

DELEGATED REPORT

TO: SENIOR PLANNER

FROM: Planning Officer

FILE: OPW/21/0001 (Stage 3)

DATE: 4 April 2022

APPLICATION DETAILS

APPLICATION		PREMISES	
FILE NO:	OPW/21/0001 (Country Road Stage 3)	ADDRESS:	Emerald End Road and Country Road, Mareeba
APPLICANT:	Conmat No 2 Pty Ltd	RPD:	Lot 200 on SP323217
LODGED BY:	Benchmark Survey & Design	AREA:	34.62 ha
DATE LODGED:	12 February 2022	OWNER:	Conmat No 2 Pty Ltd
TYPE OF APPROVAL:	Development Permit		
PROPOSED DEVELOPMENT:	Operational Works (Roadworks, Earthworks, Stormwater and Water Reticulation for Stage 3 (11 Lots) of Development Permit REC/08/0096)		
PLANNING SCHEME:	Mareeba Shire Council Planning Scheme 2016		
ZONE:	Rural Residential zone		
LEVEL OF ASSESSMENT:	Code Assessment		

PREVIOUS APPLICATIONS & APPROVALS

REC/08/0096

DESCRIPTION OF PROPOSED DEVELOPMENT

The development application seeks a Development Permit for Operational Works (Roadworks, Earthworks, Stormwater and Water Reticulation for Stage 3 (11 Lots) of Development Permit REC/08/0096) - **Country Road Estate Stage 3**

ASSESSMENT

State Planning Policy

Separate assessment against the State Planning Policy (SPP) is not required because the Mareeba Shire Council Planning Scheme appropriately integrates all relevant aspects of the SPP.

Relevant Development Codes

The following Development Codes are considered to be applicable to the assessment of the application:

- 6.2.10 Rural residential zone code
- 9.4.4 Reconfiguring a lot code
- 9.4.5 Works, services and infrastructure code

The application did not include a planning report and assessment against the planning scheme. An officer assessment has found that the application satisfies the relevant acceptable solutions (or probable solutions/performance criteria where no acceptable solution applies) of the relevant codes set out below.

Relevant Codes	Comments
Rural residential zone code	The application can be conditioned to comply with the relevant acceptable outcomes contained within the code.
Reconfiguring a lot code	The application can be conditioned to comply with the relevant acceptable outcomes contained within the code.
Works, services and infrastructure code	The application can be conditioned to comply with the relevant acceptable outcomes contained within the code.

Compliance with conditions of earlier related approval

REC/08/0096

1. Development must be carried out substantially in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, subject to any alterations:
 - found necessary by Council's delegated officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements; and
 - to ensure compliance with the following conditions of approval.

2. Timing of Effect

The conditions of the development permit must be complied with to the satisfaction of Council's delegated officer prior to the endorsement of the plan of survey, except where specified otherwise in these conditions of approval.

3. General

- 3.1 The applicant/developer is responsible for the cost of necessary alterations to existing public utility mains, services or installations required by works in relation to the proposed development or any works required by condition(s) of this approval.
- 3.2 All payments or bonds required to be made to the Council pursuant to any condition of this approval or the Adopted Infrastructure Charges Notice must be made prior to the endorsement of the plan of survey and at the rate applicable at the time of payment.
- 3.3 The developer must relocate (in accordance with FNQROC standards) any services such as water, sewer, drainage, telecommunications and electricity that are not wholly located within the lots that are being created/serviced where required by the relevant authority, unless approved by Council's delegated officer.

- 3.4 Where utilities (such as sewers on non-standard alignments) traverse lots to service another lot, easements must be created in favour of Council for access and maintenance purposes. The developer is to pay all costs (including Council's legal expenses) to prepare and register the easement documents.
- 3.5 The applicant must provide a letter from any Concurrence Agencies confirming that their conditions have been complied with.
- 3.6 All works must be designed, constructed and carried out in accordance with FNQROC Development Manual requirements (as amended) and to the satisfaction of Council's delegated officer.
- 3.7 Flood Immunity
- a) All allotments must have a minimum area of 2,000 square metres 300mm above the Q100 level.
 - b) Any relevant Operational Works applications will include a Q100 analysis for the subject land. The applicant/developer must provide a plan showing the extent of a 100 ARI year flood event certified by a RPEQ (Registered Professional Engineer of Queensland).
 - c) No filling is to occur below the 100 ARI flood level unless accompanied by evidence that filling below the 100 ARI level would not detrimentally impact upon upstream or downstream properties to the satisfaction of Council's delegated officer.

3.8 Bushfire Management

Firebreaks

Where new roads are not involved or it is impractical to use new roads as firebreaks, firebreaks are established that:-

- have a minimum cleared width of 6m;
- have a maximum gradient of 12.5%;
- are constructed and maintained to prevent erosion and provide continuous access for fire fighting vehicles;
- have vehicular access at each end or have suitable clear manoeuvring areas for the turning of emergency fire fighting vehicles;
- all internal roads are to include fire hydrants;
- are within an easement in favour of Council and the Queensland Fire and Rescue Service or road reserve; and
- Are provided in at least the following situations:

The required firebreaks will be established:

- Along the eastern boundary of proposed Lots 38 and 41;
- Within the unnamed road reserve, for the entire northern road frontage of Lots 32 and 37, immediately adjacent to the agricultural buffer required under Condition 4.11.
- Along the southern boundary of proposed Lots 62 and 65.

- Long the entire eastern and western boundaries of the Vegetation Corridor identified on Drawing No. 11/4743 - Stages 3-6 (2B)

Building and Structures (Lots greater than 2,500m²)

- Are sited in location of lowest hazard within the lot;
- Achieve setbacks from hazardous vegetation of 1.5 times the predominant mature canopy tree height or 10 metres, whichever is the greater;
- Are 10 metres from any retained vegetation strips or small areas of vegetation;
- Are sited so that elements of the development least susceptible to fire are sited closest to the bushfire hazard.

3.9 Environmental Covenant

The applicant shall be responsible for the preparation and registration of a statutory covenant with Council pursuant to S97A of the Land Title Act for the purposes of native vegetation and habitat preservation including the preservation of native plants and natural features.

The covenant will be of a form that is acceptable to the Registrar of Titles and will apply to the area identified on Drawing No. 11/4743-Stages 3-6 (2B) as the Vegetation Corridor. The covenant location and the covenant document provisions will be to the satisfaction of Council's delegated officer.

The covenant agreement shall be signed by the registered owner prior to endorsement of the survey plan by Council and the signed covenant shall be jointly lodged for registration with the survey plan, in the Department of Environment and Resource Management.

The covenant shall require the registered owners of the site to obtain approval of the Council prior to undertaking any earthworks, clearing of vegetation, fencing or placement of water pumps and pipelines within or across the area of the Covenant. The placement of effluent waste disposal systems, building of structures and cultivation shall be specifically excluded from within the area of the Covenant. The maintenance of the area of the Covenant shall be the responsibility of the owner of the land.

Each Covenant must stipulate:-

- (i) that it is for the express purpose of vegetation and habitat preservation, including the preservation of native plants and the natural features of the lot (including the water in Unnamed Creek and the soil contained in the covenant area).
- (ii) that no building, fixtures, infrastructure or improvements over the Covenant Area shall be permitted, including water pipes and pumps;
- (iii) Any maintenance required to be performed in respect of the Covenant Area shall be the responsibility of the lot owner.

The covenant shall be to the satisfaction of Council's delegated officer, and the applicant shall be responsible for the cost of preparation and registration of the Covenant.

- 3.10 Prior to the approval for any operational works for Stage 6, the subdivision layout will be amended so that the internal road network connects to the common boundary with Lot 219

on NR378 generally in the location of the road network shown on the approved plans as part of any further development of the adjoining Lot 219 on NR378 the configuration of proposed Lot 41 will be effected such that the road provides suitable geometry to the adjoining road network satisfactory of Council's delegated officer.

3.11 Stage 8 Requirements

- a) Prior to lodgement of an application for Operational Works for Stage 8, the applicant will:
- i) in addition to any other Stormwater Management Plan requirements, provide a conceptual stormwater design for the stage that details how any threats or impacts from upstream dams will be addressed;
 - ii) demonstrate, through that stormwater design, how stormwater flows that: originate outside the site, flow through the site, and discharge downstream of the site, will be suitably directed and contained.
 - iii) demonstrate how stormwater infrastructure will be incorporated into the lot design in accordance with the requirements of this approval;
 - iv) demonstrate how it is intended to maintain water quality within that storage in accordance with the requirements of Appendix 1 Parts A & C of State Planning Policy 4/10 Healthy Waterways.
 - v) demonstrate that suitable building platforms can be provided on proposed lots with slopes greater than 1:6.
 - vi) demonstrate that average lot size for the entire development exceeds 3000 sq m.

These requirements will be to the satisfaction of Council's delegated officer.

- b) The developer will prepare a management and operation plan for any artificial storage area within any proposed lot in accordance with Appendix 1 Part C of State Planning Policy 4/10 Healthy Waterways to the satisfaction of Council's delegated officer.
- c) the registered owner of any lot containing an artificial storage area within any proposed lot will be responsible for the maintenance and operation of that storage area in accordance with the required management and operation plan.

~~3.11~~ **3.12** Design Changes

- i) Prior to lodgement of an application for Operational Works for Stage 6, the developer will provide an amended layout plan for that stage which ensures that the connecting road to the eastern boundary is almost square to that boundary.
- ii) Prior to lodgement of an application for Operational Works for Stage 8, the developer will provide an amended layout plan for that stage which complies with the requirements of any other conditions of this approval.

These requirements will be to the satisfaction of Council's delegated officer.

~~3.12~~ **3.13** Charges

All outstanding rates, charges and expenses pertaining to the land are to be paid in full.

4. Infrastructure Services and Standards

4.1 Access

Access must be constructed to each allotment in accordance with the FNQROC Development Manual, to the satisfaction of Council's delegated officer. The provision of Layback Kerbing along the total frontage of the proposed lots will satisfy this condition, except in the case of axe handle lots).

Where axe handle lots are proposed, a concrete or bitumen sealed driveway shall be provided within any access handles. The driveway will:

- Have a minimum width of 3 metres.
- Be constructed for the full length of the access handle.
- Be formed with one-way crossfall to cater for stormwater drainage such that any stormwater runoff is contained within the access strip.
- Service and utility conduits are to be provided for the full length of the sealed driveway constructed within the access handle of the battleaxe allotments.

4.2 Stormwater Drainage

The applicant must ensure a non-worsening effect on surrounding land as a consequence of the development and the applicant must take all necessary steps to achieve this including the following:

- a) The applicant must provide a Stormwater Management Plan prepared and certified by a RPEQ engineer that meets or exceeds the standards of design and construction set out in the Queensland Urban Development Manual (QUDM) and the Far North Queensland Regional Organisation of Councils Manual (FNQROC).
- b) The Stormwater Management Plan must include an erosion and sediment control plan that meets or exceeds the Soil Erosion and Sedimentation Control Guidelines (Institute of Engineers Australia 1996).
- c) The Stormwater Management Plan must provide for:
 - (i) stormwater drainage from roofed and paved areas to be lawfully discharged to an approved drainage system within adjoining road reserves or where stormwater from roofed and paved areas cannot be drained into the approved drainage system within the adjoining road reserves, an inter-allotment drainage collection system must be provided;
 - (ii) overland flow paths and underground drainage is to be designed in accordance with water sensitive urban design solutions so as not to directly or indirectly cause nuisance or worsen peak flows to downstream or adjoining properties. The completed development discharge rate for a Q100 storm frequency must not exceed the pre-development discharge rates for a Q100 storm frequency;

- (iii) The assumed increase in stormwater runoff associated with the construction of future dwelling houses and driveways within the development must provide for an ARI 100 years overland flow through roads, open space areas or easements over adjoining properties. Construction of drainage must be to FNQROC standards;
 - d) The Stormwater Management Plan must include a plan of the development showing the Q100 Flood Levels as well as a 2,000 square metre building envelope for each lot that is impacted by the Q100 Flow. The building envelopes must be above the Q100 Flood Levels.
 - e) The applicant must prepare a Stormwater Report, including an assessment of blockages, prepared and certified by a suitably qualified design engineer (RPEQ) clearly indicating measures taken and calculated impacts based upon the Stormwater Management Plan in accordance with the Queensland Urban Development Manual (QUDM) and the Far North Queensland Regional Organisation of Councils Manual (FNQROC).
 - f) All stormwater channels through private property must be located in a registered easement for drainage purposes, with the easement in favour of Council. Alternatively stormwater channels may be located with drainage reserves or other similar approved land tenure.
 - g) The applicant must submit the Stormwater Management Plan and Stormwater Report to council as part of the operational works application for its approval.
 - h) The applicant must construct the stormwater drainage infrastructure in accordance with the approved Stormwater Management Plan and Stormwater Report.
 - i) Deleted
 - j) Temporary drainage is to be provided and maintained during the construction phase of the development, discharged to a lawful point and not onto the construction site.
 - k) The applicant (at its cost) must video all stormwater lines and submit the video for inspection by Council's delegated officer prior to the development being taken "off maintenance" to ensure that no defects have occurred during the 12 month maintenance period.
 - l) A bond of 50% of the contract value of the drainage works must be lodged with Council during the 12 month maintenance period, as a guarantee for the satisfactory operation of the drainage works. The bond will be returned on satisfactory correction of any defective work after expiration of the maintenance period. During the maintenance period, Council may call up the bond and carry out any drainage repair work required.
 - m) All stormwater channels through private property must be registered, with the easement for drainage purposes in favour of Council. All documentation leading to the registration of the easement must be completed at no cost to Council.
- 4.3 Prior to endorsement of the plan of survey creating the first lot of this development, the plan of survey/s for Stages 1, 2 and 7 (Development Approvals RC2005/56, RC2006/27 and REC/08/0110) of Country Road Estate must be registered.

4.4 Roadworks – Internal – All Stages

Internal roads must be constructed to Residential Street standard in accordance with FNQROC Development Manual standards (as amended) for the applicable planning scheme area to the satisfaction of Council's delegated officer.

A temporary turnaround area, with gravel surface, must be provided at the end of the new road construction adjacent to the balance area of the overall subdivision to allow traffic manoeuvring.

4.5 Water Supply

4.5.1 Where the existing reticulated water supply does not currently service the site or is not at an adequate capacity, the developer is required to extend the reticulated water supply infrastructure to connect the site to Council's existing infrastructure at a point that has sufficient capacity to service the development in accordance with FNQROC Development Manual standards (as amended).

4.5.2 The following reticulated water supply infrastructure upgrades must be undertaken by the developer:

- (i) Prior to the issue of any Development Permit for operational works, the developer must enter into an infrastructure agreement requiring the developer to contribute per additional allotment created (currently \$487.00 per lot) towards the construction of the following water infrastructure upgrades:
 - A connection into the existing 375 mm diameter water main in Lloyd Street (at the corner of Constance Street). This connection must be a DN300 PN16 PVCO (or equivalent) pipe (Line A) to a point where the cross river boring commences (Line B).
 - The cross river pipe must be a PE DN400 (Line B) which is to be directionally drilled under the Barron River, flanged at each end and extended to the eastern side of the Hastie Road reserve; a flanged Tee must be provided to connect the cross river pipe to the DN300 pipe to the left and the DN200 pipe to the right at the outlet on the eastern side of the Hastie Road reserve.
 - From Line B, a DN200 PN16 PVCO (or equivalent) pipe (Line C) must extend to the current western end of the DN150 main on Hastie Road.
 - Installation of a PVC DN200 main (Line D) from the current eastern end of the DN150 main on Hastie Rd to the proposed water pump station within the Godfrey Road road reserve.

The amount of the contribution shall be adjusted on 30th June each financial year in accordance with the Consumer Price Index.

4.5.3 A water service connection must be provided to each proposed lot in accordance with FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer.

4.6 On-Site Wastewater Management

The applicant must provide a site and soil evaluation report (or an evaluation report where existing on-site disposal), prepared by an accredited site and soil evaluator, demonstrating the ability of the lots to accommodate an on-site effluent disposal in compliance with the latest version of On-Site Domestic Wastewater Management Standard (ASNZ1547) to the satisfaction of the Council's delegated officer.

4.7 Electricity provision/supply

The applicant/developer must ensure that an appropriate level of electricity supply is provided to each allotment in accordance with FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer.

Written advice from an Electricity Service Provider is to be provided to Council indicating that an agreement has been made for the provision of **underground** power reticulation.

4.8 Telecommunications

The applicant/developer must enter into an agreement with a telecommunication carrier to provide telecommunication services to each allotment and arrange provision of necessary conduits and enveloping pipes.

4.9 Lighting

Street lighting must be provided to all roads in accordance with FNQROC Development Manual requirements (as amended) and to the satisfaction of Council's delegated officer.

4.10 Street trees

One street tree must be provided in the nature strip of each lot created. The plan depicting species must be submitted to Council's delegated officer for approval. The street trees must be planted in accordance with the approved plan.

4.11 Agricultural Buffering

- (i) A 30 metre wide vegetation buffer, 20 metres planted and 10 metres clear on the southern side, is to be planted along northern road frontage of the following lots:
 - That part of the northern road frontage of Lot 31, extending from the DERM vegetation corridor, east to the boundary with Lot 32.
 - The entire northern road frontage of Lots 32 to 37.
- (ii) Appropriate native species will be used in the plantings. A landscaping/planting plan will be developed by a suitably qualified professional in compliance with SPP1/92 Planning Guidelines on Separating Agricultural and Residential Land Uses and must be endorsed by Council's delegated officer prior to any plantings being undertaken.

- (iii) The buffer vegetation will be established to a height of 4m on any relevant lot prior to Council signing the relevant plan of survey to the satisfaction of Council's delegated officer.
- (iv) The developer will maintain the buffer for two (2) years, and a bond of 50% of the contract value of the works must be lodged with Council during the maintenance period, as a guarantee. The bond will be returned on satisfactory correction of any defective work after expiration of the maintenance period. During the maintenance period, Council may call up the bond and carry out any work required. The bond will be lodged with Council to secure those works prior to Council signing the relevant plan of survey.
- (v) The applicant shall be responsible for the preparation and registration of a statutory covenant with Council pursuant to S97A of the Land Title Act for the purposes of establishment, protection and use of the land for a vegetated buffer over the required 30m buffer area.

The required covenant/s will be of a form that is acceptable to the Registrar of Titles and will contain provisions for:

- a management plan for the covenant area;
- protection of any vegetated buffer established as a result of this approval, including a requirement for cattle-proof fencing of the northern boundary of the vegetated buffer; and
- exclusion of buildings.

The covenant agreement shall be signed by the registered owner prior to signing of the relevant survey plan by Council and the signed covenant shall be jointly lodged for registration with the survey plan, in the Department of Environment and Resource Management.

The covenant location and the covenant document provisions will be to the satisfaction of Council's delegated officer. Maintenance of the area of the Covenant shall be the responsibility of the owner of the land.

The covenant shall be to the satisfaction of Council's delegated officer, and the applicant shall be responsible for the cost of preparation and registration of the Covenant.

4.12 Landscaping / Site Maintenance

The required buffer plantings shall be maintained as follows:

- replacement of plantings as required
- site maintenance shall include mowing / slashing of all areas outlined above
- landscaping / site maintenance is to be continued throughout the Defects Liability Period until date of Final Acceptance

Contrary to Section D9.23 Paragraph 7 of the FNQROC Manual, the maintenance period for irrigation works and landscaping shall be a minimum of twelve months.

At Council's Ordinary Meeting held on 20 June 2018, it was resolved to add Condition 4.13 to the extent below;

4.13 Roadworks - External Construction (Stage 8)

The intersection of Emerald End Road and the unnamed road servicing Stage 8 (as shown on Plan CRE-018-C01 dated 29/01/18) must be designed and constructed in accordance with the FNQROC Development Manual, to the satisfaction of Council's delegated officer.

The finished surface of the intersection is to be in asphalt, unless otherwise determined by Council's delegated officer.

Prior to works commencing, plans for the works described above must be approved as part of a subsequent application for operational works.

At Council's Ordinary Meeting held on 14 October 2020, it was resolved to add Condition 4.14 to the extent below;

4.14 External Works - Emerald End Road

Prior to Council endorsing a plan of survey creating any new lot under Development Approval REC/08/0096 (excluding Lot 26 of Stage 3), the following works must be completed to the satisfaction of Council's delegated officer:

- (i)
 - (a) The applicant is to construct kerb and channel on Emerald End Road for the complete frontage of the subject land and also between the subject land and the intersection of Emerald End Road and Country Road.
 - (b) The applicant is to widen and extend the existing bitumen on Emerald End Road by two (2) metres for the complete frontage of the subject land and also between the subject land and the intersection of Emerald End Road and Country Road.
- (ii) Alternatively, in lieu of constructing the works required by Conditions 2(i)(a) and 2(i)(b), the applicant is to contribute to Council an amount equivalent to the construction cost of the following works:
 - (a) The construction of kerb and channel on Emerald End Road for the complete frontage of the subject land and also between the subject land and the intersection of Emerald End Road and Country Road.
 - (b) The widening and extension of the existing bitumen on Emerald End Road by two (2) metres for the complete frontage of the subject land and also between the subject land and the intersection of Emerald End Road and Country Road.

The applicable contribution shall be calculated based on the actual construction cost at the time of payment, to the satisfaction of Council's delegated officer. The construction cost shall be adjusted on 30 June each year in accordance with the Road Industry Construction Index.

- (iii) The Intersection of Emerald End Road and Country Road is to be designed and constructed in accordance with the FNQROC Development Manual, as amended.

The main points to note from the manual are that the finished surface is to be in asphalt and the design is to be in accordance with NAASRA Part 5.

(iv) Prior to works commencing, plans for the abovementioned works must be approved as part of a subsequent application for operational works.

FNQROC Regional Development Manual

Section	Assessment
DP1 - Development Principles	Complies
AP1 - Application Procedures	Complies
D1 - Road Geometry	Complies
D2 - Site Regrading	Complies
D3 - Road Pavements	Complies
D4 - Stormwater Drainage	Complies
D5 - Stormwater Quality Management	Complies
D6 - Water Reticulation	Complies
D7 - Sewerage System	Complies
D8 - Utilities	Not part of current application
D9 - Landscaping	Not part of current application

REFERRALS

Nil

Internal Consultation

Technical Services

OFFICER'S RECOMMENDATION

- That in relation to this operational works development application:

APPLICATION		PREMISES	
APPLICANT:	Conmat No 2 Pty Ltd	ADDRESS:	Emerald End Road and Country Road, Mareeba
DATE LODGED	12 February 2022	RPD:	Lot 200 on SP323217
TYPE OF APPROVAL	Development Permit		
PROPOSED DEVELOPMENT	Operational Works (Roadworks, Earthworks, Stormwater and Water Reticulation for Stage 3 (11 Lots) of Development Permit REC/08/0096)		

and in accordance with the Planning Act 2016, as amended, the applicant be notified that the application for operational works:

Approved subject to the following assessment manager conditions:

- (A) **APPROVED DEVELOPMENT:** Development Permit for Operational Works (Roadworks, Stormwater, Water Infrastructure, Drainage, Earthworks, & Sewerage Infrastructure) - **Stage 3**

- (B) **APPROVED PLANS:**

Plan/Document Number	Plan/Document Title	Prepared by	Dated
CRE17-018-CO1	Cover Sheet	Benchmark Survey & Design	16/03/22
CRE17-018-CO2	Typical Cross Sections and Pavement Details	Benchmark Survey & Design	10/01/22

CRE17-018-CO3	Intersection & Cul-de-sac Details	Benchmark Survey & Design	10/01/22
CRE17-018-CO4	Setout Tables - Intersections and Cul-de-sacs	Benchmark Survey & Design	10/01/22
CRE17-018-CO5	Stormwater Drainage - Longitudinal Sections	Benchmark Survey & Design	10/01/22
CRE17-018-CO6	Stormwater Drainage - Calculations	Benchmark Survey & Design	10/01/22
CRE17-018-CO7	Water Reticulation Notes	Benchmark Survey & Design	10/01/22
CRE17-018-CO8	Site Plan	Benchmark Survey & Design	10/01/22
CRE17-018-CO9	Layout Plan	Benchmark Survey & Design	16/03/22
CRE17-018-C10	Country Road Longitudinal Section	Benchmark Survey & Design	16/03/22
CRE17-018-C11	Country Road Cross Sections - Ch47.9 To Ch180.00	Benchmark Survey & Design	10/01/22
CRE17-018-C12	Country Road Cross Sections - Ch184.031 To Ch292.922	Benchmark Survey & Design	10/01/22
CRE17-018-C13	Road 'A' Longitudinal Section	Benchmark Survey & Design	16/03/22
CRE17-018-C14	Road 'A' Cross Sections - Ch.16.291 to Ch.135.623	Benchmark Survey & Design	10/01/22
CRE17-018-C15	Road 'A' Cross Sections - Ch.140.00 to Ch.200.00	Benchmark Survey & Design	10/01/22
CRE17-018-C16	Stormwater Drainage - Layout Plan	Benchmark Survey & Design	16/03/22
CRE17-018-C17	Water Reticulation Plan	Benchmark Survey & Design	04/03/22
CRE17-018-C18	Erosion & Sediment Control Plan	Benchmark Survey & Design	16/03/22
CRE17-018-C65	Layout Plan	Benchmark Survey & Design	03/03/22
CRE17-018-C66	Typical Cross Sections and Pavement Details	Benchmark Survey & Design	02/03/22
CRE17-018-C67	Emerald End Road Widening - Longitudinal Section	Benchmark Survey & Design	10/05/20
CRE17-018-C68	Emerald End Road Widening - Cross Sections - 00 to 327.853	Benchmark Survey & Design	04/03/22
CRE17-018-C69	Erosion & Sediment Control Plan	Benchmark Survey & Design	10/05/20
CRE17-018-D1	Diagram 1 - 12.5m Austroads Rigid Vehicle Swept Paths	Benchmark Survey & Design	09/03/22
CRE17-018-D2	Diagram 2 - 12.5m Austroads Rigid Vehicle Swept Paths	Benchmark Survey & Design	09/03/22

(C) ASSESSMENT MANAGER'S CONDITIONS (COUNCIL)

(a) **General**

- (i) This development permit applies to Stage 3 of Country Road estate only, as depicted on Plan CRE17-018-CO1 (Cover Sheet) dated 16/03/22 as well as the widening of Emerald End Road.
- (ii) **This condition is optional.** Should the applicant/developer wish to upgrade/construct the section of Emerald End Road (frontage of Lot 1 on RP739487) between Chainage 00 and 51.035 marked as "To Be Constructed By Others" on Plan CRE17-018-C65 dated 03/03/22, Council will reimburse the applicant/developer for the full cost of upgrading this section of Emerald End Road conditional on Council's delegated officer signing off on a final quote for the works prior to commencement.

The applicant/developer may also wish to credit the cost of this section of works (as agreed to by Council's delegated officer) against any augmentation of the road network contributions payable for the 11 lots included in Stage 3.

- (iii) All operational works must be designed and constructed in accordance with the procedures as set out in the FNQROC Development Manual.
- (iv) Development must be carried out substantially in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, and subject to any alterations:
 - found necessary by the Council's Delegated Officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements;
 - to ensure the works comply in all respects with the requirements and procedures of the FNQROC Development Manual, Queensland Urban Drainage Manual and good engineering practice; and
 - to ensure compliance with the following conditions of approval.
- (v) Council's examination of the documents should not be taken to mean that the documents have been checked in detail and Council takes no responsibility for their accuracy. If during construction, inadequacies of the design are discovered, it is the responsibility of the Principal Consulting Engineer to resubmit amended plans to Council for approval and rectify works accordingly.

(b) Pre-start Meeting

- (i) In addition to the requirements of Clause CP1.07 and CP1.08 of the FNQROC Development Manual; after documentation has been approved by Council, a pre-start meeting is to be held on site prior to the commencement of work. Part 1 of the **attached** pre-start meeting pro-forma is to be completed and returned prior to the meeting including clause 1.u 'Request for Meeting' together with the prescribed Construction Monitoring Fee as set out in Council's Schedule of Fees.

(c) Inspections

- (i) Inspections are to be carried out as detailed in the FNQROC Manual unless advised otherwise at the pre-start meeting.

(d) Construction Security Bond and Defects Liability Bond

- (i) In addition to Clauses CP1.06 and CP1.20 of the FNQROC Development Manual; the Construction Security Bond and Defects Liability Bond shall each be a minimum of \$1000 and Bank Guarantees shall have no termination date.
- (ii) During the Defects Liability period, it is the responsibility of the developer to rectify any works found to be defective due to design faults and or found to exhibit faults attributed to the performance of the construction activities in terms of quality and conformance with design and specifications. The bond will be returned on satisfactory correction of any defective work and after expiration of the maintenance period. Failure to comply with a Council issued instruction to correct defective work may result in the call up of the bond to have the work completed.

(e) Hours of Work

- (i) Work involving the operation of construction plant and equipment of any description, shall only be carried out on site during the following times:
 - 7.00am to 6.00pm, Monday to Friday;
 - 7.00am to 1.00pm Saturdays;
 - No work is permitted on Sundays or Public Holidays.
- (ii) No variation to the above working hours is allowed unless otherwise agreed in writing by Council.

(f) Transportation of Soil

- (i) All soil transported to or from the site must be covered to prevent dust or spillage during transport. If soil is tracked or spilt onto the road pavement from works on the subject land, it must be removed no later than at the end of each working day. Sediment must not enter Council's stormwater drainage network.

(D) RELEVANT PERIOD

When approval lapses if development not started (s.85)

- Two (2) years (starting the day the approval takes effect).

(E) OTHER NECESSARY DEVELOPMENT PERMITS AND/OR COMPLIANCE PERMITS

- Nil

DECISION BY DELEGATE

DECISION

Having considered the Planning Officer's report detailed above, I approve, as delegate of Council, the application subject to the conditions listed in the report.

Dated the *4TH* day of *APRIL* 2022



BRIAN MILLARD
SENIOR PLANNER

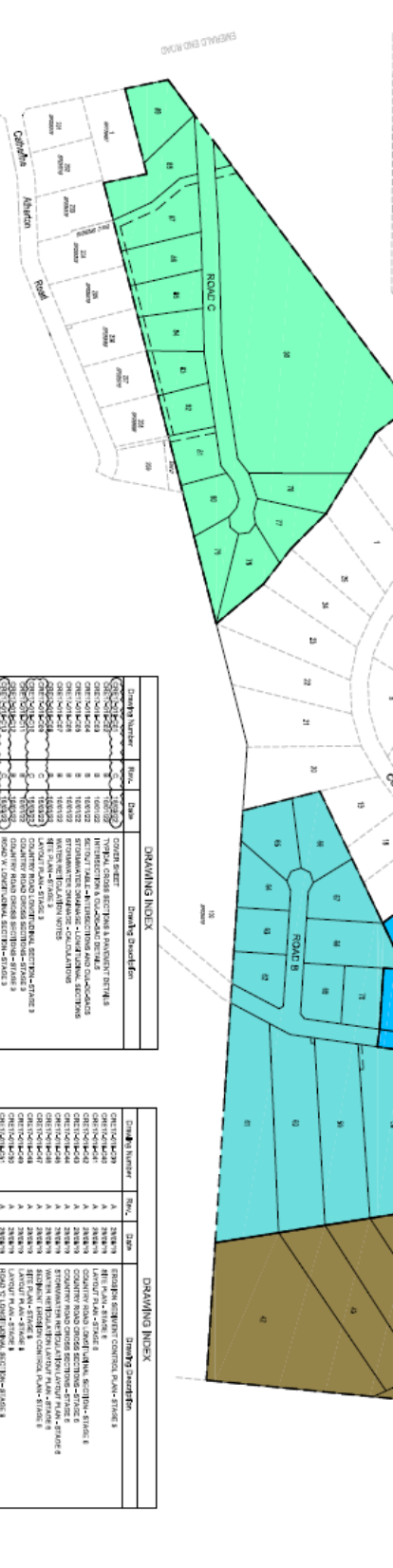
MAREEBA SHIRE
AS DELEGATE OF THE COUNCIL

ATTACHMENT 1

COUNTRY ROAD ESTATE
RURAL RESIDENTIAL SUBDIVISION
STAGES 3, 4, 5, 6 & 8

OPERATIONAL WORKS DRAWINGS
STAGE 3

- Stage 3 - Lots 30, 55 - 57 & 71 - 74
- Stage 4 - Lots 58 - 70
- Stage 5 - Lots 31 - 33 & 43 - 54
- Stage 6 - Lots 40 - 48
- Stage 8 - Lots 75 - 80



FINROC STANDARD DRAWINGS

Drawing Number	Rev.	Drawing Description
S1040	E	STREET NAME SIGNS
S1046	A	EXCAVATION, BEDDING AND BACKFILLING OF CONCRETE PIPES
S1050	B	GRATED KERB INLET PPT PIPE DIA. ≤ 600
S1055	D	GRATED KERB INLET PPT PIPE DIA. >600
S1085	B	STORMWATER MANHOLES 1050 & 1500.
S2000	A	MSC VALVE BOX INSTALLATION
S2005	A	MSC HYDRANT BOX INSTALLATION
S2010	D	KERB/ROAD MARKERS
S2015	A	MSC THRUST BLOCK DETAILS
S2016	B	WATER RETICULATION BEDDING DETAILS
S2020	D	MSC MAIN CONNECTION DETAILS
S2060	A	MSC DOMESTIC WATER SERVICE CONNECTION DETAILS

DRAWING INDEX

Drawing Number	Rev.	Date	Drawing Description
CR17-018-001	A	1/69	COVER SHEET
CR17-018-002	A	1/69	STAGE 3 OPERATIONAL WORKS DRAWINGS
CR17-018-003	A	1/69	STAGE 4 OPERATIONAL WORKS DRAWINGS
CR17-018-004	A	1/69	STAGE 5 OPERATIONAL WORKS DRAWINGS
CR17-018-005	A	1/69	STAGE 6 OPERATIONAL WORKS DRAWINGS
CR17-018-006	A	1/69	STAGE 8 OPERATIONAL WORKS DRAWINGS

DRAWING INDEX

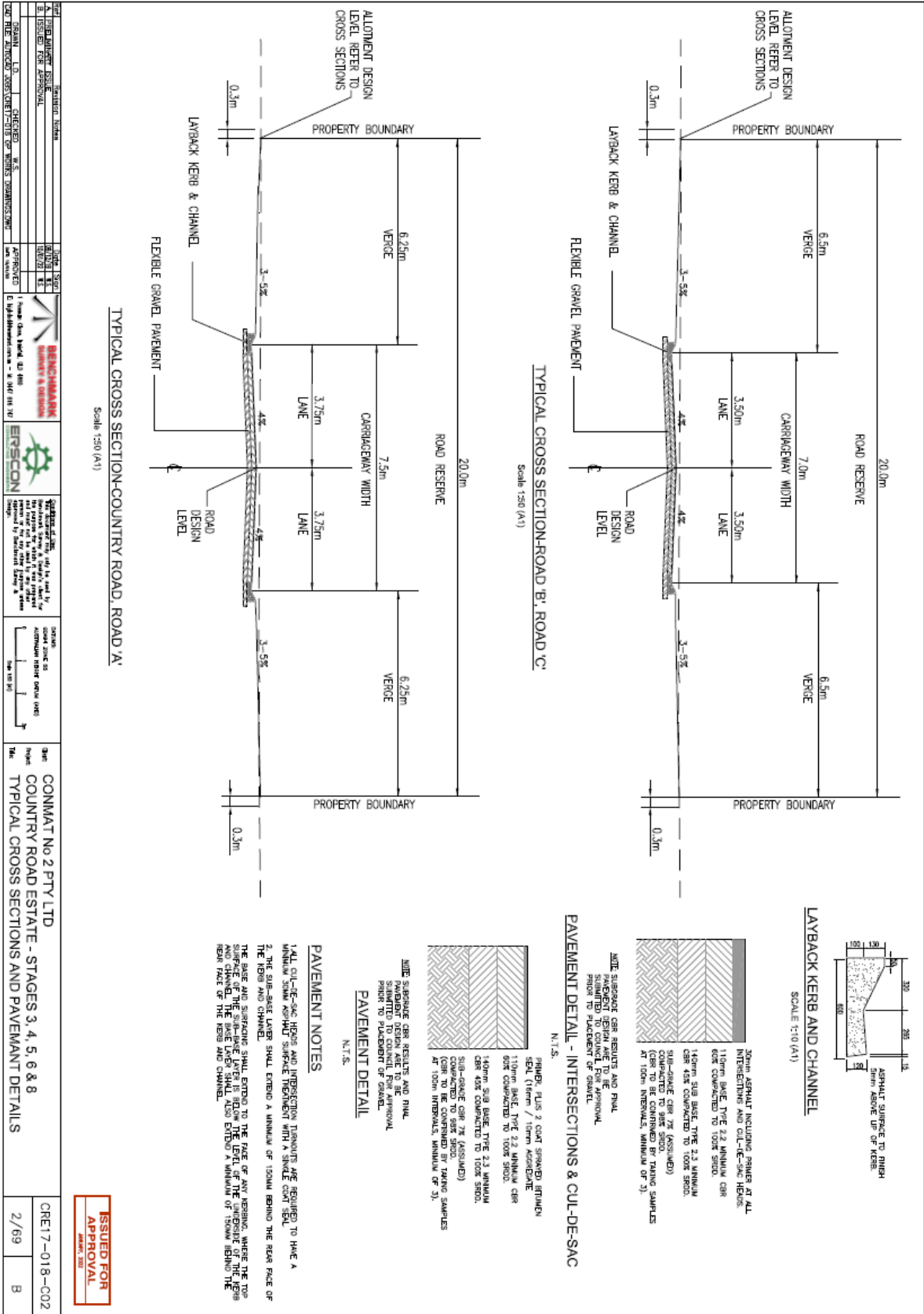
Drawing Number	Rev.	Date	Drawing Description
CR17-018-001	A	1/69	COVER SHEET
CR17-018-002	A	1/69	STAGE 3 OPERATIONAL WORKS DRAWINGS
CR17-018-003	A	1/69	STAGE 4 OPERATIONAL WORKS DRAWINGS
CR17-018-004	A	1/69	STAGE 5 OPERATIONAL WORKS DRAWINGS
CR17-018-005	A	1/69	STAGE 6 OPERATIONAL WORKS DRAWINGS
CR17-018-006	A	1/69	STAGE 8 OPERATIONAL WORKS DRAWINGS

ISSUED FOR APPROVAL
JAN 2022

CONMAT No. 2 PTY LTD
 COUNTRY ROAD ESTATE - STAGES 3, 4, 5, 6 & 8
 COVER SHEET

CRE17-018-001
 1/69
 C

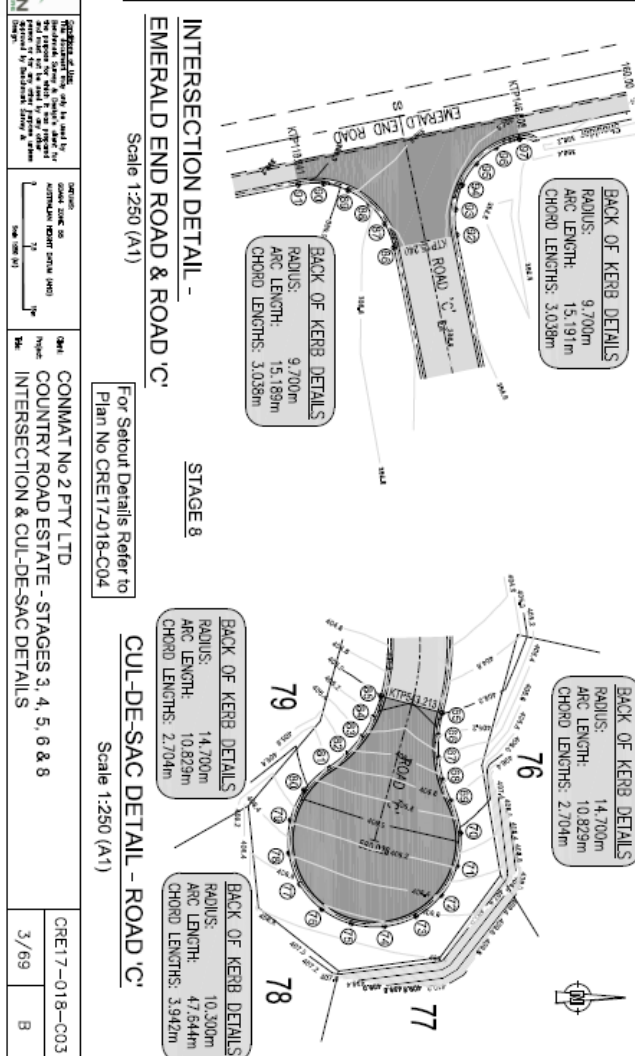
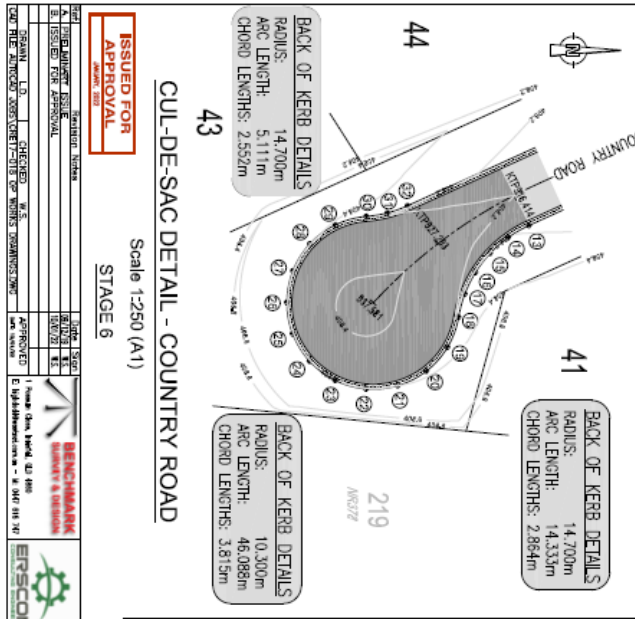
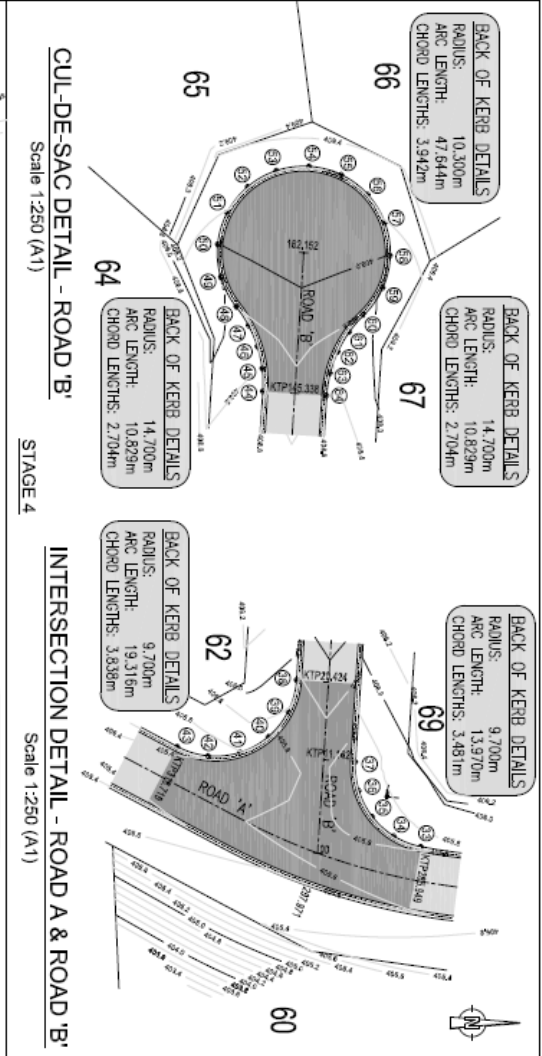
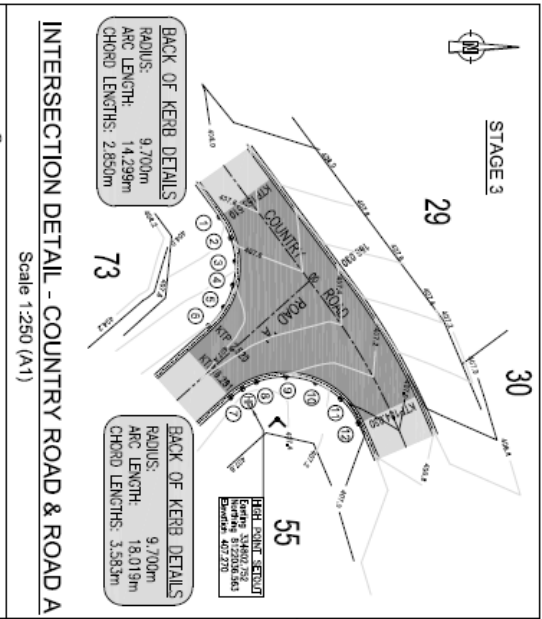
ERSCON
 ENGINEERING & DESIGN
 1/69



DATE	DESCRIPTION	BY	CHECKED
13/07/2018	ISSUED FOR APPROVAL	...	...
13/07/2018	REVISION	...	...
13/07/2018	REVISION	...	...

PROJECT NO.	CONMAT No 2 PTY LTD
PROJECT NAME	COUNTRY ROAD ESTATE - STAGES 3, 4, 5, 6 & 8
PROJECT LOCATION	...
PROJECT DRAWING NO.	...
PROJECT DATE	2/69
PROJECT SHEET NO.	B

ISSUED FOR APPROVAL	DATE
...	2/69

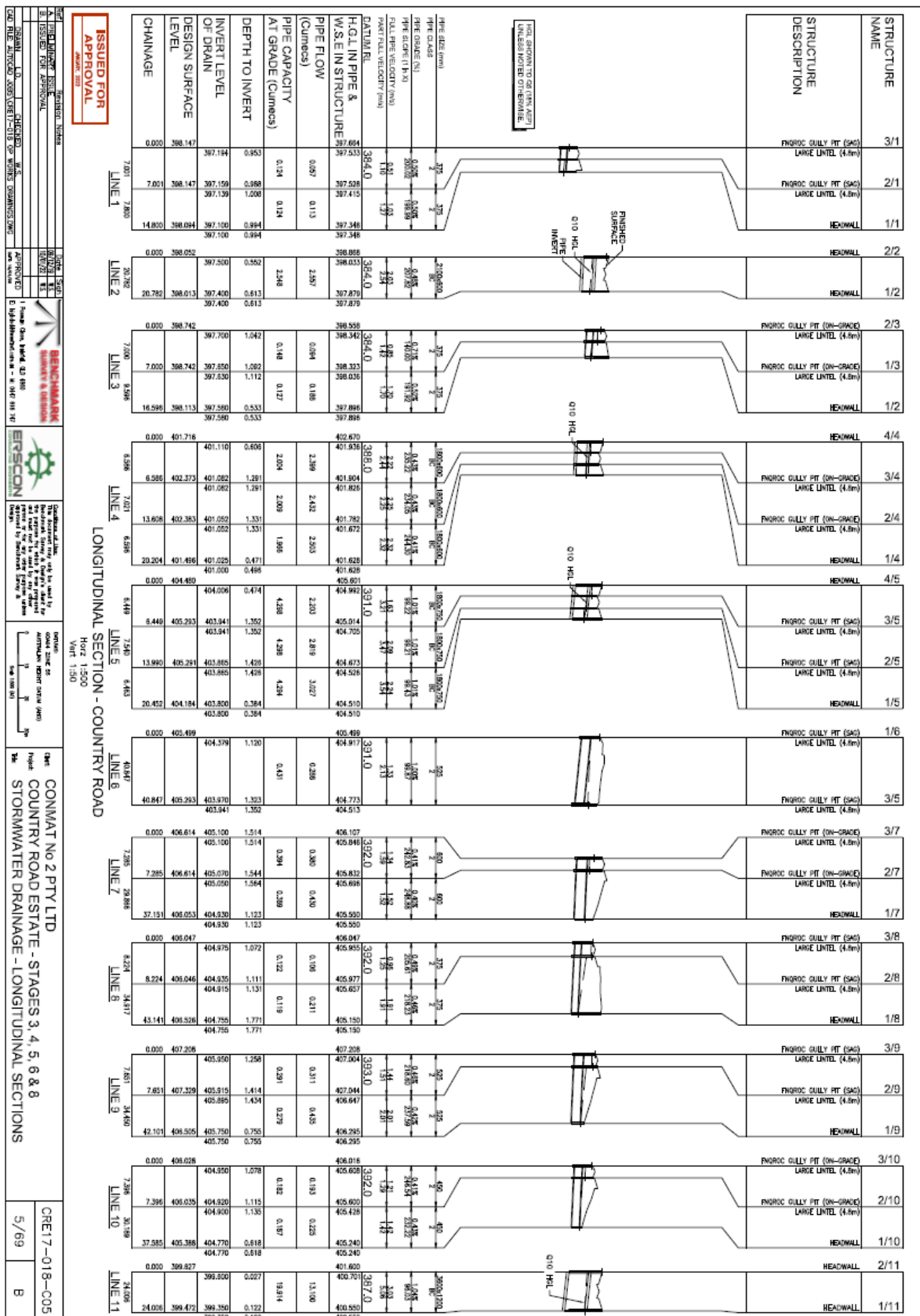


DATE	DESCRIPTION	BY	CHECKED
15/07/22	ISSUED FOR APPROVAL	...	...
15/07/22	...	...	...
15/07/22	...	...	...

PROJECT	CONMAT No 2 PTY LTD
CLIENT	COUNTRY ROAD ESTATE - STAGES 3, 4, 5, 6 & 8
DATE	3/69
SCALE	B

ISSUED FOR APPROVAL	APPROVAL
DATE	...

PROJECT	CONMAT No 2 PTY LTD
CLIENT	COUNTRY ROAD ESTATE - STAGES 3, 4, 5, 6 & 8
DATE	3/69
SCALE	B



REF CODE	DESCRIPTION
1	150 x 150 x 150 D.I.C.L Tee with concrete thrust block.
2	150 x 150 x 100 D.I.C.L Tee with concrete thrust block.
3	150 x 150 x 50 D.I.C.L Tee with concrete thrust block.
4	100 x 100 x 100 D.I.C.L Tee with concrete thrust block.
5	100 x 100 x 50 D.I.C.L Tee with concrete thrust block.
6	50 x 50 x 50 D.I.C.L Tee with concrete thrust block.
7	80 dia. Spring Hydrant "Maxi Flow" 2000 Type (DN80) complete with D.I.C.L Tee, Riser, C.I. cover box margin and kerb marker. (100 Main)
8	150 dia. Sluice Valve Class 600 M.E. complete with C.I. cover box margin and kerb marker.
9	100 dia. Sluice Valve Class 600 M.E. complete with C.I. cover box margin and kerb marker.
10	50 dia. gate valve DR Brass complete with C.I. cover box margin and kerb marker.
11	150 dia. steel or bronze tapping band to 40 or 200 copper service to brass stop cock, meter & dirt box.
12	100 dia. steel or bronze tapping band to 40 or 200 copper service to brass stop cock, meter & dirt box.
13	50 dia. service fitting to 40 or 200 copper service to brass stop cock, meter & dirt box.
14	150 dia. D.I.C.L 11 1/2" bend with concrete thrust block.
15	150 dia. D.I.C.L 22 1/2" bend with concrete thrust block.
16	150 dia. D.I.C.L 45" bend with concrete thrust block.
17	150 dia. D.I.C.L 90" bend with concrete thrust block.
18	100 dia. D.I.C.L 11 1/2" bend with concrete thrust block.
19	100 dia. D.I.C.L 22 1/2" bend with concrete thrust block.
20	100 dia. D.I.C.L 45" bend with concrete thrust block.
21	100 dia. D.I.C.L 90" bend with concrete thrust block.
22	50 dia. 90" bend with concrete thrust block.
23	150 dia. D.I.C.L Dead end cap with concrete thrust block.
24	100 dia. D.I.C.L Dead end cap with concrete thrust block.
25	50 dia. D.I.C.L Dead end cap with concrete thrust block.

Proposed Water Main 150ø (Class 16)
 Proposed Water Main 100ø (Class 16)
 630D: PE Pressure Pipe PE 100 Blue Stripe SDR11 PN16
 Existing Water Main

WATER RETICULATION NOTES

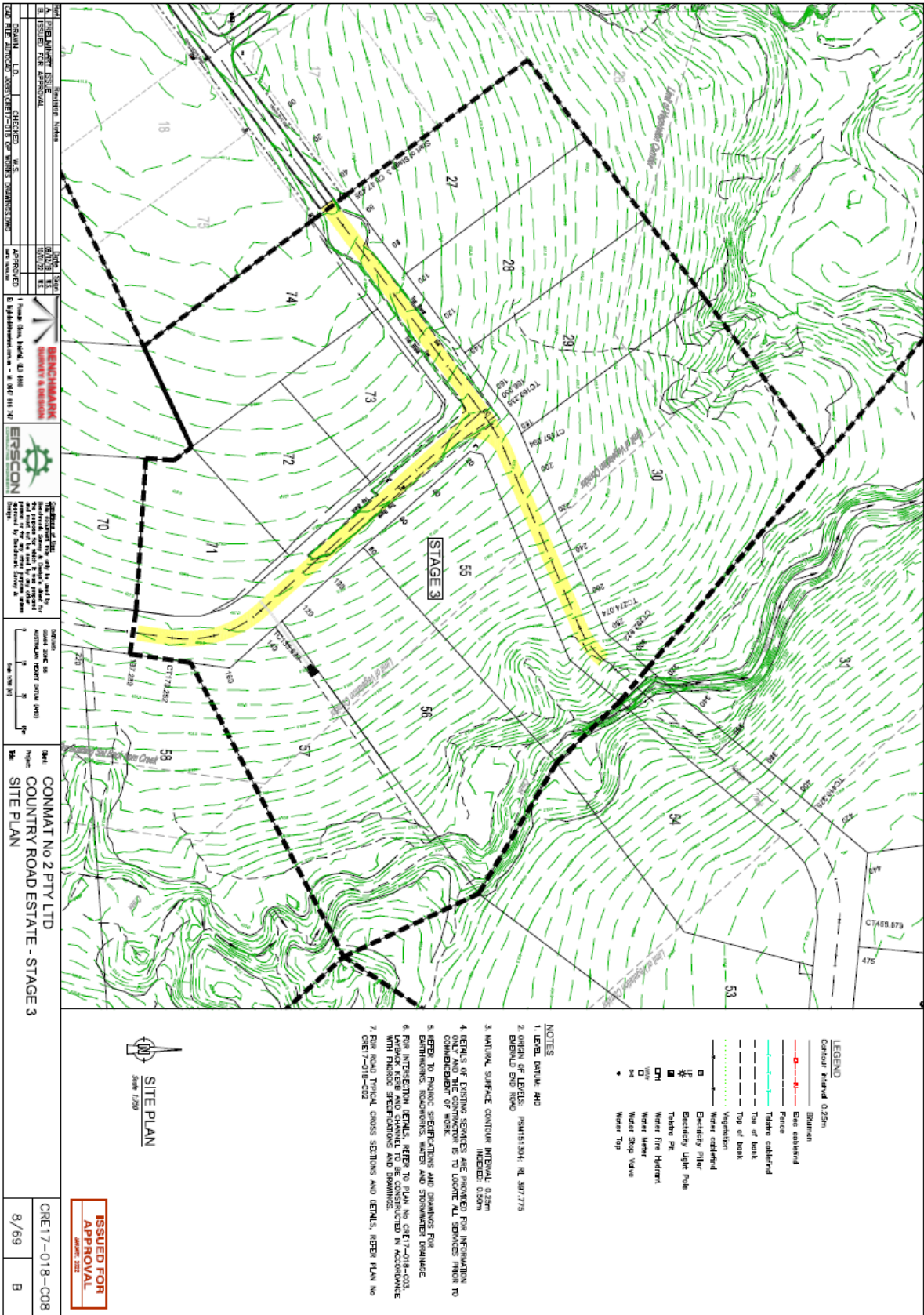
1. WATER SUPPLY PRESSURE PIPES TO COMPLY WITH AS1477.
2. WATER RETICULATION TO BE HYDRAULICALLY PRESSURE TESTED TO 1250 KPA AFTER LAYING AND BEFORE BEING CONNECTED TO THE EXISTING COUNCIL PIPELINE. THE TEST PRESSURE SHALL BE HELD FOR 15 MINUTES MIN. WITHOUT LOSS.
3. MINIMUM COVER TO ALL PIPES (TOP OF PIPE TO FINISHED SURFACE LEVEL) SHALL BE 600MM IN NON-TRAFFICKED AREAS AND 800MM IN TRAFFICKED AREAS.
4. WATER RETICULATION ALIGNMENT FOR ALL ROADS SHALL BE 2.0M FROM PROPERTY BOUNDARY.
5. WHERE NON-METALLIC PIPE IS LAID A CONTINUOUS STAINLESS STEEL WIRE, 1.6mm DIAMETER SHALL BE LAID IMMEDIATELY ABOVE THE FILL SAND. THIS WIRE SHALL BE WRAPPED ONCE AROUND ALL HYDRANTS AND SLUICE VALVES.
6. FOR MINIMUM BENDING RADIUS TO 630D POLYETHYLENE REFER TO MANUFACTURERS SPECIFICATIONS.
7. BENDING OF PE PIPES IS PERMITTED. BENDING OF ALL OTHER PIPES IS NOT PERMITTED.
8. PROVIDE WATER SERVICE AND METER TO EACH PROPERTY.
9. PROPERTIES LOCATED ON THE OPPOSITE SIDE OF THE ROAD TO THE RETICULATION MAIN SHALL BE SERVICED BY A 630D POLYETHYLENE LOOP PE100 BLUE STRIPE SDR11 PN16
10. RETICULATION MAINS TO BE 100 or 150dia (As Noted) PVC Series 2 MIN PN16
11. PRESSURE AT EMERALD END ROAD TO BE CHECKED AGAINST FIRE FIGHTING FLOWS TO ACHIEVE 3M RESIDUAL PRESSURE (RL473.00)

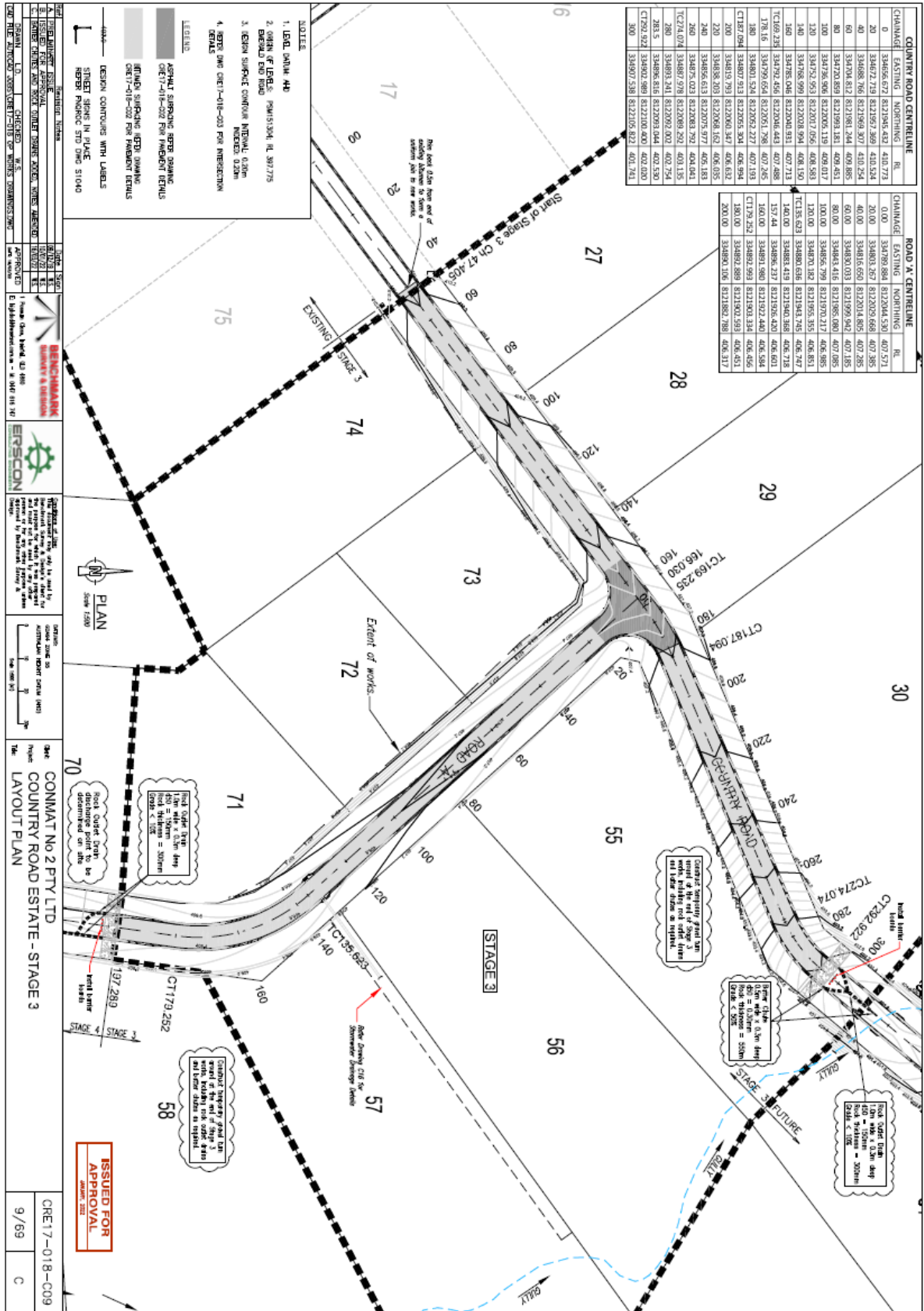
FNOROC DRAWINGS

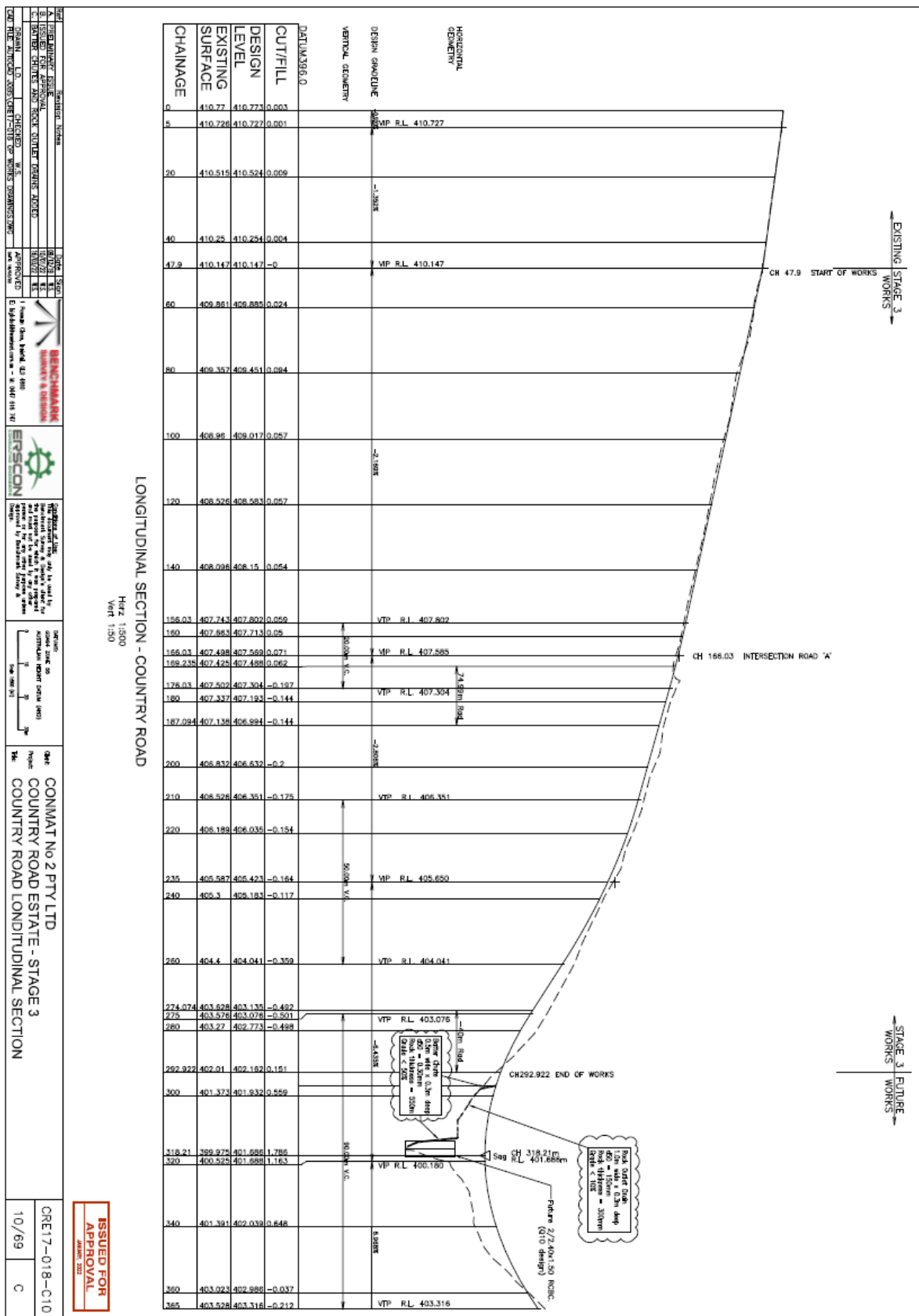
- S2000A - MSC VALVE BOX INSTALLATION
- S2005A - MSC HYDRANT BOX INSTALLATION
- S2010D - KERB/ROAD MARKERS
- S2015A - MSC THRUST BLOCK DETAILS
- S2016B - WATER RETICULATION BEDDING DETAILS
- S2020D - MSC MAIN CONNECTION DETAILS
- S2050A - MSC DOMESTIC WATER SERVICE CONNECTION DETAILS

ISSUED FOR APPROVAL	DATE	BY
7/69	09/17-018-007	B
CONMAT No 2 PTY LTD COUNTRY ROAD ESTATE - STAGES 3, 4, 5, 6 & 8 WATER RETICULATION NOTES		

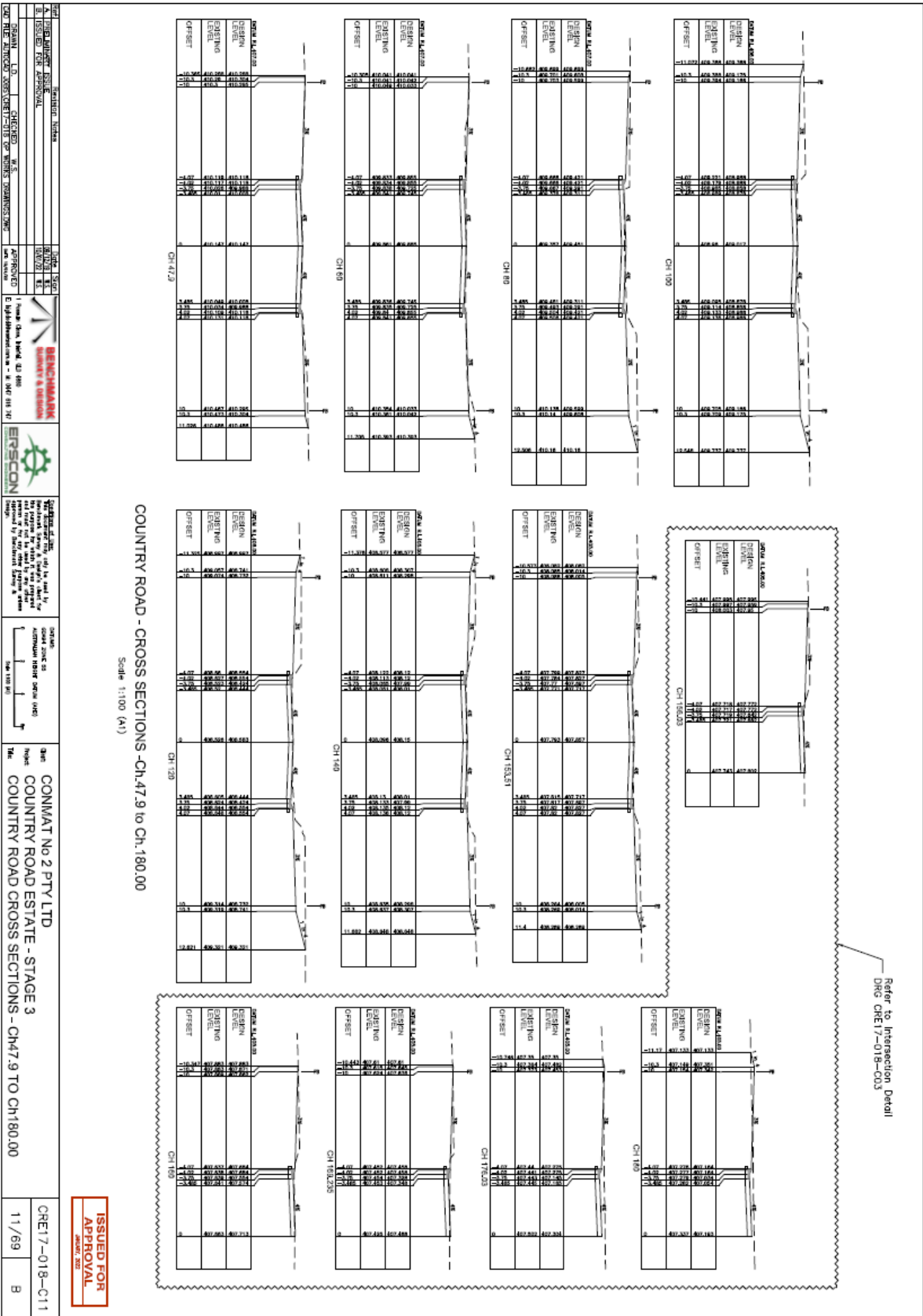








Document Set ID: 4116444
Version: 1, Version Date: 20/07/2022



A. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		B. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		C. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		D. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69	
E. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		F. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		G. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		H. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69	
I. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		J. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		K. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		L. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69	
M. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		N. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		O. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		P. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69	
Q. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		R. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		S. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69		T. DESIGN APPROVAL ISSUED FOR APPROVAL DATE 11/69	

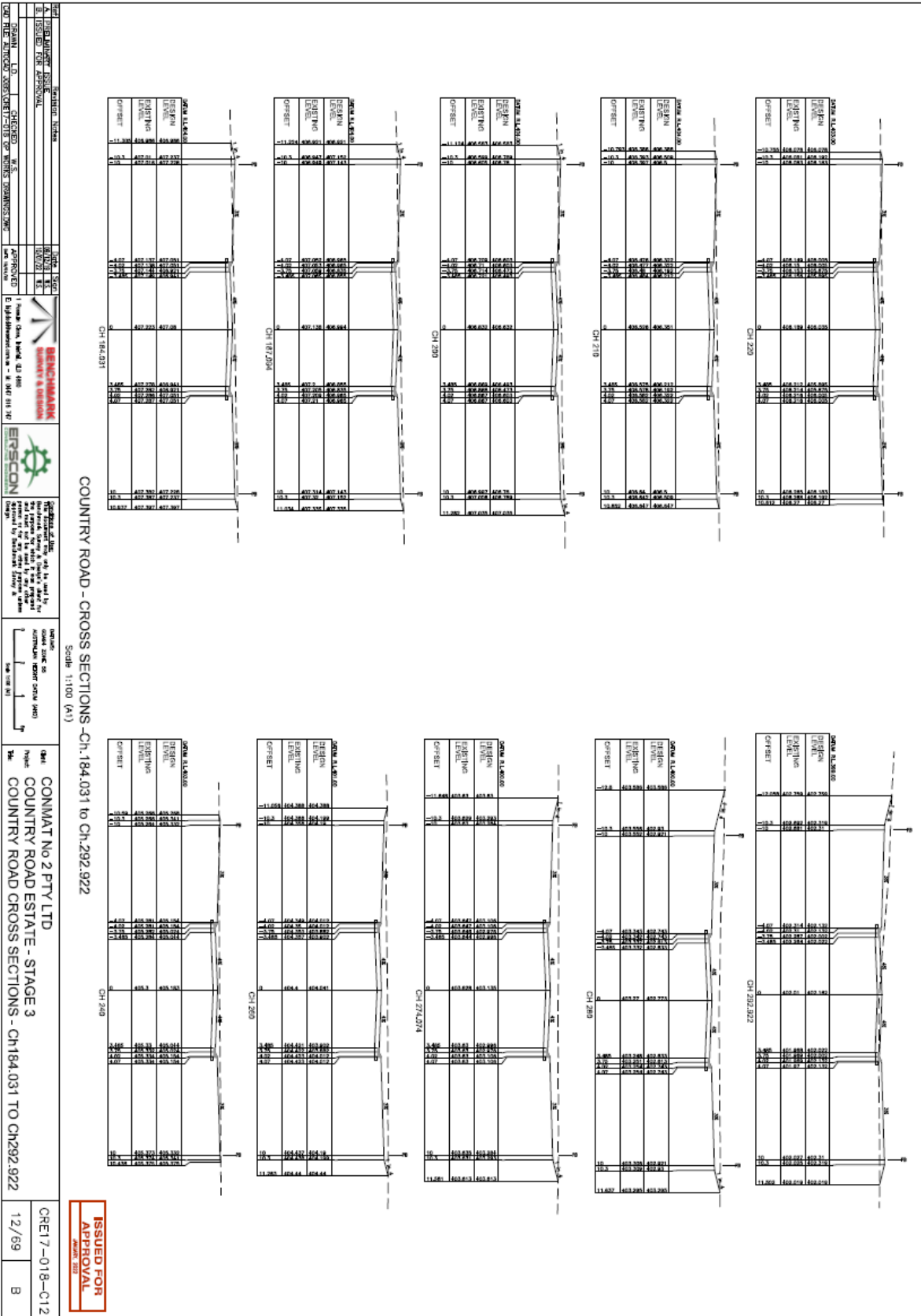
BENCHMARK
 SURVEY & DESIGN

ERSCON

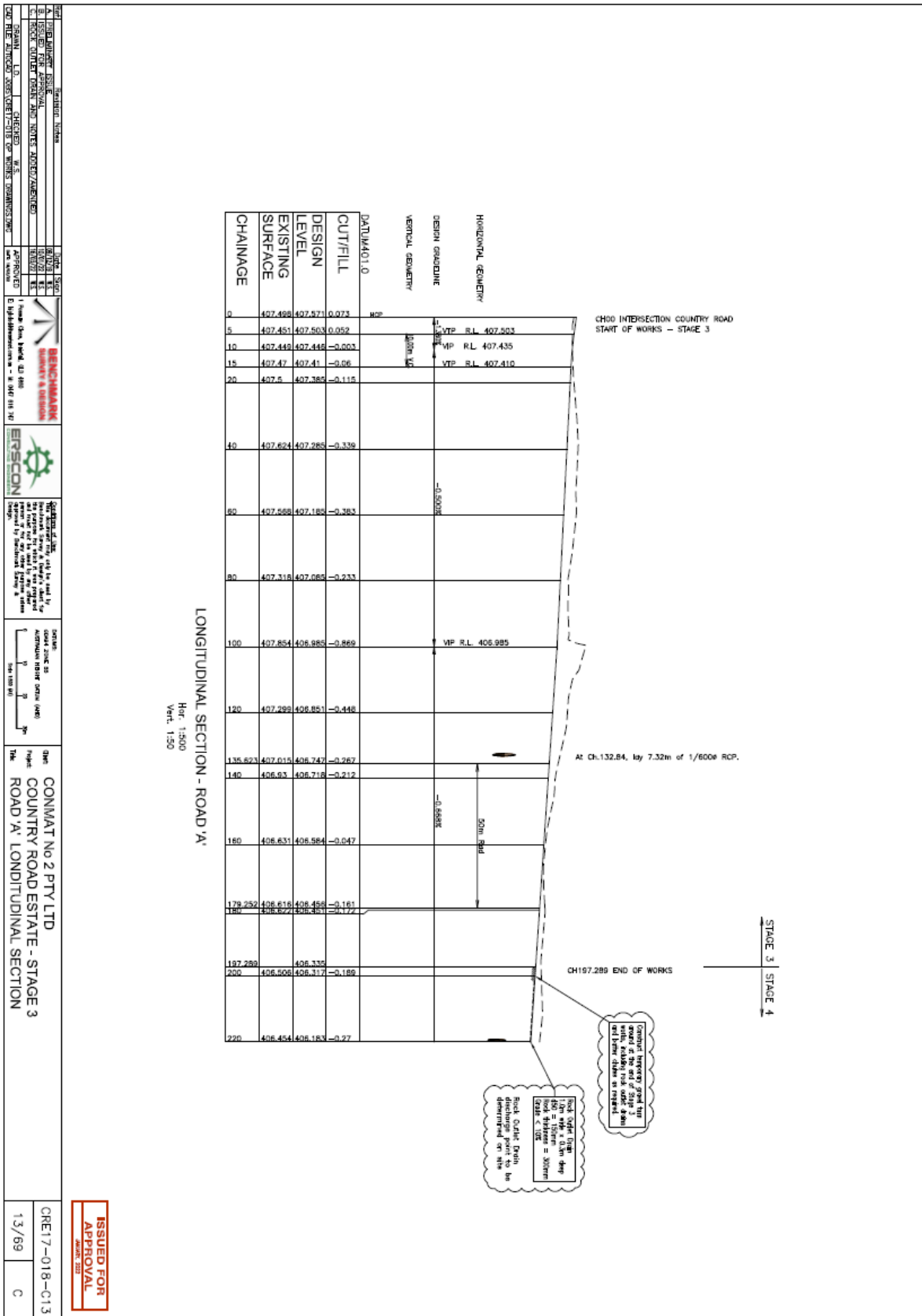
Prepared by: [Name]
 Checked by: [Name]
 Drawn by: [Name]
 Scale: 1:100 (A1)

SHEET NO. 11 OF 11
 PROJECT NO. [Number]
 DRAWING TITLE: COUNTRY ROAD CROSS SECTIONS - CH 47.9 TO CH 180.00

CONMAT No 2 PTY LTD
 COUNTRY ROAD ESTATE - STAGE 3
 COUNTRY ROAD CROSS SECTIONS - CH 47.9 TO CH 180.00



Document Set ID: 4116444
Version: 1, Version Date: 20/07/2022

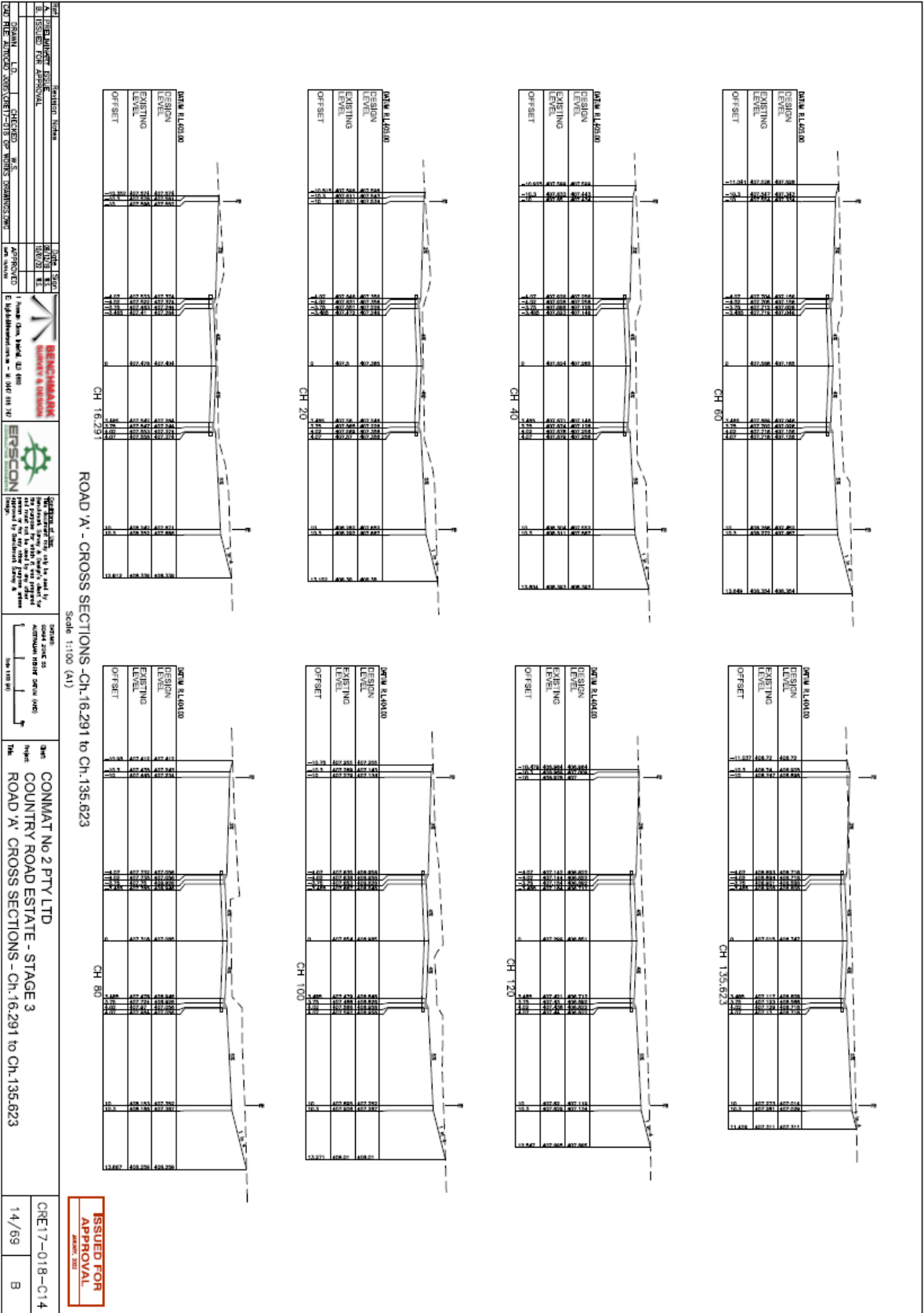


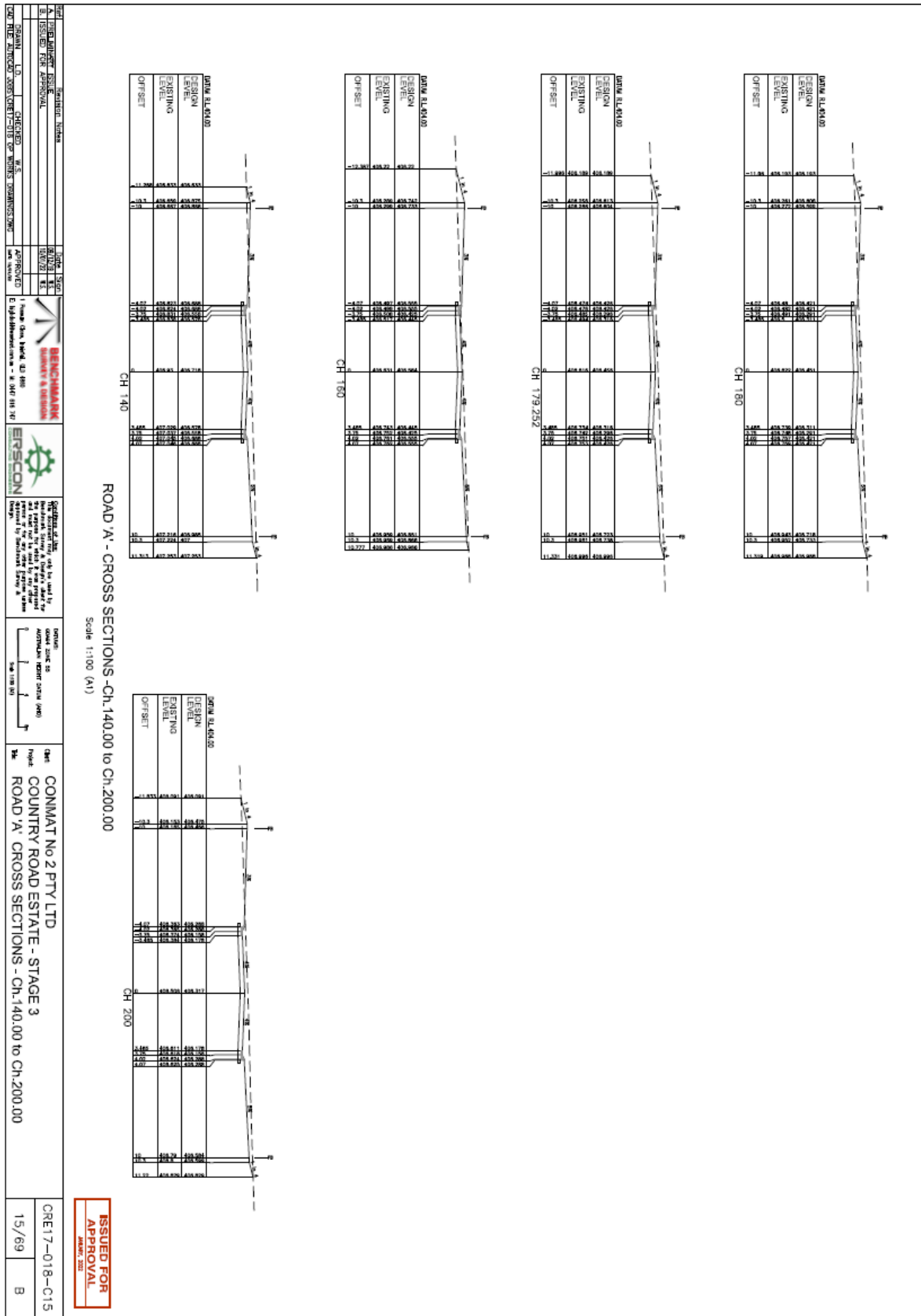
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13/09/20	DESIGN	AMC	AMC
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13/09/20	APPROVED	AMC	AMC

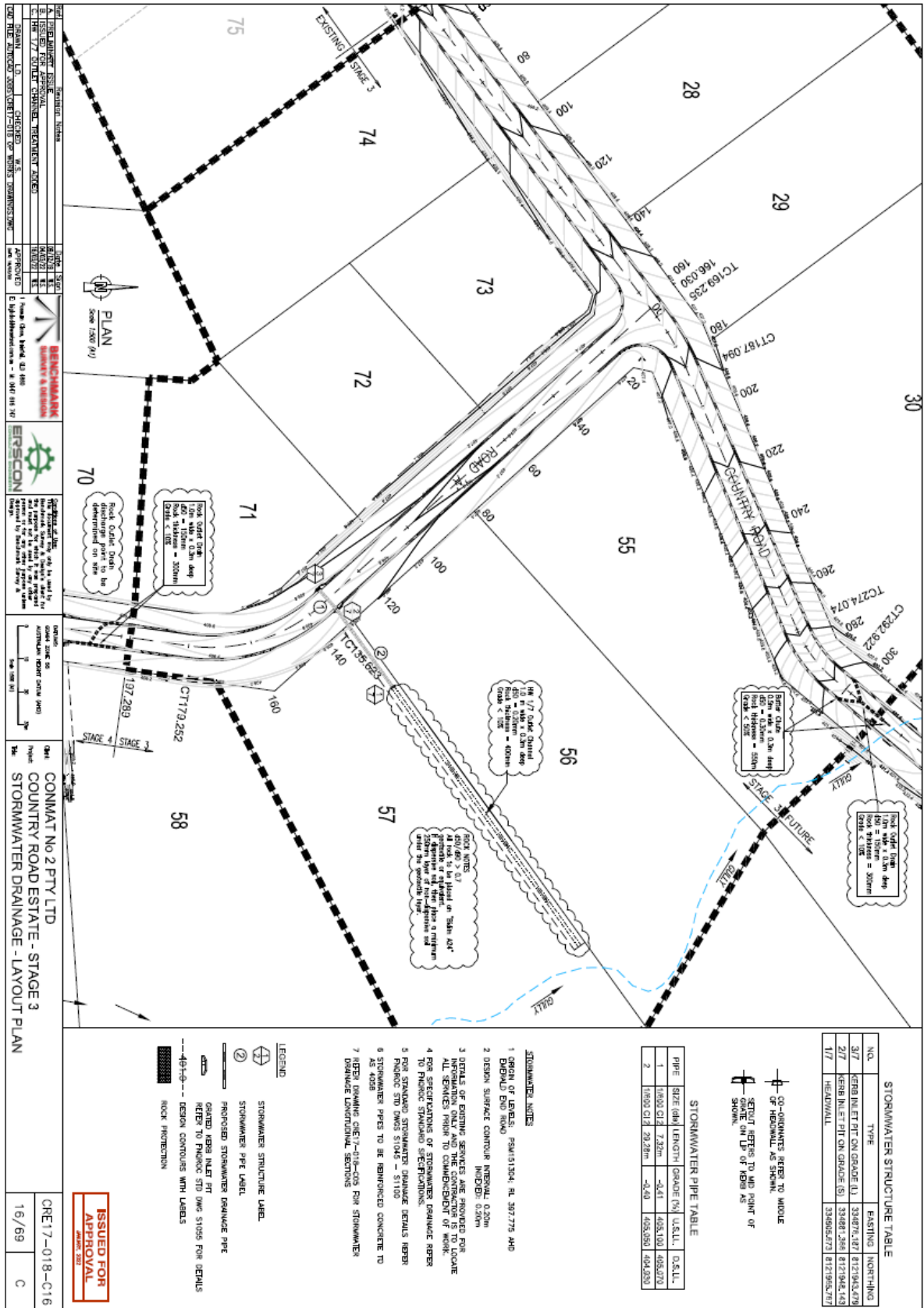
PROJECT: CONMAT No 2 PTY LTD
 ROAD A' LONGITUDINAL SECTION

SCALE: Horiz. 1:500, Vert. 1:50

ISSUED FOR APPROVAL







STORMWATER STRUCTURE TABLE

NO.	TYPE	EXISTING	NORTHING
3/7	HEMB INLET PIT ON GRADE (L)	334876.427	8121943.479
2/7	HEMB INLET PIT ON GRADE (S)	334887.286	8121944.143
1/7	HEADWALL	334885.673	8121944.747

STORMWATER PIPE TABLE

PIPE	SIZE (mm)	LENGTH	GRADE (%)	U.S.L.L.	D.S.L.L.
1	1500 C12	7.20m	-3.41	405.100	405.079
2	1500 C12	23.28m	-3.40	405.050	404.930

- STORMWATER NOTES**
- ORIGIN OF LOTS: F94/151304, RL 397.775 AHD
 - DEVELOP DOWNSIDE
 - DESIGN SURFACE CONTOUR INTERVAL: 0.20m
 - DESIGN SURFACE CONTOUR INTERVAL: 0.20m
 - DETAILS OF EXISTING SERVICES ARE PROVIDED FOR INFORMATION ONLY. ALL SERVICES SHALL BE REFERRED TO THE APPROPRIATE AUTHORITY FOR CONFIRMATION OF WORK.
 - FOR SPECIFICATIONS OF STORMWATER DRAINAGE REFER TO FINISHED STANDARD SPECIFICATIONS.
 - FOR STANDARD STORMWATER DRAINAGE DETAILS REFER TO FINISHED STANDARD SPECIFICATIONS.
 - FOR STANDARD STORMWATER DRAINAGE DETAILS REFER TO FINISHED STANDARD SPECIFICATIONS.
 - STORMWATER PIPES TO BE REINFORCED CONCRETE TO AS 4028
 - REFER DRAWING C/E17-018-005 FOR STORMWATER DRAINAGE UNINDIVIDUAL SECTIONS

- LEGEND**
- STORMWATER STRUCTURE LABEL
 - STORMWATER PIPE LABEL
 - PROPOSED STORMWATER DRAINAGE PIPE
 - GRADED HEMB INLET PIT
 - REFER TO FINISHED STD DWG STAGE FOR DETAILS
 - DESIGN CONTOURS WITH LABELS
 - ROCK PROTECTION

ISSUED FOR APPROVAL

CHE17-018-C16
16/69
C

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD
1	15/06/2022	ISSUED FOR APPROVAL	...	...

PROJECT INFORMATION

PROJECT: CONMAT NO 2 PTY LTD COUNTRY ROAD ESTATE - STAGE 3 STORMWATER DRAINAGE - LAYOUT PLAN

CLIENT: CONMAT NO 2 PTY LTD

DATE: 15/06/2022

DESIGNER

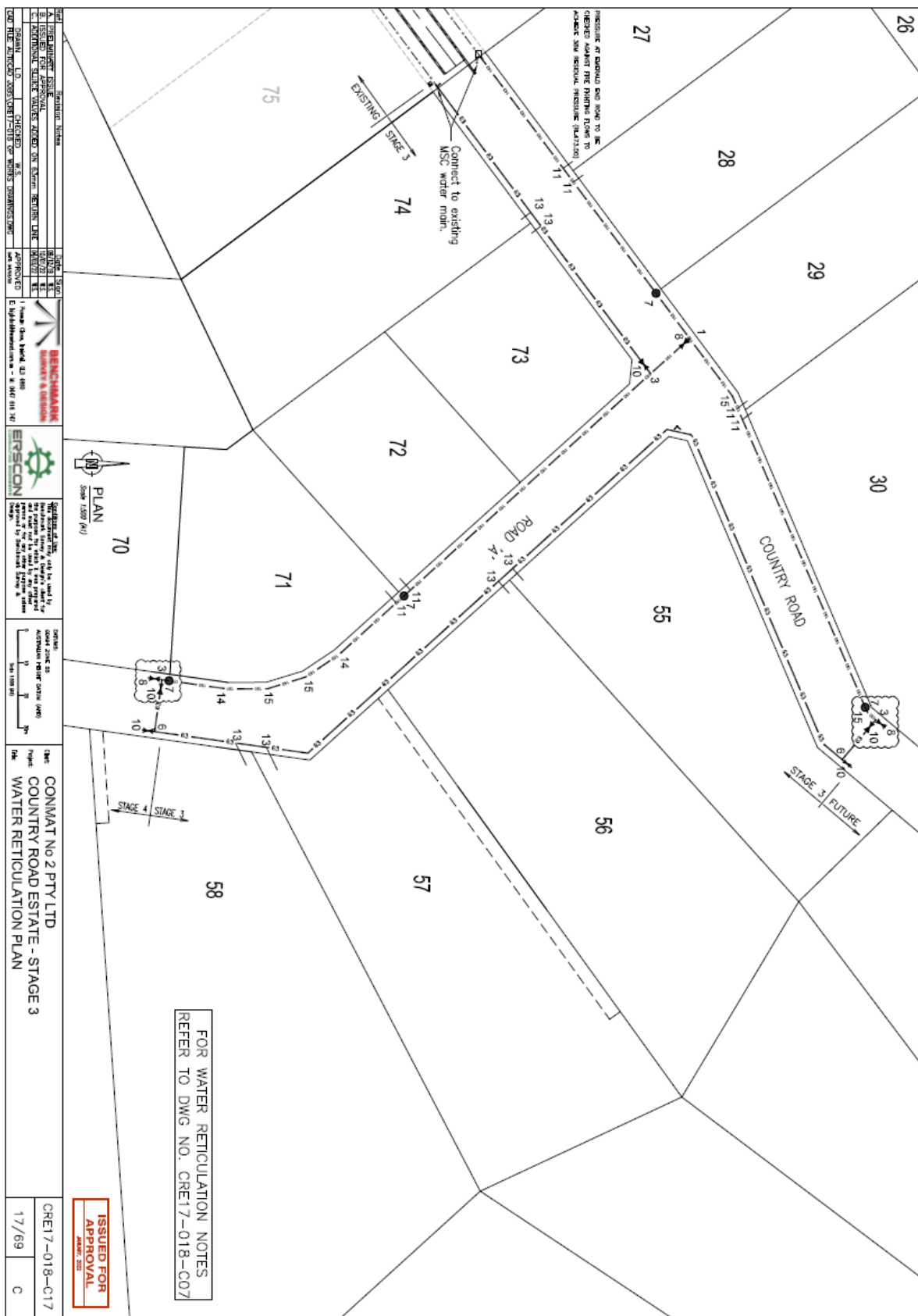
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SCALE

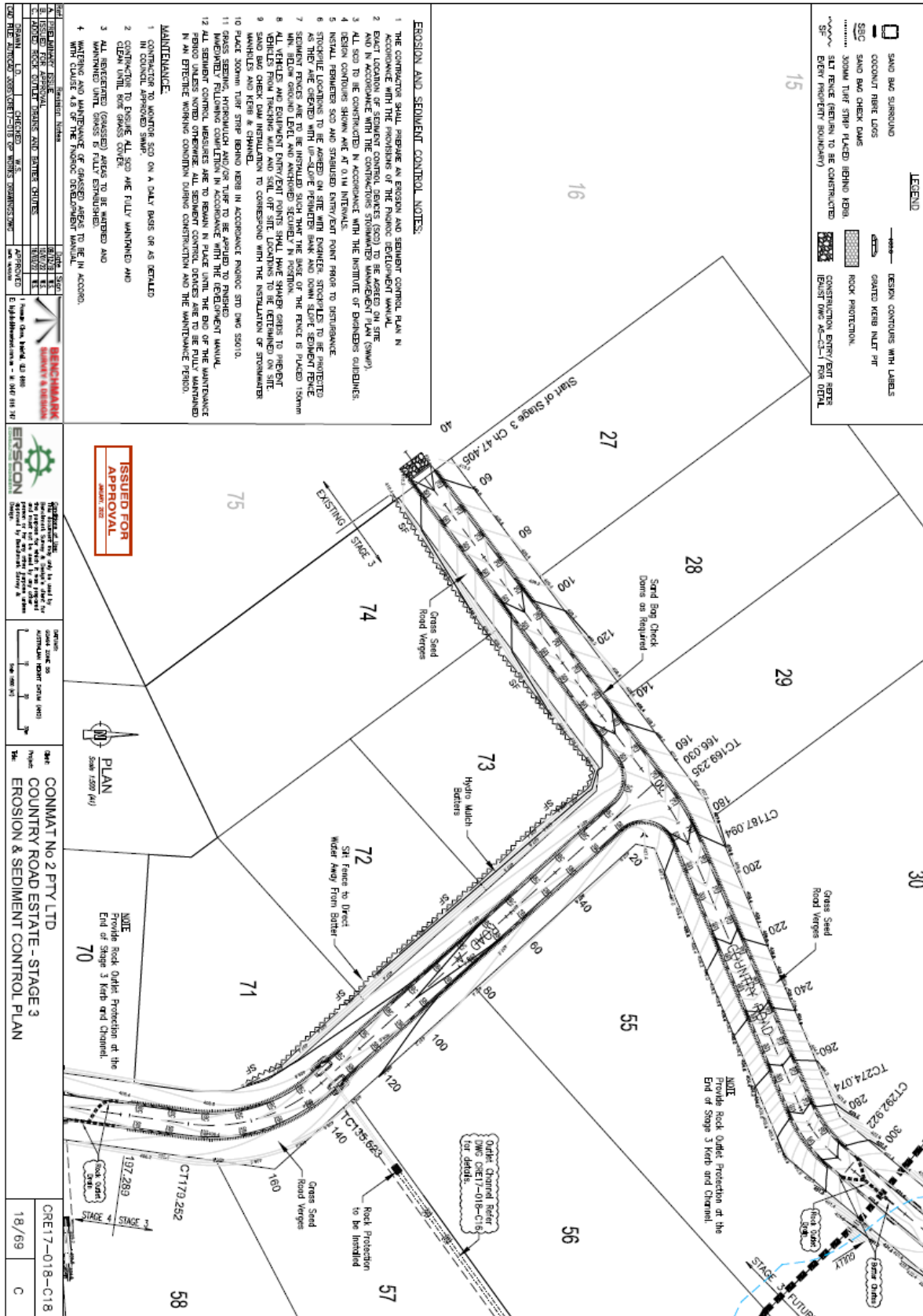
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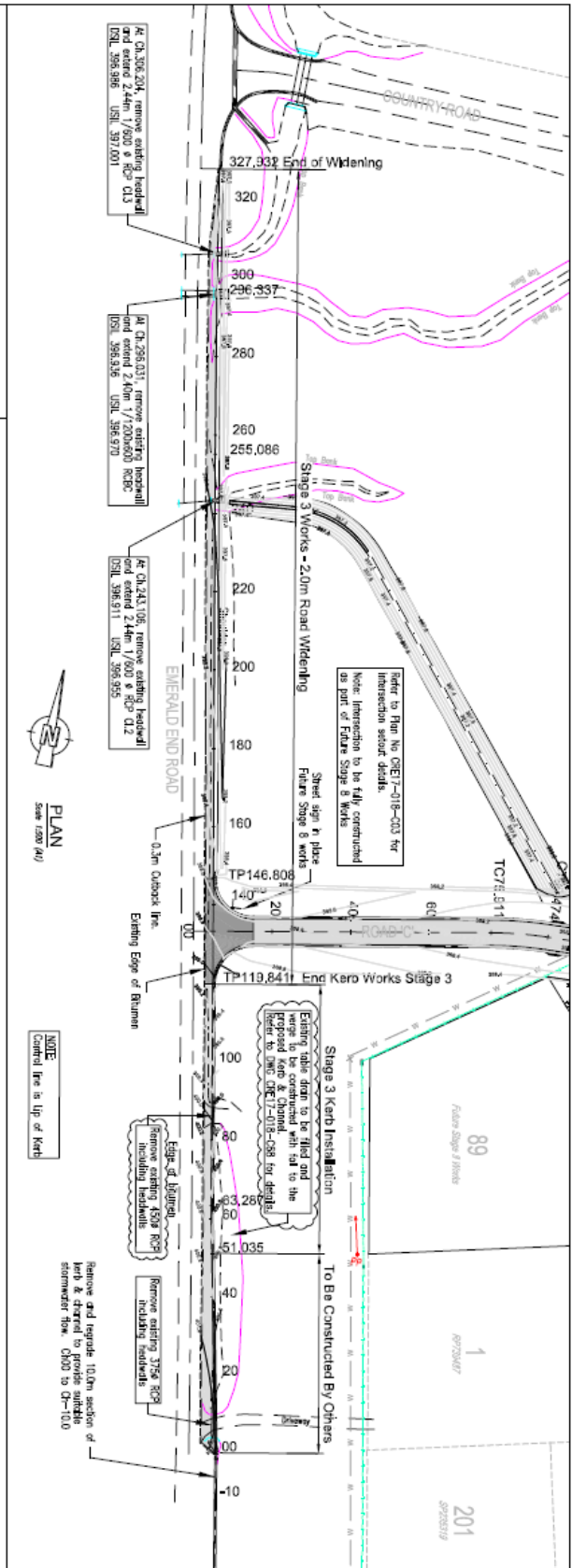
DATE

16/69



<p>1. THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF THE ENGINEER AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.</p> <p>2. THE INFORMATION CONTAINED HEREIN IS NOT TO BE USED FOR ANY OTHER PROJECT OR FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER.</p>	<p>DATE: 17/07/2022</p> <p>PROJECT: CONMAT No 2 PTY LTD COUNTRY ROAD ESTATE - STAGE 3 WATER RETICULATION PLAN</p>	<p>SCALE: 1:1000</p> <p>DATE: 17/07/2022</p>	<p>PROJECT: CONMAT No 2 PTY LTD COUNTRY ROAD ESTATE - STAGE 3 WATER RETICULATION PLAN</p>	<p>DATE: 17/07/2022</p> <p>PROJECT: CONMAT No 2 PTY LTD COUNTRY ROAD ESTATE - STAGE 3 WATER RETICULATION PLAN</p>
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NOTES

1. LEG. DATA: A10
2. OPEN OF LEG. S. FROM 15/3/04. RL 307.775
3. DESIGN SURFACE CONTOUR INTERVAL: 0.20m
NUMBER: 0.20m
4. REFER DWG CRE17-018-003 FOR INTERSECTION DETAILS
5. LANDSCAPING PLAN TO BE SUBMITTED TO WARRIATA SHIRE COUNCIL FOR APPROVAL PRIOR TO WORKS COMMENCING

LEGEND

- ASPHALT SURFACING REFER DRAWING CRE17-018-C66 FOR PAVED DETAIL
- GRUNNER SURFACING REFER DRAWING CRE17-018-C66 FOR PAVED DETAIL
- DESIGN CONTOURS WITH LABELS
- STREET SIGNS IN PLACE
- REFER PAVED STD DWG S100

FINANCIAL STANDARD DRAWINGS

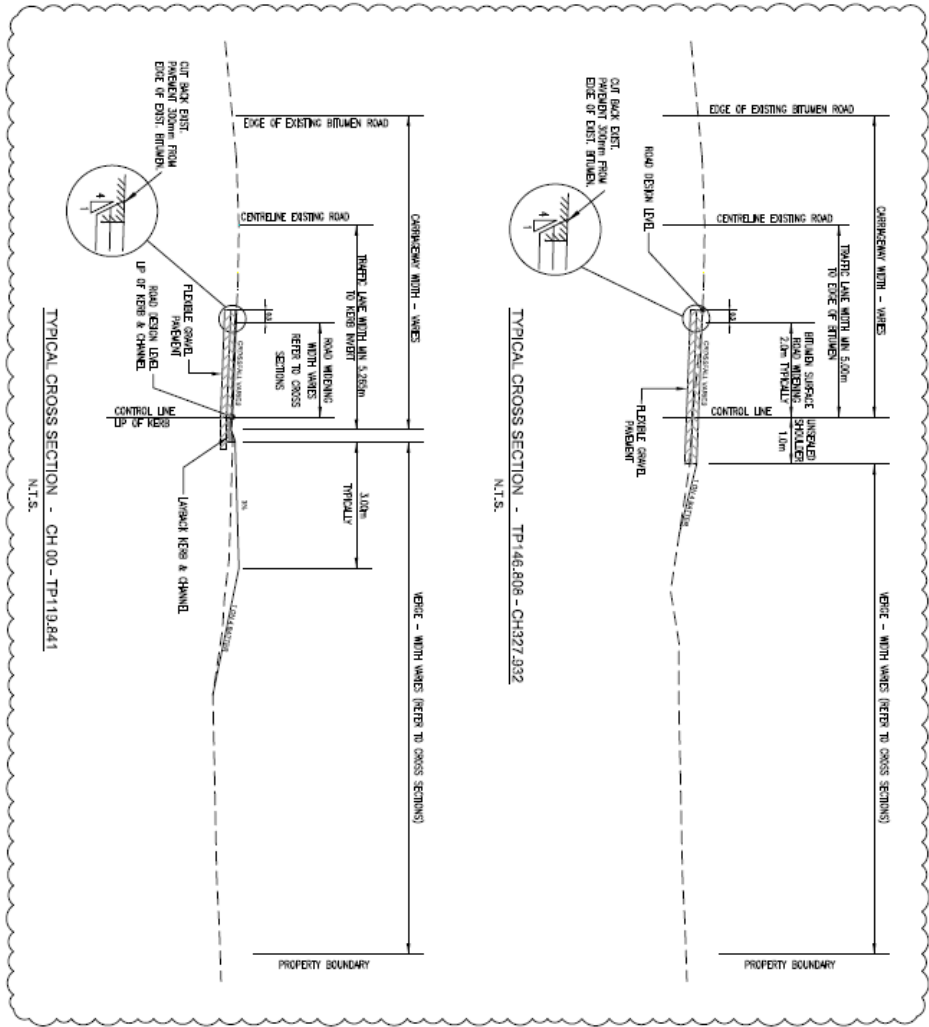
Drawing Number	Rev	Drawing Description
Sheet	F	CONCRETE KERB & CHANNEL
Sheet	E	EXCAVATION BEHIND AND BACKFILLING OF PRECAST BOX CULVERTS
Sheet	A	EXCAVATION BEHIND AND BACKFILLING OF CONCRETE TYPERS

EMERALD END ROAD WIDENING CONTROL LINE

CHANGEGE	EASTING	NORTHING	RL	Bearing
0.00	333798.685	812159.639	400.970	194°12'04"
20.00	333798.254	812159.142	400.960	194°12'04"
40.00	333775.824	812159.845	400.815	194°12'04"
60.00	333771.993	812159.845	400.537	194°12'04"
63.29	333770.665	812160.324	400.459	
80.00	333767.408	812161.726	400.122	194°24'40"
113.84	333759.304	812166.755	399.027	
120.00	333759.272	812166.900	399.029	194°19'15"
140.00	333755.445	812167.426	398.627	194°19'15"
146.00	333751.545	812168.026	398.346	194°13'48"
180.00	333747.024	812175.657	398.253	194°13'48"
200.00	333742.995	812176.227	398.131	194°13'48"
220.00	333738.615	812176.816	398.020	194°13'48"
240.00	333734.835	812177.326	397.979	194°13'48"
255.00	333731.258	812178.105	397.802	
260.00	333729.701	812178.983	397.862	194°18'45"
280.00	333726.833	812181.920	397.808	
296.34	333722.637	812183.608	397.808	
300.00	333722.545	812183.205	397.796	194°06'25"
320.00	333719.165	812185.845	397.817	194°06'25"
327.85	333717.681	812186.527	397.844	194°06'25"

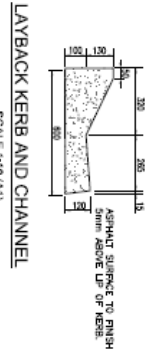
ISSUED FOR APPROVAL
JANUARY 2022

CRE17-018-C65
65/69
C



TYPICAL CROSS SECTION - TP146.808 - CH927.932
N.T.S.

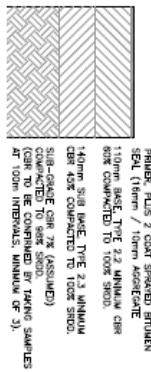
TYPICAL CROSS SECTION - CH 00 - TP119.841
N.T.S.



LAYBACK KERB AND CHANNEL
SCALE 1:10 (A1)



PAVEMENT DETAIL - INTERSECTION
N.T.S.



PAVEMENT DETAIL
N.T.S.

PAVEMENT NOTES

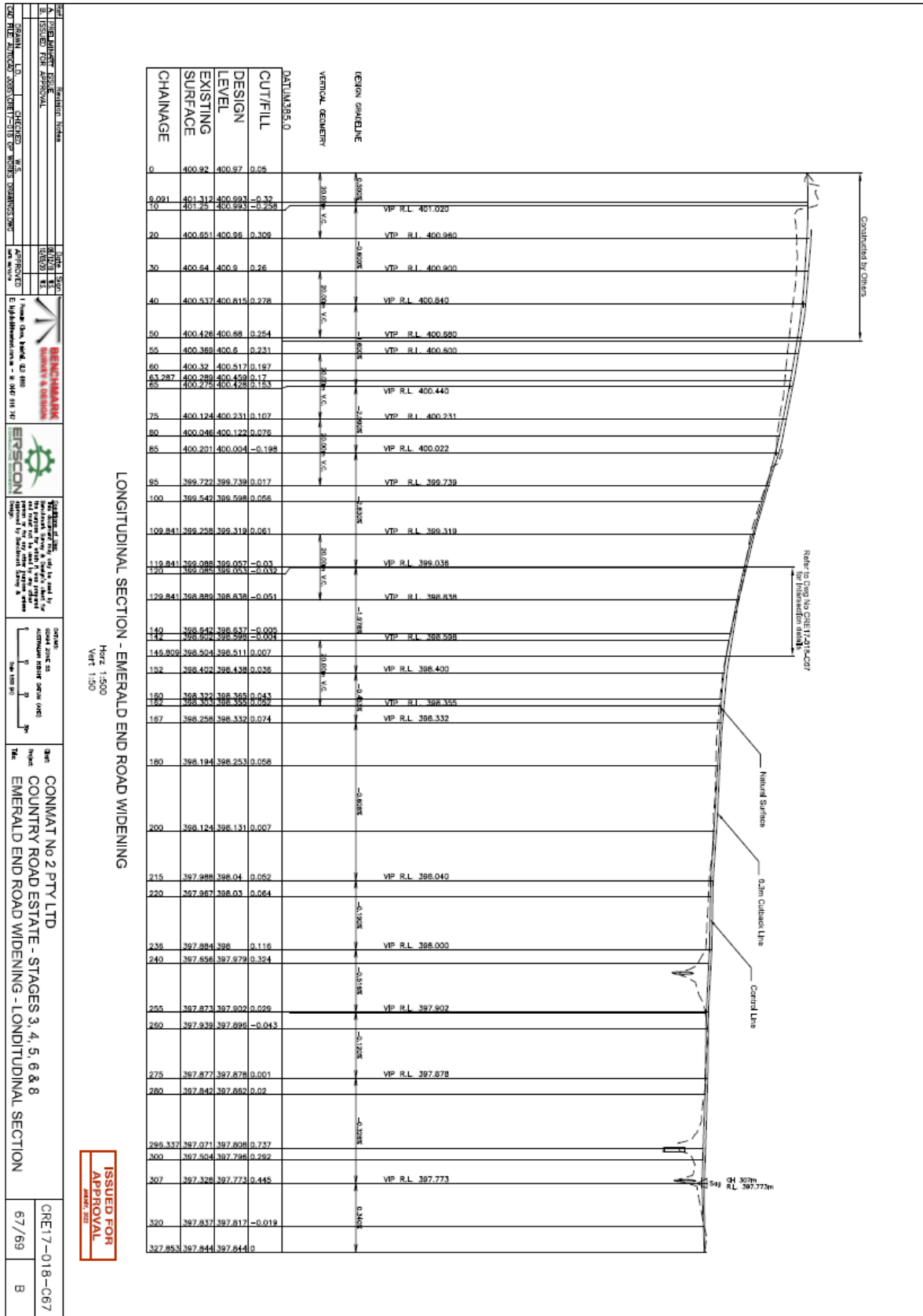
1. ALL CUT-OR-SAW JOINTS AND INTERSECTION TYPICALLY ARE REQUIRED TO HAVE A MINIMUM 30MM ASPHALT SURFACE TREATMENT WITH A SINGLE COAT SEAL.
2. THE SUB-BASE LAYER SHALL EXTEND A MINIMUM OF 150MM BEHIND THE NEAR FACE OF THE KERB AND CHANNEL.
3. THE BASE AND SURFACING SHALL EXTEND TO THE FACE OF ANY KERBING, WHERE THE NEAR SIDE OF THE BASE LAYER IS BELOW THE LEVEL OF THE OUTSIDE BEING THE NEAR FACE OF THE KERB AND CHANNEL.

ISSUED FOR APPROVAL
January 2022

DATE	DESCRIPTION	BY	CHECKED
06/09/2022	ISSUED FOR APPROVAL	[Signature]	[Signature]

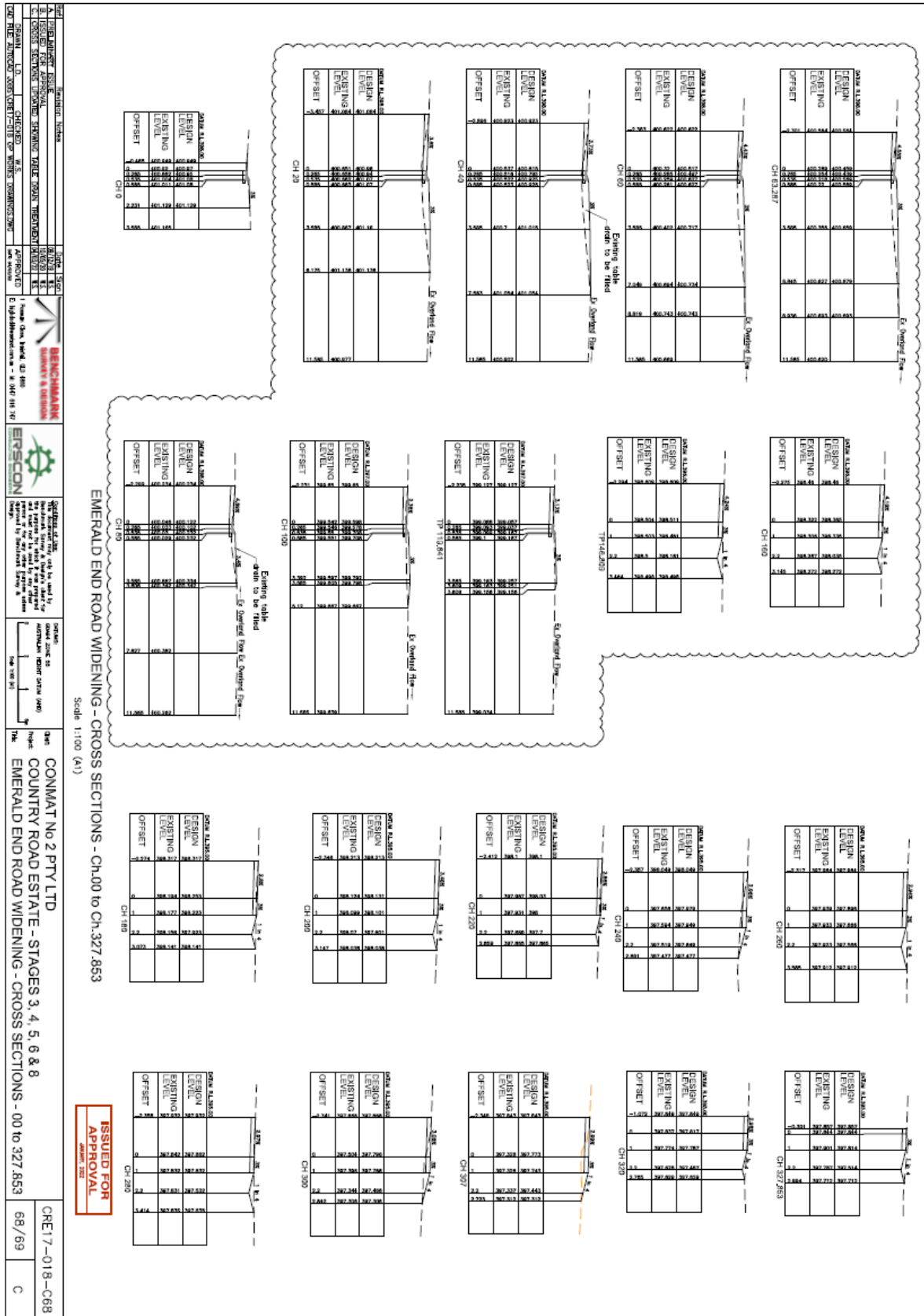
PROJECT	CONMAT No 2 PTY LTD COUNTRY ROAD ESTATE - EMERALD END ROAD WIDENING
CLIENT	CONMAT No 2 PTY LTD
LOCATION	150m Chas Road, CH 00
SCALE	1:100
DATE	06/09/2022

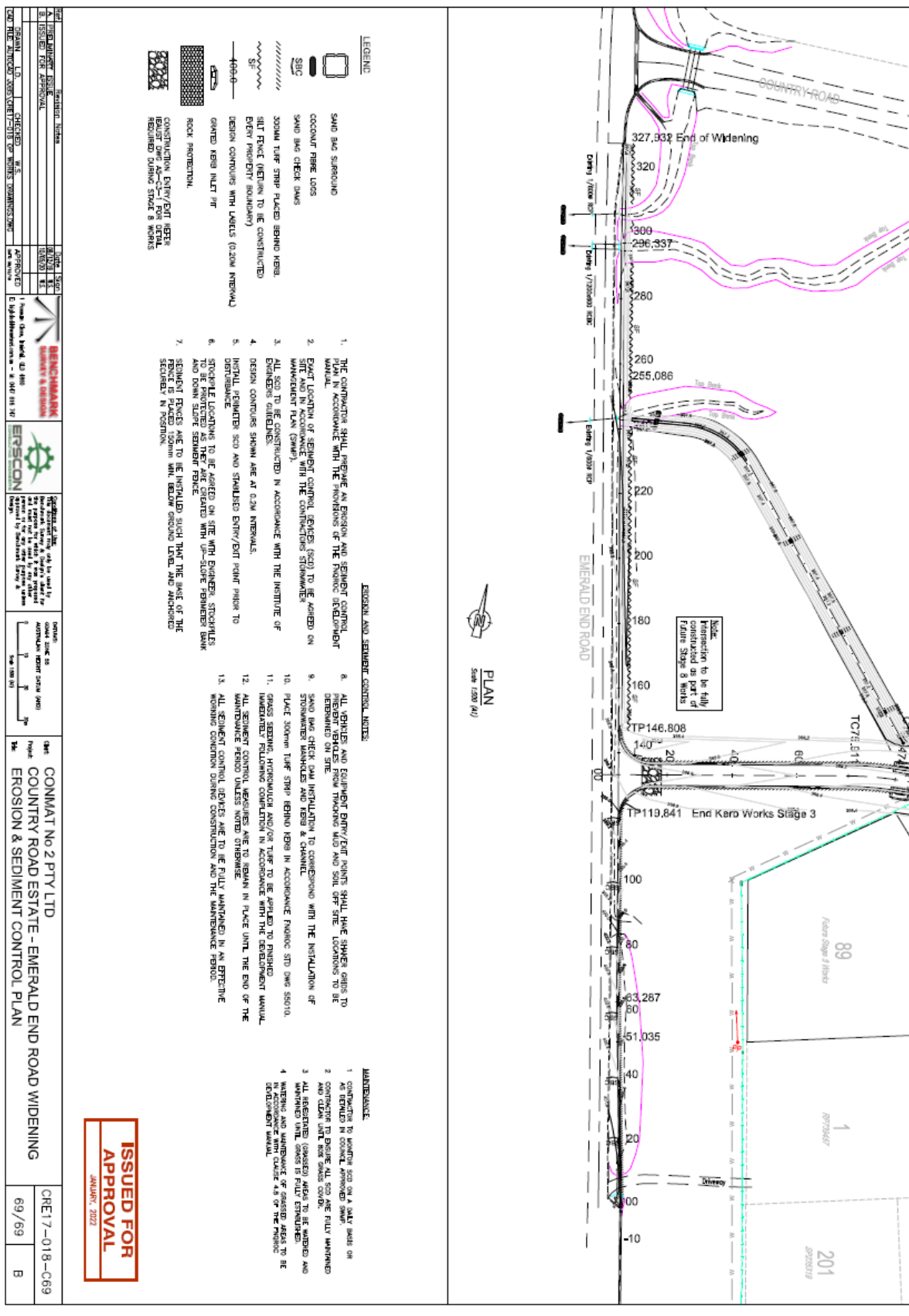
DESIGNED BY	ENGINEER	DATE
CHECKED BY	ENGINEER	DATE
APPROVED BY	ENGINEER	DATE



ISSUED FOR APPROVAL
DATE: 2022

PROJECT	CONWAY No 2 PTY LTD	DATE	06/11/2022
CLIENT	COUNTRY ROAD ESTATE - STAGES 3, 4, 5, 6 & 8	PROJECT	EMERALD END ROAD WIDENING - LONGITUDINAL SECTION
DESIGNER	ERSCON	SCALE	VERT 1:500
CHECKER	ERSCON	DATE	07/09/2022
APPROVED	ERSCON	DATE	07/09/2022





LEGEND

- SAND BAG SURROUND
- COCONUT FIBRE LOGS
- SAND BAG CHECK DAMS
- 300MM TURF STRIP PLACED BEHIND KERB
- SILT FENCE (METHOD TO BE CONSTRUCTED EVERY PRESENTLY BOUNDARY)
- BERMS CONTOURS WITH LAYERS (0.20M INTERVAL)
- GRATED KERB INLET PIT
- ROCK PROTECTION
- CONSTRUCTION ENTRY/EXIT AREA BEHIND ONE M3-CM FOR DETAIL REQUIRED DURING STAGE 8 WORKS

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL PROVIDE AN EROSION AND SEDIMENT CONTROL PLAN IN ACCORDANCE WITH THE PROVISIONS OF THE FINANCIAL DEVELOPMENT ACT 2016.
2. EXACT LOCATION OF SEDIMENT CONTROL DEVICES (SCD) TO BE AGREED ON MANAGEMENT PLAN (CMP).
3. ALL SCD TO BE CONSTRUCTED IN ACCORDANCE WITH THE INSTITUTE OF ENGINEERS GUIDELINES.
4. DESIGN CONTOURS SHOWN ARE AT 0.2M INTERVALS.
5. INSTALL PERIMETER SCD AND STABILISED ENTRY/EXIT POINT PRIOR TO DEVELOPMENT.
6. STRUCTURE LOCATIONS TO BE AGREED ON SITE WITH ENGINEER, STRUCTURES AND DOWN SLOPE SEDIMENT FENCE.
7. SEDIMENT FENCES ARE TO BE INSTALLED SUCH THAT THE BASE OF THE FENCE IS PLACED 150mm MIN. BELOW GROUND LEVEL AND ANCHORED SECURELY IN POSITION.
8. ALL VEHICLES AND EQUIPMENT ENTRY/EXIT POINTS SHALL HAVE SHIMMER GRITS TO PREVENT TRACKS FROM TRACKING MUD AND SOIL OFF SITE. LOCATIONS TO BE AGREED ON MANAGEMENT PLAN (CMP).
9. SAND BAG CHECK DAM INSTALLATION TO CONFORM WITH THE INSTALLATION OF STRUCTURES VEHICLES AND TRAILERS.
10. PLACE 300mm TURF STRIP BEHIND KERB IN ACCORDANCE FINANCING STD DMS 555010.
11. GRASS SEEDING, HYDRATION AND/OR TURF TO BE APPLIED TO FINISHED/IMPROVED/ FILLING COMPLETION IN ACCORDANCE WITH THE DEVELOPMENT MANUAL.
12. ALL SEDIMENT CONTROL MEASURES ARE TO REMAIN IN PLACE UNTIL THE END OF THE MAINTENANCE PERIOD UNLESS NOTED OTHERWISE.
13. ALL SEDIMENT CONTROL DEVICES ARE TO BE FULLY MAINTAINED IN AN EFFECTIVE WORKING CONDITION DURING CONSTRUCTION AND THE MAINTENANCE PERIOD.

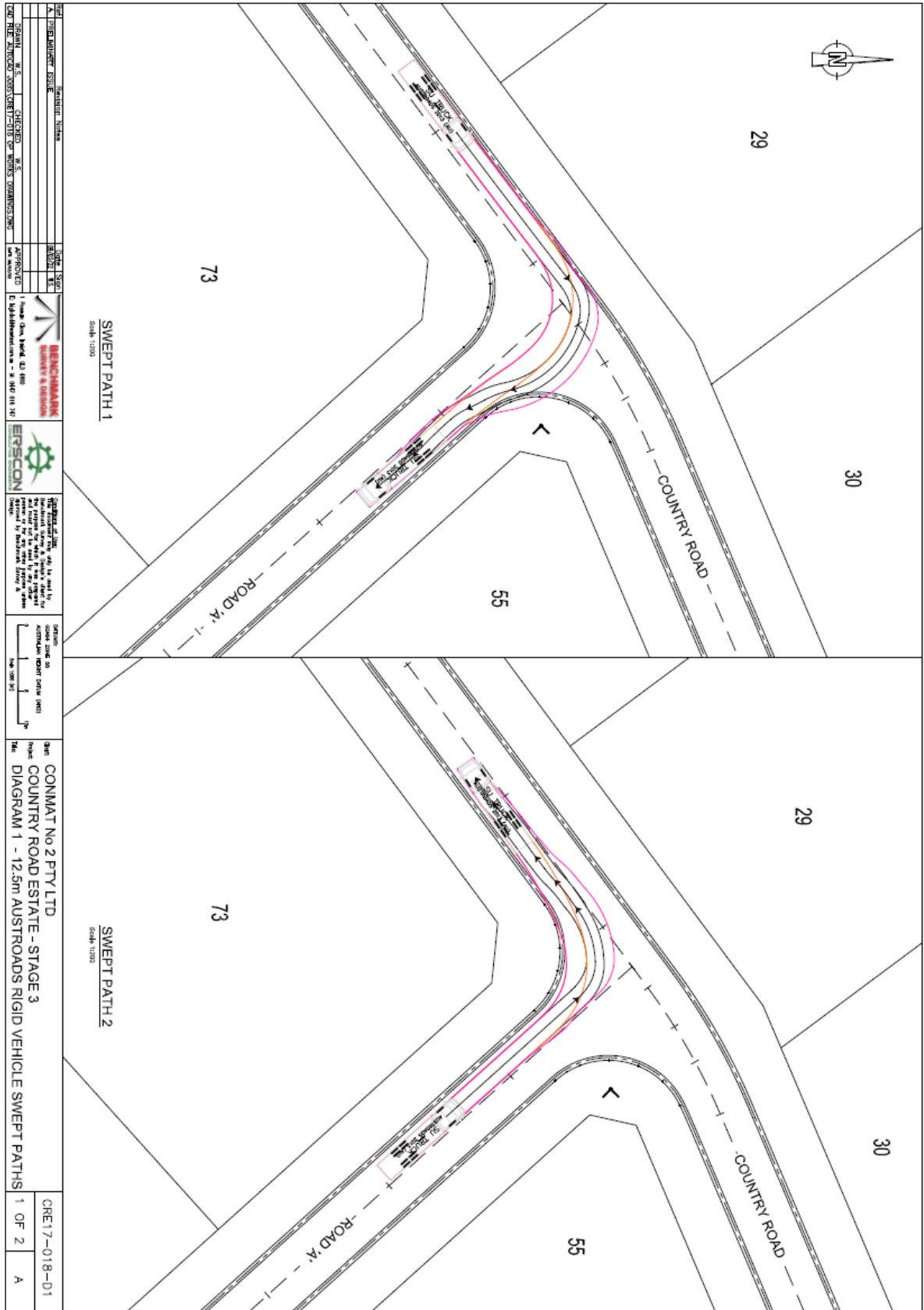
MAINTENANCE

1. CONSTRUCTION TO REMAIN FOR 6 MONTHS OR AS DETERMINED IN ORIGINAL APPROVED SMP.
2. CONSTRUCTION TO REMAIN FOR 6 MONTHS OR AS DETERMINED IN ORIGINAL APPROVED SMP.
3. ALL REVERSED (GRASED) AREAS TO BE WATERED AND MAINTAINED FOR 6 MONTHS OR AS DETERMINED IN ORIGINAL APPROVED SMP.
4. MAINTENANCE AND MAINTENANCE OF GRASSED AREAS TO BE DETERMINED IN ORIGINAL APPROVED SMP.

ISSUED FOR APPROVAL
 JANUARY 2022

DATE	REVISION	BY	FOR
01/02/2022	ISSUED FOR APPROVAL	01/02/2022	01/02/2022
01/02/2022	ISSUED FOR APPROVAL	01/02/2022	01/02/2022
01/02/2022	ISSUED FOR APPROVAL	01/02/2022	01/02/2022

PROJECT: CONMAT No 2 PTY LTD
 COUNTRY ROAD ESTATE - EMERALD END ROAD WIDENING
 EROSION & SEDIMENT CONTROL PLAN
 DRAWING NO: CRE17-018-C69
 DATE: 6/9/2022
 SHEET: B



DATE	DESCRIPTION	BY	CHECKED
18/07/2022	ISSUED FOR CONSTRUCTION	...	...
18/07/2022	DESIGNED	...	...
18/07/2022	DRAWN	...	...
<p>PROJECT: CONMAT NO 2 PTY LTD COUNTRY ROAD ESTATE - STAGE 3 DIAGRAM 1 - 12.5m AUSTRROADS RIGID VEHICLE SWEEP PATHS</p>			
<p>DATE: 18/07/2022 SCALE: 1:1000</p>			
<p>CRE17-018-D1 1 OF 2 A</p>			

