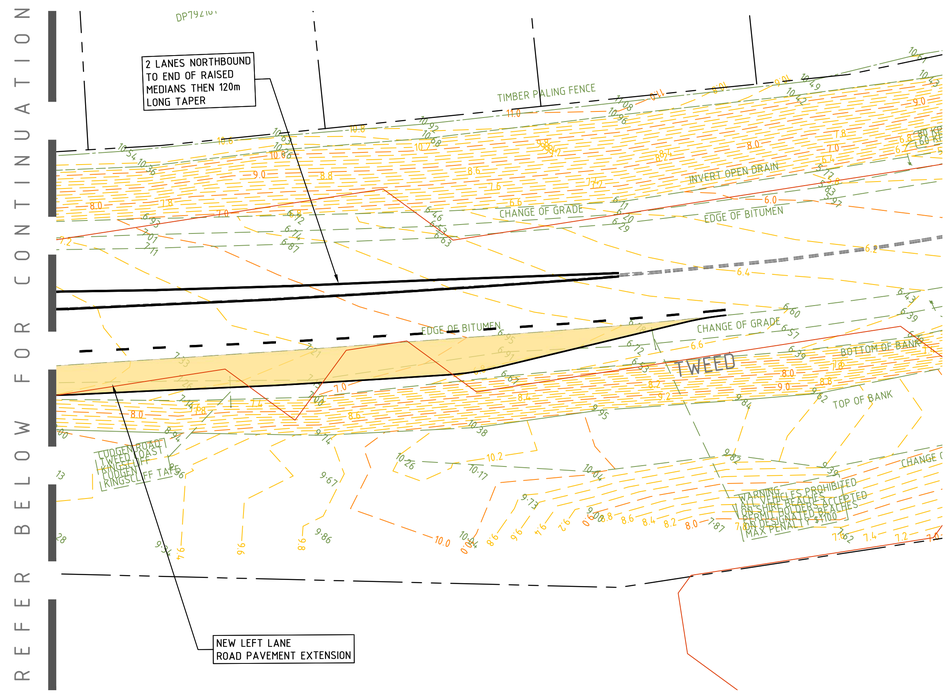
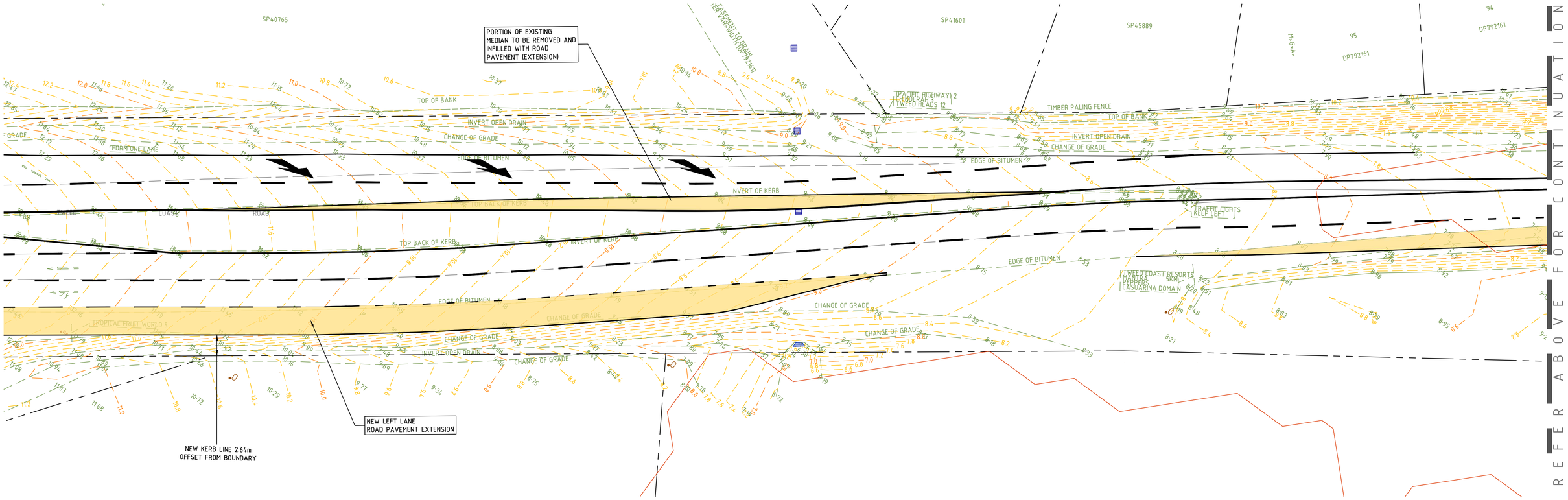
LEGEND:

Ex S	EXISTING SEWER
Ex OH	EXISTING OVERHEAD LINES
Ex T	EXISTING TELSTRA
Ex SW	EXISTING STORMWATER
Ex W	EXISTING WATER
	SITE BOUNDARY
	ROAD PAVEMENT
C1 (0.15m wide, 3m gap, 1m line, 3m gap)	CONTINUITY LINE
L1 (0.1m wide, 3m line, 9m gap)	LANE LINE
E1 (0.15m wide)	EDGE LINE
E5 (0.15m wide)	EDGE LINE (PAINTED MEDIAN)
T1 (0.1m wide, 0.6m gap, 0.6m line, 0.6m gap)	TURN LINE
TF (0.3m wide)	STOP LINE
PCW (0.15m wide, 0.3m gap, 1m line, 0.3m gap)	PEDESTRIAN CROSS WALK LINES
	100 YR FLOODING
	PMF FLOODING





COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P2	ISSUED FOR REF APPROVAL	31.10.18	PA	-
P1	ISSUED FOR REF APPROVAL	30.10.18	PA	-

Rev	Description	Date	By	App

5.0 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:250 A1 SHEET

BONACCI

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, KINGSCLIFF, NSW

Drawing Title: CONCEPT INTERSECTION WORKS PLAN SHEET 2 OF 2

PRELIMINARY

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:250		
Date	27.09.18		
Sheet	A1		

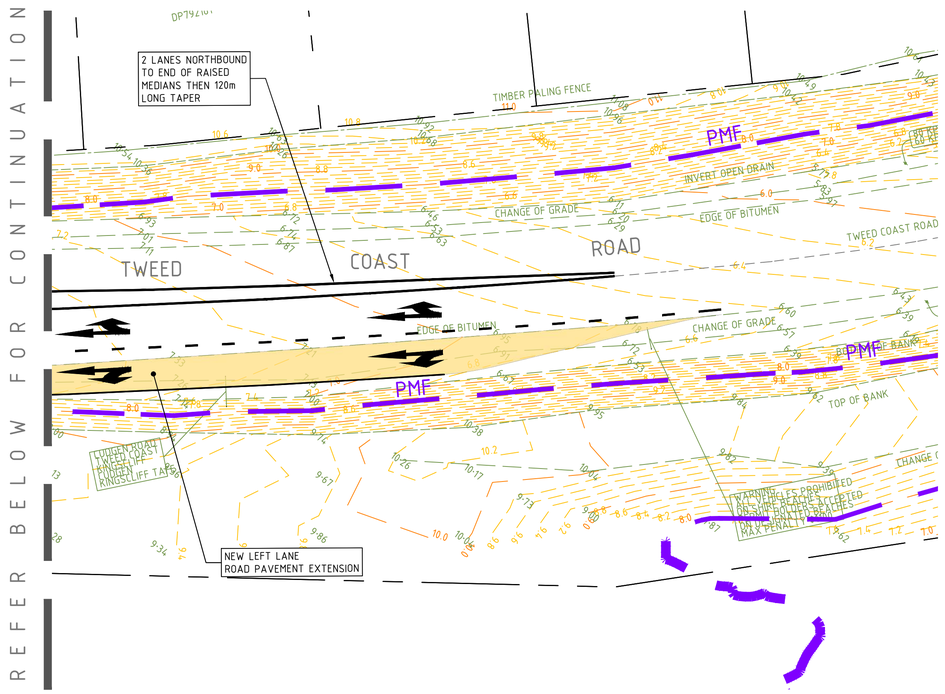
North

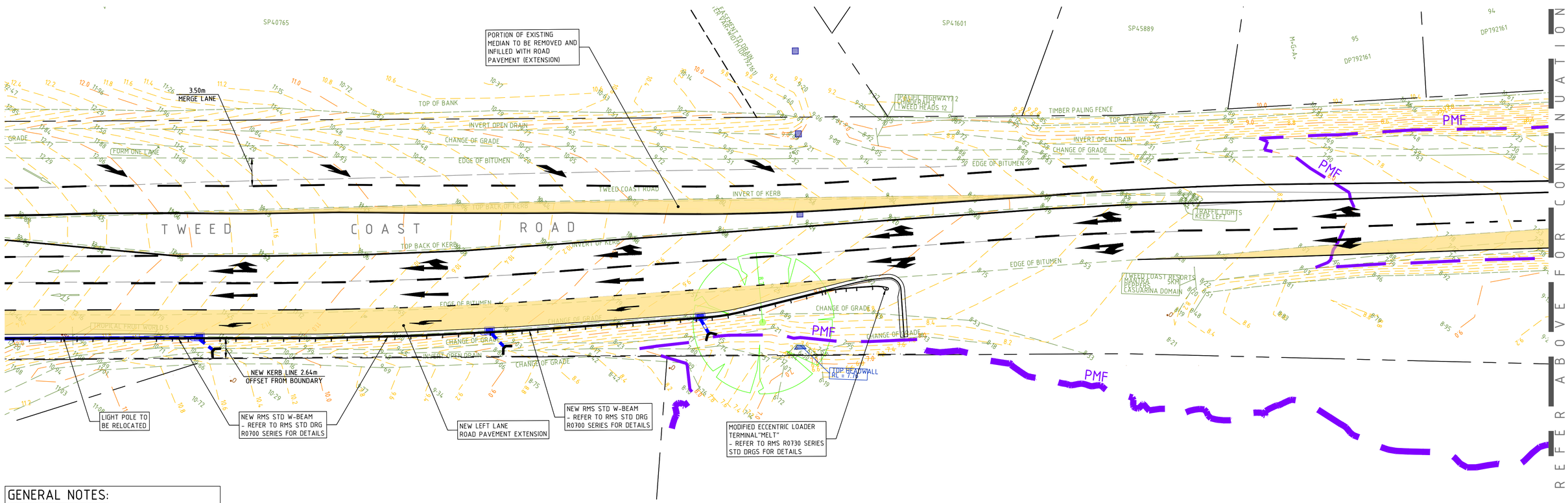
Project Ref	Drawing No	Rev
20 10748 01	C333	P2

File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C332-CAD[P2].dwg Plotted: 31.10.18 at 5:35 PM By: Prawal Adhikari

LEGEND:

Ex S	EXISTING SEWER
Ex OH	EXISTING OVERHEAD LINES
Ex T	EXISTING TELSTRA
Ex SW	EXISTING STORMWATER
Ex W	EXISTING WATER
	SITE BOUNDARY
	ROAD PAVEMENT
	100 YR FLOODING
	PMF FLOODING
	EXTENT OF WETLAND
C1 (0.15m wide; 3m gap; 1m line; 3m gap)	CONTINUITY LINE
L1 (0.1m wide; 3m line; 9m gap)	LANE LINE
E1 (0.15m wide)	EDGE LINE
E5 (0.15m wide)	EDGE LINE (PAINTED MEDIAN)
T1 (0.1m wide; 0.6m gap; 0.6m line; 0.6m gap)	TURN LINE
TF (0.3m wide)	STOP LINE
PCW (0.15m wide; 0.3m gap; 1m line; 0.3m gap)	PEDESTRIAN CROSS WALK LINES
KG	KERB AND GUTTER
DD	DISH DRAIN
	RMS STD W-BEAM - REFER TO RMS STD DRG R0700 SERIES FOR DETAILS
	STORMWATER PIPE
	KERB INLET PIT
	HEADWALL





GENERAL NOTES:

1. SERVICE LOCATIONS TO BE DETERMINED IN CONJUNCTION WITH SERVICE PROVIDERS.

COPYRIGHT
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.
All rights reserved.

Rev	Description	Date	By	App
P3	ISSUED FOR REVIEW	17.12.18	CS	"
P2	ISSUED FOR REF APPROVAL	31.10.18	PA	"
P1	ISSUED FOR REF APPROVAL	30.10.18	PA	"

Rev	Description	Date	By	App

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

PLAN SCALE 1:250 A1 SHEET

Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, KINGSCLIFF, NSW

Drawing Title: CONCEPT INTERSECTION WORKS PLAN SHEET 2 OF 2

PRELIMINARY

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:250		
Date	27.09.18		
Sheet	A1		

North

Project Ref	Drawing No	Rev
20 10748 01	C333	P3

File: G:\J20\10748\03 Work in Progress\02 Civil\01 CAD\01 Autocad\300 Series - Tweed Coast Road Intersection\10748C-C332.dwg Plotted: 21.01.19 at 11:19 AM By: Dean Bowen

TWEED VALLEY HOSPITAL DEVELOPMENT
CUDGEN ROAD AUXILIARY LANE WORKS

DRAWING No.	DESCRIPTION
20 10748 C400	DRAWING REGISTER AND CONSTRUCTION NOTES
20 10748 C405	SEDIMENT AND EROSION CONTROL PLAN
20 10748 C441	AUXILIARY LANE CIVIL WORKS PLAN
20 10748 C442	AUXILIARY LANE STORMWATER DRAINAGE PLAN
20 10748 C450	AUXILIARY LANE STORMWATER DRAINAGE LONGITUDINAL SECTION
20 10748 C460	CIVIL WORKS AND STORMWATER DRAINAGE DETAILS
20 10748 C480	AUXILIARY LANE KERB CROSS SECTIONS
20 10748 C485	AUXILIARY LANE KERB LONGITUDINAL SECTIONS

GENERAL NOTES

G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS OR SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH WORK.

G2 MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION, CURRENT SAA CODES, BUILDING REGULATIONS AND THE REQUIREMENTS OF ANY OTHER RELEVANT STATUTORY AUTHORITIES.

G3 THESE DRAWINGS MUST NOT BE SCALED. ALL DIMENSIONS ARE IN METERS. ALL SET OUT DIMENSIONS AND LEVELS, INCLUDING THOSE SHOWN ON THESE DRAWINGS SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S DRAWINGS AND VERIFIED ON SITE.

G4 ALL SETOUT AND DIMENSIONS OF THE STRUCTURE INCLUDING KERBS AND RETAINING WALLS, AND BULK EARTHWORKS MUST BE TAKEN FROM THE ARCHITECT'S DRAWINGS. SETOUT OF THE STORMWATER PITS BY OTHERS. CONTRACTOR TO CONFIRM SETOUT OF SERVICE TRENCHING INCLUDING SUBSOIL ON SITE.

G5 THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF AUTHORITIES HAVING JURISDICTON OVER THE WORKS. REFER TO GEOTECHNICAL REPORT BY MORRISON GEOTECHNIC PTY LTD, REFERENCE: GE18/144 REV 2, DATED 28th SEPTEMBER 2018.

G6 ALL DIMENSIONS AND REDUCED LEVELS MUST BE VERIFIED ON SITE BEFORE THE COMMENCEMENT OF ANY WORK.

G7 THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IS NOT AN AUTHORISATION OF A COST VARIATION. THE SUPERINTENDENT MUST APPROVE ANY COST VARIATION INVOLVED BEFORE ANY WORK STARTS.

G8 ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM.

G9 SERVICE INFORMATION SHOWN IS APPROXIMATE ONLY. PRIOR TO COMMENCEMENT OF ANY WORKS, THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND SERVICES AND COMPLY WITH ALL REQUIREMENTS OF THOSE AUTHORITIES.

G10 EXISTING SURFACE CONTOURS, WHERE SHOWN, ARE INTERPOLATED AND MAY NOT BE ACCURATE.

G11 UNLESS NOTED OTHERWISE, ALL VEGETATION SHALL BE STRIPPED TO A MINIMUM DEPTH OF 150mm UNDER ALL PROPOSED PAVEMENT AND BUILDING AREAS.

G12 MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.

SITEWORKS NOTES

S1 PRIOR TO THE PLACEMENT OF ANY PAVEMENTS, BUILDINGS OR DRAINS THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION IN ACCORDANCE WITH TEST 'E1.1' OF A.S. 1289 FOR THE TOP 300mm. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH GRANULAR FILL TO THE ENGINEERS APPROVAL AND COMPACTED IN ACCORDANCE WITH THE COMPACTION REQUIREMENTS SET OUT BELOW. ON HIGHLY REACTIVE CLAY AREAS SITE EXCAVATED MATERIAL MAY BE USED WITH THE PRIOR AUTHORISATION OF THE ENGINEER.

S2 ALL FILL AND PAVEMENT MATERIALS SHALL BE COMPACTED IN ACCORDANCE WITH GEOTECHNICAL REPORT BY MORRISON GEOTECHNIC PTY LTD REFERENCE: GE18/144 REV 2 DATED 28th SEPTEMBER 2018 MOISTURE CONTENT TO BE MAINTAINED AT +/- 2% OMC. MINIMUM COMPACTION REQUIREMENTS ARE DETAILED BELOW FOR (ALL REQUIREMENTS ARE TO VERIFIED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER):

- LANDSCAPED AREAS — 95% STD.
- FILL UNDER ANY FOOTINGS AND FLOOR SLABS FOR ANY STRUCTURE TO SUBGRADE LEVEL;
  - FINE CRUSHED ROCK — 98% STD.
  - SELECTED FILL WITHOUT CONSPICUOUS CLAY CONTENT — 98% STD.
- BUILDING BASECOURSE — 98% MOD
- FILL UNDER ROAD PAVEMENTS;
  - TO WITHIN 500mm OF FINISHED SUBGRADE LEVEL — 98% STD.
  - UP TO FINISHED SUBGRADE LEVEL — 98% STD.
- ROAD PAVEMENT MATERIALS;
  - SUB BASE — 98% MOD.
  - BASE COURSE — 98% MOD.

THE MAXIMUM COMPACTION IS TO BE NO GREATER THAN 4% ON TOP OF THE ABOVE MENTION VALUES.

S3 GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY. WHERE FINISHED SURFACE LEVELS ARE NOT SHOWN, THE SURFACE SHALL BE GRADED SMOOTHLY SO THAT IT WILL DRAIN AND MATCH ADJACENT SURFACES OR STRUCTURES.

S4 ALL DIMENSIONS GIVEN ARE TO FACE OF KERB, CENTER OF PIPE OR EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.

S5 ANY STRUCTURES, PAVEMENTS OR SURFACES DAMAGED, DIRTIED OR MADE UNSERVICABLE DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE ENGINEER.

S6 ANY FILL REQUIRED SHALL BE APPROVED BY THE ENGINEER / GEOTECHNICAL CONSULTANT

S7 CONTRACTOR IS TO ENSURE THAT ALL EXCAVATIONS ARE MAINTAINED IN A DRY CONDITION WITH NO WATER ALLOWED TO REMAIN IN THE EXCAVATIONS.

S8 ALL FINISHES AND COLOURS TO BE IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS.

S9 REFER TO STRUCTURAL DRAWINGS FOR CONCRETE, REINFORCEMENT AND RETAINING WALL DETAILS.

S10 GENERALLY FOR TRENCHING WORKS THE CONTRACTOR MUST:
A) COMPLY WITH THE GENERAL PROVISIONS OF PART 3.1 "MANAGING RISKS TO HEALTH AND SAFETY" OF NSW WORK AND HEALTH AND SAFETY REGULATION 2011

B) COMPLY PART 6.3 DIVISION 3 "EXCAVATION WORK" OF NSW WORK HEALTH AND SAFETY REGULATION NSW 2011

S11 PRIOR TO THE EXCAVATION OF ANY TRENCH DEEPER THAN 1.5 METRES THE CONTRACTOR MUST:
A) NOTIFY THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY ON THE APPROPRIATE FORM.

STORMWATER DRAINAGE NOTES

SW1 UNLESS NOTED OTHERWISE BY HYDRAULIC ENGINEERS DRAWINGS, ALL DOWNPIPES & GRATED INLETS SHALL BE CONNECTED TO PITS OR MAIN STORMWATER DRAINS WITH 150 DIA. UPVC PIPES LAID AT A MINIMUM GRADE OF 1 IN 100. FOR SYPHONIC ROOF DRAINAGE SYSTEMS ALL DOWNPIPES CONNECTION DRAIN SIZES TO BE CONNECTED INTO MAIN STORMWATER DRAINS SHALL BE IN ACCORDANCE WITH HYDRAULIC ENGINEERS DRAWINGS.

SW2 ALL MAIN STORMWATER DRAINS SHALL BE CONSTRUCTED USING MATERIALS AS SPECIFIED ON THE DRAWINGS IN ACCORDANCE WITH THE APPROPRIATE A.S. IF NOT SPECIFIED THEN CLASS 4 RRJ RCP SHALL BE USED FOR DIAMETERS > 225mm. SEWER CLASS SEH UPVC IN ACCORDANCE WITH AS1260 SHALL BE USED FOR Φ225mm OR SMALLER.

SW3 ALL PIPEWORK TO BE INSTALLED IN ACCORDANCE WITH AS3725 FOR RCP AND AS2032 FOR PVC. ALL BEDDING TO BE TYPE H2 UNLESS NOTED OTHERWISE.

SW4 FOR ALL PITS > 1.2m DEEP, STEP IRONS SHALL BE INSTALLED.

SW5 PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY BONACCI GROUP.

SW6 ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.

SW7 WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.

SW8 GRATES AND COVERS SHALL CONFORM WITH AS 3996 AND AS 1428.1 FOR ACCESS REQUIREMENTS.

SW9 CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES ARE NOT TO BE REDUCED WITHOUT APPROVAL.

SW10 AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.

SW11 ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

KERBING NOTES

K1 ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa U.N.O.

K2 ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 75mm GRANULAR BASECOURSE COMPACTED TO A MINIMUM 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 5.2.1.

K3 EXPANSION JOINTS (EJ) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.

K4 WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.

K5 BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.

K6 IN THE REPLACEMENT OF KERBS:-
- EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O. FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER, NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O.
- EXISTING KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.

JOINTING NOTES

PEDESTRIAN FOOTPATH JOINTS

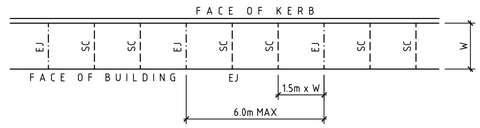
J1 EXPANSION JOINTS (EJ) ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT 6m CENTRES.

J2 SAWCUT JOINTS (SC) ARE TO BE LOCATED AT A MAX 1.5m x WIDTH OF PAVEMENT. THE TIMING OF THE SAWCUT IS TO BE CONFIRMED BY THE CONTRACTOR ON SITE. SITE CONDITIONS WILL DETERMINE HOW MANY HOURS AFTER THE CONCRETE POUR BEFORE THE SAW CUTS ARE COMMENCED.

J3 WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS.

J4 PROVIDE 10mm WIDE FULL DEPTH EXPANSION JOINTS (EJ) BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS

J5 ALL PEDESTRIAN FOOTPATH JOINTINGS AS FOLLOWS (U.N.O.).



VEHICULAR PAVEMENT JOINTS

J6 ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.

J7 LONGITUDINAL WARPING JOINTS (LWJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 3m TO 4.5m MAX CENTERS. ALL LWJ's SHOULD BE TIED UP TO A MAXIMUM TOTAL WIDTH OF 30m.

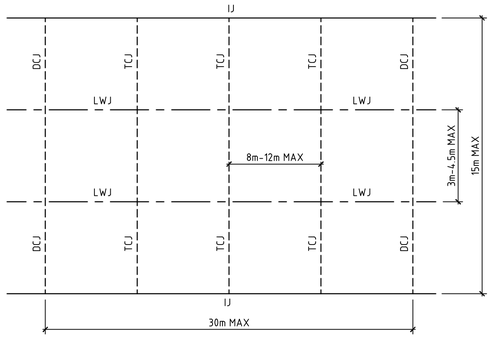
J8 TRANSVERSE CONTRACTION JOINTS (TCJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 8m TO 12m MAX CENTERS. TCJ's CAN BE SPACED AT SUITABLE INTERVALS UP TO A RECOMMENDED MAXIMUM LENGTH OF 15m.

J9 TRANSVERSE DOWELLED CONSTRUCTION JOINTS (DCJ) TO BE PROVIDED FOR PLANNED INTERRUPTIONS SUCH AS AT THE END OF EACH DAY'S OPERATIONS (POUR BREAK), AT BLOCK OUTS FOR BRIDGES AND INTERSECTIONS OR FOR UNEXPECTED DELAYS WHEN THE SUSPENSION OF OPERATIONS IS LIKELY TO CREATE A JOINT.

J10 ISOLATION JOINTS WITH SUB-GRADE BEAM (IJ) TO BE PROVIDED AT INTERSECTIONS OR AT THE JUNCTION OF A POUR BREAK.

J11 ALL VEHICULAR PAVEMENTS TO BE JOINTED IN ACCORDANCE WITH AUSTROADS AGPT02-12 GUIDE TO PAVEMENT TECHNOLOGY PART 2 STRUCTURAL PAVEMENT DESIGN AND SUPPLEMENT AP-T36-06 PAVEMENT DESIGN FOR LIGHT TRAFFIC

J12 VEHICULAR PAVEMENT JOINTING AS FOLLOWS (U.N.O.)



COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

Rev	Description	Date	By	App

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

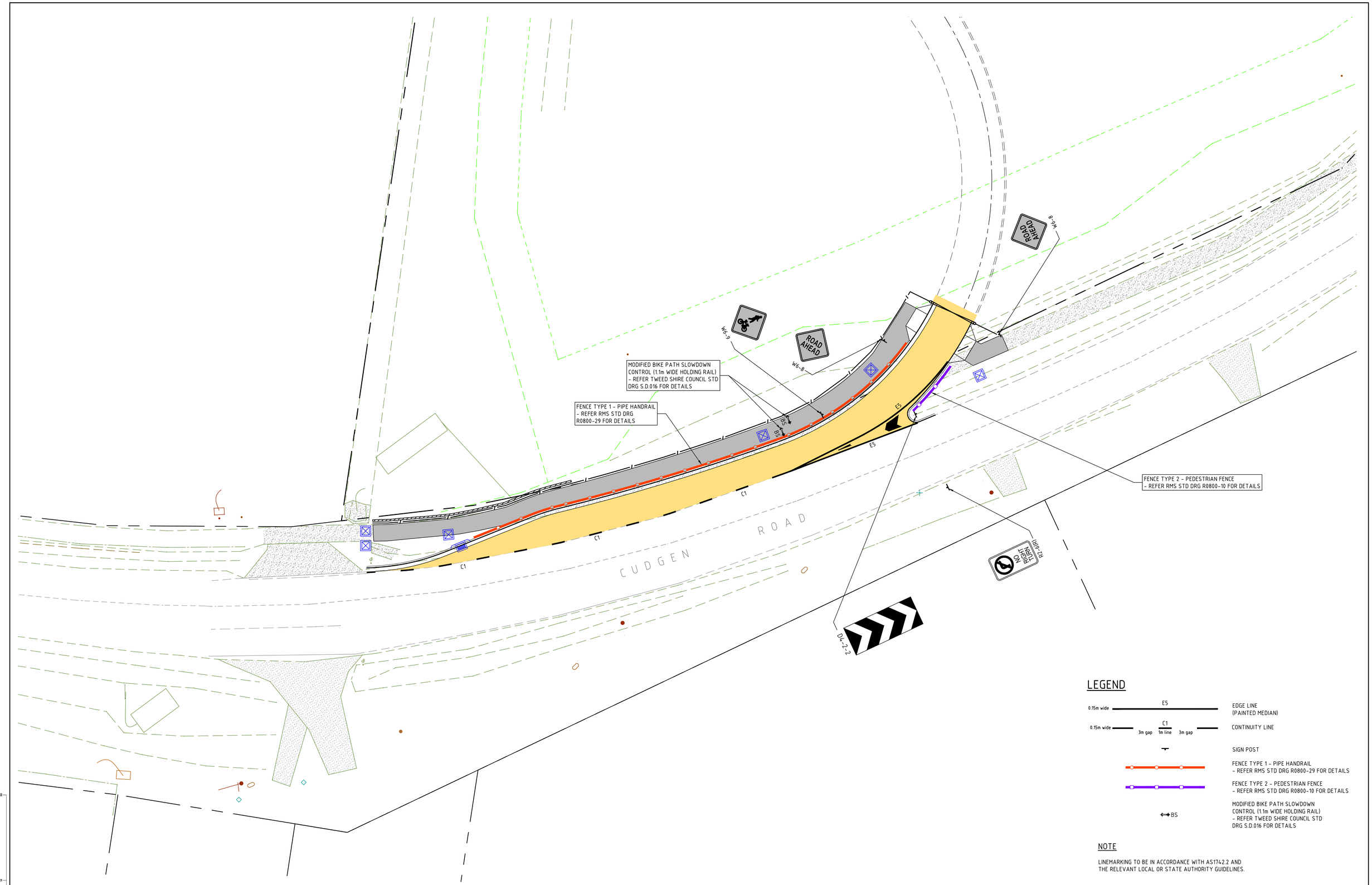
Project Name: TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS

Drawing Title: DRAWING REGISTER AND CONSTRUCTION NOTES

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		North
Scale	NTS		
Date	3.10.2018	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C400 P2

File: G:\Job\10748\01_Civil\IssuedDwg\10748-C-C400-CAD[P2].dwg Plotted: 05.11.18 at 9:07 PM By: Cameron Stanford



LEGEND

0.15m wide — E5	EDGE LINE (PAINTED MEDIAN)
0.15m wide — C1 (3m gap, 1m line, 3m gap)	CONTINUITY LINE
	SIGN POST
	FENCE TYPE 1 - PIPE HANDRAIL - REFER RMS STD DRG R0800-29 FOR DETAILS
	FENCE TYPE 2 - PEDESTRIAN FENCE - REFER RMS STD DRG R0800-10 FOR DETAILS
BS	MODIFIED BIKE PATH SLOWDOWN CONTROL (1.1m WIDE HOLDING RAIL) - REFER TWEED SHIRE COUNCIL STD DRG S.D.016 FOR DETAILS

NOTE

LINEMARKING TO BE IN ACCORDANCE WITH AS1742.2 AND THE RELEVANT LOCAL OR STATE AUTHORITY GUIDELINES.

COPYRIGHT
All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P1	ISSUED FOR TENDER	21.12.18	CS	-

Rev	Description	Date	By	App

2.5 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:200 A1 SHEET

BONACCI
BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS

Drawing Title: AUXULIARY LANE TRAFFIC CONTROL DEVICE PLAN

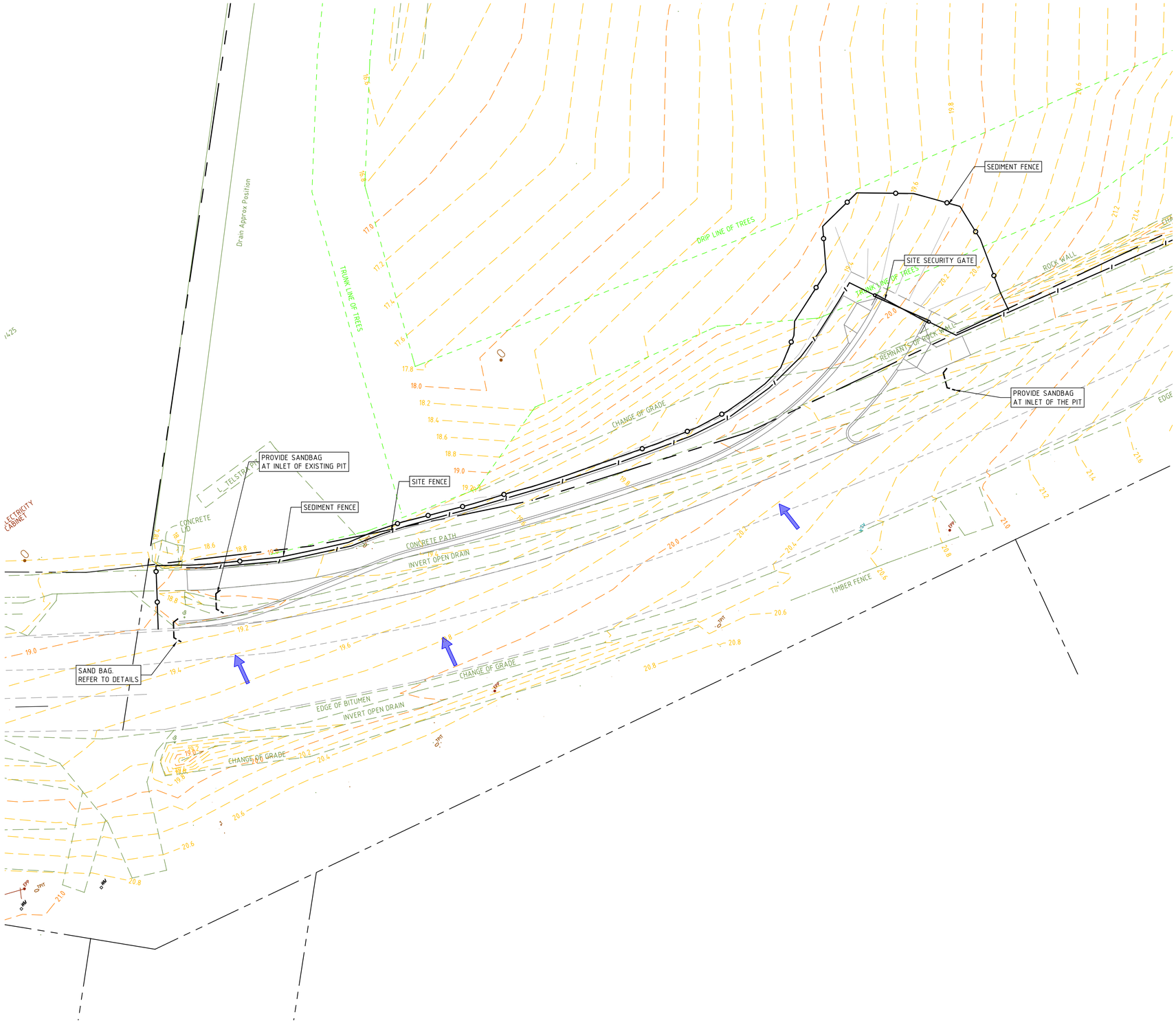
TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:200		
Date	05.11.18		
Sheet	A1		

North

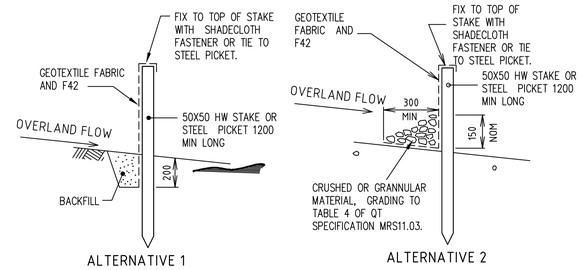
Project Ref	Drawing No	Rev
20 10748 01	C403	P1

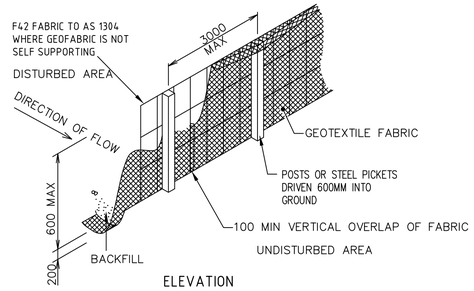
File: G:\Job\10748\03 Work in Progress\02 Civil\01 CAD\01 Autocad\400 Series - Auxiliary Lane Works\10748C-C403.dwg Plotted: 21.12.18 at 12:13 PM By: Cameron Stanford



LEGEND

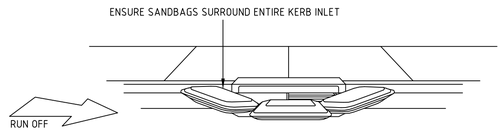
- SITE BOUNDARY
- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- SEDIMENT FENCE REFER TO DETAILS
- SITE FENCE
- SANDBAG. REFER TO DETAILS
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR





SEDIMENT FENCE

NOT TO SCALE



SANDBAG KERB INLET SEDIMENT TRAP

NOT TO SCALE

COPYRIGHT
All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

2.5 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:200 A1 SHEET

BONACCI
BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS

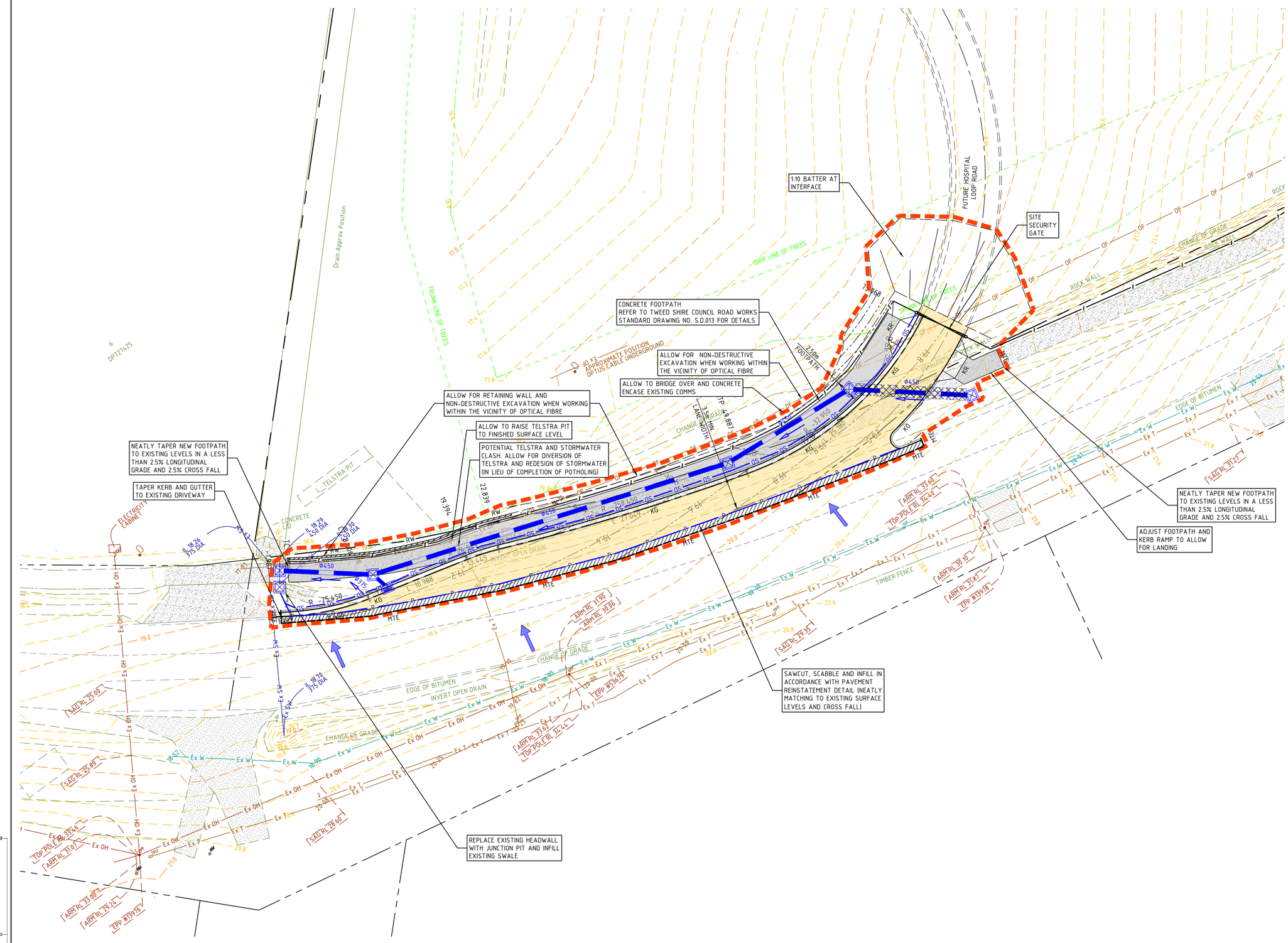
Drawing Title: SEDIMENT AND EROSION CONTROL PLAN

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:200		
Date	3.10.2018	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C405 P2

North

File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C405-CAD[P2].dwg Plotted: 05.11.18 at 9:08 PM By: Cameron Stanford



LEGEND

- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- P — INTRAPAVEMENT DRAINAGE. REFER RMS DETAIL
- SD — SUBSOIL DRAINAGE. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.012 FOR DETAIL
- Ø375 — NEW STORMWATER PIPE
- NEW STANDARD GULLY PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.104 FOR DETAILS
- NEW GRATED INLET PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- NEW JUNCTION PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- CONCRETE ENCASEMENT. REFER DRAWING C460 FOR DETAILS
- KG — BARRIER KERB AND GUTTER REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAIL
- KO — KERB ONLY REFER TYPICAL DETAIL ON DRAWING NO. 460
- KR — KERB RAMP REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.014 FOR DETAIL
- PAVEMENT TYPE 1 HEAVY DUTY ASPHALT PAVEMENT. REFER TO DRAWING C460 FOR DETAILS
- CONCRETE FOOTPATH REFER TWEED SHIRE COUNCIL ROAD WORKS STANDARD DRAWING NO. S.D.013 FOR DETAIL
- PAVEMENT REINSTATEMENT REFER DRAWING C460 FOR DETAILS
- RW — RETAINING WALL. REFER TO DRAWING C460 FOR DETAILS
- MTE — NEATLY MATCH TO EXISTING SURFACE LEVELS
- SITE FENCE
- LIMIT OF WORKS
- Ex S — EXISTING SEWER
- Ex OH — EXISTING OVERHEAD LINES
- Ex T — EXISTING TELSTRA
- Ex SW — EXISTING STORMWATER
- Ex W — EXISTING WATER
- Ex OF — EXISTING OPTICAL FIBRE

COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

2.5 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:200 A1 SHEET

BONACCI
BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS

Drawing Title: AUXULIARY LANE CIVIL WORKS PLAN

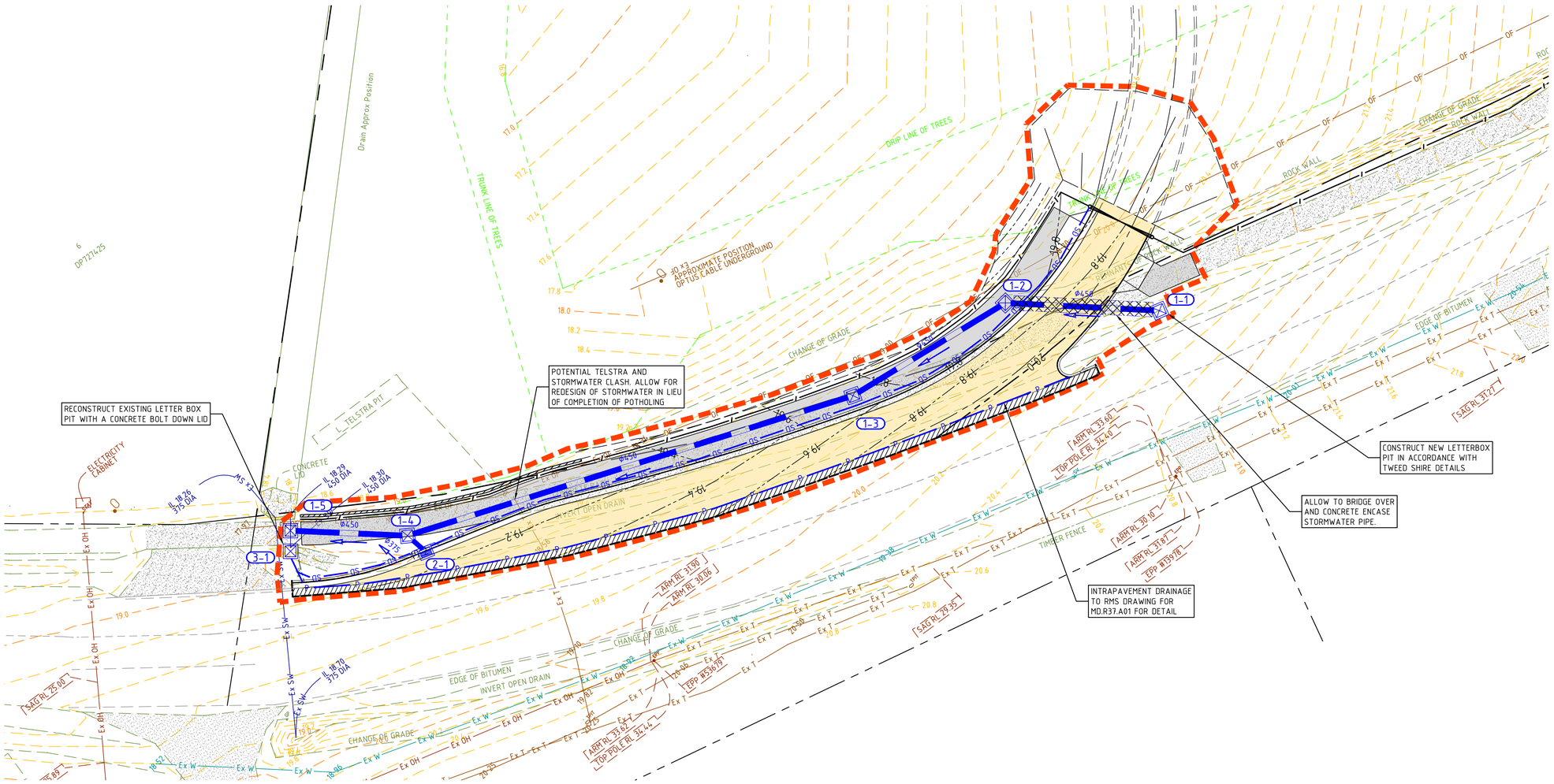
TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA	North	
Scale	1:200		
Date	05.11.18	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C441 P2

File: G:\Job\10748\01_Civil\Issued\Dwg\107480-C441-CAD[P2].dwg Plotted: 05.11.18 at 9:09 PM By: Cameron Stanford

PIT SCHEDULE

Pit Name	TYPE	EASTING	NORTHING	INTERNAL WD	LEN	INLET DIA	INV LEV	OUTLET DIA	INV LEV	PIT SETOUT RL	DEPTH	REMARKS
1-1	LETTER BOX INLET PIT - REFER DETAIL ON DRG 460	555414.109	6873115.864	0.9	0.9			450	18.969	20.23	1.262	
1-2	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555401.359	6873116.504	0.9	0.9	450	18.675	450	18.656	19.865	1.209	
1-3	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555388.740	6873108.826	0.9	0.9	450	18.582	450	18.562	19.742	1.18	
1-4	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555351.852	6873097.222	0.9	0.9	450	18.369	450	18.349	19.259	0.911	
1-5	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555342.153	6873097.638	0.9	0.9	450	18.3			19.021	0.721	
Pit Name	TYPE	EASTING	NORTHING	INTERNAL WD	LEN	INLET DIA	INV LEV	OUTLET DIA	INV LEV	PIT SETOUT RL	DEPTH	REMARKS
1-4	TSC STD GULLY PIT WITH 2.4m LINTEL - REFER STD DRG S.D.104	555353.314	6873095.939	0.9	0.9			375	18.398	19.061	0.663	
1-5	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555351.852	6873097.222	0.9	0.9	375	18.389			19.259	0.911	CONNECT INTO EXTG 450 DIA. PIPE
Pit Name	TYPE	EASTING	NORTHING	INTERNAL WD	LEN	INLET DIA	INV LEV	OUTLET DIA	INV LEV	PIT SETOUT RL	DEPTH	REMARKS
3-1	TSC STD JUNCTION PIT - REFER STD DRG S.D.106	555342.158	6873095.931	0.9	0.9	375	18.389			19.259	0.911	REPLACE EXISTING HEADWALL WITH JUNCTION PIT AND INFILL EXISTING SWALE



LEGEND

- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- INTRAPAVEMENT DRAINAGE. REFER RMS DETAIL
- SUBSOIL DRAINAGE. REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.012 FOR DETAIL
- NEW STORMWATER PIPE
- NEW STANDARD GULLY PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.104 FOR DETAILS
- NEW GRATED INLET PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- NEW JUNCTION PIT. REFER TWEED SHIRE COUNCIL STORMWATER STANDARDS DRAWING NO. S.D.106 DETAILS
- CONCRETE ENCASEMENT. REFER DRAWING C460 FOR DETAILS
- BARRIER KERB AND GUTTER REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAIL
- KERB ONLY REFER TYPICAL DETAIL ON DRAWING NO. 460
- KERB RAMP REFER TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.014 FOR DETAIL
- PAVEMENT TYPE 1 HEAVY DUTY ASPHALT PAVEMENT. REFER TO DRAWING C460 FOR DETAILS
- CONCRETE FOOTPATH REFER TWEED SHIRE COUNCIL ROAD WORKS STANDARD DRAWING NO. S.D.013 FOR DETAIL
- PAVEMENT REINSTATEMENT REFER DRAWING C460 FOR DETAILS
- RETAINING WALL. REFER TO DRAWING C460 FOR DETAILS
- NEATLY MATCH TO EXISTING SURFACE LEVELS
- SITE FENCE
- LIMIT OF WORKS
- Ex S — EXISTING SEWER
- Ex OH — EXISTING OVERHEAD LINES
- Ex T — EXISTING TELSTRA
- Ex SW — EXISTING STORMWATER
- Ex W — EXISTING WATER
- Ex OF — EXISTING OPTICAL FIBRE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR

COPYRIGHT
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.
All rights reserved.

Rev	Description	Date	By	App
P1	ISSUED FOR TENDER	05.11.18	PA	-

Rev	Description	Date	By	App

2.5 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:200 A1 SHEET

BONACCI
BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, CUDGEN ROAD AUXILIARY LANE WORKS

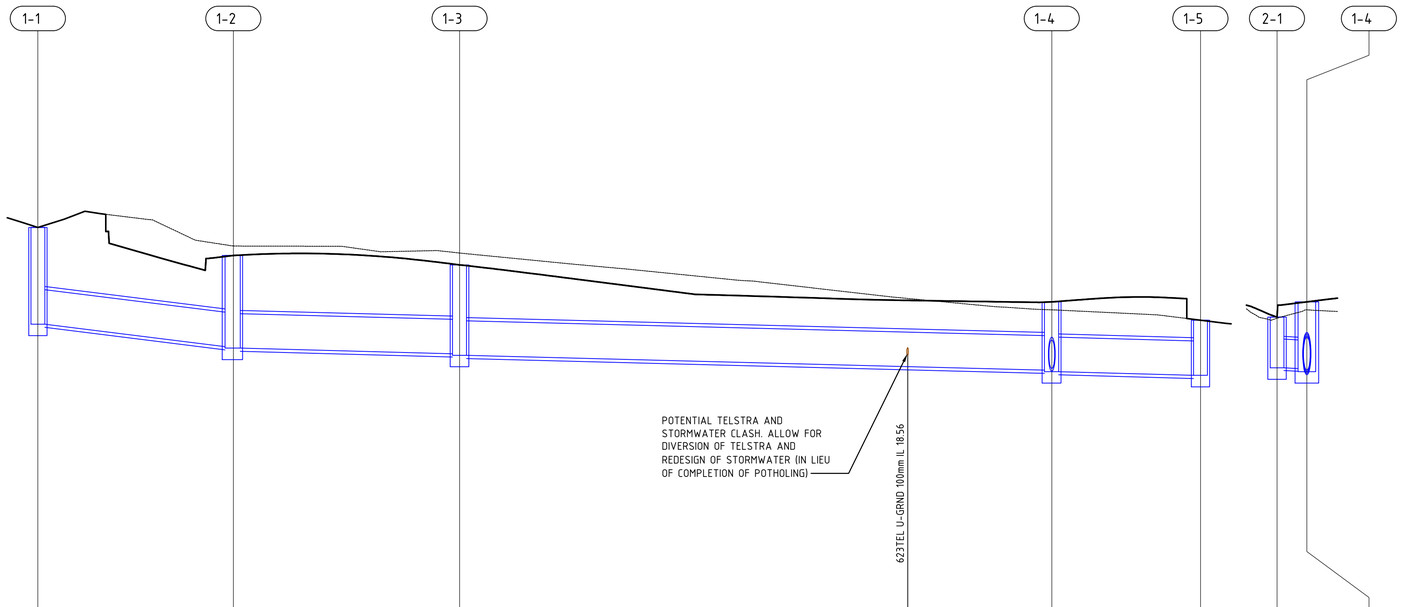
Drawing Title: AUXULIARY LANE STORMWATER DRAINAGE PLAN

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:200		
Date	05.11.18	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C442 P1

North

File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C442-CADP1.dwg Plotted: 05.11.18 at 9:10 PM By: Cameron Stanford



Pipe Diameter	450Φ RCP CLASS 4			450Φ RCP CLASS 4				450Φ RCP CLASS 4					450Φ RCP CLASS 4			375Φ RCP CLASS 4		
Pipe Grade	2.3%			0.5%				0.5%					0.5%			0.5%		
DATUM R.L.	14.000															14.000		
DEPTH TO INVERT	1.262		1.190	1.209		1.160	1.180					0.891	0.911		0.721	0.663		0.871
INVERT LEVEL	18.969		18.675	18.656		18.582	18.562			18.414		18.369	18.349		18.300	18.398		18.389
DESIGN SURFACE LEVEL	20.230		19.865			19.742						19.259			19.021	19.061		19.259
EXISTING SURFACE LEVEL	20.230		19.988			19.897						19.156			19.021	19.046		19.156
CHAINAGE	0.000		12.765			27.537				29.260		66.206			75.915	0.000		1.945

COPYRIGHT
All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P1	ISSUED FOR TENDER	05.11.18	PA	-

Rev	Description	Date	By	App

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL
CUDGEN ROAD AUXILIARY
LANE WORKS

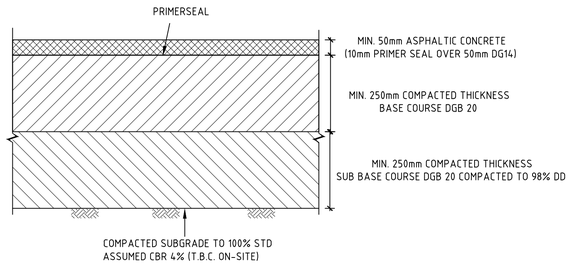
Drawing Title: AUXILIARY LANE
STORMWATER DRAINAGE
LONGITUDINAL SECTION

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	NOTED		
Date	05.11.18	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C450 P1

North

File: G:\Jobs\10748\01_Civil\Issued\Dwg\10748C-C450-CAD[P1].dwg Plotted: 05.11.18 at 9:10 PM By: Cameron Stanford



PAVEMENT TYPE P1
HEAVY DUTY ASPHALT PAVEMENT

SCALE 1:10

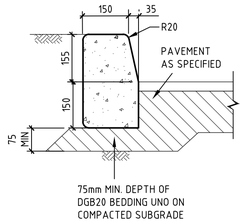
DENOTED ON PLAN

ROAD DESIGN PARAMETERS (FLEXIBLE)

DESIGN TRAFFIC 1.5 X 10^6 (ESA's OR HVAG)

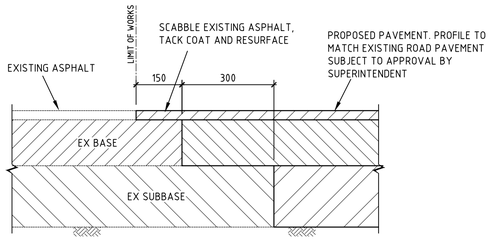
ASSUMPTIONS:

- TWEED SHIRE COUNCIL PAVEMENT DESIGN TABLE D2.2 ARTERIAL DISTRIBUTOR, SHOPPING STRIP ACCESS, INDUSTRIAL, DESIGN PERIOD 25 YEAR.
- CBR 4.0%
- PREPARE SUBGRADE AND SELECT FILL IN ACCORDANCE WITH (MORRISON GEOTECH, REFERENCE NO. GE18/144-REV 1)



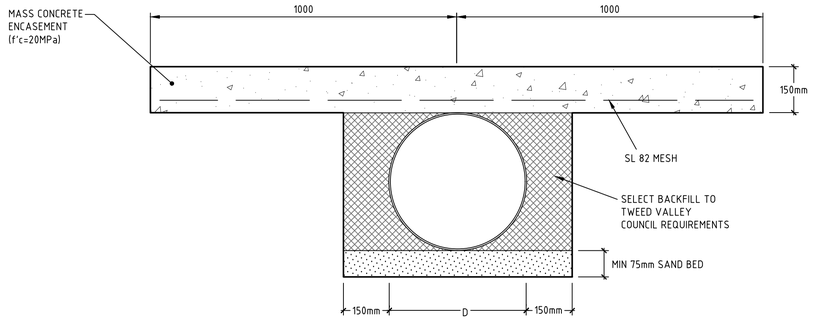
KERB ONLY (KO)

SCALE 1:10
(TO BE APPROVED BY COUNCIL)



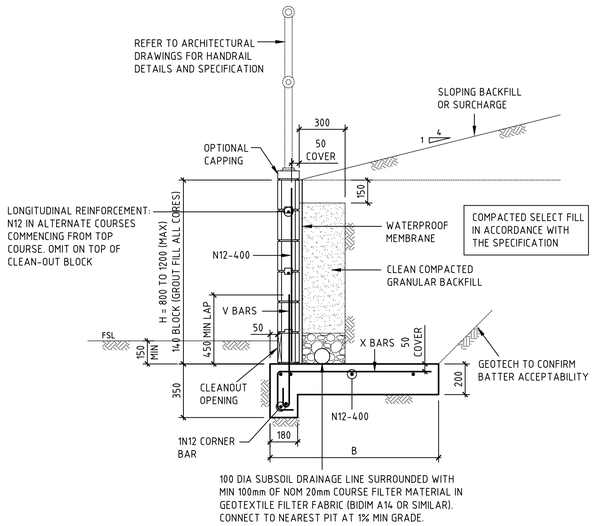
AC CONNECTION TO EXISTING PAVEMENT

SCALE 1:10



CONCRETE ENCASEMENT DETAIL

SCALE 1:10



BLOCK RETAINING WALL (MAX 1200 HIGH)

SCALE 1:20

NOTE: DESIGNER TO CHECK THE NEED FOR SHEAR KEY

COPYRIGHT
All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL
CUDGEN ROAD AUXILIARY
LANE WORKS

Drawing Title: CIVIL WORKS AND
STORMWATER DRAINAGE DETAILS

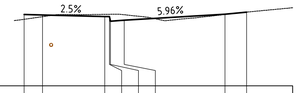
TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	NOTED		
Date	05.11.18		
Sheet	A1		

North

Project Ref	Drawing No	Rev
20 10748 01	C460	P2

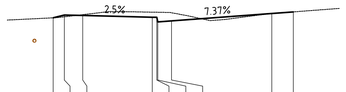
File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C460-CADP2].dwg Plotted: 05.11.18 at 9:11 PM By: Cameron Stanford



EASTING 555362.223
NORTHING 6873099.02
DATUM RL 17.000

DESIGN LEVEL			19.329	19.314		19.263	19.263	19.108	19.143	19.339	19.406
EXISTING SURFACE LEVEL			19.171	19.257		19.333	19.335	19.335	19.320	19.339	19.406
DESIGN OFFSET			-3.269	-2.669		-0.635	-0.485	-0.450	0.000	3.288	3.997

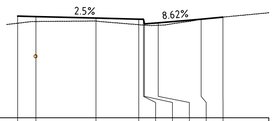
CH 20.000



EASTING 555390.906
NORTHING 6873107.761
DATUM RL 17.000

DESIGN LEVEL	19.729	19.820	19.805		19.749	19.749	19.594	19.629	19.870	19.923
EXISTING SURFACE LEVEL	19.729	19.162	19.832		19.914	19.911	19.910	19.894	19.870	19.923
DESIGN OFFSET	-3.867	-3.502	-2.902		-0.635	-0.485	-0.450	0.000	3.271	3.971

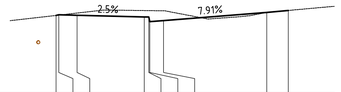
CH 50.000



EASTING 555352.94
NORTHING 6873095.304
DATUM RL 16.000

DESIGN LEVEL		19.318	19.303		19.254	19.219	19.219	19.064	19.099	19.220	19.287
EXISTING SURFACE LEVEL		19.086	19.142		19.159	19.039	19.027	19.024	19.020	19.220	19.287
DESIGN OFFSET		-4.591	-3.991		-2.035	-0.635	-0.485	-0.450	0.000	1.399	2.111

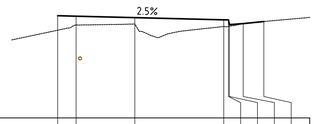
CH 10.000



EASTING 555381.445
NORTHING 6873104.523
DATUM RL 17.000

DESIGN LEVEL		19.560	19.582	19.567		19.513	19.513	19.358	19.393	19.659	19.723
EXISTING SURFACE LEVEL		19.560	19.570	19.639		19.720	19.718	19.718	19.713	19.659	19.723
DESIGN OFFSET		-3.512	-3.424	-2.824		-0.635	-0.485	-0.450	0.000	3.369	4.070

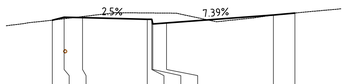
CH 40.000



EASTING 555343.288
NORTHING 6873092.914
DATUM RL 16.000

DESIGN LEVEL		19.336	19.321		19.273		19.200	19.200	19.045	19.080	19.147
EXISTING SURFACE LEVEL		18.863	19.031		19.065		18.985	18.987	18.992	19.080	19.147
DESIGN OFFSET		-6.059	-5.459		-3.541		-0.635	-0.485	-0.450	0.000	0.671

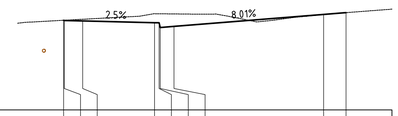
CH 0.000



EASTING 555371.863
NORTHING 6873101.666
DATUM RL 17.000

DESIGN LEVEL		19.310	19.407	19.392		19.339	19.339	19.184	19.219	19.477	19.543
EXISTING SURFACE LEVEL		19.310	19.356	19.427		19.545	19.544	19.544	19.540	19.477	19.543
DESIGN OFFSET		-3.733	-3.346	-2.746		-0.635	-0.485	-0.450	0.000	3.487	4.187

CH 30.000



EASTING 555399.627
NORTHING 6873112.575
DATUM RL 17.000

DESIGN LEVEL		19.926	19.919	19.904		19.846	19.846	19.691	19.726	20.177	20.175
EXISTING SURFACE LEVEL		19.926	19.927	19.959		20.140	20.139	20.138	20.133	20.177	20.175
DESIGN OFFSET		-3.604	-3.579	-2.979		-0.635	-0.485	-0.450	0.000	4.887	5.619

CH 60.000

COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P1	ISSUED FOR TENDER	05.11.18	PA	-

Rev	Description	Date	By	App

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS

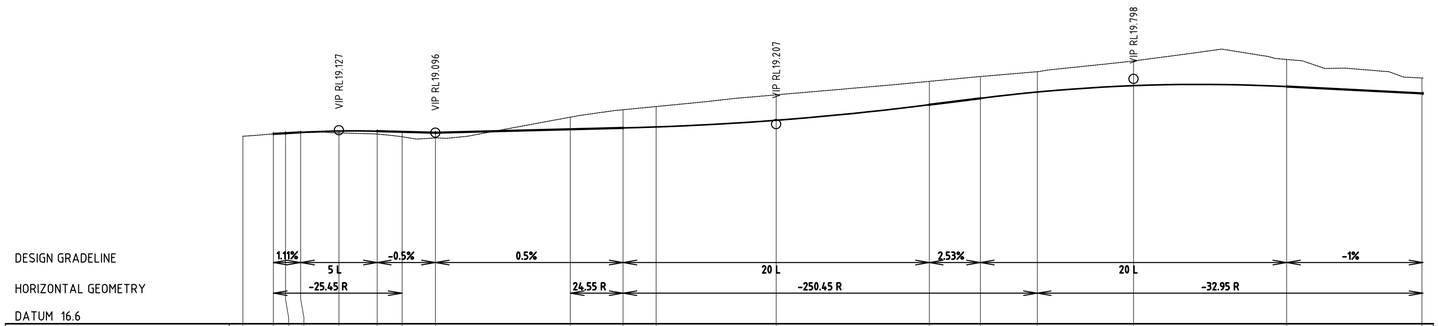
Drawing Title: AUXILIARY LANE KERB CROSS SECTIONS

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	NOTED	Project Ref	Drawing No / Rev
Date	05.11.18	20 10748 01	C480 P1
Sheet	A1		

North

File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C480-CAD[P1].dwg Plotted: 05.11.18 at 9:11 PM By: Cameron Stanford



DESIGN SURFACE		19.080	19.089	19.100	19.117	19.115	19.107	19.096	19.140	19.157	19.170	19.258	19.460	19.545	19.627	19.709	19.698	19.609
EXISTING SURFACE	19.050	19.080	19.092	19.105	19.099	19.078	19.042	19.027	19.298	19.395	19.438	19.589	19.765	19.820	19.892	20.032	20.055	19.810
CHAINAGES	-1.987	0.000	0.799	1.786	4.286	6.786	8.406	10.584	19.394	22.836	25.000	32.836	42.836	46.172	49.887	56.172	66.172	75.000

1 in 200 HORIZONTAL
1 in 40 VERTICAL

SLIP LANE KR01 CL LONGITUDINAL SECTION

COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P1	ISSUED FOR TENDER	05.11.18	PA	-

Rev	Description	Date	By	App

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers. Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL CUDGEN ROAD AUXILIARY LANE WORKS

Drawing Title: AUXILIARY LANE KERB LONGITUDINAL SECTION

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	NOTED	Project Ref	Drawing No / Rev
Date	05.11.18	20 10748 01	C485 P1
Sheet	A1		

North

File: G:\Job\10748\01_Civil\IssuedDwg\10748C-C485-CAD[P1].dwg Plotted: 05.11.18 at 9:11 PM By: Cameron Stanford

TWEED VALLEY HOSPITAL DEVELOPMENT
TURNOCK STREET ROUNDABOUT WORKS

DRAWING No.	DESCRIPTION
20 10748 C500	DRAWING REGISTER AND CONSTRUCTION NOTES
20 10748 C505	SEDIMENT AND EROSION CONTROL PLAN
20 10748 C540	EXTERNAL WORKS INTERSECTION PLAN
20 10748 C545	DEMOLITION PLAN
20 10748 C560	CIVIL WORKS DETAILS

GENERAL NOTES

G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS OR SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH WORK.

G2 MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION, CURRENT SAA CODES, BUILDING REGULATIONS AND THE REQUIREMENTS OF ANY OTHER RELEVANT STATUTORY AUTHORITIES.

G3 THESE DRAWINGS MUST NOT BE SCALED. ALL DIMENSIONS ARE IN METERS. ALL SET OUT DIMENSIONS AND LEVELS, INCLUDING THOSE SHOWN ON THESE DRAWINGS SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S DRAWINGS AND VERIFIED ON SITE.

G4 ALL SETOUT AND DIMENSIONS OF THE STRUCTURE INCLUDING KERBS AND RETAINING WALLS, AND BULK EARTHWORKS MUST BE TAKEN FROM THE ARCHITECT'S DRAWINGS. SETOUT OF THE STORMWATER PITS BY OTHERS. CONTRACTOR TO CONFIRM SETOUT OF SERVICE TRENCHING INCLUDING SUBSOIL ON SITE.

G5 THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF AUTHORITIES HAVING JURISDICTON OVER THE WORKS. REFER TO GEOTECHNICAL REPORT BY MORRISON GEOTECHNIC PTY LTD, REFERENCE: GE18/144 REV 2, DATED 28th SEPTEMBER 2018.

G6 ALL DIMENSIONS AND REDUCED LEVELS MUST BE VERIFIED ON SITE BEFORE THE COMMENCEMENT OF ANY WORK.

G7 THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IS NOT AN AUTHORISATION OF A COST VARIATION. THE SUPERINTENDENT MUST APPROVE ANY COST VARIATION INVOLVED BEFORE ANY WORK STARTS.

G8 ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM.

G9 SERVICE INFORMATION SHOWN IS APPROXIMATE ONLY. PRIOR TO COMMENCEMENT OF ANY WORKS, THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND SERVICES AND COMPLY WITH ALL REQUIREMENTS OF THOSE AUTHORITIES.

G10 EXISTING SURFACE CONTOURS, WHERE SHOWN, ARE INTERPOLATED AND MAY NOT BE ACCURATE.

G11 UNLESS NOTED OTHERWISE, ALL VEGETATION SHALL BE STRIPPED TO A MINIMUM DEPTH OF 150mm UNDER ALL PROPOSED PAVEMENT AND BUILDING AREAS.

G12 MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.

G13 THESE DWGS SHOULD BE READ IN CONJUNCTION WITH COUNCIL'S STANDARD DETAILS.

SITEWORKS NOTES

S1 PRIOR TO THE PLACEMENT OF ANY PAVEMENTS, BUILDINGS OR DRAINS THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION IN ACCORDANCE WITH TEST 'E1.1' OF A.S. 1289 FOR THE TOP 300mm. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH GRANULAR FILL TO THE ENGINEERS APPROVAL AND COMPACTED IN ACCORDANCE WITH THE COMPACTION REQUIREMENTS SET OUT BELOW. ON HIGHLY REACTIVE CLAY AREAS SITE EXCAVATED MATERIAL MAY BE USED WITH THE PRIOR AUTHORISATION OF THE ENGINEER.

S2 ALL FILL AND PAVEMENT MATERIALS SHALL BE COMPACTED IN ACCORDANCE WITH GEOTECHNICAL REPORT BY MORRISON GEOTECHNIC PTY LTD REFERENCE: GE18/144 REV 2 DATED 28th SEPTEMBER 2018 MOISTURE CONTENT TO BE MAINTAINED AT +/- 2% OMC. MINIMUM COMPACTION REQUIREMENTS ARE DETAILED BELOW FOR (ALL REQUIREMENTS ARE TO VERIFIED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER):

- LANDSCAPED AREAS — 95% STD.
- FILL UNDER ANY FOOTINGS AND FLOOR SLABS FOR ANY STRUCTURE TO SUBGRADE LEVEL;
  - FINE CRUSHED ROCK — 98% STD.
  - SELECTED FILL WITHOUT CONSPICUOUS CLAY CONTENT — 98% STD.
- BUILDING BASECOURSE — 98% MOD
- FILL UNDER ROAD PAVEMENTS;
  - TO WITHIN 500mm OF FINISHED SUBGRADE LEVEL — 98% STD.
  - UP TO FINISHED SUBGRADE LEVEL — 98% STD.
- ROAD PAVEMENT MATERIALS;
  - SUB BASE — 98% MOD.
  - BASE COURSE — 98% MOD.

THE MAXIMUM COMPACTION IS TO BE NO GREAT THAN 4% ON TOP OF THE ABOVE MENTION VALUES.

S3 GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY. WHERE FINISHED SURFACE LEVELS ARE NOT SHOWN, THE SURFACE SHALL BE GRADED SMOOTHLY SO THAT IT WILL DRAIN AND MATCH ADJACENT SURFACES OR STRUCTURES.

S4 ALL DIMENSIONS GIVEN ARE TO FACE OF KERB, CENTER OF PIPE OR EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.

S5 ANY STRUCTURES, PAVEMENTS OR SURFACES DAMAGED, DIRTIED OR MADE UNSERVICABLE DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE ENGINEER.

S6 ANY FILL REQUIRED SHALL BE APPROVED BY THE ENGINEER / GEOTECHNICAL CONSULTANT

S7 CONTRACTOR IS TO ENSURE THAT ALL EXCAVATIONS ARE MAINTAINED IN A DRY CONDITION WITH NO WATER ALLOWED TO REMAIN IN THE EXCAVATIONS.

S8 ALL FINISHES AND COLOURS TO BE IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS.

S9 REFER TO STRUCTURAL DRAWINGS FOR CONCRETE, REINFORCEMENT AND RETAINING WALL DETAILS.

S10 GENERALLY FOR TRENCHING WORKS THE CONTRACTOR MUST:
A) COMPLY WITH THE GENERAL PROVISIONS OF PART 3.1 "MANAGING RISKS TO HEALTH AND SAFETY" OF NSW WORK AND HEALTH AND SAFETY REGULATION 2011

B) COMPLY PART 6.3 DIVISION 3 "EXCAVATION WORK" OF NSW WORK HEALTH AND SAFETY REGULATION NSW 2011

S11 PRIOR TO THE EXCAVATION OF ANY TRENCH DEEPER THAN 1.5 METRES THE CONTRACTOR MUST:
A) NOTIFY THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY ON THE APPROPRIATE FORM.

STORMWATER DRAINAGE NOTES

SW1 UNLESS NOTED OTHERWISE BY HYDRAULIC ENGINEERS DRAWINGS, ALL DOWNPIPES & GRATED INLETS SHALL BE CONNECTED TO PITS OR MAIN STORMWATER DRAINS WITH 150 DIA. UPVC PIPES LAID AT A MINIMUM GRADE OF 1 IN 100. FOR SYPHONIC ROOF DRAINAGE SYSTEMS ALL DOWNPIPES CONNECTION DRAIN SIZES TO BE CONNECTED INTO MAIN STORMWATER DRAINS SHALL BE IN ACCORDANCE WITH HYDRAULIC ENGINEERS DRAWINGS.

SW2 ALL MAIN STORMWATER DRAINS SHALL BE CONSTRUCTED USING MATERIALS AS SPECIFIED ON THE DRAWINGS IN ACCORDANCE WITH THE APPROPRIATE A.S. IF NOT SPECIFIED THEN CLASS 4 RRJ RCP SHALL BE USED FOR DIAMETERS > 225mm. SEWER CLASS SEH UPVC IN ACCORDANCE WITH AS1260 SHALL BE USED FOR Φ225mm OR SMALLER.

SW3 ALL PIPEWORK TO BE INSTALLED IN ACCORDANCE WITH AS3725 FOR RCP AND AS2032 FOR PVC. ALL BEDDING TO BE TYPE H2 UNLESS NOTED OTHERWISE.

SW4 FOR ALL PITS > 1.2m DEEP, STEP IRONS SHALL BE INSTALLED.

SW5 PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY BONACCI GROUP.

SW6 ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.

SW7 WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.

SW8 GRATES AND COVERS SHALL CONFORM WITH AS 3996 AND AS 1428.1 FOR ACCESS REQUIREMENTS.

SW9 CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES ARE NOT TO BE REDUCED WITHOUT APPROVAL.

SW10 AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.

SW11 ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

KERBING NOTES

K1 ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa U.N.O.

K2 ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 75mm GRANULAR BASECOURSE COMPACTED TO A MINIMUM 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 5.2.1.

K3 EXPANSION JOINTS (EJ) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.

K4 WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.

K5 BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.

K6 IN THE REPLACEMENT OF KERBS:-
- EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O. FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER, NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O.
- EXISTING KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.

JOINTING NOTES

PEDESTRIAN FOOTPATH JOINTS

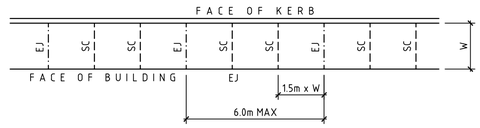
J1 EXPANSION JOINTS (EJ) ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT 6m CENTRES.

J2 SAWCUT JOINTS (SC) ARE TO BE LOCATED AT A MAX 1.5m x WIDTH OF PAVEMENT. THE TIMING OF THE SAWCUT IS TO BE CONFIRMED BY THE CONTRACTOR ON SITE. SITE CONDITIONS WILL DETERMINE HOW MANY HOURS AFTER THE CONCRETE POUR BEFORE THE SAW CUTS ARE COMMENCED.

J3 WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS.

J4 PROVIDE 10mm WIDE FULL DEPTH EXPANSION JOINTS (EJ) BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS

J5 ALL PEDESTRIAN FOOTPATH JOINTINGS AS FOLLOWS (U.N.O.).



VEHICULAR PAVEMENT JOINTS

J6 ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.

J7 LONGITUDINAL WARPING JOINTS (LWJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 3m TO 4.5m MAX CENTERS. ALL LWJ's SHOULD BE TIED UP TO A MAXIMUM TOTAL WIDTH OF 30m.

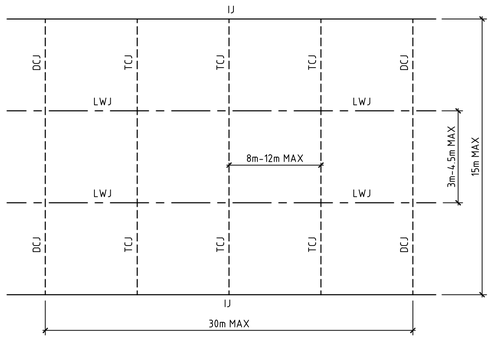
J8 TRANSVERSE CONTRACTION JOINTS (TCJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 8m TO 12m MAX CENTERS. TCJ's CAN BE SPACED AT SUITABLE INTERVALS UP TO A RECOMMENDED MAXIMUM LENGTH OF 15m.

J9 TRANSVERSE DOWELLED CONSTRUCTION JOINTS (DCJ) TO BE PROVIDED FOR PLANNED INTERRUPTIONS SUCH AS AT THE END OF EACH DAY'S OPERATIONS (POUR BREAK), AT BLOCK OUTS FOR BRIDGES AND INTERSECTIONS OR FOR UNEXPECTED DELAYS WHEN THE SUSPENSION OF OPERATIONS IS LIKELY TO CREATE A JOINT.

J10 ISOLATION JOINTS WITH SUB-GRADE BEAM (IJ) TO BE PROVIDED AT INTERSECTIONS OR AT THE JUNCTION OF A POUR BREAK.

J11 ALL VEHICULAR PAVEMENTS TO BE JOINTED IN ACCORDANCE WITH AUSTROADS AGPT02-12 GUIDE TO PAVEMENT TECHNOLOGY PART 2 STRUCTURAL PAVEMENT DESIGN AND SUPPLEMENT AP-T36-06 PAVEMENT DESIGN FOR LIGHT TRAFFIC

J12 VEHICULAR PAVEMENT JOINTING AS FOLLOWS (U.N.O.)



COPYRIGHT
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.
All rights reserved.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER ISSUE	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

Rev	Description	Date	By	App

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

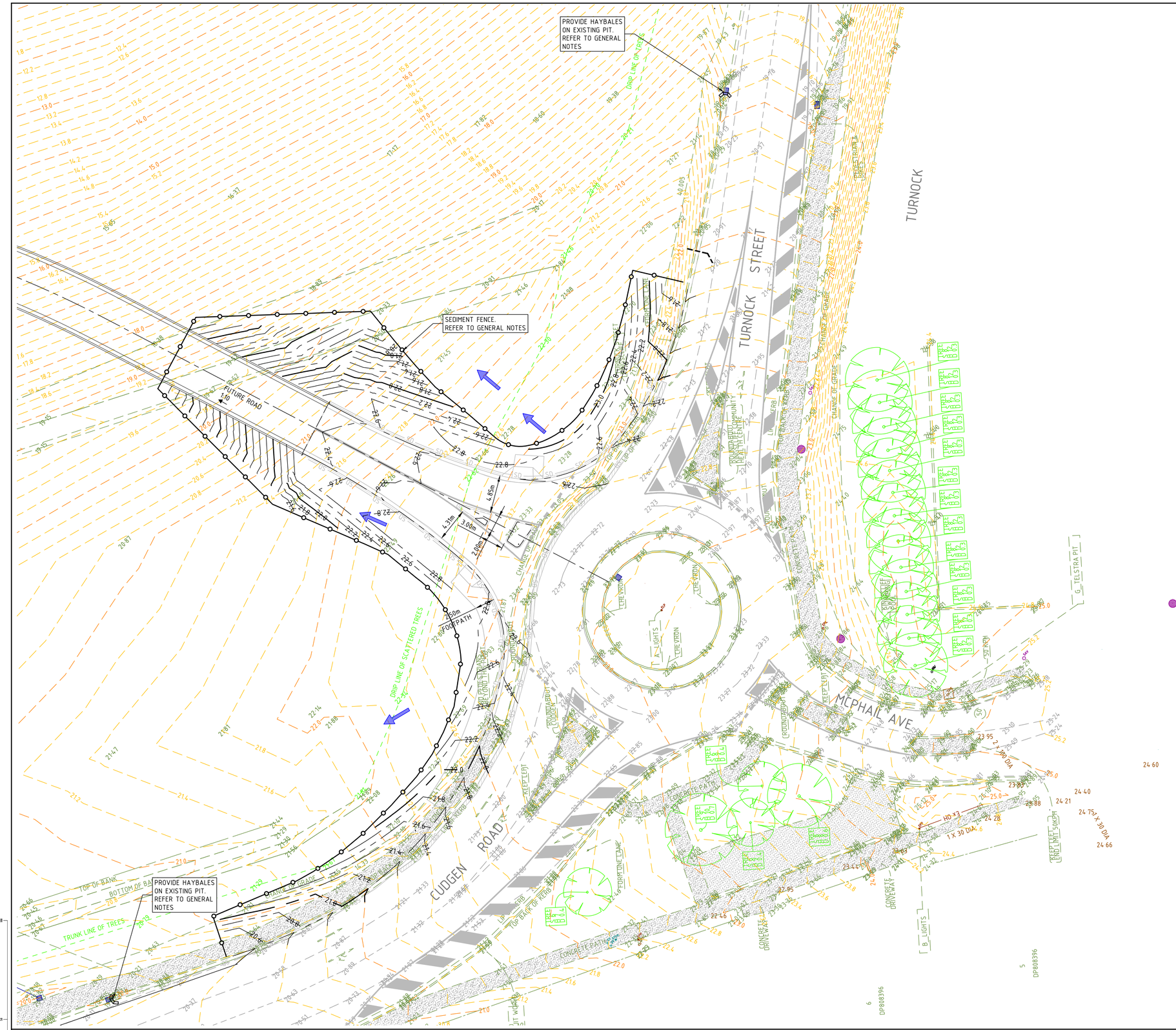
Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS

Drawing Title: DRAWING REGISTER AND CONSTRUCTION NOTES

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		North
Scale	NTS	Project Ref	Drawing No / Rev
Date	3.10.2018	20 10748 01	C500 P2
Sheet	A1		

File: G:\Job\10748\01_Civil\IssuedDwg\10748-C-C500-CAD[P2].dwg Plotted: 05.11.18 at 9:20 PM By: Cameron Stanford



LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- INDICATIVE DIRECTION OF OVERLAND FLOW PATH
- SEDIMENT FENCE REFER TO DRAWING C560 FOR DETAILS
- SANDBAG SEDIMENT TRAP REFER TO DETAIL SHEET C507

GENERAL NOTES:

1. ALL EROSION & SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH TWEED SHIRE COUNCILS DEVELOPMENT DESIGN SPECIFICATIONS D7-STORMWATER QUALITY, & ITS ANNEXURE A - CODE OF PRCATICE FOR SOIL AND WATER MANAGEMENT ON CONSTRUCTION SITES.

COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER ISSUE	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

Rev	Description	Date	By	App

5.0 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:250 A1 SHEET

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS

Drawing Title: SEDIMENT AND EROSION CONTROL PLAN

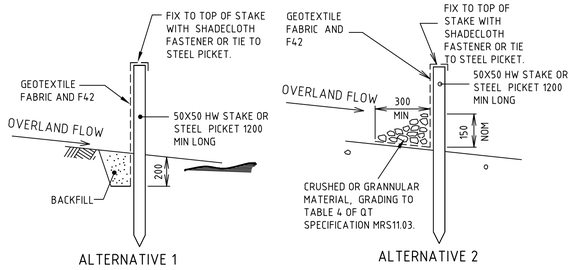
TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	NTS		
Date	3.10.2018		
Sheet	A1		

North

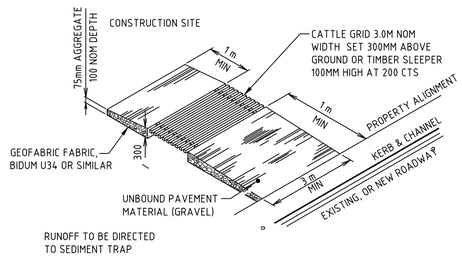
Project Ref	Drawing No	Rev
20 10748 01	C505	P2

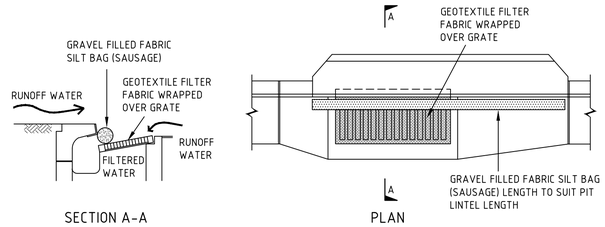
File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C505-CADP2].dwg Plotted: 05.11.18 at 9:21 PM By: Cameron Stanford



TEMPORARY CONSTRUCTION VEHICLE ENTRY/EXIT SEDIMENT TRAP

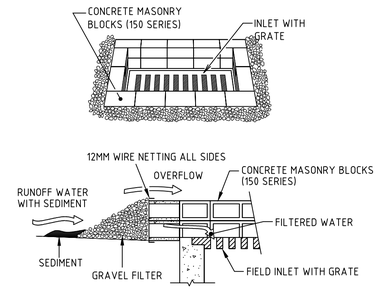
NOT TO SCALE





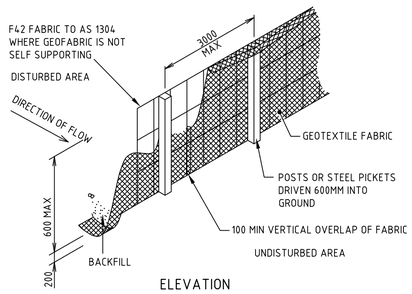
KERB INLET SEDIMENT TRAP

NOT TO SCALE



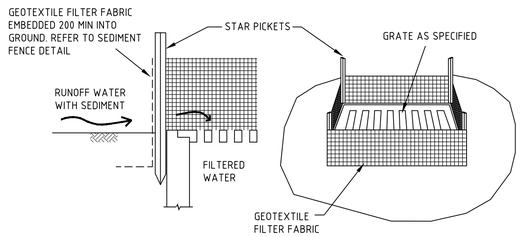
FIELD INLET SEDIMENT TRAP

NOT TO SCALE



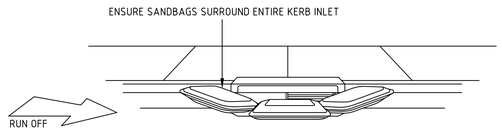
SEDIMENT FENCE

NOT TO SCALE



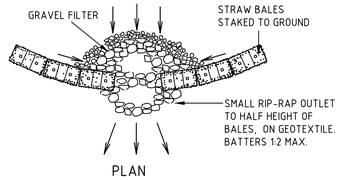
GEOTEXTILE PIT FILTER 1

NOT TO SCALE



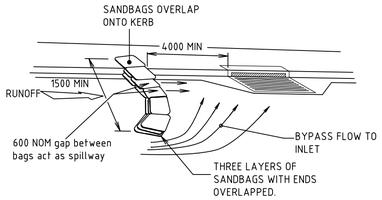
SANDBAG KERB INLET SEDIMENT TRAP

NOT TO SCALE



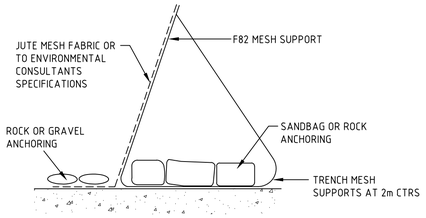
STRAW BALE AND STONE TRAP SEDIMENT CONTROL (CONCENTRATE FLOW)

NOT TO SCALE



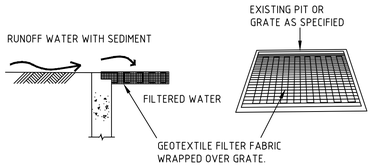
ON GRADE KERB INLET SEDIMENT TRAP

NOT TO SCALE



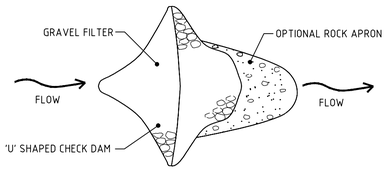
ALTERNATIVE SEDIMENT FENCE

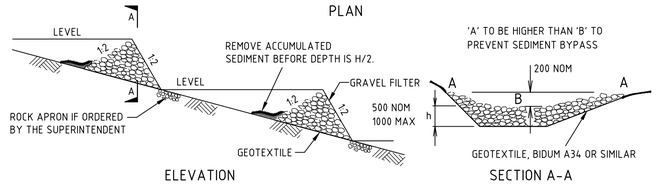
NOT TO SCALE



GEOTEXTILE PIT FILTER 2

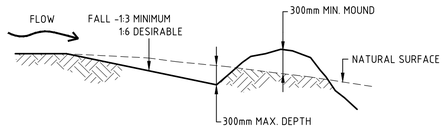
NOT TO SCALE





CHECK DAMS FLOW CONTROL

NOT TO SCALE

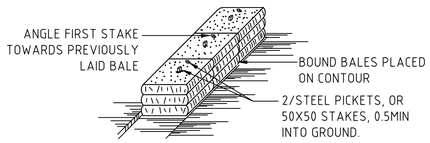


CATCH DRAIN

NOT TO SCALE

ALTERNATIVE SEDIMENT FENCE NOTES

1. INSTALL THIS TYPE OF SEDIMENT FENCE WHEN USE OF SUPPORT POSTS IS NOT DESIRABLE OR NOT POSSIBLE. SUCH CONDITIONS MIGHT APPLY, FOR EXAMPLE, WHERE APPROVAL IS GRANTED FROM THE APPROPRIATE AUTHORITIES TO PLACE THESE FENCES IN HIGHLY SENSITIVE ESTUARINE AREAS.
2. USE BENT TRENCH MESH TO SUPPORT THE F82 WELDED MESH FACING AS SHOWN ON THE DRAWING ABOVE. ATTACH THE JUTE MESH TO THE WELDED MESH FACING USING UV-RESISTANT CABLE TIES.
3. STABILISE THE WHOLE STRUCTURE WITH SANDBAG OR ROCK ANCHORING OVER THE TRENCH MESH AND THE LEADING EDGE OF THE JUTE MESH. THE ANCHORING SHOULD BE SUFFICIENTLY LARGE TO ENSURE STABILITY OF THE STRUCTURE IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.



ANCHORING DETAIL

BEDDING DETAIL

STRAW BALE BANK SEDIMENT CONTROL

NOT TO SCALE

COPYRIGHT
All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P1	ISSUED FOR TENDER ISSUE	05.11.18	PA	-

Rev	Description	Date	By	App

BONACCI
BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

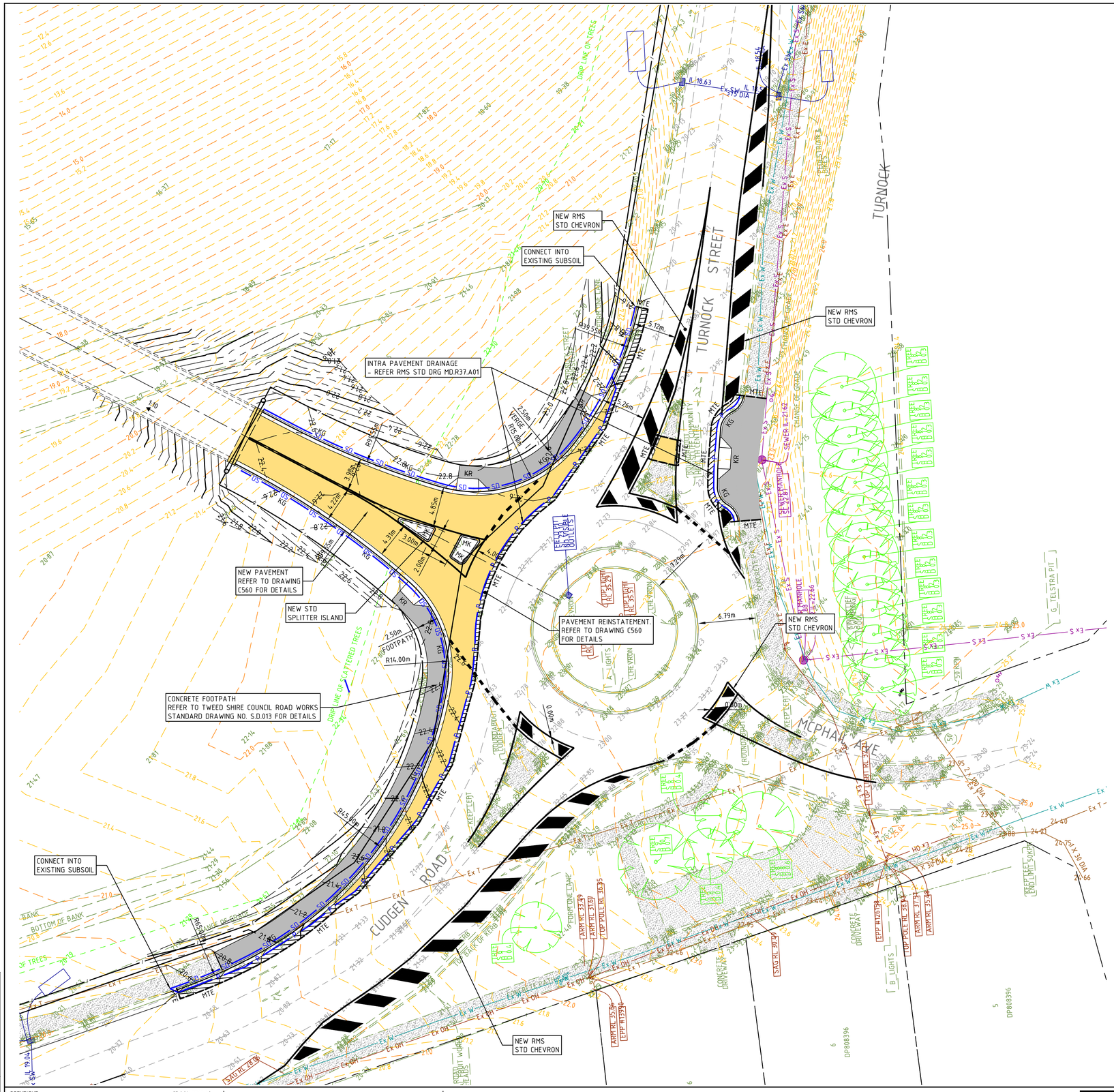
Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS

Drawing Title: SOIL AND WATER MANAGEMENT DETAILS

TENDER

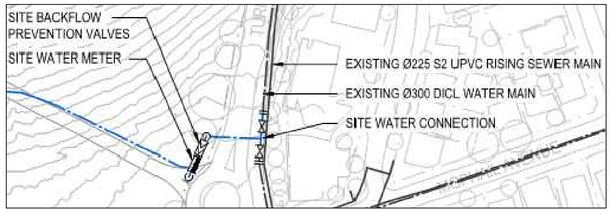
Designed	P.A	Project Director Approved	Date
Drawn	P.A		North
Scale	-		
Date	02.10.18	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C507 / P1

File: G:\Job\10748\01_Civil\10748C-C507.dwg Plotted: 05.11.18 at 9:27 PM By: Cameron Stanford



LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- Ex S — EXISTING SEWER
- Ex OH — EXISTING OVERHEAD LINES
- Ex T — EXISTING TELSTRA
- EXISTING STORMWATER
- Ex W — EXISTING WATER
- 19.0 — DESIGN MINOR CONTOUR
- 20.0 — DESIGN MAJOR CONTOUR
- KG — KERB AND GUTTER REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAILS
- KO — KERB ONLY REFER TO TYPICAL DETAILS AT DRAWING NO. 560
- MK — MOUNTABLE KERB REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.007 FOR DETAILS
- KR — KERB RAMP REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D.014 FOR DETAILS
- PAVEMENT TYPE 1 HEAVY DUTY ASPHALT PAVEMENT. REFER TO DRAWING C560 FOR DETAILS
- CONCRETE FOOTPATH REFER TO TWEED SHIRE COUNCIL ROAD WORKS STANDARD DRAWING NO. S.D.013 FOR DETAILS
- PAVEMENT REINSTATEMENT REFER TO DRAWING C560 FOR DETAILS
- MTE — MATCH TO EXISTING PAVEMENT
- SD — SUBSOIL DRAINAGE - REFER TO TWEED SHIRE COUNCIL ROADWORKS STANDARD DRAWING NO. S.D. 012 FOR DETAIL (UNO)
- P — INTRA PAVEMENT DRAINAGE - REFER RMS STD DRG MD.R37.A01
- FENCE LINE
- BOUNDARY



PROPOSED FUTURE POTABLE WATER CONNECTION BY TWEED SHIRE COUNCIL

NOT TO SCALE

COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P3	RE-ISSUED FOR TENDER	22.11.18	CS	-
P2	ISSUED FOR TENDER	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

Rev	Description	Date	By	App

5.0 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:250 A1 SHEET

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

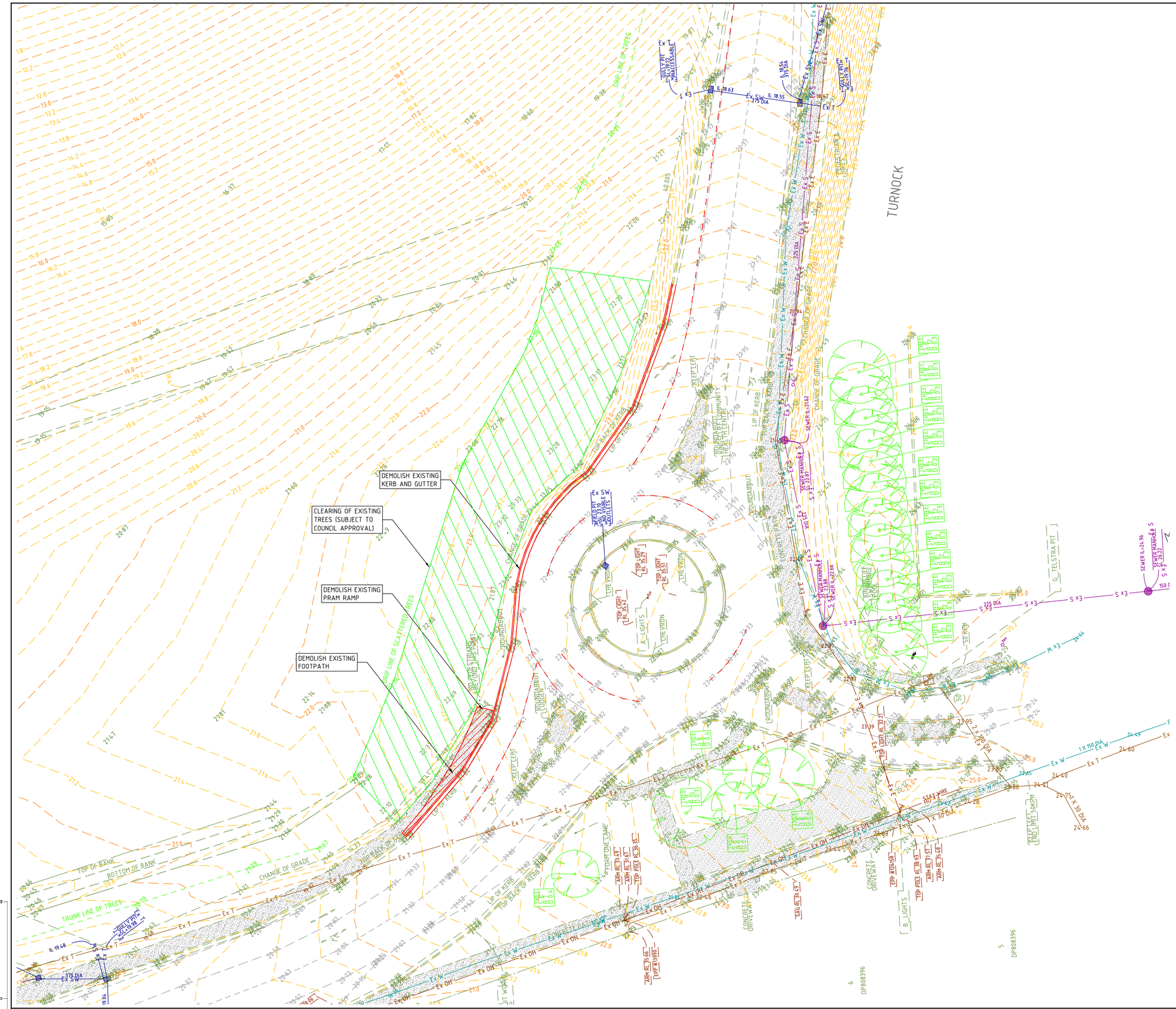
Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS

Drawing Title: EXTERNAL WORKS INTERSECTION PLAN

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:250		
Date	3.10.2018	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C540 P3

File: G:\Job\10748 NEW\03 Work in Progress\02 Civil\01 CAD\01 Autocad\10748C-C540.dwg Plotted: 22.11.18 at 12:23 PM By: Cameron Stanford



LEGEND

- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- Ex S — EXISTING SEWER
- Ex OH — EXISTING OVERHEAD LINES
- Ex T — EXISTING TELSTRA
- Ex SW — EXISTING STORMWATER
- Ex W — EXISTING WATER
- Ex OF — EXISTING OPTICAL FIBRE
- KG — EXISTING KERB AND GUTTER TO BE REMOVED
- EXISTING LINEMARKING TO BE REMOVED (ALLOW TO GRIND EXISTING LINEMARKING AND PATCH AND PATCH AS REQUIRED)

COPYRIGHT All rights reserved.
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER ISSUE	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

Rev	Description	Date	By	App

5.0 0 2.5 5.0 7.5 10.0m
PLAN SCALE 1:250 A1 SHEET

BONACCI
BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS

Drawing Title: DEMOLITION PLAN

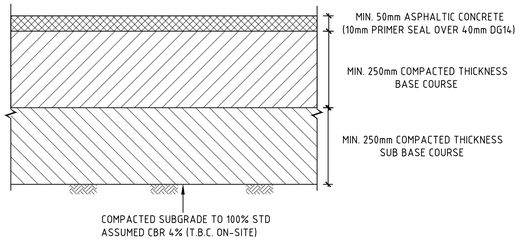
TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	1:250		
Date	3.10.2018		
Sheet	A1		

North

Project Ref	Drawing No	Rev
20 10748 01	C545	P2

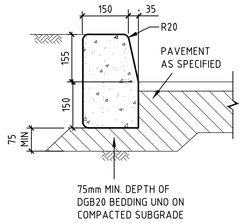
File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C545-CADP2).dwg Plotted: 05.11.18 at 9:24 PM By: Cameron Stanford



PAVEMENT TYPE P1
HEAVY DUTY ASPHALT PAVEMENT

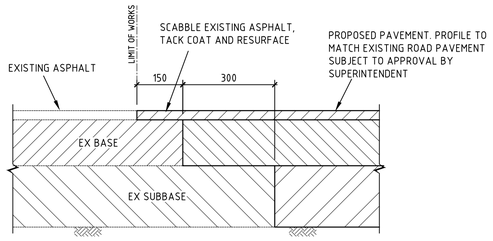
SCALE 1:10

DENOTED ON PLAN



KERB ONLY (KO)

SCALE 1:10



AC CONNECTION TO EXISTING PAVEMENT

SCALE 1:10

ROAD DESIGN PARAMETERS (FLEXIBLE)

DESIGN TRAFFIC 1.5 X 10^6 (ESA's OR HVAG)

ASSUMPTIONS:

- TWEED SHIRE COUNCIL PAVEMENT DESIGN TABLE D2.2 ARTERIAL DISTRIBUTOR, SHOPPING STRIP ACCESS, INDUSTRIAL, DESIGN PERIOD 25 YEAR.
- CBR 4.0%
- PREPARE SUBGRADE AND SELECT FILL IN ACCORDANCE WITH (MORRISON GEOTECH, REFERENCE NO. GE18/144-REV 1)

COPYRIGHT
These drawings, plans and specifications and the copyright therein are the property of the Bonacci Group and must not be used, reproduced or copied wholly or in part without the written permission of the Bonacci Group. All rights reserved.

Rev	Description	Date	By	App
P2	ISSUED FOR TENDER ISSUE	05.11.18	PA	-
P1	ISSUED FOR DRAFT TENDER	02.11.18	PA	-

Rev	Description	Date	By	App

BONACCI GROUP Pty Ltd
ABN 42 060 332 345
Consulting Engineers, Structural - Civil - Infrastructure
Level 6, 37 York Street, Sydney, NSW 2000 Australia
Tel: +61 2 8247 8400 Fax: +61 2 8247 8444
sydney@bonaccigroup.com
www.bonaccigroup.com

Project Name: TWEED VALLEY HOSPITAL DEVELOPMENT, TURNOCK STREET ROUNDABOUT WORKS

Drawing Title: CIVIL WORKS DETAILS

TENDER

Designed	CS	Project Director Approved	Date
Drawn	PA		
Scale	NOTED		
Date	3.10.2018	Project Ref	Drawing No / Rev
Sheet	A1	20 10748 01	C560 P2

North

File: G:\Job\10748\01_Civil\Issued\Dwg\10748C-C560-CAD(P2).dwg Plotted: 05.11.18 at 9:24 PM By: Cameron Stanford