



LEGACYPROPERTY

# CADDENS HILL - PLAYING FIELD CONSTRUCTION CERTIFICATE PROPOSED CARPARK, ROAD & DRAINAGE WORKS



## LOCALITY SKETCH

Prepared By:

**J. WYNDHAM PRINCE**

**CONSULTING CIVIL INFRASTRUCTURE ENGINEERS  
& PROJECT MANAGERS**

PO Box 4366 PENRITH WESTFIELD NSW 2750

P 02 4720 3300 F 02 4720 3399

W [www.jwprince.com.au](http://www.jwprince.com.au)

E [jwp@jwprince.com.au](mailto:jwp@jwprince.com.au)

**ISSUED FOR CONSTRUCTION APPROVAL**

PLAN No.  
110358/CC800 A

FILE No. 110358CC800



LEGEND			
DESCRIPTION	PROPOSED	EXISTING	FUTURE
EXTENT OF WORKS			
KERB & GUTTER			
PRAM RAMP			
DRAINAGE LINE, PIT & EASEMENT			
DRAINAGE LINE & PIT			
HEADWALL			
GUIDE POSTS			
EXTENT OF FILL			
EXTENT OF CUT			
CONTOURS			
CATCH DRAIN			
KERB RETURN No			
ELECTRICITY, POWER POLE			
TELECOM, BOX			
WATER, STOP VALVE, HYDRANT			
SEWER, MANHOLE			
GAS			
TREES TO BE RETAINED			
TREES TO BE REMOVED			
STREET NAME SIGNS			
SURVEY MARKS - BENCH MARKS			
STATE SURVEY MARKS			
RECOVERY PEGS			
STAGE BOUNDARY			
STABILISED SITE ACCESS			
SEDIMENT FENCE			
STRAW BALE BARRIER			
STOCKPILE			
PROTECTIVE FENCING			
MESH AND GRAVEL INLET FILTER			
GEOTEXTILE INLET FILTER			

## GENERAL NOTES:

- ALL WORKS ARE TO BE IN ACCORDANCE WITH PENRITH CITY COUNCILS "DESIGN GUIDELINES FOR ENGINEERING WORKS FOR SUBDIVISIONS AND DEVELOPMENTS" & "ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS".
- SURVEY MARKS:-
  - STATE SURVEY MARKS LOCATIONS TO BE FIXED BY PROJECT SURVEYOR DURING WORK AS EXECUTED SURVEY OF SUBDIVISION.
  - SURVEY MARKS SHOWN THUS ▲ SHALL BE RETAINED AT ALL TIMES. WHERE RETENTION IS NOT POSSIBLE THE SUPERINTENDENT MUST BE NOTIFIED AND CONSENT RECEIVED PRIOR TO THEIR REMOVAL.
- THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST IF NECESSARY.
- THE CONTRACTOR SHALL NOT ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE WRITTEN PERMISSION OF THE OWNERS. TO BE PROVIDED PRIOR TO THE APPROVAL OF THE PLANS.
- THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
- NO TREE SHALL BE FELLED, LOPPED OR REMOVED WITHOUT THE PRIOR APPROVAL OF COUNCIL'S ENGINEER.
- TREES TO BE RETAINED ON SITE SHALL BE PROTECTED BY SUITABLE STURDY APPROVED PROTECTIVE FENCING PRIOR TO COMMENCEMENT OF SITE WORKS.
- THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES OUT-HOUSES, CAR BODIES AND DEBRIS ETC.
- EXISTING SEDIMENT BASINS SHALL BE DEWATERED AND DESILTED. LEVELS SHALL BE OBTAINED ON SOUND MATERIAL PRIOR TO FILLING.
- FILLING IS TO BE FROM A NOMINATED SOURCE, OF SOUND CLEAN MATERIAL, FREE FROM LARGE ROCK, STUMPS, CONTAMINATED MATTER, INDUSTRIAL AND BUILDING WASTE, ORGANIC MATTER AND OTHER DEBRIS. PLACING OF FILLING ON THE PREPARED AREAS SHALL NOT COMMENCE UNTIL THE AUTHORITY TO DO SO HAS BEEN OBTAINED FROM THE COUNCIL.
- SITE FILL AREAS:- THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- ALL SITE FILLING TO BE COMPACTED TO 95% STANDARD COMPACTION AND SHALL BE CONTROLLED BY A REGISTERED SOIL LABORATORY IN ACCORDANCE WITH COUNCIL'S "ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS".
- ALL SITE REGRADING AREAS SHALL BE GRADED AT A MINIMUM 1% TO THE ENGINEERS. REQUIREMENTS.
- SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED BY THE SUPERINTENDENT.
- EASEMENT WIDTHS SHALL BE IN ACCORDANCE WITH 3.11 DRAINAGE EASEMENTS OF PENRITH CITY COUNCIL'S DESIGN GUIDELINES FOR ENGINEERING WORKS FOR SUBDIVISION AND DEVELOPMENTS.

PIPE DIA.	EASEMENT WIDTH
150Ø	1.5m
225Ø	2.0m
300Ø	2.0m
375Ø	2.5m
450Ø	2.5m
545Ø	2.5m
600Ø	2.5m
675Ø	3.0m
- DRAINAGE LINES UNDER ROADS SHALL BE BACKFILLED WITH NON-COHESIVE SAND AND HAVE 3m OF SUBSOIL DRAIN WRAPPED IN APPROVED FILTER SOCK, DISCHARGING INTO DOWN STREAM PITS. PIPE CLASS INDICATED ARE FOR REINFORCED CONCRETE PIPES (RCP) IF FIBRE REINFORCED CONCRETE PIPES (FRC) REFER TO PENRITH CITY COUNCIL "ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS"
- ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL ASPHALTIC CONCRETE SEAL.
- VEHICULAR CROSSINGS SHALL BE CONSTRUCTED IN KERB AND GUTTER WHERE SHOWN IN ACCORDANCE WITH PCC STANDARD DRAWING SD1002.
- PRAM CROSSINGS SHALL BE CONSTRUCTED IN KERB AND GUTTER IN ACCORDANCE WITH COUNCIL'S STANDARD DRAWING SD1002.
- STREET NAME SIGNS SHALL BE ERECTED, WHERE SHOWN, IN ACCORDANCE WITH COUNCIL'S STANDARD SD1006/1 AND SD1006/2.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS.
- ALL INTERALLOTMENT DRAINAGE LINES SHALL BE LAID AT A MINIMUM GRADE OF 1% UNLESS OTHERWISE INDICATED.
- DRAINAGE LINES ON PLANS ARE DIAGRAMMATIC ONLY AND PIPE CENTRELINES SHALL ENTER AND EXIT PITS AT THE CENTRE OF THE RESPECTIVE PIT WALLS.
- DIMENSIONS OF ANY DETAIL SHALL NOT BE SCALED - DIMENSIONS, IF IN DOUBT, SHALL BE VERIFIED BY THE SUPERINTENDENT.
- ALL CONSTRUCTION AND RESTORATION WORK ON COUNCIL'S ROAD AND FOOTPATH AREA ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED DRAWINGS AND COUNCIL'S STANDARD SPECIFICATIONS AND APPROVED BY PENRITH CITY COUNCIL THROUGH A S138 ROADS ACT APPROVAL.
- ALL LAND THAT HAS BEEN DISTURBED BY EARTHWORKS IS TO BE SPRAY GRASSED OR SIMILARLY TREATED TO ESTABLISH A GRASS COVER.
- NO FILL MATERIAL IS TO BE IMPORTED TO THE SITE WITHOUT THE PRIOR APPROVAL OF PCC IN ACCORDANCE WIT H SYDNEY REGIONAL ENVIRONMENTAL PLAN No.20 (HAWKESBURY-NEPEAN RIVER) (No.2-1997). NO RECYCLING OF MATERIAL FOR USE OF FILL MATERIAL SHALL BE CARRIED OUT ON THE SITE WITHOUT THE PRIOR APPROVAL OF COUNCIL.
- ALL EARTHWORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH AS3798 AND PCC DESIGN GUIDELINES FOR ENGINEERING WORKS FOR SUBDIVISIONS AND DEVELOPMENTS AND ENGINEERING CONSTRUCTION SPECIFICATIONS FRO CIVIL WORKS.
- VEHICLE CROSSINGS TO BE LOCATED 1.0m CLEAR OF ANY LINTELS.
- ALL VERGE AREAS EXTEND FROM BACK OF KERB TO PROPERTY BOUNDARY TO BE TURFED.
- ALL STORMWATER PITS WITH DEPTHS GREATER THAN 1.0m TO HAVE GALVANISED OR OTHERWISE APPROVED STEP IRONS AT 300mm SPACING INSTALLED.
- KERB TYPES USED IN SITE ARE KERB AND GUTTER UNLESS OTHERWISE NOTED. FOR DETAILS REFER TO PENRITH CITY COUNCIL "ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS" STANDARD SD1003/1 & SD1003/2.
- KERB ADAPTORS SHALL BE PROVIDED FOR ALL LOTS DRAINING TO THE STREET. FOR DETAIL REFER TO PENRITH CITY COUNCIL "ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS"
- ALL WASTE MATERIAL STORED ON-SITE ARE TO BE CONTAINED WITHIN A DESIGNATED AREA SUCH AS A WASTE BAY OR BIN. CONTRACTOR TO ENSURE THAT NO WASTE MATERIALS ARE ALLOWED TO ENTER THE STORMWATER SYSTEM OR NEIGHBOURING PROPERTIES. THE DESIGNATED WASTE STORAGE AREAS SHALL PROVIDE AT LEAST TWO WASTE BAY/BINS SO AS TO ALLOW FOR THE SEPARATION OF WASTES, AND ARE TO BE FULLY ENCLOSED WHEN SITE IS UNATTENDED.
- AN APPROPRIATE QUALIFIED PERSON/S SHALL SUPERVISE ALL FILLING WORKS.

## SURVEY SET OUT INFORMATION NOTES:

- ALL SITE SET OUT AND CONTROL POINTS ARE TO BE CERTIFIED BY A REGISTERED SURVEYOR.
- THE INFORMATION DETAILED ON THE CERTIFIED CONSTRUCTION CERTIFICATE PLANS TAKES PRECEDENCE OVER ALL ELECTRONIC INFORMATION PROVIDED. THE ORDER OF PRIORITY FOR USE OF ALL INFORMATION PROVIDED IS AS FOLLOWS:
  - CERTIFIED CONSTRUCTION CERTIFICATE DRAWINGS
  - 2D DRAFTING BASE (ELECTRONIC FILE)
  - 3D DTM (ELECTRONIC FILE)
- ANY DISCREPANCY BETWEEN ANY OF THE INFORMATION CONTAINED WITHIN THESE FILES IS TO BE BROUGHT TO THE ATTENTION OF THE SUPERINTENDENT PRIOR TO CONSTRUCTION WHO WILL SEEK CLARIFICATION AND ISSUE INSTRUCTIONS ON THE APPROPRIATE COURSE OF ACTION.

### SURVEY BY:

**SDG LAND DEVELOPMENT SOLUTIONS**  
UNIT 7 1B KLEINS ROAD  
NORTHMEND 2152  
Ph. (02) 9630 7955  
FILE: 6072 CONTOUR ISSUE D.DWG      DATE: 22/4/16

### Survey By:

**VINCE MORGAN (SURVEYORS) PTY. LTD.**  
CONSULTING SURVEYORS  
P.O. Box 227, Penrith. 2751  
Ph. (02) 4721 5293

Date: 21/09/16 File Name: 20467-L2.dwg  
Date: 21/09/16 File Name: 210916topo.dxf

## CUSTOM MADE PRECAST PIT NOTES:

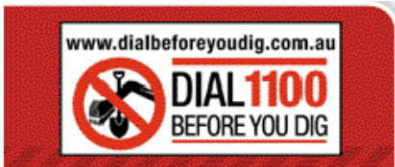
- DESIGN DOCUMENTATION REFLECTS PRECAST DRAINAGE PITS BEING USED FOR THE SITE. UNLESS NOTED OTHERWISE.
- AUSPITS CUSTOM MADE PRECAST PITS TO BE USED.
- PITS TO COMPLY WITH THE FOLLOWING PARAMETERS:
  - ARE SPECIFICALLY MANUFACTURED FOR THE PROJECT.
  - EACH PIT IS ACCOMPANIED BY A CERTIFICATE OF STRUCTURAL ADEQUACY SIGNED BY A NPER ENGINEER (STRUCTURAL)
  - THE STRUCTURAL CERTIFICATION OF THE PITS SHOULD INCLUDE ANY ADDITIONAL PRECAST ELEMENTS REQUIRED TO BRING THE PIT UP TO FINAL LEVELS ON SITE.
  - PITS MUST BE FIRMLY BEDDED ON SOUND MATERIAL.
  - CONCRETE IS TO BE POURED AROUND THE BASE TO AID IN STABILISATION OF THE PIT.
  - PIT FLOORS ARE TO HAVE A 1% FALL TOWARDS THE OUTLET PIPE.
  - ANY PIT REQUIRING MODIFICATION AFTER IT HAS BEEN POURED IN THE FACTORY OR DAMAGED IN TRANSPORT CANNOT BE USED.
  - ALL WORK TO BE TO THE SATISFACTION OF COUNCIL'S DEVELOPMENT INSPECTORS.

IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE DETAILED PIT DRAWINGS AND STRUCTURAL CERTIFICATION IF INSITU PITS ARE TO BE CONSTRUCTED.

ALL CAST INSITU PITS TO BE IN ACCORDANCE WITH PCC STANDARD DRAWINGS SD2001/1, SD2001/2 AND SD2001/3. ANY PIT GREATER THAN 2m DEEP WILL REQUIRE SEPARATE APPROVAL.

## INDEX

PLAN NO.	PLAN NAME	REV
110358/CC800	COVER SHEET	A
110358/CC801	GENERAL NOTES, INDEX & LEGEND	B
110358/CC802	SITE LAYOUT PLAN	A
110358/CC803	ENGINEERING PLAN	B
110358/CC804	PAVEMENT PLAN	B
110358/CC805	CADDENS ROAD LIP PROFILE AND TYPICAL SECTIONS	B
110358/CC806	ROAD No.1 CROSS SECTIONS	B
110358/CC806A	ROAD No.1 CROSS SECTIONS & LONGITUDINAL SECTION	A
110358/CC807	CATCHMENT PLAN	B
110358/CC808	DRAINAGE PROFILES	B
110358/CC809	SOIL & WATER MANAGEMENT PLAN	B
110358/CC810	SOIL & WATER MANAGEMENT NOTES	A
110358/CC811	SIGNAGE AND LINEMARKING PLAN	A



UTILITIES SHOWN ARE DIAGRAMMATIC ONLY. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM.

**NOTE: UTILITIES SHOWN MAY NOT INCLUDE ALL SERVICES WITHIN THE LIMIT OF WORKS**

CLIENT:



THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

**ISSUED FOR CONSTRUCTION APPROVAL**

**CADDENS HILL - PLAYING FIELD  
CARPARK, ROAD & DRAINAGE WORKS**

GENERAL NOTES, INDEX & LEGEND

PLAN No:  
**110358/CC801** **B**

FILE No: 110358CC801

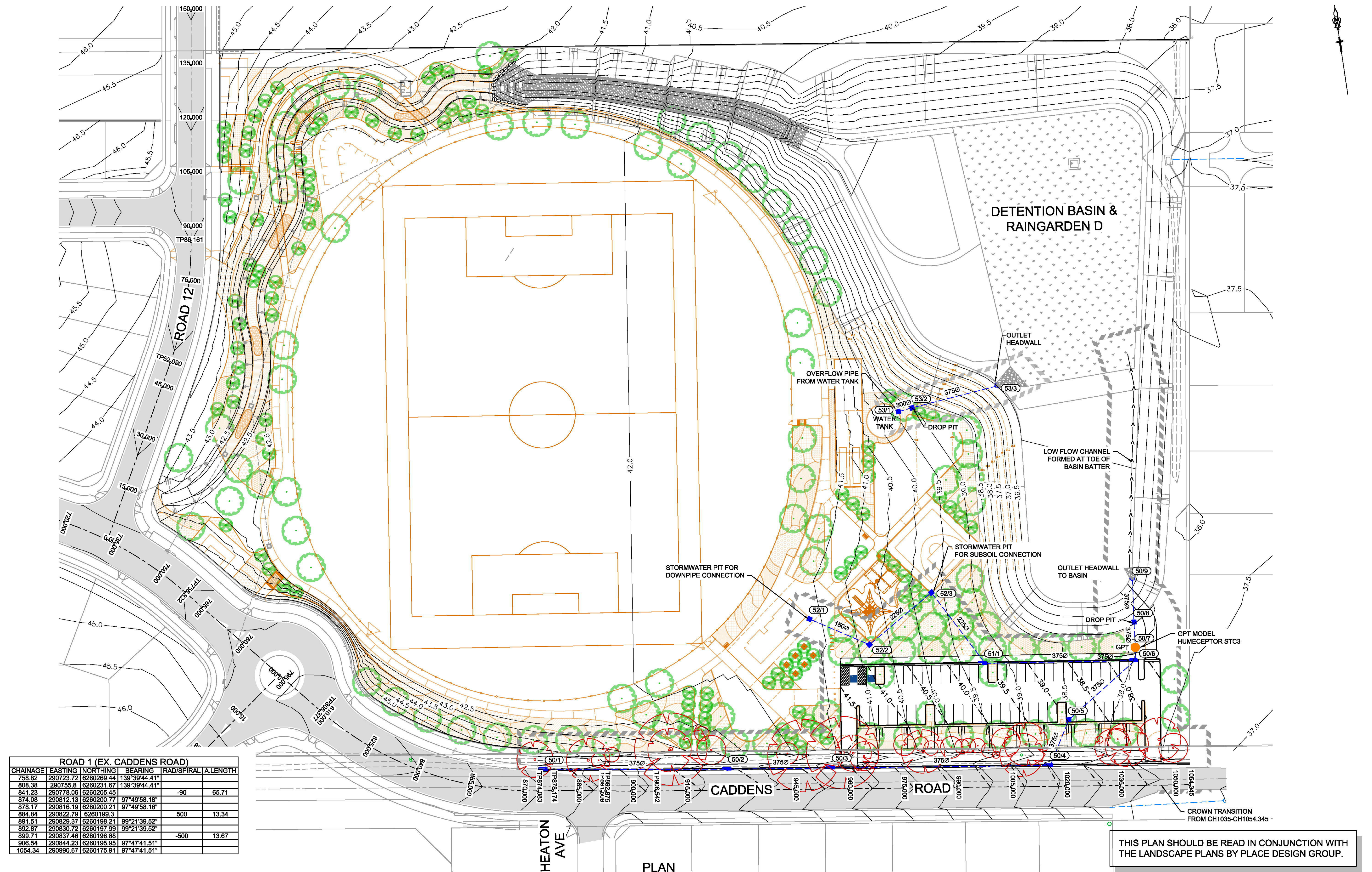
SHEET SIZE: A1 ORIGINAL

**J. WYNDHAM PRINCE** CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

AZIMUTH:  
M.G.A  
DATUM:  
A.H.D  
ORIGIN:





ROAD 1 (EX. CADDENS ROAD)						
CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	
708.38	290723.72	6260289.44	138°39'44.41"			
808.38	290755.8	6260231.67	138°39'44.41"			
841.23	290778.06	6260205.45		-90	65.71	
874.08	290812.13	6260200.77	97°45'58.18"			
878.17	290816.19	6260200.21	97°45'58.18"			
884.84	290822.79	6260199.3		500	13.34	
891.51	290829.37	6260198.21	98°21'39.52"			
892.87	290830.72	6260197.89	98°21'39.52"			
892.87	290837.46	6260197.89		-500	13.67	
906.54	290844.23	6260195.95	97°47'41.51"			
1054.34	290980.67	6260175.91	97°47'41.51"			

PLAN  
SCALE 1:500

10 0 10 20 30 40

1:500 (AT A1)  
1:1000 (AT A3)

METRES

CLIENT



**LEGACYPROPERTY**

THIS DRAWING MUST NOT BE USED FOR  
CONSTRUCTION UNLESS SIGNED AS PART OF AN  
APPROVED CONSTRUCTION CERTIFICATE.

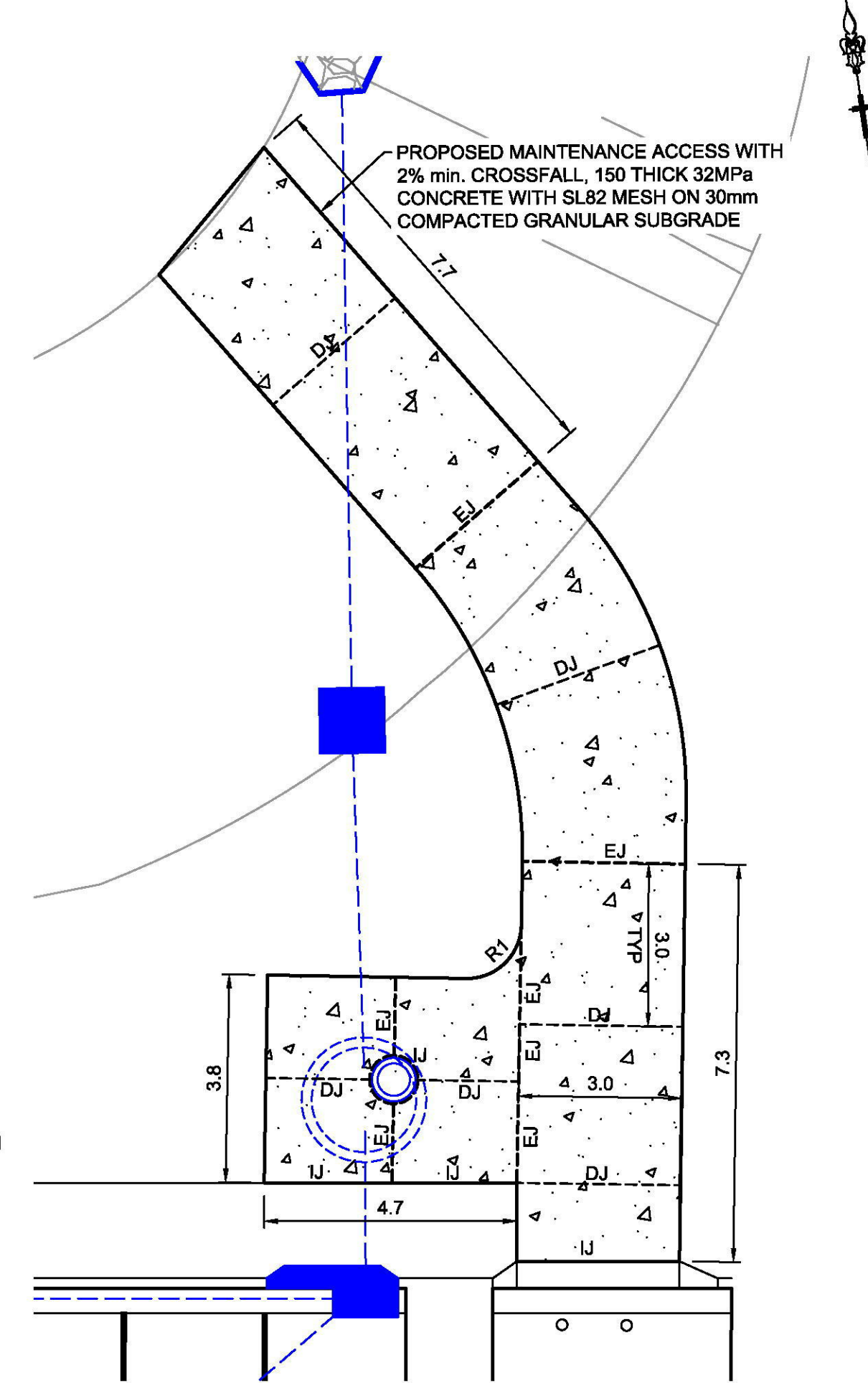
**ISSUED FOR CONSTRUCTION APPROVAL**

## CADDENS HILL - PLAYING FIELD CARPARK, ROAD & DRAINAGE WORKS

## SITE LAYOUT PLAN

PLAN No:		A
110358/CC802		
FILE No: 110358CC802		
SHEET SIZE:		A1 ORIGINAL





**PLAN**  
SCALE 1:200

20.3

3.5

EXISTING CADDENS ROAD

ROAD BOUNDARY

EX. PAVEMENT

NEW PAVEMENT

1:10

KO

3.0%

CARPARK CL

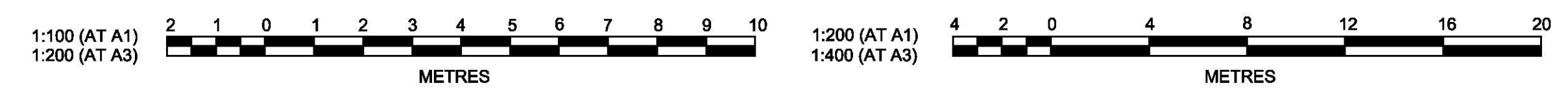
K&G

BASIN D  
(UNDER CONSTRUCTION)

EXISTING WATER MAIN

**SECTION**  
SCALE H 1:200  
V 1:100

KERB ALIGNMENT 2					
CH/AJNCE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH
0	290900.53	6260194.3	7°49'11.22"		
16.56	290902.78	6260210.71	7°49'11.22"		
16.8	290902.82	6260211.01		0.3	0.47
17.03	290903.12	6260210.97	97°25'43.24"		
17.23	290903.32	6260210.94	97°25'43.24"		
17.47	290903.52	6260210.9		0.3	0.47
17.71	290903.58	6260210.6	187°49'11.22"		
22.9	290902.87	6260205.45			
41.1	290920.92	6260203.1			
46.11	290921.6	6260208.06	7°49'11.22"		
46.5	290921.67	6260208.55		0.5	0.78
46.89	290922.16	6260208.49	97°25'43.24"		
48.49	290923.74	6260208.28	97°25'43.24"		
48.88	290924.24	6260208.21		0.5	0.79
49.28	290924.17	6260207.72	187°49'11.22"		
54.28	290923.5	6260202.77			
88.08	290957.01	6260195.39			
93.09	290957.69	6260203.35	7°49'11.22"		
93.47	290957.76	6260203.84		0.5	0.78
93.86	290958.25	6260203.78	97°25'43.24"		
95.46	290958.84	6260203.57	97°25'43.24"		
95.86	290960.34	6260203.51		0.5	0.79
96.25	290960.27	6260203.01	187°49'11.22"		
101.25	290959.59	6260198.06			
122.05	290980.22	6260195.37			
127.25	290980.92	6260200.52	7°49'11.22"		
127.49	290980.96	6260200.82			
127.72	290981.28	6260200.78	97°25'43.24"		
127.92	290981.46	6260200.65	97°25'43.24"		
128.16	290981.76	6260200.72		0.3	0.47
128.39	290981.72	6260200.42	187°49'11.22"		
145.46	290979.39	6260183.51	187°49'11.22"		



**J. WYNDHAM PRINCE** CONSULTING CIVIL INFRASTRUCTURE ENGINEERS  
& PROJECT MANAGERS

AZIMUTH:  
M.G.A

DATUM:  
A.H.D

ORIGIN:

**CLIENT:**



THIS DRAWING MUST NOT BE USED FOR  
CONSTRUCTION UNLESS SIGNED AS PART OF AN  
APPROVED CONSTRUCTION CERTIFICATE.

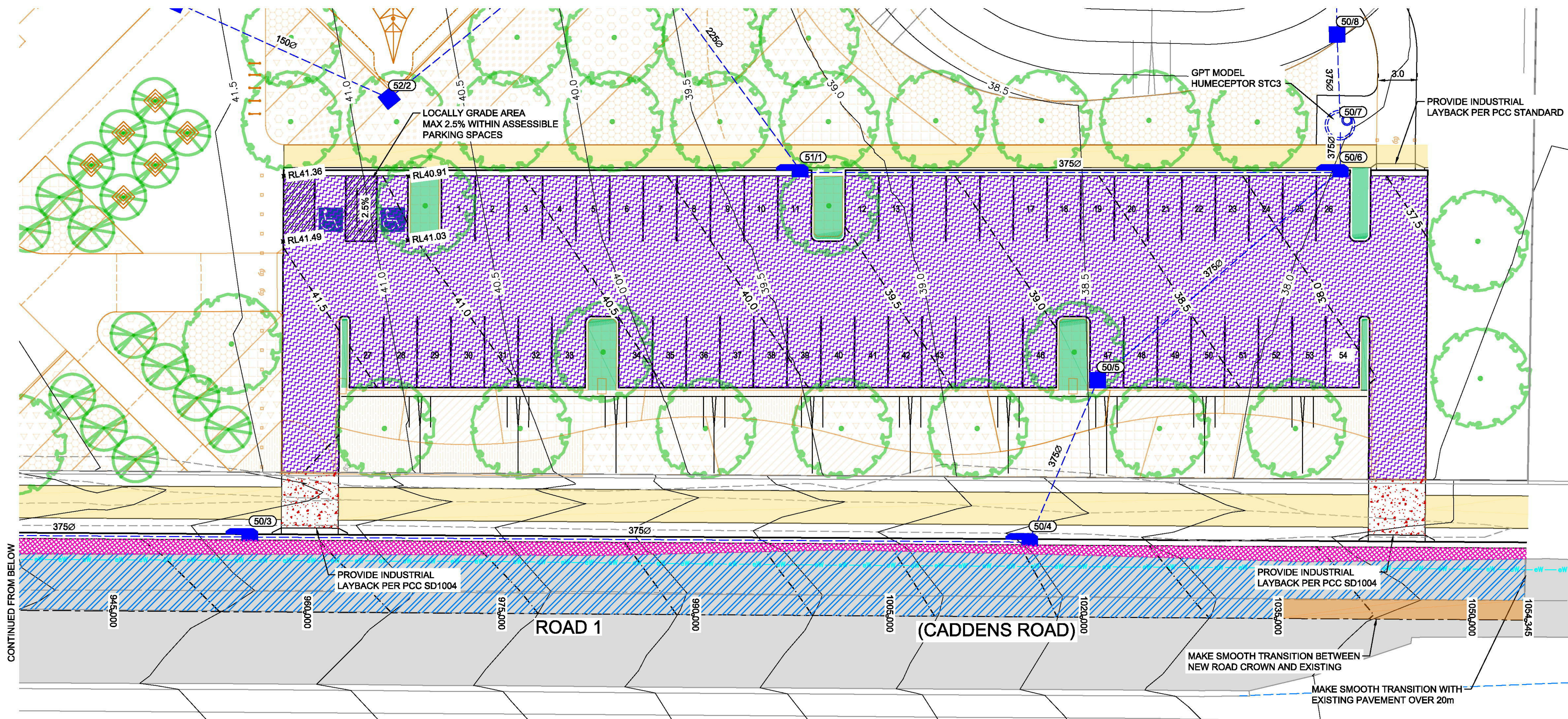
**ISSUED FOR CONSTRUCTION APPROVAL**

## CADDENS HILL - PLAYING FIELD CARPARK, ROAD & DRAINAGE WORKS

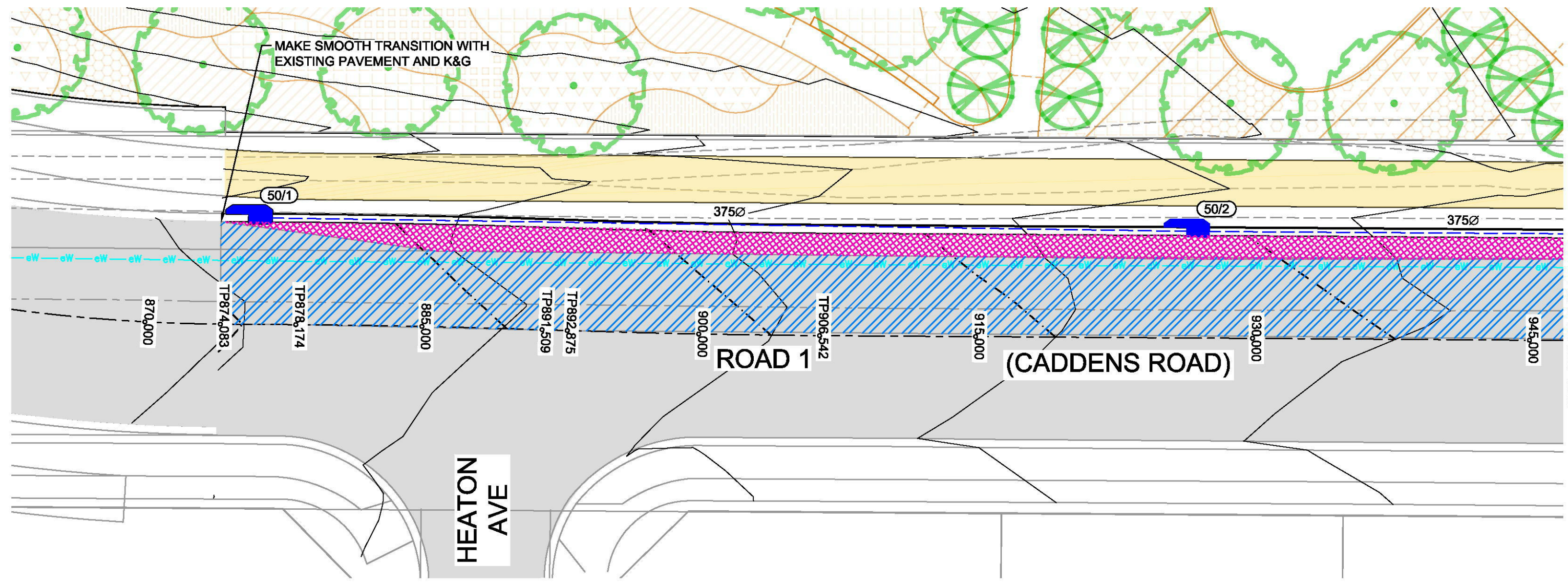
## ENGINEERING PLAN

PLAN No:	
110358/CC803	B
FILE No: 110358CC803	
SHEET SIZE: A1 ORIGINAL	





PLAN  
SCALE 1:200



PLAN  
SCALE 1:200

**LEGEND**

PAVEMENT TYPE

- NEW PAVEMENT (DEEP LIFT)
- NEW PAVEMENT (FULL DEPTH)
- PAVEMENT TRANSITION
- CARPARK PAVEMENT
- CONCRETE FOOTPATH/SHARED PATH (REFER PCC CONSTRUCTION SPEC)
- CONCRETE ACCESS DRIVEWAY (REFER PCC CONSTRUCTION SPEC)
- LANDSCAPING (BY OTHERS)
- NOMINAL SAWCUT LINE (ALONG PROPOSED CL)

**PAVEMENT NOTES CARPARK**

CARPARK 1x10<sup>5</sup>

40mm MINIMUM THICKNESS (AC10)  
SINGLE COAT FLUSH SEAL  
120mm THICK BASECOURSE (DGB20)  
230mm THICK SUB BASE (DGS40)  
COMPACTED SUBGRADE

REFER TO REPORT BY GEOTECH TESTING  
PTY LTD REF 8611/2-AA

**PAVEMENT NOTES ROAD No.1**

DISTRIBUTOR 1x10<sup>6</sup>

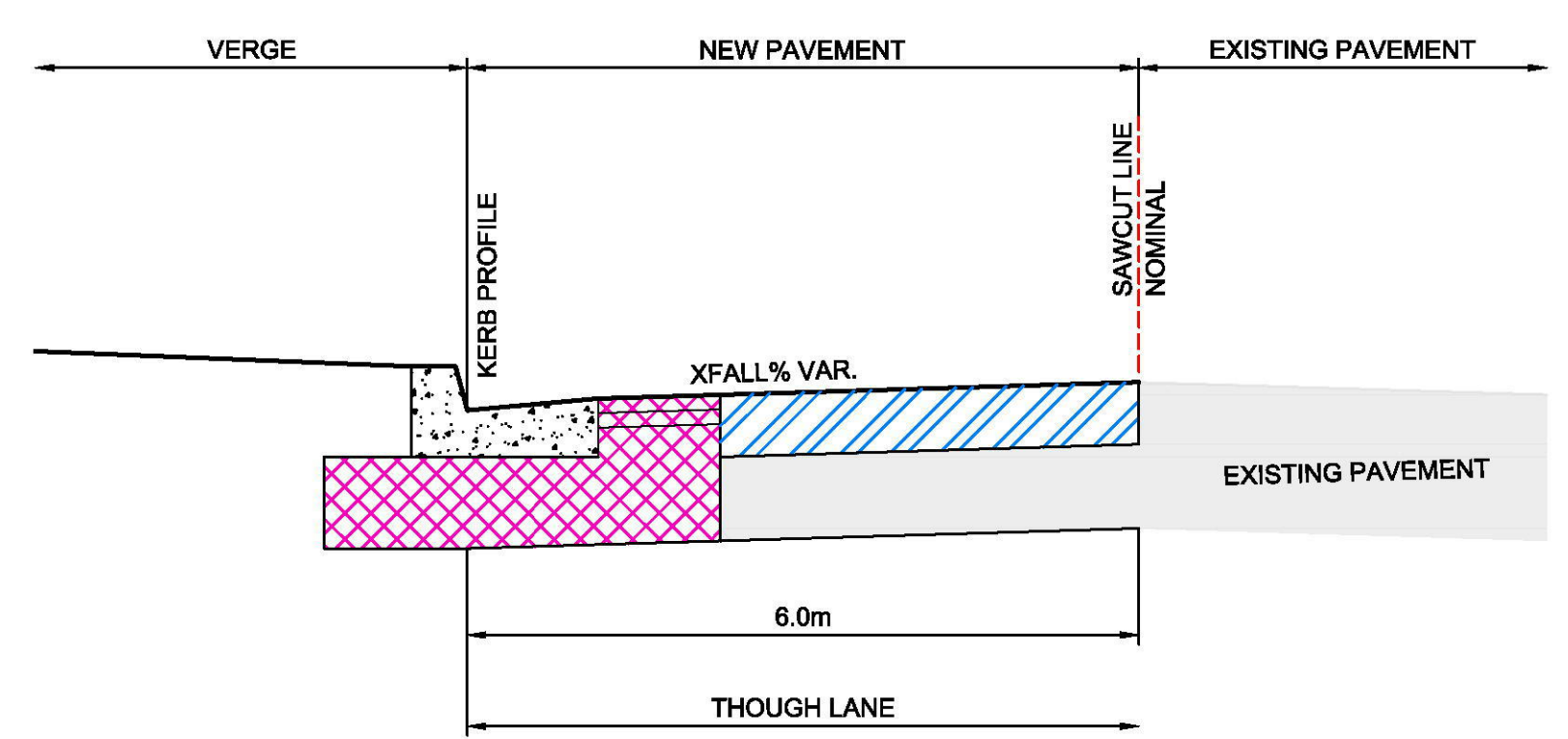
50mm MINIMUM THICKNESS (AC10) 2 x LAYERS 25mm (AC10)  
\*FINAL AC LAYER TO BE DEFERRED & BONDED  
SINGLE COAT FLUSH SEAL  
150mm THICK BASECOURSE (DGB20)  
300mm THICK SUB BASE (DGS40)  
COMPACTED SUBGRADE

REFER TO REPORT BY GEOTECH TESTING  
PTY LTD REF 8611/1-AA-R4

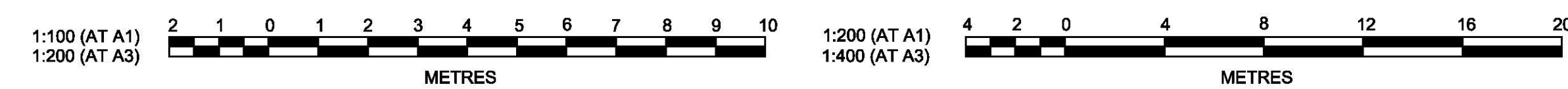
**PAVEMENT NOTES ROAD No.1**

50mm THICK AC14 HDA (A15E) WAERING COURSE  
60mm AC20 HDA (AR450)  
60mm AC20 HDA (AR450)  
SINGLE COAT FLUSH SEAL  
EXISTING ROAD BASE

REFER TO REPORT BY GEOTECH TESTING  
PTY LTD REF 8611/2-AA



DETAIL 'A'  
NEW PAVEMENT INTERFACE WITH MILL & PAVE  
SCALE 1:25



Plotfile: 13 March, 2018 9:30:47 AM File Name: J:\110358 - O'Connell Lane Caddens\06 - Playing Field\CD\CC110358CC804.dwg

B	CARPARK ALIGNMENT & PAVEMENT EXTENTS AMENDED	JT	JT	MP	MS	12/03/18
A	ISSUE FOR CONSTRUCTION APPROVAL	JT	NM	MP	MS	07/12/17
	AMENDMENT	DES	DRN	CKD	APR	DATE

**J. WYNDHAM PRINCE** CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750  
P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

AZIMUTH: M.G.A  
DATUM: A.H.D  
ORIGIN:

CLIENT:

**LEGACYPROPERTY**

THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

**ISSUED FOR CONSTRUCTION APPROVAL**

CADDENS HILL - PLAYING FIELD  
CARPARK, ROAD & DRAINAGE WORKS

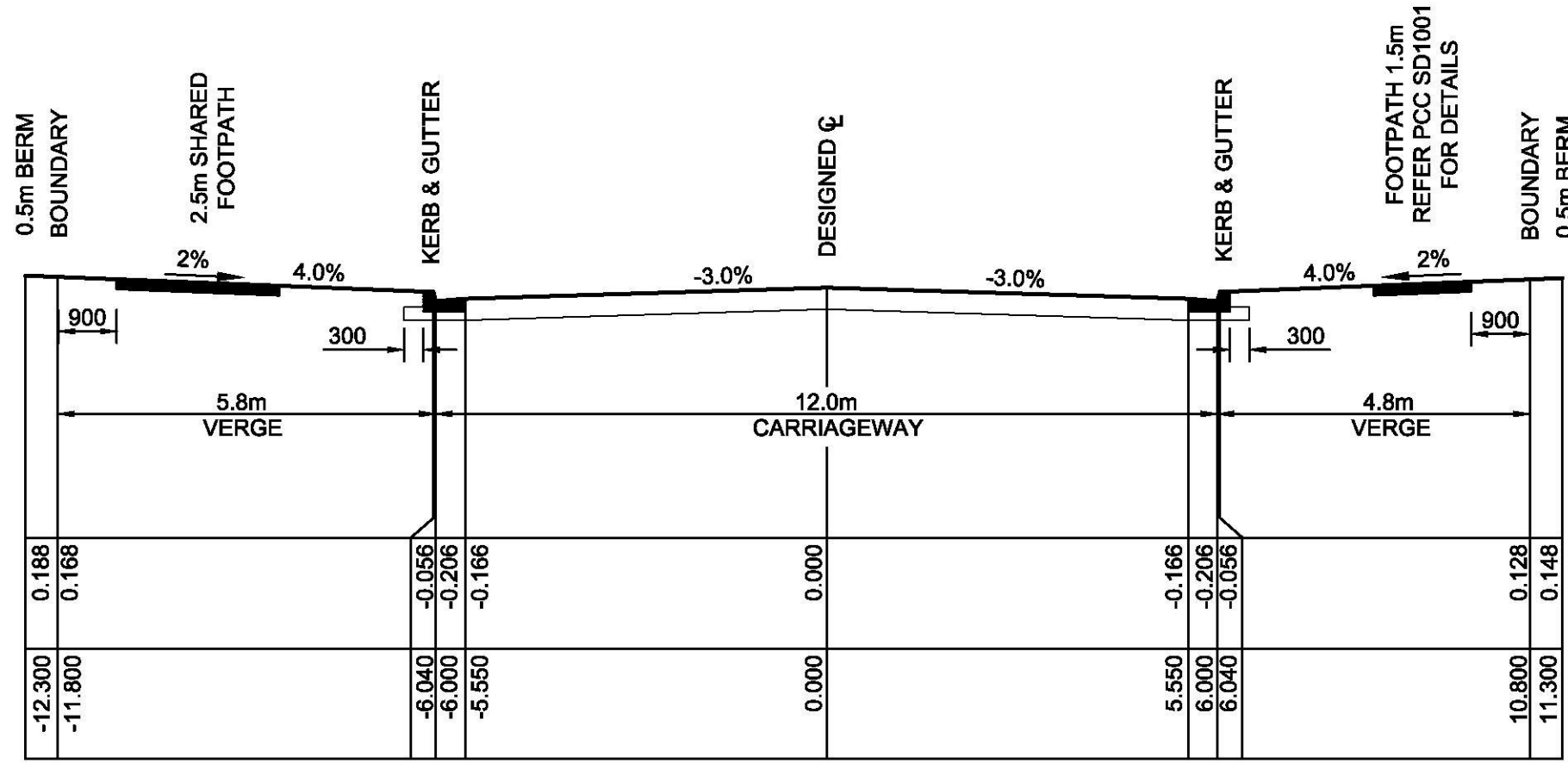
PAVEMENT PLAN

PLAN No: 110358/CC804 **B**

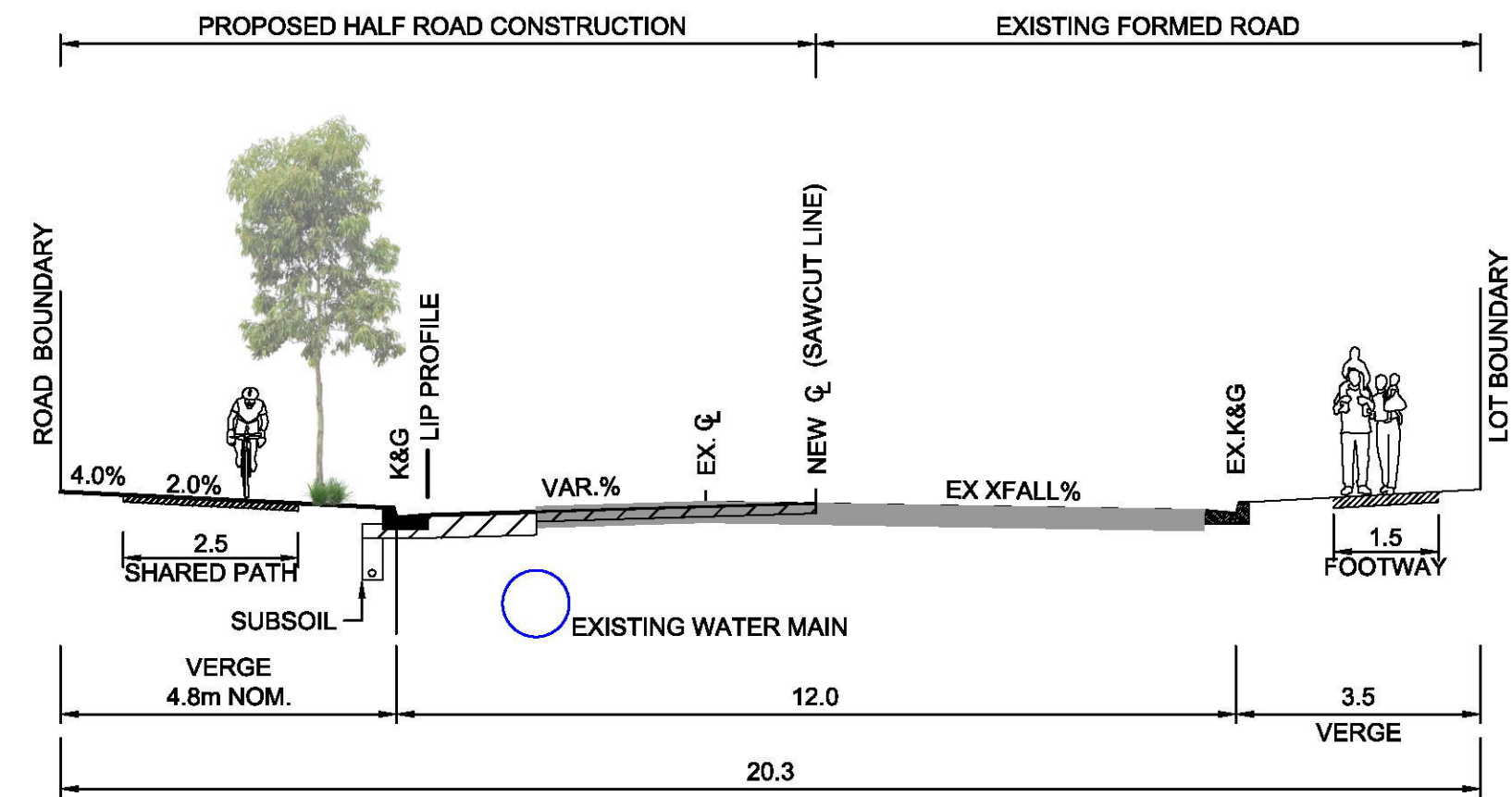
FILE No: 110358CC804

SHEET SIZE: A1 ORIGINAL

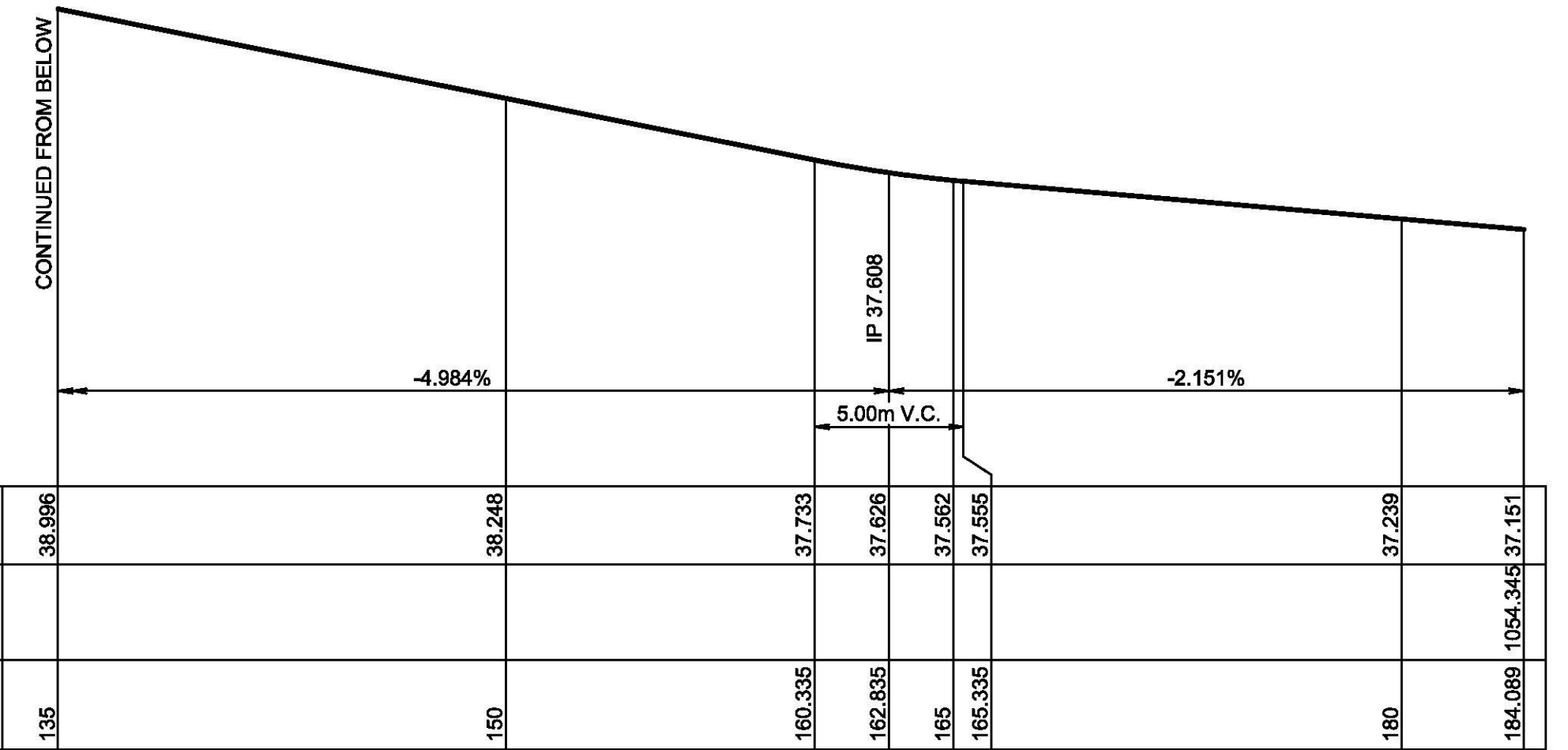




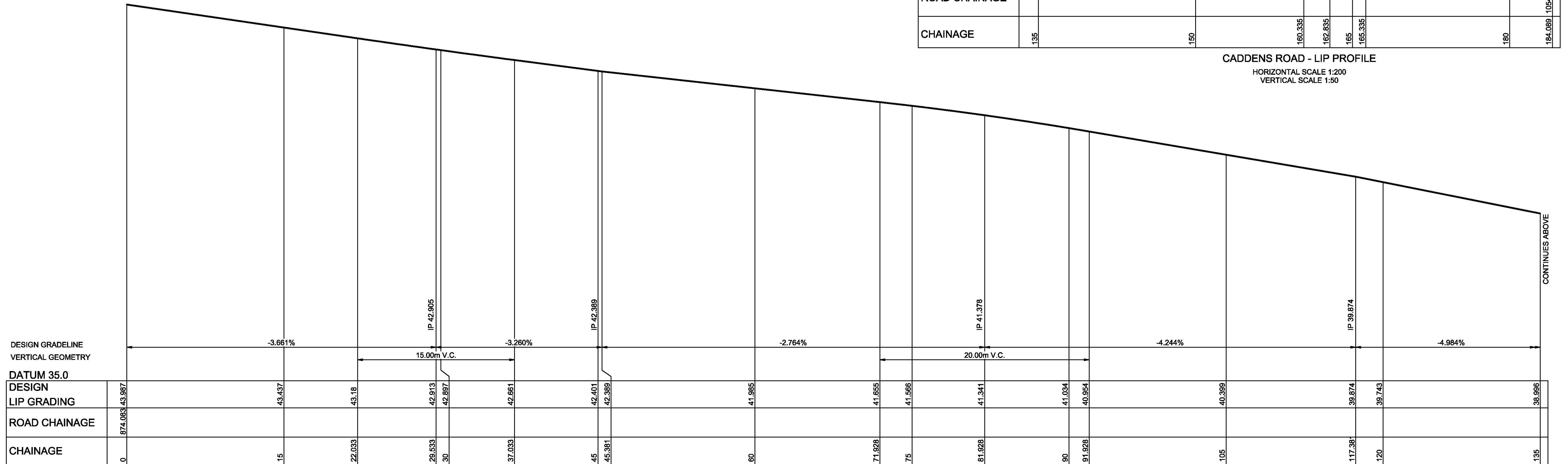
ROAD No.1 TYPICAL SECTION  
(CADDENS ROAD - CH874.083)  
(22.6m ROAD RESERVE)  
1:100 NAT



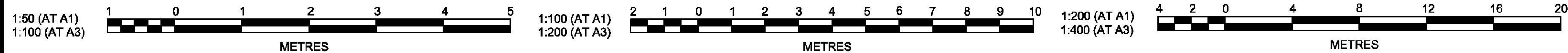
TYPICAL CROSS SECTION  
CADDENS ROAD  
SCALE 1:100



CADDENS ROAD - LIP PROFILE  
HORIZONTAL SCALE 1:200  
VERTICAL SCALE 1:50



CADDENS ROAD - LIP PROFILE  
HORIZONTAL SCALE 1:200  
VERTICAL SCALE 1:50



B	LIP PROFILE AMENDED AND TYPICAL XSECTION REVISED	JT	JT	MP	MS
A	ISSUE FOR CONSTRUCTION APPROVAL	JT	NM	MP	MS
	AMENDMENT	DES	DRN	CKD	APR
					DATE

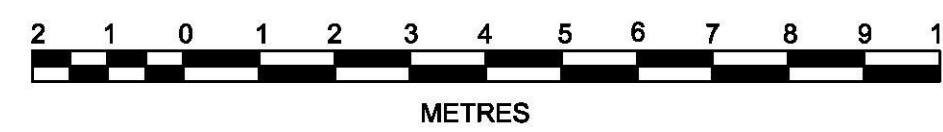
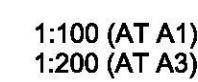
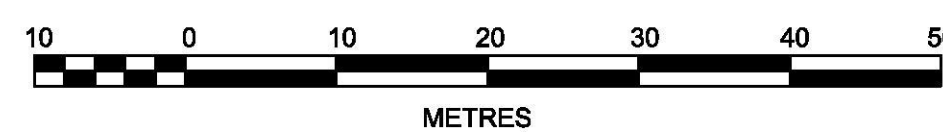
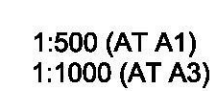
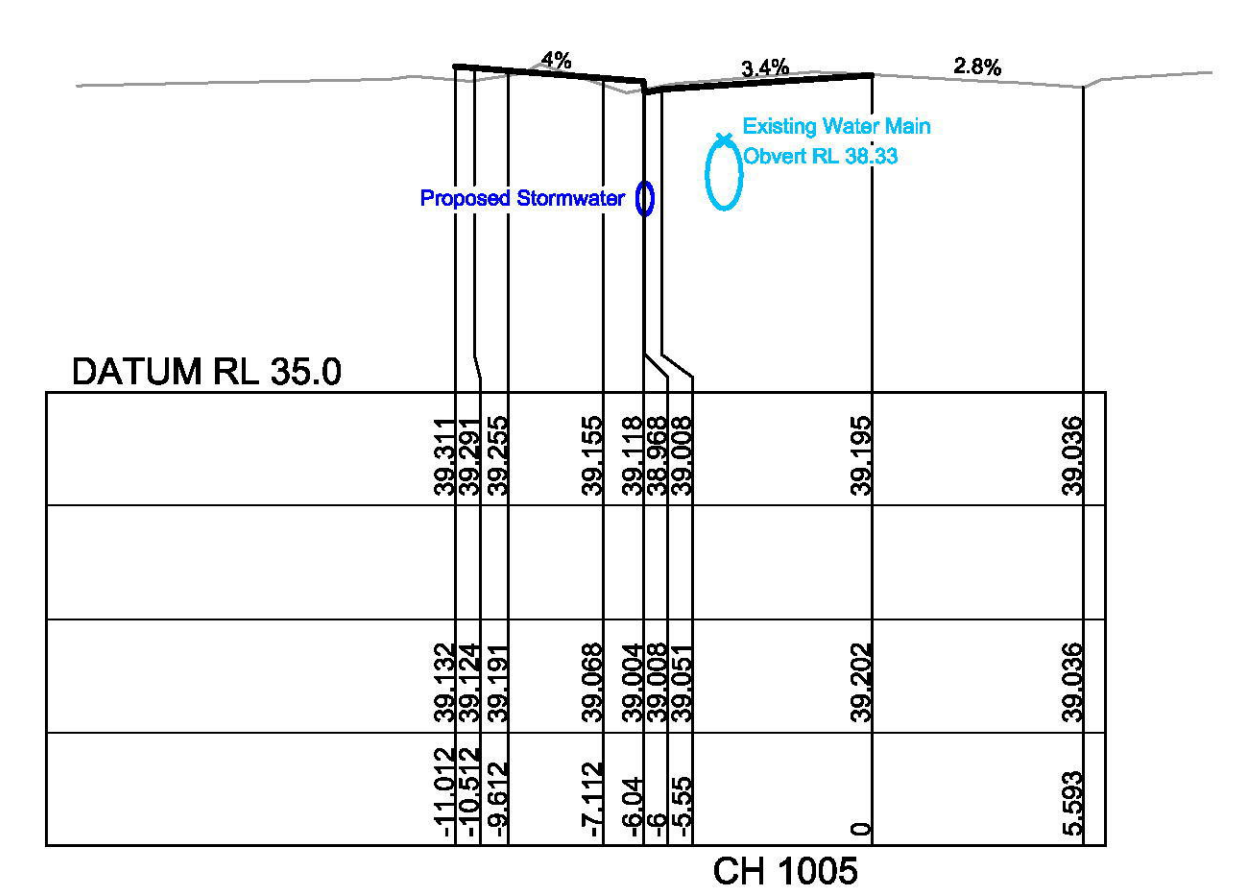
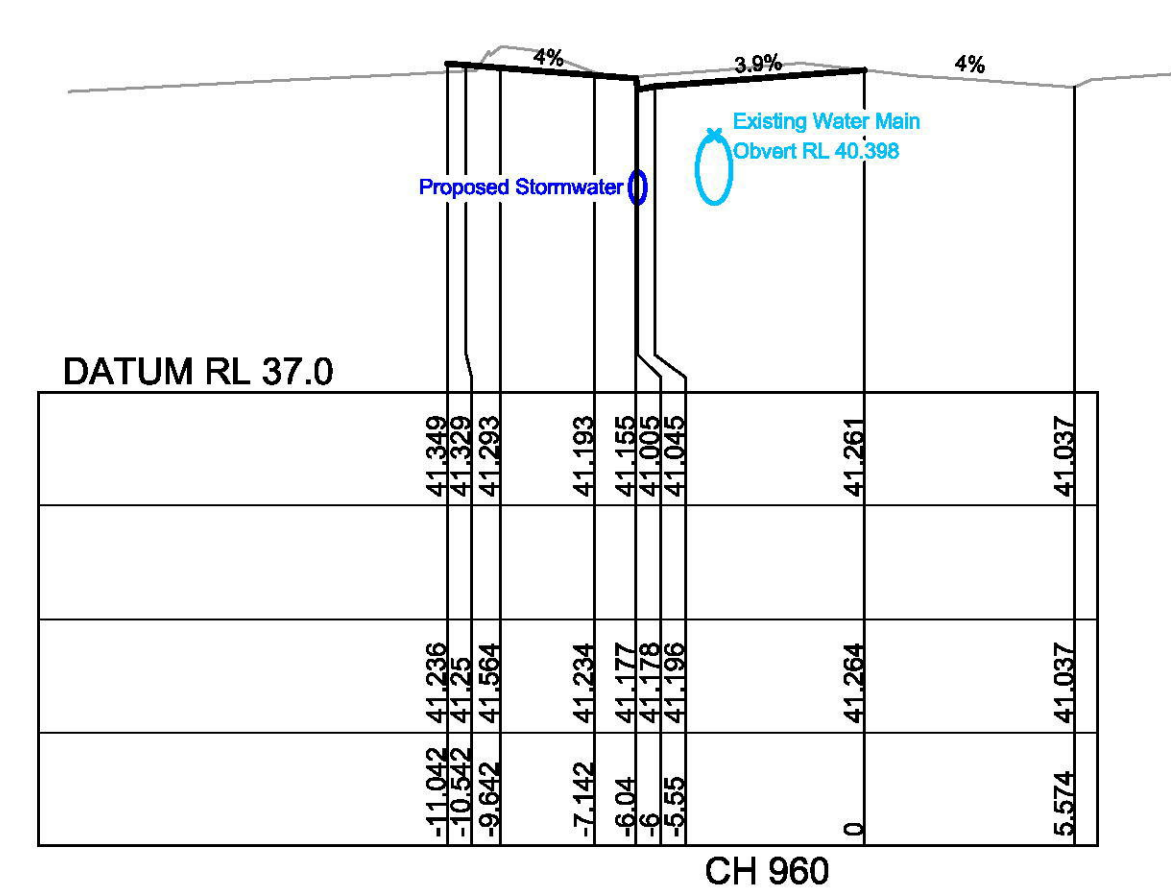
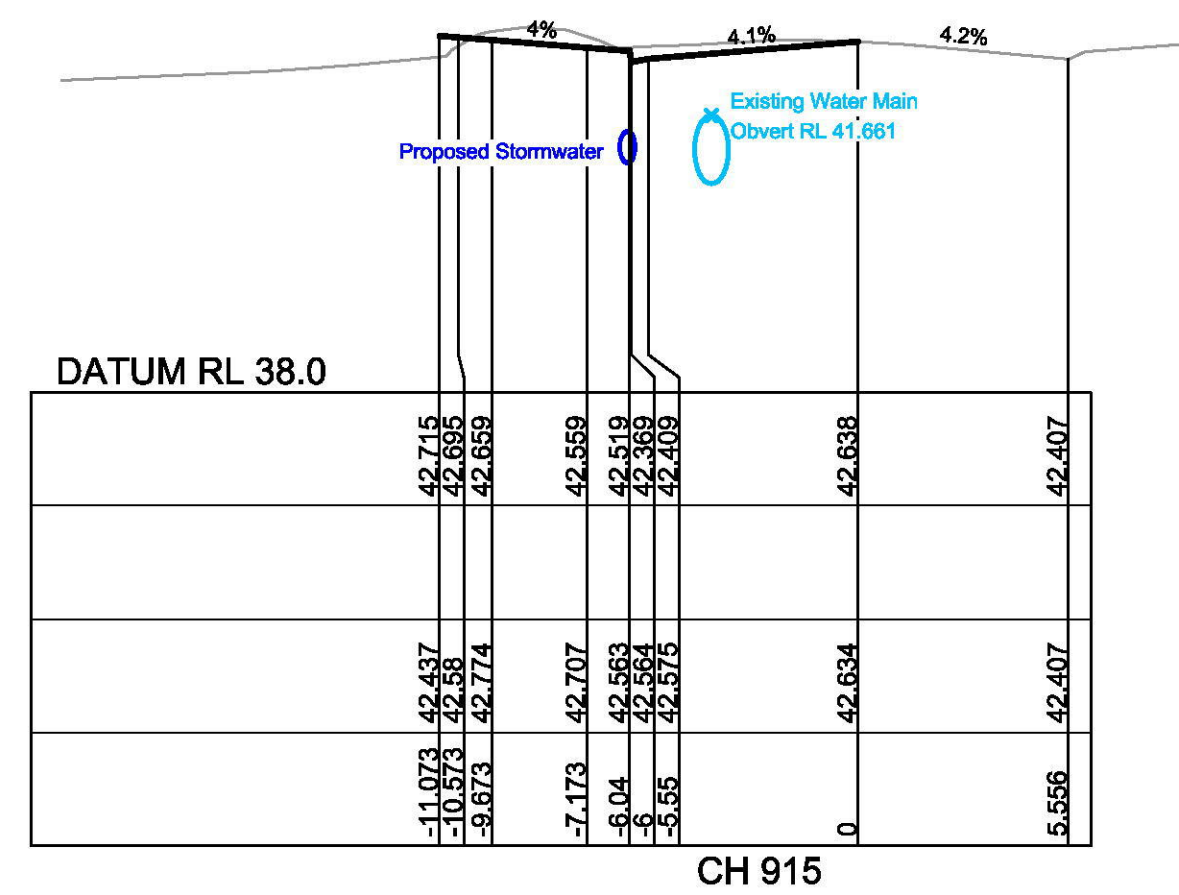
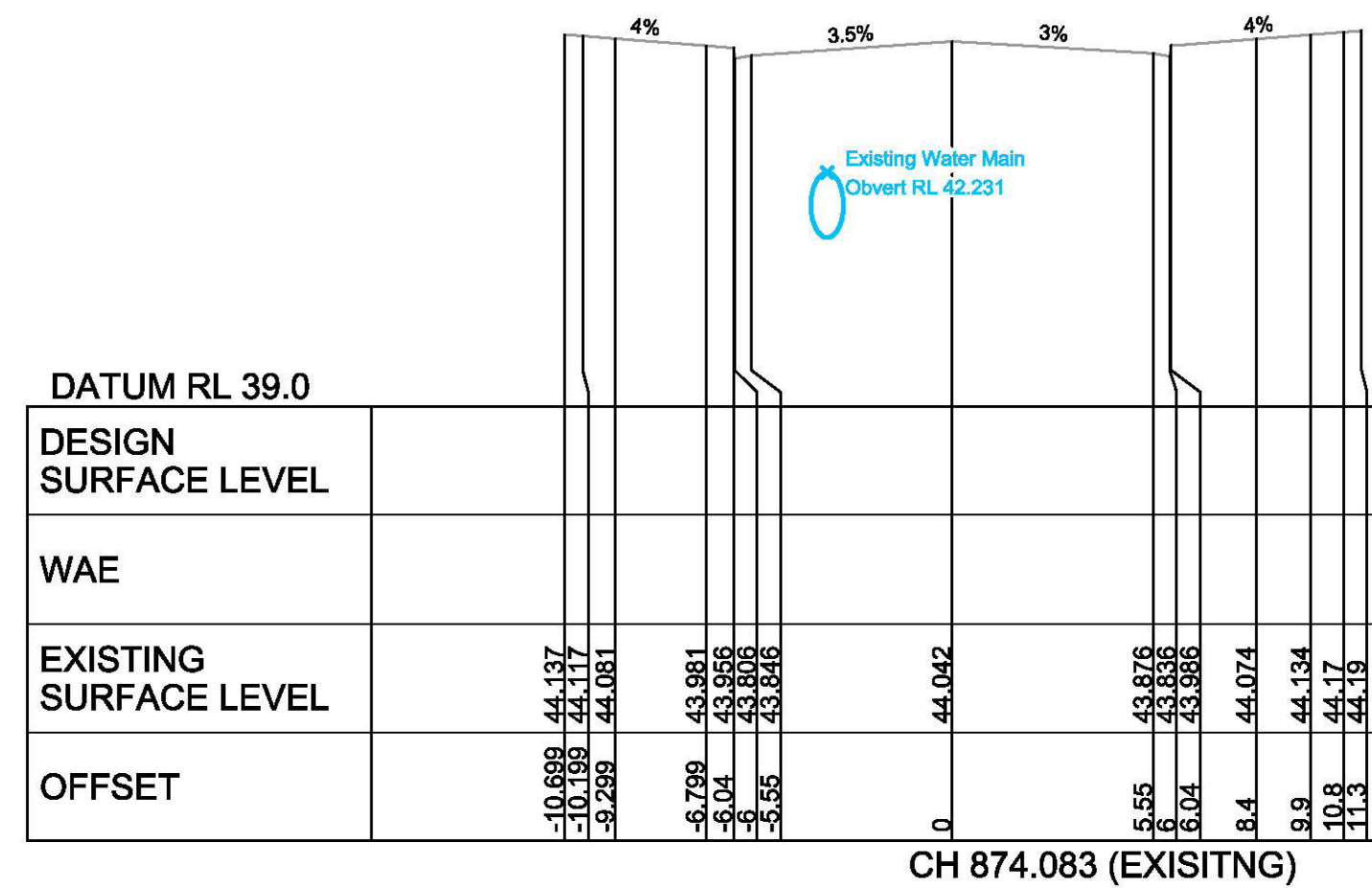
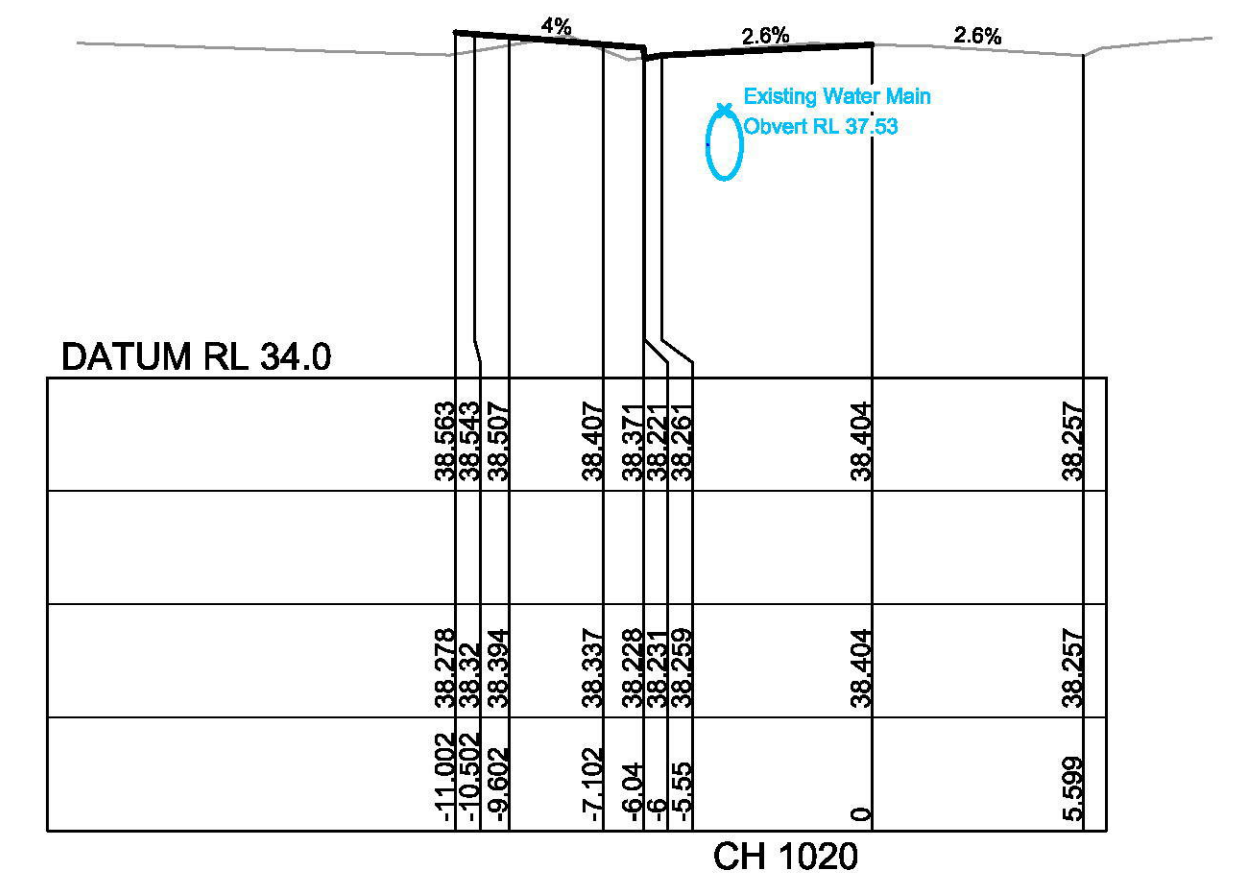
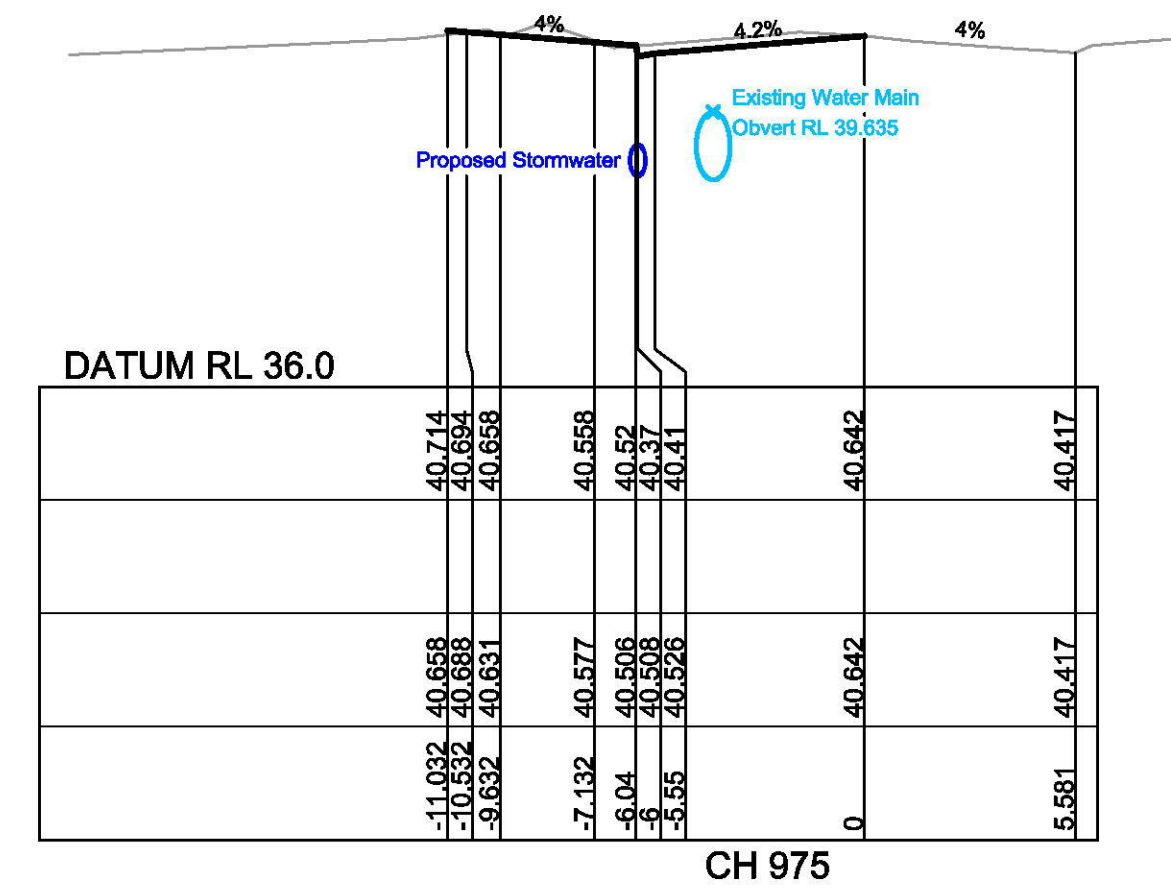
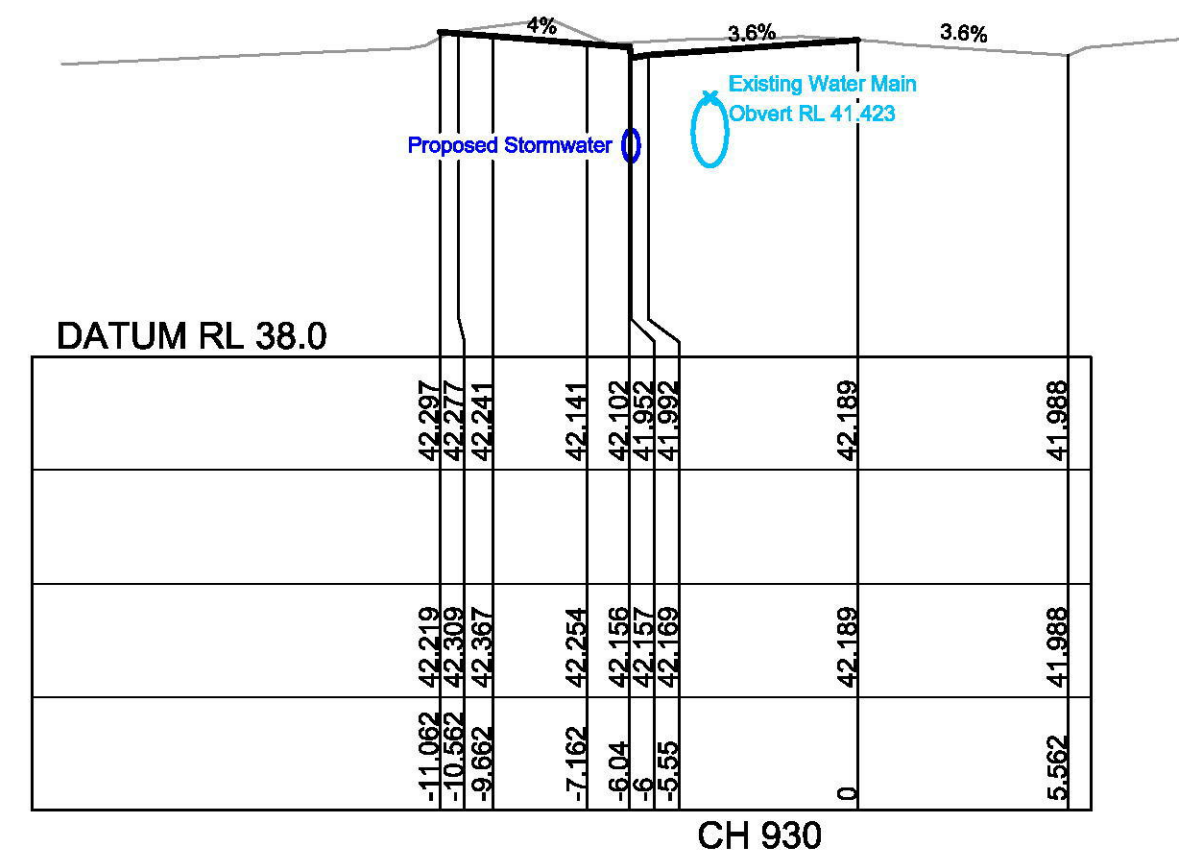
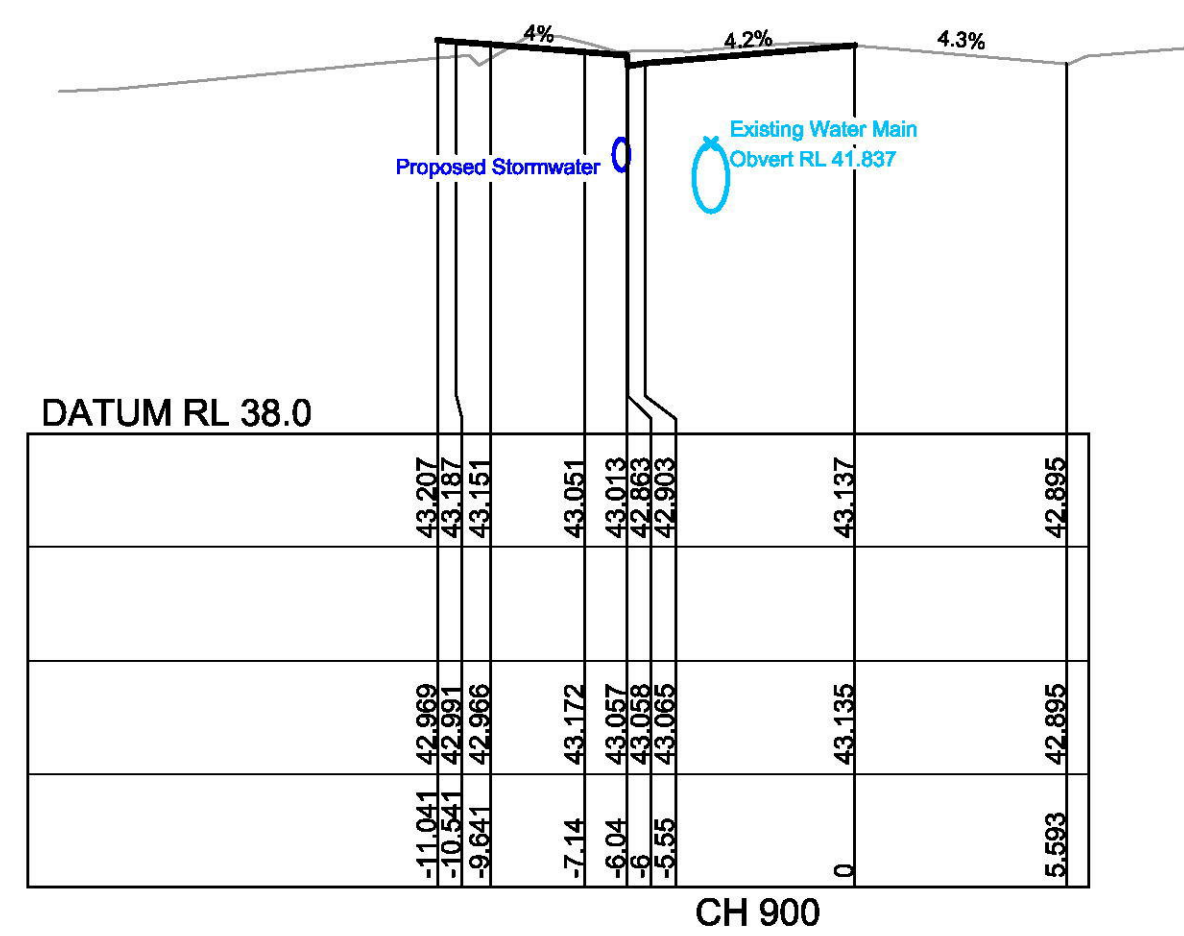
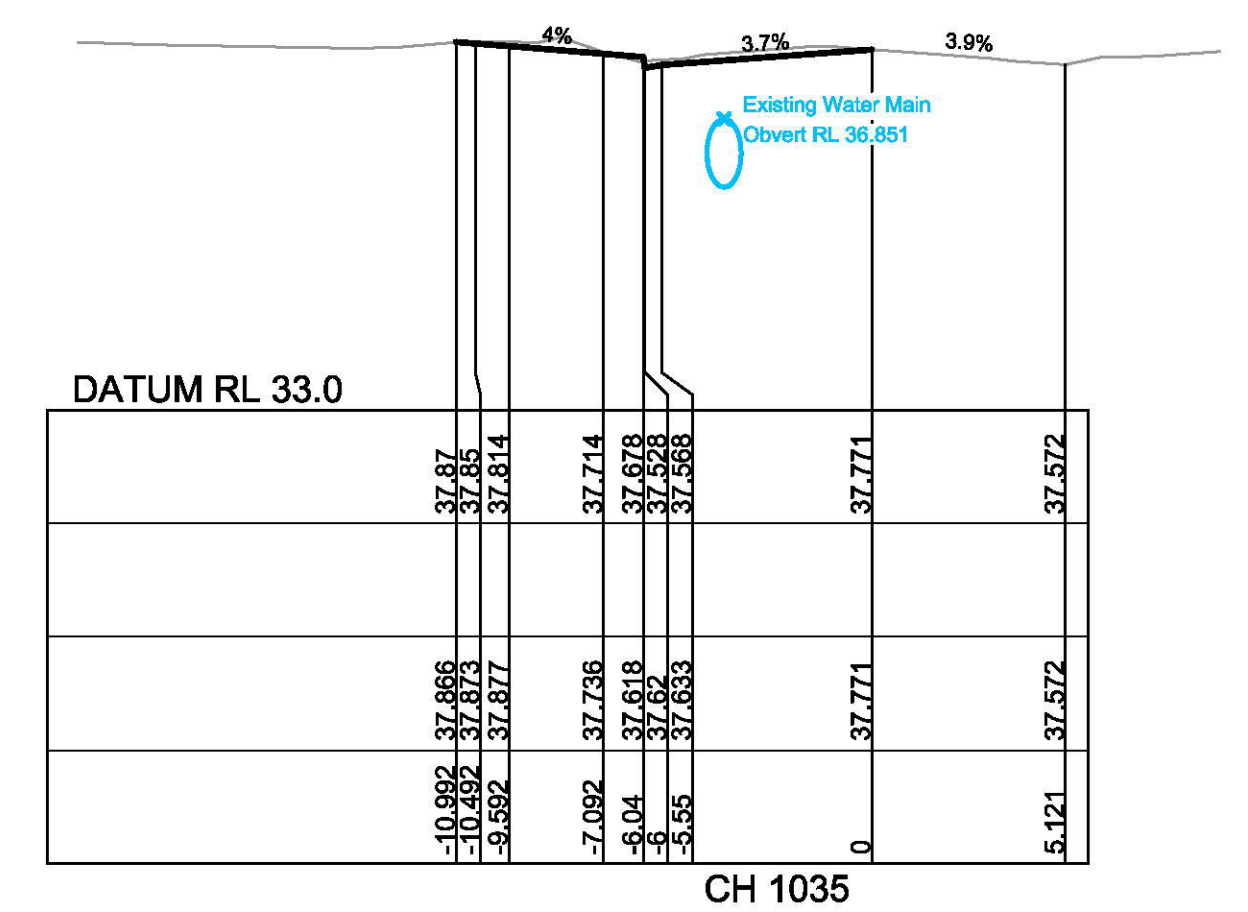
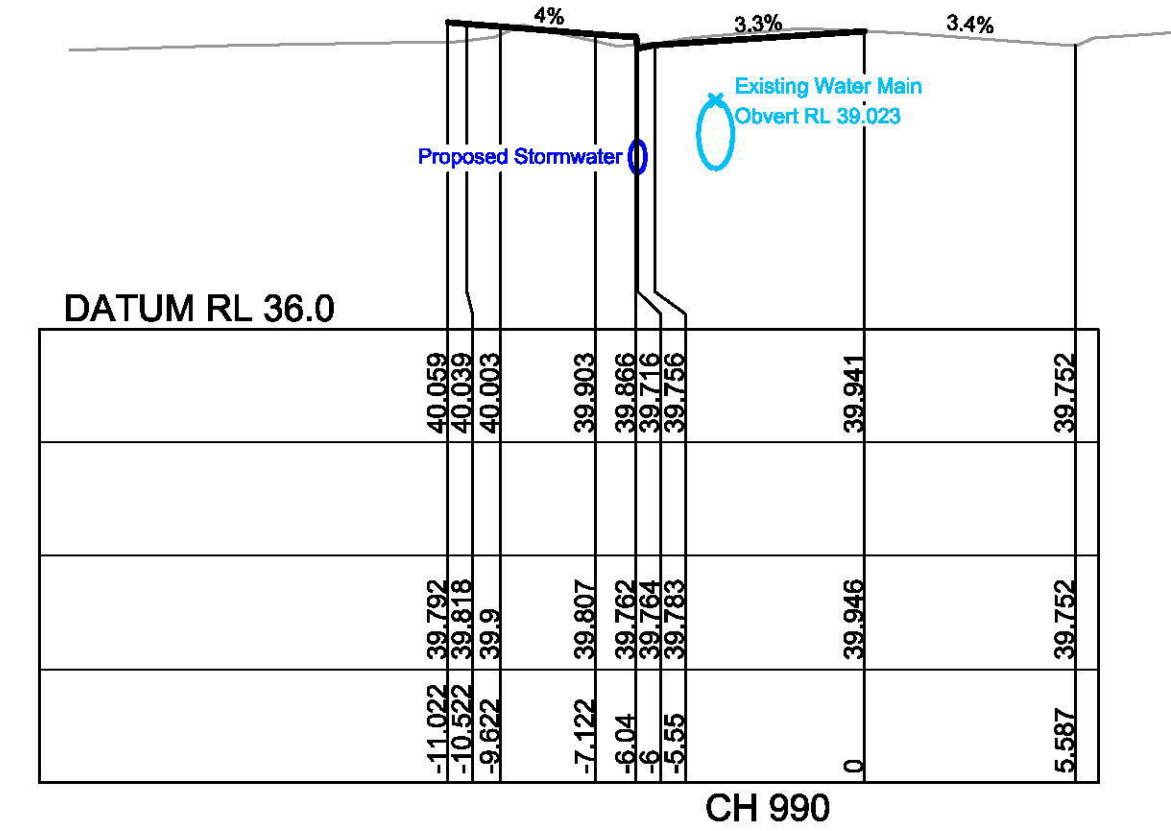
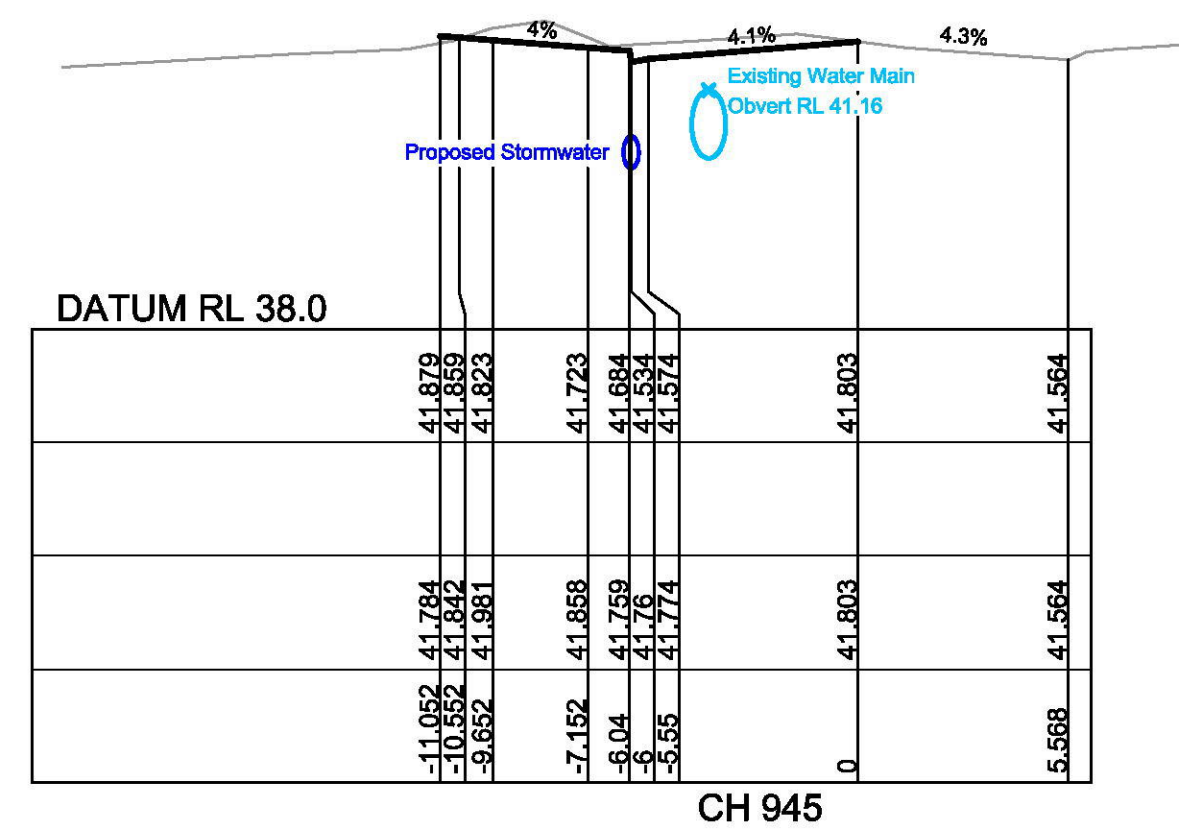
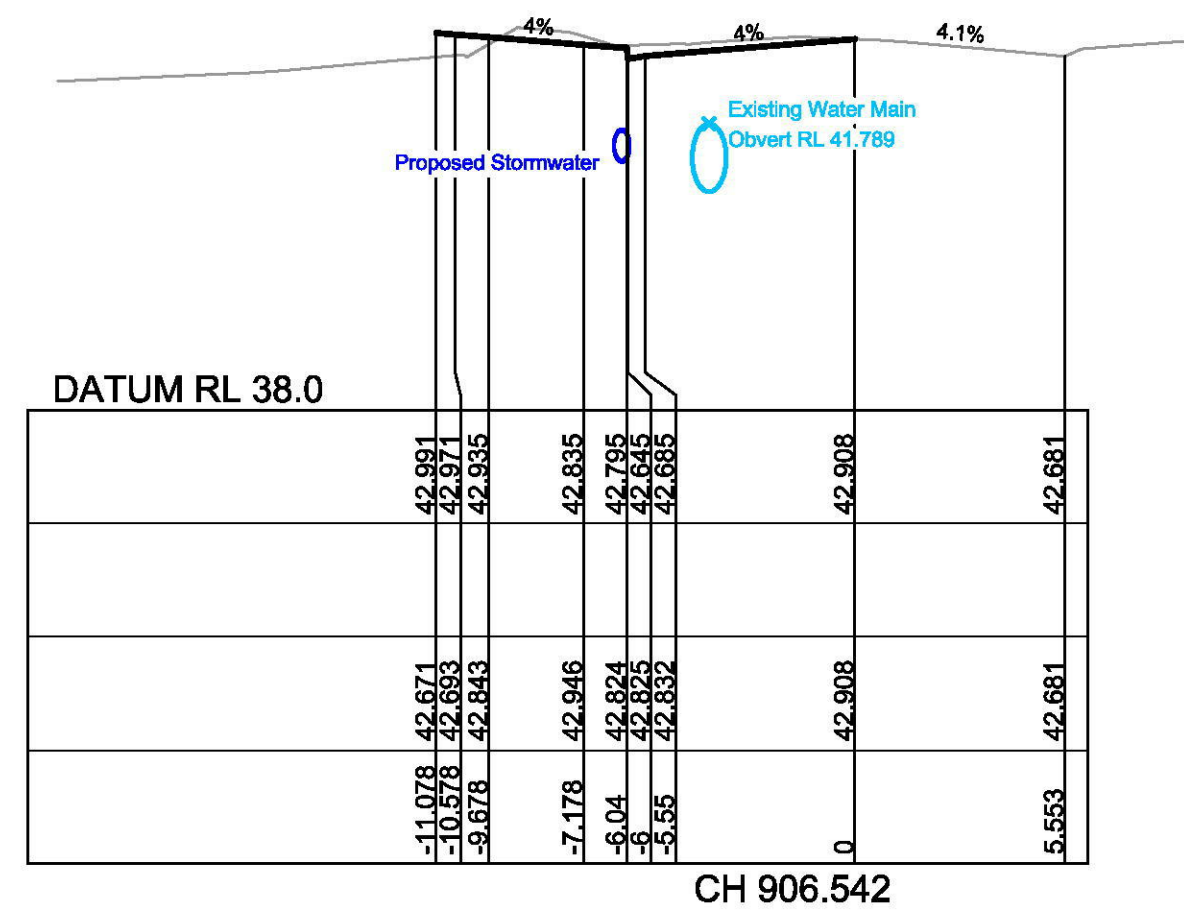
**J. WYNDHAM PRINCE** CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS  
PO Box 4366 PENRITH WESTFIELD NSW 2750  
P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

AZIMUTH:  
M.G.A  
DATUM:  
A.H.D  
ORIGIN:

CLIENT:  
  
LEGACYPROPERTY  
THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

**ISSUED FOR CONSTRUCTION APPROVAL**  
CADDENS HILL - PLAYING FIELD CARPARK, ROAD & DRAINAGE WORKS  
CADDENS ROAD LIP PROFILE AND TYPICAL SECTIONS  
PLAN No: 110358/CC805  
FILE No: 110358CC805  
SHEET SIZE: A1 ORIGINAL





B	CROSS SECTIONS REVISED	JT	JT	MP	MS
A	ISSUE FOR CONSTRUCTION APPROVAL	JT	NM	KP	MS
	AMENDMENT	DES	DRN	CPD	APR
					DATE

**J. WYNDHAM PRINCE** CONSULTING CIVIL INFRASTRUCTURE ENGINEERS  
& PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750  
P 02 4720 3300 F 02 4720 3399 W [www.jwprince.com.au](http://www.jwprince.com.au) E [jwp@jwprince.com.au](mailto:jwp@jwprince.com.au)

AZIMUTH:  
M.G.A

DATUM:  
A.H.D

ORIGIN:



THIS DRAWING MUST NOT BE USED FOR  
CONSTRUCTION UNLESS SIGNED AS PART OF  
APPROVED CONSTRUCTION CERTIFICATE

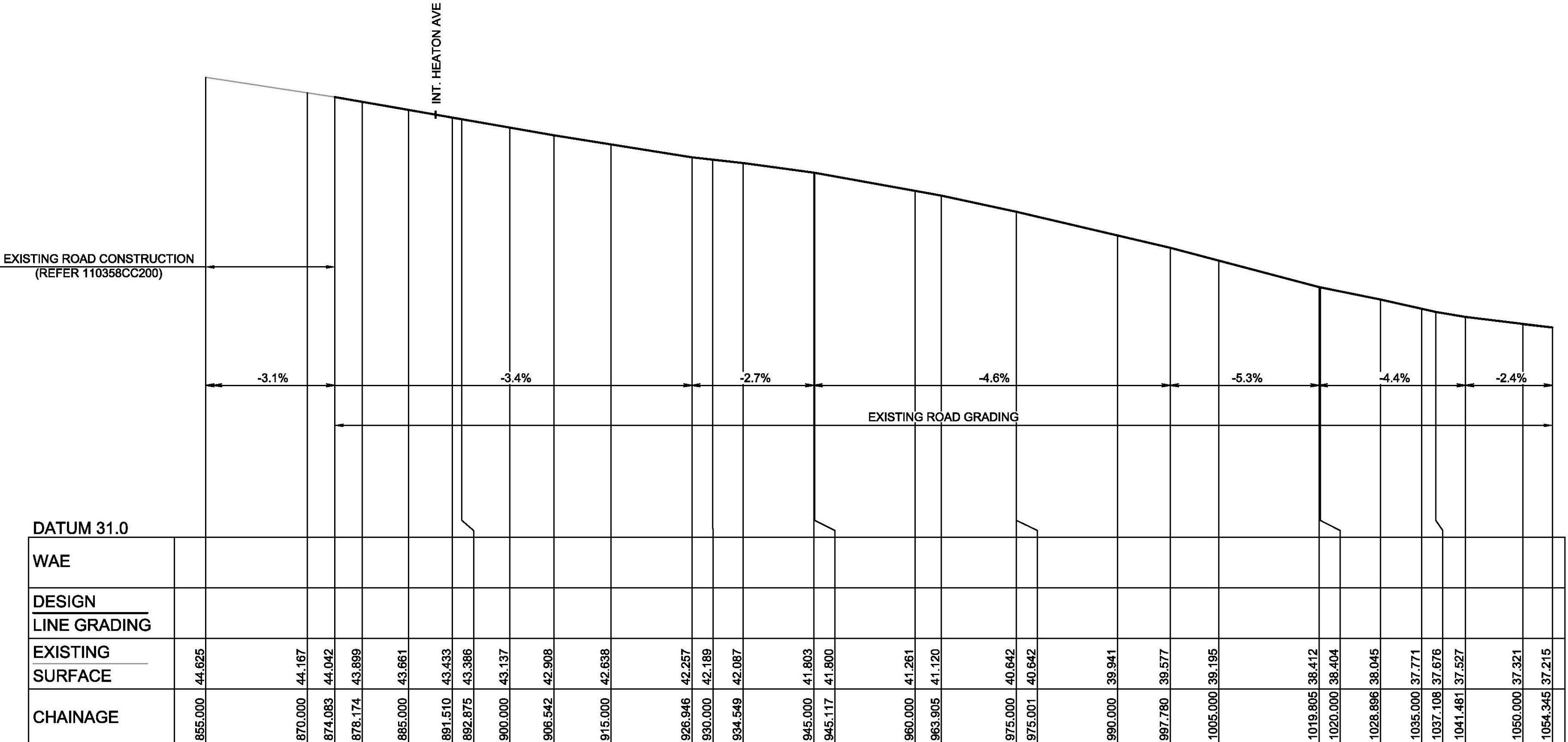
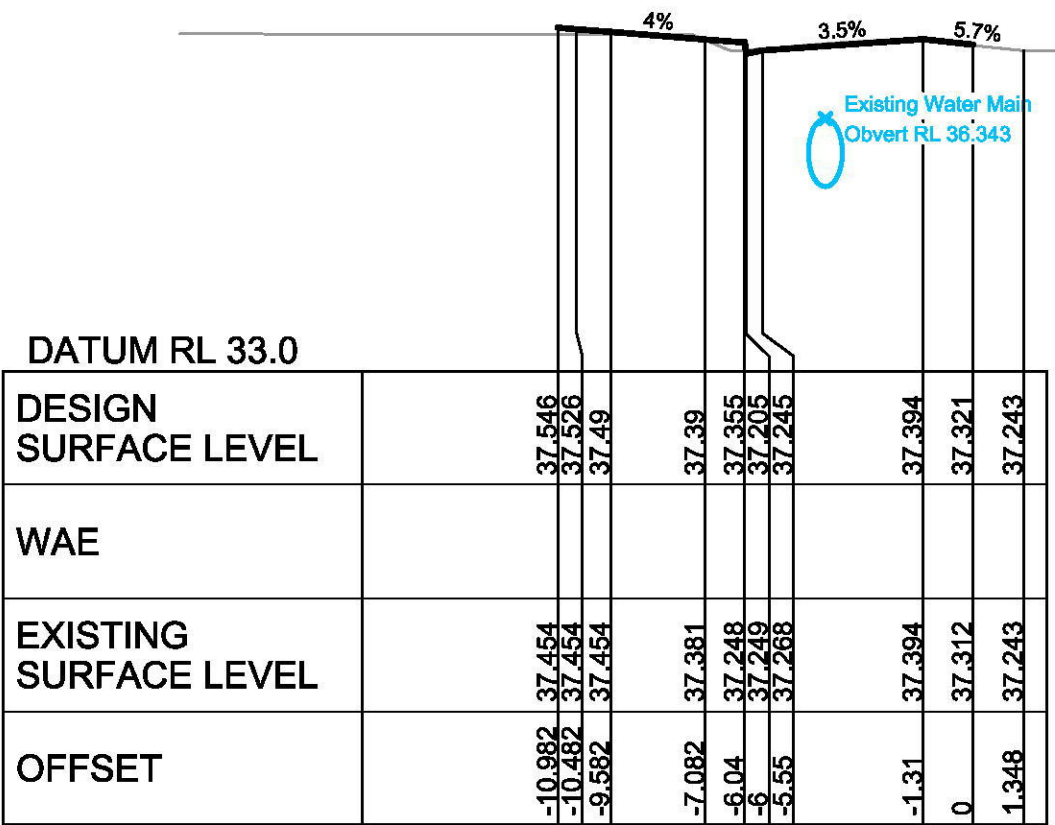
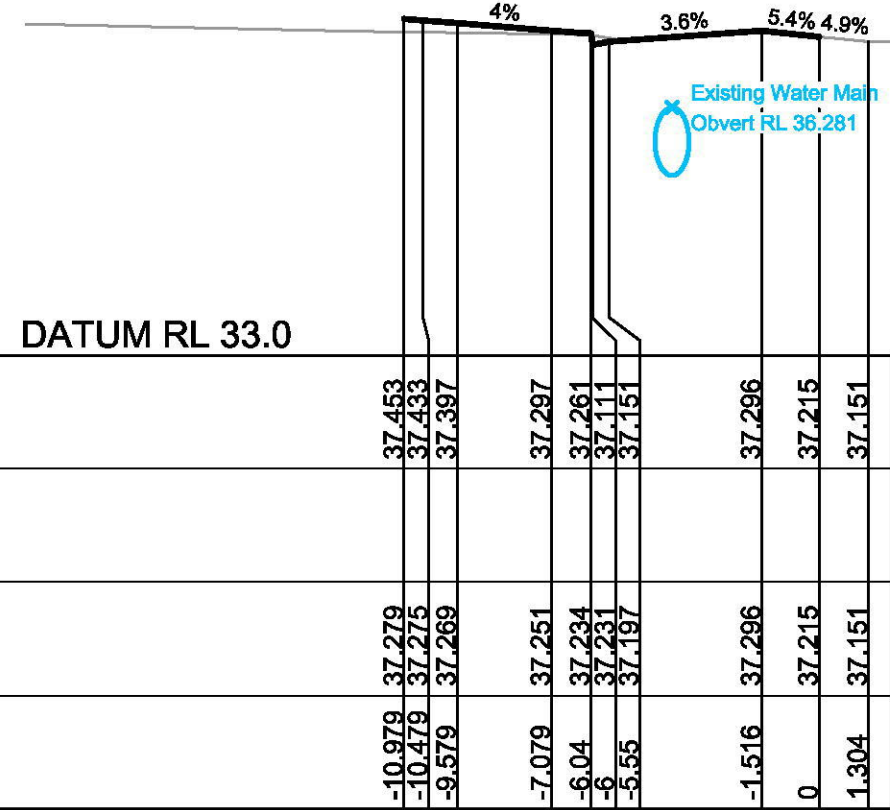
ISSUED FOR CONSTRUCTION APPROVAL

## CADDENS HILL - PLAYING FIELD CARPARK, ROAD & DRAINAGE WORKS

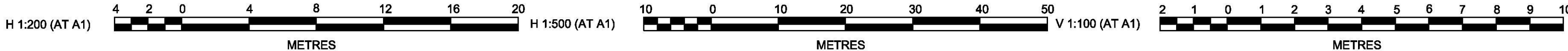
## ROAD No.1 CROSS SECTIONS

PLAN No:		<div style="border: 1px solid black; padding: 5px; text-align: center; width: 50px;">B</div>
110358/CC806		
FILE No: 110358CC806		
SHEET SIZE:		A1 ORIGINAL





LONGITUDINAL SECTION ROAD 1 (CADDENS ROAD)  
HORIZONTAL SCALE 1:500  
VERTICAL SCALE 1:100



A	ISSUE FOR CONSTRUCTION APPROVAL	JT	JT	MP	MS
	AMENDMENT	DES	DRN	CKD	APR
					12/03/16
					DATE

**J. WYNDHAM PRINCE** CONSULTING CIVIL INFRASTRUCTURE ENGINEER  
& PROJECT MANAGER

PO Box 4366 PENRITH WESTFIELD NSW 2750  
P 02 4720 3300 F 02 4720 3399 W [www.jwprince.com.au](http://www.jwprince.com.au) E [jwp@jwprince.com.au](mailto:jwp@jwprince.com.au)

AZIMUTH:  
M.G.A

DATUM:  
A.H.D

ORIGIN:

**CLIENT:**



**LEGACY**PROPERTY

THIS DRAWING MUST NOT BE USED FOR  
CONSTRUCTION UNLESS SIGNED AS PART OF  
APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL

## CADDENS HILL - PLAYING FIELD CARPARK, ROAD & DRAINAGE WORKS

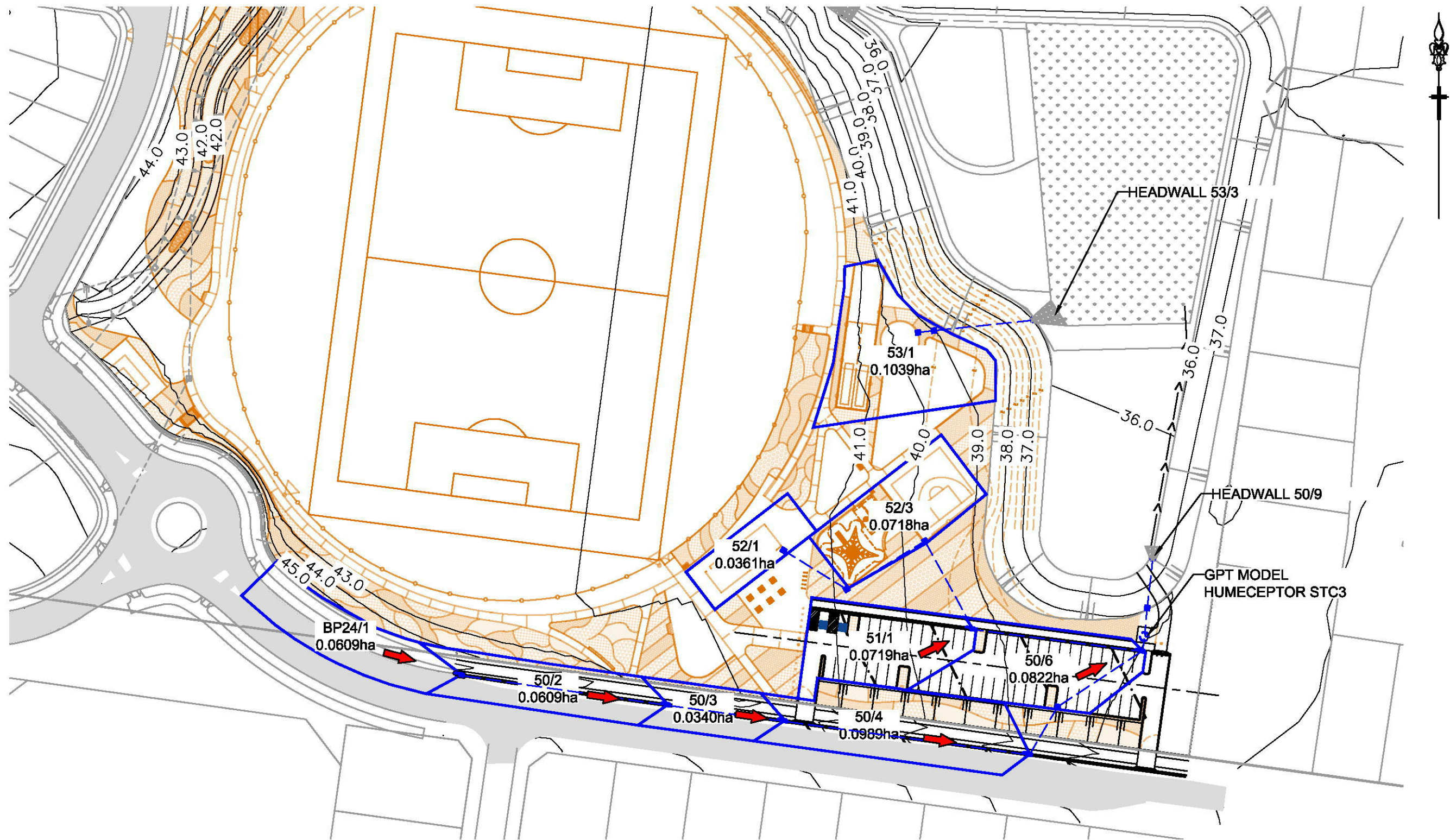
## ROAD No.1 CROSS SECTIONS & LONGITUDINAL SECTION

PLAN No: 110358/CC806A A

FILE No: 110358CC806A

**SHEET SIZE:** A1 ORIGINAL





PLAN

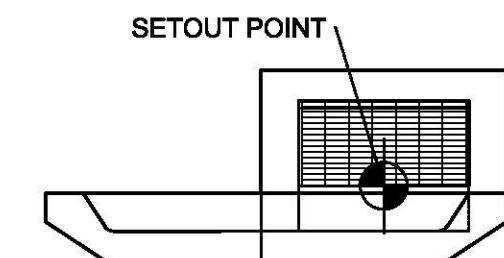
SCALE 1:1000

NOTES:  
ALL GRATED PIT COVERS IN ROADS ARE TO BE BICYCLE SAFE.

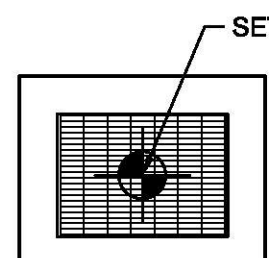
ALL SAG PITS TO HAVE WELDLICK GGSB 94 5D GRATES

FOR ALL PITS <2m DEEP REFER TO PENRITH CITY COUNCIL STANDARD PIT DRAWINGS SD 2002.

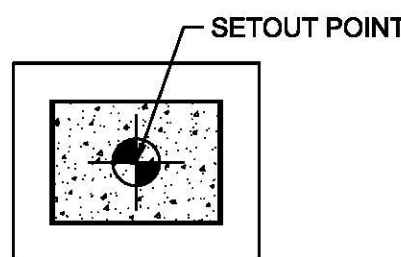
ANY INTER-ALLOTMENT PIT GREATER THAN 900mm DEEP SHALL HAVE A CONCRETE LID REFER PCC CONSTRUCTION SPEC SECTION 6.7.



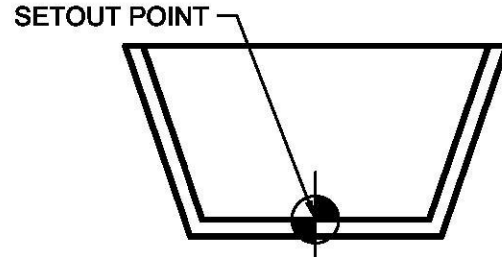
SETOUT DETAIL KERB INLET PIT (LINTEL) NTS



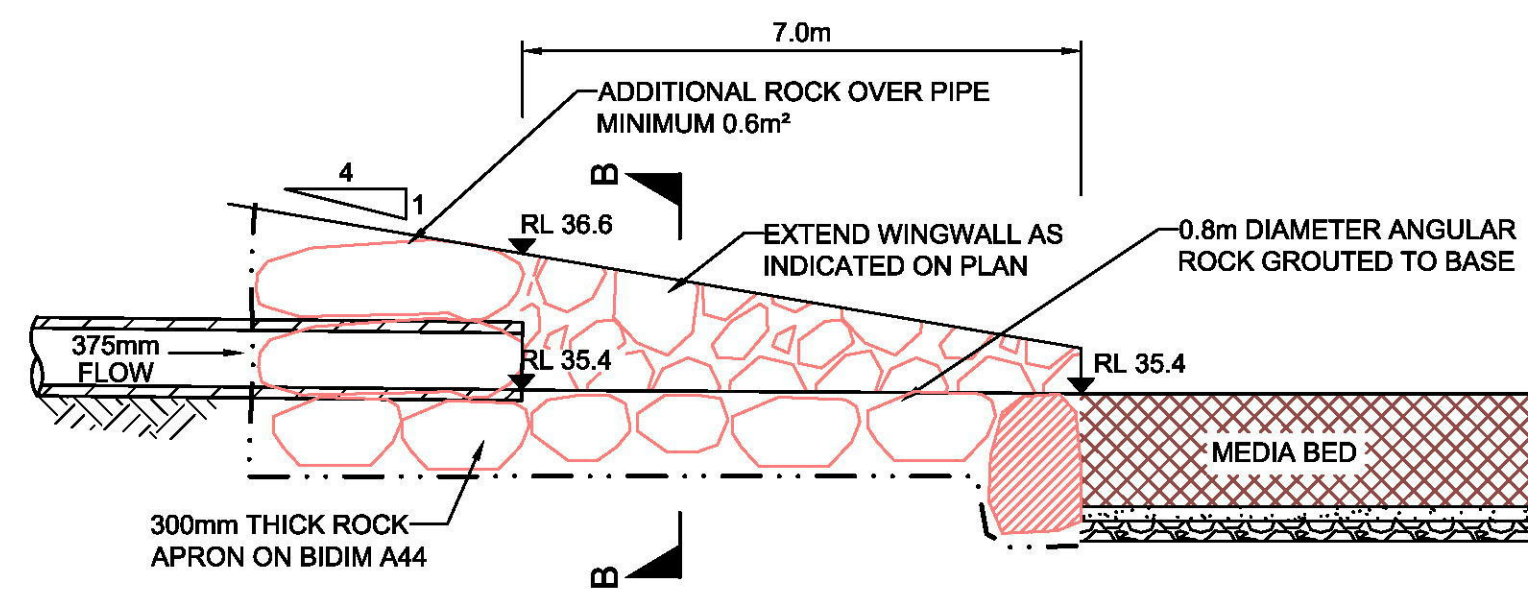
GRATED SURFACE INLET PIT (GSIP) NTS



IAD - JUNCTION PIT (JP) NTS

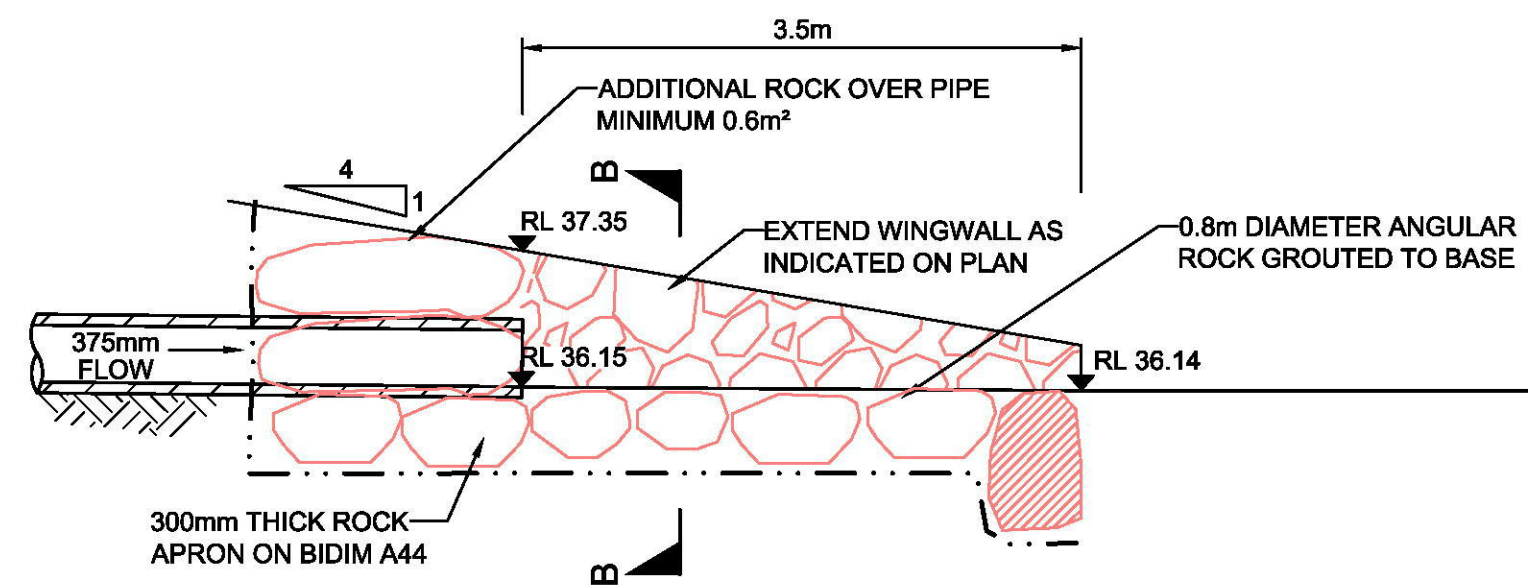


SETOUT DETAIL HEADWALL NTS



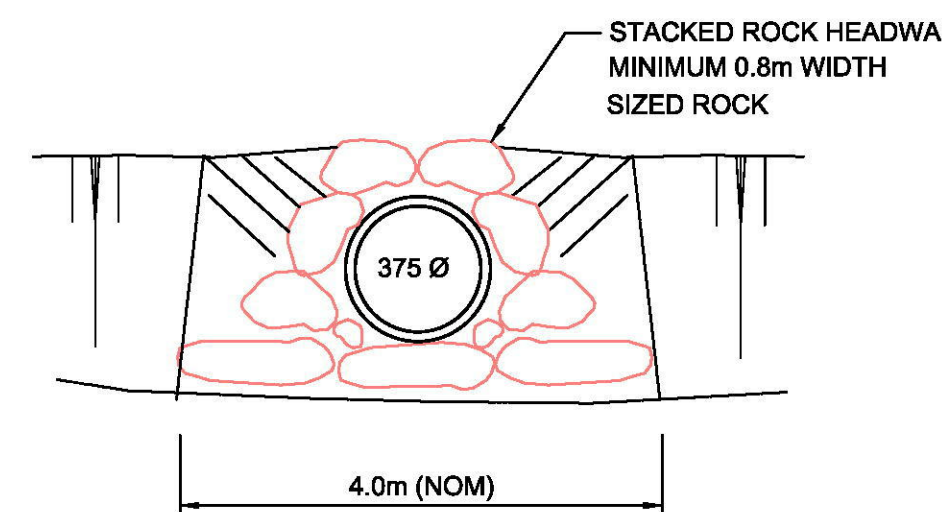
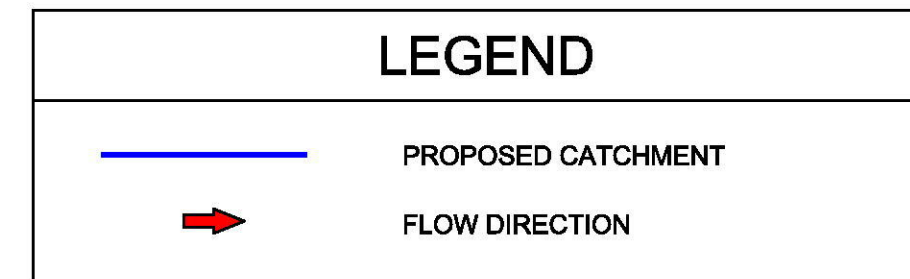
HEADWALL 53/3

SCALE N.T.S.



HEADWALL 50/9

SCALE N.T.S.



HEADWALL OUTLET STRUCTURE

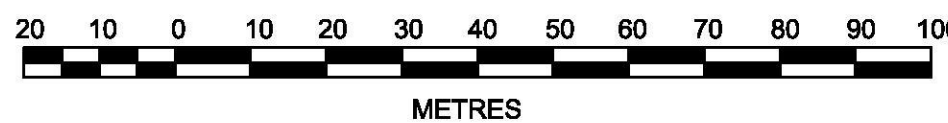
N.T.S.

DESIGN STORM 1:5yr ARI HYDRAULIC RESULTS																							
PIPE NAME	PIPE DIAMETER	PIPE TYPE	PIPE LENGTH	PIPE GRADE	CRITICAL FLOW	PEAK FLOW	CAPACITY RATIO	PEAK VELOCITY	PIPE U/S IL	PIPE D/S IL	PIPE D/S DROP	U/S PIT Ku	D/S PIT Kw	PIT LOSS Ku.V/head	WSE LOSS Kw.V/head	U/S PIPE HGL	D/S PIPE HGL	GRADE (%)	MINIMUM COVER	MINIMUM FREEBOARD	COMMENTS		
50/1 to 50/2	375	RRJ2	50.79	3.11	25	19	0.06	1.56	42.135	40.555	0.065	4.5	4.5	0.56	0.56	42.199	40.615	3.12	1.1	1.529			
50/2 to 50/3	375	RRJ2	28.7	2.73	25	37	0.12	1.78	40.491	39.707	0.093	2.62	2.62	0.35	0.35	40.586	39.795	2.76	1.1	1.448			
50/3 to 50/4	375	RRJ2	60.27	4.39	25	47	0.12	1.3	39.615	36.971	0.019	7	7	0.22	0.22	39.702	37.193	4.16	1.1	1.47			
50/4 to 50/5	375	RRJ2	13.36	1	25	75	0.39	1.24	36.953	36.819	0.05	9.7	9.7	0.21	0.21	37.193	36.983	1.57	1.22	1.228			
50/5 to 50/6	375	RRJ2	24.79	1	25	79	0.41	0.93	36.769	36.521	0.05	0.32	0.32	0.01	0.01	36.983	36.955	0.11	0.78	1.994			
50/6 to 50/7	375	RRJ2	3.5	1	25	153	0.81	1.46	36.471	36.436	0.05	1.75	2	0.18	0.2	36.955	36.737	6.24	0.93	0.665			
50/7 to 50/8	375	RRJ2	6.99	1	25	153	0.81	1.6	36.386	36.316	0.05	0.5	0.5	0.07	0.07	36.737	36.571	2.38	1.27	1.294			
50/8 to 50/9	375	RRJ2	11.63	1	25	153	0.8	1.75	36.266	36.15		0.2	0.2	0.03	0.03	36.565	36.405	1.38	1.21	1.363			
51/1 to 50/6	375	RRJ2	41.75	4	25	57	0.15	1.54	38.191	36.521	0.05	7	7	0.45	0.45	38.289	36.955	3.2	0.74	1.209			
52/1 to 52/2	150	uPVC	18.03	4.39	25	12	0.28	1.72	40.891	40.1	0.143	4.5	4.5	0.68	0.68	40.958	40.154	4.46	0.6	0.697			
52/2 to 52/3	225	uPVC	22.4	4.82	25	12	0.09	1.99	39.957	38.877	0.242	0.24	1.22	0.05	0.25	40.003	38.923	4.82	0.6	0.82			
52/3 to 51/1	225	uPVC	24.32	1	25	35	0.59	1.12	38.636	38.392	0.201	6.1	6.02	0.3	0.31	38.843	38.517	1.34	0.6	0.84			
53/1 to 53/2	300	uPVC	3.92	1	20	33	0.26	0.85	36.961	36.922	0.568	4.5	4.5	0.16	0.16	37.181	37.027	3.93	1.81	2.13			
53/2 to 53/3	375	RRJ2	23.85	4	20	33	0.09	0.48	36.354	35.4		2.09	2.71	0.02	0.03	36.429	36.36	0.29	0.27	2.561			
BP24/1 to BP24/2	2	No Flow	6.3	1	10	0	0	0	43.371	43.308		0	0	0	0	43.371	43.308	1	1.1	0.948			

DESIGN STORM 1:5yr ARI HYDROLOGIC RESULTS																
PIT NAME	PIT TYPE	CATCHMENT AREA	PERCENT IMPERVIOUS	Tc IMP	Tc PERV	CRITICAL STORM	APPROACH FLOW	CAPTURED FLOW	UNCAPTURED FLOW	GRATE DEPTH	ROAD GRADE	ROAD CROSSFALL	BYPASS PIT	FLOW	U/S FLOW WIDTH	COMMENTS
50/1	1.8 m lintel	0.061	95	6	6	15	19	19	0	56	3.7	3.6	50/2	19	1	
50/2	1.8 m lintel	0.061	95	6	6	25	19	19	0	46	2.8	3.4	50/3	10	0.66	
50/3	1.8 m lintel	0.034	95	6	6	25	10	10	0	61	3.5	3.7	50/4	30	1.18	
50/4	1.8 m lintel	0.099	85	6	6		30	29	1	19	5	2.8	LOST	1	0.22	
50/5	JP	0	0	6	6		0	0	0	0						
50/6	1.8 m lintel	0.082	95	6	6	25	26	26	0	0						
50/7	GPT	0	0	6	6		0	0	0	0						
50/8	JP	0	0	6	6		0	0	0	0						
50/9	H.W.						0	0	0	0						
51/1	1.8 m lintel	0.072	95	6	6	25	23	23	0	0						
52/1	NODE	0.036	100	6	6	25	12	12	0	0						
52/2	JP	0	0	6	6		0	0	0	0						
52/3	JP	0.072	100	6	6	15	23	23	0	0						
53/1	NODE	0.104	100	6	6	15	33	33	0	0						
53/2	JP	0	0	6	6		0	0	0	0						
53/3	H.W.						0	0	0	0						
BP24/1	BYPASS NODE	0.061	85	6	6	25	19	0	0	56	3.3	3	50/1	19	1	
BP24/2	BYPASS NODE						0	0	0	0						

PIT SCHEDULE					
PIT NAME	PIT TYPE	PIT EASTING	PIT NORTHING	PIT DEPTH	COMMENTS
50/1	1.8 m lintel	290815.07	6260206.418	1.593	
50/2	1.8 m lintel	290865.332	6260199.122	1.544	
50/3	1.8 m lintel	290893.764	6260195.23	1.557	
50/4	1.8 m lintel	290953.479	6260187.055	1.468	
50/5	JP	290960.273	6260198.562	2.208	
50/6	1.8 m lintel	290980.968	6260212.214	1.149	
50/7	GPT	290981.41	6260215.681	1.645	
50/8	JP	290982.073	6260222.635	1.662	
50/9	H.W.	290983.39	6260234.194	0.375	
51/1	1.8 m lintel	290939.567	6260217.612	1.307	
52/1	NODE	290893.442	6260236.669	0.765	
52/2	JP	290908.791	6260227.209	0.866	
52/3	JP	290927.875	6260238.937	1.047	
53/1	NODE	290926.191	6260289.75	2.35	WATER TANK
53/2	JP	290930.085	6260290.211	2.636	
53/3	H.W.	290953.805	6260292.679	0.375	

1:1000 (AT A1)  
1:2000 (AT A3)



**J. WYNDHAM PRINCE** CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750  
P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

AZIMUTH:  
M.G.A

DATUM:  
A.H.D

ORIGIN:

CLIENT:



THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

**ISSUED FOR CONSTRUCTION APPROVAL**

**CADDENS HILL - PLAYING FIELD  
CARPARK, ROAD & DRAINAGE WORKS**

CATCHMENT PLAN

PLAN No:  
**110358/CC807**

FILE No: 110358CC807

SHEET SIZE: A1 ORIGINAL











SOIL AND WATER MANAGEMENT NOTES

GENERAL NOTES:

1.

ALL EROSION AND SEDIMENT CONTROL MEASURES AND STANDARD DRAWINGS, INCLUDING REVEGETATION AND STORAGE OF SOIL AND TOPSOIL, SHALL BE IMPLEMENTED TO THE REQUIREMENTS OF THE " SOILS AND CONSTRUCTION - VOLUME 1, 4TH EDITION, MARCH 2004 ".
2.

TOPSOIL FROM ALL AREAS TO BE DISTURBED SHALL BE STOCKPILED AND LATER RESPREAD TO AID REVEGETATION IN THOSE AREAS.
3.

ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILISED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
4.

ALL TAIL-OUT DRAINS SHALL BE COUCH GRASSED AND TRAPEZOIDAL IN SECTION. STRAW BALES SHALL BE PLACED AS A SEDIMENT CONTROL DEVICE WHERE REQUIRED.
5.

VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING DEVELOPMENT CONFINING ACCESS WHERE POSSIBLE TO PROPOSED OR EXISTING ROAD ALIGNMENTS. AREAS TO BE LEFT UNDISTURBED SHALL BE MARKED OFF.
6.

ROADS SHALL BE PAVED AS EARLY AS POSSIBLE AFTER FORMATION.
7.

DISTURBANCE OF VEGETATION SHALL BE LIMITED TO FILL AREAS, ROADWAYS AND DRAINAGE LINES. NO LOT GRADING SHALL BE CARRIED OUT IN UNDISTURBED AREAS WITHOUT CONSULTATION WITH COUNCIL'S ENGINEER.
8.

ALL DISTURBED AREAS SHALL BE REVEGETATED AS SOON AS THE RELEVANT WORKS ARE COMPLETED.
9.

ALL SEDIMENT BASINS AND TRAPS SHALL BE CLEANED WHEN THE STRUCTURES ARE A MAXIMUM 60% FULL OF SOLID MATERIALS, INCLUDING DURING THE MAINTENANCE PERIOD.
10.

THE SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, AND COUNCIL'S WRITTEN GUIDELINES FOR THE DEVELOPMENT OF LAND.
11.

CONTRACTORS SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS SPECIFIED ON THE PLAN AND IN ACCORDANCE WITH THE GUIDELINES SHOWN IN "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION 4TH EDITION" ("THE BLUE BOOK").
12.

ALL CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR REDUCING THE SOIL EROSION AND POLLUTION OF DOWNSLOPE AREAS.
13.

THE SOIL EROSION HAZARD ON THE SITE IS TO BE KEPT AS LOW AS POSSIBLE AND GENERALLY IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

LAND USE	LIMITATION	COMMENTS
CONSTRUCTION AREAS	DISTURBANCE TO BE NO FURTHER THAN 5m (PREF 2m) FROM THE EDGE OF ANY ESSENTIAL ENGINEERING ACTIVITY AS SHOWN ON THESE PLANS	ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE ZONES - WHERE APPROPRIATE THE CONSTRUCTION AREAS ARE TO BE IDENTIFIED WITH BARRIER FENCING (DOWNSLOPE) OR SIMILAR MATERIAL.
ACCESS AREAS	LIMITED TO A MAXIMUM WIDTH OF 10m	THE SITE MANAGER SHALL DETERMINE AND MARK THE LOCATION OF THESE ZONES ONSITE. THEY CAN VARY IN POSITION TO BEST CONSERVE THE EXISTING VEGETATION AND PROTECT DOWNSTREAM AREAS WHILE BEING CONSIDERATE OF THE NEEDS OF EFFICIENT WORKS ACTIVITIES. ALL SITE WORKERS SHALL CLEARLY RECOGNISE THEIR BOUNDARIES. WHERE APPROPRIATE THE ACCESS AREAS ARE TO BE MARKED WITH BARRIER MESH, SEDIMENT FENCING OR SIMILAR MATERIALS.
REMAINING LANDS	ENTRY PROHIBITED EXCEPT FOR ESSENTIAL THINNING OF PLANT GROWTH	THINNING OF GROWTH MAY BE REQUIRED FOR FIRE HAZARD REDUCTION.

NOTE:  
WORKS WITHIN WATERWAYS AND CREEKS SHALL BE RESTRICTED AS DIRECTED - ALL LANDS WITHIN CREEKS AND WATERWAYS SHALL HAVE C-FACTORS BELOW 0.05 FROM 1st JANUARY TO 15th MAY USING MATERIALS THAT CAN CATER FOR CONCENTRATED FLOWS.

14.

WORKS ARE TO BE UNDERTAKEN IN THE FOLLOWING SEQUENCE. EACH SUBSEQUENT STAGE IS NOT TO COMMENCE UNTIL THE PREVIOUS ONE IS COMPLETE:-

a.

INSTALL ALL BARRIER AND SEDIMENT FENCING WHERE SHOWN ON THE PLAN AND TO DETAIL(SD) 6-8.

b.

CONSTRUCT STABILISED SITE ACCESS AS SHOWN ON THE PLAN AND TO DETAIL (SD) 6-14.

c.

CONSTRUCT LOW FLOW EARTH BANKS WHERE SHOWN ON THE PLAN AND TO DETAIL (SD) 5-5.

d.

PROVIDE TEMP. ACCESS TO THE SEDIMENT BASIN(S)AND PROTECT THIS WITH SEDIMENT FENCING (SD) 6-8 OR BARRIER FENCING AND EARTH BANKS (SD) 5-5

e.

PLACE SEDIMENT FENCING (SD) 6-8 DOWNSLOPE OF LANDS TO BE DISTURBED FOR CONSTRUCTION OF THE SEDIMENT BASINS.

f.

CONSTRUCT SEDIMENT BASIN(S) GENERALLY IN ACCORDANCE WITH (SD) 6-4

g.

STABILISE LAND SURFACES DISTURBED BY CONSTRUCTION OF THE SEDIMENT BASIN(S) AS SOON AS FINAL LEVELS ARE ESTABLISHED

h.

CLEAR THE SITE AND STRIP AND STOCKPILE THE TOPSOIL IN THE LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE SITE SUPERINTENDENT TO DETAIL (SD) 4-1.

i.

UNDERTAKE ALL ESSENTIAL CONSTRUCTION WORKS.

j.

GRADE LOT AREAS TO FINAL GRADES AND APPLY PERMANENT STABILISATION (LANDSCAPING) WITHIN 14 DAYS OF COMPLETION OF CONSTRUCTION WORKS.

k.

REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER THE PERMANENT LANDSCAPING HAS BEEN COMPLETED.
15.

CLEARLY VISIBLE BARRIER FENCING SHALL BE INSTALLED WHERE DIRECTED BY THE SITE SUPERINTENDENT TO CONTROL AND PROHIBIT UNNECESSARY SITE DISTURBANCE
16.

EARTH BATTERS SHALL BE CONSTRUCTED WITH AS LOW A GRADIENT AS PRACTICABLE BUT NO STEEPER THAN:-

a.

2(h) - 1(v) WHERE SLOPE LENGTH IS LESS THAN 7m

b.

2.5(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 7m AND 10m

c.

3(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 10m AND 12m

d.

4(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 12m AND 18m

e.

5(h) - 1(v) WHERE SLOPE LENGTH IS BETWEEN 18m AND 27m

f.

6(h) - 1(v) WHERE SLOPE LENGTH IS GREATER THAN 27m

SLOPE LENGTHS CAN BE SHORTENED BY USING LOW FLOW EARTH BANKS AS CATCH DRAINS ABOVE THE EARTH BATTER AREA.

17.

PROTECTION FROM EROSION FORCES SHALL BE UNDERTAKEN ON ALL LANDS TO MEET THE REQUIREMENTS OF TABLE J3-3 "MAXIMUM ACCEPTABLE C-FACTORS AT NOMINATED TIMES DURING WORKS" FROM "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION 4TH EDITION"
18.

TEMPORARY GROUND COVER IN SHEET FLOW AREAS IS TO BE IN ACCORDANCE WITH TABLE J3-4 "PLANT SPECIES FOR GROUND COVER" FROM "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION 4TH EDITION" WHERE PRACTICAL FOOT AND VEHICULAR TRAFFIC SHALL BE KEPT AWAY FROM REHABILITATED AREAS
19.

WHERE POSSIBLE THE CONSTRUCTION PROGRAM IS TO BE SCHEDULED SO THAT THE TIME FROM STARTING LAND DISTURBANCE ACTIVITIES TO STABILISATION IS A DURATION OF LESS THAN 6 MONTHS - THIS MEANS ACHIEVING A C-FACTOR OF LESS THAN 0.1 AND SETTING IN MOTION A PROGRAM THAT ENSURES THAT IT DROPS PERMANENTLY, (BY VEGETATION, PAVING, ARMOURING etc.) TO LESS THAN 0.05 WITHIN A FURTHER 60 DAYS. LOCAL WATER RESTRICTIONS PERMITTING, LANDS THAT HAVE BEEN NEWLY PLANTED WITH GRASS SPECIES SHALL BE WATERED REGULARLY UNTIL AN EFFECTIVE COVER HAS BEEN ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY. FOLLOW-UP SEED AND FERTILISER SHALL BE APPLIED AS NECESSARY IN AREAS OF MINOR SOIL EROSION AND/OR INADEQUATE VEGETATIVE PROTECTION. NOTWITHSTANDING THIS SCHEDULE WORKS SO THAT THE DURATION FROM THE CONCLUSION OF LAND SHAPING TO THE COMPLETION OF FINAL STABILISATION IS LESS THAN 20 WORKING DAYS.
20.

SEDIMENT FENCES (SD) 6-8 SHALL:-

a.

BE INSTALLED WHERE SHOWN ON THE PLAN AND AS DIRECTED AT THE DISCRETION OF THE SITE SUPERINTENDENT DURING THE COURSE OF CONSTRUCTION TO CONTAIN THE COARSER SEDIMENT FRACTIONS AS NEAR AS POSSIBLE TO THEIR SOURCE.

b.

HAVE A CATCHMENT AREA NOT EXCEEDING 720sq.m, AND A STORAGE DEPTH OF AT LEAST 0.6m.

c.

PROVIDE AN UPSLOPE RETURN OF 1m AT INTERVALS ALONG THE FENCE WHERE THE CATCHMENT AREA EXCEEDS 720sq.m. TO LIMIT THE DISCHARGE REACHING EACH SECTION TO 50litres/sec IN A MAX. 10yr Tc DISCHARGE.
21.

STOCKPILES (SD) 4-1 SHALL BE LOCATED AS SHOWN ON THE PLANS AND AT THE DISCRETION OF THE SITE SUPERINTENDENT.
22.

DURING WINDY WEATHER LARGE UNPROTECTED AREAS ARE TO BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL. IN THE EVENT WATER IS NOT AVAILABLE IN SUFFICIENT QUANTITIES SOIL BINDERS AND/OR DUST RETARDANTS SHALL BE USED OR THE SURFACE SHALL BE LEFT IN A CLODDY STATE THAT RESISTS REMOVAL BY WIND.
23.

STOCKPILES SHALL NOT BE LOCATED WITHIN 5m OF HAZARD AREAS, INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS OR DRIVEWAYS.
24.

THE SEDIMENT RETENTION BASINS (SD) 6-4 SHALL:-

a.

BE CONSTRUCTED WHERE SHOWN ON THE PLANS.

b.

BE FLOCCULATED (APPENDIX E MANAGING URBAN STORMWATER SOILS & CONSTRUCTION 4TH ED.) BEFORE DISCHARGE OCCURS (UNLESS THE DESIGN STORM EVENT IS EXCEEDED)

c.

HAVE ONE OR MORE PEGS PLACED ON THE FLOOR TO CLEARLY INDICATE THE LEVEL AT WHICH DESIGN CAPACITY OCCURS AND WHEN SEDIMENT SHALL BE REMOVED.
25.

STORED CONTENTS OF THE BASINS SHALL BE TREATED WITH GYPSUM (APPENDIX E MANAGING URBAN STORMWATER SOILS & CONSTRUCTION 4TH ED.) OR OTHER FLOCCULATING AGENTS WHERE THEY CONTAIN MORE THAN 50mg/litre OF SUSPENDED SOLIDS. TREATMENT SHALL BE AS FOLLOWS:-

a.

LOWER SUSPENDED SOLIDS TO LESS THAN 50mg/litre WITHIN 24hrs OF FILLING

b.

THE BASINS SHALL THEN BE ALLOWED TO STAND 36 TO 48hrs FOR FLOCCULATED PARTICLES TO SETTLE

c.

THE BASINS SHALL THEN BE DRAINED SO THAT FULL STORAGE CAPACITY IS REGAINED WITHOUT DISCHARGING SEDIMENT FROM THE SITE.
26.

SEDIMENT REMOVED FROM ANY TRAPPING DEVICE SHALL BE DISPOSED IN LOCATIONS WHERE FURTHER EROSION AND CONSEQUENT POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS SHALL NOT OCCUR.
27.

WATER SHALL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE (ie THE CATCHMENT HAS BEEN LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN TREATED IN AN APPROVED DEVICE) NEVERTHELESS STORMWATER INLETS SHALL BE PROTECTED (SD) 6-11 & 6-12.
28.

TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED.
29.

ACCEPTABLE BINS SHALL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES SHALL BE PROVIDED AT LEAST ONCE A WEEK.

STOCKPILE NOTES:

1.

SPOIL AND TOPSOIL STOCKPILES SHALL BE LOCATED AWAY FROM DRAINAGE LINES AND AREAS WHERE WATER MAY CONCENTRATE.
2.

IF STOCKPILES ARE TO BE IN PLACE FOR LONGER THAN 14 DAYS THEN THEY SHALL BE STABILIZED BY COVERING WITH A MULCH OR WITH TEMPORARY VEGETATION.
3.

FOLLOWING CONSTRUCTION, TOPSOIL SHALL BE RESPREAD TO A MINIMUM DEPTH OF 100mm ON THE BARE SOIL SURFACES AND REVEGETATED.

SEDIMENTATION CONTROL DEVICES:

1.

ALL STRAW BALES SHALL BE BOUND WITH WIRE. STRAW BALES SHALL BE PLACED END TO END IN A SINGLE ROW AND EMBEDDED INTO THE SOIL TO A DEPTH OF 100mm. EACH BALE SHALL BE SECURELY ANCHORED WITH TWO STEEL STAKES DRIVEN 600mm INTO THE GROUND AND LOCKED ON THE BALE CENTRELINE.
2.

SILT FENCES SHALL BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR SIMILAR) BETWEEN POSTS AT 2.5m CENTRES. FABRIC SHALL BE BURIED 150mm ALONG IT'S LOWER EDGE.
3.

PROVIDE STRIP OF TURF MIN. 300mm WIDE BEHIND KERB + 1m WIDE AROUND ALL SURFACE INLET PITS

SITE INSPECTION AND MAINTENANCE:

1.

A SELF-AUDITING PROGRAM SHALL BE ESTABLISHED BASED ON A INSPECTION TEST PLAN (ITP) OR LOG BOOK. A SITE INSPECTION USING THE ITP SHALL BE MADE BY THE SITE MANAGER:-

a.

AT LEAST WEEKLY

b.

IMMEDIATELY BEFORE SITE CLOSURE

c.

IMMEDIATELY FOLLOWING RAINFALL EVENTS IN EXCESS OF 5mm IN ANY 24hr PERIOD.

THE SELF AUDIT SHALL INCLUDE:-

- a.

RECORDING THE CONDITION OF EVERY 'BEST MANAGEMENT PRACTICE' EMPLOYED
- b.

RECORDING MAINTENANCE REQUIREMENTS (IF ANY) FOR EACH 'BEST MANAGEMENT PRACTICE'
- c.

RECORDING THE VOLUMES OF SEDIMENT REMOVED FROM SEDIMENT RETENTION SYSTEMS WHERE APPLICABLE
- d.

RECORDING THE SITE WHERE SEDIMENT IS DISPOSED
- e.

FORWARDING A SIGNED DUPLICATE OF THE COMPLETED CHECK SHEET TO THE PROJECT MANAGER/DEVELOPER FOR THEIR INFORMATION.
2.

IN ADDITION A SUITABLY QUALIFIED PERSON SHALL BE RESPONSIBLE FOR OVERSEEING THE INSTALLATION AND MAINTENANCE OF ALL SOIL AND WATER MANAGEMENT WORKS ON THE SITE. THE PERSON SHALL BE REQUIRED TO SPEND A MINIMUM OF:-

a.

2hrs ONSITE EACH FORTNIGHT UP UNTIL COMPLETION OF ROAD AND DRAINAGE WORKS AND/OR THE COMMISSIONING OF SEDIMENT BASIN(S)/WATER QUALITY CONTROL FACILITIES, AND DURING THE DECOMMISSIONING OF SAME AND/OR FINAL SITE STABILISATION. TO PROVIDE A SHORT MONTHLY WRITTEN REPORT.

b.

ONE HOUR ONSITE EACH 2 MONTHS DURING THAT PHASE WHERE THE DEVELOPERS RESPONSIBILITIES ARE LIMITED TO MAINTENANCE OF THE SDS DEVICES AND/OR SEDIMENT BASINS (ie DURING THE STAGE WHEN BUILDING WORKS CAN BE UNDERTAKEN) TO PROVIDE A SHORT WRITTEN REPORT EACH 4 MONTHS

THE RESPONSIBLE PERSON SHALL ENSURE THAT:-

- a.

THIS PLAN IS BEING IMPLEMENTED CORRECTLY
- b.

REPAIRS ARE BEING UNDERTAKEN AS REQUIRED
- c.

ESSENTIAL MODIFICATIONS TO THIS PLAN ARE BEING MADE IF AND WHEN NECESSARY. EACH REPORT SHALL CERTIFY THAT WORKS HAVE BEEN CARRIED OUT ACCORDING TO THE APPROVED PLANS.
3.

WASTE BINS SHALL BE EMPTIED AS NECESSARY, DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT
4.

PROPER DRAINAGE OF THE SITE SHALL BE MAINTAINED. DRAINS (INCLUDING INLET AND OUTLET WORKS) SHALL BE CHECKED TO ENSURE THAT THEY ARE OPERATING AS INTENDED, ESPECIALLY THAT:-

a.

NO LOW POINTS EXIST WHICH CAN OVERTOP IN A LARGE STORM EVENT.

b.

AREAS OF EROSION ARE REPAIRED (e.g LINED WITH SUITABLE MATERIAL) AND/OR VELOCITY OF FLOW IS REDUCED APPROPRIATELY THROUGH CONSTRUCTION OF SMALL CHECK DAMS OR INSTALLING ADDITIONAL DIVERSIONS UPSLOPE

c.

BLOCKAGES ARE CLEARED (THESE MIGHT OCCUR BECAUSE OF SEDIMENT POLLUTION, SAND/SOIL/SPOIL BEING DEPOSITED IN OR TOO CLOSE TO THEM, BREACHED BY VEHICLE WHEELS etc)
5.

SAND/SOIL/SPOIL MATERIALS PLACED CLOSER THAN 2m FROM HAZARD AREAS SHALL BE REMOVED SUCH HAZARD AREAS INCLUDE ANY AREAS OF HIGH VELOCITY WATER FLOWS (eg WATERWAYS AND GUTTERS) PAVED AREAS AND DRIVEWAYS.
6.

RECENTLY STABILISED LANDS SHALL BE CHECKED TO ENSURE THAT THE EROSION HAZARD HAS BEEN EFFECTIVELY REDUCED. ANY REPAIRS SHALL BE INITIATED AS APPROPRIATE.
7.

EXCESSIVE VEGETATIVE GROWTH SHALL BE CONTROLLED THROUGH MOWING OR SLASHING.
8.

ALL SEDIMENT DETENTION SYSTEMS SHALL BE KEPT IN GOOD WORKING CONDITION. IN PARTICULAR ATTENTION SHALL BE GIVEN TO:-

a.

RECENT WORKS TO ENSURE THAT THEY HAVE NOT RESULTED IN DIVERSION OF SEDIMENT LADEN WATER AWAY FROM THEM.

b.

DEGRADABLE PRODUCTS TO ENSURE THAT THEY ARE REPLACED AS REQUIRED

c.

SEDIMENT REMOVAL TO ENSURE THE DESIGN CAPACITY OR LESS REMAINS IN THE SETTling ZONE.
9.

ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS SHALL BE CONSTRUCTED AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS (ie MAKE ONGOING CHANGES TO THIS PLAN WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECTED TO CHANGES IN CONDITIONS AT THE WORKS SITE OR ELSEWHERE IN THE CATCHMENT.
10.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN A FUNCTIONING CONDITION UNTIL ALL EARTHWORKS ACTIVITIES ARE COMPLETED AND THE SITE STABILISED.
11.

WATERS IN SEDIMENT RETENTION BASIN(S) THAT OCCUPY MORE THAN 1/4 OF THE DESIGN CAPACITY DURING THAT STAGE OF THE WORKS UP UNTIL COMMISSIONING OF THE BASIN(s) SHALL BE:-

a.

TREATED WITH A FLOCCULATING AGENT (APPENDIX E MANAGING URBAN STORMWATER SOILS & CONSTRUCTION 4TH ED.)

b.

DISCHARGED WITHIN 5 days FROM THE CONCLUSION OF ANY STORM EVENT LARGE ENOUGH TO FILL THE BASIN TO THAT LEVEL.
12.

LITTER, DEBRIS AND COARSE SEDIMENT SHALL BE REMOVED FROM THE GROSS POLLUTANT TRAPS AND TRASH RACKS AS REQUIRED.

SOIL AND WATER MANAGEMENT SHALL BE READ IN CONJUNCTION WITH CADDENS HILL STAGES 2 BULK EARTHWORKS CC APPROVAL

Plotdate: 13 March - 2018 9:32:02 AM File Name: J:\110358 - O'Connell Lane Caddens\06 - Playing Field\CD\CD\110358CC810.dwg

A	ISSUE FOR CONSTRUCTION APPROVAL	JT	NM	MP	MS	07/12/17	
	AMENDMENT	DES	DRN	CKD	APR	DATE	

J. WYNDHAM PRINCE CONSULTING CIVIL INFRASTRUCTURE ENGINEERS & PROJECT MANAGERS

PO Box 4366 PENRITH WESTFIELD NSW 2750  
P 02 4720 3300 F 02 4720 3399 W www.jwprince.com.au E jwp@jwprince.com.au

AZIMUTH: M.G.A  
DATUM: A.H.D  
ORIGIN:

CLIENT:



THIS DRAWING MUST NOT BE USED FOR CONSTRUCTION UNLESS SIGNED AS PART OF AN APPROVED CONSTRUCTION CERTIFICATE.

ISSUED FOR CONSTRUCTION APPROVAL

CADDENS HILL - PLAYING FIELD CARPARK, ROAD & DRAINAGE WORKS

SOIL & WATER MANAGEMENT NOTES

PLAN No: 110358/CC810

A

FILE No: 110358CC810

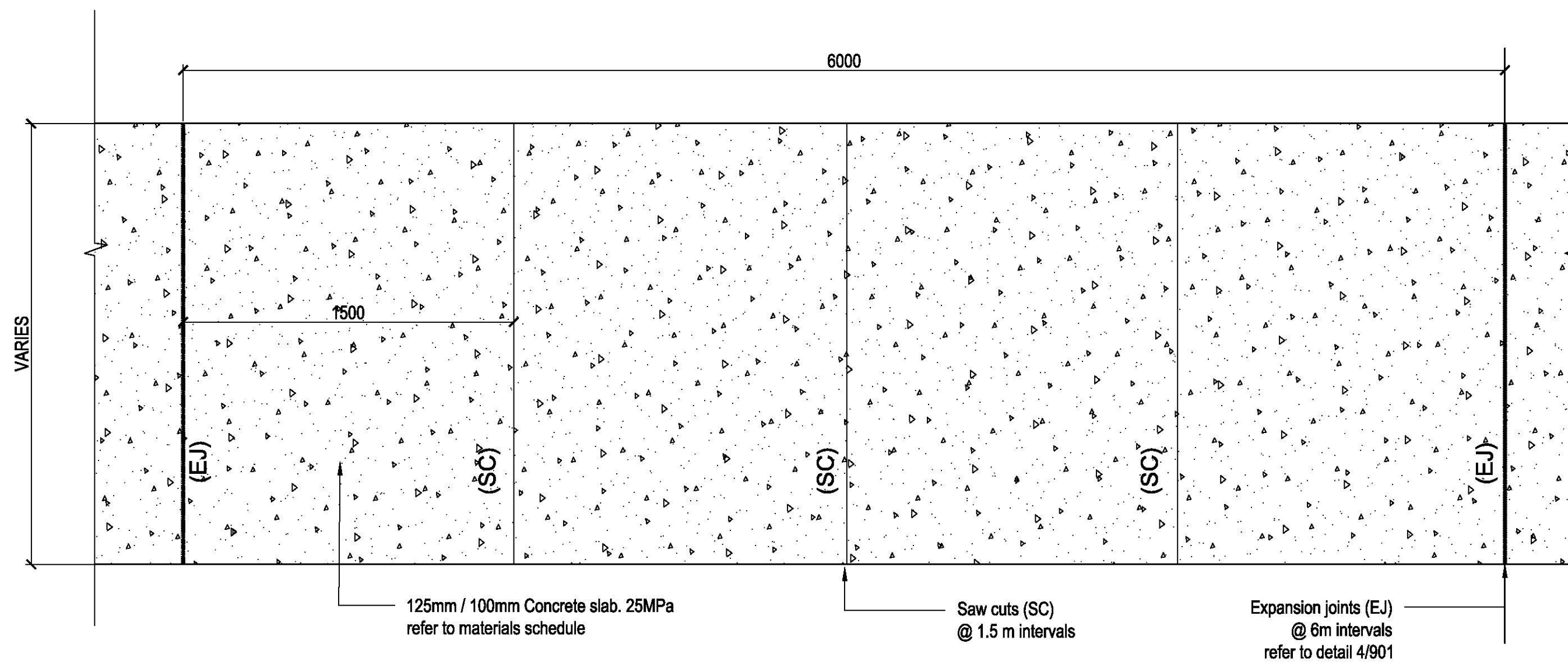
SHEET SIZE: A1 ORIGINAL





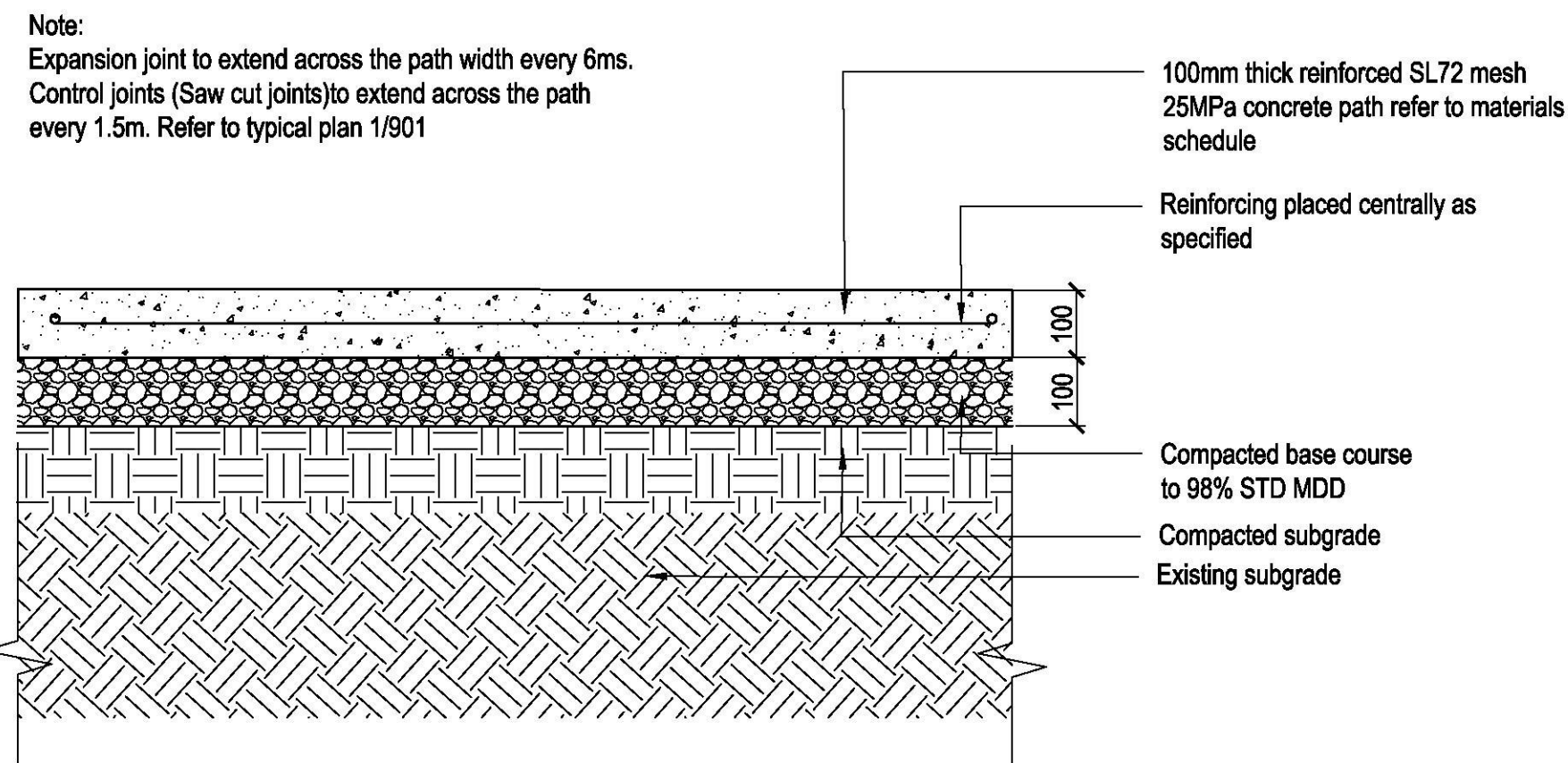


ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	REVISED PAVING	EP	SH	19/02/18
04	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
05	CC	STRUCTURAL REVIEW	SS	PK	04/05/18
06	CON	FOR CONSTRUCTION	SS	PK	07/05/18

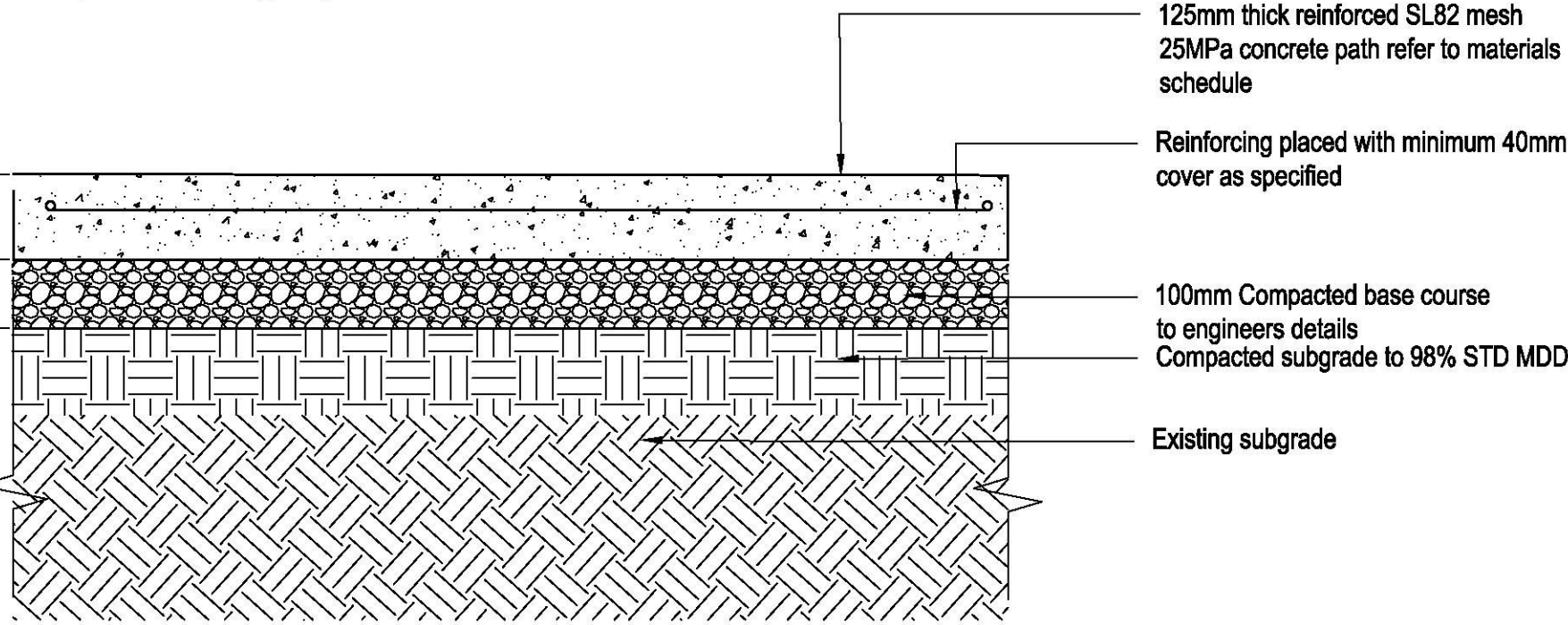


01 PAVING TYPE P1/1A - CONCRETE PAVING TYPICAL PLAN  
SCALE 1:20

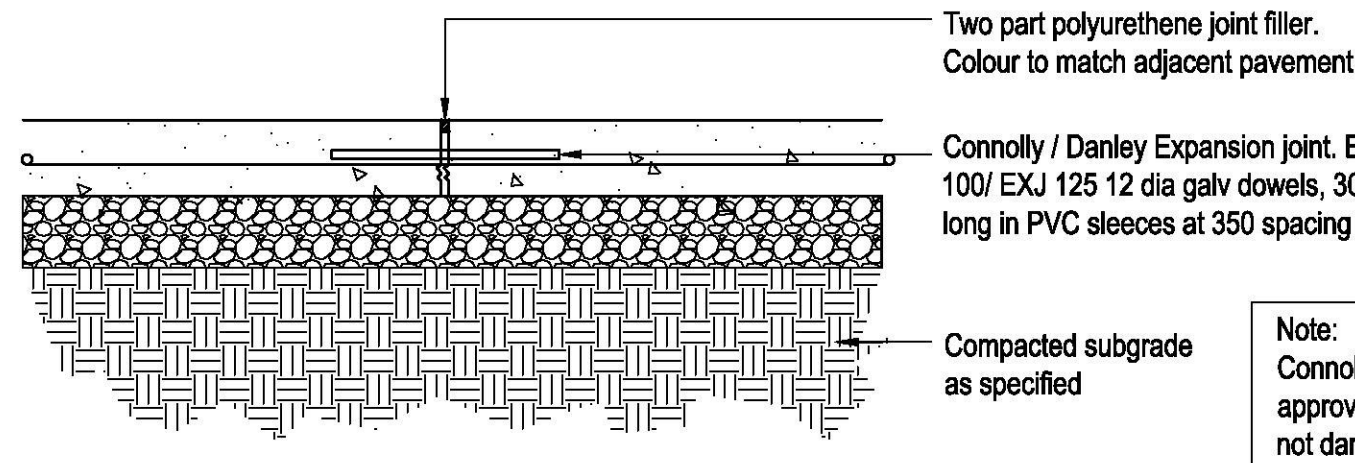
02 PAVING TYPE P1 - CONCRETE PAVING TYPICAL SECTION (PEDESTRIAN)  
SCALE 1:10



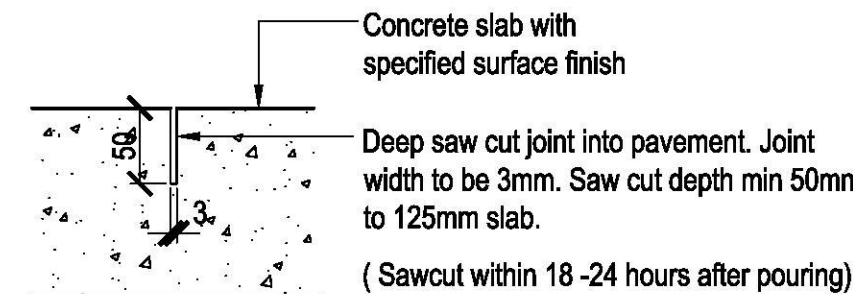
Note:  
Expansion joint to extend across the path width every 6ms.  
Control joints (Saw cut joints) to extend across the path every 1.5m. Refer to typical plan 4/901



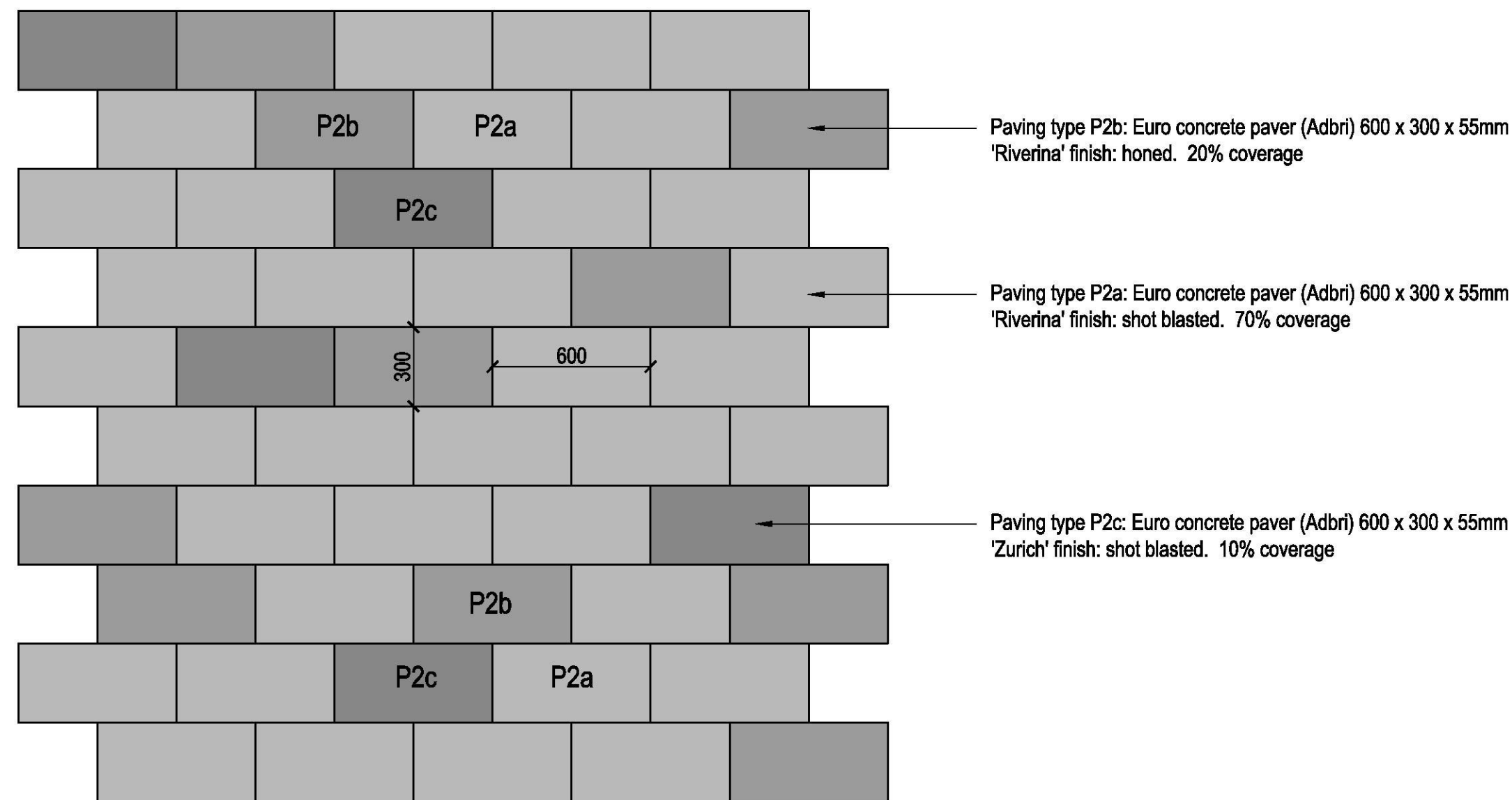
03 PAVING TYPE P1A - TYPICAL SECTION (VEHICULAR)  
SCALE 1:10



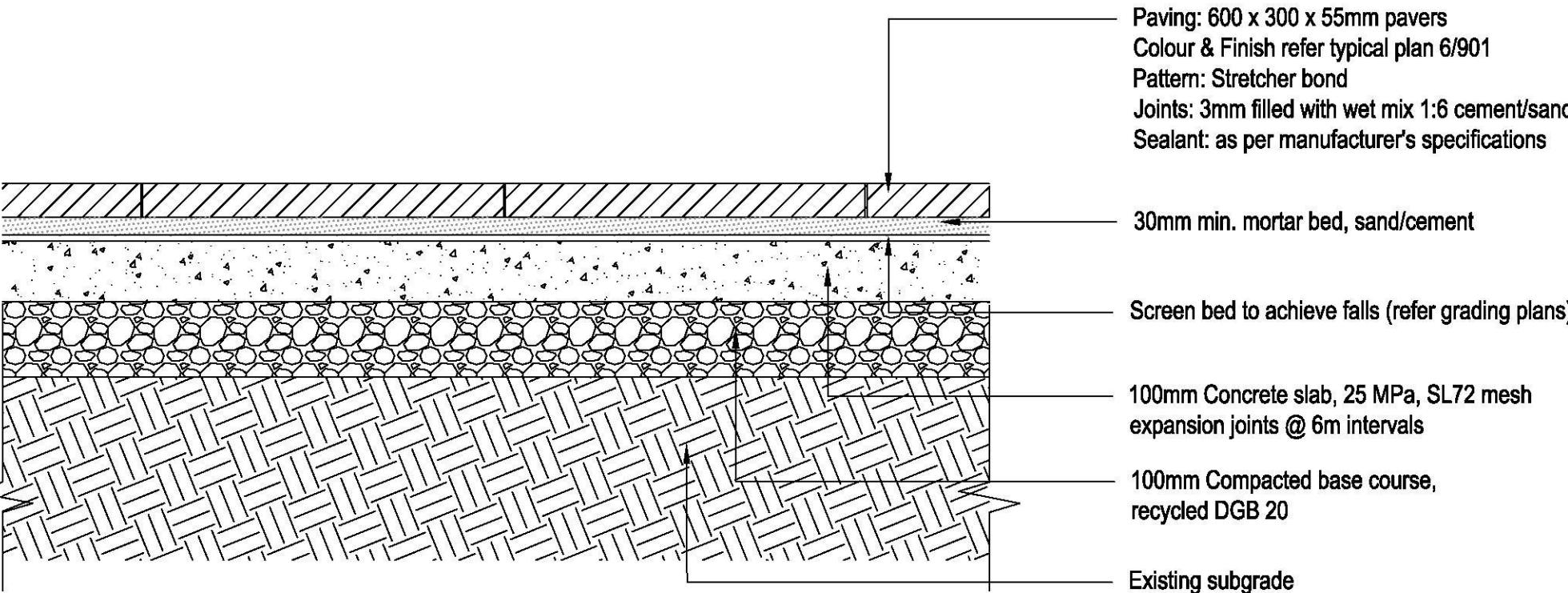
04 PAVING TYPE P1/1A EXPANSION JOINT- TYPICAL SECTION  
SCALE 1:10



05 PAVING TYPE P1/1A SAW CUT JOINT - TYPICAL SECTION  
SCALE 1:5



06 PAVING TYPE P2 - TYPICAL PLAN  
SCALE 1:20



07 PAVING TYPE P2 - TYPICAL PLAN  
SCALE 1:10



ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	EDGING NOTE ADDED.	EP	SH	30/11/17
04	CC	NET & SOFTFALL AMENDED	EP	SH	14/12/17
05	CC	SOFTFALL AMENDED.	EP	PK	18/02/18
06	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
07	CC	STRUCTURAL REVIEW	SS	PK	04/05/18
08	CON	FOR CONSTRUCTION	SS	PK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

**DRAWING TITLE**

## HARDSCAPE DETAILS

### - PLAY AREA

DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

SCALE AS @ A1

DRAWING NUMBER	REVISION
L902	08



## ADDITIONAL STANDARDS

**ADDITIONAL STANDARDS**  
New play facilities shall comply with, but not limited to are;

- Disability Discrimination ACT
- Manufacturers installation instruction & requirements

## SOFT FALL MATERIALS REQUIREMENTS

Must comply specifically with;

- AN / NZS : 4422 (1996) - Playground surfacing - specifications, requirements & test methods

## SPECIFICATION STANDARDS

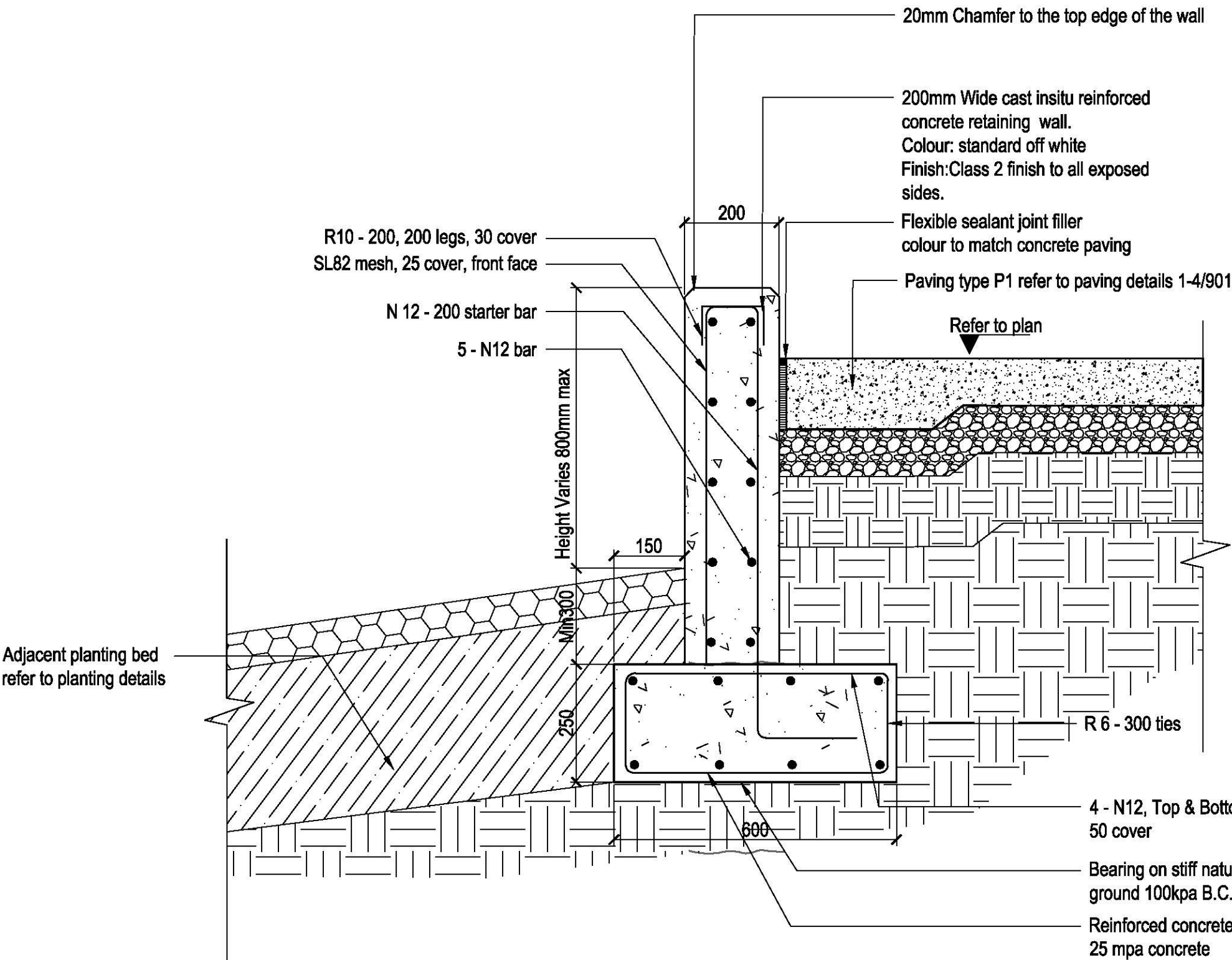
All play facility equipment shall comply specifically with but not limited to;  
Australian Standards;  
(AS 4685.1-2004), (AS 4685.2-2004), (AS 4685.3-2004), (AS 4685.4-2004),  
(AS 4685.5-2004), (AS 4685.6-2004), (AS/NZS: 4486.1 (1997)), (AS: 2599-2001)

## GENERAL PLAY SPECIFICATION REQUIREMENTS

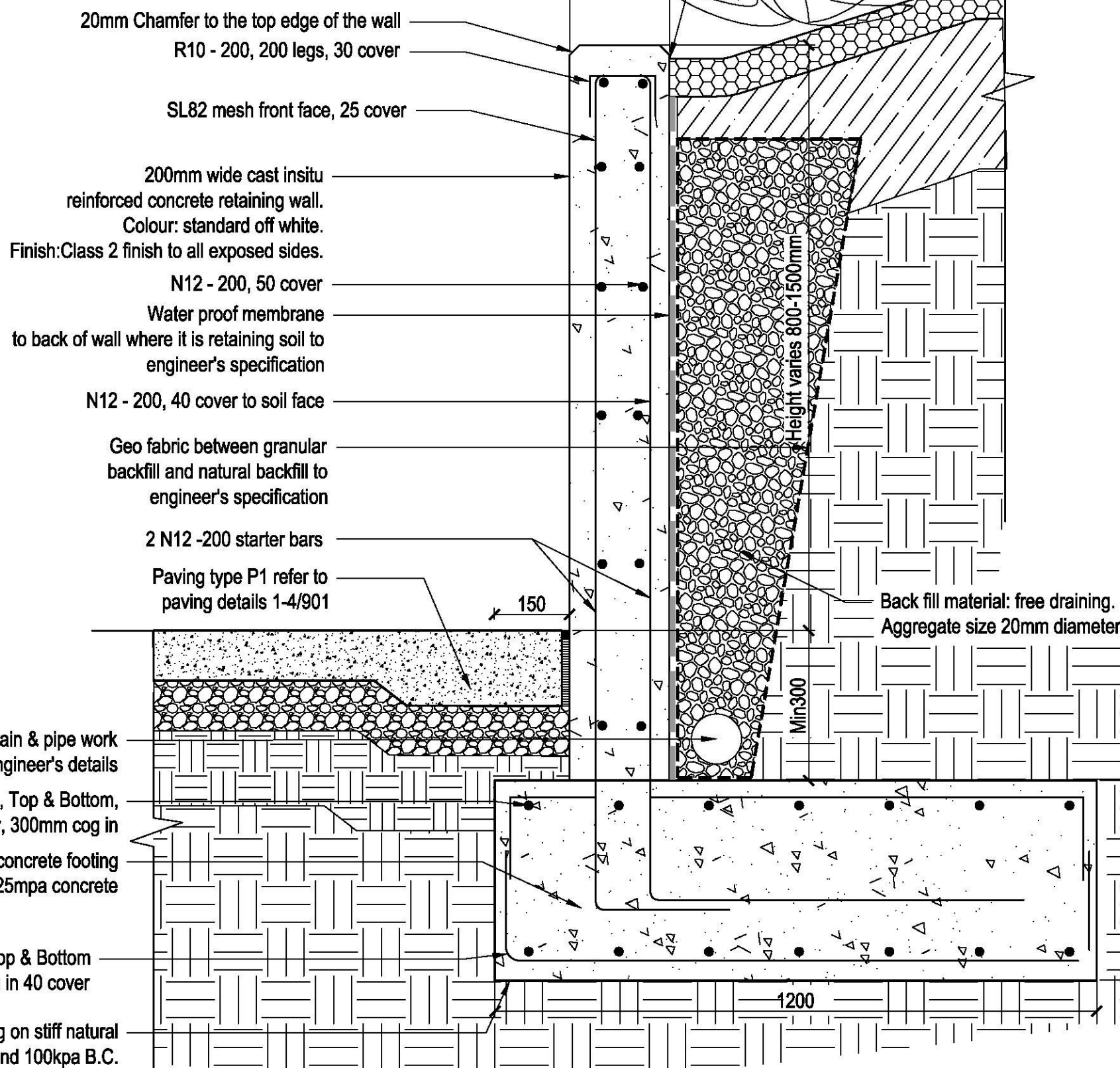
Due to high risk of vandalism, where possible equipment shall be constructed of fire resistance materials & equipment assembled with approved tamper resistant / vandalism reducing safety screw systems.



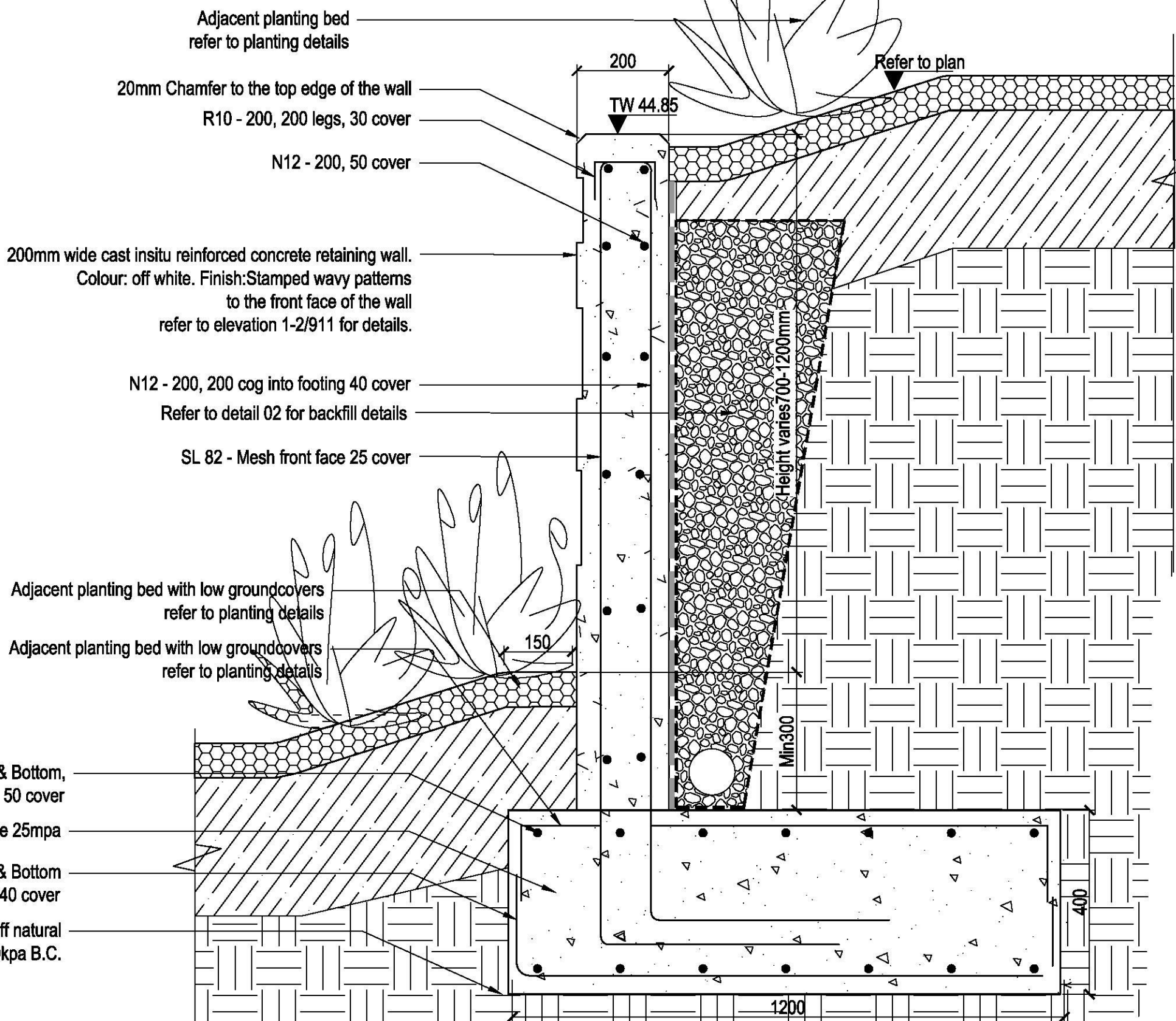
ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	SKATE DETERRENT REMOVED	EP	SH	19/02/18
04	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
05	CC	STRUCTURAL REVIEW	SS	PK	06/05/18
06	CON	FOR CONSTRUCTION	SS	PK	07/05/18



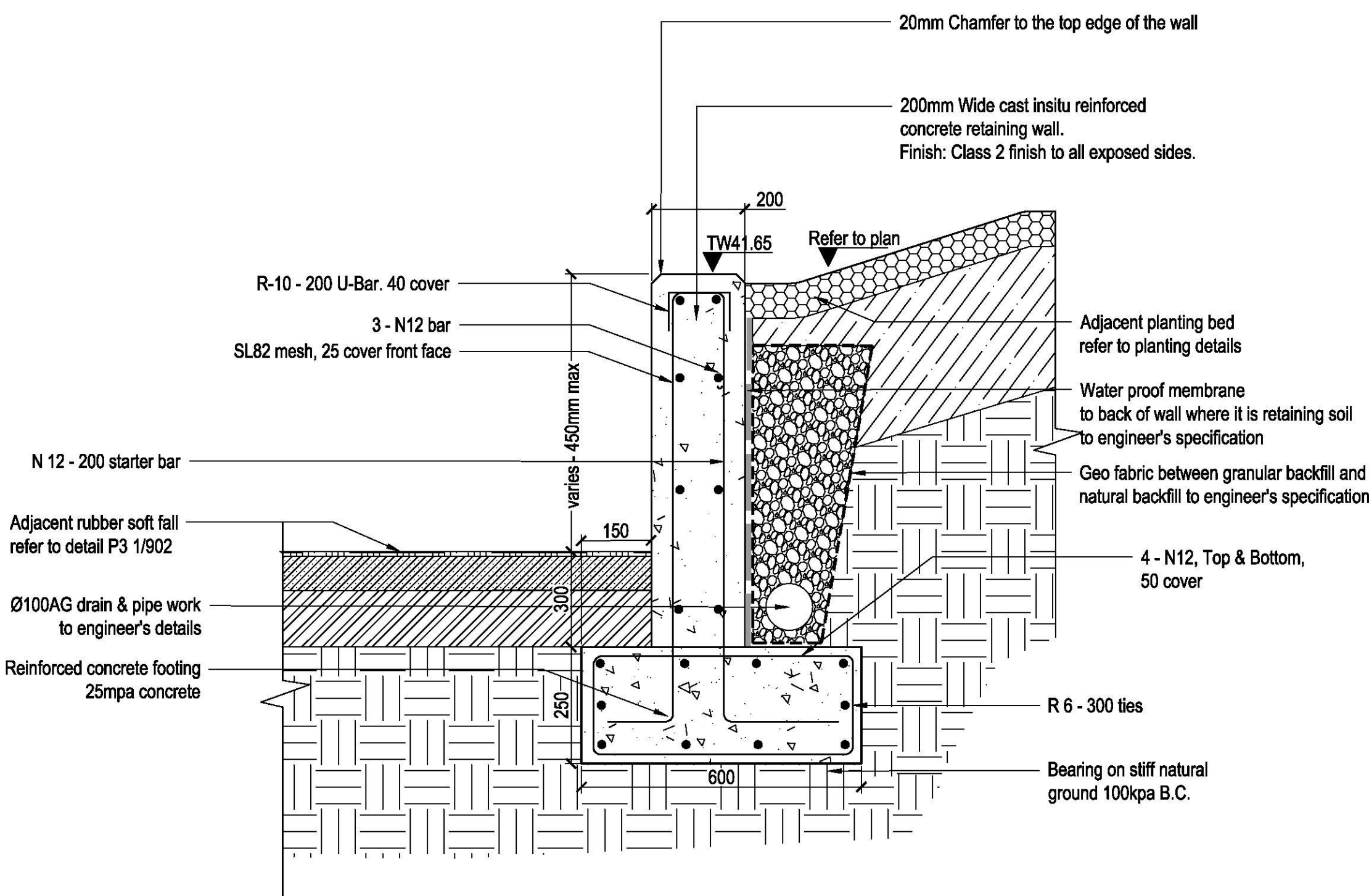
01 WALL TYPE W1 - CONCRETE RETAINING WALL (RETAINING ON PAVING SIDE)  
SCALE 1:10



02 WALL TYPE W1A - CONCRETE TERRACE WALL  
SCALE 1:10



03 WALL TYPE W1B - CONCRETE TERRACE WALL  
SCALE 1:10



04 WALL TYPE W1 - CONCRETE RETAINING WALL TO PLAYGROUND (RETAINING ON PLANTING SIDE)  
SCALE 1:10





FOR  
CONSTRUCTION

ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	REVISED WALL DETAIL	EP	SH	19/02/18
04	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
05	CC	STRUCTURAL REVIEW	SS	PK	06/05/18
06	CON	FOR CONSTRUCTION	SS	PK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

DRAWING TITLE

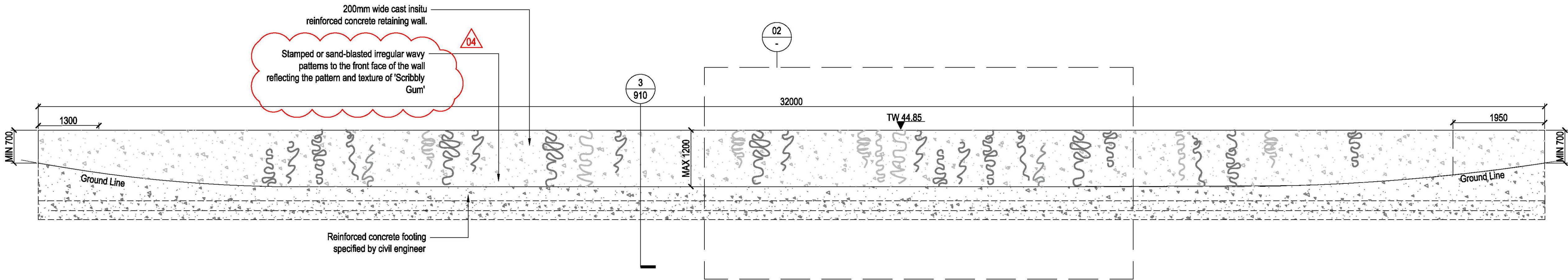
HARDSCAPE DETAILS  
- WALLS

DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

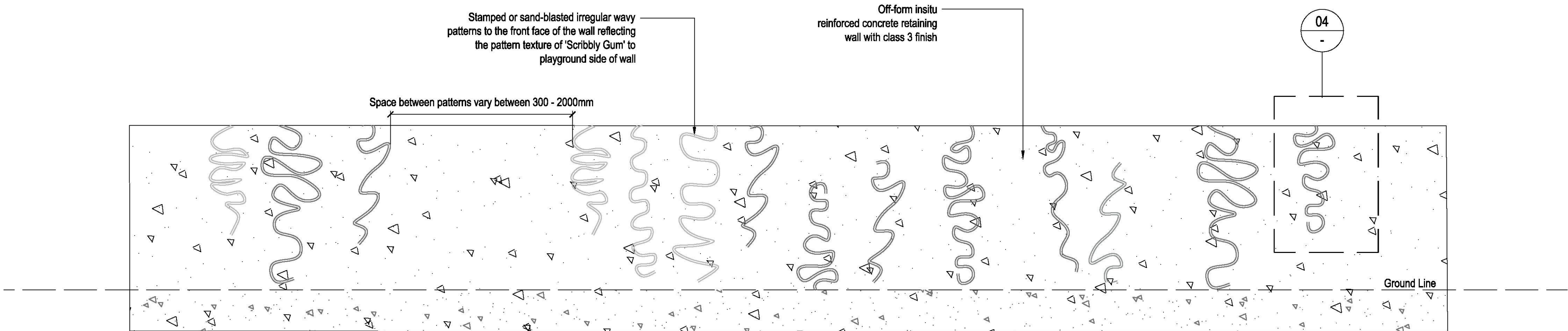
SCALE AS @ A1

DRAWING NUMBER  
L911

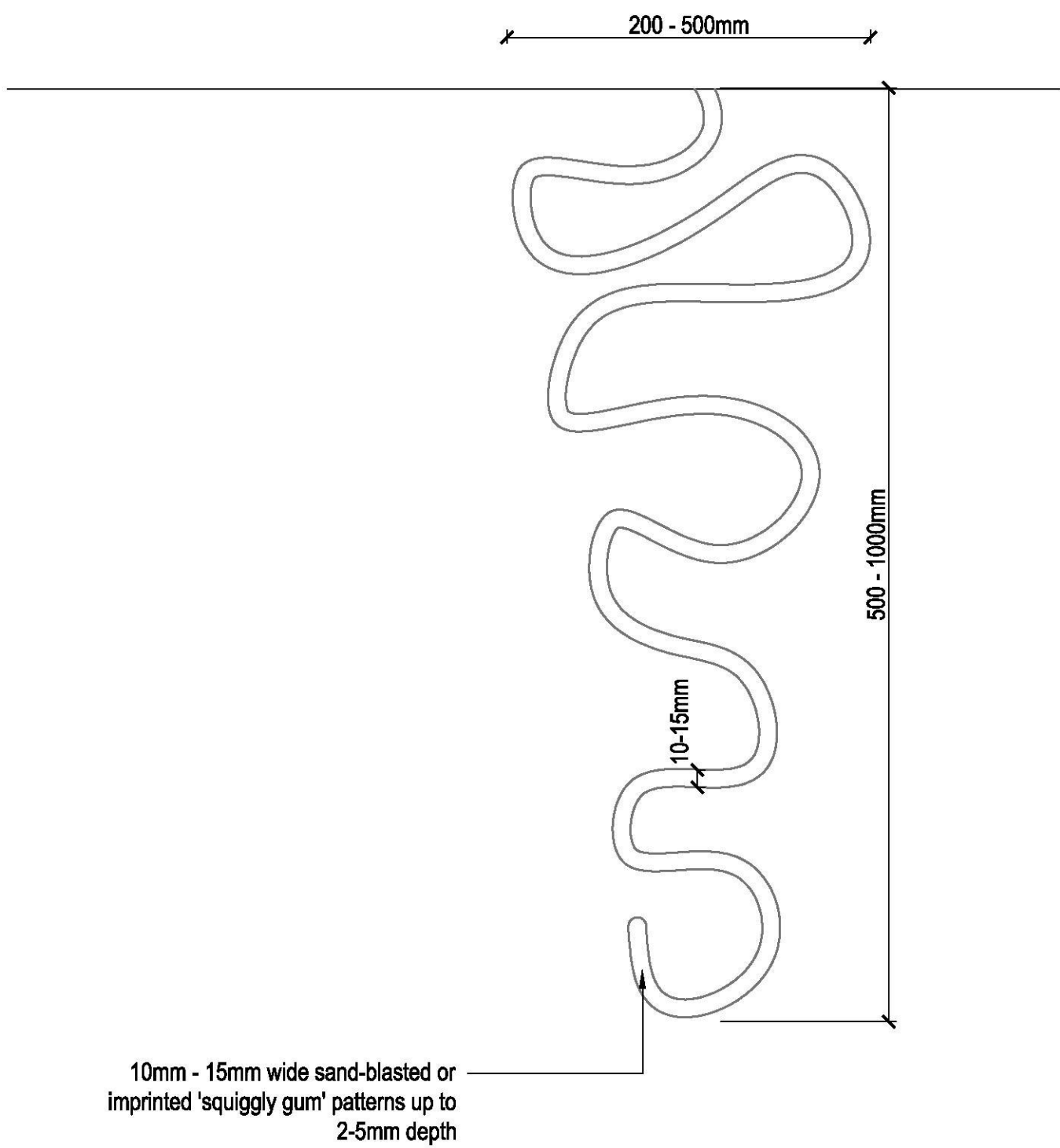
REVISION  
06



01 WALL TYPE W1B - ELEVATION  
SCALE 1:50



02 WALL TYPE W1B - INDICATIVE DETAIL PATTERN  
SCALE 1:20



04 SAND-BLASTED/STAMPED TYPICAL WAVY PATTERN  
SCALE 1:5





ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
04	CC	STRUCTURAL REVIEW	SS	PK	04/05/18
05	CON	FOR CONSTRUCTION	SS	PK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

DRAWING TITLE

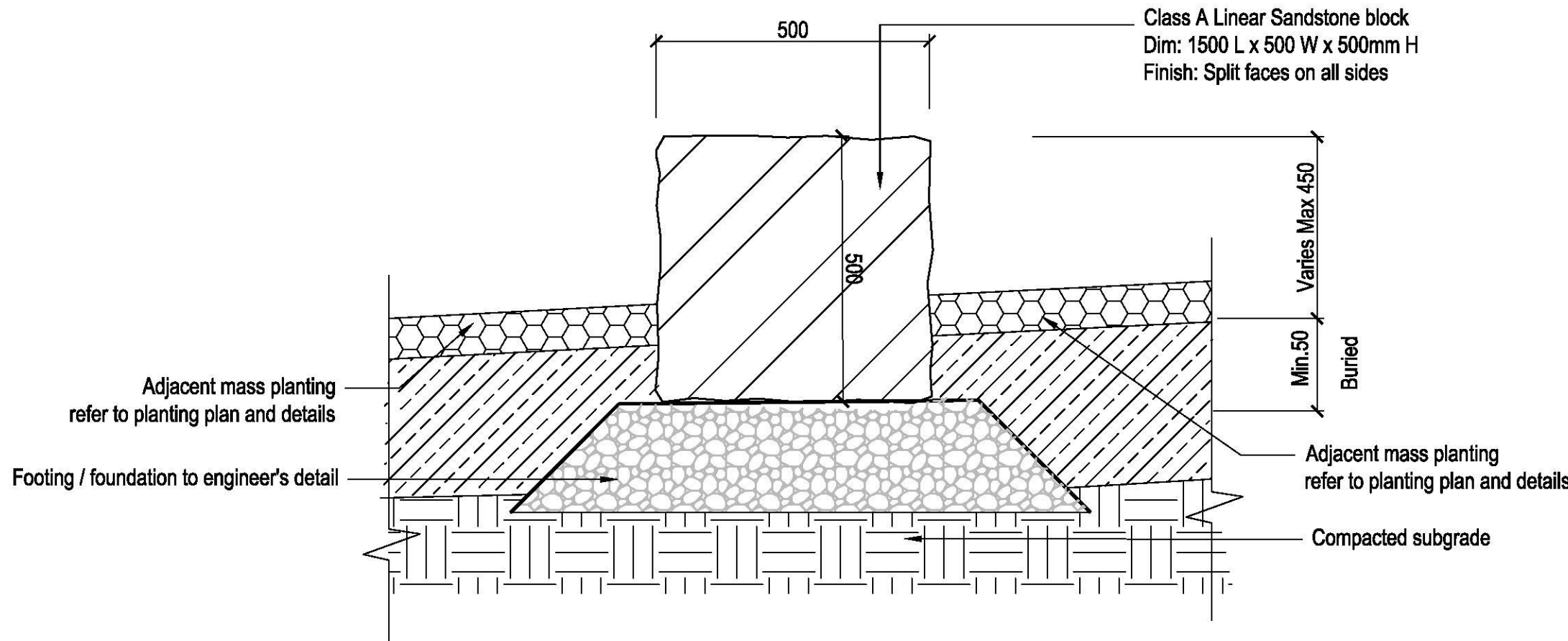
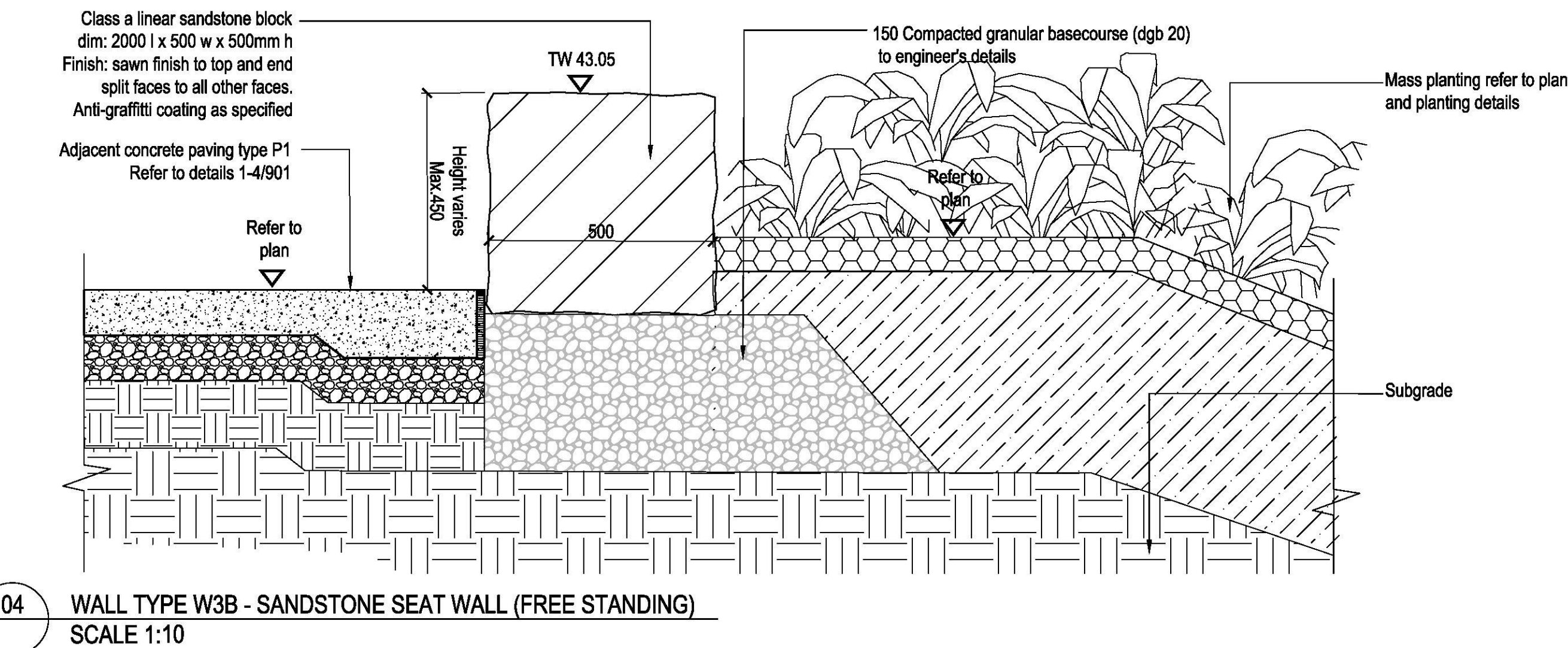
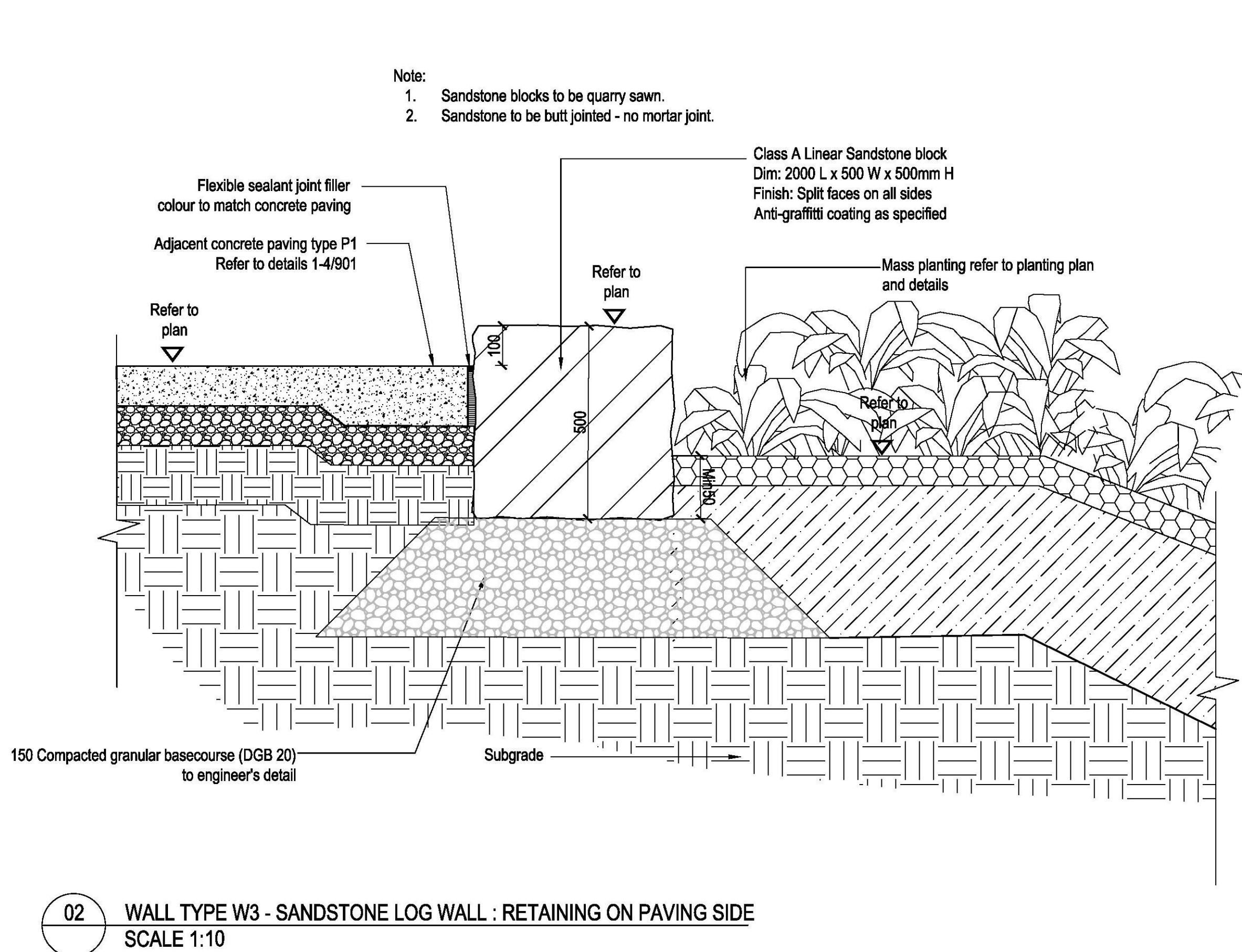
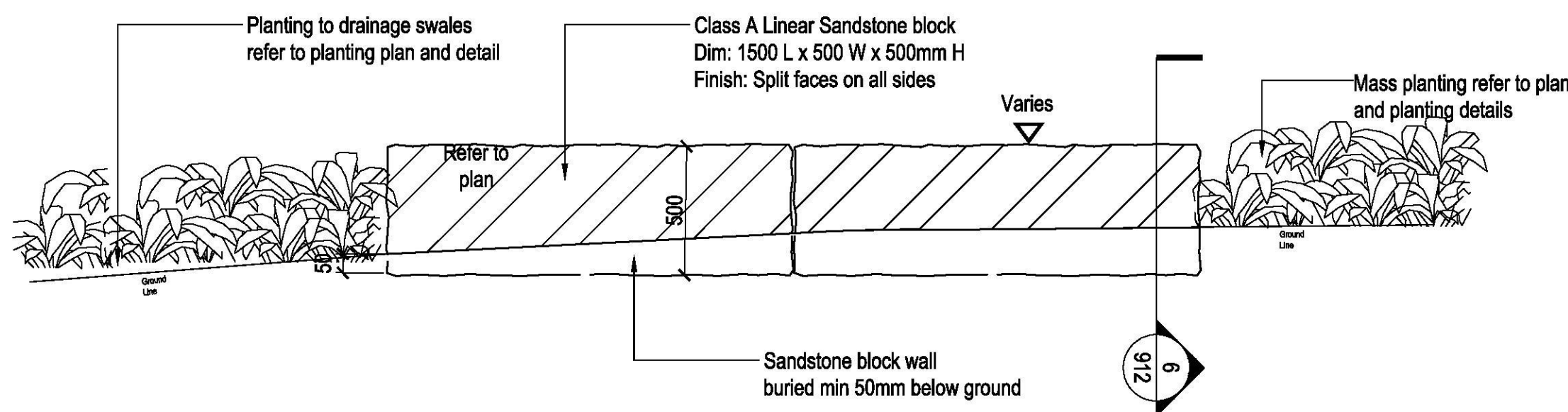
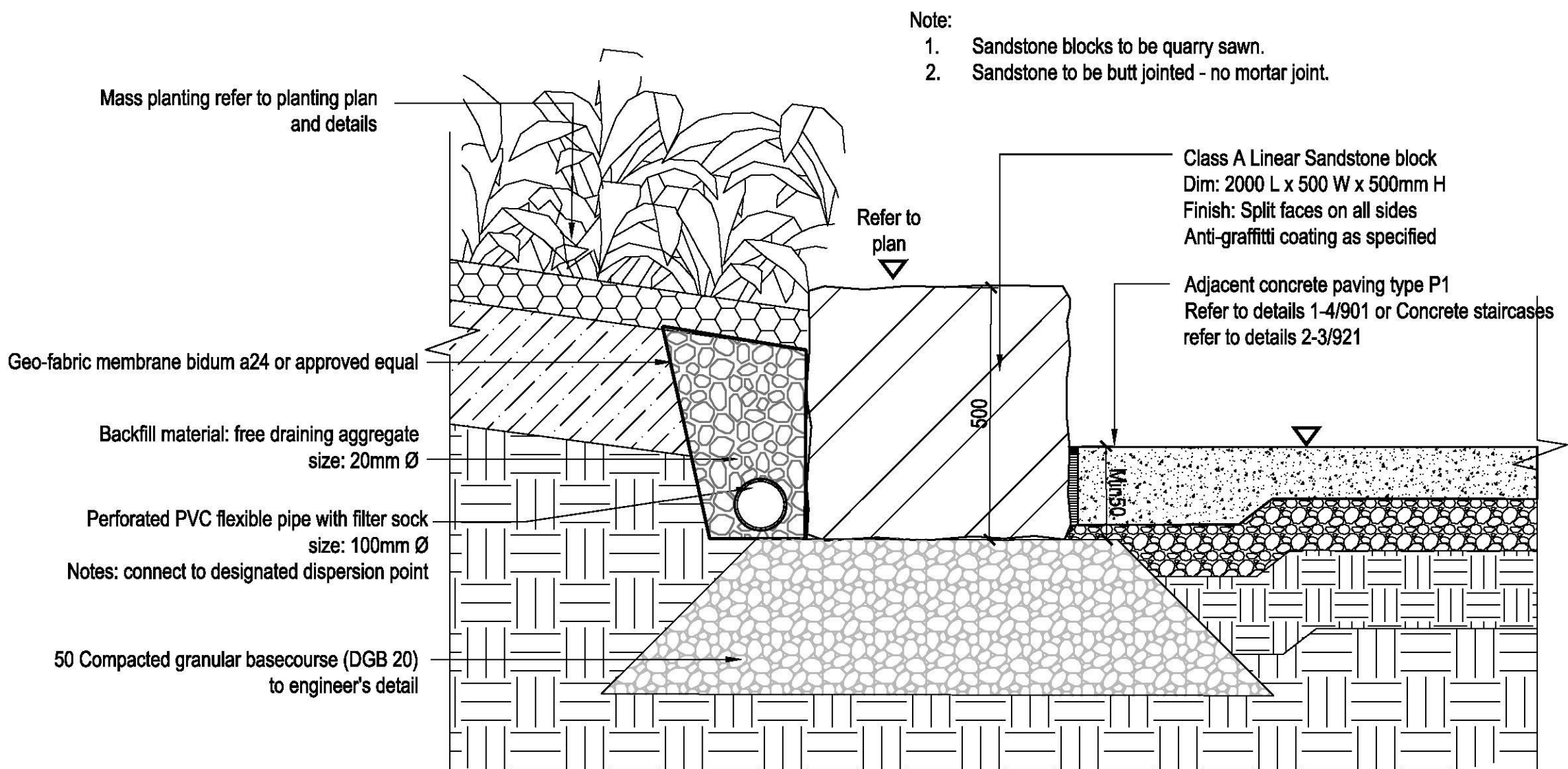
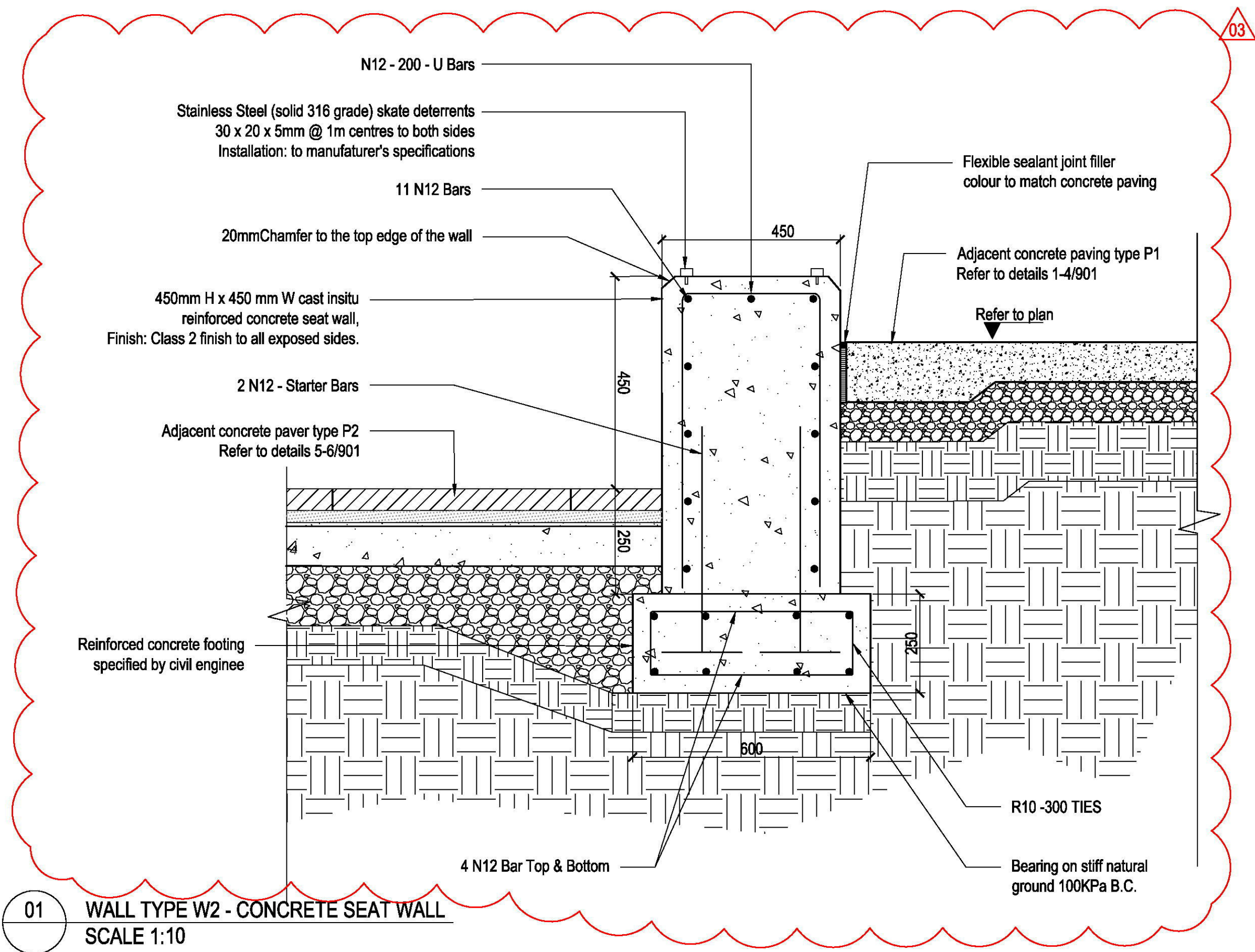
HARDSCAPE DETAILS  
- WALLS

DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

SCALE AS @ A1

DRAWING NUMBER  
L912

REVISION  
05





© Place Design Group Pty Ltd A.C.N. 082 370 063

All information displayed, transmitted or carried within this Copyright is protected by Copyright and Intellectual Property laws.

The information contained in this document is confidential.

Recipients of this document are prohibited from disclosing the information herein to any person without the written consent of Place Design Group.

Associated documents take precedence over any measures of scale.

Vertical dimensions on this plan refer to construction.

This drawing may display with permission a combination of specialist and consultant's input and teamwork.

Nominated specialist and consultant information contained within this document is referenced from their supplied documentation and is contained in this document as indicative only and not for construction or certification purposes.

PROJECT  
CADDENS HILL SPORTS  
PRECINCT

**CLIENT**



## NOTES

FOR  
CONSTRUCTION

[illegible]

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

## DRAWING TITLE

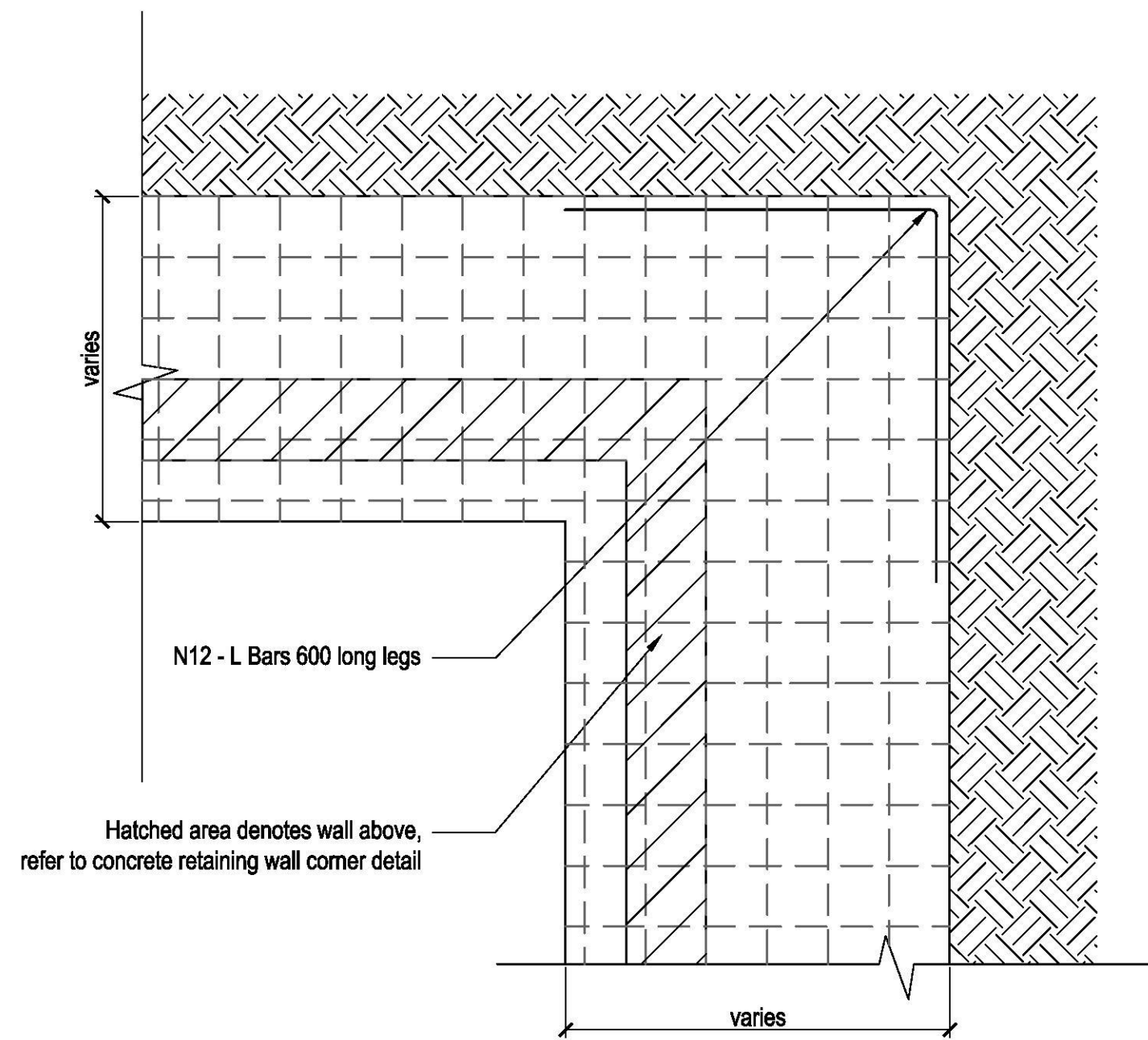
## HARDSCAPE DETAILS

### - WALLS

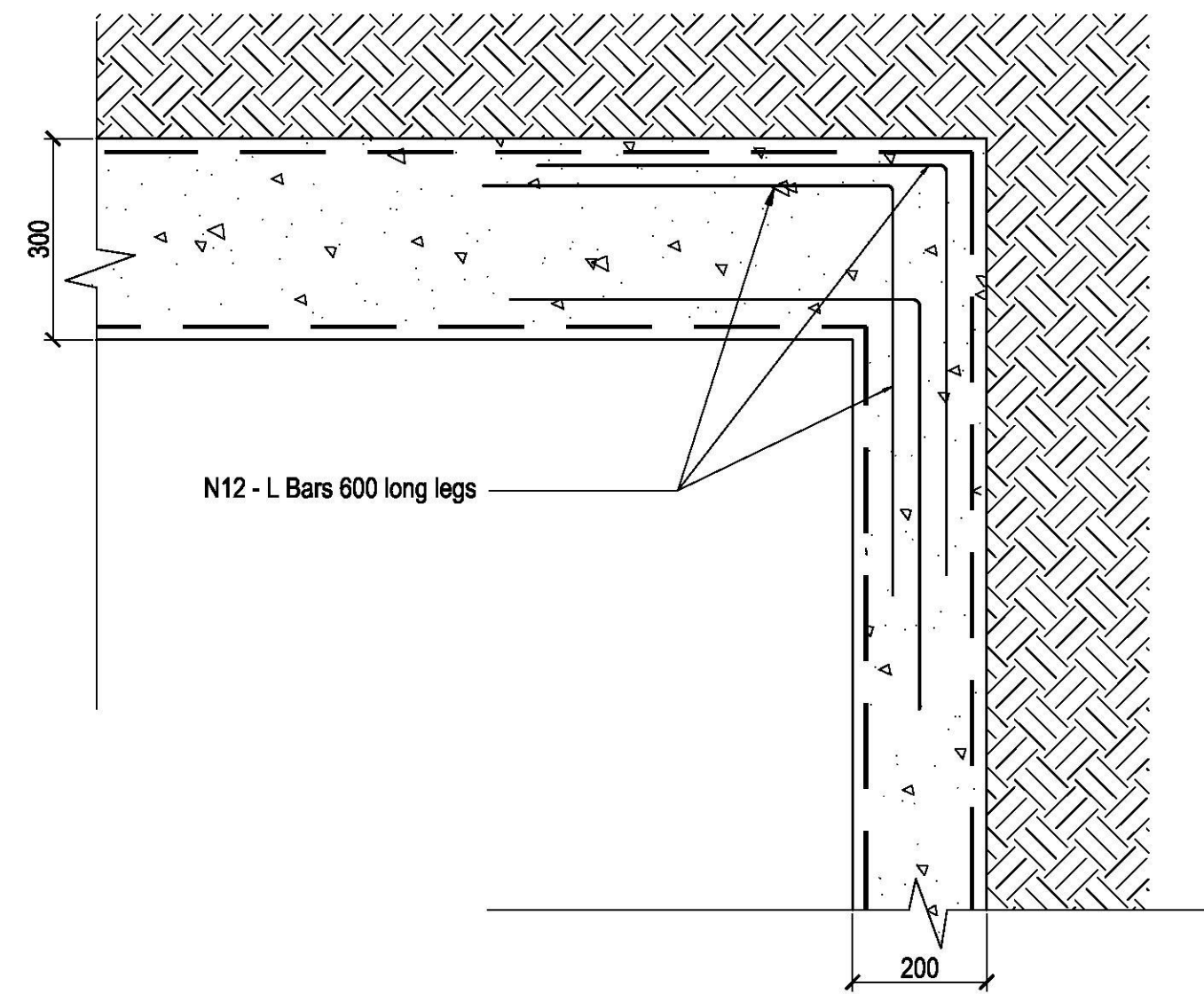
DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

SCALE AS @ A1

DRAWING NUMBER	REVISION
L913	03



01 CONCRETE RETAINING WALL FOOTING CORNER DETAIL  
SCALE 1:10



02 CONCRETE RETAINING WALL CORNER DETAIL  
SCALE 1:10



ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	REVISED TEXT	EP	SH	19/02/18
04	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
05	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
06	CON	FOR CONSTRUCTION	SS	PK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

DRAWING TITLE

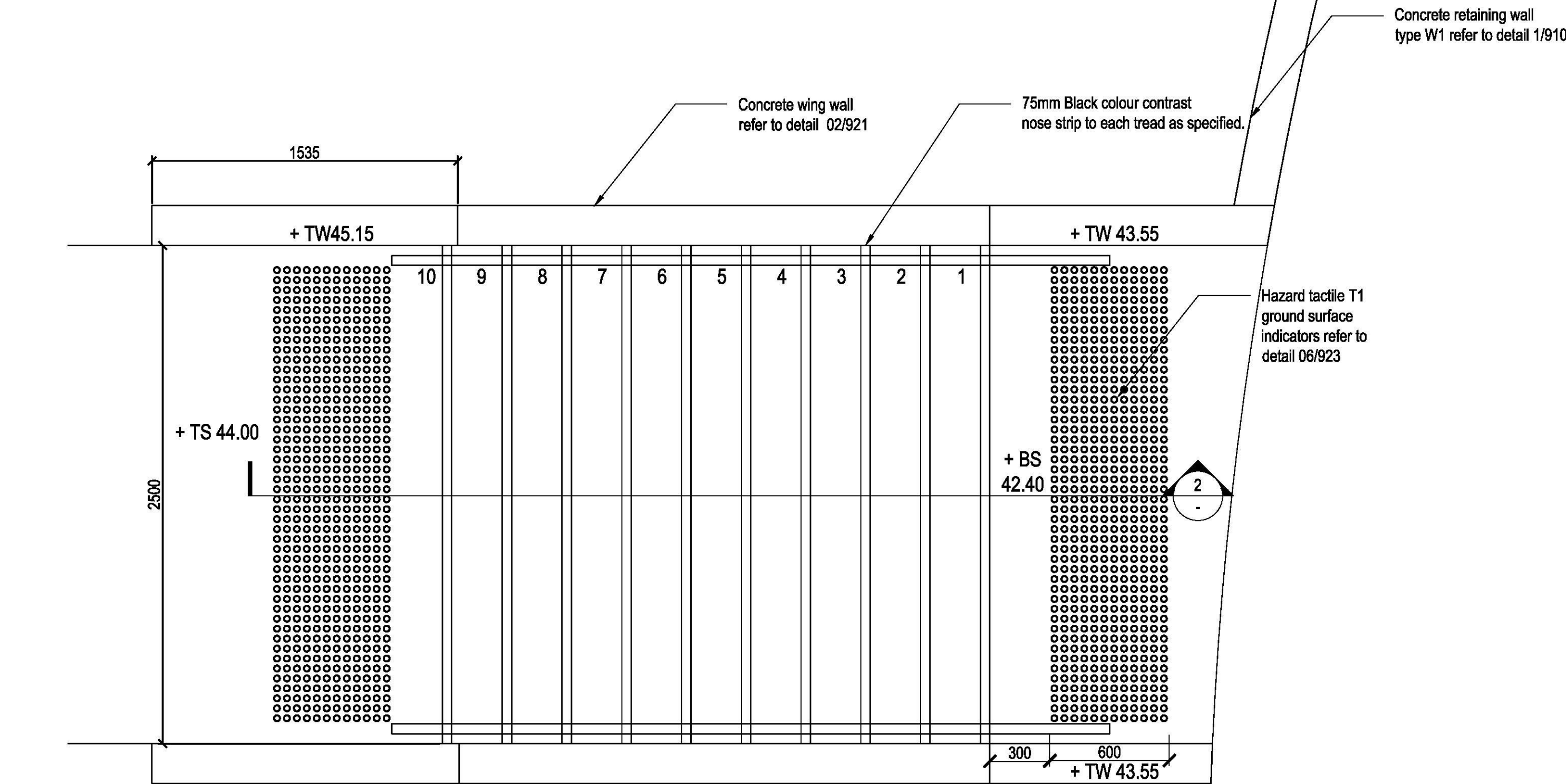
HARDSCAPE DETAILS  
- STAIRS

DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

SCALE AS @ A1

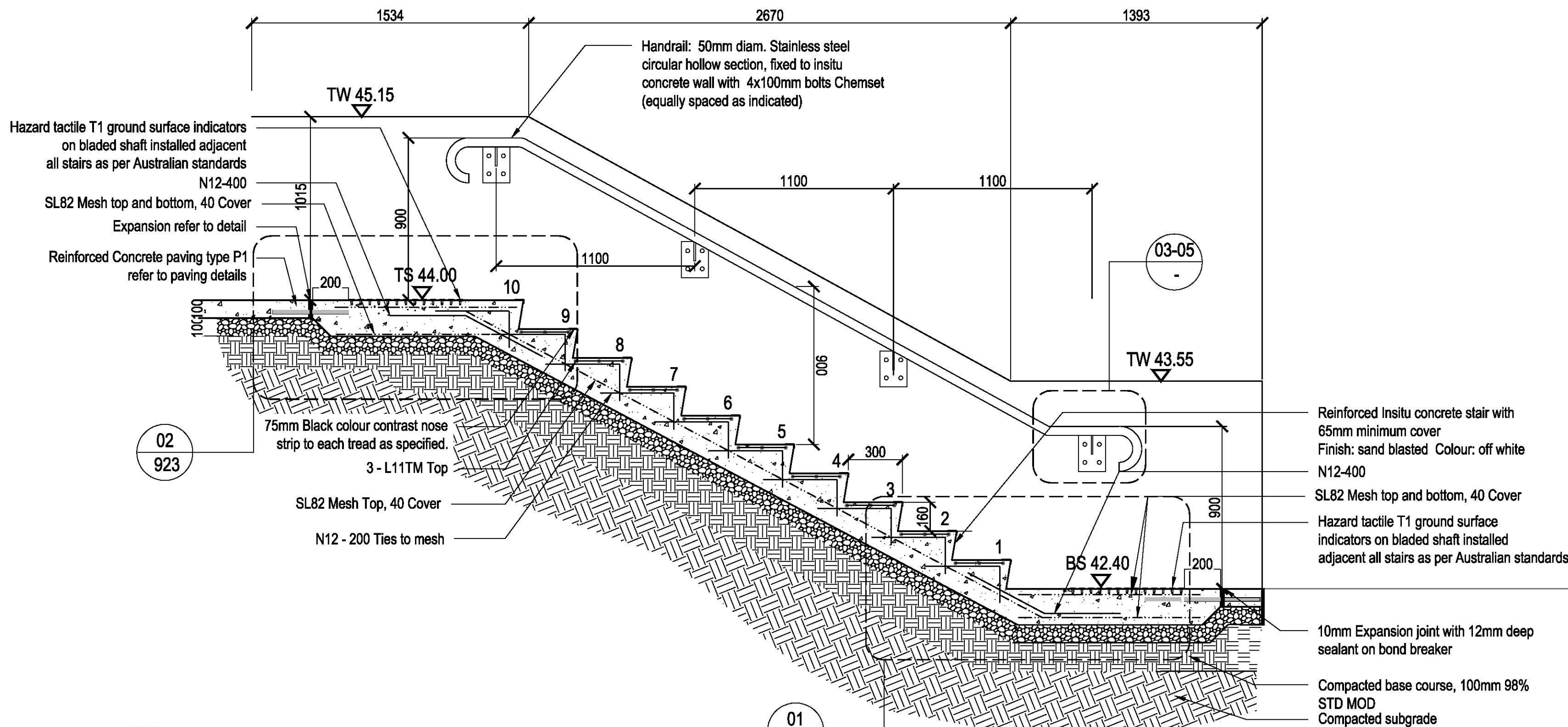
DRAWING NUMBER  
L920

REVISION  
06

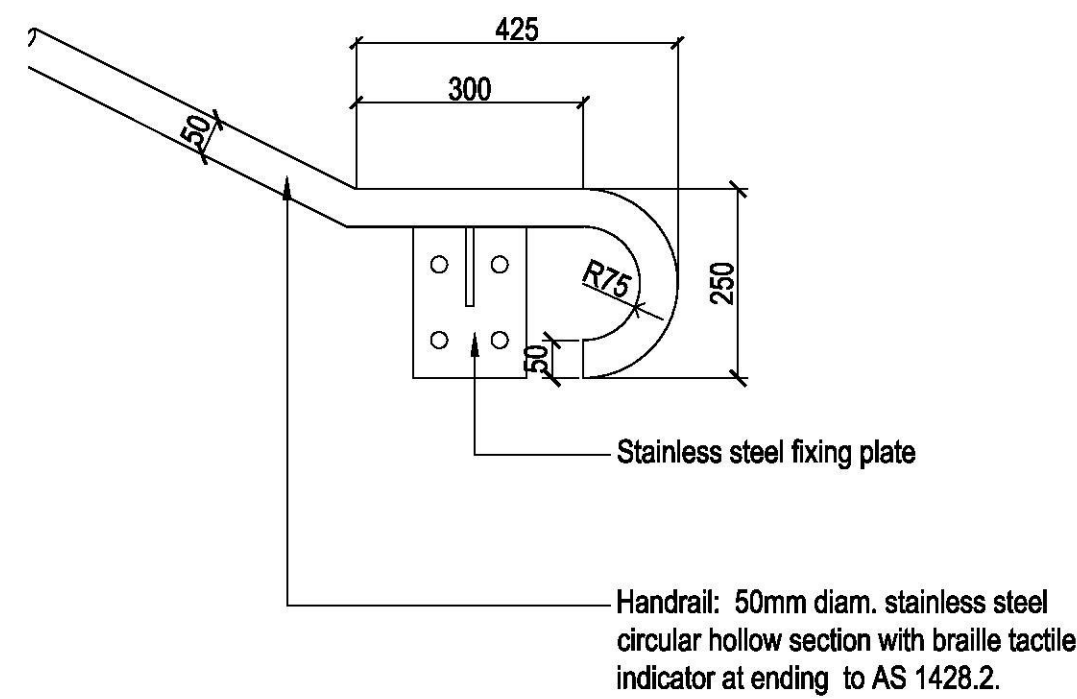


01 STAIR TYPE S1 - DETAIL PLAN  
SCALE 1:20

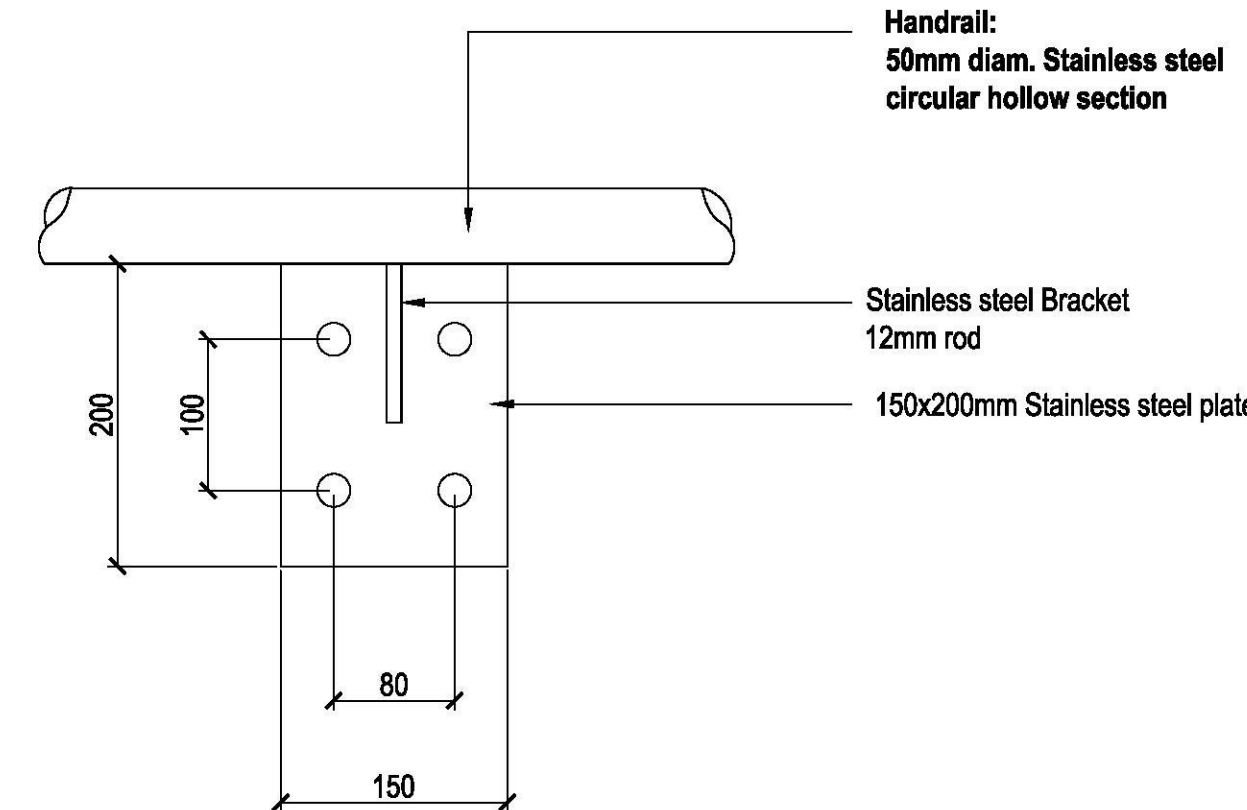
Note:  
All Stairs are to be concrete 25 MPa



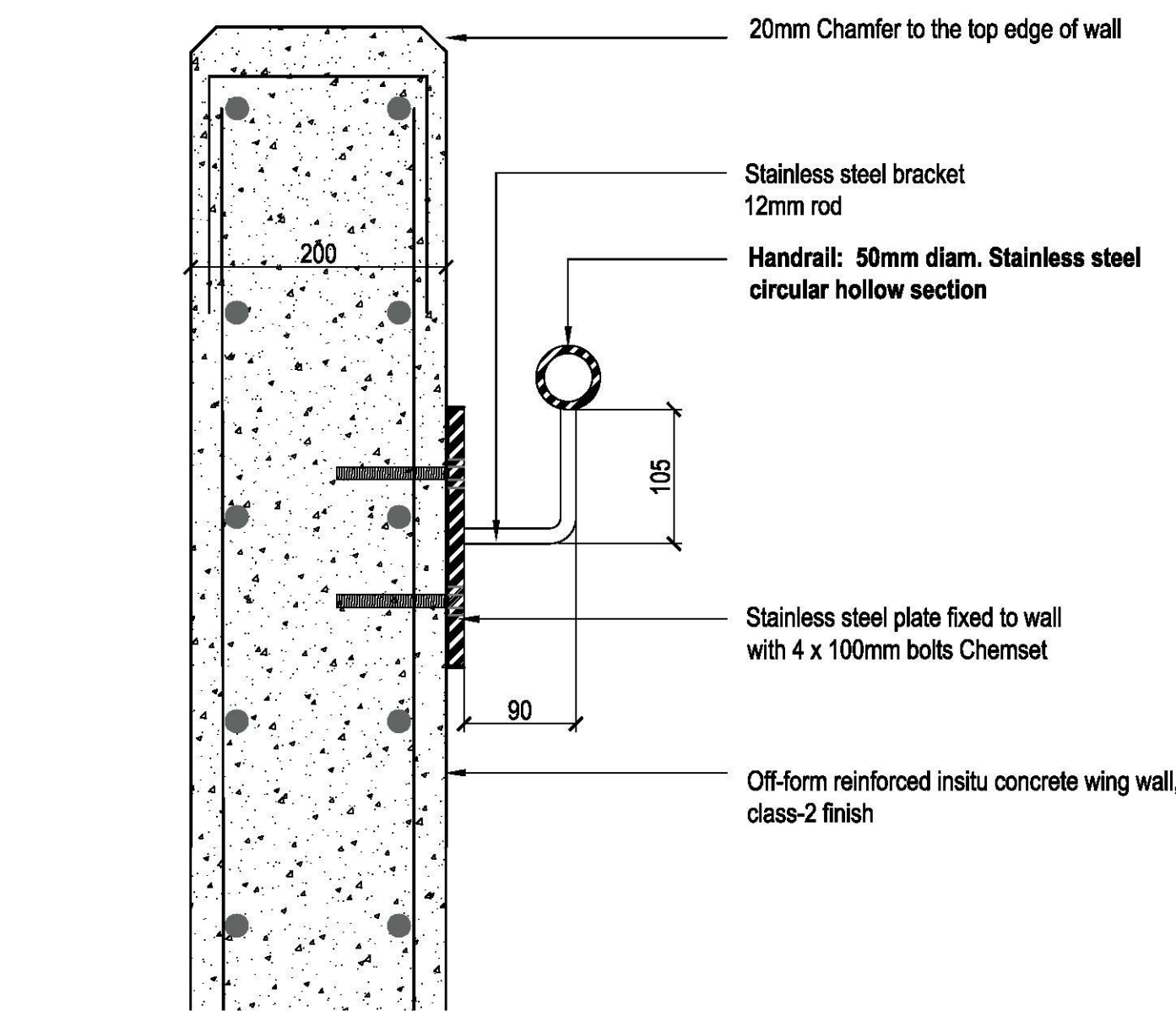
02 STAIR TYPE S1 - CONCRETE STAIRS DETAIL SECTION  
SCALE 1:20



03 STAIR TYPE S1 - STAINLESS STEEL HANDRAIL DETAIL  
SCALE 1:10

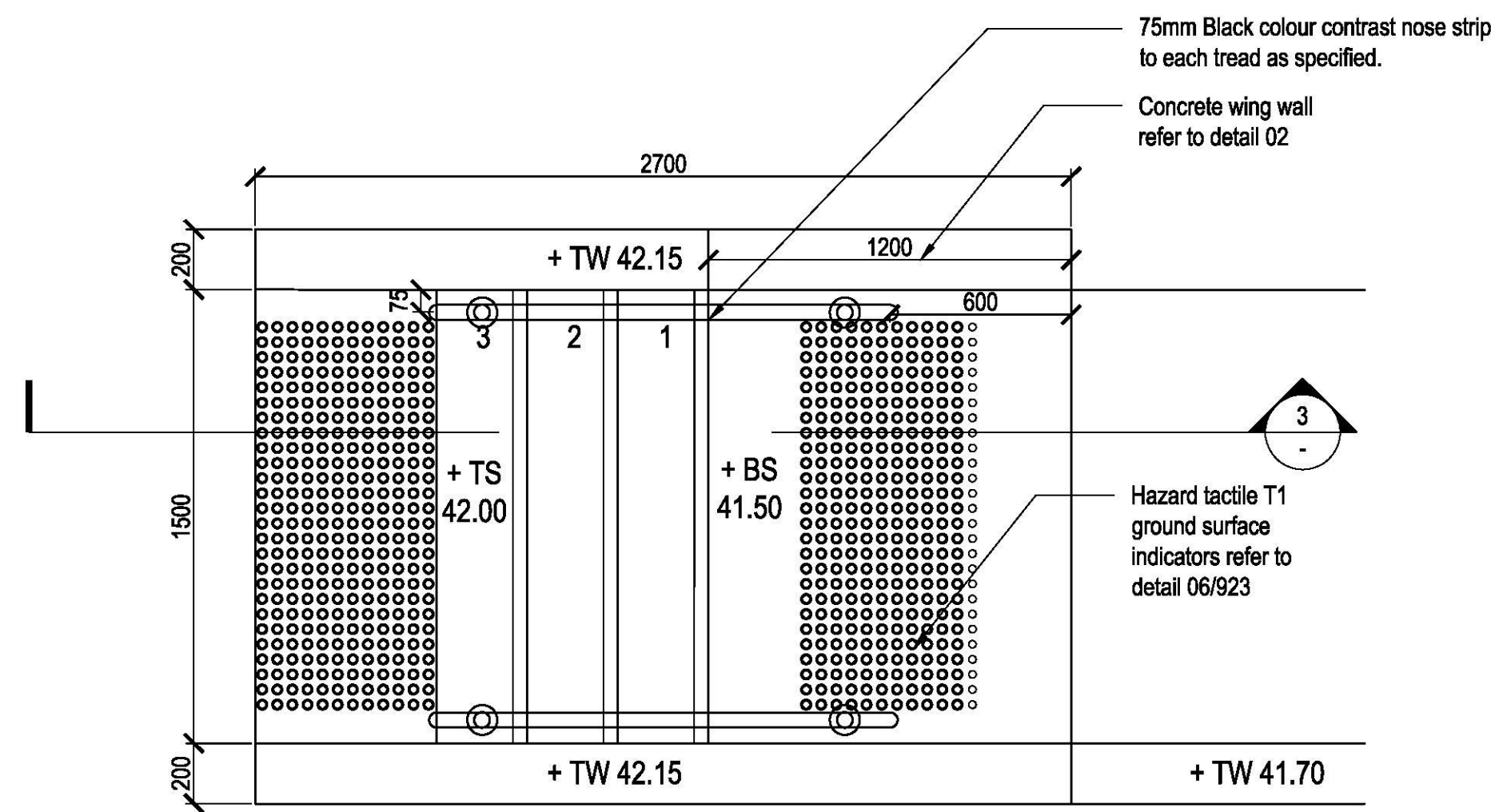


04 STAIR TYPE S1 - STAINLESS STEEL HANDRAIL FIXING  
SCALE 1:5

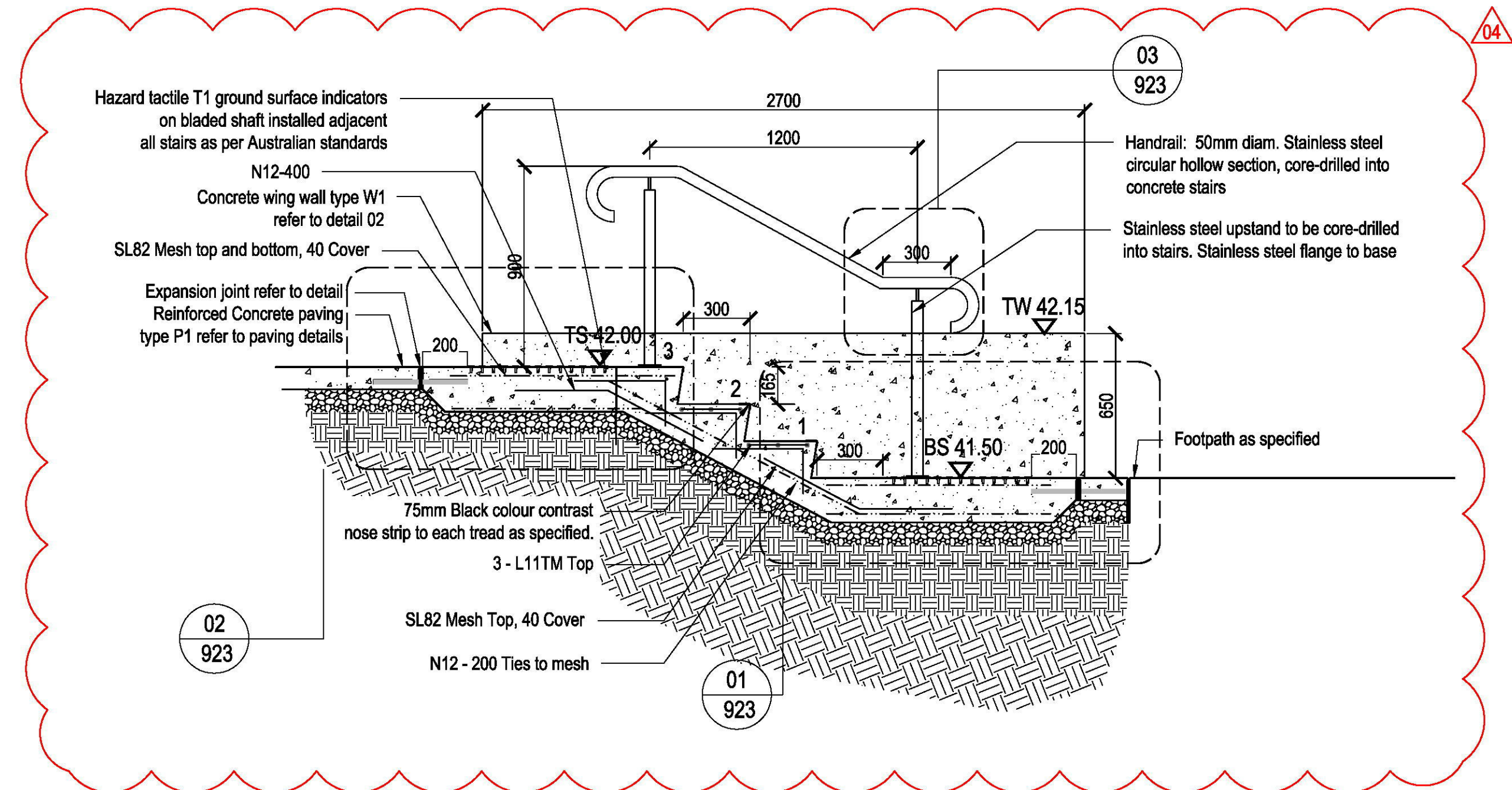


05 STAIR TYPE S1 - STAINLESS STEEL HANDRAIL FIXING  
SCALE 1:10

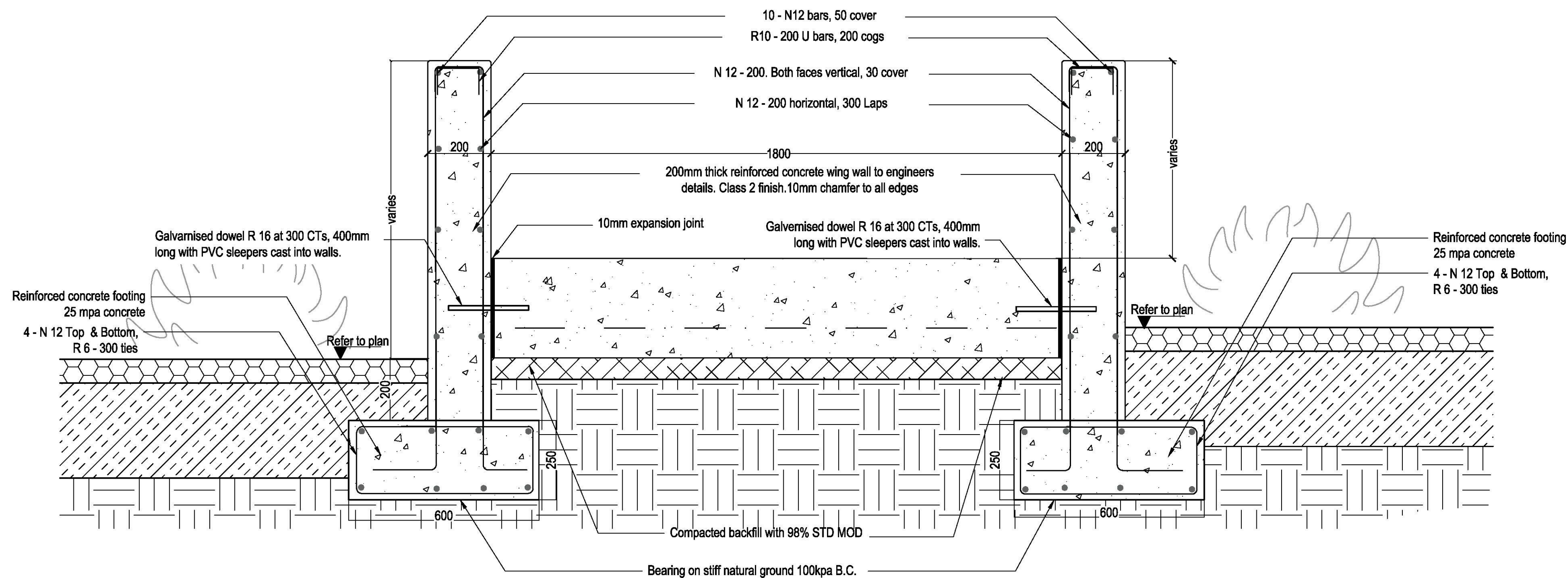




01 STAIR TYPE S2 - DETAIL PLAN  
SCALE 1:20



03 STAIR TYPE S2 - CONCRETE STAIRS DETAIL SECTION  
SCALE 1:20



02 STAIR TYPE S1/S2 - CONCRETE WING WALL DETAIL  
SCALE 1:10

FOR  
CONSTRUCTION

ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	REVISED TEXT	EP	SH	19/02/18
04	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
05	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
06	CON	FOR CONSTRUCTION	SS	PK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

DRAWING TITLE

## HARDSCAPE DETAILS

### - STAIRS

DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

SCALE AS @ A1

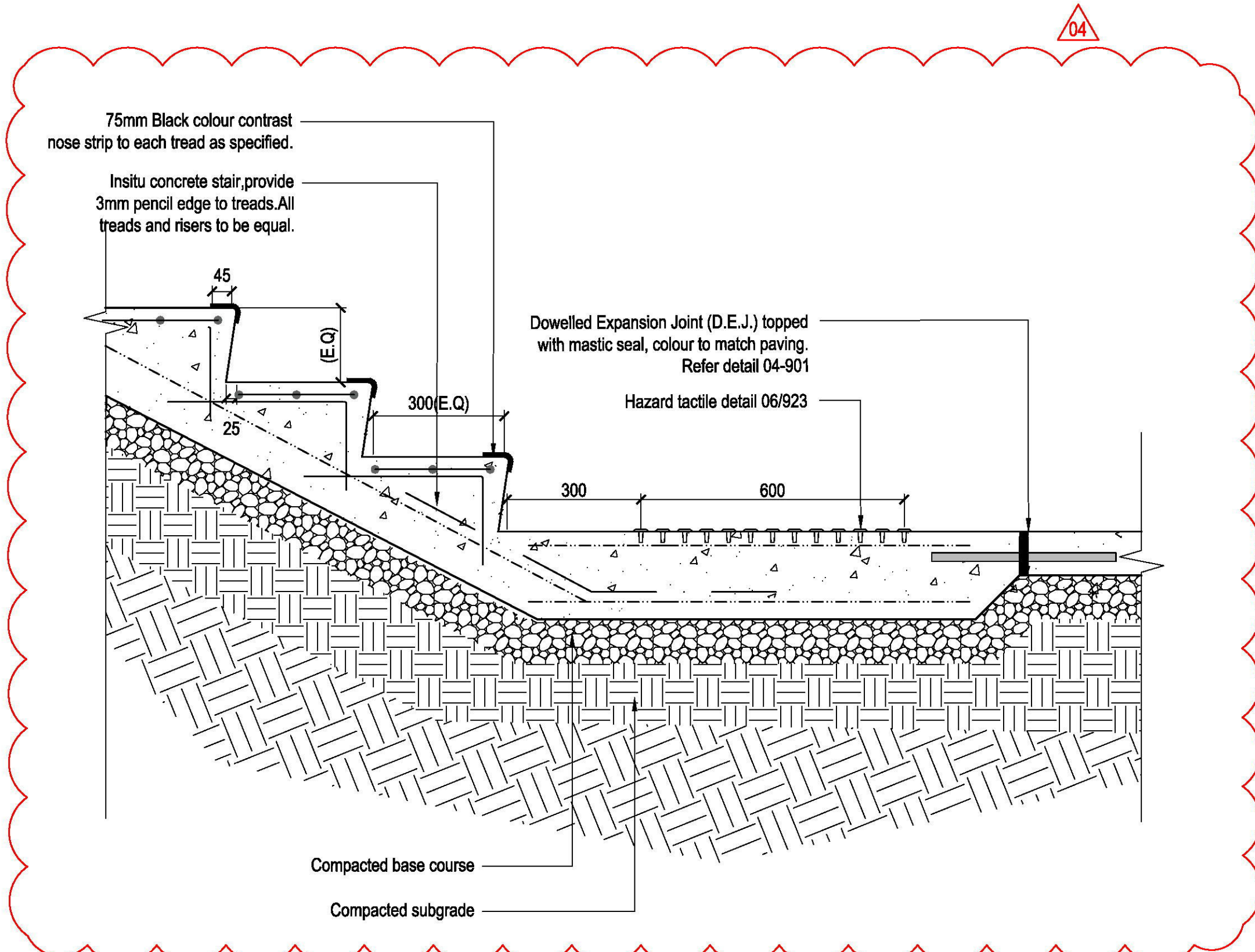
DRAWING NUMBER	REVISION
L921	06



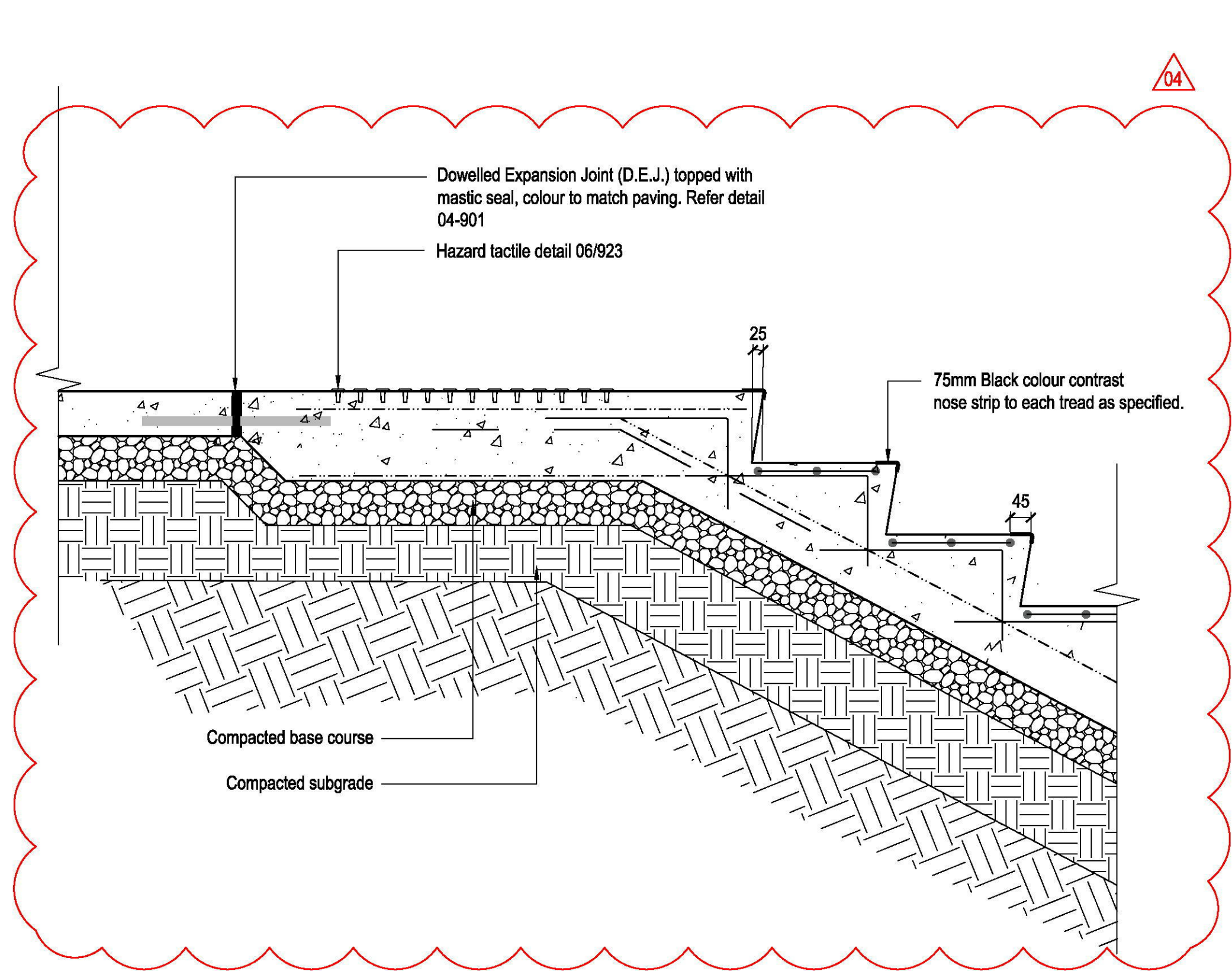




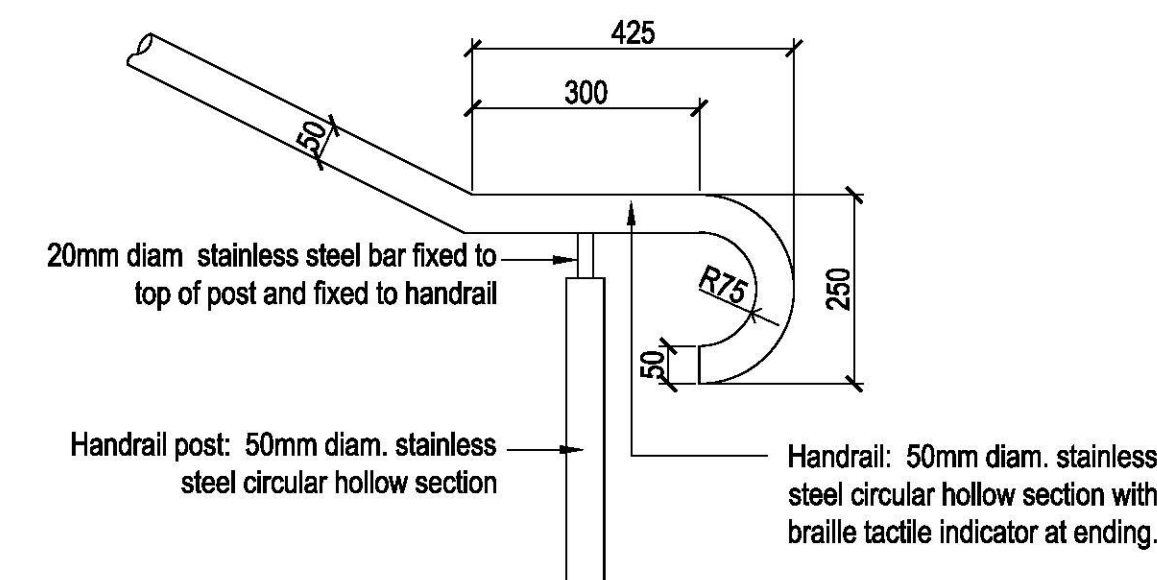
ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	REVISED TEXT	EP	SH	19/02/18
04	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
05	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
06	CON	FOR CONSTRUCTION	SS	PK	07/05/18



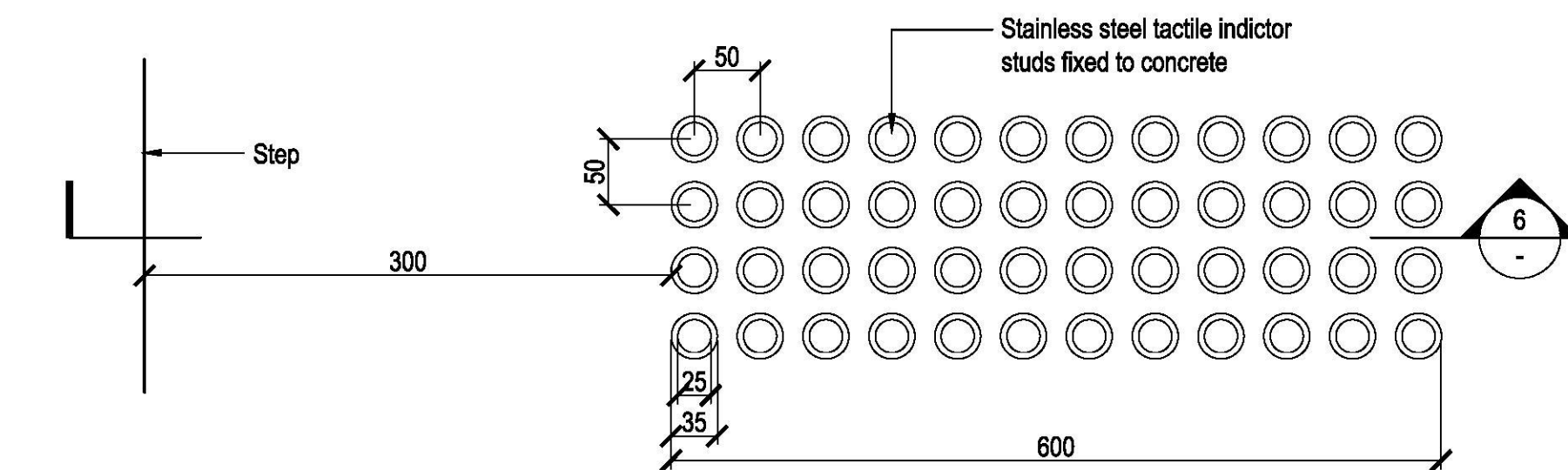
01 TYPICAL STAIR BOTTOM DETAIL  
SCALE 1:10



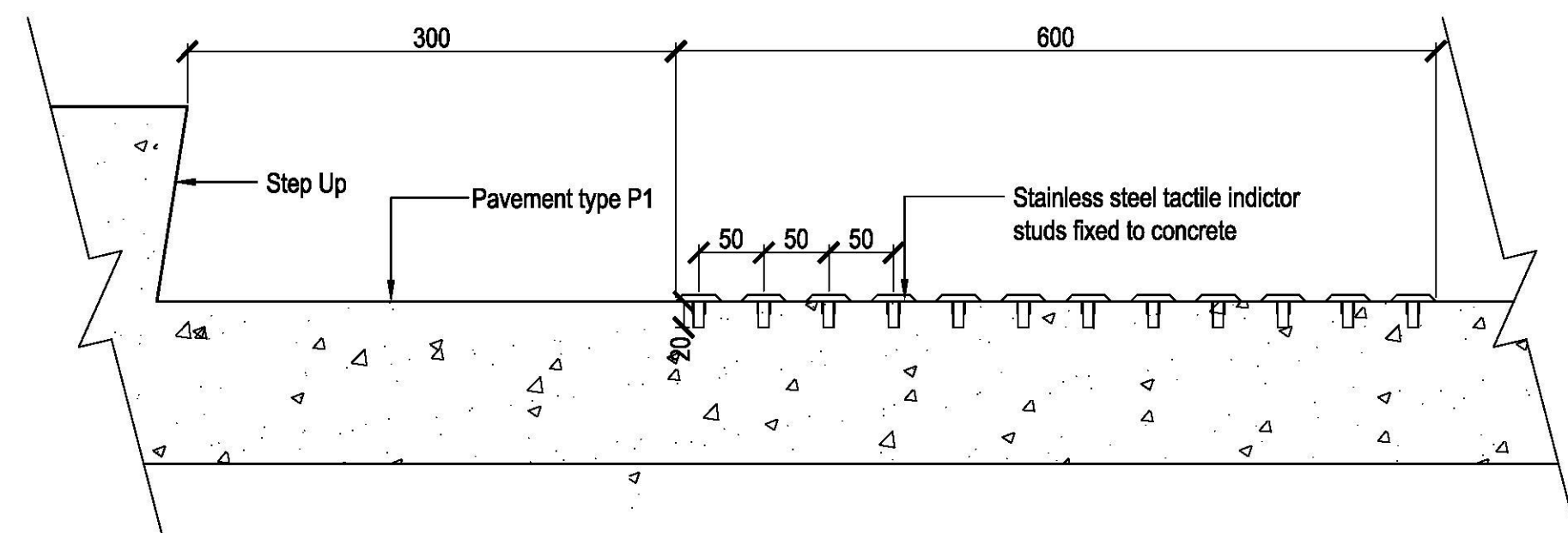
02 TYPICAL STAIR TOP DETAIL  
SCALE 1:10



03 STAIR TYPE S2/S3 - STAINLESS STEEL HANDRAIL BOTTOM END  
SCALE 1:10

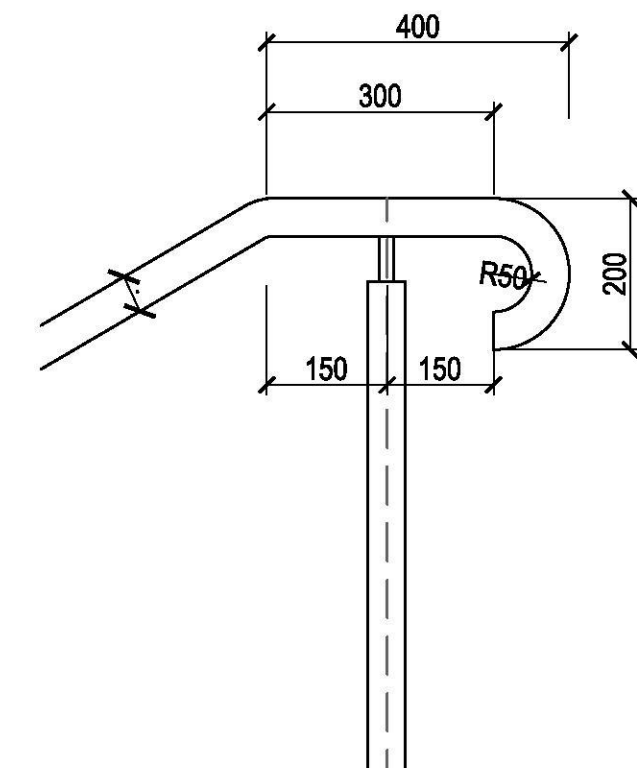


04 TACTILE INDICATOR TYPE T1 - TYPICAL PLAN  
SCALE 1:5

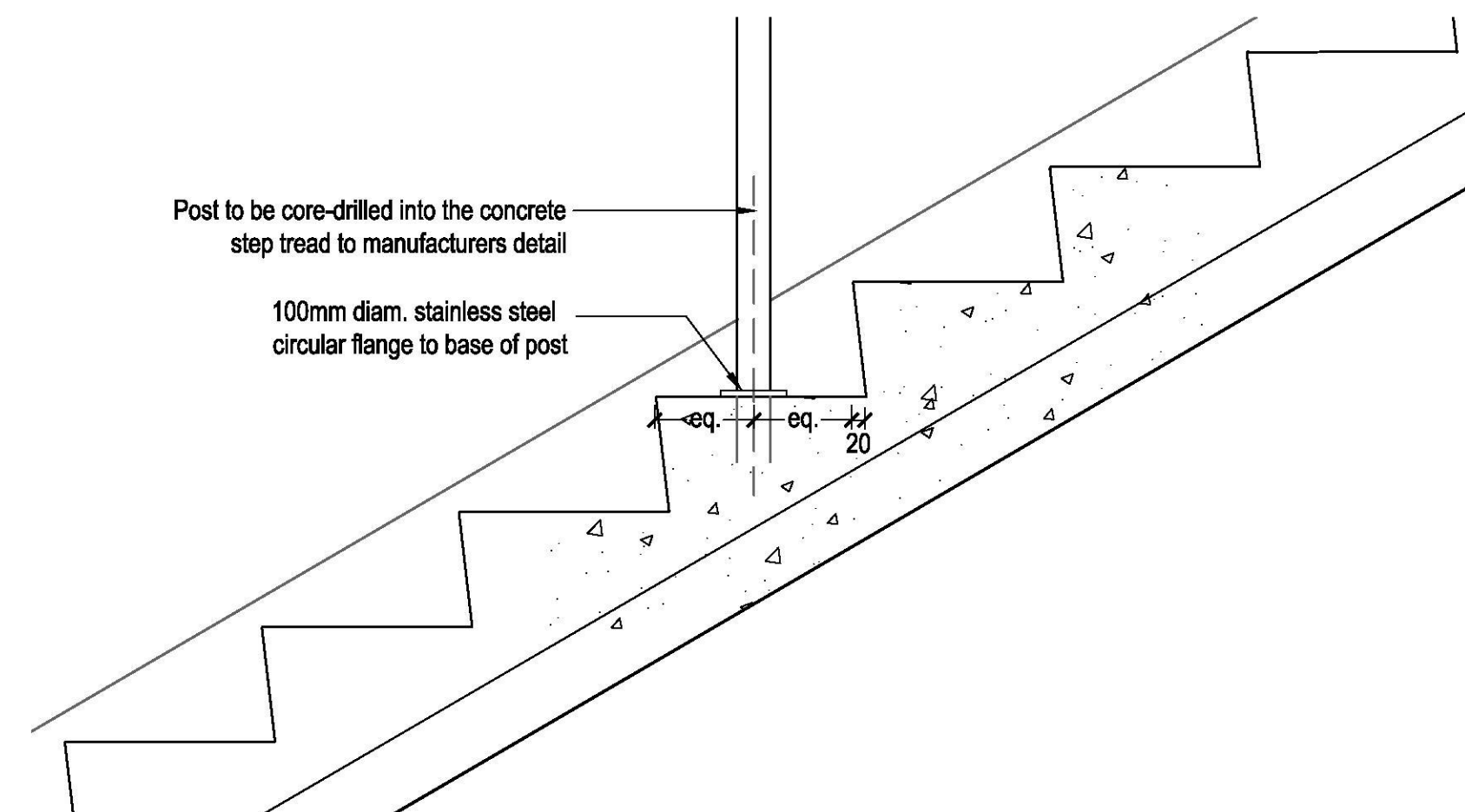


06 TACTILE INDICATOR TYPE T1 - TYPICAL SECTION  
SCALE 1:5

Tactile indicators -S/Steel with Black colour polyurethane insert studs fixed into concrete to manufactures recommendation. Installation, location and spacings to comply with AS1428.4 2002. Refer to Surface Finishes plans for locations



05 STAIR TYPE S2/S3 - STAINLESS STEEL HANDRAIL TOP END  
SCALE 1:10



07 STAIR TYPE S2/S3 - STAINLESS STEEL HANDRAIL FIXING  
SCALE 1:10



ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	REVISED BRIDGE DETAILS	EP	FK	19/02/18
04	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
05	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
06	CON	FOR CONSTRUCTION	SS	FK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

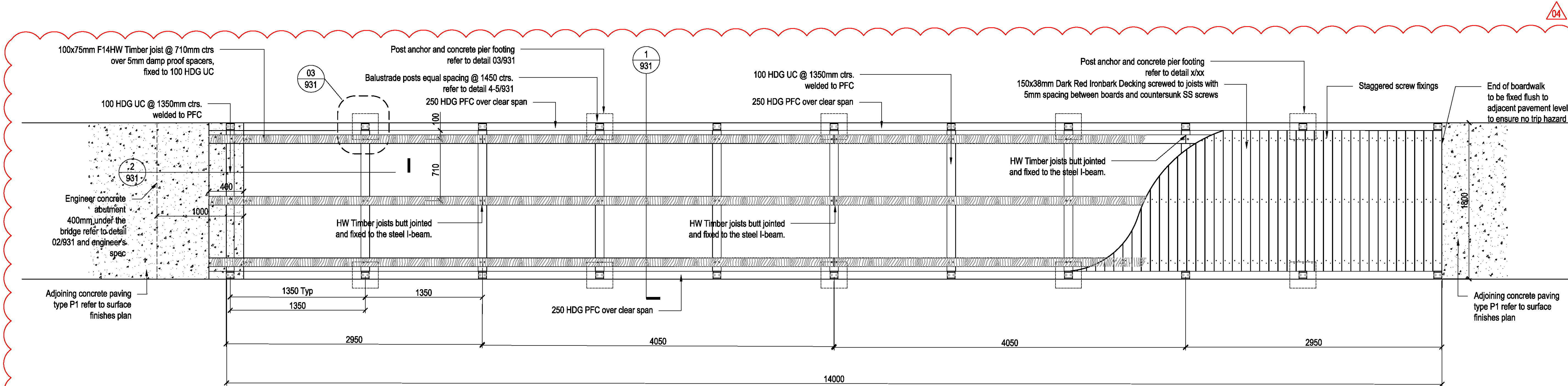
DRAWING TITLE

HARDSCAPE DETAILS  
- STRUCTURE

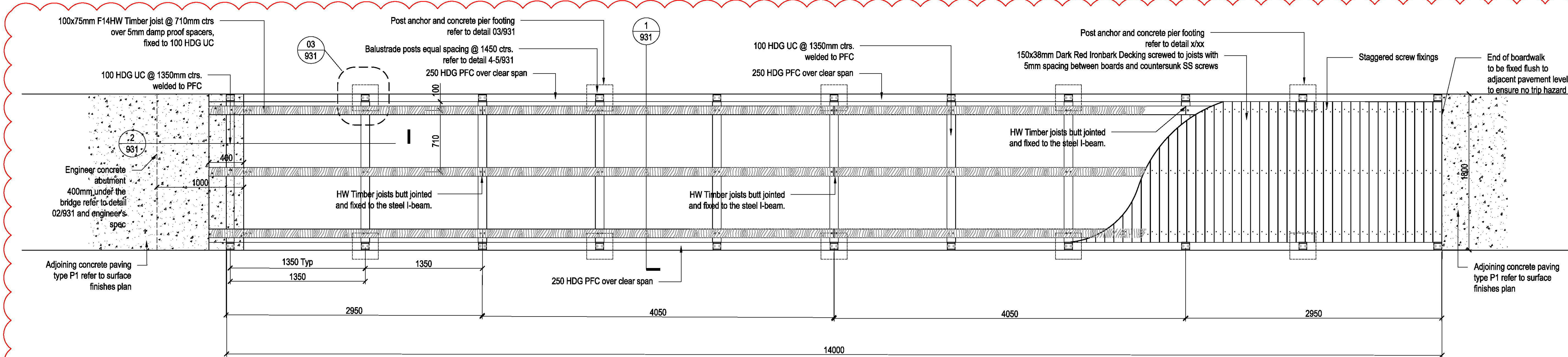
DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

SCALE AS @ A1  
DRAWING NUMBER  
L930  
REVISION  
06

01 BRIDGE TYPE BD1 - TYPICAL PLAN  
SCALE 1:25

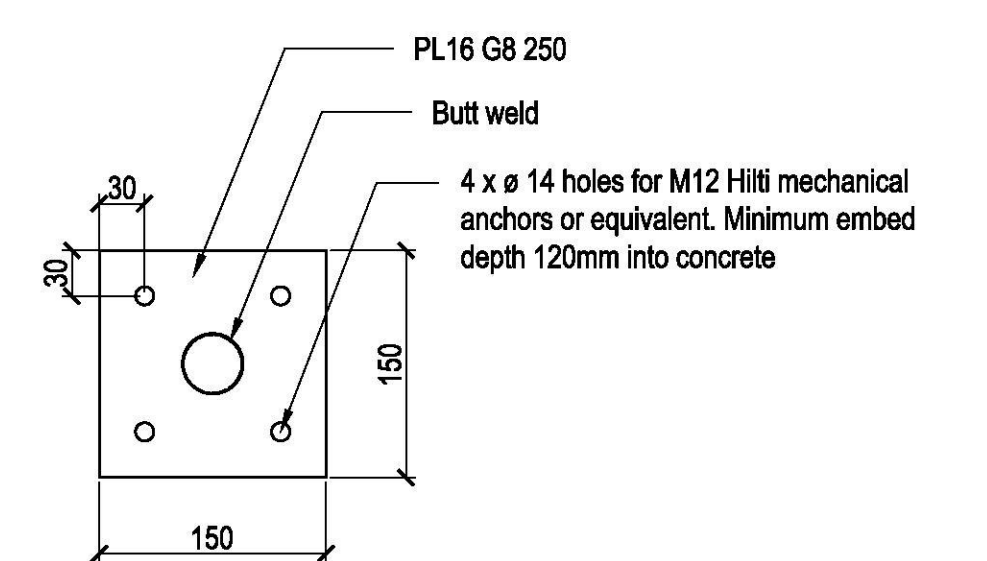
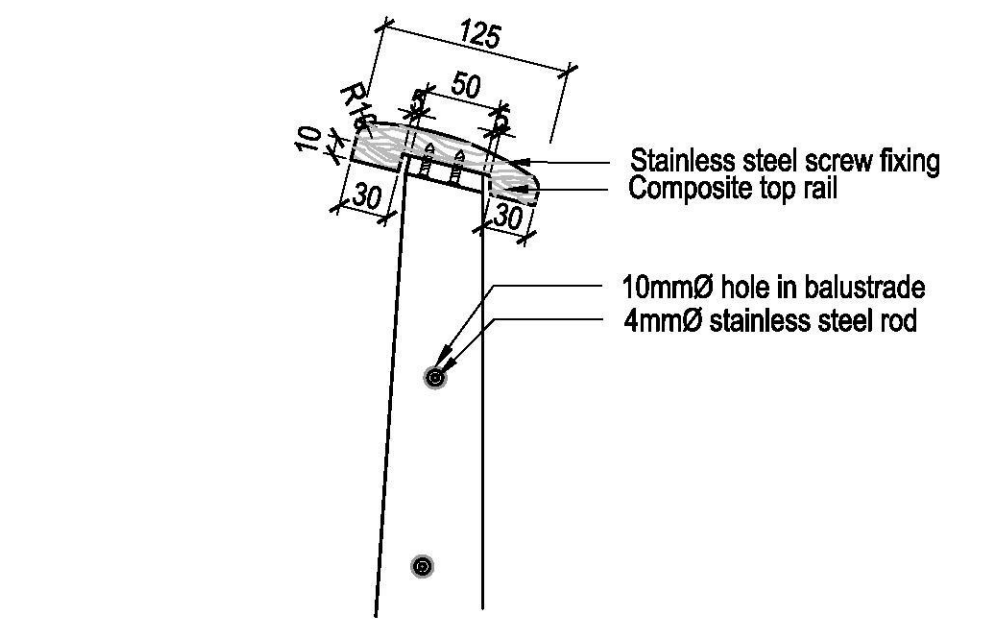
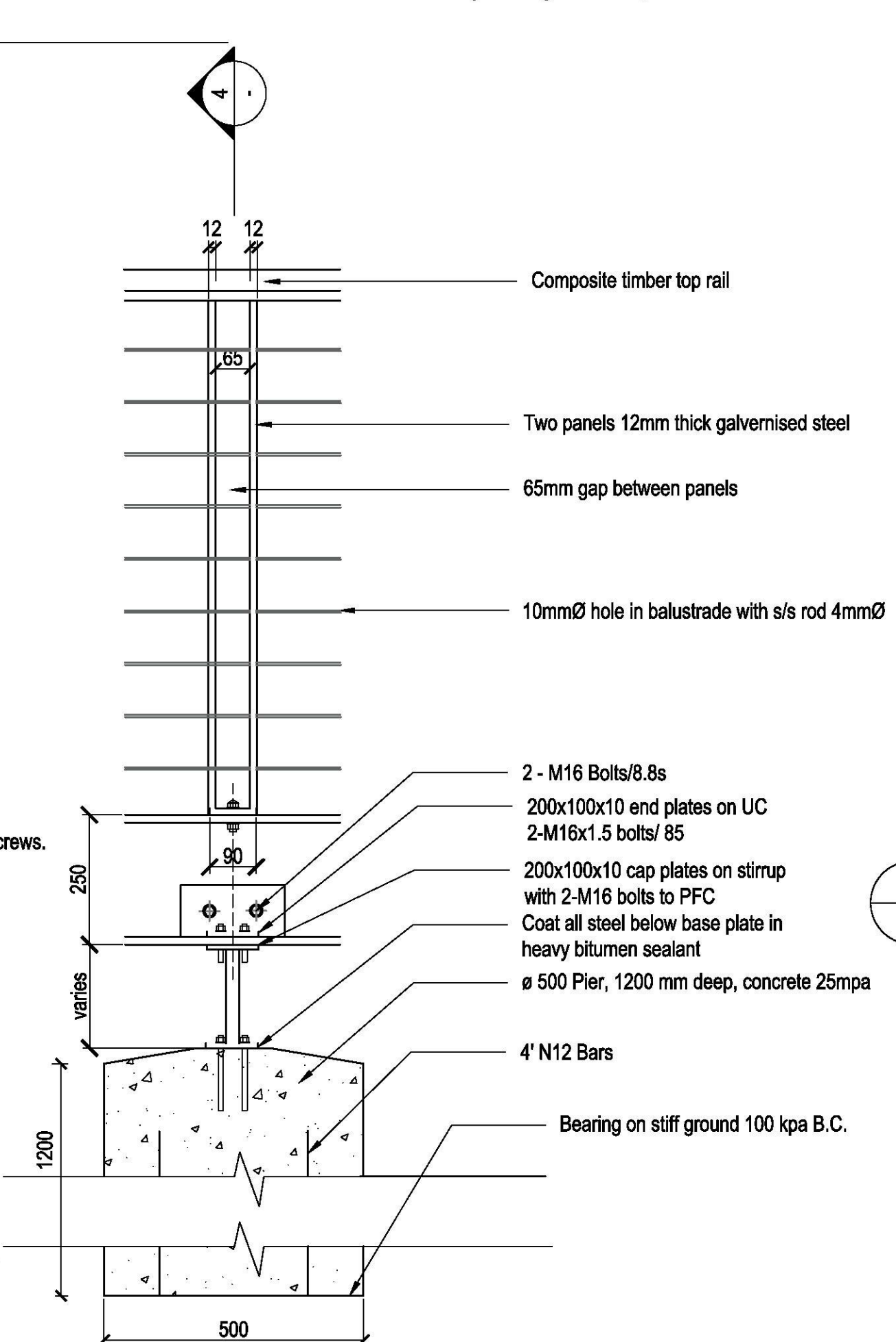
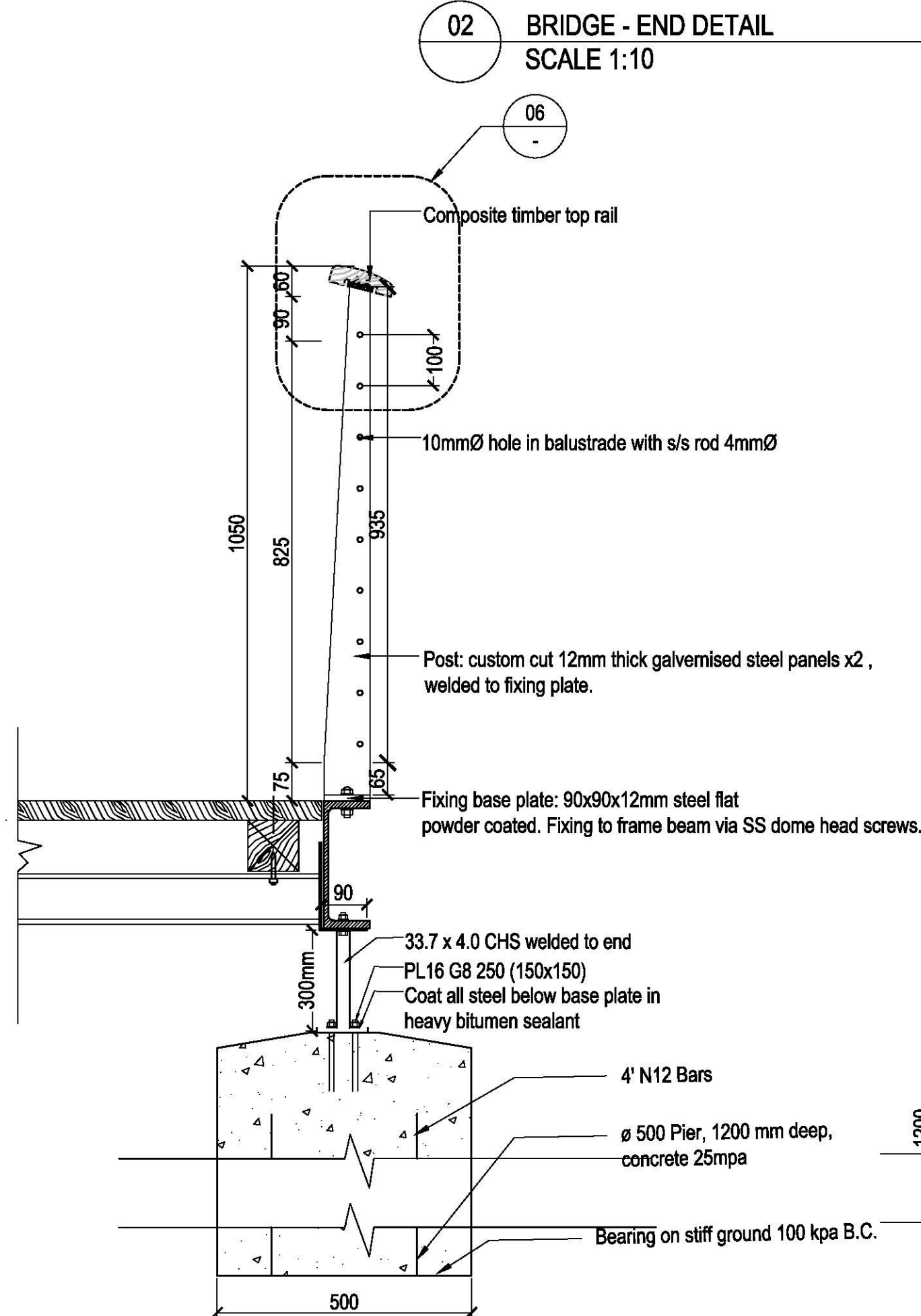
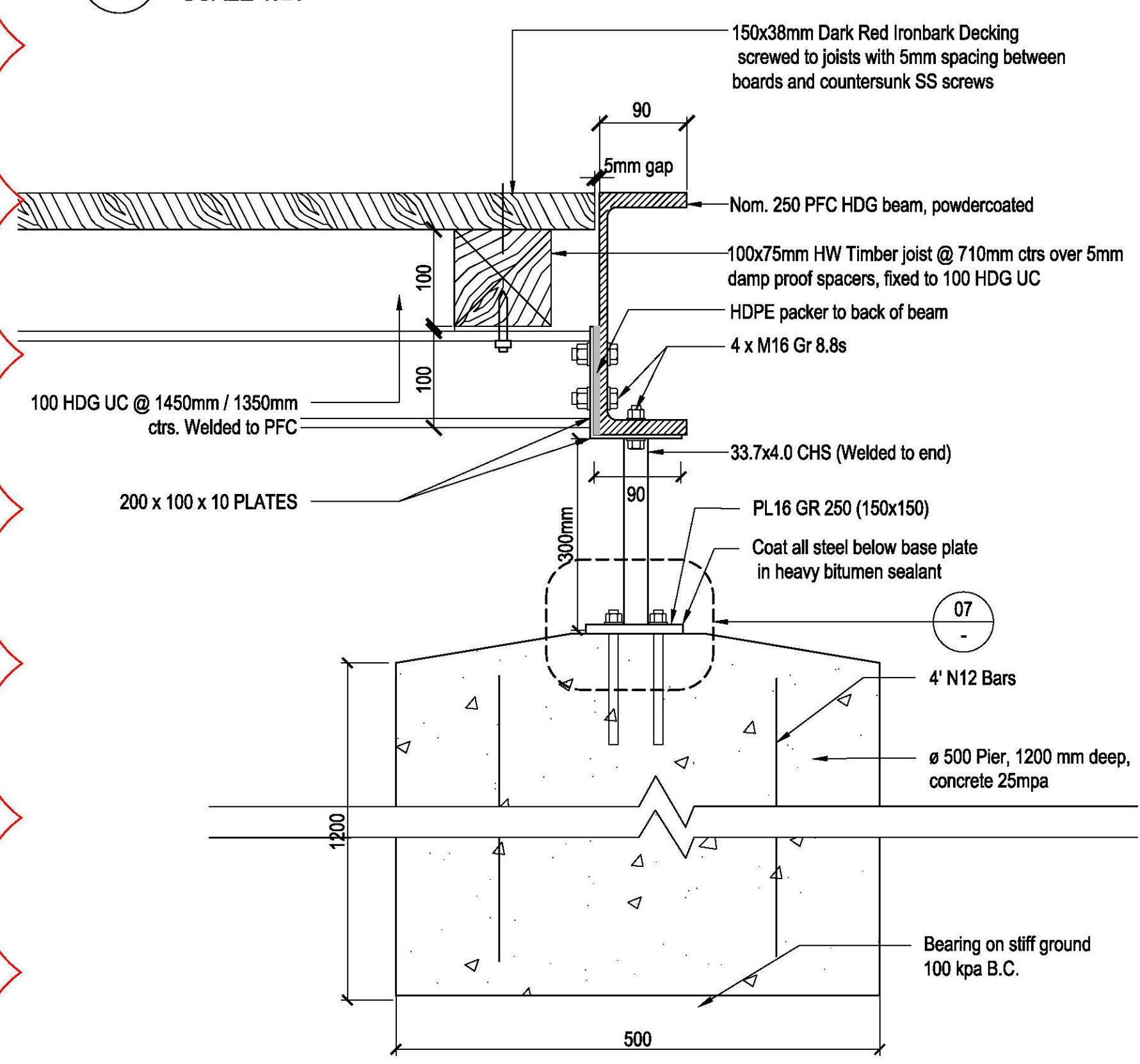
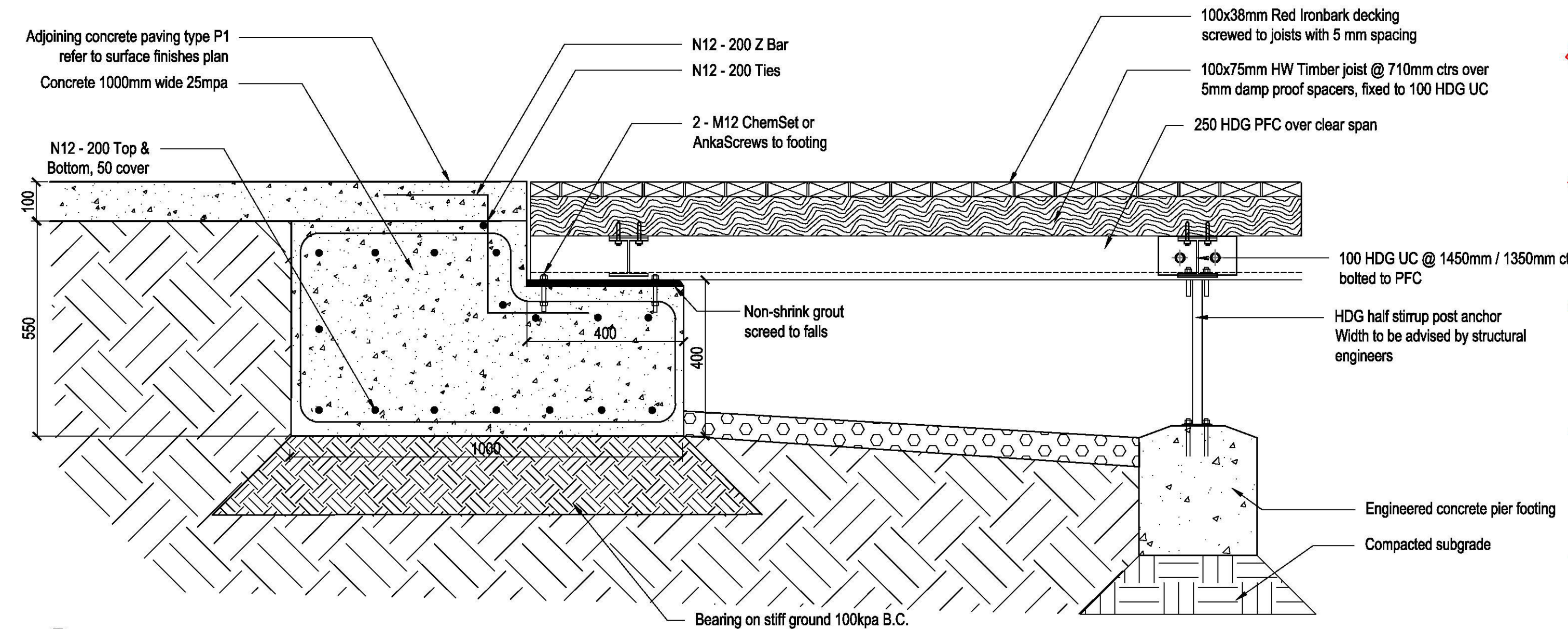
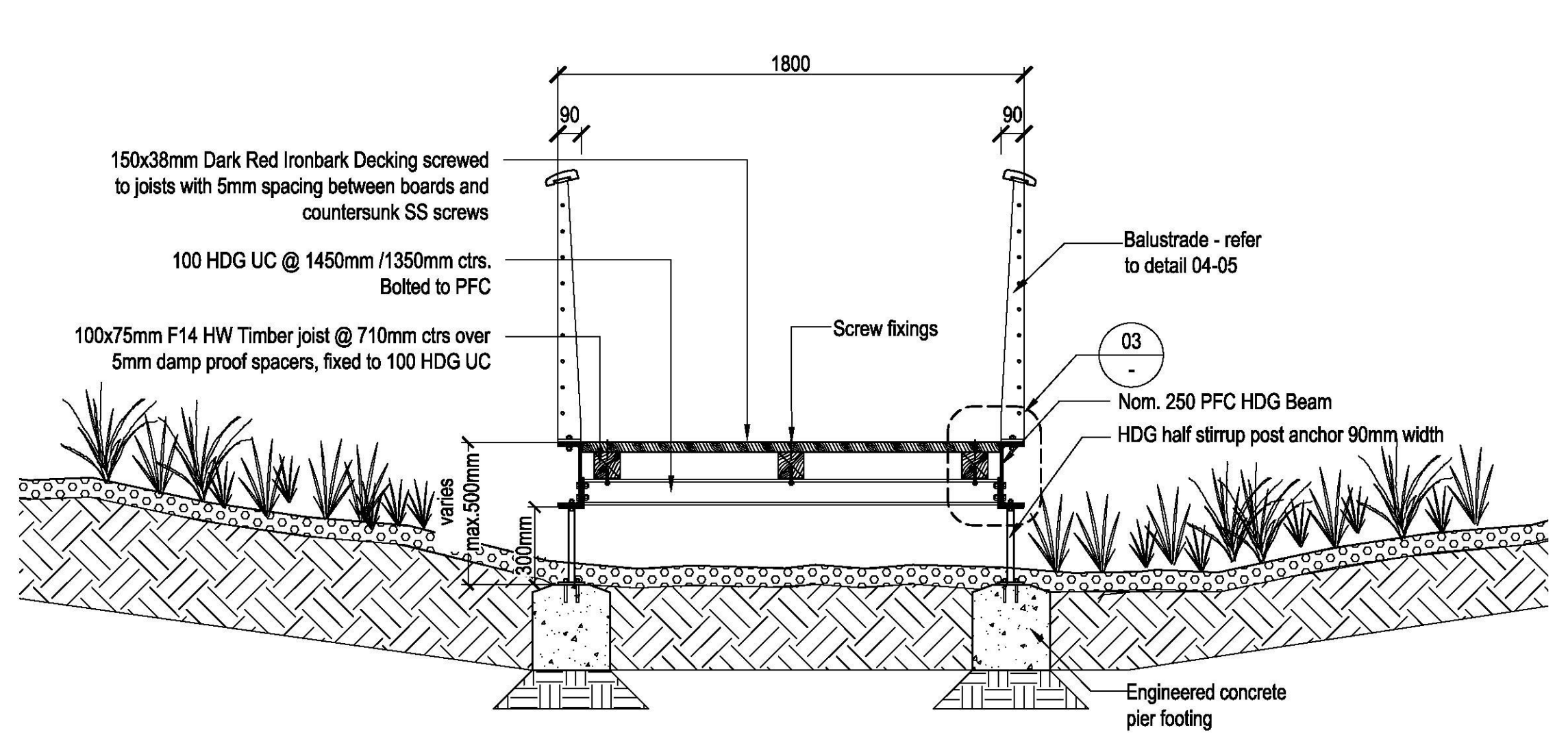


02 BRIDGE TYPE BD2 - TYPICAL PLAN  
SCALE 1:25





ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	FOR TENDER	EP	SH	29/11/17
04	CC	REVISED BRIDGE DETAILS	EP	PK	18/02/18
05	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
06	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
07	CON	FOR CONSTRUCTION	SS	PK	07/05/18







FOR  
CONSTRUCTION

ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
04	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
05	CON	FOR CONSTRUCTION	SS	PK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

DRAWING TITLE

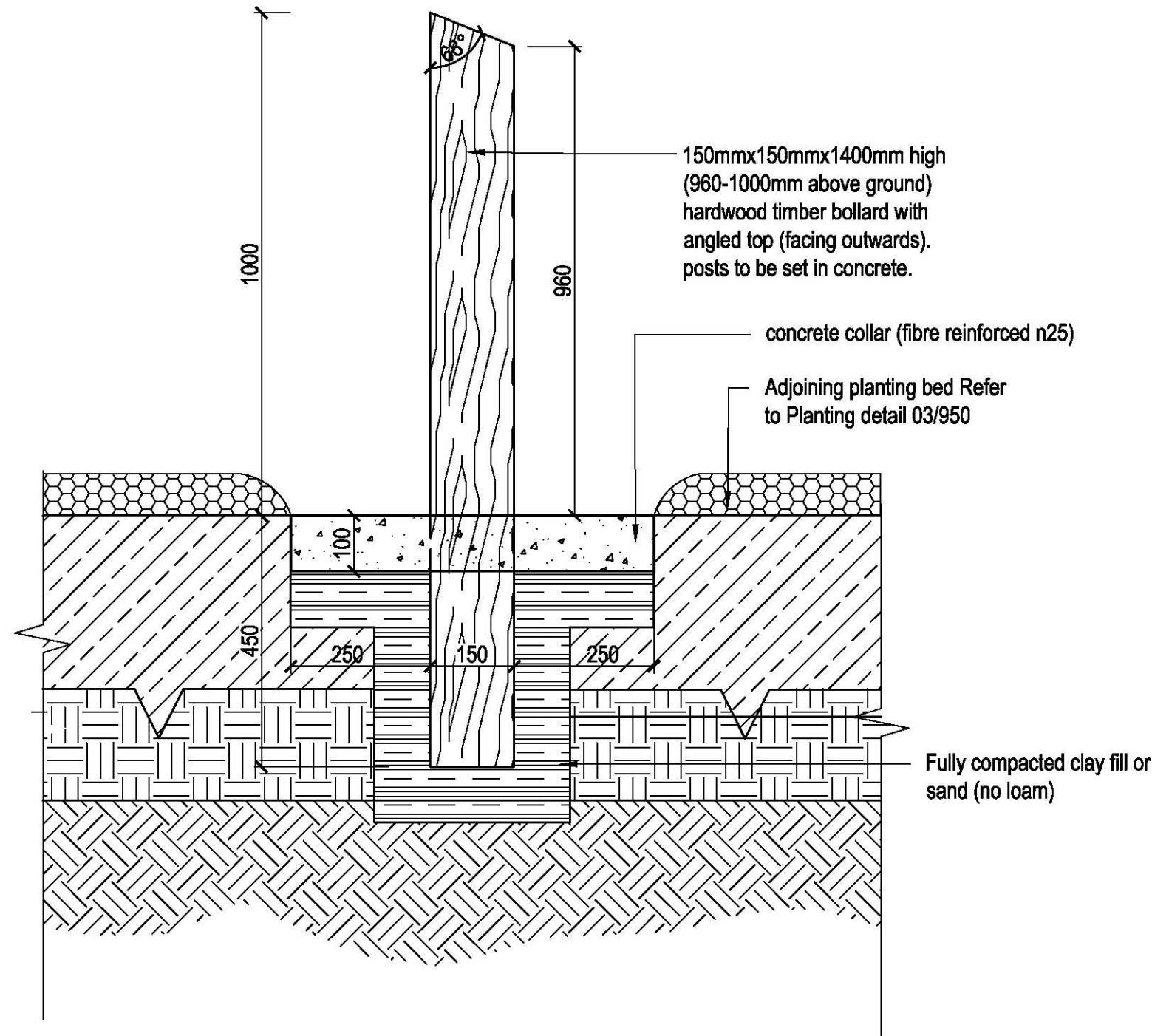
HARDSCAPE DETAILS  
- FURNITURE

DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

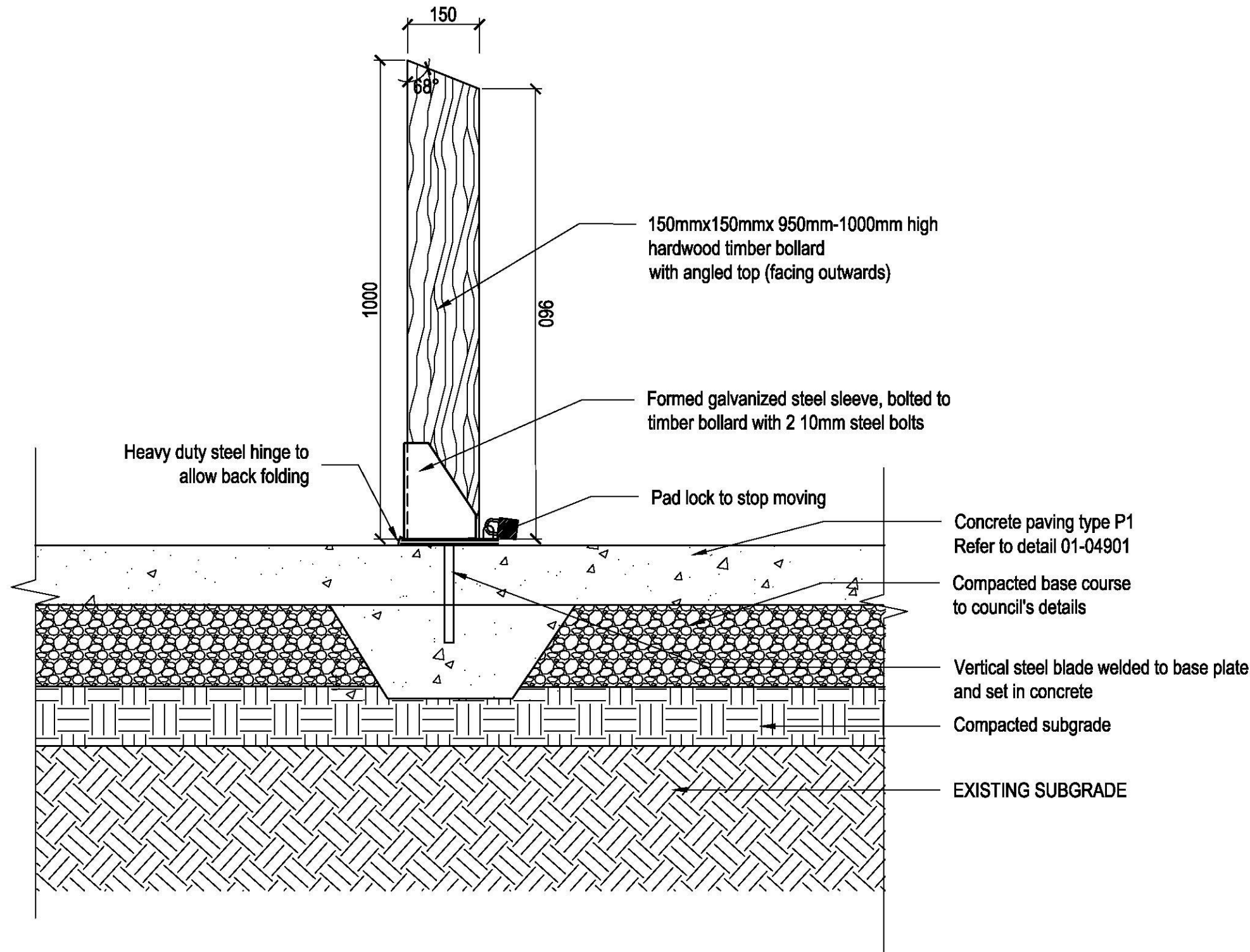
SCALE AS @ A1

DRAWING NUMBER  
L932

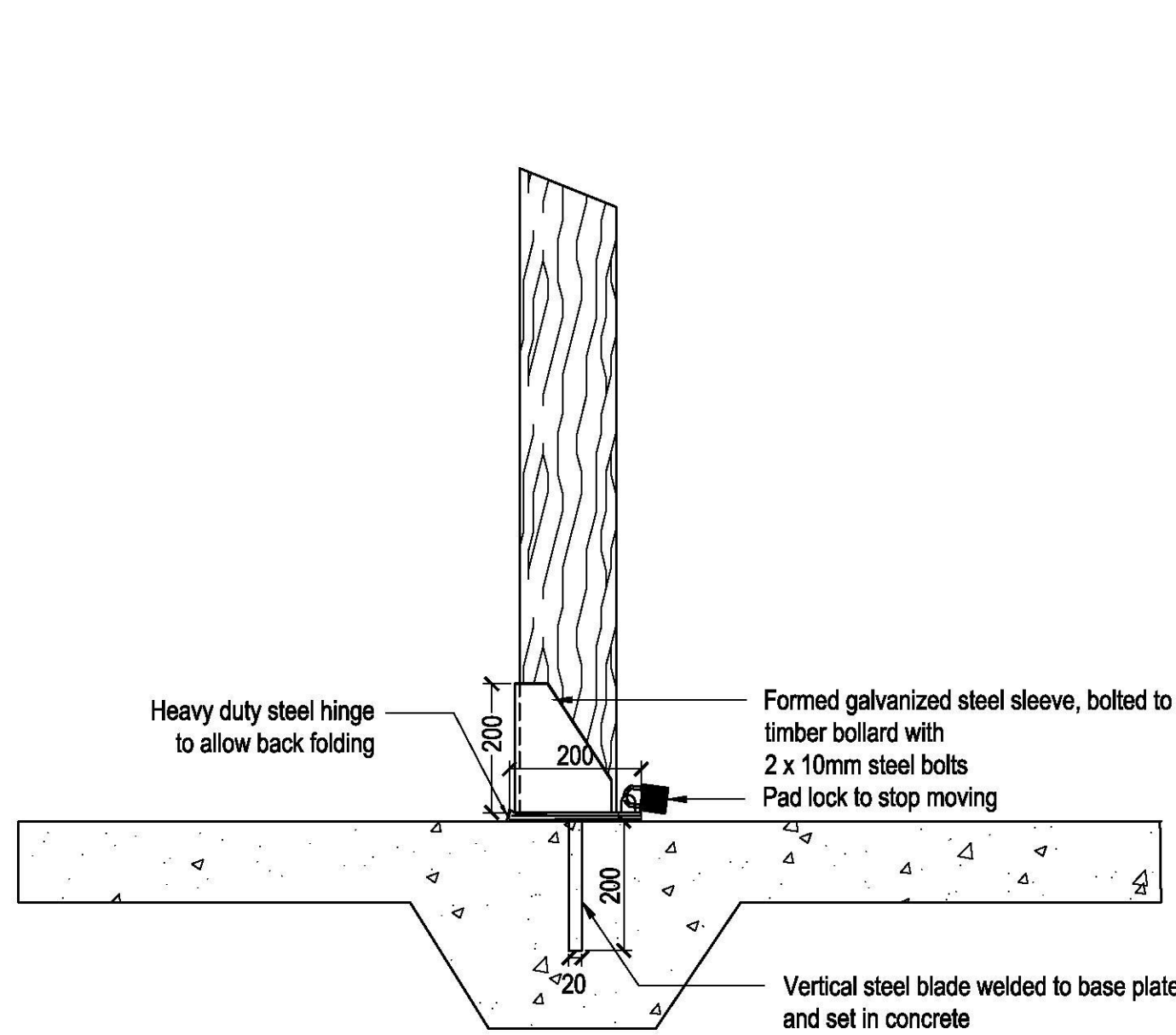
REVISION  
05



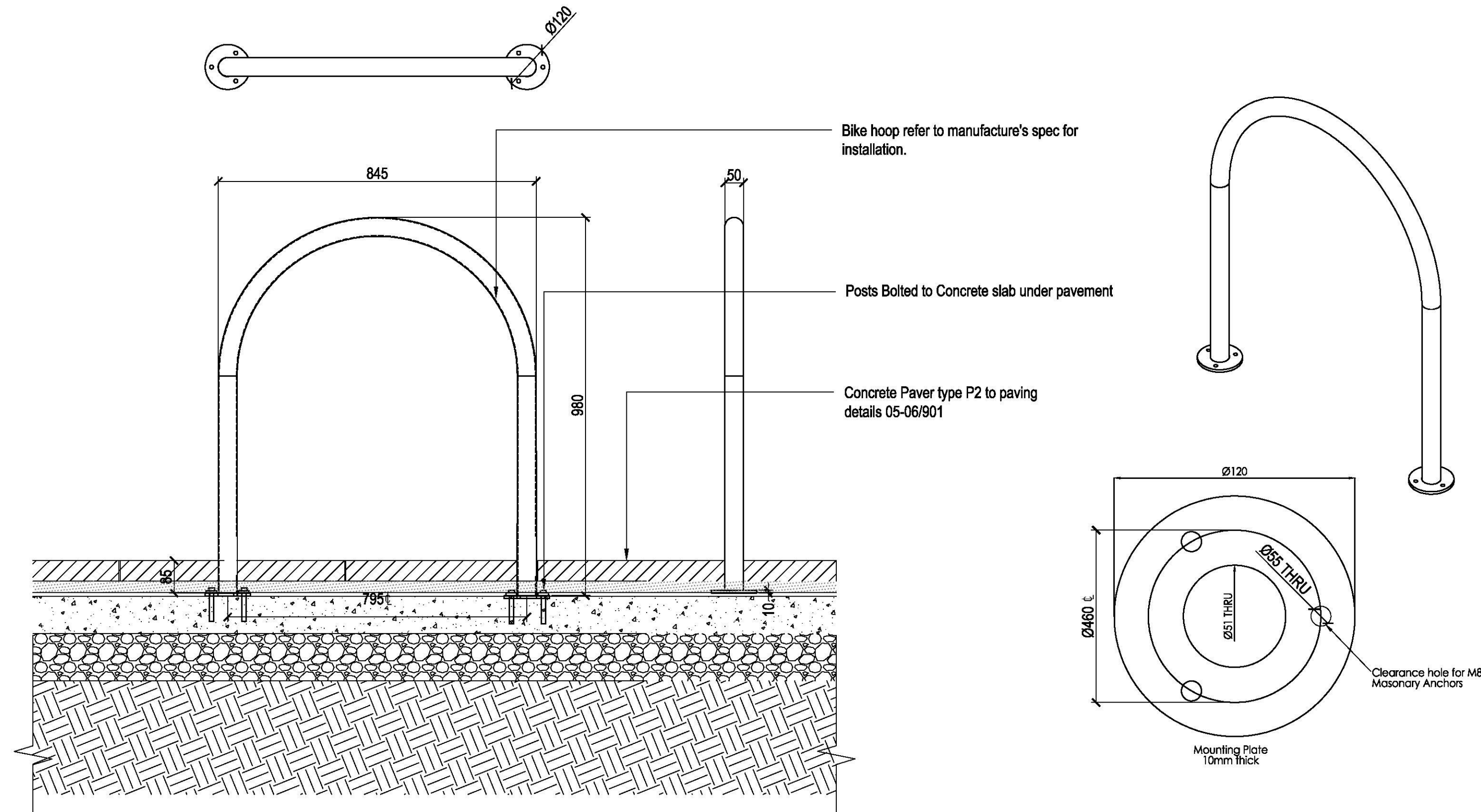
01 BOLLARD TYPE BR1 - FIXED TIMBER BOLLARD  
SCALE 1:10



02 BOLLARD TYPE BR2 - REMOVABLE TIMBER BOLLARD  
SCALE 1:10



03 BOLLARD TYPE BR2 - REMOVABLE TIMBER BOLLARD FIXING DETAIL  
SCALE 1:10



04 BIKE HOOP - TYPICAL DETIAL  
SCALE 1:10



ISSUE	CODE	ISSUE DESCRIPTION	BY	CHK	DATE
01	CC	FOR REVIEW	EP	SH	17/11/17
02	CC	FOR REVIEW	EP	SH	27/11/17
03	CC	STRUCTURAL REVIEW	KZ	PK	01/05/18
04	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
05	CC	STRUCTURAL REVIEW	KZ	PK	04/05/18
06	CON	FOR CONSTRUCTION	SS	PK	07/05/18

PRE - Preliminary | CA - Council Approval | T - Tender | CON - Construction

DRAWING TITLE

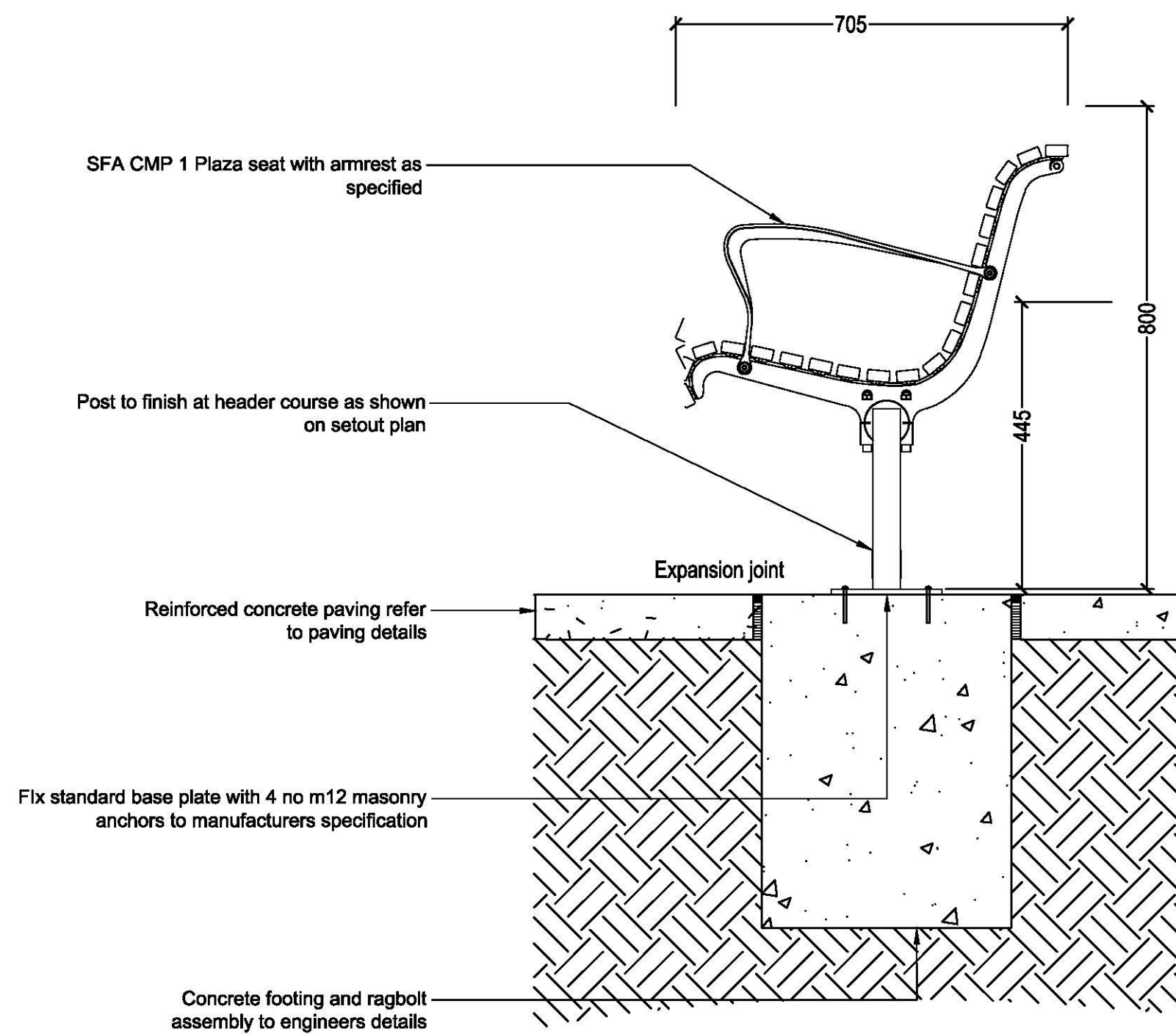
HARDSCAPE DETAILS  
- FURNITURE

DESIGN : SH/JP  
DOCUMENT : EP  
PROJECT : 2516076A

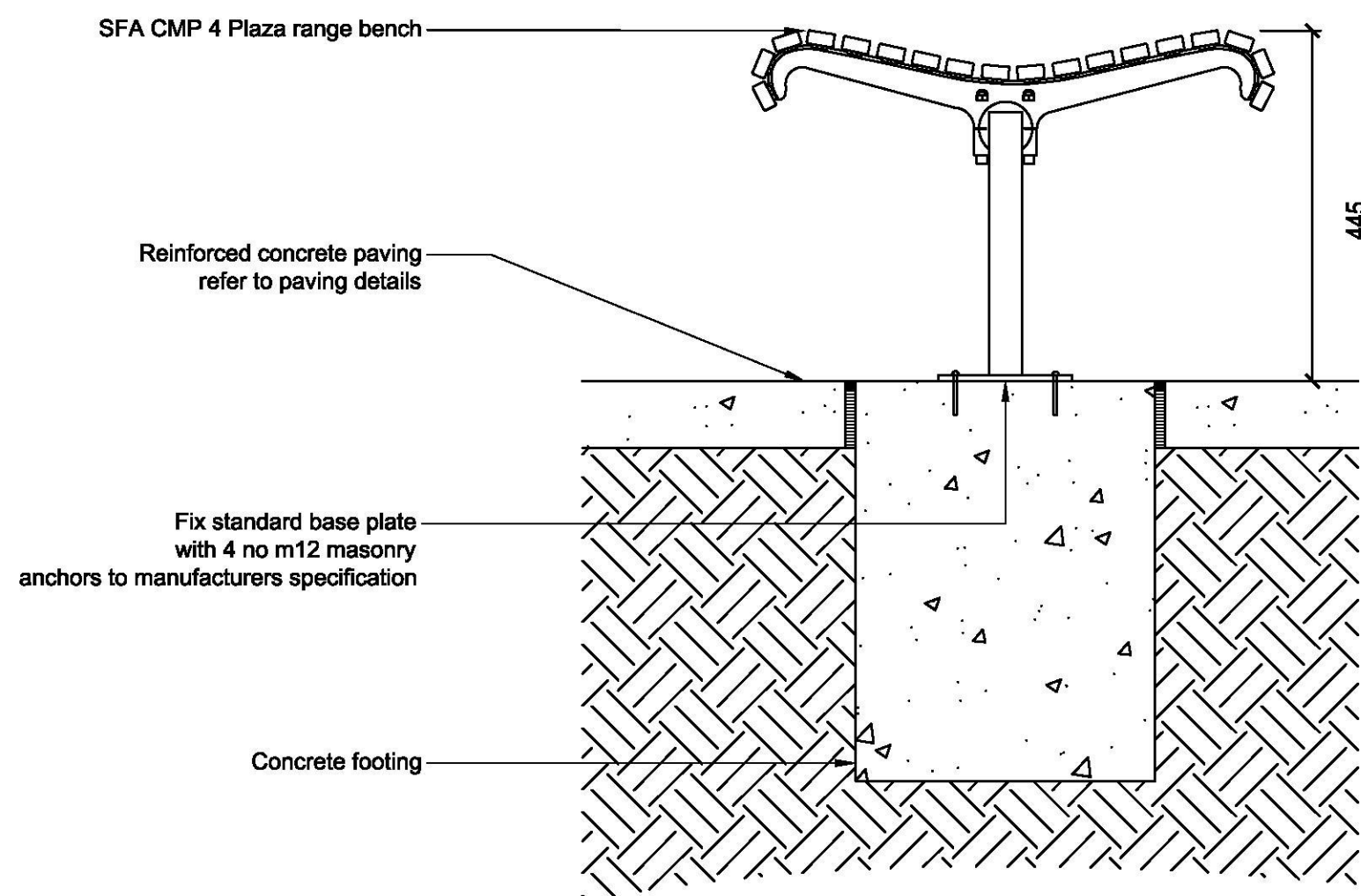
SCALE AS @ A1

DRAWING NUMBER  
L933

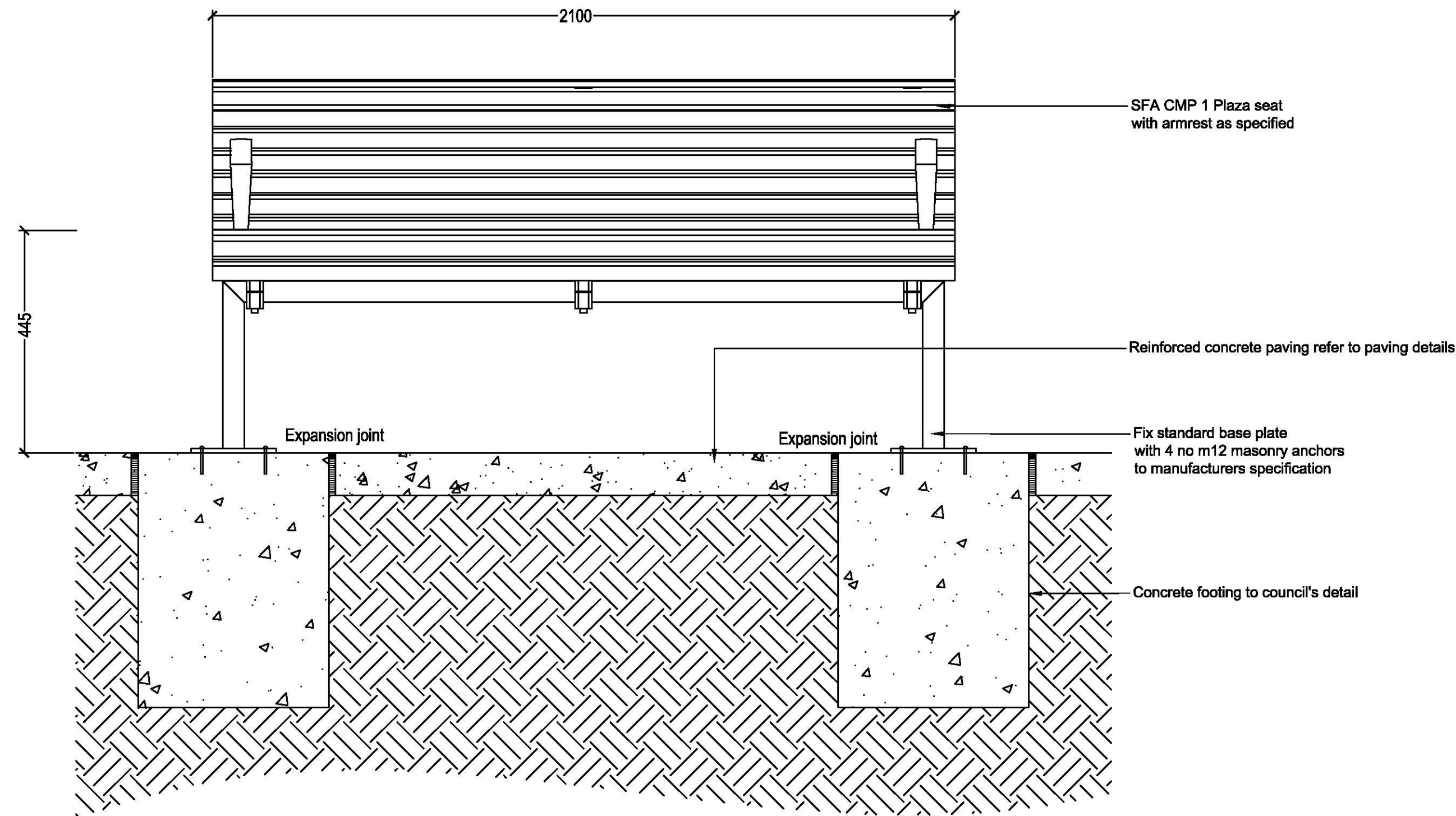
REVISION  
06



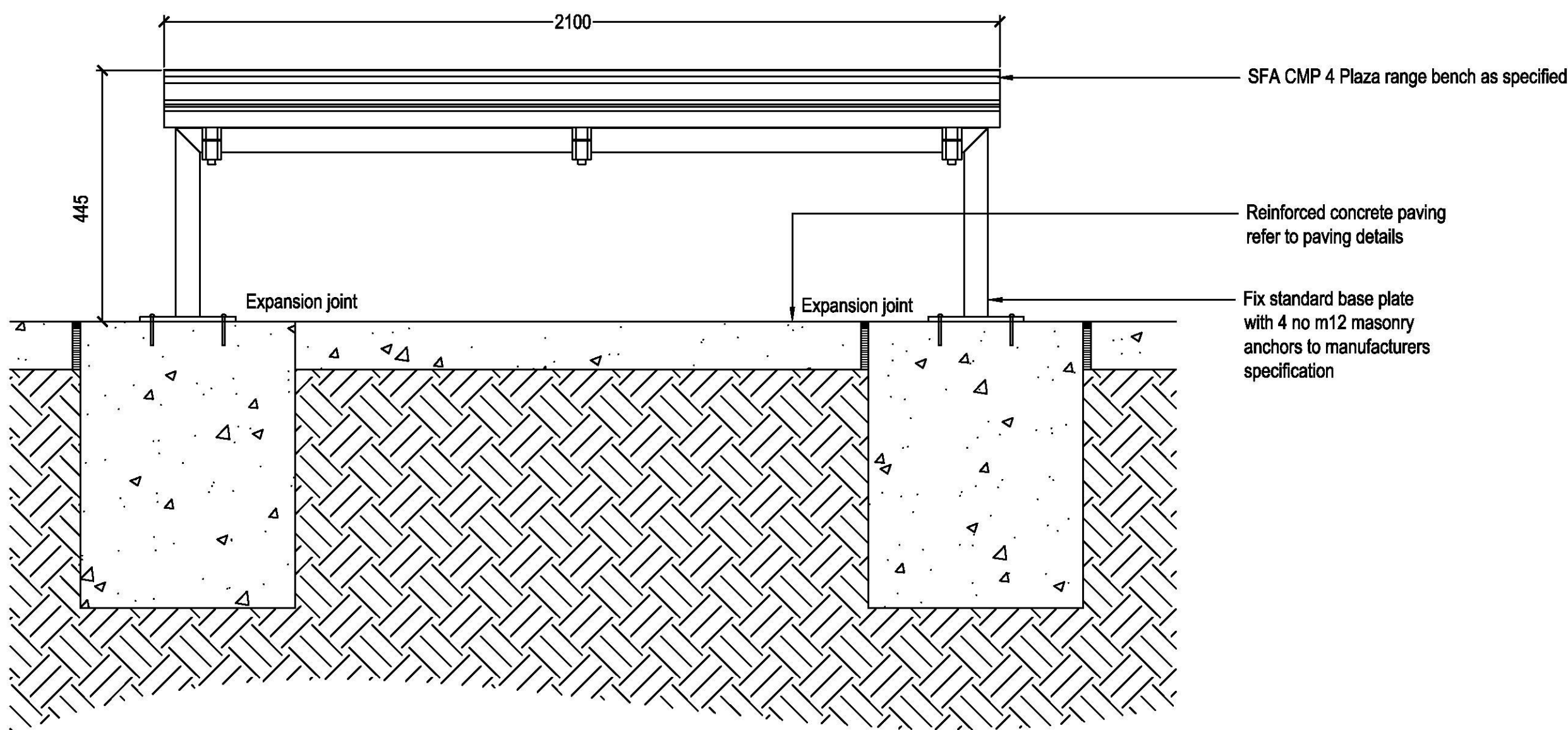
01 BENCH SEAT TYPE B1  
SCALE 1:10



03 BENCH SEAT TYPE B2  
SCALE 1:10



02 BENCH SEAT TYPE B1  
SCALE 1:10



04 BENCH SEAT TYPE B2  
SCALE 1:10