SHEET NO. SHEET TITLE  C001 COVER SHEET LOCALITY PLAN & DRAWII  C002 SURVEY SETOUT PLAN  C007 OVERDALL SETSUEES LANGUA	NG SCHEDULE
C002 SURVEY SETOUT PLAN	NG SCHEDULE
C007 OVERALL CERVICES L MOUS	
C003 OVERALL SERVICES LAYOUT	Г
C004 SAFETY IN DESIGN PLAN	
C100 ROADWORKS & DRAINAGE LAYOUT PLAN	- SHEET 1 OF 2
C101 ROADWORKS & DRAINAGE LAYOUT PLAN	- SHEET 2 OF 2
C200 EARTHWORKS LAYOUT PLAN - SHEE	T 1 OF 2
C201 EARTHWORKS LAYOUT PLAN - SHEE	T 2 OF 2
C202 EARTHWORKS NOTES AND DET	AILS
C203 EARTHWORKS SUBGRADE ROCK PREPARATION D	ETAILS - SHEET 1 OF 2
C204 EARTHWORKS SUBGRADE ROCK PREPARATION D	ETAILS - SHEET 2 OF 2
C300 ROADWORKS TYPICAL SECTIONS &	NOTES
C301 TEAL CIRCUIT LONGITUDINAL SEC	CTIONS
C302 TEAL CIRCUIT CROSS SECTIONS - SHE	EET 1 OF 4
C303 TEAL CIRCUIT CROSS SECTIONS - SHE	EET 2 OF 4
C304 TEAL CIRCUIT CROSS SECTIONS - SHE	EET 3 OF 4
C305 TEAL CIRCUIT CROSS SECTIONS - SHE	EET 4 OF 4
C306 DRIVEWAY 1 LONGITUDINAL AND CROS	
C307 DRIVEWAY 1 CROSS SECTION	
C308 DRIVEWAY 2 LONGITUDINAL AND CROS	
C309 OPAL ROAD LONGITUDINAL AND CROS	
C310 OPAL ROAD CROSS SECTION	
C311 GREENAWAY STREET LONGITUDINAL AND C	
C312 INTERSECTION DETAILS PLAN - SHE	
C313 INTERSECTION DETAILS PLAN - SHE	
C314 PAVEMENT MARKINGS AND SIGNAGE LAYOU	
C315 PAVEMENT MARKINGS AND SIGNAGE LAYOU	
C316 JADE PLACE LONGITUDINAL AND CROS	
C400 STORMWATER DRAINAGE DETAILS AI	
C401 STORMWATER DRAINAGE CATCHMENT PLAI	
C402 STORMWATER DRAINAGE CATCHMENT PLAI	
C403 STORMWATER DRAINAGE LONG SECTIONS	
C404 STORMWATER DRAINAGE LONG SECTIONS	
C405 STORMWATER DRAINAGE LONG SECTIONS	
C406 Q2 MINOR STORM CALCULATION	
C407 Q100 MAJOR STORM CALCULAT	
C408 STORMWATER STRUCTURE DET	
C500 SEWERAGE RETICULATION LOCALITY PL	
C500 SEWERAGE RETICULATION LOCALITY PL C501 SEWERAGE RETICULATION LAYOUT PLAN	
C502 SEWERAGE RETICULATION LAYOUT PLAN C503 SEWERAGE RETICULATION LONG SECTIONS	
C504 SEWERAGE RETICULATION LONG SECTIONS  SEWERAGE RETICULATION LONG SECTIONS	
C505 SEWERAGE RETICULATION LONG SECTIONS C506 SEWERAGE RETICULATION LONG SECTIONS	
C507 SEWERAGE RETICULATION NOTES AN	
C600 WATER RETICULATION LOCALITY PLAN	
C601 WATER RETICULATION LAYOUT PLAN S	
C602 WATER RETICULATION LAYOUT PLAN S	
C700 EROSION AND SEDIMENT CONTROL LAYOUT - CL	
C701 EROSION AND SEDIMENT CONTROL LAYOUT - BUL	
C702 EROSION AND SEDIMENT CONTROL LAYOUT - S'	
C703 EROSION & SEDIMENT CONTROL NOTES AND	
C704 EROSION & SEDIMENT CONTROL NOTES AND	
C800 TEMPORARY WORKS - ROADWORKS AND DRAIN	
C801 TEMPORARY WORKS - ROADWORKS AND DRAIN	NAGE - SHEET 2 OF 2

#### **GENERAL NOTES**

- ALL DIMENSIONS GIVEN ON THESE DRAWINGS ARE IN METRES UNLESS NOTED OTHERWISE
- OTHERWISE.

  2. ALL NEW WORK AND MATERIALS SHALL COMPLY CURRENT RELEVANT COUNCIL STANDARDS AND SPECIFICATIONS.

  3. ALL WORK SHALL BE JOINED
- ALL WORK SHALL BE JOINED NEATLY TO EXISTING CONSTRUCTION.
- 4. 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.
- 5. 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. 6. PROOF ROLLIING NOMINATED
- 6. PROOF ROLLING NOMINATED SHALL BE CARRIED OUT USING A SINGLE AXLE HIGHWAY TRUCK WITH A REAR AXLE LOAD NOT LESS THAN 10 TONNES AND TYRES INFLATED TO 550kPa OR APPROVED EQUIVALENT. EQUIPMENT LABOUR AND LOADING REQUIRED FOR PROOF ROLLING IS TO BE PROVIDED BY THE CONTRACTOR.
- 7. THESE NOTES SHALL APPLY TO ALL PORTIONS OF WORK. 8. THE DRAWINGS ARE TO BE READ
- 8. THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS. ANY POINT OF CONFLICT WILL BE RESOLVED BY THE SUPERINTENDENT.

#### 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

- 1. 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.
- 2. 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.
- 3. THE CONTRACTOR IS

  RESPONSIBLE TO PROTECT ALL

  EXISTING SERVICES FROM

  DAMAGE.
- 4. ANY WORKS DAMAGED AS A RESULT OF CONSTRUCTION ARE TO BE REINSTATED TO RELEVANT AUTHORITY'S REQUIREMENTS AT THE CONTRACTORS COST.
- 5. FINISHED SURFACE LEVELS ARE TO BE GRADED UNIFORMLY BETWEEN LEVELS INDICATED ON THE DRAWINGS.

## WORKPLACE HEALTH & SAFETY

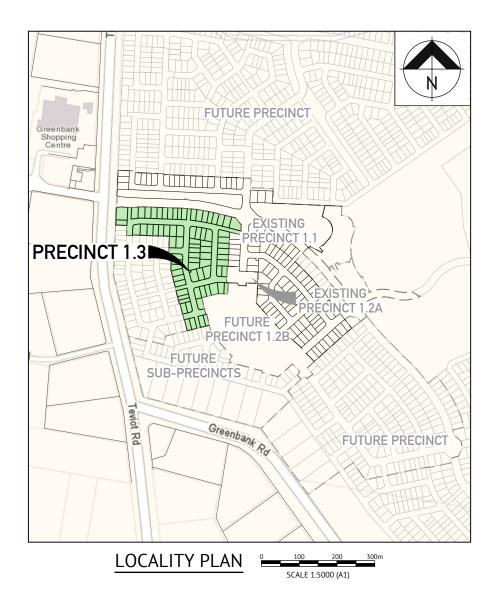
- 1. THE CONTRACTOR SHALL BE THE PRINCIPAL CONTRACTOR AS DESIGNATED BY THE WORK HEALTH AND SAFFTY ACT (2011).
- 2. THE CONTRACTOR SHALL
  PREPARE AND IMPLEMENT A
  WORKPLACE HEALTH AND
  SAFETY PLAN AS REQUIRED BY
  THE WORK HEALTH AND SAFETY
  ACT (2011).

#### SETOUT NOTES

- CO-ORDINATE SETOUT
   PROVIDED ON THESE DRAWINGS
   IS BASED ON A CO-ORDINATE
   BASE PROVIDED BY SAUNDERS
   HAVILL GROUP, REFERENCE
   MARKS AND CORRESPONDING
   CO-ORDINATES ARE PROVIDED
   ON DRAWING COO2.

   THE LEVEL DATUM FOR WORKS
- THE LEVEL DATUM FOR WORKS IS A.H.D (AUSTRALIAN HEIGHT DATUM).

# EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK FOR MIRVAC



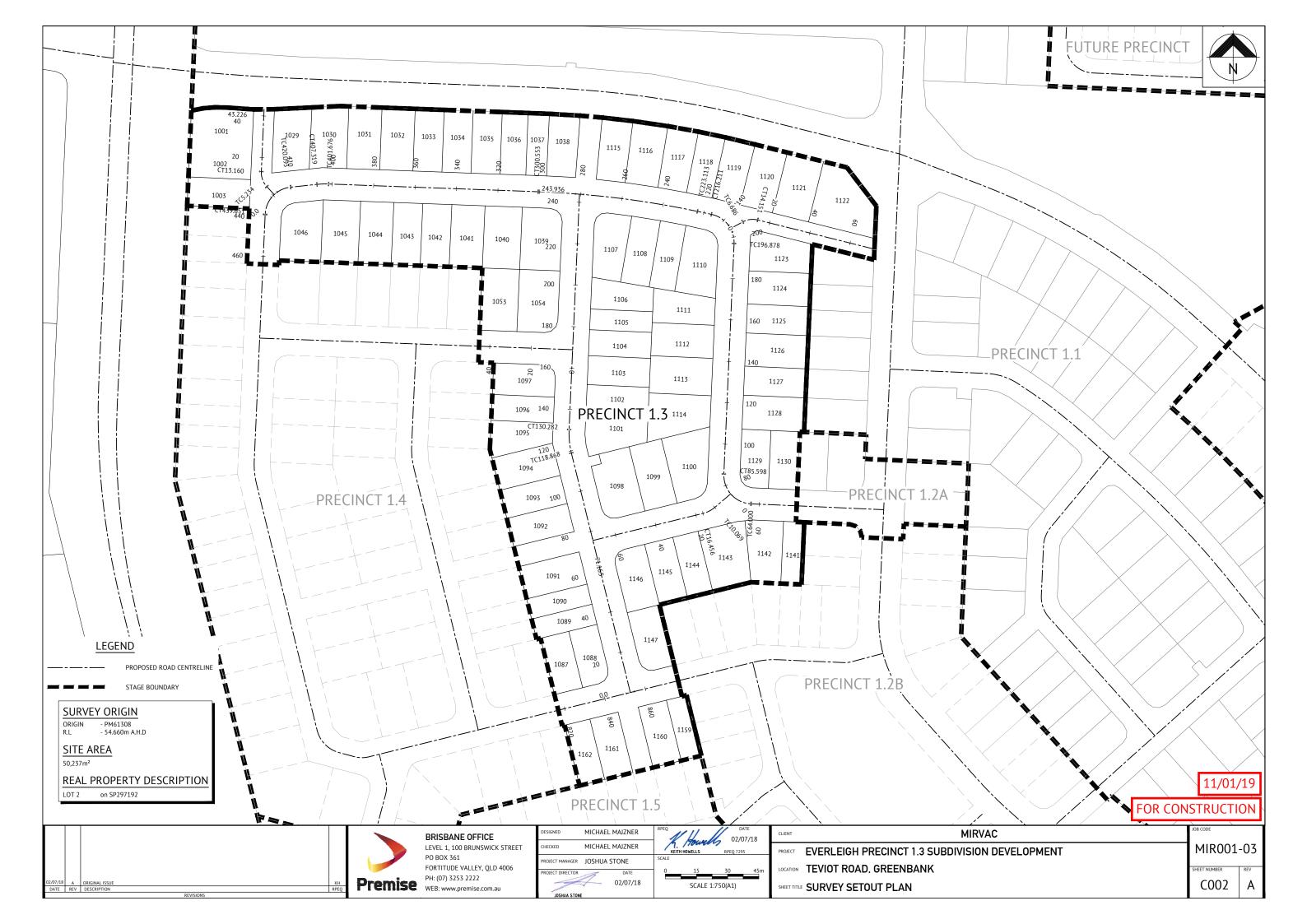


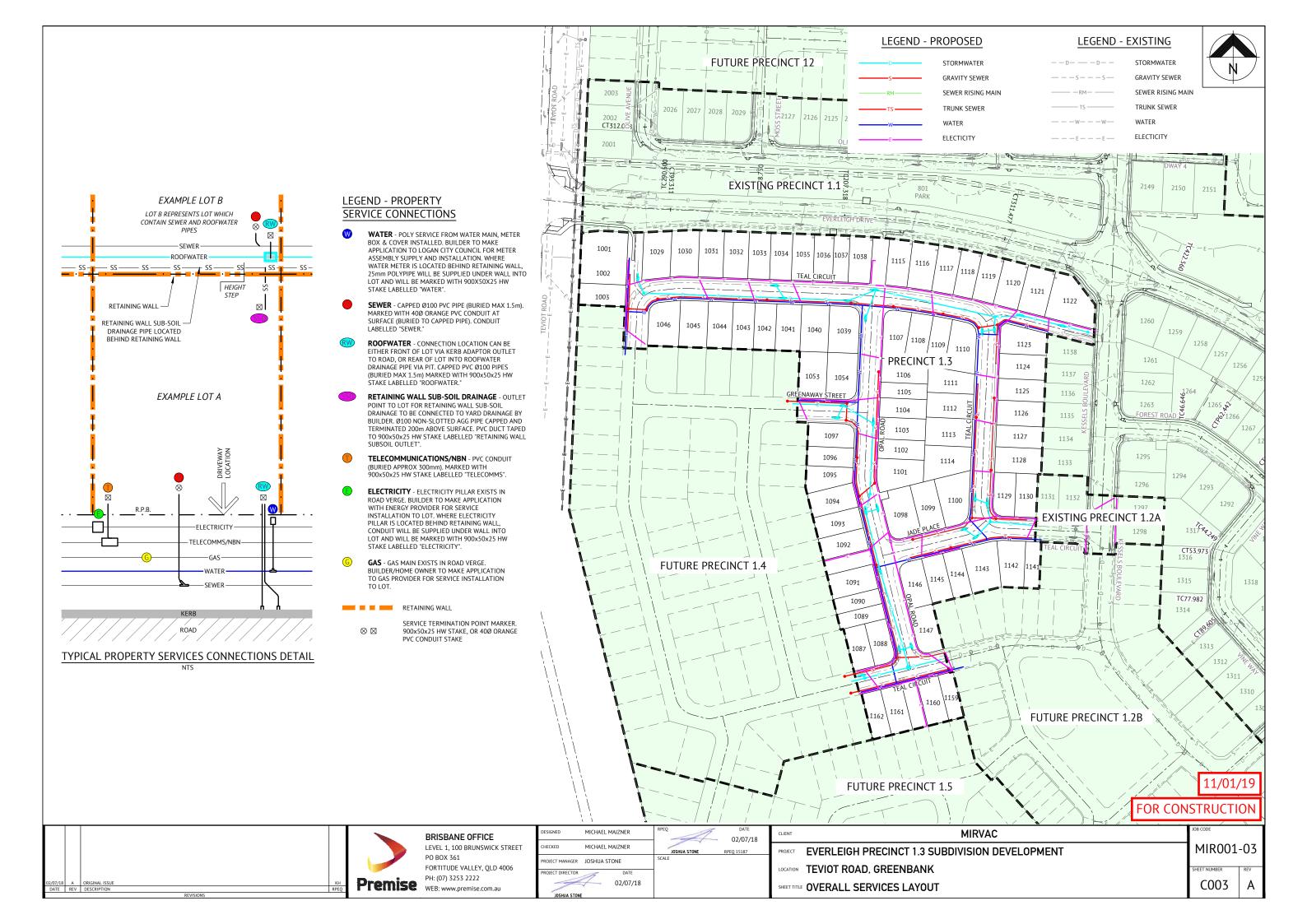
11/01/19 FOR CONSTRUCTION





REVISION B





#### **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 OLD.
- 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
- 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 THE SITE AND OF THE WORKS.

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 2 - MINOR 3 - MODERATE 4 - MAJOR 5 - CATASTROPHIC								
	A - ALMOST CERTAIN	MODERATE	HIGH	EXTREME	EXTREME	EXTREME			
00	B - LIKELY	MODERATE	HIGH	HIGH	EXTREME	EXTREME			
LIKELIHOOD	C - POSSIBLE	LOW	MODERATE	HIGH	EXTREME	EXTREME			
Ħ	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	DESCRIPTION	QUANTIFICATION GUIDE		
A - ALMOST CERTAIN	THE EVENT IS 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		

	DESIGN HAZARD SCHEDULE					
ITEM	ITEM DESIGN HAZARD POTENTIAL HAZARD		RISK	ELIMINATION / MINIMISATION OF HAZARD / RISK	RESIDUAL RISK	
D1	URBAN LAYOUT HAZARD	THE URBAN LAYOUT IS DESIGNED AROUND A PARTICULAR HAZARD: - INTERSECTION IS UNCLEAR WHICH ROAD HAS PRIORITY	HIGH	THE HAZARD HAS BEEN REDUCED/ELIMINATED BY: LINE MARKED INTERSECTION TO ENSURE IT IS CLEAR WHICH ROAD HAS PRIORITY - DESIGN VEHICLE SWEPT PATH CHECKED FOR COMPLIANCE	LOW	
D2	EXISTING UNDERGROUND / OVERHEAD SERVICES HAZARD	EXISTING UNDERGROUND AND/OR OVERHEAD SERVICES HAZARD EXIST ON SITE AND NEEDS TO BE REMOVED AND RELOCATED.	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	
D3		DEEP EXCAVATION IS REQUIRED TO INSTALL SEWER TO SERVICE STRUCTURE.	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	
D4	HIGH RETAINING WALLS	SOME AREAS OF WORKS CONTAIN HIGH RETAINING WALLS WHERE LAND MORPHOLOGY DICTATES.	HIGH	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	
D5	WATER BODIES	PROPOSED CONSTRUCTION WATER DAMS WILL BE PRESENT ON SITE.	MEDIUM	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	

	CONSTRUCTION HAZARD SCHEDULE				
ITEM	POTENTIAL HAZARD	POSSIBLE PREVENTATIVE ACTION			
C1	DEEP EXCAVATION HAZARD	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	UNDERGROUND ELECTRICAL, TELECOMMUNICATION, GAS AND WATER MAIN HAZARD	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	WORKS NEAR RAIL, AIRPORTS AND ROADS HAZARD	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.			

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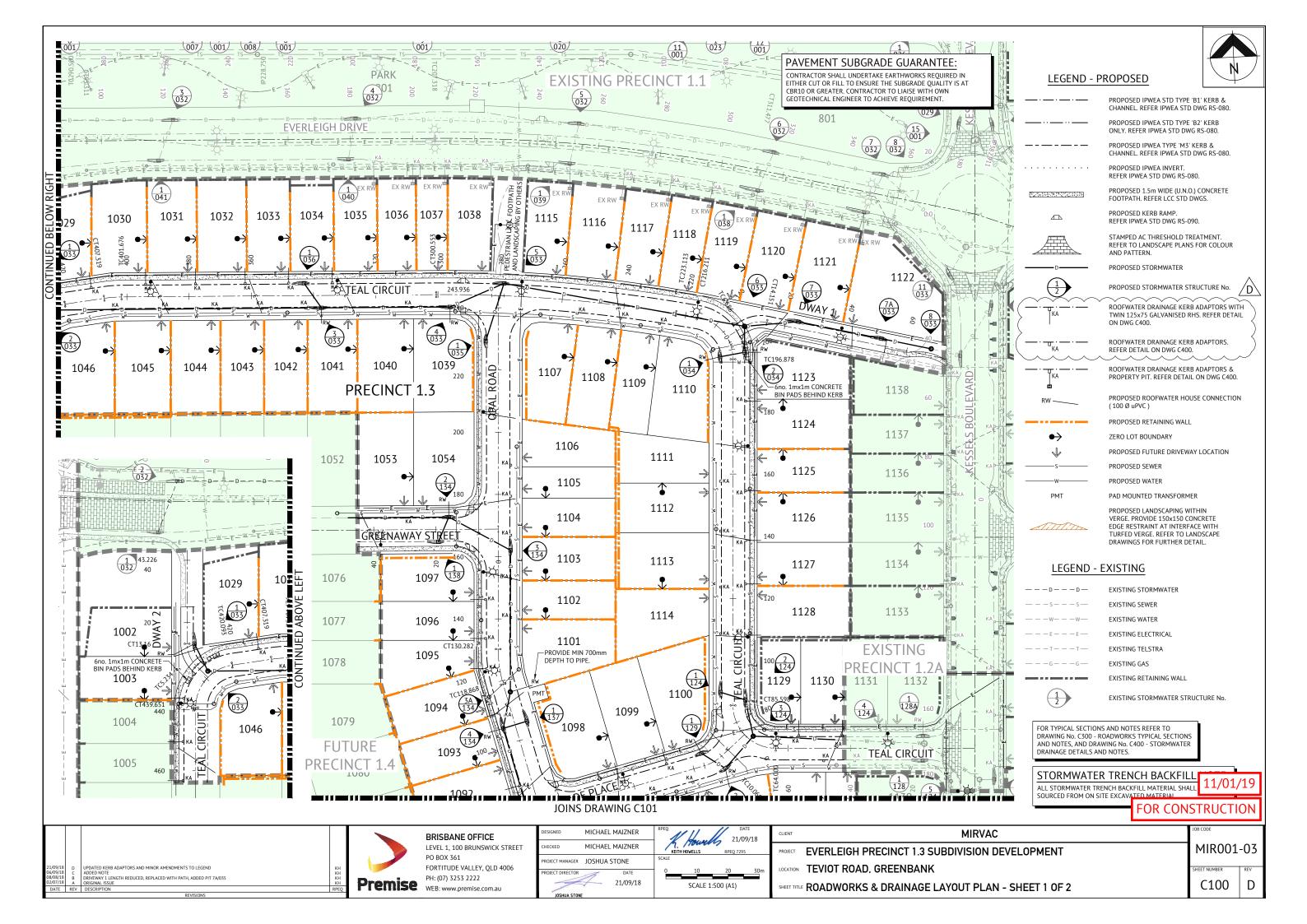


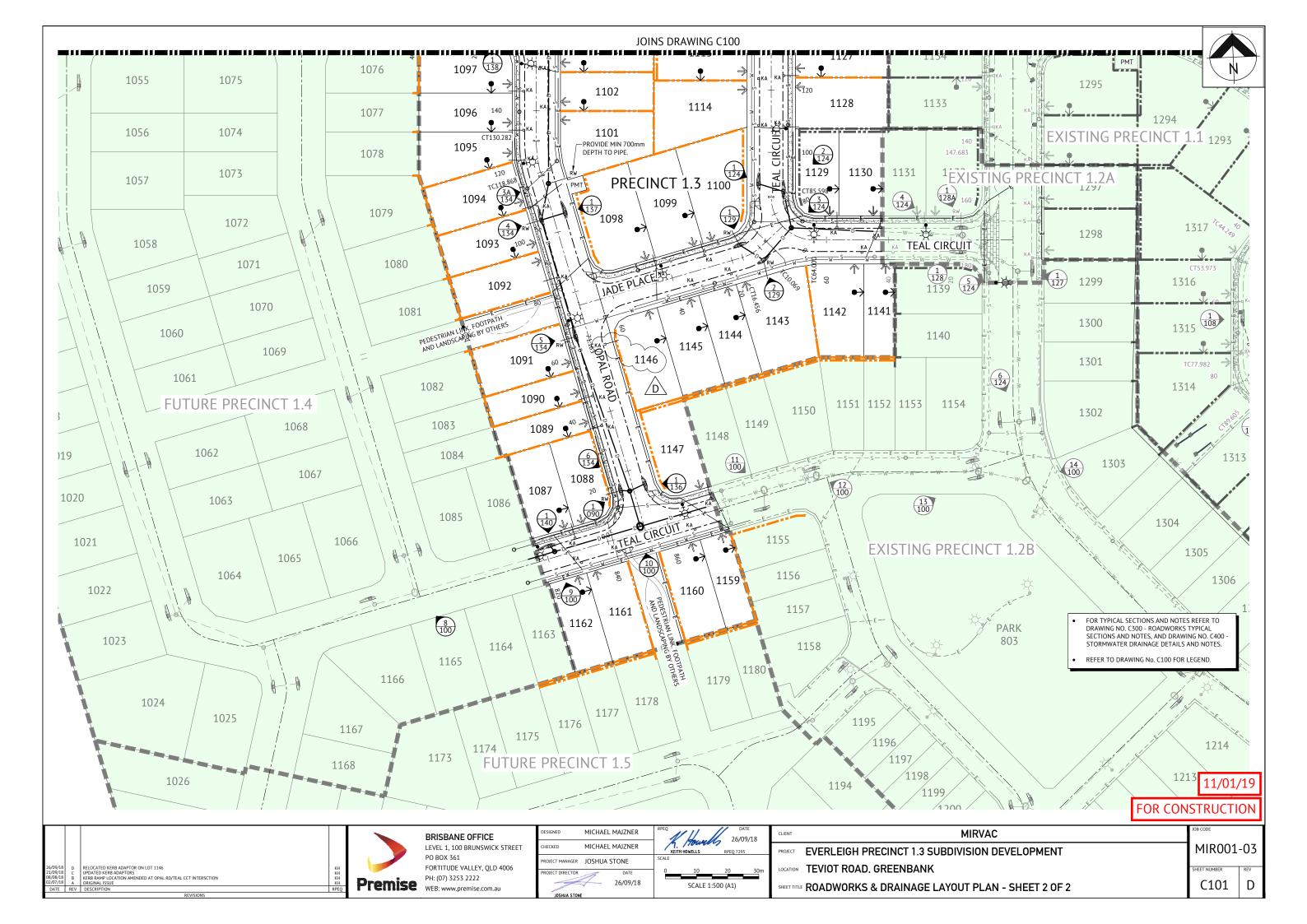
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

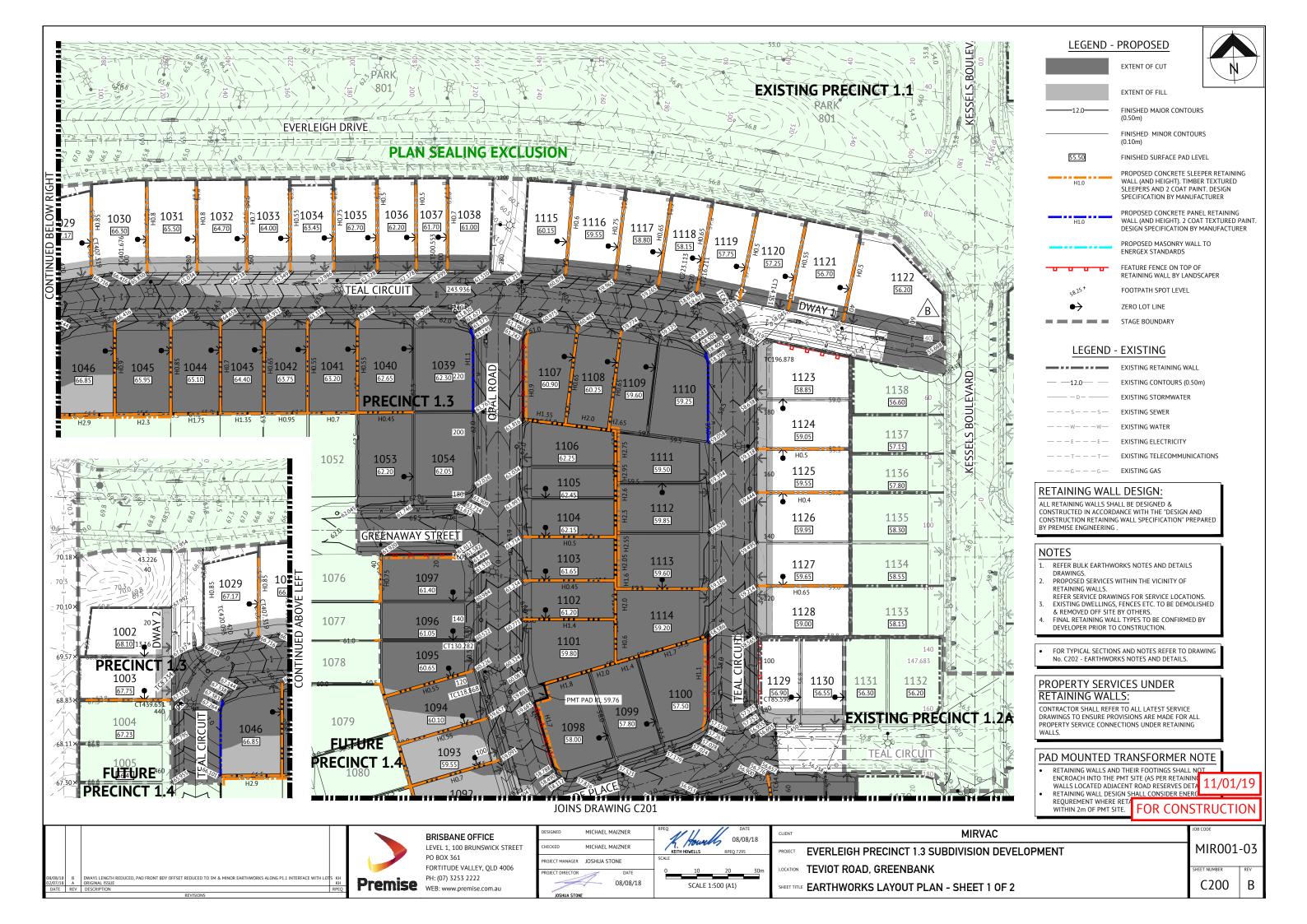
DESIGNED	MICHAEL MAJZNER	RPEQ ////	02/07/18
CHECKED	MICHAEL MAJZNER	KEITH HOWELLS	RPEQ 7295
PROJECT MANAGER	JOSHUA STONE	SCALE	
PROJECT DIRECTOR	DATE	1	
	02/07/18		
INSHIIA STONE	:		

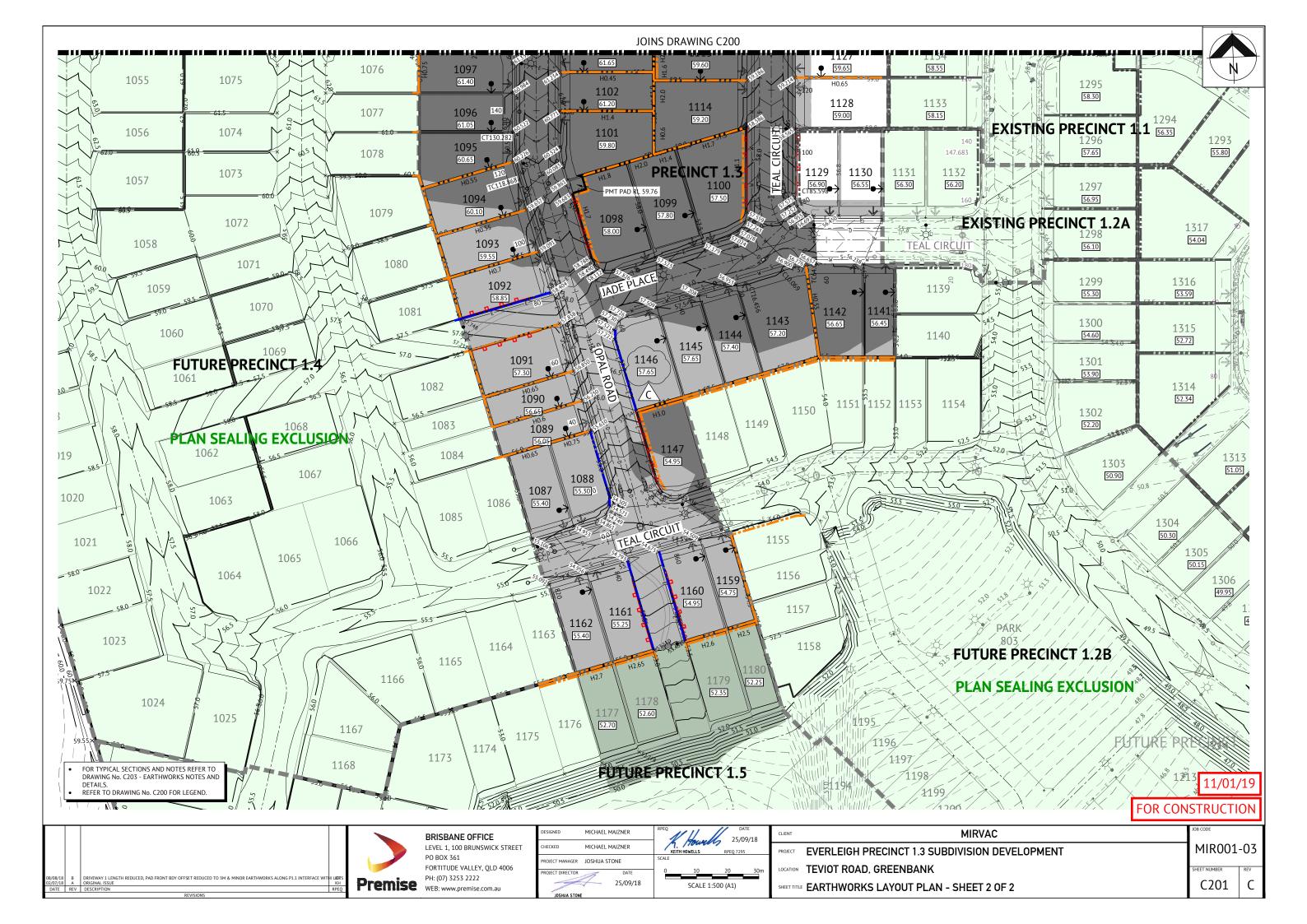
MIRVAC PROJECT EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE SAFETY IN DESIGN PLAN

MIR001-03









#### **NOTES**

- LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- FARTHWORKS DRAWINGS ARE TO BE READ IN CONJUNCTION WITH DRAWING C001, EROSION AND SEDIMENT CONTROL LAYOUT PLANS AND EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
- 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 ON
- ALL BATTERS ARE 1 IN 4 UNLESS SHOWN OTHERWISE

#### TESTING

THE SUPERINTENDENT MAY ORDER ADDITIONAL TESTS. REFER TO THE LOCAL AUTHORITIES SPECIFICATION FOR STANDARDS OF COMPACTION AND

#### **EARTHWORKS TESTING**

1 COMPACTION TESTS

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

QUALITY TESTS OF IMPORTED MATERIAL ARE REQUIRED AS SET OUT BY LOCAL AUTHORITY.

SUBGRADE TESTS
THE NUMBER AND LOCATION OF PAVEMENT SUBGRADE TESTS SHALL BE AS DETERMINED BY THE SUPERINTENDENT WHO SHALL RECOMMEND CBR VALUES TO BE USED IN ROAD PAVEMENT DESIGN. THE NUMBER AND TYPES OF CBR TESTS SHALL BE DETERMINED BY THE SOILSTESTING CONSULTANT TO BEST REPRESENT THE CONDITION OF THE SUBGRADE EXPECTED IN SERVICE.

- 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 POLLUTANTS IN NSW.
- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN CONTROLS TO ACHIEVE THE REQUIREMENTS OF ITEM 1 ABOVE.

#### **CONDUITS**

THE CONTRACTOR IS TO CONFIRM THE LOCATION OF SERVICE CONDUITS WITH THE SUPERINTENDENT PRIOR TO LAYING.

#### FILL MANAGEMENT

PLIBLIC ROAD

- ALL FILL MATERIAL WILL BE PLACED IN ACCORDANCE WITH THE APPROVED
- THE FILL MATERIAL WILL COMPRISE ONLY OF NATURAL FARTH 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 USE.
- 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, UNDERGROUND SERVICES ETC, SHOULD HAVE ALL DISTURBED SOIL CLEANED OUT AND BE BACKFILLED WITH COMPACTED SELECT FILL

ANY STRUCTURAL CLAY FILL SHOULD BE PLACED IN LOOSE LAYERS NOT GREATER THAN 200mm THICK AT A MOISTURE CONTENT IN THE RANGE -2% TO +3% OF THE STANDARD OPTIMUM MOISTURE CONTENT, AND BE COMPACTED TO A MINIMUM DRY DENSITY RATIO OF 98% UNDER STANDARD COMPACTION AS PER (AS1289 5.1.1/5.2.1). CLAY FILL SHOULD BE COMPACTED USING A MINIMUM 10 TONNE VIBRATING PADEOOT ROLLER, MEASURES SHOULD BE ADOPTED TO ENSURE THAT CLAY FILL MATERIAL IS NOT ALLOWED TO DRY OUT PRIOR TO THE PLACEMENT OF SUCCEEDING LAYERS OF FILL AND FINAL COVERING WITH BUILDING SLABS AND ROAD PAVEMENTS

ANY STRUCTURAL, FREE DRAINING SAND FILL SHOULD BE PLACED IN LOOSE LAYERS NOT GREATER THAN 200mm THICK, FLOODED, IF NECESSARY, AND COMPACTED TO A MINIMUM DENSITY INDEX OF 70% AS PER AS1289 5.5.1 LISING A STATIC SMOOTH ROLLER DRUM NOT LESS THAN 10 TONNE IN STATIC WEIGHT

- THE PLACEMENT OF ALL STRUCTURAL FILL TO BE INSPECTED, TESTED AND CERTIFIED BY A GEOTECHNICAL ENGINEER TO A LEVEL 1 REQUIREMENT DURING THE EARTHWORKS OPERATIONS TO ENSURE THAT ALL FILL IS PLACED IN A 'CONTROLLED MANNER', IN ACCORDANCE WITH AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'.
- 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 DRG. No. C701
- ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK

## TOPSOIL RESPREAD REQUIREMENTS

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

- ROAD VERGE FRONTING PARK AND OPEN SPACE AREAS
  CIVIL CONTRACTOR TO CONSTRUCT TO LEVEL 100mm BELOW FSL. (LANDSCAPE CONTRACTOR TO SPREAD 100mm OF AMELIORATED TOPSOIL).
- BIORETENTION BASIN BATTERS CIVIL CONTRACTOR TO CONSTRUCT TO LEVEL 300mm BELOW FSL. (LANDSCAPE CONTRACTOR TO SPREAD 300mm OF AMELIORATED TOPSOIL).
- ALLOTMENTS
  CIVIL CONTRACTOR TO RESPREAD 100mm TOPSOIL THICKNESS TO

CONTRACTOR SHALL SUPPLY AND LAY TURE TO ROAD VERGES TO FULL WIDTH OF ROAD RESERVE. WHERE VERGE IS LOCATED ADJACENT PARK AND OPEN SPACES, TURF WILL BE SUPPLIED AND INSTALLED BY LANDSCAPING CONTRACTOR.

CONTRACTOR SHALL SUPPLY AND LAY TURF TO ROAD VERGES TO FULL WIDTH OF ROAD RESERVE. WHERE VERGE IS LOCATED ADJACENT PARK AND OPEN SPACES, TURF WILL BE SUPPLIED AND INSTALLED BY LANDSCAPING CONTRACTOR.



**EARTHWORKS TOLERANCES** 

**CUT BATTERS** -150mm +300mm -300mn +0mm EARTHWORKS IN PARKS (2) -100mm

(1) NOT LESS THAN SPECIFIED LEVELS WHERE ADJACENT DRAINAGE FEATURES. (2) CONFIRM WITH CONTRACT WHETHER TOPSOIL RESPREAD BY LANDSCAPER

-FINISHED SURFACE LEVEL (FINISHED PAD LEVEL)

-POSSIBLE CIVIL FINISHED COMPACTED EARTHWORKS LEVEL PRIOR TO RESPREAD

TYPICAL INTER ALLOTMENT RETAINING WALL TOP OF WALL

SETOUT AND END DETAIL

PRIVATE

(ENSURE PAD IS FREE DRAINING)

<u>0.35m</u> TYPICAL RETAINING WALL DETAIL

STEEL POST TO BE POSITIONED

CENTRAL OVER PROPERTY

PRIVATE

ALLOTMENT

STEEL POST TO BE POSITIONED CENTRAL OVER PROPERTY

PRIVATE

ALLOTMEN<sup>3</sup>

PRIVATE

ALLOTMENT

BOUNDARY (U.N.O.)

BOUNDARY (U.N.O.)

PRIVATE

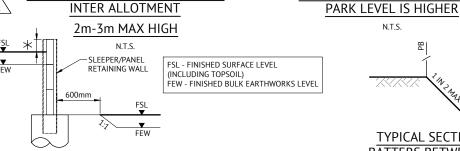
ALLOTMENT

PRIVATE

RETAINING WALL

RETAINING WALL

ALLOTMENT



TYPICAL RETAINING WALL TOP AND BOTTOM FINISHING LEVEL DETAIL

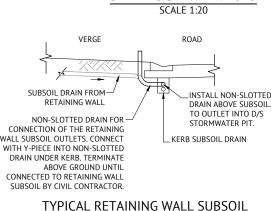
LOWER ALLOTMENT FINISHED SURFACE LEVEL

TYPICAL RETAINING WALL DETAIL

TYPICAL RETAINING WALL DETAIL

INTER ALLOTMENT

0.4m-2m MAX HIGH



WHERE WALL IS RETAINING PRIVATE ALLOTMENT PROVIDE TYPICALLY

ACCOMMODATE FUTURE BUILDING SLAB AND TOP SOIL LEVELS. REFER TO TYPICAL RETAINING WALL LOT FINISHING DETAIL THIS SHEET.

PUBLIC ROAD

RETAINING WALL

PUBLIC PARK

-RETAINING WALL

100mm ADDITIONAL HEIGHT ABOVE FINISHED PAD LEVEL TO

TYPICAL RETAINING WALL DETAIL

ROAD ADJACENT TO LOT WHERE

ROAD LEVEL IS HIGHER

PARK ADJACENT TO LOT WHERE

0.50m WHEN ADJACENT

PRIVATE

ALLOTMENT

ALLOTMENT

PUBLIC ROAD

PEDESTRIAN I INK

TYPICAL RETAINING WALL SUBSOIL OUTLET TO ROAD

LOT LEVEL IS HIGHER

TYPICAL RETAINING WALL DETAIL

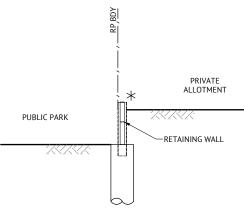
ROAD ADJACENT TO LOT WHERE

PUBLIC ROAD

PRIVATE

ALLOTMENT

-RETAINING WALL



TYPICAL RETAINING WALL DETAIL PARK ADJACENT TO LOT WHERE LOT LEVEL IS HIGHER

ALLOTMENT INSTALL MARKER POST LABELLED CONNECT TO ROOFWATER PIPEWORK RETAINING WALL PRIVATE **ALLOTMENT** IUNCTION TO ION-SLOTTED SUBSOIL DRAIN OUTLET FROM THE MAIN RETAINING WALL DRAINAGE SUBSOIL INTO INDIVIDUAL LOT FOR CONNECTION TO FUTURE HOUSE ROOFWATER DRAINAGE BY BUILDER. TERMINATE SUBSOIL PIPE 200mm ABOVE FSL WITH CAP. TO BE INSTALLED IN REAR CORNER OF ALL ALLOTMENTS LOCATED

BELOW A RETAINING WALL.

TYPICAL RETAINING WALL SUBS 11/01/19 OUTLET TO AL N.T.: FOR CONSTRUCTION

**Premise** 

BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361

FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222 WEB: www.premise.com.au

MICHAEL MAJZNER 10/01/19 MICHAEL MAJZNER DIECT MANAGER IOSHUA STONE 10/01/19

(FINISHED PAD LEVEL)

CONCRETE SLEEPER OR PANEL RETAINING WALL

TOP OF RETAINING WALL LEVEL

ALLOTMENT PAD LEVEL PLUS 100mm

**MIRVAC EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT** 

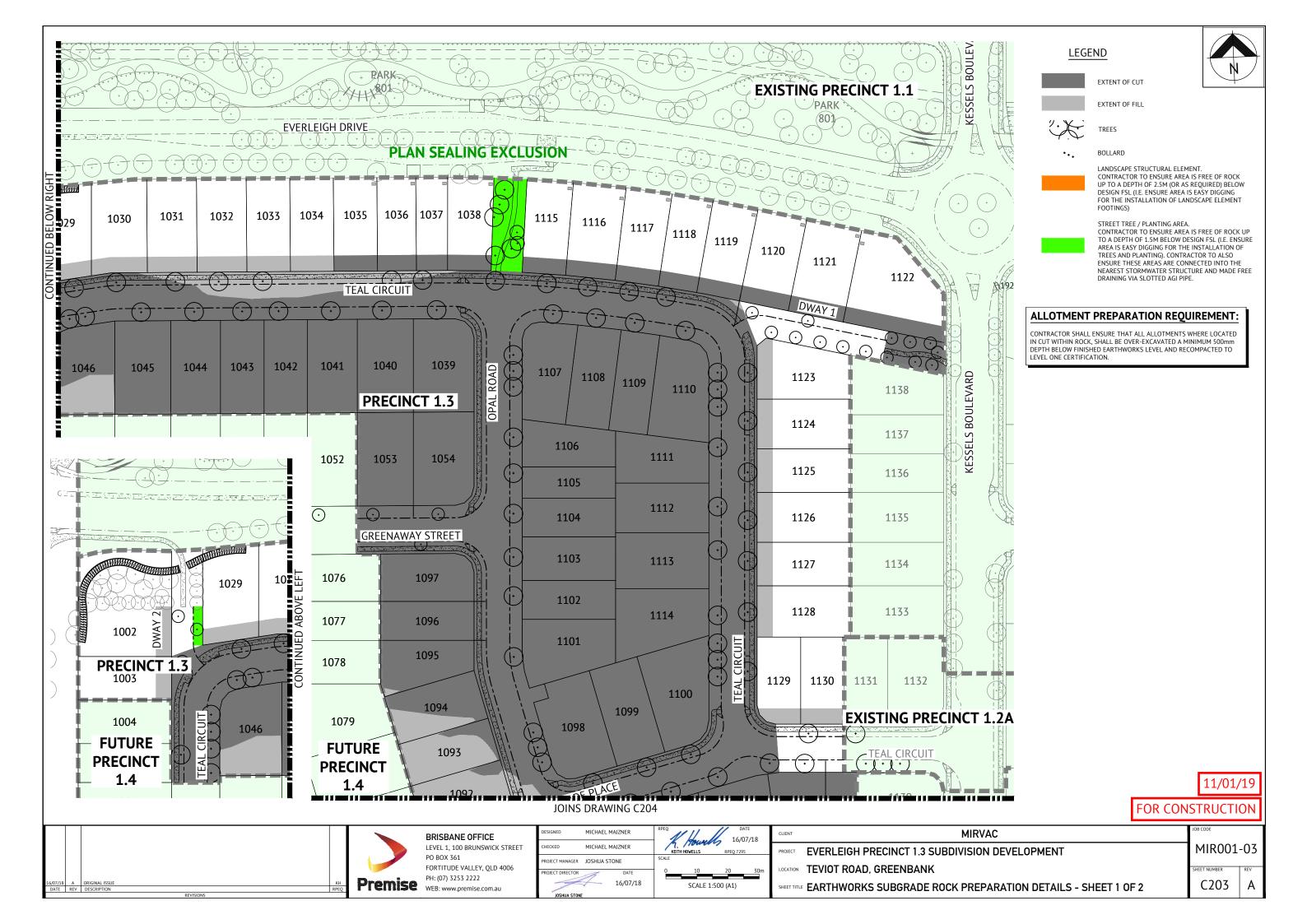
TYPICAL SECTION FOR

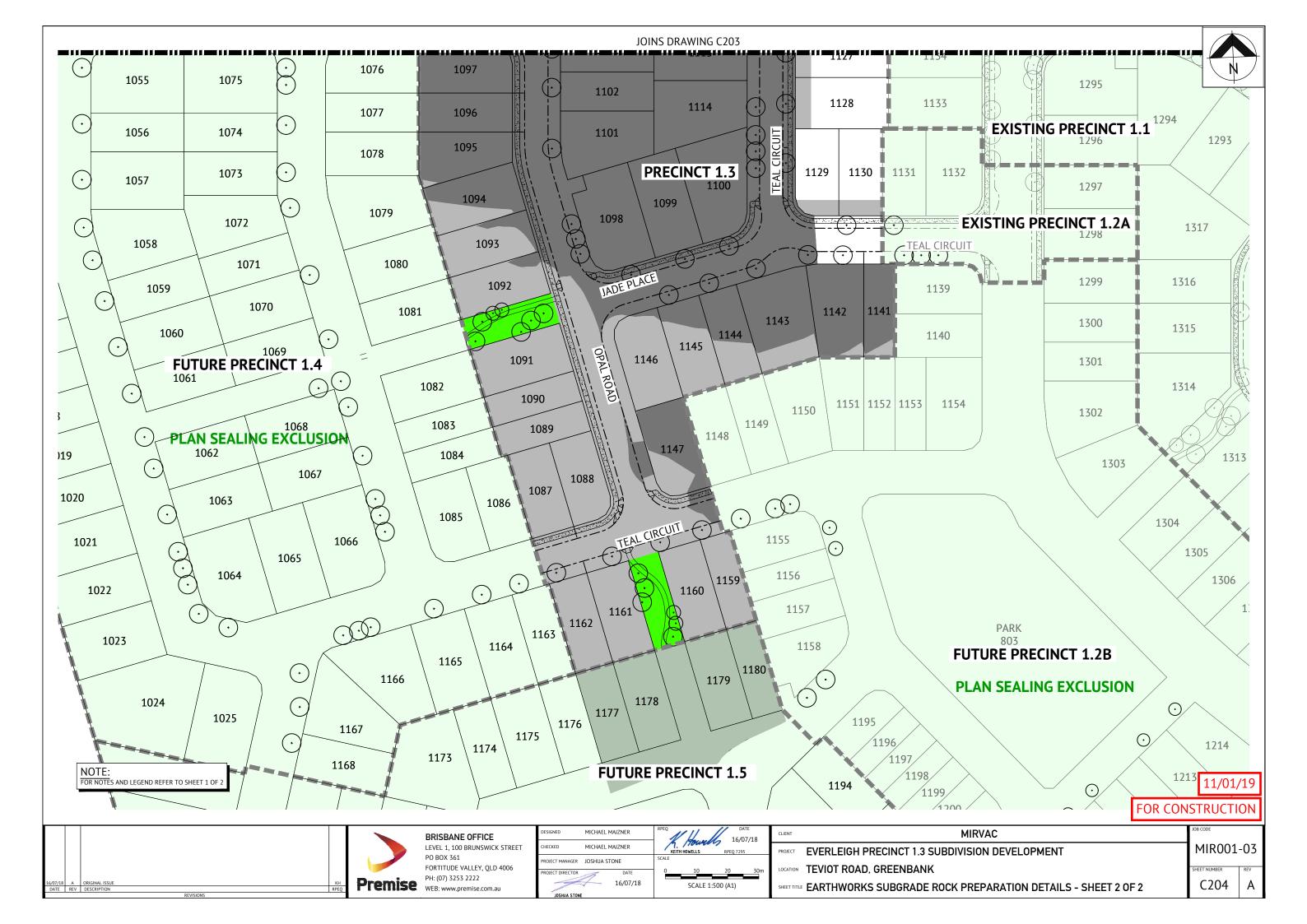
**BATTERS BETWEEN LOTS** 

LOCATION TEVIOT ROAD, GREENBANK

SHEET TITLE EARTHWORKS NOTES AND DETAILS

MIR001-03





#### NOTES

- 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.
   KACEY GALV. STEEL KERB ADAPTORS ARE TO BE INSTALLED TO THE REQUIREMENTS OF THE LOCAL COUNCILS STANDARD DRAWINGS AND SPECIFICATIONS.
- 13. ALL LOTS SHOWN BOXED TO HAVE ROOFWATER FOOTPATH CROSSINGS TO KERB. CROSSINGS ARE TO BE 88.9 DIA. GALV. CHS.TO KACEY KERB ADAPTOR.
- 14 ALL TEMPORARY ROOFWATER OLITLETS TO BE EXCAVATED AT 1 IN 200 TO NATURAL SURFACE
- 15. 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
- 16. ALL ROOFWATER PIPES CROSSING CONCRETE FOOTPATHS ARE TO BE INSTALLED PRIOR TO CONSTRUCTION OF CONCRETE FOOTPATHS.
- 17. HAZARD MARKERS (D4-4A) TO BE PLACED AT THE END OF NEW WORKS AS DIRECTED BY
- 18. SITE CBR VALUE AND PAVEMENT DESIGN AND DEPTHS TO BE VERIFIED WITH CBR TESTS PRIOR TO CONSTRUCTION.
- 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 PAVEMENT 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.

#### **CONCRETE PAVEMENT**

- THE CONCRETE PAVEMENT HAS BEEN DESIGNED BASED ON A CBR 5 AND IS SUBJECT TO CONFIRMATION UPON RECEIPT OF CBR TEST RESULT AT TIME OF CONSTRUCTION
- CONCRETE PAVEMENT SPECIFICATION

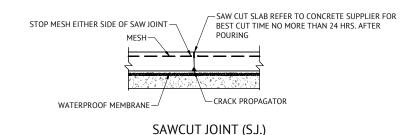
COMPRESSIVE STRENGTH: 25 MPa @ 28 DAYS 3.5 MPa @28 DAYS MAXIMUM AGGREGATE SIZE: 20mm

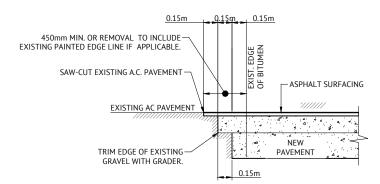
MESH: SL72, 50 TOP COVER 100mm MIN CBR 15 BEDDING BEDDING:

- MATERIALS AND WORKMANSHIP SHALL COMPLY WITH AS1379, AS3600 AND AS3610.
- PROJECT ASSESSMENT OF STRENGTH IN ACCORDANCE WITH AS3600 SHALL BE ADOPTED FOR SAMPLING AND TESTING. THE CONTRACTOR SHALL PAY ALL TESTING COSTS.
- CONSTRUCTION JOINTS SHALL BE MADE ONLY AT APPROVED LOCATIONS.
  ALL JOINTS ARE TO BE SEALED JUST PRIOR TO HANDOVER WITH DOW CORNING '888' SEALANT INSTALLED
- IN ACCORDANCE WITH MANUFACTURING RECOMMENDATIONS.
  JOINTS ARE TO BE INSPECTED AND SEALANT REGULARLY REPLACED IF REOUIRED.
- DIMENSIONAL TOLERANCES OF AS3600, MODIFIED BY AS3610, SHALL APPLY UNLESS OTHERWISE NOTED. SLAB SURFACE FLATNESS TOLERANCE SHALL BE 5mm MAXIMUM DEVIATION FOR A 3m STRAIGHT EDGE.
- CONCRETE PAVEMENTS ARE TO BE BROOM FINISHED. SLAB THICKNESSES NOTED ARE EXCLUSIVE OF APPLIED FINISHES
- 10. CURE ALL CONCRETE BY AN APPROVED METHOD FOR 7 DAYS AFTER HARDENING. PVA AND RESIN BASED CURING COMPOUNDS SHALL NOT BE USED

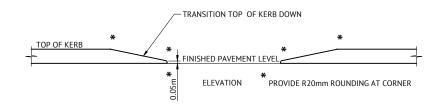
#### CONCRETE PAVEMENT MAINTENANCE NOTES

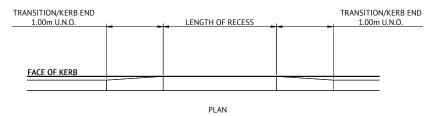
- NOTE THAT UPKEEP AND REPLACEMENT OF SEALANTS IS PART OF THE ONGOING MAINTENANCE
- REQUIREMENTS FOR THIS SITE.
  NOTE THAT SHRINKAGE CRACKS OF WIDTH < 1.5mm MAY OCCUR IN CONCRETE PAVEMENTS WITHIN 12 MONTHS OF INITIAL CASTING
- NOTE THAT THE PAVEMENT WILL NOT BE MAINTENANCE FREE FOR ITS DESIGN LIFE.
- INSPECT FLUSH SIDE DRAINS AND SUBSOIL DRAINS EVERY 12 MONTHS





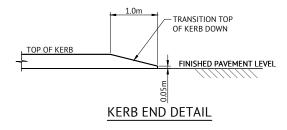
## TYPICAL PAVEMENT CUT-BACK DETAIL





NOTE: REFER LAYOUT PLAN FOR TRANSITION RECESS & KERB END LOCATIONS & LENGTHS

### TYPICAL KERB RECESS / END DETAIL



#### **CONCRETE REQUIREMENTS**

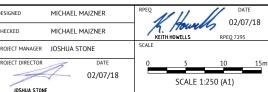
ITEM	28 DAY STRENGTH	CONCRETE CYLINDER TEST	TESTING FREQUENCY
KERB & CHANNEL	N32	REQUIRED	1 TEST PER 300m
VEHICULAR CROSSINGS	N25	REQUIRED	1 TEST PER CROSSING
BIKEWAYS	N25	REQUIRED	1 TEST PER 300m
FOOTPATHS	N25	REQUIRED	1 TEST PER 300m
CONCRETE CHANNELS	N25	REQUIRED	1 TEST PER 150m <sup>2</sup>
STRUCTURES	AS DESIGN	REQUIRED	AS DIRECTED
ROOFWATER MH'S	N20	NOT REQUIRED	
STORMWATER MH'S	N25	NOT REQUIRED	
PRECAST MANHOLE ROOF SLABS	N40	NOT REQUIRED	
GULLY PITS			
PRECAST LINTEL	N30	NOT REQUIRED	
OTHER	N25	NOT REQUIRED	

11/01/19

FOR CONSTRUCTION

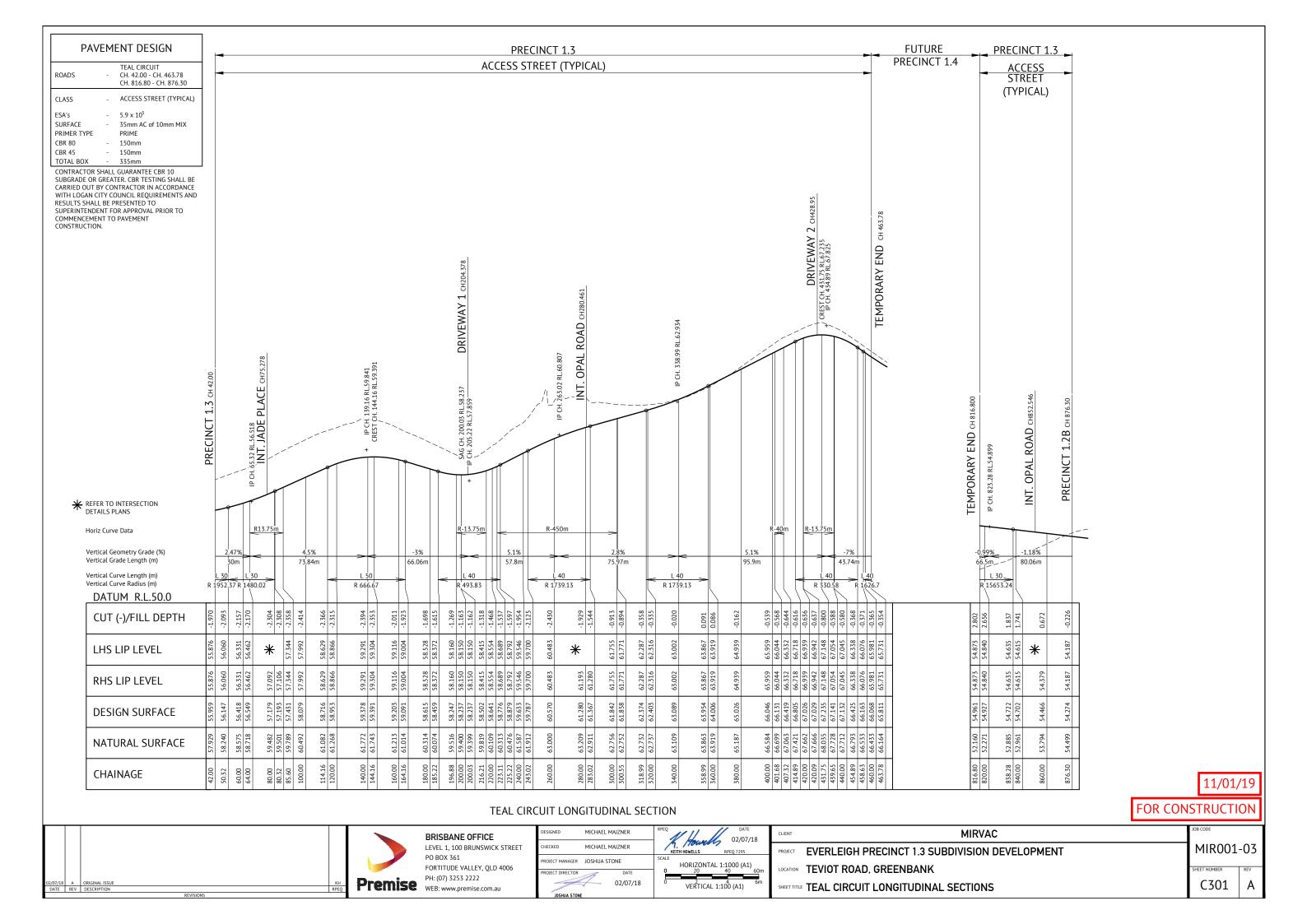


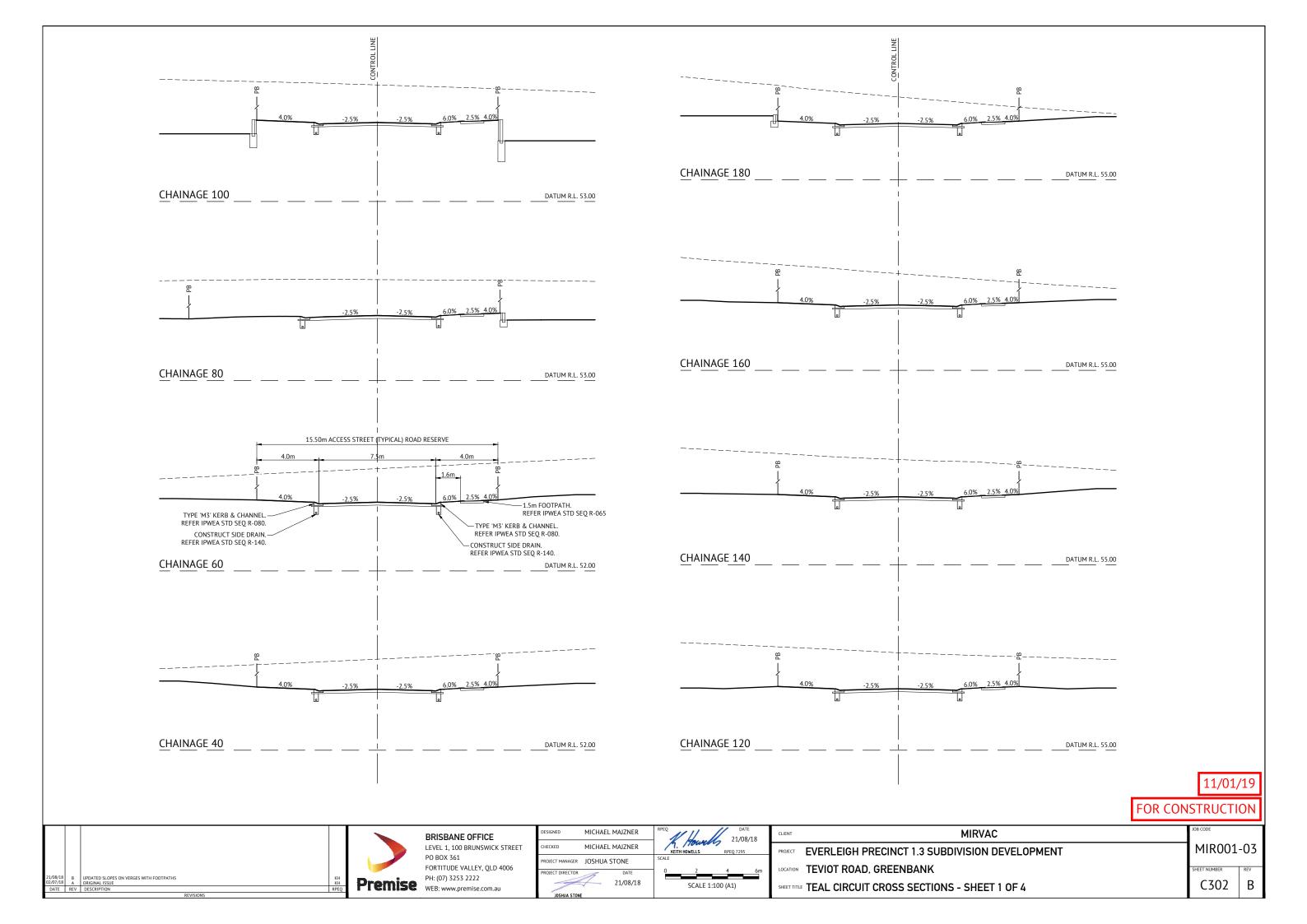
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

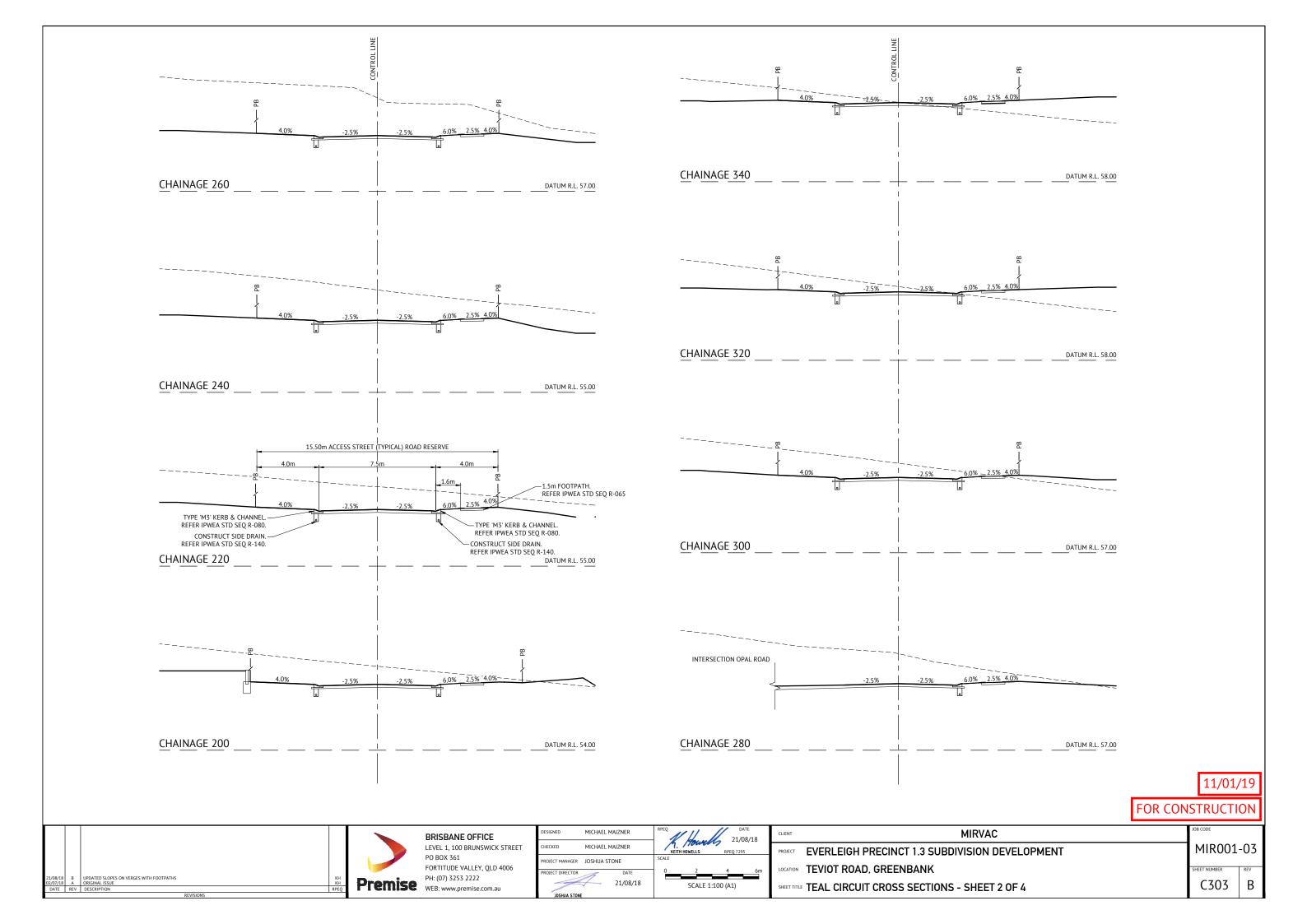


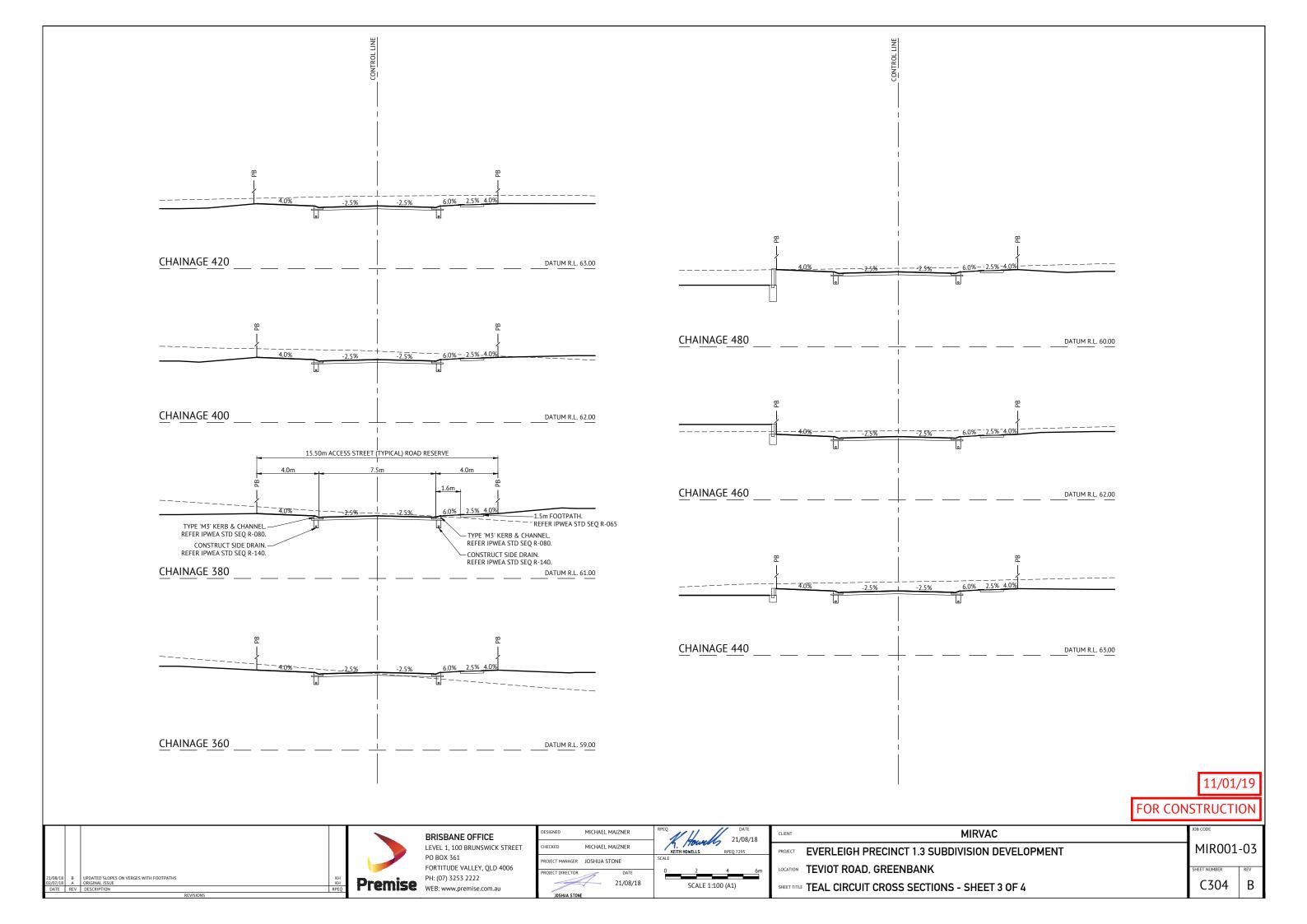
	CLIENT	MIRVAC
	PROJECT	EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT
m	LOCATION	TEVIOT ROAD, GREENBANK
	SHEET TITL	ROADWORKS TYPICAL SECTIONS & NOTES

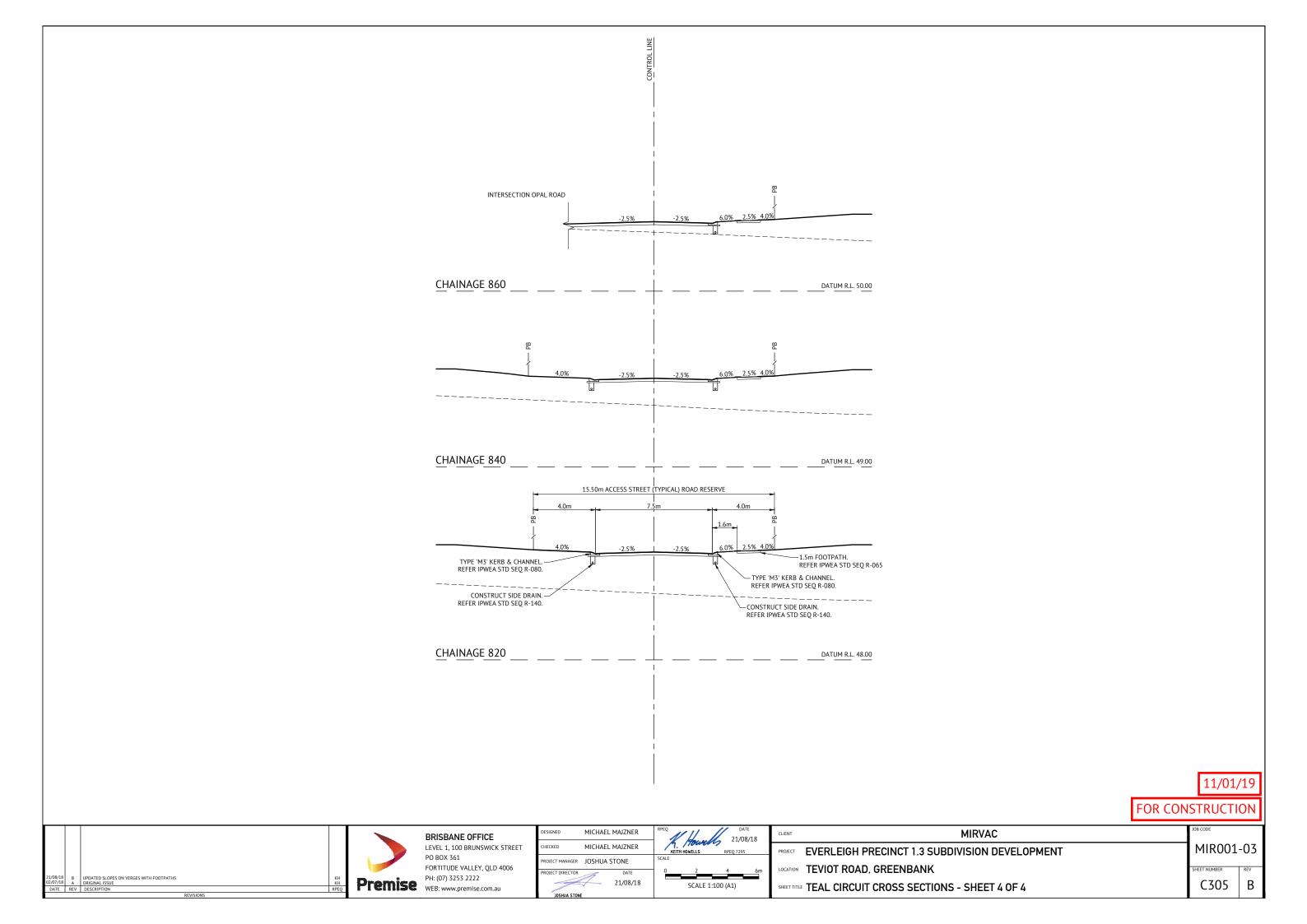
MIR001-03 C300

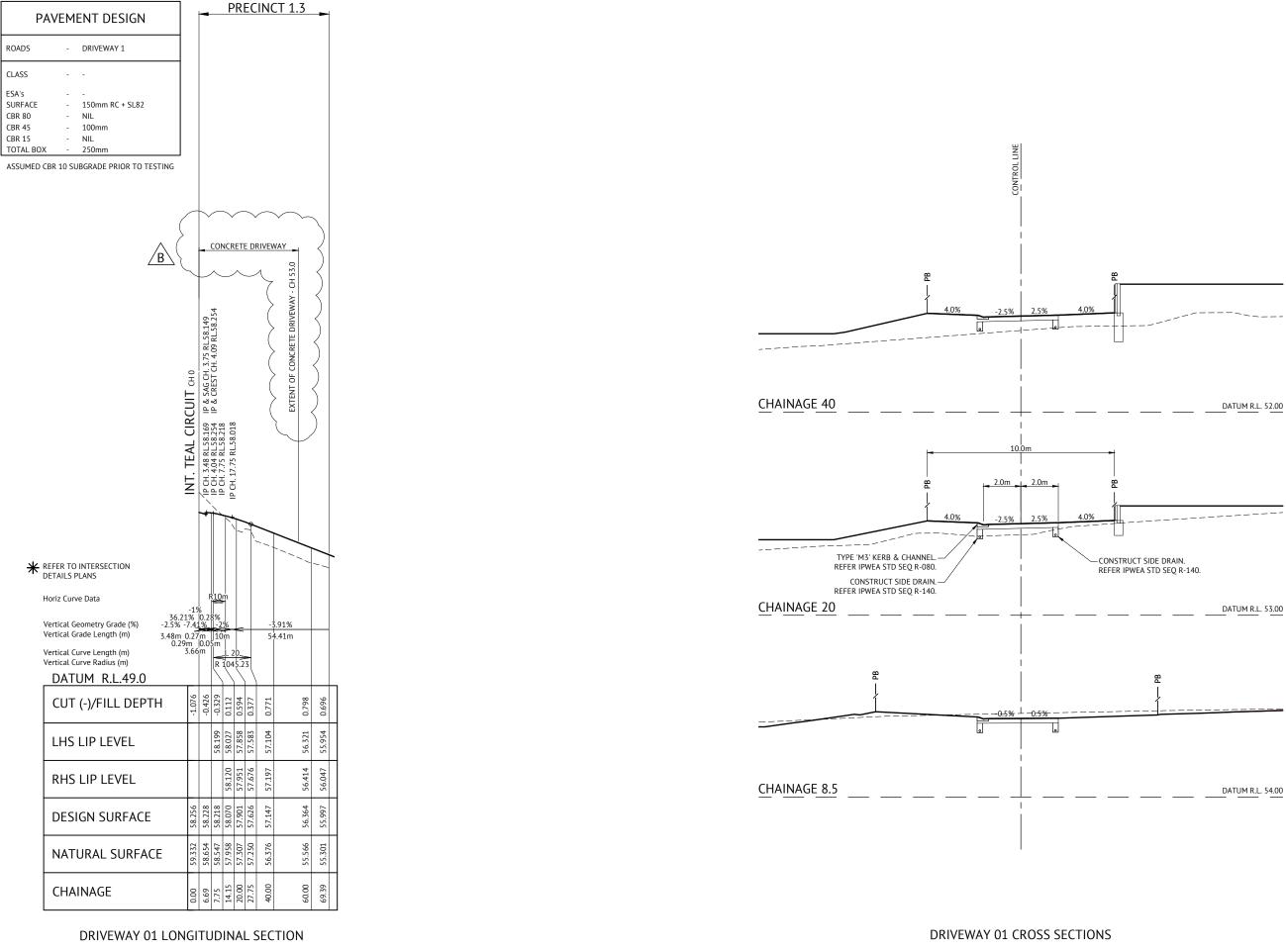












FOR CONSTRUCTION

C306

11/01/19

MIRVAC MIR001-03 PROJECT EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK

SHEET TITLE DRIVEWAY 1 LONGITUDINAL AND CROSS SECTIONS

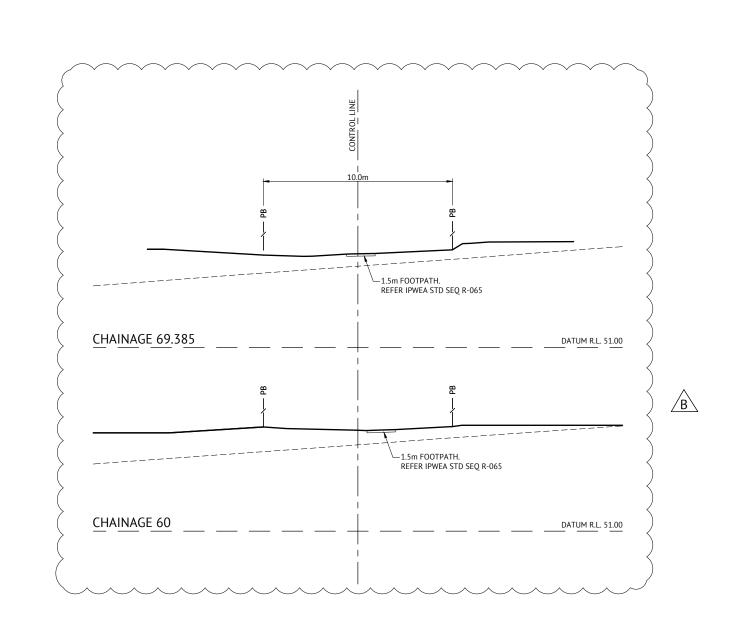
Premise PH: (07) 3255 2222
WEB: www.premise.com.au

BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

MICHAEL MAJZNER ROJECT MANAGER JOSHUA STONE 08/08/18

MICHAEL MAJZNER

08/08/18 HORIZONTAL 1:1000 (A1) VERTICAL 1:100 (A1)



FOR CONSTRUCTION

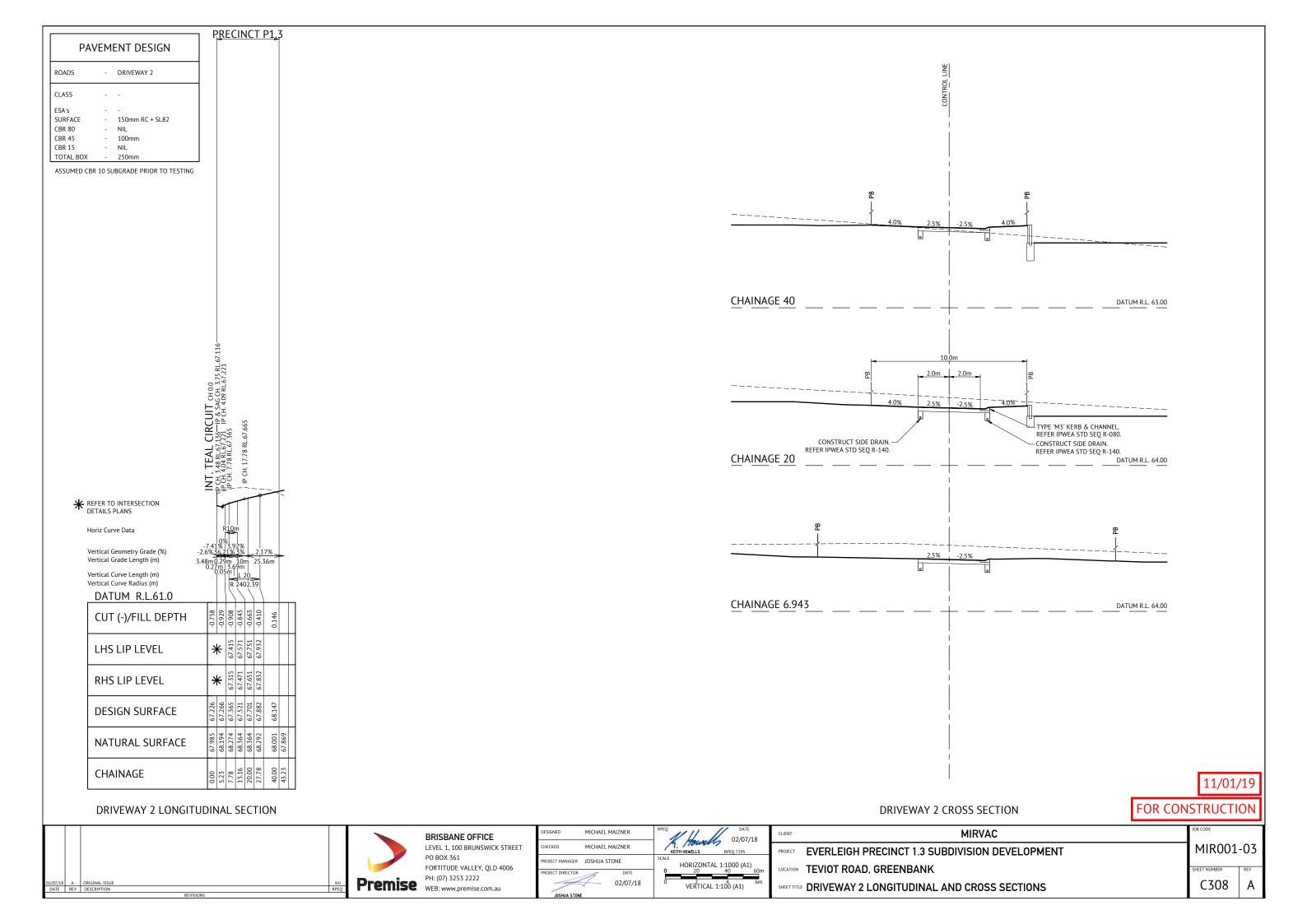
Premise PH: (07) 3253 2222 WEB: www.premise.com.au

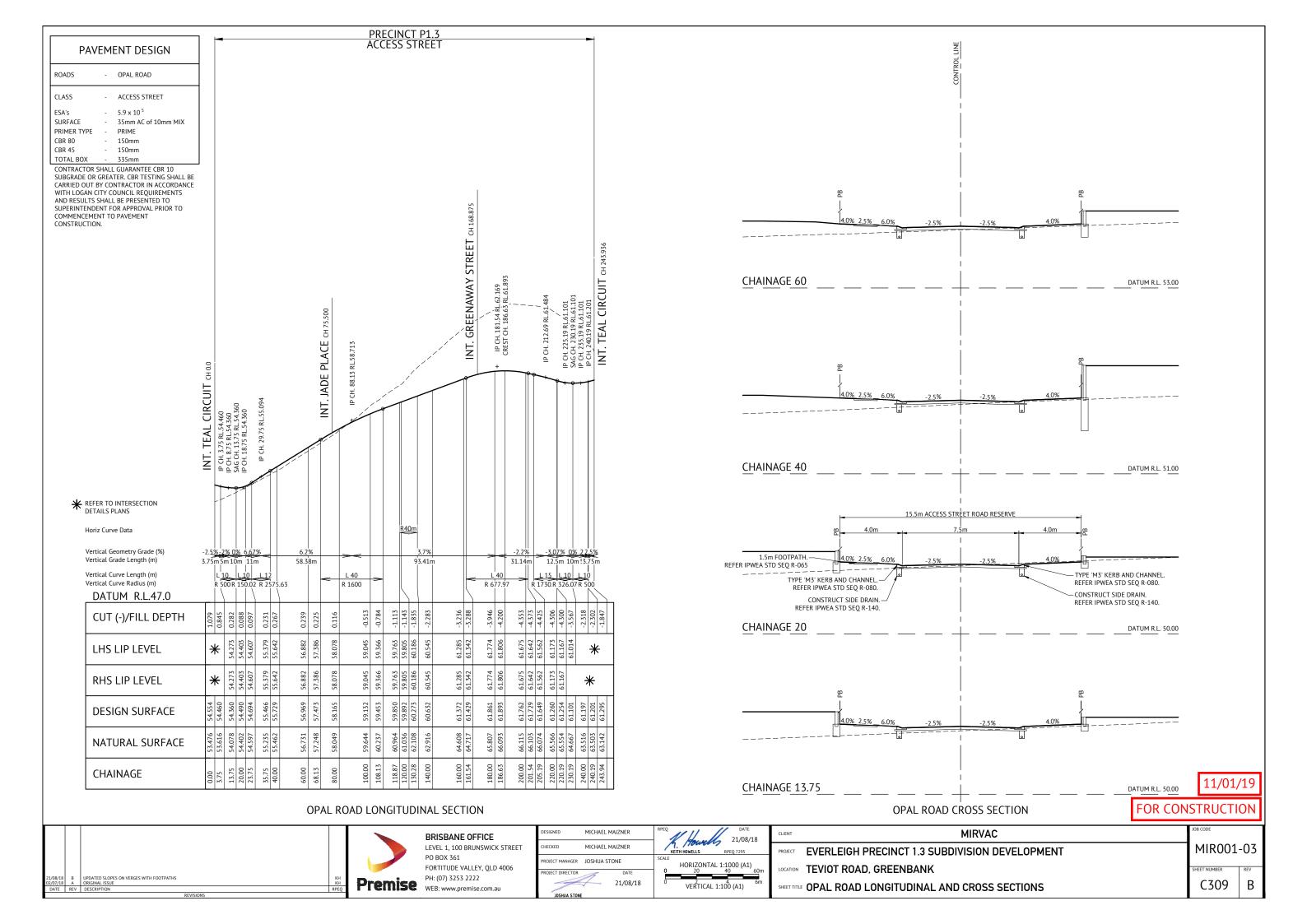
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

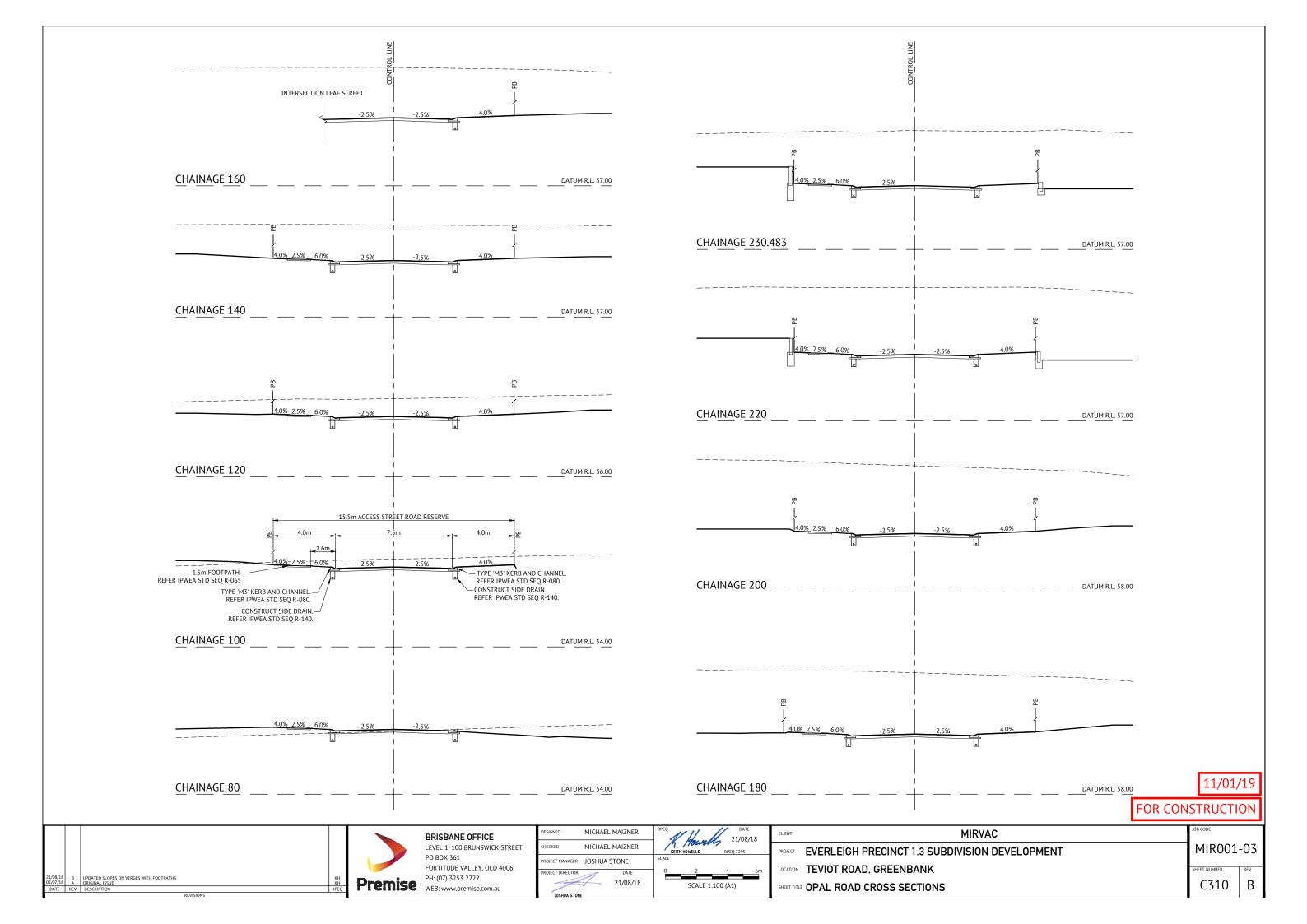
SIGNED	MICHAE	L MAJZNER	RPEQ	111	//	ATE 08/18
ECKED	MICHAE	L MAJZNER		HOWELLS	RPEQ 729	
DJECT MANAGER	JOSHUA	STONE	SCALE			
DJECT DIRECTOR	1	DATE	0	2	4	6m
1	-	08/08/18		SCALE 1	:100 (A1)	
INCHIIA STONE	:					

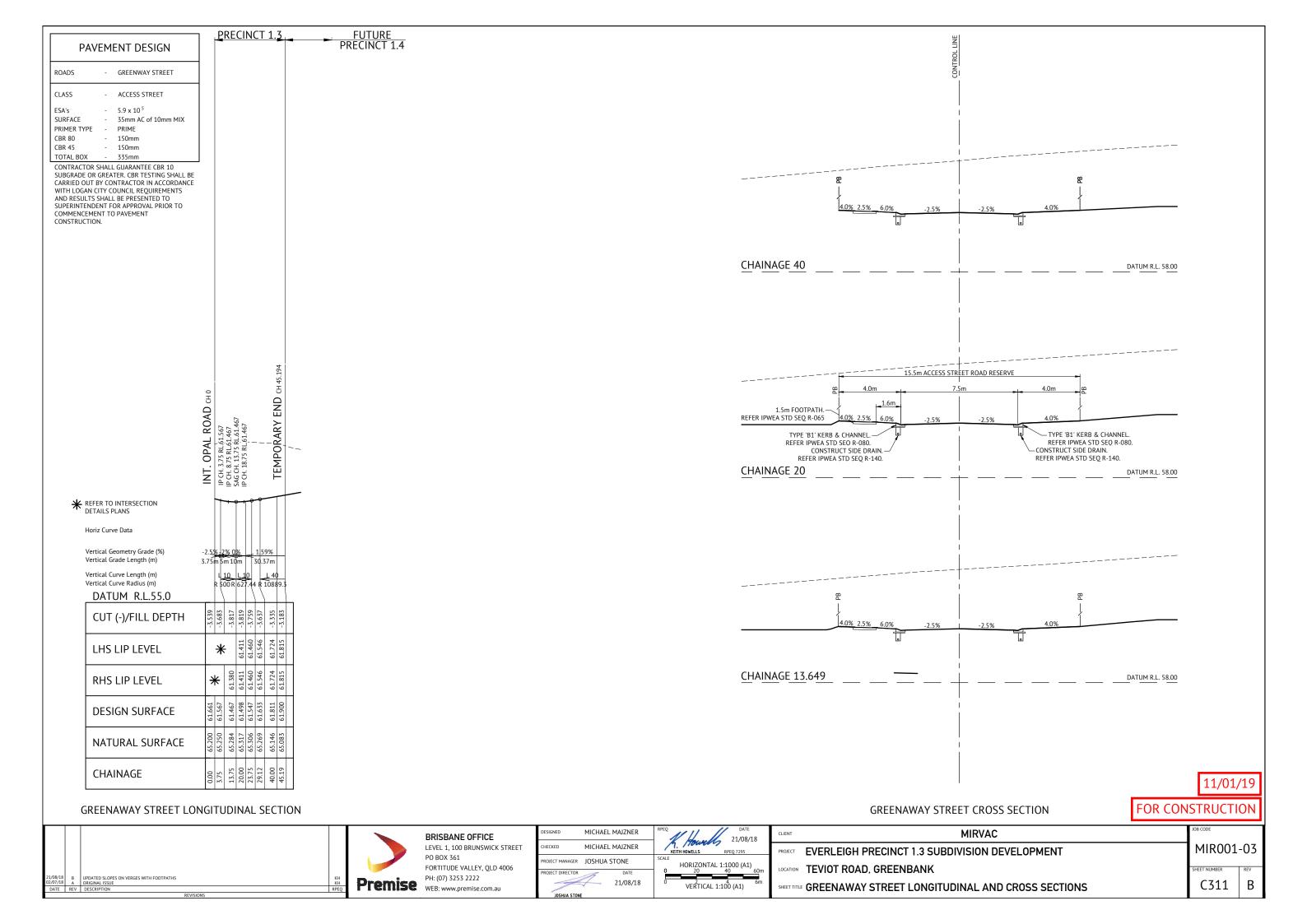
CLIENT	MIRVAC
PROJECT	EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	DRIVEWAY 1 CROSS SECTIONS

MIR001-03





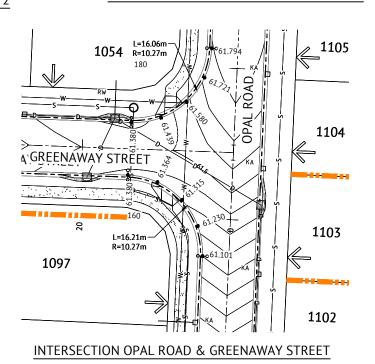






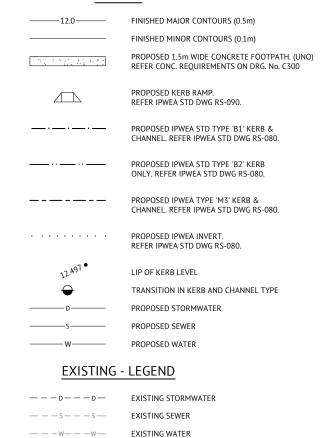
## 6no. 1mx1m CONCRETE BIN PADS BEHIND KERB . 10492 MA /₺ 1029∏ R=8.00m 13.160 TEAL CIRCUIT L=9.51m-R=12.00m 1003 4.0m WIDE CONCRETE DRIVEWAY CROSSOVER. GENERALLY IN ACCORDANCE WITH IPWEA SEQ R-050 . CT439.651 1046 INTERSECTION TEAL CIRCUIT & DRIVEWAY 2

# 1038 1115 243.936 TEAL CIRCUIT RW L=16.07m L=16.85m R=10.27m ROAD R=10.27m 1039 1107 INTERSECTION TEAL CIRCUIT & OPAL ROAD



## 4.0m WIDE CONCRETE DRIVEWAY CROSSOVER. GENERALLY IN ACCORDANCE WITH IPWEA SEQ R-050 11/8 1119 -L=8.95m 7 R=12.00m A 1120 DRIVEWAY 1 R=8.00m TC196.878 6no. 1mx1m CONCRETE BIN PADS BEHIND KERB 1123 1110 INTERSECTION TEAL CIRCUIT & DRIVEWAY 1

#### **LEGEND**



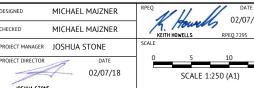
EXISTING ELECTRICAL

EXISTING TELSTRA EXISTING GAS

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

11/01/19 FOR CONSTRUCTION

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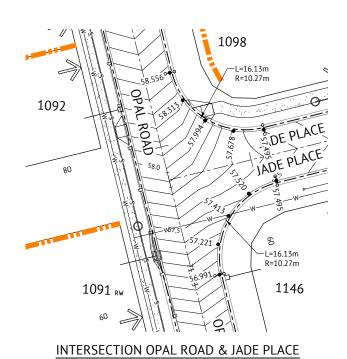


02/07/18

**MIRVAC** PROJECT EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT

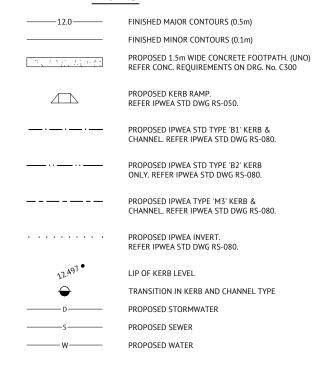
LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE INTERSECTION DETAILS PLAN - SHEET 1 OF 2 MIR001-03





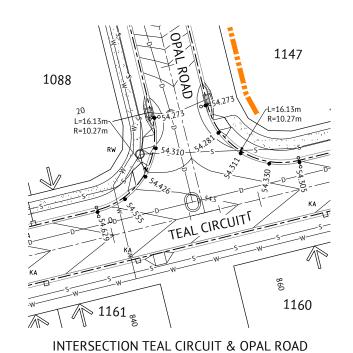
# CT85.598 1100 L=15.53m JADE PLACE I = 10.76m -R=10.27m 09 1144 1142 1143 INTERSECTION TEAL CIRCUIT & JADE PLACE

#### **LEGEND**



## **EXISTING - LEGEND**





11/01/19 FOR CONSTRUCTION



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WEB: www.premise.com.au

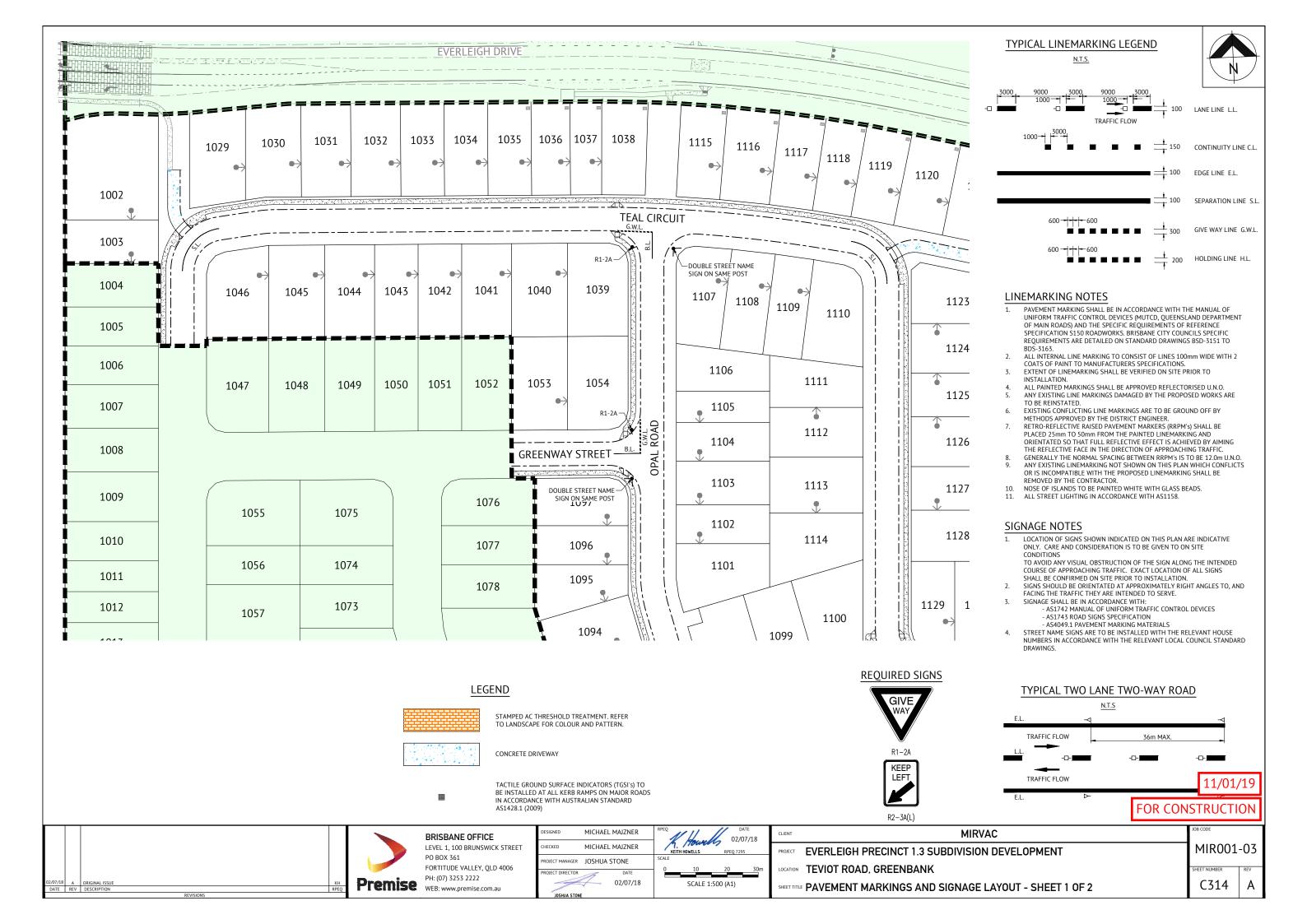


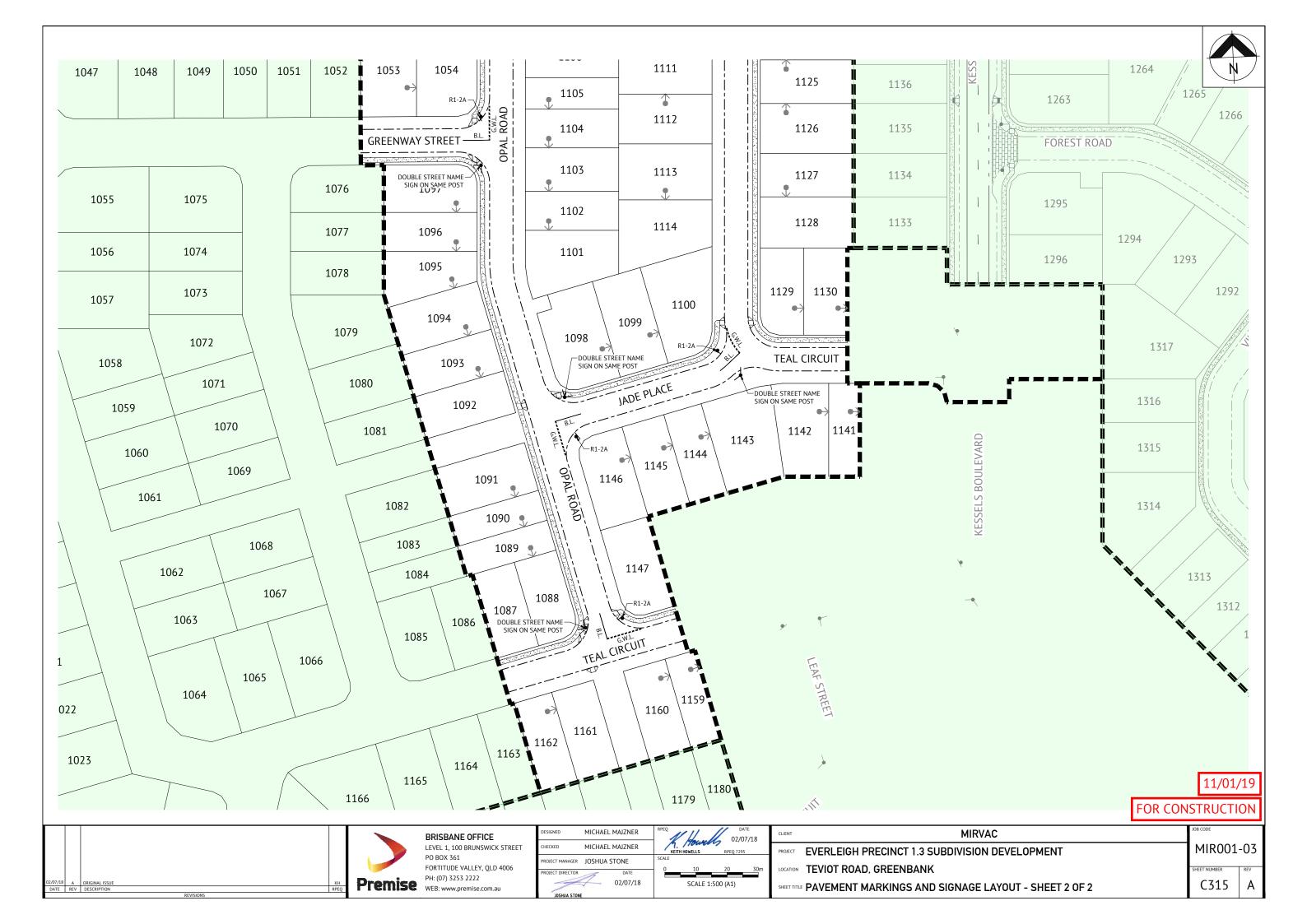
SHEET TITLE INTERSECTION DETAILS PLAN - SHEET 2 OF 2

MIRVAC PROJECT EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT

LOCATION TEVIOT ROAD, GREENBANK

MIR001-03





#### PAVEMENT DESIGN (PRELIMINARY)

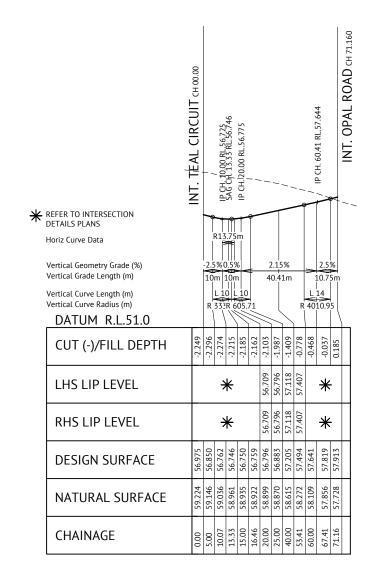
JADE PLACE

CLASS ACCESS STREET

ESA's 5.9 x 10<sup>5</sup> SURFACE - 35mm AC of 10mm MIX PRIMER TYPE - PRIME

- 150mm CBR 45 - 150mm TOTAL BOX 335mm

CONTRACTOR SHALL GUARANTEE CBR 10 SUBGRADE OR GREATER. CBR TESTING SHALL BE CARRIED OUT BY CONTRACTOR IN REQUIREMENTS AND RESULTS SHALL BE PRESENTED TO SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT TO PAVEMENT CONSTRUCTION.



JADE PLACE LONGITUDINAL SECTION

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CHAINAGE 40

TYPE 'M1' KERB & CHANNEL.

REFER IPWEA STD SEQ R-080.

REFER IPWEA STD SEQ R-140.

CHAINAGE 20

CONSTRUCT SIDE DRAIN.

**MIRVAC** MIR001-03 PROJECT EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK C316 SHEET TITLE JADE PLACE LONGITUDINAL AND CROSS SECTIONS

15.50m ACCESS STREET (TYPICAL) ROAD RESERVE

11/01/19

FOR CONSTRUCTION

DATUM R.L. 53.00

-1.5m FOOTPATH. REFER IPWEA STD SEQ R-065

TYPE 'M1' KERB & CHANNEL

REFER IPWEA STD SEQ R-080.

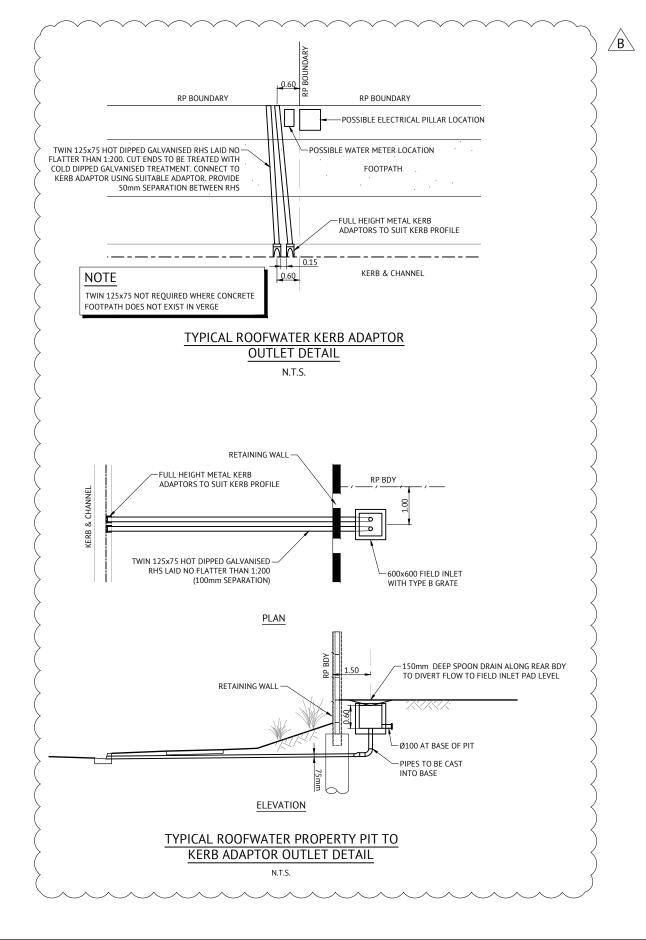
- CONSTRUCT SIDE DRAIN. REFER IPWEA STD SEQ R-140.

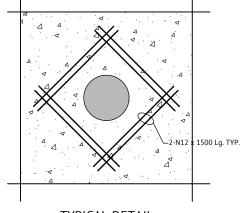
#### STORMWATER DRAINAGE NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE STORMWATER DRAINAGE DRAWINGS
- 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 &
- ALL upvc pipes shall be class 'SN8' for Ø150 & Ø225, AND Class 'SN6' FOR Ø100 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
- WHERE PIPES ARE TO BE LAID WITHIN THE ZONE OF INFLUENCE OF WHERE PIPES ARE TO BE LAID WITHIN THE ZOING 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
- 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.
- REFER TO LCC STD DWG'S FOR TYPICAL ROOF SLAB REINFORCEMENT

#### REFERENCE POINT LOCATION FOR DRAINAGE STRUCTURES

STRUCTURE TYPE	HORIZONTAL CONTROL POINT [REFERENCE POINT LOCATION]	VERTICALCONTROL 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





TYPICAL DETAIL GRATED PIT IN CONCRETE PAVEMENT 1:20 @ A1

11/01/19

FOR CONSTRUCTION





BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

DESIGNED MICHAEL MAJZNER	RPEQ	111	//	ATE 09/18
CHECKED MICHAEL MAJZNER		TH HOWELLS	RPEQ 729	•
PROJECT MANAGER JOSHUA STONE	SCALE			
PROJECT DIRECTOR DATE	0	10	20	30m
21/09/18 JOSHUA STONE		SCALE 1	:500 (A1)	

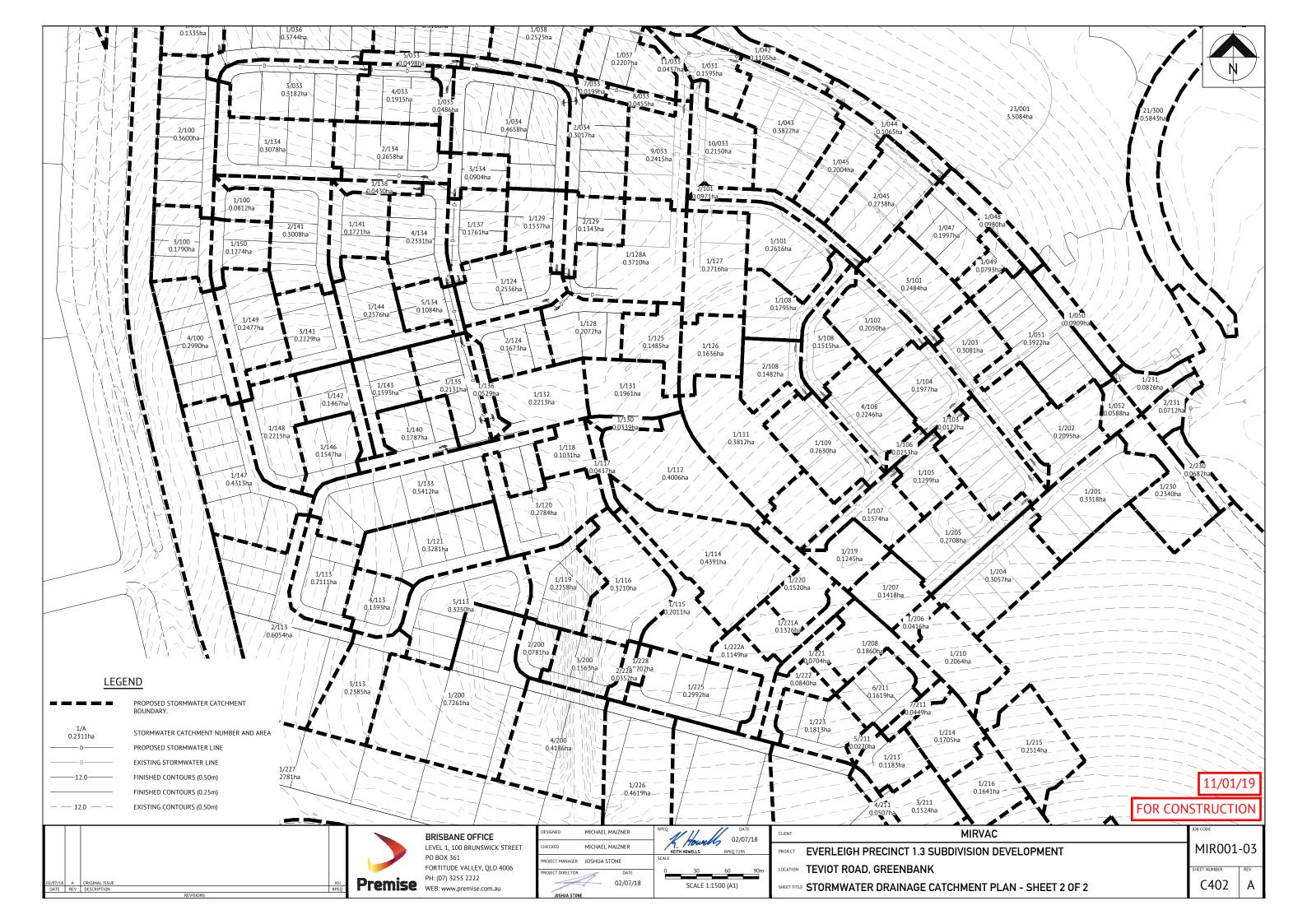
CLIENT	MIRVAC
PROJECT	EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK

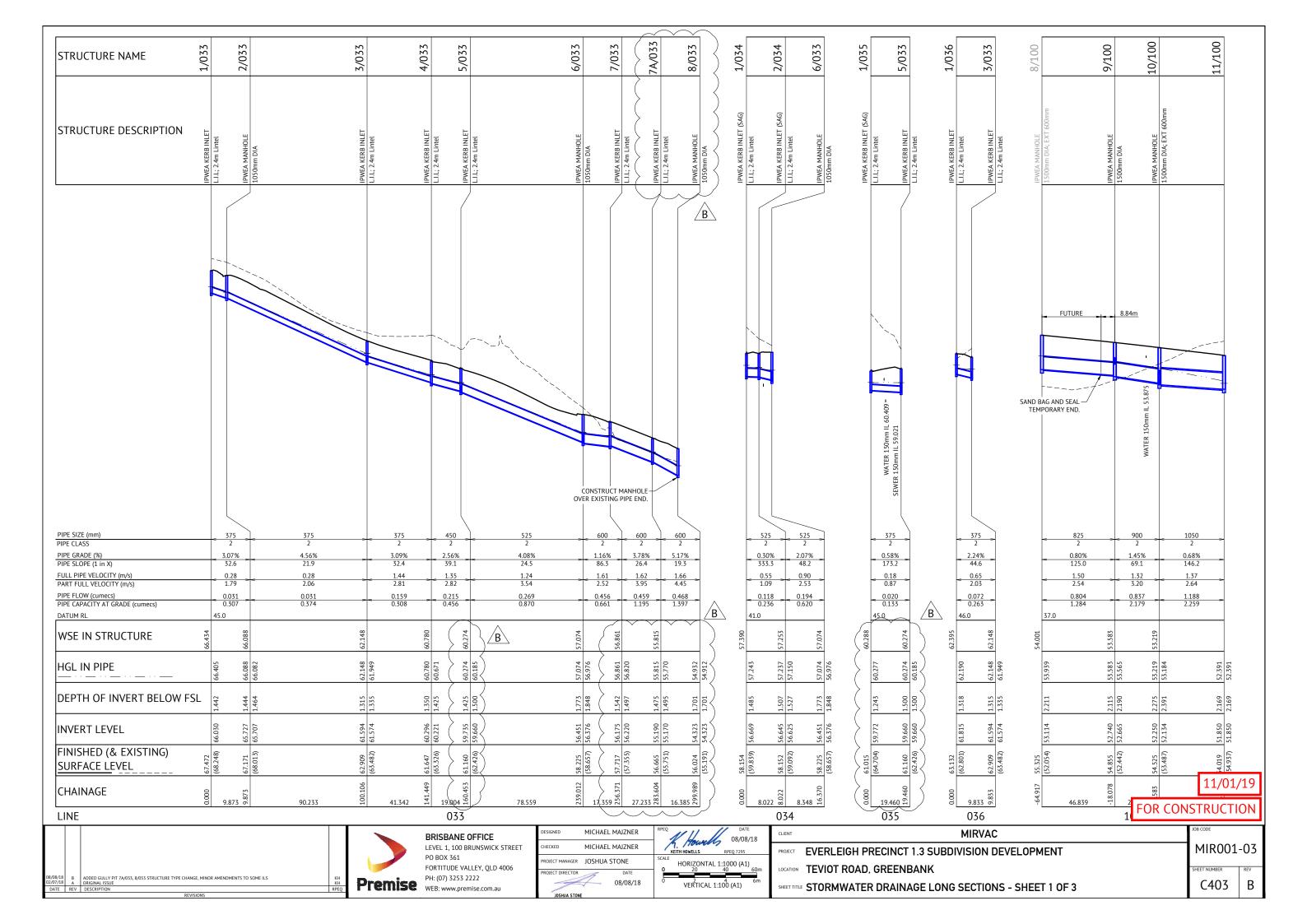
MIR001-03

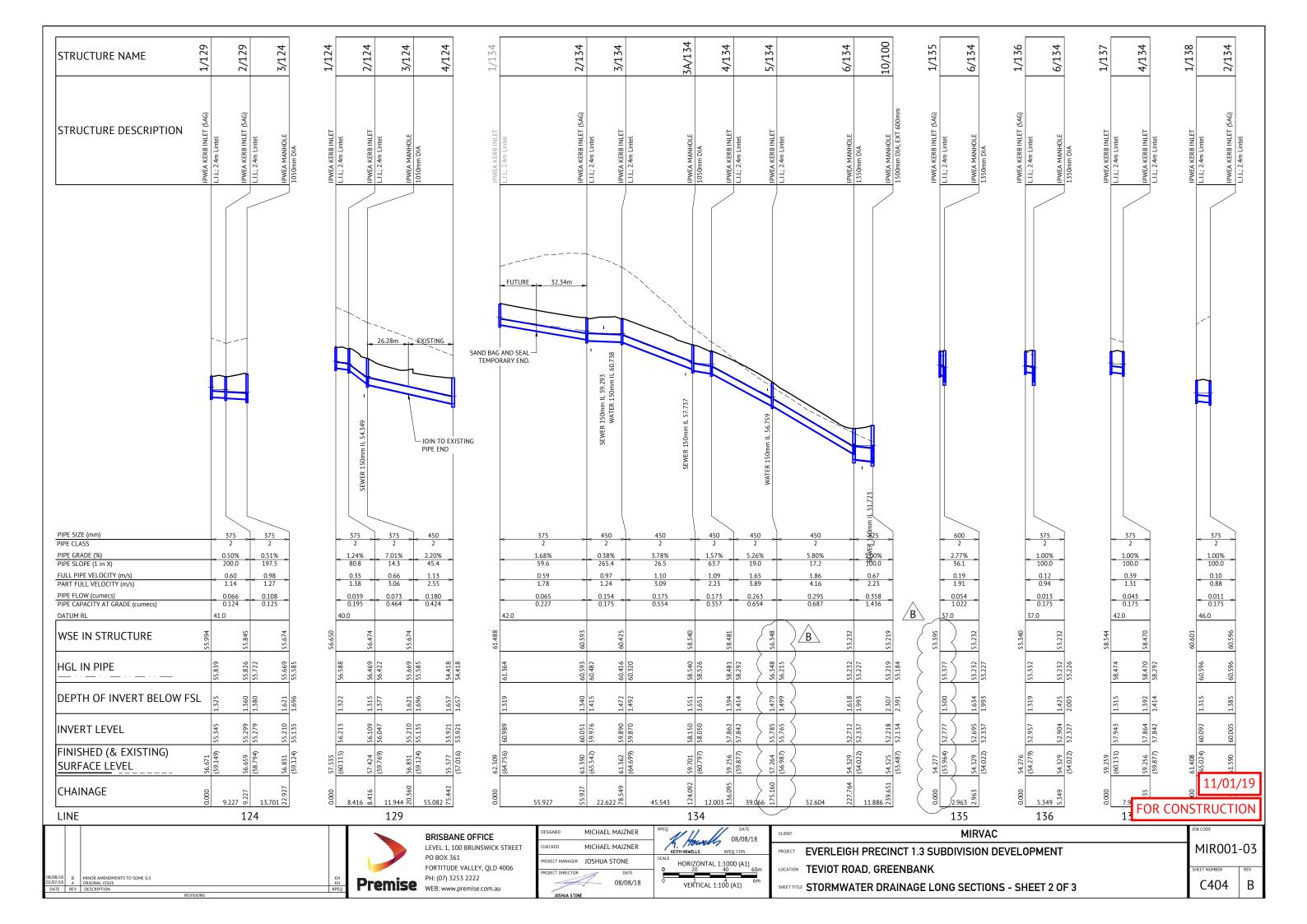
SHEET TITLE STORMWATER DRAINAGE DETAILS AND NOTES

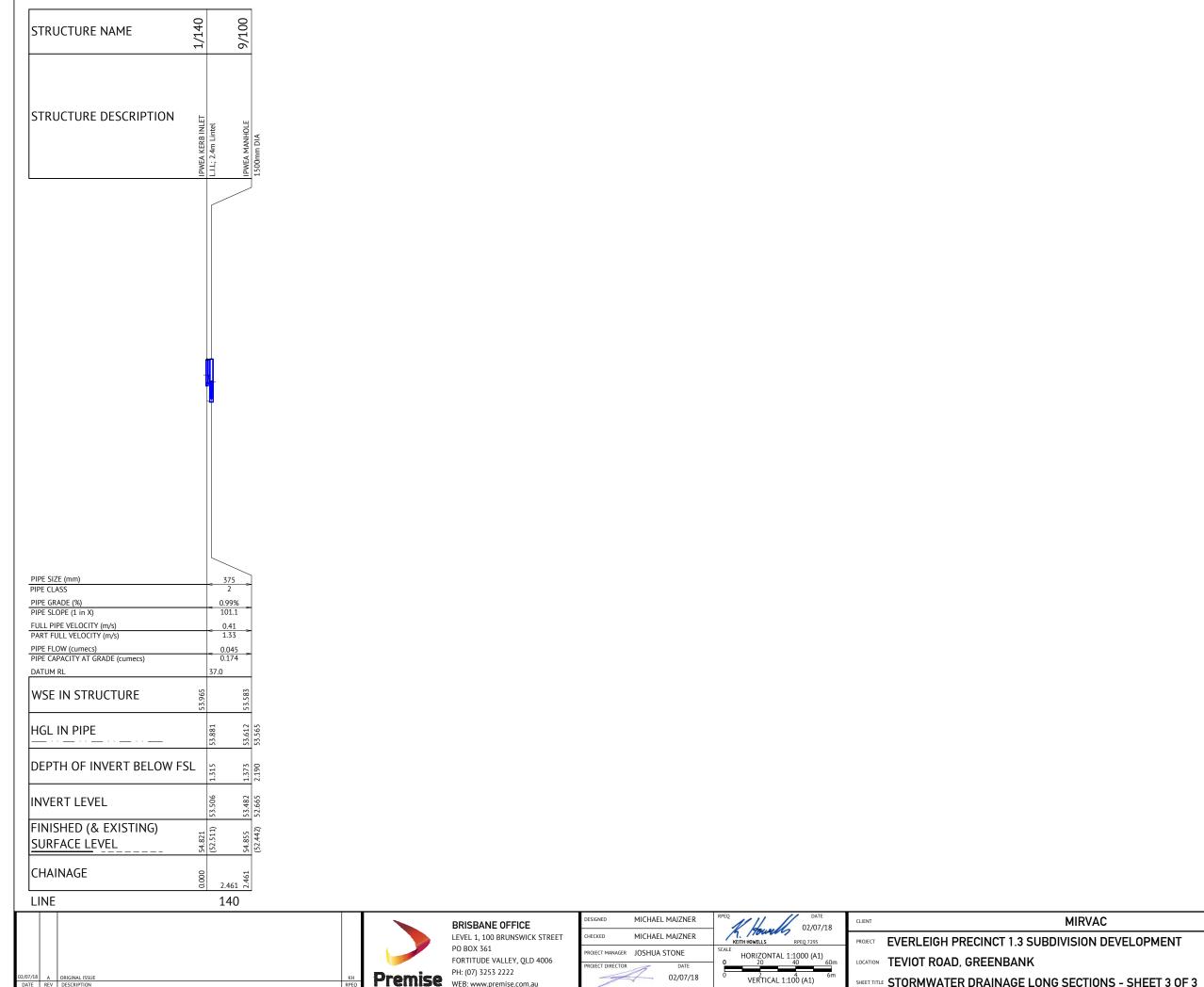
MIDVAG











MIR001-03

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FOR CONSTRUCTION



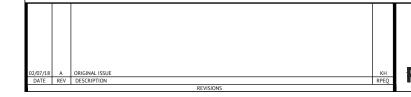
FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222 Premise PH: (07) 3253 2222
WEB: www.premise.com.au

SIGNED	MICHAE	L MAJZNER	RPEQ	1111
HECKED	MICHAE	L MAJZNER	KE	TITH HOWELLS
ROJECT MANAGER	JOSHUA	STONE	SCALE	HORIZO
OJECT DIRECTOR	A	DATE	<u> </u>	20
	-	02/07/18	Ō	VERTI
JOSHUA STONE	Ε			

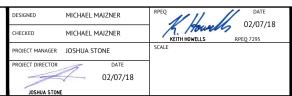
CLIENT	MIRVAC
PROJECT	EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	STORMWATER DRAINAGE LONG SECTIONS - SHEET 3 OF 3

	L	OCATION		TIME	SUB-C	CATCHI	MENT R	UNOFF	:	INL	ET DESIGN						DRA	IN DE	SIGN							Н	EADLOS	SSES				PART FULL DESIGN LEVELS							
			_	ı	C A	CA	Q				Qg Qb		tc	Ι	CA	Qp	L	S			Vf=Q/A			STRUC	CTURE RA	TIOS V2/	2g Ku	hu	Kw hw	Sf	hf	dn	Vn						
STRUCTURE NUMBER	STRUCTURE	SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL INTENSITY	CO-EFFICIENT OF RUNOFF SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE		FLOW WIDTH	ROAD GRADE AT INLET	Z	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW	REACH LENGTH	PIPE GRANE		CLASS	FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	Q9/Qo	Du/Do	S/Do	UPSTREAM HEADLOSS	<b>∠</b>   ≪	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 STRUCTURE NUMBER
			min	mm/h	ha	ha	l/s	l/s	m r	n % l/s	l/s l/s		min	mm/h	ha	l/s l/s	m	%	5 mm		m/s	min				m	1	m	m	%	m	m	m/s	m	m	m	m	m	m
1/033 2	/033	1/033	8	113	0.75 0.133	0.1	31	31	2.852 0.0	4 2.72 318	8 31 0	1/036	8	113	0.1	0 31	9.823	3.08	87 375	2	0.28	0.06	32	1	1	.08 0.00	4 7	0.029	0.029	3.22	0.318	0.081	1.79	66.405	66.102	66.405	66.088 6	6.434	67.472 1/033
2/033 3	/033	1/033											8.06	113	0.1	0 31	90.233	3 4.5	58 375	2	0.28	0.44	37 42 43	0	1 1	.02 0.00	4 1.36	0.006	1.43 0.006	4.36	3.934	0.073	2.06	66.082	61.969	66.082	62.148 6	6.088	67.171 2/03
3/033 4	/033	1/036 1/033 3/033	6	122	0.75 0.318	0.238	81	81	2.477 0.0	7 3.72 286	64 17	4/033	6.07	122	0.588	0 159	41.342	2 3.09	9 375	2	1.44	0.25	34 37	0.38	1 1	.53 0.10	6 1.88	0.2	0.2	2.83	1.169	0.191	2.81	61.949	60.671	61.949	60.78 6	2.148	62.909 3/03
4/033 5	/033	1/036 1/033 3/033 4/033	6	122	0.75 0.191	0.143	49	65	2.422 0.0	68 2.82 246	57 8	1/035	6.32	121	0.731	0 215	18.914	4 3.83	19 450	2	1.35	0.09	34 37	0.27	0.83 1	.24 0.09	3 1.17	0.109	0.109	3.33	0.633	0.194	3.27	60.671	59.949	60.671	60.038 6	0.78	61.647 4/03
5/033 6		1/035 1/036 1/033 3/033 4/033 5/033	6	122	0.75 0.05	0.037	13	35	1.817 0.0	56 2.88 274	35 0	2/034	6.41	120	0.805	0 269	78.555	5 3.78	84 525	2	1.24	0.34	34 37	0.13	1 1	.17 0.07	9 1.13	0.089	0.089	3.66	2.875	0.205	3.44	59.949	56.976	59.949	57.074 6	0.038	61.16 5/03
6/033 7		1/034 2/034 1/035 1/036 1/033 3/033 4/033 5/033											6.74	119	1.379	0 456	17.339	9 2.43	25 600	2	1.61	0.09	37	0	1 1	.16 0.13	3 0.73	0.097	0.097	2.3	0.399	0.292	3.34	56.976	56.556	56.976	56.577 5	7.074	58.225 6/03
	/033	1/034 2/034 1/035 1/036 1/033 3/033 4/033 5/033 7/033	6	122	0.75 0.02	0.015	5	5	1.022 0.0	28 3.54 422	4 5 0	8/033	6.83	119	1.394	0 460	43.618	8 3.69	98 600	2	1.63	0.17	33 34	0.01	1 1	.07 0.13	5 0.31	0.041	0.041	3.64	1.587	0.26	3.92	56.536	54.923	56.536	54.949 5		
8/033																																						1.949	
	/034				0.75 0.466	+		_			118 0	2/034	_	122		0 118	_	_	525	2	+	0.12		1		.37 0.01	_	_	0.147	_				57.194		-	57.237 5		58.154 1/034
	-	1/034 2/034			0.75 0.302			77	0.0	26 0.4 375		_	6.12			0 194	_	-	76 525	2	0.9	+	42 46 43 47	0.39	_	2 0.04		0.087	2.52 0.103	_		0.202	2.53	57.15	56.976		57.074 5		
	/033				0.75 0.049	_		20	0	0.73 375		5/033	_	122		0 20			83 375	2	0.18	0.27		1		.03 0.00	_	0.012		0.12			0.87	60.062	_	60.062			
1/036 3	/033		6	122	0.75 0.374	0.28	95	95	2.596 0.0	72 4.3 301	72 23	5/033	6	122	0.28	0 72	9.671	2.28	82 375	2	0.65	0.07	32	1	1	55 0.02	2 9.44	0.206	0.206	0.42	0.041	0.134	2.03	62.19	61.969	62.19	62.148 6	2.395	63.132 1/036
8/100 9	/100	1/146 1/145 2/145 1/147 1/149 1/150 1/100 2/100 3/100 4/100 1/142 1/143 1/144 1/141 2/141 3/141											6.91	118	2.446	0 804	46.839	9 0.8	825	2	1.5	0.32	34 37	0	1 1	.07 0.11	5 0.53	0.061	0.061	0.76	0.356	0.473	2.54	53.939	53.565	53.939	53.583 5	4.001	55.325 8/100
9/100 10	0/100	1/140 1/146 1/145 2/145 1/147 1/149 1/150 1/100 2/100 3/100 4/100 1/142 1/143 1/144 1/141 2/141 3/141											7.23	117	2.58	0 837	28.661	1 1.78	900	2	1.32	0.13	33 34	0	1 1	02 0.08	8 0.21	0.019	0.019	1.66	0.476	0.366	3.45	53.565	53.054	53.565	53.089 5	3.583	54.855 9/100
10/100 1:	1/100	1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134 1/140 1/146 1/145 2/145 1/147 1/149 1/150 1/100 2/100 3/100 4/100 1/142 1/143 1/144 1/141 2/141 3/141											7.36	116	3.689	0 118	9 41.529	9 2.00	01 1050	2	1.37	0.16	34 37	0	1 1	03 0.09	6 0.37	0.035	0.035	1.99	0.826	0.4	3.93	53.054	52.223	53.054	52.228 5	3.089	54.525 10/10
11/100																																					5	2.228	54.019 11/10
1/129 2	/129	1/129	6	122	0.75 0.254	0.19		66	0.0	19 0.5 375	66 0	2/129	6	122	0.19	0 66	9.089	0.50	08 375	2	0.6	0.14	32	1	1	.73 0.01	8 8.46	0.155	0.155	0.14	0.013	0.195	1.14	55.72	55.674	55.839	55.826 5	5.994	56.671 1/129
2/129 3	/124	1/129 2/129	_			0.125	_	42		02 0.83 375		1/128	6.14	121	0.315	0 108		_	07 375	2	0.98	0.2	42 46 43 47	0.39			_	_	2.52 0.123	0.38	0.052	0.27	1.27	55.654	55.585	55.722	55.669 5	5.845	56.659 2/129
1/124 2					0.75 0.154			_		55 4.5 334		1/129			0.115				44 375	2		0.08		1		.16 0.00				_		_					56.469 5		
		1/124 2/124	6	122	0.75 0.134	0.101	34	34	1.974 0.0	49 4.5 211	34 0	1/1284	_		0.216				17 375	2	_			0.47			_	_	2.33 0.052								55.669 5		
	/124	1/129 2/129 1/124 2/124						1					6.34	121	0.531	0 180	55.082	2 2.20	05 450	2	1.13	0.34	37 42 43	0	1 1	2 0.06	5 1.3	0.084	1.36 0.089	2.12	1.167	0.205	2.55	55.585	54.371	55.585	54.418 5		
4/124																																							55.577 4/124
1/134 2					0.75 0.308			78		77 1.96 210		2/134		122		0 65		_	78 375	2		0.45		1		.33 0.01		0.124		_	0.768	_					60.596 6		
		1/138 1/134 2/134			0.75 0.266		_	80		29 0.51 375			6.45	_		0 154			79 450	2	0.97			0.51		.38 0.04	_		0.111	+	_	+			+		60.419 6		
3/134 4		1/138 1/134 2/134 3/134				0.068		23	1.513 0.0	48 3.4 281	23 0	1/137	6.8	119	0.529	0 175	57.324	4 3.50	04 450	2	1.1	0.28	37 42 43	0.13	1 1	.24 0.06	2 1.61	0.099	1.77 0.109	3.23	1.851	0.177	3	60.32	58.312	60.32	58.47 6	0.429	61.362 3/134
	_	1/137 1/138 1/134 2/134 3/134 4/134	6	122	0.75 0.233	0.174	59	59	2.059 0.0	65 3.79 338	51 8	5/134	7.08	118	0.835	0 263	39.066	6 5.53	18 450	2	1.66	0.15	34 37	0.19	1 1	.4 0.14	1.27	0.178	0.178	5.23	2.042	0.196	3.96	58.292	56.136	58.292	56.249 5	8.47	59.256 4/134
5/134 6		1/137 1/138 1/134 2/134 3/134 4/134 5/134	6	122	0.75 0.108	0.081	27	35	1.601 0.0	5 6.2 375	35 0	1/135	7.23	117	0.916	0 296	52.592	2 5.63	37 450	2	1.86	0.21	33 34	0.12	1 1	3 0.17	6 0.76	0.133	0.133	5.62	2.959	0.208	4.11	56.116	53.152	56.116	53.157 5	5.249	57.264 5/134
6/134 10	0/100	1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134											6.99	118	1.098	0 358	11.886	6 1	825	2	0.67	0.07	33 34	0	1 1	.01 0.02	3 0.25	0.006	0.006	0.52	0.062	0.281	2.23	53.152	53.033	53.152	53.089 5	3.157	54.329 6/134
1/135 6	/134	1/135	6	122	0.75 0.213	0.159	54	54	0.0	1 1.59 375	54 0	1/136	6	122	0.159	0 54	2.932	1.0	1 600	2	0.19	0.02	32	1	1	.03 0.00	2 9.7	0.018	0.018	5.65	0.167	0.12	1.34	53.325	53.295	53.325	53.157 5	3.343	54.277 1/13!
1/136 6	/134	1/136			0.75 0.053		_	13	0	1.52 375		1/132	_	122		0 13	5.343	1.00	01 375	2		0.06		1	1	.02 0.00	1 9.7	0.007	0.007	3.27	0.174	0.07	0.94	53.332	53.279	53.332	53.157 5	3.34	54.276 1/136
1/137 4	/134	1/137	6	122	0.75 0.176	0.132	45			58 3.78 315		1/129	6	122	0.132	0 43	7.935	1	375	2	0.39	0.08	32	1	1	.6 0.00	_		0.07	0.06	0.005	0.126					58.47 5		
1/138 2	/134	1/138	6	122	0.75 0.043	0.032	11			32 1.29 158		4/134	6	122	0.032	0 11	8.634	_	09 375	2		0.09		1		.36 0	_	0.005	0.005	0	0	0.063					60.596 6		
1/140 9	/100	1/140	6	122	0.75 0.179	0.134	45	45	2.498 0.0	71 1.08 157	45 0	1/135	6	122	0.134	0 45	2.395	1.0	16 375	2	0.41	0.03	32	1	1	22 0.00	9 9.7	0.083	0.083	10.92	0.188	0.13	1.33	53.881	53.857	53.881	53.612 5	3.965	54.821 1/140
1/140 9	/100	1/140	6	122	0.75 0.179	0.134	45	45	2.498 0.0	71 1.08 157	45 0	1/135	6	122	0.134	0 45	2.395	1.0	16 375	2	0.41	0.03	32	1	1	22 0.00	9 9.7	0.083	0.083	10.92	0.188	0.13	1.33	53.881	53.857	53.881	53.612	2 5	2 53.965 5

FOR CONSTRUCTION



BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006
PH: (07) 3253 2222
WEB: www.premise.com.au



MIRVAC PROJECT EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE Q2 MINOR STORM CALCULATIONS

MIR001-03

	LOCATION		TIME		SUB-	CATCH	IMENT	RUNOF	F	IN	ILET DI	ESIGN						DRA	IN DESIGN								HEA	DLOSS	SES					PART	FULL			DESI	GN LEVE	LS		R	RUNOFF	
		tc	1	С	Α	CA	, Q			Qg	Qb		tc	1	CA		Qp	L	S		Vf=Q/A			STRUC	CTURE R	RATIOS	V2/2g	Ku	hu	Kw	hw	Sf	hf	dn	Vn				$\bot$				$\Box$	
STRUCTURE NUMBER	DOWNSTREAM STRUCTURE SUB-CATCHMENTS CONTRIBUTING	SUB-CATCHMENT TIME OF CONCENTRATION	-ALL	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT	DISCHARGE FLOW IN K&C (INC RYPASS)	ROAD GRADE AT INLET	INTO INLE	BYPASS FLOW	BYPASS STRUCTURE NUMBER	CRITICAL TIME OF	RAINFALL INTENSITY	TOTAL (C × A)	SUM ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE		CLASS FULL PIPE VELOCITY	TIME OF FLOW IN REACH	CHARTS USED	09/00	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.	₹	W.S.E.		SURFACE OR GRATE LEVEL MAJOR SURFACE	FLOW CAPACITY MAJOR SURFACE FLOW	STRUCTURE NUMBER
		min	mm/h		ha	ha	l/s	l/s	%	l/s	l/s		min	mm/ł	n ha	l/s	l/s	m	% mn	n	m/s	min					m		m		m	%	m	m	m/s	m	m	m	m	m		m l/	/s l/s	
1/033	2/033 1/033	8	252	1	0.133	0.13	3 93	93	2.72	2 75	19	1/036	8	252	0.133	0	75	9.823	3.087 375	2	0.68	0.06	32	1		1.44	0.023	7	0.164	(	0.164	2.95	0.292	0.126	2.3	66.405	66.102	66.40	5 66.114	4 66.56	9 67.	472 174	ł3 93	1/033
2/033	3/033 1/033												8.06	251	0.133	0	75	90.233	4.558 375	2	0.68	0.44	37 42 43	0	1	1.09	0.023	1.36	0.032	1.43	0.033	3.9	3.523	0.114	2.64	66.082	61.969	66.08	2 62.559	9 66.11	5 67.	171 0		2/033
3/033	4/033 1/036 1/033 3/033	6	275	1	0.318	0.318	8 243	243	3.72	94	149	4/033	6.07	274	0.786	0	260	41.342	3.09 375	2	2.35	0.25	34 37	0.33	1	2.63	0.282	1.3	0.367	(	0.367	2.19	0.907	0.264	3.13	61.949	60.671	62.19	2 61.28	5 62.55	9 62.	909 168	30 243	3/033
4/033	5/033 1/036 1/033 3/033 4/033	6	275	1	0.191	0.193	1 146	295	2.82	2 137	158	1/035	6.32	271	0.977	0	389	18.914	3.819 450	2	2.44	0.09	34 37	0.35	0.83	2.36	0.305	1.15	0.35	(	0.35	1.86	0.353	0.277	3.78	60.671	59.949	60.93	5 60.582	2 61.28	5 61.	647 174	13 295	4/033
5/033	6/033 1/035 1/036 1/033 3/033 4/033 5/033	6	275	1	0.05	0.05	38	312	2.88	3 166	146	2/034	6.41	270	1.075	0	661	78.555	3.784 525	2	3.05	0.34	37	0.25	1	2.21	0.476	1.33	0.633	C	0.634	2.89	2.273	0.352	4.28	59.949	56.976	59.94	9 57.676	6 60.58	3 61.	16 174	43 312	5/033
6/033	7/033 1/034 2/034 1/035 1/036 1/033 3/033 4/033 5/033												6.68	267	1.837	0	683	17.339	2.425 600	2	2.41	0.09	33 34	0	1	2.17	0.297	0.26	0.078	C	0.078	1.23	0.214	0.375	3.67	56.976	56.556	57.59	8 57.384	4 57.67	6 58.	225 0		6/033
7/033	8/033 1/034 2/034 1/035 1/036 1/033 3/033 4/033 5/033 7/033	6	275	1	0.02	0.02	15	695	3.54	4 206	489	8/033	6.76	266	1.857	0	883	43.618	3.698 600	2	3.12	0.17	33 34	0.23	1	2.41	0.497	1.01	0.504	C	0.504	2.07	0.901	0.387	4.58	56.536	54.923	56.88	55.97	9 57.38	4 57.	717 168	80 695	7/033
8/033 1/034	2/034 1/034	6	275	1	0.466	0.466	6 356	356	0.8	20	336	2/034	6	275	0.466	0	20	8.019	0.3 525	2	0.09	0.12	32	1		1.94	0	7.32	0.003		0.003	)	0	0.104	0.67	57.194	57.17	57.68	4 57.684		9 56. 8 58.		356	8/033 1/034
2/034	6/033 1/034 2/034	6	275	1	0.302						680	7/033	6.12			0	49	8.344		2	0.23		32 42 46 4 47	3 0.61	1	2.02		2.6				0.01	0.001	0.1	1.71	57.15	56.976			6 57.68			712	2/034
1/035	5/033 1/035	6	275	1	0.049	0.049	9 37	195	0.73	3 111	85	5/033	6	275	0.049	0	111	19.422	0.583 375	2	1	0.27	32	1		3.02	0.051	3.14	0.16		0.16	0.4	0.077	0.26	1.35	60.062	59.949	60.66	60.58	2 60.82	61.	015	195	1/035
1/036	3/033 1/036	6	275	1		0.374	_		_	115			6	275				9.671		7	1.04	_	32	1			0.056								2.3	62.19		+	2 62.559	_	_		_	1/036
8/100	9/100 1/146 1/145 2/145 1/147 1/149 1/150 1/100 2/100 3/100 4/100 1/142 1/143 1/144 1/141 2/141 3/141												6.91		3.268				0.8 825	2	2.65		34 37	0	1	1.52	0.358	0.42	0.15				0.456						53.764					8/100
9/100	1/140 1/146 1/145 2/145 1/147 1/149 1/150 1/100 10/100 2/100 3/100 4/100 1/142 1/143 1/144 1/141 2/141 3/141												7.23	260	3.447	0	1587	28.661	1.447 900	2	2.49	0.14	33 34	0	1	1.22	0.318	0.22	0.071	C	0.071	0.77	0.22	0.57	3.74	53.565	53.15	53.69	3 53.473	3 53.76	4 54.	855 0		9/100
	1/135 1/136 1/137 1/138 1/134 2/134 3/134 4/134 5/134 1/140 1/146 1/145 11/100 2/145 1/147 1/149 1/150 1/100 2/100 3/100 4/100 1/142 1/143 1/144 1/141 2/141 3/141												7.37	259	4.93	0	2692	41.529	0.684 1050	2	3.11	0.27	34 37	0	1	1.28	0.493	0.59	0.289	C	0.289	1	0.336	1.05	3.11	53.184	52.9	53.18	4 52.767					10/100
11/100	2420 4420			ļ					-			2 4 20																													4 54.			11/100
	2/129 1/129	6	275	1		0.254	-		-			2/129			0.254	_		9.089		2	0.24	0.14		1			0.003			-			0.003			_		_	55.718	_	_		360	1/129
	3/124 1/129 2/129		275	1			_	_	_		_				0.421					2			42 46 43 47	/ 0.28	_	_	_		0.011						_		_		7 55.701				461	2/129
	2/124 1/124		275	1		_	_	117		_	_	1/129		_	0.154			8.375		2	0.76	0.08		1				7.97		-			0.019		_		_	_			_		31 117	1/124
	3/124 1/124 2/124	6	275	1	0.134	0.134	4   103	103	4.5	/6	26	1/128A			0.288				7.017 375	2	1.45	+	37 42 43	0.48	-				0.218				0.721										31 103	
3/124	4/124 1/129 2/129 1/124 2/124			-			$\perp$		+		1		6.34	271	0.709	0	190	55.082	2.205 450	2	1.2	0.34	42 46 43 47	/  0	1	1.28	0.073	1.59	0.116	1.75	J.128	1.22	0.671	0.211	2.59	55.585	54.371	55.58	5 54.914	_	_		+	3/124
4/124				1.		1	_		-		1		1.	1						_		1		1.				1		$\vdash$					ļ	1	1	1.	+		9 55.			4/124
	2/134 1/134		275	1	0.308	_	_	235	_	_		2/134		_	0.308	_			1.678 375	2		0.45		1			0.082						0.356					_			_		15 235	
2/134			275	1	-	_									0.617	_		_	0.379 450	2	1.93	0.34		0.39			0.19						0.262			_			2 60.71	_	_		298	2/134
3/134		6	275	1	0.09	0.09	69	69	3.4	57	12	1/137	6.8	265	0.707	0	355	57.324	3.504 450	2	2.23	0.28	37 42 43	0.16	1	1.93	0.254	1.54	0.39	1.65	0.42	2.39	1.372	0.268	3.59	60.32	58.312	60.32	58.948	8 60.74	61.	362 171	.4 69	3/134
4/134	5/134 1/137 1/138 1/134 2/134 3/134 4/134	6	275	1	0.233	0.23	3 178	333	3.79	166	167	5/134	7.08	262	1.116	0	512	39.066	5.518 450	2	3.22	0.15	33 34	0.31	1	2.46	0.53	1.24	0.657	0	0.657	3.88	1.516	0.295	4.64	58.292	56.136	58.29	2 56.77	6 58.94	8 59.	256 168	80 333	4/134
5/134	3/134 4/134 3/134	6	275	1	0.108	0.108	8 83	250	6.2	117	133	1/135	6.87	265	1.206	0	621	52.592	5.637 450	2	3.9	0.21	33 34	0.19	1	2.47	0.777	0.8	0.624		0.624	4.73	2.49	0.339	4.83	56.116	53.152	56.15	2 53.66	2 56.77	6 57.	264 156	67 250	5/134
	1/135 1/136 1/137 1/138 10/100 1/134 2/134 3/134 4/134 5/134														1.467			11.886		2	2.1	0.07		0			0.226						0.073						6 53.47					6/134
1/135	6/134 1/135	6	275	1	0.213	0.21	3 163	807	1.59	332	475	1/136	6	275	0.213	0	332	2.932	1.01 600	2	1.17	0.02	32	1	_		0.07						0.009			53.325	53.295	53.67	1 53.662	2 54.08	5 54.	277 1	807	1/135
1/136	6/134 1/136	6	275	1	0.053	0.05	3 40	515	1.52	189	326	1/132	6	275	0.053	0	189	5.343	1.001 375	2	1.71	0.06	32	1		3.39	0.15	3.38	0.505		0.505	1.16	0.062	0.375	1.71	53.332	53.279	53.72	4 53.66	2 54.23	54.	276 186	515	1/136
1/137	4/134 1/137	6	275	1	0.176	0.176	6 135	146	3.78	3 13	133	1/129	6	275	0.176	0	13	7.935	1 375	2	0.12	0.08	32	1		2.69	0.001	4.48	0.003		0.003	0.01	0	0.069	0.93	58.318	58.239	58.94	€ 58.94°	8 58.95	2 59.	259 168	80 146	1/137
1/138	2/134 1/138	6	275	1	0.043	0.043	3 33	207	1.29	52	155	4/134	6	275	0.043	0	52	8.634	1.009 375	2	0.47	0.09	32	1		3.19	0.011	3.59	0.04	0	0.04	0.09	0.008	0.14	1.38	60.467	60.38	61.24	8 61.24	1 61.28	9 61.	408 190	04 207	1/138
1/140	9/100 1/140	6	275	1	0.179	0.179	9 137	723	1.08	3 211	512	1/135	6	275	0.179	0	211	2.395	1.016 375	2	1.91	0.03	32	1		2.95	0.187	3.91	0.73		0.73	2.78	0.041	0.375	1.91	53.881	53.857	53.88	1 53.81	3 54.61	2 54.	821 192	29 723	1/140
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FOR CONSTRUCTION





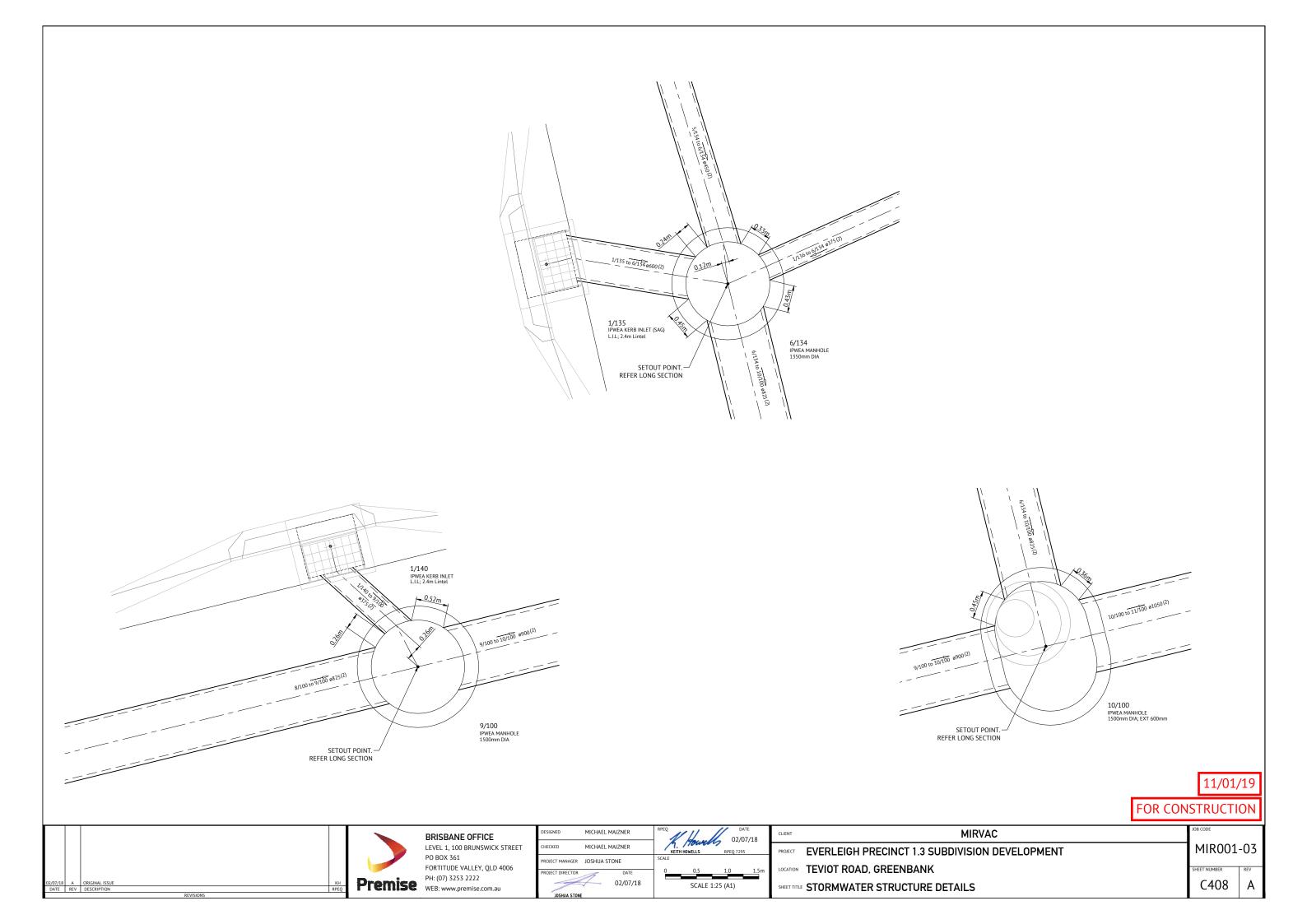
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET Premise

LEVEL 1, 100 BKUNSWICK STREE
PO BOX 361
FORTITUDE VALLEY, QLD 4006
PH: (07) 3253 2222
WEB: www.premise.com.au

DESIGNED MICHAEL MAJZNER	DATE 02/07/18
CHECKED MICHAEL MAJZNER	KEITH HOWELLS RPEQ 7295
PROJECT MANAGER JOSHUA STONE	SCALE
PROJECT DIRECTOR DATE 02/07/18 JOSHUA STONE	

MIRVAC PROJECT EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE Q100 MAJOR STORM CALCULATIONS

MIR001-03



# **EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT** TEVIOT ROAD, GREENBANK **FOR MIRVAC**

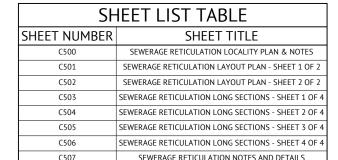
## SEWERAGE RETICULATION



SCALE 1:5000 (A1)

REAL PROPERTY DESCRIPTION

LOT 205 & 434 on RP845844 LOT 9 on S312355



#### **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 SEQ 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.
- 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 EACH ALTERNATE LAYER, IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY THE SEQ SERVICE PROVIDER UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
- WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SEO SEWER CODE.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
- 12. SEWERS SHALL BE DISUSED /ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEO SEWER CODE.
- BENCH MARK AND LEVELS TO AHD.
- 14. REFER TO BULK EARTHWORKS DRAWINGS FOR FINISHED SURFACE LEVELS. 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.
- 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.
- CONSTRUCT PROPERTY CONNECTIONS TO SEQ-SEW-1100 SERIES.
   CONSTRUCT MAINTENANCE STRUCTURES TO SEQ-SEW-1300 SERIES.
- CONSTRUCT BULKHEADS TO SEQ-SEW-1206-1.
- 22. INSTALL DETECTABLE MARKER TAPE ON ALL MAINS AND PROPERTY CONTRACTOR SHALL ENSURE THAT ALL SEWER PROPERTY CONNECTIONS
- CLEARANCE WHERE CROSSING LINDERNEATH WATER MAINS

#### 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.

C. TREE ROOTS SHALL BE TUNNELLED UNDER, RATHER THAN SEVERED, JE 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

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

C. IF ACID SUI PHATE SOILS EXIST IN THE WORKS AREA. ACID SUI PHATE SOILS ARE TO MANAGED IN ACCORDANCE WITH AN APPROVED ACID SULPHATE SOIL

#### **CREEK CROSSINGS**

A. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY

B APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT

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.

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

#### 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. TH 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 UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS O THE QUEENSLAND WORKPLACE HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF HEALTH & SAFETY FOR INFORMATION. PHONE: 1300 369 915

CONTACT "DIAL BEFORE YOU DIG" ON 1100 FOR LOCATION OF EXISTING PUBLIC SERVICES PRIOR TO EXCAVATION

NAME OF ES	STATE	EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT		
SUBDIVIDER		MIRVAC		
APPLICATION No.		-		
SP DELEGATE APPR	OVAL DATE	5 JUNE 2017		
COUNCIL DA APPRO	VAL No.	DEV 2016 / 768		
DRAWING/PLAN No.		C501-C502		
No. OF ALLOTMENT	S	62		
AREA IN Ha.		5.03 Ha		
LENGTH OF SEWERS DN150 uPVC SN8		1085m		

11/01/19

FOR CONSTRUCTION

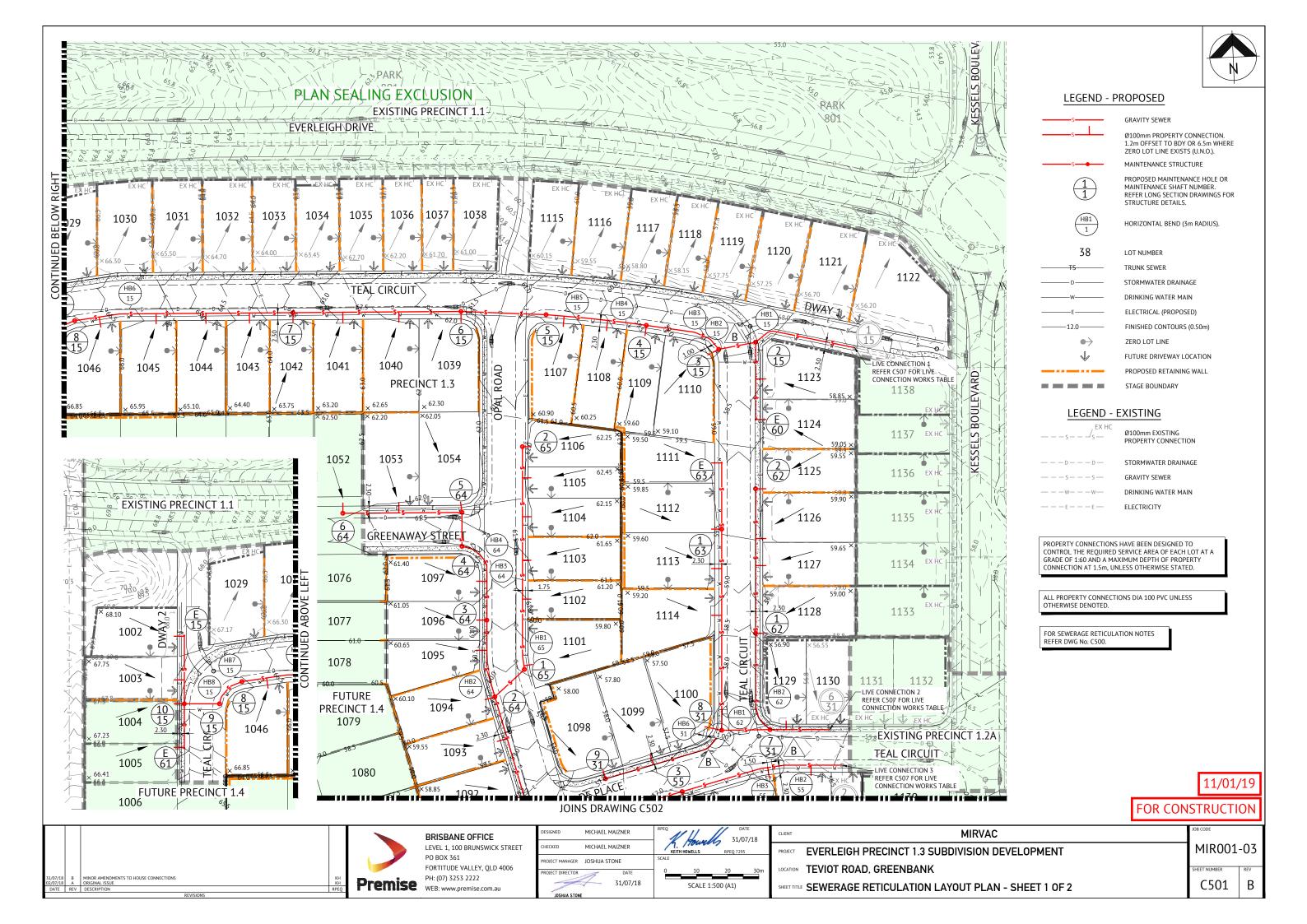


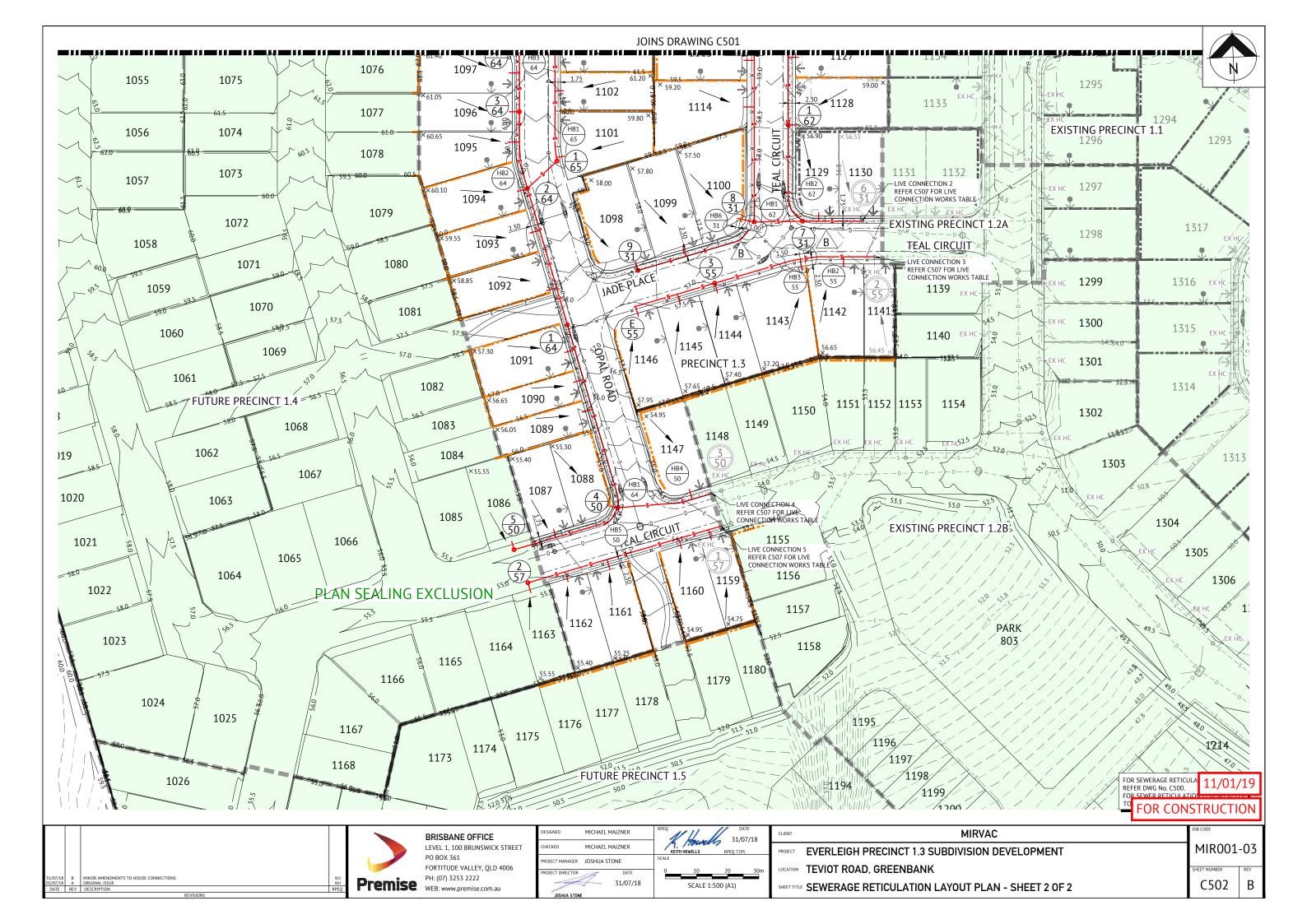


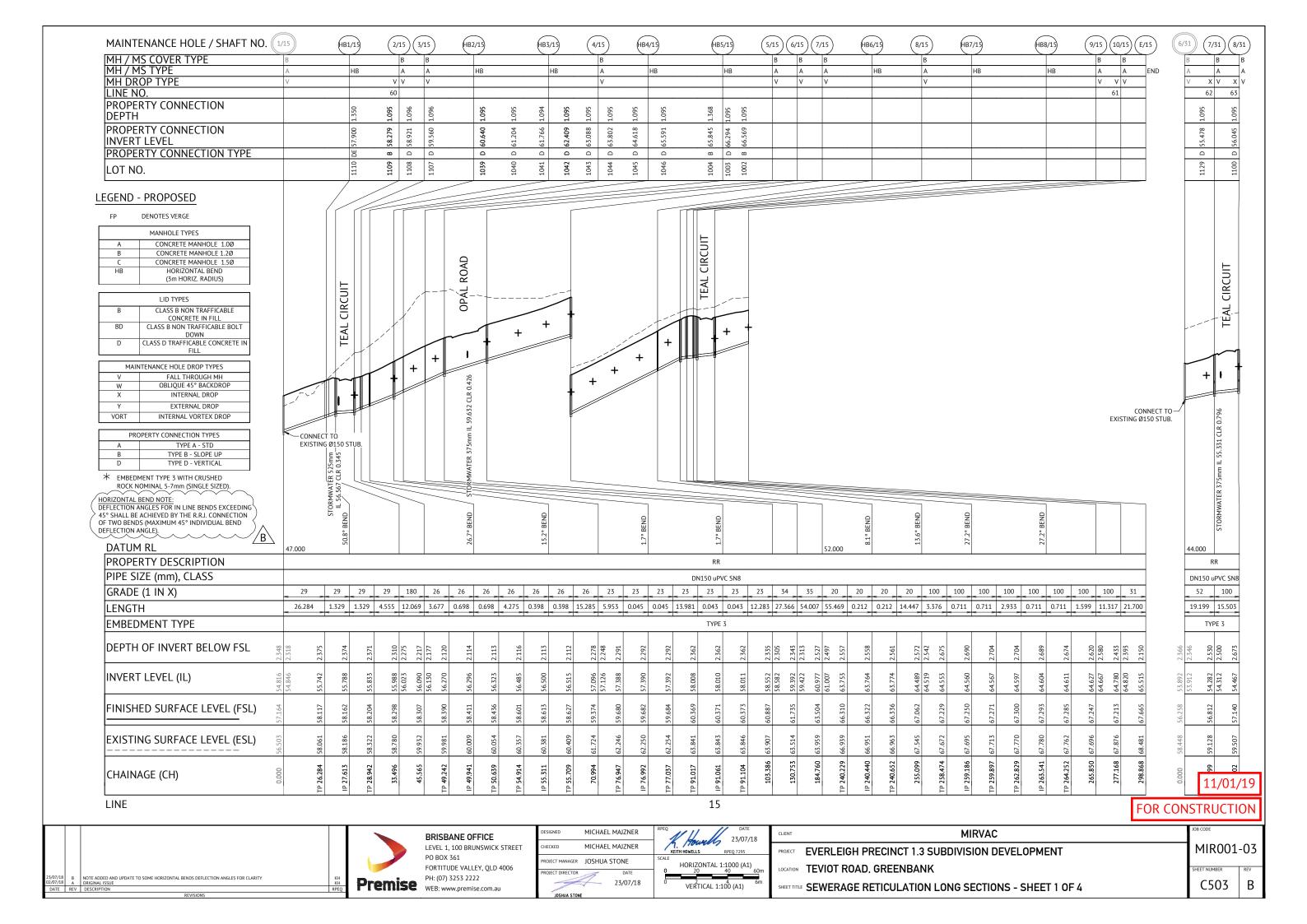


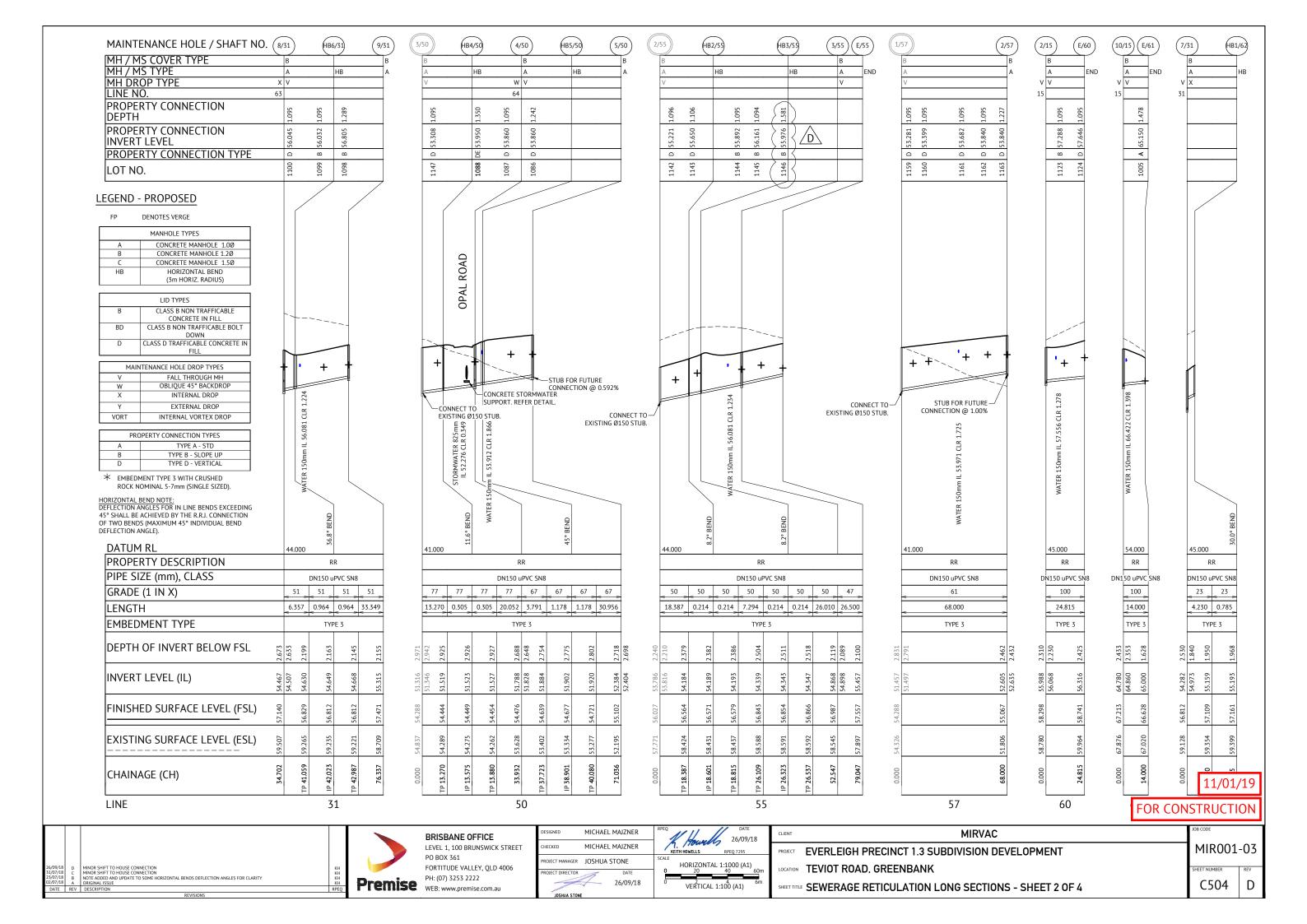
MIR001-03 | C500

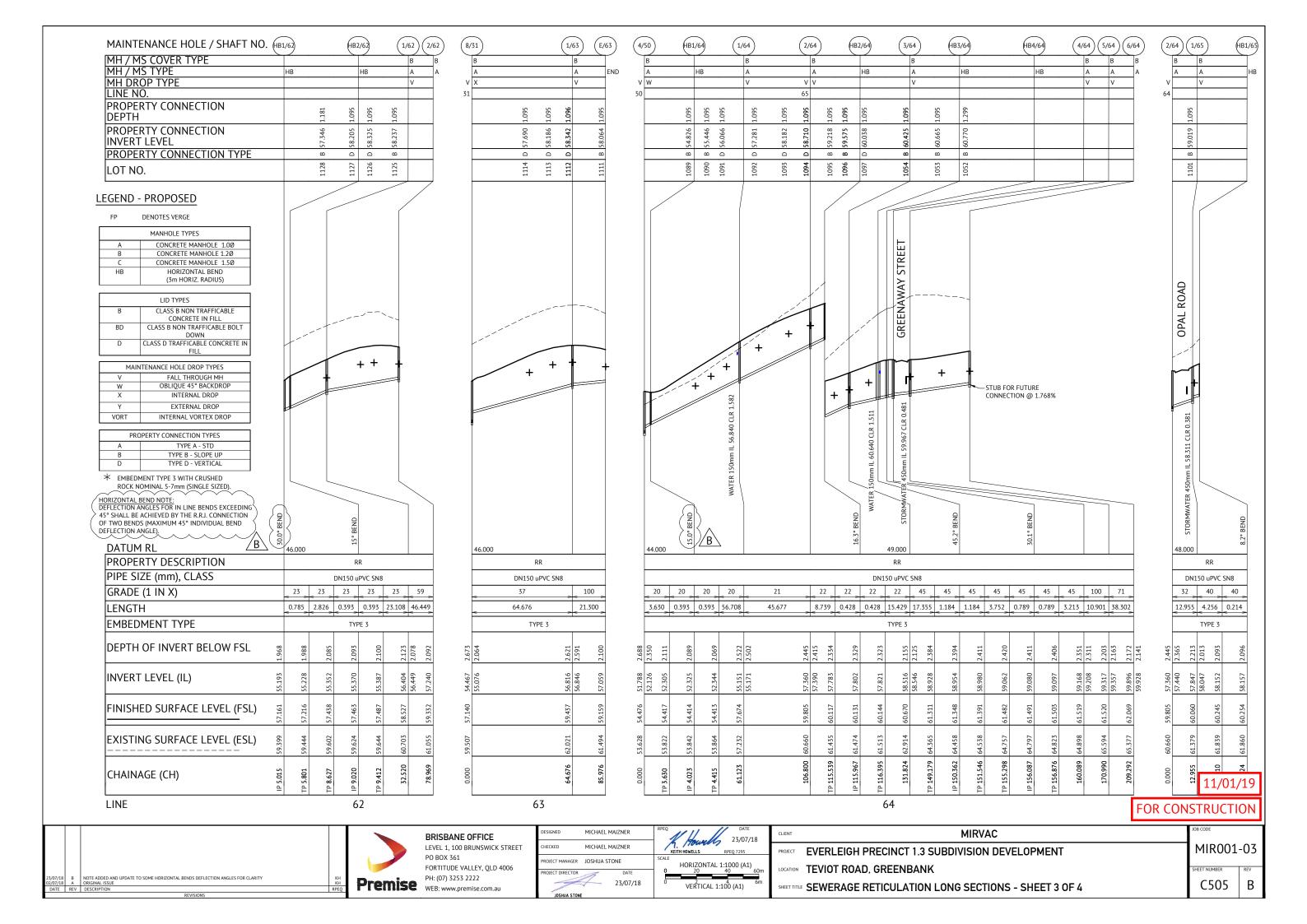
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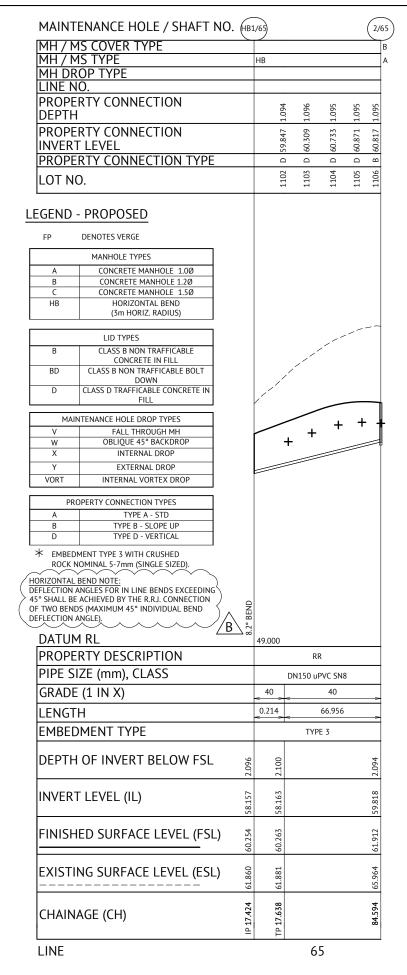












11/01/19

FOR CONSTRUCTION

Premise PH: (U/) 5253 2222
WEB: www.premise.com.au

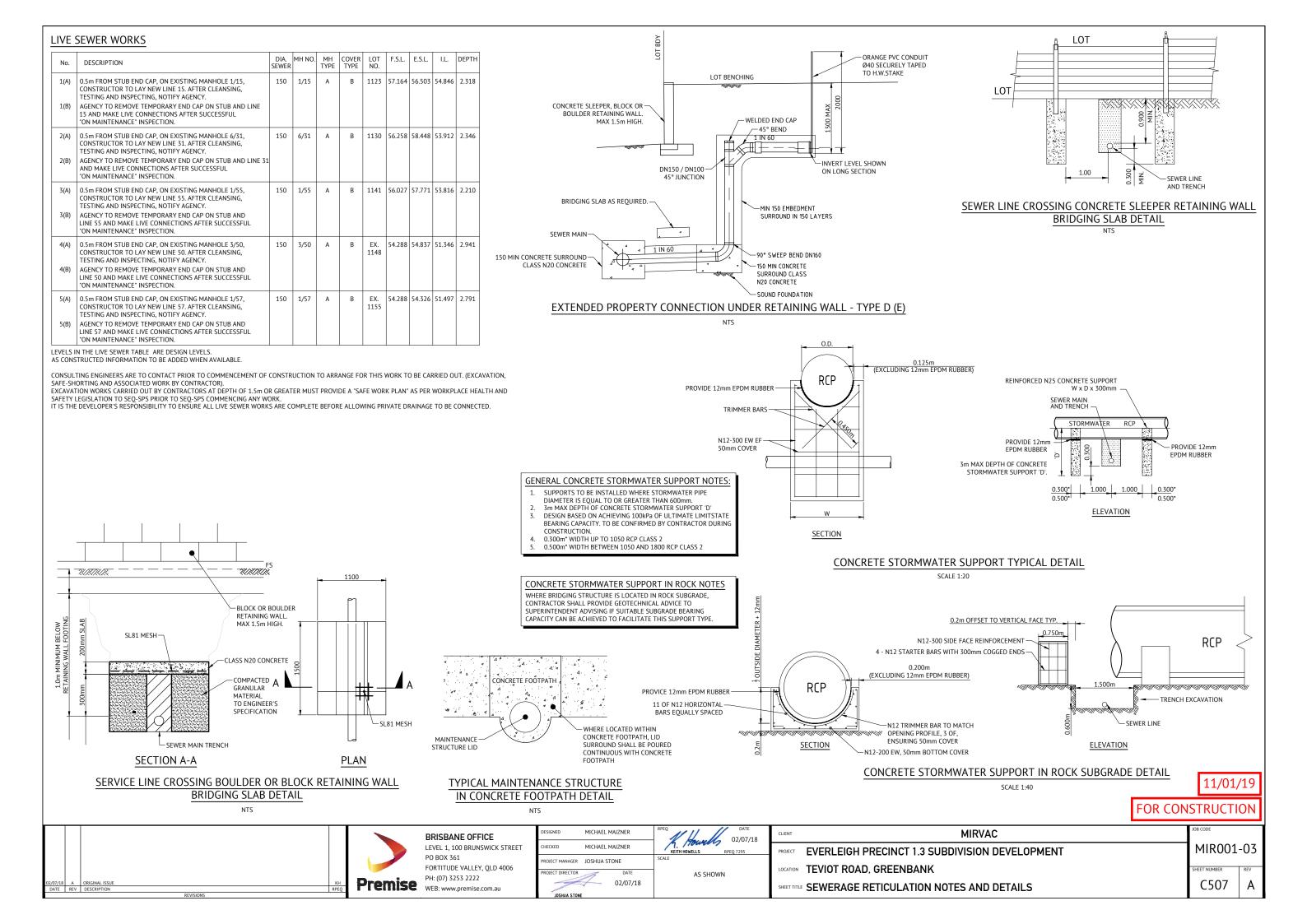
BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222

IGNED	MICHAE	L MAJZNER	RPEQ	1/11	//	DATE
CKED	MICHAE	L MAJZNER	1	House	16 23/	07/18
			<b>₹</b> KE	EITH HOWELLS	RPEQ 72	95
JECT MANAGER	JOSHUA	STONE	SCALE	HORIZON	TAL 1:1000	(A1)
JECT DIRECTOR	1	DATE	<u> </u>	20	40	60
	7	23/07/18	0	VERTICA	L 1:100 (A1	1)

CLIENT	MIRVAC
PROJECT	EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT
LOCATION	TEVIOT ROAD, GREENBANK
SHEET TITLE	SEWERAGE RETICULATION LONG SECTIONS - SHEET 4 OF 4

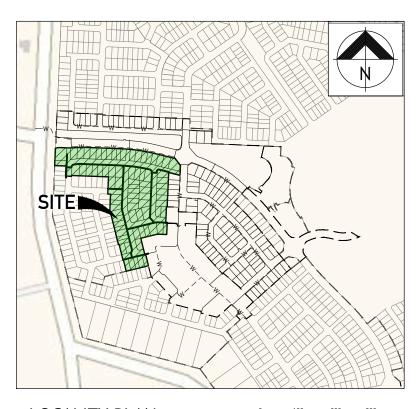
MIR001-03

C506



# EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT TEVIOT ROAD, GREENBANK FOR MIRVAC

## WATER RETICULATION

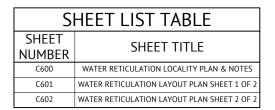


SCALE 1:5000 (A1)

#### LOCALITY PLAN

#### REAL PROPERTY DESCRIPTION

LOT 205 & 434 on RP845844 LOT 9 on S312355



#### **GENERAL NOTES**

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SOUTH EAST QUEENSLAND WATER SUPPLY CODE SPECIFICATIONS AND STANDARDS.
- 2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- 3. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
  4. COVER OF MAIN FROM PERMANENT LEVEL TO BE AS SHOWN IN
- SEQ-WAT-1200-2.

  5. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD
- DRAWINGS.
- 6. 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 SEQ-SP'S
- 7. ALL CONCRETE FOOTPATHS TO BE CLEAR OF WATER MAINS. WHERE POSSIBLE
- 8. TEST/CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO. SEO-WAT-1410-1
- CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
- 10. ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH & SAFETY FOR INFORMATION. PHONE: 1300 362 128.
- CONSTRUCT THRUST BLOCKS ON ALL BENDS, TEES, TAPERS AND DEAD ENDS IN ACCORDANCE WITH SEQ-WAT-1205-1, AND SEQ-WAT-1206-1.
   CONSTRUCT TRENCHES IN ACCORDANCE WITH SEQ-WAT-1200-2, PIPE
- CONSTRUCT TRENCHES IN ACCORDANCE WITH SEQ-WAT-1200-2, PI EMBEDMENT TO SEQ-WAT-1201-1 (TYPE C SUPPORT) AND ROAD CROSSINGS TO SEQ-WAT-1204-1 AND BCC STANDARDS.
- 13. INSTALL SCOURS IN ACCORDANCE WITH SEQ-WAT-1307-2.

  14. INSTALL DETECTABLE MARKER TAPE ON ALL WATER MAINS AND
- PROPERTY SERVICES.

  15. INSTALL HYDRANTS IN ACCORDANCE WITH SEQ-WAT-1302-1,
- 15. INSTALL HYDRANTS IN ACCURDANCE WITH SEQ-WAT-1302-1, SEQ-WAT-1303-2 AND SEQ-WAT-1409-1

  16. INSTALL PAVEMENT MARKERS IN ACCORDANCE WITH SEQ-SEW-1300-1
- & 2.

#### **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.

#### SOIL

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.

#### **CREEK CROSSINGS**

- SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT
- SEDIMENT FROM ENTERING THE CREEK.

  NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.

#### REHABILITATION

- I. PRE-DISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.
- 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.
- 3. ALL DISTURBED AREAS ARE TO BE LEFT IN STABLE CONDITION.
- ALL PLANTING/RE-VEGETATION WILL NEED TO BE MAINTAINED THROUGHOUT THE MAINTENANCE PERIOD.

#### CONSTRUCTION REQUIREMENTS

- LIVE WATER CONNECTIONS TO BE CARRIED OUT BY CONTRACTOR IN ACCORDANCE WITH A VALID NETWORK ACCESS PERMIT UNDER LOGAN WATER SUPERVISION AT DEVELOPERS EXPENSE AT LOCATION MARKED
- 2. PRIOR TO ANY EXCAVATION, CONTRACTOR IS TO LOCATE ACTUAL
- POSITIONS OF PUBLIC SERVICE UTILITIES BY POT HOLES.

  3. UPON COMPLETION OF ALL WORKS, CONTRACTORS SHALL SUPPLY THE SUPERVISING RPEQ 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.
- 4. CONTRACTOR IS TO BE RESPONSIBLE FOR ARRANGING ALL LOGAN WATER CONNECTIONS AND PAYMENTS OF CONNECTION FEES.

#### **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 RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO LOGAN WATER RETICULATION SYSTEM. ALL RPEQ CERTIFIED DRAWINGS COMPLY WITH SEQ CODE AND LOGAN WATER REQUIREMENTS.

#### INSPECTION REQUIREMENTS

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

A 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 CONTEACTOR

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

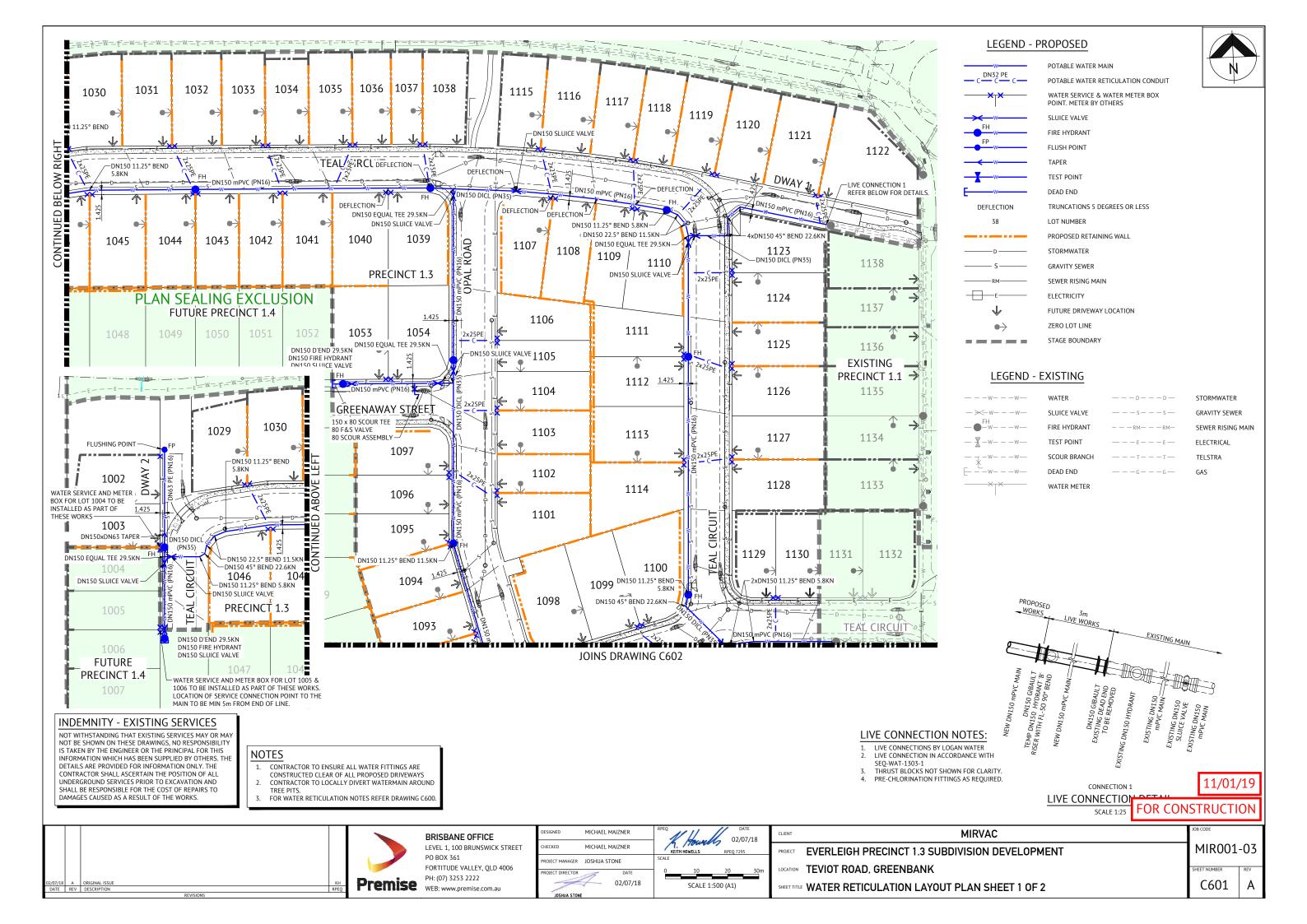
ALL WATER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH & SAFETY FOR INFORMATION, PHONE: 1300 362 128

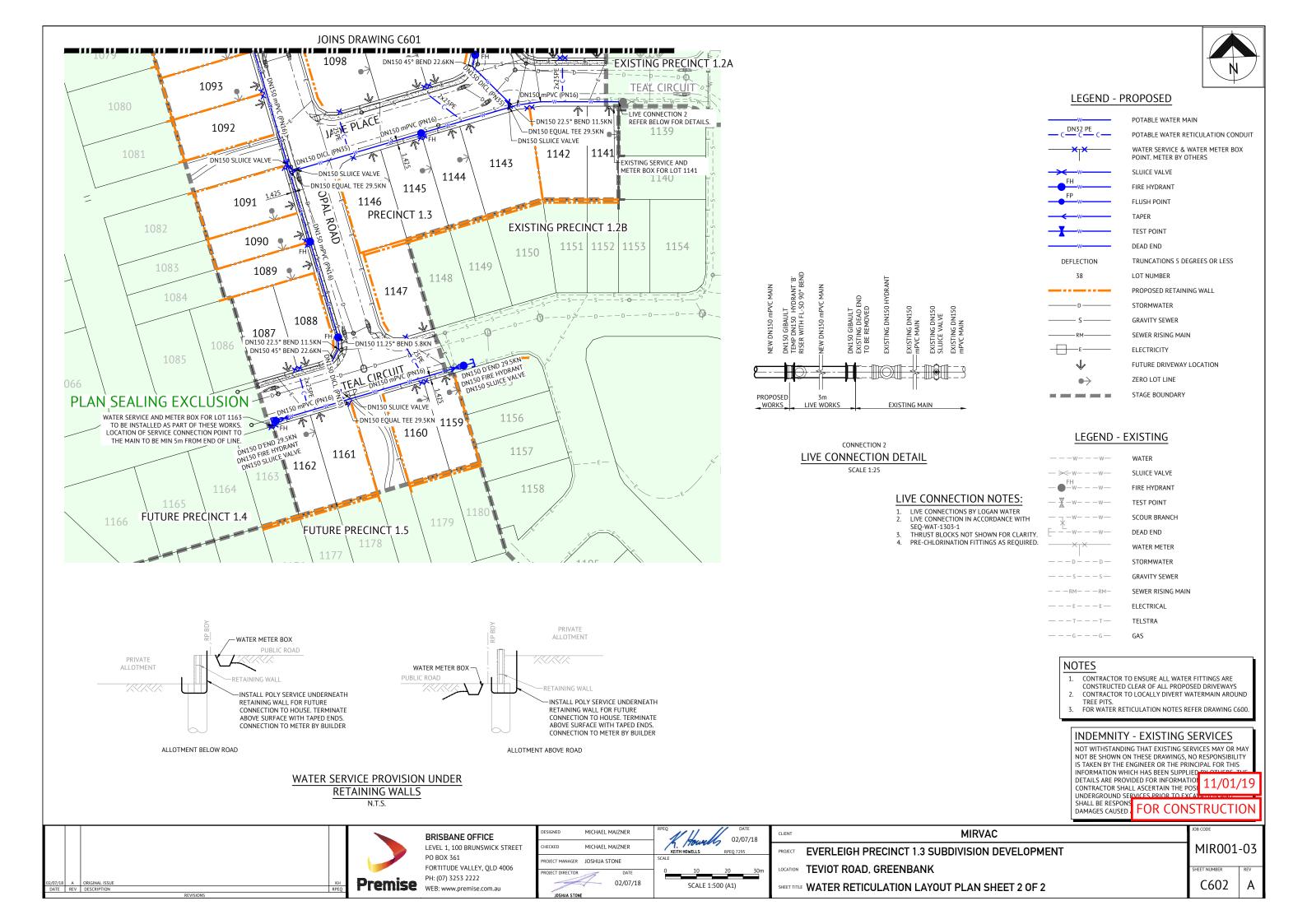
#### SEQ CODE STD DRAWING SCHEDULE

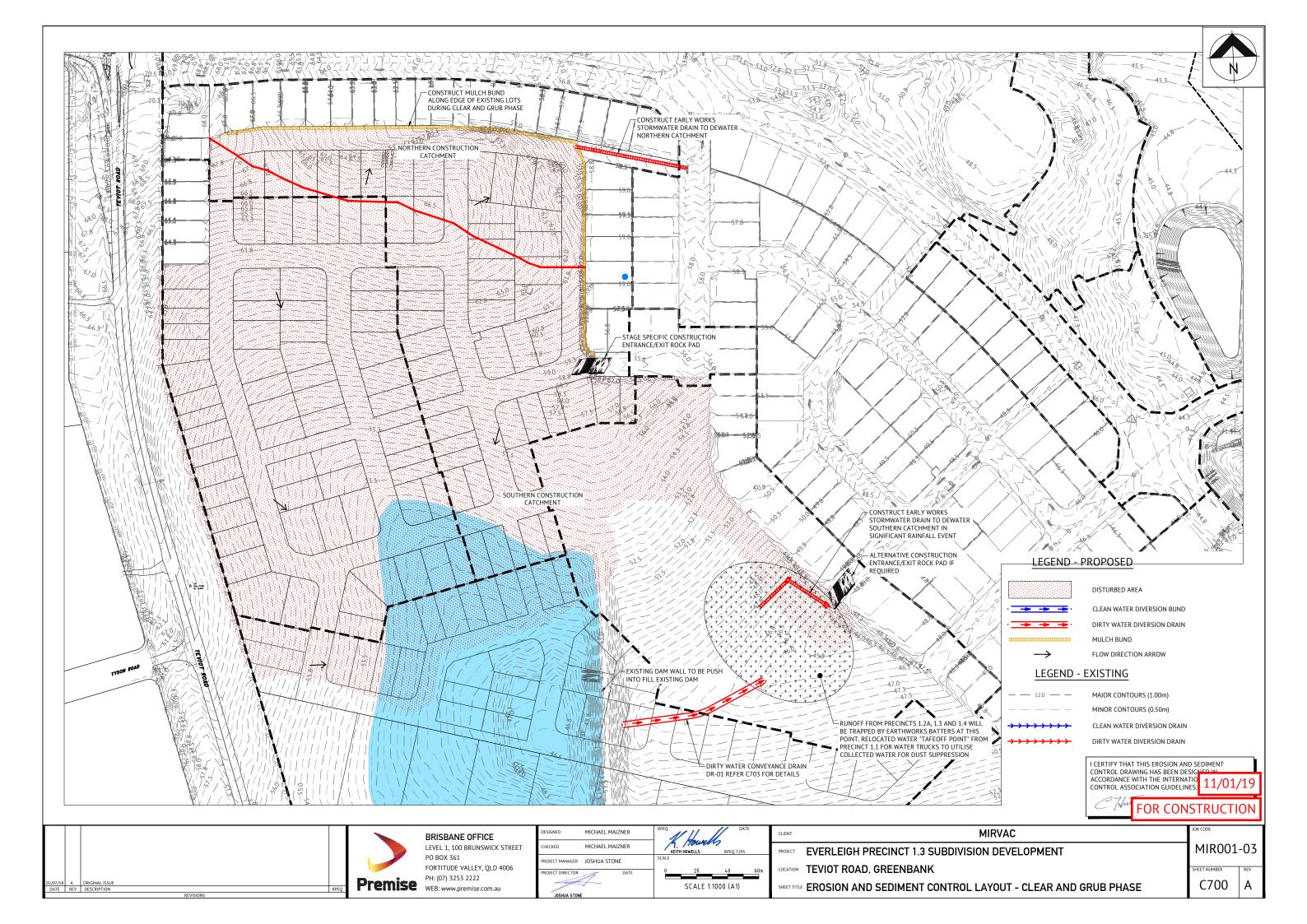


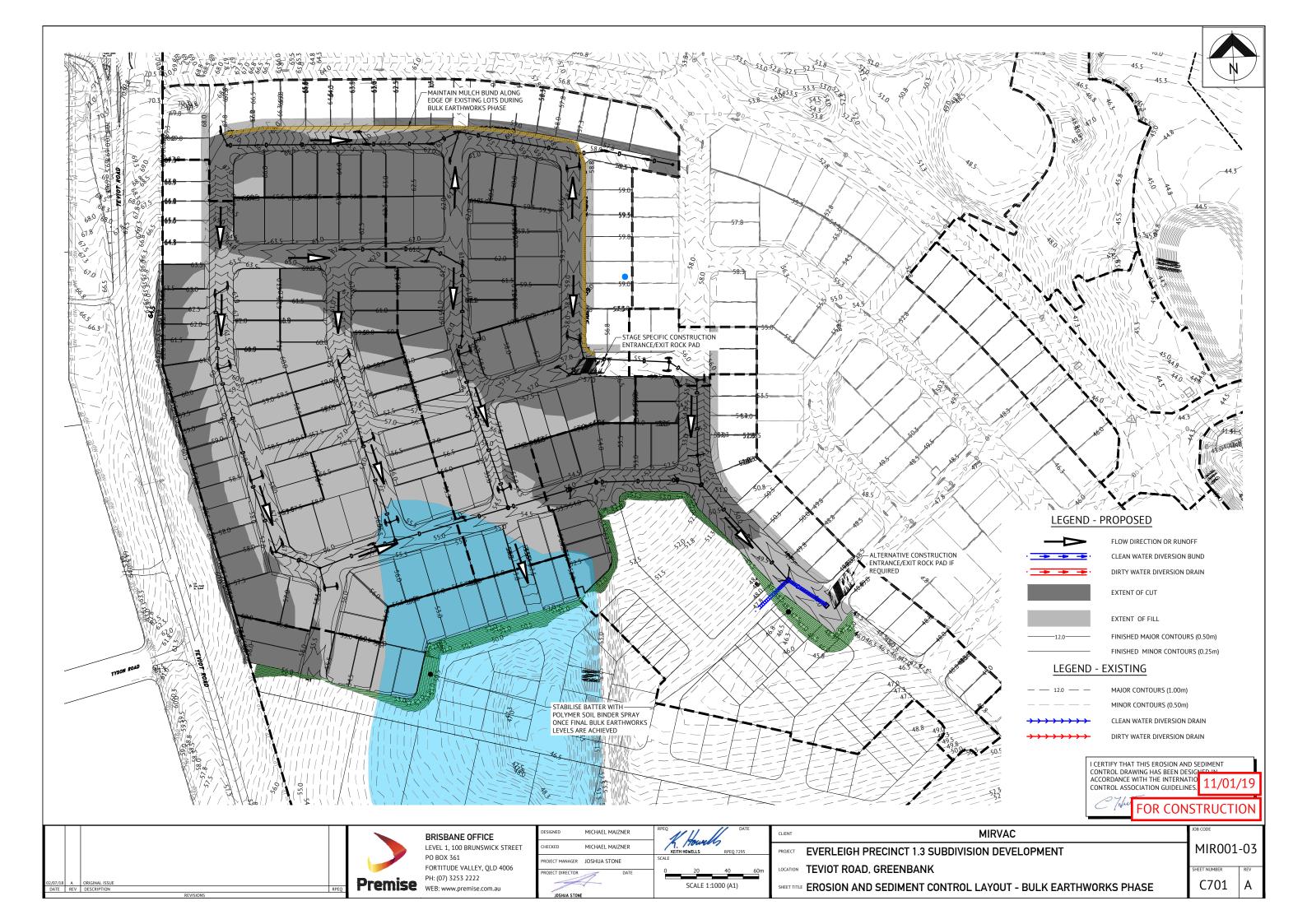
11/01/19 FOR CONSTRUCTION

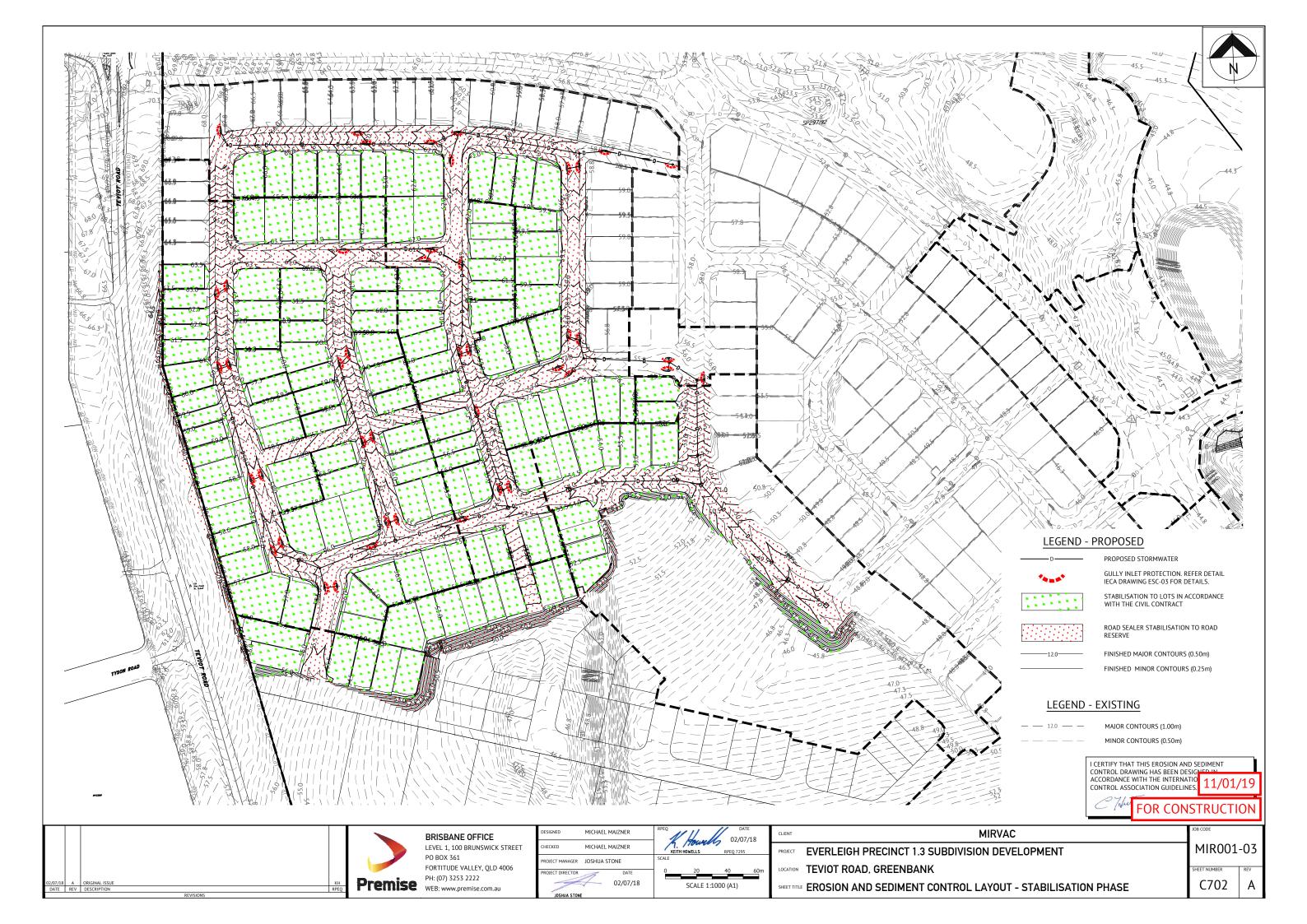












#### **EROSION & SEDIMENT CONTROL NOTES**

- 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.
- 4. 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
- 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 FEFECTS 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:

		TIME FRAME FOR
ESC MEASURES	MAINTENANCE TRIGGER	UNDERTAKING
		MAINTENANCE
SEDIMENT BASINS	WHEN SETTLED SEDIMENT VOLUME EXCEEDS THE VOLUME OF THE SEDIMENT SETTLEMENT ZONE	WITHIN 4 DAYS OF INSPECTION
OTHER ESC MEASURES	WHEN SETTLED SEDIMENT VOLUME EXCEEDS 25% OF THE CAPACITY OF THE ESC MEASURE	BY THE END OF THE DAY

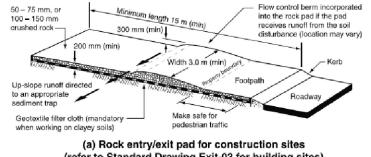
- INSTALL DIVERSION CATCH DRAINS UPSTREAM OF, AND SILT FENCE DOWNSTREAM OF, STOCKPILES.
- 8. STOCKPILES ARE TO BE LOCATED AWAY FROM EROSION HAZARD AREAS SUCH AS DRAINAGE LINES AND STEEP SLOPES.
- STOCKPILES ARE TO BE PROTECTED FROM EROSION BY THE WIND
- 10. ADEQUATE SUPPLIES OF EMERGENCY MAINTENANCE 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
- 12. DISTURBED AREA ARE TO BE STABILISED AS SOON AS POSSIBLE ON COMPLETION OF BULK FARTHWORKS LOTS TO BE STABILISED FOLLOWING RESPREADING OF TOPSOIL
- 13. SUPPLEMENTARY ESC MEASURES SHALL BE DIRECTED BY THE SUPERINTENDENT

#### CATCH DRAIN DETAILS

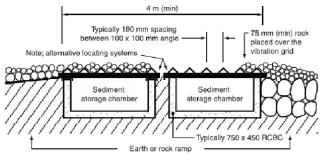
	Drain ID	Drain Type	Slope	Lining	Base Width (m)	Top Width (m)	Depth incl. freeboard (m)	Side Slope Length	Wetted Perimeter (m²)	Velocity (m/s)
ĺ	DR-01	Type B	2.0%	Geofabric	4	5.2	0.3	2	5.34	2.0

#### NOTE:

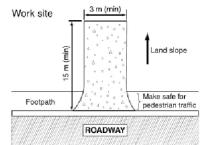
COIR LOG CHECK DAMS TO BE INSTALLED AT 20m CRS



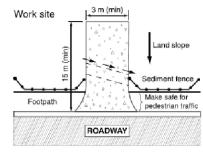
# (refer to Standard Drawing Exit-03 for building sites)



(c) Alternative low maintenance arrangement (still under development)



#### (b) Rock pad sloping away from road



(d) Rock pad sloping towards the road

#### CONSTRUCTION ENTRANCE DETAIL

#### MATERIALS

COMPOSTS MUST COMPLY WITH THE **REQUIREMENTS OF AS4454** 

AEROBIC (BIOLOGICAL) DECOMPOSITION

(ii) MAXIMUM OF 1% OF INERT MATERIAL

(iii) MAXIMUM SOLUBLE SALT CONCENTRATION OF 5dS/m, AND pH RANGE OF 5.0 TO 8.5.

(iv) MOISTURE CONTENT OF 30 TO 50% PRIOR TO APPLICATION.

#### INSTALLATION

1. REFER TO APPROVED PLANS FOR LOCATION AND EXTENT. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION EXTENT MATERIAL TYPE OR METHOD OF INSTALLATION CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.

2. WHEN SELECTING THE LOCATION OF A COMPOST FILTER BERM, TO THE MAXIMUM DEGREE PRACTICABLE ENSURE THE BERM IS LOCATED:

(i) TOTALLY WITHIN THE PROPERTY BOUNDARIES: (ii) ALONG A LINE OF CONSTANT

ELEVATION (PREFERRED, BUT NOT ALWAYS PRACTICAL): (iii) AT LEAST 1m, IDEALLY 3m, FROM THE TOE OF A FILL EMBANKMENT;

(iv) AWAY FROM AREAS OF

3. ENSURE THE BERM IS INSTALLED IN A MANNER THAT AVOIDS THE

CONCENTRATION OF FLOW ALONG THE BERM, OR THE UNDESIRABLE DISCHARGE OF WATER AROUND THE ENDS OF THE BERM.

4. ENSURE THE BERM HAS BEEN PLACED ALONG THE CONTOUR SUCH THAT WATER WILL POND EVENLY ALONG THE

5 ENSURE BOTH ENDS OF THE BERM 5. ENSURE BOTH ENDS OF THE BERM ARE ADEQUATELY TURNED UP THE SLOPE TO PREVENT FLOW BYPASSING PRIOR TO WATER PASSING OVER THE

6. ENSURE 100% CONTACT WITH THE

7. WHERE SPECIFIED, TAKE APPROPRIATE STEPS TO VEGETATE THE

#### MAINTENANCE

 DURING THE CONSTRUCTION PERIOD, INSPECT THE BERM AT LEAST WEEKLY AND AFTER ANY SIGNIFICANT RAIN. MAKE NECESSARY REPAIRS IMMEDIATELY.

2 REPAIR OR REPLACE ANY DAMAGED

RESTORE THE SYSTEM TO ITS ORIGINA CONFIGURATION UNLESS AN AMENDED LAYOUT IS REQUIRED OR SPECIFIED.

REMOVE ACCUMULATED SEDIMENT IF THE SEDIMENT DEPOSIT EXCEEDS A
DEPTH OF 100mm OR 1/3 THE HEIGHT OF

5. DISPOSE OF SEDIMENT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

#### REMOVAL (IF REQUIRED)

1. WHEN DISTURBED AREAS UP-SLOPE OF THE BERM ARE SUFFICIENTLY

2. REMOVE ANY COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

3. REHABILITATE/REVEGETATE THE DISTURBED GROUND AS NECESSARY TO MINIMISE THE EROSION HAZARD.

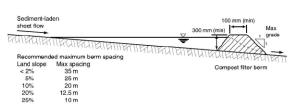
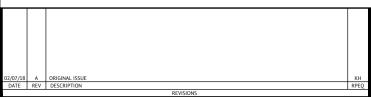


Figure 1 - Typical profile of a compost filter berm

#### MULCH BUND DETAIL

I CERTIFY THAT THIS EROSION AND SEDIMENT CONTROL DRAWING HAS BEEN DESIG ACCORDANCE WITH THE INTERNATI 11/01/19 CONTROL ASSOCIATION GUIDELINES FOR CONSTRUCTION





BRISBANE OFFICE LEVEL 1, 100 BRUNSWICK STREET PO BOX 361 FORTITUDE VALLEY, QLD 4006 PH: (07) 3253 2222



**MIRVAC EVERLEIGH PRECINCT 1.3 SUBDIVISION DEVELOPMENT** LOCATION TEVIOT ROAD, GREENBANK SHEET TITLE EROSION & SEDIMENT CONTROL NOTES AND DETAILS - SHEET 1

MIR001-03

C703

#### 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 chemical 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

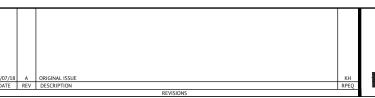
- All drainage, erosion and sediment control measures
- Occurrences of excessive sediment deposition (whether on-site or off-site)
- Occurrences of construction materials, litter or sediment placed, deposited, washed or blown from the site, including deposition by vehicular movements

#### **ROLLS AND RESPONSIBILITIES**

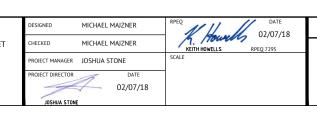
Role	Responsibility
Project Manager	<ul> <li>Overall responsibility of ESC implementation</li> </ul>
	<ul> <li>Notify the Environmental Manager immediately of any non- compliance with ESCP</li> </ul>
	<ul> <li>Ensure the prompt implementation of measures to mitigate erosion and sediment generation</li> </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>
	<ul> <li>Installation and maintenance of ESC</li> </ul>
Environmental Manager	Provide design information as required
	<ul> <li>Conduct in-situ monitoring (as required)</li> </ul>
	<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 and audits (as required)</li> </ul>
	<ul> <li>Inspect ESC installation and maintenance</li> </ul>
	<ul> <li>Inspect offsite impacts and management</li> </ul>
	<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>

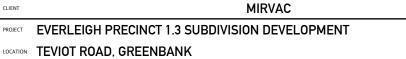


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EROSION & SEDIMENT CONTROL NOTES AND DETAILS - SHEET 2

C704

