

PENRITH CITY COUNCIL

MAJOR ASSESSMENT REPORT

Application number:	DA17/1157
Proposed development:	Demolition of Existing Structures and Torrens Title Subdivision x 46 Residential Lots and Associated Civil Works, Landscaping & Public Roads
Property address:	189 Caddens Road, CADDENS NSW 2747 191 - 205 Caddens Road, CADDENS NSW 2747 185 Caddens Road, CADDENS NSW 2747 187 Caddens Road, CADDENS NSW 2747 207 Caddens Road, CADDENS NSW 2747 20 Weema Street, CADDENS NSW 2747
Property description:	Lot 2 DP 502333 Lot 3 DP 502333 Lot 101 DP 564332 Lot 1 DP 1225593 Lot 1 DP 1229889 Lot 72 DP 1166546
Date received:	15 November 2017
Assessing officer	Jane Hetherington
Zoning:	Zone R1 General Residential - LEP 2010 RE1 Public Recreation - LEP 2010
Class of building:	N/A
Recommendations:	Approve

Executive Summary

The Development Application is referred to the Local Planning Panel for determination as the application proposes a variation to a development standard.

Council is in receipt of a Development Application for the demolition of existing structures and torrens title subdivision x 46 residential lots and associated civil works, landscaping & public roads at 20 Weema Street, Caddens.

The subject site is zoned R1 General Residential under the provisions of Penrith Local Environmental Plan 2010. Subdivision is permissible under Clause 2.6.

The Minister for Planning recently gave directions under Section 9.1 of the *Environmental Planning and Assessment Act 1979* on the development applications that are to be determined on behalf of Council by a local planning panel. These directions, dated 23 February 2018, outline that development within the Penrith Local Government Area (LGA) that contravenes a development standard by more than 10% is to be determined by the local planning panel. As 28% of the proposed lots contravene the minimum lot size development standard the Penrith Local Planning Panel is the determining authority.

The application is defined as integrated development under Section 4.46 of the *Environmental Planning and Assessment Act, 1979*. Accordingly, the application was referred to the NSW Rural Fire Service (RFS) and Department of Industry - Water (DoI Water). In response, the NSW RFS issued their General Terms of Approval dated 3 January 2018 and the DoP - Water advised that a controlled activity approval was not required.

The development application has been advertised in local a newspaper and notified to all adjoining and adjacent property owners and placed on public exhibition between 1 December 2017 and 31 January 2018. One submission was received in response raising concerns regarding the potential dust impacts.

Key issues identified for the proposed development include:

Minimum Lot Size

The applicant seeks a variation to the provisions relating to the minimum lot size under Clause 4.1 of Penrith Local Environmental Plan 2010. The proposal involves the creation of lots at 300m² - 437.5m² where the minimum lot size is identified as being 450m². A total of 13 lots out of 46 residential lots do not comply with the minimum lot size requirement, which equates to a 28% variation. The development application was lodged with a written request to vary the minimum lot size of 450m². The variation is supportable given that the proposal still ensures that the proposed lots can accommodate suitable forms of residential housing; provides for a mix in lot and housing diversity; and is consistent with the lot sizes provided in the rest of the Caddens Release Area.

Extent of Earthworks

Given the existing topography of the site, substantial earthworks (up to 5m of cut and fill) are required to allow for the future residential development of the land and to meet appropriate drainage and road gradient levels. The extent of earthworks are consistent with the rest of the Caddens Release Area, with up to 8m of cut and fill approved under DA16/1166. The earthworks are not considered to impact on the streetscape or cause any amenity issues for future residents and as such is supportable.

An assessment under Section 4.15 of the *Environmental Planning and Assessment Act 1979* has been undertaken and the application is recommended for approval, subject to recommended conditions.

Site & Surrounds

The subject site is located within the Werrington Enterprise, Living & Learning (WELL) Precinct which comprises of approximately 670 hectares of land for mixed use development. The WELL Precinct is divided into sub-precincts; North Werrington, Werrington Mixed Use Area, Western Sydney University (Kingswood & Werrington Campuses), South Werrington Urban Village (SWUV), Caddens Release Area and Claremont Meadows Stage 2 Release Area. The subject site is located within the Caddens Release Area which is predominantly residential development.

The development site has an area of approximately 2.85 hectares and is undulating in nature generally falling to the north-east. The site currently contains a dwelling, associated structures and orchard. No vegetation is located on the site.

Surrounding land uses include rural residential development to the south and to the north, east and west land also within the Caddens Release Area previously approved for residential development.

Proposal

The proposed development involves:

- Demolition of all existing structures;
- Bulk earthworks;
- Road construction and street tree planting;
- Subdivision into 46 residential allotments (ranging in size from 300m² to 602.6m²); and
- Stormwater management works including easements, stormwater drainage lines and detention basins.

Plans that apply

- Local Environmental Plan 2010 (Amendment 4)
- Development Control Plan 2014
- State Environmental Planning Policy No 55—Remediation of Land
- Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River

- **Section 79C - Evaluation**

The development has been assessed in accordance with the matters for consideration under Section 4.15 of the Environmental Planning and Assessment Act 1979, and having regard to those matters, the following issues have been identified for further consideration:

- **Section 91- Integrated development**

The proposal is defined as Integrated Development under Section 4.46 (formerly Section 91) of the *Environmental Planning and Assessment Act 1979*, requiring an approval under the *Water Management Act 2000*, Section 89, 90 & 91 and the *Rural Fire Act 1997*, Section 100B.

Accordingly, the application was referred to the NSW Department of Industry - Water (DoI - Water) and the NSW Rural Fire Service (RFS) on 27 November 2017.

In response, the NSW RFS issued their General Terms of Approval dated 3 January 2018, raising no objection to the proposal subject to conditions.

The response from the DoI - Water (dated 27 February 2018) advised that an assessment had been undertaken in accordance with the requirements of the *Water Management Act 2000* and a controlled activity approval was not required or any no further assessment by DoI - Water.

Section 79C(1)(a)(i) The provisions of any environmental planning instrument

State Environmental Planning Policy No 55—Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) aims to provide a framework for the assessment, management and remediation of contaminated land throughout the state. Clause 7(1) of SEPP 55 prevents Council from consenting to a development unless it has considered whether the land is contaminated, and is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out.

The application was accompanied by a report titled *Environmental Site Assessment Report - 20 Weema Street and 191-205 Caddens Road Caddens* prepared JBS&G and dated 28 August 2017. This report details that the site has historically been used for rural purposes, including an orchard and market garden at 191-205 Caddens Road. To identify potential areas of environmental concern an assessment was undertaken that included a desktop review, the development and documentation of a conceptual site model and intrusive soil sampling. The investigation identified stained soils and asbestos containing material (ACM) and recommended that this material be removed prior to the development of the site.

In response to the recommendations of the ESA, the application was accompanied by a Remediation Action Plan (RAP) prepared by JBS& G and dated 30 August 2018. The RAP addresses the areas of environmental concern identified during preliminary contamination investigations, namely TP15, TP 17 and the asbestos corrugated roofing in the north-eastern portion of the site. The RAP concludes that *'if all the procedures in the RAP are sufficiently followed, the site can be made suitable for the proposed land use'*. The document has been reviewed by Council's Environmental Health Officer, who has advised that they are satisfied with the contents and conclusions of the RAP.

As such, in accordance with Clause 7(b) of the *SEPP No. 55 - Remediation of Land*, Council is satisfied that the land will be suitable, after remediation, for the proposed use. This is subject to compliance with recommended conditions of consent which requires site validation (clearance) prior to the commencement of subdivision works.

Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean River

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 -1997) (SREP 20) integrates planning with catchment management to protect the Hawkesbury-Nepean river system, requiring the impact of future land use to be considered in a regional context. The plan covers water quality and quantity, environmentally sensitive areas, riverine scenic quality, agriculture and urban and rural-residential development. It controls development that has the potential to impact on the river environment. The plan applies to all parts of the catchment in the Sydney region (15 local government areas, including Penrith), except for land covered by *Sydney Regional Environmental Plan No.11 - Penrith Lakes Scheme*. SREP 20 is supported by an Action Plan which includes actions necessary to improve existing conditions.

Stormwater treatment for this stage of the subdivision was broadly addressed in the report titled "*Stormwater Management Strategy Report - Stages 2 to 4*" prepared by J. Wyndham Prince (JWP) and dated 16 December 2016. This report detailed that two (2) detention basins (Basins "B" and "D") will manage stormwater runoff from Stages 2 to 4 of the development and allowed for Basin D to receive flows from Stages 2, 3 and 4 as well as the "future subdivision" (now recognised as Stage 7). This report and the associated MUSIC modelling was considered and approved under DA16/1166 (for Stages 2-4)

The application was accompanied by a review of the original Stormwater Management Strategy and additional MUSIC modelling to include and reflect the lot layout for Stage 7. The review was detailed in the document titled "*Caddens Road, Caddens Hill, Stage 7 Development Application - Certificate of Compliance*" prepared by J. Wyndham Prince and dated 22 January 2018. Results of the review confirm that the Stage 7 DA works are generally in accordance with the overall strategy (JWP, 2016) and comply with statutory requirements of Penrith City Council. The report details that the water quality treatments devices for the subdivision include the combination of rainwater tanks, gross pollutant traps (GPTs) and bio-retention rain gardens.

Council's Development Engineers and Environmental Waterways Team have reviewed the application and subject to recommended conditions relating to stormwater management and erosion and sediment controls and have no objection to the proposal.

Local Environmental Plan 2010 (Amendment 4)

Provision	Compliance
Clause 2.3 Permissibility	Complies - See discussion
Clause 2.3 Zone objectives	Complies
Clause 2.6 Subdivision - consent requirements	Complies
Clause 2.7 Demolition requires development consent	Complies
Clause 4.1 - Minimum subdivision lot size	Does not comply - See discussion
Clause 4.6 Exceptions to development standards	Complies - See discussion
Clause 5.9 Preservation of trees or vegetation	Complies - See discussion
Clause 5.10 Heritage conservation	Complies
Clause 7.1 Earthworks	Complies
Clause 7.6 Salinity	Complies
Clause 7.7 Servicing	Complies - See discussion

Clause 2.3 Permissibility

The subject site is zoned R1 General Residential under the provisions of Penrith Local Environmental Plan 2010. The proposed subdivision is permissible in the zone with Council consent.

Clause 4.1 - Minimum subdivision lot size

Clause 4.1(3) specifies that the size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the Lot Size Map in relation to that land. The Lot Size Map shows that the majority of the subject site is required to not be less than 450m². The remainder of the site has no minimum lot size or a minimum lot size of 600m², however no variation is proposed to those standards. A total of 13 lots out of the 46 lots do not comply with the 450m² minimum lot size representing 28% of the total lots. Non-compliant lot sizes range from 300m² to 437.5m², which represents variations ranging between 2.7% to 33.3%. The applicant has submitted a request under Clause 4.6 to vary this requirement. This is discussed later in the report under Clause 4.6 of the Penrith Local Environmental Plan 2010.

Clause 4.6 Exceptions to development standards

Clause 4.6(2) of the LEP specifies that consent may be granted for development even though the development would contravene a development standard imposed by the LEP, or any other environmental planning instrument. However, Clause 4.6(3) states that:

Development consent must not be granted for development that contravenes a development standard unless the consent authority has written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

- (a) that compliance with the development standard is unreasonable or unnecessary in the circumstance of the case, and*
- (b) there are sufficient environmental planning grounds to justify contravening the development standard.*

Further, Clause 4.6(4) states that:

Development consent must not be granted for development that contravenes a development standard unless:

(a) the consent authority is satisfied that:

- (i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
- (ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
- (b) the concurrence of the Secretary has been obtained.*

Clause 4.1(3) Minimum Subdivision Lot Size specifies that the size of any lot from a subdivision of land to which this clause applies is not be less than the minimum size shown on the Lot Size Map in relation to that land. The Lot Size Map sets out a minimum lot size of 450m² for the majority of the site. The remainder of the site has no minimum lot size or a minimum lot size of 600m², however no variation to those standards. A total of 13 lots out of the 46 lots do not comply with the 450m² minimum lot size representing 28% of the total lots. Non-compliant lot sizes range from 300m² to 437.5m², which equates to a departure of 2.7% to 33.3% to the 450m² minimum lot size control.

In accordance with Clause 4.6, the development application was lodged with a written request to vary the minimum lot size control of 450m². The Clause 4.6 variation submission has been prepared and responds to the case of *Four2Five Pty v Ashfield Council* [2015] NSWLEC 90 as well as the 'five part test' established in *Wehbe v Pittwater Council* [2007] NSWLEC 827. The applicant's response to the matters listed in Clause 4.6(3) and (4) are discussed below in turn:

The Development Standard is Unreasonable or Unnecessary

- *"The application represents Stage 7 of a master planned estate, where stages 1-6 have previously been approved and delivered. As part of developing a master plan response to the site, a key principle was responding to the substantial topography that exists across the site, by locating small lots on flatter areas and larger lots on steeper areas. The approach is continued in the current application by capitalising on limited opportunities to incorporate smaller lots where the topography is flatter. This approach ensures the lot sizes are compatible with the environmental capabilities of the land.*
- *The placement of the proposed smaller lots will not result in any unacceptable impacts on the amenity, or potential amenity, of neighbouring properties.*
- *The location of the proposed smaller lots is such that they will not impact on any potential natural or cultural features of the land.*
- *There would be no unreasonable increase in densities on the site as a result of supporting the*

variation. The proposal will contribute an appropriate dwelling yield to the dwelling yield targets for the precinct.

- *The documentation submitted with this application demonstrates that development consistent with the relevant development controls can be accommodated on those sites."*

Environmental Planning Grounds

- *"The proposal provides a diversity of lot sizes to respond to housing demand and needs within the community, therefore supporting social planning objectives.*
- *Excessive cut and fill, and retaining, is minimised through the appropriate location of smaller housing lots.*
- *The proposed development will continue to achieve an appropriate response to Section 1.2.2 of the Caddens DCP in that it will respond to the topographical constraints of the site, and the amenity (both current and future) will be maintained or enhanced as a result.*
- *No precedence would be created given this variation relates to the specific site characteristics that are unique to this development proposal."*

Objectives of the R1 General Residential Zone

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure that a high level of residential amenity is achieved and maintained.
- To ensure that new development reflects the desired future character and dwelling densities of the area.

"The proposed development is consistent with the objectives in that:

- *It will result in additional housing stock in the LGA that responds to the needs of the community.*
- *It provides a variety of lot sizes to facilitate a diversity of housing types and sizes, supporting different household types and sizes.*
- *The infrastructure and recreational needs of the wider area will be provided for - notably the applicant has separately entered into a Voluntary Planning Agreement with Penrith City Council to deliver approximately \$15 million in public benefits including significant open spaces and a major road upgrade.*
- *A high level of amenity will be provided through the open spaces being delivered and high quality streetscapes.*
- *The objectives of the DCP as they relate to desired future character and dwelling densities have been achieved."*

In response to Clause 4.6(4)(b), the NSW Department of Planning and Environments planning circular, *PS18-003 - Variations to development standards*, outlines Secretary's concurrence may be assumed for applications being considered by a local planning panel.

The applicant's Clause 4.6 variation request is considered to be well founded and is consistent with the aims of the policy. The objection has adequately addressed the matters prescribed in the LEP, and has demonstrated that full compliance with the minimum lot size requirement would be unreasonable and unnecessary in this circumstance.

The proposal still ensures compliance with the objectives of the zone as the proposed allotments can still accommodate suitable forms of residential housing. The applicant has submitted sufficient information to ensure that driveway locations provide suitable separation for on street parking and street tree planting with adequate allotment widths and depths to provide residential housing that meets the provisions of SEPP (Exempt and Complying Development) 2008 if complying development was pursued. It is also noted that the Stage 1 subdivision (DA15/0992) approved by way of consent orders through the NSW Land and Environment Court provided similar variations to the lot size requirements within the DCP, thereby ensuring that the current proposal is not out of keeping with the planned and approved character of the immediate locality. The proposed variation meets the objectives of the zone, provides a suitable response to the environmental capabilities of the land, establishes suitable capability for compliant residential housing and the submitted clause 4.6 variation request suitably responds to the established court principles outlined

above.

As a result the proposed variation and associated justification is considered to be reasonable and the variation to the lot size requirements in the DCP is supportable.

Clause 5.9 Preservation of trees or vegetation

Three (3) trees are located within the development site. Approval to remove these trees was granted under development consent DA16/1166. The landscape plan indicates that fifty-nine (59) street trees will be planted across the site compensating for this tree removal.

Clause 7.7 Servicing

Standard condition for obtaining a S73 Certificate from Sydney Water and documentary evidence from Endeavour Energy and a telecommunication provider is recommended to ensure services are available to support future development on the lots.

Section 79C(1)(a)(iii) The provisions of any development control plan

Development Control Plan 2014

Provision	Compliance
DCP Principles	Complies
C1 Site Planning and Design Principles	Complies
C2 Vegetation Management	Complies
C3 Water Management	Complies
C4 Land Management	Complies
C5 Waste Management	Complies
C6 Landscape Design	Complies
C7 Culture and Heritage	N/A
C8 Public Domain	N/A
C9 Advertising and Signage	N/A
C10 Transport, Access and Parking	Complies
C11 Subdivision	Complies
C12 Noise and Vibration	Complies
E1 Caddens controls	Complies - see Appendix - Development Control Plan Compliance

Section 79C(1)(a)(iv) The provisions of the regulations

The proposal does not contravene the *Environmental Planning and Assessment Regulations 2000*.

Section 79C(1)(b) The likely impacts of the development

Context and Setting

The proposed development forms Stage 7 of the Caddens Release Area. The subdivision layout and lot sizes have been designed to reflect the existing character of the Caddens Precinct. The lot interfacing with Caddens Road is larger and wider to provide a transition between the new urban release area and the rural landscape to the south. The application was accompanied by a building envelope plan demonstrating that the smaller lots are capable of accommodating a compliant dwelling. The subdivision allows for the future development of detached dwelling houses which is consistent with the requirements of the Caddens Road interface character area.

The extent of the earthworks (up to 5m of cut and fill) and retaining walls are consistent with the rest of the Caddens Release Area. The earthworks provide generally level building platforms and integrate with the surrounding ground levels. The proposal is compatible with the surrounding and adjacent land uses and will have no major impact on the amenity of the area.

Noise Impacts

The application was supported by a report titled '*Caddens - Central Bypass Road Traffic Noise - Stage 7*' prepared by Wilkinson Murray and dated 27 February 2018. The aim of the report was to determine the traffic noise impact associated with the Central Bypass Road (Road 1) and outline any required noise control measures. The assessment concludes that external noise levels at future residences along the bypass route are likely to exceed applicable open window noise criteria during the daytime peak hour, and as such, compliance with the internal windows closed criteria, as detailed in the DCP, is required. Architectural treatments have been recommended for installation, which will enable applicable internal criteria to be achieved. A condition of consent is recommended requiring a positive covenant to be created on the affected lots to ensure that dwellings on the affected lots be constructed to incorporate the required architecture treatment measures.

Access, Traffic and Parking

A Transport Management and Accessibility Plan (TMAP) was prepared for the Werrington Enterprise Living and Learning (WELL) Precinct (prepared by Maunsell Australia P/L and dated 10 May 2007). This included road network traffic modelling (in this case NETANAL) which determined appropriate road network improvements to support staged development. The TMAP informed the Penrith Development Control Plan (DCP) chapter *E1 Caddens*, with regard to traffic generated by the development and appropriate road network treatments including the proposed dwelling yield targets, street hierarchy, pedestrian and bicycle routes, public transport networks, Cadda Ridge Drive bypass / extension between O'Connell Lane and Caddens Road and intersection treatments. The proposed subdivision provides for a dwelling yield generally in accordance with the DCP and as such, the development is not considered to have adverse impact on the surrounding road network.

The TMAP also identified strategic closures of Caddens Road at two locations to allow efficient access through the Caddens release area – one at Werrington Creek and another east of Ulm Road. The closure at Werrington Creek was undertaken by Urban Growth NSW in 2017 being the major developer of all subdivision works west of Werrington Creek. Legacy Property are the major developer of all stages east of Ulm Road, including construction of the Cadda Ridge Drive bypass, and are required to provide the second permanent closure of Caddens Road. The proposed subdivision is the last stage to be developed by Legacy Property and so the closure must form part of this application. A condition of consent has been provided requiring a S138 Roads Act application to be lodged with and approved by Council for the closure works prior the issue of a Construction Certificate.

The application was supported by a Stage 2 Road Safety Audit, prepared by Transport & Urban Planning P/L and dated 28 June 2018. This document indicated that the extension of the existing Weema Street carriageway to the east (known as Road 18), results in a design that does not conform with the sight distance requirements over the resulting crest at the intersection with Road 19. The report details two possible solutions including slowing vehicles approaching the crest (by installing warning signs, speed humps or reduced speed limits) or by installing a concrete medium to restrict movements at the intersection to left in/left out only. Council's Development Engineer and Traffic Engineer have reviewed both options and prefer the installation of a central medium. A condition of consent has been included requiring that detailed design requirements for the central medium be provided prior to the issue of a Construction Certificate.

Bushfire

The small portion along the southern boundary of the site is mapped as bushfire prone land. As such, the application was supported by a Bushfire Protection Assessment, prepared by EcoLogical and dated 25 October 2017. This assessment identifies that the grassland on the southern side of Caddens Road as a potential fire hazard. The report recommends that dwellings within 50 metres of the grassland be constructed to a 12.5 bushfire attack level (BAL). This requirement only impacts on ten (10) of the proposed lots (lots 721-727 & 739-741). To ensure that dwellings are constructed to the correct BAL level and future purchasers are aware of these construction requirements, it is recommended that a condition of consent be included requiring that affected lots have a positive covenant registered against them in accordance with the Bushfire Protection Assessment.

The application was referred to the Rural Fire Service (RFS), and a conditional bushfire safety authority was

issued. Conditions recommended by the RFS have been applied in the conditions of consent.

Section 79C(1)(c)The suitability of the site for the development

The subject site is zoned R1 General Residential and the layout of the subdivision and its location is within close proximity to services and amenities such as Penrith city centre, public transport, educational establishments and recreation. The proposed development is compatible with surrounding and adjoining land uses, therefore Council can be satisfied that the site is suitable for the proposed development.

Section 79C(1)(d) Any Submissions

Community Consultation

In accordance with Clause 4.4 of Appendix F4 of Penrith Development Control Plan 2014, the proposed development was notified to nearby and adjoining residents. Council notified one hundred and fifty-two (152) residences in the area and the exhibition period was between 1 December 2017 and 31 January 2018. Council has received one (1) submission in response.

The application was advertised on 30 November 2017 with the exhibition period between 1 December 2017 and 31 January 2018.

Submissions

The following issues were raised in the submissions received and have formed part of the assessment.

Issue Raised	Comments
<i>Development will result in red dust causing a nuisance to the surrounding properties.</i>	<i>It is acknowledged that the proposed works may generate dust, however a condition of consent is recommended to ensure that the dust suppression techniques are employed during demolition and earthworks to reduce any potential nuisances to surrounding properties.</i>

Referrals

The application was referred to the following stakeholders and their comments have formed part of the assessment:

Referral Body	Comments Received
Development Engineer	No objections - subject to conditions
Environmental - Environmental management	No objections - subject to conditions
Environmental - Waterways	No objections - subject to conditions
Traffic Engineer	No objection

Section 79C(1)(e)The public interest

The proposed development has addressed the requirements of the relevant planning instruments and development controls including the objectives of the zone. The proposed development has demonstrated that the site is suitable for the proposed development. The proposal promotes the residential subdivision of land to accommodate the growth predicted in the NSW Governments metropolitan strategy, *A Plan for Growing Sydney*. In addressing the above, Council is satisfied that the proposal is in the interest of the public.

Section 94 - Developer Contributions Plans

The following Section 94 plans apply to the site:

- Section 94 - District Open Space Facilities
- Section 94 - Cultural Facilities
- Section 94 - Werrington Enterprise Living and Learning (WELL) Precinct

Pursuant to Section 9.1 of the *Environmental Planning and Assessment Act 1979* and in accordance with the Ministerial Direction dated 15 September 2010, the consent authority, being Council, cannot impose a consent requiring payment of a monetary contribution for the subdivision of land exceeding \$30,000 for each lot authorised by the consent. Therefore, a \$30,000 contribution is required for each lot to be created from the development.

It is noted that a Voluntary Planning Agreement has been created which covers Stages 1-6 and opportunities exist to incorporate Stage 7 into that agreement. The recommended conditions of consent reflect this potential.

Conclusion

In assessing this application against the relevant environmental planning policies, being Penrith LEP 2010, SREP 20, SEPP 55 and Penrith DCP 2014, the proposal satisfies the aims, objectives and provisions of these policies. The site is suitable for the proposed development, the proposal is in the public interest, and there is unlikely to be negative impacts arising from the proposed development. Therefore, the application is worthy of support, subject to recommended conditions.

Recommendation

1. That the submitted variation to a development standard under Clause 4.6 of the standard instrument be supported.
2. That those making submissions are notified of the determination.
3. That DA17/1157 for the demolition of existing structures and torrens title subdivision x 48 residential lots and associated civil works, landscaping and public roads at 20 Weena Street, Caddens, be approved subject to the following conditions.

CONDITIONS

General

1 [A001](#)

The development must be implemented substantially in accordance with the following plans stamped approved by Council, the application form and any supporting information received with the application, except as may be amended in red on the approved plans and by the following conditions.

Drawing Title	Drawing Reference	Prepared By	Dated
Subdivision Plan	20467-7C	Vince Morgan Surveyors	16/06/2018
Landscape Plan	2517024	Place Design Group	March 2018
Civil Plans	110358/DA700-716	J. Wyndham Prince	4/07/2018

2 [A037 - POSITIVE COVENANTS](#)

A 'positive covenant' shall be registered over all affected lots identified within the *Bushfire Protection Assessment - Proposed Subdivision 191-205 Caddens Road, Orchard Hills*, prepared by Ecological and dated 25/10/2017. The covenant will require BAL Construction levels in accordance with this report unless otherwise agreed to by Council by way of an independent Bushfire Assessment Report.

3 [A044 - Compliance with NSW Rural Fire Service conditions of consent](#)

The conditions imposed by the NSW Rural Fire Service in the Integrated Development consent and in the Bush Fire Safety authority for the said development are to be completed prior to the issue of a Subdivision Certificate.

4 [A046 - Obtain Construction Certificate before commencement of works](#)

A **Construction Certificate** shall be obtained prior to commencement of any works.

Demolition

5 [B002 - AS FOR DEMOLITION AND DISPOSAL TO APPROVED LANDFILL SITE](#)

All demolition works are to be conducted in accordance with the provisions of AS 2601-1991 "The Demolition of Structures". **Prior to demolition**, all services shall be suitably disconnected and capped off or sealed to the satisfaction of the relevant service authority requirements.

All demolition and excavated material shall be disposed of at a Council approved site or waste facility. Details of the proposed disposal location(s) of all excavated material from the development site shall be provided to the Principal Certifying Authority **prior to commencement of demolition**.

6 [B003 - ASBESTOS](#)

You should read Council's Fact Sheet titled "Handling and Disposal of Fibrous Cement Products" **before any demolition works commence on the site**.

Prior to commencement of demolition works on site, a portaloo with appropriate washing facilities shall be located on the site and the Principal Certifying Authority is to be satisfied that:

- Measures are in place so as to comply with the WorkCover Authority's "Short Guide to Working with Asbestos Cement" and
- The person employed to undertake the works is a licensed asbestos removal contractor and is holder of a current WorkCover Asbestos Licence.

Any demolition works involving the removal of all asbestos shall only be carried out by a licensed asbestos removal contractor who has a current WorkCover Asbestos Licence.

All asbestos laden waste, including asbestos cement flat and corrugated sheeting must be disposed of at a tipping facility licensed by the Environmental Protection Authority to receive asbestos wastes.

7 B006 - Hours of work

All remediation, demolition and construction works that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties, are restricted to the following hours in accordance with the NSW Department of Environment and Climate Change's "Interim Construction Noise Guideline" 2009: □

- Mondays to Fridays, 7am to 6pm □
- Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises),
- otherwise 8am to 1pm □
- No work is permitted on Sundays and Public Holidays.

In the event that the works relates to works inside the building and does not involve external walls or the roof, and does not involve the use of equipment that emits noise, then the demolition [and construction] works are not restricted to the hours stated above. The provisions of the Protection of the Environment Operations Act, 1997 in regulating offensive noise also apply to all remediation, demolition and construction works.

Environmental Matters

8 D: Special BLANK

No work associated with this development is to be undertaken until such time as a NSW Environment Protection Authority Accredited Site Auditor has issued a Site Audit Statement for the area, it has been deemed suitable for its intended use, and the Site Audit Statement has been submitted to Council.

9 D: Remediation Condition 1

Site remediation works shall be carried out generally in accordance with *the Environmental Site Assessment prepared by JBS&G (dated: 28 August 2017, ref: 54023/109960 Rev 0) and the Remedial Action Plan [191/ 205 Caddens Road, Caddens, NSW Prepared by JBS&G (dated: 30 August 2018, reference: 54023 / 117622)*, as well as the Penrith Development Control Plan, the applicable NSW Environment Protection Authority Guidelines and the National Environment Protection (Assessment of Site Contamination) Measure (1999) [NEPM 2013].

On completion of the site remediation works, the following documentation is to be submitted for approval to the Principal Certifying Authority and Penrith City Council, if Council is not the Principal Certifying Authority:

- Written notification that the site remediation works have been completed is to be submitted **within 30 days of the said works having been completed.**
 - A Validation Report, prepared by an appropriately qualified person as defined in Penrith Development Control Plan, is to be submitted

within 60 days of the said works having been completed and before any building work can commence on the remediated site. The report shall certify that the remediation works have been carried out in accordance with the approved Remedial Action Plan, relevant NSW Environment Protection Authority requirements, NEPM 2013 and Penrith Development Control Plan.

10 D: Special BLANK

The recommendations outlined in the Remedial Action Plan for 191-205 Caddens Road, Caddens, NSW prepared by *JBS&G (dated: 30 August 2018, reference: 54023 - 117622)* are to be implemented and complied with at all times

11 D: Special BLANK

Contaminated topsoil shall not be mixed with uncontaminated underlying natural soils

12 D: Special BLANK

All excavated material and other wastes generated as a result of the development are to be classified and reused or disposed of in accordance with the Council approved Remedial Action Plan prepared by *JBS&G (dated: 30 August 2018, reference: 54023 / 117622)*.

All excavated waste, including contaminated soil, is to be lawfully transported and disposed of at a lawful waste facility. Suitable documentation is to be provided to Council demonstrating the lawful transportation and disposal of the contaminated soil. No contaminated soil is to be retained on site. This information may be included in the Validation Report

13 D: Special BLANK

Offensive odours are not to be emitted from the site. Vapours, fumes, gases, particles or any other substance that are considered to be harmful to human health or the environment or impact unreasonably on a person outside of the premises are not to be emitted from the site.

14 **D: Special BLANK**

Prior to the Issue of a Construction Certificate, a site plan is to be submitted to Council for approval that shows key site locations during the remediation works, including but not limited to the proposed locations of vehicle and personnel entry/exit, any unloading area, any decontamination zones and those areas that may be used for stockpiling of contaminated or other materials. *This plan is also to show all sediment and erosion control measures that will be installed.*

15 **D:Noise**

Prior to the issue of the Subdivision Certificate, a positive covenant is to be registered against Lots 701, 702, 703, 704, 705 of Stage 7 of the Caddens Hill Precinct, as shown in 'Caddens Hill Stage 7 Engineering Plan' prepared by J. Wyndham Prince (dated: 04/07/2018, Plan number: 110358/DA702 Issue F) that refers to Caddens - Central Bypass Road Traffic Noise Assessment - Stage 7 prepared by Wilkinson Murray dated 27 February 2018 (Ref. No. MW 270218 TrafficS7). The covenant is also to: □

- stipulate the noise criteria as outlined in the above document □
- provide advice on the mechanisms required for each lot to meet the noise criteria, as outlined in relevant section of document; and
- ensure that the noise criteria be achieved through the implementation of the recommendations of the Caddens - Central Bypass Road Traffic Noise Assessment - Stage 7 prepared by Wilkinson Murray dated 27 February 2018 (Ref. No. MW 270218 TrafficS7).

16 **D001 - Implement approved sediment& erosion control measures**

Erosion and sediment control measures shall be installed prior to the commencement of works on site including approved clearing of site vegetation. The erosion and sediment control measures are to be maintained in accordance with the approved erosion and sediment control plan(s) for the development and Landcom's "Managing Urban Stormwater: Soils and Construction" 2004.

{Note: Visit www.urbangrowth.nsw.gov.au to obtain a copy of the publication.}

The approved sediment and erosion control measures are to be installed prior to and maintained throughout the construction phase of the development until the land, that was subject to the works, has been stabilised and grass cover established

17 **D004 - Dust**

Dust suppression techniques are to be employed during demolition and earthworks to reduce any potential nuisances to surrounding properties.

18 **D005 - Mud/Soil**

Mud and soil from vehicular movements to and from the site must not be deposited on the road.

19 **D009 - Covering of waste storage area**

All waste materials stored on-site are to be contained within a designated area such as a waste bay or bin to ensure that no waste materials are allowed to enter the stormwater system or neighbouring properties. The designated waste storage areas shall provide at least two waste bays / bins so as to allow for the separation of wastes, and are to be fully enclosed when the site is unattended.

20 **D010 – Appropriate disposal of excavated or other waste**

All excavated material and other wastes generated as a result of the development are to be re-used, recycled or disposed of in accordance with the approved waste management plan.

Waste materials not specified in the approved waste management plan are to be disposed of at a lawful waste management facility. Where the disposal location or waste materials have not been identified in the waste management plan, details shall be provided to the Certifying Authority as part of the waste management documentation accompanying the Construction Certificate application.

All receipts and supporting documentation must be retained in order to verify lawful disposal of materials and are to be made available to Penrith City Council on request.

21 **D06A – Approval for bulk earthworks/major filling operations (Use for bulk earthworks/ major filling operations)**

No fill material shall be imported to the site until such time as a Validation Certificate (with a copy of any report forming the basis for the validation) for the fill material has been submitted to Council. The Validation Certificate shall:

- state the legal property description of the fill material source site,
- be prepared by an appropriately qualified person (as defined in Penrith Development Control Plan) with consideration of all relevant guidelines (e.g. EPA, ANZECC, NH&MRC), standards, planning instruments and legislation,
- clearly indicate the legal property description of the fill material source site,
- provide details of the volume of fill material to be used in the filling operations,
- provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
- (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment.

An appropriately qualified person/s (as defined in the Penrith Land Development Control Plan) shall:

- Supervise the filling works,
- (On completion of filling works) carry out an independent review of all documentation relating to the filling of the site, and shall submit a review findings report to Council and any Principal Certifying Authority,
- Certify by way of a Compliance Certificate or other written documentation that fill materials have been placed on the site in accordance with all conditions of this consent and that the site will not pose an unacceptable risk to human health or the environment. A copy of the Compliance Certificate or other documentation shall be submitted to Council and any Principal Certifying Authority.

The contact details of any appropriately qualified person/s engaged for the works shall be provided with the Notice of Commencement.

If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances the works shall be carried out prior to any further approved works.

{Note: Penrith Development Control Plan defines an appropriately qualified person as "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soils science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance."}

22 **D Special BLANK**

An appropriately qualified person/s (as defined in the Penrith City Council Contaminated Land Development Control Plan) shall:

1. Supervise the remediation works.
2. Supply Council with a copy of any relevant documentation for further testing carried out during the remediation works.
3. Address off site impacts and proposed management strategies where relevant.
5. (after completion of works) Certify by way of a Compliance Certificate or other written documentation that remediation works have been carried out in accordance with all conditions of this consent and that the site will not pose an unacceptable risk to human health or the environment (this information can be included in the Validation Report). A copy of the Compliance Certificate or other written documentation is to be submitted to the Principal Certifying Authority (PCA) and Penrith City Council if it is not the PCA.

The contact details of any appropriately qualified person/s engaged for the works shall be **provided with the notice of commencement**.

{Note: Penrith Contaminated Land Development Control Plan defines an appropriately qualified person as "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance."}

23 D Special BLANK

An Unexpected Finds Protocol (the Protocol) is to be developed by an appropriately qualified environmental consultant. **Prior to the issue of the Construction Certificate**, the Protocol is to be submitted to Council for approval. If Council is not the certifying authority for this development, the report is required to be provided to Penrith City Council for approval.

The Protocol is to address, at minimum, the management of any contamination found on the site during the demolition, remediation, excavation and construction phases of the development, including at minimum, contaminated soils, groundwater, buried building materials, asbestos, odour and staining.

The above Protocol is to be complied with at all times during all stages of the development.

24 D Special BLANK

Should any "unexpected finds" occur during site excavation and earthworks including, but not limited to, the identification/finding of contaminated soils, buried building materials, asbestos, odour and/or staining, works are to cease immediately and Penrith City Council is to be notified. Any such "unexpected finds" shall be addressed by an appropriately qualified environmental consultant.

All remediation works within the Penrith Local Government Area are considered to be Category 1 works under State Environmental Planning Policy 55-Remediation of Land. Should any contamination be found during development works and should remediation works be required, development consent is to be sought from Penrith City Council before the remediation works commence.

Utility Services

25 G001 - Installation of services and Service Clearances (subdivision)

All services (water, sewer, electricity, telephone and gas) are to be installed within the proposed public roads before final inspection of the engineering works.

Prior to the release of the linen plan, the following service authority clearances shall be obtained:

- a Section 73 Compliance Certificate under the Sydney Water Act 1994 shall be obtained from Sydney Water. This is required prior to the issue of the Subdivision Certificate and
- a letter from Endeavour Energy stating that satisfactory arrangements have been made for electricity supply to all proposed allotments in the subdivision, including any necessary easements; and
- a letter from an approved telecommunications service provider that satisfactory arrangements have been made for underground telephone services to all proposed allotments in the subdivision, including any necessary easements.

These clearances are to be submitted to the Principal Certifying Authority.

Construction

26 H041 - Hours of work (other devt)

Subdivision works that are carried out in accordance with an approved consent that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:

- Mondays to Fridays, 7am to 6pm
- Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm
- No work is permitted on Sundays and Public Holidays.

Other construction works carried out inside a building/tenancy and do not involve the use of equipment that emits noise are not restricted to the construction hours stated above.

The provisions of the *Protection of the Environment Operations Act, 1997* in regulating offensive noise also apply to all construction works.

Engineering

27 **K101 - Works at no cost to Council**

All roadworks, stormwater drainage works, associated civil works and dedications, required to effect the consented development shall be undertaken at no cost to Penrith City Council.

28 **K201 - Infrastructure Bond**

An Infrastructure Restoration Bond is to be lodged with Penrith City Council for development involving works around Penrith City Council's Public Infrastructure Assets. The bond is to be lodged with Penrith City Council prior to commencement of any works on site or prior to the issue of any Construction Certificate, whichever occurs first. The bond and applicable fees are in accordance with Council's adopted Fees and Charges.

An application form together with an information sheet and conditions are available on Council's website.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

29 **K202 - S138 Roads Act – Works and Structures - Minor Works in the public road DRIVEWAYS ROAD OPENINGS**

Prior to the issue of any Construction Certificate, a Section 138 Roads Act applications, including payment of application and inspection fees, shall be lodged and approved by Penrith City Council (being the Roads Authority for any works required in a public road). These works may include but are not limited to the following:

- a) Vehicular crossings (including kerb reinstatement of redundant vehicular crossings)
- b) Concrete footpaths and or cycleways
- c) Road opening for utilities and stormwater (including stormwater connection to Penrith City Council roads and other Penrith City Council owned drainage)
- d) Road occupancy or road closures
- e) The placement of hoardings, structures, containers, waster skips, signs etc. in the road reserve
- f) Temporary construction access

All works shall be carried out in accordance with the Roads Act approval, the development consent, including the stamped approved plans, and Penrith City Council's specifications, guidelines and best engineering practice.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

Note:

- a) Where Penrith City Council is the Certifying Authority for the development, the Roads Act approval for the above works may be issued concurrently with the Construction Certificate.
- b) Separate approvals may also be required from the Roads and Maritime Services for classified roads.
- c) All works associated with the Roads Act approval must be completed prior to the issue of any Occupation Certificate or Subdivision Certificate as applicable.
- d) On completion of any awning over the road reserve, a certificate from a practising structural engineer certifying the structural adequacy of the awning is to be submitted to Council before Council will inspect the works and issue its final approval under the Roads Act.

30 **K203 - S138 Roads Act – Works and structures - Roadworks requiring approval of civil drawings. CIVIL CONSTRUCTION IN THE ROAD RESERVE**

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that a Section 138 Roads Act application, including payment of application and inspection fees, has been lodged with, and approved by Penrith City Council (being the Roads Authority under the Roads Act), for provision of the permanent closure of Caddens Road, east of Ulm Road.

Engineering plans are to be prepared in accordance with the development consent, Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments, Engineering Construction Specification for Civil Works, Austroads Guidelines, and best engineering practice.

Contact Penrith City Council's Development Engineering Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

Note:

- a) Where Penrith City Council is the Certifying Authority for the development the Roads Act approval for the above works may be issued concurrently with the Construction Certificate.
- b) Separate approvals may also be required from the Roads and Maritime Services for classified roads.
- c) All works associated with the Roads Act approval must be completed prior to the issue of any Occupation Certificate or Subdivision Certificate as applicable.

31 **K206 - Construction Certificate for Subdivision Works**

A Construction Certificate is to be approved by the Certifying Authority for the provision of engineering works (road, drainage, earthworks, subdivision works).

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that engineering plans are consistent with the stamped approved concept plans prepared by J. Wyndham Prince, drawing number 110358/DA700 to 110358/DA716, up to and including revision F, dated 4/07/2018 and 16/07/2018, and that all subdivision works have been designed in accordance with the development consent, Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments, Engineering Construction Specification for Civil Works, Austroads Guidelines and best engineering practice.

The subdivision works may include but are not limited to the following:

- Public and private roads
- Storm water management (quantity and quality)
- Interallotment drainage
- Private access driveways
- Sediment and erosion control measures
- Flood control measures
- Overland flow paths
- Traffic facilities
- Earthworks
- Bridges, culverts, retaining walls and other structures
- Landscaping and embellishment works

The Construction Certificate must be supported by engineering plans, calculations, specifications and any certification relied upon.

Note:

- a) Council's Development Engineering Department can provide this service. Contact Penrith City Council's Development Engineering Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

32 K207 - Road design criteria table

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that the proposed roads have been designed in accordance with Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments, Engineering Construction Specification for Civil Works and the following criteria:

Road No.	Road Reserve Width	Carriageway Width	Verge Width	Footpath Width	ESA
Road 18 (Ch 0.00 - Ch 212)	16.0m	8.0m	4.0m (both sides)	1.5m (both sides)	5 x 10 ⁴
Road 19 (Ch 146 - Ch 290)	14.5m	8	2.7m (southern side) 3.8m (northern side)	1.5m (northern side only)	5 x 10 ⁴
Road 19 (Ch 308 - End)	16.0m	8.0m	4.0m (both sides)	1.5m (both sides)	5 x 10 ⁴

A copy of the pavement design prepared and certified by a suitably qualified geotechnical engineer must accompany the application for Construction Certificate.

33 K208 - Road Safety Audit

A Stage 3 (detailed design) Road Safety Audit (RSA) shall be undertaken in accordance with Austroads Guide to Road Safety Part 6: Road Safety Audit on the proposed roadworks by an accredited auditor who is independent of the design consultant. A copy of the RSA shall accompany the design plans submitted with the Construction Certificate or Roads Act application.

Prior to the issue of the Construction Certificate or Section 138 Roads Act approval, the Certifying Authority shall ensure that the recommendations of the RSA have been considered in the final design, through review of the Road Safety Audit Checklist, including Findings, Recommendations and Corrective Actions.

A copy of the Road Safety Audit shall be submitted to Penrith City Council by the applicant or Certifying Authority for information purposes.

34 K210 - Stormwater Management

The stormwater management system shall be provided generally in accordance with the concept plans lodged for development approval, prepared by J. Wyndham Prince, drawing number 110358/DA707 and 110358/DA708, revision F, dated 4/07/2018.

Engineering plans and supporting calculations for the stormwater management systems are to be prepared by a suitably qualified person and shall accompany the application for a Construction Certificate.

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that the stormwater management system has been designed in accordance with Penrith City Council's Stormwater Drainage for Building Developments and Water Sensitive Urban Design (WSUD) policies.

35 K222 - Access, Car Parking and Manoeuvring – General

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that vehicular access, circulation, manoeuvring, pedestrian and parking areas associated with the subject development are in accordance with AS 2890.1, AS2890.2, AS2890.6 and Penrith City Council's Development Control Plan.

36 **K225 - Performance Bond**

Prior to the issue of a Roads Act Approval, a Performance Bond is to be lodged with Penrith City Council for the permanent closure of Caddens Road, east of Ulm Road.

The value of the bond shall be determined in accordance with Penrith City Council's adopted Fees and Charges.

Note:

Contact Penrith City Council's Development Engineering Department on (02) 4732 7777 for further information relating to bond requirements.

37 **K301 - Sediment & Erosion Control**

Prior to commencement of any works associated with the development, sediment and erosion control measures shall be installed in accordance with the approved Construction Certificate and to ensure compliance with the Protection of the Environment Operations Act 1997 and Managing Urban Stormwater series from the Office of Environment and Heritage.

The erosion and sediment control measures shall remain in place and be maintained until all disturbed areas have been rehabilitated and stabilised.

38 **K303 - Matters to be addressed prior to commencement of Subdivision Works**

Work on the subdivision shall not commence until:

- a Construction Certificate (if required) has been issued,
- a Principal Certifying Authority has been appointed for the project, and
- any other matters prescribed in the development consent for the subdivision and the Environmental Planning and Assessment Act and Regulation have been complied with.

A Notice of Commencement of works is to be submitted to Penrith City Council five (5) days prior to commencement of engineering works or clearing associated with the subdivision.

39 **K402 - Street Lighting**

Street lighting is to be provided for all new and existing streets within the proposed subdivision to Penrith City Council's standards.

40 **K403 - Major Filling/ Earthworks**

All earthworks shall be undertaken in accordance with AS 3798 and Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments and Engineering Construction Specification for Civil Works.

The level of testing shall be determined by the Geotechnical Testing Authority/ Superintendent in consultation with the Principal Certifying Authority.

41 **K404 - Soil testing - Subdivisions**

Soil Testing is to be carried out to enable each lot to be classified according to AS2870 "Residential Slabs and Footings". The results shall be submitted to Penrith City Council prior to the issue of the Subdivision Certificate.

42 **K405 - Turf to Verge**

Upon completion of all works in the road reserve, all verge areas fronting and within the development are to be turfed. The turf shall extend from the back of kerb to the property boundary, with the exception of concrete footpaths, service lids or other infrastructure which is not to be turfed over. Turf laid up to concrete footpaths, service lids or other infrastructure shall finish flush with the edge.

43 **K501 - Penrith City Council clearance – Roads Act/ Local Government Act**

Prior to the issue of any Occupation Certificate, the Principal Certifying Authority shall ensure that all works associated with a S138 Roads Act approval or S68 Local Government Act approval have been inspected and signed off by Penrith City Council.

44 **K502 - Completion of subdivision works**

Prior to the issue of a Subdivision Certificate, the Principal Certifying Authority shall ensure that all subdivision works required by this consent have been satisfactorily completed or that suitable arrangements have been made with Penrith City Council for any outstanding works.

45 **K509 - Linemarking & Signage**

Prior to the issue of a Subdivision Certificate, and installation of regulatory / advisory linemarking and signage, plans are to be lodged with Penrith City Council and approved by the Local Traffic Committee.

Notes:

- a) Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for further information on this process.
- b) Allow eight (8) weeks for approval by the Local Traffic Committee.
- c) Applicable fees are indicated in Council's adopted Fees and Charges.

46 **K512 - Outstanding Works Bond for Stormwater Management Systems**

Prior to the issue of the Subdivision Certificate, an Outstanding Works Bond for the construction, landscaping and implementation of the bioretention basin is to be lodged with Penrith City Council.

The Outstanding Works bond will be refunded once the stormwater management system works have been completed to Council's satisfaction and a separate Maintenance Bond has been lodged with Penrith City Council.

The value of the bonds shall be determined in accordance with Penrith City Council's Bond Policy. The bond will be administered in accordance with this policy.

Note:

1. Contact Council's **Engineering Services Department** on 4732 7777 for further information relating to bond requirements.

47 **K512 - Street Naming**

Prior to the issue of a Subdivision Certificate, an application for proposed street names must be lodged with and approved by Penrith City Council and the signs erected on-site.

The proposed names must be in accordance with Penrith City Council's Street Naming Policy.

Notes:

- a) Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for advice regarding the application process and applicable fees.
- b) Allow eight (8) weeks for notification, advertising and approval.

48 [K513 - Bond for final wearing course](#)

Prior to the issue of the Subdivision Certificate, a bond for the final layer of outstanding asphalt works (AC Bond) is to be lodged with Penrith City Council.

The final layer of asphalt on all roads shall not to be placed without the written consent of Penrith City Council (consent will generally be provided when 80% of the housing within the subdivision has been completed).

The value of the bond shall be determined in accordance with Penrith City Council's adopted Fees and Charges.

Note:

- a) Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for further information relating to bond requirements.

49 [K514 - Subdivision Compliance documentation](#)

Prior to the issue of a Subdivision Certificate, the following compliance documentation shall be submitted to the Principal Certifying Authority. A copy of the following documentation shall be provided to Council where Council is not the Principal Certifying Authority:

- a) Work as Executed (WAE) drawings of all civil works. The WAE drawings shall be marked in red on copies of the stamped Construction Certificate drawings signed, certified and dated by a registered surveyor or the design engineer. The Work as Executed drawings shall be prepared in accordance with Council's Engineering Construction Specification for Civil Works.
- b) The WAE drawings shall clearly indicate the 1% Annual Exceedence Probability flood lines (local and mainstream flooding).
- c) The WAE drawings shall be accompanied by plans indicating the depth of fill for the entire development site. The plans must show, by various shadings or cross hatchings, the depth of any fill within 0.3m depth ranges.
- d) CCTV footage in DVD format to Council's requirements and a report in "SEWRAT" format for all drainage within future public roads and public land. Any damage that is identified is to be rectified in consultation with Penrith City Council.
- e) A copy of all documentation, reports and manuals required by Section 2.6 of Penrith City Council's WSUD Technical Guidelines for handover of stormwater management facilities to Council.
- f) Surveyor's Certificate certifying that all pipes and services are located wholly within the property or within appropriate easements and that no services encroach boundaries.
- g) Documentation for all road pavement materials used demonstrating compliance with Council's Engineering Construction Specification for Civil Works.
- h) A Geotechnical Report certifying that all earthworks and road formation have been completed in accordance with AS3798 and Council's Design Guidelines and Construction specifications. The report shall include:
 - Compaction reports for road pavement construction
 - Compaction reports for bulk earthworks and lot regrading
 - Soil classification for all residential lots
 - Statement of Compliance
- i) Structural Engineer's construction certification of all structures
- j) A slope junction plan for interallotment drainage lines indicating distances to boundaries and depths.

50 **K515 - Maintenance Bond**

Prior to the issue of a Subdivision Certificate, a Maintenance Bond is to be lodged with Penrith City Council for all subdivision works including, the permanent closure of Caddens Road, east of Ulm Road.

The value of the bond shall be determined in accordance with Penrith City Council's adopted Fees and Charges.

Note:

- a) Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for further information relating to bond requirements.

51 **K516 - Subdivision Compliance documentation**

Prior to the issue of a Subdivision Certificate, the following compliance documentation shall be submitted to the Principal Certifying Authority. A copy of the following documentation shall be provided to Penrith City Council where Penrith City Council is not the Principal Certifying Authority:

- a) Works As Executed (WAE) drawings of all civil works. The WAE drawings shall be marked in red on copies of the stamped Construction Certificate drawings signed, certified and dated by a registered surveyor or the design engineer. The WAE drawings shall be prepared in accordance with Penrith City Council's Engineering Construction Specification for Civil Works.
- b) The WAE drawings shall clearly indicate the 1% Annual Exceedence Probability flood lines (local and mainstream flooding), if applicable.
- c) The WAE drawings shall be accompanied by plans indicating the depth of cut / fill for the entire development site. The survey information is required to show surface levels and site contours at 0.5m intervals. All levels are to be shown to AHD.
- d) CCTV footage in DVD format to Penrith City Council's requirements and a report in "SEWRAT" format for all drainage as identified as Council's future assets. Any damage that is identified is to be rectified in consultation with Penrith City Council.
- e) A copy of all documentation, reports and manuals required by Section 2.6 of Penrith City Council's WSUD Technical Guidelines for handover of stormwater management facilities to Penrith City Council.
- f) Surveyor's Certificate certifying that all pipes and services are located wholly within the property or within appropriate easements and that no services encroach boundaries, private or public lands.
- g) Documentation for all road pavement materials used demonstrating compliance with Penrith City Council's Engineering Construction Specification for Civil Works.
- h) A Geotechnical Report certifying that all earthworks and road formation have been completed in accordance with AS3798 and Penrith City Council's Design Guidelines and Construction specifications. The report shall include:
 - Compaction reports for road pavement construction
 - Compaction reports for bulk earthworks and lot regarding.
 - Soil classification for all residential lots
 - Statement of Compliance
- i) Structural Engineer's construction certification of all structures
- j) A slope junction plan for interallotment drainage lines indicating distances to boundaries and depths.
- k) Soil testing for each lot to be classified according to AS2870 "Residential Slabs and Footings".

52 K - Waterways - Storm water Management – sediment basin

The bio-retention basin on Lot 754 DP 1180111 is to be maintained by the proponent as a sediment basin until 80% of housing construction is completed and retain in the ownership of the proponent. After 80% of housing has been constructed the sediment basin is to be decommissioned and the bio-retention basin completed. After completion of the bio-retention basin has occurred, the proponent is to maintain the bio-retention basin for a period of 3 years after which time handover is permitted.

53 K - Waterways - Stormwater Management – GPT Design

Prior to the issue of a Construction Certificate, the following information is to be submitted to Council for review

- Council should be given an opportunity to review and approve the proposed GPT so that considerations of the life cycle costs can be made. The proponent should provide Council with a detailed operation and maintenance manual which includes estimated costing
- Detailed construction plans including all calculations, drawings and designs which are consistent with the design parameters used in the modelling and approved concept designs from the Development Application

54 K Special Condition BLANK

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that all common drainage lines are located outside the zone of influence of all retaining wall structures. Where a common drainage line passes under a retaining wall, the footings of the retaining wall shall be founded on piers that extend below the invert of the common drainage line trench. The piers shall be located outside any drainage easements.

55 K Special Condition BLANK

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that the north-western intersection of Road 18 and Road 19 complies with the following requirements:

1. The central median shall be a minimum width of 0.6m
2. Keep Left (R2-3AA) signage shall be provided at both ends of the central median
3. The median island shall be finished with a white non-slip paint
4. The intersection shall be designed to ensure 0.5m clearance for Council's waste collection vehicles from the edge of vehicle to the face of any kerb or median island
5. Vehicles shall be able to exit Lots 706-710 without the need to make more than one reversing manoeuvre, with 0.5m clearance to any kerb face or median island, based on swept paths for a B85 vehicle

Landscaping

56 L001 - General

All landscape works are to be constructed in accordance with the stamped approved plan landscape plan, 2517024, prepared by Place Design Group and dated March 2018 and Penrith Development Control Plan 2014.

Landscaping shall be maintained:

- in accordance with the approved plan, and
- in a healthy state, and in perpetuity by the existing or future owners and occupiers of the property.

If any of the vegetation comprising that landscaping dies or is removed, it is to be replaced with vegetation of the same species and, to the greatest extent practicable, the same maturity as the vegetation which died or was removed.

57 L002 - Landscape construction

The approved landscaping for the site must be constructed by a suitably qualified and experienced landscape professional.

58 L006 - Aust Standard

All landscape works are to meet industry best practice and the following relevant Australian Standards:

- AS 4419 Soils for Landscaping and Garden Use,
- AS 4454 Composts, Soil Conditioners and Mulches, and
- AS 4373 Pruning of Amenity Trees.

Subdivision

59 **M001 - Prior to subdivision work (Applies to subdivision except strata)**

Work on the subdivision is not to commence until:

- a Construction Certificate has been issued,
- a Principal Certifying Authority has been appointed for the project, and
- any other matters prescribed in the development consent for the subdivision and the Environmental Planning and Assessment Act and Regulation have been complied with.

Penrith City Council is to be notified 48 hours prior to commencement of engineering works or clearing associated with the subdivision.

60 **M008 - Linen Plan**

Submission of the original Linen Plan and ten (10) copies. All drainage easements, rights of way, restrictions and covenants are to be included on the linen plan.

All dedications of roads/drainage are to be undertaken at no cost to Penrith City Council.

The following information is to be shown on one (1) copy of the plan.

- The location of all buildings and/or other permanent improvements shall comply with any statutory boundary clearances or setbacks as defined by the Building Code of Australia and Council's resolutions.
- All existing services are wholly contained within the lot served and/or covered by an appropriate easement.

61 **M014 - Surveyors certificate**

A Surveyors Certificate is to be lodged with the application for a Subdivision Certificate that certifies that all pipes and services are located wholly within the property or within appropriate easements and that no services encroach boundaries.

Development Contributions

62 **N001 - Section 94 contribution (apply separate condition for each Contribution Plan)**

This condition is imposed in accordance with Penrith City Council's Section 94 Contributions Plan(s) for Werrington Enterprise Living and Learning (WELL) Precinct. Based on the current rates detailed in the accompanying schedule attached to this Notice, \$1,380,000 is to be paid to Council prior to a Subdivision Certificate being issued for this development (the rates are subject to quarterly reviews). If not paid within the current quarterly period, this contribution will be reviewed at the time of payment in accordance with the adopted Section 94 plan. The projected rates of this contribution amount are listed in Council's Fees and Charges Schedule.

Council should be contacted prior to payment to ascertain the rate for the current quarterly period. The S94 invoice accompanying this consent should accompany the contribution payment. The Section 94 Contributions Plan for Werrington Enterprise Living and Learning (WELL) Precinct may be inspected at Council's Civic Centre, 601 High Street, Penrith.

Note: This condition may be amended by way of a revision to the existing Voluntary Planning Agreement between Penrith City Council and LegPro Pty Ltd ATF LegPro 54 Unit Trust to include Stage 7 within the terms of the agreement.

Certification

63 **Q008 - Subdivision Certificate**

A Subdivision Certificate is to be obtained prior to the release of the linen plan of subdivision. The Subdivision Certificate will not be issued if any of the conditions in this consent are outstanding.

Appendix - Development Control Plan Compliance

Development Control Plan 2014

E1 Caddens

The aims of Chapter E1 of Penrith Development Control Plan 2014 are to support the objectives of Penrith Local Environmental Plan 2010 and facilitate the sustainable development of residential, mixed use, retail, open space and conservation areas of the Caddens Release Areas.

The proposed development particularly relates to the provision of residential land for future development in order to meet the burgeoning demand for housing as identified in Sydney's metropolitan strategy, *A plan for growing Sydney*. The proposal also includes the provision of open space to complement the residential and conservation areas produced from the development of the western precinct of Caddens Release Area.

The following assessment provides a comprehensive overview of the proposed development and demonstrates how the objectives of Chapter E1 are achieved.

1.2 Structure Plan	The proposed development is generally in accordance with the structure plan outlined in Figure E1.2 of Chapter E1 in the DCP. A variation to the location of the Hilltop park and road network was approved under DA16/1166 which has resulted in minor variations to the road layout within Stage 7.
1.2.2 Character Area Design Principles	Design principles for the precinct include the Caddens Road Interface, Hilltops and the Precinct Centre. Development within the Caddens Road interface is required to respond to the characteristics of the semi-rural edge and maintain the character of Caddens Road as a rural road. The proposed development incorporates larger lots fronting Caddens Road and therefore complies with this requirement. The proposed development does not include any Hilltop sites and is not located within the Precinct Centre.
1.2.3 Dwelling Yield and Diversity	The subject site is located within Precinct B which is required to provide a minimum dwelling yield of 634 residential lots. Adjoining developments to the west of the subject site have provided 170 lots for residential development (approved under DA11/0125 & DA15/0992). Stages 2-4 (DA16/1166) included 257 residential lots and Stages 5-6 (DA17/0099) included 183 residential lots. The proposed development includes 46 residential lots which provides for a total of 656 lots within Precinct B. Varying lot sizes will provide opportunities for a diverse range of housing types in accordance with the provisions of the DCP.

<p>1.3 Public Domain</p>	<p>The proposal includes the construction of local roads with the extension of Weema Street (Road 18) and Road 19 (currently unnamed). A variation to the residential street network was amended under DA16/1166. The amended street layout was supported as the original layout (as shown in the DCP) would have resulted in numerous battle-axe lots and an irregular shaped park, which was considered to impact on its functionality. The proposed local roads join with the previously approved road network. In considering the above, the proposed variation complies with the principles as outlined in Section 1.3.1 of Chapter E1.</p> <p>Roads have been designed to accommodate heavy vehicles such as Council's waste collection vehicle and buses. Based on the recommendation of the Stage 2 Road Safety Audit and Council's Development Engineer and Traffic Engineer, a central medium will be provided at the intersection of Weema Street and Road 19.</p> <p>The subject site is not located adjacent to the Werrington Creek riparian corridor or an area identified as containing items of European or Aboriginal Heritage.</p> <p>The application has satisfactorily addressed bushfire hazard management, with the NSW Rural Fire Service providing general terms of approval. Water cycle management has also been satisfactorily addressed with Council's Development Engineer and Waterways teams ensuring stormwater detention is provided to reduce post development flows. Water Sensitive Urban Design (WSUD) has been proposed and reviewed and meets the requirements of Council's Water Sensitive Urban Design Policy.</p> <p>In accordance with State Environmental Planning Policy No. 55 – Remediation of Land, the subject site has been assessed for any contamination.</p>
<p>1.4 Residential Development</p>	<p>The subdivision and neighbourhood design proposed aims to provide a range of lot sizes for various dwelling types and housing opportunities in the future.</p> <p>The orientation of lots allows for solar access to be achieved for the future residential development of the lots being created. The proposed development incorporates a diverse range of lot types and frontages.</p> <p>Section 1.4.1 requires that all lots proposed that are less than 350m² are required to be accompanied by a restriction that provides for an appropriate built form on the site. All lots proposed that are 350m² or less are accompanied by a building envelope plan and design guidelines which are required to be complied with by any future development application proposing a dwelling on those lots.</p> <p>The remainder of this section relates to detailed design and development controls for dwellings on the lots which will be required to be complied with.</p>



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CADDENS HILL STAGE 7

PROPOSED SUBDIVISION & BULK EARTHWORKS



LOCALITY SKETCH

Prepared By:

J. WYNDHAM PRINCE

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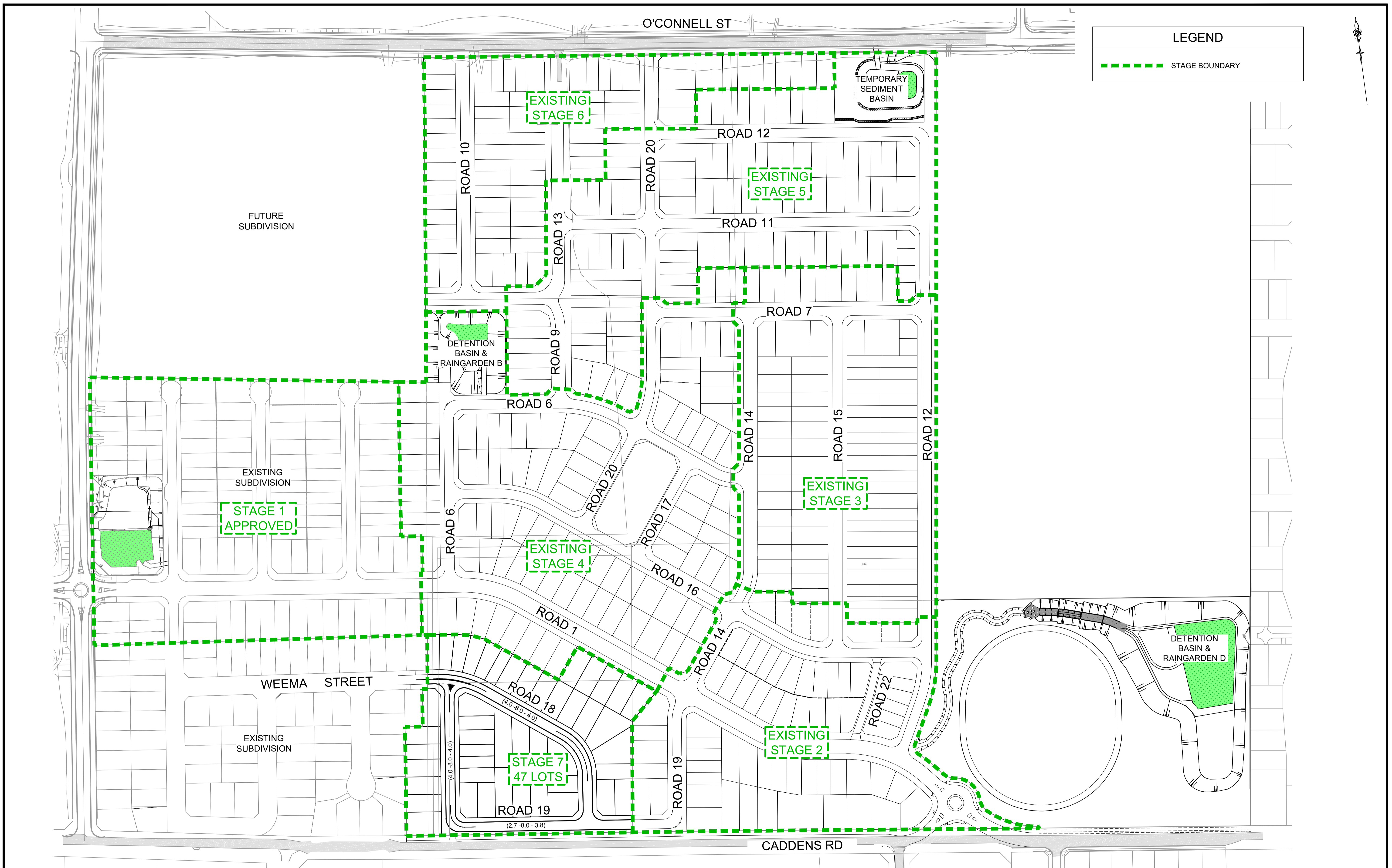
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CIVIL PLAN INDEX		
PLAN NO.	PLAN NAME	REV
110358/DA700	COVER SHEET & INDEX	G
110358/DA701	SITE LAYOUT PLAN	D
110358/DA702	ENGINEERING PLAN	F
110358/DA703	BULK EARTHWORKS PLAN	E
110358/DA704	SITE SECTIONS	E
110358/DA705	ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS SHEET 1	E
110358/DA706	ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS SHEET 2	C
110358/DA707	STORMWATER PLAN	F
110358/DA708	SOIL & WATER MANAGEMENT PLAN	F
110358/DA709	TREE MANAGEMENT & DEMOLITION PLAN	C
110358/DA710	SIGHT DISTANCE ANALYSIS SHEET 1	D
110358/DA711	SIGHT DISTANCE ANALYSIS SHEET 2	C
110358/DA712	SIGHT DISTANCE ANALYSIS SHEET 3	C
110358/DA713	SIGHT DISTANCE ANALYSIS & GARBAGE TRUCK SIMULATION SHEET 4	C
110358/DA714	SIGHT DISTANCE ANALYSIS SHEET 5	C
110358/DA715	SITE SECTIONS - BOUNDARY INTERFACE SHEET 1	C
110358/DA716	SITE SECTIONS - BOUNDARY INTERFACE SHEET 2	C

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PLAN No.
110358/DA700 **G**

FILE No. 110358DA700



LEGEND

--- STAGE BOUNDARY



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AMENDMENT	DES	DRN	CKD	APR	DATE
D	JT	JT	RO	MS	04/07/18
C	AJ	NM	AM	MS	06/06/18
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A	JT	NA	AM	MS	13/09/17

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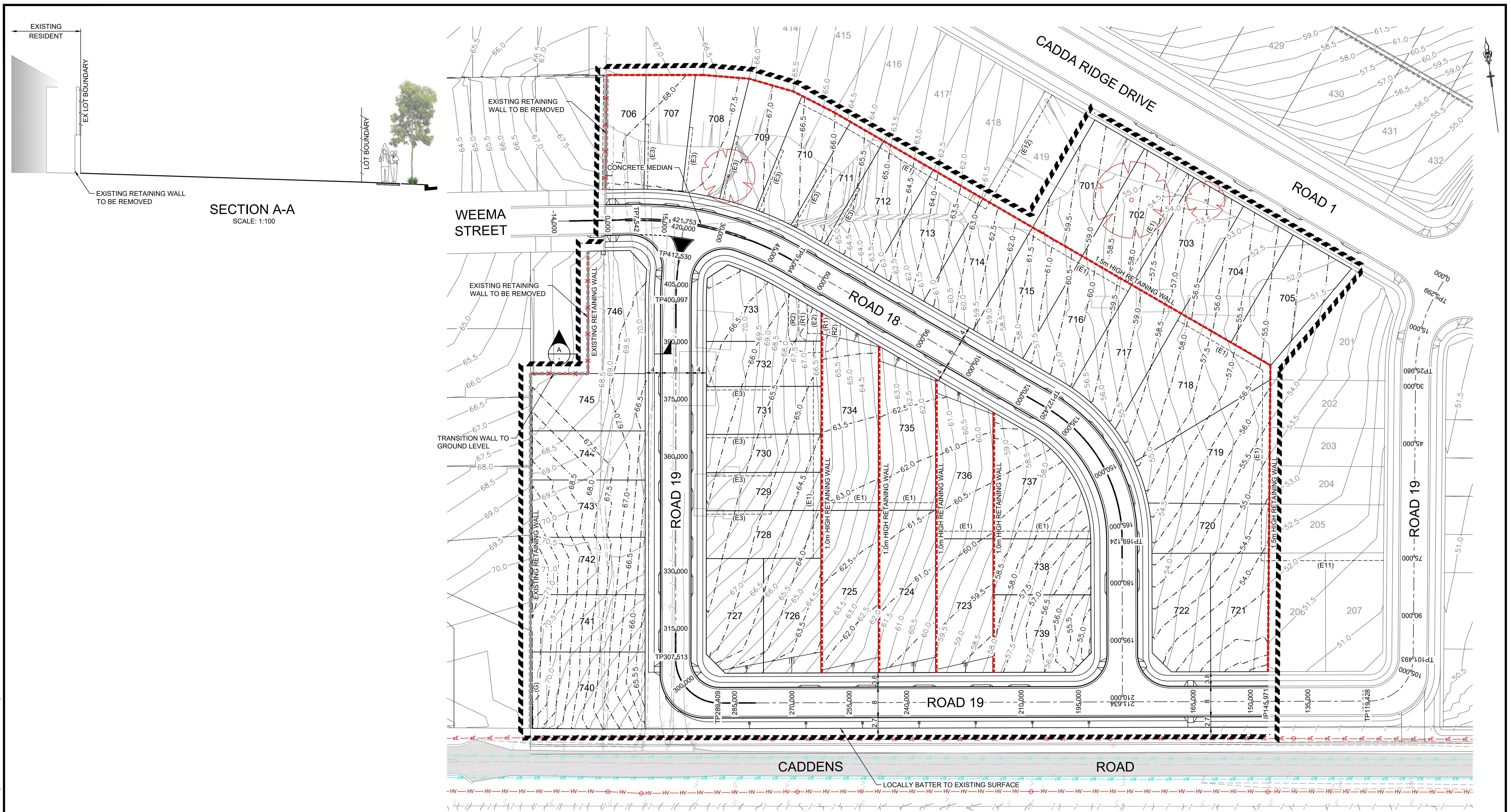
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CADDENS HILL
 STAGE 7
 SITE LAYOUT PLAN

PLAN No: **110358/DA701** D

FILE No: 110358DA701

SHEET SIZE: A1 ORIGINAL



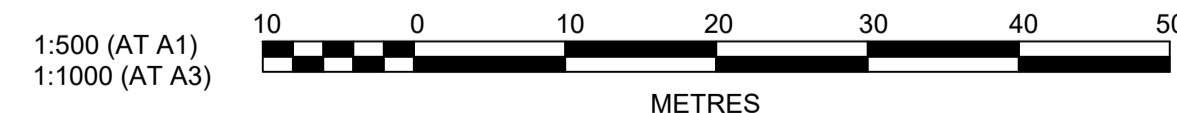
SECTION A-A
SCALE: 1:100

PLAN
SCALE 1:500

- (E1) EASEMENT TO DRAIN WATER 2.0 WIDE
- (E2) EASEMENT FOR PADMOUNT SUBSTATION 3.5 WIDE
- (E3) EASEMENT FOR ACCESS AND MAINTENANCE 0.9 WIDE
- (E11) EASEMENT TO DRAIN WATER 2.0 WIDE (D.P. 1229230)
- (E12) EASEMENT TO DRAIN WATER 2.0 WIDE (D.P. 1229232)
- (G) EASEMENT TO SUPPORT 0.5 WIDE (D.P. 1166546)
- (R1) RESTRICTION ON THE USE OF LAND
- (R2) RESTRICTION ON THE USE OF LAND

LEGEND	
	TREES TO BE REMOVED
	EXISTING RETAINING WALL
	RETAINING WALL 1.5m HIGH

NOTE:
ALL BATTERS SHOWN ARE 1:4 UNLESS NOTED OTHERWISE



AMENDMENT	DES	DRN	CKD	APR	DATE
F	JT	JT	RO	MS	04/07/18
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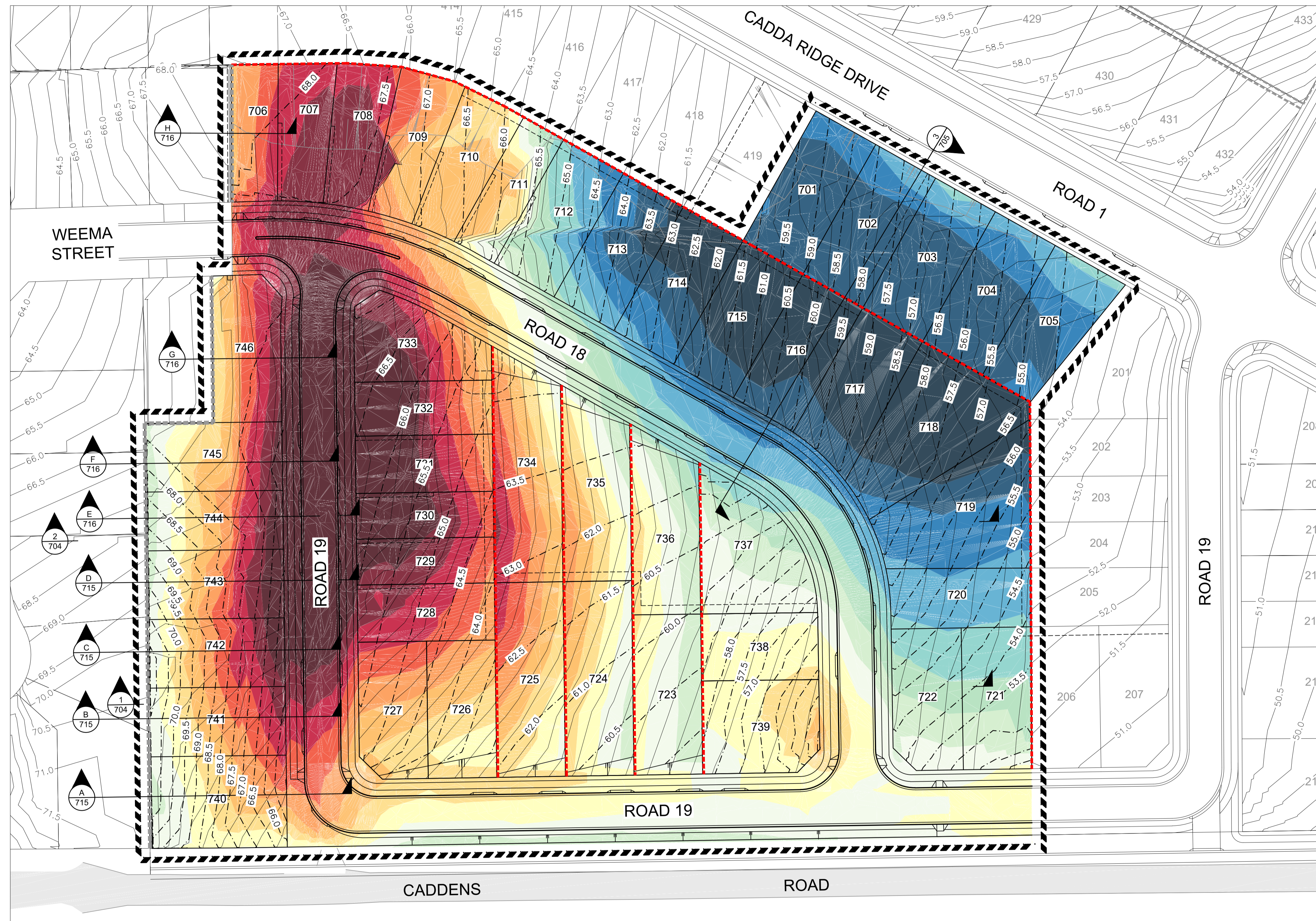
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CADDENS HILL
STAGE 7
ENGINEERING PLAN

PLAN No: 110358/DA702 **F**
FILE No: 110358DA702
SHEET SIZE: A1 ORIGINAL

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VOLUMES (EXISTING TO DESIGN)

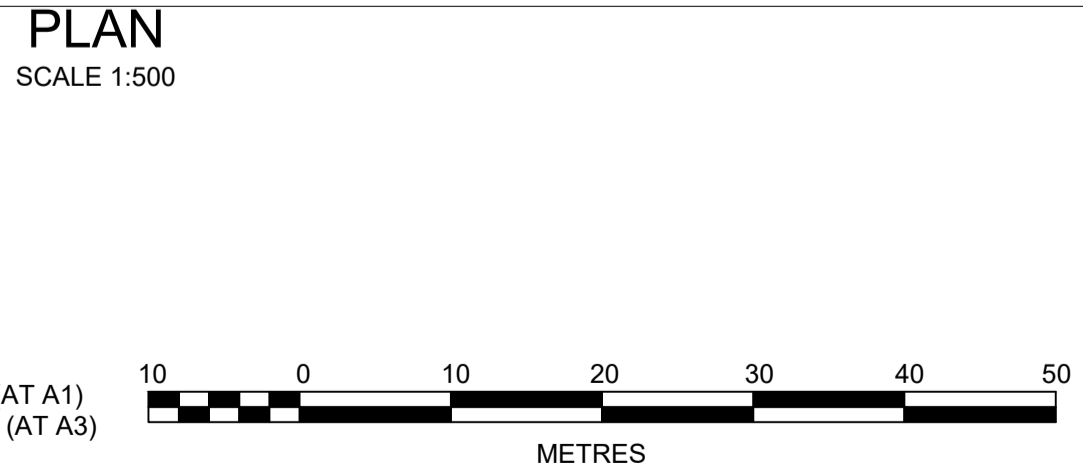
CUT	FILL	NET (F)
29,390	28,022	1,368

VOLUME NOTES:

- VOLUME IS FROM EXISTING TO PROPOSED FINISHED DESIGN LEVELS.
- EXCLUDES TOPSOIL ADJUSTMENTS, ROAD BOXING AND SERVICES TRENCHING.
- EXCLUDES ANY BULKING/COMPACTION.

CUTFILL LEGEND

Lower_value	Upper_value	Colour
	< -5.5 m	Dark Purple
-5.5	to -3.5 m	Dark Red
-3.5	to -3 m	Red
-3	to -2.5 m	Orange-Red
-2.5	to -2 m	Orange
-2	to -1.5 m	Light Orange
-1.5	to -1 m	Yellow-Orange
-1	to -0.5 m	Yellow
-0.5	to 0 m	Light Yellow
0	to 0.5 m	Light Green
0.5	to 1 m	Green
1	to 1.5 m	Light Blue-Green
1.5	to 2 m	Blue-Green
2	to 2.5 m	Blue
2.5	to 3 m	Dark Blue
3	to 3.5 m	Very Dark Blue
3.5	to 5.5 m	Dark Green
> 5.5	m	Dark Green



Plotted: 16 July 2018 2:09:08 PM File Name: J:\110358 - O'Connell Lane Caddens\08 - Stage 7\CDD\DA\110358DA703.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
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D	AJ	NM	AM	MS	06/06/18
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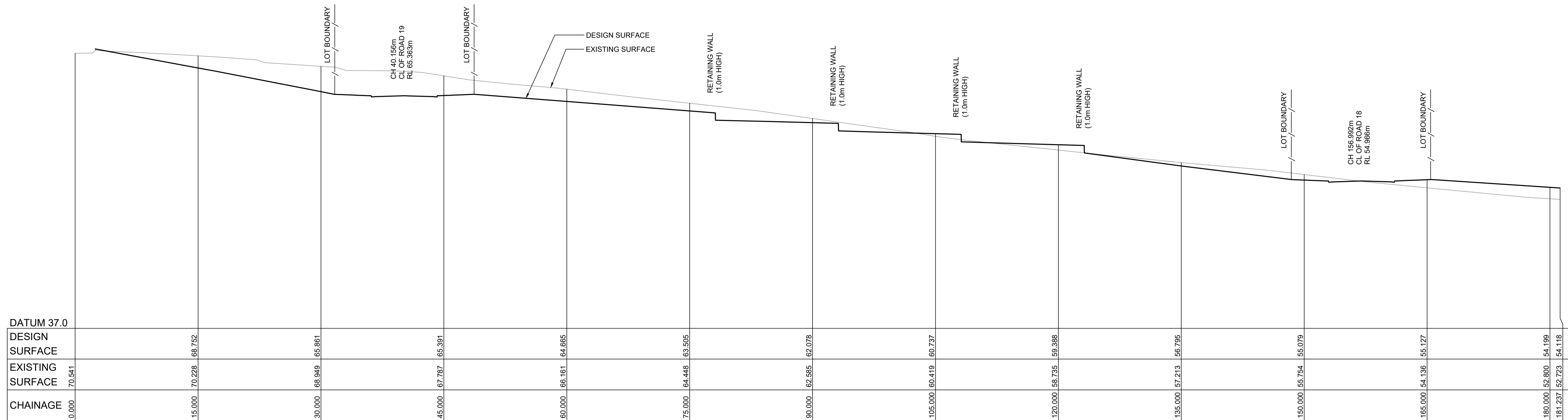
CADDENS HILL
STAGE 7
BULK EARTHWORKS PLAN

PLAN No: 110358/DA703 **E**

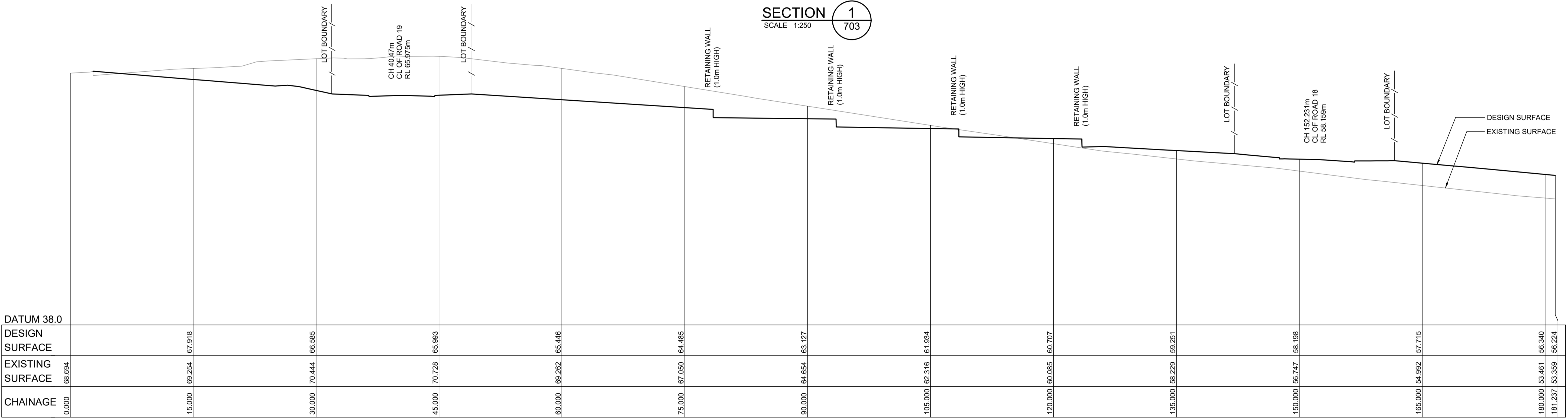
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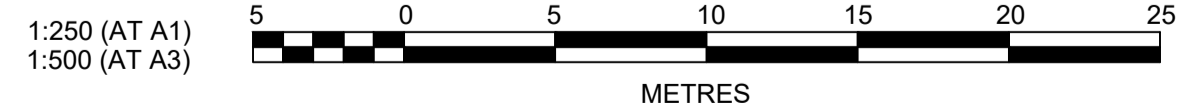
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SECTION 1
SCALE 1:250
703



SECTION 2
SCALE 1:250
703



AMENDMENT	DES	DRN	CKD	APR	DATE
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D	AJ	NM	AM	MS	06/06/18
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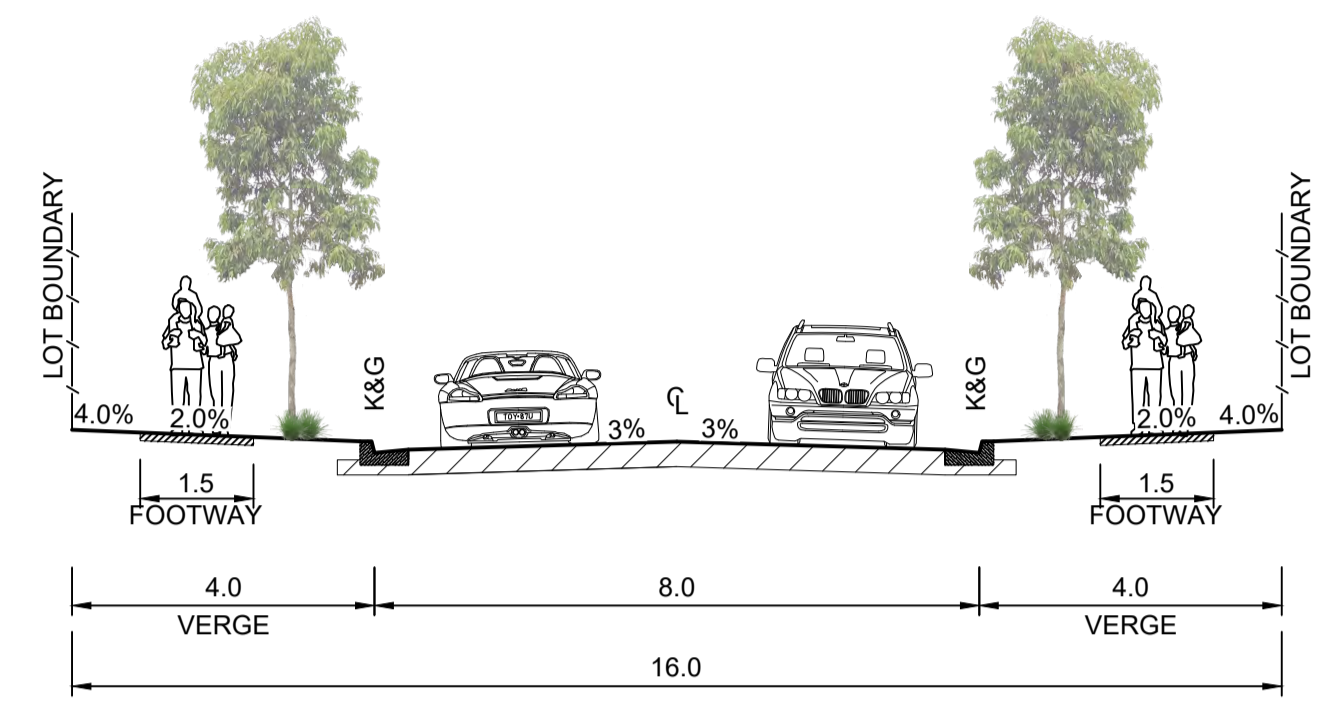
CADDENS HILL
STAGE 7
SITE SECTIONS

PLAN No: 110358/DA704 **E**

FILE No: 110358DA704

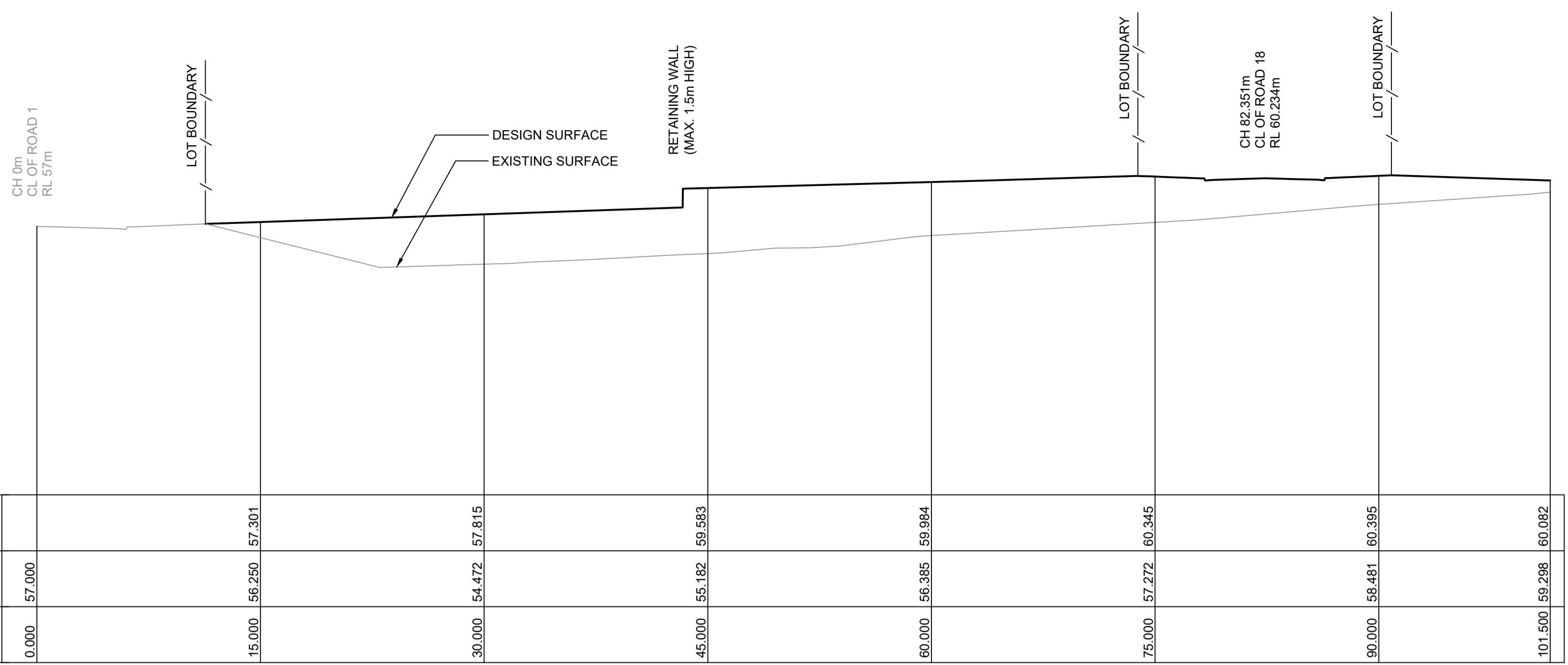
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NOTE:
ALL VERGE TO HAVE 4% FALL WITH CONCRETE FOOTPATH & SHARED PATH AT 2%

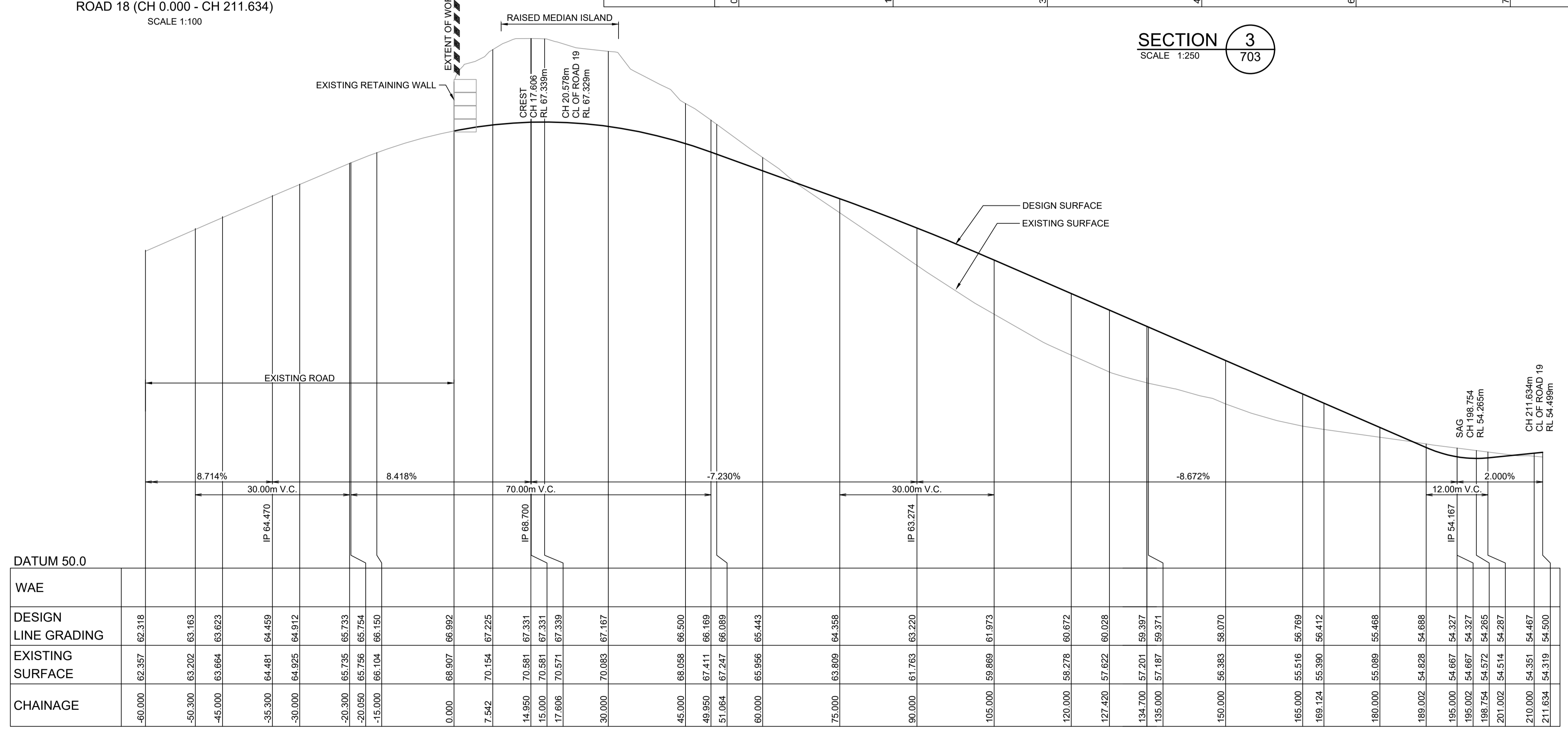


TYPICAL CROSS SECTION
ROAD 18 (CH 0.000 - CH 211.634)
SCALE 1:100

DATUM 39.0	CHAINAGE	DESIGN SURFACE	EXISTING SURFACE
	0.000	57.000	57.000
	15.000	56.250	57.301
	30.000	54.472	57.815
	45.000	55.182	59.553
	60.000	56.385	59.954
	75.000	57.272	60.345
	90.000	58.481	60.395
	101.500	59.298	60.082

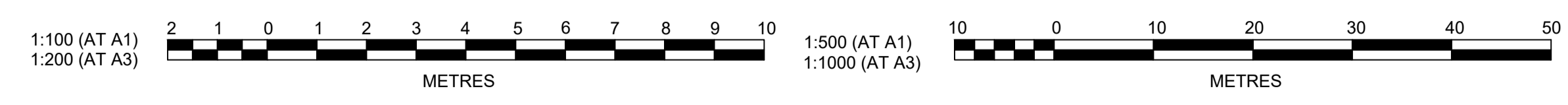


SECTION 3
SCALE 1:250
703



DATUM 50.0	CHAINAGE	EXISTING SURFACE	DESIGN LINE GRADING	WAE
	-60.000	62.357	62.318	
	-50.300	63.202	63.163	
	-45.000	63.664	63.623	
	-35.300	64.481	64.459	
	-30.000	64.925	64.912	
	-20.300	65.735	65.733	
	-20.050	65.756	65.754	
	-15.000	66.104	66.150	
	0.000	68.907	66.992	
	7.542	70.154	67.225	
	14.950	70.581	67.331	
	15.000	70.581	67.331	
	17.606	70.571	67.339	
	30.000	70.083	67.167	
	45.000	68.058	66.500	
	49.950	67.411	66.169	
	51.064	67.247	66.089	
	60.000	65.956	65.443	
	75.000	63.809	64.358	
	90.000	61.763	63.220	
	105.000	59.669	61.973	
	120.000	58.278	60.672	
	127.420	57.622	60.028	
	134.700	57.201	59.397	
	135.000	57.187	59.371	
	150.000	56.383	58.070	
	165.000	55.516	56.769	
	168.124	55.390	56.412	
	180.000	55.089	55.468	
	189.002	54.928	54.688	
	195.000	54.667	54.327	
	195.002	54.667	54.327	
	198.754	54.572	54.265	
	201.002	54.514	54.287	
	210.000	54.351	54.467	
	211.634	54.319	54.500	

LONGITUDINAL SECTION ROAD 18
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



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D	AJ	NM	AM	MS	06/06/18
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A	JT	NA	AM	MS	13/09/17

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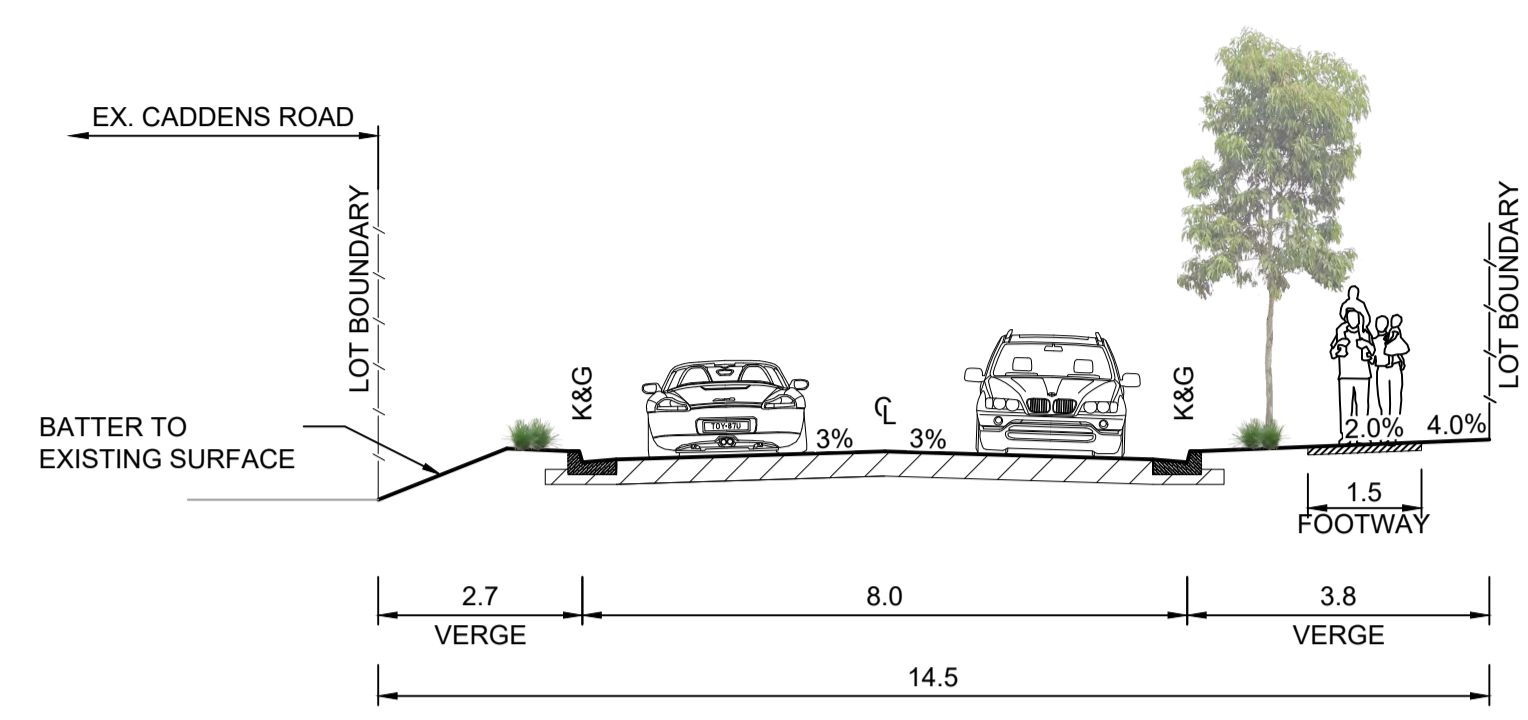
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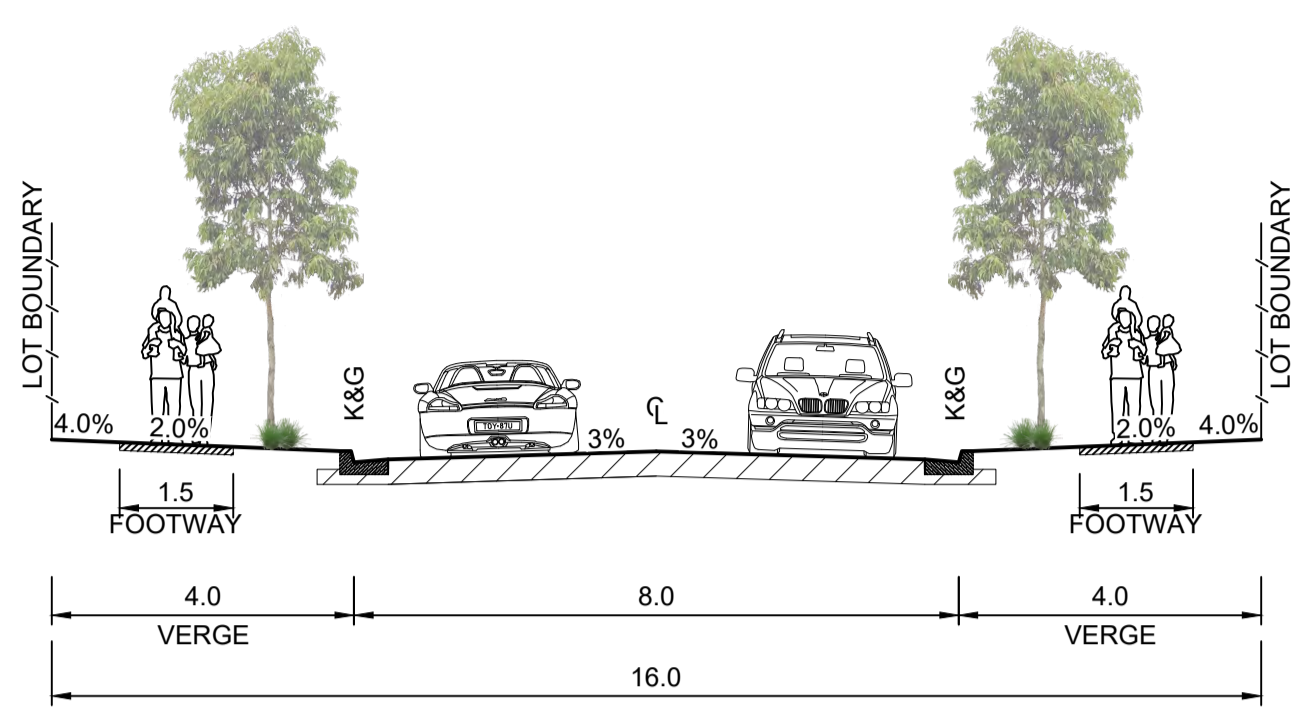
CADDENS HILL
STAGE 7
ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS
SHEET 1

PLAN No: **110358/DA705** E
FILE No: 110358DA705
SHEET SIZE: A1 ORIGINAL

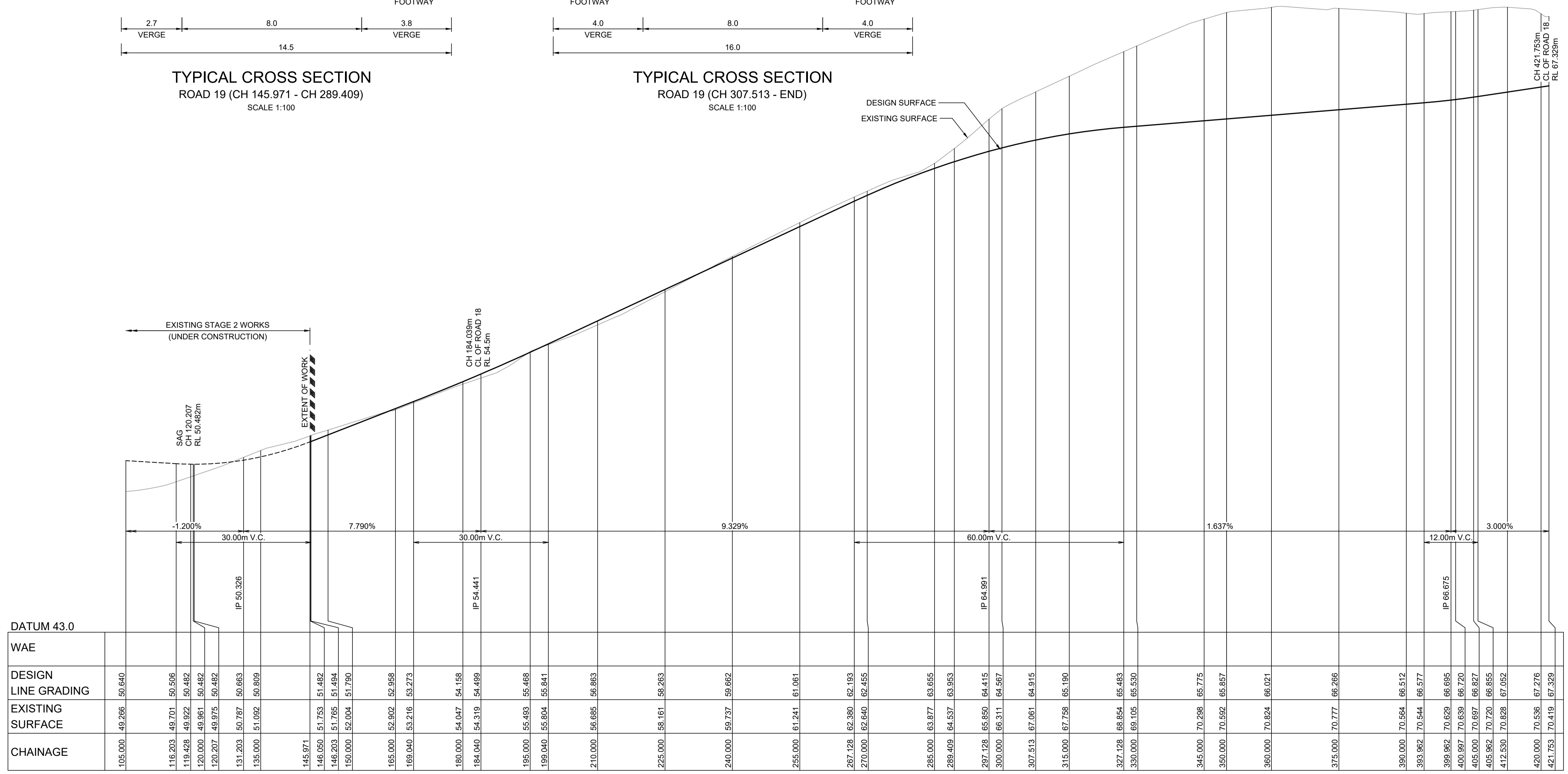
NOTE:
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TYPICAL CROSS SECTION
ROAD 19 (CH 145.971 - CH 289.409)
SCALE 1:100

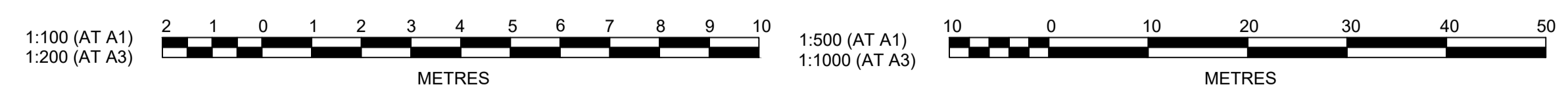


TYPICAL CROSS SECTION
ROAD 19 (CH 307.513 - END)
SCALE 1:100



LONGITUDINAL SECTION ROAD 19
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

CHAINAGE	EXISTING SURFACE	DESIGN LINE GRADING	WAE
105.000	49.266	50.640	
116.203	49.701	50.506	
119.428	49.922	50.482	
120.000	49.961	50.482	
120.207	49.975	50.482	
131.203	50.787	50.663	
135.000	51.092	50.809	
145.971			
146.050	51.753	51.482	
146.203	51.765	51.494	
150.000	52.004	51.790	
165.000	52.902	52.958	
169.040	53.216	53.273	
180.000	54.047	54.158	
184.040	54.319	54.499	
195.000	55.493	55.468	
199.040	55.804	55.841	
210.000	56.665	56.863	
225.000	58.161	59.263	
240.000	59.737	59.662	
255.000	61.241	61.061	
267.128	62.380	62.193	
270.000	62.640	62.455	
285.000	63.877	63.655	
289.409	64.537	63.953	
297.128	65.650	64.415	
300.000	66.311	64.567	
307.513	67.061	64.915	
315.000	67.758	65.190	
327.128	68.654	65.483	
330.000	69.105	65.530	
345.000	70.298	65.775	
350.000	70.592	65.857	
360.000	70.824	66.021	
375.000	70.777	66.266	
390.000	70.564	66.512	
393.982	70.544	66.577	
399.982	70.629	66.695	
400.987	70.639	66.720	
405.000	70.697	66.827	
405.982	70.720	66.855	
412.530	70.828	67.052	
420.000	70.536	67.276	
421.753	70.419	67.329	



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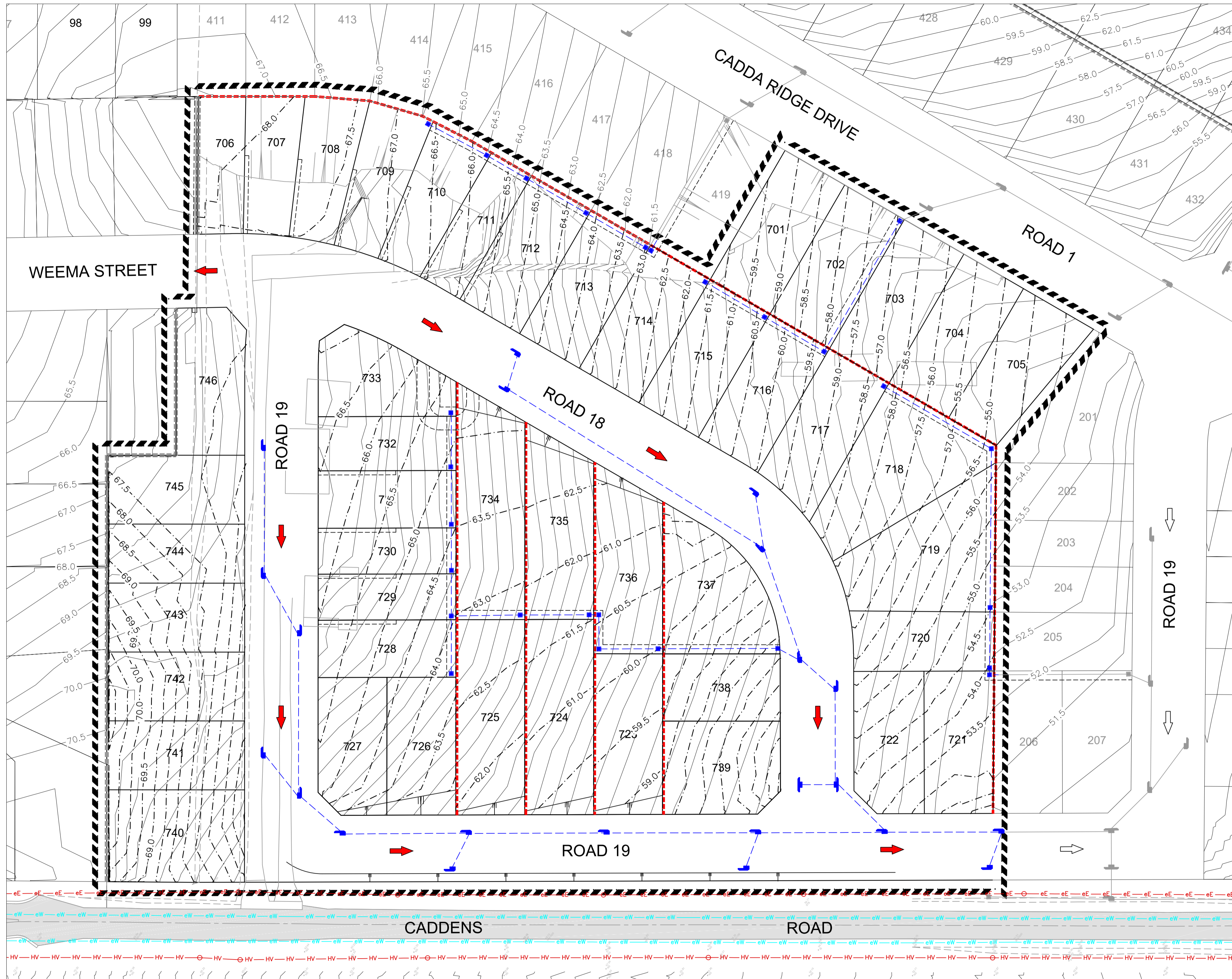
CADDENS HILL
STAGE 7
ROAD LONGITUDINAL & TYPICAL CROSS SECTIONS
SHEET 2

PLAN No: **110358/DA706** C
FILE No: 110358DA706
SHEET SIZE: A1 ORIGINAL

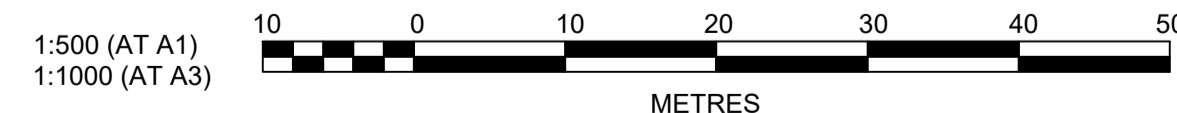
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LEGEND

- PROPOSED STORMWATER PIPE (5YR ARI PIPE)
- FLOW DIRECTION



PLAN
SCALE 1:500



Plotfile: 16 July, 2018 2:09:41 PM File Name: J:\110358 - O'Connell Lane Caddens\08 - Stage 7\CD\DA\110358DA707.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
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E	JT	JT	AM	MS	07/06/18
D	AJ	NM	AM	MS	06/06/18
C	JT	JT	AM	MS	23/02/18
B	JT	JT	AM	MS	19/02/17
A	JT	NA	AM	MS	13/09/17

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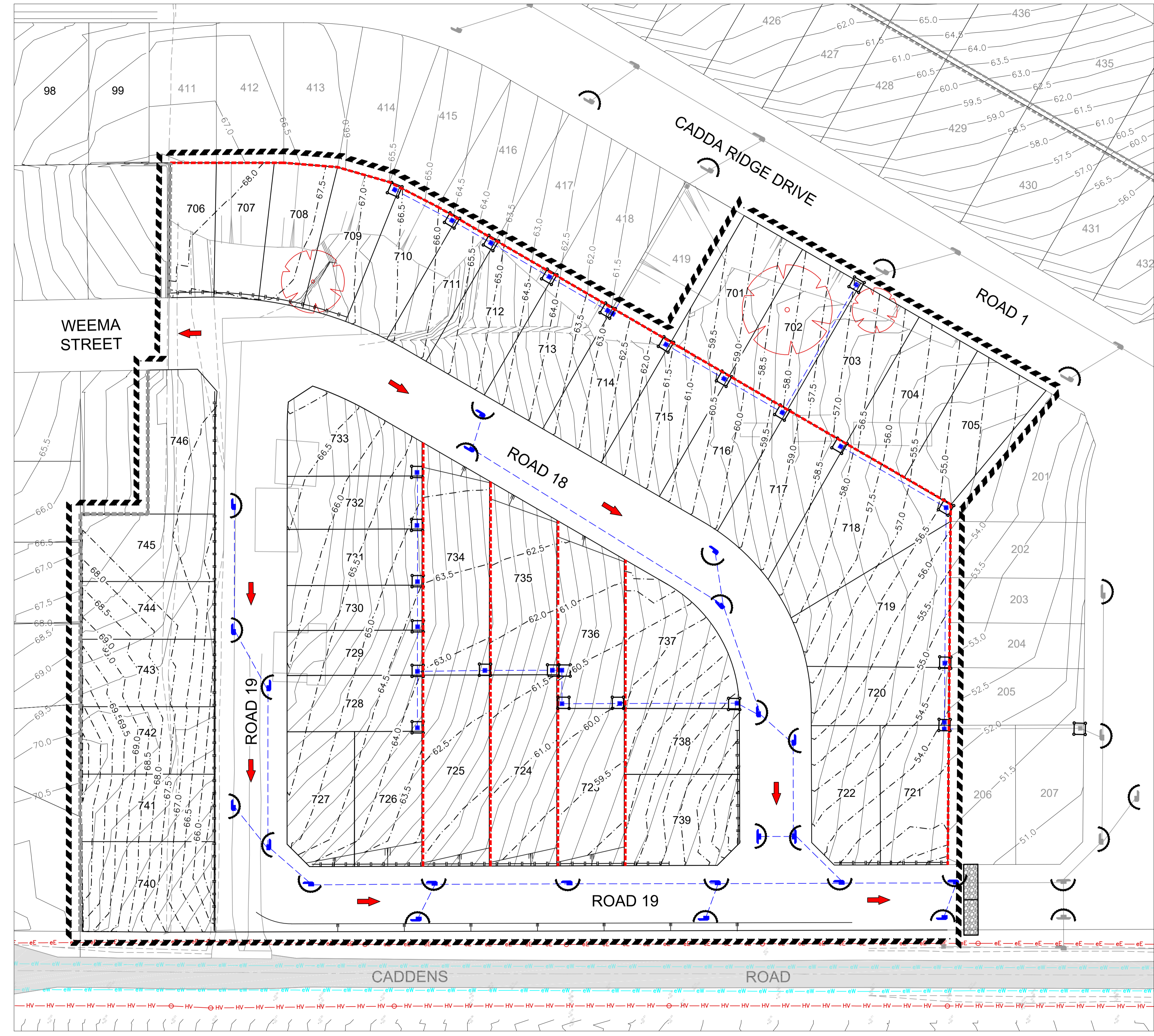
CADDENS HILL
STAGE 7
STORMWATER PLAN

PLAN No: **110358/DA707** F

FILE No: 110358DA707

SHEET SIZE: A1 ORIGINAL

LEGEND	
STABILISED SITE ACCESS	
SEDIMENT FENCE	
MESH AND GRAVEL INLET FILTER	
GEOTEXTILE INLET FILTER	



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AMENDMENT	DES	DRN	CKD	APR	DATE
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E	JT	JT	AM	MS	07/06/18
D	AJ	NM	AM	MS	06/06/18
C	JT	JT	AM	MS	23/02/18
B	JT	JT	AM	MS	19/02/17
A	JT	NA	AM	MS	13/09/17

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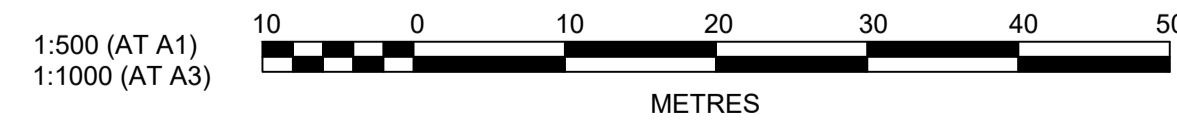
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CADDENS HILL
 STAGE 7
 SOIL & WATER MANAGEMENT PLAN

PLAN No: **110358/DA708** F

FILE No: 110358DA708

SHEET SIZE: A1 ORIGINAL





UTILITIES SHOWN ARE DIAGRAMMATIC ONLY, CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDE LINES & STANDARDS.

NOTE: UTILITIES SHOWN MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS

LEGEND

- AREA OF WORKS
- EXISTING STRUCTURE INCLUDING CONCRETE SLAB TO BE DEMOLISHED & REMOVED OFF-SITE
- EXISTING BITUMEN DRIVEWAY TO BE REMOVED OFF-SITE
- EXISTING FENCE TO BE REMOVED OFF-SITE
- TREES TO BE REMOVED
- TREES TO BE RETAINED



Plotted: 16 July 2018 2:10:09 PM File Name: J:\110358 - O'Connell Lane Caddens\08 - Stage 7\CD\DA\110358DA709.dwg

1:1000 (AT A1)
1:2000 (AT A3)

METRES

AMENDMENT	DES	DRN	CKD	APR	DATE
C	JT	JT	RO	MS	04/07/18
B	JT	JT	AM	MS	19/02/17
A	JT	NA	AM	MS	13/09/17

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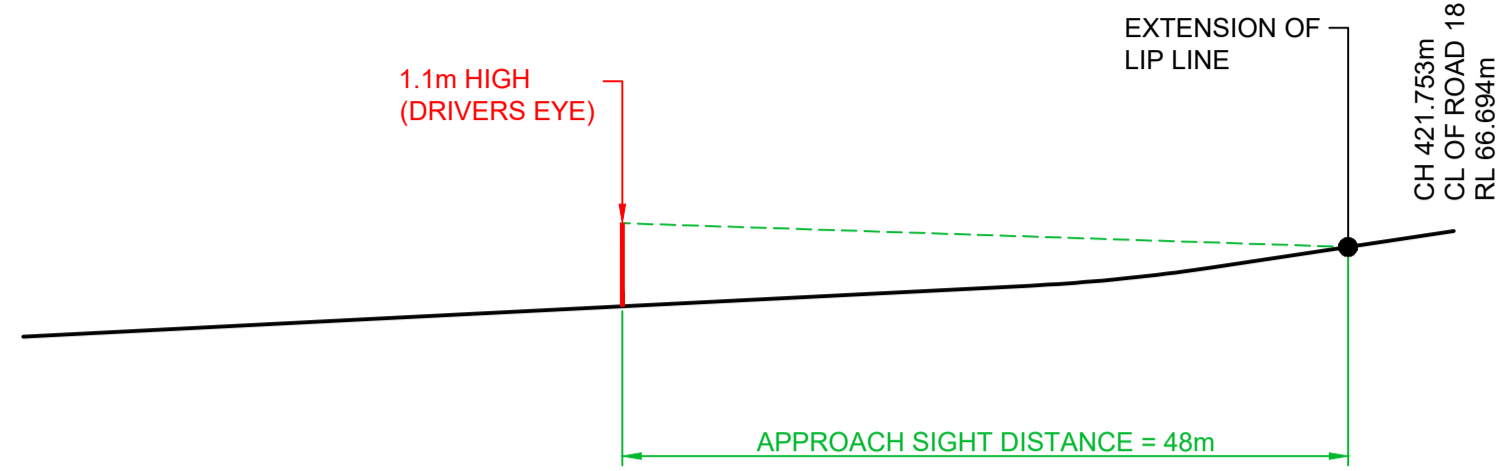
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CADDENS HILL
STAGE 7
TREE MANAGEMENT & DEMOLITION PLAN

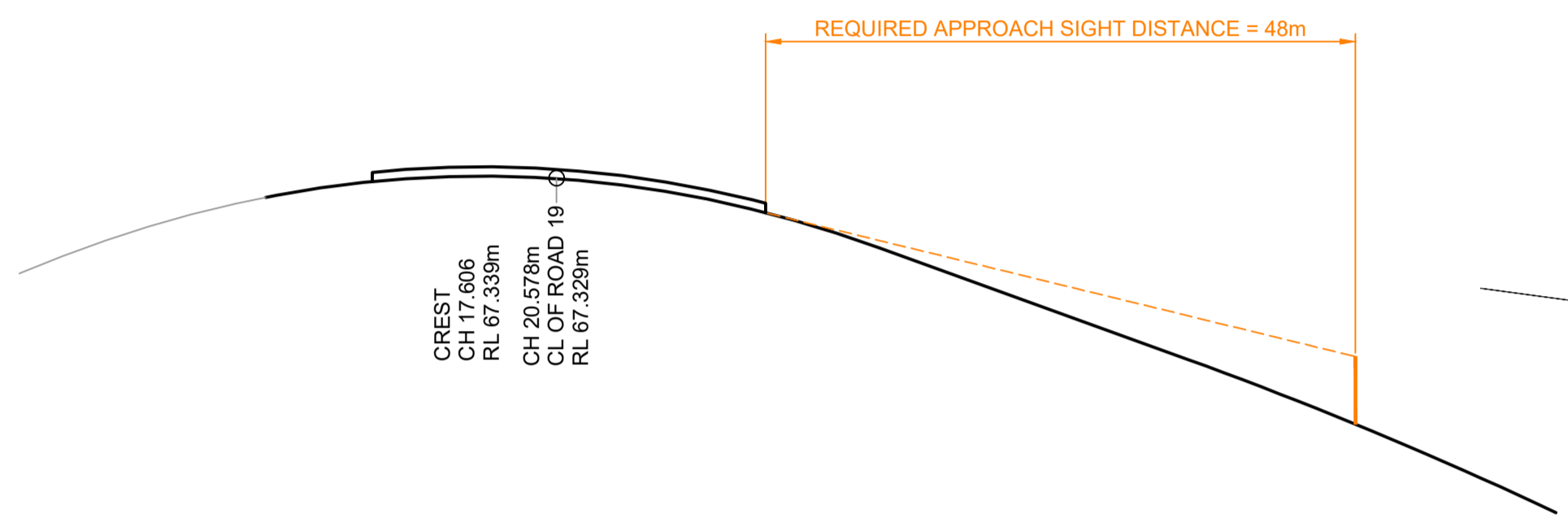
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110358/DA709 C

FILE No: 110358DA709

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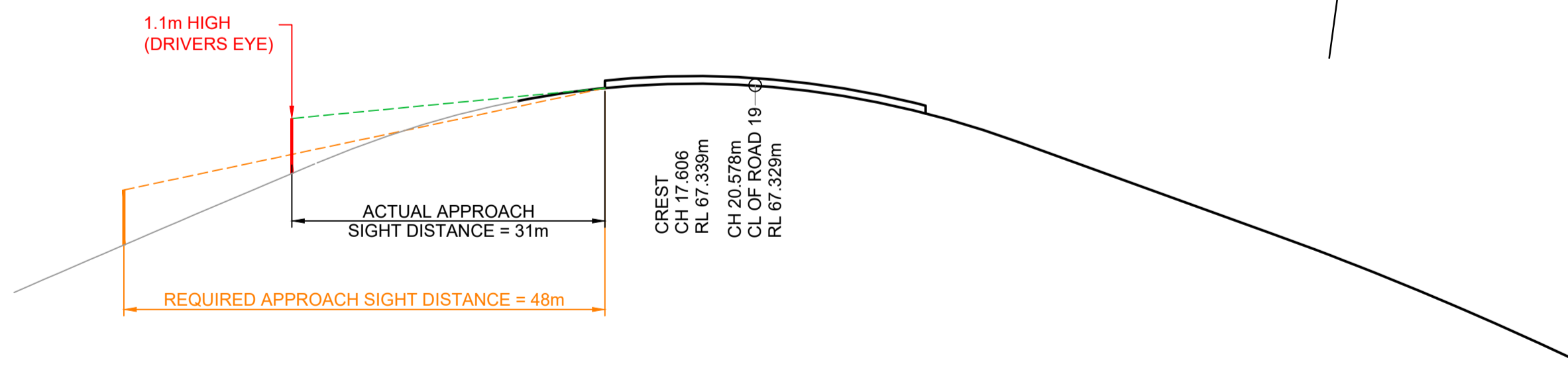


ROAD 19 - ASD ANALYSIS
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

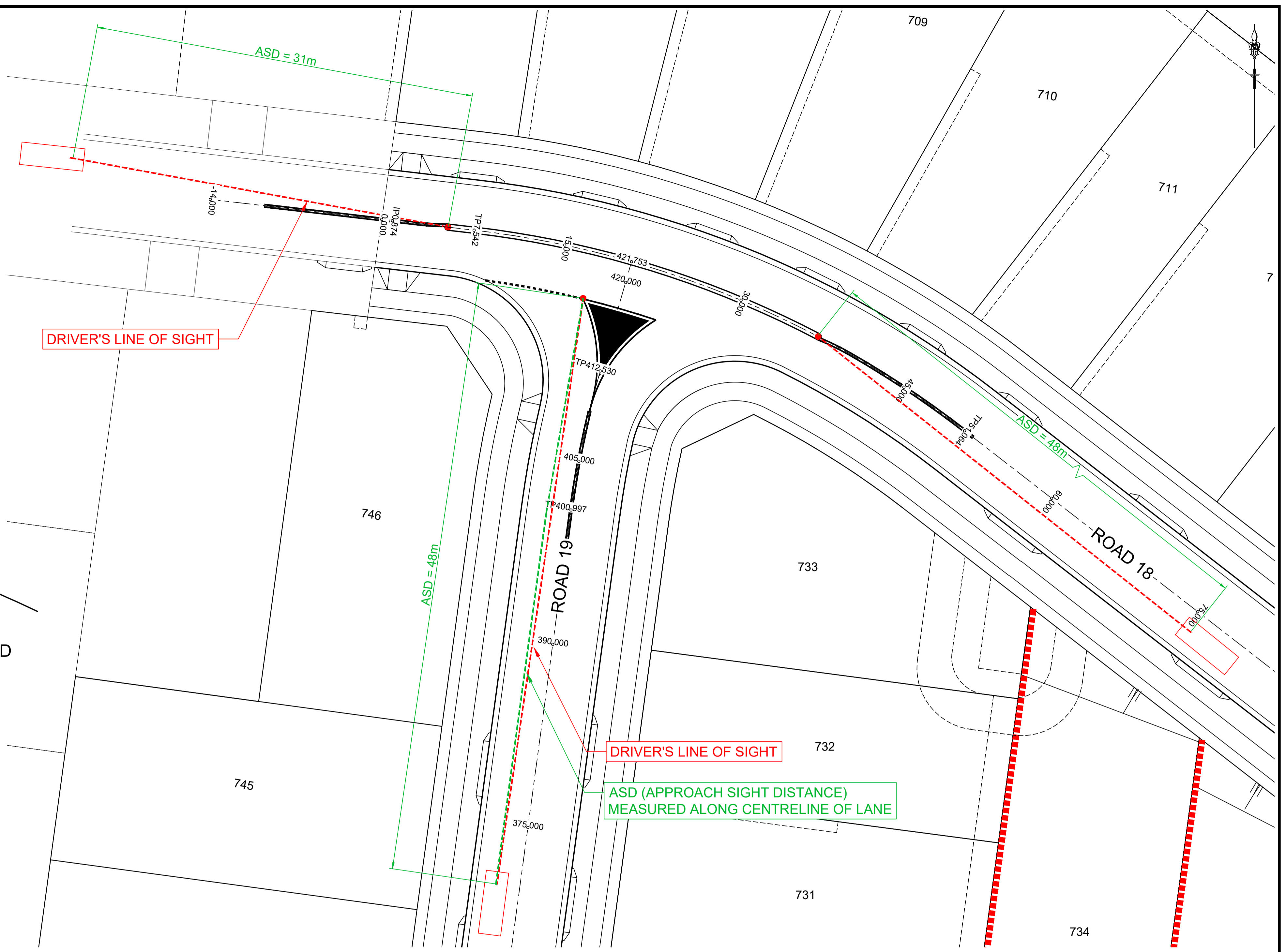


ROAD 18 - ASD ANALYSIS WESTBOUND TO RAISED MEDIAN ISLAND
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

ASD MEASURED TO VERTICAL CURVE INTERSECTION POINT

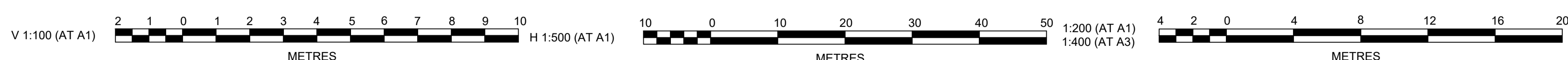


ROAD 18 - ASD ANALYSIS EASTBOUND TO RAISED MEDIAN ISLAND
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



PLAN
SCALE 1:200

ASD CHECK
DESIGN SPEED = 50km/h
ASD LENGTH = 48m
RT = 1.5sec



Plotted: 16 July 2018 2:10:17 PM File Name: J:\110358 - O'Connell Lane Caddens\08 - Stage 7\CD\DA\110358DA710.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
C	AJ	NM	AM	MS	06/06/18
B	JT	AM	MS		19/02/17
A	JT	NA	AM	MS	13/09/17

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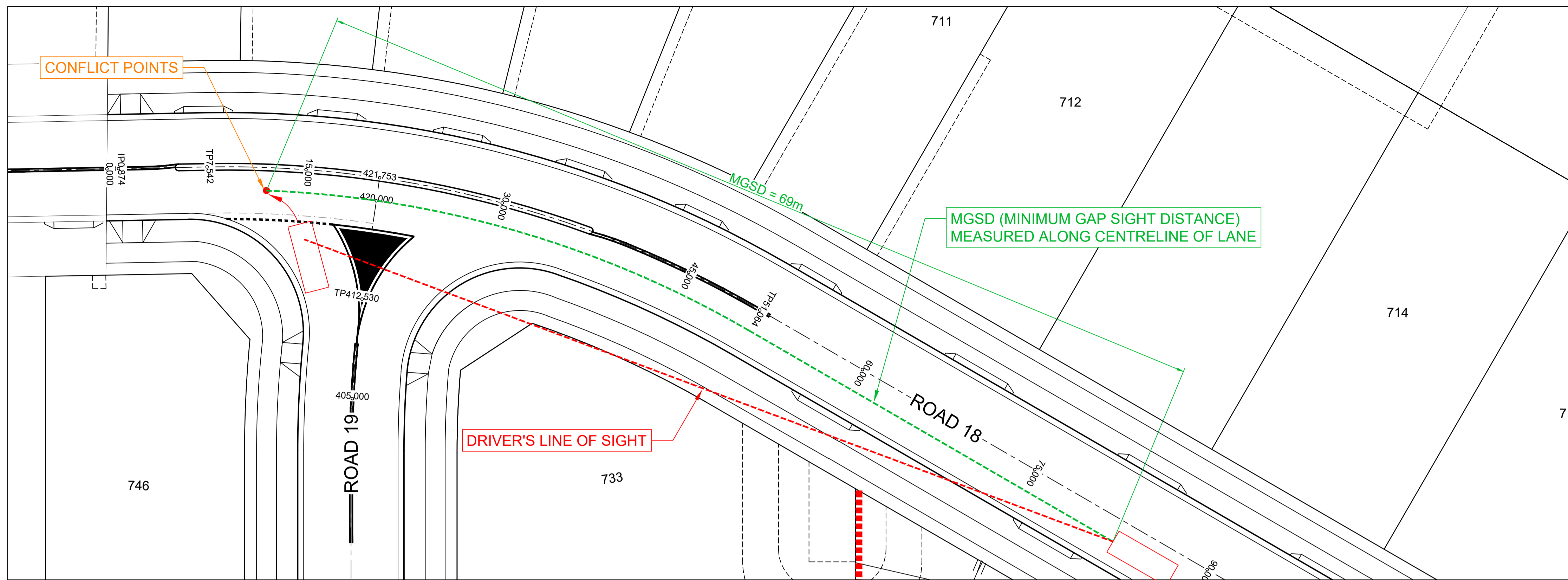
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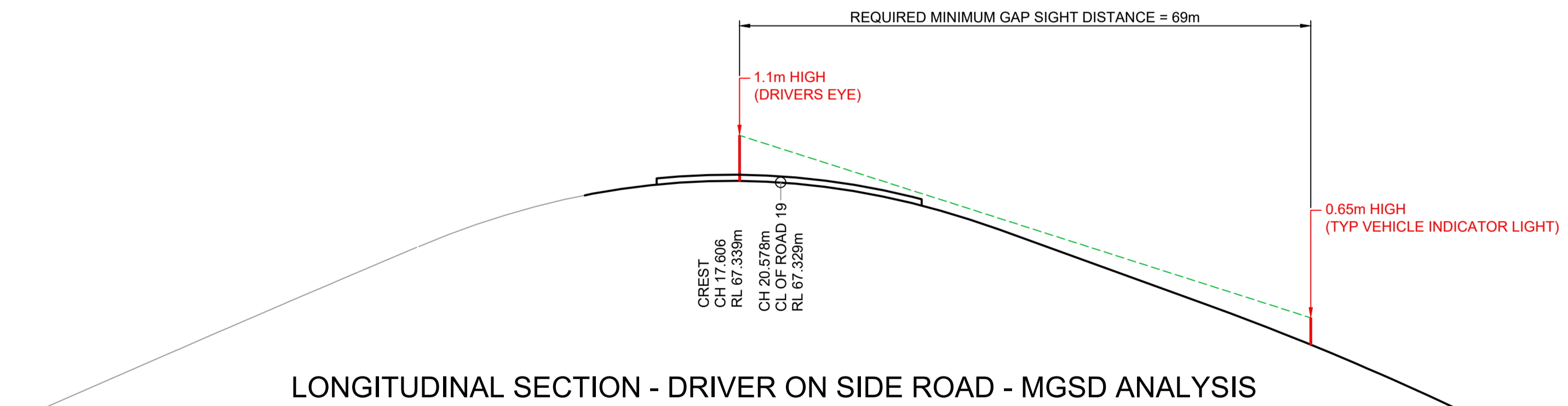
CADDENS HILL
STAGE 7
SIGHT DISTANCE ANALYSIS
SHEET 1

PLAN No: 110358/DA710 **D**
FILE No: 110358DA710
SHEET SIZE: A1 ORIGINAL

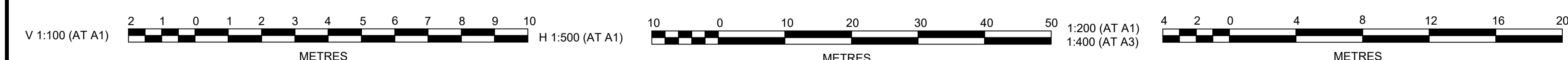


PLAN - SIGHT TO VEHICLE - VEHICLE TURNING LEFT
SCALE 1:200

MGSD CHECK
 DESIGN SPEED = 50km/h
 MGSD LENGTH = 69m
 Ta = 5sec



LONGITUDINAL SECTION - DRIVER ON SIDE ROAD - MGSD ANALYSIS
 HORIZONTAL SCALE 1:500
 VERTICAL SCALE 1:100



AMENDMENT	DES	DRN	CKD	APR	DATE
C	JT	JT	RO	MS	04/07/18
B	AJ	NM	AM	MS	06/06/18
A	JT	JT	AM	MS	19/02/17

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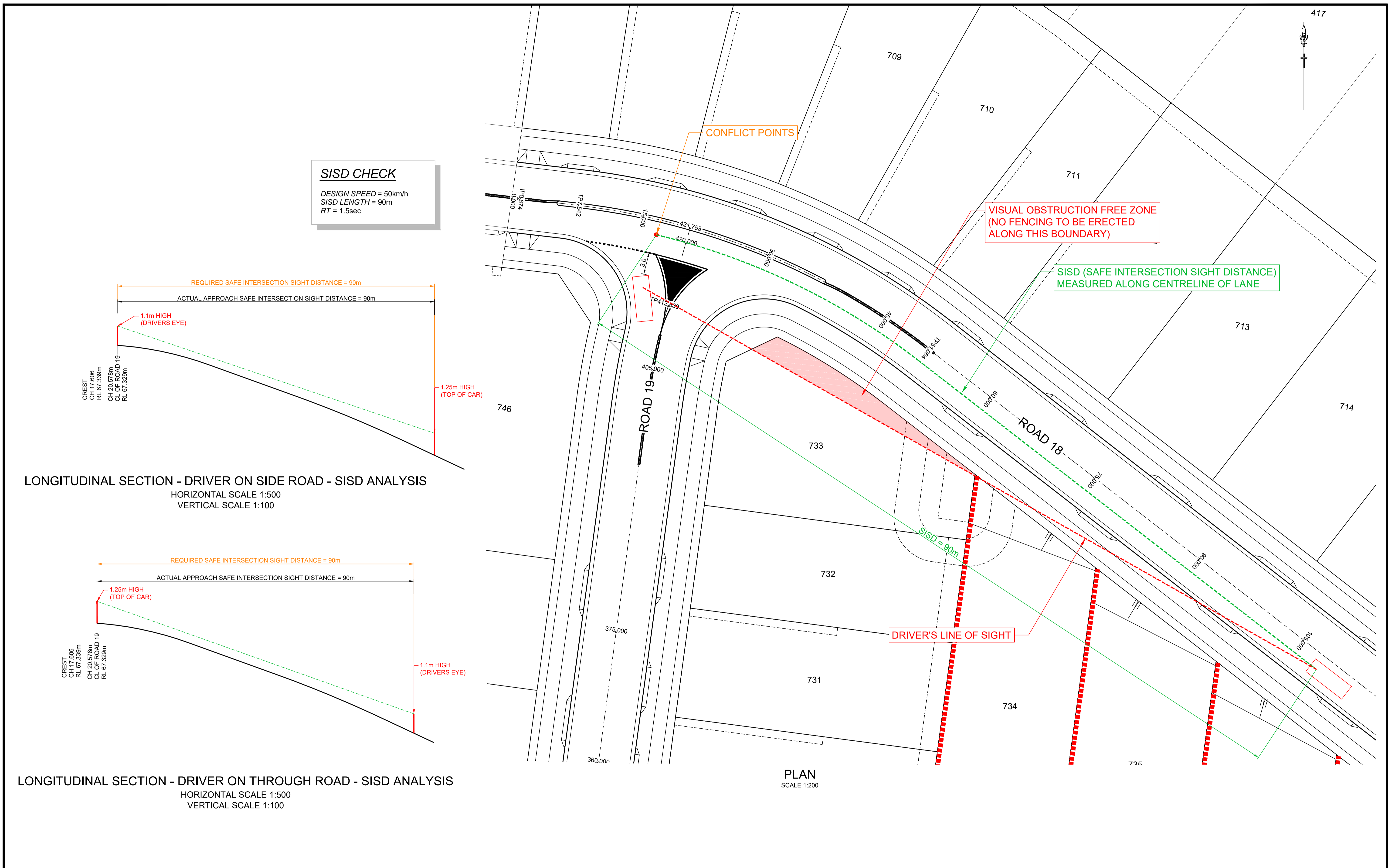
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 DATUM:
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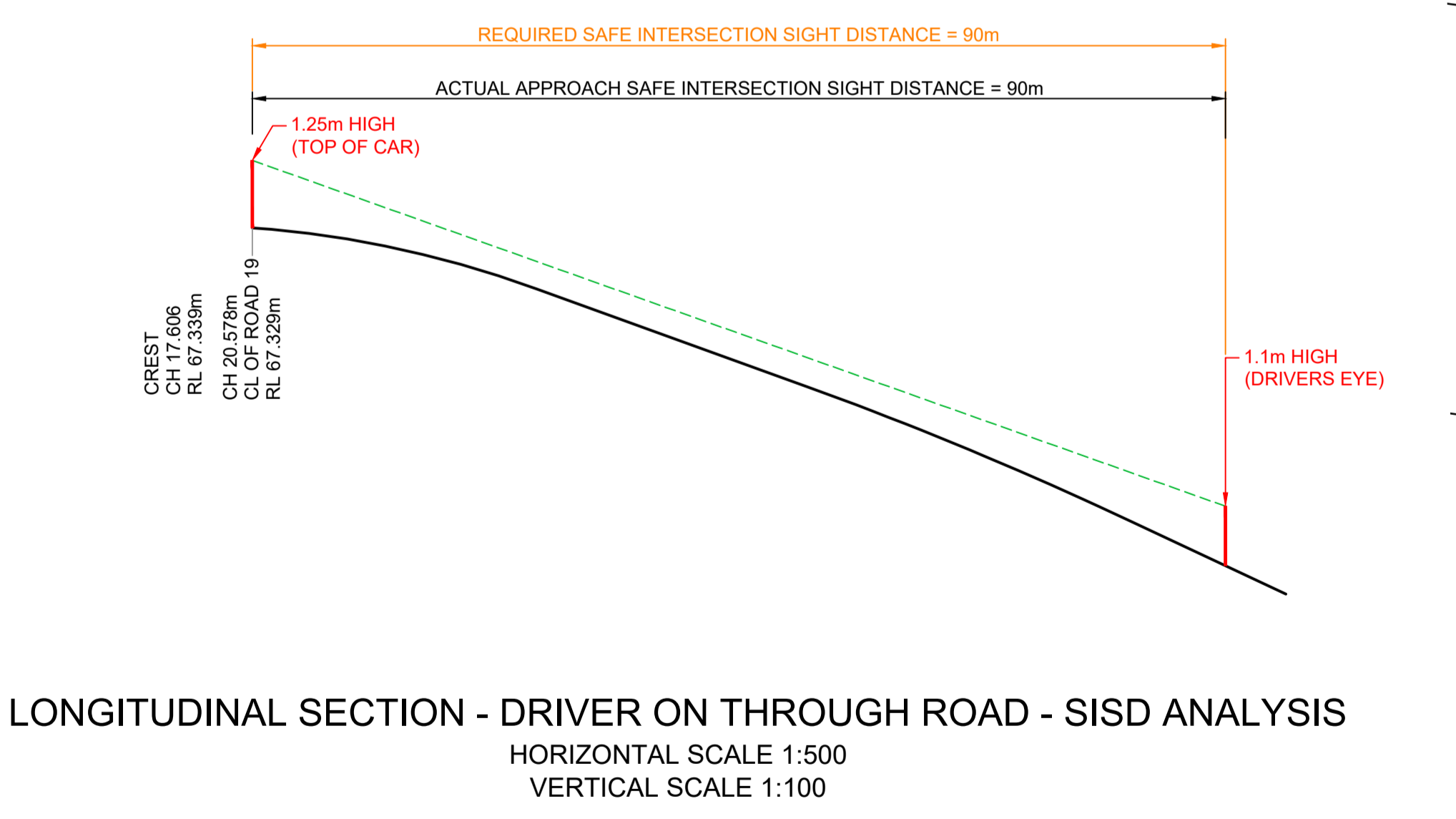
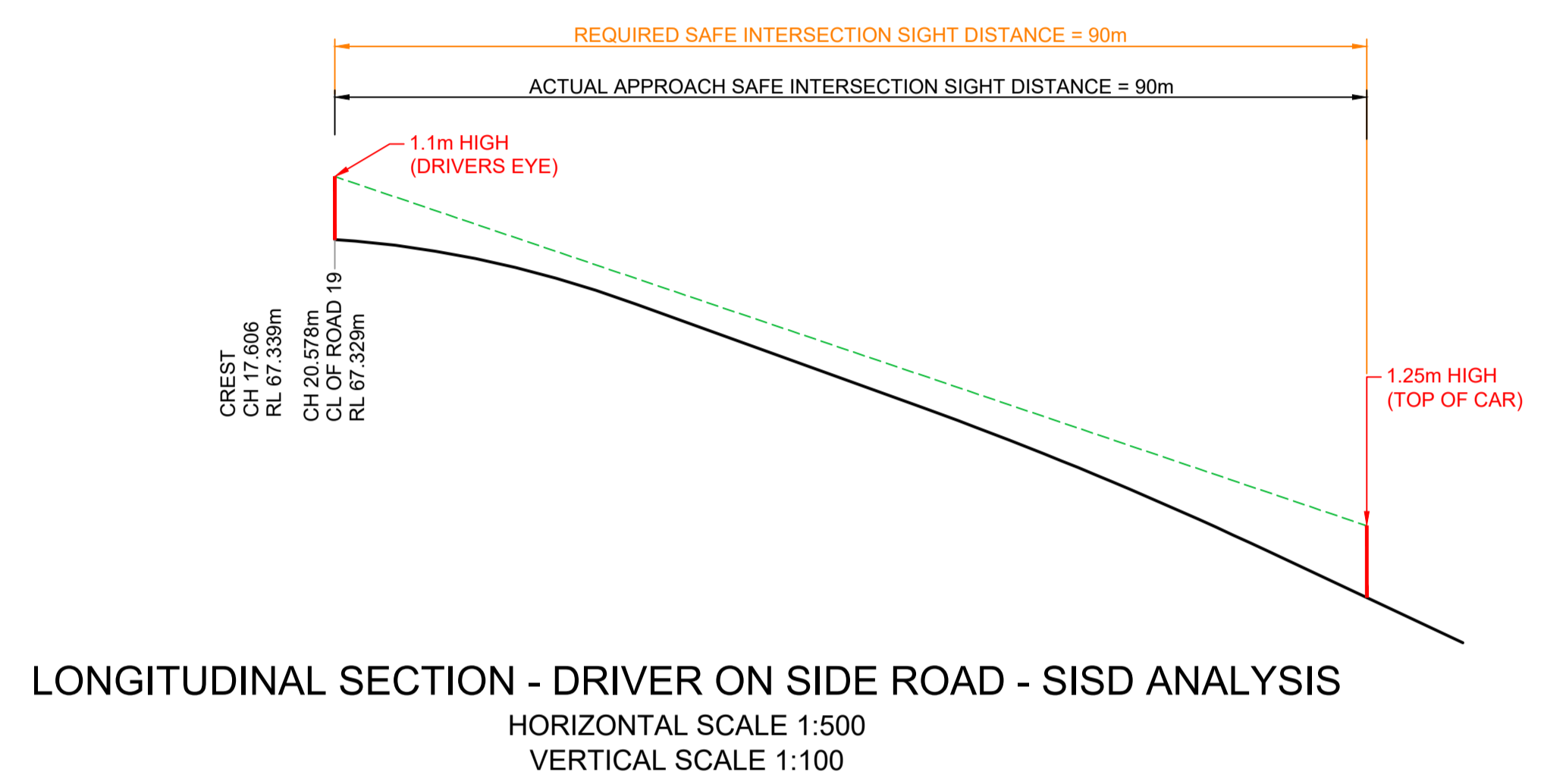
CADDENS HILL
 STAGE 7
 SIGHT DISTANCE ANALYSIS
 SHEET 2

PLAN No: 110358/DA711 **C**
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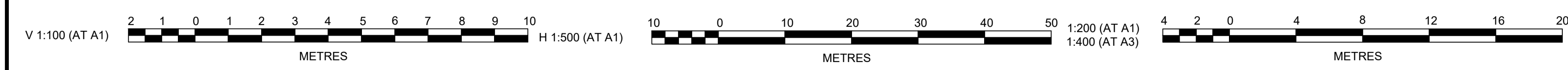
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SISD CHECK
 DESIGN SPEED = 50km/h
 SISD LENGTH = 90m
 RT = 1.5sec



PLAN
 SCALE 1:200



AMENDMENT	DES	DRN	CKD	APR	DATE
C	JT	JT	RO	MS	04/07/18
B	AJ	NM	AM	MS	06/06/18
A	JT	JT	AM	MS	19/02/17

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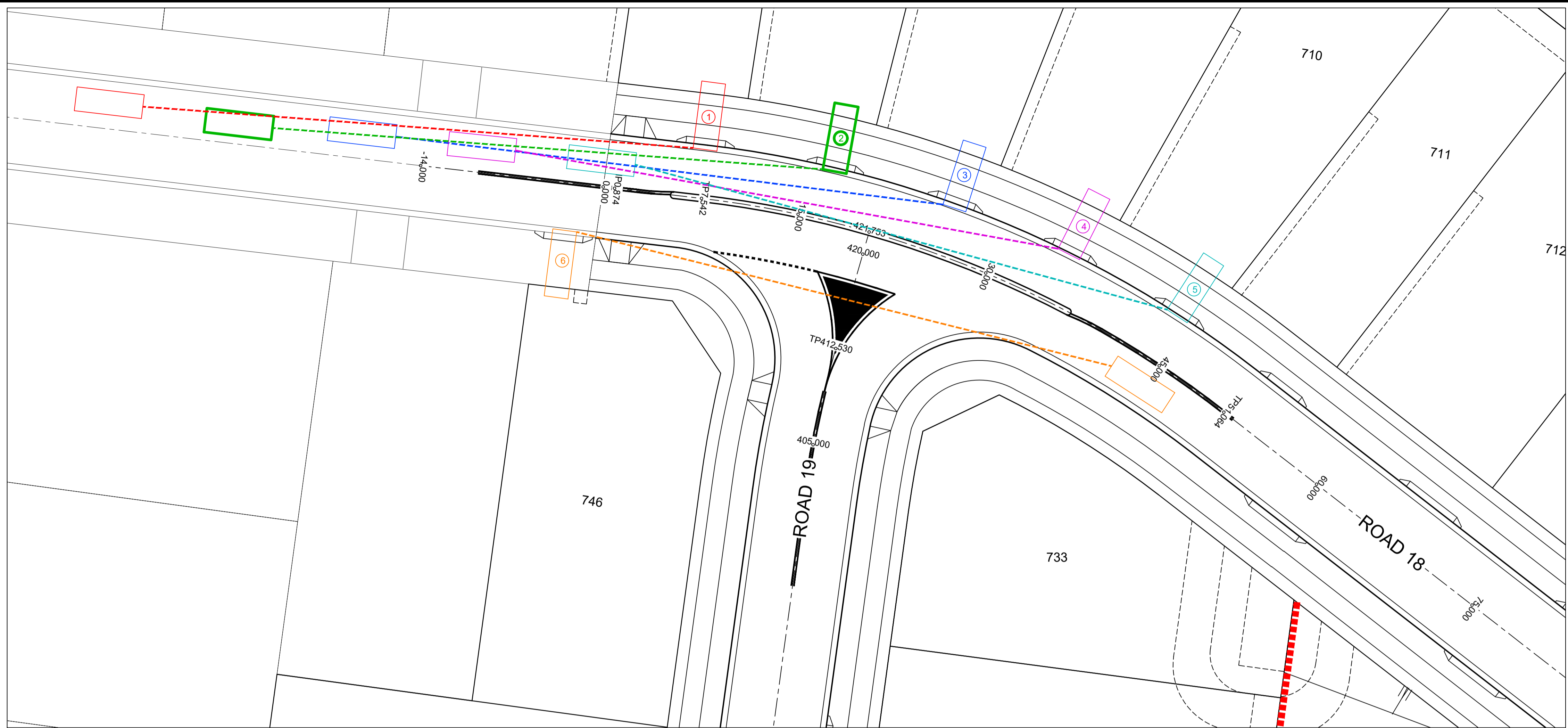
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CADDENS HILL
 STAGE 7
 SIGHT DISTANCE ANALYSIS
 SHEET 3

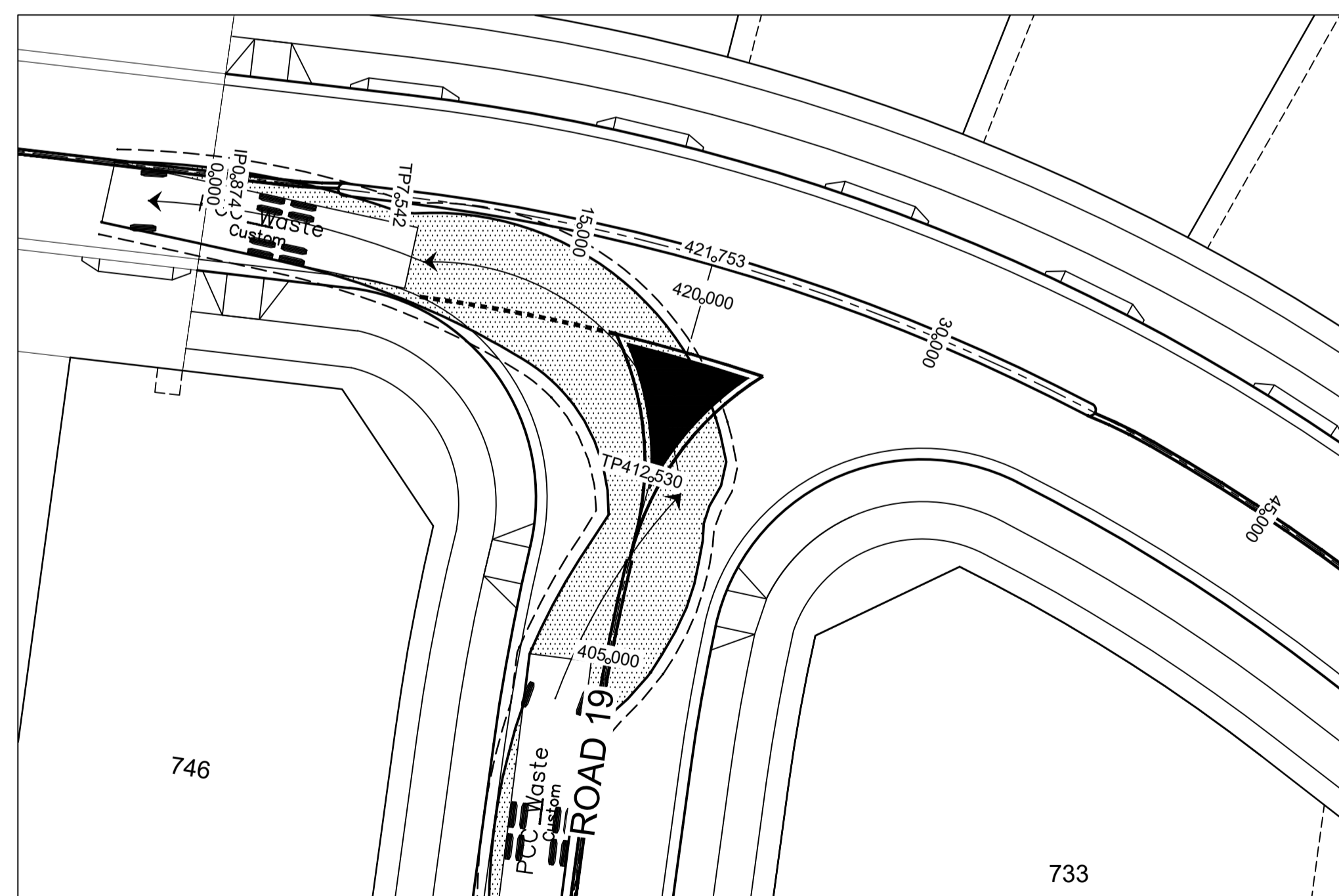
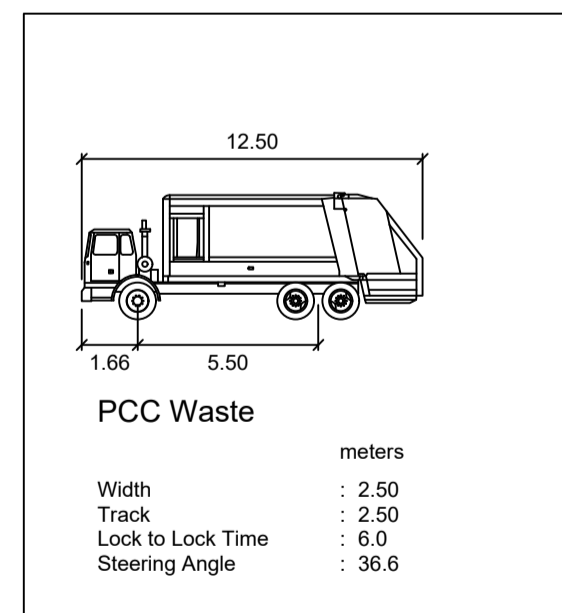
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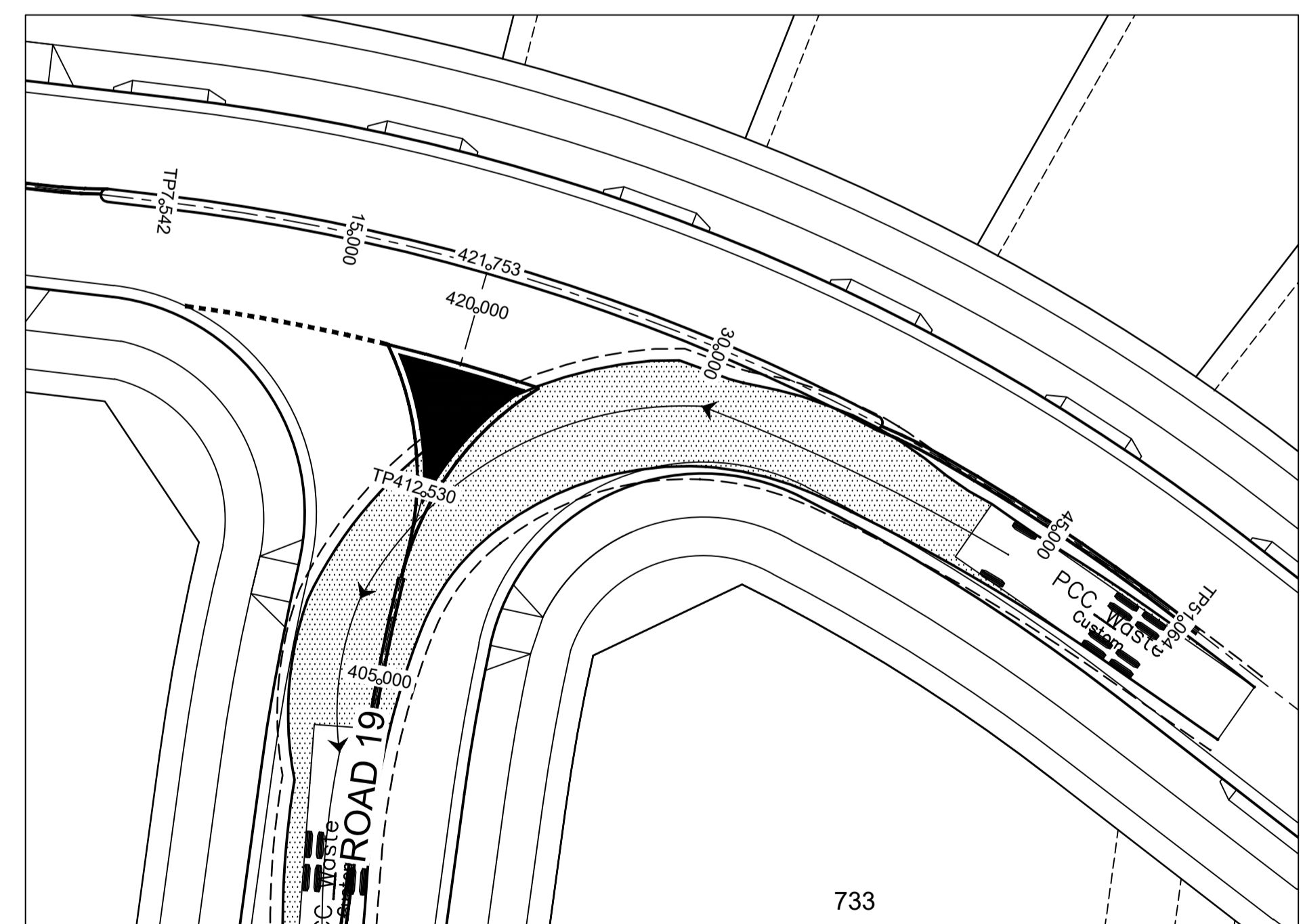
SSD CHECK

DESIGN SPEED = 50km/h
 SSD LENGTH = 42m
 RT = 1.5sec



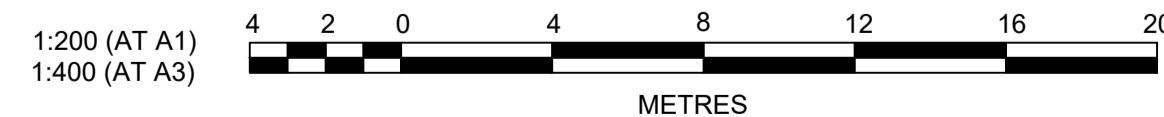
PENRITH CITY COUNCIL GARBAGE TRUCK
 SIMULATION LEFT OUT OF ROAD 19

SCALE 1:200



PENRITH CITY COUNCIL GARBAGE TRUCK
 SIMULATION LEFT INTO ROAD 19

SCALE 1:200



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CADDENS HILL
 STAGE 7

SIGHT DISTANCE ANALYSIS & GARBAGE TRUCK SIMULATION
 SHEET 4

PLAN No: 110358/DA713 C

FILE No: 110358DA713

SHEET SIZE: A1 ORIGINAL

Plotted: 16 July 2018 2:11:17 PM File Name: J:\110358 - O'Connell Lane Caddens\08 - Stage 7\CDD\DA\110358DA713.dwg

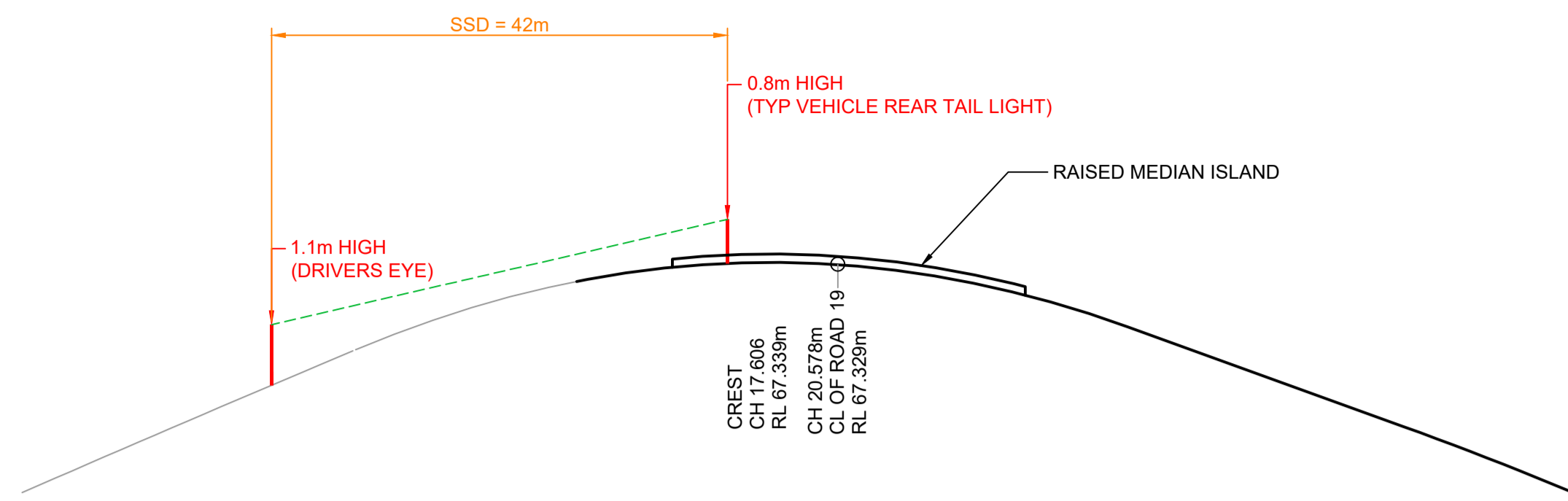
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B	AJ	NM	AM	MS	06/06/18
A	JT	JT	AM	MS	19/02/17

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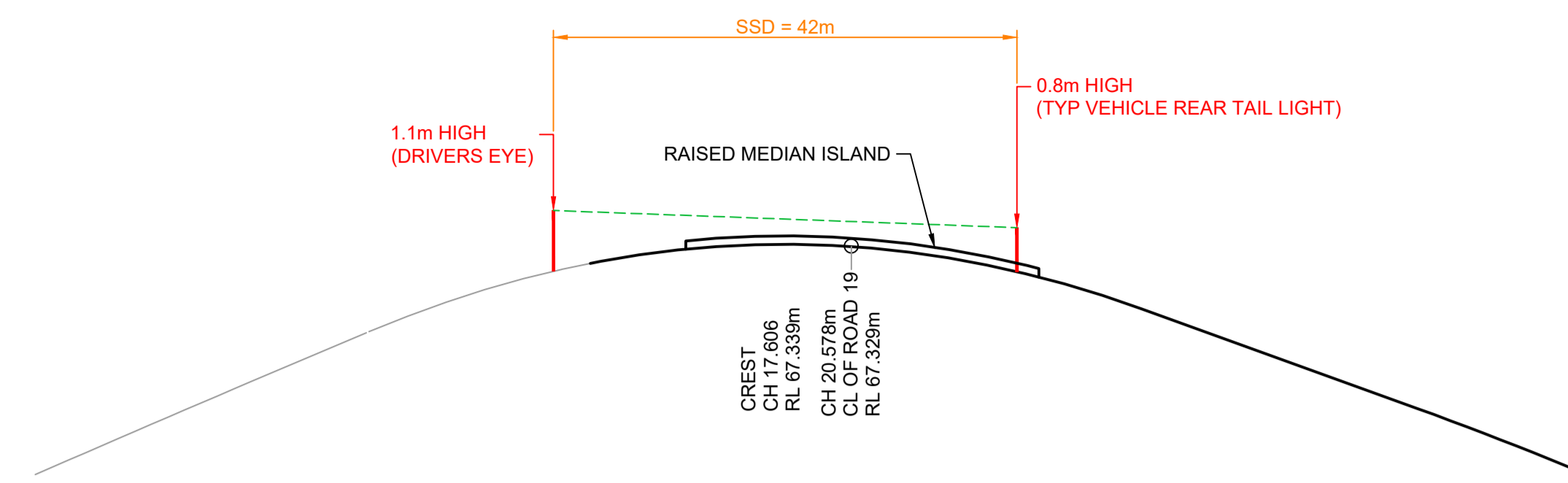
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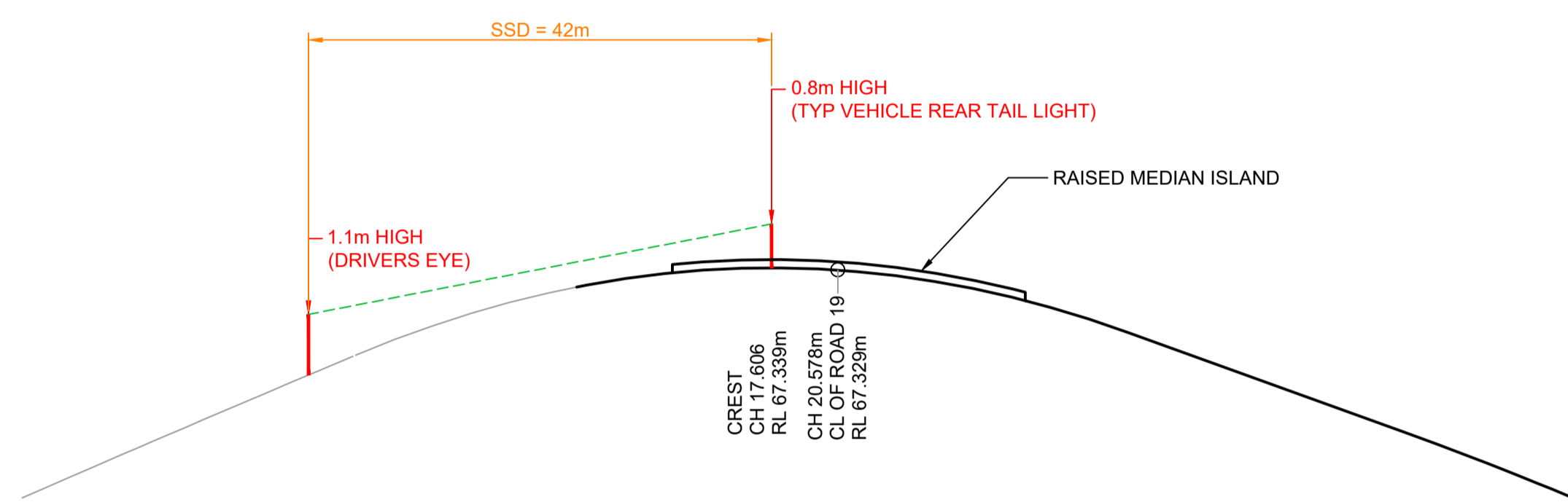
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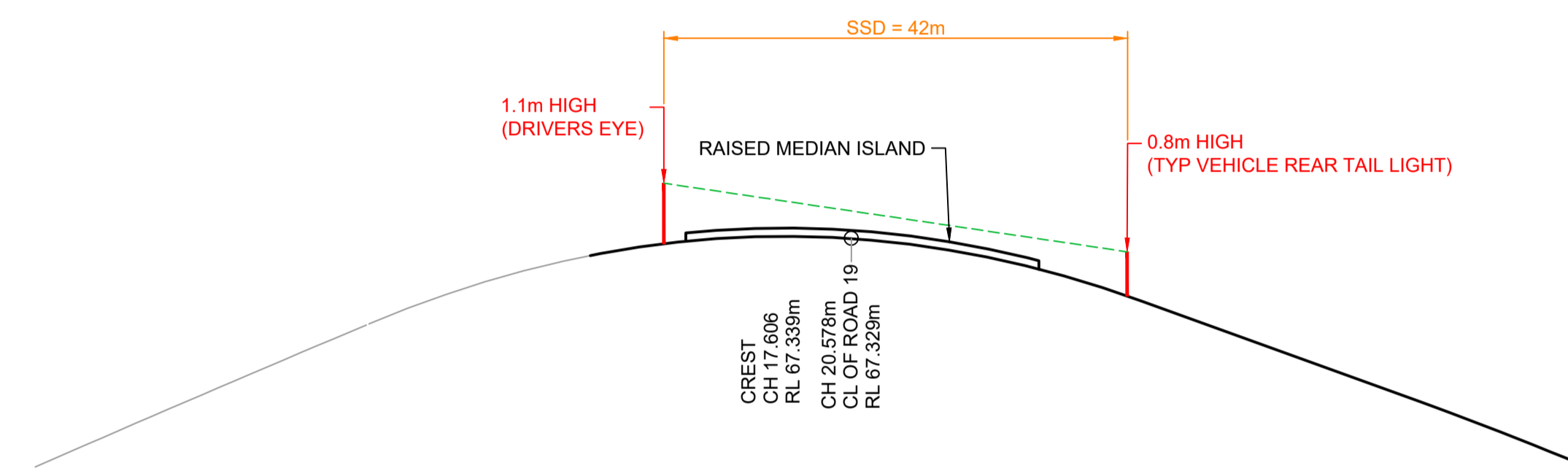
LONGITUDINAL SECTION - SECTION ① - SSD ANALYSIS
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



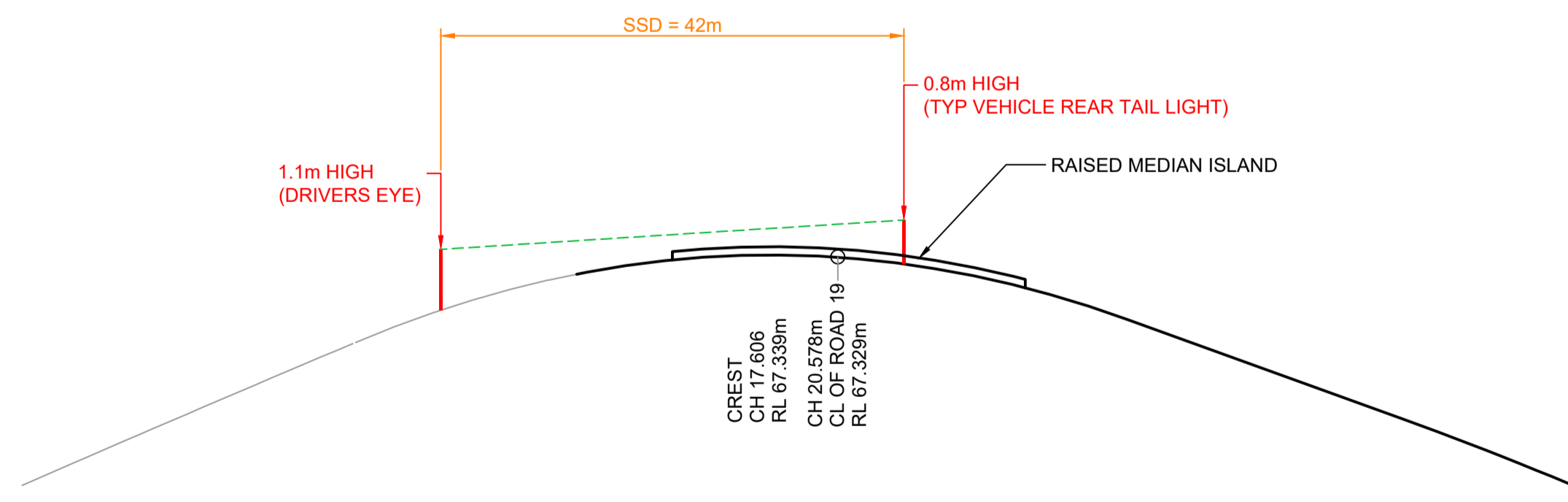
LONGITUDINAL SECTION - SECTION ④ - SSD ANALYSIS
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



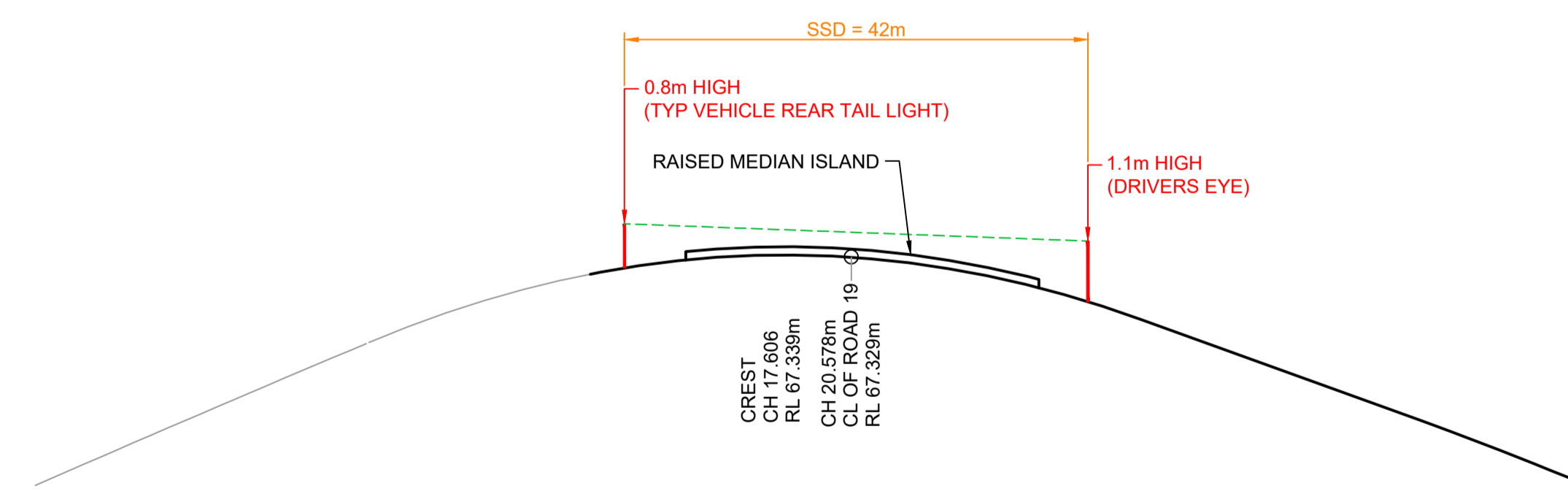
LONGITUDINAL SECTION - SECTION ② - SSD ANALYSIS
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



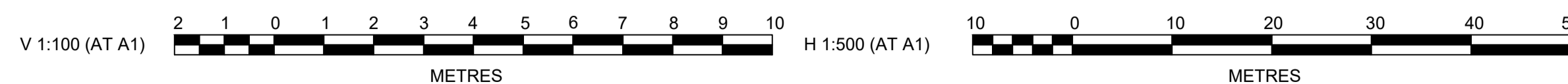
LONGITUDINAL SECTION - SECTION ⑤ - SSD ANALYSIS
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



LONGITUDINAL SECTION - SECTION ③ - SSD ANALYSIS
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



LONGITUDINAL SECTION - SECTION ⑥ - SSD ANALYSIS
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



NO.	DESCRIPTION	DES	DRN	CKD	APR	DATE
C	ISSUE FOR DA APPROVAL	JT	JT	RO	MS	04/07/18
B	COUNCIL COMMENTS	AJ	NM	AM	MS	06/06/18
A	COUNCIL COMMENTS	JT	JT	AM	MS	19/02/17
	AMENDMENT	DES	DRN	CKD	APR	DATE

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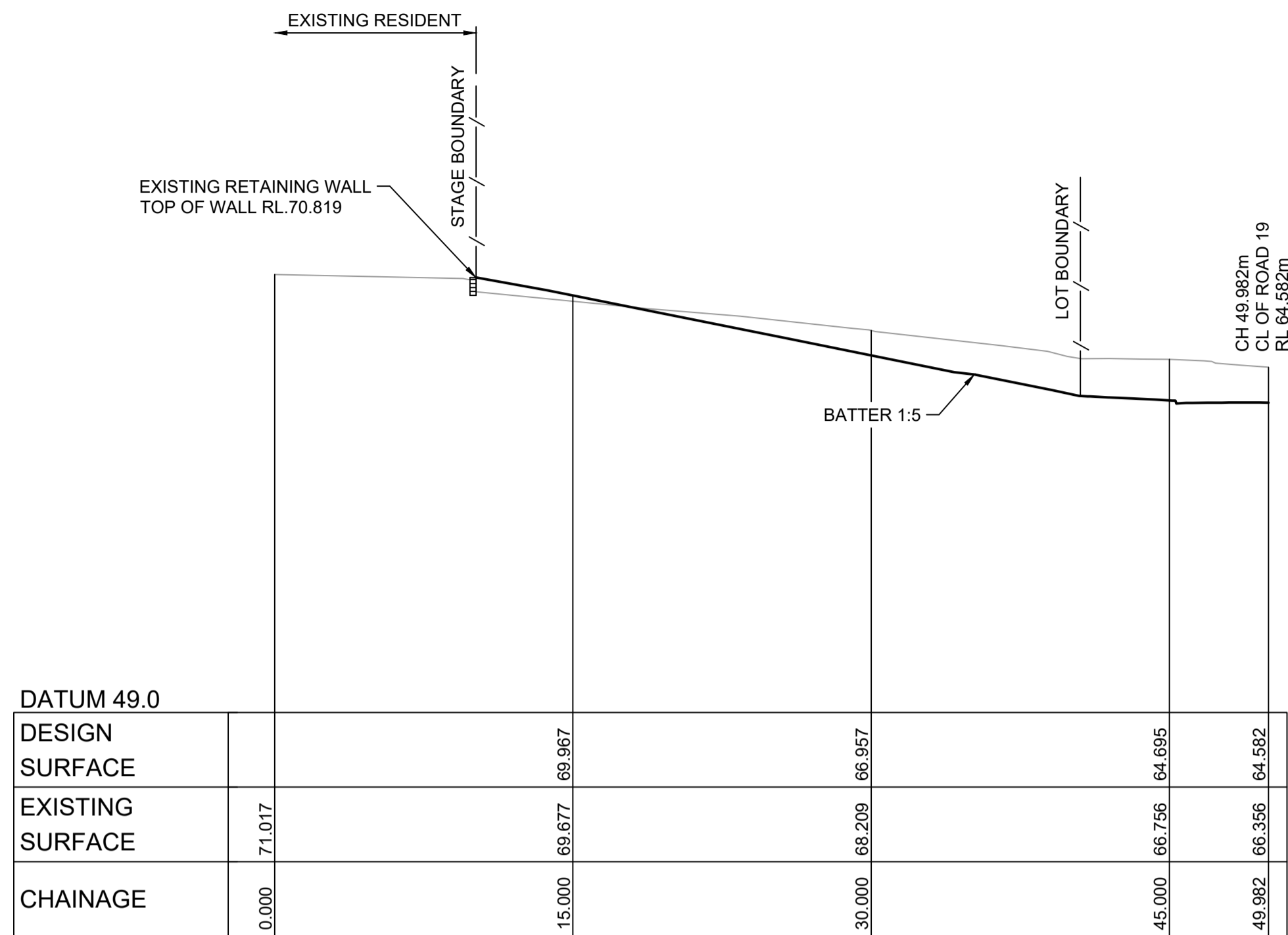
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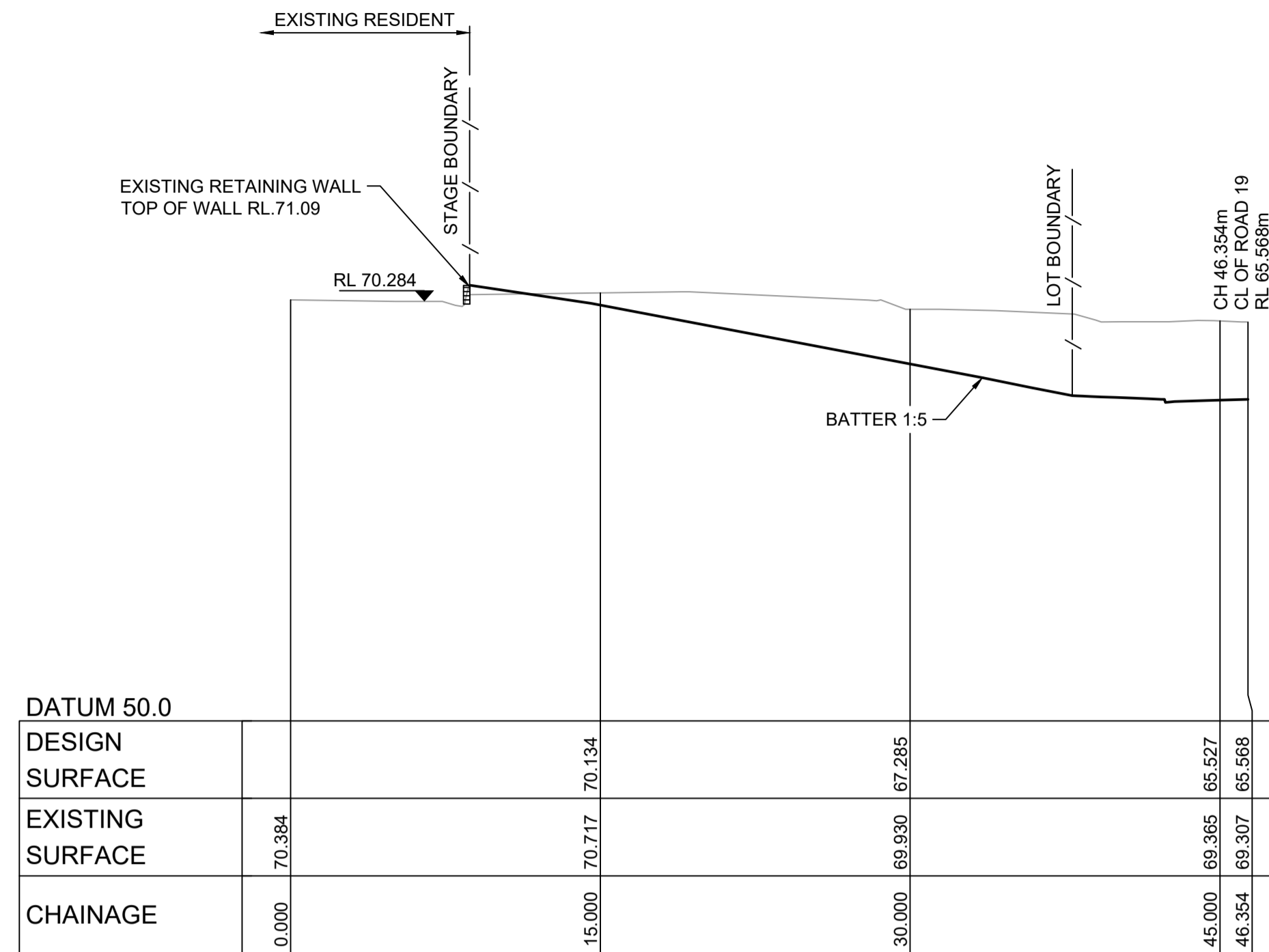
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CADDENS HILL
STAGE 7
SIGHT DISTANCE ANALYSIS
SHEET 5

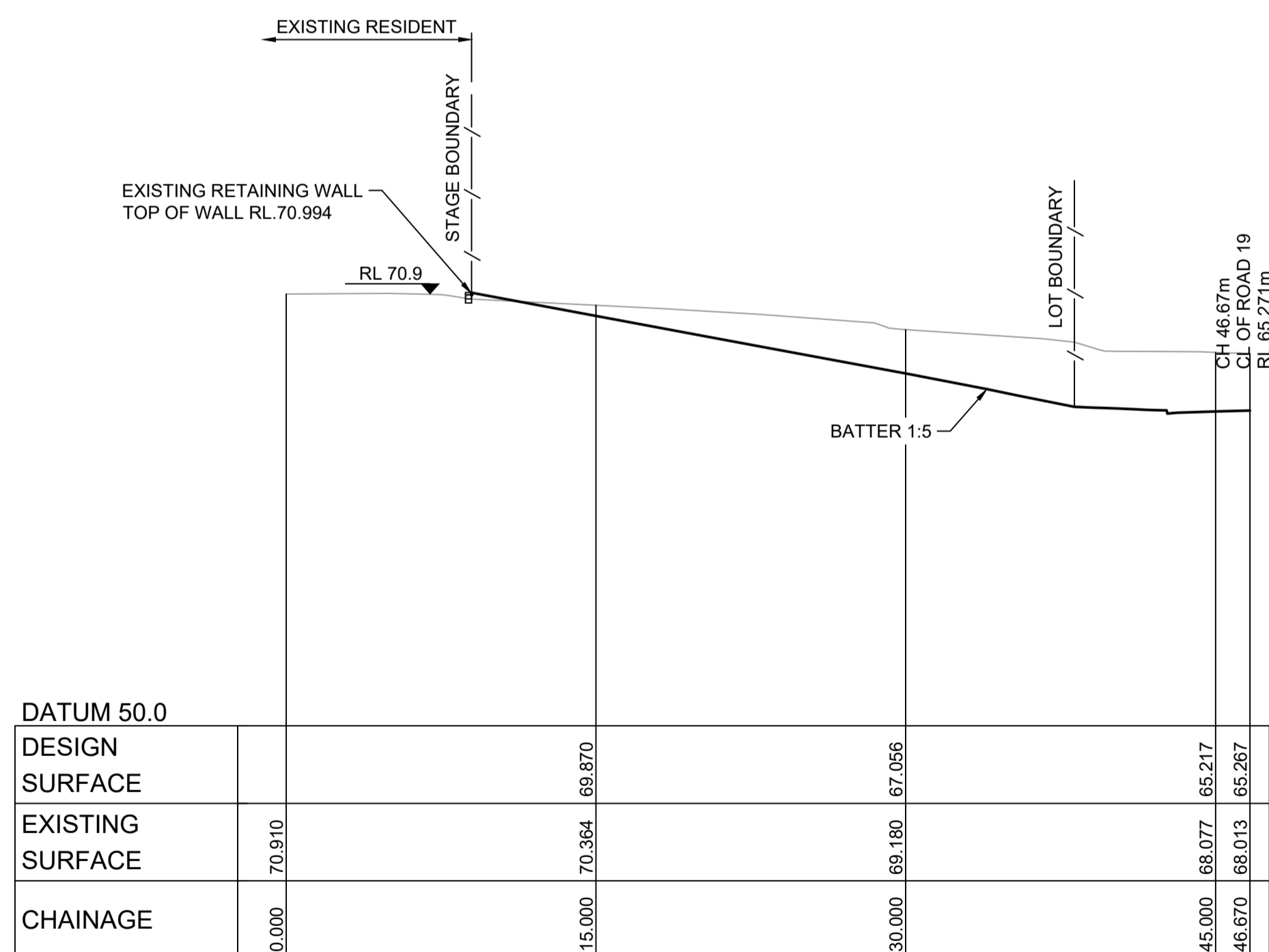
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FILE No: 110358DA714
SHEET SIZE: A1 ORIGINAL



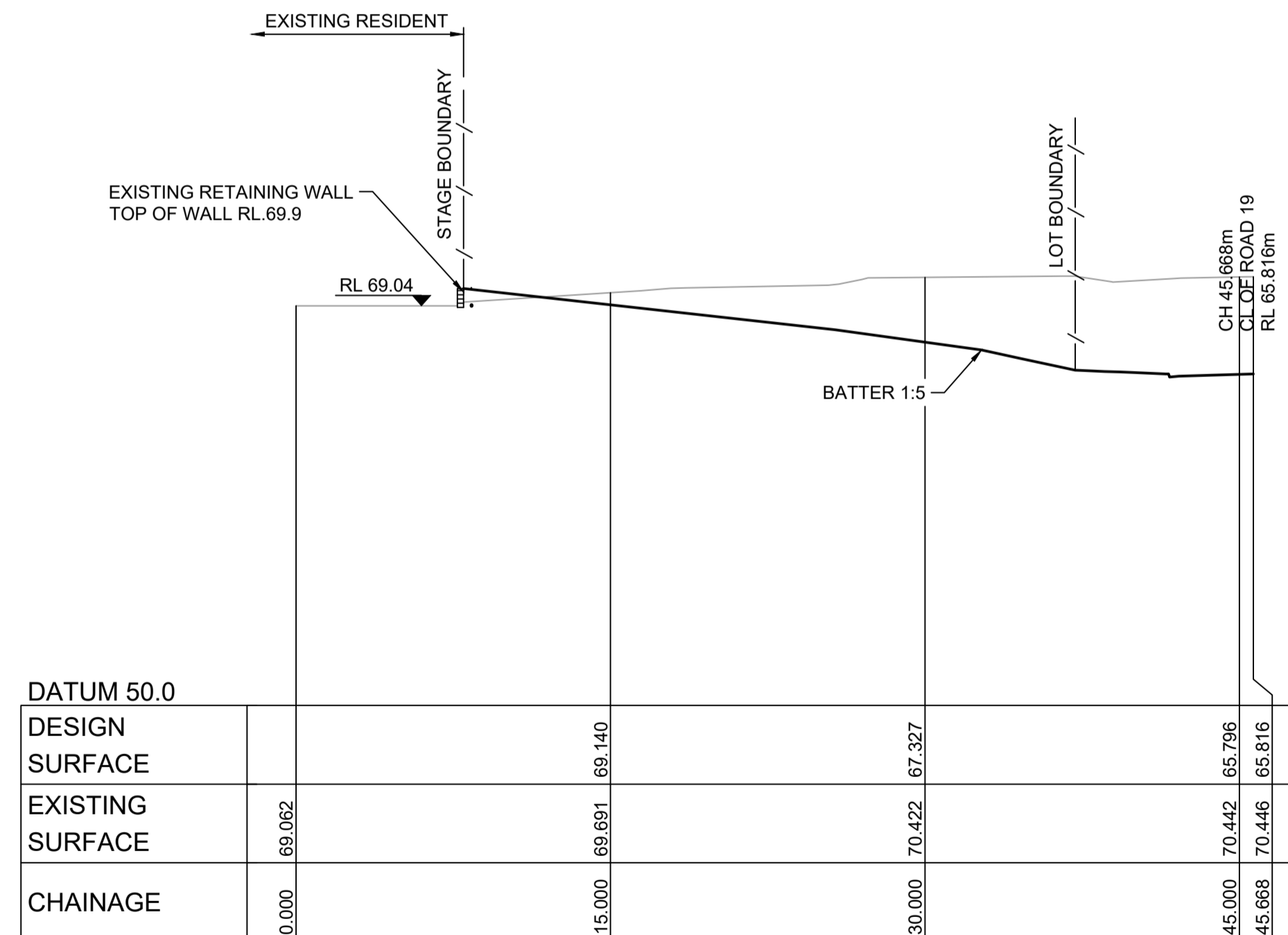
SECTION A
SCALE 1:250
703



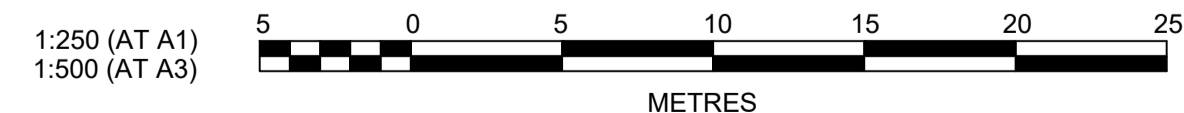
SECTION C
SCALE 1:250
703



SECTION B
SCALE 1:250
703



SECTION D
SCALE 1:250
703



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AMENDMENT	DES	DRN	CKD	APR	DATE
C	JT	JT	RO	MS	16/07/18
B	JT	JT	RO	MS	04/07/18
A	JT	JT	AM	MS	19/02/17

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ORIGIN:

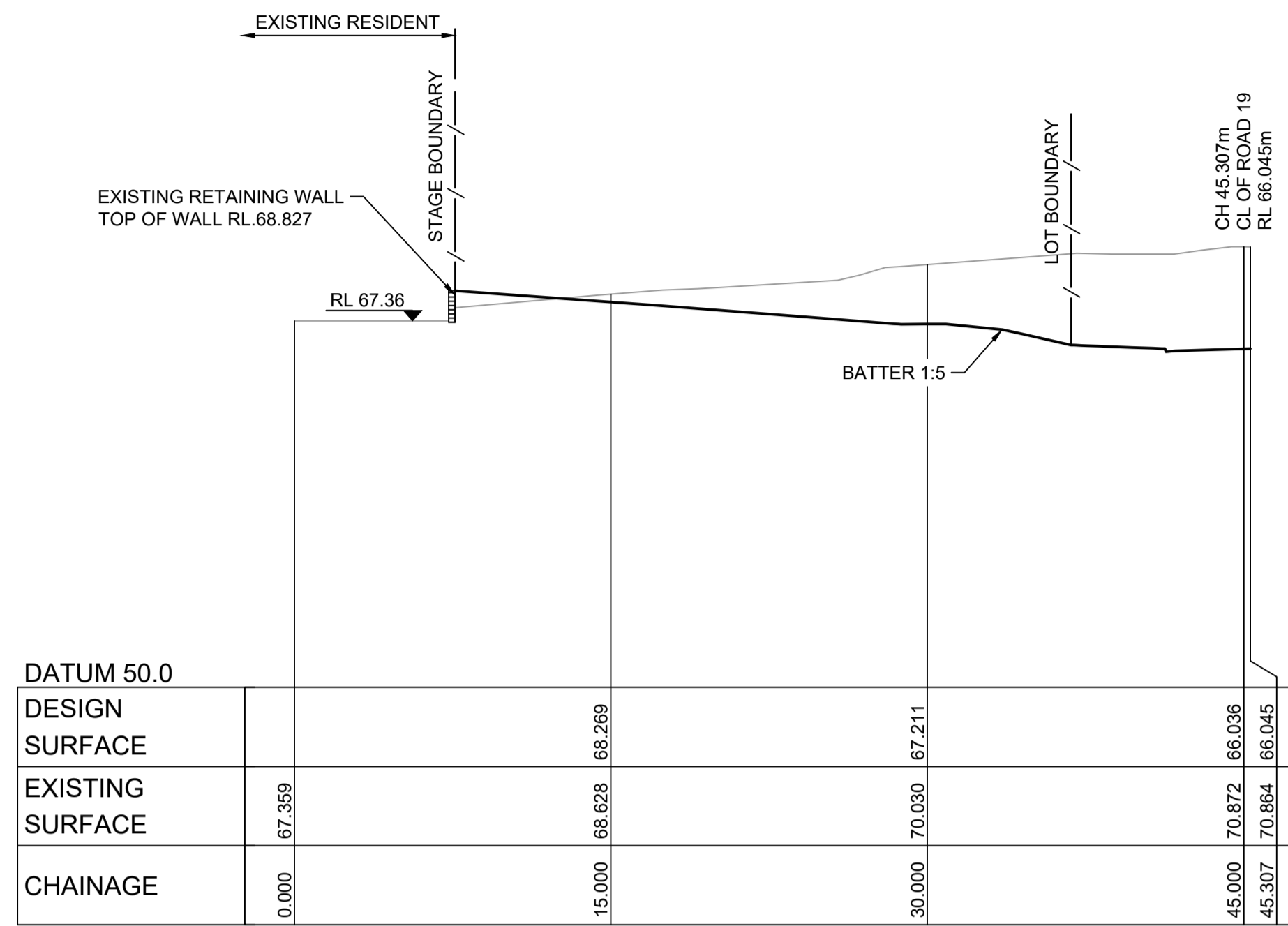
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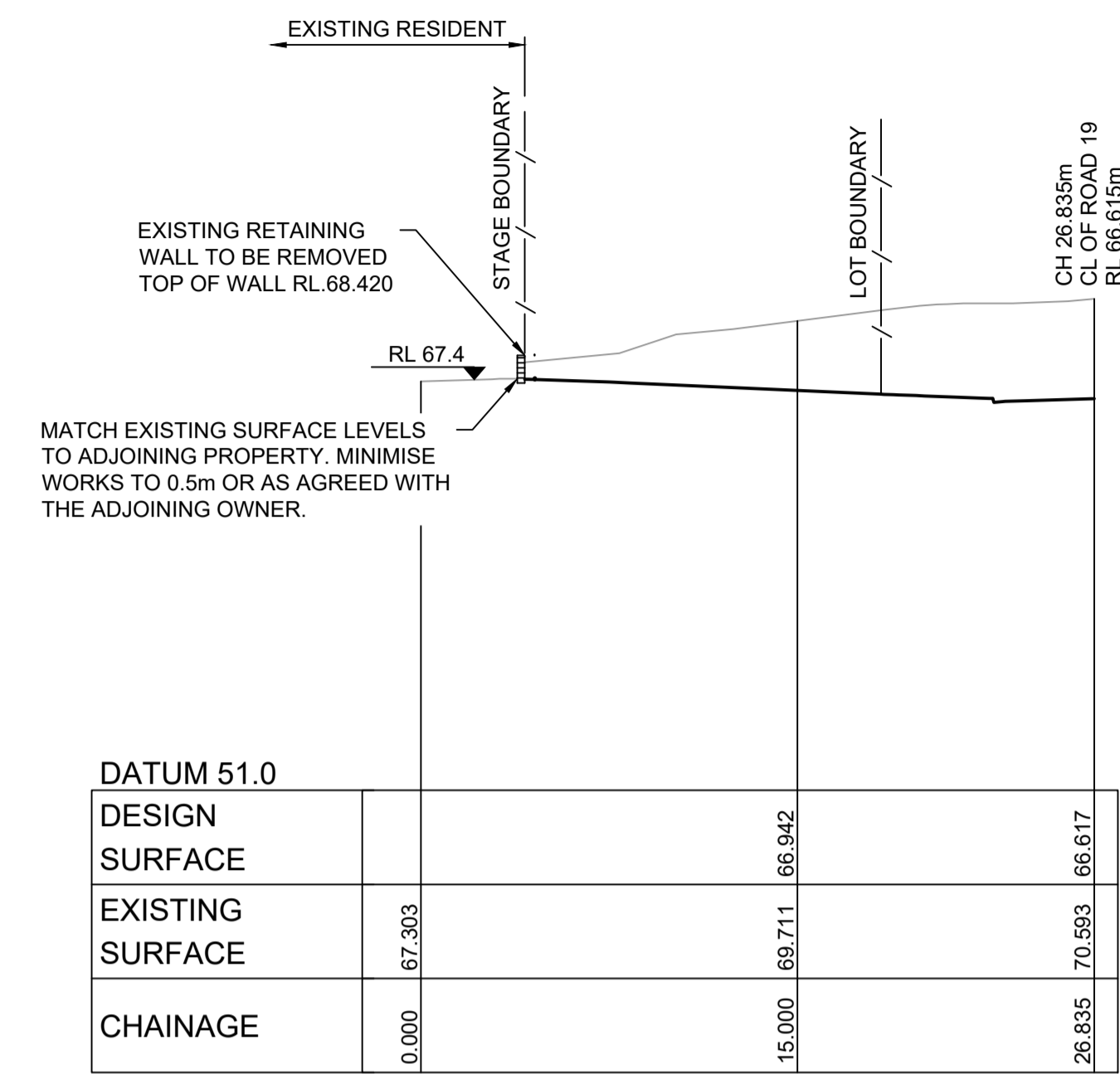
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CADDENS HILL
STAGE 7
SITE SECTIONS - BOUNDARY INTERFACE
SHEET 1

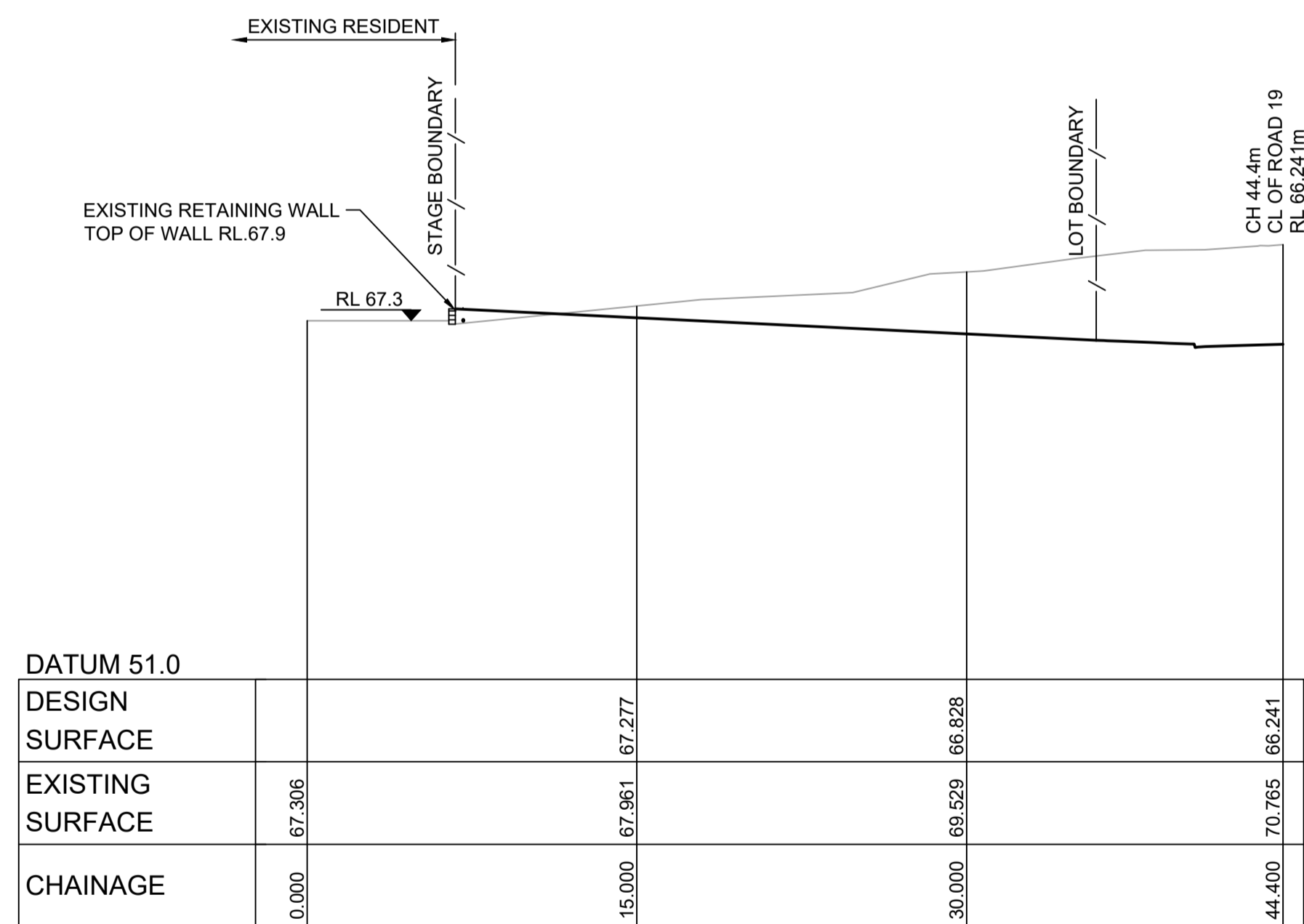
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 FILE No: 110358DA715
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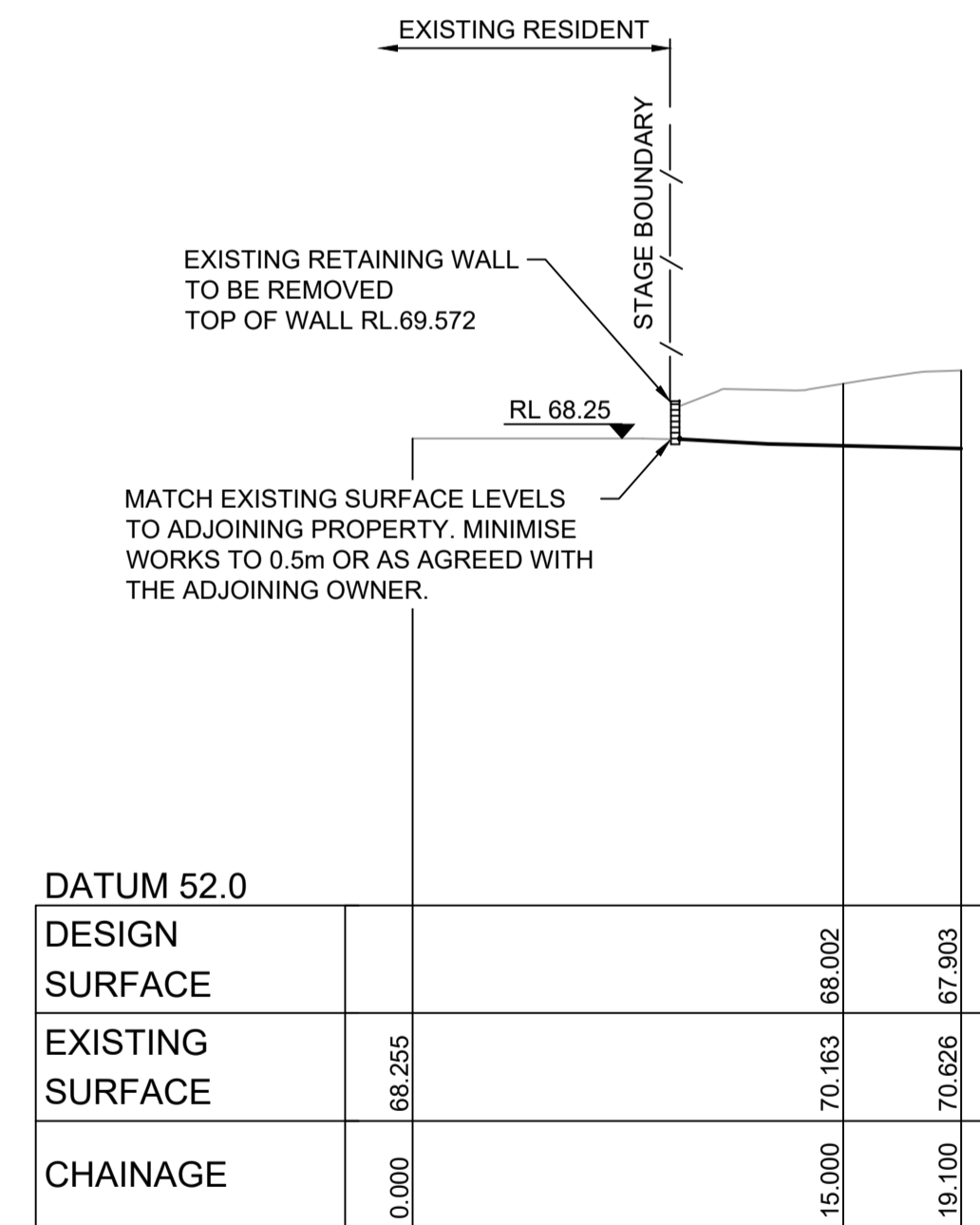
SECTION E
SCALE 1:250



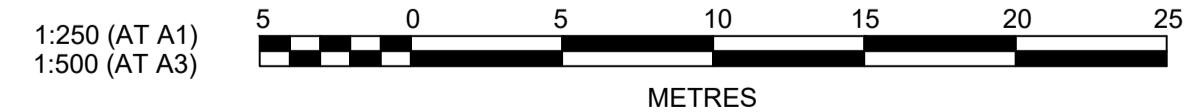
SECTION G
SCALE 1:250



SECTION F
SCALE 1:250



SECTION H
SCALE 1:250



Plotted: 16 July 2018 2:11:51 PM File Name: J:\110358 - O'Connell Lane Caddens\08 - Stage 7\CD\DA\110358DA716.dwg

AMENDMENT	DES	DRN	CKD	APR	DATE
C	JT	JT	RO	MS	16/07/18
B	JT	JT	RO	MS	04/07/18
A	JT	JT	AM	MS	19/02/17

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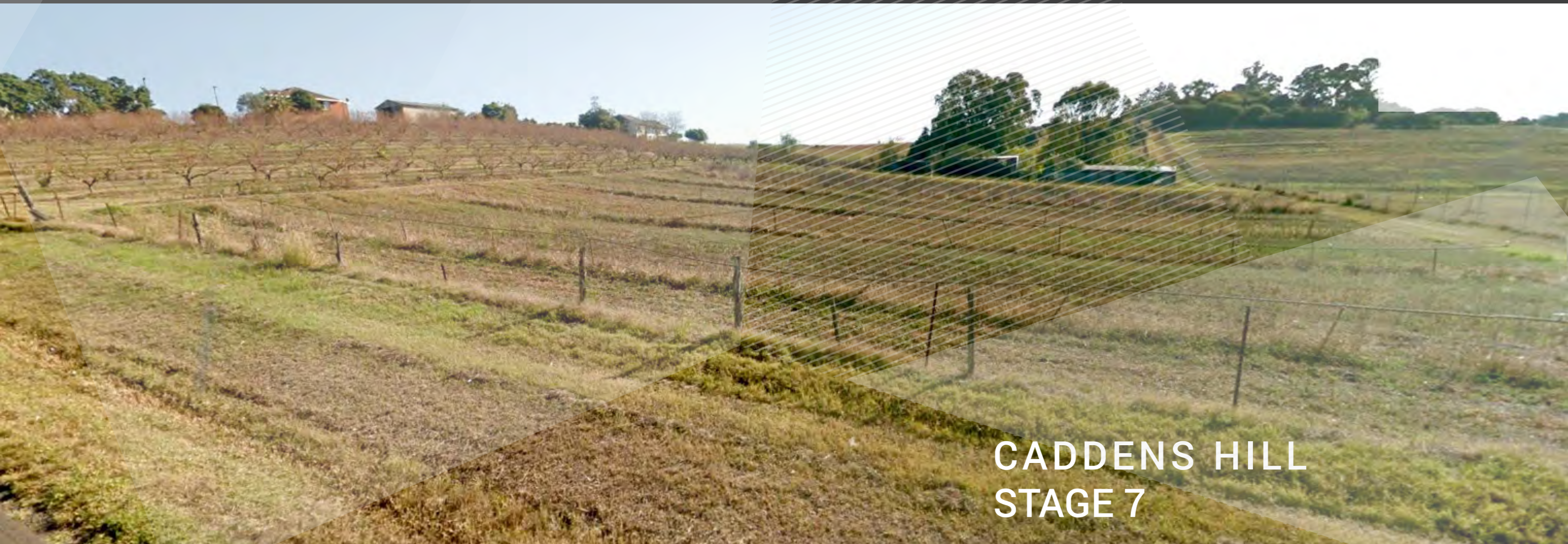
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CADDENS HILL
STAGE 7
SITE SECTIONS - BOUNDARY INTERFACE
SHEET 2

PLAN No:	110358/DA716	C
FILE No:	110358DA716	
SHEET SIZE:	A1 ORIGINAL	



CADDENS HILL STAGE 7

Landscape Masterplan Report

Prepared for
Legacy Property

Project Reference: 2517024
March 2018 rev B

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INTRODUCTION	3
STAGING PLAN & DOCUMENT REFERENCES	4
STAGE 7 PLAN	5
CIRCULATION DIAGRAM	6
TYPICAL PLANT SCHEDULE, IMAGES & FENCE	7
MAINTENANCE PROGRAM	8



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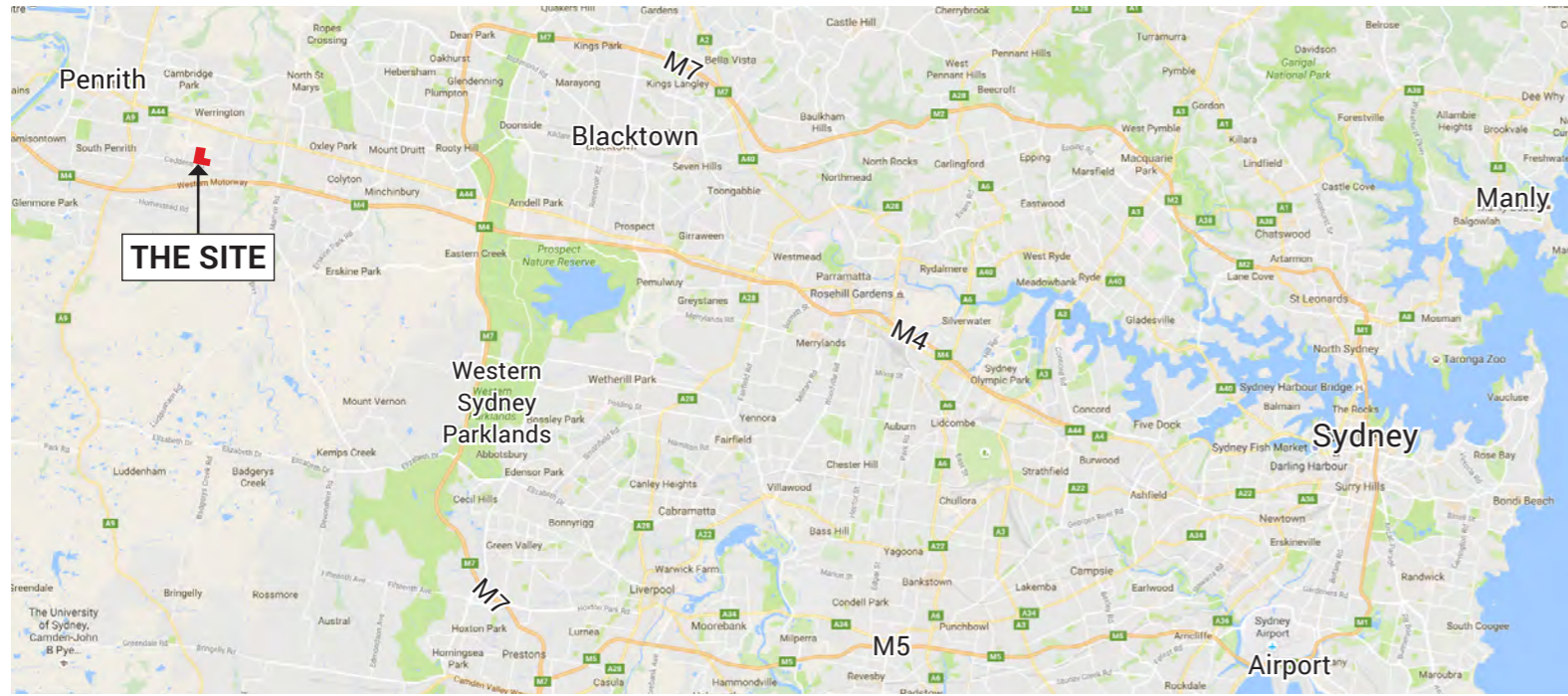


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Document number	2517024
Prepared for	Legacy Property
Authors	Steven Holmes, Jared Phillips
Revision number	B
Revision issue date	March 2018
Approved	
Reason for revision	DA Issue - response to Council comments

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INTRODUCTION



GoogleMap Location of the Site, NSW

NOT TO SCALE NORTH



PLACE Design Group have been engaged by Legacy Property to provide landscape DA documentation for Stage 7 of the Caddens Hill Development in Caddens, Penrith, NSW.

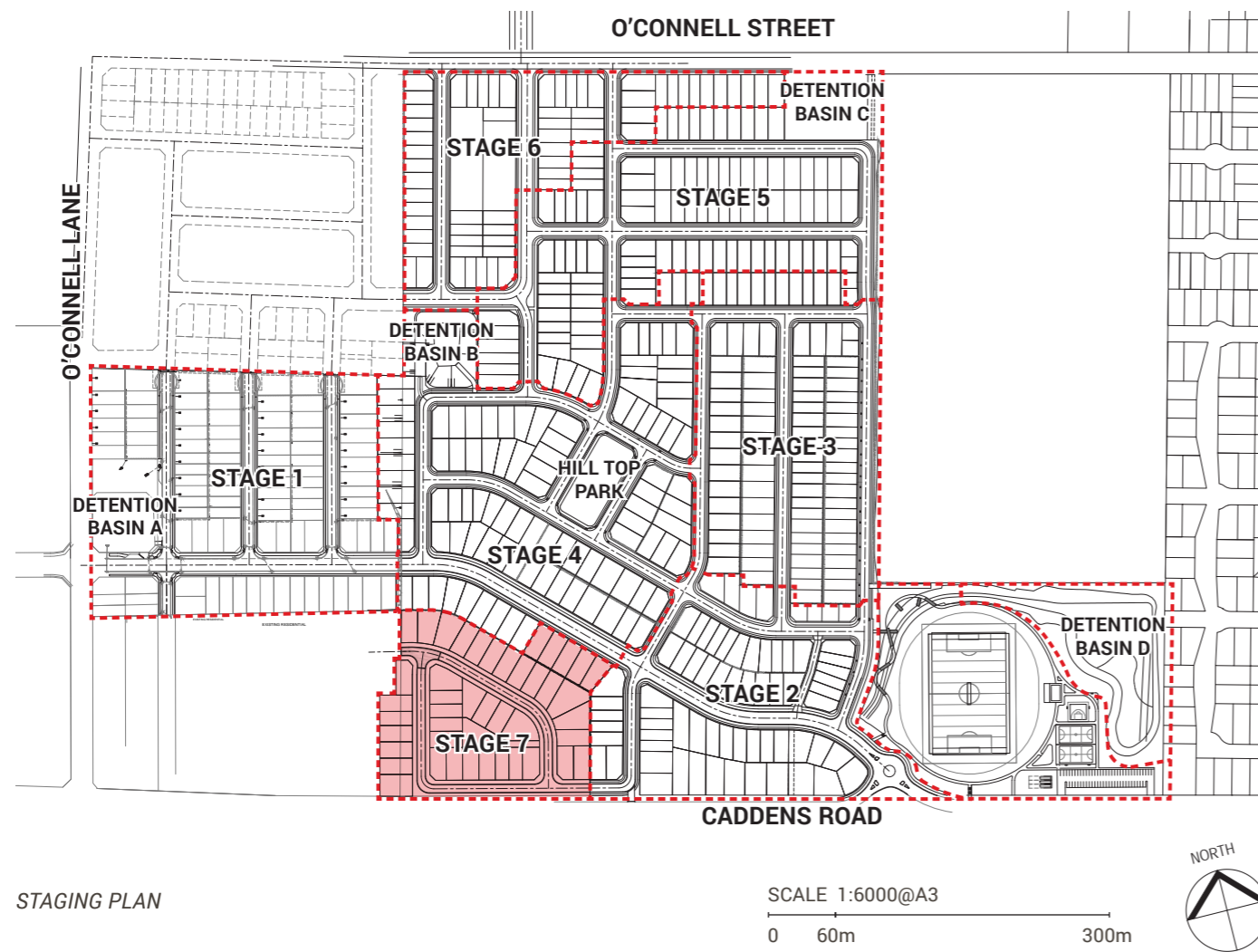
This document is intended to assist in defining the development and landscape character of Caddens Hill and to be coherent with the current development of the site. It is intended that Caddens Hill will provide a quality sustainable development that recognizes and interprets the rural character, landscape features and undulating topography of the site.

The landscape Design as set out in this DA Report is intended to:

- Provide high quality, low maintenance public domain which affords the community with a high level of amenity and creates a strong sense of place for the development.
- Create attractive streetscapes which retain and enhance significant views and vistas, landmark elements and Landscape Features and;

- Ensure continuity of design not only from Stages 1 to 6 but also the adjacent UGNSW Caddens site
- Create a strong sense of arrival and identity for the site through the use of linear avenues of trees (*various species*) that characterise the streetscapes.

STAGING PLAN & DOCUMENT REFERENCES



View from Caddens Road Looking north at the Proposed Additional Lots



View from Caddens Road at Proposed Location of New Road



Images taken from GoogleMaps

Control Documents:

Background Information

- DCP - Penrith City Council. Items for the site include:

Penrith DCP 2014 Volume 2 E1 Caddens

1.3 The Public Domain

1.3.3 Pedestrian and Cycle Network

Figure E1.6 – Street Hierarchy

Figure E1.7a-j

Figure E1.8 – Pedestrian & Cycle Routes

1) Key pedestrian and cycleway routes are to be provided generally in accordance with Penrith Development Control Plan 2014 E1 Caddens E1 - 25 Figure E1.8.

2) The design of cycleways located within the road reserve is to be in accordance with Figure E1.7.

3) The minimum width of off-street shared cycle and pedestrian pathways is to be 2.5m (as shown in Figure E1.7g).

4) The minimum width of pedestrian footpaths is 1.5m.

5) All pedestrian and cycleway routes and facilities are to be consistent with the Planning Guidelines for Walking and Cycling (DOP & RTA 2004).

1.3.5 Open Space, Environmental Conservation and Landscape Network

Figure E1.10 – Open Space and Environmental Conservation Network

Figure E1.11 – Eastern Hilltop Park Concept

Figure E1.14 – Active open space concept

Figure E1.15 – Detention Basins Concept

7) The 0.35 hectare Eastern Hilltop Park located on the ridgeline to the east of the site is to present as natural woodland. It is to incorporate the following elements as illustrated in Figure E1.11:









- heritage interpretation of the ruins of the 19th century farmhouse and re-use of materials where appropriate;
- viewing platforms to other vantage points within Caddens and beyond;
- an informal kick about space on the flatter land;
- accessible paths where possible;
- seating areas and shade structures;
- canopy trees;
- existing trees, Cumberland Plain Woodland species as well as other endemic robust native plant species and where necessary saline-tolerant species; and
- low maintenance and robust finishes.

Associated Consultant Documents:

Caddens Hill Project Stage 1 to 7 Soil Investigation by SESL (October 2016)

STAGE 7 PLAN

LEGEND

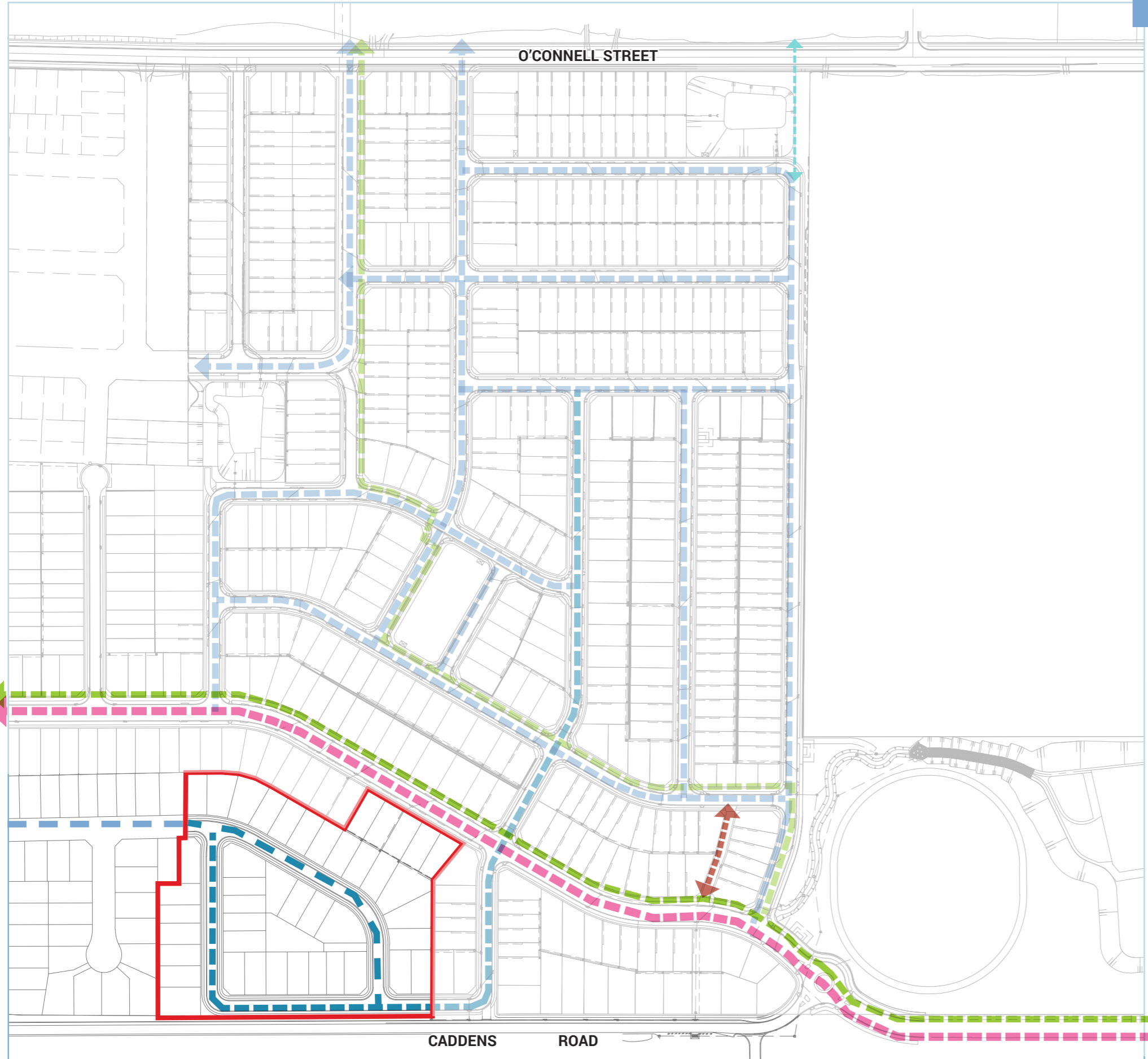
-  *Eucalypus sideroxylon*
-  *Lagerstroemia indica 'Natchez'*
-  *Tristaniopsis laurina 'Luscious'*
-  *Melaleuca linariifolia*
-  Grasses & Low Shrub Embellishment Planting
-  Turf
-  Post & Rail Timber Fence (to continue into Stage 2)
-  Path 1.5m wide



SCALE 1:1000@A3
0 10m 50m



CIRCULATION DIAGRAM



- LEGEND**
- Scope of Work (Stage 7)
 - - - Site Wide 2.5m wide Shared Path (Cycleway / Pedestrian)
 - - - Site Wide Primary Vehicle Circulation
 - - - Site Wide Secondary Vehicle Circulation
 - - - STAGE 7 Secondary Vehicle Circulation
 - - - Laneway



SCALE 1:3000@A3
 0 30m 150m

TYPICAL PLANT SCHEDULE & IMAGES

CADDENS HILL PLANT SCHEDULE				
STAGE 7				
Botanical Name	Common Name	Mature Height	Pot Size	Spacing /m2
TREES TO STREETScape				
<i>Eucalyptus sideroxylon</i>	Red Ironbark	15m	75L	As Shown
<i>Lagerstroemia indica x L. fauriei 'Natchez'</i>	Crepe Mytle	5m	100L	As Shown
<i>Melaleuca linariifolia</i>	Snow in Summer	6m	100L	As Shown
<i>Tristaniopsis laurina</i>	Water Gum	9m	100L	As Shown
SHRUBS & GRASSES BETWEEN CADDENS ROAD & ROAD 19				
<i>Carex appressa</i>	Tall Sedge	0.8m	150mm	4
<i>Grevillea rosmarinifolia 'Crimson villeda'</i>		0.8m	150mm	3
<i>Lomandra longifolia 'Nyalla'</i>	Basket Grass	0.75m	150mm	4
<i>Pennisetum alopecuroides 'Pennstripe'</i>	Chinese Fountain grass	0.45m	150mm	5
<i>Poa labillardieri 'Eskdale'</i>	Common Tussock Grass	0.75m	150mm	5
Turf				
Kikuyu Grass	<i>Pennisetum clandestinum</i>			

Street Trees



Lagerstroemia 'Natchez'



Melaleuca linariifolia



Eucalyptus sideroxylon



Tristaniopsis laurina 'Luscious'

Embellishment Planting



Carex appressa



Grevillea rosmarinifolia 'Crimson Villeda'



Lomandra longifolia 'Nyalla'



Pennisetum alopecuroides 'Pennstripe'



Poa labillardieri 'Eskdale'



Rural Fence

MAINTENANCE PROGRAM

Caddens Hill DEVELOPER MAINTENANCE PROGRAM - SOFTSCAPE

Client: Legacy Property
Project Name: Caddens Hill
Precinct Name: STAGE 7
Works Description: Maintenance of soft landscape areas
Maintenance Period: 12 months

SOFTSCAPE AREAS:

TASK DESCRIPTION:	0-9 MONTHS FREQUENCY:	9-12 MONTHS FREQUENCY:
Trees to Streetscapes		
Visual inspection of all street and park trees	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Manually inspect water levels to trees	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Inspect damage to trees	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Prune dead or damaged branches	Fortnightly in summer/Monthly in Winter	Monthly in summer/Once in Winter
Check for and report pests & diseases	Fortnightly	Monthly
Replace failed or damaged trees	Fortnightly/As required	Monthly/As required
Spray in accordance with manufacturers recommendations	As required	As required
Adjust &/or replace stakes & ties where necessary	As required	As required
Monitor and apply fertiliser to turf areas	6 month intervals - Autumn/Spring	Yearly
Turf to Verges		
Mow all turf areas to maintain height between 30-40mm	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Trim edges of all turf areas	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Remove clippings from site	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Remove litter & debris from turf areas	Weekly in Summer/Monthly in Winter	Fortnightly in Summer/2 months in Winter
Check for and report pests & diseases	Fortnightly	Monthly
Spray in accordance with manufacturers recommendations	As required	As required
Monitor and apply fertiliser to turf areas	6 month intervals - Autumn/Spring	Yearly
Garden Bed - Between Caddens Road & Road 19		
Remove litter & debris and rake over mulch as required	Fortnightly	Monthly/As required
Remove weed growth in mulch areas	Fortnightly	Monthly
Top up mulch as required	Annually	Annually
Replace failed or damaged shrubs and grasses	Fortnightly/As required	Monthly/As required
Visual inspection of rural fence, check, report / repair any damage	Fortnightly/As required	Monthly/As required
General watering		
Irrigation by hydrant or water cart as required to maintain health	Weekly first 6 months/Fortnightly there after	Monthly

ADDITIONAL WORKS / COMMENTS:

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Caddens Hill DEVELOPER MAINTENANCE PROGRAM - HARDSCAPE

Client: Legacy Property
Project Name: Caddens Hill
Precinct Name: STAGE 7
Works Description: Maintenance of hard landscape areas
Maintenance Period: 12 months

HARDSCAPE AREAS:

TASK DESCRIPTION:	0-9 MONTHS FREQUENCY	9-12 MONTHS FREQUENCY
Concrete pavements to Streetscapes & Basin C		
Visual inspection of all pavements for damage and cracks	Fortnightly	Monthly
Visual inspection of all pavements for efflorescence (salt deposits)	Fortnightly	Monthly
Visual inspection of all pavements for colour consistency and stains	Fortnightly	Monthly
Clean in accordance with manufacturers recommendations	As required	As required
Leaf and debris clearance with blower	Monthly	2 Months
Urgent works		
Report any theft damage or vandalism	Weekly	Fortnightly

ADDITIONAL WORKS / COMMENTS:

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Site Foreman

place
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Australia
China
South East Asia

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SURVEYING & SPATIAL INFORMATION REGULATION 2012 CLAUSE 61(2)

M.G.A. CO ORDINATES (ZONE 56)

MARK	EASTING	NORTHING	CLASS	ORDER	METHOD
XXXXXX	XXXXXX	XXXXXX	B	2	SCIMS
XXXXXX	XXXXXX	XXXXXX	B	2	"
XXXXXX	XXXXXX	XXXXXX	B	2	"
XXXXXX	XXXXXX	XXXXXX	B	2	CADASTRAL
XXXXXX	XXXXXX	XXXXXX	C	3	TRAVERSE

COMBINED SEA LEVEL AND SCALE FACTOR 0.999985

SOURCE M.G.A. CO ORDINATES ADOPTED FOR ESTABLISHED MARKS FROM S.C.I.M.S. MAY, 2008.

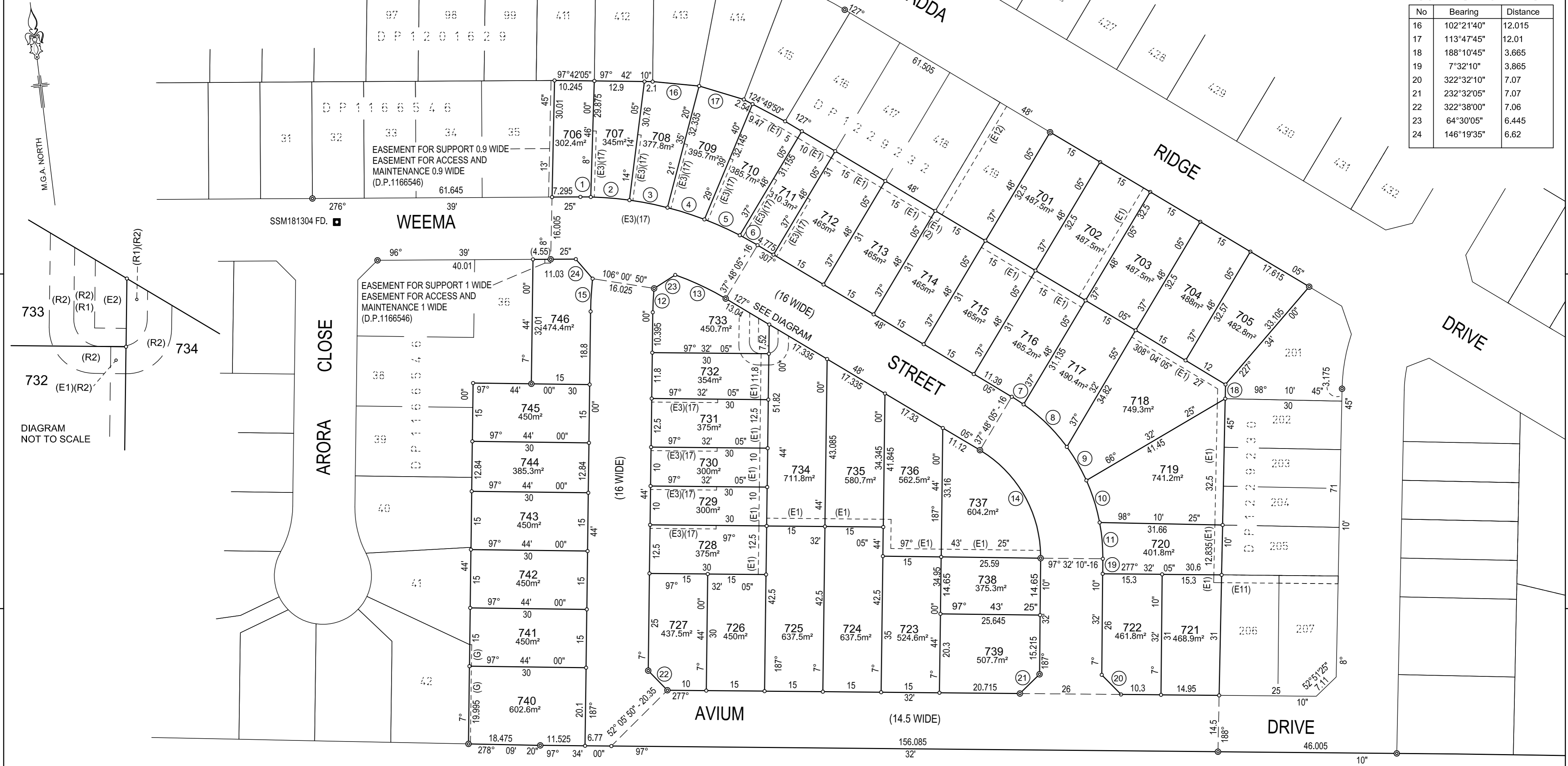
(E11) EASEMENT TO DRAIN WATER 2 WIDE (D.P.1229230)
 (E12) EASEMENT TO DRAIN WATER 2 WIDE (D.P.1229232)
 (G) EASEMENT FOR SUPPORT 0.5 WIDE (D.P.1166546)
 (E1) EASEMENT TO DRAIN WATER 2 WIDE
 (E2) EASEMENT FOR PADMOUNT SUBSTATION 3.5 WIDE
 (R1) RESTRICTION ON THE USE OF LAND
 (R2) RESTRICTION ON THE USE OF LAND
 (E3) EASEMENT FOR ACCESS AND MAINTENANCE 0.9 WIDE

SCHEDULE of CURVED BOUNDARIES

No	Bearing	Chord	Arc	Radius	No	Bearing	Chord	Arc	Radius
1	277°31'50"	2.67	2.67	88	9	336°46'50"	9.98	9.995	48
2	281°39'05"	9.98	9.985	88	10	349°32'25"	11.355	11.385	48
3	288°09'05"	9.98	9.985	88	11	1°56'05"	9.37	9.385	48
4	294°39'00"	9.975	9.98	88	12	10°10'50"	6.15	6.155	72
5	301°08'55"	9.975	9.98	88	13	122°05'15"	14.335	14.36	72
6	306°05'55"	5.23	5.23	88	14	157°40'05"	31.87	33.365	32
7	309°57'35"	3.615	3.615	48	15	190°29'20"	8.46	8.465	88
8	321°27'55"	15.595	15.665	48					

SCHEDULE of LINES

No	Bearing	Distance
16	102°21'40"	12.015
17	113°47'45"	12.01
18	188°10'45"	3.665
19	7°32'10"	3.865
20	322°32'10"	7.07
21	232°32'05"	7.07
22	322°38'00"	7.06
23	64°30'05"	6.445
24	146°19'35"	6.62



DRAFT 16.06.18
 DIMENSIONS AND AREAS
 ARE SUBJECT TO FINAL SURVEY

Surveyor: Ian Vincent Myers Vince Morgan Surveyors Ph.47215293. email: imyers@vmsurvey.com.au Date of Survey: XXXXXXXX Surveyor's Reference:20467-7C	PLAN OF SUBDIVISION OF LOT 500 D.P.1229232, LOT 72 D.P.1166546 AND LOT 3 D.P.502333	LGA: PENRITH Locality: CADDENS Subdivision No.: Lengths are in metres. Reduction Ratio 1: 700	Registered:
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