CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017
DATE APPROVED

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.

WARNING
CONTRACTOR TO TAKE EXTRA CAUTION OF OPTIC FIBER CABLE IN DAVIS ROAD

SYMBOL LEGEND

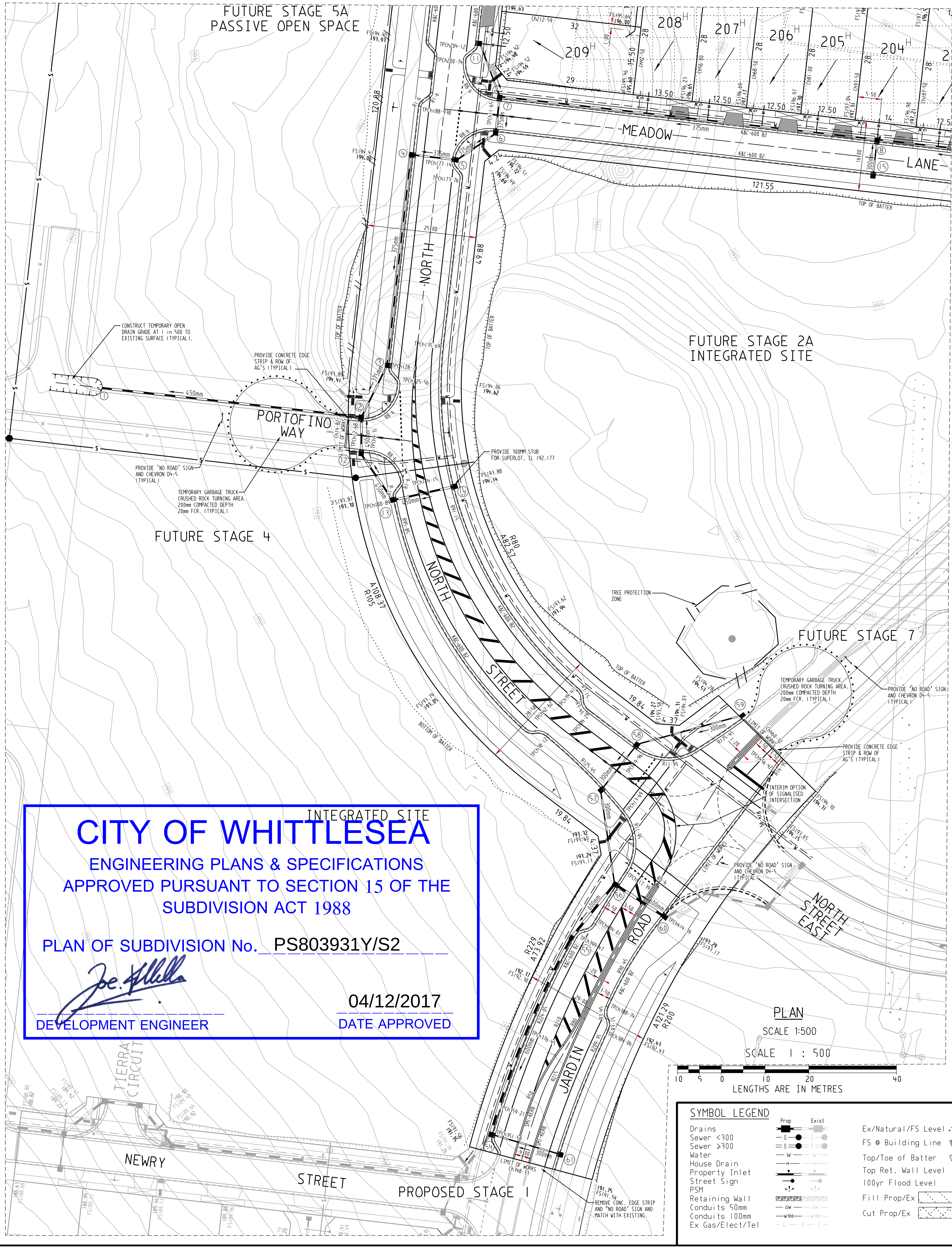
Drains	Ex/Natural/FS Level
Sewer <300	FS @ Building Line
Sewer >300	Top/Toe of Batter
Water	Top Ret. Wall Level
House Drain	100yr Flood Level
Property Inlet	Fill Prop/Ex
Street Sign	Cut Prop/Ex
PSM	
Retaining Wall	
Conduits 50mm	
Conduits 100mm	
Ex Gas/Elect/Tel	

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 388-C10	RATHDOWNE ESTATE STAGE 2 DETAIL PLAN SHEET 1 OF 2	MUNICIPALITY	WHITTLESEA
SURVEY BPD		REFERENCE	8352 E/2
DESIGN SS			
DRAWN SS			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JUL'17
SHEET 1 OF 21	P3		

VER	DATE	REMARKS

AMENDMENTS



PLAN

SCALE 1:500

SCALE 1 : 500

LENGTHS ARE IN METRES

CITY OF WHITTLESEA

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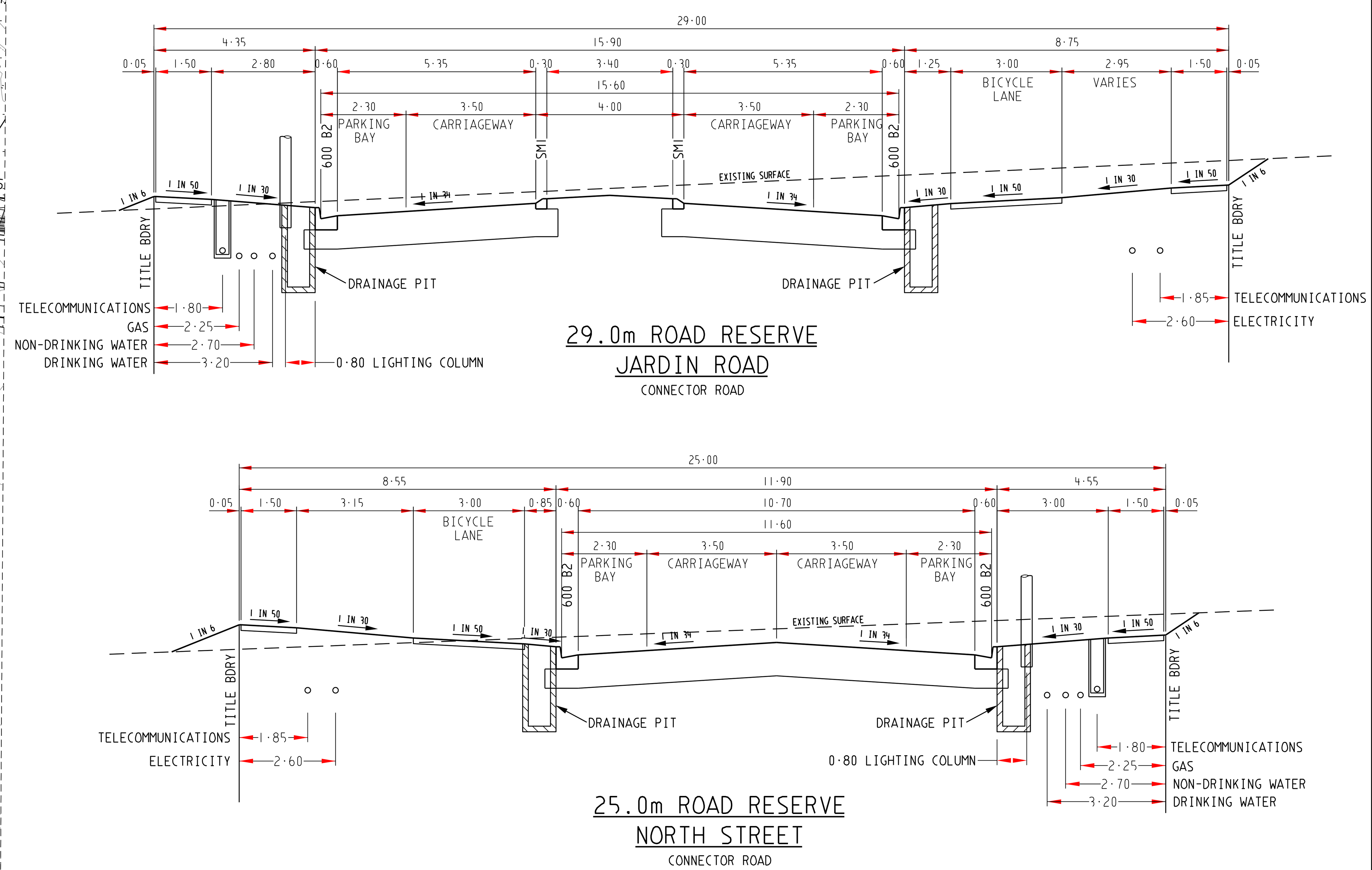
DEVELOPMENT ENGINEER

04/12/2017

DATE APPROVED



TYPICAL ROAD CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

SHEET INDEX

ATTENTION TO CONTRACTOR

1. **IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.**
2. **Contractor to ensure that the site is pegged and or set out checked by the licenced surveyor responsible for certifying the Plan of Subdivision prior to underground infrastructure being installed.**
3. Where concrete works abut a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.

North

WARNING

CONTRACTOR TO TAKE EXTRA CAUTION OF OPTIC FIBER CABLE IN DAVIS ROAD

WARNING

BEWARE OF UNDERGROUND SERVICES

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SERVICES OFFSETS AND LOCATIONS

STREET NAME	Rd.RESERVE	WATER DW	WATER NDW	GAS	ELECTRICITY CABLES	ELECTRICITY POLES	FIBRE TO THE HOME FTTH CABLES	FIBRE TO THE HOME FTTH PITS	Bk. of KERB	JOINT TRENCHING	STREET CLASIFICATION	STREET TREES
JARDIN ROAD	29·00	3·20 W	2·70 W	2·25 W	2·60 E	0·90 BOK	1·85 E	1·78 E/W	4·35 W 8·75 E	G & W, FTTH & E	CONNECTOR ROAD	2·95W, 3·05E
NORTH STREET	25·00	3·20 E	2·70 E	2·25 E	2·60 W	0·90 BOK	1·85 W	1·78 E/W	4·55 E 8·55 W	G & W, FTTH & E	STREET - LEVEL 1	3·25N, 4·72S
MEADOW LANE	16·00	3·20 N	2·70 N	2·25 N	2·50 S	0·90 BOK	1·85 S	1·78 N/S	4·35 N 4·05 S	G & W, FTTH & E	STREET - LEVEL 1	2·95N, 2·80S
GLENWOOD AVENUE	20·00	5·30 N	4·80 N	4·30 N	2·60 S	0·90 BOK	1·85 S	1·78 N/S	4·95 S 7·45 N	G & W, FTTH & E	STREET - LEVEL 1	4·72N, 3·25S
YORK PARADE	16·00	3·20 E	2·70 E	2·25 E	2·50 W	0·90 BOK	1·85 W	1·78 E/W	4·35 E 4·05 W	G & W, FTTH & E	STREET - LEVEL 1	2·80W, 2·95E
CARMICHAEL DRIVE	16·00	3·20 S	2·70 S	2·25 S	2·60 N	0·90 BOK	1·85 N	1·78 N/S	4·35 S 4·05 N	G & W, FTTH & E	STREET - LEVEL 1	2·80N, 2·95S
PORTOFINO WAY	20·00	5·30 S	4·80 S	4·30 S	2·60 N	0·90 BOK	1·85 N	1·78 N/S	4·95 N 7·45 S	G & W, FTTH & E	STREET - LEVEL 1	

SYMBOL LEGEND

Prop / Exist

- Drains
- Sewer <300
- Sewer >300
- Water
- House Drain
- Property Inlet
- Street Sign
- PSM
- Retaining Wall
- Conduits 50mm
- Conduits 100mm
- Ex Gas/Elect/Tel
- Ex/Natural/FS Level
- FS @ Building Line
- Top/Toe of Batter
- Top Ret. Wall Level
- 100yr Flood Level
- Fill Prop/Ex
- Cut Prop/Ex

AMENDMENTS

VER	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

RATHDOWNE ESTATE
STAGE 2
DETAIL PLAN SHEET 2 OF 2

MELWAY REF.	388-C10	MUNICIPALITY	WHITTLESEA
SURVEY	BPD	REFERENCE	8352 E/2
DESIGN	SS		
DRAWN	SS		
CHECKED			
SCALE	AS SHOWN	DATUM	AHD
DATE	JUL'17	SHEET	2 OF 21
	P3		

Plotted:01-Dec-17

J:\W9765\Eng\Stage 2\E02_R02_DET2.dgn

NOTES

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH PLANS AND CURRENT CITY OF WHITTLESEA SPECIFICATIONS AND STANDARD DRAWINGS APPROVED BY COUNCIL AND TO THE SATISFACTION OF THE ENGINEER. PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION:
   a) SOURCES OF QUARRYMATERIAL
   b) N.A.T.A. APPROVED TEST RESULTS FOR THE F.C.R. THAT IS TO BE USED.
   c) IF THE SOURCE THE QUARRY MATERIAL IS CHANGED DURING THE COURSE OF THE WORKS, THEN NEW TEST RESULTS SHALL BE PROVIDED.
2. COUNCIL TO BE NOTIFIED 2 CLEAR DAYS PRIOR TO COMMENCEMENT OF WORKS.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE
4. ALL LEVELS ARE TO BE AUSTRALIAN HEIGHT DATUM (AHD)
5. DRAINAGE AND PITS TO BE SETOUT FROM OFFSETS SHOWN RATHER THAN FROM CENTRELINE PIPE CHAINAGES.
6. ALL PIPES TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED AND SHALL BE RRJ UP TO AND INCLUDING 750mm DIAMETER. ALL DRAINS THAT CROSS UNDER ROAD PAVEMENTS ARE TO BE RRJ CLASS 2 R.C.P.
7. JOINTING FOR CURVED PIPE ALIGNMENT SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS (RRJ'S FOR MINOR DEFLECTIONS OR COMPLETE R.C. BANDAGES)
8. PROPERTY INLETS ARE TO BE PLACED 1.0m FROM THE LOW CORNER OF LOT UNLESS OTHERWISE SHOWN.
9. LOTS DENOTED THUS 416H ARE TO BE PROVIDED WITH A 100mm HOUSE DRAIN PLACED 7.00m FROM THE LOW CORNER OF THE LOT UNLESS OTHERWISE SHOWN. HOUSE DRAINS TO BE CONNECTED TO STREET DRAINAGE WITH 27A & CAP, CLEAR OF ANY PAVING. IF CONNECTION IS WITHIN PAVING A PIT MUST BE USED.
10. APPROVED GRANULAR BACKFILL TO BE PROVIDED WHERE PIPE TRENCHES ENCROACH UNDER ROADWAY DUE TO DEEP EXCAVATIONS IN ROCK.
11. SHALLOW CUT OFF DRAINS ARE TO BE PROVIDED ON SUBDIVISION BOUNDARY WHERE NECESSARY.
12. WHERE CONCRETE PAVING CROSSES SERVICE TRENCHES, SEWERAGE AND DRAINAGE, TRENCHES SHALL BE BACKFILL WITH COMPACTED FINE CRUSH ROCK.
13. ALL CROSSOVERS MUST BE 0.75m FROM THE DRAINAGE PITS AND PRAM CROSSINGS. IN ADDITION, THE PRAM CROSSING MUST BE 2m FROM THE DRAINAGE PITS.
14. PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004, INCLUDING ALL RELEVANT REGULATIONS, HAVE BEEN ADDRESSED. IN PARTICULAR, THE REQUIRED NOTIFICATIONS MUST BE CONVEYED TO THE VICTORIAN WORKCOVER AUTHORITY - HEALTH & SAFETY DIVISION WITH RESPECT TO TRENCHING OPERATIONS. DETAILS OF THE CONTRACTORS OCCUPATIONAL HEALTH & SAFETY PROCEDURES MUST BE LODGED WITH THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORKS.
15. AGRICULTURAL PIPE DRAINS 100mm PVC CLASS 4 TO BE PLACED BEHIND ALL KERB AND CHANNEL AND BUFFER PITCHERS AND WHERE DIRECTED BY THE ENGINEER (REFER TO COUNCIL STANDARD DRAWINGS). WHERE KERB AND CHANNEL IS LOCATED ON TITLE BOUNDARY AG's ARE TO BE PLACED BENEATH KERB AND 750mm BELOW TOP OF KERB.
16. ALL DRAINS BEHIND KERB AND CHANNEL SHALL BE BACKFILLED TO MATCH PAVEMENT SUBGRADE LEVEL WITH 20mm CLASS 2 F.C.R. COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH A.S. 1289.5.2.1-2003. EXCEPT WHERE DRAINS UP TO AND INCLUDING 450mm DIA. PIPES ARE LOCATED BEHIND KERB, THESE TRENCHES ARE TO BE BACKFILLED WITH SCREENINGS IN LIEU OF AG'S.
17. AGRICULTURAL DRAINS ARE TO BE 760mm BELOW TOP OF KERB.
18. BATTERS SHALL BE 1 IN 6 FOR CUT & FILL UNLESS OTHERWISE SHOWN.
19. ALL NATIVE TREES AND SHRUBS TO BE RETAINED UNLESS ROAD CONSTRUCTION NECESSITATES THEIR REMOVAL OR REMOVAL IS DIRECTED BY THE ENGINEER.
20. LOTS TO BE GRADED AND LEFT CLEAN TO THE SATISFACTION OF THE ENGINEER.
21. ON COMPLETION THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF RUBBISH AND SPOIL FROM SITE.
22. WHERE WORKS ARE IN THE VICINITY OF EXISTING SERVICES, THESE SERVICES ARE TO BE LOCATED AND THE VARIOUS AUTHORITIES NOTIFIED PRIOR TO COMMENCEMENT OF WORKS.
23. ALL MATERIAL SURROUNDING SERVICE AUTHORITY PITS LOCATED IN FOOTPATHS MUST BE ADEQUATELY COMPACTED IN 150mm LAYERS AND TESTED TO THE SATISFACTION OF THE CITY OF WHITTLESEA,PRIOR TO THE CONSTRUCTION OF FOOTPATH BAYS ADJACENT TO THESE PITS.
24. THE WATER CONDUIT OFFSET FROM THE LOT BOUNDARY IS GIVEN ON THE WATER RETICULATION PLAN. THE CONTRACTOR MUST CONSTRUCT CONDUITS TO ACCORD WITH THE GIVEN OFFSET AND ENSURE THAT THE CONCRETER MARKS THE KERB AND FOOTPATH EXACTLY ABOVE THE CONDUIT.
25. ALL GAS AND WATER CONDUIT TYPES ARE PVC CLASS 12 WITH A 50mm DIAMETER FOR RESIDENTIAL LOTS.
26. TELSTRA/NBN Co TO BE NOTIFIED 7 DAYS PRIOR TO CONCRETE BEING PLACED.
27. CONDUITS ARE TO BE EXTENDED 450mm BEHIND FACE OF KERB AND TO BE REFERENCED ON FACE OF KERB.
28. ALL STREET SIGNS TO BE CONSTRUCTED AND ERECTED TO CURRENT CITY OF WHITTLESEA STANDARDS. STREET NAME PLATES TO BE IN ACCORDANCE WITH STANDARD DRAWING SD812, INCLUDING "NO THROUGH ROAD" NOMINATION WHERE APPLICABLE.
29. TRAFFIC CONTROL SIGNS, MARKINGS & DELINEATORS TO BE INSTALLED IN ACCORDANCE WITH AS1742.2. ALL LINE MARKING IS TO BE LONG LIFE ROAD MARKING, WITH LONGITUDINAL LINES IN THERMOPLASTIC & TRANSVERSE MARKINGS IN COLD APPLIED.
30. ALL DRIVEWAYS TO BE OFFSET 0.75m FROM SIDE BOUNDARY OR EASEMENT (REFER EDCM501) UNLESS OTHERWISE SHOWN.
31. ALL DRIVEWAY RAMPS INTO PROPERTIES ARE TO BE CUT IN AT A MAXIMUM GRADE OF 1 IN 6.
32. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND TOPSOIL REPLACED TO OBTAIN FINAL FILL LEVELS AS SHOWN ON PLANS. FILLING TO BE CLEAN CLAY COMPACTED TO A DRY DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1289.5.2.1-1993. TESTING TO COMPLY WITH AS3798-1996 APPENDIX B, LEVEL 1.
33. THE CONTRACTOR IS RESPONSIBLE FOR THE ENSURING THAT ALL IMPORTED FILL MATERIAL, INCLUDING TOPSOIL, SATISFIES THE DESCRIPTION FOR CLEAN FILL MATERIAL IN EPA BULLETIN PUBLICATION No. 448 (SEPT '95) AND SUBSEQUENT REVISIONS. THE CONTRACTOR SHALL PROVIDE VERIFICATION INCLUDING TEST CERTIFICATES TO THE SUPERVISING ENGINEER.
34. FILL REQUIRED UNDER ROADWAY KERB AND CHANNEL AND FOOTPATH TO BE APPROVED GRANULAR MATERIAL COMPACTED TO 95% AASHO IN 150mm LAYERS.
35. PAVEMENT TO CONSIST OF: JARDIN ROAD AND NORTH STREET (540mm DEPTH)
   a) 40mm COMPACTED DEPTH SIZE 14 TYPE H ASHPHALT WITH A C320 BINDER (ASPHALT TO BE 5mm PROUD OF LIP OF KERB)
   b) 75mm COMPACTED DEPTH SIZE 20 TYPE SI ASHPHALT WITH A C320 BINDER
   c) 75mm COMPACTED DEPTH SIZE 20 TYPE SF ASHPHALT WITH A C320 BINDER
   d) BITUMINOUS PRIME
   e) 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
   f) 250mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM SOAKED CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSTIY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
   g) SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR>2.0%) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR" OR APPROVED EQUIVALENT MATERIAL.

   Refer to "Technical Specification for Roads and Drainage Works" Section 20.3.5 & Table 20.3.5 for requirements

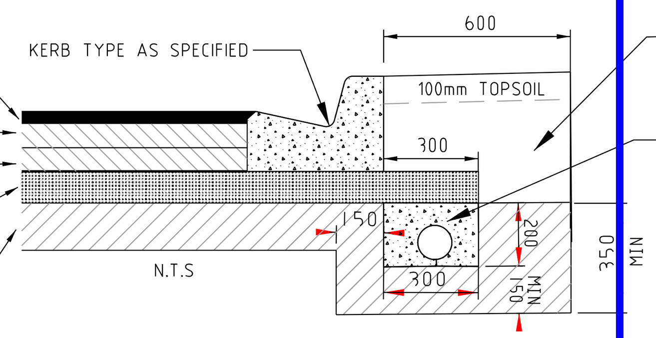
   SAMI TREATMENT (STRAIN ALLEVIATING MEMBRANE INTERLAYER) CONSISTING SIZE 10 SPRAYED SEAL USING CLASS S18RF BITUMEN CRUMB RUBBER BINDER APPLIED AT AN APPLICATION RATE ≥ 1.8 l/m2 AND COVERED WITH A LIGHT APPLICATION OF PRE-COATED SIZE 10 AGGREGATE.

   PAVEMENT TO CONSIST OF: INTERSECTION NORTH STREET / JARDIN ROAD (600mm DEPTH)
   a) 40mm COMPACTED DEPTH SIZE 14 TYPE V ASHPHALT WITH A C320 BINDER (ASPHALT TO BE 5mm PROUD OF LIP OF KERB)
   b) 75mm COMPACTED DEPTH SIZE 20 TYPE SI ASHPHALT WITH A C320 BINDER
   c) 75mm COMPACTED DEPTH SIZE 20 TYPE SF ASHPHALT WITH A C320 BINDER
   d) BITUMINOUS PRIME
   e) 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
   f) 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 4 CR, COMPACTED TO AT LEAST 95% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
   g) 210mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM SOAKED CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSTIY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
   h) SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR>2.0%) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR" OR APPROVED EQUIVALENT MATERIAL.

   PAVEMENT TO CONSIST OF: PORTOFINO WAY (580mm DEPTH)
   a) 30mm COMPACTED DEPTH SIZE 10 TYPE N ASHPHALT WITH A C170 BINDER
   b) 30mm COMPACTED DEPTH SIZE 10 TYPE N ASHPHALT WITH A C170 BINDER
   c) SAMI SEAL WITH CLASS S18RF BINDER AND BITUMINUS PRIME
   d) BITUMINOUS PRIME
   e) 130mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 FCR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
   f) 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
   g) 140mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 4 FCR, COMPACTED TO AT LEAST 95% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
   h) 150mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSTIY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
   i) SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR>2.5%) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR" OR APPROVED EQUIVALENT MATERIAL.

   PAVEMENT TO CONSIST OF: GLENWOOD AVENUE AND YORK PARADE (500mm DEPTH)
   a) 30mm COMPACTED DEPTH SIZE 10 TYPE N ASHPHALT WITH A C170 BINDER
   b) 30mm COMPACTED DEPTH SIZE 10 TYPE N ASHPHALT WITH A C170 BINDER
   c) SAMI SEAL WITH CLASS S18RF BINDER AND BITUMINUS PRIME
   d) BITUMINOUS PRIME
   e) 130mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 FCR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
   f) 160mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
   g) 150mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSTIY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
   h) SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR>2.5%) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR" OR APPROVED EQUIVALENT MATERIAL.

   PAVEMENT TO CONSIST OF: MEADOW LANE AND CARMICHAEL DRIVE (450mm DEPTH)
   a) 20mm COMPACTED DEPTH SIZE 7 TYPE L ASHPHALT WITH A C170 BINDER
   b) 30mm COMPACTED DEPTH SIZE 10 TYPE N ASHPHALT WITH A C170 BINDER
   c) SAMI SEAL WITH CLASS S18RF BINDER AND BITUMINUS PRIME
   d) BITUMINOUS PRIME
   e) 140mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 FCR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
   f) 110mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
   g) 150mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSTIY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
   h) SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR>2.5%) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR" OR APPROVED EQUIVALENT MATERIAL.
36. PAVEMENT DEPTH MAY BE MODIFIED AS DIRECTED BY THE ENGINEER.
37. ALL 125mm THICK FOOTPATH CONCRETE PAVING TO BE REINFORCED WITH SL72 MESH AND MUST BE CONSTRUCTED WITH A 50mm UNDERLAYER OF 20mm COMPACTED CLASS 3 FCR IN ACCORDANCE WITH EDCM STANDARD DRAWING 401.
38. THE CONTRACTOR IS TO ORGANISE AND PAY FOR TESTING OF PAVEMENT BASE COURSE MATERIAL AND FINAL LAYER OF CRUSHED ROCK. A COPY OF RESULTS IS TO BE FORWARDED TO THE DIRECTOR OF ENGINEERING OR HIS REPRESENTATIVE. THE RESULTS MUST MEET THE REQUIREMENTS OF THE CITY OF WHITTLESEA SPECIFICATION BEFORE ANY FURTHER WORKS ARE REQUIRED.
39. THE CONTRACTOR MUST COMPLETE A LEVEL CHECK BETWEEN ALL TBM'S TO VERIFY LEVEL VALUES BEFORE COMMENCEMENT OF WORKS. ALL TBM,s AND CONTROL POINTS ARE TO BE MAINTAINED AND PROTECTED AT ALL TIMES DURING CONSTRUCTION. SHOULD ANY MARKS BE DISTURBED, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE DEVELOPER'S CONSULTANT TO ARRANGE RE-INSTATEMENT AT THE CONTRACTORS EXPENSE.
40. PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR MUST SUBMIT A SMP TO THE DEVELOPER'S CONSULTANT FOR APPROVAL. THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE ENVIRONMENT PROTECTION AUTHORITY PUBLICATION No.275 "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL" AND MW SITE ENVIRONMENTAL MANAGEMENT POLICY 3.8.2. APPROPRIATE SILTATION CONTROL IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD OF THE WORKS.



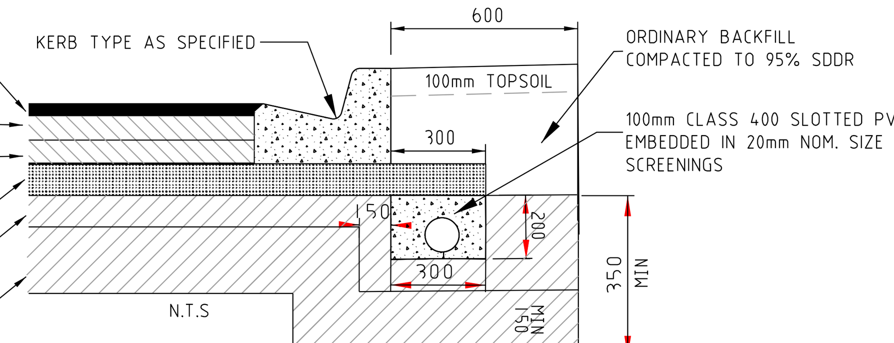
PAVEMENT DETAILS
JARDIN ROAD & NORTH STREET

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE SUBDIVISION ACT 1988

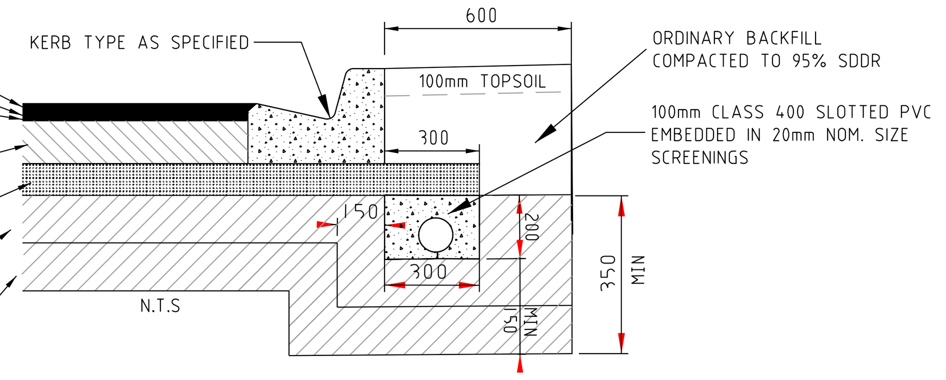
PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

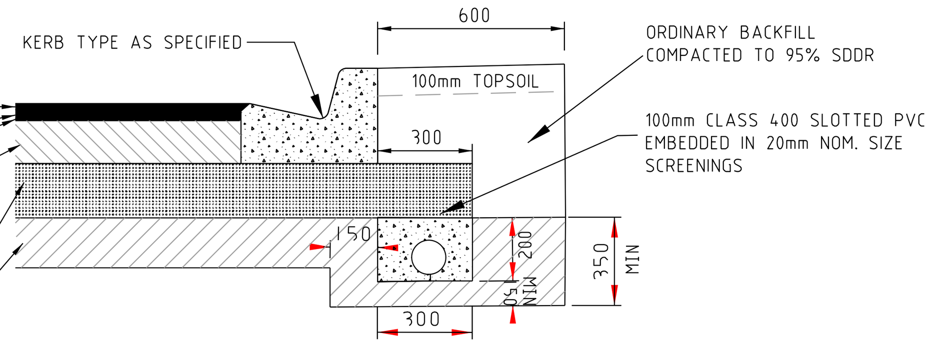
04/12/2017
DATE APPROVED



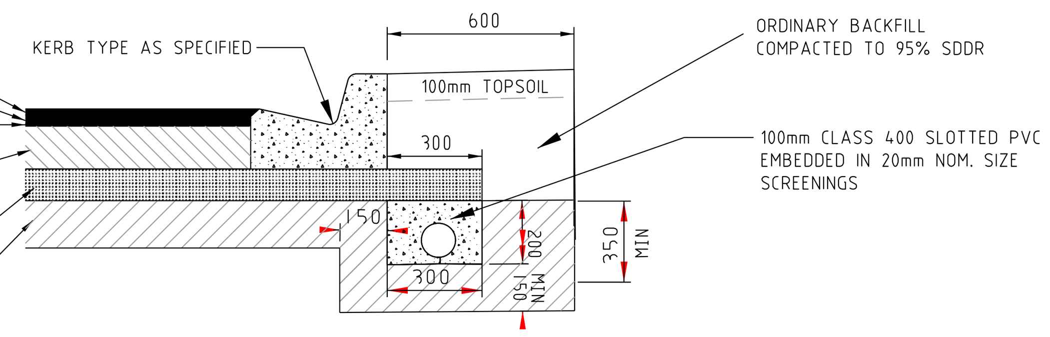
PAVEMENT DETAILS
INTERSECTION JARDIN ROAD & NORTH STREET



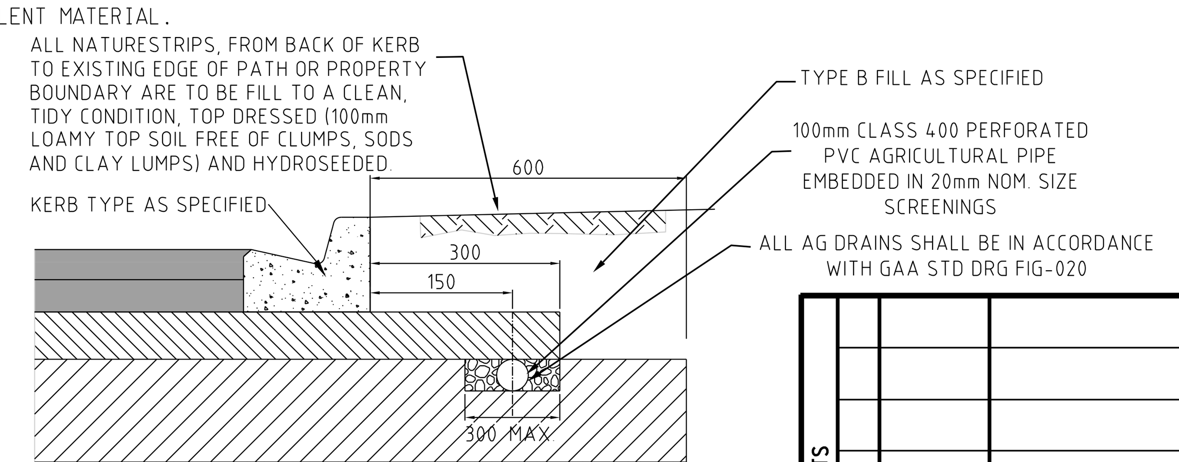
PAVEMENT DETAILS
PORTOFINO WAY



PAVEMENT DETAILS
GLENWOOD AVENUE AND YORK PARADE

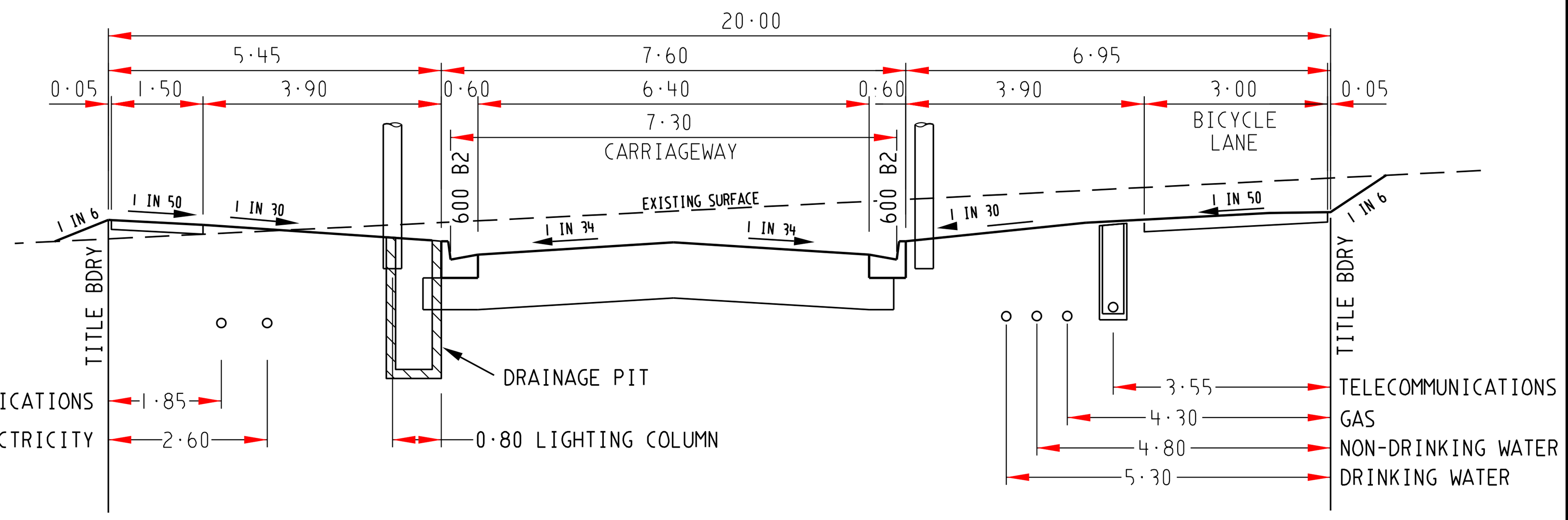


PAVEMENT DETAILS
MEADOW LANE AND CARMICHAEL DRIVE

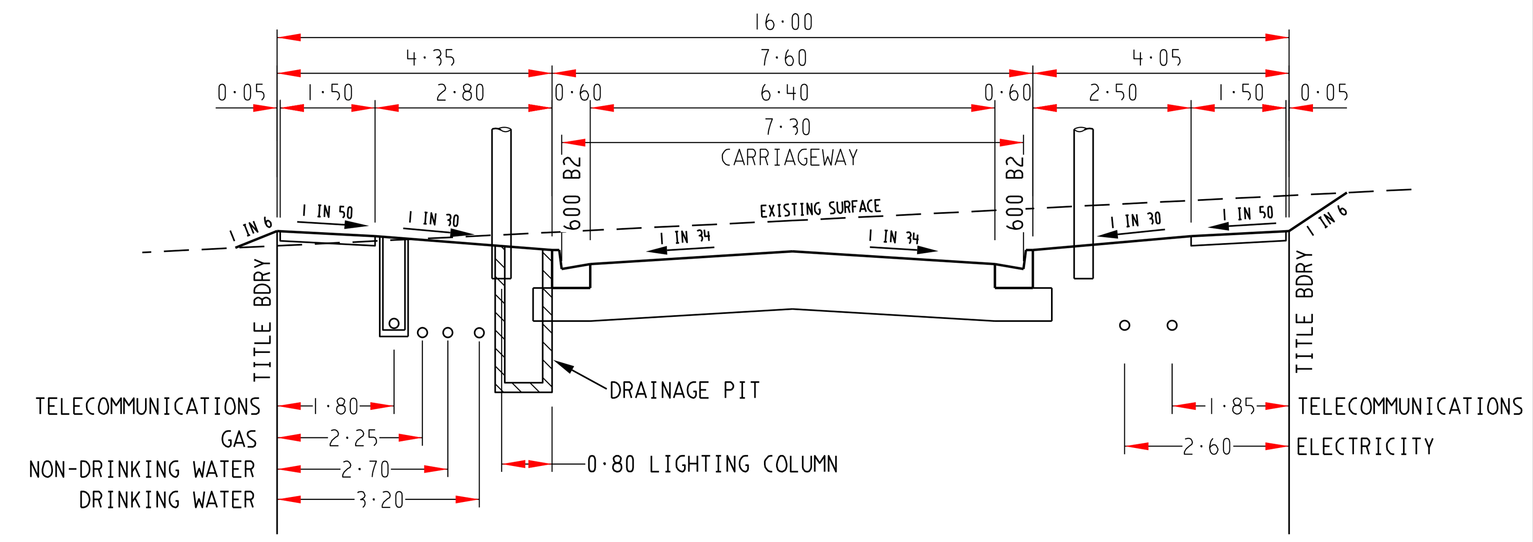


PAVEMENT COMPOSITION
NOT TO SCALE

41. ALL FOOTPATHS IN ROADS TO BE OFFSET 50mm FROM PROPERTY BOUNDARY. FOOTPATHS CONSTRUCTED ABOVE EXISTING LEVEL TO BE CONSTRUCTED ON APPROVED FILL (TO AS-3798) OF F.C.R. INTO NATURAL GROUND.
42. REFER TO LANDSCAPE ARCHITECT PLANS FOR DETAILS OF VEHICLE EXCLUSION FENCING AROUND PERIMETER OF WORKS.
43. PRIOR TO COMMENCEMENT OF WORKS A RINGLOCK WIRE MESH FENCE, APPROX 1.8m HIGH, SHALL BE ERECTED AROUND TREES NOTED "TO BE RETAINED". CORNER POSTS TO BE TREATED PINE WITH TREATED PINE STAYS. INTERMEDIATE POSTS TO BE STAR PICKETS AT 3m INTERVALS,EVERY THIRD POST TO BE TREATED PINE, NO CONCRETE IS TO BE USED TO SECURE POSTS. NO EXCAVATION SHALL BE CARRIED OUT WITHIN 5.0m OF ANY TREE UNTIL APPROVAL IS GIVEN BY THE ENGINEER.
44. ALL FENCES ADJOINING ALL RESERVES (OTHER THAN ROAD RESERVES) ARE TO BE ERECTED BY THE DEVELOPER (OR OWNER) AT NO COST TO COUNCIL AND SHALL BE CONSTRUCTED PRIOR TO STATEMENT OF COMPLIANCE IN ACCORDANCE WITH CONDITION 43 OF THE PERMIT.
45. EXISTING DAM OR WATERCOURSES TO BE EXCAVATED TO A FIRM BASE AND BACKFILLED AS SPECIFIED. DEVELOPER'S CONSULTANT TO BE NOTIFIED WHEN THE DAM OR WATERCOURSES ARE EXCAVATED TO A FIRM BASE. NO FILLING IS TO BE PLACED PRIOR TO DAMS BEING INSPECTED AND LEVELS TAKEN. BACKFILLING IS TO BE CARRIED OUT TO THE SATISFACTION OF THE COUNCIL SUPERVISING ENGINEER.
46. TACTILE GROUND SURFACE INDICATORS (TGSI) ARE TO BE INSTALLED WHERE SHOWN IN ACCORDANCE WITH AS1428 AND SD320.
47. THE CONTRACTOR MUST ARRANGE THE REQUISITE INSPECTIONS OF THE WORKS WITH THE CHIEF EXECUTIVE OFFICER/OR THEIR REPRESENTATIVE AS PER THE HOLD POINTS IN THE WHITTLESEA CITY COUNCIL SPECIFICATIONS.
48. THE CONTRACTOR IS TO OBTAIN A BUILDING PERMIT FOR ANY STRUCTURE / FENCES AND OR ANY RETAINING WALLS 600mm IN HEIGHT.
49. ANY INFRASTRUCTURE DAMAGE DURING THE DEFECTS LIABILITY PERIOD IS THE RESPONSIBILITY OF THE DEVELOPER OR HIS REPRESENTATIVE AND IS TO BE REINSTATED TO THE SATISFACTION OF THE CHEIF EXECUTIVE OFFICER / OR THEIR REPRESENTATIVE.
50. AT THE COMPLETION OF ALL WORKS, ALL RUBBISH, DEBRIS AND SURPLUS SPOIL SHALL BE REMOVED AND THE SITE SHALL BE CLEARED TO THE SATISFACTION OF THE CHEIF EXECUTIVE OFFICER / OR THEIR REPRESENTATIVE.
51. ALL FIRE HYDRANTS ARE TO BE MARKED IN ACCORDANCE WITH "IDENTIFICATION OF STREET HYDRANTS FOR FIRE-FIGHTING PURPOSES" PUBLICATION (DEVELOPED BY C.F.A., M.F.E.S.B. & N.R.E.). MARKINGS TO BE VIA BLUE PAVEMENT MARKER AND A (RED TOPPED) WHITE POST.



20.0m ROAD RESERVE
GLENWOOD AVENUE & PORTOFINO WAY
LOCAL ACCESS STREET - LEVEL 1



16.0m ROAD RESERVE
MEADOW LANE, YORK PARADE & CARMICHAEL DRIVE
LOCAL ACCESS STREET - LEVEL 1

TYPICAL ROAD CROSS SECTIONS
SCALE HORIZONTAL 1:100
VERTICAL 1:50

VER.	DATE	REMARKS (AMENDMENTS)

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10	RATHDOWNE ESTATE STAGE 2 NOTES AND LOCALITY PLAN	MUNICIPALITY WHITTLESEA
SURVEY	BPD		REFERENCE 8352 E/2
DESIGN	SS		
DRAWN	SS		
CHECKED		SCALE AS SHOWN	DATUM AHD	DATE JUL '17	SHEET 3 OF 21	P3

Plotted:01-Dec-17
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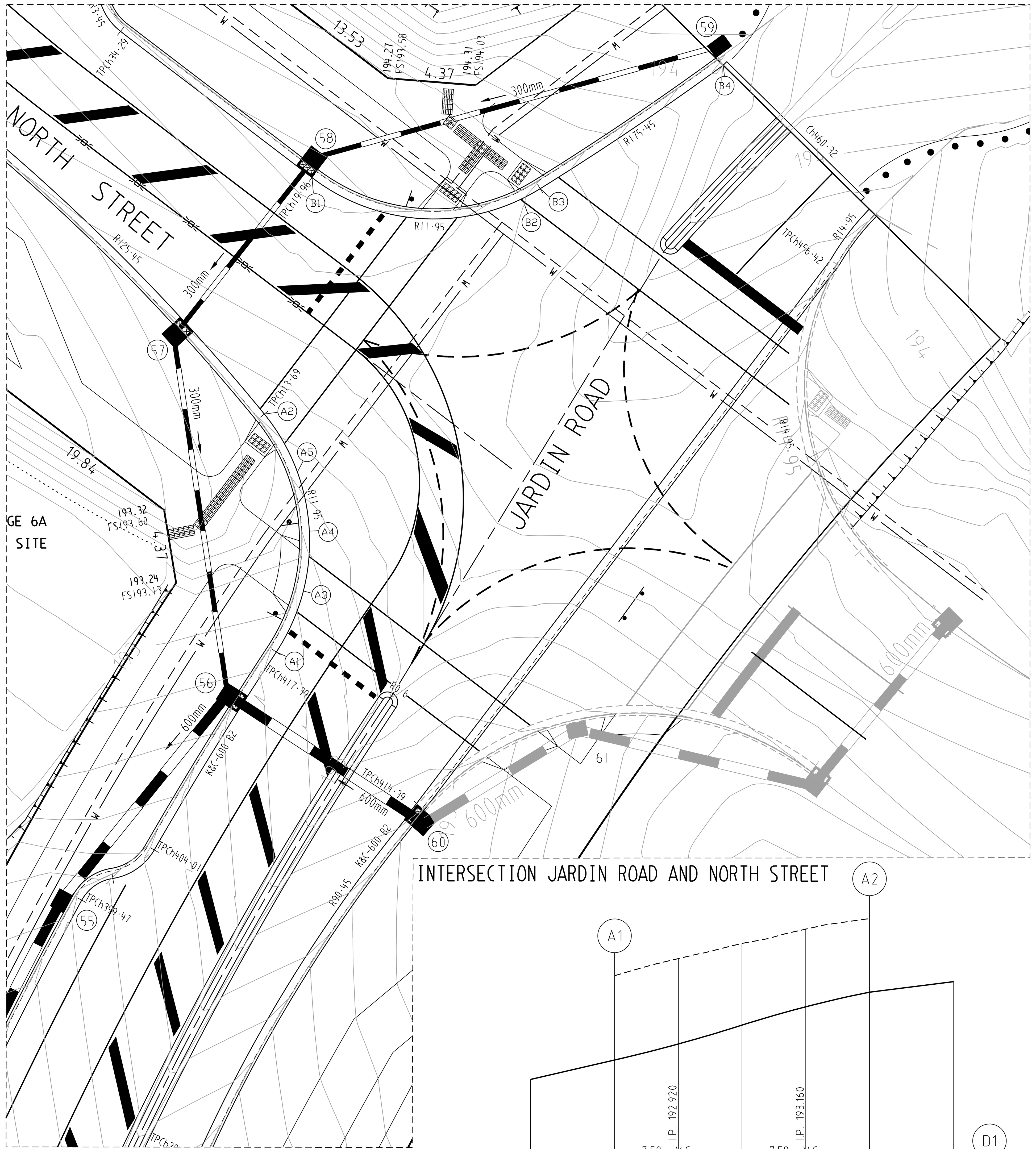
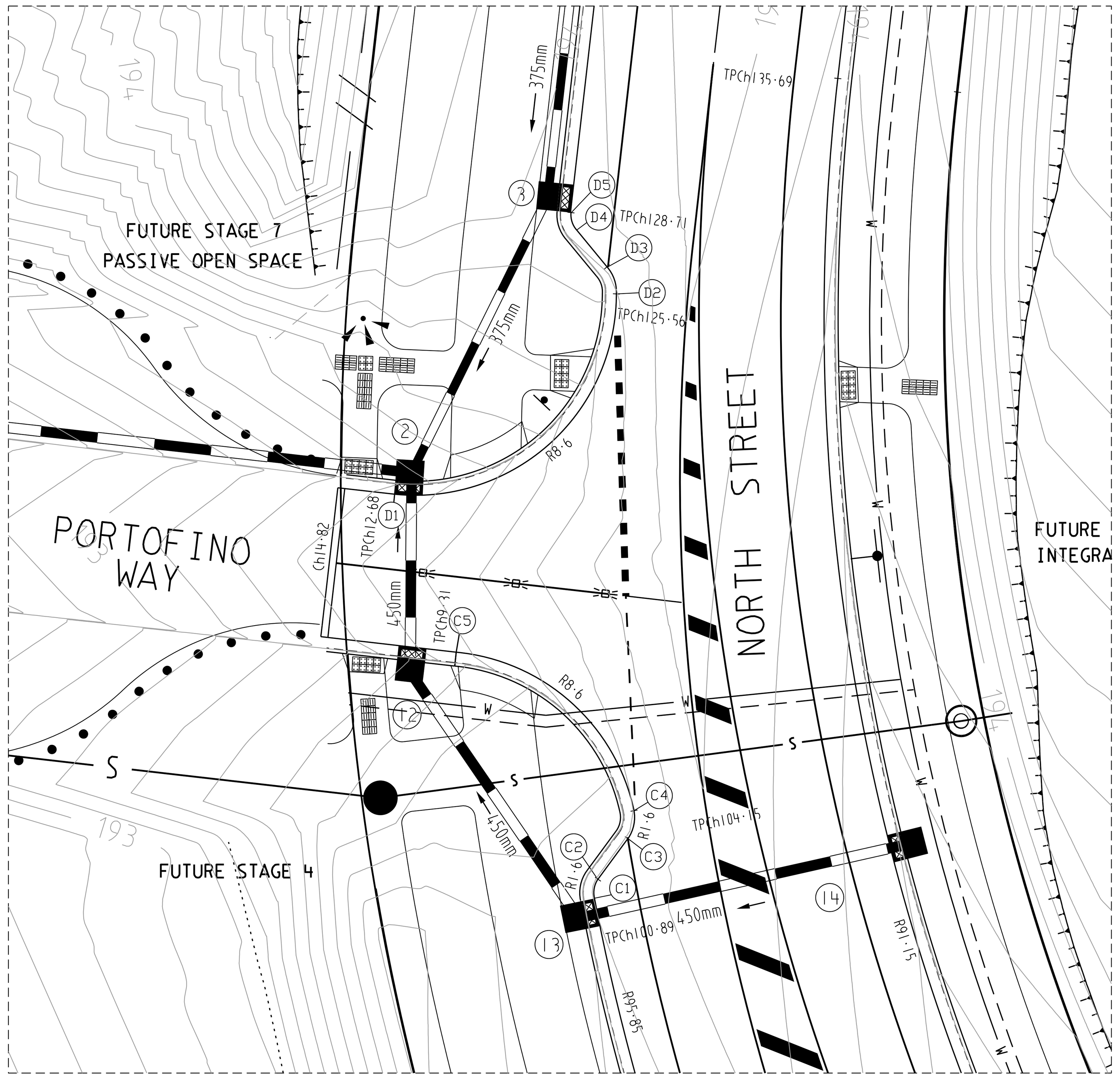
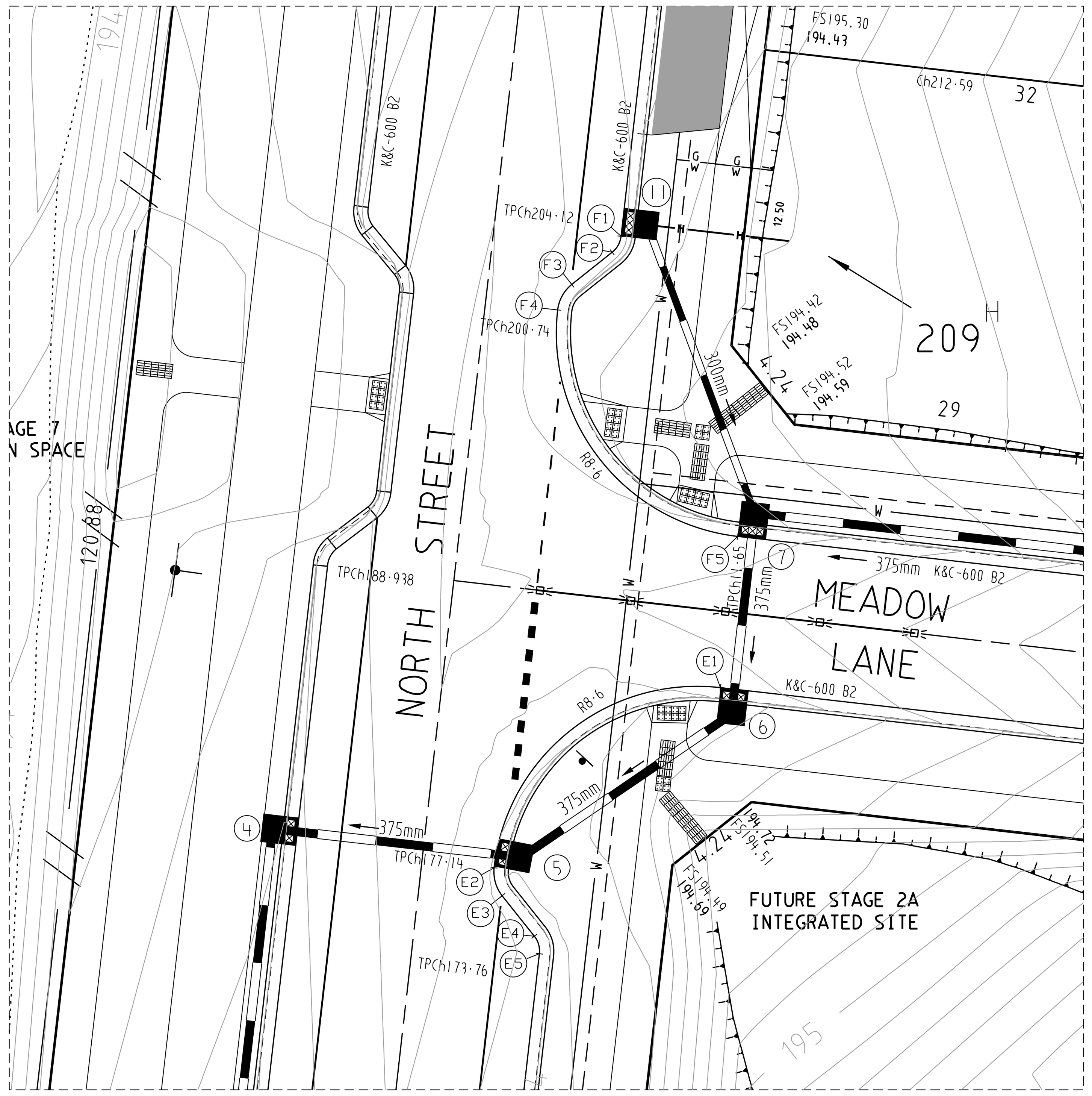


INTERSECTION JARDIN ROAD AND NORTH STREET



INTERSECTION NORTH STREET AND PORTOFINO WAY



INTERSECTION NORTH STREET AND MEADOW LANE

Alignment A

	Point no	Easting	Northing	RL
A	1	322391·315	5836576·902	192·832
A	2	322390·604	5836591·042	193·235
A	3	322392·921	5836580·527	192·933
A	4	322393·279	5836584·089	193·040
A	5	322392·566	5836587·597	193·144

Curve no			Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
A	1	2	-11·950	14·158	2·322	1·786	193·040

Alignment C

	Point no	Easting	Northing	RL
C	1	322338·434	5836662·868	193·704
C	2	322338·581	5836663·676	193·708
C	3	322339·852	5836665·435	193·708
C	4	322340·121	5836666·616	193·703
C	5	322332·519	5836673·391	193·473

Curve no			Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
C	1	2	1·000	0·810	0·091	0·069	193·706
C	3	4	-1·600	1·212	0·123	0·093	193·706
C	4	5	-8·600	10·179	1·668	1·283	193·636

Alignment D

	Point no	Easting	Northing	RL
D	1	322329·890	5836680·132	193·335
D	2	322339·368	5836688·689	193·797
D	3	322338·992	5836689·839	193·816
D	4	322337·661	5836691·406	193·838
D	5	322337·428	5836692·146	193·843

Curve no			Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
D	1	2	-8·600	12·769	2·838	2·224	193·593
D	3	4	-1·600	1·189	0·115	0·087	193·807
D	5	6	1·000	0·775	0·078	0·059	193·841

Alignment B

	Point no	Easting	Northing	RL
B	1	322393·437	5836605·091	193·260
B	2	322405·936	5836603·852	193·495
B	3	322406·996	5836604·438	193·533
B	4	322417·875	5836611·775	193·925
B	5	322396·427	5836603·424	193·288
B	6	322399·511	5836602·697	193·335
B	7	322402·677	5836602·805	193·401
B	8	322406·206	5836603·988	193·504
B	9	322406·473	5836604·131	193·514
B	10	322406·736	5836604·281	193·523
B	11	322409·767	5836606·196	193·635
B	12	322412·504	5836608·005	193·734
B	13	322415·206	5836609·864	193·831

Curve no			Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
B	1	2	-11·950	12·560	1·783	1·363	193·335
B	2	3	-11·950	1·212	0·015	0·012	193·514
B	3	4	-175·450	13·122	0·123	0·092	193·734

Alignment F

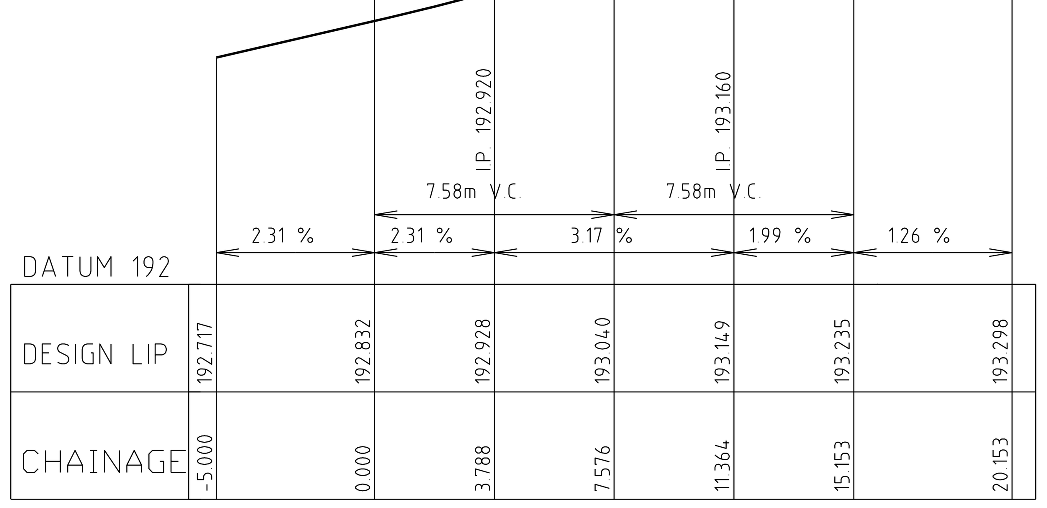
	Point no	Easting	Northing	RL
F	1	322356·571	5836765·877	194·122
F	2	322356·200	5836765·208	194·126
F	3	322354·497	5836763·853	194·137
F	4	322353·903	5836762·782	194·143
F	5	322361·475	5836753·264	194·247

Curve no			Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
F	1	2	1·000	0·765	0·076	0·058	194·124
F	3	4	-1·600	1·225	0·122	0·092	194·140
F	4	5	-8·600	12·162	2·519	1·963	194·182

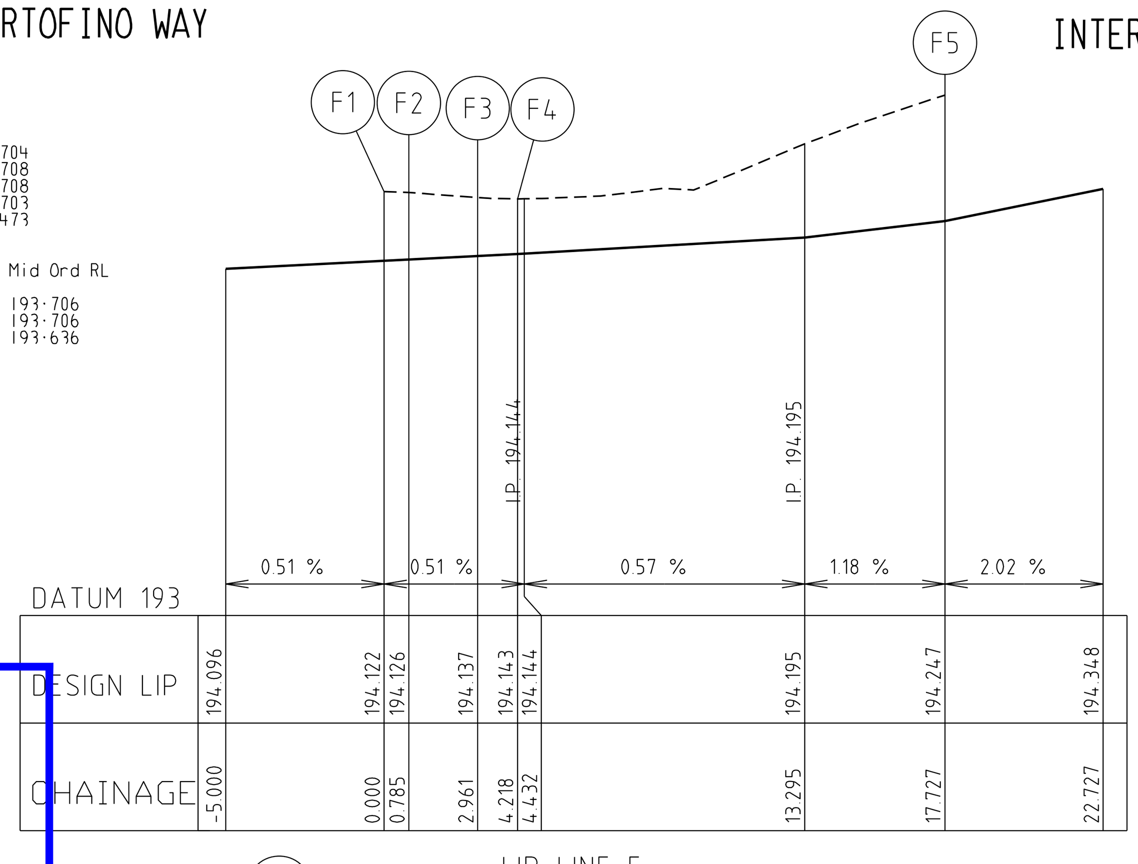
Alignment E

	Point no	Easting	Northing	RL
E	1	322360·751	5836746·906	194·247
E	2	322351·234	5836739·334	194·092
E	3	322351·571	5836738·157	194·085
E	4	322352·926	5836736·454	194·073
E	5	322353·137	5836735·718	194·069

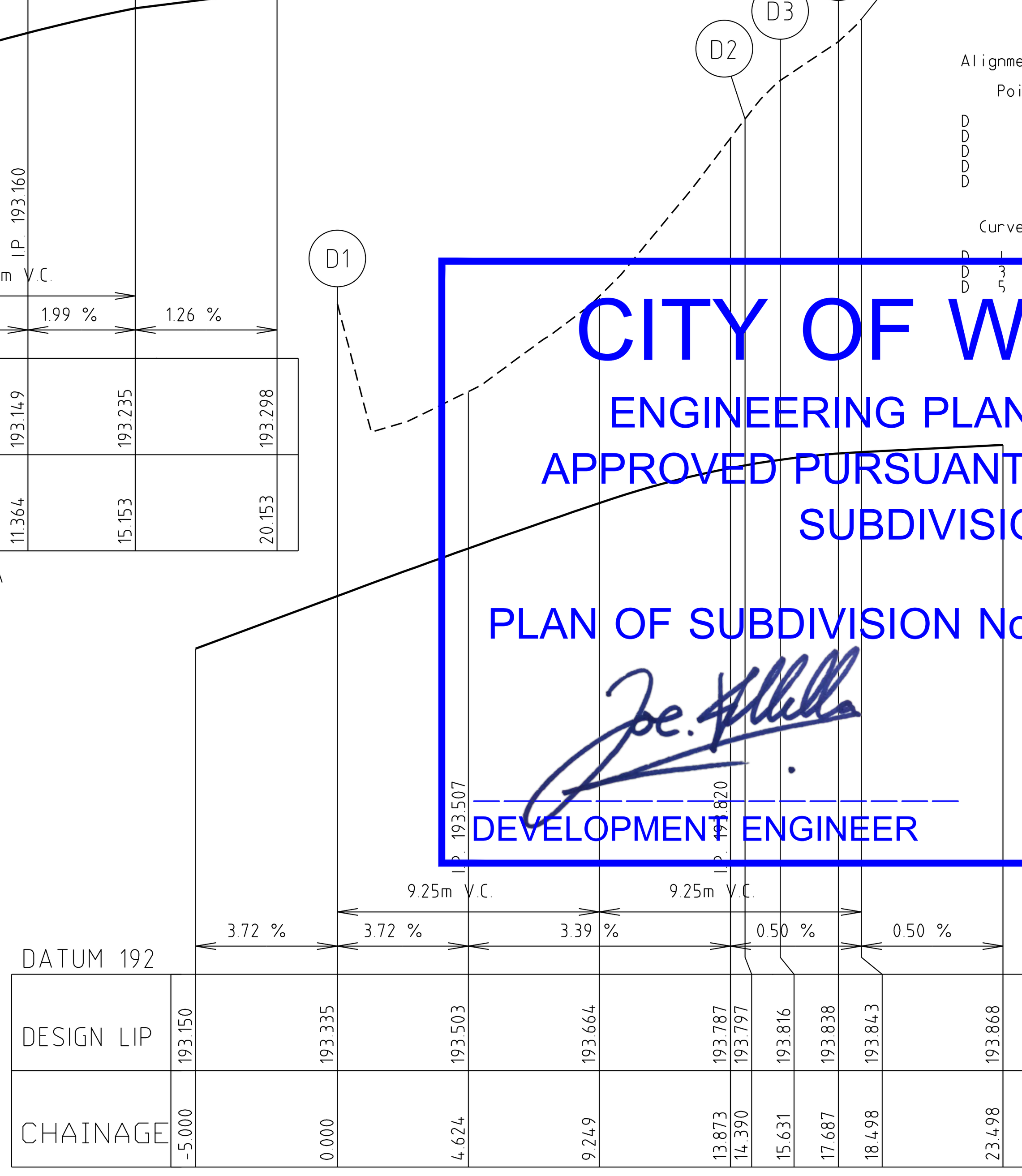
Curve no			Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
E	1	2	-8·600	12·162	2·519	1·963	194·143
E	2	3	-1·600	1·225	0·122	0·092	194·088
E	4	5	1·000	0·765	0·076	0·058	194·071



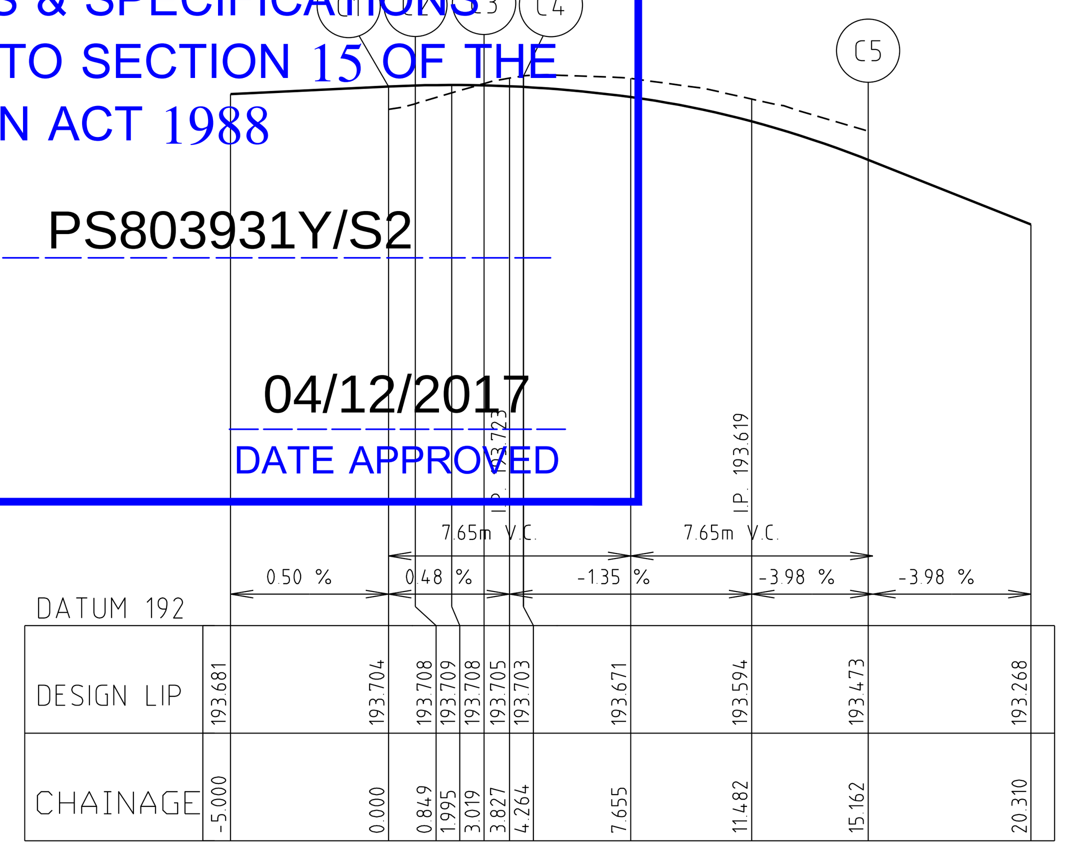
LIP LINE A



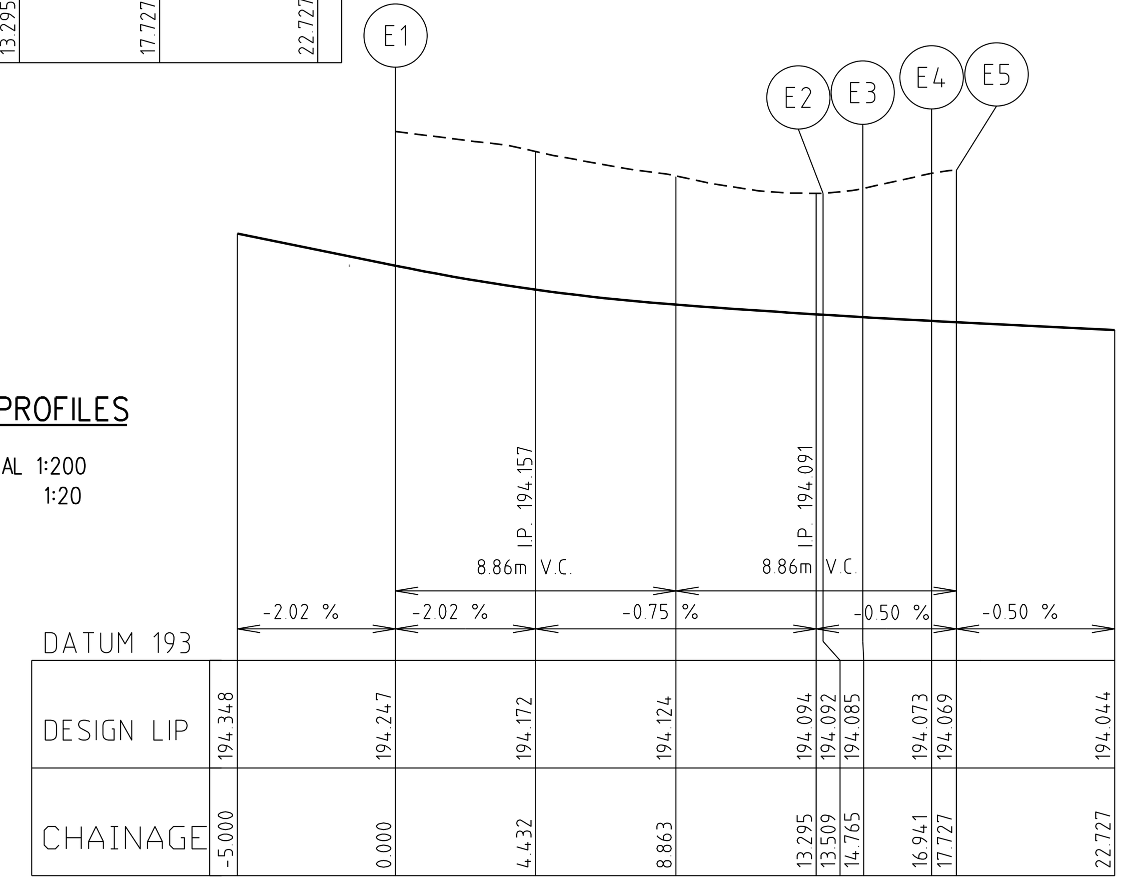
LIP LINE F



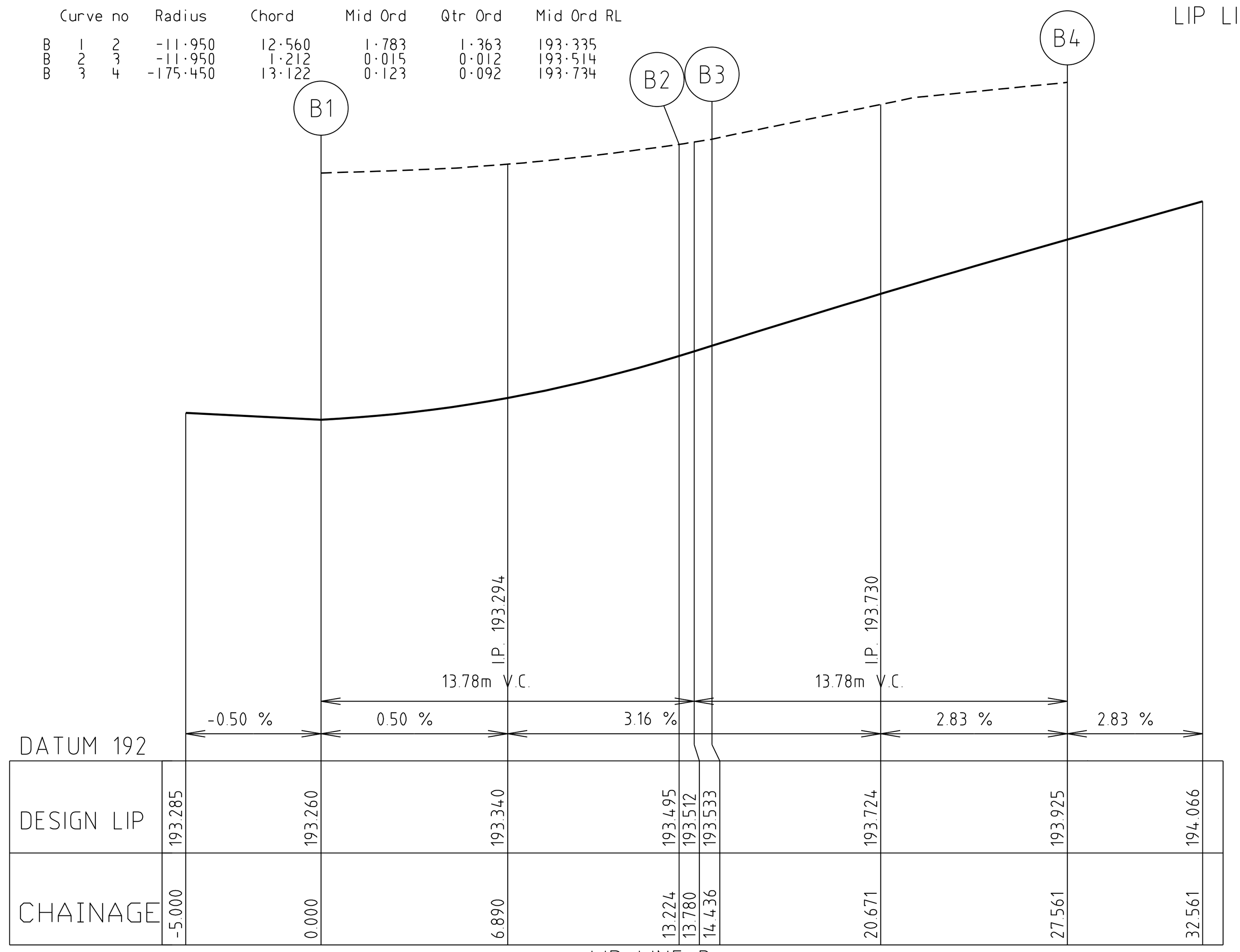
LIP LINE D



LIP LINE C



LIP LINE E



LIP LINE B

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017
DATE APPROVED

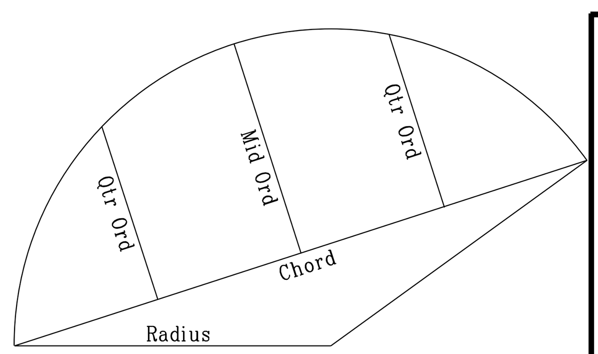
LIP OF KERB PROFILES

SCALE: HORIZONTAL 1:200
VERTICAL 1:20

INTERSECTION DETAILS

SCALE 1:200
SCALE 1 : 200

LENGTHS ARE IN METRES



CURVE SETOUT DIAGRAM

AMENDMENTS

VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
INTERSECTION DETAILS

MUNICIPALITY
WHITTLESEA

REFERENCE
8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL'17 | SHEET 4 OF 21 | P3

Plotted:01-Dec-17
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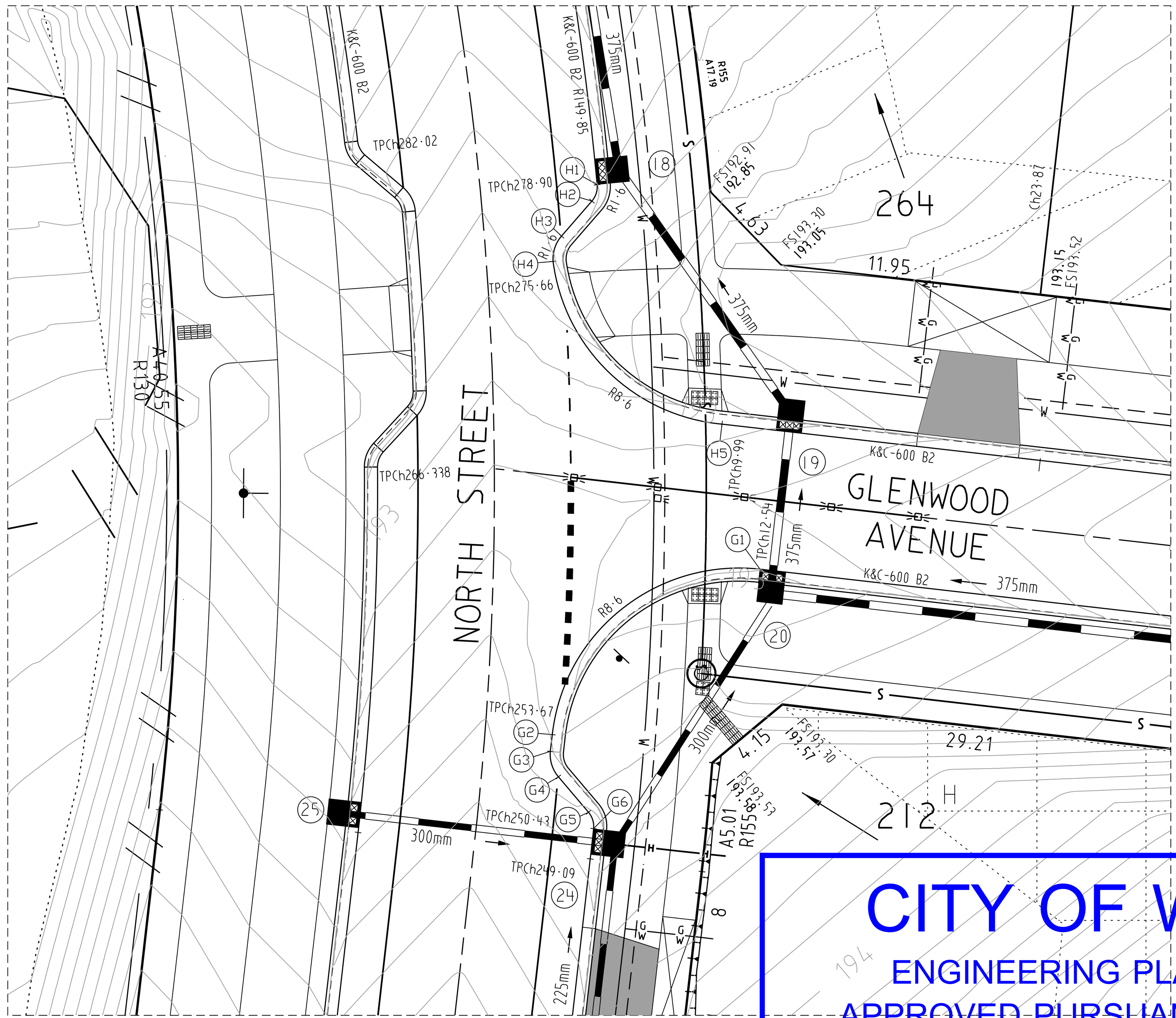
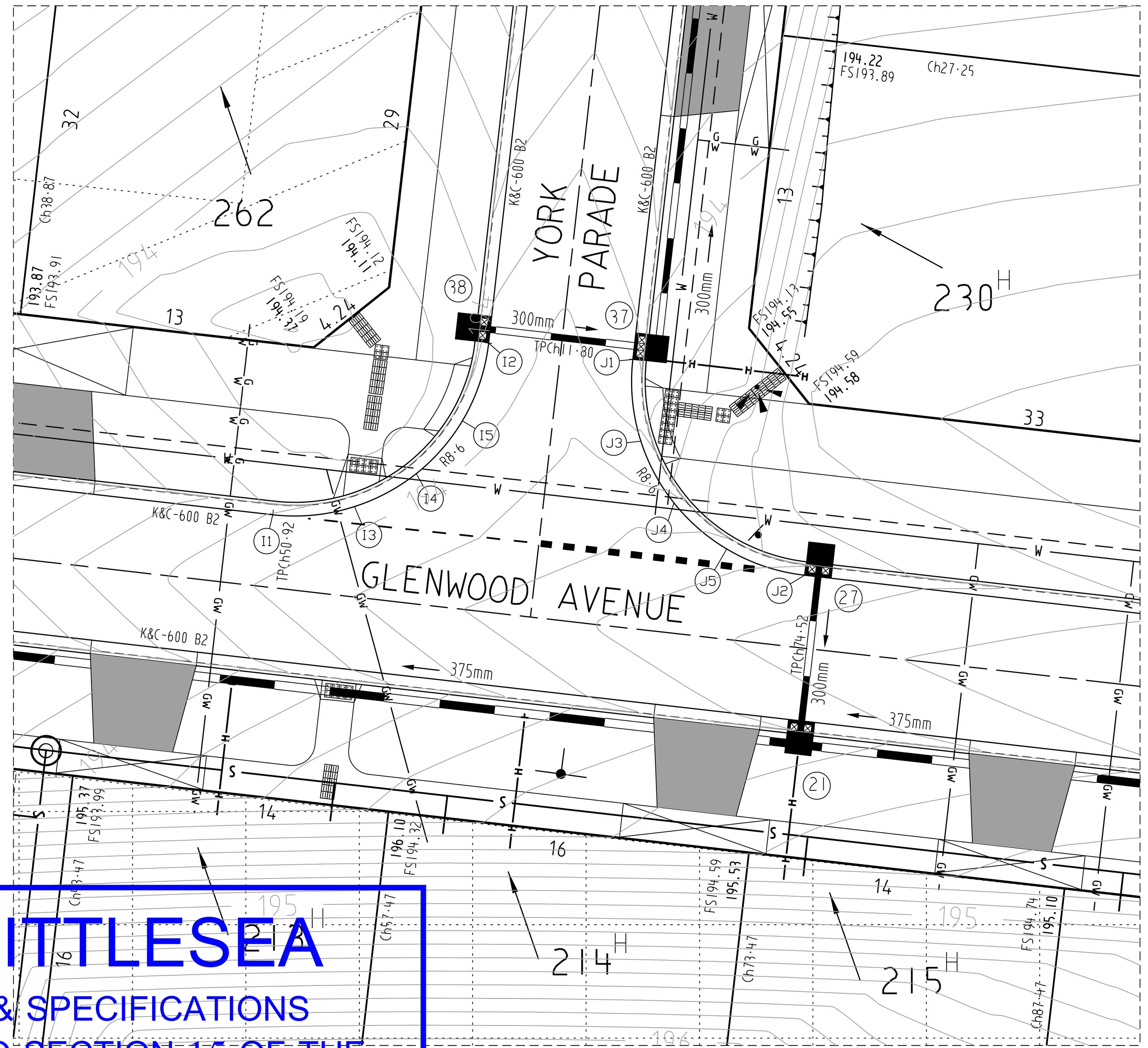
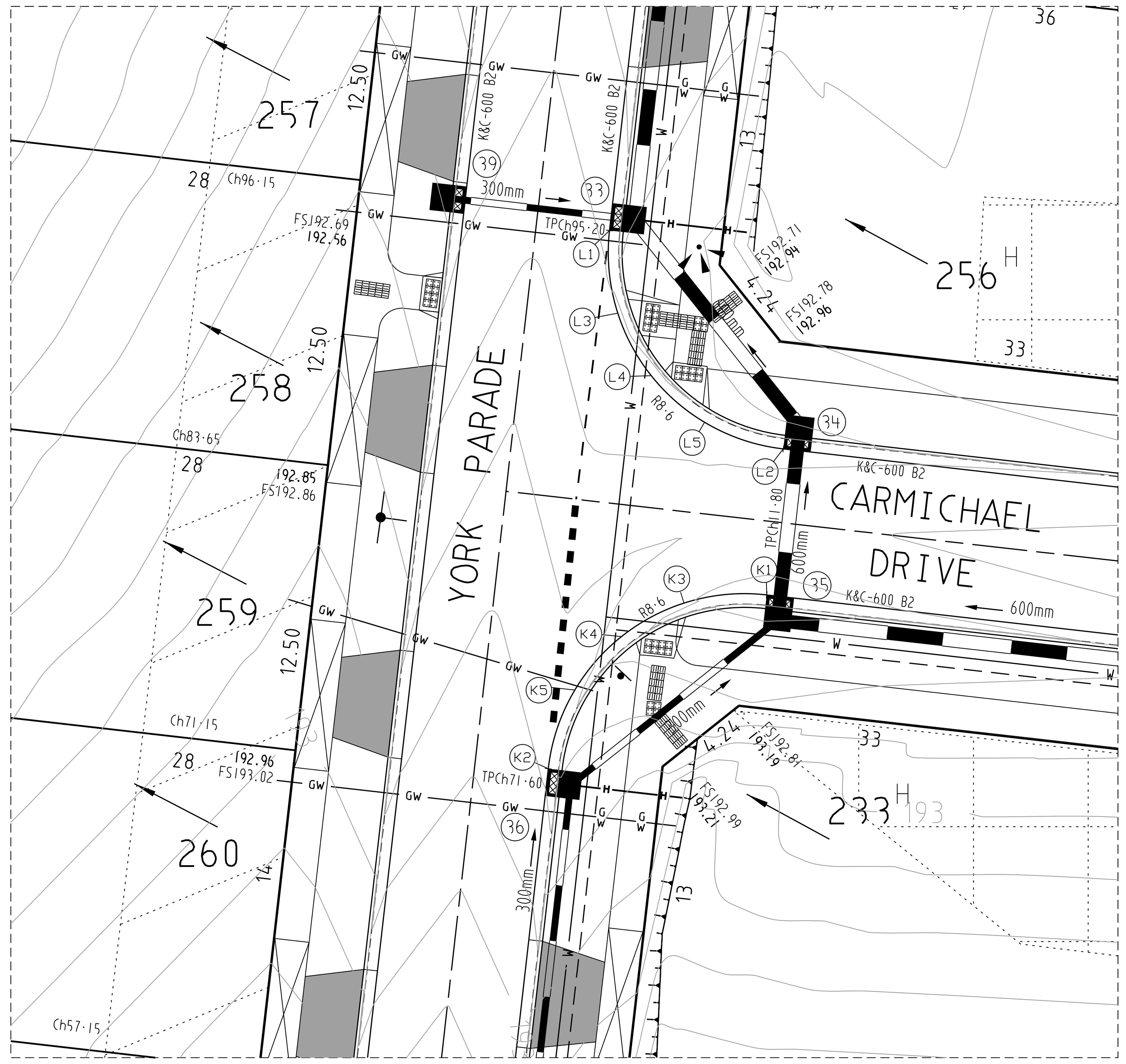


INTERSECTION NORTH STREET AND GLENWOOD AVENUE



INTERSECTION YORK PARADE AND GLENWOOD AVENUE



INTERSECTION YORK PARADE AND CARMICHAEL DRIVE

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

04/12/2017

DEVELOPMENT ENGINEER | DATE APPROVED

Alignment H

	Point no	Easting	Northing	RL
H	1	322361·973	5836841·420	192·602
H	2	322361·733	5836840·672	192·622
H	3	322360·341	5836839·069	192·676
H	4	322359·954	5836837·907	192·709
H	5	322367·692	5836830·457	192·974

	Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
H	1	2	1·000	0·786	0·080	0·061	192·612
H	3	4	-1·600	1·225	0·122	0·092	192·692
H	4	5	-8·600	10·743	1·884	1·454	192·858

DATUM 192

DESIGN LIP	192.477	192.602	192.622	192.676	192.702	192.709	192.805	192.900	192.974	193.039
CHAINAGE	-5.000	0.000	0.808	2.931	3.947	4.187	7.895	11.842	15.790	20.790

IP 192.701, IP 192.910, 7.89m VC, 7.89m VC, 2.50 %, 2.50 %, 2.65 %, 1.62 %, 1.31 %

LIP LINE H

Alignment I

	Point no	Easting	Northing	RL
I	1	322408·287	5836825·835	193·906
I	2	322417·804	5836833·406	193·928
I	3	322411·889	5836826·191	193·958
I	4	322414·614	5836827·649	193·962
I	5	322416·647	5836829·977	193·946

	Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
I	1	2	-8·600	12·162	2·519	1·963	193·962

DATUM 193

DESIGN LIP	193.852	193.928	194.004	194.127	194.253	194.336	194.402
CHAINAGE	-5.000	0.000	3.377	6.754	10.132	13.509	18.509

IP 193.980, IP 194.275, 6.75m VC, 6.75m VC, 1.50 %, 1.55 %, 4.37 %, 1.80 %, 1.32 %

LIP LINE J

Alignment J

	Point no	Easting	Northing	RL
J	1	322424·163	5836832·682	193·928
J	2	322431·735	5836823·165	194·336
J	3	322424·520	5836829·080	194·012
J	4	322425·978	5836826·355	194·128
J	5	322428·306	5836824·322	194·245

	Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
J	1	2	-8·600	12·162	2·519	1·963	194·128

DATUM 193

DESIGN LIP	193.795	193.906	193.956	193.965	193.962	193.945	193.928	193.852
CHAINAGE	-5.000	0.000	3.377	5.466	6.754	10.132	13.509	18.509

IP 193.979, IP 193.945, 6.75m VC, 2.23 %, 2.17 %, -0.51 %, -0.50 %, -1.50 %

LIP LINE I

Alignment K

	Point no	Easting	Northing	RL
K	1	322440·390	5836899·173	192·571
K	2	322430·872	5836891·602	192·786
K	3	322436·788	5836898·817	192·607
K	4	322434·063	5836897·359	192·664
K	5	322432·029	5836895·031	192·728

	Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
K	1	2	-8·600	12·162	2·519	1·963	192·664

DATUM 192

DESIGN LIP	192.596	192.571	192.603	192.664	192.733	192.786	192.850
CHAINAGE	-5.000	0.000	3.377	6.754	10.132	13.509	18.509

IP 192.588, IP 192.740, 6.75m VC, 6.75m VC, -0.50 %, 0.50 %, 2.25 %, 1.36 %, 1.29 %

LIP LINE K

Alignment L

	Point no	Easting	Northing	RL
L	1	322433·542	5836915·050	192·482
L	2	322441·114	5836905·532	192·571
L	3	322433·898	5836911·448	192·506
L	4	322435·357	5836908·723	192·527
L	5	322437·684	5836906·689	192·547

	Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
L	1	2	-8·600	12·162	2·519	1·963	192·527

DATUM 192

DESIGN LIP	192.418	192.482	192.571	192.596
CHAINAGE	-5.000	0.000	13.509	18.509

1.29 %, 0.66 %, 0.50 %

LIP LINE L

Alignment G

	Point no	Easting	Northing	RL
G	1	322369·434	5836823·817	193·006
G	2	322359·916	5836816·245	193·192
G	3	322359·829	5836815·477	193·212
G	4	322360·204	5836814·311	193·247
G	5	322361·577	5836812·693	193·314
G	6	322361·809	5836811·942	193·341

	Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
G	1	2	-8·600	12·162	2·519	1·963	193·064
G	3	4	-1·600	1·225	0·122	0·092	193·229
G	5	6	1·000	0·786	0·080	0·061	193·327

DATUM 192

DESIGN LIP	193.082	193.006	193.030	193.105	193.192	193.201	193.212	193.247	193.314	193.341	193.467
CHAINAGE	-5.000	0.000	4.617	9.235	13.509	13.852	14.282	15.538	17.661	18.469	23.469

IP 193.030, IP 193.179, 5m VC, 9.23m VC, -2.53 %, -0.50 %, 0.51 %, 1.61 %, 3.52 %, 2.50 %

LIP LINE G

LIP OF KERB PROFILES

SCALE: HORIZONTAL 1:200
VERTICAL 1:20

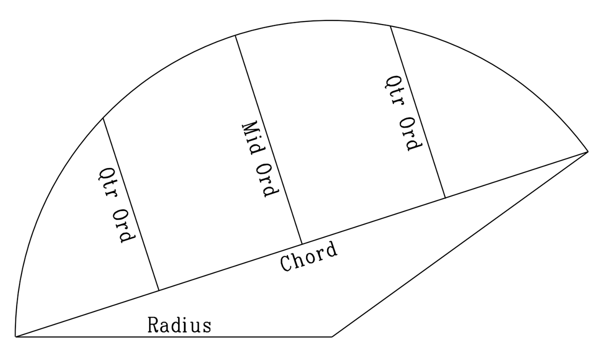
INTERSECTION DETAILS

SCALE 1:200

SCALE 1 : 200

4 2 0 4 8 16

LENGTHS ARE IN METRES



CURVE SETOUT DIAGRAM

AMENDMENTS

VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
INTERSECTION DETAILS

MUNICIPALITY WHITTLESEA

REFERENCE 8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL'17 | SHEET 5 OF 21 | P3

Plotted:01-Dec-17

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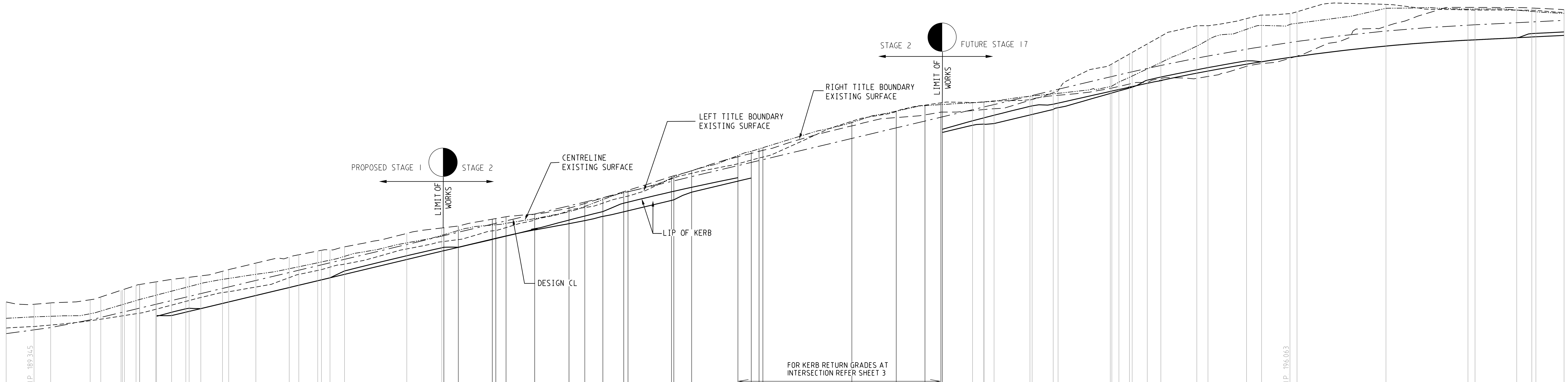


TRUE LEFT & RIGHT ARE IN THE DIRECTION OF THE INCREASING CHAINAGE

VC LENGTH: 30.00VC; 80.00VC

DESIGN GRADELINE: 0.50%; 2.38%; 0.50%

DATUM 187

ES LEFT TITLE BDY	189.46	189.50	189.53	189.63	189.66	189.73	189.74	189.74	189.78	189.80	189.80	189.88	189.89	189.98
FS LEFT TITLE BDY													190.03	190.13
LEFT LIP OF KERB													189.73	189.82
DESIGN CL	189.34	189.42	189.47	189.65	189.70	189.81	189.82	189.83	189.89	189.91	189.91	190.00	190.00	190.08
RIGHT LIP OF KERB													189.74	189.74
FS RIGHT TITLE BDY													190.16	190.08
ES RIGHT TITLE BDY	190.05	190.00	190.03	190.10	190.16	190.31	190.32	190.34	190.42	190.44	190.44	190.50	190.50	190.56
CHAINAGE CENTRE LINE	250.00	256.26	260.00	268.87	271.26	275.80	276.10	276.57	279.18	279.95	280.00	283.60	283.79	287.16

ES LEFT TITLE BDY	190.06	190.08	190.15	190.26	190.28	190.38	190.60	190.67	190.76	190.78	190.83	190.90	191.24
FS LEFT TITLE BDY	190.21	190.21	190.13	190.25	190.28	190.43	190.61	190.66	190.76	190.78	190.83	191.06	
LEFT LIP OF KERB	189.90	189.91	189.90	190.02	190.05	190.19	190.37	190.42	190.53	190.54	190.59	190.75	191.09
DESIGN CL	190.16	190.17	190.24	190.35	190.39	190.53	190.71	190.76	190.86	190.88	190.93	191.01	191.34
RIGHT LIP OF KERB	189.82	189.84	189.90	190.02	190.05	190.19	190.37	190.42	190.53	190.54	190.59	190.67	191.00
FS RIGHT TITLE BDY	190.16	190.18	190.24	190.36	190.39	190.54	190.71	190.77	190.87	190.89	190.93	191.01	191.34
ES RIGHT TITLE BDY	190.59	190.60	190.64	190.74	190.77	190.92	191.06	191.11	191.19	191.21	191.22	191.29	191.59
CHAINAGE CENTRE LINE	290.35	291.10	293.73	298.60	300.00	306.10	313.60	315.75	320.00	320.82	322.75	326.01	340.00

ES LEFT TITLE BDY	191.40	191.41	191.45	191.65	191.65	191.71	191.88	192.10	192.17	192.27	192.40	192.43	192.81
FS LEFT TITLE BDY	191.58	191.59	191.51	191.69	191.71	191.77	191.90	192.02	192.09	192.17	192.28	192.31	192.54
LEFT LIP OF KERB	191.27	191.28	191.28	191.46	191.48	191.53	191.67	191.81	191.88	191.97	192.07	192.10	192.33
DESIGN CL	191.53	191.54	191.61	191.80	191.82	191.87	192.02	192.21	192.29	192.39	192.50	192.52	192.75
RIGHT LIP OF KERB	191.19	191.20	191.27	191.45	191.47	191.53	191.68	191.89	191.98	192.08	192.27	192.29	192.52
FS RIGHT TITLE BDY	191.53	191.54	191.61	191.79	191.81	191.86	192.05	192.21	192.30	192.40	192.66	192.68	192.92
ES RIGHT TITLE BDY	191.71	191.72	191.75	191.91	191.92	191.97	192.03	192.15	192.26	192.37	192.52	192.55	192.87
CHAINAGE CENTRE LINE	347.87	348.33	351.58	359.21	360.00	362.31	368.74	376.45	380.00	384.06	388.74	389.70	399.47

ES LEFT TITLE BDY	192.83	192.94	193.15	193.23	193.28	193.29	194.11	194.31	194.47	194.52	194.52	194.53	194.54
FS LEFT TITLE BDY	192.56	192.78	193.03	193.10							194.26	194.45	194.52
LEFT LIP OF KERB	192.34	192.51	192.76	192.83							193.92	194.12	194.18
DESIGN CL	192.77	192.86	193.11	193.18	193.22	193.24	193.72	193.96	194.11	194.20	194.20	194.37	194.43
RIGHT LIP OF KERB	192.53	192.62	192.84								193.85	194.02	194.04
FS RIGHT TITLE BDY	192.93	193.01	193.19								194.25	194.41	194.40
ES RIGHT TITLE BDY	192.88	193.00	193.30	193.37	193.41	193.45	194.00	194.21	194.25	194.31	194.31	194.34	194.37
CHAINAGE CENTRE LINE	400.00	404.01	414.39	417.39	419.15	420.00	440.00	449.96	456.42	460.00	460.32	467.11	469.63

ES LEFT TITLE BDY	194.54	194.56	194.59	194.59	194.73	194.77	195.37	195.40	195.49	195.63	195.65	195.85	196.03
FS LEFT TITLE BDY	194.52	194.57	194.75	194.76	194.72	194.75	195.01	195.02	195.05	195.10	195.12	195.19	195.26
LEFT LIP OF KERB	194.18	194.24	194.44	194.45	194.49	194.51	194.78	194.78	194.82	194.87	194.88	194.96	195.02
DESIGN CL	194.43	194.48	194.67	194.68	194.80	194.82	195.10	195.11	195.15	195.20	195.22	195.29	195.36
RIGHT LIP OF KERB	194.04	194.05	194.25	194.26	194.37	194.41	194.73	194.74	194.79	194.85	194.87	195.03	195.10
FS RIGHT TITLE BDY	194.40	194.37	194.56	194.58	194.71	194.75	195.06	195.07	195.12	195.19	195.21	195.45	
ES RIGHT TITLE BDY	194.37	194.39	194.58	194.60	194.68	194.69	194.84	194.85	194.88	194.93	194.96	194.98	195.06
CHAINAGE CENTRE LINE	469.70	471.94	480.00	480.50	485.22	486.32	498.06	498.41	500.00	502.35	502.98	506.36	509.42

ES LEFT TITLE BDY	196.25	196.25	196.41	196.49	196.52	196.56	196.73	196.60	196.60	196.60	196.60	196.59	196.54
FS LEFT TITLE BDY	195.42	195.47	195.62	195.68	195.77	195.79	196.03	196.16	196.17	196.21	196.38		
LEFT LIP OF KERB	195.18	195.23	195.39	195.44	195.54	195.56	195.79	195.93	195.93	195.98	196.07	196.08	196.11
DESIGN CL	195.52	195.57	195.72	195.78	195.87	195.90	196.13	196.26	196.27	196.32	196.33	196.34	196.37
RIGHT LIP OF KERB	195.26	195.31	195.46	195.44	195.54	195.56	195.79	195.93	195.93	195.98	196.00	196.00	196.03
FS RIGHT TITLE BDY				195.78	195.88	195.90	196.13	196.27	196.27	196.32	196.34	196.34	196.37
ES RIGHT TITLE BDY	195.07	195.11	195.34	195.40	195.52	195.57	196.24	196.66	196.66	196.66	196.65	196.64	196.61
CHAINAGE CENTRE LINE	517.49	520.00	528.66	532.04	538.41	540.00	560.00	578.41	580.00	589.37	592.75	593.67	600.00

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 — 1 0.5 00 1 2 4

1:500 — 10 5 00 10 20 40

JARDIN ROAD

CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS APPROVED PURSUANT TO SECTION 15 OF THE SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017

DATE APPROVED

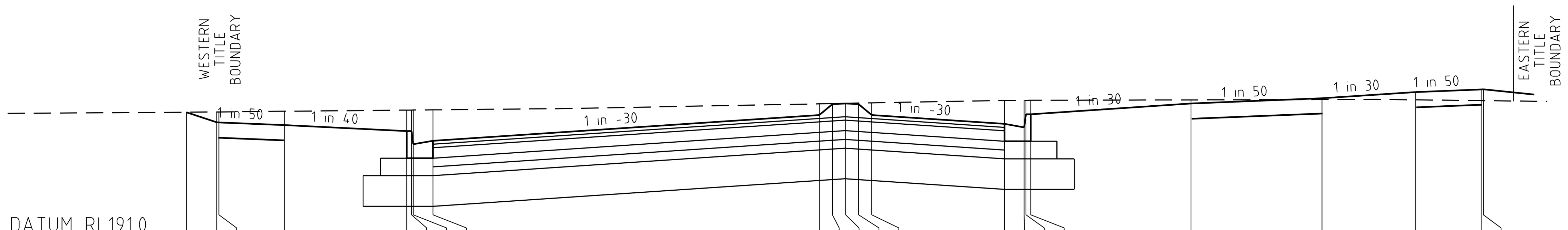
AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310

MELWAY REF. 388-C10	RATHDOWNE ESTATE STAGE 2 JARDIN ROAD	MUNICIPALITY WHITTLESEA	
SURVEY BPD		REFERENCE 8352 E/2	
DESIGN SS			
DRAWN SS			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JUL'17
SHEET 6 OF 21	P3		

Plotted:01-Dec-17

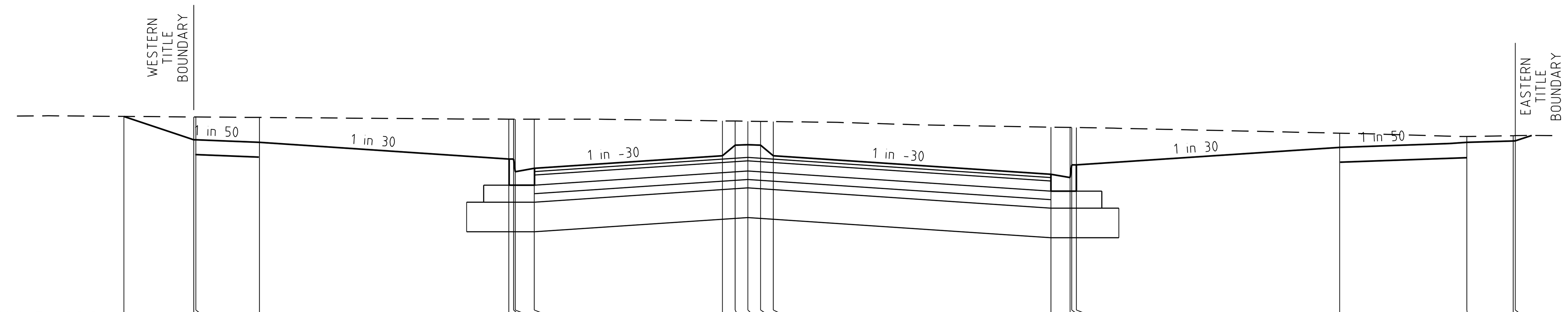
J:\MFR65\Eng\Stage 2\E02_R06_JRLS.dgn



DATUM RL191.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-15.09	192.42	192.42
-14.40	192.31	192.43
-14.35	192.31	192.43
-12.85	192.28	192.43
-10.05	192.21	192.45
-9.94	192.21	192.45
-9.90	192.06	192.45
-9.45	192.10	192.45
-0.60	192.39	192.52
-0.30	192.52	192.52
0.00	192.52	192.52
0.30	192.52	192.53
0.60	192.39	192.53
3.64	192.29	192.56
4.09	192.25	192.56
4.13	192.25	192.56
4.24	192.40	192.56
7.91	192.52	192.56
10.91	192.58	192.57
13.05	192.65	192.56
14.55	192.68	192.56
14.60	192.68	192.56

389.70



DATUM RL192.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
[illegible]	194.54	194.54
[illegible]	194.26	194.53
[illegible]	194.26	194.53
-11.52	194.23	194.53
-5.44	194.03	194.51
-5.53	194.03	194.51
-5.49	193.88	194.51
-5.04	193.92	194.51
-0.60	194.07	194.49
-0.30	194.20	194.48
0.00	194.20	194.48
0.30	194.20	194.48
0.60	194.07	194.48
7.15	193.85	194.41
7.60	193.81	194.41
7.64	193.96	194.41
7.75	193.96	194.41
13.96	194.17	194.34
16.96	194.23	194.30
18.05	194.25	194.31
18.10	194.25	194.31

460.32

CITY OF WHITTLESEA

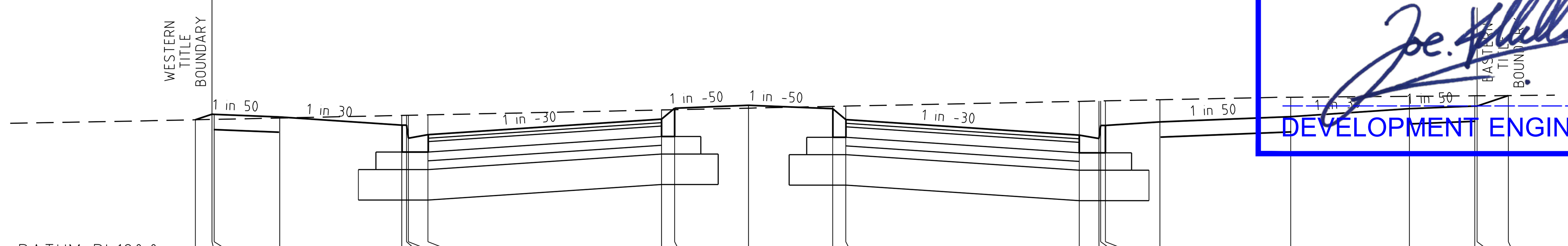
ENGINEERING PLANS & SPECIFICATIONS APPROVED PURSUANT TO SECTION 15 OF THE SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017

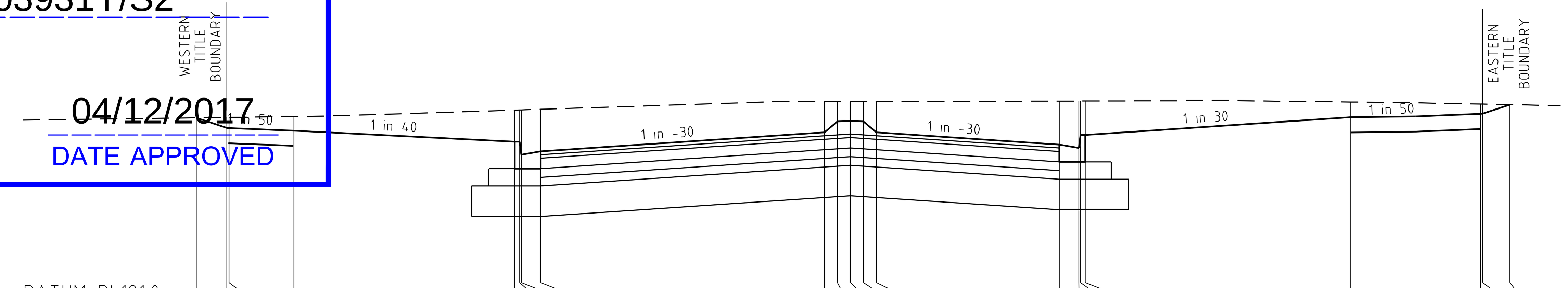
DATE APPROVED



DATUM RL190.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-12.68	191.65	191.65
-12.30	191.71	191.65
-12.25	191.71	191.65
-10.75	191.68	191.67
-7.95	191.59	191.70
-7.84	191.59	191.70
-7.80	191.44	191.70
-7.35	191.48	191.70
-2.00	191.66	191.76
-1.70	191.78	191.76
0.00	191.82	191.78
1.93	191.78	191.80
2.23	191.65	191.81
7.58	191.47	191.86
8.03	191.43	191.86
8.07	191.58	191.86
8.18	191.58	191.87
9.43	191.62	191.88
12.43	191.68	191.91
15.15	191.78	191.92
16.65	191.81	191.92
16.70	191.81	191.92
17.42	191.93	191.93

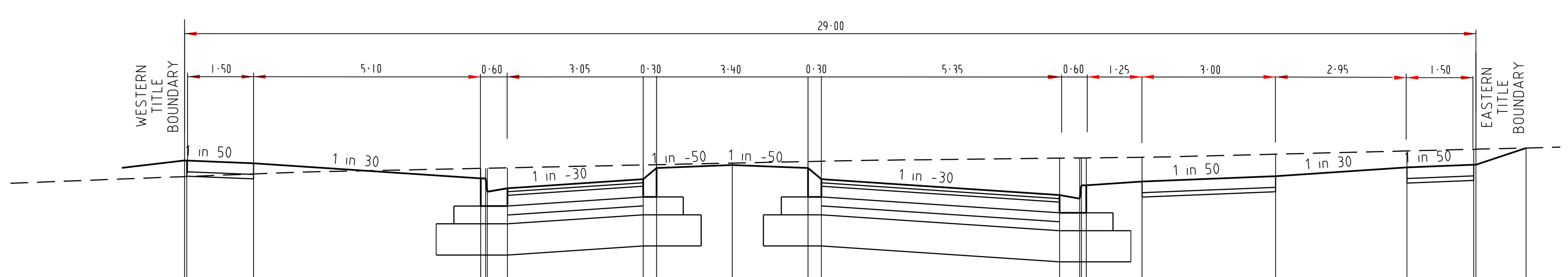
360.00



DATUM RL191.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-15.10	193.15	193.15
-14.40	193.03	193.15
-14.35	193.03	193.15
-12.85	193.00	193.16
-7.75	192.87	193.23
-7.64	192.87	193.24
-7.60	192.72	193.24
-7.15	192.76	193.24
-0.60	192.98	193.34
-0.30	193.10	193.34
0.00	193.11	193.34
0.30	193.10	193.34
0.60	192.98	193.34
4.82	192.84	193.34
5.27	192.80	193.34
5.31	192.95	193.34
5.42	192.95	193.34
11.55	193.15	193.33
14.55	193.19	193.30
14.60	193.19	193.30
15.23	193.30	193.30

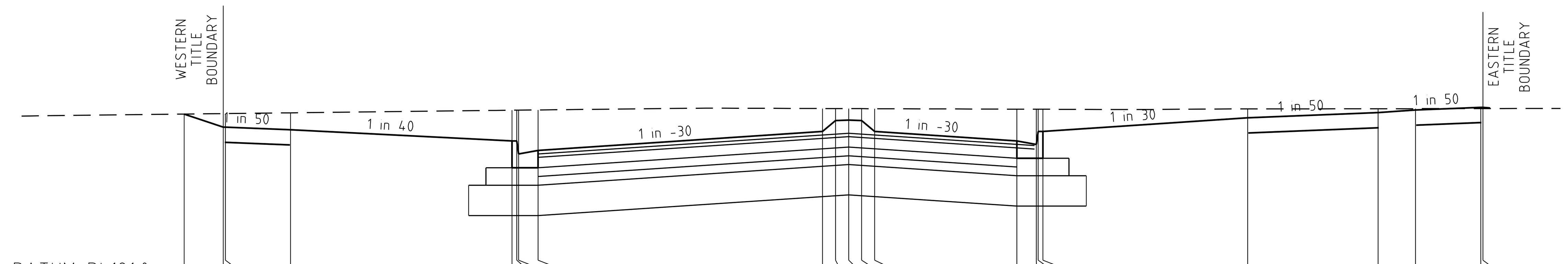
414.39



DATUM RL190.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-12.30	191.59	191.41
-12.25	191.59	191.41
-10.75	191.56	191.44
-5.65	191.39	191.50
-5.54	191.39	191.50
-5.50	191.24	191.50
-5.05	191.28	191.51
-2.00	191.38	191.54
-1.70	191.50	191.54
0.00	191.54	191.56
1.70	191.50	191.58
2.00	191.38	191.58
7.35	191.20	191.61
7.80	191.16	191.62
7.84	191.31	191.62
7.95	191.31	191.62
9.20	191.35	191.62
12.20	191.41	191.66
15.15	191.51	191.69
16.65	191.54	191.71
16.70	191.54	191.71
17.82	191.73	191.73

348.33



DATUM RL191.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-15.30	192.93	192.93
-14.40	192.78	192.94
-14.35	192.78	192.94
-12.85	192.75	192.95
-7.75	192.62	192.98
-7.64	192.62	192.98
-7.60	192.47	192.98
-7.15	192.51	192.98
-0.60	192.73	193.00
-0.30	192.86	193.00
0.00	192.86	192.99
0.30	192.86	192.99
0.60	192.73	192.99
3.87	192.62	192.99
4.32	192.58	192.99
4.36	192.73	192.99
4.47	192.73	192.99
9.19	192.89	192.99
12.19	192.95	192.99
13.05	192.98	192.99
14.55	193.01	193.00
14.60	193.01	193.00

404.01

JARDIN ROAD

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8

CRUSHED ROCK BACKFILL

AMENDMENTS VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
JARDIN ROAD

MUNICIPALITY WHITTLESEA

REFERENCE 8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL'17 | SHEET 7 OF 21 | P3

J:\HF165\Eng\Stage 2\E02_R07_JRXS.dgn
Plotted:01-Dec-17

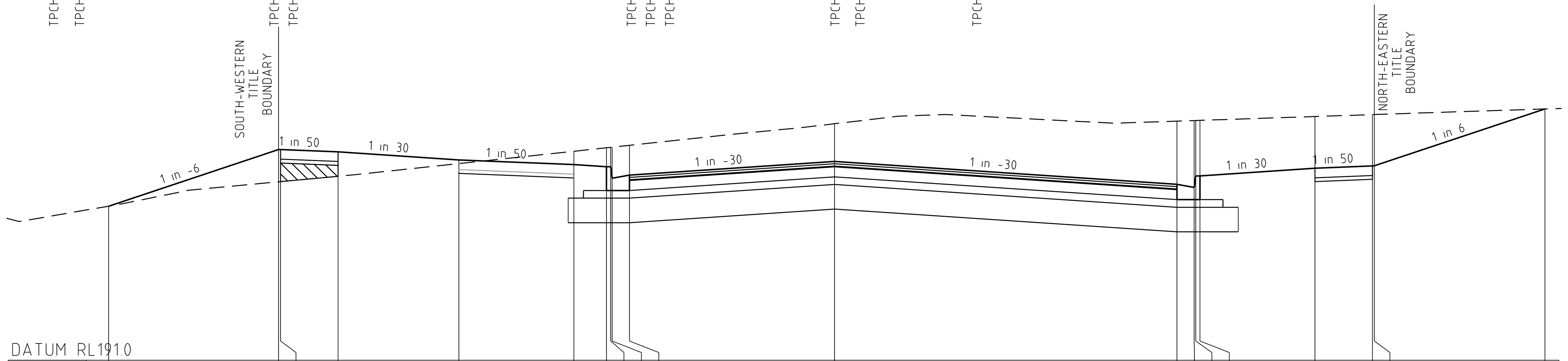
CHAINAGE CENTRE LINE	ES LEFT TITLE BDY	FS LEFT TITLE BDY	LEFT LIP OF KERB	DESIGN CL	RIGHT LIP OF KERB	FS RIGHT TITLE BDY	ES RIGHT TITLE BDY	
0.00				193.59				
5.50				193.41				
13.69	193.27	193.58	193.24	193.45			194.26	
19.96	193.34	193.70	193.31	193.48	193.26	193.58	194.27	TPCH
34.29	193.39	193.85	193.44	193.55	193.33	193.65	194.23	TPCH
34.80	193.39	193.85	193.45	193.55	193.33	193.65	194.22	
38.12	193.36	193.88	193.47	193.57	193.28	193.53	194.20	TPCH
39.41	193.35	193.87	193.46	193.58	193.28	193.52	194.19	TPCH
40.00	193.35	193.85	193.46	193.58	193.28	193.52	194.19	
42.62	193.33	193.75	193.41	193.59	193.29	193.53	194.15	TPCH
60.00	193.08	193.83	193.50	193.68	193.38	193.62	193.88	
80.00	193.03	193.93	193.60	193.78	193.50	193.74	193.92	
100.00	193.33	194.03	193.70	193.88	193.63	193.87	194.08	
100.89	193.32	194.04	193.70	193.88	193.63	193.88	194.10	TPCH
120.00	194.48			193.98	193.77	194.01	194.46	
128.21	194.77			194.02	193.83	194.07	194.66	
128.71	194.83			194.02	193.83	194.08	194.68	TPCH
135.69	195.22	194.21	193.88	194.06	193.88	194.12	194.94	TPCH
140.00	195.24	194.23	193.90	194.08	193.90	194.14	195.12	
160.00	194.39	194.33	194.00	194.18	194.00	194.24	195.20	
173.76	194.05	194.40	194.07	194.25	194.07	194.31	194.72	TPCH
177.14	194.06	194.42	194.09	194.26			194.70	TPCH
180.00	194.08	194.43	194.10	194.28			194.68	
184.55	194.07	194.46	194.12	194.30			194.66	
188.94	194.10	194.47	194.14	194.32			194.65	
189.70	194.10	194.49	194.15	194.32			194.65	
191.19	194.09	194.60	194.21	194.32			194.64	
192.33	194.08	194.63	194.22	194.32			194.61	
194.24	194.05	194.63	194.22	194.33			194.56	
200.00	193.97	194.63	194.22	194.32			194.48	TPCH
200.74	193.96	194.62	194.21	194.31			194.48	TPCH
201.87	193.95	194.59	194.19	194.31			194.48	
203.36	193.93	194.48	194.14	194.30			194.47	
204.12	193.94	194.46	194.12	194.30	194.12	194.36	194.47	
212.59	193.97	194.39	194.06	194.24	194.06	194.30	194.47	
214.55	193.95	194.37	194.04	194.22	194.04	194.28	194.44	
220.00	193.86	194.31	193.98	194.15	193.98	194.22	194.40	
225.09	193.71	194.24	193.90	194.08	193.90	194.14	194.37	
240.00	193.24	193.94	193.61	193.79	193.61	193.85	193.93	
241.09	193.21	193.92	193.58	193.76	193.58	193.82	193.90	
244.55	193.18	193.83	193.49	193.67	193.49	193.73	193.77	
249.09	193.11	193.71	193.38	193.55	193.38	193.62	193.66	TPCH
250.43	193.09	193.68	193.34	193.52			193.62	TPCH
253.67	193.03	193.59	193.26	193.44			193.55	TPCH
260.00	192.92	193.43	193.09	193.27			193.33	
266.34	192.78	193.26	192.93	193.11			193.11	
267.17	192.75	193.26	192.91	193.08			193.11	
268.89	192.69	193.32	192.92	193.04			193.10	
270.04	192.66	193.32	192.91	193.01			193.09	
275.66	192.45	193.17	192.76	192.86			193.02	TPCH
278.90	192.35	193.09	192.68	192.78	192.60	192.84	192.88	TPCH
279.61	192.33	193.04	192.65	192.76	192.58	192.82	192.85	
280.00	192.32	193.01	192.62	192.75	192.57	192.81	192.84	
281.33	192.28	192.89	192.55	192.72	192.54	192.78	192.78	
294.16	191.87	192.54	192.21	192.38	192.21	192.45	192.47	TPCH
300.00	191.65	192.39	192.05	192.23	192.05	192.30	192.32	
307.25	191.42	192.20	191.87	192.04			192.04	
307.51	191.42	192.19	191.86	192.04			192.03	
318.63	191.29	191.91	191.57	191.75	191.57	191.81	191.81	
320.00	191.27	191.87	191.54	191.71	191.54	191.78	191.79	
322.45	191.24	191.81	191.47	191.65	191.47	191.72	191.75	
322.94	191.23	191.80	191.46	191.64	191.46	191.70	191.75	
329.79	191.16	191.64	191.31	191.49	191.31	191.55	191.65	
338.19	191.11	191.48	191.14	191.32	191.14	191.38	191.53	
340.00	191.10	191.45	191.11	191.29	191.11	191.35	191.50	
342.52	191.09	191.40	191.07	191.25	191.07	191.31	191.47	
343.63	191.09	191.39	191.05	191.23	191.05	191.29	191.45	
347.26	191.08	191.33	191.00	191.18	191.00	191.24	191.44	
351.37	191.05	191.28	190.95	191.12	190.95	191.19	191.45	
354.53	191.03	191.24	190.91	191.09	190.91	191.15	191.46	
360.00	190.98	191.19	190.86	191.03	190.86	191.10	191.46	
367.37	190.93	191.14	190.80	190.98	190.80	191.04	191.40	
368.63	190.93	191.13	190.80	190.97	190.80	191.04	191.39	

NORTH STREET WEST

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

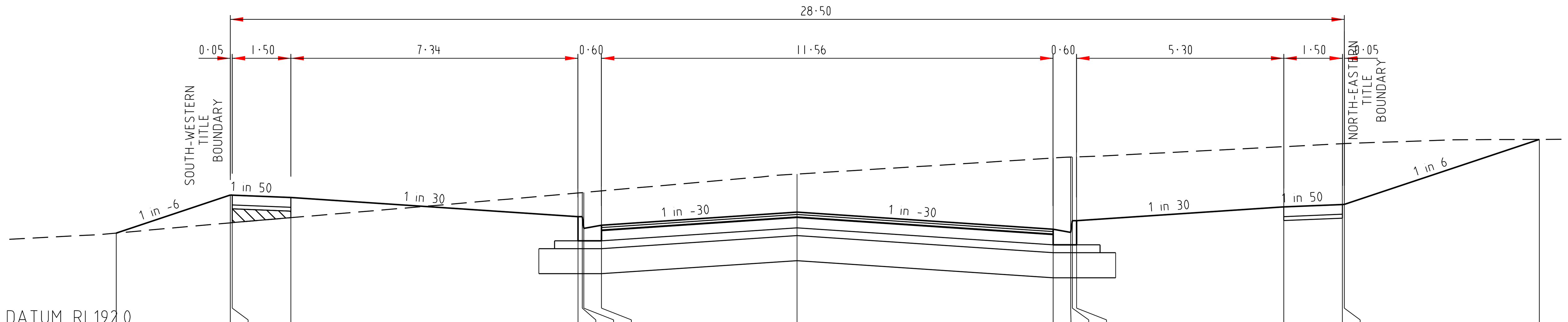
1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40



DATUM RL191.0

DESIGN SURFACE	193.01	193.75	193.75	193.72	193.61	193.55	193.52	193.52	193.37	193.41	193.59	193.29	193.25	193.40	193.40	193.50	193.53	193.53	194.28
EXISTING SURFACE	193.01	193.33	193.33	193.40	193.56	193.72	193.77	193.78	193.78	193.80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	194.28
OFFSET	-18.93	-14.50	-14.45	-12.95	-9.80	-6.80	-5.95	-5.84	-5.80	-5.35	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.53

42.62



DATUM RL192.0

DESIGN SURFACE	193.21	193.70	193.70	193.67	193.42	193.42	193.27	193.27	193.31	193.48	193.26	193.22	193.37	193.37	193.55	193.58	193.58	194.41
EXISTING SURFACE	193.21	193.34	193.34	193.41	193.72	193.73	193.74	193.75	193.75	193.97	194.17	194.18	194.18	194.19	194.32	194.35	194.36	194.41
OFFSET	-17.42	-14.50	-14.45	-12.95	-5.61	-5.50	-5.46	[illegible]	-5.01	0.00	6.55	7.00	7.04	7.15	12.45	13.95	14.00	18.99

19.96

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8

CRUSHED ROCK BACKFILL

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER
04/12/2017
DATE APPROVED

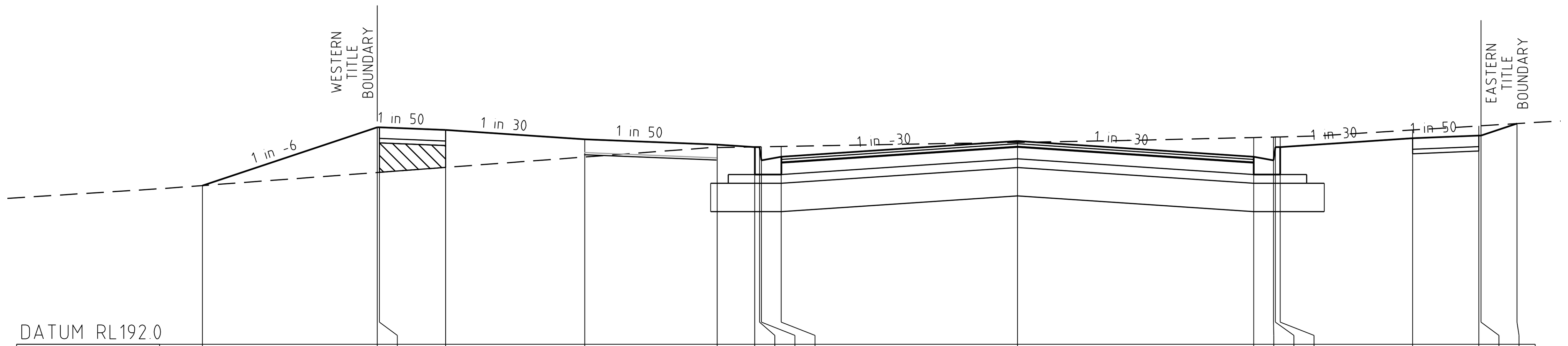
breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

AMENDMENTS		
VER.	DATE	REMARKS

MELWAY REF. 388-C10	RATHDOWNE ESTATE STAGE 2 NORTH STREET WEST		MUNICIPALITY WHITTLESEA
SURVEY BPD			
DESIGN SS			REFERENCE 8352 E/2
DRAWN SS			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JUL'17	SHEET 8 OF 21 P3

Plotted: 01-Dec-17

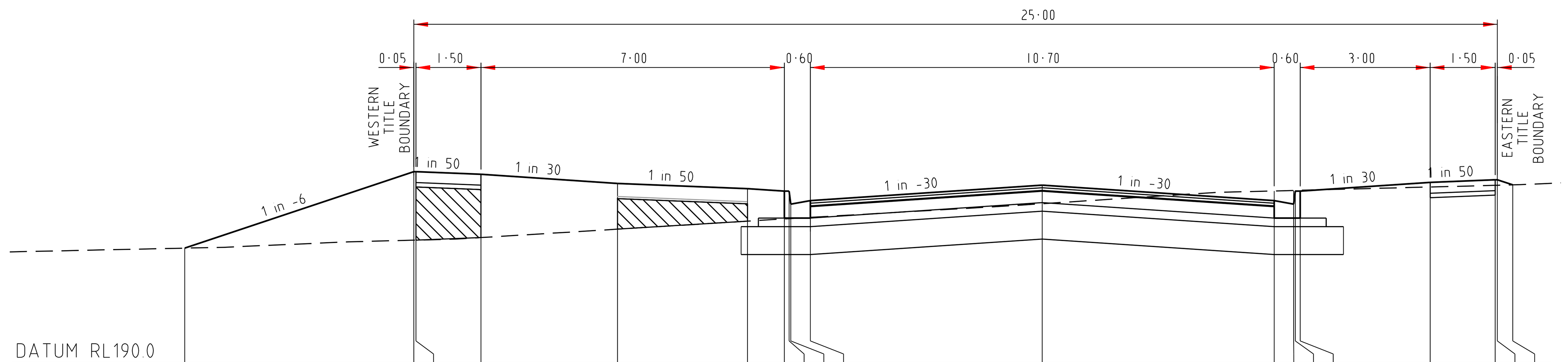
J:\49765\Eng\Stage 2\E02_R08_NSW_SXS.dgn



DATUM RL192.0

DESIGN SURFACE	193.80	194.46	194.46	194.43	194.32	194.26	194.23	194.23	194.08	194.12	194.30	194.12	194.08	194.23	194.23	194.33	194.36	194.36	194.50
EXISTING SURFACE	193.80	193.94	193.95	194.00	194.12	194.23	194.23	194.24	194.24	194.24	194.29	194.34	194.35	194.35	194.35	194.43	194.47	194.47	194.50
OFFSET	-18.46	-14.50	-14.45	-12.95	-9.80	-6.80	-5.95	-5.84	-5.80	-5.35	0.00	5.35	5.80	5.84	5.95	8.95	10.45	10.50	[illegible]

204.12



DATUM RL190.0

DESIGN SURFACE	191.32	192.20	192.20	192.17	192.06	192.00	191.98	191.98	191.83	191.87	192.04	191.87	191.83	191.98	191.98	192.08	192.11	192.11	192.05
EXISTING SURFACE	191.32	191.41	191.41	191.44	191.54	191.63	191.66	191.66	191.66	191.67	191.83	191.98	191.98	191.98	191.99	192.02	192.04	192.04	192.05
OFFSET	[illegible]	-14.50	-14.45	-12.95	-9.80	-6.80	-5.95	-5.84	-5.80	-5.35	0.00	5.35	5.80	5.84	5.95	8.95	10.45	10.50	10.86

307.25

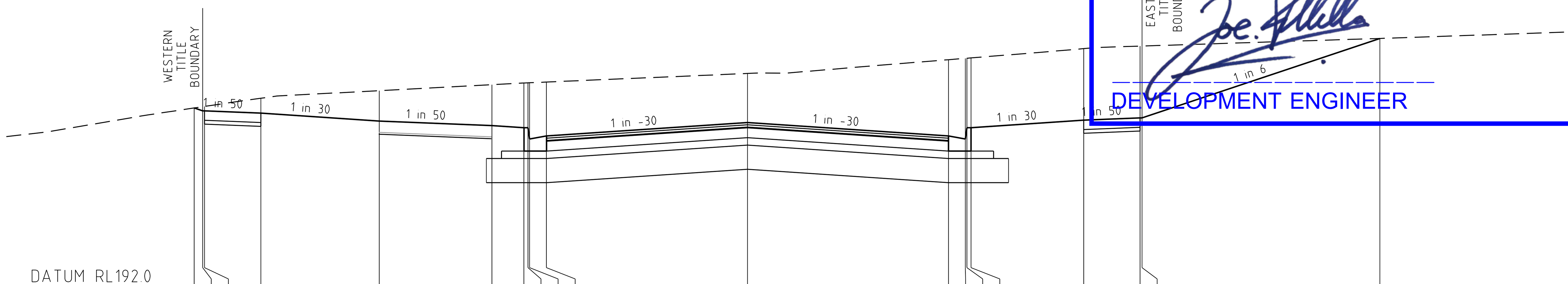
CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

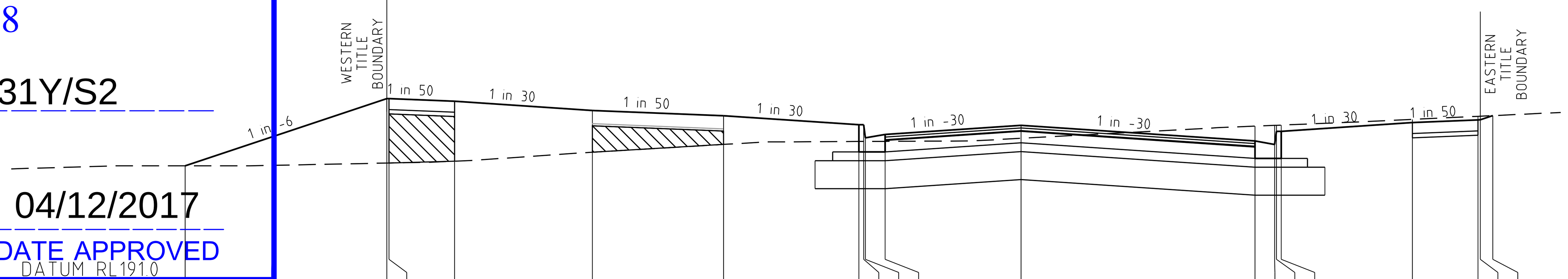
04/12/2017
DATE APPROVED



DATUM RL192.0

DESIGN SURFACE	194.37	194.33	194.33	194.30	194.20	194.14	194.11	194.11	193.96	194.00	194.18	194.00	193.96	194.11	194.11	194.21	194.24	194.24	195.30
EXISTING SURFACE	194.37	194.39	194.39	194.50	194.60	194.68	194.70	194.71	194.71	194.72	194.83	195.01	195.03	195.03	195.04	195.16	195.19	195.20	195.30
OFFSET	-14.73	-14.50	-14.45	-12.95	-9.80	-6.80	-5.95	-5.84	-5.80	-5.35	0.00	5.35	5.80	5.84	5.95	8.95	10.45	10.50	16.83

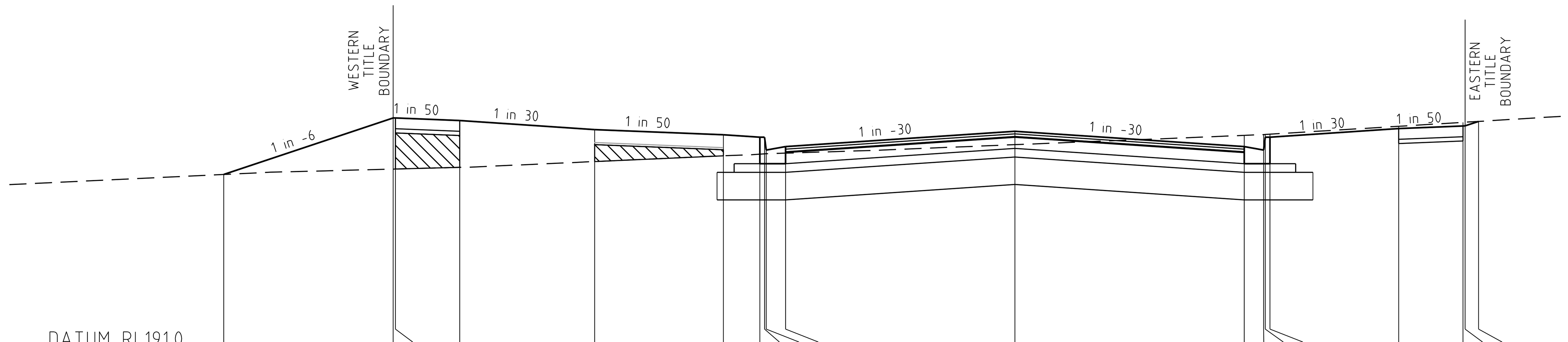
160.00



DATUM RL191.0

DESIGN SURFACE	192.32	193.09	193.08	193.05	192.95	192.89	192.79	192.79	192.64	192.68	192.78	192.60	192.56	192.71	192.71	192.81	192.84	192.84	192.89
EXISTING SURFACE	192.32	192.35	192.35	192.37	192.47	192.56	192.60	192.60	192.60	192.60	192.63	192.77	192.78	192.78	192.78	192.85	192.88	192.88	192.89
OFFSET	-19.11	-14.50	-14.45	-12.95	-9.80	-6.80	-3.71	-3.60	-3.56	-3.11	0.00	5.35	5.80	5.84	5.95	8.95	10.45	10.50	10.79

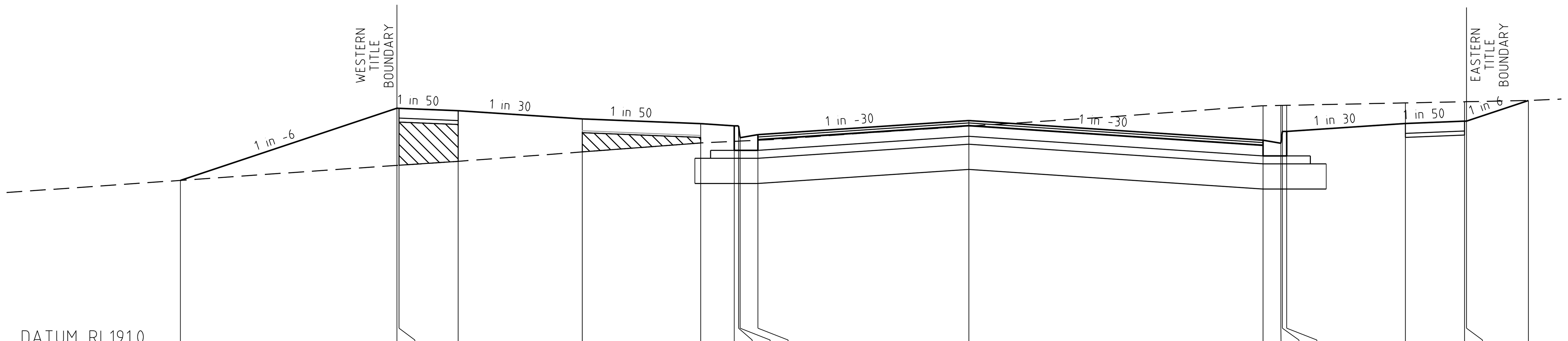
278.90



DATUM RL191.0

DESIGN SURFACE	193.05	193.71	193.71	193.68	193.57	193.51	193.49	193.49	193.34	193.38	193.55	193.38	193.34	193.49	193.49	193.59	193.62	193.62	193.67
EXISTING SURFACE	193.05	193.11	193.11	193.13	193.20	193.27	193.29	193.29	193.29	193.30	193.40	193.51	193.52	193.52	193.52	193.61	193.66	193.66	193.67
OFFSET	-18.45	-14.50	-14.45	-12.95	-9.80	-6.80	-5.95	-5.84	-5.80	-5.35	0.00	5.35	5.80	5.84	5.95	8.95	10.45	10.50	10.81

249.09



DATUM RL191.0

DESIGN SURFACE	193.12	194.04	194.04	194.01	193.90	193.84	193.81	193.81	193.66	193.70	193.88	193.63	193.59	193.74	193.74	193.84	193.87	193.88	194.14
EXISTING SURFACE	193.12	193.31	193.31	193.37	193.48	193.60	193.62	193.62	193.62	193.63	193.81	194.07	194.07	194.07	194.08	194.11	194.12	194.12	194.14
OFFSET	-19.99	-14.50	-14.45	-12.95	-9.80	-6.80	-5.95	-5.84	-5.80	-5.35	0.00	7.46	7.91	7.95	8.06	11.07	12.57	12.62	14.19

100.89

NORTH STREET WEST

CRUSHED ROCK BACKFILL

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8

AMENDMENTS

VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers

1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
NORTH STREET WEST

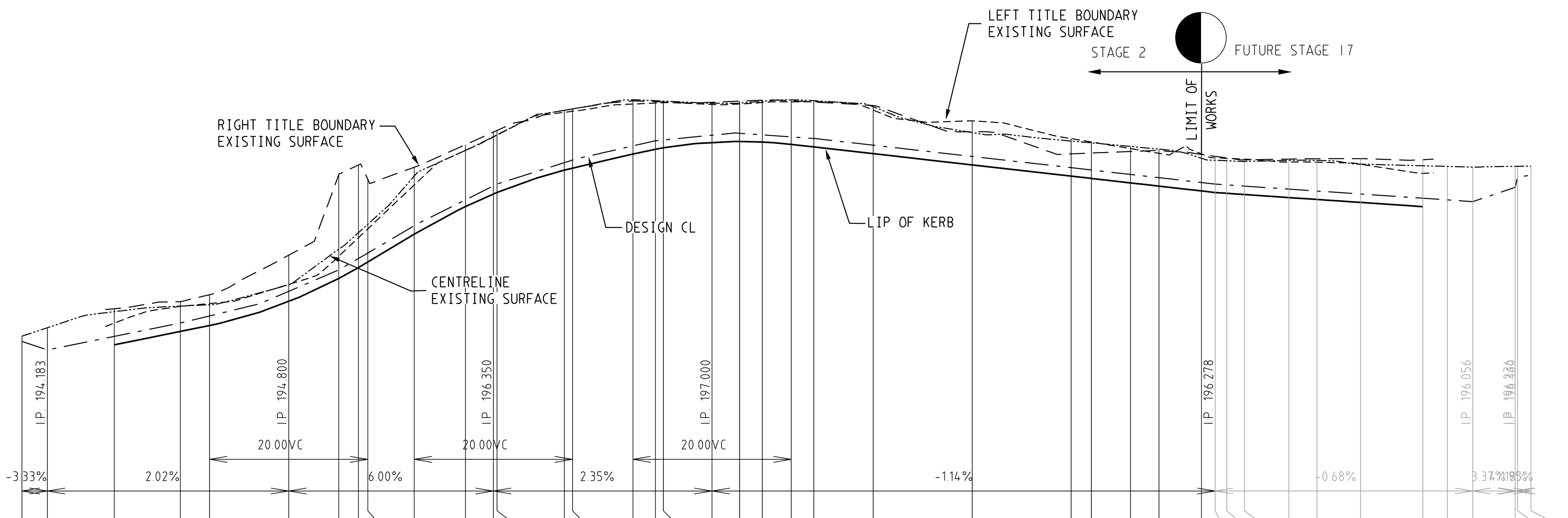
MUNICIPALITY WHITTLESEA

REFERENCE 8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL'17 | SHEET 9 OF 21 | P3

Plotted:01-Dec-17

J:\H9365\Eng\Stage 2\E02_R09_NSWXS.dgn



TRUE LEFT & RIGHT ARE IN THE DIRECTION OF THE INCREASING CHAINAGE

VC LENGTH

DESIGN GRADELINE

DATUM 192

CHAINAGE CENTRE LINE	ES LEFT TITLE BDY	FS LEFT TITLE BDY	LEFT LIP OF KERB	DESIGN CL	RIGHT LIP OF KERB	FS RIGHT TITLE BDY	ES RIGHT TITLE BDY
0.00				194.29			
3.20				194.18			
11.65 (TPCH)	194.52	194.48	194.25	194.35	194.25	194.47	194.70
20.00	194.73	194.65	194.42	194.52	194.42	194.64	194.79
23.68	194.77	194.73	194.49	194.60	194.49	194.72	194.88
33.68	195.01	195.03	194.80	194.90	194.80	195.02	195.38
40.00	195.37	195.32	195.09	195.19	195.09	195.31	196.39
42.50	195.60	195.46	195.22	195.33	195.22	195.45	196.52
43.68	195.71	195.53	195.29	195.40	195.29	195.52	196.34
49.53	196.27	195.88	195.64	195.75	195.64	195.87	196.49
56.00	196.70	196.23	195.99	196.10	195.99	196.22	196.78
59.53	196.87	196.39	196.15	196.26	196.15	196.38	196.93
60.00	196.90	196.41	196.17	196.28	196.17	196.40	196.96
68.50	197.18	196.69	196.45	196.56	196.45	196.68	197.21
69.53	197.20	196.71	196.48	196.59	196.48	196.70	197.23
77.15	197.29	196.89	196.66	196.76	196.66	196.88	197.33
80.00	197.30	196.95	196.72	196.82	196.72	196.94	197.32
81.00	197.31	196.97	196.74	196.84	196.74	196.96	197.31
87.15	197.28	197.04	196.80	196.91	196.80	197.03	197.31
90.64	197.29	197.05	196.82	196.92	196.82	197.04	197.33
93.50	197.31	197.04	196.81	196.92	196.81	197.03	197.34
97.15	197.32	197.01	196.78	196.89	196.78	197.00	197.33
100.00	197.32	196.98	196.75	196.85	196.75	196.97	197.31
107.50	197.21	196.90	196.66	196.77	196.66	196.89	197.27
120.00	197.08	196.75	196.52	196.63	196.52	196.74	196.94
132.50	196.85	196.61	196.38	196.48	196.38	196.60	196.66
135.06 (TPCH)	196.81	196.58	196.35	196.46	196.35	196.57	196.67
140.00	196.73	196.53	196.29	196.40	196.29	196.52	196.69
143.60	196.67	196.49	196.25	196.36	196.25	196.48	196.70
148.95	196.66	196.43	196.19	196.30	196.19	196.42	196.65
150.69	196.61	196.41	196.17	196.28	196.17	196.40	196.63
152.15	196.60	196.40	196.16	196.27	196.16	196.39	196.61
154.39	196.59	196.38	196.15	196.25	196.15	196.37	196.58
160.00	196.56	196.34	196.11	196.21	196.11	196.33	196.59
163.55	196.55	196.32	196.08	196.19	196.08	196.31	196.60
169.05	196.53	196.28	196.05	196.15	196.05	196.27	196.60
176.92	196.41	196.23	195.99	196.10	195.99	196.22	196.59
180.00				196.08			
183.22				196.06			
188.57				196.24			
188.87				196.36			
190.57				196.39			

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40

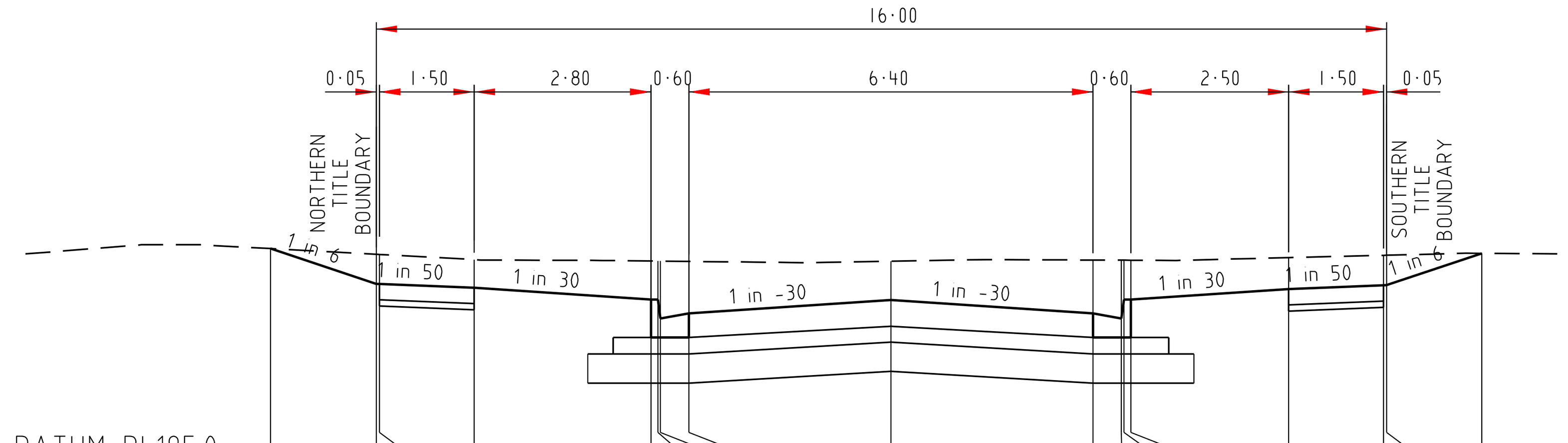
MEADOW LANE

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

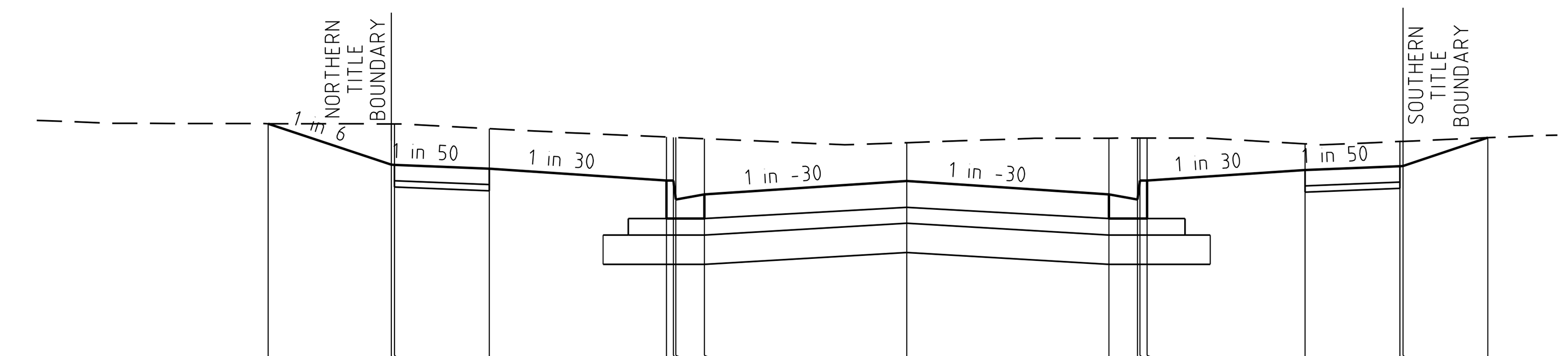
04/12/2017
DATE APPROVED



DATUM RL195.0

DESIGN SURFACE	196.70	196.43	196.42	196.39	196.30	196.30	196.15	196.19	196.30	196.19	196.15	196.30	196.30	196.38	196.41	196.42	196.67
EXISTING SURFACE	196.70	196.66	196.66	196.62	196.61	196.61	196.61	196.60	196.60	196.61	196.61	196.61	196.61	196.63	196.65	196.65	196.67
OFFSET	-9.82	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	9.36

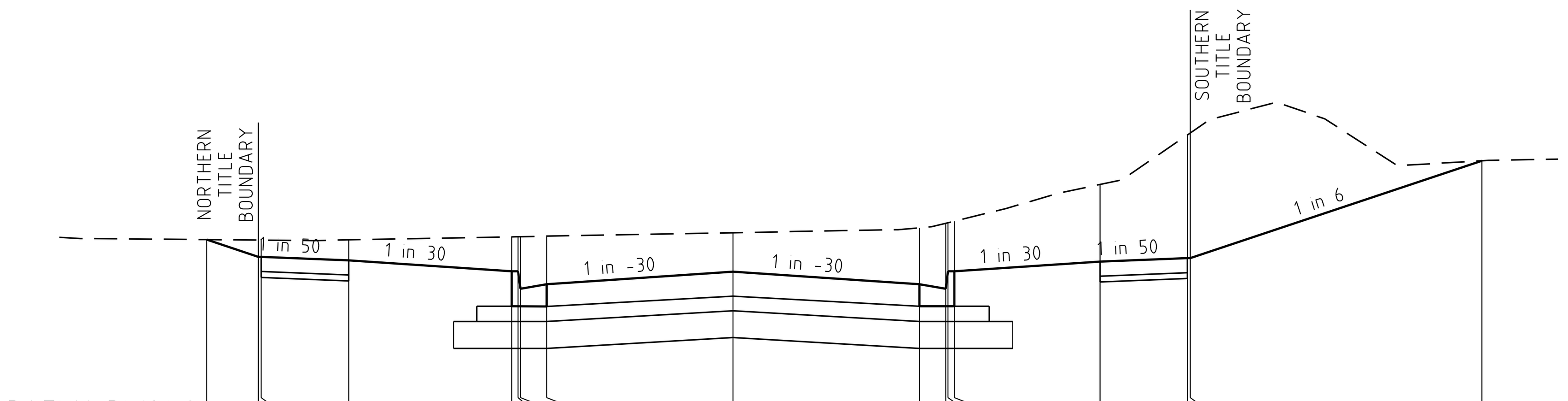
148.95



DATUM RL195.0

DESIGN SURFACE	197.08	196.75	196.75	196.72	196.63	196.63	196.48	196.52	196.63	196.52	196.48	196.63	196.63	196.71	196.74	196.74	196.97
EXISTING SURFACE	197.08	197.08	197.08	197.04	196.97	196.97	196.97	196.96	196.93	196.96	196.96	196.96	196.96	196.92	196.94	196.94	196.97
OFFSET	-10.10	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	9.19

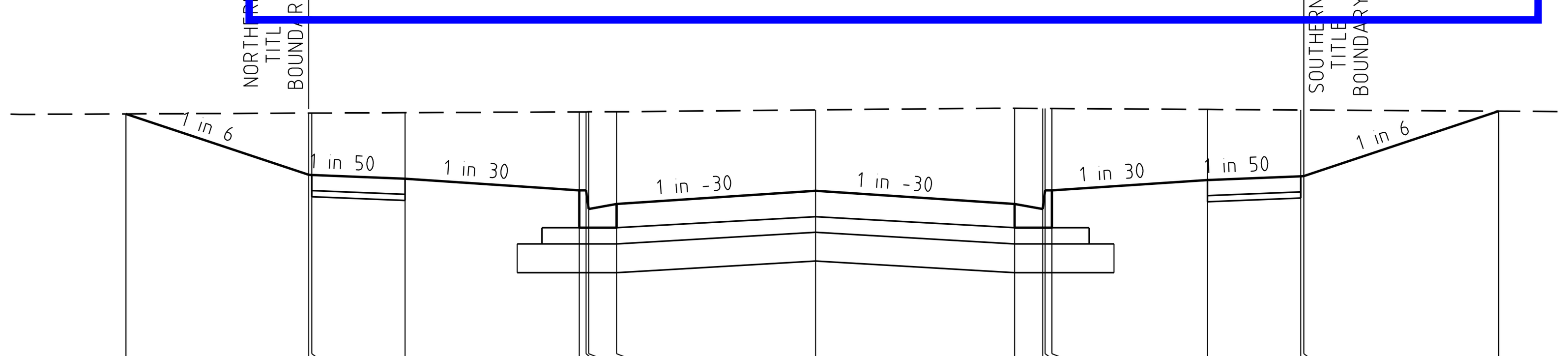
120.00



DATUM RL194.0

DESIGN SURFACE	195.61	195.46	195.46	195.43	195.33	195.33	195.18	195.22	195.33	195.22	195.18	195.33	195.33	195.42	195.45	195.45	196.28
EXISTING SURFACE	195.61	195.60	195.60	195.60	195.63	195.63	195.63	195.63	195.66	195.71	195.74	195.75	195.76	196.08	196.50	196.52	196.28
OFFSET	-9.04	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	12.86

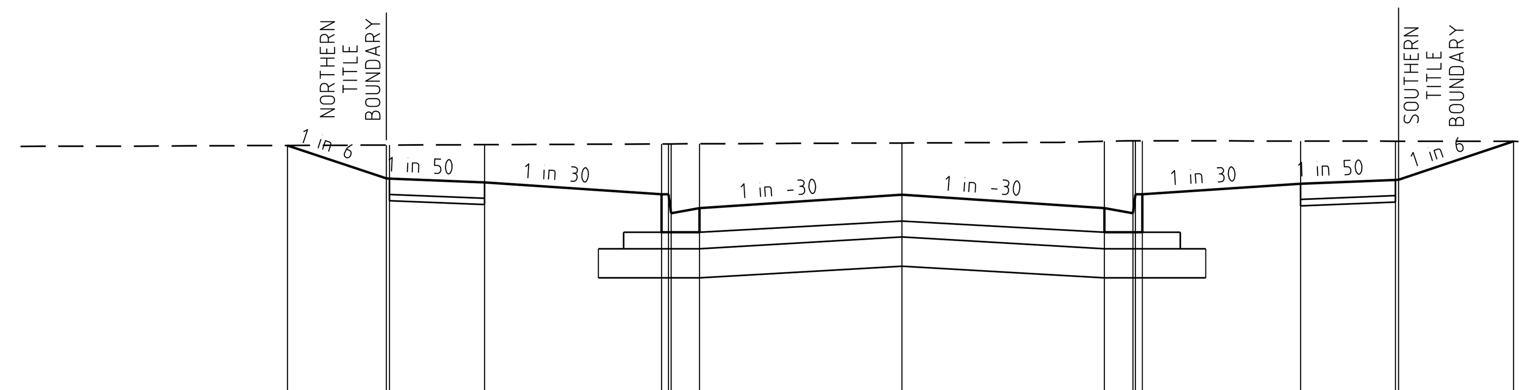
42.50



DATUM RL195.0

DESIGN SURFACE	197.18	196.69	196.69	196.66	196.56	196.56	196.41	196.45	196.56	196.45	196.41	196.56	196.56	196.65	196.68	196.68	197.20
EXISTING SURFACE	197.18	197.18	197.18	197.19	197.19	197.19	197.19	197.20	197.21	197.22	197.22	197.22	197.22	197.21	197.21	197.21	197.20
OFFSET	-11.09	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	10.98

68.50

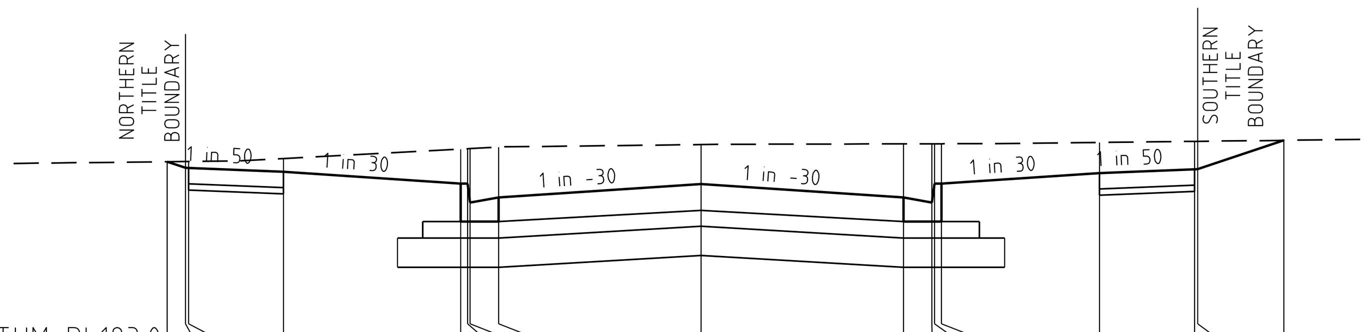


DATUM RL195.0

DESIGN SURFACE	197.30	197.04	197.04	197.01	196.92	196.92	196.77	196.81	196.92	196.81	196.77	196.92	196.92	197.00	197.03	197.03	197.34
EXISTING SURFACE	197.30	197.31	197.31	197.31	197.32	197.32	197.32	197.32	197.32	197.34	197.34	197.34	197.34	197.34	197.34	197.34	197.34
OFFSET	-9.71	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	9.67

93.50

MEADOW LANE



DATUM RL193.0

DESIGN SURFACE	194.53	194.48	194.48	194.45	194.36	194.36	194.21	194.25	194.35	194.25	194.21	194.36	194.36	194.44	194.47	194.47	194.70
EXISTING SURFACE	194.53	194.53	194.53	194.55	194.63	194.63	194.63	194.65	194.67	194.67	194.67	194.67	194.67	194.68	194.69	194.69	194.70
OFFSET	-8.44	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	9.21

11.65

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8

CRUSHED ROCK BACKFILL

AMENDMENTS

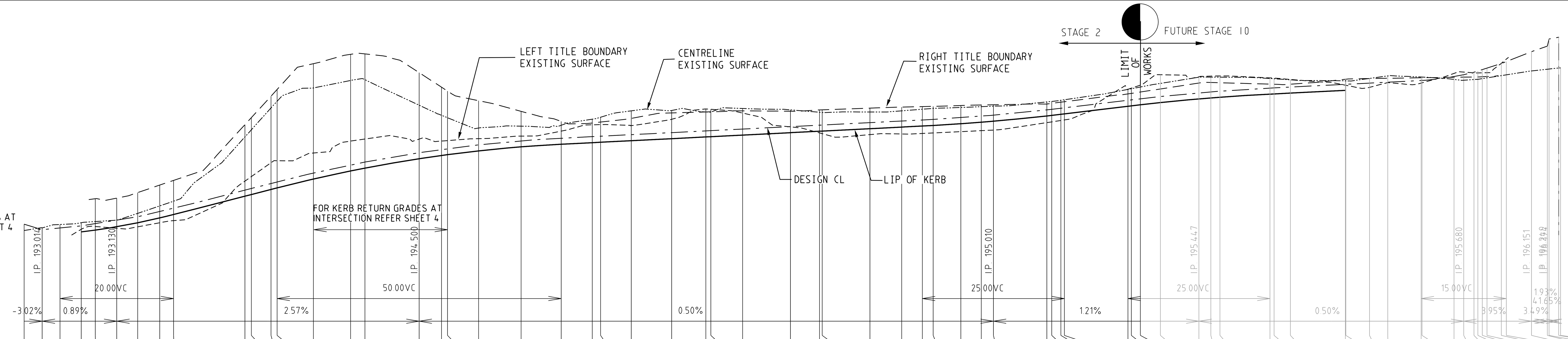
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 388-C10	RATHDOWNE ESTATE STAGE 2 MEADOW LANE		MUNICIPALITY WHITTLESEA
SURVEY BPD			REFERENCE 8352 E/2
DESIGN SS			
DRAWN SS			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JUL'17
SHEET 10 OF 21	P3		

Plotted:01-Dec-17

J:\H9365\Eng\Stage 2\E02_R10_MLLSXS .dgn



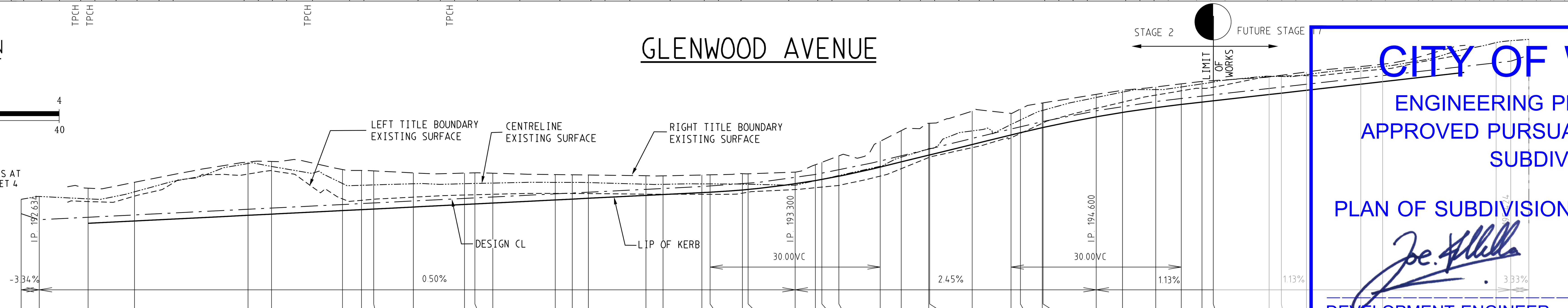
CHAINAGE CENTRE LINE	ES LEFT TITLE BDY	FS LEFT TITLE BDY	LEFT LIP OF KERB	DESIGN CL	RIGHT LIP OF KERB	FS RIGHT TITLE BDY	ES RIGHT TITLE BDY	
0.00				193.11				
3.19				193.01				
6.32				193.04				
10.07	193.02	193.28	192.97	193.08				TPCH
12.54	193.07	193.31	193.01	193.11			193.56	TPCH
16.32	193.04	193.37	193.07	193.17	193.07	193.34	193.57	
20.00	193.06	193.44	193.14	193.24	193.14	193.41	193.67	
23.87	193.14	193.52	193.22	193.33	193.22	193.49	193.80	
26.32	193.17	193.58	193.28	193.39	193.28	193.55	193.88	
38.87	193.87	193.91	193.60	193.71	193.60	193.88	194.86	
40.00	193.95	193.93	193.63	193.74	193.63	193.90	194.99	
43.47	194.19	194.02	193.72	193.83	193.72	193.99	195.37	
44.53	194.23	194.05	193.75	193.86	193.75	194.02	195.48	
50.92	194.36		193.91	194.01	193.91	194.18	195.94	TPCH
57.47	194.58		194.05	194.15	194.05	194.32	196.10	
60.00	194.61		194.10	194.21	194.10	194.37	196.11	
69.53	194.61		194.26	194.37	194.26	194.53	195.78	
73.47	194.58		194.32	194.43	194.32	194.59	195.53	
74.52	194.58		194.34	194.44	194.34	194.61	195.46	TPCH
80.00	194.62	194.70	194.40	194.51	194.40	194.67	195.29	
87.47	194.66	194.77	194.47	194.58	194.47	194.74	195.10	
94.53	194.75	194.82	194.52	194.63	194.52	194.79	194.92	
100.00	194.86	194.85	194.55	194.65	194.55	194.82	194.89	
101.47	194.87	194.86	194.55	194.66	194.55	194.83	194.91	
106.87	194.85	194.88	194.58	194.69	194.58	194.85	194.98	
113.97	194.96	194.92	194.62	194.72	194.62	194.89	195.07	
120.00	195.14	194.95	194.65	194.75	194.65	194.92	195.09	
120.87	195.13	194.95	194.65	194.76	194.65	194.92	195.09	
126.47	195.07	194.98	194.68	194.79	194.68	194.95	195.11	
134.87	194.83	195.02	194.72	194.83	194.72	194.99	195.10	
140.00	194.72	195.05	194.75	194.86	194.75	195.02	195.12	
140.47	194.71	195.05	194.75	194.86	194.75	195.02	195.13	
148.87	194.69	195.09	194.79	194.90	194.79	195.06	195.16	
154.47	194.70	195.12	194.82	194.93	194.82	195.09	195.17	
158.10	194.71	195.14	194.84	194.95	194.84	195.11	195.18	
160.00	194.72	195.15	194.85	194.96	194.85	195.12	195.19	
164.87	194.74	195.18	194.88	194.99	194.88	195.15	195.20	
168.47	194.76	195.21	194.91	195.01	194.91	195.18	195.21	
170.60	194.77	195.23	194.93	195.03	194.93	195.20	195.22	
180.00	194.90	195.32	195.02	195.12	195.02	195.29	195.23	
180.87	194.91	195.33	195.03	195.13	195.03	195.30	195.24	
182.47	194.94	195.35	195.05	195.15	195.05	195.32	195.26	
183.10	194.95	195.36	195.05	195.16	195.05	195.33	195.27	
194.28	195.49	195.49	195.19	195.30	195.19	195.46	195.41	
194.87	195.51	195.50	195.20	195.30	195.20	195.47	195.42	
196.47	195.56	195.52	195.22	195.32	195.22	195.49	195.44	
200.00	195.74	195.55	195.25	195.36	195.25	195.52	195.49	
206.78	195.71	195.62	195.32	195.42	195.32	195.59	195.60	
208.87	195.72	195.64	195.34	195.44	195.34	195.61	195.61	
210.47	195.72	195.65	195.35	195.45	195.35	195.62	195.60	
219.28	195.69	195.70	195.40	195.51	195.40	195.67	195.58	
220.00	195.69	195.71	195.41	195.51	195.41	195.68	195.58	
222.87	195.66	195.72	195.42	195.53	195.42	195.69	195.58	
232.54	195.57	195.77	195.47	195.58	195.47	195.74	195.67	
232.64	195.57			195.58			195.67	
236.79	195.52			195.60			195.68	
240.00	195.61			195.61			195.68	
245.88	195.60			195.64			195.69	
246.04	195.60			195.64			195.69	
251.66				195.71			195.70	
253.38				195.74			195.70	
255.18				195.79			195.70	
255.87				195.81			195.71	
256.65				195.83			195.71	
257.47				195.86			195.71	
260.00				195.94				
260.88				195.98				
265.30				196.15				
268.10				196.25				
268.40				196.37				
270.08				196.41				
270.42								

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40

GLENWOOD AVENUE



CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017
DATE APPROVED

CHAINAGE CENTRE LINE	ES LEFT TITLE BDY	FS LEFT TITLE BDY	LEFT LIP OF KERB	DESIGN CL	RIGHT LIP OF KERB	FS RIGHT TITLE BDY	ES RIGHT TITLE BDY	
0.00				192.74				
3.20				192.63				
11.80	192.95	192.79	192.57	192.68	192.57	192.80	193.19	TPCH
20.00	193.05	192.84	192.61	192.72	192.61	192.85	193.29	
40.00	193.44	192.94	192.71	192.82	192.71	192.95	193.65	
44.15	193.50	192.96	192.73	192.84	192.73	192.97	193.66	
56.65	193.00	193.02	192.79	192.90	192.79	193.03	193.52	
60.00	192.98	193.04	192.81	192.92	192.81	193.05	193.50	
62.15	192.99	193.05	192.82	192.93	192.82	193.06	193.49	
69.15	193.03	193.08	192.86	192.96	192.86	193.09	193.46	
78.15	193.07	193.13	192.90	193.01	192.90	193.14	193.45	
80.00	193.07	193.14	192.91	193.02	192.91	193.15	193.46	
83.15	193.08	193.15	192.93	193.03	192.93	193.16	193.45	
94.15	193.10	193.21	192.98	193.09	192.98	193.22	193.43	
97.15	193.10	193.22	193.00	193.10	193.00	193.23	193.42	
100.00	193.09	193.24	193.01	193.12	193.01	193.25	193.42	
110.15	193.08	193.29	193.06	193.17	193.06	193.30	193.41	
113.15	193.08	193.30	193.08	193.18	193.08	193.31	193.41	
120.00	193.08	193.34	193.11	193.22	193.11	193.35	193.42	
121.44	193.08	193.34	193.12	193.23	193.12	193.35	193.42	
127.15	193.10	193.38	193.16	193.26	193.16	193.39	193.44	
128.15	193.12	193.39	193.17	193.27	193.17	193.40	193.44	
136.44	193.16	193.49	193.27	193.37	193.27	193.50	193.47	
140.00	193.20	193.55	193.32	193.43	193.32	193.56	193.60	
141.15	193.21	193.57	193.34	193.45	193.34	193.58	193.64	
144.15	193.24	193.62	193.40	193.51	193.40	193.63	193.76	
151.44	193.40	193.79	193.56	193.67	193.56	193.80	194.01	
155.15	193.53	193.88	193.65	193.76	193.65	193.89	194.20	
160.00	193.73	193.99	193.77	193.88	193.77	194.00	194.33	
160.15	193.73	194.00	193.77	193.88	193.77	194.01	194.33	
167.65	193.90	194.18	193.96	194.06	193.96	194.19	194.55	
174.50	194.08	194.35	194.13	194.23	194.13	194.36	194.51	
176.15	194.15	194.39	194.17	194.27	194.17	194.40	194.58	
180.00	194.33	194.48	194.25	194.36	194.25	194.49	194.69	
180.15	194.34	194.48	194.26	194.36	194.26	194.49	194.69	
189.50	194.59	194.67	194.44	194.55	194.44	194.68	194.84	
194.15	194.70	194.75	194.52	194.63	194.52	194.76	194.91	
200.00	194.83	194.83	194.61	194.71	194.61	194.84	194.97	
204.50	194.90	194.89	194.66	194.77	194.66	194.90	195.02	
208.15	194.95	194.93	194.70	194.81	194.70	194.94	195.07	
210.16	194.97	194.95	194.73	194.83	194.73	194.96	195.08	
220.00	195.15	195.06	194.84	194.94	194.84	195.07	195.15	
222.15	195.16	195.09	194.86	194.97	194.86	195.10	195.18	
226.57	195.17	195.14	194.91	195.02	194.91	195.15	195.23	
236.15	195.24	195.24	195.02	195.13	195.02	195.25	195.33	
240.00	195.28	195.29	195.06	195.17	195.06	195.30	195.37	
260.00				195.40				
262.58				195.42				
265.78				195.53				

CRUSHED ROCK BACKFILL

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40

CARMICHAEL DRIVE

AMENDMENTS		
VER.	DATE	REMARKS

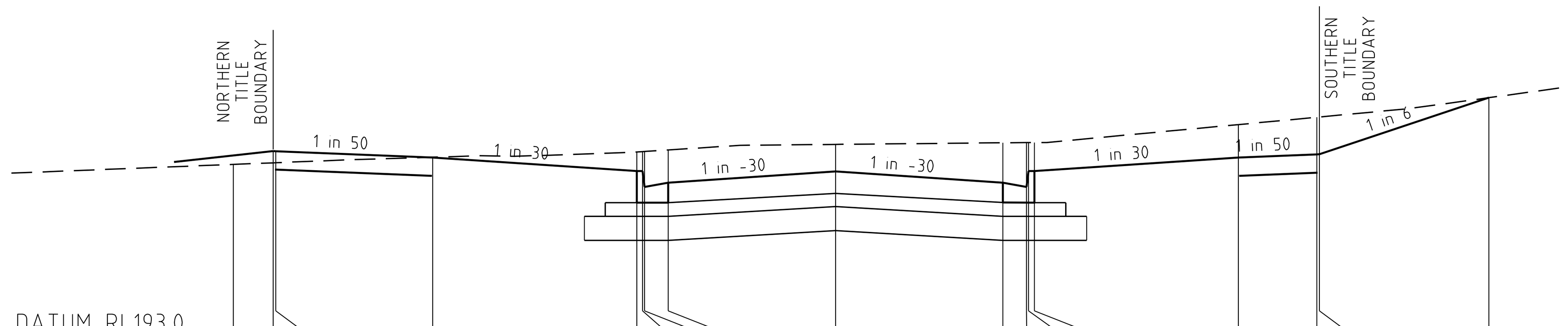
breese pitt dixon pty. ltd.
land surveyors civil engineers

1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 388-C10	RATHDOWNE ESTATE STAGE 2 GLENWOOD AVENUE & CARMICHAEL DRIVE		MUNICIPALITY WHITTLESEA
SURVEY BPD			REFERENCE 8352 E/2
DESIGN SS			
DRAWN SS			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JUL'17
SHEET 11 OF 21	P3		

Plotted: 01-Dec-17

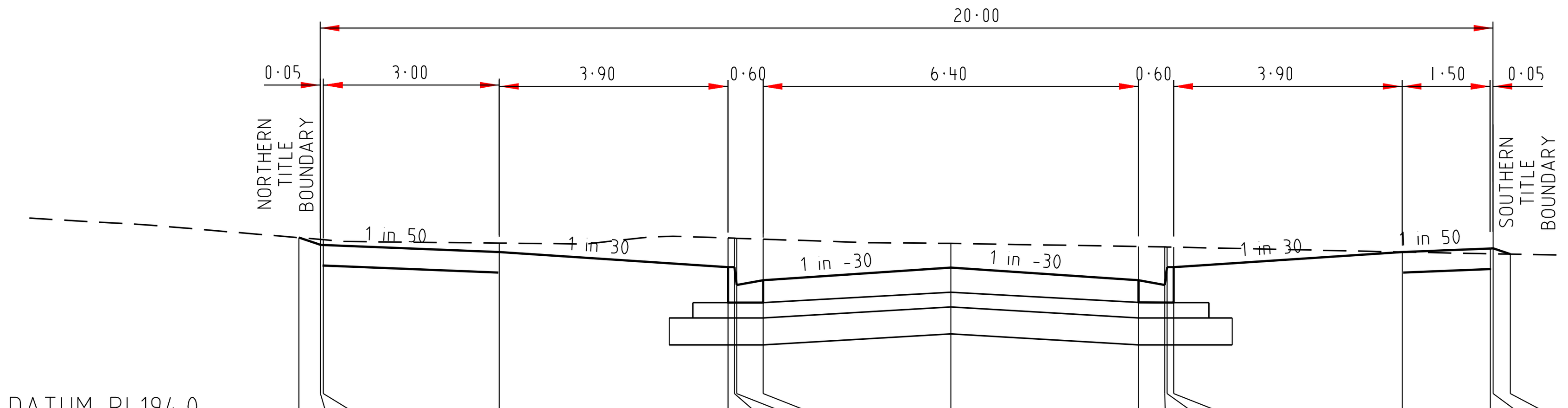
J:\MR765\Eng\Stage 2\E02_R11_GACOLS.dgn



DATUM RL193.0

DESIGN SURFACE	194.65	194.77	194.77	194.71	194.58	194.58	194.43	194.47	194.58	194.47	194.43	194.58	194.58	194.71	194.74	194.74	195.28
EXISTING SURFACE	194.65	194.66	194.66	194.72	194.77	194.77	194.77	194.79	194.84	194.85	194.86	194.86	194.86	195.03	195.10	195.10	195.28
OFFSET	-11.51	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25	12.49

87.47



DATUM RL194.0

DESIGN SURFACE	195.58	195.52	195.52	195.46	195.33	195.33	195.18	195.22	195.32	195.22	195.18	195.33	195.33	195.46	195.49	195.49	195.44
EXISTING SURFACE	195.58	195.56	195.56	195.53	195.57	195.57	195.57	195.56	195.53	195.50	195.50	195.50	195.50	195.46	195.44	195.44	195.44
OFFSET	-11.12	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25	9.54

196.47

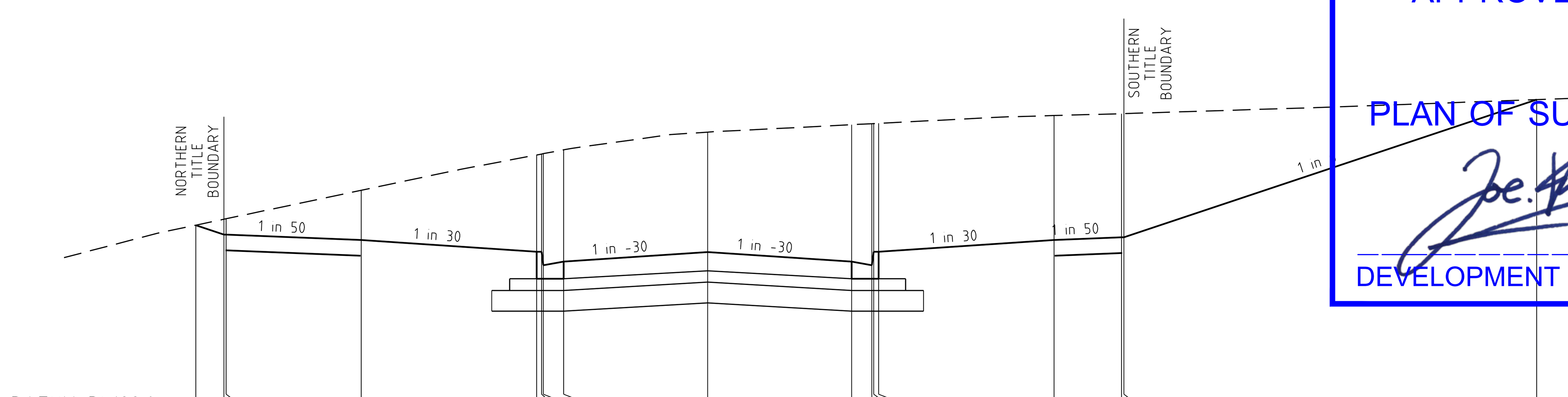
CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

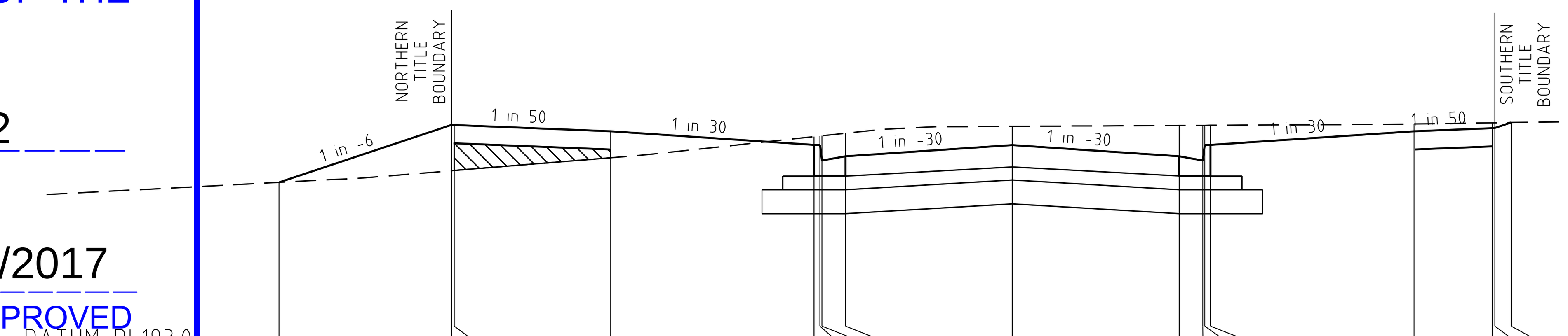
04/12/2017
DATE APPROVED



DATUM RL192.0

DESIGN SURFACE	194.13	194.02	194.02	193.96	193.83	193.83	193.68	193.72	193.83	193.72	193.68	193.83	193.83	193.96	193.99	193.99	195.52
EXISTING SURFACE	194.13	194.19	194.20	194.51	194.91	194.92	194.92	194.96	195.16	195.24	195.25	195.26	195.26	195.35	195.37	195.37	195.52
OFFSET	-11.38	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25	18.42

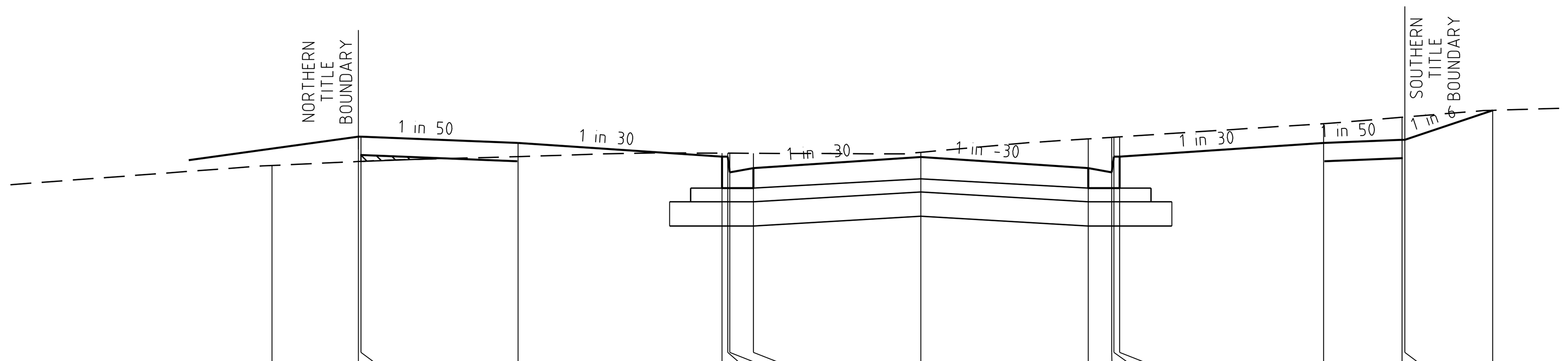
43.47



DATUM RL193.0

DESIGN SURFACE	194.63	195.18	195.18	195.12	194.99	194.99	194.84	194.88	194.99	194.88	194.84	194.99	194.99	195.12	195.15	195.15	195.20
EXISTING SURFACE	194.63	194.74	194.74	194.87	195.07	195.08	195.08	195.10	195.17	195.18	195.18	195.18	195.18	195.19	195.20	195.20	195.20
OFFSET	-14.06	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25	9.57

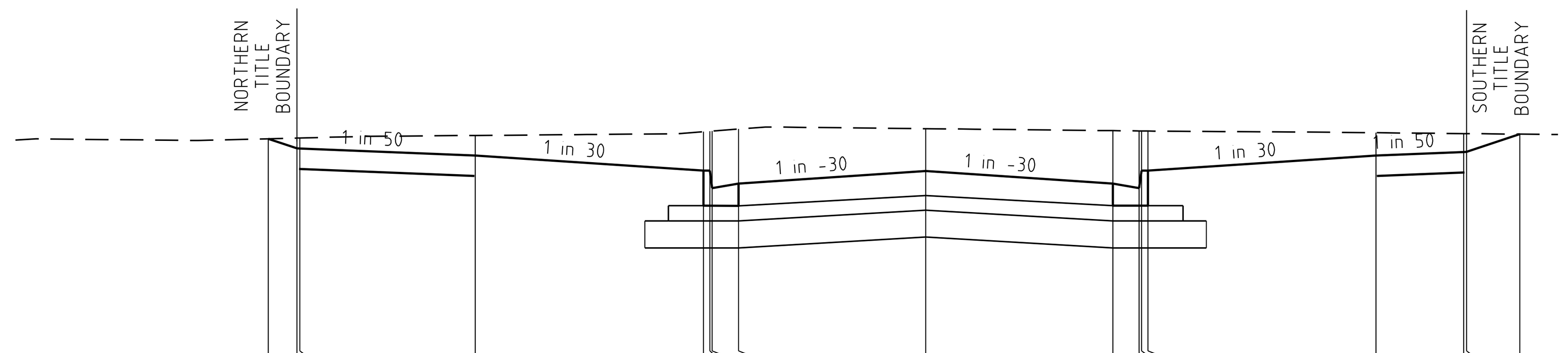
164.87



DATUM RL191.0

DESIGN SURFACE	193.03	193.31	193.31	193.25	193.12	193.12	192.97	193.01	193.11	193.01	192.97	193.12	193.12	193.25	193.28	193.28	193.56
EXISTING SURFACE	193.03	193.07	193.07	193.12	193.15	193.15	193.15	193.15	193.16	193.29	193.30	193.30	193.31	193.43	193.49	193.49	193.56
OFFSET	-12.40	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25	10.93

12.54



DATUM RL193.0

DESIGN SURFACE	195.06	194.98	194.98	194.92	194.79	194.79	194.64	194.68	194.79	194.68	194.64	194.79	194.79	194.92	194.95	194.95	195.10
EXISTING SURFACE	195.06	195.07	195.07	195.09	195.12	195.13	195.13	195.15	195.15	195.13	195.13	195.13	195.13	195.12	195.11	195.11	195.10
OFFSET	-11.24	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25	10.16

126.47

CRUSHED ROCK BACKFILL

GLENWOOD AVENUE

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8

AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
GLENWOOD AVENUE

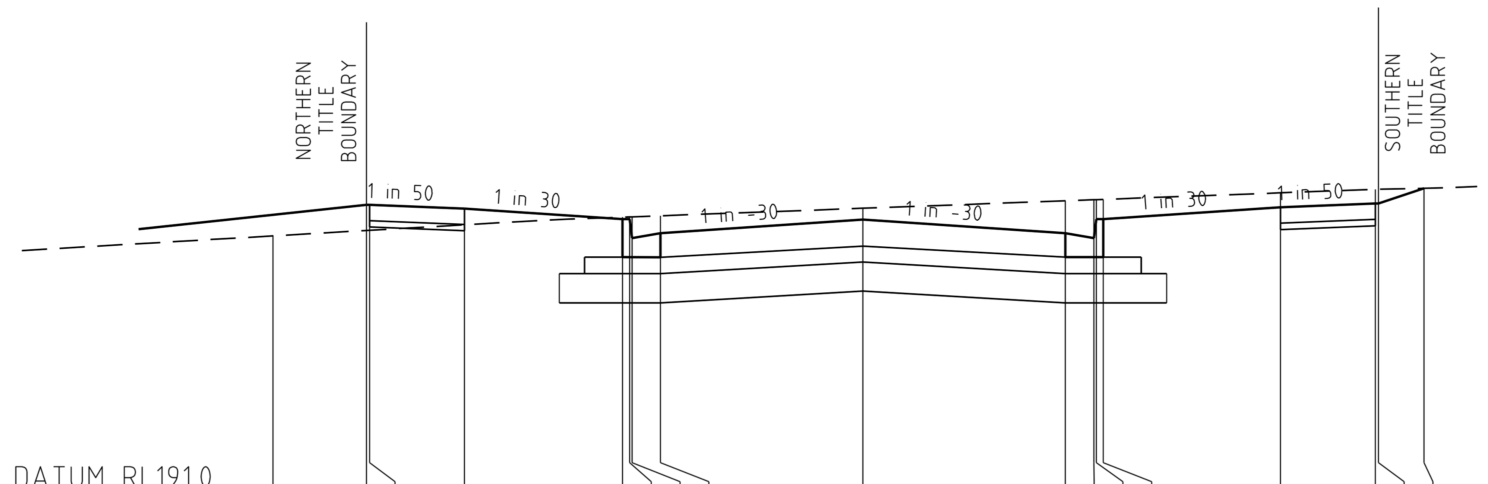
MUNICIPALITY WHITTLESEA

REFERENCE 8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL'17 | SHEET 12 OF 21 | P3

Plotted:01-Dec-17

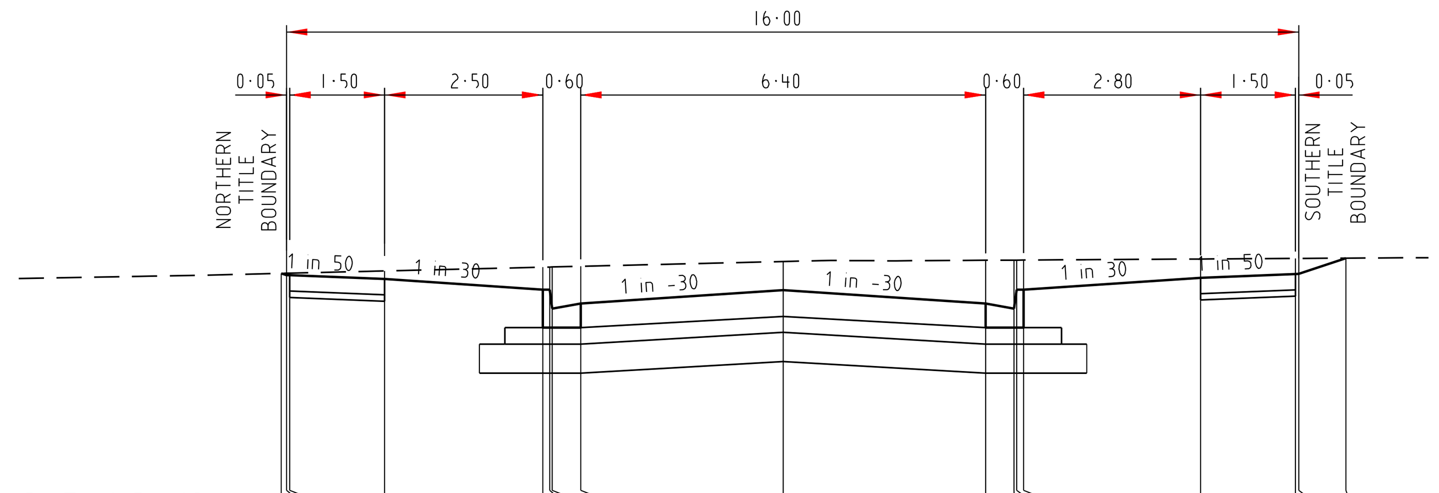
J:\H9365\Eng\Stage 2\E02_R12_GAXS.dgn



DATUM RL191.0

DESIGN SURFACE	193.04	193.29	193.29	193.26	193.17	193.17	193.02	193.06	193.17	193.06	193.02	193.17	193.17	193.27	193.30	193.30	193.42
EXISTING SURFACE	193.04	193.08	193.08	193.13	193.19	193.19	193.19	193.20	193.26	193.32	193.33	193.33	193.33	193.38	193.41	193.41	193.42
OFFSET	-9.33	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	8.87

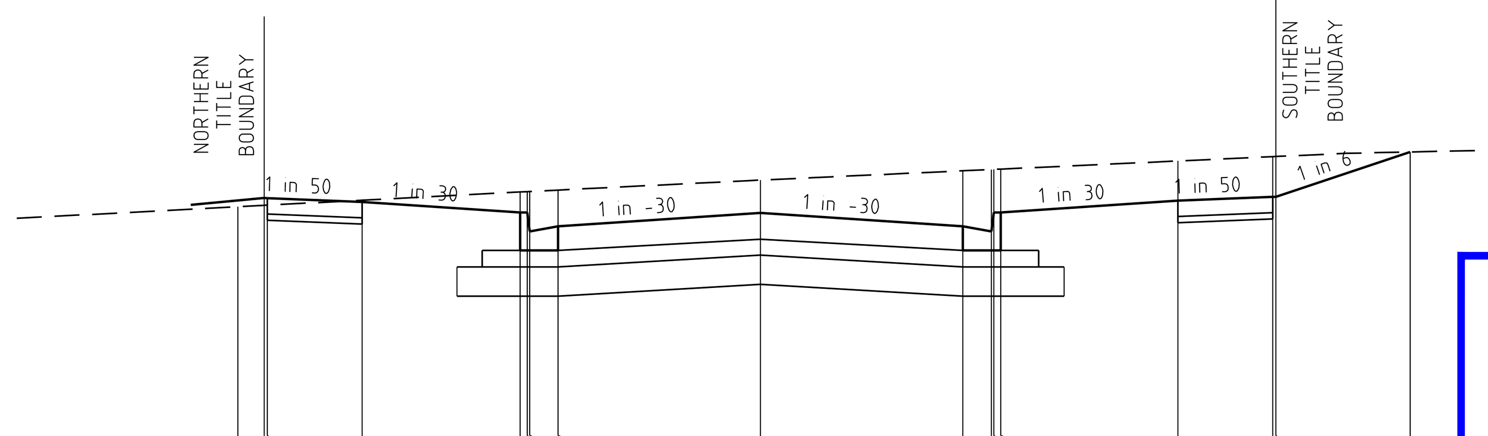
110.15



DATUM RL193.0

DESIGN SURFACE	194.96	194.95	194.95	194.92	194.84	194.84	194.69	194.73	194.83	194.73	194.69	194.84	194.84	194.93	194.96	194.96	195.08
EXISTING SURFACE	194.96	194.97	194.97	194.98	195.01	195.01	195.02	195.02	195.06	195.07	195.07	195.07	195.07	195.08	195.08	195.08	195.08
OFFSET	-7.93	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	8.90

210.15



DATUM RL191.0

DESIGN SURFACE	193.06	193.13	193.13	193.10	193.01	193.01	192.86	192.90	193.01	192.90	192.86	193.01	193.01	193.11	193.14	193.14	193.49
EXISTING SURFACE	193.06	193.07	193.07	193.11	193.17	193.18	193.18	193.19	193.27	193.34	193.35	193.35	193.35	193.42	193.45	193.45	193.49
OFFSET	-8.26	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	10.27

78.15

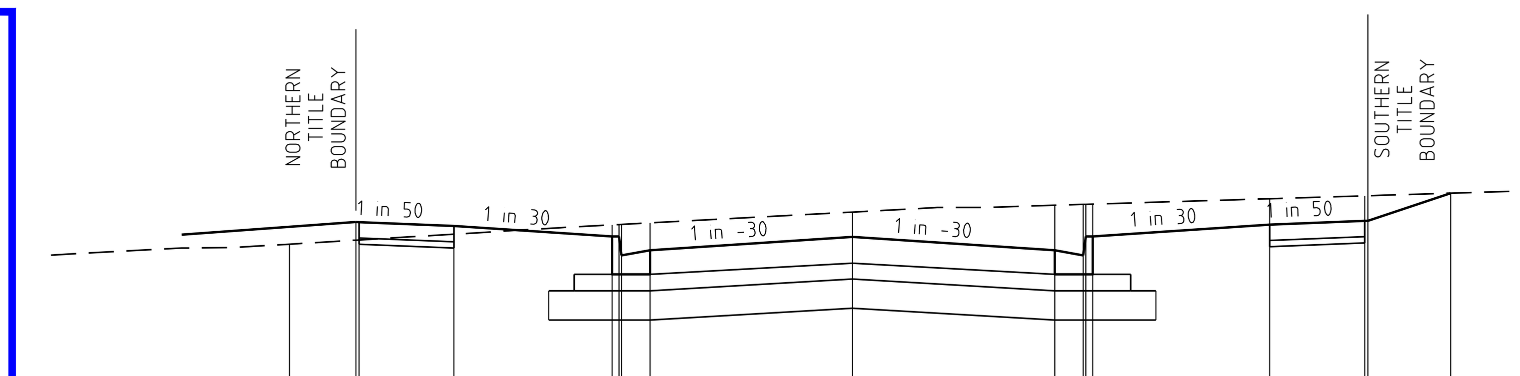
CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

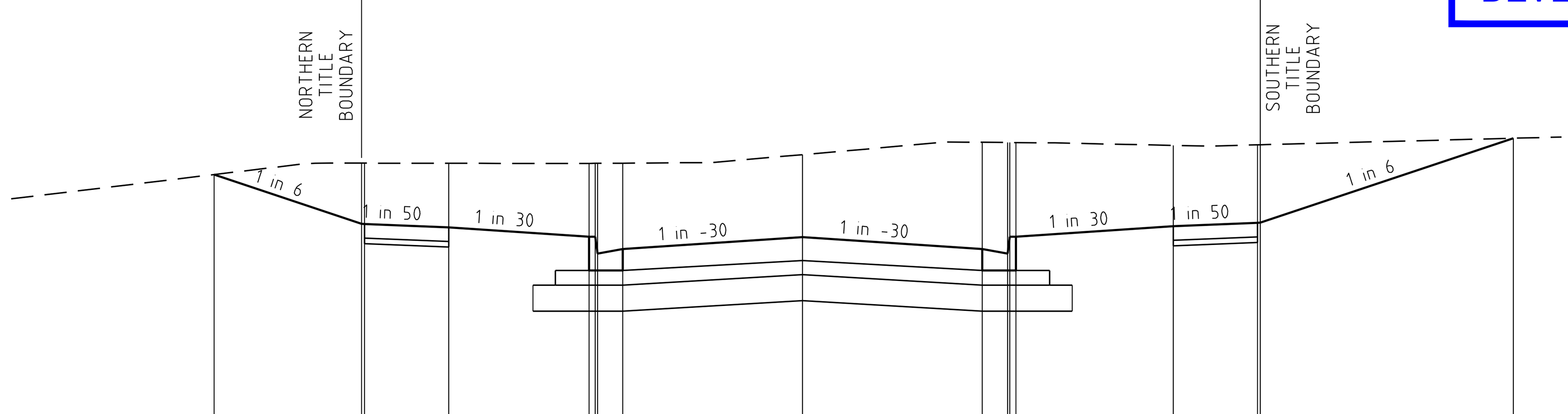
04/12/2017
DATE APPROVED



DATUM RL193.0

DESIGN SURFACE	194.31	194.48	194.48	194.45	194.37	194.37	194.22	194.26	194.36	194.26	194.22	194.37	194.37	194.46	194.49	194.49	194.71
EXISTING SURFACE	194.31	194.34	194.34	194.39	194.46	194.46	194.46	194.47	194.56	194.61	194.62	194.62	194.62	194.67	194.69	194.69	194.71
OFFSET	-8.90	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	9.46

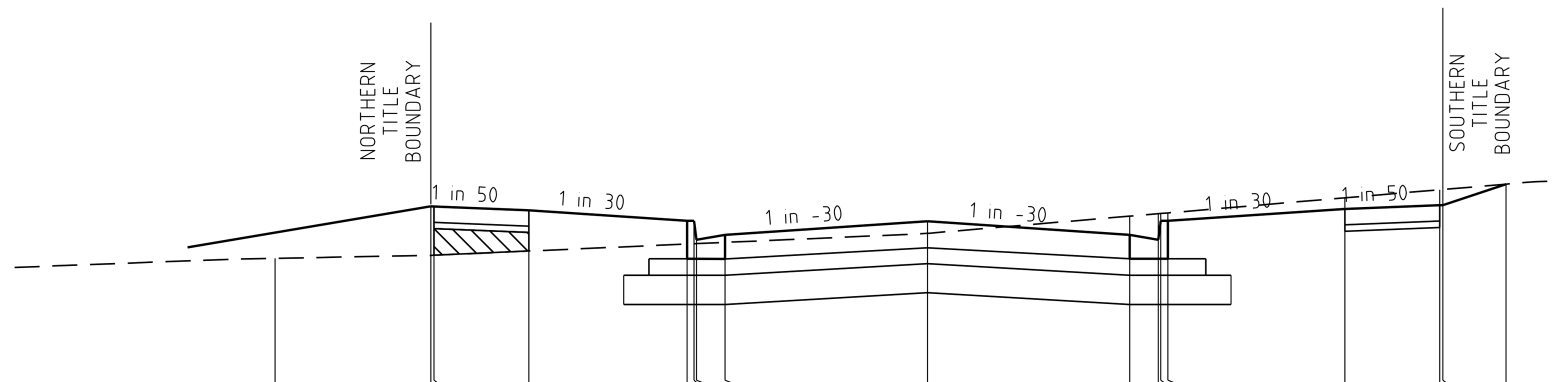
180.15



DATUM RL191.0

DESIGN SURFACE	193.39	192.96	192.96	192.93	192.84	192.84	192.69	192.73	192.84	192.73	192.69	192.84	192.84	192.94	192.97	192.97	193.72
EXISTING SURFACE	193.39	193.50	193.50	193.49	193.49	193.49	193.49	193.50	193.57	193.68	193.68	193.68	193.68	193.65	193.66	193.66	193.72
OFFSET	-10.48	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	12.65

44.15

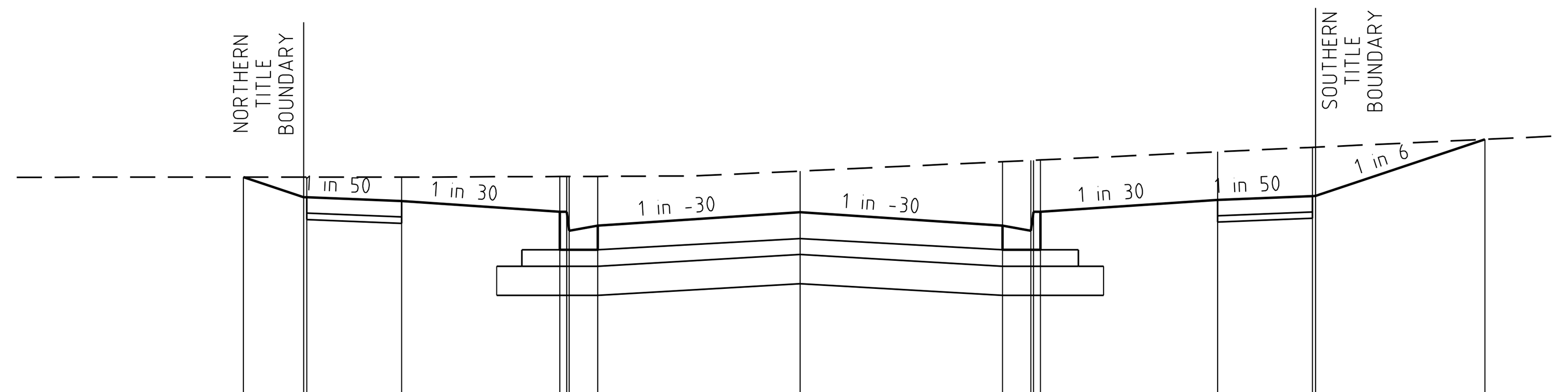


DATUM RL192.0

DESIGN SURFACE	193.21	193.62	193.62	193.59	193.51	193.51	193.36	193.40	193.51	193.40	193.36	193.51	193.51	193.60	193.63	193.63	193.80
EXISTING SURFACE	193.21	193.24	193.24	193.27	193.33	193.33	193.33	193.34	193.41	193.55	193.57	193.57	193.57	193.69	193.76	193.76	193.80
OFFSET	-10.31	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	9.15

144.15

CARMICHAEL DRIVE



DATUM RL191.0

DESIGN SURFACE	192.95	192.79	192.79	192.76	192.68	192.68	192.53	192.57	192.68	192.57	192.53	192.68	192.68	192.77	192.80	192.80	193.25
EXISTING SURFACE	192.95	192.95	192.95	192.95	192.96	192.96	192.96	192.96	193.00	193.07	193.09	193.09	193.09	193.15	193.19	193.19	193.25
OFFSET	-8.80	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	10.83

11.80

CROSS SECTIONS
SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8

CRUSHED ROCK BACKFILL

AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
CARMICHAEL DRIVE

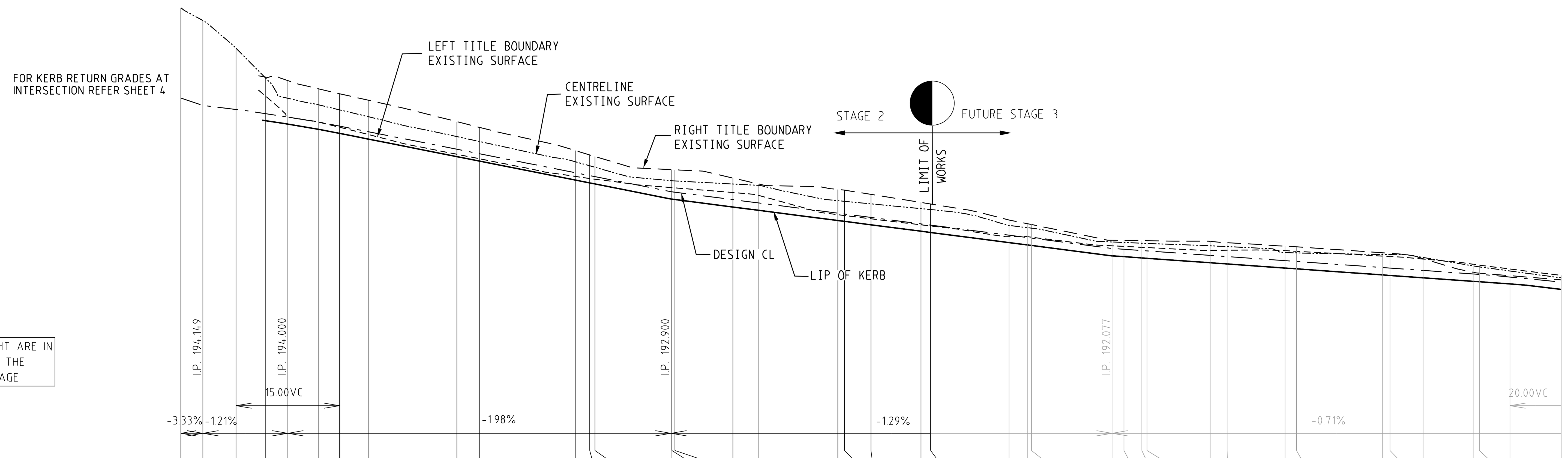
MUNICIPALITY WHITTLESEA
REFERENCE 8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL '17 | SHEET 13 OF 21 | P3

Plotted:01-Dec-17
J:\M9765\Eng\Stage 2\E02_R13_CDXS.dgn

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50



TRUE LEFT & RIGHT ARE IN THE DIRECTION OF THE INCREASING CHAINAGE

VC LENGTH

DESIGN GRADELINE

DATUM 189

CHAINAGE CENTRE LINE	ES LEFT TITLE BDY	FS LEFT TITLE BDY	LEFT LIP OF KERB	DESIGN CL	RIGHT LIP OF KERB	FS RIGHT TITLE BDY	ES RIGHT TITLE BDY	
0.00				194.26				
3.20				194.15				
8.00				194.09				
12.30	194.28	194.15	193.93	194.03	193.93	194.16	194.56	TPCH
15.50	193.98	194.10	193.88	193.99	193.88	194.11	194.51	
20.00	193.91	194.03	193.80	193.91	193.80	194.04	194.39	
23.00	193.83	193.97	193.74	193.85	193.74	193.98	194.32	
27.25	193.73	193.88	193.66	193.77	193.66	193.89	194.22	
40.00	193.44	193.63	193.41	193.51	193.41	193.64	193.91	
43.25	193.38	193.57	193.34	193.45	193.34	193.58	193.83	
57.15	193.12	193.29	193.07	193.17	193.07	193.30	193.50	
59.25	193.09	193.25	193.03	193.13	193.03	193.26	193.43	
60.00	193.08	193.24	193.01	193.12	193.01	193.25	193.41	
71.03	192.96	193.02	192.79	192.90	192.79	193.03	193.22	
71.15	192.96	193.02	192.79	192.90	192.79	193.03	193.22	
71.60	192.96	193.01	192.79	192.89	192.79	193.02	193.22	TPCH
80.00	192.89	192.90	192.68	192.78	192.68		193.10	
83.65	192.85	192.86	192.63	192.74	192.63		193.01	
95.20	192.57	192.71	192.48	192.59	192.48		192.93	TPCH
96.15	192.56	192.69	192.47	192.58	192.47	192.70	192.92	
100.00	192.51	192.64	192.42	192.53	192.42	192.65	192.86	
107.25	192.42	192.55	192.33	192.43	192.33	192.56	192.74	
108.65	192.40	192.55	192.31	192.42	192.31	192.56	192.72	
120.00	192.25	192.39	192.16	192.27	192.16	192.40	192.49	
122.65	192.25	192.35	192.13	192.24	192.13	192.36	192.44	
123.25	192.24	192.35	192.12	192.23	192.12	192.36	192.42	
134.94	192.12	192.19	191.97	192.08	191.97	192.20	192.20	
136.65	192.11	192.18	191.96	192.07	191.96	192.19	192.19	
139.25	192.09	192.16	191.94	192.05	191.94	192.17	192.19	
140.00	192.09	192.16	191.93	192.04	191.93	192.17	192.19	
149.15	192.05	192.09	191.87	191.98	191.87	192.10	192.18	
151.60	192.05	192.08	191.85	191.96	191.85	192.09	192.16	
160.00	192.05	192.02	191.79	191.90	191.79		192.11	
161.65	192.04	192.01	191.78	191.89	191.78		192.10	
174.15	191.97	191.92	191.69	191.80	191.69		192.01	
175.20	191.96	191.91	191.69	191.79	191.69		192.01	
180.00	191.92	191.88	191.65	191.76	191.65	191.89	191.93	
187.25	191.85	191.83	191.60	191.71	191.60	191.84	191.73	
188.15	191.84	191.82	191.60	191.70	191.60	191.83	191.72	
192.58	191.78	191.79	191.56	191.67	191.56	191.80	191.68	
200.00	191.69	191.71	191.48	191.59	191.48	191.72	191.62	

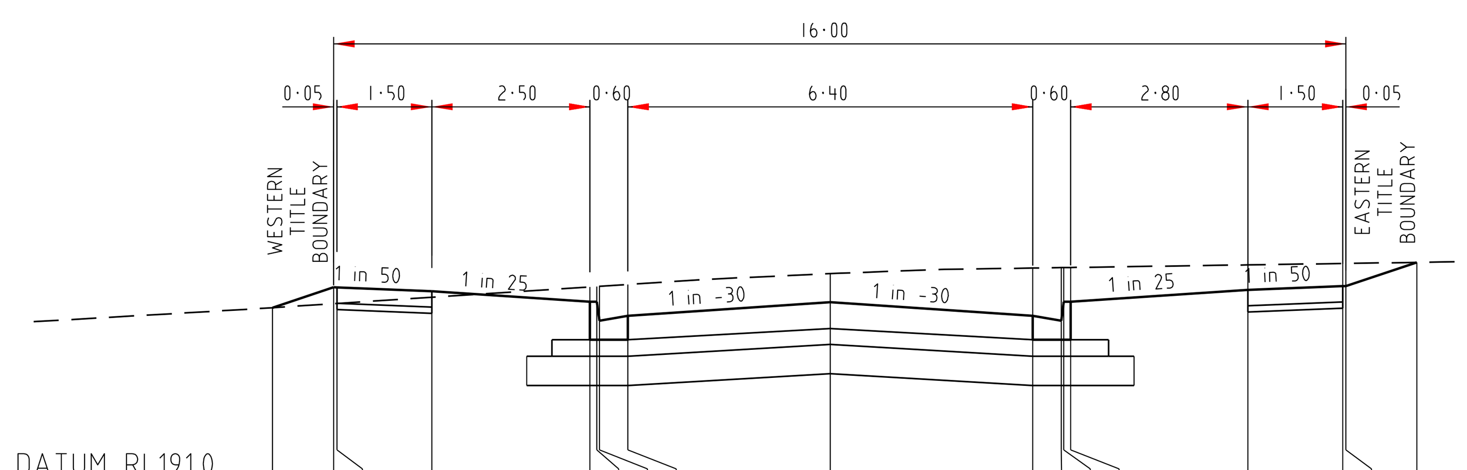
1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8

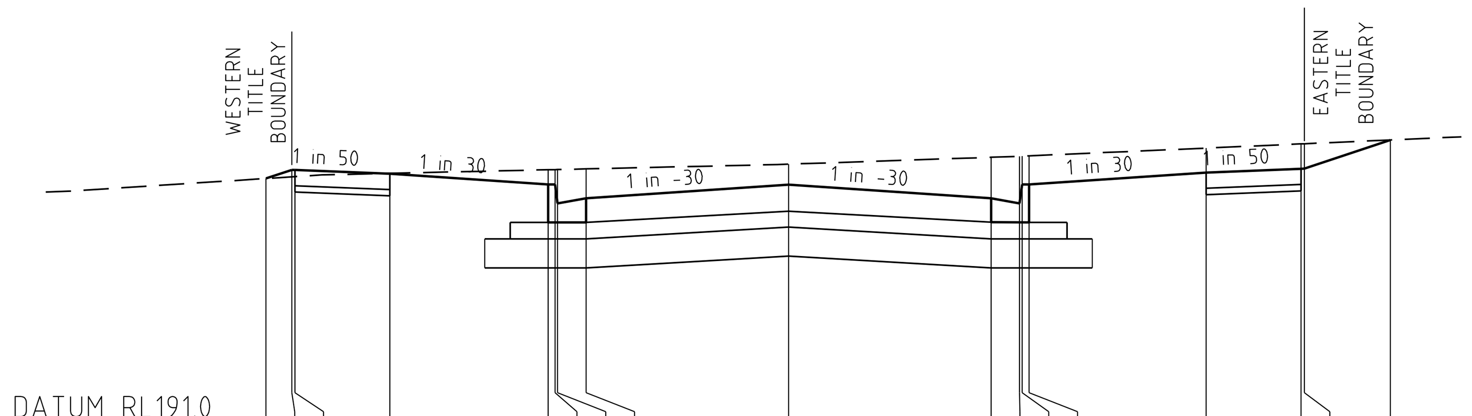
YORK PARADE



DATUM RL191.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-8.82	192.37	192.37
-7.85	192.55	192.40
-7.80	192.55	192.41
-6.30	192.52	192.45
-3.80	192.42	192.54
-3.69	192.42	192.54
-3.65	192.27	192.54
-3.20	192.31	192.56
0.00	192.42	192.64
3.20	192.31	192.69
3.65	192.27	192.69
3.69	192.42	192.69
3.80	192.42	192.69
6.60	192.53	192.71
8.10	192.56	192.72
8.15	192.56	192.72
9.27	192.73	192.73

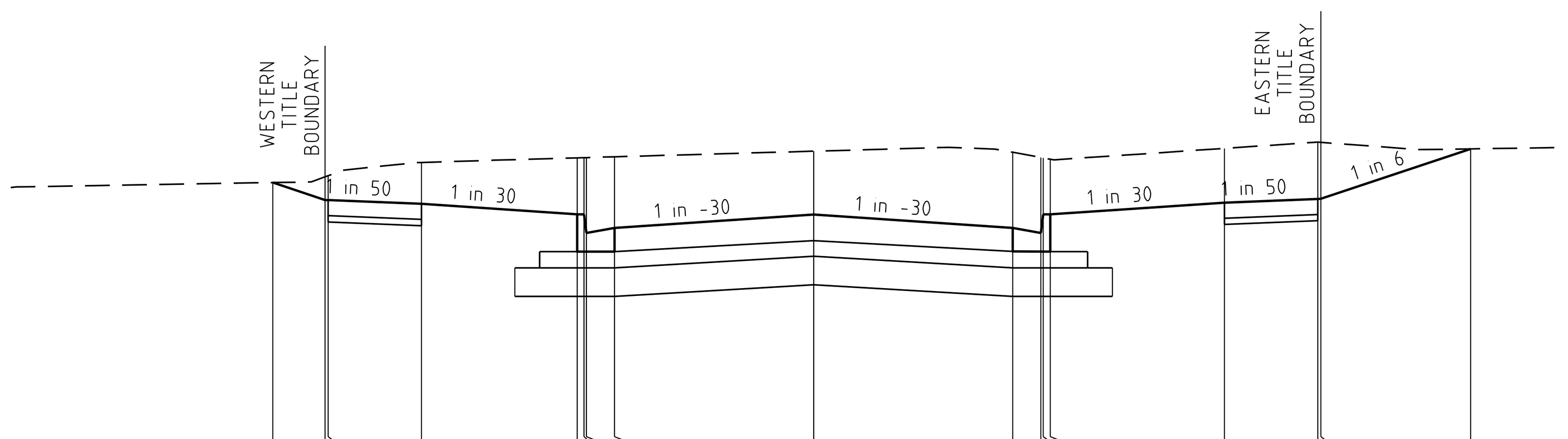
108.65



DATUM RL191.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-8.26	192.94	192.94
-7.85	193.01	192.96
-7.80	193.01	192.96
-6.30	192.98	192.98
-3.80	192.90	193.01
-3.69	192.90	193.01
-3.65	192.75	193.01
-3.20	192.79	193.02
0.00	192.89	193.06
3.20	192.79	193.11
3.65	192.75	193.12
3.69	192.90	193.12
3.80	192.90	193.12
6.60	192.99	193.18
8.10	193.02	193.22
8.15	193.02	193.22
9.51	193.25	193.25

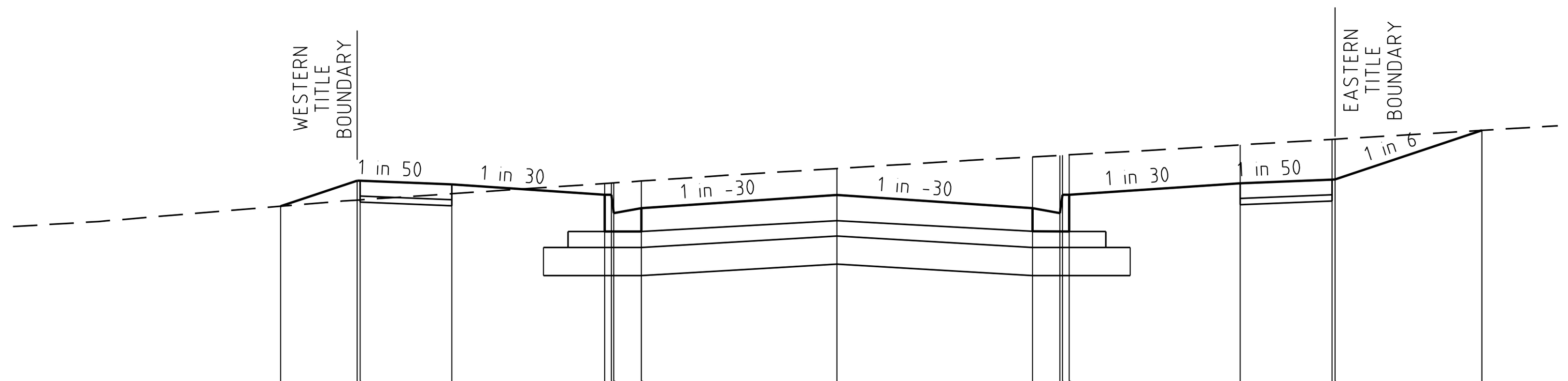
71.60



DATUM RL192.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-8.69	194.29	194.29
-7.85	194.15	194.34
-7.80	194.15	194.35
-6.30	194.12	194.45
-3.80	194.04	194.49
-3.69	194.04	194.49
-3.65	193.89	194.49
-3.20	193.93	194.50
0.00	194.03	194.54
3.20	193.93	194.54
3.65	193.89	194.49
3.69	194.04	194.49
3.80	194.04	194.48
6.60	194.13	194.57
8.10	194.16	194.62
8.15	194.16	194.61
10.56	194.56	194.56

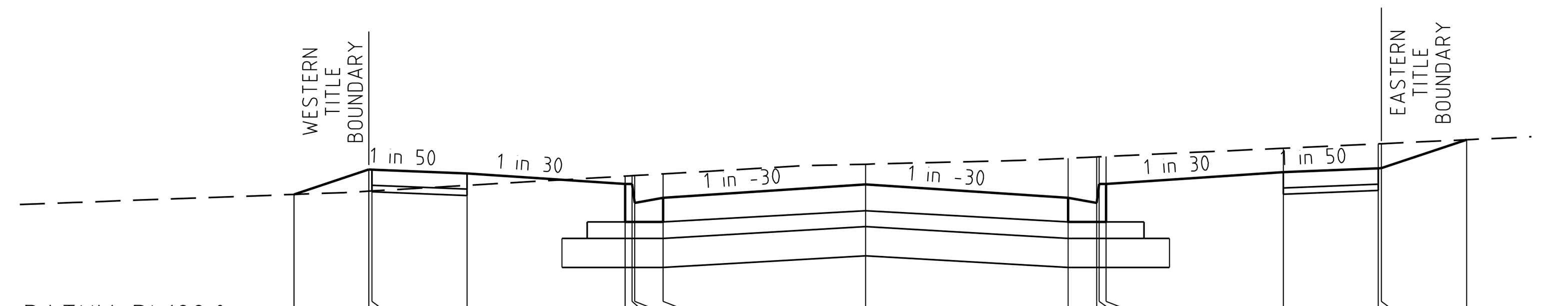
12.30



DATUM RL192.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-9.10	193.68	193.68
-7.85	193.88	193.73
-7.80	193.88	193.73
-6.30	193.85	193.78
-3.80	193.77	193.86
-3.69	193.77	193.87
-3.65	193.62	193.87
-3.20	193.66	193.88
0.00	193.77	193.98
3.20	193.66	194.08
3.65	193.62	194.09
3.69	193.77	194.09
3.80	193.77	194.10
6.60	193.86	194.18
8.10	193.89	194.22
8.15	193.89	194.22
10.55	194.30	194.30

27.25



DATUM RL192.0

OFFSET	DESIGN SURFACE	EXISTING SURFACE
-9.03	193.10	193.10
-7.85	193.29	193.12
-7.80	193.29	193.12
-6.30	193.26	193.17
-3.80	193.18	193.24
-3.69	193.18	193.24
-3.65	193.03	193.24
-3.20	193.07	193.26
0.00	193.17	193.33
3.20	193.07	193.38
3.65	193.03	193.39
3.69	193.18	193.39
3.80	193.18	193.40
6.60	193.27	193.46
8.10	193.30	193.49
8.15	193.30	193.50
9.50	193.53	193.53

57.15

CRUSHED ROCK BACKFILL

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988
PLAN OF SUBDIVISION No. PS803931Y/S2
DEVELOPMENT ENGINEER
04/12/2017
DATE APPROVED

AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
YORK PARADE

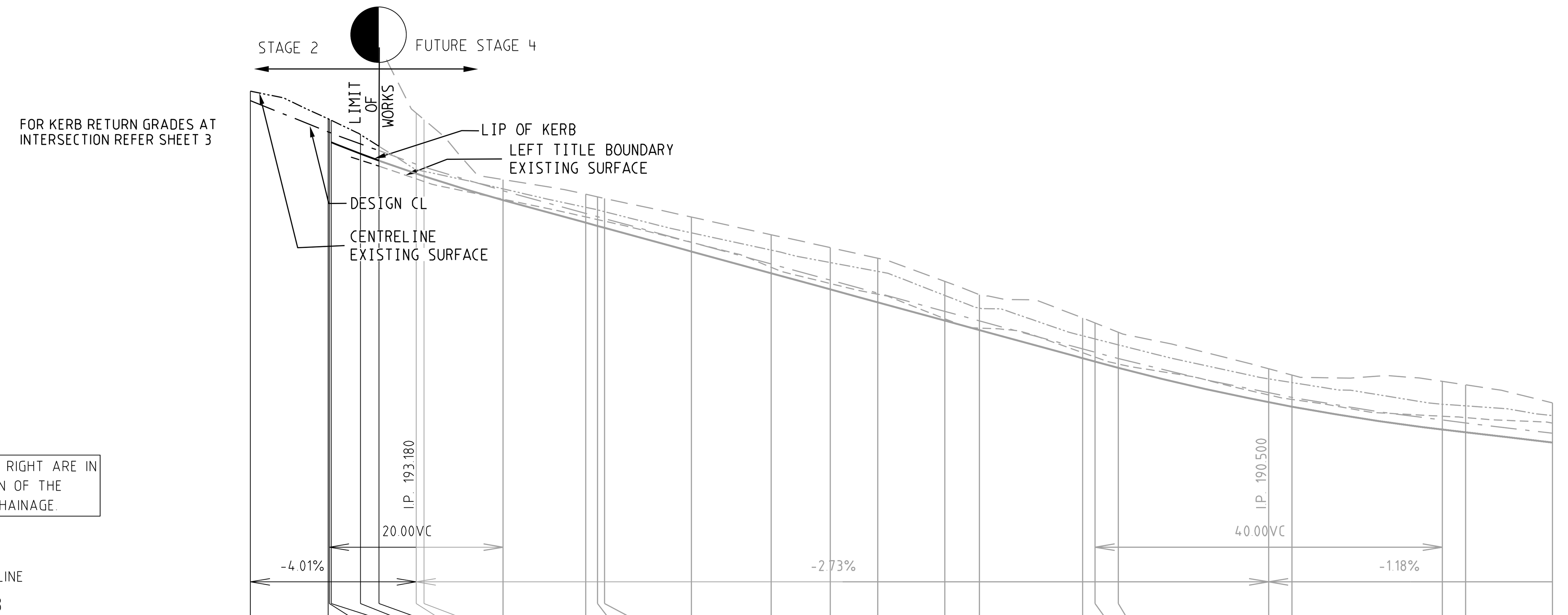
MUNICIPALITY WHITTLESEA

REFERENCE 8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL'17 | SHEET 14 OF 21 | P3

Plotted:01-Dec-17

J:\H9365\Eng\Stage 2\E02_R14_YPLSXS.dgn



TRUE LEFT & RIGHT ARE IN THE DIRECTION OF THE INCREASING CHAINAGE.

VC LENGTH: 20.00VC; 40.00VC

DESIGN GRADELINE: -4.01%; -2.73%; -1.18%

DATUM 188

ES LEFT TITLE BDY					193.26	193.19	193.05	193.02	192.81	192.61	192.58	192.56	192.31
FS LEFT TITLE BDY				193.77	193.64	193.56	193.41	193.38	193.10	192.84	192.80	192.78	192.51
LEFT LIP OF KERB				193.47	193.34	193.26	193.11	193.08	192.80	192.54	192.50	192.48	192.21
DESIGN CL	193.95	193.59	193.58	193.57	193.44	193.36	193.21	193.18	192.91	192.65	192.61	192.59	192.31
RIGHT LIP OF KERB					193.34	193.26	193.11	193.08	192.80	192.54	192.50	192.48	192.21
FS RIGHT TITLE BDY					193.74	193.66	193.51	193.48	193.20	192.94	192.90	192.88	192.61
ES RIGHT TITLE BDY							193.80	193.73	193.04	192.87	192.84	192.82	192.61
CHAINAGE CENTRE LINE	0.00	8.96	9.11	9.31 TPCH	12.68 TPCH	14.82	19.11	20.00	29.11	38.63	40.00	40.81	50.81

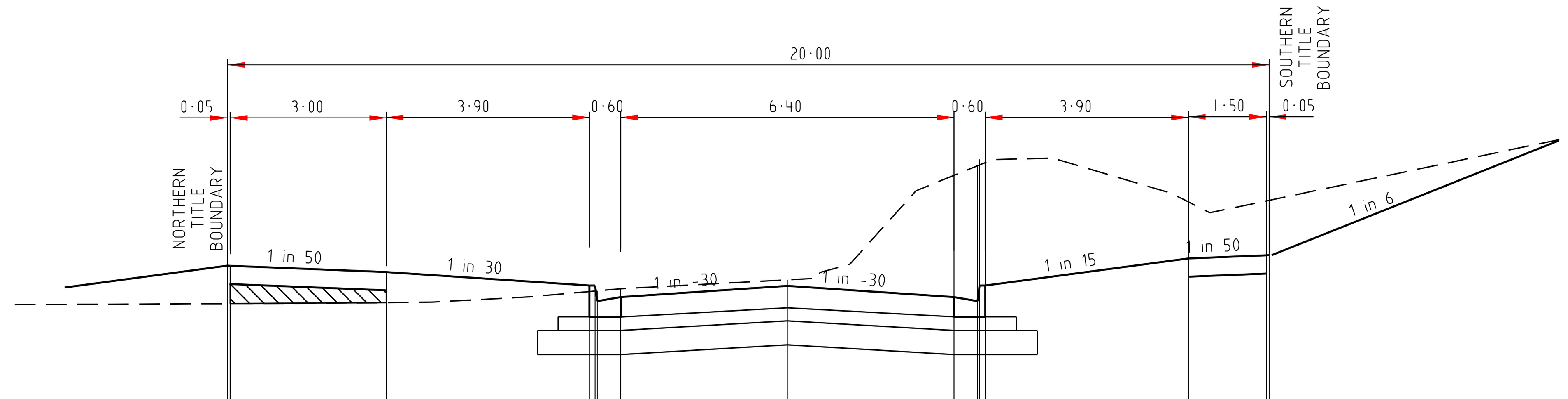
ES LEFT TITLE BDY	192.03	191.84	191.72	191.43	191.33	191.04	190.99	190.91	190.55	190.50	190.31	190.29	190.23
FS LEFT TITLE BDY	192.26	192.07	191.92	191.71	191.60	191.28	191.24	191.17	190.77	190.72	190.46	190.43	190.31
LEFT LIP OF KERB	191.96	191.77	191.62	191.41	191.30	190.98	190.94	190.87	190.47	190.42	190.16	190.12	190.01
DESIGN CL	192.06	191.88	191.73	191.52	191.41	191.08	191.05	190.97	190.58	190.53	190.26	190.23	190.11
RIGHT LIP OF KERB	191.96	191.77	191.62	191.41	191.30	190.98	190.94	190.87	190.47	190.42	190.16	190.12	190.01
FS RIGHT TITLE BDY	192.36	192.17	192.02				191.34	191.27	190.87	190.82	190.56	190.53	190.41
ES RIGHT TITLE BDY	192.40	192.25	192.13	191.86	191.71	191.44	191.38	191.28	190.86	190.78	190.71	190.67	190.46
CHAINAGE CENTRE LINE	60.00	66.81	72.28	80.00	83.99	95.88	97.31	100.00	117.31	120.00	137.31	140.00	150.00

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 — 1 0.5 00 1 2 4
1:500 — 10 5 00 10 20 40

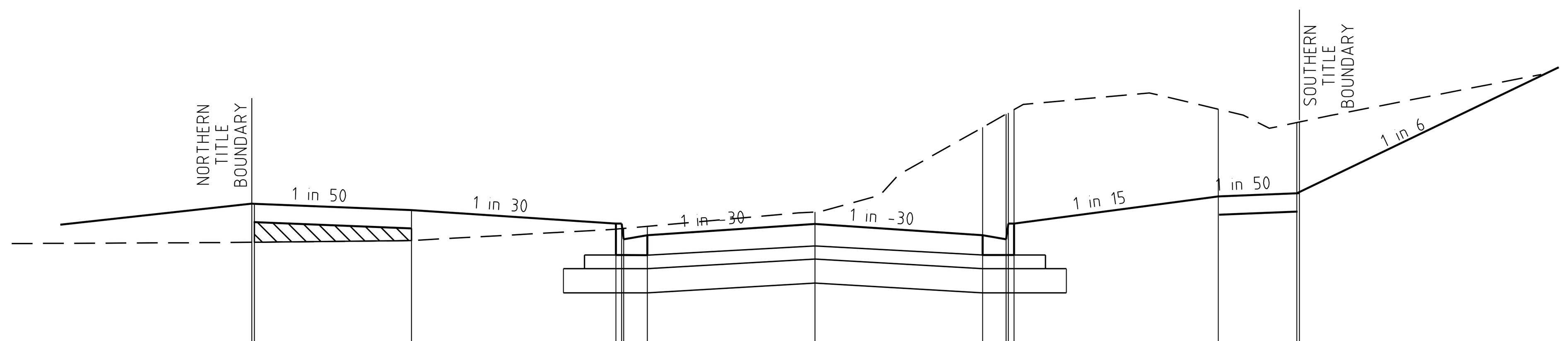
PORTOFINO WAY



DATUM RL192.0

DESIGN SURFACE	193.56	193.56	193.50	193.37	193.37	193.22	193.26	193.36	193.26	193.22	193.37	193.37	193.63	193.66	193.66
EXISTING SURFACE	193.19	193.19	193.20	193.31	193.31	193.32	193.34	193.42	194.42	194.51	194.52	194.54	194.17	194.18	194.18
OFFSET	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25

14.82



DATUM RL192.0

DESIGN SURFACE	193.64	193.64	193.58	193.45	193.45	193.30	193.34	193.44	193.34	193.30	193.45	193.45	193.71	193.74	193.74
EXISTING SURFACE	193.27	193.27	193.28	193.39	193.40	193.40	193.42	193.56	194.36	194.49	194.50	194.53	194.54	194.41	194.42
OFFSET	-10.75	-10.70	-7.70	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	7.70	9.20	9.25

12.68

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

1:50 — 1 0.5 00 1 2 4
1:100 — 2 1 00 2 4 8

CRUSHED ROCK BACKFILL

CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER — 04/12/2017 DATE APPROVED

AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

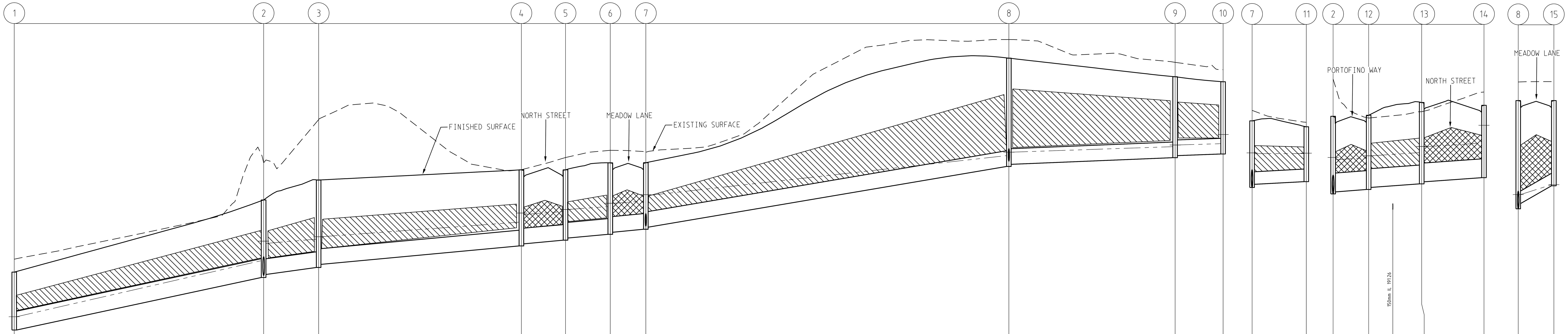
MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
PORTOFINO WAY & NORTH STREET EAST

MUNICIPALITY: WHITTLESEA
REFERENCE: 8352 E/2

SCALE	DATUM	DATE	SHEET	
AS SHOWN	AHD	JUL'17	15 OF 21	P3

Plotted:01-Dec-17
J:\WP765\Eng\Stage 2\E02_R15_PWNSE_LSXS.dgn



Line 1–10 (Datum RL 188.0)

Pipe	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10
VELOCITY (m/sec)	2.60m/s	1.79m/s	1.51m/s	1.45m/s	1.45m/s	1.45m/s	2.05m/s	1.00m/s	0.92m/s
DESIGN (m3/s)	0.35m3/s	0.16m3/s	0.15m3/s	0.14m3/s	0.14m3/s	0.14m3/s	0.12m3/s	0.09m3/s	0.08m3/s
CAPACITY (m3/s)	0.41m3/s	0.20m3/s	0.17m3/s	0.16m3/s	0.16m3/s	0.16m3/s	0.23m3/s	0.11m3/s	0.10m3/s
DIAMETER AND TYPE (CLASS 2)	450 RRJ	375 RRJ	375 RRJ	375 RRJ CLASS 4	375 RRJ	375 RRJ CLASS 4	375 RRJ	375 RRJ	375 RRJ
GRADE	1 in 47.5	1 in 79	1 in 110	1 in 120	1 in 120	1 in 120	1 in 59.7	1 in 250	1 in 300
LENGTH	L=59.602m	L=13.146m	L=48.453m	L=10.544m	L=10.697m	L=8.493m	L=86.767m	L=39.731m	L=11.462m

Pit	DEPTH FS TO INVERT	HGL LEVEL	INVERT	FINISHED SURFACE	NATURAL SURFACE	CHAINAGE
1	1.384 / 1.384	190.701	190.384 / 190.384	191.768	192.076	0.000
2	1.855 / 1.782	192.042 / 192.509 192.453	191.639 / 191.712	193.494	194.383	59.602
3	2.092 / 2.016	192.557 / 192.613	191.878 / 191.954	193.970	195.415	72.748
4	1.819 / 1.769	192.962 / 193.181 193.145	192.394 / 192.444	194.213	194.216	121.201
5	1.682 / 1.632	193.215 / 193.265	192.532 / 192.582	194.214	194.508	131.744
6	1.710 / 1.660	193.335 / 193.414 193.413	192.671 / 192.721	194.381	194.681	142.441
7	1.592 / 1.542	193.463 / 193.620 193.600	192.792 / 192.842	194.384	194.635	150.935
8	2.589 / 2.539	194.553 / 194.636	194.295 / 194.345	196.884	197.329	237.701
9	1.936 / 1.886	194.767 / 194.807	194.504 / 194.554	196.440	196.784	277.432
10	1.727	194.839 / 195.059	194.592	196.319	196.609	288.894

Line 7–11 (Datum RL 187.0)

Pipe	7–11
VELOCITY (m/sec)	0.97m/s
DESIGN (m3/s)	0.01m3/s
CAPACITY (m3/s)	0.07m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ
GRADE	1 in 200
LENGTH	L=12.955m

Pit	DEPTH FS TO INVERT	HGL LEVEL	INVERT	FINISHED SURFACE	NATURAL SURFACE	CHAINAGE
7	1.592 / 1.517	193.463 / 193.620 193.600	192.792 / 192.867	194.384	194.635	0.000
11	1.312	193.602 / 193.612	192.932	194.243	194.352	12.955

Line 2–14 (Datum RL 186.0)

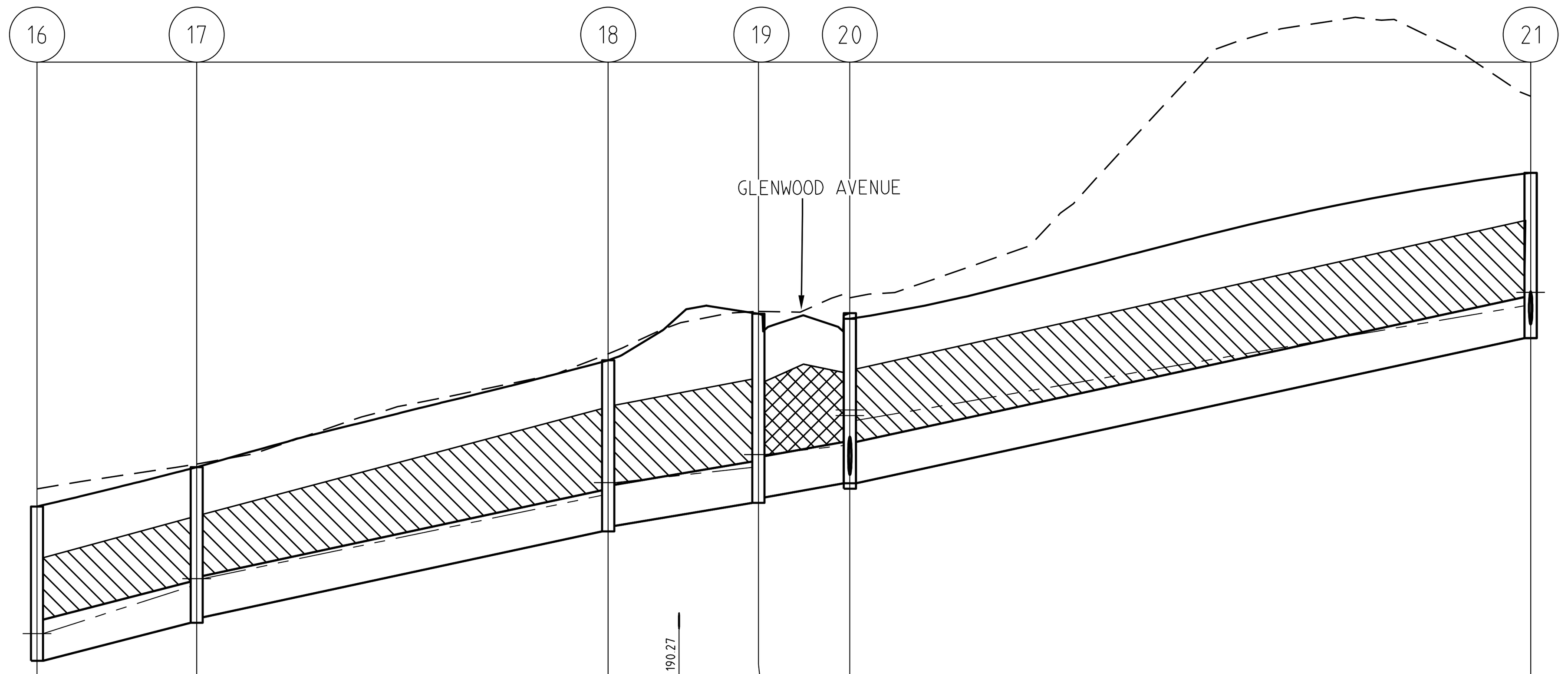
Pipe	2–12	12–13	13–14
VELOCITY (m/sec)	1.46m/s	1.46m/s	1.46m/s
DESIGN (m3/s)	0.22m3/s	0.22m3/s	0.22m3/s
CAPACITY (m3/s)	0.23m3/s	0.23m3/s	0.23m3/s
DIAMETER AND TYPE (CLASS 2)	450 RRJ CLASS 4	450 RRJ	450 RRJ CLASS 4
GRADE	1 in 150	1 in 150	1 in 150
LENGTH	L=8.491m	L=12.678m	L=14.881m

Pit	DEPTH FS TO INVERT	HGL LEVEL	INVERT	FINISHED SURFACE	NATURAL SURFACE	CHAINAGE
2	1.855 / 1.807	192.042 / 192.509 192.453	191.639 / 191.687	193.494	194.383	0.000
12	1.775 / 1.725	192.504 / 192.549	191.743 / 191.793	193.518	193.451	8.491
			191.831			14.263
13	1.947 / 1.897	192.626 / 192.773 192.764	191.878 / 191.928	193.825	193.604	21.169
14	1.730	192.854 / 193.279	192.027	193.757	194.074	36.049

Line 8–15 (Datum RL 189.0)

Pipe	8–15
VELOCITY (m/sec)	3.06m/s
DESIGN (m3/s)	0.00m3/s
CAPACITY (m3/s)	0.22m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ CLASS 4
GRADE	1 in 20
LENGTH	L=8.508m

Pit	DEPTH FS TO INVERT	HGL LEVEL	INVERT	FINISHED SURFACE	NATURAL SURFACE	CHAINAGE
8	2.589 / 2.464	194.553 / 194.636	194.295 / 194.420	196.884	197.329	0.000
15	2.038	194.872	194.845	196.883	197.334	8.508



Line 16–21 (Datum RL 187.0)

Pipe	16–17	17–18	18–19	19–20	20–21
VELOCITY (m/sec)	2.45m/s	2.29m/s	1.97m/s	1.97m/s	2.32m/s
DESIGN (m3/s)	0.21m3/s	0.21m3/s	0.20m3/s	0.19m3/s	0.16m3/s
CAPACITY (m3/s)	0.27m3/s	0.25m3/s	0.22m3/s	0.22m3/s	0.26m3/s
DIAMETER AND TYPE (CLASS 2)	375 RRJ	375 RRJ	375 RRJ	375 RRJ CLASS 4	375 RRJ
GRADE	1 in 42	1 in 48	1 in 65	1 in 65	1 in 47
LENGTH	L=14.541m	L=37.457m	L=13.676m	L=8.326m	L=61.977m

Pit	DEPTH FS TO INVERT	HGL LEVEL	INVERT	FINISHED SURFACE	NATURAL SURFACE	CHAINAGE
16	1.404 / 1.404	190.227	189.979 / 189.979	191.383	191.543	0.000
17	1.415 / 1.365	190.656 / 190.725	190.325 / 190.375	191.740	191.769	14.541
18	1.556 / 1.506	191.485 / 191.599	191.156 / 191.206	192.712	192.770	51.998
			191.304			58.450
19	1.719 / 1.669	191.739 / 191.856	191.416 / 191.466	193.135	193.157	65.674
20	1.546 / 1.496	191.938 / 192.260 192.215	191.594 / 191.644	193.141	193.331	74.000
21	1.504 / 1.454	193.258 / 193.379	192.963 / 193.013	194.467	195.163	135.977

DRAINAGE LONGITUDINAL SECTIONS

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40

CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER — 04/12/2017 DATE APPROVED

SCHEDULE NOTES:-

1. WHERE PIT HAUNCHING IS REQUIRED, INTERNAL PIT WALL DIMENSIONS MUST ALLOW 50mm CLEARANCE EACH SIDE OF PIPE OUTSIDE DIAMETER, INCLUDING ANGULAR PIPE ENTRY TO PIT. MINIMUM DIMENSIONS OF PIT BASE ARE TO BE AS PER SIZES SPECIFIED IN THE PIT SCHEDULE. TOP OF PIT OPENING FOR ALL HAUNCHED PITS TO BE 900mm x 600mm.
2. PIT BASE TO BE SHAPED TO MATCH LOWER HALF OF PIPE WHERE DROP ACROSS PIT IS LESS THAN 50mm.
3. PROVIDE BICYCLE SAFE "V" SHAPED CLASS D GRATE (600mm MIN WIDTH).

INDICATES CRUSHED ROCK BACKFILL CLASS 2

INDICATES CRUSHED ROCK BACKFILL CLASS 3

INDICATES 5YR HGL

VER.	DATE	REMARKS

AMENDMENTS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
DRAINAGE LONGITUDINAL SECTION

MUNICIPALITY WHITTLESEA
REFERENCE 8352 E/2

SCALE AS SHOWN | DATUM AHD | DATE JUL'17 | SHEET 16 OF 21 | P3

Plotted:01-Dec-17
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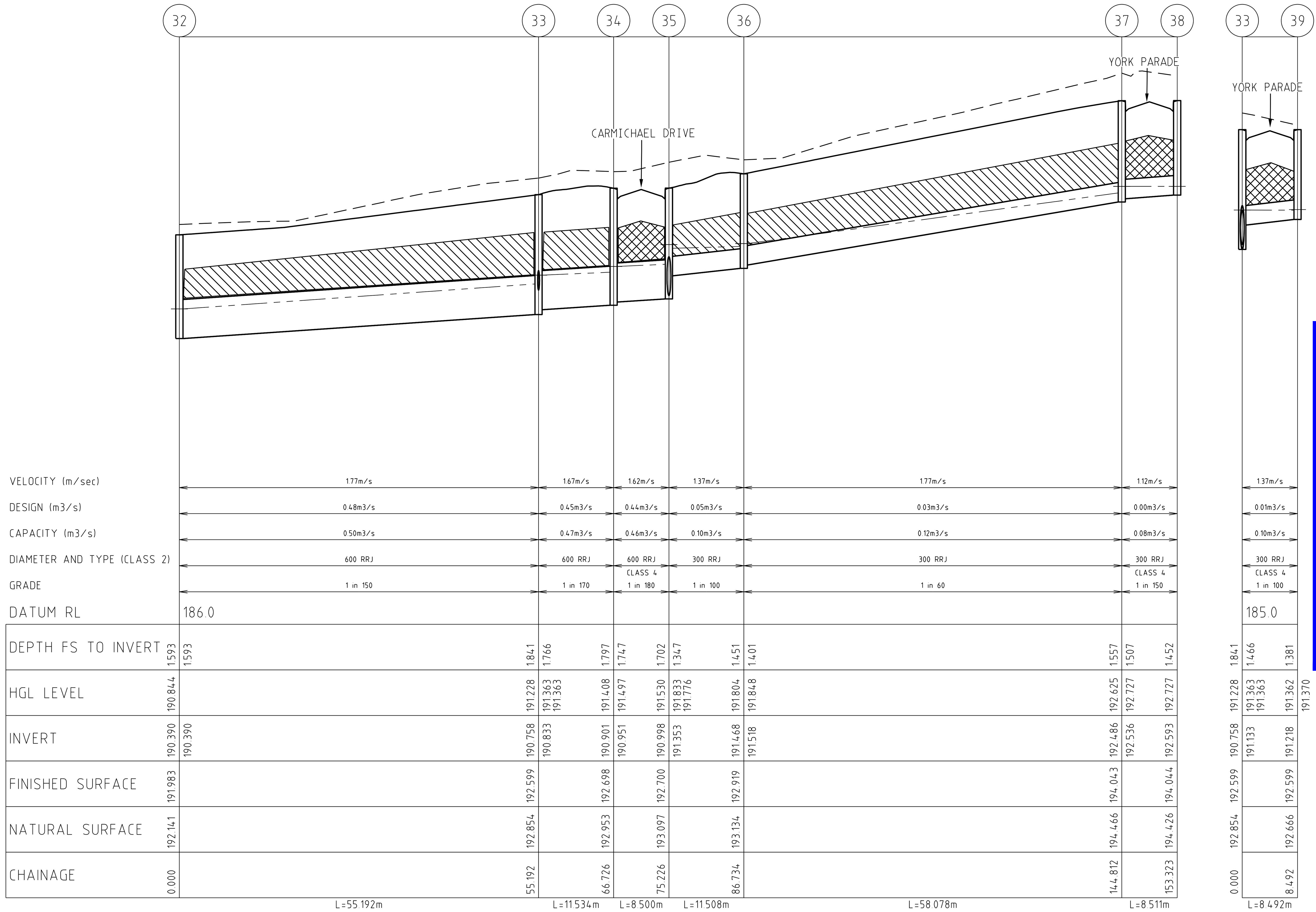

DRAINAGE LONGITUDINAL SECTIONS

SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCHEDULE NOTES:-

1. WHERE PIT HAUNCHING IS REQUIRED, INTERNAL PIT WALL DIMENSIONS MUST ALLOW 50mm CLEARANCE EACH SIDE OF PIPE OUTSIDE DIAMETER, INCLUDING ANGULAR PIPE ENTRY TO PIT. MINIMUM DIMENSIONS OF PIT BASE ARE TO BE AS PER SIZES SPECIFIED IN THE PIT SCHEDULE. TOP OF PIT OPENING FOR ALL HAUNCHED PITS TO BE 900mm x 600mm.
2. PIT BASE TO BE SHAPED TO MATCH LOWER HALF OF PIPE WHERE DROP ACROSS PIT IS LESS THAN 50mm.
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INDICATES CRUSHED ROCK BACKFILL CLASS 2

INDICATES CRUSHED ROCK BACKFILL CLASS 3

INDICATES 5YR HGL

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS APPROVED PURSUANT TO SECTION 15 OF THE SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

04/12/2017

DEVELOPMENT ENGINEER   DATE APPROVED

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310

MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
DRAINAGE LONGITUDINAL SECTION

MUNICIPALITY WHITTLESEA
REFERENCE 8352 E/2

AMENDMENTS

VER.	DATE	REMARKS

SCALE AS SHOWN | DATUM AHD | DATE JUL '17 | SHEET 17 OF 21 | P3

Plotted:01-Dec-17
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PIT SCHEDULE

PIT No.	PIT DESCRIPTION	LENGTH	WIDTH	INLET INVERT	INLET DIA	OUTLET INVERT	OUTLET DIA	TOP PIT RL	DEPTH INVERT	REMARKS
1	END PIPE			190·38	450			191·77	1·38	TEMPORARY SANDBAG ENDWALL
2	GRATED ENTRY PIT (B2)	900	600	191·71	375	191·64	450	193·49	1·86	EDCM STD DWG 601
				191·69	450					
3	GRATED ENTRY PIT (B2)	900	600	191·95	375	191·88	375	193·97	2·09	EDCM STD DWG 601 (HAUNCHED)
4	GRATED ENTRY PIT (B2)	900	600	192·44	375	192·39	375	194·21	1·82	EDCM STD DWG 601
5	GRATED ENTRY PIT (B2)	900	600	192·58	375	192·53	375	194·21	1·68	EDCM STD DWG 601
6	GRATED ENTRY PIT (B2)	900	600	192·72	375	192·67	375	194·38	1·71	EDCM STD DWG 601
7	GRATED ENTRY PIT (B2)	900	600	192·84	375	192·79	375	194·38	1·59	EDCM STD DWG 601
				192·87	300					
8	GRATED ENTRY PIT (B2)	900	600	194·35	375	194·30	375	196·88	2·59	EDCM STD DWG 601 (HAUNCHED)
				194·42	300					
9	JUNCTION PIT	900	600	194·55	375	194·50	375	196·44	1·94	EDCM STD DWG 605
10	END PIPE					194·59	375	196·32	1·73	BLANKED END
11	GRATED ENTRY PIT (B2)	900	600			192·93	300	194·24	1·31	EDCM STD DWG 601
12	GRATED ENTRY PIT (B2)	900	600	191·79	450	191·74	450	193·52	1·78	EDCM STD DWG 601
13	GRATED ENTRY PIT (B2)	900	600	191·93	450	191·88	450	193·83	1·95	EDCM STD DWG 601
14	GRATED ENTRY PIT (B2)	900	600			192·03	450	193·76	1·73	EDCM STD DWG 601
15	GRATED ENTRY PIT (B2)	900	600			194·85	300	196·88	2·04	EDCM STD DWG 601
16	END PIPE			189·98	375			191·38	1·40	TEMPORARY SANDBAG ENDWALL
17	JUNCTION PIT	900	600	190·38	375	190·33	375	191·74	1·42	EDCM STD DWG 605
18	GRATED ENTRY PIT (B2)	900	600	191·21	375	191·16	375	192·71	1·56	EDCM STD DWG 601
19	GRATED ENTRY PIT (B2)	900	600	191·47	375	191·42	375	193·14	1·72	EDCM STD DWG 601
20	GRATED ENTRY PIT (B2)	900	600	191·64	375	191·59	375	193·14	1·55	EDCM STD DWG 601
				191·72	300					
21	GRATED ENTRY PIT (B2)	900	600	193·01	375	192·96	375	194·47	1·50	EDCM STD DWG 601
				193·09	300					
22	GRATED ENTRY PIT (B2)	900	600	193·58	300	193·51	375	194·97	1·46	EDCM STD DWG 601
				193·58	300					
23	END PIPE					194·22	300	195·59	1·36	BLANKED END
24	GRATED ENTRY PIT (B2)	900	600	191·84	300	191·79	300	193·48	1·69	EDCM STD DWG 601
				191·90	225					
25	GRATED ENTRY PIT (B2)	900	600			191·97	300	193·48	1·52	EDCM STD DWG 601
26	JUNCTION PIT	900	600			192·77	225	194·11	1·34	EDCM STD DWG 605
27	GRATED ENTRY PIT (B2)	900	600			193·13	300	194·46	1·34	EDCM STD DWG 601
28	GRATED ENTRY PIT (B2)	900	600			193·62	300	194·96	1·34	EDCM STD DWG 601
29	END PIPE			190·47	225			191·64	1·17	TEMPORARY SANDBAG ENDWALL
30	EASEMENT PIT	600	600	191·86	225	191·81	225	192·74	0·93	EDCM STD DWG 605
31	EASEMENT PIT	600	600			192·16	225	193·03	0·87	EDCM STD DWG 605
32	END PIPE			190·39	600			191·98	1·59	TEMPORARY SANDBAG ENDWALL
33	GRATED ENTRY PIT (B2)	900	900	190·83	600	190·76	600	192·60	1·84	EDCM STD DWG 601 (HAUNCHED)
				191·13	300					
34	GRATED ENTRY PIT (B2)	900	900	190·95	600	190·90	600	192·70	1·80	EDCM STD DWG 601 (HAUNCHED)
35	GRATED ENTRY PIT (B2)	900	900	191·353	300	190·998	600	192·7	1·70	EDCM STD DWG 601 (HAUNCHED)
				191·048	600					
36	GRATED ENTRY PIT (B2)	900	600	191·518	300	191·468	300	192·919	1·451	EDCM STD DWG 601
37	GRATED ENTRY PIT (B2)	900	600	192·536	300	192·486	300	194·043	1·557	EDCM STD DWG 601
38	GRATED ENTRY PIT (B2)	900	600			192·593	300	194·044	1·452	EDCM STD DWG 601
39	GRATED ENTRY PIT (B2)	900	600			191·218	300	192·599	1·381	EDCM STD DWG 601

PIT SCHEDULE

PIT No.	PIT DESCRIPTION	LENGTH	WIDTH	INLET INVERT	INLET DIA	OUTLET INVERT	OUTLET DIA	TOP PIT RL	DEPTH INVERT	REMARKS
40	JUNCTION PIT	900	900	191·246	525	191·176	600	192·846	1·669	EDCM STD DWG 605
				191·395	375					
41	GRATED ENTRY PIT (B2)	900	900	191·633	450	191·563	525	193·146	1·582	EDCM STD DWG 601
				191·783	300					
42	GRATED ENTRY PIT (B2)	900	600	192·671	375	192·599	450	194·496	1·897	EDCM STD DWG 601
				192·746	300					
43	END PIPE					193·082	375	194·863	1·781	BLANKED END
44	JUNCTION PIT	900	600	192·423	375	192·348	375	194·135	1·787	EDCM STD DWG 605
45	JUNCTION PIT	900	600	193·577	300	193·502	375	194·54	1·038	EDCM STD DWG 605
46	JUNCTION PIT	900	600			193·752	300	194·785	1·033	BLANKED END
47	GRATED ENTRY PIT (B2)	900	600			191·825	300	193·147	1·322	EDCM STD DWG 601
48	GRATED ENTRY PIT (B2)	900	600			193·028	300	194·494	1·466	EDCM STD DWG 601
49	END PIPE			190·494	375			191·982	1·488	TEMPORARY SANDBAG ENDWALL
50	JUNCTION PIT	900	600	190·796	375	190·721	375	192·713	1·992	EDCM STD DWG 605
51	JUNCTION PIT	900	600	191·333	300	191·258	375	192·813	1·555	EDCM STD DWG 605
52	JUNCTION PIT	900	600	192·608	300	192·533	300	193·707	1·174	EDCM STD DWG 605
53	END PIPE					193·9	300	194·969	1·069	BLANKED END
54	GRATED ENTRY PIT (B2)	900	900	189·76	600			191·416	1·656	EDCM STD DWG 601
				190·039	300					
55	JUNCTION PIT	900	900	190·418	600	190·368	600	192·436	2·068	EDCM STD DWG 605
56	GRATED ENTRY PIT (B2)	900	900	190·943	300	190·593	600	192·868	2·275	EDCM STD DWG 601 (HAUNCHED)
				190·643	600					
57	GRATED ENTRY PIT (B2)	900	600	191·61	300	191·56	300	193·446	1·885	EDCM STD DWG 601
58	GRATED ENTRY PIT (B2)	900	600	191·885	300	191·834	300	193·385	1·551	EDCM STD DWG 601
59	JUNCTION PIT	900	600			192·496	300	194·07	1·573	EDCM STD DWG 605
60	GRATED ENTRY PIT (B2)	900	900			190·742	600	192·944	2·202	EDCM STD DWG 601 (HAUNCHED)
61	GRATED ENTRY PIT (B2)	900	600			190·123	300	191·411	1·289	EDCM STD DWG 601

DRAINAGE LONGITUDINAL SECTIONS

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40

SCHEDULE NOTES:-

1. WHERE PIT HAUNCHING IS REQUIRED, INTERNAL PIT WALL DIMENSIONS MUST ALLOW 50mm CLEARANCE EACH SIDE OF PIPE OUTSIDE DIAMETER, INCLUDING ANGULAR PIPE ENTRY TO PIT. MINIMUM DIMENSIONS OF PIT BASE ARE TO BE AS PER SIZES SPECIFIED IN THE PIT SCHEDULE. TOP OF PIT OPENING FOR ALL HAUNCHED PITS TO BE 900mm x 600mm.
2. PIT BASE TO BE SHAPED TO MATCH LOWER HALF OF PIPE WHERE DROP ACROSS PIT IS LESS THAN 50mm.
3. PROVIDE BICYCLE SAFE "V" SHAPED CLASS D GRATE (600mm MIN WIDTH).

INDICATES CRUSHED ROCK BACKFILL CLASS 2

INDICATES CRUSHED ROCK BACKFILL CLASS 3

INDICATES 5YR HGL

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017
DATE APPROVED

AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 388-C10	RATHDOWNE ESTATE STAGE 2 DRAINAGE LONGITUDINAL SECTION		MUNICIPALITY WHITTLESEA
SURVEY BPD			REFERENCE 8352 E/2
DESIGN SS			
DRAWN SS			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JUL'17
			SHEET 18 OF 21 P3

Plotted:01-Dec-17
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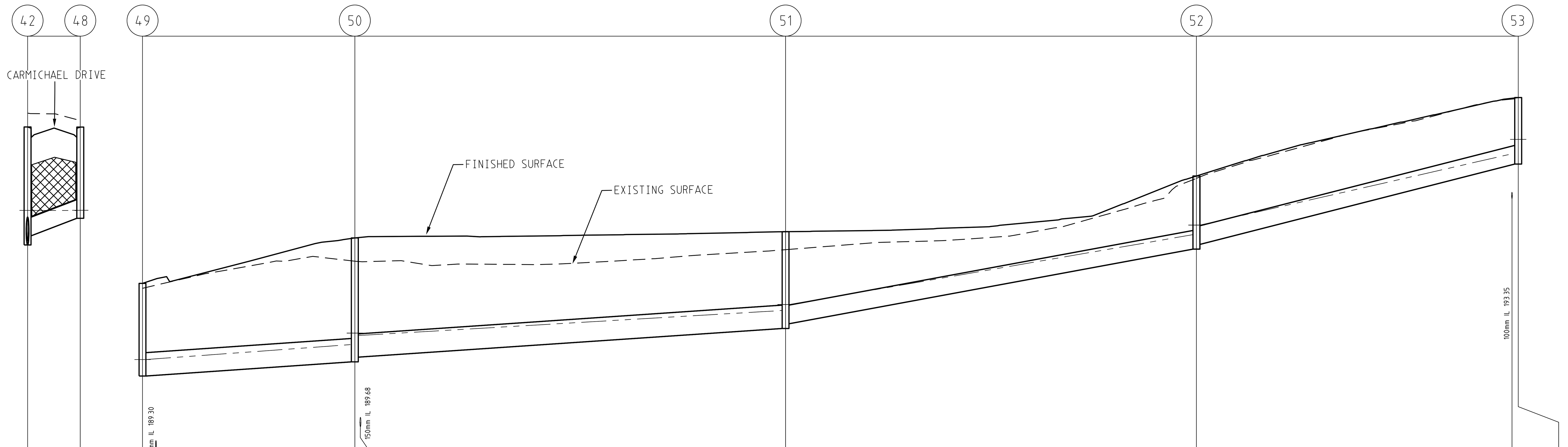
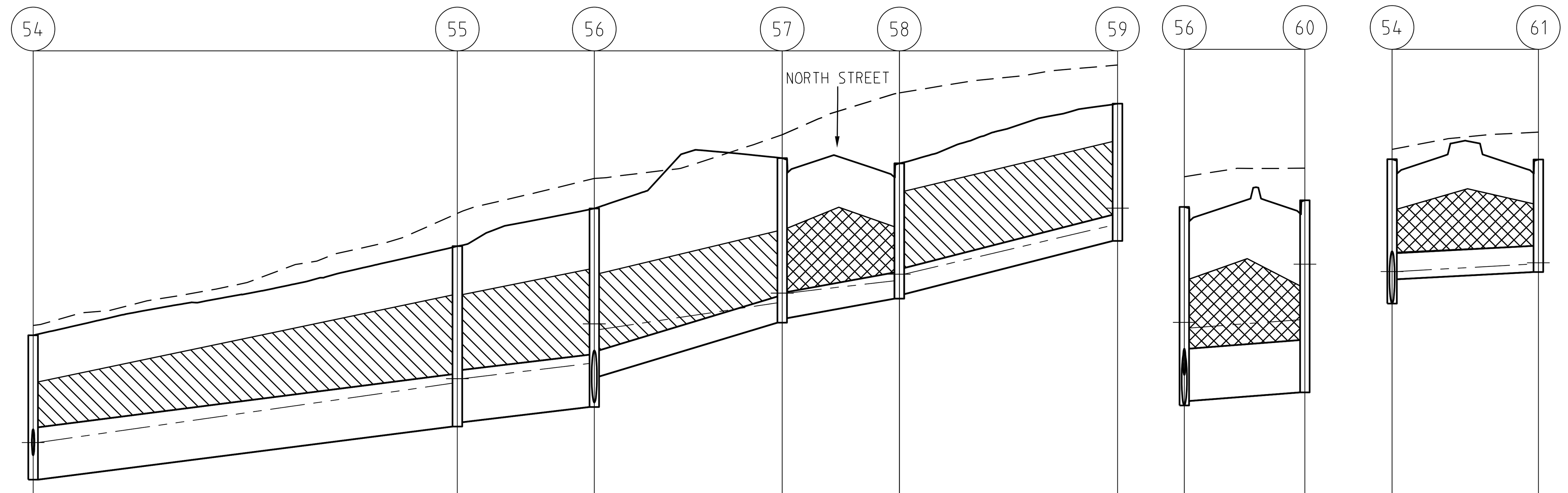


	42–48	49–50	50–51	51–52	52–53
VELOCITY (m/sec)	2.50m/s	1.30m/s	1.30m/s	1.85m/s	2.16m/s
DESIGN (m3/s)	0.01m3/s	0.13m3/s	0.13m3/s	0.09m3/s	0.05m3/s
CAPACITY (m3/s)	0.18m3/s	0.14m3/s	0.14m3/s	0.13m3/s	0.15m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ	375 RRJ	375 RRJ	300 RRJ	300 RRJ
GRADE	1 in 30	1 in 150	1 in 150	1 in 55	1 in 40
DATUM RL	187.0	187.0			187.0
	L=8.464m	L=34.108m	L=69.200m	L=66.000m	L=51.695m

	42	48	49	50	51	52	53
DEPTH FS TO INVERT	1.897 1.750	1.466	1.488 1.488	1.992 1.917	1.555 1.480	1.174 1.099	1.069
HGL LEVEL	193.004 193.155	193.153 193.158	190.758	190.999 191.184 191.144	191.546 191.642	192.765 192.919	194.075 194.296
INVERT	192.599 192.746	193.028	190.494 190.494 190.505	190.721 190.796 190.799	191.258 191.333	192.533 192.608	193.888 193.900
FINISHED SURFACE	194.496	194.494	191.982	192.713	192.813	193.707	194.969
NATURAL SURFACE	194.718	194.599	191.903	192.338	192.524	193.670	194.955
CHAINAGE	0.000	8.464	0.000 2.159	34.108 35.006	103.308	169.308	220.001 221.003



	54–55	55–56	56–57	57–58	58–59	56–60	54–61
VELOCITY (m/sec)	2.43m/s	2.29m/s	2.32m/s	1.77m/s	2.14m/s	1.84m/s	0.97m/s
DESIGN (m3/s)	0.58m3/s	0.59m3/s	0.09m3/s	0.07m3/s	0.05m3/s	0.51m3/s	0.01m3/s
CAPACITY (m3/s)	0.69m3/s	0.65m3/s	0.16m3/s	0.12m3/s	0.15m3/s	0.52m3/s	0.07m3/s
DIAMETER AND TYPE (CLASS 2)	600 RRJ	600 RRJ	300 RRJ	300 RRJ	300 RRJ	600 RRJ	300 RRJ
GRADE	1 in 80	1 in 90	1 in 34.9	1 in 60	1 in 41	1 in 140	1 in 200
DATUM RL	186.0					186.0	184.0
	L=48.670m	L=15.713m	L=21.554m	L=13.438m	L=25.032m	L=13.837m	L=16.786m

	54	55	56	57	58	59	56	60	54	61
DEPTH FS TO INVERT	1.656 1.656	2.068 2.018	2.275 1.925	1.885 1.835	1.551 1.499	1.573	2.275 2.225	2.202	1.377 1.656 1.377	1.289
HGL LEVEL	190.186	190.866 190.917	191.092 191.545 191.481	191.788 191.899 191.898	192.040 192.115	192.678 192.872	191.092 191.545 191.481	191.576 192.213	190.128	190.214 190.228
INVERT	189.760 189.760	190.368 190.418	190.593 190.943	191.560 191.610	191.834 191.885	192.496	190.593 190.643	190.742	190.039 189.760 190.039	190.123
FINISHED SURFACE	191.416	192.436	192.868	193.446	193.385	194.069	192.868	192.944	191.416	191.411
NATURAL SURFACE	191.528	192.812	193.213	193.714	194.193	194.513	193.213	193.313	191.528	191.726
CHAINAGE	0.000	48.670	64.382	85.936	99.375	124.407	0.000	13.837	0.000	16.786

CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

[illegible]
DEVELOPMENT ENGINEER

04/12/2017
DATE APPROVED

DRAINAGE LONGITUDINAL SECTIONS

SCALE HORIZONTAL 1:500
VERTICAL 1:50

1:50 1 0.5 00 1 2 4
1:500 10 5 00 10 20 40

SCHEDULE NOTES:-

1. WHERE PIT HAUNCHING IS REQUIRED, INTERNAL PIT WALL DIMENSIONS MUST ALLOW 50mm CLEARANCE EACH SIDE OF PIPE OUTSIDE DIAMETER, INCLUDING ANGULAR PIPE ENTRY TO PIT. MINIMUM DIMENSIONS OF PIT BASE ARE TO BE AS PER SIZES SPECIFIED IN THE PIT SCHEDULE. TOP OF PIT OPENING FOR ALL HAUNCHED PITS TO BE 900mm x 600mm.
2. PIT BASE TO BE SHAPED TO MATCH LOWER HALF OF PIPE WHERE DROP ACROSS PIT IS LESS THAN 50mm.
3. PROVIDE BICYCLE SAFE "V" SHAPED CLASS D GRATE (600mm MIN WIDTH).

▩ INDICATES CRUSHED ROCK BACKFILL CLASS 2

▨ INDICATES CRUSHED ROCK BACKFILL CLASS 3

—·— INDICATES 5YR HGL

AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 388-C10	RATHDOWNE ESTATE STAGE 2 DRAINAGE LONGITUDINAL SECTION		MUNICIPALITY WHITTLESEA
SURVEY BPD			REFERENCE 8352 E/2
DESIGN SS			
DRAWN SS			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JUL'17

SHEET 19 OF 21 P3

Plotted:01-Dec-17

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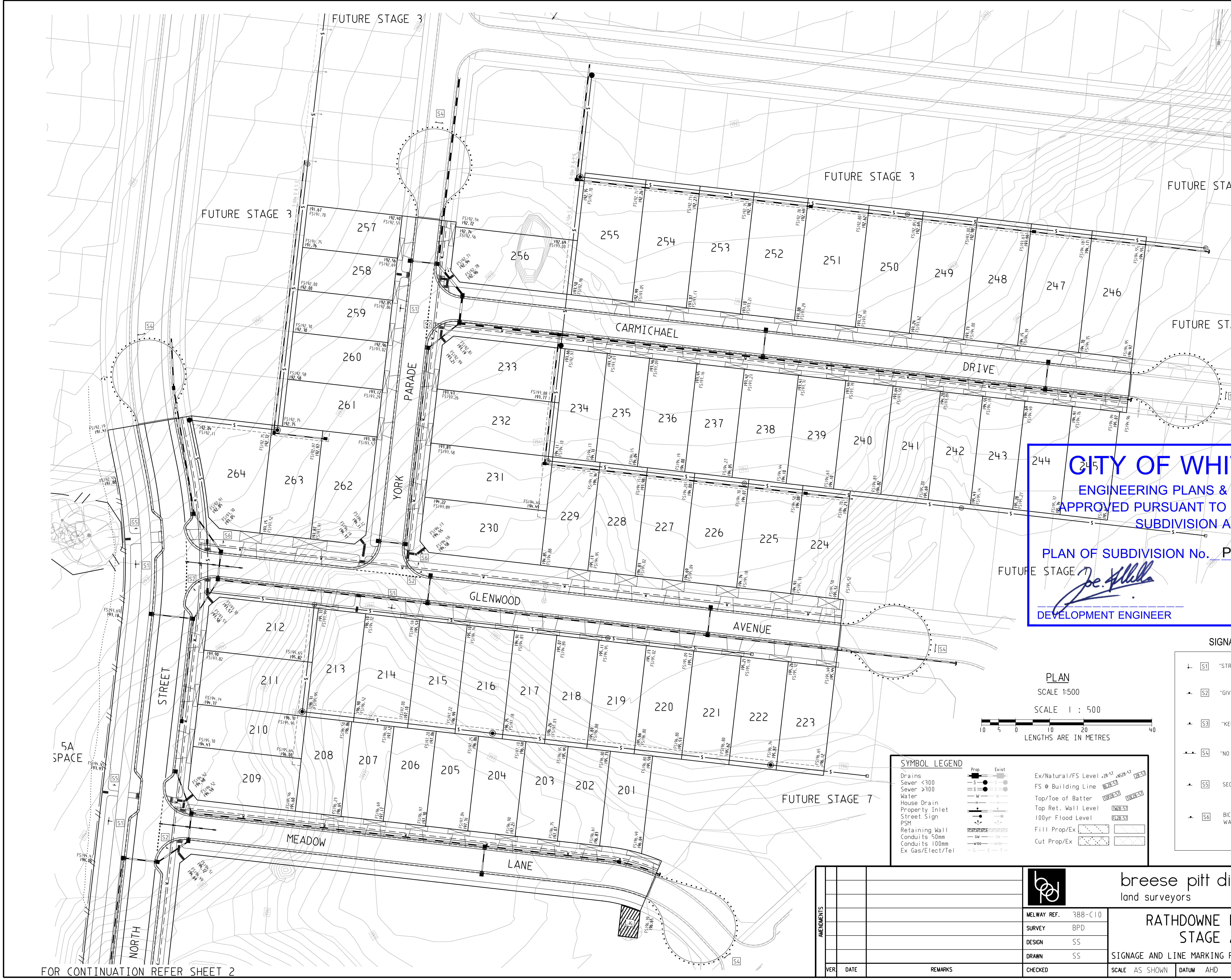


FOR CONTINUATION REFER SHEET 2

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.

WARNING

CONTRACTOR TO TAKE EXTRA CAUTION OF OPTIC FIBER CABLE IN DAVIS ROAD

CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS APPROVED PURSUANT TO SECTION 15 OF THE SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017
DATE APPROVED

SIGNAGE & LINEMARKING LEGEND

S1	"STREET" SIGN	
S2	"GIVE WAY" SIGN (R1-2A)	GIVE WAY
S3	"KEEP LEFT" SIGN (R2-3L)	KEEP LEFT
S4	"NO ROAD" SIGN & "HAZARD" SIGN (G9-18)	NO THROUGH ROAD
S5	SEGREGATED FOOTWAY (R8-3)	ONLY ONLY R8-3(R)
S6	BICYCLE / PEDESTRIAN WARNING (W6-9) & W8-23	W6-9 W8-23

PLAN

SCALE 1:500

SCALE 1 : 500

10 5 0 10 20 40

LENGTHS ARE IN METRES

SYMBOL LEGEND

	Prop	Exist
Drains		
Sewer <300	S	S
Sewer ≥300	S	S
Water	W	W
House Drain	H	H
Property Inlet		
Street Sign		
PSM		
Retaining Wall		
Conduits 50mm	GW	GW
Conduits 100mm	W100	W100
Ex Gas/Elect/Tel		G E T

Ex/Natural/FS Level	+28·57 +NS28·57 28·57
FS @ Building Line	BL28·57
Top/Toe of Batter	TOP28·57 TOE28·57
Top Ret. Wall Level	TW28·57
100yr Flood Level	FL28·57
Fill Prop/Ex	
Cut Prop/Ex	

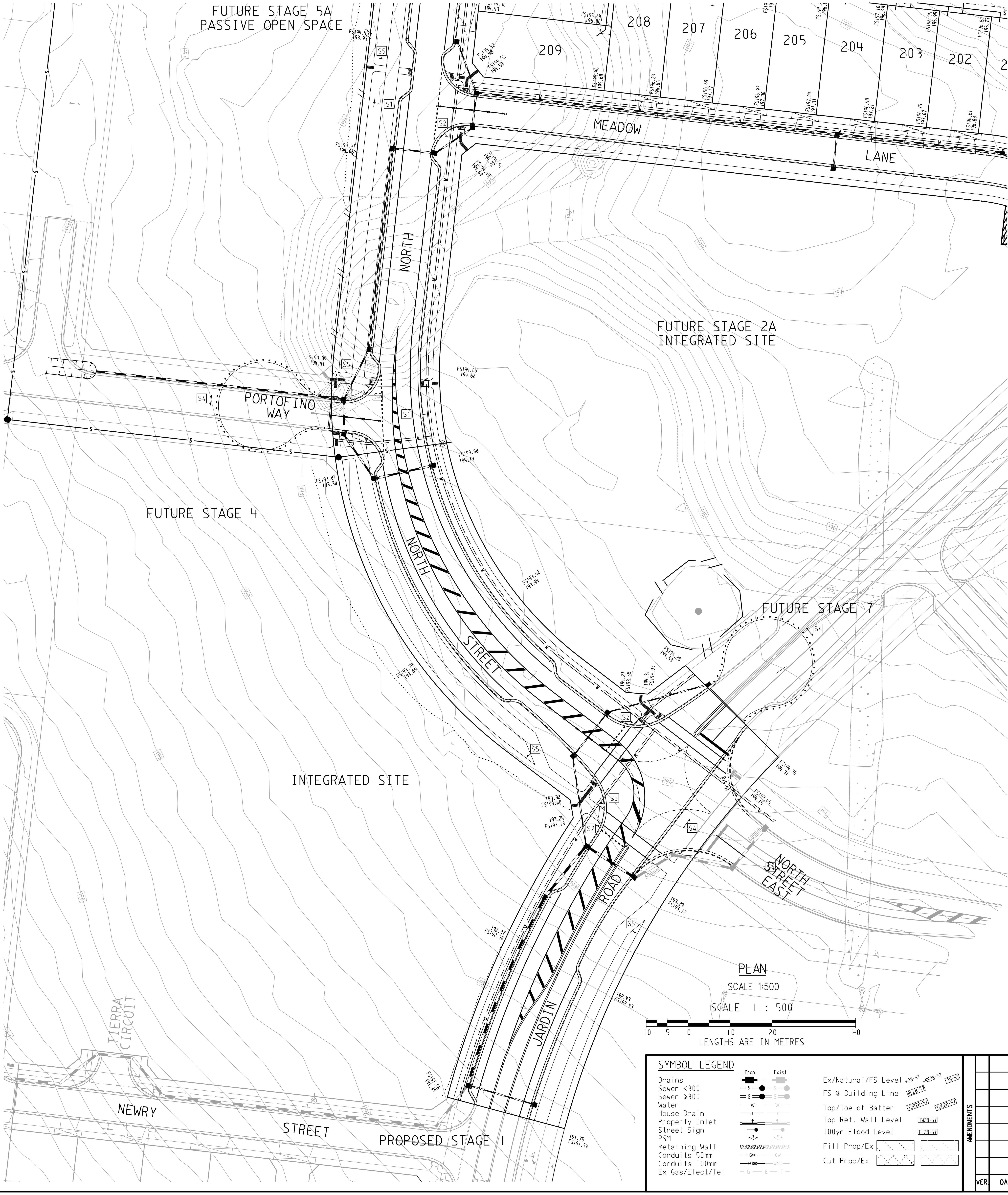
AMENDMENTS		
VER.	DATE	REMARKS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	388-C10	RATHDOWNE ESTATE STAGE 2	MUNICIPALITY WHITTLESEA
SURVEY	BPD		
DESIGN	SS		REFERENCE 8352 E/2
DRAWN	SS	SIGNAGE AND LINE MARKING PLAN SHEET 1 OF 2	
CHECKED		SCALE AS SHOWN · DATUM AHD · DATE JUL'17	SHEET 20 OF 21 · P3

Plotted:01-Dec-17

J:\H9365\Eng\Stage 2\E02_R20_SIGN1.dgn



WARNING

CONTRACTOR TO TAKE EXTRA CAUTION OF OPTIC FIBER CABLE IN DAVIS ROAD

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.

CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S2

DEVELOPMENT ENGINEER

04/12/2017
DATE APPROVED

SIGNAGE & LINEMARKING LEGEND

S1	"STREET" SIGN
S2	"GIVE WAY" SIGN (R1-2A) — GIVE WAY
S3	"KEEP LEFT" SIGN (R2-3L) — KEEP LEFT
S4	"NO ROAD" SIGN & "HAZARD" SIGN (G9-18) — NO THROUGH ROAD
S5	SEGREGATED FOOTWAY (R8-3) — ONLY ONLY — R8-3(R)
S6	BICYCLE / PEDESTRIAN WARNING (W6-9) & W8-23 — W6-9, W8-23

SYMBOL LEGEND

	Prop	Exist
Drains		
Sewer <300		
Sewer ≥300		
Water		
House Drain		
Property Inlet		
Street Sign		
PSM		
Retaining Wall		
Conduits 50mm		
Conduits 100mm		
Ex Gas/Elect/Tel		

Ex/Natural/FS Level
FS @ Building Line
Top/Toe of Batter
Top Ret. Wall Level
100yr Flood Level
Fill Prop/Ex
Cut Prop/Ex

AMENDMENTS

VER.	DATE	REMARKS

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MELWAY REF.	388-C10
SURVEY	BPD
DESIGN	SS
DRAWN	SS
CHECKED	

RATHDOWNE ESTATE
STAGE 2
SIGNAGE AND LINE MARKING PLAN SHEET 2 OF 2

MUNICIPALITY: WHITTLESEA
REFERENCE: 8352 E/2

SCALE	AS SHOWN	DATUM	AHD	DATE	JUL'17	SHEET	21 OF 21	P3