

TASMAN HIGHWAY– APSLEY RIVER BRIDGE REPLACEMENT

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Committee on Public Works

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Program	4.1	Update on budget and program

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Authorisation

	Name	Signature	Date
Authorised by:	A Fowler		18 Aug 2017

1 Introduction

1.1 Background

The Apsley River Bridge is located approximately 5 kilometres south of Bicheno on the Tasman Highway (Link 42). The bridge was constructed in 1947 and is comprised of 12 simply supported spans with a total length of 146 metres. A detailed structural assessment has been undertaken on the bridge, which found the structure is unacceptable to support current truck, axle and crane loads under normal operating conditions. The Department of State Growth (Department) is therefore planning to replace the bridge to improve safety for road users, and enable continued access for these heavier vehicles.

1.2 Project Objectives

The primary objective of the project is to replace the existing structure with a contemporary bridge designed in accordance with the current Australian Standard 5100-2017: Bridge Design, in particular to take SM1600 loading and have a 100 year design life. The Apsley River Bridge provides an important regional link to the town of Bicheno for freight vehicles, and its replacement will ensure that no load limit will have to be enforced on the bridge due to constraints on the capacity of the structure.

Due to the existing horizontal alignment being sub-standard on the western approach to the bridge, where a design speed of approximately 70km/h exists, the replacement bridge is to be constructed on a much improved alignment. Hence the objective of this new alignment will be to meet the requirements for a 100km/h design speed.

1.3 Project Location

Located approximately 5 km south west of Bicheno on the Tasman Highway, the site is on the Apsley River within the Swan - Apsley catchment and is identified in Figure 1. The site is located on the alluvial plains associated with the river and is below the 20 m contour.

Areas surrounding the site are used for rural activities, predominantly grazing, with a hard rock quarry located approximately 500 m from the existing bridge. The Tasman Highway is now marketed as The Great Eastern Drive. It is the major east coast road link and this section links the coastal centres of Bicheno, Coles Bay and Swansea, passing a number of tourist attractions such as vineyards, beaches and national parks. This section is also a popular cyclist route.

The Apsley River corridor contains riparian vegetation which extends along the river banks and over the top of the bank in this location.

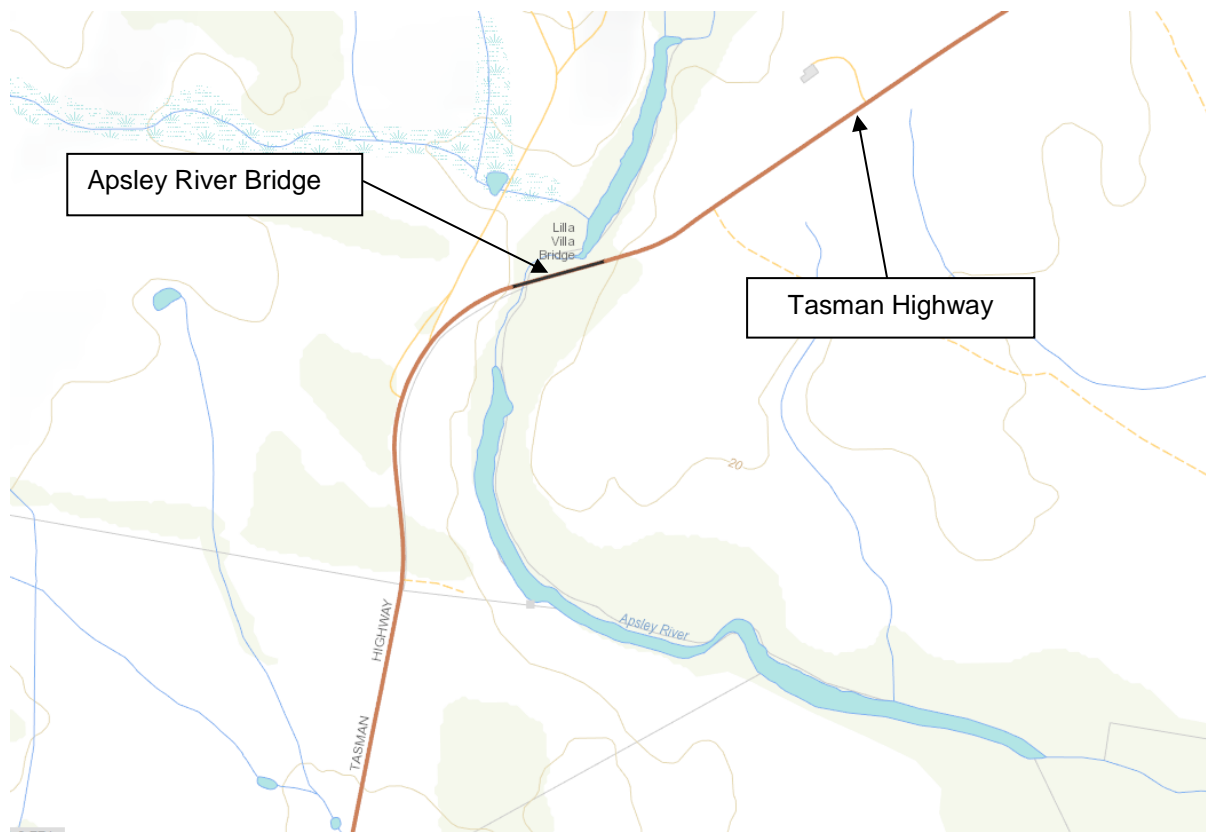


Figure 1: Locality Plan

1.4 Strategic Context of the Project

1.4.1 Alignment with Approved Strategies

The Apsley River Bridge has been identified for replacement by the Department due to its structural deficiency to support current truck, axle and crane loads under normal operating conditions. The current bridge therefore presents a major safety concern to users of this section of the Tasman Highway.

In addition to the structural deficiency of the bridge, the road geometry in the immediate vicinity of the bridge has been deemed to be acceptable only for a design speed of 70km/h. This project will incorporate an improvement in the road alignment such that a 100km/h design speed is achieved, consistent with the Tasman Highway in this vicinity. In combination with the new bridge being designed to current Australian Standards, this project will achieve a significant safety improvement for this section of the Tasman Highway.

1.4.2 Alignment with Planning Policies and Themes

This bridge replacement and road realignment is consistent with other bridge strengthening and replacements projects recently undertaken by the Department, for the purposes of both safety upgrades and improving accessibility for heavier vehicles to parts of the state road network. The replacement of the Apsley River Bridge will mitigate the need to otherwise enforce load limit restrictions to the bridge, which would have the potential to have a major impact on heavy vehicle operators in the region, and hence local industry.

In addition to the freight benefits, wider shoulders and higher bridge barriers shall be constructed to improve the safety for cyclists on this popular tourist route.

2 Project Details

2.1 Proposed Works

The proposed works for the Apsley River Bridge replacement include:

- Construction of a new 90 metre overall simply supported Super-T bridge structure with three equal 30 metre spans, adopting spill through style abutments. The new bridge shall be situated on a new alignment upstream of the existing bridge;
- A total of 1434 metres of realigned road on both approaches to the bridge, the new road alignment being designed for the specified design speed as described in Section 2.2; and
- Demolition of the existing Apsley River Bridge structure and rehabilitation of the redundant road sections.

Preliminary design drawings for the road realignment and bridge structure are included in Appendix A.

2.2 Design Speed

The design speed for the Highway at the Apsley River Bridge will be increased to 100km/h. While this is above the current design speed in a number of locations on the Tasman Highway, it is consistent with this section of the highway and it is appropriate to position and design a replacement bridge with a 100 year design life to this standard.

2.3 Road Cross Section

Design cross sections have been agreed with the Department in accordance with target widths appropriate to the assigned road category in the State Roads hierarchy including scope for the future. The agreed cross sections for the new road are:

- 3.1m wide traffic lanes throughout;
- 1.4m wide sealed shoulders at the approaches to and departures from the bridge where safety barriers exist;
- 1.0m wide sealed shoulders elsewhere;
- Verges are to be sealed to 0.5m behind the safety barrier where safety barrier is to be installed to reduce maintenance costs and increase safety; and
- 0.5m wide unsealed verges elsewhere.

Cross-falls are in accordance with standard guideline practice at 3% with superelevation to match design speed on the horizontal curves.

2.4 Drainage

Table drains have been provided in the design to direct water toward the Apsley River from each direction and on each side of the road. No cross drainage is proposed as all flows gravitate directly to the River. Culverts will be placed under property accesses as necessary.

Grassed swales are proposed on the major drains to improve water quality entering the Apsley River.

Subsoil drainage will be provided where required to ensure the protection of the new road pavement.

2.5 Utilities

Review of information obtained through topographic survey and a Dial Before You Dig query indicates that the following public utilities are located within the Highway Reservation:

- Overhead electricity, owned by TasNetworks, and
- Underground telecommunication cables, owned by Telstra.

Consultation with the public utility owners is currently being undertaken regarding the relocation and protection requirements for utilities impacted by the upgrade works.

2.5.1 Overhead Electricity

An overhead electricity line is located parallel to the Highway on the eastern and the western approach to the bridge. The poles are generally positioned in close proximity to the fence line and cross the existing road from the north side of the road to the south side as the road heads east away from the bridge. A number of poles will be relocated as part of the project.

There is an overhead crossing of the Highway to the east of the bridge that provides a connection to private property.

2.5.2 Telecommunication Cables

There are telecommunications cables located on the western approach to the bridge, however, these are not affected by the proposed works and are understood to be redundant.

3 Social, Environmental Impacts and Stakeholder Engagement

3.1 Property Acquisition

Construction of the bridge and associated road realignment will require acquisition to be undertaken on two titles, CT 47296/1 and 32288/1 both are owned by the same owner. In addition, modifications to existing road reserves on both sides of the river will be required. New fencing will be required at the newly created boundary. The road is currently proclaimed as a highway on its existing alignment. The matter of proclamation of the new road alignment may be expected to be dealt with during the detailed design phase of the project.

3.2 Property Accesses

Deviation of the Highway will result in a redundant section of the existing Tasman Highway being abandoned when the new alignment is opened to traffic. The design drawings indicate the rehabilitation of this redundant road, but the exact nature of the treatment required will be finalised in negotiation with the affected landowner.

An access to a private road listed as “future road” on The List is used by the quarry to the north of the subject site. The access will be reconstructed to suit the new alignment.

Other gates for farm access will be relocated following negotiation with the landowner.

3.3 Noise

The nearest residence is located approximately 2 km away and is in the same ownership as the land that must be acquired for the new bridge and road realignment. Other buildings located 2 km from the site (adjacent the river) are associated with the stockpiling of quarry materials on the same site.

The Department uses the Tasmanian State Road Traffic Noise Management Guidelines to manage traffic noise on State Roads. The Guidelines have been endorsed by the Environment Protection Authority (Tasmania).

The Department has applied the Guidelines and determined that the project is not an eligible scenario for noise mitigation, being a safety upgrade of an existing road. Notwithstanding this and the nature of the proposed works, the operational noise generated once construction is completed is not considered likely to increase significantly.

There will be short term noise associated with construction generated by machinery and safety requirements (reverse beepers), however there will be no impact from this on sensitive uses.

3.4 Flora and Fauna

The Department engaged Environmental Consulting Options Tasmania (ECOTas) to undertake a flora and fauna habitat assessment of the area around the existing Apsley River Bridge. This was undertaken to ensure that the requirements of the identified ecological values are appropriately considered during further project planning under local, State and Commonwealth government approval protocols.

The study area comprised the flood plain of the Apsley River on either side of the existing Apsley River Bridge and adjacent to the Tasman Highway. The topography of the study area is a broad flood plain of the Apsley River, with no significant aspect. The geology is mapped at the 1:250,000 scale as Quaternary-age (Holocene) “sand, gravel and mud of alluvial, lacustrine and littoral origin” (geocode: Qh). Land tenure and other categorisations of the study area comprise of private titles (PID 2976701; title references 47296/1, 36272/1 & 32288/1; 17010 Tasman Highway) and some open areas of water that appear to not have title references.

The area falls under the Glamorgan-Spring Bay municipality, with the private titles zoned as Rural Resource under the Glamorgan-Spring Bay Interim Planning Scheme 2015, and the linear road zoned as Utilities, with the following overlays:

- Biodiversity Protection Overlay: most of riverine forest, marked as “*Eucalyptus ovata* forest and woodland” (TASVEG code: DOV);
- Scenic Landscape Corridor (100 m buffer of major road centreline in rural areas); and
- Waterway and Coastal Protection Area (most of study area).

A number of flora species and vegetation types listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA) and, or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999* (EPBCA) were identified within the project area.

No evidence of any fauna species listed under either the TSPA or the EPBCA was identified within the project area. However, potential habitat for several species was identified within the project area including *Sarcophilus harrisii* (Tasmanian devil) [EPBCA: EN; TSPA: e], *Dasyurus maculatus* subsp. *maculatus* (spotted-tailed quoll) [EPBCA: VU; TSPA: r] and *Prototroctes maraena* (Australian grayling) [EPBCA: VU; TSPA: v].

The assessment identified seven vegetation types under the TASVEG mapping units, with three (DOV, WVI and SRE) classified as threatened under Schedule 3A of the Tasmanian *Nature Conservation Act 2002* (NCA). The DOV-WVI-SRE mosaic could equate to the threatened ecological community *Eucalyptus ovata* – *Callitris oblonga* Forest, listed as Vulnerable on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, although the limited occurrence of the key required species (*Callitris oblonga*) means that this classification is tenuous in the present case, despite available documentation and maps recognising the Apsley River Bridge site as supporting the EPBCA-listed entity.

There is a proposal before the Commonwealth government to list, as Critically Endangered, a new threatened ecological community, proposed to be named “Tasmanian Forests and Woodlands dominated by *Eucalyptus ovata* (black gum)”. This community incorporates the TASVEG unit DOV, which was identified within the project area. The proposal to list Black gum is still subject to review and consideration.

The Department of State Growth sought legal advice from the Department’s Legal Support Area on whether the project should be referred under the EPBCA for the small amount of Black gum required for clearing. Advice received on the 19 June 2017, stated that given the community isn’t listed, then referring the project under the EPBCA is not possible. The Department of State Growth has decided to proceed in accordance with this advice.

Table 1 below summarises the key issues identified in the ECOtas report.

Table 1: Flora and Fauna Key Issues

Fauna (TSPA/EPBCA listing status)	Comment	Flora (TSPA/EPBCA listing status)	Comment	Conclusion
Potential habitat for: Tasmanian Devil (e/EN) Spotted tailed quoll (r/VU) Eastern quoll (-/EN) Eastern Barred Bandicoot (-/VU) Green and Gold Frog (v/VU) Australian Grayling (v/VU) Swift Parrot (e/CR)	Limited potential for Tasmanian Devil and spotted-tail quoll dens but no evidence of presence was recorded. Grayling habitat known from upstream and downstream of project area indicating project an important part of the migratory habitat of the species. Some mature habitat trees occur within the study area. Minimising impact to mature trees is recommended.	Two flora species listed on TSPA and EPBCA: <i>Callitris oblonga</i> subsp. <i>oblonga</i> (v/EN) 8 healthy individuals confined to one area. TASVEG units DOV-WVI-SRE (t/T).	TSPA permit likely requirement. Offsets unlikely to be required but DPIPWE should be consulted depending on final design and vegetation impact area. Final impacts are to be quantified post design Avoid impact to majority of habitat trees where possible	A Permit to take flora will be required prior to construction unless avoidance measures can be implemented. Another inspection of potential habitat trees identified for removal is recommended to ensure no impacts to potential habitat for threatened fauna species.

Consideration has been given to minimising impact on threatened species during the development of the design. The proposed alignment would require some clearing of Eastern Riparian Scrub, Black Gum and potentially a single *Callitris Oblonga*. Under state regulations, the Department has an exemption from requiring a Forests Practices Plan under the *Nature Conservation Act 2002* to clear listed vegetation, for the purposes of upgrading and maintaining road and bridge infrastructure.

Given the scale of the clearing is minor, the Department is confident that impacts to state listed flora can be subsequently managed through permits.

It is intended to treat weeds through the incorporation of appropriate weed management clauses into the construction specification.

3.5 Aboriginal Heritage

There are no sites of Aboriginal Heritage value to be maintained or conserved at the project site. As part of the Contract Management Plan, the contractor will be required to implement an Unanticipated Discovery Plan should any unexpected finds be encountered during construction.

3.6 Historic Heritage Assessment

There are no sites of European Historic Heritage value to be maintained or conserved at the project site.

3.7 Landscape and Visual Impacts

The proposed bridge replacement incorporates changes to the existing Highway alignment over approximately 1434 metres in the vicinity of the Apsley River. This realignment of the highway and construction of the new bridge will result in a minor change of the landscape in the area. Some clearing will be required to facilitate the construction works, it is expected that any construction tracks as well as the original alignment will return over time to form Eastern Riparian Scrub as is current located adjacent to the current bridge.

3.8 Stakeholder Engagement

The Department has undertaken active engagement with key stakeholders, including the Glamorgan Spring Bay Council and the affected landowner.

Stakeholder engagement activities undertaken include individual meetings and telephone discussions with the landowner.

Public display plans were placed at Bicheno news agency, Council Chambers at Triabunna and the East Coast Heritage Museum in Swansea. The display information includes an address for the Department's road project webpage <http://www.transport.tas.gov.au/road/projects> where the plans can be viewed online. This also includes a 1800 phone number which enables the public to contact the Department throughout the life of the project.

At this stage, no feedback has been received through the 1800 phone number and there has been no negative feedback from the Council or the affected landowner.

3.9 Development Approvals

The project site is within the area covered by the Glamorgan Spring Bay Interim Planning Scheme 2015. The current highway alignment is zoned Utilities under the Planning Scheme while adjacent land is zoned Rural Resource.

Parts of the area are impacted by the following planning scheme overlays:

- The river is covered by a Biodiversity Protection overlay – this extends both sides of the river and will impact on the bridge location in this area
- The area 100 m either side of the existing highway is covered by a Scenic Landscape Corridor overlay, the new bridge and road will also be impacted by this overlay

- The wetland and river to the north (upstream) of the existing bridge is covered by the Waterway and Coastal Protection overlay area.

A planning application was lodged with the Glamorgan Spring Bay Council. The application was advertised by Council and no representations were received. The Development Permit was issued with no unusual conditions applied.

4 Project Program and Costs

4.1 Project Program

The key activities and their completion dates are outlined in Table 2.

Table 2: Project Program

Activity	Completion
DA Lodgement	May 2017
Preliminary design	June 2017
Detailed Design and Preparation of Tender Documents	August 2017
PSCPW approval	September 2017
Tender Process	September-October 2017
Land acquisition	September 2017
Award of Construction Contract	November 2017
Construction Commencement	December 2017
Construction Completion	February 2019

It is noted that 2017-18 and 2018-19 budget allocations may require a delayed Tender and Contract Award timeframe to keep annual expenditure within allocated budgets.

4.2 Estimate of Possible Costs

A cost estimate has been prepared based on the design presented in this report.

Quantities have been taken from the current design model and rates estimated from similar projects and experience. The Department's standard procedure of preparing P50 and P90 cost estimates has been adopted. The P50 estimate represents a probability of 50% that the project cost will not be exceeded and the P90 represents a 90% probability that the cost will not be exceeded. The inherent risks and contingent risks incorporated in the P50 and P90 cost estimates reflect similar project work, the identified unique aspects of this project and the experienced judgment of the estimator.

The P50 cost estimate is summarised in Table 3.

Table 3: P50 Estimate of Possible Cost

Costs	
Scoping and Development Phase	\$756,832
Delivery Phase (including service relocations, construction and land acquisition)	\$8,087,840
Contingencies and escalation	\$921,328
Total Project P50 Estimate of Cost*	\$9,766,000

*Total cost inclusive of P50 contingency and cost escalation.

5 Conclusion

A new bridge is proposed to replace the existing Apsley River Bridge, inland from Bicheno. The proposed bridge will be located on a new alignment upstream of the existing bridge, necessitating new road approaches and the removal of riparian vegetation. The new alignment addresses the current road geometry deficiencies to achieve the target design speed of 100km/h, and adopts the Department's target widths for the relevant road category of two 3.1 metre lanes with 1.4 metre sealed shoulders (1.0m distant from the bridge) and 0.5 metre unsealed verges (sealed behind traffic barriers).

The proposed new bridge is a 90 metre overall length, simply supported, Super-T structure with three equal 30 metre spans, adopting spill through style abutments. The replacement structure is designed in accordance with the current Australian Standard 5100-2017: Bridge Design, in particular to take SM1600 loading and have a 100 year design life. The new bridge will hence be able to accommodate all traffic using the road on a long term basis, and mitigates the need to otherwise enforce load limit restrictions on the bridge. The overall outcome of the project is a major safety improvement for users of the Tasman Highway in the vicinity of the Apsley River Bridge.

It is recommended that the project be approved to enable the detailed design to be finalised and tendering and then construction to proceed.

Appendix A. Stakeholder Concerns

No negative feedback has been received.

Appendix B. Preliminary Design Drawings



TASMAN HIGHWAY (A0113)

APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)

BRIDGE REPLACEMENT

CONTRACT NO. 2402

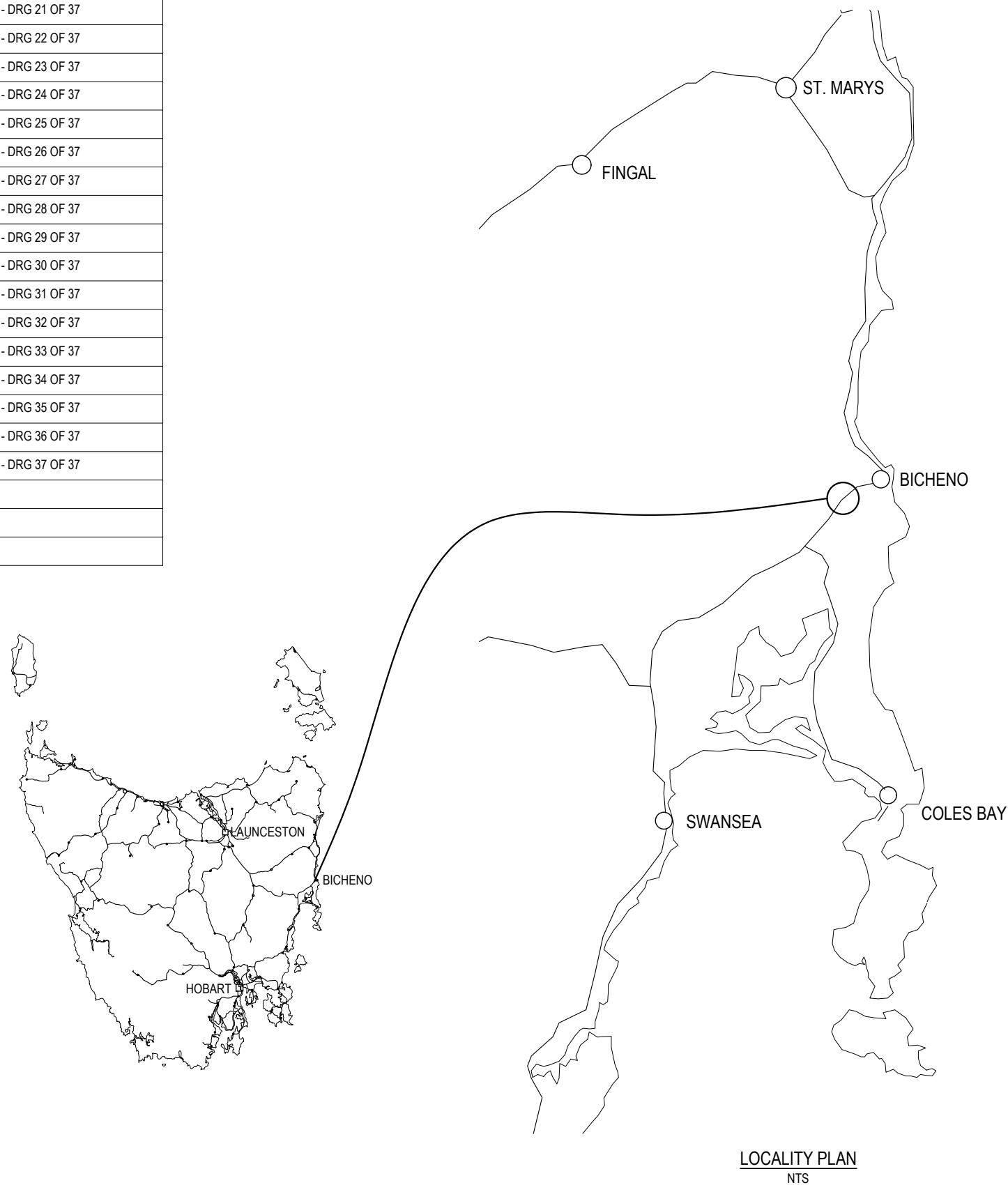
DESIGN



SETOUT REVIEW NAME SIGNED DATE	DESIGNED NAME SIGNED DATE	THESE DRAWINGS HAVE BEEN CHECKED, TAKEN TO SITE AND VERIFIED THAT THEY ARE APPROPRIATE FOR SITE CONDITIONS AND CONSTRAINTS. THE DRAWINGS ARE RECOMMENDED FOR ACCEPTANCE.	I CERTIFY THESE DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE BRIEF AND AS DETAILED IN THE FINAL DESIGN REPORT.	Department of State Growth THESE DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE DESIGN BRIEF AND PROJECT SCOPE. THE DRAWINGS ARE RECOMMENDED FOR ACCEPTANCE.		CONTRACT No. 2402	DRAWING HB17182-C1000	PRINTED DATE 09-Jun-17, 1:21 PM	No. of SHEETS -
STRUCTURAL REVIEW NAME SIGNED DATE	DESIGN REVIEW NAME SIGNED DATE	DESIGN MANAGER (DESIGN ORGANISATION) SIGNED DATE	PRINCIPAL (DESIGN ORGANISATION) SIGNED DATE	PROJECT MANAGER SIGNED DATE	ACCEPTED MANAGER SIGNED DATE	REGISTRATION NUMBER A0113.021			SHEET No. 1000
						ROAD LINK No. START: LINK 42, 5.49 FINISH: LINK 42, 6.73			REVISION A

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1005	A	PROJECT LEGEND - DRG 4 OF 5
1006	A	PROJECT LEGEND - DRG 5 OF 5
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1802	A	GENERAL ARRANGEMENT
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E BDGE (BRIDGE STRUCTURES)

---	(AB--)	ABUTMENT BOTTOM
○ ^{AB}	(PABB)	ABUTMENT BOTTOM POINT
---	(AT--)	ABUTMENT TOP
○ ^{AT}	(PABT)	ABUTMENT TOP POINT
○ ^{IC}	(PBCP)	CAP-PILE
---	(BR--)	DECK
XXXXXXXXXXXXXXXXXXXX	(XJ--)	EXPANSION JOINT
▽▽▽▽▽▽▽▽▽▽▽▽▽▽	(XP--)	EXPANSION PLATE
---	(HS--)	HEADSTOCK
---	(BC--)	PIER-COLUMN
○ ^{BP}	(PBPI)	PIER-COLUMN POINT
---	(UC--)	UNDERNEATH CLEARANCE
---	(WW--)	WING WALL

E BDYS (BOUNDARIES)

---	(BM--)	DIGITAL CADASTRE (ACCURACY 1.0m)
---	(DE--)	DIGITISING EXTENT (PHOTO)
DP	(BO--)	DP OVERLAY (ACCURACY 0.1m) (CALCULATED FROM DEPOSITED PLAN)
---	(BE--)	EASEMENT
AIR	(NF--)	FIELD COMPLETION BOUNDARY (PHOTO) (NF)
---	(FS--)	FIELD SURVEY EXTENT (PHOTO)
(+)	(BL--)	LOCAL GOVERNMENT
•	(BP--)	PARISH
---	(BT--)	TITLE (ACCURACY 0.02m)

E BUIL (BUILDINGS & STRUCTURES)

---	(AW--)	AWNING
○ ^{AW}	(PAWN)	AWNING - POINT
---	(BW--)	BOTTOM OF WALL
---	(BV--)	BUILDING EAVES
---	(BU--)	BUILDING WALLS
---	(OC--)	CEMETERY
---	(VE--)	CONCRETE SLAB AT GROUND LEVEL
○ ^{CB}	(PCBU)	CORNER OF BUILDING AT NS
◇	(DO--)	DOORWAY
○ ^{FL}	(PFLR)	FLOOR LEVEL
---	(OB--)	GENERAL BUILT-UP AREA
---	(LB--)	LOADING BAY-DOCK
---	(OM--)	MISCELLANEOUS STRUCTURE
□□□□□□□□	(RW--)	RETAINING WALL
---	(OR--)	RUIN
---	(OS--)	SILO OR TANKS
---	(OO--)	SPORTING ARENA
...	(SO--)	STAIRS - OUTSIDE

E BUIL (BUILDINGS & STRUCTURES) Continued

---	(OT--)	SWIMMING POOL
---	(TW--)	TOP OF WALL

E COMM (COMMUNICATIONS)

○ ^{AJP}	(PTJP)	ABOVE GROUND JOINING POST
---	(IT--)	ITS CABLE
T(FO)A	(OA--)	OPTICAL FIBRE - ABOVE GROUND
---	(OZ--)	OPTICAL FIBRE - DIGITISED (GIS)
T(FO)	(OU--)	OPTICAL FIBRE - UNDERGROUND
○ ^{OFC}	(POFM)	OPTICAL FIBRE CABLE MARKER
---	(OD--)	OPTICAL FIBRE FIBRE CONDUIT
□ ^{OJB}	(POFJ)	OPTICAL FIBRE JUNCTION BOX
□ ^{OPF}	(POFP)	OPTICAL FIBRE PIT
▣ ^{TSP}	(PTMP)	STD MAIN PIT
T	(TY--)	TELEPHONE - HOUSE CONNECTION
---	(TX--)	TELEPHONE - BOX
□ ^{TB}	(PTBX)	TELEPHONE BOX POINT
TC	(PTCM)	TELEPHONE CABLE MARKER
○ ^{TDP}	(PTDP)	TELEPHONE DISTRUBUTION PILLAR
TC	(TD--)	TELEPHONE CONDUIT
T	(TN--)	TELEPHONE LINE
---	(TZ--)	TELEPHONE LINE - DIGITISED (GIS)
○ ^{TPL}	(PTPL)	TELEPHONE POLE
▣	(PTSP)	TELEPHONE SINGLE CONCRETE PIT
---	(TS--)	TELEPHONE SUMP
○ ^{TTM}	(PMPT)	TELEPHONE TRANSMITTER - MOBILE
▣▣▣	(PTSP)	TELEPHONE TRIPLE CONCRETE PIT
▣▣	(PTTP)	TELEPHONE TWIN CONCRETE PIT

E CONT (PHOTOGRAMMETRY)

---	(YQ--)	CONTOUR - AUX (DECIMETRE)
---	(Y--)	CONTOUR - AUX (WHOLE METRE)
---	(Z--)	CONTOUR - INDEX
	(ZQ--)	CONTOUR - INDEX DEPRESSION
---	(XQ--)	CONTOUR - INTER DEPRESSION
---	(X--)	CONTOUR - STANDARD-INTER

E CULT (CULTURAL)

◇	(BI--)	BIN - LARGE
•	(AC--)	BOLLARD
---	(BH--)	BUS SHELTER
BUS	(PBUS)	BUS STOP
/	(FE--)	FENCE
---	(FL--)	FENCE LINE
//	(FM--)	FENCE MANPROOF

E CULT (CULTURAL) Continued

X	(FC--)	FENCE OTHER
⊗	(POST)	FENCE POST-GUIDE POST
▣	(PFPL)	FIREPLACE
▣ ^{FLG}	(PFLG)	FLAG POLE
---	(AG--)	GATE
---	(PHST)	HEADSTONE
---	(PHIS)	HISTORICAL POINT OF INTEREST
---	(SI--)	LARGE SIGN
---	(PMBX)	MAILBOX
---	(PKME)	PARKING METER
---	(TA--)	PICNIC TABLE
---	(PWEP)	PUMP
---	(PBIN)	RUBBISH BIN
---	(SF--)	SAFETY FENCE - PEDESTRIAN
---	(SE--)	SEAT
---	(PSIN)	SIGN POST
---	(PSDS)	SIGN POST - DOUBLE SIDED
---	(SX--)	SIGN WITH OUTREACH
---	(OW--)	WINDMILL
*	(PWML)	WINDMILL - POINT
---	(PMKE)	MARKER - ENVIRONMENTAL/OTHER

E DRAIN (STORMWATER)

---	(DF--)	BATTER DRAIN / GI FLUME
150H	(B0--)	BOX CULVERT - 150 HIGH
225H	(B1--)	BOX CULVERT - 225 HIGH
300H	(B2--)	BOX CULVERT - 300 HIGH
375H	(B3--)	BOX CULVERT - 375 HIGH
450H	(B4--)	BOX CULVERT - 450 HIGH
600H	(B6--)	BOX CULVERT - 600 HIGH
750H	(B7--)	BOX CULVERT - 750 HIGH
900H	(B9--)	BOX CULVERT - 900 HIGH
1.05H	(D0--)	BOX CULVERT - 1050 HIGH
1.2H	(D1--)	BOX CULVERT - 1200 HIGH
1.5H	(D2--)	BOX CULVERT - 1500 HIGH
1.8H	(D3--)	BOX CULVERT - 1800 HIGH
2.1H	(D4--)	BOX CULVERT - 2100 HIGH
2.4H	(D5--)	BOX CULVERT - 2400 HIGH
2.7H	(D6--)	BOX CULVERT - 2700 HIGH
3.0H	(D7--)	BOX CULVERT - 3000 HIGH
3.3H	(D8--)	BOX CULVERT - 3300 HIGH
3.6H	(D9--)	BOX CULVERT - 3600 HIGH
?H	(UB--)	BOX CULVERT - UNSPECIFIED HEIGHT
---	(DD--)	DISH DRAIN

E DRAIN (STORMWATER) Continued

---	(DT--)	DRAIN-TABLE DRAIN
---	(DX--)	DRAINAGE BOX
---	(DZ--)	DRAINAGE - DIGITISED (GIS)
SW	(PDJM)	DRAINAGE JUNCTION MANHOLE
DP	(DP--)	DRAINAGE PIT
EW	(PEWW)	END OF WINGWALL
FH	(PFHT)	FLOOD HEIGHT
---	(IP--)	GULLY PIT
GP	(PGUL)	GULLY PIT POINT
---	(HB--)	HEADWALL BOTTOM
HWB	(PHWB)	HEADWALL BOTTOM POINT
---	(HW--)	HEADWALL TOP
HWT	(PHWT)	HEADWALL TOP POINT
IL	(PILT)	INLET TO SUMP
IN 225 Dia	(PI01)	INVERT - 225 DIA
IN 300 Dia	(PI02)	INVERT - 300 DIA
IN 375 Dia	(PI03)	INVERT - 375 DIA
IN 450 Dia	(PI04)	INVERT - 450 DIA
IN 525 Dia	(PI05)	INVERT - 525 DIA
IN 600 Dia	(PI06)	INVERT - 600 DIA
IN 750 Dia	(PI07)	INVERT - 750 DIA
IN 900 Dia	(PI09)	INVERT - 900 DIA
IN 1050 Dia	(PI10)	INVERT - 1050 DIA
IN 1200 Dia	PI12	INVERT - 1200 DIA
IN 1350 Dia	(PI13)	INVERT - 1350 DIA
IN 1500 Dia	(PI15)	INVERT - 1500 DIA
IN 1650 Dia	(PI16)	INVERT - 1650 DIA
IN 1800 Dia	(PI18)	INVERT - 1800 DIA
IN	(PINV)	INVERT OF PIPE
SD	(IPSDO)	INVERT OF SUBSOIL DRAIN OUTLET
---	(KI--)	KERB INLET
OB	(POBV)	OBVERT OF PIPE
Ø225	(U1--)	PIPE - 225 DIA
Ø300	(U2--)	PIPE - 300 DIA
Ø375	(U3--)	PIPE - 375 DIA
Ø450	(U4--)	PIPE - 450 DIA
Ø525	(U5--)	PIPE - 525 DIA
Ø600	(U6--)	PIPE - 600 DIA
Ø750	(U7--)	PIPE - 750 DIA
Ø900	(U9--)	PIPE - 900 DIA
Ø1050	(V1--)	PIPE - 1050 DIA
Ø1200	(V2--)	PIPE - 1200 DIA
Ø1350	(V3--)	PIPE - 1350 DIA

A PRELIMINARY DESIGN			
No.	Amendment Description	Initials	Date
A3 original	This sheet may be prepared using colour and may be incomplete if copied		09/06/2017

SCALES	
NTS	
Co-ordinate System:	MGA ZONE 55
Height Datum:	A.H.D.

DESIGNED	L.ALLEN
REVIEWED	R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
PROJECT LEGEND - DRG 1 OF 5

CONTRACT No. 2402	DRAWING HB17182-C1002	PRINTED DATE 09-Jun-17, 1:21 PM	SHEET No. 1002
REGISTRATION NUMBER A0113.021			REVISION A

E DRAIN (STORMWATER) Continued

	(V5--)	PIPE - 1500 DIA
	(V6--)	PIPE - 1650 DIA
	(V8--)	PIPE - 1800 DIA
	(UU--)	PIPE - UNSPECIFIED DIAMETER
	(PSFP)	SUBSOIL DRAIN FLUSH POINT/MARKER
	(PJBX)	TOP OF CONCRETE JUNCTION BOX
	(WC--)	WATER COURSE
	(PWLPL)	WATER LEVEL POINT

E ELEC

	(PEJB)	CABLE JUNCTION BOX
	(PEMH)	CABLE MANHOLE
	(PECM)	CABLE MARKER
	(ED--)	CONDUIT
	(PEFP)	DISTRIBUTION FUSE POINT
	(PLGN)	GARDEN LIGHT
	(PHTT)	HIGH TENSION PYLON
	(EY--)	HOUSE CONNECTION
	(LI--)	LIGHT WITH OUTREACH
	(EZ--)	LINE - DIGITISED
	(UE--)	LINE - MAJOR TRANSMISSION
	(UL--)	LINE - MINOR TRANSMISSION
	(EU--)	LINE - UNDERGROUND
	(EN--)	MAIN SUMP
	(PLPL)	POLE - LIGHT
	(PPPL)	POLE - POWER
	(PPLP)	POLE - POWER AND LIGHT
	(PPTR)	POLE - POWER AND TRANSFORMER
	(PEUP)	POWER SERVICE PILLAR - UNDERGROUND
	(EL--)	PYLON LEG
	(PSAP)	STAY ANCHOR POLE
	(PSPL)	STAY POLE
	(PLSU)	SUSPENDED LIGHT
	(EC--)	TRANSFORMER CABINET
	(PETC)	TRANSFORMER CABINET CENTRE

E FOTO (PHOTOGRAMMETRY)

	(PHCP)	HORIZONTAL CONTROL POINT
	(PMCP)	MINOR CONTROL POINT
	(PPCN)	PHOTO CENTRE
	(PVCP)	VERTICAL CONTROL POINT

E GAS

	(HA--)	ETHANE PIPELINE
	(DG--)	HOUSE CONNECTION
	(ZG--)	MAIN - DIGITISED (GIS)
	(HG--)	MAIN - HIGH PRESSURE PIPELINE
	(LG)	MAIN - LOW PRESSURE
	(NG--)	MAIN - NYLON
	(YG--)	MAIN - POLYETHYLENE
	(PGHL)	MANHOLE COVER
	(PGMR)	METER
	(PGPM)	PIPELINE MARKER
	(PGHM)	PIPELINE MARKER - HIGH PRESSURE
	(PGRB)	REGULATOR BOX
	(PGTP)	TEST POINT
	(PGAS)	VALVE BOX
	(PGVP)	VENT PIPE

E HERI (HERITAGE)

	(PHEC)	ENDANGERED COMMUNITY
	(PHEE)	ENDANGERED ECOLOGICAL COMMUNITY
	(PHAZ)	HAZARDOUS SITE
	(PHIA)	INDIGENOUS HERITAGE AREA
	(PHNI)	NON INDIGENOUS HERITAGE SITE

E LNMK

	(AL--)	ARROW - LEFT TURN
	(AR--)	ARROW - RIGHT TURN
	(AS--)	ARROW - STRAIGHT AHEAD
	(AE--)	ARROW - STRAIGHT AHEAD AND LEFT
	(AI--)	ARROW - STRAIGHT AHEAD AND RIGHT
	(BS--)	BARRIER AND SEPARATION
	(SB--)	SEPARATION AND BARRIER
	(CV--)	CHEVRON MARKING LEFT
	(CY--)	CHEVRON MARKING RIGHT
	(CW--)	CLEARWAY (3x3)
	(CC--)	CONTINUITY/EDGE INTERMITTENT (1x3)
	(DB--)	DOUBLE BARRIER

E LNMK Continued

	(LL--)	LANE/SEPARATION (3x9)
	(DC--)	LANE (3x6)
	(DA--)	LANE/SEPARATION LINE (9x3)
	(CN)	SEPARATION (3x1)
	(CG)	GIVEWAY/HOLDING LINE/JUNCTION CONTINUITY
	(CX--)	PEDESTRIAN CROSSING (SIGNALS)
	(CZ--)	PEDESTRIAN CROSSING ZEBRA
	(CA--)	PEDESTRIAN CROSSING APPROACH (ZIG ZAG)
	(S4--)	SPEED ZONE - 40km/h
	(S5--)	SPEED ZONE - 50km/h
	(S6--)	SPEED ZONE - 60km/h
	(S7--)	SPEED ZONE - 70km/h
	(S8--)	SPEED ZONE - 80km/h
	(S9--)	SPEED ZONE - 90km/h
	(S1--)	SPEED ZONE - 100km/h
	(S2--)	SPEED ZONE - 110km/h
	(CD--)	UNBROKEN

E MARK (SURVEY MARKS)

	(PAPN)	ALIGNMENT PIN
	(PBMK)	BENCH MARK
	(PBLT)	BOLT
	(PBPB)	BOUNDARY PEG
	(PSSB)	BOUNDARY ARROW
	(PDHL)	DRILL HOLE AND WING
	(PDPY)	DUMPY PEG
	(PGIN)	G I NAIL
	(PGPI)	G I PIPE
	(PMSM)	MISCELLANEOUS SURVEY MARK
	(PNAL)	NAIL
	(PPMK)	PERMANENT MARK
	(PRMB)	RM CONCRETE BLOCK
	(PCMCK)	CONTROL MARK
	(PSKI)	SPIKE
	(PSTA)	STAR PICKET
	(PSSM)	STATE SURVEY MARK
	(PTSS)	TRIG STATION-CONCRETE PILLAR
	(PDSM)	WATER BOARD PM

E MISC

	(PBHX)	BORE HOLE
	(PCFU)	CAMERA - FLASH UNIT
	(QQ--)	CHECK STRING
	(PGAT)	GATIC COVER LID
	(OG--)	GOLF COURSE
	(HO--)	HIGH PRESSURE OIL PIPELINE
	(POHM)	HIGH PRESSURE OIL PIPELINE MARK
	(HP--)	HOTSPOT
	(JL)	JOIN LINE (BOUNDARY)
	(PBRK)	BREAK STRINGS
	(OP--)	PARK OR OPEN SPACE
	(PPET)	PETROL PUMP
	(PHNL)	POT HOLE - NULL LEVEL
	(PHRL)	POT HOLE - WITH RL
	(PCAM)	RED LIGHT-SPEED-TRAFFIC CAMERA
	(SL--)	SEISMIC LINE
	(PSTS)	SEISMIC TEST SHOT
	(US--)	SERVICE-JUNCTION BOX
	(SG--)	STOCK GRID
	(OH--)	STOCKPILE
	(PGE0)	TEST PIT
	(UT--)	UNDERGROUND TANK
	(PUTP)	UNDERGROUND TANK POINT
	(PPOL)	UNIDENTIFIED POLE
	(PUSR)	UNIDENTIFIED SERVICE

E RAIL

	(PRBX)	RAILWAY CONTROL BOX
	(RF--)	RAILWAY FORMATION EDGE
	(RR--)	RAILWAY RAMP
	(PRSG)	RAILWAY SIGNAL
	(RS--)	RAILWAY SIGNAL TROUGH
	(PRCC)	RAILWAY SIGNAL TROUGH - POINT
	(PSTR)	RAILWAY STANCHION
	(RT--)	RAILWAY TRACK CENTRE
	(PRTM)	RAILWAY TRACK MONUMENT
	(RA--)	TOP OF RAIL
	(PRAL)	TOP OF RAIL - POINT
	(RP--)	TOP OF RAILWAY PLATFORM

* DENOTES SYMBOL SCALED FOR CLARITY

<p>SCALES NTS</p>						<p>Department of State Growth</p> <p>TASMAN HIGHWAY (A0113) APSLEY RIVER (LILLA VILLA) BRIDGE (B6159) BRIDGE REPLACEMENT</p>			<p>CONTRACT No. 2402</p>	<p>DRAWING HB17182-C1003</p>	<p>PRINTED DATE 09-Jun-17, 1:21 PM</p>	<p>SHEET No. 1003</p>
<p>A PRELIMINARY DESIGN R.C 09/06/2017</p>				<p>DESIGNED L.ALLEN</p>		<p>REGISTRATION NUMBER A0113.021</p>			<p>REVISION A</p>			
<p>No. Amendment Description Initials Date</p>				<p>REVIEWED R.CASSIDY</p>		<p>PROJECT LEGEND - DRG 2 OF 5</p>						
<p>A3 original This sheet may be prepared using colour and may be incomplete if copied</p>				<p>Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.</p>								

E ROAD

	(BK-)	BACK OF KERB
	(RC-)	CENTRE OF ROAD
	(DW-)	DRIVEWAY
	(EJ-)	EDGE OF FORMATION
	(EM-)	EDGE OF MEDIAN
	(EP-)	EDGE OF PAVEMENT
	(EK-)	EDGE OF TRACK
	(UR-)	EDGE OF UNSEALED ROAD
	(FP-)	FOOTPATH
	(FI-)	GUTTER FLOW LINE
	(LP-)	LIP LINE
	(OF-)	OFFSET CROWN-CROWN
	(KR-)	PRAM RAMP
	(FG-)	SAFETY BARRIER GUARD FENCE
	(KJ-)	SAFETY BARRIER TYPE F
	(FW-)	SAFETY BARRIER WIRE ROPE
	(KB-)	TOP OF KERB
	(TM-)	TOP OF MEDIAN
	(VT-)	VEHICULAR TRACK EDGE
	(PRPB)	POINT ON BITUMEN

E SEWR

	(SY-)	HOUSE CONNECTION
	(PSLH)	LAMPHOLE
	(SM-)	MAIN
	(SZ-)	MAIN - DIGITISED (GIS)
	(PSMH)	MANHOLE COVER
	(SP-)	SEWAGE POND
	(ST-)	SEPTIC TANK
	(PSVP)	VENT PIPE
	(PWEP)	PUMP STATION

E STNS

	(PSSD)	AP-DH-GI-PIPE OR RMCB
	(PSSE)	BOLT-DUMPY-NAIL-SPIKE
	(PSSA)	DEFAULT SURVEY MARK
	(PSSC)	PEG
	(PSSG)	PM SSM OR CONTROL MARK
	(PSSF)	TRIG STATION

E TCS (TRAFFIC)

	(SD-)	SIGNAL DETECTOR
	(PSGL)	TRAFFIC CONTROL SIGNAL
	(TO-)	TRAFFIC LIGHT WITH OUTREACH
	(PSCL)	TRAFFIC SIGNAL CONTROLLER
	(PSDR)	TRAFFIC SIGNAL DETECTOR
	(PSJX)	TRAFFIC SIGNAL JUNCTION BOX

E TEXT

	TEXT 1.8	GREY (AUTOCAD COLOUR 8)
	TEXT 2.5	WHITE (AUTOCAD COLOUR 7)
	TEXT 3.5	YELLOW (AUTOCAD COLOUR 2)
	TEXT 5.0	RED (AUTOCAD COLOUR 1)
	TEXT 7.0	CYAN (AUTOCAD COLOUR 4)

E TOPO

	(BB-)	BOTTOM OF BANK-EMBANKMENT
	(NB-)	BREAKLINE OR RIDGE
	(VC-)	CLIFF-ESCARPMENT
	(JC-)	CULTIVATION PASTURE
	(EG-)	EDGE OF GARDEN
	(FO-)	FORD
	(JG-)	GRASSLAND
	(WL-)	LAKE
	(VL-)	LANDSLIDE-ERODED BANK
	(NS-)	NATURAL SURFACE
	(PNSS)	NATURAL SURFACE POINT
	(JO-)	ORCHARD
	(RE-)	RESERVOIR
	(WR-)	RIVER OR CREEK EDGE
	(JR-)	ROCK AREA
	(PSHT)	SPOT HEIGHT
	(JW-)	SWAMP OUTLINE
	(PSWA)	SWAMP-MARSH
	(JD-)	TIMBER OR SCRUB (DENSE)
	(JM-)	TIMBER OF SCRUB (MEDIUM)
	(JS-)	TIMBER OF SCRUB (SCATTERED)
	(TC-)	TOP OF BANK
	(CU-)	TOP OF CUTTING
	(TR-)	TREE FOLIAGE (TR)
	(PF01)	TREE FOLIAGE - 1m SPREAD
	(PF02)	TREE FOLIAGE - 2m SPREAD
	(PF03)	TREE FOLIAGE - 3m SPREAD
	(PF04)	TREE FOLIAGE - 4m SPREAD
	(PF05)	TREE FOLIAGE - 5m SPREAD

E TOPO Continued

	(PF06)	TREE FOLIAGE - 6m SPREAD
	(PF07)	TREE FOLIAGE - 7m SPREAD
	(PF08)	TREE FOLIAGE - 8m SPREAD
	(PF09)	TREE FOLIAGE - 9m SPREAD
	(PF10)	TREE FOLIAGE - 10m SPREAD
	(PF12)	TREE FOLIAGE - 12m SPREAD
	(PF15)	TREE FOLIAGE - 15m SPREAD
	(PT01)	TREE TRUNK - 100mm DIA
	(PT02)	TREE TRUNK - 200mm DIA
	(PT03)	TREE TRUNK - 300mm DIA
	(PT04)	TREE TRUNK - 400mm DIA
	(PT05)	TREE TRUNK - 500mm DIA
	(PT06)	TREE TRUNK - 600mm DIA
	(PT07)	TREE TRUNK - 700mm DIA
	(PT08)	TREE TRUNK - 800mm DIA
	(PT09)	TREE TRUNK - 900mm DIA
	(PT10)	TREE TRUNK - 1000mm DIA
	(PT12)	TREE TRUNK - 1200mm DIA
	(PT15)	TREE TRUNK - 1500mm DIA
	(PTRE)	TREE TRUNK - UNSPECIFIED DIAMETER
	(WE-)	WATER EDGE-LEVEL (WE)
	(TX-)	TRIANGULATION - DTM

E WATR

	(PWAV)	AIR VALVE
	(PRAV)	AIR VALVE - RECYCLED
	(PWET)	EARTH TERMINAL
	(PRET)	EARTH TERMINAL - RECYCLED
	(PWFB)	FIRE HYDRANT
	(WY-)	HOUSE CONNECTION
	(PWHY)	HYDRANT
	(PRHY)	HYDRANT - RECYCLED
	(WM-)	MAIN
	(WZ-)	MAIN - DIGITISED (GIS)
	(RM-)	MAIN - RECYCLED
	(PWMM)	MAIN MARKER
	(PRMM)	MAIN MARKER - RECYCLED
	(PWMR)	METER
	(PRMR)	METER - RECYCLED
	(UO-)	OVERHEAD PIPELINE
	(PWSV)	STOP VALVE
	(PRSV)	STOP VALVE - RECYCLED
	(PWTP)	TAP
	(PRTP)	TAP - RECYCLED
	(PWCV)	SCOUR VALVE
	(PRCV)	SCOUR VALVE - RECYCLED
	(UP-)	UNIDENTIFIED PIPELINE

E OTHER (uncoded features)

	DRAI	WATER COURSE (GIS)
	DRAI	STORMWATER (GIS)
	ELEC	CONDUIT (GIS)
	ELEC	LINE - MAJOR TRANSMISSION (GIS)
	ELEC	LINE - MINOR TRANSMISSION (GIS)
	ELEC	LINE - UNDERGROUND (GIS)
	TCS	TRAFFIC SIGNAL CABLE

* DENOTES SYMBOL SCALED FOR CLARITY

				SCALES NTS				Department of State Growth TASMAN HIGHWAY (A0113) APSLEY RIVER (LILLA VILLA) BRIDGE (B6159) BRIDGE REPLACEMENT			CONTRACT No. 2402	DRAWING HB17182-C1004	PRINTED DATE 09-Jun-17, 1:22 PM	SHEET No. 1004
A PRELIMINARY DESIGN				R.C		09/06/2017		DESIGNED L.ALLEN REVIEWED R.CASSIDY			REGISTRATION NUMBER A0113.021			REVISION A
No.	Amendment Description			Initials	Date		PROJECT LEGEND - DRG 3 OF 5							
A3 original				This sheet may be prepared using colour and may be incomplete if copied				Co-ordinate System: MGA ZONE 55		Height Datum: A.H.D.				

D ANNO (ANNOTATION)

	* NORTH POINT
	AMENDMENT
	SETOUT POINT

D BDGE (BRIDGE STRUCTURES)

	ABUTMENT BOTTOM
	BRIDGE DECK
	PIER/COLUMN

D BUIL (BUILDINGS & STRUCTURES)

	ROOFLINE
	WALL
	DOORWAY
	FLOOR LEVEL
	RETAINING WALL
	STAIRS - OUTSIDE

D BDYS (BOUNDARIES)

	CADASTRAL
	EASEMENT
	LIMIT OF CONTRACT
	EXTENT OF PROJECT

D COMM (COMMUNICATIONS)

	TELEPHONE LINE
	TELEPHONE LINE - ABOVE GROUND
	TELEPHONE CONDUIT
	TELEPHONE LINE - REDUNDANT
	OPTICAL FIBRE - ABOVE GROUND
	OPTICAL FIBRE - UNDERGROUND
	OPTICAL FIBRE FIBRE CONDUIT
	ITS CABLE
	ABOVE GROUND JOINING POST
	OPTICAL FIBRE JUNCTION BOX
	OPTICAL FIBRE PIT
	TELEPHONE CABLE MARKER
	TELEPHONE DISTRIBUTION PILLAR
	TELEPHONE POLE
	TELEPHONE SINGLE CONCRETE PIT
	TELEPHONE TRANSMITTER - MOBILE
	TELEPHONE TRIPLE CONCRETE PIT
	TELEPHONE TWIN CONCRETE PIT

* DENOTES SYMBOL SCALED FOR CLARITY
 DYNB DENOTES DYNAMIC BLOCK DEFINED

D CULT (CULTURAL)

	FENCE - GENERAL (POST & WIRE)
	FENCE - CHAINWIRE
	FENCE - OTHER
	SAFETY FENCE - PEDESTRIAN
	FENCE - SOUND
	FENCE - REDUNDANT/REMOVED
	BIN - LARGE
	BOLLARD
	BUS STOP
	FENCE POST-GUIDE POST
	DYNB GATE
	DYNB LARGE SIGN
	MAILBOX
	PARKING METER
	RUBBISH BIN
	SIGN POST
	SIGN POST - DOUBLE SIDED

D CHCK (CHECKING)

	(HL-)	DESIGN CLEAR ZONE (LINE SCALED FOR CLARITY)
	(---)	DESIGN SIGHT LINE (LINE SCALED FOR CLARITY)
	(---)	DESIGN CONTOUR - INDEX
	(---)	DESIGN CONTOUR - INTERMEDIATE
		TURNING PATH - ANALYSIS PATH

NOTE THAT SEPARATE LAYERS CAN BE ADDED FOR VEHICLE PATH ANALYSES AS REQUIRED (I.E. FOR DIFFERENT VEHICLE TYPES). PROPRIETARY PRODUCTS AUTOMATICALLY GENERATE LAYERS THAT ARE LINKED BACK TO THE ANALYSIS PATH. THE FOLLOWING ELEMENTS ARE FOR GUIDANCE PURPOSES ONLY, AND ARE BASED ON DIER'S STANDARD SETUP FOR AUTOTURN.

GENERAL:

	VEHICLE NAME	COL. 8	CONTINUOUS
	VEHICLE OUTLINE	COL. 8	CONTINUOUS
	TYRES	COL. 8	CONTINUOUS
	TYRE TREAD	COL. 9	CONTINUOUS
	PATH ICONS	COL. 8	CONTINUOUS

ENVELOPES:

	FRONT TYRES	COL. 82	HIDDEN
	REAR TYRES	COL. 12	DASHED
	FRONT CLEARANCE	COL. 130	CONTINUOUS
	REAR CLEARANCE	COL. 130	CONTINUOUS
	VEHICLE BODY	COL. 210	CONTINUOUS
	BODY CLEARANCE	COL. 130	CONTINUOUS
	LOAD (NS)	COL. 50	CONTINUOUS
	LOAD CLEARANCE (NS)	COL. 52	DASHED 2

HATCHING:

	VEHICLE BODY	COL. 241	NET
	BODY CLEARANCE (NS)	COL. 131	DOTS
	(NS)	DENOTES NOT SHOWN (NORMALLY)	

D DRAIN (STORMWATER)

	STORMWATER PIPE
	STORMWATER PIPE - REDUNDANT
	BATTER DRAIN
	DISH DRAIN
	CATCH DRAIN/OPEN DRAIN
	CATCH DRAIN/OPEN DRAIN - LINED
	SUBSOIL DRAIN - GENERAL
	SUBSOIL DRAIN - CLASS 400
	SUBSOIL DRAIN - CLASS 1000
	SUBSOIL DRAIN - STRIP DRAIN
	SURFACE DRAIN - TYPE A1 (UNLINED)
	SURFACE DRAIN - TYPE A2 (LINED)
	SURFACE DRAIN - TYPE B1 (UNLINED)
	SURFACE DRAIN - TYPE B2 (LINED)
	SURFACE DRAIN - TYPE C1 (UNLINED)
	SURFACE DRAIN - TYPE C2 (LINED)
	SURFACE DRAIN
	SURFACE DRAIN - TYPE 1
	SURFACE DRAIN - TYPE 2
	SURFACE DRAIN - TYPE 3
	SURFACE DRAIN - TYPE 4
	SURFACE DRAIN - TYPE 5
	BOX CULVERT
	PIPE

	* DYNB ACCESS PIT
	* SIDE ENTRY PIT - KERB
	* GRATED PIT - KERB
	* GRATED PIT - V GUTTER
	* GRATED PIT - OPEN DRAIN
	* GRATED PIT - TABLE DRAIN
	* CATCH PIT - TABLE DRAIN
	SUBSOIL DRAIN FLUSH POINT
	TOP OF CONCRETE JUNCTION BOX
	INVERT OF SUBSOIL DRAIN OUTLET
	KERB SCUPPER
	OBVERT OF PIPE
	* DYNB ENDWALL - PLAIN / MC
	* DYNB ENDWALL - SINGLE & MULTI RC [SQUARE]
	* DYNB ENDWALL - SINGLE RC [SKEWED]
	* DYNB ENDWALL - TWIN RC [SKEWED]
	* DYNB ENDWALL - MULTI RC [SKEWED]
	* DYNB ENDWALL - DRIVEABLE - TYPE 1
	* DYNB ENDWALL - DRIVEABLE - TYPE 2

D DRAIN (STORMWATER) Continued

	* DYNB BATTER DRAIN - SPLASH APRON
	* DYNB BATTER DRAIN - ENERGY DISSIPATOR
	* DYNB PIPE OUTLET - ENERGY DISSIPATOR [ON LINE]
	* DYNB PIPE OUTLET - ENERGY DISSIPATOR [DEFLECTED]

D ELEC

	LINE - GENERAL
	LINE - MAJOR TRANSMISSION
	LINE - MINOR TRANSMISSION
	LINE - UNDERGROUND
	LINE - REDUNDANT
	HOUSE CONNECTION
	CONDUIT
	CABLE JUNCTION BOX
	CABLE MANHOLE
	DISTRIBUTION FUSE POINT
	HIGH TENSION PYLON
	LIGHT WITH OUTREACH
	POLE - LIGHT
	POLE - POWER
	POLE - POWER AND LIGHT
	POLE - POWER AND TRANSFORMER
	POWER SERVICE PILLAR
	STAY ANCHOR POLE
	STAY POLE
	TRANSFORMER CABINET CENTRE

D GAS

	MAIN - GENERAL
	ETHANE PIPELINE
	HOUSE CONNECTION
	MAIN - HIGH PRESSURE PIPELINE
	MAIN - LOW PRESSURE
	MAIN - NYLON
	MAIN - POLYETHYLENE
	MAIN - REDUNDANT
	MANHOLE COVER
	METER
	PIPELINE MARKER
	PIPELINE MARKER - HIGH PRESSURE
	REGULATOR BOX
	TEST POINT
	VALVE BOX
	VENT PIPE

A3 original		This sheet may be prepared using colour and may be incomplete if copied	
No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017

SCALES	
NTS	
Co-ordinate System:	MGA ZONE 55
Height Datum:	A.H.D.

DESIGNED	L.ALLEN
REVIEWED	R.CASSIDY

Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
 PROJECT LEGEND - DRG 4 OF 5

CONTRACT No. 2402	DRAWING HB17182-C1005	PRINTED DATE 09-Jun-17, 1:22 PM	SHEET No. 1005
REGISTRATION NUMBER A0113.021			REVISION A

D LNMK

	ARROW - LEFT TURN
	ARROW - RIGHT TURN
	ARROW - STRAIGHT AHEAD
	ARROW - STRAIGHT AHEAD & LEFT
	ARROW - STRAIGHT AHEAD & RIGHT
	ARROW - MERGE (RURAL)
	ARROW - MERGE (URBAN)
	ARROW - UTURN
	(---) BARRIER (ONE DIRECTION) PD (B1) & (B1a)
	(---) BARRIER (ONE DIRECTION) CD (B1) & (B1a)
	(---) BARRIER (BOTH DIRECTIONS) (B2) & (B2a)
	(---) BARRIER (BOTH DIRECTIONS) (B3) & (B3a)
	(---) BARRIER (BOTH DIRECTIONS) (B4) & (B4a)
	(---) SEPARATION (RURAL) (S) & (Sa)
	(---) SEPARATION (URBAN) (S1)
	(---) SEPARATION (MEDIAN LANE) (S2)
	(---) SEPARATION (SPECIAL PURPOSE) (S3) & (S3a)
	(---) SEPARATION (BICYCLE PATHS) (S4)
	(---) LANE (RURAL) (L)
	(---) LANE (URBAN) (L1)
	(---) LANE (TURNOUT LANE) (L2)
	(---) LANE (SPECIAL PURPOSE) (L3)
	(---) LANE (CONTINUOUS) (LC)
	(---) CONTINUITY (C)
	(---) CONTINUOUS CONTINUITY (CC) & (CCa)
	(---) EDGE (URBAN) (E)
	(---) EDGE CONTINUITY (URBAN) (EC)
	(---) EDGE RURAL (E2)
	(---) EDGE CONTINUITY (RURAL) (EC2) & (E2a)
	(---) STOP (SL)
	(---) HOLDING (HL)
	(---) JUNCTION CONTINUITY (JC)
	(---) TURN TRAFFIC SIGNALS (T)
	(---) PEDESTRIAN WALKWAY (W)
	(---) NO STOPPING (NS)
	DYNB LINEMARKING IDENTIFICATION CODE
	* RRPM - WHITE - UNIDIRECTIONAL
	* RRPM - WHITE - BIDIRECTIONAL
	* RRPM - YELLOW - UNIDIRECTIONAL
	* RRPM - YELLOW - BIDIRECTIONAL
	* RRPM - RED - UNIDIRECTIONAL
	* RRPM - GREEN - UNIDIRECTIONAL
	* RRPM - NON REFLECTIVE

D MISC

	FUEL PIPELINE
	UNDERGROUND TANK
	SAW CUT
	SERVICE TRENCH - TYPE 1
	SERVICE TRENCH - TYPE 2
	SERVICE TRENCH - TYPE 3
	SERVICE TRENCH - TYPE 4
	SERVICE TRENCH - TYPE 5
	SERVICE TRENCH - TYPE 6
	SERVICE TRENCH - TYPE 7
	SERVICE TRENCH - TYPE 8
	SERVICE TRENCH - TYPE 9
	SILT STOP FENCE - TYPE 1
	SILT STOP FENCE - TYPE 2
	SEDIMENT TRAP
	PRESERVATION FENCE - TYPE 1
	PRESERVATION FENCE - TYPE 2
	PUMP STATION
	UTILITY - EXPOSED

D RAIL

	RAILWAY TRACK CENTRE
	TOP OF RAIL
	RAILWAY FORMATION EDGE
	RAILWAY SIGNAL TROUGH
	RAILWAY CONTROL BOX
	RAILWAY SIGNAL
	RAILWAY STANCHION

D ROAD

	(---) CONTROL LINE - CENTRELINE
	(---) CONTROL LINE - FILLET
	(---) CONTROL LINE - KERB
	(---) OFFSET CROWN
	(---) EDGE OF LANE SEAL
	(---) EDGE OF MEDIAN
	(---) EDGE OF SHOULDER (SEALED)
	(---) EDGE OF FORMATION (UNSEALED)
	(---) SAFETY BARRIER STEEL BEAM
	(---) SAFETY BARRIER WIRE ROPE
	(---) SAFETY BARRIER TYPE F
	(---) KERB - LIP LINE/EDGE OF SEAL
	(---) KERB - INVERT
	(---) KERB - TOP
	(---) KERB - BACK
	(---) FOOTPATH BACK/FOOTPATH FRONT
	(---) TABLE DRAIN
	(---) EDGE OF VERGE
	(---) EARTHWORKS - HINGE
	(---) EARTHWORKS - BATTER
	(---) EARTHWORKS - BENCH
	(---) DRIVEWAY/ACCESS
	(---) INTERFACE/JOINT
	(---) SUBGRADE
	(---) BATTER SYMBOL
	(---) SLOPE SIGNATURE

D SEWR

	MAIN
	MAIN - REDUNDANT
	HOUSE CONNECTION
	SEWAGE POND
	MANHOLE COVER
	VENT PIPE
	PUMP STATION

* DENOTES SYMBOL SCALED FOR CLARITY
DYNB DENOTES DYNAMIC BLOCK DEFINED

D TCS (TRAFFIC)

	TRAFFIC SIGNAL CABLE
	TRAFFIC SIGNAL CONDUIT
	TRAFFIC SIGNAL DETECTOR LOOP
	* 3 ASPECT LANTERN & PHASE
	* LOUVRED 3 ASPECT LANTERN
	* DYNB 3 ASPECT OVERHEAD LANTERN & PHASE
	* DYNB 3 ASPECT LANTERN WITH GREEN+YELLOW+RED TURN ARROWS & PHASE
	* DYNB GREEN+YELLOW+RED TURN ARROWS & PHASE
	* DYNB GREEN + YELLOW TURN ARROWS & PHASE
	* DYNB GREEN TURN ARROW AND PHASE
	* DYNB GREEN TURN ARROW WITH FULL RED + YELLOW ASPECTS AND PHASE
	* DYNB GREEN+YELLOW TURN ARROWS WITH RED ASPECT & PHASE
	* PEDESTRIAN PUSH BUTTON
	* DYNB PEDESTRIAN LANTERN & WALK PHASE
	* TRAFFIC SIGNAL - WIG WAG LANTERNS
	* TRAFFIC SIGNAL - LOUVRE
	TRAFFIC SIGNAL CONTROLLER
	TRAFFIC SIGNAL JUNCTION BOX

D TRIA

	(TD-) TRIANGULATION - DESIGN SURFACE
	(TC-) TRIANGULATION - COMBINED DESIGN AND SURVEY

D WATR

	MAIN
	MAIN - REGIONAL
	MAIN - RECYCLED
	MAIN - REDUNDANT
	HOUSE CONNECTION
	OVERHEAD PIPELINE
	IRRIGATION PIPELINE
	AIR VALVE
	AIR VALVE - RECYCLED
	FIRE HYDRANT
	HYDRANT
	HYDRANT - RECYCLED
	METER
	METER - RECYCLED
	STOP VALVE
	STOP VALVE - RECYCLED
	TAP
	TAP - RECYCLED
	SCOUR VALVE
	SCOUR VALVE - RECYCLED

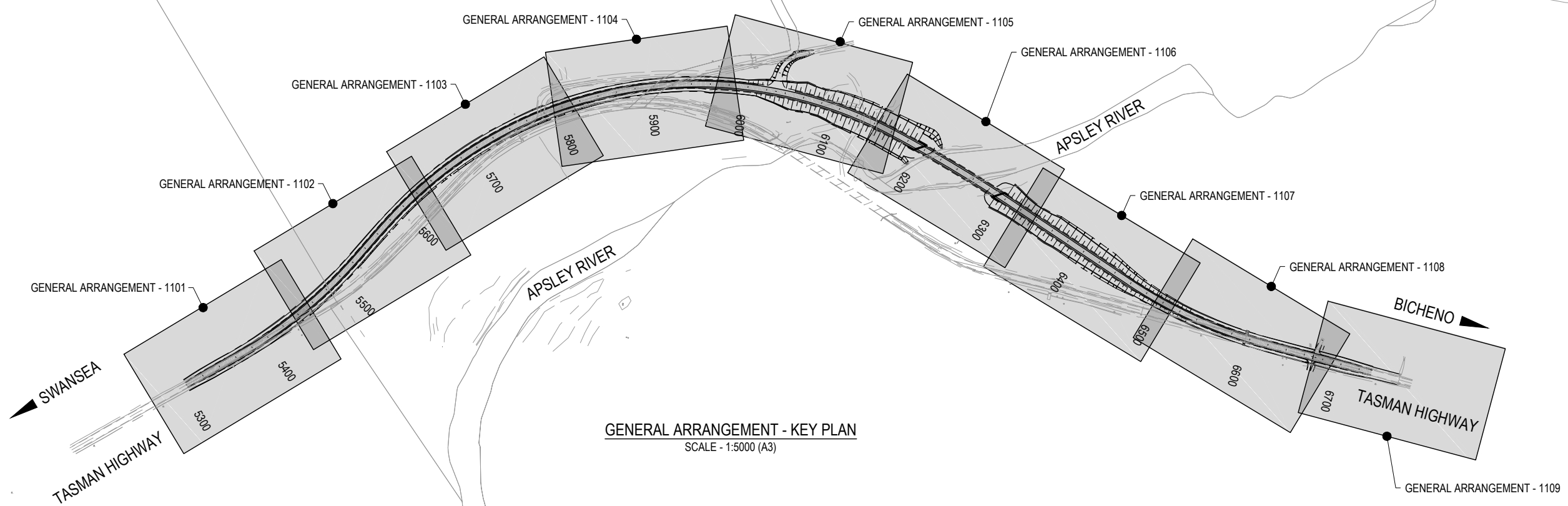
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No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017

SCALES	
NTS	
Co-ordinate System:	MGA ZONE 55
Height Datum:	A.H.D.

DESIGNED	L.ALLEN
REVIEWED	R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
PROJECT LEGEND - DRG 5 OF 5

CONTRACT No.	DRAWING	PRINTED DATE	SHEET No.
2402	HB17182-C1006	09-Jun-17, 1:22 PM	1006
REGISTRATION NUMBER			REVISION A
A0113.021			



GENERAL ARRANGEMENT - KEY PLAN
SCALE - 1:5000 (A3)

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

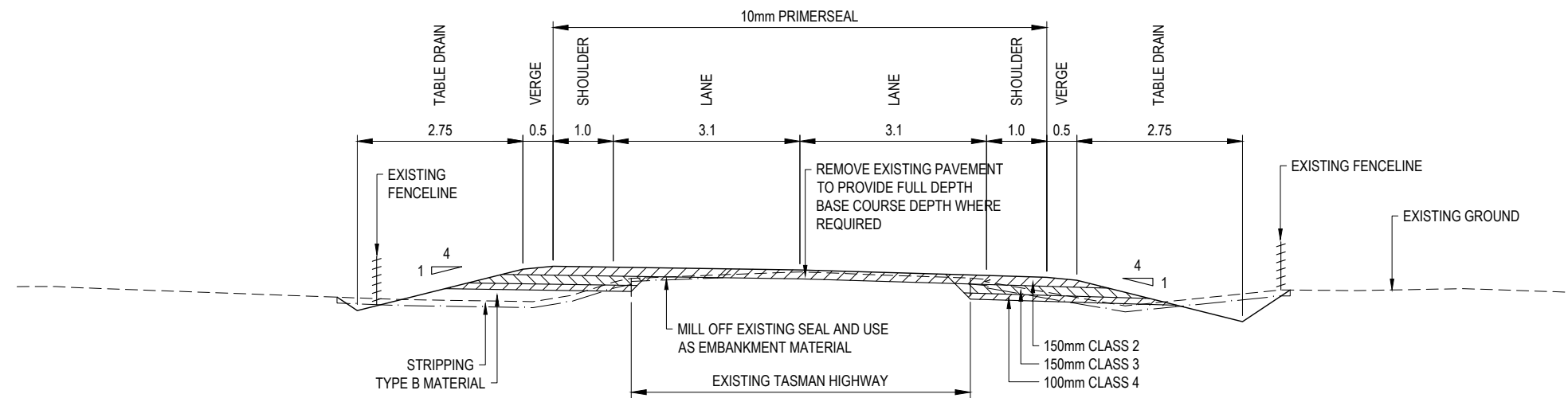
SCALES
1:500 (A3)
SCALE IN METRES - 1:5000

Co-ordinate System: MGA ZONE 55
Height Datum: A.H.D.

DESIGNED L.ALLEN
REVIEWED R.CASSIDY

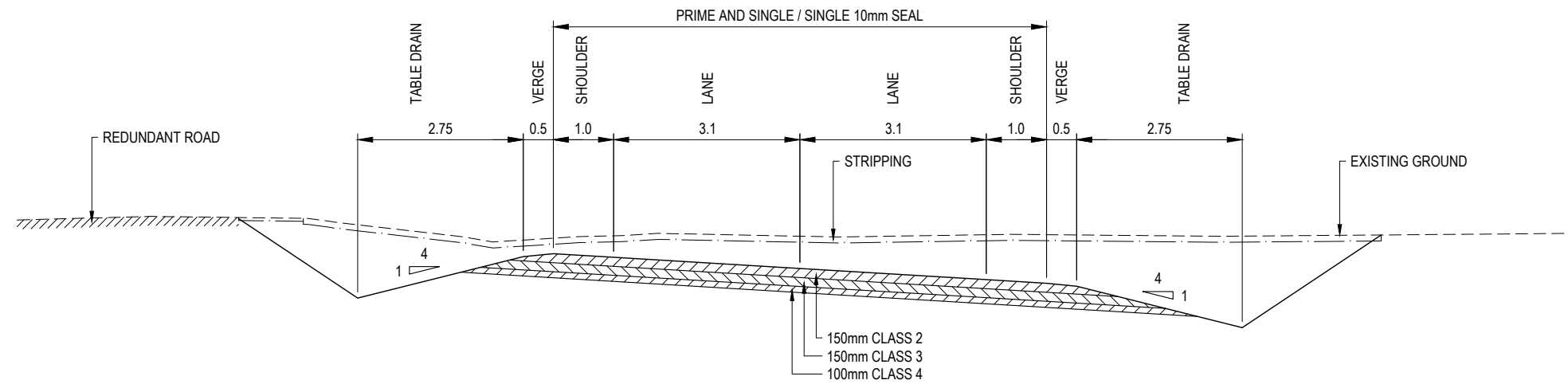
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
GENERAL ARRANGEMENT - KEY PLAN

CONTRACT No. 2402	DRAWING HB17182-C1021	PRINTED DATE 09-Jun-17, 1:22 PM	SHEET No. 1021
REGISTRATION NUMBER A0113.021			REVISION A



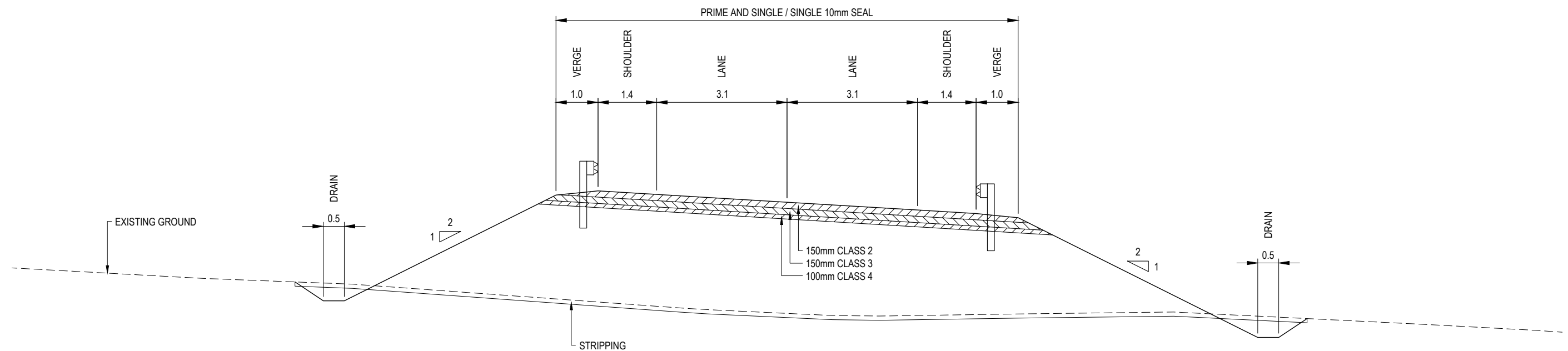
TASMAN HIGHWAY OVERLAY

SCALE 1:100



FULL DEPTH PAVEMENT

SCALE 1:100



EMBANKMENT ON BRIDGE APPROACHES

SCALE 1:100

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

SCALES

1:100 (A3)

SCALE IN METRES - 1:100

Co-ordinate System: MGA ZONE 55

Height Datum: A.H.D.

DESIGNED L.ALLEN

REVIEWED R.CASSIDY

Department of State Growth

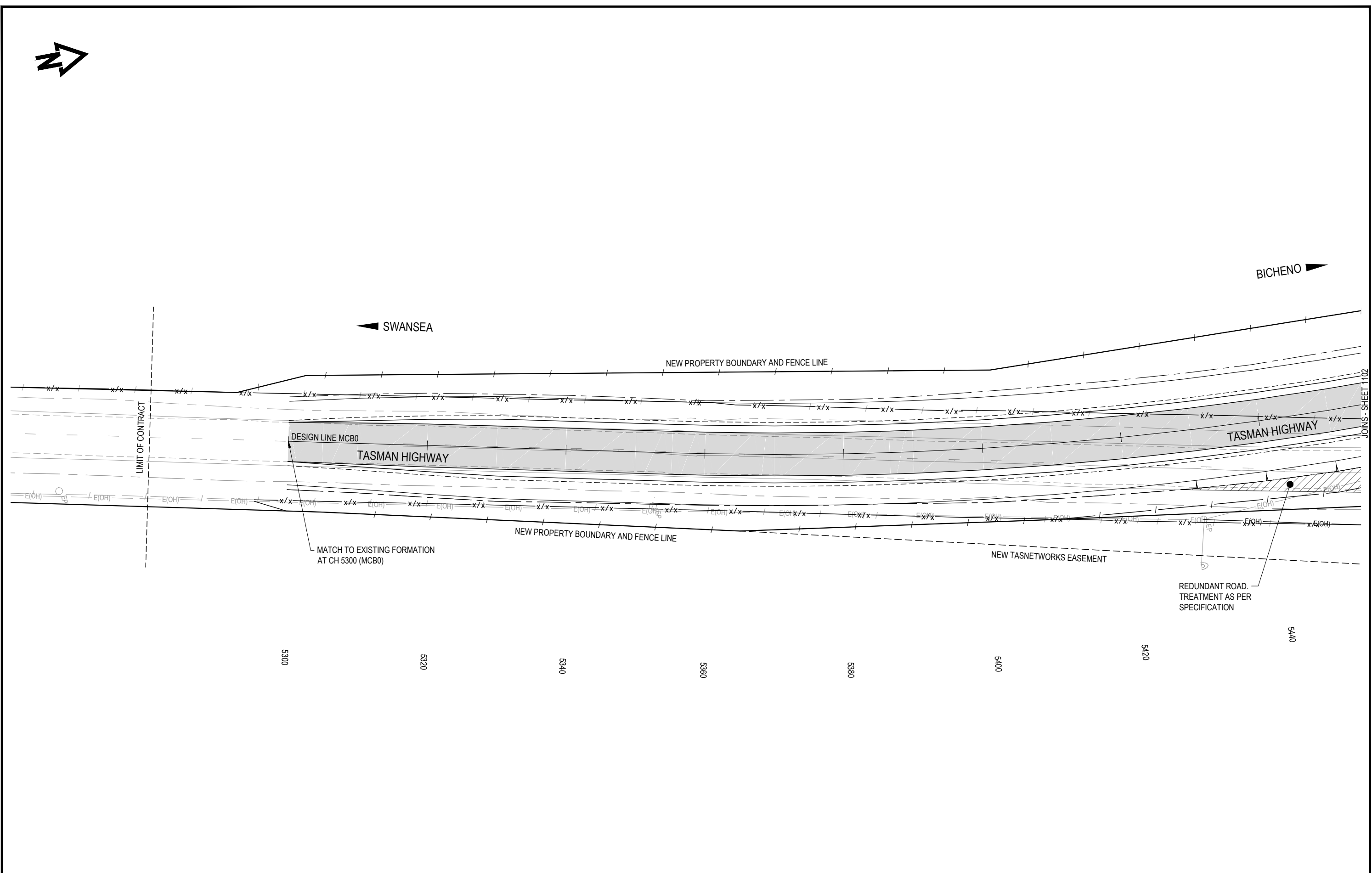
TASMAN HIGHWAY (A0113)

APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)

BRIDGE REPLACEMENT

TYPICAL SECTIONS AND DETAILS

CONTRACT No. 2402	DRAWING HB17182-C1041	PRINTED DATE 09-Jun-17, 1:22 PM	SHEET No. 1041
REGISTRATION NUMBER A0113.021			REVISION A



No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
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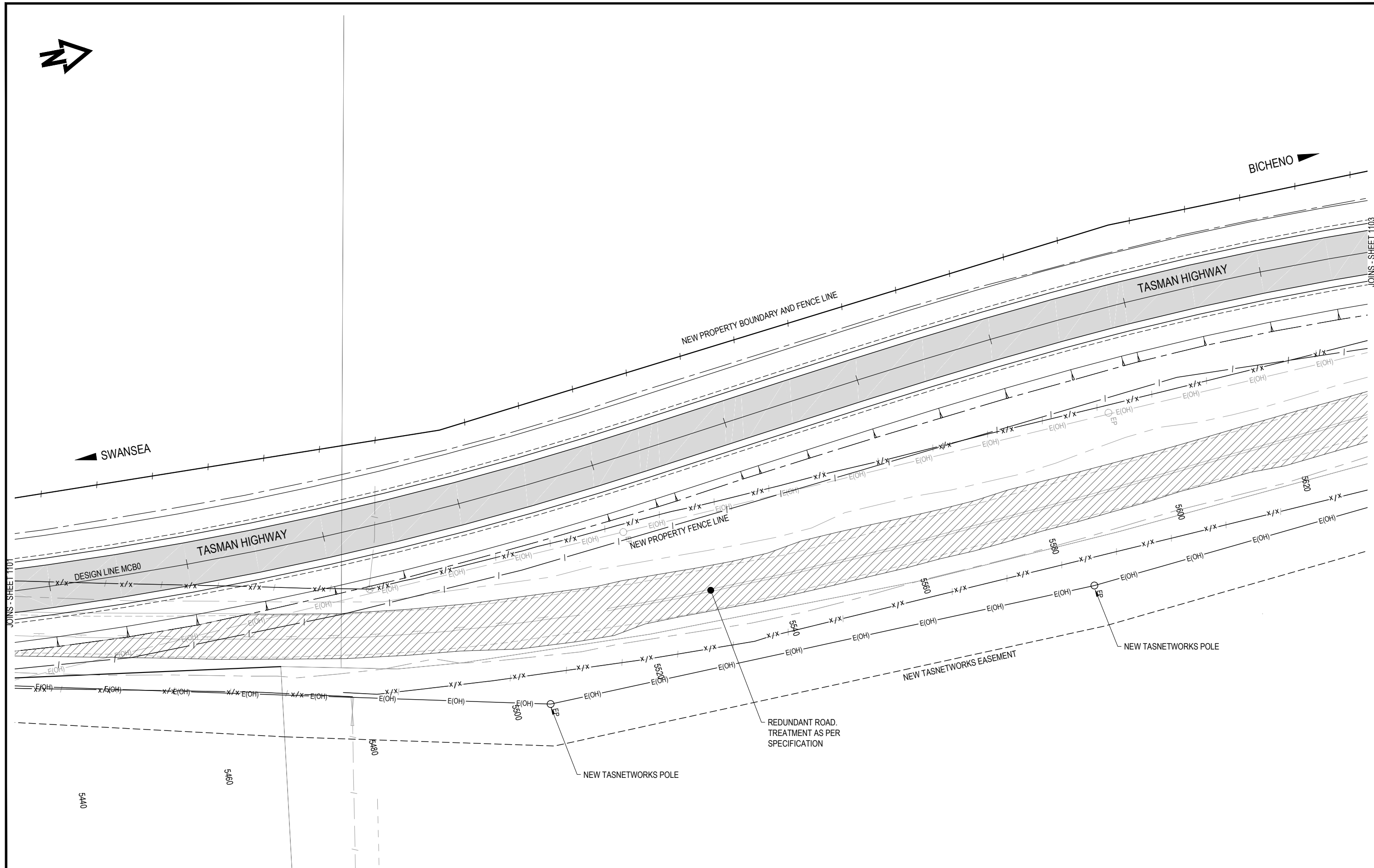
SCALES
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 SCALE IN METRES - 1:500
 Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.

DESIGNED L.ALLEN
 REVIEWED R.CASSIDY

Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1101	PRINTED DATE 09-Jun-17, 1:22 PM	SHEET No. 1101
REGISTRATION NUMBER A0113.021			REVISION A



JOINS - SHEET 1101

JOINS - SHEET 1103

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

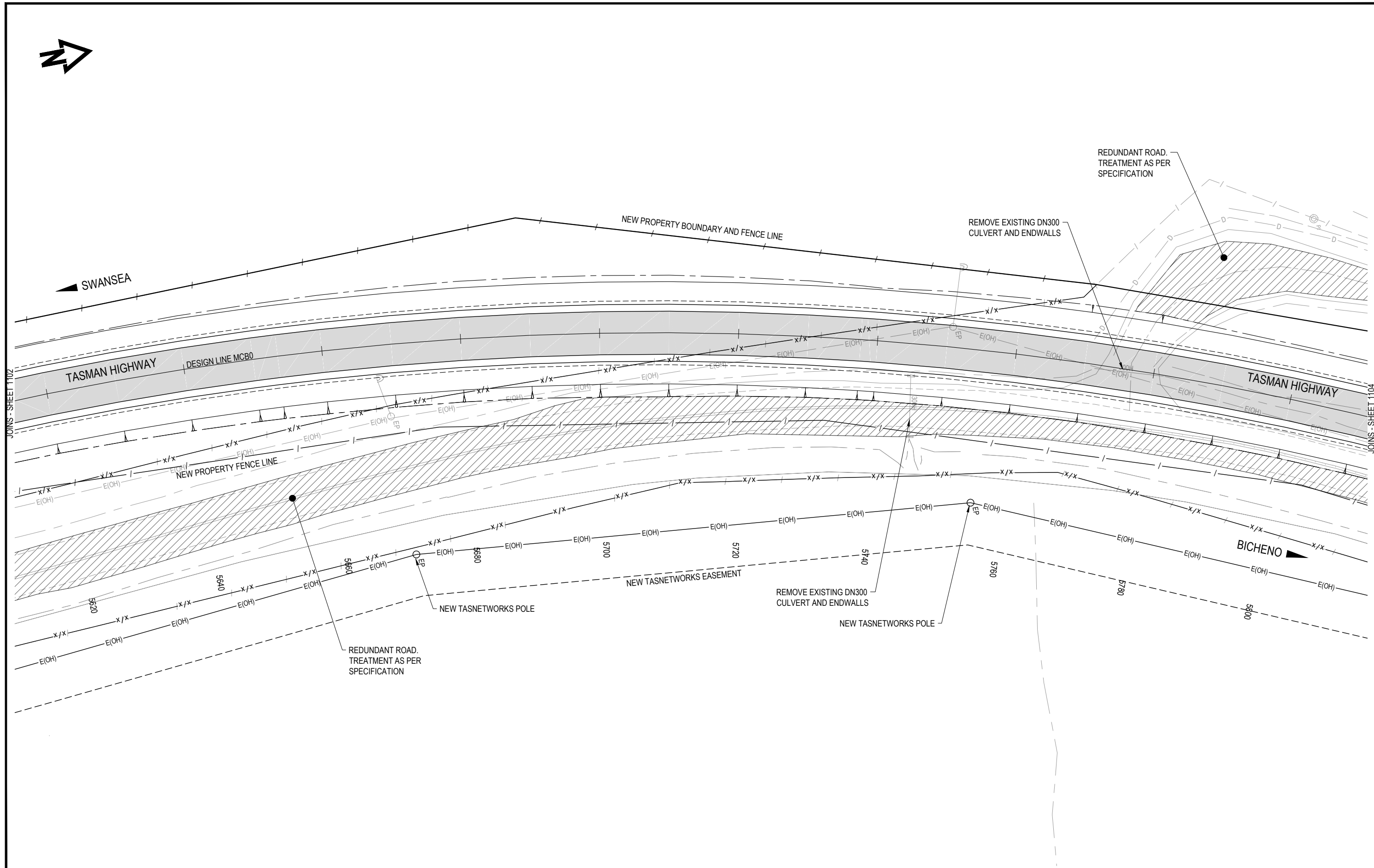
SCALES
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 SCALE IN METRES - 1:500
 Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.

DESIGNED: L.ALLEN
 REVIEWED: R.CASSIDY

Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1102	PRINTED DATE 09-Jun-17, 1:22 PM	SHEET No. 1102
REGISTRATION NUMBER A0113.021			REVISION A



No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

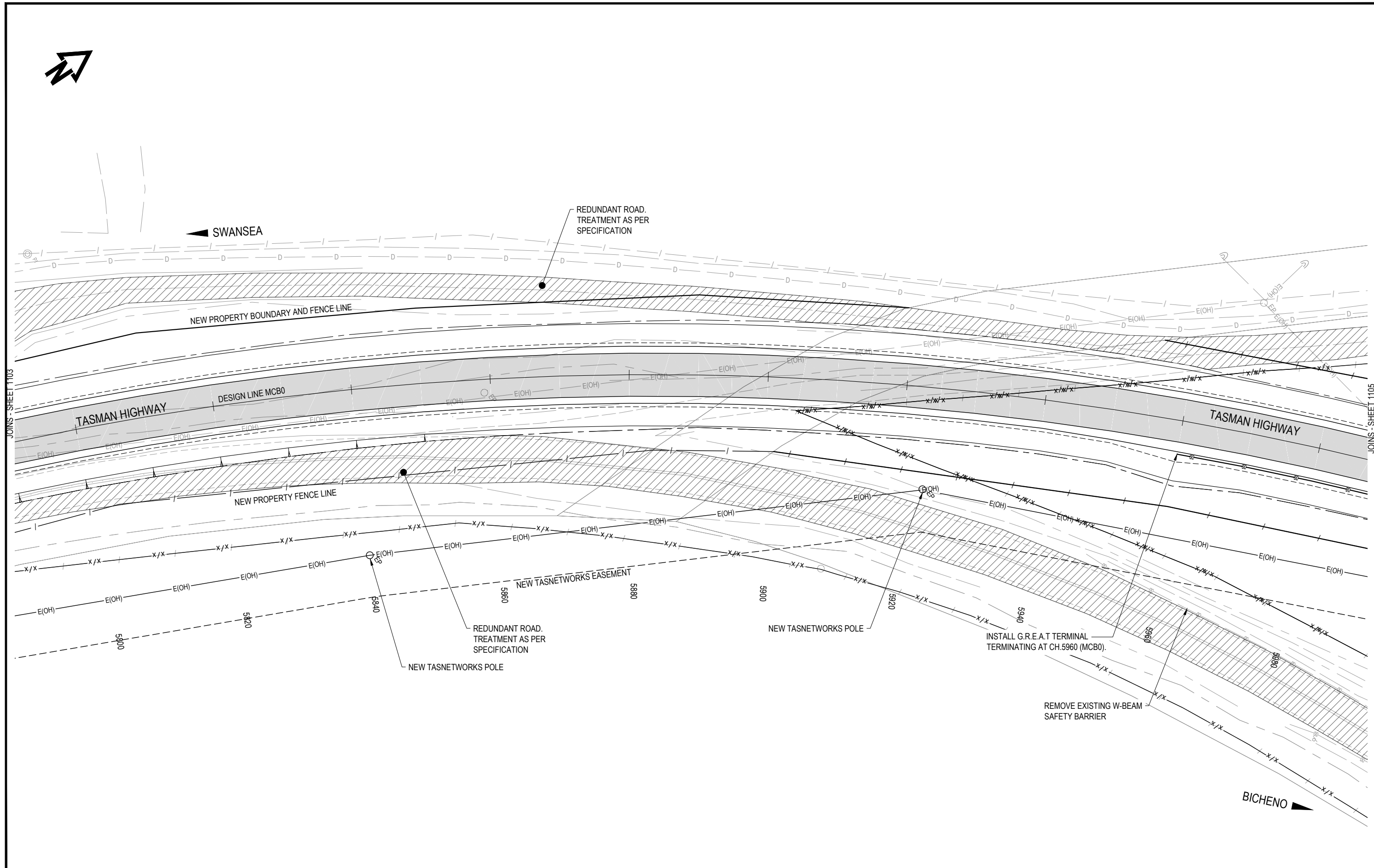
SCALES
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 SCALE IN METRES - 1:500
 Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.

DESIGNED L.ALLEN
 REVIEWED R.CASSIDY

Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1103	PRINTED DATE 09-Jun-17, 1:22 PM	SHEET No. 1103
REGISTRATION NUMBER A0113.021			REVISION A



JOINS - SHEET 1103

JOINS - SHEET 1105

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

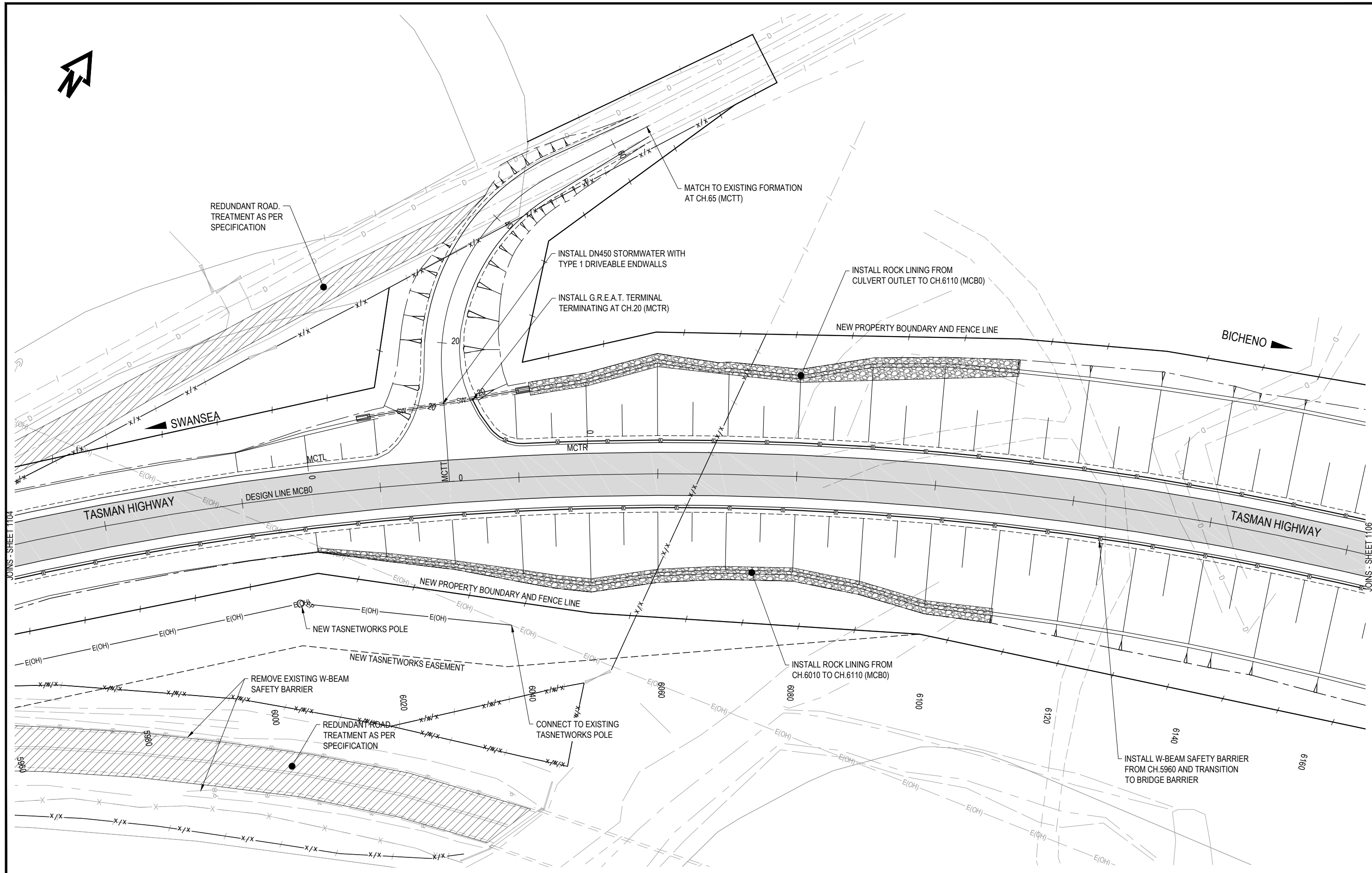
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 Co-ordinate System: MGA ZONE 55 | Height Datum: A.H.D.

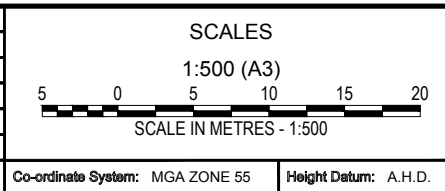
DESIGNED L.ALLEN
 REVIEWED R.CASSIDY

Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1104	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1104
REGISTRATION NUMBER A0113.021			REVISION A



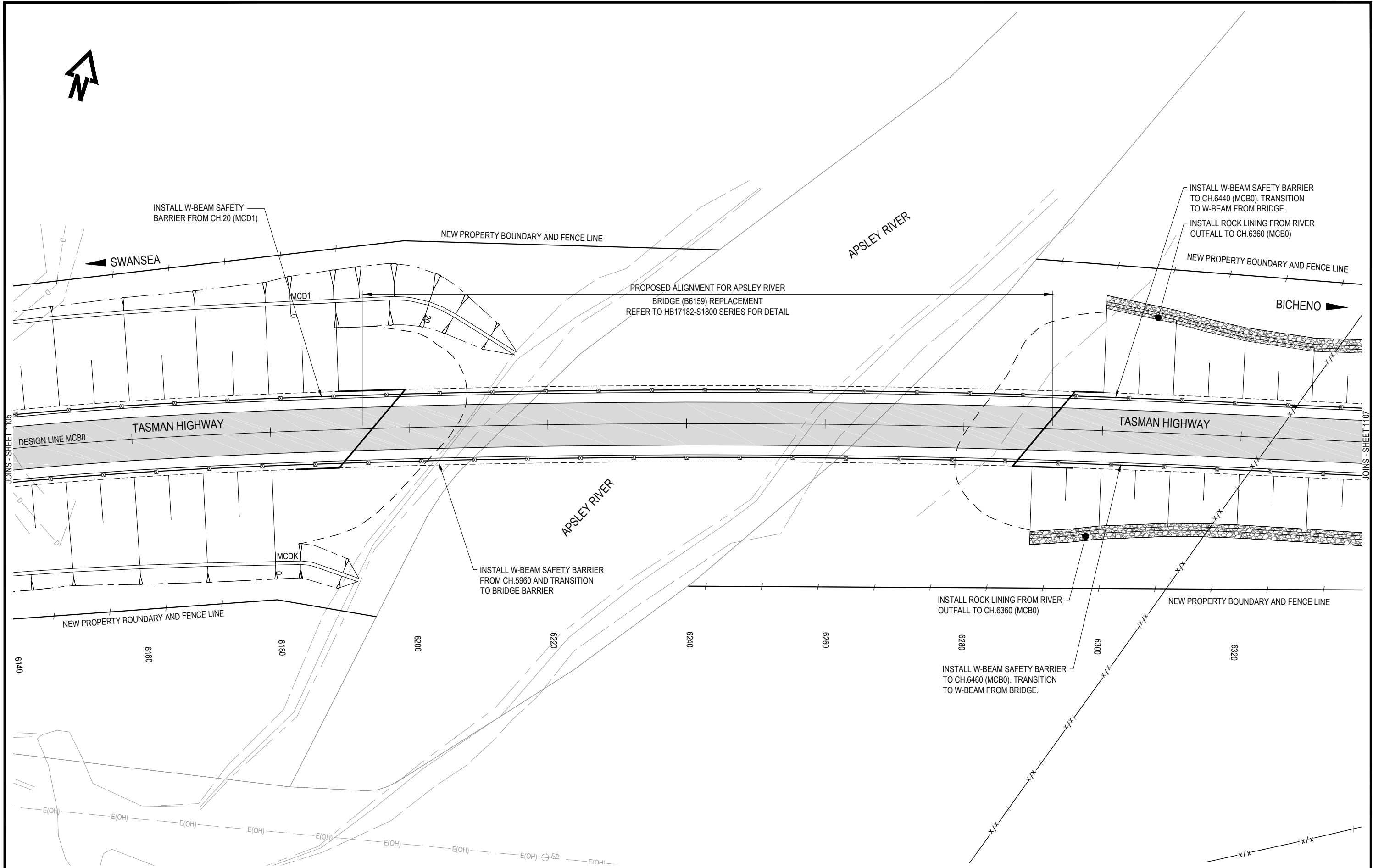
No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
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REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1105	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1105
REGISTRATION NUMBER A0113.021			REVISION A



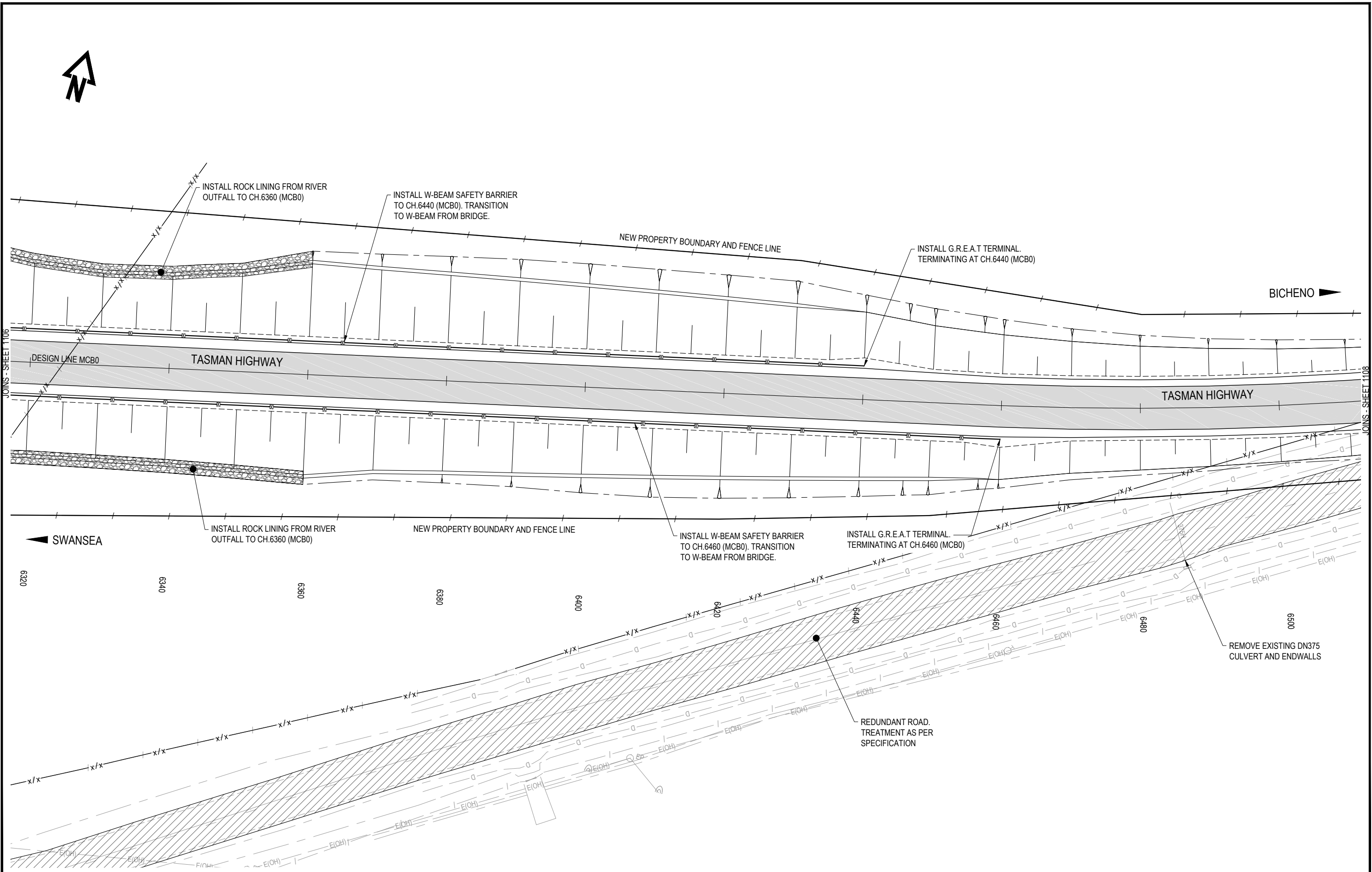
SCALES
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 SCALE IN METRES - 1:500
 Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.

DESIGNED: L.ALLEN
 REVIEWED: R.CASSIDY

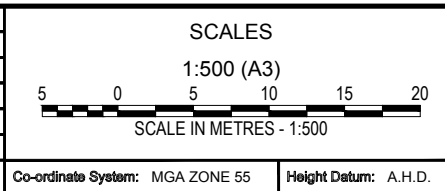
Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
 GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1106	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1106
REGISTRATION NUMBER A0113.021			REVISION A



No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017

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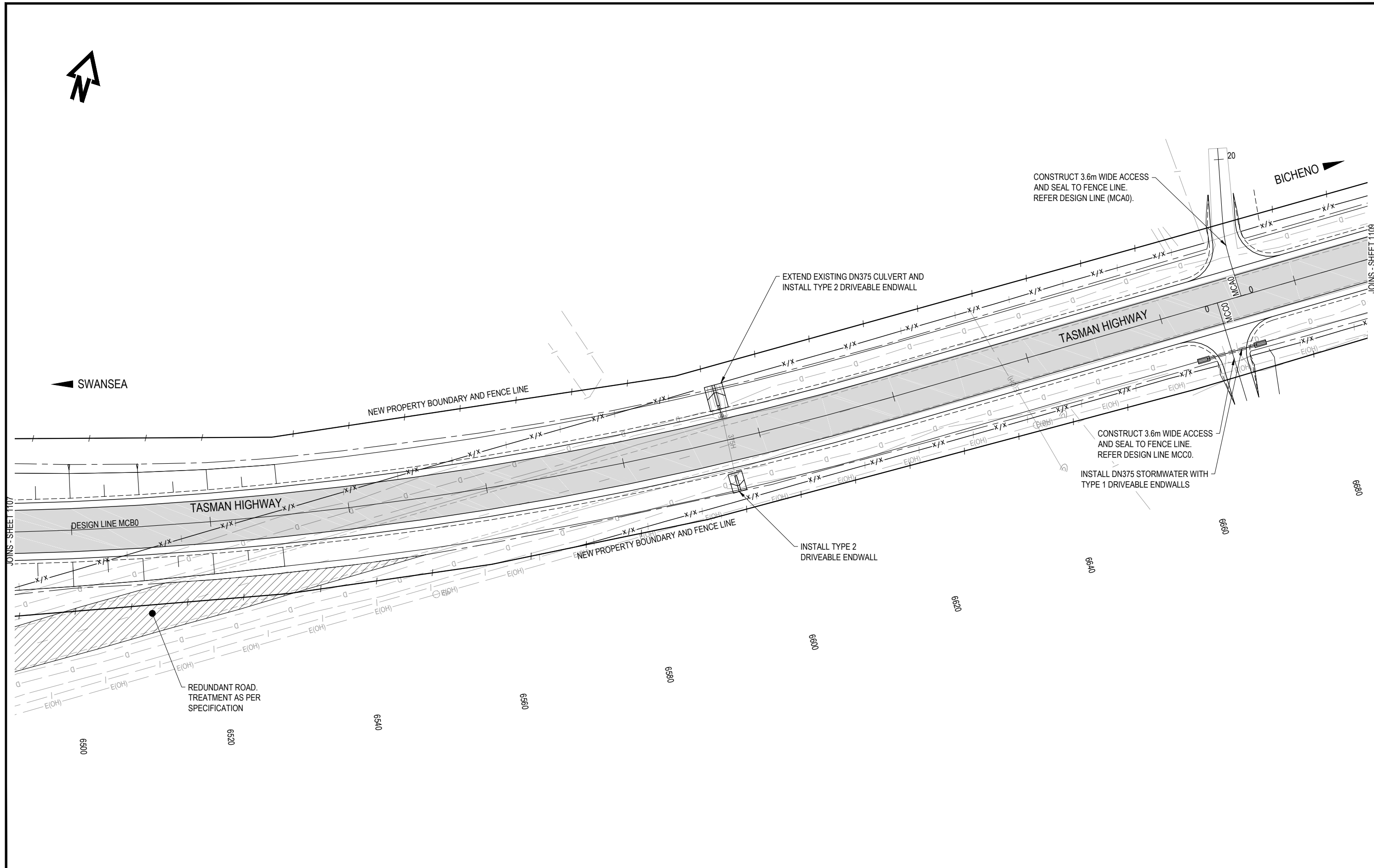
REVIEWED R.CASSIDY

Department of State Growth

TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT

GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1107	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1107
REGISTRATION NUMBER A0113.021			REVISION A



A PRELIMINARY DESIGN			
No.	Amendment Description	Initials	Date
A3 original	This sheet may be prepared using colour and may be incomplete if copied		

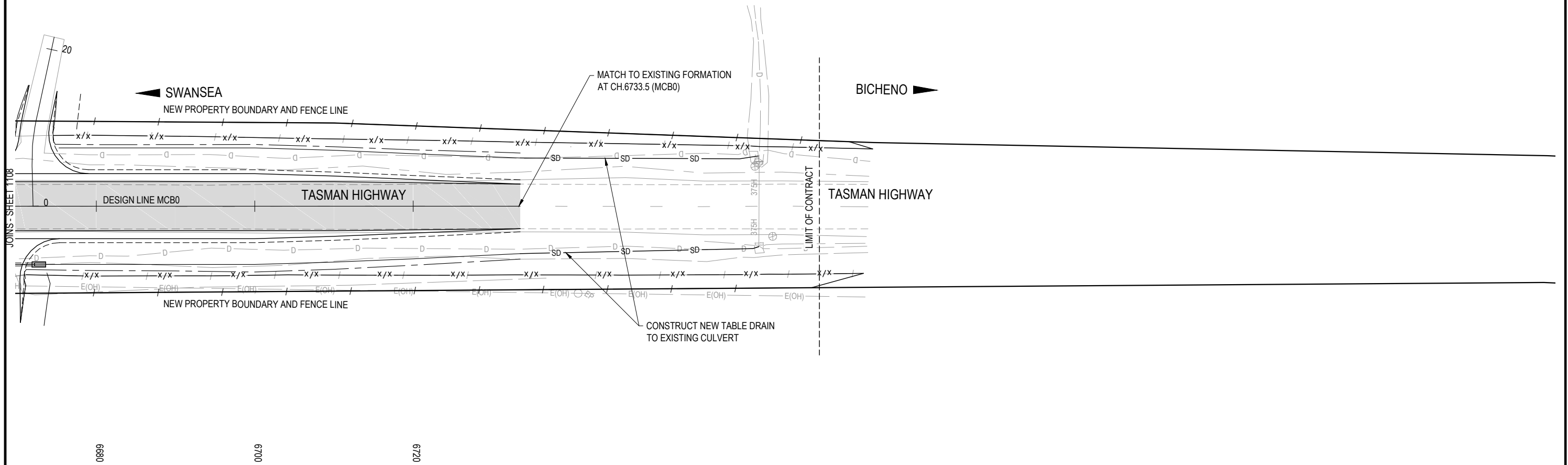
SCALES
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 SCALE IN METRES - 1:500
 Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.

DESIGNED L.ALLEN
 REVIEWED R.CASSIDY

Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
GENERAL ARRANGEMENT PLAN

CONTRACT No. 2402	DRAWING HB17182-C1108	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1108
REGISTRATION NUMBER A0113.021			REVISION A



No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

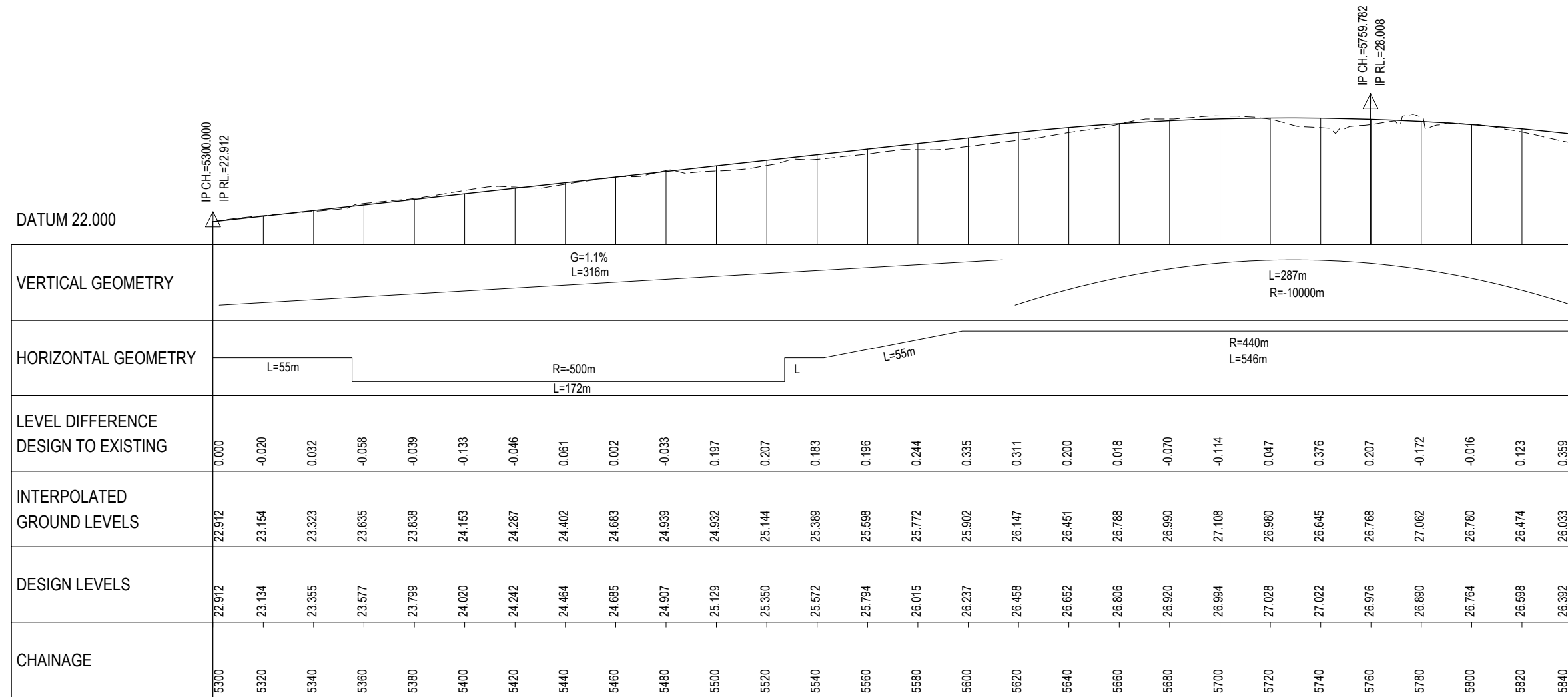
SCALES
 1:500 (A3)

 SCALE IN METRES - 1:500
 Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.

DESIGNED: L.ALLEN
 REVIEWED: R.CASSIDY



Department of State Growth
 TASMAN HIGHWAY (A0113)
 APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
 BRIDGE REPLACEMENT
 GENERAL ARRANGEMENT PLAN

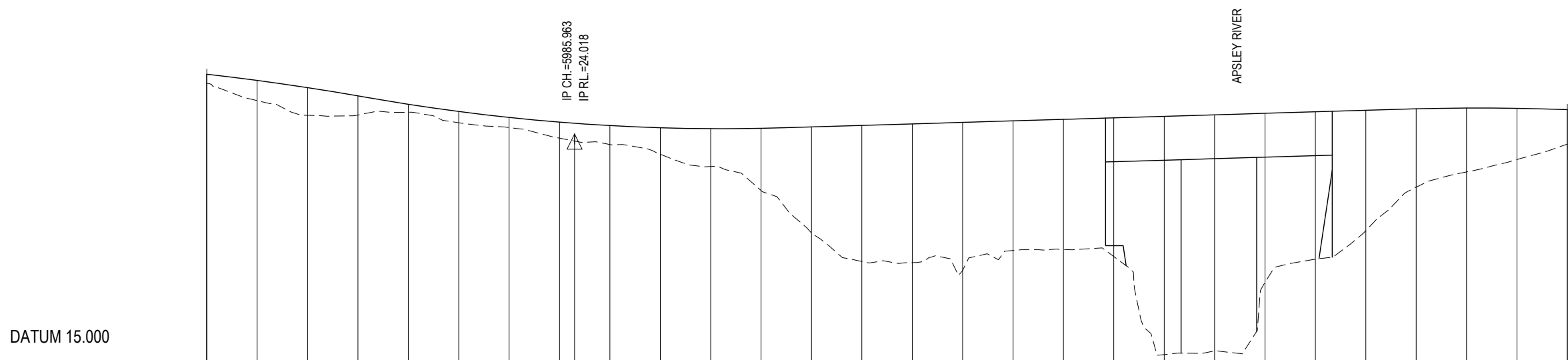
CONTRACT No. 2402	DRAWING HB17182-C1109	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1109
REGISTRATION NUMBER A0113.021			REVISION A



GEOMETRY DATA
IS ROUNDED

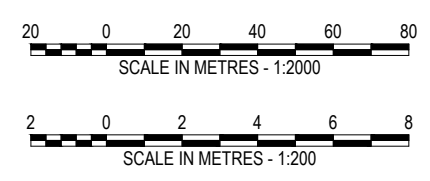


		SCALES 1:2000 (H); 1:200 (V)		 		Department of State Growth TASMAN HIGHWAY (A0113) APSLEY RIVER (LILLA VILLA) BRIDGE (B6159) BRIDGE REPLACEMENT LONGITUDINAL PROFILE MCB0 - DRG 1 OF 3		CONTRACT No. 2402	DRAWING HB17182-C1701	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1701
A	PRELIMINARY DESIGN	R.C	09/06/2017	DESIGNED L.ALLEN				REGISTRATION NUMBER A0113.021			REVISION A
No.	Amendment Description	Initials	Date	REVIEWED R.CASSIDY							
A3 original		This sheet may be prepared using colour and may be incomplete if copied		Co-ordinate System: MGA ZONE 55		Height Datum: A.H.D.					

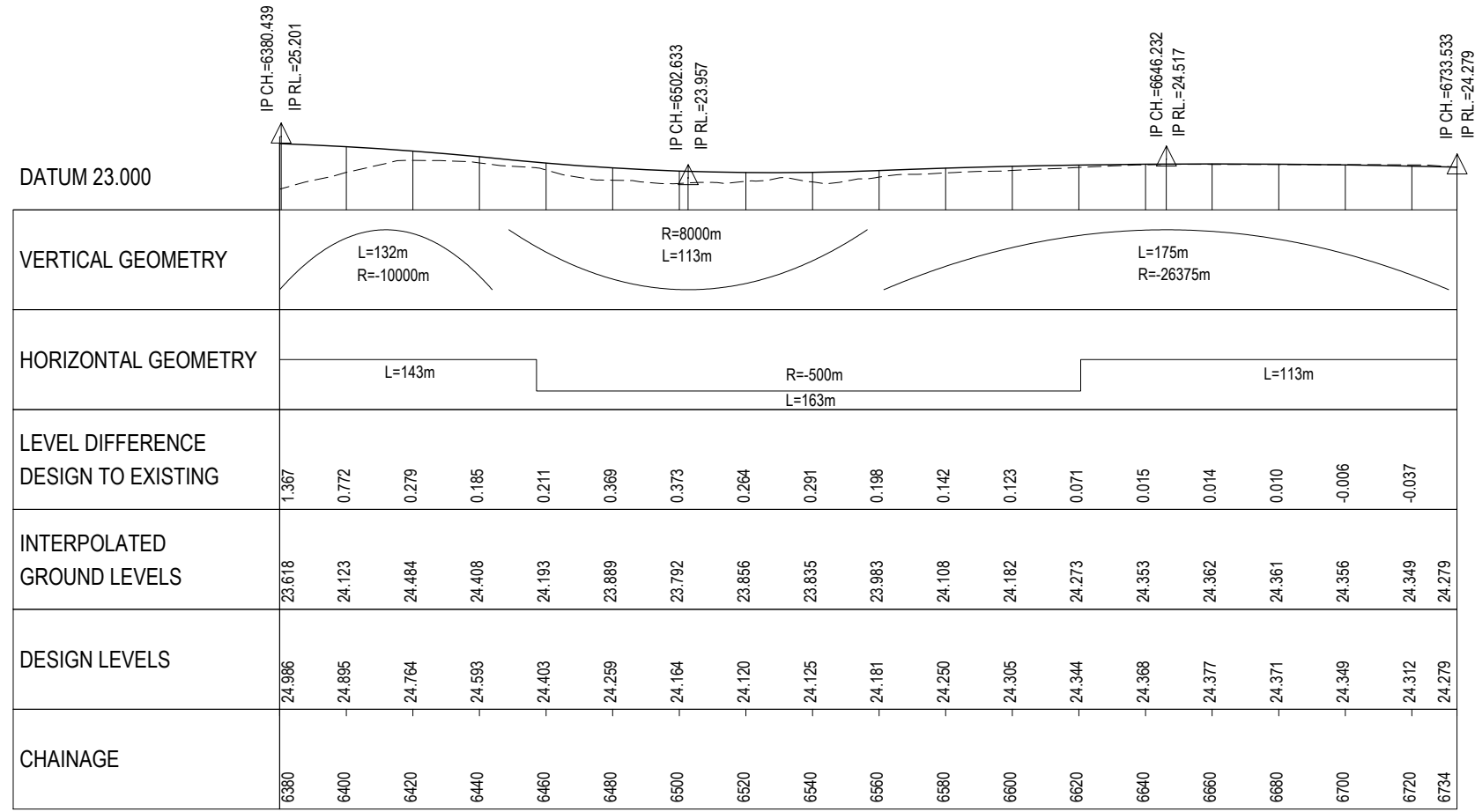


VERTICAL GEOMETRY																												
HORIZONTAL GEOMETRY																												
LEVEL DIFFERENCE DESIGN TO EXISTING	0.359	0.800	1.100	0.762	0.316	0.446	0.402	0.635	0.751	1.051	1.501	2.468	4.212	5.398	5.505	5.872	5.141	5.161	5.502	9.452	9.366	6.710	5.850	4.777	3.111	2.534	2.031	1.367
INTERPOLATED GROUND LEVELS	26.033	25.345	24.760	24.772	24.883	24.467	24.274	23.855	23.603	23.216	22.729	21.776	20.087	18.962	18.915	18.608	19.398	19.438	19.158	15.267	15.413	18.130	19.050	20.184	21.908	22.513	23.006	23.618
DESIGN LEVELS	26.392	26.146	25.860	25.534	25.199	24.912	24.676	24.490	24.353	24.267	24.231	24.245	24.300	24.360	24.420	24.480	24.540	24.600	24.660	24.720	24.780	24.840	24.900	24.960	25.019	25.048	25.037	24.986
CHAINAGE	5940	5960	5980	5900	5920	5940	5960	5980	6000	6020	6040	6060	6080	6100	6120	6140	6160	6180	6200	6220	6240	6260	6280	6300	6320	6340	6360	6380

GEOMETRY DATA
IS ROUNDED



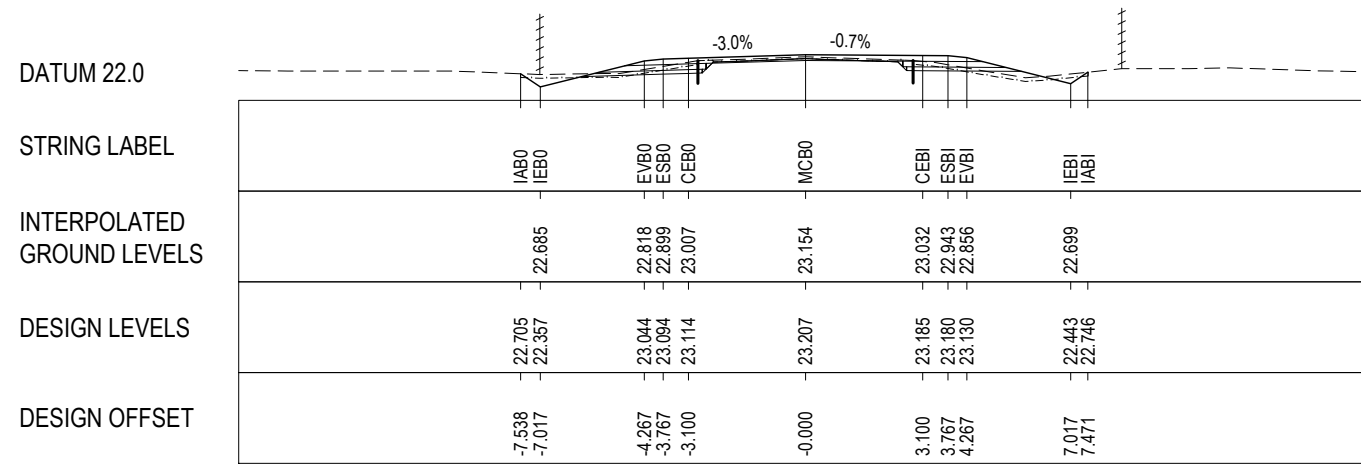
		SCALES 1:2000 (H); 1:200 (V)				Department of State Growth TASMAN HIGHWAY (A0113) APSLEY RIVER (LILLA VILLA) BRIDGE (B6159) BRIDGE REPLACEMENT LONGITUDINAL PROFILE MCB0 - DRG 2 OF 3		CONTRACT No. 2402	DRAWING HB17182-C1702	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1702
A PRELIMINARY DESIGN No. Amendment Description		R.C 09/06/2017 Initials Date		DESIGNED L.ALLEN REVIEWED R.CASSIDY		REGISTRATION NUMBER A0113.021		REVISION A		REVISION A	
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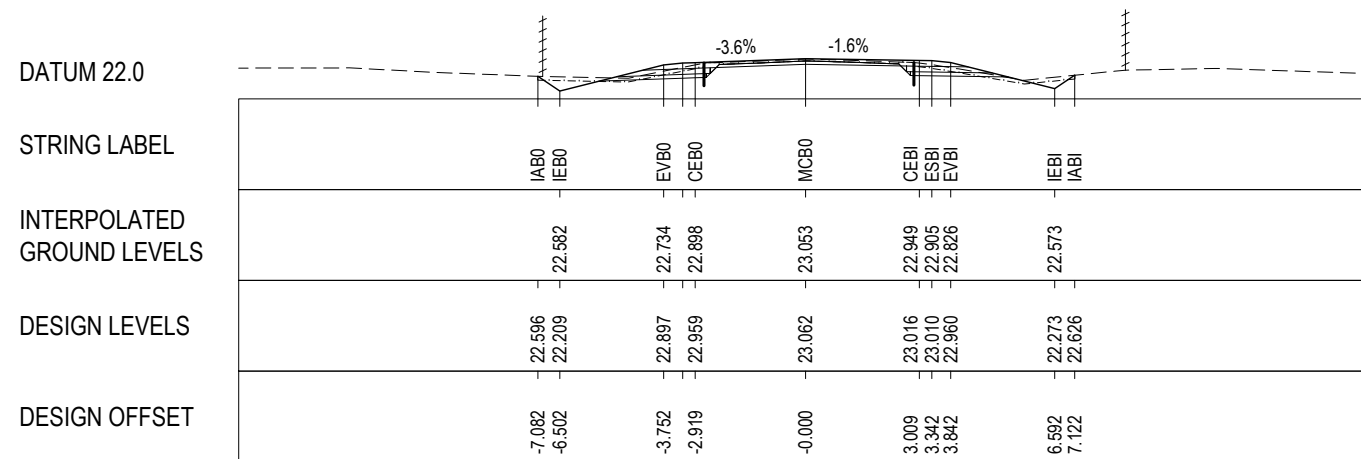
GEOMETRY DATA
IS ROUNDED



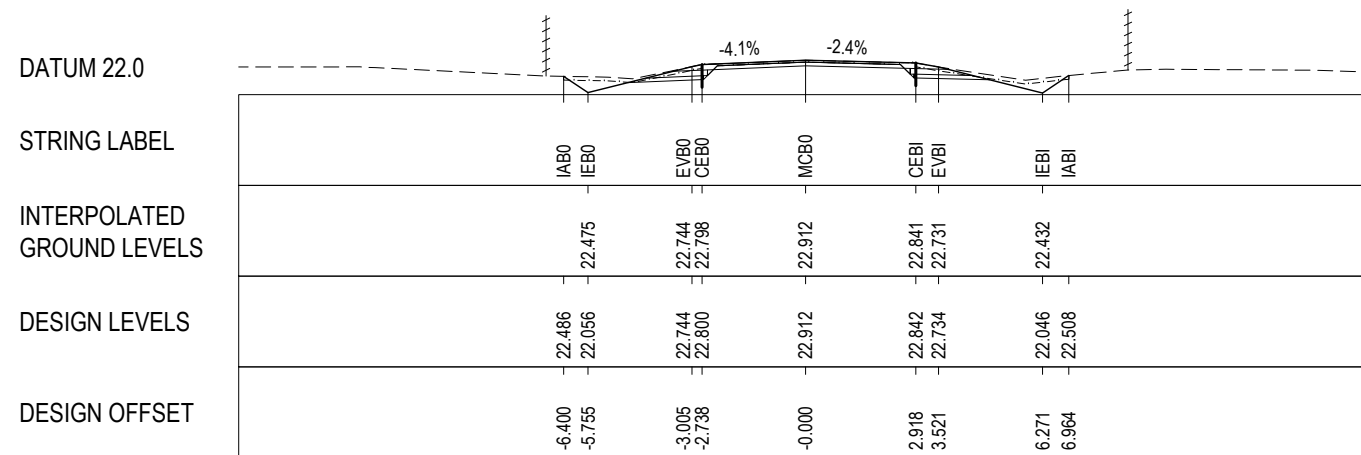
		SCALES 1:2000 (H); 1:200 (V)				Department of State Growth TASMAN HIGHWAY (A0113) APSLEY RIVER (LILLA VILLA) BRIDGE (B6159) BRIDGE REPLACEMENT LONGITUDINAL PROFILE MCB0 - DRG 3 OF 3		CONTRACT No. 2402	DRAWING HB17182-C1703	PRINTED DATE 09-Jun-17, 1:23 PM	SHEET No. 1703
A	PRELIMINARY DESIGN	R.C	09/06/2017	DESIGNED	L.ALLEN			REGISTRATION NUMBER A0113.021			REVISION A
No.	Amendment Description	Initials	Date	REVIEWED	R.CASSIDY						
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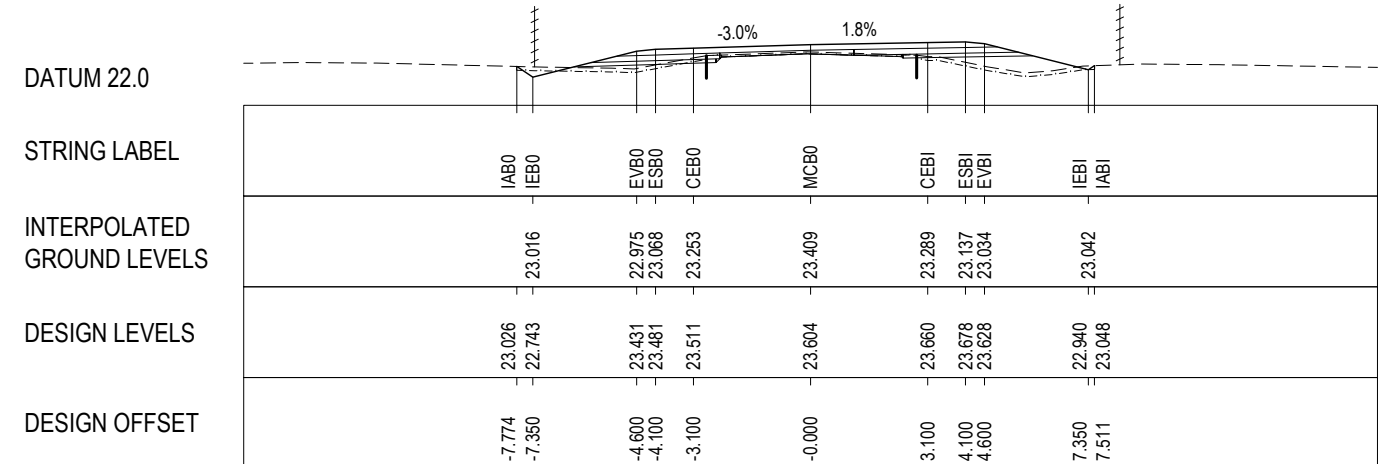
CH. 5320.000



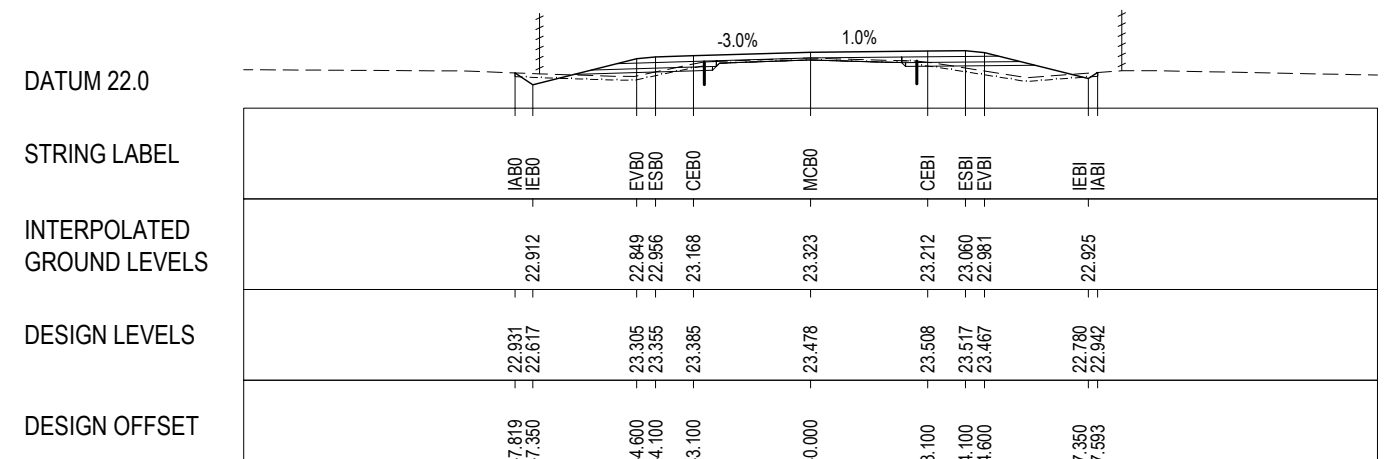
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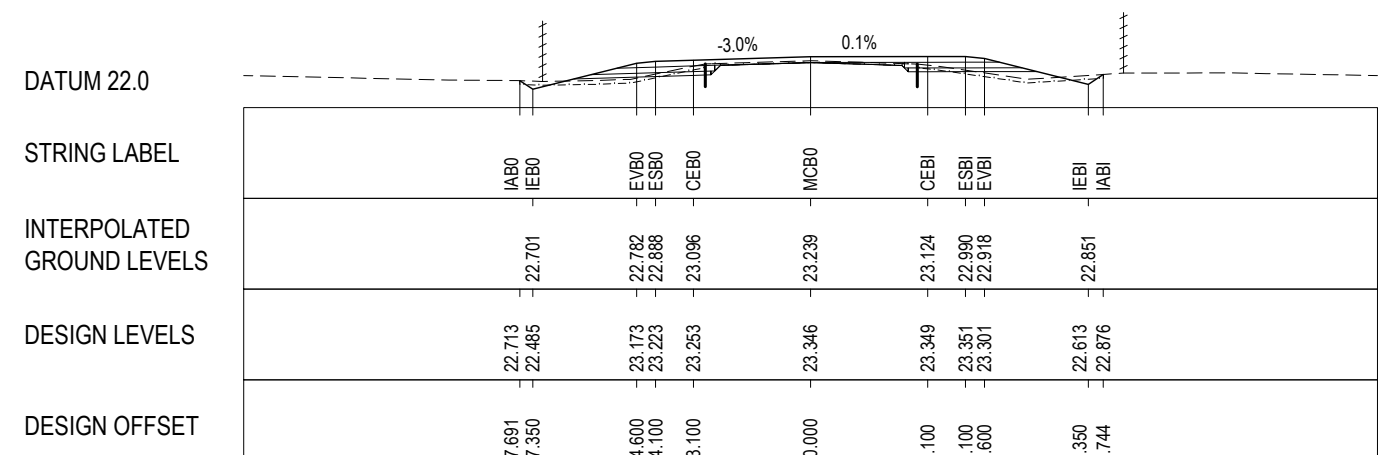
CH. 5300.000



CH. 5350.000

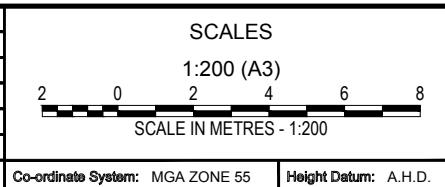


CH. 5340.000



CH. 5330.000

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No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017



DESIGNED L.ALLEN

REVIEWED R.CASSIDY

Department of State Growth

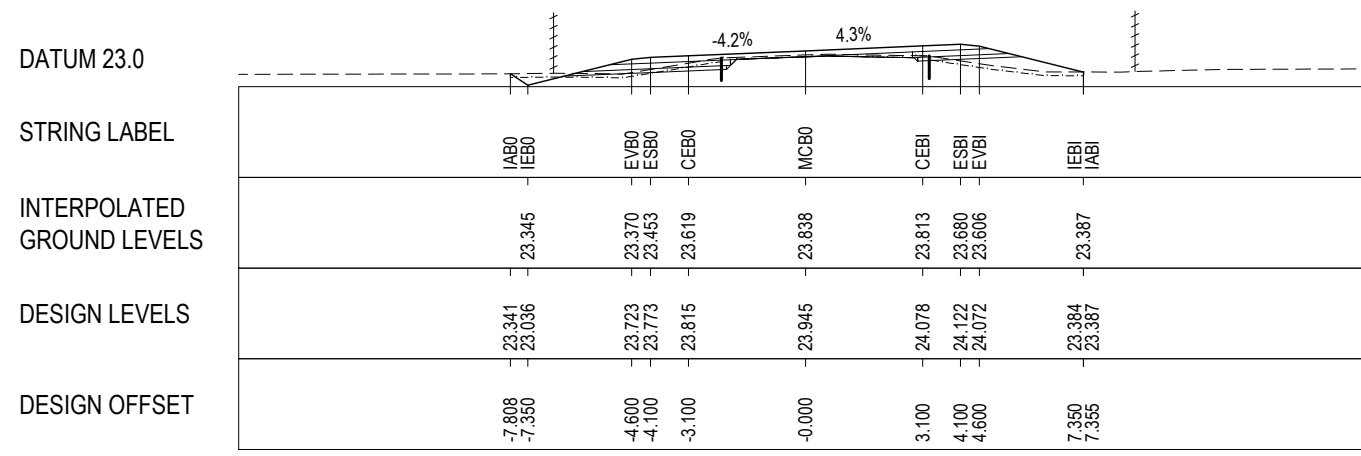
TASMAN HIGHWAY (A0113)

APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)

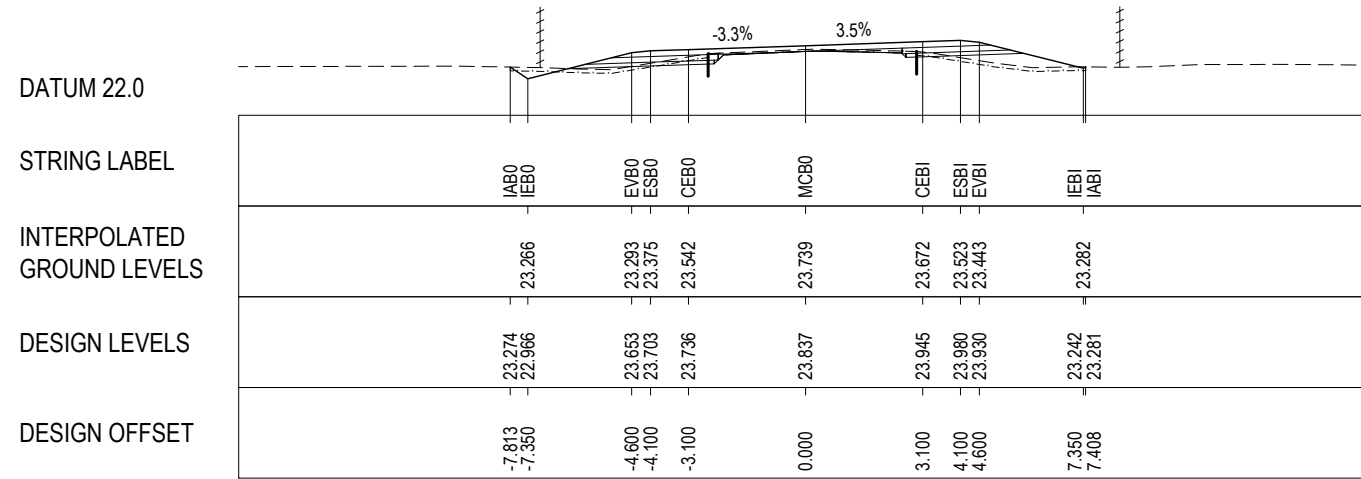
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CROSS SECTIONS (MCB0) - DRG 1 OF 37

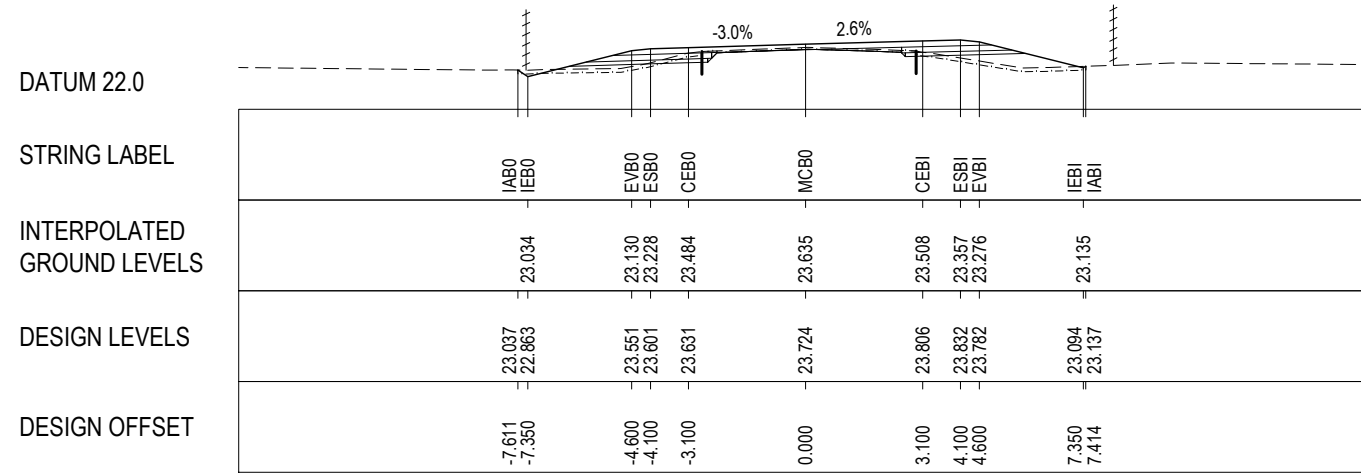
CONTRACT No.	DRAWING	PRINTED DATE	SHEET No.
2402	HB17182-C1751	09-Jun-17, 1:24 PM	1751
REGISTRATION NUMBER			REVISION A
A0113.021			



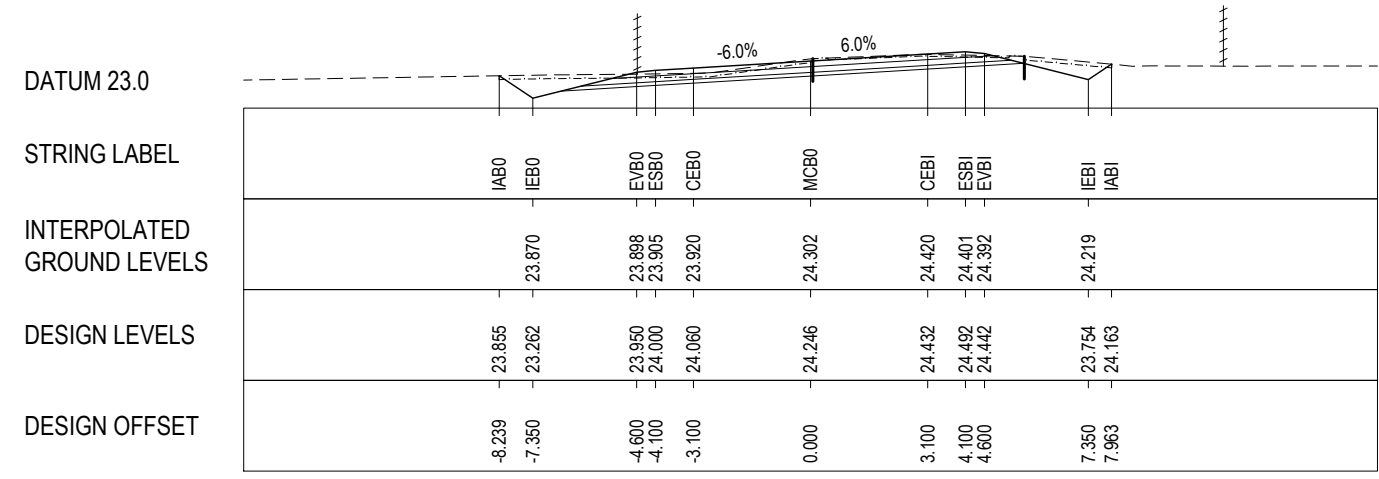
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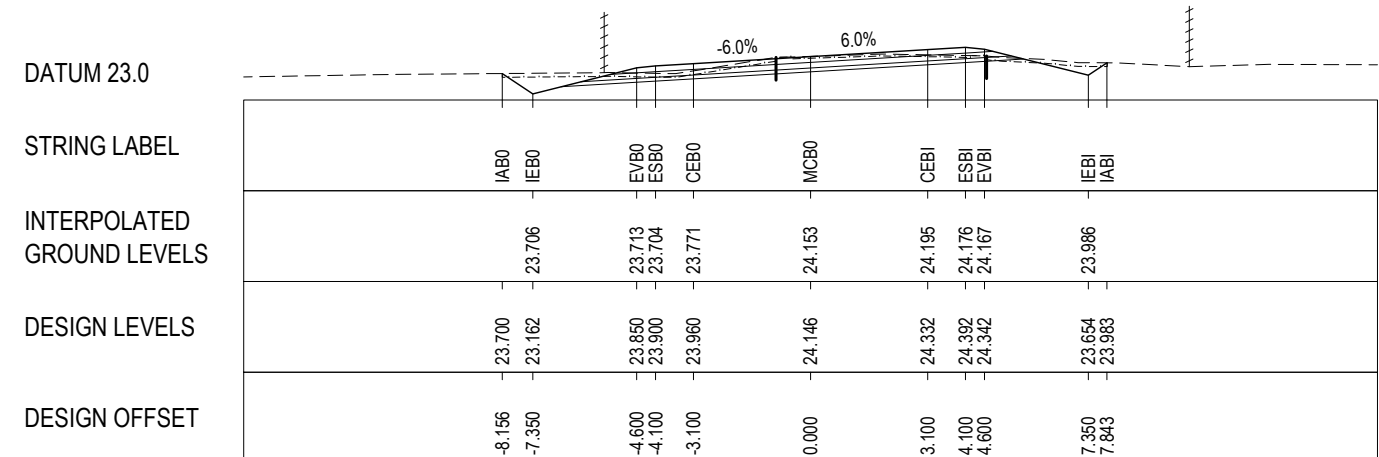
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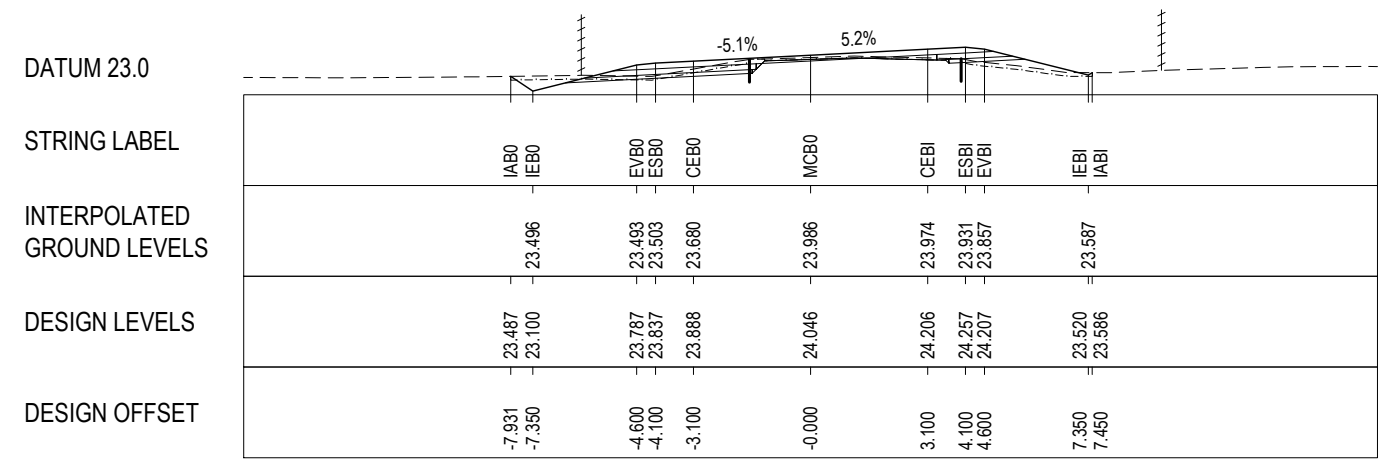
CH. 5360.000



CH. 5410.000

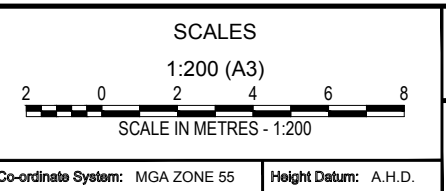


CH. 5400.000



CH. 5390.000

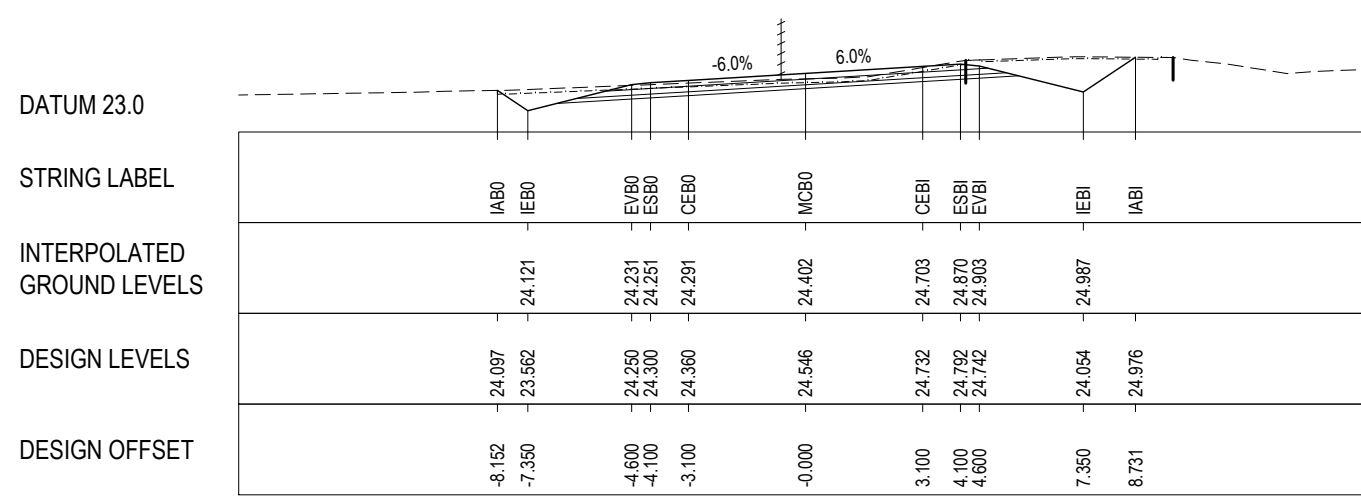
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No.	Amendment Description	Initials	Date
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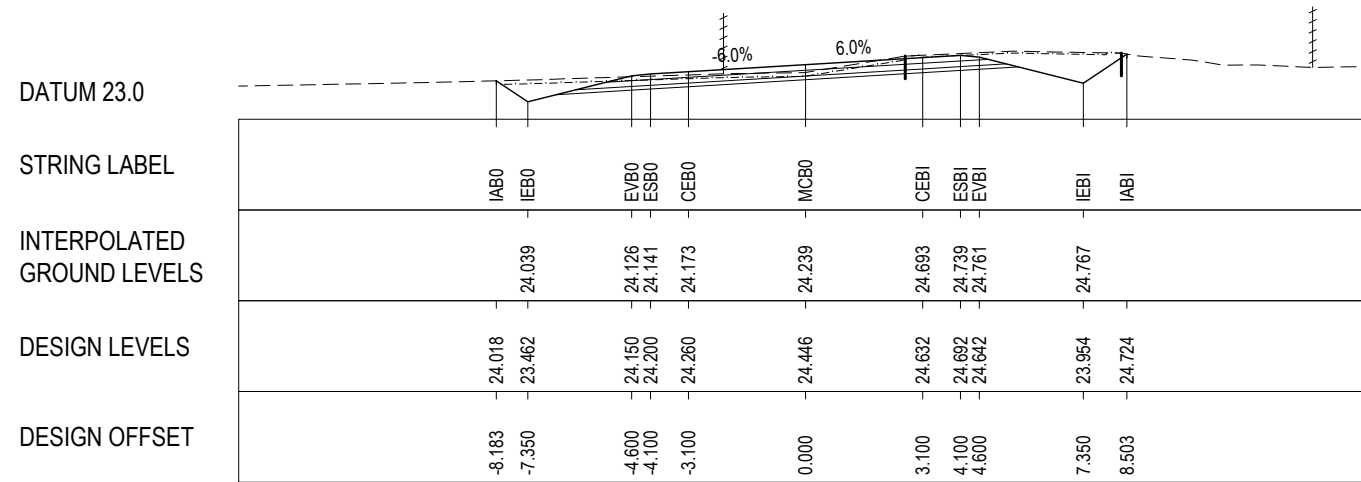
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 2 OF 37

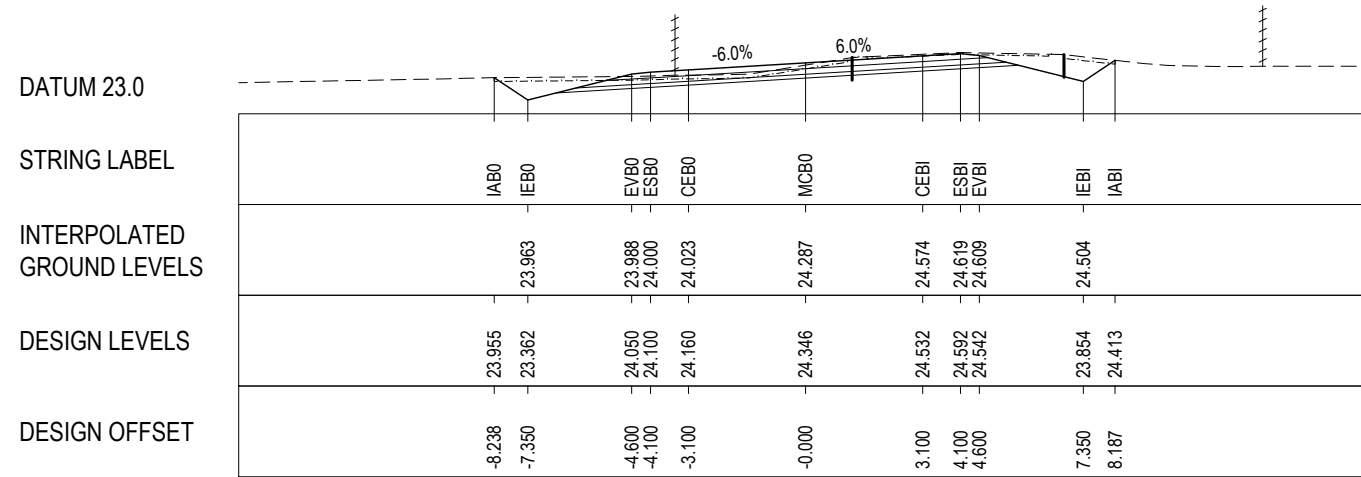
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REGISTRATION NUMBER A0113.021			REVISION A



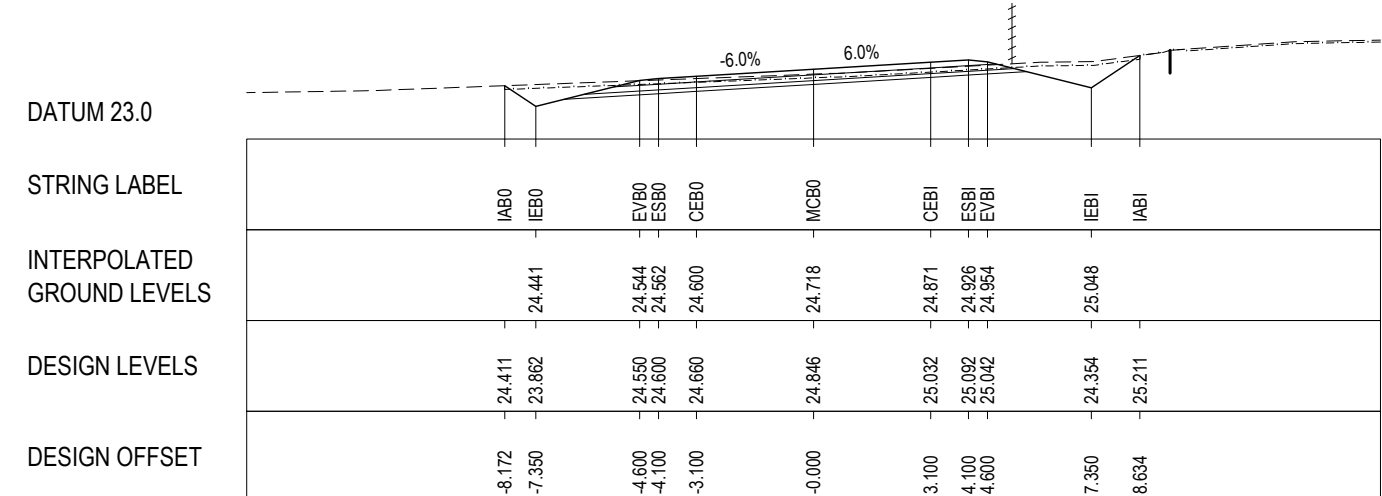
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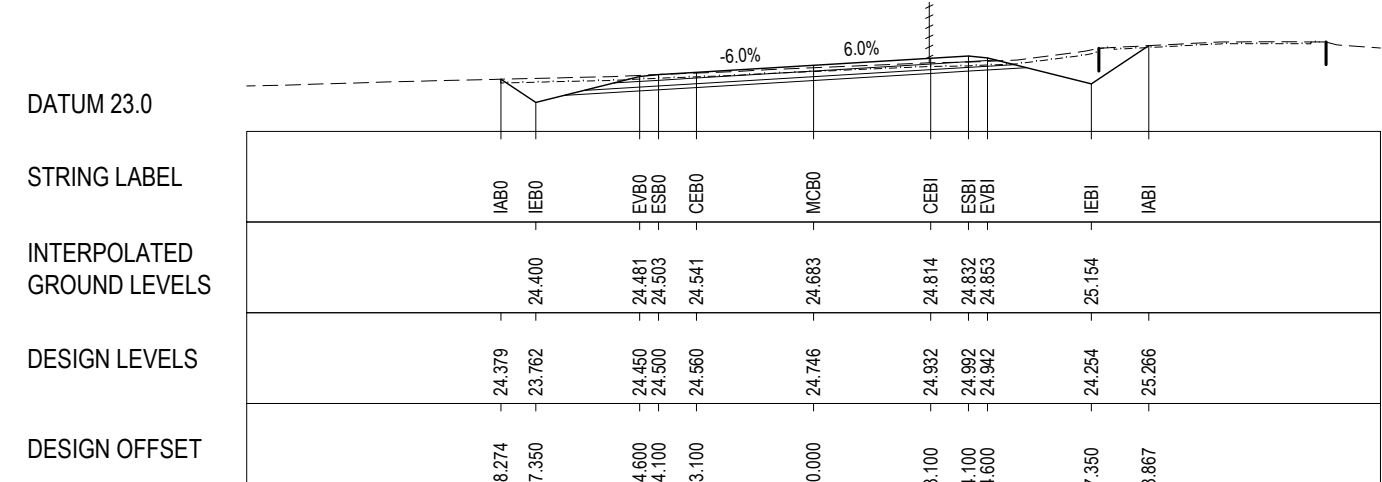
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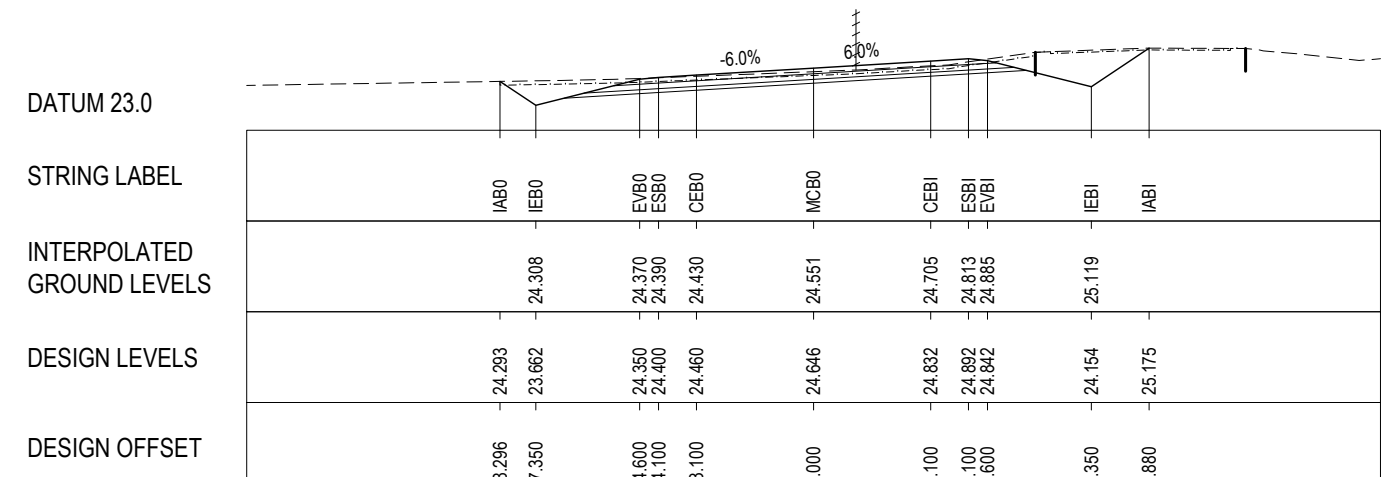
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CH. 5470.000

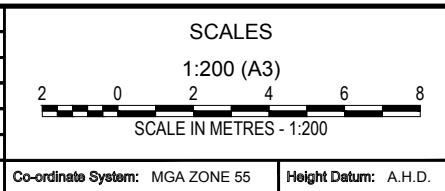


CH. 5460.000



CH. 5450.000

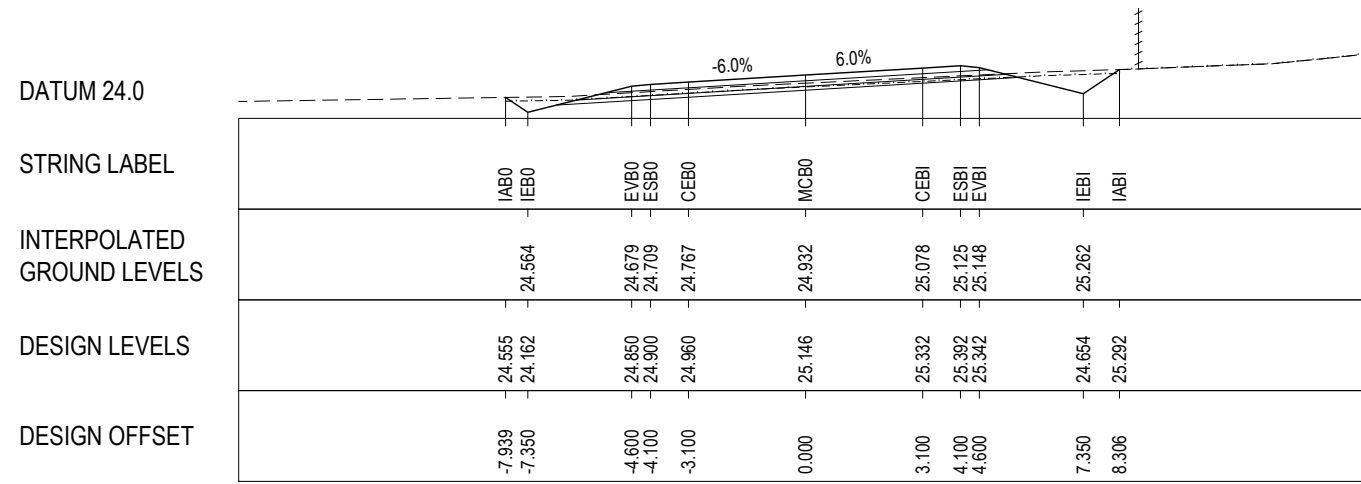
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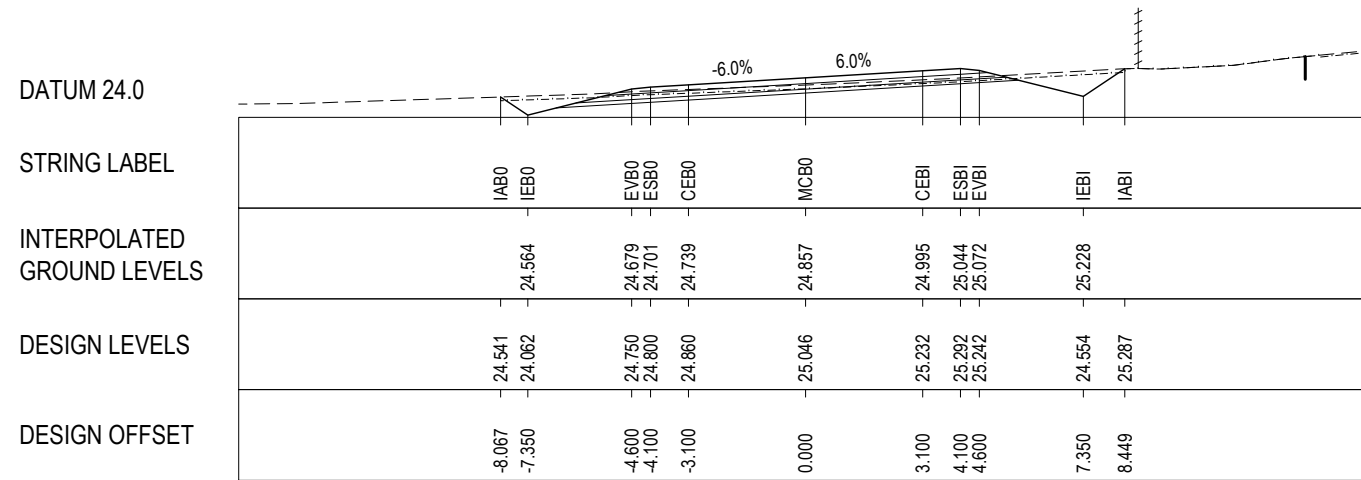
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 3 OF 37

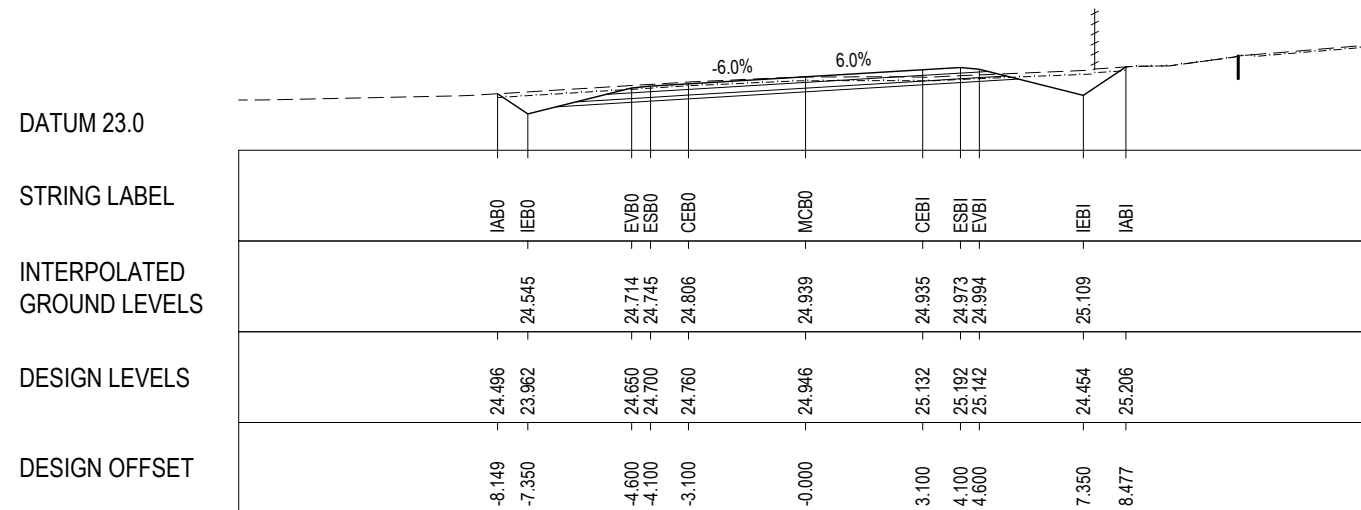
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REGISTRATION NUMBER A0113.021			REVISION A



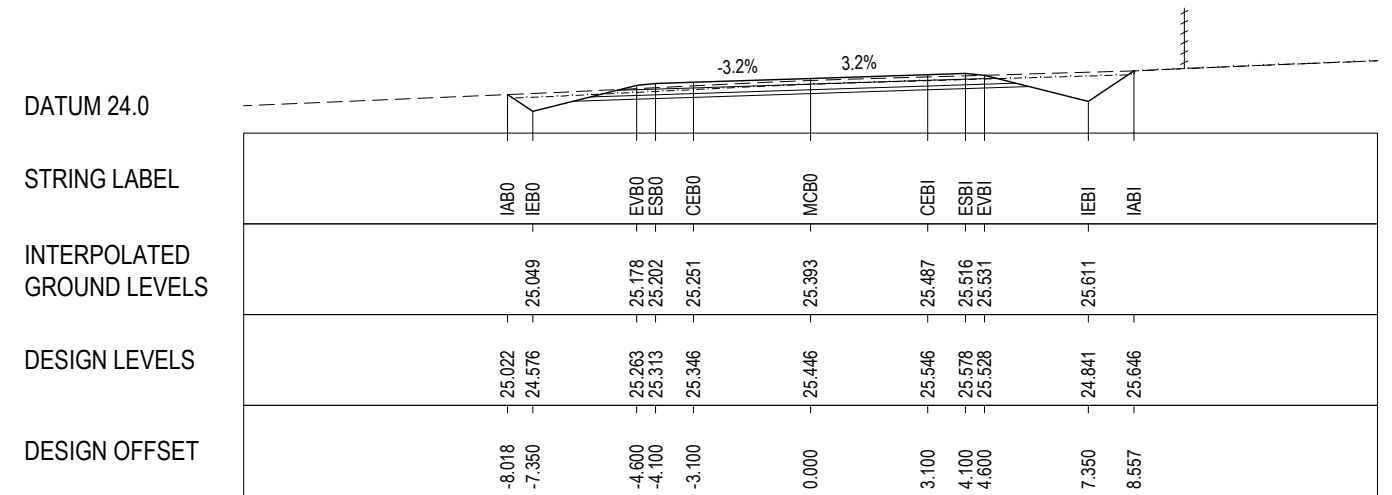
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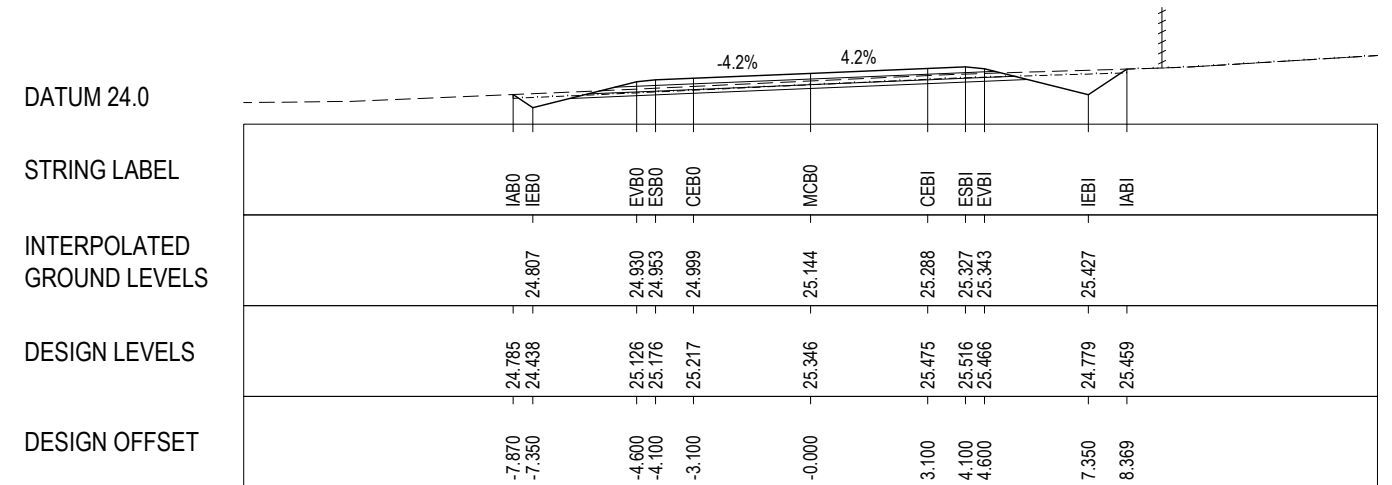
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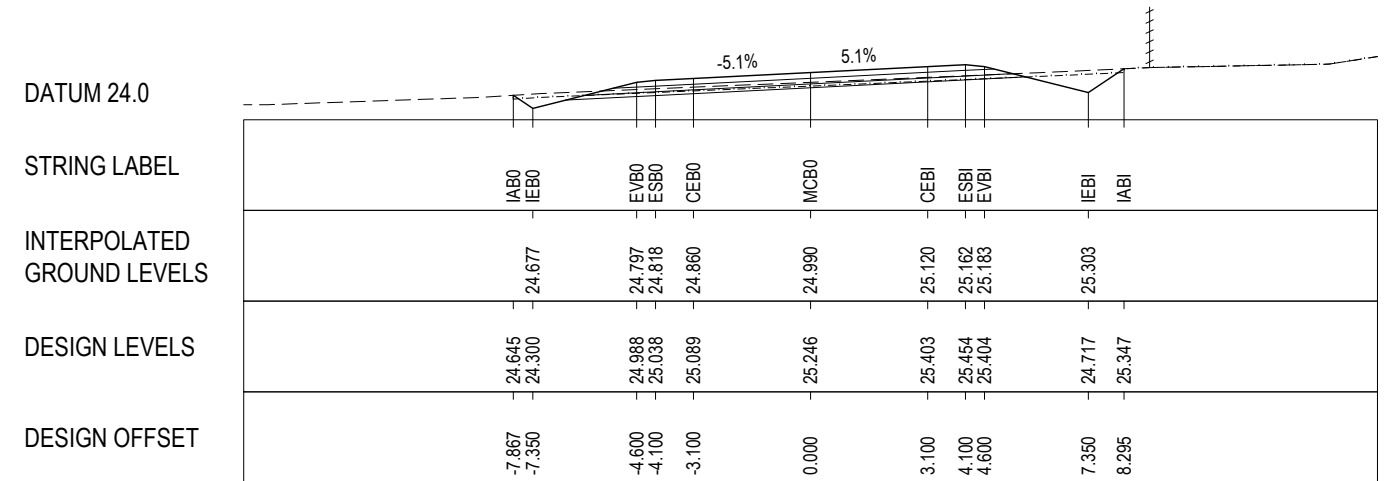
CH. 5480.000



CH. 5530.000



CH. 5520.000



CH. 5510.000

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No.	Amendment Description	Initials	Date
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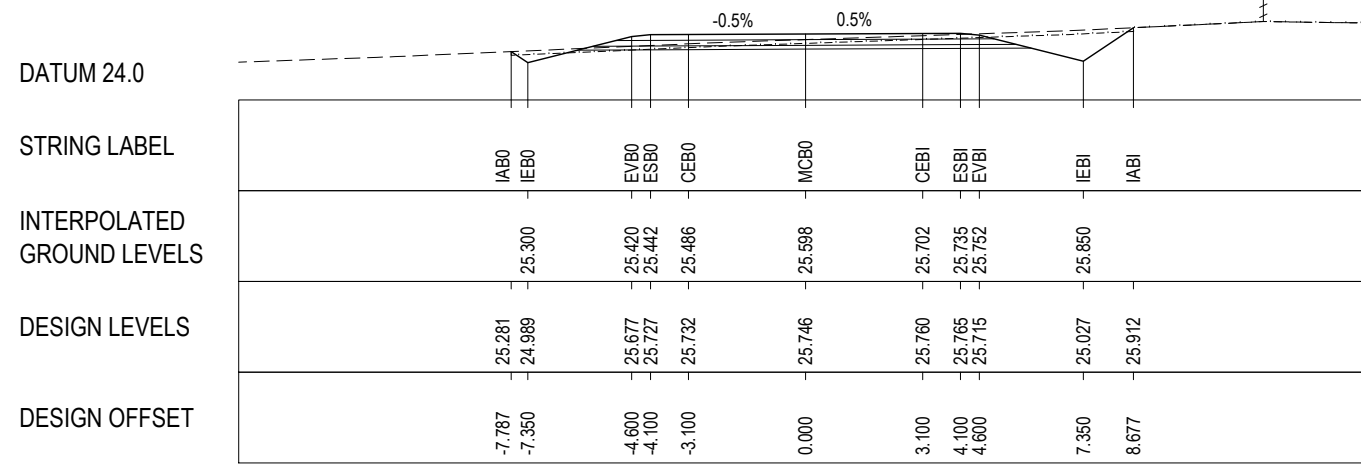
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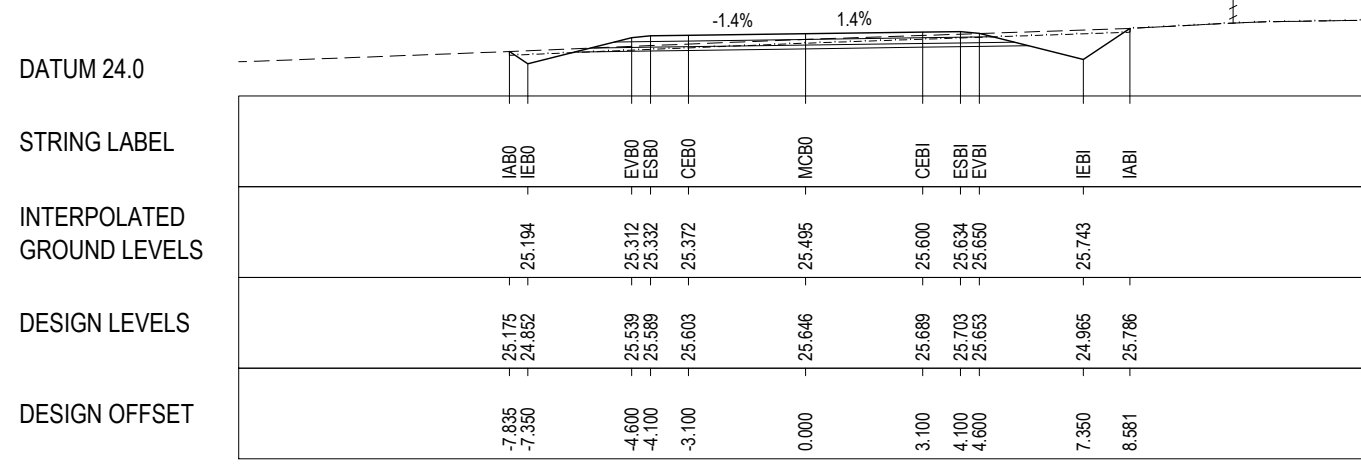
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 4 OF 37

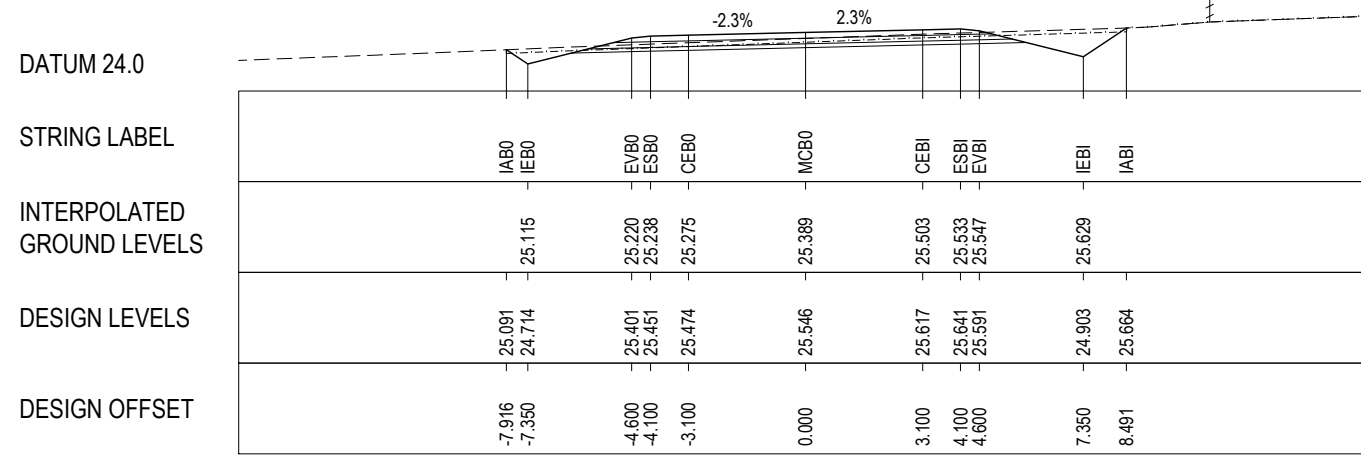
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REGISTRATION NUMBER A0113.021			REVISION A



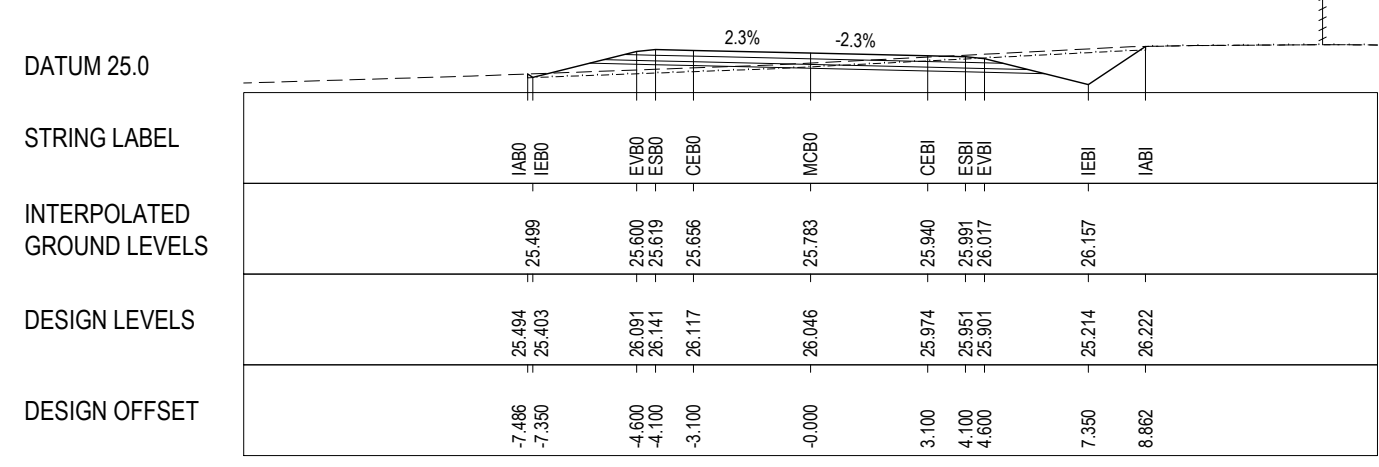
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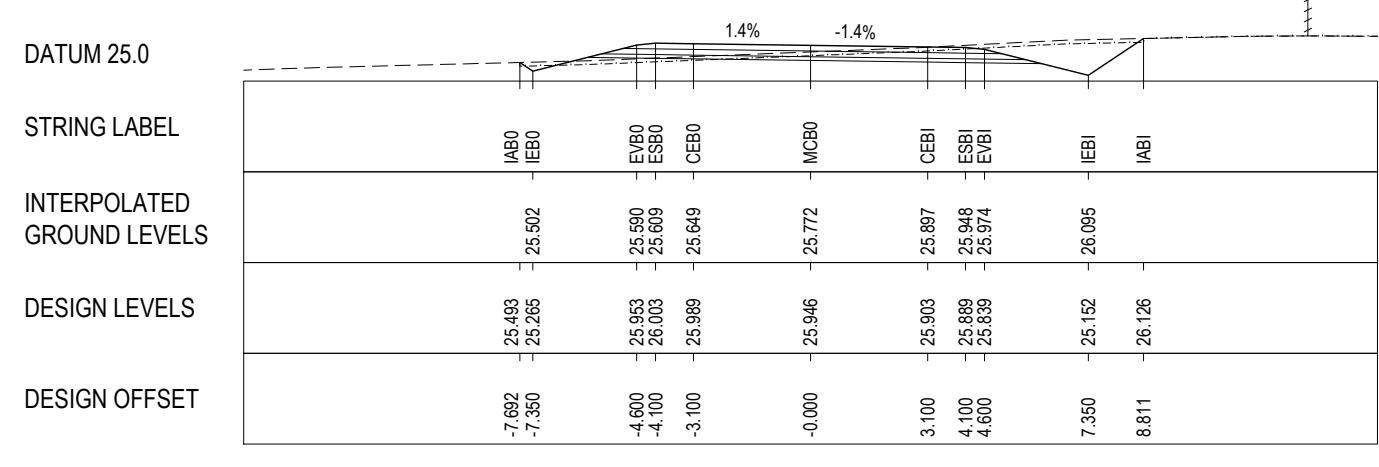
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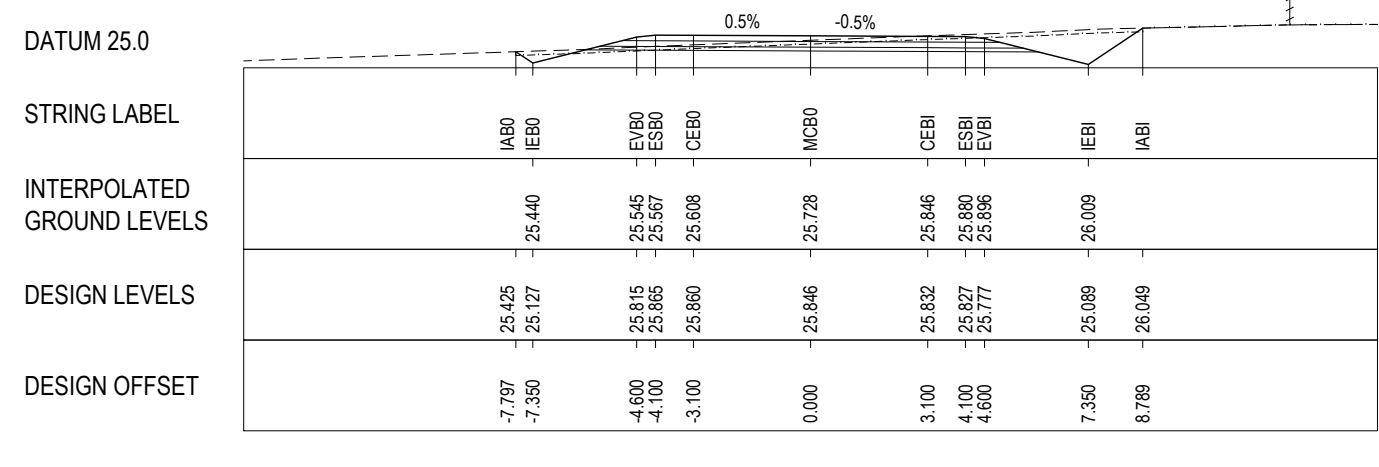
CH. 5540.000



CH. 5590.000



CH. 5580.000



CH. 5570.000

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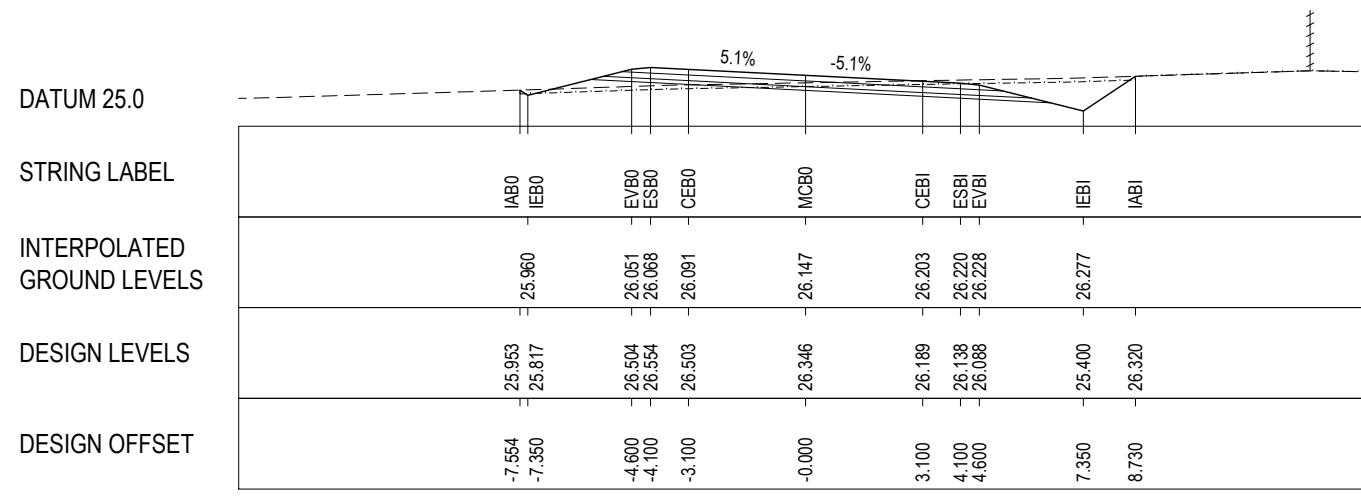
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SCALE IN METRES - 1:200

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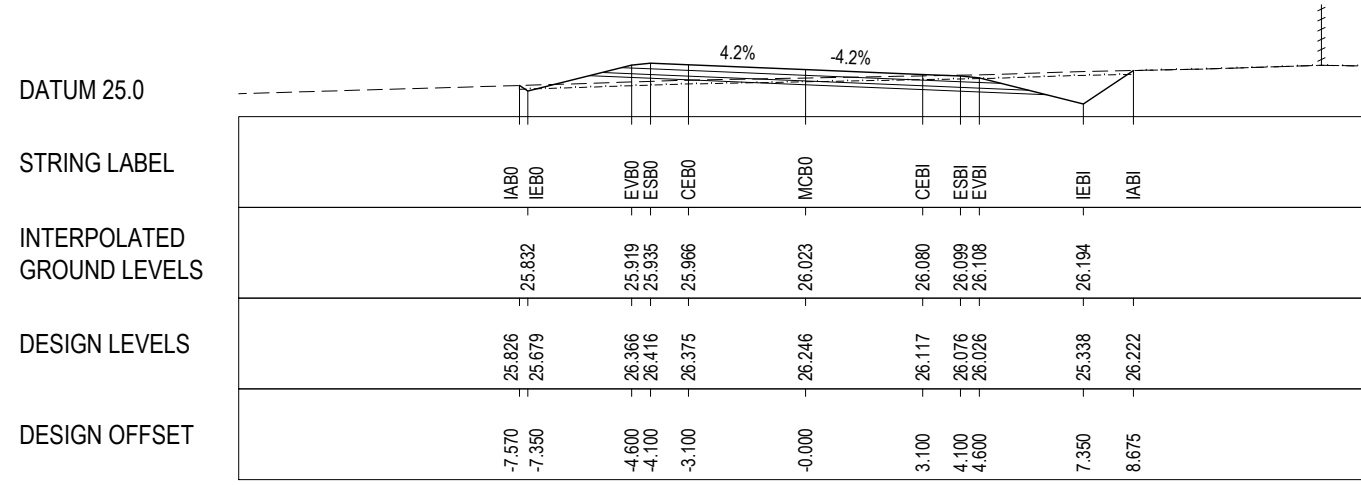
DESIGNED L.ALLEN
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Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 5 OF 37

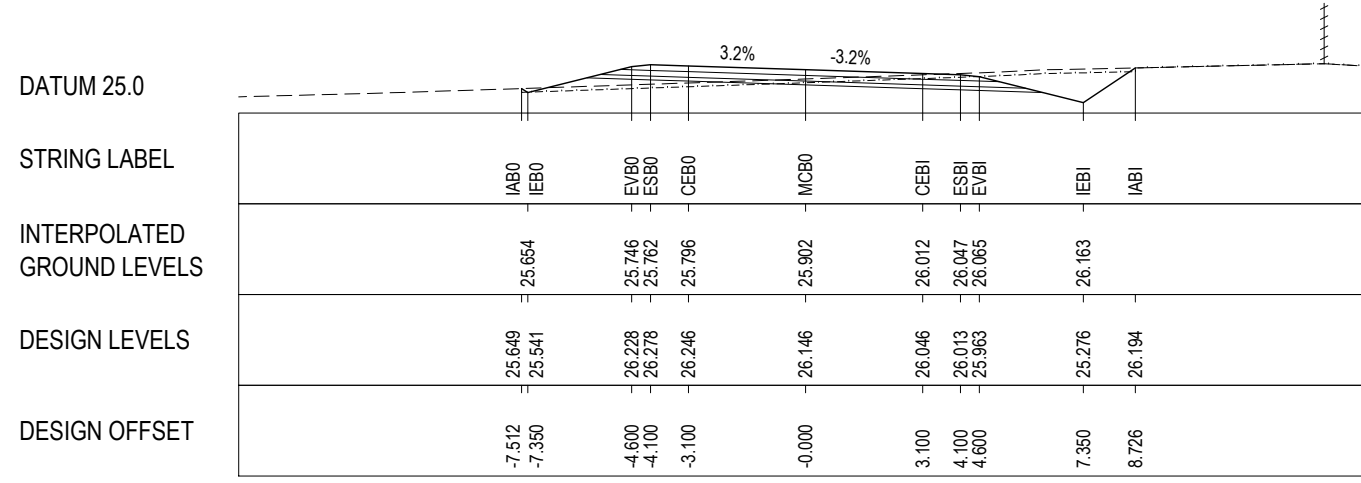
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REGISTRATION NUMBER A0113.021			REVISION A



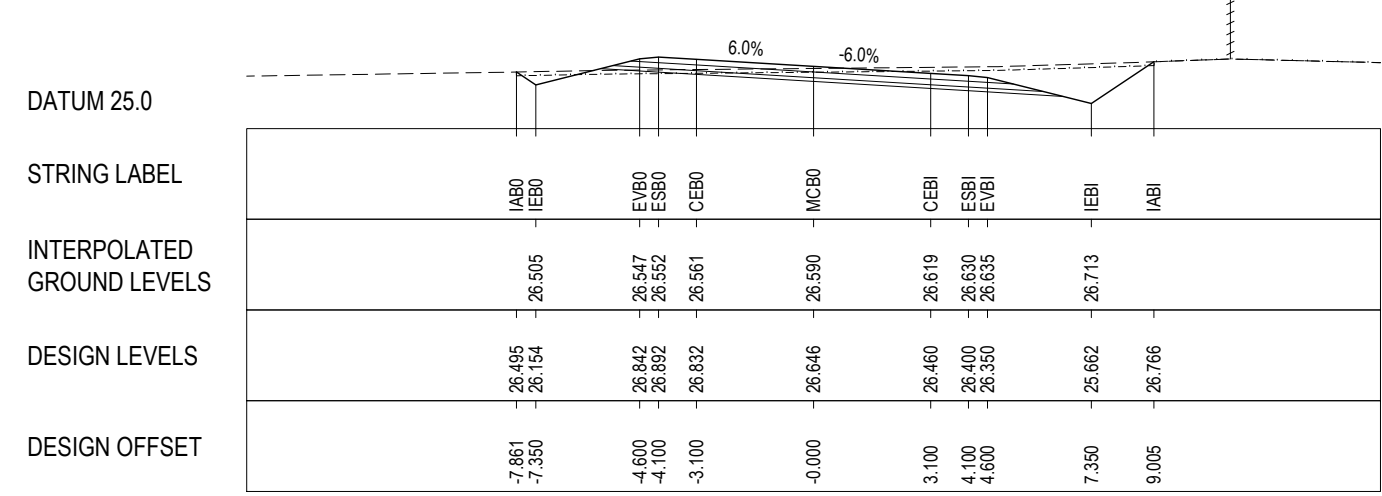
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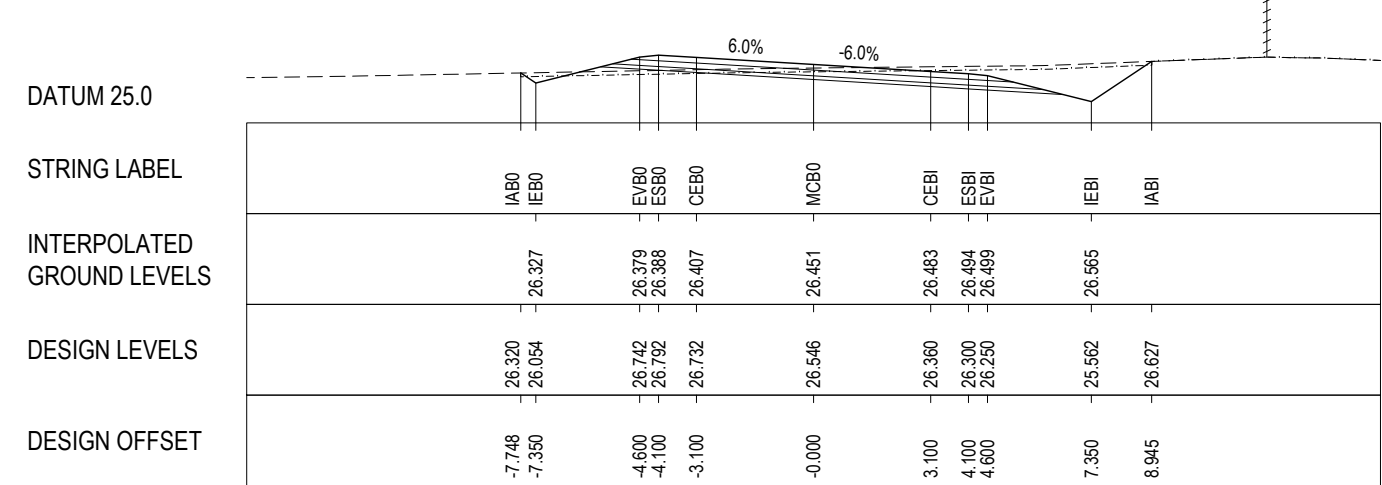
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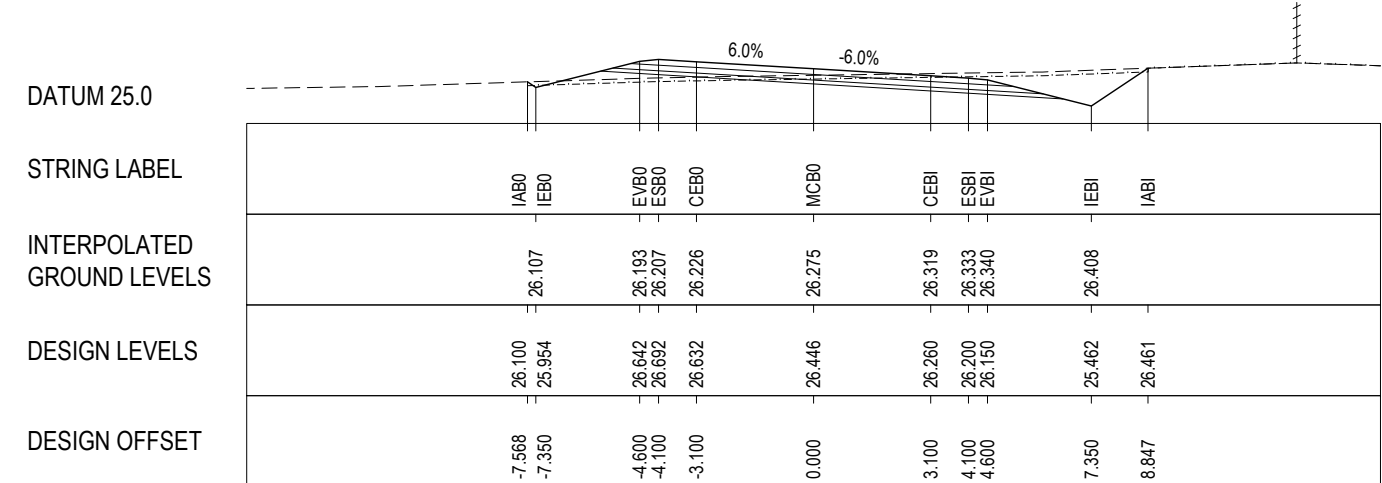
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CH. 5650.000

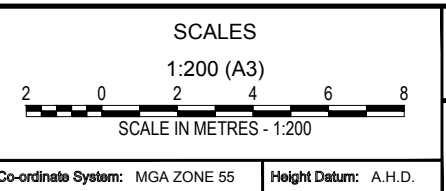


CH. 5640.000



CH. 5630.000

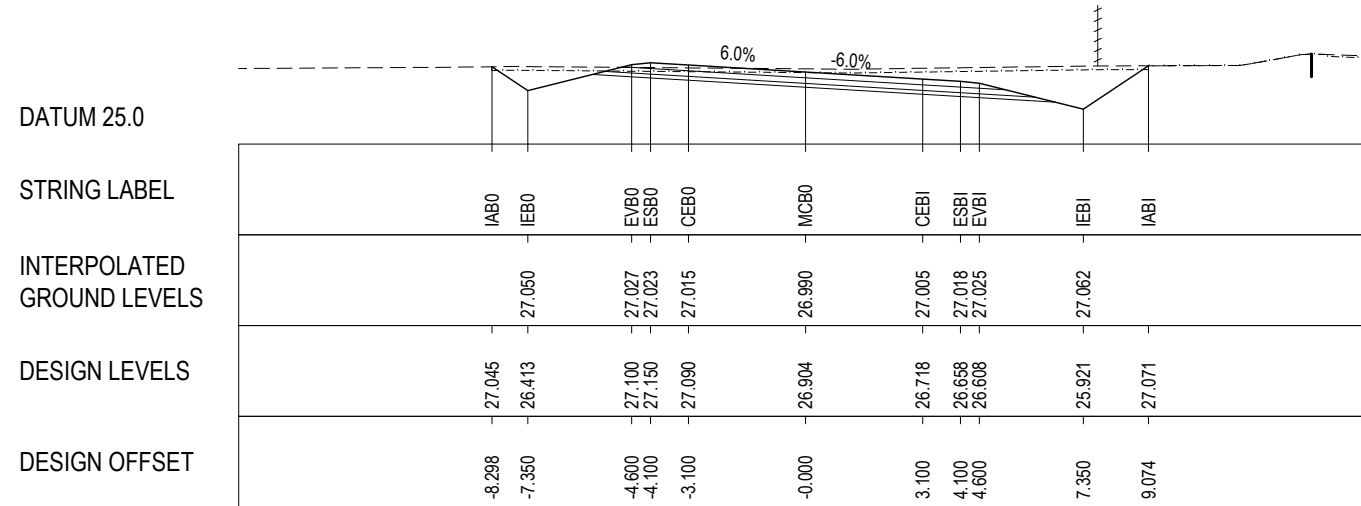
A	PRELIMINARY DESIGN	R.C	09/06/2017
No.	Amendment Description	Initials	Date
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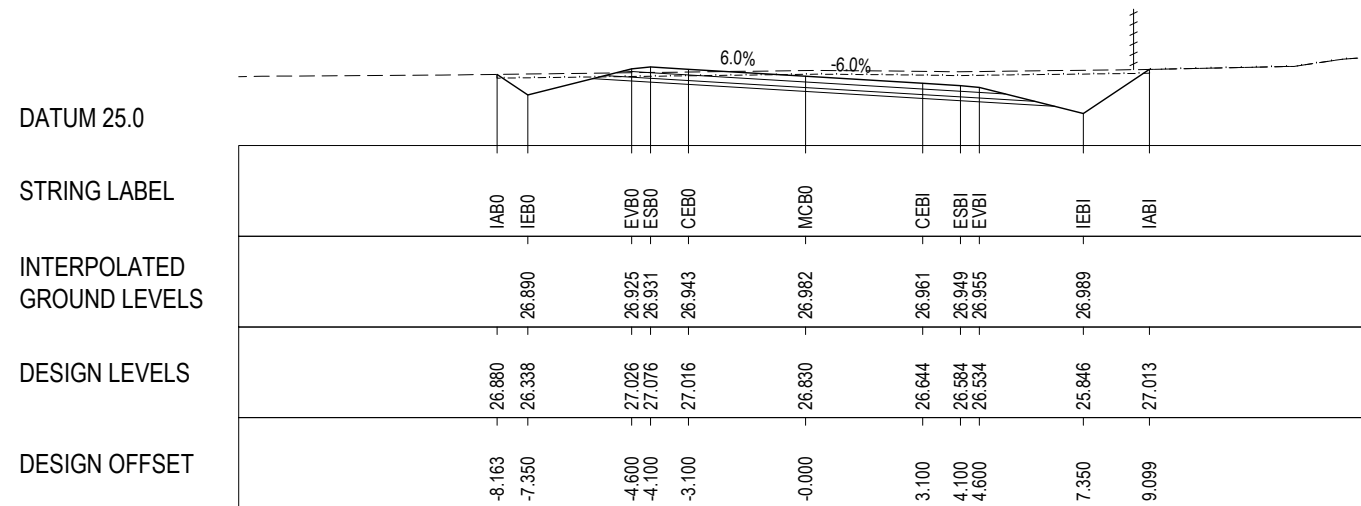
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 6 OF 37

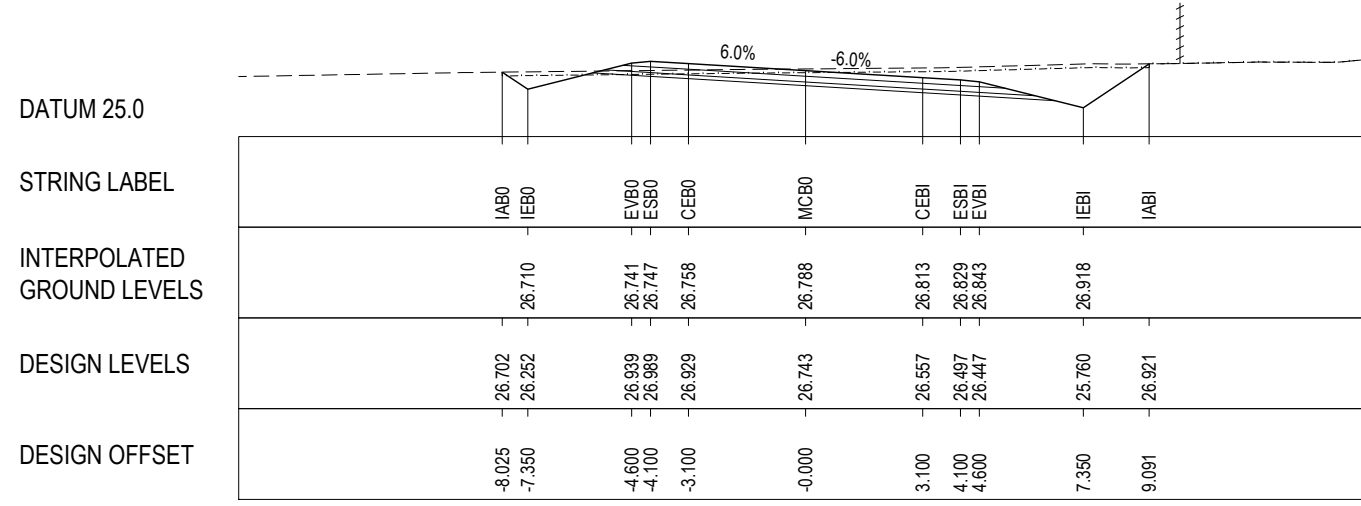
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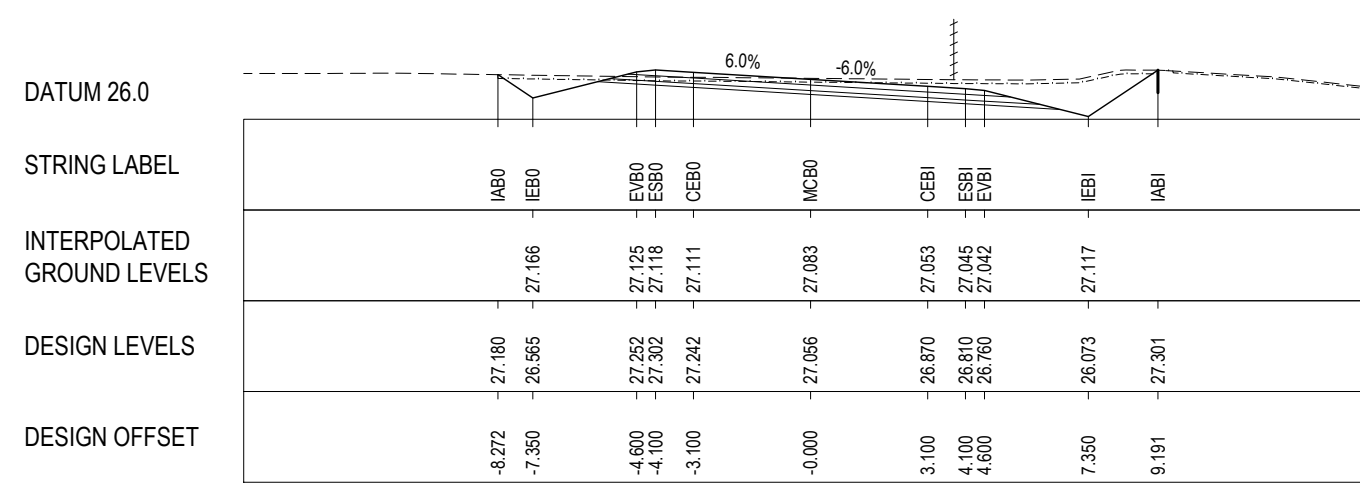
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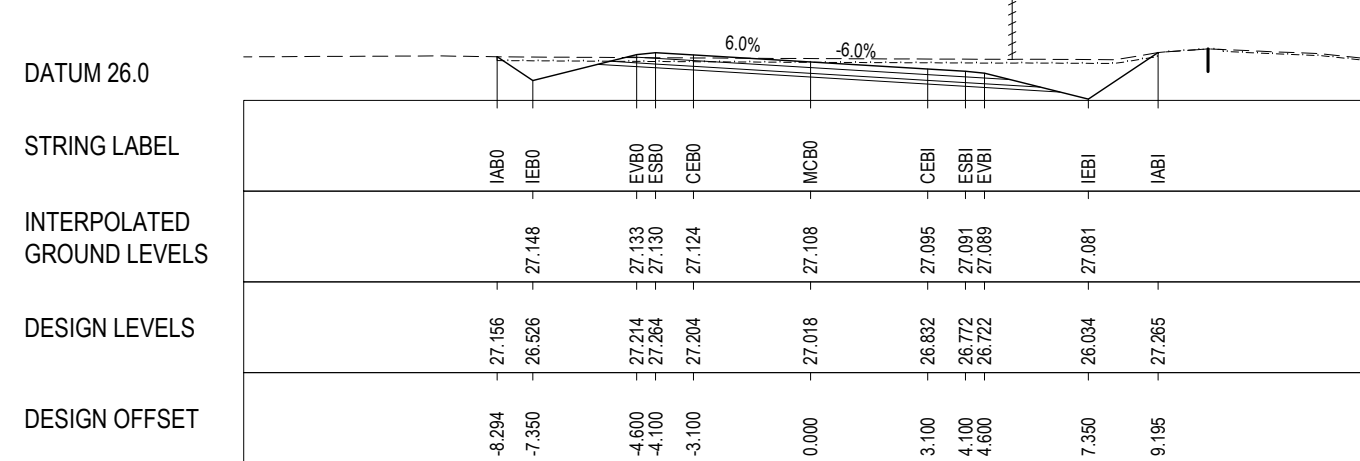
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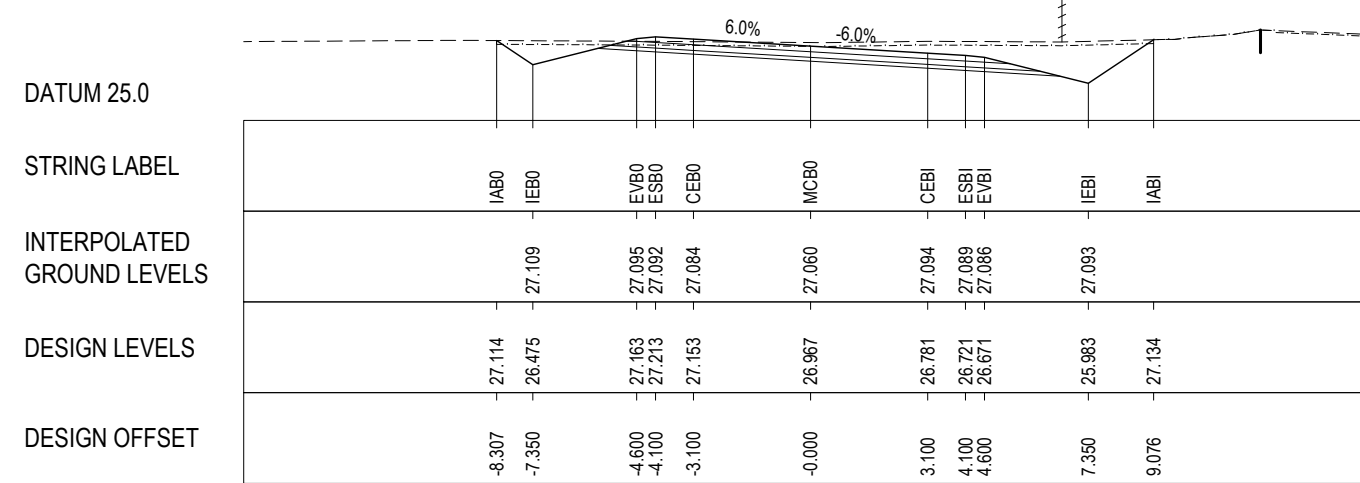
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CH. 5710.000

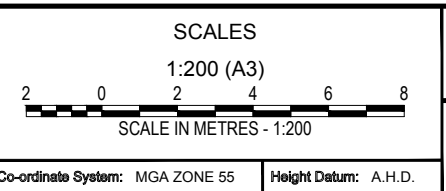


CH. 5700.000



CH. 5690.000

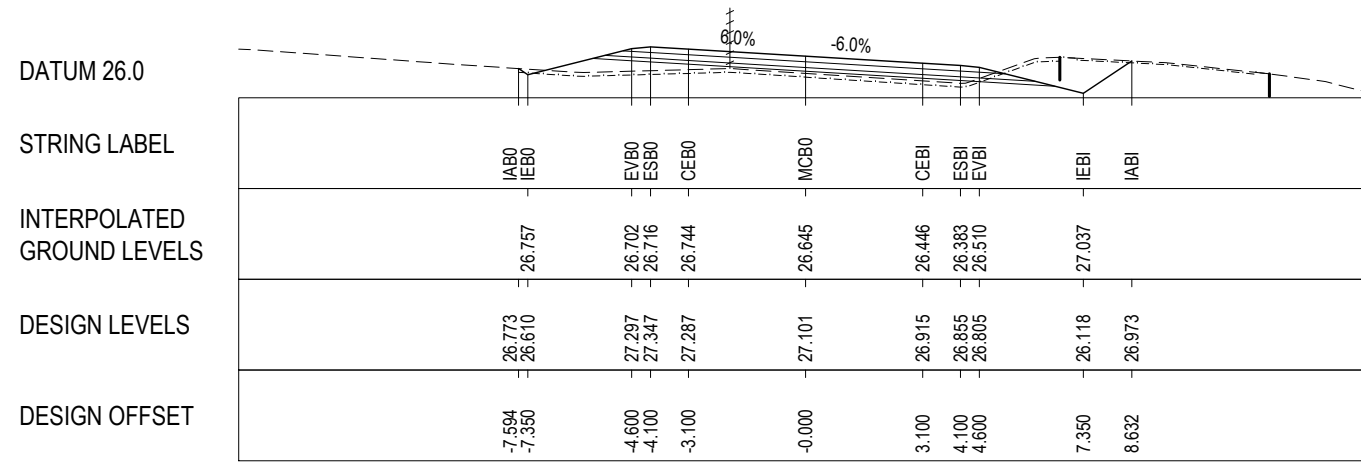
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No.	Amendment Description	Initials	Date
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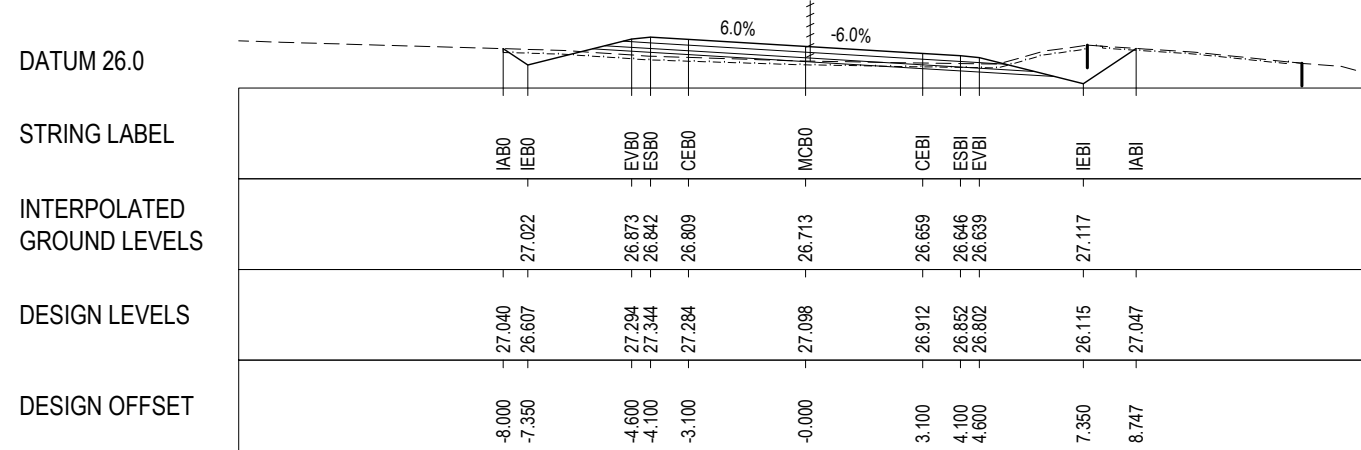
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 7 OF 37

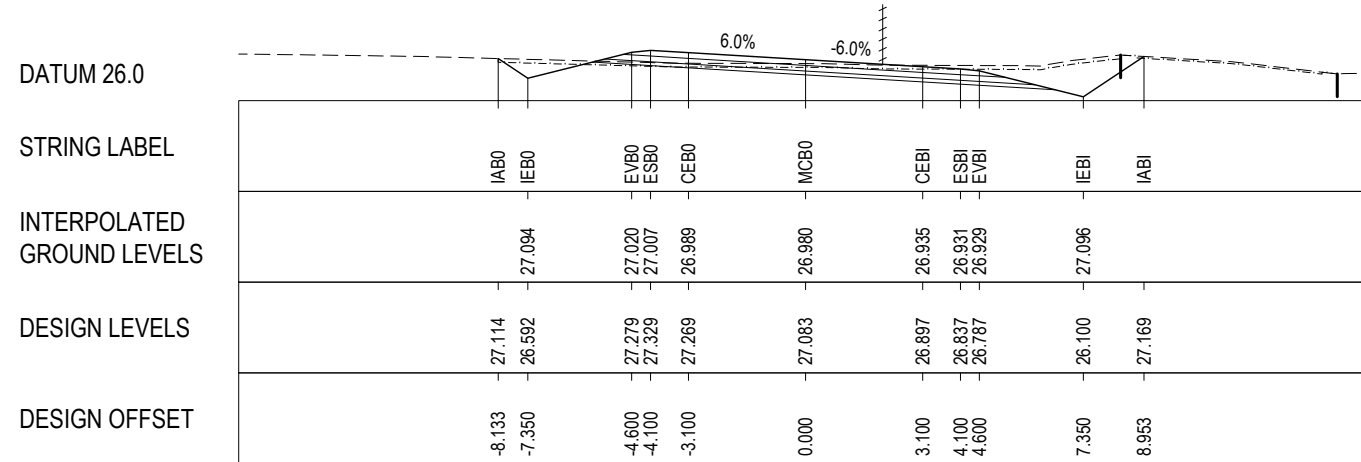
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REGISTRATION NUMBER A0113.021			REVISION A



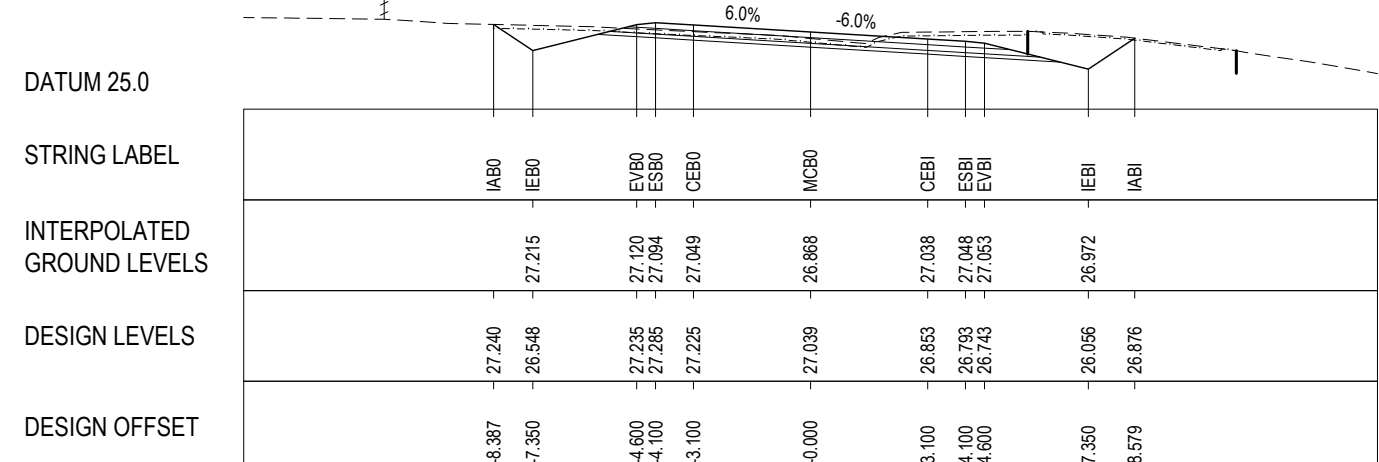
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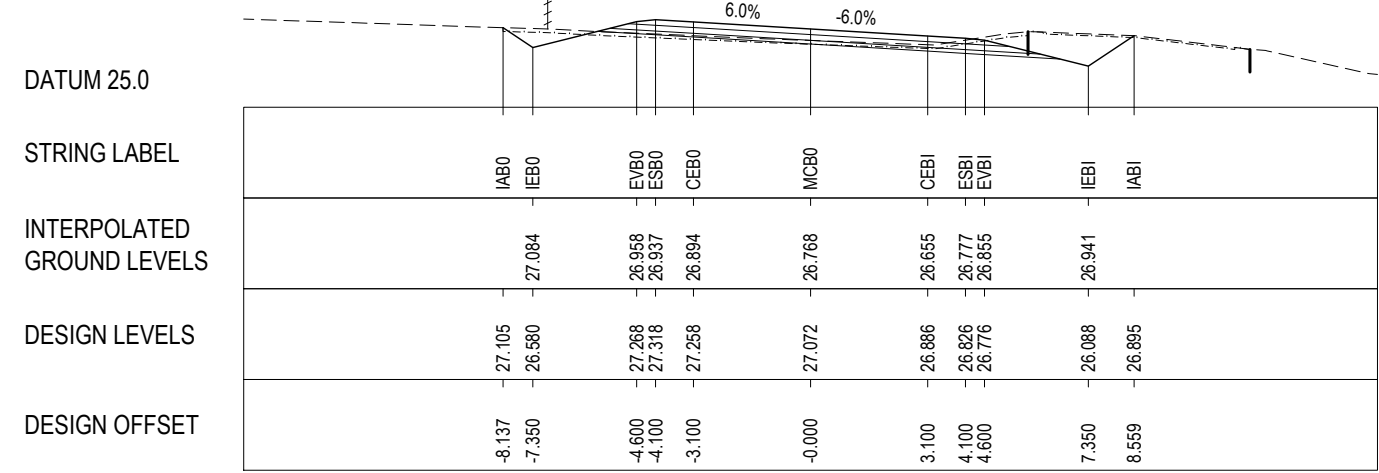
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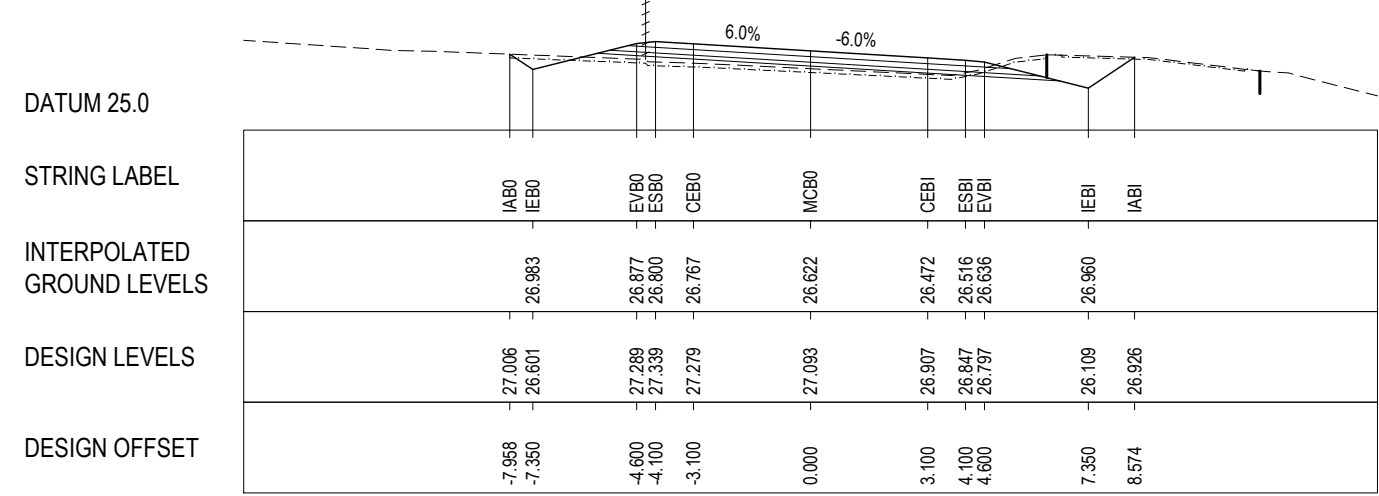
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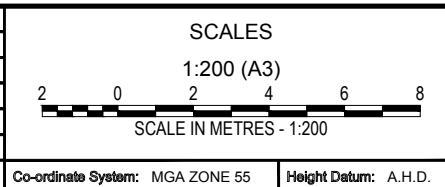


CH. 5760.000



CH. 5750.000

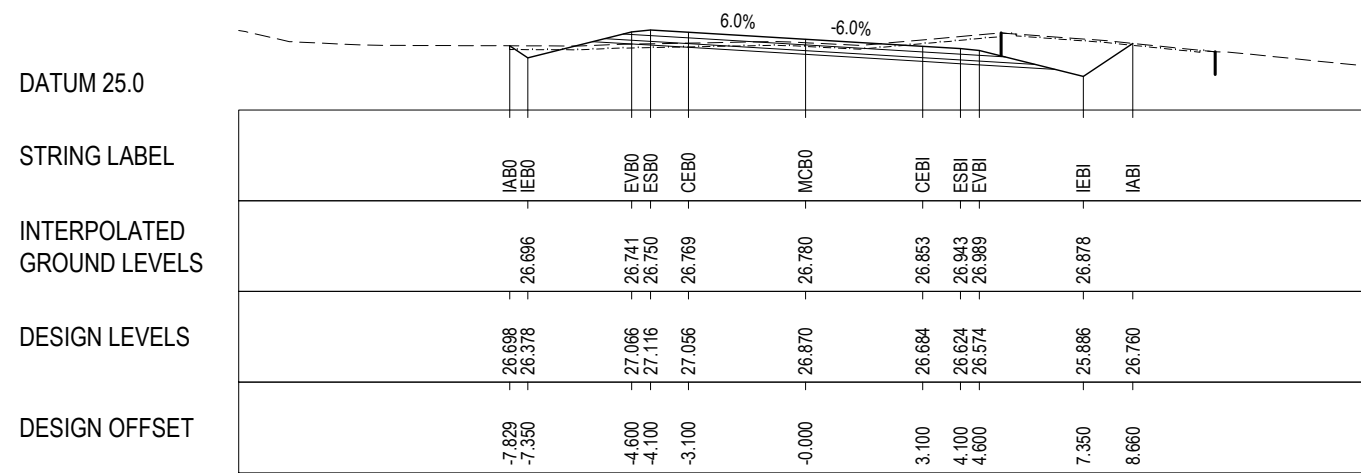
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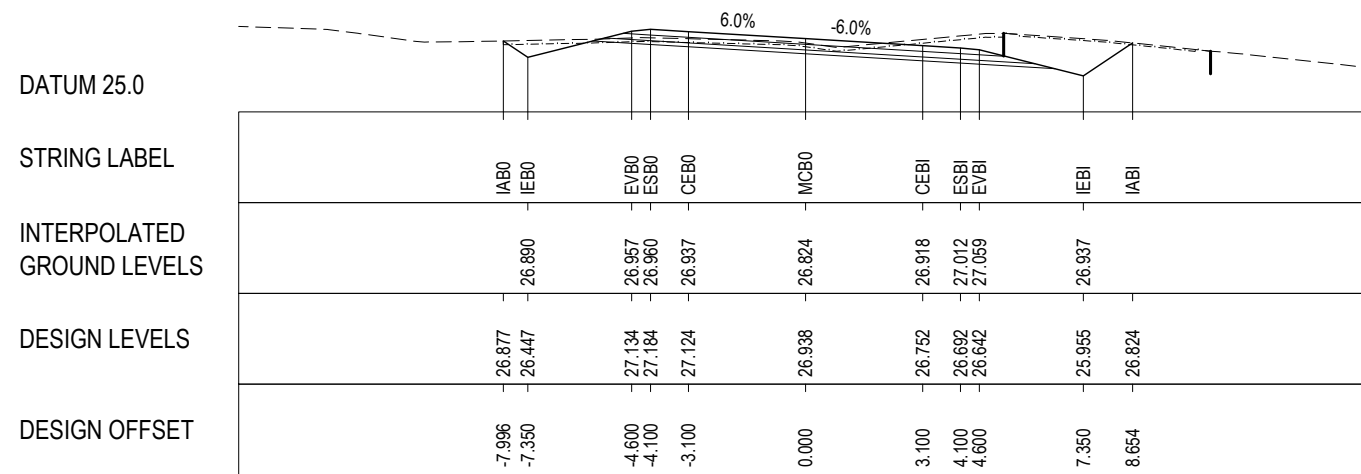
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 8 OF 37

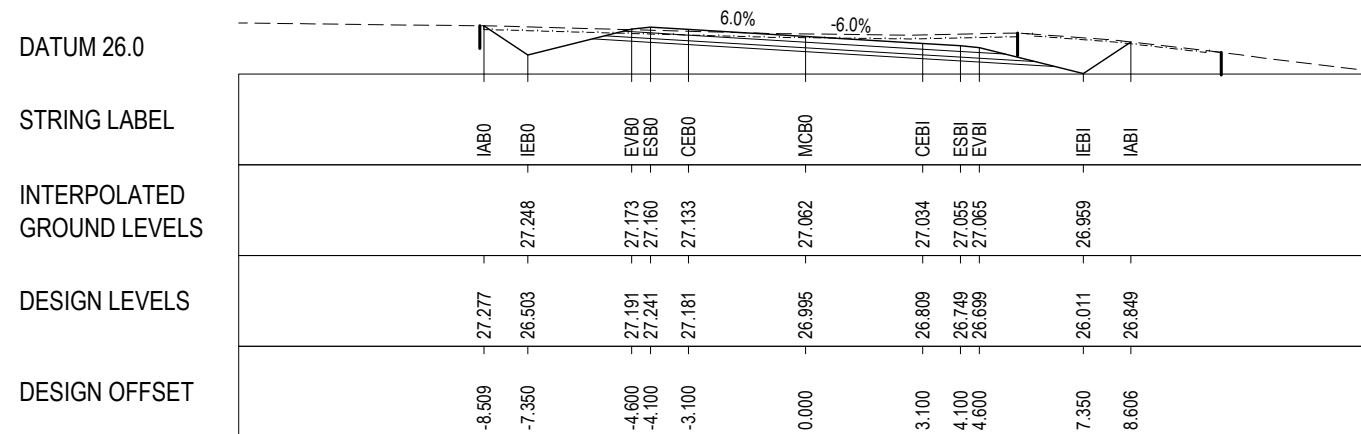
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REGISTRATION NUMBER A0113.021			REVISION A



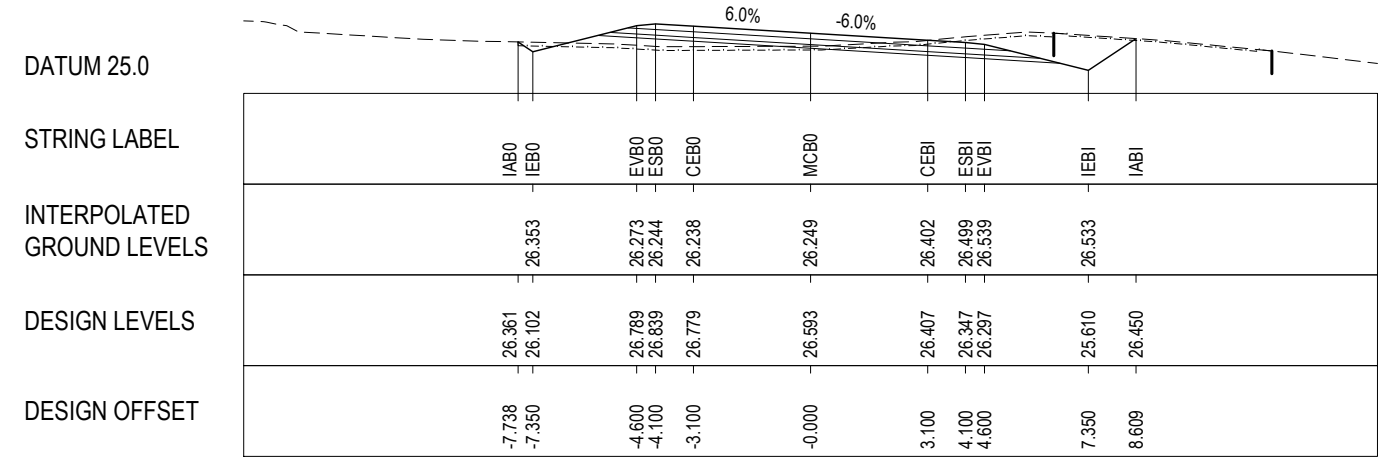
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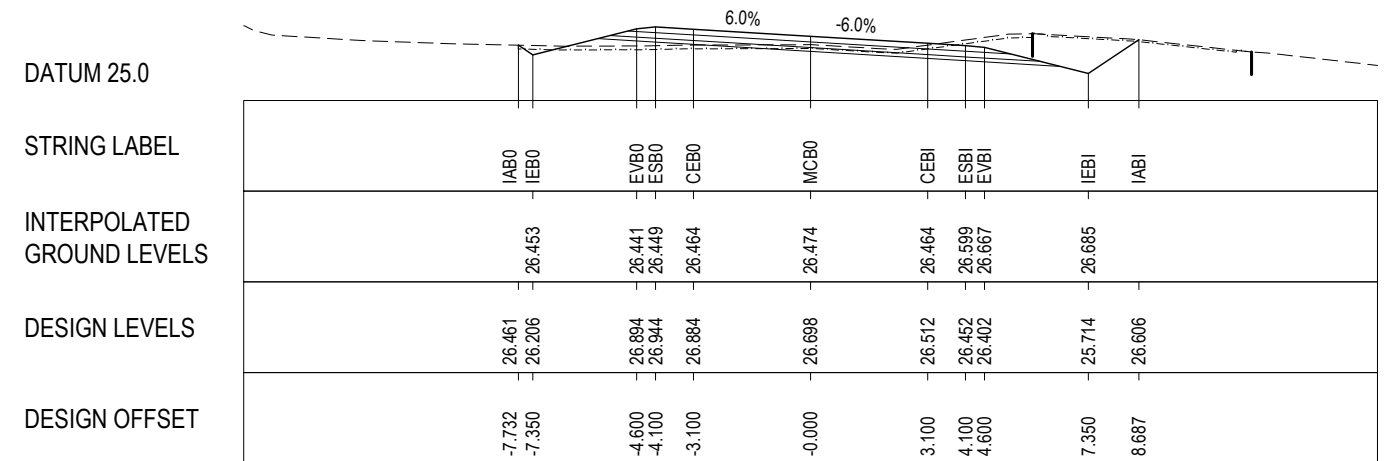
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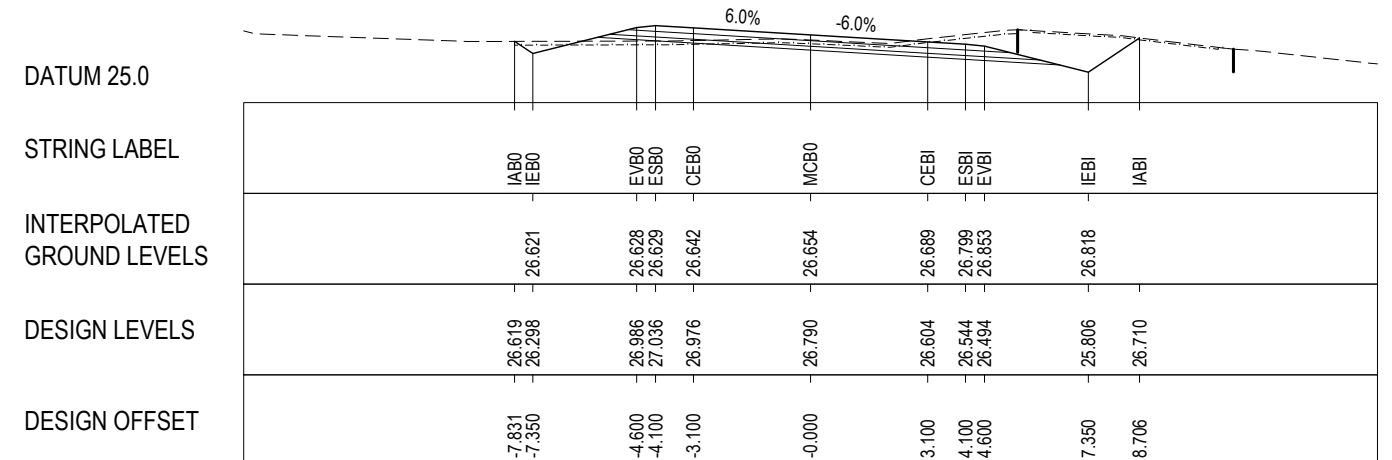
CH. 5780.000



CH. 5830.000

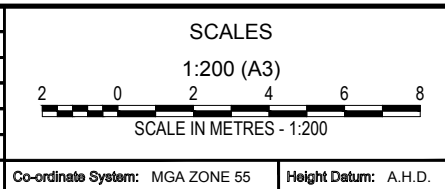


CH. 5820.000



CH. 5810.000

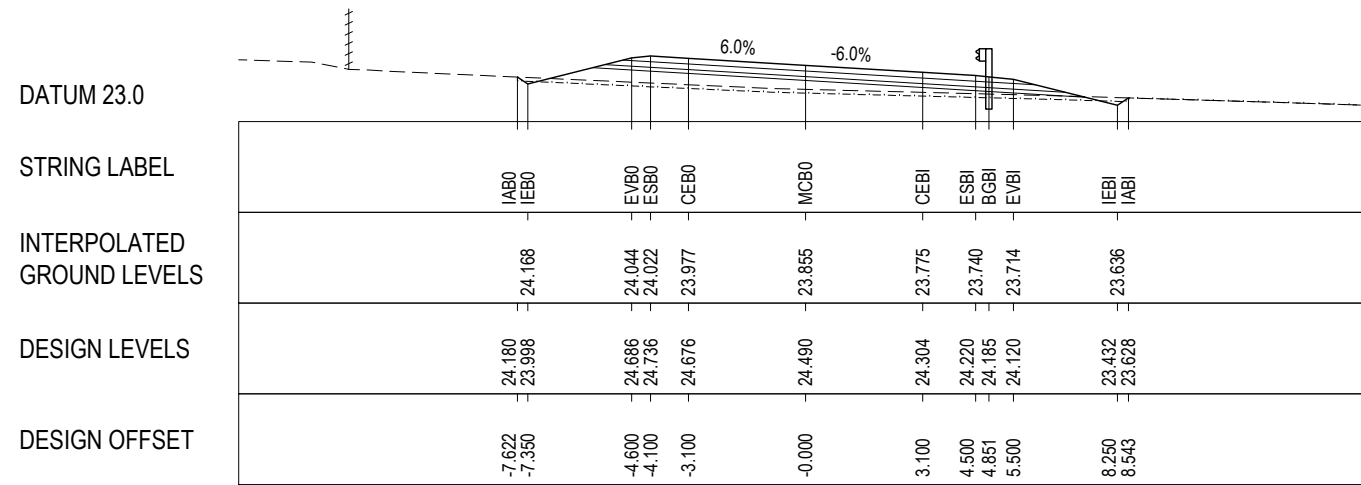
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No.	Amendment Description	Initials	Date
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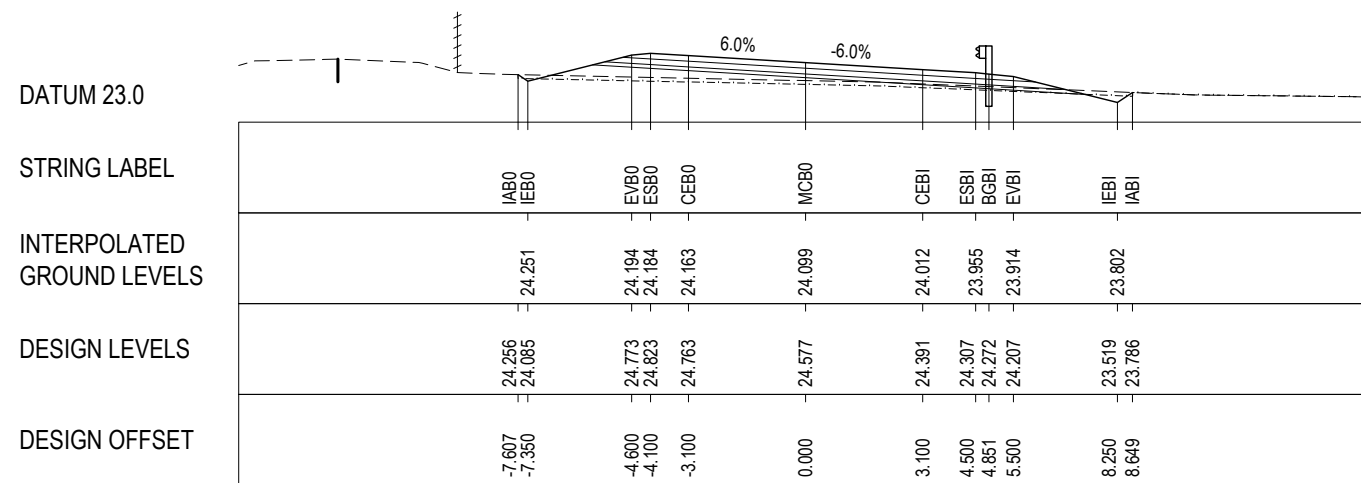
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 9 OF 37

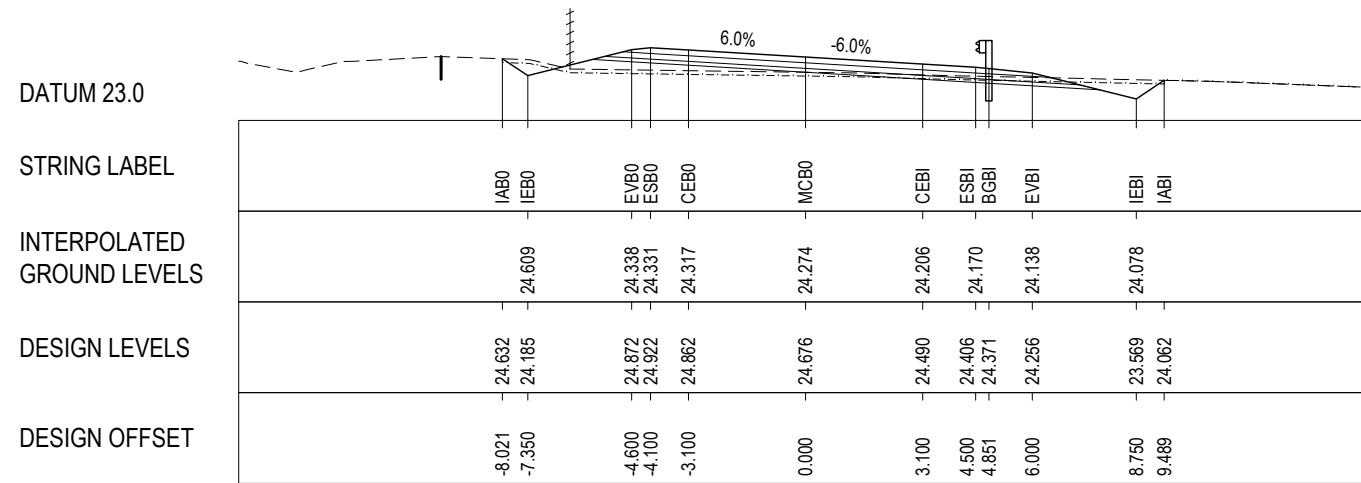
CONTRACT No. 2402	DRAWING HB17182-C1759	PRINTED DATE 09-Jun-17, 1:25 PM	SHEET No. 1759
REGISTRATION NUMBER A0113.021			REVISION A



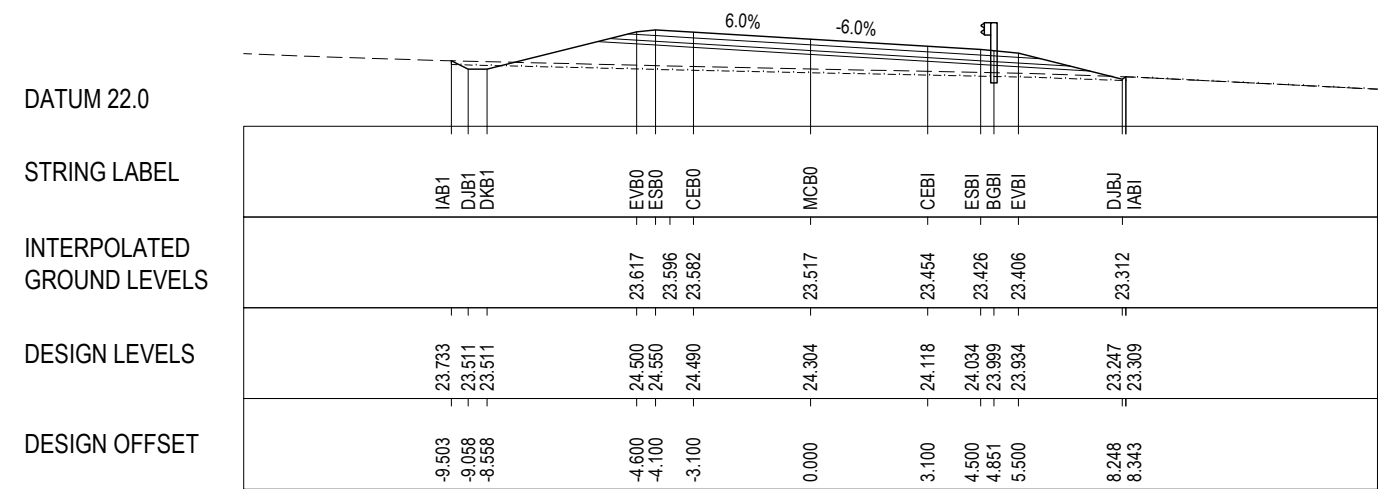
CH. 5980.000



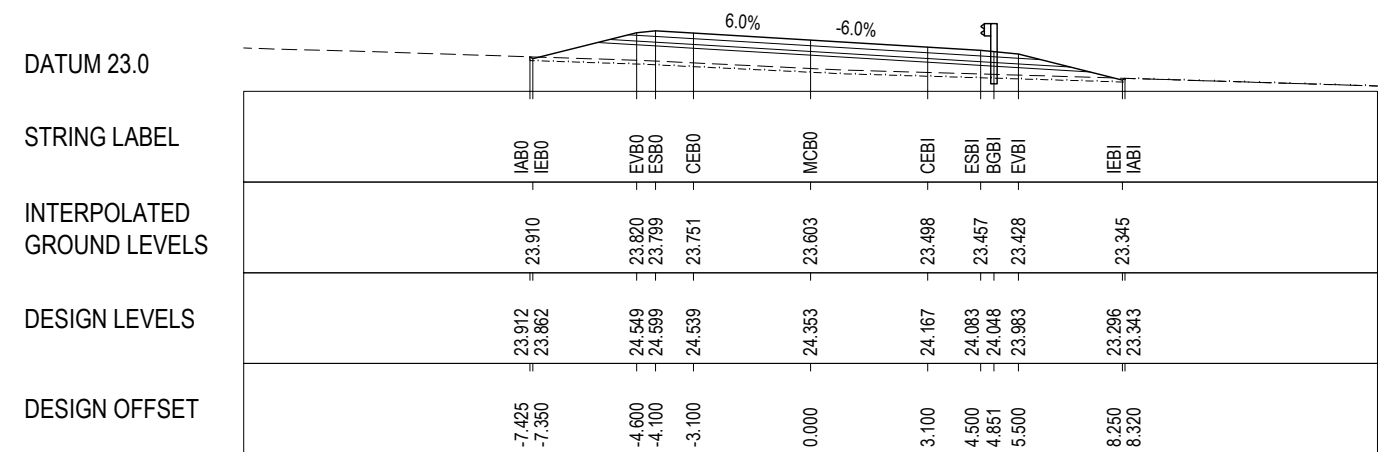
CH. 5970.000



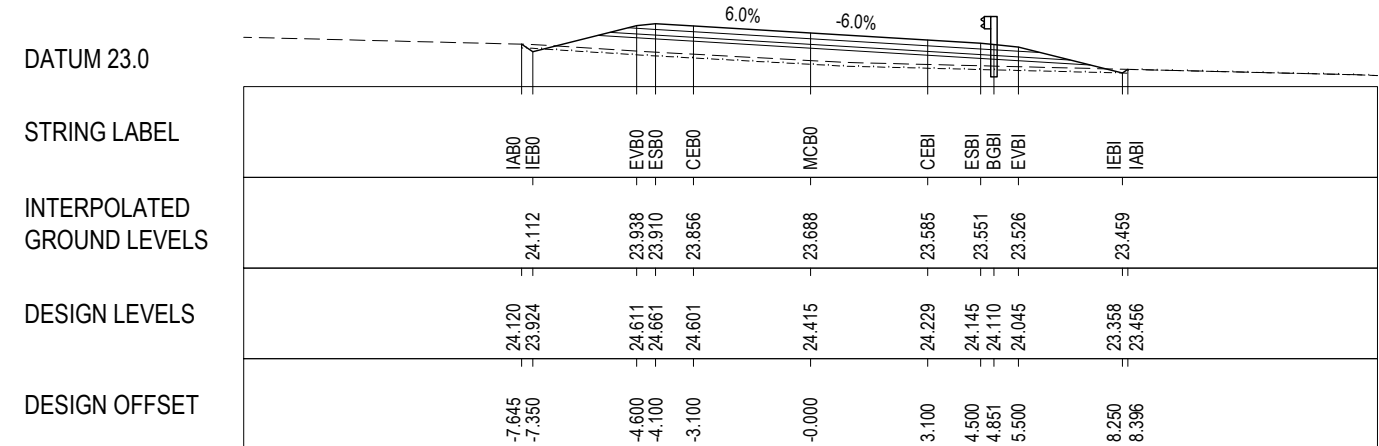
CH. 5960.000



CH. 6010.000

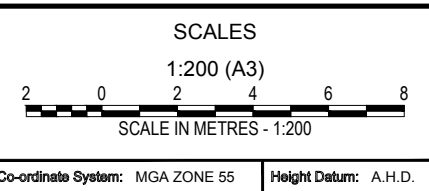


CH. 6000.000



CH. 5990.000

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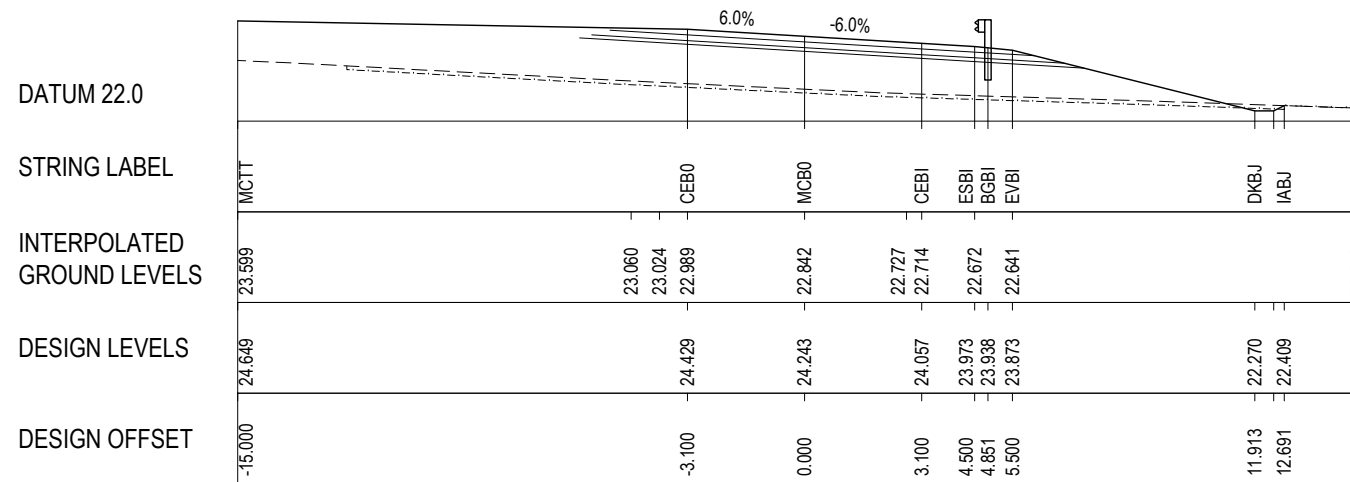
TASMAN HIGHWAY (A0113)

APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)

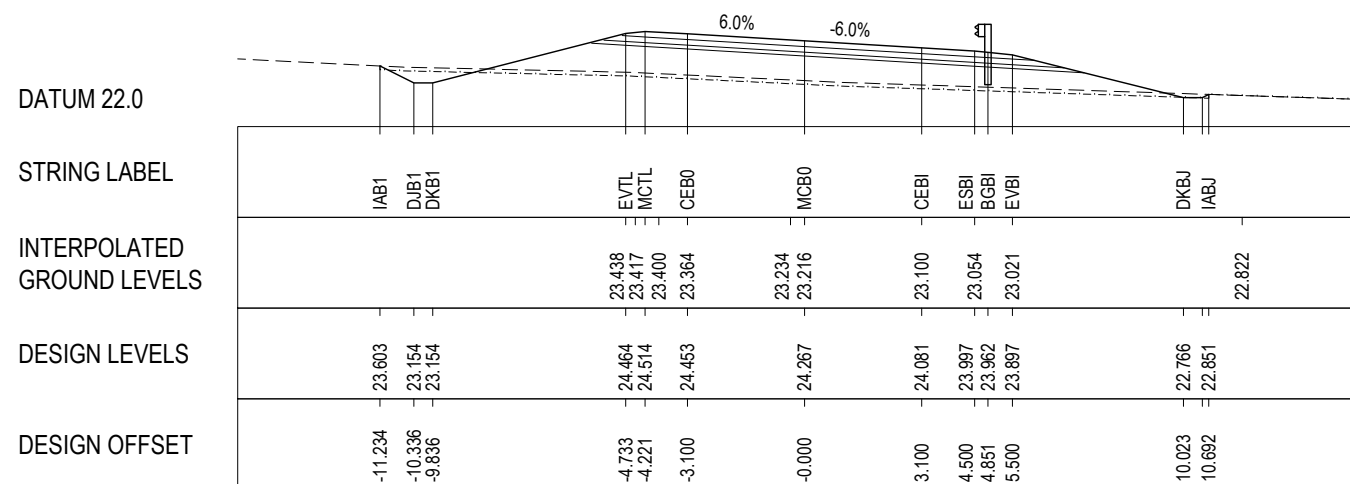
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 12 OF 37

CONTRACT No.	DRAWING	PRINTED DATE	SHEET No.
2402	HB17182-C1762	09-Jun-17, 1:25 PM	1762
REGISTRATION NUMBER			REVISION A
A0113.021			



CH. 6030.000



CH. 6020.000

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
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SCALE IN METRES - 1:200

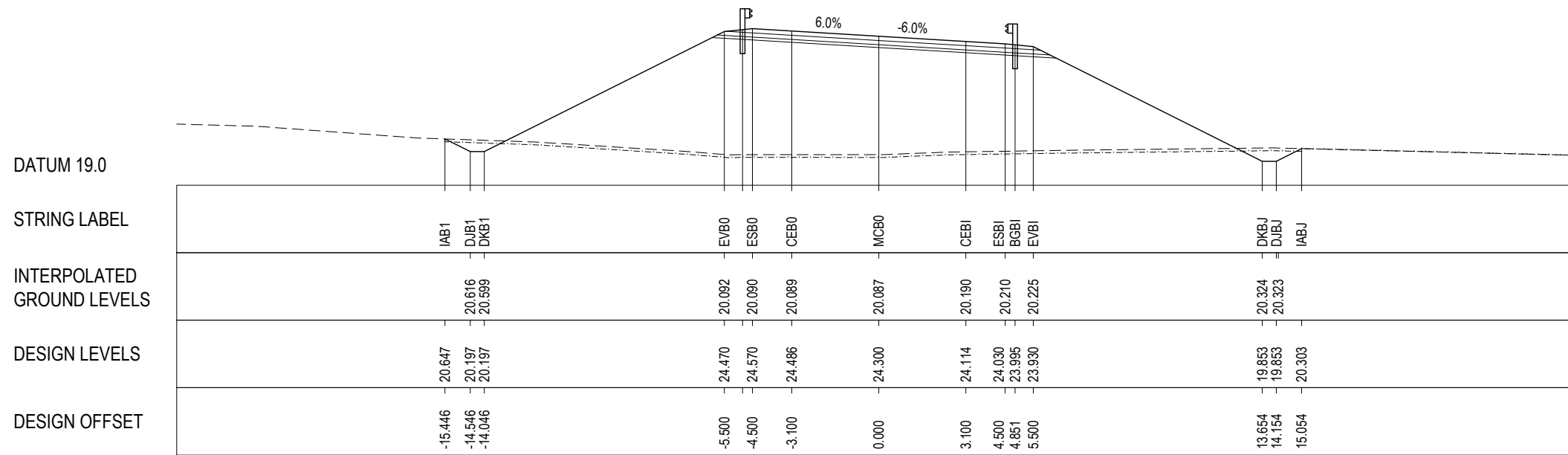
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Height Datum: A.H.D.

DESIGNED L.ALLEN
REVIEWED R.CASSIDY

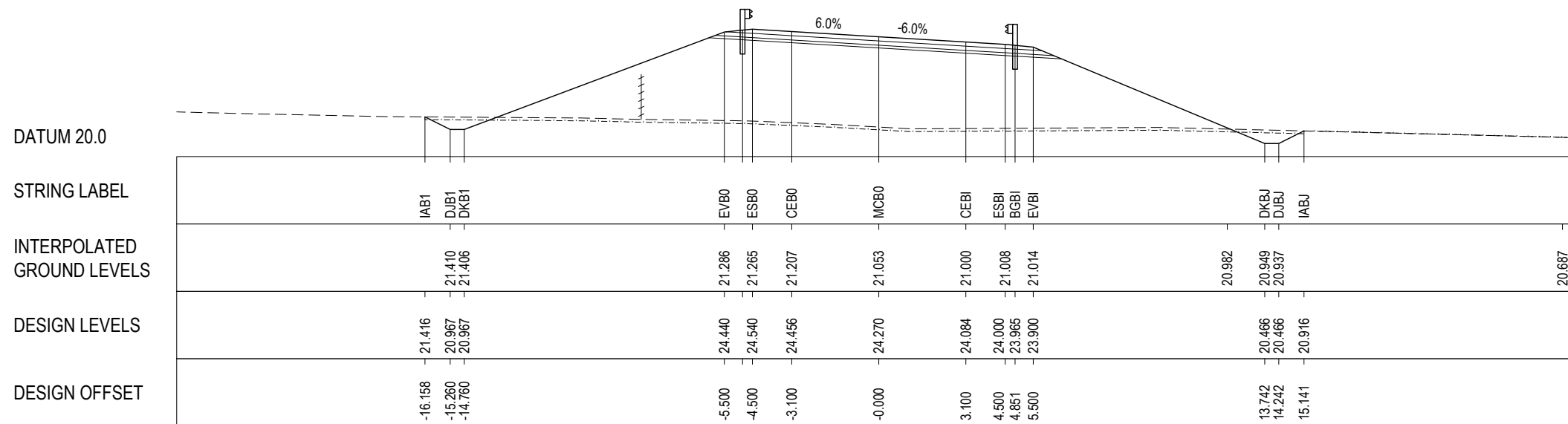
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 13 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1763	PRINTED DATE 09-Jun-17, 1:25 PM
REGISTRATION NUMBER A0113.021		

SHEET No.
1763
REVISION A



CH. 6080.000



CH. 6070.000

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

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SCALE IN METRES - 1:200

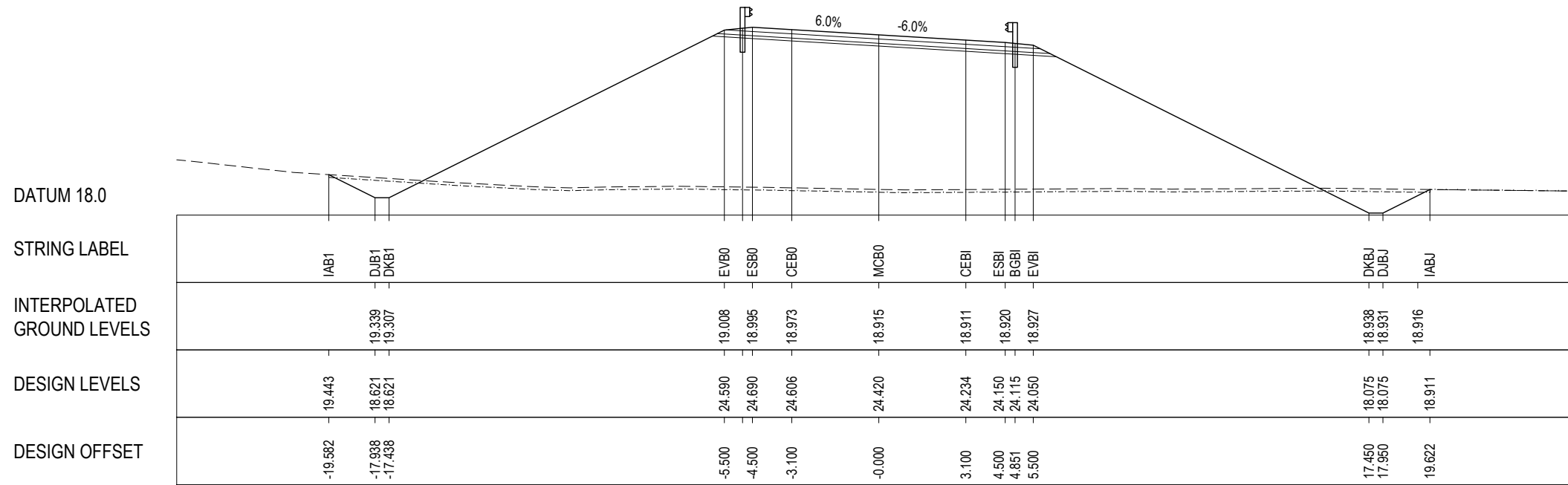
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Height Datum: A.H.D.

DESIGNED L.ALLEN
REVIEWED R.CASSIDY

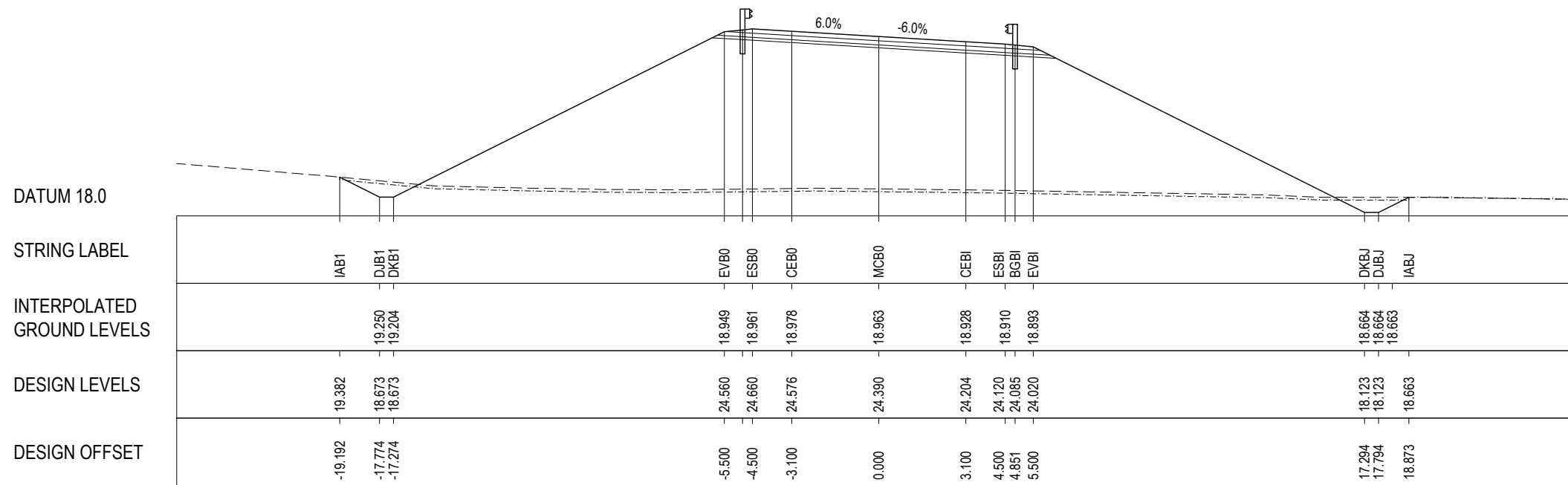
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 15 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1765	PRINTED DATE 09-Jun-17, 1:25 PM
REGISTRATION NUMBER A0113.021		

SHEET No.
1765
REVISION A



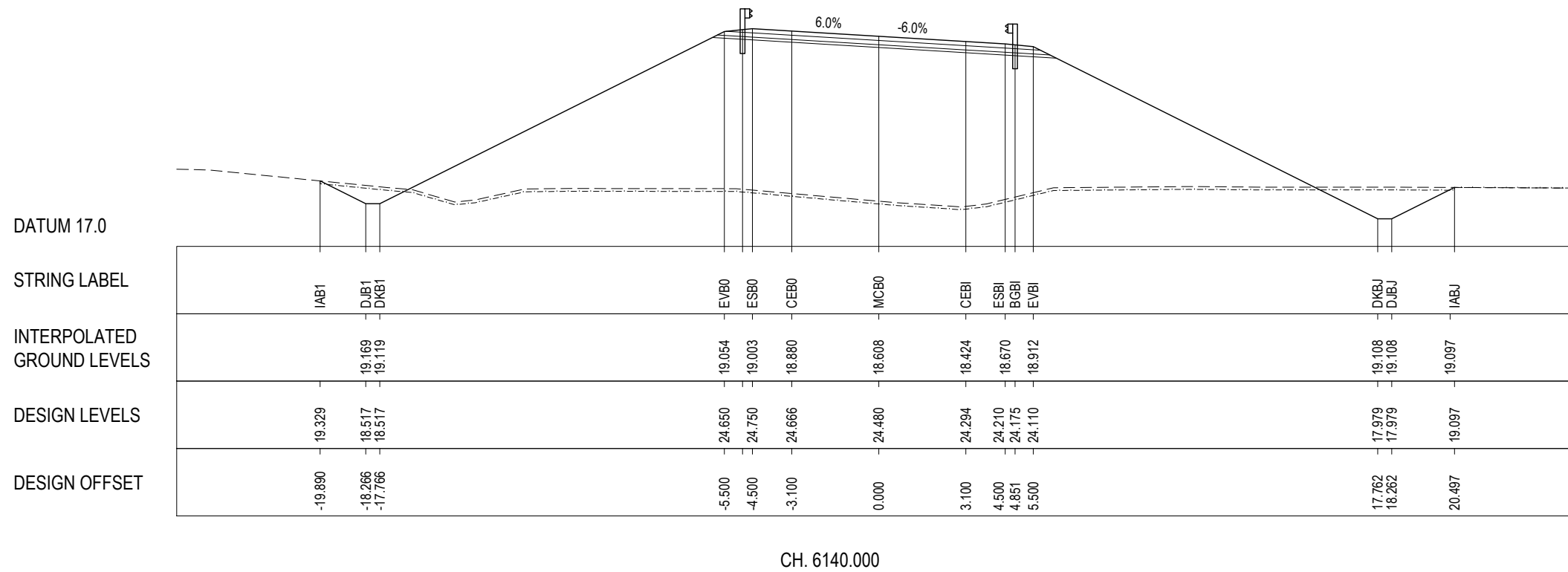
CH. 6120.000



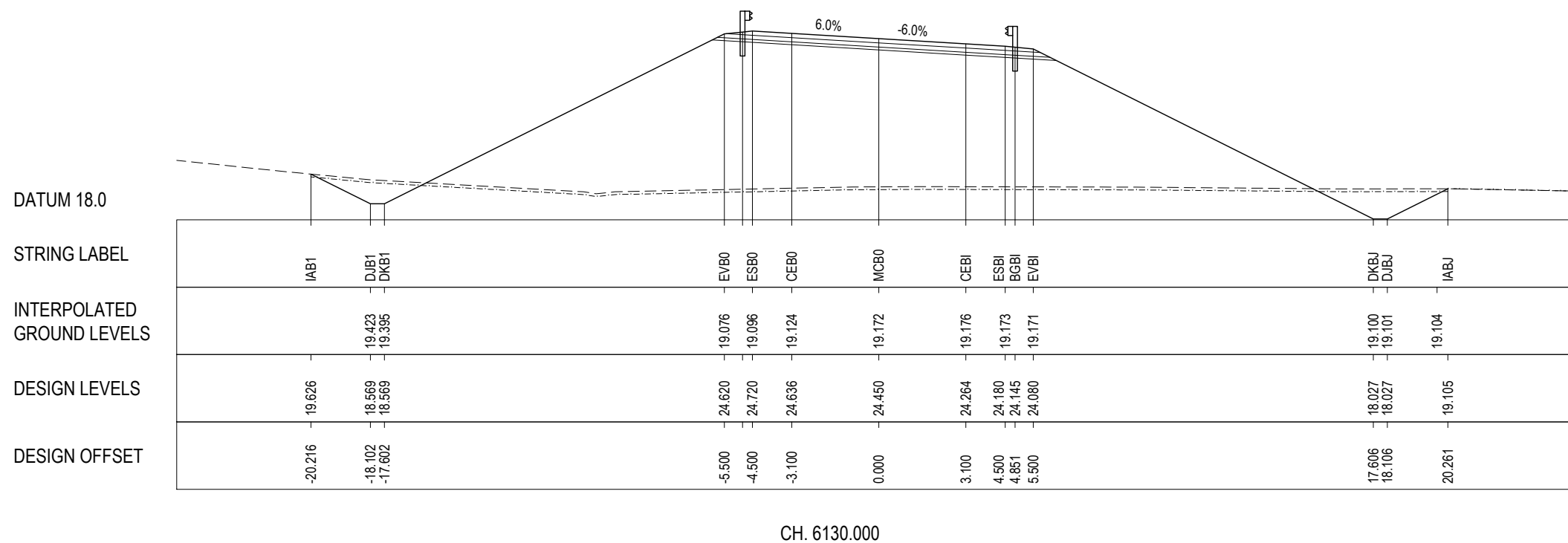
CH. 6110.000

<p>Department of State Growth</p> <p>TASMAN HIGHWAY (A0113)</p> <p>APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)</p> <p>BRIDGE REPLACEMENT</p> <p>CROSS SECTIONS (MCB0) - DRG 17 OF 37</p>		<p>CONTRACT No.</p> <p>2402</p>	<p>DRAWING</p> <p>HB17182-C1767</p>	<p>PRINTED DATE</p> <p>09-Jun-17, 1:25 PM</p>	<p>SHEET No.</p> <p>1767</p>
<p>DESIGNED L.ALLEN</p> <p>REVIEWED R.CASSIDY</p>		<p>REGISTRATION NUMBER</p> <p>A0113.021</p>			<p>REVISION A</p>
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No.	Amendment Description	Initials	Date
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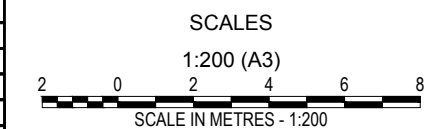


CH. 6140.000



CH. 6130.000

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No.	Amendment Description	Initials	Date
A3 original	This sheet may be prepared using colour and may be incomplete if copied		



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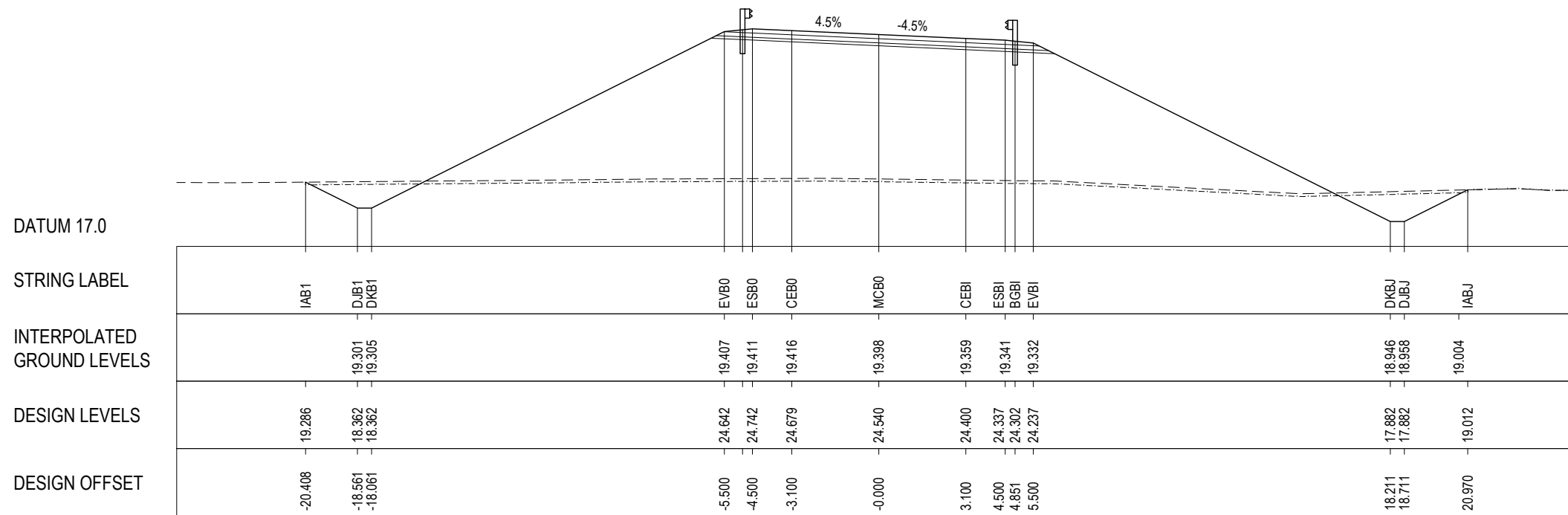
TASMAN HIGHWAY (A0113)

APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)

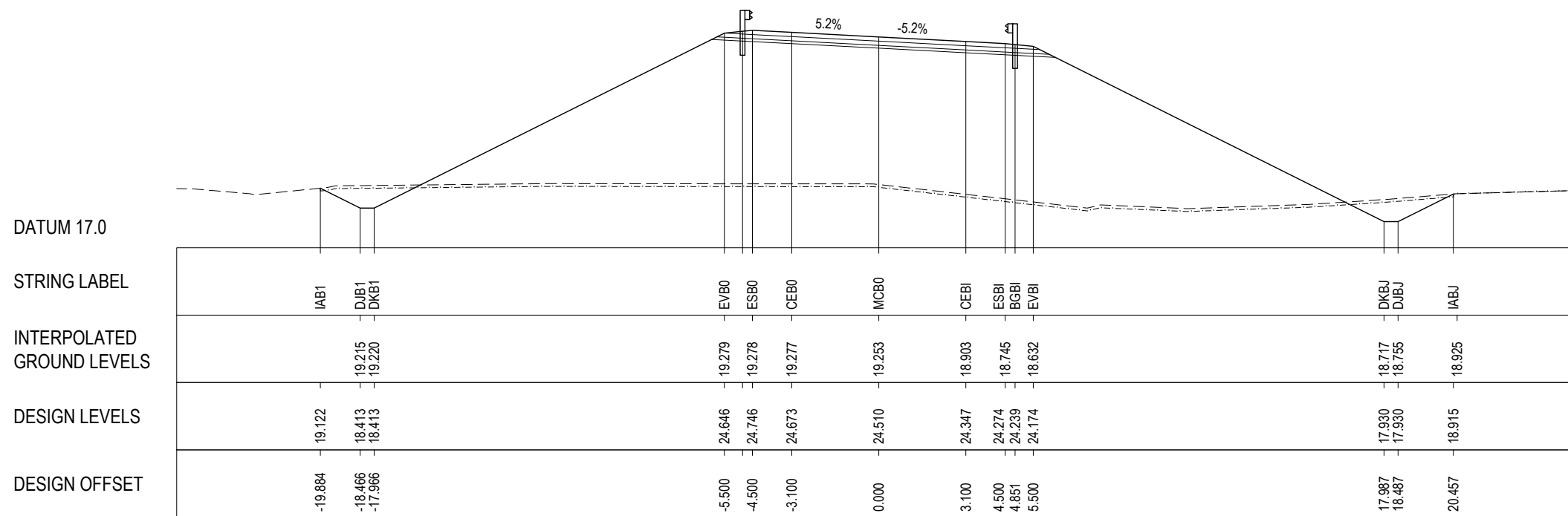
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 18 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1768	PRINTED DATE 09-Jun-17, 1:26 PM	SHEET No. 1768
REGISTRATION NUMBER A0113.021			REVISION A

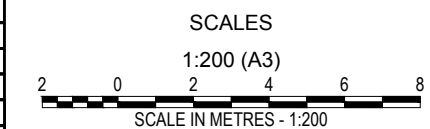


CH. 6160.000



CH. 6150.000

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
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Department of State Growth

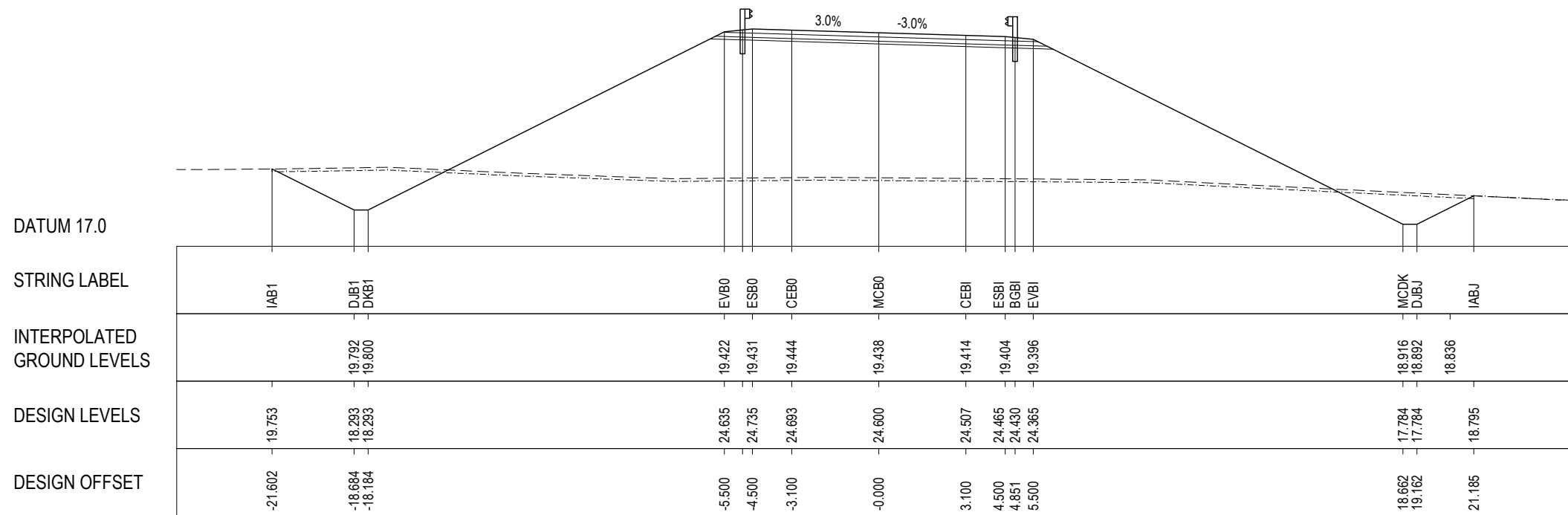
TASMAN HIGHWAY (A0113)

APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)

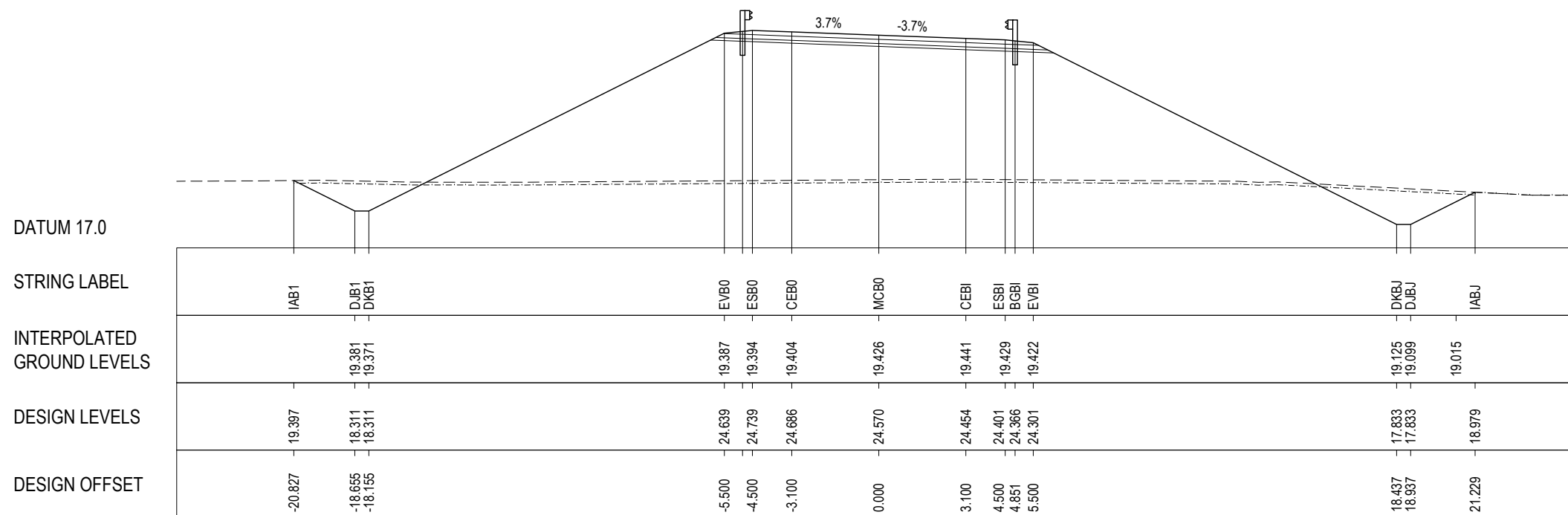
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 19 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1769	PRINTED DATE 09-Jun-17, 1:26 PM	SHEET No. 1769
REGISTRATION NUMBER A0113.021			REVISION A

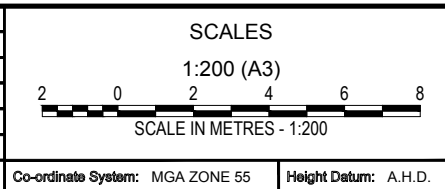


CH. 6180.000



CH. 6170.000

A		PRELIMINARY DESIGN	R.C	09/06/2017
No.	Amendment Description		Initials	Date
A3 original	This sheet may be prepared using colour and may be incomplete if copied			



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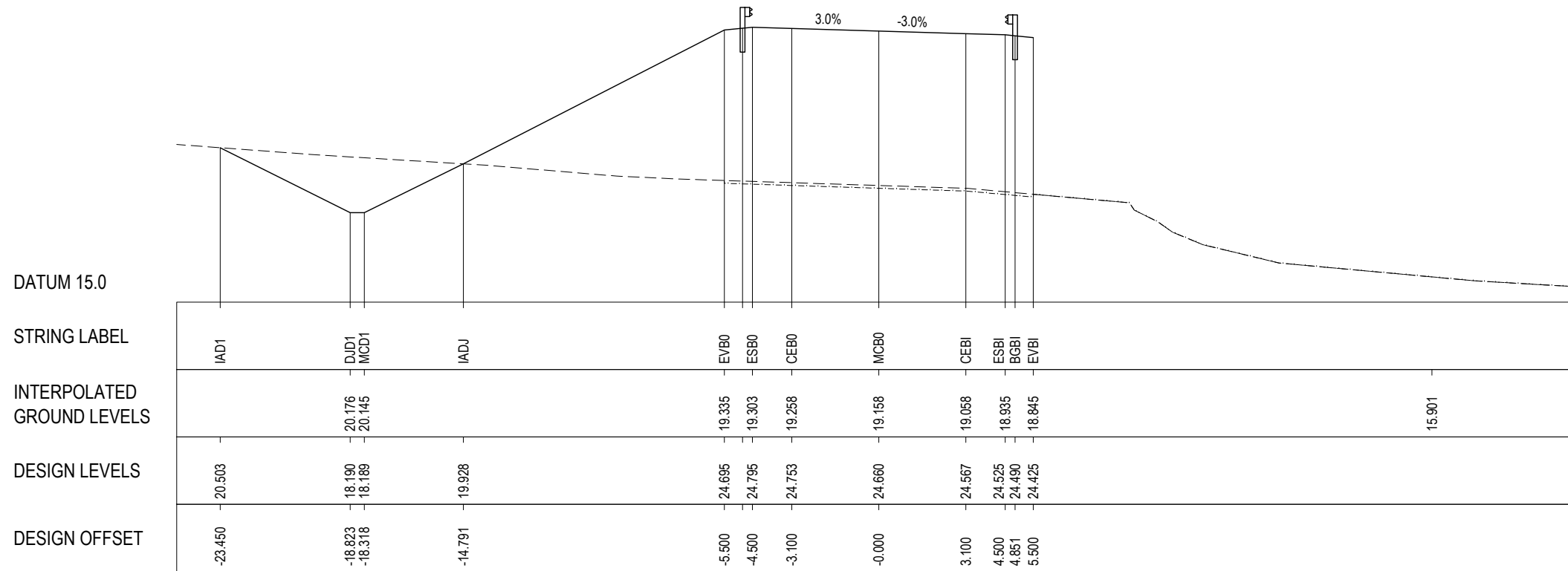
TASMAN HIGHWAY (A0113)

APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)

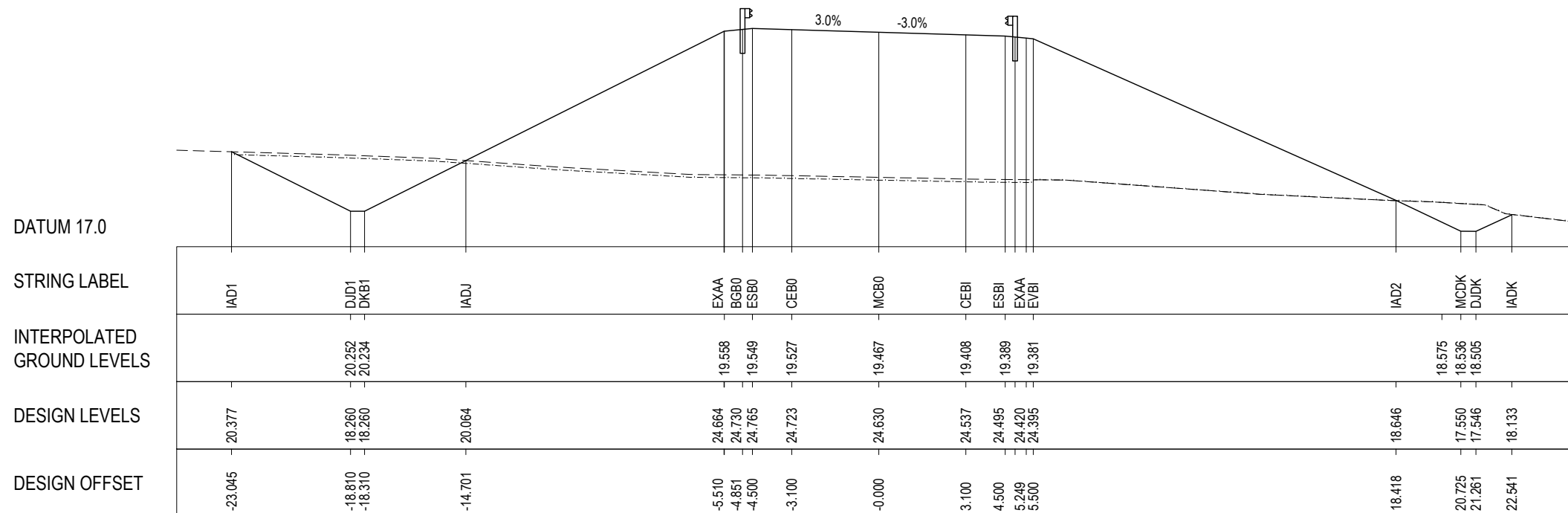
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 20 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1770	PRINTED DATE 09-Jun-17, 1:26 PM	SHEET No. 1770
REGISTRATION NUMBER A0113.021			REVISION A

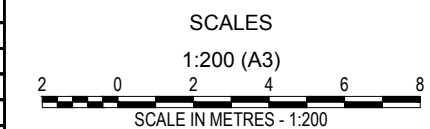


CH. 6200.000



CH. 6190.000

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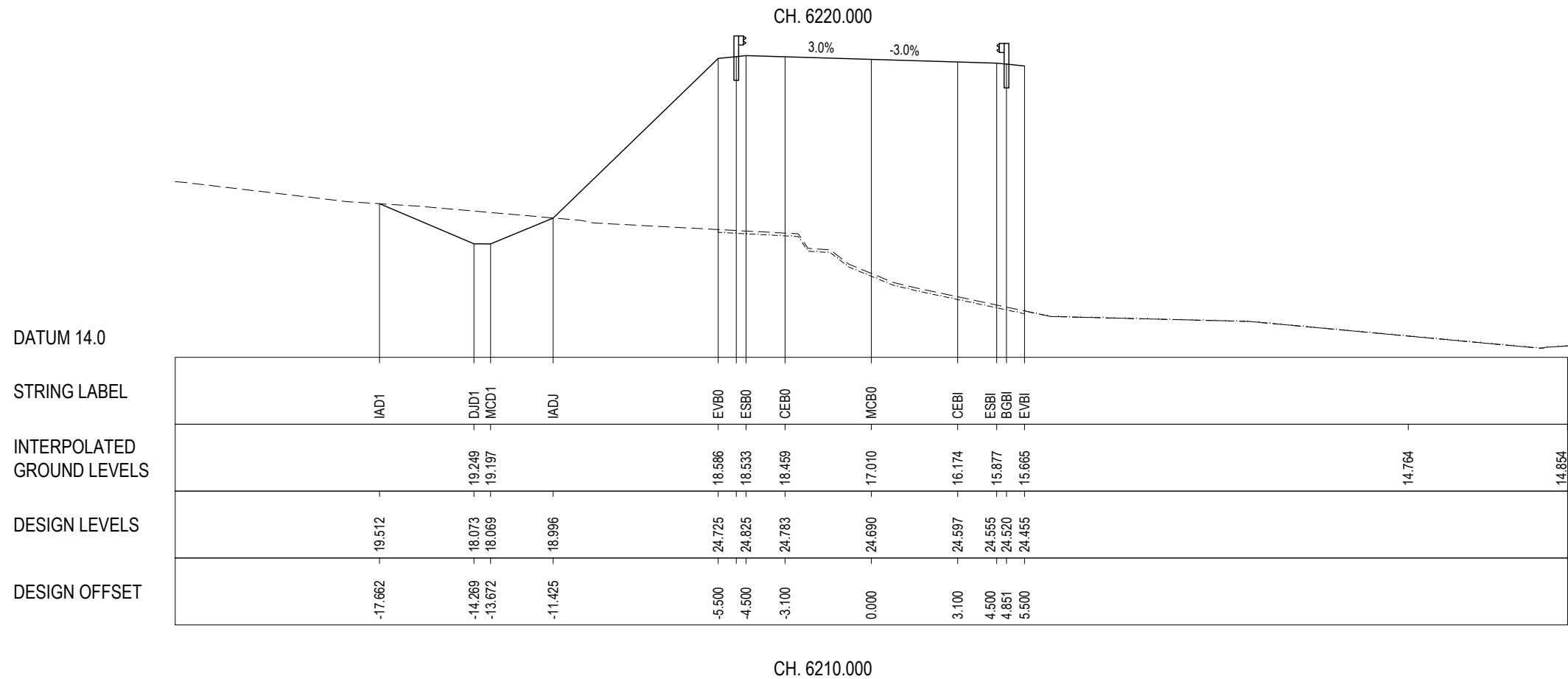
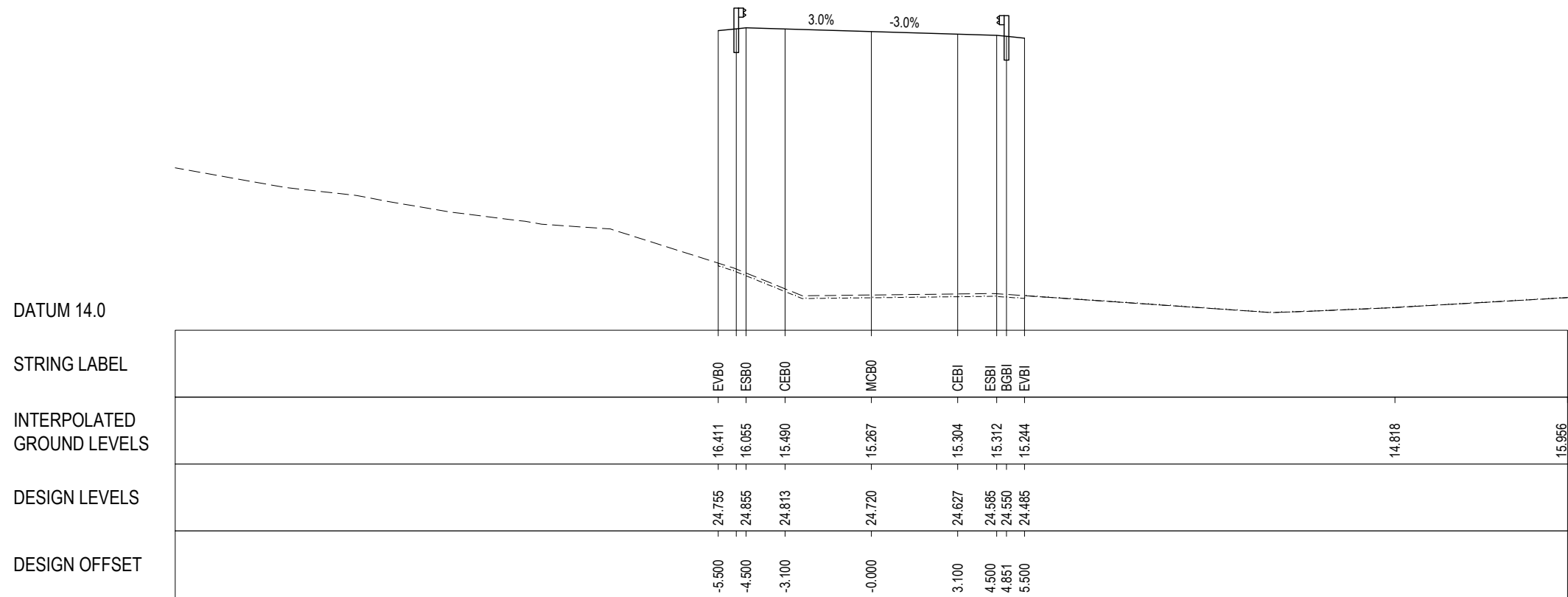


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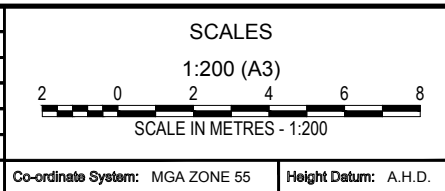
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 21 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1771	PRINTED DATE 09-Jun-17, 1:26 PM	SHEET No. 1771
REGISTRATION NUMBER A0113.021			REVISION A



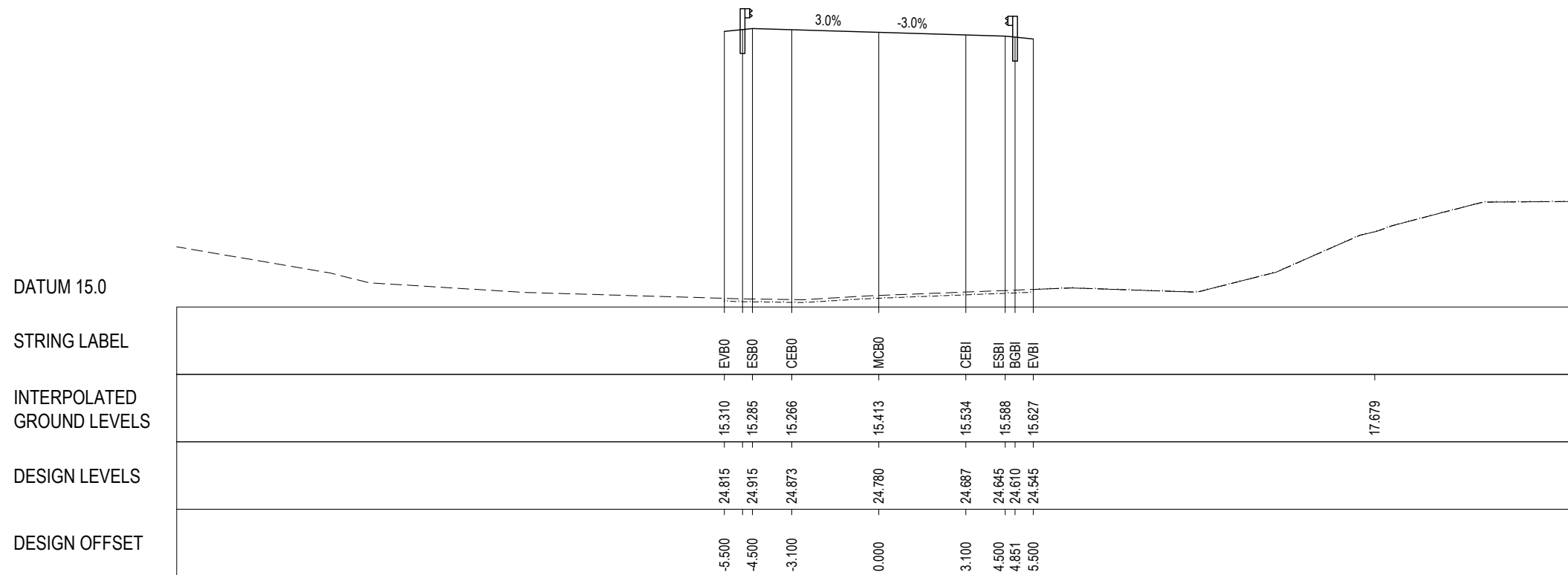
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A	PRELIMINARY DESIGN	R.C	09/06/2017
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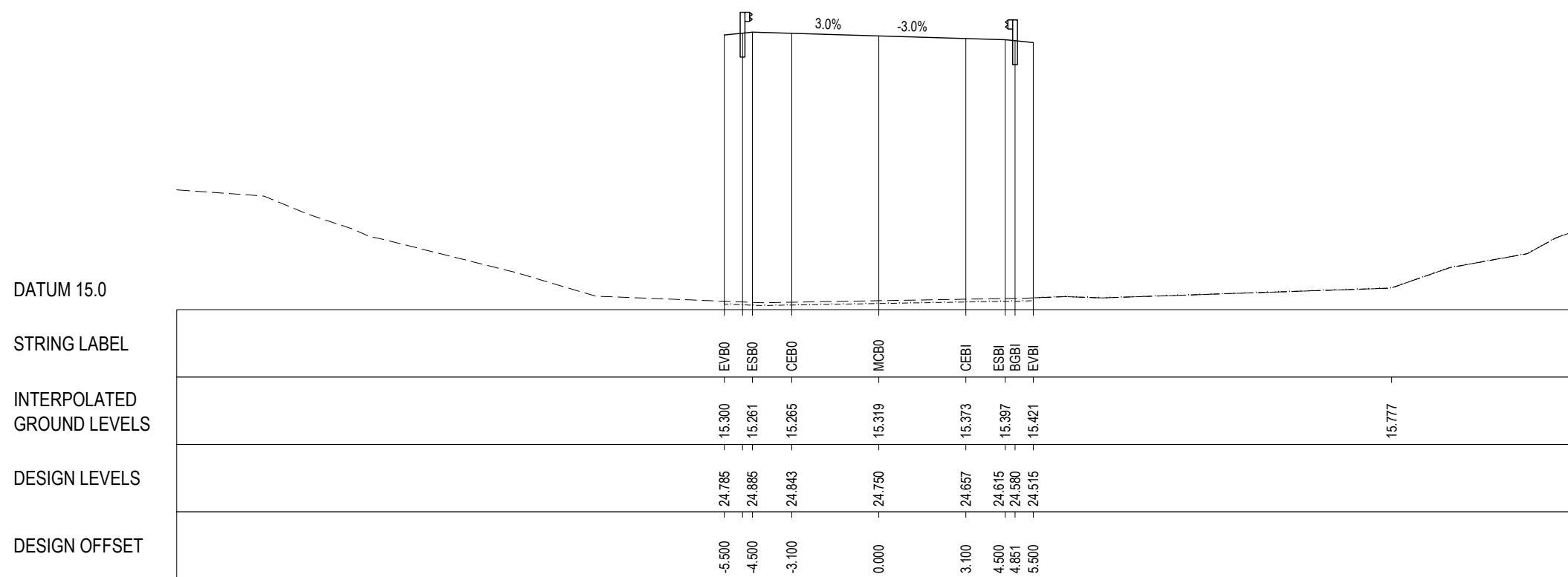
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 22 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1772	PRINTED DATE 09-Jun-17, 1:26 PM	SHEET No. 1772
REGISTRATION NUMBER A0113.021			REVISION A



CH. 6240.000



CH. 6230.000

No.	Amendment Description	Initials	Date
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SCALE IN METRES - 1:200

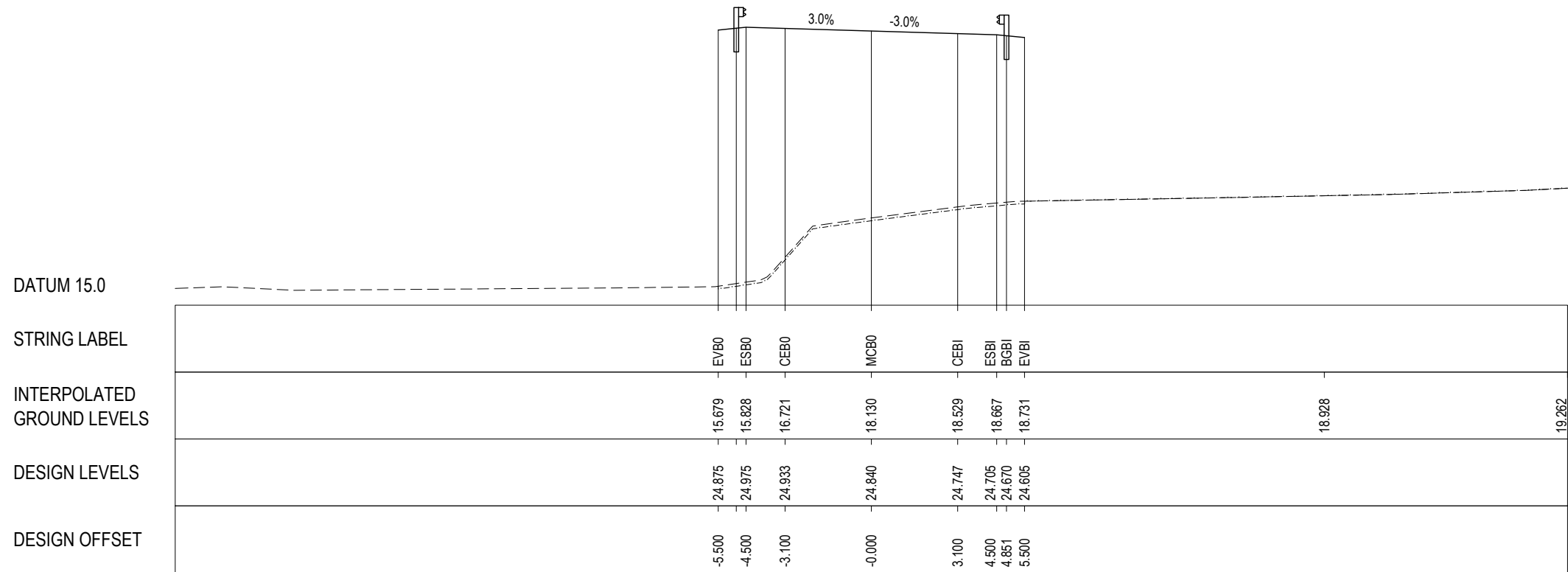
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Height Datum: A.H.D.

DESIGNED L.ALLEN
REVIEWED R.CASSIDY

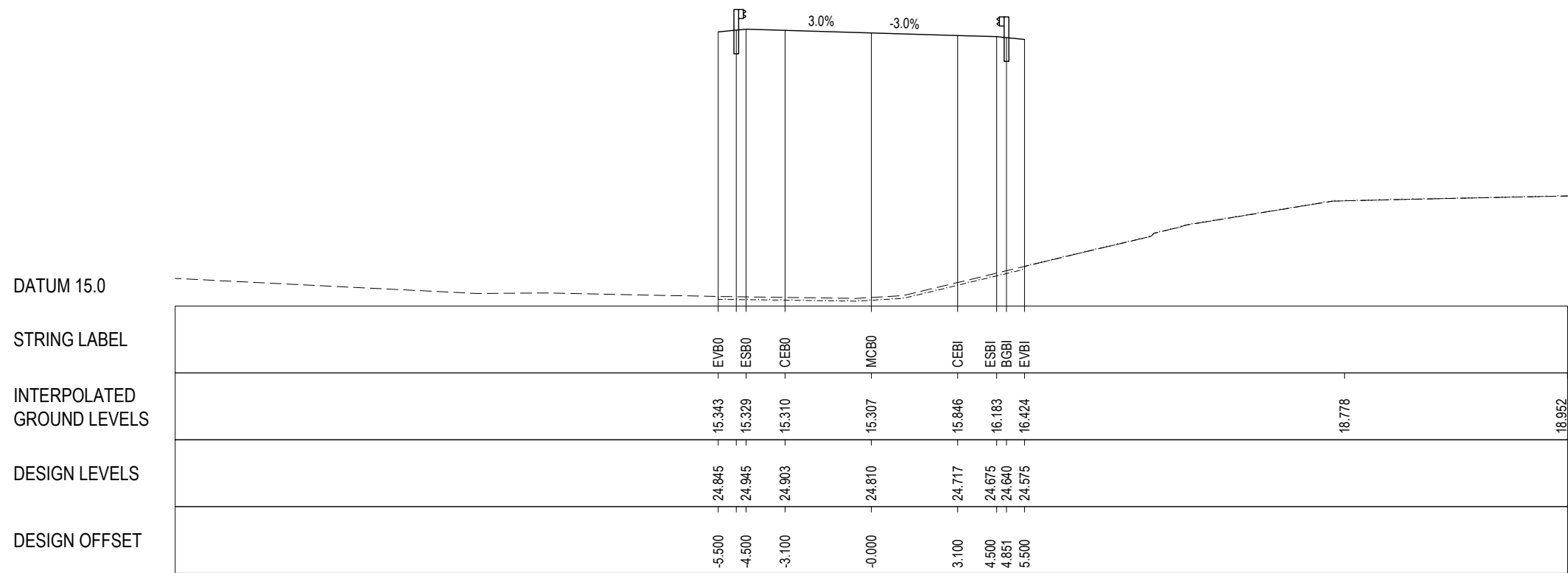
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 23 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1773	PRINTED DATE 09-Jun-17, 1:26 PM	SHEET No. 1773
REGISTRATION NUMBER A0113.021			REVISION A



CH. 6260.000



CH. 6250.000

No.	Amendment Description	Initials	Date
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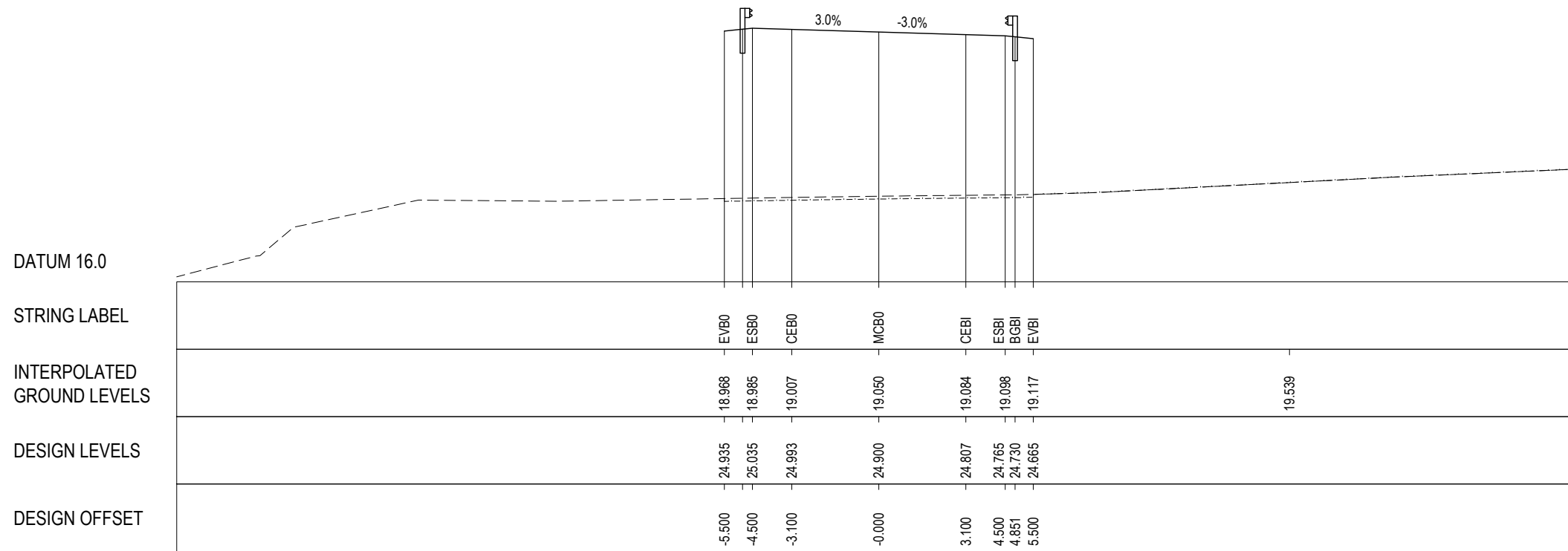
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SCALE IN METRES - 1:200

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Height Datum: A.H.D.

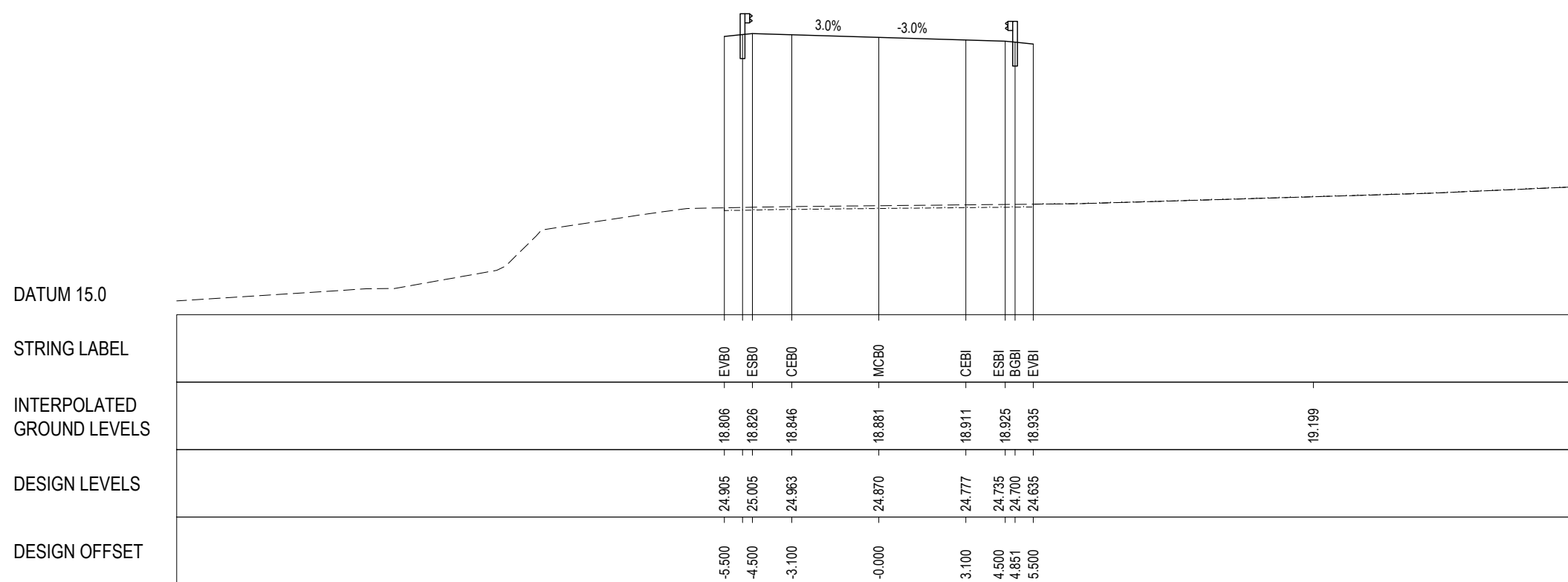
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 24 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1774	PRINTED DATE 09-Jun-17, 1:26 PM	SHEET No. 1774
REGISTRATION NUMBER A0113.021			REVISION A

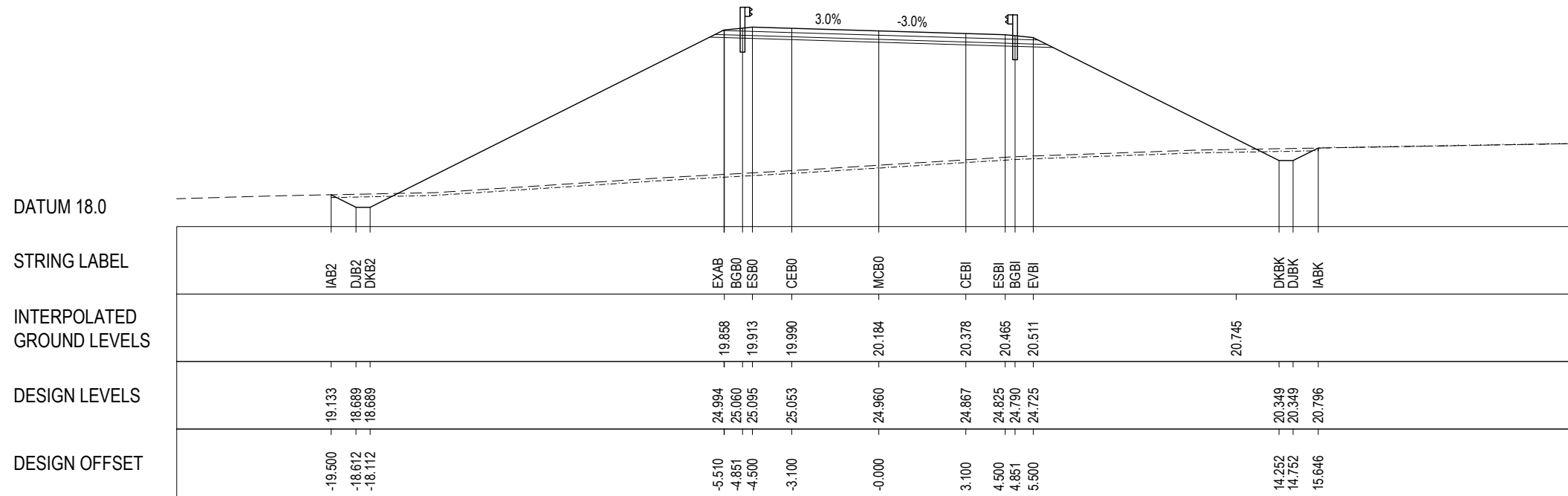


CH. 6280.000

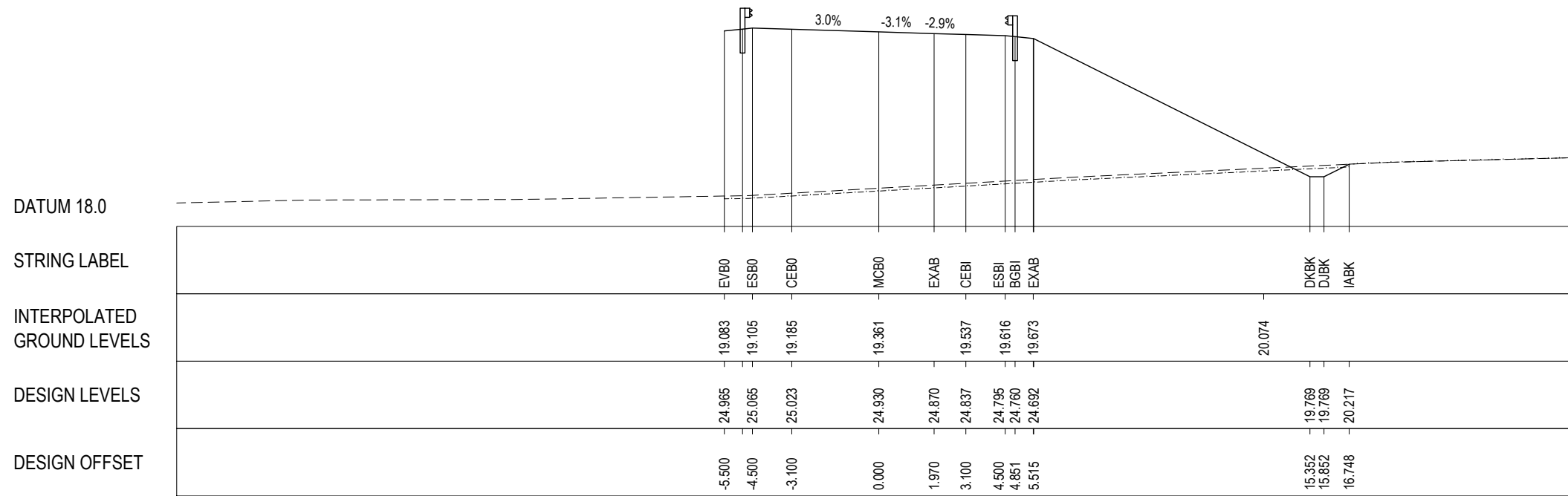


CH. 6270.000

A	PRELIMINARY DESIGN	R.C	09/06/2017
No.	Amendment Description	Initials	Date
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CH. 6300.000



CH. 6290.000

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
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SCALE IN METRES - 1:200

Co-ordinate System: MGA ZONE 55
Height Datum: A.H.D.

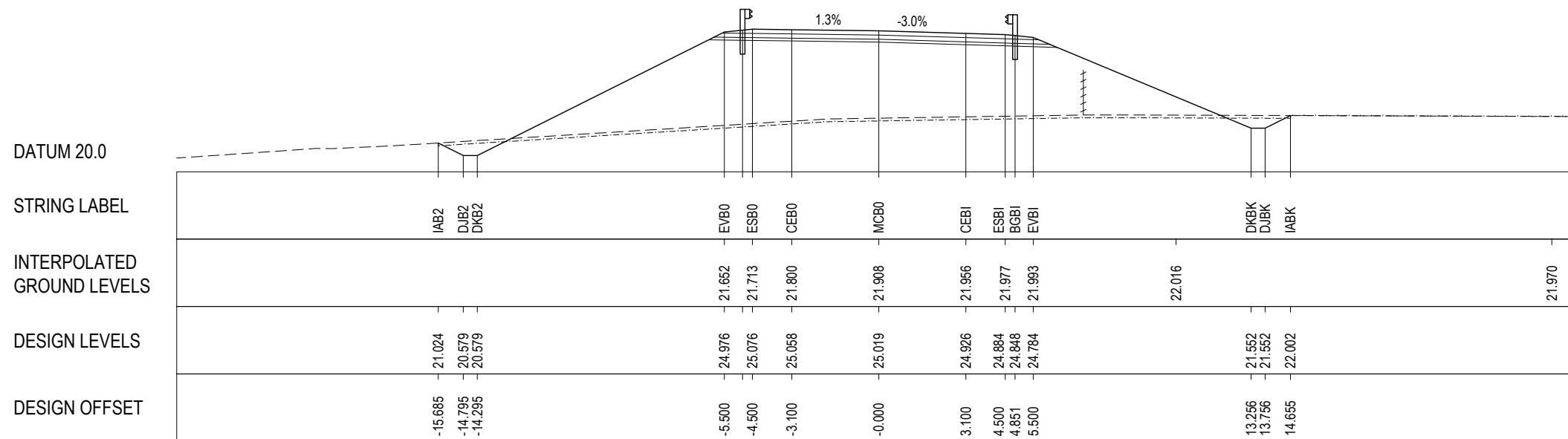
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT

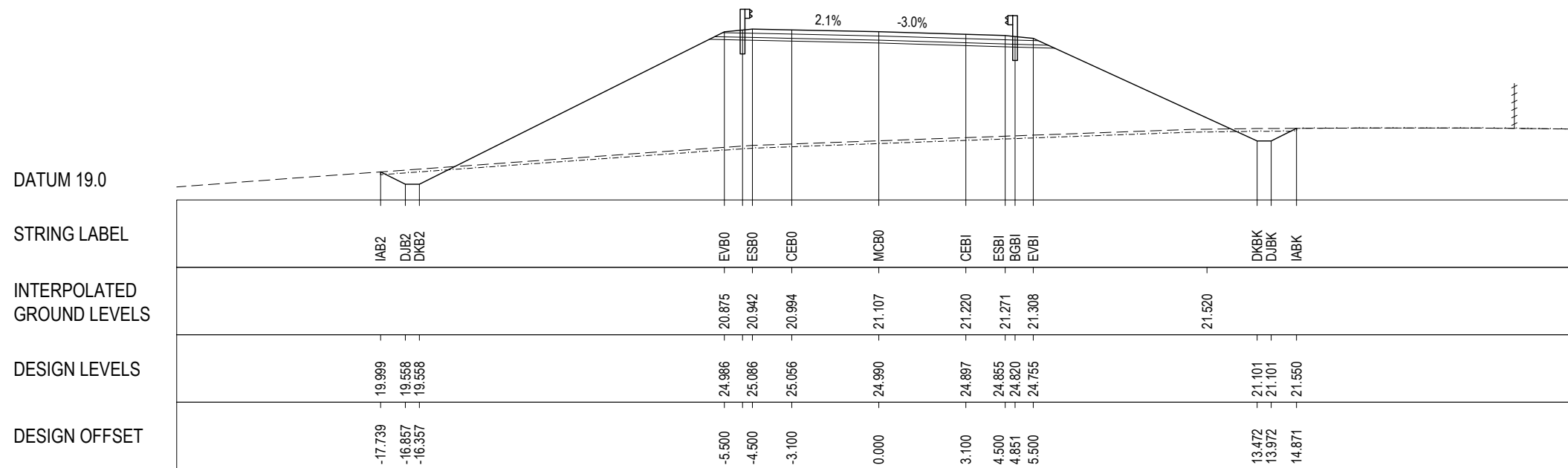
CROSS SECTIONS (MCB0) - DRG 26 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1776	PRINTED DATE 09-Jun-17, 1:26 PM
REGISTRATION NUMBER A0113.021		

SHEET No.
1776
REVISION A

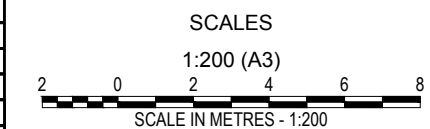


CH. 6320.000



CH. 6310.000

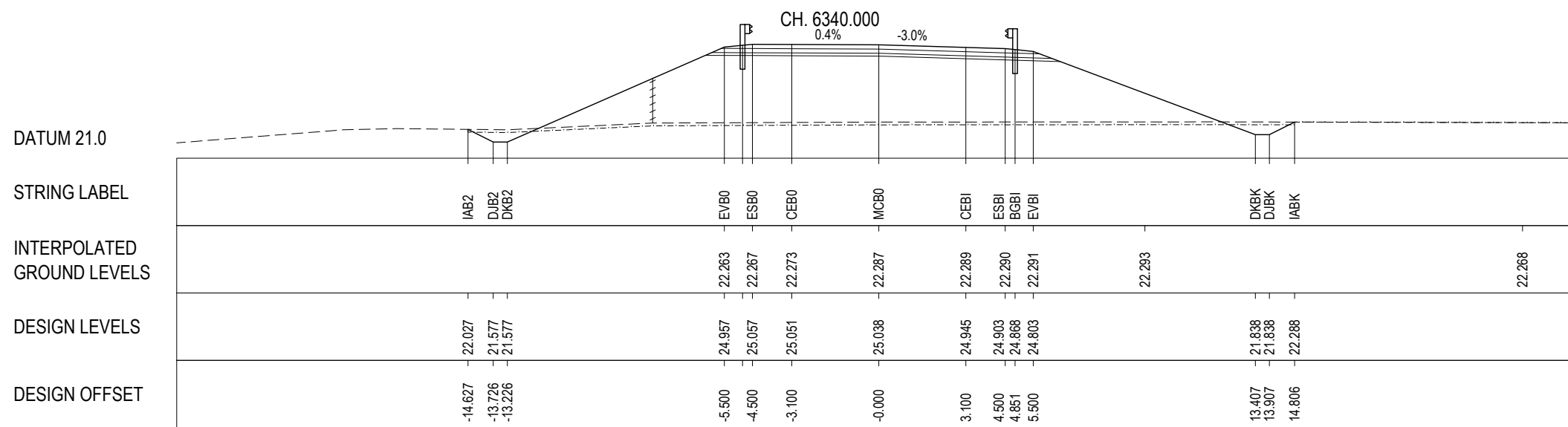
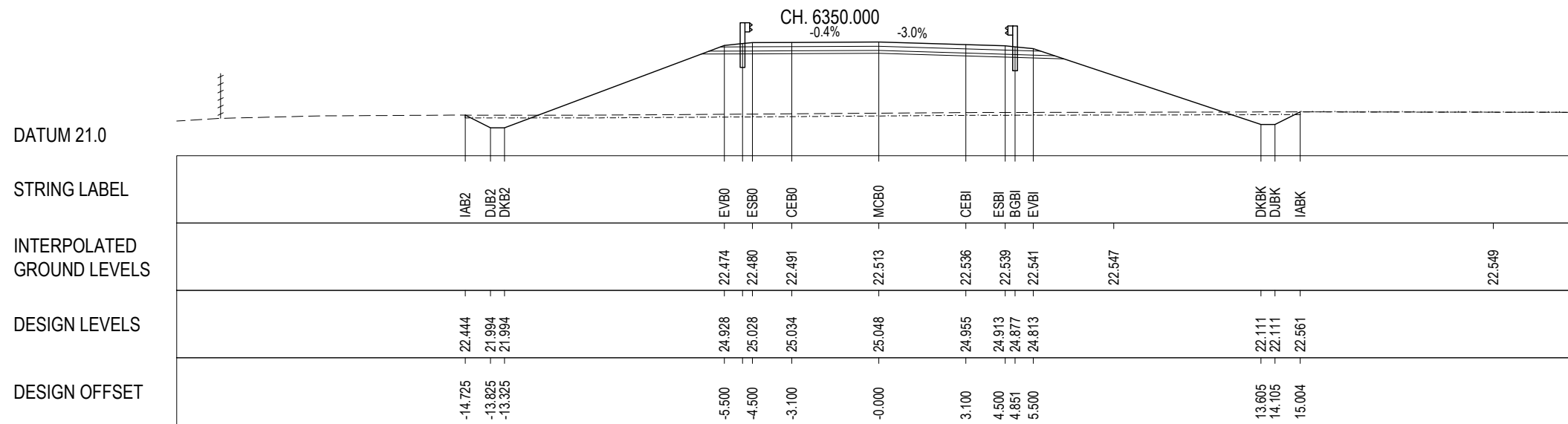
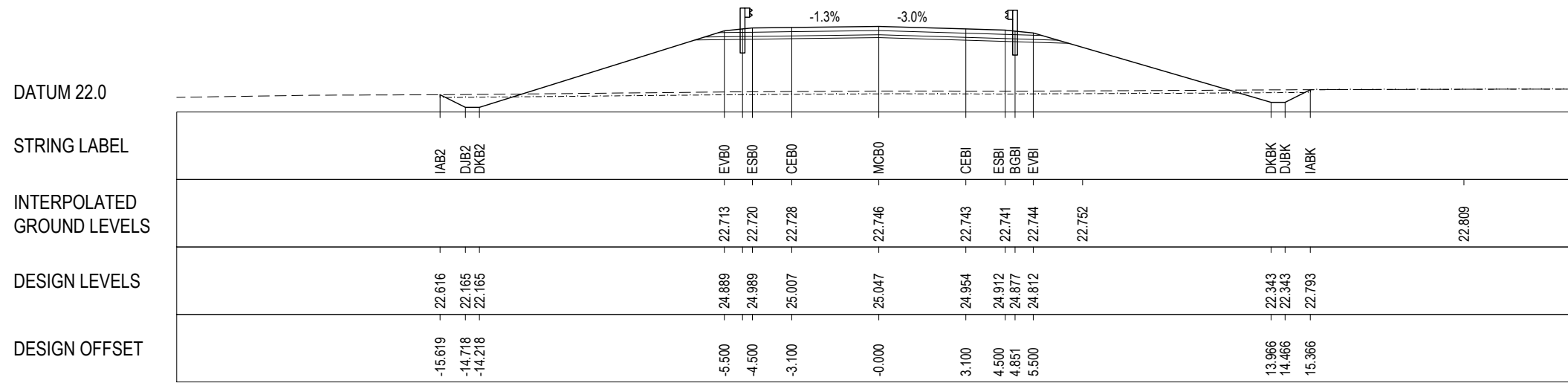
No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
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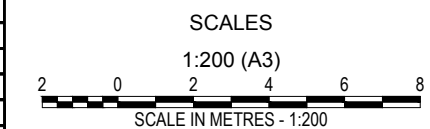
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 27 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1777	PRINTED DATE 09-Jun-17, 1:27 PM	SHEET No. 1777
REGISTRATION NUMBER A0113.021			REVISION A



CH. 6330.000

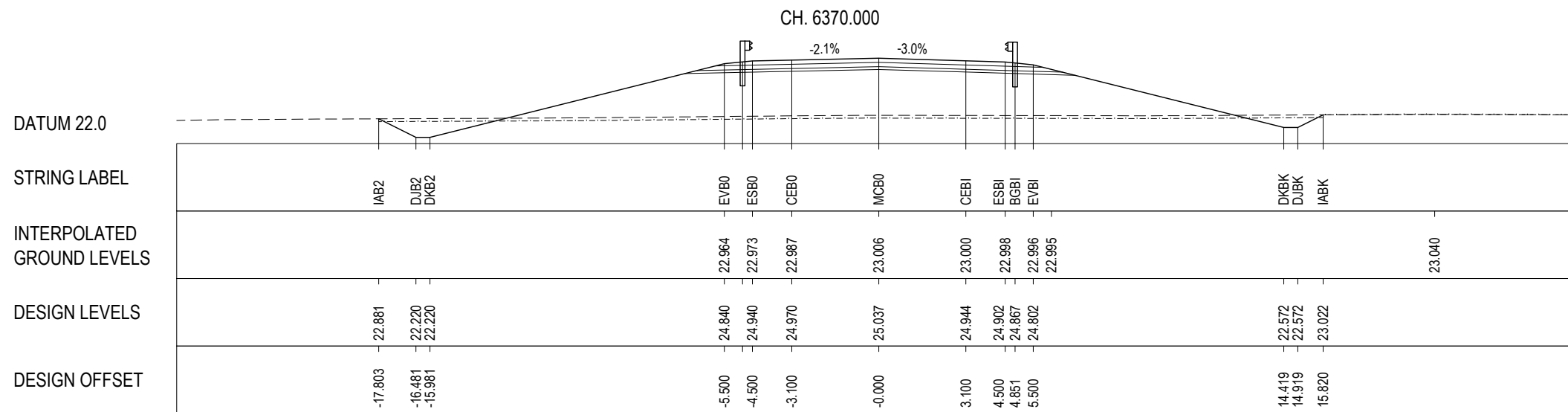
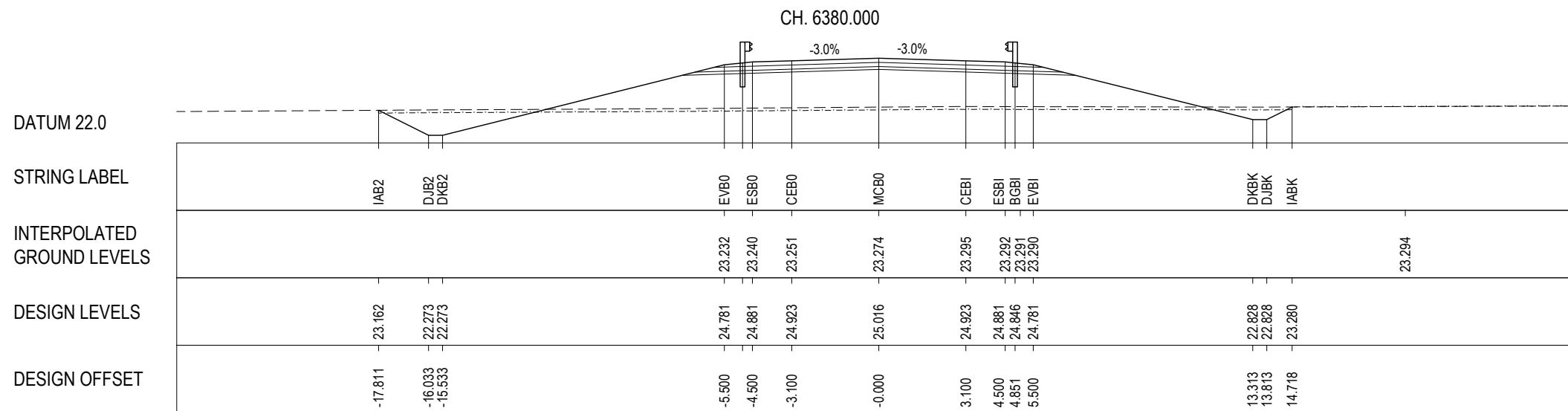
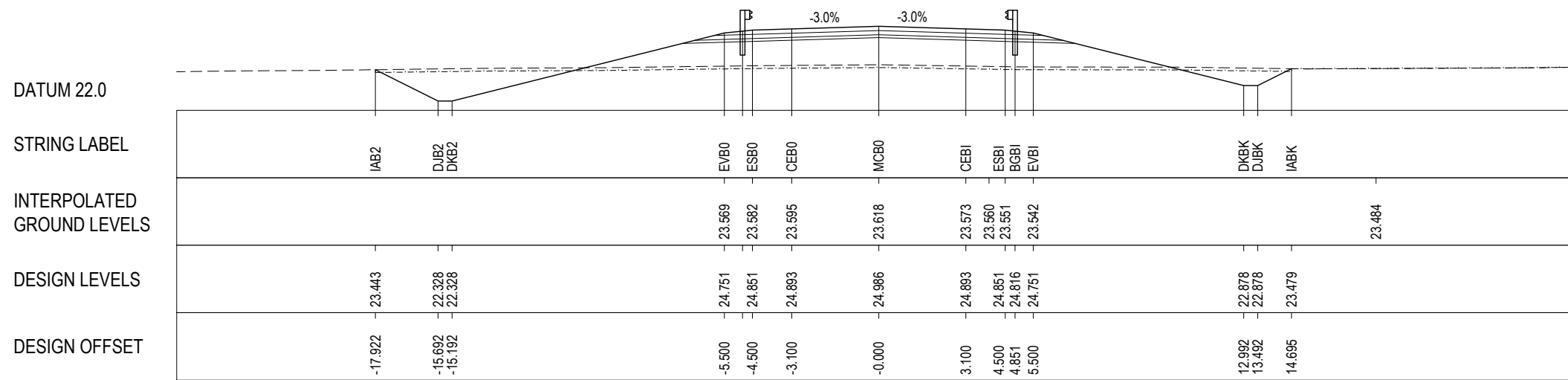
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No.	Amendment Description		Initials	Date
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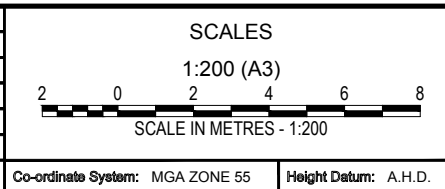
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 28 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1778	PRINTED DATE 09-Jun-17, 1:27 PM	SHEET No. 1778
REGISTRATION NUMBER A0113.021			REVISION A



No.	Amendment Description	Initials	Date
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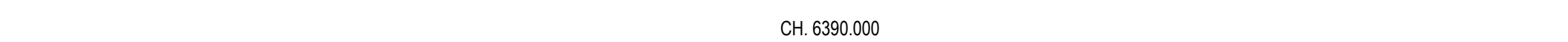
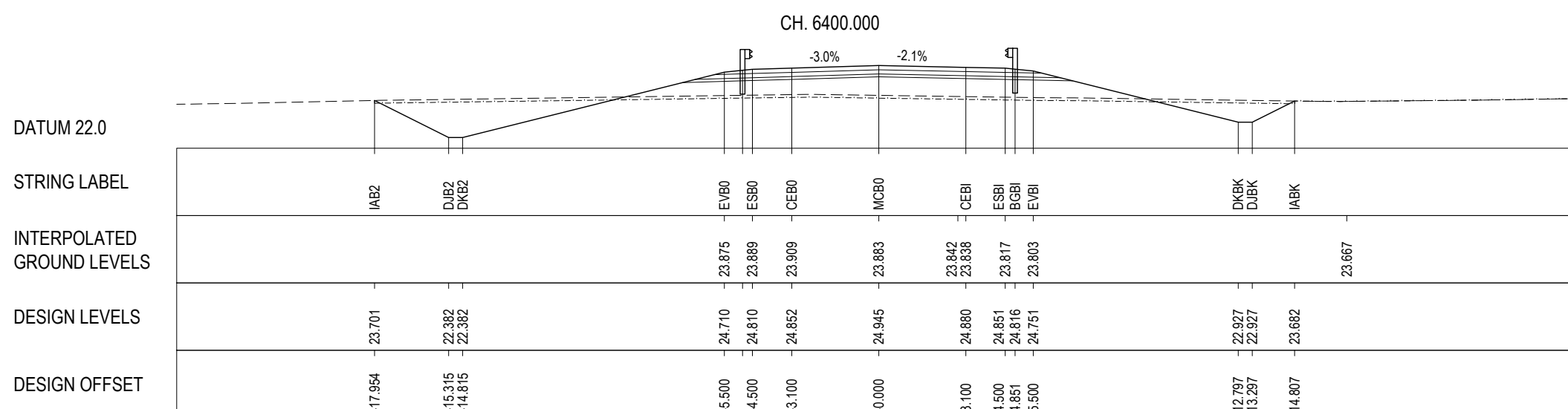
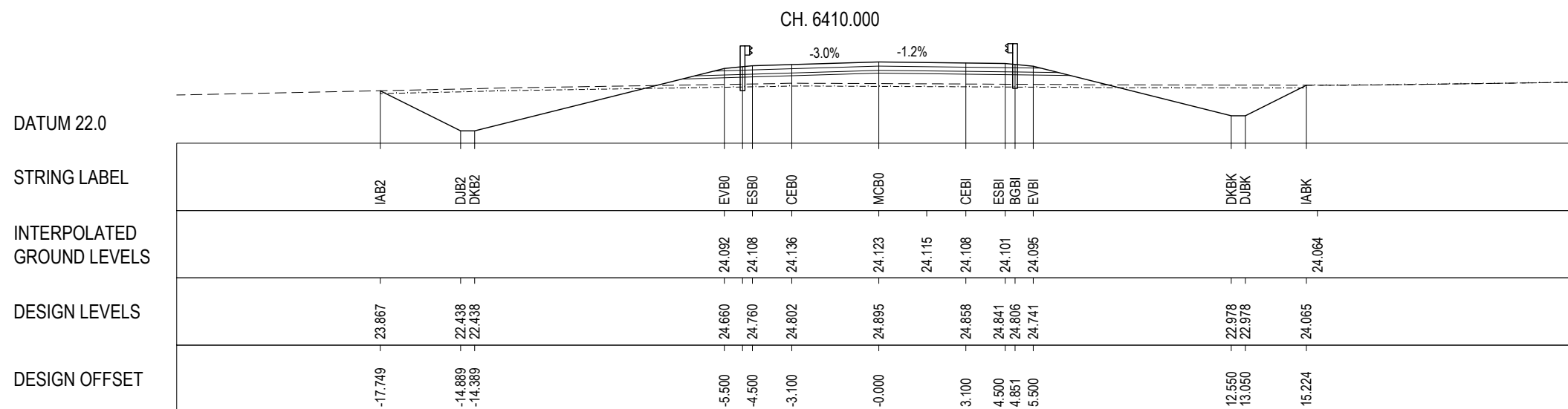
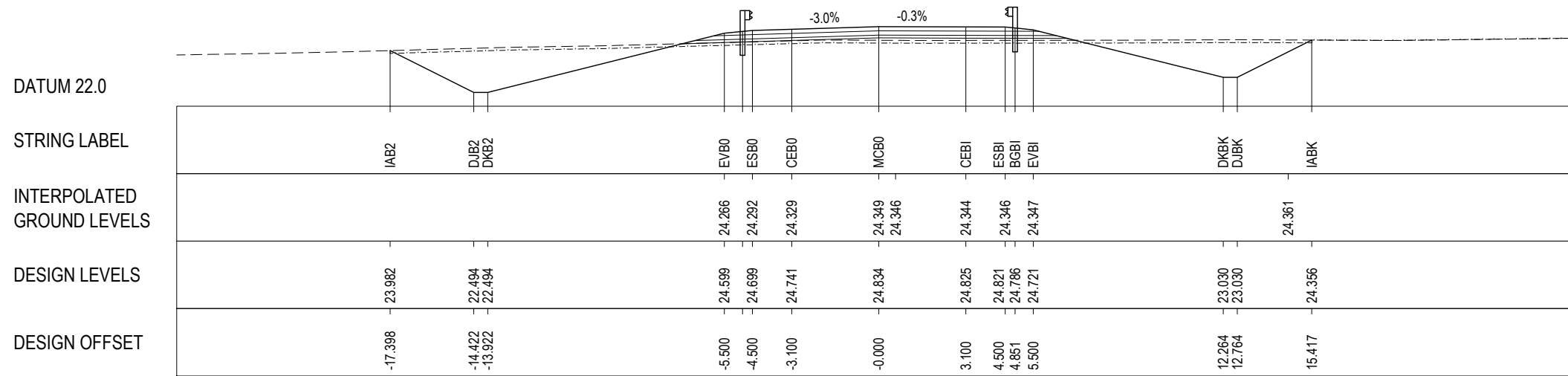


DESIGNED L.ALLEN
REVIEWED R.CASSIDY

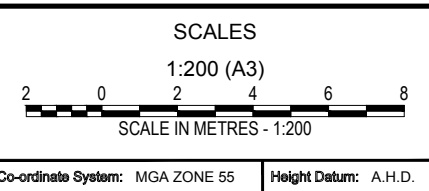
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 29 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1779	PRINTED DATE 09-Jun-17, 1:27 PM	SHEET No. 1779
REGISTRATION NUMBER A0113.021			REVISION A



A		PRELIMINARY DESIGN	R.C	09/06/2017
No.	Amendment Description		Initials	Date
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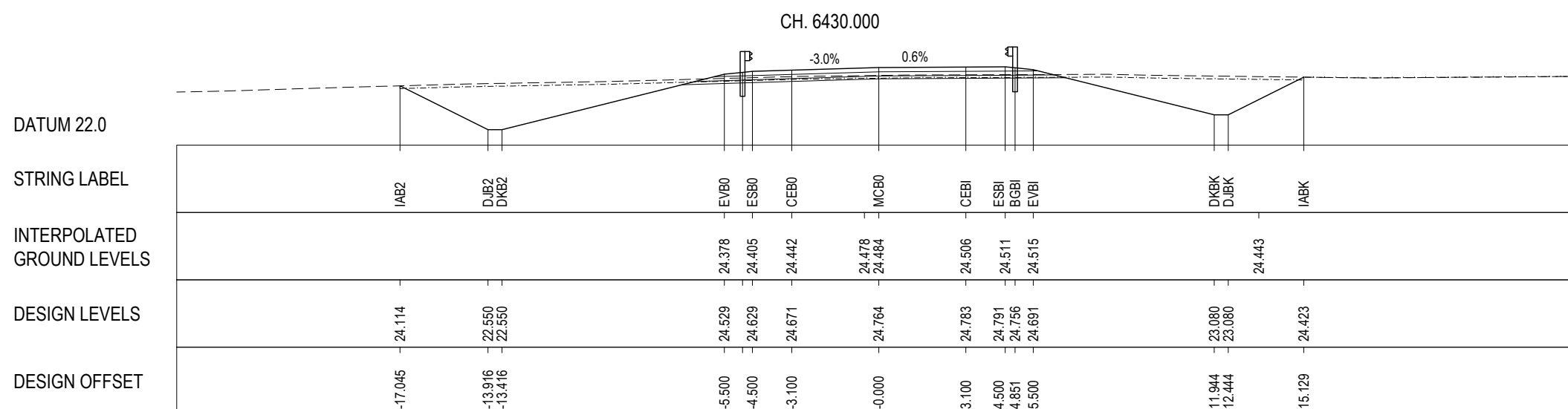
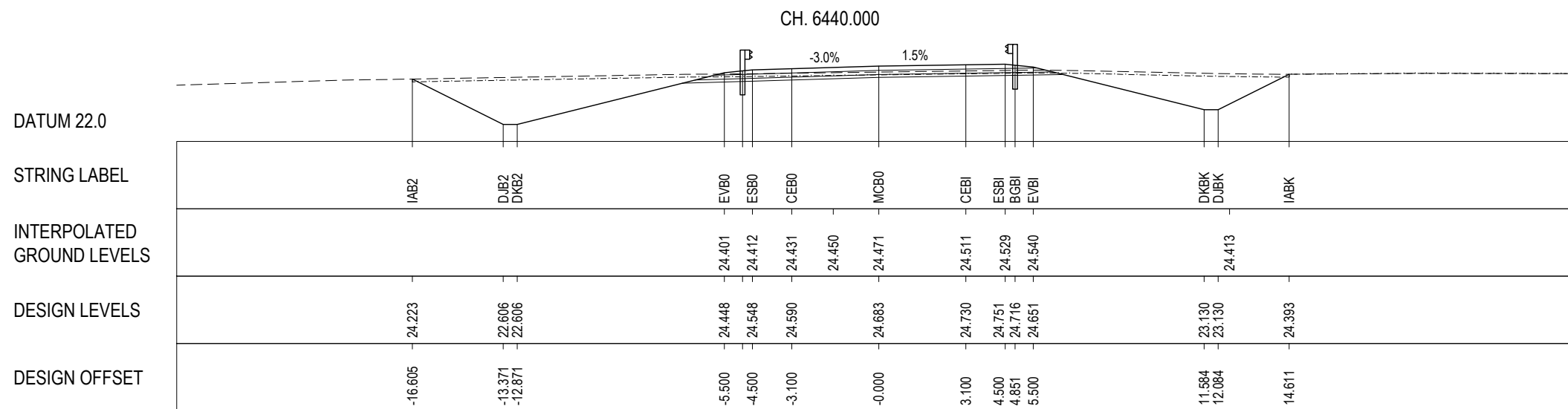
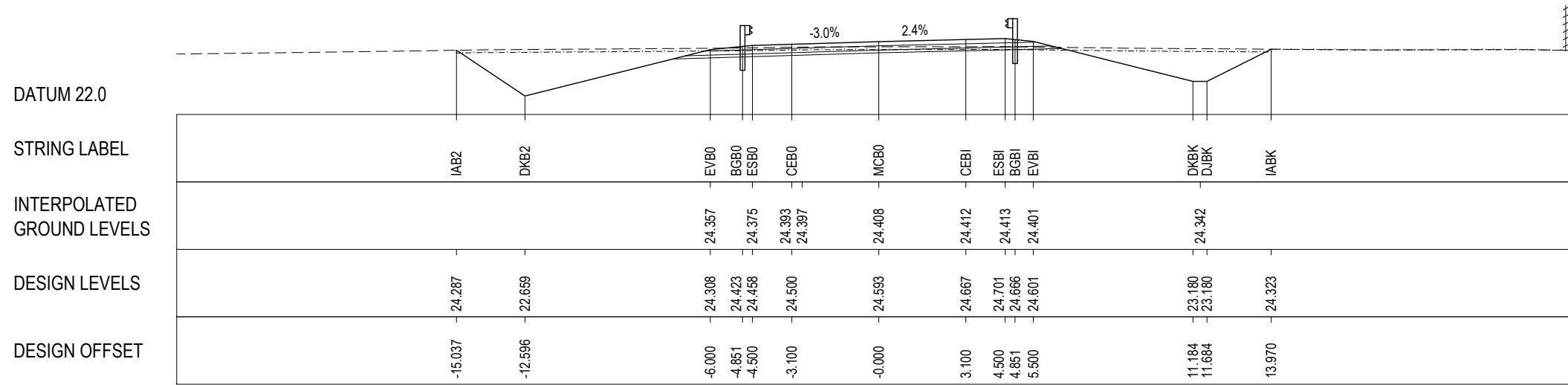


DESIGNED L.ALLEN
REVIEWED R.CASSIDY

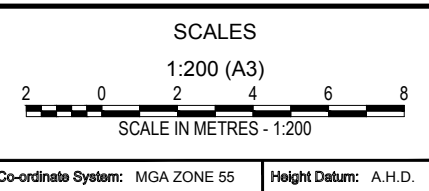
Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 30 OF 37

CONTRACT No. 2402	DRAWING HB17182-C1780	PRINTED DATE 09-Jun-17, 1:27 PM	SHEET No. 1780
REGISTRATION NUMBER A0113.021			REVISION A



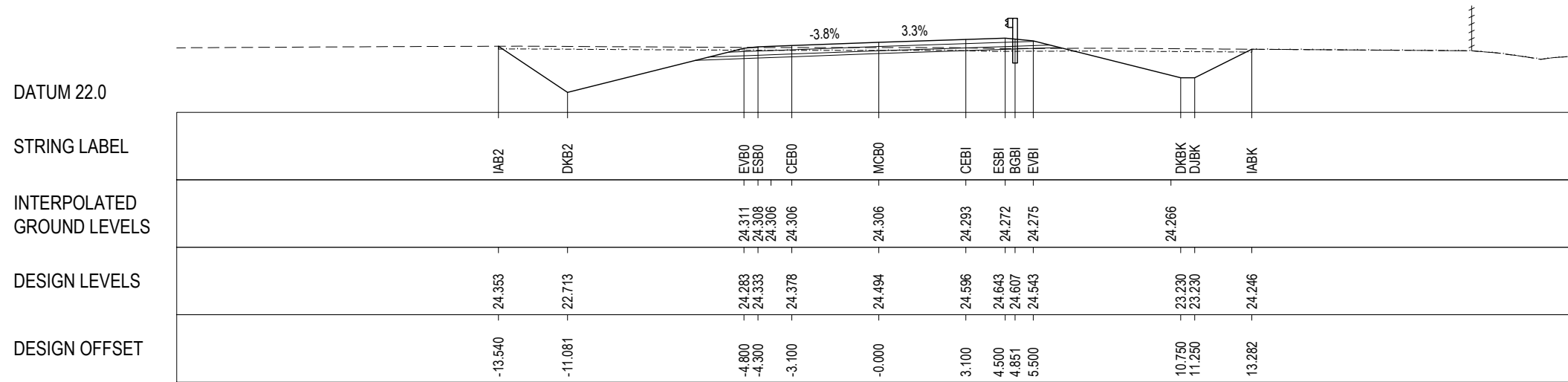
No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			



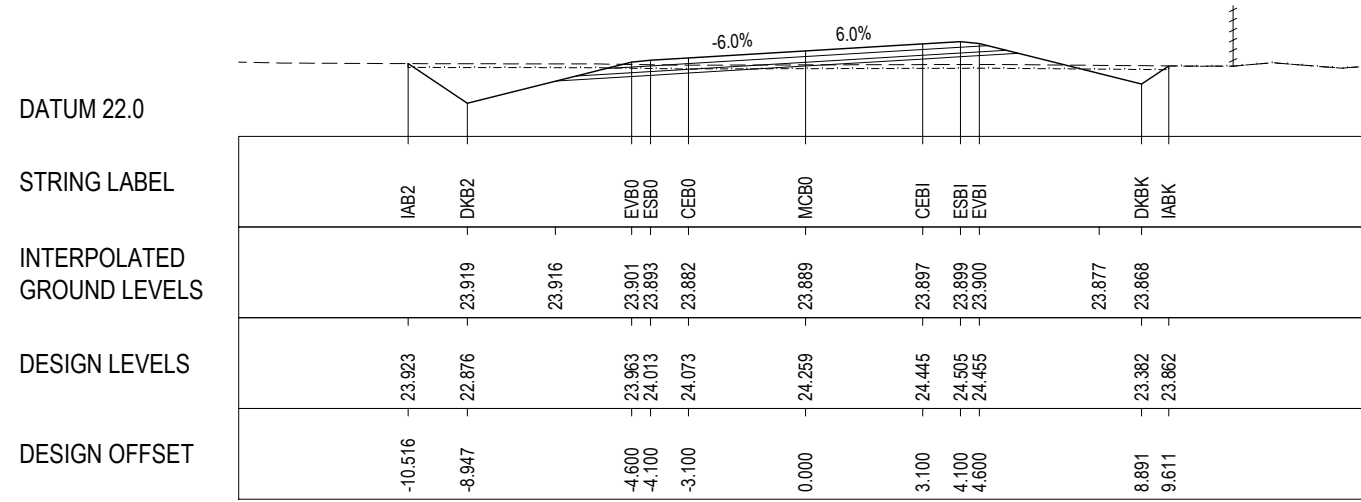
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 31 OF 37

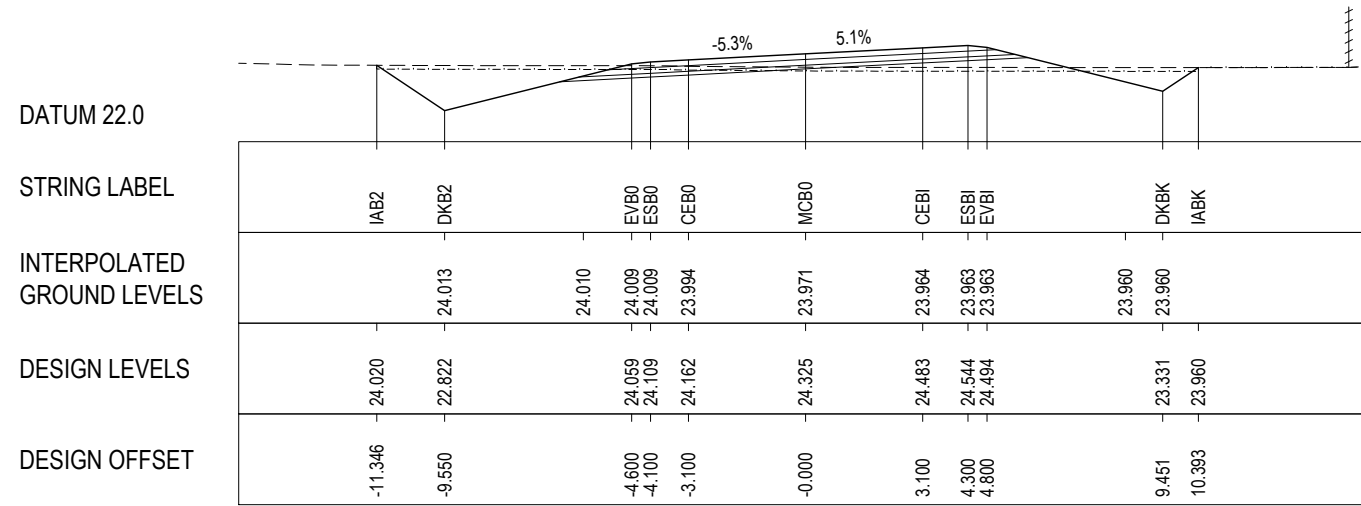
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REGISTRATION NUMBER A0113.021			REVISION A



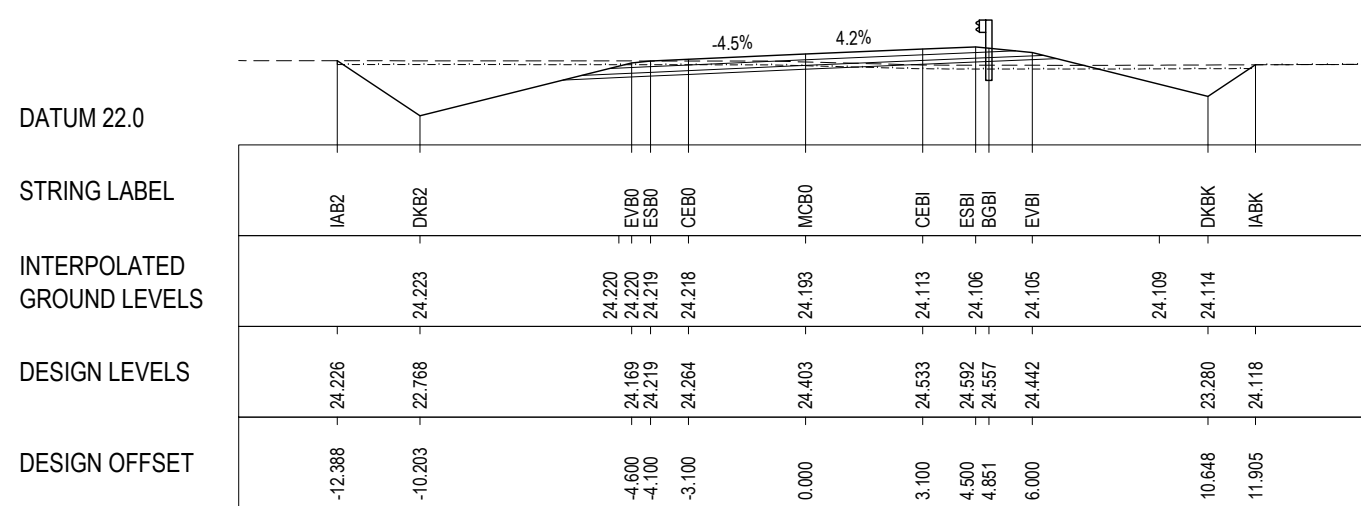
CH. 6450.000



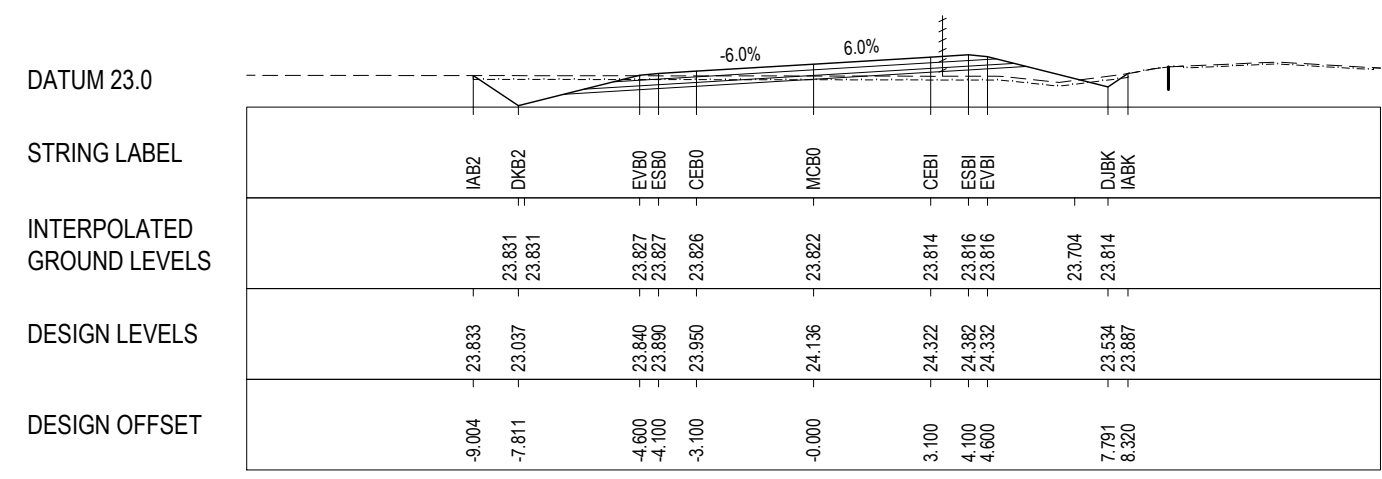
CH. 6480.000



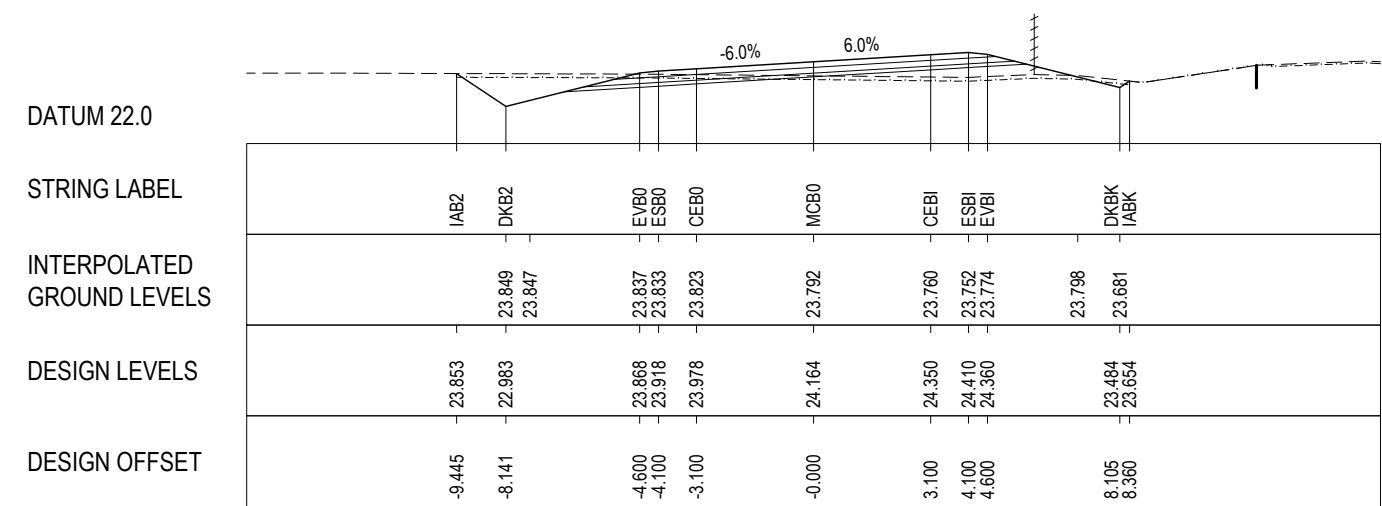
CH. 6470.000



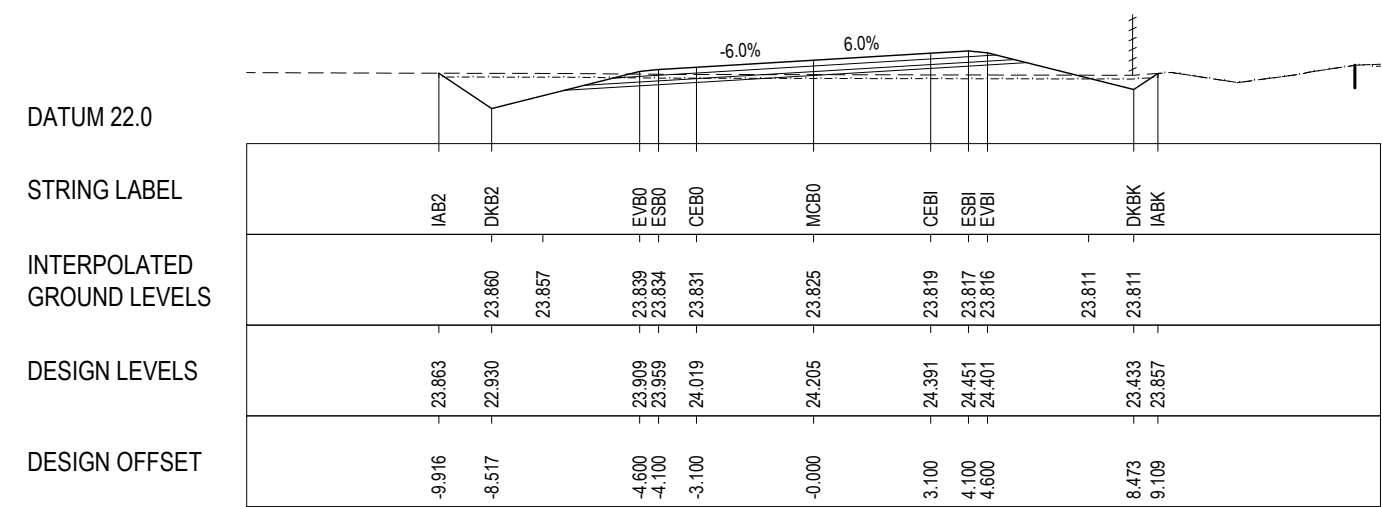
CH. 6460.000



CH. 6510.000

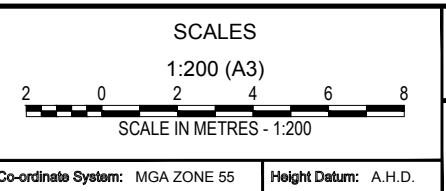


CH. 6500.000



CH. 6490.000

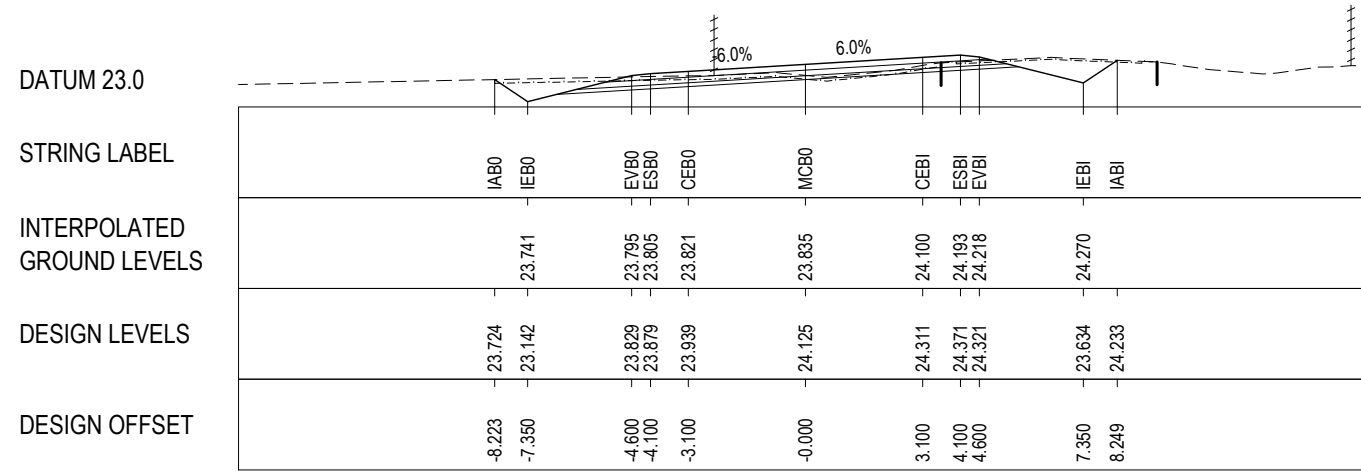
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No.	Amendment Description	Initials	Date
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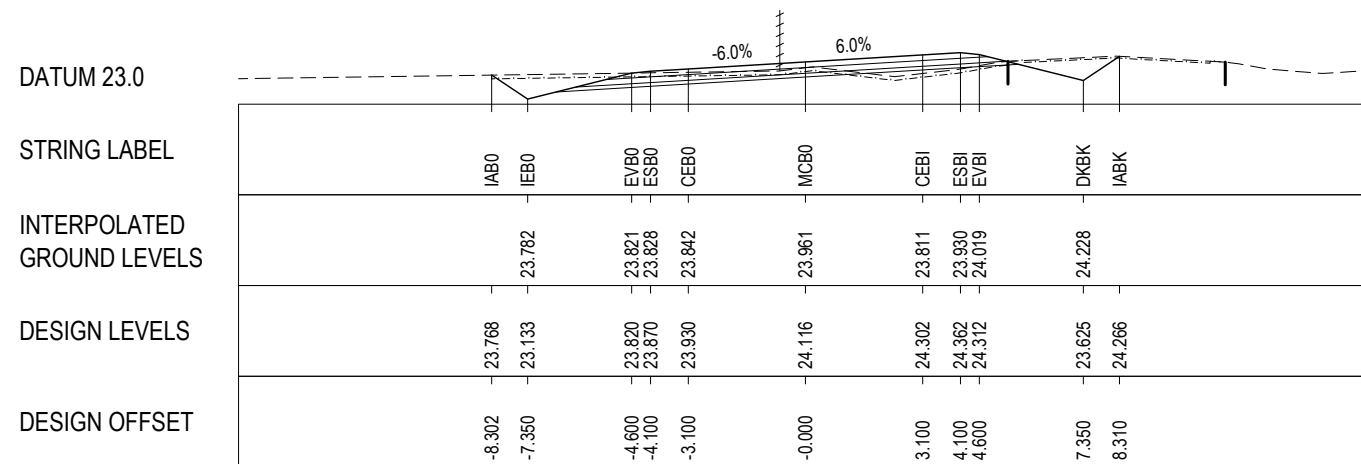
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 33 OF 37

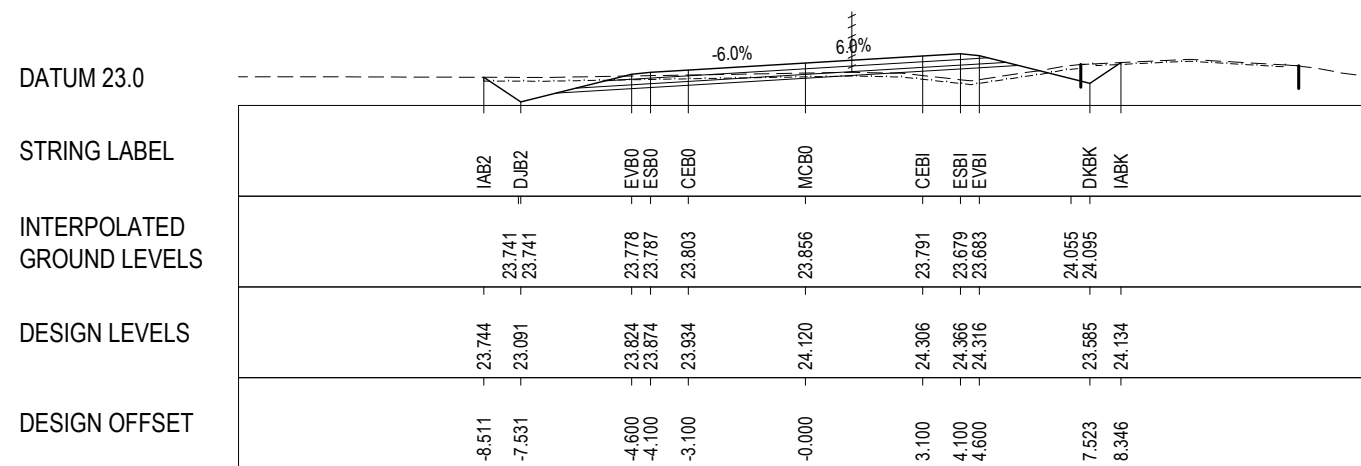
CONTRACT No. 2402	DRAWING HB17182-C1783	PRINTED DATE 09-Jun-17, 1:27 PM	SHEET No. 1783
REGISTRATION NUMBER A0113.021			REVISION A



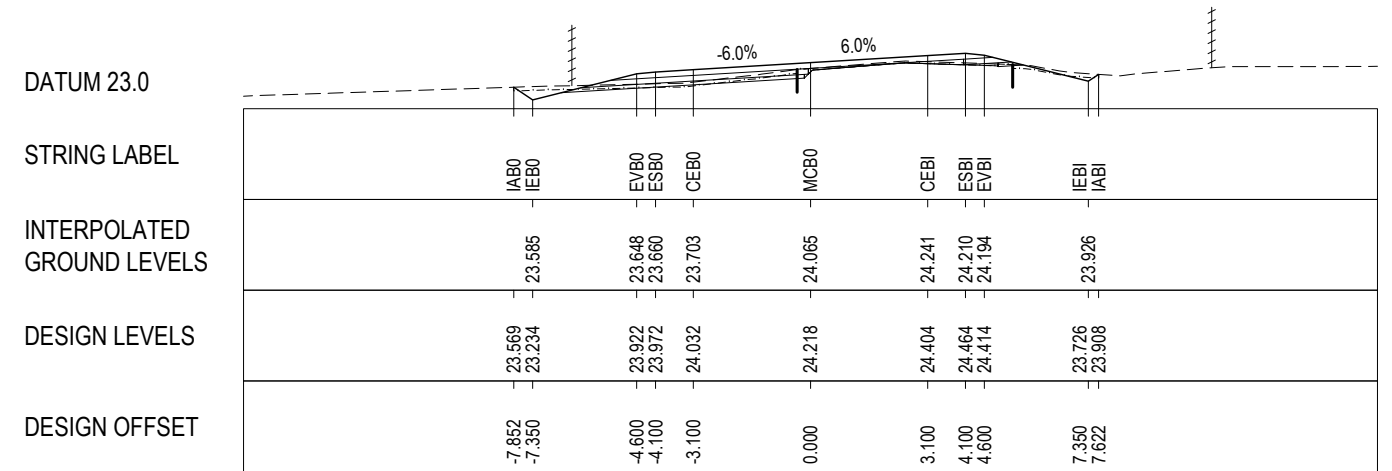
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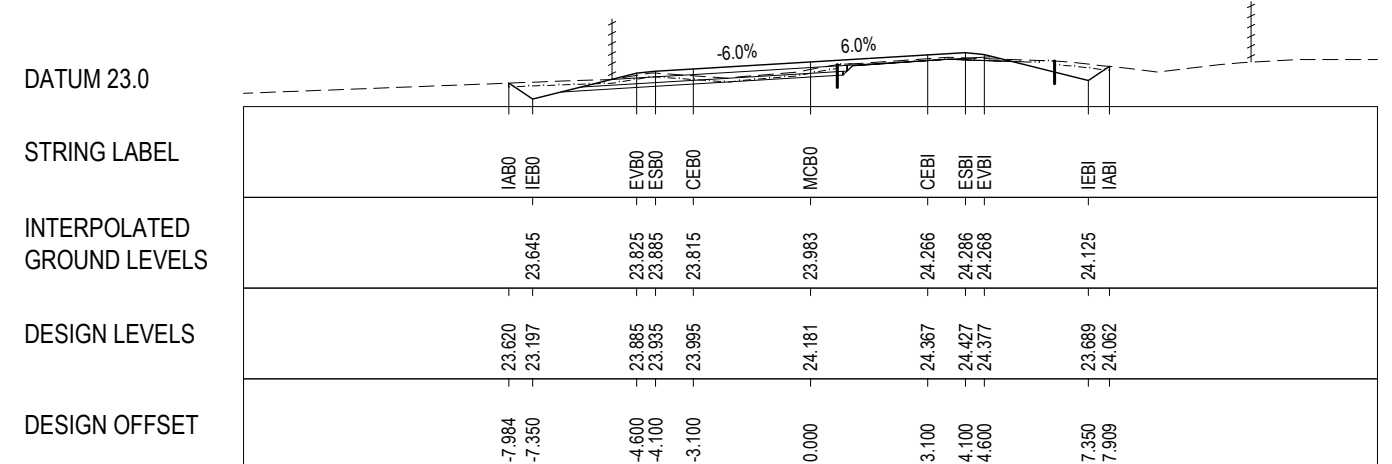
CH. 6530.000



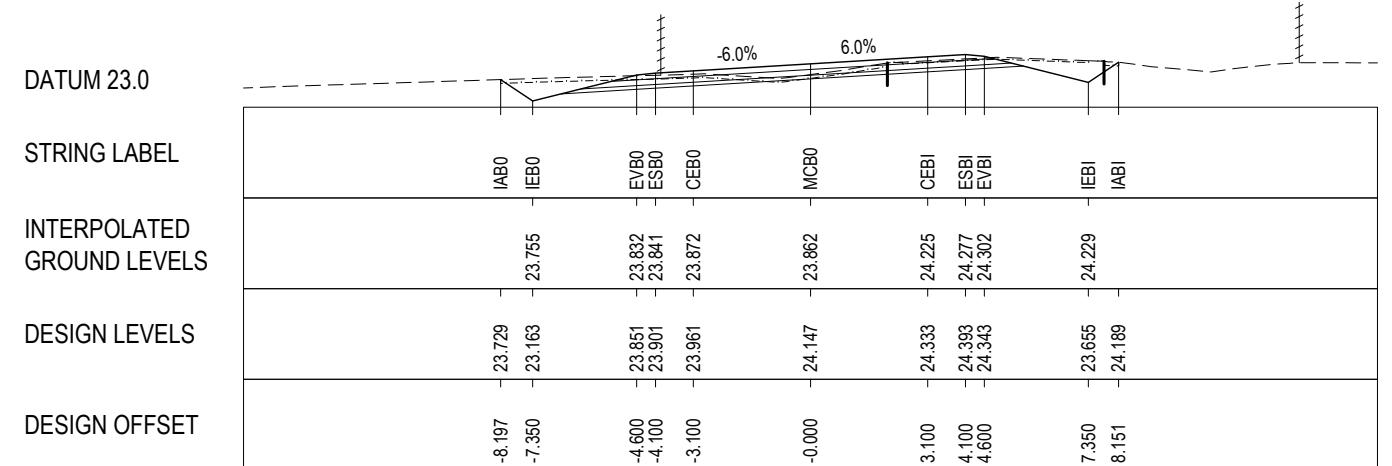
CH. 6520.000



CH. 6570.000

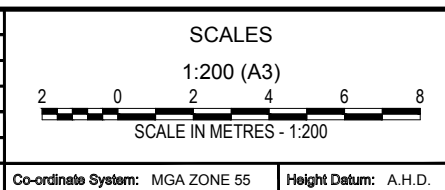


CH. 6560.000



CH. 6550.000

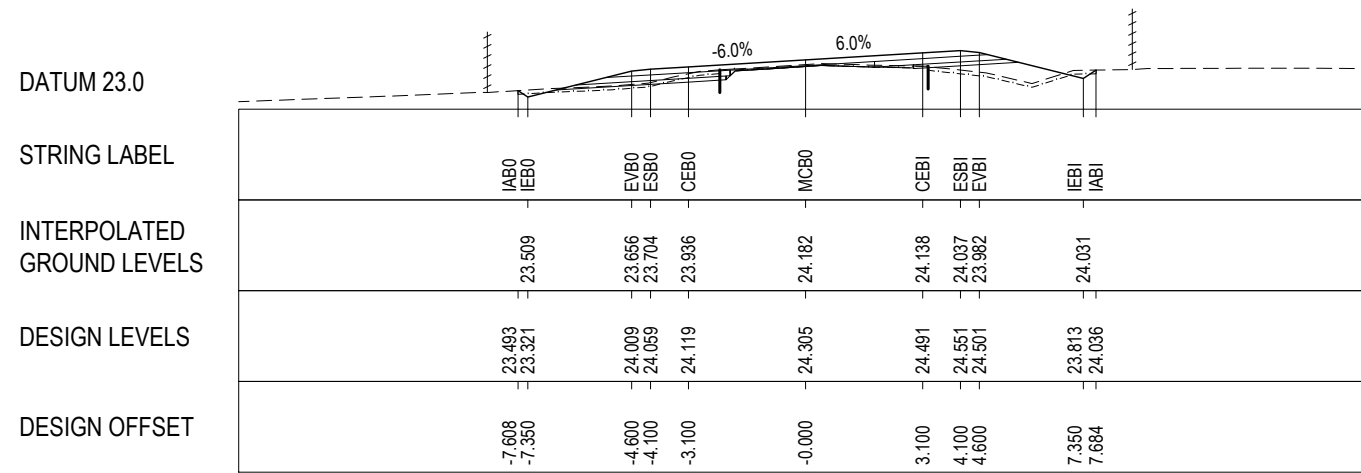
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No.	Amendment Description	Initials	Date
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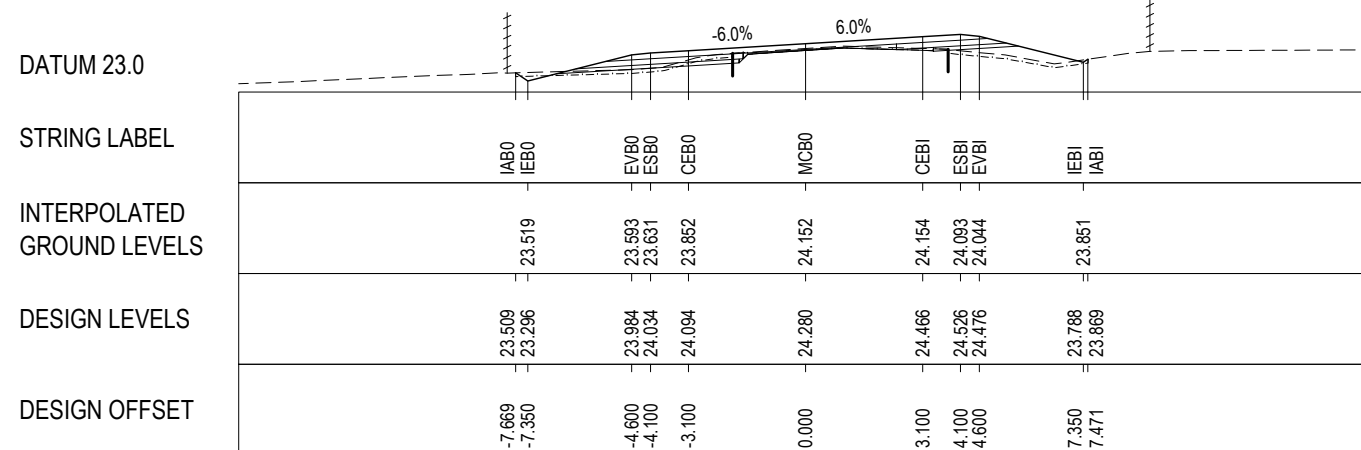
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 34 OF 37

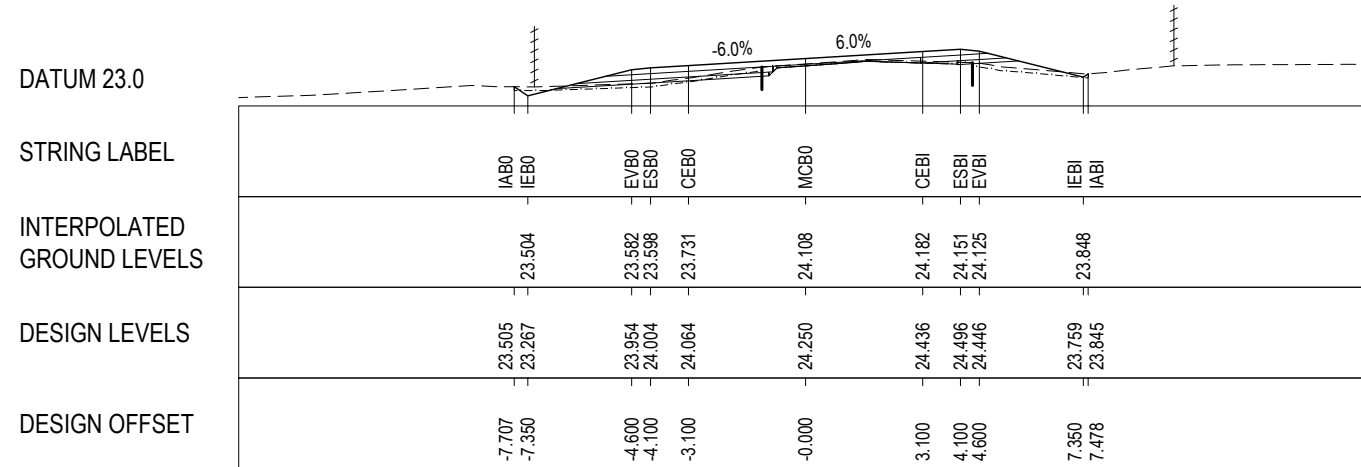
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REGISTRATION NUMBER A0113.021			REVISION A



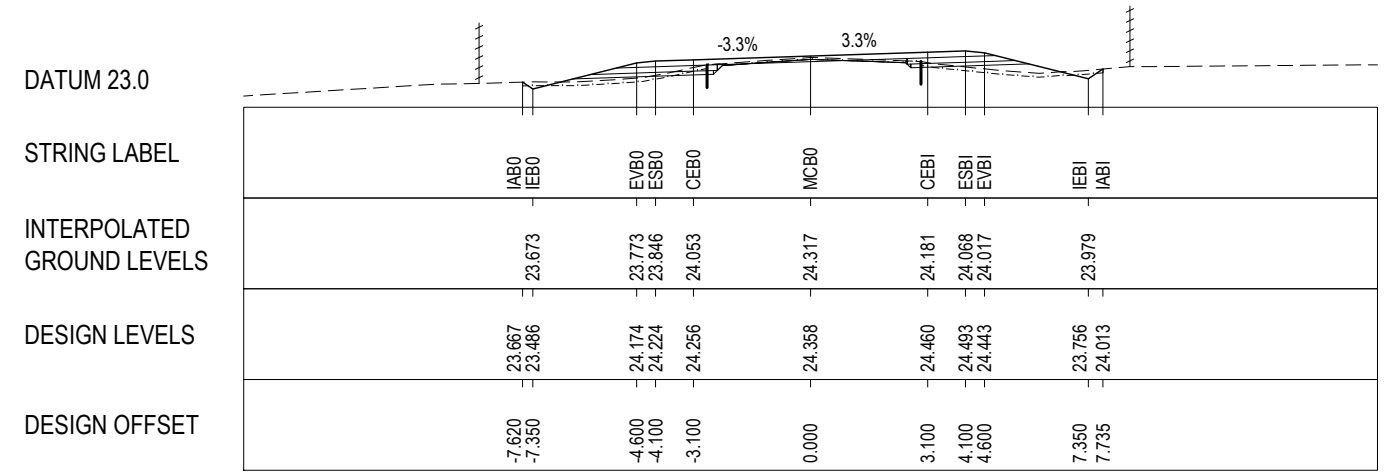
CH. 6600.000



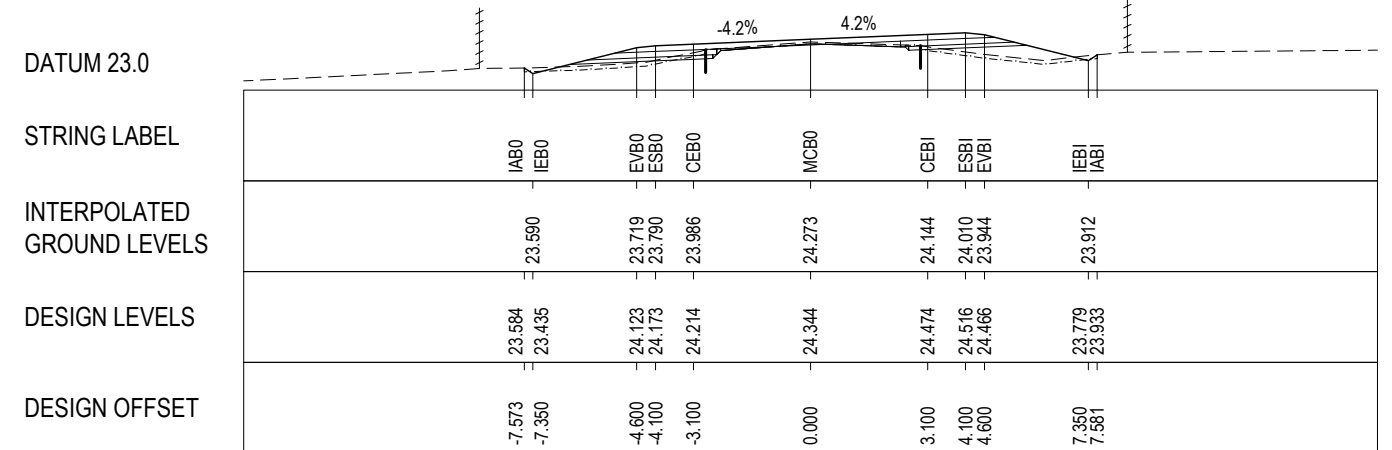
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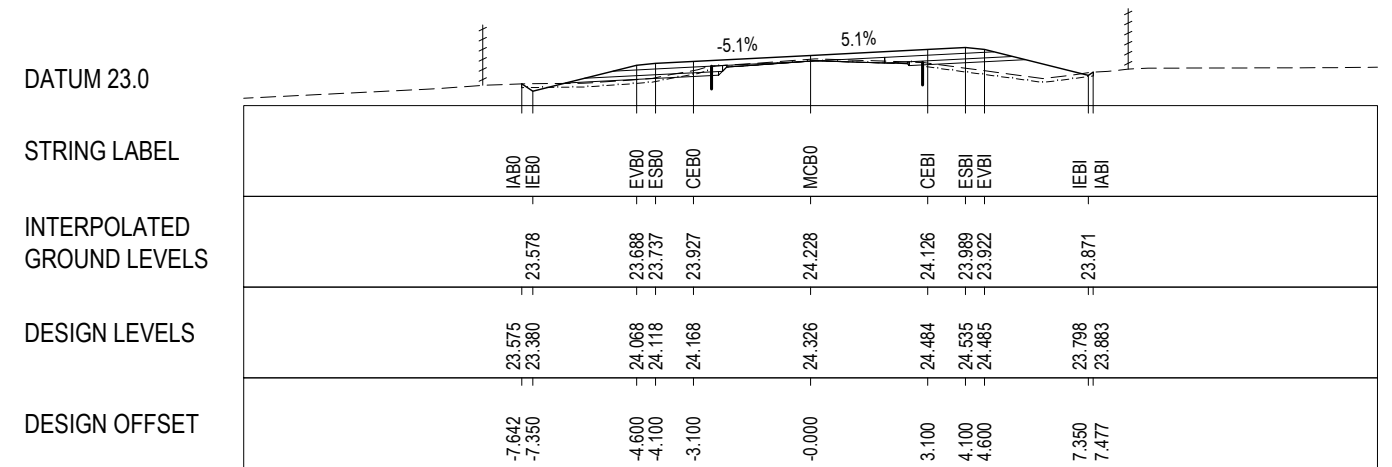
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CH. 6630.000

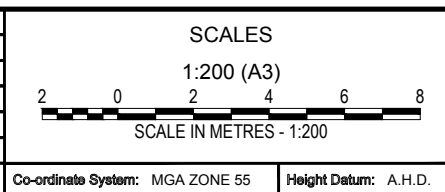


CH. 6620.000



CH. 6610.000

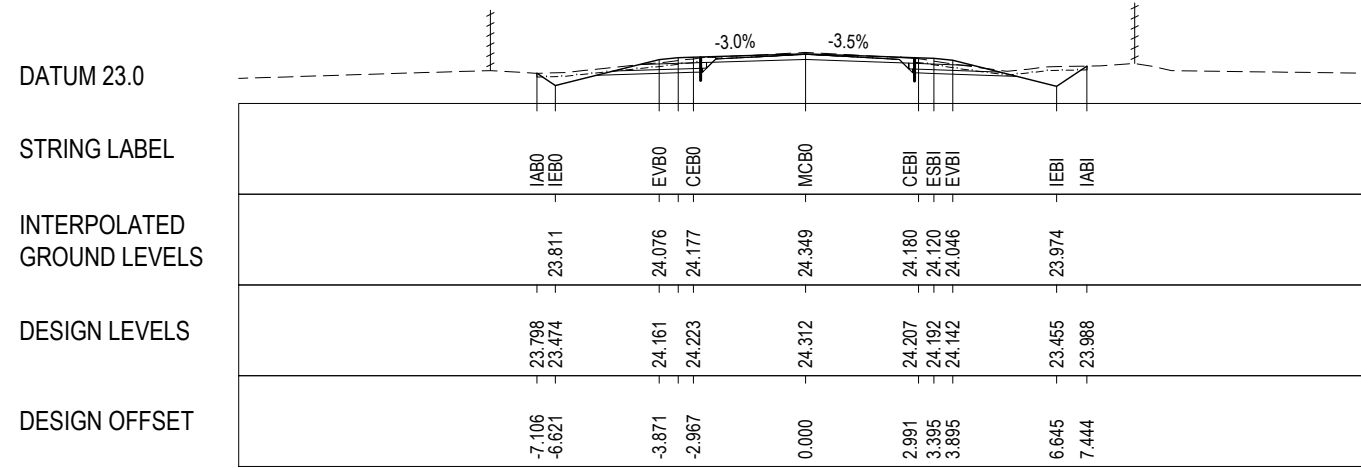
A	PRELIMINARY DESIGN	R.C	09/06/2017
No.	Amendment Description	Initials	Date
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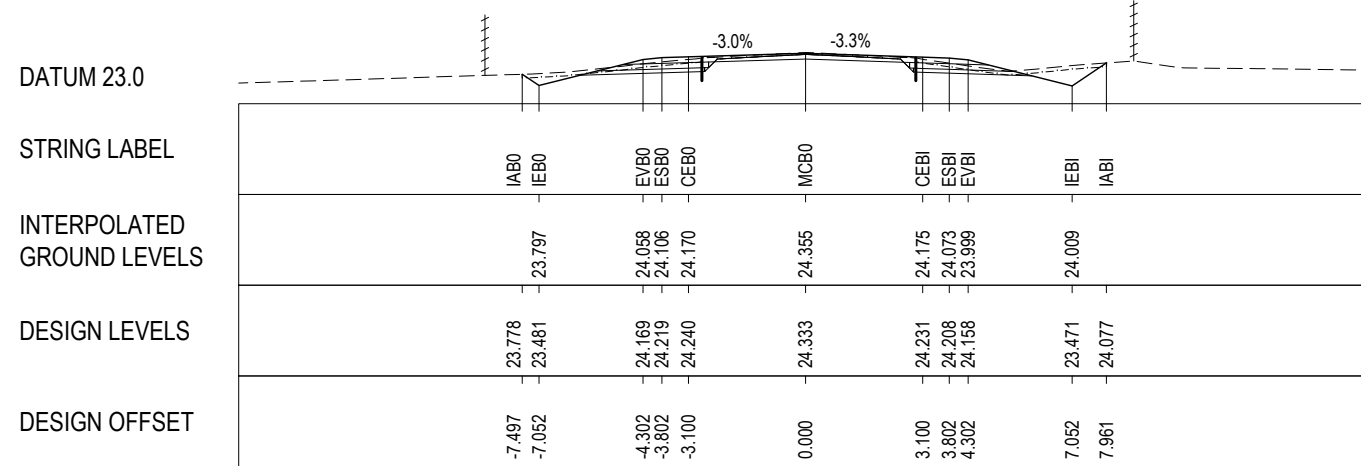
DESIGNED L.ALLEN
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
CROSS SECTIONS (MCB0) - DRG 35 OF 37

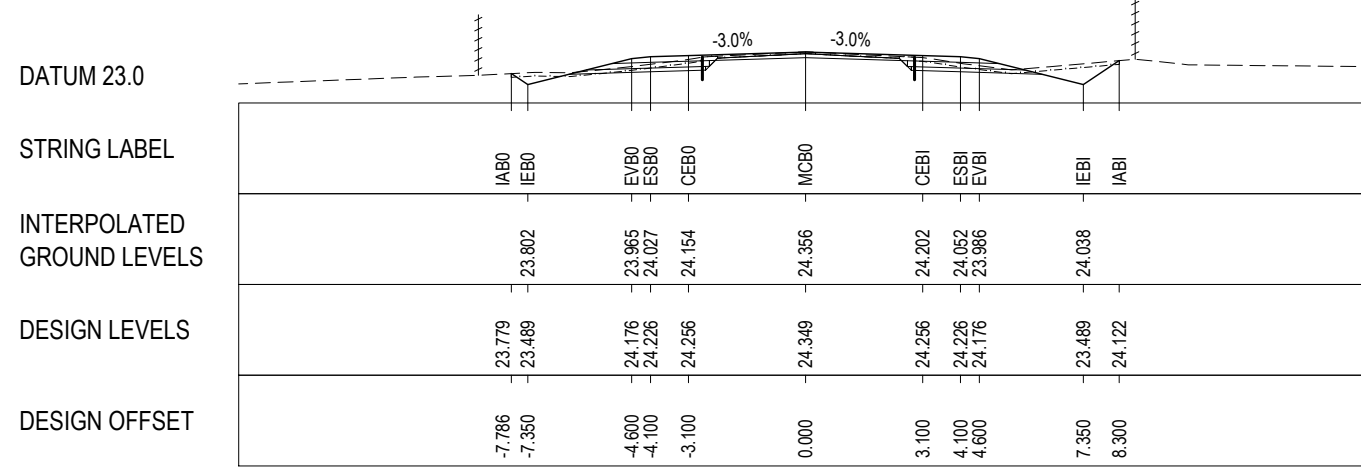
CONTRACT No. 2402	DRAWING HB17182-C1785	PRINTED DATE 09-Jun-17, 1:27 PM	SHEET No. 1785
REGISTRATION NUMBER A0113.021			REVISION A



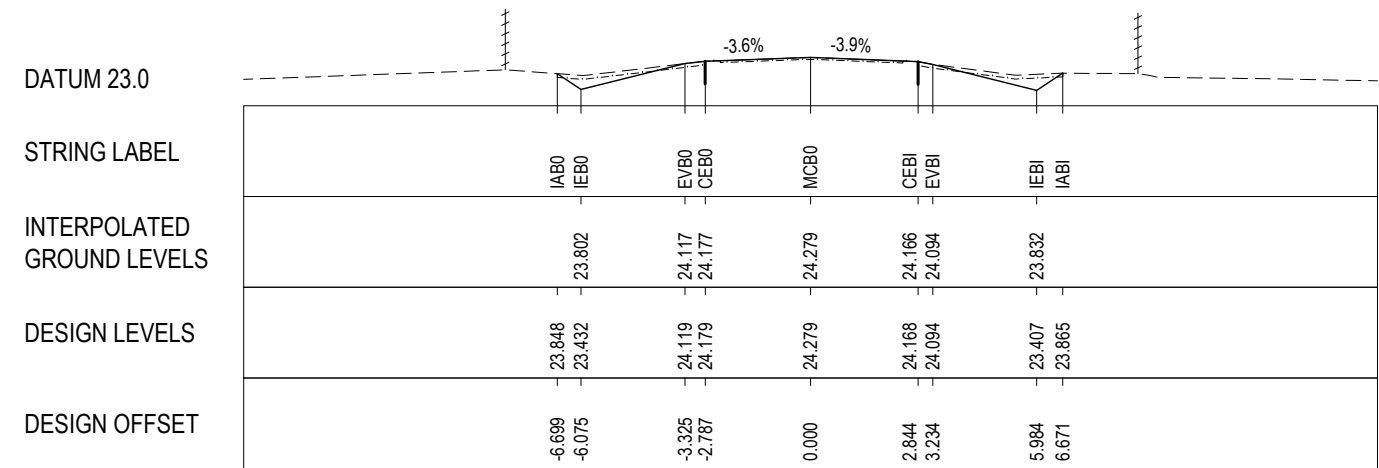
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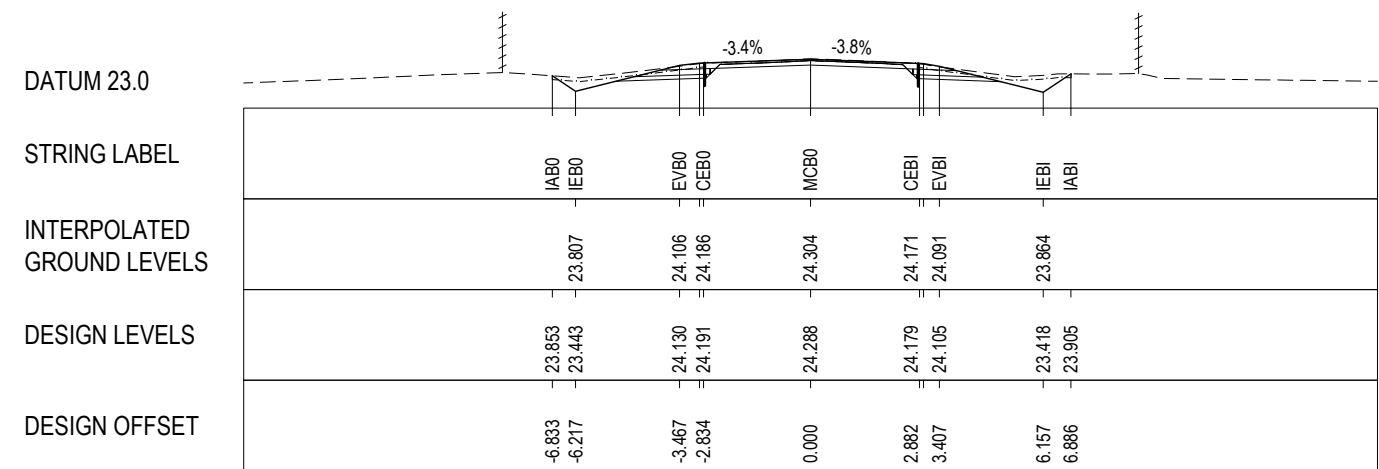
CH. 6710.000



CH. 6700.000

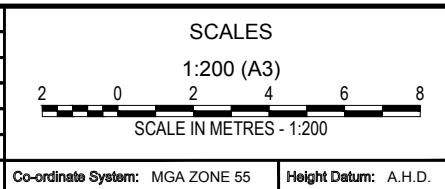


CH. 6733.533



CH. 6730.000

No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			



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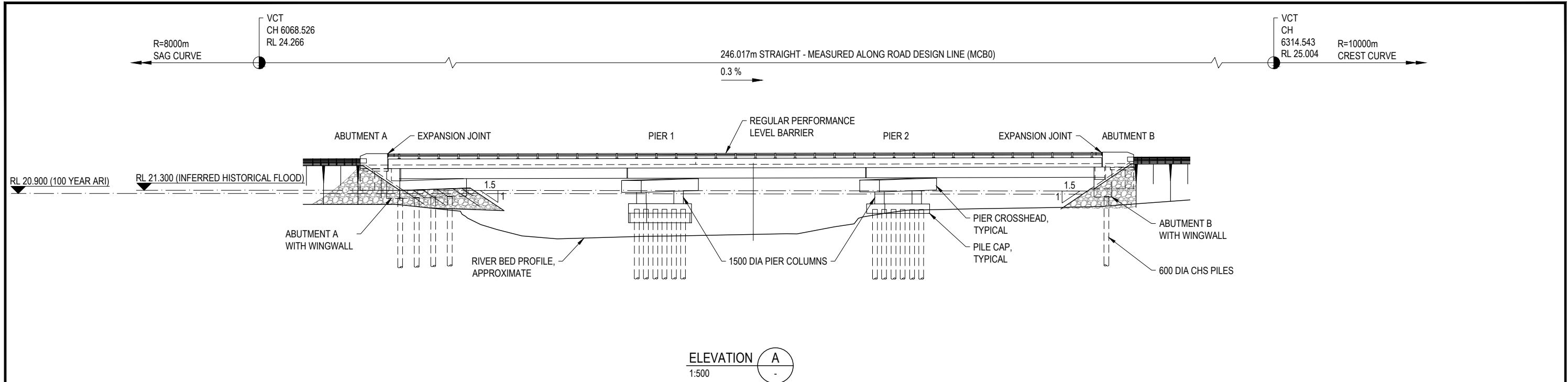
REVIEWED R.CASSIDY

Department of State Growth

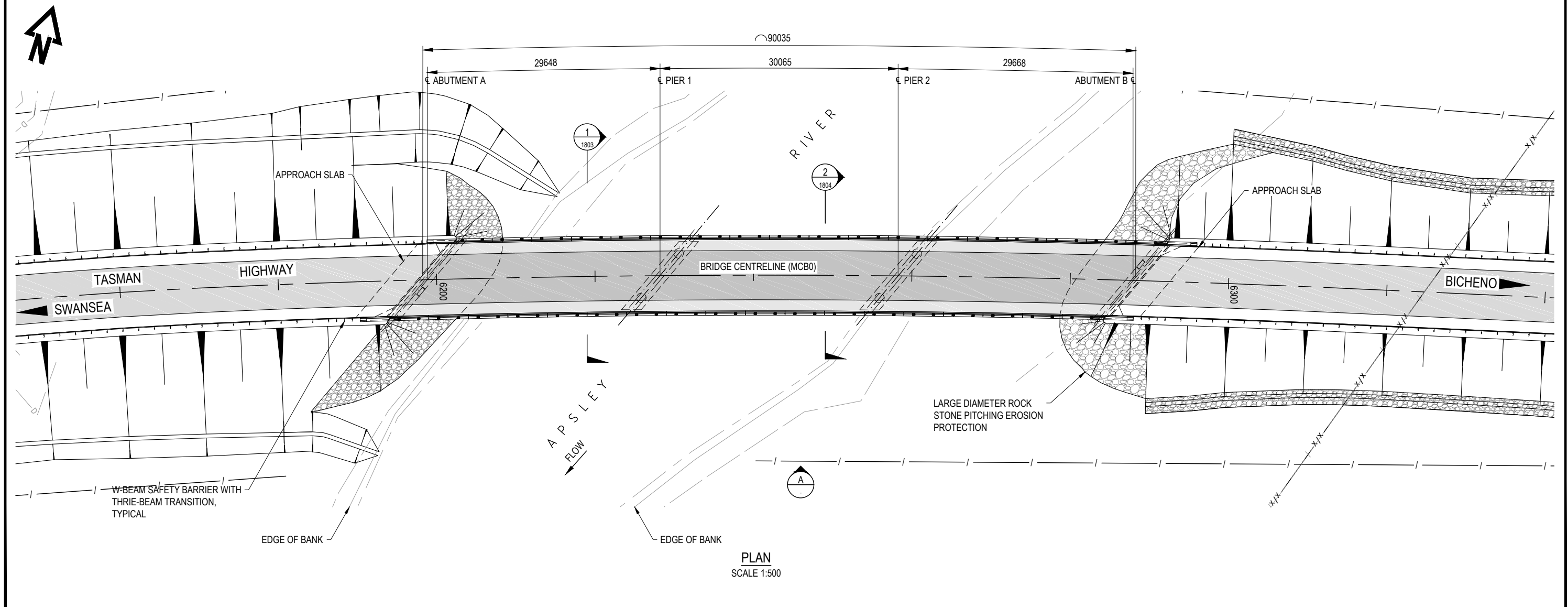
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT

CROSS SECTIONS (MCB0) - DRG 37 OF 37

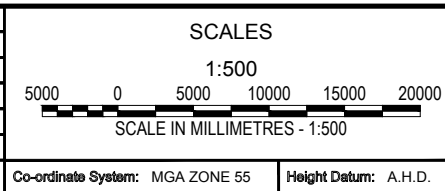
CONTRACT No. 2402	DRAWING HB17182-C1787	PRINTED DATE 09-Jun-17, 1:28 PM	SHEET No. 1787
REGISTRATION NUMBER A0113.021			REVISION A



ELEVATION A
1:500



No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017



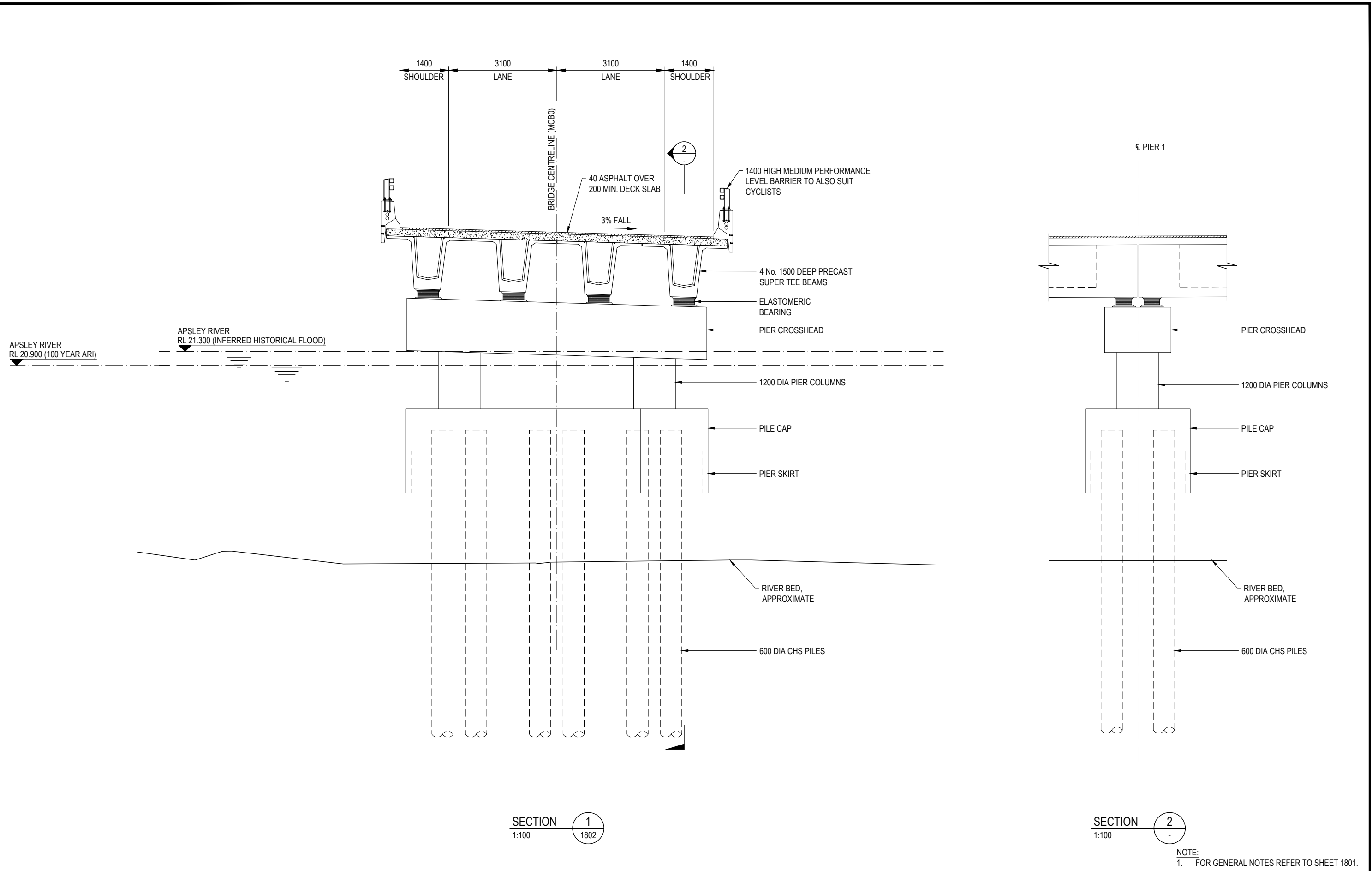
DESIGNED J.WILLIAMS
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APPSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
GENERAL ARRANGEMENT

CONTRACT No. 2402	DRAWING HB17182-S1802	PRINTED DATE 09-Jun-17, 1:28 PM	SHEET No. 1802
REGISTRATION NUMBER A0113.021			REVISION A

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Co-ordinate System: MGA ZONE 55 Height Datum: A.H.D.



SECTION 1
1:100

SECTION 2
1:100

NOTE:
1. FOR GENERAL NOTES REFER TO SHEET 1801.

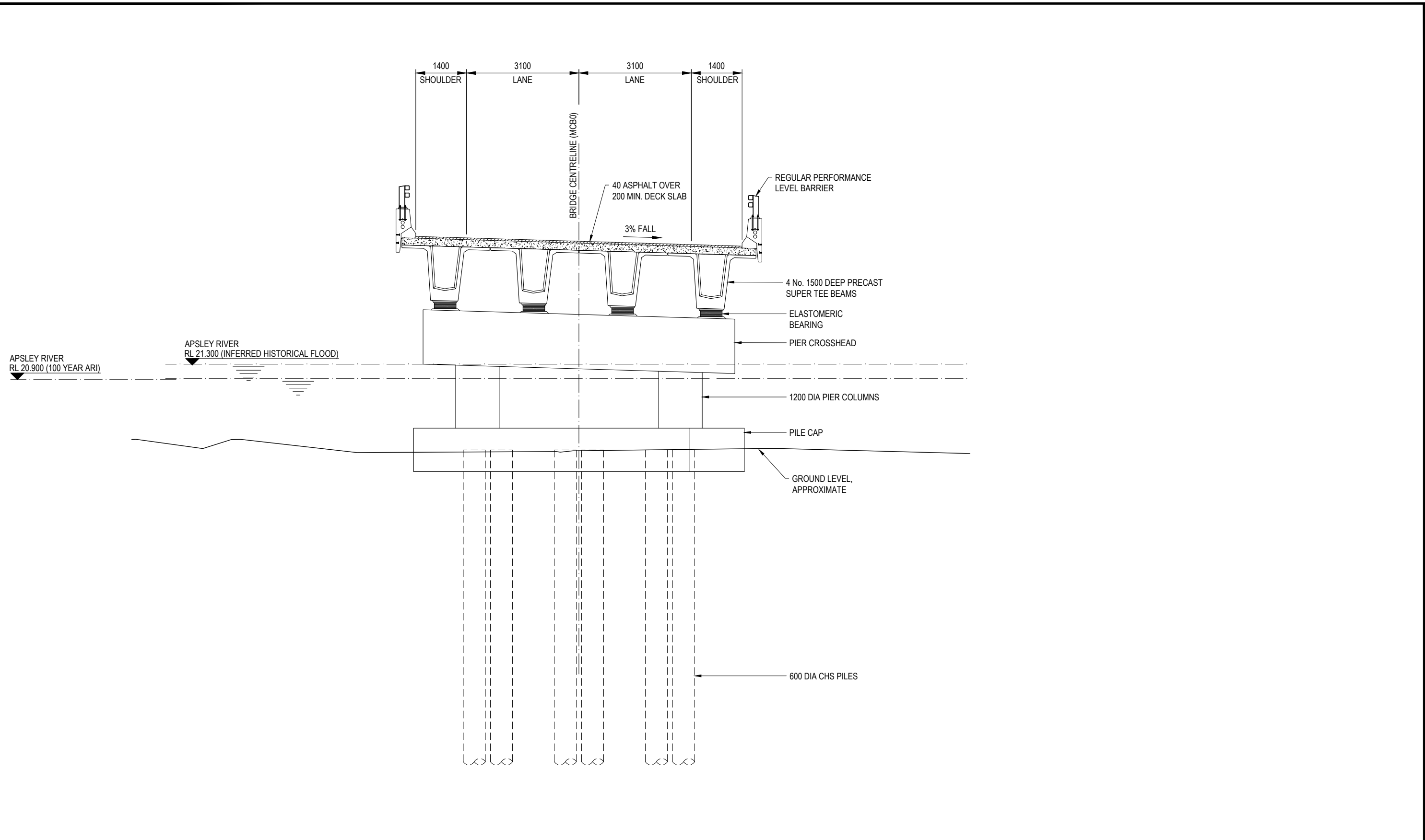
No.	Amendment Description	Initials	Date
A	PRELIMINARY DESIGN	R.C	09/06/2017
A3 original This sheet may be prepared using colour and may be incomplete if copied			

SCALES
1:100
1000 0 1000 2000 3000 4000
SCALE IN MILLIMETRES - 1:100

DESIGNED J.WILLIAMS
REVIEWED R.CASSIDY

Department of State Growth
TASMAN HIGHWAY (A0113)
APSLEY RIVER (LILLA VILLA) BRIDGE (B6159)
BRIDGE REPLACEMENT
SECTIONS - SHEET 1 OF 2

CONTRACT No. 2402	DRAWING HB17182-S1803	PRINTED DATE 09-Jun-17, 1:28 PM	SHEET No. 1803
REGISTRATION NUMBER A0113.021			REVISION A



APSLEY RIVER
RL 20.900 (100 YEAR ARI)

APSLEY RIVER
RL 21.300 (INFERRED HISTORICAL FLOOD)

SECTION 1
1:100

NOTE:
1. FOR GENERAL NOTES REFER TO SHEET 1801.

				<p>Department of State Growth</p> <p>TASMAN HIGHWAY (A0113) APSLEY RIVER (LILLA VILLA) BRIDGE (B6159) BRIDGE REPLACEMENT</p>		<p>CONTRACT No. 2402</p>	<p>DRAWING HB17182-S1804</p>	<p>PRINTED DATE 09-Jun-17, 1:28 PM</p>	<p>SHEET No. 1804</p>
				<p>DESIGNED J.WILLIAMS</p> <p>REVIEWED R.CASSIDY</p>		<p>REGISTRATION NUMBER A0113.021</p>			<p>REVISION A</p>
<p>SCALES</p> <p>1:100</p> <p>1000 0 1000 2000 3000 4000</p> <p>SCALE IN MILLIMETRES - 1:100</p>		<p>Co-ordinate System: MGA ZONE 55</p> <p>Height Datum: A.H.D.</p>		<p>DESIGNED J.WILLIAMS</p> <p>REVIEWED R.CASSIDY</p>		<p>SECTIONS - SHEET 2 OF 2</p>			
<p>A PRELIMINARY DESIGN</p> <p>No. Amendment Description</p>		<p>R.C. 09/06/2017</p> <p>Initials Date</p>		<p>A3 original</p> <p>This sheet may be prepared using colour and may be incomplete if copied</p>					