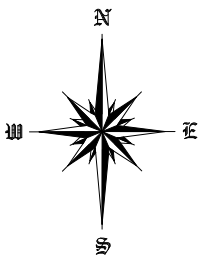
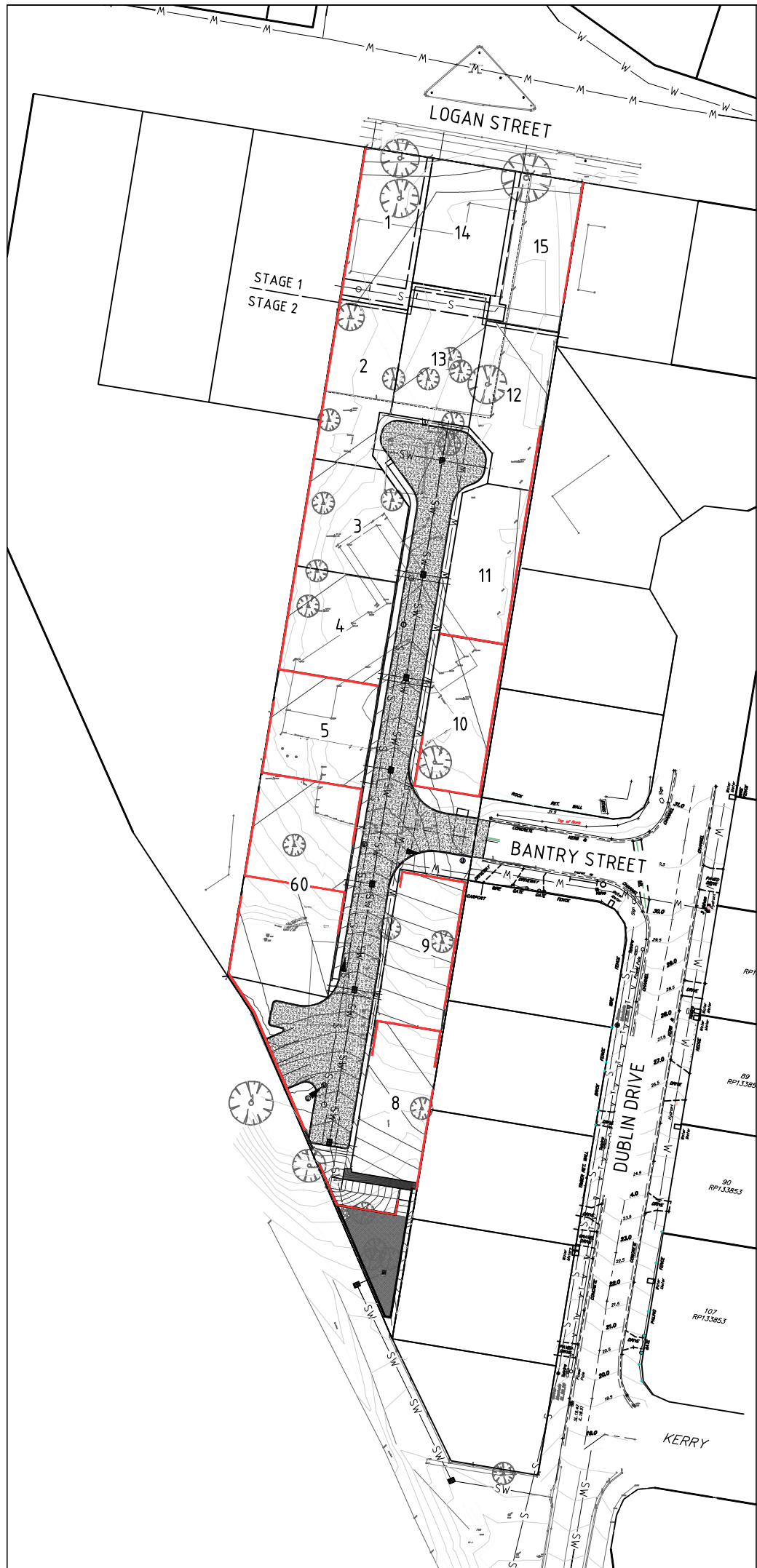


PREVIOUS APPROVAL

3/6 Bantry Court, Eagleby QLD 4207

Lot 60 on SP305652

March 2026



- GENERAL NOTES:
1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH LOGAN CITY COUNCIL'S SPECIFICATIONS. CONTRACTOR TO OBTAIN AND RETAIN A COPY ON SITE DURING THE COURSE OF THE WORKS.
 2. ALL NEW WORKS ARE TO MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS, AND MARRY IN A 'WORKMANLIKE' MANNER.
 3. THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL SERVICES WITH EACH RELEVANT AUTHORITY. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED BY THE CONTRACTOR OR THE RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE. SERVICES SHOWN ON THESE PLANS ARE ONLY THOSE EVIDENT AT THE TIME OF SURVEY OR AS DETERMINED FROM SERVICE DIAGRAMS. CLA CONSULTANTS CANNOT GUARANTEE THE INFORMATION SHOWN NOR ACCEPT ANY RESPONSIBILITY FOR INACCURACIES OR INCOMPLETE DATA.
 4. SERVICES & ACCESSES TO THE EXISTING PROPERTIES ARE TO BE MAINTAINED IN WORKING ORDER AT ALL TIMES DURING CONSTRUCTION.
 5. ADJUST EXISTING SERVICE COVERS TO SUIT NEW FINISHED LEVELS TO RELEVANT AUTHORITY REQUIREMENTS WHERE NECESSARY.
 6. REINSTATE AND STABILISE ALL DISTURBED LANDSCAPED AREAS.
 7. MINIMUM GRADE OF SUBSOIL SHALL BE 0.5% (1:200) FALL TO OUTLETS.
 8. ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, EROSION AND SEDIMENTATION CONTROL PLAN AND LOCAL COUNCIL'S REQUIREMENTS WHERE APPLICABLE.
 9. CONTRACTOR TO CHECK AND CONFIRM SITE DRAINAGE CONNECTIONS ACROSS THE VERGE PRIOR TO COMMENCEMENT OF SITE DRAINAGE WORKS.
 10. PROPERTIES AFFECTED BY THE WORKS ARE TO BE NOTIFIED IN ADVANCE WHERE DISRUPTION TO EXISTING ACCESS IS LIKELY.

132-134 LOGAN STREET EAGLEBY
CIVIL ENGINEERING DRAWINGS
FOR
BOSS DEVELOPMENTS (QLD) PTY LTD

- LEGEND
- SEWER — S —
 - SEWER RISING MAIN — RM —
 - WATER — W —
 - STORMWATER — SW —
 - ELECTRICAL - OVERHEAD — V — V —
 - ROAD CENTRELINE — — — — —
 - EDGE OF BITUMEN — — — — —
 - KERB AND CHANNEL — — — — —
 - CONTOURS - EXISTING — — — — —
 - CONTOURS - PROPOSED — — — — —
 - SPOT LEVELS - EXISTING — — — — —
 - SPOT LEVELS - PROPOSED — — — — —
 - PROPOSED ROAD WIDENING — — — — —
 - BOULDER RETAINING WALL — — — — —
 - PROPOSED CONCRETE — — — — —
 - CONCRETE SLEEPER RETAINING WALL — — — — —
 - REINFORCED CONCRETE BLOCK RETAINING WALL — — — — —

LOGAN CITY COUNCIL
APPROVED PLAN OF DEVELOPMENT
This is the approved plan of development for Development Application
OW/405/2017

DRAWING SCHEDULE	
NUMBER	TITLE
16220 - 0-01	SITE PLAN, DRAWING SCHEDULE & NOTES
16220 - 1-01	EROSION & SEDIMENT CONTROL PLAN
16220 - 2-01	BULK EARTHWORKS PLAN
16220 - 2-02	EASTERN RETAINING WALL SECTION
16220 - 2-03	WESTERN RETAINING WALL SECTION
16220 - 3-01	SITE GRADING & DRAINAGE PLAN SHEET 1 OF 3
16220 - 3-02	SITE GRADING & DRAINAGE PLAN SHEET 2 OF 3
16220 - 3-03	SITE GRADING & DRAINAGE PLAN SHEET 3 OF 3
16220 - 3-04	DRIVEWAY PLAN AND LONG SECTION
16220 - 3-05	SITE CROSS SECTIONS SHEET 1 OF 2
16220 - 3-06	SITE CROSS SECTIONS SHEET 2 OF 2
16220 - 3-07	STORMWATER DRAINAGE LONG SECTIONS
16220 - 3-08	BIO-RETENTION FILTER PLAN & DETAILS
16220 - 3-09	BIO-RETENTION FILTER SECTIONS
16220 - 3-10	STORMWATER CATCHMENT PLAN & CALCULATIONS
16220 - 4-01	SEWER RETICULATION NOTES & DETAILS
16220 - 4-02	SEWER RETICULATION PLAN SHEET 1 OF 2
16220 - 4-03	SEWER RETICULATION PLAN SHEET 2 OF 2
16220 - 4-04	SEWER LONGITUDINAL SECTIONS
16220 - 5-01	WATER RETICULATION PLAN



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CLIENT
BOSS DEVELOPMENTS
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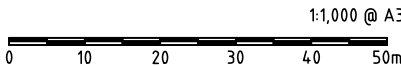
PROJECT
132-134 LOGAN
STREET EAGLEBY

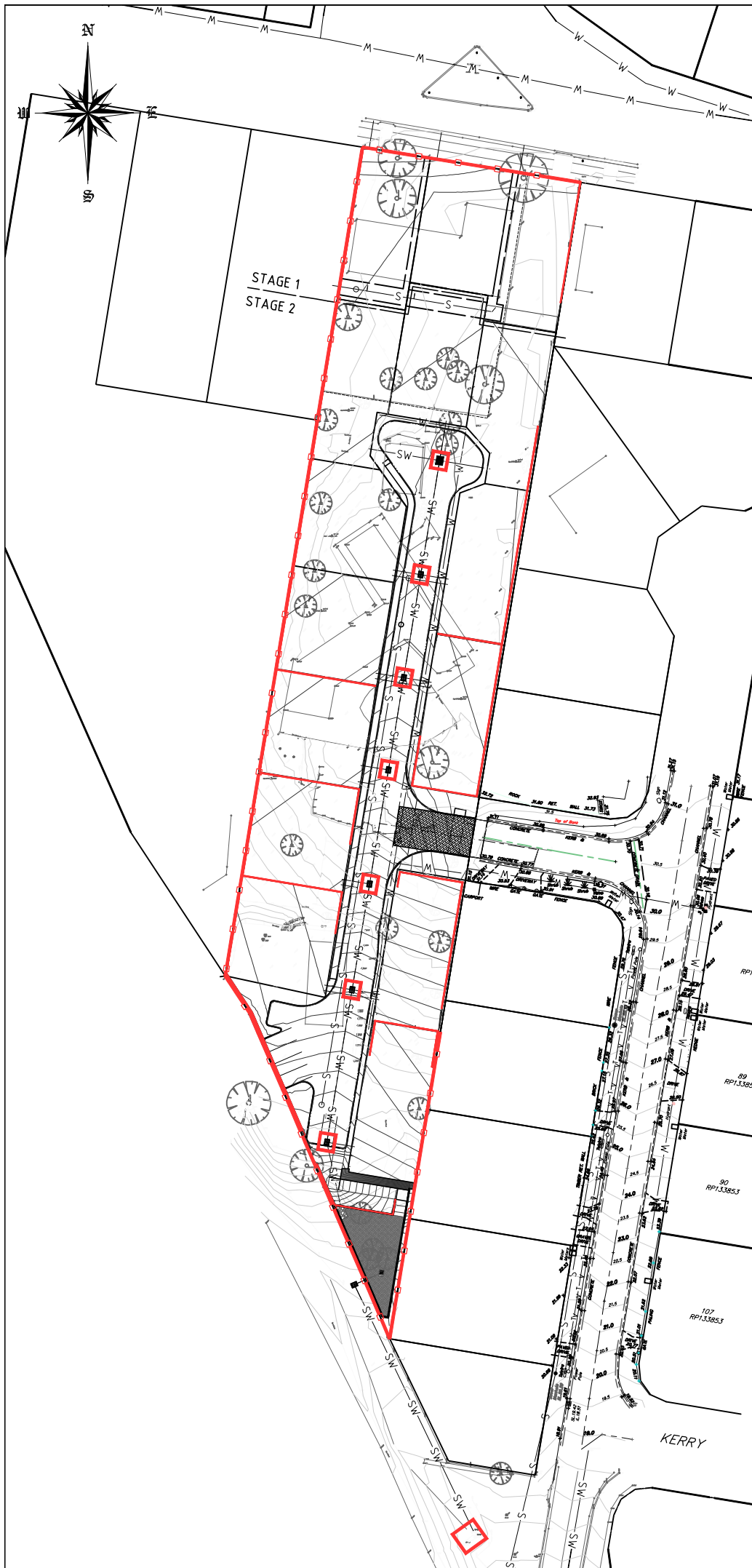
PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
DRAWN	RC LEONARD
REVIEWED	CBL
DATE	20 SEPTEMBER 2016

APPROVED				
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G	LCC RFI	RCL	13/12/17	CBL
F	RISKSMT	RCL	16/09/17	CBL
E	COMM SEWER	RCL	28/05/17	CBL
D	TMR RFI	RCL	14/02/17	CBL
C	SEWER COMMAND	RCL	19/01/18	CBL
B	STAGE BDY	RCL	25/11/16	CBL
A	REV LAYOUT	RCL	31/10/16	CBL
REV.	DESCRIPTION	BY	DATE	APPRD

NAME
SITE PLAN, DRAWING
SCHEDULE & NOTES

PROJECT REF.	DRAWING NO.	REVISION
16220	0-01	H

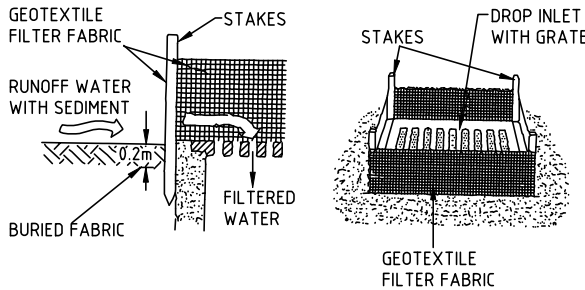




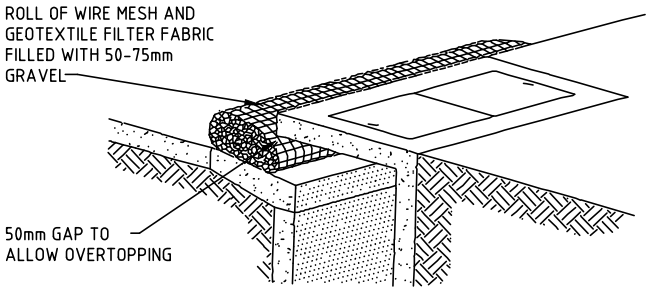
Prior to the Commencement of Works		
a	Submission of a copy of the Contractor's Program for the Works.	Contractor
b	Submit program for the implementation and monitoring (inspection type) of the specified sedimentation control measures for approval.	Contractor Superintendent /Council
c	Approve submitted program	
During Construction		
a	Install sedimentation and control measures (measures)	Contractor Superintendent
b	Approval of the Measures as constructed	Contractor Superintendent
c	Periodic inspection of the measures	Contractor Superintendent
d	Rectification of issues identified by periodic inspection	Contractor Superintendent
e	Inspection of adjacent roads and drains	Contractor Superintendent
On Maintenance		
a	Submit program for the continued maintenance of the works during the "On Maintenance" period.	Contractor Superintendent in conjunction with Council
b	Approve submitted program	
c	Install/maintain sedimentation and erosion control measures	Contractor Superintendent
d	Installation	Contractor Superintendent
e	Approval of Measures as implemented	Contractor Superintendent in conjunction with Council
f	Routine inspection of implemented measures (including adjacent road network)	Contractor Superintendent
Off Maintenance		
f	Rectification/Reinstatement of sediment and erosion control measures	Contractor Superintendent
g	Off Maintenance	Contractor Superintendent
	Removal of Erosion and sedimentation Control Measures	Contractor Superintendent

LEGEND

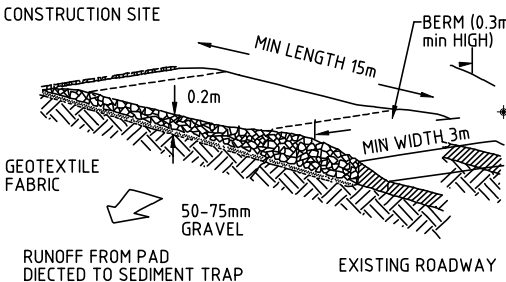
SILT FENCE	
VEHICLE SHAKEDOWN	
INLET SEDIMENT TRAP	



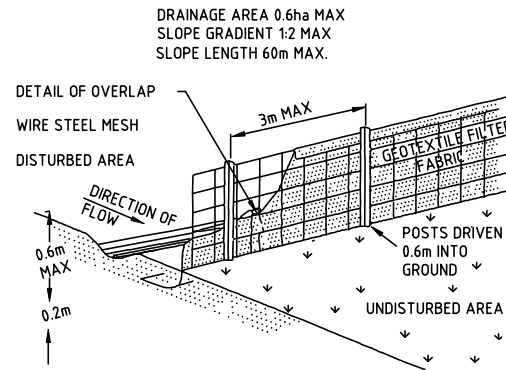
INLET SEDIMENT TRAP



PORTABLE GRAVEL KERB SEDIMENT TRAP



VEHICLE SHAKEDOWN AREA



SILT FENCE

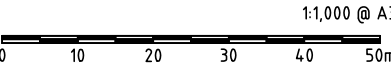
PLACE PORTABLE KERB SEDIMENT TRAP AS PER DETAIL AT ALL GULLY PITS AFFECTED BY SITE CONSTRUCTION WORKS

- Sedimentation and Erosion Control**
1. Sedimentation and erosion control implementation and maintenance shall be in accordance with Logan City Council's Development Manual as read in conjunction with the document titled "Environmental Best Management Practices". The Contractor shall make himself aware of the prevailing weather conditions and shall take all necessary precautions to secure the site at the completion of each day's work, and whenever else is considered necessary.
 2. Sediment and erosion control measures shall be provided as required to prevent the movement of dust and/or silt from the site.
 3. Sediment and erosion control measures shall be installed downstream of any work area prior to the commencement of work in that area.
 4. Erosion and sedimentation control measures shall be installed prior to the disturbance of the site and as required during the course of the works.
 5. Topsoil shall be stripped in accordance with the specification and stockpiles at locations as agreed by the superintendent and Council's designated representative.
 6. All disturbed areas shall be stabilised with the provision of 75mm minimum topsoil and grass seeded, mulched, re-vegetated etc within 7 days of the completion of final allotment earthworks.
 7. All sediment control measures and devices shall be inspected for structural damage after each rainfall event and at the completion of each days work. All trapped sediment shall be removed to an approved location on site for re-use on site or for subsequent removal from the site. Site disposal will only be approved when it can be established that no additional erosion can occur.
 8. Sediment and erosion control measures around stockpiles shall include but not necessarily be limited to:-
 - a) Provision of a silt fence below the stockpile, as indicated by the natural slopes of the land,
 - b) Provision of grass cover if stockpile is to remain in place for more that 30 days,
 - c) Provision of a surface emulsion or approved equivalent to prevent wind erosion.
 9. Place 600mm width turf at both top and toes of retaining walls and tops of new kerb.
 10. Water areas of construction regularly as required to obviate potential for dust nuisance to adjoining properties and the site generally.

Construction Traffic Shakedown

Provide construction traffic shake down device at all relevant site exit points. Clean out and maintain shake down device regularly to ensure efficient operation.

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CLIENT
BOSS DEVELOPMENTS (QLD) PTY LTD

PROJECT
132-134 LOGAN STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
DRAWN	RC LEONARD
REVIEWED	CBL
DATE	20 SEPTEMBER 2016

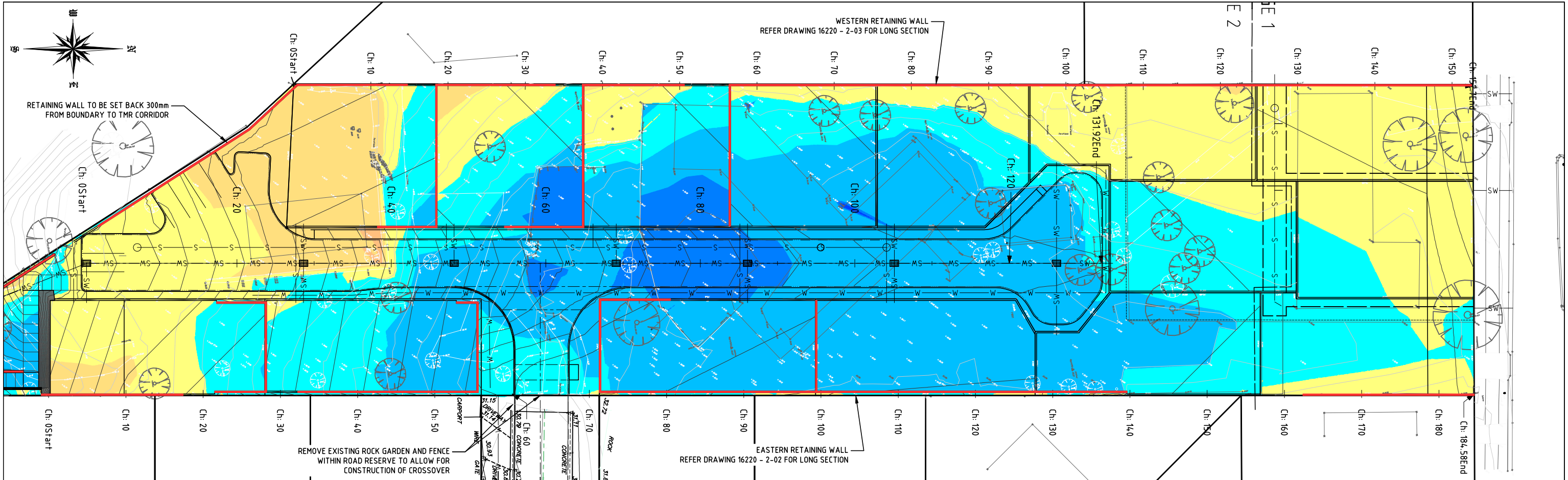
APPROVED

FIEAust CPEng RPEQ 4293

D	LCC RFI	RCL	13/12/17	CBL
C	TMR RFI	RCL	14/02/17	CBL
B	SEWER AMNDT	RCL	17/01/17	CBL
A	REV LAYOUT	RCL	31/10/16	CBL
REV.	DESCRIPTION	BY	DATE	APPRD

NAME
EROSION & SEDIMENT CONTROL PLAN

PROJECT REF.	DRAWING NO.	REVISION
16220	1-01	D



COMPACTION REQUIREMENTS	
BUILDING PAD	100% RELATIVE COMPACTION (STANDARD)
UNDER PAVEMENT (<300MM BELOW SUBGRADE LEVEL)	100% RELATIVE COMPACTION (STANDARD)
FILL GREATER THAN 300MM FROM SUBGRADE	95% RELATIVE COMPACTION (STANDARD)
EXISTING MATERIAL WITHIN 300MM OF STRIPPED SURFACE	95% RELATIVE COMPACTION (STANDARD)

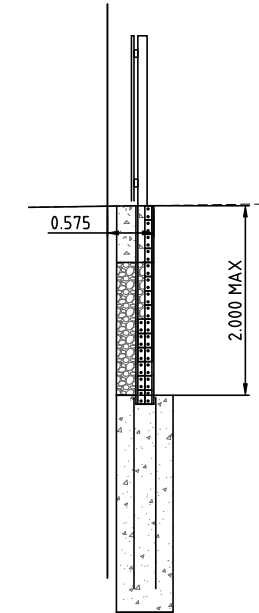
- EARTHWORKS NOTES**
1. ALL EARTHWORKS TO BE CARRIED OUT IN ACCORDANCE WITH AUSTRALIAN STANDARD 3798-GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
 2. EXCESS SPOIL MATERIAL SHALL BE REMOVED FROM THE SITE TO AN APPROVED LOCATION THE CONTRACTOR SHALL PROVIDE DETAILS OF THE SPOIL SITE TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO THE COMMENCEMENT OF SPOIL REMOVAL OPERATIONS.
 3. SEDIMENTATION AND EROSION CONTROL MEASURES TO BE INSTALLED AND APPROVED PRIOR TO THE COMMENCEMENT OF EARTHWORKS.
 4. ANY FILL BATTERS STEEPER THAN 1V:4H AND GREATER THAN 1.0M IN HEIGHT REQUIRE LODGEMENT OF BUILDING APPLICATION.
 5. ANY RETAINING WALLS GREATER THAN 1.0M IN HEIGHT REQUIRE LODGEMENT OF BUILDING APPLICATION.
 6. ALL WORKS TO BE IN ACCORDANCE WITH LCC PLANNING SCHEME.
 8. BULK EARTHWORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD 3798.
 9. THE CONTRACTOR SHALL PROVIDE LEVEL 1 CERTIFICATION OF THE FILL MATERIAL PRIOR TO THE COMMENCEMENT OF FURTHER CIVIL WORKS.
 10. BATTERS TO BE TURFED/MULCHED PRIOR TO ON MAINTENANCE INSPECTION.
 11. ALL EXPOSED EARTHWORKS TO BE SEEDED PRIOR TO ON MAINTENANCE INSPECTION.

- RETAINING WALL NOTES**
1. RETAINING WALLS TO BE CONCRETE SLEEPER WALLS.
 2. ALL WALLS GREATER THAN 1.0m REQUIRE BUILDING APPROVAL AND DESIGN/CERTIFICATION BY AN RPEQ (STRUCTURAL).
 3. 1.8m TIMBER FENCES SHOWN AT TOP OF WALLS GENERALLY.
 4. STRUCTURAL DETAILS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. REFER STRUCTURAL ENGINEER'S DRAWINGS FOR FOOTINGS, REINFORCEMENT ETC.

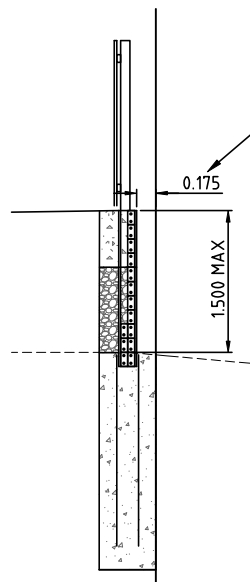
LEGEND	
CUT/FILL DEPTH (m)	Colour
-5.00 to -4.00	Blue
-4.00 to -3.00	Blue
-3.00 to -2.00	Blue
-2.00 to -1.00	Blue
-1.00 to 0.00	Blue
0.00 to 1.00	Yellow
1.00 to 2.00	Yellow
2.00 to 3.00	Yellow

LEGEND	
Boulder retaining wall	Patterned box
Concrete sleeper retaining wall	Red line
Reinforced concrete block retaining wall	Red dashed line

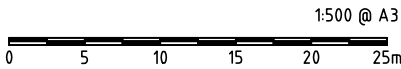
LOGAN CITY COUNCIL
APPROVED PLAN OF DEVELOPMENT
This is the approved plan of development for Development Application
OW/405/2017
Drawing approved for pre-start



TYPICAL SECTION
CONCRETE SLEEPER
RETAINING WALL IN CUT
NTS



TYPICAL SECTION
CONCRETE SLEEPER
RETAINING WALL IN FILL
NTS



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CLIENT
**BOSS DEVELOPMENTS
(QLD) PTY LTD**

PROJECT
**132-134 LOGAN
STREET EAGLEBY**

PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
DRAWN	RC LEONARD
REVIEWED	CBL
DATE	20 SEPTEMBER 2016

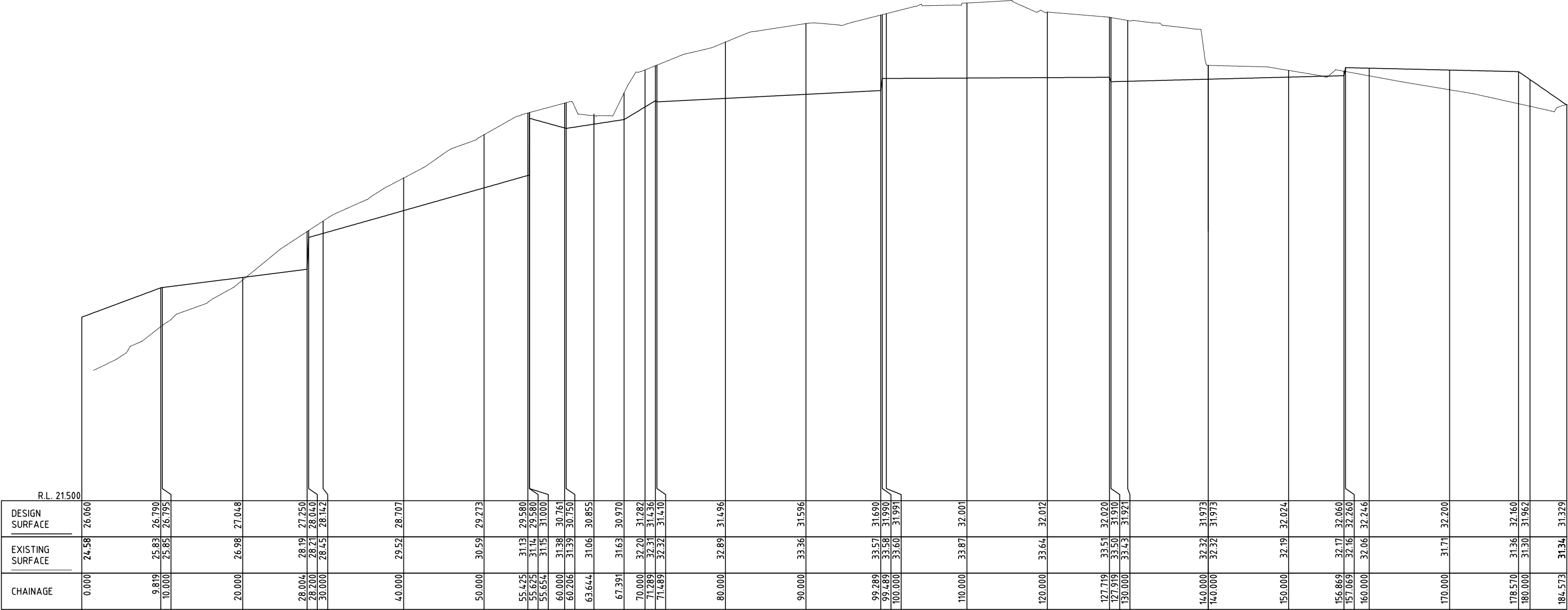
APPROVED

RPEQ Aust CP/Eng RPEQ 4293

C	LCC RFI	RCL	13/12/17	CBL
B	RISKSMT	RCL	16/09/17	CBL
A	TMR RFI	RCL	14/02/17	CBL
REV.	DESCRIPTION	BY	DATE	APPRD

NAME
**BULK EARTHWORKS
PLAN**

PROJECT REF.	DRAWING NO.	REVISION
16220	2-01	C



LOGAN CITY COUNCIL
APPROVED PLAN OF DEVELOPMENT
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VERTICAL 1:100 @ A3
HORIZONTAL 1:500 @ A3



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PROJECT
132-134 LOGAN STREET EAGLEBY

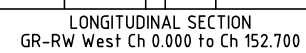
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APPROVED	

CLIENT
BOSS DEVELOPMENTS (QLD) PTY LTD

A	LCC RFI	RCL	13/12/17	CBL
REV.	DESCRIPTION	BY	DATE	APPRD

NAME
EASTERN RETAINING WALL SECTION

PROJECT REF.	DRAWING NO.	REVISION
16220	2-02	A



OW/405/2017

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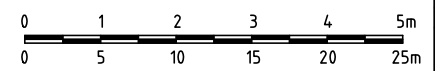
PROJECT
132-134 LOGAN
STREET EAGLEBY

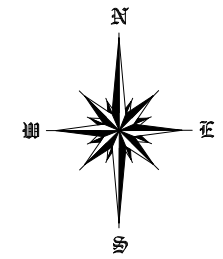
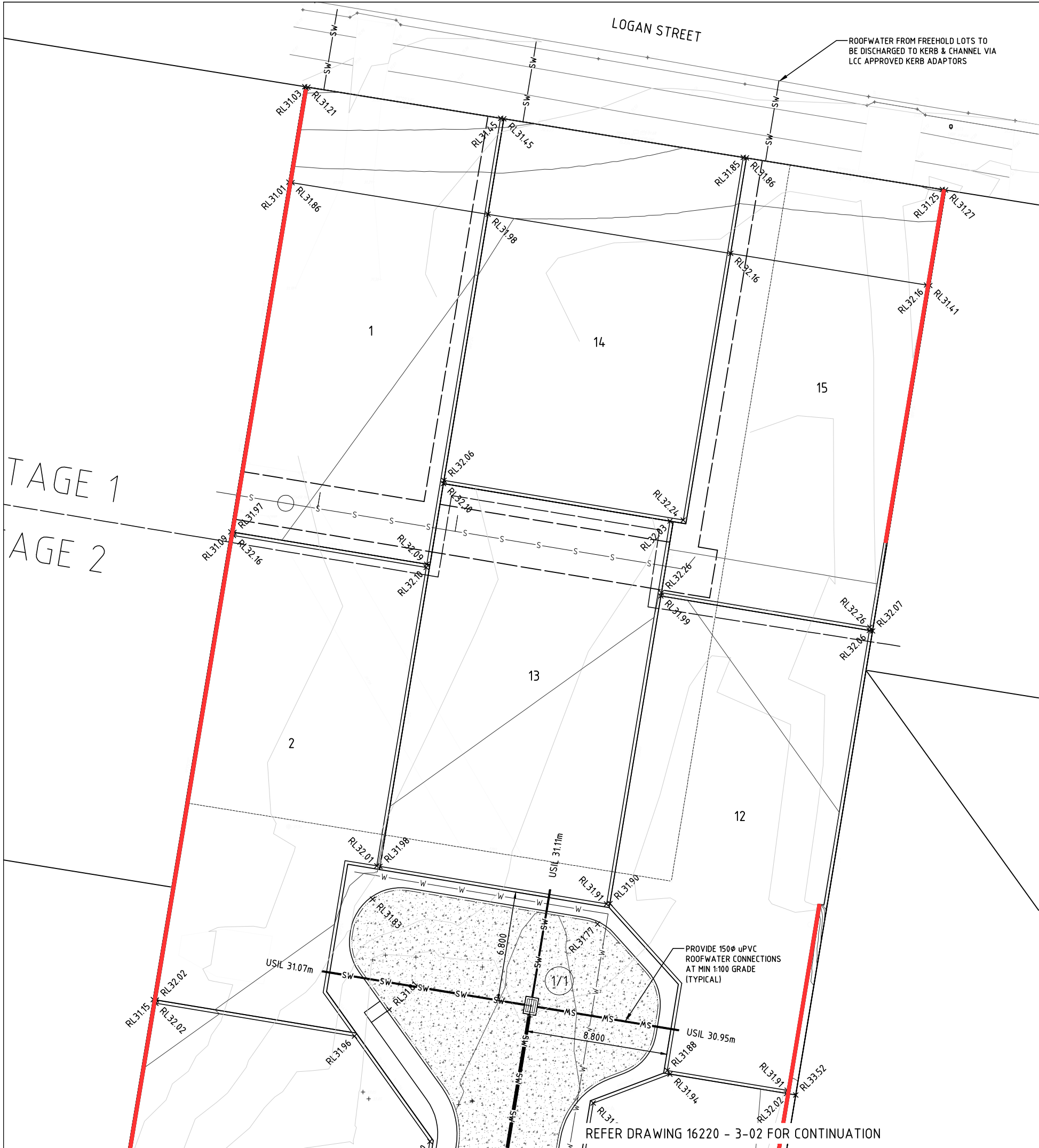
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NAME _____

WESTERN
RETAINING WALL
SECTION

VERTICAL 1:100 @ A3
HORIZONTAL 1:500 @ A3





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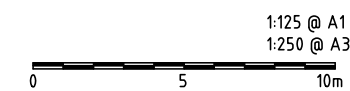
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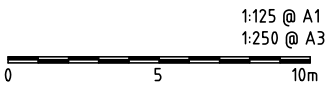
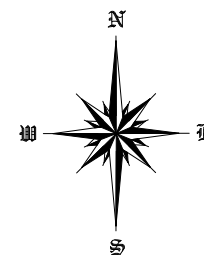
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D	LCC RFI	RCL	13/12/17	CBL
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REV.	DESCRIPTION	BY	DATE	APPRD

NAME
**SITE GRADING &
DRAINAGE PLAN
SHEET 1 OF 3**

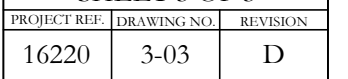
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16220	3-01	D

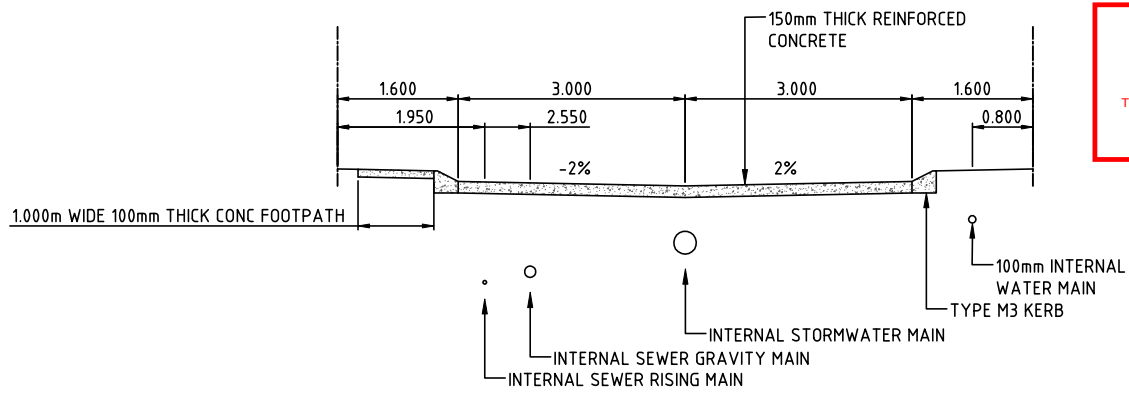
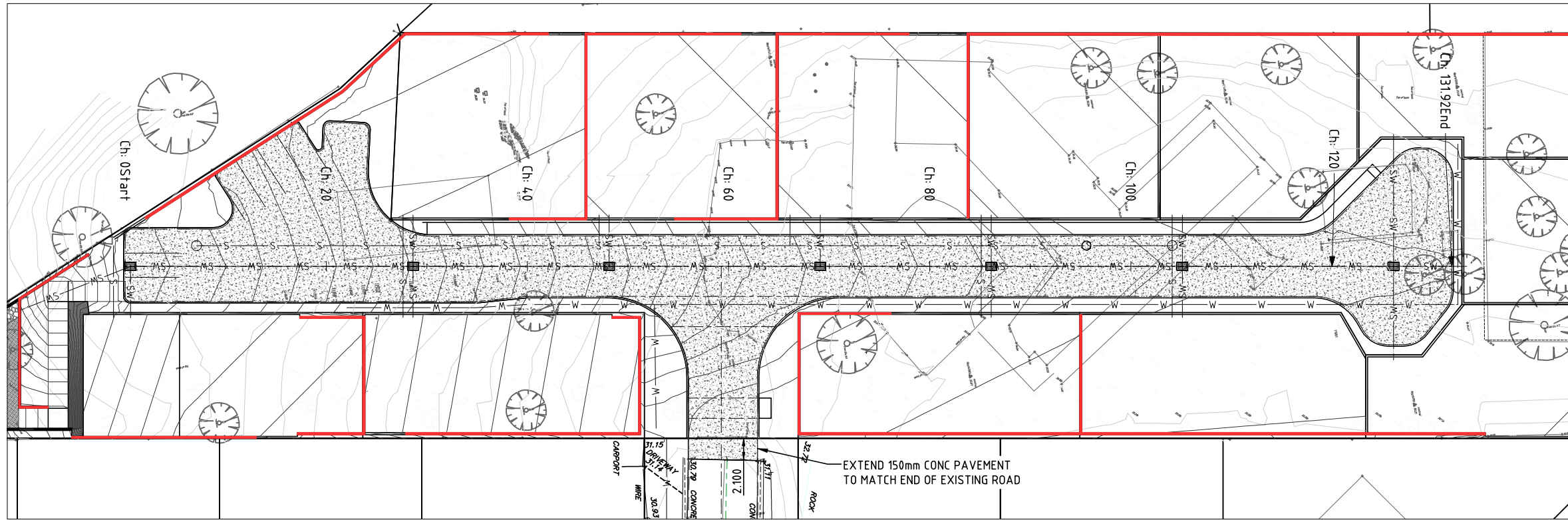
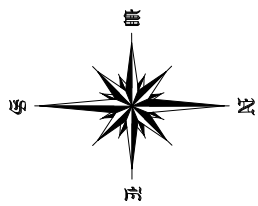






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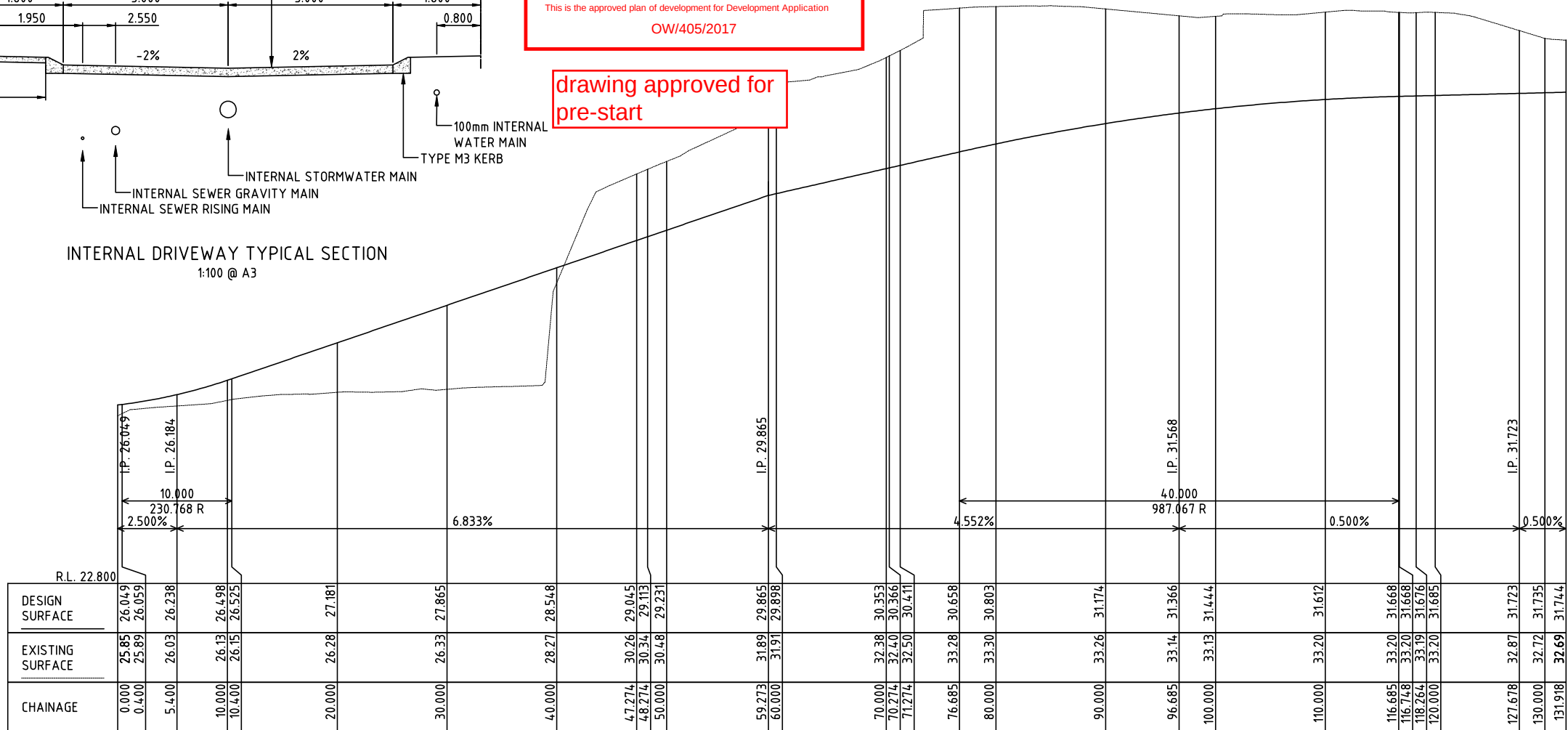




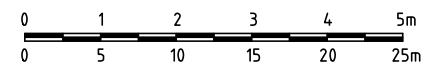
INTERNAL DRIVEWAY TYPICAL SECTION
1:100 @ A3

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VERTICAL 1:100 @ A3
HORIZONTAL 1:500 @ A3



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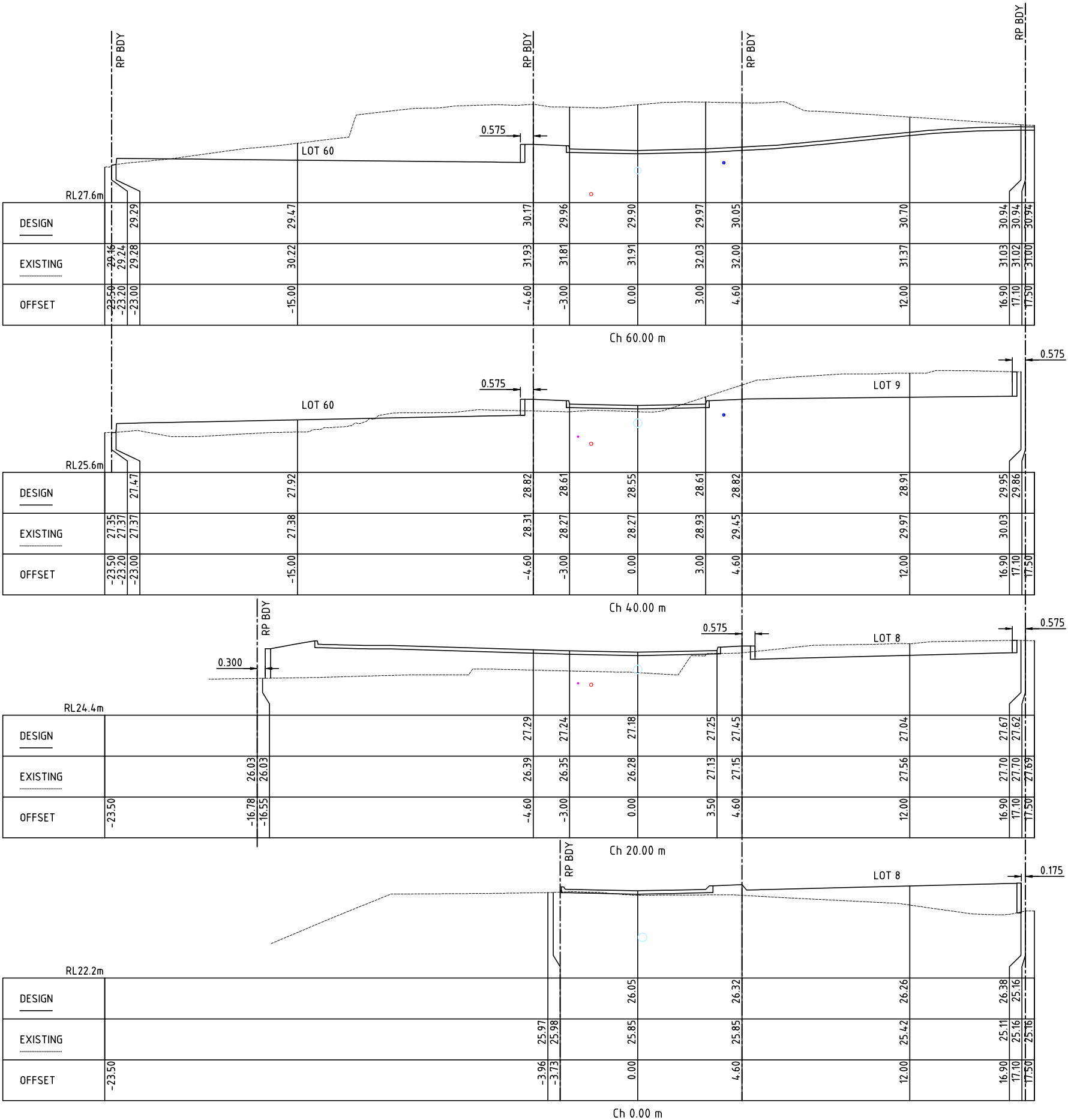
APPROVED

FIEAust CPEng RPEQ 4293

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C	TMR RFI	RCL	14/02/17	CBL
B	SEWER AMNDT	RCL	17/01/17	CBL
A	REV LAYOUT	RCL	31/10/16	CBL
REV.	DESCRIPTION	BY	DATE	APPRD

NAME
DRIVEWAY
LONGITUDINAL
SECTION

PROJECT REF.	DRAWING NO.	REVISION
16220	3-04	D



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CLIENT
CIVIC CONCEPTS PTY LTD

PROJECT
87 HOLMVIEW ROAD
BEENLEIGH

PROPERTY DESCRIPTION	LOT 5 RP168717
DESIGNED	RC LEONARD
DRAWN	RC LEONARD
REVIEWED	CBL
DATE	23 MAY 2016

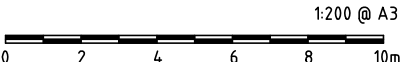
APPROVED

FIEAust CPEng RPEQ 4293

A	LCC RFI	RCL	13/12/17	CBL
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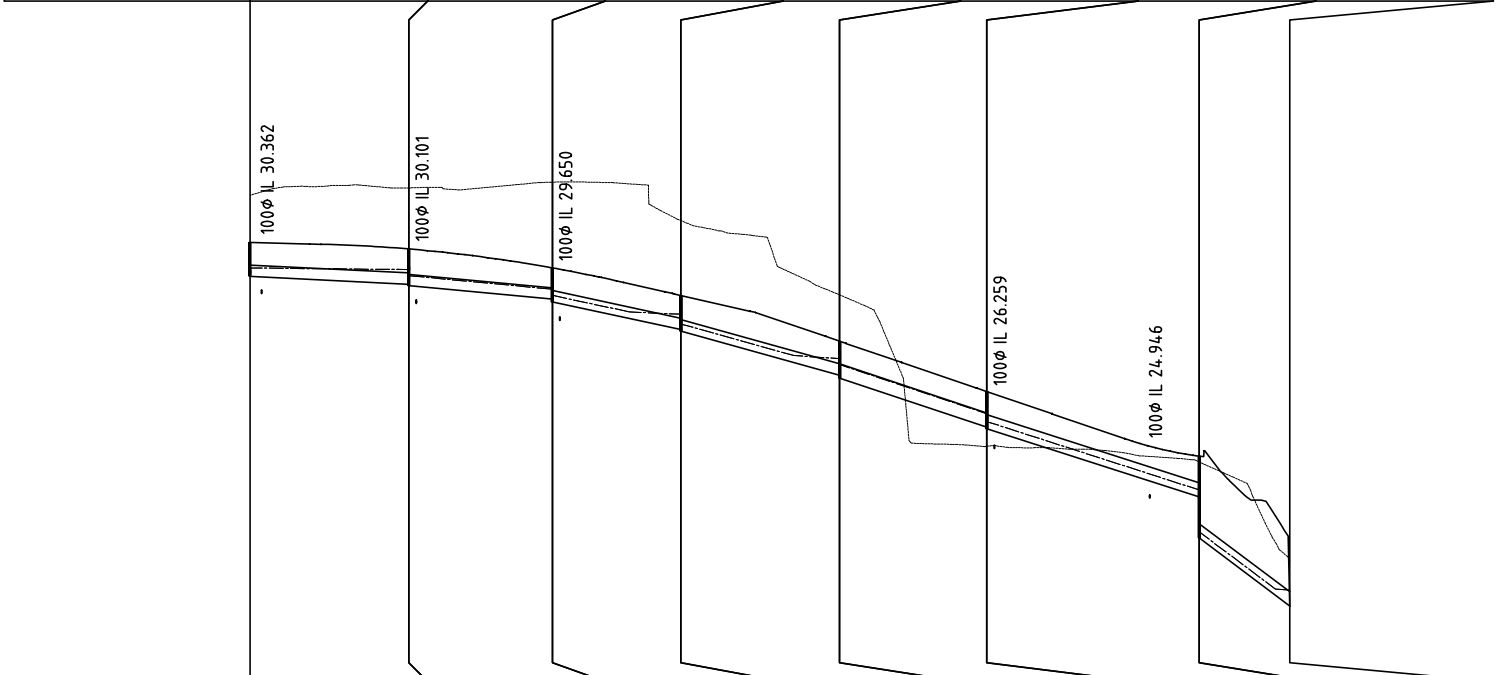
NAME
SITE CROSS SECTIONS
SHEET 1 OF 2

PROJECT REF.	DRAWING NO.	REVISION
16220	3-05	A



NOTE
1. ALL FIELD INLET PITS WITHIN
DRIVEWAY TO BE PROVIDED WITH
CLASS D GRATES

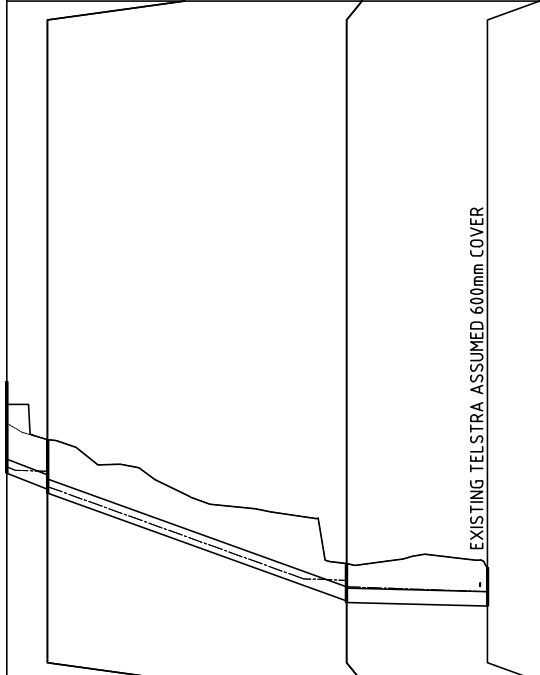
	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1
PIT TYPE	FI	FI	FI	FI	FI	FI	MH	HEADWALL OUTLET
GRATE/LID	GRATE (D)	GRATE (D)	GRATE (D)	GRATE (D)	GRATE (D)	GRATE (D)	GRATE (D)	
PIT SIZE	900 x 600	900 x 600	900 x 600	900 x 600	900 x 600	900 x 600	1050Ø	
FLOW (LIT/SEC)	58.138	100.959	126.302	159.682	192.572	224.400	259.218	
VELOCITY (m/s)	1.431	2.072	2.994	3.493	3.933	4.036	5.734	
HGL LEVEL (m)	31.304	30.997 30.838	30.478 30.315	29.818 29.558	28.642 28.487	27.187 26.977	25.169 24.058	22.523



DATUM RL 19.10								
DIAMETER (mm)	300Ø uPVC	300Ø uPVC	300Ø uPVC	300Ø uPVC	375Ø Class 2 RCP	375Ø Class 2 RCP	375Ø Class 2 RCP	
CLASS								
SLOPE/GRADE	1.00% 1:100.00	1.89% 1:52.78	4.29% 1:23.32	5.57% 1:17.94	6.67% 1:14.99	6.43% 1:15.54	15.00% 1:6.67	
DEPTH (m)	0.898	0.935 0.969	0.829 0.900	0.900 0.940	0.900 0.975	0.943 0.983	1.082 2.165	0.000
INVERT LEVEL (m)	30.817	30.607 30.573	30.213 30.142	29.413 29.373	28.203 28.128	26.828 26.788	24.980 23.898	22.100
TOP OF PIT LEVEL	31.715	31.542 30.935	31.042 30.315	30.313 29.373	29.103 28.203	27.771 26.788	26.062 23.898	22.100
FINAL SURFACE LEVEL	31.715	31.542	31.042	30.313	29.103	27.771	26.062	22.100
ROAD CHAINAGE								
CHAINAGE	0.000 21.000	21.000 19.000	40.000 17.000	57.000 21.000	78.000 19.487	97.487 28.096	125.583 11.984	137.567

1

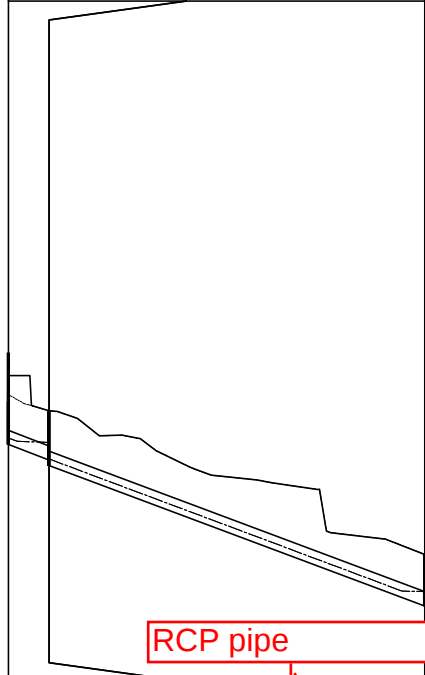
	1/2	2/2	3/2	4/2
MH	FI	FI	FI	EXISTING
DOME				
1050Ø	900 x 600 GRATE (B)	900 x 600 GRATE (B)	900 x 600 GRATE (B)	
	204.942	204.733	202.495	
	4.230	4.112	1.833	
	20.329 19.928		17.447 17.276	17.145



RL 13.77				
375Ø Class 2 RCP	375Ø Class 2 RCP	375Ø Class 2 RCP		
7.77% 1:12.88	7.21% 1:13.87	0.50% 1:200.00		
2.422	1.307 1.413	0.987 1.027	1.011 1.051	
20.278	19.861 19.755	16.903 16.863	16.770 16.730	
22.700	21.168	17.890	17.781	
22.100	21.168	17.890	17.781	
0.000	5.370	39.565	44.935	63.589

2

	1/2	2/2	3/2A
MH	FI		EXISTING
DOME			
1050Ø	900 x 600 GRATE (B)		
	204.942	204.637	
	2.899	4.169	
	20.471 19.892		16.379



RL 13.00			
375Ø Class 2 RRJ	375Ø Class 2 RRJ		
7.77% 1:12.88	6.88% 1:14.53		
2.422	1.307 1.447		1.067
20.278	19.861 19.721		16.300
22.700	21.168		17.367
22.100	21.168		17.367
0.000	5.370	49.709	55.080

2

ALTERNATIVE ALIGNMENT TO EXISTING
PIT SHOULD CONNECTION TO SIDE
ENTRY PIT 4/2 NOT BE POSSIBLE DUE
TO CONFLICT WITH EXISTING SERVICES

LOGAN CITY COUNCIL
APPROVED PLAN OF DEVELOPMENT
This is the approved plan of development for Development Application
OW/405/2017

Drawing approved for
Pre-start



CLA CONSULTANTS

CIVIL ENGINEERS
8/43 TALLEBUDGERA CREEK ROAD
WEST BURLEIGH QLD 4219
P: 07 5520 1066
F: 07 5520 1077
mail@claconsultants.com.au

CLIENT
BOSS DEVELOPMENTS
(QLD) PTY LTD

PROJECT
132-134 LOGAN
STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
DRAWN	RC LEONARD
REVIEWED	CBL
DATE	20 SEPTEMBER 2016

APPROVED

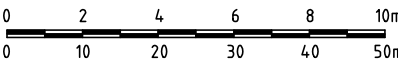
FHEAust CPEng RPEQ 4293

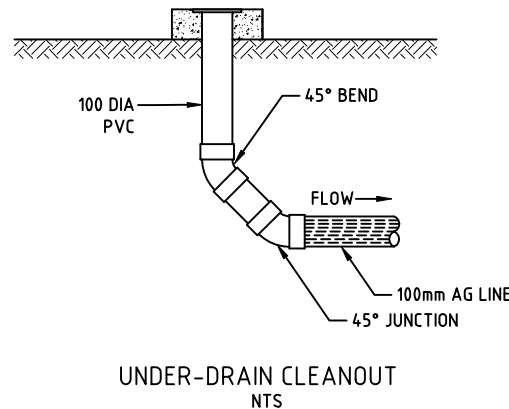
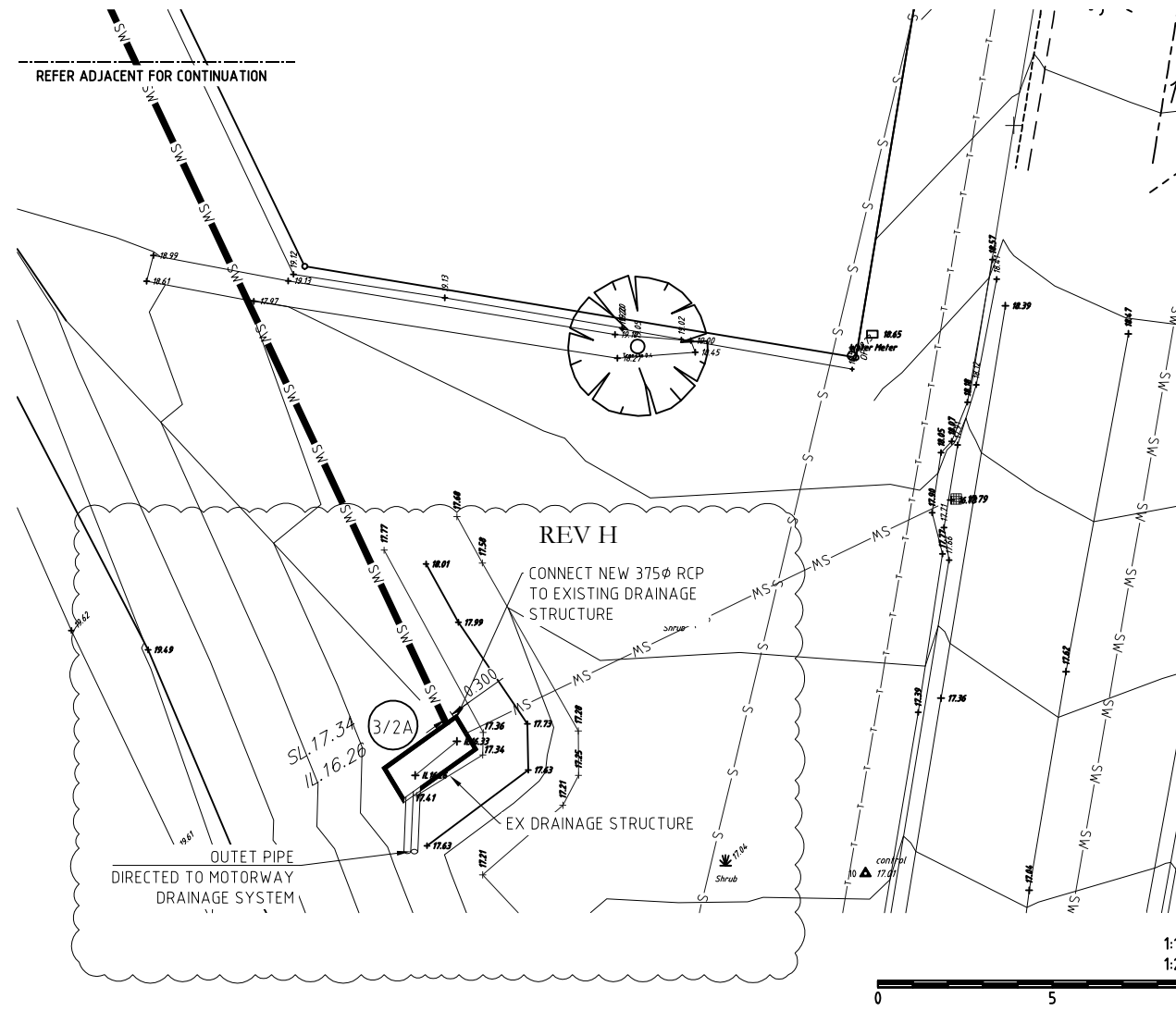
E	SW ALIGNMENT	RCL	14/03/18	CBL
D	PRE-START	RCL	9/02/18	CBL
C	LCC RFI	RCL	19/01/18	CBL
B	LCC RFI	RCL	13/12/17	CBL
A	TMR RFI	RCL	14/02/17	CBL
REV.	DESCRIPTION	BY	DATE	APPR'D

NAME
STORMWATER
DRAINAGE LONG
SECTIONS

PROJECT REF.	DRAWING NO.	REVISION
16220	3-07	E

VERTICAL 1:200 @ A3
HORIZONTAL 1:1,000 @ A3

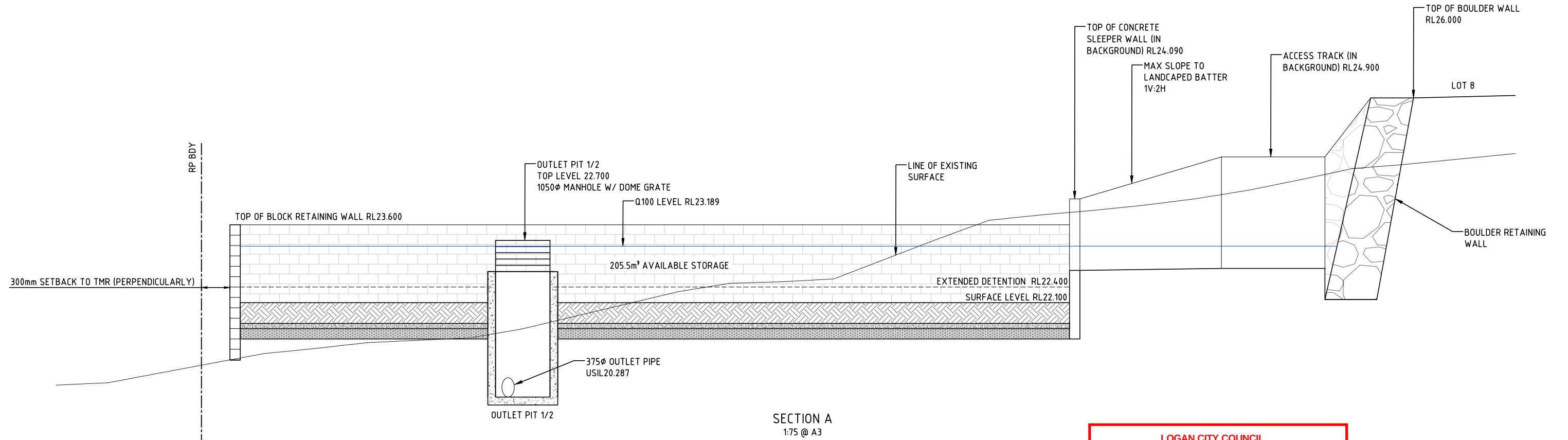




BIO-RETENTION FILTER NOTES

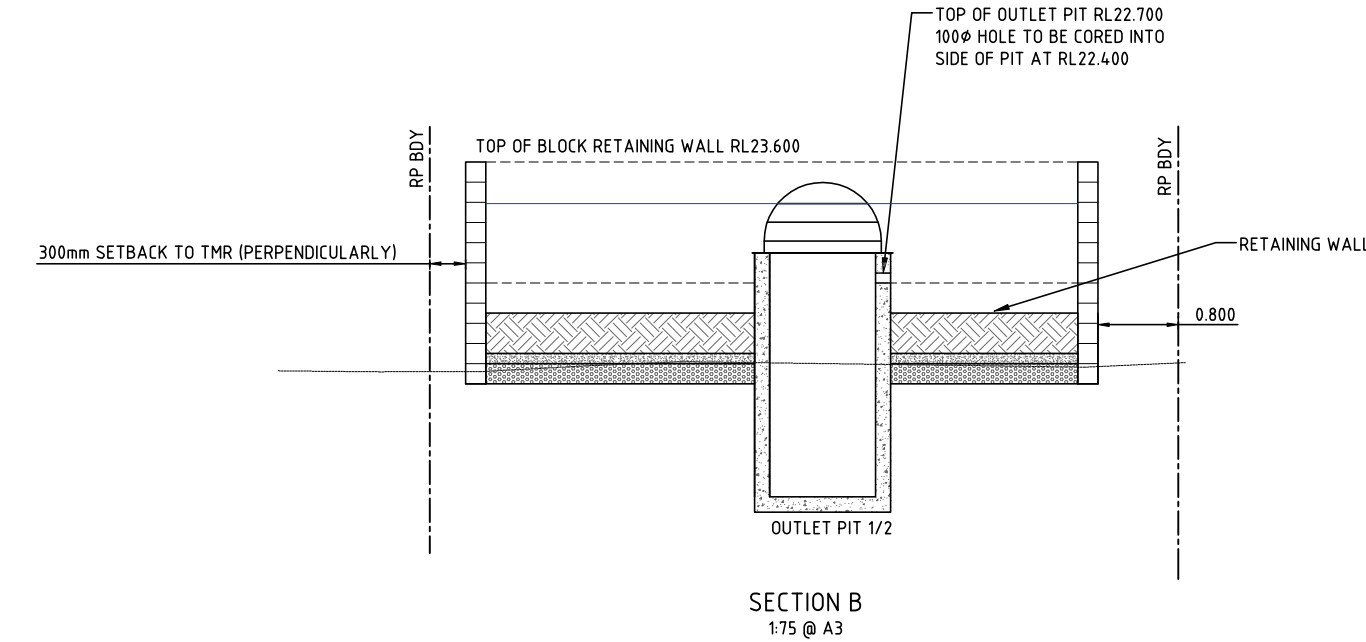
1. **BIO-RETENTION MEDIA:**
BIO-RETENTION MEDIA SPECIFICATION SHALL BE IN ACCORDANCE WITH THE FACILITY FOR ADVANCING BIOFILTRATION "GUIDELINES FOR SOIL FILTER MEDIA IN BIORETENTION SYSTEMS". BIORETENTION HYDRAULIC CONDUCTIVITY SHALL BE IN ACCORDANCE WITH FACILITY FOR ADVANCING BIOFILTRATION "PRACTICE NOTE 1: IN SITU MEASUREMENT OF HYDRAULIC CONDUCTIVITY". THE NUMBER OF SAMPLES TO BE TESTED SHALL BE IN ACCORDANCE WITH THE "WATER SENSITIVE URBAN DESIGN CONSTRUCTION AND ESTABLISHMENT GUIDELINES - SWALES, BIORETENTION SYSTEMS AND WETLANDS" (WATER BY DESIGN).
2. **UNDER-DRAIN:**
UNDER-DRAIN: SLOTTED RIGID PIPE Ø100 (uPVC OR SIMILAR TO AS2439.1) OR APPROVED EQUIVALENT, 0.5% MIN GRADE. PIPE JOINS SHOULD BE GLUED USING PLUMBING CEMENT. PIPE SHOULD NOT BE INSTALLED WITH A FILTER SOCK SURROUNDING PIPE. UNDER-DRAINAGE PIPES SHALL BE SEALED INTO PIT USING GROUT OR OTHER APPROVED WATERTIGHT SEAL. DRAINAGE PIPE SLOTS SHOULD BE LESS THAN 2MM.
3. **PLANTING:**
PLANT SPECIFICATION AND DENSITY SHALL BE IN ACCORDANCE WITH THE "WATER SENSITIVE URBAN DESIGN TECHNICAL DESIGN GUIDELINES" (WATER BY DESIGN.)
4. **LINING:**
LAPPED PERMEABLE LINING TO BE INSTALLED TO BASE AND SIDES OF THE BIO-RETENTION FILTER

 CLA CONSULTANTS CIVIL ENGINEERS 8/43 TALLEBUDGERA CREEK ROAD WEST BURLEIGH QLD 4219 P: 07 5520 1066 F: 07 5520 1077 mail@claconsultants.com.au				
CLIENT BOSS DEVELOPMENTS (QLD) PTY LTD				
PROJECT 132-134 LOGAN STREET EAGLEBY				
PROPERTY DESCRIPTION		LOTS 1/2 SP148367		
DESIGNED		RC LEONARD		
DRAWN		RC LEONARD		
REVIEWED		CBL		
DATE		20 SEPTEMBER 2016		
APPROVED  FHE Aust CPEng RPEQ 4293				
H	SW ALIGNMENT	CBL	22/03/18	CBL
G	SW ALIGNMENT	RCL	14/03/18	CBL
F	PRE-START	RCL	9/02/18	CBL
E	LCC RFI	RCL	19/01/18	CBL
D	LCC RFI	RCL	13/12/17	CBL
C	FOR OPW	RCL	13/10/17	CBL
B	RISKSMTART	RCL	16/09/17	CBL
A	TMR RFI	RCL	14/02/17	CBL
REV.	DESCRIPTION	BY	DATE	APPR'D
NAME BIO-RETENTION FILTER PLAN & DETAILS				
PROJECT REF:		DRAWING NO.		REVISION
16220		3-08		H



SECTION A
1:75 @ A3

LOGAN CITY COUNCIL
APPROVED PLAN OF DEVELOPMENT
This is the approved plan of development for Development Application
OW/405/2017



SECTION B
1:75 @ A3



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PROJECT
132-134 LOGAN
STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
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REVIEWED	CBL
DATE	20 SEPTEMBER 2016

APPROVED

PTEAust CPEng RPEQ 4293

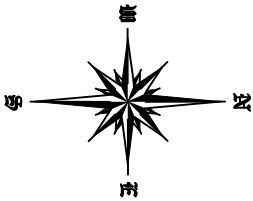
B	LCC RFI	RCL	13/12/17	CBL
A	RISKS MART	RCL	16/09/17	CBL
REV.	DESCRIPTION	BY	DATE	APPRD

NAME
BIO-RETENTION
FILTER SECTIONS

PROJECT REF.	DRAWING NO.	REVISION
16220	3-09	B

DRAINAGE CALCULATIONS - Return Period: 10yrs - Location: Crestmead - Logan

LOCATION	STRUCTURE No.	DRAIN SECTION	TIME	SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL INTENSITY	SUBCATCHMENT RUNOFF	RUNOFF CO-EFFICIENT	SUB-CATCHMENT AREA	EQUIVALANT AREA	SUM OF EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	INLET DESIGN	FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET	HALF ROAD CAPACITY	INLET TYPE	INLET CURVE	FLOW TO INLET	BYPASS FLOW	BYPASS STRUCTURE No.	FLOW WIDTH	FLOW DEPTH	DRAIN DESIGN	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (CxA)	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE SIZE	No. OF PIPES (1 IF BLANK)	PIPE CLASS	FLOW VELOCITY	TIME OF FLOW IN REACH	CAPACITY FLOW (MANNINGS)	CAPACITY FLOW (HGL)	HEADLOSSES	STRUCTURE CHART No.	VELOCITY HEAD	U/S HEADLOSS COEFFICIENT	U/S PIPE STRUCTURE HEADLOSS	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (LxSf)	PART FULL	PART FULL DEPTH	PART FULL VELOCITY	DESIGN LEVELS	OVERT LEVELS	DRAIN SECTION HGL	UPSTREAM HGL	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR K&C INVERT LEVEL	STRUCTURE No.	DESIGN ARI
	1/1	1/12/1	5	206		0.80	0.127	0.102	0.102	58	58					FI	900x600	58		3/1		0.095	5.00	206	0.102	58	21	1.000	300		Class 2 RRJ	0.82	0.245	97	136			0.035	7.682	0.265	0.20	0.04	0.17	1.43	31.117	31.304	31.304	30.997	31.715	31.715	1/1	10			
	2/1	2/13/1	5	206		0.80	0.097	0.078	0.179	44	44					FI	900x600	44		3/1		0.079	5.24	206	0.179	101	19	1.895	300		Class 2 RRJ	1.43	0.153	133	189			0.104	1.537	0.160	0.57	0.11	0.20	2.07	30.873	30.838	30.997	30.478	31.530	31.530	2/1	10			
	3/1	3/14/1	5	206		0.80	0.059	0.047	0.226	27	27					FI	900x600	27				0.057	5.40	206	0.226	126	17	4.288	300		Class 2 RRJ	1.79	0.095	200	287			0.163	1.000	0.163	0.87	0.15	0.17	2.99	30.442	30.315	30.478	29.818	31.030	31.030	3/1	10			
																				5/1																																			
	4/1	4/15/1	5	206		0.80	0.077	0.062	0.288	35	35					FI	900x600	35		5/1		0.068	5.49	206	0.288	160	21	5.574	300		Class 2 RRJ	2.26	0.100	228	328			0.260	1.000	0.260	1.37	0.29	0.18	3.49	29.673	29.558	29.818	28.642	30.313	30.313	4/1	10			
	5/1	5/16/1	5	206		0.80	0.077	0.062	0.350	35	35					FI	900x600	35				0.068	5.59	206	0.350	193	19	6.670	375		Class 2 RRJ	1.74	0.083	453	644			0.155	1.000	0.155	0.64	0.12	0.17	3.93	28.503	28.487	28.642	27.187	29.103	29.103	5/1	10			
																				6/1																																			
	6/1	6/17/1	5	206		0.80	0.075	0.060	0.410	34	34					FI	900x600	34		7/1		0.067	5.67	206	0.410	224	28	6.435	375		Class 2 RRJ	2.03	0.116	445	632			0.211	1.000	0.211	0.85	0.24	0.19	4.04	27.163	26.977	27.187	25.169	27.771	27.771	6/1	10			
	7/1	7/18/1	5	206		0.80	0.084	0.067	0.477	38	38					FI	900x600	38		8/1		0.072	5.79	206	0.477	259	12	15.000	375		Class 2 RRJ	2.35	0.035	679	971			0.281	1.000	0.281	1.13	0.14	0.16	5.73	24.273	24.058	24.339	22.523	26.073	26.073	7/1	10			
	1/2	1/22/2	8	176		0.80	0.524	0.419	0.419	205	205					FI	900x600	205		2/2		0.219	8.00	176	0.419	205	5	7.765	375		Class 2 RRJ	1.86	0.021	489	696			0.176	4.104	0.721	0.72	0.04	0.17	4.23	20.653	21.168	21.168	20.329	22.100	22.100	1/2	10			
	2/2	2/23/2		206					0.419							FI	900x600	0		4/2		0.000	8.02	206	0.419	205	40	7.208	375		Class 2 RRJ	1.85	0.160	471	670			0.175	2.289	0.401	0.72	0.28	0.17	4.11	20.130	19.928	20.329	17.454	21.168	21.168	2/2	10			
	3/2	3/24/2		206					0.419							FI	900x600	0				0.000	8.18	206	0.419	203	19	0.500	375		Class 2 RRJ	1.84	0.169	124	170			0.173	1.029	0.178	0.70	0.13	0.38	1.84	17.238	17.276	17.454	17.145	17.890	17.890	3/2	10			

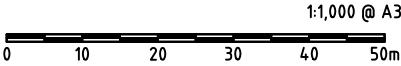


Drawing
approved for
pre-start

LOGAN CITY COUNCIL
APPROVED DOCUMENT

This is an approved document for Development Application

OW/405/2017



CLA CONSULTANTS

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CLIENT
BOSS DEVELOPMENTS
(QLD) PTY LTD

PROJECT
132-134 LOGAN
STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
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REVIEWED	CBL
DATE	20 SEPTEMBER 2016

APPROVED

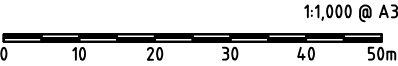
FHEAust CPEng RPE/Q 4293

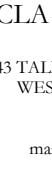
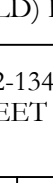
B	PRE-START	RCL	9/02/18	CBL
A	LCC RFI	RCL	13/12/17	CBL

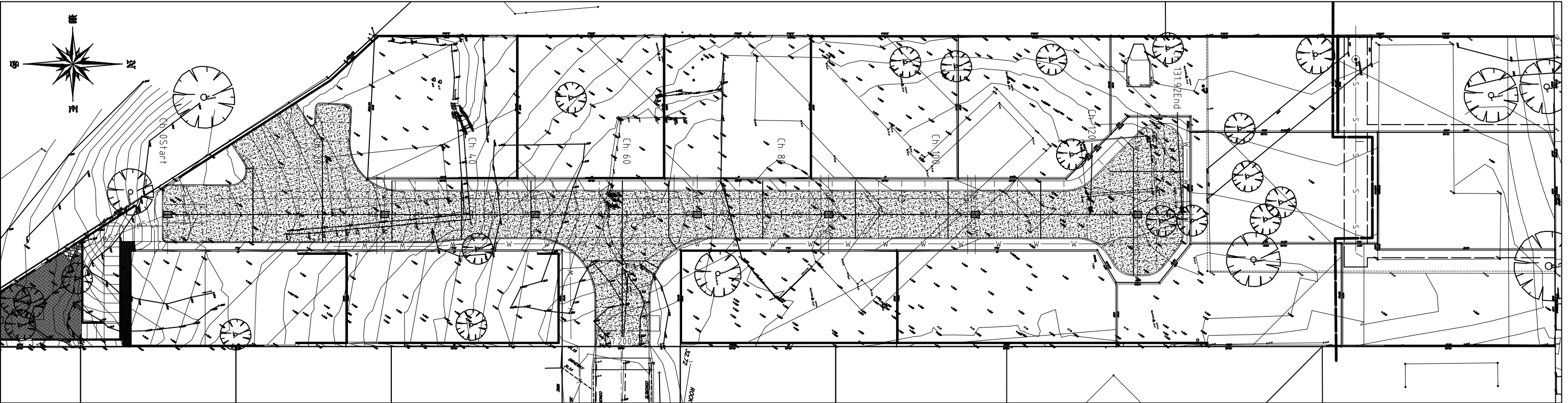
REV.	DESCRIPTION	BY	DATE	APPR'D
NAME Q10 STORMWATER CATCHMENT PLAN & CALCULATIONS				
PROJECT REF.	DRAWING NO.	REVISION		
16220	3-10	B		

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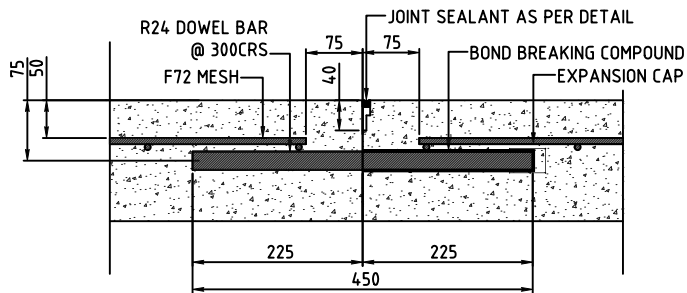
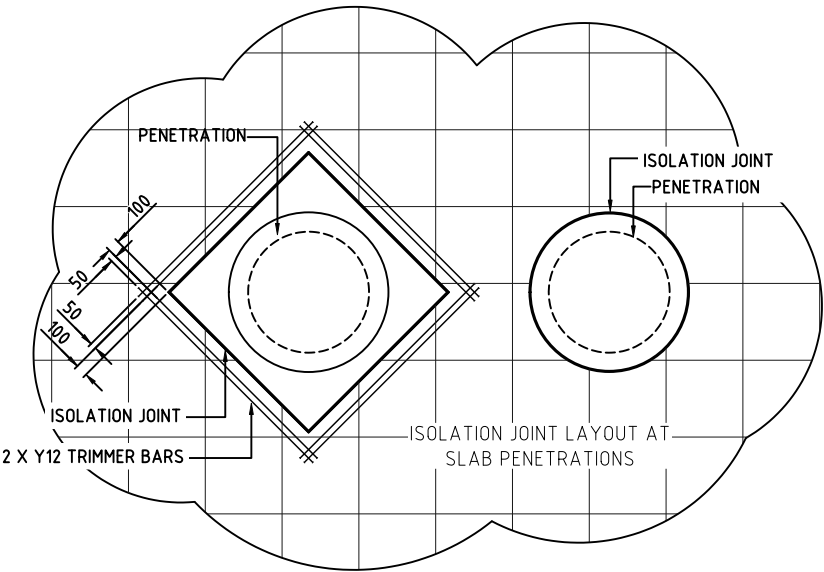
A rectangular stamp with a black border. The text inside is centered and reads: "LOGAN CITY COUNCIL" in bold, "APPROVED DOCUMENT" in bold, "This is an approved document for Development Application" in a smaller font, and "OW/405/2017" in bold.



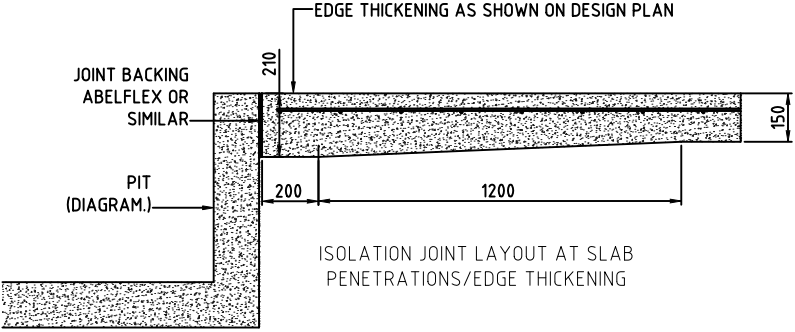
				
CLA CONSULTANTS CIVIL ENGINEERS 8/43 TALLEBUDGERA CREEK ROAD WEST BURLEIGH QLD 4219 P: 07 5520 1066 F: 07 5520 1077 mail@claconsultants.com.au				
CLIENT BOSS DEVELOPMENTS (QLD) PTY LTD				
PROJECT 132-134 LOGAN STREET EAGLEBY				
PROPERTY DESCRIPTION		LOTS 1/2 SP148367		
DESIGNED		RC LEONARD		
DRAWN		RC LEONARD		
REVIEWED		CBL		
DATE		20 SEPTEMBER 2016		
APPROVED		 FILE Aust CPEng RPEQ 4293		
B	PRE-START	RCL	9/02/18	CBL
A	LCC RFI	RCL	13/12/17	CBL
REV.	DESCRIPTION	BY	DATE	APPR'D
NAME Q100 STORMWATER CATCHMENT PLAN & CALCULATIONS				
PROJECT REF.		DRAWING NO.		REVISION
16220		3-10a		B



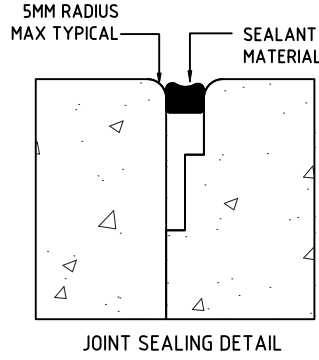
Notes
Subgrade
1. Subgrade shall be prepared to provide an even surface free of depressions capable of holding water.
2. Prior to the commencement of concrete work, the subgrade shall be load tested and inspected to ensure uniform bearing capacity.
3. Where testing indicates localised areas of inconsistency, existing subgrade material shall be removed and replaced with appropriate material. Extents of removal and appropriate replacement material shall be as directed by the Engineer.
4. Sub-base material shall be 150mm depth of CBR 15 material, compacted to 95% of modified maximum dry density.
5. Black plastic to be laid below concrete.
Concrete
A. Concrete shall be N32, unless otherwise noted. 28 day Flexural Strength 3.5MPa min.
B. Manufacture, handling, placing and curing of concrete shall comply with the requirements of AS1379 and AS3600.
C. Steel reinforcing bars shall comply with the requirements of AS 1302. Welded wire reinforcing fabric shall comply with AS 1304.
D. Reinforcing shall comply with the requirements of AS 1303 and AS 3600.
E. Pavement surface shall exhibit a uniform light texture, achieved by wood floating, light brooming of hessian drag. Concrete slump shall be in the range of 50 to 60mm.
G. Concrete to be cured in accordance with the requirements of AS 3600. Contractor to provide details of curing proposed for approval prior to the commencement of work.
H. Traffic is not to use the pavement for a period of not less than seven (7) days after placement.
I. All aggregate to be crushed. Coarse aggregate to have PSV Min 48.
J. Finished pavement to have Min Grip Number 0.50.
Jointing
1. Joints shall be constructed as per the details.
2. Joints to be sealed with approved field moulded sealant. Contractor to provide details of proposed sealant method for approval prior to the commencement of works.
3. Joints to be inspected prior to the pouring of concrete.
4. Dowels to be hot dipped galvanised, sawn, straight, smooth and free from burrs etc. orthogonal installation of dowels to be carried out to ensure they are to the joint direction and the pavement surface.
General
1. Locate line and level of all existing surfaces prior to the commencement of construction. In the event of any potential issues relating to the works, such matters are to be brought to the attention of the Engineer for consideration
2. Refer project drawings for details of detailed requirements and acceptance criteria.
3. All stormwater trenches under kerb and concrete pavement shall be backfilled with 5mm single sized aggregate.



TRANSVERSE CONTRACTION JOINT DETAIL (DOWELLED)



- LEGEND
- TRANSVERSE CONTRACTION JOINT (DOWELLED)
 - TRANSVERSE CONTRACTION JOINT (SAW CUT)
 - EDGE THICKENING AS PER DETAIL
 - 150MM CONCRETE WITH F82 MESH 50 TOP COVER

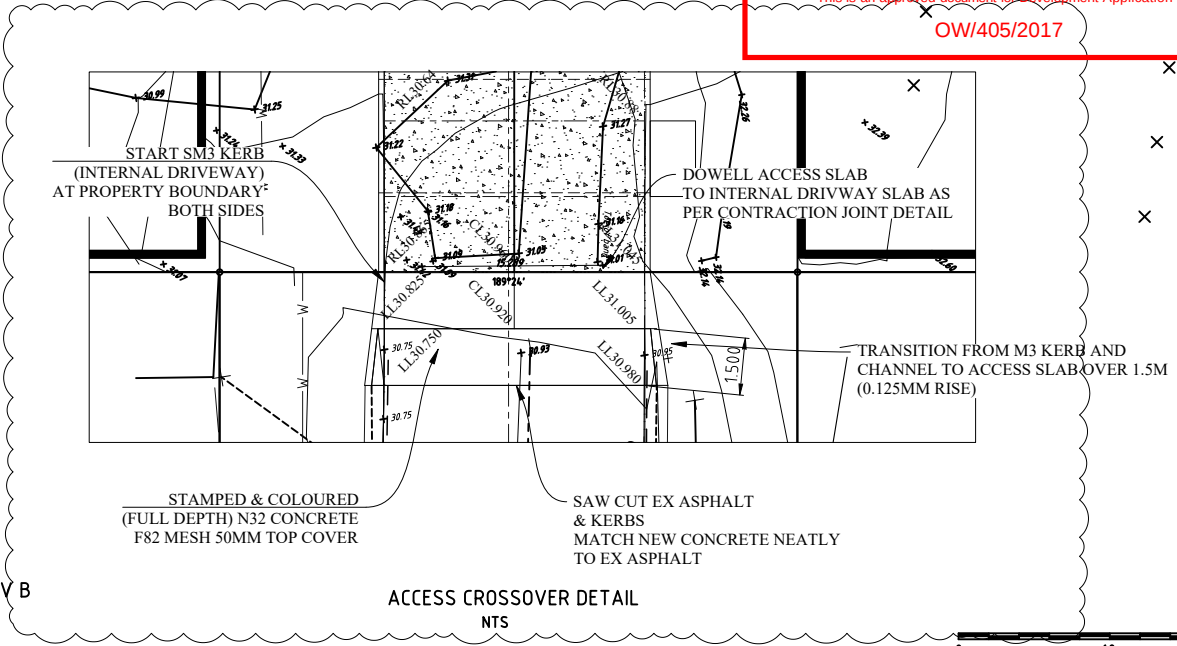


JOINT SEALING DETAIL

Drawing approved for pre-start

LOGAN CITY COUNCIL
APPROVED DOCUMENT
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OWI/405/2017

REV B



ACCESS CROSSOVER DETAIL
NTS

1:250 @ A1
1:500 @ A3

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CLIENT
BOSS DEVELOPMENTS (QLD) PTY LTD

PROJECT
132-134 LOGAN STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367				
DESIGNED	RC LEONARD				
DRAWN	RC LEONARD				
REVIEWED	CBL				
DATE	20 SEPTEMBER 2016				
APPROVED	 FIEAust CPEng RPEQ 4293				
REV	C	ACCESS AMDD	CBL	26/02/18	CBL
	B	ACCESS AMDD	CBL	16/02/18	CBL
	A	LCC RFI	RCL	13/12/17	CBL
DESCRIPTION	BY	DATE	APPRD		

NAME
CONCRETE PAVEMENT PLAN

PROJECT REF.	DRAWING NO.	REVISION
16220	3-11	C

GENERAL NOTES – SEWER

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND SEWERAGE CODE SPECIFICATIONS AND STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
3. THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE SYSTEM.
4. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY THE SEQ SERVICE PROVIDER AT THE DEVELOPER'S COST.
5. ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED PRODUCTS AND MATERIALS" LIST.
6. EACH ALLOTMENT SHALL BE SERVED BY A DN110 PE (OR DN100 PVC) PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN160 PE (OR DN150 PVC) PROPERTY CONNECTION SHALL BE PROVIDED.
7. PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS.
8. PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300mm AND A MAXIMUM OF 750mm. UNITYWATER REQUIRES MINIMUM EXTENSION OF 500mm INTO PROPERTY.
9. WHERE PIPES ARE LAID IN FILL, THE FILLING SHALL BE CARRIED OUT IN LAYERS NOT EXCEEDING 300mm (LOOSE) IN DEPTH AND SHALL BE COMPACTED UNTIL THE COMPACTION IS NOT LESS THAN 95% OF THE MATERIALS MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S. 1289 (MODIFIED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATE LAYER. IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY THE SEQ SERVICE PROVIDER UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
10. WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER,BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SEQ SEWER CODE.
11. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
12. SEWERS SHALL BE DISUSED /ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEQ SEWER CODE.
13. BENCH MARK AND LEVELS TO AHD.
14. THE EXISTING DWELLING ON LOT 3, REFER SEQ-SEW-1100, SERVED BY A SEPTIC SYSTEM, SHALL BE CONNECTED TO THE NEW SEWER BY A LICENCED PLUMBER IN ACCORDANCE WITH THE RELEVANT STATUTORY AND COUNCIL REQUIREMENTS. THE SEPTIC SYSTEM, INCLUDING TRENCHES,SHALL BE REMOVED AT THE DEVELOPER'S COST. ALL FIXTURES SHALL BE UPGRADED IF REQUIRED BY PLUMBING CODE.
15. EXISTING ALLOTMENTS REQUIRING A PROPERTY CONNECTION FROM EXISTING SEWERS SHALL BE PROVIDED BY THE SEQ SERVICE PROVIDER AT THE DEVELOPERS COST.

VEGETATION PROTECTION

- A. TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- B. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- C. TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
- D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.
- SOIL
- A. TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- B. CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.
- C. ACID SULPHATE SOILS EXIST IN THE WORKS AREA. THE OUTPUTS FROM THE RISK ASSESSMENT BASED ON THE QUEENSLAND ACID SULPHATE SOIL TECHNICAL MANUAL REQUIRES THAT ACID SULPHATE SOILS BE MANAGED AS FOLLOWS:
- CREEK CROSSINGS
- A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- B. APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- C. NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.
- REHABILITATION
- A. PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.
- B. PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

LOGAN CITY COUNCIL

APPROVED PLAN OF DEVELOPMENT

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OW/405/2017



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CLIENT
BOSS DEVELOPMENTS
(QLD) PTY LTD

PROJECT
132-134 LOGAN
STREET EAGLEBY

PROPERTY DESCRIPTION
LOTS 1/2 SP148367

DESIGNED
RC LEONARD

DRAWN
RC LEONARD

REVIEWED
CBL

DATE
20 SEPTEMBER 2016

APPROVED

RPEQ 4293

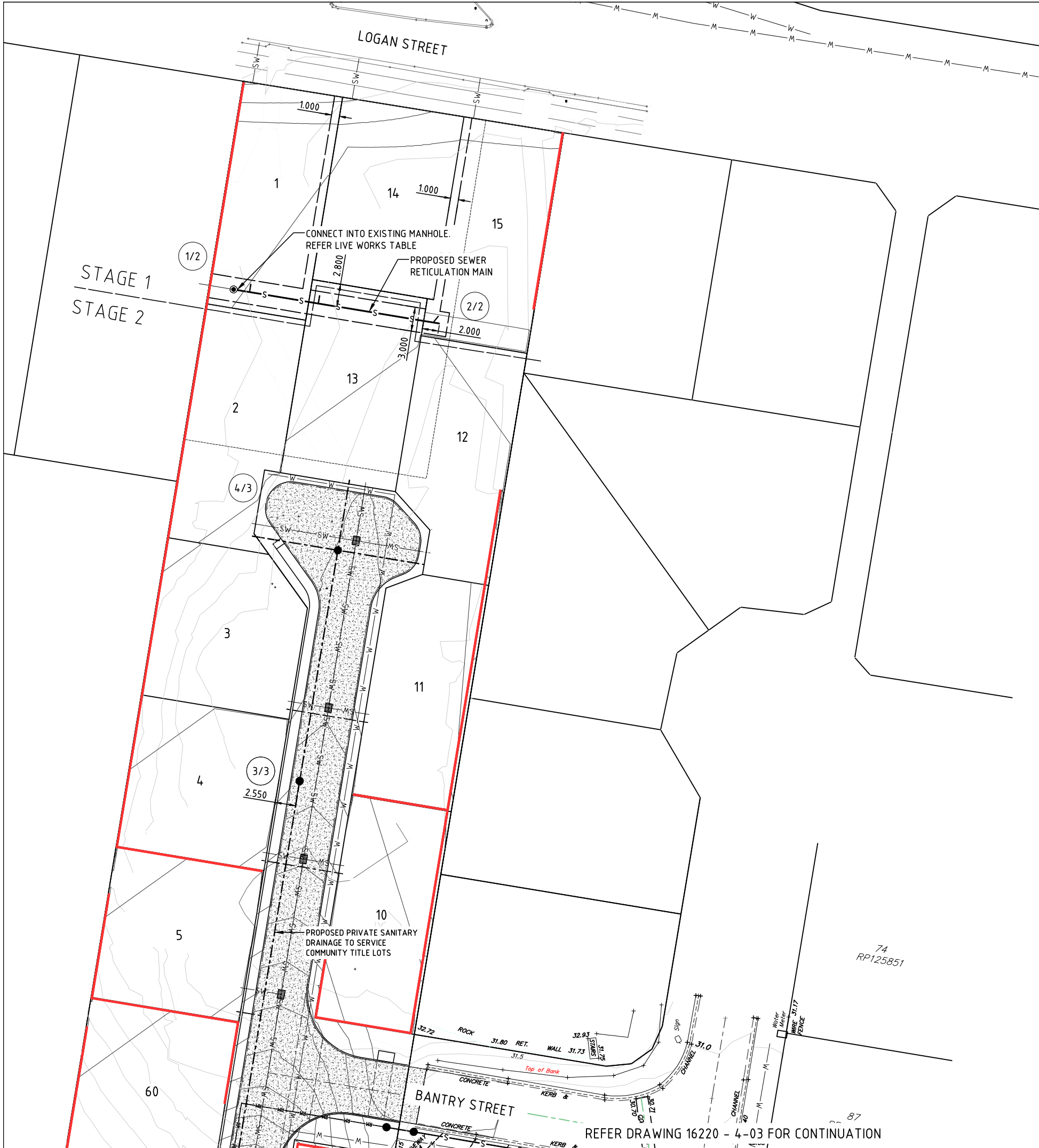
B	LCC RFI	RCL	13/12/17	CBL
A	COMM SEWER	RCL	28/05/17	CBL

REV. DESCRIPTION BY DATE APPRD

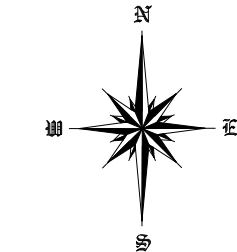
NAME
SEWER
RETICULATION
NOTES & DETAILS

PROJECT REF.	DRAWING NO.	REVISION
16220	4-01	B

	NEW	EXISTING	DISUSED
GRAVITY SEWER			
SEWER RISING MAIN			
SEWER VACUUM MAIN			
LOW PRESSURE SEWER			
MAINTENANCE HOLE AND END OF LINE			
MAINTENANCE SHAFT			
HORIZONTAL/VERTICAL BENDS			
FIRE HYDRANT			
ISOLATION VALVE			
SCOUR VALVE			
AIR VALVE			
DEAD END			
CONNECTOR			
TEST/CHLORINATION POINT			
REDUCER			
PIPE MATERIAL CHANGE			
WATER SERVICE & CONDUIT			



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PROJECT
132-134 LOGAN
STREET EAGLEBY

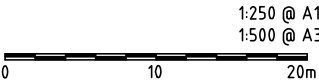
PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
DRAWN	RC LEONARD
REVIEWED	CBL
DATE	20 SEPTEMBER 2016

APPROVED

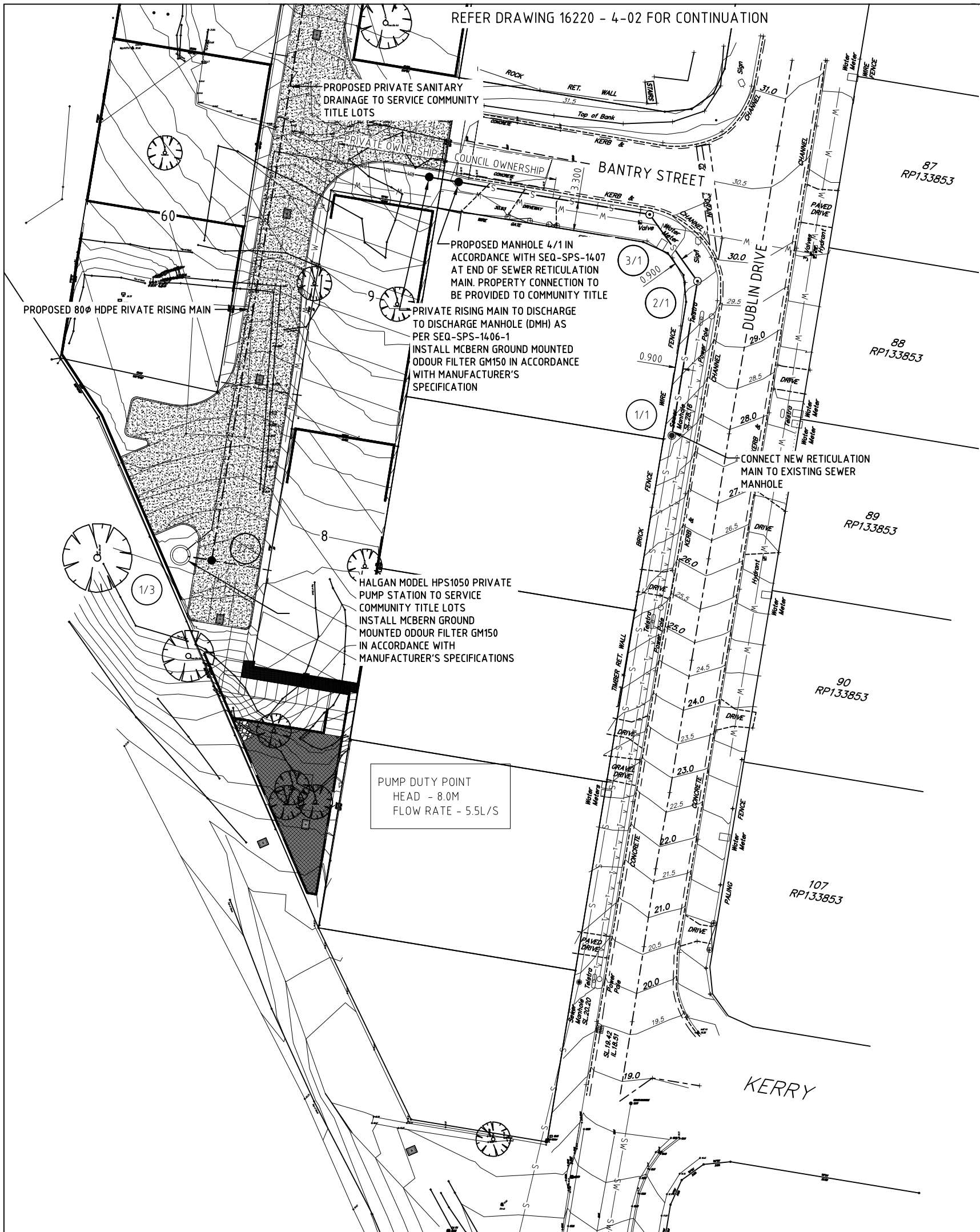
FIEAust CPEng RPEQ 4293

G	LCC RFI	RCL	13/12/17	CBL
F	PUMP STATION	RCL	14/07/17	CBL
E	PUMP STATION	RCL	6/06/17	CBL
D	COMM SEWER	RCL	28/05/17	CBL
C	TMR RFI	RCL	14/02/17	CBL
B	SEWER AMNDT	RCL	17/01/17	CBL
A	REV LAYOUT	RCL	31/10/16	CBL

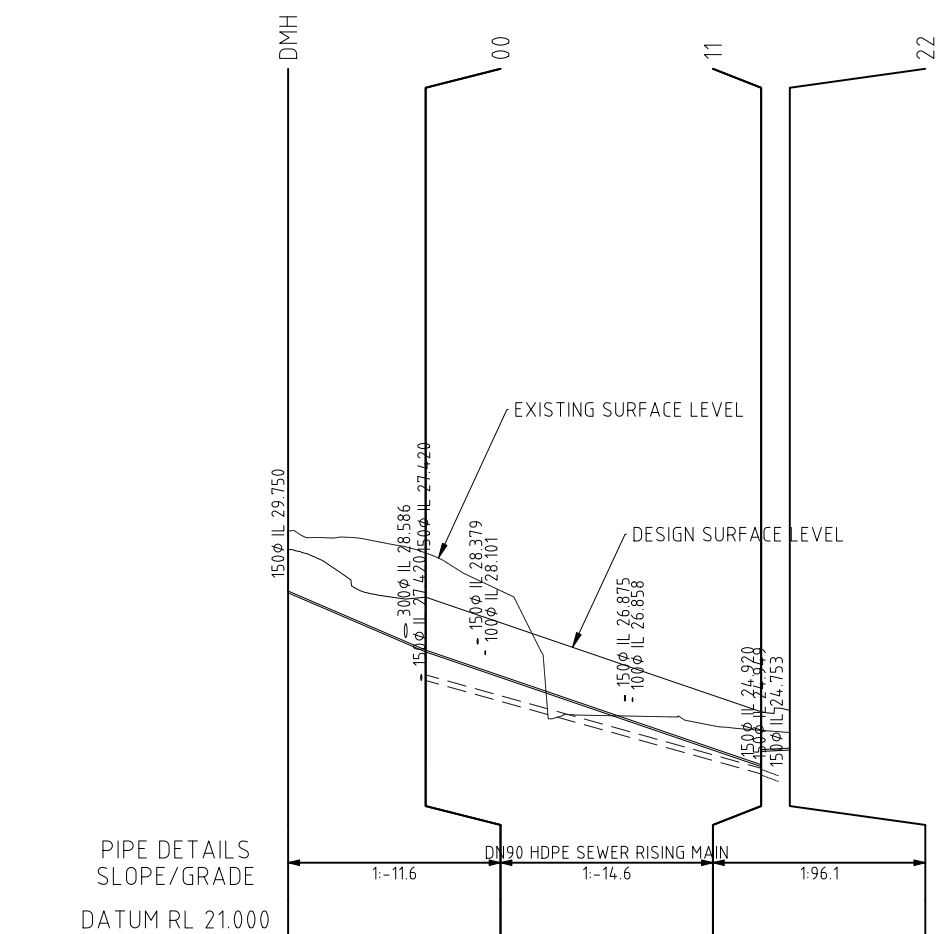
REV.	DESCRIPTION	BY	DATE	APPRD
NAME				
SEWER RETICULATION PLAN SHEET 1 OF 2				
PROJECT REF.	DRAWING NO.	REVISION		
16220	4-02	G		



REFER DRAWING 16220 - 4-03 FOR CONTINUATION



REFER DRAWING 16220 - 4-02 FOR CONTINUATION

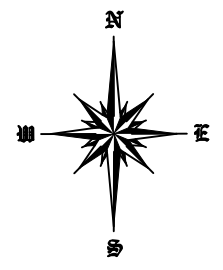


PIPE DETAILS SLOPE/GRADE DATUM RL 21.000					
DEPTH TO INVERT	1.634	2.619	0.958	0.558	0.462
INVERT LEVEL	29.738	28.176	25.143	25.543	25.582
FINISHED SURFACE	30.888	29.626	26.593	26.632	26.632
EXISTING SURFACE	31.372	30.795	26.101	26.044	26.044
CHAINAGE	0.000	18.190	44.392	62.582	66.372

SEWER RISING MAIN LONGITUDINAL SECTION FOR LINE 1
SCALES: HORIZONTAL 1:500 VERTICAL 1:100

Drawing approved for pre-start

LOGAN CITY COUNCIL
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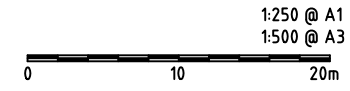
CLIENT
BOSS DEVELOPMENTS
(QLD) PTY LTD

PROJECT
132-134 LOGAN
STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367		
DESIGNED	RC LEONARD		
DRAWN	RC LEONARD		
REVIEWED	CBL		
DATE	20 SEPTEMBER 2016		
APPROVED			
J	PRE START	CBL	26/02/18
I	LCC RFI	RCL	19/01/18
H	LCC RFI	RCL	13/12/17
G	RISKSMAST	RCL	16/09/17
F	PUMP STATION	RCL	14/07/17
E	PUMP STATION	RCL	6/06/17
D	COMM SEWER	RCL	28/05/17
C	TMR RFI	RCL	14/02/17
B	SEWER AMNDT	RCL	17/01/17
REV	DESCRIPTION	BY	DATE

NAME
SEWER
RETICULATION PLAN
SHEET 2 OF 3

PROJECT REF.	DRAWING NO.	REVISION
16220	4-03	J



STRUCTURE	EX	1/1	2/1	3/1	4/1	DMH
MH/MS TYPE			G MS	G MS	A MH	A MH
COVER TYPE			300 DIA	300 DIA	PE LINED	PE LINED
DROP TYPE		V	B	V	B	V

DATUM RL 24.14

DIAMETER (mm)					150Ø PVC SN8		
CLASS							
OWNERSHIP					LOGAN WATER	COMMUNITY TITLE (PRIVATE)	
SLOPE/GRADE	8.13%	5.00%	1.59%	4.87%			
	1:12.29	1:20.00	1:63.06	1:20.53			
EMBEDMENT TYPE					TYPE C		
DEPTH (m)	1.050	1.420	1.400	1.428	1.408	1.420	1.320
							1.138
INVERT LEVEL (m)	27.139	28.611	28.631	29.106	29.126	29.482	29.582
							29.750
EXISTING SURFACE LEVEL	28.189	30.031		30.534		30.902	31.372
							31.888
FINISHED SURFACE LEVEL	28.189	30.031		30.534		30.902	30.888
CHAINAGE	0.000	18.103	9.501	27.604	22.449	50.053	53.503
						3.450	

↑
RISING MAIN TO
DISCHARGE TO
DISCHARGE
MANHOLE AT
IL29.620

1/2 2/2

EX	END
Lot 1 IL30.950 TYPE A CH2.000 D 1.052	Lot 13 IL31.157 TYPE A CH25.077 D 1.094
Lot 14 IL31.058 TYPE A CH10.643 D 1.018	
RL 27.85	
150Ø PVC SN8 R.R.J.	
LOGAN WATER	
1.00%	
1:100.00	
TYPE C	
1.235	0.897
30.850	31.109
31.437	32.736
31.987	32.255
0.000	25.877
	25.877

1/3 2/3 3/3 4/3

SPS	A MH	A MH	A MH	A MH	A MH
Lot 8 USIL25.100 TYPE A CH2.784 D 1.443	Lot 9 USIL26.700 TYPE A CH23.323 D 1.439	Lot 6 USIL28.143 TYPE B CH42.810 D 1.100	Lot 5 USIL29.582 TYPE B CH61.810 D 1.150	Lot 10 USIL30.020 TYPE A CH80.810 D 1.346	Lot 4 USIL30.386 TYPE B CH80.810 D 1.100
Lot 7 USIL26.899 TYPE B CH23.323 D 1.100	Lot 11 USIL30.400 TYPE A CH99.810 D 1.486	Lot 3 USIL30.900 TYPE B CH99.810 D 0.939	Lot 12 USIL30.671 TYPE CH120.277 D 1.219	Lot 13 USIL30.600 TYPE A CH120.277 D 1.340	Lot 2 USIL31.050 TYPE A CH120.277 D 0.927
RL 21.67					
150Ø IL 26.870	150Ø IL 28.373	150Ø IL 29.584	150Ø IL 30.315	150Ø IL 30.974	150Ø IL 30.974
0.750	1.200	1.250	1.000	0.950	0.950
1.67%	5.57%	1.69%	1.69%	1.69%	1.69%
1:60.00	1:17.96	1:59.18	1:59.18	1:59.18	1:59.18
TYPE C	TYPE C	TYPE C	TYPE C	TYPE C	TYPE C
1.929	1.696	1.686	1.646	1.533	1.533
24.667	24.713	29.680	29.720	30.210	30.210
26.041	26.055	33.144	33.144	33.111	33.111
26.596	26.409	31.366	31.366	31.743	31.743
0.000	2.785	88.492	91.277	29.000	120.277

NOTES
1. PROVIDE PE LINING TO SEWER
MANHOLE 4/1 AS PER SEQ-SEW-1407
DRAWING SET.
2. PRIVATE DISCHARGE MANHOLE
(DMH) TO BE CONSTRUCTED AS PER
SEQ-SPS-1406-1B

Drawing
approved for
pre-start

LOGAN CITY COUNCIL
APPROVED DOCUMENT

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OW/405/2017



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CLIENT
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(QLD) PTY LTD

PROJECT
132-134 LOGAN
STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367
DESIGNED	RC LEONARD
DRAWN	RC LEONARD
REVIEWED	CBL
DATE	20 SEPTEMBER 2016

APPROVED

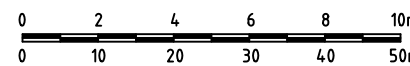
FHEAust CPEng RPEQ 4293

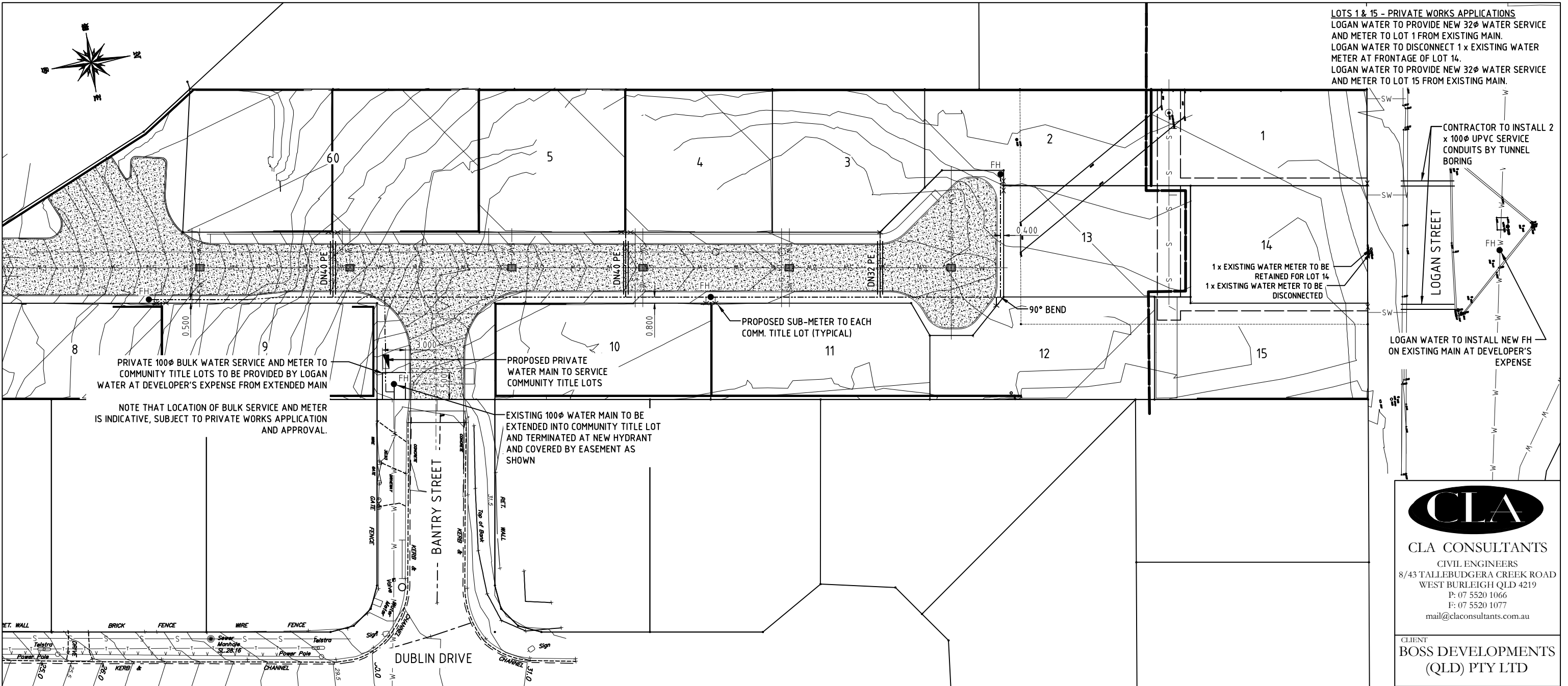
E	PRE-START	RCL	9/02/18	CBL
D	LCC RFI	RCL	19/01/18	CBL
C	LCC RFI	RCL	13/12/17	CBL
B	PUMP STATION	RCL	14/07/17	CBL
A	SEWER AMNDT	RCL	17/01/17	CBL

NAME
SEWER
LONGITUDINAL
SECTIONS

PROJECT REF.	DRAWING NO.	REVISION
16220	4-04	E

VERTICAL 1:200 @ A3
HORIZONTAL 1:1,000 @ A3





LOTS 1 & 15 - PRIVATE WORKS APPLICATIONS
LOGAN WATER TO PROVIDE NEW 320 WATER SERVICE AND METER TO LOT 1 FROM EXISTING MAIN.
LOGAN WATER TO DISCONNECT 1 x EXISTING WATER METER AT FRONTAGE OF LOT 14.
LOGAN WATER TO PROVIDE NEW 320 WATER SERVICE AND METER TO LOT 15 FROM EXISTING MAIN.

CONTRACTOR TO INSTALL 2 x 100mm UPVC SERVICE CONDUITS BY TUNNEL BORING

LOGAN STREET

LOGAN WATER TO INSTALL NEW FH ON EXISTING MAIN AT DEVELOPER'S EXPENSE



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PROJECT
132-134 LOGAN
STREET EAGLEBY

PROPERTY DESCRIPTION	LOTS 1/2 SP148367
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REVIEWED	CBL
DATE	20 SEPTEMBER 2016

APPROVED	 FIEAust CPEng RPEQ 4293		
J	PRE-START	RCL	9/02/18 CBL
I	LCC RFI	RCL	19/01/18 CBL
H	LCC RFI	RCL	13/12/17 CBL
G	LOT NOS	RCL	25/08/17 CBL
F	CONDUITS	RCL	25/08/17 CBL
E	WATER MAIN	RCL	25/08/17 CBL
D	COMM SEWER	RCL	28/05/17 CBL
C	TMR RFI	RCL	14/02/17 CBL
REV	DESCRIPTION	BY	DATE APPRD

NAME
WATER
RETICULATION PLAN

PROJECT REF.	DRAWING NO.	REVISION
16220	5-01	J

- GENERAL NOTES - WATER**
1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS AND STANDARDS.
 2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
 3. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
 4. COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
 5. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.
 6. A WATER METER SUPPLIED AT THE DEVELOPER'S COST, IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH THE STANDARD DRAWING FOR THE SEQ-SP.
 7. ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH THE SEQ-SP's ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY THE SEQ-SP.
 8. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS.
 9. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO. SEQ-WAT-1410-1.
 10. THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.

ALL ENVIRONMENT PROTECTION MEASURES SHOULD BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING, COMMENCING.

LEGEND			
NEW	EXISTING	DISUSED	
FIRE HYDRANT			GRAVITY SEWER
ISOLATION VALVE			STORMWATER DRAINAGE
SCOUR VALVE			GAS MAIN
AIR VALVE			ELECTRICITY U/G
DEAD END			ELECTRICITY O/H
CONNECTOR			TELECOMMUNICATION
TEST/CHLORINATION POINT			OPTIC FIBRE
REDUCER			UNIDENTIFIED SERVICE
PIPE MATERIAL CHANGE			OIL PIPELINE
			LIGHT POLE
WATER SERVICE POINT			ELECTRICITY/POWER POLE
FLUSHING POINT			STORMWATER GULLY
HYDRANT - OPERATIONAL PURPOSES ONLY			PIT (TELECOM/ELEC)
BOUNDARY VALVE			BACK OF KERB
FLOWMETER			
THRUST/ANCHOR BLOCK			
WATER SERVICE CONDUIT			
ENCASING/ENVELOPER PIPE			

WATER MAIN CONSTRUCTION
ALL WATER MAINS TO BE 100mm PVC-M PN16
SERIES 2 WITH TYPE C SUPPORT AS PER
SEQ-WAT STD DRG 1201-1A

LOGAN CITY COUNCIL
APPROVED PLAN OF DEVELOPMENT
This is the approved plan of development for Development Application
OW/405/2017

Drawing approved for
pre-start.

