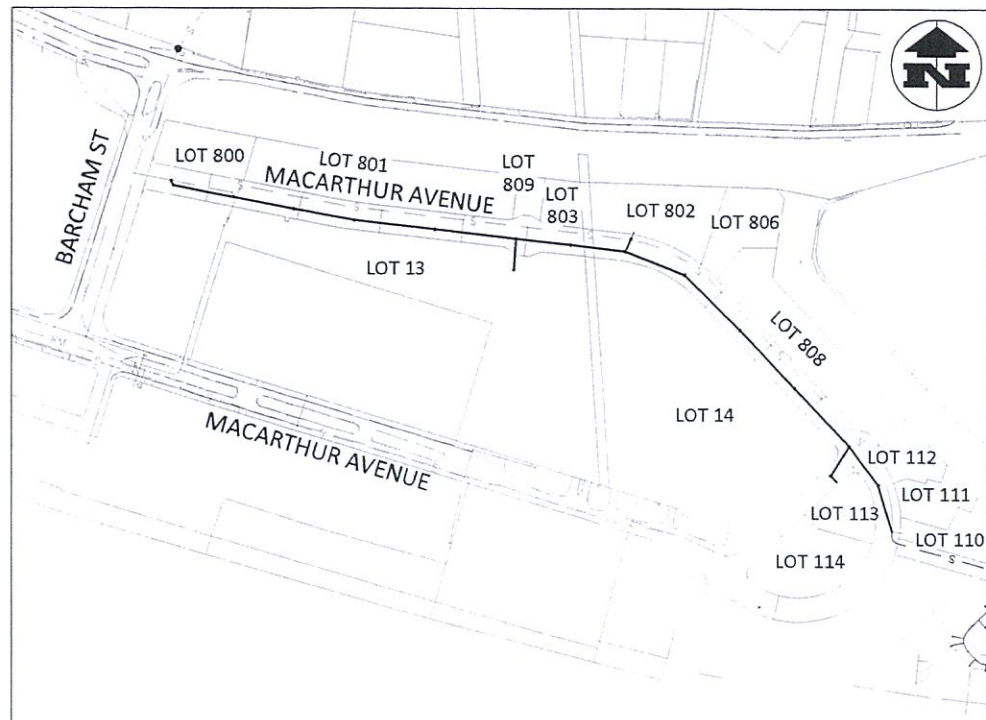




LOCALITY PLAN
NTS
UBD REFERENCE: BRISBANE MAP 141, GRID D19, E19 & F19
SITE ADDRESS: MACARTHUR AVENUE, HAMILTON QLD 4007

LEVEL DATUM

DATUM - A.H.D.
ORIGIN - PSM 77618
SURVEYOR - LANDPARTNERS

CONSTRUCTION INSPECTION:
NOTIFICATION OF INSPECTIONS MUST BE RECEIVED BY QUEENSLAND URBAN UTILITIES AUDIT & COMPLIANCE OFFICER AT LEAST TWO (2) WEEKS PRIOR TO COMMENCEMENT OF CONSTRUCTION
PLEASE CONTACT QUU PH: 0412 436 579

A "PERMIT TO WORK" MUST BE OBTAINED FROM THE RELEVANT QUU CONTROL ROOM PRIOR TO COMMENCEMENT OF WORK ON SITE. A MINIMUM PERIOD OF TEN WORKING DAYS IS REQUIRED FOR THE ISSUING OF A PERMIT. CONTROL ROOM EAST (BRISBANE LG AREA)
PH: 3856 7183
EMAIL: PTW@URBANUTILITIES.COM.AU

CONSULTANT : BORNHORST + WARD PTY LTD
TELEPHONE : (07) 3013 4699

ALL SEWER CONSTRUCTION WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORKPLACE HEALTH AND SAFETY ACT 1995. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. PHONE 1300 369 915

NAME OF ESTATE	NORTHSHORE HAMILTON
SUBDIVIDER	ECONOMIC DEVELOPMENT QLD
BCC REFERENCE NO.	-
B.C.C. DELEGATES	-
APPROVAL DATE	-
NUMBER OF LOTS	-
AREA OF ESTATE (Ha)	-
LENGTH OF	150 VC 36.750m 250 VC 163.400m 300 VC 450.600m 400 VC 388.600m

NO. PRIVATE PROPERTIES EXT. TO DEVELOPMENT TRAVERSED BY SEWER

HIGH RISK ACTIVITY ASBESTOS CEMENT PRODUCTS

THIS PROJECT MAY REQUIRE THE HANDLING, REMOVAL AND DISPOSAL OF ASBESTOS CEMENT PRODUCTS. ANY ACTIVITY ASSOCIATED WITH ASBESTOS CEMENT PRODUCTS SHALL BE IN ACCORDANCE WITH RELEVANT AUTHORITY GUIDELINES AND SAFETY REQUIREMENTS.

PRIVATE SEWER TO BE ABANDONED

LOCATION	SR NO	DIA	TYPE	LENGTH	YEAR LAID	G	F	X	MS	OTHER
MACARTHUR AVENUE	EX27/1 - EX26/1	250	PE	93.000	2008	-	-	1	-	-
MACARTHUR AVENUE	EX26/1 - EX20/1	315	PE	538.000	2008	-	-	2	4	-
MACARTHUR AVENUE	EX20/1 - EX17/1	450	PE	244.000	2008	-	-	3	-	-
MACARTHUR AVENUE	EX1/15&EXE/32 - EX26/1	160	PE	62.400	2008	-	-	-	-	-
MACARTHUR AVENUE	EXE/13&14 - EX25/1	160	PE	31.500	2008	-	-	-	-	-
MACARTHUR AVENUE	EXE/12 - EX24/1	160	PE	24.500	2008	-	-	-	-	-
MACARTHUR AVENUE	EXE/11 - EX23/1	160	PE	24.500	2008	-	-	-	-	-
MACARTHUR AVENUE	EXE/10 - EX21/1	160	PE	31.900	2008	-	-	-	-	-
MACARTHUR AVENUE	EXE/8&9 - EX20/1	160	PE	31.100	2008	-	-	-	-	-
MACARTHUR AVENUE	EXE/7 - EX19/1	160	PE	24.700	2008	-	-	-	-	-
MACARTHUR AVENUE	EXE/6&5 - EX18/1	160	PE	31.100	2008	-	-	-	-	-
MACARTHUR AVENUE	EX6/T1 - EX17/1	225	uPVC	38.400	2008	-	-	-	-	-

NOTES:

GENERAL

- WORKS MUST BE EXECUTED IN ACCORDANCE WITH SEQ WATER SUPPLY AND SEWERAGE DESIGN & CONSTRUCTION CODE INCORPORATING SEWERAGE CODE OF AUSTRALIA WSA 02-2002 V2.3 AND BCC REFERENCE SPECIFICATION S120 QUALITY, S140 EARTHWORKS, S150 ROADWORKS AND THE SPECIFICATIONS REFERENCED THEREIN.
- ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORKPLACE HEALTH AND SAFETY ACT. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. PHONE: 1300 369 915.
- CONNECTION OF THE WORKS TO THE LIVE SYSTEM SHALL BE CARRIED OUT BY A QUU APPROVED PROVIDER.
- CONTRACTOR TO TAKE APPROPRIATE ACTION TO PROTECT AND MAINTAIN QUU'S AND OTHER AUTHORITIES' EXISTING SERVICES.
- IN THE EVENT OF A BREAKAGE OR ANY OTHER EMERGENCY RELATING TO A QUU ASSET PHONE 13 23 64 IMMEDIATELY
- AUDIT AND FINAL INSPECTIONS OF WORK CONSTRUCTED BY CONTRACTORS MUST BE ARRANGED TWO WEEKS BEFOREHAND WITH THE QUU AUDIT AND COMPLIANCE OFFICER (CONTACT DETAILS BELOW).
- ONLY QUU PERSONNEL MUST OPERATE THE EXISTING QUU SEWER NETWORK
- SERVICES WHERE SHOWN ARE APPROXIMATE ONLY. EXACT LOCATION AND DEPTH TO SERVICES ARE TO BE CONFIRMED WITH RELEVANT AUTHORITIES AND ON SITE BY THE CONTRACTOR PRIOR TO COMMENCING WORKS. THE CONTRACTOR SHALL COMPLETE THEIR OWN SERVICES INVESTIGATIONS, INCLUDING PHYSICAL LOCATION ON SITE AS DEEMED NECESSARY TO FACILITATE CONSTRUCTION.
- RESTORE ALL SURFACES TO MATCH PRE-EXISTING SURFACES UNLESS NOTED OTHERWISE.
- REMOVE AND REINSTATE OBJECTS ALONG LINE OF CONSTRUCTION SUCH AS SIGNS, FENCES, ETC.
- ALL NEW WORKS REQUIRE CCTV SURVEYS, INCLINATION REPORT & VACUUM TESTING PRIOR TO ACCEPTANCE. CCTV INSPECTIONS SHALL HAVE INCLINOMETER READINGS ON THE SCREEN AT ALL TIMES. CCTV INSPECTIONS TO BE IN WINCAN 8 FORMAT. THE INCLINOMETER SHALL BE ACCURATE TO $\pm 1\%$
- HANDLING OF ASBESTOS CEMENT PIPES SHALL BE CARRIED OUT IN ACCORDANCE WITH THE QUU ASBESTOS PROCEDURE - WH&S 703 AND QUU SWMS 10.
- OTHER AUTHORITIES' UNDERGROUND SERVICES ARE SHOWN APPROXIMATELY AS TAKEN OFF DIAL BEFORE YOU DIG INFORMATION. EXTREME CAUTION MUST BE EXERCISED WHEN WORKING IN THE VICINITY OF AND AROUND THESE SERVICES. DUE TO THE TIME FRAME BETWEEN DESIGN AND CONSTRUCTION IT IS NECESSARY THAT THE CONTRACTOR CONFIRM THE LOCATION OF OTHER AUTHORITIES' UNDERGROUND SERVICES.

ENVIRONMENTAL MANAGEMENT

- REFER NOTES DRAWING C0000.
- ALL TREES AND SHRUBS THAT ARE TO BE RETAINED MUST BE PROTECTED FROM DAMAGE AS DETERMINED BY BCC LOCAL ASSET SERVICES.
- PIPELINES ADJACENT TO SIGNIFICANT TREES MUST BE INSTALLED BY BORING OR DIRECTIONAL DRILLING UNLESS OTHERWISE AGREED BY THE CONTRACT MANAGER.
- FOR TRENCH INSTALLATIONS TREE ROOTS MUST BE EXPOSED BY HAND EXCAVATION. TREE ROOTS MUST BE CUT CLEANLY AND A BITUMINOUS FUNGICIDAL SEALANT APPLIED TO THE CUT SURFACE.
- BACKFILL AROUND TREE ROOTS USING A MIXTURE OF THREE PARTS TOPSOIL TO ONE PART COMPOST, LIGHTLY COMPACTED.
- EXCAVATION UNDER TREE CANOPIES TO BE BACKFILLED AS SOON AS POSSIBLE.
- TOPSOIL AND SUBSOIL MUST BE STOCKPILED SEPARATELY.
- PLACE APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.
- NO SOIL MUST BE STOCKPILED WITHIN 5m OF ANY CREEK OR WATER COURSE.
- IF YOU SUSPECT FIRE ANTS ON SITE CALL D.P.I. ON 13 25 23.

FLOW CONTROL

PRIOR TO COMMENCEMENT OF WORKS ON LIVE SEWERS CONTACT THE RELEVANT QUU ACCESS TO ASSETS TEAM. A MINIMUM PERIOD OF TEN WORKING DAYS IS REQUIRED TO IMPLEMENT A FLOW CONTROL REQUEST. USE FORM FOR291.
PH: 3856 7027
EMAIL: QUU-NETWORKOPREQ@URBANUTILITIES.COM.AU

PIPELINES

- THE MINIMUM CLEARANCE TO EXISTING SERVICES TO BE AS PER WSA/SEQ STANDARDS UNLESS OTHERWISE SHOWN.
- CONTRACTOR TO OBTAIN PRIOR APPROVAL OF THE SUPERINTENDENT FOR ANY MINOR DEVIATIONS REQUIRED TO AVOID EXISTING SERVICES.
- VACUUM TESTING & CCTV TO BE CARRIED OUT AS PER WSA/SEQ STANDARDS.
- NON METALLIC PIPES SHALL HAVE DETECTABLE MARKER TAPE INSTALLED. REFER TO QUU STANDARDS. THE COLOURS OF MARKER TAPE MUST BE: SEWERAGE - CREAM
- PIPELINES SHALL NOT BE CONSTRUCTED IN UNCONTROLLED FILL. CERTIFICATES SHALL BE LODGED WITH THE CONTRACT MANAGER CERTIFYING THE FILL IS CONTROLLED FILL COMPACTED TO 95% R.D. TO A.S.1289.5.2.1.
- DISUSED SEWERS AND MAINTENANCE HOLES SHALL COMPLY WITH REQUIREMENTS SET OUT IN NOTES ASIDE AND PROJECT DRAWINGS.
- THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THESE DRAWINGS SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE QUU SEWERAGE SYSTEM.
- PIPE EMBEDMENT MATERIAL SHALL BE AS PER QUU TYPICAL DETAIL DRG C0061.

VITRIFIED CLAY PIPES (VC)

VC1 VC JACKING PIPES (JP) TO BE SELECTED BY THE CONTRACTOR BASED ON JACKING LOADS.
VC2 VC PIPES FITTINGS AND JOINING ASSEMBLIES SHALL COMPLY WITH EN295-1.
VC3 MINIMUM PIPE CLASS TO BE CLASS 4 TO A.S. 1741 OR CONFORM TO EN295-1.

MAINTENANCE HOLES

- ALL MAINTENANCE HOLES TO BE CAST IN-SITU USING SPECIAL CLASS CONCRETE (WSA PS-358).
- SPECIAL CLASS CONCRETE (WSA PS-358) TO BE: STRENGTH CLASS 40MPa
AGGREGATE SIZE 20mm
SLUMP 75MM
ONLY CALCAREOUS AGGREGATES TO BE USED. CALCAREOUS AGGREGATES ARE AGGREGATES DEFINED AS HAVING AN ACID SOLUBILITY GREATER THAN 98% WHEN TESTED IN ACCORDANCE WITH AWWA B 100.
- INTERNAL FORMWORK TO BE STRIPPED BEFORE EXTERNAL FORMWORK.
- CONCRETE TO CURE FOR TIME SPECIFIED BY DESIGN CONSULTANT PRIOR TO LOADING OF MAINTENANCE HOLE.
- ALL MAINTENANCE HOLES TO BE PROVIDED WITH S/S LADDERS AS PER SEQ STD DRG SEQ-SEW-1301-12. LOCATION OF LADDER AS PER SEQ STD DRG SEQ-SEW-1301-6.
- ALL MAINTENANCE HOLES TO BE POLYETHYLENE LINED, INCLUDING TOP SLAB. REFER DETAILS ON SEQ STD DRG SEQ-SPS-1407-1.
- SACRIFICIAL CAISSONS REMAINING IN GROUND POST CONSTRUCTION TO BE REMOVED OR CUT OFF MIN 2m BELOW FINISHED SURFACE LEVEL.
- MAINTENANCE HOLE TOP SLABS TO BE AS PER SEQ STD DRG SEQ-SEW-1301-11. REFER NOTE 11 STD DRG SEQ-SEW-1301-6 TO PROVIDE TOP SLAB THICKNESS OF 150MM IN TRAFFICABLE AREAS.
- PROVIDE CLASS 4 LID TO ALL MAINTENANCE HOLES. REFER SEQ STD DRG SEQ-SEW-1308-8 TO 11.
- MH BASES TO BE 450 MIN. AS PER SEQ STD DWG SEQ-SEW-1301-8.

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

- 4 APR 2014

MEDQ

AS CONSTRUCTED RECEIVED

BY	-
UTILITY/DELEGATE	-
DATE	-

ON MAINTENANCE DETAILS

START	-	FINISH	-
-------	---	--------	---

UTILITY/DELEGATES COMMENTS

PLAN CUSTODIAN

OFFICER/REC'D	-
DATE RELEASED	/ /

LIVE CONNECTION(S)/PASSED(W)

REFERENCE	-
DATE	/ /

GIS CAPTURE

JOB NUMBER	-
OFFICER CODE	-
DATE	/ /

GIS COMMENTS

LIVE WORKS E - DECOMMISSIONING OF DISUSED SEWER:

SEWER LINES

PRIOR TO COMMENCEMENT OF MICROTUNNELING:

- GROUT FILL SEWER BRANCH CONNECTIONS EX1/15, EXE/13, EXE/12, EXE/11, EXE/10, EXE/9, EXE/7, EXE/6, EXE/7/1.
- ARRANGE TANKERING/OVERPUMPING TO MAINTAIN EX1/15 CONNECTION.

FOLLOWING COMPLETION OF LIVE WORKS:

- GROUT FILL EXISTING LINES TO BE MADE REDUNDANT AS MARKED ON DRAWINGS. REFER LIVE SEWER WORKS TABLE DRG C062 FOR SEQUENCING OF WORKS.
- NOTE FAILED LINES CONTAIN GROUNDWATER INFLOW. CONTRACTOR TO ALLOW FOR PUMPING AS NECESSARY TO FACILITATE GROUT FILL.

MAINTENANCE HOLES

FOLLOWING GROUT FILLING OF ALL REDUNDANT LINES:

- REMOVE ASPRO, RISER AND COVER AND DISPOSE OFF SITE.
- CLEAN AND PUMP OUT MH.
- CORE 250 DIA HOLE IN WALL NEAR BASE.
- FILL CHAMBER WITH GRAVEL, MIN CBR 15.
- BREAK DOWN CHAMBER TO MIN 1500 BELOW FINISHED SURFACE.
- REINSTATE ROAD PAVEMENT, ASPHALT, KERB, LANDSCAPING ETC (INCLUDING DECORATIVE STAMPED ASPHALT AND OTHER SURFACE FEATURES AS REQUIRED).

MAINTENANCE SHAFTS

FOLLOWING GROUT FILLING OF ALL REDUNDANT LINES:

- REMOVE COVER, FRAME, CONCRETE SUPPORT CLEAN AND PUMP OUT MS.
- CUT DOWN RISER TO MIN 1500 BELOW FINISHED LEVEL. FOR EX22/1 CUT DOWN RISER TO MIN 1000 BELOW BASE OF NEW MH AND BACKFILL FILL COMPACTED GRAVELS MIN CBR 15 TO UNDERSIDE OF NEW MH.
- FILL RISER WITH SMPa SAND / CEMENT GROUT FILL.
- REINSTATE ROAD PAVEMENT, ASPHALT, KERB, LANDSCAPING ETC (INCLUDING DECORATIVE STAMPED ASPHALT AND OTHER SURFACE FEATURES AS REQUIRED).

NOTE: GROUT FILL TO CONSIST OF SMPa FLOWABLE SAND CEMENT GROUT. ENTIRE LINE TO BE GROUT FILLED. PLUGGING OF ENDS IS NOT ACCEPTABLE. CERTIFICATES OF COMPLETION BY SUBCONTRACTOR TO BE PROVIDED.

PAKEE BALA 05/02/14
QUEENSLAND URBAN UTILITIES DELEGATE
(VALID FOR 12 MONTHS FROM DATE SHOWN)

CLIENT	EDQ
CONTACT:	BORNHORST & WARD
QUU AUDITOR:	AUDIT AND COMPLIANCE OFFICER QUEENSLAND URBAN UTILITIES
CONTACT:	0412 436 579

AS CONSTRUCTED DETAILS FOR AMEND.

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

SIGNED	DATE:
NAME OF SIGNATORY	
RPEQ No. or LICENCE	
COMPANY NAME	
START DATE	FINISH DATE

SHEET No. 2 OF 10	
QUEENSLAND URBAN UTILITIES DRAWING No.	AMEND.
486/5/6-0138-002	O

QUEENSLAND
UrbanUtilities

STATUS

FOR CONSTRUCTION

REV.	DATE	AMENDMENT / ISSUE	DWN	DES	CHK	APP
D	29.01.14	QUU COMMENTS 29/01/14				
C	20.12.13	QUU MARKUPS 18/12/13				
B	29.10.13	QUU MARKUPS 15/10/13				
A	20.09.13	ISSUE FOR SCRUTINY				

NAME	DATE	APPROVED	CHECKED
ASSOCIATED CONSULTANTS			

DATE	DATE
29/01/14	29/01/14

BORNHORST + WARD
CONSULTING ENGINEERS
CIVIL AND STRUCTURAL
Level 4, 67 Astor Terrace, Spring Hill, QLD 4000

Bornhorst & Ward Pty Ltd
Brisbane Australia
Phone (07) 3013 4699
Facsimile (07) 3013 4611
mail@bornhorstward.com.au
www.bornhorstward.com.au
A.C.N. 620 132 304 A.B.N. 78 020 132 304



CLIENT
ECONOMIC
DEVELOPMENT
QUEENSLAND

PROJECT
NORTHSHORE HAMILTON
MACARTHUR AVENUE
SEWER REPLACEMENT

SUBJECT
SEWER NOTES AND DETAILS

PROJECT No.	10470B
DRAWING No.	C0060
REVISION	D

CONTRACTOR TO CONFIRM LIFE SEWER WORKS THROUGH CONSULTATION WITH QUU AND COMPLETION OF WORK METHOD STATEMENT. CONSULTING ENGINEERS ARE TO CONTACT A QUEENSLAND URBAN UTILITIES APPROVED PROVIDER PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR THIS WORK TO BE CARRIED OUT. (EXCAVATION, SAFE-SUPPORTING AND ASSOCIATE WORK BY CONTRACTOR.) EXCAVATION WORKS CARRIED OUT BY CONTRACTORS AT DEPTH OF 1.5m OR GREATER MUST PROVIDE A 'SAFE WORK PLAN' AS PER WORKPLACE HEALTH AND SAFETY LEGISLATION TO QUU PRIOR TO COMMENCING ANY WORKS. IT IS THE DEVELOPERS RESPONSIBILITY TO ENSURE ALL LIFE SEWER WORKS ARE COMPLETE BEFORE ALLOWING PRIVATE DRAINAGE TO BE CONNECTED.

NOTE:
1. DISPOSAL LOCATIONS FOR TANKERS IN THE TABLE ARE NOMINAL ONLY.
DISPOSAL LOCATIONS TO BE IN ACCORDANCE WITH THE APPROVED
SEWER FLOW CONTROL PLAN TO BE PREPARED BY QUU.

NOTE:
MANDATORY REQUIREMENT - QUU AUDIT & COMPLIANCE OFFICER TO BE PRESENT FOR ALL LIVE SEWER WORKS

-4 APR 2014

MEDQ

PAKEE BALA  05/02/11
QUEENSLAND URBAN UTILITIES DELEGATE
(VALID FOR 12 MONTHS FROM DATE SHOWN)

CONSTRUCTION INSPECTION:
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QUEENSLAND URBAN UTILITIES AUDIT & COMPLIANCE
OFFICER AT LEAST TWO (2) WEEKS PRIOR
TO COMMENCEMENT OF CONSTRUCTION
PLEASE CONTACT QUU PH: 0412 436 579

A "PERMIT TO WORK" MUST BE OBTAINED FROM THE RELEVANT QUU CONTROL ROOM PRIOR TO COMMENCEMENT OF WORK ON SITE. A MINIMUM PERIOD OF TEN WORKING DAYS IS REQUIRED FOR THE ISSUING OF A PERMIT. CONTROL ROOM EAST (BRISBANE LG AREA)
PH: 3856 7183
EMAIL: PTW@URBANUTILITIES.COM.AU

BY CE	SHEET No. 4 OF 10	
	QUEENSLAND URBAN UTILITIES DRAWING No. 486/5/6-0138-004	AMEND O



STATUS
FOR CONSTRUCTION

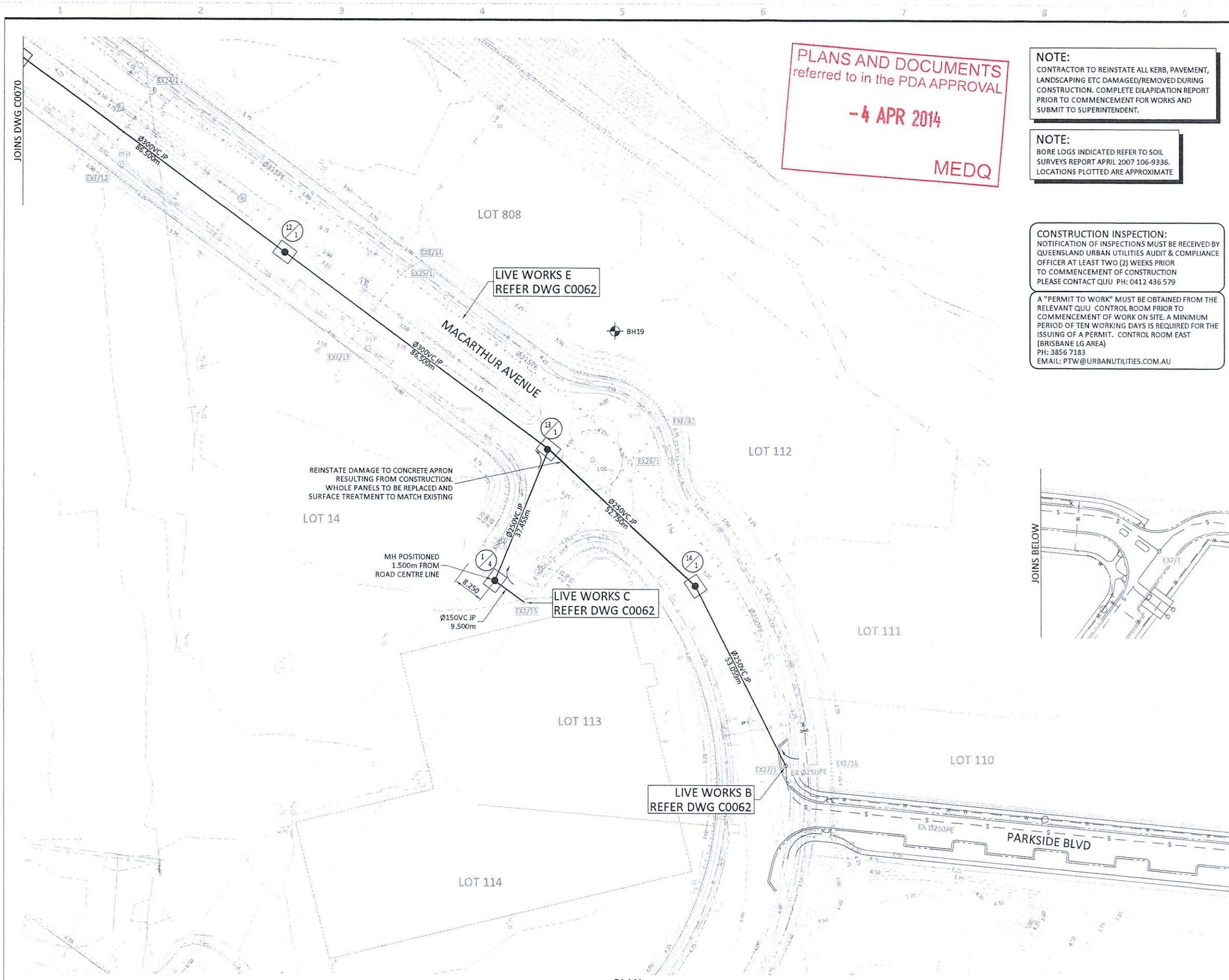
COPYRIGHT © - This document is the property of BORNHORST + WARD Pty. Ltd. The document may only be used for the purposes for which it was commissioned and in accordance with the terms of engagement. Unauthorised use of this document in any form whatsoever is prohibited.										PROJECT No. 10470B									
REV. DATE AMENDMENT / ISSUE D 29.01.14 QUU COMMENTS 29/01/14 C 20.12.13 QUU MARKUPS 18/12/13 B 29.10.13 QUU MARKUPS 15/10/13 A 20.09.13 ISSUE FOR SCRUTINY										CLIENT ECONOMIC DEVELOPMENT QUEENSLAND									
DWN DES CHK APP DWN ✓ DES WH CHK APP ASSOCIATED CONSULTANTS										PROJECT NORTHSHORE HAMILTON LIVE SEWER WORKS TABLE									
DATE 29/01/14										REVISION C0062 D									



NOTE:
SHORT PIPES AT MH ENTRY/EXIT
OMITTED FOR CLARITY



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PH: 3856 7183
EMAIL: PTW@URBANUTILITIES.COM.AU



PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

- 4 APR 2014

MEDQ

NOTE:
CONTRACTOR TO REINSTATE ALL KERB, PAVEMENT,
LANDSCAPING ETC DAMAGED/REMOVED DURING
CONSTRUCTION. COMPLETE DILAPIDATION REPORT
PRIOR TO COMMENCEMENT FOR WORKS AND
SUBMIT TO SUPERINTENDENT.

NOTE:
BORE LOGS INDICATED REFER TO SOIL
SURVEYS REPORT APRIL 2007 106-9336.
LOCATIONS PLOTTED ARE APPROXIMATE

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ISSUING OF A PERMIT. CONTROL ROOM EAST
(BRISBANE LG AREA)
PH: 3856 7183
EMAIL: PTW@URBANUTILITIES.COM.AU

LEGEND	
EXISTING	PROPOSED
	KERB AND CHANNEL
	KERB ONLY
	KERB FLUSH
	EDGE OF BITUMEN
	EXTENT OF BUILDING
	PROPERTY BATTERY
	EASEMENT
	STORMWATER DRAINAGE
	OPEN CHANNEL
	TOP OF BATTERY
	TOE OF BATTERY
	CONTOURS
	FENCE
	SEWER
	WATER
	GAS
	TELSTRA
	TELSTRA OPTIC FIBRE
	OVER HEAD POWER
	UNDER GROUND POWER
	SEWER TO BE DECOMMISSIONED
	TREE
	FLOW DIRECTION ARROW
	STRUCTURE NUMBER
	5.0m x 4.0m ASSUMED CONSTRUCTION AREA

PAKEE BALA
QUEENSLAND URBAN UTILITIES DELEGATE
(VALID FOR 12 MONTHS FROM DATE SHOWN)

CLIENT	EDQ
CONTACT:	BORNHORST & WARD
QUU AUDITOR:	AUDIT AND COMPLIANCE OFFICER QUEENSLAND URBAN UTILITIES
CONTACT:	0412 436 579

AS CONSTRUCTED DETAILS FOR AMEND.

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON
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SIGNED: _____ DATE: _____
NAME of SIGNATORY
RPEQ No. or LICENCE
COMPANY NAME
START DATE _____ FINISH DATE _____

SHEET No. 8 OF 10	AMEND.
QUEENSLAND URBAN UTILITIES DRAWING No.	O
486/5/6-0138-008	



DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. CULVERT AND PIPE SIZES IN MILLIMETRES	A1 UNREDUCED A3 REDUCED
SCALES	UNREDUCED / REDUCED
0 5 10 15 20 25m	1:500 / 1:1000

FOR CONSTRUCTION

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(BRISBANE LG AREA)
PH: 3856 7183
EMAIL: PTW@URBANUTILITIES.COM.AU

NOTE:
BORE LOGS INDICATED REFER TO SOIL
SURVEYS REPORT APRIL 2007 106-9336.
LOCATIONS PLOTTED ARE APPROXIMATE

NOTE:
• REFER MH DETAILS & SETOUT
INFORMATION DWG C0063.
• FINISHED SURFACE LEVELS
TO BE CONFIRMED ON SITE.

NOTE:
CONTRACTOR TO NOTE ABSOLUTE
MINIMUM GRADES ACCEPTED BY QUU:
Ø150 - 1:180
Ø250 - 1:300
Ø300 - 1:400
Ø400 - 1:550

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL
- 4 APR 2014
MEDQ

PAKEER BALA 05/02/14
QUEENSLAND URBAN UTILITIES DELEGATE
(VALID FOR 12 MONTHS FROM DATE SHOWN)

CLIENT: EDQ
CONTACT: BORNHORST & WARD
QUU AUDITOR: AUDIT AND COMPLIANCE OFFICER
QUEENSLAND URBAN UTILITIES
CONTACT: 0412 436 579

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I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON
THIS PLAN ARE TRUE AND ACCURATE RECORD OF THE WORKS
SIGNED: DATE:
NAME OF SIGNATORY
RPEQ No. or LICENCE
COMPANY NAME
START DATE FINISH DATE

SHEET No. 9 OF 10
QUEENSLAND URBAN UTILITIES DRAWING No. AMEND.
486/5/6-0138-009 O



DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE. CULVERT AND PIPE
SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED
SCALES
UNREDUCED / REDUCED
A 0 10 20 30 40 50m 1:1000 / 1:2000
B 0 1.0 2.0 3.0 4.0 5.0m 1:100 / 1:200
STATUS

FOR CONSTRUCTION

MANHOLE/END NAME	1	2	3	4	5	6	7	8	9	10
MANHOLE TYPE	X	X	X	X	X	X	X	X	X	X
LID TYPE	D	D	D	D	D	D	D	D	D	D
JUNCTION LINE										
DROP TYPE	A	A	A	A	A	A	A	A	A	A
DATUM RL	-13.000									
STREET ETC	MACARTHUR AVENUE									
DIAMETER	400Ø VC JP	400Ø VC JP	400Ø VC JP	400Ø VC JP	400Ø VC JP	400Ø VC JP	300Ø VC JP	300Ø VC JP	300Ø VC JP	
GRADE	1 in 350	1 in 350	1 in 350	1 in 350	1 in 350	1 in 350	1 in 350	1 in 350	1 in 350	
JUNCTION INVERT LEVEL							-2.144		0.325	
DEPTH TO INVERT	5.605	6.237	6.207	6.456	6.426	6.443	5.970	5.485	5.370	5.715
INVERT LEVEL OF SEWER	-3.538	-3.522	-3.492	-3.079	-3.049	-2.860	-2.294	-2.022	-1.820	-1.560
DESIGN SURFACE LEVEL	2.057	2.715	3.696	3.377	3.583	3.412	3.676	3.463	3.550	4.125
RUNNING CHAINAGE	0.000	5.679	5.679	67.000	67.000	139.679	66.146	205.825	88.449	294.274

SEWER LONGITUDINAL SECTION
SCALE A (HOR)
B (VERT)

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CONSTRUCTION INSPECTION:
NOTIFICATION OF INSPECTIONS MUST BE RECEIVED BY
QUEENSLAND URBAN UTILITIES AUDIT & COMPLIANCE
OFFICER AT LEAST TWO (2) WEEKS PRIOR
TO COMMENCEMENT OF CONSTRUCTION
PLEASE CONTACT QUU PH: 0412 436 579

A "PERMIT TO WORK" MUST BE OBTAINED FROM THE RELEVANT QUU CONTROL ROOM PRIOR TO COMMENCEMENT OF WORK ON SITE. A MINIMUM PERIOD OF TEN WORKING DAYS IS REQUIRED FOR THE ISSUING OF A PERMIT. CONTROL ROOM EAST (BRISBANE LG AREA)
PH: 3856 7183
EMAIL: PTW@URBANUTILITIES.COM.AU

NOTE:
BORE LOGS INDICATED REFER TO SOIL
SURVEYS REPORT APRIL 2007 106-9336.
LOCATIONS PLOTTED ARE APPROXIMATE

NOTE:

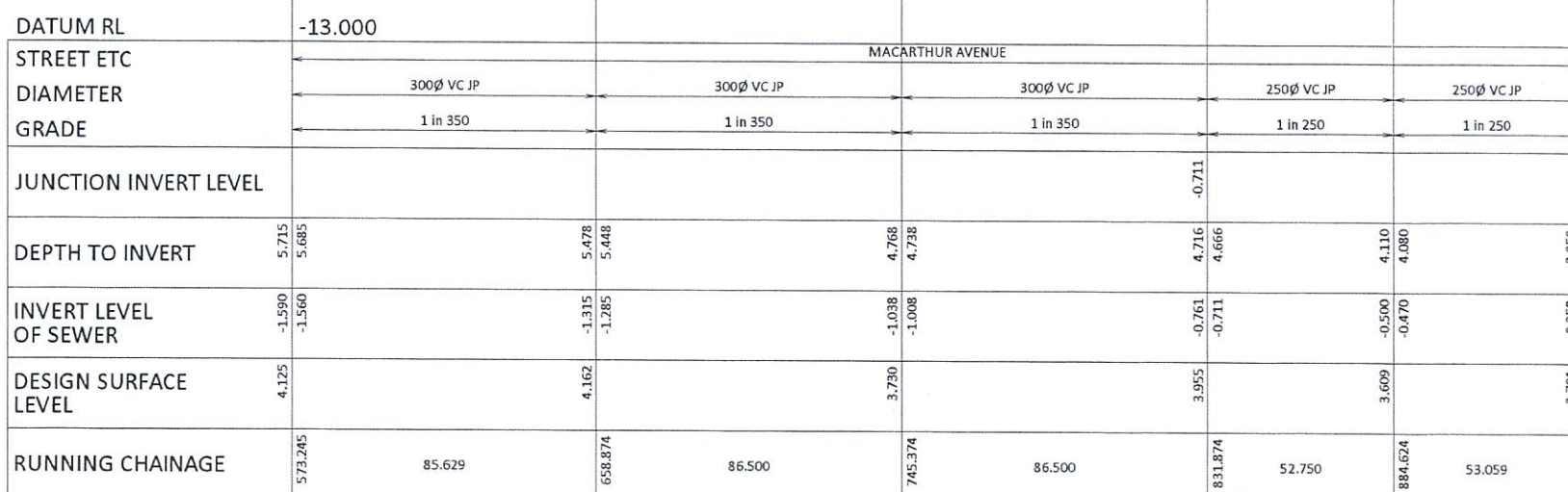
- REFER MH DETAILS & SETOUT INFORMATION DWG C0063.
- FINISHED SURFACE LEVELS TO BE CONFIRMED ON SITE.

NOTE:
CONTRACTOR TO NOTE ABSOLUTE
MINIMUM GRADES ACCEPTED BY QUU:
Ø150 - 1:180
Ø250 - 1:300
Ø300 - 1:400
Ø400 - 1:550

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

-4 APR 2014

MEDQ



CLIENT	EDQ
CONTACT:	BORNHORST & WARD
QUU AUDITOR:	AUDIT AND COMPLIANCE OFFICER QUEENSLAND URBAN UTILITIES
CONTACT:	0412 436 579

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

SIGNED: PRINT NAME OF PERSON SIGNING NAME OF SIGNATORY PRINT NAME OF COMPANY OR INDIVIDUAL FOR WHOM SIGNING IS BEING DONE RPEQ No. or LICENCE PRINT NO. OF RPEQ OR LICENCE COMPANY NAME PRINT NAME OF COMPANY FOR WHICH SIGNING IS BEING DONE		DATE: PRINT DATE OF SIGNING START DATE	FINISH DATE
--	--	---	--------------------

SHEET No. 10 OF 10	
QUEENSLAND URBAN UTILITIES DRAWING No. 486/5/6-0138-010	AMEN O



DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. CULVERT AND PIPE SIZES IN MILLIMETRES.

0 10 20 30 40 50m

0 1.0 2.0 3.0 4.0 5.0m

STATUS

STATUS
FOR CONSTRUCTION

SEWER LONGITUDINAL SECTION
SCALE A (HOR)
B (VERT)

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