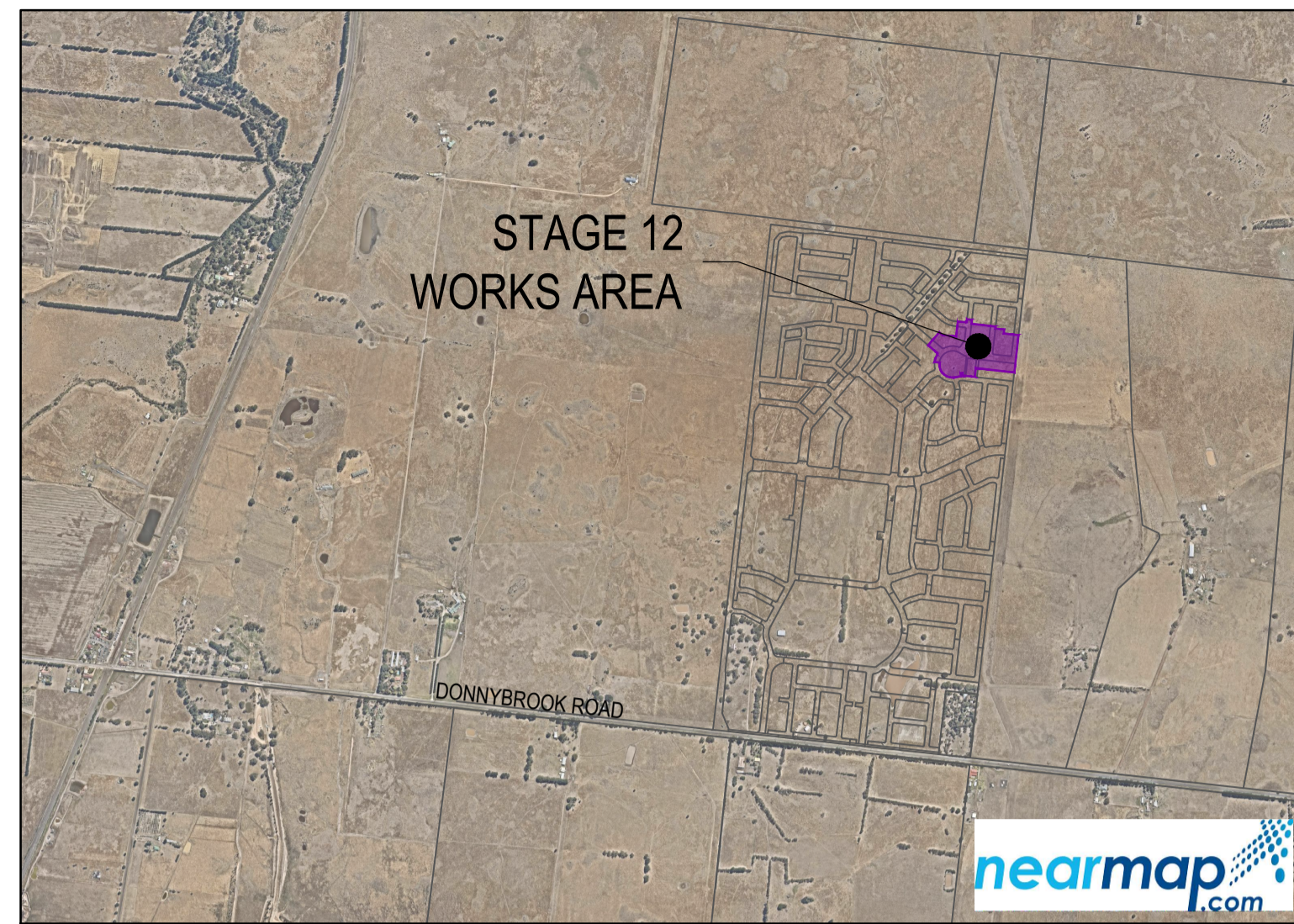


# Olivine Estate

## Stage 12



STAGE 12  
WORKS AREA

LOCALITY PLAN  
MELWAYS REF: 8M2

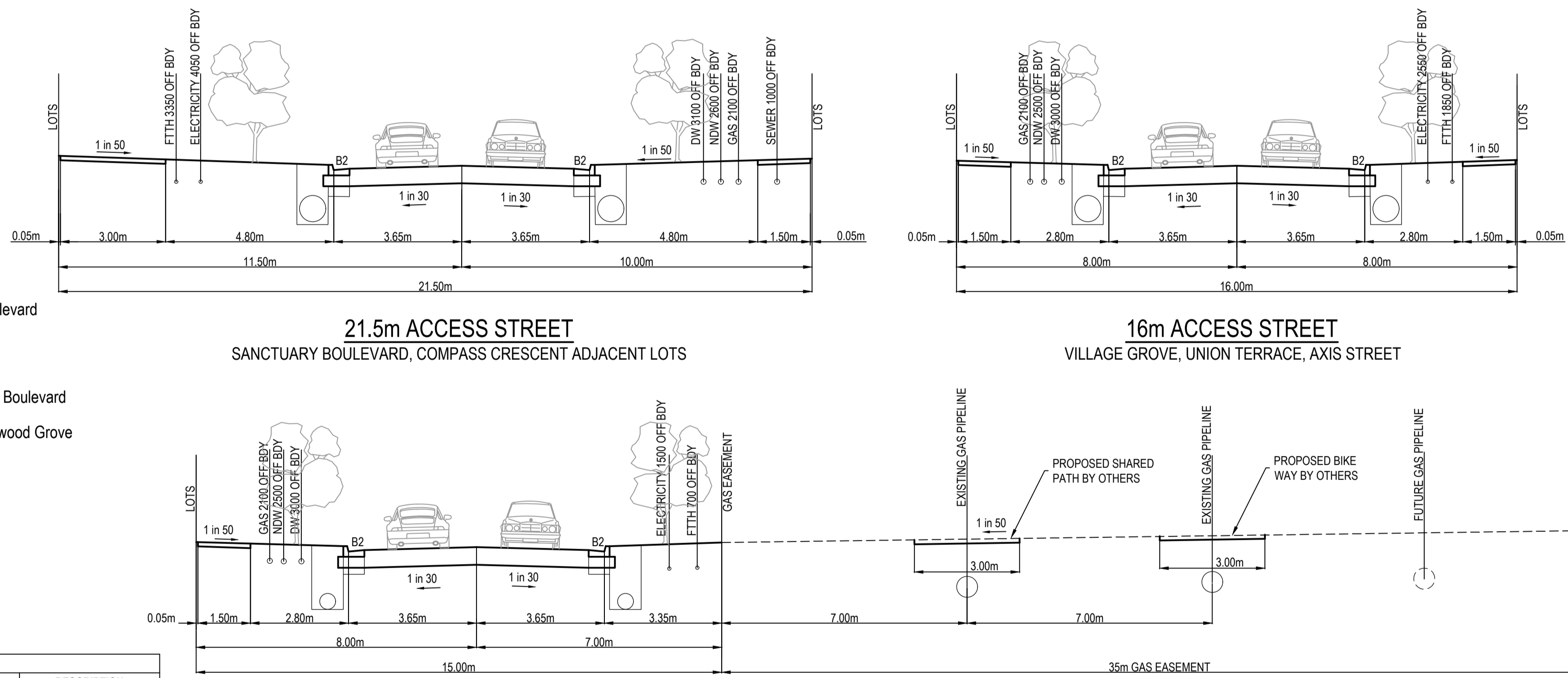
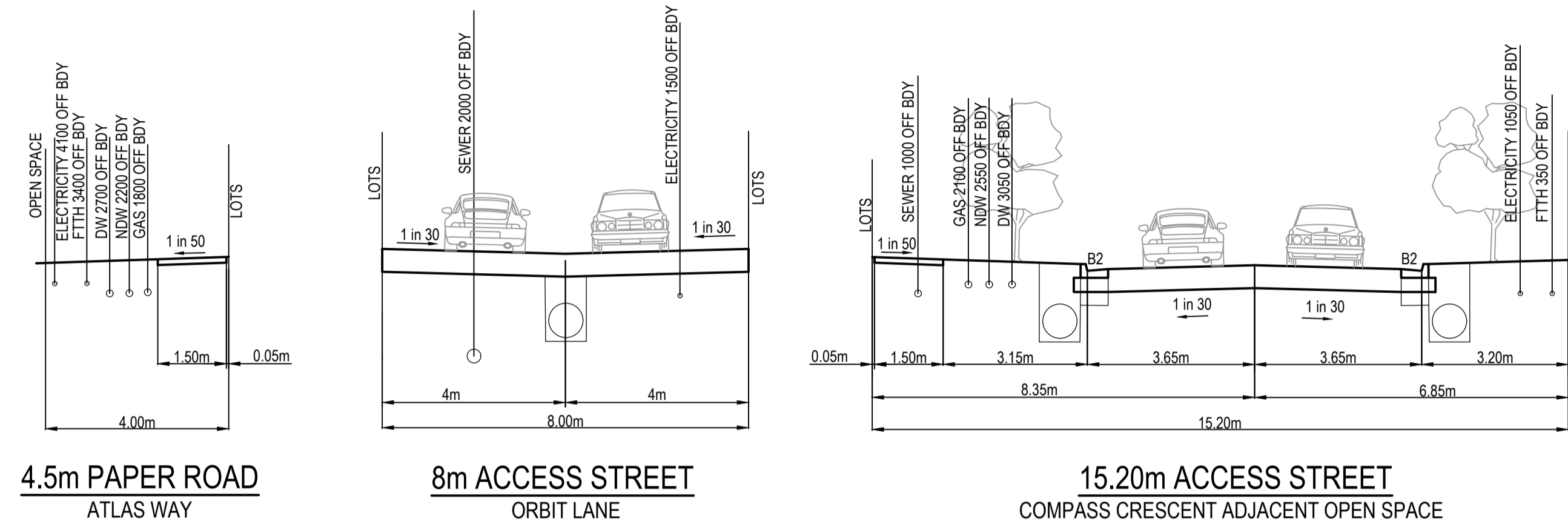


**WARNING**  
**SAFETY MEASURES REQUIRED**  
Please note there are risks attached to the construction of this project, and any ongoing maintenance of structures. Consider the safety of all. For potential risks, consequences and controls refer to Safety in Design Risk Register SID P4.E6.1700E-12-85  
**ASSESS THE RISK - STAY SAFE**

**WARNING**  
**BEWARE OF UNDERGROUND SERVICES**  
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15m MODIFIED ACCESS STREET ADJACENT GAS EASEMENT  
GLOBE PARADE

POINT	EAST	NORTHING	ELEVATION	DESCRIPTION
C29SSPG	323499.03	5843944.52		STAR PICKET
C30SSPG	323475.70	5843739.50		STAR PICKET

ROAD NAME	GAS		NON-DRINKING WATER		DRINKING WATER		ELECTRICITY		NBN	
	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)
COMPASS CRESCENT (LOT1213 - LOT1230)	NORTH	2.10	NORTH	2.60	NORTH	3.10	SOUTH	4.05	SOUTH	3.35
COMPASS CRESCENT (ADJACENT OPEN SPACE)	NORTH	2.10	NORTH	2.55	NORTH	3.05	SOUTH	1.05	SOUTH	0.35
LONSDALE PARADE	WEST	2.10	WEST	2.50	WEST	3.00	EAST	1.50	EAST	0.70
HARDWOOD GROVE	NORTH	2.10	NORTH	2.50	NORTH	3.00	SOUTH	2.55	SOUTH	1.85
SILVER STREET	EAST	2.10	EAST	2.50	EAST	3.00	WEST	2.55	WEST	1.85
DAYBOOK TERRACE	EAST	2.10	EAST	2.50	EAST	3.00	WEST	2.55	WEST	1.85
WILLOWMEAD BOULEVARD	EAST	2.10	EAST	2.60	EAST	3.10	WEST	4.05	WEST	3.35
COVE LANE	-	-	-	-	-	-	EAST	1.50	-	-
FLORET LANE	EAST	1.80	EAST	2.20	EAST	2.70	EAST	4.10	EAST	3.40

ROAD NAME	RESERVE WIDTH (m)	ROAD WIDTH (m)			KERB TYPE		VERGE WIDTH (m)	
		LIP TO LIP	INV TO INV	BACK TO BACK	NTH/WEST	STH/EAST	NTH/WEST	STH/EAST
COMPASS CRESCENT (LOT1213 - LOT1230)	21.50	6.40	7.30	7.60	B2	B2	6.35	7.85
COMPASS CRESCENT (ADJACENT OPEN SPACE)	15.20	6.40	7.30	7.60	B2	B2	4.70	3.20
LONSDALE PARADE	15.00	6.40	7.30	7.60	B2	B2	4.35	3.35
HARDWOOD GROVE	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35
SILVER STREET	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35
DAYBOOK TERRACE	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35
WILLOWMEAD BOULEVARD	21.50	6.40	7.30	7.60	B2	B2	6.35	7.85
ORBIT LANE	8.00	8.00	-	-	-	-	-	-
ATLAS WAY	4.50	-	-	-	-	-	-	-

### NOTES FOR WORKS UNDER OVERHEAD ELECTRICAL POWERLINES

1. MAINTENANCE AND REFUELLING OF VEHICLES AND EQUIPMENT MUST NOT BE CARRIED OUT UNDER POWERLINES
2. THE STORAGE OR HANDLING OF FLAMMABLE LIQUIDS OR GASSES IS NOT PERMITTED UNDER POWERLINES
3. THE PARKING OF LARGE VEHICLES OR CARAVANS, SITE HUTS OR SIMILAR IS NOT PERMITTED UNDER POWERLINES
4. STOCKPILING OF EXCAVATED MATERIAL IS NOT PERMITTED UNDER POWERLINES
5. VEHICLES AND EQUIPMENT EXCEEDING 3 METRES MAXIMUM OPERATING HEIGHT ARE NORMALLY NOT PERMITTED UNDER AUSNET'S POWERLINES. A HIGHER OPERATING HEIGHT LIMIT IS SUBJECT TO SUFFICIENT CLEARANCE TO THE CONDUCTORS AND WRITTEN APPROVAL
6. SP AUSNET'S LINE CONTRACT SUPERVISOR MUST BE NOTIFIED AT LEAST 10 WORKING DAYS PRIOR TO THE WORKS COMMENCING SO THAT APPROPRIATE PERMITS CAN BE ARRANGED. ADDITIONAL SAFETY PRECAUTIONS DEEMED NECESSARY WILL BE ADVISED AT THIS TIME. ALL PERSONS COMMENCING WORK ON THE SITE MUST BE MADE AWARE OF PERMIT CONDITIONS AND SAFETY PRECAUTIONS
7. ALL WORK IN THE VICINITY MUST BE IN ACCORDANCE WITH THE INDUSTRIES NO GO ZONE REQUIREMENTS AND SP AUSNET MUST BE SATISFIED THAT ALL SUB CONTRACTORS WORKING IN THE AREA IN THE VICINITY OF THE OVERHEAD LINES WORK WITHIN THESE GUIDELINES, INCLUDING THE PROVISION OF A SPOTTER AS REQUIRED.

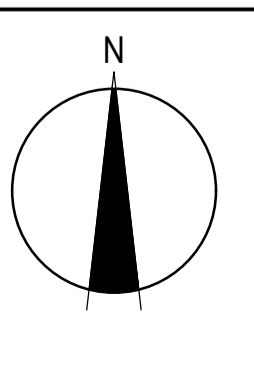
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TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	

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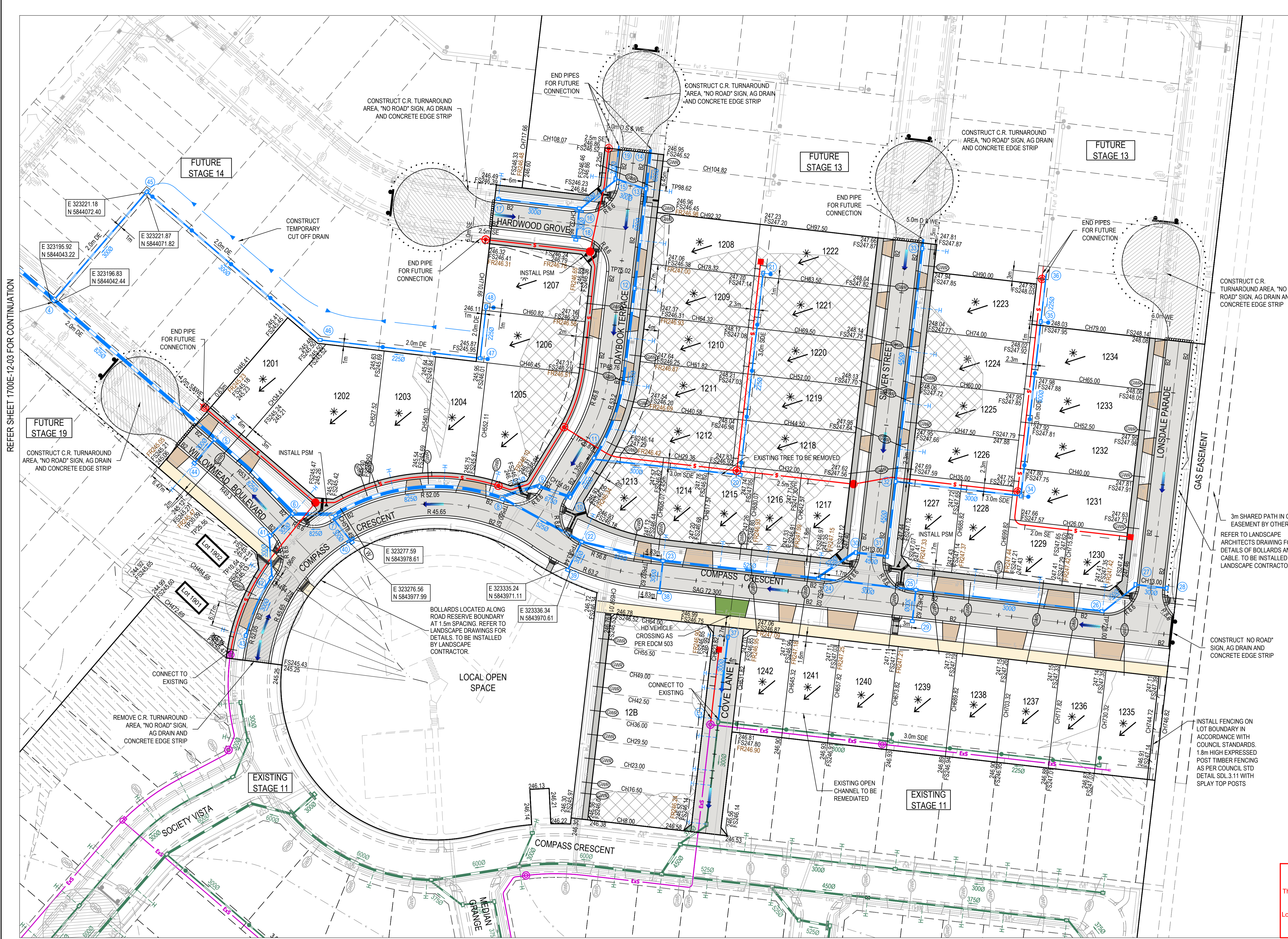


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Melbourne, VIC 3008  
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**mirvac**

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Cover Plan

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
8 M2	1700E-12-01	01 of 27	1



**LEGEND - LAYOUT PLAN**  
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SWALE DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	ELECTRICITY (U.G.)
	GAS
	TELSTRA
	WATER
	RECYCLE WATER
	AG DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SWALE DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING HOUSE DRAIN
	EXISTING ELECTRICITY (UNDER GROUND)
	EXISTING GAS
	EXISTING TELSTRA
	EXISTING WATER
	EXISTING RECYCLED WATER
	EXISTING AG DRAIN
	M
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SWALE DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE ELECTRICITY (UNDER GROUND)
	FUTURE GAS
	FUTURE TELSTRA
	FUTURE WATER
	FUTURE RECYCLED WATER
	FUTURE AG DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
	ZERO LOT LINES
	EXISTING SURFACE LEVEL
	EXISTING BUILDING LEVEL
	EXISTING FINISHED RIDGE LINE LEVEL
	CHAINAGE
	TOP OF RETAINING WALL LEVEL
	BOTTOM OF RETAINING WALL LEVEL
	STRUCTURAL FILL > 200mm DEEP
	EXISTING STRUCTURAL FILL > 200mm DEEP
	CUT > 200mm DEEP
	DIRECTION OF FALL
	OVERLAND FLOW
	GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	EXISTING RED GUM TREE & CANOPY TO BE REMOVED
	EXISTING OTHER SPECIES TREE & CANOPY TO BE REMOVED
	EXISTING RED GUM TO BE RETAINED
	EXISTING OTHER SPECIES TO BE RETAINED
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	PROPOSED INDUSTRIAL VEHICLE CROSSING

**WARNING**  
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DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
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REFERENCE No. 2	

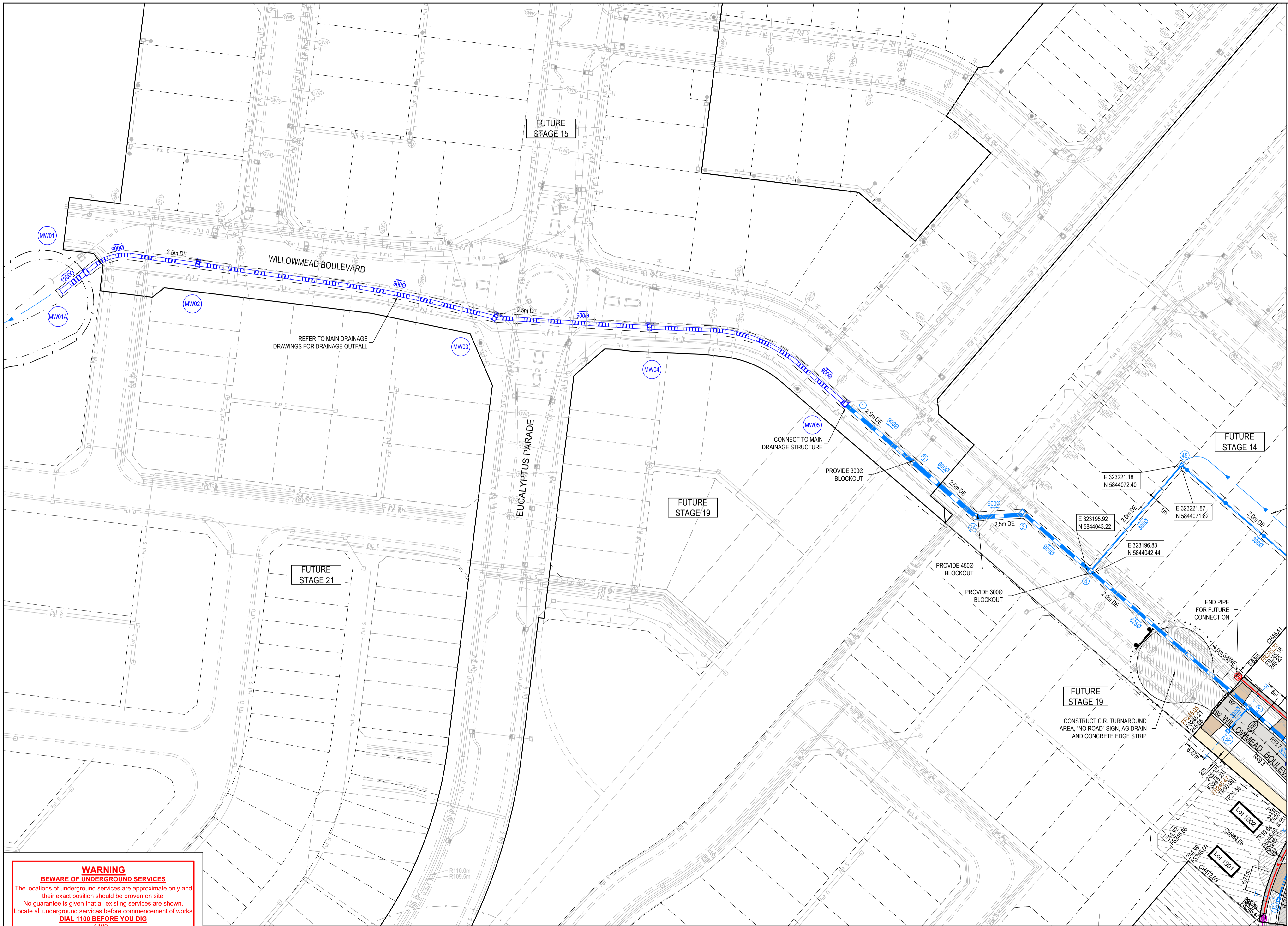
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**mirvac**

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Layout Plan - 1

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
8 M2	1700E-12-02	02 of 27	3



**LEGEND - LAYOUT PLAN**  
 ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SWALE DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	ELECTRICITY (U.GROUND)
	GAS
	TELSTRA
	WATER
	RECYCLE WATER
	AG. DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SWALE DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING HOUSE DRAIN
	EXISTING ELECTRICITY (UNDER GROUND)
	EXISTING GAS
	EXISTING TELSTRA
	EXISTING WATER
	EXISTING RECYCLED WATER
	EXISTING AG. DRAIN
	M
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SWALE DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE ELECTRICITY (UNDER GROUND)
	FUTURE GAS
	FUTURE TELSTRA
	FUTURE WATER
	FUTURE RECYCLED WATER
	FUTURE AG. DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
	ZERO LOT LINES
	EXISTING SURFACE LEVEL
	FS140.35 FINISHED BUILDING LINE LEVEL
	FR157.40 FINISHED RIDGE LINE LEVEL
	CH270.00 CHAINAGE
	TW159.60 TOP OF RETAINING WALL LEVEL
	BW159.00 BOTTOM OF RETAINING WALL LEVEL
	STRUCTURAL FILL > 200mm DEEP
	EXISTING STRUCTURAL FILL > 200mm DEEP
	CUT > 200mm DEEP
	DIRECTION OF FALL
	OVERLAND FLOW
	GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
	* EDGE STRIP, SUBSOIL DRAIN, 'NO ROAD' SIGN & BARRIER
	EXISTING RED GUM TREE & CANOPY TO BE REMOVED
	EXISTING OTHER SPECIES TREE & CANOPY TO BE REMOVED
	EXISTING RED GUM TO BE RETAINED
	EXISTING OTHER SPECIES TO BE RETAINED
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	PROPOSED INDUSTRIAL VEHICLE CROSSING

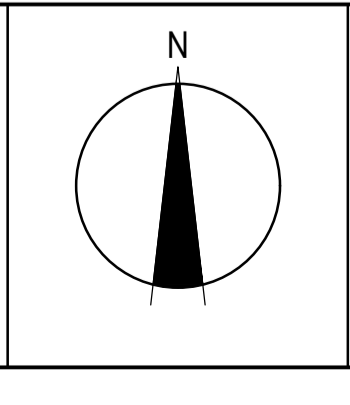
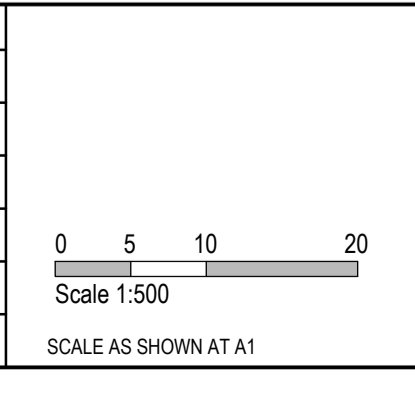
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**mirvac**

Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Layout Plan - 2

MELWAYS REF 8 M2	PROJECT / DRAWING No. 1700E-12-03	SHEET No. 03 of 27	REVISION 2
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REFER SHEET 1700E-12-02 FOR CONTINUATION



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- NOTES**
- 90° BENDS TO HAVE CENTRELINE MARKING WITH RRPMS AT MAX 6m SPACING.
  - RRPMS TO BE IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOL 2.
  - ALL LINEMARKING & SIGNAGE TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742.

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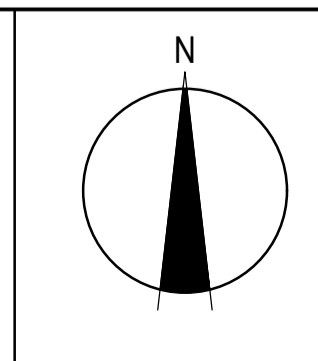
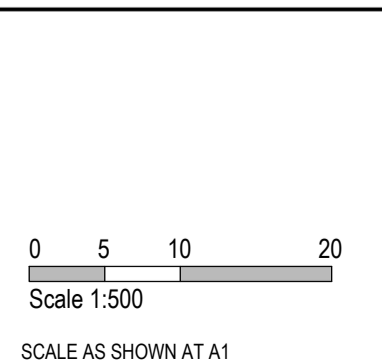
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Oris Management - AS/NZS 1801  
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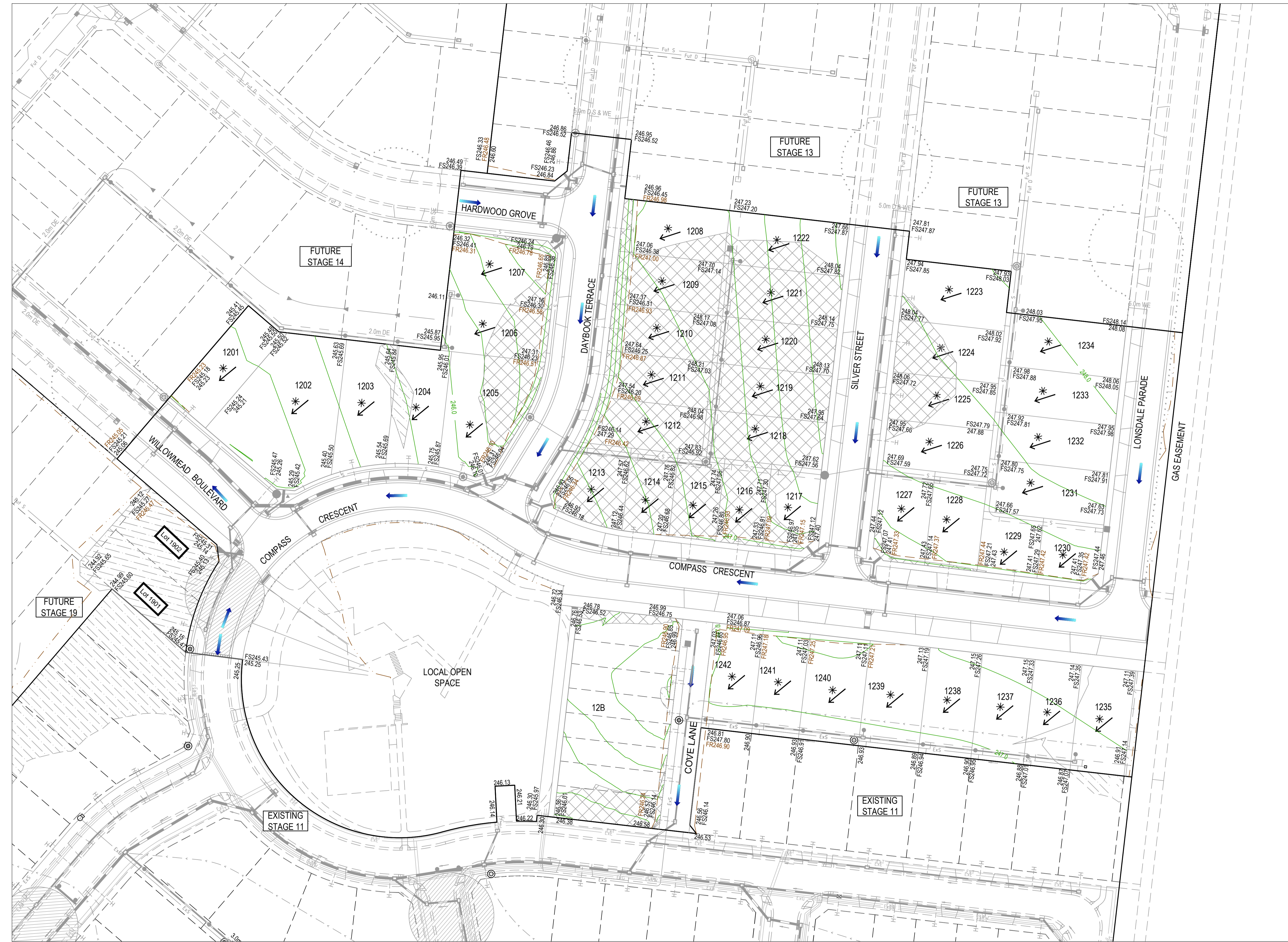


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Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Signs & Linemarking Plan

MELWAYS REF 8 M2	PROJECT / DRAWING No. 1700E-12-04	SHEET No. 04 of 27	REVISION 3
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**LEGEND - EARTHWORKS PLAN**  
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SWALE DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	ELECTRICITY (U.GROUND)
	ELECTRICITY (O.HEAD)
	GAS
	TELSTRA
	OPTIC FIBRE
	WATER
	RECYCLE WATER
	AG. DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SWALE DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING HOUSE DRAIN
	EXISTING ELECTRICITY (UNDER GROUND)
	EXISTING ELECTRICITY OVERHEAD
	EXISTING GAS
	EXISTING TELSTRA
	EXISTING OPTIC FIBRE
	EXISTING WATER
	EXISTING RECYCLED WATER
	EXISTING AG. DRAIN
	EXISTING SERVICE CONDUITS
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SWALE DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE ELECTRICITY (UNDER GROUND)
	FUTURE ELECTRICITY OVERHEAD
	FUTURE GAS
	FUTURE TELSTRA
	FUTURE OPTIC FIBRE
	FUTURE WATER
	FUTURE RECYCLED WATER
	FUTURE AG. DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
	ZERO LOT LINES
	141.34 EXISTING SURFACE LEVEL
	FS140.35 FINISHED BUILDING LINE LEVEL
	FR157.40 FINISHED RIDGE LINE LEVEL
	CH270.00 CHAINAGE
	TW159.00 TOP OF RETAINING WALL LEVEL
	BW159.00 BOTTOM OF RETAINING WALL LEVEL
	EXISTING RETAINING WALL
	RETAINING WALL
	FUTURE RETAINING WALL
	STRUCTURAL FILL > 200mm DEEP
	EXISTING STRUCTURAL FILL > 200mm DEEP
	CUT > 200mm DEEP
	DIRECTION OF FALL
	OVERLAND FLOW
	GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
	EDGE STRIP, SUBSOIL DRAIN, 'NO ROAD' SIGN & BARRIER
	EXISTING TREE TO BE RETAINED
	EXISTING TREE TO BE REMOVED
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED INDUSTRIAL DRIVEWAY
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING

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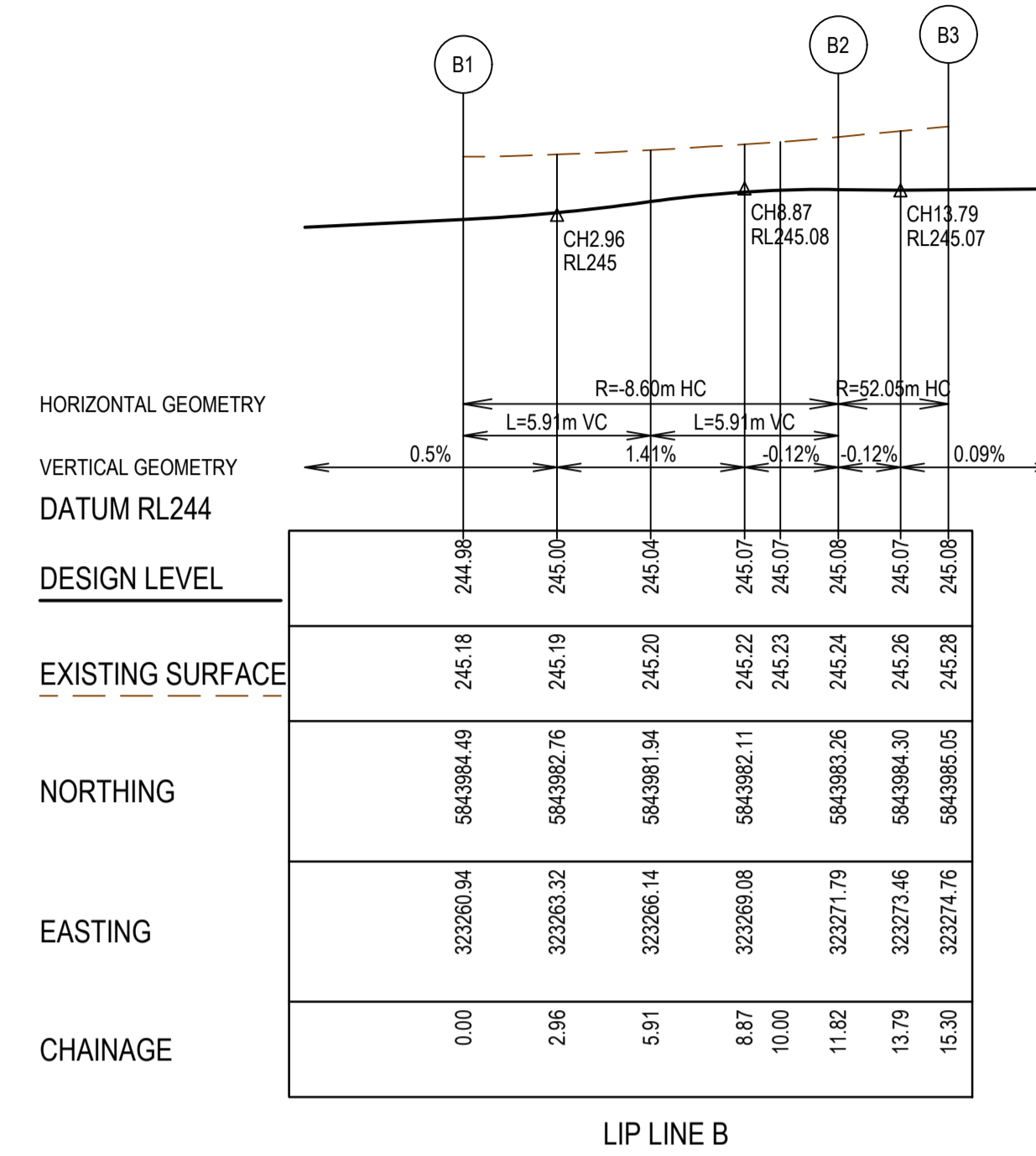
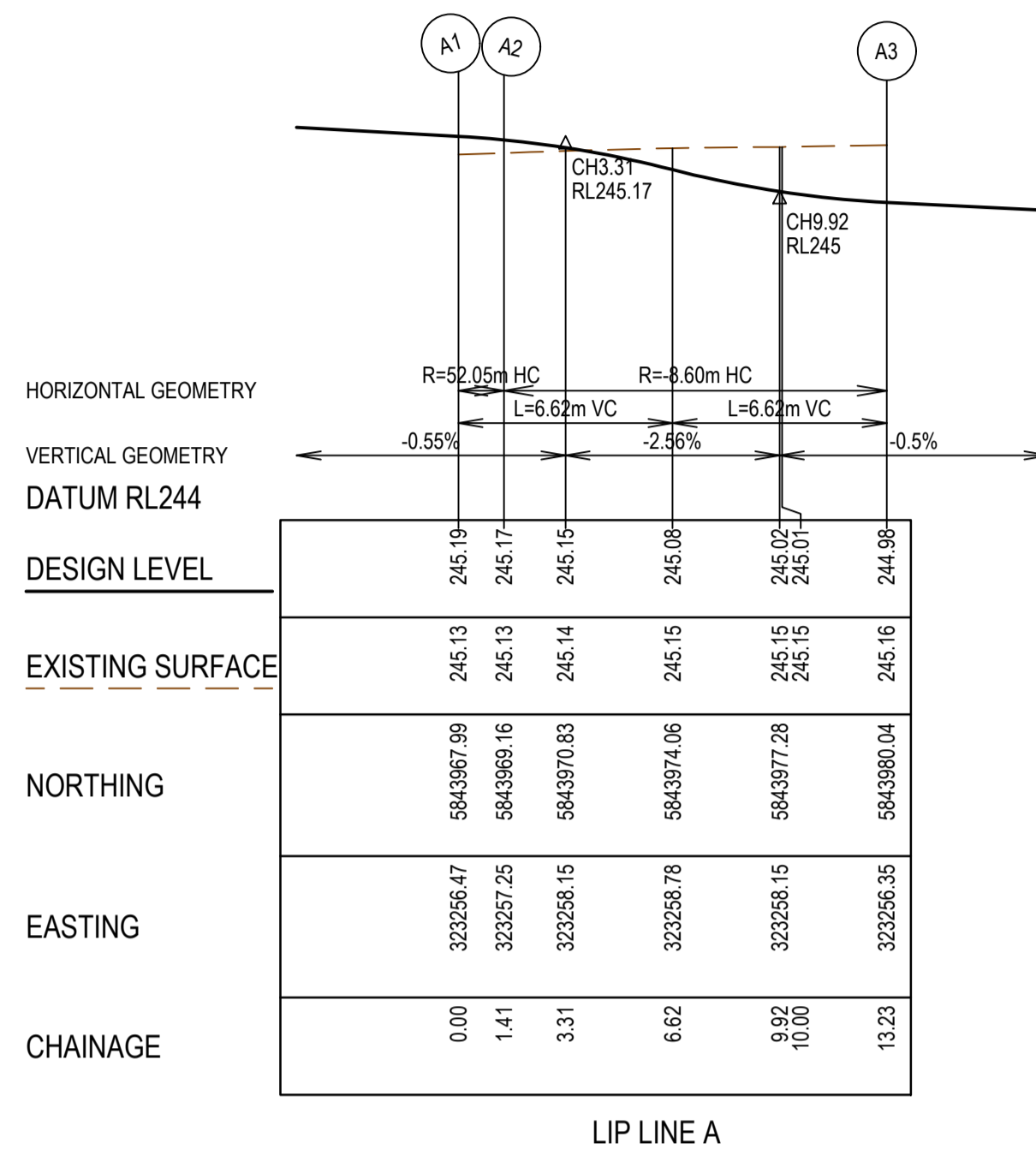
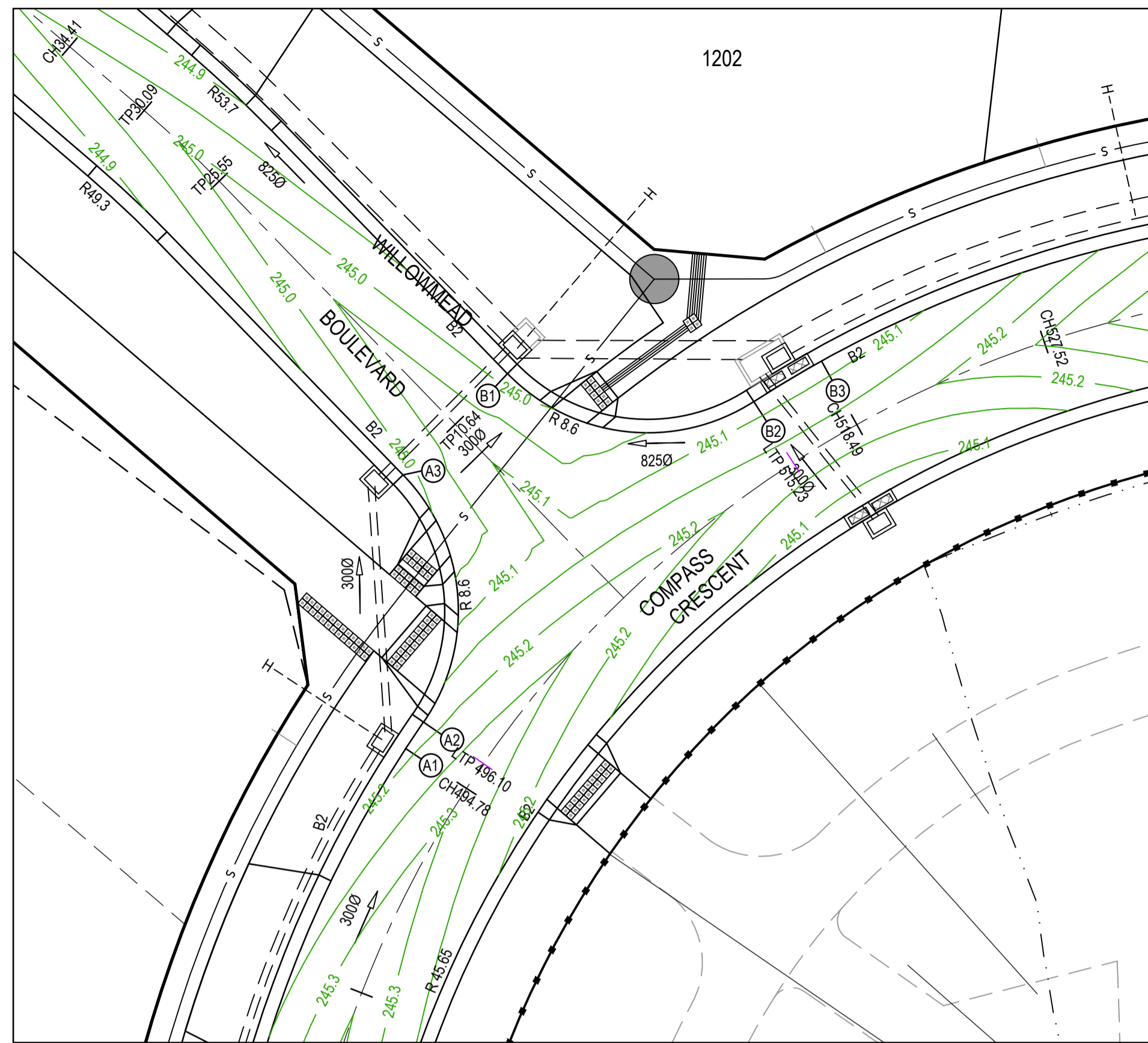
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**mirvac**

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Earthworks Plan

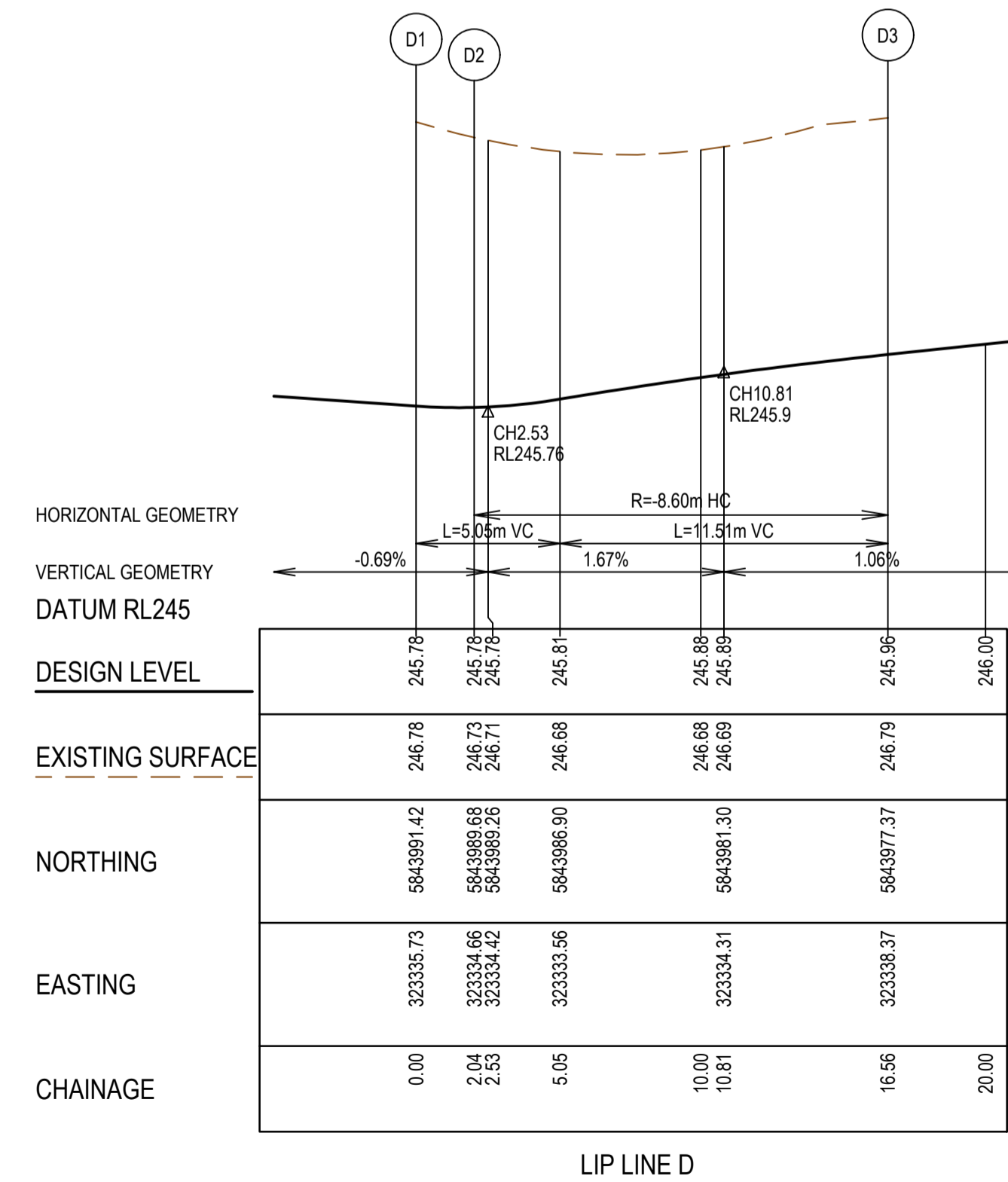
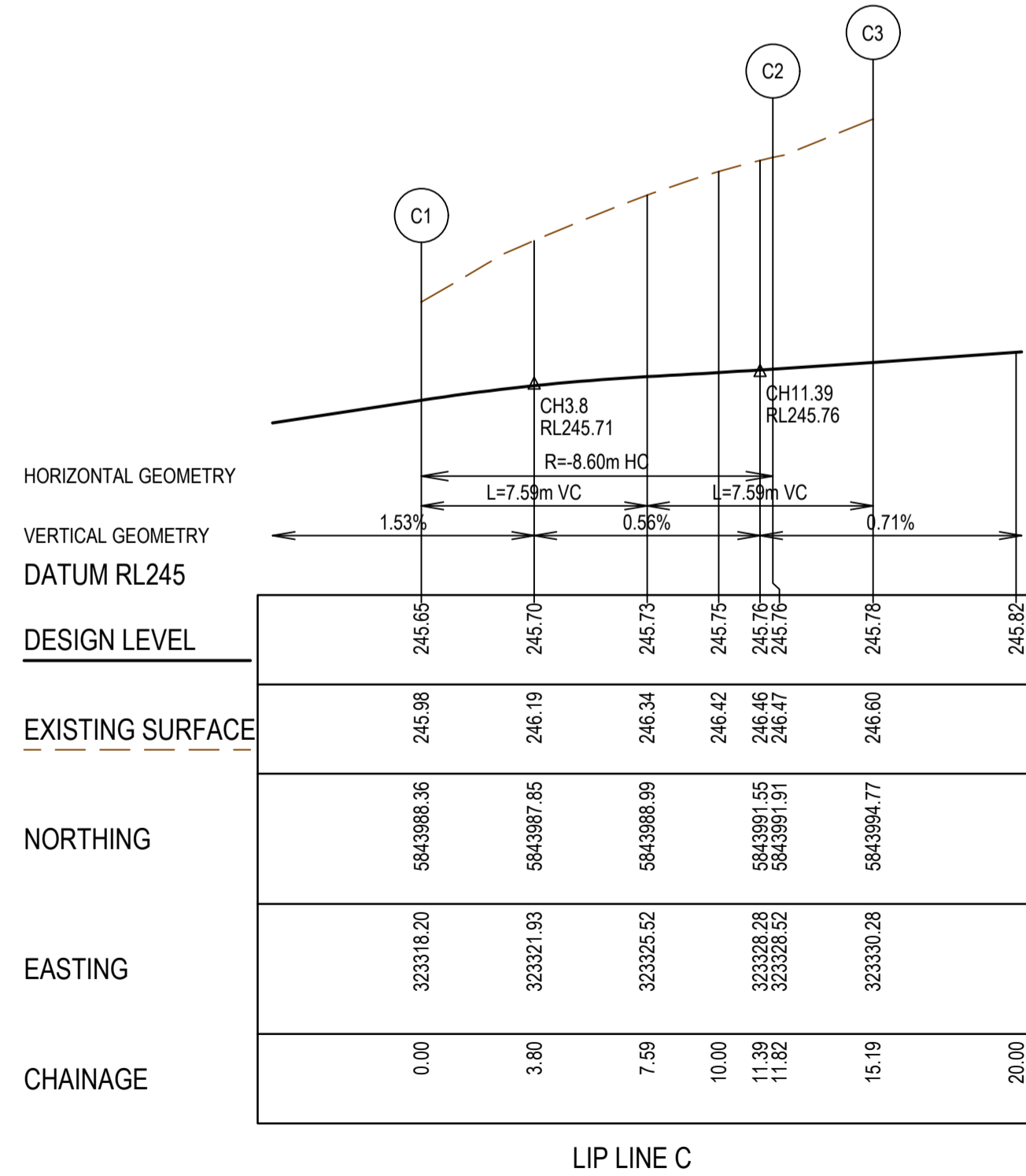
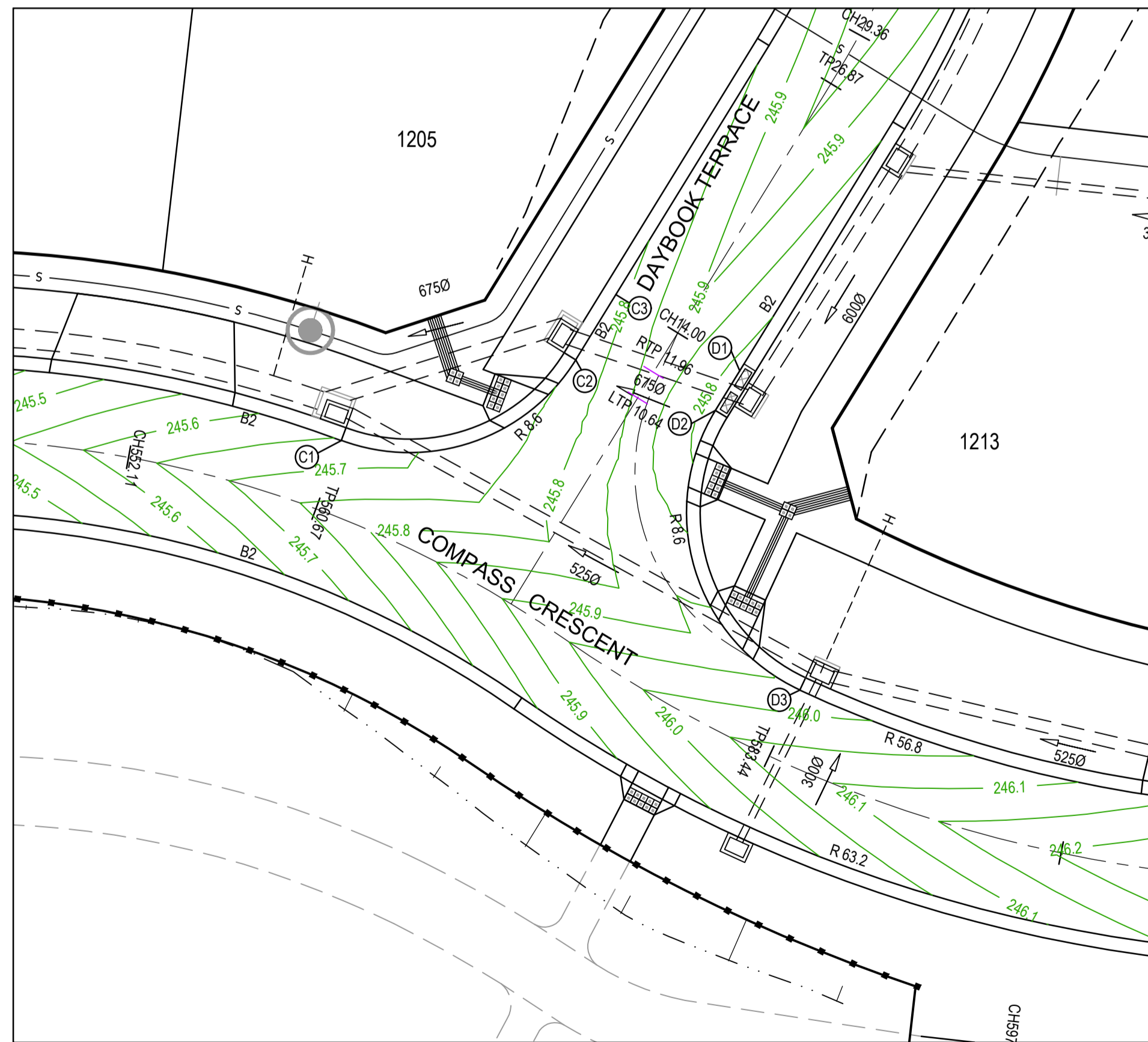
MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
8 M2	1700E-12-05	05 of 27	2



- NOTES**
1. ALL VEHICLE CROSSINGS AND PRAM CROSSINGS TO BE MINIMUM OF 0.75m FROM PIT.
  2. ALL PRAM CROSSINGS TO BE MINIMUM OF 2.0m FROM VEHICLE CROSSINGS.
  3. VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM PART OF THE LANDSCAPE WORKS.
  4. INDUSTRIAL DRIVEWAYS TO COUNCIL RESERVES TO BE PROVIDED AS PART OF LANDSCAPE WORKS.
  5. SHARE PATH THROUGH CREEK CORRIDOR TO FORM PART OF LANDSCAPE WORKS.

**LEGEND - INTERSECTION DETAIL PLAN**  
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING SERVICE CONDUITS
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
	EXISTING RETAINING WALL
	RETAINING WALL
	FUTURE RETAINING WALL
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH



**AS CONSTRUCTED PLANS**

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**AS CONSTRUCTED**

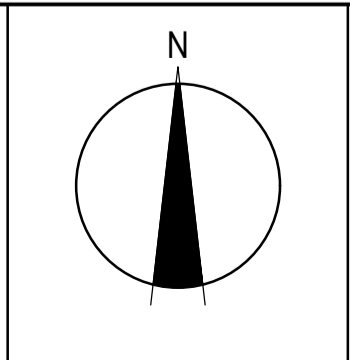
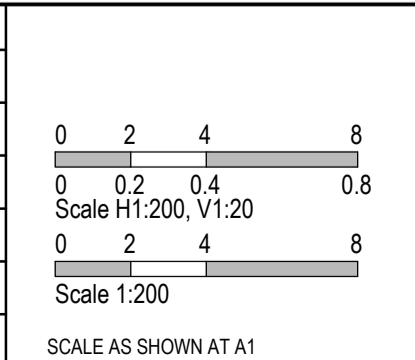
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OH&S Management AS/NZS 4501  
Global-Mark.com.au®

Environmental Management ISO 14001  
Global-Mark.com.au®

TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	

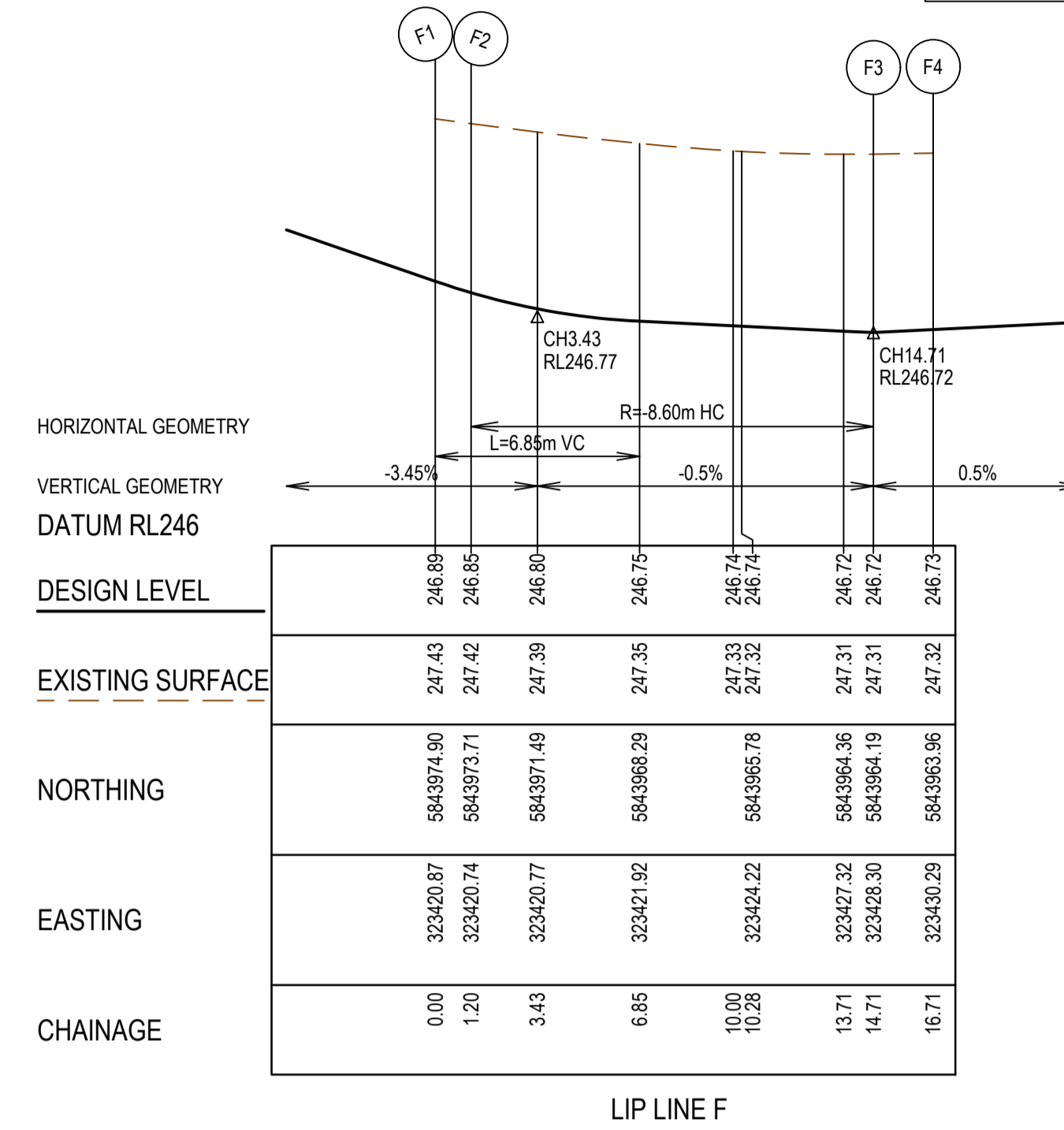
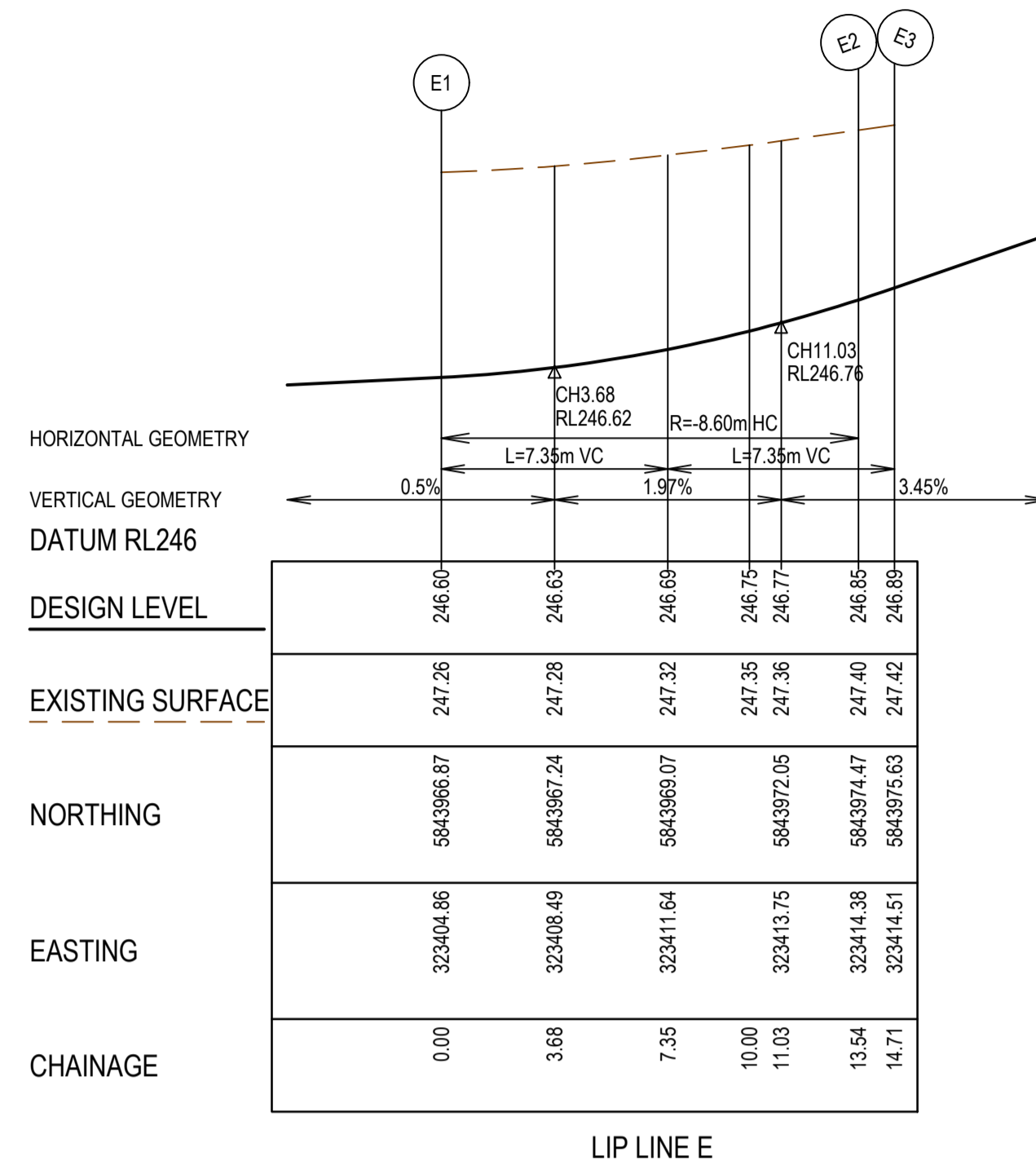
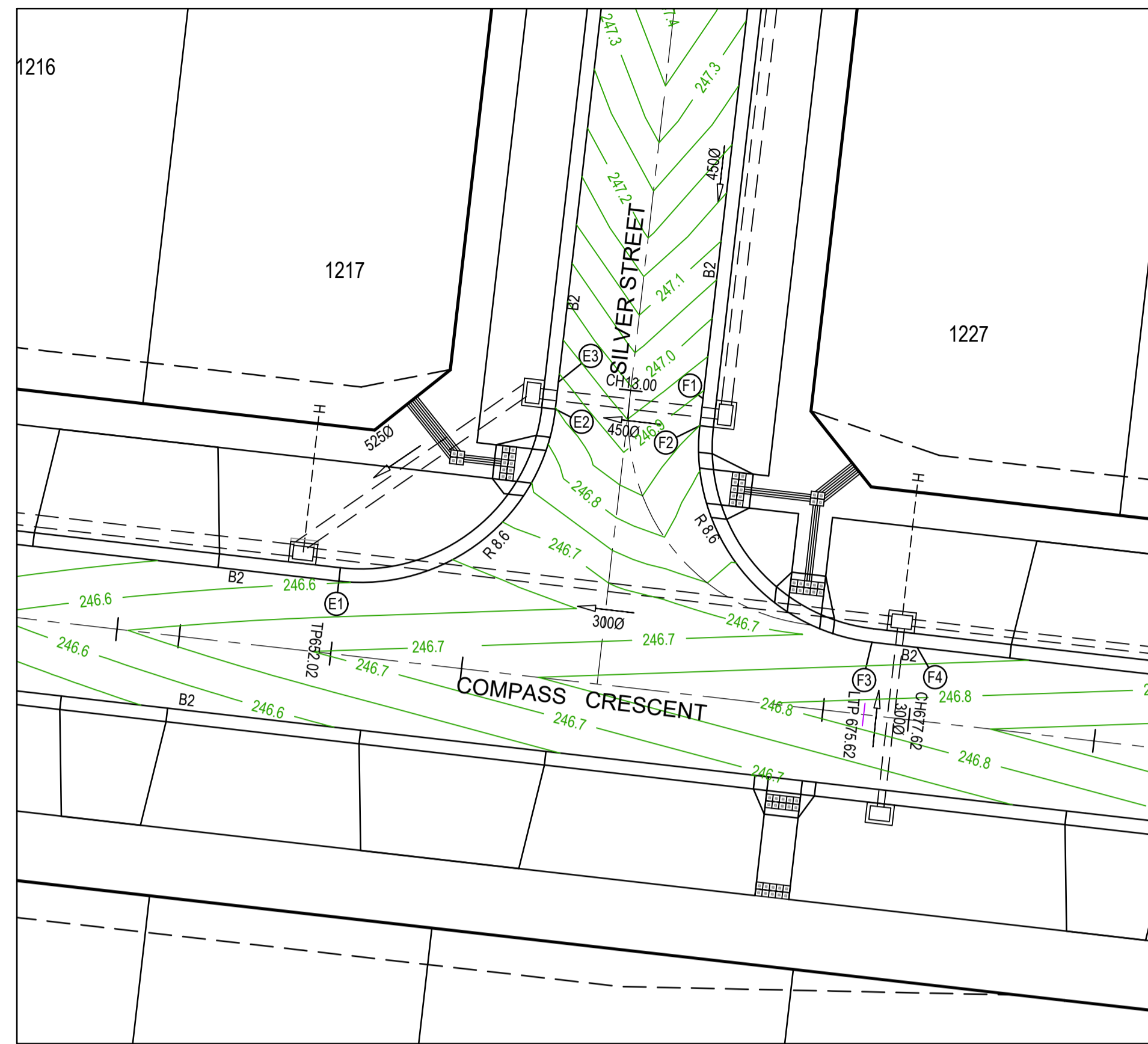


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Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

**mirvac**

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Intersection Detail Plan - 1  
Lip Profiles A - D

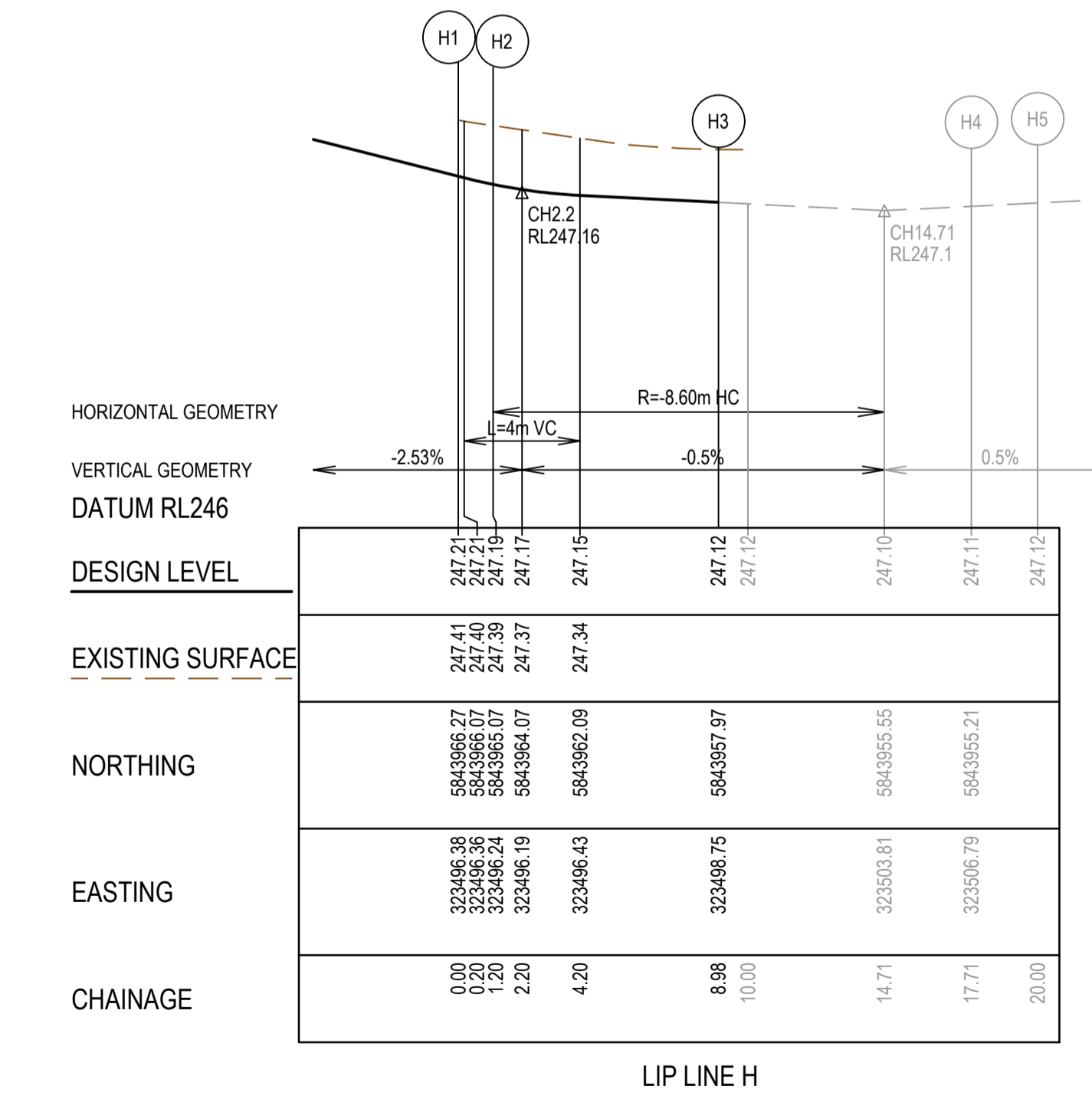
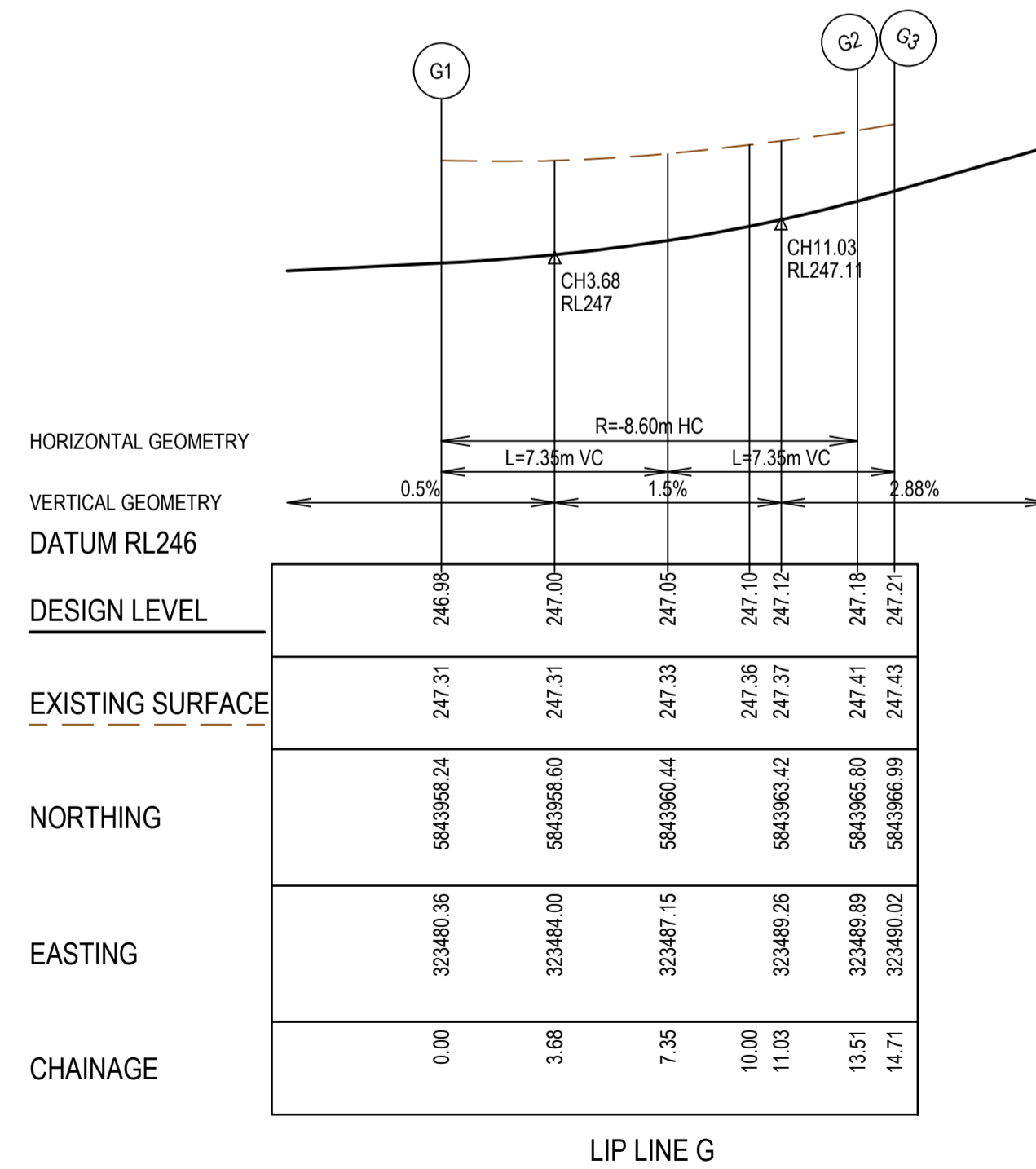
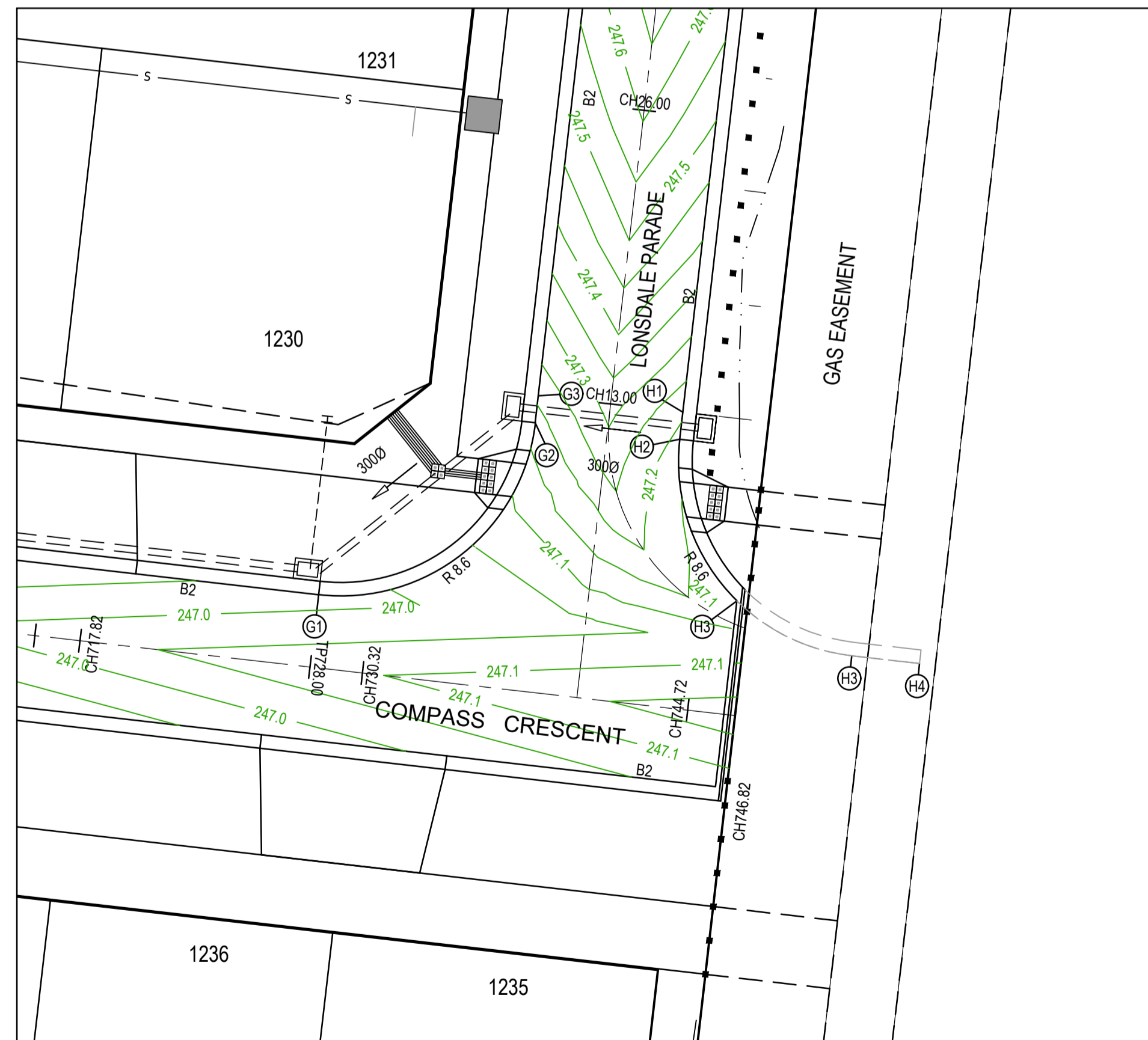
MELWAYS REF <b>8 M2</b>	PROJECT / DRAWING No. <b>1700E-12-06</b>	SHEET No. <b>06 of 27</b>	REVISION <b>1</b>
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- NOTES**
1. ALL VEHICLE CROSSINGS AND PRAM CROSSINGS TO BE MINIMUM OF 0.75m FROM PITS.
  2. ALL PRAM CROSSINGS TO BE MINIMUM OF 2.0m FROM VEHICLE CROSSINGS.
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**LEGEND - INTERSECTION DETAIL PLAN**  
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING SERVICE CONDUITS
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
	EXISTING RETAINING WALL
	RETAINING WALL
	FUTURE RETAINING WALL
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH

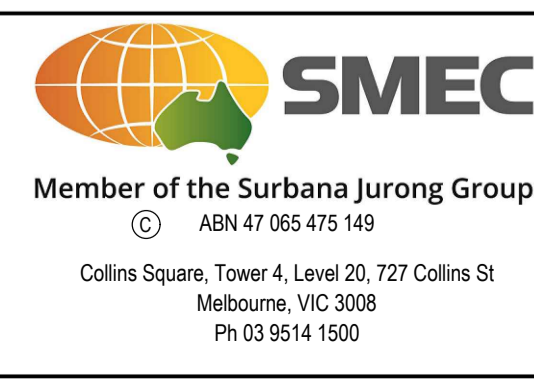
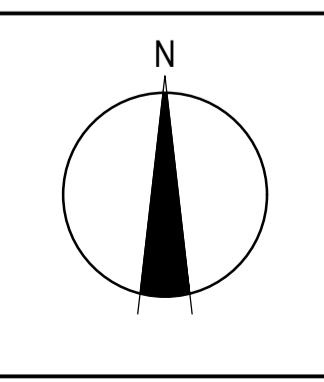
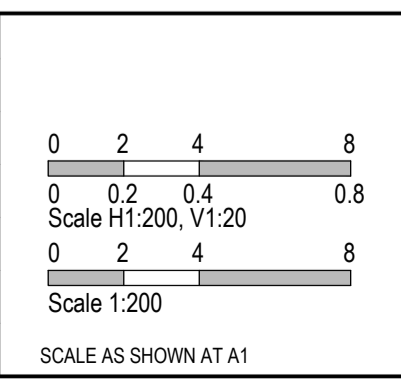


**AS CONSTRUCTED PLANS**  
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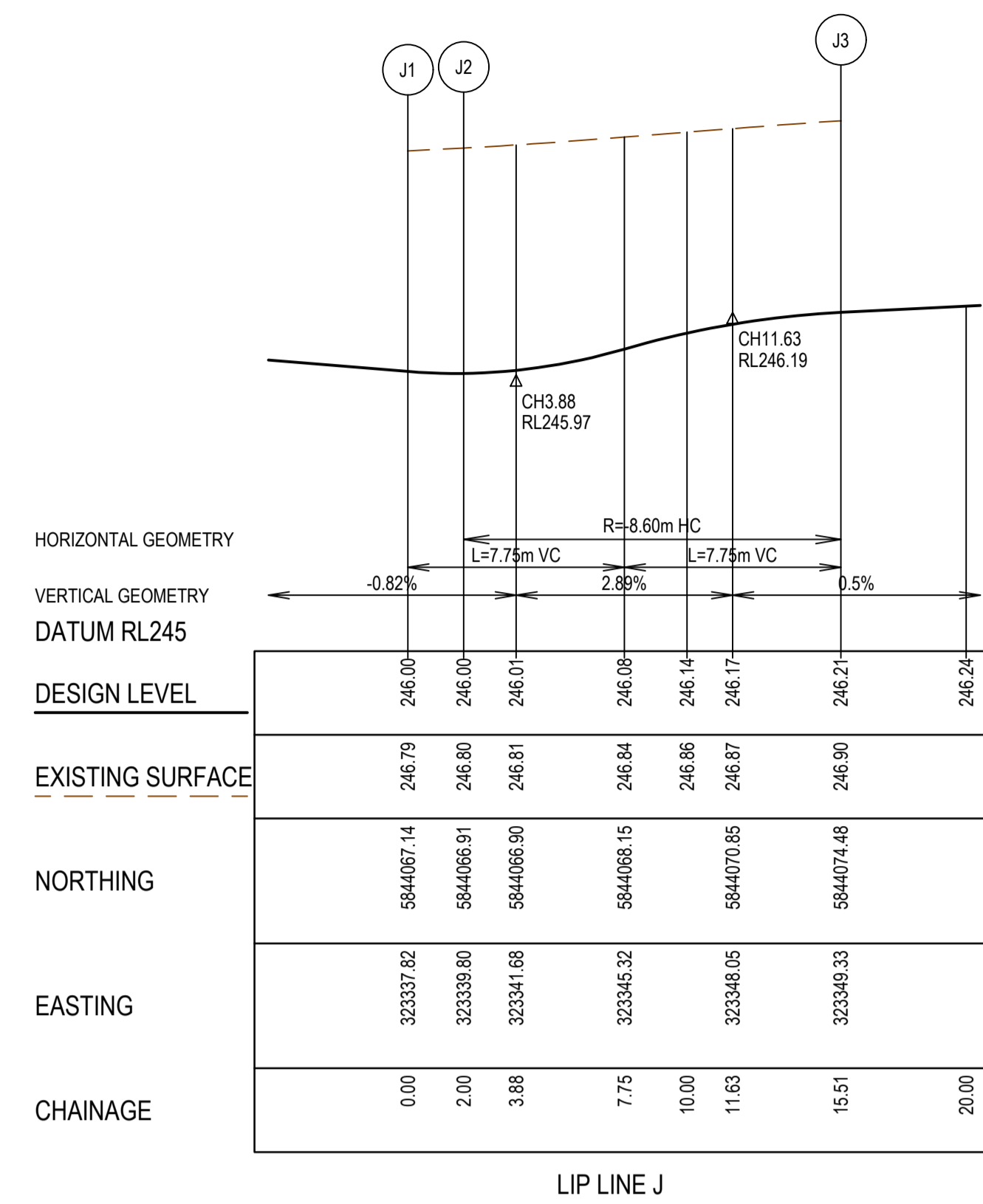
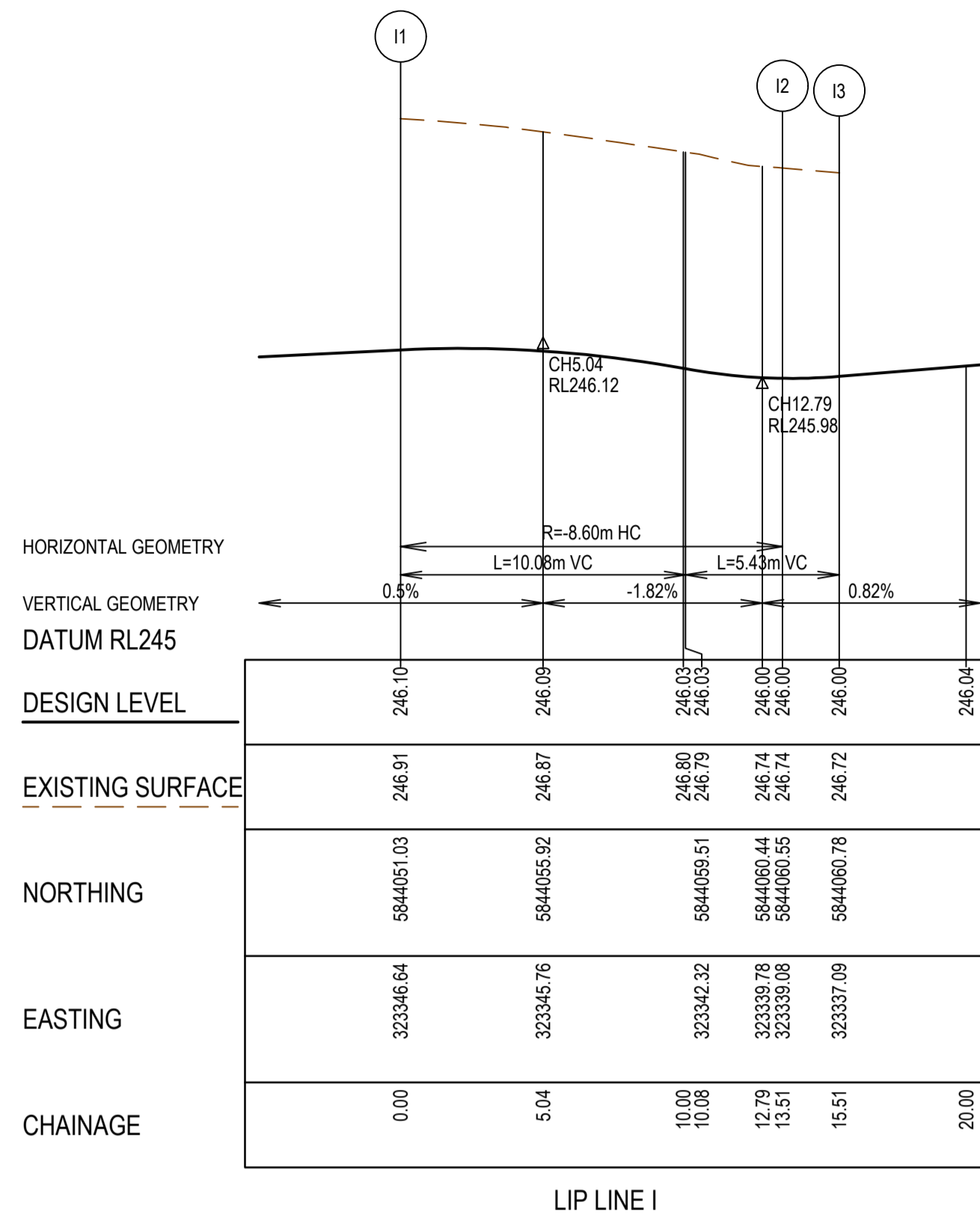
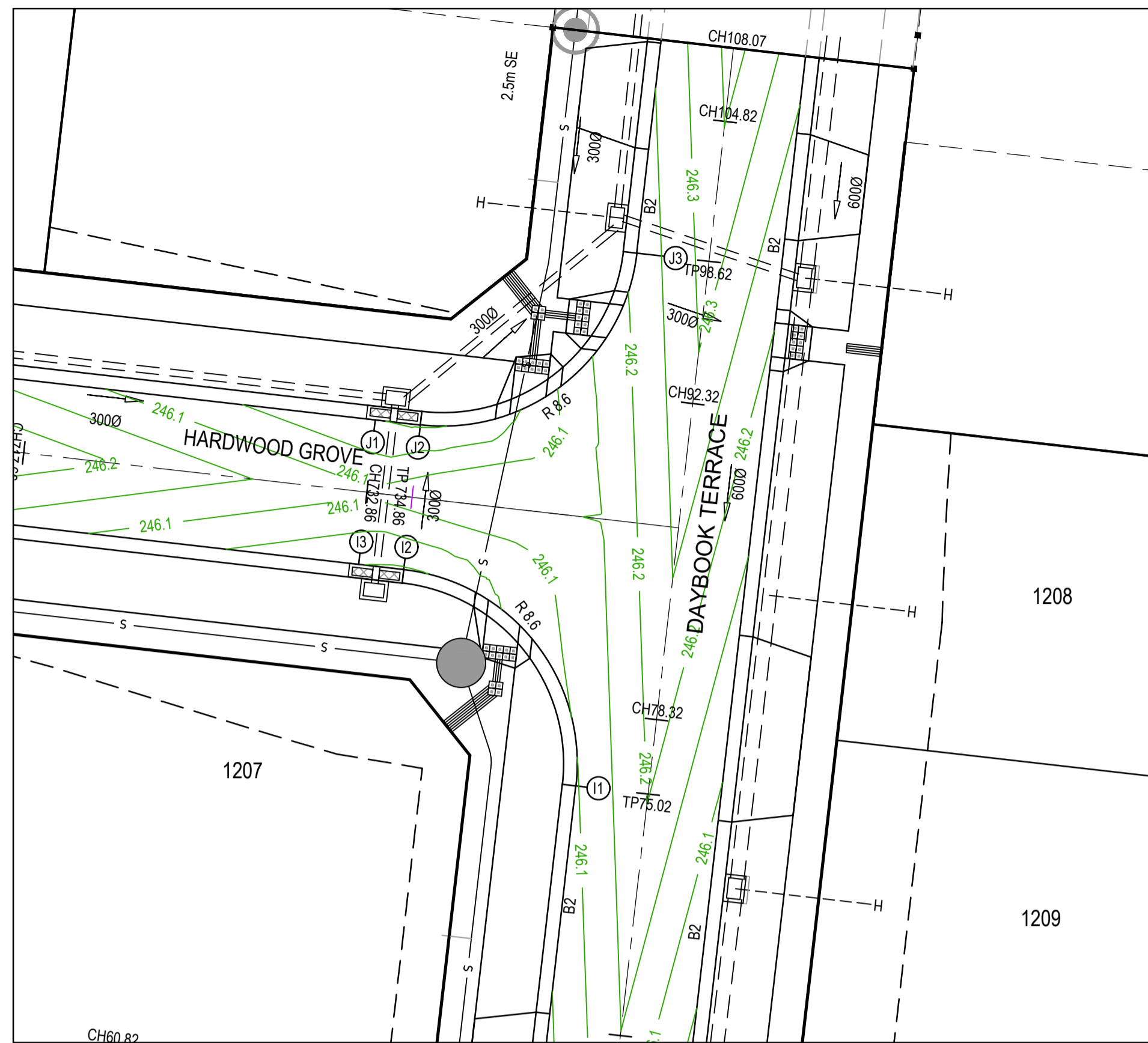
**AS CONSTRUCTED**



TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No.	2



Olivine Estate - Stage 12 Whittlesea City Council Road and Drainage Intersection Detail Plan - 2 Lip Profiles E - H		MELBOURNE REF <b>8 M2</b>	PROJECT / DRAWING No. <b>1700E-12-07</b>	SHEET No. <b>07 of 27</b>	REVISION <b>1</b>
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**LEGEND - INTERSECTION DETAIL PLAN**  
 ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN PIT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING SERVICE CONDUITS
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
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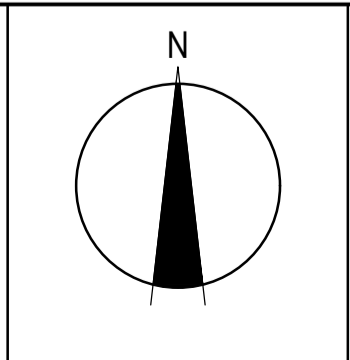
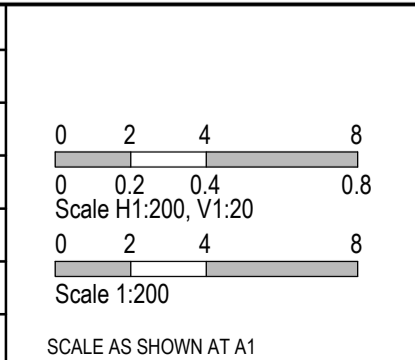
**AS CONSTRUCTED**

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 OHS Management AS/NZS 4801  
 Environmental Management ISO 14001

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TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No.	2



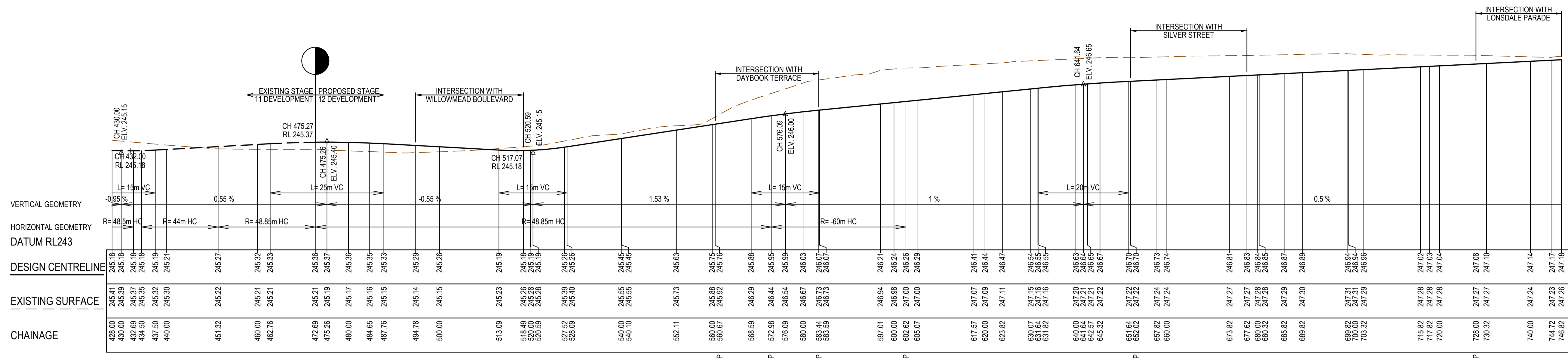
**SMEC**  
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 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

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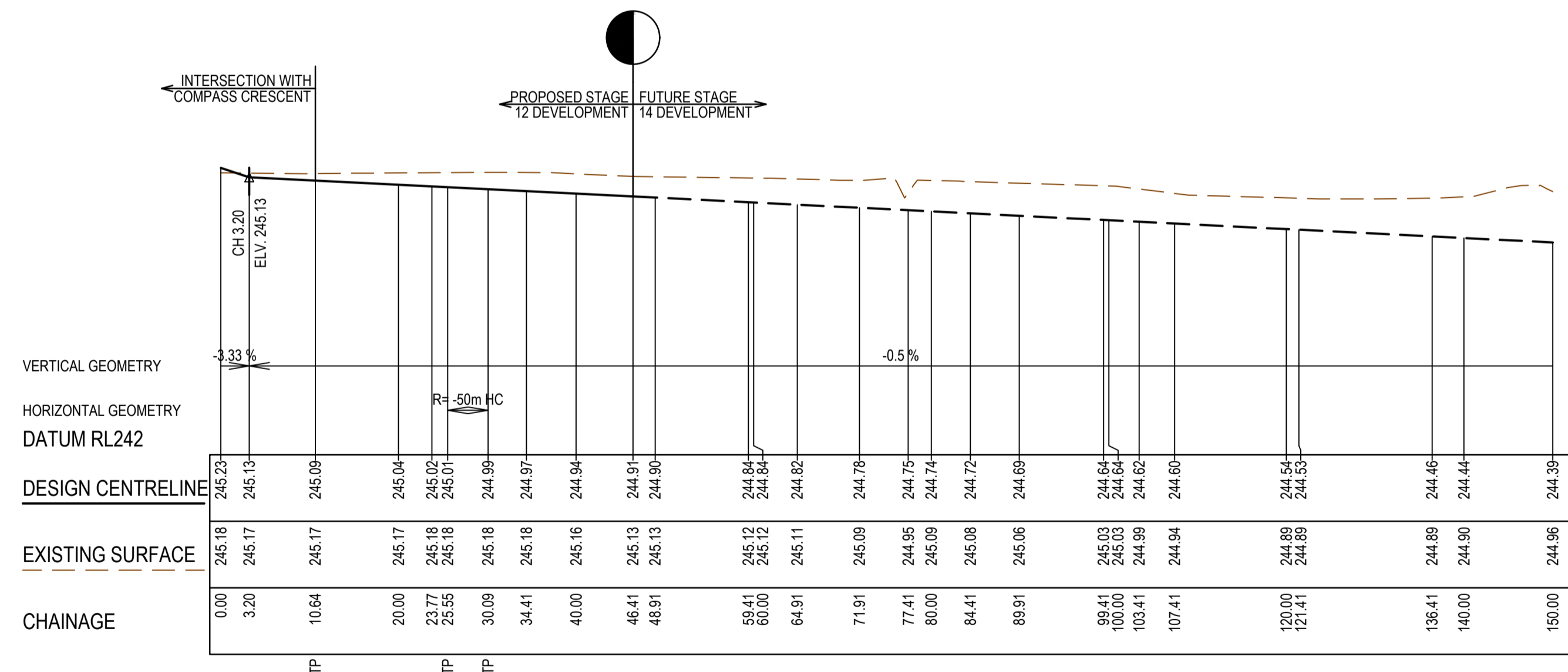
Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Intersection Detail Plan - 3  
 Lip Profiles I - J

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
8 M2	1700E-12-08	08 of 27	1





COMPASS CRESCENT LONGITUDINAL SECTION



WILLOWMEAD BOULEVARD LONGITUDINAL SECTION

**AS CONSTRUCTED PLANS**

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**AS CONSTRUCTED**

 Quality Management ISO 9001	 OHS Management AS/NZS 1880	 Environmental Management ISO 14001
TITLE DRAFTER DESIGNER CHECKED AUTHORISED SMEC DRAWING REF. REFERENCE No. 2	NAME E.Bates M.Angay K.Moore A.Burrows 1700E-12	All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.

Scale 1:500, V1:50  
SCALE AS SHOWN AT 1

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0 0.5 1 2

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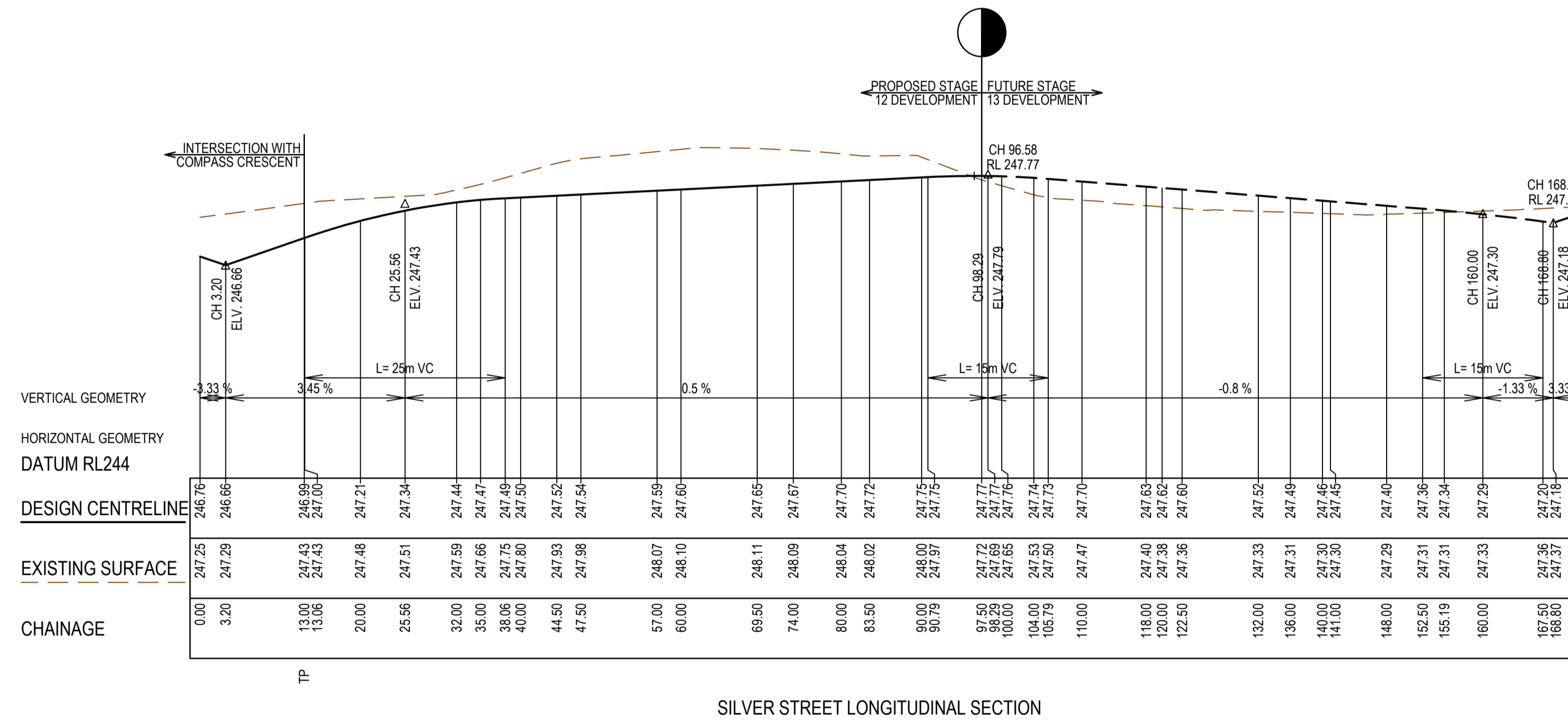
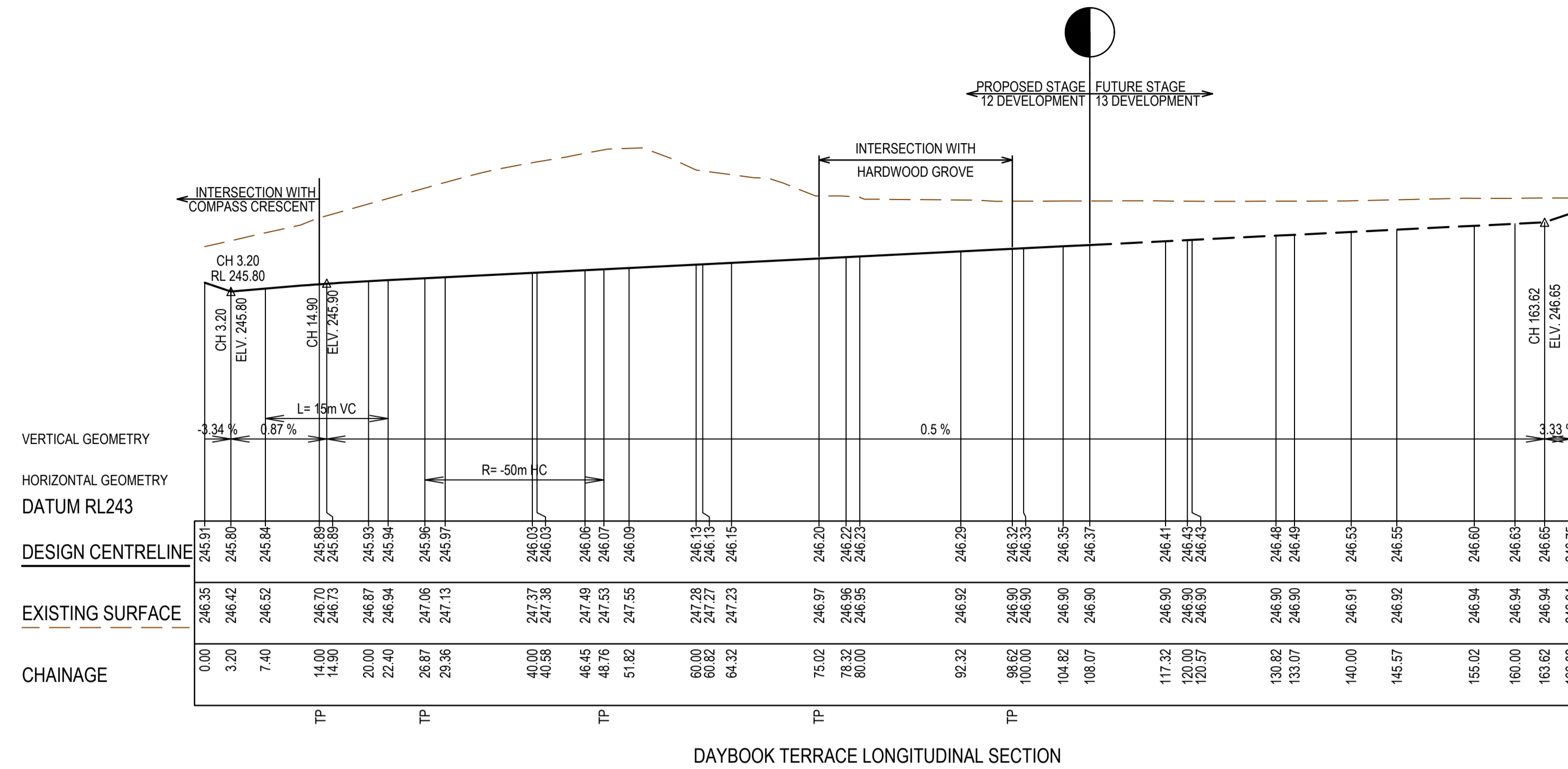
ABN 47 065 475 149

Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

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Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Longitudinal Sections - 1  
Compass Crescent and Sanctuary Boulevard

MELWAYS REF <b>8 M2</b>	PROJECT / DRAWING No. <b>1700E-12-09</b>	SHEET No. <b>09 of 27</b>	REVISION <b>1</b>
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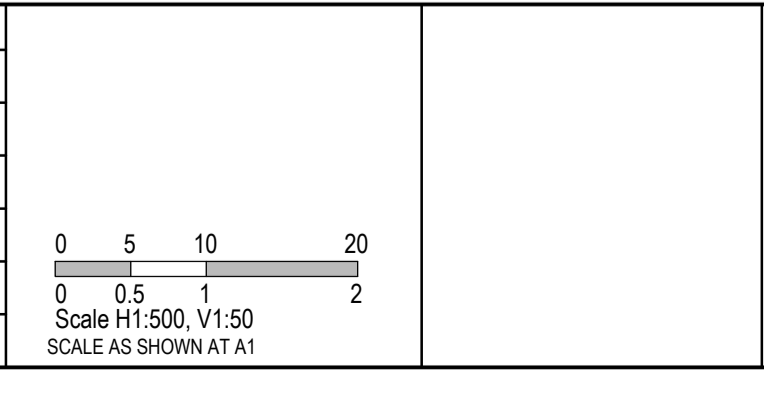


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**AS CONSTRUCTED**

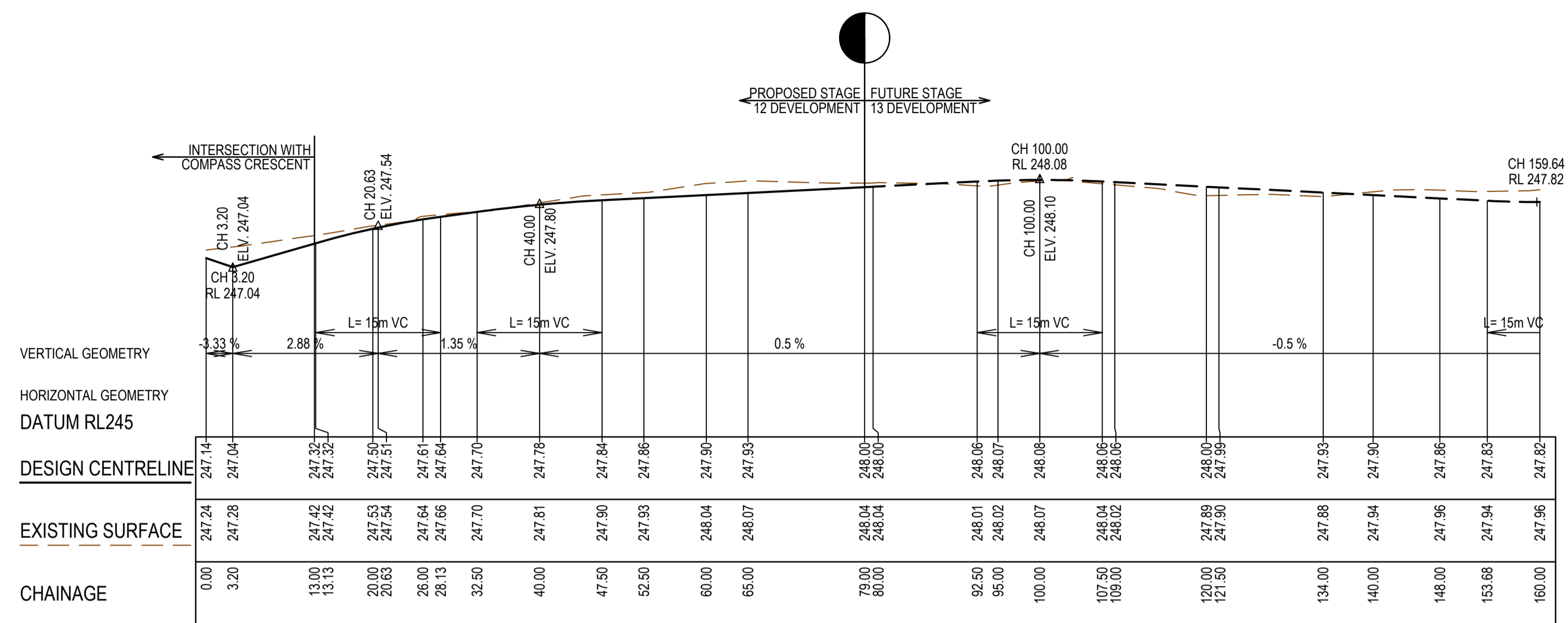
All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.		TITLE	NAME
Quality Management - ISO 9001	OH&S Management - AS/NZS 1800	DRAFTER	E.Bates
Environmental Management - ISO 14001	Legal Compliance	DESIGNER	M.Angay
Global-Mark.com.au	Global-Mark.com.au	CHECKED	K.Moore
		AUTHORISED	A.Burrows
		SMEC DRAWING REF.	1700E-12
		REFERENCE No. 2	



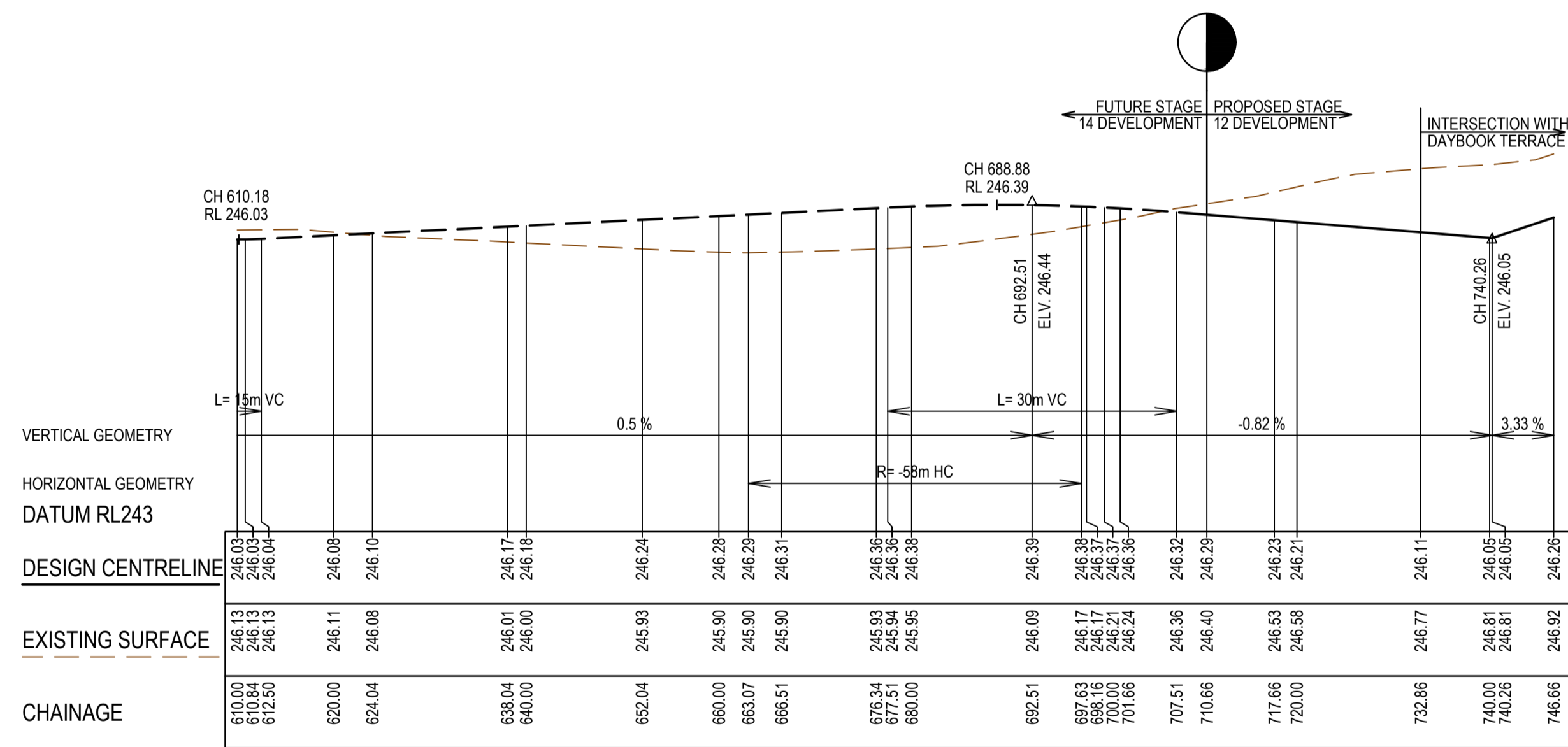
**SMEC**  
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ABN 47 065 475 149  
Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Longitudinal Sections - 2  
Union Terrace and Axis Street

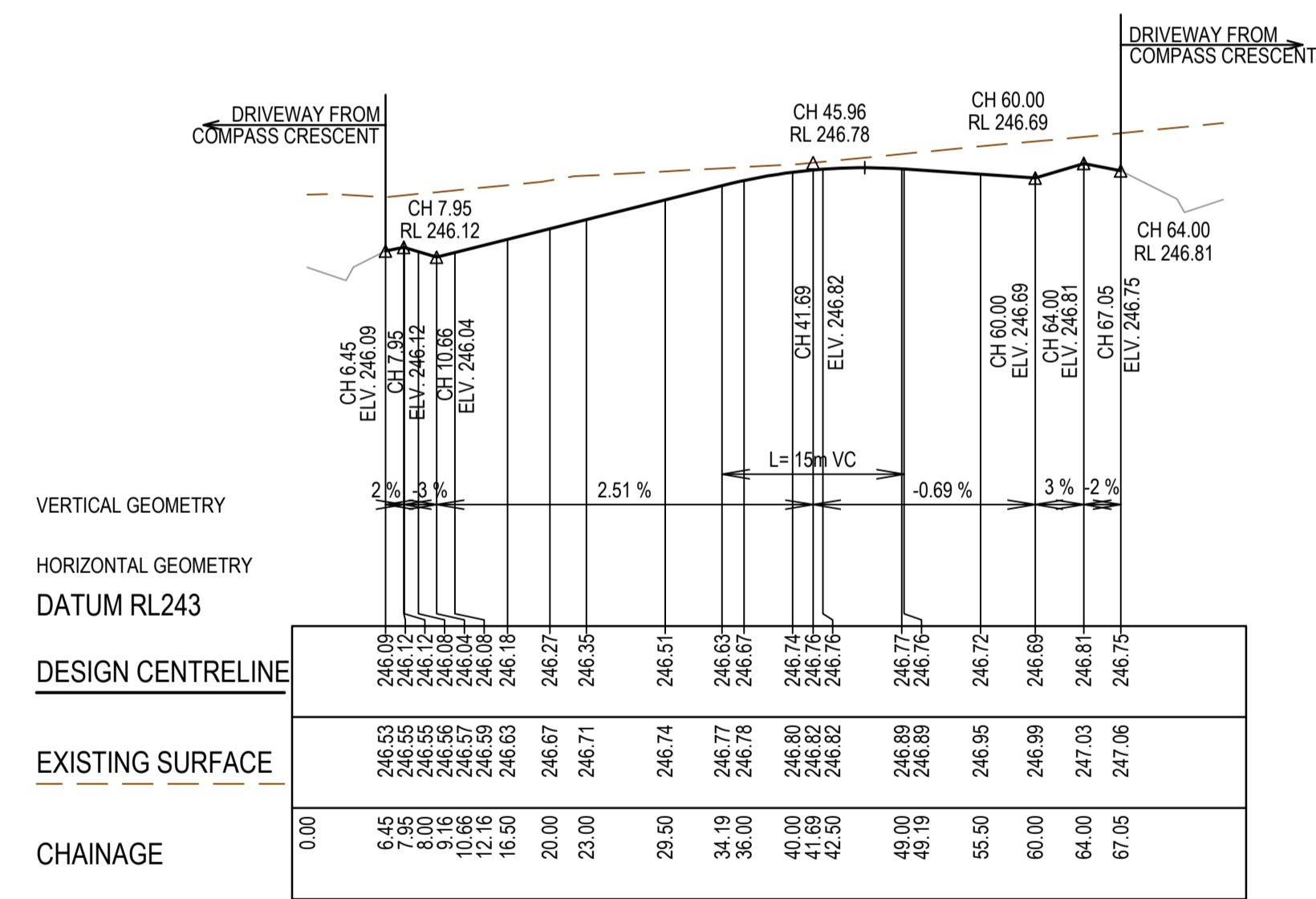
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LONSDALE PARADE LONGITUDINAL SECTION



HARDWOOD GROVE LONGITUDINAL SECTION



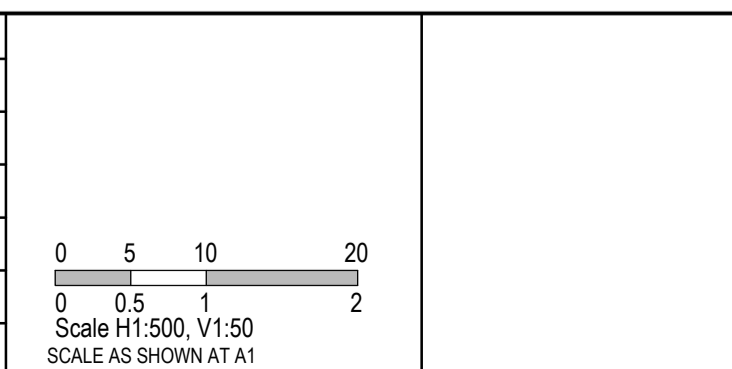
ORBIT LANE LONGITUDINAL SECTION

**AS CONSTRUCTED PLANS**

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**AS CONSTRUCTED**

TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	



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Melbourne, VIC 3008  
Ph 03 9514 1500

**mirvac**

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Longitudinal Sections - 3  
Globe Parade and Village Grove

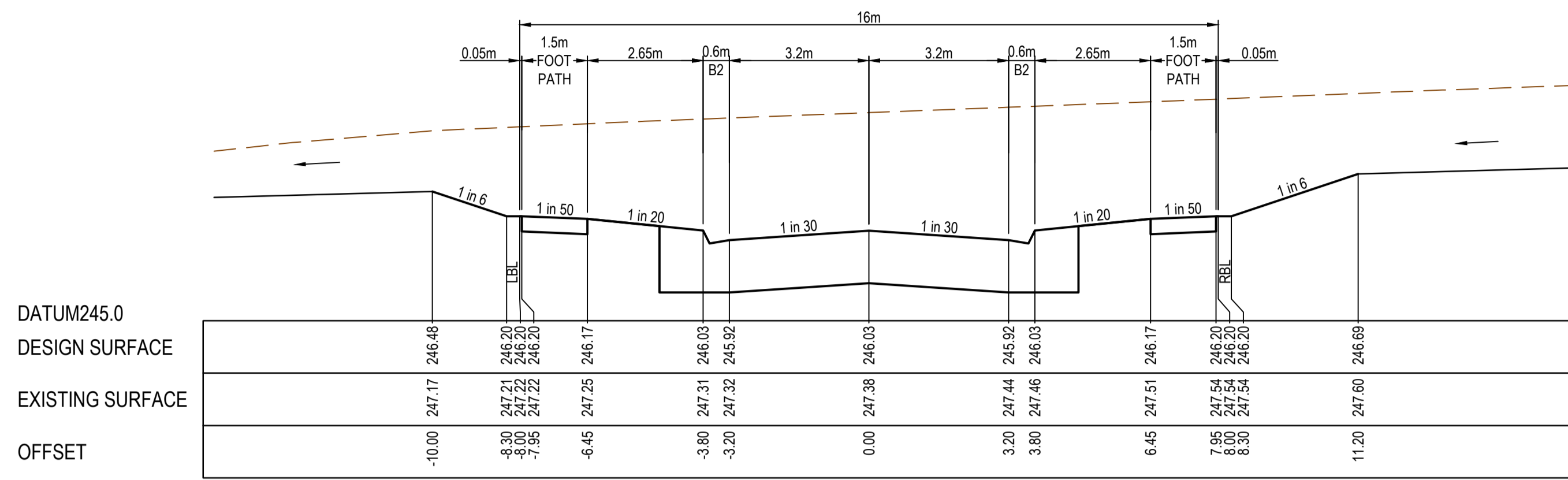
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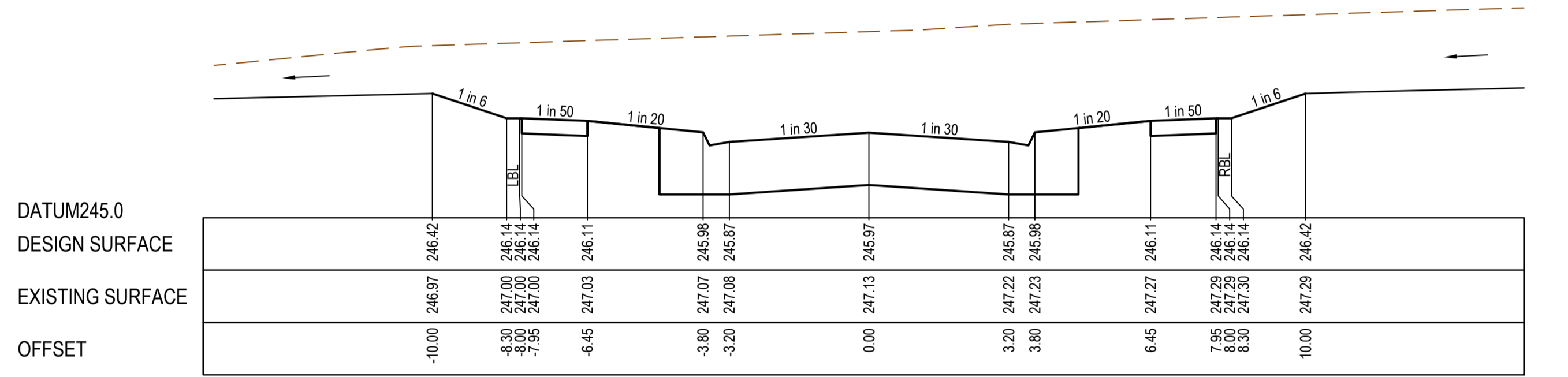




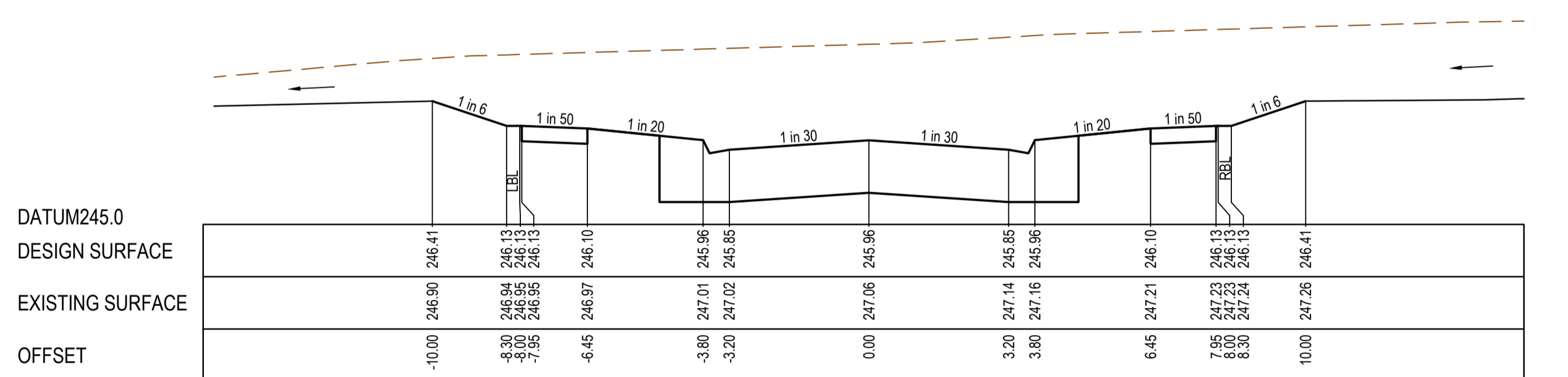
FILLING UNDER FOOTPATHS MUST BE TYPE A SELECTED MATERIAL IN ACCORDANCE WITH VICROADS STANDARD SPECIFICATION 204.



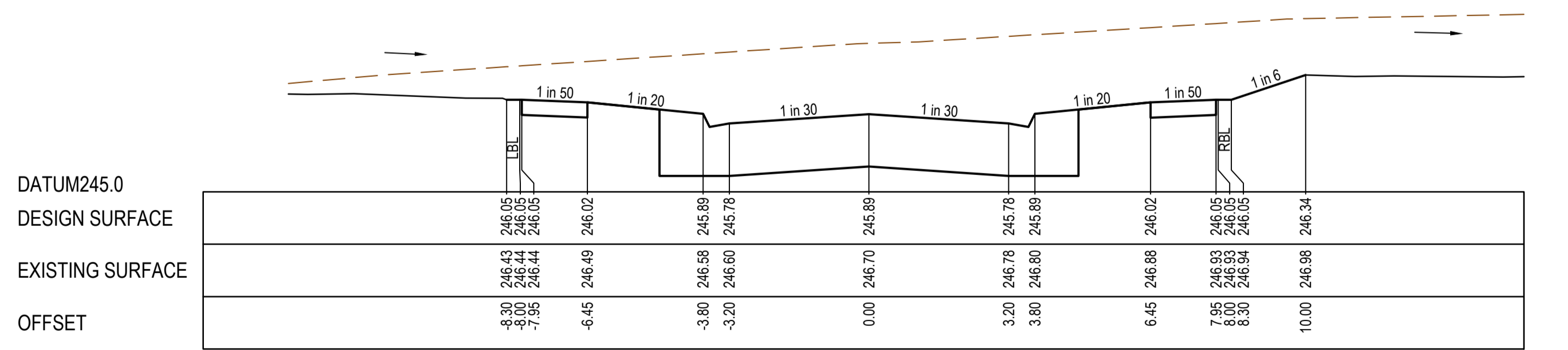
CH 40.58



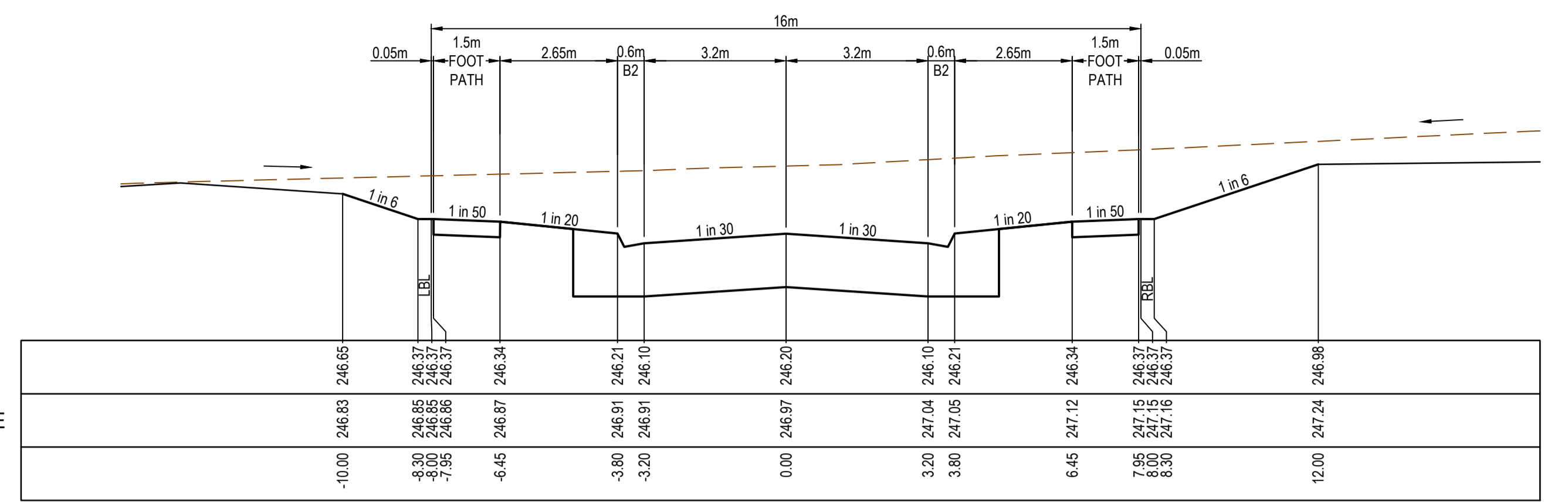
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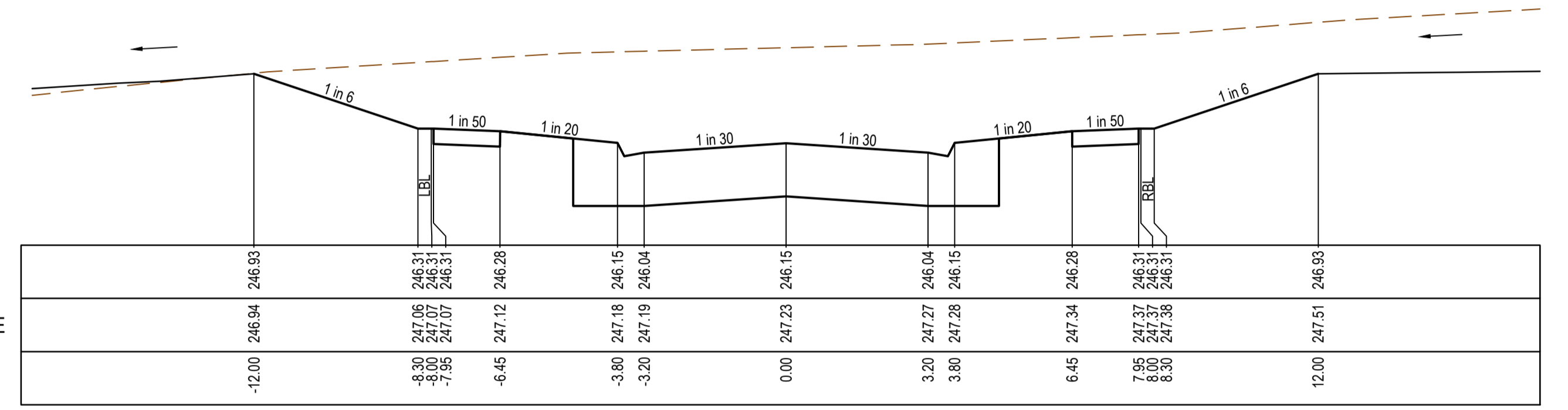
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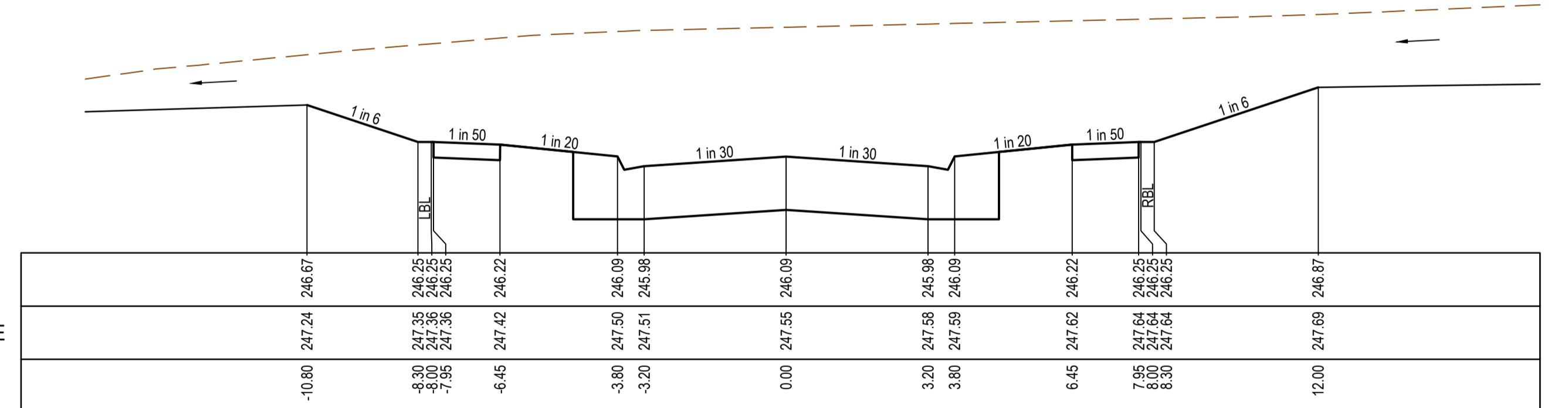
CH 14.00



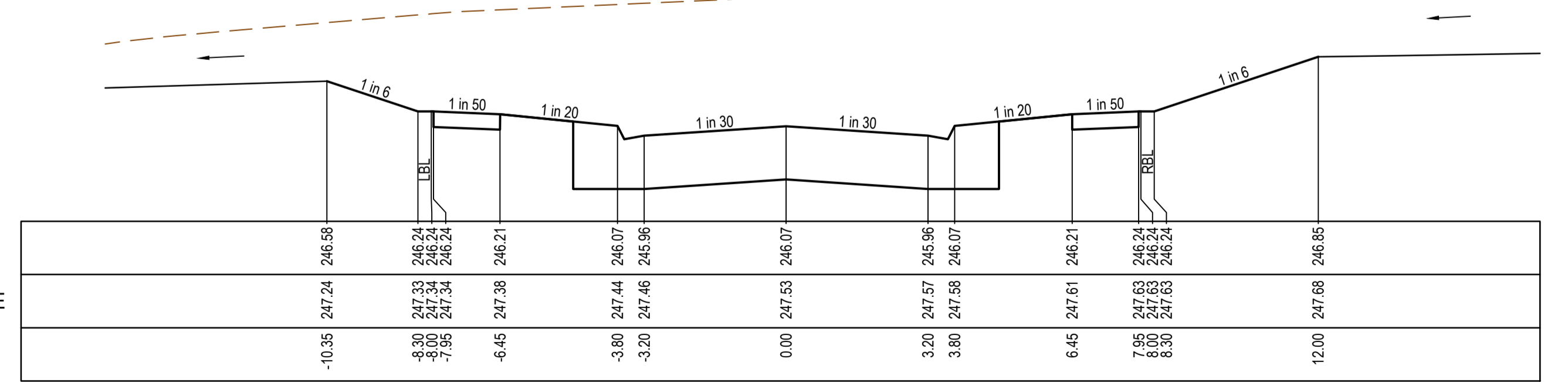
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CH 64.32



CH 51.82

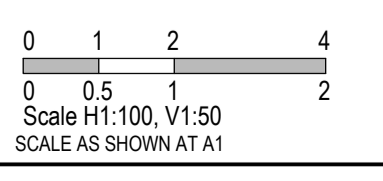


TP CH 48.76

**AS CONSTRUCTED PLANS**  
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TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	



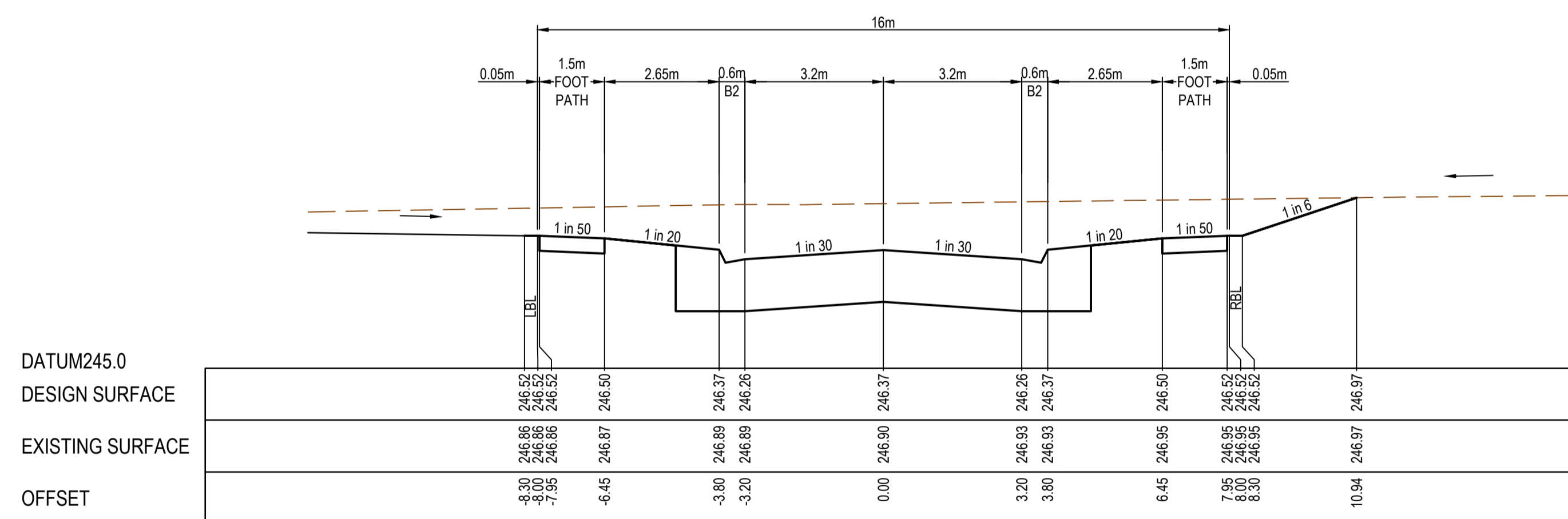
**SMEC**  
Member of the Surlana Jurong Group  
ABN 47 065 475 149  
Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

**mirvac**

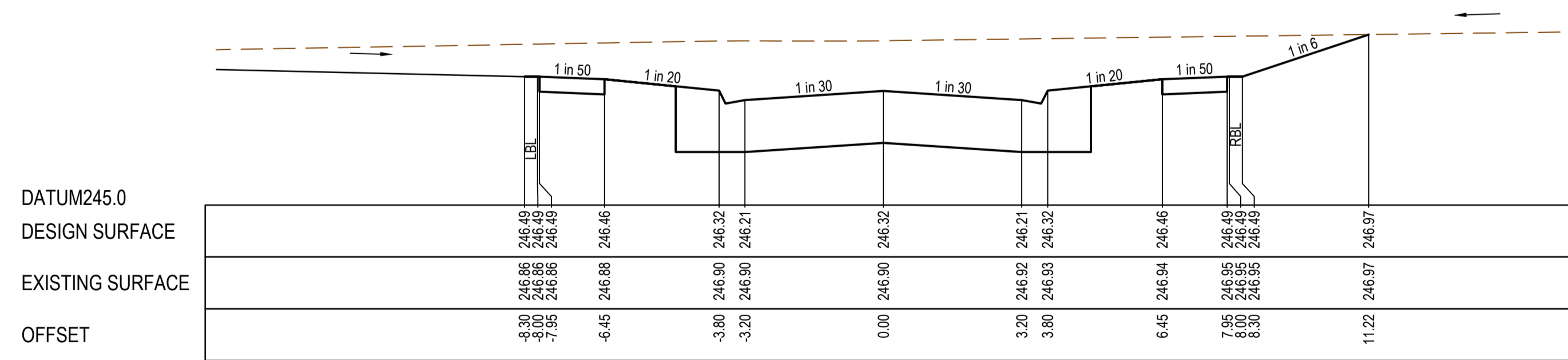
Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Cross Sections - Daybook Terrace  
CH14.00 to 75.02

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
8 M2	1700E-12-15	15 of 27	1

FILLING UNDER FOOTPATHS MUST BE TYPE A SELECTED MATERIAL IN ACCORDANCE WITH VICROADS STANDARD SPECIFICATION 204.

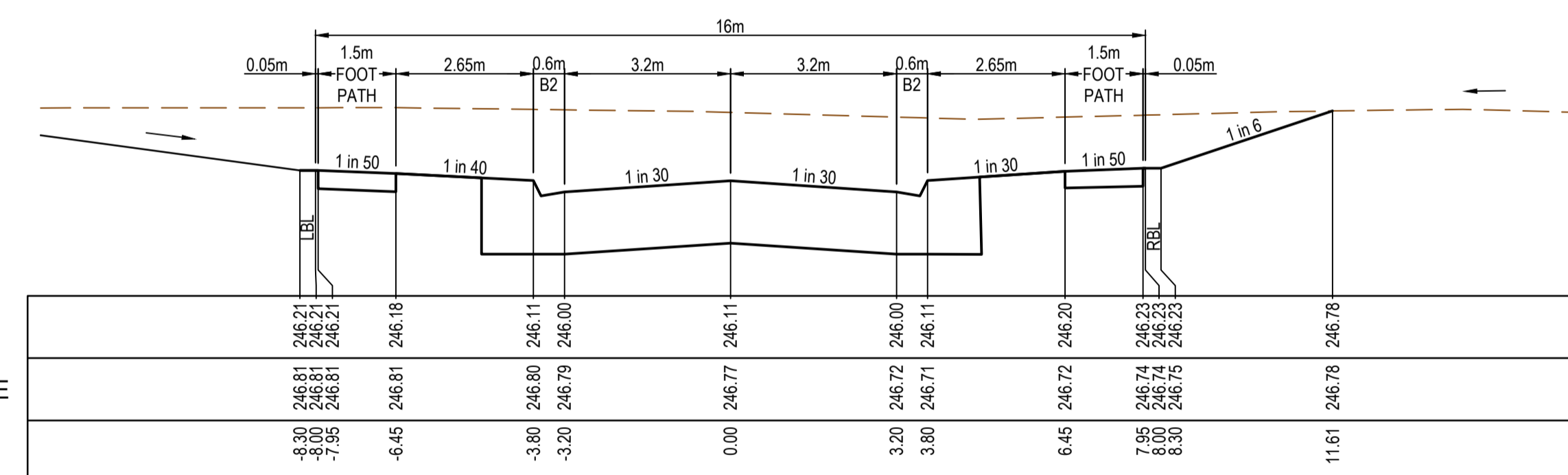


CH 108.07

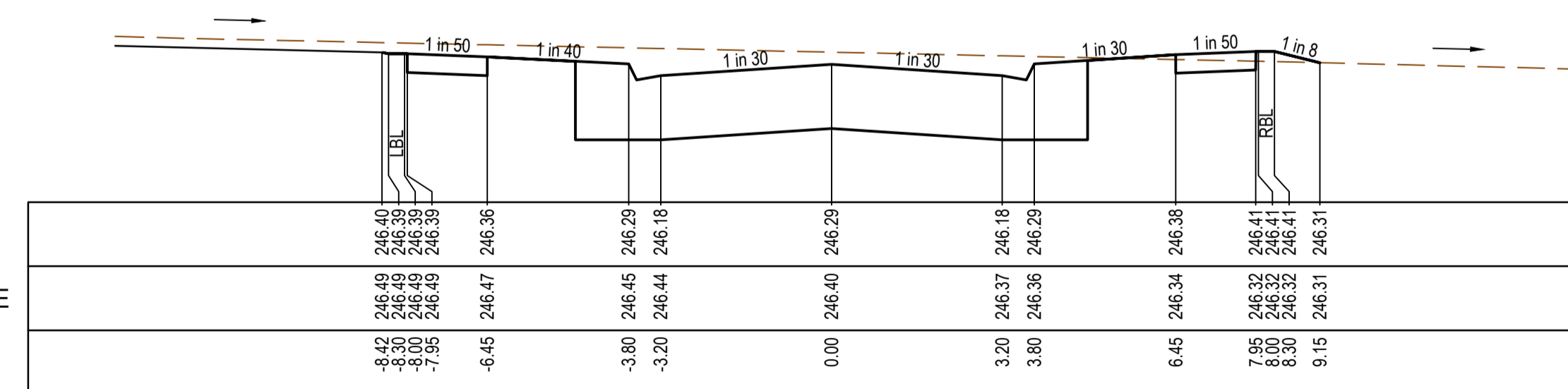


TP CH 98.62

CROSS SECTION - DAYBOOK TERRACE



CH 732.86



CH 710.66

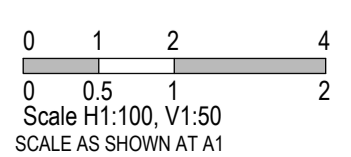
CROSS SECTIONS - HARDWOOD GROVE

**AS CONSTRUCTED PLANS**

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**AS CONSTRUCTED**

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Quality Management - ISO 9001	Site Management - AS/NZS 1800	DRAFTER	E.Bates
Environmental Management - ISO 14001		DESIGNER	M.Angay
		CHECKED	K.Moore
		AUTHORISED	A.Burrows
		SMEC DRAWING REF.	1700E-12
		REFERENCE No.	2



**SMEC**

Member of the Surlana Jurong Group

ABN 47 065 475 149

Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

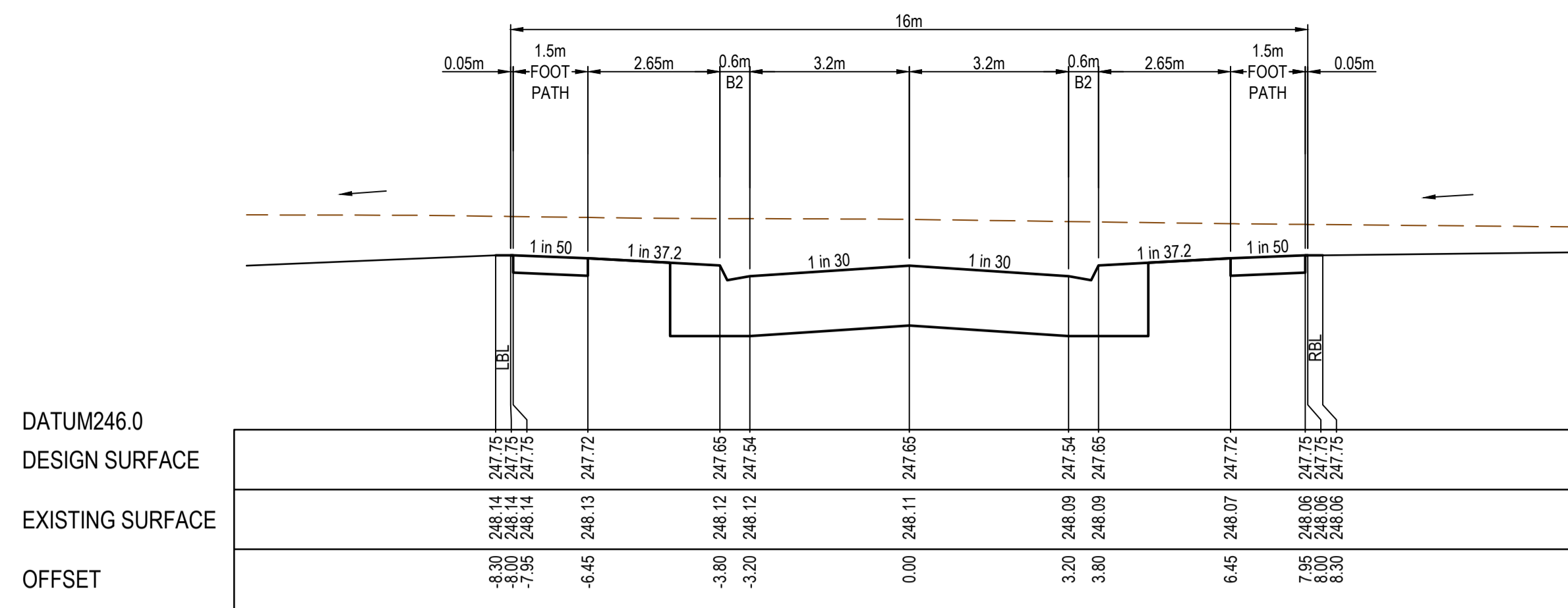
**mirvac**

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Cross Sections - Daybook Terrace CH98.62 to 108.07  
and Hardwood Grove

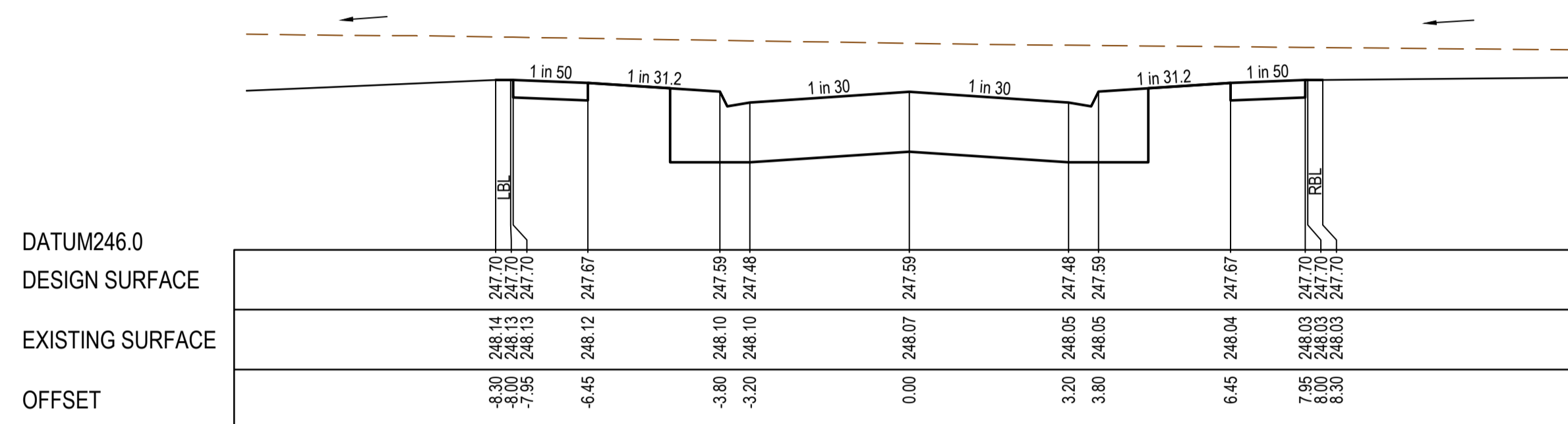
MELWAYS REF 8 M2	PROJECT / DRAWING No. 1700E-12-16	SHEET No. 16 of 27	REVISION 1
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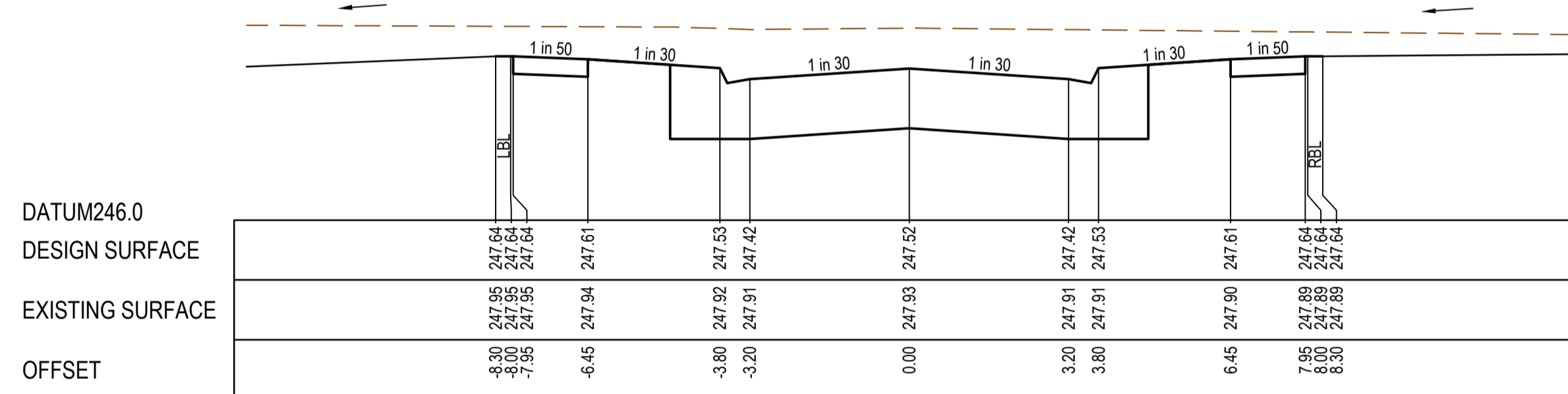
FILLING UNDER FOOTPATHS MUST BE TYPE A SELECTED MATERIAL IN ACCORDANCE WITH VICROADS STANDARD SPECIFICATION 204.



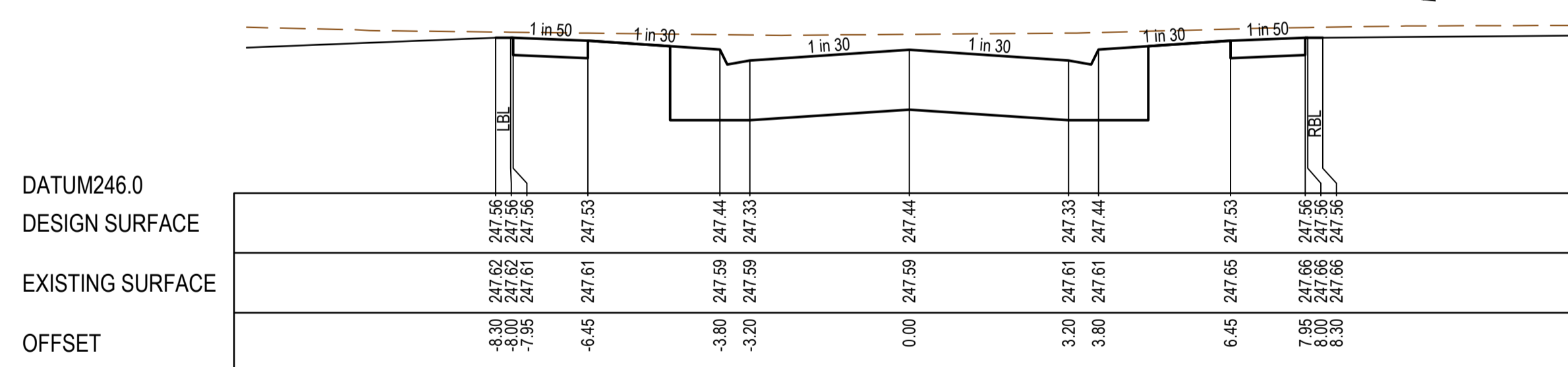
CH 69.50



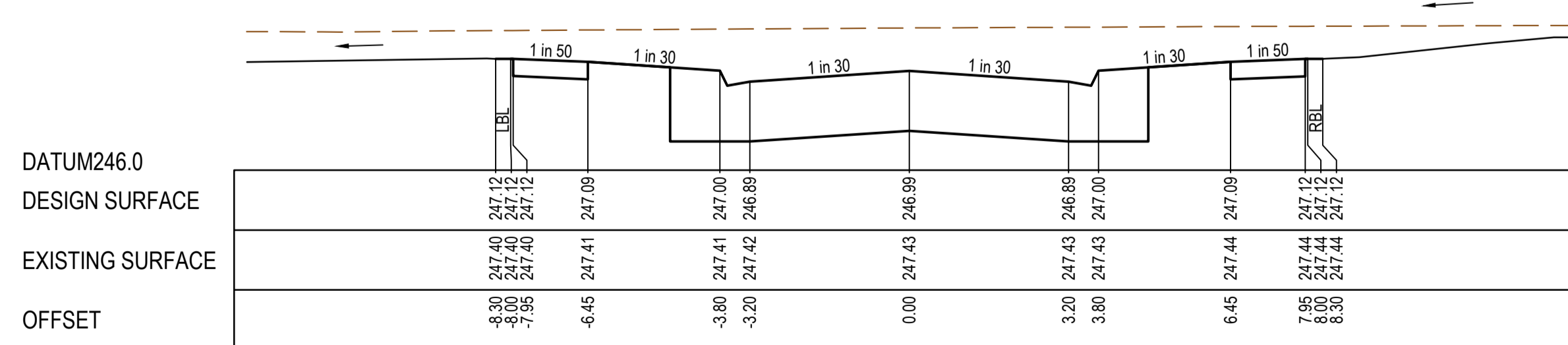
CH 57.00



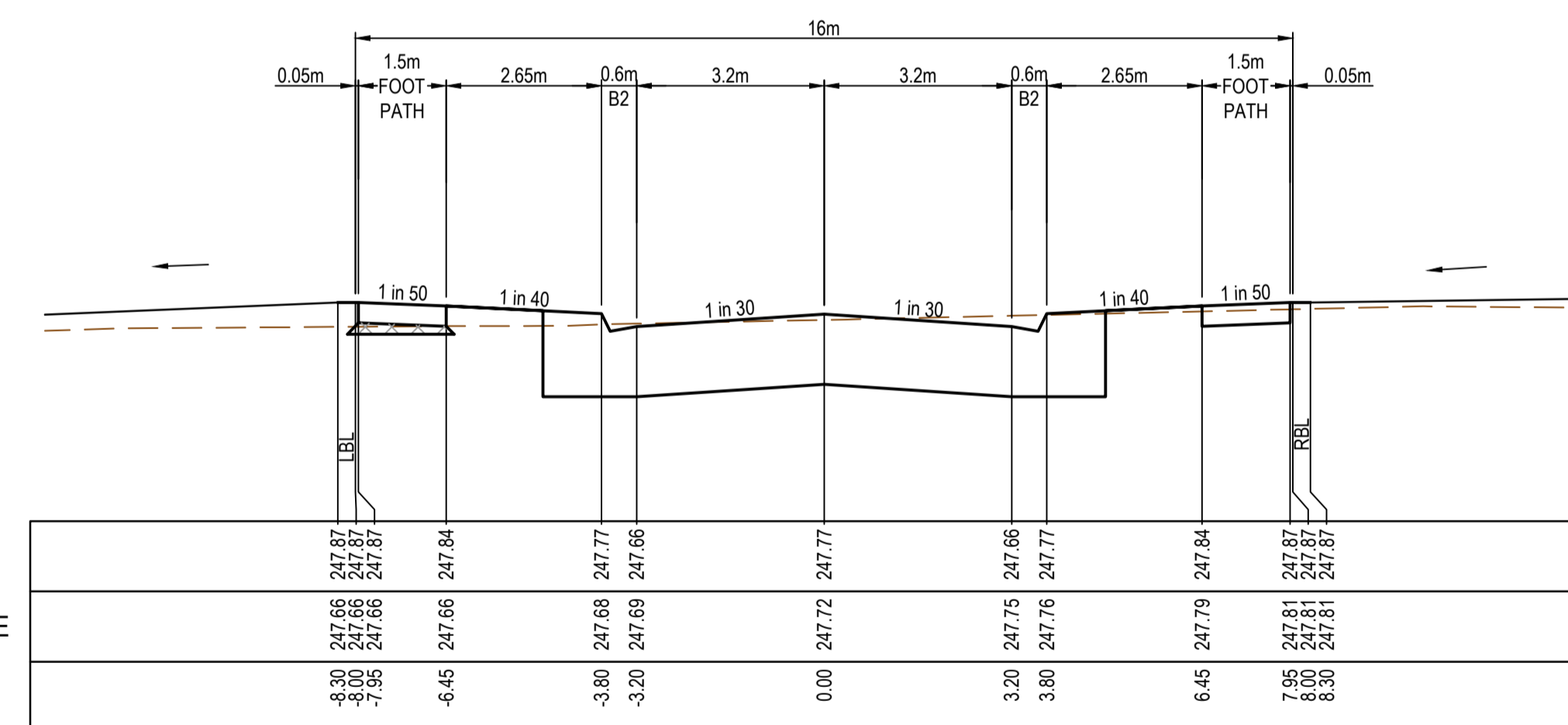
CH 44.50



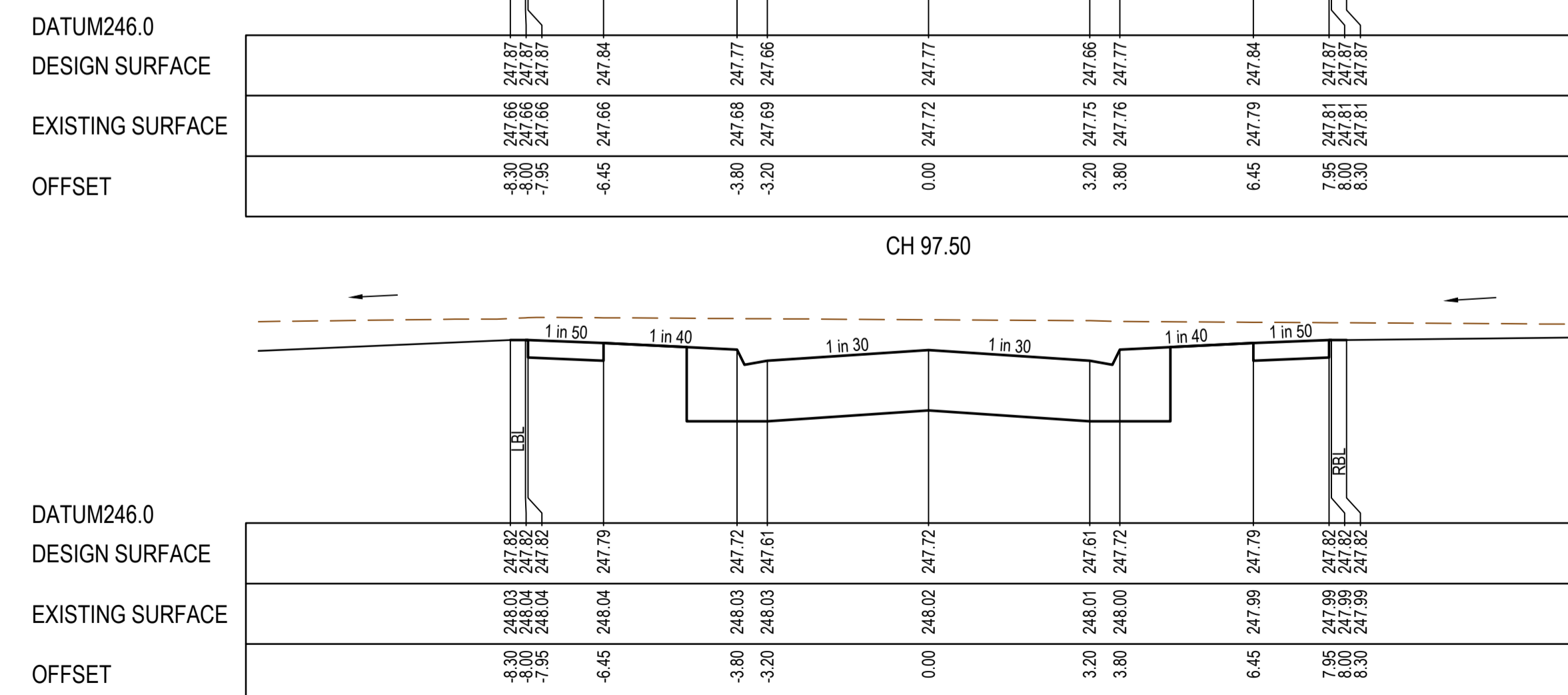
CH 32.00



CH 13.00



CH 97.50



CH 83.50

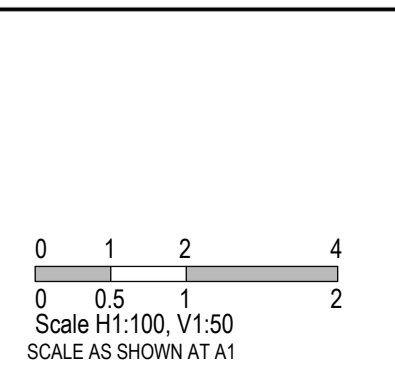
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Quality Management ISO 9001  
 Environmental Management ISO 14001  
 Occupational Health & Safety Management ISO 45001

TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	



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 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

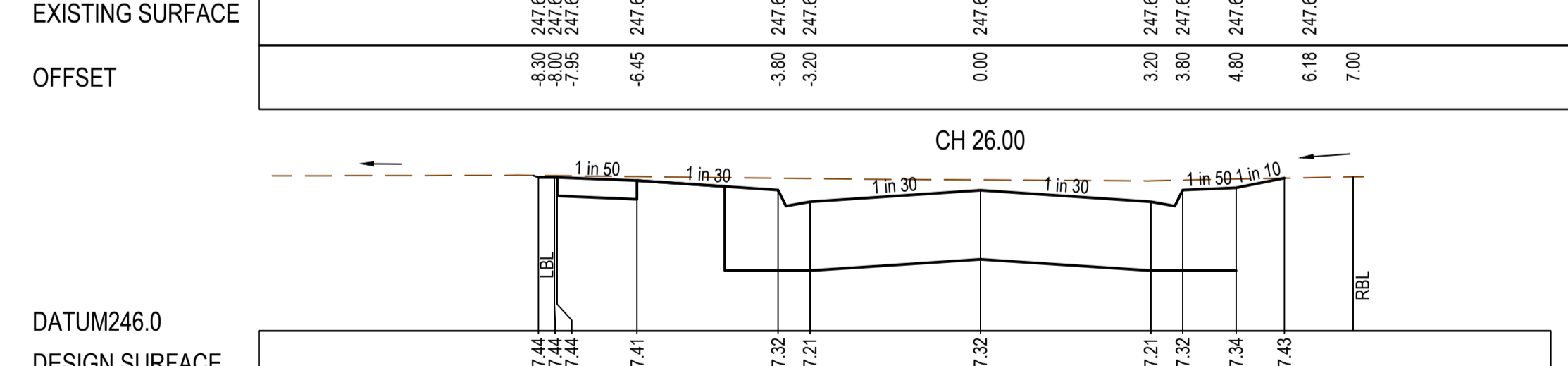
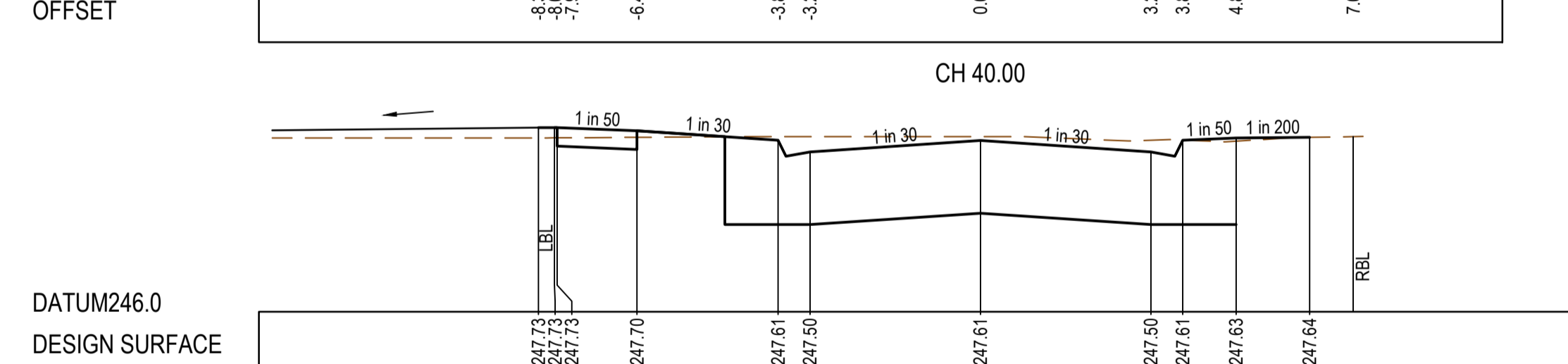
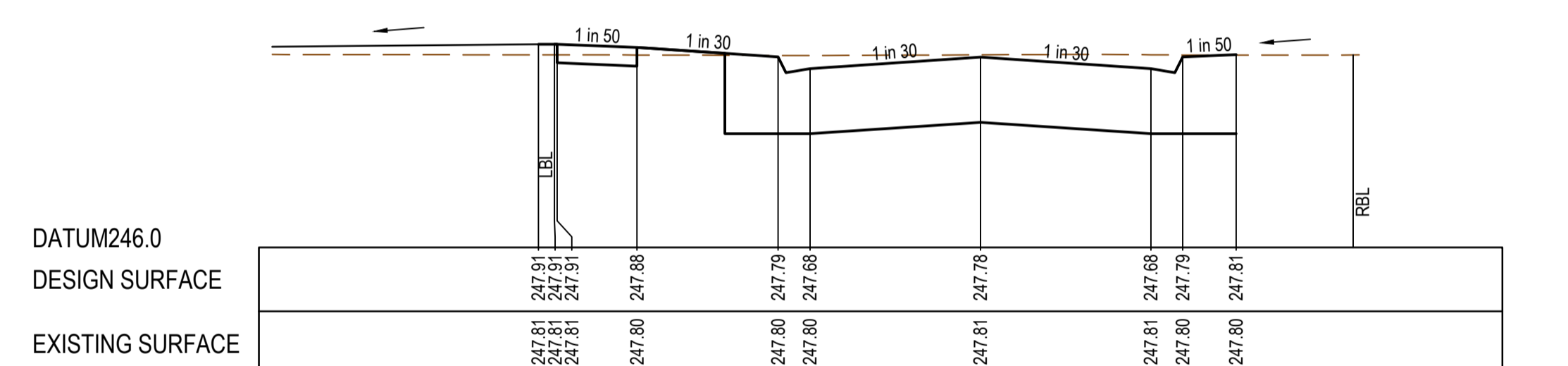
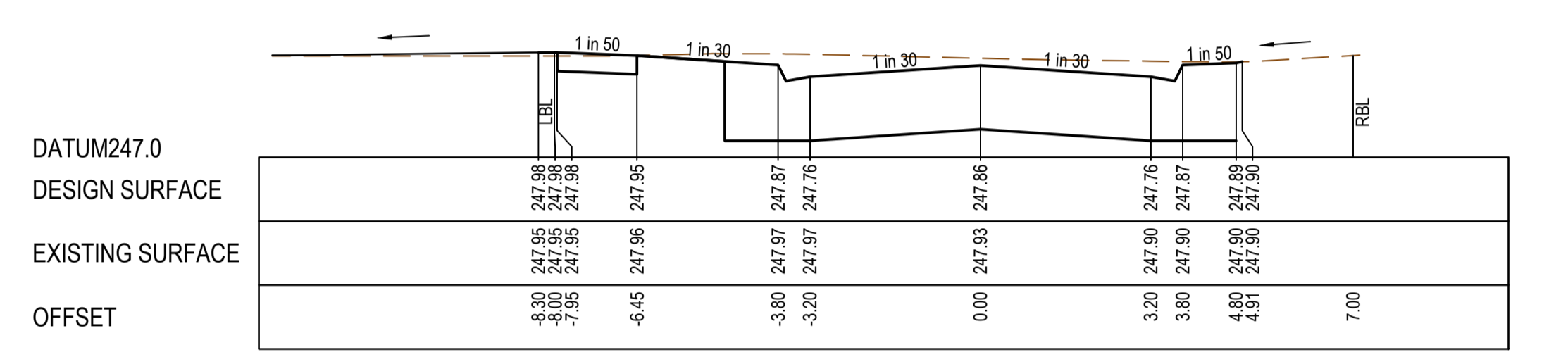
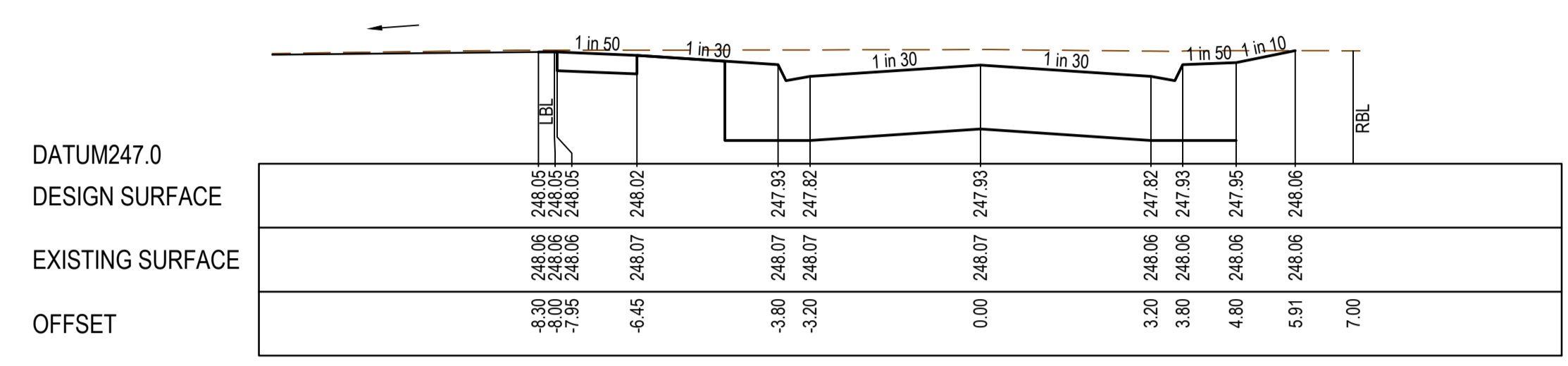
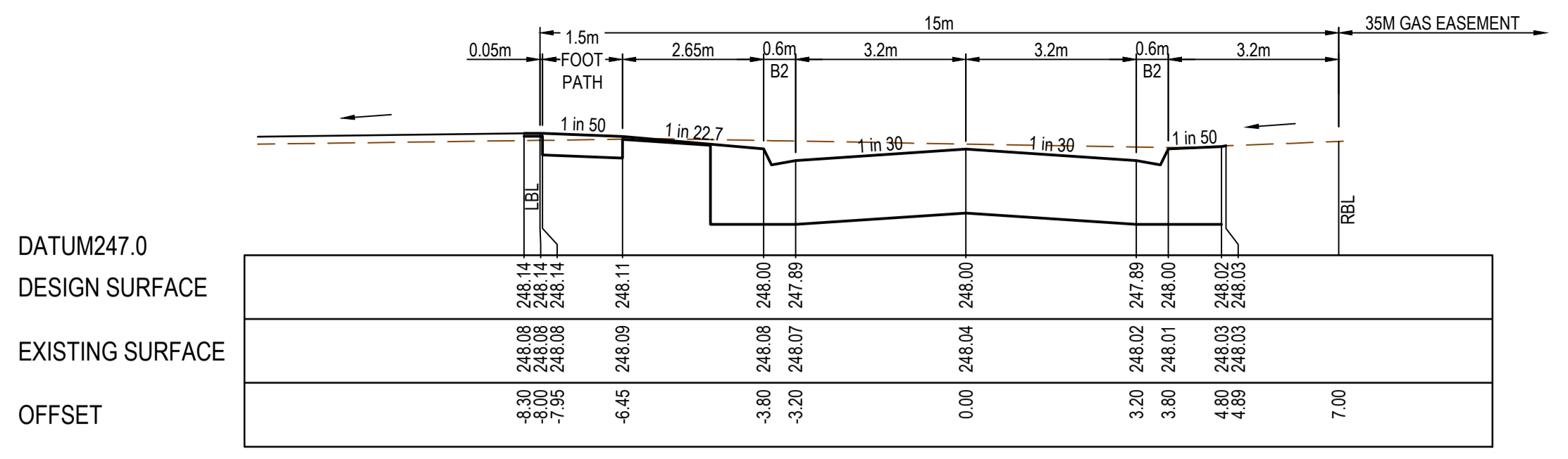
**SMEC**  
 Member of the **Surbana Jurong Group**  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

**mirvac**

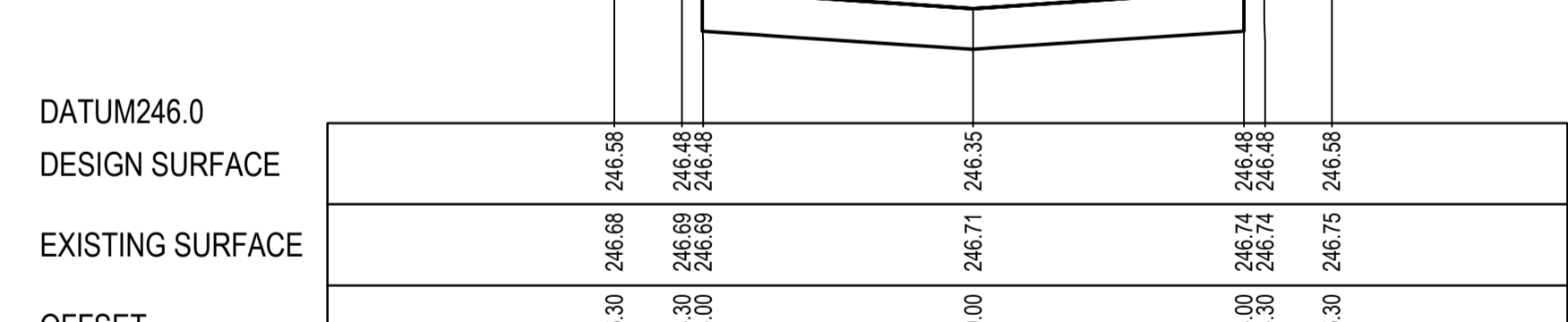
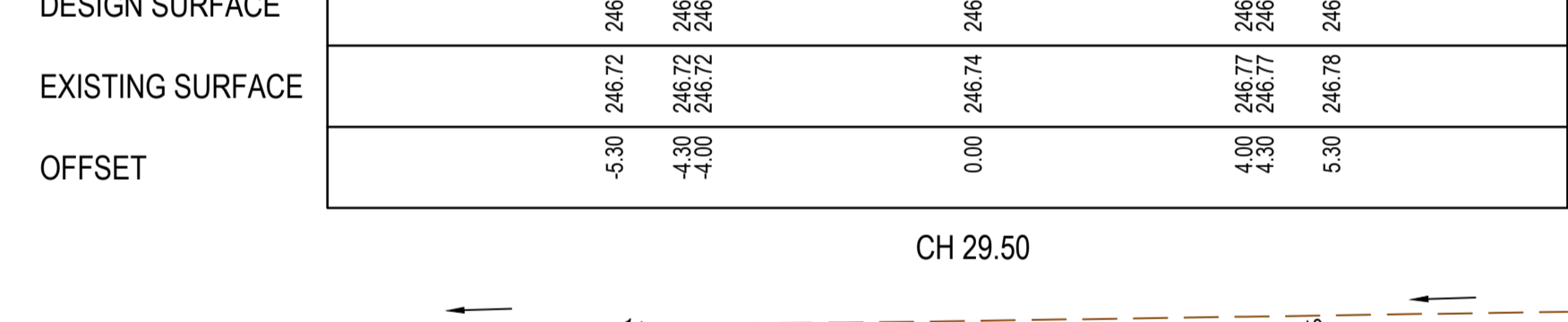
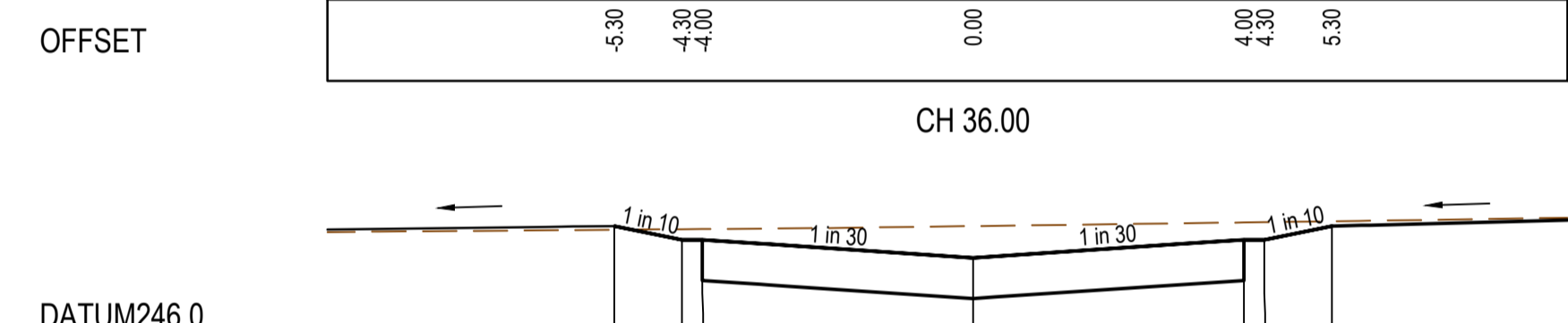
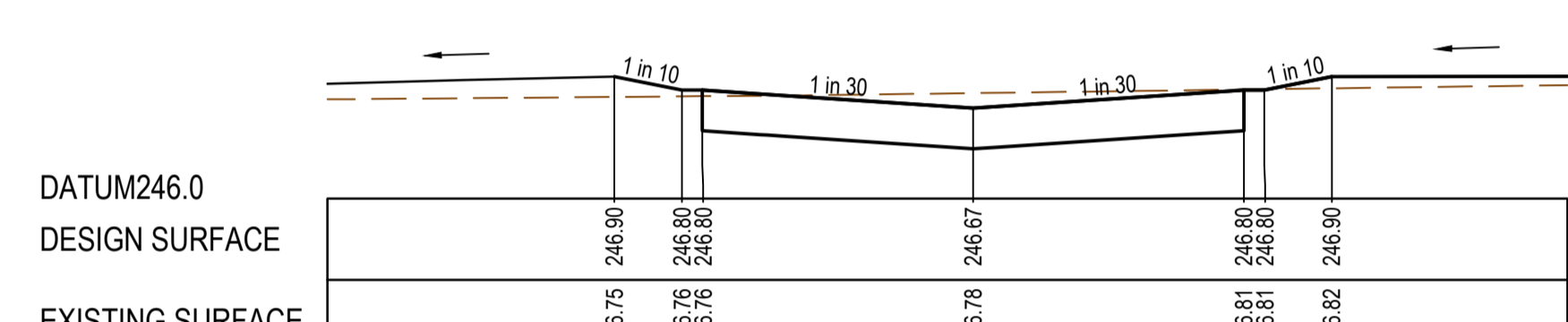
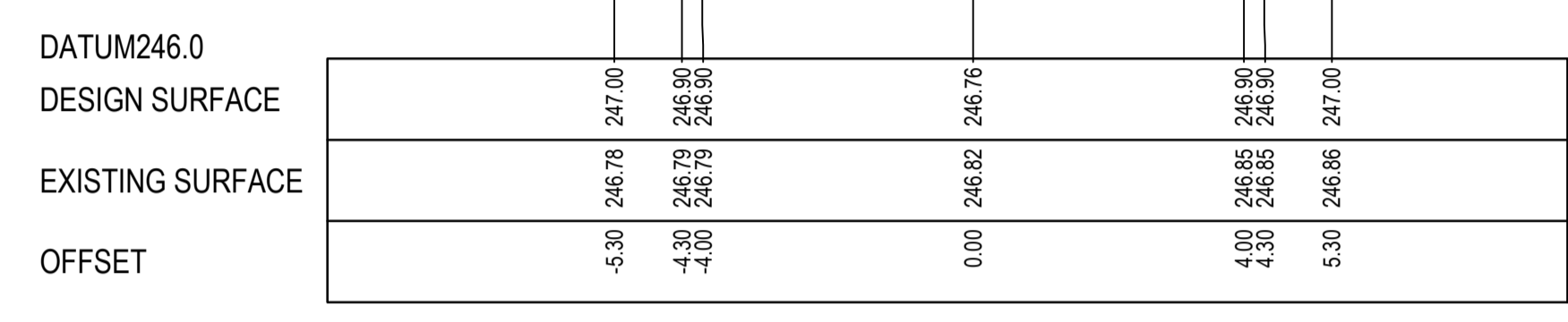
Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Cross Sections - Silver Street

MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
8 M2	1700E-12-17	17 of 27	1

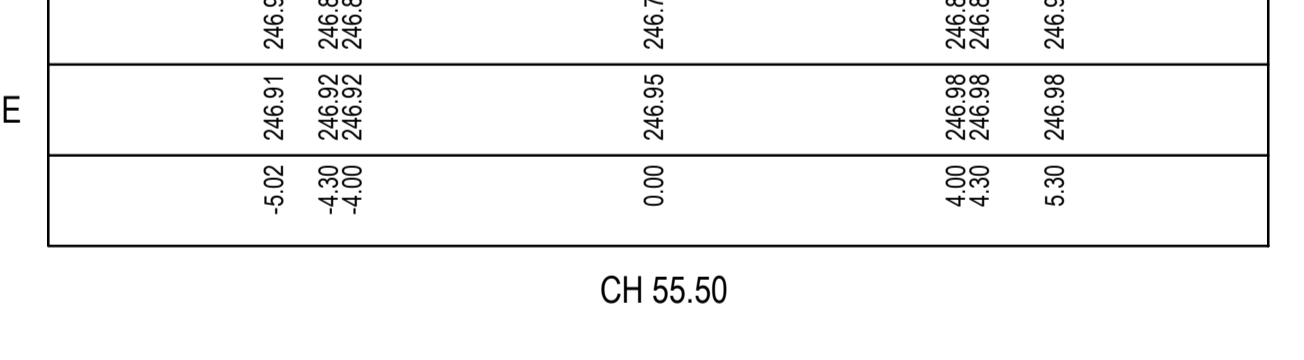
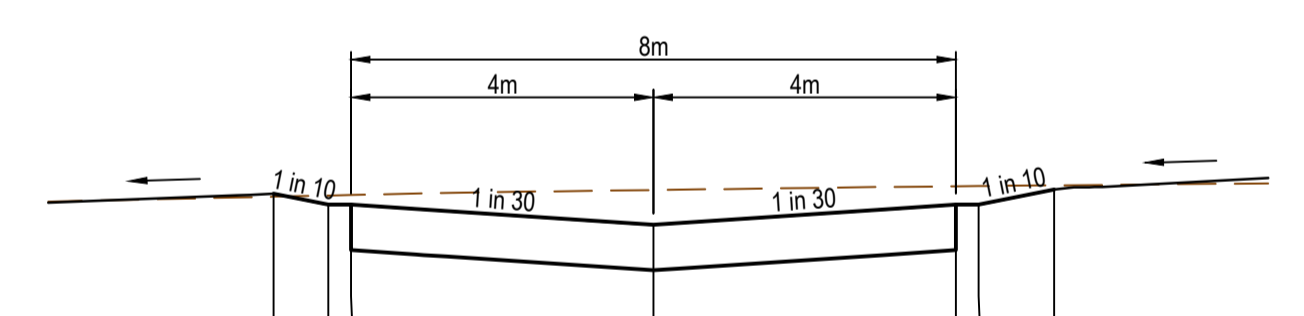
FILLING UNDER FOOTPATHS MUST BE TYPE A SELECTED MATERIAL IN ACCORDANCE WITH VICROADS STANDARD SPECIFICATION 204.



CROSS SECTIONS - LONSDALE PARADE



CROSS SECTIONS - ORBIT LANE



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TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	

Scale H1:100, V1:50  
SCALE AS SHOWN AT 1

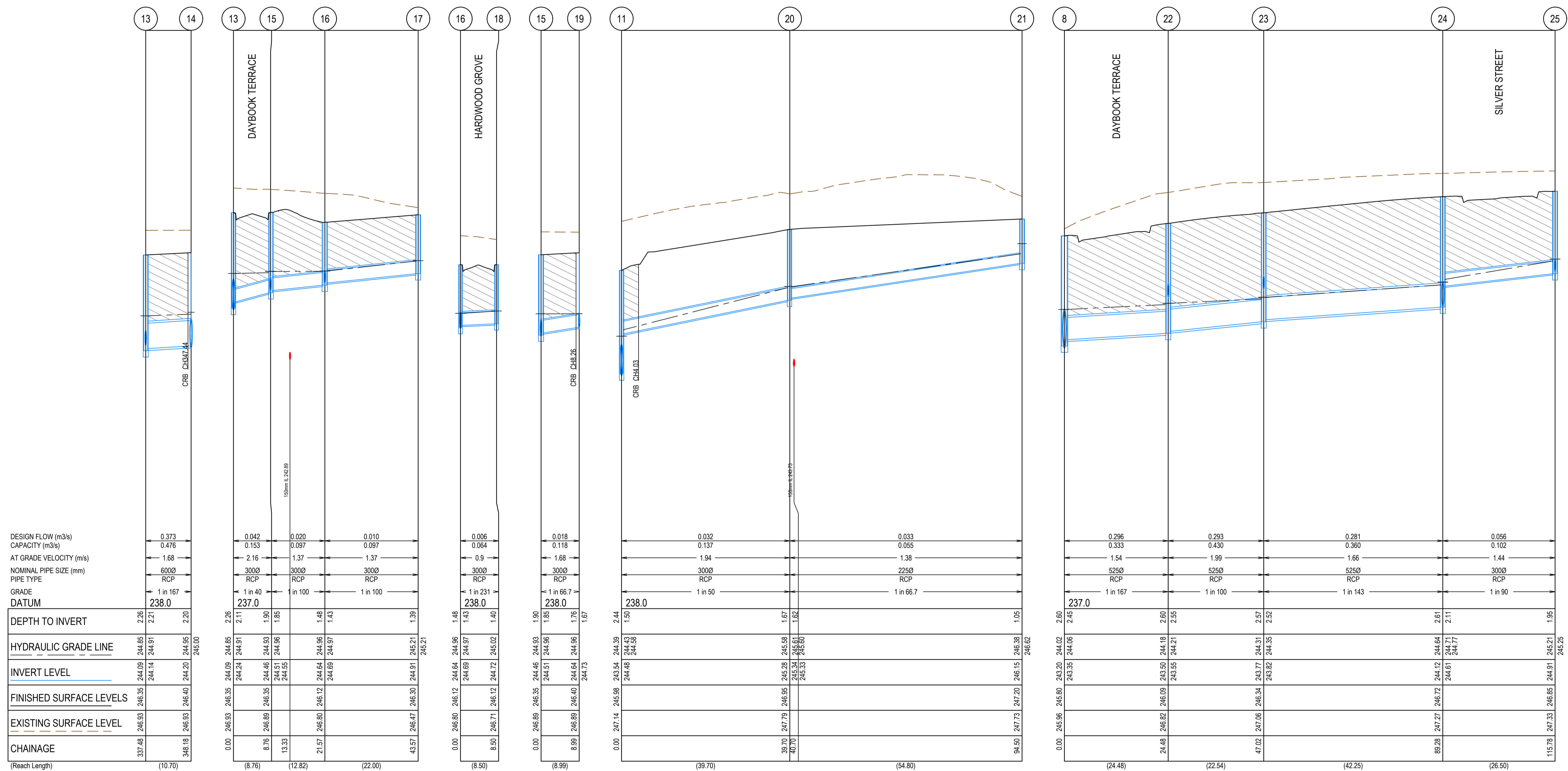
Member of the Surlana Jurong Group  
ABN 47 065 475 149  
Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Cross Sections - Lonsdale Parade  
and Orbit Lane

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
8 M2	1700E-12-18	18 of 27	1



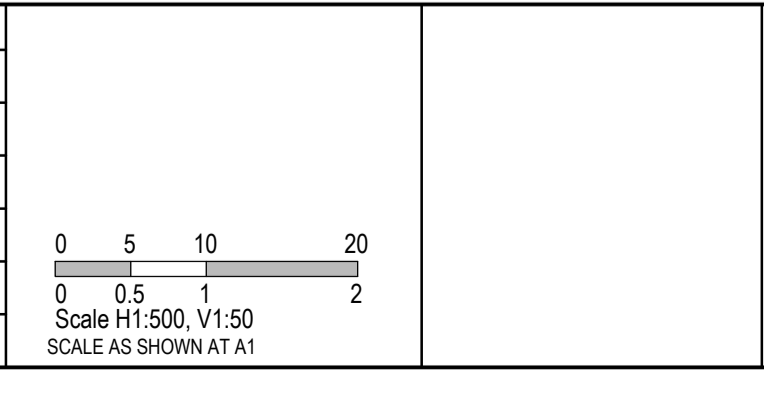
**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH COUNCIL STANDARDS & SPECIFICATIONS, CLASS 3 UNLESS SPECIFIED OTHERWISE



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		DRAFTER	E.Bates
		DESIGNER	M.Angay
		CHECKED	K.Moore
		AUTHORISED	A.Burrows
		SMEC DRAWING REF.	1700E-12
		REFERENCE No.	2



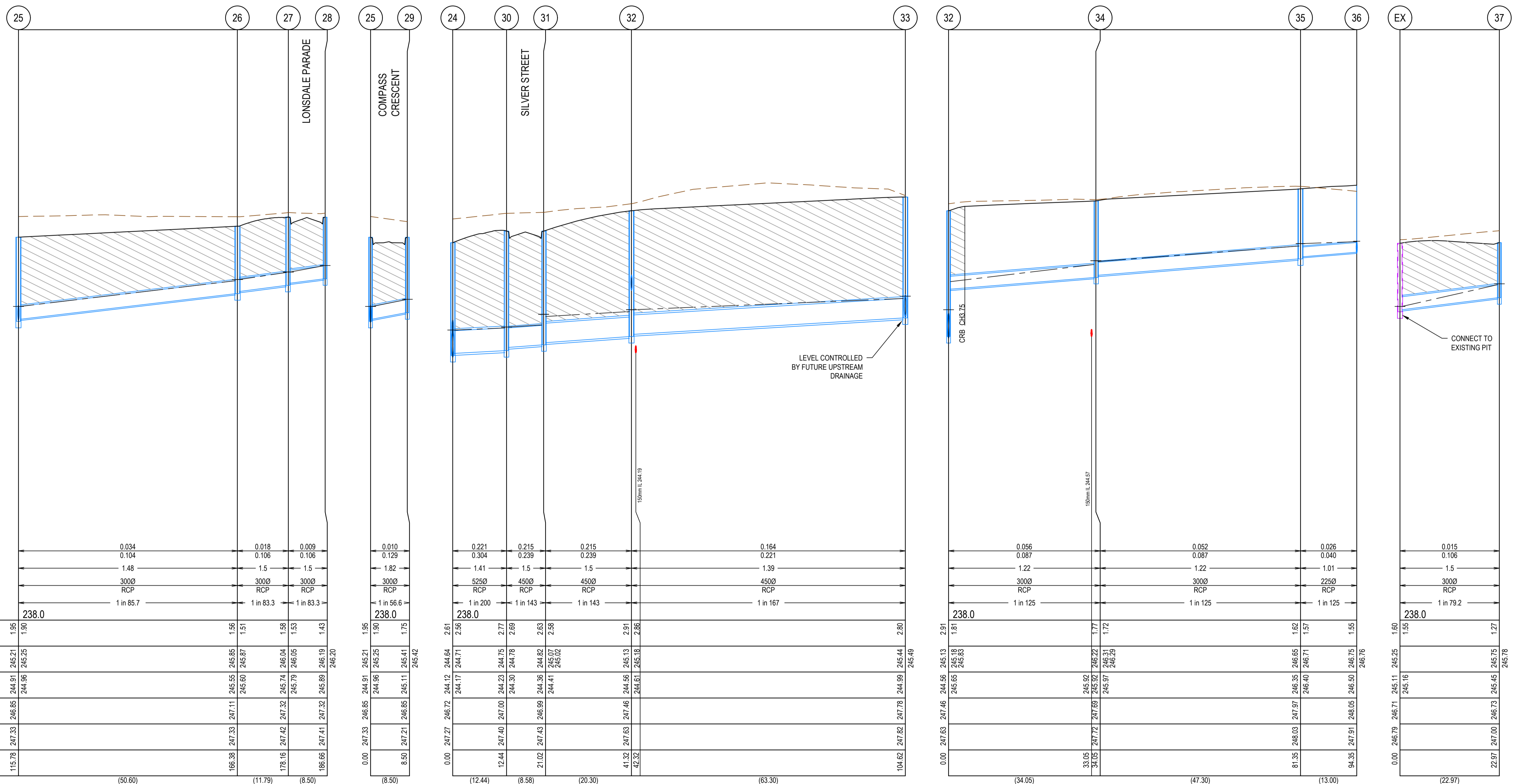
**SMEC**  
 Member of the **Surbana Jurong Group**  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

**mirvac**

Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 2

MELWAYS REF <b>8 M2</b>	PROJECT / DRAWING No. <b>1700E-12-20</b>	SHEET No. <b>20 of 27</b>	REVISION <b>1</b>
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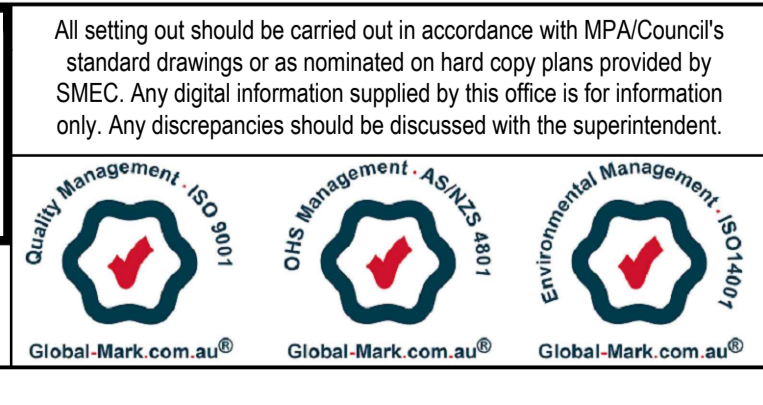
**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH COUNCIL STANDARDS & SPECIFICATIONS, CLASS 3 UNLESS SPECIFIED OTHERWISE



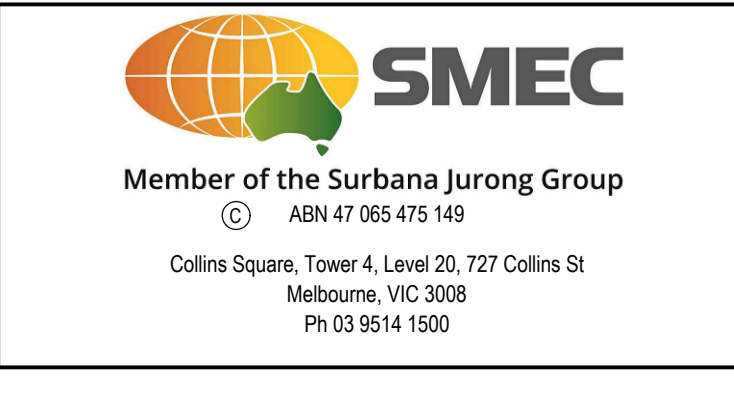
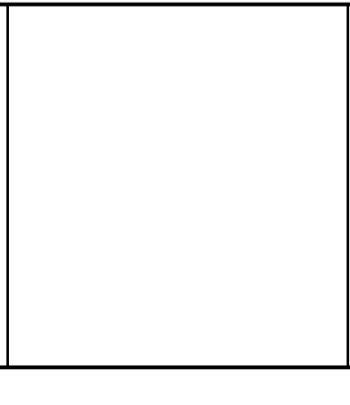
DESIGN FLOW (m3/s)	0.034	0.018	0.009	0.010	0.221	0.215	0.215	0.164	0.056	0.052	0.026	0.015	
CAPACITY (m3/s)													
AT GRADE VELOCITY (m/s)													
NOMINAL PIPE SIZE (mm)													
PIPE TYPE													
GRADE													
DATUM	238.0												
DEPTH TO INVERT	1.95	1.56	1.53	1.90	2.61	2.58	2.63	2.80	2.91	1.81	1.72	1.55	1.27
HYDRAULIC GRADE LINE	245.25	245.85	246.04	245.42	244.64	244.75	244.82	245.44	245.18	246.22	246.71	246.25	245.75
INVERT LEVEL	244.96	245.55	245.74	245.41	244.12	244.75	244.82	245.44	245.18	245.92	246.40	246.16	245.45
FINISHED SURFACE LEVELS	246.85	247.11	247.32	246.85	246.72	247.00	247.36	247.78	247.63	247.69	248.03	247.91	247.00
EXISTING SURFACE LEVEL	247.33	247.33	247.42	247.21	247.27	247.40	247.43	247.82	247.63	247.72	248.03	247.91	247.00
CHAINAGE	115.78	165.38	175.16	185.66	0.00	12.44	21.02	41.32	42.32	33.05	81.35	94.35	22.97
(Reach Length)	(50.60)	(11.79)	(8.50)	(8.50)	(12.44)	(8.58)	(20.30)	(63.30)	(34.05)	(47.30)	(13.00)	(22.97)	

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**AS CONSTRUCTED**



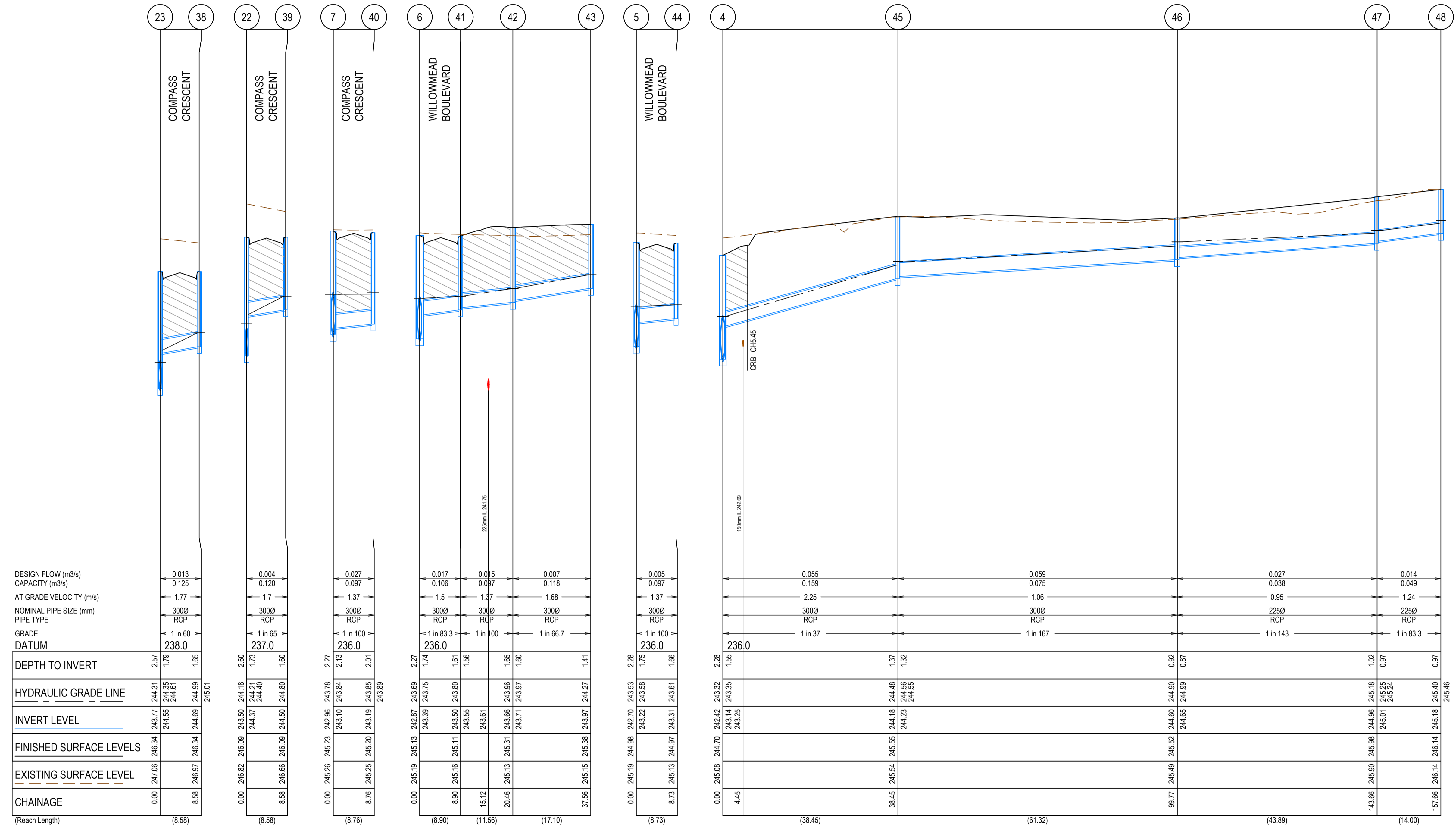
TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No.	2



Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 3

MELWAYS REF 8 M2	PROJECT / DRAWING No. 1700E-12-21	SHEET No. 21 of 27	REVISION 1
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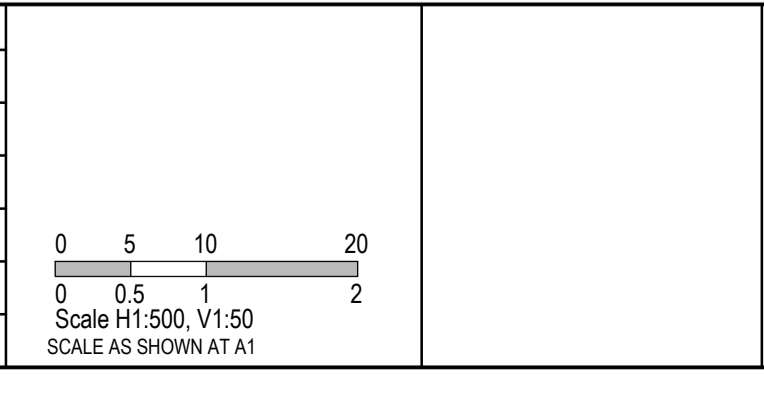
**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH COUNCIL STANDARDS & SPECIFICATIONS, CLASS 3 UNLESS SPECIFIED OTHERWISE



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DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	



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 Member of the **Surbana Jurong Group**  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

**mirvac**

Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 4

MELWAYS REF <b>8 M2</b>	PROJECT / DRAWING No. <b>1700E-12-22</b>	SHEET No. <b>22 of 27</b>	REVISION <b>1</b>
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PIT NUMBER	TYPE	PIT SCHEDULE									
		INTERNAL		INLET		OUTLET		F.S.L.	DEPTH	STANDARD DRAWING	REMARKS
		WIDTH (mm)	LENGTH (mm)	DIAMETER (mm)	INV R.L. (m)	DIAMETER (mm)	INV R.L. (m)				
1	ENDPIPE			900	241.926			245.029	0		TEMPORARY HEADWALL
2	JUNCTION PIT	1350	900	900	242.075	900	242.025	244.942	2.916	EDCM 607	
2A	JUNCTION PIT	1500	900	900	242.217	900	242.167	244.534	2.367		
				450	242.5						
3	JUNCTION PIT	1500	1200	900	242.321	900	242.271	244.573	2.302	EDCM 607	
4	JUNCTION PIT	1200	900	825	242.469	900	242.419	244.695	2.277	EDCM 607	
				300	243.144						
5	GRADED ENTRY PIT	1050	900	825	242.747	825	242.697	244.976	2.28	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				300	243.222						
6	GRADED ENTRY PIT	1500	900	825	242.915	825	242.865	245.131	2.266	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				300	243.39						
7	DOUBLE GRADED ENTRY PIT	1050	2100	825	243.01	825	242.96	245.23	2.271	EDCM 607 & 602	HAUNCH PIT COVER TO 600 x 900
				300	243.1						
8	GRADED ENTRY PIT	1050	1350	675	243.274	825	243.199	245.8	2.601	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				525	243.349						
9	GRADED ENTRY PIT	900	1350	675	243.368	675	243.318	245.907	2.589	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
10	DOUBLE GRADED ENTRY PIT	750	900	600	243.454	675	243.404	245.915	2.512	EDCM 607 & 602	HAUNCH PIT COVER TO 600 x 900
11	GRADED ENTRY PIT	750	900	600	243.59	600	243.54	245.984	2.444	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				300	244.484						
12	GRADED ENTRY PIT	750	900	600	243.926	600	243.876	246.213	2.337	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
13	GRADED ENTRY PIT	750	900	600	244.139	600	244.089	246.349	2.26	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				300	244.239						
14	ENDPIPE			600	244.203	600	244.203	246.402	2.199		BLANK OFF END PIPE
15	GRADED ENTRY PIT	600	900	300	244.508	300	244.458	246.353	1.896	EDCM 605 & 601	
				300	244.508						
16	DOUBLE GRADED ENTRY PIT	600	900	300	244.686	300	244.636	246.12	1.484	EDCM 605 & 602	
				300	244.686						
17	GRADED ENTRY PIT	600	900			300	244.906	246.297	1.391	EDCM 605 & 601	
18	DOUBLE GRADED ENTRY PIT	600	900			300	244.722	246.123	1.4	EDCM 605 & 602	
19	ENDPIPE			300	244.642	300	244.642	246.401	1.669		BLANK OFF END PIPE
20	JUNCTION PIT	600	900	225	245.328	300	245.278	246.952	1.674	EDCM 605	
21	JUNCTION PIT	900	600			225	246.15	247.197	1.046	EDCM 605	
22	GRADED ENTRY PIT	750	900	525	243.546	525	243.496	246.093	2.597	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				300	244.367						
23	GRADED ENTRY PIT	750	900	525	243.821	525	243.771	246.343	2.572	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				300	244.549						
24	GRADED ENTRY PIT	750	900	300	244.613	525	244.117	246.725	2.608	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
				525	244.167						
25	GRADED ENTRY PIT	600	900	300	244.957	300	244.907	246.853	1.946	EDCM 605 & 601	
				300	244.957						
26	GRADED ENTRY PIT	600	900	300	245.597	300	245.547	247.107	1.559	EDCM 605 & 601	
27	GRADED ENTRY PIT	600	900	300	245.789	300	245.739	247.32	1.581	EDCM 605 & 601	
28	GRADED ENTRY PIT	600	900			300	245.891	247.317	1.426	EDCM 605 & 602	
29	GRADED ENTRY PIT	600	900			300	245.107	246.854	1.747	EDCM 605 & 601	

30	GRADED ENTRY PIT	750	900	450	244.304	525	244.229	246.995	2.766	EDCM 607 & 601	HAUNCH PIT COVER TO 600 x 900
31	GRADED ENTRY PIT	600	900	450	244.414	450	244.364	246.994	2.63	EDCM 605 & 601	
32	GRADED ENTRY PIT	600	900	450	244.607	450	244.557	247.464	2.907	EDCM 605 & 601	
				300	245.65						
33	GRADED ENTRY PIT	600	900	450	245.036	450	244.986	247.783	2.796	EDCM 605 & 601	
34	JUNCTION PIT	600	900	300	245.972	300	245.922	247.692	1.769	EDCM 605	
35	JUNCTION PIT	900	600	225	246.401	300	246.351	247.971	1.62	EDCM 605	
36	ENDPIPE			225	246.505	225	246.505	248.055	1.55		BLANK OFF END PIPE
Ex	Ex	600	900	300	245.16			246.713	0		CONNECT TO EXISTING PIT
37	JUNCTION PIT	600	900			300	245.454	246.729	1.274	EDCM 605	GRADED JUNCTION PIT LID. REFER DETAIL.
38	GRADED ENTRY PIT	600	900			300	244.691	246.342	1.651	EDCM 605 & 601	
39	GRADED ENTRY PIT	600	900			300	244.499	246.094	1.596	EDCM 605 & 601	
40	DOUBLE GRADED ENTRY PIT	600	900			300	243.188	245.195	2.008	EDCM 605 & 602	
41	GRADED ENTRY PIT	600	900	300	243.547	300	243.497	245.111	1.614	EDCM 605 & 601	
42	GRADED ENTRY PIT	600	900	300	243.713	300	243.663	245.308	1.646	EDCM 605 & 601	
43	GRADED ENTRY PIT	600	900			300	243.969	245.377	1.408	EDCM 605 & 601	
44	GRADED ENTRY PIT	600	900			300	243.309	244.965	1.656	EDCM 605 & 601	
45	JUNCTION PIT	900	600	300	244.232	300	244.182	245.554	1.372	EDCM 605	GRADED JUNCTION PIT LID. REFER DETAIL.
46	JUNCTION PIT	600	900	225	244.65	300	244.6	245.517	0.917	EDCM 605	
47	JUNCTION PIT	600	900	225	245.007	225	244.957	245.981	1.024	EDCM 605	
48	JUNCTION PIT	900	600			225	245.175	246.143	0.968	EDCM 605	

**AS CONSTRUCTED PLANS**

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Quality Management - ISO 9001  
 OHS Management - AS/NZS 4801  
 Environmental Management - ISO 14001

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TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No. 2	

**SMEC**

Member of the Surbana Jurong Group

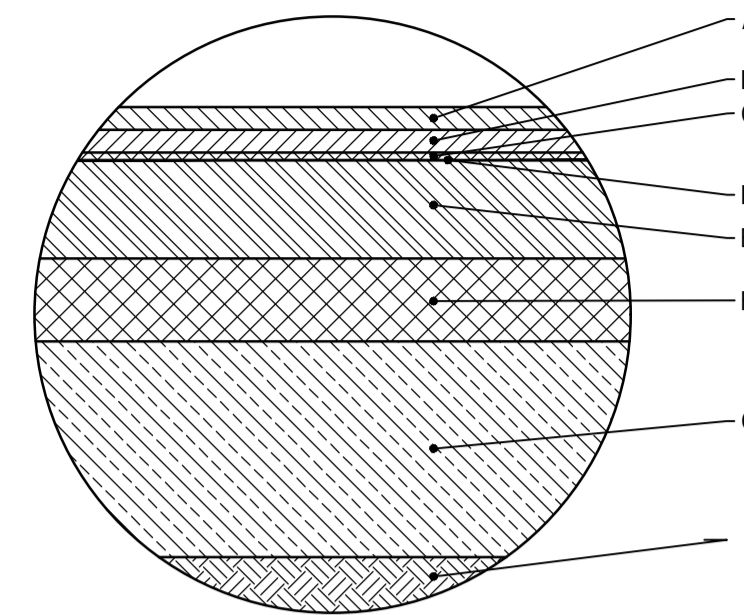
ABN 47 065 475 149

Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

**mirvac**

Olivine Estate - Stage 12  
 Whittlesea City Council  
 Road and Drainage  
 Drainage Pit Schedule

MELWAYS REF: 8 M2 PROJECT / DRAWING No: 1700E-12-23 SHEET No: 23 of 27 REVISION: 1



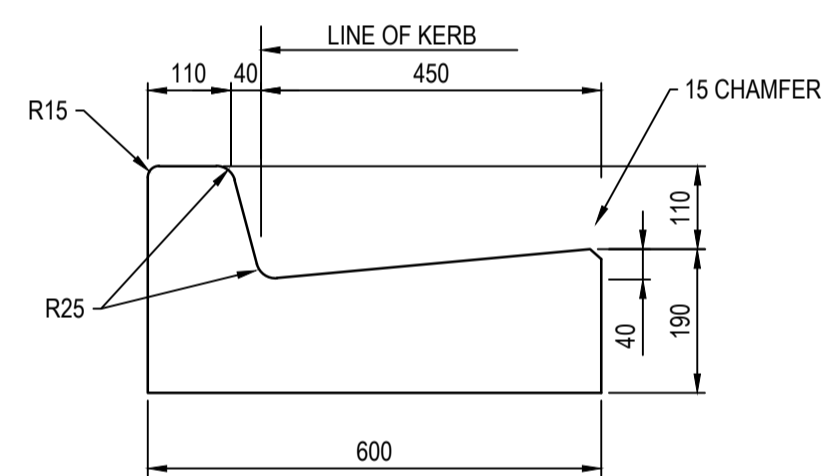
PAVEMENT COMPOSITION KEY DIAGRAM

ROAD PAVEMENT COMPOSITION

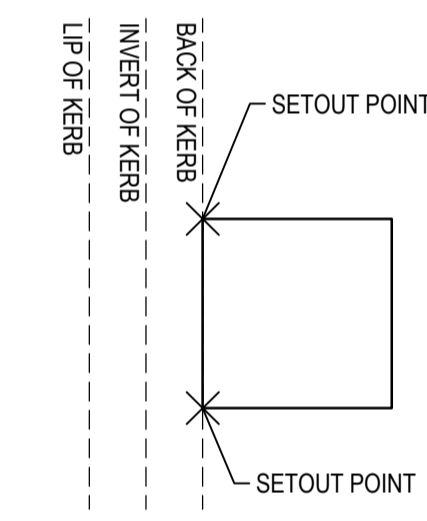
595mm DEPTH PAVEMENT COMPOSITION		
PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
A WEARING COURSE	30	SIZE 10 TYPE N ASPHALT (CLASS 170 BINDER)
B INTERMEDIATE COURSE	30	SIZE 10 TYPE N ASPHALT (CLASS 170 BINDER)
C SAMII SEAL	10	SIZE 10 S18RF
D PRIME	YES	
E BASE COURSE	130	SIZE 20 CLASS 2 CRUSHED ROCK COMPACTED TO A MINIMUM DRY DENSITY RATIO OF 98% (MODIFIED) AS1289.5.2.1
F LOWER BASE	110	CLASS 3 CRUSHED ROCK COMPACTED TO A MINIMUM DRY DENSITY RATIO OF 98% (MODIFIED) AS1289.5.2.1
G CAPPING LAYER	285	IMPORTED TYPE A FILL WITH CBR≥8% SWELL≤1.5% PERMEABILITY k≤5x10 <sup>-10</sup> m/s. OR LIME STABILISED SITE WON CLAY WHICH CONFORMS TO THE PARAMETERS ABOVE.
H SUBGRADE		SUBGRADE CLAY AS FOUND (C.B.R = 2%) (IF REQUIRED, SUBGRADE IMPROVEMENT WORKS TO BE UNDERTAKEN TO COUNCIL'S SATISFACTION)

LANEWAY COMPOSITION - EDCM503

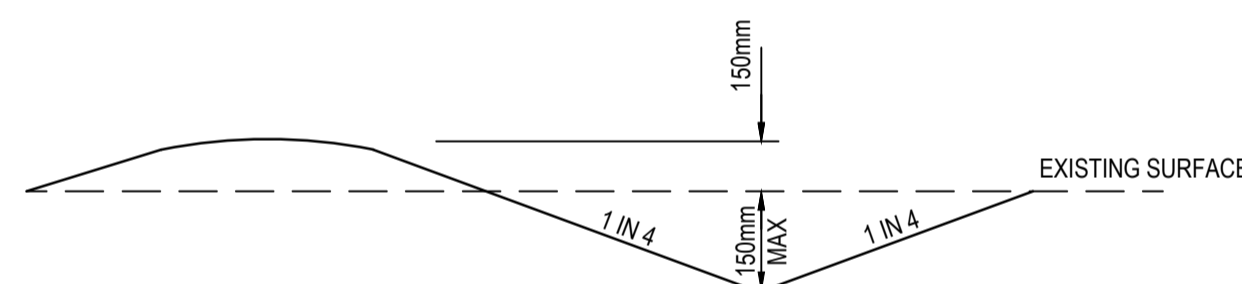
300mm DEPTH PAVEMENT COMPOSITION		
PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
CONCRETE	200	N25 CONCRETE WITH SL82 MESH TOP 50 COVER. MESH TO HAVE 50 COVER TO ALL EDGES
SUB BASE	100	CLASS 3 CRUSHED ROCK OR CLASS 3 CRUSHED CONCRETE MECHANICALLY COMPACTED



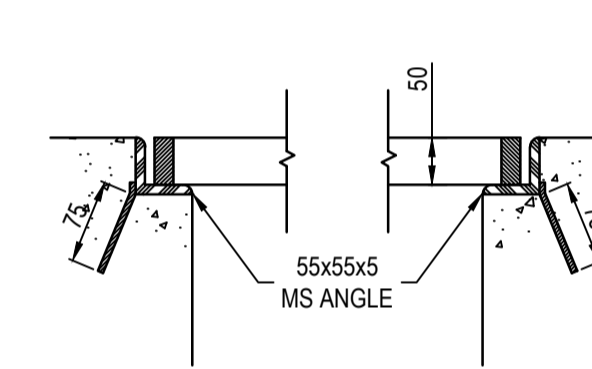
600 B2 KERB DETAIL  
SCALE 1:10  
EDCM



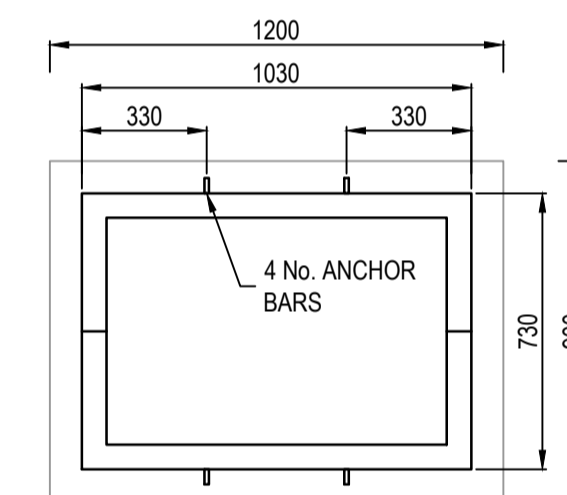
PIT SETOUT POINT DETAIL  
NOT TO SCALE



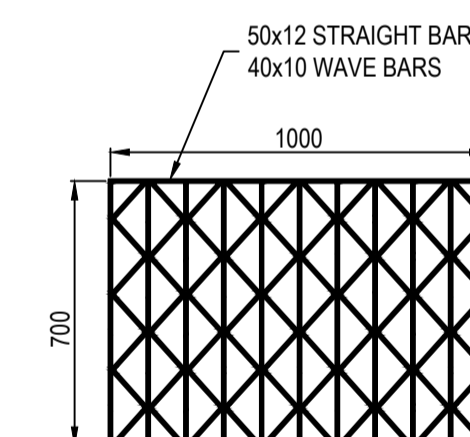
SWALE DRAIN DETAIL  
NOT TO SCALE



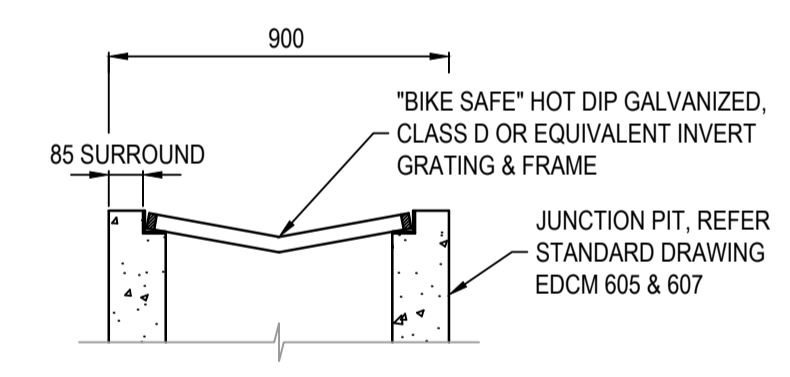
SECTION THROUGH GRATE



GRATE FRAME



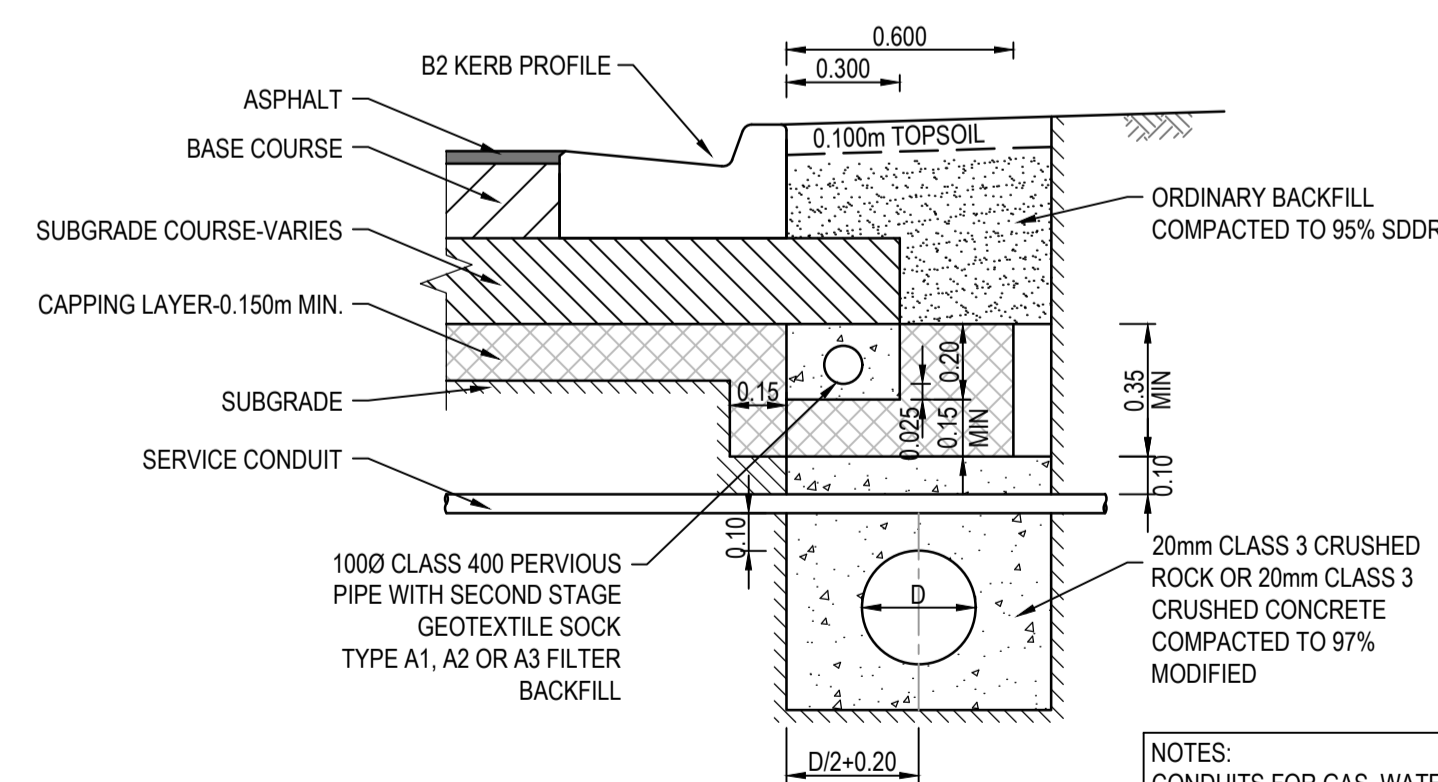
GRATE



SECTION THROUGH PIT

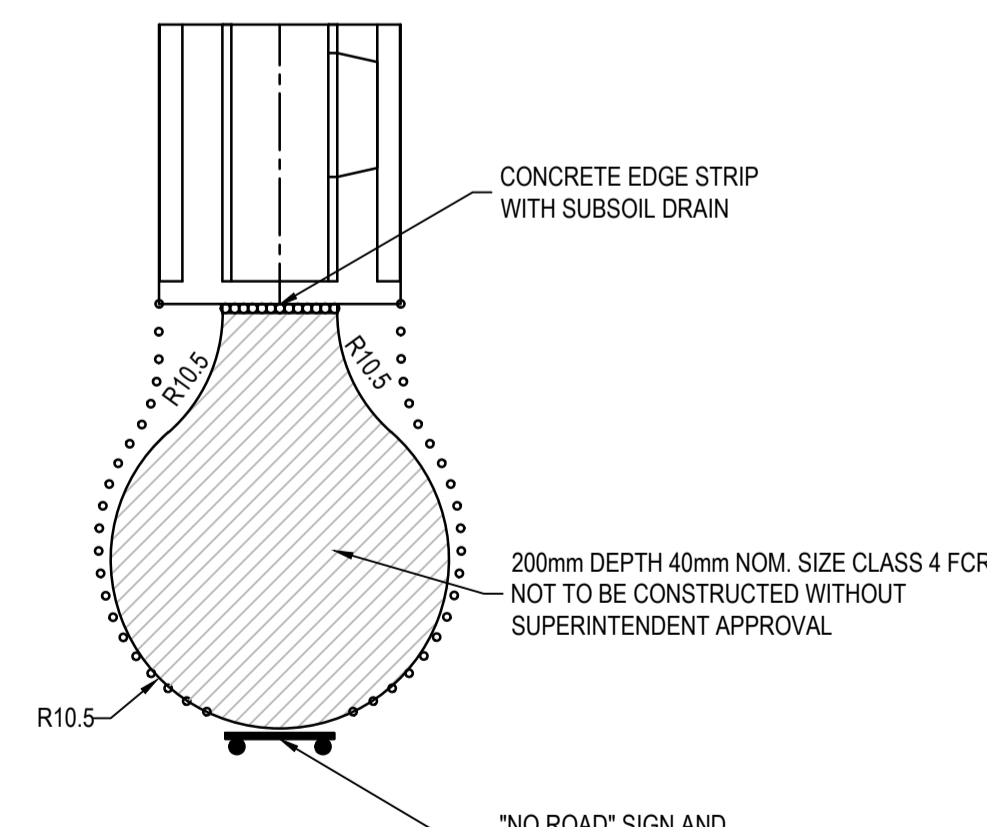
- NOTES
- REFER TO EDCM STANDARD DRAWINGS 605, 606 & 607 FOR PIT DETAILS.
  - GRATE FRAME TO BE "BIKE SAFE" TO AS3996-1992

GRATED JUNCTION PIT DETAIL  
NOT TO SCALE

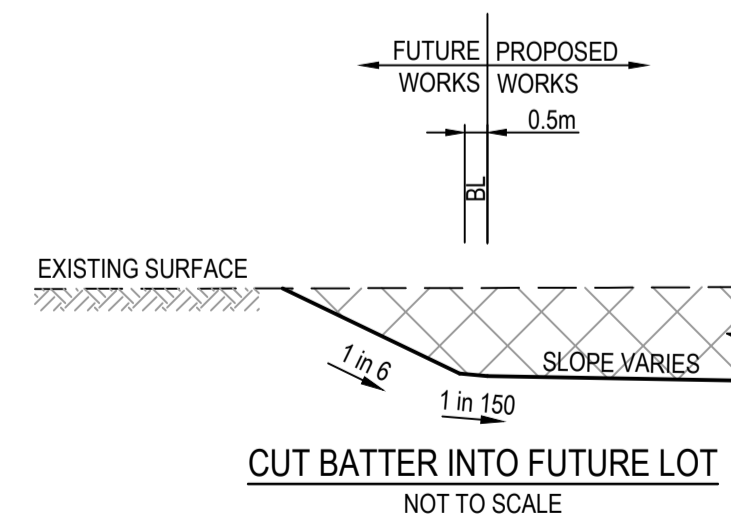


SUBSOIL DRAIN (EXPANSIVE SOILS)  
NOT TO SCALE

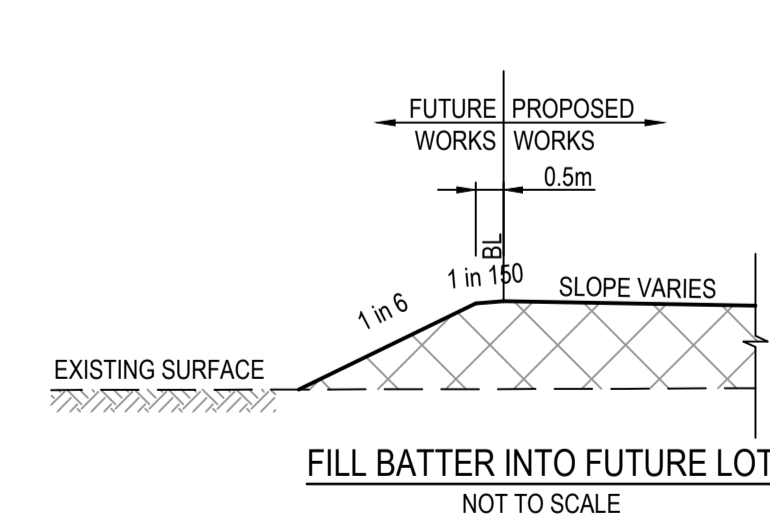
- NOTES:
- CONDUITS FOR GAS, WATER, ELECTRICITY AND TELECOM SERVICES TO BE LOCATED CLEAR OF PAVEMENT AND THE SUBSURFACE DRAIN



TEMPORARY TURN AREA DETAIL  
NOT TO SCALE



CUT BATTER INTO FUTURE LOT  
NOT TO SCALE



FILL BATTER INTO FUTURE LOT  
NOT TO SCALE

**WARNING**  
**BEWARE OF UNDERGROUND SERVICES**  
The locations of underground services are approximate only and their exact position should be proven on site.  
No guarantee is given that all existing services are shown. Locate all underground services before commencement of works  
**DIAL 1100 BEFORE YOU DIG**  
www.1100.com.au

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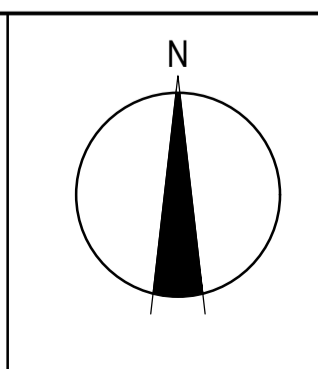
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Quality Management - ISO 9001  
OHS Management - AS/NZS 4801  
Environmental Management - ISO 14001

TITLE	NAME
DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No.	2

Scale 1:10  
Scale 1:1000  
SCALE AS SHOWN AT A1



**SMEC**  
Member of the Surlana Jurong Group  
ABN 47 065 475 149  
Collins Square, Tower 4, Level 20, 727 Collins St  
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**mirvac**

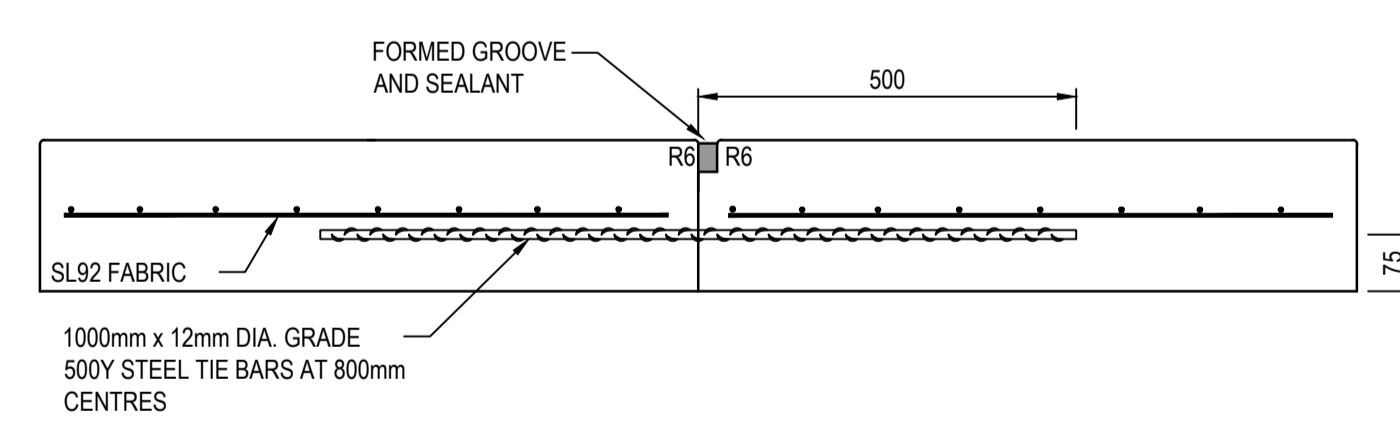
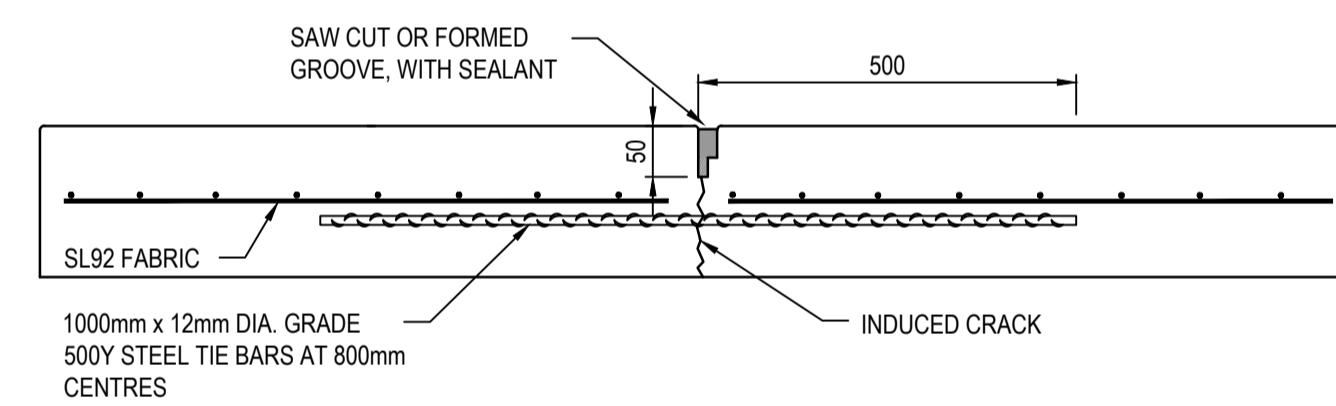
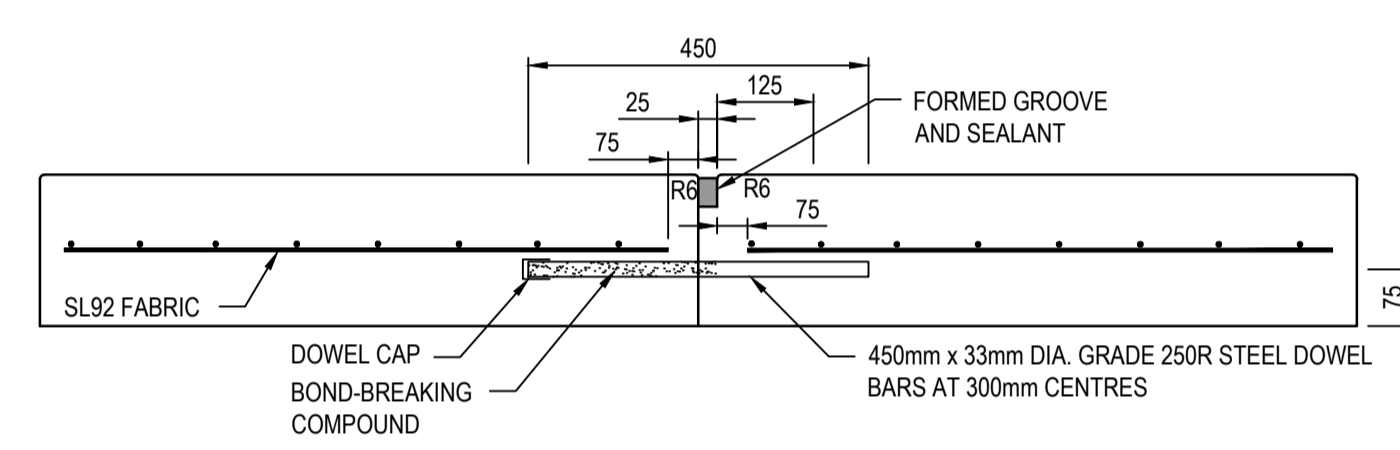
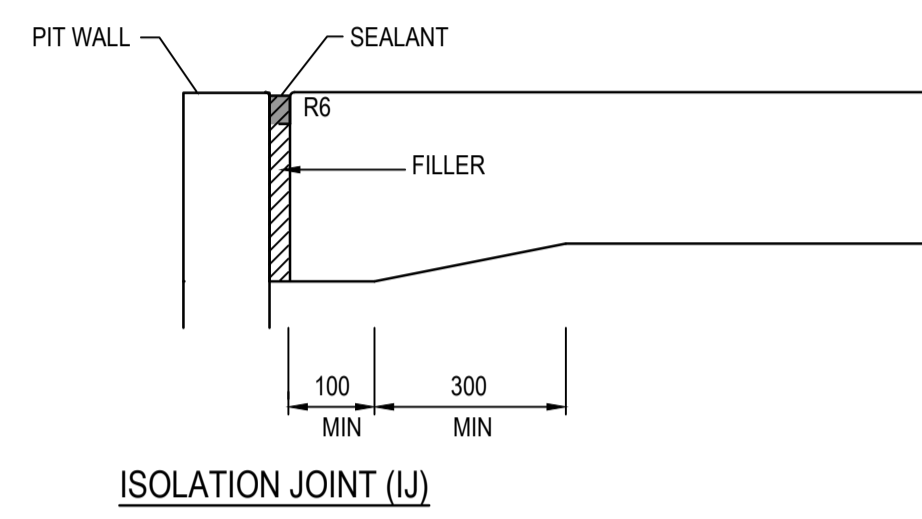
Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
General Notes & Pavement Details

MELWAYS REF 8 M2	PROJECT / DRAWING No. 1700E-12-24	SHEET No. 24 of 27	REVISION 2
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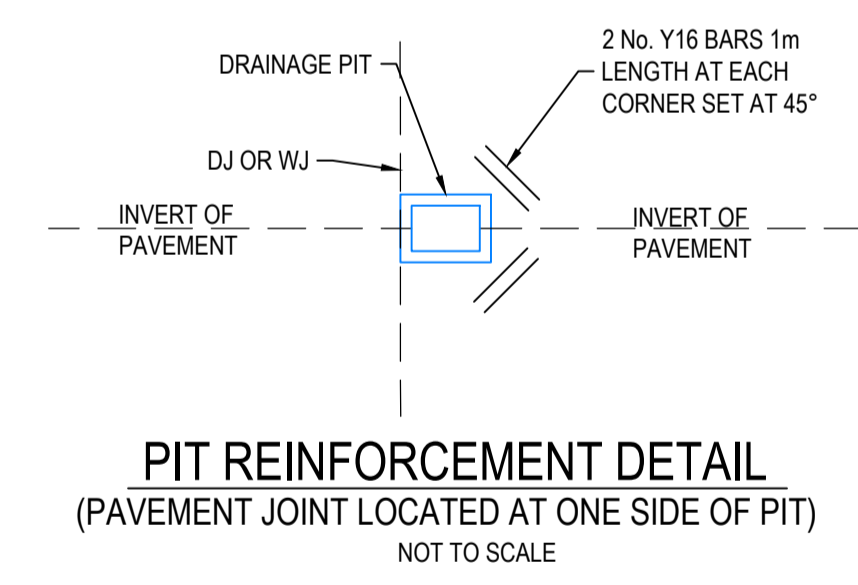
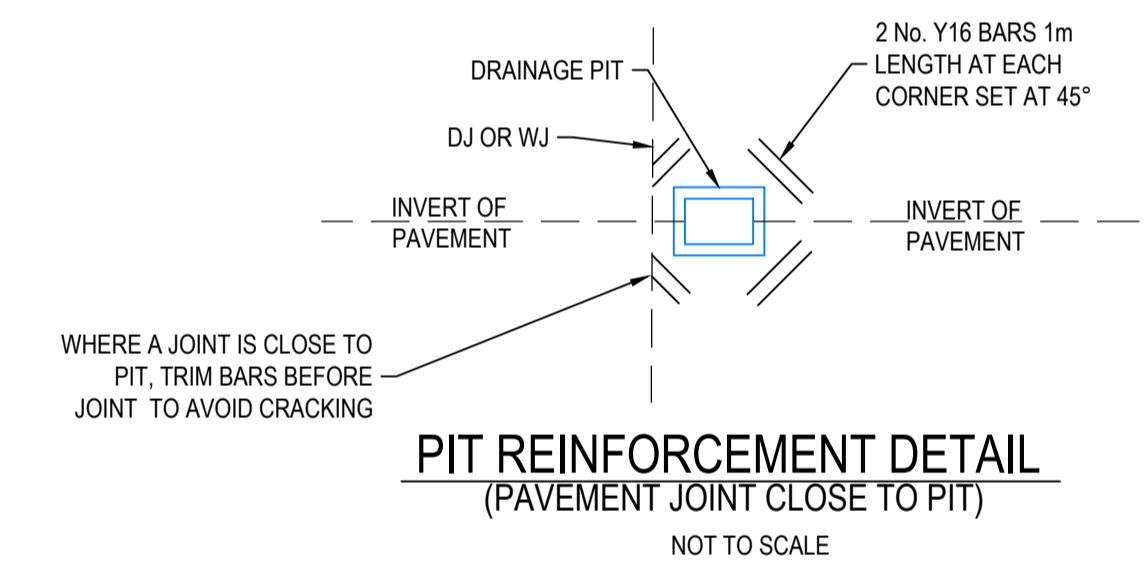
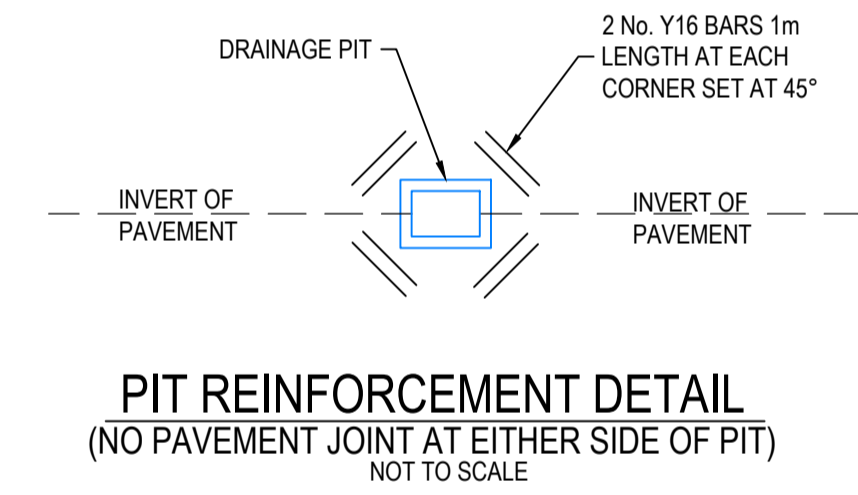
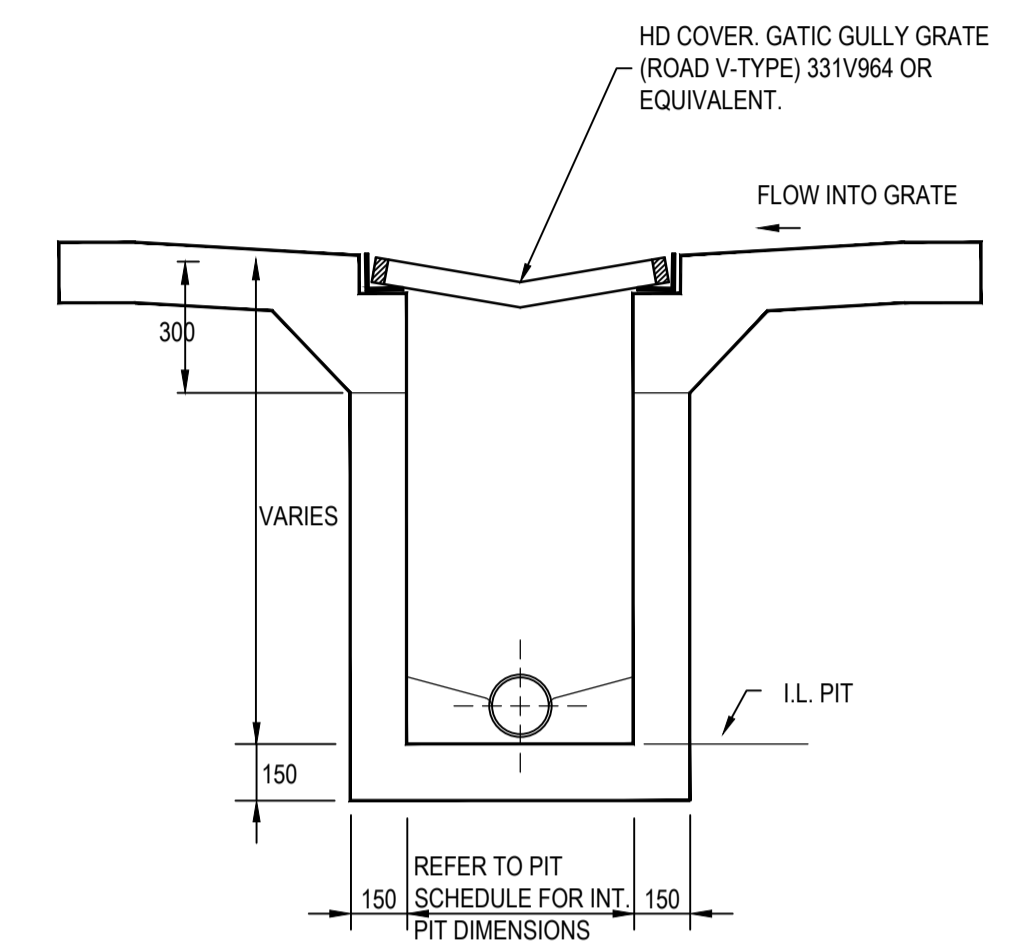
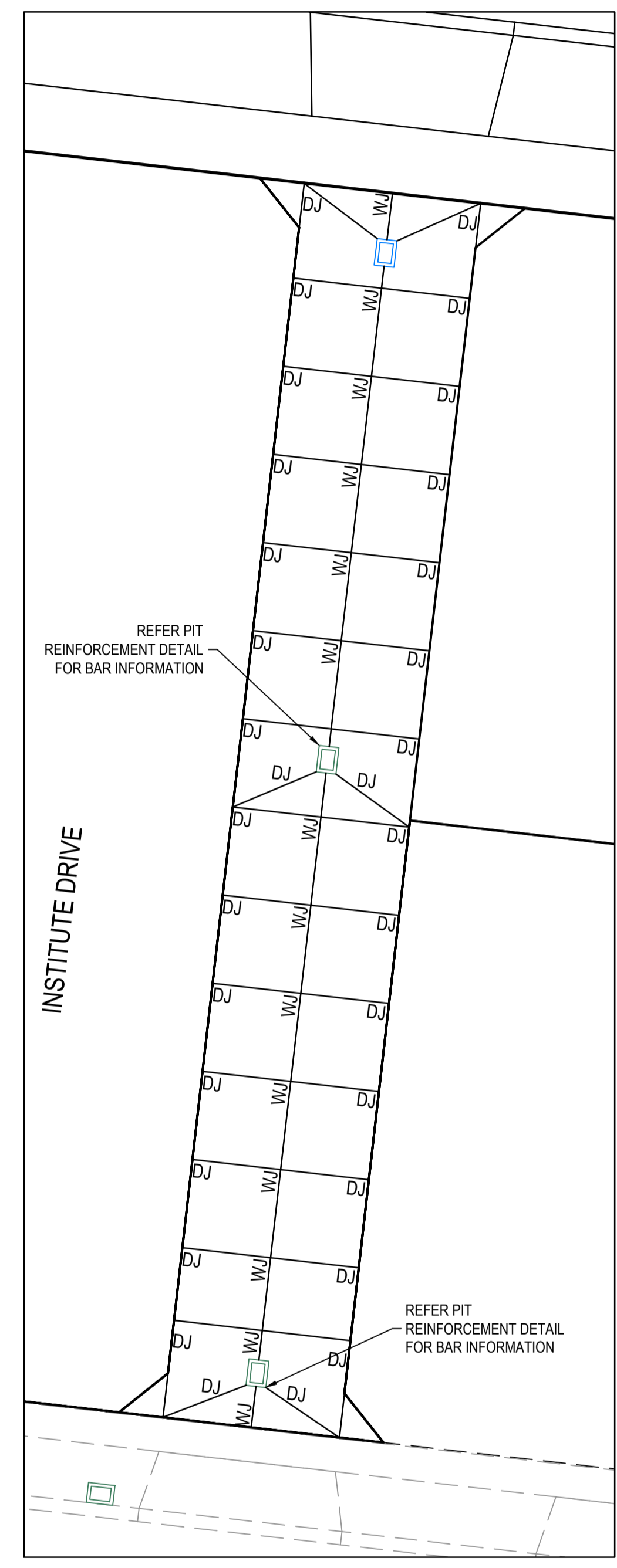


**NOTE:**  
CONCRETE SHALL BE CURED IN ACCORDANCE WITH AS3600 AND NOT TO BE TRAFFICKED UNTIL AT LEAST SEVEN DAYS AFTER POURING.

- JOINT DETAIL NOTES:**
1. SAW JOINTS ARE TO BE PLACED AT A MAXIMUM 5m SPACING AT INTERSECTIONS AND CONSTRUCTED 18-24 HOURS AFTER POURING.
  2. TRANSVERSE/CONTRACTION JOINTS ARE TO BE PLACED AT A MAXIMUM SPACING OF 12m.
  3. ISOLATION JOINTS ARE TO BE PLACED AROUND PITS.
  4. ALL JOINTS SHALL BE LOCATED AND SPACED IN ACCORDANCE WITH "CEMENT AND CONCRETE ASSOCIATION OF AUSTRALIA - CONCRETE PAVEMENT DESIGN FOR RESIDENTIAL STREETS 1997".



**CONCRETE JOINTING DETAILS**  
NOT TO SCALE



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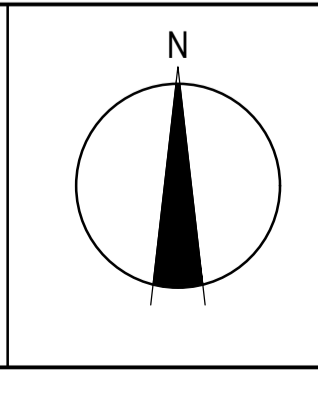
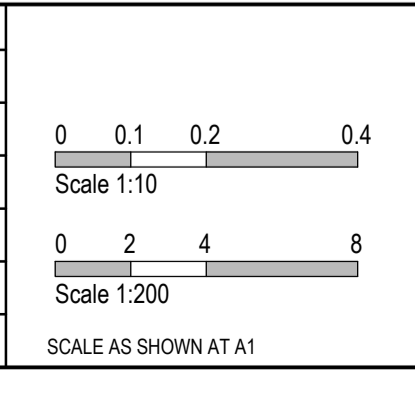
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Environmental Management - ISO 14001

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DRAFTER	E.Bates
DESIGNER	M.Angay
CHECKED	K.Moore
AUTHORISED	A.Burrows
SMEC DRAWING REF.	1700E-12
REFERENCE No.	2



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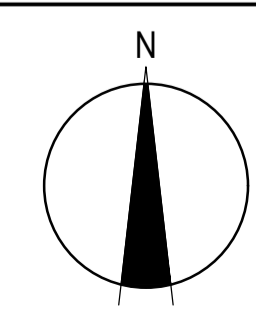
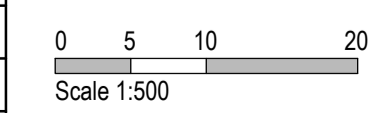
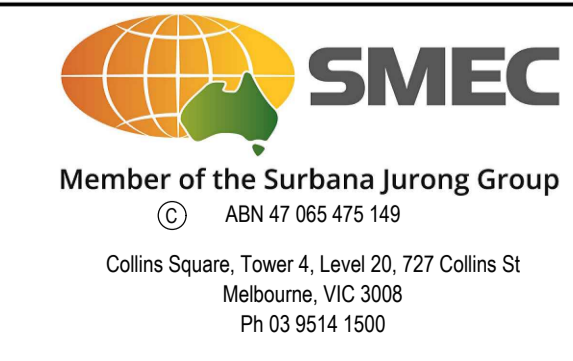

**mirvac**

Olivine Estate - Stage 12  
Whittlesea City Council  
Road and Drainage  
Concrete Jointing Details - Orbit Lane

MELWAYS REF <b>8 M2</b>	PROJECT / DRAWING No. <b>1700E-12-25</b>	SHEET No. <b>25 of 27</b>	REVISION <b>2</b>
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PHASE	DISCIPLINE CODE	POTENTIAL RISK (Construction, Operations, Maintenance)		RISK OWNER	POTENTIAL CONSEQUENCES	POTENTIAL ELIMINATION MEASURE, DESIGN INITIATIVE or CONTROL (Identify any Standard or Code of practice used)	HOW ISSUE ADDRESSED IN DESIGN AND/OR CONSTRUCTION OF THE WORKS	IS THE RISK ELIMINATED? YES / NO	RESIDUAL RISK LIKELIHOOD (0-5)	RESIDUAL RISK CONSEQUENCE (0-5)	RESIDUAL RISK RATING	RESIDUAL RISK OWNER
<b>Road Furniture / Roadside Features</b>												
Construction	RD	Roads	Construction close to live traffic	Contractor	Disruptions to live traffic, construction incident involving live traffic.	Provide safe temporary traffic control (TCP)	TCP provided within contract	N	5	3	15	Contractor
Construction	RD	Roads	Culverts	Contractor	Potential risk from culverts under construction and height / fall hazards	Temporary barriers to be provided	Temporary barrier provided in contract	N	2	5	10	Contractor
Construction	US	Utilities or Services	Utilities become a hazard within clear zones	Contractor	Vehicle conflict with utility / pit	Sequence works and protect with temp barrier or traffic control (TCP)	TCP provided within contract	N	1	5	5	Contractor
Operational	RD	Roads	Sight Lines	Road Authority	Inadequate drivers response time.	Ensure design complies with relevant standard. Undertake thorough Safety Audit	Vis lines checked and discussed with approval authority as part of design approval process	N	1	4	4	Road Authority
Operational	LS	Lines and Signs	Signs and street lights	Road Authority	Potential for drivers / riders to strike signs and street lights	Ensure design complies with relevant standard. Undertake thorough Safety Audit	Refer to appropriate standard for sign and lighting offsets	N	1	4	4	Road Authority
Operational	RF	Road Furniture	Headwalls	Road Authority	Potential vehicle conflict within clear zone	Establish adequate clear zone provision	Adequate barrier provided as per appropriate standard where within clear zone. Culvert headwall selection in accordance with authority standard	N	2	4	8	Road Authority
Operational	RD	Roads	Culverts	Relevant Authority	Potential fall hazard during maintenance, by vehicles and pedestrians	Barriers to be provided in accordance with road standards	Barriers to be provided and safe batter slopes (>1:3)	N	2	5	10	Contractor
<b>Retaining Walls</b>												
Construction	RW	Retaining Walls	Retaining Wall Alignment	Contractor	Falling from height during construction or commissioning of walls and adjacent structures eg. sewer manholes	Provide temporary and permanent fencing at top of wall.	Provide fencing (at heights) during design process	N	1	1	1	Contractor
Operational	RW	Retaining Walls	Retaining Wall Alignment	Road/ Local Authority	Lack of safe access/setback from road	Establish adequate and accessible clear zone provision. Provide guardrail where required	Wall located in suitable position during design process and approved by authority	N	1	1	1	Authority
Operational	RW	Retaining Walls	Retaining Wall Height	Road/ Local Authority	Potential for falling from height	Personal injury	Provide temporary and permanent fencing at top of wall.	N	1	5	5	Authority
Operational	RW	Retaining Walls	Retaining Wall Design	Road/ Local Authority	Potential for wall failure	Increased potential for accidents	Structural design in accordance with standards, geotechnical conditions, end use and good practise.	N	1	5	5	Authority
<b>Drainage</b>												
Operational	DR	Drainage	Grated Pits	Relevant Authority	Trip/fall hazard with large spaced grate	Increased potential for accidents	Provide pedestrian/bicycle friendly grates where applicable. Refer to pit schedule	N	3	2	6	Authority
Operational	DR	Drainage	Non Standard Large Pits	Relevant Authority	Potential for pit failure	Increased risk to maintenance crews/ vehicles	Structural design in accordance with relevant design principles.	N	1	4	4	Authority
Operational	DR	Drainage	Culvert Endwalls/Headwalls	Relevant Authority	Potential for falling from height	Increased potential for accidents	Fencing to be provided where culverts/headwalls are at height in accordance with relevant authority standards	N	1	4	4	Authority
Operational	DR	Drainage	Culvert Endwall/Headwall Outlets	Relevant Authority	Children playing in large pipes / watercourses and access for maintenance	Increased potential for accidents	Grate provided to authority standards	N	2	5	10	Authority
Maintenance	DR	Drainage	Access to Pits	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Provide safe landing/ access arrangements as per relevant authority standards	N	2	5	10	Authority
Maintenance	DR	Drainage	Deep Pits	Relevant Authority	Lack of safe entry for maintenance	Increased potential for accidents	Contractor to be certified for work in confined spaces, step irons to be provided to appropriate authority standards. Refer to pit schedule	N	1	5	5	Authority
Maintenance	DR	Drainage	Access to drains / culverts	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Access as approved by authority	N	2	3	6	Authority
<b>Sewer</b>												
Construction	SE	Sewer	Sewer Manhole located adjacent to Retaining Wall Alignment	Contractor	Falling from height during construction or commissioning of adjacent sewer manholes	Increased potential for accidents	Provide temporary fencing until such time that permanent fencing is constructed	N	1	1	1	Contractor
Maintenance	SE	Sewer	Deep Manholes	Relevant Authority	Lack of safe entry for maintenance	Increased potential for accidents	Contractor to be certified for work in confined spaces, landings and step access provided as per authority standards and schedule	N	1	5	5	Authority
Maintenance	SE	Sewer	Access to Manholes	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Manholes located in compliance with authority standards	N	1	5	5	Authority
Maintenance	SE	Sewer	Pump Station Access	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance	N	2	4	8	Authority
<b>Electricity</b>												
Operational	ES	Electrical Services	Electrical Design	Relevant Authority	Location of assets within clear zones e.g. pits/ substations	Increased potential for accidents	Electrical designed by sub consultant with appropriate accreditation and in accordance with authority standards	N	2	3	6	Authority
<b>Telstra</b>												
Operational	TE	Telstra	Telstra Design	Relevant Authority	Location of assets within clear zones e.g. pits	Increased potential for accidents	Telecommunications designed by authority consultant with appropriate accreditation and in accordance with authority standards	N	2	3	6	Authority
<b>Water</b>												
Operational	WA	Water	Water Design	Relevant Authority	Location of assets within clear zones e.g. pits/ substations	Increased potential for accidents	Water pits designed in accordance with authority standards	N	2	3	6	Authority
<b>Gas</b>												
Operational	GA	Gas	Gas Design	Relevant Authority	Location of assets within clear zones e.g. pits/ substations	Increased potential for accidents	Water pits designed in accordance with authority standards	N	1	1	1	Authority

<p><b>AS CONSTRUCTED PLANS</b></p> <p>The purpose of these as-constructed plans is to update the design drawings to show significant changes which occurred during construction. Note that the levels shown on these plans are design levels, and have not been verified by survey. All information shown on these plans should be verified on site. SMEC Australia Pty Ltd accept no responsibility for loss or damages resulting from the inappropriate usage of these plans.</p>	<p>All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.</p>	TITLE	NAME			 <p>Member of the Surlana Jurong Group ABN 47 065 475 149 Collins Square, Tower 4, Level 20, 727 Collins St Melbourne, VIC 3008 Ph 03 9514 1500</p>		Olivine Estate - Stage 12 Whittlesea City Council Road and Drainage Safety In Design										
		DRAFTER	E.Bates					DESIGNER	M.Angay	CHECKED	K.Moore	AUTHORISED	A.Burrows	SMEC DRAWING REF.	1700E-12	REFERENCE No. 2	MELWAYS REF	8 M2
<p><b>AS CONSTRUCTED</b></p>		