SHEET NO.	SHEET TITLE
HEET NUMBER	SHEET TITLE
C001	COVER SHEET
C002	SURVEY SETOUT PLAN
C003	OVERALL SERVICES LAYOUT
C004 C100	SAFETY IN DESIGN  ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 1
C100	ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 2
C102	ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 3
C200	BULK EARTHWORKS LAYOUT PLAN - SHEET 1
C201	BULK EARTHWORKS LAYOUT PLAN - SHEET 2
C210	BULK EARTHWORKS NOTES AND DETAILS - SHEET 1
C211 C220	BULK EARTHWORKS NOTES AND DETAILS - SHEET 2  EARTHWORKS SUBGRADE ROCK PREPARATION DETAILS
C230	RETAINING WALL SUBSOIL DRAINAGE PLAN - SHEET 1
C231	RETAINING WALL SUBSOIL DRAINAGE PLAN - SHEET 2
C300	ROADWORKS NOTES AND DETAILS
C310	ROAD LONG 73 SECTION
C311	ROAD 73 CROSS SECTIONS - SHEET 1
C312	ROAD LONG 104 SECTION
C313 C314	ROAD LONG 104 SECTION  ROAD 104 CROSS SECTIONS
C315	ROAD 108 LONG AND CROSS SECTIONS
C316	ROAD 110 LONG AND CROSS SECTIONS
C317	ROAD 115 LONG AND CROSS SECTIONS
C318	ROAD 117 LONG AND CROSS SECTIONS
C320 C330	INTERSECTION DETAILS LAYOUT
C331	PAVEMENT MARKINGS AND SIGNAGE LAYOUT PLAN - SHEET 1  PAVEMENT MARKINGS AND SIGNAGE LAYOUT PLAN - SHEET 2
C400	STORMWATER CATCHMENT LAYOUT PLAN
C410	STORMWATER DRAINAGE LONG SECTIONS - SHEET 1
C411	STORMWATER DRAINAGE LONG SECTIONS - SHEET 2
C412	STORMWATER DRAINAGE LONG SECTIONS - SHEET 3
C413	STORMWATER DRAINAGE LONG SECTIONS - SHEET 4
C414	STORMWATER DRAINAGE LONG SECTIONS - SHEET 5
C420	STORMWATER DRAINAGE NOTES AND DETAILS
C430	STORMWATER DRAINAGE STRUCTURE DETAILS - SHEET 1
C431	STORMWATER DRAINAGE STRUCTURE DETAILS - SHEET 2
C432	STORMWATER DRAINAGE STRUCTURE DETAILS - SHEET 3
C433	STORMWATER DRAINAGE STRUCTURE DETAILS - SHEET 4
C440	STORMWATER CALCULATIONS 39% AEP STORM - SHEET 1
C441	STORMWATER CALCULATIONS 39% AEP STORM - SHEET 2
C442	STORMWATER CALCULATIONS 39% AEP STORM - SHEET 3
C443	STORMWATER CALCULATIONS 39% AEP STORM - SHEET 4
C444	STORMWATER CALCULATIONS 39% AEP STORM - SHEET 5
C445	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 1
C446 C447	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 2  STORMWATER CALCULATIONS 1% AEP STORM - SHEET 3
C447	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 5 STORMWATER CALCULATIONS 1% AEP STORM - SHEET 4
C448	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 4  STORMWATER CALCULATIONS 1% AEP STORM - SHEET 5
C450	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 6
C500	SEWERAGE LOCALITY PLAN & NOTES
C510	SEWERAGE LAYOUT PLAN - SHEET 1
C511	SEWERAGE LAYOUT PLAN - SHEET 2
C511	SEWERAGE LAYOUT PLAN - SHEET 3
C513	SEWERAGE LAYOUT PLAN - SHEET 4
C520	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 1
C521	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 2
C522	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 3
C523	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 4
C524	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 5
C525	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 6
C526	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 7
C527	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 8
C528	SEWERAGE RISING MAIN LONG SECTIONS - SHEET 1
C529	SEWERAGE RISING MAIN LONG SECTIONS - SHEET 2

C530	SEWERAGE NOTES AND DETAILS
C540	TEMPORARY ACCESS TRACK TO SEWER PUMP STATION
C600	WATER RETICULATION LOCALITY PLAN & NOTES
C610	WATER RETICULATION LAYOUT PLAN - SHEET 1
C611	WATER RETICULATION LAYOUT PLAN- SHEET 2
C612	WATER RETICULATION LAYOUT PLAN- SHEET 3
C620	WATER LIVE CONNECTION AND TYPICAL DETAILS
C700	OVERALL EROSION & SEDIMENT CONTROL KEY PLAN
C701	EROSION AND SEDIMENT CONTROL - BULK EARTHWORKS PHASE
C702	EROSION AND SEDIMENT CONTROL - STABILISATION PHASE
C710	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
C720	EROSION AND SEDIMENT CONTROL DRAIN DETAILS
C900	TEMPORARY WORKS - ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 1
C901	TEMPORARY WORKS - ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 2

- ALL DIMENSIONS GIVEN ON THESE DRAWINGS ARE IN METRES UNLESS NOTED OTHERWISE.
- ALL NEW WORK AND MATERIALS SHALL COMPLY WITH CURRENT RELEVANT COLINCIL STANDARDS AND SPECIFICATIONS.
- ALL WORK SHALL BE JOINED NEATLY TO EXISTING CONSTRUCTION.

**GENERAL NOTES** 

- THE CONTRACTOR IS TO LOCATE, IDENTIFY AND ESTABLISH THE CONNECTIVITY OF ALL EXISTING SERVICES WITHIN THE LIMITS OF PROPOSED WORKS AND CONFIRM THIS INFORMATION WITH THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MEASURING DEVICES SAFETY EQUIPMENT AND MACHINERY REQUIRED TO CARRY OUT INSPECTIONS/MEETINGS AS SPECIFIED OR REQUESTED BY THE ENGINEER.
- CONSTRUCTION CERTIFICATION RECUIREMENTS SLICH AS PAVEMENT PROCE ROLLS ETC. ARE TO BE AS PER THE LOGAN CITY COUNCIL SPECIFICATION.
- THESE NOTES SHALL APPLY TO ALL PORTIONS
- OF WORK.
  THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.

  ANY POINT OF CONFLICT WILL BE RESOLVED BY THE SUPERINTENDENT.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A CONSTRUCTION MANAGEMENT PLAN FOR THE SITE TO BE ACCEPTED BY EDO. THIS PLAN IS TO INCLUDE ALL ITEMS AS LISTED IN THE DECISION NOTICE AS A

# NOISE

 ALL PLANT AND EQUIPMENT SHALL BE
 CONTROLLED TO MINIMISE NOISE EMISSION IN ACCORDANCE WITH AS2436 (GUIDE TO NOISE CONTROL ON CONSTRUCTION. MAINTENANCE AND DEMOLITION). THE SITE WORKING HOURS SHOULD BE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS. WHERE NOT SPECIFIED THE HOURS SHALL BE:

MONDAY - SATURDAY 7:00am to 6:00pm SUNDAY OR PUBLIC HOLIDAY NO WORK PERMITTED

# PRE-CONSTRUCTION & **APPROVALS**

- NO LOCATING/ POTHOLING OF EXISTING SERVICES HAS BEEN CARRIED OUT. THE CONTRACTOR IS TO DETERMINE THE LOCATION AND DEPTH OF ALL EXISTING SERVICES WHICH AFFECT THE WORKS AND REPORT ANY POTENTIAL CLASHES TO THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORKS.
- THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING WITH THE APPROPRIATE AUTHORITY FOR LOCATING EXISTING SERVICES AND FOR ANY MODIFICATIONS TO EXISTING SERVICES REQUIRED AS A RESULT OF THE WORKS.
- THE CONTRACTOR IS RESPONSIBLE TO PROTECT ALL EXISTING SERVICES FROM DAMAGE.
- ANY WORKS DAMAGED AS A RESULT OF CONSTRUCTION ARE TO BE REINSTATED TO RELEVANT AUTHORITY'S REQUIREMENTS AT THE CONTRACTORS COST.
- FINISHED SURFACE LEVELS ARE TO BE GRADED UNIFORMLY BETWEEN LEVELS INDICATED ON THE DRAWINGS

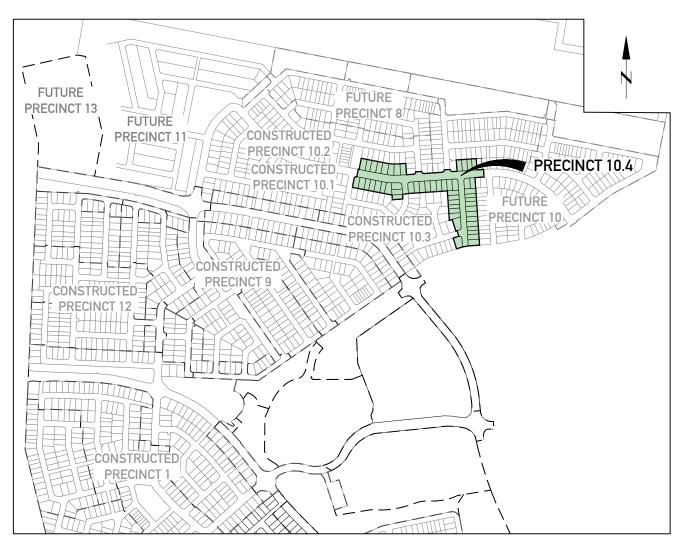
# **WORKPLACE HEALTH & SAFETY**

- THE CONTRACTOR SHALL BE THE PRINCIPAL CONTRACTOR AS DESIGNATED BY THE WORK HEALTH AND SAFFTY ACT (2011).
- THE CONTRACTOR SHALL PREPARE AND IMPLEMENT A WORKPLACE HEALTH AND SAFETY PLAN AS REQUIRED BY THE WORK HEALTH AND SAFETY ACT (2011).

# **SETOUT NOTES**

- CO-ORDINATE SETOUT PROVIDED ON THESE DRAWINGS IS BASED ON A CO-ORDINATE BASE PROVIDED ON THE DETAIL SURVEY DRAWING 7598 S 02 DTH, PREPARED BY SAUNDERS HAVILL GROUP. REFERENCE MARKS AND CORRESPONDING CO-ORDINATES ARE PROVIDED ON DRAWING COO2.
- THE LEVEL DATUM FOR WORKS IS A.H.D (AUSTRALIAN HEIGHT DATUM).

# **EVERLEIGH PRECINCT 10.4** SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK FOR MIRVAC QLD PTY LTD



**LOCALITY PLAN** Scale 1:5000



# FOR CONSTRUCTION ISSUED FOR CONSTRUCTION



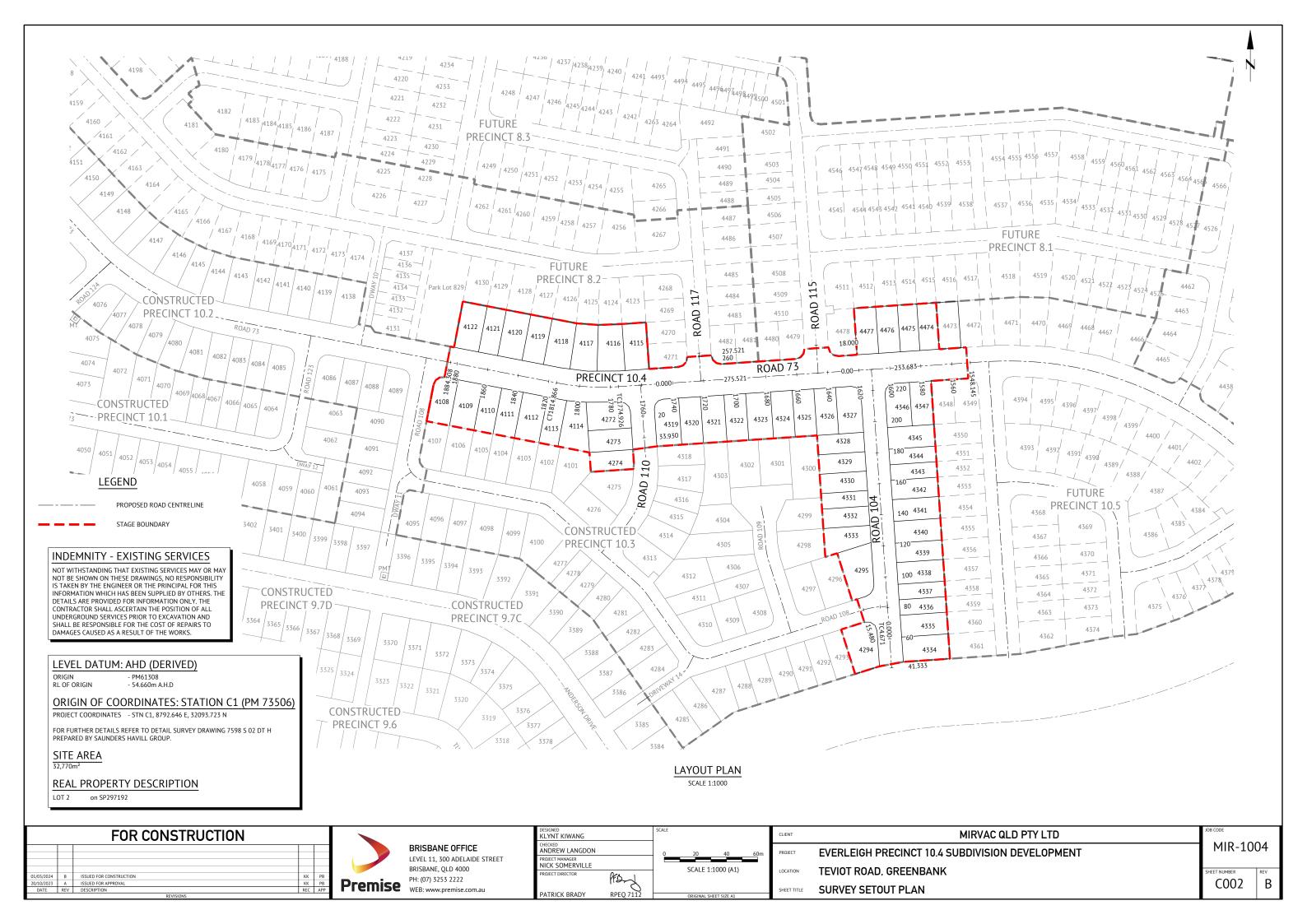
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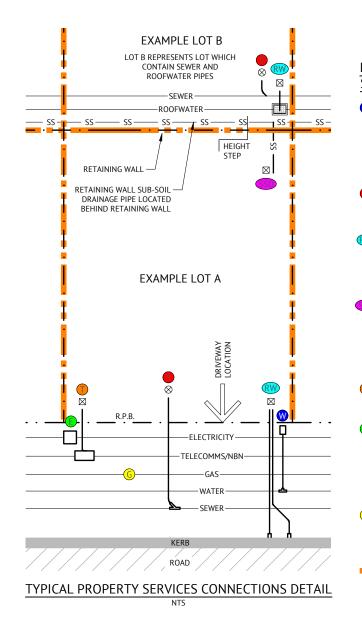
DESIGNED KLYNT KIWANG		SCALE				
CHECKED ANDREW LANGDON		0	100	200	300m	l
PROJECT MANAGER NICK SOMERVILLE			SCALE 1:5	000 (A1)		
PROJECT DIRECTOR	PROM					
PATRICK BRADY	RPEQ 7112		ORIGINAL SHE	ET SIZE A1		

	CLIENT	MIRVAC QLD PTY LTD
300m	PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
	LOCATION	TEVIOT ROAD, GREENBANK
	SHEET TITLE	COVER SHEET

MIR-1004 C001







# **LEGEND - PROPERTY SERVICE CONNECTIONS**

WATER - POLY SERVICE FROM WATER MAIN, METER BOX & COVER INSTALLED. BUILDER TO MAKE APPLICATION TO LOGAN CITY COUNCIL FOR METER ASSEMBLY SUPPLY AND INSTALLATION. WHERE WATER METER IS LOCATED BEHIND RETAINING WALL, 25mm POLYPIPE WILL BE SUPPLIED UNDER WALL INTO LOT AND WILL BE MARKED WITH 900X50X25 HW STAKE LABELLED "WATER".

SEWER - CAPPED Ø100 PVC PIPE (BURIED MAX 1.5m). MARKED WITH 400 ORANGE PVC CONDUIT SECURELY TAPED TO H.W. STAKE AT SURFACE (BURIED TO CAPPED PIPE). CONDUIT LABELLED "SEWER."

**ROOFWATER** - CONNECTION LOCATION CAN BE EITHER FRONT OF LOT VIA KERB ADAPTOR OUTLET TO ROAD. OR REAR OF LOT INTO ROOFWATER DRAINAGE PIPE VIA PIT. CAPPED PVC Ø100 PIPES (BURIED MAX 1.5m) MARKED WITH 900x50x25 HW STAKE LABELLED "ROOFWATER."

RETAINING WALL SUB-SOIL DRAINAGE - OUTLET POINT TO LOT FOR RETAINING WALL SUB-SOIL DRAINAGE TO BE CONNECTED TO YARD DRAINAGE BY BUILDER UNLESS REAR WALL CAN BE DISCHARGED THROUGH THE SUBSOIL ON A SIDE BOUNDARY ON THE LOW SIDE. Ø100 NON-SLOTTED AGG PIPE CAPPED AND TERMINATED 200m ABOVE SURFACE. PVC DUCT TAPED TO 900x50x25 HW STAKE LABELLED "RETAINING WALL SUBSOIL OUTLET".

TELECOMMUNICATIONS/NBN - PVC CONDUIT (BURIED APPROX 300mm). MARKED WITH 900x50x25 HW STAKE LABELLED "TELECOMMS".

**ELECTRICITY** - ELECTRICITY PILLAR EXISTS IN ROAD VERGE. BUILDER TO MAKE APPLICATION WITH ENERGY PROVIDER FOR SERVICE INSTALLATION TO LOT. WHERE ELECTRICITY
PILLAR IS LOCATED BEHIND RETAINING WALL, CONDUIT WILL BE SUPPLIED UNDER WALL INTO LOT AND WILL BE MARKED WITH 900x50x25 HW STAKE LABELLED "ELECTRICITY".

GAS - GAS MAIN EXISTS IN ROAD VERGE. BUILDER/HOME OWNER TO MAKE APPLICATION TO GAS PROVIDER FOR SERVICE INSTALLATION

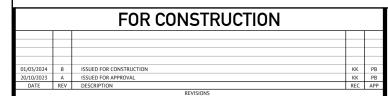
RETAINING WALL

SERVICE TERMINATION POINT MARKER 900x50x25 HW STAKE, OR 40Ø ORANGE PVC CONDUIT STAKE



# LAYOUT PLAN SCALE 1:1500







# BRISBANE OFFICE

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esigned (LYNT KIWANG		SCALE			
HECKED ANDREW LANGDON		0	30	60	90m
ROJECT MANAGER					
NICK SOMERVILLE			SCALE 1:1	500 (A1)	
ROJECT DIRECTOR	PFD-		30,122 1.1	1300 (1.1)	
ATDICK DDADY	DDEO 7113				

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	OVERALL SERVICES LAYOUT

MIR-1004 C003

# **DESIGN HAZARD NOTES:**

- 1. PREMISE, HAVING BEEN COMMISSIONED TO CARRY OUT DETAILED DESIGN AND DOCUMENTATION OF THESE WORKS, CONFIRM THAT THE PREMISE DRAWING SET HAS BEEN INTERNALLY REVIEWED FOR DESIGN SAFETY IN ACCORDANCE WITH SECTION 22 OF THE WORK HEALTH AND SAFETY ACT 2011 QLD.
- HEALTH AND SAFETY ACT 2011 QLD.

  2. THIS REPORT SUMMARISES AN INTERNAL REVIEW OF PREMISE'S DETAILED DESIGN DRAWINGS FOR DESIGN SAFETY.

  3. THIS REPORT IN NO WAY RELIEVES THE PRINCIPAL, CONTRACTOR OR ANY OTHER PARTY OF THEIR OWN OBLIGATIONS AND RESPONSIBILITIES UNDER THE WORK HEALTH AND SAFETY ACT 2011 QLD, INCLUDING (BUT NOT LIMITED TO) CONSULTATION WITH THE DESIGNER UNDER SECTION 294 OF THE ACT, THE PREPARATION OF SATISFACTORY SAFE WORK METHOD STATEMENTS AND DUTIES OF CARE.

  4. IT IS A REQUIREMENT UNDER SECTION 296 OF THE WORK HEALTH AND SAFETY ACT 2011 QLD, THAT A COPY OF THIS REPORT BE
- PROVIDED TO THE CONTRACTOR BY THE ENTITY COMMISSIONING THE WORK SHOWN OF THE PREMISE DRAWINGS.

  5. AS PER THE DEPARTMENT OF JUSTICE AND THE ATTORNEY-GENERAL- WORKPLACE HEALTH AND SAFETY QUEENSLAND, A WRITTEN REPORT IS NOT REQUIRED FOR DESIGNS THAT HAVE TYPICAL FEATURES.

CONSEQUENCE TABLE				
LEVEL	LEVEL CONSEQUENCE			
5 - CATASTROPHIC	FATALITY OR MULTIPLE PERSONS ONSITE WITH LIFE THREATENING HEALTH EFFECT OR INABILITY TO CONTINUE	HUGE FINANCIAL OR TIME LOSS		
4 - MAJOR	EXTENSIVE INJURIES, OR ONSET OF SEVERE OR LIFE THREATENING HEALTH EFFECT TO SINGLE PERSON ONSITE. MULTIPLE PERSONS WITH ONSET OF IRREVERSIBLE HEALTH EFFECTS. PREMANENT INJURT TO PERSON INSITE.	MAJOR FINANCIAL OR TIME LOSS		
3 - MODERATE	MEDICAL TREATMENT REQUIRED. IRREVERSIBLE HEALTH EFFECT TO A SINGLE PERSON. MULTIPLE PERSONS ONSITE WITH REVERSIBLE HEALTH EFFECTS.	HIGH FINANCIAL OR TIME LOSS		
2 - MINOR	FIRST AID, SINGLE OR MULTIPLE INJURIES AMONGST PERSONS ONSITE. SINGLE PERSON ONSITE WITH MODERATE SHORT TERM REVERSIBLE HEALTH EFFECTS.	MEDIUM FINANCIAL OR TIME LOSS		
1 - INSIGNIFICANT	NO INJURIES. OVER EXPOSURE TO A SINGLE PERSON ONSITE, BUT NO REPORTED HEALTH EFFECTS.	LOW FINANCIAL OR TIME LOSS		

# CONSTRUCTION HAZARD NOTES:

1. UNDER THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011, THE WORK HEALTH AND SAFETY REGULATION 2011 AND OTHER LEGISLATION AND GUIDELINES, THE PRINCIPAL CONTRACTOR HAS SPECIFIC OBLIGATIONS IN RELATION TO THE SAFE OPERATION OF

TO ASSIST THE PRINCIPAL CONTRACTOR IN COMPLYING WITH THESE OBLIGATIONS THE PROJECT DESIGNERS HAVE IDENTIFIED BY DRAWING NOTES, AREAS WHERE POTENTIAL HAZARDS MAY ARISE. THESE NOTES OR ADVICE, SHALL NOT NECESSARILY BE CONSIDERED COMPLETE AND ARE BASED UPON THE DESIGNERS' UNDERSTANDING OF THE SAFETY RISKS ASSOCIATED WITH THE

THESE NOTES OR ADVICE SHALL NOT RELIEVE THE PRINCIPAL CONTRACTOR OF ANY OBLIGATION UNDER THE RELEVANT LEGISLATION OR GUIDELINE. THE PRINCIPAL CONTRACTOR SHALL REMAIN RESPONSIBLE FOR THE PREPARATION OF AN APPROPRIATE WORK HEALTH SAFETY MANAGEMENT PLAN AND SAFE WORK METHOD STATEMENTS FOR THE SITE.
2. PURSUANT TO THE WORK HEALTH AND SAFETY ACT 2011 WE HEREBY ADVISE THAT OUR DESIGN SAFETY REVIEW HAS IDENTIFIED

UNUSUAL OR ATYPICAL DESIGN FEATURES THAT MAY PRESENT ADDITIONAL HAZARDS OR RISKS DURING THE CONSTRUCTION PHASE AND THESE ARE LISTED IN THE CONSTRUCTION HAZARD SCHEDULE.

	RISK ANALYSIS MATRIX							
		1 - INSIGNIFICANT	3 - MODERATE	4 - MAJOR	5 - CATASTROPHIC			
	A - ALMOST CERTAIN	MODERATE	HIGH	EXTREME	EXTREME	EXTREME		
LIKELIHOOD	B - LIKELY	MODERATE	HIGH	HIGH	EXTREME	EXTREME		
	C - POSSIBLE	LOW	MODERATE	HIGH	EXTREME	EXTREME		
	D - UNLIKELY	LOW	LOW	MODERATE	HIGH	EXTREME		
	E - RARE	LOW	LOW	MODERATE	HIGH	HIGH		

RISK EVALUATION TABLE			
RISK LEVEL ACTION REQUIRED			
EXTREME	UNACCEPTABLE RISK. RE-DESIGN REQUIRED. DO NOT PROCEED WITHOUT ADDITIONAL CONTROLS.		
HIGH	UNACCEPTABLE RISK. ADDITIONAL CONTROLS NEEDED. CONSIDER FURTHER REVIEW AND CONSIDER RE-DESIGN		
MODERATE	RISK MAY BE ACCEPTABLE. MANAGEMENT TO DETERMINE ACTIONS REQUIRED		
LOW	ACCEPTABLE. MANAGE RISK THROUGH ROUTINE PROCEDURES AND OTHER ADMINISTRATIVE CONTROLS		

LIKELIHOOD TABLE				
LEVEL	LEVEL DESCRIPTION			
A - ALMOST CERTAIN	THE EVENT <u>IS</u> EXPECTED TO OCCUR IN MOST CERTAIN CIRCUMSTANCES	MORE THAN ONCE PER YEAR		
B - LIKELY	THE EVENT WILL PROBABLY OCCUR IN MOST CIRCUMSTANCES	AT LEAST ONCE IN 5 YEARS		
C - POSSIBLE	THE EVEN T SHOULD OCCUR AT SOME TIME	AT LEAST ONCE IN 10 YEARS		
D - UNLIKELY	THE EVENT COULD OCCUR AT SOME TIME	AT LEAST ONCE IN 30 YEARS		
E - RARE	THE EVENT MAY OCCUR IN EXCEPTIONAL CIRCUMSTANCES	LESS THAN ONCE IN 30 YEARS		

FOR CONSTRUCTION							
		1 01/ 001/311/0011014					
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB			
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB			
DATE	REV	DESCRIPTION	REC	APP			
REVISIONS							



BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

DESIGNED KLYNT KIWANG		SCALE
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	Pronj	
	$\mathcal{O}$	
PATRICK BRADY	RPEQ 7112	ORIG

ITEM DESIGN HAZARD

URBAN LAYOUT HAZARD

D5

**ITEM** 

HAZARD :

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	SAFETY IN DESIGN

				1	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	
			ERGROUND AND/OR OVERHEAD SERVICES ON SITE AND NEEDS TO BE REMOVED AND	HIGH	THE DESIGN OF THE PROJECT HAS INCORPORATED THE RELOCATION OF THESE EXISTING SERVICES AND THE CONTRACTOR IS TO BE MADE AWARE OF THESE EXISTING SERVICES AND TAKE ALL ACTIONS NECESSARY TO MITIGATE THIS HAZARD DURING CONSTRUCTION.	MEDIUM
	DEEP EXCAVATION HAZARD	DEEP EXCAVAT STRUCTURE.	ION IS REQUIRED TO INSTALL SEWER TO SERVICE	HIGH	THE DEEP EXCAVATION HAZARD CANNOT BE AVOIDED AND THE CONTRACTOR WILL NEED TO TAKE ALL ACTIONS NECESSARY TO ADDRESS THIS HAZARD DURING CONSTRUCTION.	MEDIUM
HIGH RETAINING WALLS			OF WORKS CONTAIN HIGH RETAINING WALLS MORPHOLOGY DICTATES.	HICH	HIGH RETAINING WALLS CANNOT BE AVOIDED DUE TO EXISTING LAND MORPHOLOGY. SINGLE TIER WALLS HAVE LIMITED TO A MAX HEIGHT OF 2m. CONTRACTOR WILL NEED TO TAKE ALL ACTIONS NECESSARY TO ADDRESS THIS HAZARD DURING CONSTRUCTION.	MEIDUM
WATER BODIES PROPOSED CO			NSTRUCTION WATER DAMS WILL BE PRESENT ON	MEDILIM	PROPOSED WATER BODIES HAVE BEEN LOCATED AWAY FROM PUBLIC ACCESS AREAS. ACCESS TO THESE LOCATION WILL BE RESTRICTED FROM THE PUBLIC. CONTRACTOR WILL NEED TO TAKE ALL ACTIONS NECESSARY TO ADDRESS THIS HAZARD DURING CONSTRUCTION.	LOW
			CONSTRUCTIO	)N HAZAR[	) SCHEDULE	
POTENTIAL HAZARD POSSIBLE PREVENTATIVE ACTION						
DEEP EXCAVATION HAZARD UNDERTAKEN BY APP					ES INFORMATION BEFORE EXCAVATION WORKS COMMENCE. EXCAVATION WORK M INEL. EXCAVATIONS SHALL BE ADEQUATELY SHORED AND APPROPRIATE BARRICAD	
-						

ELIMINATION / MINIMISATION OF HAZARD /

THE HAZARD HAS BEEN REDUCED/ELIMINATED BY:- LINE MARKED INTERSECTION TO ENSURE IT IS CLEAR WHICH ROAD HAS

- DESIGN VEHICLE SWEPT PATH CHECKED FOR COMPLIANCE

RESIDUAL

RISK

LOW

C1		ALL STEPS MUST BE TAKEN TO OBTAIN CURRENT UNDERGROUND SERVICES INFORMATION BEFORE EXCAVATION WORKS COMMENCE. EXCAVATION WORK MUST BE UNDERTAKEN BY APPROPRIATELY EXPERIENCED AND QUALIFIED PERSONNEL. EXCAVATIONS SHALL BE ADEQUATELY SHORED AND APPROPRIATE BARRICADES AND SIGNAGE ERECTED, IF REQUIRED.
C2	OVERHEAD POWER HAZARD	WARNING SIGNS AND MARKERS SHALL BE ERECTED ADVISING OF THE PRESENCE OF LIVE OVERHEAD CABLES. A REPRESENTATIVE OF THE SUPPLY AUTHORITY SHALL REMAIN ON SITE DURING EARTHWORKS AND ANY OTHER HIGH RISK WORKS, IF REQUIRED.
C3	recedent former trion, cris rate mitter	WARNING SIGNS AND MARKERS SHALL BE ERECTED ADVISING OF THE PRESENCE OF THE EXISTING SERVICE. THE SERVICE SHALL BE IDENTIFIED AND MARKED BY THE SUPPLY AUTHORITY PRIOR TO THE COMMENCEMENT OF EXCAVATION. A REPRESENTATIVE OF THE SUPPLY AUTHORITY SHALL REMAIN ON SITE DURING THE EXCAVATION WORK, IF REQUIRED.
C4		ALL REQUIRED PERMITS, APPROVALS AND SAFETY REQUIREMENTS FROM THE RELEVANT AUTHORITY SHOULD BE OBTAINED PRIOR TO COMMENCING WORK. A REPRESENTATIVE OF THE RELEVANT AUTHORITY SHALL REMAIN ON SITE DURING CONSTRUCTION WHILE THE HAZARD REMAINS.
C5	PEDESTRIAN ACCESS HAZARD	WORK WITHIN OR ADJACENT TO AREAS WHICH THE PUBLIC REQUIRES PEDESTRIAN ACCESS MUST HAVE APPROPRIATE BARRICADES AND SIGNAGE ERECTED AT ALL TIMES.
C6	POTENTIAL VEHICLE HAZARD	SITE PERSONNEL SHALL BE ADVISED OF THE POTENTIAL HAZARDS AND THE APPROPRIATE PROCEDURES FOR WORKING ADJACENT TO OPERATING PUBLIC ROADS.  APPROPRIATE SAFETY CLOTHING SHALL BE WORN AND THE REQUIRED SIGNAGE SHALL BE ERECTED. THE WORKS SHALL BE UNDERTAKEN IN A MANNER WHICH DOES NOT COMPROMISE THE SAFETY OF THE VEHICLE OCCUPANTS OR THE SITE PERSONNEL.
C7	DEMOLITION AND CLEARING HAZARD	SUITABLE QUALIFIED AND EXPERIENCED PERSONNEL SHALL BE RESPONSIBLE FOR THE DEMOLITION AND CLEARING WORKS FOR THE PROJECT AT ALL TIMES. THE CONTRACTORS WORK METHOD STATEMENT SHALL ALSO GIVE CONSIDERATION TO FALLING DEBRIS, COLLAPSE AND DANGEROUS AIRBORNE AGENTS.
C8	TRAFFIC MANAGEMENT HAZARD	SUITABLE QUALIFIED AND EXPERIENCED PERSONNEL SHALL BE RESPONSIBLE FOR THE SAFE AND ORDERLY PASSAGE OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH THE PROJECT AT ALL TIMES. THE CONTRACTOR SHALL DEVELOP A TRAFFIC MANAGEMENT PLAN (TMP) FOR THE PROJECT TO ESTABLISH APPROPRIATE CONTROLS IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL.
С9	ASBESTOS HAZARD	ALL PERSONNEL SHOULD BE ADVISED OF THE POTENTIAL PRESENCE OF ASBESTOS AND AN IDENTIFICATION AND ACTION PLAN SHALL BE PUT IN PLACE. SAMPLING AND IDENTIFICATION IS TO BE UNDERTAKEN IN ACCORDANCE WITH WORKPLACE HEALTH AND SAFETY REGULATIONS. IF SAMPLING CONFIRMS THE PRESENCE OF ASBESTOS THEN THE ACTION PLAN IS TO BE IMPLEMENTED TO REMEDIATE THE SITE.
C10	POTENTIAL ROCK FALL	LAND ABOVE THE SITE HAS BEEN CLEARED AND SOME EARTHWORKS HAS BEEN UNDERTAKEN CREATING A POTENTIAL ROCK FALL HAZARD. SUITABLE PERSONNEL SHALL BE RESPONSIBLE FOR IDENTIFYING ANY POTENTIAL HAZARD AND THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO ELIMINATE THE HAZARD.

**DESIGN HAZARD SCHEDULE** 

HIGH

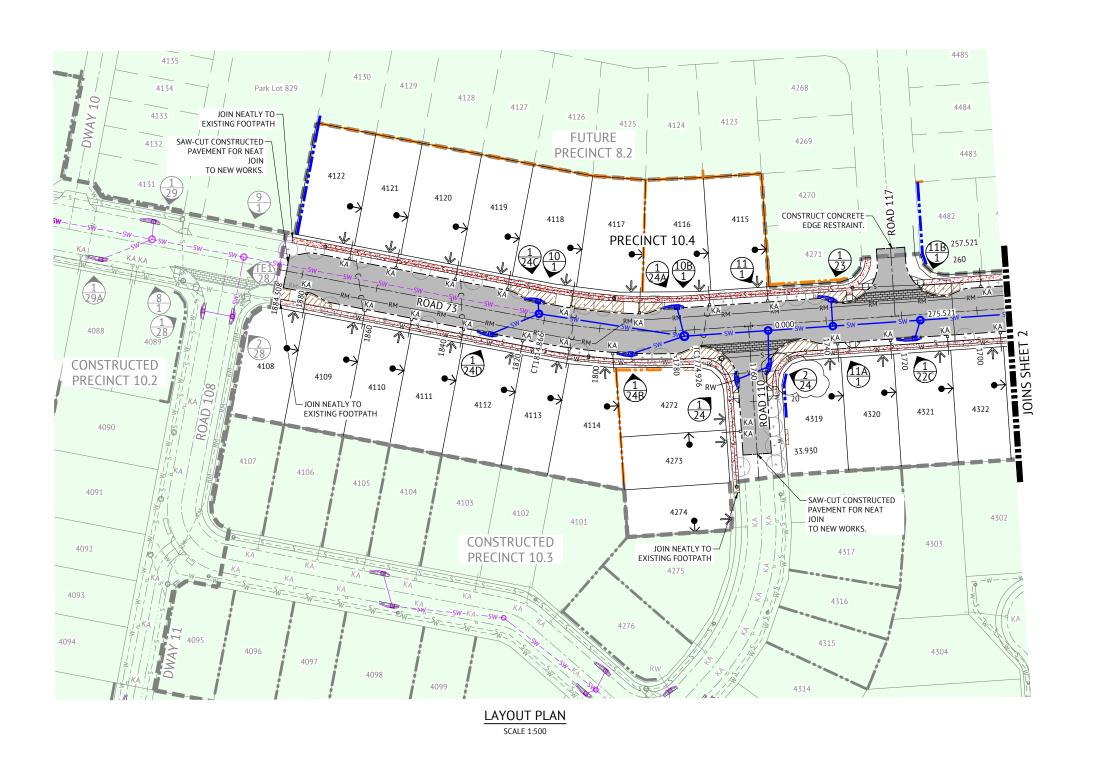
POTENTIAL HAZARD

THE URBAN LAYOUT IS DESIGNED AROUND A PARTICULAR

INTERSECTION IS UNCLEAR WHICH ROAD HAS PRIORITY

MIR-1004

В



# **LEGEND - PROPOSED**

 $\triangle$ 

RW

PROPOSED IPWEA STD TYPE 'B1' KERB & CHANNEL. REFER IPWEA STD DWG RS-080.

PROPOSED IPWEA TYPE 'M3' KERB & CHANNEL. REFER IPWEA STD DWG RS-080.

PROPOSED IPWEA TYPE 'ER1' EDGE RESTRAINT.

REFER IPWEA STD DWG RS-080.

PROPOSED 1.5m WIDE (U.N.O.) CONCRETE FOOTPATH. REFER LCC STD DWGS.

PROPOSED KERB RAMP.

REFER IPWEA STD DWG RS-090. PROPOSED STORMWATER

PROPOSED STORMWATER STRUCTURE No.

ROOFWATER DRAINAGE KERB ADAPTORS WITH TWIN 125×75 GALVANISED RHS. REFER DETAIL ON DWG C420.

ROOFWATER DRAINAGE KERB ADAPTORS. REFER DETAIL ON DWG C420.

> PROPOSED ROOFWATER HOUSE CONNECTION (150 Ø uPVC)

PROPOSED CONCRETE PANEL RETAINING WALL

PROPOSED CONCRETE SI FEPER RETAINING WALL

ZERO LOT BOUNDARY PROPOSED FUTURE DRIVEWAY LOCATION PROPOSED SEWER

PROPOSED WATER

PROPOSED WATER CONDUIT PROPOSED SEWER RISING MAIN

STAGE BOUNDARY

DURATHEM THRESHOLD TREATMENT. REFER TO URBIS EVERLEIGH LANDSCAPE MASTERPLAN - PART B (PAGE 20) FOR

PROPOSED LANDSCAPING. CIVIL CONTRACTOR TO COORDINATE WITH LANDSCAPING CONTRACTOR 7/1////////// TO CARRY OUT THEIR WORKS. REFER TO LANDSCAPE DRAWINGS FOR FURTHER DETAIL.

TREES

# **LEGEND - CONSTRUCTED**

ROOFWATER DRAINAGE KERB ADAPTORS WITH TWIN 125x75 GALVANISED RHS. REFER DETAIL ON DWG C420.

ROOFWATER DRAINAGE KERB ADAPTORS. REFER DETAIL ON DWG C420.

ROOFWATER HOUSE CONNECTION ( 150 Ø uPVC ) RW ~

STORMWATER SEWER

SEWER RISING MAIN

WATER RETAINING WALL



STORMWATER STRUCTURE No.

# PAVEMENT SUBGRADE GUARANTEE:

CONTRACTOR SHALL UNDERTAKE EARTHWORKS REQUIRED IN FITHER CUT OR FILL TO ENSURE THE SUBGRADE QUALITY IS AT CBR10 OR GREATER. CONTRACTOR TO LIAISE WITH OWN GEOTECHNICAL ENGINEER TO ACHIEVE REQUIREMENT.

# STORMWATER TRENCH BACKFILL NOTE:

ALL STORMWATER TRENCH BACKFILL MATERIAL SHALL BE SOURCED FROM ON SITE EXCAVATED MATERIAL

FOR TYPICAL SECTIONS AND NOTES REFER TO DRAWING No. C300 - ROADWORKS TYPICAL SECTIONS AND NOTES, AND DRAWING No. C420 STORMWATER DRAINAGE DETAILS AND NOTES.

FOR CONSTRUCTION					
01/03/2024 B MOVED SAG GULLY KK PE					
20/10/2023 A ISSUED FOR APPROVAL KK PE					
DATE REV DESCRIPTION REC AP					



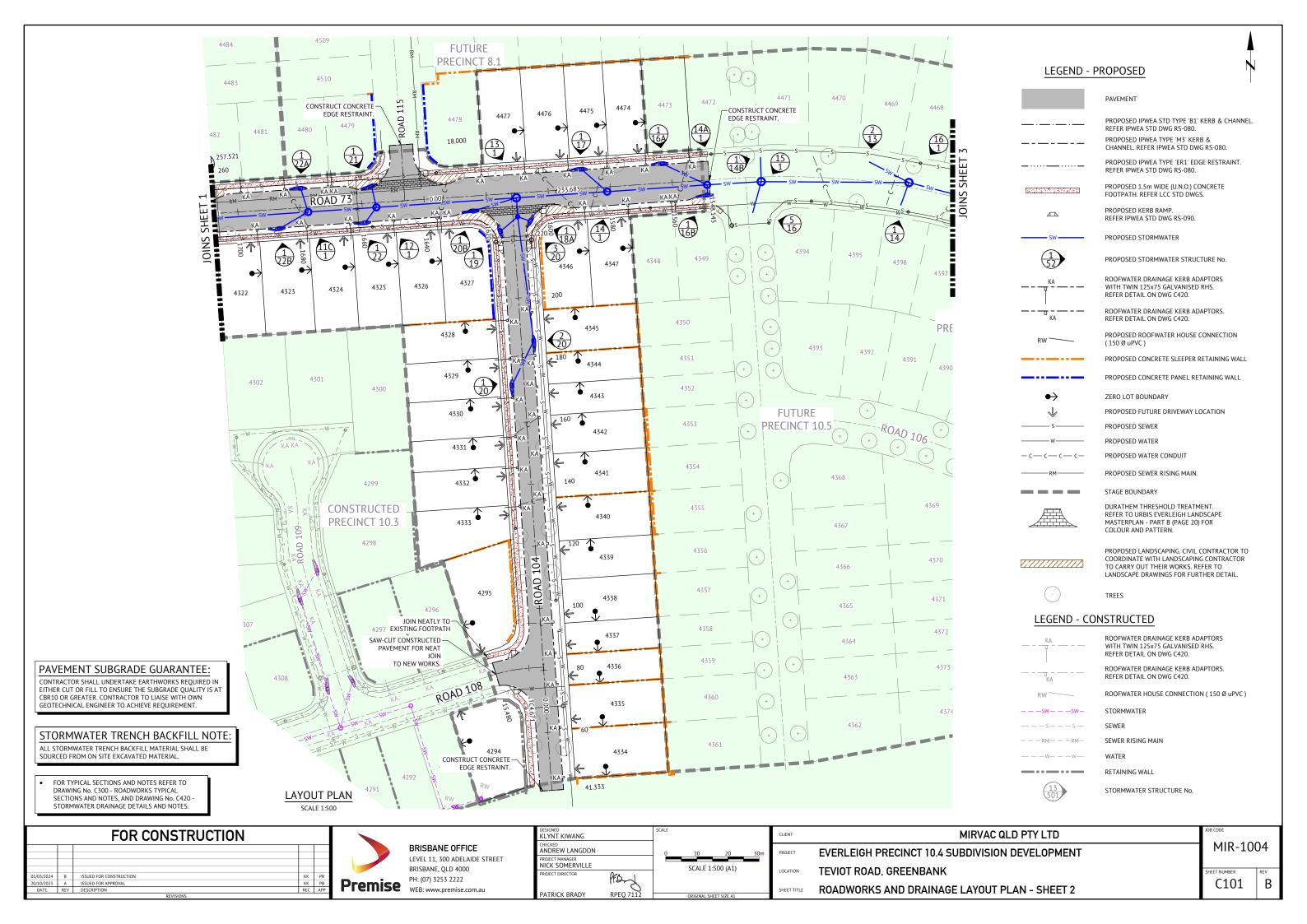
# BRISBANE OFFICE BRISBANE, QLD 4000

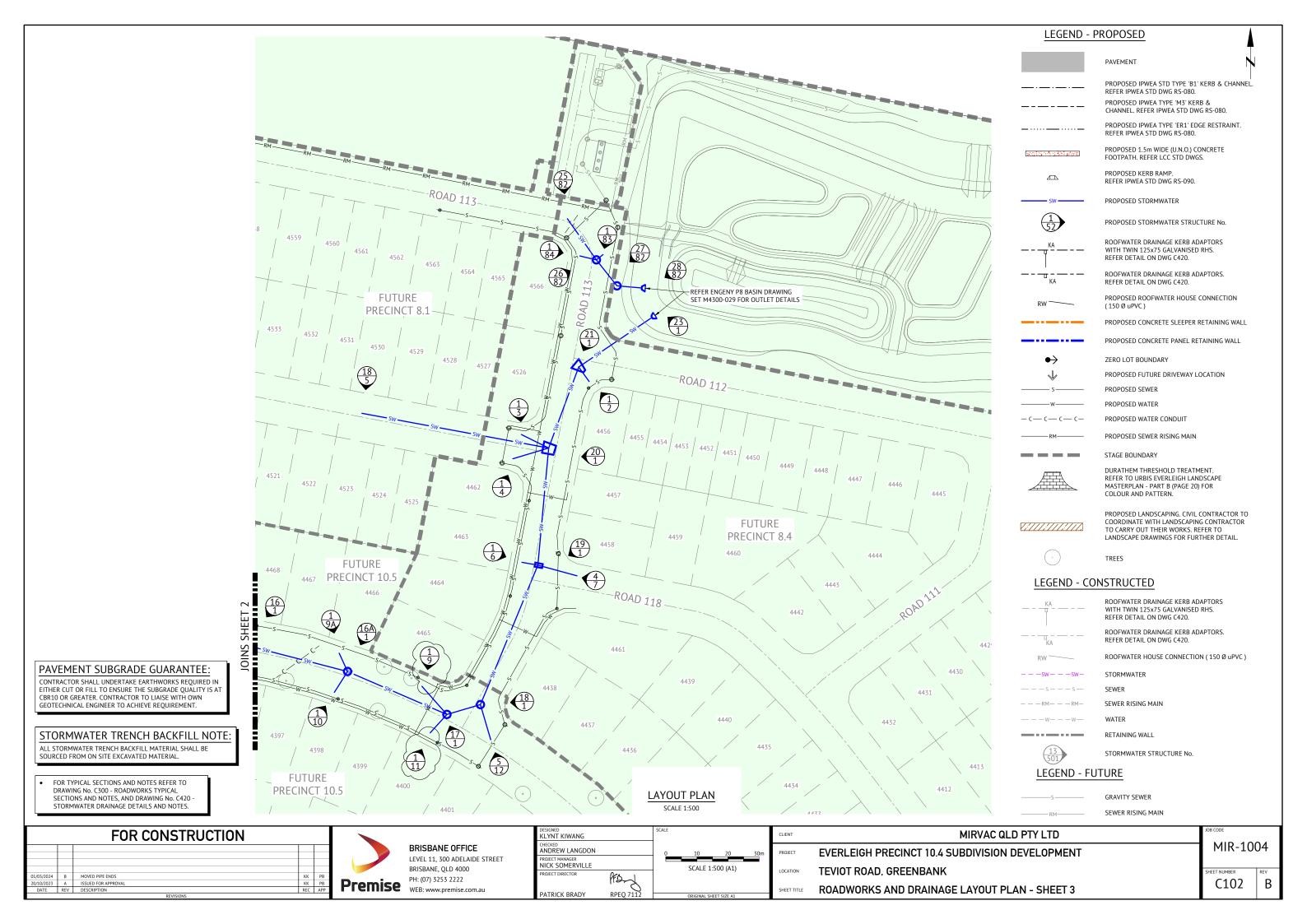
LEVEL 11, 300 ADELAIDE STREET PH: (07) 3253 2222 Premise PH: (U/) 3233 2222 WEB: www.premise.com.au

NT KIWANG		SCALE			
REW LANGDON		0	10	20	30m
CT MANAGER					
K SOMERVILLE			SCALE 1	:500 (A1)	
CT DIRECTOR	PFD			,	
RICK BRADY	RPEO 7112	-	ORIGINAL SH	IFFT SIZE A1	
	_		53ii v iz 5i		

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 1

MIR-1004









# LEGEND - PROPOSED

NO CHANGES TO BULK EARTHWORKS. EARTHWORKS DONE AS PART OF PRECINCTS 9, 10.1, 10.2 & 10.3 WORKS EXTENT OF CUT EXTENT OF FILL FINISHED MAJOR CONTOURS (1.00m) FINISHED MINOR CONTOURS (0.25m) 51.65 FINISHED SURFACE LEVEL PROPOSED CONCRETE SLEEPER RETAINING WALL (AND HEIGHT). TIMBER TEXTURED SLEEPERS AND 2 COAT PAINT. DESIGN SPECIFICATION BY MANUFACTURER PROPOSED CONCRETE PANEL RETAINING WALL (AND HEIGHT). 2 COAT TEXTURED PAINT. DESIGN SPECIFICATION BY MANUFACTURER FEATURE FENCE BY LANDSCAPER FOOTPATH SPOT LEVEL ightharpoonsZERO LOT LINE PROPOSED FUTURE DRIVEWAY LOCATION STAGE BOUNDARY

# LEGEND - CONSTRUCTED

RETAINING WALL — —12.0—— — CONTOURS (0.50m) STORMWATER SEWER WATER

# NOTES

- REFER TO BULK EARTHWORKS NOTES & DETAILS DRAWINGS FOR:
  - EARTHWORKS NOTES AND DETAILS
- RETAINING WALL NOTES AND DETAILS PROPOSED SERVICES ARE WITHIN THE VICINITY OF RETAINING WALLS. REFER SERVICE DRAWINGS FOR SERVICE LOCATIONS AND DETAILS.
- EXISTING DWELLINGS, FENCES ETC TO BE DEMOLISHED AND REMOVED OFF SITE BY OTHERS (UNLESS NOTED OTHERWISE)
  FINAL RETAINING WALL TYPES AND FINISHES SHALL BE
- CONFIRMED WITH THE SUPERINTENDENT PRIOR TO

EARTHWORKS FOR LOTS 4108-4114, 4272-4274, 4294-4295, 4319-4333 & 4334-4337 COMPLETED AS PART OF PRECINCT 9, 10.1, 10.2 & 10.3 WORKS

FOR CONSTRUCTION				
01/03/2024	В	AMENDED PAD LEVELS AND RETAINING WALL HEIGHTS, ADDED RETAINING WALL BET 4116/4117	KK	PB
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB
DATE	REV	DESCRIPTION	REC	APP
		REVISIONS		



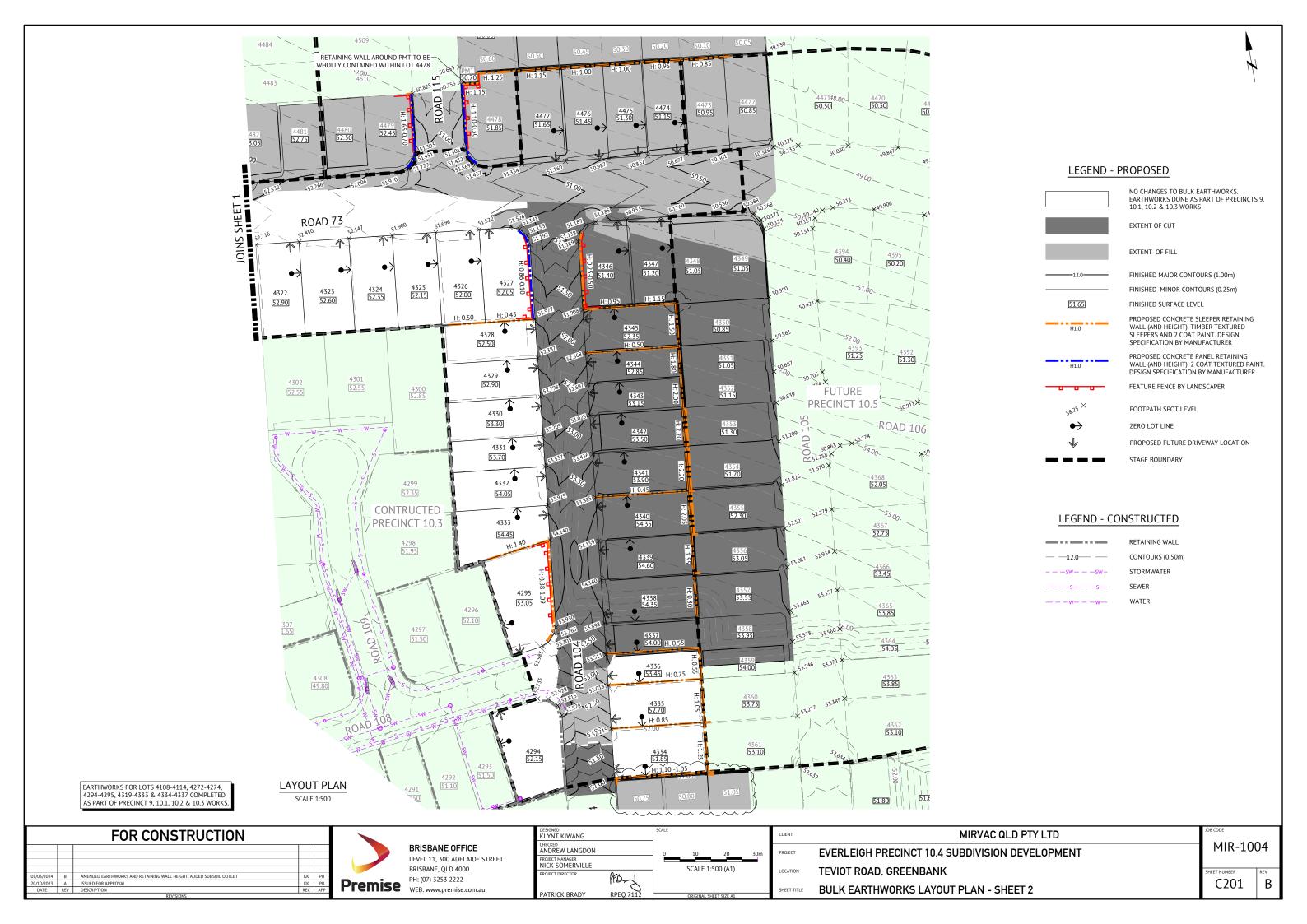
BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222



CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	BULK EARTHWORKS LAYOUT PLAN - SHEET 1

MIR-1004

C200 В



# **NOTES**

- LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE
- BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
  EARTHWORKS DRAWINGS ARE TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL LAYOUT PLANS AND EROSION AND SEDIMENT
- ALL EARTHWORKS TO BE CARRIED OUT UNDER 'LEVEL ONE' GEOTECHNICAL
- CONTROL IN ACCORDANCE WITH LOCAL AUTHORITIES AND AS3798. EXCESS CUT TO BE STOCKPILED IN THE LOCATION SHOWN OR AS DIRECTED
- ALL BATTERS ARE 1 IN 4 UNLESS SHOWN OTHERWISE.
- CONTRACTOR TO INSTALL TEMPORARY CONSTRUCTION FENCING ALONG THE FULL PERIMETER BOUNDARY INCLUDING APPROPRIATE SIGNAGE.

## **TESTING**

THE SUPERINTENDENT MAY ORDER ADDITIONAL TESTS. REFER TO THE LOCAL AUTHORITIES SPECIFICATION FOR STANDARDS OF COMPACTION AND MATERIAL STANDARDS. FAILED TESTS WILL BE AT THE CONTRACTOR'S

## **EARTHWORKS TESTING**

CONTROL NOTES AND DETAILS.

COMPACTION TESTS

LOCATION	AREA PER TEST		
FINISHED LEVEL OR ROAD SUBGRADE (IN CUT OR FILL)			
LOWEST TWO LEVELS OF EMBANKMENT (PER LAYER)	REFER TO THE LOCAL AUTHORITY		
OTHER LAYERS OF EMBANKMENT	SPECIFICATION		
PREPARED NATURAL GROUND UNDER EMBANKMENT			

- **OUALITY TESTS**
- QUALITY TESTS OF IMPORTED MATERIAL ARE REQUIRED AS SET OUT BY I OCAL ALITHORITY
- SUBGRADE TESTS
- THE NUMBER AND LOCATION OF PAVEMENT SUBGRADE TESTS SHALL BE IN ACCORDANCE WITH LOGAN CITY COUNCIL SPECIFICATION REQUIREMENTS.

## DUST

- NO VISIBLE DUST EMISSIONS MUST OCCUR AT THE BOUNDARIES OF THE SITE DURING EARTHWORKS AND CONSTRUCTION ACTIVITIES ON THE SITE DUST CONTROL TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH AS/NZS3580.10.1:2003. DUST CONTROL SHALL COMPLY WITH THE NSW DEPARTMENT OF ENVIRONMENT AND CONSERVATION REPORT "APPROVED METHODS & GUIDANCE FOR THE MODELLNG AND ASSESSMENT OF AIR
- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN CONTROLS TO ACHIEVE THE REQUIREMENTS OF ITEM 1 ABOVE.

# FILL MANAGEMENT

- ALL FILL MATERIAL WILL BE PLACED IN ACCORDANCE WITH THE FILL SPECIFICATION PROVIDED ON THIS SHEET, OR WHERE PROVIDED, THE REQUIREMENTS OF THE GEOTECHNICAL REPORT SPECIFIC TO THIS CONTRACT
- THE FILL MATERIAL WILL COMPRISE ONLY OF NATURAL EARTH AND ROCK AND SHALL BE FREE OF ALL CONTAMINATES, NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIAL.
- ALL SITE PREPARATION WORK SHOULD GENERALLY BE CARRIED OUT IN ACCORDANCE WITH AS3798 'GUIDELINES ON EARTHWORKS FOR
- COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
  THE SITE SHOULD BE STRIPPED OF ANY TOPSOIL FROM CUT AND FILL AREAS, ROAD ALIGNMENTS AND CARPARKING AREAS, AND STOCKPILED FOR LATER
- PRIOR TO THE PLACEMENT OF ANY STRUCTURAL FILL THE SITE SHOULD BE PROOF ROLLED USING A MINIMUM 10 TONNE (STATIC WEIGHT) PADFOOT ROLLER. ANY LOOSE OR SOFT AREAS SHOULD BE REMOVED AND RECOMPACTED OR REPLACED USING A COMPACTED SELECT FILL.
- DEPRESSIONS FORMED BY THE REMOVAL OR VEGETATION, EXISTING STRUCTURES LINDERGROUND SERVICES FTC SHOULD HAVE ALL DISTURBED. SOIL CLEANED OUT AND BE BACKFILLED WITH COMPACTED SELECT FILL
- ALL COMPLIANCE TESTING SHALL BE CARRIED OUT BY THE GEOTECHNICAL ENGINEER WHO WILL BE ENGAGED BY THE PRINCIPAL CONTRACTOR. ANY/ALL TESTING NECESSARY FOR GUIDANCE OR RE-TESTS WILL BE AT THE COST OF THE CONTRACTOR
- THE PLACEMENT OF FILL TO BE EXECUTED SUCH THAT TO BE FREE DRAINING AT ALL TIMES AND NOT TO BE A NUISANCE OR PONDING TO ADJOINING PROPERTY OR ROADS.
- NO DEMOLITION MATERIAL TO BE USED AS FILL MATERIAL. WHERE UNSUITABLE MATERIAL IN AREAS OF FILL IS ENCOUNTERED, THIS WILL BE TREATED AS SET OUT IN THE EARTHWORK SPECIFICATION.
- ALL VEHICLES EXITING FROM THE SITE TO BE CLEAN TO PREVENT MATERIAL BEING TRACKED OR DEPOSITED ON THE ADJOINING PUBLIC ROADS, REFER ENVIRONMENTAL MANAGEMENT NOTES ON THE EROSION AND SEDIMENT
- SITE ACCESS TO AND ACROSS THE SITE ARE SUBJECT TO SUPERINTENDENT

## TOPSOIL RESPREAD REQUIREMENTS

TOPSOIL RESPREAD THICKNESS SHALL BE AS SPECIFIED BELOW IN THE FOLLOWING AREAS:

REFER TO EROSION & SEDIMENT CONTROL - STABILISATION PHASE DRAWING FOR TOPSOIL RESPREAD LOCATIONS AND THICKNESS.

CONTRACTOR SHALL SUPPLY AND LAY TURF AS SPECIFIED IN THE FOLLOWING

REFER TO EROSION & SEDIMENT CONTROL - STABILISATION PHASE DRAWING FOR TURF SUPPLY AND LAY AREAS.

### TRENCH SPOIL

EXCESS TRENCH SPOIL MATERIAL GENERATED BY THIS CONTRACT SHALL BE PLACED EITHER WITHIN THE FILL ZONE NOMINATED ON THE EARTHWORKS DRAWINGS OR WITHIN A FILL ZONE NOMINATED BY THE SUPERINTENDENT THAT SHALL BE CONFIRMED PRIOR TO CONSTRUCTION COMMENCEMENT. FILL TO BE PLACED UNDER LEVEL 1 SUPERVISION AND IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION.

### TRENCH BACKFILL

CBR15 STORMWATER TRENCH BACKFILL MATERIAL SHALL BE SOURCED FROM ON SITE EXCAVATED MATERIAL

## **EXCAVATION IN ROCK**

CONTRACT SHALL INCLUDE TREATING, SIZING, CONDITIONING AND PROCESSING ALL TYPES OF ROCK IN ALL EXCAVATIONS. PROCESSING TO BE COMPLETED TO ENSURE THAT FILL SPECIFICATION AND LEVEL ONE CERTIFICATION IS ACHIEVED.

# EVERLEIGH EARTHWORKS TOLERANCE TABLE

ITEM	TOLERANCE
EARTHWORKS IN ALLOTMENTS AND VERGES <sup>(a)</sup>	EWL or FSL +/- 50mm
CUT BATTERS (OTHER THAN IN LOTS)	EWL or FSL +/- 150mm <sup>(b)</sup>
FILL BATTERS (OTHER THAN IN LOTS)	EWL or FSL +/- 300mm <sup>(b)</sup>
EARTHWORKS IN PARKS	EWL or FSL +/- 50mm

- (a) TOI FRANCE IS -0mm / +50mm WHERE ADIACENT DRAINAGE ELEMENT
- (b) MEASURED FROM THE AVERAGE SLOPE PLANE.

### TOLERANCE NOTES

- EARTHWORKS LEVEL (EWL) IS 100mm BELOW FINISHED SURFACE LEVEL (FSL) ON ALLOTMENTS (TOPSOIL RESPREAD THICKNESS).
- FINISHED SURFACE LEVEL (FSL) IS TOP OF TURF / STABILISED TOPSOIL
- ROADWORKS SUBGRADE, PAVEMENT, ASPHALT CONSTRUCTION LEVEL
- STORMWATER DRAINAGE CONSTRUCTION LEVEL TOLERANCES AS PER LCC
- SEWER AND WATER RETICULATION CONSTRUCTION LEVEL TOLERANCES AS PER SEQ D&C CODE.

# DISPERSIVE SOILS MANAGEMENT NOTES

- GYPSUM TREATMENT FOR DISPERSIVE SOILS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE EVERLEIGH DISPERSIVE SOIL MANAGEMENT PLAN (REPORT #GE20.042.R1). AREAS THAT REQUIRED TREATMENT REGARDLESS OF NOMINATING ON PLANS ARE:
  - ALL SERVICE TRENCHES BELOW AND ABOVE BEDDING MATERIAL,

  - INCLUDING STRUCTURES, E.G. MANHOLES.
    UNDER AND SURROUNDING STORMWATER HEADWALLS
    TURF/LANDSCAPED AREAS SUBJECT TO DIRECTED WATER FLOWS. TREATMENT AT FINISHED EARTHWORKS PRIOR TO TOPSOIL PLACEMENT/FINISH LANDSCAPE SURFACE
  - TURF/LANDSCAPED AREAS SUBJECT TO WATER PONDING. TREATMENT AT FINISHED EARTHWORKS PRIOR TO TOPSOIL PLACEMENT/FINISH LANDSCAPE SURFACE.
- TREATMENT TO INSITU/UNTOUCHED ROCK IS NOT REQUIRED.
  STABILISATION OF DISTURBED AREAS AND MANAGEMENT OF EROSION AND SEDIMENT SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS IN THIS DRAWING SET. THE CONTRACTOR IS TO REVIEW THE PROPOSED DRAINS AND DETERMINE IF TREATMENT TO ANY DIVERSION DRAIN IS REQUIRED BASED ON TIME IN USE ON DURING WORKS.
- TREATMENT TO BE IN ACCORDANCE WITH THE DSMP.
  CONTRACTOR MUST CONSTRUCT AND ESTABLISH THE EROSION AND SEDIMENT CONTROL DEVICES, CONSTRUCTION WATER HOLDING DAM AND HES BASIN PRIOR TO COMMENCING EARTHWORKS OPERATION. TREATMENT TO THE SURFACE OF ANY WATER RETAINING BODY SHALL BE IN ACCORDANCE WITH THE DSMP
- ALL DISTURBED AREAS SHALL BE STABILISED AS SOON AS PRACTICABLE (BUT NOT MORE THAN 10 DAYS) FOLLOWING FINALISATION OF LEVELS STABILISATION TO BE IN ACCORDANCE WITH EROSION & SEDIMENT CONTROL - STABILISATION PHASE

## TOPSOIL AMELIORATION

ONSITE STRIPPED TOPSOIL SHALL BE AMELIORATED PRIOR TO RESPREAD. THE FOLLOWING AMELIORATION SPECIFICATIONS SHALL APPLY:

# A-GRADE QUALITY TOPSOIL AMELIORATION: - SCREEN STRIPPED TOPSOIL

- ON-SITE COMPOST INCORPORATION (0.15kg/m³ OF TOPSOIL) DOLOMITE (15kg/m³ OF TOPSOIL)
- GRANULAR WETTING AGENT (0.5kg/m³ OF TOPSOIL)
- FERTILISER (0.4kg/m<sup>3</sup> OF TOPSOIL)

### B-GRADE QUALITY TOPSOIL AMELIORATION:

- SCREEN STRIPPED TOPSOIL
- DOLOMITE (15kg/m³ OF TOPSOIL) GRANULAR WETTING AGENT (0.5kg/m³ OF TOPSOIL)
- FERTILISER (0.4kg/m³ OF TOPSOIL)

# **ROCK TREATMENT IN ALLOTMENTS**

WHERE ALLOTMENTS ARE LOCATED IN CUT, THE CONTRACTOR SHALL OVER-EXCAVATE A MINIMUM 500mm DEPTH BELOW DESIGN EARTHWORKS LEVEL (EWL), AND RECOMPACT IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION

ALL CUT LOTS WHICH ARE NOT LOCATED IN ROCK MUST ACHIEVE 100kPa BEARING CAPACITY WHERE THIS CAN'T BE ACHIEVED THE CONTRACTOR SHALL RECTIFY THE SUBGRADE IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION TO ACHIEVE A 100kPa BEARING CAPACITY

# **ROCK TREATMENT IN VERGES**

WHERE ROAD RESERVES ARE LOCATED IN CUT, THE CONTRACTOR SHALL OVER-EXCAVATE A MINIMUM 1000mm DEPTH BELOW DESIGN EARTHWORKS LEVEL (EWL) AND RECOMPACT IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION

# **EARTHWORKS SPECIFICATION**

SPECIFICATION		DEPTH R	PAVEMENT	TRENCH		
	0.0 - 0.6	0.6 - 3.00	3.00 - 5.00	> 5.00	SUBGRADE	BACKFILL
CBR %	-	-	-	-	10	15
LAYER THICKNESS (mm)	300	300	300	300	BETWEEN SUBGRADE AND 0.3m BELOW	300
MAXIMUM PARTICLE SIZE (mm)	200	500	500	500	200	200
% PASSING 37.5mm	80% MIN	REFER NOTES AND KEY OUTCOMES	REFER NOTES AND KEY OUTCOMES	REFER NOTES AND KEY OUTCOMES	REFER NOTES AND KEY OUTCOMES	REFER NOTES AND KEY OUTCOMES
% PASSING 0.075mm	30% MIN	REFER NOTES	REFER NOTES	REFER NOTES	REFER NOTES	REFER NOTES AND AS3798
COMPACTION	95% STD	95% STD	95% STD	95% STD	100% STD	95% MOD IN ROADS AND 95% STD OUTSIDE ROADS
MOISTURE	+/- 2% OMC	+/- 2% OMC	+/- 2% OMC	+/- 2% OMC	60% - 90% OF OMC	+/- 2% OMC

- 1. OMC OPTIMUM MOISTURE CONTENT
- 2. LAYER OF THICKNESS IS LIMITED TO 300mm TO ALLOW IDENTIFICATION OF LARGER PARTICLES AND ALLOW EVERY CHANCE OF BREAK DOWN IN FILLING OR REMOVAL
- 3. TREATMENT OF ROCK TO SIZES ABOVE SHOULD BE CARRIED OUT IN CUT PRIOR TO LOADING TO FILL AREAS. TREATED ROCK TO BE APPROVED BY GITA PRIOR TO TRANSPORTING.
  4. UPPER 0.6m, (PARTICULARLY IN AREAS OF DEEP FILL), OF THE FILL PROFILE TO BE RELATIVELY IMPERMEABLE HENCE INCREASE IN FINES COMPONENT.
- 5.PROOF ROLL TESTING ON EACH COMPACTED LAYER USING RUBBER WHEELED PLANT SUCH AS LOADED ADT'S OR LOADED SCRAPERS, UNFAVOURABLE DEFORMATION OF THE COMPACTED SURFACE UNDER LOAD OF ADT'S OR SCRAPERS WILL REQUIRE REPAIR PRIOR TO ADDITIONAL PLACEMENT.
- 6. MECHANICAL INTERLOCK METHODOLOGY IS NOT APPROPRIATE DUE TO POOR DURABILITY OF SITE WON SANDSTONE. FILL COMPOSITION IS REQUIRED TO INCLUDE AN APPROPRIATE SAND GRAVEL AND FINES COMPONENT CONFORMING TO THE REQUIREMENTS OF AS798.

# EY OUTCOMES FOR EARTHWORKS OPERATIONS

- 1. DELIVER RESIDENTIAL LOTS WITH FAVOURABLE LOT CLASSIFICATIONS I.E NO P CLASSIFICATIONS 2. FILL THICKNESS DOES NOT VARY MORE THAN 2m OVER A DISTANCE OF 10m
- 3. CONSTRUCT FILL AND LIMIT LONG TERM CREEP SETTLEMENTS TO WITHIN 0.5% TO 1.0% OF THE FILL THICKNESS
  4. BUILDING PLATFORM THAT ALLOWS BUILDERS TO CONSTRUCT SLAB ON GROUND RAFTS USING LIGHT EARTHMOVING EQUIPMENT
- 5. MATERIAL WON FROM CUTS AND USED IN FILL WITH REQUIRE
- CUTS IN ROCK AS WELL AS BLENDED WITH
- CUTS IN FINER MATERIALS SUCH AS SANDS AND CLAYS
   CREATING A FILL PLATFORM THAT IS ABLE TO BE TESTED IN ACCORDANCE WITH AS3798 AND AS1289

FOR CONSTRUCTION									
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB					
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB					
DATE	REV	DESCRIPTION	REC	APP					
	DEMICIONIC								



# BRISBANE OFFICE

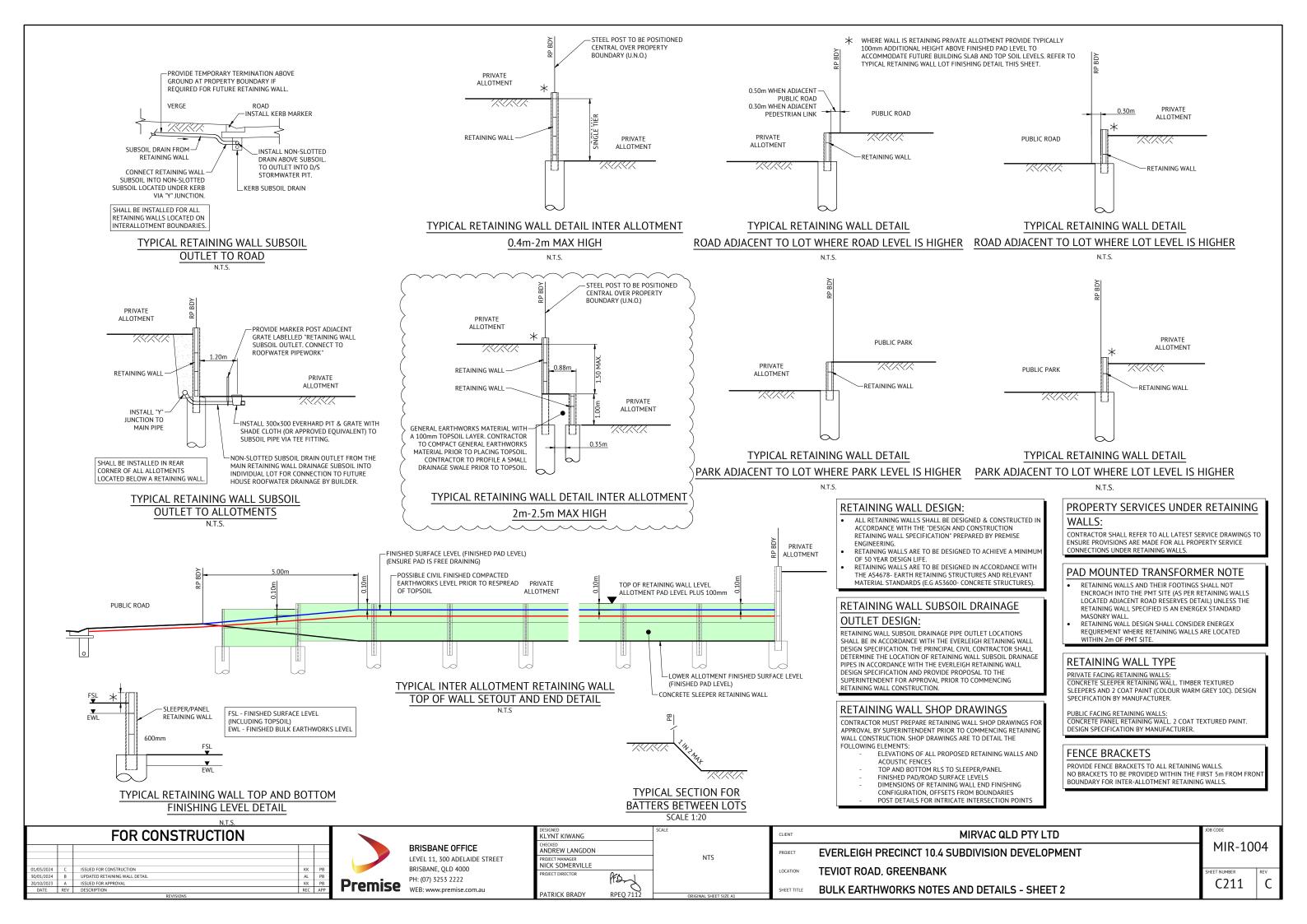
LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

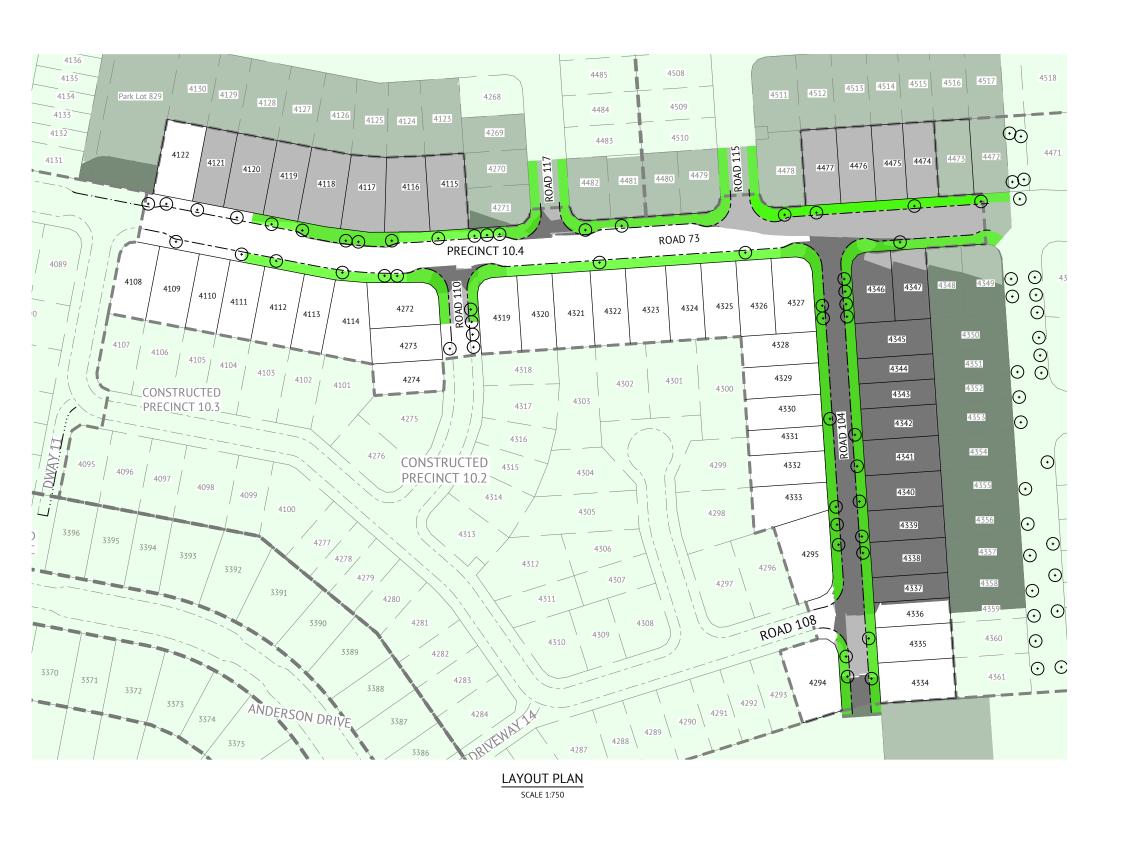
DESIGNED KLYNT KIWANG		SCALE
HECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	PFD-J	
PATRICK BRADY	RPFO 7112	

	CLIE
	PRO
	LOC
ORIGINAL SHEET SIZE A1	SHE

MIRVAC QLD PTY LTD **EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT** TEVIOT ROAD, GREENBANK **BULK EARTHWORKS NOTES AND DETAILS - SHEET 1** 

MIR-1004





# LEGEND - PROPOSED

NO CHANGES TO BULK EARTHWORKS.
EARTHWORKS DONE AS PART OF PRECINCTS
9, 10.1, 10.2 & 10.3 WORKS



EXTENT OF CUT



TREES



BOLLARD



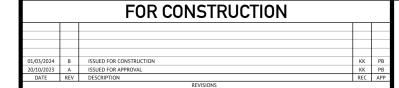
STREET TREE / PLANTING AREA.
CONTRACTOR TO ENSURE AREA IS FREE OF ROCK UP TO A DEPTH OF 1.5M
BELOW DESIGN FSL (I.E. ENSURE AREA IS EASY DIGGING FOR THE
INSTALLATION OF TREES AND PLANTING). CONTRACTOR TO ALSO ENSURE
THESE AREAS ARE CONNECTED INTO THE NEAREST STORMWATER
STRUCTURE AND MADE FREE DRAINING VIA SLOTTED AGI PIPE.

MIR-1004

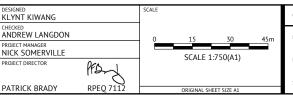
C220

# **ALLOTMENT PREPARATION REQUIREMENT:**

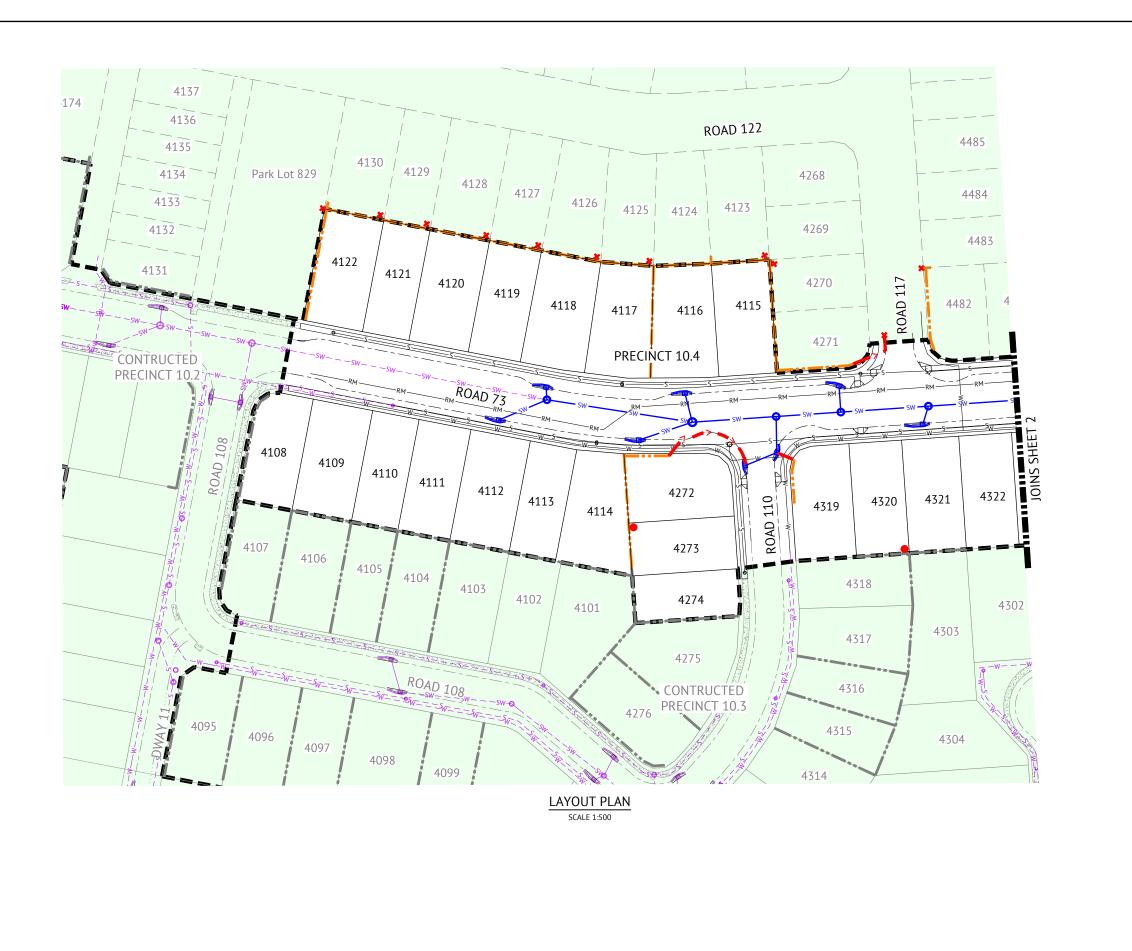
CONTRACTOR SHALL ENSURE THAT ALL ALLOTMENTS WHERE LOCATED IN CUT WITHIN ROCK, SHALL BE OVER-EXCAVATED A MINIMUM 500mm DEPTH BELOW DESIGN EARTHWORKS LEVEL AND RECOMPACTED TO LEVEL ONE CERTIFICATION.

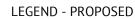


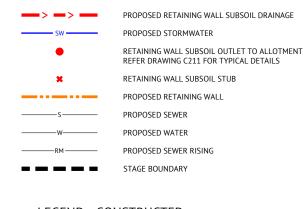




CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	EARTHWORKS SUBGRADE ROCK PREPARATION DETAILS





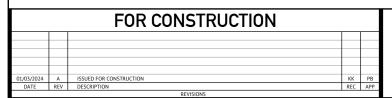


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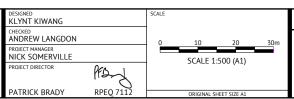
C230

# LEGEND - CONSTRUCTED

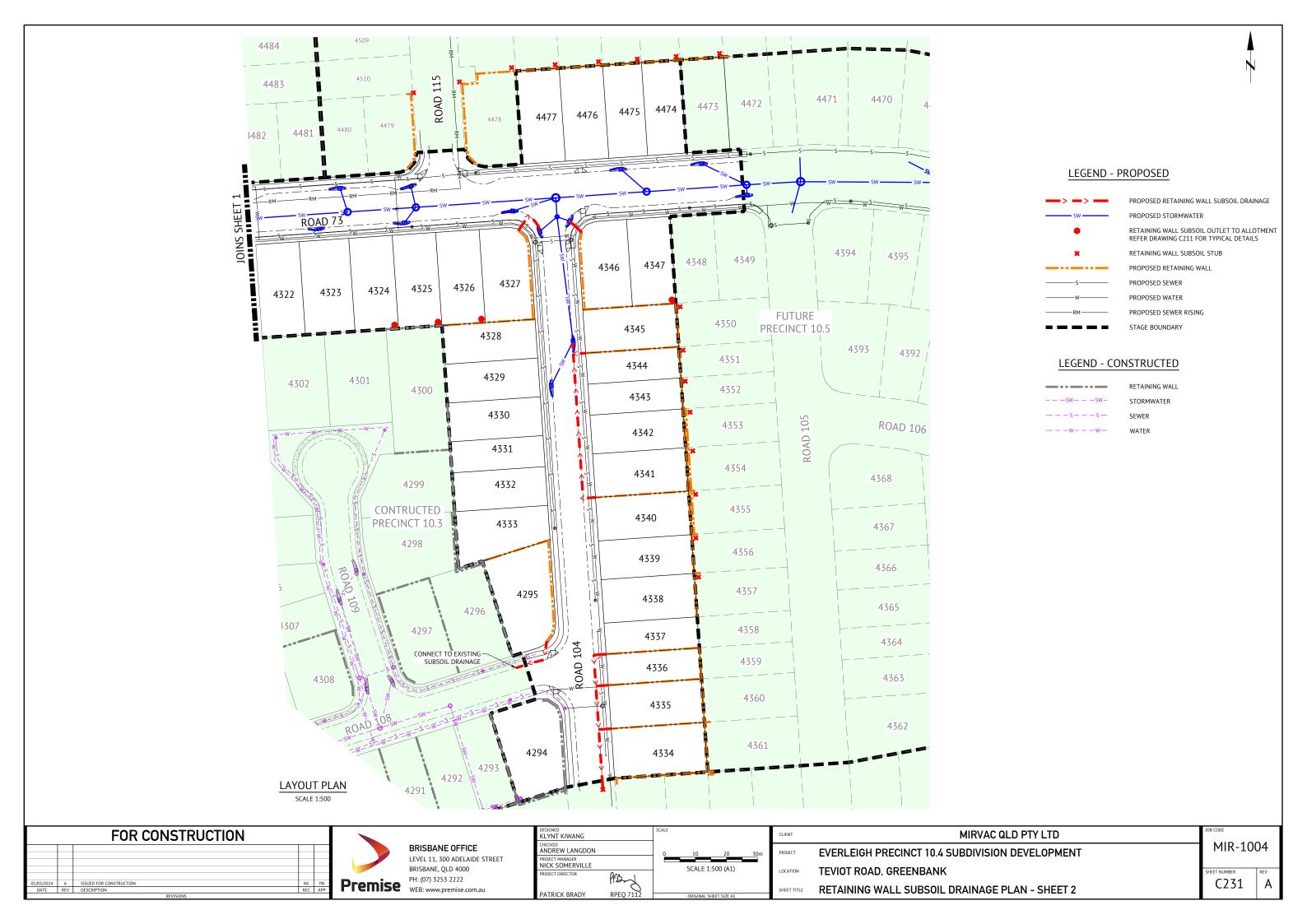
RETAINING WALL STORMWATER WATER







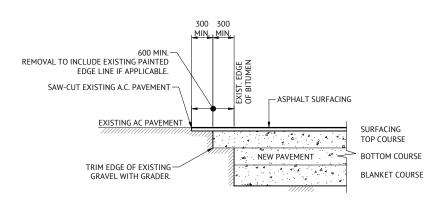
CLIENT	MIRVAC QLD PTY LTD	JOB CODE
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT	MIR-
LOCATION	TEVIOT ROAD, GREENBANK	SHEET NUMBER
SHEET TITLE	RETAINING WALL SUBSOIL DRAINAGE PLAN - SHEET 1	C230



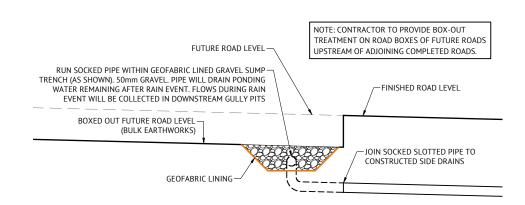
- 1. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH LOGAN CITY COUNCIL STANDARD DRAWINGS AND METHODS (U.N.O.).
- NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION AND SIMILARLY THE FINISHED SURFACE CONTOURS MAY BE ADJUSTED BY WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION.
- THE CONTRACTOR IS TO ASCERTAIN THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE COST OF RECTIFICATION OF ANY DAMAGES TO EXISTING SERVICES WHICH MAY OCCUR. THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY.
  SUBGRADE TEST RESULTS TO BE FORWARDED TO SUPERINTENDENT FOR DETERMINATION OF BOX
- DEPTHS PRIOR TO EXCAVATION. TESTS SHALL INCLUDE SOAKED CBR AND/OR OTHER TESTS AS REQUESTED BY THE SUPERINTENDENT.
- ALLOTMENT FILLING TO BE COMPACTED TO 95% (min) OF THE R.D.D. (AS 1289 TESTS E1.1, E4.1). LEVELS AND SETOUT INFORMATION FOR KERB AND CHANNEL CONSTRUCTION IS GIVEN TO LIP OF KERB.
- LEVELS AND GRADIENTS AT JUNCTIONS WITH EXISTING WORKS MAY BE VARIED AS APPROVED BY THE SUPERINTENDENT TO ACHIEVE SATISFACTORY CONNECTION TO THE EXISTING WORKS.
- SIDE DRAINS AND MITRE DRAINS TO BE CONSTRUCTED ADJACENT TO ALL KERB AND CHANNEL
- PROVIDE FLUSH POINTS TO SUBSOIL DRAINS LOCATIONS TO BE CONFIRMED ON SITE
- ALL STORMWATER PIPES SHALL BE CLASS '2' (UNO) R.C. PIPES UNLESS AN ALTERNATIVE IS APPROVED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION. ALL PIPES ARE 375mm DIAMETER U.N.O.
- GULLIES AND GULLY GRATES SHALL BE TO STD. DRGs BSD-8051 BSD-8059.
- 12. KACEY GALV. STEEL KERB ADAPTORS ARE TO BE INSTALLED TO THE REQUIREMENTS OF THE LOCAL COUNCILS STANDARD DRAWINGS AND SPECIFICATIONS.
- ALL LOTS SHOWN BOXED TO HAVE ROOFWATER FOOTPATH CROSSINGS TO KERB. CROSSINGS ARE TO BE 88.9 DIA. GALV. CHS.TO KACEY KERB ADAPTOR.
- ALL TEMPORARY ROOFWATER OUTLETS TO BE EXCAVATED AT 1 IN 200 TO NATURAL SURFACE.
   ROOFWATER PITS ARE TO BE 600mm DIAMETER FOR DEPTHS LESS THAN 750mm, 900mm DIAMETER
- FOR DEPTHS BETWEEN 750mm AND 1500mm DEEP AND 1050mm DIAMETER FOR DEPTHS GREATER THAN 1500mm.
- ALL ROOFWATER PIPES CROSSING CONCRETE FOOTPATHS ARE TO BE INSTALLED PRIOR TO CONSTRUCTION OF CONCRETE FOOTPATHS.
- HAZARD MARKERS (D4-4A) TO BE PLACED AT THE END OF NEW WORKS AS DIRECTED BY SUPERINTENDENT
- 18. SITE CBR VALUE AND PAVEMENT DESIGN AND DEPTHS TO BE VERIFIED WITH CBR TESTS PRIOR TO CONSTRUCTION.
- 19. LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 20. TO BE READ IN CONJUNCTION WITH ALL STORMWATER DRAINAGE LAYOUT PLANS & ROADWORKS

# **ROADWORKS NOTES**

- GEOTECHNICAL TESTING FOR PAYEMENT CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT SPECIFICATION. TEST CERTIFICATES ARE TO BE PREPARED BY A REGISTERED N.A.T.A. LABORATORY AT THE CONTRACTORS COST AND SHALL BE PROVIDED TO THE ENGINEER PROGRESSIVELY THROUGH THE WORKS. THE CONTRACTOR IS TO NOTIFY THE ENGINEER OF ANY NON-CONFORMANCES.
- ALL NON CONFORMING WORK IS TO BE RECTIFIED AS DIRECTED BY THE ENGINEER.
  FULL DEPTH PAVEMENT CONSTRUCTION SHALL EXTEND BEHIND ALL KERB AND KERB AND CHANNEL FOR A DISTANCE WHICH IS THE GREATER OF 150mm FROM THE BACK OF KERB OR ACROSS TO THE OUTER LIMIT OF SIDE DRAIN FILTER MATERIAL.
- TRANSITION KERB AND CHANNEL TO BARRIER KERB SMOOTHLY OVER MIN. 1.0m LENGTH.
  PAVEMENT THICKNESSES NOMINATED ON THESE DRAWINGS ARE PROVISIONAL ONLY AND MAY BE
- VARIED BY THE SUPERINTENDENT SUBJECT TO INSITU PAVEMENT SUBGRADE TESTING, PAVEMENT SUBGRADES ARE TO BE INITIALLY CONSTRUCTED TO THE UNDERSIDE OF THE NOMINATED LOWER SUBBASE COURSE WITHIN FILL AREAS, AND TO THE UNDERSIDE OF THE NOMINATED UPPER SUBBASE COURSE WITHIN CUT AREAS, INSITU SUBGRADE CBR TESTING AS SPECIFIED FOR PAVEMENT DESIGN VERIFICATION IS TO BE CARRIED OUT AT THESE LEVELS.
- REPAIR ANY DAMAGE TO EXISTING KERB AND CHANNEL, FOOTPATH OR ROADWAY (INCLUDING REMOVAL OF CONCRETE SLURRY FROM FOOTPATHS, ROADS, KERB AND CHANNEL AND STORMWATER GULLIES AND SIDEDRAINS) THAT MAY OCCUR DURING ANY WORKS CARRIED OUT.



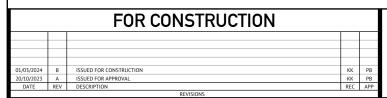
TYPICAL PAVEMENT CUT-BACK DETAIL



TYPICAL FUTURE ROADS BOX-OUT TREATMENT

MIR-1004

C300



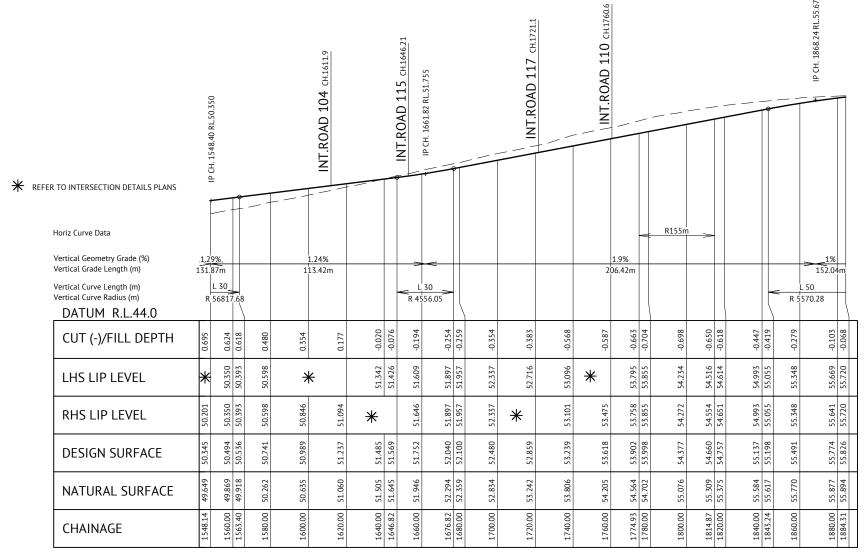


BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

DESIGNED KLYNT KIWANG		SCALE				
CHECKED ANDREW LANGDON		0	0.4	0.8	1.2m	r
PROJECT MANAGER NICK SOMERVILLE				L:20 (A1)		
PROJECT DIRECTOR	PFD		JCALL .	1.20 (A1)		
PATRICK BRADY	RPFO 7117		ODICINAL CI	IEEE CIZE AA		1

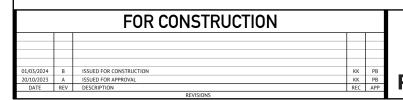
CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	ROADWORKS NOTES AND DETAILS

PAVEMENT DESIGN			
(PRELIMINARY)			
ROADS	-	ROAD 73	
CLASS	-	NEIGHBOURHOOD CONNECTOR 2	
ESA's	-	6.40 x 10 <sup>6</sup>	
SURFACE	-	50mm AC of 14mm MIX	
PRIMER TYPE	-	PRIMER SEAL	
CBR 80	٠	300mm	
CBR 45	-	100mm	
TOTAL BOX	-	450mm	

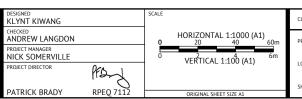


ROAD 73 LONGITUDINAL SECTION

SCALE 1:1000(H) 1:100(V)



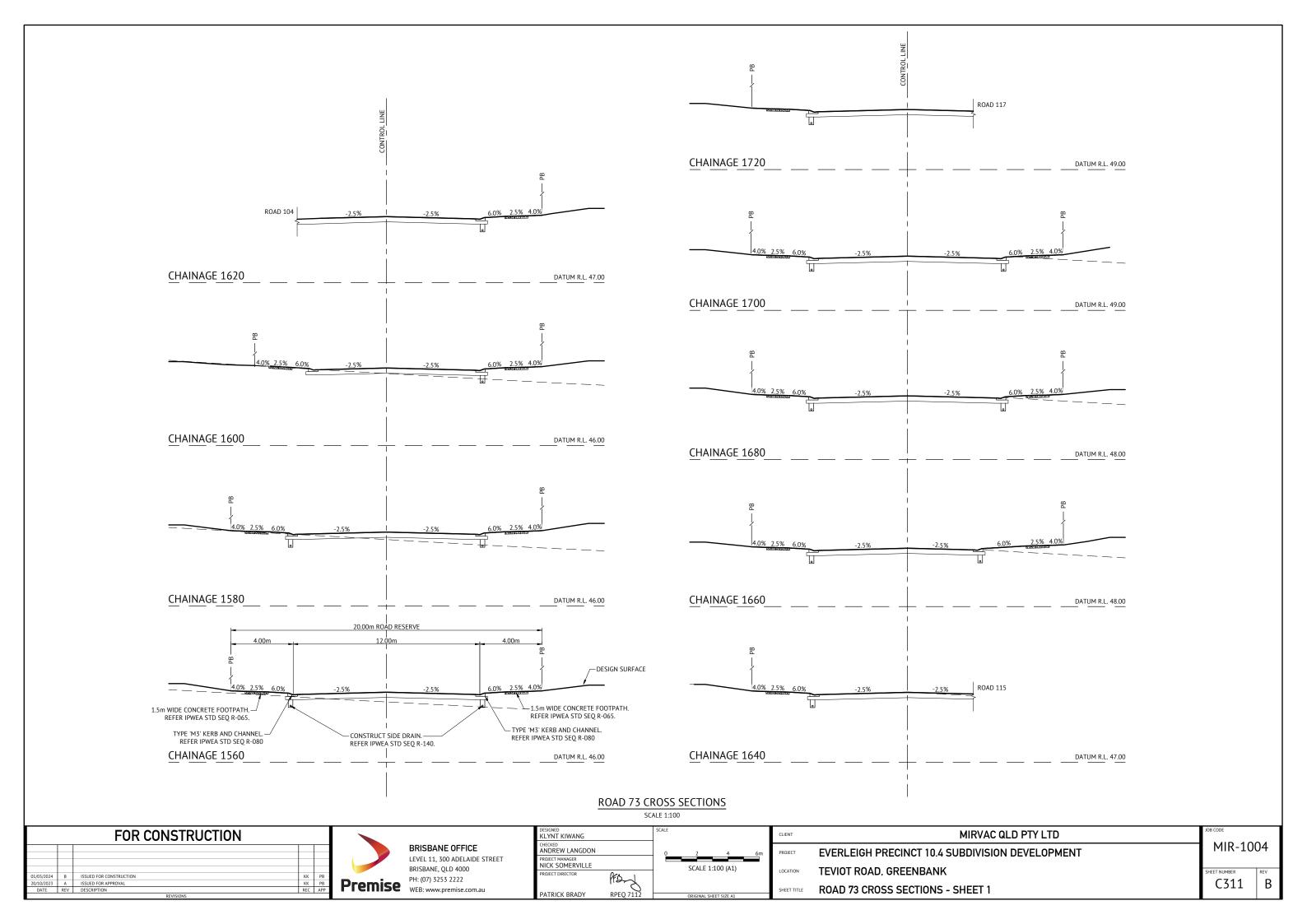


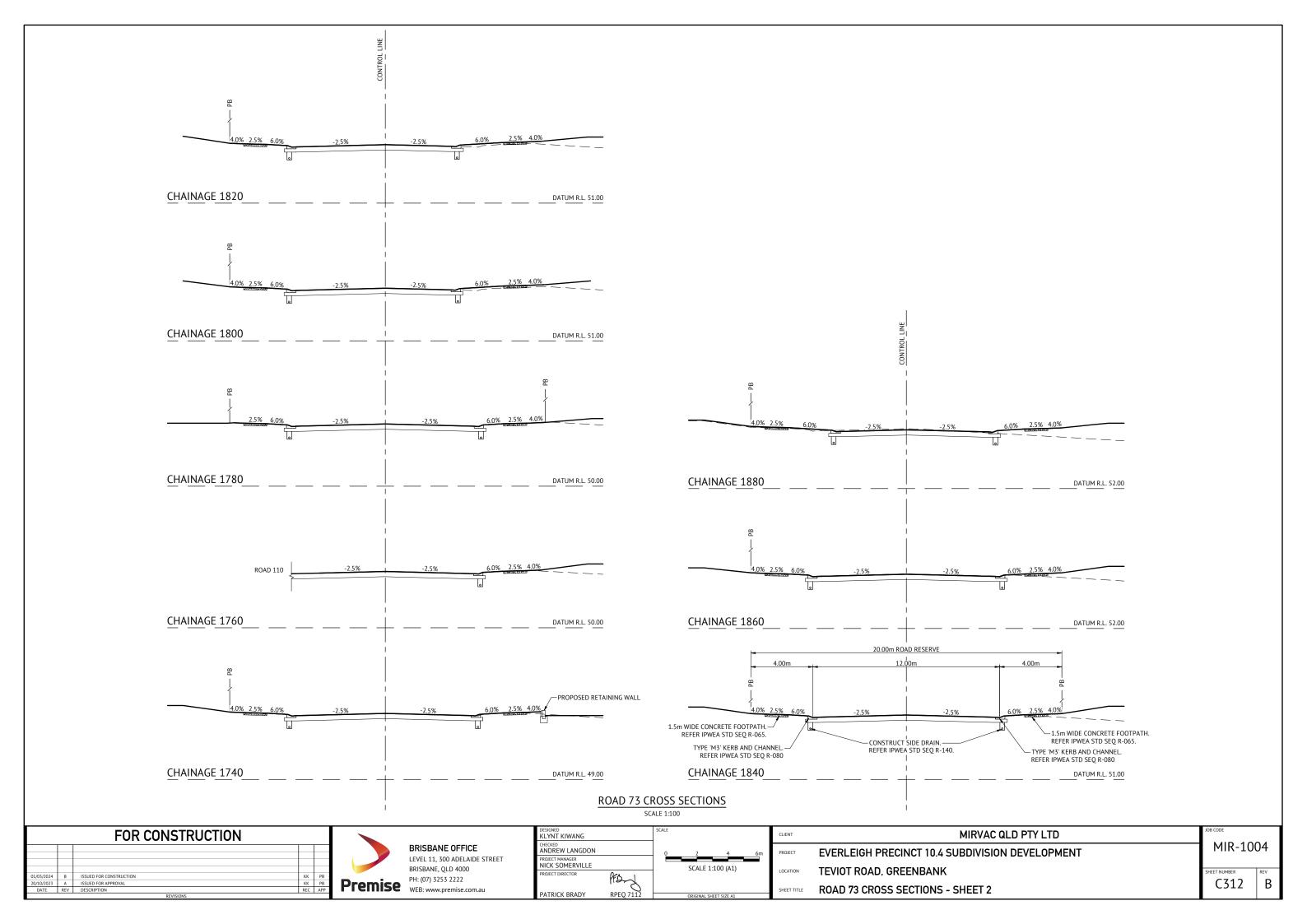


CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	ROAD LONG 73 SECTION

MIR-1004

В

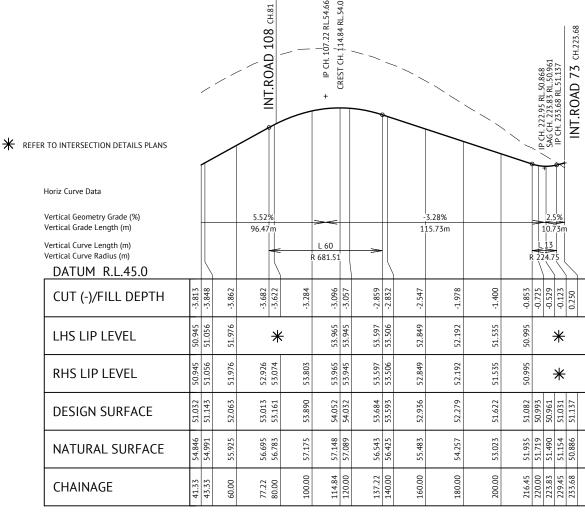




PAVEMENT DESIGN (PRELIMINARY)				
ROADS	-	ROAD 104 (CH.41.33-CH.229.45)		
CLASS	-	ACCESS STREET (TYPICAL)		
ESA's	-	5.90 x 10 <sup>5</sup>		
SURFACE	-	35mm AC of 10mm MIX		
PRIMER TYPE	-	PRIME		
CBR 80	-	150mm		
CBR 45	-	150mm		
TOTAL BOX	-	335mm		

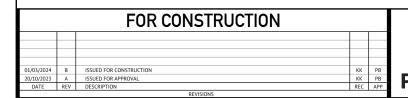
1	PAVEMENT DESIGN (PRELIMINARY)			
ROADS	-	ROAD 104 (CH.229.45-CH.233.68)		
CLASS	-	NEIGHBOURHOOD CONNECTOR 2		
ESA's	-	6.40 x 10 <sup>6</sup>		
SURFACE	-	50mm AC of 14mm MIX		
PRIMER TYPE	-	PRIMER SEAL		
CBR 80	-	300mm		
CBR 45	-	100mm		
TOTAL BOX	-	450mm		

CONTRACTOR SHALL GUARANTEE CBR10 SUBGRADE OR GREATER. CBR TESTING SHALL BE CARRIED OUT BY CONTRACTOR IN ACCORDANCE WITH LOGAN CITY COUNCIL REQUIREMENTS AND RESULTS SHALL BE PRESENTED TO SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT OF PAVEMENT CONSTRUCTION.

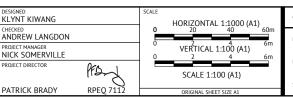


ROAD 104 LONGITUDINAL SECTION

SCALE 1:1000(H) 1:100(V)



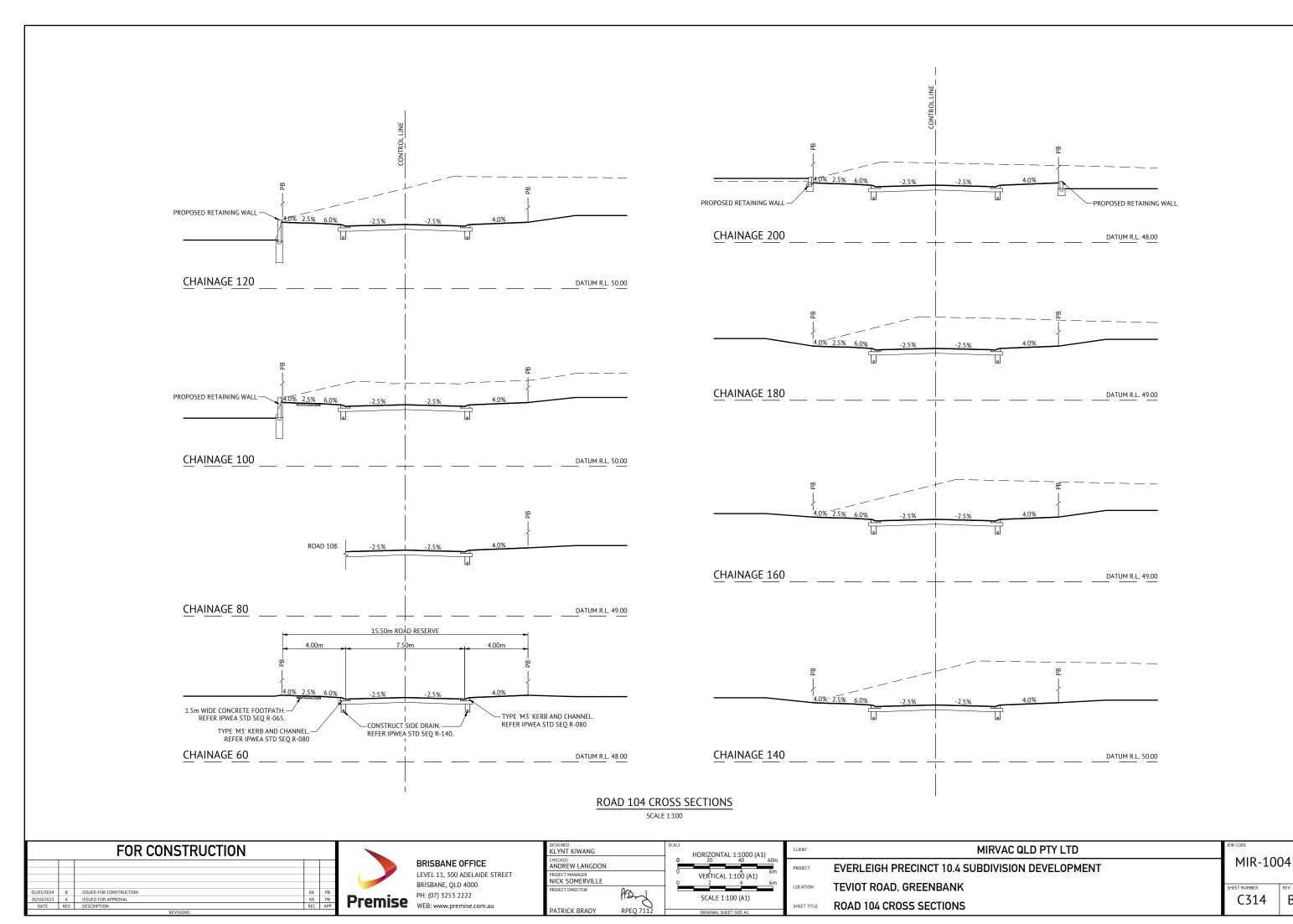




	CLIENT	MIRVAC QLD PTY LTD
n I	PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
1	LOCATION	TEVIOT ROAD, GREENBANK
	SHEET TITLE	ROAD LONG 104 SECTION

MIR-1004

В

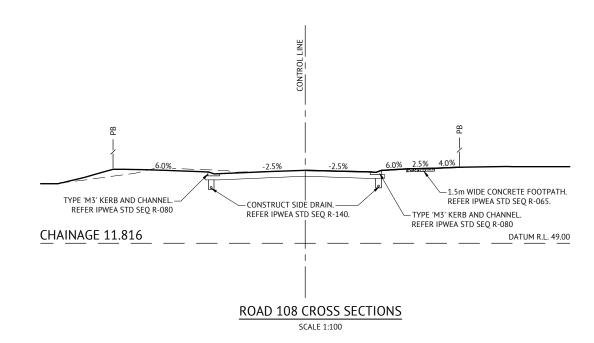


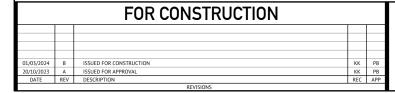
PAVEMENT DESIGN (PRELIMINARY)				
ROADS	-	ROAD 108		
CLASS	-	ACCESS STREET (TYPICAL)		
ESA's	-	5.90 x 10 <sup>5</sup>		
SURFACE	-	35mm AC of 10mm MIX		
PRIMER TYPE	-	PRIME		
CBR 80	-	150mm		
CBR 45	-	150mm		
TOTAL BOX	-	335mm		

* REFER TO INTERSECTION DETAILS PLANS	INT.ROAD 104 CH.0.00	IP CH. 0.00 RL,53.216	IP CH 1075 RI 52 947		
Horiz Curve Data	٠	R	-50	)m	
Vertical Geometry Grade (%) Vertical Grade Length (m)				5.21 0.89	
Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.47.0		R	516	.73	
CUT (-)/FILL DEPTH	-3.596	-3.612	-3.615	-3.721	
LHS LIP LEVEL			*	<u>.</u>	
RHS LIP LEVEL		*		52.608	
DESIGN SURFACE	53.216	53.122	53.098	52.696	
NATURAL SURFACE	56.812	56.734	56.713	56.416	
CHAINAGE	00.00	3.75	4.67	15.48	

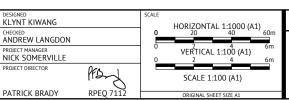
ROAD 108 LONGITUDINAL SECTION

SCALE 1:1000(H) 1:100(V)









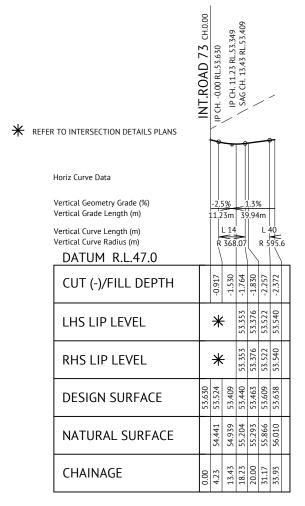
CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	ROAD 108 LONG AND CROSS SECTIONS

MIR-100	)4	
SHEET NUMBER	REV	ı
C315	R	

PAVEMENT DESIGN (PRELIMINARY)			
ROADS	-	ROAD 110 (CH.0.00-CH.4.230)	
CLASS	-	NEIGHBOURHOOD CONNECTOR 2	
ESA's	-	6.40 x 10 <sup>6</sup>	
SURFACE	-	50mm AC of 14mm MIX	
PRIMER TYPE	-	PRIMER SEAL	
CBR 80	-	300mm	
CBR 45	-	100mm	
TOTAL BOX	-	450mm	

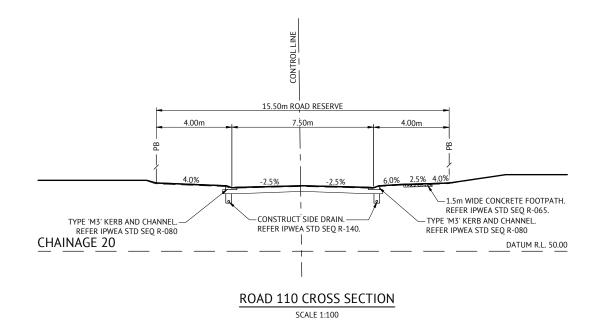
PAVEMENT DESIGN (PRELIMINARY)			
ROADS	-	ROAD 110 (CH.4.230-CH.33.930)	
CLASS	-	ACCESS STREET (TYPICAL)	
ESA's	-	5.90 x 10 <sup>5</sup>	
SURFACE	-	35mm AC of 10mm MIX	
PRIMER TYPE	-	PRIME	
CBR 80	-	150mm	
CBR 45	-	150mm	
TOTAL BOX	-	335mm	

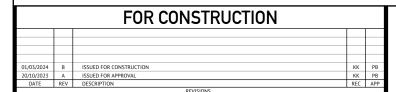
CONTRACTOR SHALL GUARANTEE CBR10 SUBGRADE OR GREATER. CBR TESTING SHALL BE CARRIED OUT BY CONTRACTOR IN ACCORDANCE WITH LOGAN CITY COUNCIL REQUIREMENTS AND RESULTS SHALL BE PRESENTED TO SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT OF PAVEMENT CONSTRUCTION.



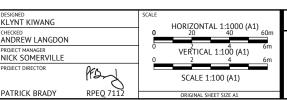
ROAD 110 LONGITUDINAL SECTION

SCALE 1:1000(H) 1:100(V)









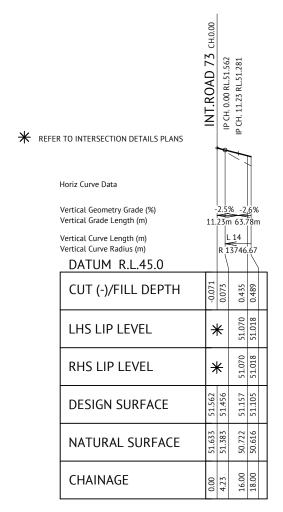
CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	ROAD 110 LONG AND CROSS SECTIONS

MIR-1004

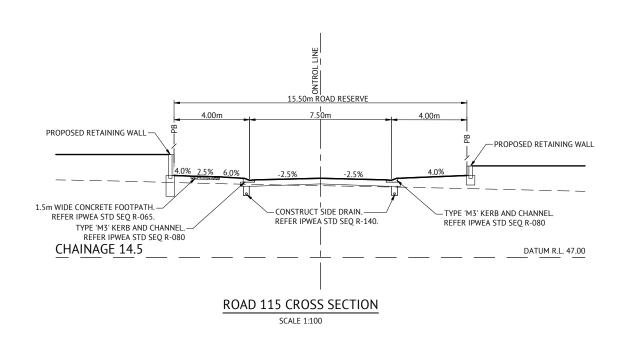
PAVEMENT DESIGN (PRELIMINARY)			
ROADS	-	ROAD 115 (CH.0.00-CH.4.230)	
CLASS	-	NEIGHBOURHOOD CONNECTOR 2	
ESA's	-	6.40 x 10 <sup>6</sup>	
SURFACE	-	50mm AC of 14mm MIX	
PRIMER TYPE	-	PRIMER SEAL	
CBR 80	-	300mm	
CBR 45	-	100mm	
TOTAL BOX	_	450mm	

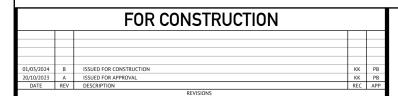
PAVEMENT DESIGN (PRELIMINARY)				
ROADS	-	ROAD 115 (CH.4.230-CH.18.00)		
CLASS	-	ACCESS STREET (TYPICAL)		
ESA's	-	5.90 x 10 <sup>5</sup>		
SURFACE	-	35mm AC of 10mm MIX		
PRIMER TYPE	-	PRIME		
CBR 80	-	150mm		
CBR 45	-	150mm		
TOTAL BOX	-	335mm		

CONTRACTOR SHALL GUARANTEE CBR10 SUBGRADE OR GREATER. CBR TESTING SHALL BE CARRIED OUT BY CONTRACTOR IN ACCORDANCE WITH LOGAN CITY COUNCIL REQUIREMENTS AND RESULTS SHALL BE PRESENTED TO SUPERINTENDENT FOR APPROVAL CONSTRUCTION.



ROAD 115 LONGITUDINAL SECTION SCALE 1:1000(H) 1:100(V)







BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000

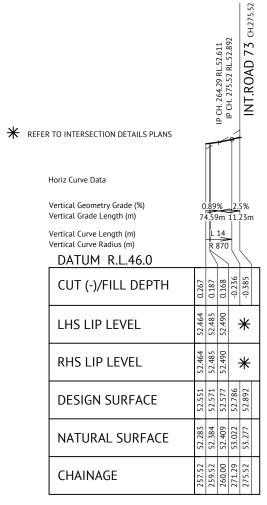
DESIGNED KLYNT KIWANG		SCALE	HORIZONTAL 1:1000 (A1)	(
CHECKED ANDREW LANGDON		0	20 40 60m	F
PROJECT MANAGER NICK SOMERVILLE		0	VERTICAL 1:100 (A1)  2  4  6m  6m	١.
PROJECT DIRECTOR	Pronj		SCALE 1:100 (A1)	
PATRICK BRADY	RPEO 7112		ORIGINAL SHEET SIZE A1	5

	CLIENT	MIRVAC QLD PTY LTD	JOB CODE	
n I	PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT	MIR-100	)4
ı	LOCATION	TEVIOT ROAD, GREENBANK	SHEET NUMBER	REV
	SHEET TITLE	ROAD 115 LONG AND CROSS SECTIONS	C317	В

PAVEMENT DESIGN (PRELIMINARY)			
ROADS	-	ROAD 117 (CH.257.52-CH.271.29)	
CLASS	-	ACCESS STREET (TYPICAL)	
ESA's	-	5.90 x 10 <sup>5</sup>	
SURFACE	-	35mm AC of 10mm MIX	
PRIMER TYPE	-	PRIME	
CBR 80	-	150mm	
CBR 45	-	150mm	
TOTAL BOX	-	335mm	

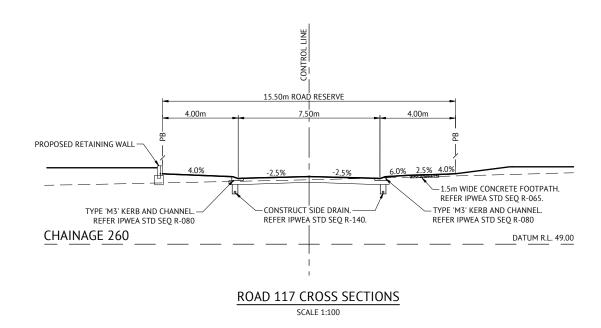
PAVEMENT DESIGN (PRELIMINARY)			
ROADS	-	ROAD 117 (CH.271.29-CH.275.52)	
CLASS	-	NEIGHBOURHOOD CONNECTOR 2	
ESA's	-	6.40 x 10 <sup>6</sup>	
SURFACE	-	50mm AC of 14mm MIX	
PRIMER TYPE	-	PRIMER SEAL	
CBR 80	-	300mm	
CBR 45	-	100mm	
TOTAL BOX	-	450mm	

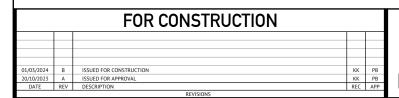
CONTRACTOR SHALL GUARANTEE CBR10 SUBGRADE OR GREATER. CBR TESTING SHALL BE CARRIED OUT BY CONTRACTOR IN ACCORDANCE WITH LOGAN CITY COUNCIL REQUIREMENTS AND RESULTS SHALL BE PRESENTED TO SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT OF PAVEMENT CONSTRUCTION.



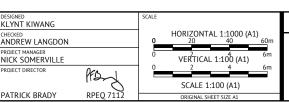
ROAD 117 LONGITUDINAL SECTION

SCALE 1:1000(H) 1:100(V)





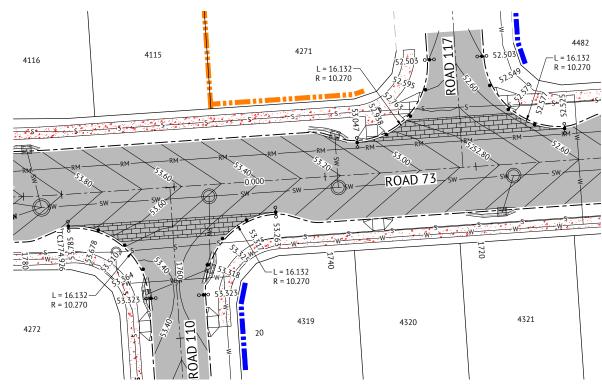




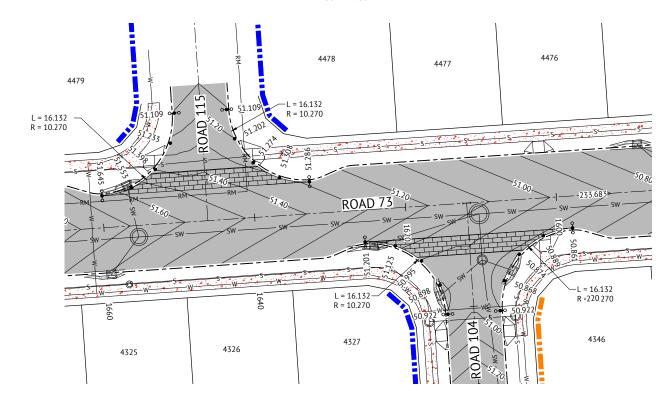
	CLIENT	MIRVAC QLD PTY LTD
1	PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
	LOCATION	TEVIOT ROAD, GREENBANK
	SHEET TITLE	ROAD 117 LONG AND CROSS SECTIONS

MIR-1004

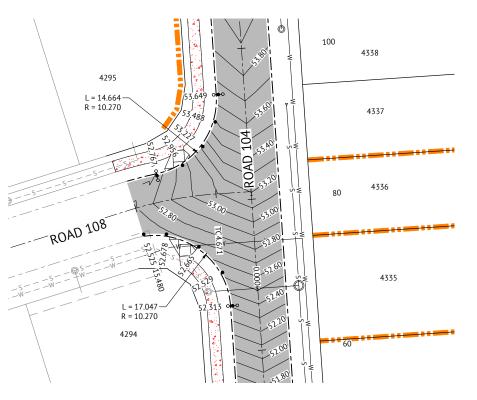




# INTERSECTION ROAD 73 AND ROAD 110 INTERSECTION ROAD 73 AND ROAD 117



INTERSECTION ROAD 73 AND ROAD 115 INTERSECTION ROAD 73 AND ROAD 104 SCALE 1:250



INTERSECTION ROAD 104 AND ROAD 108 SCALE 1:250

# LEGEND - PROPOSED

	PAVEMENT
58.0	FINISHED MAJOR CONTOURS (0.20m)
	FINISHED MINOR CONTOURS (0.10m)
	PROPOSED 1.5m WIDE CONCRETE FOOTPATH. (UNO) REFER CONC. REQUIREMENTS ON DRG. No. C300
	PROPOSED KERB RAMP. REFER IPWEA STD DWG RS-090.
	PROPOSED IPWEA TYPE 'B1' KERB & CHANNEL. REFER IPWEA STD DWG RS-080.
	PROPOSED IPWEA TYPE 'M3' KERB & CHANNEL. REFER IPWEA STD DWG RS-080.
62.7A8 •	LIP OF KERB LEVEL
SW	PROPOSED STORMWATER
————W———	PROPOSED WATER
s	PROPOSED SEWER
RM	SEWER RISING MAIN
	PROPOSED CONCRETE SLEEPER RETAINING WALL
	PROPOSED CONCRETE PANEL RETAINING WALL
	DURATHEM THRESHOLD TREATMENT. REFER TO URBIS EVERLEIGH LANDSCAPE MASTERPLAN - PART B (PAGE 20) FOR COLOUR AND PATTERN.

# LEGEND - CONSTRUCTED

EXISTING STORMWATER EXISTING SEWER EXISTING WATER EXISTING ELECTRICAL EXISTING TELSTRA EXISTING GAS

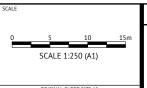
LEVELS AND SETOUT INFORMATION FOR KERB AND CHANNEL CONSTRUCTION IS GIVEN TO LIP OF KERB.

FOR CONSTRUCTION 24 B ISSUED FOR CONSTRUCTION 23 A ISSUED FOR APPROVAL REV DESCRIPTION

Premise PH: (07) 3253 2222
WEB: www.premise.com.au

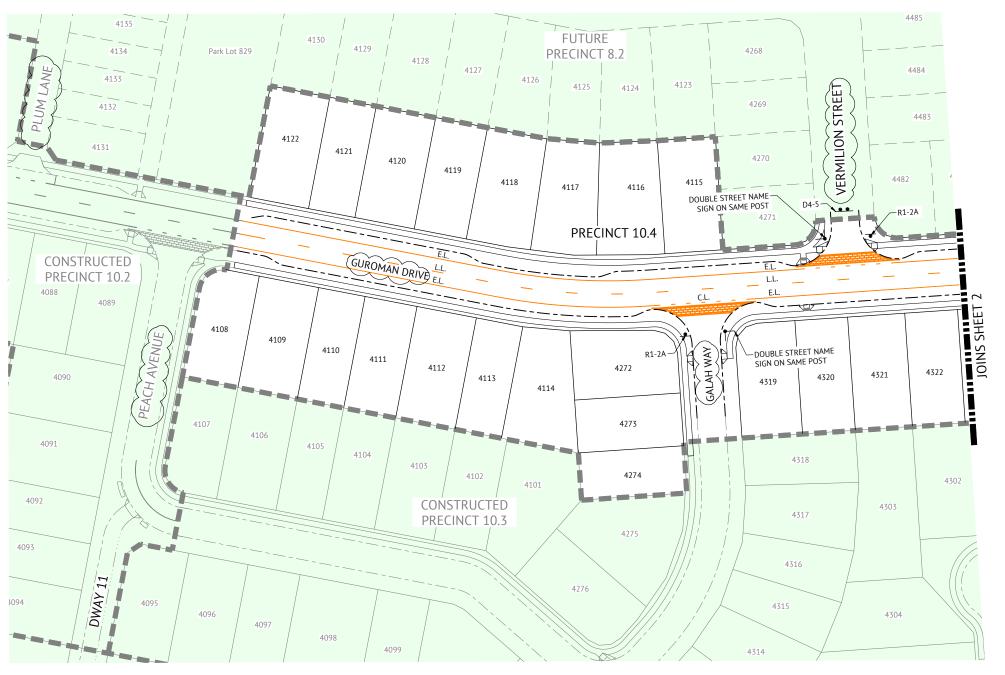
BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000

KLYNT KIWANG ANDREW LANGDON NICK SOMERVILLE PPD 7112 PATRICK BRADY

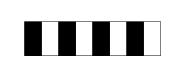


MIRVAC QLD PTY LTD **EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT** TEVIOT ROAD, GREENBANK INTERSECTION DETAILS LAYOUT

MIR-1004



PAVEMENT MARKINGS AND SIGNAGE LAYOUT SCALE 1:500





# TYPICAL LINEMARKING LEGEND LANE LINE L.L. CONTINUITY LINE C.L. FDGE LINE F.L. SEPARATION LINE S.L. 100 GIVE WAY LINE G.W.L HOLDING LINE H.L. <del>\_\_\_\_\_</del> 100 BARRIER LINE B.L. DURATHEM THRESHOLD TREATMENT. REFER TO URBIS EVERLEIGH LANDSCAPE MASTERPLAN - PART B (PAGE 20) FOR COLOUR AND PATTERN.

# LINEMARKING NOTES

 PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD, QUEENSLAND DEPARTMENT OF MAIN ROADS) AND THE SPECIFIC REQUIREMENTS OF REFERENCE SPECIFICATION \$150 ROADWORKS, BRISBANE CITY COUNCILS SPECIFIC REQUIREMENTS ARE DETAILED ON STANDARD DRAWINGS BSD-3151 TO BDS-3163

TACTILE GROUND SURFACE INDICATORS

(TGSI's) TO BE INSTALLED AT ALL KERB

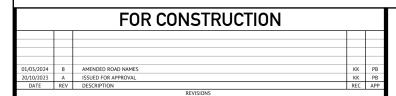
RAMPS ON MAIOR ROADS IN ACCORDANCE WITH AUSTRALIAN

STANDARD AS1428.1 (2009)

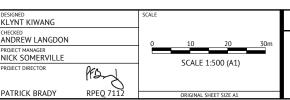
- ALL INTERNAL LINE MARKING TO CONSIST OF LINES 100mm WIDE WITH 2
- COATS OF PAINT TO MANUFACTURERS SPECIFICATIONS. EXTENT OF LINEMARKING SHALL BE VERIFIED ON SITE PRIOR TO INSTALLATION.
- ALL PAINTED MARKINGS SHALL BE APPROVED REFLECTORISED U.N.O.
- ANY EXISTING LINE MARKINGS DAMAGED BY THE PROPOSED WORKS ARE TO BE REINSTATED.
- EXISTING CONFLICTING LINE MARKINGS ARE TO BE GROUND OFF BY METHODS APPROVED BY THE DISTRICT ENGINEER.
- RETRO-REFLECTIVE RAISED PAVEMENT MARKERS (RRPM's) SHALL BE PLACED 25mm TO 50mm FROM THE PAINTED LINEMARKING AND ORIENTATED SO THAT FULL REFLECTIVE EFFECT IS ACHIEVED BY AIMING THE REFLECTIVE FACE IN THE DIRECTION OF APPROACHING TRAFFIC
- GENERALLY THE NORMAL SPACING BETWEEN RRPM's IS TO BE 12.0m U.N.O. ANY EXISTING LINEMARKING NOT SHOWN ON THIS PLAN WHICH CONFLICTS
- OR IS INCOMPATIBLE WITH THE PROPOSED LINEMARKING SHALL BE REMOVED BY THE CONTRACTOR.
  NOSE OF ISLANDS TO BE PAINTED WHITE WITH GLASS BEADS.
- NOSE OF ISLANDS TO BE PAINTED WHITE WITH GLASS
   ALL STREET LIGHTING IN ACCORDANCE WITH AS1158.

# SIGNAGE NOTES

- LOCATION OF SIGNS SHOWN INDICATED ON THIS PLAN ARE INDICATIVE ONLY. CARE AND CONSIDERATION IS TO BE GIVEN TO ON SITE CONDITIONS
- TO AVOID ANY VISUAL OBSTRUCTION OF THE SIGN ALONG THE INTENDED COURSE OF APPROACHING TRAFFIC. EXACT LOCATION OF ALL SIGNS SHALL BE CONFIRMED ON SITE PRIOR TO INSTALLATION.
- SIGNS SHOULD BE ORIENTATED AT APPROXIMATELY RIGHT ANGLES TO, AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE.
- SIGNAGE SHALL BE IN ACCORDANCE WITH:
   AS1742 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - AS1743 ROAD SIGNS SPECIFICATION
  - AS4049.1 PAVEMENT MARKING MATERIALS
- STREET NAME SIGNS ARE TO BE INSTALLED WITH THE RELEVANT HOUSE NUMBERS IN ACCORDANCE WITH THE RELEVANT LOCAL COUNCIL STANDARD

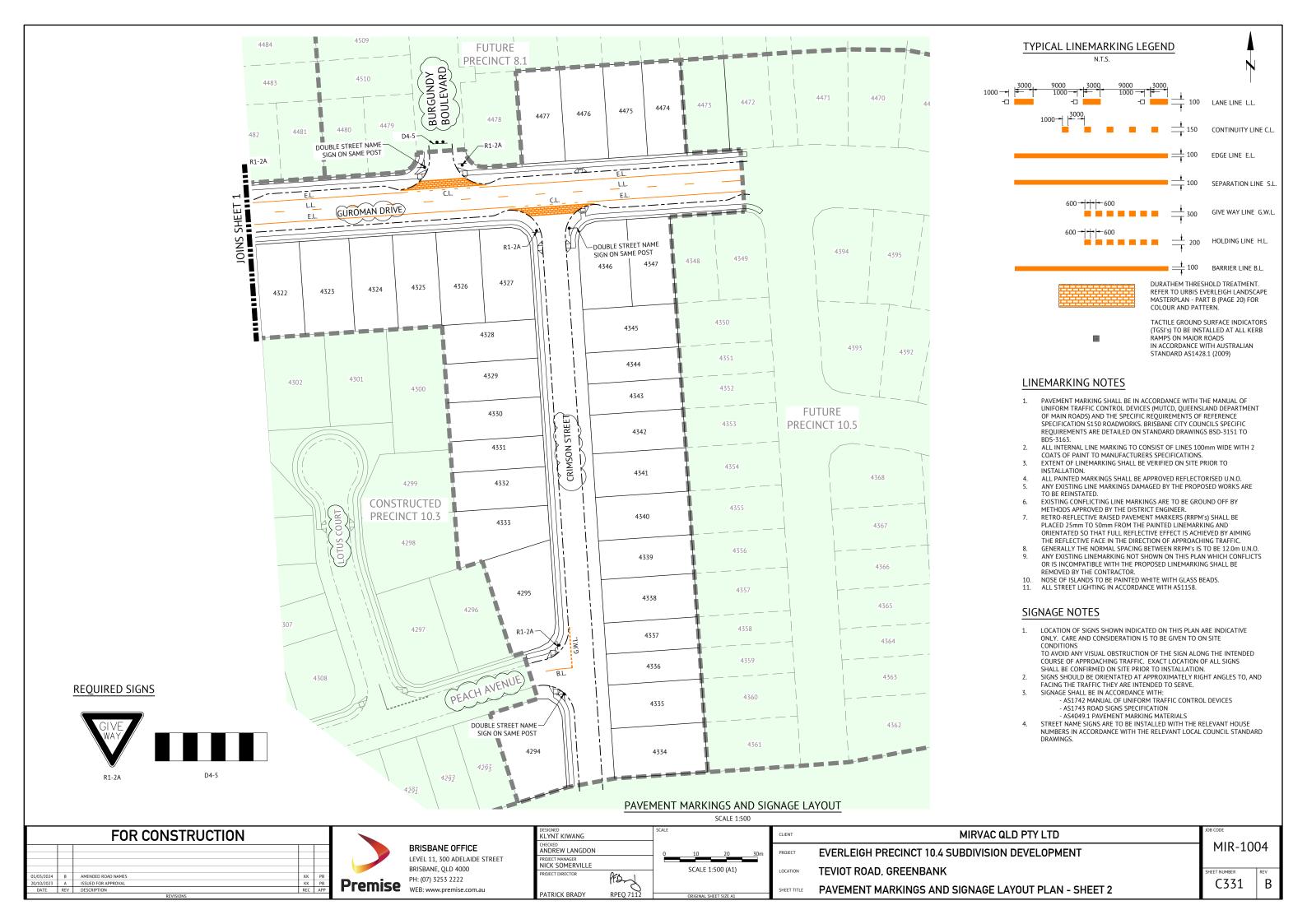


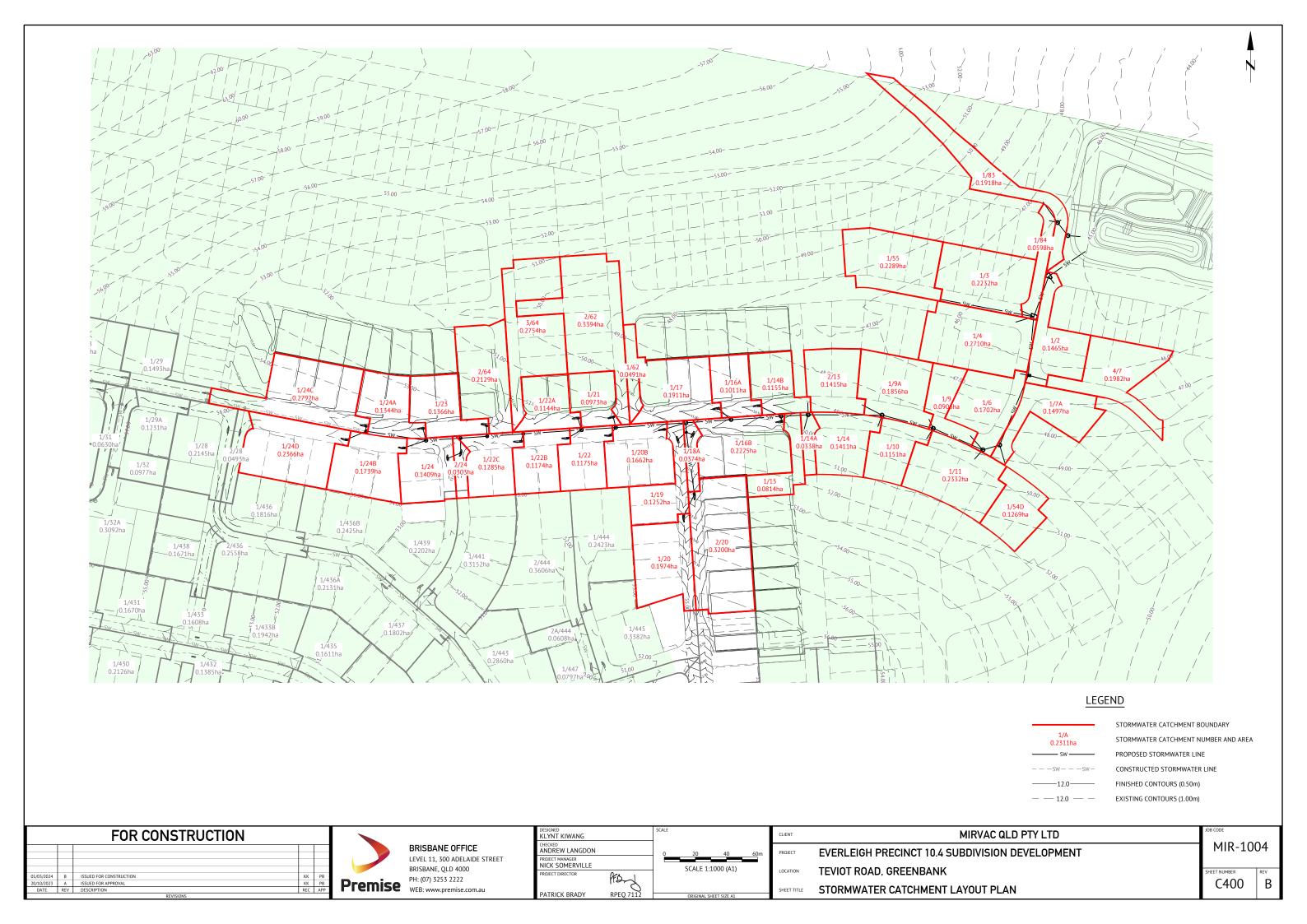
BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222 Premise PH: (07) 5233 2222
WEB: www.premise.com.au

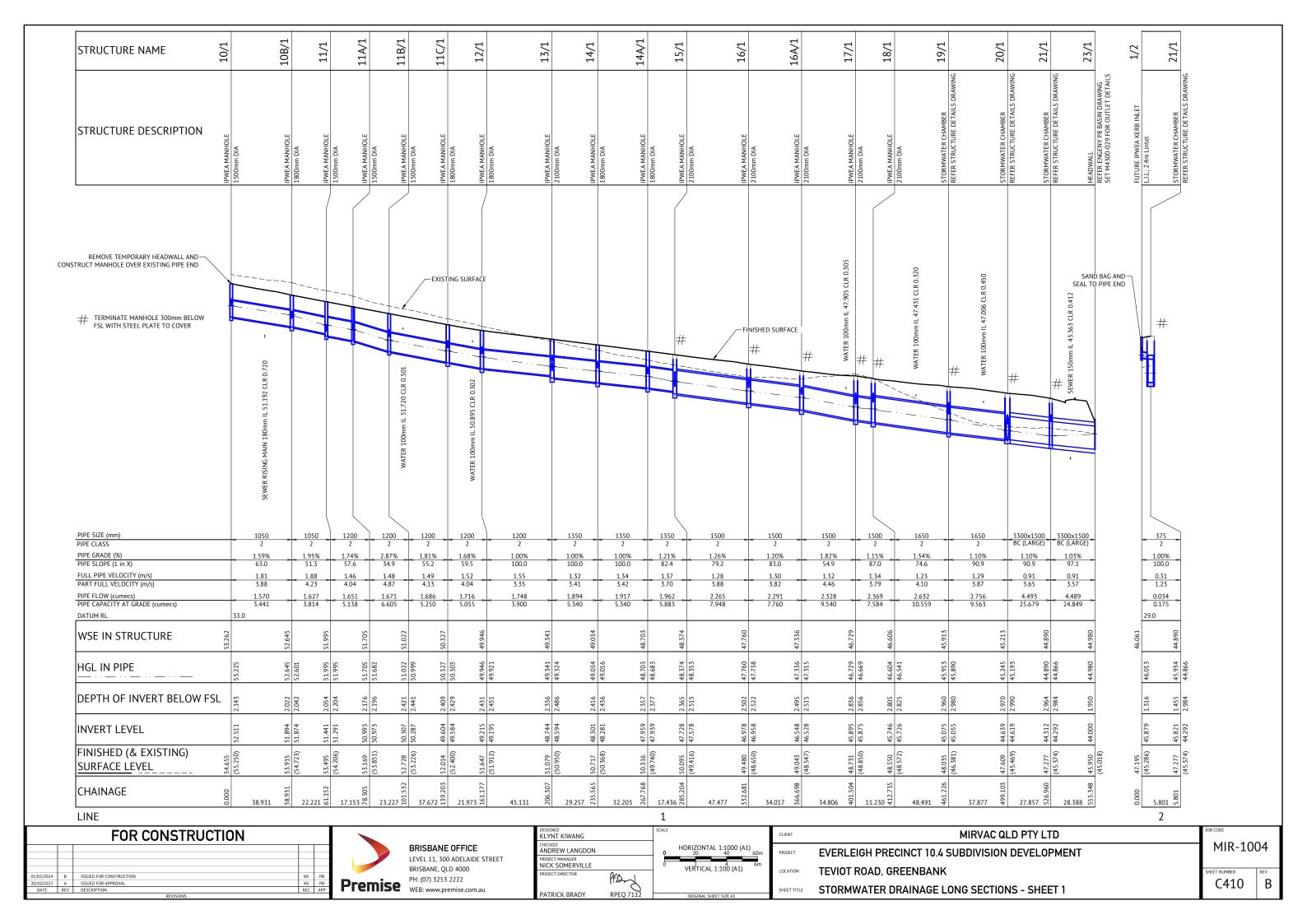


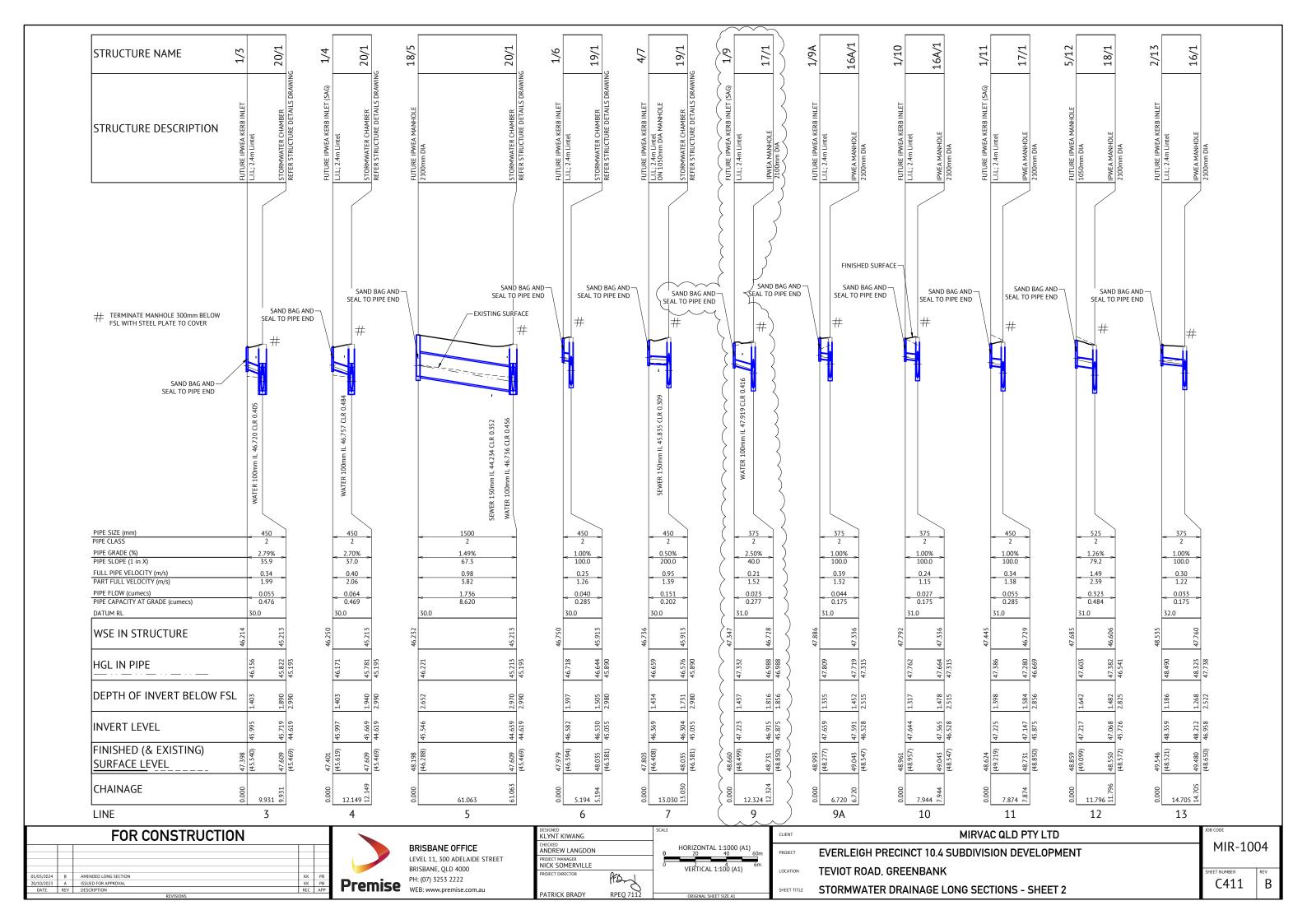
MIRVAC QLD PTY LTD **EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT** TEVIOT ROAD, GREENBANK PAVEMENT MARKINGS AND SIGNAGE LAYOUT PLAN - SHEET 1

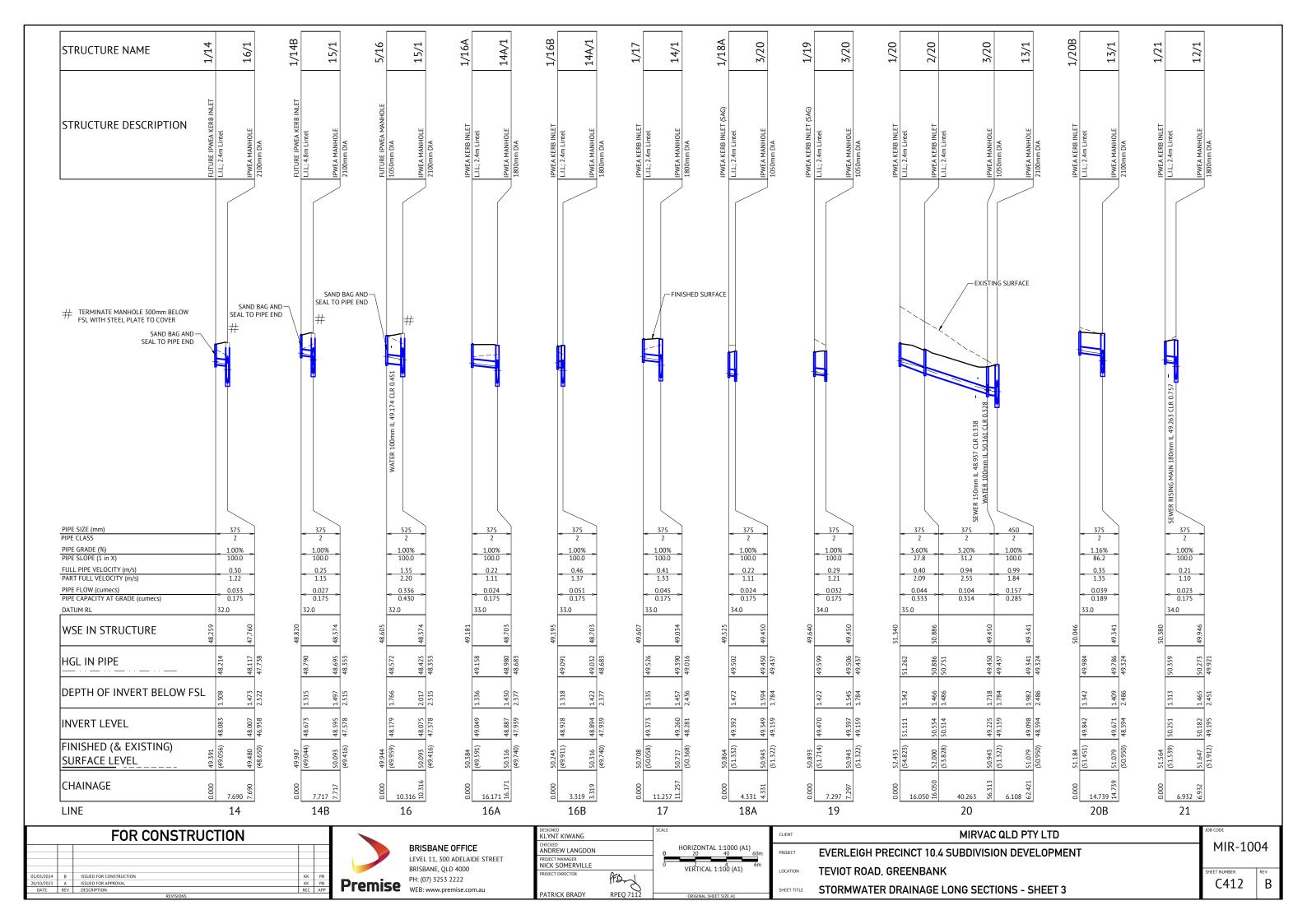
MIR-1004 C330

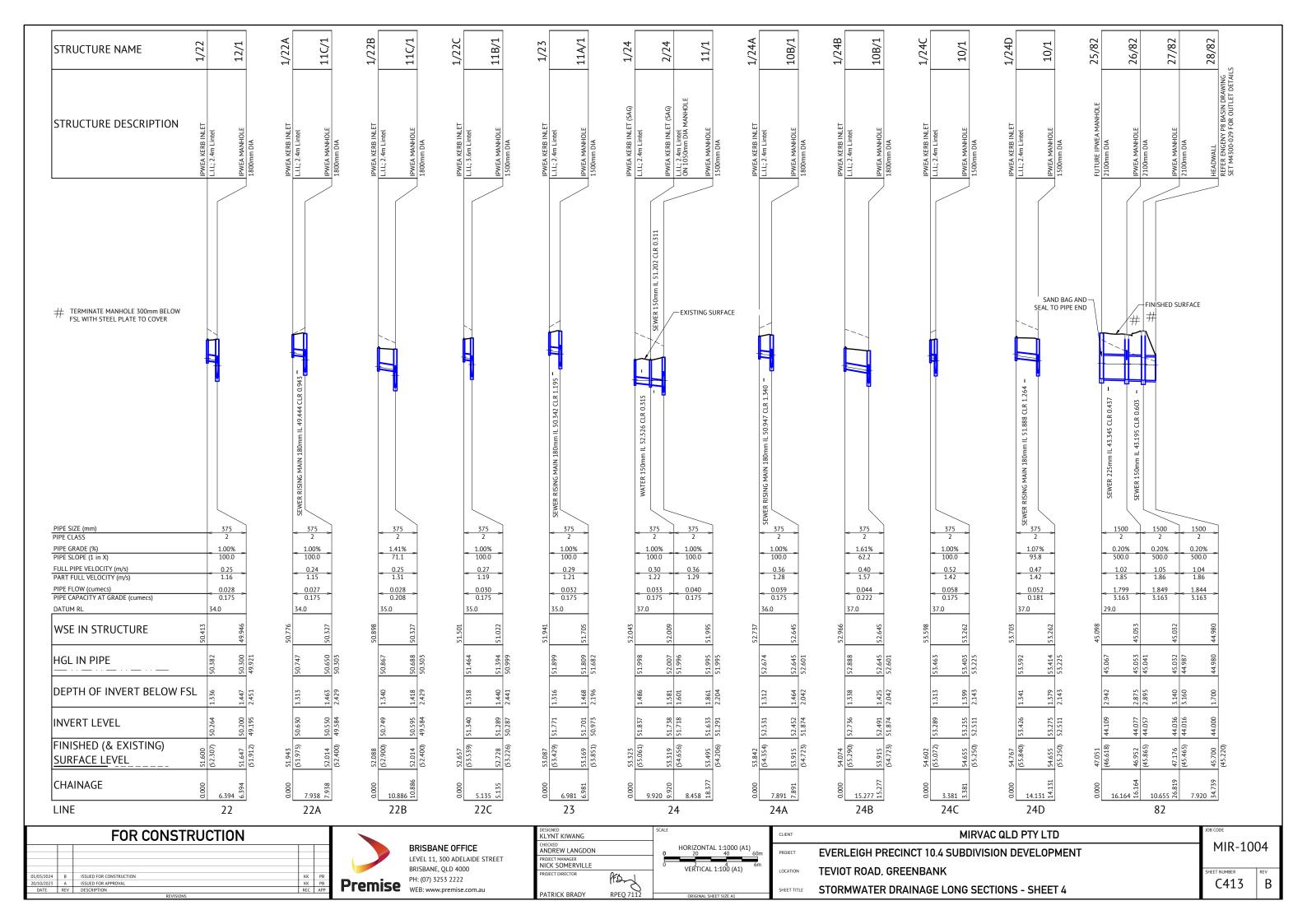


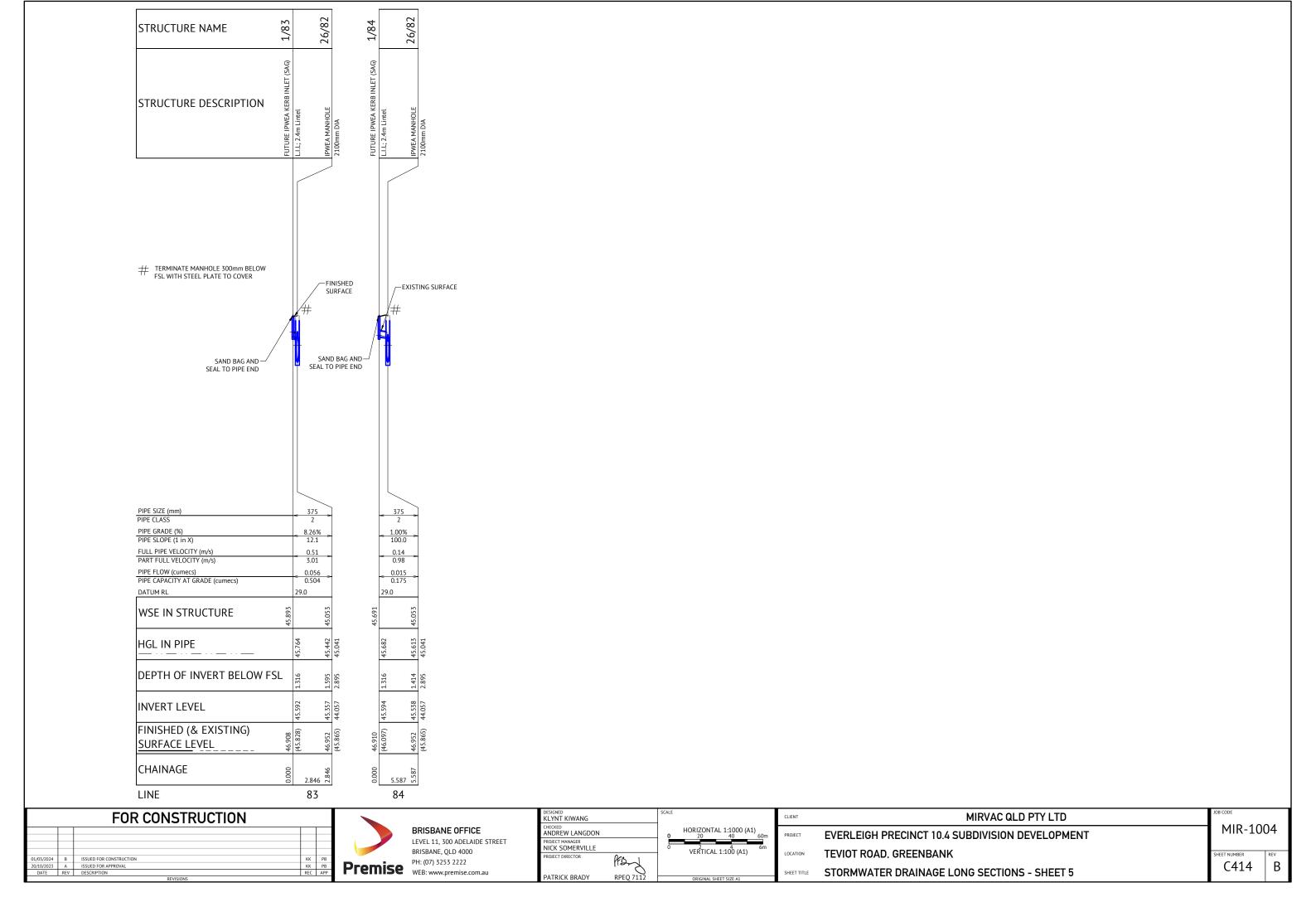












# STORMWATER DRAINAGE NOTES

- ALL STORMWATER DRAWINGS ARE TO BE READ IN CONJUNCTION WITH DRAWING C001. STORMWATER LAYOUT PLANS, NOTES AND DETAILS.
- STORMWATER PITS ARE TO BE CONSTRUCTED INSITU IN ACCORDANCE WITH DRAWINGS OR AS VARIED AS NOTED ON THE DRAWING, PREFABRICATED STORMWATER PITS CAN BE USED SUBJECT TO WRITTEN APPROVAL FROM THE SUPERINTENDENT, CLASS D HEAVY DUTY GALVANIZED STEEL GRATES ARE TO BE FITTED IN TRAFFIC AREAS, CLASS B LIGHT DUTY GALVANIZED STEEL GRATES ARE TO BE FITTED IN LANDSCAPE AREAS UNLESS NOTED OTHERWISE.
  ALL DRAINAGE EXCAVATION AND CONSTRUCTION SHALL BE CARRIED OUT IN
- ACCORDANCE WITH AS3500 AND THE APPLICABLE LOCAL AUTHORITY SPECIFICATIONS AND STANDARD DETAILS.
- ALL MATERIALS SHALL MEET THE REQUIREMENTS OF AS1254 & AS1273.
  ALL uPVC PIPES SHALL BE CLASS 'SN8' FOR DN150 & DN225, AND CLASS 'SN6'
- FOR DN100 UNLESS NOTED OTHERWISE.
  PIPES SHALL BE LAID AT MIN. 1% GRADE UNLESS NOTED OTHERWISE.
- CONTRACTOR MUST VERIFY THAT ALL PIPE LEVELS AND GRADES CAN BE ACHIEVED PRIOR TO CONSTRUCTING DRAIN LINES. ANY CONFLICT SHALL BE REPORTED TO THE SUPERINTENDENT FOR ANY NECESSARY ALTERATIONS PRIOR TO ANY CONSTRUCTION OF CONNECTING PIPEWORK
- WHERE PIPES ARE TO BE LAID WITHIN THE ZONE OF INFLUENCE OF STRUCTURAL LOADINGS (e.g. BUILDING FOOTINGS, RETAINING WALLS...etc). THE BUILDER SHALL PROVIDE ADEQUATE BRIDGING / PROTECTION. WHERE ANY DOUBT MAY EXIST REFERENCE SHALL BE MADE TO THE DESIGNER OF THE STRUCTURE.
- BENCHING OF PIT STRUCTURES SHALL HAVE A SMOOTH FINISHED SURFACE, AND PIPES SHALL NOT PROJECT INSIDE THE SHAFT OF THE PIT.
- WHERE RECTANGULAR PIT STRUCTURES ARE USED, PIPES MUST NOT CONNECT TO THE PIT AT CORNERS.
- ALL CONSTRUCTION AND EXCAVATIONS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF THE WORK HEALTH AND SAFETY ACT 2011 AND SUBSEQUENT AMENDMENTS.
- ALL STORMWATER PIPES SHALL BE CLASS '2' (UNO) R.C. PIPES UNLESS AN ALTERNATIVE IS APPROVED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION.
- ALL TEMPORARY ROOFWATER OUTLETS TO BE EXCAVATED AT 1 IN 200 TO NATURAL SURFACE.
- ALL ROOFWATER PIPES CROSSING CONCRETE FOOTPATHS ARE TO BE INSTALLED PRIOR TO CONSTRUCTION OF CONCRETE FOOTPATHS
- INSTALL 150mm DIAMETER PVC ROOFWATER HOUSE CONNECTION STUB INTO ROOFWATER PITS. INSTALL AT 750mm DEPTH TYPICAL OR 50mm FROM THE BASE OF PIT (WHICHEVER IS SHALLOWER).

# REFERENCE POINT LOCATION FOR DRAINAGE STRUCTURES

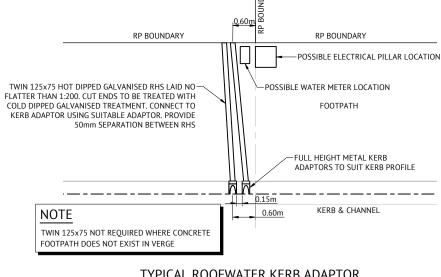
STRUCTURE TYPE	HORIZONTAL CONTROL POINT [REFERENCE POINT LOCATION]	VERTICAL CONTROL REFERENCE LEVEL
MANHOLE	CENTRELINE OF MAIN SHAFT	FINISHED SURFACE LEVEL AT CENTRE OF MAIN SHAFT
GULLY PIT OVER MANHOLE	CENTRE OF GULLY PIT	LIP LEVEL
GULLY PIT (LIP IN LINE)	CENTRE OF GULLY PIT	LIP LEVEL
HEADWALL	INTERSECTION OF HEADWALL FACE AND PIPE CENTRE LINE	INVERT LEVEL
FIELD INLET	CENTRE OF PIT	TOP OF CONCRETE PIT
ROOFWATER PIT	CENTRE OF PIT	TOP OF GRATE

# **EXCAVATION IN ROCK NOTE:**

CONTRACT SHALL INCLUDE TREATING, SIZING CONDITIONING AND PROCESSING ALL TYPES OF ROCK IN ALL EXCAVATIONS. PROCESSING TO BE COMPLETED AS PER MORRISON GEOTECHNICAL REPORTS TO ENSURE LEVEL 1 IS ACHIEVED.

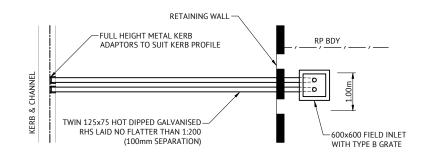
# TRENCH SPOIL NOTE:

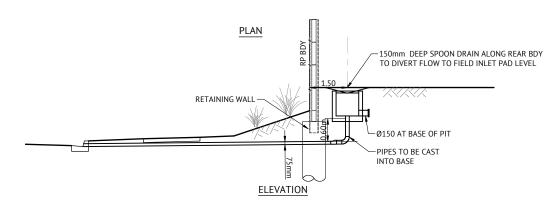
SPOILAGE OF EXCESS MATERIAL TO BE PLACED INTO THE SOUTHERN DAM REHABILITATION AREA INCLUDING ALL LEVEL ONE COMPACTION REQUIREMENTS AND TESTING IN ACCORDANCE WITH MORRISON GEOTECHNICAL SPECIFICATION AND ALL LOCAL AUTHORITY STANDARDS, AND SHALL BE FREE DRAINING.



# TYPICAL ROOFWATER KERB ADAPTOR **OUTLET DETAIL**

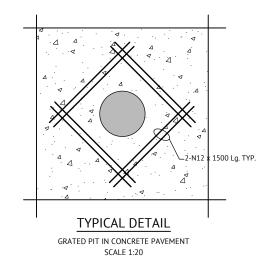
N.T.S.





# TYPICAL ROOFWATER PROPERTY PIT TO KERB ADAPTOR OUTLET DETAIL

N.T.S.



STORMWATER DRAINAGE LONG SECTION CHAINAGE LENGTHS ARE MEASURED FROM NODE CENTRE POINTS ALONG THE PROPOSED ALIGNMENT INCLUDING PIPE OFFSETS SUCH AS TO CENTRE OF PIT SIDE WALL AND CUSTOM PIPE SPACING INTO STRUCTURES.
REFER STORMWATER DRAINAGE STRUCTURE DETAILS DRAWINGS

# FOR CONSTRUCTION

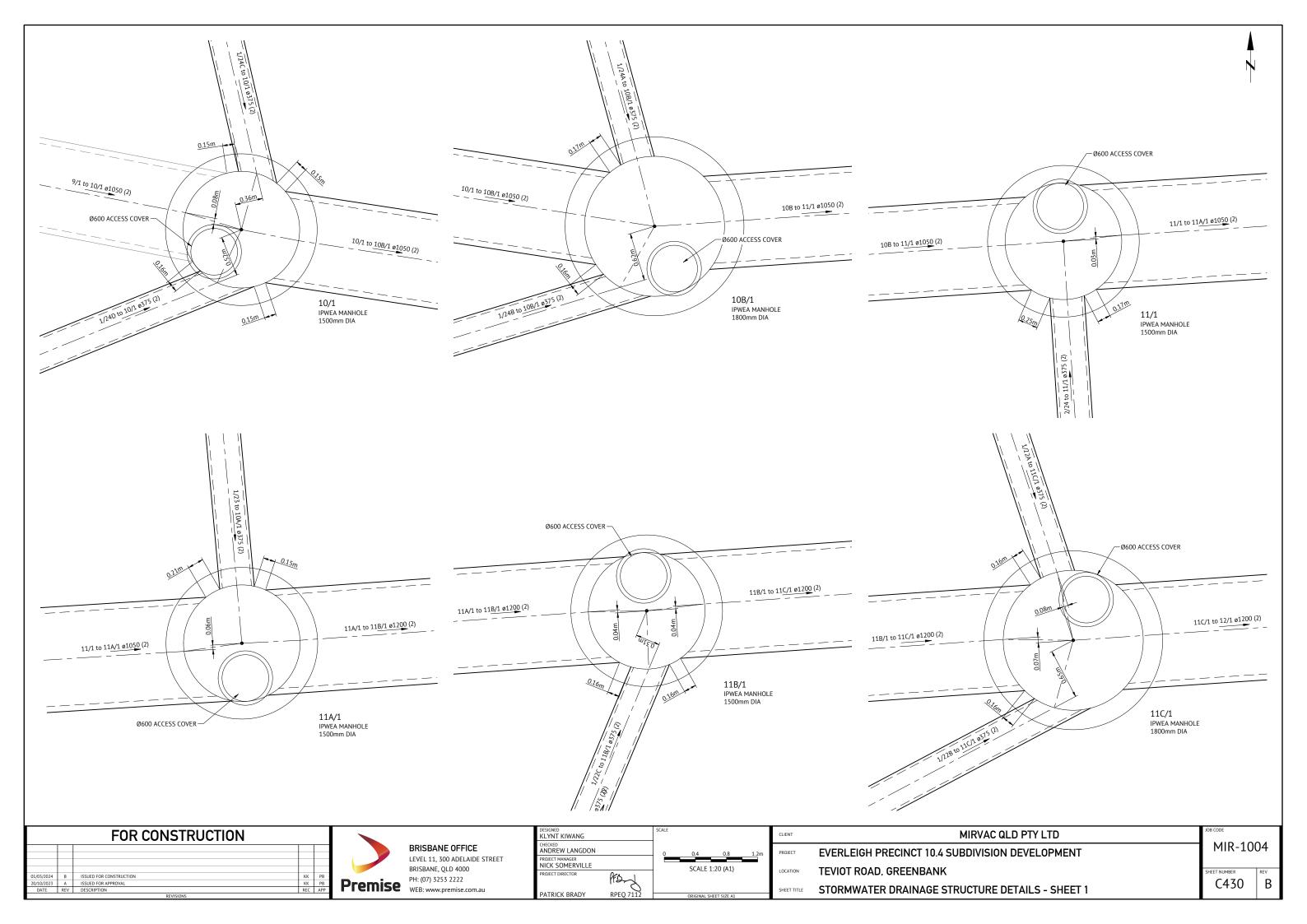
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK		
20/10/2023	Α	ISSUED FOR APPROVAL	KK		
DATE	REV	DESCRIPTION	REC		
REVISIONS					

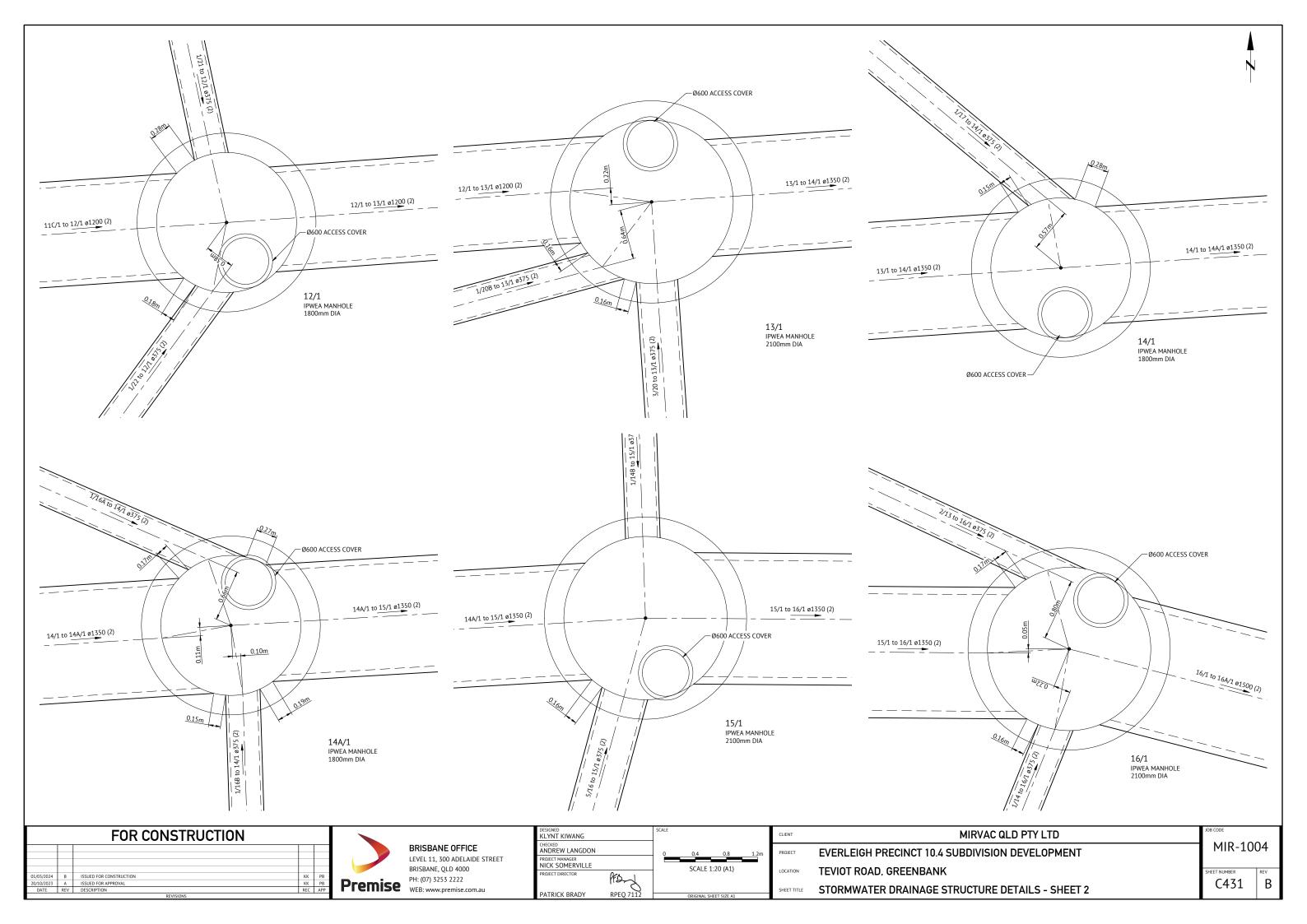
# BRISBANE OFFICE

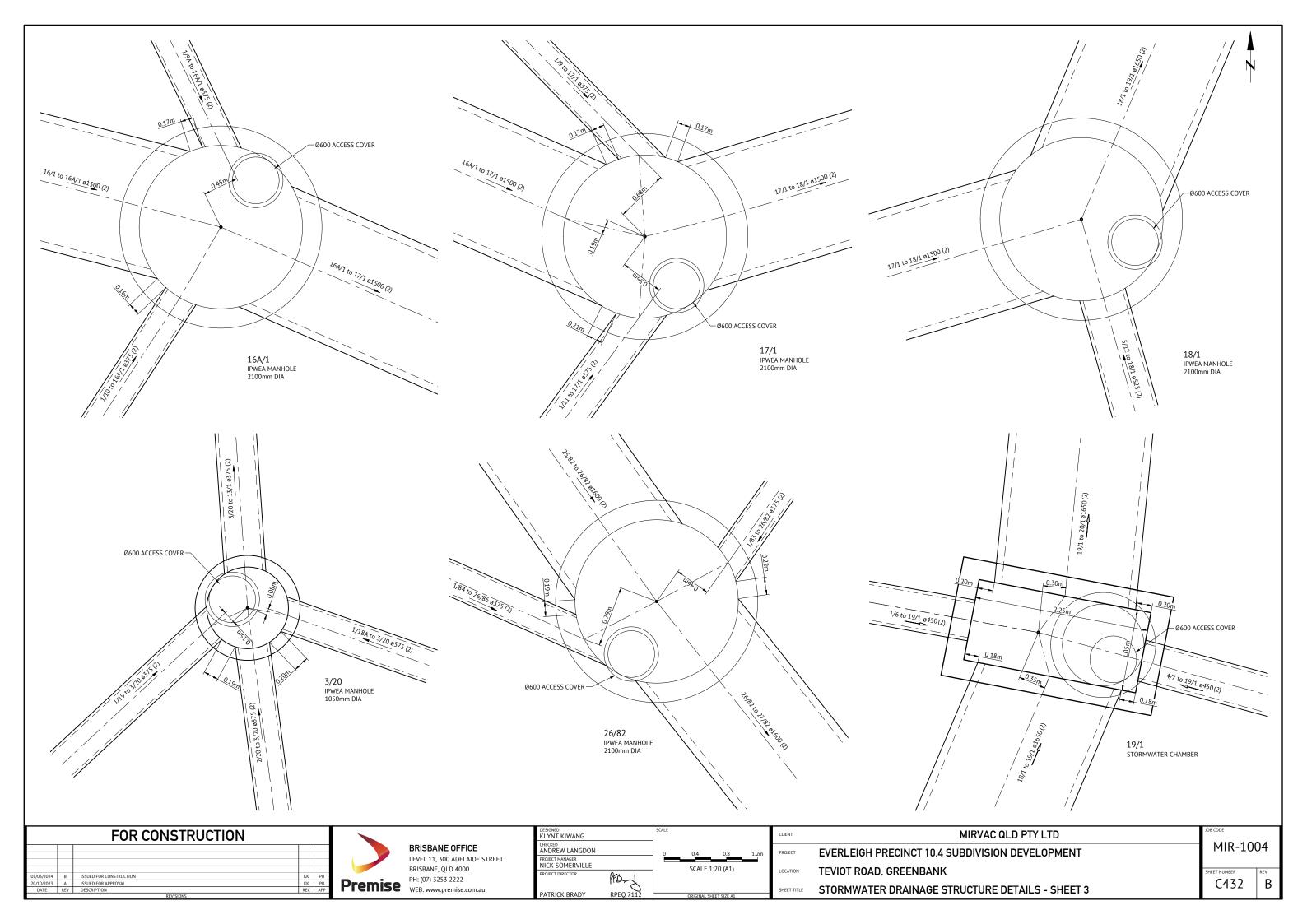
LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222 Premise PH: (U/) 5233 2222
WEB: www.premise.com.au

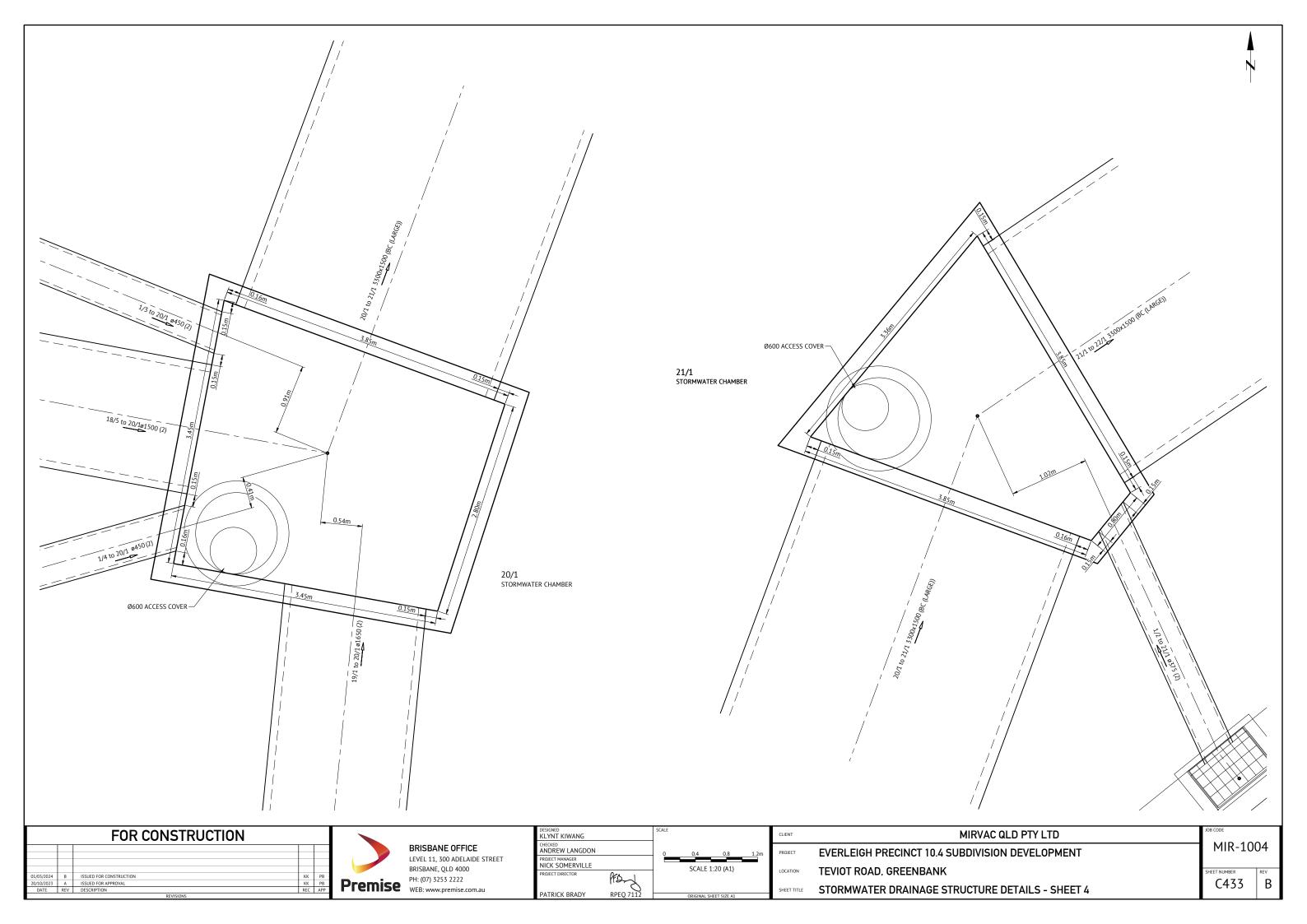
DESIGNED		SCALE
KLYNT KIWANG		
CHECKED ANDREW LANGDON		
PROJECT MANAGER		NTS
NICK SOMERVILLE		2
PROJECT DIRECTOR	DER 1	
	112	
DATE OF A DATE OF	2252 7443	
PATRICK BRADY	RPEQ 7112	ORIGINAL SHEET SIZE A1

CLIENT	MIRVAC QLD PTY LTD  /ERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT  MIR-1		004	
PROJECT				
LOCATION	TEVIOT ROAD, GREENBANK	SHEET NUMBER	REV	
SHEET TITLE	STORMWATER DRAINAGE NOTES AND DETAILS	C420	В	

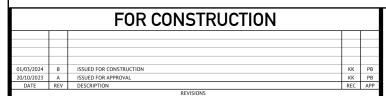








	LOCATION	TIME	:	SUB-CA	ТСНМЕ	NT RU	NOFF			IN	LET DES	IGN							DRAI	IN DESI	GN								F	IEADLO:	SSES					P.A	ART FU	LL			DES	IGN LEV	ELS		
		tc I	-	Α	CA	Q					Qg	Qb		tc	I	CA		Qp	L	S			Vf=Q/	A			STRUCT	URE RAT	IOS V	2/2g K	u h	u Kw	/ hw	Sf		dn	Vn	Vn						L .	
STRUCTURE NUMBER DOWNSTREAM STRUCTURE	'∢ ≅	SUB-CATCHMENT TIME OF CONCENTRATION RAINFALL INTENSITY	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVAL	SUB-CATC DISCHARG		FLOW	FLOW DEPTH	ROAD GRADE AT	HALF ROAD CAPACITY FLOW INTO INLET		BYPASS STRUCTURE		RAINFALL INTI	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW		REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS		TIME OF FLOW	IIN KEACH	CHARTS USED	Qg/Qo	Du/Do	-	VELOCITY HEAD UPSTREAM HEADLOSS		W.S.E. CO-EFFICIE			PIPE FRICTION HE (L x Sf)		NORMAL DEPTH VELOCITY (MINOR STORM)		I	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	STRUCTURE NUMBER
	1/28 2/28 1/29 1/29A 1/31	min mm/h		ha	ha	l/s	l/s	m	m	%	l/s l/s	l/s		min	mm/h	ha	l/s	l/S	m	%	mm	n	m/s	min	1					m	n	n	m	%	m	m	m/s	m/s	m	m	m	m	m	m	+
10/1 108/1	1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													11.40	101	5.633	0	1570	38.931	1.586	1050	2	1.81	0.32	33 34	ı	0.00 1	00 1.0	0.1	.68 0.2	2 0.03	36	0.036	1.49	0.614	0.498	3.88	3.59	53.561	52.944	53.225	52.645	53.262	54.655	10/1
108/1 11/1	1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													11.73	99	5.864	0	1627	22.221	1.949	1050	2	1.88	0.19	33 34	ŀ	0.00 1	1.00	0.1	80 0.2	4 0.04	14	0.044	2.73	0.308	0.479	4.23	3.89	52.924	52.491	52.601	51.995	52.645	53.915	10B/1
11/1 11A/1	1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C													11.91	99	5.992	0	1651	17.152	1.735	1200	2	1.46	0.14	33 34	ŀ	0.00	).93 1.0	00 0.1	.09 0.0	0.00	00	0.000	1.69	0.298	0.468	4.04	3.72	52.491	52.193	51.995	51.705	51.995	53.495	11/1
11A/1 11B/1	1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 5/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													12.06	98	6.095	0	1671	23.226	2.868	1200	2	1.48	0.19	33 34	ŀ	0.00 1	00 1.0	0.1	11 0.2	0.02	23	0.023	2.84	0.666	0.412	4.87	4.46	52.173	51.507	51.682	51.022	51.705	53.169	11A/1
118/1 11C/1	1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													12.25	98	6.191	0	1686	37.668	1.812	1200	2	1.49	0.31	33 34	ı	0.00 1	00 1.0	02 0.1	13 0.2	0.02	23	0.023	1.78	0.682	0.468	4.13	3.8	51.487	50.804	50.999	50.327	51.022	52.728	11B/1
11C/1 12/1	1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/45 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C													12.56	97	6.364	0	1716	21.973	1.680	1200	2	1.52	0.18	33 34	ŀ	0.00 1	00 1.0	0.1	17 0.2	0.02	24	0.024	1.62	0.369	0.482	4.04	3.71	50.784	50.415	50.303	49.946	50.327	52.014	11C/1
12/1 13/1	1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													12.75	96	6.525	0	1748	45.109	1.000	1200	2	1.55	0.38	33 34	ı	0.00 1	00 1.0	0.1	22 0.2	0.02	25	0.025	1.29	0.391	0.563	3.35	3.09	50.395	49.944	49.921	49.341	49.946	51.647	12/1





BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000

DESIGNED KLYNT KIWANG		SCALE
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	PFD	
PATRICK BRADY	RPEQ 7112	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER CALCULATIONS 39% AEP STORM - SHEET 1

MIR-1004

	LOCATION	TIME	E	SUB-C	АТСНМ	ENT RU	INOFF			IN	ILET DESI	GN							DRAII	N DESIG	5N								Н	EADLOS	SES					PA	RT FUI	LL			DES	IGN LEV	ELS		
		tc I	С	Α	CA	Q					Qg	Qb		tc	ı	CA		Qр	L	S			Vf=Q/A	١			STRUCTU	JRE RATI	OS V2	/2g Ku	hu	Kw	hw	Sf	hf	_	Vn	Vn							
STRUCTURE NUMBER DOWNSTREAM STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION RAINFALL INTENSITY	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA		FLOW IN K&C (INC. BYPASS)	FLOW WIDTH	FLOW DEPTH	GRADE AT IN	HALF ROAD CAPACITY FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE	CRITICAL TIME OF CONCENTRATION	1 55	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW	<u> </u>	CHARTS USED	Qg/Qo	Du/Do	00/5	VELUCITY HEAD UPSTREAM HEADLOSS	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	S	PIPE FRICTION HEADLOSS (L x Sf)	DEPTH	EPTH ORM)	1AL DEP AR STOR	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	STRUCTURE NUMBER
		min mm/h		ha	ha	l/s	l/s	m		%	l/s l/s	l/s			mm/h		l/s		m	%	mm		m/s	min						n	m		m	%	m	m	m/s		m	m	m	m	m	m	
13/1 14/1	1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/50 2/30 3/35 0/30 1/44B 1/30 1/30 3/35 0/30 1/44B 1/30 1/30 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													13.05	95	7.143	0	1894	29.257	1.000	1350	2	1.32	0.24	33 34	ı	0.00 0.	99 1.0	1 0.0	0.19	0.017		0.017	0.99	0.293	0.555	3.41	3.14 4	9.944	49.651	49.324	49.034	49.341	51.079	13/1
14/1 14A/1	1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													13.30	94	7.286	0	1917	32.198	1.000	1350	2	1.34	0.27	33 34	<b>,</b>	0.00 1.	00 1.0	1 0.0	91 0.20	0.019		0.019	0.97	0.322	0.559	3.42	3.15 4	9.631	49.309	49.016	48.703	49.034	50.717	14/1
14A/1 15/1	1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													13.56	94	7.528	0	1962	17.436	1.214	1350	2	1.37	0.15	33 34	ŀ	0.00 1.	00 1.0	1 0.0	96 0.21	0.020		0.020	1.77	0.181	0.537	3.70	3.4 4	9.289	49.078	48.683	48.374	48.703	50.316	14A/1
15/1 16/1	1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/45 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													13.45	94	8.657	0	2265	47.476	1.263	1500	2	1.28	0.40	33 34	ŀ	0.00 1.	00 1.0	1 0.0	84 0.24	0.020		0.020	1.25	0.600	0.548	3.88	3.56 4	9.078	48.478	48.353	47.760	48.374	50.093	15/1
16/1 16A/1	2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24B 1/24 1/24 1/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D													13.85	93	8.869	0	2291	34.017	1.204	1500	2	1.30	0.28	33 34	ı	0.00 1.	00 1.0	1 0.0	86 0.25	0.021		0.021	1.18	0.409	0.559	3.82	3.51 4	8.458	48.048	47.738	47.336	47.760	49.480	16/1

	FOR CONSTRUCTION													
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB										
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB										
DATE	REV	DESCRIPTION	REC	APP										
		DEVICIONIC												



DESIGNED		SC
KLYNT KIWANG		
CHECKED ANDREW LANGDON		
PROJECT MANAGER		
NICK SOMERVILLE		
PROJECT DIRECTOR	PRON	
PATRICK BRADY	RPEQ 7112	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER CALCULATIONS 39% AEP STORM - SHEET 2

MIR-1004

C441 B

LOCATION TIME	SUB-CA	TCHMI CA		NOFF		11	NLET DE	SIGN lg Qb		tc		CA	Qp		IN DESIG	N		Vf=Q/A			STRIN	CTURE RATI		ADLOSSES		Kw b	M Sf	hf	_	RT FULI				DES	IGN LEVE	ELS		
STRUCTURE NUMBER DOWNSTREAM STRUCTURE SUB-CATCHMENTS CONTRIBUTING TIME OF CONCENTRATION RAINFALL INTENSITY CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	FLOW (INC. E	FLOW WIDTH FLOW DEPTH	ROAD GRAD	HALF ROAD CAPACITY	BYPASS FLOW	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C × A) SUM ADDITIONAL	PIPE FLOW PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	09/00	Du/Do	VELOCITY HEAD	UPSTREAM HEADLOSS CO-EFFICIENT	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L x Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY (MINOR STORM)	NORMAL DEPTH VELOCITY (1 YEAR STORM)	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	STRUCTURE NUMBER
	ha	ha	l/s	l/s	m m	%	l/s l/	's L/s		min m	nm/h	ha l/	's l/s	m	%	mm		m/s	min				m	+	m	n	n %	m	m	m/s	m/s	m	m	m	m	m	m	
1/14 1/148 1/14A 1/15 1/50 1/51 1/52 1/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 17/1 18/1 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D	0.000	0.000	0	0	0.000		0	0	1/6	14.42 9:	1 9.3	337 0	2369	11.230	1.150	1500	2	1.34	0.09	34 37	0.00	1.00 1.0	4 0.092	. 0.65 (	0.060	0.06	1.74	0.117	0.576	3.79	3.48 4	47.472	47.343	46.767	46.571	46.826	48.816	17/1
1,754B 1,754C 1,754 1,754A 1/12 2/12 1,754D 1,754E 2/54E 1,79 1,711 1,79A 1,710 2/13 1,714 1,714B 1,714A 1,715 1,750 1,751 1,752 2,752 1,753 1,753A 1,716 2,716 1,716A 1,716B 1,717 1,718A 1,719 1,720 2,720 1,720B 1,721 1,722 1,722A 1,722B 1,722C 1,723 1,742 7,74 18/1 19/1 19/1 1/24A 1,724B 1,732 2,728 1,733 1,734 1,735 1,736 1,737 1,738 2,738 1,739 1,731 1,732 1,733 1,734 1,735 1,736 1,737 1,738 2,738 1,739 1,741 1,740 2,740 3,740 1,743 2,743 3,743 4,743 5,743 6,743 7,743 1,744 2,744 3,744 1,744A 2,744A 1,730 2,730 3,730 4,730 1,744B 1,744C 1,749 2,749 1,71 2,71 3,71 4,71 1,746A 1,746B 1,724C 1,724D										14.07 93	2 10	0.268 0	2632	48.488	1.142	1650	2	1.23	0.40	37 42 43	0.00	0.96 1.0	4 0.077	0.81	0.063 0	0.06	55 1.10	0.553	0.586	3.87	3.55 4	47.343	46.789	46.508	45.977	46.574	48.625	18/1
1/6 1/7 3/7 1/7A 4/7 1/54B 1/54C 1/54 1/54A 1/12 2/12 1/54D 1/54E 2/54E 1/9 1/11 1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/23 1/24 2/24 1/24A 1/24B 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D	0.000	0.000	0	0	0.000		0	0	1/2	14.47 9:	1 10	0.886	2756	37.817	1.271	1650	2	1.29	0.32	33 34	0.00	1.00 1.0	1 0.085	0.27	0.023	0.02	1.93	0.215	0.584	4.07	3.73 4	46.769	46.289	45.954	45.223	45.977	48.063	19/1
1/3 1/4 1/56B 1/57  1/58 1/59 1/60 1/61 1/62  2/62 1/64 2/64 3/64 1/65  1/67 1/68 1/66 2/66 3/66  1/69 1/69 1/70 1/71 1/72  1/73 2/73 1/74 1/75 1/76  2/76 3/76 4/76 1/77 2/77  3/77 4/77 1/78 1/79 1/80  1/81 1/5 2/5 3/5 4/5 1/55  1/56 1/6 1/7 3/7 1/7A 4/7  1/54B 1/54C 1/54 1/54A  1/12 2/12 1/54D 1/54E  2/54E 1/9 1/11 1/9A 1/10  2/13 1/14 1/14B 1/14A 1/15  20/1  21/1 1/50 1/51 1/52 2/52 1/53  1/53A 1/16 2/16 1/16A  1/16B 1/17 1/18A 1/19 1/20  2/20 1/20B 1/21 1/22 1/22A  1/22B 1/22C 1/23 1/24 2/24  1/24A 1/24B 1/28 2/28 1/29  1/29A 1/31 1/32 1/32A 1/33  1/34 1/35 1/36 1/37 1/38  2/38 1/39 1/41 1/40 2/40  3/40 1/43 2/43 3/43 4/45  5/43 6/43 7/43 1/44 2/44  3/44 1/44A 2/44A 1/30 2/30  3A/30 4/30 1/44B 1/44C  1/49 2/49 1/1 2/1 3/1 4/1  1/46A 1/46B 1/24C 1/24D										13.94 9:	2 17	7.467 0	4493	3 27.787	1.103	3300x15 00	BC (LAR GE)	0.91	0.23	34 37	0.00	0.92 1.0	1 0.042	0.48	0.020	0.02	1.09	0.306	0.373	3.65	3.27 4	46.119	45.812	45.193	44.890	45.213	47.610	20/1
FOR CONSTRUCTION	1						חחם	DANIE	OFFICE			CHECKED	KIWANG			SCALE					CLIENT								LD P							JO	MIR -	1004
							LEVE	11, 300	ADELAID			PROJECT	EW LANG MANAGER SOMERVII								PROJECT			SH PRE				VISIO	N DEV	ELOF	PMEN	NT					IYIIK-	1004
01,03/2024 B ISSUED FOR CONSTRUCTION 20/10/2023 A ISSUED FOR APPROVAL DATE REV DESCRIPTION			KK KK REC	PB PB APP	Prer	nise	PH: (0	3ANE, QLI 37) 3253 2 www.nre		au		PROJECT	DIRECTOR		Ford						LOCATION SHEET TITL			OAD, G ATER C				% VED	STOP	M - C	HEE	T 2				SF	C44	2 B
DATE REV DESCRIPTION REVISIONS			I VEC	70.1			- TTLD.	.,,,,,		u		PATRI	CK BRAD	Y	RPEQ 711		OF	RIGINAL SHEET	Γ SIZE A1		STILL HILL	- 310	/1 X IVI VV.	WILV C	/ALCU	LATIO	112 29	/0 ALP	2101	141 - 2		. 1 3						

	LOCATION		TIME	SI	JB-CATCI			OFF				DESIGN							DRAII	N DESI	GN								ADLOS					P.	ART FL	JLL			DES	SIGN LEV	ELS		
			-	_	A C	Α (	Q					Qg (	)b	tc	I	CA		Qp	L	S	+		Vf=Q/A		+	STRU	CTURE F	RATIOS V2/	2g Kı	ı hu	Kw	hw		dn	_	Vn							+
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL	CO-EFFICIENT OF	SUB-CATCHMENT AREA			(INC. BYPASS)		ROAD GRADE AT INLET	HALF ROAD CAPACITY		BYPASS FLOW BYPASS STRUCTURE	_			SUM ADDITIONAL PIPE FLOW		REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW	_	09/00	Du/Do	S/Do	UPSTREAM		W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	PIPE FRICTION SLOPE PIPE FRICTION HEADLOSS (I x Sh	<u>Š</u>	NORMA	(MINOR STORM) NORMAL DEPTH VELOCITY (1 YEAR STORM)	UPSTRE LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	STRUCTURE NUMBER
	1/2 1/7 1/4 1/5 (	min	mm/h	_	ha h	a l,	l/s	l/s m	m	%	l/s	l/s l	/s	min	mm/h	ha	l/s	l/s	m	%	mm		m/s	min	1			m	1	m		m	% m	m	m/s	s m/s	m	m	m	m	m	m	++
	1/2 1/3 1/4 1/56A 1/56B 1/57 1/58 1/59 1/60 1/61 1/62 2/62 1/64 2/64 3/64 1/65 1/67 1/68 1/66 2/66 3/66 1/69 1/69A 1/70 1/71 1/72 1/73 2/73 1/74 1/75 1/76 2/76 3/76 4/76 1/77 2/77 3/77 4/77 1/78 1/79 1/80 1/81 1/5 2/5 3/5 4/5 1/55 1/56 1/6 1/7 3/7 1/7A 4/7 1/54B 1/54C 1/54 1/54A 1/12 2/12 1/54D 1/54E 2/54E 1/9 1/11 1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 23/1 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/2C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/45 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/40 1/40 3/40 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D	5 0 0 1 1 1 9 3 3												14.2	2 92	17.604	0	4489	28.374	1.031	3300×1 00	15 BC (LAR GE)	0.91	0.24	34 37	0.00	1.00	1.02 0.04	2 0.58	3 0.024		0.024	-0.40 0.075	0.381	3.57	3.2	45.792	45.500	44.866	44.980			
23/1																																									44.980	45.950	23/1
1/2	21/1 1/2				146 0.11					3.22				_		0.110	0		5.750	1.009	_	2	0.31	0.05	_	1.00	_	1.13 0.00	-	_	_		1.35 0.050	_	_	_	46.254		46.013	45.934	46.061	47.195	
1/3	20/1 1/3 20/1 1/4				223 0.16 271 0.20	_	-	5 2.772		0.30 0.85		55 0		_		0.167			9.790 11.994	2.826	_	2	0.34	0.08		1.00		1.13 0.00 1.18 0.00	_				3.36 0.191 3.21 0.238					46.169				47.400	
18/5	1/56A 1/56B 1/57 1/58 1/59 1/60 1/61 1/62 2/62 1/64 2/64 3/64 1/65 1/67 1/68 1/66 2/66 3/66 1/69 1/69A 20/1 1/70 1/71 1/72 1/73 2/73 1/74 1/75 1/76 2/76 3/76	)													9 97	6.430		1736	61.056	1.486	1500	2	0.98	0.51	33 34	0.00	1.00	1.01 0.04	9 0.21	1 0.010			1.65 0.870										
	4/76 1/77 2/77 3/77 4/77 1/78 1/79 1/80 1/81 1/5 2/5 3/5 4/5 1/55 1/56	5																																									
1/6	19/1 1/6	8.00	113	0.75 0.3	170 0.12	7 40	) 40	2.388	8 0.068	3 1.06	137	40 0	1/4	8.00	113	0.127	0	40	5.194	1.000	450	2	0.25	0.04	32	1.00		1.07 0.00	3 9.70	0.031		0.031	1.43 0.042	0.114	1.26	1.16	47.060	47.008	46.747	46.672	46.778	48.008	1/6
4/7	19/1 1/7 3/7 1/7A 4/7	8.00	113	0.75 0.3	198 0.14	8 47	47	7 3.866	6 0.109	0.37	0.054	47 0	19/1	8.30	112	0.486	0	151	13.030	0.500	450	2	0.95	0.11	34 37	0.31	1.00	1.17 0.04	6 1.67	7 0.077		0.077	0.64 0.067	0.290	1.39	1.3	46.852	46.786	46.692	46.609	46.769	47.836	4/7
1/9	17/1 1/9	6.00	122	0.76	0.06	9 23	23	3	0.000	0.36	75	23 0	17/1	6.00	122	0.069	0	23	10.062	2.556	375	2	0.21	0.09	32	1.00		1.04 0.00	2 7.00	0.016		0.016	2.84 0.213	0.073	1.52	1.4	47.656	47.399	47.390	47.097	47.405	48.740	1/9
1/9A	16A/1 1/9A	8.00	113	0.75 0.3	186 0.13	9 44	44	4 2.389	9 0.069	1.26	161	44 0	1/9	8.00	113	0.139	0	44	6.472	1.038	375	2	0.39	0.06	32	1.00		1.21 0.00	8 9.70	0.077		0.077	1.34 0.058	0.127	1.32	1.21	48.034	47.966	47.809	47.719	47.886	48.993	1/9A
1/10	16A/1 1/10	8.00	113	0.75 0.3	115 0.08	6 27	27	7 1.961	1 0.058	3 1.33	145	27 0	1/11	8.00	113	0.086	0	27	7.930	1.002	375	2	0.24	0.07	32	1.00		1.08 0.00	3 9.70	0.030		0.030	1.23 0.072	0.100	1.15	1.06	48.019	47.940	47.762	47.664	47.792	48.961	1/10
1/11	17/1 1/11	8.00	113	0.75 0.2	233 0.17	5 55	5.5	5	0.011	0.18	375	55 0	17/1	8.00	113	0.175	0	55	7.735	1.018	450	2	0.34	0.07	32	1.00		1.13 0.00	6 9.70	0.059		0.059	1.34 0.067	0.134	1.38	1.27	47.761	47.683	47.472	47.366	47.531	48.710	1/11
5/12	1/54B 1/54C 1/54 1/54A 18/1 1/12 2/12 1/54D 1/54E 2/54E													8.72	110	1.056	0	323	11.776	1.002	525	2	1.49	0.10	34 37	0.00	1.00	1.16 0.11	4 0.72	2 0.082		0.082	1.39 0.105	0.340	2.18	2.04	47.742	47.624	47.603	47.439	47.685	48.897	5/12
2/13	16/1 2/13	8.00	113	0.75 0.3	142 0.10	6 33	33	3 2.179	9 0.062	2 1.26	136	33 0	1/9/	8.00	113	0.106	0	33	14.327	1.026	375	2	0.30	0.12	32	1.00		1.12 0.00	5 9.70	0.045		0.045	1.14 0.139	0.111	1.22	1.12	48.734	48.587	48.490	48.323	48.535	49.546	2/13
1/14	16/1 1/14	8.00	113	0.75 0.3	141 0.10	6 33	33	3 2.15	1 0.062	1.33	153	33 0	1/10	8.00	113	0.106	0	33	7.664	1.003	375	2	0.30	0.06	32	1.00		1.12 0.00	5 9.70	0.045		0.045	1.26 0.069	0.110	1.22	1.12	48.458	48.382	48.214	48.117	48.259	49.391	1/14
1/148	15/1 1/14B		113	0.75 0.1	115 0.08	6 27	27	7 1.986	6 0.059	1.26	152	27 0	2/13	8.00	113	0.086	0	27	7.717	1.000	375	2	0.25	0.06	32	1.00		1.08 0.00	3 9.70	0.030		0.030	1.23 0.070	0.100	1.15	1.06	49.048	48.970	48.790	48.695	48.820	49.987	1/14B
5/16	15/1 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16				[		_							8.90	109	1.102	0	336	10.316	1.000	525	2	1.55	0.09	34	0.00	1.00	1.06 0.12	3 0.27	7 0.033		0.033	1.42 0.091	0.349	2.20	2.06	48.704	48.600	48.572	48.425	48.605	49.944	5/16
1/16	14A/1 1/16A	8.00	113	0.75 0.1	101 0.07	6 24	24	1.892	2 0.057	7 1.24	141	24 0	1/14	B 8.00	113	0.076	0	24	15.835	1.021	375	2	0.22	0.13	32	1.00		1.06 0.00	2 9.70	0.023		0.023	1.10 0.155	0.093	1.11	1.02	49.424	49.262	49.158	48.980	49.181	50.384	1/16A
1/168	14A/1 1/16B	8.00	113	0.75 0.2	222 0.16	6 52	52	2.419	9 0.068	3 2.33	161	51 2	1/15	8.00	113	0.166	0	51	3.310	1.003	375	2	0.46	0.03	32	1.00		1.28 0.01	1 9.70	0.104		0.104	1.75 0.024	0.138	1.37	1.28	49.303	49.269	49.091	49.032	49.195	50.245	1/16B
1/17	14/1 1/17	8.00	113	0.75 0.3	191 0.14	3 45	45	5 2.43	1 0.069	1.24	142	45 0	1/16	A 8.00	113	0.143	0	45	10.926	1.030	375	2	0.41	0.09	32	1.00		1.22 0.00	8 9.70	0.082		0.082	1.21 0.103	0.129	1.33	1.22	49.748	49.635	49.526	49.390	49.607	50.708	1/17
1/18A	3/20 1/18A	6.00	122	0.76	0.02	8 10	24	4	0.000	0.70	375	24 0	1/16	B 6.00	122	0.028	0	24	4.320	1.003	375	2	0.22	0.04	32	1.00		1.06 0.00	2 9.70	0.023		0.023	1.19 0.042	0.093	1.11	0.94	49.767	49.724	49.502	49.450	49.525	50.864	1/18A
1/19	3/20 1/19	8.00	113	0.75 0.1	125 0.09	4 29	32	2	0.000	1.23	375	32 0	1/18	A 8.00	113	0.094	0	32	7.246	1.007	375	2	0.29	0.06	32	1.00		1.11 0.00	4 9.70	0.041		0.041	1.27 0.065	0.108	1.21	1.08	49.845	49.772	49.599	49.506	49.640	50.893	1/19
1/20	2/20 1/20	8.00	113	0.75 0.1	197 0.14	8 46	5 46	5 2.037	7 0.060	3.28	250	44 3	1/19	8.00	113	0.148	0	44	15.919	3.630	375	2	0.40	0.13	32	1.00		1.21 0.00	8 9.70	0.078		0.078	2.35 0.425	0.092	2.09	1.94	51.486	50.909	51.262	50.886	51.340	52.453	1/20
2/20	3/20 1/20 2/20	8.00	113	0.75 0.3	320 0.23	75	7.5	2.459	9 0.070	3.28	231	61 14	1/18	A 8.13	112	0.387	0	104	40.262	3.200	375	2	0.94	0.34	32 34 37	0.58	1.00	1.36 0.04	5 2.97	7 0.135		0.135	3.23 1.287	0.149	2.55	2.4	50.889	49.600	50.751	49.450	50.886	52.000	2/20
3/20	13/1 1/18A 1/19 1/20 2/20													8.47	111	0.509	0	157	6.108	1.000	450	2	0.99	0.05	34	0.00	1.00	1.03 0.05	0 0.27	7 0.013		0.013	1.58 0.050	0.239	1.84	1.7	49.609	49.548	49.437	49.341	49.450	50.943	3/20
1/208	13/1 1/20B	8.00	113	0.75 0.1	166 0.12	4 39	39	2.249	9 0.062	2 2.21	134	39 0	1/19	8.00	113	0.124	0	39	14.505	1.179	375	2	0.35	0.12	32	1.00		1.16 0.00	6 9.70	0.062		0.062	1.34 0.158	0.116	1.35	1.24	50.217	50.046	49.984	49.786	50.046	51.184	1/20B
1/21	12/1 1/21	8.00	113	0.75	0.07	3 23	23	3 1.447	7 0.053	3 2.41	169	23 0	2/62	8.00	113	0.073	0	23	6.923	1.001	375	2	0.21	0.06	32	1.00		1.06 0.00	2 9.70	0.021		0.021	1.24 0.063	0.091	1.10	1.01	50.626	50.557	50.359	50.273	50.380	51.564	1/21
1/22	12/1 1/22	8.00	113	0.75 0.3	117 0.08	28	28	3 1.931	1 0.058	3 1.55	143	28 0	1/20	B 8.00	113	0.088	0	28	6.145	1.041	375	2	0.25	0.05	32	1.00		1.08 0.00	3 9.70	0.031		0.031	1.28 0.057	0.101	1.16	1.06	50.639	50.575	50.382	50.300	50.413	51.600	1/22
	FOR CONS	STRU	JCTI	ON				T								DE:	SIGNED YNT KIV	WANG			SCA	ALE				CLIENT							MIRVAC	QLD F	PTY L	_TD						JOB CODE	1004

FUR CUNSTRUCTION 
 1/03/2024
 B
 ISSUED FOR CONSTRUCTION

 0/10/2023
 A
 ISSUED FOR APPROVAL

 DATE
 REV
 DESCRIPTION



BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000

CHECKED ANDREW LANGDON PROJECT MANAGER
NICK SOMERVILLE
PROJECT DIRECTOR

PATRICK BRADY

PFD 7112

EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT

TEVIOT ROAD, GREENBANK STORMWATER CALCULATIONS 39% AEP STORM - SHEET 4 MIR-1004

LOCATION		TIME		SUB-C	ATCHI	иENT R	UNOFF			IN	ILET D	ESIGN							DRAI	N DESIG	GN .								F	HEADLO	OSSES					$\top$	PART I	ULL	Т			DE	SIGN LE	VELS		
	tc	I	С	Α	CA	Q						Qg Qb		to	: 1	CA		Qp	L	S			Vf=Q	/A		S	TRUCTU	RE RAT	IOS V	2/2g	Ku	hu	(w hw	S	f h	- 0	In V	n Vr	n							
STRUCTURE NUMBER DOWNSTREAM STRUCTURE SUB-CATCHMENTS	CONTRIBUTING SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL INTENSITY	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT	FLOW IN K&C (INC. BYPASS)	FLOW WIDTH	DEPTH	E AT	Š	FLOW INTO INLET BYPASS FLOW	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF	CONCENTRATION RAINFALL INTENSITY	TOTAL (C x A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	234 12	CLASS FULL PIPE VELOCITY	0 3	IN KEACH		0g/00	Du/Do	S/Do	VELOCITY HEAD	CO-EFFICIENT	EAM HEA	W.S.E. CO-EFFICIENT CHANGE IN W.S.E.	PIDE EPICH OF CORE	FRICTION HE	<u> </u>	NORMAL DEPTH NORMAL DEPTH VELOCITY	ORM) EPTH	(1 YEAR STORM) UPSTREAM OBVERT	LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	400	SURFACE OR GRATE LEVEL STRUCTURE NUMBER
		mm/h		ha	ha	l/s	l/s	m			l/s	l/s l/s			n mm/h		l/s	l/s	m	%	mm		m/s							m		m	m				n m	/s m/	$\neg$	m	m	m	m	m		m
1/22A 11C/1 1/22A	8.00	113	0.75	0.114	0.086	27	27	1.826	0.055 1	.90 1	79 2	7 0	1/21	8.00	113	0.086	0	27	7.924	1.002	375	2	0.24	0.07	32	1.	00	1.0	08 0.0	003 9	.70 0.	)29	0.029	1.2	3 0.07	2 0.0	99 1.1	5 1.06	6 51.0	005 5	50.925	50.747	50.650	50.776	51.	.943 1/22/
1/22B 11C/1 1/22B		113			0.088		28		0.056 1				_	_	) 113		0	-	10.576	-	375	2	0.25	_	32		00		08 0.0					-	5 0.13		92 1.3	1 1.2	_	_	50.970		50.688			.088 1/228
1/22C 11B/1 1/22C				0.129	0.096		30		0.057 1	_	_		_	_	) 113	+	0	_	5.047		375	2	0.27	_	32		00	_	10 0.0					_	7 0.04		05 1.1		_	_	51.664		_	_	52.	
1/23 11A/1 1/23				0.127	0.102	_	32		0.068 1	_		_		_	) 113	+	0	-	6.954	_	375	2	0.29	_	32	_	00	_	11 0.0	_	_	_		_	3 0.06			_	_	_	52.076					
					-					_			_	_	_		0				+	2		_				_			_			_	_		09 1.2	_					-			
1/24 2/24 1/24		-	-	0.141	0.105		33		0.000 1				_	_	) 113			_	9.893		375	2	0.30	_	32		00		12 0.0						_			_	_	_	52.113	_			_	.323 1/24
2/24 11/1 1/24 2/24			-	0.030	0.023		8		0.000	_	-	_	_	_	3 113	+	0	_	8.458		375	2	0.36	_	37 42		19 1.0	-	_	_	-	_		_	_			_	_	_	52.008	_				.319 2/24
1/24A 10B/1 1/24A	8.00	113	0.75	0.134	0.101	32	39	2.119	0.062 1	.97 1	79 3	9 0		_	113		0	39	7.881	1.001	375	2	0.36	0.07	32	1.	00	1.3	17 0.0	007 9	.70 0.	063	0.063	0.3	7 0.05	8 0.1	21 1.2	8 1.11	1 52.9	906	52.827	52.674	52.645	52.737		.842 1/24/
1/24B 10B/1 1/24B	8.00	113	0.75	0.174	0.130	41	44	2.233	0.065 1	.83 1	70 4	4 0	1/24	8.00	113	0.130	0	44	15.008	1.636	375	2	0.40	0.13	32	1.	00	1.2	21 0.0	008 9	.70 0.	078	0.078	3 1.5	0.24	5 0.1	13 1.5	7 1.41	1 53.1	111 5	52.866	52.888	52.645	52.966	54.	.074 1/24
1/24C 10/1 1/24C	8.00	113	0.75	0.279	0.209	66	66	2.604	0.073 1	.90 1	74 5	8 8	1/24A	4 8.00	113	0.209	0	58	3.297	1.025	375	2	0.52	0.03	32	1.	00	1.3	36 0.0	014 9	.70 0.	135	0.13	1.7	3 0.02	4 0.1	48 1.4	2 1.36	6 53.6	664	53.630	53.463	53.403	53.598	54.	.602 1/240
1/24D 10/1 1/24D	8.00	113	0.75	0.237	0.177	56	56	2.428	0.069 1	.90 1	59 5	2 3	1/24B	8.00	113	0.177	0	52	13.852	1.087	375	2	0.47	0.12	32	1.	00	1.3	30 0.0	)12 9	.70 0.	112	0.112	1.2	5 0.13	9 0.1	38 1.4	2 1.33	3 53.8	801	53.650	53.592	53.414	53.703	54.	.767 1/240
25/82 26/82 26/82 1/99 1/100 1/10 1/10 1/10 1/10 1/10 1/1	01 1/102 105 1/138 107 1/108 111 1/128 112 2/112 114 1/115 131A 1/131B 1/133 1/134 136 1/137 4/82 8/82								1	.26				16.6	60 85	7.694	0	1799	16.164	0.200	1500	2	1.02	0.13	5 37	0.	00 0.9	93 1.0	0.0	053 0	.59 0.	031	0.032	0.0	8 0.01	9 0.8	11 1.8	5 1.72	2 45.0	609 4	45.577	45.067	45.053	45.098	47.	.051 25/8:
1/85 1/84 1/86 1/89 1/90 2/90 2/92 1/93 1/94 1/97 1/98 1/99 1/102 1/103 1/1 1/138 1/139 1/1 1/128 1/129 1/1 2/112 3/112 1/1 1/115 2/115 3/1 1/138 2/131B 1/134 2/134 1/1 1/137 1/82 2/82 8/82 1/85	1/91 1/92 1/95 1/96 1/100 1/101 104 1/105 106 1/107 110 1/111 130 1/112 113 1/114 115 1/131A 1/132 1/133 135 1/136													16.3	39 86	7.791	0	1849	10.655	0.200	1500	2	1.05	0.09	33 34	0.	00 1.0	00 1.0	0.0	056 0	.22 0.	012	0.012	2 0.0	8 0.01	2 0.8.	24 1.8	6 1.73	3 45.	557 4	45.536	45.041	45.032	45.053	46.	.952 26/8.
1/83 1/84 1/86 1/89 1/90 2/90 2/92 1/93 1/94 1/97 1/98 1/99 1/102 1/103 1/1 1/138 1/139 1/1 1/138 1/139 1/1 1/128 1/129 1/1 2/112 3/112 1/1 1/115 2/115 3/1 1/131B 2/131B 1/134 1/1 1/137 1/82 2/82 8/82 1/85	1/91 1/92 1/95 1/96 1/100 1/101 104 1/105 106 1/107 110 1/101 130 1/112 113 1/114 115 1/131A 1/132 1/133 155 1/136													16.4	48 86	7.791	0	1844	7.920	0.200	1500	2	1.04	0.07	37 42	43 0.	00 1.0	00 1.0	0.0	056 0	.81 0.	0.045	82 0.04	5 0.0	9 0.00	9 0.8.	23 1.8	6 1.73	3 45.	516 4	45.500	44.987	44.980	45.032	47.	.176 27/8.
28/82																																								_				44.980	45.	.700 28/82
1/83 26/82 1/83	8.00	113	0.69	0.192	0,137	41	56		0.007	.17 3	60 5	6 0	LOST	8.00	113	0.137	0	56	2.716	8.660	375	2	0.51	0.02	2 32	1	00	1:	34 0.0	013 9	.70 n	129	0.129	) 11	34 0.00	0 0.0	85 3.0	1 2.67	3 45	967	45.732	45,764	45.442	_	_	.908 1/83
1/84 26/82 1/84					+	_	15	+	0.000	_		_			0 122			-	5.448	1.025		2	0.14	_	32		00		03 0.0					_			75 0.9		_	_	45.913	_				.910 1/84
,   2, 0 .	0.00	1	00	1 0.000	10.015	123	1-7	1	0.000 10	.55  5	. 7   1.	- 10		3.00	-	10.015		1	50	1.025	13.3		J.1 r	0.03	172	11.		12.0	-5   0.0		5   5.		0.010	.   1.2	0.03			- 10.7	1 .5	- 07		1.5.002	.5.015	.5.071	10.	

		FOR CONSTRUCTION		
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB
DATE	REV	DESCRIPTION	REC	APP



DESIGNED KLYNT KIWANG ANDREW LANGDON PROJECT MANAGER
NICK SOMERVILLE
PROJECT DIRECTOR RPEQ 7112

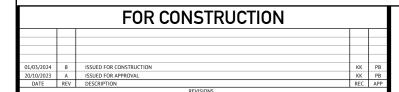
PATRICK BRADY

	PROJEC
	LOCAT
	SHEET
SHEET SIZE A1	

MIRVAC QLD PTY LTD EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK STORMWATER CALCULATIONS 39% AEP STORM - SHEET 5 MIR-1004

C444 B

	L	OCATION	TIME	SUB-C						DESIG								N DESIG	iΝ										LOSSES						PART				DE:	SIGN LI	EVELS				RUNOFF	:	
			tc I C	A	CA	Q		C	g Q	b		tc	ı	CA		Qp	L	S		+	Vf=Q/A	A	-		STRUCTU	RE RAT	ios V	′2/2g	Ku	hu	Kw	hw	Sf	hf	dn	Vn ≻											
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE	ATC RIBU	SUB-CATCHMENT TIME OF CONCENTRATION RAINFALL INTENSITY CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	IN K&C YPASS)	<b>▼</b>	PLOW HATO INCE!	BYPASS STRUCTURE		CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW	  -  -	CHARIS USED	<u> </u>	Du/Do	S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS CO-EFFICIENT	STR	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	FRICTION SLO	PIPE FRICTION HEADLOSS (L × Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT	DOWNSTREAM OBVERT		UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	MAJOR SURFACE	MAJOR SURFACE FLOW	DEPTH x VELOCITY PRODUCT	STRUCTURE NUMBER
			min mm/h	ha	ha		l/s						mm/h	ha		l/s	m	%	mm			min						m		m		m	%	m		m/s	m	m		m	m	m	m		l/s		
10/1	10B/1	1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D									1	11.40	222 7	.544	0	2417 3	88.931	1.586	1050	2	2.79	0.32	33 34	(	0.00 1.0	00 1.0	09 0.3	398	0.23 0.	092	0	.092 1	30	0.587	0.649	4.30	53.561	52.944	1 53.3	390 5.	2.885	53.482	54.655				10/1
108/1	11/1	1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D									1	11.73	219 7	.852	0	2552 2	22.221	1.949	1050	2	2.95	0.19	33 34	Ó	0.00 1.0	00 1.:	11 0.4	443	0.25 0.	113	0	.113 2	.51	0.381	0.628	4.72	52.924	52.493	L 52.7	772 5.	2.214	52.885	53.915				10B/1
11/1	11A/1	1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C									1	11.91	218 8	.023	0	2792 1	7.152	1.735	1200	2	2.47	0.14	33 34	C	0.00	93 1.0	00 0.3	311	0.01 0.	002	0	.002 1	20	0.281	0.631	4.64	52.491	52.193	3 52.2	211 5:	2.006	52.214	53.495				11/1
11A/1	11B/1	1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D									1	12.06	217 8	.160	0	3002 2	23.226	2.868	1200	2	2.65	0.19	33 34	(	0.00 1.0	00 1.0	07 0.3	360	0.22 0.	080	0	.080 2	.44	0.646	0.568	5.70	52.173	51.507	7 51.9	926 5:	1.359	52.006	53.169				11A/1
11B/1	11C/1	1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D									1	12.25	215 8	.289	0	3215 3	57.668	1.812	1200	2	2.84	0.31	33 34	(	0.00 1.0	00 1.0	07 0.4	412	0.22 0.	089	0	.089 1	56	0.664	0.679	4.87	51.487	50.804	\$ 51.2	270 50	0.682	51.359	52.728				118/1
11C/1	12/1	1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 3 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D									1	12.56	213 8	.520	0	3349 2	21.973	1.680	1200	2	2.96	0.18	33 34	C	0.00 1.0	00 1.0	0.4	447	0.22 0.	097	0	.097 1	15	0.341	0.714	4.78	50.784	50.41!	5 50.5	585 50	0.332	50.682	52.014				11C/1
12/1	13/1	1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D									1	12.75	212 8	.735	0	3541 4	¥5.109	1.000	1200	2	3.13	0.38	33 34		0.00 1.0	00 1.0	0.5	500	0.23 0.	113	0	.113 1	03	0.451	0.897	3.91	50.395	49.94	4 50.2	219 4	9.755	50.332	51.647				12/1





BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000

DESIGNED KLYNT KIWANG		SCA
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	Prond	
PATRICK BRADY	RPEQ 7112	

PROJECT	EV
LOCATION	TE
 SHEET TITLE	ST

CLIENT MIRVAC QLD PTY LTD VERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT EVIOT ROAD, GREENBANK TORMWATER CALCULATIONS 1% AEP STORM - SHEET 1

MIR-1004

	LOCATION		TIM	E	SUB-0	CATCHM	IENT R	UNOFF	-	INL	LET DES	SIGN						DRAIN	DESIG	N								HE	ADLOS	SES					PART	FULL			DESIG	N LEVELS	;			RUNO	FF	
			: 1	С	Α	CA	Q			Qg	Qb		tc	1 (	CA	(	Qp	L	S			Vf=Q/A			STR	UCTUF	RE RATIO	)S V2/2	g Ku	hu	ı Kw	hw	Sf	hf	dn	Vn						Ι.				
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT	A R	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET	FLOW INTO INLET	BYPASS FLOW	IRUCI	TIME OF	=   ;	IUIAL (C x A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	<u>0</u> 9/00		S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L x Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL		FLOW CAPACITY MAJOR SURFACE FLOW	DEPTH × VELOCITY PRODUCT	STRUCTURE NUMBER
			n mm/		ha			l/s		l/s	l/s			m/h		l/s I	/s	m	%	mm		m/s	min					m	_	m		m	%	m	m		m	m	m	m	m	m		/s l/s		
	1/18A 1/19 1/20 2/20 1/21 1/22 1/22A 1/22	3																																												
13/1	1/22C 1/23 1/24 2/24 1/24B 1/28 2/28 1/29 1/31 1/32 1/32A 1/33 1/35 1/36 1/37 1/38 2 14/1 1/39 1/41 1/40 2/44 1/39 1/41 1/40 2/44 3 1/442 2/43 3/43 4/43 5 6/43 7/43 1/44 2/44 3 1/44A 2/44A 1/30 2/3 3A/30 4/30 1/44B 1/4 1/49 2/49 1/1 2/1 3/1 1/46A 1/46B 1/24C 1/	1/29A 1/34 /38 /40 /43 /44 0 4C 4/1											13.12 20	9.5	81 0	4(	079 2	9.257	1.000	1350	2	2.85	0.24	33 34	0.00	0.9	9 1.06	0.414	0.20	0.084	4	0.084	0.76	0.283	0.884	4.11	49.944	49.651	49.672	49.450	49.755	51.07	9			13/1
14/1	1/17 1/18A 1/19 1/20 1/20B 1/21 1/22 1/22 1/22B 1/22C 1/23 1/2- 1/24A 1/24B 1/28 2/2 1/29A 1/31 1/32 1/32 1/34 1/35 1/36 1/37 1 14A/1 2/38 1/39 1/41 1/40 2 3/40 1/43 2/43 3/43 4 5/43 6/43 7/43 1/44 2 3/44 1/44A 2/44A 1/3 3A/30 4/30 1/44B 1/4 1/49 2/49 1/1 2/1 3/1 1/46A 1/46B 1/24C 1/	4 4 2/24 4 2/24 8 1/29 4 1/33 /38 /40 /44 /44 0 2/30 4C 4/1											13.37 20	9.7	72 0	4.1	121 33	2.198	1.000	1350	2	2.88	0.27	33 34	0.00	1.00	0 1.06	0.423	0.20	0.086	6	0.086	0.67	0.302	0.890	4.12	49.631	49.309	49.364	49.149	49.450	50.71	7			14/1
14A/1	1/16A 1/16B 1/17 1/1 1/19 1/20 2/20 1/20B 1/22 1/22A 1/22B 1/2 1/23 1/24 2/24 1/24A 1/28 2/28 1/29 1/29A 1/32 1/32A 1/33 1/34 1/36 1/37 1/38 2/38 1 1/31 1/40 2/40 3/40 1 2/43 3/43 4/43 5/43 6 7/43 1/44 2/44 3/44 1 2/44A 1/30 2/30 3A/3 1/44B 1/44C 1/49 2/4 2/1 3/1 4/1 1/46A 1/4 1/24C 1/24D	1/21 2C 1/24B 1/31 1/35 /39 /43 /44 0 4/30 9 1/1											13.63 20	06 10.	096 0	43	337 1	7.436	1.214	1350	2	3.03	0.15	33 34	0.00	1.00	0 1.07	0.468	0.22	0.101	1	0.101	1.29	0.211	0.862	4.49	49.289	49.078	49.047	48.823	49.149	50.31	6			14A/1
15/1	1/14B 1/14A 1/15 1/5 1/52 2/52 1/53 1/53A 2/16 1/16A 1/16B 1/1 1/18A 1/19 1/20 2/20 1/21 1/22 1/22A 1/22 1/21 1/22 1/23 1/24 2/24 1/24B 1/28 2/28 1/29 1/31 1/32 1/32A 1/33 1/35 1/36 1/37 1/38 2 1/39 1/41 1/40 2/40 3 1/43 2/43 3/43 4/44 6/43 7/43 1/44 2/44 3 1/44A 2/44A 1/30 2/3 3A/30 4/30 1/44B 1/4 1/49 2/49 1/1 2/1 3/1	1/16 7 1/20B 3 1/24A 1/29A 1/34 /38 /40 /43 /44 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1											13.45 20	07 11.	584 0	48	391 4	7.476	1.263	1500	2	2.77	0.40	33 34	0.00	1.00	0 1.06	5 0.391	0.24	0.093	3	0.093	1.03	0.581	0.851	4.73	49.078	48.478	48.730	48.239	48.823	50.09	3			15/1
16/1	2/13 1/14 1/14B 1/14, 1/50 1/51 1/52 2/52 1 1/534 1/16 2/16 1/16, 1/16B 1/17 1/18A 1/1 2/20 1/20B 1/21 1/22 1/22B 1/22 C 1/23 1/2 1/24B 1/28 1/28 1/28 1/24B 1/35 1/36 1/37 1 2/38 1/39 1/41 1/40 2 3/40 1/43 2/43 3/43 4 5/43 6/43 7/43 1/44 2 3/44 1/44A 2/44A 1/3 3A/30 4/30 1/44B 1/4 1/49 2/49 1/1 2/1 3/1 1/46A 1/46B 1/24C 1/	A 1/15 /53 A 9 1/20 1/22A 4 2/24 8 1/29 A 1/33 /38 /40 /43 /44 0 0 2/30 4C 4/1											13.85 20	05 11.	866 0	50	088 3	4.017	1.204	1500	2	2.88	0.28	33 34	0.00	1.00	0 1.07	, 0.423	0.25	0.107	7	0.107	0.91	0.393	0.886	4.68	48.458	48.048	48.132	47.823	48.239	49.48	80			16/1

		FOR CONSTRUCTION		
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB
DATE	REV	DESCRIPTION	REC	APP
		DED/JEJONIE		



DESIGNED KLYNT KIWANG		SCA
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	PFD-	
PATRICK BRADY	RPEQ 7112	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 2

MIR-1004

	LOCATION		TIME		SUB-C	CATCHN	1ENT F	RUNOF	F	IN	LET DE	SIGN						DRAI	N DESI	3N									HEA	DLOSS	ES					PART	FULL			DESIG	N LEVELS	5			RUNOI	FF	
		_	I	С	Α	CA	Q			Qg	Qb		tc	I	CA		Qp	L	S			Vf=Q	/A			STRUC	TURE R	RATIOS	V2/2g	Ku	hu	Kw	hw	Sf		dn	_										
STRUCTURE NUMBER	STRUCTURE SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	AINFALL INTENSITY	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT	DISCHARGE FLOW IN K & C	(INC. BYPASS) ROAD GRADE AT INLET	FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	i 1 —	OF F	IN REACH	CHARTS USED	Qg/Qo	Du/Do	S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS CO-EFFICIENT	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L x Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL		FLOW CAPACITY MAJOR SURFACE FLOW	DEPTH × VELOCITY PRODUCT	STRUCTURE NUMBER
		min	mm/h	1	ha			l/s		l/s	l/s		min	mm/h	ha	l/s	l/s	m	%	mm	1	m/s	m	nin					m		m		m	%	m	m		m	m	m	m	m	m		/s l/s		
16A/1 1	1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D												14.13	203	12.167	0	5226	34.788	1.541	1500	2	2.96	0.2	29 33	34	0.00	1.00	1.07	0.446	0.24	0.105	(	0.105	0.46	0.333	0.834	5.18 4	48.028	47.492	47.717	47.556	47.823	49.04	3			16A/1
17/1 1	1/9 1/11 1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 1/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D		0		0.000	0.000	0	820		0	820	1/6	14.42	201	12.490	0	5502	11.230	1.150	1500	2	3.11	0.0	09 34	- 37	0.00	1.00	1.22	0.495	0.65	0.323	(	0.323	-0.39	0.060	0.948	4.68 4	47.472	47.343	47.233	47.277	47.556	48.81	6 21	63 820		17/1
18/1 1	1/54B 1/54C 1/54 1/54A 1/12 2/12 1/54D 1/54E 2/54E 1/9 1/11 1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D												14.18	203	13.778	0	6048	48.488	1.142	1650	2	2.83	0.4	40 37	42 43	0.00	0.96	1.21	0.408	0.81	0.332	0.85 (	0.346	0.55	0.451	0.941	4.80 4	47.343	46.789	46.945	46.676	47.291	48.62	5			18/1
19/1 2	1/6 1/7 3/7 1/7A 4/7 1/54B 1/54C 1/54 1/54A 1/12 2/12 1/54D 1/54E 2/54E 1/9 1/11 1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/8 2/28 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/45 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/44C 1/49 2/49 1/1 2/1 3/1 4/1 1/46A 1/46B 1/24C 1/24D		0		0.000	0.000	0	761		0	761	1/2	14.47	201	14.559	0	6256	37.817	1.271	1650	2	2.93	0.3	32 34	- 37	0.00	1.00	1.10	0.437	0.36	0.157	(	0.157	0.19	0.168	0.930	5.04 4	46.769	46.289	46.519	46.448	46.676	48.06	.3 21	63 761		19/1

		FOR CONSTRUCTION		
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB
DATE	REV	DESCRIPTION	REC	APP
		DED/JEJONIE		



BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000

DESIGNED KLYNT KIWANG		SCA
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	PRON	
PATRICK BRADY	RPEQ 7112	
•		

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 3

MIR-1004

В

		LOCATION	TIME				ENT RUI	NOFF		INLET								IN DESIG	GN									DLOSSES						T FULL			D	DESIGN LE	VELS			R	UNOFF	$\Box$	
			tc I	C	Α	CA	Q	$\dashv$	Q	g Qt	)	to	c I	CA	+	Qp	L	S	1	+	Vf=Q/	Ά	+ -	STRUC	TURE R	ATIOS	V2/2g	Ku	hu	Kw	ıw :	of hf	dn	Vn		+		$\overline{-}$	$\dashv$			+	$ \vdash$	#	<u> </u>
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION RAINFALL INTENSITY	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	[	ROAD GRADE AT INLET	BYPASS FLOW	BYPASS STRUCTURE	NUMBER CRITICAL TIME OF	CONCENTRATION RAINEAL INTENSITY	TOTAL (C × A)	SUM ADDITIONAL PIPE EI OW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW IN RFACH		09/00	og/ng	S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS CO-EFFICIENT	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	NGE IN W.	PIPE FRICTION SLOPE PIPE FRICTION HEADLOSS	NORMAL DEPTH	NORMAL DEPTH VELOCITY	M OBVERT	DOWNSTREAM OBVERT	LEVEL		DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	MAJOR SURFACE FLOW CAPACITY	MAJOR SURFACE FLOW DEPTH x VELOCITY	PRODUCT	STRUCTURE NUMBER
			min mm/h		ha	ha			% l/				in mm	n/h ha			m	%	mm		m/s						m		m			% m						m	m	m	m	l/s	l/s m	1 <sup>2</sup> /s	
20/1	21/1	1/3 1/4 1/56A 1/56B 1/57 1/58 1/59 1/60 1/61 1/62 2/62 1/64 2/64 3/64 1/65 1/67 1/68 1/66 2/66 3/66 1/69 1/69 1/70 1/71 1/72 1/73 2/73 1/74 1/75 1/76 2/76 3/76 4/76 4/76 1/77 2/77 3/77 4/77 1/78 1/79 1/80 1/81 1/5 2/5 3/5 4/5 1/55 1/56 1/6 1/7 3/7 1/7A 4/7 1/54B 1/54C 1/54 1/54A 1/12 2/12 1/54D 1/54E 2/54E 1/9 1/11 1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/2B 2/2B 1/29 1/29A 1/31 1/32 1/32A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/4C 1/24D										13.	99 204	23.58	9 0	1052	27.787	1.103	3300x1	5 BC (LAR GE)	2.13	0.23	34 37	0.00	0.92	1.22	0.231	0.54 0	125	0.1	.25 0.1	3 0.051	0.655	4.87	46.119	45.81	12 4	46.324 46	5.272	46.448	47.610				20/1
21/1	23/1	1/2 1/3 1/4 1/56A 1/56B 1/57 1/58 1/59 1/60 1/61 1/62 2/62 1/64 2/64 3/64 1/65 1/67 1/68 1/66 2/66 3/66 1/69 1/69A 1/70 1/71 1/72 1/73 2/73 1/74 1/75 1/76 2/76 3/76 4/76 1/77 2/77 3/77 4/77 1/78 1/79 1/80 1/81 1/5 2/5 3/5 4/5 1/55 1/56 1/6 1/7 3/7 1/7A 4/7 1/54B 1/54C 1/54 1/54 1/52 1/54 1/54 1/54 1/54 1/12 2/12 1/54D 1/54E 2/54E 1/9 1/11 1/9A 1/10 2/13 1/14 1/14B 1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16 1/16A 1/16B 1/17 1/18A 1/19 1/20 2/20 1/20B 1/21 1/22 1/22A 1/22B 1/22C 1/23 1/24 2/24 1/24A 1/24B 1/28 2/28 1/29 1/29A 1/31 1/32 1/33A 1/33 1/34 1/35 1/36 1/37 1/38 2/38 1/39 1/41 1/40 2/40 3/40 1/43 2/43 3/43 4/43 5/43 6/43 7/43 1/44 2/44 3/44 1/44A 2/44A 1/30 2/30 3A/30 4/30 1/44B 1/4C 1/24D										14	222 203	3 23.53	5 0	1062	28.374	1.031	3300x1	5 BC (LAR GE)	2.15	0.24	34 37	0.00	1.00	1.32	0.235	0.59 0	139	0.1	.39 0.1	0.053	0.674	4.78	45.792	45.50	000 4	46.133 46	6.080	46.272	47.277				21/1
23/1																																								46.080	45.950				23/1
1/2	21/1		8.00 252				_			_	_	18 8.00	_	_			5.750	1.009		2	1.87	0.05		1.00	-			3.76			67 1.3	_	_	_			_	16.352 46					1864 0.	_	1/2
1/3	20/1		8.00 252				-		0.30 86	_	7 1/8	_	0 252	_			9.790	2.826		2	2.08	0.08		1.00		-		3.69 0		0.8		_	_	_	46.445		_		5.448				1794 0.		1/3
18/5	20/1	1/56A 1/56B 1/57 1/58 1/59 1/60 1/61 1/62 2/62 1/64 2/64 3/64 1/65 1/67 1/68 1/66 2/66 3/66 1/69 1/69A 1/70 1/71 1/72 1/73 2/73 1/74 1/75 1/76 2/76 3/76 4/76 1/77 2/77 3/77 4/77 1/78 1/79 1/80 1/81 1/5 2/5 3/5 4/5 1/55 1/56					190 1					12.:		8.591				1.486		2	2.49	0.10	33 34	0.00		1.05		0.22			069 0.3							46.641 46				1548	1548		18/5
1/6	19/1		8.00 252											0.170		_	5.194	1.000		2	3.37	0.04				_		0.00			000 3.6	_				_		47.189 46				-		_	1/6
4/7		1/7 3/7 1/7A 4/7	8.00 252	-					0.37 255				0 249			_	_	0.500		2	2.85		32 33 34		1.00	-		1.60 0	-	0.6		_	_	_	46.852		_	47.108 46					1017 0.	_	4/7
1/9 1/9A	17/1 16A/1		6.00 275 1 8.00 252		0.091	_			0.36   75 1.26   111	_	17/	_	0 275	0.091		75 111	10.062 6.472	2.556 1.038		2	1.01	0.09		1.00		1.43		7.00 0		0.1	.63 0.0 .68 1.2	_	_	_			_	47.561 47 47.904 47				1529	104 146 0.		1/9 1/9A
1/10	16A/1		8.00 252	-			_		1.33 124	_	_			0.186			7.930	1.002		2	1.12	0.06		1.00		2.12		6.51		_	1.2		_	_	_	_	-	17.904 47 17.904 47					856 0.	_	1/10
1/11			8.00 252							_	_	_	_	_		_		1.018		2	1.96	0.07		1.00		_		4.20 0				_	_	_	_	_	_	17.724 47				_	_	_	1/11
<u> </u>						_ <del></del>	1  -		-	1.0		1	1	1	<u> </u>		DESIGNED	)				CALE	1	1.55		$\overline{}$				1	1	1							- 1				JOB COD		
	1	FOR CONST	KUCIIC	N								RISBA	NE OE	EICE			CHECKED	KIWANG	i							CLIENT									QLD									1IR-:	100

1/03/2024 B ISSUED FOR CONSTRUCTION 0/10/2023 A ISSUED FOR APPROVAL DATE REV DESCRIPTION

BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 Premise PH: (07) 3253 2222
WEB: www.premise.com.au

ANDREW LANGDON PROJECT MANAGER
NICK SOMERVILLE
PROJECT DIRECTOR RPEQ 7112

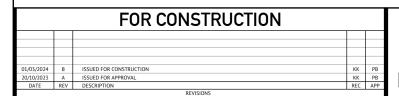
PATRICK BRADY

EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK

STORMWATER CALCULATIONS 1% AEP STORM - SHEET 4

MIR-1004

		LOCATION	TIME	SUB-	-CATCI	HMENT	RUNOFF	=	INLE	T DES	IGN						DRAIN	N DESIG	SN .									ADLOS						PART F	ULL			DESI	SN LEVI	ELS			RUN	IOFF	
			tc I C	A	C.	A Ç	Ď _		Qg	Qb		tc	ı	CA		Qp	L	S			Vf=Q/A	1		S	RUCTURE	RATIOS	S V2/2	g Ku	hu	Kw	hw	Sf	hf	dn											
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION RAINFALL INTENSITY CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	- 1 -		∴I< .	ROAD GRADE AT INLET	FLOW INTO INLET		BYPASS STRUCTURE NUMBER	CRITICAL TIME OF CONCENTRATION	∃	(C × A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW IN REACH	i a		0g/20 Du/Do	S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	PE FRICTION	PIPE FRICTION HEADLOSS (L × Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	LO H M & B ALCONNOCIO		VICTOR CRATELEVEL	RFACE	FLOW CAPACITY		STRUCTURE NUMBER
			min mm/h	ha	h	a l/	's l/s	%	l/s	l/s		min I	mm/h	ha	l/s	l/s	m	%	mm		m/s	min					m		m		m	%	m	m	m/s	m	m	m	n	ı n	n m	ı l/	's l/	/s m <sup>2</sup> /s	
5/12	18/1	1/54B 1/54C 1/54 1/54A 1/12 2/12 1/54D 1/54E 2/54E										8.72	245 1.	.412	0	729 1	1.776	1.002	525	2	3.37	0.10	37	0.	00 1.00	2.23	0.578	0.75	0.433		0.433 2	.96 0	.338	0.525	3.37	47.742	47.624	47.95	47.6	08 48.3	90 48.8	97			5/12
2/13	16/1	2/13	8.00 252 1.00	0.142	0.14	12 99	103	1.26 8	37 10	5 1	/9A	8.00	252 0.	.142	0	87 1	4.327	1.026	375	2	0.79	0.12	32	1.	00	1.72	0.032	8.52	0.269		0.269 1	.20 0	.137	0.187	1.58	48.734	48.587	48.57	48.3	99 48.8	45 49.5	46 241	18 103	3 0.07	2/13
1/14	16/1	1/14	8.00 252 1.00	0.141	0.14	11 99	999	1.33 2	23 7	75 1	/10	8.00	252 0.	.141	0	223 7	.664	1.003	375	2	2.02	0.06	32	1.0	00	3.12	0.208	3.67	0.765		0.765 1	.87 0	.120	0.375	2.02	48.458	48.382	48.48	48.3	49.2	53 49.3	91 241	18 999	9 0.27	1/14
1/14B	15/1	1/14B	8.00 252 1.00	0.115	0.11	L5 81	96	1.26	92 4	2	/13	8.00	252 0.	.115	0	92 7	7.717	1.000	375	2	0.83	0.06	32	1.0	00	1.77	0.035	8.23	0.289		0.289	.93 0	.077	0.193	1.61	49.048	48.970	48.89	48.8	23 49.1	84 49.9	87 241	18 96	0.07	1/14B
5/16	15/1	1/14A 1/15 1/50 1/51 1/52 2/52 1/53 1/53A 1/16 2/16										8.90	243 1.	.472	0	649 1	.0.316	1.000	525	2	3.00	0.09	37	0.	00 1.00	2.31	0.459	0.73	0.335		0.335 2	.28 0	.235	0.525	3.00	48.704	48.600	49.05	48.8	23 49.3	93 49.9	44			5/16
1/16A	14A/1	1/16A	8.00 252 1.00	0.101	0.10	01 71	100	1.24 8	35 1	5 1	/14B	8.00 2	252 0.	.101	0	85 1	5.835	1.021	375	2	0.77	0.13	32	1.0	00	1.70	0.030	8.64	0.261		0.261	.70 0	.146	0.184	1.58	49.424	49.262	49.26	49.1	49.5	24 50.38	34 216	53 100	0 0.07	1/16A
1/16B	14A/1	1/16B	8.00 252 1.00	0.222	0.22	22   156	772	2.33 2	16 5	56 1	/15	8.00	252 0.	.222	0	216 3	5.310	1.003	375	2	1.96	0.03	32	1.	00	2.99	0.195	3.82	0.746		0.746 2	.08 0	.044	0.375	1.96	49.303	49.269	49.29	7 49.2	28 50.0	43 50.24	45 247	79 772	2 0.26	1/16B
1/17	14/1	1/17	8.00 252 1.00	0.191	0.19	91 134	1 134	1.24 1	.04 29	9 1	/16A	8.00 2	252 0.	.191	0	104 1	0.926	1.030	375	2	0.95	0.09	32	1.0	00	1.91	0.046	7.48	0.341		0.341 1	.26 0	.104	0.208	1.66	49.748	49.635	49.61	49.4	59 49.9	52 50.70	08 216	53 134	4 0.09	1/17
1/18A	3/20	1/18A	6.00 275 1.00	0.037	0.03	37 29	745	0.70 1	.29 6:	16 1	/16B	6.00	275 0.	.037	0	129 4	1.320	1.003	375	2	1.17	0.04	32	1.0	00	2.86	0.070	4.12	0.286		0.286	.54 0	.023	0.239	1.74	49.767	49.724	50.176	50.1	53 50.4	53 50.86	54 126	54 745	5	1/18A
1/19	3/20	1/19	8.00 252 1.00	0.125	0.12	25 88	755	1.23 1	.32 6	22 1	/18A	8.00 2	252 0.	.125	0	132 7	'.246	1.007	375	2	1.20	0.06	32	1.0	00	2.77	0.073	4.30	0.315		0.315	.57 0	.042	0.243	1.74	49.845	49.772	50.194	50.1	53 50.5	10 50.89	93 178	37 755	5	1/19
1/20	2/20	1/20	8.00 252 1.00	0.197	0.19	97 138	3 138	3.28 9	95 4	3 1	/19	8.00	252 0.	.197	0	95 1	5.919	3.630	375	2	0.86	0.13	32	1.	00	1.81	0.038	8.03	0.303		0.303	.24 0	.095	0.137	2.60	51.486	50.909	51.338	51.30	00 51.6	41 52.4	53 177	75 138	8 0.11	1/20
2/20	3/20	1/20 2/20	8.00 252 1.00	0.320	0.32	20 224	1 224	3.28 1	30 9	4 1	/18A	8.13	251 0.	.517	0	223 4	10.262	3.200	375	2	2.02	0.34	32 34 3	37 0.	8 1.00	2.20	0.208	2.16	0.449		0.449 1	.73 0	.722	0.234	3.08	50.889	49.600	50.85	50.1	53 51.3	00 52.00	00 177	75 224	4 0.14	2/20
3/20	13/1	1/18A 1/19 1/20 2/20										8.34	249 0.	.677	0	475 6	5.108	1.000	450	2	2.99	0.05	34 37	0.	00 1.00	2.21	0.455	0.50	0.228		0.228 2	.77 0	.169	0.450	2.99	49.609	49.548	49.92	49.7	55 50.1	53 50.94	43		$\overline{}$	3/20
1/20B	13/1	1/20B	8.00 252 1.00	0.166	0.16	56 116	5 840	2.21 2	16 6	24 1	/19	8.00 2	252 0.	.166	0	216 1	4.505	1.179	375	2	1.96	0.12	_		00	3.03	0.195	3.77	0.736		0.736 1	.60 0	.210	0.375	1.96	50.217	50.046	50.240	50.00	_	_	34 247	79 840	0 0.27	1/20B
1/21	12/1	1/21	8.00 252 1.00	0.097	_	_	_	2.41 2	14 34	47 2	/62	8.00 2	252 0.	.097	0	214 6	5.923	1.001	375	2	1.94	0.06	32		00	2.99	0.192	3.83	0.735		0.735 1	.76 0	.096	0.375	1.94	50.626	50.557	50.637	50.5	15 51.3	72 51.50	54 247	79 562	2 0.22	1/21
1/22	12/1	1/22	8.00 252 1.00	0.117	0.11	L7 82	755	1.55 3	52 7:	23 1	/20B	8.00 2	252 0.	.117	0	250 6	5.145	1.041	375	2	2.26	0.05	32	1.0	00	3.45	0.261	3.31	0.864		0.864 2	.27 0	.128	0.375	2.26	50.639	50.575	50.693	50.5	18 51.5	57 51.60	00 259	99 755	5 0.24	1/22
1/22A	11C/1	1/22A	8.00 252 1.00	0.114	0.11	L4 80	380	1.90 1	.87 19	94 1	/21	8.00 2	252 0.	.114	0	187 7	7.924	1.002	375	2	1.69	0.07	32	1.	00	2.72	0.146	4.42	0.644		0.644 1	.22 0	.082	0.336	1.79	51.005	50.925	50.96	50.8	56 51.6	07 51.94	43 253	31 380	0 0.17	1/22A
1/22B	11C/1	1/22B	8.00 252 1.00	0.117	0.11	17 82	996	1.90 2	23 9	73 1	/22	8.00 2	252 0.	.117	0	241 1	0.576	1.448	375	2	2.18	0.09	32	1.	00	3.32	0.242	3.45	0.836		0.836 2	.00 0	.198	0.375	2.18	51.124	50.970	51.158	50.9	10 51.9	94 52.08	38 253	31 996	6 0.29	1/22B
1/22C	11B/1	1/22C	8.00 252 1.00	0.129	0.12	29 90	1470	1.90 2	257 12	214 1	/22B	8.00 2	252 0.	.129	0	257 5	5.047	1.017	375	2	2.32	0.04	32	1.0	_	3.51	0.275	3.25	0.894		0.894 2	.42 0	.109	0.375	2.32	51.715	51.664	51.764	51.6	52.6	57 52.6	57 253	31 147	70 0.37	1/22C
1/23	11A/1	1/23	8.00 252 1.00		_	_	1033	1.01 2				-		.137	0	248 6	5.954	1.004	375	2	2.25	0.06	_	1.			0.257		0.856		0.856 2	.22 0	.138			52.146	52.076	52.204			_		_	33 0.29	_
1/24	2/24	1/24			_	11 99	1648	1.09 2		528 2		8.00 2		.141	0	20 9	9.893	1.003	375	2	0.18	0.08	+	1.0	_	3.91	+		0.005	-		_				52.212	_	_	_	_	_	_	28 164	_	1/24
2/24	11/1	1/24 2/24	6.00 275 1.00			30 23	1652	0.22 2		380 1				.171	0		3.458	1.000	375	2	2.62		32 37 4		_	4.22	+		0.856			_		0.375		52.093	52.008	52.44			_		28 165	52	2/24
1/24A			8.00 252 1.00		_			1.97 2	_			-		.134			7.881	1.001	375	2	1.96	0.07	_		00	3.15		_					_			52.906	52.827	53.00!		_	_		_	53 0.32	1/24A
1/24B					_	74 122		1.83 1		550 1	-	-		.174			5.008	1.636	+	2	2.30	0.13	-	1.0	_		0.270		0.864				-				52.866	_	_	_	_	_		51 0.38	+
1/24C			8.00 252 1.00	_	0.27	_		1.90 2	_			_		.279		_	5.297	1.025	375	2	1.96	0.03	+		00	_	0.195		0.746	-				0.375		53.664	53.630	53.659				_	_	_	+
1/24D		1/24D	8.00 252 1.00		_	_							252 0.		-	251 1		_	375	2	2.27	0.12		1.0	_	_	0.264	_	0.838		0.838 2									24 54.7	_			95 0.44	+ -
	26/82	1/86 1/87 1/88 1/89 1/90 2/90 1/91 1/92 2/92 1/93 1/94 1/95 1/96 1/97 1/98 1/99 1/100 1/101 1/102 1/103 1/104 1/105 1/138 1/139 1/106 1/107 1/108 1/109 1/110 1/111 1/128 1/129 1/130 1/112 2/112 3/112 1/113 1/114 1/115 2/115 3/115 1/131A 1/131B 2/131B 1/135 1/134 1/131B 2/134 1/135 1/136 1/137 1/82 2/82 3/82 4/82 8/82 1/85						1.26					189 10						1500	2	2.53	0.13			00 0.93																63 47.0				25/82
26/82	27/82	1/83 1/84 1/86 1/87 1/88 1/89 1/90 2/90 1/91 1/92 2/92 1/93 1/94 1/95 1/96 1/97 1/98 1/99 1/100 1/101 1/102 1/103 1/104 1/105 1/138 1/139 1/106 1/107 1/108 1/109 1/110 1/111 1/128 1/129 1/130 1/112 2/112 3/112 1/113 1/114 1/115 2/115 3/115 1/151A 1/131B 2/131B 1/132 1/133 1/134 2/134 1/135 1/136 1/137 1/82 2/82 3/82 4/82 8/82 1/85										16.76	188 10	0.657	0	4561 1	.0.655	0.200	1500	2	2.58	0.09	33 34	0.1	00 1.00	1.63	0.340	0.23	0.077		0.077 C	.42 0	.044	1.500	2.58	45.557	45.536	46.430	46.3	36 46.5	08 46.9.	52			26/82



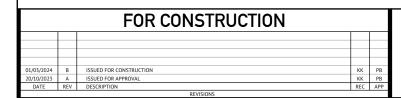


DESIGNED KLYNT KIWANG		SCALE
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	Pronj	
DATRICK BRADY	DDEO 7113	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 5

MIR-1004

	LOCATION	TIM	1E	SUB-	CATCH	MENT	RUNOFF	F	INL	ET DES	IGN					DRA	N DESI	GN								HEA	DLOSSE	:S					PART F	ULL			DESIGN	I LEVELS	5		R	RUNOFF	
		tc I	(	A	CA	Q			Qg	Qb		tc I	C	4	Qp	L	S			Vf=Q/A			STRU	ICTURE R	ATIOS	V2/2g	Ku	hu	Kw	hw	Sf	hf	dn	Vn									
STRUCTURE NUMBER	URE URE ICHM 3UTIN	SUB-CATCHMENT TIME OF CONCENTRATION RAINFALL INTENSITY	_ u	CHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT	DISCHARGE FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET	OW INTO	MOT:	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF CONCENTRATION RAINFALL INTENSITY	¥ A	ADDITI FLOW		REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS	CLASS	FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	<u>0</u> 9/00	Du/Do	S/Do	VELOCITY HEAD	UPSTREAM HEADLOSS CO-EFFICIENT	UPSTREAM HEADLOSS	W.S.E. CO-EFFICIENT	CHANGE IN W.S.E.	TION SLOPE	PIPE FRICTION HEADLOSS (L × Sf)	NORMAL DEPTH	NORMAL DEPTH VELOCITY	UPSTREAM OBVERT LEVEL	DOWNSTREAM OBVERT LEVEL	UPSTREAM H.G.L.	DOWNSTREAM H.G.L.	W.S.E.	SURFACE OR GRATE LEVEL	MAJOR SURFACE FLOW CAPACITY	MAJOR SURFACE FLOW	DEPTH × VELOCITY PRODUCT STRUCTURE NUMBER
		min mm,	/h	ha	ha	l/s	l/s	%	l/s	l/s		min mm	/h h	a l/s	l/s	m	%	mm		m/s	min					m		m		m	%	m	m	m/s	m	m	m	m	m	m	l/s	l/s	m²/s
27/82	1/83 1/84 1/86 1/87 1/88 1/89 1/90 2/90 1/91 1/92 2/92 1/93 1/94 1/95 1/96 1/97 1/98 1/99 1/100 1/101 1/102 1/103 1/104 1/105 1/138 1/139 1/106 1/107 1/108 1/109 1/110 1/111 1/128 1/129 1/130 1/112 2/112 3/112 1/113 1/114 1/115 2/115 3/115 1/131A 1/131B 2/131B 1/132 1/133 1/134 2/134 1/135 1/136 1/137 1/82 2/82 3/82 4/82 8/82 1/85										1	16.85 188	10.6	57 0	4548	7.920	0.200	1500	2	2.57	0.07	37 42 43	0.00	1.00	1.58	0.338	0.81	0.273 (	0.82 0	).276	0.41	0.033 1	500	2.57 4	45.516	45.500	46.113	46.080	46.388	47.176			27/83
28/82																																							46.080	45.700			28/82
1/83	26/82 1/83	3.00 252	0.9	6 0.192	0.184	129	2007	0.17	154 1	853 L	OST 8	3.00 252	0.18	4 0	154	2.716	8.660	375	2	1.39	0.02	32	1.00		3.39	0.099	3.38	0.334	0	0.334	0.77	0.022	0.142	4.01 4	45.967	45.732	46.530	46.508	46.863	46.908	2800	2007	1/83
1/84	26/82 1/84	5.00 275	1.0	0.060	0.060	46	1545	0.53	0 1	545 1	L/83 6	5.00 275	0.06	0 0	354	5.448	1.025	375	2	3.21	0.05	32				0.525	0.00	0.000	0	0.000	4.08	0.228	).375	3.21 4	45.969	45.913	46.736	46,508	46.736	46.910	1855	1545	1/84





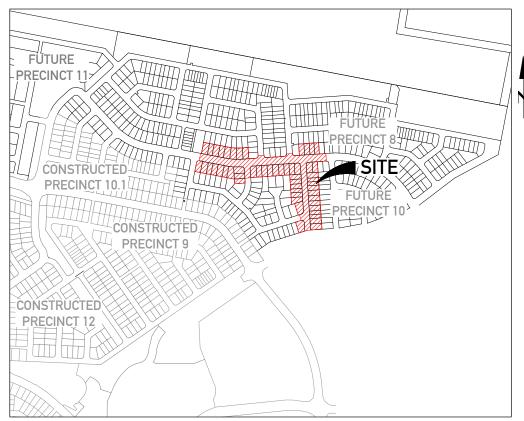
DESIGNED KLYNT KIWANG		SCA
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	PRON	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER CALCULATIONS 1% AEP STORM - SHEET 6

MIR-1004

# EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT

# TEVIOT ROAD, GREENBANK FOR MIRVAC QLD PTY LTD **SEWERAGE**



# LOCALITY PLAN **REAL PROPERTY DESCRIPTION**

LOT 205 & 434 on RP845844

NAME OF ES	STATE	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT				
SUBDIVIDER		Mirvac QLD Pty Ltd				
APPLICATION No.		DEV2022/1277				
SP DELEGATE APPR	OVAL DATE	11/11/2022				
COUNCIL DA APPRO	VAL No.	-				
DRAWING/PLAN No.		C510				
No. OF ALLOTMENT	S	52				
AREA ha		3.27ha				
LENGTH OF	DN150 uPVC SN8	1645m				
SEWERS	DN225 uPVC	17.5m				

#### **GENERAL NOTES**

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND SEWERAGE CODE SPECIFICATIONS AND STANDARDS.
- UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEO REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEO SERVICE PROVIDER SEWERAGE
- ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY THE CONTRACTOR UNDER LOGAN WATER SUPERVISION AT THE DEVELOPER'S COST.
- ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED PRODUCTS AND MATERIALS" LIST.
- EACH ALLOTMENT SHALL BE SERVED BY A DN100 PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN150 PROPERTY CONNECTION SHALL BE PROVIDED.
- PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS.
- SHOWN IN THE DRAWINGS.

  8. PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300mm AND A MAXIMUM OF 750mm.
- 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 FACH 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 VERIEV 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. REFER TO BULK EARTHWORKS DRAWINGS FOR FINISHED SURFACE LEVELS. 15. ALL SEWER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK
- HEALTH AND SAFETY ACT. FOR INFORMATION PHONE: 1300 369 915.

  16. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY
- PERMITS TO ALLOW CONSTRUCTION OF THE SEWER SYSTEM.

  17. THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION AND SAFE SHORING TO ALLOW SEWER MAINTENANCE SECTION TO CARRY OUT LIVE SEWER
- 18. CONSTRUCT TRENCHES TO SEQ-SEW-1200-2, WITH EMBEDMENT TYPE 3 SUPPORT MINIMUM TO SEQ-SEW-1201-1, AND ROAD CROSSINGS TO SEQ-SEW-1205-1 AND LCC STANDARDS.
- 19 CONSTRUCT PROPERTY CONNECTIONS TO SEO-SEW-1100 SERIES 20. CONSTRUCT MAINTENANCE STRUCTURES TO SEQ-SEW-1300 SERIES.
- 21 CONSTRUCT BUILKHEADS TO SEO-SEW-1206-1 22. INSTALL DETECTABLE MARKER TAPE ON ALL MAINS AND PROPERTY
- CONNECTIONS 23. CALCAREOUS CONCRETE IN MAINTENANCE HOLES REQUIRED IN
- ACCORDANCE WITH SEQ WS&S D&C CODE REQUIREMENTS.

  24. CCTV OF SEWER TO BE UNDERTAKEN AND SUPPLIED TO SUPERINTENDENT PRIOR TO, BUT NO GREATER THAN 2 WEEKS BEFORE, THE ON-SITE INSPECTION FOR OFF MAINTENANCE.

### 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 S HALL 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. . 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

#### 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. IF ACID SULPHATE SOILS EXIST IN THE WORKS AREA, ACID SULPHATE SOILS ARE TO MANAGED IN ACCORDANCE WITH AN APPROVED ACID SULPHATE SOIL

## **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 B. PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED

C530

C540

A. THE DESIGN AND CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL

SHEET LIST TABLE

# **INDEMNITY - EXISTING SERVICES** NOT WITHSTANDING THAT EXISTING SERVICES MAY OR MAY

NOT BE SHOWN ON THESE DRAWINGS, NO RESPONSIBILITY IS TAKEN BY THE ENGINEER OR THE PRINCIPAL FOR THIS INFORMATION WHICH HAS BEEN SUPPLIED BY OTHERS. THI DETAILS ARE PROVIDED FOR INFORMATION ONLY, THE CONTRACTOR SHALL ASCERTAIN THE POSITION OF ALL UNDERGROUND SERVICES PRIOR TO EXCAVATION AND SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGES CAUSED AS A RESULT OF THE WORKS.

ALL ENVIRONMENT PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO COMMENCING ANY CONSTRUCTION WORK INCLUDING CLEARING

ALL SEWER CONSTRUCTION WORK LINDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS O THE OUFFNSLAND WORKPLACE HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF HEALTH & SAFETY FOR PHONE: 1300 369 915

CONTACT "DIAL BEFORE YOU DIG" ON 1100 FOR LOCATION

# TRENCH SPOIL NOTE:

SPOILAGE OF EXCESS MATERIAL TO BE PLACED IN FUTURE FILL AREA AS NOMINATED BY THE SUPERINTENDENT INCLUDING ALL LEVEL ONE COMPACTION REQUIREMENTS AND TESTING IN ACCORDANCE WITH MORRISON GEOTECHNICAL SPECIFICATION AND ALL LOCAL AUTHORITY STANDARDS AND SHALL BE FREE DRAINING

# **EXCAVATION IN ROCK NOTE:**

CONTRACT SHALL INCLUDE TREATING, SIZING CONDITIONING AND PROCESSING ALL TYPES OF ROCK IN ALL EXCAVATIONS. PROCESSING TO BE COMPLETED AS PER MORRISON GEOTECHNICAL REPORTS TO **ENSURE LEVEL 1 IS ACHIEVED** 

SHEET NO.	SHEET TITLE
C500	SEWERAGE LOCALITY PLAN & NOTES
C510	SEWERAGE LAYOUT PLAN - SHEET 1
C511	SEWERAGE LAYOUT PLAN - SHEET 2
C512	SEWERAGE LAYOUT PLAN - SHEET 3
C513	SEWERAGE LAYOUT PLAN - SHEET 4
C520	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 1
C521	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 2
C522	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 3
C523	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 4
C524	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 5
C525	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 6
C526	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 7
C527	SEWERAGE GRAVITY MAIN LONG SECTIONS - SHEET 8
C528	SEWERAGE RISING MAIN LONG SECTIONS - SHEET 1
C529	SEWERAGE RISING MAIN LONG SECTIONS - SHEET 2

# FOR CONSTRUCTION ISSUED FOR CONSTRUCTION



BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, OLD 4000 PH: (07) 3253 2222

DESIGNED		SCALE	
KLYNT KIWANG			
CHECKED			
ANDREW LANGDON		0	100
PROJECT MANAGER			صتحد
NICK SOMERVILLE			SCALE 1:5
PROJECT DIRECTOR	Oca 1		JCALL 1.3
	ron		
	0		
PATRICK BRADY	RPEQ 7112		ORIGINAL SH

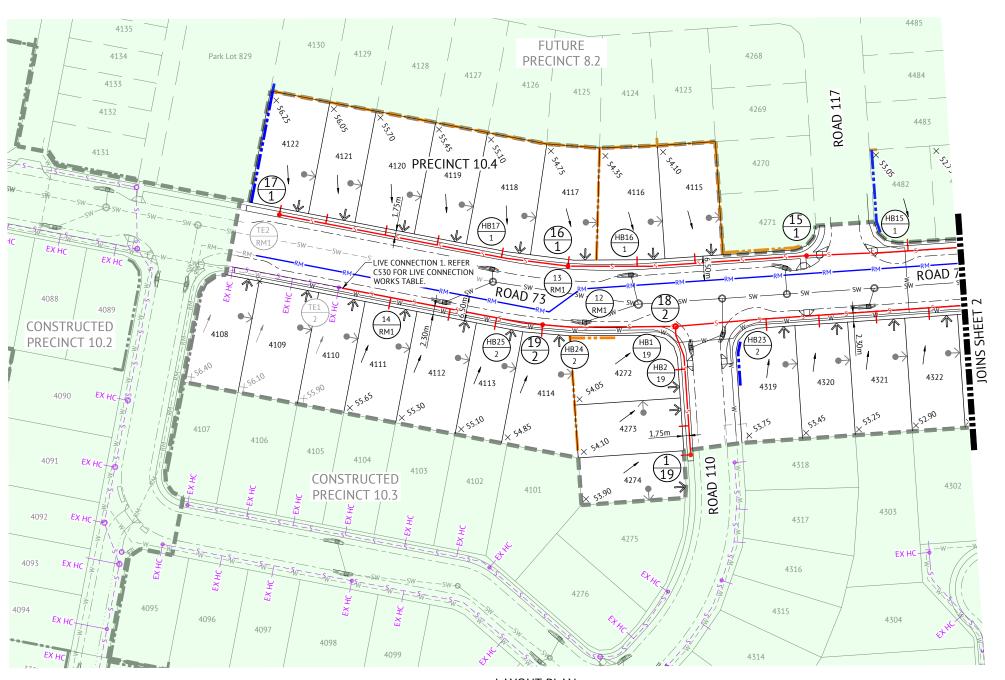
SCALE				CL
0	100	200	300m	PR
	SCALE 1:	5000 (A1)		LC
				SH

MIRVAC QLD PTY LTD **EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT** TEVIOT ROAD, GREENBANK SEWERAGE LOCALITY PLAN & NOTES

SEWERAGE NOTES AND DETAILS

TEMPORARY ACCESS TRACK TO SEWER PUMP STATION

MIR-1004



CONSTRUCTED HOUSE CONNECTION DETAILS

CONNE	CHONL	<u> ETAILS</u>
LOT#	INVERT	DFPTH
LOT#	LEVEL	DEPIN
4108	54.729	1.250
4109	54.394	1.250
4110	54 201	1 250

LAYOUT PLAN SCALE 1:500

MAINTENANCE HOLE OR MAINTENANCE SHAFT NUMBER. REFER LONG SECTION DRAWINGS FOR STRUCTURE DETAILS. HORIZONTAL BEND (3m RADIUS). PAD EXCLUSION ZONE CONTRACTOR TO CONSTRUCT PROPOSED SEWER MANHOLES WITH SUFFICIENT NECK HEIGHT SHOULD FUTURE LAND OWNER REQUIRE ADJUSTMENT TO LIC LEVEL TO SUIT POTENTIAL DRIVEWAY. CONTRACTOR TO ENSURE THAT ALL SLOPED PROPERTY

CONNECTIONS LOCATED AT REAR OF LOTS SHALL TERMINATE AT SHORTEST LENGTH POSSIBLE FROM THI JUNCTION WITH THE SEWER MAIN.

**LEGEND - PROPOSED** 

 $\begin{pmatrix} 1 \\ 1 \end{pmatrix}$ 

 $\rightarrow$ 

GRAVITY SEWER

MAINTENANCE STRUCTURE

PROPOSED MAINTENANCE HOLE OR

MAINTENANCE SHAFT NUMBER.
REFER LONG SECTION DRAWINGS FOR
STRUCTURE DETAILS.

HORIZONTAL BEND (3m RADIUS).

STORMWATER DRAINAGE

DRINKING WATER MAIN

ELECTRICAL (PROPOSED)

FUTURE DRIVEWAY LOCATION PROPOSED CONCRETE SLEEPER RETAINING WALL

PROPOSED CONCRETE PANEL RETAINING WALL

PROPOSED CONCRETE FOOTPATH & KERB RAMP

ZERO LOT LINE

STAGE BOUNDARY

PROPERTY CONNECTION

MAINTENANCE STRUCTURE

STORMWATER DRAINAGE

DRINKING WATER MAIN

GRAVITY SEWER

FALL ARROW

LEGEND - CONSTRUCTED

SEWER RISING MAIN

LOT NUMBER

Ø100mm PROPERTY CONNECTION. 7.5m OFFSET FROM SIDE BDY WITH DWAY.  $1.2 \mathrm{m}$  OFFSET FROM SIDE BDY WITHOUT DWAY. TYPICAL U.N.O.

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 1:60 AND A MAXIMUM DEPTH TO INVERT OF PROPERTY CONNECTION AT 1.5m, UNLESS OTHERWISE STATED.

FOR SEWERAGE RETICULATION NOTES REFER DWG No. C500.

ALL PROPERTY CONNECTIONS DIA 100 PVC UNLESS OTHERWISE DENOTED

	FOR CONSTRUCTION										
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB							
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB							
DATE	REV	DESCRIPTION	REC	APP							

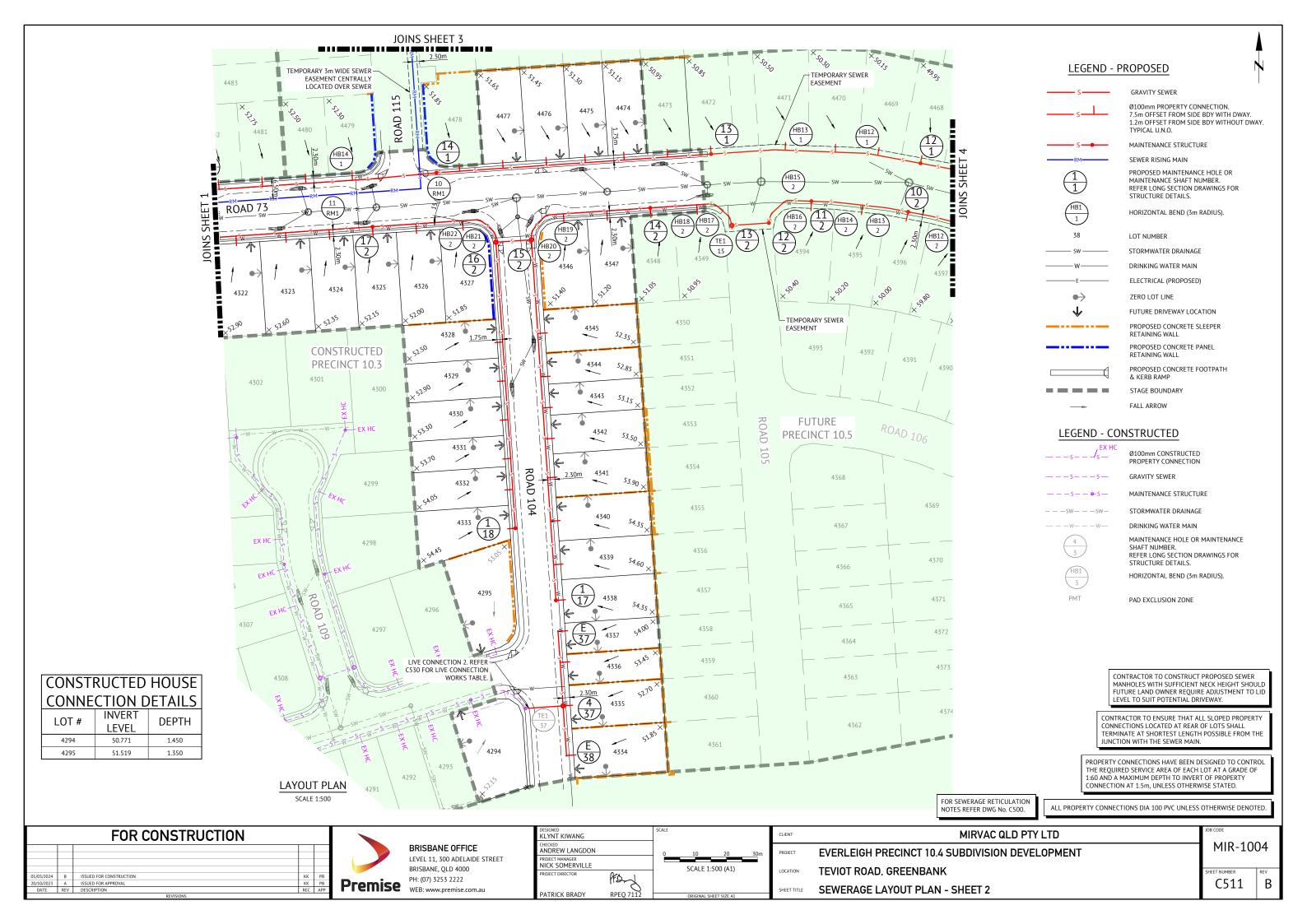


BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

NED NT KIWANG		SCALE			
REW LANGDON		0	10	20	30m
CT MANAGER K SOMERVILLE					
CCT DIRECTOR	PFD		SCALE 1:	500 (A1)	
RICK BRADY	RPEQ 7112		ORIGINAL SH	EET SIZE A1	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	SEWERAGE LAYOUT PLAN - SHEET 1

MIR-1004





### **LEGEND - PROPOSED**

GRAVITY SEWER Ø100mm PROPERTY CONNECTION. 7.5m OFFSET FROM SIDE BDY WITH DWAY. 1.2m OFFSET FROM SIDE BDY WITHOUT DWAY. TYPICAL U.N.O. MAINTENANCE STRUCTURE SEWER RISING MAIN PROPOSED MAINTENANCE HOLE OR  $\begin{pmatrix} 1 \\ 1 \end{pmatrix}$ MAINTENANCE SHAFT NUMBER. REFER LONG SECTION DRAWINGS FOR STRUCTURE DETAILS. HORIZONTAL BEND (3m RADIUS). LOT NUMBER STORMWATER DRAINAGE DRINKING WATER MAIN

ELECTRICAL (PROPOSED)

ZERO LOT LINE FUTURE DRIVEWAY LOCATION

 $\rightarrow$ 

PROPOSED CONCRETE SLEEPER RETAINING WALL PROPOSED CONCRETE PANEL

RETAINING WALL PROPOSED CONCRETE FOOTPATH & KERB RAMP

STAGE BOUNDARY

FALL ARROW

# LEGEND - CONSTRUCTED

Ø100mm CONSTRUCTED PROPERTY CONNECTION GRAVITY SEWER

MAINTENANCE STRUCTURE STORMWATER DRAINAGE

DRINKING WATER MAIN MAINTENANCE HOLE OR MAINTENANCE

SHAFT NUMBER.
REFER LONG SECTION DRAWINGS FOR STRUCTURE DETAILS.

HORIZONTAL BEND (3m RADIUS).

PAD EXCLUSION ZONE

CONTRACTOR TO CONSTRUCT PROPOSED SEWER MANHOLES WITH SUFFICIENT NECK HEIGHT SHOULD FUTURE LAND OWNER REQUIRE ADJUSTMENT TO LIC LEVEL TO SUIT POTENTIAL DRIVEWAY.

CONTRACTOR TO ENSURE THAT ALL SLOPED PROPERTY CONNECTIONS LOCATED AT REAR OF LOTS SHALL TERMINATE AT SHORTEST LENGTH POSSIBLE FROM THI JUNCTION WITH THE SEWER MAIN.

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 1:60 AND A MAXIMUM DEPTH TO INVERT OF PROPERTY CONNECTION AT 1.5m, UNLESS OTHERWISE STATED.

FOR SEWERAGE RETICULATION NOTES REFER DWG No. C500.

ALL PROPERTY CONNECTIONS DIA 100 PVC UNLESS OTHERWISE DENOTED

FOR CONSTRUCTION 
 /03/2024
 B
 ISSUED FOR CONSTRUCTION

 /10/2023
 A
 ISSUED FOR APPROVAL

 DATE
 REV
 DESCRIPTION

Premise PH: (U/) 5255 2222 WEB: www.premise.com.au

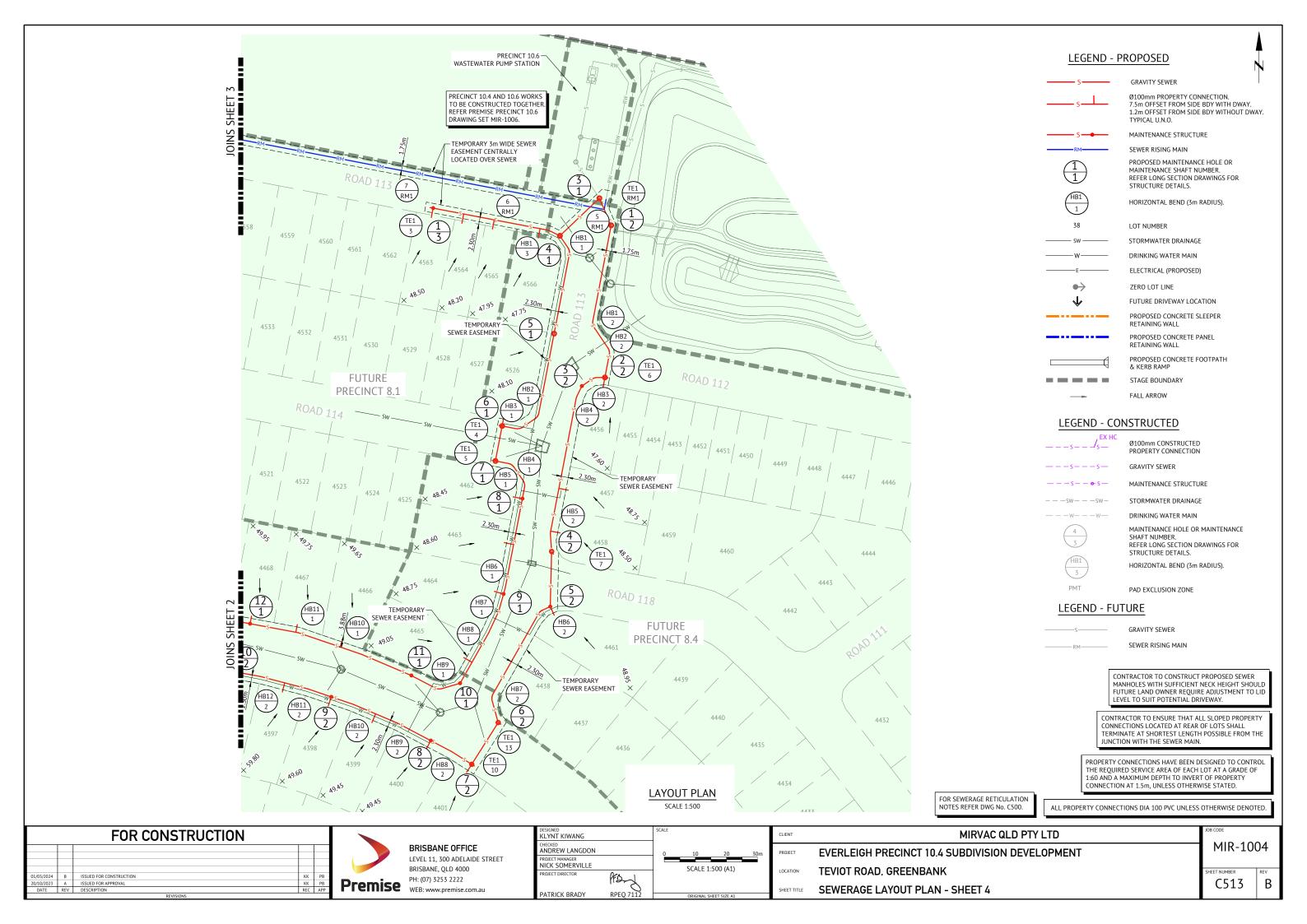
BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

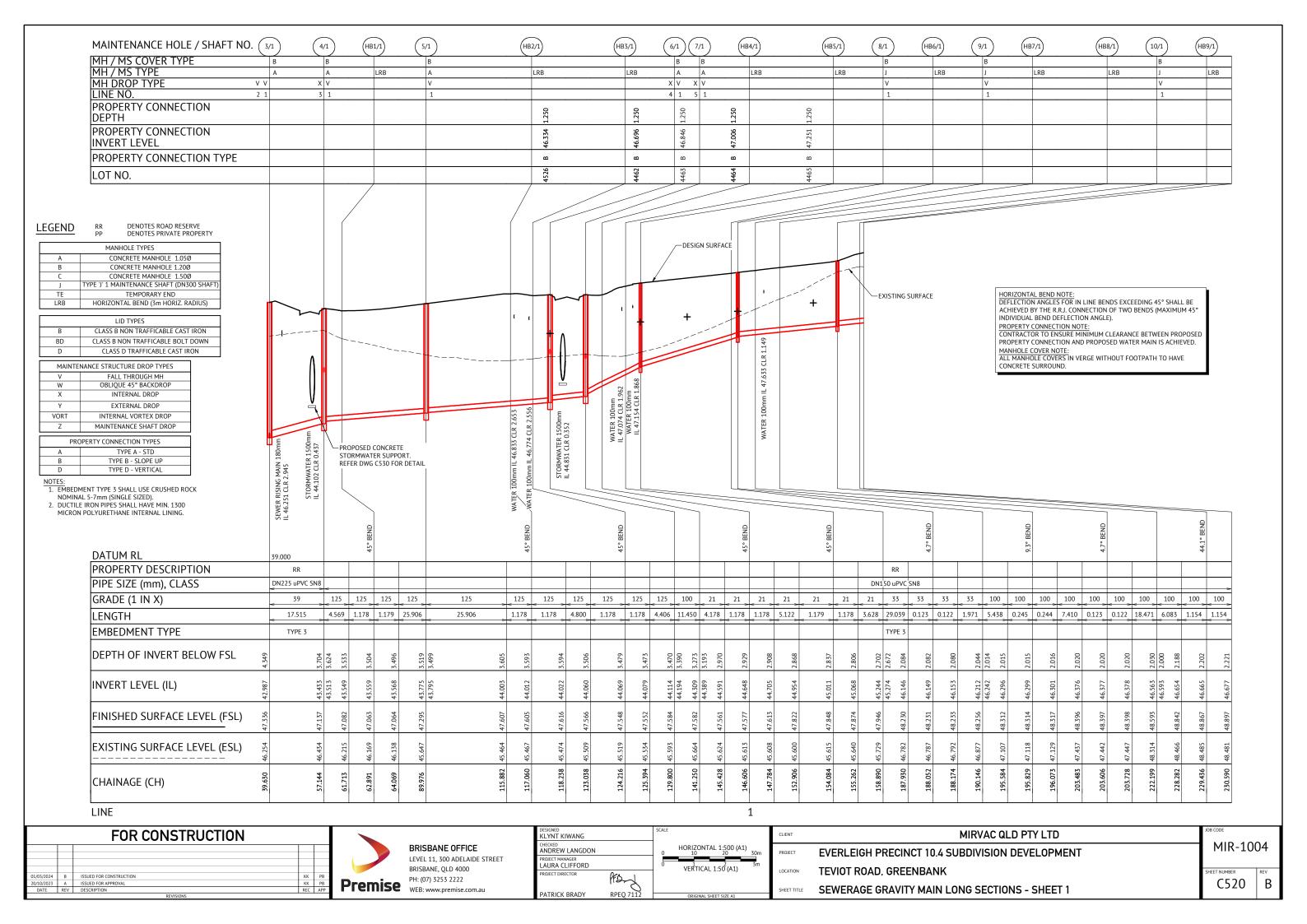
KLYNT KIWANG ANDREW LANGDON NICK SOMERVILLE RPEQ 7112 PATRICK BRADY

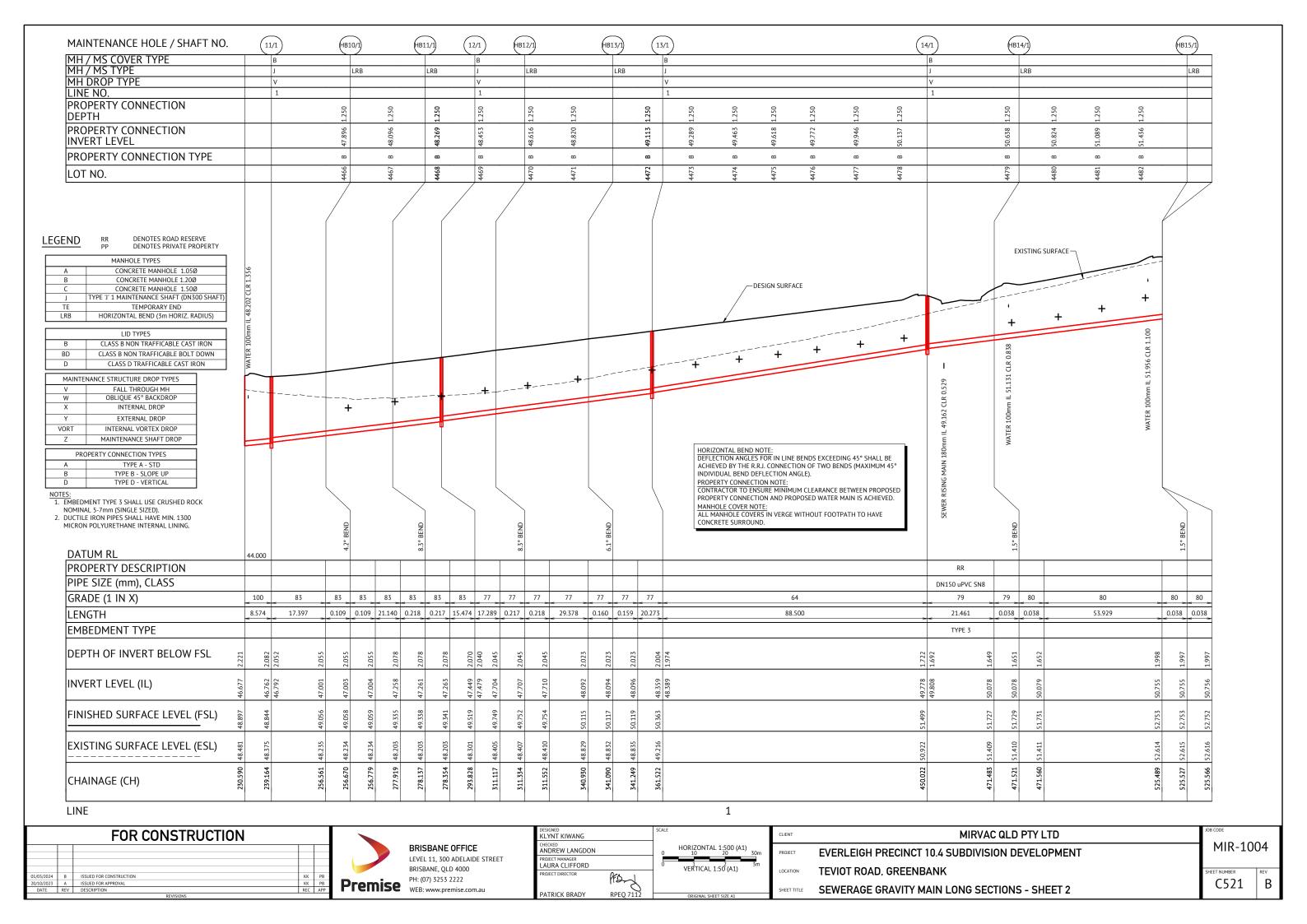


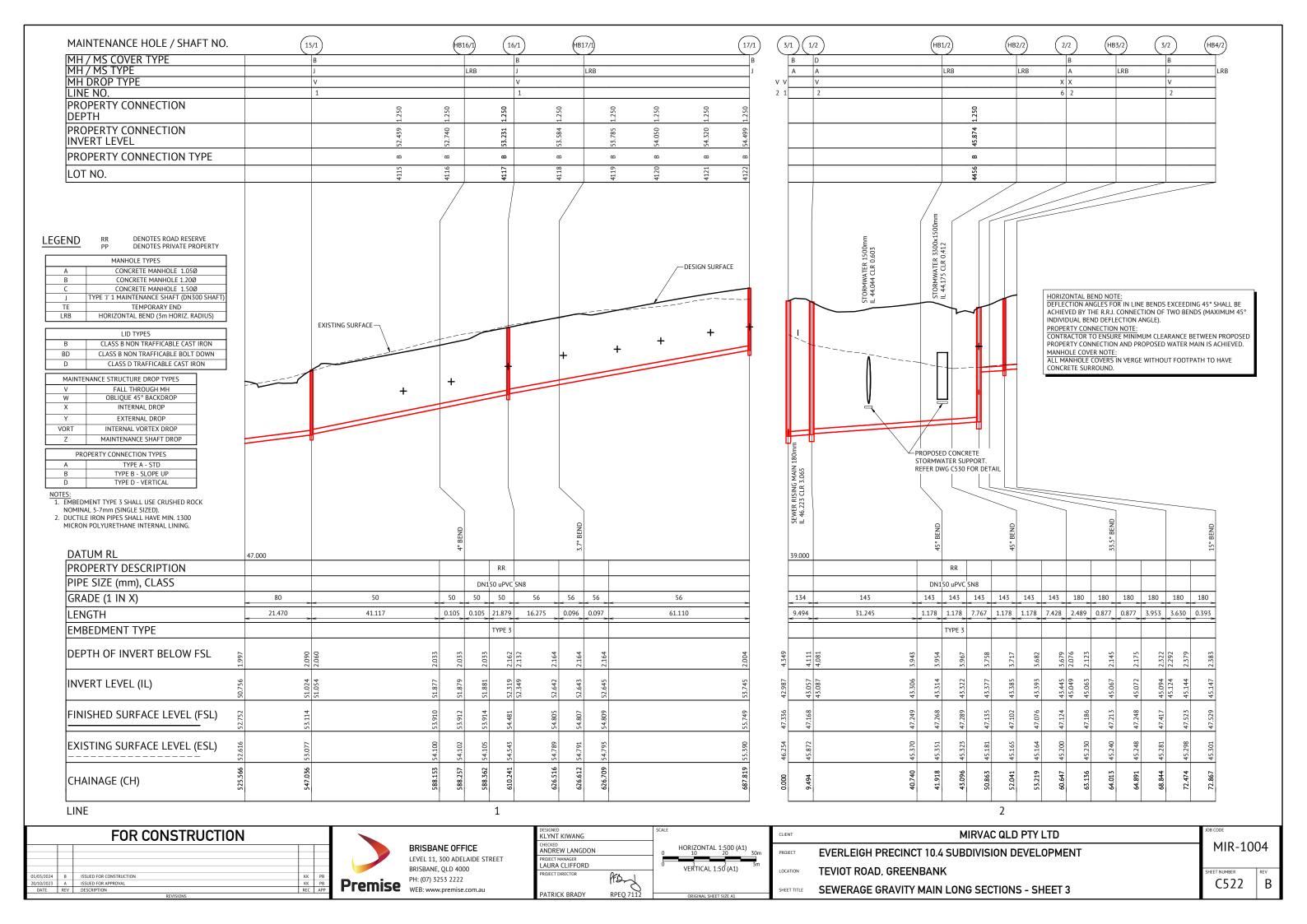
MIRVAC QLD PTY LTD **EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT** TEVIOT ROAD, GREENBANK **SEWERAGE LAYOUT PLAN - SHEET 3** 

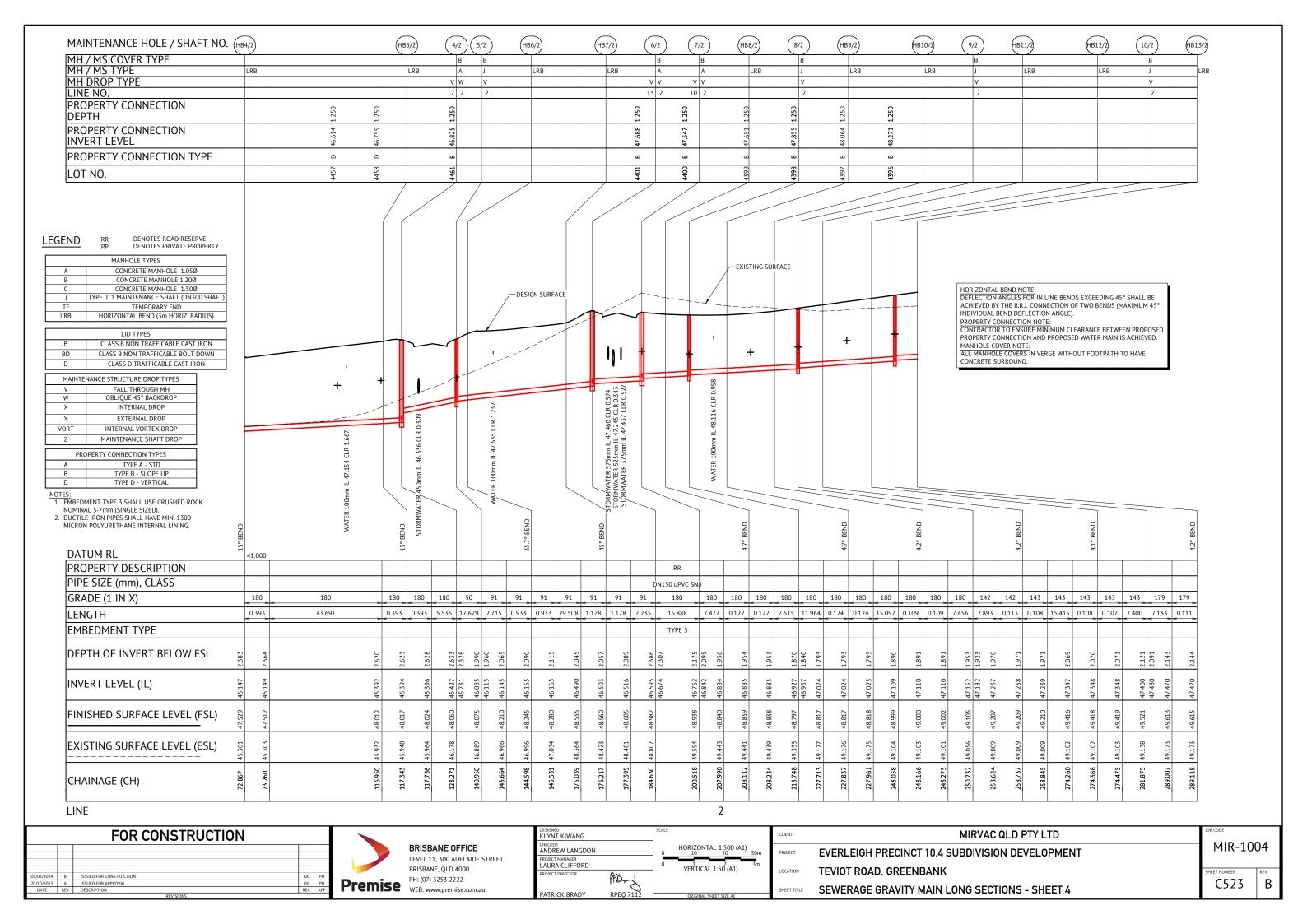
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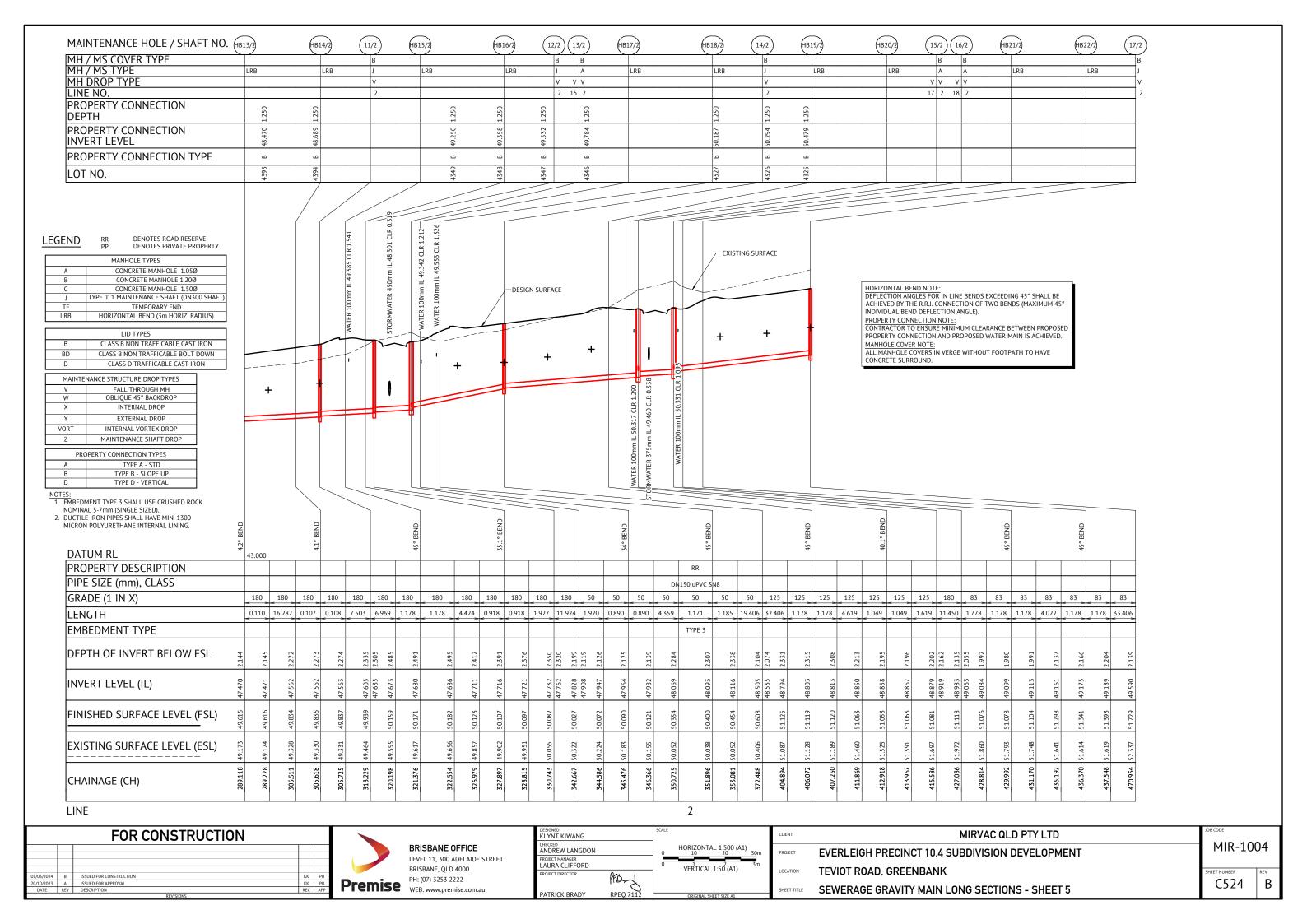


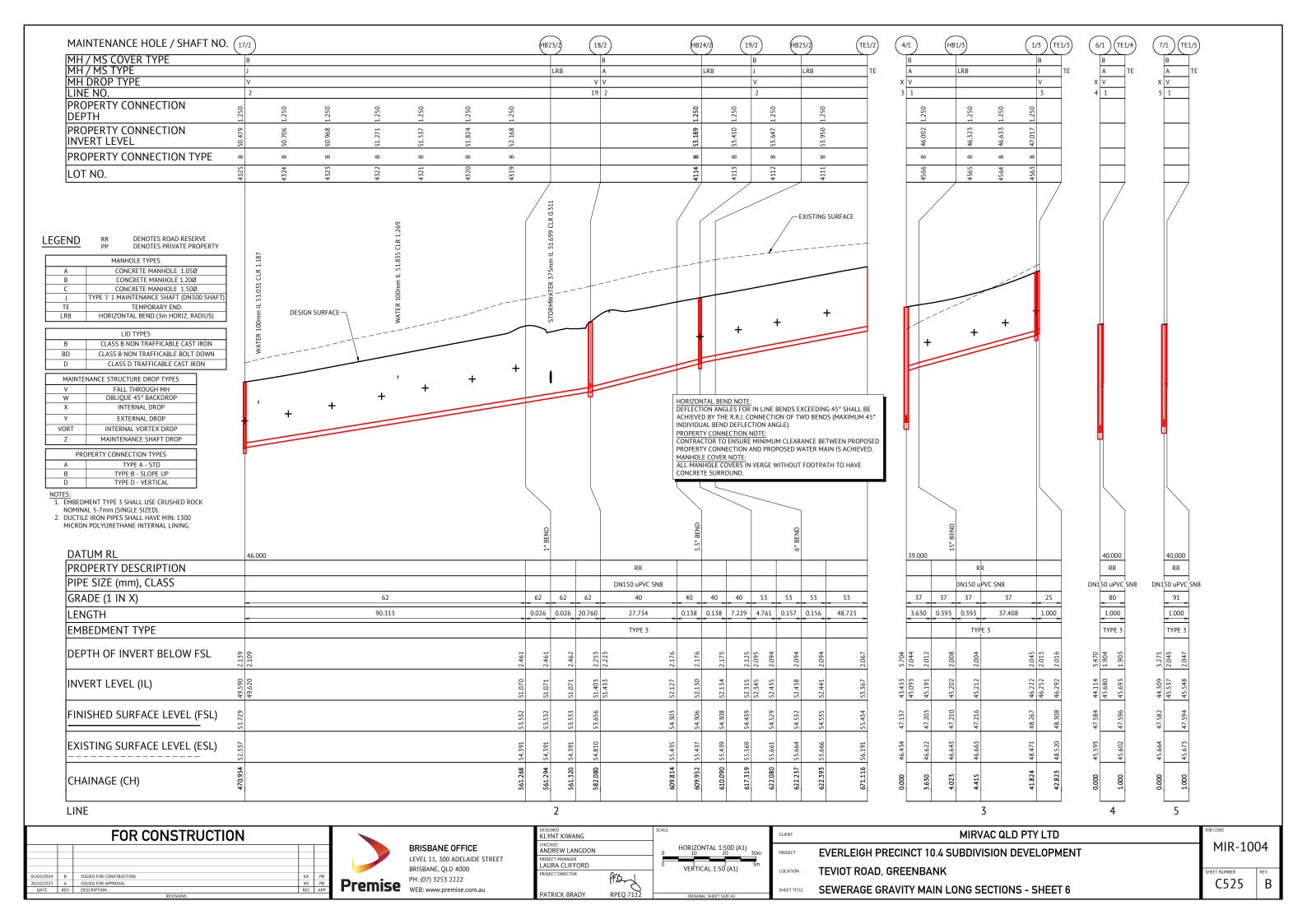


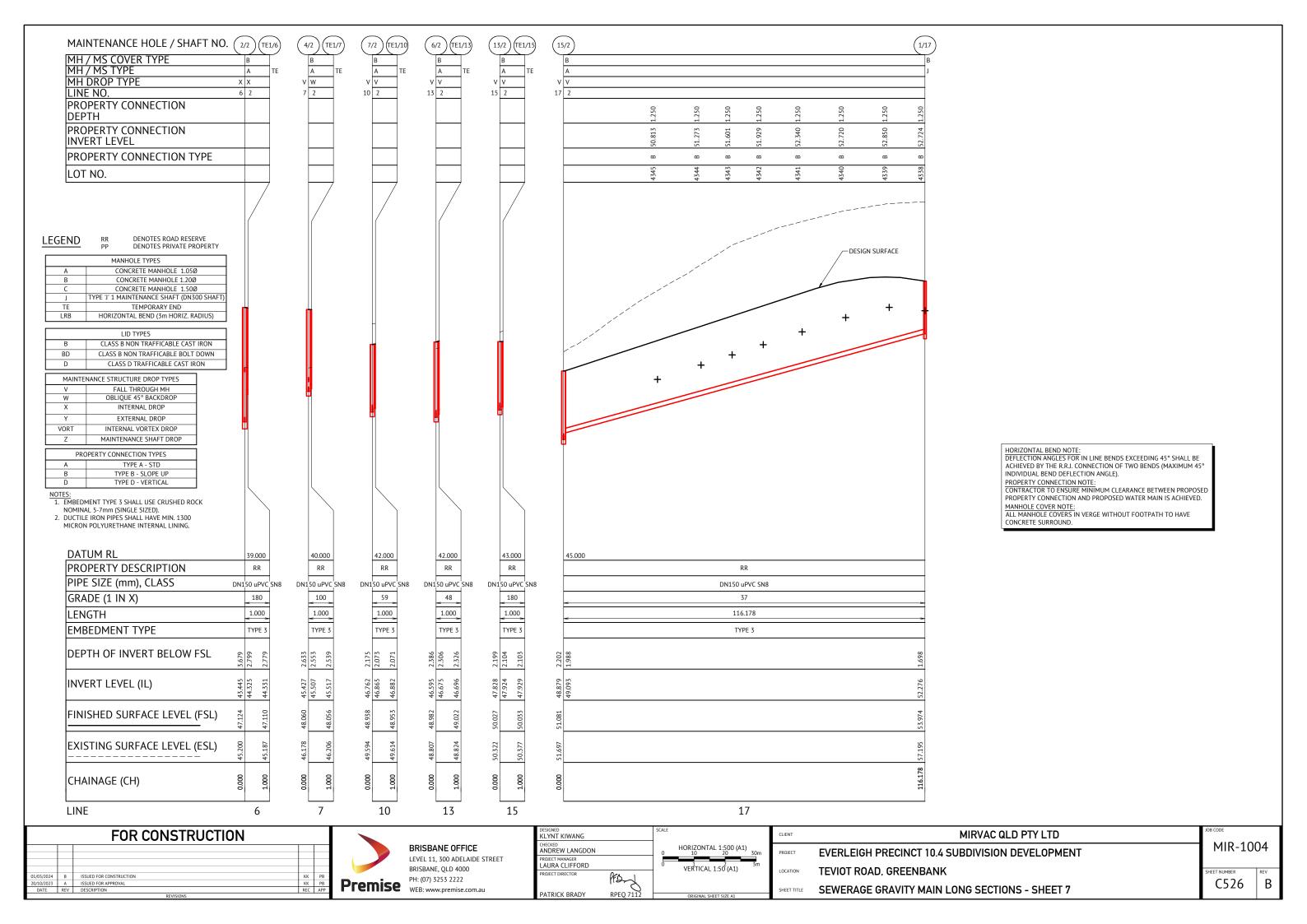


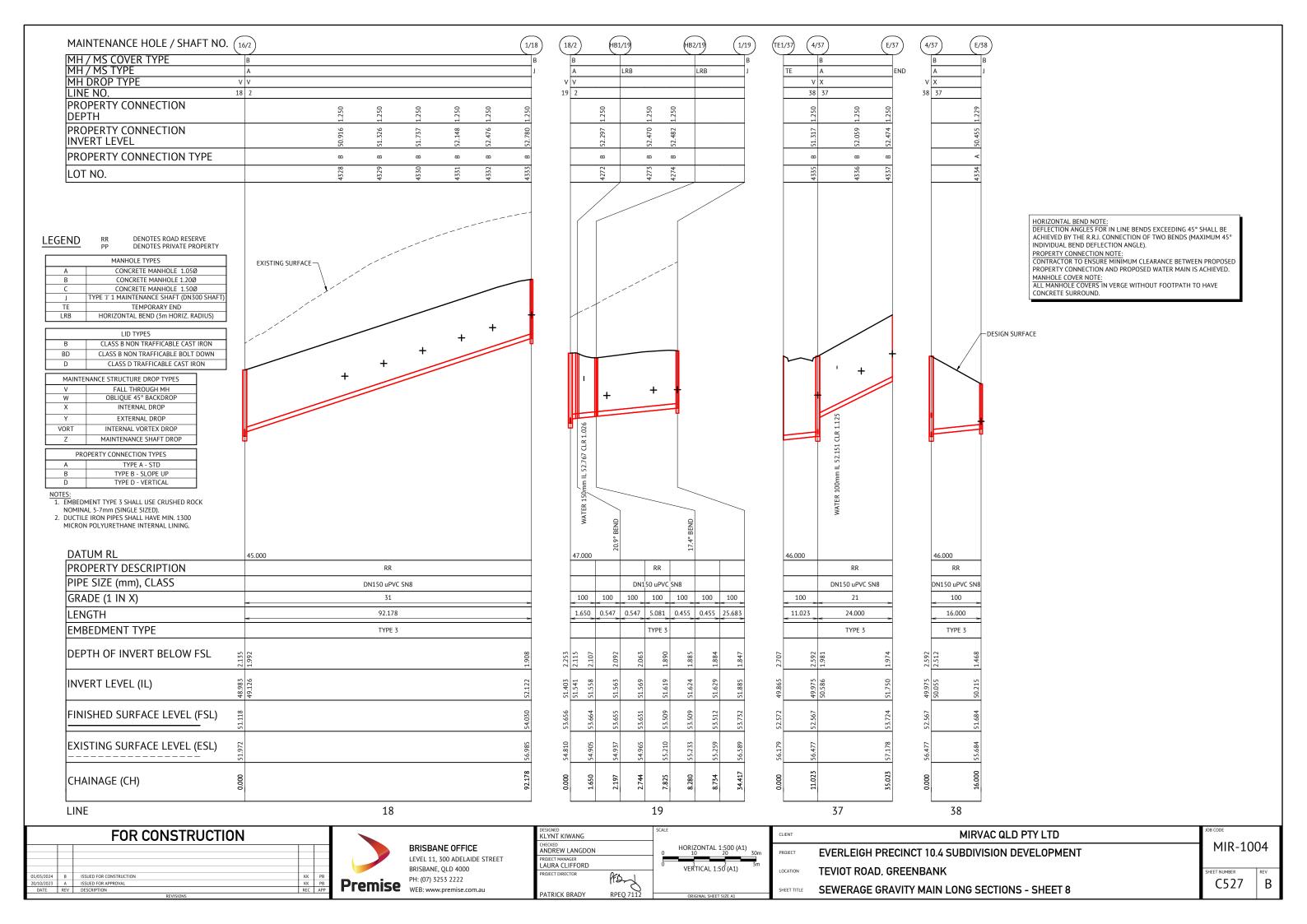


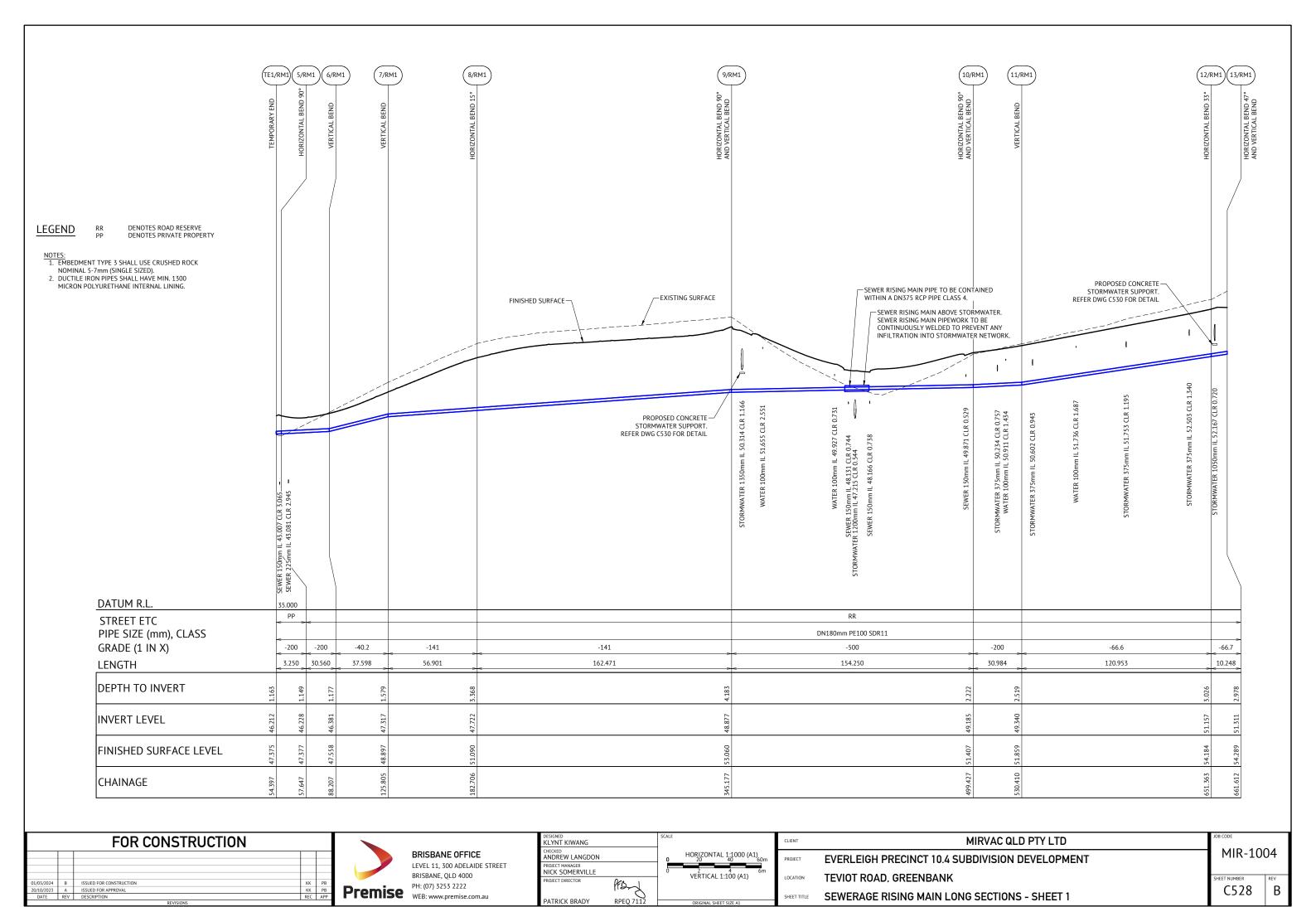


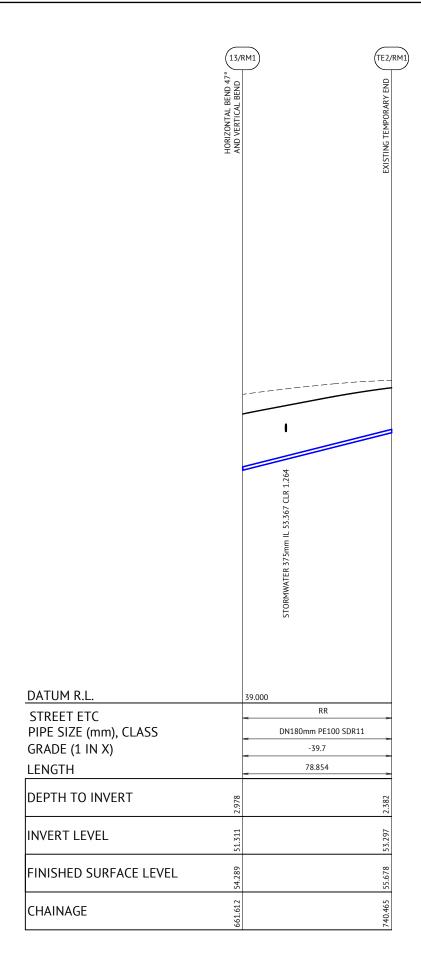












		FOR CONSTRUCTION		
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB
DATE	REV	DESCRIPTION	REC	APP
		REVISIONS		

DENOTES ROAD RESERVE DENOTES PRIVATE PROPERTY

NOTES:

1. EMBEDMENT TYPE 3 SHALL USE CRUSHED ROCK NOMINAL 5-7mm (SINGLE SIZED).

2. DUCTILE IRON PIPES SHALL HAVE MIN. 1300 MICRON POLYURETHANE INTERNAL LINING.

LEGEND



DESIGNED KLYNT KIWANG		SCALE		
CHECKED ANDREW LANGDON		0	HORIZONTAL 1:1000 (A1)	
PROJECT MANAGER NICK SOMERVILLE		0	2 4 6m VERTICAL 1:100 (A1)	
PROJECT DIRECTOR	Prand		VERTICAL 1.100 (A1)	
PATRICK BRADY	RPEO 7112		ORIGINAL SHEET SIZE A1	9

	CLIENT	MIRVAC QLD PTY LTD	JOB CODE	
n	PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT	MIR-100	)4
1	LOCATION	TEVIOT ROAD, GREENBANK	SHEET NUMBER	REV
	SHEET TITLE	SEWERAGE RISING MAIN LONG SECTIONS - SHEET 2	C529	В

# LIVE SEWER WORKS

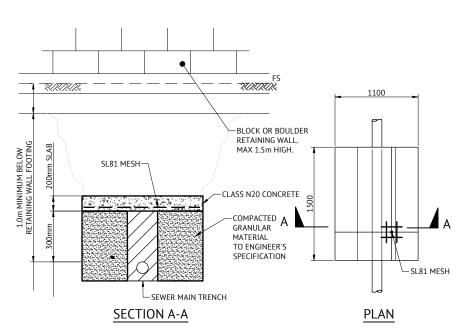
No.	DESCRIPTION	DIA. SEWER	MH NO.	MH TYPE	COVER TYPE	LOT NO.	F.S.L.	E.S.L.	I.L.	DEPTH
1(A)	0.5m FROM STUB END CAP TE1/2, CONSTRUCTOR TO LAY NEW LINE 2. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY AGENCY.	150	TE1/2	END	-	4110	55.434	56.191	53.367	2.067
1(B)	AGENCY TO REMOVE TEMPORARY END CAP ON STUB AND LINE 2 AND MAKE LIVE CONNECTIONS AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.									
2(A) 2(B)	0.5m FROM STUB END CAP TE1/37, CONSTRUCTOR TO LAY NEW LINE 37. AFTER CLEANSING, TESTING AND INSPECTING. AGENCY TO REMOVE TEMPORARY END CAP ON STUB AND LINE 37 AND MAKE LIVE CONNECTIONS AFTER SUCCESSFUL	150	TE1/37	END	-	4294	52.572	56.179	49.865	2.707
3(A)	"ON MAINTENANCE" INSPECTION.  0.5m FROM STUB END CAP TE2/RM1, CONSTRUCTOR TO LAY NEW LINE RM1. AFTER CLEANSING. TESTING AND INSPECTING.	180	TE2/RM1	END	-	4108	55.678	56.073	53.297	2.382
3(B)	AGENCY TO REMOVE TEMPORARY END CAP ON STUB AND LINE RM1 AND MAKE LIVE CONNECTIONS AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.									

LEVELS IN THE LIVE SEWER TABLE ARE DESIGN LEVELS. AS CONSTRUCTED INFORMATION TO BE ADDED WHEN AVAILABLE.

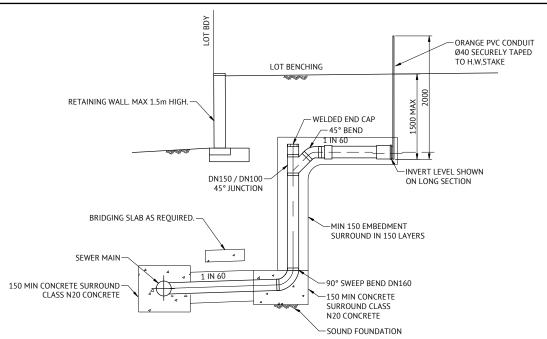
CONSULTING ENGINEERS ARE TO CONTACT PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR THIS WORK TO BE CARRIED OUT. (EXCAVATION,

SAFE-SHORTING AND ASSOCIATED WORK BY CONTRACTOR).
EXCAVATION WORKS CARRIED OUT BY CONTRACTORS AT DEPTH OF 1.5m OR GREATER MUST PROVIDE A "SAFE WORK PLAN" AS PER WORKPLACE HEALTH AND SAFETY LEGISLATION TO SEO-SPS PRIOR TO COMMENCING ANY WORK.

IT IS THE DEVELOPER'S RESPONSIBILITY TO ENSURE ALL LIVE SEWER WORKS ARE COMPLETE BEFORE ALLOWING PRIVATE DRAINAGE TO BE CONNECTED.



SERVICE LINE CROSSING BOULDER OR BLOCK RETAINING WALL **BRIDGING SLAB DETAIL** 



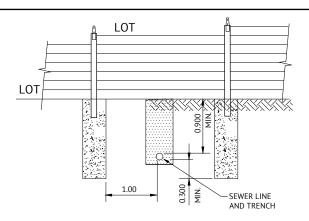
# EXTENDED PROPERTY CONNECTION UNDER RETAINING WALL - TYPE D (E)

PROVIDE 12mm EPDM RUBBER -

TRIMMER BARS

N12-300 EW EF-

50mm COVER



# SEWER LINE CROSSING CONCRETE SLEEPER RETAINING WALL

BRIDGING SLAB DETAIL

CONCRETE FOOTPATH WHERE LOCATED WITHIN CONCRETE FOOTPATH, LID MAINTENANCE SURROUND SHALL BE POURED STRUCTURE LID CONTINUOUS WITH CONCRETE FOOTPATH

## TYPICAL MAINTENANCE STRUCTURE IN CONCRETE FOOTPATH DETAIL

REINFORCED N25 CONCRETE SUPPORT AND TRENCH STORMWATER PROVIDE 12mm EPDM RUBBER FPDM RUBBER 3m MAX DEPTH OF CONCRETE 1.000 1.000 0.300\*

**ELEVATION** 

# GENERAL CONCRETE STORMWATER SUPPORT NOTES:

- SUPPORTS TO BE INSTALLED WHERE STORMWATER PIPE DIAMETER IS EQUAL TO OR GREATER THAN 600mm. 3m MAX DEPTH OF CONCRETE STORMWATER SUPPORT 'D'
- DESIGN BASED ON ACHIEVING 100kPa OF ULTIMATE LIMITSTATE BEARING CAPACITY. TO BE CONFIRMED BY CONTRACTOR DURING

CONCRETE STORMWATER SUPPORT IN ROCK NOTES

- 0.300m\* WIDTH UP TO 1050 RCP CLASS 2
- 0.500m\* WIDTH BETWEEN 1050 AND 1800 RCP CLASS 2

WHERE BRIDGING STRUCTURE IS LOCATED IN ROCK SUBGRADE, CONTRACTOR SHALL PROVIDE GEOTECHNICAL ADVICE TO

SUPERINTENDENT ADVISING IF SUITABLE SUBGRADE BEARING CAPACITY CAN BE ACHIEVED TO FACILITATE THIS SUPPORT TYPE.

### CONCRETE STORMWATER SUPPORT TYPICAL DETAIL

0.125m (EXCLUDING 12mm EPDM RUBBER)

4 - N12 STARTER BARS WITH 300mm COGGED ENDS-0.200m (EXCLUDING 12mm EPDM RUBBER) -N12 TRIMMER BAR TO MATCH OPENING PROFILE, 3 OF, ENSURING 50mm COVER

SECTION

SCALE 1:20 0.2m OFFSET TO VERTICAL FACE TYP. N12-300 SIDE FACE REINFORCEMENT RCP TRENCH EXCAVATION -SEWER LINE

**ELEVATION** 

# CONCRETE STORMWATER SUPPORT IN ROCK SUBGRADE DETAIL

SCALE 1:40

Nett. ARTHUR ROWSON

	FOR CONSTRUCTION			
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB
DATE	REV	DESCRIPTION	REC	APP



BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

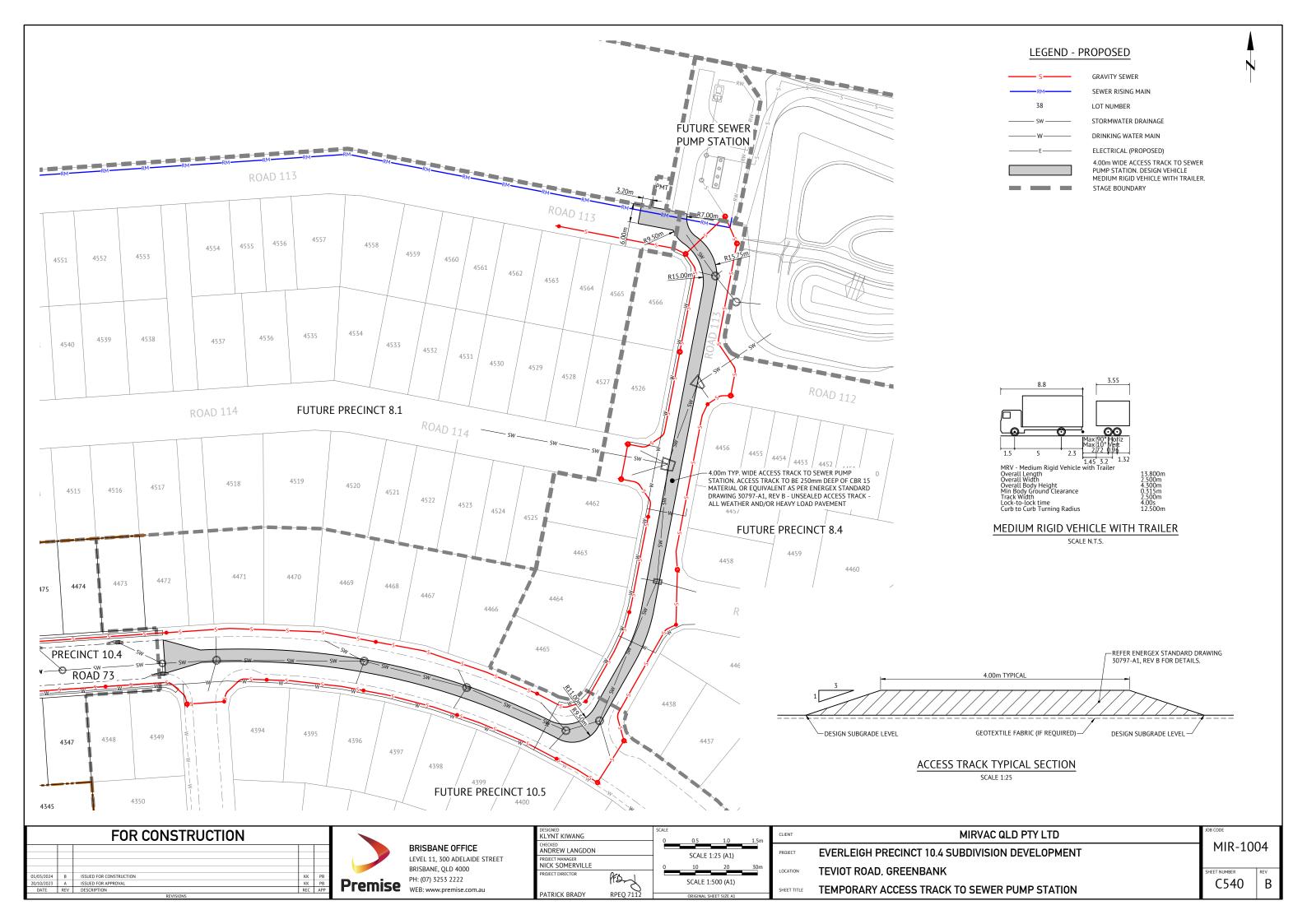
DESIGNED KLYNT KIWANG		SCALE	
HECKED ANDREW LANGDON			
PROJECT MANAGER NICK SOMERVILLE		NTS	
PROJECT DIRECTOR	Pray		
PATRICK BRADY	RPEQ 7112	ORIGINAL SHEET SIZE A1	_

PROVICE 12mm EPDM RUBBER

11 OF N12 HORIZONTAL BARS EQUALLY SPACED

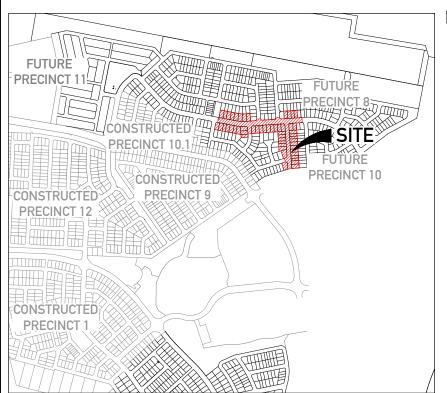
CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	SEWERAGE NOTES AND DETAILS

MIR-1004 C530



# EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT

# TEVIOT ROAD, GREENBANK FOR MIRVAC QLD PTY LTD WATER RETICULATION



# LOCALITY PLAN

# **REAL PROPERTY DESCRIPTION**

LOT 205 & 434

on RP845844

#### SHEET LIST TABLE SHEET NO. SHEET TITLE WATER RETICULATION LOCALITY PLAN & NOTES C600 WATER RETICULATION LAYOUT PLAN - SHEET 1 C610 WATER RETICULATION LAYOUT PLAN- SHEET 2 C611 C612 WATER RETICULATION LAYOUT PLAN- SHEET 3 WATER LIVE CONNECTION AND TYPICAL DETAILS

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST OUEENSLAND WATER SUPPLY CODE SPECIFICATIONS
- LINI ESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL COVER OF MAIN FROM PERMANENT LEVEL TO BE AS SHOWN IN SEO-WAT-1200-2
- CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD
- ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH 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 SEO-SP's
- ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS. WHERE
- 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
- ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE OLIFENSI AND WORK HEALTH AND SAFETY ACT 2011 CONTACT THE DIVISION OF WORKPLACE HEALTH & SAFETY FOR INFORMATION.
- PHONE: 1300 362 128.

  10. CONSTRUCT THRUST BLOCKS ON ALL BENDS, TEES, TAPERS AND DEAD ENDS IN ACCORDANCE WITH SEQ-WAT-1205-1, AND SEQ-WAT-1206-1.

  11. CONSTRUCT TRENCHES IN ACCORDANCE WITH SEQ-WAT-1200-2, PIPE
- EMBEDMENT TO SEQ-WAT-1201-1 (TYPE C SUPPORT) AND ROAD CROSSINGS TO SEQ-WAT-1204-1 AND LCC STANDARDS. INSTALL SCOURS IN ACCORDANCE WITH SEO-WAT-1307-3
- 13. INSTALL DETECTABLE MARKER TAPE ON ALL WATER MAINS AND PROPERTY SERVICES.
- 14. INSTALL HYDRANTS IN ACCORDANCE WITH SEO-WAT-1302-1.
- 15. INSTALL PAVEMENT MARKERS IN ACCORDANCE WITH SEQ-WAT-1300-1 CREEK CROSSINGS
- 16. WATER SERVICE CONNECTIONS INCLUSIVE OF WATER METER BOXES ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWINGS SEO-WAT-1110-1 & SEO-WAT-1110-2 AND OTHER RELEVANT STANDARD DRAWINGS FROM SEQ DESIGN AND CONSTRUCTION CODE. 17 TERMINATE ALL WATER SERVICES AFTER INSTALLATION OF THE BALL
- VALVE (PRIOR TO THE WATER METER). THE APPLICANT IS NOT REQUIRED TO MAKE AN APPLICATION TO COUNCIL FOR THE PROVISION OF A WATER METER AT THIS TIME.
- 18. THE POLYETHYLENE SERVICE LINE MUST COMPLY WITH AS/NZ4130 SERIES 1 DN20 PN16.
- 19. TAPPING BANDS MUST BE USED WHEN PROVIDING CONNECTION, UNLESS OTHERWISE APPROVED BY COUNCIL
- 20. PROPERTY SERVICES WITHIN ANY FOOTWAY SHALL BE POSITIONED AT 90+/-5 DEGREES TO THE WATER MAIN OR KERB, WHERE REQUIRED TO CROSS THE ROAD CARRIAGEWAY, PROPERTY SERVICES SHALL BE LOCATED WITHIN THE SERVICE DUCTS (CONDUITS) POSITIONED AT BOUNDARY TO SIDE BOUNDARY AND EXTENDING BEHIND EACH KERB IN ACCORDANCE WITH CLAUSE 5.11.3 OF THE SOUTH EAST

- QUEENSLAND WATER SUPPLY AND SEWERAGE DESIGN AND CONSTRUCTION CODE. THE CONDUIT SHALL HAVE A MAXIMUM LENGTH OF 25m AND EXTEND 300mm BEYOND THE BACK OF THE KERB OR CONCRETE/PAVED AREA.
- 21. WHERE PRACTICABLE, PROPERTY SERVICE CONNECTION POINTS MUST BE LOCATED 300mm FROM THE RESIDENTIAL PROPERTY SIDE BOUNDARY ON THE OPPOSITE SIDE OF THE ALLOTMENT TO THE ELECTRICAL SERVICE PILLAR-BOX. SERVICES MUST BE LOCATED AT LEAST 1.0m FROM ALL ELECTRICAL SOURCES AND CLEAR OF EXISTING OR FUTURE DRIVEWAYS. PROPERTY SERVICES LAID PARALLEL TO THE FOOTPATH AND/OR PROPERTY BOUNDARY ARE NOT PERMITTED (SEQ CODE CLAUSE 5.11.5). TERMINATE ALL WATER SERVICES AFTER INSTALLATION OF THE BALL VALVE (PRIOR TO THE WATER METER)

### **VEGETATION PROTECTION**

- TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- 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.
- 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.
- ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST

- TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY.
- CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

- SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF
- APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK.
- NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.

#### REHABILITATION

- PRE-DISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL
- PRE-DISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED, ALL DISTURBED AREAS ASSOCIATED WITH CONSTRUCTION SHALL BE REHABILITATED, HEAVILY COMPACTED AREAS SHOULD BE RIPPED PRIOR TO TREATMENT
- ALL DISTURBED AREAS ARE TO BE LEFT IN STABLE CONDITION.
- ALL PLANTING/RE-VEGETATION WILL NEED TO BE MAINTAINED

### CONSTRUCTION REQUIREMENTS

- LIVE WATER CONNECTIONS TO BE CARRIED OUT BY LOGAN WATER AS PER THE LIVE CONNECTION REQUEST UNLESS AGREED OTHERWISE WITH LOGAN WATER.
- PRIOR TO ANY EXCAVATION. CONTRACTOR IS TO LOCATE ACTUAL POSITIONS OF PUBLIC SERVICE UTILITIES BY POT HOLES.
- UPON COMPLETION OF ALL WORKS, CONTRACTORS SHALL SUPPLY THE SUPERVISING RPEO DETAILED "AS CONSTRUCTED" INFORMATION OF THE WORK. "AS CONSTRUCTED" INFORMATION SHALL COMPLY WITH CURRENT SEQ CODE OR LOCAL AUTHORITY STANDARDS FOR PLAN AND DIGITAL INFORMATION.
- CONTRACTOR IS TO BE RESPONSIBLE FOR ARRANGING ALL LOGAN WATER CONNECTIONS AND PAYMENTS OF CONNECTION FEES

#### TRENCH SPOIL NOTE:

SPOILAGE OF EXCESS MATERIAL TO BE PLACED IN FUTURE FILL AREA AS NOMINATED BY THE SUPERINTENDENT INCLUDING ALL LEVEL ONE COMPACTION REQUIREMENTS AND TESTING IN ACCORDANCE WITH MORRISON GEOTECHNICAL SPECIFICATION AND ALL LOCAL AUTHORITY STANDARDS, AND SHALL BE FREE DRAINING

#### **EXCAVATION IN ROCK NOTE:**

CONTRACT SHALL INCLUDE TREATING, SIZING CONDITIONING AND PROCESSING ALL TYPES OF ROCK IN ALL EXCAVATIONS, PROCESSING TO BE COMPLETED AS PER MORRISON GEOTECHNICAL REPORTS TO ENSURE LEVEL 1 IS ACHIEVED.

#### INDEMNITY - EXISTING SERVICES

NOT WITHSTANDING THAT EXISTING SERVICES MAY OR MAY NOT BE SHOWN ON THESE DRAWINGS, NO RESPONSIBILITY IS TAKEN BY THE ENGINEER OR THE PRINCIPAL FOR THIS INFORMATION WHICH HAS BEEN SUPPLIED BY OTHERS. THE DETAILS ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ASCERTAIN THE POSITION OF ALL UNDERGROUND SERVICES PRIOR TO EXCAVATION AND SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGES CAUSED AS A RESULT OF THE WORKS.

### RPEQ CERTIFICATION

THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEO REGISTRATION, WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO LOGAN WATER RETICULATION SYSTEM. ALL RPEQ CERTIFIED DRAWINGS COMPLY WITH SE CODE AND LOGAN WATER REQUIREMENTS

#### INSPECTION REQUIREMENTS

PRIOR TO COMMENCEMENT OF WORKS CONTACT PREMISE (07) 3253 2222 AND LOGAN WATER TO CONFIRM INSPECTIO REQUIREMENTS INCLUDING LIVE CONNECTIONS.

MINIMUM 48 HOURS NOTICE IS REQUIRED

INSPECTIONS ARE REQUIRED TO BE ORGANIZED WITH PREMISE AND LOGAN WATER. ANY COSTS ASSOCIATED WITH ENGAGING LOGAN WATER TO UNDERTAKE INSPECTIONS OUTSIDE OF THE FEE PAID SHALL BE BORNE BY THE

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

ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE OUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH & SAFETY FOR INFORMATION PHONE: 1300 362 128

#### SEO CODE STD DRAWING SCHEDULE

SOIL CLASSIFICATION SFO-WAT-1200-1 EMBEDMENT AND TRENCH FILL THRUST BLOCK DETAILS SFO-WAT-1205-1 VALVE THRUST BLOCKS SEO-WAT-1206-1 IDENTIFICATION MARKERS SEO-WAT-1300-1.2



# FOR CONSTRUCTION ISSUED FOR CONSTRUCTION



### BRISBANE OFFICE

LEVEL 11, 300 ADELAIDE STREET BRISBANE, OLD 4000 PH: (07) 3253 2222

DESIGNED	
KLYNT KIWANG	
CHECKED	
ANDREW LANGDON	
PROJECT MANAGER	
NICK SOMERVILLE	
PROJECT DIRECTOR	DER 1
	rrand
	0
PATRICK BRADY	RPEQ 7112
	PFQ 7112

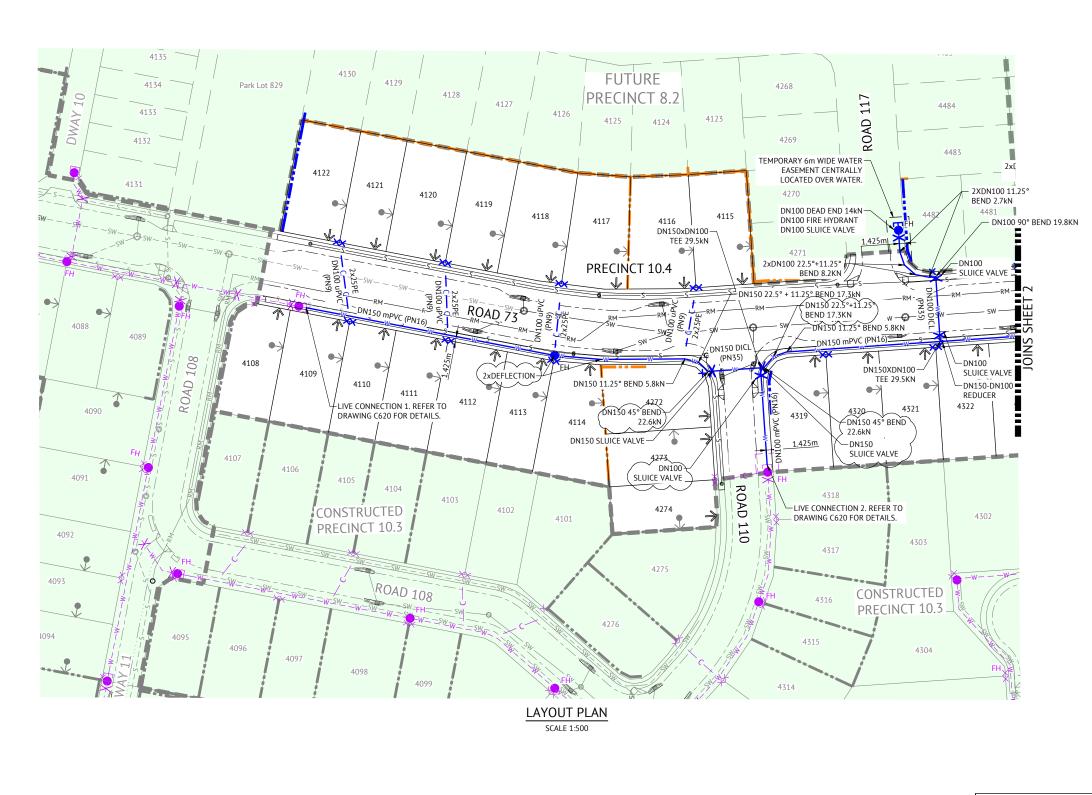
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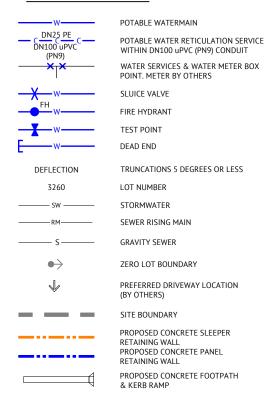
OPMENT TEVIOT ROAD, GREENBANK WATER RETICULATION LOCALITY PLAN & NOTES

MIR-1004

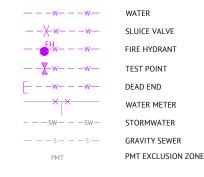




## LEGEND - PROPOSED



## LEGEND - CONSTRUCTED



## INDEMNITY - EXISTING SERVICES

NOT WITHSTANDING THAT EXISTING SERVICES MAY OR MA NOT BE SHOWN ON THESE DRAWINGS, NO RESPONSIBILITY IS TAKEN BY THE ENGINEER OR THE PRINCIPAL FOR THIS INFORMATION WHICH HAS BEEN SUPPLIED BY OTHERS. THI DETAILS ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ASCERTAIN THE POSITION OF ALL UNDERGROUND SERVICES PRIOR TO EXCAVATION AND SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGES CAUSED AS A RESULT OF THE WORKS.

AS CONSTRUCTED DETAILS FOR AMEND. I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE TRUE AND ACCURATE RECORD OF THE WORKS SIGNED

NAME of SIGNATORY RPEQ No. or LICENCE

FOR CONSTRUCTION 
 /03/2024
 B
 ADDED AND AMENDED LEADERS

 /10/2023
 A
 ISSUED FOR APPROVAL

 DATE
 REV
 DESCRIPTION

Premise PH: (U/) 3233 2222 WEB: www.premise.com.au

BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

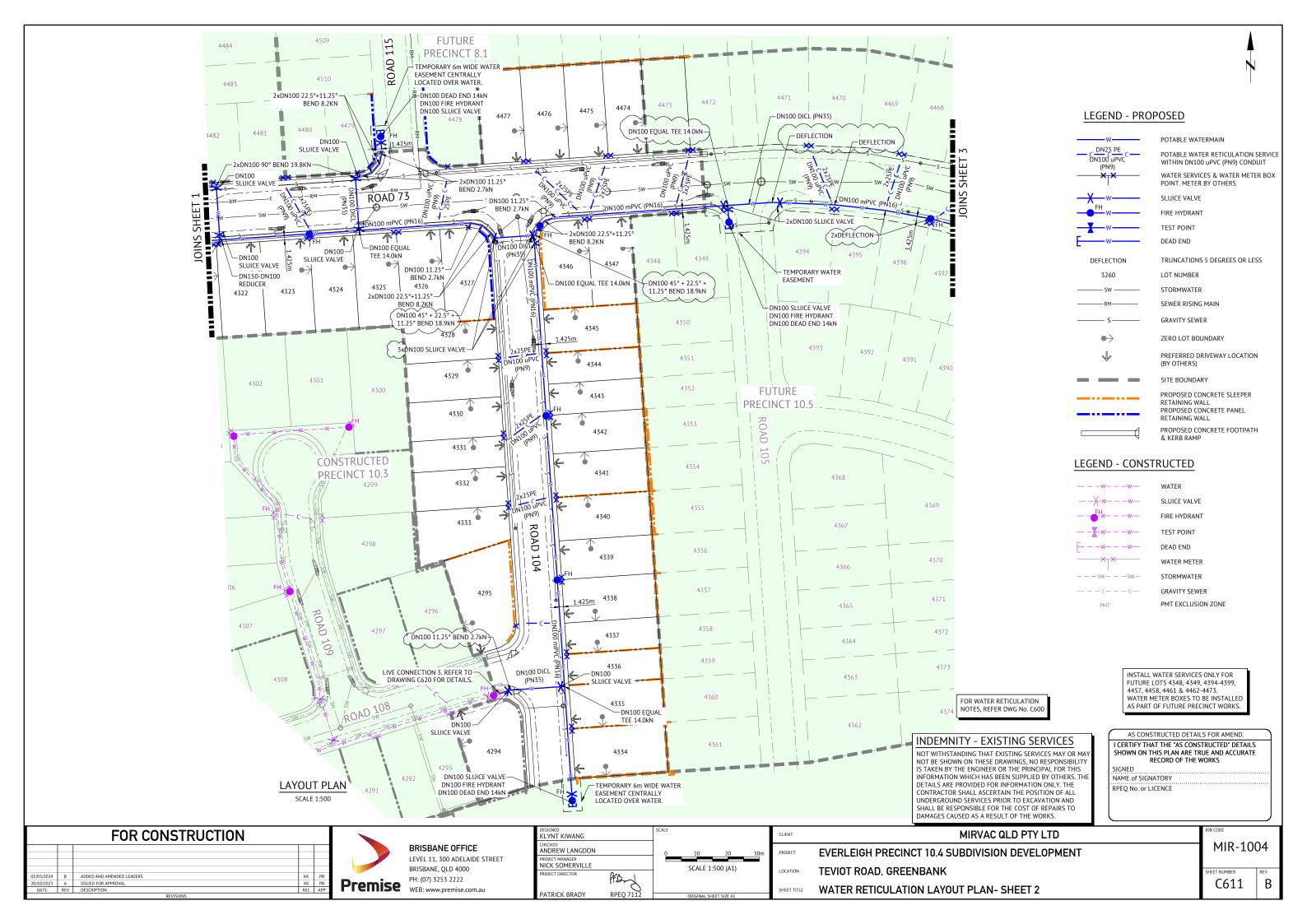
KLYNT KIWANG ANDREW LANGDON NICK SOMERVILLE SCALE 1:500 (A1) PD 7112 PATRICK BRADY

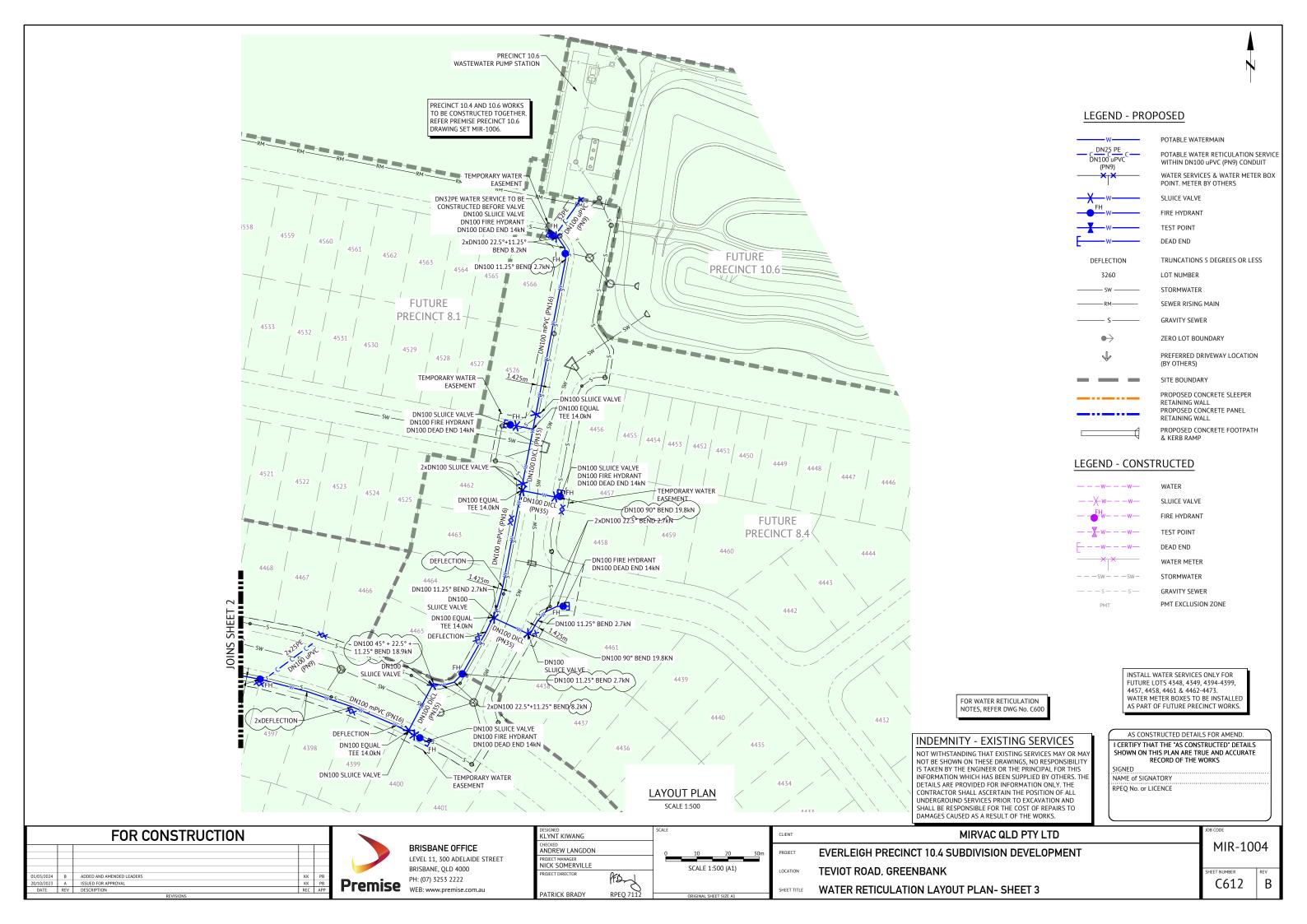
MIRVAC QLD PTY LTD **EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT** TEVIOT ROAD, GREENBANK

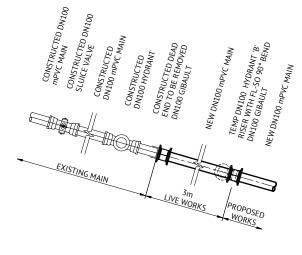
**WATER RETICULATION LAYOUT PLAN - SHEET 1** 

FOR WATER RETICULATION NOTES, REFER DWG No. C600

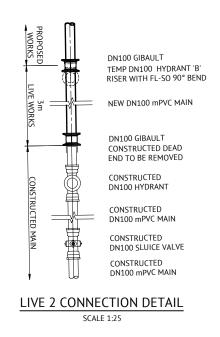
MIR-1004

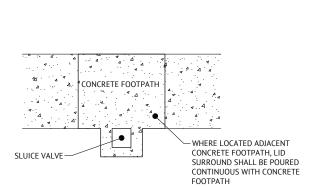












# TYPICAL SLUICE VALVE ADJACENT CONCRETE FOOTPATH DETAIL

## LIVE CONNECTION NOTES:

LIVE 3 CONNECTION DETAIL

SCALE 1:25

- LIVE CONNECTIONS BY LOGAN WATER
   LIVE CONNECTION IN ACCORDANCE WITH SEQ-WAT-1303-1
   THRUST BLOCKS NOT SHOWN FOR CLARITY.
   PRE-CHLORINATION FITTINGS AS REQUIRED.

AS CONSTRUCTED DETAIL	LS FUR AMEND.						
I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS							
SHOWN ON THIS PLAN ARE TRUE AND ACCURATE							
RECORD OF THE \	WORKS						
SIGNED	DATE:						
NAME of SIGNATORY							
RPEQ No. or LICENCE							
COMPANY NAME							
START DATE							
1							

# FOR CONSTRUCTION | 1,703/2024 B | ISSUED FOR CONSTRUCTION | 1,703/2023 A | ISSUED FOR APPROVAL | DATE | REV | DESCRIPTION |

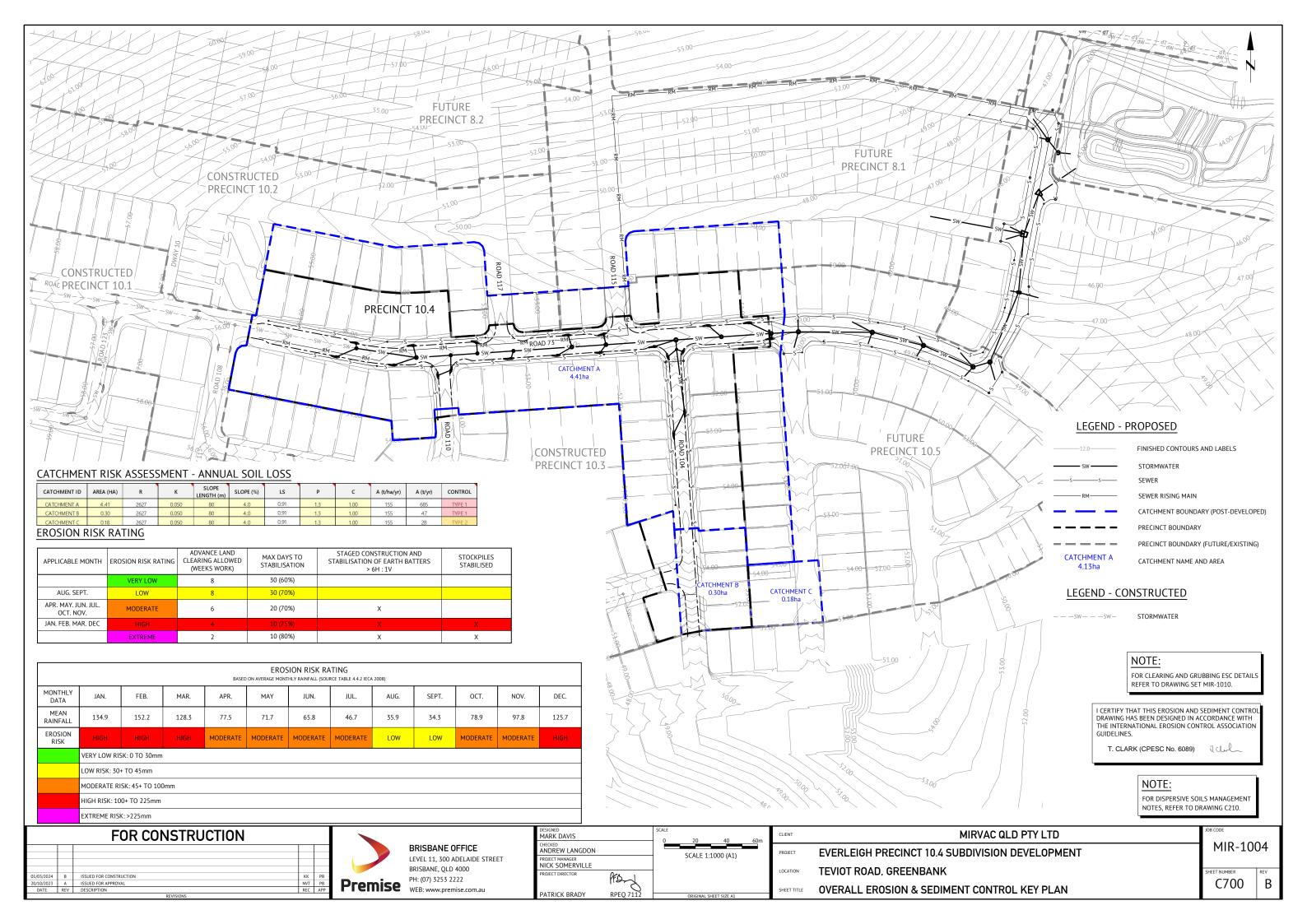


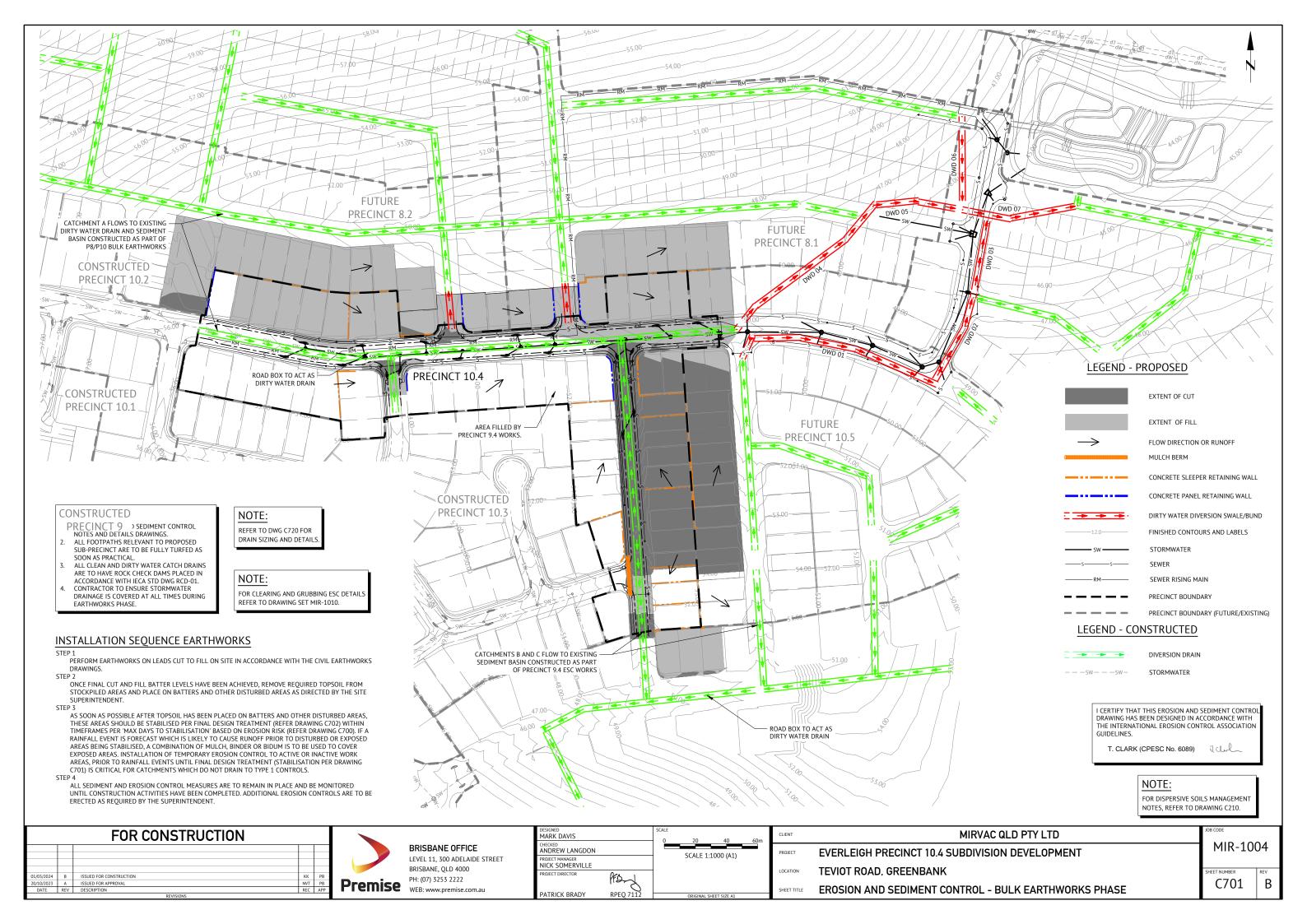
BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000

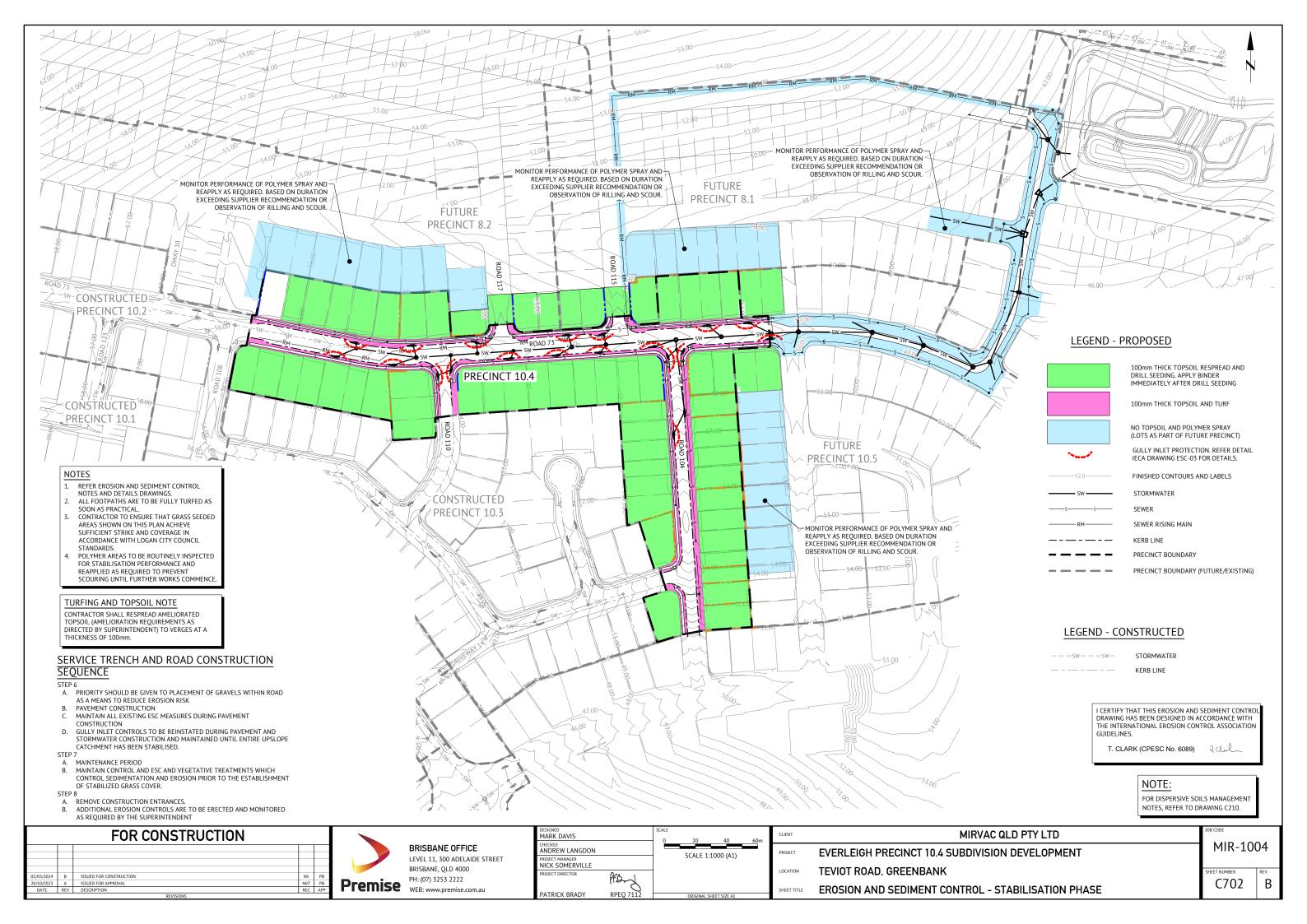
DESIGNED		SCALE			
KLYNT KIWANG					
CHECKED ANDREW LANGDON		0	10	20	
PROJECT MANAGER					4
NICK SOMERVILLE			SCALE 1	:500 (A1)	_
PROJECT DIRECTOR	PFD		301.22		
PATRICK BRADY	RPFO 7112		ODICINIAL CI	JEET SIZE A1	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	WATER LIVE CONNECTION AND TYPICAL DETAILS

MIR-1004







### **EROSION & SEDIMENT CONTROL NOTES**

- 1. LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- REFER EARTHWORKS DRAWINGS FOR ADDITIONAL NOTES.
  ALL TRENCHES, FOOTPATH EXCAVATIONS & STOCKPILES TO BE PROTECTED BY TEMPORARY SEDIMENT FENCES UNTIL 80% GRASS COVERAGE IS ACHIEVED TO DISTURBED AREAS.
- EVERY PRECAUTION IS TO BE TAKEN TO PREVENT THE TRANSPORT OF SILT INTO THE NEWLY LAID STORMWATER PIPES THAT ARE CONNECTED TO THE DOWNSTREAM PIPE SYSTEMS, AND ANY EXISTING OPEN CHANNELS
- THESE NOTES SHALL BE READ IN CONJUNCTION WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS
- THE EROSION AND SEDIMENT CONTROL WORKS SHALL COMPLY WITH THE REQUIREMENTS OF THE
- LOCAL AUTHORITIES EROSION AND SEDIMENT CONTROL STANDARDS.
  THE CONTRACTOR SHALL TAKE ALL REASONABLE AND PRACTICABLE MEASURES TO:
- ALLOW STORMWATER TO PASS THROUGH THE SITE IN A CONTROLLED MANNER AND AT NON EROSIVE FLOW VELOCITIES;
- MINIMISE SOIL EROSION FROM WATER AND WIND; MINIMISE ADVERSE EFFECTS OF SEDIMENT RUN-OFF;
- MINIMISE OR PREVENT ENVIRONMENTAL HARM ASSOCIATED WITH DISCHARGES FROM THE SITE (E.G. THE EFFECTS OF SEDIMENTATION ON THE ENVIRONMENTAL VALUES OF RECEIVING WATERS); AND
- ENSURE THAT THE VALUE AND USE OF RESIDENTIAL PROPERTIES ADJACENT TO THE DEVELOPMENT (SUCH AS DRAINAGE AND ROADS) ARE NOT DIMINISHED AS A RESULT OF THE MIGRATION OF
- SEDIMENT FROM THE DEVELOPMENT.
  THE CONTRACTOR SHALL APPOINT AN APPROPRIATELY EXPERIENCED PERSON TO BE MADE
- RESPONSIBLE FOR IMPLEMENTATION OF THE ESC.
  ALL ESC MEASURES SHALL BE INSPECTED:

- AT LEAST DAILY (WHEN WORK IS OCCURRING ON SITE). AT LEAST WEEKLY (WHEN WORK IS NOT OCCURRING ON SITE).
- WITHIN 24 HOURS OF EXPECTED RAINFALL.
- WITHIN 18 HOURS OF RAINFALL OCCURRING
- MAINTENANCE OF ESC MEASURES SHALL OCCUR TO ENSURE THEY ARE OPERATING EFFICIENTLY AND IN ACCORDANCE WITH THE FOLLOWING SCHEDULE

ESC MEASURES	MAINTENANCE TRIGGER	TIME FRAME FOR UNDERTAKING MAINTENANCE
ESC MEASURES	WHEN SETTLED SEDIMENT VOLUME EXCEEDS 25% OF THE CAPACITY OF THE ESC MEASURE	BY THE END OF THE DAY

- INSTALL DIVERSION CATCH DRAINS UPSTREAM OF, AND SILT FENCE DOWNSTREAM OF, STOCKPILES.
- STOCKPILES ARE TO BE LOCATED AWAY FROM EROSION HAZARD AREAS SUCH AS DRAINAGE LINES AND STEEP SLOPES.
- 9. STOCKPILES ARE TO BE PROTECTED FROM EROSION BY THE WIND.

  10. ADEQUATE SUPPLIES OF EMERGENCY MAINTENANCE MATERIALS, INCLUDING (BUT NOT LIMITED TO) TIE WIRE, STAKES, FILTER CLOTH, WIRE MESH AND CLEAN GRAVEL SHOULD BE AVAILABLE ON-SITE.

  11. ESC MAINTENANCE ACTIVITIES ARE TO BE RECORDED IN AN ON-SITE REGISTER. THE REGISTER IS TO
- BE MAINTAINED FOR THE DURATION OF THE WORKS AND IS TO BE MADE AVAILABLE TO THE SUPERINTENDENT.
- 12. DISTURBED AREA ARE TO BE STABILISED AS SOON AS POSSIBLE ON COMPLETION OF BULK EARTHWORKS, LOTS TO BE STABILISED FOLLOWING RESPREADING OF TOPSOIL
- 13. SUPPLEMENTARY ESC MEASURES SHALL BE DIRECTED BY THE SUPERINTENDENT.

#### **MAINTENANCE**

- INSPECT ALL CATCH DRAINS AT LEAST WEEKLY AND AFTER RUNOFF-PRODUCING STORM EVENTS AND REPAIR ANY SLUMPS, BANK DAMAGE. OR LOSS OF FREEBOARD.
  CLOSELY INSPECT THE OUTER EDGES OF THE ROCK PROTECTION. ENSURE WATER ENTRY
- INTO THE ROCK -LINED AREA IS NOT CAUSING EROSION ALONG THE EDGE OF THE ROCK
- CAREFULLY CHECK THE STABILITY OF THE ROCK LOOKING FOR INDICATIONS OF PIPING SCOUR HOLES, OR BANK FAILURES.
- REPLACE OR REPOSITION THE SURFACE ROCK SUCH THAT THE DRAIN FUNCTIONS AS
- REQUIRED AND THE DRAIN'S REQUIRED HYDRAULIC CAPACITY IS NOT REDUCED.
  REPLACE ANY DISPLACED ROCK WITH ROCK OF SIGNIFICANTLY (MINIMUM 110%) LARGER
- SIZE THAN THE DISPLACED ROCK.
  ENSURE SEDIMENT IS NOT PARTIALLY BLOCKING THE DRAIN. WHERE NECESSARY,
- REMOVE ANY DEPOSITED MATERIAL TO ALLOW FREE DRAINAGE.
  DISPOSE OD ANY SEDIMENT OF FILL IN A MANNER THAT WILL NOT CREATE AN EROSION OR POLITITION HAZARD

# **ROLES AND RESPONSIBILITIES**

ROLE	RESPONSIBILITY
PROJECT MANAGER	OVERALL RESPONSIBILITY OF ESC IMPLEMENTATION
	<ul> <li>NOTIFY THE ENVIRONMENTAL MANAGER IMMEDIATELY OF ANY NON-COMPLIANCE WITH ESCP</li> </ul>
	<ul> <li>ENSURE THE PROMPT IMPLEMENTATION OF MEASURES TO MITIGATE EROSION AND SEDIMENT GENERATION</li> </ul>
SITE SUPERVISOR / FOREMEN	MONITOR DAILY RAINFALL
	<ul> <li>NOTIFY ENVIRONMENTAL ADVISOR/CONSULTANT WHEN RUNOFF GENERATING RAINFALL OCCURS IN THE PREVIOUS 24 HOURS</li> </ul>
	<ul> <li>MAINTAIN CURRENT RECORDS OF RAINFALL, STORAGE VOLUMES, WATER QUALITY, TREATMENT PRACTICES, DISCHARGE VOLUMES (AS APPROPRIATE)</li> </ul>
	• INSTALLATION AND MAINTENANCE OF ESC
ENVIRONMENTAL MANAGER	PROVIDE DESIGN INFORMATION AS REQUIRED
	• CONDUCT IN-SITU MONITORING (AS REQUIRED)
	<ul> <li>COLLECT AND SUBMIT SAMPLES TO LABORATORY (AS REQUIRED)</li> </ul>
	<ul> <li>COLLATE RESULTS AND PREPARE REPORTS (AS REQUIRED)</li> </ul>
	<ul> <li>CONDUCT SITE INSPECTIONS AN AUDITS (AS REQUIRED)</li> </ul>
	• INSPECT ESC INSTALLATION AND MAINTENANCE
	• INSPECT OFFSITE IMPACTS AND MANAGEMENT
	<ul> <li>PROVIDE ADVICE REGARDING ESC SITE IMPROVEMENT (AS REQUIRED)</li> </ul>
ALL PERSONNEL	<ul> <li>REPORT ANY DAMAGE TO ESC DEVICES AND ANY POTENTIAL OR ACTUAL ENVIRONMENTAL HARM IN LINE WITH DUTY TO NOTIFY UNDER THE REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION ACT 1994</li> </ul>

# CORRECTIVE AND PREVENTATIVE ACTION

AN ENVIRONMENTAL INCIDENT WITH RESPECT TO THE ESCP IS DEFINED AS ANY OCCURRENCE WHERE SEDIMENT IS RELEASED FROM THE SITE, WHETHER CONTROLLED OR UNCONTROLLED, OR WHERE STORM WATER IS RELEASED (CONTROLLED) FROM SITE WHICH DOES NOT MEET THE WATER QUALITY REQUIREMENTS.

ALL INCIDENTS AND NON-CONFORMANCES ARE TO BE REPORTED, INVESTIGATED AND CORRECTED IN ACCORDANCE WITH THE ESCP TO ENSURE EFFECTIVE SOIL AND WATER QUALITY MANAGEMENT PRACTICES AT ALL TIMES.

BEST PRACTICE SITE MANAGEMENT REQUIRES ALL ESC MEASURES TO BE INSPECTED BY THE CONTRACTORS NOMINATED REPRESENTATIVE AT LEAST DAILY WHEN RAIN IS OCCURRING, WITHIN 24 HOURS PRIOR TO EXPECTED
RAINFALL, AND WITHIN 18 HOURS OF A RAINFALL EVENT OF SUFFICIENT INTENSITY AND DURATION TO CAUSE ONSITE RUNOFF (IECA, 2008). SUCH INSPECTIONS MUST CHECK:

- DAILY SITE INSPECTIONS (DURING PERIODS OF RUNOFF PRODUCING RAINFALL)
- ALL DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES
- OCCURRENCES OF EXCESSIVE SEDIMENT DEPOSITION (WHETHER ON-SITE OR OFF-SITE)
  ALL SITE DISCHARGE POINTS (INCLUDING DEWATERING ACTIVITIES AS APPROPRIATE)
- WEEKLY SITE INSPECTIONS (EVEN IF WORK IS NOT OCCURRING ON-SITE)
- ALL DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES
- OCCURRENCES OF EXCESSIVE SEDIMENT DEPOSITION (WHETHER ON-SITE OR OFF-SITE)
- OCCURRENCES OF CONSTRUCTION MATERIALS, LITTER OR SEDIMENT PLACED, DEPOSITED, WASHED
- OR BLOWN FROM THE SITE, INCLUDING DEPOSITION BY VEHICULAR MOVEMENTS.
- LITTER AND WASTE RECEPTORS
- OIL, FUEL AND CHEMICALS STORAGE FACILITIES
- PRIOR TO ANTICIPATED RUNOFF PRODUCING RAINFALL
- ALL DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES
- ALL TEMPORARY FLOW DIVERSION AND DRAINAGE WORKS
- FOLLOWING RUNOFF PRODUCING RAINFALL
- ALL DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES
- OCCURRENCES OF EXCESSIVE SEDIMENT DEPOSITION (WHETHER ON-SITE OR OFF-SITE)
- OCCURRENCES OF CONSTRUCTION MATERIALS, LITTER OR SEDIMENT PLACED, DEPOSITED, WASHED OR BLOWN FORM THE SITE, INCLUDING DEPOSITION BY VEHICULAR MOVEMENTS.

I CERTIFY THAT THIS EROSION AND SEDIMENT CONTROL DRAWING HAS BEEN DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL EROSION CONTROL ASSOCIATION

T. CLARK (CPESC No. 6089)

	FOR CONSTRUCTION						
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01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB			
20/10/2023	Α	ISSUED FOR APPROVAL	NVT	PB			
DATE	DATE REV DESCRIPTION REC APP						
	REVISIONS						



BRISBANE OFFICE LEVEL 11, 300 ADELAIDE STREET BRISBANE, QLD 4000 PH: (07) 3253 2222

PESIGNED MARK DAVIS		SCALE
HECKED ANDREW LANGDON		
ROJECT MANAGER NICK SOMERVILLE		
ROJECT DIRECTOR	PEDA	
PATRICK BRADY	RPEO 7112	

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

MIR-1004

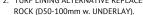
## DRAIN CALCULATION TABLE

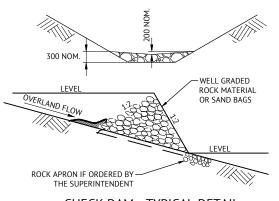
DRAIN ID	CATCH AREA (HA)	ARI	Cari	TIME OF CONC (MINS)	<b>I</b> ARI	FLOW - Q (m <sup>3</sup> /s)	LONG. SLOPE (m/m)	BASE WIDTH	SIDE SLOPE1 (1 in x)	SIDE SLOPE 2 (1 in x)	LINING	MANNING ROUGH COEFF	MAX PERM VEL (m/s)		DEPTH OF FLOW (m)	DEPTH WITH F/BOARD (m)	DRAIN TOP WIDTH (m)
DWD 01	1.69	2	0.6	10	105	0.30	0.005	0.6	2	2	Vital HR - L/m2	0.02	1.5	1.05	0.25	0.40	2.22
DWD 02	3.359	2	0.6	13	95.2	0.53	0.05	1.5	2	2	Vital HR - 2L/m2	0.02	2.5	2.48	0.12	0.27	2.59
DWD 03	4.512	2	0.6	16	86.7	0.65	0.04	1.5	2	2	Vital HR - 2L/m2	0.02	2.5	2.47	0.15	0.30	2.69
DWD 04	3.519	2	0.75	15	89.4	0.66	0.015	1.5	2	2	Vital HR - 2L/m2	0.02	2.5	1.77	0.20	0.35	2.88
DWD 05	19.969	2	0.63	35	55.7	1.95	0.025	1.5	2	2	Turf	0.04	2	1.80	0.45	0.60	3.90
DWD 06	4.063	2	0.6	10	105	0.71	0.025	0.6	2	2	Vital HR - 2L/m2	0.02	2.5	2.40	0.26	0.41	2.25
DWD 07	28.544	2	0.62	35	55.7	2.74	0.012	2	2	2	Turf	0.04	2	1.60	0.55	0.70	4.80

## DRAIN SIZING SUMMARY TABLE

DRAIN ID	DEPTH (m)	BASE WIDTH (m)	BATTER SLOPE (1 IN)	TEMPORARY DRAIN LINING			
DWD 01	0.49	0.60	2.9	Vital HR - L/m2			
DWD 02	0.40	1.50	2.0	Vital HR - 2L/m2			
DWD 03	0.40	1.50	2.0	Vital HR - 2L/m2			
DWD 04	0.40	1.50	2.6	Vital HR - 2L/m2			
DWD 05	0.60	1.50	2.0	Turf			
DWD 06	0.40	0.60	2.9	Vital HR - 2L/m2			
DWD 07	0.70	2.00	2.0	Turf			

- 1. DRAIN SIZING (INCLUDING DEPTH NOMINATED ABOVE) DOES NOT ACCOUNT FOR INSTALLATION OF CHECK DAMS. THE NOMINATED DRAIN LINING IS BASED ON CALCULATED VELOCITIES AND IS SUFFICIENT TO FUNCTION IN A NON-EROSIVE MANNER WITHOUT CHECK DAMS. IF CHECK DAMS ARE TO BE INSTALLED, DRAIN DIMENSIONS ARE TO BE INCREASED TO PROVIDE A MINIMUM ADDITIONAL 0.3m DEPTH.
- 2. TURF LINING ALTERNATIVE REPLACEMENTS INCLUDE GEOSPRAY, BLACK PLASTIC OR

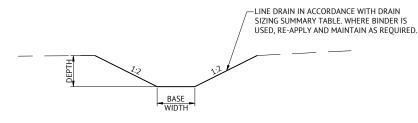




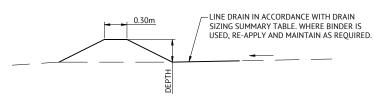
# CHECK DAM - TYPICAL DETAIL

## CHECK DAM SPACING - (WHERE ORDERED)

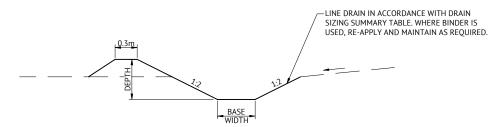
SWALE	SPACING INTERVAL (m)								
Warranton Machiner Control	200mm	300mm	400mm	500mm	600mm				
GRADE (%)	HIGH	HIGH	HIGH	HIGH	HIGH				
0.5	40	60	80	100	120				
1.0	20	30	40	50	60				
2.0	10	15	20	25	30				
3.0	6.7	10	13	17	20				
4.0	5.0	7.5	10	13	15				
5.0	4.0	6.0	8.0	10	12				
10.0	2.0	3.0	4.0	5.0	6.0				
15.0	1.3	2.0	2.7	3.3	4.0				



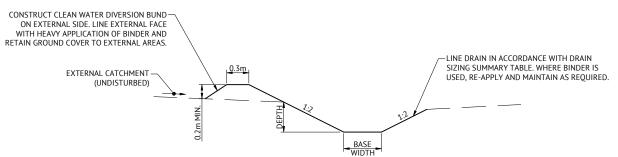
# TYPICAL CROSS SECTION SWALE DRAIN



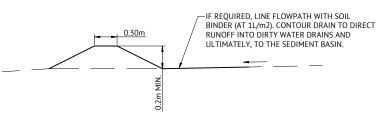
# TYPICAL CROSS SECTION **BUND DRAIN**



TYPICAL CROSS SECTION COMBINATION DRAIN



TYPICAL CROSS SECTION SWALE DRAIN WITH EXTERNAL DIVERSION



TYPICAL CROSS SECTION CONTOUR DRAIN

I CERTIFY THAT THIS EROSION AND SEDIMENT CONTROL DRAWING HAS BEEN DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL EROSION CONTROL ASSOCIATION

T. CLARK (CPESC No. 6089)

# FOR CONSTRUCTION ./03/2024 B ISSUED FOR CONSTRUCTION 0/10/2023 A ISSUED FOR APPROVAL DATE REV DESCRIPTION



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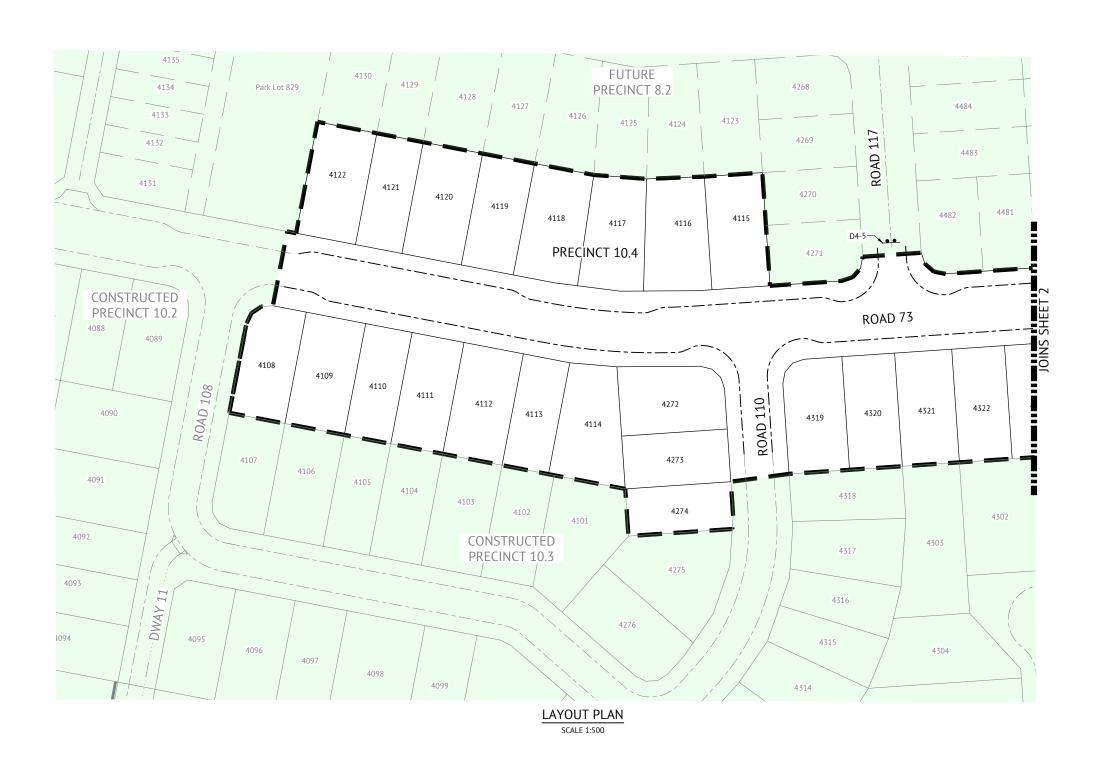
DESIGNED MARK DAVIS		SCALE
CHECKED ANDREW LANGDON		
PROJECT MANAGER NICK SOMERVILLE		
PROJECT DIRECTOR	PFD	
PATRICK BRADY	RPEQ 7112	ORIGINAL SHEET SIZE A1

CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	EROSION AND SEDIMENT CONTROL DRAIN DETAILS

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MIR-1004

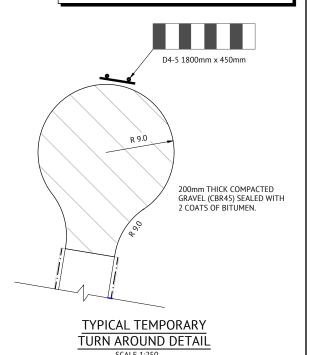




# LEGEND LOT BOUNDARIES STAGE BOUNDARIES

# NOTE

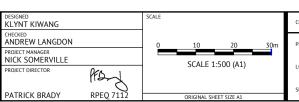
CONTRACTOR TO ENSURE THAT THE SURFACE WATER IN TURNAROUND IS DIRECTED TO KERB AND CHANNEL AND OVERLAND FLOW PATHS ARE CONSIDERED. CONTRACTOR TO NOTIFY SUPERINTENDENT SHOULD THIS CRITERIA NOT BE MET



MIR-1004

FOR CONSTRUCTION						
01/03/2024	В	ISSUED FOR CONSTRUCTION	KK	PB		
20/10/2023	Α	ISSUED FOR APPROVAL	KK	PB		
DATE	REV	DESCRIPTION	REC	APP		
		REVISIONS				





CLIENT	MIRVAC QLD PTY LTD
PROJECT	EVERLEIGH PRECINCT 10.4 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	TEMPORARY WORKS - ROADWORKS AND DRAINAGE LAYOUT PLAN - SHEET 1

