectification of defects

- 14.1 The Council may give the Owner or the Developer a Rectification Notice during the Defects Liability Period.
- 14.2 The Owner and the Developer must comply with a Rectification Notice at its cost.
- 14.3 When the Owner or the Developer considers that it has complied with a Rectification Notice it may request the Council to issue a Rectification Certificate relating to the work the subject of the relevant Rectification Notice.
- 14.4 Within 21 days of receipt of the Owner's or the Developer's request under clause 14.3, the Council must:
 - (a) issue a Rectification Certificate to the Owner or the Developer if it is satisfied that the Owner or the Developer has complied with the relevant Rectification Notice; or
 - (b) give the Owner or the Developer notice of its decision to refuse to issue a Rectification Certificate containing sufficient detail of the reasons for its decision so as to inform the Owner of the work that needs to be done to enable the Council to issue a Rectification Certificate.
- 14.5 If the Owner or the Developer does not fully comply with a Rectification Notice, the Council may rectify the defect and may recover the reasonable cost of doing so by calling on the bank guarantee provided under clause 29 or as a debt due in a court of competent jurisdiction.

15. Floor Space Ratio and Gross Floor Area

- 15.1 The parties acknowledge that:
 - (a) the Development Application seeks approval for Development with a Floor Space Ratio of 1.99:1 (11,831sqm) which exceeds Council's controls;
 - (b) the area of the Land is 5,937sqm;
 - (c) the area of the Road Works is 1,774sqm;
 - (d) the total area of the Road Works will be added to the Land area to provide for a GFA of 7,711sqm and FSR 1.53:1;
 - (e) the total area of the Pedestrian Link shall not be added to the Land Area for the purposes of calculating the FSR of the Development;
 - (f) the Development Contribution is proposed in connection with the Development;
 - (g) the Owner and the Developer will pay contributions pursuant to Sections 94 or 94A of the Act on the total achieved GFA in the Development, in respect of which the Development Application seeks approval of 11,831sqm.

16. Dispute resolution

- 16.1 If a dispute arises in connection with this Agreement, a party to the dispute must give to the other party notice specifying the dispute and requiring its resolution under this clause 16 (**Notice of Dispute**).
- 16.2 The chief executive officer or other senior representative of the Developer or Owner and General Manager of the Council or their nominated representatives must confer within 3 days after the Notice of Dispute is given to try to resolve the dispute.
- 16.3 If the dispute is not resolved within 7 days after the Notice of Dispute is given to the other party (**First Period**), the dispute is by this clause submitted to mediation. The mediation must be conducted in Sydney, NSW. The Institute of Arbitrators and Mediators Australia Mediation and Conciliation Rules (at the date of this Agreement) as amended by this clause 16 apply to the mediation, except where they conflict with this clause 16.
- 16.4 If the parties have not agreed upon the mediator and the mediator's remuneration within 10 days after the First Period:
- (a) the mediator is the person appointed by; and
 - (b) the remuneration of the mediator is the amount or rate determined by;
- the Chair of the NSW Chapter of the Institute of Arbitrators and Mediators Australia (**Principal Appointor**) or the Principal Appointor's nominee, acting on the request of any party to the dispute.
- 16.5 The parties must pay the mediator's remuneration in equal shares. Each party must pay its own costs of the mediation.
- 16.6 If the dispute is not resolved within 28 days after the appointment of the mediator (**Second Period**), either party may by written notice to the other party require the dispute to be submitted to expert determination.
- 16.7 The provisions of the Expert Determination Rules 2010 as published by The Institute of Arbitrators and Mediators Australia (to be found on its website www.iama.org.au) apply to the expert determination, except to the extent that there are inconsistent provisions in this Agreement.
- 16.8 Despite anything in this clause 16, a party at any time may commence court proceedings in relation to any dispute or claim arising under or in connection with this Agreement where that party seeks urgent interlocutory relief.
- 16.9 Despite the reference of a dispute to expert determination under this clause 16, the parties must continue to perform their obligations under this Agreement. In the award, the expert may make any appropriate adjustment for the performance of obligations under this Agreement since the Notice of Dispute was given.
- 16.10 Subject to clause 16.8, a party must not commence or maintain a court action or proceeding upon a dispute in connection with this Agreement until the dispute has been referred to an expert and determined under this clause 16.
- 16.11 This clause 16 continues in force even where the Agreement has been fully performed, terminated or rescinded or where the parties or any of them have been discharged from the obligation to further perform the Agreement for any reason.
- 16.12 This clause 16 applies even where the Agreement is otherwise void or voidable.

16.13 The parties must:

- (a) keep confidential any information or documents disclosed under this clause; and
- (b) only use any information or documents disclosed under this clause to attempt to resolve the dispute.

17. Confidentiality

17.1 The terms of this Agreement are not confidential. This Agreement may be exhibited by either party.

17.2 Except as stated in this Agreement, Council must not and must not permit any of its officers, employees, agents, contractors or related companies to use or to disclose any Confidential Information to any person without the prior written consent of the Developer.

17.3 If requested by a party, the other party must:

- (a) not issue, publish or authorise any media release, advertisement or publicity concerning this Agreement without obtaining the prior written consent of the other party; and
- (b) ensure that its officers, employees, agents, contractors and related companies do the same.

17.4 This clause 17 does not apply to any information which:

- (a) is generally available to the public (other than as a result of the wrongful disclosure by the Council); or
- (b) is required to be disclosed by any law.

18. Approvals and consent

18.1 Each party may conditionally or unconditionally give or withhold its approval or consent in its absolute discretion unless this Agreement expressly provides otherwise.

19. Severability

19.1 If any provision in this Agreement is unenforceable, illegal or void or makes this Agreement or any part of it unenforceable, illegal or void, then that provision is severed and the rest of this Agreement remains in force.

20. Assignment

20.1 The Developer and the Owner may assign or otherwise deal with this Agreement or any interest in the Land with the prior written consent of the Council which consent must not be unreasonably withheld.

20.2 The Council is required to give its consent under clause 20.1 if:

- (a) the Developer or the Owner gives the Council at least 10 Business Days' notice of the proposed assignment;

- (b) the proposed assignee provides to the Council a replacement of the Bank Guarantee referred to in clause 29 (if it has not been released) in a form satisfactory to the Council;
- (c) the proposed assignee executes a deed with the Council under which:
 - (i) the proposed assignee agrees to perform all of the obligations of the Owner and the Developer under this Agreement which have not already been performed;
 - (ii) the proposed assignee is bound by this Agreement as if the proposed assignee were named in this Agreement in place of the Owner and the Developer; and
 - (iii) the Owner and the Developer are released from their obligations under this Agreement;
- (d) the Owner and the Developer pay all expenses (including legal costs on a solicitor and own client or full indemnity basis, whichever is greater) incurred by the Council in investigating the proposed assignee or in connection with the proposed assignment.

20.3 On receipt of the deed referred to in clause 20.2(c) the Council must execute the deed so that the Owner and the Developer are released from their obligations under this Agreement.

21. No fetter

21.1 The parties:

- (a) acknowledge that the Council is a consent authority, having statutory rights and obligations under the Legislation; and
- (b) do not intend this Agreement to fetter Council's Discretion.

21.2 If, contrary to the parties' intention, any provision in this Agreement is held by a court of competent jurisdiction to constitute an unlawful fetter on Council's Discretion:

- (a) the parties must take all practical steps, including the execution of any further documents, to ensure that the objective of clause 21.1 is substantially satisfied; and
- (b) if clause 21.2(a) cannot be achieved without unlawfully fettering Council's Discretion, the relevant provision is severed and the rest of this Agreement remains in force.

21.3 If:

- (a) the Legislation permits the Council to contract out of a provision of that Legislation or gives the Council power to exercise Council's Discretion; and
- (b) the Council has in this Agreement contracted out of a provision or exercised Council's Discretion, then to that extent this Agreement is to be regarded as consistent with the Legislation.

22. Goods and services tax

22.1 Definitions

In this clause 22:

- (a) **GST** means GST as defined in *A New Tax System (Goods and Services Tax) Act 1999* as amended (**GST Act**) or any replacement or other relevant legislation and regulations; and
- (b) words or expressions used in this clause which have a particular meaning in the **GST law** (as defined in the GST Act, and also including any applicable legislative determinations and Australian Taxation Office public rulings) have the same meaning, unless the context otherwise requires.
- (c) Any liability for GST in relation to the Developer Works and this Agreement is the sole responsibility of the Owner and the Developer.

23. Further assurance

- 23.1 Each party must promptly at its own cost do all things (including executing and if necessary delivering all documents) necessary or desirable to give full effect to this Agreement.

24. Entire understanding

- 24.1 Subject to clause 24.2, this Agreement:

- (a) is the entire agreement and understanding between the parties on everything connected with the subject matter of this Agreement; and
- (b) supersedes any prior agreement or understanding on anything connected with that subject matter.

- 24.2 The explanatory note prepared in relation to this Agreement under clause 25E(1) of the *Environmental Planning and Assessment Regulation 2000 (NSW)* may be used to assist in construing this Agreement.

25. Variation

- 25.1 An amendment or variation to this Agreement is not effective unless it is in writing and signed by the parties.

26. Waiver

- 26.1 A party's failure or delay to exercise a power or right does not operate as a waiver of that power or right unless otherwise set out in this Agreement.
- 26.2 The exercise of a power or right does not preclude either its exercise in the future or the exercise of any other power or right.
- 26.3 A waiver is not effective unless it is in writing.
- 26.4 Waiver of a power or right is effective only in respect of the specific instance to which it relates and for the specific purpose for which it is given.

27. Costs and outlays

- 27.1 The Developer must pay the Council's legal costs and disbursements in connection with the negotiation, preparation, execution, carrying into effect and release and discharge of this Agreement.
- 27.2 The Developer must pay all stamp duty and other government imposts payable in connection with this Agreement and all other documents and matters referred to in this Agreement when due or earlier if requested in writing by the Council.

28. Notices

- 28.1 A notice or other communication connected with this Agreement (**Notice**) has no legal effect unless it is in writing.
- 28.2 In addition to any other method of service provided by law, the Notice may be:
- (a) sent by prepaid ordinary post to the address for service of the addressee, if the address is in Australia and the Notice is sent from within Australia;
 - (b) sent by prepaid airmail to the address for service of the addressee, if the address is outside Australia or if the Notice is sent from outside Australia;
 - (c) sent by facsimile to the facsimile number of the addressee; or
 - (d) delivered at the address for service of the addressee.
- 28.3 A certificate signed by a party giving a Notice or by an officer or employee of that party stating the date on which that Notice was sent or delivered under clause 28.2 is prima facie evidence of the date on which that Notice was sent or delivered.
- 28.4 If the Notice is sent or delivered in a manner provided by clause 28.2, it must be treated as given to and received by the party to which it is addressed:
- (a) if sent by post from within Australia to an address in Australia, on the 2nd Business Day (at the address to which it is posted) after posting;
 - (b) if sent by post to an address outside Australia or sent by post from outside Australia, on the 5th Business Day (at the address to which it is posted) after posting;
 - (c) if sent by facsimile before 5pm on a Business Day at the place of receipt, on the day it is sent and otherwise on the next Business Day at the place of receipt; or
 - (d) if otherwise delivered before 5pm on a Business Day at the place of delivery, upon delivery, and otherwise on the next Business Day at the place of delivery.
- 28.5 Despite clause 28.4(c):
- (a) a facsimile is not treated as given or received unless at the end of the transmission the sender's facsimile machine issues a report confirming the transmission of the number of pages in the Notice;
 - (b) a facsimile is not treated as given or received if it is not received in full and in legible form and the addressee notifies the sender of that fact within 3 hours after the transmission ends or by 12 noon on the Business Day on which it would otherwise be treated as given and received, whichever is later.

28.6 If a Notice is served by a method which is provided by law but is not provided by clause 28.2, and the service takes place after 5pm on a Business Day, or on a day which is not a Business Day, it must be treated as taking place on the next Business Day.

28.7 A Notice sent or delivered in a manner provided by clause 28.2 must be treated as validly given to and received by the party to which it is addressed even if:

- (a) the addressee has been liquidated or deregistered or is absent from the place at which the Notice is delivered or to which it is sent; or
- (b) the Notice is returned unclaimed.

Council's address for service and facsimile number are:

Name : City of Ryde Council
Attention : General Manager
Address : 1 Devlin Street, Ryde, NSW 2112
Facsimile no : (02) 9952 8070

Developer's address for service and facsimile number are:

Name : Goodman Property Services (Aust) Pty Limited
Attention : –Head of Legal - Property
Address : Level 17, 60 Castlereagh Street, Sydney NSW 2000
Facsimile no : (02) 9230 7444

Owner's address for service and facsimile number are:

Name : The Trust Company Limited
Attention : Manager – Custody
Address : Level 18, 123 Pitt Street, Sydney
Facsimile no : (02) 8256 1473

Trustee's address for service and facsimile number are:

Name : Goodman Funds Management Australia Limited
Attention : Fund Manager
Address : Level 17, 60 Castlereagh Street, Sydney NSW 2000
Facsimile no : (02) 9230 7444

28.8 A party may change its address for service or facsimile number by giving Notice of that change to each other party.

28.9 If the party to which a Notice is intended to be given consists of more than 1 person then the Notice must be treated as given to that party if given to any of those persons.

28.10 Any Notice by a party may be given and may be signed by its solicitor.

29. Bank guarantee for performance

29.1 Upon execution of this Agreement the Owner and the Developer must provide to the Council an unconditional and irrevocable written undertaking (**Bank Guarantee**):

- (a) issued by a bank as defined by the *Banking Act 1959* or a financial organisation approved by the Council;

- (b) for the amount of \$1,506,000.00 plus GST, indexed in accordance with movements in the CPI from the date of this Agreement to the date of the Bank Guarantee;

in favour of and on terms acceptable to the Council, as security for the performance by the Owner and the Developer of their obligations under this Agreement.

29.2 The Owner and the Developer must:

- (a) ensure that the Bank Guarantee is kept current and enforceable and that it does not expire until the Owner and the Developer have provided the whole of the Development Contribution, any Defects Liability Period has ended and there is no outstanding Rectification Notice;
- (b) if the Council makes a demand on the Bank Guarantee for an amount less than that referred to in clause 29.1(b), provide a replacement Bank Guarantee for the balance of the amount referred to in clause 29.1(b) when requested by the Council; and
- (c) pay all expenses associated with the provision and maintenance of the Bank Guarantee.

29.3 Within 20 Business Days of each anniversary of a Bank Guarantee provided under clause 29.1, the Owner and the Developer must provide Council with one or more replacement Bank Guarantees. Each replacement Bank Guarantee is to be in the amount of \$1,506,000.00 plus GST, indexed in accordance with movements in the CPI from the date of this Agreement to the date of the replacement Bank Guarantee.

29.4 On receipt of any replacement Bank Guarantee, the Council must release and return to the Developer, as directed, the Bank Guarantees which it holds that have been replaced.

29.5 If the Owner and the Developer fail to deliver any Development Contribution under this Agreement, the Council may take action to complete works or acquire any land to be dedicated as it considers appropriate in the circumstances and, after giving reasonable notice to the Owner and the Developer (which must not be less than 20 Business Days) call on and apply the proceeds of a Bank Guarantee in satisfaction of:

- (a) any obligation of the Owner or the Developer under this Agreement; or
- (b) any associated liability, loss, cost, charge or expense directly or indirectly incurred by the Council because of the failure by the Owner and the Developer to comply with this Agreement.

29.6 Nothing in this agreement affects the Council's right, under this clause 29, to make a demand on or claim against a Bank Guarantee.

30. Governing law and jurisdiction

30.1 The law of New South Wales governs this Agreement.

30.2 The parties submit to the non-exclusive jurisdiction of the courts of New South Wales and of the Commonwealth of Australia.

31. Limitation of Owner's Liability

31.1 The Owner enters into this Agreement as custodian for the Trust and in no other capacity.

- 31.2 The parties other than the Owner acknowledge that the Obligations are incurred by the Owner solely in its capacity as custodian of the Assets and that the Owner will cease to have any Obligation under this Agreement if the Owner ceases for any reason to be owner of the Assets.
- 31.3 The Owner will not be liable to pay or satisfy any Obligations except to the extent to which it is indemnified or entitled to be indemnified:
- (a) by the Trustee; or
 - (b) out of the Assets in respect of any liability incurred by it.

The obligation of the Trustee to indemnify the Owner and the right of the Owner to be indemnified out of the Assets are limited.

- 31.4 The parties other than the Owner may enforce their rights against the Owner arising from non-performance of the Obligations only to the extent of the Owner indemnities referred to in clause 31.3.
- 31.5 Subject to clause 31.6, if any party other than the Owner does not recover all money owing to it arising from non-performance of the Obligations it may not seek to recover the shortfall by:
- (a) bringing proceedings against the Owner in its personal capacity; or
 - (b) applying to have the Owner wound up or proving in the winding up of the Owner.
- 31.6 Except in the case of and to the extent of fraud, negligence or breach of duty on the part of the Owner under its custody agreement with the Trustee, the parties other than the Owner waive their rights and release the Owner from any personal liability whatsoever, in respect of any loss or damage:
- (a) which they may suffer as a result of any:
 - (i) breach by the Owner of any of its Obligations; or
 - (ii) non-performance by the Owner of the Obligations; and
 - (b) which cannot be paid or satisfied by the indemnities set out above in clause 31.3 in respect of any liability incurred by it.

- 31.7 The parties other than the Owner acknowledge that the whole of this Agreement is subject to this clause, and subject to clause 31.6, the Owner shall in no circumstances be required to satisfy any liability arising under, or for non-performance or breach of any Obligations under or in respect of, this Agreement or under or in respect of any other document to which it is expressed to be a party out of any funds, property or assets other than to the extent that this Agreement requires satisfaction out of the Assets under the Owner's control and in its possession as and when they are available to the Owner to be applied in exoneration for such liability.
- 31.8 The parties acknowledge that the Trustee is responsible under the Constitution for performing a variety of obligations relating to the Trust, including under this Agreement. The parties agree that no act or omission of the Owner (including any related failure to satisfy any Obligations) will constitute fraud, negligence or breach of duty of the Owner for the purposes of clause 31.6 to the extent to which the act or omission was caused or contributed to by any failure of the Trustee or any other person to fulfil its obligations relating to the Trust or by any other act or omission of the Trustee or any other person.

- 31.9 No attorney, agent or other person appointed in accordance with this Agreement has authority to act on behalf of the Owner in a way which exposes the Owner to any personal liability and no act or omission of such a person will be considered fraud, negligence or breach of duty of the Owner for the purposes of clause 31.6.
- 31.10 Nothing in this clause 31 affects or limits the Council's right to make a demand on or claim against a Bank Guarantee provided under this Agreement or to acquire any part of the Land in accordance with the terms of this Agreement.

32. Limitation of Trustee's Liability

32.1 Capacity

The Trustee's liability under this Agreement is limited to the Trustee's Capacity and the Trustee is not liable in any other capacity.

32.2 Limitation

Subject to clause 32.4 the liability of the Trustee in respect of any cause of action, claim or loss arising:

- (a) under or in connection with this Agreement;
- (b) in connection with any transaction, conduct or any other agreement contemplated by this Agreement; or
- (c) under or in connection with (to the extent permitted by law) any representation or undertaking given or to be given in connection with this Agreement,

(each, a **Trust Claim**), is limited to the Assets. The right of the parties other than the Trustee to recover any amount in respect of any (and all) Trust Claims is limited to a right to recover an amount not exceeding the amount which the Trustee is entitled and able to recover from the Assets (after taking account of the costs of exercising its right of indemnity or exoneration) and if, after exercise of those rights, any such amount remains outstanding, no further Trust Claim may be made against the Trustee personally.

32.3 Acknowledgment of limitations

The parties other than the Trustee agree and acknowledge that they must not, in respect of any Trust Claim:

- (a) subject to clause 32.4, bring proceedings against the Trustee in its personal capacity;
- (b) seek to appoint an administrator or liquidator to the Trustee;
- (c) commence the winding-up, dissolution or administration of the Trustee; or
- (d) appoint a receiver, receiver and manager, administrative receiver or similar official to all or any of the assets of the Trustee,

except to the extent that the steps taken affect any Assets or the Trustee's right of recourse against, and indemnity from, the Assets and nothing else.

32.4 Exception

If the Trustee acts negligently, fraudulently, with wilful misconduct or in breach of trust with a result that:

- (a) the Trustee's right of indemnity, exoneration or recoupment of the Assets; or
- (b) the actual amount recoverable by the Trustee in exercise of those rights,

is reduced in whole or in part or does not exist, then to the extent that such right or the amount so recoverable is reduced or does not exist, the Trustee may be personally liable.

32.5 Owner obligations

- (a) Despite any other provision in this Agreement, but subject to the limitations on the Trustee's liability under this clause 32, the Trustee is responsible for all of the obligations of the Owner under this Agreement, other than the Custodial Obligations, as if all references in this Agreement to the Owner (except those relating to the Custodial Obligations) were references to the Trustee.
- (b) Subject to the limitations on the liability of the Trustee under this clause 32, the Trustee must do all things reasonably required to procure the Owner to comply with the Custodial Obligations.

32.6 Trustee warranties

The Trustee warrants that:

- (a) true and complete copies of the Constitution, the Trust Deed and the Custodian Agreement have been supplied to the Council's solicitors prior to the date of this Agreement;
- (b) the Trust is validly created and subsisting and no circumstances exist pursuant to which it may be determined and no date of the vesting of any of the Trust fund has been appointed other than as may be set out in the Constitution as at the date of this Agreement;
- (c) the Trustee is validly appointed as the sole trustee of the Trust, is not aware of any breach of its obligations as trustee and is not aware of any circumstances which exist pursuant to which it may be removed as at the date of this Agreement;
- (d) this Agreement is duly executed and granted pursuant to and in proper exercise of the powers of the Trustee as trustee of the Trust and all formalities required by the Constitution in connection with this Agreement have been complied with;
- (e) execution and performance of this Agreement is for a proper purpose of and is intended to provide commercial benefit to the Trust;
- (f) subject to the limitation of liability in clause 32, the Owner is entitled to be fully indemnified out of the assets of the Trust in respect of its liability under this Agreement;
- (g) the Owner is the legal owner of the assets of the Trust, which includes the land, as at the date of this Agreement ;
- (h) the Trust has not been terminated and no action is pending to terminate the Trust as at the date of this Agreement; and
- (i) no liquidation of the Trust has occurred, as at the date of this Agreement.

32.7 Change of custodian

If:

- (a) another person replaces the Owner as the custodian of the assets of the Trust; or
- (b) another person becomes the custodian of the Trust jointly with the Owner, (New Custodian),

the Trustee must procure that the Owner and the New Custodian enter into an agreement with the Council under which the New Custodian agrees to be bound by the Owner's obligations under this Agreement.

32.8 Nothing in this clause 32 affects or limits the Council's right to make a demand on or claim against a Bank Guarantee provided under this Agreement or to acquire any part of the Land in accordance with the terms of this Agreement.

32.9 Definitions

The following definitions apply where used in clauses 31 and 32:

- (a) **Assets** includes all assets, property and rights real and personal of any value whatsoever of the Trust.
- (b) **Constitution** means the constitution of the Trust as amended from time to time.
- (c) **Custodial Obligations** means those obligations of the Owner and of the Trustee which only the Owner can perform or which the Owner is required by Law or otherwise to perform as a consequence of the Owner being the registered owner (as custodian of the Trust) of the Land.
- (d) **Obligations** means all obligations and liabilities of whatever kind undertaken or incurred by, or devolving upon, the Owner under or in respect of this Agreement.
- (e) **Trust** means Goodman Australia Industrial Trust No 3.
- (f) **Trustee's Capacity** means as responsible entity of the Trust.

Schedule 1

Item 1 **Land**

Land means Lot 1 in DP 582794 (also known 8 Khartoum Road, Macquarie Park NSW).

Item 2 **Development**

The Development comprises:

- The demolition of an existing office building on the Land;
- The construction of a six storey commercial office building with plant;
- Three levels of basement parking for 250 car spaces;
- Ground floor retail café use fronting Khartoum Road;
- Provision of the Road Works, being a 20.4m wide Type 2 Road along the southern boundary of the Land connecting to Khartoum Road (with a modified location from that shown on the access network map) known as Road 1;
- Provision of 3m pedestrian link including landscaping along the western boundary of the Land;
- Landscaping of the Land including the nature strip on Khartoum Road; and
- Associated stormwater management works;

generally in accordance with the Statement of Environmental Effects dated April 2013 prepared by Urbis Pty Ltd and accompanying reports and drawings, received by Council as LDA 2013/106.

Schedule 2

This Schedule 2 applies to all Works.

1. Approvals and Design responsibility

- 1.1 The Developer must at its cost and risk:
- (a) prepare all applications and submit such applications and obtain all Approvals necessary to carry out the Works; and
 - (b) comply with all conditions of all such Approvals.

2. Construction phase

- 2.1 Subject to paragraph 2.2 of this Schedule 2, the Developer must procure the execution and completion of the Works in accordance with:
- (a) the Approvals;
 - (b) any Works program agreed with the Council; and
 - (c) its other obligations under this Agreement.
- 2.2 The Developer must not commence construction of any of the Works until it has given the Council copies of all Approvals relating to the Works.

3. Review of Works and Construction Documents

- 3.1 The Developer acknowledges and agrees that:
- (a) the Council is not responsible for any errors omissions or non-compliance with any Law or the requirement of any Authority by reason of agreeing to the plans and specifications of the Works;
 - (b) the Council is not liable for any liability, loss or cost incurred by the Developer because of any defect in the design or construction of any part of the Works; and
 - (c) no comment, review or information supplied to the Developer by the Council alters or alleviates the Developer from its obligation to construct and complete the Works in accordance with this Agreement.

4. Developer responsibilities

- 4.1 The Developer is responsible for the delivery and care of the Works at all times prior to the dedication of land and the creation of the Right of Way required under clause 9 (Handover).
- 4.2 Prior to Handover, the Developer is responsible for:
- (a) providing all things and taking all measures reasonably within its control to protect people and property in relation to the land on which the Works are located and

where failure to do so may render the Council or the Developer liable under the Law; and

- (b) taking any urgent action in relation to the land on which the Works are located necessary to protect people and the consequences of any failure to take such action where failure to do so may render the Council or the Developer liable under the Law.

5. Damage

- 5.1 If the Developer or the employees or agents of the Developer damage any public utilities and services or property on or adjacent to the land on which the Works are located, the Developer must promptly make good the damage and pay any compensation which the Law requires the Developer to pay.

6. Best Industry Practice

- 6.1 The Developer must ensure that the Works are designed and carried out according to Best Industry Practice.

7. Quality of Material and Work

- 7.1 The Developer must procure the Works to be carried out:
 - (a) using good quality materials, which must be suitable for the purpose for which they are required under this Agreement;
 - (b) without the use of asbestos in any form;
 - (c) in compliance with relevant standards determined by Australian Standards Limited, the Building Code of Australia and any relevant manufacturers' standards; and
 - (d) so that the Works, when completed, are suitable for the purpose for which they are required as contemplated by the relevant Approvals.

8. Insurance

- 8.1 The Developer must ensure that there is effected and maintained insurance policies covering such risks, and on terms, reasonably acceptable to the Council including:
 - (a) physical loss, damage or destruction of each aspect of the Works (including any associated temporary works);
 - (b) third party liability;
 - (c) contractors; and
 - (d) professional indemnity insurance with respect to design works only.
- 8.2 The policies must provide cover for the period from the date of the commencement of construction of the Works until the end of any relevant Defects Liability Period for each and every aspect of the Works.
- 8.3 The insurance cover in relation to works insurance must be for an amount not less than the full insurable value of the relevant Works on a full reinstatement and replacement basis

(including extra costs of reinstatement, costs of demolition and removal of debris, and professional fees).

- 8.4 All insurances which the Developer is required by this Agreement to effect and maintain:
- (a) must be with an insurer that is licensed by the Australian Prudential Authority (APRA) to operate in Australia or has an investment grade rating from an industry recognised rating agency such as Moodies, Standard & Poors or Bests;
 - (b) must note the rights and interests of the Council; and
 - (c) must not in any respect limit or derogate from the liabilities or obligations of the Developer under this Agreement.
- 8.5 Whenever reasonably requested in writing by the Council, the Developer must give the Council certificates of the insurance policies which the Developer is required by this Agreement to effect and maintain.
- 8.6 The Developer must punctually pay all premiums in respect of all insurances required under this Agreement.
- 8.7 The Developer must:
- (a) not do or omit to do anything which if done or not done might vitiate, impair, derogate or prejudice any insurance or might prejudice any claim under any insurance policy;
 - (b) if necessary, rectify anything which might prejudice any insurance policy;
 - (c) reinstate an insurance policy if it lapses;
 - (d) immediately notify the Council in writing if an insurer gives notice of cancellation in respect of any insurance policy; and
 - (e) give full, true and particular information to the insurer of all matters and things the non-disclosure of which might in any way prejudice or affect any such policy or the payment of all or any benefits under the insurance.
- 8.8 If all or any part of the Works are damaged or destroyed prior to Handover in accordance with clause 4.1 of this Schedule 2:
- (a) all insurance proceeds in respect of that damage or destruction must be applied to repair or reinstate the Works, except if the damage or destruction is caused by the Council;
 - (b) if the insurance proceeds received under the insurances in respect of the damage or destruction are less than the cost of repairing or replacing the Works (or those insurances are void or unenforceable and there are no proceeds), the Developer must complete the repair and replacement of the Works using its own funds; and
 - (c) if the insurance proceeds received under the insurances in respect of the damage or destruction exceed the costs of repairing or replacing the Works, the Developer will be entitled to keep that excess.
- 8.9 Where the Developer has effected any insurance policy referred to in this Agreement before the date of this Agreement, the Developer:

- (a) warrants that it informed the insurer of the extent of its entitlement to an input tax credit for the last premium it paid at or before the time of first making any subsequent claim under the insurance policy; and
 - (b) must inform the insurer of the extent of its entitlement to an input tax credit for any future premium it pays immediately after paying that premium.
- 8.10 Where the Developer effects any insurance policy referred to in this Agreement after the date of this Agreement, the Developer must inform the insurer of the extent of its entitlement to an input tax credit for any premium it pays immediately after paying that premium.

9. Providing documents to the Council

- 9.1 If the Council reasonably so requires, the Developer must procure the issue and delivery to the Council of copies of the following items (as may be relevant) on Handover of the Works in accordance with clause 4.1 of this Schedule 2:
- (a) a copy of as built drawings and all warranties and operations manuals given in connection with the Works; and
 - (b) a copy of all certificates issued by any Authority in relation to any part of the Works which have not previously been delivered to the Council.
- 9.2 To the extent the Developer has or receives intellectual property rights for the Works, the Developer shall assign or transfer those rights to Council on Handover of the Works in accordance with clause 4.1 of this Schedule 2.

10. Remediation

- 10.1 In this clause 10 of Schedule 2:
- (a) **Contamination** means the presence in, on or under land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment, which would, if present on land:
 - (i) result in an Authority issuing a notice, direction or order under an Environmental Law; or
 - (ii) constitute a violation of any Environmental Law.
 - (b) **Contaminated** means subject to Contamination.
 - (c) **Environmental Law** means all planning, environmental or pollution laws and any regulations, orders, directions, ordinances or requirements, permissions, permits, licences issued under those laws or instruments.
- 10.2 The Developer acknowledges to the Council:
- (a) that it is responsible for the management and remediation of any Contamination present upon, in or under the Land;
 - (b) it will attend to any reasonably necessary remediation upon, in or under the Land at its own cost so the Land will be suitable for its proposed use; and

(c) to the fullest extent permitted by law releases the Council from any Claim which might arise from any Contamination with respect to the land to be dedicated to Council under this Agreement.

10.3 Prior to the dedication of any land to Council, the Developer must ensure that the land is not Contaminated and may be used for the purposes for which is to be dedicated.

A handwritten signature in black ink, consisting of several stylized, overlapping strokes, located in the bottom right corner of the page.

Executed as an agreement.

Signed for Goodman Property Services

(Aust) Pty Limited by its attorney pursuant to Power of Attorney [Registered No. 75 BK 4507 Book No.] dated [18/12/06] (who states that by executing this document that the attorney has received no notice of revocation of the power of attorney):



Witness Signature

Michelle Ban

Print Name



Attorney Signature

SAMANTHA EVANS

Print Name


Signed for The Trust Company Limited by its attorney pursuant to Power of Attorney

[Registered No. 134 Book No.] dated [18/09/2014 4676] (who states that by executing this document that the attorney has received no notice of revocation of the power of attorney):



Witness Signature

Print Name



Attorney Signature

Trent Franklin
Manager Custody

Print Name

Signed for Goodman Funds Management Australia Limited by its attorney pursuant to Power of Attorney [Registered No. Book No.] dated []

(who states that by executing this document that the attorney has received no notice of revocation of the power of attorney):

641 BK 4513
27102107



Witness Signature

Michelle Ban

Print Name




Attorney Signature

SAMANTHA EVANS

Print Name

Signed for and on behalf of The Council of
the City of Ryde ABN 81 621 292 610 in
accordance with a resolution of the
Council dated 24/9/13 in the presence of:


Signature of witness

PAUL KARETAS
Name of witness
(BLOCK LETTERS)

BUDG 0 3 RICHARDSON PLACE
Address of witness
NORTH RYDE NSW 2113


Signature of authorised representative

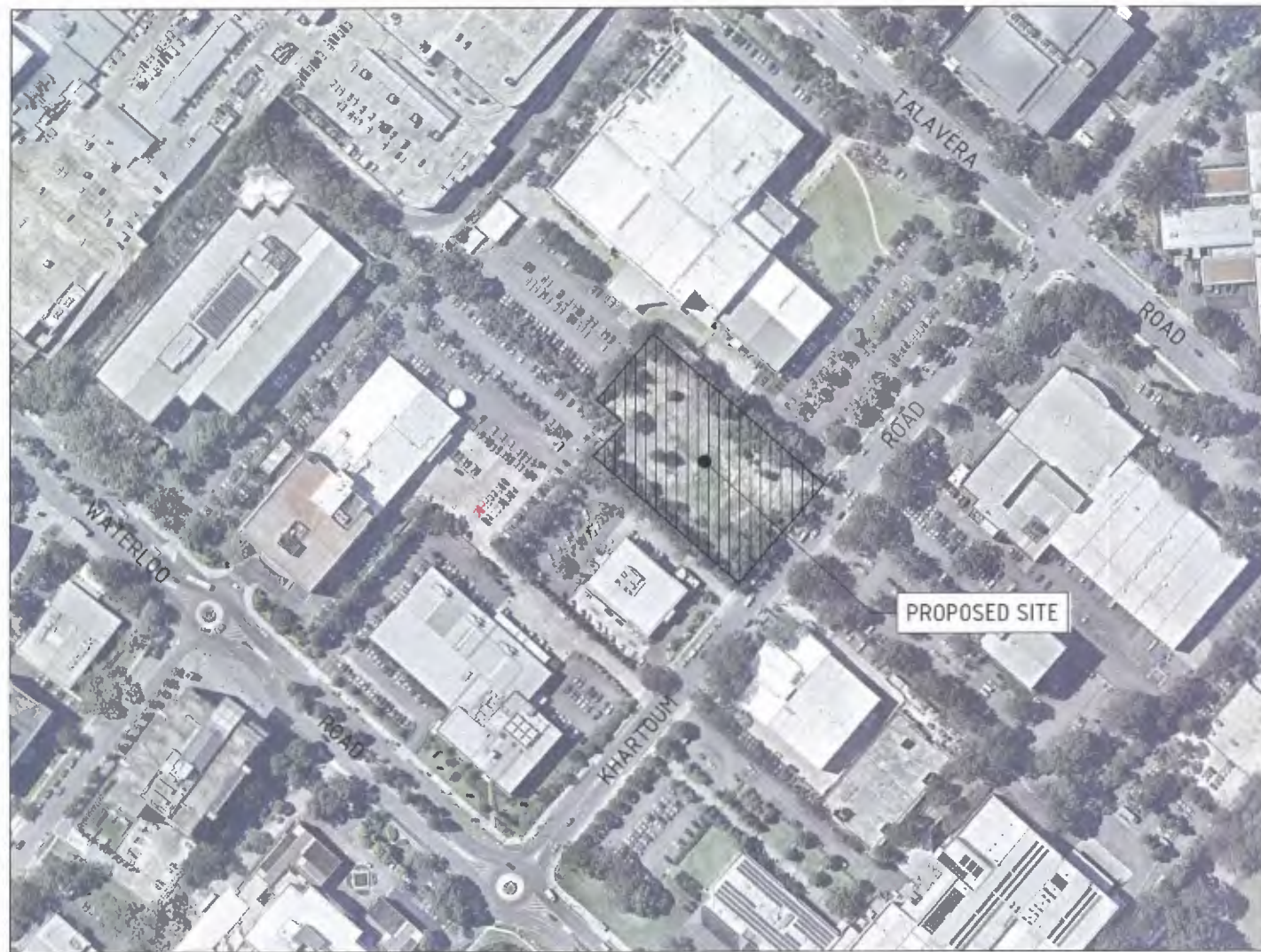
ROY NEWSOME
Name of authorised representative
(BLOCK LETTERS) ACTING GENERAL
MANAGER

Annexure A– Pedestrian Link and Road Works drawings (clause 1.1)

Handwritten signature in black ink, consisting of a stylized name and a horizontal line below it.

KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

CIVIL WORKS CONSTRUCTION PACKAGE



SOURCE: NEARMAP.COM.AU (©2015)

DRAWING SCHEDULE		
DRG No.	DRAWING TITLE	REV No.
C1.01	COVER SHEET, LOCALITY PLAN & DRAWING SCHEDULE	11
C1.02	SPECIFICATION NOTES - SHEET 1	8
C1.03	SPECIFICATION NOTES - SHEET 2	8
C4.01	SITWORKS & STORMWATER DRAINAGE PLAN - SHEET 1	12
C4.02	SITWORKS & STORMWATER DRAINAGE PLAN - SHEET 2	3
C6.01	PAVEMENT AND JOINTING PLAN	6
C7.01	SIGNAGE & LINE MARKING PLAN	6
C9.01	ALIGNMENT CONTROL PLAN	6
C10.01	ROAD LONGITUDINAL SECTION - SHEET 1	5
C10.05	ROAD LONGITUDINAL SECTION - SHEET 2	3
C10.11	PEDESTRIAN LINK LONGSECTION	4
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CITY OF RYDE
 APPROVED FOR CONSTRUCTION
 Signed *Allyson*
 Date 28/1/2017
 Subject to the Conditions of Development Consent
 LDA 2013/106

AMENDED PLANS
 13 JAN 2017

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NOT FOR CONSTRUCTION

DRAWN: J. DELA CRUZ DESIGNED: P. CONNORS JOB MANAGER: A. DAVES VERIFIER: A. DAVES



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NOTE: ALL CIVIL ENGINEERING CONSTRUCTION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CITY OF RYDE DEVELOPMENT GUIDELINES. THE FOREMENTIONED GUIDELINES INCLUSIVE OF ALL SPECIFICATIONS TAKE PRECEDENCE OVER NOTES PROVIDED BELOW.

ACCESS AND SAFETY

1. THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY AND INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLIED BY A SUITABLY QUALIFIED PERSON AND APPROVED BY COUNCIL / REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME.
3. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS ADJACENT TO THE WORKS IS NOT DISRUPTED.
4. WHERE NECESSARY THE CONTRACTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE.
5. THE CONTRACTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.

SEDIMENT AND SOIL EROSION

1. THE SEDIMENT & EROSION CONTROL PLAN PRESENTS CONCEPTS ONLY. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT & MANAGEMENT OF A DETAILED SCHEME MEETING COUNCIL'S DESIGN, OTHER REGULATORY AUTHORITY REQUIREMENTS AND MAKE GOOD PAYMENT OF ALL FEES.
2. THE CONTRACTOR SHALL INSTIGATE ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH STATUTORY REQUIREMENTS AND IN PARTICULAR THE 'BLUE BOOK' (MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION) PRODUCED BY THE DEPARTMENT OF HOUSING AND COUNCIL'S POLICIES. THESE MEASURES ARE TO BE INSPECTED AND MAINTAINED ON A DAILY BASIS.
3. THE SITE SUPERINTENDENT SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THE DRAWINGS AND ADHERE TO ALL REGULATORY AUTHORITY REQUIREMENTS.
4. THE CONTRACTOR SHALL INFORM ALL SUB CONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.
5. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
 1. CONSTRUCT TEMPORARY STABILISED SITE ACCESS INCLUSIVE OF SHAKE DOWN / WASH PAD.
 2. INSTALL ALL TEMPORARY SEDIMENT FENCES AND BARRIER FENCES, WHERE FENCES ADJACENT EACH OTHER, THE SEDIMENT FENCE CAN BE INCORPORATED INTO THE BARRIER FENCE.
 3. INSTALL SEDIMENT CONTROL MEASURES AS OUTLINED ON THE APPROVED PLANS.
6. UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MINIMUM WORKABLE SIZE.
7. AT ALL TIMES AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL, ENSURING CONFORMANCE TO REGULATORY AUTHORITY REQUIREMENTS.
8. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) SHALL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
9. WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN STABILISED AND/OR ANY LIKELY SEDIMENT BEEN FILTERED OUT.
10. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED / REHABILITATED.
11. ALLOW FOR GRASS STABILISATION OF EXPOSED AREAS, OPEN CHANNELS AND ROCK BATTERS DURING ALL PHASES OF CONSTRUCTION.
12. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING RAIN EVENTS.
13. RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH REGULATORY AUTHORITY REQUIREMENTS. CONTRACTOR TO PAY ALL FEES AND PROVIDE EVIDENCE OF SAFE DISPOSAL.
14. IF A TEMPORARY SEDIMENT BASIN IS REQUIRED, ENSURE SAFE BATTER SLOPES IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. MAINTAIN ADEQUATE STORAGE VOLUME IN ACCORDANCE WITH PLANS. TEMPORARY PUMP 'CLEAN FLOCCULATED' WATER TO COUNCIL'S STORMWATER SYSTEM. ENSURE WHOLE SITE RUN-OFF IS DIRECTED TO TEMPORARY SEDIMENT BASIN.

EXISTING SERVICES

1. ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIA. BEFORE YOU DIG SEARCHES, THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY. NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS.
2. CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES AND MECHANICAL EXCAVATIONS AREA TO BE UNDERTAKEN OVER COMMUNICATION, GAS OR ELECTRICAL SERVICES. HAND EXCAVATION ONLY IN THESE AREAS.
3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING SERVICES THAT ARE TO BE RETAINED IN THE VICINITY OF THE PROPOSED WORKS, ANY AND ALL DAMAGE TO THESE SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS.
5. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE TAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR BY THE SUPERINTENDENT.
6. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED AND MAINTAINED.
7. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THE PROGRAM FOR THE RELOCATION AND/OR CONSTRUCTION OF TEMPORARY SERVICES AND FOR ANY ASSOCIATED INTERRUPTION OF SUPPLY.
8. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.

SITWORKS

1. ALL WORKS TO BE IN ACCORDANCE WITH RELEVANT LOCAL COUNCIL / REGULATORY AUTHORITIES REQUIREMENTS, ALL SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONFLICTS BETWEEN SAID DOCUMENTS SHALL BE REFERRED TO THE SUPERINTENDENT FOR DIRECTION.
2. THE CONTRACTOR IS TO DESIGN, OBTAIN APPROVALS AND CARRY OUT REQUIRED TEMPORARY TRAFFIC CONTROL PROCEDURES DURING CONSTRUCTION IN ACCORDANCE WITH ALL REGULATORY AUTHORITIES, INCLUSIVE OF LOCAL COUNCIL REGULATIONS AND REQUIREMENTS.
3. THE CONTRACTOR IS TO OBTAIN ALL AUTHORITY APPROVALS AS REQUIRED PRIOR TO COMMENCEMENT OF WORKS.
4. RESTORE ALL PAVED, COVERED, GRASSED AND LANDSCAPED AREAS TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT. INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL, GRASSED AREAS AND ROAD PAVEMENTS.
5. ON COMPLETION OF ANY TRENCHING WORKS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL, GRASSED AREAS AND ROAD PAVEMENTS.
6. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR PRIOR TO COMMENCEMENT OF WORKS.
7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO LODGMENT OF TENDER AND ON SITE WORKS THE PRICE AS TENDERED SHALL BE INCLUSIVE OF ALL WORKS SHOWN ON THE TENDER PROJECT DRAWINGS. ADDITIONAL PAYMENTS FOR WORKS SHOWN ON THE TENDER PROJECT DRAWINGS WILL NOT BE APPROVED.
8. DO NOT OBTAIN DIMENSIONS BY SCALING DRAWINGS.
9. IN CASE OF DOUBT OR DISCREPANCY REFER TO SUPERINTENDENT FOR CLARIFICATION OR CONFIRMATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. WHERE NEW WORKS ABOUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED. MAKE SMOOTH TRANSITION TO EXISTING FEATURES AND MAKE GOOD WHERE JOINED.
11. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
12. ALL CIVIL ENGINEERING DESIGN HAS BEEN DOCUMENTED UNDER THE ASSUMPTION THAT ALL NECESSARY SITE CONTAMINATION REMEDIATION WORKS HAVE BEEN SATISFACTORILY COMPLETED (IF APPLICABLE) AND THAT THE SITE IS NOT AFFECTED BY ANY SOIL STRATA OR GROUNDWATER TABLE CONTAMINATION.

STORMWATER DRAINAGE

1. ALL PIPES SHALL BE CLASS 3 OR ABOVE RUBBER-RING JOINTED RCP U.N.D. WHERE UPVC PIPES HAVE BEEN SPECIFIED, THE FOLLOWING CLASS PIPEWORK IS TO BE ADOPTED U.N.D. @100mm OR LESS TO BE CLASS 'SN10' AND ABOVE @100mm TO BE CLASS 'SN8'.
2. UPVC STORMWATER LINES PASSING UNDER FLOOR SLABS TO BE CONCRETE ENCASED.
3. FRC PIPES EQUAL TO THAT OF THE STEEL REINFORCED CONCRETE PIPE CLASS SPECIFIED ON THE DRAWINGS MAY BE USED SUBJECT TO APPROVAL FROM THE SUPERINTENDENT.
4. ALL PIPE ARE TO BE LAID AT 1.0% MIN GRADE U.N.D.
5. COVERS
 1. USE HOT DIPPED GALVANISED COVERS AND GRATES COMPLYING WITH RELEVANT COUNCIL AND AUSTRALIAN STANDARDS.
 2. ALL COVERS AND GRATES TO BE POSITIONED IN A FRAME AND MANUFACTURED AS A UNIT.
 3. ALL COVERS AND GRATES TO BE FITTING WITH POSITIVE COVER LIFTING KEYS.
 4. OBTAIN SUPERINTENDENT'S APPROVAL FOR THE USE OF CAST IRON SOLID COVERS AND GRATES. CAST IRON SOLID COVERS (IF APPROVED) TO CONSIST OF CROSS-WEBBED, CELLULAR CONSTRUCTION WITH THE RIBS UPPERMOST TO ALLOW INFILLING WITH CONCRETE. INSTALL POSITIVE COVER LIFTING KEYS AND PLASTIC PLUGS.
 5. UNLESS DETAILED OR SPECIFIED OTHERWISE, COVERS AND GRATES TO BE CLASS 'D' IN VEHICULAR PAVEMENTS AND CLASS 'B' ELSEWHERE.
 6. ALL GATED TRENCH DRAINS SHOULD BE CLASS 'D' CAST IRON WITH VEHICULAR PAVEMENTS AND CLASS 'B' HEEL SAFE WITHIN PEDESTRIAN PAVEMENTS.
6. ALL PIPE BENDS, JUNCTIONS, ETC ARE TO BE PROVIDED USING PURPOSE MADE FITTINGS OR STORMWATER PITS.
7. ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
8. STORMWATER PIPEWORK TO FINISH FLUSH WITH INTERNAL PIT WALLS AND MUST NOT PROTRUDE CONNECTION TO BE NEATLY RENDER AND MADE NEAT.
9. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
10. U.N.D. MATERIAL USED FOR BEDDING OF PIPES SHALL BE APPROVED NON-COHESIVE GRANULAR MATERIAL HAVING HIGH PERMEABILITY AND HIGH STABILITY WHEN SATURATED AND FREE OF ORGANIC AND CLAY MATERIAL.
11. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN 50mm CONCRETE BED OR 75mm THICK BED OF 12mm BLUE METAL UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK.
12. BEDDING SHALL BE U.N.D. TYPE H52 UNDER ROADS AND H2 UNDER GENERAL AREAS IN ACCORDANCE WITH CURRENT RELEVANT INDUSTRY STANDARDS AND GUIDELINES.
13. THE CONTRACTOR SHALL ENSURE AND PROTECT THE INTEGRITY OF ALL STORMWATER PIPES DURING CONSTRUCTION AND ALL DAMAGE TO THESE PIPES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AND AT NO EXTRA COST.
14. NOTE THAT THE PIT COVER LEVEL NOMINATED IN GUTTERS ARE TO THE INVERT OF THE GUTTER WHICH ARE 40mm LOWER THAN THE PAVEMENT LEVEL AT LIP OF GUTTER REFER KERB DETAILS FOR CONFIRMATION.
15. SUBSOIL DRAINAGE
 1. @100mm SUBSOIL DRAINAGE LINES WITH NON-WOVEN GEOTEXTILE FILTER SOCK SURROUND SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT MIN 1% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS:
 1. THE HIGH SIDE OF PROPOSED TRAFFICKED PAVEMENT AREAS.
 2. ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO PAVEMENT AREAS.
 3. BEHIND RETAINING WALLS (IN ACCORDANCE WITH RETAINING WALL DETAILS).
 4. ALL OTHER AREAS SHOWN ON DRAWINGS.
 5. CONTRACTOR IS TO MAKE ALLOWANCE IN BOTH TENDER AND CONSTRUCTION COSTING TO ALLOW FOR SUBSURFACE DRAINAGE BEHIND ALL RETAINING WALLS / ABOVE LOCATIONS AND TO MAKE CONNECTION TO STORMWATER SYSTEM.
 2. WHERE SUBSOIL DRAINAGE PASSES BENEATH BUILDINGS / PAVED AREAS AND/OR PAVEMENTS, CONTRACTOR TO ENSURE @100mm CLASS 'SN10' UPVC DRAINAGE LINE IS USED AND THAT PROPRIETARY FITTINGS ARE USED TO RECONNECT SUBSOIL DRAINAGE LINE.
 3. THE CONTRACTOR SHALL INSTALL INSPECTION OPENINGS / CLEAROUTS TO ALL SUBSOIL DRAINAGE LINES AND DOWNPIPE LINES AS SPECIFIED ON DRAWINGS AND IN ACCORDANCE WITH COUNCIL SPECIFICATIONS AT MAXIMUM 30m CENTRE AND AT ALL UPSTREAM ENDPOINTS.
 4. PROVIDE 3.0m LENGTH OF @100 SUBSOIL DRAINAGE LINE WRAPPED IN NON-WOVEN GEOTEXTILE FILTER FABRIC TO THE UPSTREAM SIDE OF STORMWATER PITS, LAID IN STORMWATER PIPE TRENCHES AND CONNECTED TO DRAINAGE PIT.
 5. IN AREAS WHERE DUMPED / HAND PLACED ROCK IS USED AS A MEANS OF SOIL PROTECTION, CONTRACTOR IS TO EXCAVATE A MINIMUM OF 100mm FROM PROPOSED SURFACE, LEVEL AND COMPACT SUBGRADE AS SPECIFIED. ROCK TO THEN BE PLACED ON GEOTEXTILE FILTER FABRIC.

PRECAST STORMWATER PITS

1. THE USE OF PRE-CAST STORMWATER DRAINAGE PITS IS NOT ACCEPTED WITHOUT CONFIRMATION BETWEEN NORTHROP ENGINEERS AND THE CONTRACTOR REGARDING QUALITY CONTROL AND CERTIFICATION OF FINISHES.
2. REFER MANUFACTURERS SPECIFICATIONS FOR INSTALLATION GUIDELINES.
3. PRECAST PIT TO BE PLACED ON MINIMUM 150mm THICK CONCRETE PAD AND BED MINIMUM 50mm WHILST CONCRETE IS STILL PARTIALLY WET.
4. ENSURE PENETRATION IS CORED THROUGH PIT FACE TO ALLOW CONNECTION.
5. ENSURE A SMOOTH SEALED FINISH AT PIPE CONNECTIONS BY HAND APPLYING CONCRETE AROUND THE PIPE ON THE INTERNAL FACE OF THE PIT TO FILL IN ANY VOIDS CREATED WHEN PENETRATION FOR THE PIPE WAS CORED.
6. ENSURE A SEALED FINISH AT PIPE CONNECTIONS BY HAND APPLYING MINIMUM 150mm THICK CONCRETE AROUND PIPE AT THE EXTERNAL FACE OF THE PIT. ENSURE CONCRETE DOES NOT AFFECT THE INTEGRITY OF THE SUBSOIL DRAINAGE CONNECTED TO THE PIT.
7. ENSURE PIPEWORK DOES NOT PROTRUDE INTO THE BEYOND THE WALL. PIPEWORK IS TO FINISH FLUSH WITH INTERNAL WALL UNLESS OTHERWISE NOTED OR DETAILED.
8. ENSURE THE OUTLET PIPE IS CONNECTED AT THE INVERT LEVEL OF THE PIT TO DRAIN. ALTERNATIVELY FILL THE BASE OF THE PIT WITH MASS CONCRETE (MIN 50mm THICK) OR APPROVED GROUTING COMPOUND (LESS THAN 50mm THICK) TO DRAIN.
9. PROVIDE CONCRETE BENCHING TO SIDES OF PIT TO SUIT PIPE DIAMETER. HEIGHT TO MATCH MINIMUM 1/3 PIPE DIAMETER.

LANDSCAPING

1. REFER TO DRAWINGS BY SITE IMAGE LANDSCAPE ARCHITECTS FOR DETAILS OF PROPOSED LANDSCAPING TREATMENT.
2. ALL DISTURBED SURFACE TO BE TEMPORARILY STABILISED WITH HYDROMULCH UPON COMPLETION OF WORKS. A 50mm STRIP OF TURF ICT22 COUCH IS TO BE PLACED BEHIND ALL NEW KERB AND GUTTER / ROLL KERB.

SIGNAGE AND LINEMARKING

1. ALL SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AUSTRALIAN STANDARDS 1742 / RMS STANDARDS AND SPECIFICATIONS.
2. LINE MARKING AND PAINT SHALL BE IN ACCORDANCE WITH AS1742.3 AND RMS STANDARDS.
3. PAINT SHALL BE TYPE 3 CLASS 'A' AND THE COLOUR SHALL BE WHITE AND NOT SUBJECT TO DISCOLOURATION BY BITUMEN FROM ROAD SURFACE. ALL PAINT TO BE APPLIED BY MECHANICAL SPRAYER.
4. LINE MARKING SHALL BE SPOTTED OUT AND APPROVED PRIOR TO SPRAYING.
5. PAINT SHALL BE APPLIED AT A WET THICKNESS OF BETWEEN 0.35mm AND 0.40mm.
6. LAMPARK LINEMARKING TO BE 80mm WIDE.

PAVEMENTS

1. ALL PAVEMENT MATERIALS SHALL COMPLY WITH CURRENT RMS SPECIFICATIONS. PROVIDE MECHANICAL ANALYSIS FOR EACH BATCH OF PAVEMENT MATERIAL TO ENSURE CONFORMITY.
2. COMPACTION STANDARDS

BASE	98% MODIFIED MAXIMUM DRY DENSITY
SUBBASE	98% MODIFIED MAXIMUM DRY DENSITY
SUBGRADE	100% STANDARD MAXIMUM DRY DENSITY
3. THE CONTRACTOR SHALL CONFIRM THE DESIGN (OR WITH A MINIMUM OF 3 TESTS TAKEN AT SUBGRADE LEVEL, WHERE DISCREPANCY IS FOUND, CONTACT THE DESIGN ENGINEER).
4. ALLOW FOR COMPACTION TESTING BY A N.A.T.A. REGISTERED LABORATORY FOR BASE LAYER, SUBBASE LAYER AND SUBGRADE LAYER IN ACCORDANCE WITH THE LATEST VERSION OF AS3198 FOR PAVEMENTS (MINIMUM 2 TESTS PER LAYER). ALLOW FOR AT LEAST TWO SUCCESSFUL COMPACTION TESTS IN EACH LAYER.
5. HATCH NEW PAVEMENTS NEATLY AND FLUSH WITH EXISTING.
6. AFTER BASE IS APPROVED, SWEEP CLEAN AND PRIME AT NOMINAL RATE OF 1.8L PER 10 sq m.
7. PAVEMENT HOLD POINTS
 1. SUB-GRADE PROOF ROLL PRIOR TO SET-UP AND FORM FOR CONCRETE POUR.
 2. INSPECTION OF FORMWORK / STEEL PRIOR TO CONCRETE POUR.
 3. SUBMISSION OF SUB-GRADE AND BASE DENSITY TESTS.

ASPHALTIC CONCRETE

1. GENERAL
 1. ALL ASPHALTIC CONCRETE (AC) WORK TO BE PREPARED AND CARRIED OUT IN ACCORDANCE WITH GOOD ASPHALTIC PAVING PRACTICE AS DESCRIBED IN AS2736-1994 "ASPHALTIC (HOT-MIXED) PAVING - GUIDE TO GOOD PRACTICE" AND CURRENT RMS SPECIFICATIONS.
2. PAVEMENT PREPARATION
 1. THE FINISHED PAVEMENT SURFACE TO BE SEALED SHALL BE WITHIN +/- 2% OF THE OPTIMUM AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL, FOREIGN OR LOOSE MATTER.
 2. PRIME ALL SURFACES TO BE SEALED. ALLOW PRIME TO SETTLE FOR A MINIMUM OF 3 DAYS BEFORE APPLYING TACK COAT AND ASPHALT.
 3. SWEEP PRIME SURFACES BEFORE APPLYING TACK COAT.
 4. ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT UP TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE LAYING OF MAIN COURSE.
 5. ALL DEFECTS IN THE BASE COURSE INCLUDING TRACKS, SURFACE DEGRADATION AND THE LIKE SHALL BE REPAIRED AS DIRECTED BY THE SUPERINTENDENT PRIOR TO PLACEMENT OF TACK COAT AND/OR AC COURSE.
3. PLACEMENTS
 1. ALL ASPHALT SHALL BE PLACED UTILISING APPROVED MECHANICAL PAVING MACHINES, DO NOT HAND PLACE ASPHALT WITHOUT PRIOR APPROVAL FROM ENGINEER.
4. JOINTS
 1. THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM.
 2. THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.
5. COMPACTION
 1. ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS.
 2. INITIAL ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 105°C USING A STEEL DRUM ROLLER HAVING A MINIMUM WEIGHT OF 8 TONNES AND A MAXIMUM UNIT LOAD ON THE REAR DRUM EQUIVALENT TO 55kN/m WIDTH OF DRUM.
 3. SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 80°C USING A PNEUMATIC TYRED ROLLER OF AT LEAST 10 TONNES MASS, A MINIMUM TYRE PRESSURE OF 550kPa AND A MINIMUM TOTAL LOAD OF 1 TONNE ON EACH TYRE.
 4. ROLLED SURFACES SHALL BE SMOOTH AND FREE OF UNDESIRABLE BONY AND/OR UNEVEN SURFACES WILL BE REJECTED.
 5. PROVIDE 2 No MINIMUM COMPACTION TESTS.
6. FINISHED SURFACE PROPERTIES
 1. FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE OF SHAPE AND SHALL NOT VARY MORE THAN:
 1. 3mm FROM THE SPECIFIED PLAN LEVEL AT ANY POINT
 2. 3mm FROM THE BOTTOM OF A STRAIGHT EDGE LAID TRANSVERSELY.
 2. 5mm FROM THE BOTTOM OF A STRAIGHT EDGE LAID LONGITUDINALLY.
 3. MINUS 0 TO PLUS 2mm ADJACENT TO OTHER ELEMENTS SUCH AS KERBS AND THE LIKE TO AVOID POOLING OF SURFACE WATER.
 4. MINUS 0 FROM THE SPECIFIED THICKNESS.
7. DO NOT STORE PLANT EQUIPMENT OR TRAFFIC HEAVILY LAID ASPHALTIC CONCRETE PAVEMENTS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
8. DO NOT APPLY MARKING PAINTS UNTIL ASPHALT HAS CURED IN ACCORDANCE WITH PAINT MANUFACTURERS SPECIFICATIONS.

BITUMEN SEALING

1. PAVEMENT PREPARATION
 1. THE SURFACE TO BE SEALED SHALL BE DRY AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL, FOREIGN OR LOOSE MATTER.
 2. IF APPROVED BY THE MANAGING CONTRACTOR, ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE SEALING COMMENCES.
2. MATERIALS
 1. BINDER SHALL BE CLASS 170 TO AS 2008 OR APPROVED PROPRIETARY MATERIAL FOR PRIMING AND PRIME SEALING.
 2. AGGREGATE SHAPE, DURABILITY AND WET TO DRY STRENGTH SHALL COMPLY TO AS2758 FOR CLASS 'N' AGGREGATES. A 200g SAMPLE TO BE APPROVED BY THE MANAGING CONTRACTOR PRIOR TO USE.
 3. AGGREGATES SHALL BE DELIVERED UNIFORMLY PRECOATED, EXCESSIVE PRECOATING WILL RESULT IN AGGREGATES BEING REJECTED.
 4. FOR TWO COAT FLUSH SEALS, THE SIZE OF THE AGGREGATE FOR THE SECOND COAT, WHILE NORMALLY HALF THAT OF THE FIRST COAT, SHALL BE DIMENSIONALLY COMPATIBLE WITH THAT OF THE FIRST COAT.
 5. PRECOATING AGENTS SHALL BE COMPATIBLE WITH THE AGGREGATES AND BINDER TO BE USED.
3. DESIGN
 1. DESIGN OF SPRAYED BITUMINOUS SEALS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE AUSTRALASIAN PUBLICATION "PRINCIPLES AND PRACTICE OF BITUMINOUS SURFACING, VOLUME 1 - SPRAYED WORK".
 2. WHERE NOT INDICATED ON THE DRAWINGS, PRIMES AND PRIMER SEALS SHALL BE DESIGNED TO REMAIN INTACT UNTIL FINAL SEALING TAKES PLACE, HAVING REGARD FOR THE TRAFFIC AND CLIMATIC CONDITIONS.
 3. UNLESS OTHERWISE SPECIFIED, BINDER APPLICATION RATES SHALL BE SELECTED TO FILL 85% OF THE THEORETICAL VIDS OF THE MAT.
4. BITUMEN FLUSH SEALING
 1. BITUMEN FLUSH SEALS SHALL BE EITHER SINGLE OR DOUBLE COAT AS SHOWN ON THE DRAWINGS. 99 1/2% INDICATES A DOUBLE COAT FLUSH SEAL USING TWO APPLICATIONS OF BITUMEN AND AGGREGATE. THE FIRST AGGREGATE LAYER BEING OF 14mm NOMINAL SIZE, THE SECOND 2mm.
 2. COVER AGGREGATE SHALL BE SPREAD IMMEDIATELY AFTER SPRAYING OF BINDER IN NO CASE SHALL SPREADING BE DELAYED MORE THAN 8 MINUTES.
5. RECORDS
 1. ALL SPRAY RECORDS AND AGGREGATE SUPPLY TONNAGE RECEIPTS SHALL BE RETAINED AND PASSED ON TO THE CONSULTING ENGINEER AS PART OF QUALITY ASSURANCE PROCEDURES.
 2. GENERALLY FLUSH SEALING SHALL BE CARRIED OUT COMPLETE AND IN ACCORDANCE WITH THE RELEVANT RMS STANDARD.

CONCRETE SEALING

1. THE CURING PROCESS FOR NEW CONCRETE IS TO INCORPORATE THE FOLLOWING ASPECTS, GENERALLY AS ORDERED:
 1. SPRAY CURING COMPOUND
 2. SAWCUT JOINTS AS LOCATED AND SPECIFIED AS SOON AS CURING PERMITS
 3. COVER NEW PAVING WITH HESSIAN AND BLACK PLASTIC SHEETS TAPED AT JOINTS ON COMPLETION OF SAWCUTTING. NOTE COVERING IS TO EXTEND MIN 5m BEYOND PAVEMENT BEING CURED. OVER ADJOINING (EXISTING) PAVEMENT AREAS, MAINTAIN CURING AS SPECIFIED.

CITY OF RYDE

APPROVED FOR CONSTRUCTION

Signed: *[Signature]*

Date: *23/1/2017*

Subject to the Conditions of Development Consent
LOA 2015/106

NOT FOR CONSTRUCTION


REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	PROJECT	DRAWING TITLE	JOB NUMBER							
3	ISSUED FOR APPROVAL	AM	AD	MC	23.03.16	RICHARD CROOKES CONSTRUCTIONS	OPRA ARCHITECTS	NORTHROP Sydney Level 11 345 George Street, Sydney NSW 2000 Ph (02) 9241 4188 Fax (02) 9241 4324 Email sydney@northrop.com.au ABN 81 094 433 100	KHARTOUM CORPORATE CENTRE, MACQUARIE PARK	CIVIL WORKS PACKAGE SPECIFICATION NOTES - SHEET 1	151073						
4	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16												
5	ISSUED FOR CONSTRUCTION	AM	AD	MC	16.07.16												
6	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16												
7	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16												
8	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16												
												DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD			DRAWING NUMBER	REVISION
																C1.02	8
										DRAWING SHEET SIZE = A1							

NOTE: ALL CIVIL ENGINEERING CONSTRUCTION WORKS TO BE CARRIED OUT IN ACCORDANCE WITH CITY OF RYDE DEVELOPMENT GUIDELINES. THE AFOREMENTIONED GUIDELINES INCLUSIVE OF ALL SPECIFICATIONS TAKE PRECEDENCE OVER NOTES PROVIDED BELOW.

CONCRETE PAVEMENTS

- THIS SECTION REFERS TO CIVIL CONCRETE WORKS AND DOES NOT INCLUDE STRUCTURAL ELEMENTS SUCH AS BUILDINGS, BELOW GROUND STRUCTURES OR RETAINING WALLS.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARYED BY THE CONTRACT DOCUMENTS.
- CONCRETE QUALITY AND REINFORCING COVER
ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

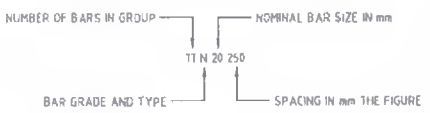
ELEMENT	CONCRETE STRENGTH (f _c MPa)	SPECIFIED SLUMP	NOMINAL AGGREGATE SIZE	MAX. 56 DAY DRYING SHRINKAGE	COVER (mm)
KERBS AND PATHS	25	60	20	650microns	TOP 40
PITS AND VEHICULAR PAVEMENTS	32	80	20	650microns	TOP 40

- CONCRETE PROPERTIES SHALL BE VARIED FROM NORMAL CLASS AS FOLLOWS
 - MINIMUM CEMENT CONTENT 250 kg/m³
 - MAXIMUM 56 DAY SHRINKAGE STRAIN AS NOMINATED ABOVE
 - PRIOR TO COMMENCEMENT CONCRETE SUPPLIER TO PROVIDE DRYING SHRINKAGE TEST RESULTS FROM PRODUCTION ASSESSMENT AS EVIDENCE THAT SPECIFIED DRYING SHRINKAGE LIMITS CAN BE ACHIEVED USING NORMAL MIX DESIGN
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS. PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL.
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1319. TEST CYLINDERS ARE TO BE KEPT ON SITE.
- ALL COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE CIVIL ENGINEER FOR REVIEW.
- ALL CONCRETE IS TO BE CONTINUOUSLY CURED FOR A MINIMUM PERIOD OF 10 DAYS AFTER PLACING. CURING TO COMMENCE IMMEDIATELY AFTER FINISHING. SPRAY ON CURING COMPOUNDS TO COMPLY WITH AS3799.
- PLACE CONCRETE CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS SHOWN ON PLAN. DO NOT BREAK OR INTERRUPT SUCCESSIVE POURS SUCH THAT COLD JOINTS OCCUR. ANY REVISIONS OR ADDITIONS TO CONSTRUCTION JOINTS SHOWN ON PLAN REQUIRE APPROVAL FROM THE CIVIL ENGINEER.
- FALLS IN SLAB AS SHOWN ON PLAN MAINTAIN MINIMUM SLAB THICKNESS AS SHOWN.
- NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED BY WRITING BY THE DESIGN ENGINEER.
- THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS.
- FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL
 

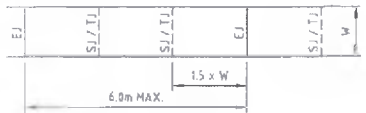
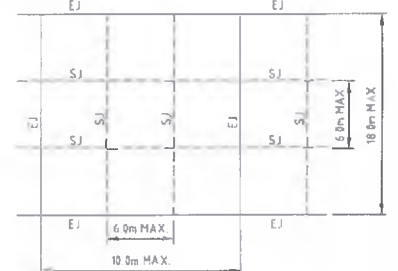
- POLYETHYLENE SHEET SHALL BE PLACED BELOW ALL CONCRETE PAVEMENTS.
- ALL PENETRATIONS TO HAVE 2/N12 TRIMMER BARS TOP AND BOTTOM TO EACH FACE U.N.O. EXTEND TRIMMERS 700 BEYOND PENETRATION MAINTAIN 40mm COVER TOP AND BOTTOM.
- FORMWORK CLASS SHALL BE IN ACCORDANCE WITH AS3600.

ELEMENT	FORMWORK CLASS
STORMWATER PIT PAVEMENTS	OFF FORM
KERBS	MACHINE FLOAT / BROOM FINISH
	STEEL FLOAT / TROWEL

- REINFORCEMENT SYMBOLS
 - N DENOTES GRADE 450 N BARS TO AS1302 GRADE N
 - R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS1302
 - SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS1304



PAVEMENT JOINTS

- PROVIDE 10mm ABLEFLEX BETWEEN NEW CONCRETE WORKS AND EXISTING STRUCTURES.
- LOCAL AUTHORITY REQUIREMENTS SHALL TAKE PRECEDENCE WITHIN THE PUBLIC ROAD RESERVE.
- DOWELS TO BE PLACED ON PROPRIETARY CRADLES TO ENSURE CORRECT SPACING AND ALIGNMENT.
- PEDESTRIAN PAVEMENTS
ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINTED AS FOLLOWS U.N.O. ON THE DESIGN DRAWINGS.
- EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX. 6.0m CENTRES.
- WEAKENED PLANE JOINTS (SAWN OR TOOL JOINTS) ARE TO BE LOCATED AT A MAX. SPACING OF 15m x WIDTH OF THE PAVEMENT.
- WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND OR ADJACENT PAVEMENT JOINTS.
- TYPICAL PEDESTRIAN PAVEMENT JOINT DETAIL
 
- VEHICULAR PAVEMENTS
ALL VEHICULAR PAVEMENTS TO BE JOINTED AS FOLLOWS U.N.O. ON THE DESIGN DRAWINGS.
- TIED KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED LONGITUDINALLY AT A MAX. OF 6.0m CENTRES.
- SAWN JOINTS SHOULD GENERALLY BE LOCATED LATERALLY AT A MAX. OF 6.0m CENTRES WITH DOWELED EXPANSION JOINTS AT MAX 18.0m CENTRES.
- TYPICAL VEHICULAR PAVEMENT JOINT DETAIL
 

- KERB EXPANSION JOINTS SHALL BE FORMED FROM 10mm ABLEFLEX FOR FULL DEPTH OF SECTION.
- KERB EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, TANGENT POINTS OF CURVES / CORNERS AND AT 12m MAX CENTRES.
- KERB TOOLED JOINTS TO BE MIN 3mm WIDE AND LOCATED AT MAX 3m CENTRES.
- INTEGRAL KERB JOINTS SHALL MATCH THE LOCATION OF PAVEMENT JOINTS.

CONCRETE

- CARRY OUT ALL CONCRETE WORK IN ACCORDANCE WITH AS3600 AND NATSPEC CONCRETE STANDARDS.
- CONCRETE PROPERTIES AND COVER TO REINFORCING:

ELEMENT	CONCRETE STRENGTH (f _c MPa)	MAX. 56 DAY DRYING SHRINKAGE	COVER (mm)
SLABS ON GROUND	32	650microns	TOP 40 BTH 40
TANK LID	40	700microns	TOP 40 BTH 40

- MAXIMUM AGGREGATE SIZE = 20mm U.N.O.
SLUMP DURING PLACING = 75mm
EXPOSURE CLASSIFICATION = B1
NO ADMIXTURES SHALL BE USED IN CONCRETE MIX UNLESS APPROVED BY STRUCTURAL ENGINEER IN WRITING.

- CONCRETE PROPERTIES FOR SLABS AND BEAMS SHALL BE VARIED FROM NORMAL CLASS AS FOLLOWS
 - MINIMUM CEMENT CONTENT 250kg/cum
 - PRIOR TO COMMENCEMENT CONCRETE SUPPLIER TO PROVIDE DRYING SHRINKAGE TEST RESULTS FROM PRODUCTION ASSESSMENT AS EVIDENCE THAT SPECIFIED DRYING SHRINKAGE LIMITS CAN BE ACHIEVED USING NORMAL MIX DESIGN

- SUBMIT FOR APPROVAL THE FOLLOWING TO THE STRUCTURAL ENGINEER:
 - CURING PROCEDURE (PVA MEMBRANES NOT PERMITTED)
 - STRIPPING PROCEDURE
 - DETAILS AND LOCATION OF CAST IN SERVICES
 - CONDUITS, PENETRATIONS AND CONSTRUCTION JOINT LOCATIONS

- ALL CONCRETE MIXES SHALL BE DESIGNED BY A RECOGNISED TESTING LAB AND SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER.

- ALL COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW.

- PROJECT CONTROL TESTING SHALL BE CARRIED OUT ON ALL CONCRETE IN ACCORDANCE WITH AS1319. TEST CYLINDERS ARE TO BE KEPT ON SITE.

- ALL CONCRETE IS TO BE CONTINUOUSLY CURED FOR A MINIMUM PERIOD OF 10 DAYS AFTER PLACING. CURING TO COMMENCE IMMEDIATELY AFTER FINISHING. SPRAY ON CURING COMPOUNDS TO COMPLY WITH AS3799.

- FOR TENDER PURPOSES ASSUME MINIMUM STRIPPING TIMES AND EXTENT OF BACK PROPPING AS PER AS3600-1995 SECTION 5.0 AND AS PER GENERAL NOTES FOR FORMWORK AND PROPPING.

- FORMWORK FINISH CLASSIFICATION TO AS3600

ELEMENT	CLASS
INGROUND FOOTINGS	5
RETAINING WALLS	5 EARTH FACE
RETAINING WALLS	3 EXPOSED FACE
COLUMNS	2
BEAMS AND SLABS	2

- SURFACE FINISHES:
 - COLUMNS AND WALLS OFF FORM

- COMPACT ALL CONCRETE INCLUDING FOOTINGS AND SLABS, USING MECHANICAL VIBRATORS.

- PLACE CONCRETE CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS SHOWN ON PLAN. DO NOT BREAK OR INTERRUPT SUCCESSIVE POURS SUCH THAT COLD JOINTS OCCUR. ANY REVISIONS OR ADDITIONS TO CONSTRUCTION JOINTS SHOWN ON PLAN REQUIRE APPROVAL FROM THE STRUCTURAL ENGINEER.

- CONCRETE PROFILES:
 - BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE THE SLAB THICKNESS.
 - SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
 - NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN SHOWN IN THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
 - PROVIDE DRIP GROOVES AT ALL EXPOSED EDGES, CHAMFERS, DRIP GROOVES, REGLETS ETC TO BE TO ARCHITECT'S DETAILS.

- ALL PENETRATIONS TO HAVE 2-N12 TRIMMER BARS TOP AND BOTTOM TO EACH FACE U.N.O. EXTEND TRIMMERS 600 BEYOND PENETRATION.

- SETDOWNS OR FALLS IN FLOOR SURFACES ARE NOT PERMITTED UNLESS SHOWN ON DRAWINGS. MAINTAIN MINIMUM SLAB THICKNESS SHOWN ON PLAN WHERE FALLS OCCUR.

CONCRETE (cont)

SYMBOL	BAR SHAPE	STRENGTH GRADE (MPa)	DUCTILITY CLASS	TO COMPLY WITH AUSTR STANDARD
N	DEFORMED RIB BAR	500	NORMAL	AS4671
R	PLAIN ROUND BAR	250	NORMAL	AS4671
RL	RECTANGULAR MESH OF DEFORMED RIB BAR	500	LOW	AS4671
SL	SQUARE MESH OF DEFORMED RIB BAR	500	LOW	AS4671
L-TM	TRENCH MESH	500	LOW	AS4671

- ALL REINFORCING BARS SHALL BE GRADE 500N TO AS4671 AND ALL MESH SHALL BE GRADE 500L TO AS4671 U.N.O. CLASS L REINFORCEMENT SHALL NOT BE USED U.N.O.



- REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY, AND NOT NECESSARILY IN TRUE PROJECTION. BARS SHOWN ARE INDICATIVE ONLY AND LENGTHS MAY VARY. BE AN ELEVATIONS TAKE PRECEDENCE OVER SECTIONS. SLAB PLANS TAKE PRECEDENCE OVER SECTIONS. REFER TO SECTIONS FOR EXTRA BARS THAT MAY BE REQUIRED.

- USE ONLY ALL PLASTIC OR CONCRETE CHAIRS AT EXTERNAL SURFACES.

- SITE BENDING OF REINFORCEMENT BARS SHALL BE DONE WITHOUT HEATING USING A RE-BENDING TOOL. THE BARS SHALL BE RE-BENT AGAINST A FLAT SURFACE OR A PIN WITH A DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN AS3600-2001.

- SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS OR IN POSITIONS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS3600 SECTION 9.3 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.

- FOR LAPS IN MESH REFER TO SLAB ON GROUND NOTES.
- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

- AT EXTERNALLY EXPOSED SURFACES NO METALLIC ITEMS INCLUDING FORM BOLTS, FORM SPACERS, METALLIC BAR CHAIRS AND TIE WIRE ARE TO BE PLACED IN THE COVER ZONE.

- ALL REINFORCEMENT, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION AND INSPECTED BY THE STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.

- HOLD DOWN BOLTS SHALL BE HOT DIPPED GALVANISED.

- U.N.O. ALL MASONRY ANCHORS INTO CONCRETE SHALL BE RAMSET TRUBOLTS (LONGEST VERSION) OR APPROVED EQUIVALENT BOLTS SHALL BE GALVANISED WHERE THEY ARE ADJOINING NON FERROUS OR PREPAINTED MEMBERS. PROVIDE STAINLESS STEEL BOLTS FOR ALL EXTERNAL CONDITIONS, OR WHERE EXPOSED TO THE WEATHER.

ENGINEERING CERTIFICATION

- TO CERTIFY THE CONSTRUCTED CIVIL WORKS, A QUALIFIED EXPERIENCED ENGINEER IS TO VISIT THE SITE TO OBSERVE CONSTRUCTION TECHNIQUES AND VARIOUS ELEMENTS THAT MAY BE CONCEALED WHEN THE WORKS ARE COMPLETE.

- THIS SPECIFICATION ALLOWS FOR CERTIFICATION OF WORKS CONTROLLED BY A PRIVATE CERTIFIER FOR LAND DEVELOPMENT WORKS. THIS SPECIFICATION DOES NOT COVER CERTIFICATION REQUIREMENTS FOR AUTHORITIES SUCH AS COUNCIL, RMS OR OFFICE OF WATER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND PROVIDE ALL PROJECT SPECIFIC CONSTRUCTION COMPLIANCE (WORKS AS EXECUTED) INFORMATION TO THE SATISFACTION OF THE STAKEHOLDER / AUTHORITY. DISCREPANCIES BETWEEN THIS SPECIFICATION AND SPECIFICATIONS OF OTHER EXTERNAL STAKEHOLDERS / AUTHORITIES IS TO BE REPORTED TO THE SUPERINTENDENT FOR CLARIFICATION.

- THE CONTRACTOR IS TO AGREE WITH THE ENGINEER AN APPROPRIATE SITE VISIT SCHEDULE AND TIME ARRANGEMENT PRIOR TO COMMENCEMENT OF THE WORKS. THE CONTRACTOR SHALL ENSURE THAT THE ENGINEER CAN SAFELY ACCESS ALL CIVIL ELEMENTS TO BE REVIEWED. SITE VISITS ARE CONDUCTED DURING NORMAL BUSINESS HOURS. WE REQUIRE TWO (2) WORKING DAY NOTICE FOR ANY SITE VISIT.

- TO PROVIDE CERTIFICATION THE ENGINEER MUST VISIT THE SITE TO OBSERVE:

- PAVEMENTS
 - POOR SUBGRADE CONDITIONS
 - PROF. ROLLING OF SUB-GRADE
 - PLACEMENT OF SUB-BASE COURSE, BASE COURSE AND WEARING COURSE.
 - PLACEMENT OF STEEL REINFORCEMENT, DOWELS AND JOINT CRADLES PRIOR TO POURING OF CONCRETE

- EARTHWORKS
 - TOPSOIL STRIP
 - EARTHWORKS BATTER FILLING
 - FILLING

- STORMWATER DRAINAGE
 - DRAINAGE TRENCHES PRIOR TO BACKFILLING
 - LEGAL POINT OF CONNECTION PRIOR TO BACKFILLING
 - ANY OTHER DRAINAGE STRUCTURE THAT MAY BE CONCEALED DURING THE COURSE OF THE WORKS

- CONCRETE STRUCTURES
 - PLACEMENT OF ANY STEEL REINFORCEMENT PRIOR TO CONSTRUCTION

- THE CONTRACTOR SHALL PROVIDE SURVEYED LEVELS, PREPARED BY A QUALIFIED SURVEYOR FOR SUBGRADE, SUB-BASE COURSE, BASE COURSE AND WEARING COURSE.

- THE CONTRACTOR SHALL PROVIDE WORKS AS EXECUTED (WAE) DOCUMENTATION PREPARED BY A QUALIFIED PRACTISING SURVEYOR. THE WAE DRAWINGS SHALL CLEARLY SHOW: STORMWATER GRATE/COVER LEVELS, STORMWATER PIT INVERT LEVELS AND CORRESPONDING INVERT LEVELS OF ANY INCOMING OR OUTGOING PIPES. DIAMETER OF ALL PIPES, DIMENSIONS AND VOLUME OF ON-SITE DETENTION FACILITIES, INVERT LEVELS OF ORIFICE PLATES, OVERFLOW WEIRS, BASE OF TANK FINISHED LEVELS OF PAVEMENTS. THE WAE SHALL SHOW WHERE THE SIZE OR ALIGNMENT OF CIVIL ENGINEERING ELEMENTS WHEN THEY DEVIATE FROM THE DESIGN DOCUMENTATION.

- THE WAE DRAWINGS SHALL BE STAMPED WITH THE FOLLOWING STATEMENT "THESE WAE DRAWINGS HAVE BEEN PREPARED BY (COMPANY NAME) AND ARE A TRUE AND ACCURATE REPRESENTATION OF THE CONSTRUCTED WORKS". EACH DRAWING SHALL BE SIGNED AND DATED BY THE SURVEYOR WHO PREPARED THE DRAWINGS.

- THESE WAE DRAWINGS HAVE BEEN PREPARED BY (COMPANY NAME) AND ARE A TRUE AND ACCURATE REPRESENTATION OF THE CONSTRUCTED WORKS

SIGNED: _____ DATE: _____

NAME: _____

POSITION: _____

- WAE SHALL BE PROVIDED IN BOTH AUTOCAD AND PDF FORMAT. NORTHROP CONSULTING ENGINEERS WILL PROVIDE ENGINEERING PLANS TO THE CONTRACTOR IN AUTOCAD FORMAT TO AID PREPARATION OF WAE DOCUMENTATION.

- CONTRACTOR IS TO UNDERTAKE A CCTV INSPECTION OF ALL STORMWATER DRAINAGE PIPELINES AND PROVIDE TO THE ENGINEER FOR APPROVAL.

- THE CONTRACTOR SHALL PROVIDE ALL RELEVANT TEST CERTIFICATES PROGRESSIVELY THROUGHOUT THE DURATION OF THE WORKS. ALL TEST CERTIFICATES SHALL BE PREPARED BY A NATA REGISTERED LABORATORY. TEST CERTIFICATES ARE REQUIRED FOR PROOF ROLLING, SUBGRADE COMPACTION, COMPACTION OF PAVEMENT LAYERS, COMPACTION OF FILLING OPERATIONS, CONCRETE SLUMP TEST, AND CONCRETE STRENGTH TESTS. THE CONTRACTOR SHALL PROVIDE ALL RELEVANT VALIDATIONS BY A GEOTECHNICAL ENGINEER FOR ALL IMPORTED FILL.

- EACH TEST CERTIFICATE WILL NOMINATE THE DATE AND TIME OF THE TEST AND PROVIDE A LOCATION OF WHERE THE TEST SAMPLE WAS TAKEN FROM.

- THE CONTRACTOR SHALL ARRANGE FOR THE ENGINEER TO CONDUCT A FINAL VISIT TO REVIEW OF THE CONSTRUCTED WORKS. THIS VISIT REVIEW WILL NOT TAKE PLACE UNTIL THE WAE DOCUMENTATION AND RELEVANT TEST CERTIFICATES HAVE BEEN RECEIVED.

- IF DEFECTIVE OR INCOMPLETE WORK IS FOUND DURING THE FINAL INSPECTION ANOTHER INSPECTION MAY BE REQUIRED AT THE CONTRACTORS EXPENSE TO VERIFY THE RECTIFICATION WORKS HAVE BEEN COMPLETED.

3D INFORMATION DISCLAIMER

PLEASE BE ADVISED 12D DESIGN FILE, IF SUPPLIED, IS DEEMED TO BE AN ACCURATE REFLECTION OF NORTHROP'S DESIGN AT THE TIME OF FINAL DESIGN DEVELOPMENT AND MAY NOT FULLY REFLECT THE DESIGN SURFACE AS PRESENTED. HOWEVER THIS INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO INCORPORATION IN THE CONSTRUCTION WORKS.

YOU ARE FURTHER ADVISED THAT ISSUED HARD COPY/PDF PLANS AND DOCUMENTS TAKE PRECEDENCE OVER THE SUPPLIED ELECTRONIC INFORMATION AND ANY INCONSISTENCIES SHOULD IMMEDIATELY BE REPORTED TO NORTHROP CONSULTING ENGINEERS FOR VERIFICATION PRIOR TO THEIR INCORPORATION IN THE WORKS.

NORTHROP CONSULTING ENGINEERS TAKES NO RESPONSIBILITY FOR USE OF NON-VERIFIED 3D DESIGN INFORMATION USED IN THE WORKS.

THE USE OF THE 3D MODEL INFORMATION SHALL CONSTITUTE ACKNOWLEDGMENT AND ACCEPTANCE OF THE ABOVE STATEMENTS BY THE RECIPIENT.

CITY OF RYDE

APPROVED FOR CONSTRUCTION

Signed: *Morgan*

Date: 23/1/2017

Subject to the Conditions of Development Consent

LDA 2013/106

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
3	ISSUED FOR APPROVAL	AM	AD	MC	23.03.16
4	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
5	ISSUED FOR CONSTRUCTION	AM	AD	MC	16.07.16
6	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
7	RE-ISSUED FOR APPROVAL	UM	AD	HC	17.10.16
8	RE-ISSUED FOR APPROVAL	UM	HR	AD	02.12.16

CLIENT: RICHARD CROOKES CONSTRUCTIONS

ARCHITECT: OPR ARCHITECTS

DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

ARCHITECT: OPR ARCHITECTS

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NORTHROP Sydney

Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT: KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE: CIVIL WORKS PACKAGE SPECIFICATION NOTES - SHEET 2

JOB NUMBER: 151073

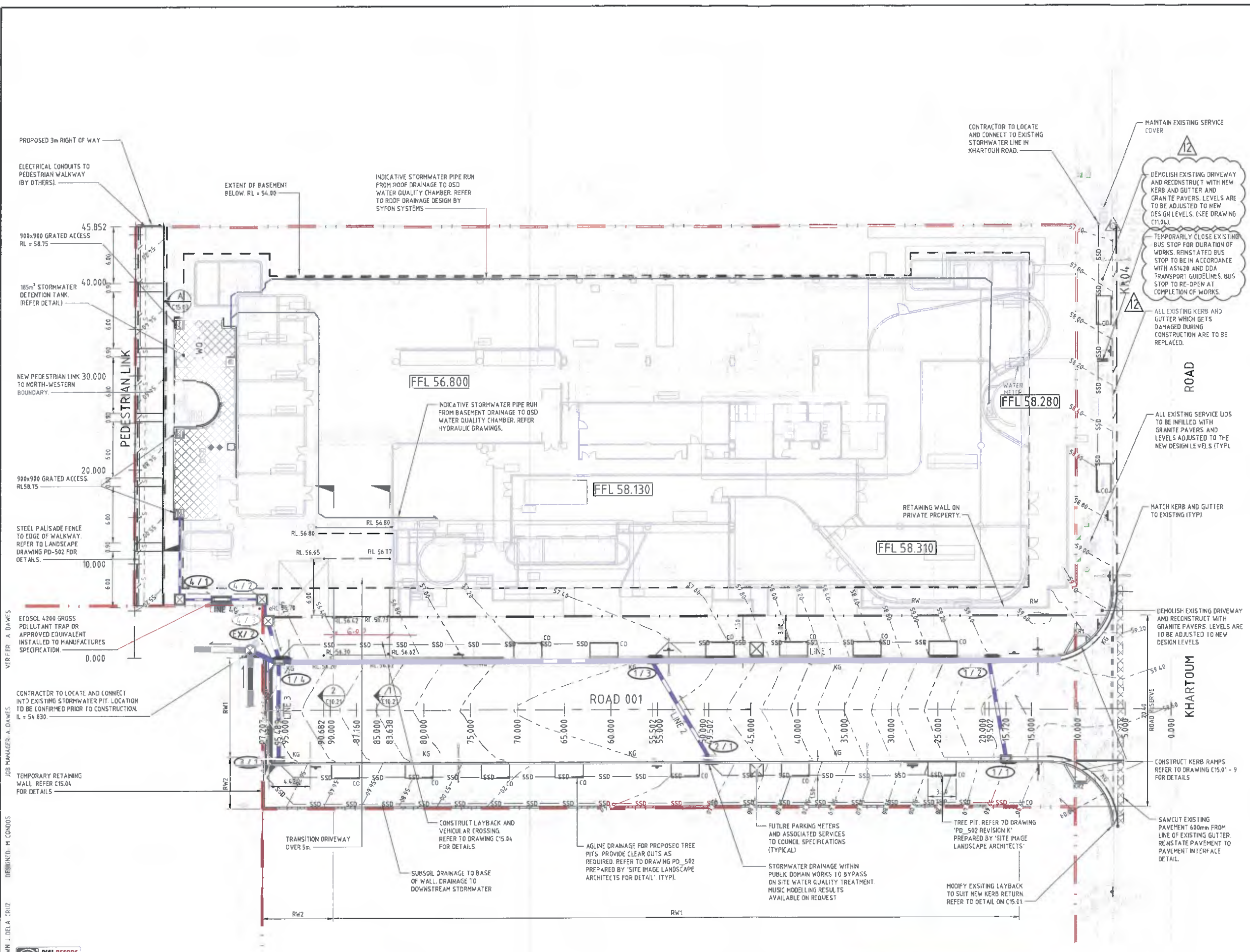
DRAWING NUMBER: C1.03

REVISION: 8

DRAWING SHEET SIZE: A1

DRAWN: J. DELA CRUZ, DESIGNED: M. CONDOS, JOB MANAGER: A. DAVES, VERIFIER: A. DAVES





LEGEND

- EXISTING BOUNDARY LINE
- FUTURE ROAD RESERVE BOUNDARY LINE
- RIGHT OF WAY BOUNDARY (PEDESTRIAN LINK)
- STORMWATER PIPE
- EXISTING STORMWATER PIT
- GRATED INLET PIT
- KERB INLET PIT
- JUNCTION PIT
- STORMWATER PIT TAG
- KERB AND GUTTER
- LAYBACK KERB
- KERB RAMP
- PROPOSED SPOT HEIGHT
- PROPOSED FINISHED FLOOR LEVEL
- MFP
- PROPOSED TREE PITS
- BATTERS
- RETAINING WALL
- PARKING METERS
- STEEL PALISADE FENCE
- SUBSOIL DRAINAGE LINE
- SUBSOIL DRAINAGE CLEAROUT

CITY OF RYDE
APPROVED FOR CONSTRUCTION

Signed *Alanya*
Date 23/1/2017

Subject to the Conditions of Development Consent
LDA 2013/106
INCLUDING MARKING IN RED SHOWN HEREIN

AMENDED PLANS
13 JAN 2017

- ### GENERAL NOTES:
- REFER SPECIFICATIONS NOTES FOR STORMWATER AND SITESWORKS GENERAL REQUIREMENTS.
 - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
 - CAO FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES UPON REQUEST.
 - REFER HYDRAULIC ENGINEERS / ARCHITECTS DRAWINGS FOR DOWNPIPE LOCATIONS AND SIZING.
 - ALL STORMWATER INLET PITS TO BE FITTED WITH 'ENVIROPOOD' INSERT AND 200 MICRON FILTER.
 - CONTRACTOR TO ALLOW TO ADJUST AND CLIAE WITH RELEVANT SERVICE AUTHORITIES IN RELATION TO EXISTING SERVICE ADJUSTMENT AND MODIFICATIONS.
 - REFER TO C4.07 FOR DETAIL OF DOWNSTREAM STORMWATER NETWORK.
 - PIT SETOUT PROVIDED TO CENTRE OF PIT. REFER ROAD CHAINAGES.

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER D	APP'D	DATE
7	ISSUED FOR CONSTRUCTION	AM	AD	MC	14.07.16
8	RE-ISSUED FOR APPROVAL	LWH	AD	MC	16.08.16
9	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
10	RE-ISSUED FOR APPROVAL	MR	AD	AD	02.12.16
11	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.16
12	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17

CLIENT **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT **OPRA ARCHITECTS**

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SCALE 1:200 @ A1

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PROJECT **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

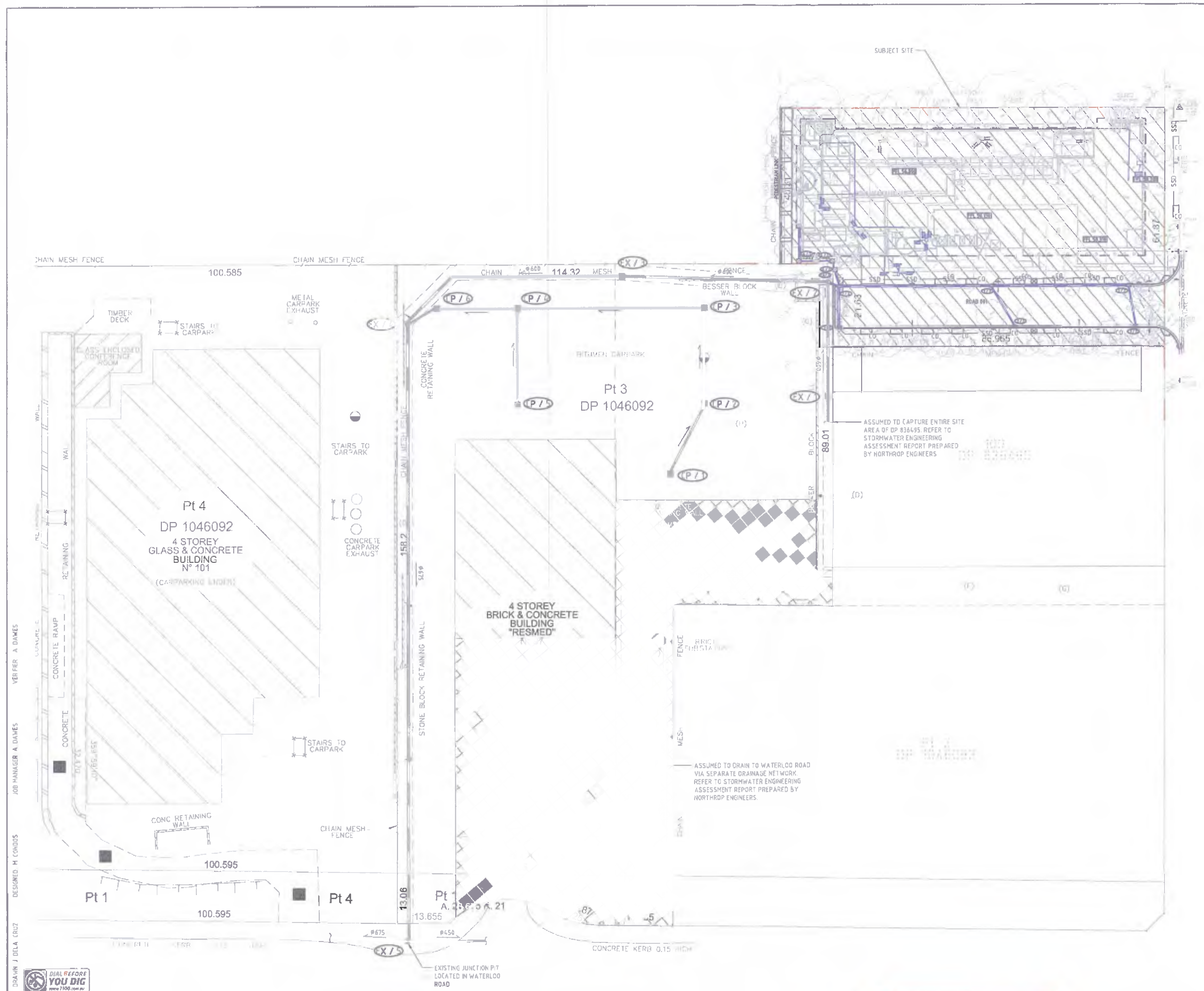
DRAWING TITLE **CIVIL WORKS PACKAGE**

SITESWORKS & STORMWATER DRAINAGE PLAN - SHEET 1

JOB NUMBER **151073**

DRAWING NUMBER **C4.01** REVISION **12**

DRAWING SHEET SIZE = A1



LEGEND

- STORMWATER PIPE, DIAMETER AND FLOW DIRECTION
- EXISTING STORMWATER PIT
- GRATED INLET PIT
- JUNCTION PIT
- EXISTING CAR PARK PIT NUMBER
- SUBJECT SITE
- SEPARATE CATCHMENT

- GENERAL NOTES**
- REFER SPECIFICATIONS NOTES FOR STORMWATER AND SITEWORKS GENERAL REQUIREMENTS.
 - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
 - CAD FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).
 - REFER HYDRAULIC ENGINEERS / ARCHITECTS DRAWINGS FOR DOWNPIPE LOCATIONS AND SIZING.
 - ALL STORMWATER INLET PITS TO BE FITTED WITH 'ENVIROPOD' INSERT AND 200 MICRON FILTER.
 - CONTRACTOR TO ALLOW TO ADJUST AND LIAISE WITH RELEVANT SERVICE AUTHORITIES IN RELATION TO EXISTING SERVICE ADJUSTMENT AND MODIFICATIONS.
 - REFER TO REPORT PREPARED BY NORTHROP ENGINEERS FOR DRAINAGE CALCULATIONS AND DRAINS MODEL RESULTS.
 - ORIGINAL SURVEY SHOWN CONDUCTED BY CAROND HARD AND FORESTER.

CITY OF RYDE
APPROVED FOR CONSTRUCTION
 Signed Allyce
 Date 23/1/2017
 Subject to the Conditions of Development Consent
 13/1 2017/106

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REVISION	DESCRIPTION	ISSUED	VER D	APP D	DATE
1	ISSUED FOR APPROVAL	AM	ME		16.08.16
2	RE-ISSUED FOR APPROVAL	UH	AD	MC	11.10.16
3	RE-ISSUED FOR APPROVAL	UH	HR	AD	07.12.16

CLIENT
RICHARD CROOKES CONSTRUCTIONS

ARCHITECT
OPRA ARCHITECTS

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PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
**CIVIL WORKS PACKAGE
 SITEWORKS &
 STORMWATER DRAINAGE
 PLAN - SHEET 2**

JOB NUMBER
151073
 DRAWING NUMBER
C4.02
 REVISION
3
 DRAWING SHEET SIZE: A1

DRAWN J DELA CRUZ DESIGNED H CONDOS JOB MANAGER A DAMES VERIFIER A DAMES



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LEGEND	
	EXISTING BOUNDARY LINE
	FUTURE ROAD RESERVE BOUNDARY LINE
	RIGHT OF WAY BOUNDARY (PEDESTRIAN LINK)
	HEAVY DUTY ASPHALT PAVEMENT (FOR DETAIL REFER TO PLAN C15 01)
	GRANITE VEHICULAR CROSSING
	FOOTPATH PAVEMENT (GRANITE) (FOR DETAIL REFER TO PLAN C15 01)
	PROPOSED TREE PITS (FOR DETAIL REFER TO LANDSCAPE ARCHITECTS DRAWINGS)
	SOFT LANDSCAPING (FOR DETAIL REFER TO LANDSCAPE ARCHITECTS DRAWINGS)
	PEDESTRIAN LINK CONCRETE COLOUR SYSTEM (CCS) OXIDE BLACK 21 6X PIGMENT WITH BLACK GRANITE BANDING
	GRANITE BANDING 600x300x60mm AT 6m INTERVALS
	MFP
	KERB INLET PIT
	STREET SIGN
	PROPOSED KERB AND GUTTER
	EXISTING KERB AND GUTTER
	PARKING METER

CITY OF RYDE
APPROVED FOR CONSTRUCTION

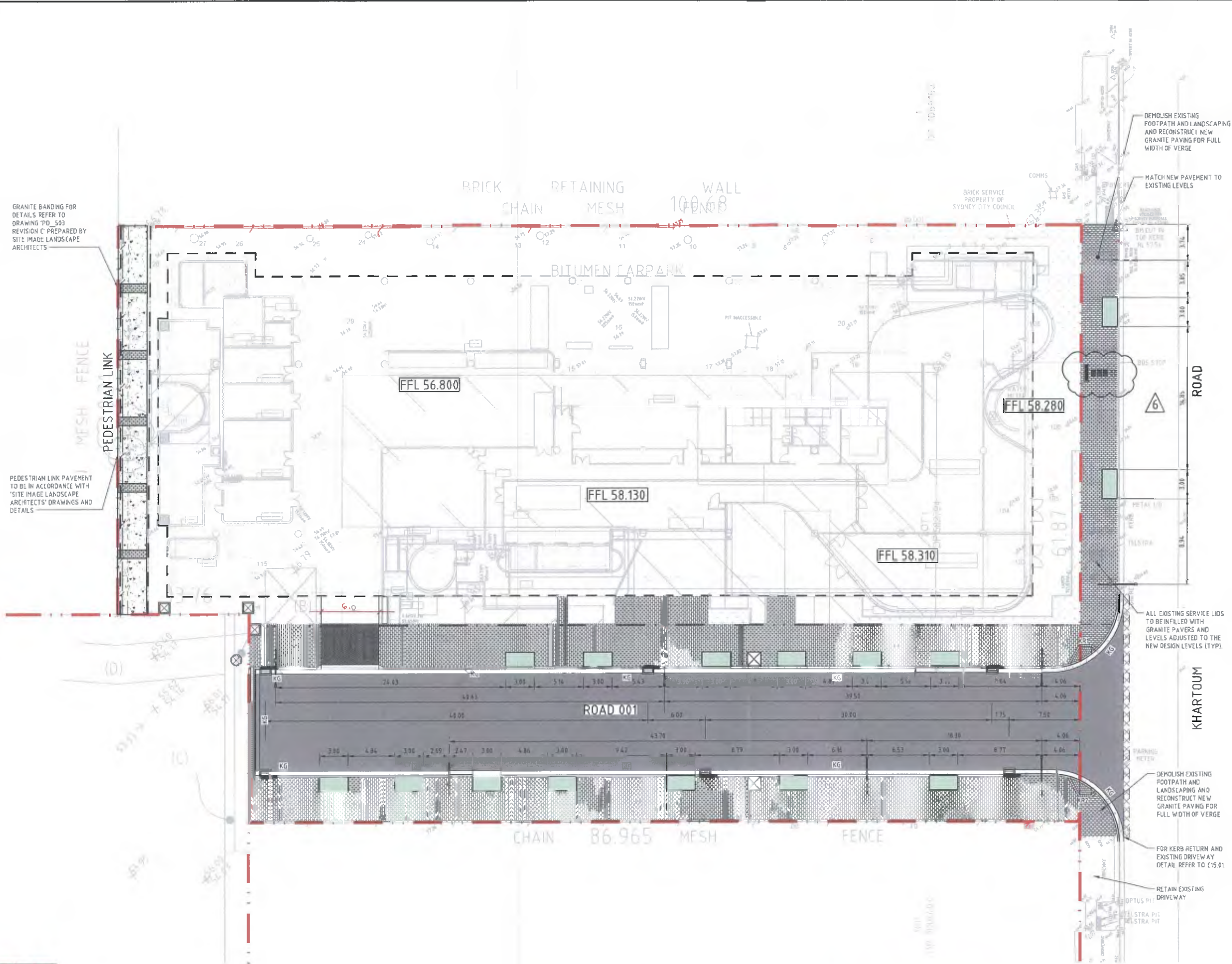
Signed *[Signature]*
Date *23/1/2017*

Subject to the Conditions of Development Consent
LDA 2013/106
INCLUDING MARKINGS IN RED SHOWN HEREIN

AMENDED PLANS
13 JAN 2017

- GENERAL NOTES:**
- REFER SPECIFICATIONS NOTES FOR PAVEMENT GENERAL REQUIREMENTS
 - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS
 - CONTRACTOR TO CONFIRM ALL CBR VALUES PRIOR TO COMMENCEMENT OF WORKS
 - ENSURE ALL INTERFACES WITH EXISTING MATCH NEATLY - REFER STANDARD INTERFACE DETAILS ON DETAILS SHEET
 - PROVIDE ISOLATION JOINT TO BUILDING SURROUND, REAR OF KERBS, ABUTMENTS TO RETAINING WALLS AND UTILITY SERVICE PITS / PDES - REFER DETAIL 'J'
 - FOR PAVING SETOUT REFER LANDSCAPE ARCHITECTS DRAWINGS PREPARED BY SITE IMAGE. DRAWING PD_501 (REVISION G)

NOT FOR CONSTRUCTION



DRAWN: J. DELA CRUZ, DESIGNED: H. CONDOS, JOB MANAGER: A. DAWES, VERIFIER: A. DAWES



REVISION	DESCRIPTION	ISSUED	VER D	APP D	DATE	CLIENT	ARCHITECT	PROJECT	DRAWING TITLE	JOB NUMBER
1	ISSUED FOR APPROVAL	AM	AD	MC	23.03.15	RICHARD CROOKES CONSTRUCTIONS	OPRA ARCHITECTS	KHARTOUM CORPORATE CENTRE, MACQUARIE PARK	CIVIL WORKS PACKAGE	151073
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.15				PAVEMENT AND JOINTING PLAN	DRAWING NUMBER
3	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16					REVISION
4	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16					C6.01
5	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16					6
6	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17					DRAWING SHEET SIZE = A1

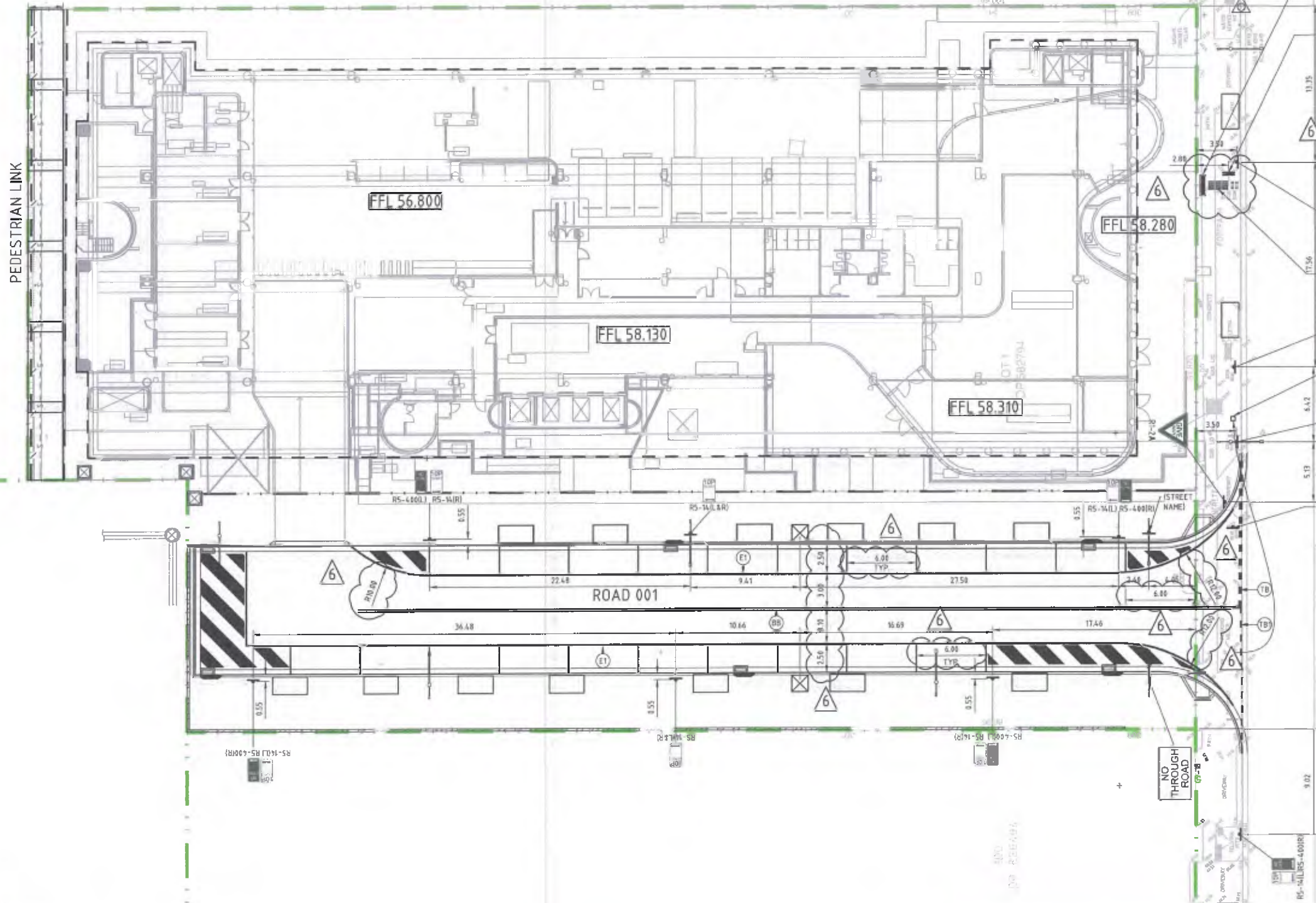
NORTHROP
Sydney
Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

SCALE 1:200 @ A1

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LINEMARKING LEGEND	
	EXISTING BOUNDARY LINE
	FUTURE ROAD RESERVE BOUNDARY LINE
	RIGHT OF WAY BOUNDARY (PEDESTRIAN LINK)
	E1 - EDGE LINE
	BB - BARRIER LINES
	TD - GIVE WAY LINE
	TB1 - GIVE WAY LINE
	CHEVRONS
	STREET SIGN
	PARKING METER
	MFP



CITY OF RYDE
APPROVED FOR CONSTRUCTION

Signed *Abbygo*
Date 23/1/2017
Subject to the Conditions of Development Consent
LDA 2013/106

AMENDED PLANS
13 JAN 2017

- GENERAL NOTES:**
- REFER SPECIFICATIONS NOTES FOR SIGNAGE AND LINEMARKING GENERAL REQUIREMENTS.
 - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
 - CAD FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SET OUT PURPOSES (UPON REQUEST).
 - ALL SIGNAGE AND LINEMARKING TO BE INSTALLED IN ACCORDANCE WITH AS1742.

NOT FOR CONSTRUCTION

DRAWN: J. DELA CRUZ DESIGNED: H. CONDORS JOB MANAGER: A. DAVIES VERBER: A. DAVIES

REVISION	DESCRIPTION	ISSUED	VER D	APP'D	DATE	CLIENT
1	ISSUED FOR APPROVAL	AM	AD	MC	23.03.16	RICHARD CROOKES CONSTRUCTIONS
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16	
3	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16	
4	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.09.16	
5	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16	
6	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17	

RICHARD CROOKES CONSTRUCTIONS

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Email sydney@northrop.com.au ABN 81 084 433 100

PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
**CIVIL WORKS PACKAGE
SIGNAGE & LINE MARKING PLAN**

JOB NUMBER
151073

DRAWING NUMBER
C7.01

REVISION
6

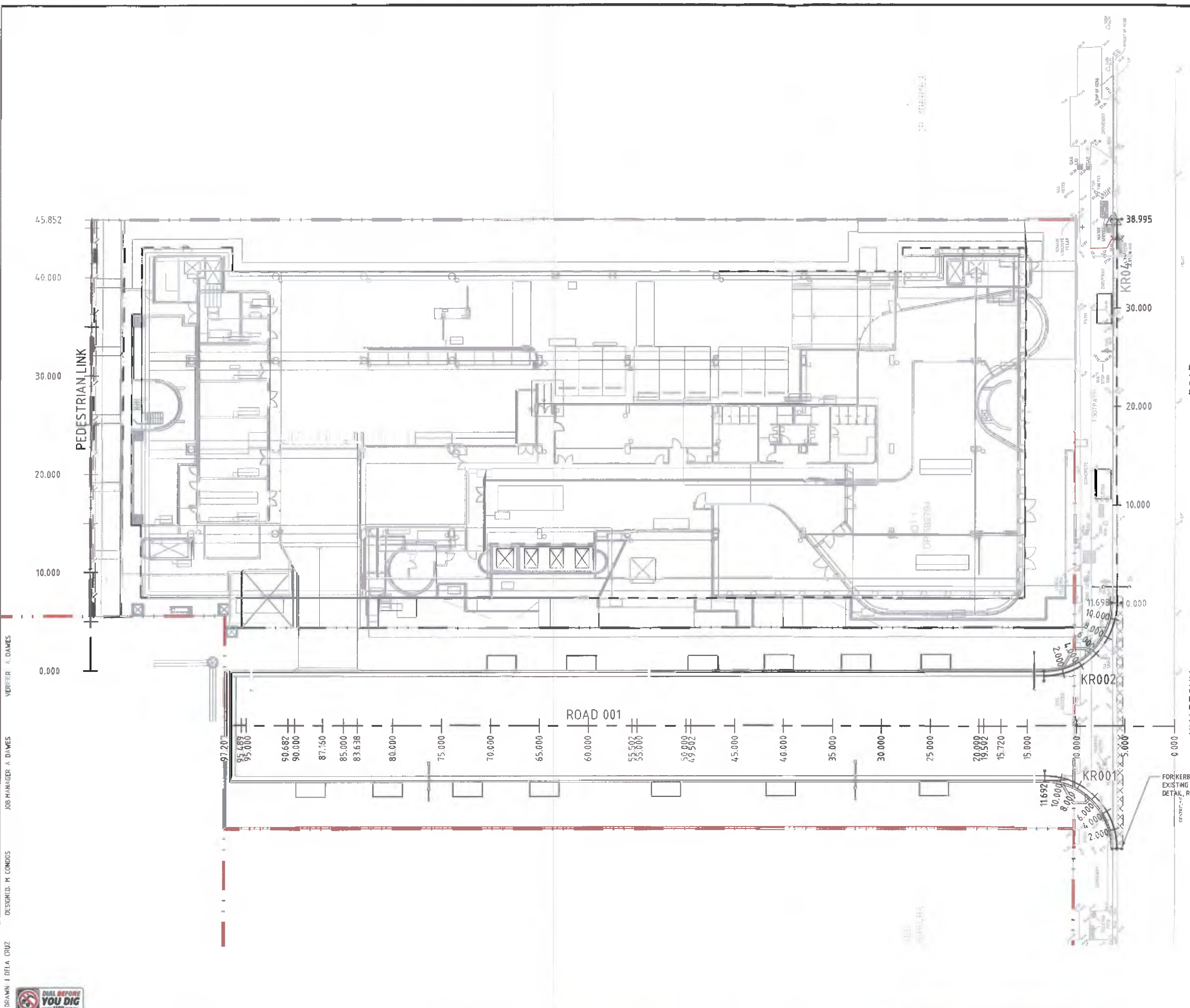
DRAWING SHEET SIZE = A1

hw

LEGEND	
M.C.01	CONTROL LINE
CH.0.000	CHAINAGE
TC.0.000	TANGENT POINT
(Red dashed line)	EXISTING BOUNDARY LINE
(Black dashed line)	ROAD RESERVE BOUNDARY LINE
(Red dashed line)	RIGHT OF WAY BOUNDARY (PEDESTRIAN LINK)

C1 RD CL->RD001 HORIZONTAL IPS				
PT	CHAINAGE	EASTING	NORTHING	HEIGHT
IP 1	0.000	1332.762	911.448	59.612
IP 2	57.287	1258.290	973.807	

C1 FP CL->PEDESTRIAN LINK HORIZONTAL IPS				
PT	CHAINAGE	EASTING	NORTHING	HEIGHT
IP 1	0.000	1252.427	985.922	55.758
IP 2	45.852	1281.844	1021.894	



CITY OF RYDE
APPROVED FOR CONSTRUCTION
 Signed *Allyce*
 Date *23/1/2017*
 Subject to the Conditions of Development Consent
10A 2013/106

AMENDED PLANS
 13 JAN 2017

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	PROJECT	DRAWING TITLE	JOB NUMBER	DRAWING NUMBER	REVISION
1	ISSUED FOR APPROVAL	AM	AD	MC	23.03.16	RICHARD CROOKES CONSTRUCTIONS	OPRA ARCHITECTS	NORTHROP Sydney Level 11 345 George Street, Sydney NSW 2000 Ph (02) 9241 4188 Fax (02) 9241 4324 Email sydney@northrop.com.au ABN 81 094 433 100	CIVIL WORKS PACKAGE ALIGNMENT CONTROL PLAN	151073	C9.01	6
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16							
3	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.09.16							
4	RE-ISSUED FOR APPROVAL	UH	AD	MC	17.10.16							
5	RE-ISSUED FOR APPROVAL	UH	MR	AD	02.02.16							
6	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17							

DRAWN: J. DELA CRUZ
 DESIGNED: M. LONDOS
 JOB MANAGER: A. DAVES
 VERIFIER: A. DAVES



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SCALE 1:200@A1

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PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
CIVIL WORKS PACKAGE
ALIGNMENT CONTROL PLAN

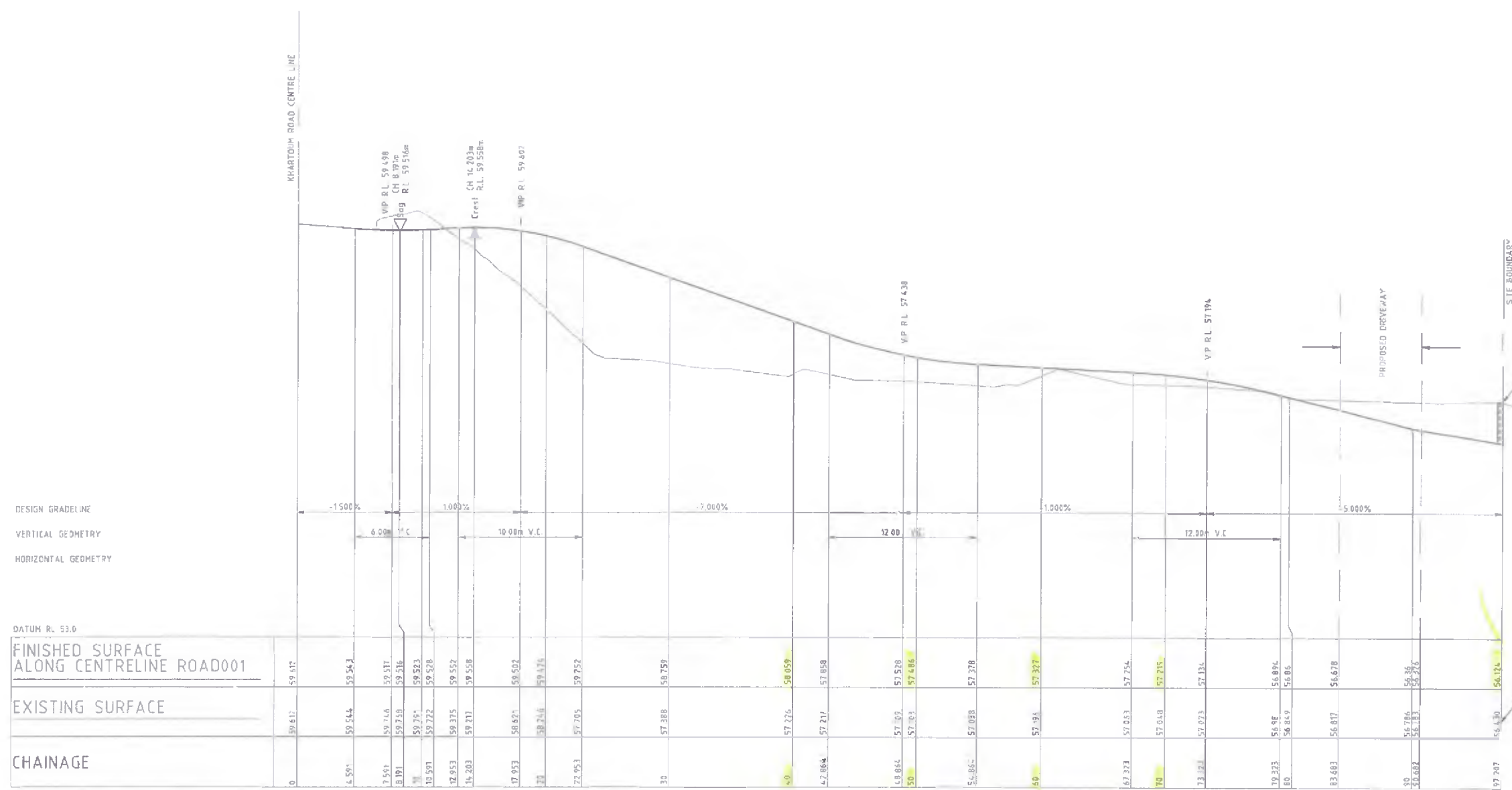
JOB NUMBER
151073

DRAWING NUMBER
C9.01

REVISION
6

DRAWING SHEET SIZE = A1

DRAWN: J. DE LA CRUZ | DESIGNED: M. CONDOS | JOB MANAGER: A. DAVIES | VERIFIED: A. DAVIES



LONGITUDINAL SECTION ALONG CENTRELINE ROAD001
 HORIZONTAL SCALE 1:200(±)
 VERTICAL SCALE 1:40(±)

TEMPORARY RETAINING WALL (REFER TO SHEET C15.04 FOR DETAILS)

EXISTING SURFACE LEVEL UPDATED DUE TO ADDITIONAL SURVEY INFORMATION

CITY OF RYDE
 APPROVED FOR CONSTRUCTION
 Signed: *[Signature]*
 Date: 23/1/2017
 Subject to the Conditions of Development Consent
 10/2013/106

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	AM	AD	MC	23.03.16
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
3	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
4	RE-ISSUED FOR APPROVAL	LM	AD	MC	17.10.16
5	RE-ISSUED FOR APPROVAL	LM	MR	AD	02.12.16

CLIENT: **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT: **OPRA ARCHITECTS**

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 Email: sydney@northrop.com.au ABN 81 094 435 100

PROJECT: **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

DRAWING TITLE: **CIVIL WORKS PACKAGE ROAD LONGITUDINAL SECTION - SHEET 1**

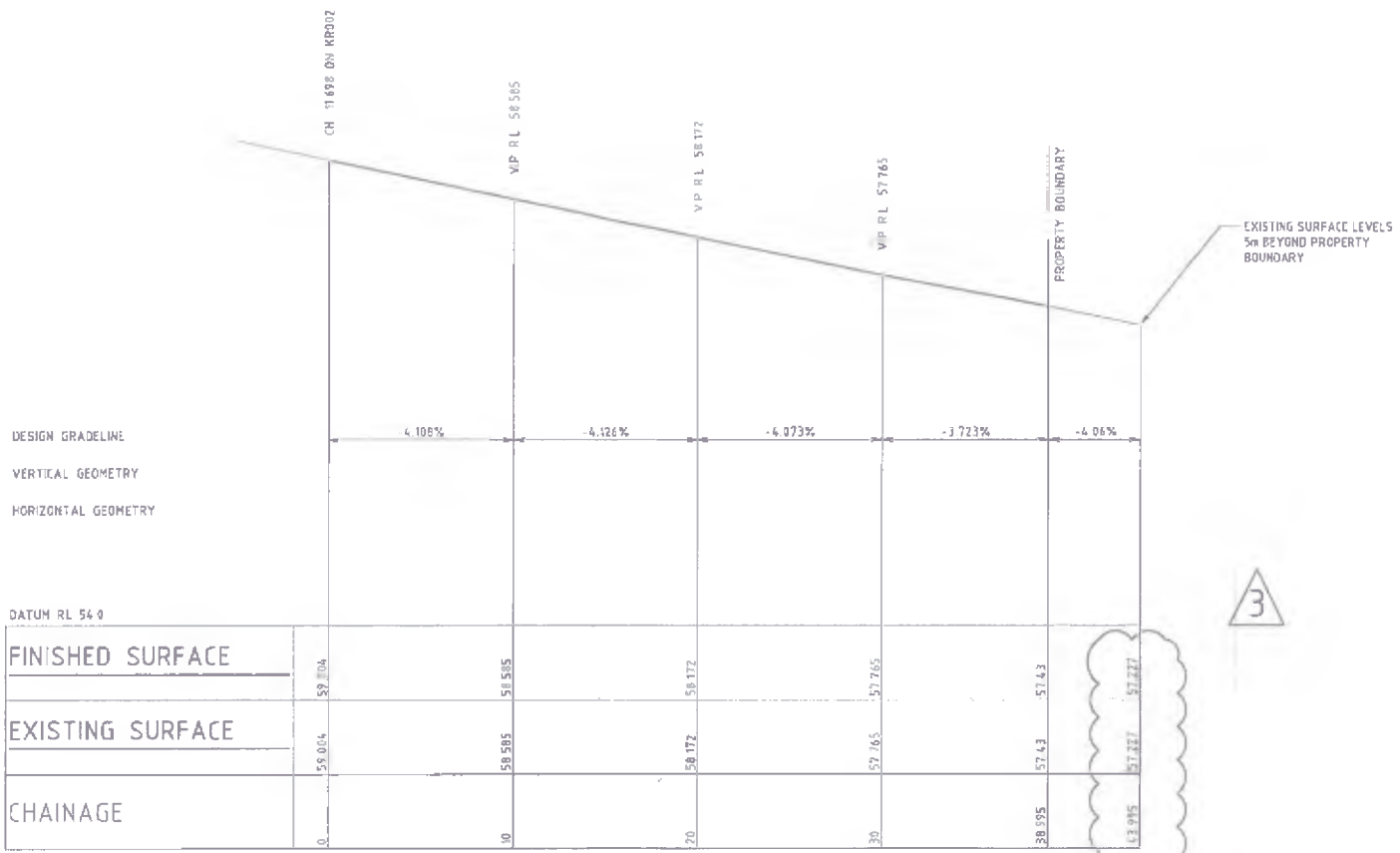
JOB NUMBER: **151073**
 DRAWING NUMBER: **C10.01** REVISION: **5**
 DRAWING SHEET SIZE: A1

VER MER A DAVES

JOB MANAGER A DAVES

DESIGNED M CONDOIS

DRAWN J DELA CRUZ



LONGITUDINAL SECTION ALONG KHARTOUM ROAD LIP LINE (KR04)

HORIZONTAL SCALE 1:200@A1
VERTICAL SCALE 1:40@A1

CITY OF RYDE
APPROVED FOR CONSTRUCTION
 Signed M. Lange
 Date 23/1/2017
 Subject to the Conditions of Development Consent
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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
2	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
3	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.02.17

CLIENT
RICHARD CROOKES CONSTRUCTIONS

ARCHITECT
OPRA ARCHITECTS

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PROJECT
 KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

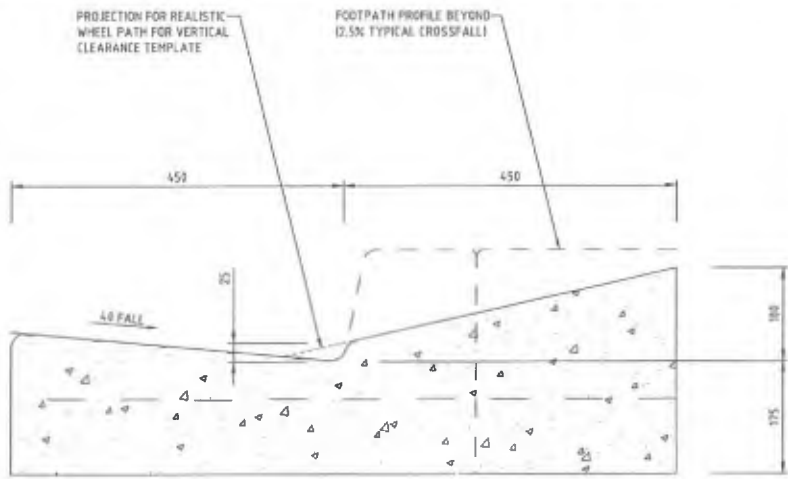
DRAWING TITLE
 CIVIL WORKS PACKAGE
 ROAD LONGITUDINAL SECTION - SHEET 2

JOB NUMBER
151073

DRAWING NUMBER
C10.05

REVISION
3

DRAWING SHEET SIZE = A1

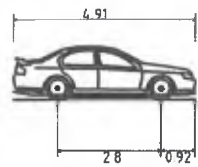


VERTICAL CLEARANCE TEMPLATE PROFILE

NOTE
THE LAYBACK PROFILE HAS BEEN MODELLED BASED ON A 'REALISTIC' TRAVEL PATH BY ELIMINATING THE GUTTER INVERT. THIS REPLICATES THE REALISTIC PATH TAKEN BY THE B85 VEHICLE

6

CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed *Alange*
Date *23/1/2017*
Subject to the Conditions of Development Consent
LDA 2013/106



B85 Ground Clearance (2004)
Overall Length 4.910m
Overall Width 1.870m
Overall Body Height 1.421m
Min Body Ground Clearance 0.120m
Track Width 1.770m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 8.000m



DATUM RL 50	
DESIGN LEVEL	56.68
CHAINAGE	0.000
	5.050
	5.100
	5.150
	10.000
	15.000
	19.470

DRIVEWAY LONGITUDINAL SECTION

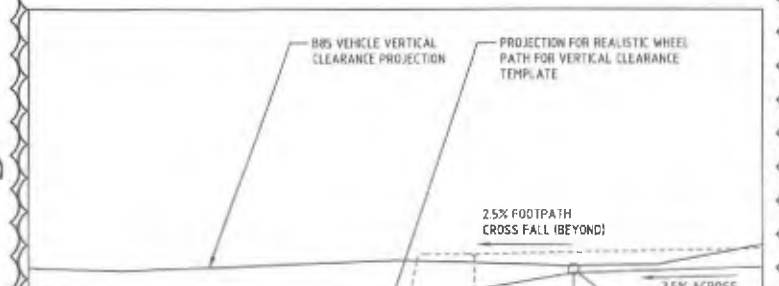
SECTION 1
SCALE 1:100
CL 81



DATUM RL 50	
DESIGN LEVEL	56.35
CHAINAGE	0.000
	5.050
	5.100
	5.150
	10.000
	15.000
	19.470

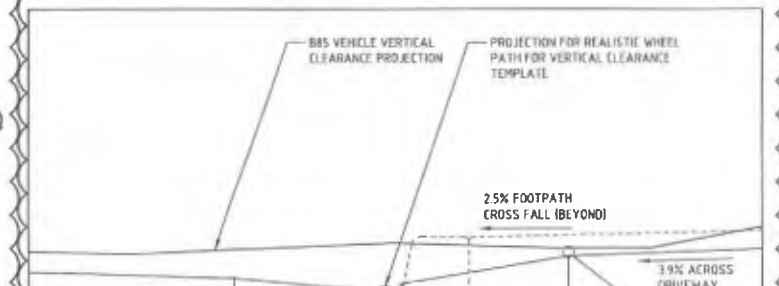
DRIVEWAY LONGITUDINAL SECTION

SECTION 2
SCALE 1:100
CL 81



INSET A

6



INSET B

6

AMENDED PLANS
13 JAN 2017

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
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4	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.02.16
5	RE-ISSUED FOR APPROVAL	UM	MR	AD	16.12.16
6	RE-ISSUED FOR APPROVAL	MC	MR	AD	12.01.17

CLIENT
RICHARD CROOKES CONSTRUCTIONS

ARCHITECT
OPRA ARCHITECTS

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Sydney
Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 084 433 100

PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
CIVIL WORKS PACKAGE
DRIVEWAY LONGSECTION - SHEET 1

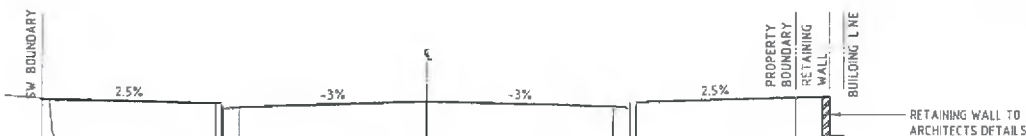
JOB NUMBER
151073
DRAWING NUMBER
C10.21
REVISION
6
DRAWING SHEET SIZE * A1

DRAWN: J. DELA CRUZ DESIGNED: M. CONDOS JOB MANAGER: A. DAVIES VERIFIER: A. DAVIES

Centreline Data
X = 1315.156
Y = 926.166
Z = 59.252

DATUM RL 57.0

FINISHED SURFACE	-10.400	59.318	5.680	57.876	59.210	5.530	57.871	59.210	5.530	57.870	59.050	5.680	57.854	59.100	0.000	57.795	59.252	10.000	57.532	59.318	11.290	58.300	
EXISTING SURFACE	-10.400	59.357																					
OFFSET	-10.400																						

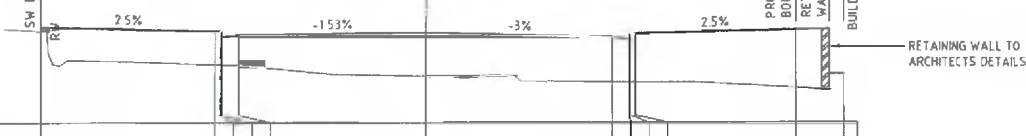


CHAINAGE 22.953

Centreline Data
X = 1317.421
Y = 924.271
Z = 59.424

DATUM RL 57.0

FINISHED SURFACE	-10.400	59.466	5.680	58.558	59.457	5.530	58.552	59.457	5.530	58.551	59.207	5.680	58.536	59.347	0.000	58.246	59.424	10.000	57.938	59.466	11.290	58.300	
EXISTING SURFACE	-10.400	59.446																					
OFFSET	-10.400																						

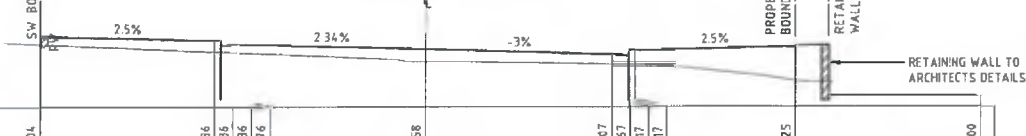


CHAINAGE 20.000

Centreline Data
X = 1321.867
Y = 920.552
Z = 59.558

DATUM RL 58.0

FINISHED SURFACE	-10.400	59.804	5.680	59.445	59.766	5.530	59.118	59.167	5.530	59.117	59.517	5.680	59.113	59.517	0.000	59.217	59.558	10.000	58.696	59.804	15.000	58.300	
EXISTING SURFACE	-10.400	59.681																					
OFFSET	-10.400																						

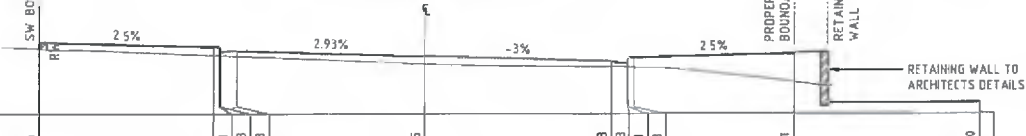


CHAINAGE 14.203

Centreline Data
X = 1322.548
Y = 919.983
Z = 59.555

DATUM RL 58.0

FINISHED SURFACE	-10.400	59.748	5.680	59.555	59.813	5.530	59.245	59.363	5.530	59.245	59.513	5.680	59.241	59.513	0.000	59.335	59.555	10.000	58.845	59.748	15.000	58.300	
EXISTING SURFACE	-10.400	59.748																					
OFFSET	-10.400																						

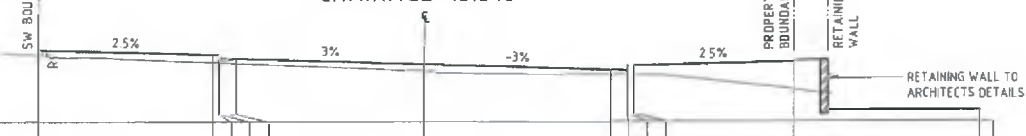


CHAINAGE 13.316

Centreline Data
X = 1322.629
Y = 919.915
Z = 59.554

DATUM RL 58.0

FINISHED SURFACE	-10.400	59.914	5.680	59.811	59.816	5.530	59.261	59.310	5.530	59.261	59.510	5.680	59.252	59.510	0.000	59.346	59.554	10.000	58.945	59.914	15.000	58.300	
EXISTING SURFACE	-10.400	59.761																					
OFFSET	-10.400																						

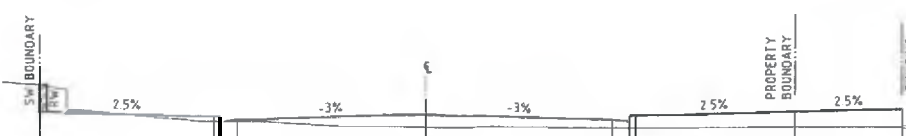


CHAINAGE 13.211 REFER TO C11.01 FOR KERB RETURN DESIGN LEVELS

Centreline Data
X = 1250.679
Y = 946.640
Z = 57.378

DATUM RL 58.0

FINISHED SURFACE	-10.400	58.174	5.680	57.718	57.337	5.530	57.716	57.337	5.530	57.716	57.187	5.680	57.711	57.227	0.000	57.838	57.378	10.000	57.021	57.445	12.894	57.030	57.517
EXISTING SURFACE	-10.400	58.174																					
OFFSET	-10.400																						

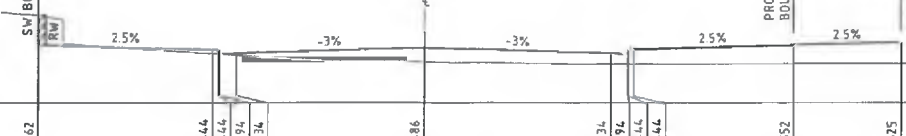


CHAINAGE 54.864

Centreline Data
X = 1294.410
Y = 943.519
Z = 57.486

DATUM RL 56.0

FINISHED SURFACE	-10.400	58.354	5.680	57.320	57.444	5.530	57.310	57.444	5.530	57.308	57.234	5.680	57.280	57.334	0.000	57.103	57.486	10.000	57.047	57.552	12.894	57.055	57.625
EXISTING SURFACE	-10.400	58.354																					
OFFSET	-10.400																						

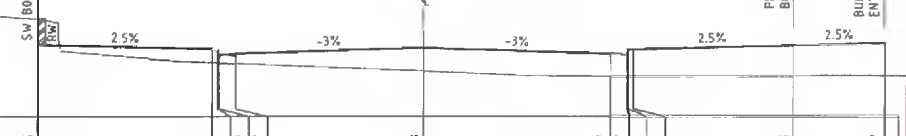


CHAINAGE 50.000

Centreline Data
X = 1299.883
Y = 938.941
Z = 57.858

DATUM RL 56.0

FINISHED SURFACE	-10.400	58.619	5.680	57.454	57.817	5.530	57.448	57.817	5.530	57.447	57.667	5.680	57.428	57.707	0.000	57.217	57.858	10.000	57.086	57.925	12.414	57.092	57.987
EXISTING SURFACE	-10.400	58.619																					
OFFSET	-10.400																						

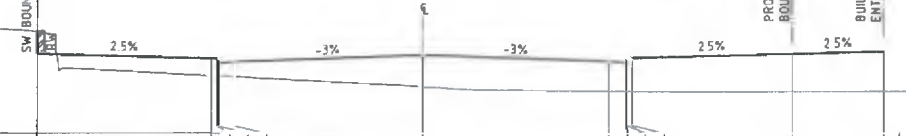


CHAINAGE 42.864

Centreline Data
X = 1302.080
Y = 937.103
Z = 58.059

DATUM RL 56.0

FINISHED SURFACE	-10.400	58.725	5.680	57.533	58.011	5.530	57.525	58.011	5.530	57.524	57.867	5.680	57.499	57.907	0.000	57.226	58.059	10.000	57.111	58.175	12.412	57.118	58.107
EXISTING SURFACE	-10.400	58.725																					
OFFSET	-10.400																						

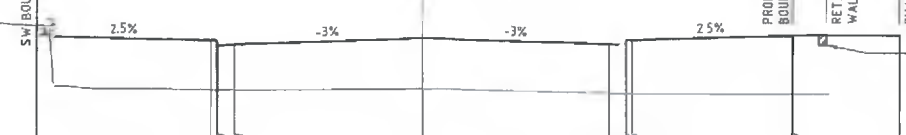


CHAINAGE 40.000

Centreline Data
X = 1309.751
Y = 930.687
Z = 58.759

DATUM RL 56.0

FINISHED SURFACE	-10.400	59.096	5.680	57.883	58.717	5.530	57.882	58.717	5.530	57.876	58.567	5.680	57.877	58.607	0.000	57.318	58.759	10.000	57.261	58.825	12.970	57.261	58.826
EXISTING SURFACE	-10.400	59.096																					
OFFSET	-10.400																						



CHAINAGE 30.000

CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed: *Chloe*
Date: 23/1/2017
Subject to the Conditions of Development Consent
LDA 2013/106

AMENDED PLANS
13 JAN 2017

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
3	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
4	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
5	RE-ISSUED FOR APPROVAL	UM	MR	AD	07.12.16
6	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.16
7	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17

CLIENT: **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT: **OPRA ARCHITECTS**

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SCALE 1:100 @ A1

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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT: **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

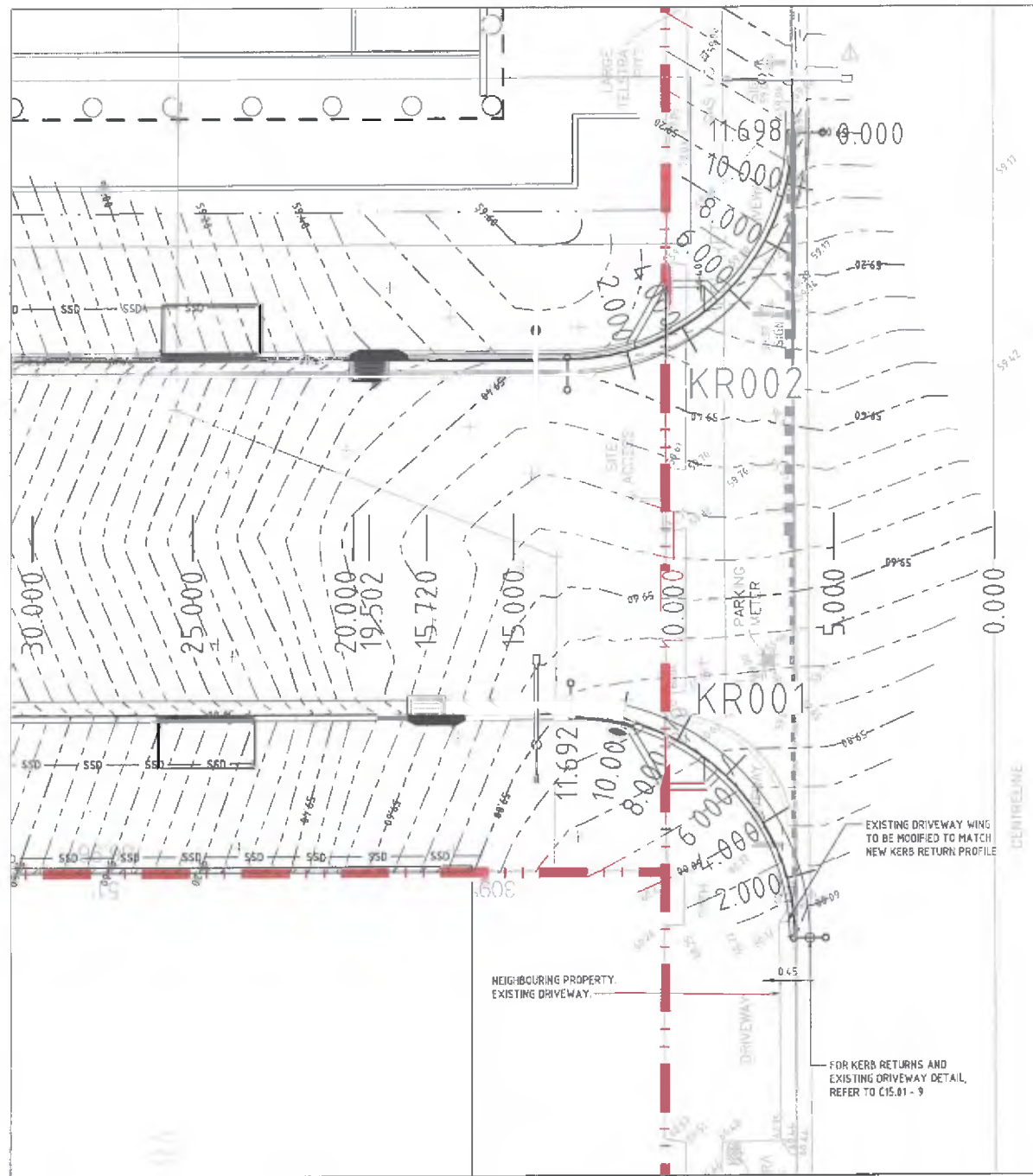
DRAWING TITLE: **CIVIL WORKS PACKAGE ROAD 001 CROSS SECTIONS - SHEET 1**

JOB NUMBER: **151073**

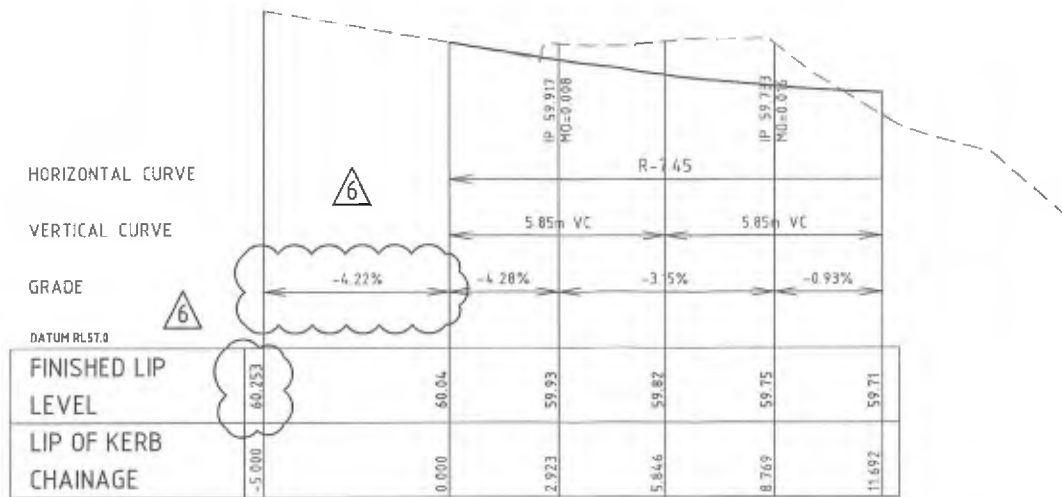
DRAWING NUMBER: **C11.01** REVISION: **7**

DRAWING SHEET SIZE: A1

[Handwritten signature]



PLAN
1:100



SCALE 1:100 HOR - 1:25 VER
LONGITUDINAL SECTION ALONG KR001

C1 RD K->KR001 HORIZONTAL IPS							
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	RADIUS	A.LENGTH	DEFL.ANGLE
IP 1	0.000	1320.330	905.555	60.042			
IP 2	5.846	1325.095	911.268	59.825	-7.450	11.692	89°55'20.36"
IP 3	11.692	1319.389	916.047	59.786			

CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed *[Signature]*
Date 23/1/2017
Subject to the Conditions of Development Consent

IDA 2013/106



SCALE 1:100 HOR - 1:25 VER
LONGITUDINAL SECTION ALONG KR002

C1 RD K->KR002 HORIZONTAL IPS							
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	RADIUS	A.LENGTH	DEFL.ANGLE
IP 1	0.000	1325.815	923.834	59.403			
IP 2	5.845	1331.526	919.057	59.251	-7.450	11.698	89°58'05.57"
IP 3	11.698	1336.306	924.166	59.902			

AMENDED PLANS
13 JAN 17

NOT FOR CONSTRUCTION



REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.09.16
3	RE-ISSUED FOR APPROVAL	JO	AD	MC	16.09.16
4	RE-ISSUED FOR APPROVAL	UM	AD	MC	11.10.16
5	RE-ISSUED FOR APPROVAL	UM	HR	AD	02.02.16
6	RE-ISSUED FOR APPROVAL	AM	HR	AD	12.01.17

CLIENT
RICHARD CROOKES CONSTRUCTIONS

ARCHITECT
OPRA ARCHITECTS

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SCALE 1:200 @ A1

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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

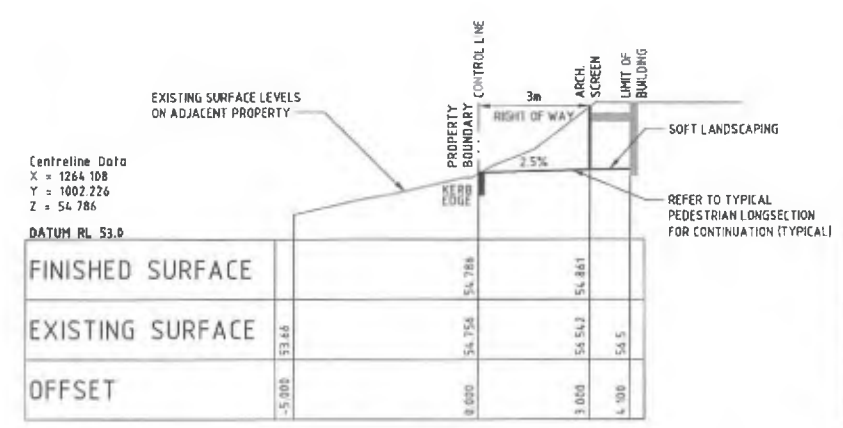
DRAWING TITLE
**CIVIL WORKS PACKAGE
KERB RETURN PROFILES**

JOB NUMBER
151073
DRAWING NUMBER
C14.01
REVISION
6
DRAWING SHEET SIZE - A1

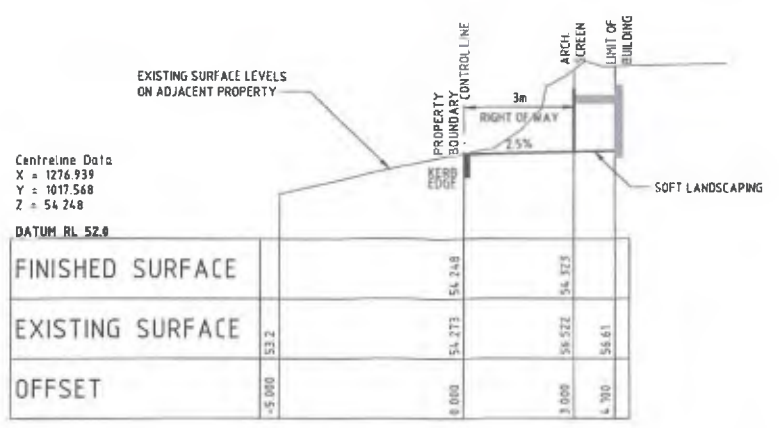
[Handwritten signature]

GENERAL NOTES:

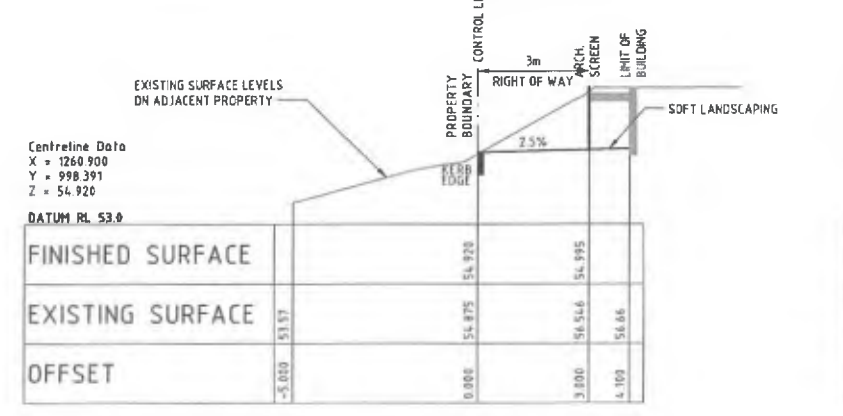
1 EXISTING SURFACE LEVELS FROM SURVEY PERFORMED BY 'GEOSURV SURVEYORS'



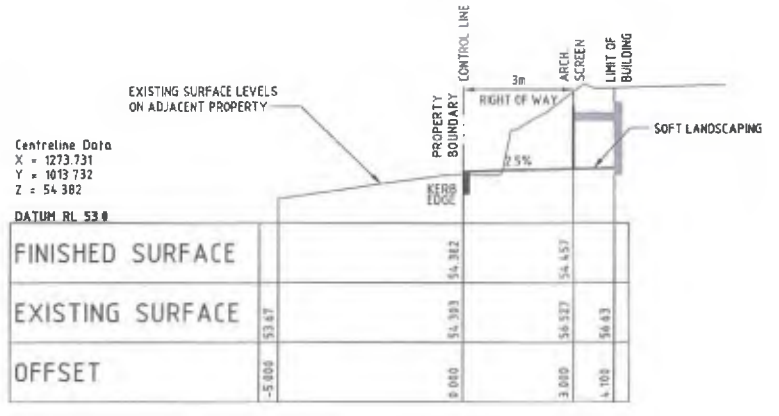
CHAINAGE 20.000



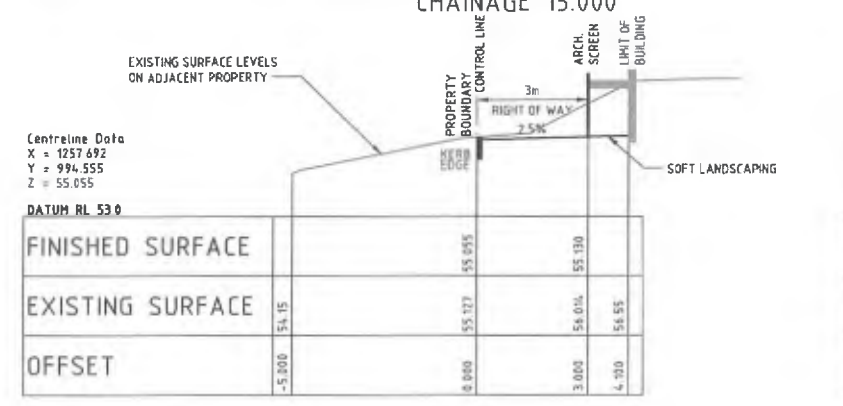
CHAINAGE 40.000



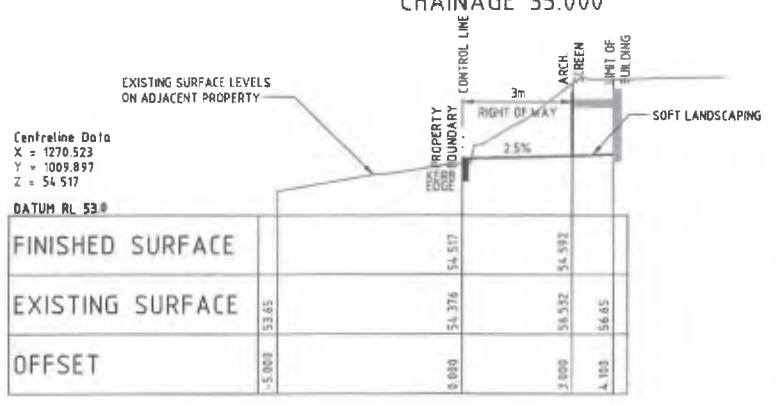
CHAINAGE 15.000



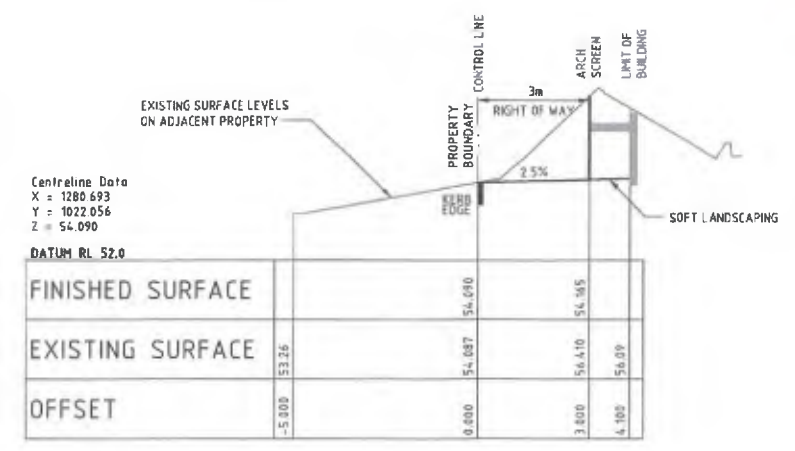
CHAINAGE 35.000



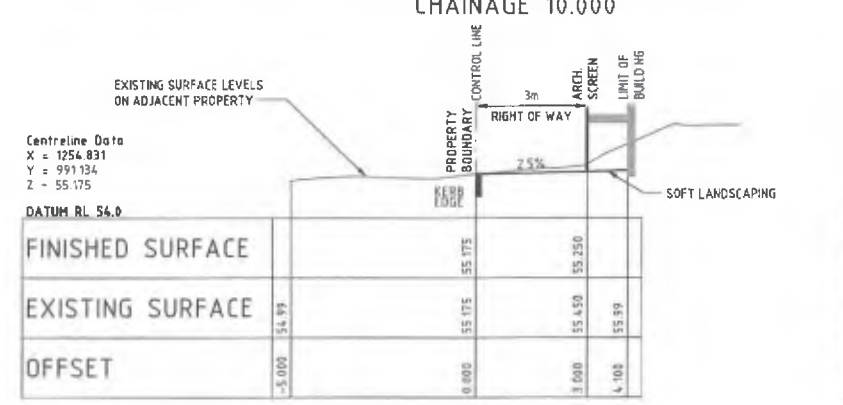
CHAINAGE 53.0



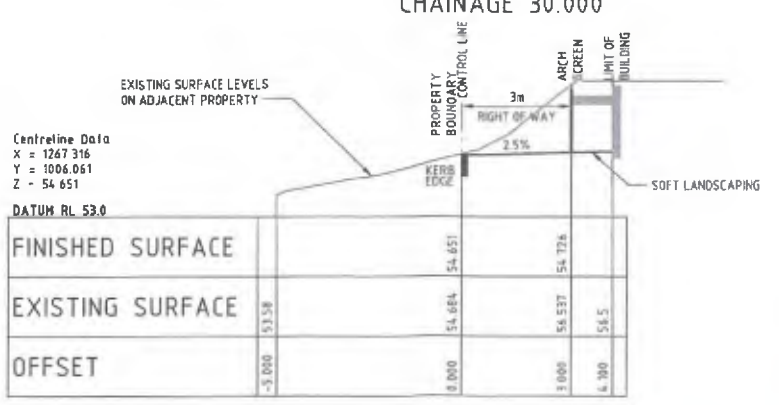
CHAINAGE 30.000



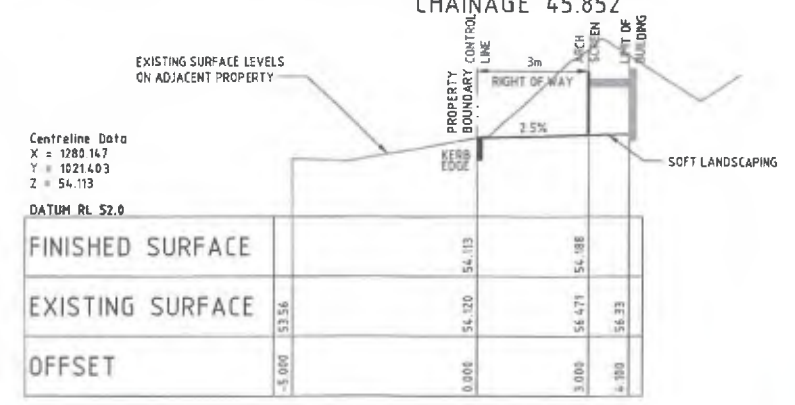
CHAINAGE 52.0



CHAINAGE 10.000



CHAINAGE 25.000



CHAINAGE 45.852

CITY OF RYDE
APPROVED FOR CONSTRUCTION

Signed _____
Date 22/1/2017
Subject to the Conditions of Development Consent
10A 2013/106

AMENDED PLANS
13 JAN 2017

NOT FOR CONSTRUCTION

VERFER: A DAVES
JOB MANAGER: A DAVES
DESIGNED: M CHIODS
DRAWN: J DELA CRUZ

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
3	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
4	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.02.16
5	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.16
6	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17

RICHARD CROOKES CONSTRUCTIONS

OPRA ARCHITECTS

SCALE 1:100 @ A1

NORTHROP
Sydney
Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
CIVIL WORKS PACKAGE PEDESTRIAN LINK CROSS SECTIONS

JOB NUMBER
151073

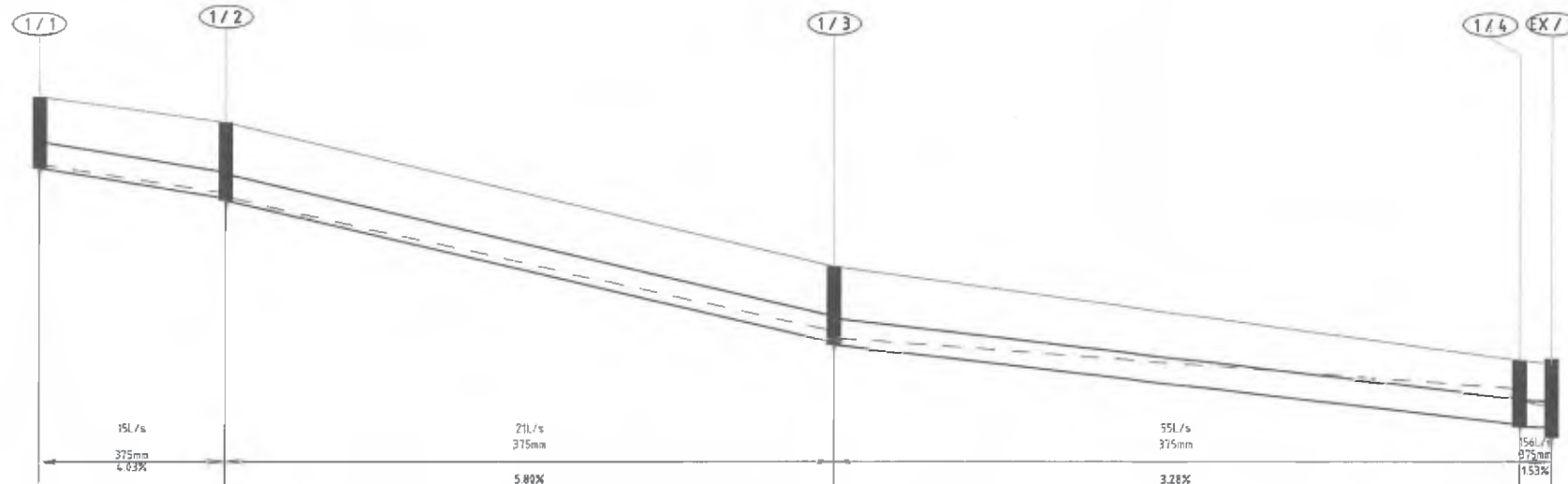
DRAWING NUMBER
C12.11

REVISION
6

DRAWING SHEET SIZE: A1

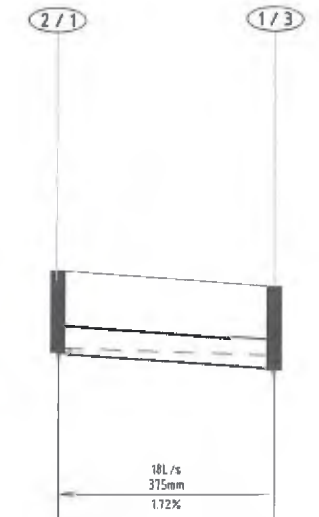


DRAWN: J. DELA CRUZ DESIGNED: H. GONDOS VERIFIED: A. DAVIES



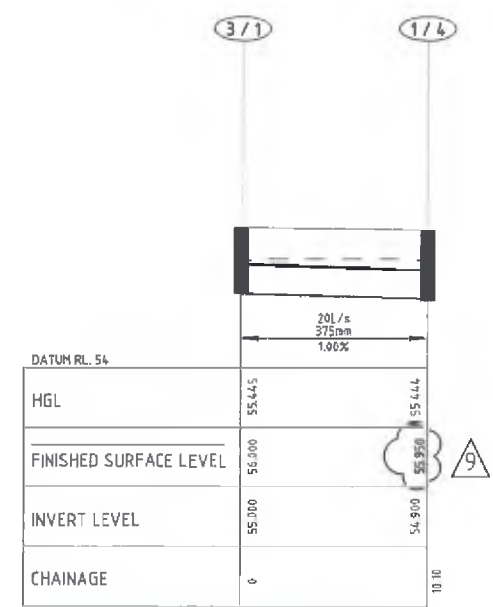
DATUM RL 54	
HGL	58.648 58.240 58.106 56.264 56.108 55.444 55.130 55.276
FINISHED SURFACE LEVEL	59.470 59.254 57.185 55.951 55.180 55.430
INVERT LEVEL	58.600 58.055 56.100 54.970 54.870 54.830
CHAINAGE	12.45 23.25 58.35 94.20 94.630

CITY OF RYDE
 APPROVED FOR CONSTRUCTION
 Signed *[Signature]*
 Date 23/1/2017
 Subject to the Conditions of Development Consent
 LDA 2013/106

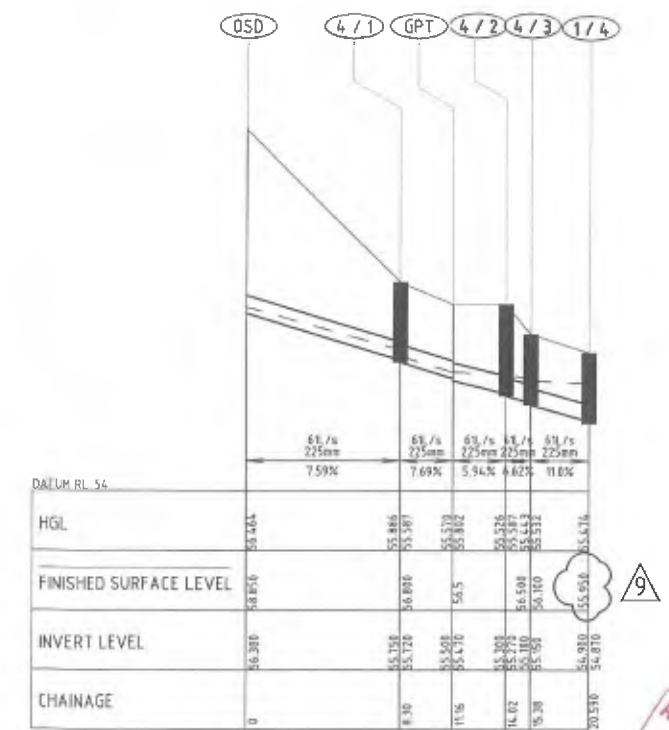


DATUM RL 54	
HGL	56.303 56.264
FINISHED SURFACE LEVEL	57.000 57.185
INVERT LEVEL	56.300 56.000
CHAINAGE	0 11.66

DRAINAGE STRUCTURE SCHEDULE					
STRUCTURE ID (STRUCTURE-LINE)	STRUCTURE DESCRIPTION	GRATE & FRAME SIZE	LINTEL TYPE & SIZE	ACCESS COVER & CLASS	REMARKS
LINE A					
1/1	NEW KERB INLET PIT	450 x 900	1.0m CONCRETE LINTEL	GALV. HEEL SAFE COVER 'D'	
1/2	NEW KERB INLET PIT	450 x 900	1.0m CONCRETE LINTEL	GALV. HEEL SAFE COVER 'D'	
1/3	NEW KERB INLET PIT	450 x 900	1.0m CONCRETE LINTEL	GALV. HEEL SAFE COVER 'D'	
1/4	NEW KERB INLET PIT	450 x 900	2.4m CONCRETE LINTEL 'SAG'	GALV. HEEL SAFE COVER 'D'	
EX/2	EXISTING JUNCTION PIT				CONTRACTOR TO CONFIRM RL AND IL ON SITE PRIOR TO CONSTRUCTION
2/1	NEW KERB INLET PIT	450 x 900	1.0m CONCRETE LINTEL	GALV. HEEL SAFE COVER 'D'	
3/1	NEW KERB INLET PIT	450 x 900	2.4m CONCRETE LINTEL 'SAG'	GALV. HEEL SAFE COVER 'D'	
4/1	NEW JUNCTION PIT	600 x 900		CONCRETE INFILL COVER 'B'	
4/2	NEW JUNCTION PIT	600 x 900		CONCRETE INFILL COVER 'B'	
4/3	NEW JUNCTION PIT	600 x 900		CONCRETE INFILL COVER 'B'	



DATUM RL 54	
HGL	55.445 55.444
FINISHED SURFACE LEVEL	56.900 56.950
INVERT LEVEL	55.300 54.900
CHAINAGE	0 11.16



DATUM RL 54	
HGL	58.444 58.885 58.587 58.570 58.376 58.587 58.444 58.532 58.474
FINISHED SURFACE LEVEL	58.950 56.800 56.800 56.500 56.000 56.000 56.100 56.950
INVERT LEVEL	56.300 55.150 55.150 54.500 54.300 54.300 54.100 54.810
CHAINAGE	0 8.30 11.56 14.02 15.38 20.330

AMENDED PLANS
 13 JAN 2017

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
4	RE-ISSUED FOR APPROVAL	AM	AD	HC	07.07.16
5	ISSUED FOR CONSTRUCTION	AM	AD	HC	14.07.16
6	RE-ISSUED FOR APPROVAL	AM	AD	HC	16.08.16
7	RE-ISSUED FOR APPROVAL	UM	AD	HC	17.10.16
8	RE-ISSUED FOR APPROVAL	UM	HR	AD	02.02.16
9	RE-ISSUED FOR APPROVAL	AM	HR	AD	12.01.17

CLIENT: **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT: **OPRA ARCHITECTS**

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SCALE 1:50 @ A1 (V)

NORTHROP Sydney

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 Email sydney@northrop.com.au ABN 81 094 433 100

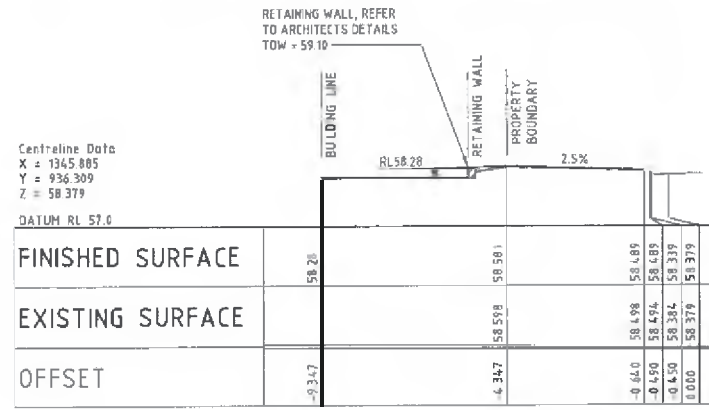
PROJECT: **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

DRAWING TITLE: **CIVIL WORKS PACKAGE STORMWATER LONGITUDINAL SECTIONS - SHEET 1**

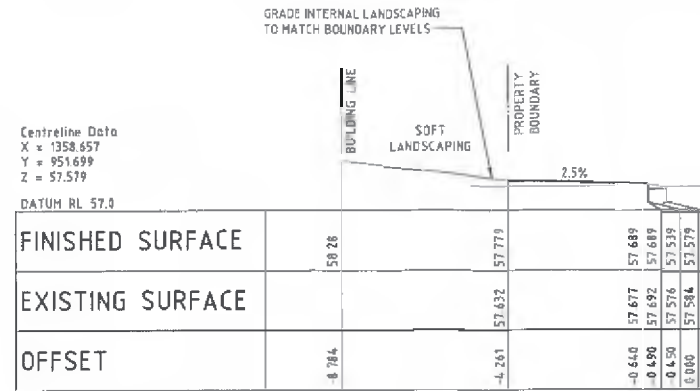
JOB NUMBER: **151073**

DRAWING NUMBER: **C13.01** REVISION: **9**

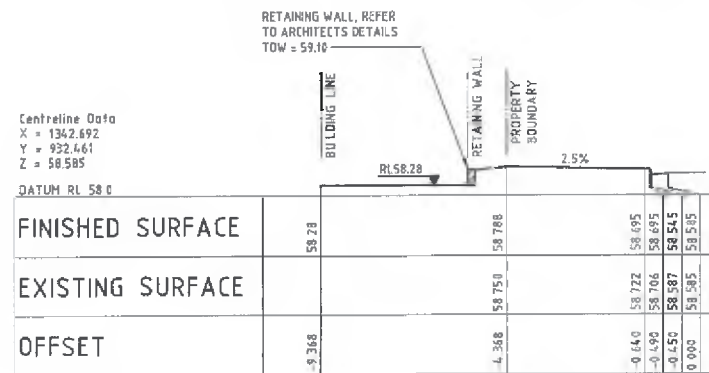
DRAWING SHEET SIZE = A1



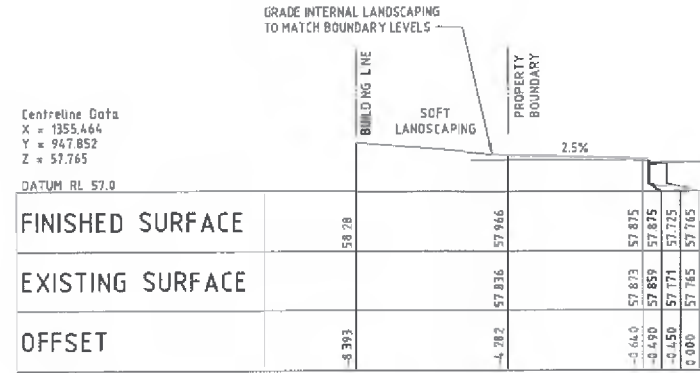
CHAINAGE 15.000



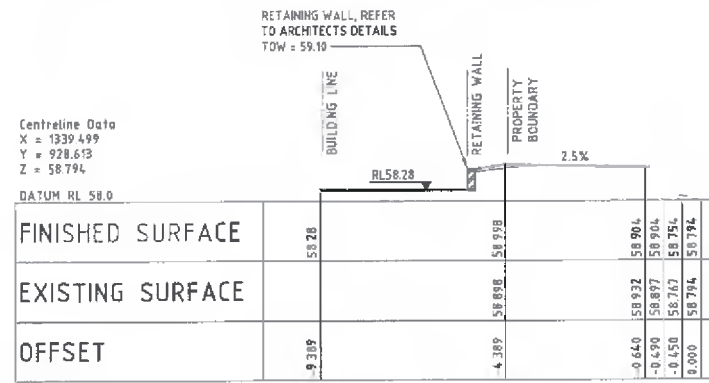
CHAINAGE 35.000



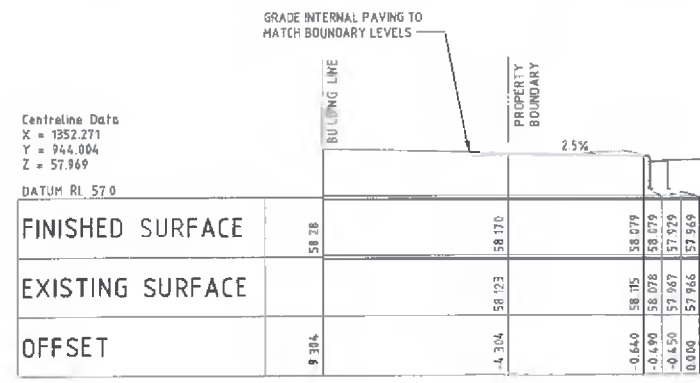
CHAINAGE 10.000



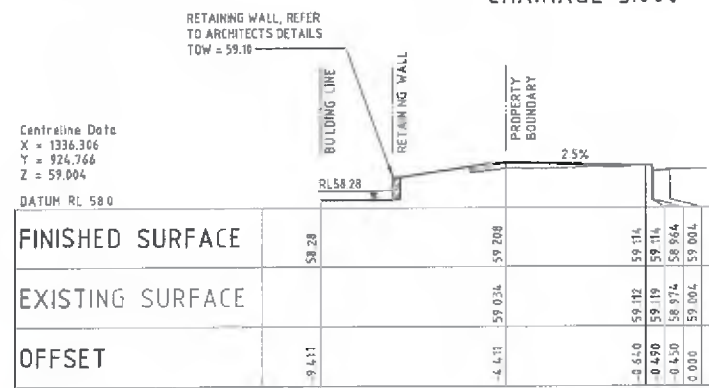
CHAINAGE 30.000



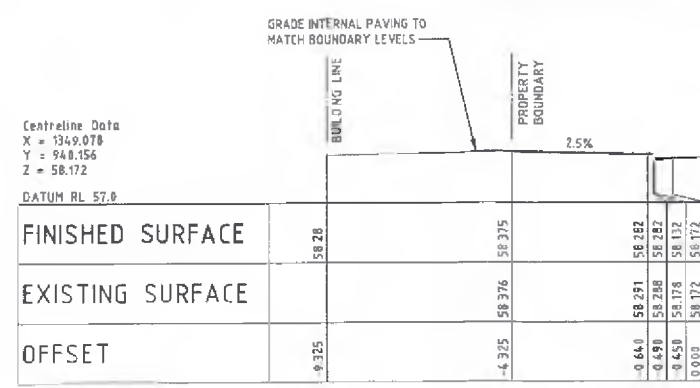
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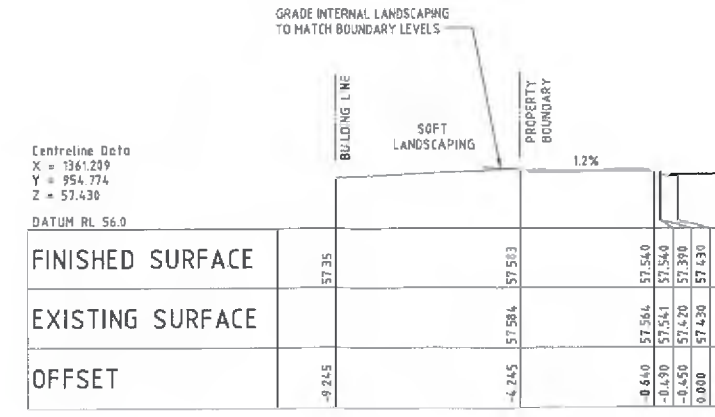
CHAINAGE 25.000



CHAINAGE 0.000



CHAINAGE 20.000



CHAINAGE 38.995

CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed *[Signature]*
Date *28/1/2017*
Subject to the Conditions of Development Consent
LOA 2013/106

AMENDED PLANS
13 JAN 2017

NOT FOR CONSTRUCTION

DRAWN J. DOLA CRUZ DESIGNED M. CONDOIS JOB MANAGER A. DAVIES VERIFIER A. DAVIES

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
2	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
3	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16
4	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.16
5	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17

CLIENT **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT **OPRA ARCHITECTS**

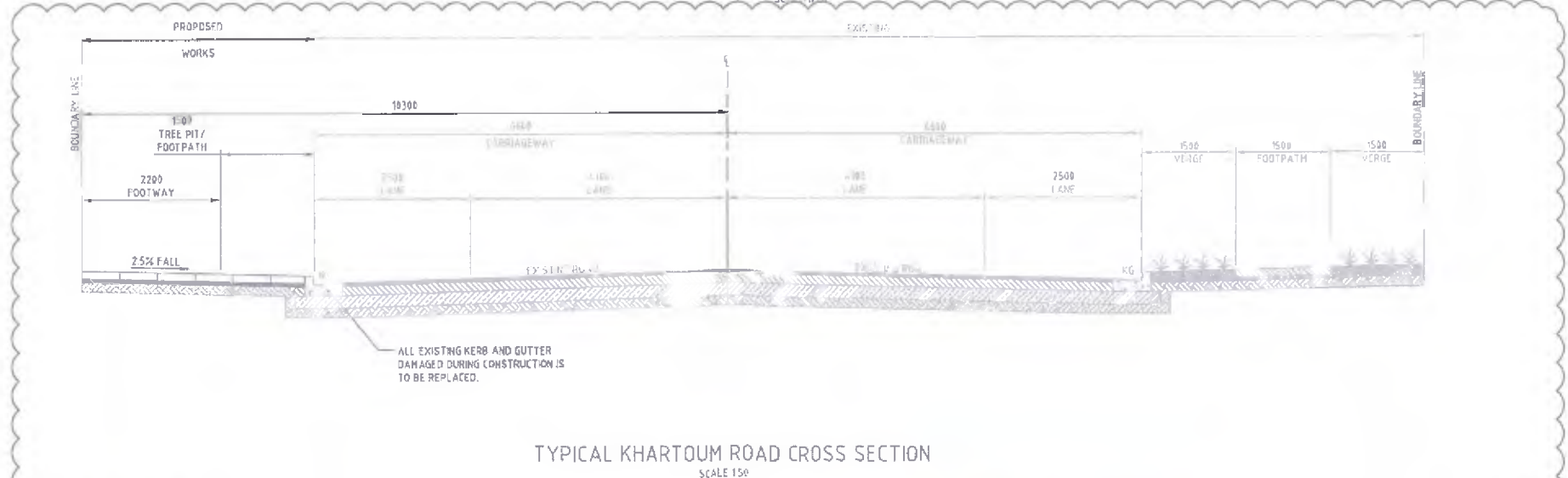
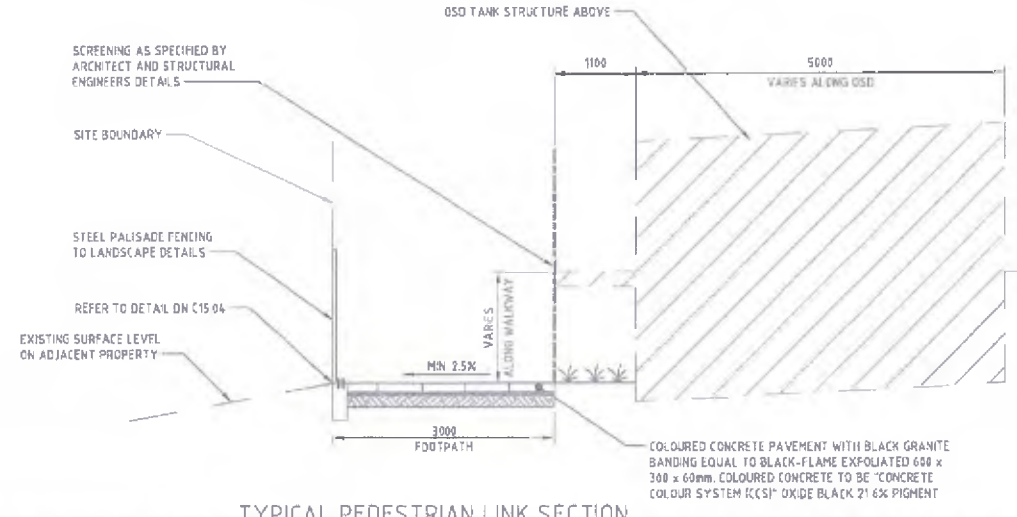
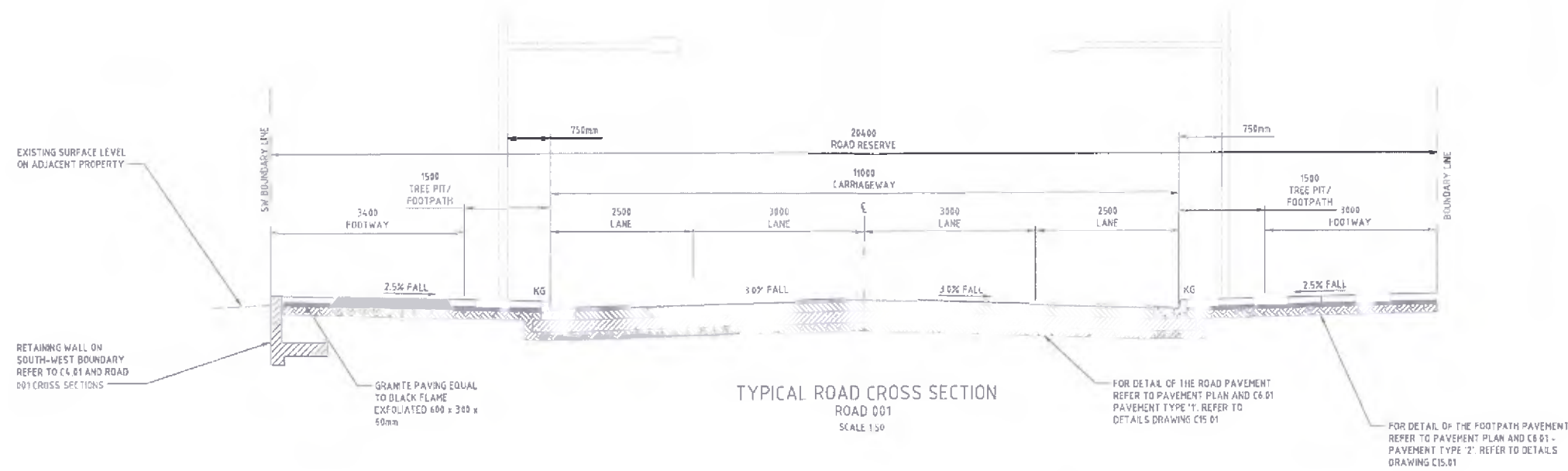
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Email sydney@northrop.com.au ABN 81 004 433 100

PROJECT **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

CIVIL WORKS PACKAGE
KHARTOUM ROAD CROSS SECTIONS

DRAWING NUMBER **151073**
REVISION **5**
DRAWING SHEET SIZE = A1



CITY OF RYDE
APPROVED FOR CONSTRUCTION

Signed *Allyson*
 Date 23/1/2017

Subject to the Conditions of Development Consent
LDA 2013/106

6

NOT FOR CONSTRUCTION

DRAWN BY J. DE J. CRUZ, CHECKED BY CONDIS, JOB MANAGER A. DAVIES, VERIFIED A. DAVIES



REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	AM	AD	MC	23.03.16
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
3	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
4	RE-ISSUED FOR APPROVAL	UN	AD	ML	17.10.16
5	RE-ISSUED FOR APPROVAL	UN	MR	AD	02.02.17
6	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.16

RICHARD CROOKES CONSTRUCTIONS

OPRA ARCHITECTS

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PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
CIVIL WORKS PACKAGE
 TYPICAL ROAD CROSS SECTIONS

JOB NUMBER
151073

DRAWING NUMBER
C12.01

REVISION
6

DRAWING SHEET SIZE: A1

Centreline Data
X = 1271.399
Y = 962.767
Z = 56.860

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	56.936				56.860		56.994
EXISTING SURFACE		56.994	56.818		56.718		56.994
OFFSET	-10.400						

CHAINAGE 80.000

Centreline Data
X = 1271.918
Y = 962.333
Z = 56.894

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	56.970				56.894		57.028
EXISTING SURFACE		56.916	56.852		56.742		57.028
OFFSET	-10.400						

CHAINAGE 79.323

Centreline Data
X = 1279.369
Y = 956.351
Z = 57.215

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	57.291				57.215		58.030
EXISTING SURFACE		57.228	57.173		57.063		58.030
OFFSET	-10.400						

CHAINAGE 70.000

Centreline Data
X = 1281.123
Y = 954.433
Z = 57.254

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	57.332				57.254		58.033
EXISTING SURFACE		57.281	57.212		57.102		58.033
OFFSET	-10.400						

CHAINAGE 67.323

Centreline Data
X = 1286.739
Y = 949.935
Z = 57.327

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	57.403				57.327		57.441
EXISTING SURFACE		57.319	57.285		57.195		57.441
OFFSET	-10.400						

CHAINAGE 60.000

Centreline Data
X = 1259.518
Y = 972.705
Z = 56.085

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	56.082				56.085		56.994
EXISTING SURFACE		56.771	56.044		56.044		56.994
OFFSET	-10.400						

CHAINAGE 95.489

Centreline Data
X = 1263.204
Y = 969.622
Z = 56.325

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	56.402				56.325		56.402
EXISTING SURFACE		57.559	56.284		56.174		56.402
OFFSET	-10.400						

CHAINAGE 90.683

Centreline Data
X = 1263.728
Y = 969.183
Z = 56.360

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	56.436				56.360		56.610
EXISTING SURFACE		57.531	56.318		56.188		56.610
OFFSET	-10.400						

CHAINAGE 90.000 (DRIVEWAY)

Centreline Data
X = 1265.901
Y = 967.366
Z = 56.501

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	56.518				56.501		56.720
EXISTING SURFACE		57.414	56.460		56.310		56.720
OFFSET	-10.400						

CHAINAGE 87.167 (DRIVEWAY)

Centreline Data
X = 1268.607
Y = 965.192
Z = 56.678

	SW BOUNDARY				PROPERTY BOUNDARY	RETAINING WALL	BUILDING LINE
FINISHED SURFACE	56.754				56.678		56.778
EXISTING SURFACE		57.269	56.656		56.486		56.778
OFFSET	-10.400						

CHAINAGE 83.639 (DRIVEWAY)

CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed _____
Date 23/1/2017
Subject to the Conditions of Development Consent
LDA 2013/106

AMENDED PLANS
13 JAN 2017

NOT FOR CONSTRUCTION

DESIGNED: H. CONDOS
DRAWN: J. DELA CRUZ
JOB MANAGER: A. DAVIES
VERIFIER: A. DAVIES

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.09.16
3	RE-ISSUED FOR APPROVAL	AM	AD	MC	17.10.16
4	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16
5	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.16
6	RE-ISSUED FOR APPROVAL	MC	MR	AD	12.01.17

CLIENT
RICHARD CROOKES CONSTRUCTIONS

ARCHITECT
OPRA ARCHITECTS

SCALE 1:100 @ A1

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Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

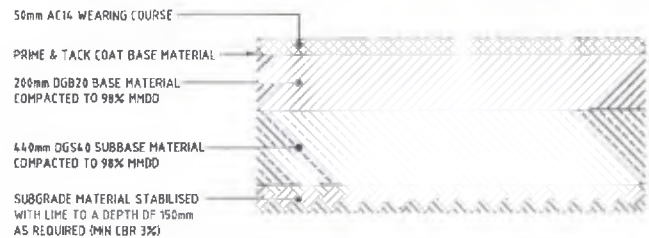
DRAWING TITLE
CIVIL WORKS PACKAGE ROAD 001 CROSS SECTIONS - SHEET 2

JOB NUMBER
151073

DRAWING NUMBER
C11.02

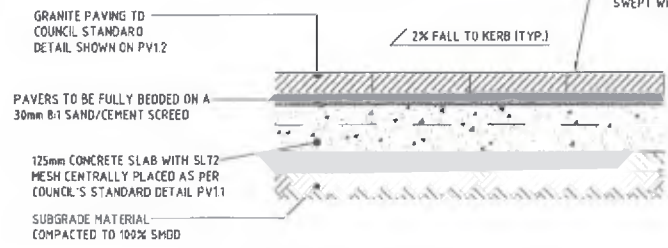
REVISION
6

DRAWING SHEET SIZE = A1



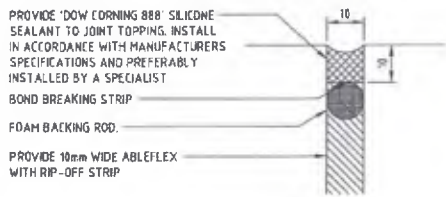
PAVEMENT TYPE '1'

MIN CBR 3% (CONTRACTOR TO CONFIRM ONSITE)
DESIGN LOADING = 1x10⁶ ESA's

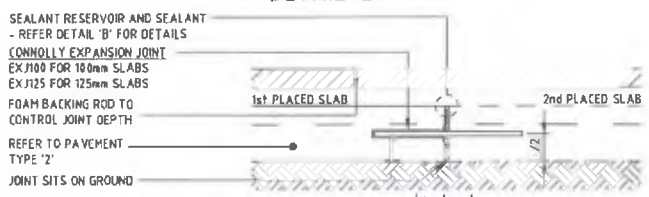


PAVEMENT TYPE '2'

CONTRACTOR TO ALLOW FOR JOINTS - REFER JOINT DETAILS
FINISH SURFACE WITH BROOM OR WOODEN FLDAT

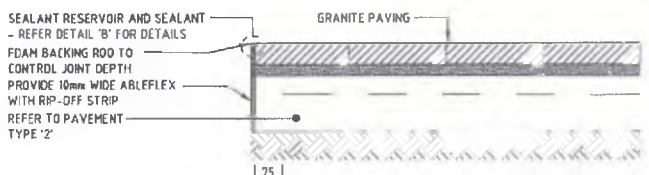


DETAIL 'B'



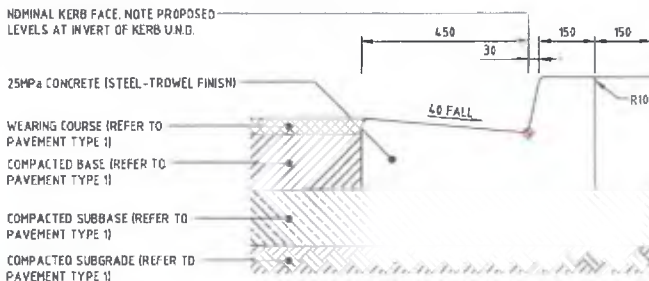
FOOTPATH EXPANSION JOINT 'EJ'

- TO ALSO BE USED AS A 'STOPWORK JOINT'
- MAXIMUM CONTINUOUS POUR NOT TO EXCEED 36m
- JOINT TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS
- REFER SPECIFICATION NOTES FOR JOINT SPACINGS (6m UMD)



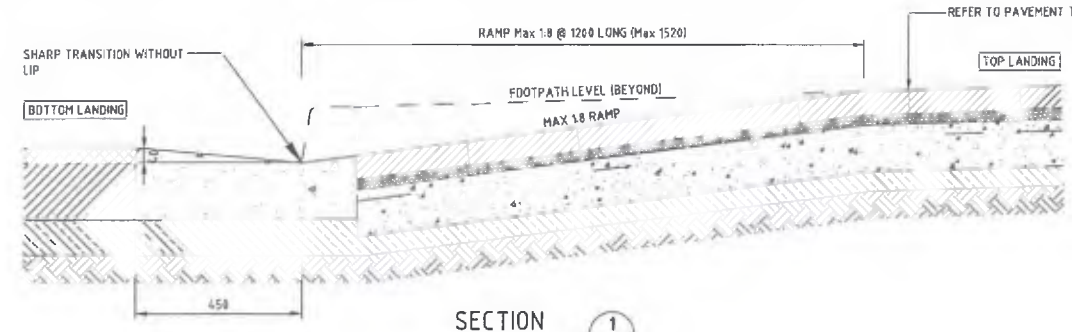
ISOLATION JOINT 'IJ'

- PROVIDE JOINT BETWEEN ALL NEW CONCRETE AND EXISTING STRUCTURES
- JOINT TO BE USED AGAINST ALL WALLS, FOOTINGS, COLUMNS, BACK OF KERB, SERVICE PITS, DRAINAGE PITS AND ALL SLAB PENETRATIONS

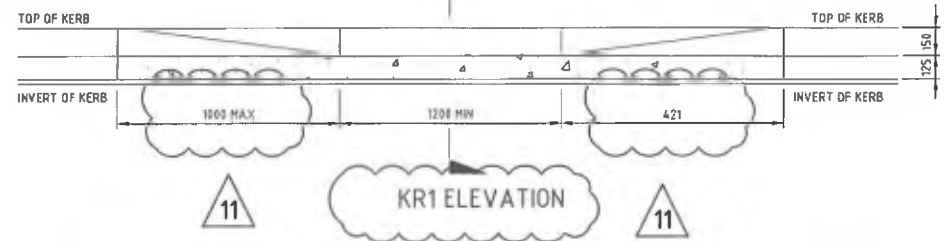


KERB & GUTTER 'KG'

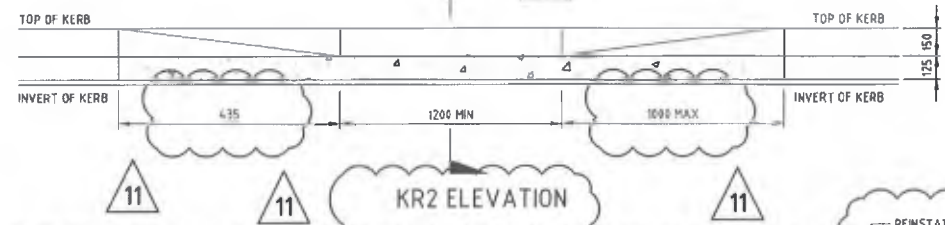
EXPANSION JOINTS @ MAX 12m CTRS / TOOL JOINTS @ MAX 3m CTRS
ALL RADII TO BE 20mm UMD.



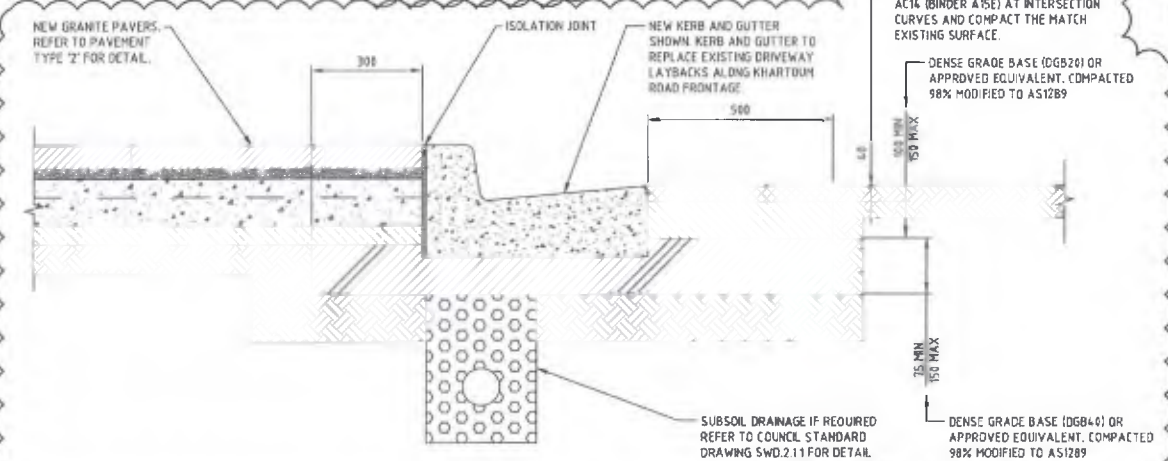
SECTION 1



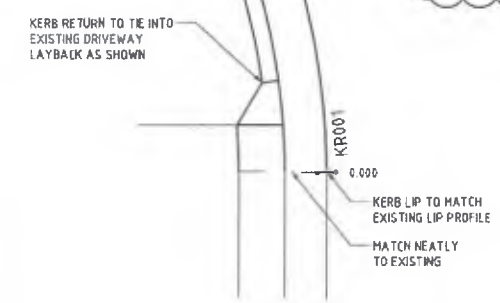
KR1 ELEVATION



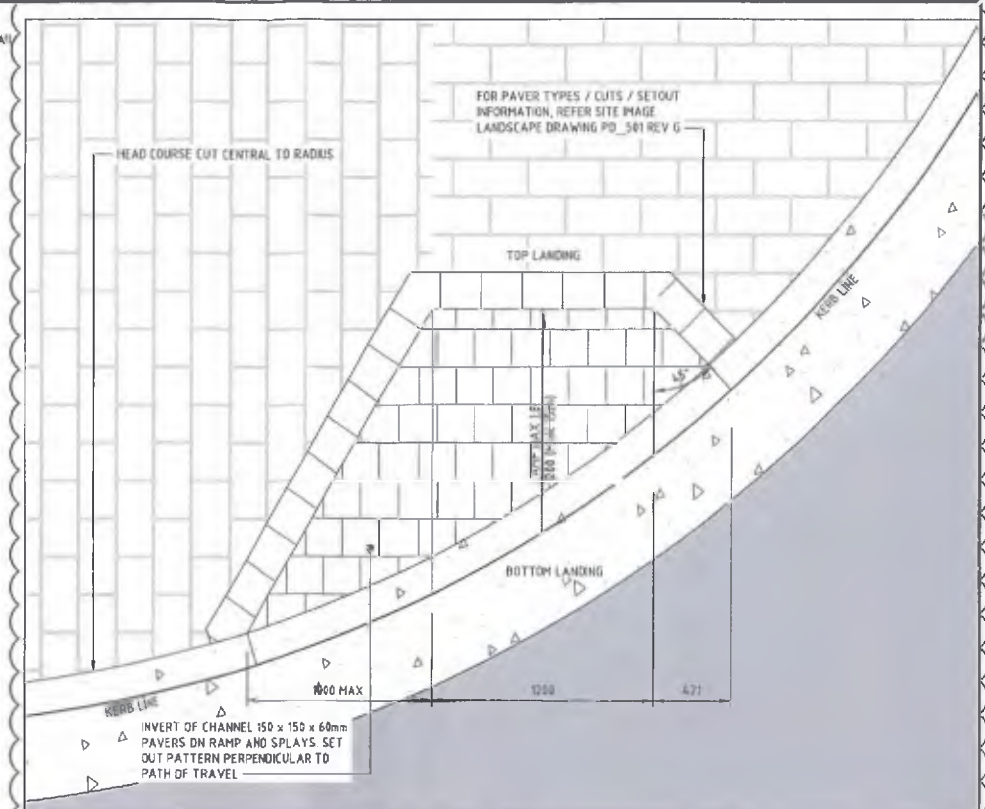
KR2 ELEVATION



PAVEMENT SUBSTRATA RESTORATION DETAIL

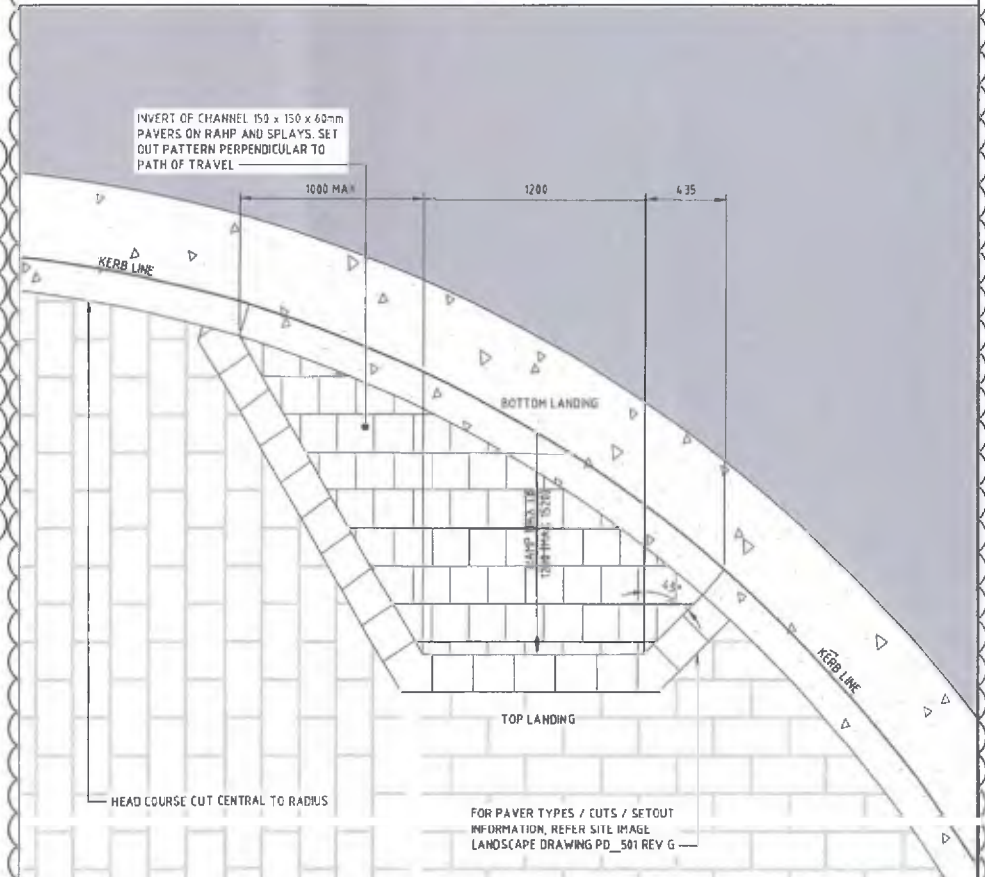


MODIFIED KERB RETURN KR001 DETAIL



PLAN KERB RAMP 'KR1'

'KR' DENOTES 12m WIDE KERB RAMP AT PEDESTRIAN CROSSING AND SIGNALS



PLAN KERB RAMP 'KR2'

'KR' DENOTES 12m WIDE KERB RAMP AT PEDESTRIAN CROSSING AND SIGNALS

CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed *[Signature]*
Date 28/1/2017
Subject to the Conditions of Development Consent
LOA 2013/106

AMENDED PLANS
13 JAN '17

NOT FOR CONSTRUCTION

DRAWN: J. DELA CRUZ, DESIGNED: M. CONDOS, VERIFIED: A. DAVIES, JOB MANAGER: A. DAVIES

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
6	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
7	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
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9	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.02.17
10	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.17
11	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17

CLIENT: **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT: **OPRA ARCHITECTS**

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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT: **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

DRAWING TITLE: **CIVIL WORKS PACKAGE**

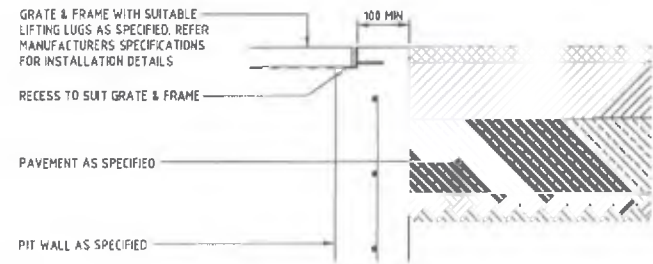
DETAILS - SHEET 1

JOB NUMBER: **151073**

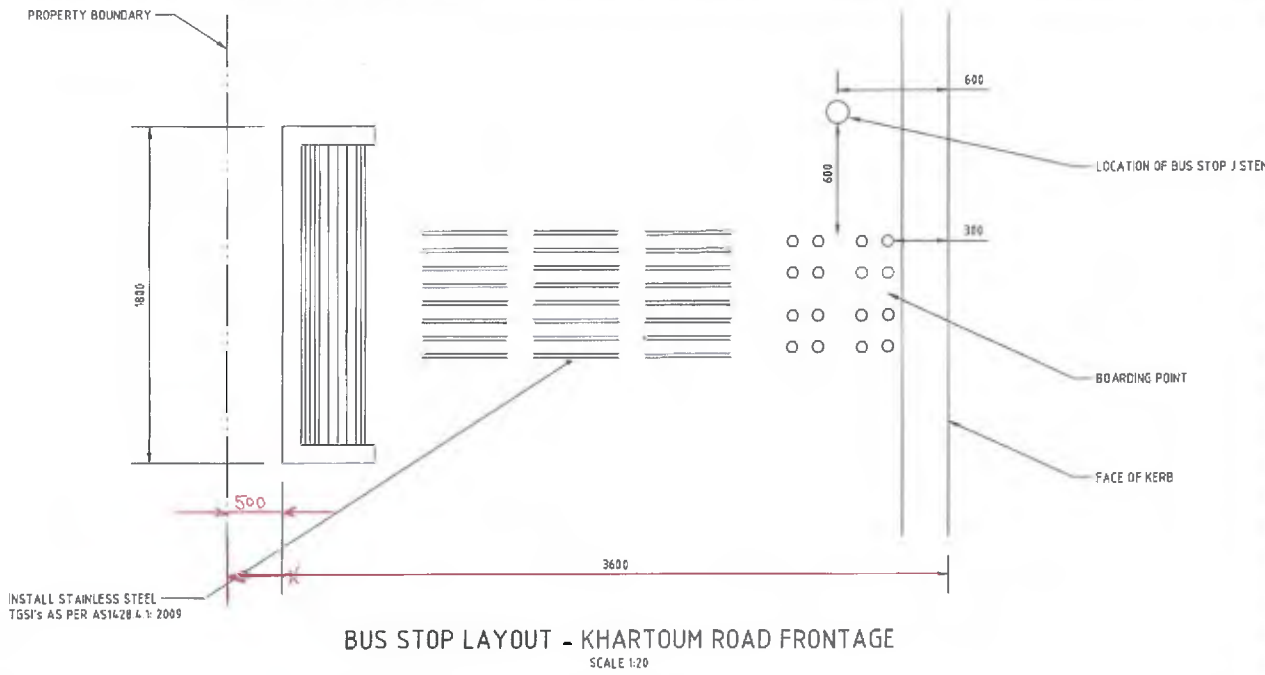
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REVISION: **11**

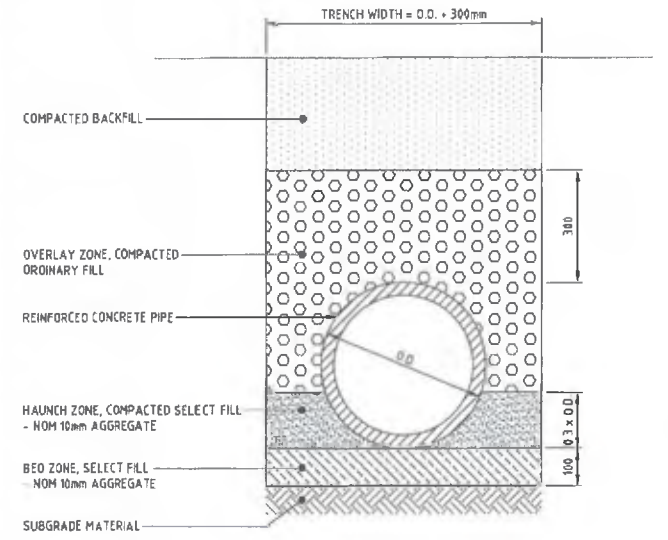
DRAWING SHEET SIZE: A1



PIT INTERFACE - DETAIL 'A'
REFER STORMWATER PIT SCHEDULE FOR GRATE DETAILS

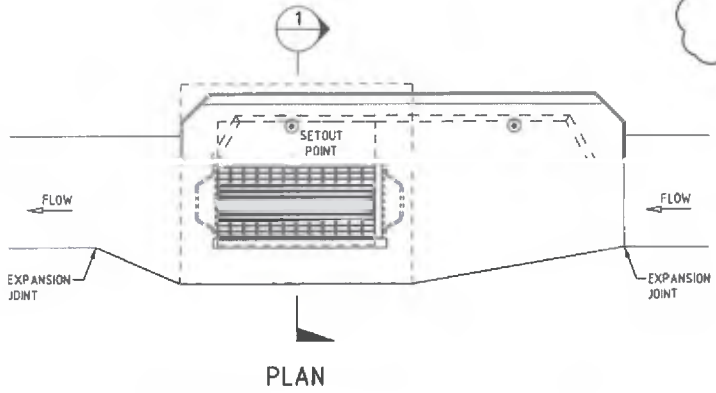


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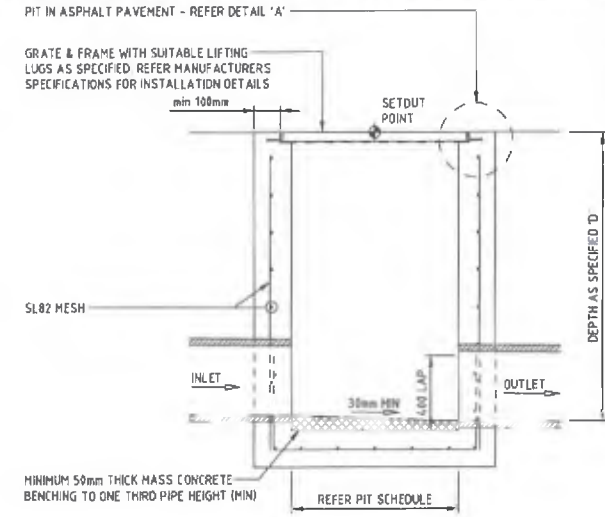


TYPICAL PIPE TRENCH - GENERAL AREAS

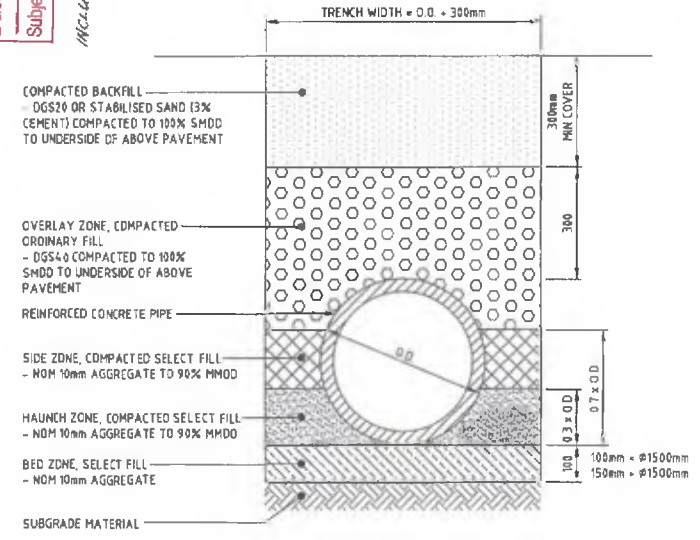
- TRENCH WIDTH MAY NEED TO BE INCREASED SUBJECT TO ACHIEVING COMPACTION. ENSURE MINIMUM 300mm CLEARANCE BETWEEN, WHEN USING MULTIPLE PIPES TO ACHIEVE ADEQUATE COMPACTION.
- MINIMUM PIPE COVER NOT UNDER ROADS TO BE 300mm U.N.D.
- THE CONTRACTOR SHALL ENSURE THAT SHORING OF TRENCHES IS INSTALLED AS REQUIRED BY STATUTORY REQUIREMENTS.
- ENSURE BACKFILLING COMPACTION MEETS THE FOLLOWING STANDARDS;
 - TRENCHES UNDER PAVED AREAS / BUILDING - 100% SMDD
 - TRENCHES NOT UNDER PAVEMENTS - 95% SMDD



FOR SAG PITS, ENSURE PIT LINTEL IS LOCATED CENTRAL TO PIT GRATE AND FRAME AND 1:10 CHUTE IS CONSTRUCTED TO BOTH SIDES OF PIT



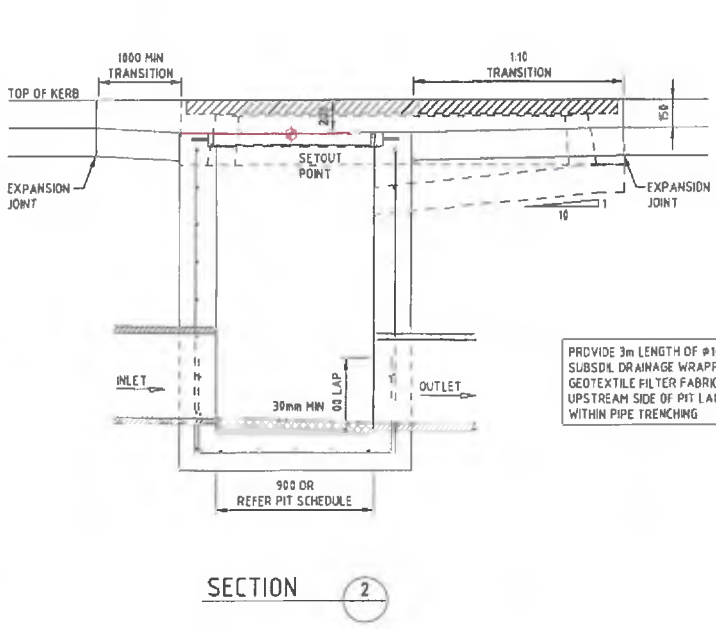
CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed: [Signature]
Date: 23/1/2017
Subject to the Conditions of Development Consent
LDA 2013/106
INCLUDING MARKINGS, H. LEEY
SHORING MARKERS



TYPICAL PIPE TRENCH - UNDER ROADS

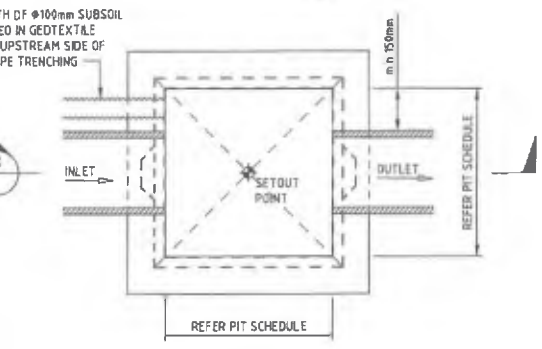
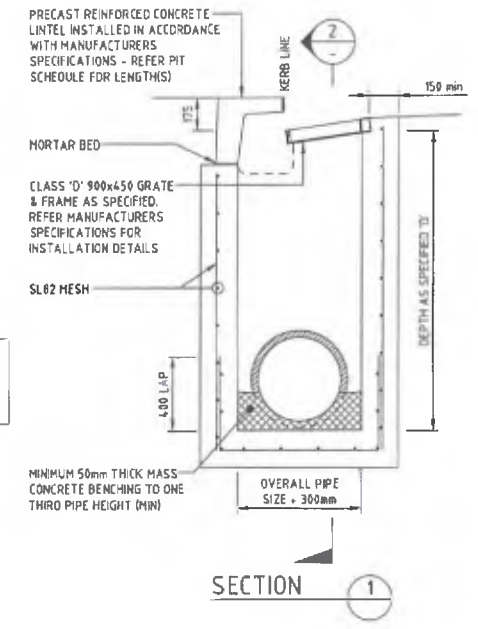
- TRENCH WIDTH MAY NEED TO BE INCREASED SUBJECT TO ACHIEVING COMPACTION. ENSURE MINIMUM 300mm CLEARANCE BETWEEN, WHEN USING MULTIPLE PIPES TO ACHIEVE ADEQUATE COMPACTION.
- MINIMUM PIPE COVER UNDER ROADS TO BE 600mm U.N.D. FOR CLASS '2' PIPES
- THE CONTRACTOR SHALL ENSURE THAT SHORING OF TRENCHES IS INSTALLED AS REQUIRED BY STATUTORY REQUIREMENTS.
- ENSURE BACKFILLING COMPACTION MEETS THE FOLLOWING STANDARDS;
 - TRENCHES UNDER PAVED AREAS / BUILDING - 100% SMDD

AMENDED PLANS
13 JAN 2017



KERB INLET PIT 'KIP'

PIT STRUCTURE TO BE 200mm THICK UNLESS SHOWN OTHERWISE. DRILL AND EPOXY PLASTIC PROPRIETARY STEP IRONS IN ACCORDANCE WITH AUSTRALIAN STANDARDS AND MANUFACTURERS SPECIFICATIONS (PITS > 1000mm DEPTH). REFER PIT INTERFACE DETAIL 'F' FOR CORNER REINFORCEMENT



PIT STRUCTURE TO BE 200mm THICK UNLESS SHOWN OTHERWISE. DRILL AND EPOXY PLASTIC PROPRIETARY STEP IRONS IN ACCORDANCE WITH AUSTRALIAN STANDARDS AND MANUFACTURERS SPECIFICATIONS (PITS > 1000mm DEPTH). REFER PIT INTERFACE DETAIL 'F' FOR CORNER REINFORCEMENT

VERBIEK A DAVIES
JOB MANAGER A DAVIES
DESIGNED M LONDOS
DRAWN J DELA CRUZ

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
4	RE-ISSUED FOR APPROVAL	AM	AD	MC	07.07.16
5	ISSUED FOR CONSTRUCTION	AM	AD	MC	14.07.16
6	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
7	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
8	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16
9	RE-ISSUED FOR APPROVAL	AM	MR	AD	12.01.17

CLIENT
RICHARD CROOKES CONSTRUCTIONS

ARCHITECT
OPRA ARCHITECTS

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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
**CIVIL WORKS PACKAGE
DETAILS - SHEET 2**

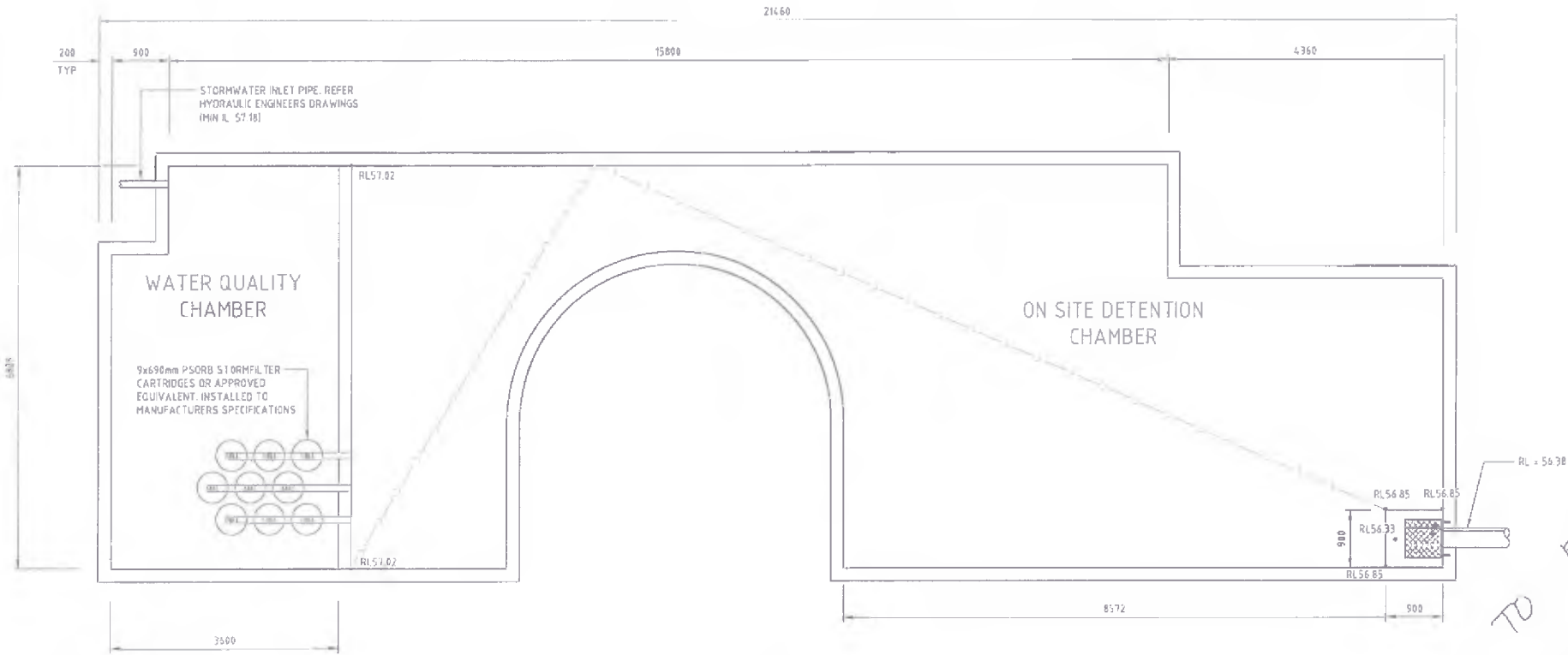
JOB NUMBER
151073

DRAWING NUMBER
C15.02

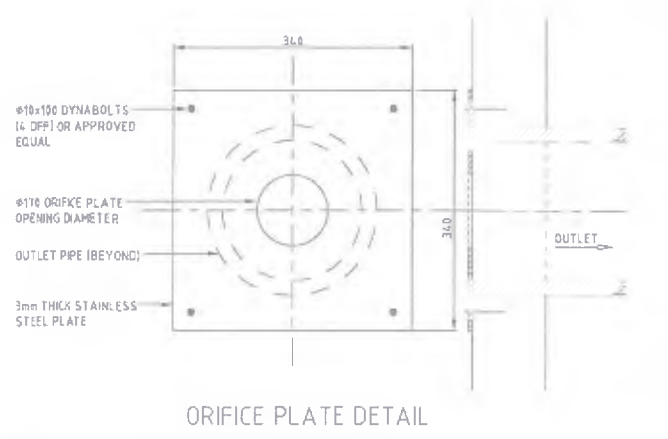
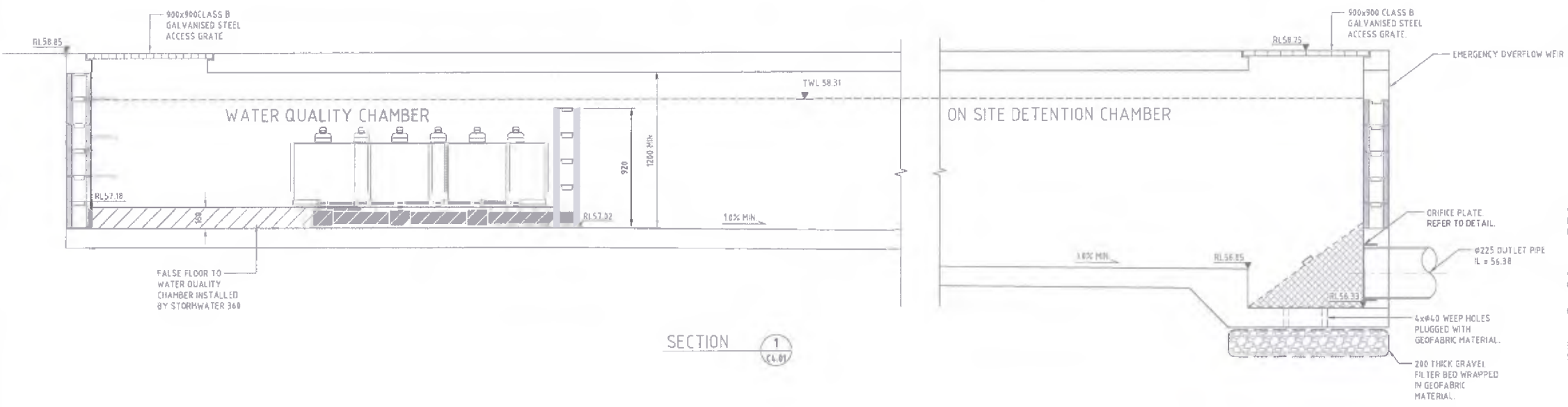
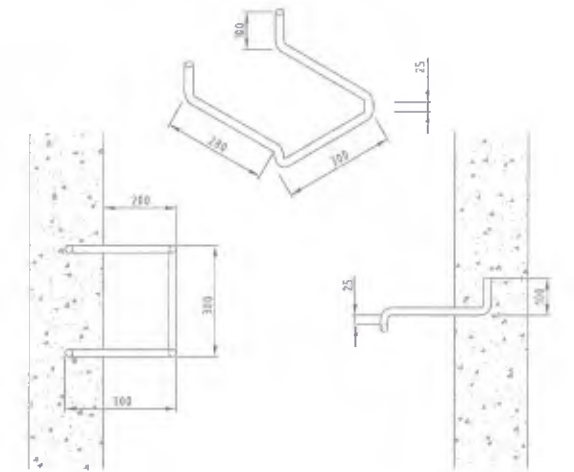
REVISION
9

DRAWING SHEET SIZE = A1

NOT FOR CONSTRUCTION



NOT APPLICABLE TO PUBLIC DOMAIN APPROVAL



DRAWN: J. DELA CRUZ, DESIGNED: M. CONDUS, CHECKED: A. DAVIES, VERIFIED: A. DAVIES

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APPT'D	DATE
4	ISSUED FOR APPROVAL	AM	AD	MC	23.03.16
5	ISSUED FOR RE-APPROVAL	AM	AD	MC	07.07.16
6	ISSUED FOR CONSTRUCTION	AM	AD	MC	12.07.16
7	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
8	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
9	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16

RICHARD CROOKES CONSTRUCTIONS

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OPRA ARCHITECTS

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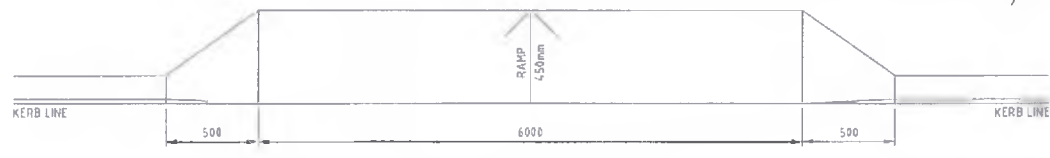
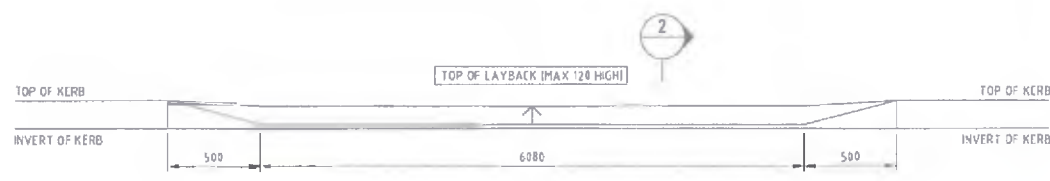
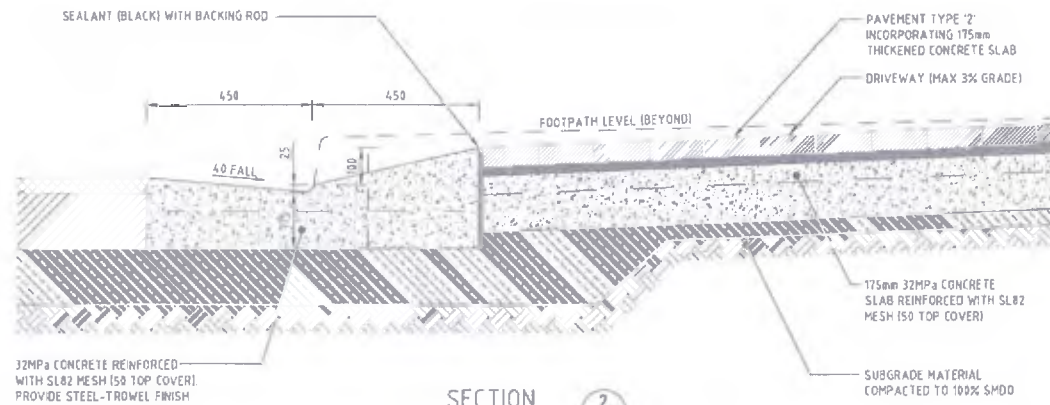
NOT TO SCALE

NORTHROP Sydney
 Level 11 345 George Street, Sydney NSW 2000
 Ph (02) 9241 4188 Fax (02) 9241 4324
 Email: sydney@northrop.com.au ABN 81 094 433 100

PROJECT: **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

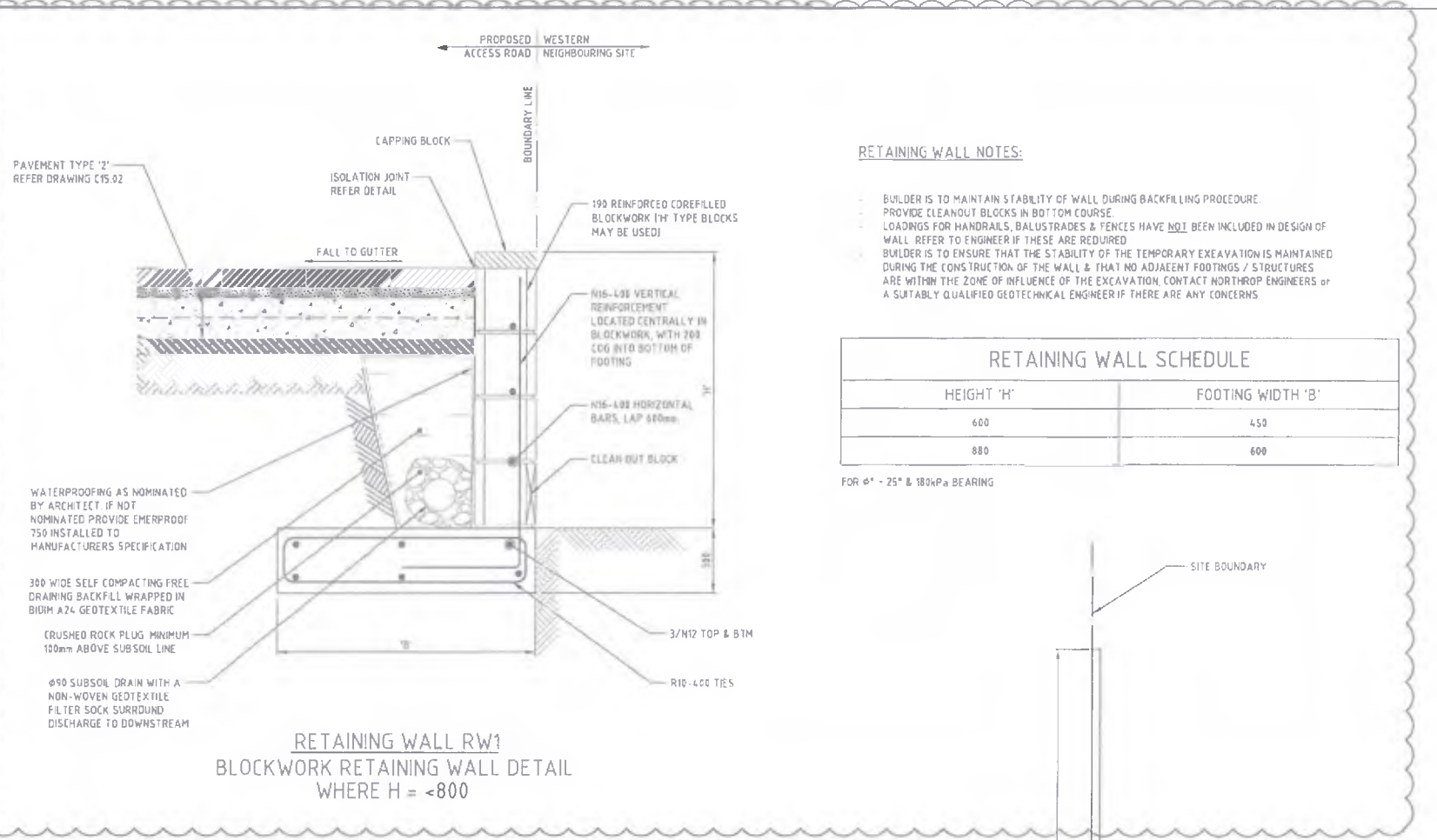
DRAWING TITLE: **CIVIL WORKS PACKAGE**
 DETAILS - SHEET 3

JOB NUMBER: **151073**
 DRAWING NUMBER: **C15.03** REVISION: **9**
 DRAWING SHEET SIZE: A1



PLAN VEHICLE CROSSING 'VC'
ALL RADII TO BE 20mm U.N.O
REFER COUNCIL STANDARD DRAWING CIV 04

CITY OF RYDE
APPROVED FOR CONSTRUCTION
Signed *[Signature]*
Date *23/1/2017*
Subject to the Conditions of Development Consent
104 2013/106



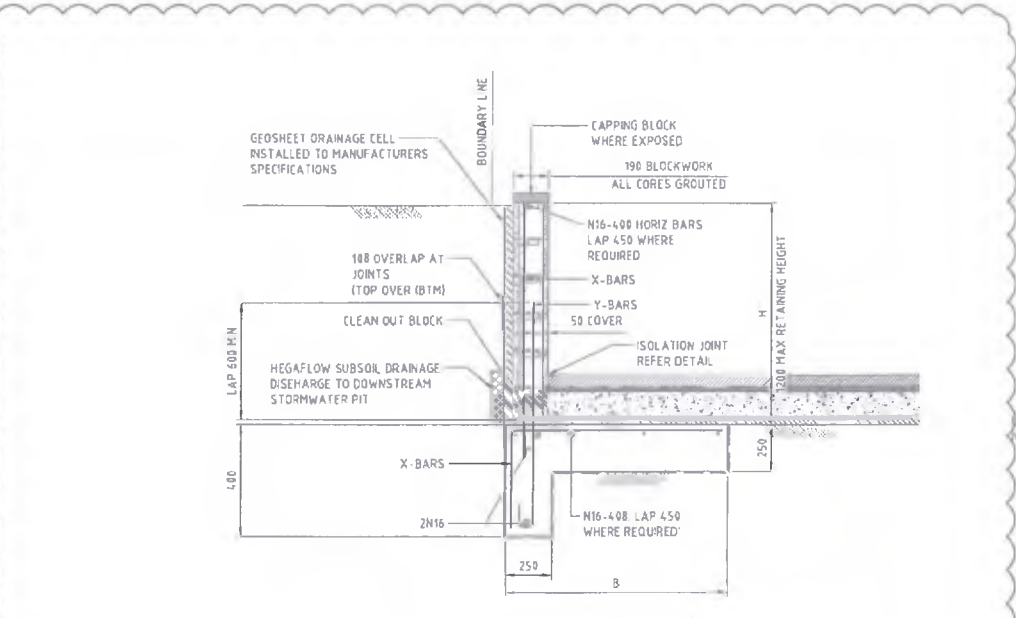
RETAINING WALL RW1
BLOCKWORK RETAINING WALL DETAIL
WHERE H = <800

RETAINING WALL NOTES:

- BUILDER IS TO MAINTAIN STABILITY OF WALL DURING BACKFILLING PROCEDURE.
- PROVIDE CLEANOUT BLOCKS IN BOTTOM COURSE.
- LOADINGS FOR HANDRAILS, BALUSTRADES & FENCES HAVE NOT BEEN INCLUDED IN DESIGN OF WALL REFER TO ENGINEER IF THESE ARE REQUIRED.
- BUILDER IS TO ENSURE THAT THE STABILITY OF THE TEMPORARY EXCAVATION IS MAINTAINED DURING THE CONSTRUCTION OF THE WALL & THAT NO ADJACENT FOOTINGS / STRUCTURES ARE WITHIN THE ZONE OF INFLUENCE OF THE EXCAVATION, CONTACT NORTHROP ENGINEERS OR A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER IF THERE ARE ANY CONCERNS.

RETAINING WALL SCHEDULE	
HEIGHT 'H'	FOOTING WIDTH 'B'
600	450
880	600

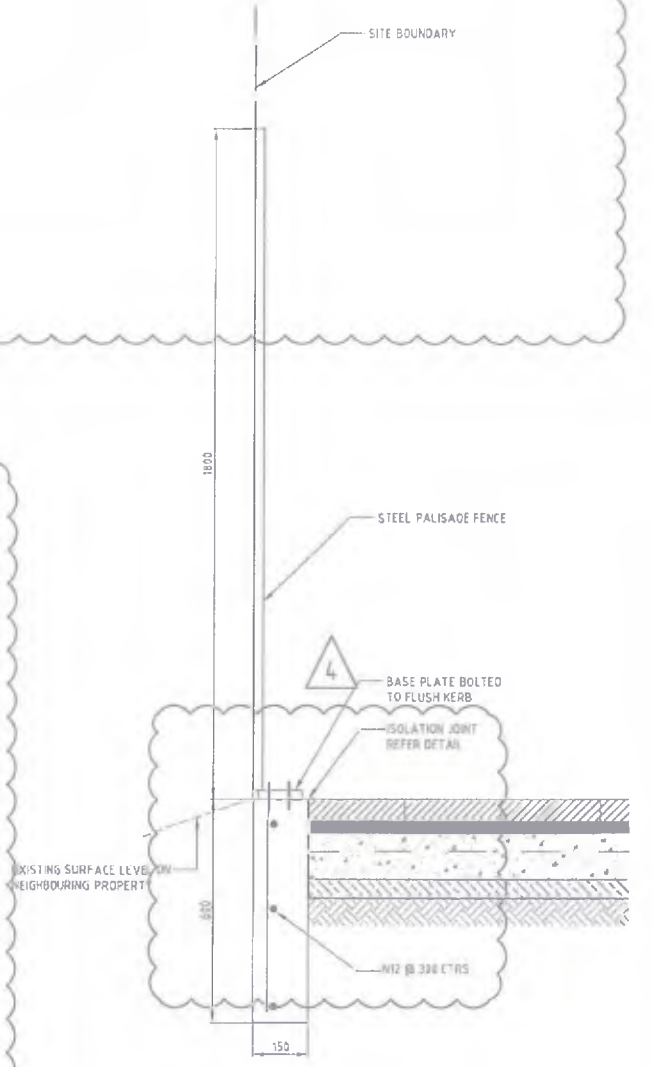
FOR 0° - 25° & 180kPa BEARING



RETAINING WALL RW2
BLOCK RETAINING WALL SCHEDULE
WHERE H = 800 - 1200

WALL HEIGHT 'H'	BASE WIDTH 'B'	HEEL DEPTH 'D'	BAR TYPE 'X' AND 'Y'
800	800	400	N16-400
1000	1000	400	N16-400
1200	1200	400	N16-400

THESE DIMENSIONS ARE PROVIDED BASED ON A 5kPa SURCHARGE



KERB EDGE DETAIL



NOT FOR CONSTRUCTION

DRAWN: J. DELA CRUZ, DESIGNED: M. CONDUS, JOB MANAGER: A. DAVIES, VERIFIER: A. DAVIES

REVISION	DESCRIPTION	ISSUED	VER D	APP D	DATE
1	ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
2	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.10.16
3	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16
4	RE-ISSUED FOR APPROVAL	AM	MR	AD	06.12.16

CLIENT: **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT: **OPRA ARCHITECTS**

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NOT TO SCALE

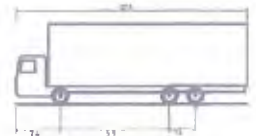
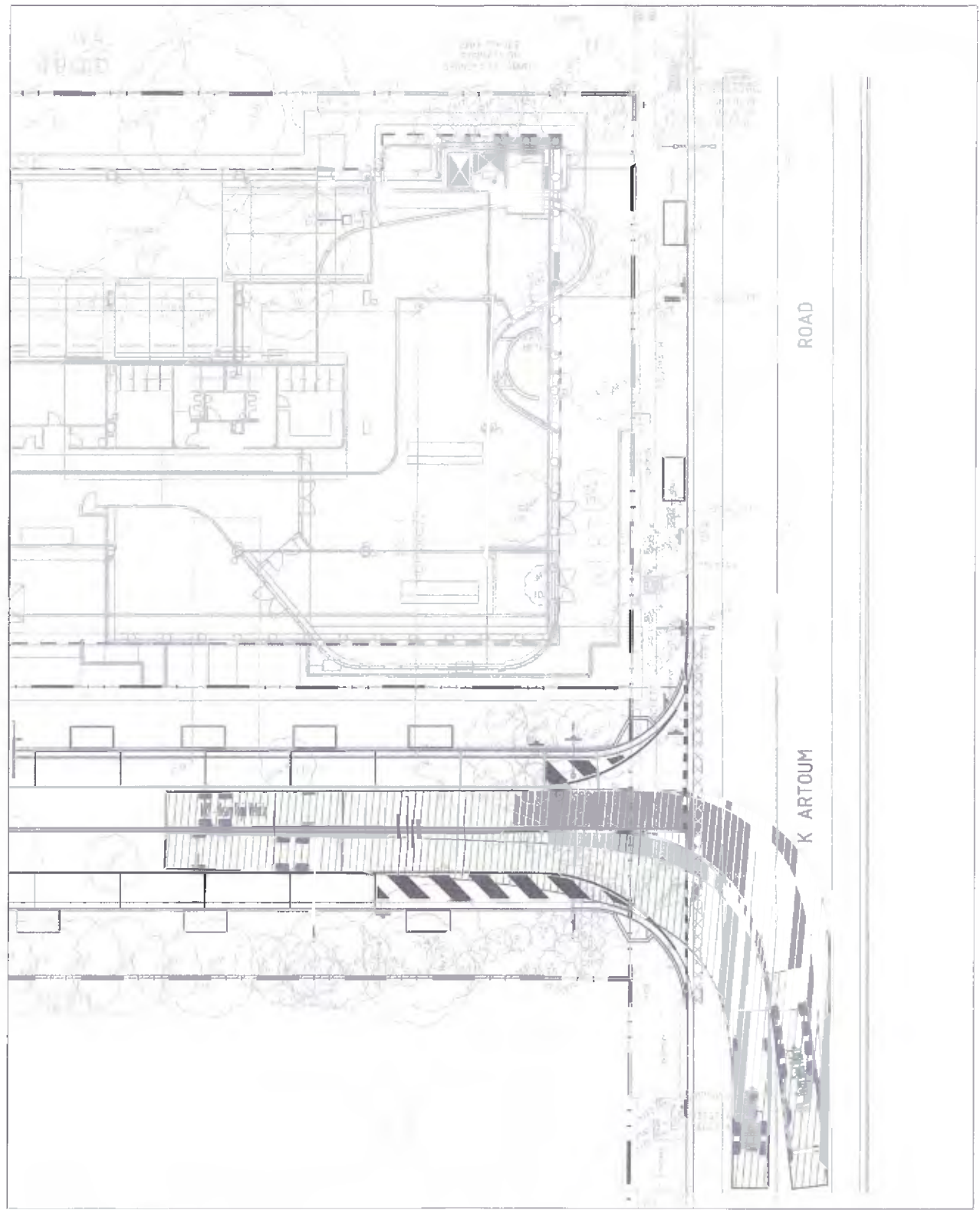
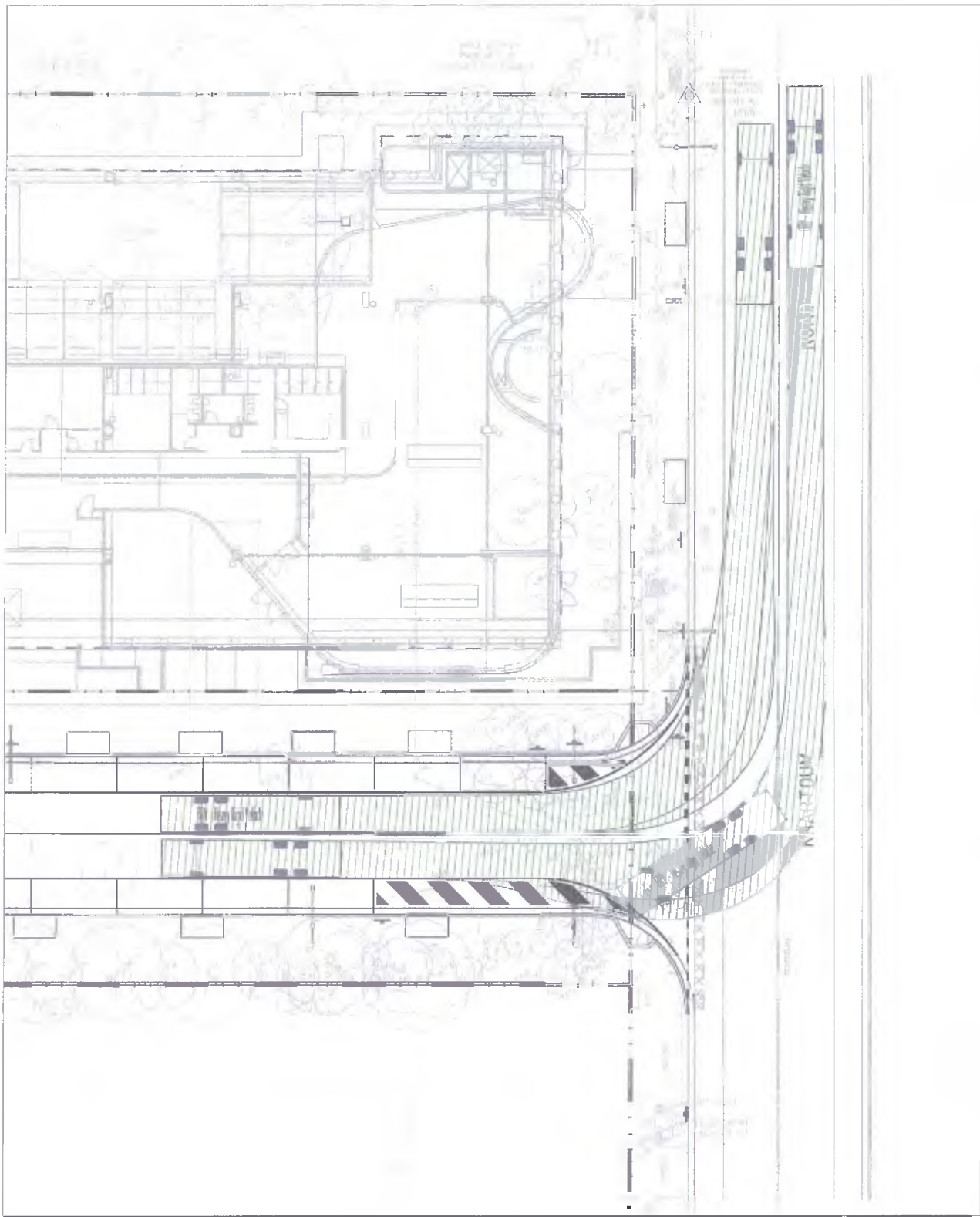
NORTHROP
Sydney
Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT: **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

DRAWING TITLE: **CIVIL WORKS PACKAGE**
DETAILS - SHEET 4

JOB NUMBER: **151073**
DRAWING NUMBER: **C15.04**
REVISION: **4**
DRAWING SHEET SIZE: A1

DRANNY DELA CRUZ DISKRD M GORDON JOB MANAGER A DAVES VERWER A DAVES



HRV - Heavy Rigid Vehicle
 Overall Length 12.500m
 Overall Width 2.500m
 Overall Body Height 4.300m
 Min Body Ground Clearance 0.417m
 Track Width 2.500m
 Lock-to-lock time 5.50s
 Curb-to-curb Turning Radius 12.500m

CITY OF RYDE
 APPROVED FOR CONSTRUCTION
 Signed *[Signature]*
 Date 23/1/2017
 Subject to the Conditions of Development Consent

10/10 2013/106

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	AM	AD	HC	07.07.16
2	RE-ISSUED FOR APPROVAL	AM	AD	MC	16.08.16
3	RE-ISSUED FOR APPROVAL	UM	AD	HC	17.10.16
4	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16
5	RE-ISSUED FOR APPROVAL	UM	MR	AD	05.12.16

RICHARD CROOKES CONSTRUCTIONS
 CLIENT
 DRAWINGS NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

ARCHITECT
OPRA ARCHITECTS
 THE CITY OF RYDE CONSULTING ENGINEERS WITH NORTHROP CONSULTING ENGINEERS PTY LTD

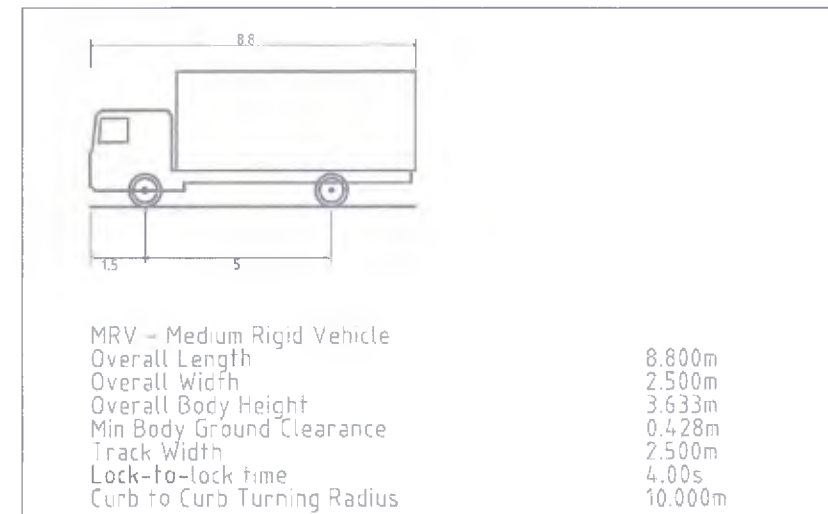
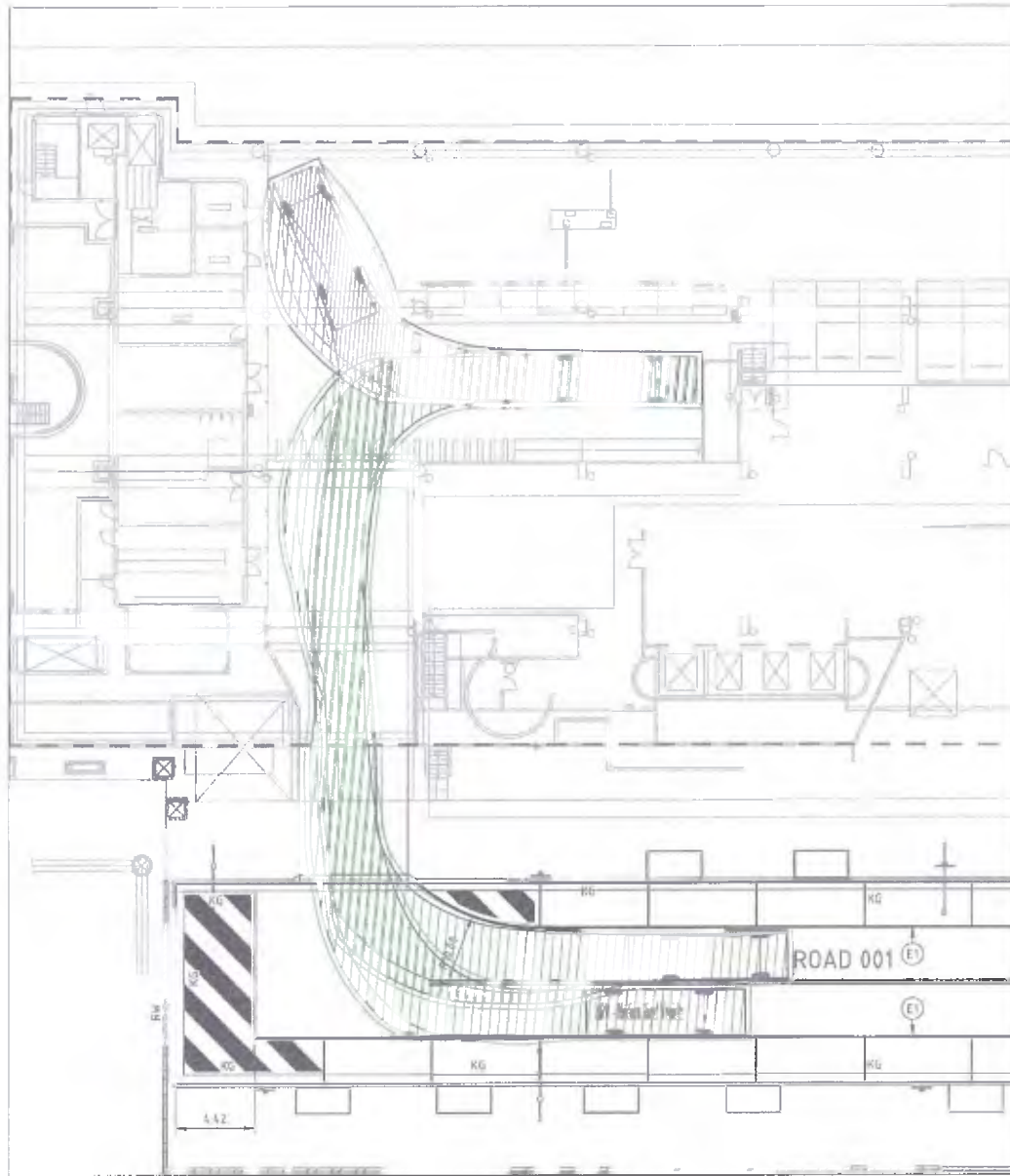
ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK
 NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY
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 SCALE 1:200 @ A1
 0 2 4 6 8 10m

NORTHROP
 Sydney
 Level 11 345 George Street, Sydney NSW 2000
 Ph (02) 9241 4188 Fax (02) 9241 4324
 Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
KHARTOUM CORPORATE CENTRE, MACQUARIE PARK

DRAWING TITLE
CIVIL WORKS PACKAGE TURNING PATHS PLAN - SHEET 1

JOB NUMBER
151073
 DRAWING NUMBER
C17.01
 REVISION
5
 DRAWING SHEET SIZE A1



CITY OF RYDE
 APPROVED FOR CONSTRUCTION

Signed *[Signature]*
 Date 23/1/2017

Subject to the Conditions of Development Consent
 L09-2013/106

NOT FOR CONSTRUCTION

DRAWN: A. HARGREAVES, DESIGNED: H. LUNDQVIST, JOB MANAGER: A. DAVIES, VERIFIER: A. DAVIES



REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR INFORMATION	AH	AD	MC	16.08.16
2	RE-ISSUED FOR APPROVAL	UM	AD	MC	17.12.16
3	RE-ISSUED FOR APPROVAL	UM	MR	AD	02.12.16

CLIENT: **RICHARD CROOKES CONSTRUCTIONS**

ARCHITECT: **OPRA ARCHITECTS**

SCALE 1:200 @ A1

NORTHROP Sydney
 Level 11 346 George Street, Sydney NSW 2000
 Ph: (02) 9241 4180 Fax: (02) 9241 4324
 Email: sydney@northrop.com.au ABN 61 004 433 100

PROJECT: **KHARTOUM CORPORATE CENTRE, MACQUARIE PARK**

DRAWING TITLE: **CIVIL WORKS PACKAGE**
TURNING PATHS PLAN - SHEET 2

JOB NUMBER: **151073**
 DRAWING NUMBER: **C17.02** REVISION: **3**
 DRAWING SHEET SIZE: A1

[Handwritten signature]

Khartoum Corporate Centre Public Domain

Macquarie Park, NSW 2113

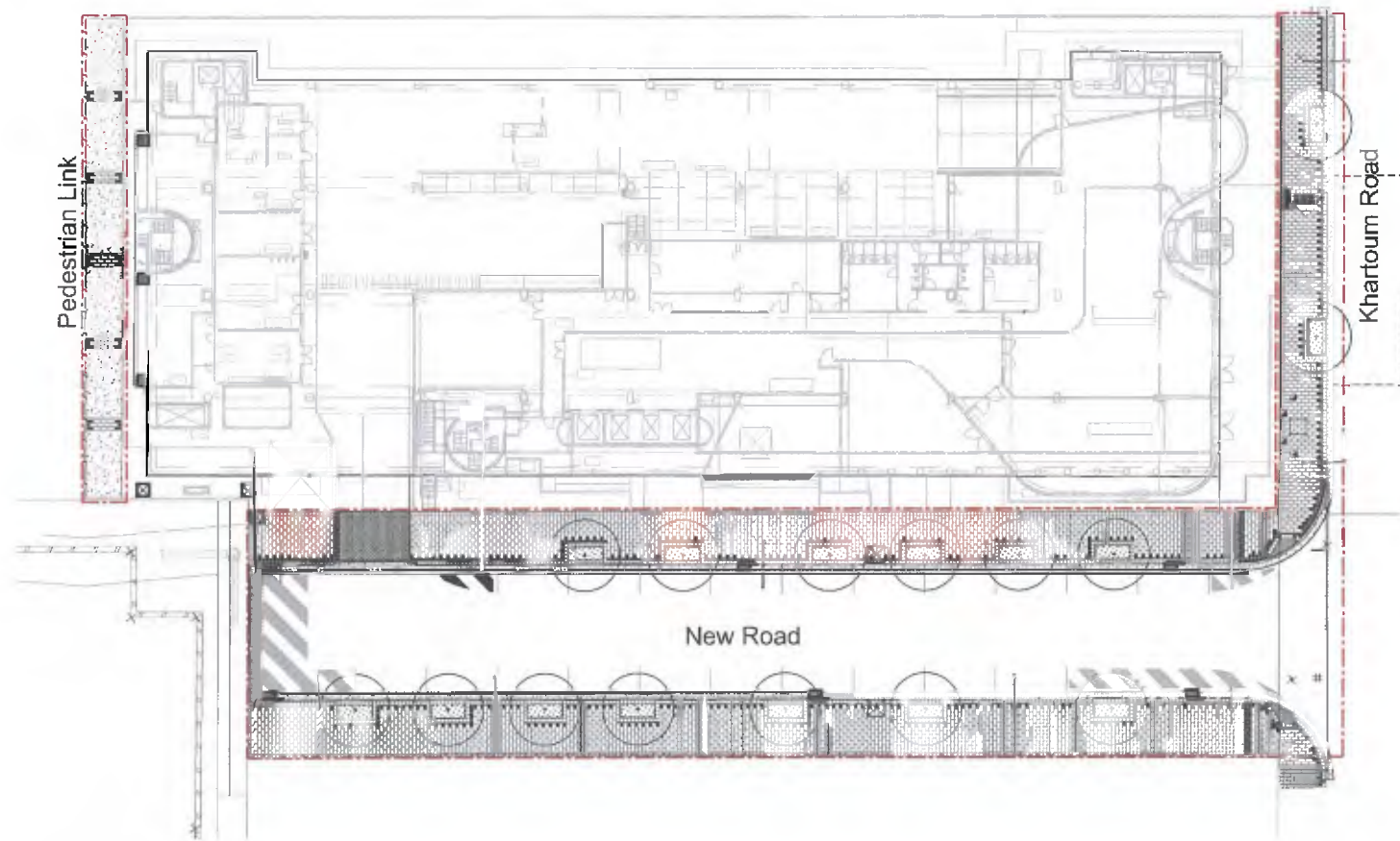
LANDSCAPE

DRAWINGS

DWG NO.	DRAWING TITLE	ISSUE	SCALE
PD_000	COVERSHEET	L	N/A
PD_101	LANDSCAPE PUBLIC DOMAIN PLAN	M	1:150
PD_501	LANDSCAPE DETAILS	G	AS SHOWN
PD_502	LANDSCAPE DETAILS	G	AS SHOWN
PD_503	LANDSCAPE DETAILS	D	AS SHOWN

PLANT SCHEDULE

Symbol	Botanic Name	Common Name	Install Height x Width (Metres)	Mature Height x Width (Metres)	Pot Size	Spacing	Qty
Ac	Trees <i>Angophora costata</i>	Smooth Barked Apple	3 x 1.5	30 x 10	100L	As Shown	15
DB	Groundcovers/ Grasses <i>Dianella caerulea 'Breeze'</i>	Dianella Breeze	0.2 x 0.2	0.6 x 0.6	150mL	5m2	315



SITE PLAN

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LEGEND

Issue	Revision Description	Drawn	Check	Date
L	Minor Amendments	JW	NM	12.01.2017
K	Revised for Comments	JW	NM	01.12.2016
J	Revised for Comments	JW	NM	30.11.2016
I	Revised for Comments	JW	NM	20.10.2016
H	Minor Amendments	JW	NM	20.10.2016
G	Civil Coordination	JW	NM	16.08.2016
F	Minor Amendments	JW	NM	16.08.2016
E	Revised for Comments	JW	NM	17.08.2016
D	Civil Coordination	JW	NM	15.08.2016
C	Revised for Comments	JW	NM	15.08.2016
B	Lighting Coordination	JW	NM	06.07.2016
A	For Comment	JW	NM	24.03.2016

Key Plan



SITE IMAGE



Client: Richard Crooks Constructions

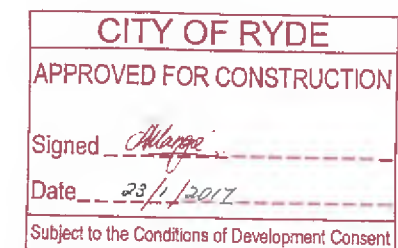
Project: Khartoum Corporate Centre
Macquarie Park, NSW 2113

Drawing Name: COVERSHEET

DEVELOPMENT APPLICATION

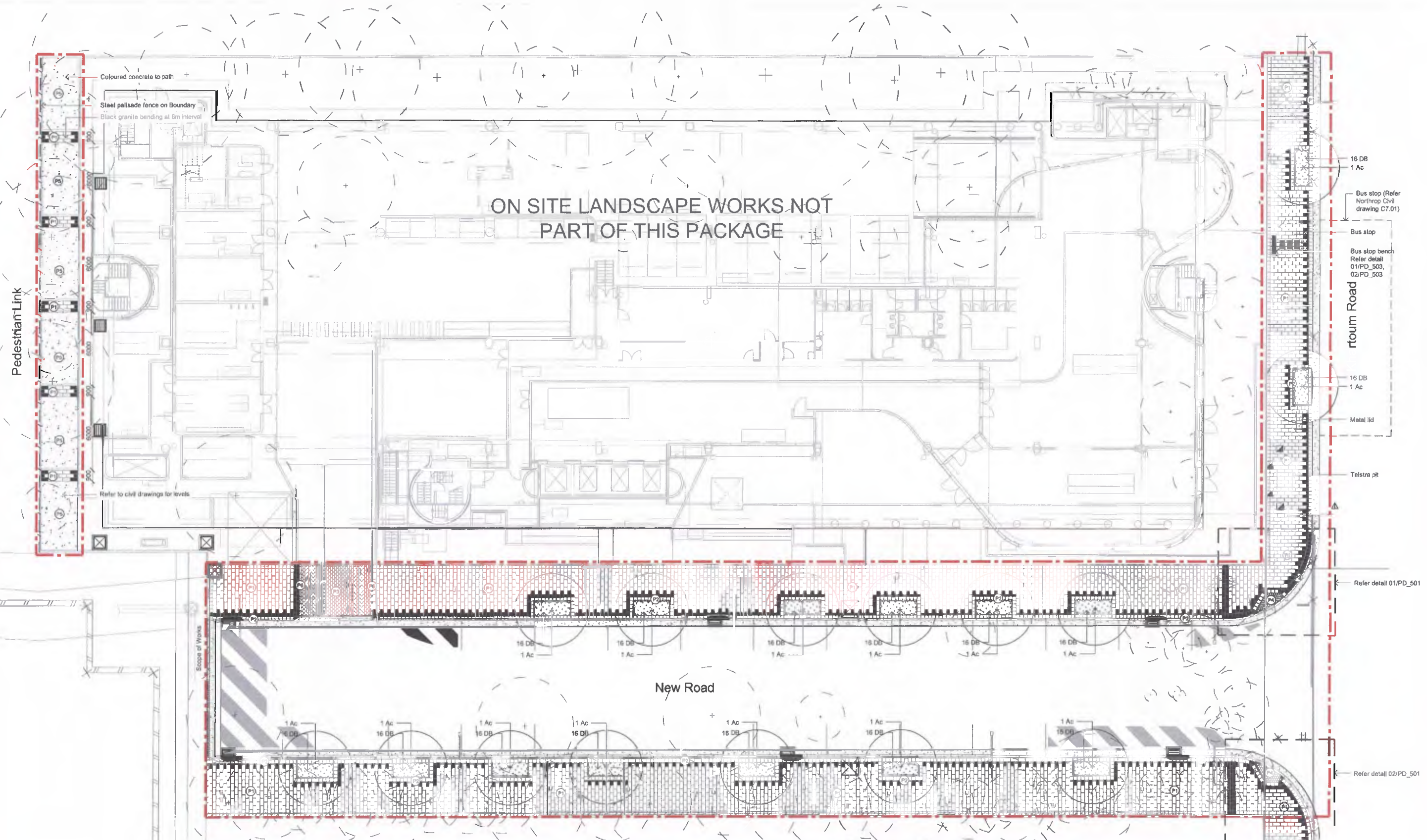
Scale: Job Number: SS16-3242

Drawing Number: PD_000 L



1/09/2016/106





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AMENDED PLANS
 13 JAN 2017

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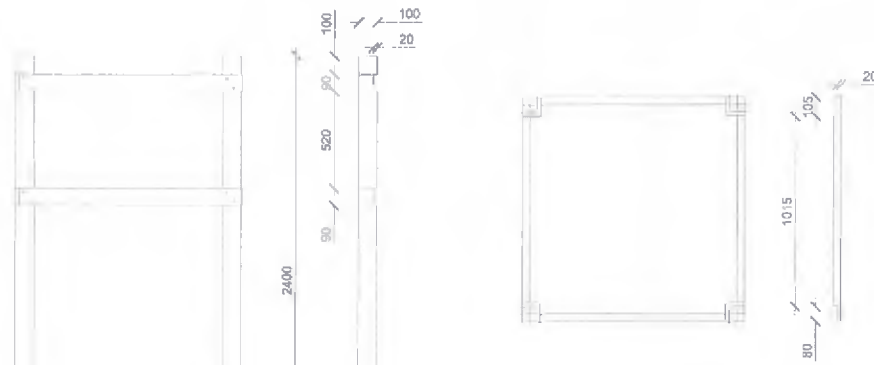
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L	Revised for Comments	JW	NM	30.11.2016
J	Revised for Comments	JW	NM	20.10.2016
I	Minor Amendments	JW	NM	20.10.2016
H	Client Coordination	JW	NM	18.09.2016
G	Minor Amendments	JW	NM	18.08.2016
F	Revised for Comments	JW	NM	17.08.2016
E	Client Coordination	JW	NM	15.08.2016
D	Revised for Comments	JW	NM	15.08.2016
C	Client Coordination	JW	NM	12.08.2016
B	Lighting Coordination	JW	NM	06.07.2016
A	For Comment	JW	NM	24.03.2016

LEGEND	
	Scope of Works
	Property Boundary
	Proposed Grasses and Groundcovers
	Proposed Tree (Refer to plant schedule)
	Existing Tree To be removed
	Steel Palisade Fence
	Isolation Joint
	P1 - Main Body Paving 600 x 300 x 60
	P2 - Header Course 300 x 300 x 60
	P3 - Driveway Infill Paving 150 x 300 00
	P4 - Kerb Ramp Infill Paving 150 x 150 x 60
	P5 - Coloured Concrete
	PG - Driveway Edge Paver 800 x 150 x 60

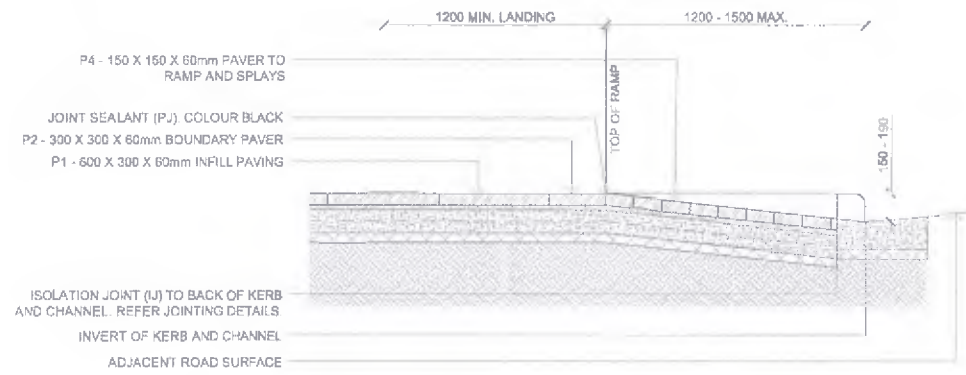
SITE IMAGE
 Landscape Architects
 Level 1, 3-5 Sealed Street
 Rydalm NSW 2016
 Australia
 Tel: 851 21 6332 5800
 Fax: (61 2) 4698 2977
 www.siteimage.com.au

Client: Richard Crooks Constructions
 Project: Khartoum Corprate Centre
 Macquarie Park, NSW 2113

Drawing Name: PUBLIC DOMAIN PLAN
 DEVELOPMENT APPLICATION
 Scale: 1:150 @ A1
 Job Number: SS16-3242
 Drawing Number: PD_101 M



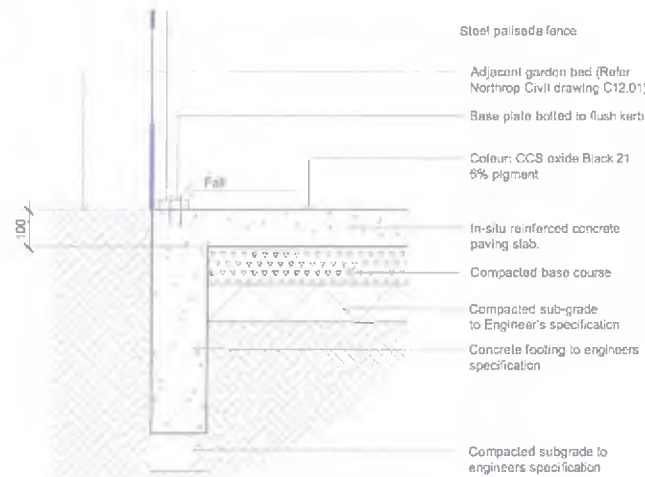
DETAIL - TREE GUARD 1200mm SIZE - TYPICAL
1:20



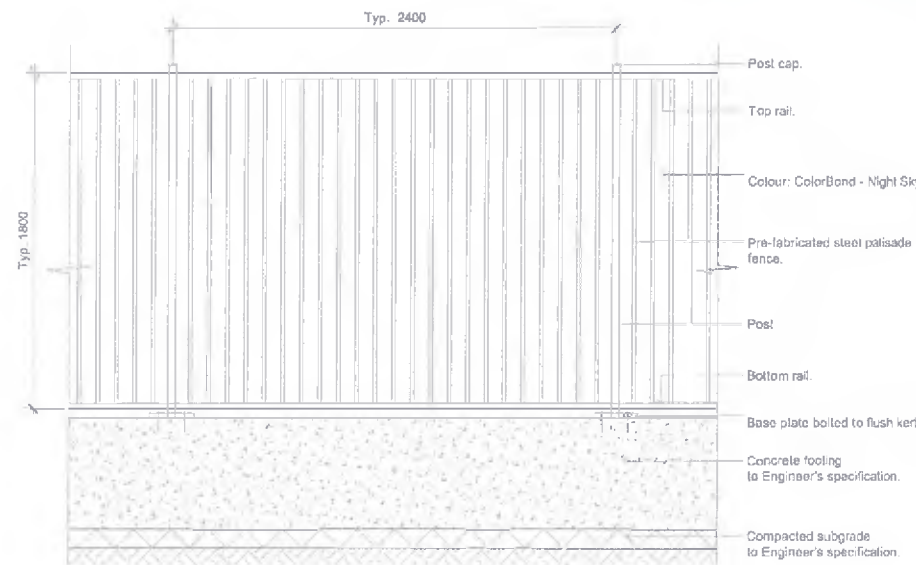
KERB RAMP - SECTION
1:20



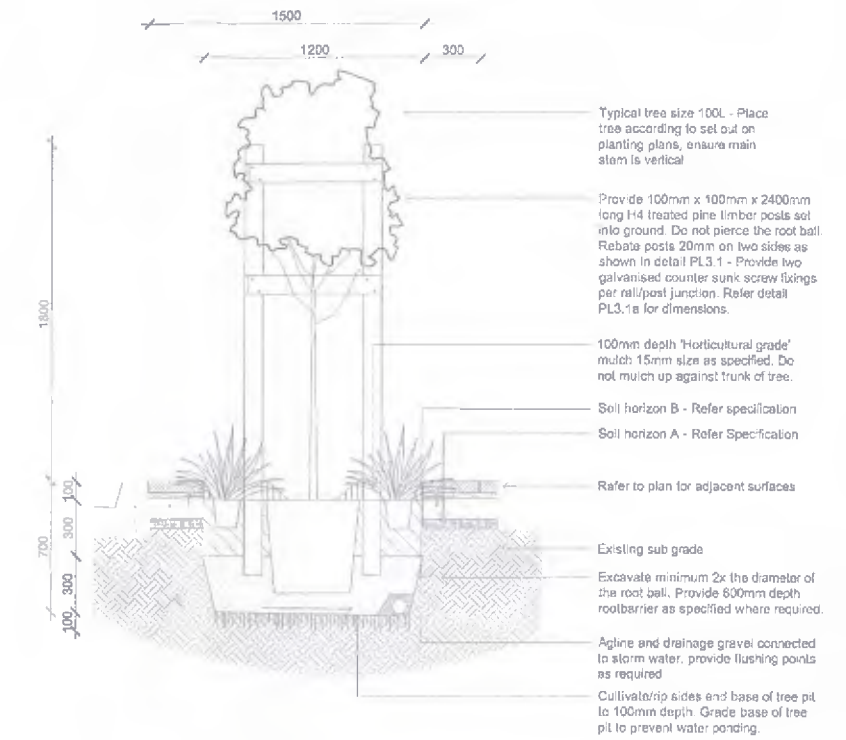
DETAIL - TREE GUARD 1200mm SIZE - TYPICAL
1:10



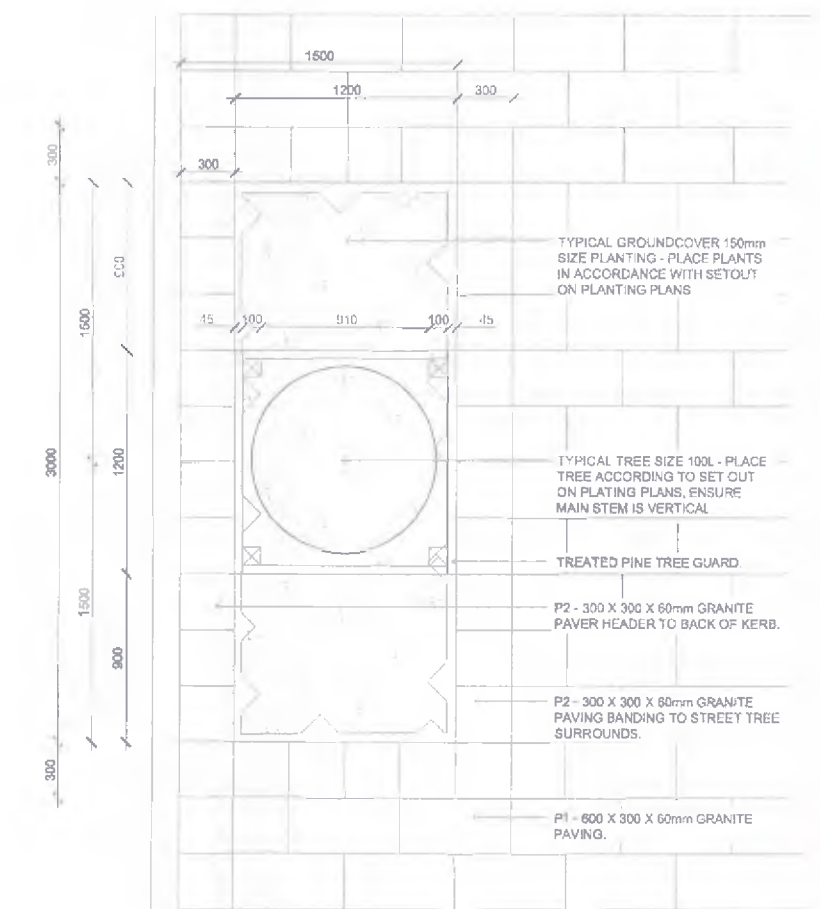
INSITU CONCRETE PAVING AND FENCE
SCALE 1:10



TYPICAL PRE-FABRICATED STEEL PALISADE FENCE
SCALE 1:20



DETAIL - TYPICAL TREE PIT AND GARDEN BED
1:20



TREE PIT WITH GRANITE PAVING SURROUNDS 3m X 1.2m - TYPICAL
1:20

CITY OF RYDE
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Date *28/1/2017*
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Revision	Description	Drawn	Check	Date
G	Revised for Comments	JW	NM	01/12/2016
F	Revised for Comments	JW	NM	30/11/2016
E	Revised for Comments	JW	NM	20/10/2016
D	Minor Amendments	JW	NM	20/10/2016
C	Minor Amendments	JW	NM	16/08/2016
B	Revised for Comments	JW	NM	17/08/2016
A	Revised for Comments	JW	NM	16/08/2016
1/00/00	Revision Description	Drawn	Check	Date

LEGEND

Key Plan

SITE IMAGE



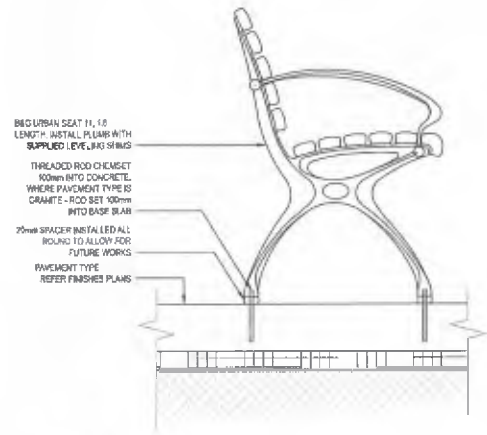
Client: Richard Crooks Constructions

Drawing Name: LANDSCAPE DETAILS

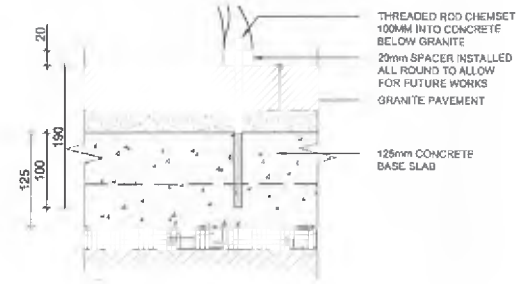
Project: Khartoum Corporate Centre
Macquarie Park, NSW 2113

DEVELOPMENT APPLICATION

Scale: As Shown
Job Number: SS16-3242
Drawing Number: PD_502 G



01 BENCH SEAT WITH BACK
503 SCALE 1:10

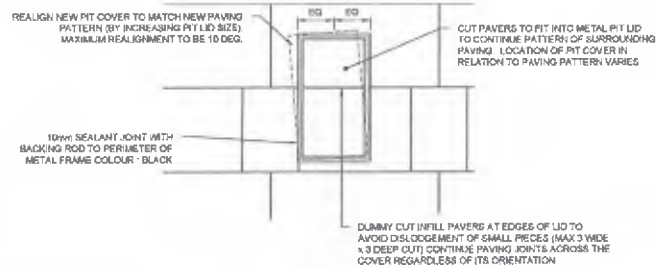


02 BENCH SEAT FIXING ON GRANITE
503 SCALE 1:5

CITY OF RYDE
APPROVED FOR CONSTRUCTION

Signed *Allyce*
Date *23/1/2017*

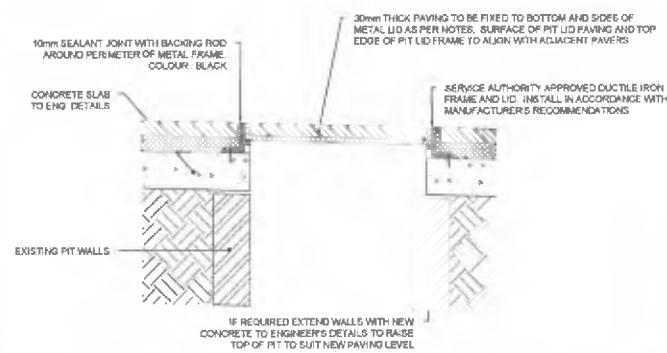
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NOTES:

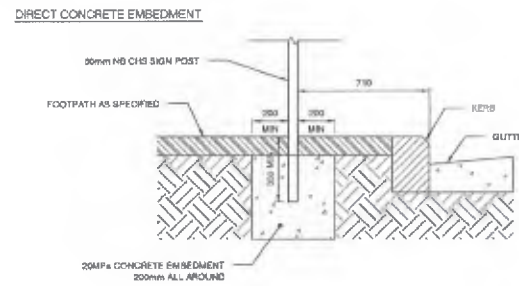
- 1 OBTAIN APPROVAL FROM AUTHORITY FOR COVER REALIGNMENT
- 2 CLEAN PIT LID WITH WIRE BRUSH AND THEN WITH SOFT BRUSH TO REMOVE DUST FROM LID.
- 3 MOISTEN PAVES AND LID TO AID HYDRATION OF MORTAR MIX
- 4 USE CEMENT MORTAR WITH FORTIFYING COMPOUND (INDEX OR APPROVED EQUIVALENT) AS JOINTING MATERIAL
- 5 USE A RICHER MIX (eg. 1:1 CEMENT SAND THINNER (2.5mm) JOINTS AND 1:3:6 CEMENT SAND MIX FOR THICKER (15-18mm) JOINT)
- 6 PIT LID WELLS TO HAVE APPROX. 3mm GAP ON SIDES AS TO NOT TOUCH THE LID
- 7 GAPS ON SIDES SHOULD BE GROUTED WITH RICH CEMENT SAND MIX WITH FORTIFYING COMPOUND
- 8 TO ENSURE THE SERVICE PIT IS STILL ACCESSIBLE AND FIT FOR USE THE RELEVANT AUTHORITY IS TO PROVIDE SIGN OFF / APPROVAL.

PLAN 1:50



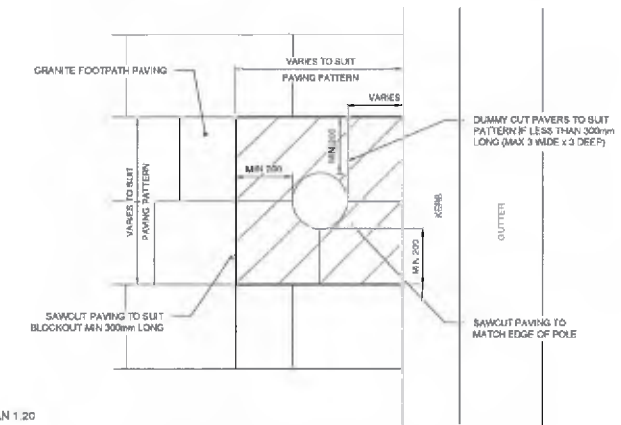
SECTION 1:10

PIT ALIGNMENT
SCALE AS SHOWN

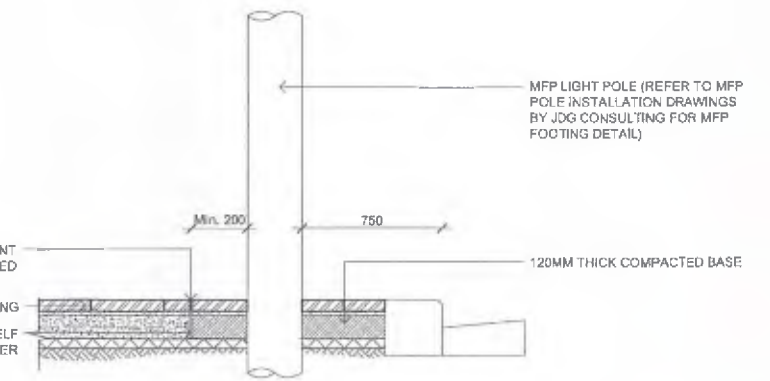


SECTION 1:20

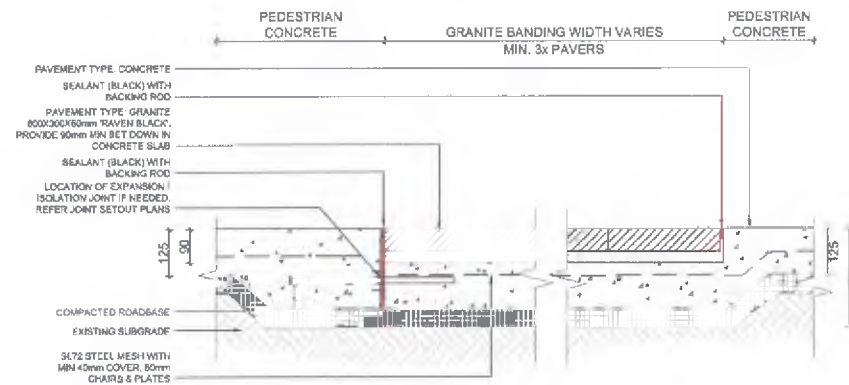
SIGN POST DETAIL
SCALE 1:20



PLAN 1:20



PAVING AROUND LIGHT POLES
SCALE 1:20



GRANITE BANDING IN CONCRETE PAVING
SCALE 1:10

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LEGEND

Issue	Revision Description	Drawn	Checked	Date
D	Minor Amendments	JW	NM	12.01.2017
C	Revised for Comments	JW	NM	01.12.2016
B	Revised for Comments	JW	NM	20.10.2016
A	Minor Amendments	JW	NM	20.10.2016

Key Plans:



SITE IMAGE



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Level 1, 3-5 Dapford Street
Ryde NSW 2116
Australia
Tel: 01 21 6332 5600
Fax: (01 21) 9696 2977
www.siteimage.com.au

Client:
Richard Crooks Constructions

Project:
Khartoum Corporate Centre
Macquarie Park, NSW 2113

Drawing Name:
LANDSCAPE DETAILS

DEVELOPMENT APPLICATION

Scale: As Shown
Job Number: SS16-3242

Drawing Number: PD_503 D

AMENDED PLANS
13 JAN 2017