

Planning Agreement

Narrabri Shire Council

and

**Johnstone Concrete & Landscape Supplies Pty Ltd
(ACN 151 205 882)**

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Planning Agreement

Date	11 November 2014
Parties	<p>Narrabri Shire Council of 46-48 Maitland Street, Narrabri, New South Wales (Council)</p> <p>Johnstone Concrete & Landscape Supplies Pty Ltd ACN 151 205 882 of 173 Old Gunnedah Road, Narrabri, New South Wales (Developer)</p>
Recitals	<p>A. The Developer is the owner of the Land.</p> <p>B. The Developer has lodged with Council the Development Application seeking approval to carry out the Development on the Land.</p> <p>C. The Joint Regional Planning Panel is the consent authority for the purposes of the determination of the Development Application.</p> <p>D. The Developer has offered to enter into a Planning Agreement with the Council to carry out the Developer's Works and pay the Developer's Contribution.</p>

The parties agree, in consideration of, among other things, the mutual promises contained in this agreement as follows:

1. 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. The parties agree that this agreement excludes the operation of Section 94 and 94A of the Act in relation to the Development Application.

2. Scope and application of this Agreement

This Agreement binds the parties and applies to the Land on which the Development is to be carried out by the Developer.

3. Operation of this Agreement

This Agreement takes effect on execution of this Agreement.

4. Definitions and interpretation

4.1 Definitions

In this Agreement the following definitions apply:

Act means the *Environmental Planning and Assessment Act 1979 (NSW)* (as amended) and includes any regulations made under that Act;

Completion means the stage in the construction of the Developer's Works when, in the reasonable discretion of the Council's Representative and notified under clause 10.6(a) or (c), the Developer's Works are complete except for minor omissions and minor defects which are non-essential and:

- (a) which do not prevent the Developer's Works from being reasonably capable of being used for their intended purposes;
- (b) which the Council determines the Developer has reasonable grounds for not promptly rectifying; and
- (c) the rectification of which will not prejudice the convenient use of the Developer's Works;

Commencement Date means the date on which the Development Consent is granted;

Construction Certificate has the same meaning as in the Act;

Council's Representative means the person specified in Item 2 of Schedule 1 who is duly authorised to give approval under this Agreement;

Dealing means selling, transferring, assigning, mortgaging, charging, encumbering or otherwise dealing with the Land;

Defects Liability Period means the period of 12 months from the date on which the Developer's Works reach Completion;

Developer means the Owner of the Land and the entity described in Item 1 of Schedule 1;

Development means the proposal of the general nature set out in Item 4 of Schedule 1 to be completed by the Developer in accordance with the Development Consent;

Development Application means the development application identified in Item 4 of Schedule 1 and includes all plans, reports models, photomontages, material boards (as amended or supplemented) submitted to the consent authority before the determination of that Development Application;

Development Consent means the approval granted by the Northern Region Joint Regional Planning Panel to the Development Application for the Development identified in Item 4 of Schedule 1 and includes all modifications made to that consent;

Developer's Contributions means the sum of the Monetary Contributions, Dedicated Land or other Public Benefits and any combination of a Monetary Contributions, Dedicated Land or any other Public Benefits identified in this Agreement;

Developer's Works means the works identified in Schedule 3, as refined and developed in accordance with this Agreement;

GST has the same meaning as in the GST Law;

GST Law has the meaning given to that term in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and any other Act or regulation relating to the imposition or administration of the GST;

Guarantee means an unconditional bank guarantee, unlimited in time, issued by a bank licensed to carry on business in Australia that:

- (a) is in favour of the Council;
- (b) for the Guarantee Amount; and
- (c) on such other terms and conditions the Council may approve from time to time;

Guarantee Amount means the amount specified in **Error! Reference source not found.** of Schedule 1 as varied from time to time in accordance with this Agreement;

Johnstone's Quarry means the quarry operated by the Developer at 975 Wave Hill Road, Narrabri and the subject of the Development Application;

Joint Regional Planning Panel means the Northern Region Joint Regional Planning Panel constituted pursuant to section 23G of the Act;

Land means the land identified in Item 3 of Schedule 1, comprising the land the subject of the Development Application;

Materials means the product from the Quarry including road base and gravel;

Monetary Contributions means the payment referred to in clause 5;

Occupation Certificate has the same meaning as in the Act;

Owner means Johnstone Concrete & Landscape Supplies Pty Ltd (ACN 151 205 882);

Party means a party to this agreement, and includes their successors and assigns;

Product means the material quarried at the Quarry;

Public Benefits means the public benefits identified in **Error! Reference source not found.** of Schedule 1 which are to be provided as a result of the Developer's Works;

Quantity Surveyor means a duly qualified quantity surveyor of at least five years' experience in the assessment of building material and construction costs;

Quarry means Johnstone's Quarry;

Road Maintenance Plan is the plan prepared in accordance with Clause 6;

Wave Hill Road is the public road of that name as shown on the Wave Hill Road Plan;

"Wave Hill Road Plan" is the plan Road Construction and Sealing Works Drawing No. 1318284-01 to 1318284-90 being Annexure "A" hereto;

Weighbridge Records means the records kept by the Developer in relation to the production and transportation of product from the Quarry.

4.2 Interpretation

In the interpretation of this Agreement, the following provisions apply unless the context otherwise requires:

- (a) Headings are inserted for convenience only and do not affect the interpretation of this Agreement.
- (b) A reference in this Agreement to a business day means a day other than a Saturday or Sunday on which banks are open for business generally in Sydney.
- (c) A reference in this Agreement to dollars or \$ means Australian dollars and all amounts payable under this Agreement are payable in Australian dollars.
- (d) A reference in this Agreement to any law, legislation or legislative provision includes any statutory modification, amendment or re-enactment, and any subordinate legislation or regulations issued under that legislation or legislative provision.
- (e) A reference to a clause, part, schedule or attachment is a reference to a clause, part, schedule or attachment of or to this Agreement.
- (f) A word which denotes the singular denotes the plural, a word which denotes the plural denotes the singular.
- (g) References to the word 'include' or 'including' are to be construed without limitation.
- (h) Reference to a party to this Agreement includes a reference to the servants, agents and contractors of the party, and the party's successors and assigns.
- (i) Any schedules and attachments form part of this Agreement.
- (j) A word defined in the Act has the same meaning in this Agreement.

5. Payment of monetary contribution

- 5.1 The Developer agrees to pay the Monetary Contributions to the Council, as set out in items 1 and 2 of Schedule 5, over the period of time as set out in Schedule 5.
- 5.2 The Developer shall pay to the Council an amount per tonne of Product, as described in items 1 and 2 of Schedule 5, that is produced by the Quarry on the following basis:
 - (a) The contributions referred to in items 1 and 2 of Schedule 5 shall be paid on a quarterly basis to Council commencing on the Commencement Date and continuing for the period set out in items 1 and 2 of Schedule 5.
 - (b) The contributions referred to in Item 1 and Item 2 of Schedule 5 shall be utilised by the Council at its discretion for the purpose of the Council Works as described in Item 1 and Item 2 of Schedule 5.
 - (c) The contributions shall be calculated based on the amount per tonne of Product produced by the Developer as evidenced in the Weighbridge Records. Such Weighbridge Records must be produced to the Council each quarter and upon the payment of a Monetary Contribution in accordance with clause 5.2(a).
 - (d) The Monetary Contributions shall be paid into a fund maintained by the Council for this purpose.
- 5.3 **Adjustment of Monetary Contributions**
 - (a) On each anniversary of the date of this Agreement ('adjustment date') the amount referred to as the Rate in Item 1 of Schedule 5 ('Rate Item 1') is adjusted to a revised amount derived by applying the following formula:

- (b)
 - (i) $RRI1 = RItem1 \times \frac{A}{B}$

where:

RRI1 is the Revised Rate Item 1 applicable from the relevant adjustment date;

R Item 1 is the Rate amount for Item 1 that is current on the relevant adjustment date;

"A" is the index number of the Consumer Price Index All Groups Index for Sydney available from the Australian Bureau of Statistics and published immediately before the relevant adjustment date; and

"B" is the index number for the Consumer Price Index: All Groups Index for Sydney available from the Australian Bureau of Statistics and published immediately before the later of the date of this Agreement (in the case of the first adjustment of the Rate) and, (in the case of subsequent adjustments), the immediately preceding adjustment date.

- (b)
 - (i) On the first anniversary of the date of this Agreement the amount referred to as the Rate in Item 2 in Schedule 5 shall be reviewed in line with the method set out in the Road Maintenance Plan.
 - (ii) On the second anniversary of the date of this Agreement and each anniversary thereafter the rate determined in Clause 5.3(b)(i) for the Rate in Item 2 in Schedule 5 shall be adjusted to a revised amount derived by applying the following formula:

$$RRI2 = RItem2 \times \frac{A}{B}$$

where:

RRI2 is the Revised Rate Item 2 applicable from the relevant adjustment date;

R Item 2 is the Rate amount for Item 2 that is current on the relevant adjustment date;

"A" is the index number of the Consumer Price Index All Groups Index for Sydney available from the Australian Bureau of Statistics and published immediately before the relevant adjustment date; and

"B" is the index number for the Consumer Price Index: All Groups Index for Sydney available from the Australian Bureau of Statistics and published immediately before the later of the date of this Agreement (in the case of the first adjustment of the Rate) and, (in the case of subsequent adjustments), the immediately preceding adjustment date.

- (c) The Council may give the Developer written notice of the Revised Rate Item 1 and Item 2 to apply from the adjustment date.

5.4 In lieu of contributions

- (a) The Council at its ultimate discretion may agree to accept the supply of Materials to a value equal to the contribution referred to in clause 5.2 each quarter, or in lieu of part of the contribution referred to in clause 5.2, or instead of a monetary contribution.

- (b) If the Council agrees to accept the in-kind supply of Materials in accordance with this clause, the Developer shall provide a detailed breakdown of the costs of such materials to the Council Representative and the Council must by notice in writing to the Developer indicate that it agrees to accept the supply of materials in lieu of the contribution.

5.5 Failure to pay contribution

If the Developer fails to pay any monetary contribution in accordance with this Agreement any outstanding amount becomes a liquidated debt which the Council may recover in a court of competent jurisdiction.

6. Road Maintenance Plan

6.1 The Developer agrees to participate in the development with the Council of a Road Maintenance Plan in relation to Wave Hill Road which must provide for:

- (a) the grading of the road on four (4) occasions in the first 12 months of the date of this Agreement;
- (b) the regular monitoring of the road surface for a period of 15 years commencing on the date of this Agreement;
- (c) the adjustment of the rate referred to in Item 2 of Schedule 5; and
- (d) any other matters relating to the maintenance of Wave Hill Road.

6.2 The Road Maintenance Plan shall be completed within 12 months of the date of this Agreement.

7. Council Works

7.1 The Council shall carry out the Council Works described in Schedule 2 within the timeframe described in Schedule 2, provided the Monetary Contributions are paid as and when due.

8. Approval of Developer's Works

8.1 The Developer shall carry out the Works described in Schedule 3 within the timeframe described in Schedule 3.

8.2 Definition of Scope of Works

The parties agree that the works described in Schedule 3 comprise the Developer's Works for the purposes of this Agreement. The parties acknowledge and agree that further design detail and refinement are/may be necessary to take into account any approvals or development consent granted in respect of the Developer's Works.

8.3 Plans

- (a) The Developer shall carry out the Developer's Works by itself or by a contractor in accordance with the plans and detailed designs prepared by the Council and described in Schedule 3.
- (b) Where the Council has not provided a design the Developer shall prepare and submit to the Council a detailed description including plans of the Developer's Works for approval as described in Schedule 3.

- (c) The Council will promptly (and in any event within 40 days of submission) give the Developer notice whether or not the design drawings and description of the Developer's Works referred to in clause 8.1 is satisfactory. If the design or description is not satisfactory, then the Council will identify the further information, or modifications, (as the case may be) which are required. The Developer must promptly amend the proposed design to take into account the comments made by the Council under this clause.

9. Final Design of the Developer's Works

9.1 Preparation of the Plans and Specifications

The Developer must submit a construction specification, including inspection and test plans in accordance with the design developed and approved by Council under clause 8.

9.2 Approval or variation by the Council

The Council may by written notice to the Developer approve, vary or direct the Developer to vary the construction design drawings for the Developer's Works so as to reflect the documents or standards (as the case may be) set out in Schedule 4.

9.3 Directions by the Council

Subject to clause 15, the Developer must comply with any direction given by the Council under the preceding sub-clause in respect of the design and implementation of the Developer's Works.

10. Construction of Developer's Works

10.1 Insurance

The Developer must:

- (a) maintain public liability insurance, with an insurer approved by the Council, with the Council identified as an interested party, for an amount not less than the amount stated in **Error! Reference source not found.** of Schedule 1 covering all aspects of the Developer's Works and submit a copy of the certificate of insurance to the Council before the commencement of the construction of the Developer's Works;
- (b) maintain all other reasonably necessary and prudent insurance policies in respect of the Developer's Works including:
 - (i) construction insurance in relation to the Developer's Works;
 - (ii) insurance against death or injury to persons employed or otherwise engaged in relation to the undertaking of the Developer's Works; and
 - (iii) any other insurances required at law; and
- (c) maintain the insurances in clauses 10.1(a) and 10.1(b) until the expiration of the Defects Liability Period.

10.2 Approvals and consents

- (a) The Developer must (at its cost) obtain all relevant approvals and consents for the Developer's Works whether from the Council or any other relevant government agency, including any necessary road opening permit.

- (b) Before commencing the Developer's Works, the Developer must give to the Council copies of all approvals and consents for the Developer's Works.

10.3 Construction Work

The Developer must (at its cost):

- (a) carry out and complete the Developer's Works in accordance with all approvals and consents relating to the Developer's Works (including the approval by Council of plans and any other information submitted under this Agreement) within the timeframe set out in Schedule 3; and
- (b) ensure that all Developer's Works are constructed in a good and workmanlike manner, in accordance with the plans approved under this Agreement so that they are structurally sound, fit for purpose, and suitable for their intended use; and
- (c) promptly advise the Council's Representative of any significant delays which it experiences in completing the Developer's Works within the timeframe set out in Schedule 3; and
- (d) comply with any reasonable directions from the Council in respect of the construction of the Developer's Works.

10.4 Management of Works

The Council as a party to this Deed and not as an authority may (but is not obliged to):

- (a) inspect the Developer's Works during the course of construction at reasonable times and upon giving reasonable notice;
- (b) notify the Developer's representative in good faith of any material or significant defect, error or omission relating to the construction or installation of the Developer's Works identified during or as the result of such inspection.

The parties expressly agree that any failure to identify a defect, error and omission, will not be construed as amounting to an acceptance by the Council of that defect, error or omission.

10.5 Works completion

When, in the opinion of the Developer, the Developer's Works have reached Completion, the Developer must notify the Council's Representative in writing, and must include in that notice:

- (a) a statement from the person with direct responsibility carriage and supervision of that work that in their opinion the Developer's Works have reached completion; and
- (b) copies of any certification, warranties, guarantees, maintenance information or other material reasonably required for the ongoing repair, maintenance, or servicing (as the case may be) of any part of the Developer's Works; and
- (c) at least three sets of the "as built" drawings of the Developer's Work, including one set in electronic format.

10.6 Final Inspection by Council

The Council may inspect the Developer's Works with the Developer or its representative and must by notice in writing:

- (a) concur that Completion has been achieved; or

- (b) disagree that Completion has been achieved and (if the Council's Representative so disagrees) identify the errors or omissions which have been identified and which in the opinion of the Council's Representative prevents Completion; or
- (c) issue a notice of the nature identified in clause 10.8.

Nothing in this clause 10.6, or in any notice issued under this clause, will be construed to reduce or waive in any manner the Developer's responsibility to correct minor defects or minor omissions, whether or not these are identified by the Council.

10.7 Date of Completion of Developer's Works

The Developer must ensure that the Developer's Works reach Completion on or before the dates set out in Schedule 3.

10.8 Non-completion of Developer's Works

- (a) The Council may permit the Developer not to complete the Developer's Works (or part of them) by issuing a notice in writing to the Developer, expressly stating that completion of the items identified in that notice is not required in fulfilment of this Agreement.
- (b) If the Council permits the Developer not to complete the Developer's Works (or any part of them), the Council may make an appropriation from the Guarantee in such amount as the Council considers necessary. The Developer shall be given seven days' notice of any such appropriation.
- (c) If the Developer fails to complete the whole of the Developer's Works in the form and to the standards required under this Agreement, then Council in its discretion may either:
 - (i) complete the Developer's Works; or
 - (ii) modify the Public Benefits to reasonably achieve the objectives identified in this Agreement or the Development Consent,

and may recover all costs of and reasonably incidental to that work from the Developer. The Council may apply the monies secured from the Bank Guarantee and (to the extent that expenditure exceeds the amount secured) recover any shortfall from the Developer as a debt due and owing.

10.9 Indemnity by the Developer

The Developer indemnifies and releases the Council against all damage, expense, loss or liability of any nature suffered or incurred by the Council arising from any act or omission by the Developer (or any person engaged by it) in connection with the performance of the Developer's Works.

11. Defects Liability Period

11.1 Defects in the Developer's Works

If the Council notifies the Developer of a defect in the Developer's Works within the Defects Liability Period, then the Developer must remedy that defect to the reasonable satisfaction of the Council's Representative, within a reasonable period (having regard to the nature of the defect).

11.2 Security for Defects Liability Period

Until the expiration of the Defects Liability Period, the Council may retain from the Guarantee an amount equal to 10% of the Guarantee Amount.

11.3 Application of Security

If the Developer does not rectify any defect in the Developer's Works duly notified under clause 11.1, then the Council may:

- (a) rectify the defect in the Developer's Works;
- (b) make an appropriation from the Guarantee for the costs of and arising from the rectification; and
- (c) (to the extent that the costs exceed the Guarantee held) recover the costs from the Developer as a debt due and owing.

12. Security

12.1 Provision of Security

The Developer must provide the Guarantee to the Council upon execution of this Agreement in the amount set out in **Error! Reference source not found.** of Schedule 1.

12.2 Reduction of the Guarantee

- (a) The Developer may by notice to the Council, upon completion of any distinct stage of the construction of the Developer's Works, request a partial release of the Guarantee.
- (b) The Council may, by notice to the Developer, request that the Developer provide a Quantity Surveyor's assessment of the costs of the Developer's Works and the actual construction cost before considering any request made by the Developer under paragraph (a).
- (c) The Council may promptly, after receipt of any notice under paragraph (a) and assessment under paragraph (b):
 - (i) consent to a partial release of the Guarantee (and if consent is given, Council acting reasonably may identify the amount of that reduction); or
 - (ii) reject that request, and if the request is so rejected Council must give reasons.

12.3 Rights and remedies of the Council

- (a) The Developer expressly acknowledges and agrees that the Council may make an appropriation from the Guarantee upon the giving of seven days' notice to the Developer, in such amount as the Council thinks fit if:
 - (i) the Developer's Works do not reach Completion by the time specified in Schedule 3; and
 - (ii) the Council in exercising its powers under this Agreement reasonably incurs expense or liability.
- (b) The amount appropriated by the Council under paragraph (a) must be applied towards:

- (i) the costs and expenses incurred by the Council rectifying any default by the Developer under this Agreement;
- (ii) carrying out the Developer's Works; or
- (iii) carrying out any other works to achieve the Public Benefits as the Council considers appropriate.

12.4 Right to claim not affected

The Developer acknowledges and agrees that the rights of the Council under this Agreement do not derogate from any other rights at law or in equity in relation to any default by the Developer.

12.5 Adjustment of Guarantee Amount

- (a) On each anniversary of the date of this Agreement ("adjustment date") the Guarantee Amount may be adjusted by the Council to a revised amount derived by applying the following formula:

$$RGA = \frac{GA \times A}{B}$$

where:

RGA is the Revised Guarantee Amount applicable from the relevant adjustment date;

GA is the Guarantee Amount that is current on the relevant adjustment date;

A is the index number for the Consumer Price Index: All Groups Index for Sydney available from the Australian Bureau of Statistics and published immediately before the relevant adjustment date; and

B is the index number for the Consumer Price Index: All Groups Index for Sydney available from the Australian Bureau of Statistics and published immediately before the later of the date of this Agreement (in the case of the first adjustment of the guarantee) and, (in the case of subsequent adjustments), the immediately preceding adjustment date.

- (b) The Council may give the Developer written notice of the revised Guarantee Amount to apply from the relevant adjustment date. If the Council does not do so, then the existing Guarantee will be retained.
- (c) The Developer must give the Council a replacement or further Guarantee so that the Council holds Guarantees for an amount equal to the revised Guarantee Amount no later than 14 days after receipt of a notice given under paragraph (b).

12.6 Release of the Guarantee

If upon Completion:

- (a) the whole of the monies secured under the Guarantee have not been expended, and the monies accounted for in accordance with clauses 12.2 and 12.3; and
- (b) the Council's Representative (acting reasonably) is satisfied that there are no actual or contingent liabilities of the Council arising as a result of the performance of any Developer's Works,

then the Council will promptly return the Guarantee within 14 days, or the remainder of the monies secured under that Guarantee (as the case may be), to the Developer or as the Developer directs.

12.7 Release of undertaking

If upon the expiration of the Defects Liability Period:

- (a) the whole of the monies secured under clause 11.2 have not been expended, and the monies accounted for in accordance with clause 12.2 and 12.3; and
- (b) the Council's Representative (acting reasonably) is satisfied that there are no actual or contingent liabilities of the Council arising as a result of the performance of any Developer's Works,

then the Council will promptly return the said monies within 14 days, or the remainder of the monies secured under that Guarantee (as the case may be), to the Developer or as the Developer directs.

13. Expenditure by the Council

13.1 Expenditure by the Council

If the Council carries out the Developer's Works under clause 12.3, or 10.8 then the Council:

- (a) is not required to expend more money than is secured by the Guarantee. The Council may in its discretion elect not to carry out items of Developer's Works to ensure that the Developer's Works can be achieved for an amount equal to, or less than, the amount secured by the Guarantee at that time; or
- (b) may expend more money than is secured by the Guarantee in order to deliver the Developer's Works.

13.2 Debt due and owing to the Council

If Council expends more money than is secured by the Guarantee in either carrying out or in rectifying the Developer's Works (whether that expenditure is incurred under clause 13.1 or 11.3), then the amount in excess of the Guarantee will be deemed to be a debt immediately due and owing to the Council by the Developer.

14. Registration of this Agreement

14.1 Registration of Agreement

The Developer must promptly:

- (a) obtain any necessary consents to the registration of this Agreement on the title to the Land;
- (b) lodge the Agreement for registration with Land & Property Information;
- (c) promptly comply with any requisitions that may be raised with regard to registration of the Agreement from Land & Property Information;
- (d) produce to the Council within 35 days of execution of this Agreement details of lodgement of the Agreement with Land & Property Information; and

- (e) following registration of the Agreement, notify the Council of registration, enclosing a title search of the Land confirming the registration.

14.2 Caveat

Without limiting any other provision of this Agreement, until such time as the registration of this Agreement is completed, the Owner agrees that Council may place a caveat over the Land precluding any dealing which is not consistent with this Agreement at its own cost.

14.3 Removal of Agreement

After the whole of the Developer's Works have been completed and the Defects Liability Period has expired, and the Developer's Contributions have been paid the Council will promptly execute any form and supply such other information and do anything as reasonably required by the Owner or the Developer to enable the removal of the Agreement from the title to the Land.

15. Dispute Resolution

15.1 Reference to dispute

If a dispute arises between the parties in relation to this Agreement, then either party may seek to resolve in accordance with this clause.

15.2 Notice of dispute

The party wishing to commence dispute resolution processes must notify the other of:

- (a) the nature, or subject matter, of the dispute, including a summary of any efforts made to resolve latter than by way of this clause;
- (b) the intent to invoke this clause;
- (c) (if practicable) the outcomes which the notifying party wishes to achieve;
- (d) any material impact which the dispute has upon the completion of the Developer's Works (and in particular the completion of the remainder of the Development).

The contents of a notice issued under this clause are deemed to be confidential. The party issuing the notice may (but is not obliged) to assert legal professional privilege in respect of the contents.

15.3 Principals of parties to meet

The principals of the parties (and in the case of the Council, the principal may include the person acting in the role of General Manager as defined in the *Local Government Act 1993*, or such person as is nominated by that officer in writing) must promptly (and in any event within 14 days of written notice) meet in good faith to attempt to resolve the notified dispute. The parties may, without limitation:

- (a) resolve the dispute during the course of that meeting;
- (b) agree that further material, expert opinion, or consideration is needed to effectively resolve the dispute (in which event the parties will in good faith agree to a timetable for resolution); or
- (c) agree that the parties are unlikely to resolve the dispute and in good faith agree to a form of alternative dispute resolution (including expert determination, arbitration, or mediation) which is appropriate for the resolution of the relevant dispute.

15.4 Neither party may constrain

If:

- (a) at least one meeting has been held in accordance with clause 15.3; and
- (b) the parties have been unable to reach an outcome identified in clause 15.3(a) to (c); and
- (c) either of the parties (acting in good faith) forms the view that the dispute is reasonably unlikely to be resolved in accordance with a process agreed under clause 15.3,

then that party may, by 14 days' notice to the other, terminate the dispute resolution process in respect of that dispute. The termination of the process set out in this clause 15 does not of itself amount to a breach of the Agreement.

16. Notices

16.1 Service of Notice

Any notice, consent, information, application or request that must or may be given or made to a Party under this Agreement is only given or made if it is in writing and sent in one of the following ways:

- (a) delivered or posted to that Party at its address set out in Item 5 of Schedule 1; or
- (b) faxed to that Party at its fax number set out in Item 5 of Schedule 1.

16.2 Change of address

If a Party gives the other Party 10 business days' notice of a change of its address or fax number, any notice, consent, information, application or request is only given or made by that other Party if it is delivered, posted or faxed to the latest address or fax number.

16.3 Time of service of Notice

Any notice, consent, information, application or request is to be treated as given or made at the following time:

- (a) If it is delivered, when it is left at the relevant address.
- (b) If it is sent by post, two business days after it is posted.
- (c) If it is sent by fax, as soon as the sender receives from the sender's fax machine a report of an error free transmission to the correct fax number.

16.4 Service after hours, on weekends and holidays

If any notice, consent, information, application or request is delivered, or an error free transmission report in relation to it is received, on a day that is not a business day, or if on a business day, after 5:00 pm on that day in the place of the Party to whom it is sent, it is to be treated as having been given or made at the beginning of the next business day.

17. Approvals and consent

Except as otherwise set out in this Agreement, a party may give or withhold an approval or consent to be given under this Agreement in that Party's absolute discretion and subject to

any conditions determined by the Party. A Party is not obliged to give its reasons for giving or withholding consent or for giving consent subject to conditions.

18. Assignment and dealings

18.1 Dealings with Land

- (a) Subject to clause 18.1(b), the Owner must not have any Dealings with the Land unless the Owner first informs the proposed assignee, purchaser or other party (the "Incoming Party") of this Agreement and provides the Incoming Party with a copy of this Agreement and transfers the obligations of this Agreement to that party.
- (b) If the Incoming Party is acquiring an interest in the Land as a purchaser of one or more lots in a strata scheme, (whether or not the plan has, at the date of exchange, been registered at Land and Property Information NSW), then the Owner may create that interest without requiring that party to enter into an agreement with the Council and the interest so created will not be in breach of this Agreement.

18.2 Substitution of Security

As soon as is practicable after the Owner has any Dealings with the Land and the Incoming Party executes an agreement in similar form to this Agreement and provides a Guarantee in terms acceptable to the Council in accordance with this Agreement, the Council will, if so directed by the Owner or Developer, release the Guarantee held at that time.

18.3 Claim if no substitution

If the Owner omits to comply with its obligations under clause 18.1, then the Council may make an appropriation from the Guarantee in such amount as the Council thinks fit.

19. Variation of Agreement

- 19.1 The parties may agree to vary the terms of this Agreement. Any such variation shall be evidenced by a written variation and must comply with the provisions of Section 93G of the Act.

20. Costs

20.1 Legal and administrative costs

Each party must pay their own legal and administrative costs and expenses in relation to:

- (a) the negotiation, preparation and execution of this Agreement;
- (b) the giving effect to this Agreement; and
- (c) any enforcement of the rights under this Agreement.

20.2 Stamp duty

The Developer is liable for and must pay all stamp duty (including any fine or penalty except where it arises from default by any other party) on or relating to this Agreement, any document executed under it or any dutiable transaction evidenced or effected by it.

21. Entire Agreement

This Agreement contains everything to which the Parties have agreed in relation to the matters it deals with. No Party can rely on an earlier document, or anything said or done by another Party, or by a director, officer, agent or employee of that Party, before this Agreement was executed, except as permitted by law.

22. Further acts

Each Party must promptly execute all documents and do all things that another Party from time to time reasonably requests to affect, perfect or complete this Agreement and all transactions incidental to it.

23. Governing law and jurisdiction

This Agreement is governed by the law of New South Wales. The Parties submit to the jurisdiction of the courts of that state.

24. Joint and several liability

Any agreement, covenant, representation or warranty under this Agreement by two or more persons binds them jointly and each of them individually.

25. No fetter

Nothing in this Agreement will be construed as limiting or fettering in any way the exercise by Council of any statutory discretion or duty.

26. Representations and warranties

The Parties represent and warrant that they have power to enter into this Agreement and that entry into this Agreement will not result in the breach of any law.

27. Severability

If a clause or part of a clause of this Agreement can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it must be read in the latter way. If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this Agreement, but the remainder of this Agreement is not affected.

28. Modification

No modification of this Agreement will be of any force or effect unless it is in writing and signed by the parties to this Agreement.

29. Waiver

A waiver by either Party is only effective if it is given in writing, and that waiver will only relate to the particular obligation or breach (as the case may be) identified in that communication.

30. GST

30.1 In this clause terms used have the meaning given to them by the GST Law as defined in Section 195-1 of the *A New Tax System (Goods and Services Tax) Act 1999* (the "GST Act").

- 30.2 If a party to this Agreement (the "Supplier") makes a supply under or in connection with this Agreement and is liable by law to pay GST on that supply, then the consideration otherwise payable by the recipient of the supply will be increased by an amount equal to the GST paid or payable by the Supplier.
- 30.3 If this Agreement requires a party to pay for, or reimburse any expense, loss or outgoing (**reimbursable expense**) suffered or incurred by another party, the amount required to be paid, or reimbursed by the first party is the amount of the reimbursable expense net of any input tax credit or reduced input tax credit to which the other party is entitled in respect of the reimbursable expense.
- 30.4 If a party to this Agreement has the benefit of an indemnity for a cost, expense, loss or outgoing (**indemnified cost**) under this Agreement, the indemnity is for the indemnified cost net of any input tax credit or reduced input tax credit to which that party is entitled in respect of the indemnified cost.
- 30.5 Each party agrees to do all things, including providing tax invoices and other documentation that may be necessary or desirable to enable or assist the other party to claim any input tax credit, set-off, rebate or refund in relation to any amount of GST paid or payable in respect of any supply under this Agreement.
- 30.6 Subject to the operation of this clause, and unless otherwise expressly stated amounts in this Agreement are GST exclusive.

Schedule 1 - Reference Schedule

Item 1	Developer's Details	Developer's Name: Johnstone Concrete & Landscape Supplies Pty Ltd Developer's ACN: 151 205 882 Developer's Address: 173 Old Gunnedah Road, Narrabri, New South Wales
Item 2	Council's Representative	Diane Hood – General Manager
Item 3	Land	Lot 89 DP 821255 and Lot 77 DP 754937 Parish of Eulah County of Nandewar
Item 4	Development Application	DA 60/2013 to expand the operation of Johnstone's Quarry
Item 5	Public Benefits	Construction of, upgrading of and maintenance of public roads
Item 6	Guarantee Amount	\$250,000.00
Item 7	Public Liability Insurance	\$20 million
Item 8	Notices	<p>Council</p> Council Name: Narrabri Shire Council Address: 46-48 Maitland Street, Narrabri NSW 2390 Attention: Diane Hood, General Manager Telephone: (02) 6799 6866 Facsimile: (02) 6799 6888 Email: council@narrabri.nsw.gov.au
		<p>Developer</p> Name: Johnstone's Concrete and Landscape Supplies Pty Limited Address: PO Box 878, 173 Old Gunnedah Road, Narrabri NSW 2390 Attention: Ian Johnstone, Managing Director Telephone: 02 6792 3036 Facsimile: 02 6792 4778 Email: mark@jcls.net.au

Schedule 2 - Council's Works

Section 2

1. Construction and sealing of part of Wave Hill Road shown as Segment "A" of the Wave Hill Road Plan within 15 years of the date of commencement of this agreement.

Schedule 3 - Developer's Works

Section 1

Developer Works:

1. The upgrading of part of Wave Hill Road, shown as "Segment B" on the Wave Hill Road Plan.

In accordance with the "Wave Hill Road Plan" which is the plan of Road Construction and Sealing Works Drawings No. 1318284-01 to 1318284-90

Completion of Developer Works:

Works must be completed within a period of 2 years such period to commence on the execution of this Agreement.

Schedule 4 - Standards

1. General

The standards referred to in this Schedule 4 are included for information purposes only, and as a guide to the relevant standards for the general nature of the work of the kind identified as Developer's Works in this Agreement. The Council makes no representation or warranty whatsoever as to the currency of the standards identified, or their application to the final design of any particular element. If any standard is replaced or supplemented, then a reference will be deemed to include any other standards as may replace or supplement that standard.

2. Conflict

In the event that any Australian Standard prescribes or describes a different level of material, finish, work or workmanship, than those contained in any Council Standard, then the higher of the two standards will apply. In the event that one or more Council Standards conflict with another Council Standard, then the Council must nominate the correct and applicable Council Standard. The Council's decision as to the applicable standard in the event of conflict is final.

3. Relevant Australian Standards – Roads (including pedestrian areas)

- AS 1725 Geotechnical Site investigations
- AS 4455 Masonry Units and segmental pavers
- AS 2876 Concrete kerbs and channels
- AS 1158 Road Lighting
- AS 4282 Control of the Obtrusive Effects of Outdoor lighting
- AS 1428 Design for Access and Mobility
- AS 3500 Plumbing and Drainage
- AS 4282 Design for Access and Mobility
- AS 1742 Manual of uniform traffic control devices
- AS 1743 Road Signs
- **Council Standards and Designs (All Works)**

Schedule 5 - Reference Schedule

<p>Item 1</p>	<p>Rate: \$1.12 per tonne of product (indexed in accordance with clause 5.3)</p> <p>Period of payment: A period of 15 years commencing on the Commencement Date.</p> <p>Council Works: Upgrading of part of Wave Hill Road between Segment "A" of the Wave Hill Road Plan</p>
<p>Item 2</p>	<p>Rate: \$0.20 per tonne of product (indexed in accordance with clause 5.3)</p> <p>Period of payment: 15 years commencing on the Commencement Date.</p> <p>Council Works: Towards the ongoing maintenance of Wave Hill Road as shown in the Council's Road Maintenance Plan prepared in accordance with clause 6.</p>

PLANNING AGREEMENT

BETWEEN

NARRABRI SHIRE COUNCIL

And

JOHNSTONE CONCRETE AND LANDSCAPE SUPPLIES PTY LIMITED




Level 14, Australia Square
264-278 George Street
Sydney NSW 2000
DX 129 Sydney
Telephone +61 2 9334 8555
Facsimile 1300 369 656

hwlebsworth.com.au

Executed as an Agreement.

Executed for and on behalf of **Narrabri Shire Council** in accordance with Minute number 674/2014 being a resolution of Council dated 28 October 2014 by:



Signature of

DIANE HOOD, GENERAL MGR
Full name (print)



Signature of

CONRAD BOLTON, MAYOR.
Full name (print)

Executed by **Johnstone Concrete & Landscape Supplies Pty Ltd ACN 151 205 882** in accordance with section 127(1) of the *Corporations Act 2001 (Cth)* by:



Signature of Director

LEE-ANNE JOHNSTONE
Full name (print)



Signature of Director/Company Secretary

IAN ANTHONY JOHNSTONE
Full name (print)

Annexure "A"

Wave Hill Road Plan

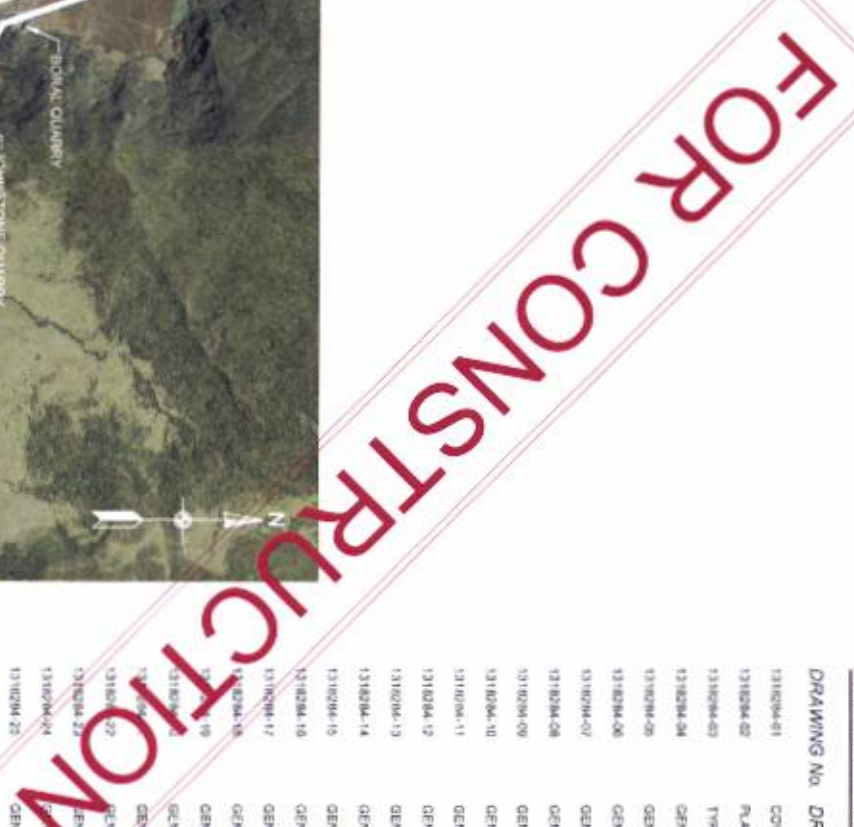
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ROAD CONSTRUCTION & SEALING WORKS

WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY

DRAWING INDEX

DRAWING No.	DRAWING TITLE	DRAWING No.	DRAWING TITLE
1318284-01	COVER SHEET LOCALITY SKETCH & DRAWING INDEX	1318284-08	ROAD CROSS SECTIONS - SHEET 1 OF 20
1318284-02	PLAN LAYOUT	1318284-09	ROAD CROSS SECTIONS - SHEET 2 OF 20
1318284-03	TYPICAL ROAD CROSS SECTIONS, DETAILS, QUANTITIES & NOTES	1318284-10	ROAD CROSS SECTIONS - SHEET 3 OF 20
1318284-04	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 1 OF 22	1318284-11	ROAD CROSS SECTIONS - SHEET 4 OF 20
1318284-05	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 2 OF 22	1318284-12	ROAD CROSS SECTIONS - SHEET 5 OF 20
1318284-06	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 3 OF 22	1318284-13	ROAD CROSS SECTIONS - SHEET 6 OF 20
1318284-07	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 4 OF 22	1318284-14	ROAD CROSS SECTIONS - SHEET 7 OF 20
1318284-08	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 5 OF 22	1318284-15	ROAD CROSS SECTIONS - SHEET 8 OF 20
1318284-09	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 6 OF 22	1318284-16	ROAD CROSS SECTIONS - SHEET 9 OF 20
1318284-10	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 7 OF 22	1318284-17	ROAD CROSS SECTIONS - SHEET 10 OF 20
1318284-11	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 8 OF 22	1318284-18	ROAD CROSS SECTIONS - SHEET 11 OF 20
1318284-12	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 9 OF 22	1318284-19	ROAD CROSS SECTIONS - SHEET 12 OF 20
1318284-13	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 10 OF 22	1318284-20	ROAD CROSS SECTIONS - SHEET 13 OF 20
1318284-14	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 11 OF 22	1318284-21	ROAD CROSS SECTIONS - SHEET 14 OF 20
1318284-15	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 12 OF 22	1318284-22	ROAD CROSS SECTIONS - SHEET 15 OF 20
1318284-16	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 13 OF 22	1318284-23	ROAD CROSS SECTIONS - SHEET 16 OF 20
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1318284-18	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 15 OF 22	1318284-25	ROAD CROSS SECTIONS - SHEET 18 OF 20
1318284-19	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 16 OF 22	1318284-26	ROAD CROSS SECTIONS - SHEET 19 OF 20
1318284-20	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 17 OF 22	1318284-27	ROAD CROSS SECTIONS - SHEET 20 OF 20
1318284-21	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 18 OF 22	1318284-28	ROAD CROSS SECTIONS - SHEET 21 OF 20
1318284-22	GENERAL ARRANGEMENT & SIGNPOSTING PLANS - SHEET 19 OF 22	1318284-29	ROAD CROSS SECTIONS - SHEET 22 OF 20
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1318284-27	LONGITUDINAL SECTION - SHEET 2 OF 22	1318284-34	ROAD CROSS SECTIONS - SHEET 27 OF 20
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1318284-46	LONGITUDINAL SECTION - SHEET 21 OF 22		
1318284-47	LONGITUDINAL SECTION - SHEET 22 OF 22		



LOCALITY PLAN
NOT TO SCALE

PLAN SCALE:		APPROVED:	ANTHONY SWEETMAN	30-09-2013
HORIZONTAL SCALE:		DESIGNED BY:	SEAN SERVICES NUMBER	
VERTICAL SCALE:		DRAWN:	GEORGE LATHAM	
DATUM:	SUPREME BEST AVAILABLE	ISSUED FOR CONSTRUCTION:		
AHD:	DESIGNED BY: LATHAM	ISSUED FOR APPROVAL:		
	DRAWN: GEORGE LATHAM			
	REV	DATE	DESCRIPTION	DRAWN

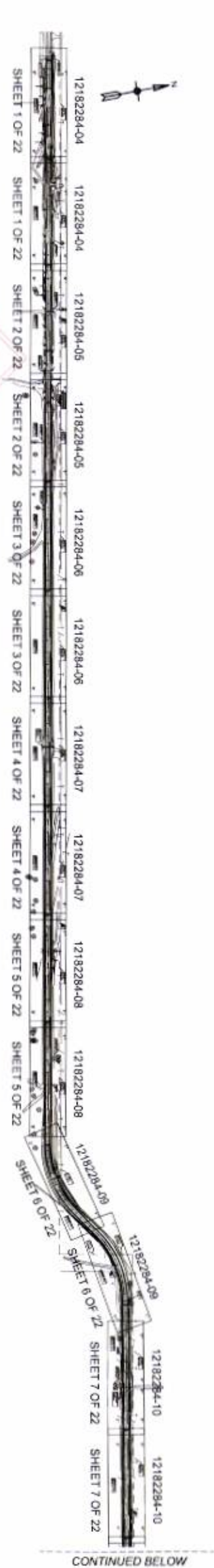
NARRABRI SHIRE COUNCIL
 48-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6798 6666 FAX: (02) 6798 6668

ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY
 COVER SHEET, LOCALITY SKETCH & DRAWING INDEX

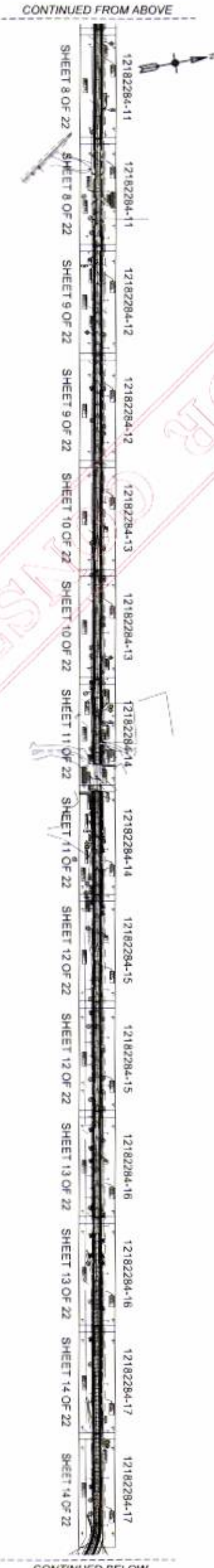
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 PROJECT No: 1318284
 No. OF SHEETS: 90
 SHEET No: 1

DRAWING No: 1318284-01
 REV: B

DO NOT SCALE



PLAN LAYOUT
NOT TO SCALE



PLAN LAYOUT
NOT TO SCALE



PLAN LAYOUT
NOT TO SCALE



PLAN LAYOUT
NOT TO SCALE

PLAN SCALE	1
HORIZONTAL SCALE	1
VERTICAL SCALE	1
DATE	30-09-2013
DESIGNED BY	ANTHONY SHEETMANN
DRAWN BY	ANTHONY SHEETMANN

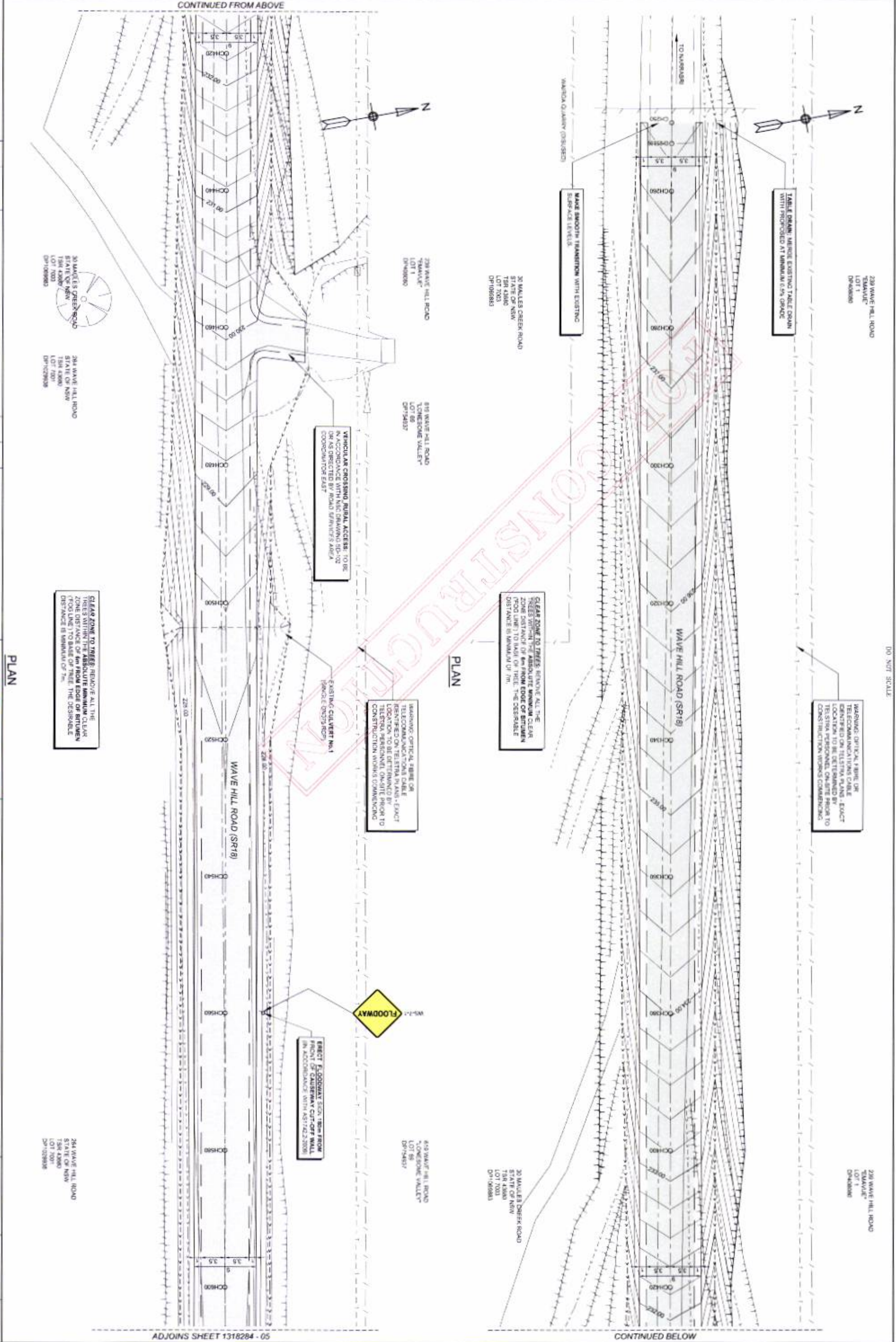
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A	30-09-2013	ISSUED FOR APPROVAL

REV.	DATE	DESCRIPTION
OP1	30-09-2013	ANTHONY SHEETMANN
OP2	30-09-2013	ANTHONY SHEETMANN



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 44-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 0888 FAX: (02) 6799 0888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY
 PLAN LAYOUT

FILE NO.	1318284	SHEET NO.	2
PROJECT NO.	1318284	NO. OF SHEETS	90
DRAWING NO.	1318284-02	REV.	B



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<p>PLAN SCALE: 1:300 @ A1: 1:500 @ A2</p> <p>HORIZONTAL SCALE</p> <p>VERTICAL SCALE</p>		<p>DESIGNED: GEORGE LATHAM</p> <p>DRAWN: GEORGE LATHAM</p>		<p>REV. DATE</p>		<p>ISSUED FOR CONSTRUCTION</p> <p>ISSUED FOR APPROVAL</p>		<p>SCALE: 1:300</p>		<p>DATE</p>		<p>APPROVAL</p>		<p>DATE</p>	
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NARRABRI SHIRE COUNCIL

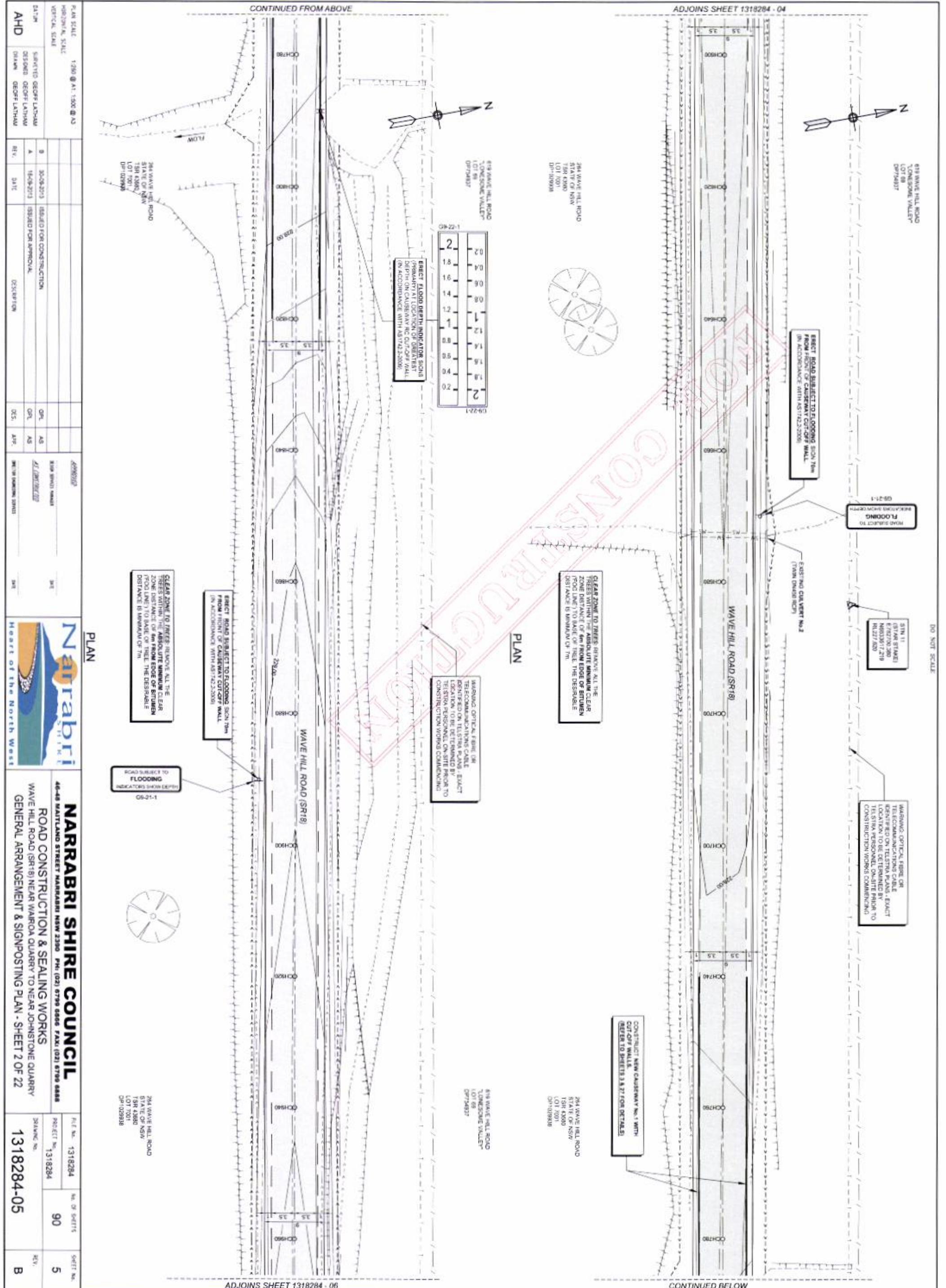
44-48 MATLAND STREET NARRABRI NSW 2380 PH: (02) 6799 8888 FAX: (02) 6799 8888

ROAD CONSTRUCTION & SEALING WORKS

WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY

GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 1 OF 22

<p>FILE No. 1318284</p> <p>PROJECT No. 1318284</p>	<p>No. OF SHEETS 90</p>	<p>SHEET No. 4</p>
<p>1318284-04</p>		



PLAN SCALE VERTICAL SCALE 1:500 @ A1 1:500 @ A3		DATE		DESIGNED		CHECKED		DATE		DATE		DATE		DATE	
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DESIGNED BY: GEORGE LATHAM		CHECKED BY: GEORGE LATHAM		DATE: 15/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013	
DRAWN BY: GEORGE LATHAM		DATE: 15/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013	
DESCRIPTION: ROAD CONSTRUCTION & SEALING WORKS		SCALE: 1:500		DATE: 15/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013	
PROJECT No: 1318284		SHEET No: 5		DATE: 15/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013	
PROJECT No: 1318284		SHEET No: 5		DATE: 15/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013		DATE: 16/04/2013	

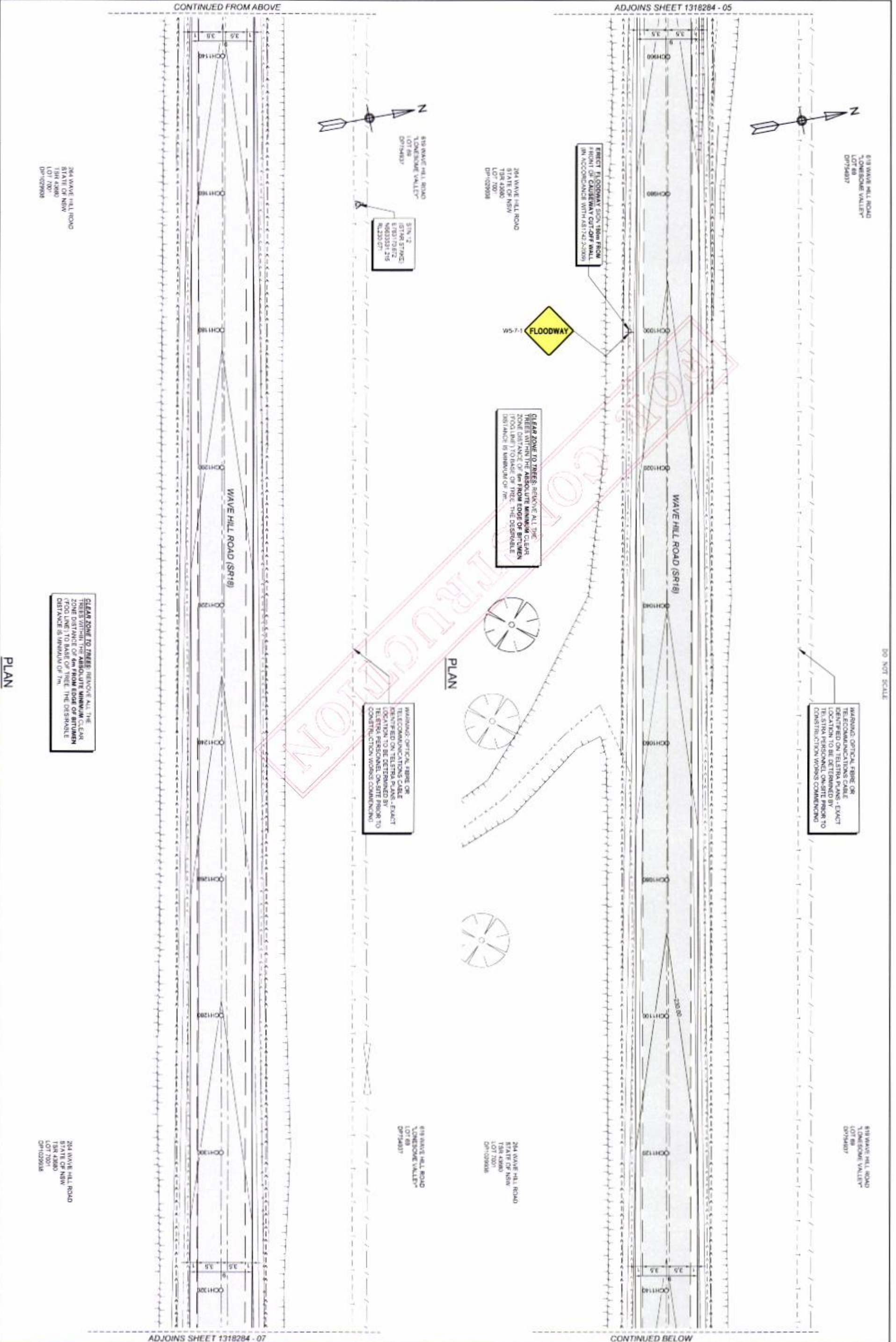
Narabri
Heart of the North West

NARRABRI SHIRE COUNCIL
46-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6666

ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 2 OF 22

FILE No: 1318284 No. of SHEETS: 90 SHEET No: 5

PROJECT No: 1318284 DATE: 15/04/2013

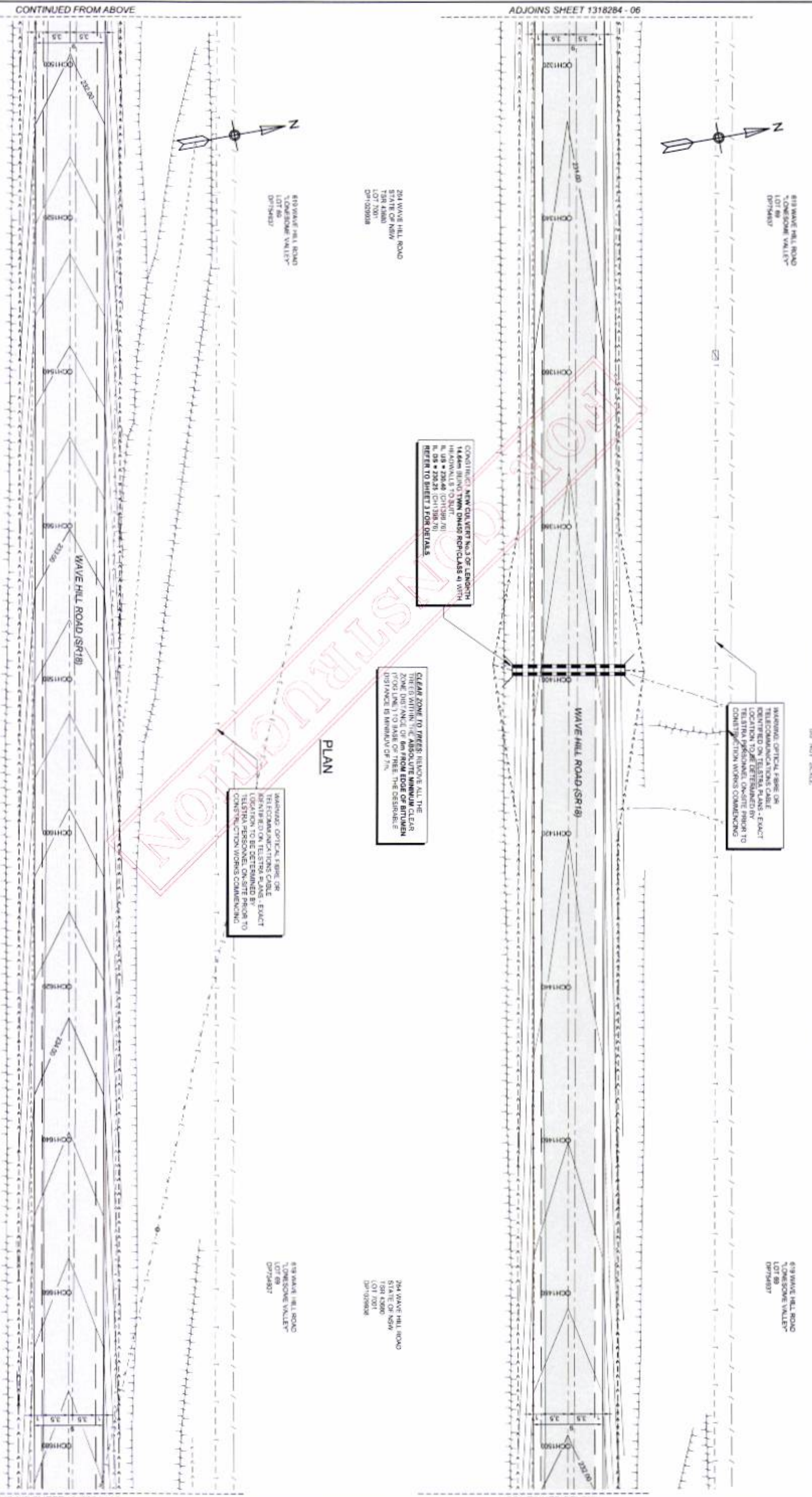


<p>PLAN SCALE HORIZONTAL SCALE VERTICAL SCALE</p>	<p>1:250 @ A1: 1:500 @ A3</p>		<p>DATE</p>	<p>ISSUED FOR CONSTRUCTION</p>	<p>ISSUED FOR APPROVAL</p>	<p>DESCRIPTION</p>	<p>SECTION NUMBER</p>	<p>DATE</p>	<p>DRAWN BY</p>	<p>CHECKED BY</p>	<p>DATE</p>
	<p>15-09-2013</p>	<p>15-09-2013</p>									
<p>DESIGNED BY GEOFF LATHAM</p>	<p>DRAWN BY GEOFF LATHAM</p>	<p>CHECKED BY</p>	<p>DATE</p>	<p>ISSUED FOR CONSTRUCTION</p>	<p>ISSUED FOR APPROVAL</p>	<p>DESCRIPTION</p>	<p>SECTION NUMBER</p>	<p>DATE</p>	<p>DRAWN BY</p>	<p>CHECKED BY</p>	<p>DATE</p>
<p>AHD</p>	<p>DESIGNED BY GEOFF LATHAM</p>	<p>DRAWN BY GEOFF LATHAM</p>	<p>DATE</p>	<p>ISSUED FOR CONSTRUCTION</p>	<p>ISSUED FOR APPROVAL</p>	<p>DESCRIPTION</p>	<p>SECTION NUMBER</p>	<p>DATE</p>	<p>DRAWN BY</p>	<p>CHECKED BY</p>	<p>DATE</p>



NARRABRI SHIRE COUNCIL
 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6795 6666 FAX: (02) 6795 6668
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 3 OF 22

PLAN



204 WAVE HILL ROAD
STATE OF NSW
TSR 4380
LOT 7001
DP1029808

204 WAVE HILL ROAD
STATE OF NSW
TSR 4380
LOT 7001
DP1029808

204 WAVE HILL ROAD
STATE OF NSW
TSR 4380
LOT 7001
DP1029808

PLAN

CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN (POG LINE) TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.



PLAN SCALE: 1:250 @ A1, 1:500 @ A2 VERTICAL SCALE:		30-09-2013 ISSUED FOR CONSTRUCTION		30-09-2013 ISSUED FOR APPROVAL		30-09-2013 ANTHONY SWEETMAN SR18 SR18 WORKS		30-09-2013 ANTHONY SWEETMAN SR18 SR18 WORKS	
DATE: 30-09-2013 DRAWN: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM	DATE: 30-09-2013 CHECKED: GEOFF LATHAM
AHD DRAWN: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM	AHD CHECKED: GEOFF LATHAM



NARRABRI SHIRE COUNCIL
 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 8799 6666 FAX: (02) 8799 6666
ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 4 OF 22

PROJECT No. 1318284 SHEET No. 1318284	No. OF SHEETS 90	SHEET No. 7
--	---------------------	----------------

DO NOT SCALE



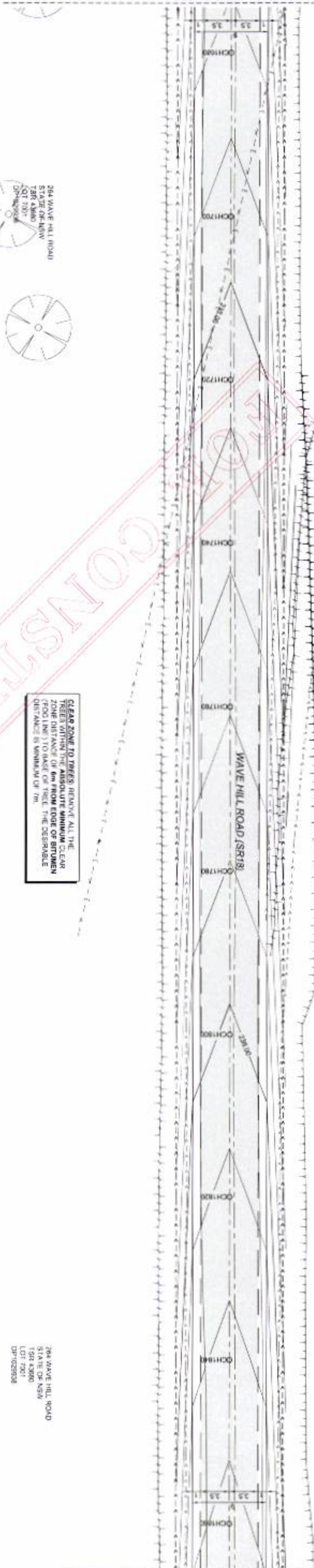
819 WAVE HILL ROAD
"LONGSOME VALLEY"
LOT 69
DP754537

819 WAVE HILL ROAD
"LONGSOME VALLEY"
LOT 69
DP754537

819 WAVE HILL ROAD
"LONGSOME VALLEY"
LOT 69
DP754537

WARNING: OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELESTRAL PLANS - EXACT LOCATION TO BE DETERMINED BY TELESTRAL PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

ADJOINS SHEET 1318284 - 07



PLAN

CLEAR ZONE TO TREES REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN (FOOT LINE) TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

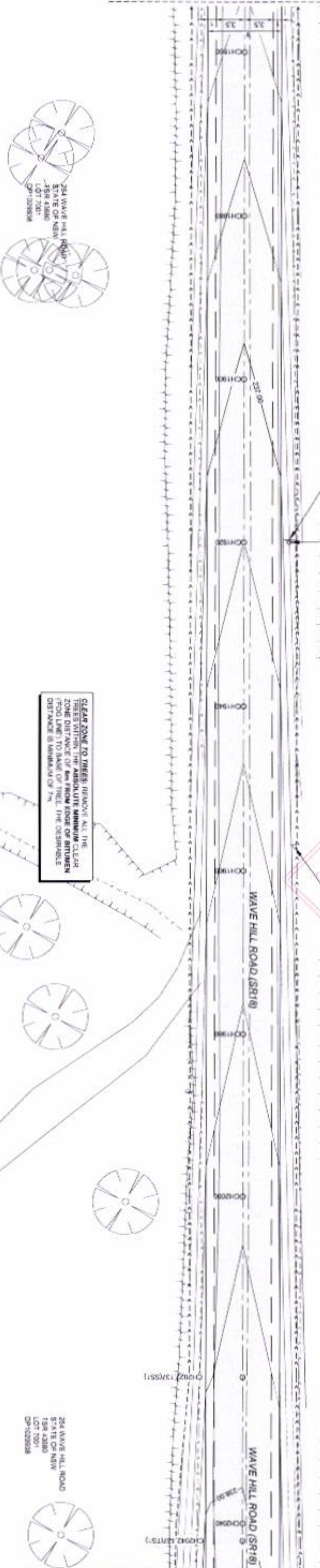


ERECT REVERSE CURVE & ADVISORY SPEED SIGNS 140m BACK FROM ANCHOR POINT AT THE END OF THE STRAIGHT IN ACCORDANCE WITH AS1742.2:2008

REMOVE EXISTING SIGN

WARNING: OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELESTRAL PLANS - EXACT LOCATION TO BE DETERMINED BY TELESTRAL PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

CONTINUED FROM ABOVE



PLAN

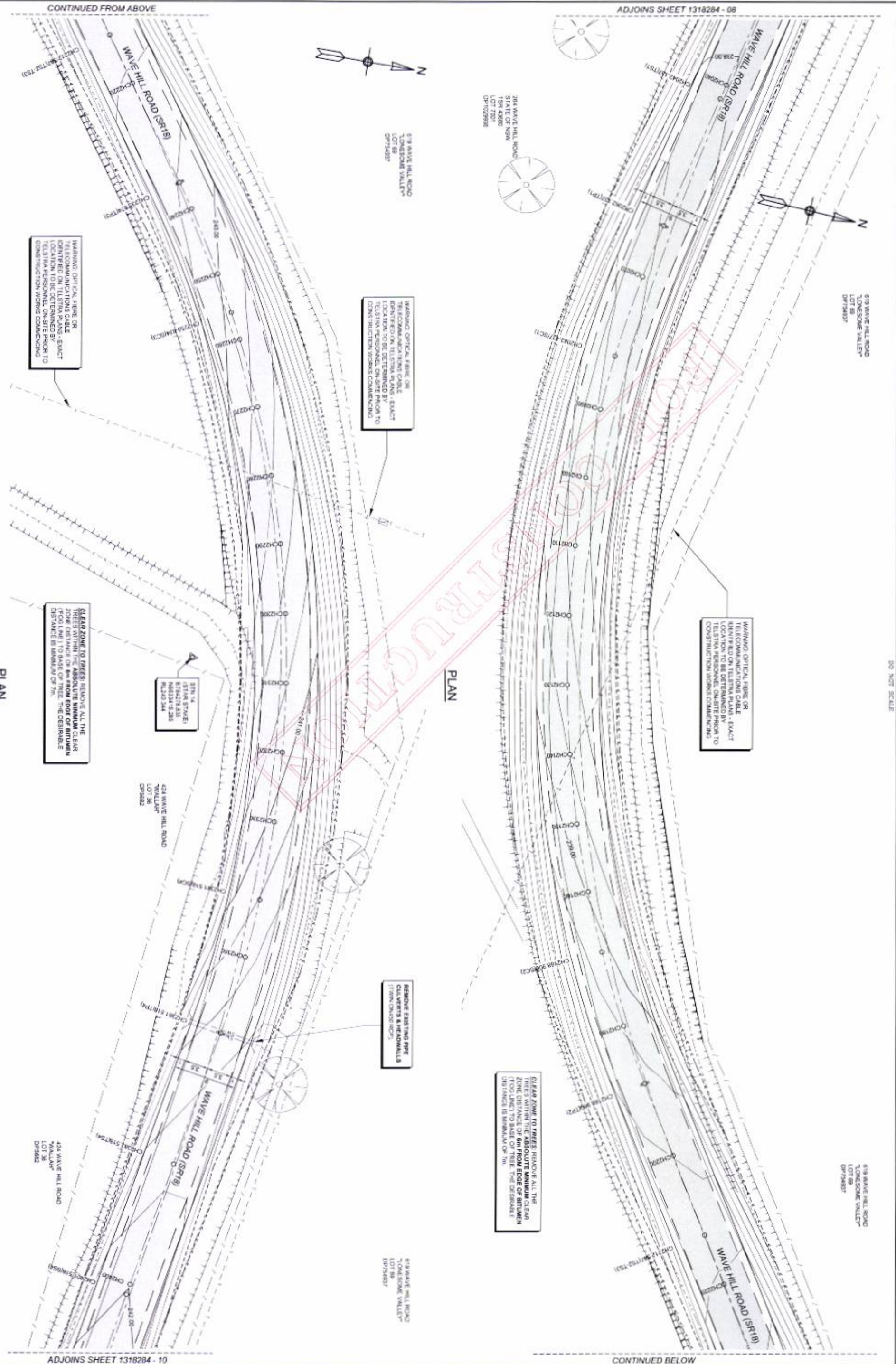
CLEAR ZONE TO TREES REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN (FOOT LINE) TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

ADJOINS SHEET 1318284 - 09

PLAN SCALE 1:200 @ A1, 1:500 @ A2	VERTICAL SCALE	DATE	DESCRIPTION	DESIGNER	CHECKER	DATE	DESCRIPTION
DATE	BY	DATE	DESCRIPTION	DATE	DATE	DATE	DESCRIPTION
DATE	BY	DATE	DESCRIPTION	DATE	DATE	DATE	DESCRIPTION
DATE	BY	DATE	DESCRIPTION	DATE	DATE	DATE	DESCRIPTION
DATE	BY	DATE	DESCRIPTION	DATE	DATE	DATE	DESCRIPTION

PROJECT NO.	1318284	SHEET NO.	8
DRAWING NO.	1318284-08	REV.	B

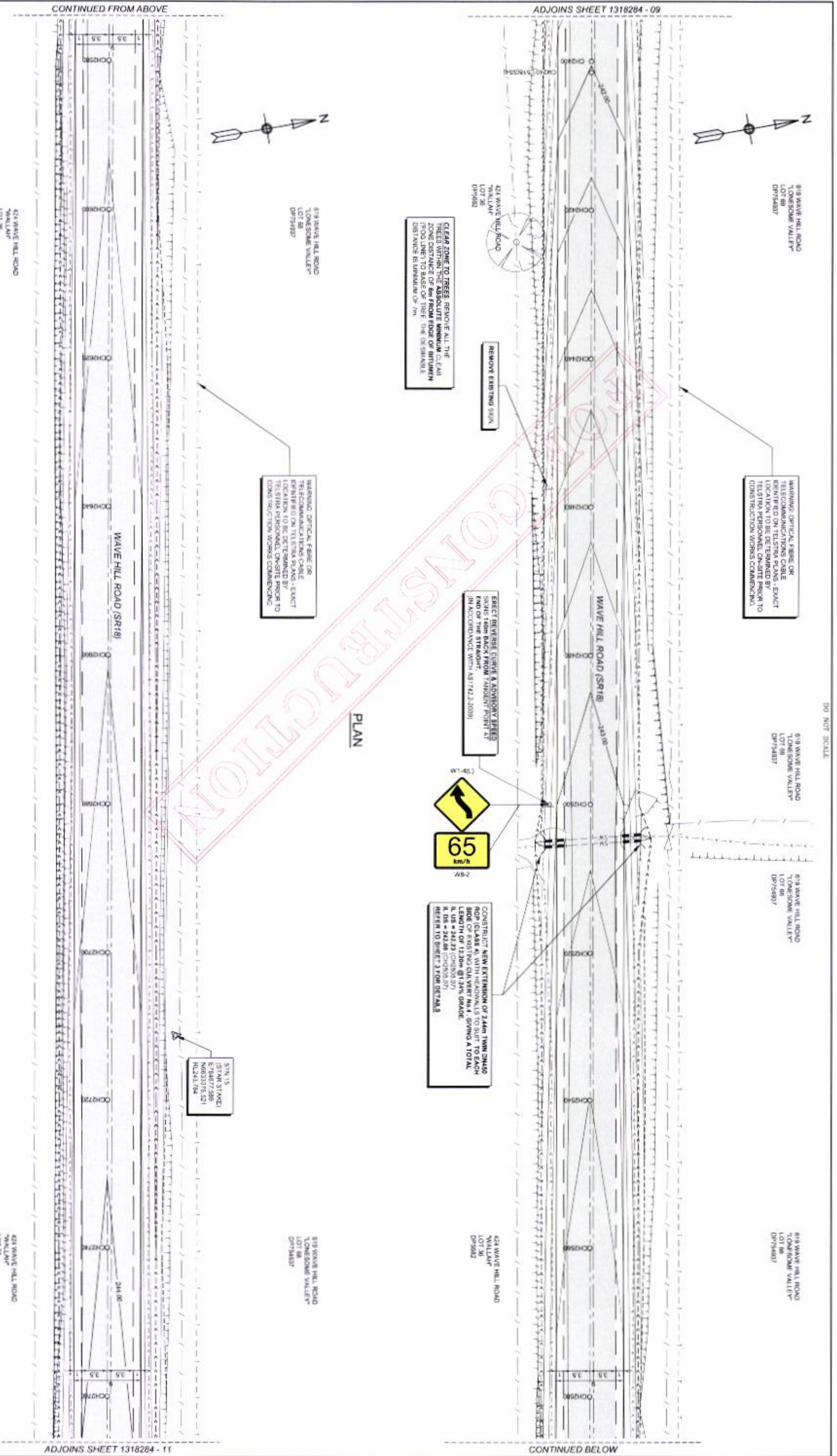
CLIENT	NARRABRI SHIRE COUNCIL
PROJECT	ROAD CONSTRUCTION & SEALING WORKS
LOCATION	WAVE HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 5 OF 22	



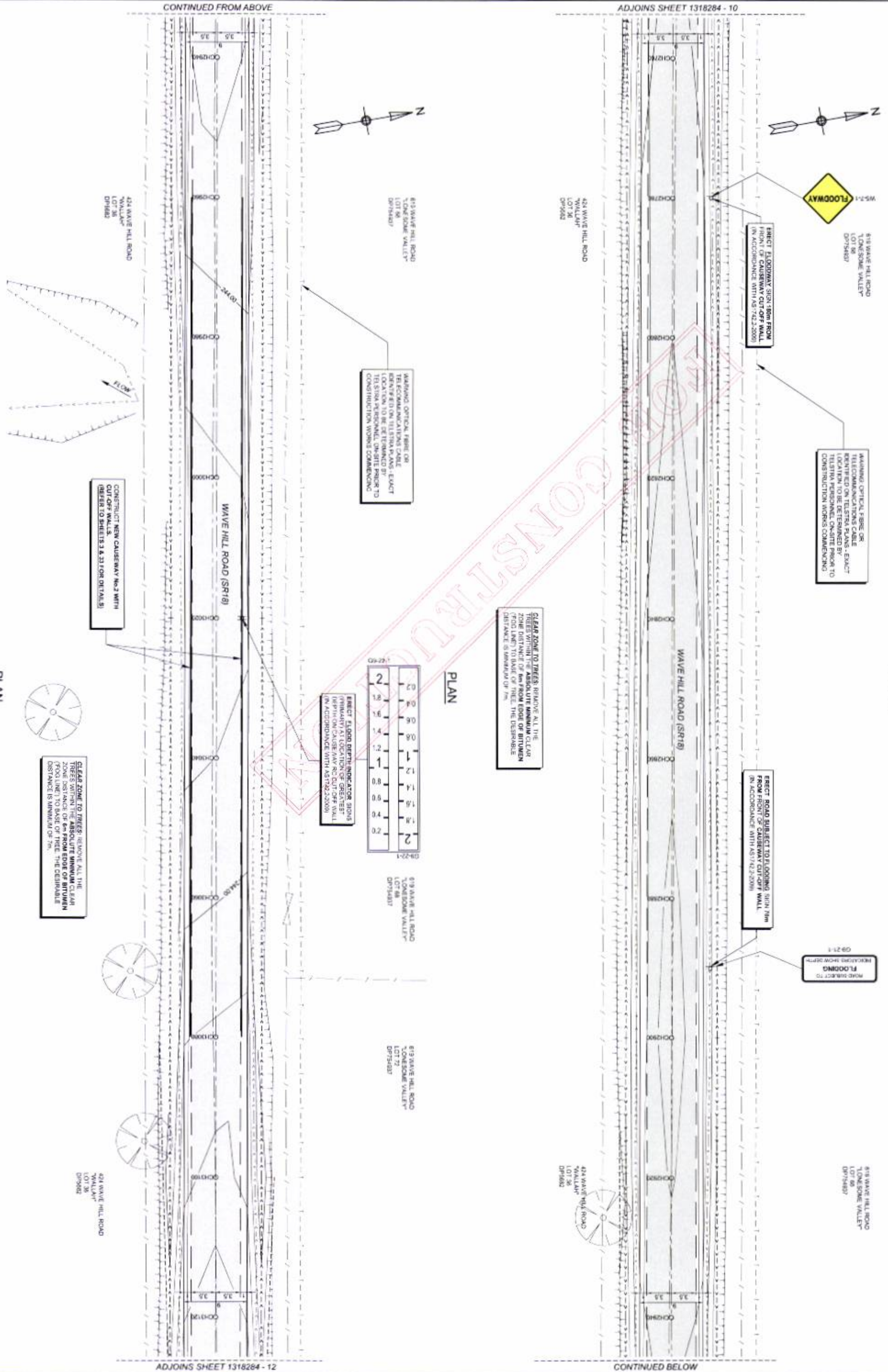
PLAN

PLAN

PLAN SCALE 1:250 @ A1, 1:500 @ A2 VERTICAL SCALE AS SHOWN	DATE 14-09-2015	DESIGNED BY GEORGE LATHAM	CHECKED BY GEORGE LATHAM	DATE 14-09-2015	REVISION 1. ISSUED FOR CONSTRUCTION	DATE 14-09-2015	BY G.L.	CHKD BY G.L.	APP'D BY G.L.	DESCRIPTION ROAD CONSTRUCTION & SEALING WORKS	SCALE AS SHOWN	DATE 14-09-2015	BY G.L.	CHKD BY G.L.	APP'D BY G.L.	DESCRIPTION ROAD CONSTRUCTION & SEALING WORKS
WARNING: OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRAS PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRAS PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING.																
WARNING: OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRAS PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRAS PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING.																
REMOVE EXISTING PITS, CURBS & KERBS (FROM DRAWINGS)																
CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN (FOOT LINE) TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.																
CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN (FOOT LINE) TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.																



PLAN SCALE: 1:200 @ A1, 1:500 @ A3 HORIZONTAL SCALE VERTICAL SCALE		4/20/2022 ANTHONY SMETANN 8599 STREET WARRABRI		20-09-2019 SH	
DATE: 30-08-2019 DESIGNED: DEBORAH LATHAM DRAWN: DEBORAH LATHAM		ISSUED FOR CONSTRUCTION 18-09-2019 ISSUED FOR APPROVAL		20-09-2019 SH	
AHD	REV.	DATE	DESCRIPTION	DES.	APP.
	1			DL	AS
NARRABRI SHIRE COUNCIL 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 8888 FAX: (02) 6799 8888 ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARRA QUARRY TO NEAR JOHNSTONE QUARRY GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 7 OF 22					
FILE NO. 1318284 PROJECT NO. 1318284		No. OF SHEETS 90		SHEET NO. 10	
DRAWING NO. 1318284-10			REV. B		



DO NOT SCALE



819 WAVE HILL ROAD
'LONGSIDE VALLEY'
LOT 66
DP15487

ERECT FLOODWAY SIGN 100M FROM FRONT OF CAUSEWAY CUT-OFF WALL (IN ACCORDANCE WITH AS 192.2:2009)

WARN ON OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFY BY TELESTRATA PLANS - EXACT LOCATION TO BE DETERMINED BY TELESTRATA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

ERECT ROAD SUBJECT TO FLOODING SIGN 70M FROM FRONT OF CAUSEWAY CUT-OFF WALL (IN ACCORDANCE WITH AS 192.2:2009)

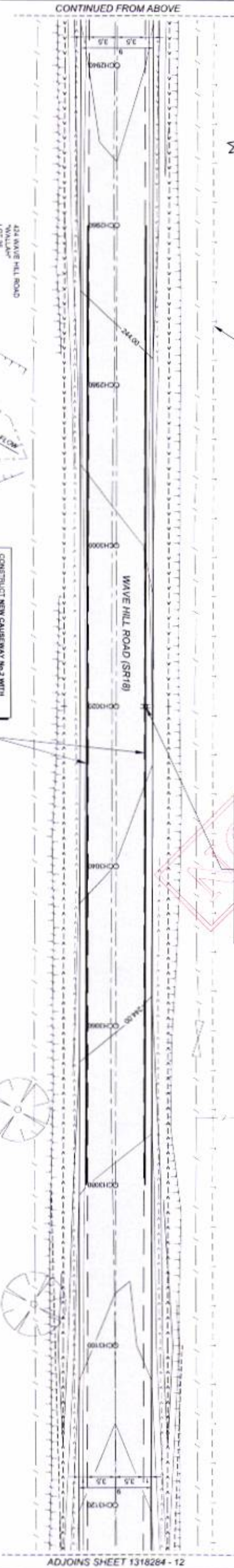
819 WAVE HILL ROAD
'LONGSIDE VALLEY'
LOT 66
DP15487



819 WAVE HILL ROAD
'LONGSIDE VALLEY'
LOT 66
DP15487

CONTINUED BELOW

CONTINUED FROM ABOVE



819 WAVE HILL ROAD
'LONGSIDE VALLEY'
LOT 66
DP15487

WARN ON OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFY BY TELESTRATA PLANS - EXACT LOCATION TO BE DETERMINED BY TELESTRATA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

ERECT FLOOD DEPTH INDICATOR SIGNS (PRIMARY) AT LOCATION OF GREATEST DEPTH ON CAUSEWAY CUT-OFF WALL (IN ACCORDANCE WITH AS 192.2:2009)

819 WAVE HILL ROAD
'LONGSIDE VALLEY'
LOT 66
DP15487

819 WAVE HILL ROAD
'LONGSIDE VALLEY'
LOT 72
DP15487

819 WAVE HILL ROAD
'LONGSIDE VALLEY'
LOT 72
DP15487

ADJOINS SHEET 1318284 - 12

PLAN SCALE: 1:250 @ A1, 1:500 @ A2
VERTICAL SCALE: AS SHOWN
DATE: 16-09-2013
ISSUED FOR CONSTRUCTION
ISSUED FOR APPROVAL

REV.	DATE	DESCRIPTION	DWG.	CHK.	APP.
0	20-09-2013	ISSUED FOR CONSTRUCTION	DP1	AS	
A	16-09-2013	ISSUED FOR APPROVAL	DP1	AS	

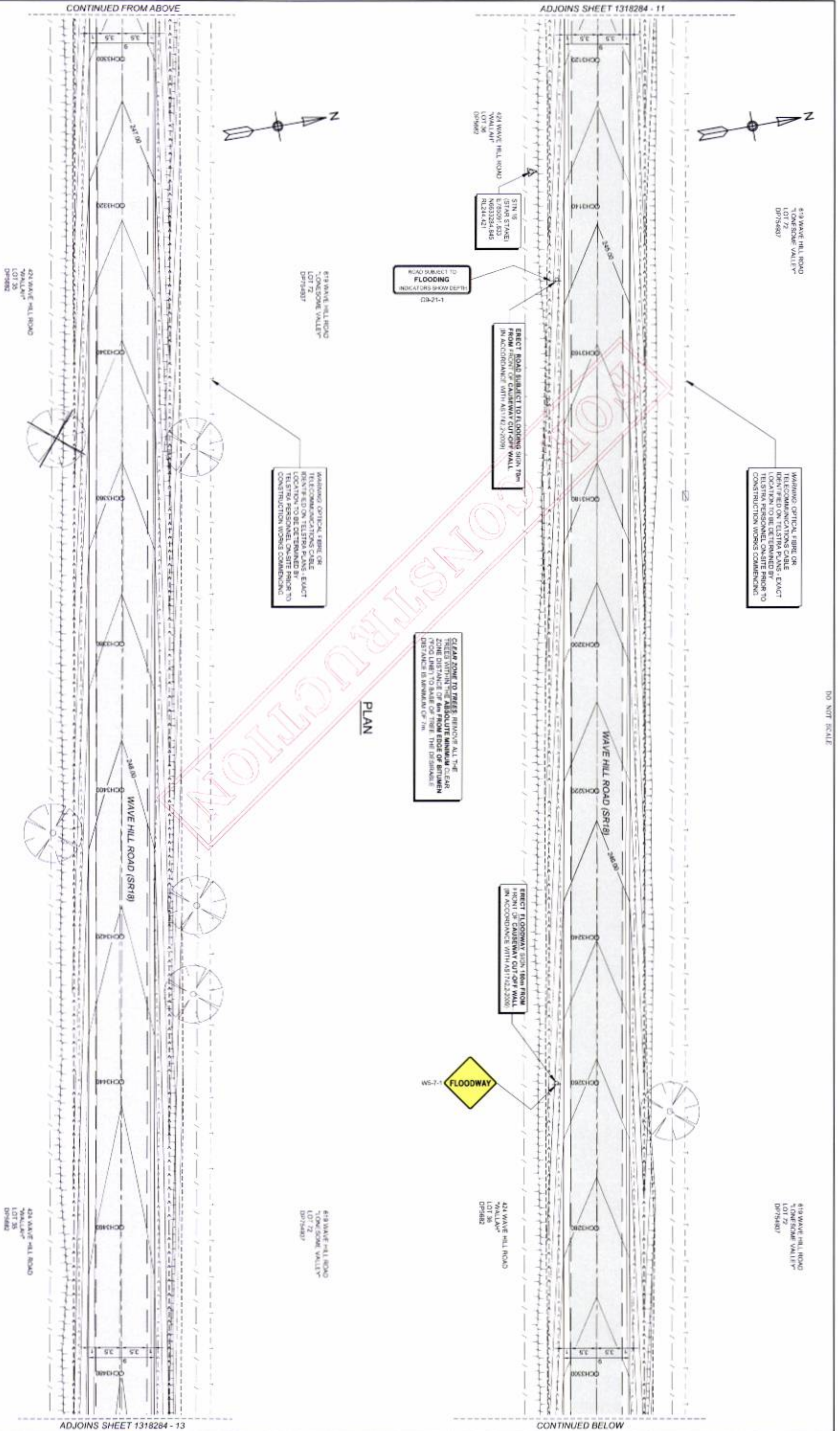
NARRABRI SHIRE COUNCIL
ROAD CONSTRUCTION & SEALING WORKS
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 8 OF 22

PLT No.	1318284	No. OF SHEETS	11
PROJECT No.	1318284		
DRAWING No.	1318284-11	REV.	B

PLAN SCALE VERTICAL SCALE 1:500 @ A1, 1:800 @ A3		DATE 16-09-2013		ISSUED FOR CONSTRUCTION		DATE 16-09-2013		ISSUED FOR APPROVAL	
DRAWN DESIPT LATHAM		CHKD A		DATE 16-09-2013		ISSUED FOR APPROVAL		DATE	
PROJECT NO. 1318284		SHEET NO. 90		SHEET TITLE NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 9 OF 22		FILE NO. 1318284		NO. OF SHEETS 90	
PROJECT NO. 1318284		SHEET NO. 12		SHEET TITLE NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 9 OF 22		FILE NO. 1318284		NO. OF SHEETS 90	
PROJECT NO. 1318284		SHEET NO. 12		SHEET TITLE NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 9 OF 22		FILE NO. 1318284		NO. OF SHEETS 90	

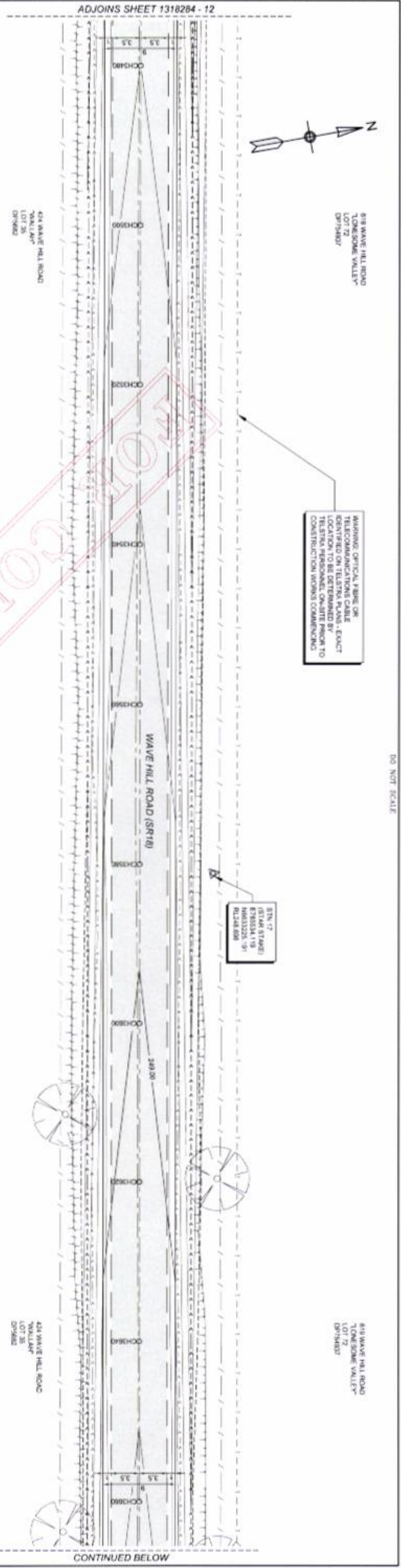
PLAN

CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN (POD LINE) TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

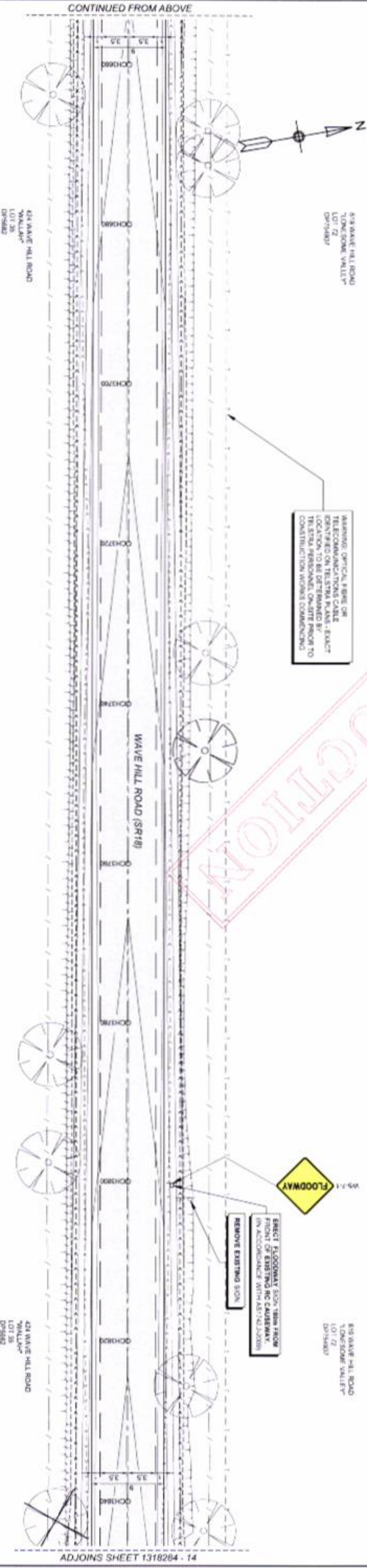


PLAN

DO NOT SCALE



PLAN



PLAN

CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 5m FROM EDGE OF BITUMEN (POD LINE) TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

PLAN SCALE: 1:250 @ A1, 1:500 @ A2 HORIZONTAL SCALE VERTICAL SCALE		PROJECTED GEOFF LATHAM DESIGNED GEOFF LATHAM		ISSUED FOR CONSTRUCTION 30-09-2013 16-06-2013		ISSUED FOR APPROVAL 30-09-2013 16-06-2013		DESCRIPTION		ANT HONEY SHEETMAN 8300 SHEDS WARRA 30-09-2013 16-06-2013		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 10 OF 22		FILE NO. 1318284 PROJECT NO. 1318284		NO. OF SHEETS 90		SHEET NO. 13																															
DRAWN: GEOFF LATHAM		REV. A		DATE: 16-06-2013		REV. B		DATE: 30-09-2013		DESCRIPTION:		DTL.		APP.		DTL.		APP.																															
CAD FILE NAME: U:\eng\design\PROJECTS\1318284 - SR18 Reconstruction\DESIGN\1318284-040.dwg		PLAN SCALE: 1:250 @ A1, 1:500 @ A2		HORIZONTAL SCALE		VERTICAL SCALE		PROJECTED GEOFF LATHAM		DESIGNED GEOFF LATHAM		ISSUED FOR CONSTRUCTION		30-09-2013		16-06-2013		ISSUED FOR APPROVAL		30-09-2013		16-06-2013		DESCRIPTION		ANT HONEY SHEETMAN		8300 SHEDS WARRA		30-09-2013		16-06-2013		NARRABRI SHIRE COUNCIL		ROAD CONSTRUCTION & SEALING WORKS		WAVE HILL ROAD (SR18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY		GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 10 OF 22		FILE NO. 1318284		PROJECT NO. 1318284		NO. OF SHEETS 90		SHEET NO. 13	

DATE	BY	DATE	DISCIPLINE
30-09-2013	A	16-09-2013	ISSUED FOR APPROVAL
	B		ISSUED FOR CONSTRUCTION

DESIGNED BY	DRYAN	GEORF LATHAM
DRAWN BY	GEORF LATHAM	

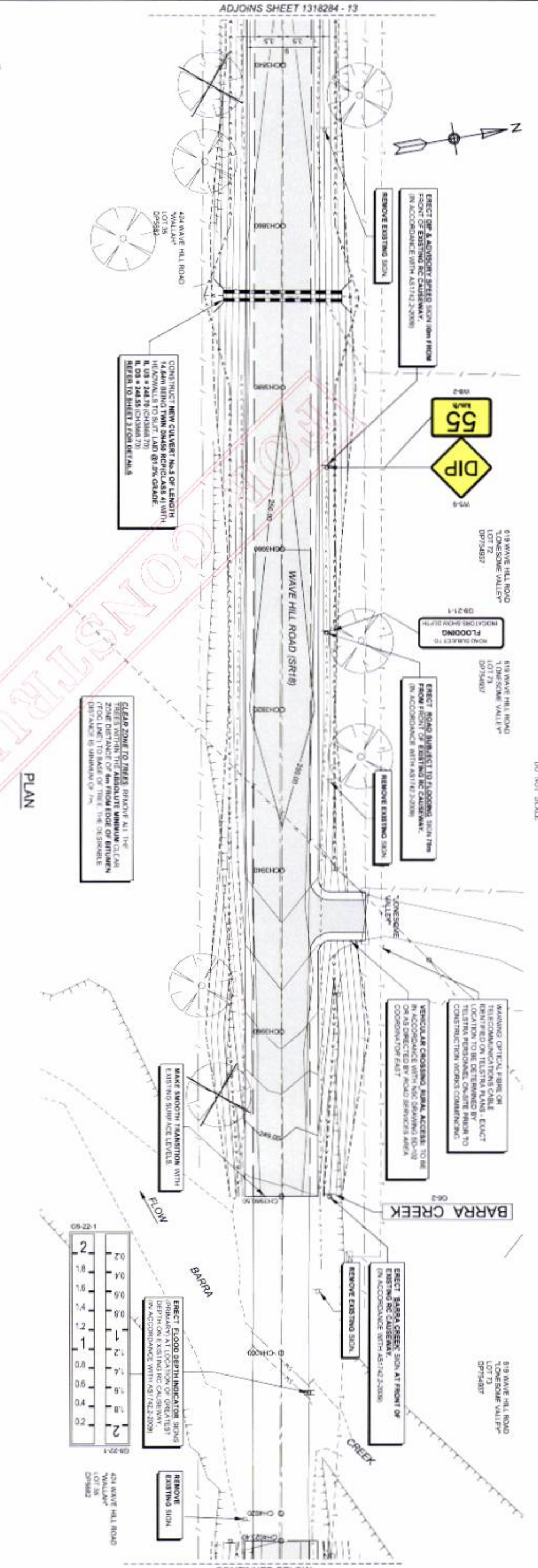
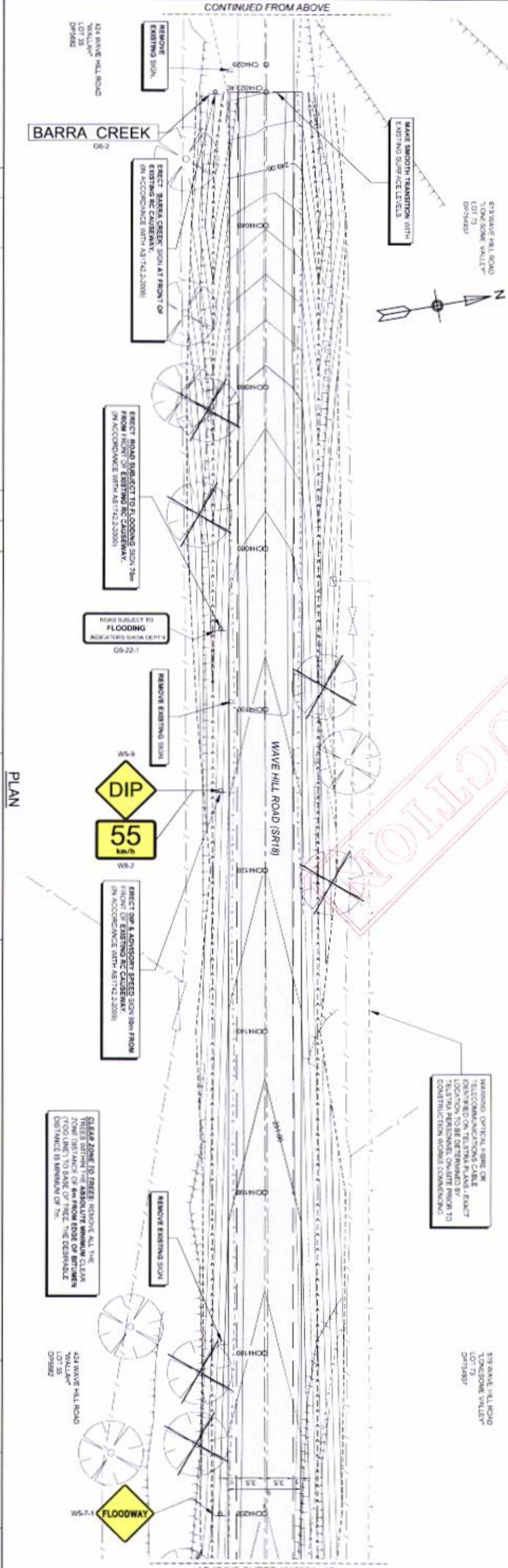
PLAN SCALE	1:250 @ A1, 1:500 @ A3
HORIZONTAL SCALE	
VERTICAL SCALE	

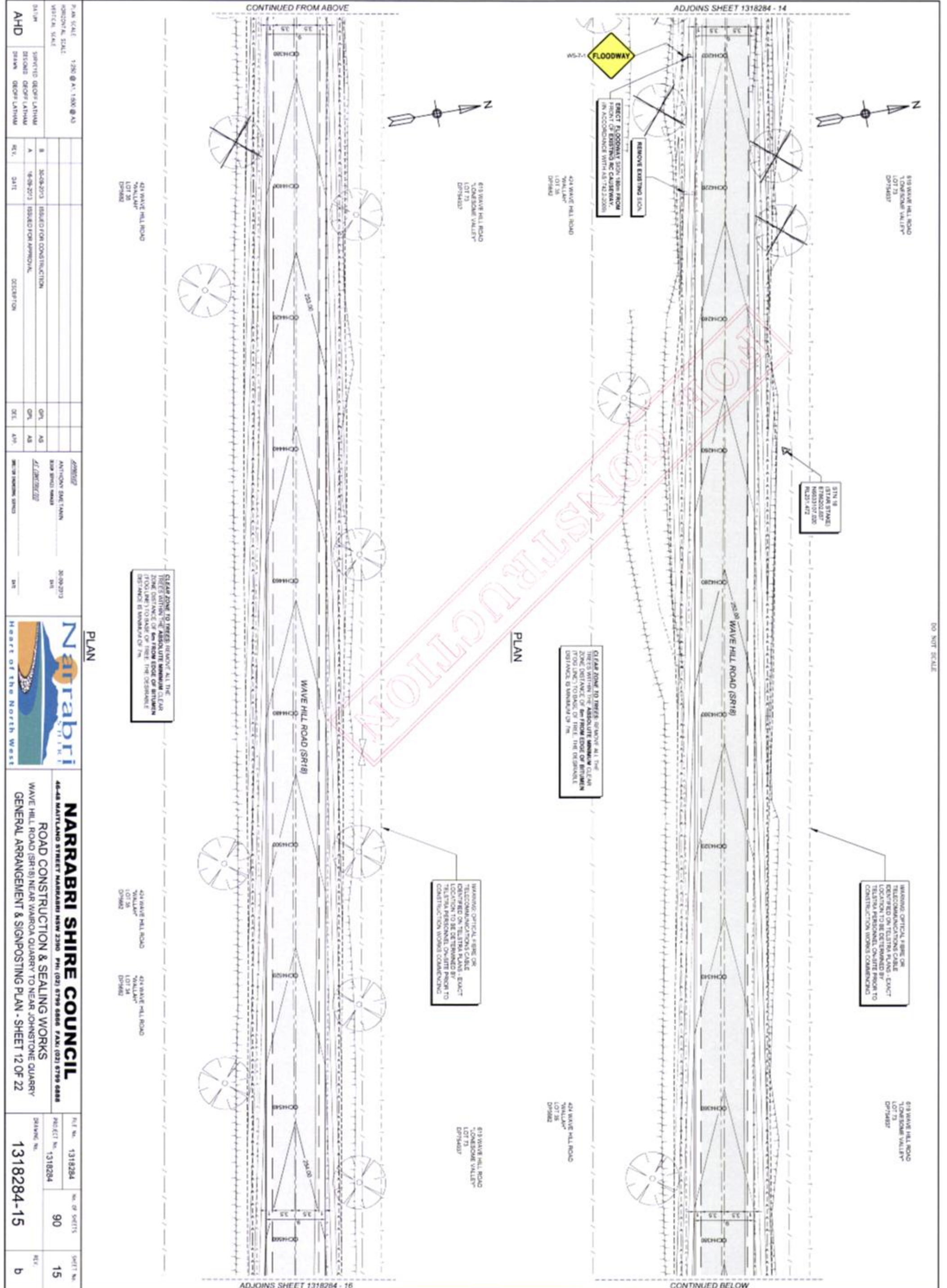
APPROVED BY	ANTHONY SWEETMAN	20-09-2013
SCALE	AS SHOWN	
DATE		



NARRABRI SHIRE COUNCIL
 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6666
ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARQA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 11 OF 22

PROJECT No.	1318284	No. of SHEETS	90	SHEET No.	14
DRAWING No.	1318284-14				





PLAN

PLAN

PLEASE ZONE TO THREE METRES FROM ALL THE TIER 1 WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN FLOORING TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

PLEASE ZONE TO THREE METRES FROM ALL THE TIER 1 WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN FLOORING TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

WARNING: OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE LOCATED ON TELESTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELESTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING.

WARNING: OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE LOCATED ON TELESTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELESTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING.

424 WAVE HILL ROAD
"OWNER"
LOT 73
DP79482

424 WAVE HILL ROAD
"OWNER"
LOT 73
DP79482

424 WAVE HILL ROAD
"OWNER"
LOT 73
DP79482

PLAN SCALE	1:250 @ A1, 1:500 @ A2
VERTICAL SCALE	
DATE	15/09/2013
ISSUED FOR CONSTRUCTION	15/09/2013
ISSUED FOR APPROVAL	15/09/2013
DESCRIPTION	SR18 RECONSTRUCTION



NARRABRI SHIRE COUNCIL
44-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6868 FAX: (02) 6799 6868
WAVE HILL ROAD (SR18) NEAR WARQA QUARRY TO NEAR JOHNSTONE QUARRY
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 12 OF 22

PROJECT No.	1318284
No. of SHEETS	90
SHEET No.	15

CONTINUED FROM ABOVE

ADJOINS SHEET 1318284 - 15

619 WAVE HILL ROAD
"LONGSTONE VALLEY"
LOT 73
DP754537

619 WAVE HILL ROAD
"LONGSTONE VALLEY"
LOT 73
DP754537

619 WAVE HILL ROAD
"LONGSTONE VALLEY"
LOT 73
DP754537

624 WAVE HILL ROAD
"WALLARF"
LOT 34
DP96982

624 WAVE HILL ROAD
"WALLARF"
LOT 34
DP96982

619 WAVE HILL ROAD
"LONGSTONE VALLEY"
LOT 73
DP754537

REMOVE ALL THE
TREES WITHIN THE ABSOLUTE MINIMUM CLEAR
ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN
FOOT LINE TO BASE OF TREE. THE DESIRABLE
DISTANCE IS MINIMUM OF 7m.

REMOVE ALL THE
TREES WITHIN THE ABSOLUTE MINIMUM CLEAR
ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN
FOOT LINE TO BASE OF TREE. THE DESIRABLE
DISTANCE IS MINIMUM OF 7m.

WARNING: OPTICAL FIBRE OR
TELECOMMUNICATIONS CABLE
IDENTIFIED ON TELSTRA PLANS - EXACT
LOCATION TO BE DETERMINED BY
TELSTRA PERSONNEL ON-SITE PRIOR TO
CONSTRUCTION WORKS COMMENCING

WARNING: OPTICAL FIBRE OR
TELECOMMUNICATIONS CABLE
IDENTIFIED ON TELSTRA PLANS - EXACT
LOCATION TO BE DETERMINED BY
TELSTRA PERSONNEL ON-SITE PRIOR TO
CONSTRUCTION WORKS COMMENCING

PLAN

PLAN

PLAN SCALE: 1:250 @ A1, 1:500 @ A3		VERTICAL SCALE:	
DATE:	REV:	DATE:	REV:
01/09/2013	0	01/09/2013	0
05/09/2013	A	15/09/2013	A
05/09/2013	B	05/09/2013	B
DRAWN: DEE LATHAM		CHECKED: DEE LATHAM	
DESIGN: DEE LATHAM		APPROVED: DEE LATHAM	
PROJECT: ROAD ARRANGEMENT & SEALING WORKS		SHEET: 16	
SITE: 46-48 MAITLAND STREET MARRABRI NSW 2390		PROJECT NO: 1318284	
DRAWING NO: 1318284-16		SHEET NO: 16	



NARRABRI SHIRE COUNCIL
46-48 MAITLAND STREET MARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6666
ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARRA QUARRY TO NEAR JOHNSTONE QUARRY
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 13 OF 22

PROJECT NO:	1318284	SHEET NO:	16
DRAWING NO:	1318284-16	DATE:	05/09/2013

ADJOINS SHEET 1318284 - 17

CONTINUED BELOW



DATE	08-09-2013	ISSUED FOR CONSTRUCTION
	16-09-2013	ISSUED FOR APPROVAL
DATE		

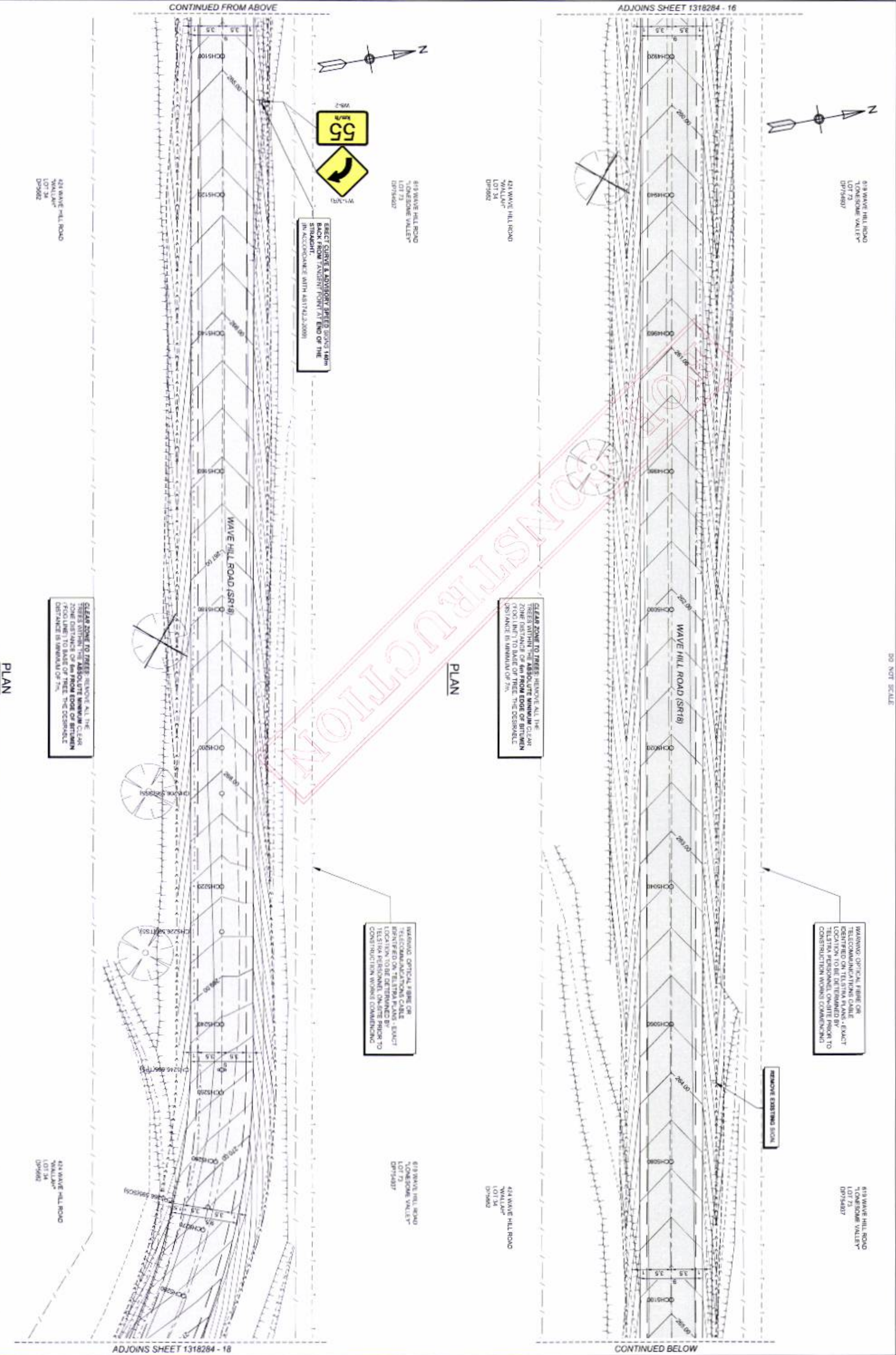
NO.	REV.	DATE	DESCRIPTION
0	A	08-09-2013	ISSUED FOR CONSTRUCTION
1	A	16-09-2013	ISSUED FOR APPROVAL
2	A		
3	A		
4	A		
5	A		

DESIGNED BY	ANTHONY SMETANN	DATE	30-09-2013
CHECKED BY	ANTHONY SMETANN	DATE	30-09-2013
SCALE	AS SHOWN		

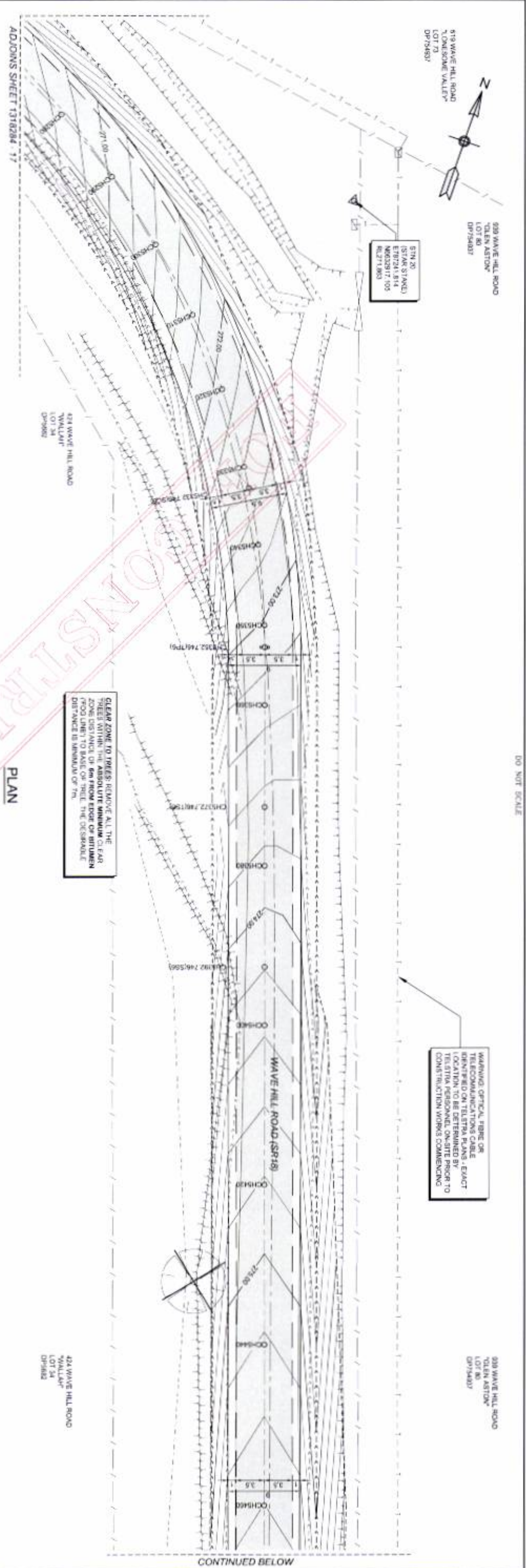
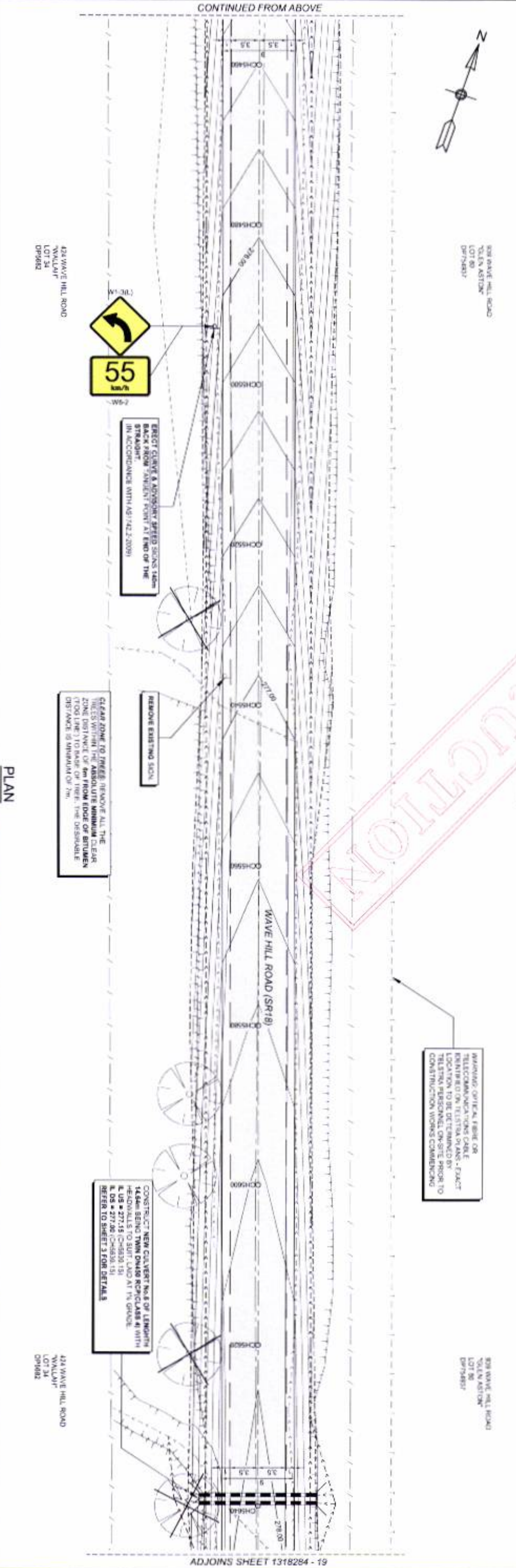


NARRABRI SHIRE COUNCIL
 44-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6066 FAX: (02) 6799 6888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 14 OF 22

FILE NO.	1318284	NO. OF SHEETS	90	SHEET NO.	17
PROJECT NO.	1318284				
DRAWING NO.	1318284-17				
REV.	B				



PLAN SCALE 1:250 @ A1, 1:500 @ A3		HORIZONTAL SCALE	
VERTICAL SCALE			
DATE	DESIGNED BY	ISSUED FOR CONSTRUCTION	
AHD	DRYAN GRIFF LATHAM	ISSUED FOR APPROVAL	
REV.	DATE	DESCRIPTION	
1	16-09-2013	ISSUED FOR APPROVAL	
2	26-04-2013	ISSUED FOR CONSTRUCTION	
3	16-09-2013	ISSUED FOR APPROVAL	
4	16-09-2013	ISSUED FOR APPROVAL	
5	16-09-2013	ISSUED FOR APPROVAL	
6	16-09-2013	ISSUED FOR APPROVAL	
7	16-09-2013	ISSUED FOR APPROVAL	
8	16-09-2013	ISSUED FOR APPROVAL	
9	16-09-2013	ISSUED FOR APPROVAL	
10	16-09-2013	ISSUED FOR APPROVAL	
11	16-09-2013	ISSUED FOR APPROVAL	
12	16-09-2013	ISSUED FOR APPROVAL	
13	16-09-2013	ISSUED FOR APPROVAL	
14	16-09-2013	ISSUED FOR APPROVAL	
15	16-09-2013	ISSUED FOR APPROVAL	
16	16-09-2013	ISSUED FOR APPROVAL	
17	16-09-2013	ISSUED FOR APPROVAL	
18	16-09-2013	ISSUED FOR APPROVAL	



PLAN

PLAN

NARRABRI SHIRE COUNCIL
44-48 MALLARD STREET NARRABRI NSW 2390 PH: (02) 6799 8866 FAX: (02) 6799 8888

ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARRICA QUARRY TO NEAR JOHNSTONE QUARRY
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 15 OF 22

PROJECT No.	1318284	No. OF SHEETS	90	SHEET No.	18
DRAWING No.	1318284-18	REV.			B

PLAN SCALE	1:200 @ A1, 1:800 @ A2	
HORIZONTAL SCALE		
VERTICAL SCALE		
DATE	30-09-2013	
DRAWN	GEORF LATHAM	
CHECKED	GEORF LATHAM	
DATE	16-09-2013	
ISSUED FOR APPROVAL	ISSUED FOR APPROVAL	
REV.	DATE	DESCRIPTION
A		
B		

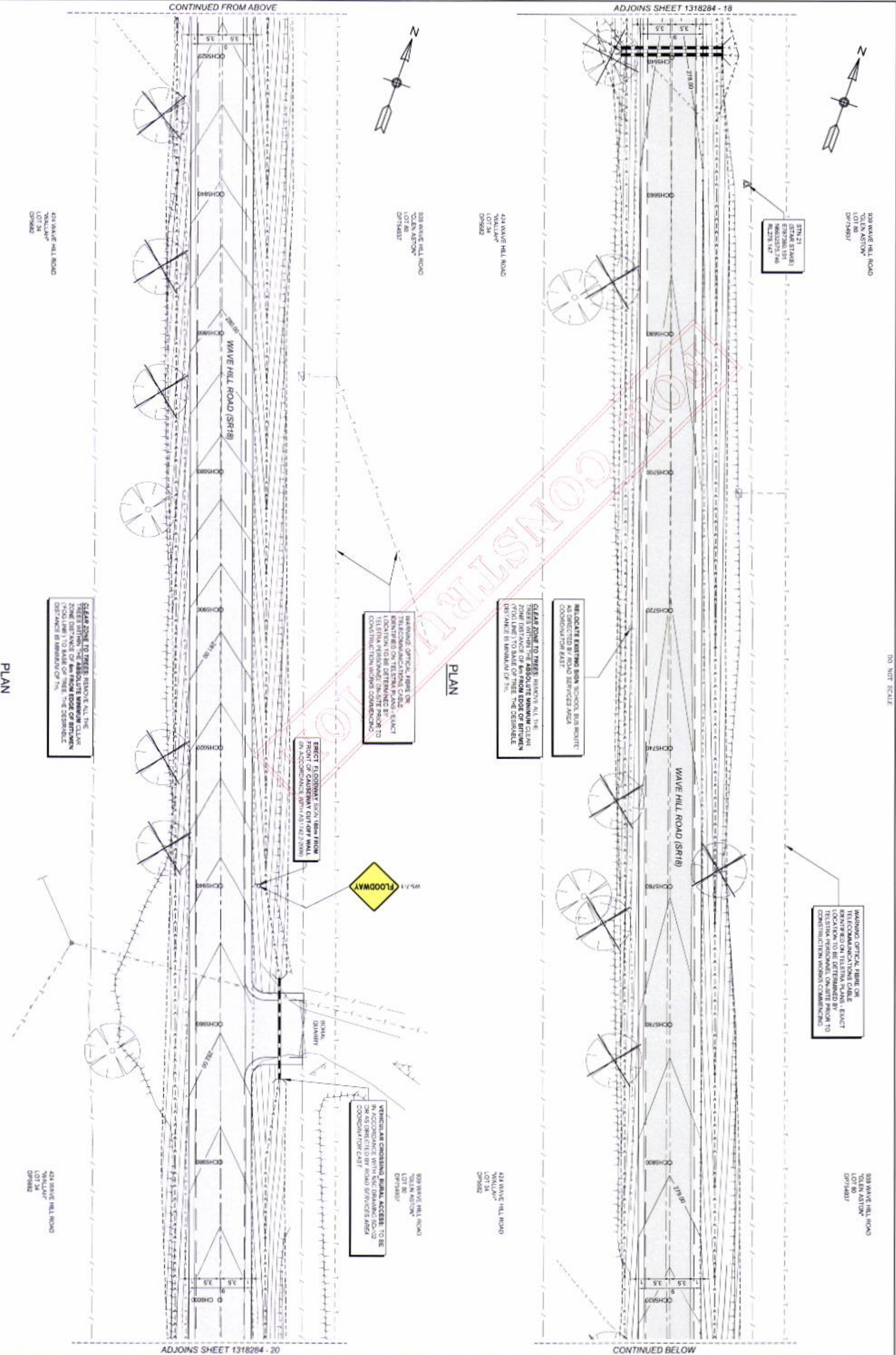
DESIGNER	ANTHONY SHERMAN
DATE	30-09-2013
SCALE	AS SHOWN
PROJECT NO.	1318284
SHEET NO.	19

PROJECT NO.	1318284
SHEET NO.	19



NARRABRI SHIRE COUNCIL
 44-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6799 8866 FAX: (02) 6799 8888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 16 OF 22

PROJECT NO.	1318284
SHEET NO.	19



PLAN

PLAN

NO NOT SCALE

DATE	DESIGNED	DRAWN	DATE	DESCRIPTION
AHD	GEORF LATHAM	GEORF LATHAM	REV	

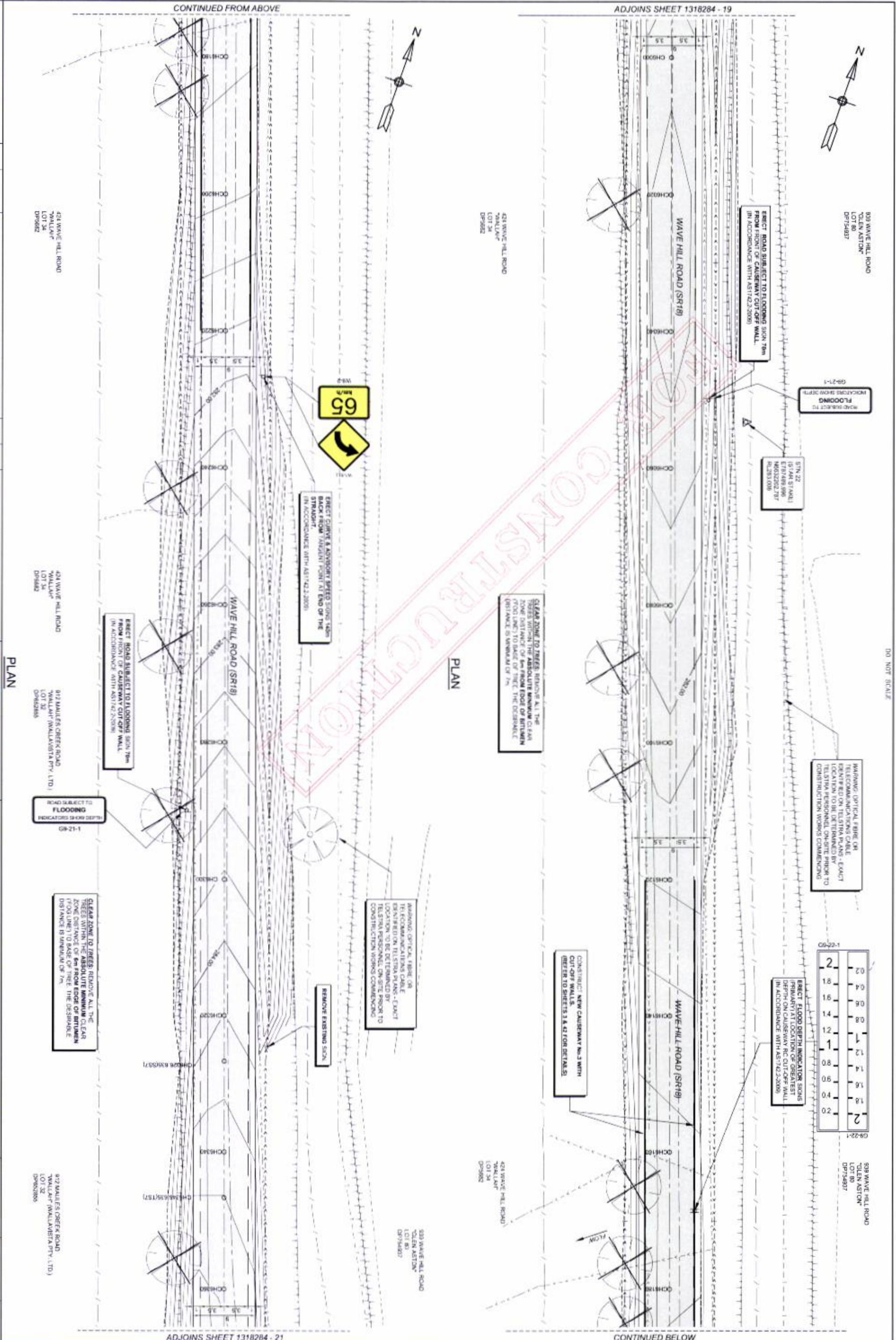
PLAN SCALE	1:250 @ A1	1:500 @ A3
VERTICAL SCALE		

ISSUED FOR CONSTRUCTION	30-09-2013	ISSUED FOR APPROVAL	16-09-2013
ISSUED FOR APPROVAL	16-09-2013	ISSUED FOR APPROVAL	16-09-2013

DESIGNED BY	ANTHONY SWETMAN	DATE	30-09-2013
DRAWN BY	WALLACE WALLABRI	DATE	11/09/2013

NARRABRI SHIRE COUNCIL
 48-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6799 8866 FAX: (02) 6799 8888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARRICA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 17 OF 22

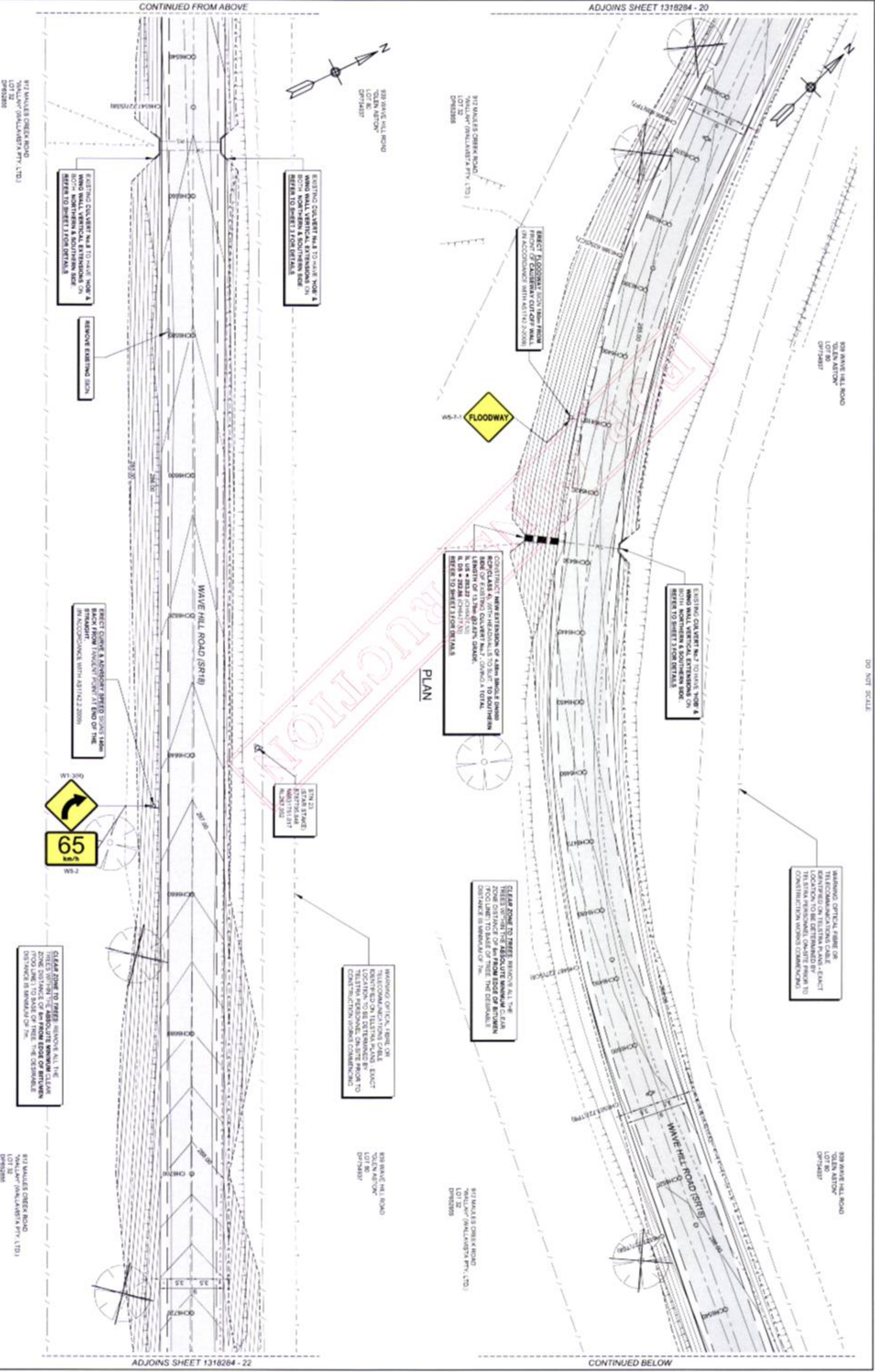
FILE NO.	1318284	NO. OF SHEETS	90	SHEET NO.	20
PROJECT NO.	1318284				
DRAWING NO.	1318284-20				



DO NOT SCALE

CONTINUED FROM ABOVE

ADJOINS SHEET 1318284 - 20



PLAN

PLAN

ADJOINS SHEET 1318284 - 22

CONTINUED BELOW

PLAN SCALE VERTICAL SCALE	1:200 @ A1 1:500 @ A2	
DATE	REVISED DESIGN LAYOUT	20-08-2013
	ISSUED FOR APPROVAL	16-09-2013
DRAWN	DESIGN LAYOUT	DN
	CHECK LAYOUT	AS
REV.	DATE	DESCRIPTION
DES.	DATE	

ANTHONY SWEETMAN
3000 STREET WORKS
20-09-2013
DATE

ANTHONY SWEETMAN
3000 STREET WORKS
20-09-2013
DATE

NARRABRI
SHIRE

NARRABRI SHIRE COUNCIL
44-48 MULLAND STREET NARRABRI NSW 2390 PH: (02) 6799 8888 FAX: (02) 6799 8888

ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARCO QUARRY TO NEAR JOHNSTONE QUARRY
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 18 OF 22

FILE NO.	1318284	NO. OF SHEETS	21
PROJECT NO.	1318284		
DRAWING NO.	1318284-21		
SHEET NO.			B

817 WALES CREEK ROAD
"WALLAR" (WALLAR) PTY. LTD.
LOT 22
DP952895

817 WALES CREEK ROAD
"WALLAR" (WALLAR) PTY. LTD.
LOT 22
DP952895

829 WAVE HILL ROAD
"OLEN AFTON"
LOT 96
DP784837

829 WAVE HILL ROAD
"OLEN AFTON"
LOT 96
DP784837

817 WALES CREEK ROAD
"WALLAR" (WALLAR) PTY. LTD.
LOT 22
DP952895

817 WALES CREEK ROAD
"WALLAR" (WALLAR) PTY. LTD.
LOT 22
DP952895

829 WAVE HILL ROAD
"OLEN AFTON"
LOT 96
DP784837

829 WAVE HILL ROAD
"OLEN AFTON"
LOT 96
DP784837

WARNING OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 4m FROM EDGE OF BITUMEN PAVEMENT TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

WARNING OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 4m FROM EDGE OF BITUMEN PAVEMENT TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.



STAY STRAIGHT
WAVE HILL ROAD (SR18)
R. 200 200

RETRACT CURB & ADJACENT PAVED SHOULDERS BACK FROM INVERT POINT AT END OF THE STRAIGHT IN ACCORDANCE WITH AS1742.2:2009

REMOVE EXISTING KERB

EXISTING CURB/VERT N.B. TO HAVE NOB. & WIND WALL VERTICAL EXTENSIONS ON BOTH NORTHERN & SOUTHERN SIDE REFER TO SHEET 1 FOR DETAILS

EXISTING CURB/VERT N.B. TO HAVE NOB. & WIND WALL VERTICAL EXTENSIONS ON BOTH NORTHERN & SOUTHERN SIDE REFER TO SHEET 1 FOR DETAILS

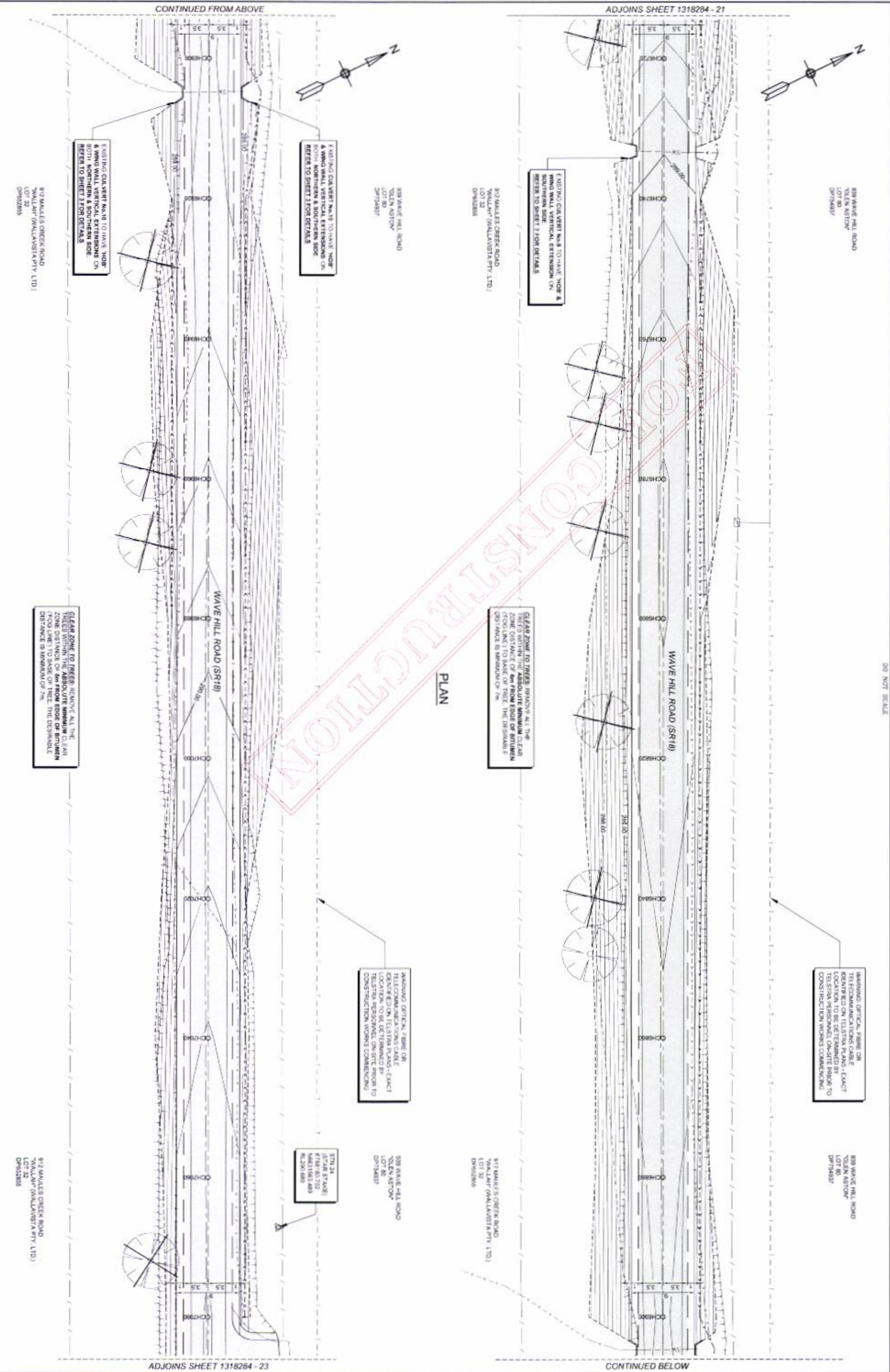
CONSTRUCT NEW EXTENSION OF 4.8M SINGLE ENDING KERB/CLASS 4.5 WITH HEADS TO LEFT TO SOUTHERN END OF EXISTING CURB/VERT N.B. TO TOTAL LENGTH OF 21.75M (21.75M GRADE). N. OS + 322M (CHANGING) REFER TO SHEET 1 FOR DETAILS

RETRACT EXISTING KERB FROM EDGE OF ROAD TO ACCORDANCE WITH AS1742.2:2009



PLAN SCALE	1:200 @ A1, 1:500 @ A2
VERTICAL SCALE	
DATE	30-09-2013
DESIGNER	ANTHONY SHRETTINI
CHECKER	ANTHONY SHRETTINI
DATE	30-09-2013
DESCRIPTION	ROAD CONSTRUCTION & SEALING WORKS
PROJECT NO.	1318284
SHEET NO.	22

PLAN



EXISTING CURBVERT NO.10 TO HAVE HOBB & WING WALL VERTICAL EXTENSIONS ON BOTH NORTHERN & SOUTHERN SIDE REFER TO SHEET 3 FOR DETAILS

EXISTING CURBVERT NO.13 TO HAVE HOBB & WING WALL VERTICAL EXTENSIONS ON BOTH NORTHERN & SOUTHERN SIDE REFER TO SHEET 3 FOR DETAILS

EXISTING CURBVERT NO.8 TO HAVE HOBB & WING WALL VERTICAL EXTENSION ON SOUTHERN SIDE REFER TO SHEET 7 FOR DETAILS

CLEAR ZONE TO TREES: SHAVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN PAVEMENT TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

CLEAR ZONE TO TREES: REMOVE ALL THE TREES WITHIN THE ABSOLUTE MINIMUM CLEAR ZONE DISTANCE OF 6m FROM EDGE OF BITUMEN PAVEMENT TO BASE OF TREE. THE DESIRABLE DISTANCE IS MINIMUM OF 7m.

INSTALLING OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

INSTALLING OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

912 WAILES CREEK ROAD
"WALLAW" (WALLAVISTA PTY. LTD.)
LOT 32
08962855

818 WAVE HILL ROAD
"OLEN ASTON"
LOT 80
08754837

912 WAILES CREEK ROAD
"WALLAW" (WALLAVISTA PTY. LTD.)
LOT 32
08962855

818 WAVE HILL ROAD
"OLEN ASTON"
LOT 80
08754837



NARRABRI SHIRE COUNCIL
44-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6886 FAX: (02) 6799 6888
ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY
GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 19 OF 22

FILE NO. 1318284
PROJECT NO. 1318284
DRAWING NO. 1318284-22
SHEET NO. 22

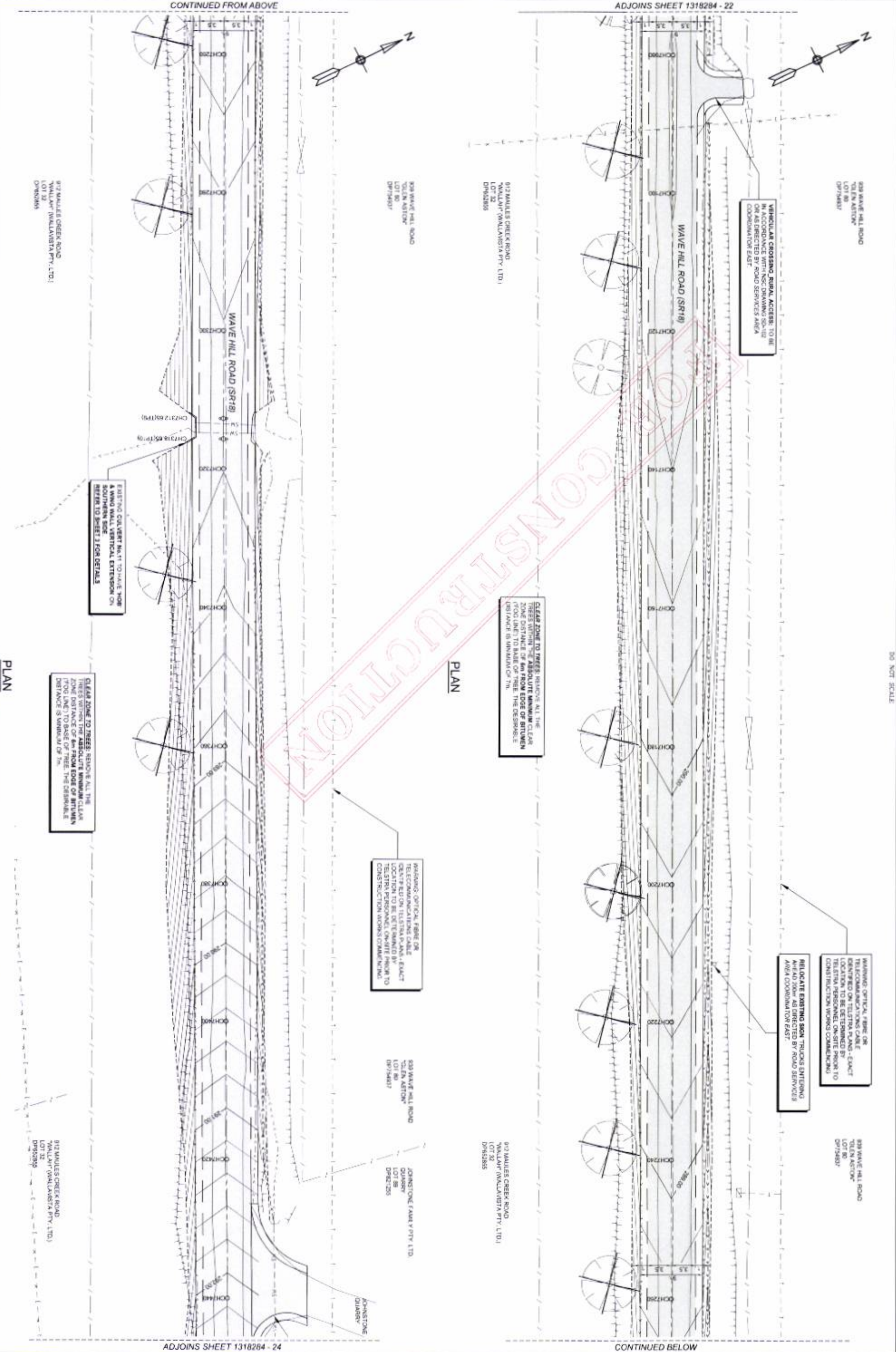
PLAN SCALE	1:200 @ A1, 1:500 @ A2
VERTICAL SCALE	
DATE	30-09-2013
DESIGNED BY	GEORGE LATHAM
DRAWN BY	GEORGE LATHAM

REV.	DATE	DESCRIPTION	BY	APP.
A	16-09-2013	ISSUED FOR APPROVAL	GPL	AS
B	30-09-2013	ISSUED FOR CONSTRUCTION	GPL	AS

Narrabri
 HEART OF THE NORTH WEST

NARRABRI SHIRE COUNCIL
 44-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6886 FAX: (02) 6799 6888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN - SHEET 20 OF 22

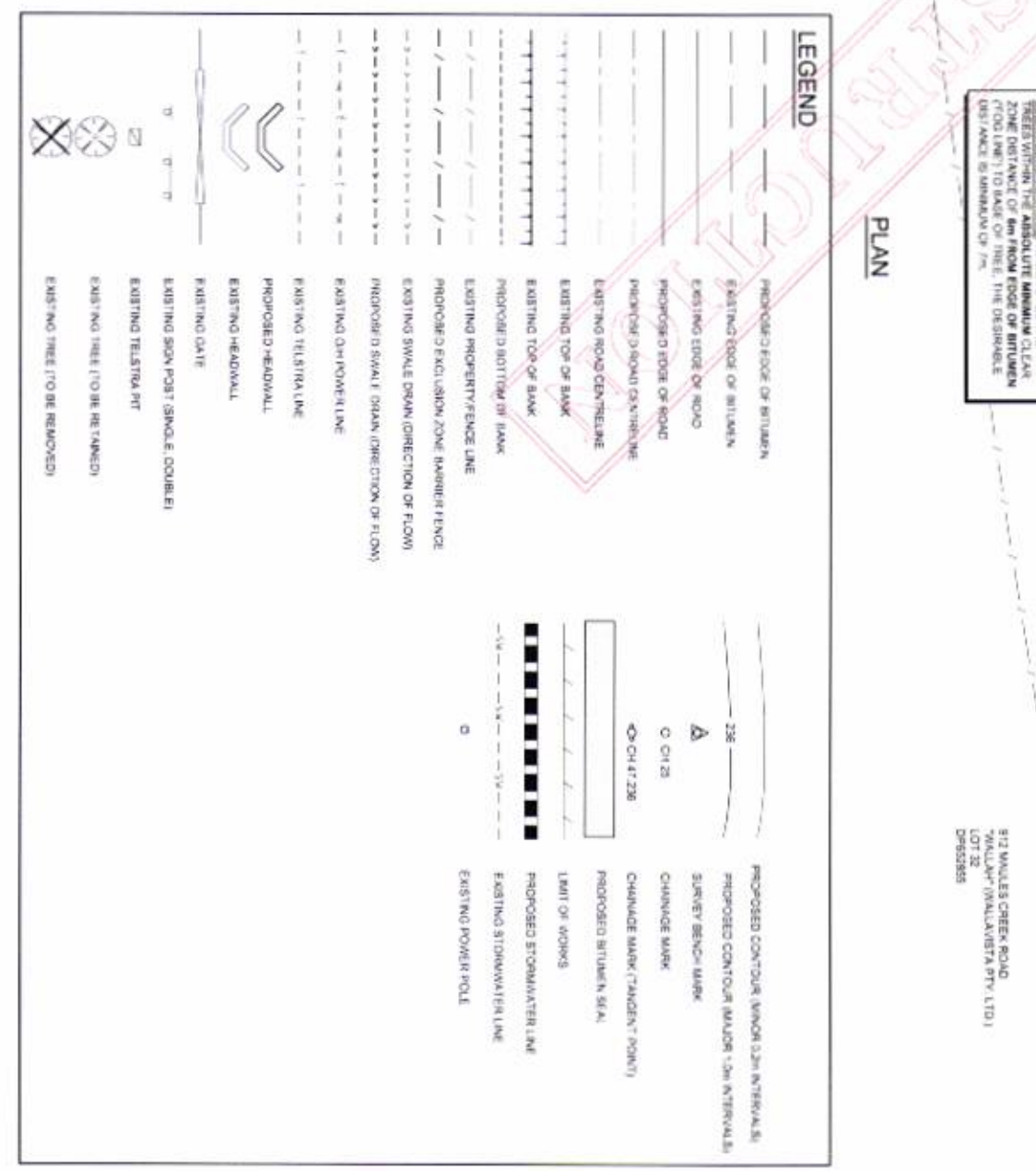
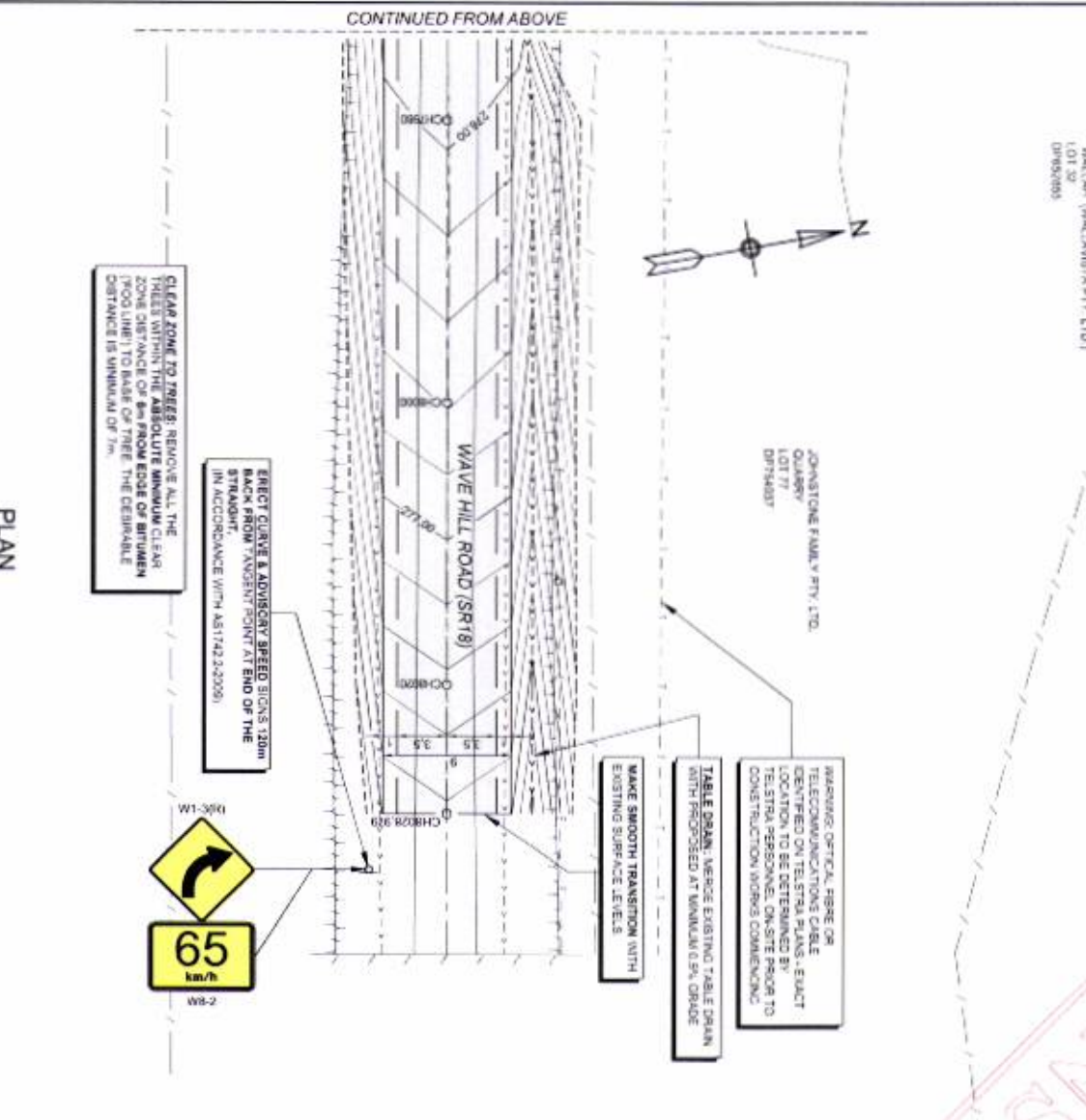
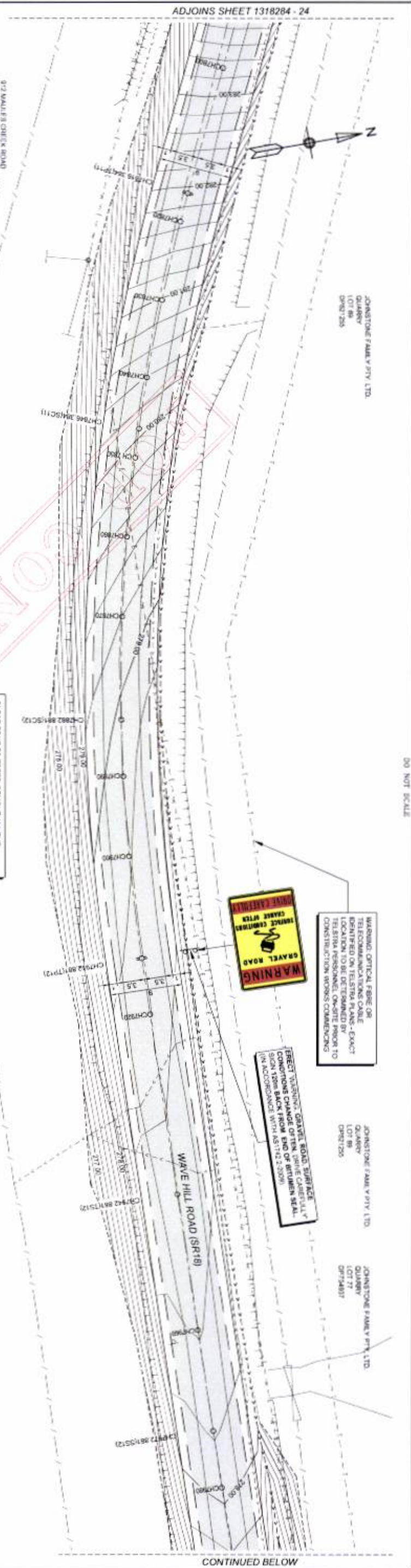
FILE NO.	1318284	NO. OF SHEETS	90	SHEET NO.	23
PROJECT NO.	1318284				
DATE	13/10/2013				



PLAN

PLAN

DO NOT SCALE



CODE	SIGN TYPE	QUANTITY
DR		1
C(R)		2
C(L)		2
SW(38)		4
SW(5)		6
SW(18)		6
RTT		8
F		4
DIP		2
BC		2

PLAN SCALE	1:200 @ A1, 1:500 @ A2
HORIZONTAL SCALE	
VERTICAL SCALE	
DATE	20-09-2013
ISSUED FOR CONSTRUCTION	20-09-2013
ISSUED FOR APPROVAL	16-06-2013
DATE	
DESCRIPTION	
DESIGNER	ANTHONY SWEETMAN
DATE	20-09-2013
SCALE	AS SHOWN
PROJECT NUMBER	1318284
SHEET	25

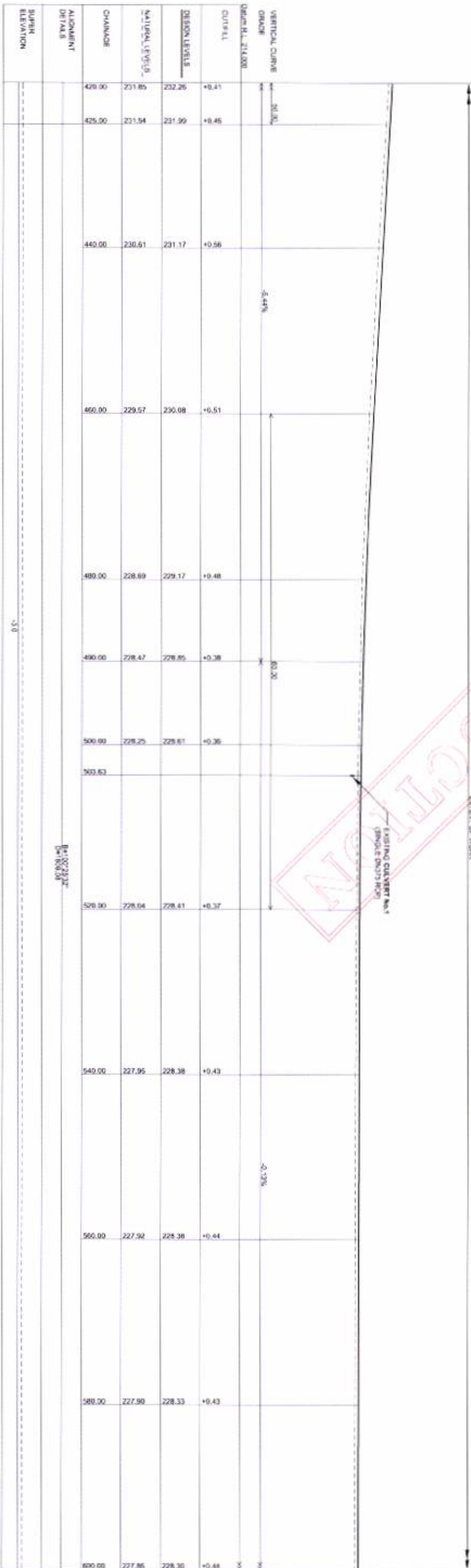


NARRABRI SHIRE COUNCIL
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY
 GENERAL ARRANGEMENT & SIGNPOSTING PLAN SCHEDULE - SHEET 22 OF 22

FILE NO.	1318284	NO. OF SHEETS	90	SHEET NO.	25
PROJECT NO.	1318284				
DRAWING NO.	1318284-25				
					B



LONGITUDINAL SECTION



LONGITUDINAL SECTION

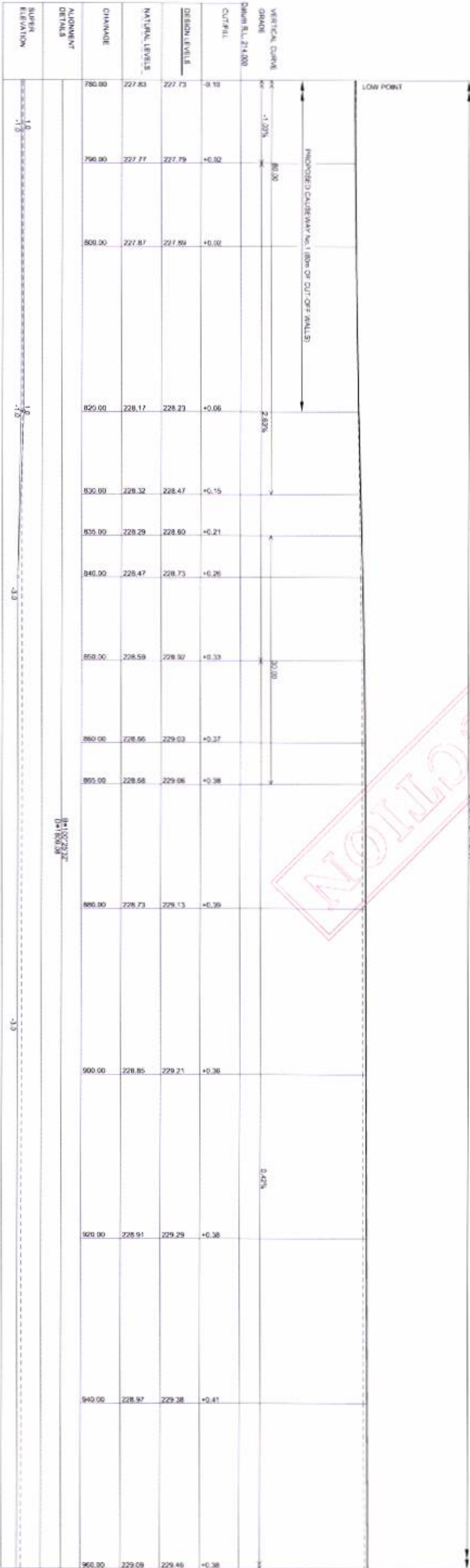
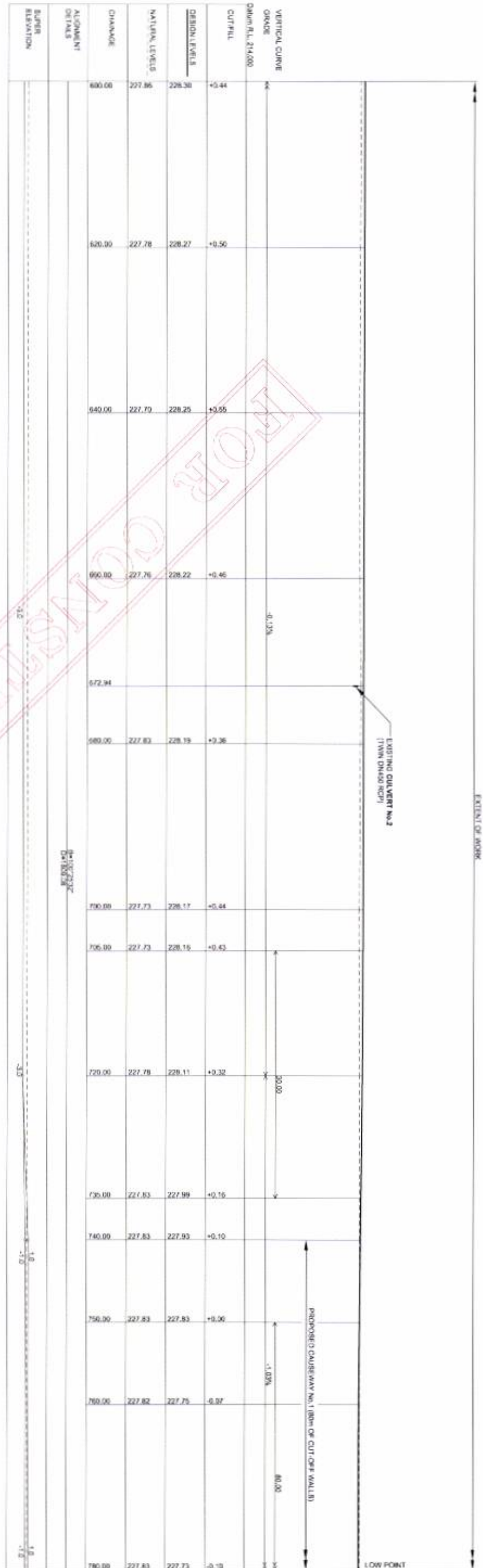
PLAN SCALE: 1:200 @ A1, 1:500 @ A3 VERTICAL SCALE: 1:25 @ A1, 1:40 @ A3		DATE: 30-09-2013 ISSUED FOR CONSTRUCTION		DRAWN: GEOP LATHAM CHECKED: GEOP LATHAM	
PROJECT No. 1318284 No. of SHEETS 90		SHEET No. 26		DATE: 16-09-2013 ISSUED FOR APPROVAL	
PROJECT No. 1318284-26		PROJECT No. 1318284		DATE: 30-09-2013 ISSUED FOR CONSTRUCTION	
PROJECT No. 1318284		PROJECT No. 1318284		DATE: 16-09-2013 ISSUED FOR APPROVAL	

NARRABRI SHIRE COUNCIL
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARRIDA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 1 OF 22

ANTHONY SMETANIN
 DESIGNER
 30-09-2013
 DATE

GEOP LATHAM
 CHECKED
 16-09-2013
 DATE

NARRABRI SHIRE COUNCIL
 HEART OF THE NORTH WEST



PLAN SCALE: 1:100 HORIZONTAL SCALE: 1:25 @ A1, 1:50 @ A2 VERTICAL SCALE: 1:25 @ A1, 1:50 @ A2		DATE: 20-09-2013 ISSUED FOR CONSTRUCTION	
AHD DESIGN: GEORF LATHAM CHECK: GEORF LATHAM		REV. DATE A 16-09-2013 ISSUED FOR APPROVAL	
DESIGNER: ANTHONY SWEETMAN DESIGNER: KEVIN SHELDON DATE: 20-09-2013		CHECKER: KEVIN SHELDON DATE: 20-09-2013	
PROJECT: ROAD CONSTRUCTION & SEALING WORKS ROAD HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY		SHEET: 27 OF 90	
NARRABRI SHIRE COUNCIL 46-48 MATTLAND STREET NARRABRI NSW 2390 PHONE: (02) 6799 8866 FAX: (02) 6799 8888		FILE NO: 1318284 PROJECT NO: 1318284	
HEART OF THE NORTH WEST		SHEET NO: 27	



DO NOT SCALE
EXTENT OF WORK

VERTICAL CURVE			
GRADE	GRADIENT	VERTICAL CURVE	GRADE
960.00	0.40%	1000.00	0.40%
980.00	0.40%	1020.00	0.34%
1000.00	0.35%	1040.00	0.36%
1020.00	0.34%	1060.00	0.36%
1040.00	0.36%	1080.00	0.36%
1060.00	0.36%	1100.00	0.46%
1080.00	0.50%	1120.00	0.42%
1100.00	0.40%		

EXTENT OF WORK

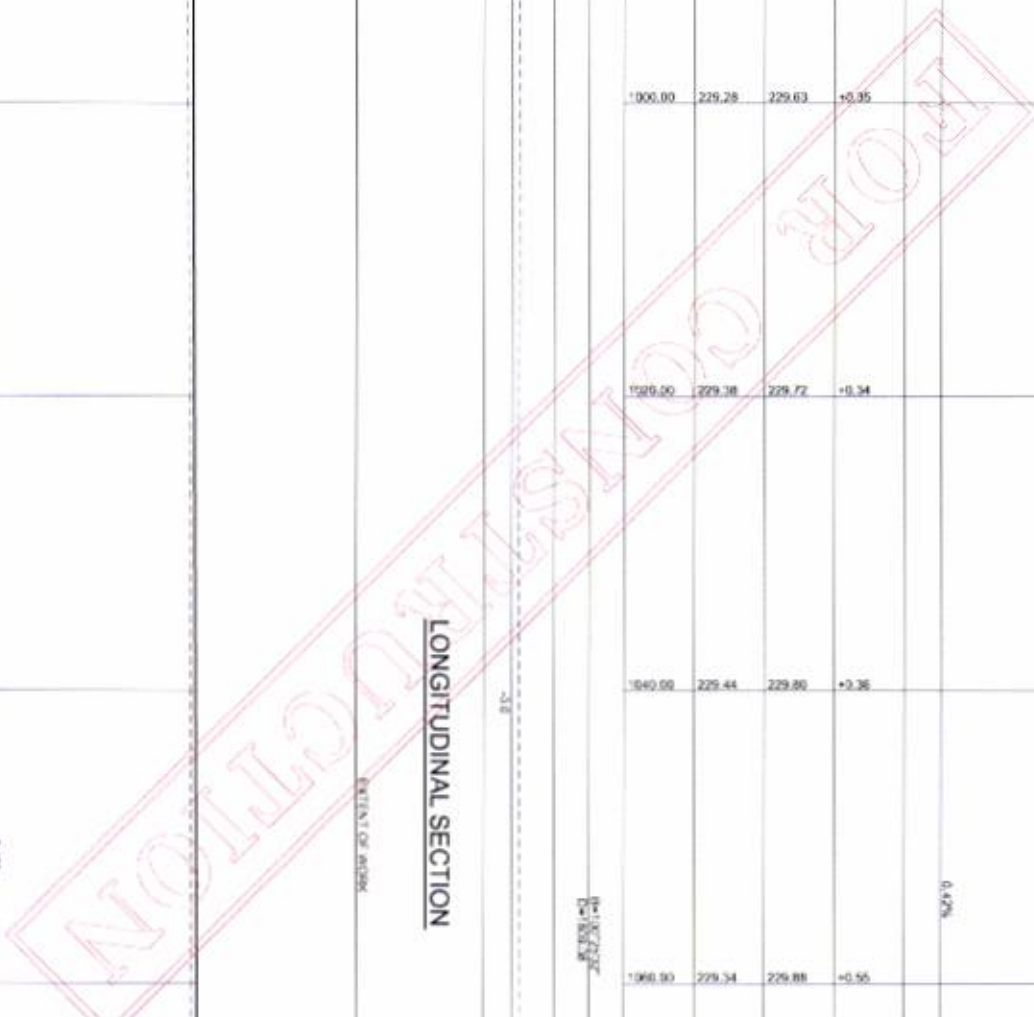
LONGITUDINAL SECTION

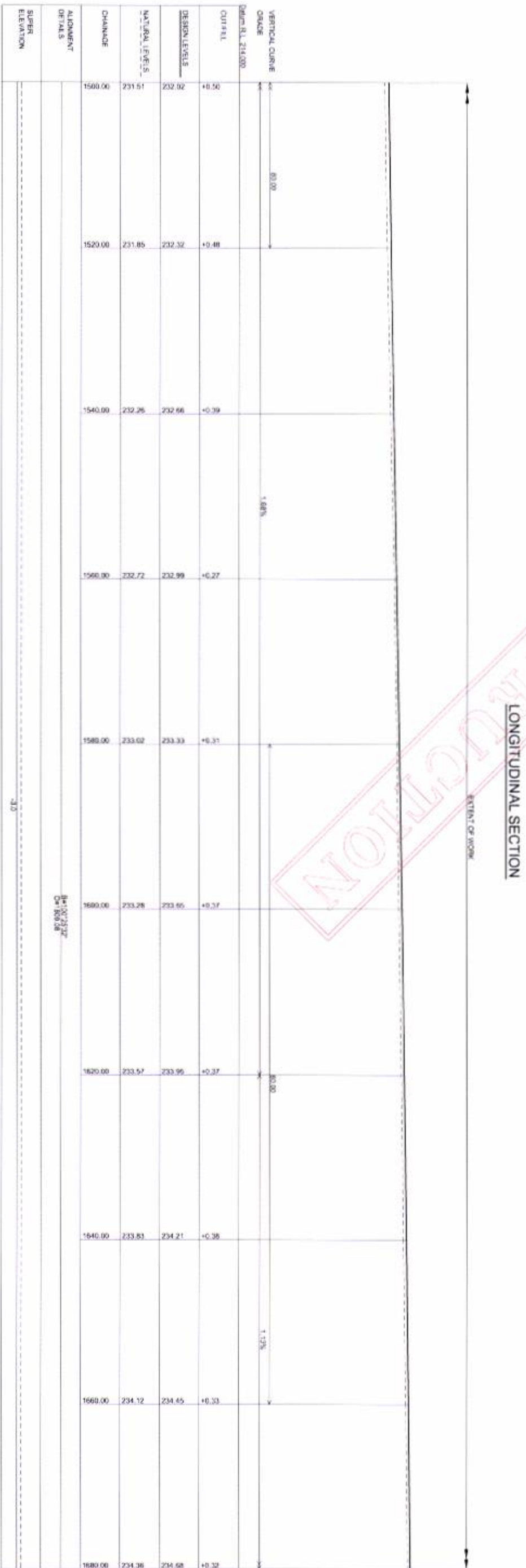
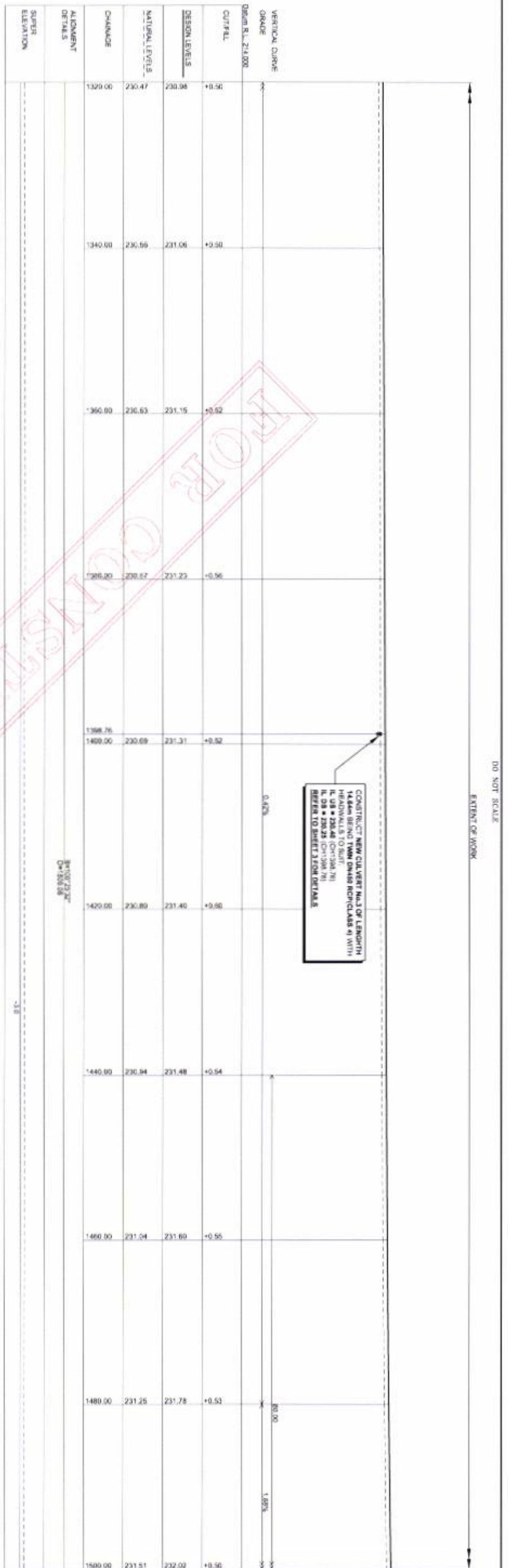
VERTICAL CURVE			
GRADE	GRADIENT	VERTICAL CURVE	GRADE
1140.00	0.40%	1160.00	0.37%
1160.00	0.37%	1180.00	0.38%
1180.00	0.38%	1200.00	0.36%
1200.00	0.36%	1220.00	0.34%
1220.00	0.34%	1240.00	0.42%
1240.00	0.42%	1260.00	0.44%
1260.00	0.44%	1280.00	0.47%
1280.00	0.50%	1300.00	0.50%
1300.00	0.50%		

EXTENT OF WORK

LONGITUDINAL SECTION

PLAN SCALE: 1:200 @ A1, 1:500 @ A2 VERTICAL SCALE: 1:20 @ A1, 1:50 @ A2		DATE: 30-08-2013 DESIGNED: GEOFF LATHAM DRAWN: GEOFF LATHAM	
REV. B DATE: 30-08-2013 ISSUED FOR CONSTRUCTION	REV. A DATE: 18-09-2013 ISSUED FOR APPROVAL	DESCRIPTION:	
DESIGNED: GEOFF LATHAM DRAWN: GEOFF LATHAM	CHECKED: GEOFF LATHAM DATE: 18-09-2013	APPROVED: ANTHONY SWEETMAN ROAD DESIGN MANAGER DATE: 30-08-2013	APPROVED: ANTHONY SWEETMAN ROAD DESIGN MANAGER DATE: 30-08-2013
NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 3 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 3 OF 22	
FILE NO. 1318284 PROJECT NO. 1318284	NO. OF SHEETS 90	SHEET NO. 28	REV. B





PLAN SCALE
 HORIZONTAL SCALE 1:250 @ A1 1:500 @ A3
 VERTICAL SCALE 1:25 @ A1 1:50 @ A3

DATE
 AHD 30-09-2013
 DESIGNED GEOFF LATHAM
 DRAWN GEOFF LATHAM

ISSUED FOR CONSTRUCTION
 30-09-2013
 ISSUED FOR APPROVAL
 18-09-2013

DISTRICTION

DATE

QPL
 AS
 AS

APPROVAL
 ANTHONY SWETTAN
 RISK ENGINEER
 30-09-2013
 AN

SCALE
 1:1000
 1:1000

LONGITUDINAL SECTION

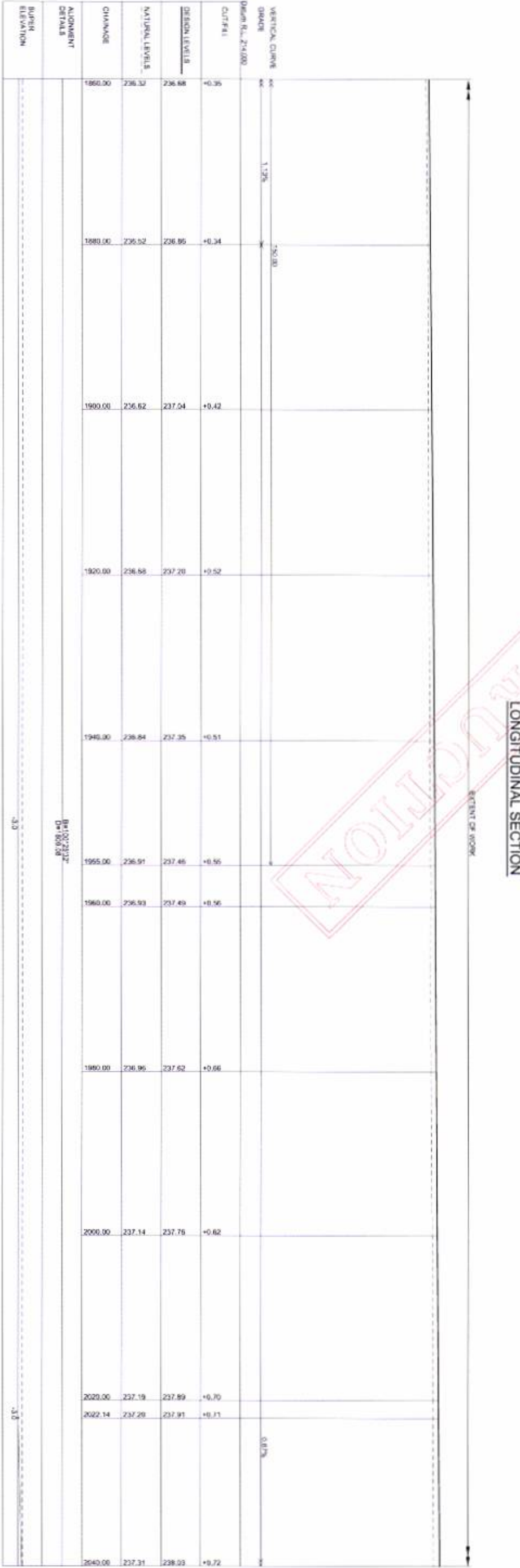
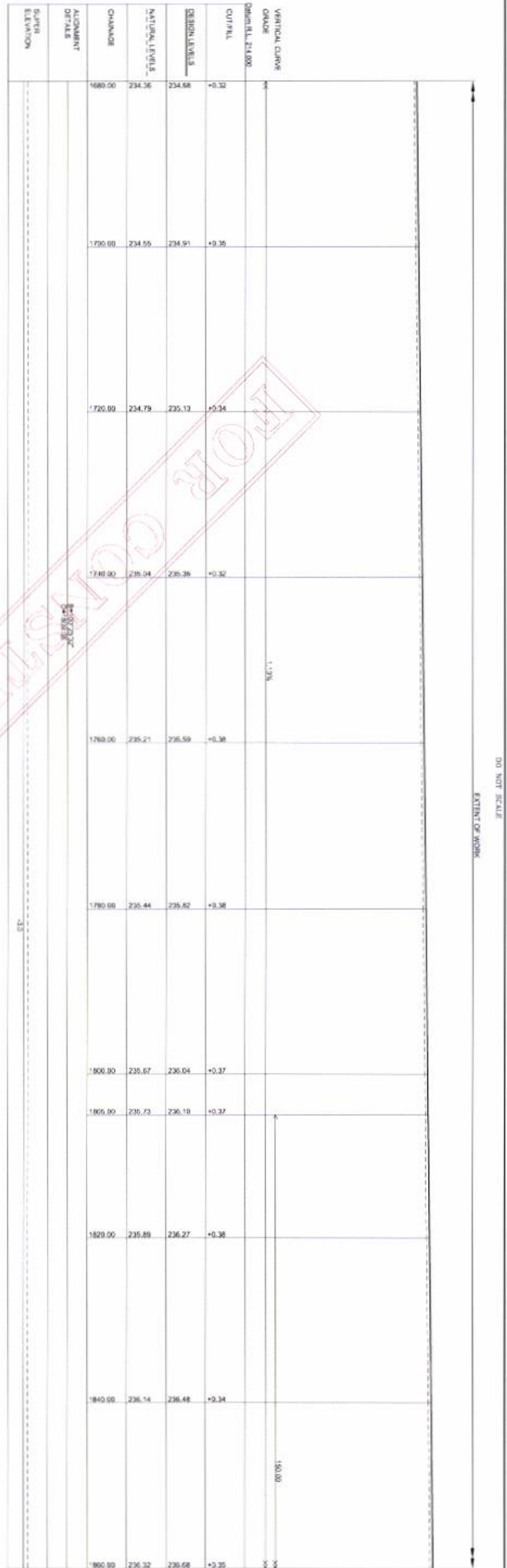
NARRABRI SHIRE COUNCIL
 46-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888

ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 4 OF 22

FILE NO. 1318284
 PROJECT NO. 1318284
 DRAWING NO. 1318284-29

NO. OF SHEETS 90
 SHEET NO. 29

REV. B



<p>PLAN SCALE: 1:500 @ A1, 1:500 @ A3 VERTICAL SCALE: 1:25 @ A1, 1:50 @ A3</p>	<p>DATE: 30-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 18-09-2013 ISSUED FOR APPROVAL</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>
<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>
<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>
<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>	<p>DATE: 03-09-2013 ISSUED FOR CONSTRUCTION</p>

LONGITUDINAL SECTION

NARRABRI SHIRE COUNCIL
 46-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888

ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 5 OF 22

FILE NO: 1318284
 PROJECT NO: 1318284
 DRAWING NO: 1318284-30

NO. OF SHEETS: 90
 SHEET NO: 30

DO NOT SCALE
EXTENT OF WORK

SUPER ELEVATION	ALIGNMENT DETAILS	VERTICAL CURVE GRADE			TP1 CL ROAD
		GRADE	CHANGING POINT	END POINT	
2640.00	1:2.5%	+0.72	257.31	238.03	
2642.14	1:2.5%	+0.71	257.34	238.04	
2660.00	1:2.5%	+0.66	237.51	238.16	
2662.14	1:2.5%	+0.66	237.52	238.18	
2668.90	1:2.5%	+0.86	237.57	238.23	
2682.14	1:2.5%	+0.65	237.67	238.32	
2690.00	1:2.5%	+0.66	237.72	238.37	
2100.00	1:2.5%	+0.54	237.81	238.45	
2110.00	1:2.5%	+0.65	237.88	238.53	
2120.00	1:2.5%	+0.67	237.94	238.61	
2136.00	1:2.5%	+0.70	238.00	238.70	
2148.00	1:2.5%	+0.70	238.06	238.79	
2159.00	1:2.5%	+0.73	238.15	238.88	
2160.00	1:2.5%	+0.72	238.26	238.98	
2168.90	1:2.5%	+0.70	238.37	239.07	
2180.00	1:2.5%	+0.68	238.50	239.18	
2188.90	1:2.5%	+0.63	238.60	239.27	
2200.00	1:2.5%	+0.52	238.88	239.39	
2212.39	1:2.5%	+0.37	239.17	239.53	
2222.00	1:2.5%	+0.34	239.26	239.62	

LONGITUDINAL SECTION

WARNING - OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

WARNING - OPTICAL FIBRE OR TELECOMMUNICATIONS CABLE IDENTIFIED ON TELSTRA PLANS - EXACT LOCATION TO BE DETERMINED BY TELSTRA PERSONNEL ON-SITE PRIOR TO CONSTRUCTION WORKS COMMENCING

SUPER ELEVATION	ALIGNMENT DETAILS	VERTICAL CURVE GRADE			TP1 CL ROAD
		GRADE	CHANGING POINT	END POINT	
2220.00	1:2.5%	+0.34	229.62	239.62	
2235.97	1:2.5%	+0.32	229.81	239.87	
2240.00	1:2.5%	+0.30	229.87	239.87	
2250.00	1:2.5%	+0.28	229.99	239.99	
2255.87	1:2.5%	+0.25	229.81	240.07	
2260.00	1:2.5%	+0.25	229.87	240.12	
2268.90	1:2.5%	+0.21	240.02	240.25	
2280.00	1:2.5%	+0.22	240.17	240.39	
2290.00	1:2.5%	+0.20	240.32	240.52	
2300.00	1:2.5%	+0.21	240.44	240.65	
2315.00	1:2.5%	+0.22	240.56	240.79	
2320.00	1:2.5%	+0.24	240.68	240.92	
2330.00	1:2.5%	+0.24	240.81	241.06	
2341.52	1:2.5%	+0.15	241.06	241.21	
2350.00	1:2.5%	+0.03	241.29	241.32	
2361.52	1:2.5%	-0.08	241.56	241.48	
2381.52	1:2.5%	+0.10	241.64	241.74	
2400.00	1:2.5%	+0.34	241.92	241.92	

LONGITUDINAL SECTION

EXTENT OF WORK

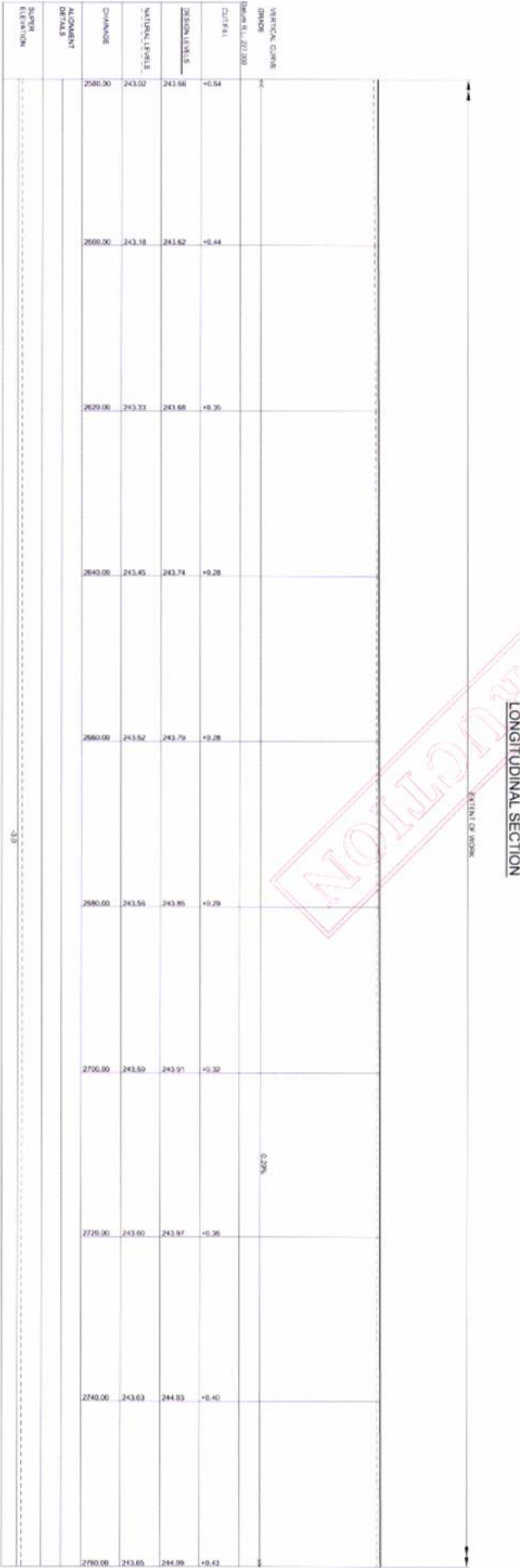
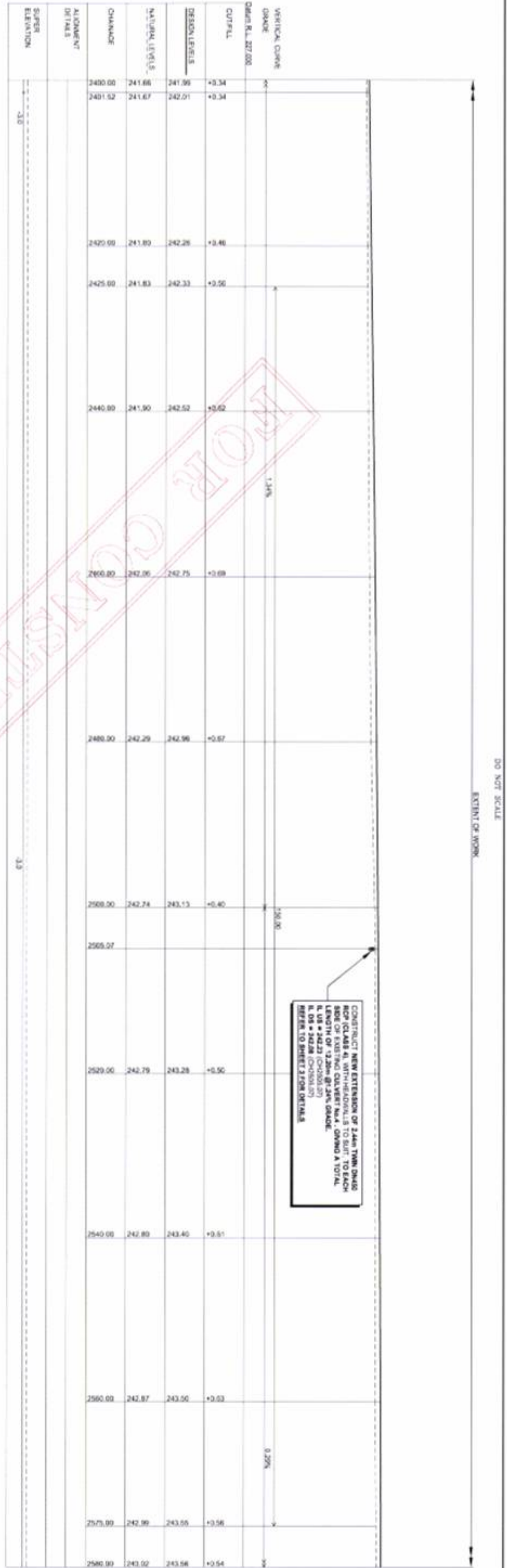
PLAN SCALE	1:500 @ A1	1:500 @ A3
VERTICAL SCALE	1:25 @ A1	1:50 @ A3
DATE	30-09-2013	ISSUED FOR CONSTRUCTION
REV.	A	ISSUED FOR APPROVAL
DATE	18-09-2013	
DESIGNER	DEFF LATHAM	
CHECKER	DEFF LATHAM	
DATE		

Heart of the North West

NARRABRI SHIRE COUNCIL
46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888

ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SRI 8) NEAR WARPOA QUARRY TO NEAR JOHNSTONE QUARRY
LONGITUDINAL SECTION - SHEET 6 OF 22

FILE NO.	1318284	NO. OF SHEETS	90
PREDICT NO.	1318284		
DRAWING NO.	1318284-31		
REV.	B		



LONGITUDINAL SECTION

PLAN SCALE: 1:1000
VERTICAL SCALE: 1:25 @ A1, 1:50 @ A3

DATE: 18-08-2013
ISSUED FOR CONSTRUCTION
ISSUED FOR APPROVAL

DESIGNED BY: GEORGE LATHAM
DRAWN BY: GEORGE LATHAM

REV: A, B
DATE: 18-08-2013, 20-09-2013

DESCRIPTION: ROAD CONSTRUCTION & SEALING WORKS

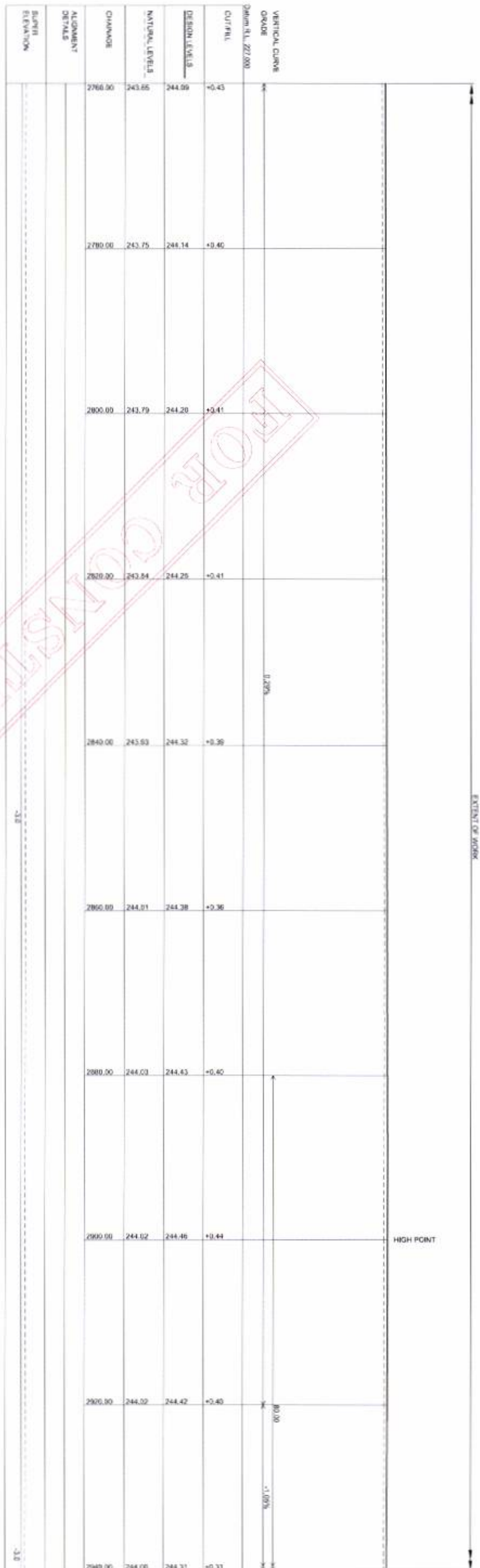
ANTHONY SARTYAN
SENIOR CIVIL ENGINEER
20-09-2013

HEART OF THE NORTH WEST

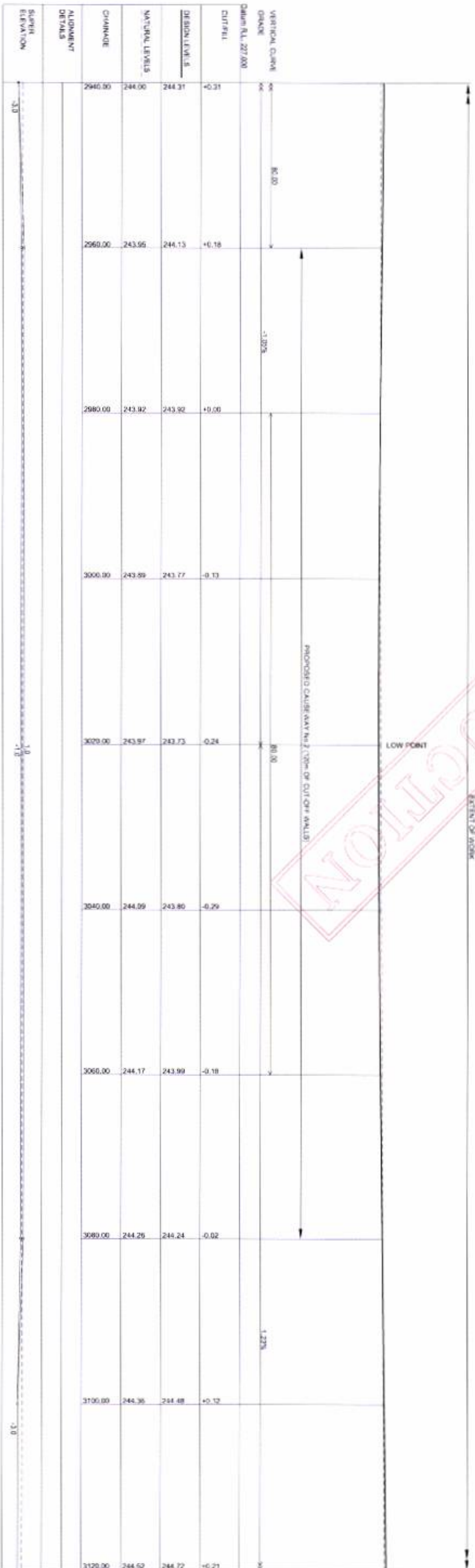
NARRABRI SHIRE COUNCIL
46-48 MAITLAND STREET NARRABRI NSW 2390
ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY
LONGITUDINAL SECTION - SHEET 7 OF 22

FILE NO. 1318284
PROJECT NO. 1318284
NO. OF SHEETS 90
SHEET NO. 32

1318284-32
REV. B

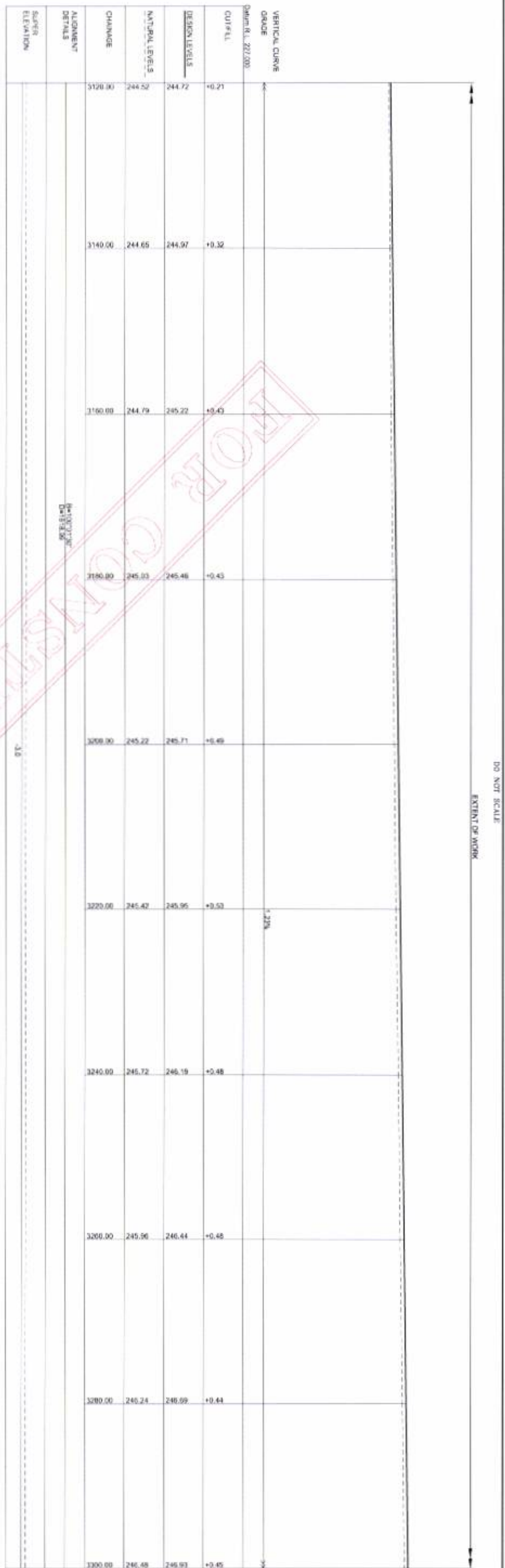


LONGITUDINAL SECTION

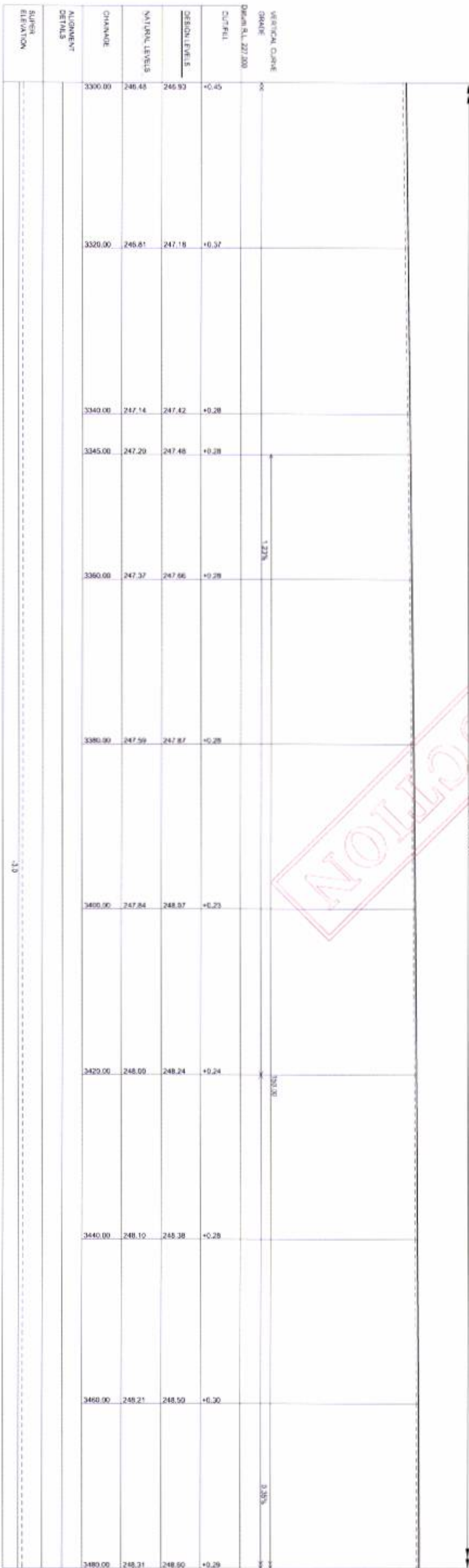


LONGITUDINAL SECTION

<p>PLAN SCALE: 1:250 @ A1, 1:500 @ A2 VERTICAL SCALE: 1:20 @ A1, 1:50 @ A2</p>			
<p>DATE: 30-09-2013 DESIGNED: GEORF LATHAM DRAWN: GEORF LATHAM</p>		<p>REVISIONS: NO. DATE DESCRIPTION 1 16-09-2013 ISSUED FOR APPROVAL 2 05-10-2013 DESIGNATION</p>	
<p>PROJECT NAME: 44-48 MATTLAND STREET NARRABRI NSW 2390 SHEET NO.: 90 SHEET NO. OF SHEETS: 90</p>		<p>PROJECT NO.: 1318284 SHEET NO.: 33</p>	
<p>NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 8 OF 22</p>			
<p>CLIENT: NARRABRI SHIRE COUNCIL PROJECT MANAGER: ANTHONY BERTHANN CONTACT: 02 6872 2822</p>		<p>DATE: 30-09-2013 DESIGNER: G. LATHAM DRAWN: G. LATHAM</p>	



LONGITUDINAL SECTION



LONGITUDINAL SECTION

PLAN SCALE: 1:250 @ A1, 1:500 @ A3 VERTICAL SCALE: 1:25 @ A1, 1:50 @ A3		DATE: 30-09-2013 ISSUED FOR CONSTRUCTION		DATE: 16-09-2013 ISSUED FOR APPROVAL		QPL: A3 QPL: A3		QPL: A3 QPL: A3		DATE: 30-09-2013 ISSUED FOR CONSTRUCTION		DATE: 16-09-2013 ISSUED FOR APPROVAL		QPL: A3 QPL: A3		QPL: A3 QPL: A3	
SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM		SURVEYED: GEOFF LATHAM DESIGNER: GEOFF LATHAM	
ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER		ANTHONY SWEETMAN DESIGNER	
NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22		NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 9 OF 22	
FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284		FILE NO: 1318284 PROJECT NO: 1318284	
NO. OF SHEETS: 90		NO. OF SHEETS: 90		NO. OF SHEETS: 90		NO. OF SHEETS: 90		NO. OF SHEETS: 90		NO. OF SHEETS: 90		NO. OF SHEETS: 90		NO. OF SHEETS: 90		NO. OF SHEETS: 90	
SHEET NO: 34		SHEET NO: 34		SHEET NO: 34		SHEET NO: 34		SHEET NO: 34		SHEET NO: 34		SHEET NO: 34		SHEET NO: 34		SHEET NO: 34	
REV: B		REV: B		REV: B		REV: B		REV: B		REV: B		REV: B		REV: B		REV: B	

DO NOT SCALE
EXTENT OF WORK

VERTICAL CURVE GRADE	CHAINAGE	DESIGN LEVEL	NATURAL LEVEL	CHANGE	ALIGNMENT DETAILS	SURFACE ELEVATION
Design SL: 227.00	3485.00	248.86	248.31	+0.55		248.31
	3500.00	248.86	248.28	+0.58		248.28
	3520.00	248.86	248.47	+0.39		248.47
	3540.00	248.86	248.75	+0.11		248.75
	3560.00	248.86	248.86	+0.00		248.86
	3580.00	248.86	248.53	+0.33		248.53
	3600.00	248.86	248.02	+0.84		248.02
	3620.00	248.86	248.09	+0.77		248.09
	3640.00	248.86	248.71	+0.15		248.71

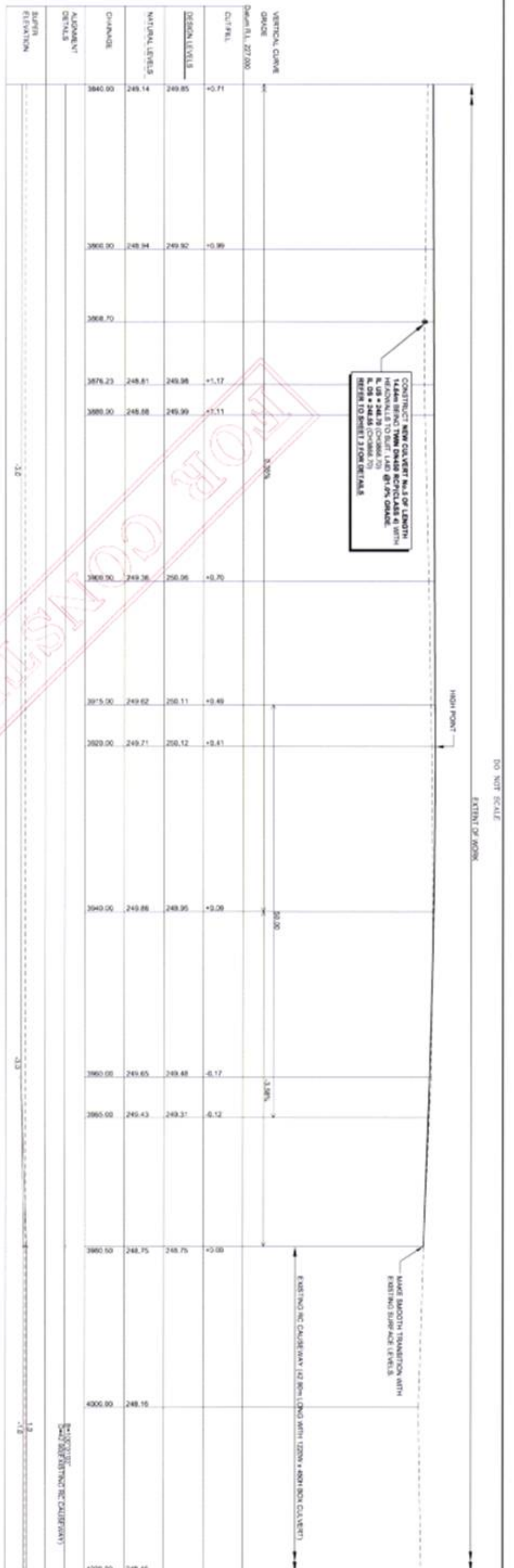
LONGITUDINAL SECTION

DO NOT SCALE
EXTENT OF WORK

VERTICAL CURVE GRADE	CHAINAGE	DESIGN LEVEL	NATURAL LEVEL	CHANGE	ALIGNMENT DETAILS	SURFACE ELEVATION
Design SL: 227.00	3680.00	249.30	248.77	+0.53		248.77
	3700.00	249.30	248.89	+0.41		248.89
	3720.00	249.30	249.37	+0.03		249.37
	3740.00	249.30	249.51	+0.19		249.51
	3760.00	249.30	249.12	+0.18		249.12
	3780.00	249.30	249.55	+0.43		249.55
	3790.00	249.30	249.04	+0.54		249.04
	3800.00	249.30	249.72	+0.58		249.72
	3820.00	249.30	249.78	+0.72		249.78

LONGITUDINAL SECTION

PLAN SCALE: - HORIZONTAL SCALE: 1:250 @ A1, 1:500 @ A2 VERTICAL SCALE: 1:25 @ A1, 1:50 @ A2	DATE: 30-09-2013 DESIGNED: GEORGE LATHAM DRAWN: GEORGE LATHAM	SHEET NO. 35 NO. OF SHEETS 90	PROJECT NO. 1318284 DRAWING NO. 1318284-35	SHEET NO. B
ISSUED FOR CONSTRUCTION ISSUED FOR APPROVAL DATE: 30-09-2013				
APPROVED: ANTHONY SWEETMAN 30-09-2013				
NARRABRI SHIRE COUNCIL 46-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6868 ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 10 OF 22				



PLAN SCALE: HORIZONTAL SCALE 1:200 @ A1, 1:500 @ A2, VERTICAL SCALE 1:20 @ A1, 1:50 @ A2

DATE: 21/08/2013

PROJECT: NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS

LOCATION: ROAD CONSTRUCTION & SEALING WORKS, WAVE HILL ROAD (SR18) NEAR WARRIGA QUARRY TO NEAR JOHNSTONE QUARRY

PROJECT NO: 1318284

SHEET NO: 36

REV: B

1318284-36

HEART OF THE NORTH WEST

NARRABRI SHIRE COUNCIL

46-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6790 6666 FAX: (02) 6790 6666

ROAD CONSTRUCTION & SEALING WORKS

WAVE HILL ROAD (SR18) NEAR WARRIGA QUARRY TO NEAR JOHNSTONE QUARRY

LONGITUDINAL SECTION - SHEET 11 OF 22

DATE: 21/08/2013

BY: [Signature]

DATE: 21/08/2013

BY: [Signature]

DO NOT SCALE
EXTENT OF WORK

VERTICAL CURVE GRADE	DESIGN R.L. 227.00	DESIGN LEVELS	NATURAL LEVELS	CHANGE	ALIGNMENT DETAILS	SURFACE ELEVATION
		+1.10	251.41	0.00		
		+0.94	251.56	0.00		
		+0.71	251.71	0.00		
		+0.45	251.86	0.00		
		-0.41	252.02	0.00		
		+0.43	252.17	0.00		
		+0.50	252.32	0.00		
		+0.81	252.47	0.00		
		+0.67	252.62	0.00		
		+0.71	252.77	0.00		

LONGITUDINAL SECTION

DO NOT SCALE
EXTENT OF WORK

VERTICAL CURVE GRADE	DESIGN R.L. 242.00	DESIGN LEVELS	NATURAL LEVELS	CHANGE	ALIGNMENT DETAILS	SURFACE ELEVATION
		+0.71	252.77	0.00		
		+0.88	252.92	0.00		
		+0.83	253.07	0.00		
		+0.84	253.22	0.00		
		-0.75	253.38	0.00		
		+0.68	253.53	0.00		
		+0.80	253.68	0.00		
		+0.57	253.83	0.00		
		+0.59	253.98	0.00		
		+0.81	254.13	0.00		

LONGITUDINAL SECTION

PLAN SCALE HORIZONTAL SCALE 1:250 @ A1, 1:500 @ A3 VERTICAL SCALE 1:25 @ A1, 1:50 @ A3	DATE AHD DRAWN: GEOF LATHAM CHECKED: GEOF LATHAM	REV. DATE A 16-09-2013 B 30-04-2013	ISSUED FOR CONSTRUCTION ISSUED FOR APPROVAL DESCRIPTION	QPL AS QPL AS QPL AS	4500000 ANTHONY SHEETMAN BSR SHEET NUMBER 20-09-2013 DATE	4500000 ANTHONY SHEETMAN BSR SHEET NUMBER 20-09-2013 DATE	NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARDLA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 12 OF 22	FILE NO. 1318284 PROJECT NO. 1318284 DRAWING NO. 1318284-37	NO. OF SHEETS 90 SHEET NO. 37	REV. B
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DO NOT SCALE
EXTENT OF WORK

VERTICAL CURVE GRADE	0.75%		200.00		0.75%		200.00	
Design RL: 248.000								
CUT/FILL	+0.51		+0.56		+0.54		+0.52	
DESIGN LEVELS	254.13	254.29	254.44	254.59	254.74	254.89	255.04	255.19
NATURAL LEVELS	253.53	253.76	253.86	254.05	254.22	254.34	254.51	254.64
CHANGE	4580.00	4580.00	4620.00	4620.00	4640.00	4660.00	4700.00	4720.00
ALIGNMENT DETAILS	<p>DESIGNER: [Signature]</p>							
SURF ELEVATION								

LONGITUDINAL SECTION

DO NOT SCALE
EXTENT OF WORK

VERTICAL CURVE GRADE	0.75%		200.00		0.75%		200.00	
Design RL: 265.000								
CUT/FILL	+0.39		+0.38		+0.31		+0.32	
DESIGN LEVELS	255.69	255.98	256.33	256.71	257.02	257.27	257.60	257.92
NATURAL LEVELS	255.30	255.59	255.94	256.29	256.72	257.27	257.86	258.11
CHANGE	4740.00	4750.00	4780.00	4800.00	4820.00	4840.00	4860.00	4880.00
ALIGNMENT DETAILS	<p>DESIGNER: [Signature]</p>							
SURF ELEVATION								

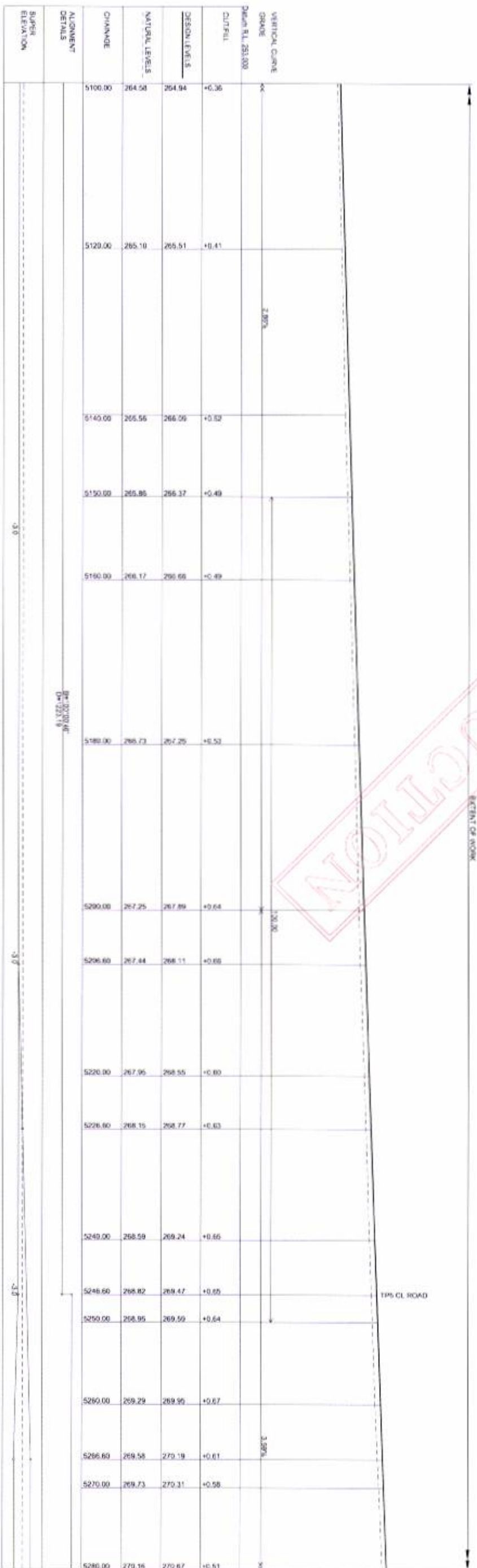
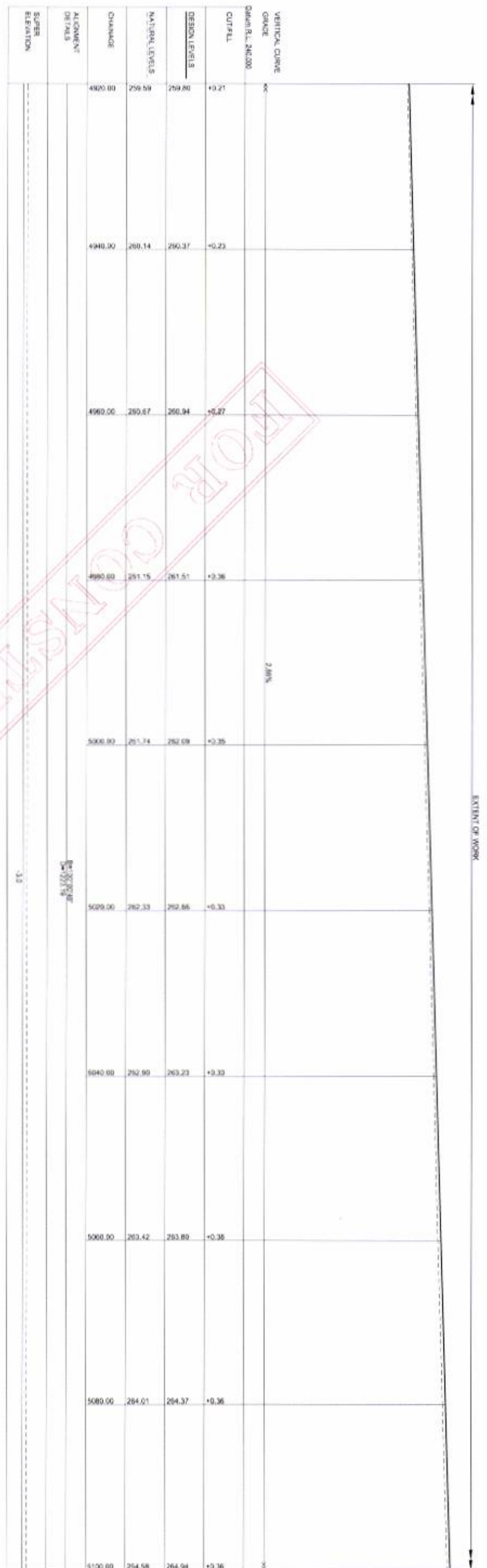
LONGITUDINAL SECTION

PLAN SCALE: - HORIZONTAL SCALE: 1:200 @ A1, 1:500 @ A2 VERTICAL SCALE: 1:20 @ A1, 1:50 @ A2		DATE: 30-08-2013 ISSUED FOR CONSTRUCTION 16-08-2013 ISSUED FOR APPROVAL		DATE: 30-08-2013 16-08-2013		DESCRIPTION:		DTS:		DTS:	
ADDRESS: ANTHONY SMETANIN SRM CIVIL ENGINEER		30-08-2013 SRM		30-08-2013 SRM		30-08-2013 SRM		30-08-2013 SRM		30-08-2013 SRM	
DRAWN: GEORF LATHAM CHECKED: GEORF LATHAM		30-08-2013 16-08-2013		30-08-2013 16-08-2013		30-08-2013 16-08-2013		30-08-2013 16-08-2013		30-08-2013 16-08-2013	
PROJECT NO: 1318284 SHEET NO: 1318284-38		PROJECT NO: 1318284 SHEET NO: 1318284-38		PROJECT NO: 1318284 SHEET NO: 1318284-38		PROJECT NO: 1318284 SHEET NO: 1318284-38		PROJECT NO: 1318284 SHEET NO: 1318284-38		PROJECT NO: 1318284 SHEET NO: 1318284-38	



NARRABRI SHIRE COUNCIL
 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 13 OF 22

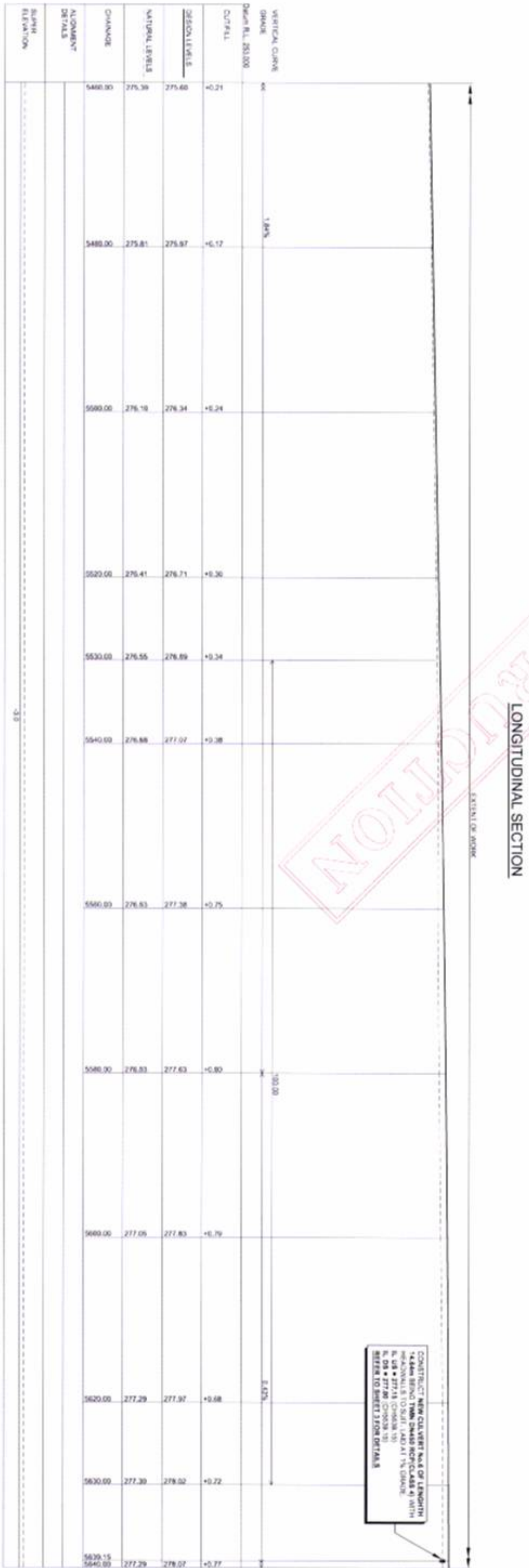
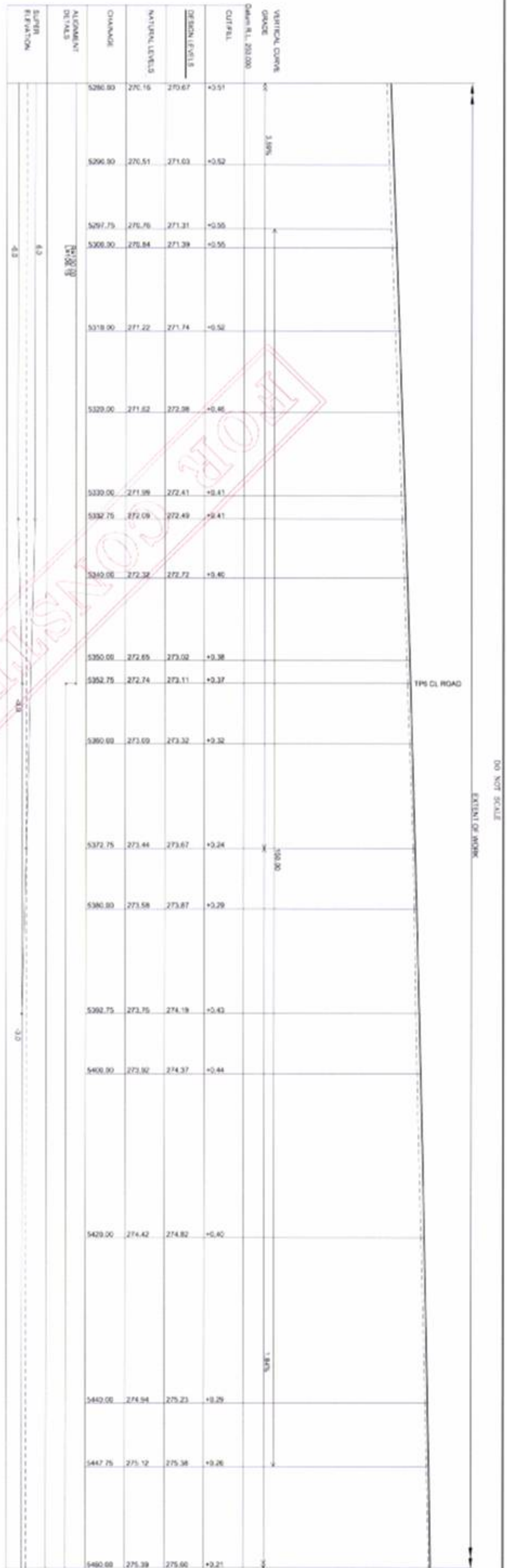
PROJECT NO: 1318284
 SHEET NO: 1318284-38
 SHEET NO: 38



PLAN SCALE HORIZONTAL SCALE 1:250 @ A1, 1:500 @ A2 VERTICAL SCALE 1:20 @ A1, 1:50 @ A3		DATE 0 30-09-2013 A 16-09-2013		ISSUED FOR CONSTRUCTION ISSUED FOR APPROVAL		DESIGNED GEOFF LATHAM		DATE 16-09-2013		ISSUED FOR APPROVAL ISSUED FOR APPROVAL		DESIGNED GEOFF LATHAM		DATE 16-09-2013	
VERTICAL CURVE GRADE DESIGN R.L. 261.00 CUT/FILL DESIGN LEVELS NATURAL LEVELS CHANGE ALIGNMENT DETAILS SUPER ELEVATION		2.87% 2.25% 2.27% 2.36% 2.35% 2.33% 2.33% 2.35% 2.36%		261.00 260.14 260.67 261.15 261.74 262.33 262.96 263.42 264.01 264.58		259.59 260.14 260.67 261.15 261.74 262.33 262.96 263.42 264.01 264.58		4962.00 4940.00 4960.00 4990.00 5000.00 5020.00 5040.00 5060.00 5080.00 5100.00		264.36 265.51 266.56 266.37 266.66 267.25 268.89 268.11 268.55 268.77 269.24 269.47 269.59 269.95 270.19 270.31 270.67		5100.00 5120.00 5140.00 5150.00 5160.00 5180.00 5200.00 5206.00 5220.00 5226.00 5240.00 5246.00 5250.00 5260.00 5266.00 5270.00 5280.00		264.94 265.10 266.06 265.86 266.17 266.72 267.25 267.44 268.11 268.55 268.77 269.24 269.47 269.59 269.95 270.19 270.31 270.67	



NARRABRI SHIRE COUNCIL
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 14 OF 22



CONSTRUCT NEW CURB AND GUTTER
144m FROM NEW CURB AND GUTTER
RECOMMENDED TO BE 1400mm HIGH
R. 05 • 277.15 (CONCRETE)
R. 05 • 277.00 (CONCRETE)
REFER TO SHEET 3 FOR DETAILS

PLAN SCALE: HORIZONTAL SCALE: 1:500 @ A1, 1:200 @ A2, VERTICAL SCALE: 1:25 @ A1, 1:50 @ A2

DATE	BY	REVISION
20-08-2013	A	ISSUED FOR APPROVAL
20-08-2013	B	ISSUED FOR CONSTRUCTION

APPROVED: ANTHONY DE LUCA, CIVIL ENGINEER

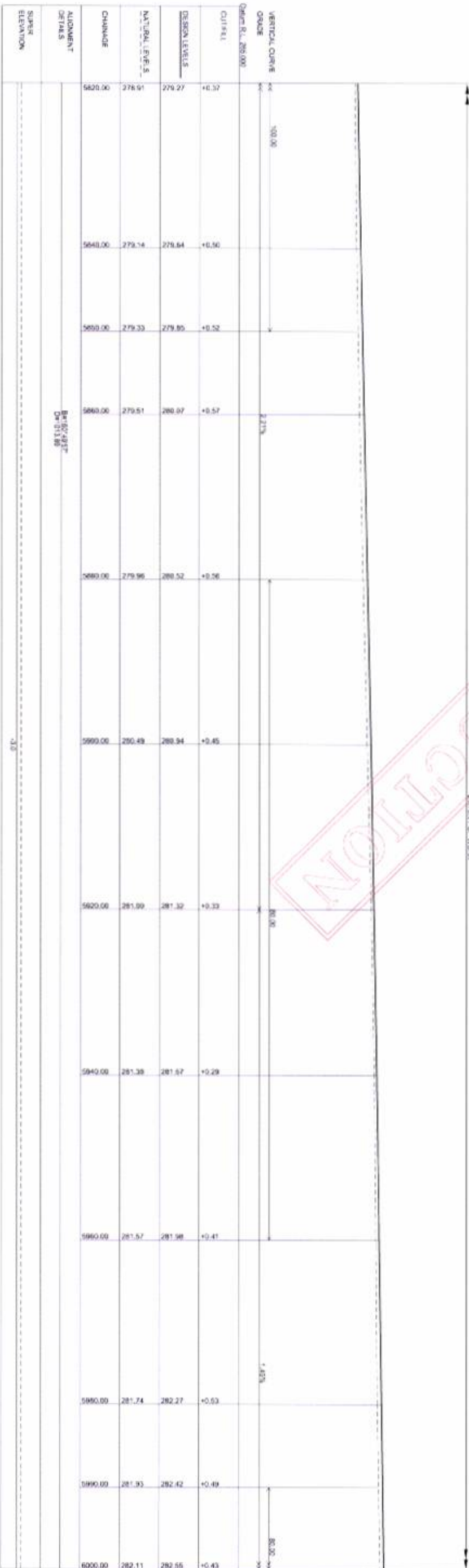
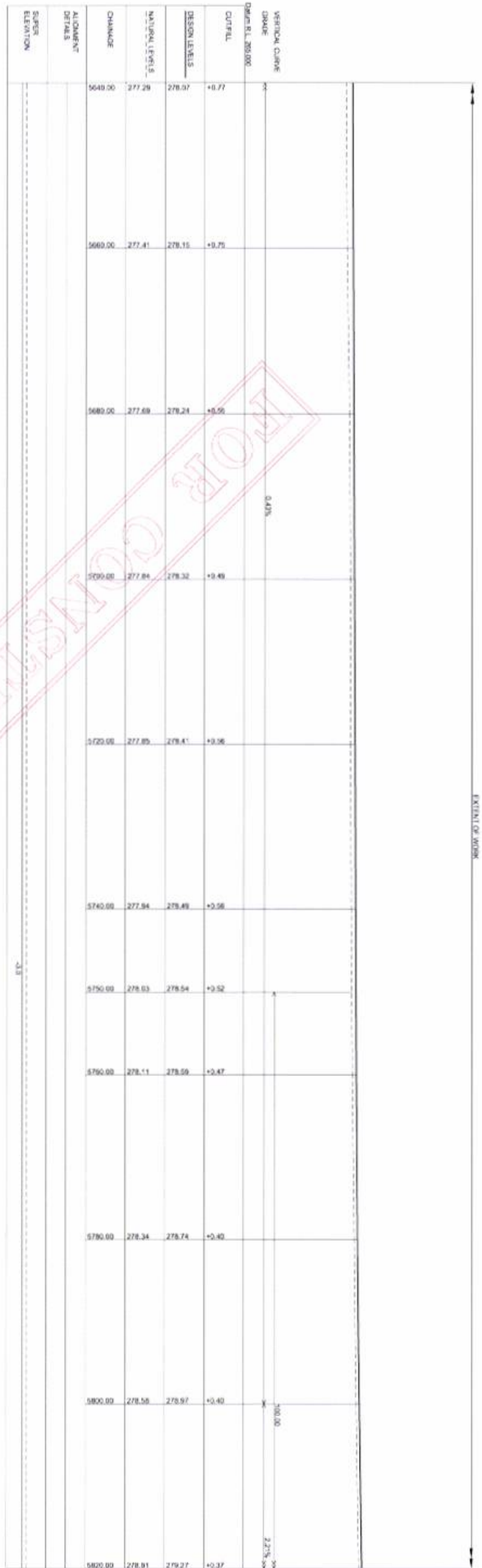
DATE: 20-08-2013

NARRABRI SHIRE COUNCIL
46-48 WATLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6668

ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR16) NEAR WARDIA QUARRY TO NEAR JOHNSTONE QUARRY
LONGITUDINAL SECTION - SHEET 15 OF 22

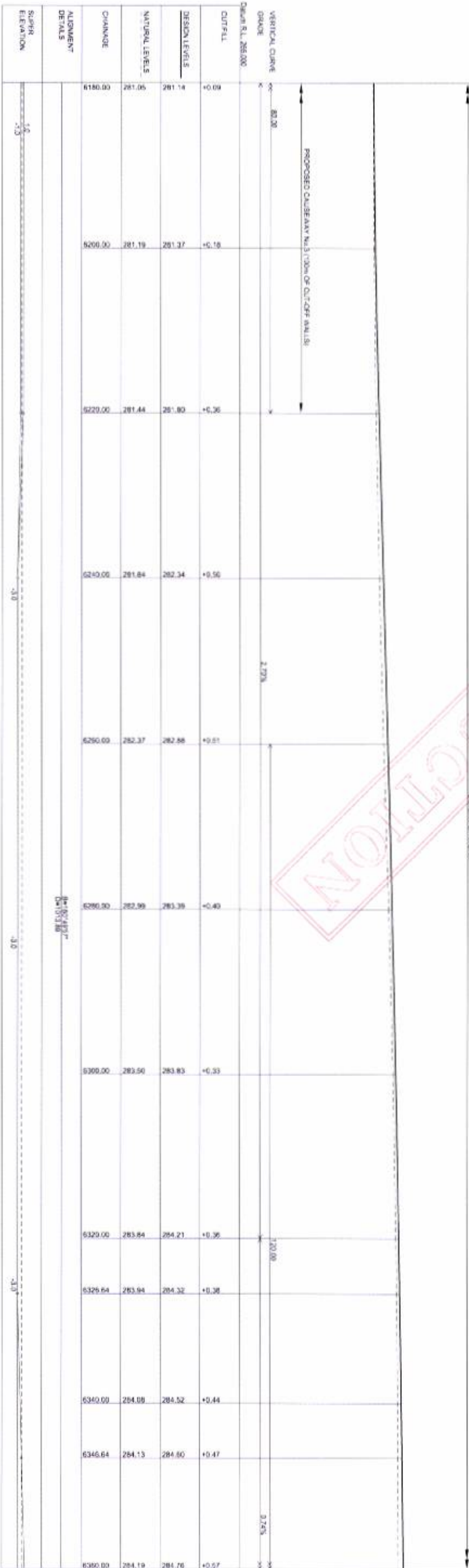
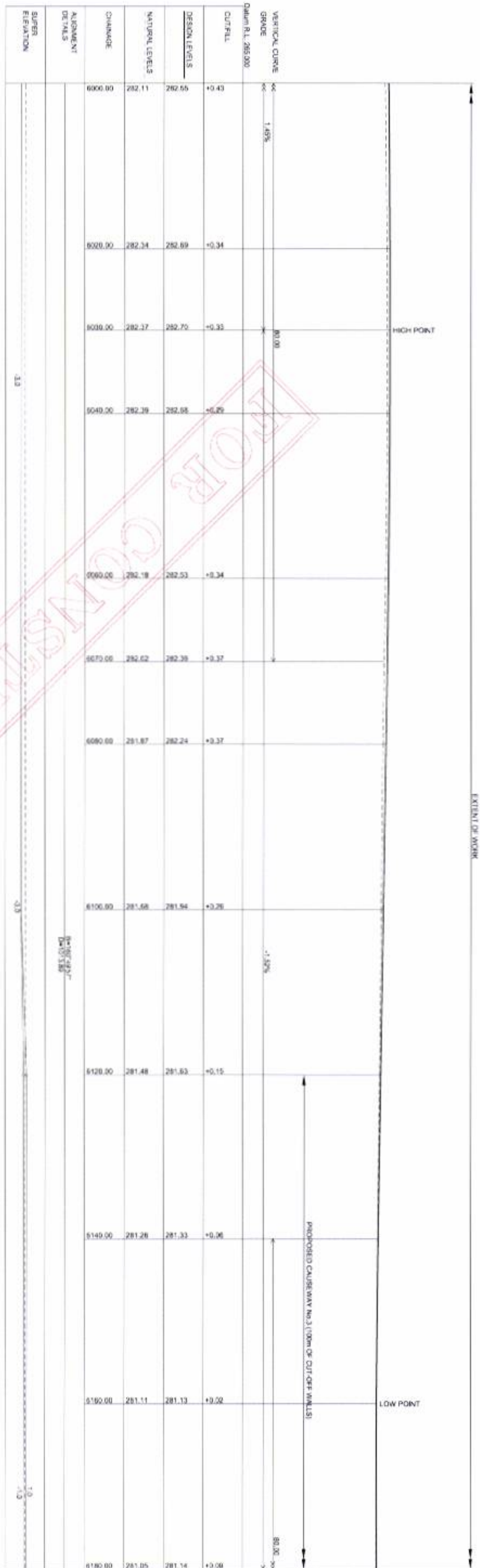
FILE NO: 1318284
PROJECT NO: 1318284
NO. OF SHEETS: 90
SHEET NO: 40

DRAWING NO: 1318284-40
REV: B



PLAN SCALE: 1:250 @ A1, 1:500 @ A2 VERTICAL SCALE: 1:25 @ A1, 1:50 @ A2		DATE: 16-09-2013 REV: A		PROJECT NO: 1318284 SHEET NO: 41	
SURVEYED BY: GEORGE LATHAM DESIGNED BY: GEORGE LATHAM DRAWN BY: GEORGE LATHAM		ISSUED FOR CONSTRUCTION: 30-09-2013 ISSUED FOR APPROVAL: 16-09-2013		NO. OF SHEETS: 90	
DESCRIPTION:		DESIGNED BY: ANTHONY SWEETMAN DRAWN BY: ANTHONY SWEETMAN		SHEET NO: 41	
APPROVED BY:		DATE: 30-09-2013		SHEET NO: 41	
NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR16) NEAR WAIRUA QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 16 OF 22		NARRABRI SHIRE COUNCIL 48-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888		SHEET NO: 41	





DATE	ISSUED FOR CONSTRUCTION	DATE	ISSUED FOR APPROVAL
	30-09-2013	16-09-2013	
DRAWN	GEOFF LATHAM	REV.	DATE
	GEOFF LATHAM		
DESCRIPTION			
NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS			
44-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6668			
ROAD CONSTRUCTION & SEALING WORKS			
WAVE HILL ROAD (SR18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY			
LONGITUDINAL SECTION - SHEET 17 OF 22			
FILE No.	1318284	No. OF SHEETS	90
PROJECT No.	1318284		
DRAWING No.	1318284-42	SHEET No.	42
REV.	B		

LONGITUDINAL SECTION

LONGITUDINAL SECTION

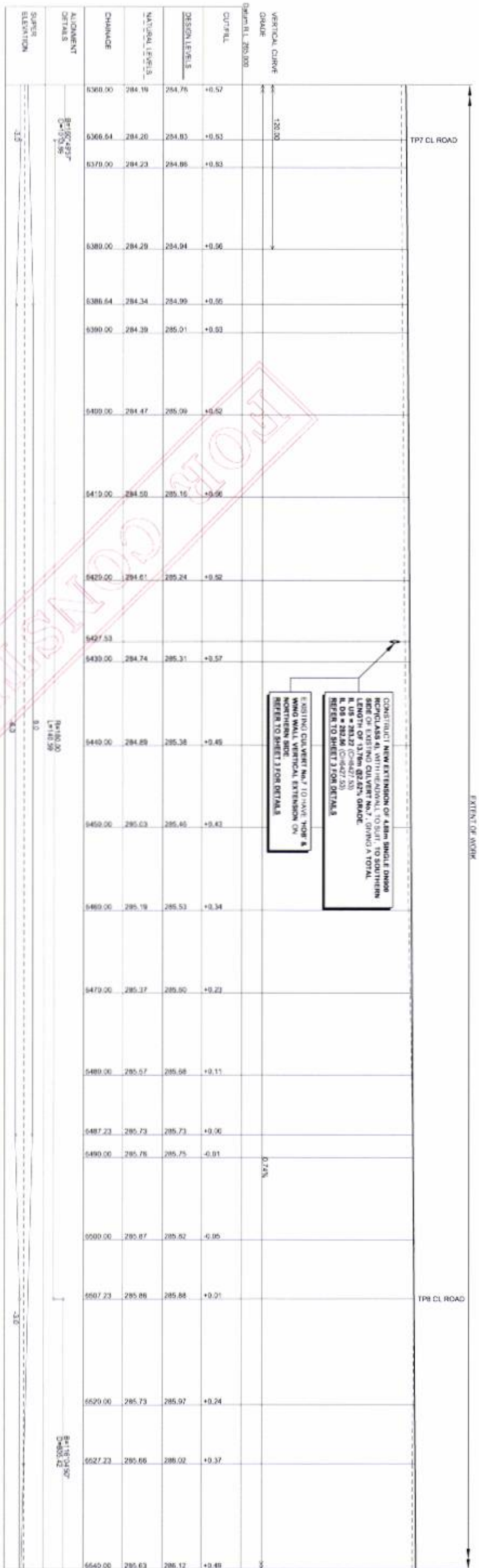


NARRABRI SHIRE COUNCIL
 44-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6668
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 17 OF 22

FILE No. 1318284
 PROJECT No. 1318284
 DRAWING No. 1318284-42
 No. OF SHEETS 90
 SHEET No. 42
 REV. B



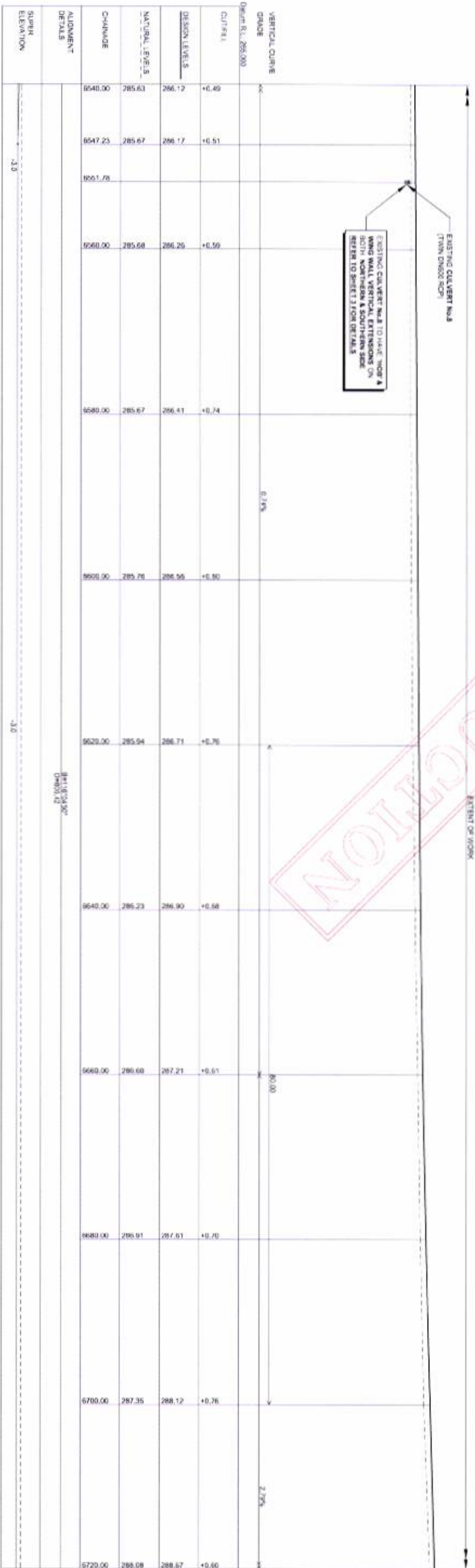
DO NOT SCALE
EXTENT OF WORK



LONGITUDINAL SECTION

EXISTING CULVERT NO.8
11.7m x 2.2m
REFER TO SHEET 1 FOR DETAILS

CONSTRUCT NEW EXTENSION OF 4.8m SINGLE DRAIN
NO. CLASS 4L WITH HEADWALL TO SLOPE TO SOUTHERN
SIDE OF EXISTING CULVERT NO.7. GIVING A TOTAL
LENGTH OF 13.7m @ 2.5% GRADE.
R. 0.8 = 285.27 (CHAINAGE 6427.53)
R. 0.8 = 285.26 (CHAINAGE 6430.00)
REFER TO SHEET 2 FOR DETAILS



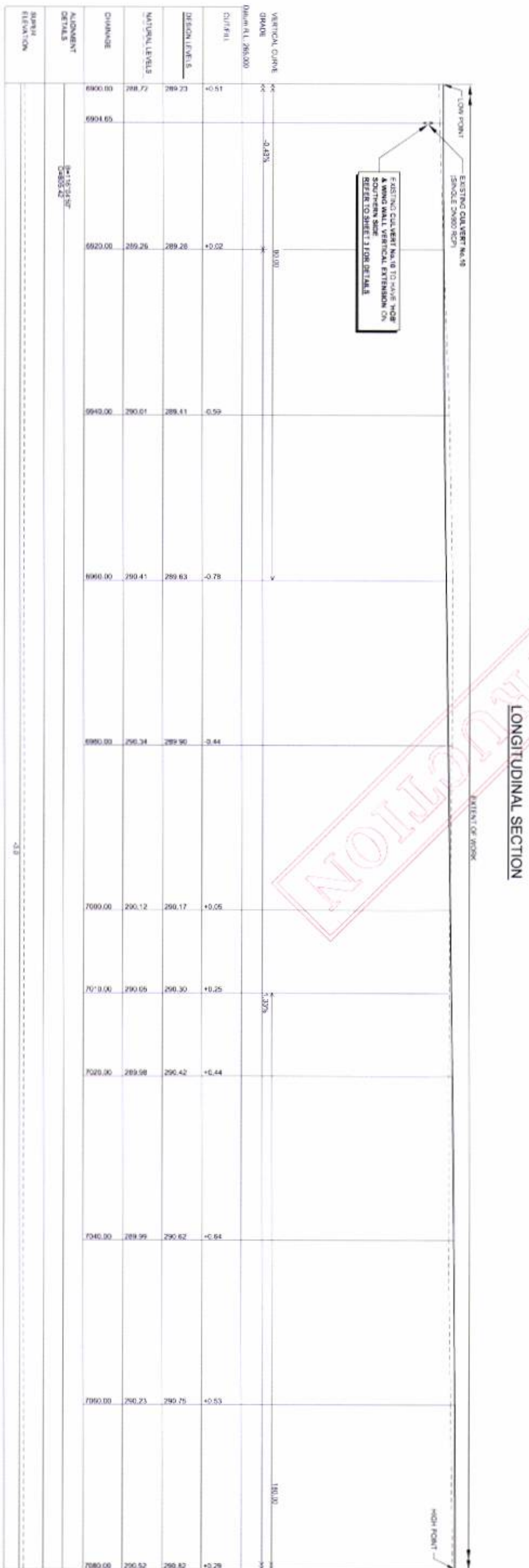
LONGITUDINAL SECTION

<p>PLAN SCALE: 1:250 @ A1, 1:500 @ A2</p> <p>VERTICAL SCALE: 1:25 @ A1, 1:50 @ A2</p> <p>DATE: 30-09-2013</p> <p>DESIGN: GEOFF LATHAM</p> <p>DRAWN: GEOFF LATHAM</p>	<p>APPROVED: ANTHONY SWIFTMAN</p> <p>DATE: 30-09-2013</p> <p>DESCRIPTION: ISSUED FOR CONSTRUCTION</p>	<p>APPROVED: ANTHONY SWIFTMAN</p> <p>DATE: 30-09-2013</p> <p>DESCRIPTION: ISSUED FOR APPROVAL</p>	<p>FILE No. 1318284</p> <p>PROJECT No. 1318284</p> <p>NO. OF SHEETS: 90</p> <p>SHEET No. 43</p>
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NARRABRI SHIRE COUNCIL
44-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888

ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARRIOO QUARRY TO NEAR JOHNSTONE QUARRY
LONGITUDINAL SECTION - SHEET 18 OF 22

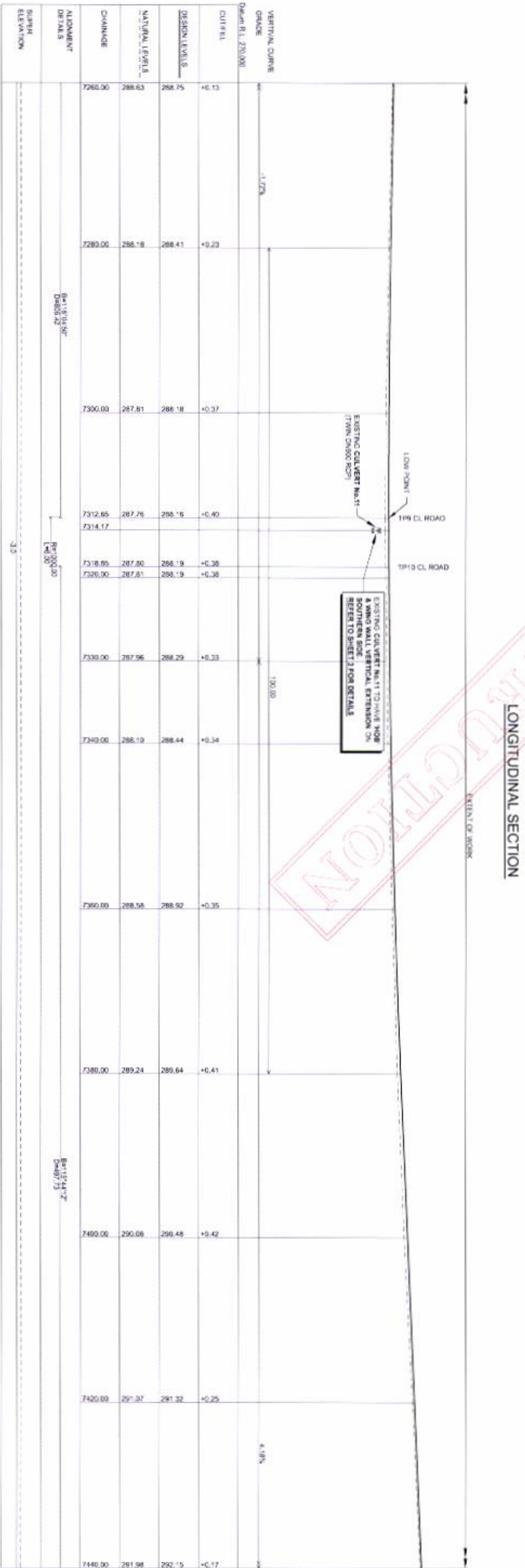
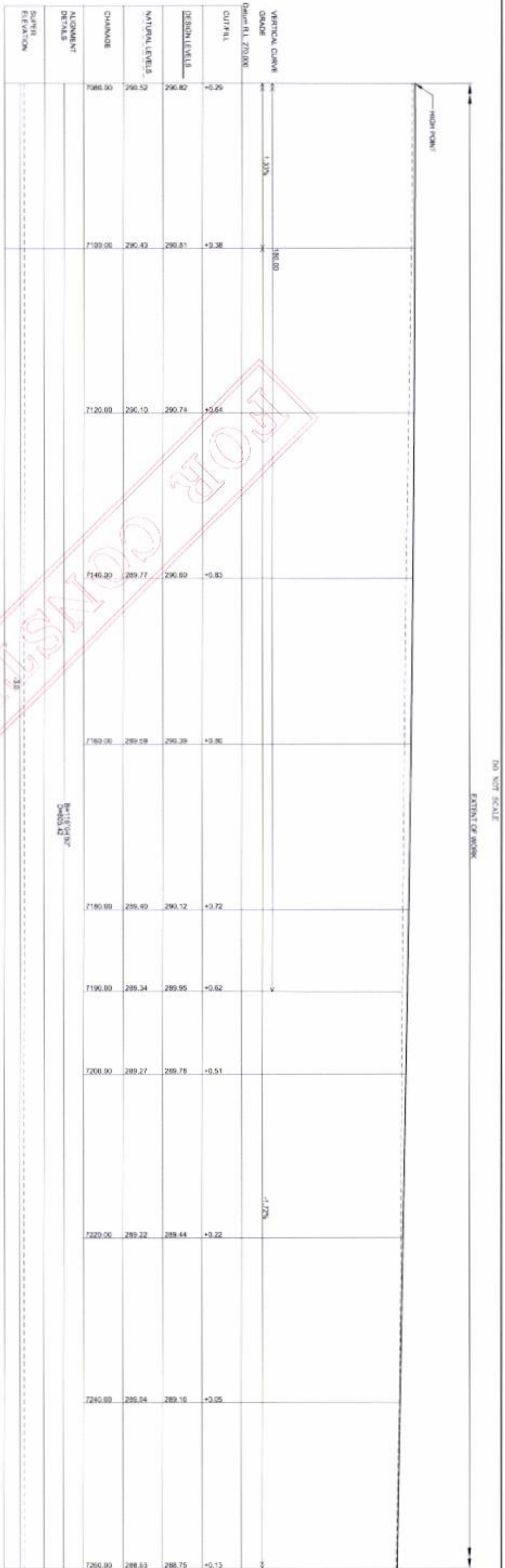


PLAN SCALE: HORIZONTAL SCALE: 1:250 @ A1, 1:500 @ A3 VERTICAL SCALE: 1:25 @ A1, 1:50 @ A3		PROJECTED: GEOFF LATHAM DESIGN: GEOFF LATHAM DRAWN: GEOFF LATHAM		REV. A DATE: 18-09-2013 ISSUED FOR APPROVAL		REV. B DATE: 30-09-2013 ISSUED FOR CONSTRUCTION		DES. A/S A/S		DES. A/S A/S	
ANTHONY SWEETMAN 8399 SPENCER STREET ST. LOUIS, MO 63110 TEL: (636) 796-7700 SECTION ENGINEER SERVICES				20-09-2013 ANT				NARRABRI SHIRE COUNCIL ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARRIO QUARRY TO NEAR JOHNSTONE QUARRY LONGITUDINAL SECTION - SHEET 19 OF 22			
FILE No. 1318284 NO. OF SHEETS 90		SHEET No. 44		1318284-44		REV. B					

LONGITUDINAL SECTION

LONGITUDINAL SECTION



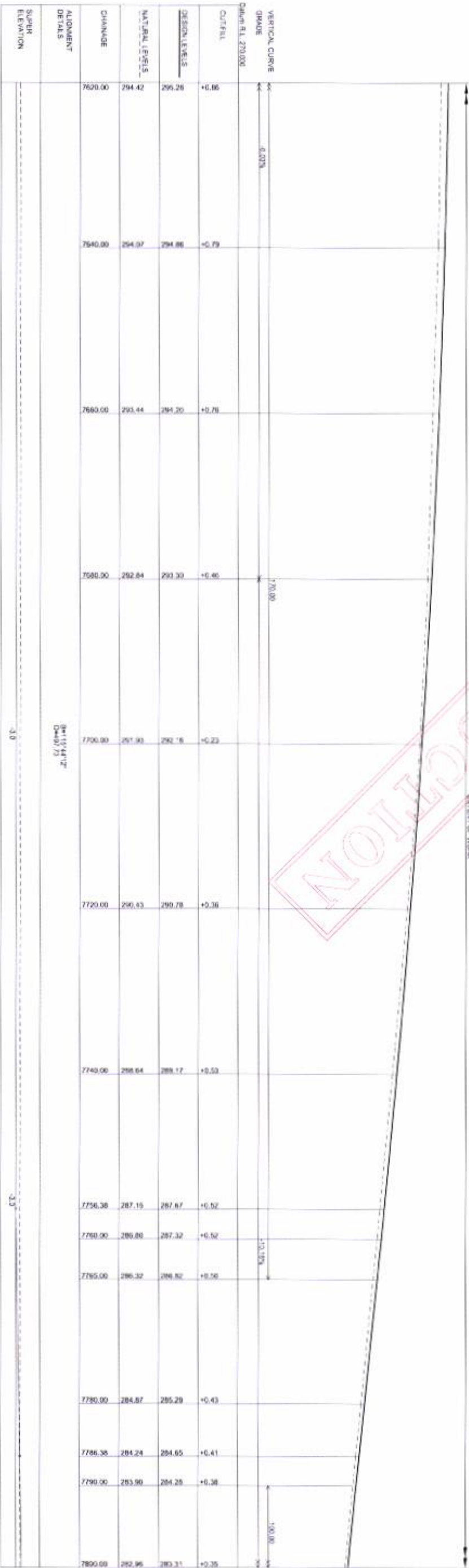
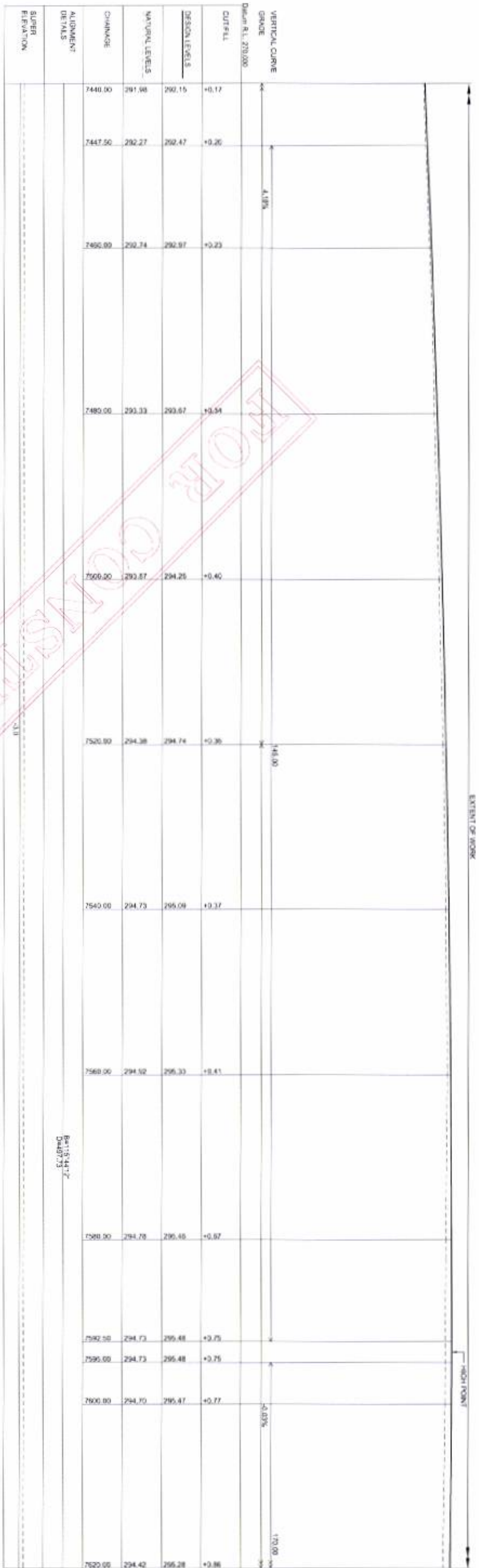


LONGITUDINAL SECTION

DATE: 30-09-2013
 DRAWN: ANTHONY SWEETMAN
 CHECKED: ANTHONY SWEETMAN
 PROJECT: 1318284
 SHEET: 90 OF 90
 SHEET NO: 45

NARRABRI SHIRE COUNCIL
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR16) NEAR WARRA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 20 OF 22

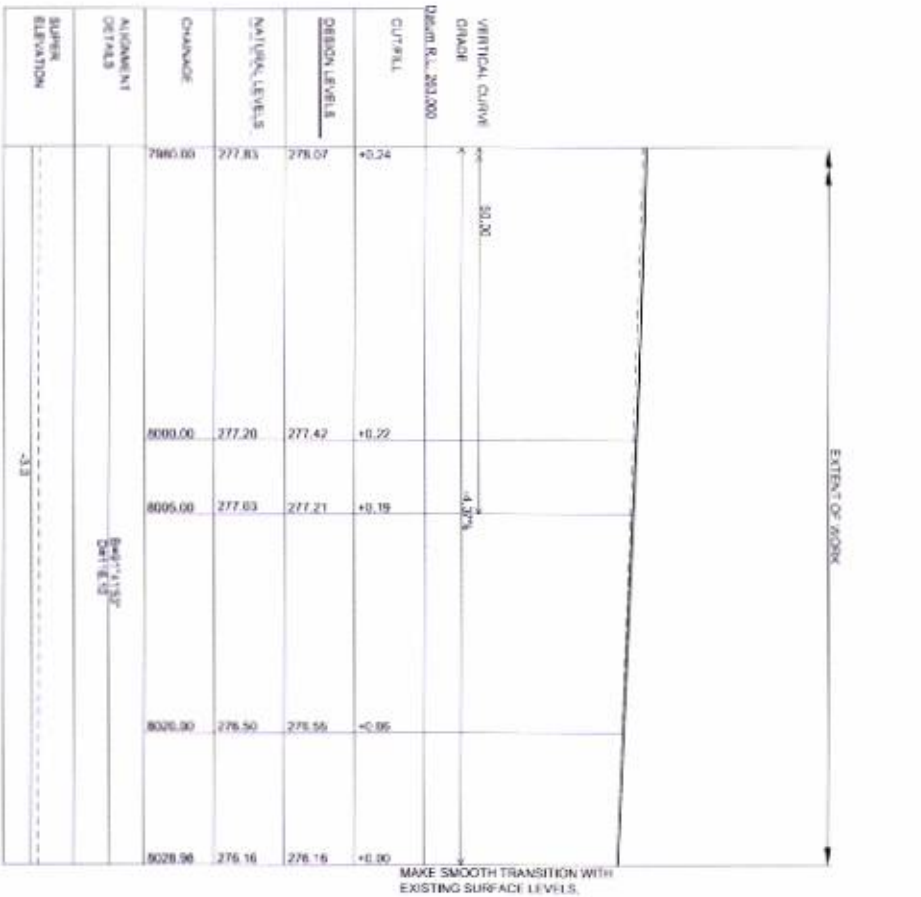
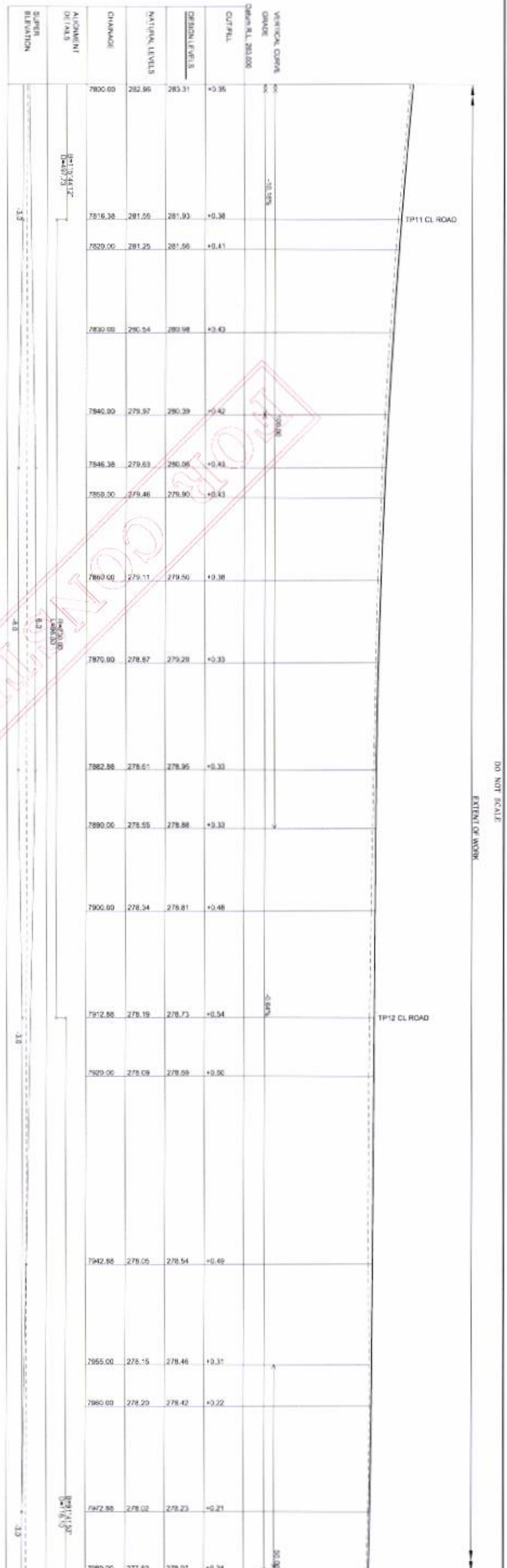
1318284-45



PLAN SCALE HORIZONTAL SCALE 1:250 @ A1, 1:500 @ A2 VERTICAL SCALE 1:25 @ A1, 1:50 @ A2		DATE SHEETED: 20-09-2013 CHECKED: 20-09-2013 DRAWN: GEOFF LATHAM		DATE ISSUED FOR CONSTRUCTION: 20-09-2013 ISSUED FOR APPROVAL: 20-09-2013		DATE Q/A: AS Q/A: AS A/P: AS		DESCRIPTION ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY		LONGITUDINAL SECTION - SHEET 21 OF 22	
APPROVED ANTHONY SWEETMAN CIVIL ENGINEER		20-09-2013		20-09-2013		20-09-2013		20-09-2013		20-09-2013	
FILE No. 1318284 PROJECT No. 1318284		No. OF SHEETS 90		SHEET No. 46		DRAWING No. 1318284-46		REV. B		1318284-46	



NARRABRI SHIRE COUNCIL
 46-48 MULLAND STREET NARRABRI NSW 2390 PH: (02) 6799 8886 FAX: (02) 6799 8888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY
 LONGITUDINAL SECTION - SHEET 21 OF 22



LONGITUDINAL SECTION

VERTICAL CURVE
GRADE
CHAIN RL: 282.000

CUT/FILL
DESIGN LEVELS
NATURAL LEVELS
CHANGEL

ALIGNMENT
DETAILS
SUPER
ELEVATION

EXTENT OF WORK

MAKE SMOOTH TRANSITION WITH
EXISTING SURFACE LEVELS.

TP11 CL ROAD

TP12 CL ROAD

DO NOT SCALE

EXTENT OF WORK

FILE NO. 1318284
PROJECT NO. 1318284
DRAWING NO. 1318284-47

NO. OF SHEETS 90
SHEET NO. 47

DATE 30-09-2013
ISSUED FOR CONSTRUCTION

DATE 18-09-2013
ISSUED FOR APPROVAL

DATE 01-09-2013
DISSEMINATION

ANTHONY SHERMAN
SRM SRM1 NUMBER
30-09-2013
SRM

NARRABRI SHIRE COUNCIL
46-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888

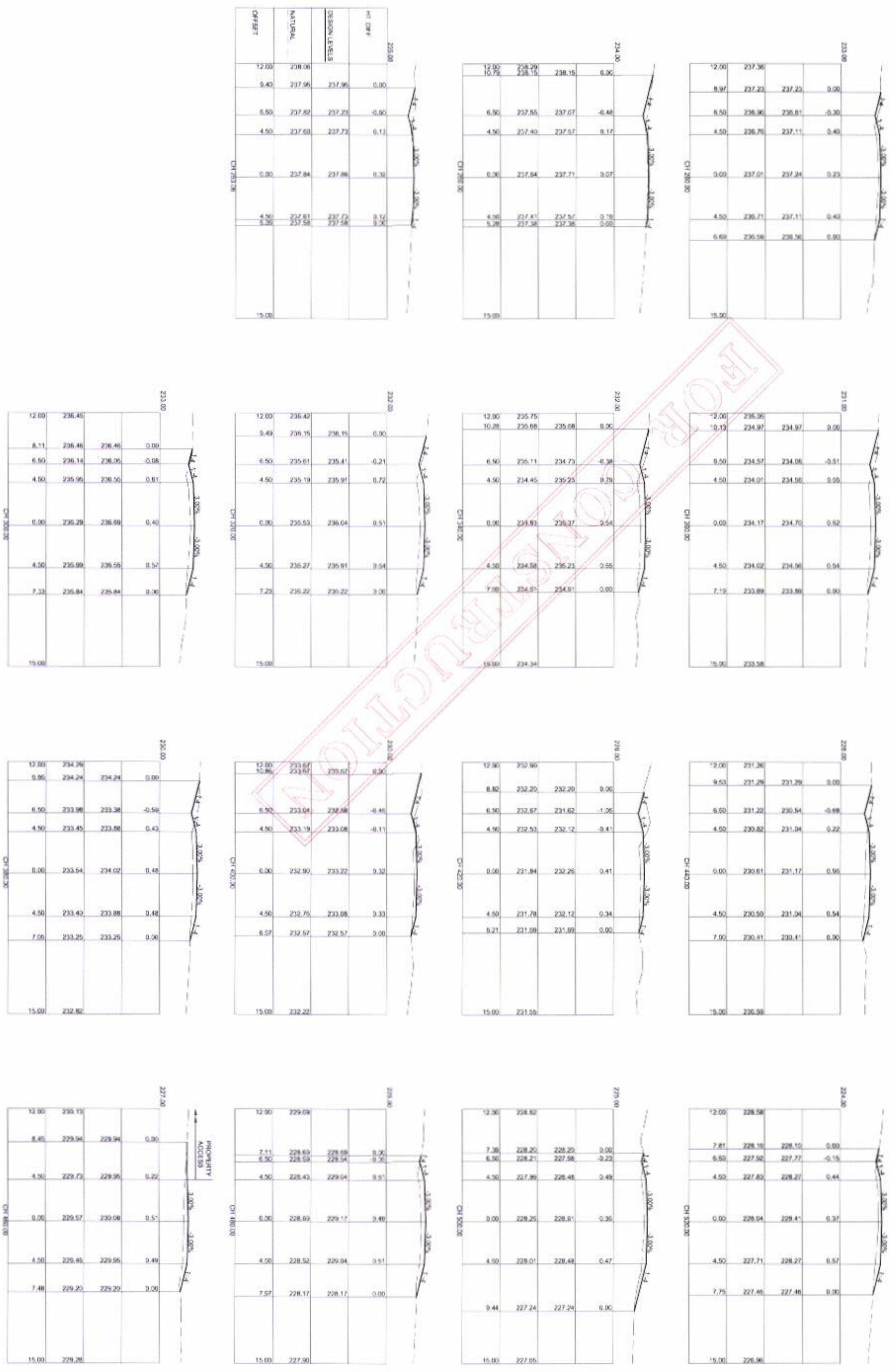
ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SR18) NEAR WARRIDA QUARRY TO NEAR JOHNSTONE QUARRY
LONGITUDINAL SECTION - SHEET 22 OF 22

PLAN SCALE HORIZONTAL SCALE 1:200 @ A1, 1:400 @ A3 VERTICAL SCALE 1:200 @ A1, 1:400 @ A3	
DATE 20-09-2013	DESIGNED GEORF LATHAM
DRAWN GEORF LATHAM	CHECKED GEORF LATHAM
PROJECT NO. 1318284	SHEET NO. 48
PROJECT NAME ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARPOA QUARRY TO NEAR JOHNSTONE QUARRY ROAD CROSS SECTIONS - SHEET 1 OF 29	CLIENT NARRABRI SHIRE COUNCIL



NARRABRI SHIRE COUNCIL
 46-48 MATTIAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6666

FILE NO. 1318284	NO. OF SHEETS 90	SHEET NO. 48
PROJECT NO. 1318284	DRAWING NO. 1318284-48	REV. B

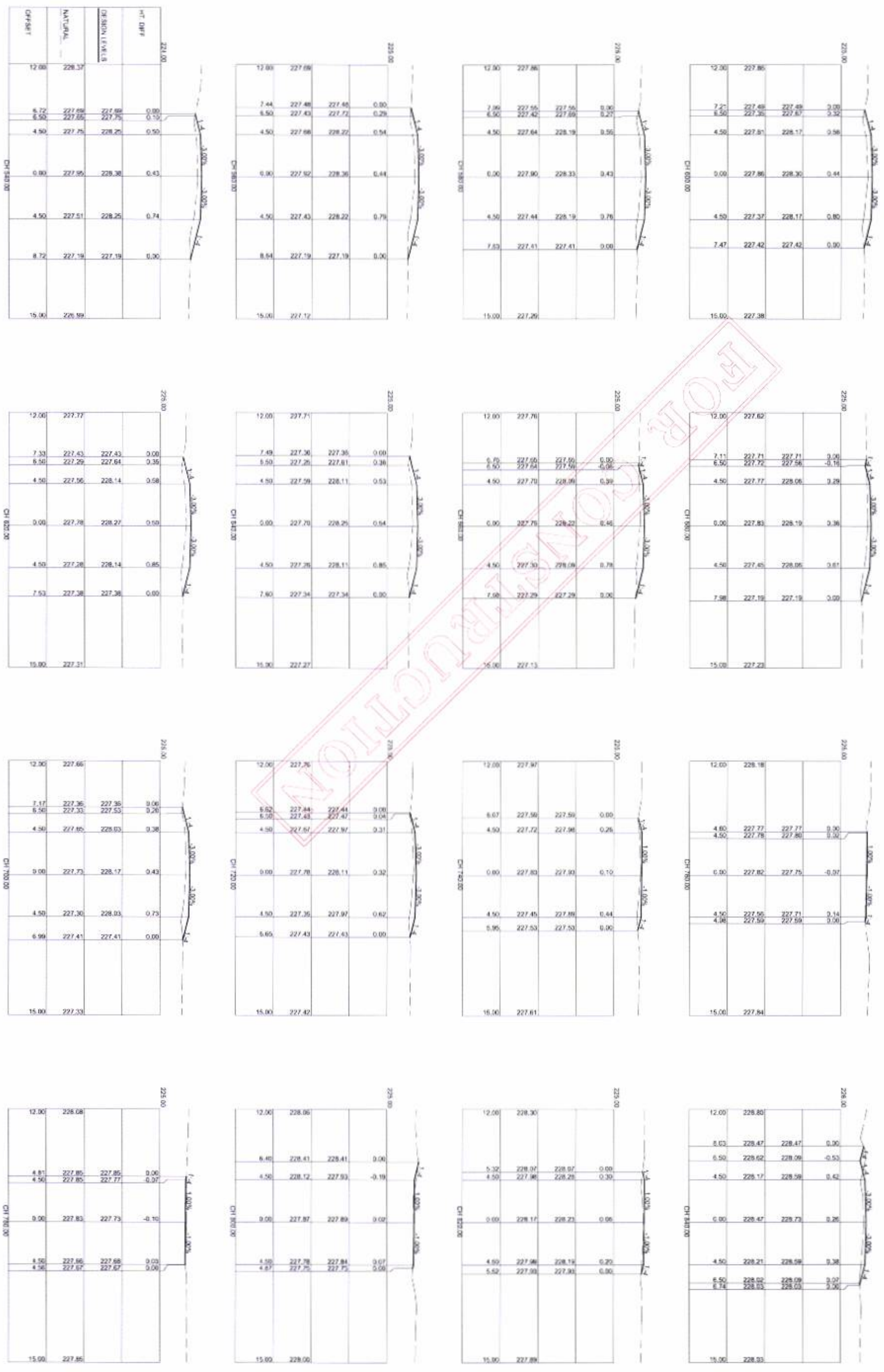


PLAN SCALE		1:200 @ A1, 1:400 @ A2	
VERTICAL SCALE		1:200 @ A1, 1:400 @ A2	
DATE	15-09-2013	ISSUED FOR CONSTRUCTION	30-09-2013
DESIGNED	DEVELOP LATHAM	ISSUED FOR APPROVAL	
DRAWN	DEVELOP LATHAM	DESCRIPTION	
REV.	DATE	DESCRIPTION	
AS			
AS			
AS			
AS			
AS			
AS			



NARRABRI SHIRE COUNCIL
 48-48 MULLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888
ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR16) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY
 ROAD CROSS SECTIONS - SHEET 2 OF 29

FILE NO.	1318284	NO. OF SHEETS	90	SHEET NO.	49
PROJECT NO.	1318284				
DRAWING NO.	1318284-49				
REV.	B				



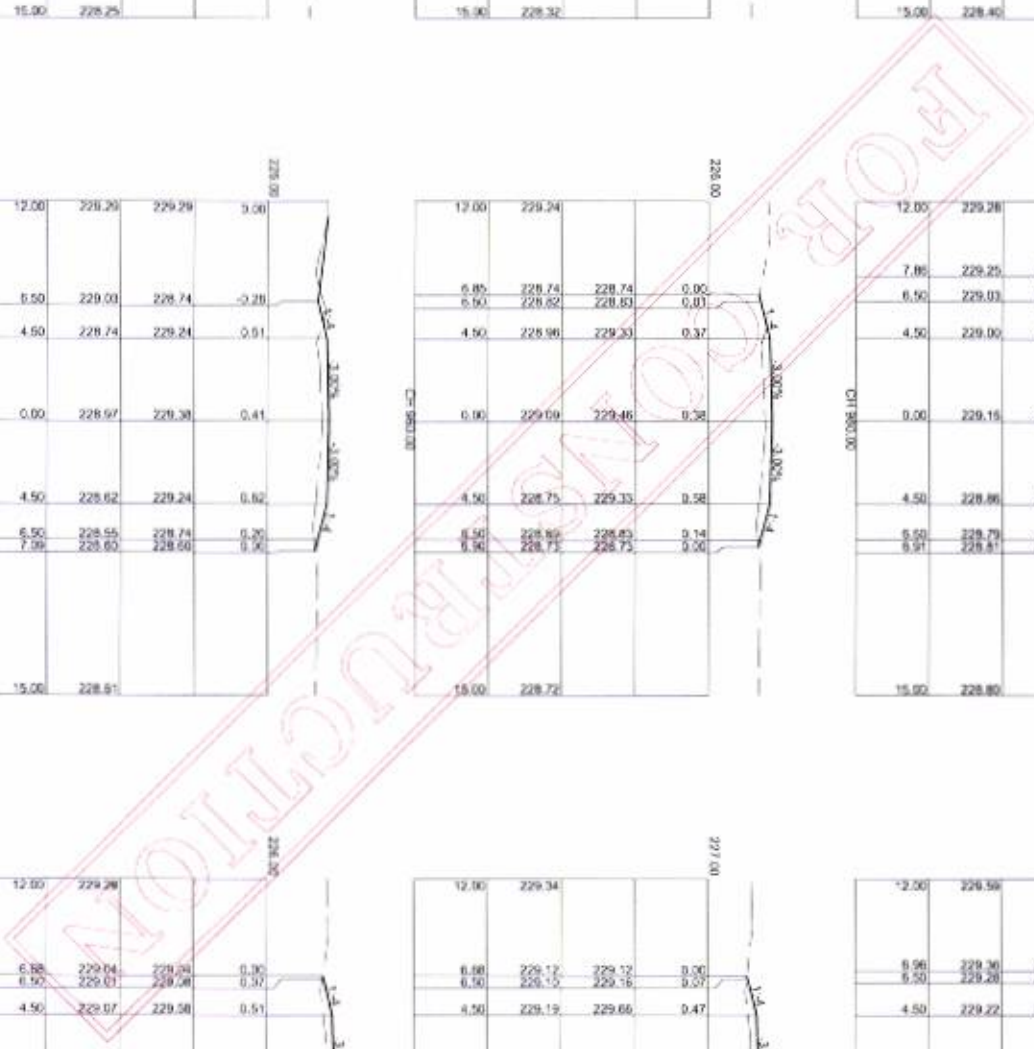
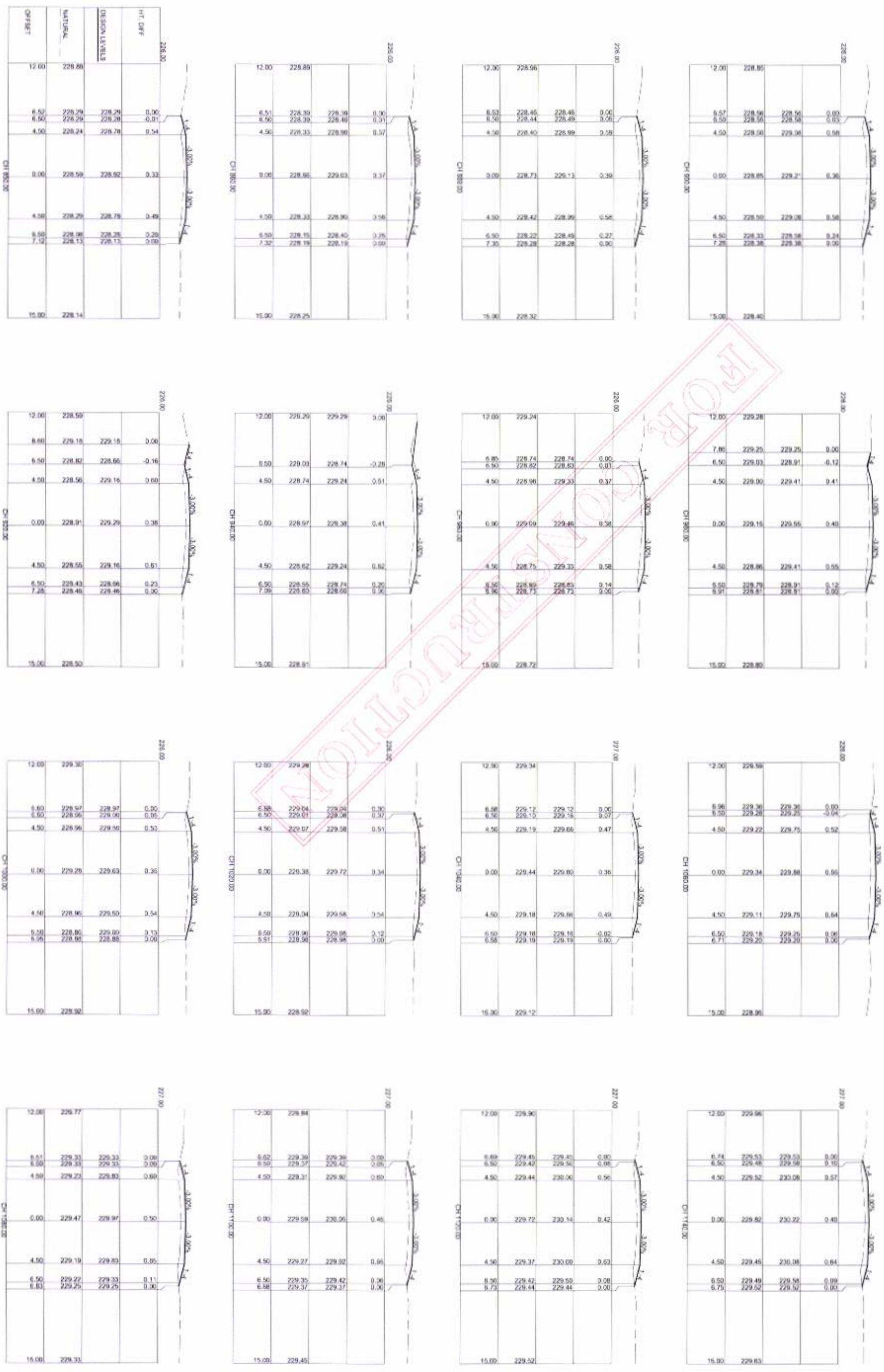
DO NOT SCALE

PLAN SCALE		HORIZONTAL SCALE 1:200 @ A1, 1:400 @ A3	
VERTICAL SCALE		1:200 @ A1, 1:400 @ A3	
DATE	DESIGNED	DATE	ISSUED FOR CONSTRUCTION
AHD	GEORF LATHAM	16-08-2013	16-08-2013
DATE	DESIGNED	DATE	ISSUED FOR APPROVAL
	GEORF LATHAM		
REV.	DATE	DESCRIPTION	
REV.	DATE	DESCRIPTION	
REV.	DATE	DESCRIPTION	



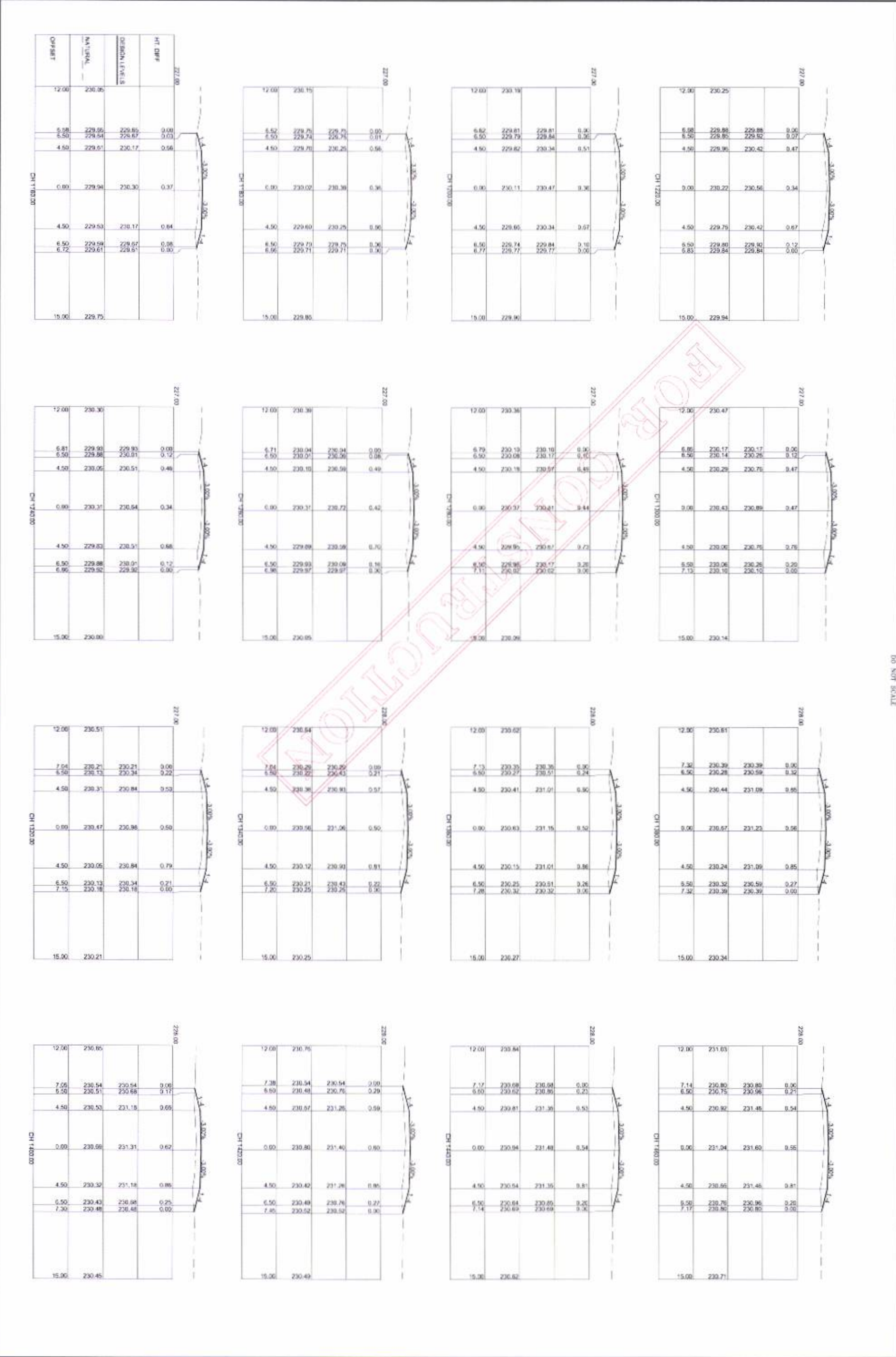
NARRABRI SHIRE COUNCIL
 45-48 MATTIAND STREET NARRABRI NSW 2390 PH: (02) 6799 8888 FAX: (02) 6799 8888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY
 ROAD CROSS SECTIONS - SHEET 3 OF 29

FILE NO.	1318284	SHEET NO.	50
PROJECT NO.	1318284	NO. OF SHEETS	90
DRAWING NO.	1318284-50	REV.	B



DO NOT SCALE

AHD SURVEYED GEOPATHWAY DESIGN GEOPATHWAY DRAWN GEOPATHWAY	PLAN SCALE HORIZONTAL SCALE 1:200 @ A1 1:400 @ A3 VERTICAL SCALE 1:200 @ A1 1:400 @ A3
	PROJECT NO. 1318284 SHEET NO. 51
ISSUED FOR CONSTRUCTION ISSUED FOR APPROVAL	DATE DATE
DESCRIPTION	DWT
ANTWOON SAEITANIN 8334 STREET MAKER AT (085) 786 1111	30-09-2013 DWT
NARRABRI SHIRE COUNCIL 46-48 WATLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888	ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY ROAD CROSS SECTIONS - SHEET 4 OF 29
1318284-51	REV. B



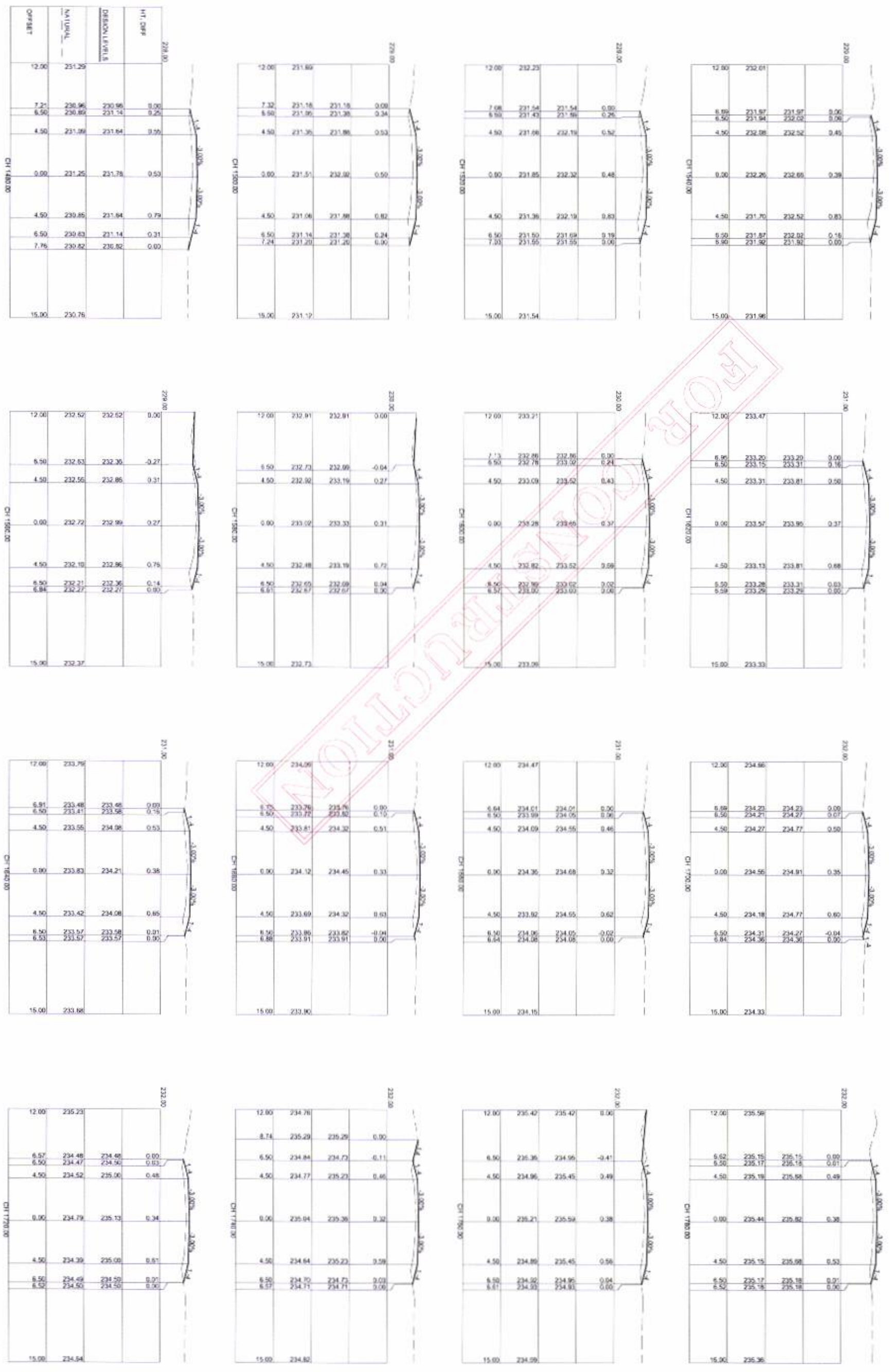
DO NOT SCALE

PLAN SCALE: 1:200 HORIZONTAL SCALE: 1:200 @ A1, 1:400 @ A3 VERTICAL SCALE: 1:200 @ A1, 1:400 @ A3	
DATE: 16-09-2013 DESIGNED: DEBORAH LATHAM DRAWN: DEBORAH LATHAM	ISSUED FOR CONSTRUCTION 16-09-2013 ISSUED FOR APPROVAL
REV. DATE A 16-09-2013 B	DESCRIPTION ROAD CROSS SECTIONS - SHEET 5 OF 29
DES. DATE A 16-09-2013 B	DATE



NARRABRI SHIRE COUNCIL
 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6668
ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY
 ROAD CROSS SECTIONS - SHEET 5 OF 29

FILE NO. 1318284 PROJECT NO. 1318284	NO. OF SHEETS 90	SHEET NO. 52
DRAWING NO. 1318284-52		REV. B



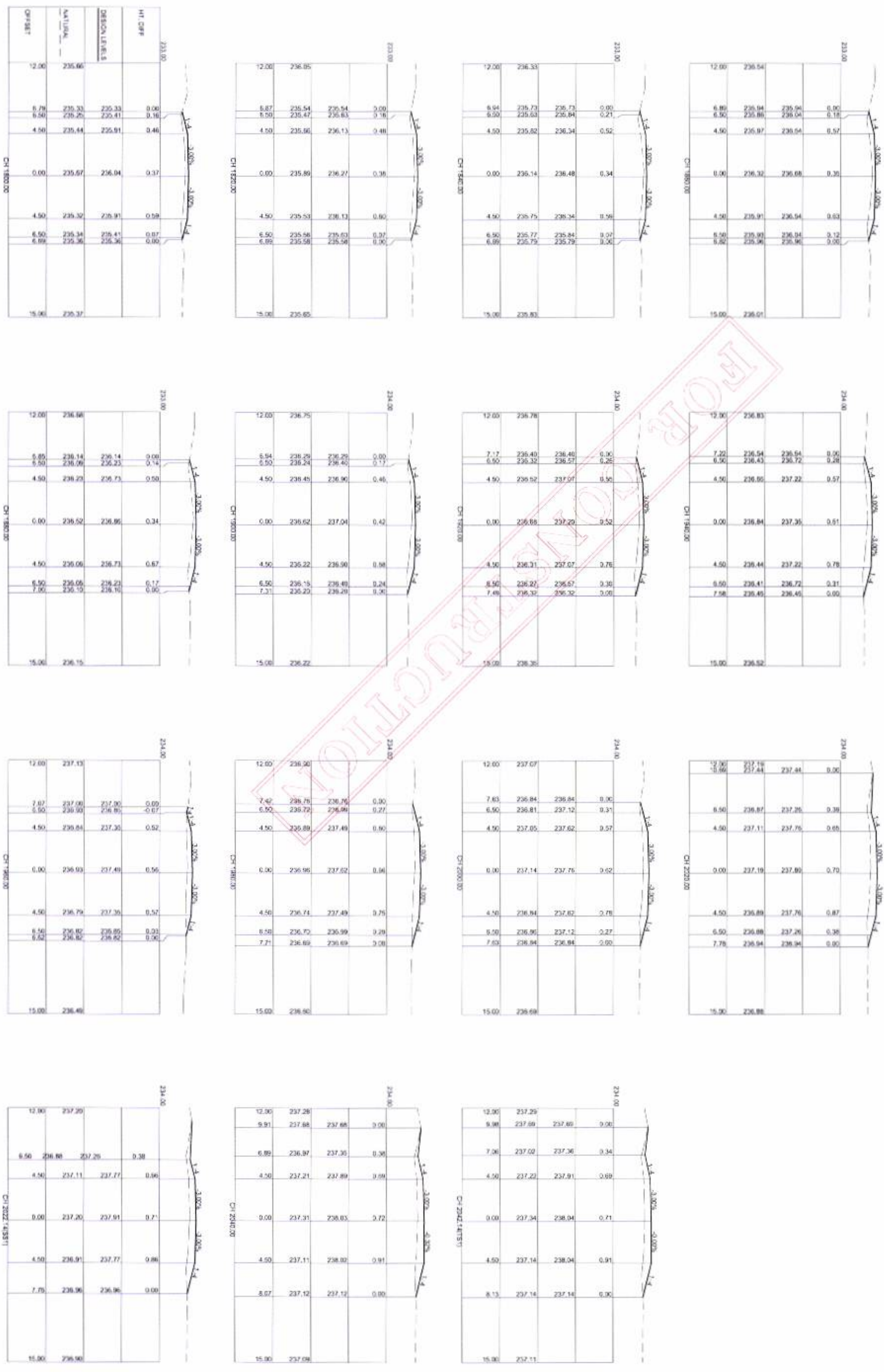
DO NOT SCALE

DATE	ISSUED FOR CONSTRUCTION	30-09-2013
	ISSUED FOR APPROVAL	16-09-2013
DRAWN	GEOP/LATHAM	REV. DATE
	GEOP/LATHAM	
CHECKED	ANTHONY SWEETMAN	DATE
	ANTHONY SWEETMAN	
SCALE	HORIZONTAL SCALE	1:200 @ A1 1:400 @ A3
	VERTICAL SCALE	1:200 @ A1 1:400 @ A3
PROJECT	PROJECT NAME	1318284
	PROJECT NO.	1318284
SHEET	SHEET NO.	53
	SHEET TOTAL	90



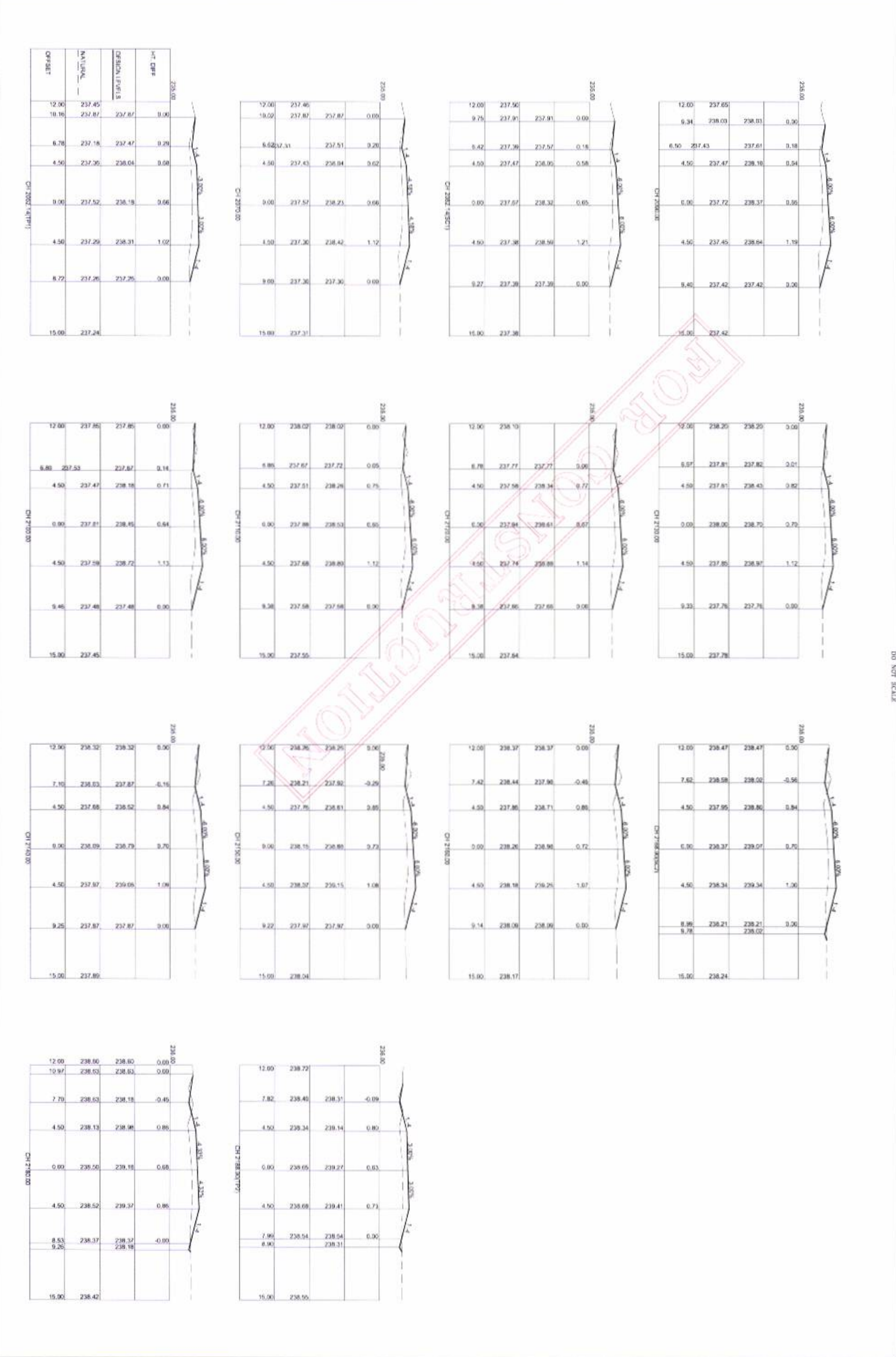
NARRABRI SHIRE COUNCIL
 46-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6790 6666 FAX: (02) 6790 6688
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY
 ROAD CROSS SECTIONS - SHEET 6 OF 29

FILE NO.	1318284	SHEET NO.	53
PROJECT NO.	1318284	NO. OF SHEETS	90
DRAWING NO.	1318284-53	REV.	B



DO NOT SCALE

PLAN SCALE: HORIZONTAL SCALE: 1:200 @ A1, 1:400 @ A2 VERTICAL SCALE: 1:200 @ A1, 1:400 @ A2		DATE: 03-09-2013 DESIGNED: GEORF LATHAM DRAWN: GEORF LATHAM	
SHEET NO. 90 OF 90 SHEETS PROJECT NO. 1318284		SHEET NO. 54	
ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WARORA QUARRY TO NEAR JOHNSTONE QUARRY ROAD CROSS SECTIONS - SHEET 7 OF 29		FILE NO. 1318284 PROJECT NO. 1318284 DRAWING NO. 1318284-54	



NARRABRI SHIRE COUNCIL
 48-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6790 6666 FAX: (02) 6790 6666

ANTHONY SWEETMAN
 CIVIL ENGINEER
 30-04-2013
 1318284

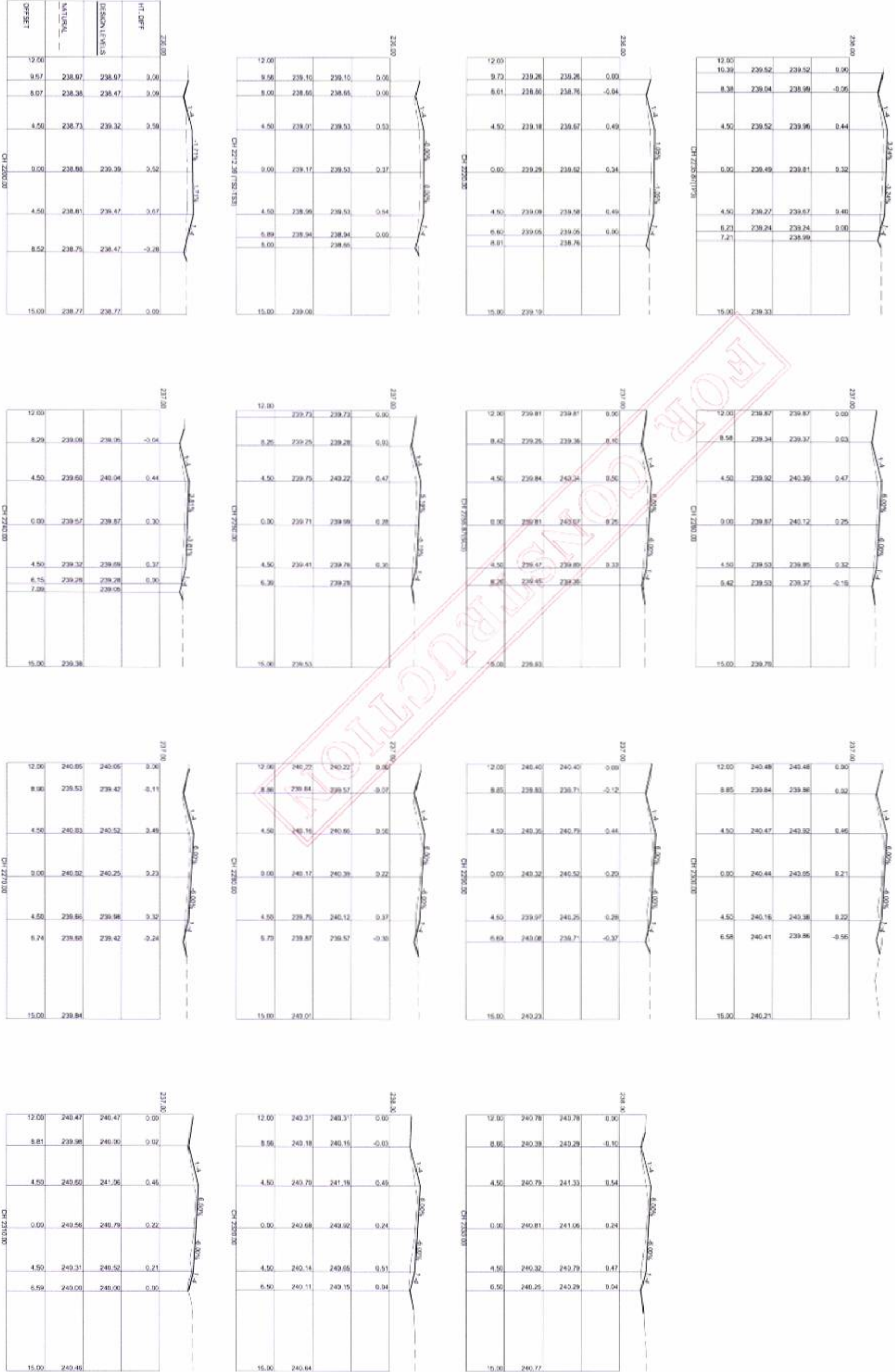
DO NOT SCALE

PLAN SCALE: 1:200 @ A1, 1:400 @ A3 HORIZONTAL SCALE: 1:200 @ A1, 1:400 @ A3 VERTICAL SCALE: 1:200 @ A1, 1:400 @ A3	
DATE: 16-09-2013 DRAWN: GEOFF LATHAM CHECKED: GEOFF LATHAM APPROVED: GEOFF LATHAM	REV. DATE DESCRIPTION A 16-09-2013 ISSUED FOR CONSTRUCTION B 16-09-2013 ISSUED FOR APPROVAL
ANTHONY SWETMAN CIVIL ENGINEER 16-09-2013 CIVIL	ANTHONY SWETMAN CIVIL ENGINEER 16-09-2013 CIVIL



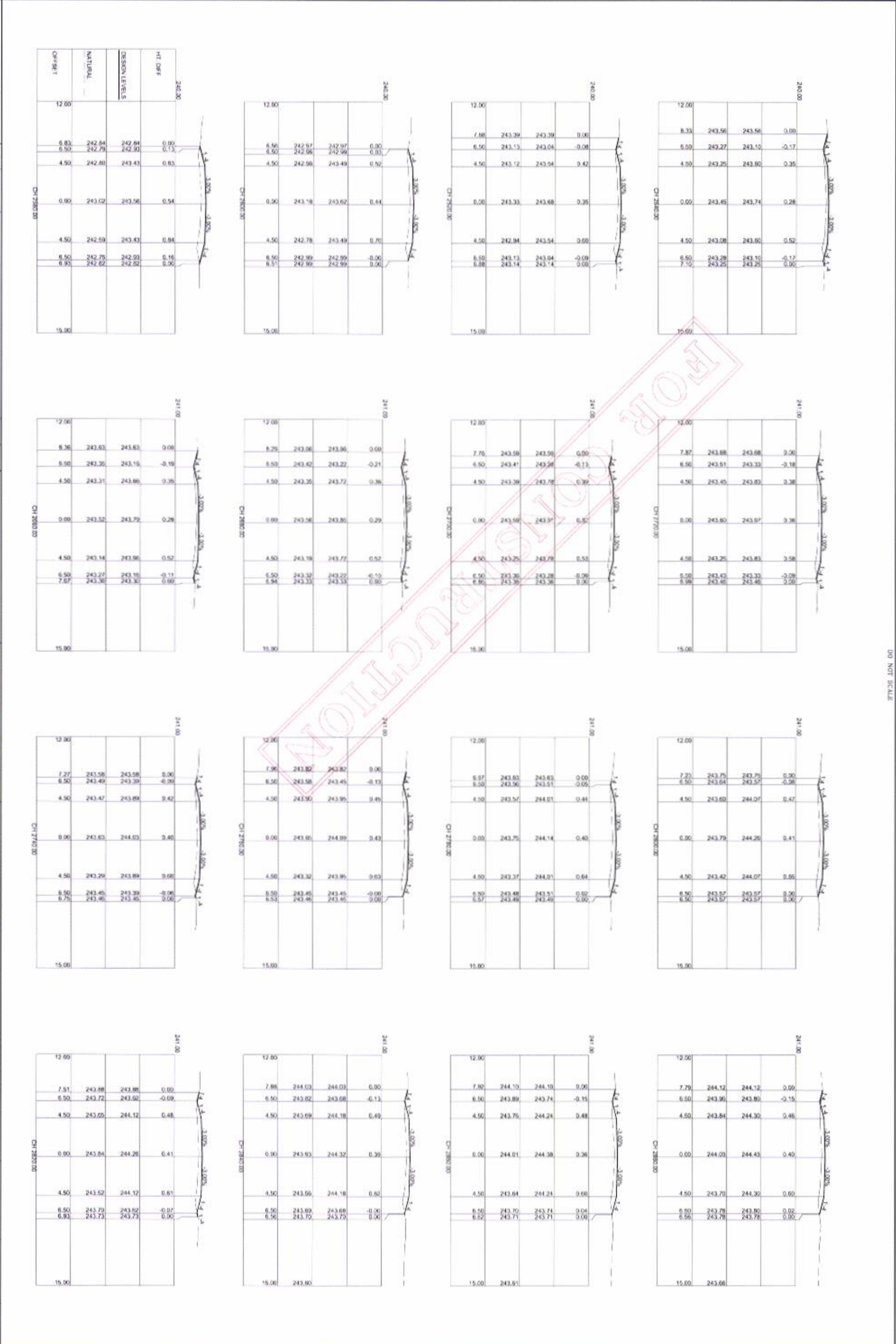
NARRABRI SHIRE COUNCIL
 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 8866 FAX: (02) 6799 8888
ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY
 ROAD CROSS SECTIONS - SHEET 8 OF 29

FILE NO. 1318284 PROJECT NO. 1318284 DRAWING NO. 1318284-55	NO. OF SHEETS 90 SHEET NO. 55
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DO NOT SCALE

DATE	DESIGNED	DATE	ISSUED FOR CONSTRUCTION	DATE
	DESIGNED	DATE	ISSUED FOR APPROVAL	DATE
AHD	DESIGNED	DATE	ISSUED FOR CONSTRUCTION	DATE
	DESIGNED	DATE	ISSUED FOR APPROVAL	DATE
<p>NARRABRI SHIRE COUNCIL 46-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6790 0000 FAX: (02) 6790 0000 ROAD CONSTRUCTION & SEALING WORKS WAVE HILL ROAD (SR18) NEAR WAIROA QUARRY TO NEAR JOHNSTONE QUARRY ROAD CROSS SECTIONS - SHEET 10 OF 29</p>				
FILE NO.	1318284	NO. OF SHEETS	90	
PROJECT NO.	1318284	REV.	57	
DRAMA NO.	1318284-57	REV.	B	



PLAN SCALE HORIZONTAL SCALE: 1:200 @ A1, 1:400 @ A2 VERTICAL SCALE: 1:200 @ A1, 1:400 @ A2	DESIGNED	19-09-2013	ISSUED FOR CONSTRUCTION
	DRAWN	19-09-2013	ISSUED FOR APPROVAL
AHD DESIGNED DRAIN	DESIGNED	19-09-2013	ISSUED FOR APPROVAL
	DRAIN	19-09-2013	ISSUED FOR APPROVAL
REV.	DATE	DESCRIPTION	
001	19-09-2013	ISSUED FOR APPROVAL	
002	19-09-2013	ISSUED FOR CONSTRUCTION	

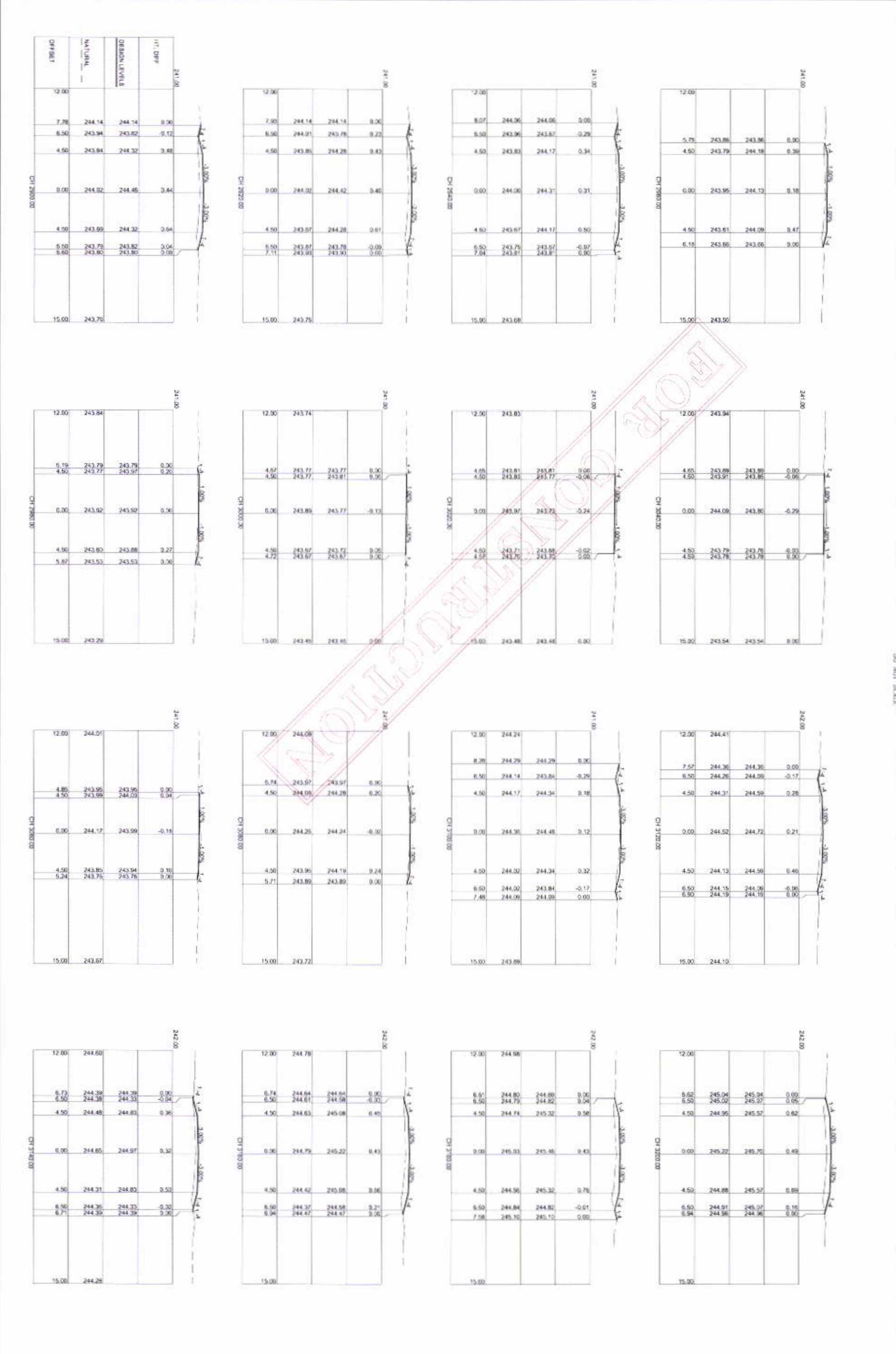
ANTHONY SWEETMAN SEALING ENGINEER	30-09-2013 MIL
ANTHONY SWEETMAN SEALING ENGINEER	30-09-2013 MIL



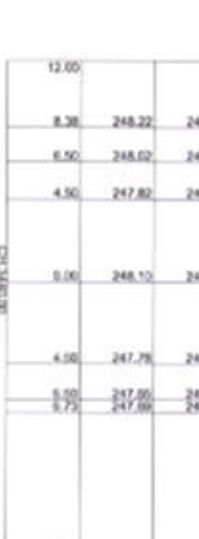
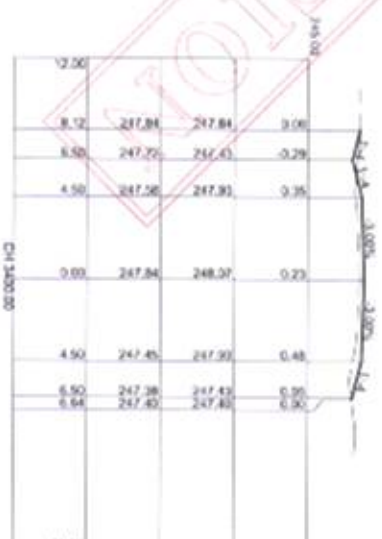
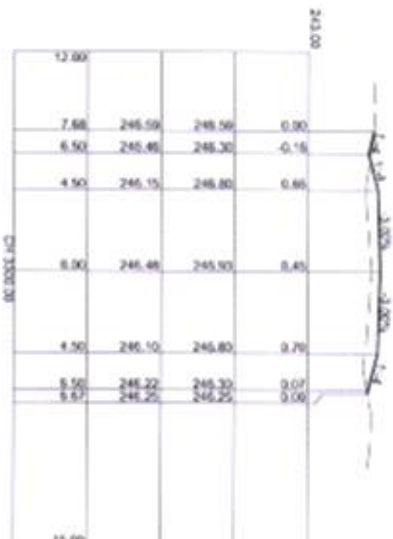
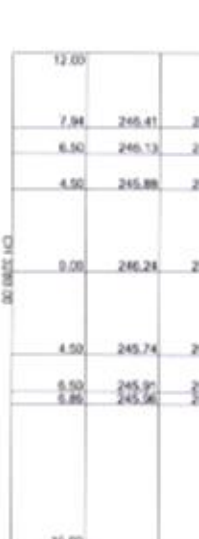
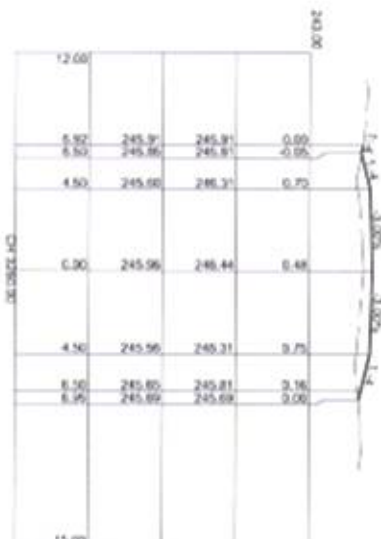
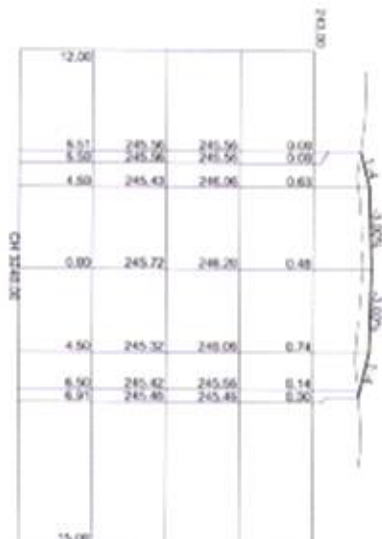
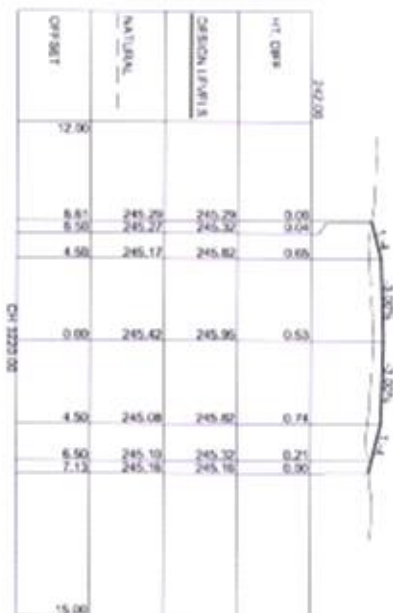
NARRABRI SHIRE COUNCIL
46-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6790 6866 FAX: (02) 6790 6868

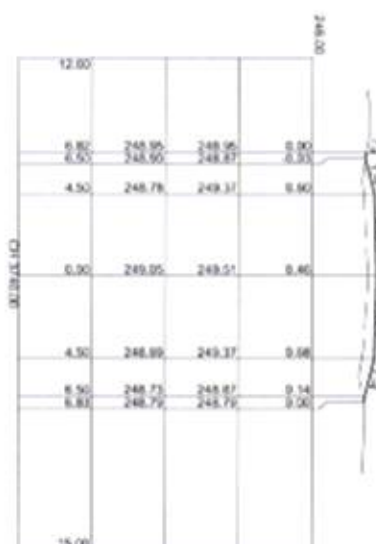
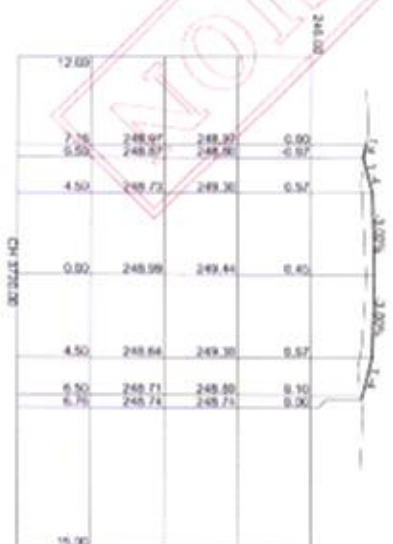
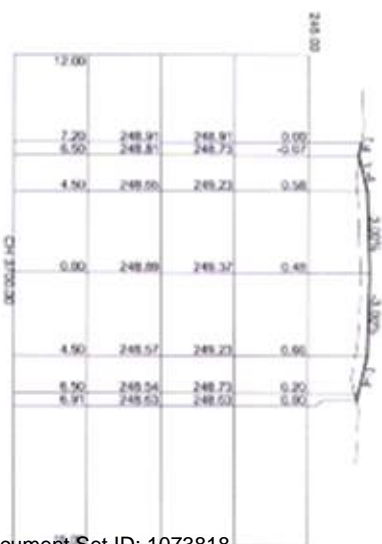
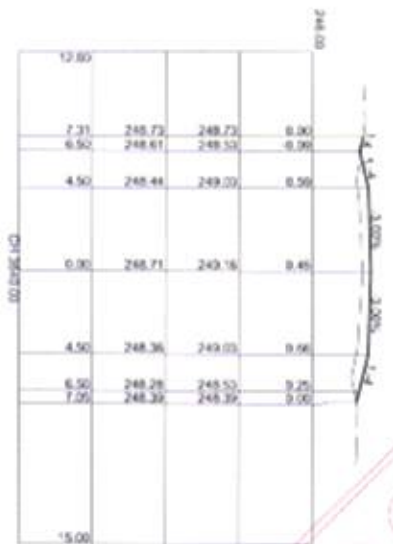
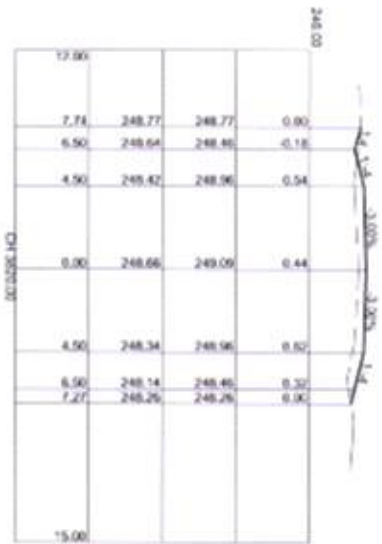
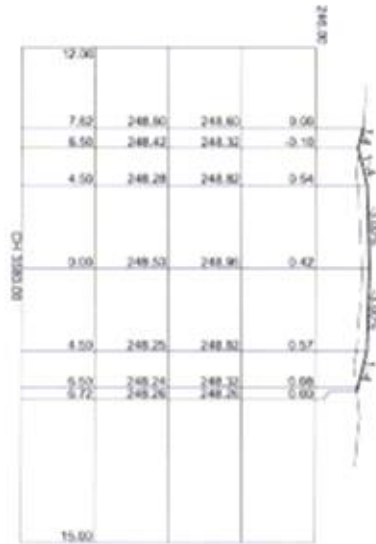
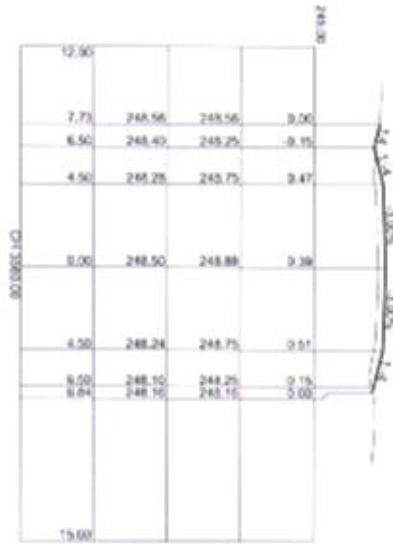
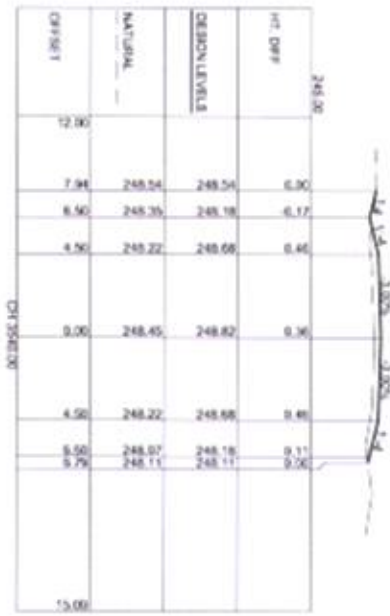
ROAD CONSTRUCTION & SEALING WORKS
WAVE HILL ROAD (SRT18) NEAR WAROA QUARRY TO NEAR JOHNSTONE QUARRY
ROAD CROSS SECTIONS - SHEET 11 OF 29

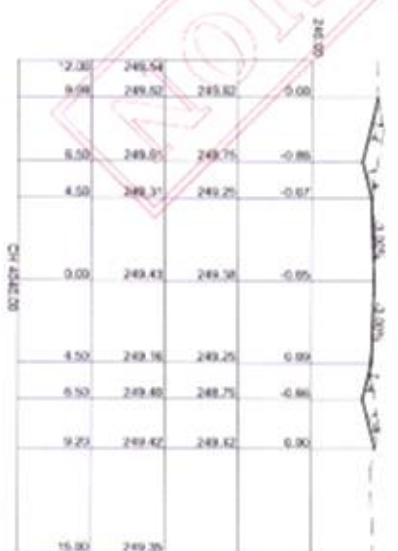
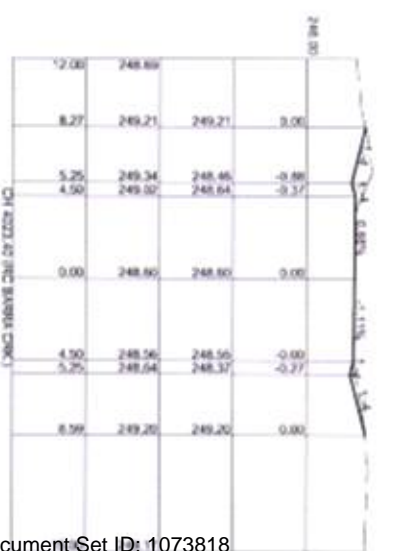
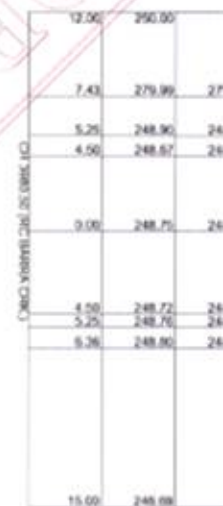
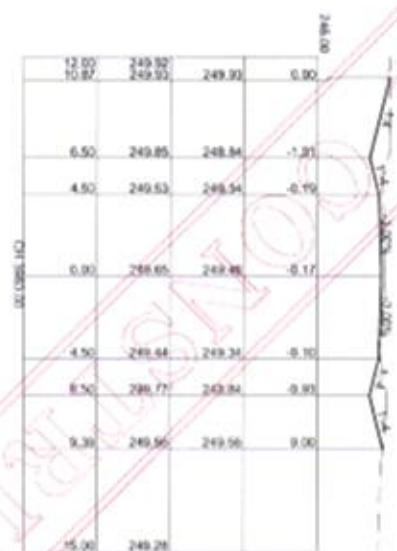
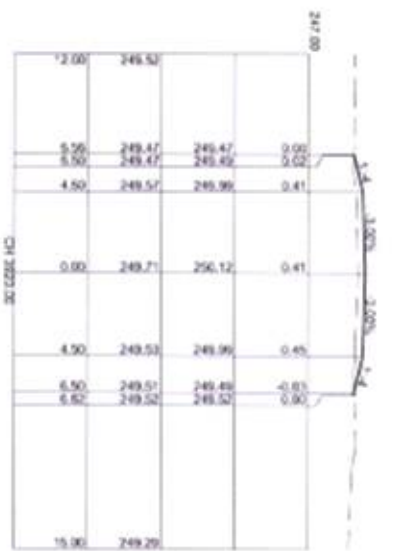
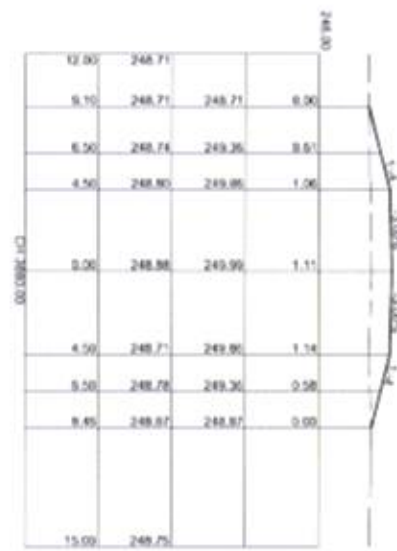
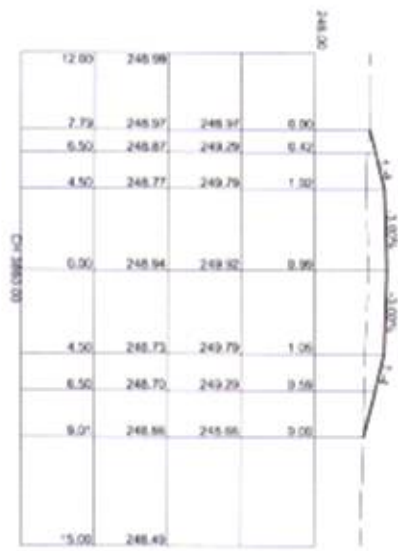
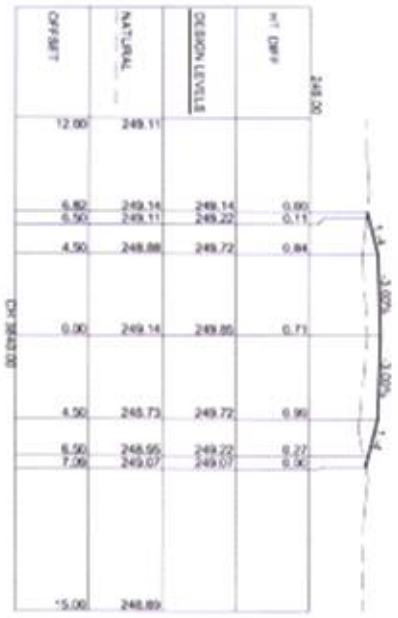
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DRAWING NO.	1318284-58				
REV.	B				

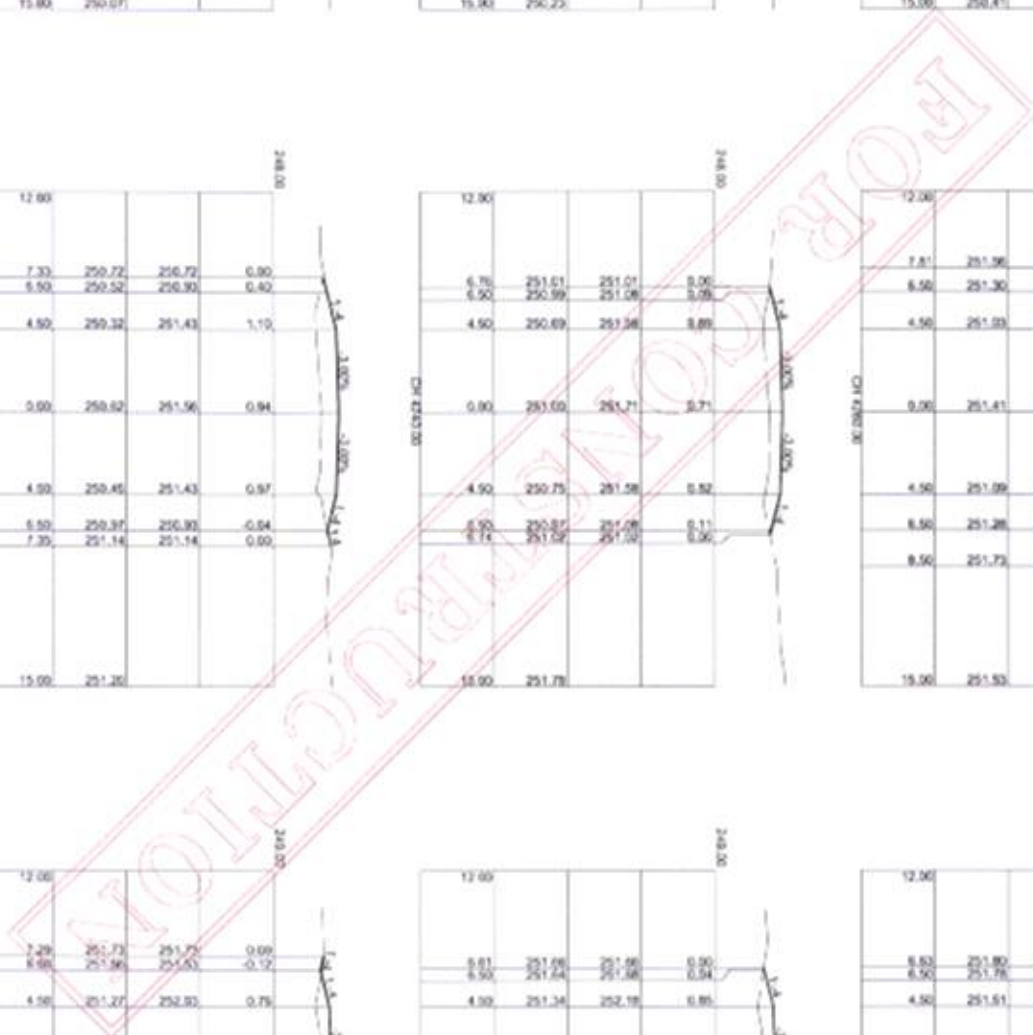
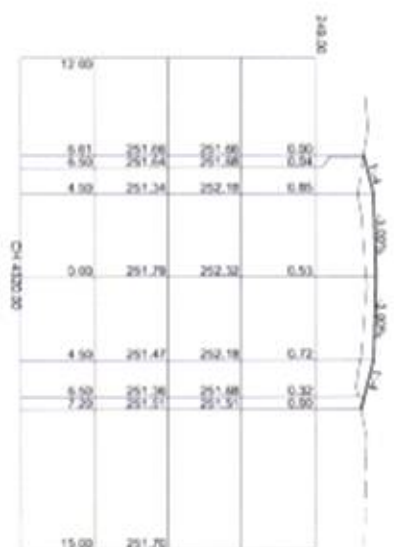
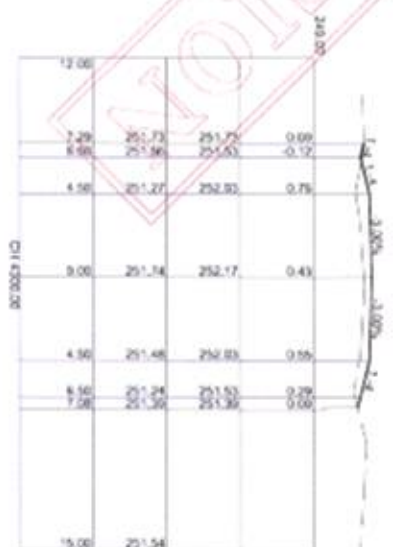
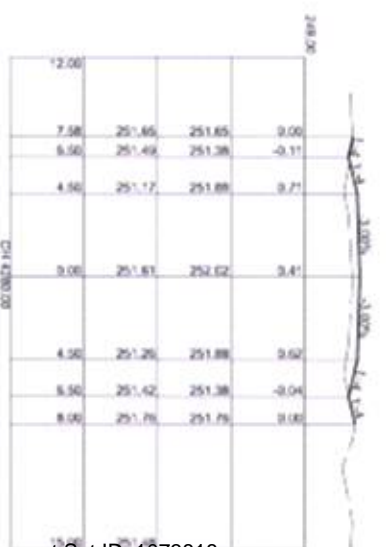
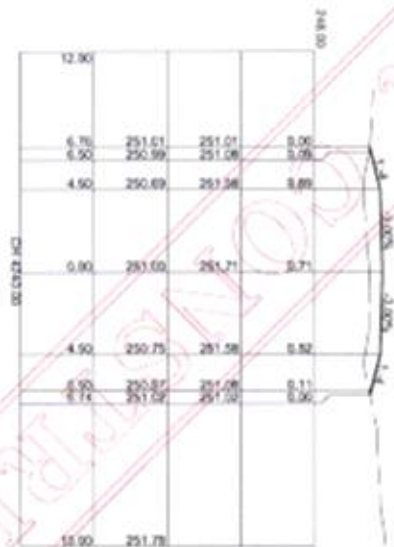
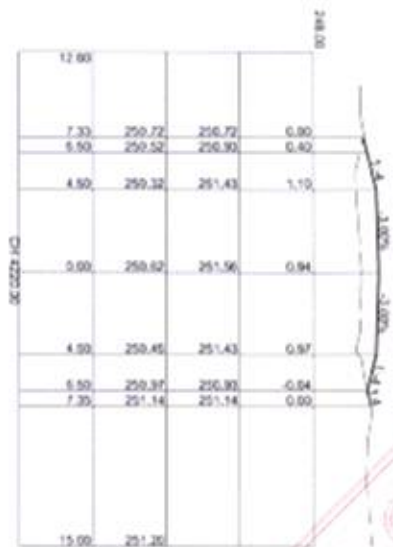
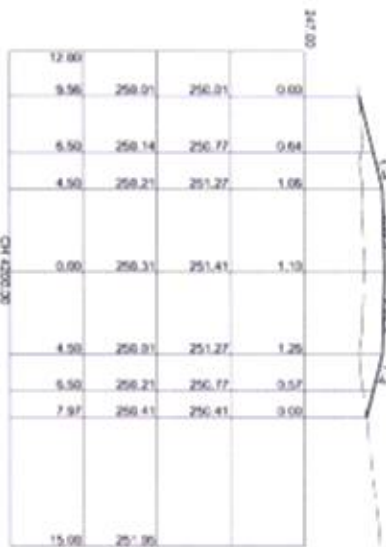


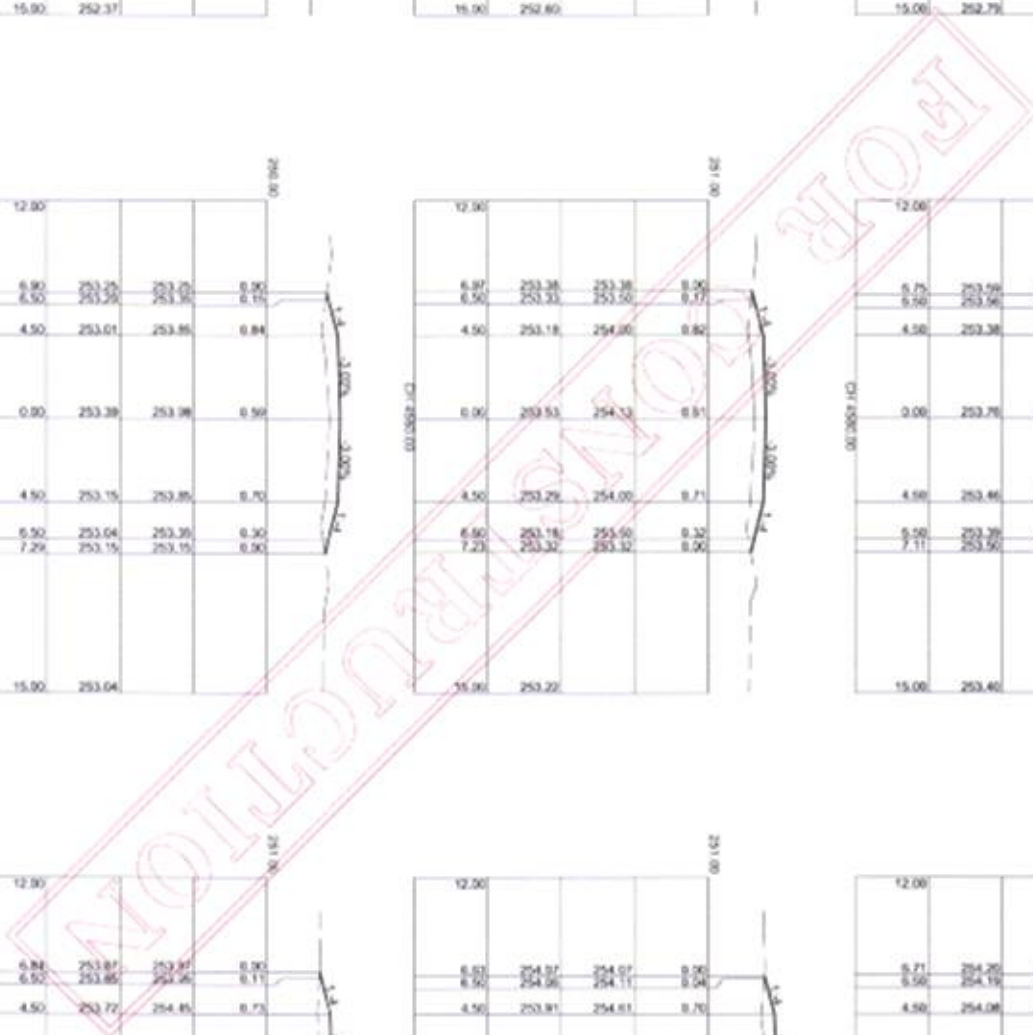
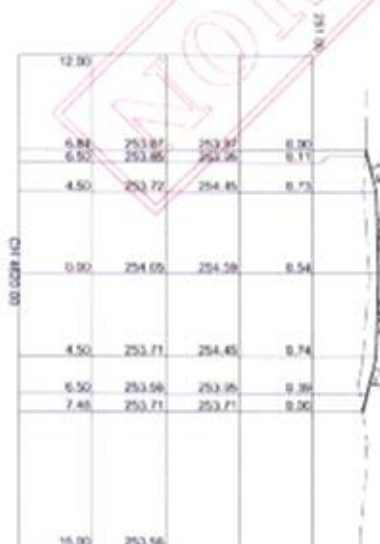
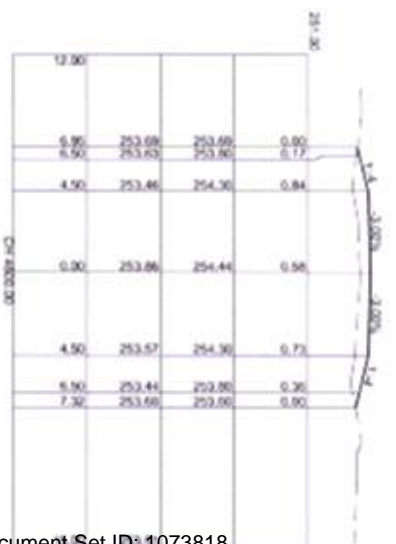
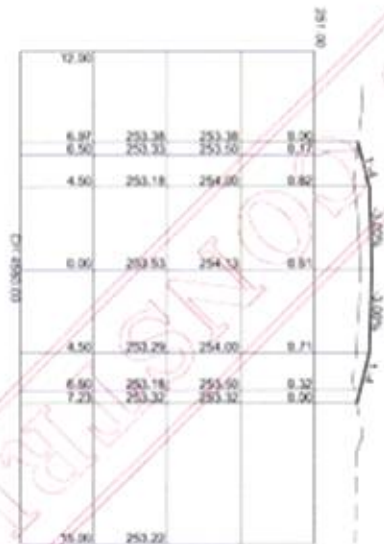
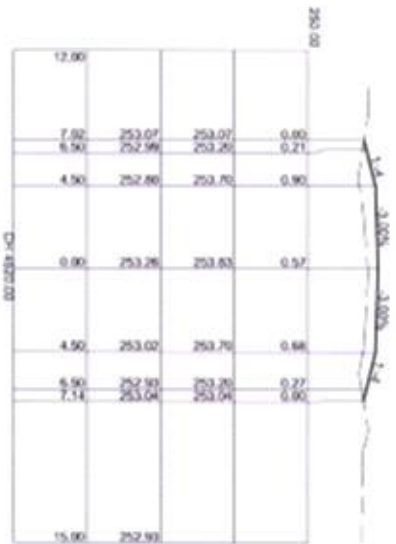
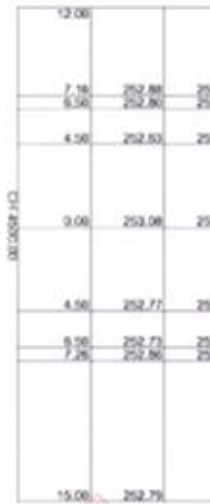
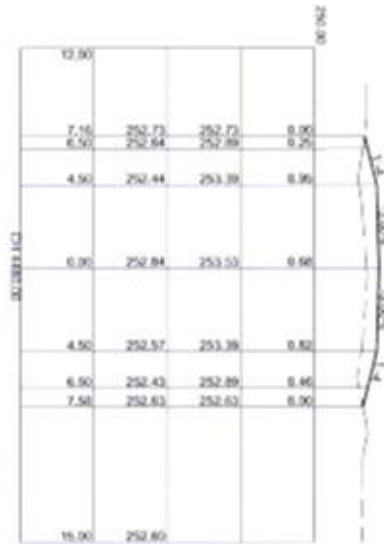
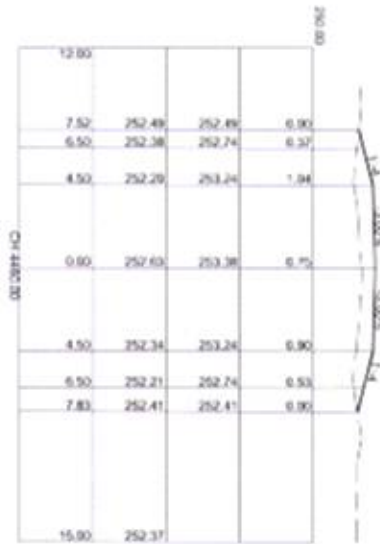
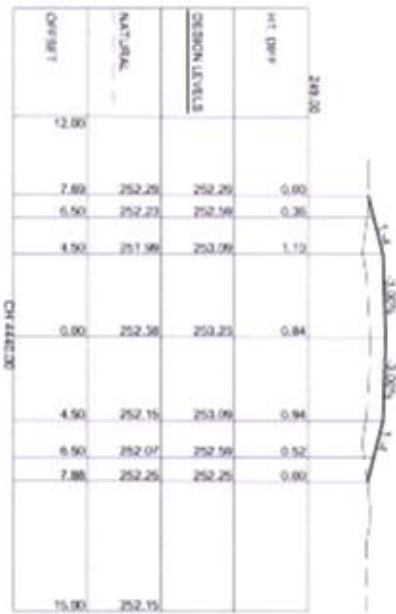
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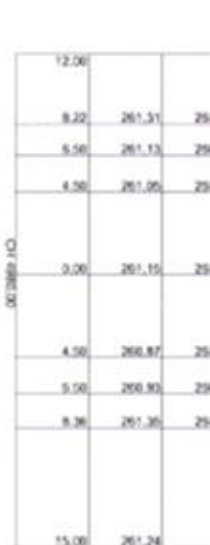
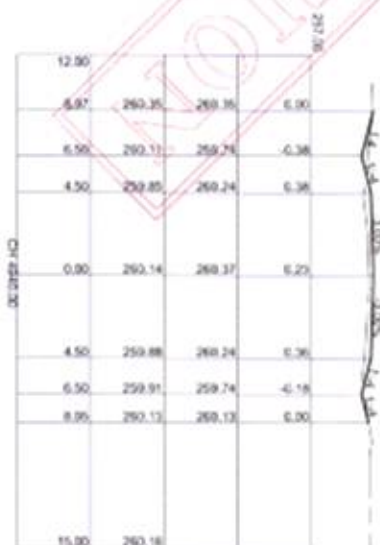
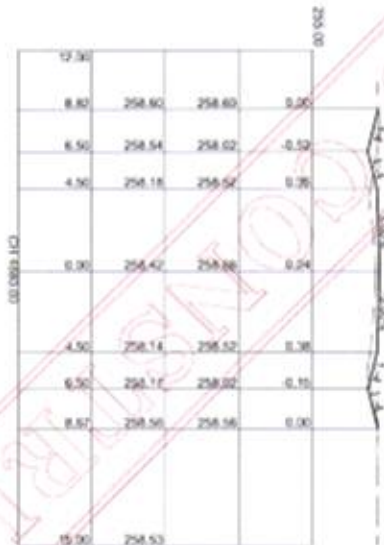
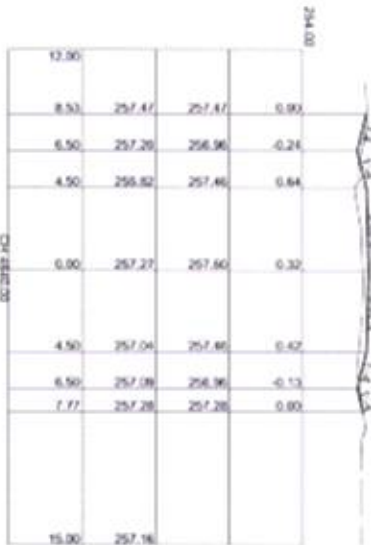
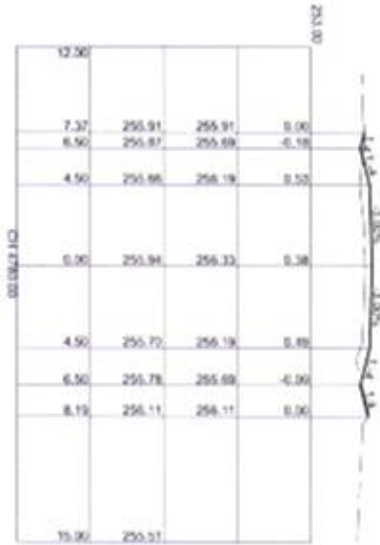
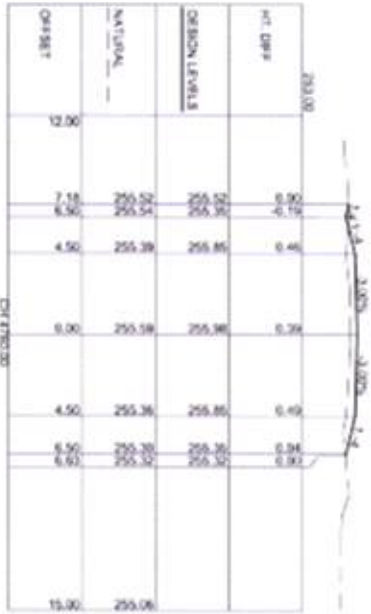


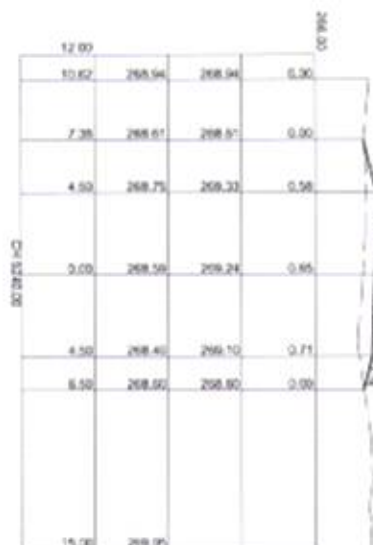
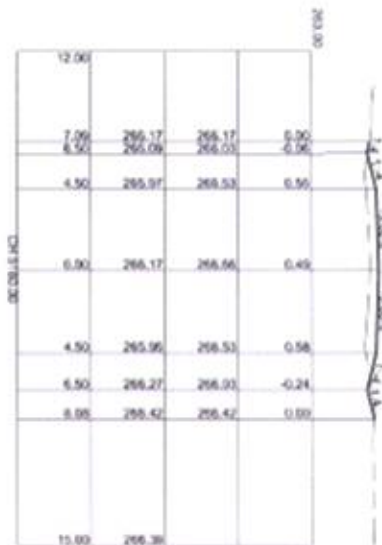
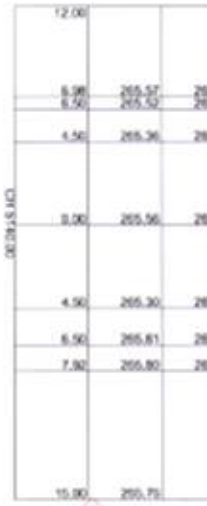
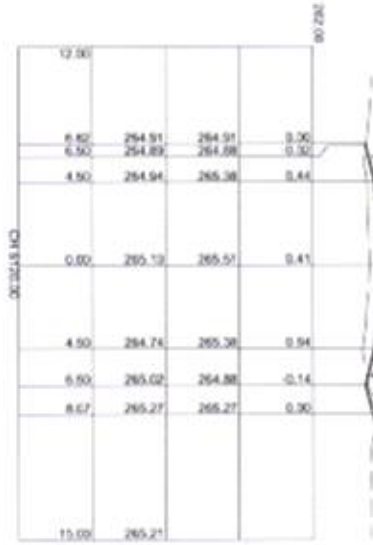
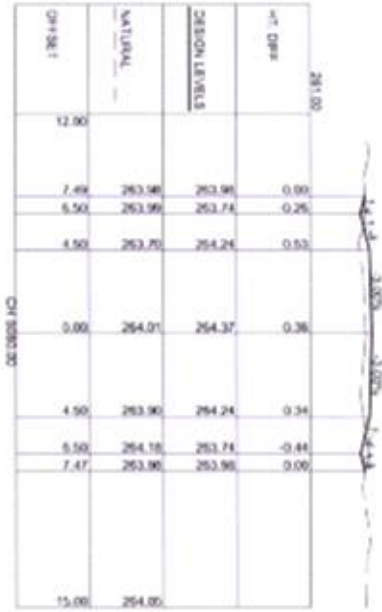


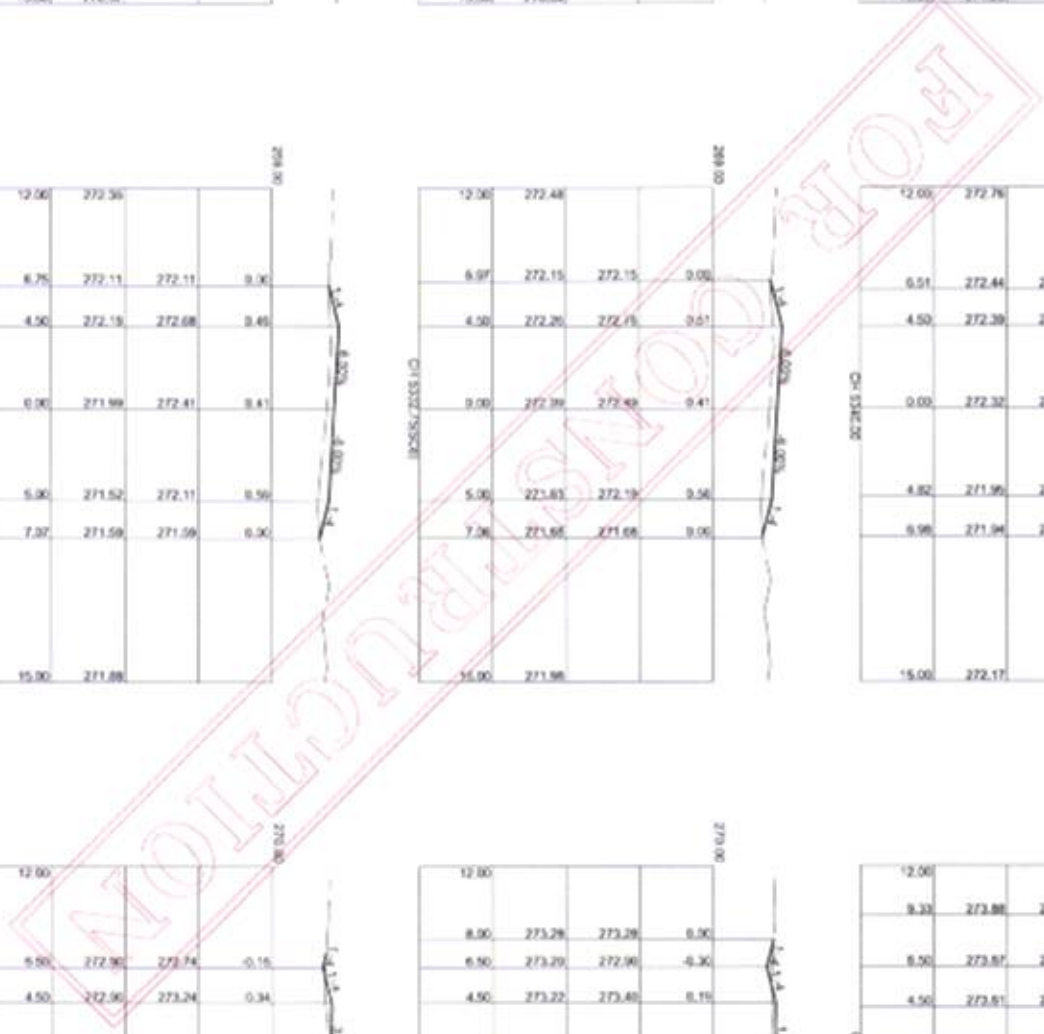
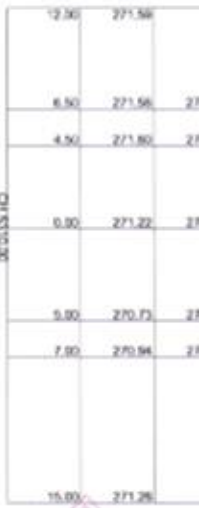
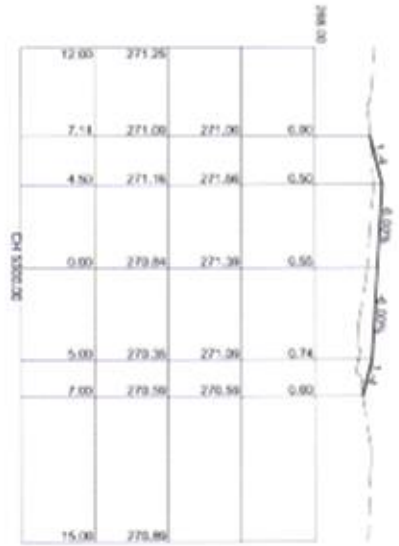
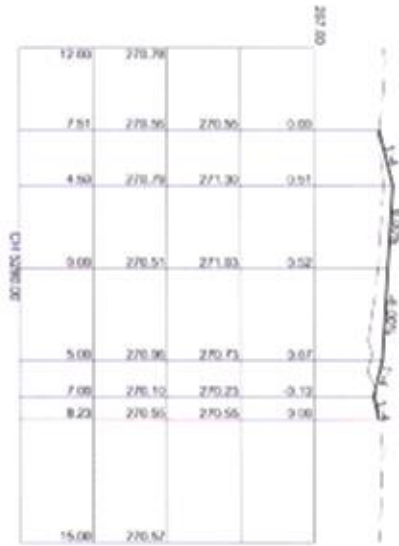
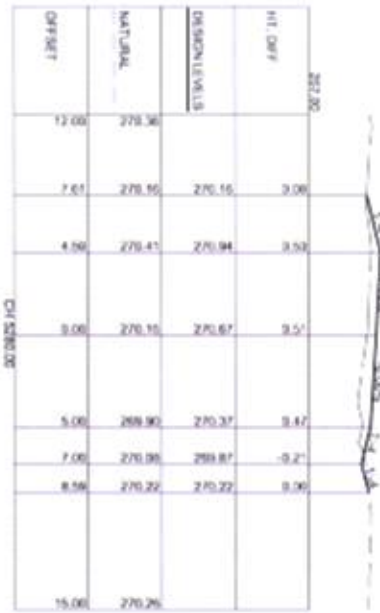


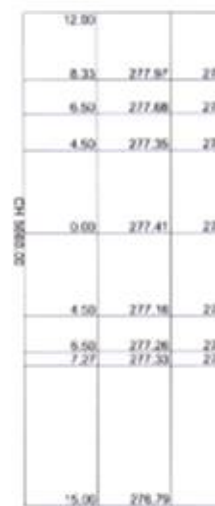
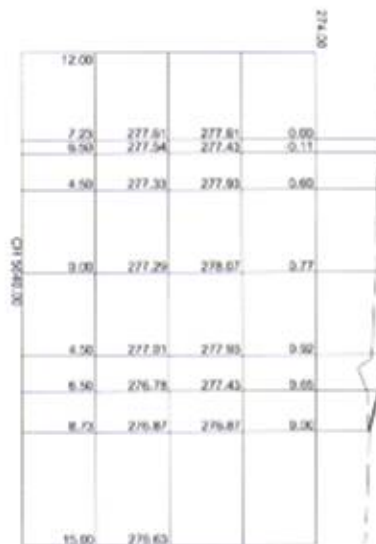
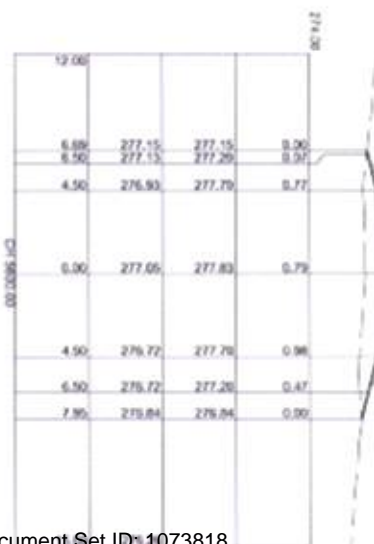
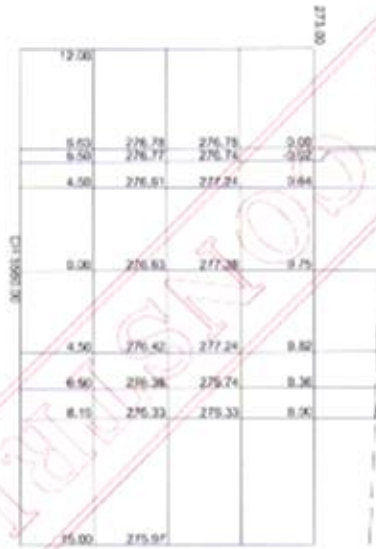
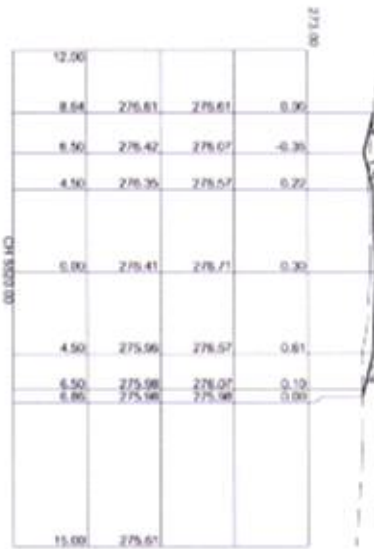
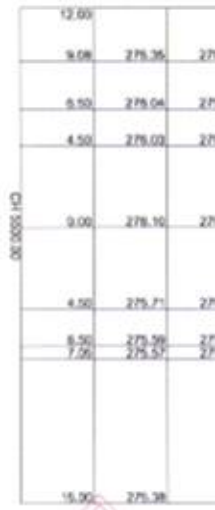
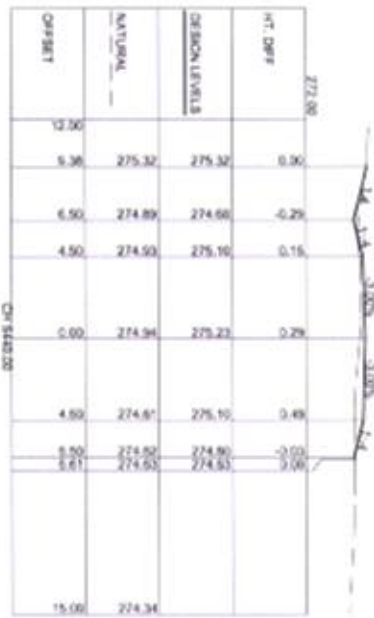


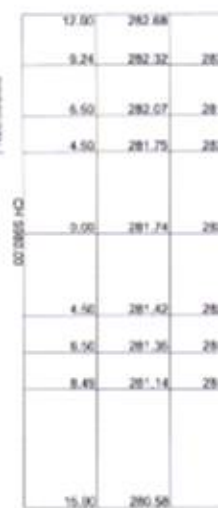
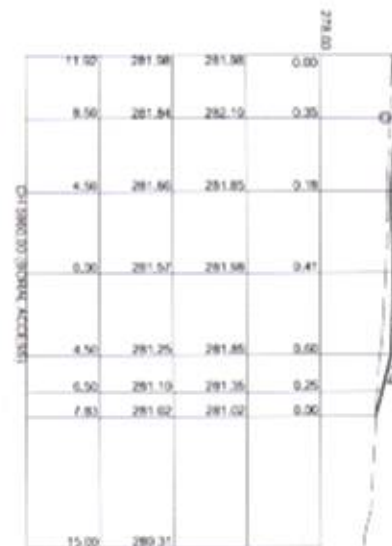
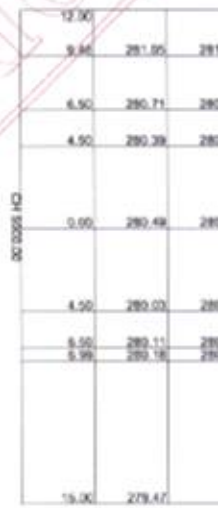
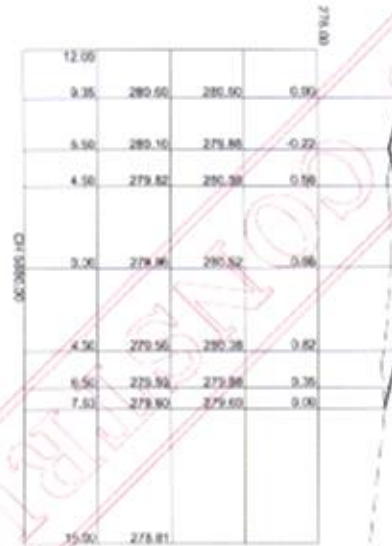
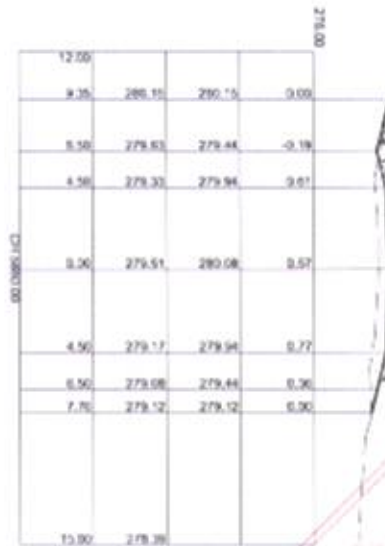
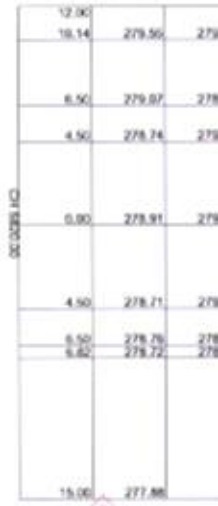
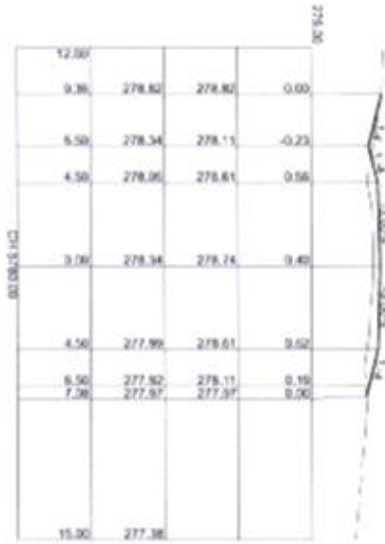
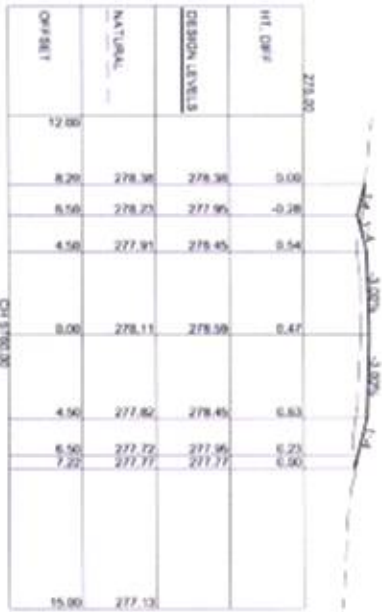


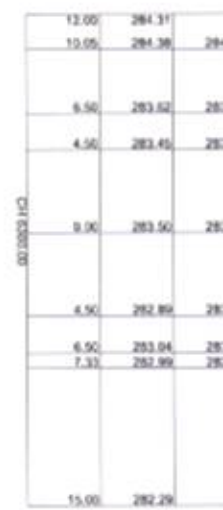
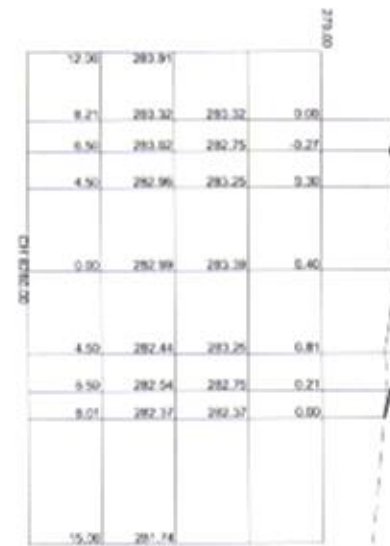
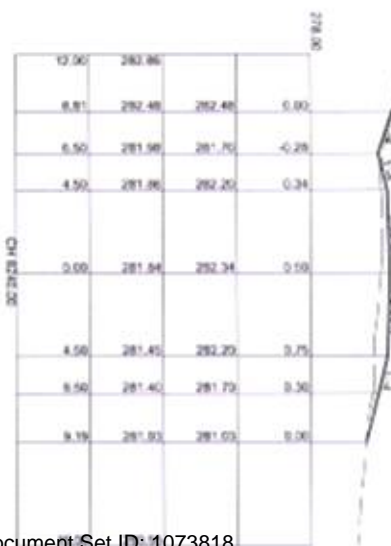
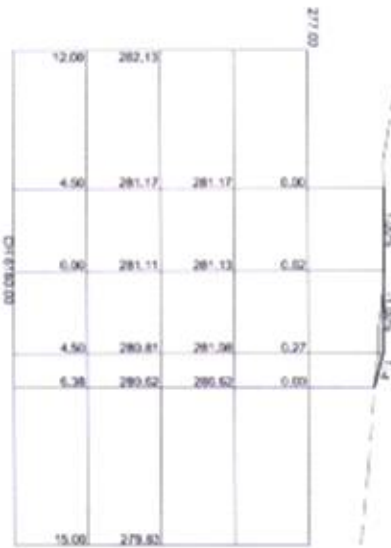


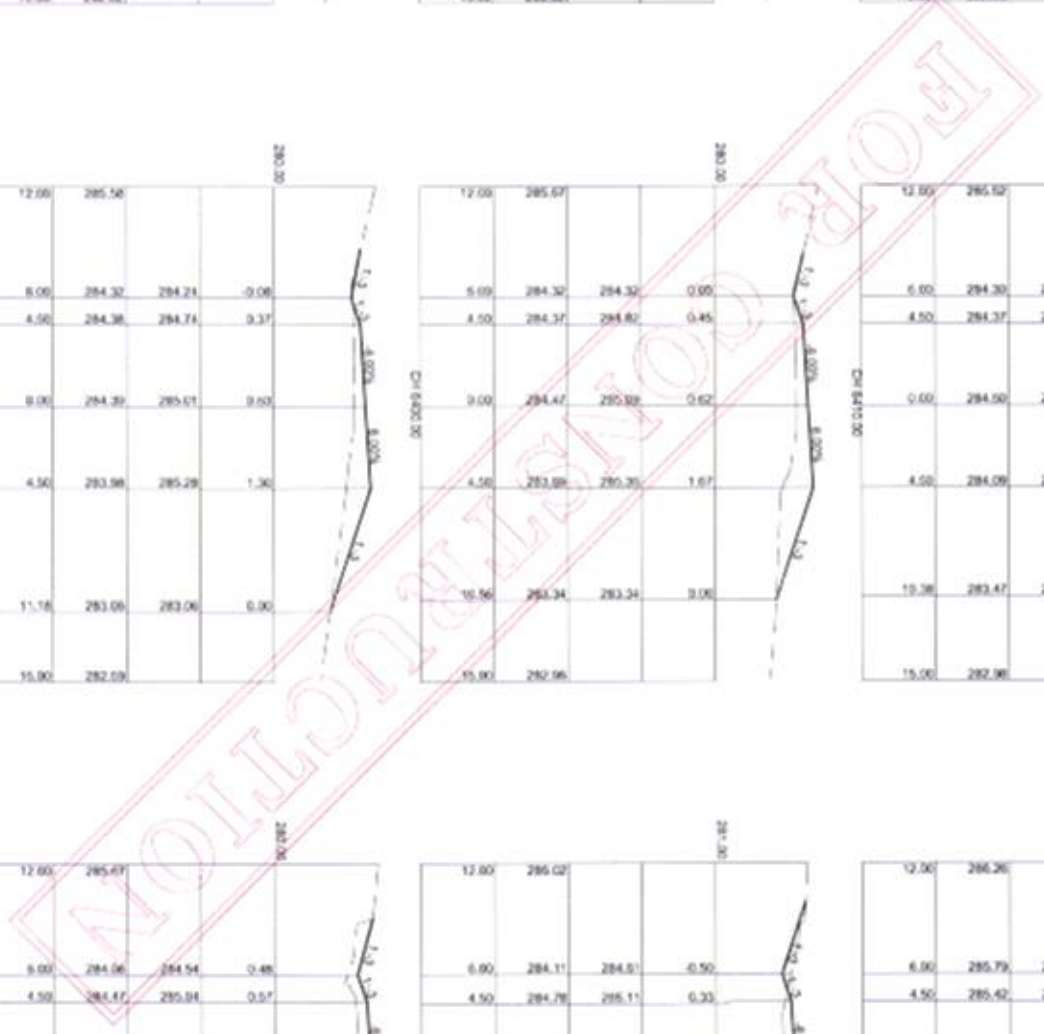
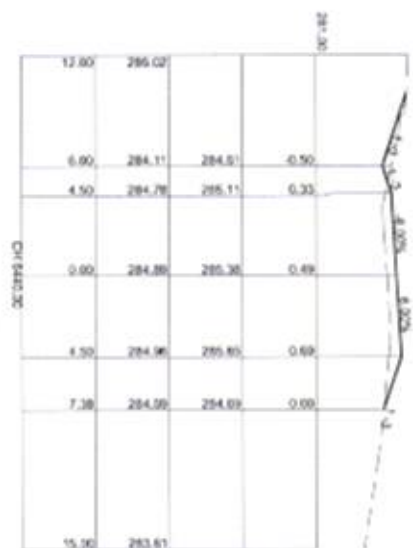
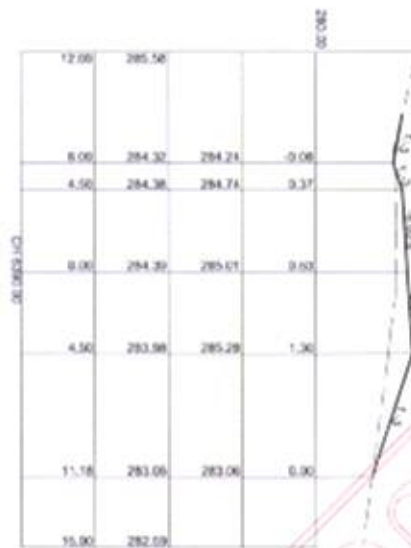
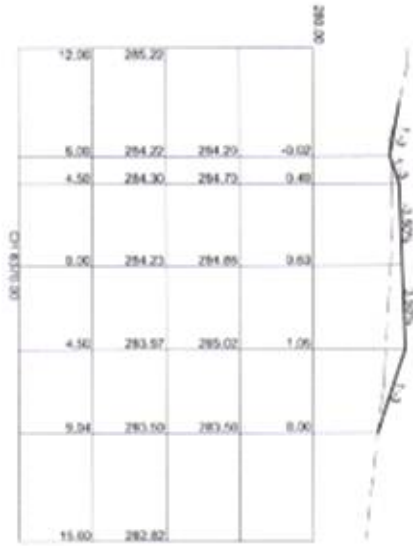
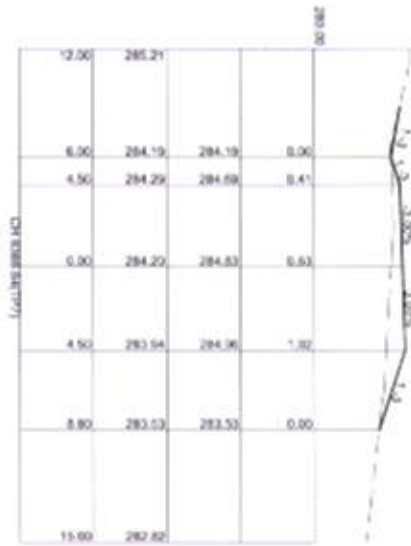


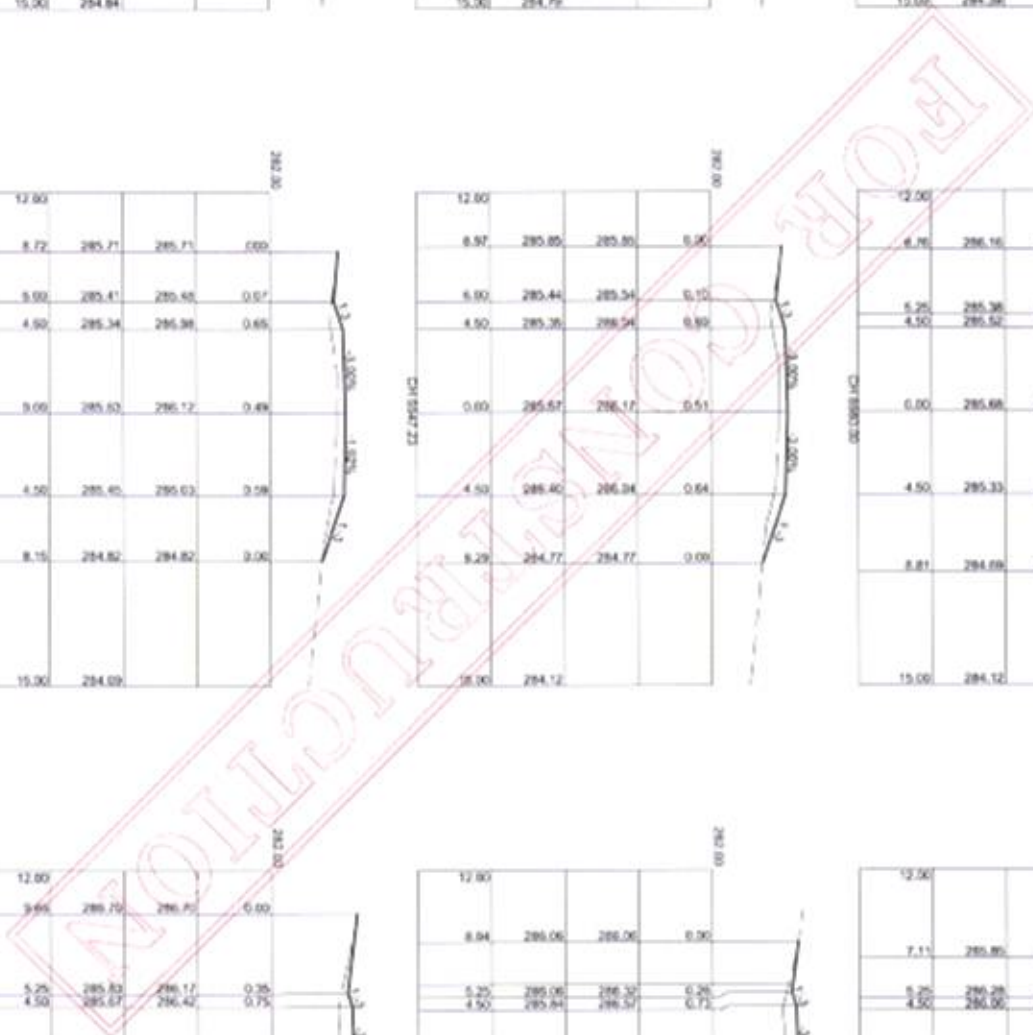
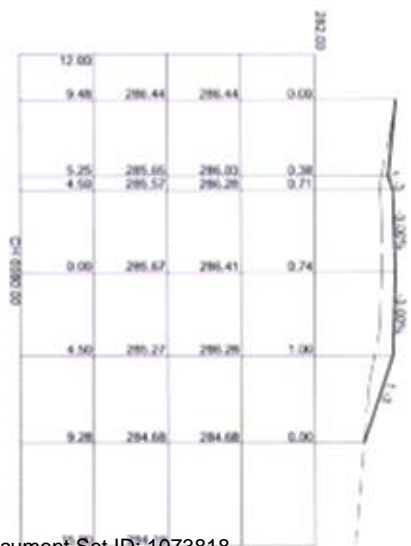
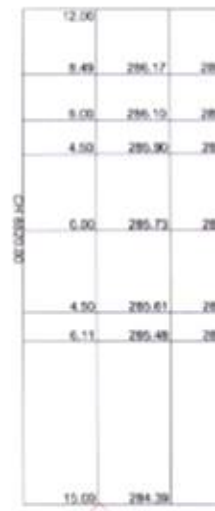


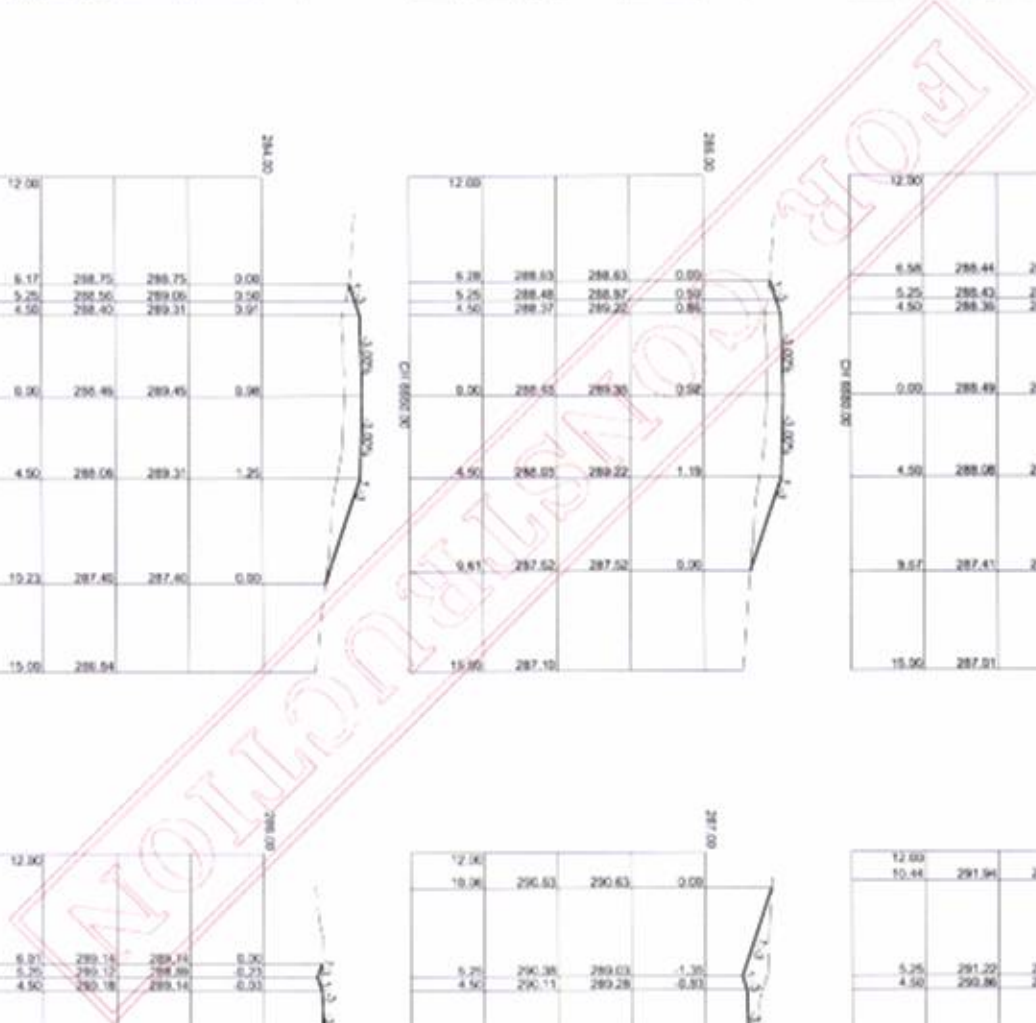
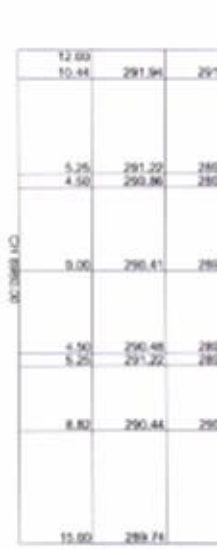
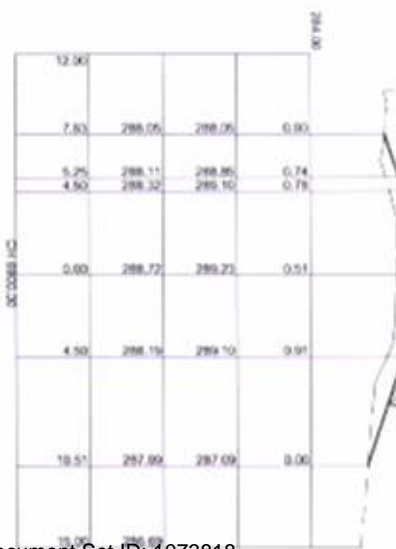
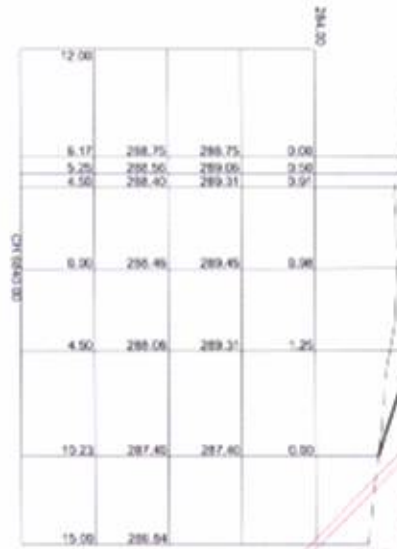
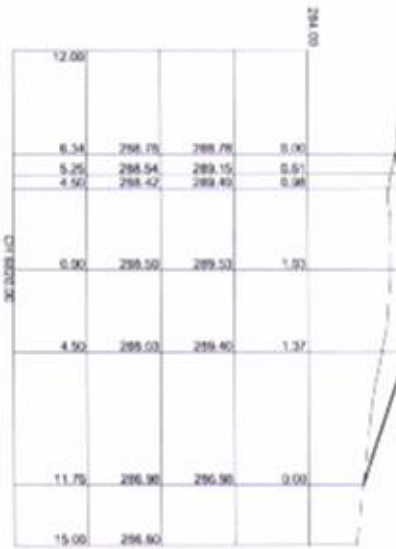
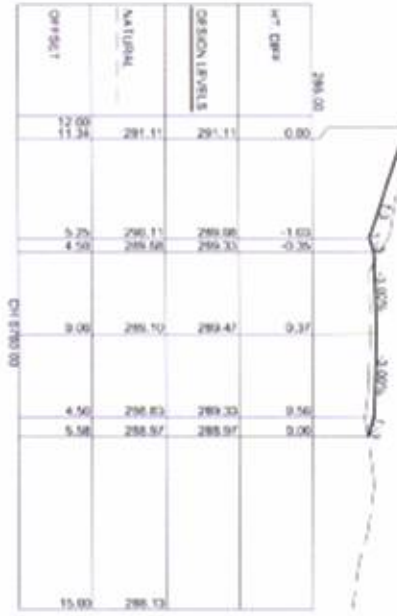


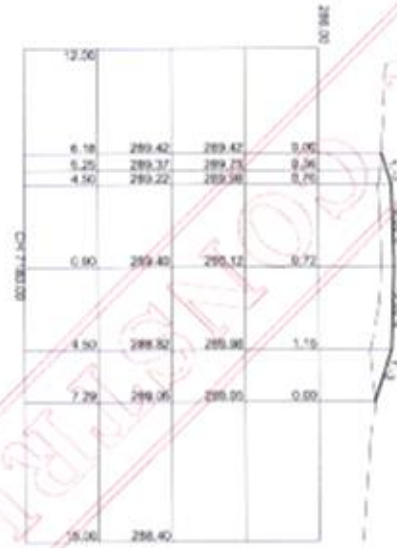
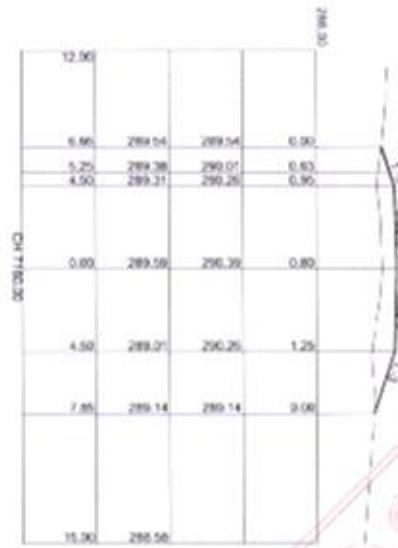
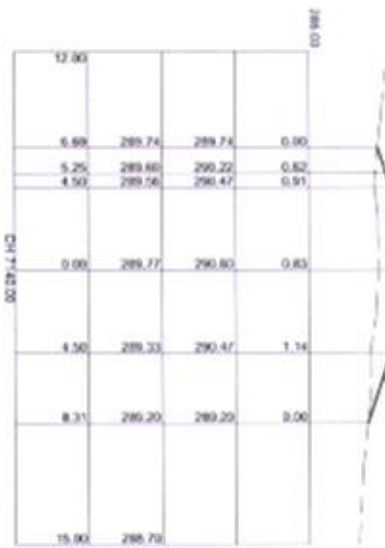


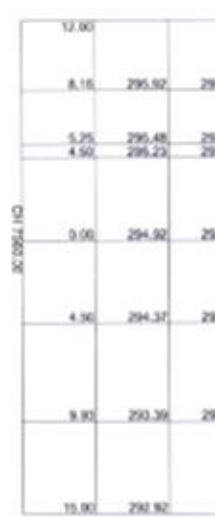
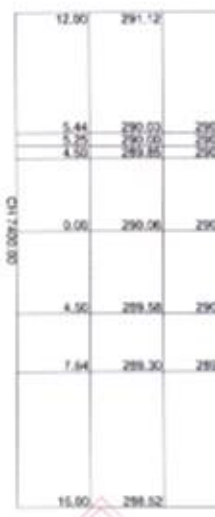
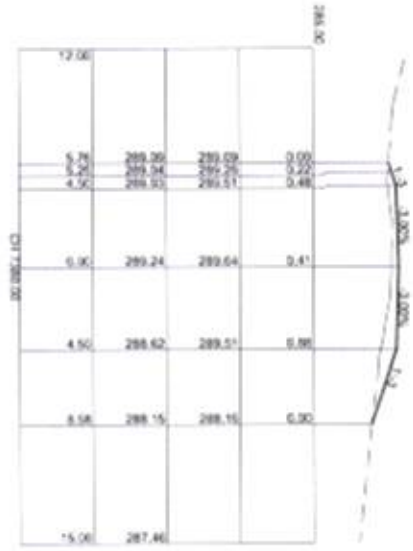
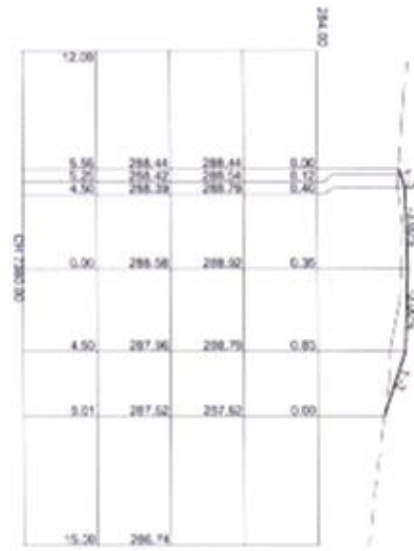
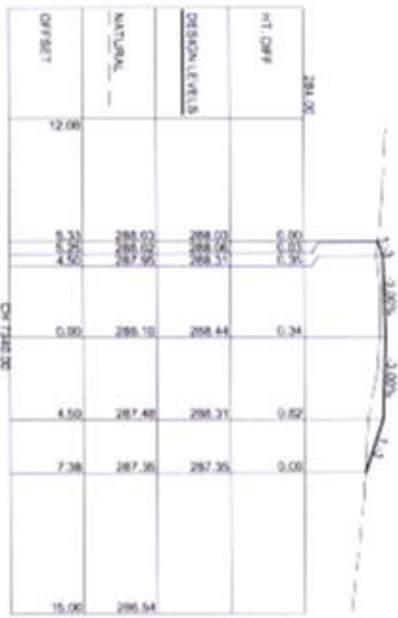


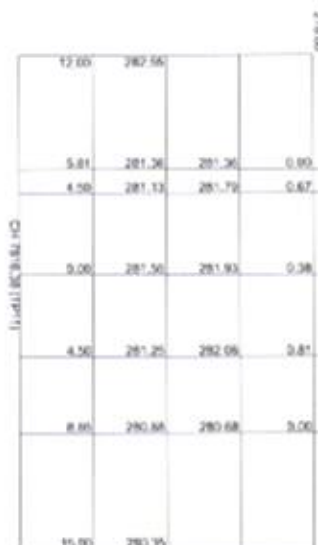
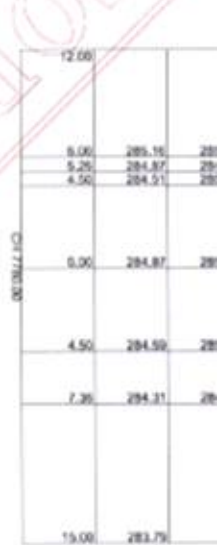
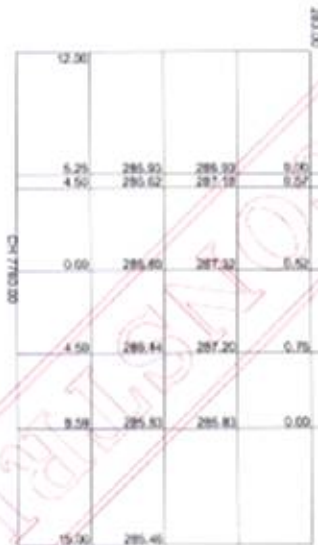
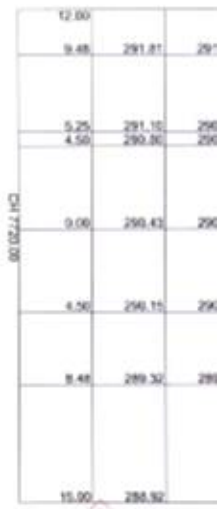


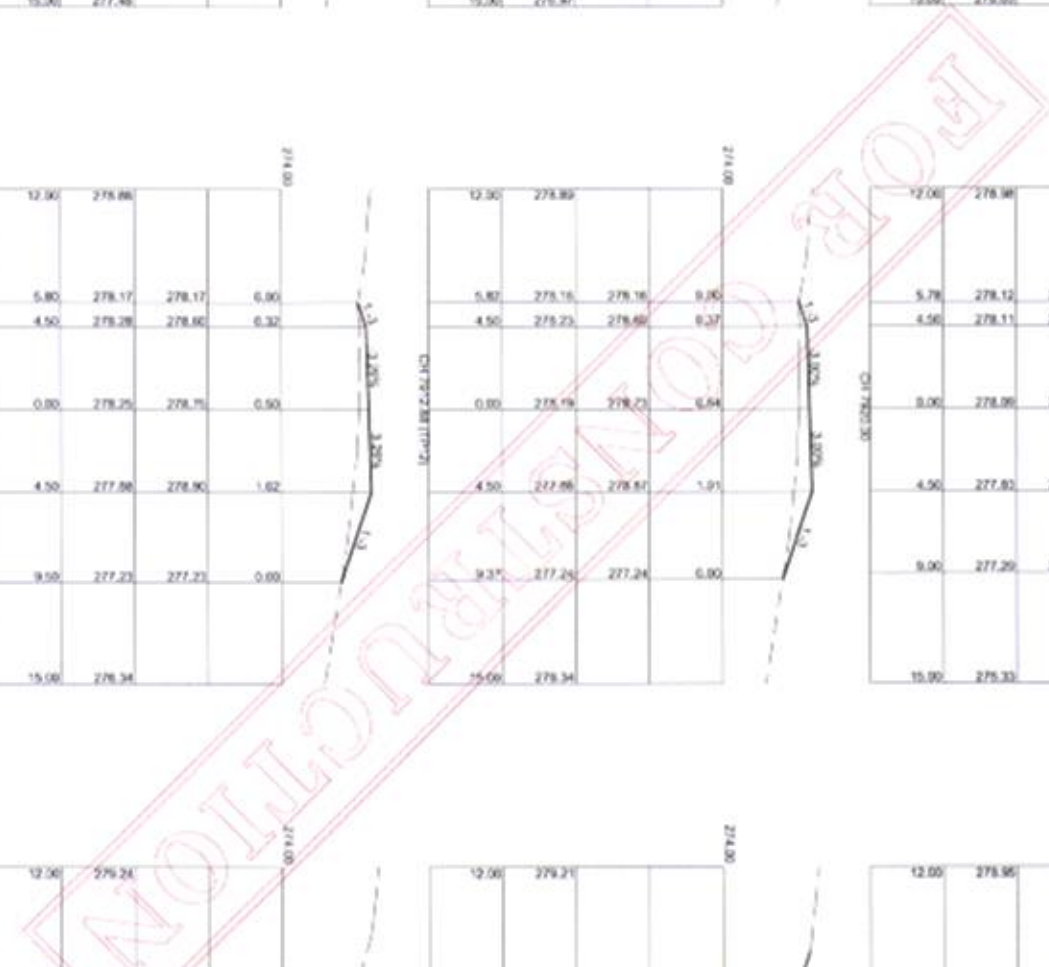
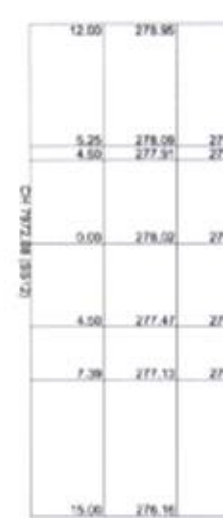
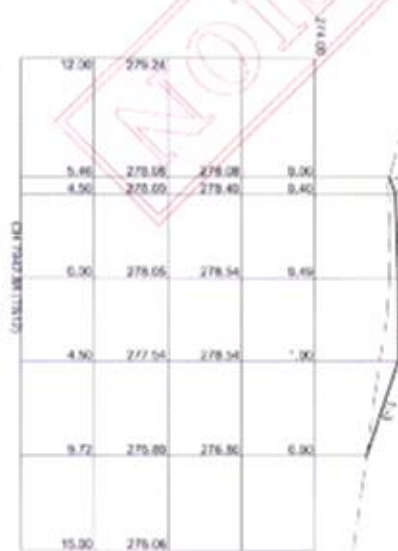
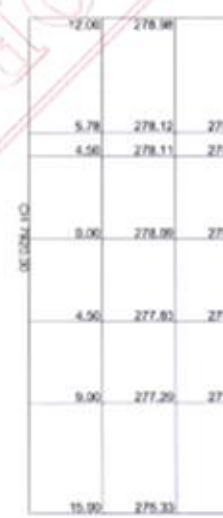
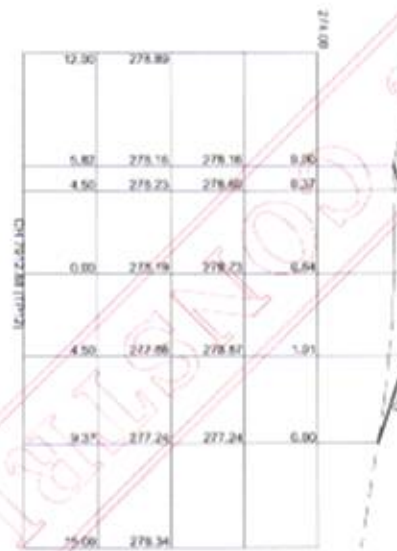
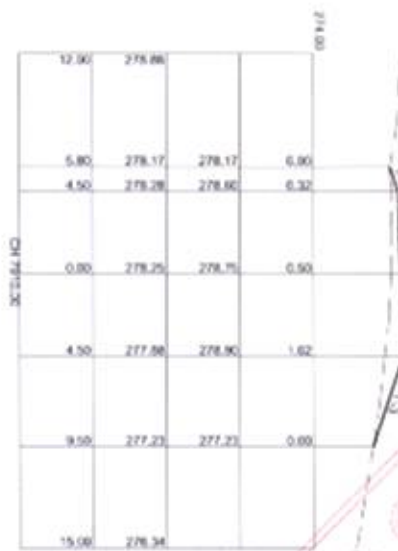
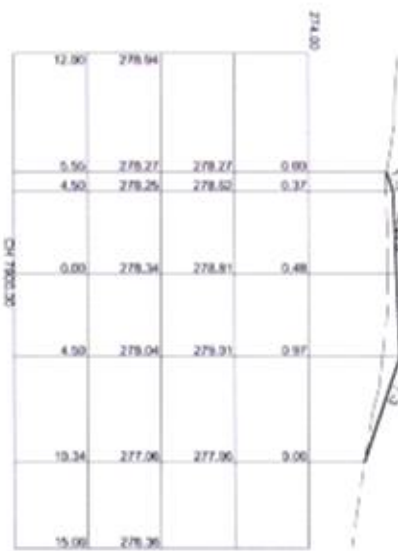
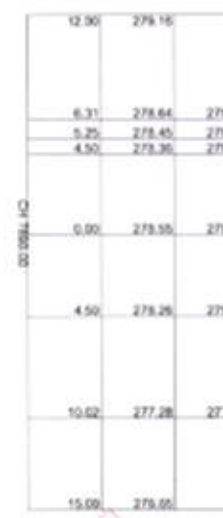
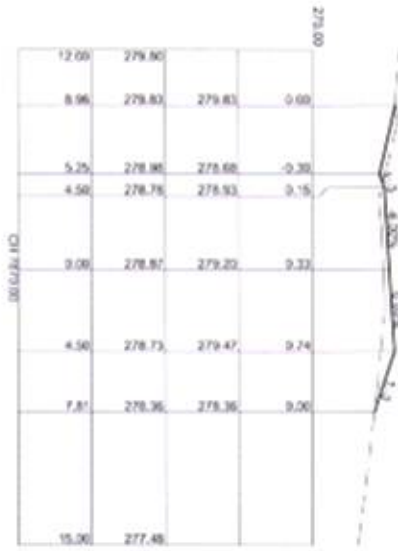












NOTES: SEDIMENTATION & EROSION CONTROL

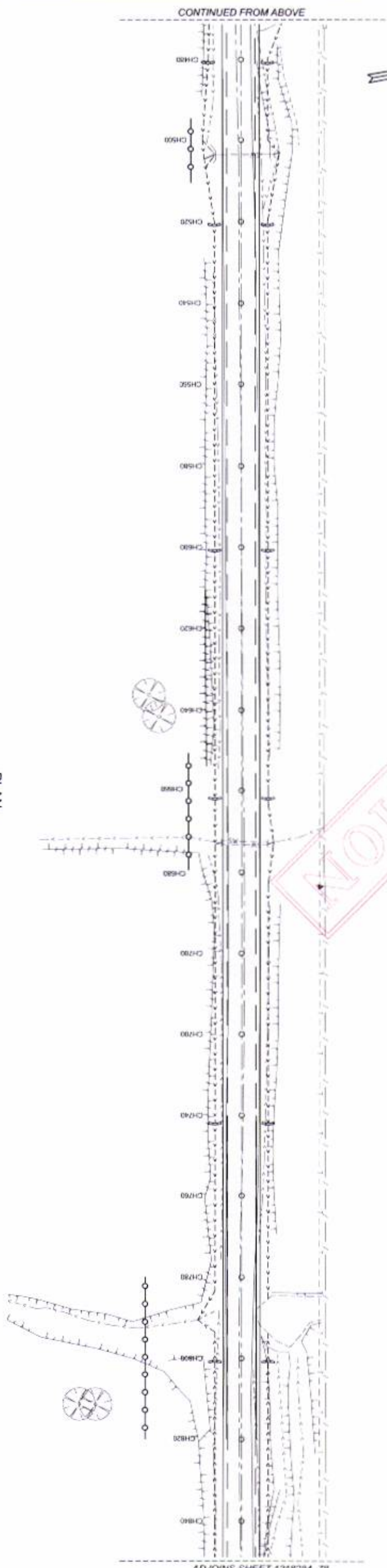
1. SEDIMENTATION & EROSION CONTROL MEASURES ARE TO BE IN ACCORDANCE WITH THE "BLUE BOOK" BY LANDCOM: SOIL & CONSTRUCTION, MANAGING URBAN STORMWATER.
2. ALL SOIL, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED AS INDICATED ON THESE DRAWINGS. LOCATION AND EXTENT OF SOIL AND WATER MANAGEMENT DEVICES IS DISCRETIONARY ONLY AND THE ACTUAL REQUIREMENTS SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT.
3. ALL SITE WORKERS SHALL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO CONSTRUCTION AREAS.
4. SEDIMENT AND EROSION CONTROL STRUCTURES SHALL BE REGULARLY MAINTAINED AND THE LENGTH OF TRENCH OPENINGS MINIMISED. THE SEDIMENT SHALL BE DISPOSED OF ON SITE IN AN APPROVED MANNER.
5. TOPSOIL AND SOIL SHALL BE STOCKPILED IN NON-HAZARDOUS AREAS AND PROTECTED FROM SURFACE RUNOFF BY DIVERSION BARRIERS OR SIMILAR. STOCKPILES SHALL BE SUITABLY COMPACTED TO INHIBIT EROSION. WHERE THE STOCKPILING PERIOD EXCEEDS FOUR (4) WEEKS, THE STOCKPILE SHALL BE SEEDED TO ENCOURAGE VEGETATION GROWTH.
6. TOPSOIL SHALL BE RE-SPREAD AND STABILISED AS SOON AS POSSIBLE. DISTURBED AREAS SHALL BE LEFT WITH A SCALPED SURFACE TO ENCOURAGE WATER INFILTRATION AND ASSIST REVEGETATION IN TOPSOIL.
7. ALL DISTURBED AREAS SHALL BE REHABILITATED IN AN APPROVED MANNER.
8. GRASS COVER SHALL BE MAINTAINED UNTIL ALL WORKS HAVE BEEN COMPLETED, INCLUDING THE MAINTENANCE PERIOD BY FREQUENT WATERING AND MOWING WHERE REQUIRED. PLANT, MACHINERY AND VEHICLES SHALL NOT BE DRIVEN OVER GRASSED AREAS UNLESS ON AN APPROVED HAULAGE ROUTE.
9. ALL DAMAGE WORKS SHALL BE CONSTRUCTED AND STABILISED AS QUICKLY AS POSSIBLE TO MINIMISE RISK OF EROSION.
10. VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION, COMPANING ACCESS WHERE POSSIBLE TO UNDISTURBED AREAS. EXISTING ROAD ALIGNMENTS PLUS THREE (3) METRES WHERE NECESSARY AREAS TO BE LEFT UNDISTURBED SHALL BE FENCED OFF.
11. SITE ACCESS SHALL BE CONTROLLED DURING CONSTRUCTION, COMPANING ACCESS WHERE POSSIBLE TO A SUITABLE SHADE DOWN ENTRY & EXIT RAMP.
12. DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE WORKS.
13. HIGH EROSION AREAS, INCLUDING BATTERS, SHALL BE STABILISED WITHIN SEVEN (7) DAYS OF COMPLETION OF WORKS OR EARLIER IF POSSIBLE.
14. PLACE STOCKPILES IN LOCATIONS MORE THAN 2 (PREFERABLE 5) METRES FROM EXISTING VEGETATION CONCENTRATED WATER FLOW, ROADS & HAULAGE AREAS.

LEGEND

- (with line) : SITE ACCESS (REFER TO NSC DRAWING SD-30)
- (with line) : DESIGNATED STOCKPILE LOCATED ON-SITE
- (with line) : DESIGNATED STOCKPILE SITE
- (with line) : SILT CONTROL BARRIER (HAY BALES OR SANDBAGS) (REFER TO NSC DRAWING SD-30)

PLAN

PLAN

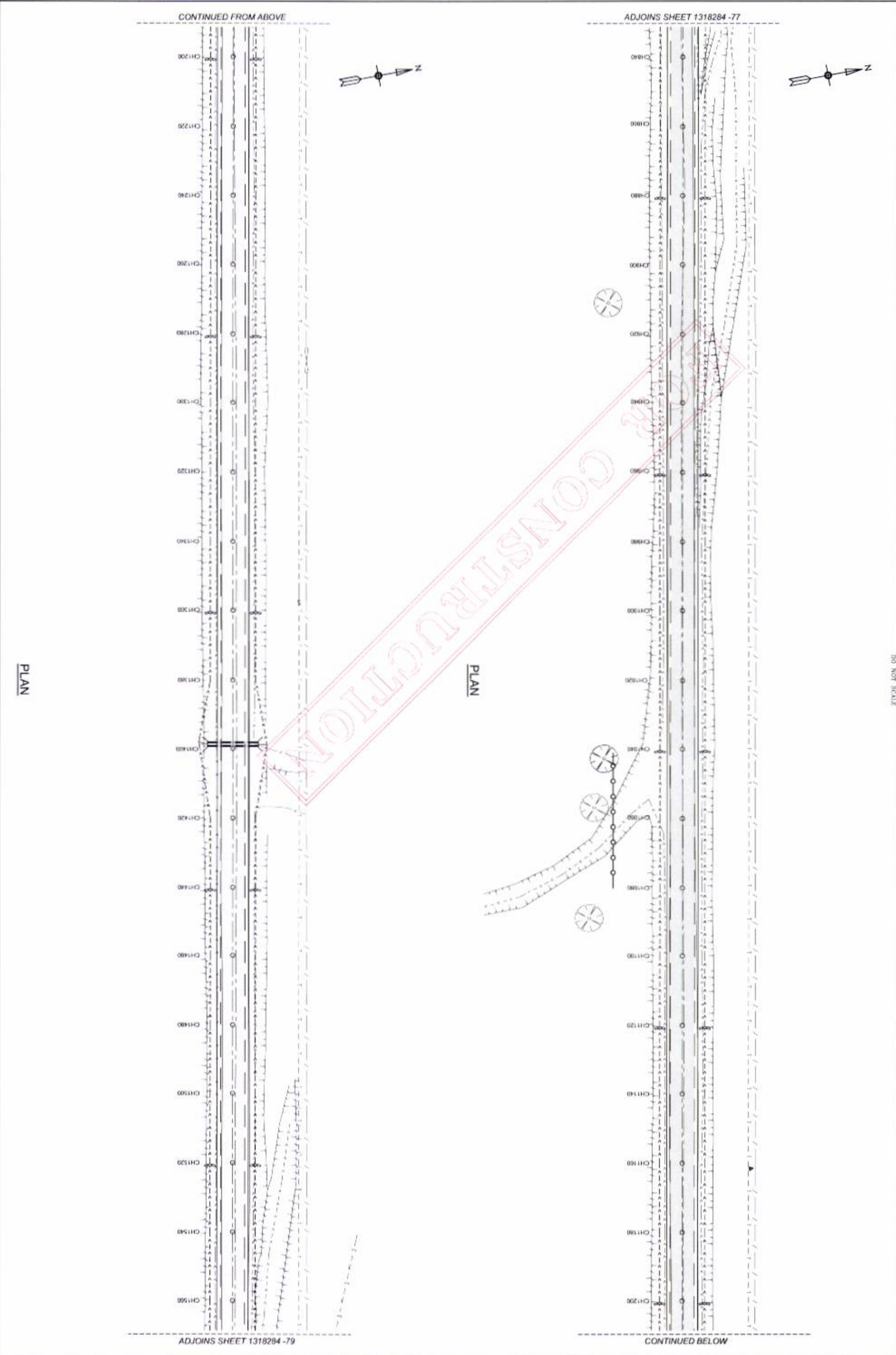


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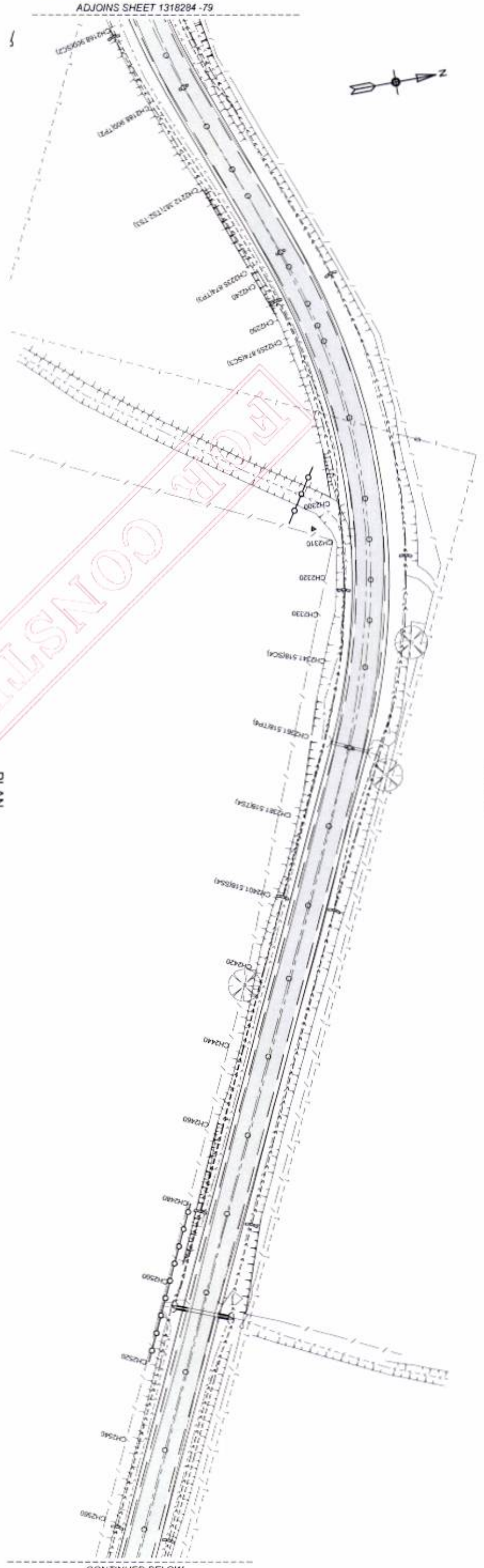
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REV.	DATE	ISSUED FOR CONSTRUCTION	DESCRIPTION
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A	08-08-2013	ISSUED FOR APPROVAL	
CHK.	APR.		
APPROVED	ANTHONY SWEETMAN NSW STATE MANAGER	26-09-2013	
DATE	26-09-2013		



NARRABRI SHIRE COUNCIL	
46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888	
ROAD CONSTRUCTION & SEALING WORKS	
WAVE HILL ROAD (SR18) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY	
EROSION & SEDIMENTATION CONTROL PLAN - SHEET 2 OF 12	
FILE NO.	1318284
PROJECT NO.	1318284
NO. OF SHEETS	90
DRAWING NO.	1318284-78
SHEET NO.	78
REV.	B

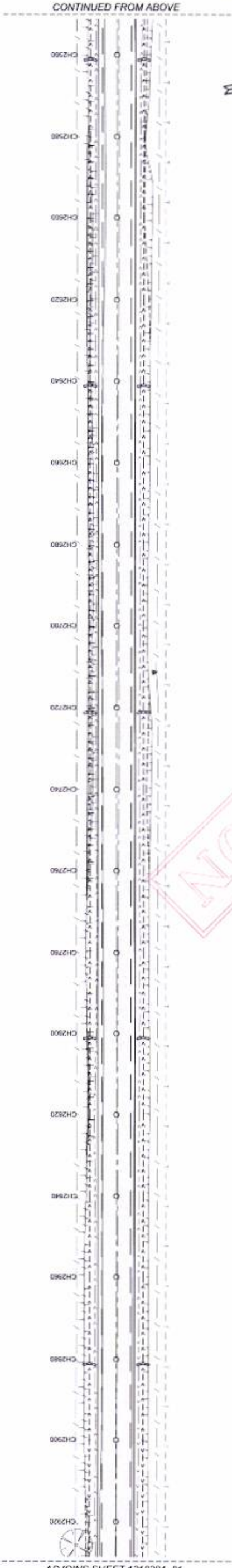


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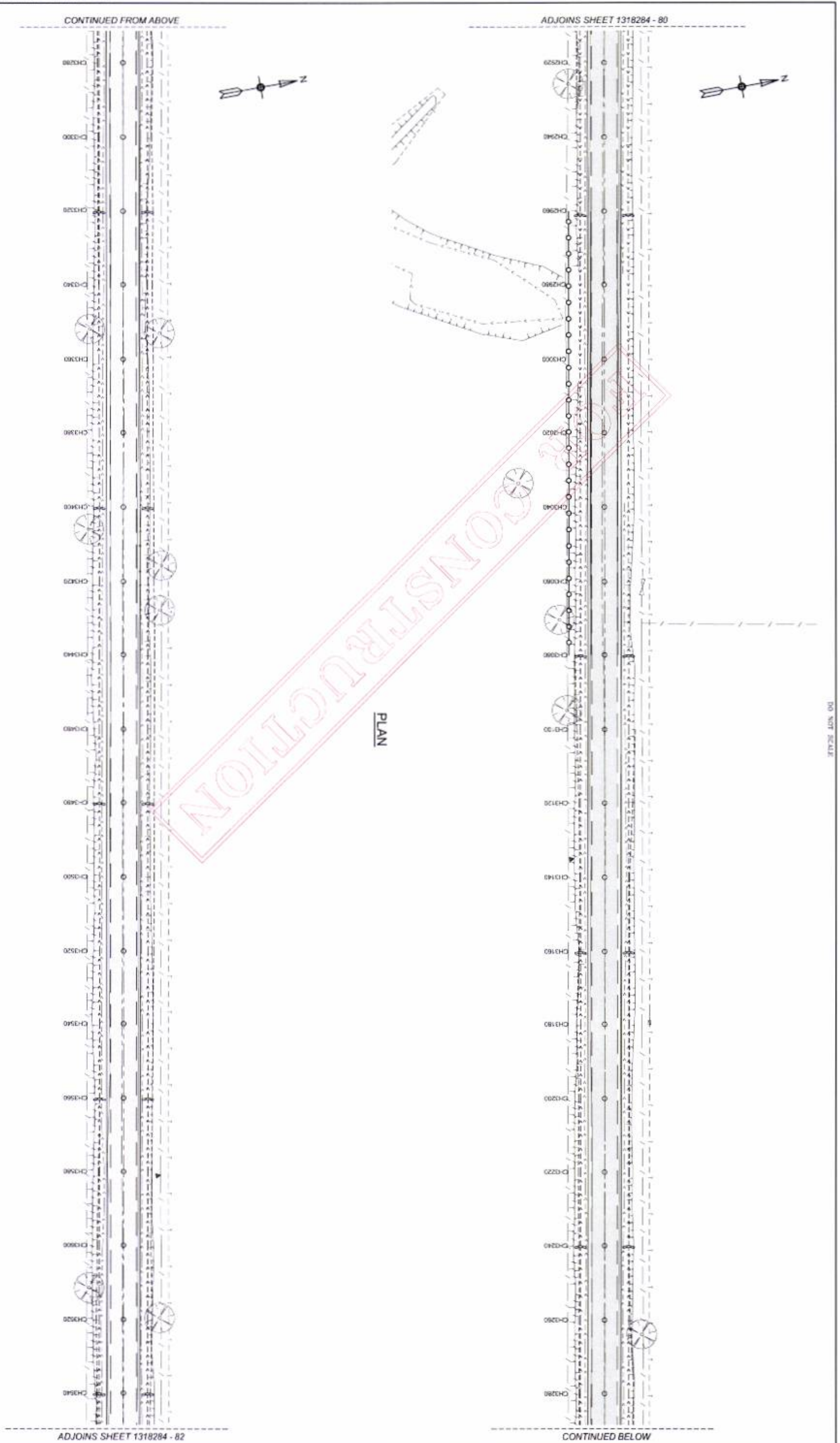
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NARRABRI SHIRE COUNCIL
 44-48 MULLAND STREET NARRABRI NSW 2390 PH: (02) 8799 8888 FAX: (02) 8799 8888
ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR16) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY
 EROSION & SEDIMENTATION CONTROL PLAN - SHEET 4 OF 12

FILE NO. 1318284	NO. OF SHEETS 90	SHEET NO. 80
PROJECT NO. 1318284		
DRAWING NO. 1318284-80		



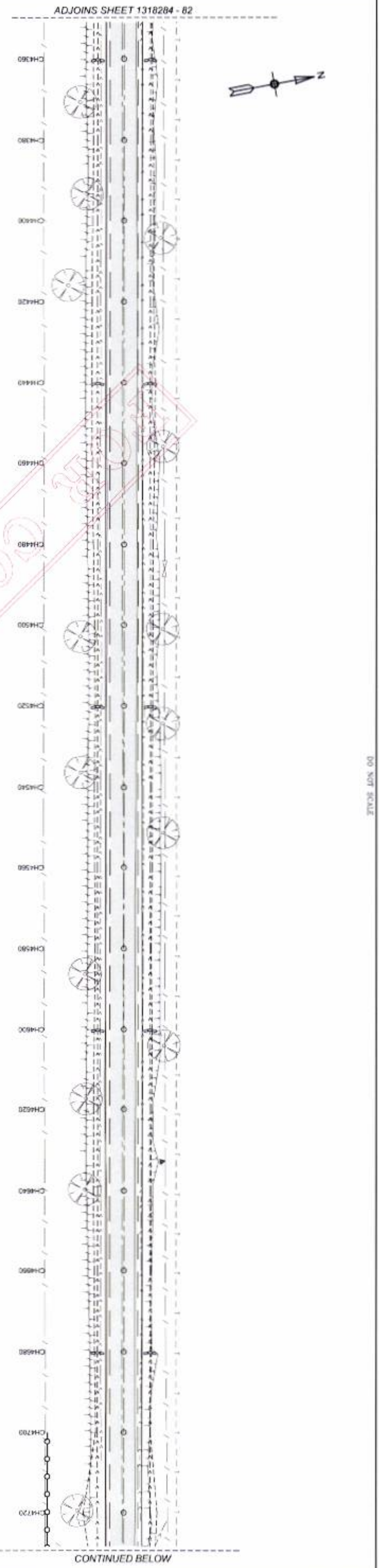
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ISSUED FOR APPROVAL	06-09-2013
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CHECKED BY	SR18 RECONSTRUCTION
DATE	
REV.	
DESCRIPTION	
DES.	AS
APP.	AS
DATE	
APPROVED	ANTHONY SWEETMAN
FOR STREET NUMBER	41 (SR18 RECON)
DATE	30-09-2013
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DATE	

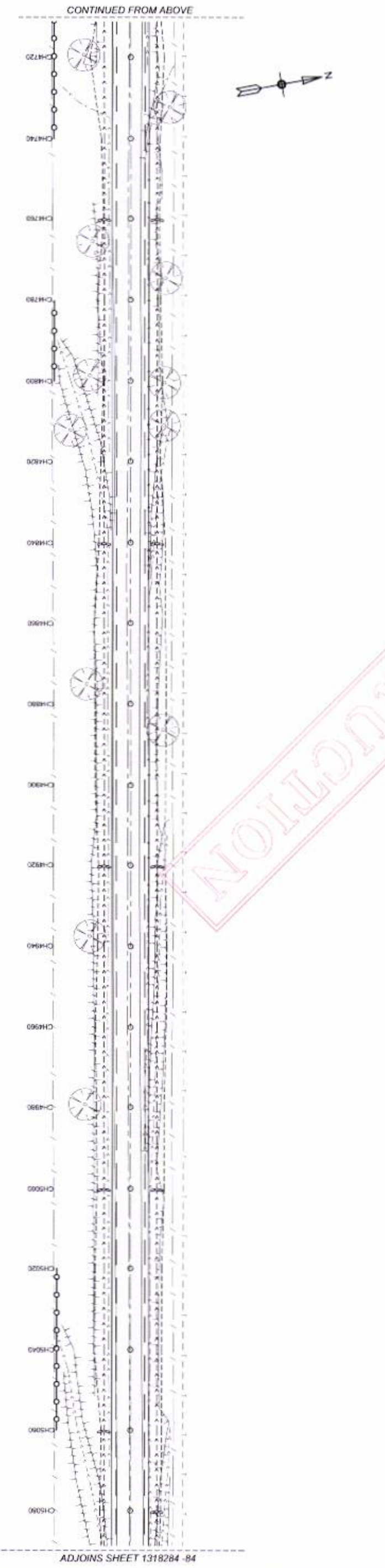


NARRABRI SHIRE COUNCIL
 46-48 MATTLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6866 FAX: (02) 6799 6888
 ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY
 EROSION & SEDIMENTATION CONTROL PLAN - SHEET 5 OF 12

FILE NO.	1318284	SHEET NO.	81
PROJECT NO.	1318284	NO. OF SHEETS	90
DRAWING NO.	1318284-81	REV.	B



PLAN



PLAN

PLAN SCALE	1:300 @ A1 1:1000 @ A0
HORIZONTAL SCALE	-
VERTICAL SCALE	-
DRAWN	GEORGE LATHAM
DESIGNED	GEORGE LATHAM
DATE	30-09-2013
ISSUED FOR CONSTRUCTION	30-09-2013
REVISION	REV. DATE
A	06-09-2013
B	30-09-2013
DESIGNATION	SEALING WORKS
DES.	GP, AS
APP.	AS
APPROVED	ANTHONY SWEETMAN
DATE	30-09-2013
SCALE	AS SHOWN



NARRABRI SHIRE COUNCIL
 46-48 MATLAND STREET NARRABRI NSW 2390 PH: (02) 6790 6666 FAX: (02) 6790 6668

ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR15) NEAR WARRCOA QUARRY TO NEAR JOHNSTONE QUARRY
 EROSION & SEDIMENTATION CONTROL PLAN - SHEET 7 OF 12

FILE NO.	1318284	SHEET NO.	83
PROJECT NO.	1318284	NO. OF SHEETS	90
DRAWING NO.	1318284-83	REV.	B

0.0 NOT SCALE

PLAN SCALE HORIZONTAL SCALE VERTICAL SCALE	1:500 (H) 1:100 (V)	
	DATE	30/09/2013
DRAWN CHECKED	DATE	06/09/2013
	REV.	ISSUED FOR APPROVAL
AHD	DATE	06/09/2013
	REV.	ISSUED FOR CONSTRUCTION

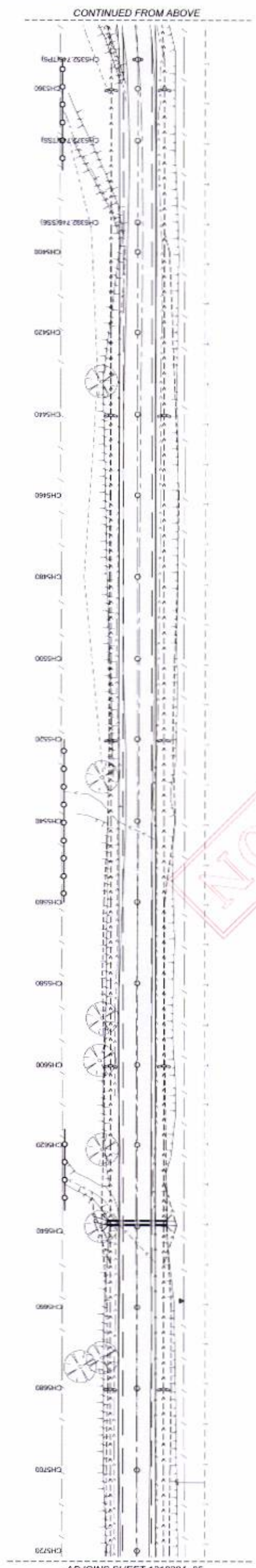
ANTHONY SARTI
 ANTHONY SARTI
 CIVIL ENGINEER
 30/09/2013



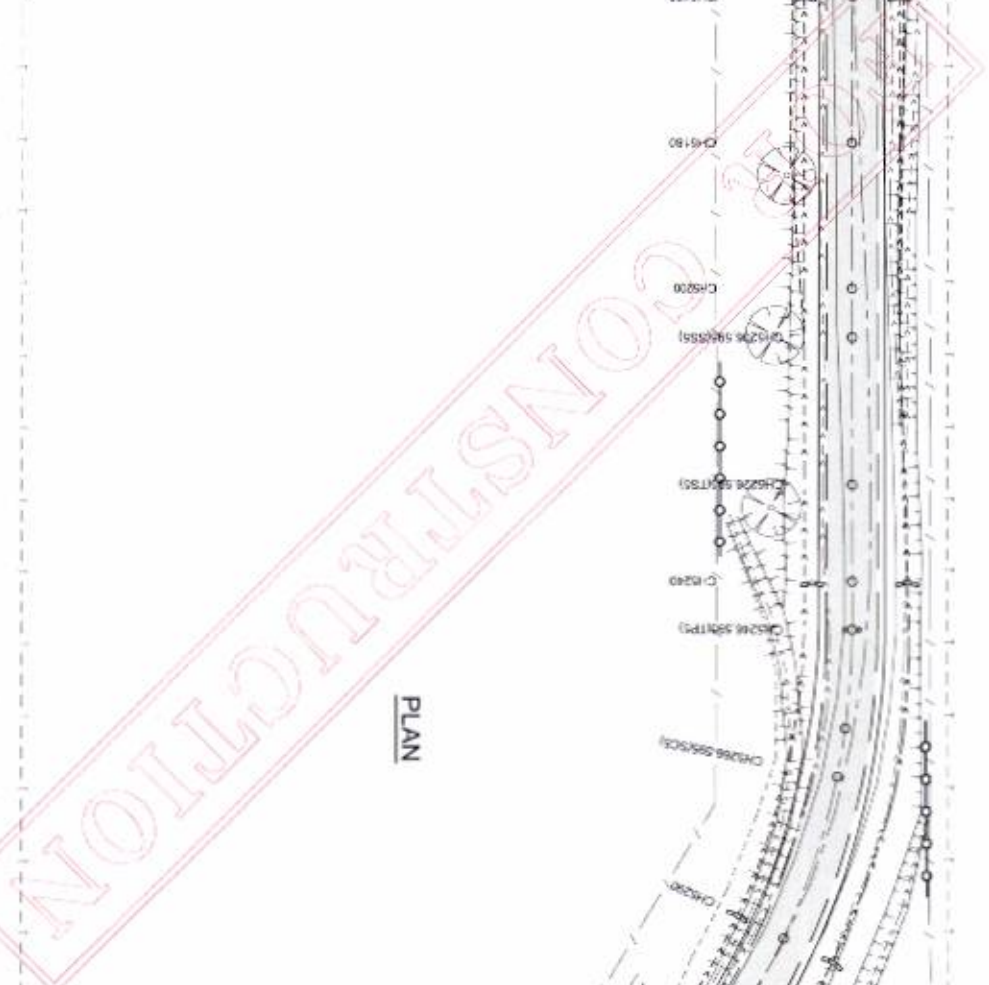
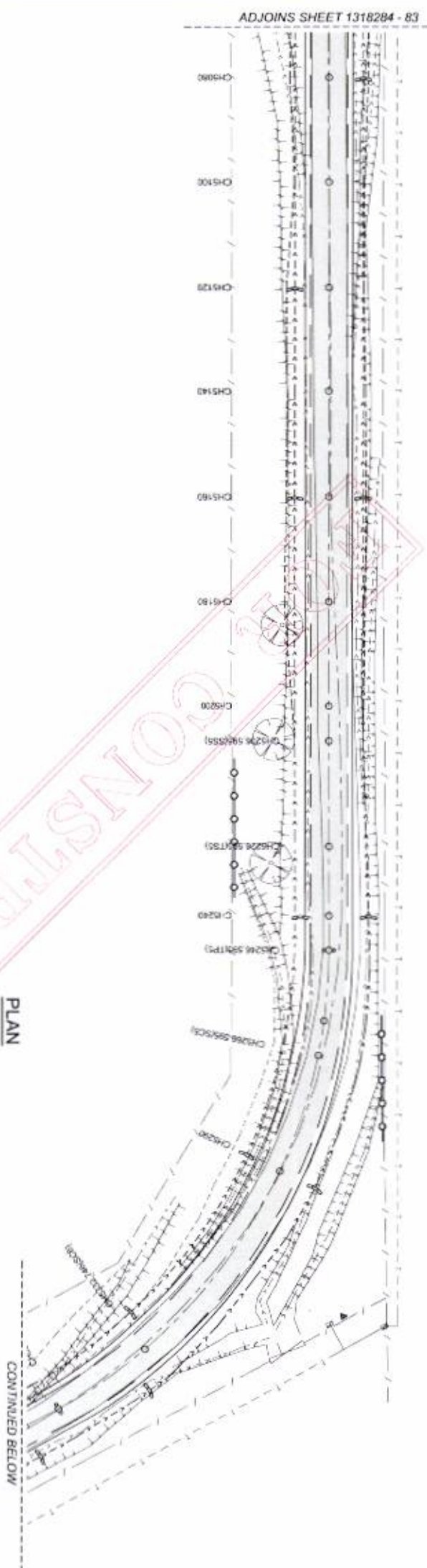
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ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARCOA QUARRY TO NEAR JOHNSTONE QUARRY
 EROSION & SEDIMENTATION CONTROL PLAN - SHEET 8 OF 12

FILE No.	1318284	SHEET No.	84
PROJECT No.	1318284	No. OF SHEETS	90
DRAWING No.	1318284-84	REV.	B

PLAN



PLAN



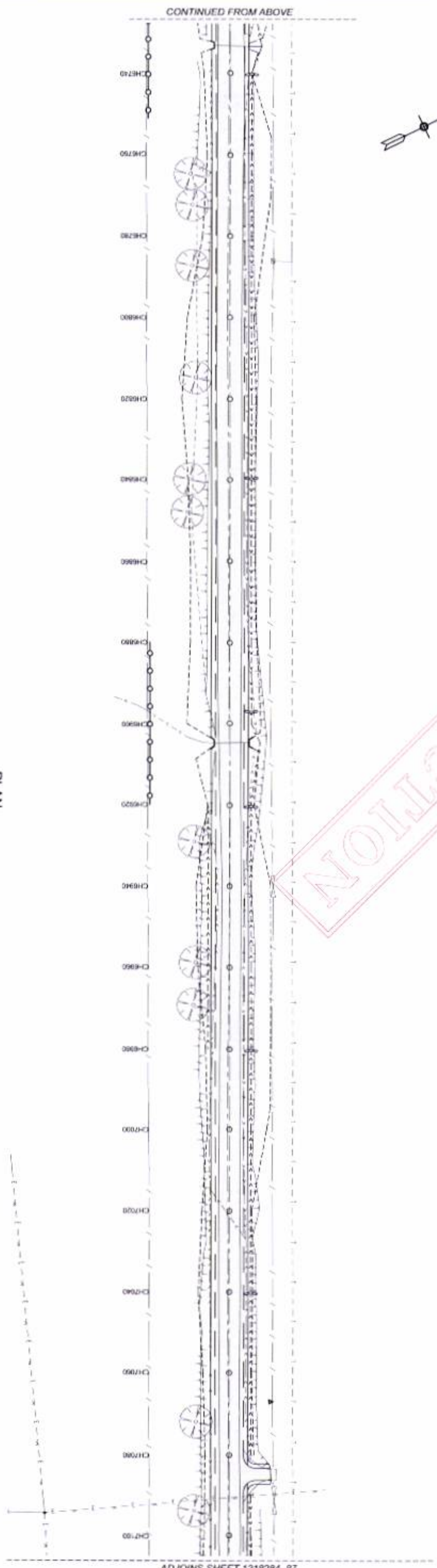
PLAN SCALE 1:500 (G.A.) 1:100 (D.A.)	VERTICAL SCALE 1:10	DATE 20-09-2010	DESIGNED GEOFF LATHAM	CHECKED GEOFF LATHAM	DATE 06-09-2013	REVISIONS	DESCRIPTION
AHD		REV.	DATE	DESCRIPTION	BY	CHK	DATE
B		20-09-2010	ISSUED FOR CONSTRUCTION	AS	AS		
A		06-09-2013	ISSUED FOR APPROVAL	AS	AS		



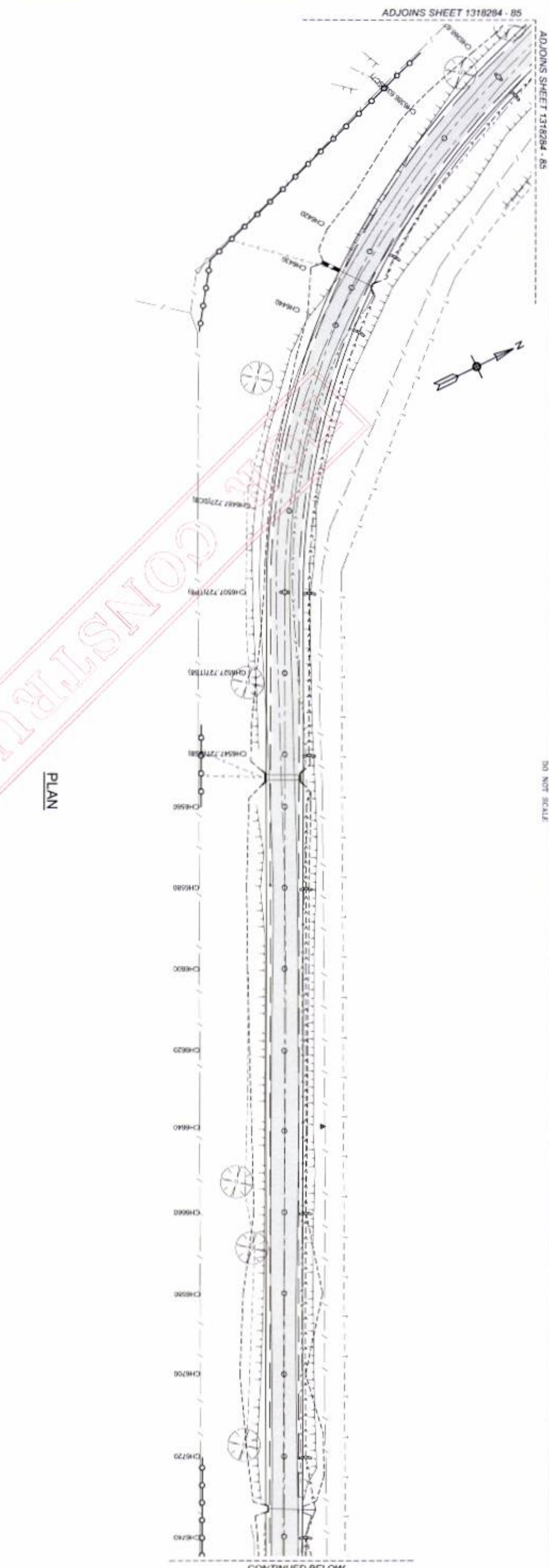
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 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6799 6666 FAX: (02) 6799 6668
ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR16) NEAR WARROA QUARRY TO NEAR JOHNSTONE QUARRY
 EROSION & SEDIMENTATION CONTROL PLAN - SHEET 10 OF 12

FILE NO.	1318284	NO. OF SHEETS	90	SHEET NO.	86
PROJECT NO.	1318284			REV.	B
DRAWING NO.	1318284-86				

PLAN



PLAN



NOT FOR CONSTRUCTION

DO NOT SCALE

DESIGNED BY: GEOFF LATHAM
 RMS DESIGN AUDIT TRAFFIC PLANS
 CERTIFICATE NO. 5183011748

LEGEND
 AREA OF WORKS

TRAFFIC CONTROL SIGNAGE: TIME INSPECTION TABLE

DAILY INSPECTION	MON	TUES	WED	THU	FRI	SAT	SUN
MORNING							
POST LUNCH							
CLOSEDOWN							
OTHER							
COVERING SIGNS	MON	TUES	WED	THU	FRI	SAT	SUN
SMOKO							
LUNCH							
FINISH							

- NOTES: SITE SPECIFIC
- TRAFFIC CONTROL PLAN ADAPTED FROM RTA'S TRAFFIC CONTROL AT WORK SITES - TOP 43 SHORT OR LONG TERM WORK - 2 LANE / 2 WAY - LANE CLOSURE
 - TOP 57 GENERAL WORKS - ALL RIGORS - ROADWORK SPEED LIMITS
 - TOP 47 SHORT TERM WORK - 2 LANE / 2 WAY - FULL ROAD CLOSURE
 - MAINTAIN CLEAR CARBONEMOUNTED UNIT SHOULD BE 1.5m MINIMUM BUT MAY BE REDUCED TO AN ABSOLUTE MINIMUM OF 2.5m WHERE AVERAGE DAILY TRAFFIC (ADT) IS LESS THAN 100 VEHICLES PER DAY.
 - ROADWORK AHEAD (T-1-1) AND END ROADWORK (T-1-1) SIGNS REQUIRED ONLY FOR LONG TERM WORK 5.1.4 MORE THAN ONE SHEET.
 - SPEED ZONES ARE ENFORCEABLE. SIGNS ARE REQUIRED FOR WORKS IN EXCESS OF 4 WEEKS ON AVERAGE SPEED ZONE COMPLIANCE IS A PROBLEM.
 - AFTER CARE SPEED LIMIT TO BE DETERMINED BY A RISK ASSESSMENT.
 - RELEASE SPEED ZONE TO BE IN ACCORDANCE WITH AFTER CARE ZONE SCHEDULE APPLICABLE.
 - ACCESS TO RURAL ADDRESS ENTRANCES IS TO BE PROVIDED DURING THE CONSTRUCTION OF THE ROAD WORK.

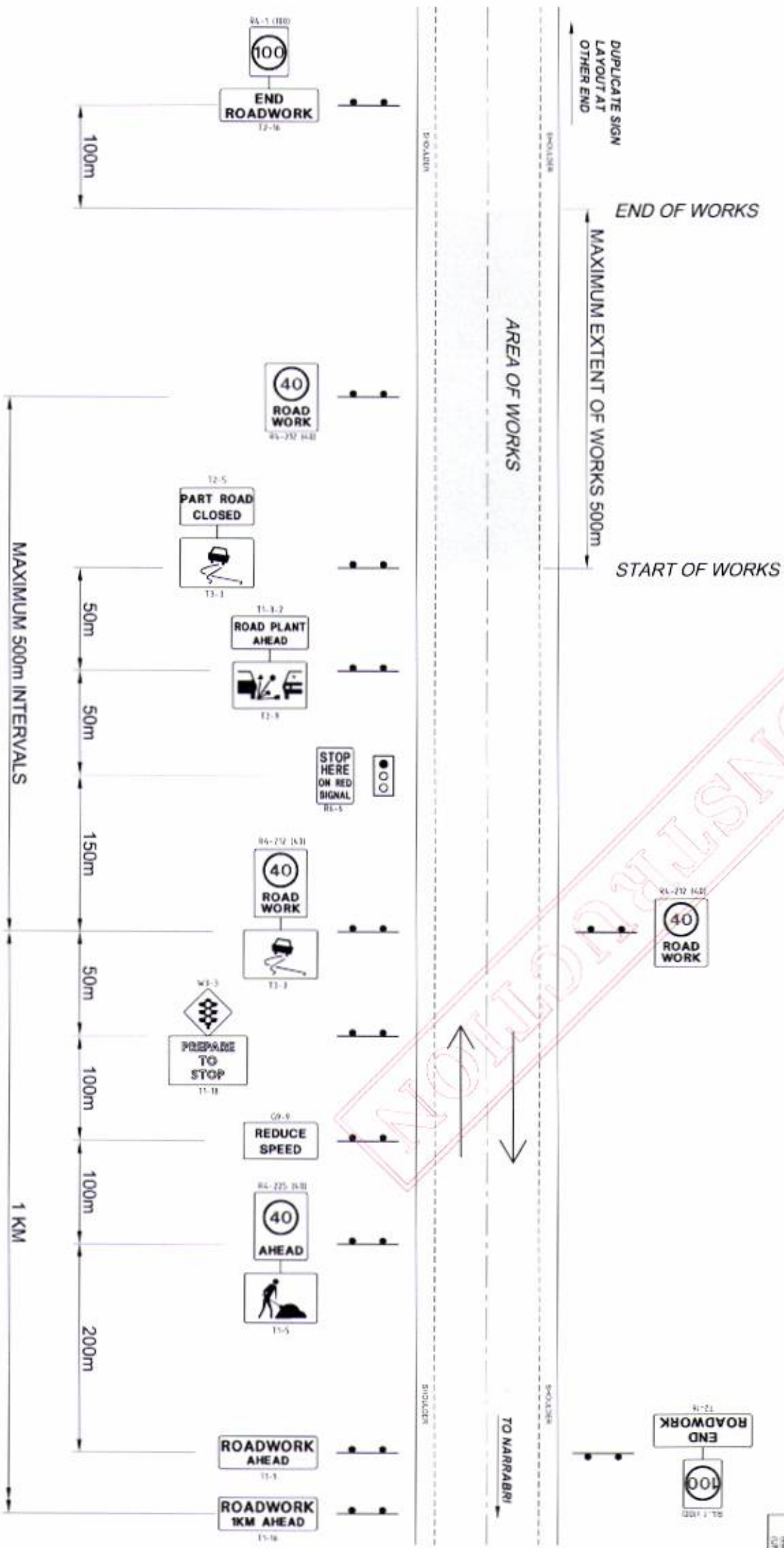
TEMPORARY WARNING SIGNS

CODE	SIGN TYPE	QUANTITY	CODE	SIGN TYPE	QUANTITY
R/A	ROADWORK AHEAD	2	100	100	2
R/S	REDUCE SPEED	2	S/S	4 (M/V)	4 (M/V)
E/R	END ROADWORK	2	T/C A	750 x 750	2
W/A	WORK AHEAD	2	40 R/W	400 x 300	6 (M/V)
P/T S	PREPARE TO STOP	2	40 A	400 x 300	2
L/S	LANE SHUTTING	2 (M/V)	40 A	400 x 300	2
R/A A	ROADWORK AHEAD	2	R/C	PART ROAD CLOSED	2
S/S	STOP HERE ON RED SIGNAL	2	R/A A	ROAD PLANT AHEAD	2

NOTE: ALL SIGNS SHALL BE 6' SIGNED UNLESS OTHERWISE NOTED

NOTES: TRAFFIC CONTROL

- CONTROL OF TRAFFIC REFER TO CS01 DEVICES AND AS 1742.3 - 2008) PLAN VERSION X (17/14/11)
- TRAFFIC CONTROLLERS SHALL BE APPROPRIATELY TRAINED IN THE DUTIES OF TRAFFIC CONTROL REFER IN ACCORDANCE WITH AS 1742.3
- ALL PERSONNEL WORKING IN CLOSE PROXIMITY TO TRAFFIC SHALL WEAR CLOTHING THE REQUIREMENTS OF AS 1742.3
- AT NIGHT, LIGHT TRAFFIC IS PERMITTED TO USE THE WHOLE OR PORTION OF THE EXISTING ROAD ALL PLANT TRUCKS AND SMALL CONSTRUCTIONS SHALL BE REMOVED FROM THE NORMAL PATH OF TRAFFIC TO PROVIDE A LATERAL CLEARANCE OF AT LEAST 8m WHERE PRACTICABLE WITH A MINIMUM CLEARANCE OF 1.2m.
- WHERE A TEMPORARY ROADWAY OR A SETBACK IS NOT PROVIDED, CONSTRUCTION UNDER TRAFFIC MAY BE PERMITTED PROVIDED A 3.5m LANE WIDTH IS AVAILABLE FOR THROUGH TRAFFIC ON A TWO LANE ROADWAY
- THE CARBONEMOUNTED SHALL BE POSITIONED TO A SAFE AND TRAFFICABLE STATE FOR THROUGH TRAFFIC PRIOR TO THE END OF WORK EACH DAY
- ALL TEMPORARY TRAFFIC CONTROL DEVICES WHEN NO LONGER REQUIRED SHALL BE REMOVED AND OR REMOVED WITHOUT DELAY IN ORDER TO MAINTAIN UNHINDERED SAFE CLEARANCE TO TRAFFIC
- ALL TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED IN ACCORDANCE WITH AS 1742.3 SO THAT THEY ARE IN 9000 ORDER AND IN THE CORRECT POSITIONS DAY AND NIGHT
- THE REFLECTIVE MATERIAL USED ON SIGNS SHALL BE CLASS 2 MATERIAL COMPLYING WITH AS 1961.1
- WARNING LAMPS, WHERE REQUIRED, SHALL BE IN 3000 WORKING ORDER CORRECTLY ALIGNED AND POSITIONED WITH RESPECT TO THE DIRECTION OF TRAFFIC FLOW EACH NIGHT BEFORE THE SITE IS LEFT UNATTENDED
- TRAFFIC CONTROLLERS SHALL NOT BE LOCATED IN POSITIONS WHERE THE SHORT DISTANCE IS LESS THAN 1.5 TIMES THE SPEED LIMIT OF THE ROAD.
- SHORT DISTANCE OF THE APPROACH TO TRAFFIC SIGNALS SHALL BE A MINIMUM OF 50m.
- SIGNS AND DEVICES SHOULD GENERALLY BE PLACED ABOUT 10m CLEAR OF THE TRAVELLED PATH
- FOR WORKS LASTING LONGER THAN 2 WEEKS (LONG TERM WORKS)
- IN RURAL AREAS WHERE SIGNS ARE TO BE MOUNTED ON POSTS, THEY SHOULD BE ERECTED A MINIMUM OF 1.5m ABOVE THE LEVEL OF THE NEAREST EDGE OF THE TRAVELLED PATH TO THE UNDERSIDE OF THE SIGN.
- IN URBAN AREAS ADJACENT TO FOOTPATHS OR WHERE VEHICLE PARKING MAY OCCUR SIGNS SHOULD BE ERECTED A MINIMUM OF 2.2m ABOVE THE LEVEL OF THE KERB OR FOOTPATH TO THE UNDERSIDE OF THE SIGN.
- FOR SHORT TERM OPERATIONS MOUNTINGS SHALL BE ARRANGED SO THAT THE SIGNS ARE PROMINENTLY DISPLAYED TO TRAFFIC AND ARE CONSPICUOUSLY ATTENTION THE MINIMUM HEIGHT TO THE LOWER EDGE OF THE SIGN SHOULD BE 200mm. SIGNS MAY BE PLACED ON THE SURFACE SUBJECT TO THEM BEING CLEARLY VISIBLE TO TRAFFIC.
- SIGNS SHALL FACE TOWARDS APPROXIMATE TRAFFIC APPROXIMATELY AT RIGHT ANGLES TO THE LINE OF SIGHT FROM THE DRIVER TO THE SIGN. AT CURVED ALIGNMENTS, THE SIGN SHOULD BE PLACED APPROXIMATELY AT RIGHT ANGLES TO THE LINE OF SIGHT OF A MOTORIST 50m IN ADVANCE OF THE SIGN.
- SIGNS ARE TO BE PLACED AT CHANGES INDICATED ON THIS PLAN OR TO SUIT MANUALLY VISIBILITY ON SITE.



PLAN SCALE: NOT TO SCALE
 HORIZONTAL SCALE: NOT TO SCALE
 VERTICAL SCALE: NOT TO SCALE

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/11/11	AHD	SIGNED GEOFF LATHAM	01/11/11	AHD	SIGNED GEOFF LATHAM
02/02/11	AHD	DESIGNED GEOFF LATHAM	02/02/11	AHD	DESIGNED GEOFF LATHAM
03/03/11	AHD	DRAWN GEOFF LATHAM	03/03/11	AHD	DRAWN GEOFF LATHAM

ISSUED FOR CONSTRUCTION: 30-09-2013
 ISSUED FOR APPROVAL: 30-09-2013

ANTHONY SWETNAM
 RMA SERVICE MANAGER
 30-09-2013

AT LATHAM
 30-09-2013

HEART OF THE NORTH WEST

NARRABRI SHIRE COUNCIL
 46-48 MAITLAND STREET NARRABRI NSW 2390 PH: (02) 6790 6866 FAX: (02) 6790 6888

ROAD CONSTRUCTION & SEALING WORKS
 WAVE HILL ROAD (SR18) NEAR WARDA QUARRY TO NEAR JOHNSTONE QUARRY
 CONSTRUCTION TCP, NOTES & LEGEND - SHEET 1 OF 2

FILE NO: 1318284 No. OF SHEETS: 90 SHEET NO: 89
 DRAWING NO: 1318284 - TCP89 REV: B

