

BOLTON AVENUE, MOUNT COLAH

ROAD RECONSTRUCTION

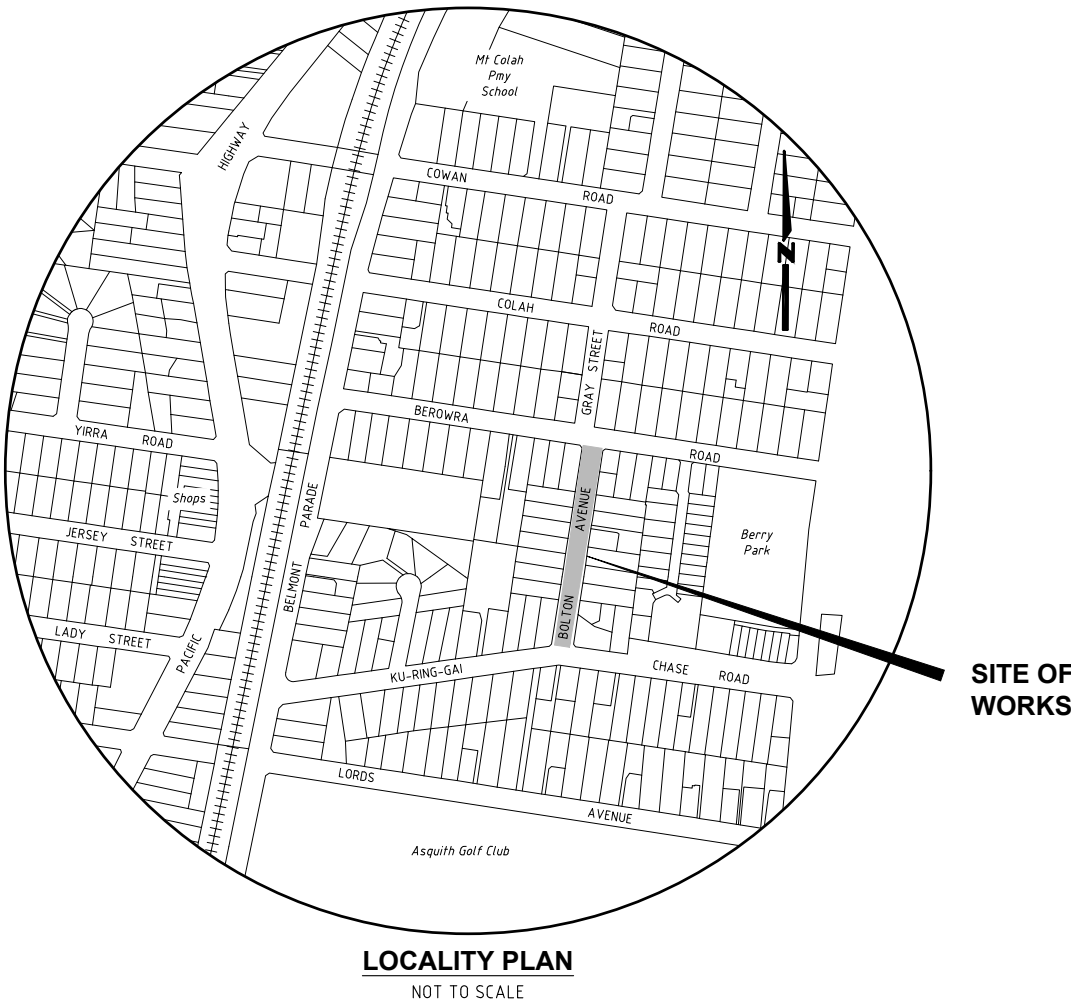
FULL LENGTH

LEGEND

	EXISTING KERB & GUTTER.
	EXISTING EDGE OF BITUMEN.
	EXISTING FENCE.
	EXISTING CONCRETE PATH EDGE.
	EXISTING STORMWATER PIPE.
	EXISTING POWER POLE.
	EXISTING/PROPOSED SIGN.
	EXISTING TREE.
	SURVEY TRAVERSE STATION.
	STATE SURVEY MARK.
	SURVEY REFERENCE MARKS - DRILL HOLE & WING/GALVANISED IRON PIPE.
	EXISTING SEWER MANHOLE.
	EXISTING WATER STOP VALVE / FIRE HYDRANT.
	EXISTING TELSTRA PIT.
	EXISTING SEWER MAIN.
	EXISTING U/G TELSTRA CABLES.
	EXISTING U/G GAS MAIN.
	EXISTING U/G ELECTRICAL CABLES.
	EXISTING OVERHEAD ELECTRICAL CABLES.
	EXISTING WATER MAIN.
	PROPOSED KERB & GUTTER.
	PROPOSED STORMWATER PIT.
	PROPOSED STORMWATER PIPE.
	STORMWATER PIT LABEL (LINE No./PIT No.).
	DESIGN SETOUT POINT & NUMBER.
	EXTENT OF NEW PAVEMENT CONSTRUCTION (REFER TO TYPICAL SECTION ON SHEET No.3 FOR DETAILS).
	EXTENT OF DRIVEWAY RECONSTRUCTION REINSTATED WITH EXISTING OR MATCHING MATERIALS UNLESS NOTED OTHERWISE.
	EXTENT OF NEW FOOTPATH CONSTRUCTION. ALL PATHS N25 CONCRETE (COLOUR: PLAIN CONCRETE).
	EXTENT OF PAVEMENT PROFILING TO SUIT FINISHED DESIGN LEVELS.
	EXTENT OF AC PAVEMENT DEEP LIFT VARIABLE THICKNESS.

DRAWING SCHEDULE

SHEET No.	TITLE	ISSUE
1	DRAWING SCHEDULE, LOCALITY PLAN & LEGEND.	1
2	PROJECT NOTES.	1
3	TYPICAL CROSS SECTION & NEW ROAD PAVEMENT DETAILS.	1
4	OVERALL LAYOUT PLAN.	1
5	CONTROL LINE 1 SETOUT DETAILS.	1
6	GENERAL WORKS & SERVICES PLAN - SHEET 1 OF 2.	1
7	GENERAL WORKS & SERVICES PLAN - SHEET 2 OF 2.	1
8	CL1 CROSS SECTIONS - CH20.000 TO CH130.000.	1
9	CL1 CROSS SECTIONS - CH140.000 TO CH200.000.	1
10	SETOUT & LINE MARKING PLAN.	1
11	DRIVEWAY PROFILES - SHEET 1 OF 2.	1
12	DRIVEWAY PROFILES - SHEET 2 OF 2 & DRAINAGE LONG SECTION LINE 1.	1



Hornsby Shire Council Design & Construction Branch

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Authorised for release - Manager Design & Construction
Name: R. RAJCA Signed: Date:

Designer
S. COMISH
Drawn
K.ROM
Surveyor
J.HART
Project Identifier\VCAD File Name
H:\Bolton Ave_LR_101075\Design\ACAD\Bolton Ave.dwg
TRIM Document Number
D08686824

Design Checked-Design Team Leader
Signed:
Drawing Checked
Signed:
NA
Field Book
NA
Level Book
AHD/GDA94
Datum

1	ISSUED FOR CONSTRUCTION	M. DRAKE			
Issue	Description	Name	Initial	Date	
Design not to be amended without authorisation by Manager Design & Construction					

Bar Scales

NOT TO SCALE

DO NOT SCALE, USE FIGURED DIMENSIONS ONLY



BOLTON AVENUE, MOUNT COLAH PROPOSED ROAD RECONSTRUCTION FULL LENGTH

DRAWING SCHEDULE, LOCALITY PLAN & LEGEND

ASSET MANAGEMENT & MAINTENANCE BRANCH

Senior Asset Engineer
Name: A. BOYD Telephone: 9847 6672
Accepted as complying with the general intent of the design brief
Signed: Date:

Project Number
101075
Sheet of Issue
1 12 1
HSC Drawing Number
1157.1

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS & SPECIFICATIONS OF HORNSBY SHIRE COUNCIL.
2. LEVELS SHALL BE OBTAINED FROM ESTABLISHED BENCH MARKS & NOT FROM SURVEY PEGS.
3. PROVIDE TRAFFIC MANAGEMENT, LINEMARKING & SIGNAGE IN ACCORDANCE WITH THE TfNSW "TRAFFIC CONTROL AT WORK SITES" TECHNICAL MANUAL & AS1742.3 REQUIREMENTS.
4. SERVICES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM INFORMATION SUPPLIED FROM THE RELEVANT AUTHORITIES VIA A "DIAL BEFORE YOU DIG" ENQUIRY. THE LOCATION OF SERVICES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED AS ACCURATELY AS POSSIBLE FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES & FIELD INVESTIGATIONS & ARE TO BE VERIFIED PRIOR TO CONSTRUCTION.
5. EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH THE LANDCOM PUBLICATION:- "MANAGING URBAN STORMWATER, SOILS & CONSTRUCTION" Vol. 1, 4th EDITION.
6. ALL DISTURBED AREAS OF THE SITE ARE TO BE REINSTATED WITH EXISTING OR MATCHING MATERIALS UNLESS NOTED OTHERWISE AT THE COMPLETION OF THE WORKS.
7. WHERE WORKS ARE ADJACENT TO EXISTING STRUCTURES UNDERTAKE A DILAPIDATION SURVEY OF EXISTING ADJACENT STRUCTURES BEFORE COMMENCEMENT OF ANY WORKS.
8. IF SET-OUT IS REQUIRED BY HORNSBY SHIRE COUNCIL DESIGN & CONSTRUCTION BRANCH SURVEYOR, NOTIFY ENGINEERING SURVEYOR A MINIMUM OF 24 HOURS IN ADVANCE.
9. WHERE PAVEMENT RESURFACING IS UNDERTAKEN ENSURE ALL BLUE HYDRANT MARKER RRPMS ARE REINSTATED AT THE COMPLETION OF WORKS.
10. COUNCIL'S TREE MANAGEMENT GROUP CONTACT DETAILS.
CONTACT: Scott Hannell PH: 9847 6993

1. THE CONSTRUCTOR SHALL COMPLY WITH ALL STATUTORY & INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
2. THE CONSTRUCTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON. WORK IS NOT TO COMMENCE ON SITE PRIOR TO IMPLEMENTING OF A SUITABLE TRAFFIC MANAGEMENT SCHEME.
3. THE CONSTRUCTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS/RESIDENCES ADJACENT TO THE WORKS IS NOT DISRUPTED.
4. WHERE NECESSARY THE CONSTRUCTOR SHALL PROVIDE SAFE PASSAGE OF EMERGENCY SERVICE VEHICLES AND/OR EMERGENCY SERVICE PERSONNEL THROUGH THE SITE.

1. SUBSOIL DRAINAGE TO BE INSTALLED AS DIRECTED BY SUPERVISING CONSTRUCTION ENGINEER.
2. SUBSOIL FLUSHING POINTS TO BE INSTALLED AT ALL U/S ENDS OF LINES & AT 60m MAXIMUM CENTRES. CONNECT SUBSOIL PIPES TO STORMWATER PITS.

1. A GEO-TECHNICAL INVESTIGATION HAS BEEN UNDERTAKEN AT THIS PROJECT SITE BY STS GEOTECHNICS PTY LTD (REPORT No. 23/1649). THE REPORT CAN BE FOUND IN COUNCIL'S DOCUMENT MANAGEMENT SYSTEM AS DOCUMENT No. D08678658.
2. CARE WILL BE REQUIRED TO ENSURE THAT NEARBY STRUCTURES & INFRASTRUCTURE ARE NOT DAMAGED WHEN EXCAVATING THE ROCK. EXCAVATION METHODS SHOULD BE ADOPTED WHICH LIMIT GROUND VIBRATIONS AT THE ADJOINING STRUCTURES TO NOT MORE THAN 5mm/SEC.
3. IT IS RECOMMENDED THAT BEFORE COMMENCING EXCAVATION TO UNDERTAKE A DILAPIDATION SURVEY OF ANY STRUCTURES THAT MAY POTENTIALLY BE DAMAGED. THIS WILL PROVIDE REASONABLE BASIS FOR ASSESSING ANY FUTURE CLAIMS OF DAMAGE.
4. EXCAVATIONS ARE NOT EXPECTED TO ENCOUNTER THE GROUNDWATER TABLE, HOWEVER SHOULD ANY SIGNIFICANT GROUNDWATER FLOWS BE ENCOUNTERED DURING EXCAVATION, STS MUST BE CONTACTED IMMEDIATELY TO PROVIDE FURTHER ADVICE & RECOMMENDATIONS.
5. STS GEOTECHNICS CONTACT PH: 02 9756 2166.

1. CONCRETE TO BE MINIMUM GRADE N25.
2. ALL CONCRETE TO BE TRANSVERSE HEAVY BROOM FINISHED. USE A STANDARD EDGING TOOL TO PENCIL ROUND THE EDGE INCLUDING CONTROL & EXPANSION JOINTS WITH SMOOTH BORDER APPROXIMATELY 50mm WIDE.
3. THE RAMP GRADIENT IS TO BE NO STEEPER THAN 1 IN 8.
4. ALL CONSTRUCTION TO COMPLY WITH THE REQUIREMENTS OF AS3600, CONCRETE CODE.
5. FOUNDATION MATERIALS MUST BE CAPABLE OF WITHSTANDING A SAFE BEARING PRESSURE OF 100kPa. VERIFY & RECORD THE BEARING CAPACITY BEFORE ANY CONCRETE IS PLACED.
6. DIMENSIONS ARE IN METRES UNLESS SHOWN OTHERWISE.

1. MATERIALS AND CONSTRUCTION: TO AS 3600, AS 3610
STEEL REINFORCEMENT MATERIALS: TO AS 4671.

2. CONCRETE QUALITY: TO AS 1379
READY MIX CONCRETE: TO AS 1379

a) DO NOT USE ADMIXTURES WITHOUT WRITTEN APPROVAL FROM SUPERVISING ENGINEER.

b) CEMENT: TYPE 'GP' OR 'GB' TO AS 3972.

c) MAXIMUM SIZE OF COARSE AGGREGATE: 20mm.

d) CONCRETE SLUMP: 80mm U.N.O.

ELEMENT	CHARACTERISTIC CONCRETE STRENGTH(f'c) AT 28 DAYS	REO	COVER	FINISH	COLOUR
FOOTPATH	N25 (U.N.O.)	-	REO NOT REQUIRED	BROOM FINISH	PLAIN CONCRETE
DRIVEWAYS	N25 (U.N.O.)	SL62	MIN. 40MM	BROOM FINISH	PLAIN CONCRETE

3. VERIFY STRENGTH BY PRODUCTION CONTROL TESTING TO AS 1379.

4. NO UNSPECIFIED HOLES, DUCTING OR CHASES ARE PERMITTED WITHOUT WRITTEN APPROVAL FROM SUPERINTENDENT (SUPERVISING OFFICER). NO PIPES OR CONDUITS ARE PERMITTED WITHIN CONCRETE COVER.

5. STRUCTURAL DIMENSIONS DO NOT INCLUDE TOPPINGS OR FINISHES.

6. FORM CONSTRUCTION JOINTS ONLY AT LOCATIONS SHOWN ON DRAWINGS. DO NOT VARY WITHOUT WRITTEN APPROVAL FROM SUPERVISING ENGINEER.

7. PREPARE COLD JOINTS BY LIGHT SCABBLING, REMOVAL OF DEBRIS & WASHING WITH CLEAN WATER.

8. FOUNDATION MATERIALS MUST BE CAPABLE OF WITHSTANDING A SAFE BEARING PRESSURE OF 100kPa. VERIFY & RECORD THE BEARING CAPACITY BEFORE ANY CONCRETE IS PLACED.

9. DO NOT PLACE CONCRETE UNTIL REINFORCEMENT (IF USED) & FORMWORK ARE INSPECTED BY SUPERVISING ENGINEER.

10. THOROUGHLY CLEAN OUT ALL FORMWORK PRIOR TO POURING.

11. DO NOT PLACE CONCRETE UNDER THE FOLLOWING CONDITIONS:

a) WHEN THE SURROUNDING OUTDOOR TEMPERATURE EXCEEDS 30°C.

b) WHEN THE SURROUNDING WIND SPEED EXCEEDS 12 KNOTS.

12. IMPLEMENT THE FOLLOWING PROCEDURES TO MITIGATE PREMATURE DRYING & CRACKING OF THE CONCRETE:

a) IN HOT CONDITIONS, PROGRAM CONCRETE PLACEMENT FOR THE COOLER PART OF THE DAY (ie. EARLY MORNING).

b) SPRAY EVAPORATIVE RETARDERS WITH FUGATIVE DYES (eg. ALIPHATIC ALCOHOL) OVER THE SURFACE IMMEDIATELY AFTER SCREEDING & WHILST BLEED WATER IS STILL PRESENT. REAPPLY IF THE SURFACE IS DISTURBED.

c) COMMENCE CURING IMMEDIATELY AFTER FINISHING. CURE FOR 7 DAYS.

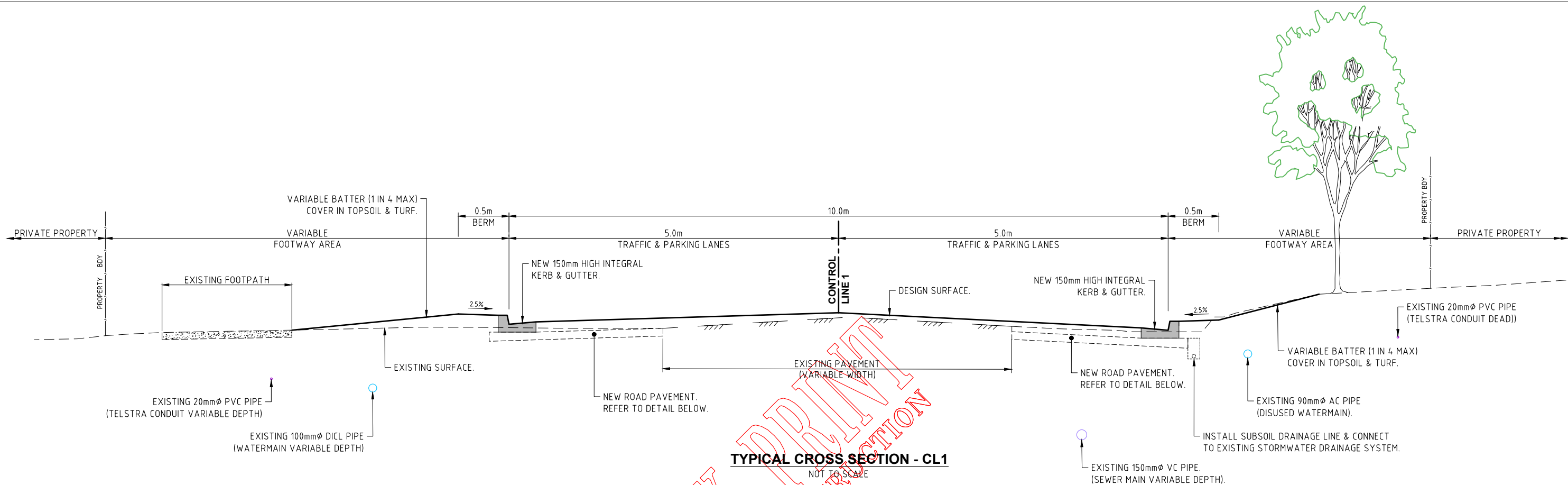
13. VIBRATE CONCRETE DURING PLACEMENT TO GIVE MAXIMUM COMPACTION WITHOUT SEGREGATION.

14. SURFACE FINISH - REFER TO DRAWINGS FOR DETAILS.

15. COMMENCE CURING OF ALL CONCRETE SURFACES IMMEDIATELY ON FINISHING & CONTINUE FOR 7 DAYS MIN.

16. EXPANSION JOINTS & ISOLATION JOINTS ARE TO BE SEALED TO MANUFACTURER'S SPECIFICATIONS WITH A GUN GRADE POLYURETHANE LOW MODULUS SELF PRIMING SEALANT EQUAL TO 'TREMCO DYMONIC NT' (+100%, -50% MOVEMENT CAPACITY). SEALANT COLOUR GREY OR EQUIVALENT.

Hornsby Shire Council Design & Construction Branch TELEPHONE: (02) 9847 6666 FACSIMILE: (02) 9847 6999	Designer	Design Checked-Design Team Leader								Bar Scales NOT TO SCALE	 HORNSBY SHIRE COUNCIL PO BOX 37, HORNSBY NSW 1630	Project Number	
	S. COMISH	Signed:										101075	
	Drawn	Drawing Checked										Sheet of	Issue
	K.ROM	Signed:										212	1
	Surveyor	NA	NA	AHD/GDA94								HSC Drawing Number	
	J.HART	Field Book	Level Book	Datum								1157.1	
Project Identifier\\CAD File Name													
H:\\\\Bolton Ave_LR_101075\\Design\\ACAD\\Bolton Ave.dwg		1	ISSUED FOR CONSTRUCTION			M. DRAKE							
Authorised for release - Manager Design & Construction		TRIM Document Number		Issue	Description	Name	Initial	Date	DO NOT SCALE, USE FIGURED DIMENSIONS ONLY				
Name: R. RAJCA Signed: Date:		D08686824		Design not to be amended without authorisation by Manager Design & Construction									

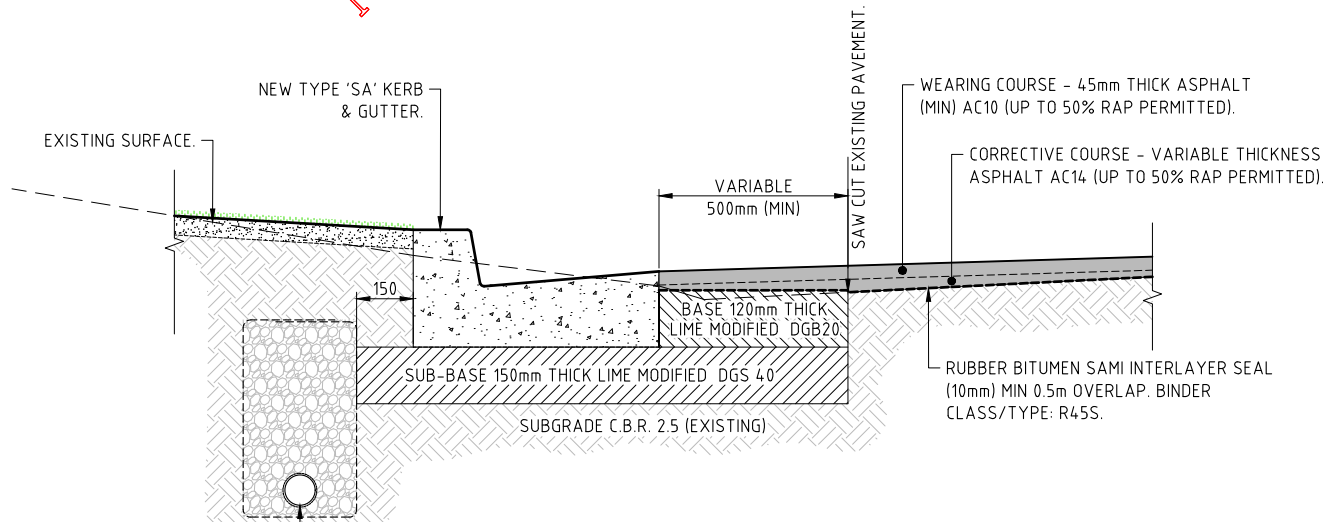


TYPICAL CROSS SECTION - CL1
NOT TO SCALE

ASPHALT COURSE & LAYER THICKNESS TABLE

NOMINAL SIZE OF ASPHALT (mm)	COMPACTED LAYER THICKNESS (mm)	TYPE OF WORK	RAP (%)
10	45	WEARING COURSE	MAX. 50
14	30 TO 55	CORRECTIVE COURSE	MAX. 50
20	40 TO 90	CORRECTIVE COURSE	MAX. 50

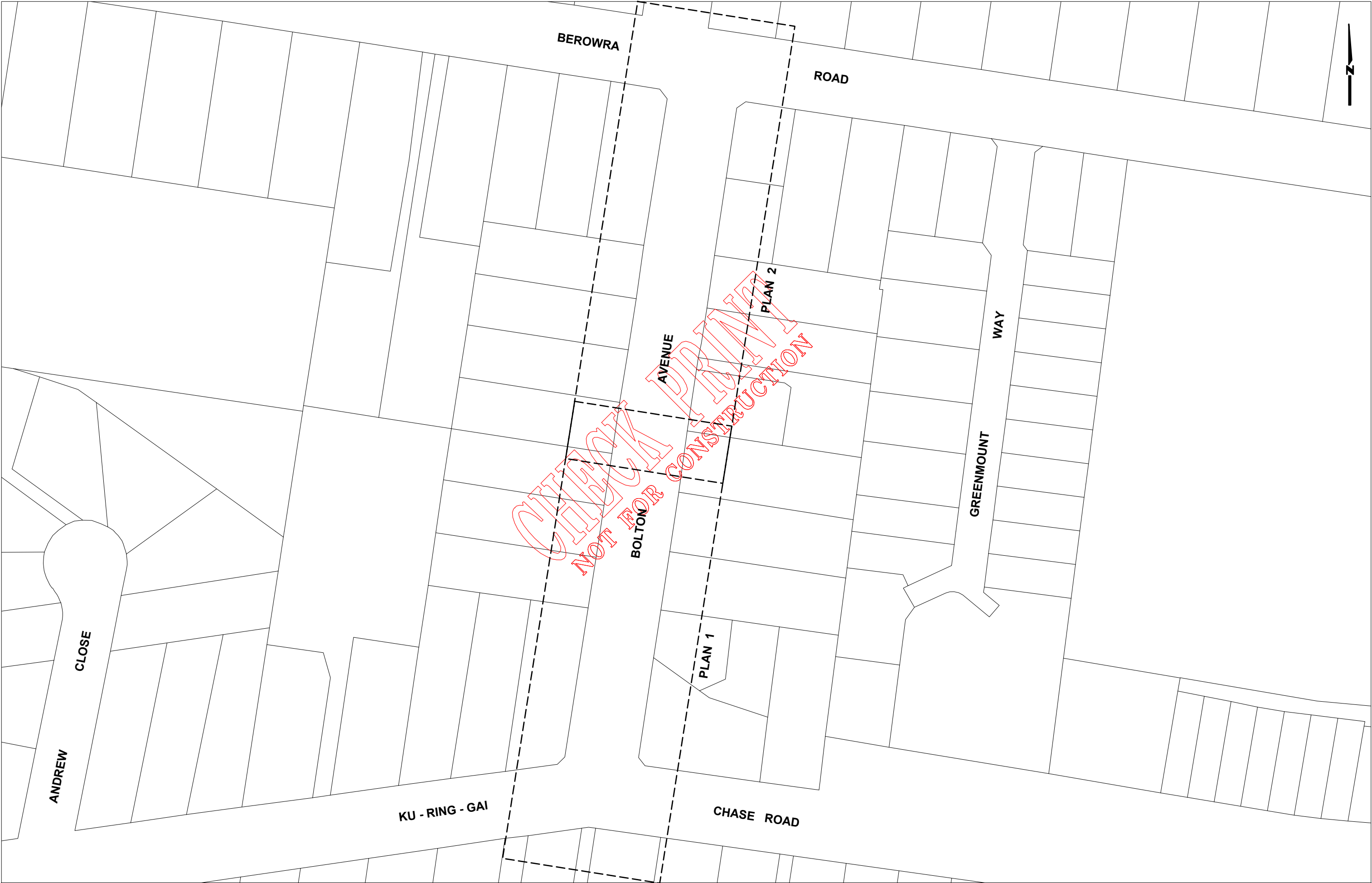
NOTE: REFER TO GEO-TECHNICAL NOTES ON SHEET No. 2 FOR REFERENCE TO PAVEMENT TESTINGS REPORT.



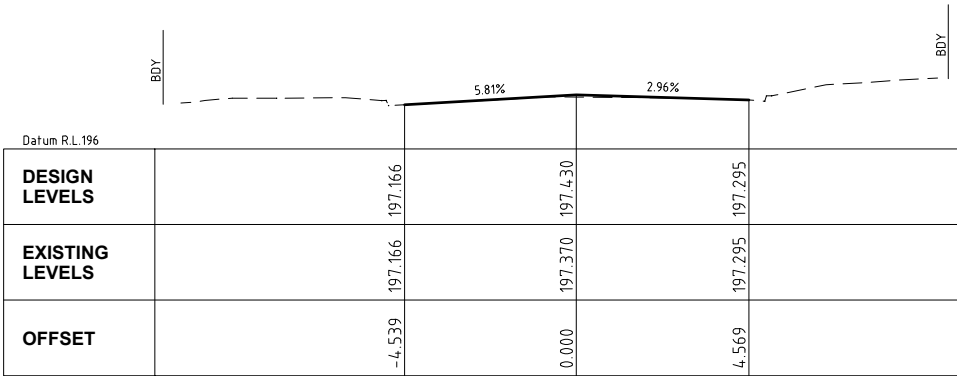
NEW ROAD PAVEMENT DETAIL

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(FOR DESIGN TRAFFIC ESA : 8 x 10⁴)

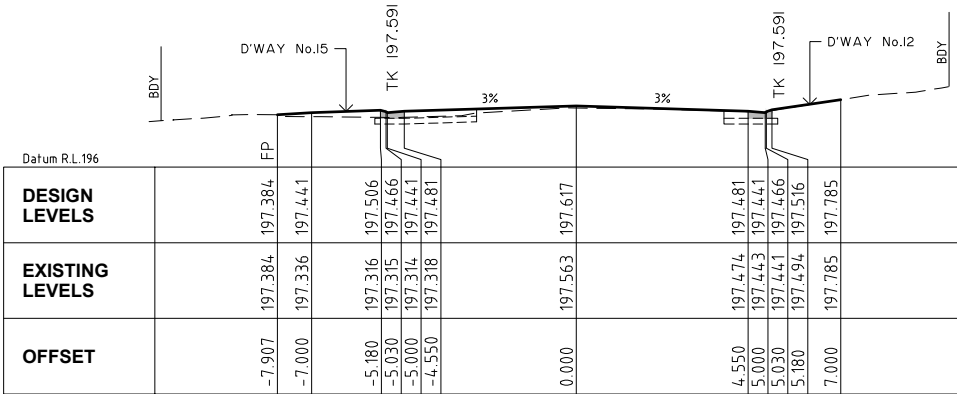
Hornsby Shire Council Design & Construction Branch TELEPHONE: 021 9847 6666 FACSIMILE: 021 9847 6999	Designer S. COMISH	Design Checked-Design Team Leader				Bar Scales		 HORNSBY SHIRE COUNCIL P.O. BOX 37, HORNSBY NSW 1630	BOLTON AVENUE, MOUNT COLAH PROPOSED ROAD RECONSTRUCTION FULL LENGTH	Project Number 101075		
	Drawn K.ROM	Signed:				NOT TO SCALE				Sheet 3	of 12	Issue 1
	Surveyor J.HART	NA Field Book	NA Level Book	AHD/GDA94 Datum						HSC Drawing Number 1157.1		
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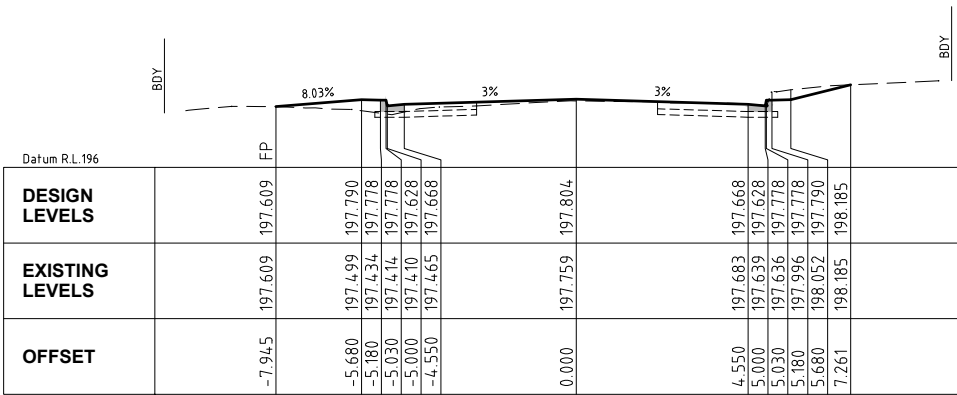
Hornsby Shire Council Design & Construction Branch TELEPHONE: 021 9847 6666 FACSIMILE: 021 9847 6999	Designer S. COMISH	Design Checked-Design Team Leader				Bar Scales		 HORNSBY SHIRE COUNCIL PO BOX 37, HORNSBY NSW 1630	BOLTON AVENUE, MOUNT COLAH PROPOSED ROAD RECONSTRUCTION FULL LENGTH			Project Number 101075	
	Drawn K.ROM	Signed:				0 5 10 15 20 25m			Sheet	of	Issue		
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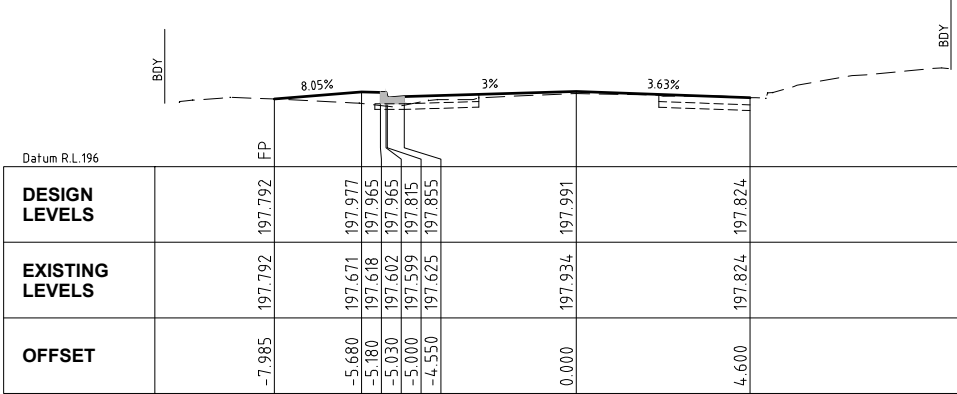
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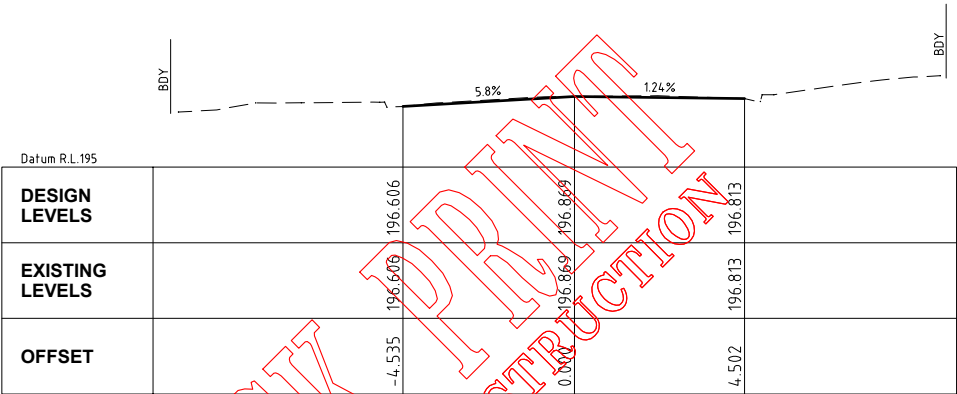
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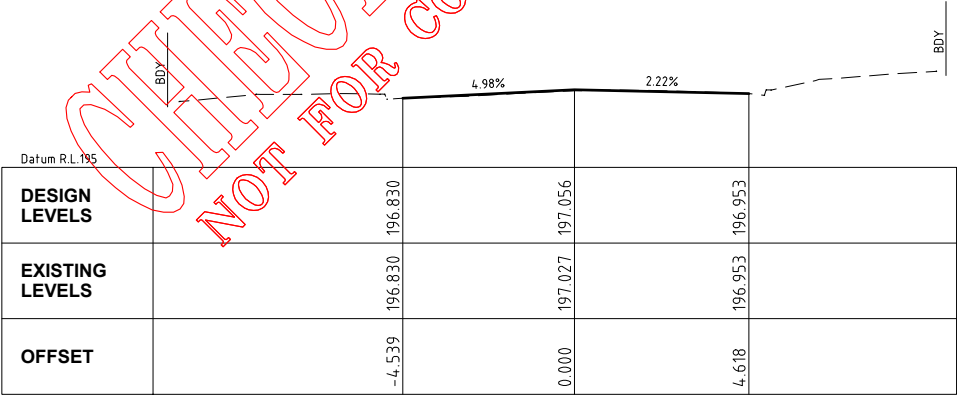
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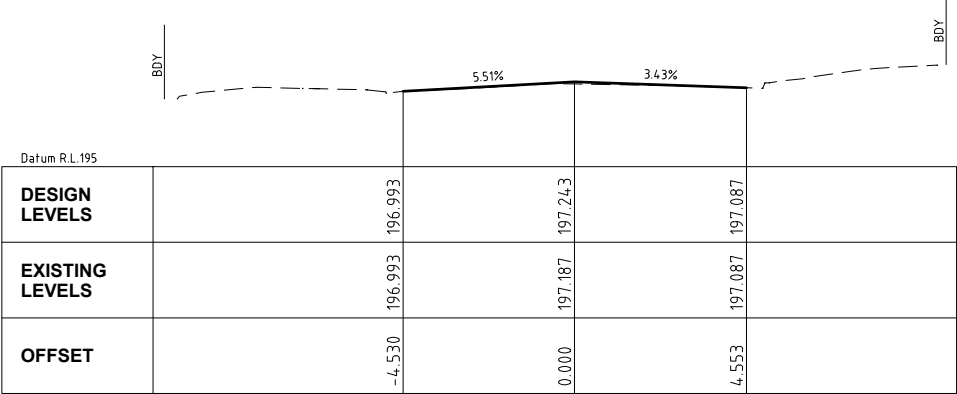
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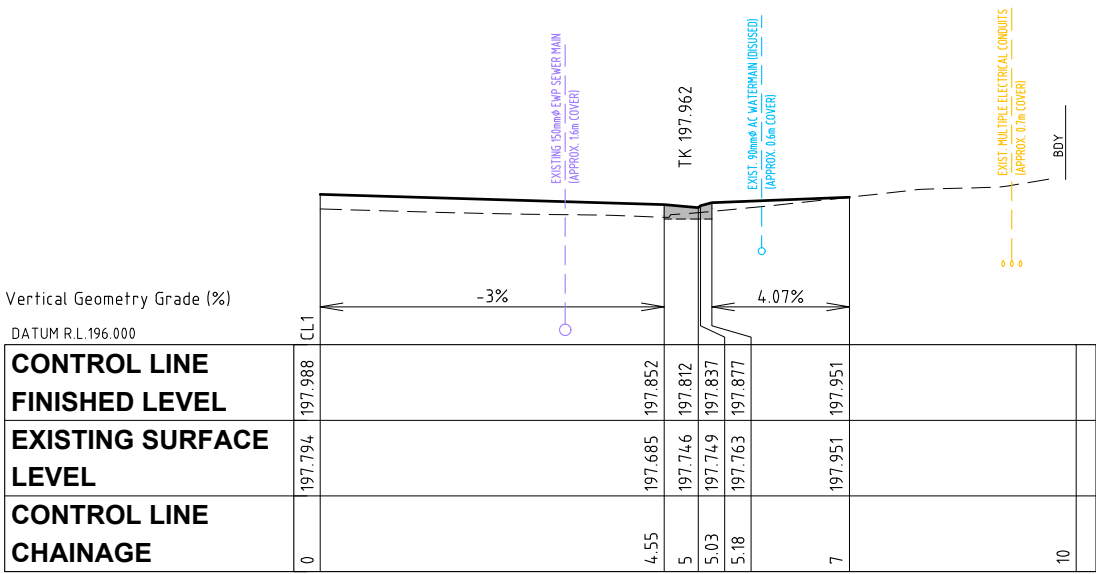
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CH 190.000

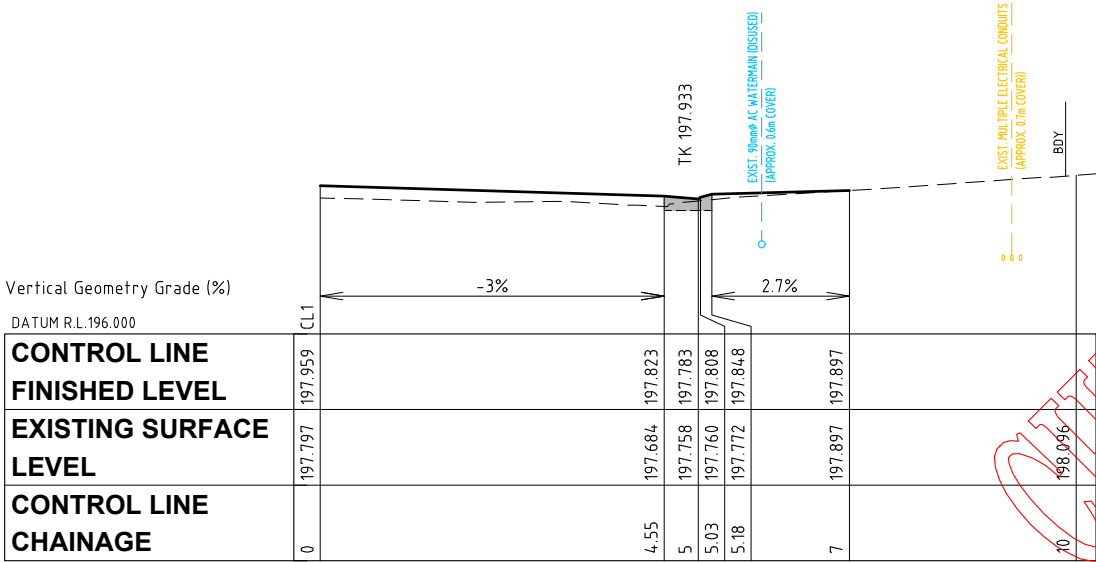


CH 180.000



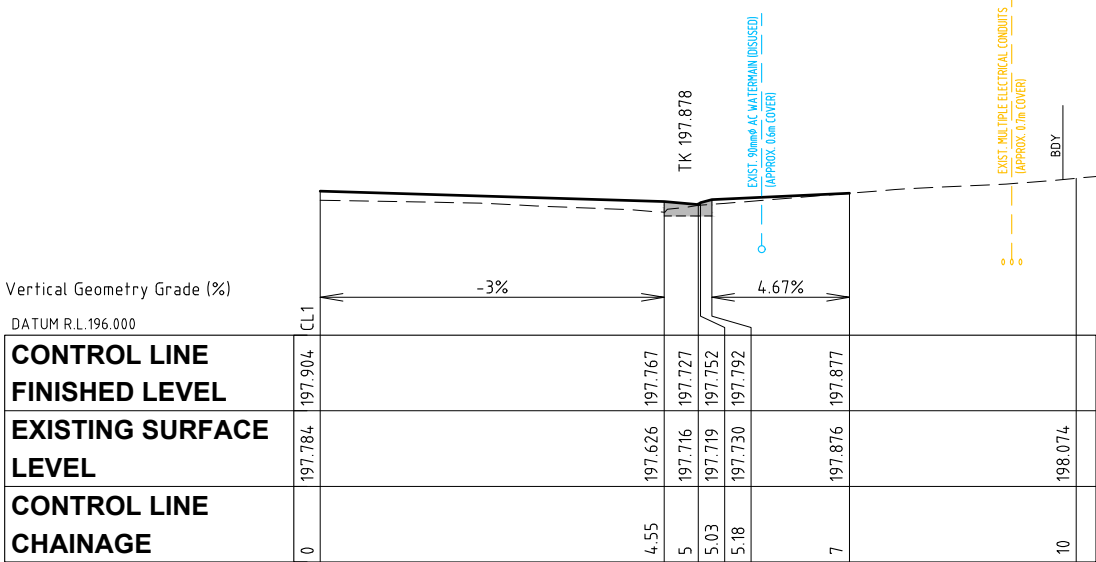
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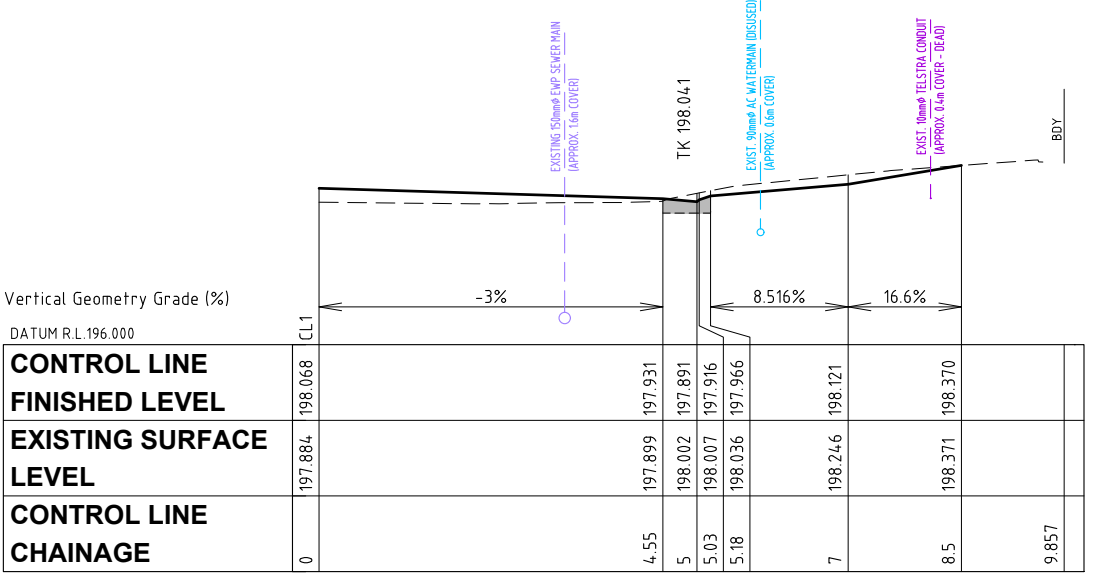
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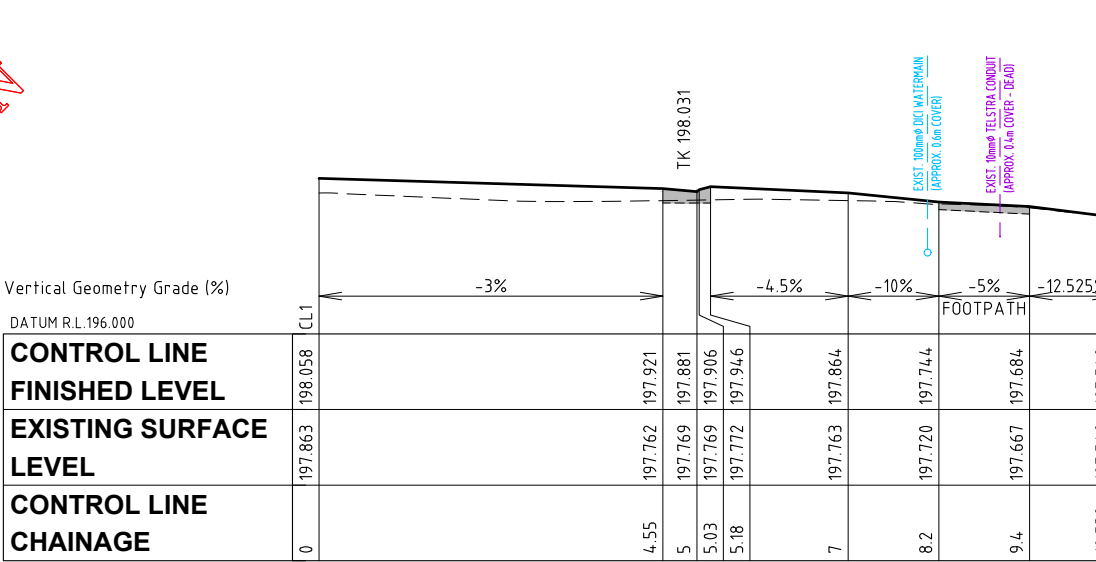
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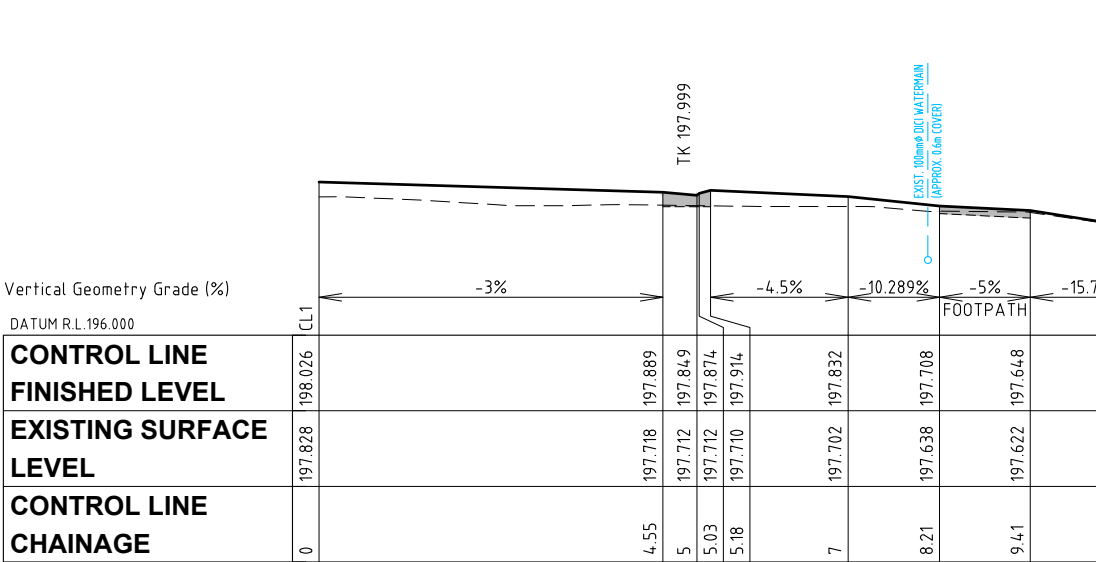
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LONGITUDINAL SECTION - D'WAY No.3

SCALE 1:50 NATURAL



LONGITUDINAL SECTION - D'WAY No.1

SCALE 1:50 NATURAL

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NA Field Book NA Level Book AHD Datum

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1	ISSUED FOR CONSTRUCTION	M. DRAKE		

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Bar Scales

SCALE 1:50
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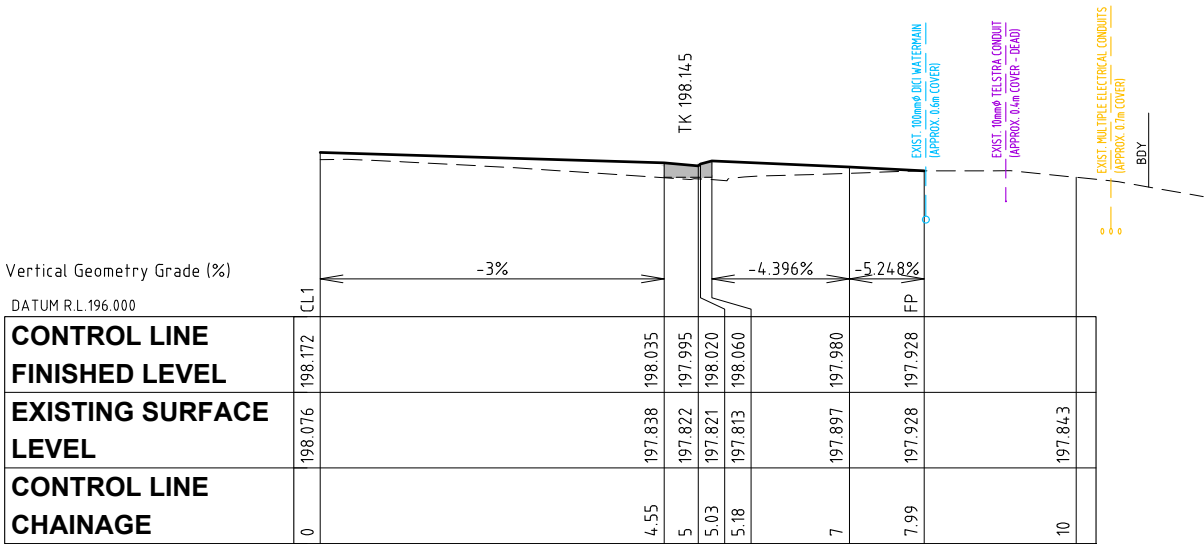
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BOLTON AVENUE, MOUNT COLAH
PROPOSED ROAD RECONSTRUCTION
FULL LENGTH

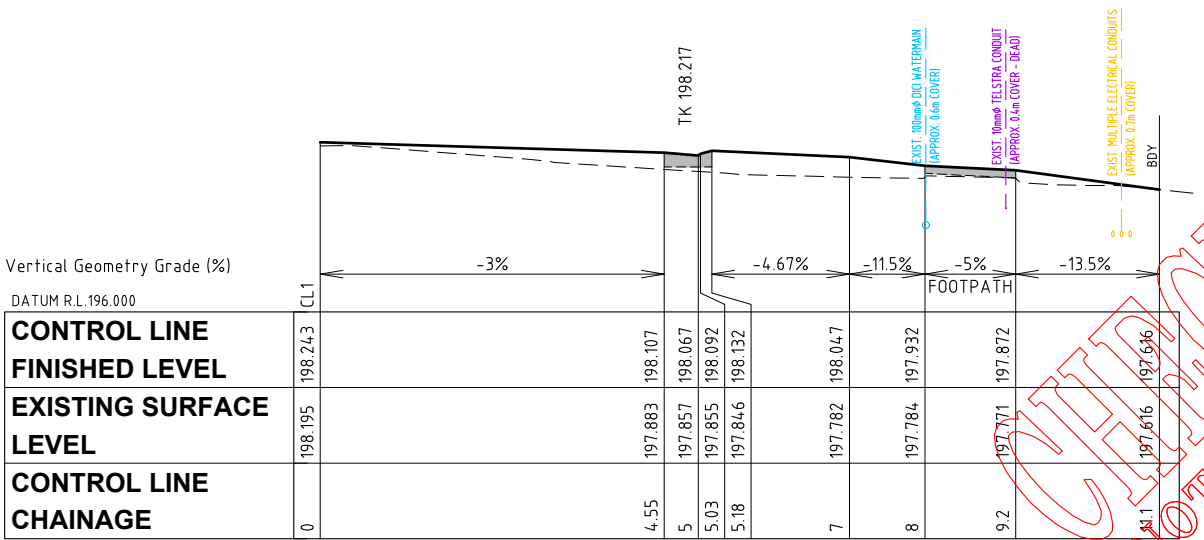
DRIVEWAY PROFILES
SHEET 1 OF 2

Project Number
101075
Sheet 11 of 12 Issue 1
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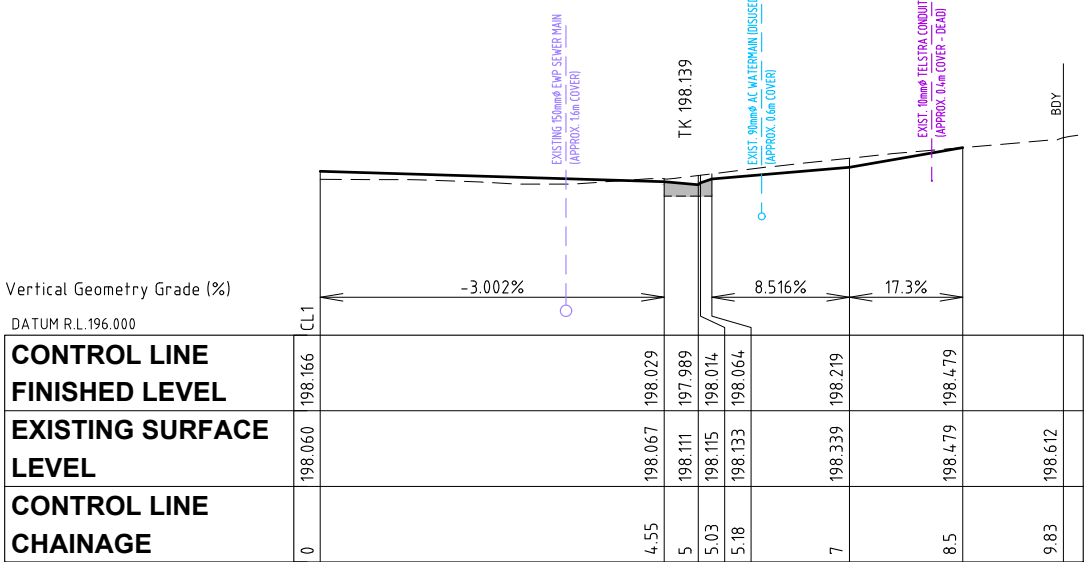
LONGITUDINAL SECTION - DWAY 9

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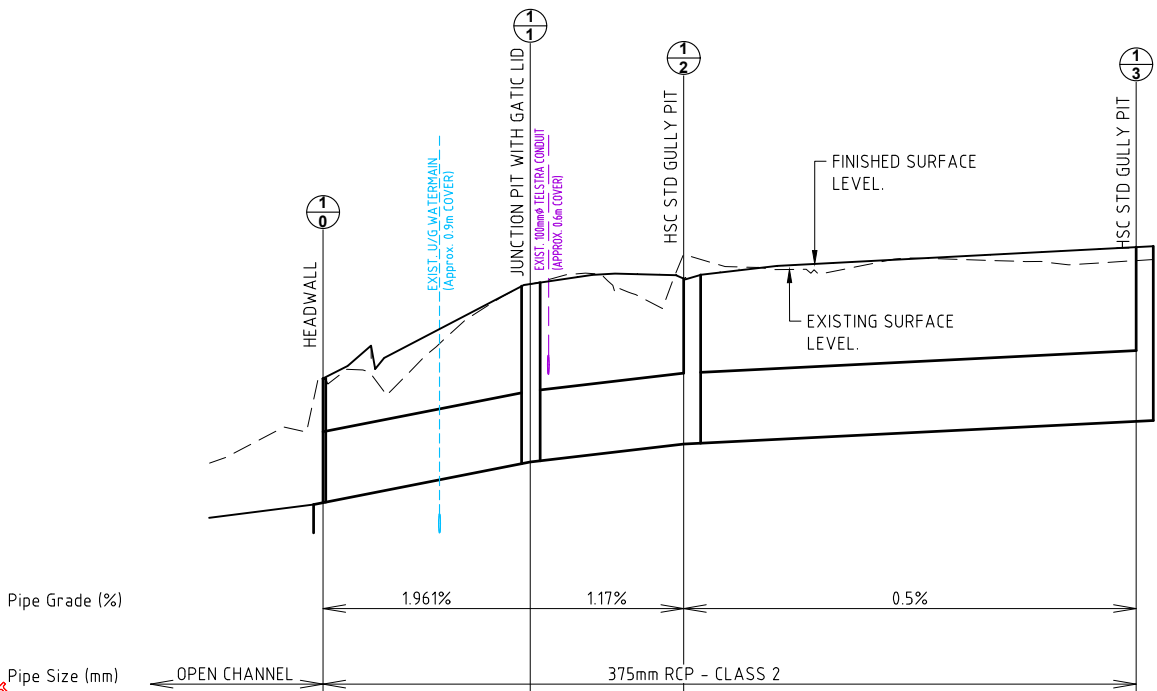
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LONGITUDINAL SECTION - D'WAY No.6

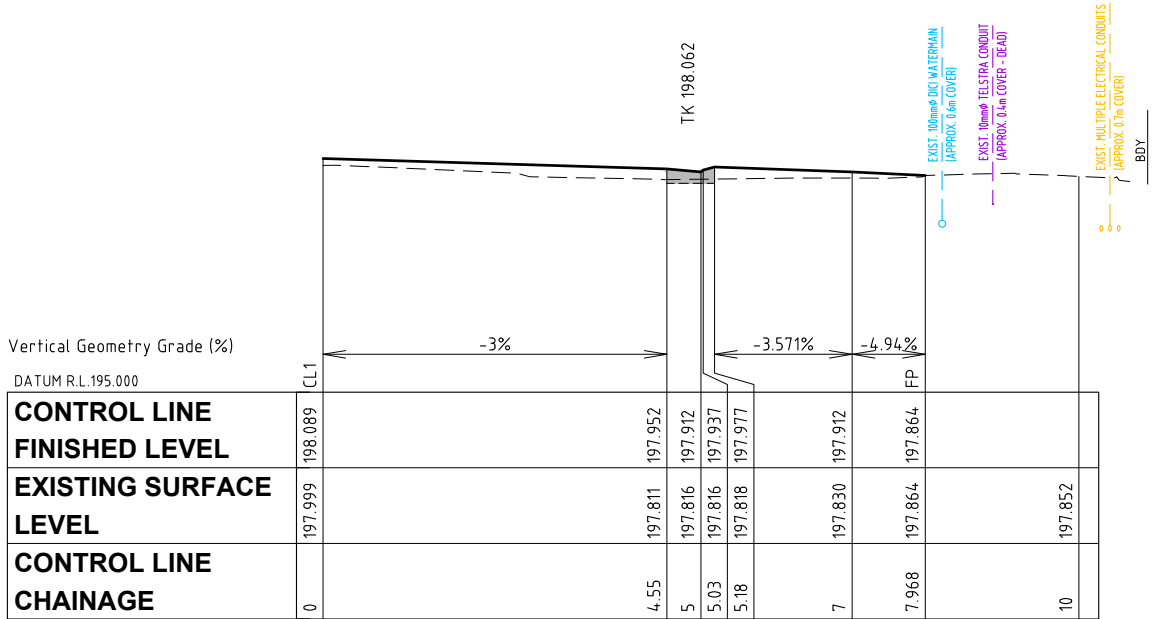
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LINE 1

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LONGITUDINAL SECTION - D'WAY No.11

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Hornsby Shire Council
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Branch

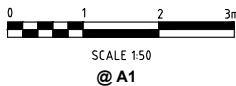
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BOLTON AVENUE, MOUNT COLAH
PROPOSED ROAD RECONSTRUCTION
FULL LENGTH

DRIVEWAY PROFILES - SHEET 2 OF 2 &
DRAINAGE LONG SECTION LINE 1

Project Number

101075

Sheet

12

Issue

1

HSC Drawing Number

1157.1