

RESIDENTIAL TOWNHOUSE DEVELOPMENT

LOT 188-189 ON RP33870

47-49 NOBLE STREET

CLAYFIELD, QLD 4011

DEVELOPMENT APPROVAL No. A005430425

DRAWING INDEX	
DRAWING No.	DESCRIPTION
20191-C01	LOCALITY PLAN, DRAWING INDEX AND GENERAL NOTES
20191-EW01	EARTHWORKS AND RETAINING WALL PLAN
20191-EW02	EARTHWORKS SECTIONS
20191-R01	FINISHED LEVELS AND VERGE WORKS PLAN
20191-SW01	STORMWATER DRAINAGE PLAN
20191-SW02	STORMWATER DRAINAGE LONGITUDINAL SECTION



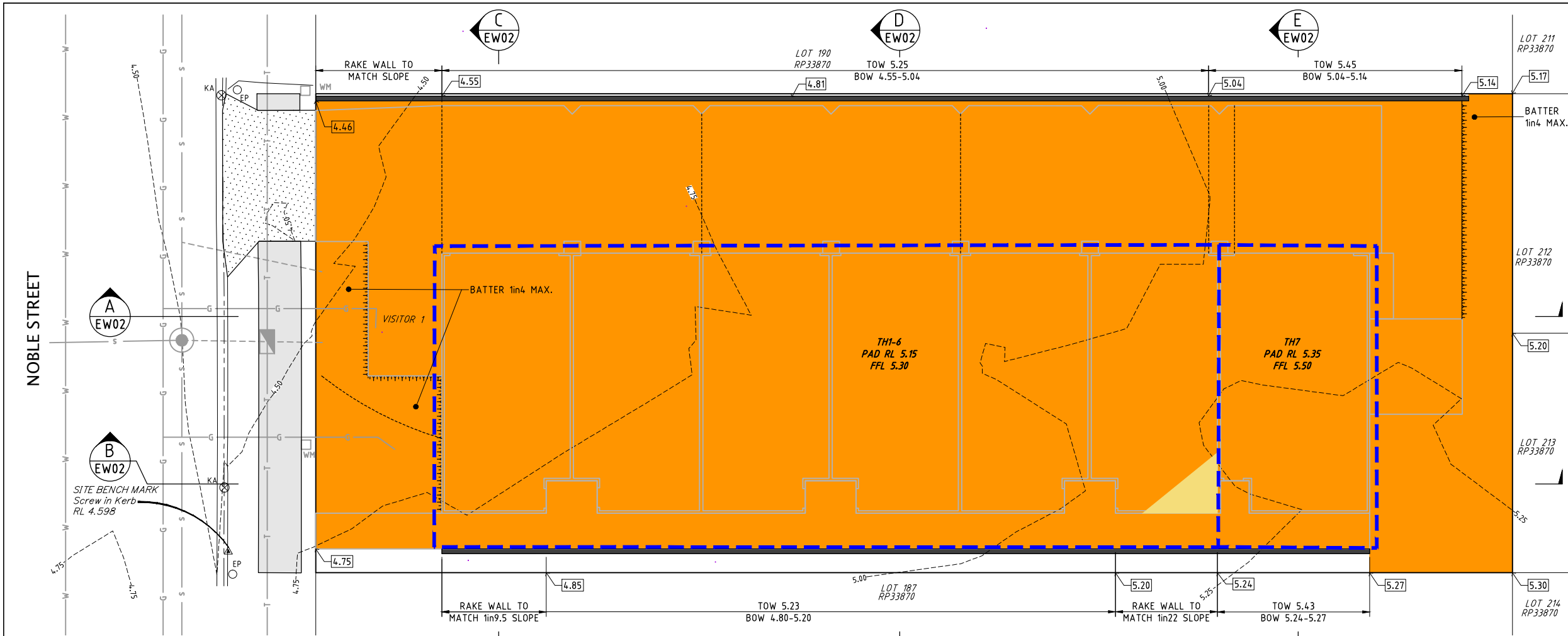
LOCALITY PLAN
SCALE 1:2500

GENERAL NOTES

- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ALL TEMPORARY AND PERMANENT SIGNAGE AND LINEMARKING TO BE IN ACCORDANCE WITH MAIN ROADS STANDARDS (MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES).
- ALL DIMENSIONS ARE TO BE CHECKED ON-SITE BEFORE WORK COMMENCES.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWING.
- DURING CONSTRUCTION BARRIERS, LIGHTS & SIGNS SHALL BE MAINTAINED TO ENSURE SAFE PASSAGE OF TRAFFIC AND PEDESTRIANS IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH S.A.A. CODES & BY-LAWS AND ORDINANCES OF THE RELEVANT LOCAL AUTHORITY AND WORKPLACE HEALTH AND SAFETY REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL RELEVANT AUTHORITIES AND PAYING ALL FEES NECESSARY BEFORE COMMENCING WORK, FOR LOCATING ALL EXISTING SERVICES AND FOR REPAIR OF ANY SERVICES DAMAGED AS A RESULT OF THE WORKS.
- CONTRACTOR TO VERIFY ALL INVERT LEVELS, SURFACE LEVELS, COVER OVER DRAINAGE LINES, AND MINIMUM FALLS ARE CORRECT & OBTAINABLE PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR'S ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE WORK HEALTH AND SAFETY ACT 2011. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THIS ACT AND IN PARTICULAR THE CONTRACTOR IS TO ENSURE THE REQUIREMENTS OF THIS SPECIFICATION WITH REGARD TO 'NOTIFICATION IN RELATION TO A NOTIFIABLE PROJECT', ARE FULFILLED.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK. ALL EXISTING SERVICES AND STRUCTURES ARE TO BE MAINTAINED IN GOOD ORDER FOR THE DURATION OF THE CONTRACT. ANY COST ASSOCIATED WITH REPAIRING DAMAGE TO EXISTING SERVICES SHALL BE BORNE BY THE CONTRACTOR.
- THE PERSON RESPONSIBLE FOR THE DEMOLITION WORKS SHALL ENSURE THAT ALL VEHICLES LEAVING THE SITE CARRYING DEMOLITION MATERIALS HAVE THEIR LOADS COVERED AND DO NOT TRACK SOIL OR WASTE MATERIALS ONTO THE ROAD.
- SHOULD ASBESTOS BE PRESENT, ITS REMOVAL SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NATIONAL OH&S COMMITTEE - CODE OF PRACTICE FOR SAFE REMOVAL OF ASBESTOS AND ITS CODE OF PRACTICE FOR THE MANAGEMENT AND CONTROL OF ASBESTOS IN THE WORKPLACE.

SCALE 1:2500 (A1)
(SCALE BEFORE REDUCTION)

		HCE Engineers Hydraulic • Civil • Environmental P.O. Box 7214, Phone: (07) 3829 1399 Redland Bay, mail@hce-engineers.com.au QLD, 4165 6 Marine Street, Redland Bay	PROJECT	TITLE	CLIENT	CERTIFICATION		REVISION	AMENDMENT		DATE	DO NOT SCALE. Copyright © CONFIRM ALL DIMENSIONS ON SITE.		
			47-49 NOBLE STREET CLAYFIELD QLD 4011 LOTS 188-189 RP33870	LOCALITY PLAN, DRAWING INDEX AND GENERAL NOTES	HOMA GROUP	SIGNATURE	A	ISSUED FOR COMMENT	22.09.20	Designed	Drawn	Date		
										TM	TM	16/09/20		
										Approval No.		Scale		
										A005430425		AS SHOWN		
										Drawing No.		Rev.		
										20191-C01		A		



NOTE:
EARTHWORKS LEVELS ARE BASED ON THE FOLLOWING THICKNESSES:

- FFL TO EARTHWORKS PAD = 150mm
- CONCRETE PAVEMENT = 125mm

PLAN
SCALE 1:100

NOTE:
CONCRETE BLOCK RETAINING WALLS TO BE DESIGNED AND CERTIFIED BY STRUCTURAL ENGINEER

NOTE:
ALL RETAINING WALL SUBSOIL DRAINAGE TO CONNECT TO STORMWATER DRAINAGE

NOTE:
ALL RETAINING WALL FOOTING TO BE WHOLLY CONTAINED WITHIN THE SUBJECT SITE

LEGEND

- 10.0--- EXISTING SURFACE CONTOURS
- FILL
- CUT
- 5.00 EXISTING LEVEL
- S EXISTING SEWERAGE
- W EXISTING WATER RETICULATION
- T EXISTING TELECOMMUNICATIONS
- G EXISTING GAS
- EXISTING KERB AND CHANNEL
- PROPOSED RETAINING WALL
- PROPOSED CROSSOVER
- BUILDING PAD
- EMBANKMENT
- WM EXISTING WATER METER
- EP EXISTING ELECTRICAL POLE

EARTHWORKS NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK. ALL EXISTING SERVICES AND STRUCTURES ARE TO BE MAINTAINED IN GOOD ORDER FOR THE DURATION OF THE CONTRACT. ANY COSTS ASSOCIATED WITH REPAIRING DAMAGE TO EXISTING SERVICES SHALL BE PAID FOR BY THE CONTRACTOR.
2. ALL EARTHWORKS UNDERTAKEN BY THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE NEAREST OFFICE OF THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION. Phone : 1300 369915
3. THE CONTRACTOR SHALL VERIFY BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCY BEFORE COMMENCEMENT OF CONSTRUCTION.
4. ALL LEVELS ARE TO A.H.D.
5. THE ENTIRE SITE SHALL BE CLEARED OF ALL UNDESIRABLE MATTER. THIS SHALL INCLUDE DEAD TIMBER, GRASS, OLD FOUNDATIONS, CONCRETE, REDUNDANT MASONRY REMAINS, GARBAGE, DEBRIS, AND ALL OTHER OBSTRUCTIONS TO THE WORKS UNLESS NOTED OTHERWISE. HOLES LEFT BY THE REMOVAL OF ANY OF THE ABOVE SHALL BE FILLED WITH APPROVED COMPACTED MATERIAL WITH PROPERTIES AT LEAST SIMILAR TO INSITU SOILS.
6. CLEARED MATERIAL AND EARTHWORKS SPOIL SHALL BE REMOVED FROM THE SITE.
7. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY ALL EARTHWORKS AND CLEARING OPERATIONS.
8. SITE EARTHWORKS GENERALLY, SHALL BE CARRIED OUT IN ACCORDANCE WITH AUSTRALIAN STANDARD AS 3798. GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS, UNLESS NOTED OTHERWISE.
9. TOPSOIL WHERE ENCOUNTERED SHALL BE STRIPPED PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OPERATION. SUFFICIENT QUANTITY FOR RE-USE TO BE STOCKPILED IN A LOCATION AS DIRECTED BY THE SUPERINTENDENT. SURPLUS TO BE REMOVED FROM SITE.
10. STRIPPING SHALL BE UNDERTAKEN IN SUCH A MANNER AS TO AVOID CONTAMINATION BY OVERCUTTING. IF TOPSOIL IS CONTAMINATED BY OVERCUTTING AND DETERMINED NOT SUITABLE FOR REUSE BY THE SUPERINTENDENT, THE CONTRACTOR SHALL BEAR THE COST OF REMOVAL FROM SITE OF ALL CONTAMINATED TOPSOIL AND THE COST TO SUPPLY AND IMPORT SUITABLE TOPSOIL FOR RESPREADING.
11. IF DURING EARTHWORKS OPERATIONS UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED THEN PRIOR TO ANY FILLING OPERATION THIS MATERIAL SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE SUPERINTENDENT WITH AN APPROVED SUITABLE MATERIAL.
12. FILL MATERIAL SHALL BE COMPACTED TO THE FOLLOWING STANDARD, WHERE DRY DENSITY RATIO IS DETERMINED IN ACCORDANCE WITH AS 1289 USING STANDARD COMPACTION METHODS.
 - 100% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 80% IN COHESIONLESS MATERIAL FOR ROAD SUBGRADE.
 - 95% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 65% IN COHESIONLESS MATERIAL FOR ALL AREAS OTHER THAN THE ROADWAY AND BUILDING PADS.
 - 98% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 70% IN COHESIONLESS MATERIAL FOR BUILDING PADS.
12. IMPORTED GENERAL FILL MATERIAL SHOULD BE COHESIVE IN NATURE, WITH A SOAKED CBR > 5% AND A MAXIMUM PARTICLE SIZE OF 75mm)
13. THROUGHOUT THE EARTHWORKS OPERATION THE CONTRACTOR IS TO ENSURE THAT THE SITE IS SELF DRAINING. DAMAGE RESULTING FROM THE EXPOSURE SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
14. ALL EARTHWORKS TO BE CARRIED OUT UNDER LEVEL 1 SUPERVISION IN ACCORDANCE WITH AUSTRALIAN STANDARD AS 3798 UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
15. SPECIFICATIONS FOR SELECT FILL:

- SOAKED CBR	MINIMUM OF 10%
- LIQUID LIMIT	<45%
- PLASTICITY INDEX	<15%
- MAXIMUM AGGREGATE INDEX	<75mm
- PASSING 19mm SIEVE	80% MINIMUM
- PASSING 0.075mm SIEVE	20% MAXIMUM
- SHRINK/SWELL INDEX	MAXIMUM OF 1%

BRISBANE CITY COUNCIL STANDARD:
ALL RETAINING WALLS INCLUDING FOOTINGS MUST BE LOCATED WHOLLY WITHIN THE PROPERTY BOUNDARY OF THE SITE WHERE WORKS ARE OCCURRING. RETAINING WALLS TO STABILISE EXCAVATION MUST BE SET BACK OFF THE PROPERTY BOUNDARIES TO ACCOMMODATE SUBSOIL DRAINAGE WITHOUT ENCROACHMENT INTO THE NEIGHBOURING PROPERTY. THIS SET BACK MAY VARY DEPENDING ON THE HEIGHT, STRUCTURE AND DESIGN OF THE RETAINING WALL, INCLUDING LOADINGS FROM NEIGHBOURING PROPERTIES, AND TO PROVIDE A SURFACE DRAIN ALONG THE TOP OF THE RETAINING WALL.

THIS DESIGN HAS BEEN PREPARED BASED ON SERVICE AUTHORITY AS CONSTRUCTED INFORMATION. NO POT HOLING HAS BEEN UNDERTAKEN TO VERIFY EXISTING SERVICE LOCATIONS AND DEPTHS. IT IS THE CONTRACTORS RESPONSIBILITY TO UNDERTAKE POT HOLING TO VERIFY THE DESIGN.

SCALE 1:100 (A1)
(SCALE BEFORE REDUCTION)

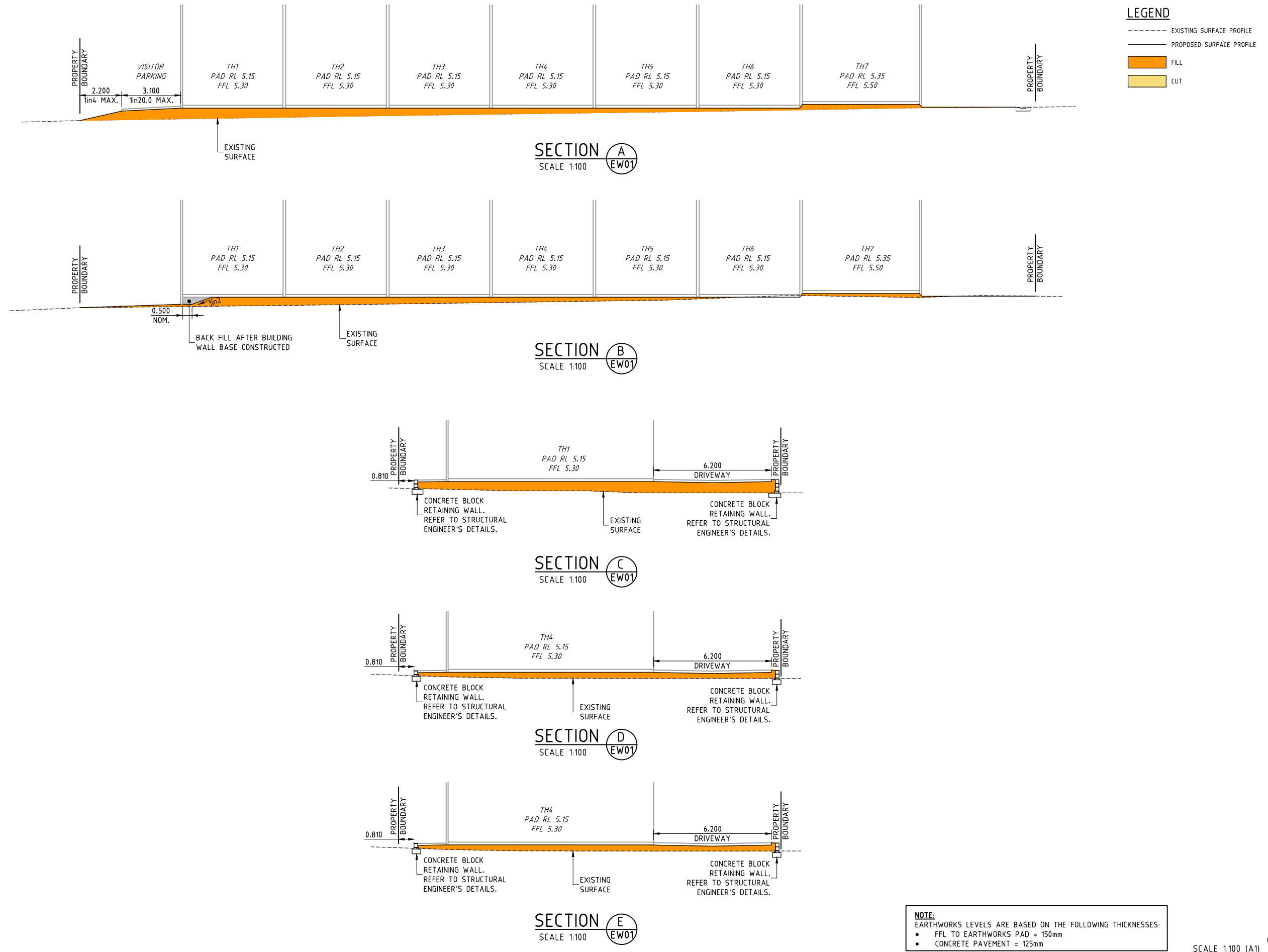
PROJECT	TITLE	CLIENT	CERTIFICATION	REVISION	AMENDMENT	DATE	DO NOT SCALE. CONFIRM ALL DIMENSIONS ON SITE.		
							Designed	Drawn	Date
47-49 NOBLE STREET CLAYFIELD QLD 4011 LOTS 188-189 RP33870	EARTHWORKS AND RETAINING WALL PLAN	HOMA GROUP	SIGNATURE NAME GREG HENWOOD RPEQ 5317 DATE 22.09.20	A	ISSUED FOR COMMENT	22.09.20	TM	TM	18.09.20
							Approval No.		Scale
							A005430425		AS SHOWN
							Drawing No.	20191-EW01	Rev. A



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PROJECT
47-49 NOBLE STREET
CLAYFIELD QLD 4011
LOTS 188-189 RP33870

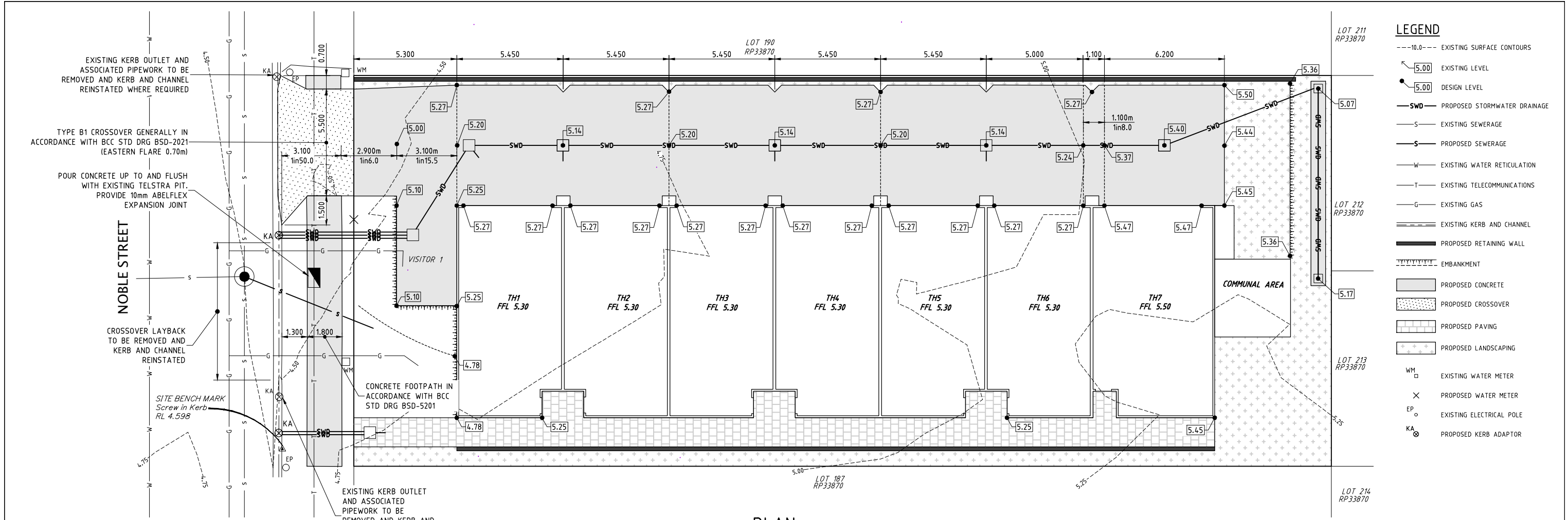
TITLE
EARTHWORKS SECTION

CLIENT
HOMA GROUP

CERTIFICATION
SIGNATURE
NAME GREG HENWOOD
RPEQ 5317
DATE 22.09.20

REVISION	AMENDMENT	DATE
A	ISSUED FOR COMMENT	22.09.20

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TM	TM	18.09.20		
Approval No.	A005430425		Scale	AS SHOWN
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LEGEND

- 10.0--- EXISTING SURFACE CONTOURS
- [5.00] EXISTING LEVEL
- [5.00] DESIGN LEVEL
- SWD— PROPOSED STORMWATER DRAINAGE
- S— EXISTING SEWERAGE
- S— PROPOSED SEWERAGE
- W— EXISTING WATER RETICULATION
- T— EXISTING TELECOMMUNICATIONS
- G— EXISTING GAS
- === EXISTING KERB AND CHANNEL
- == PROPOSED RETAINING WALL
- ||||| EMBANKMENT
- [] PROPOSED CONCRETE
- [] PROPOSED CROSSOVER
- [] PROPOSED PAVING
- [] PROPOSED LANDSCAPING
- WM □ EXISTING WATER METER
- × PROPOSED WATER METER
- EP ○ EXISTING ELECTRICAL POLE
- KA ⊙ PROPOSED KERB ADAPTOR

PLAN

SCALE 1:100

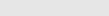
NOTE:
REFER TO STRUCTURAL ENGINEER'S
DRAWINGS FOR PAVEMENT DETAILS

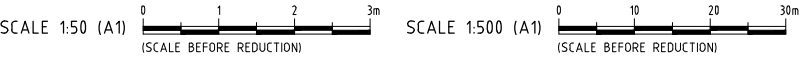
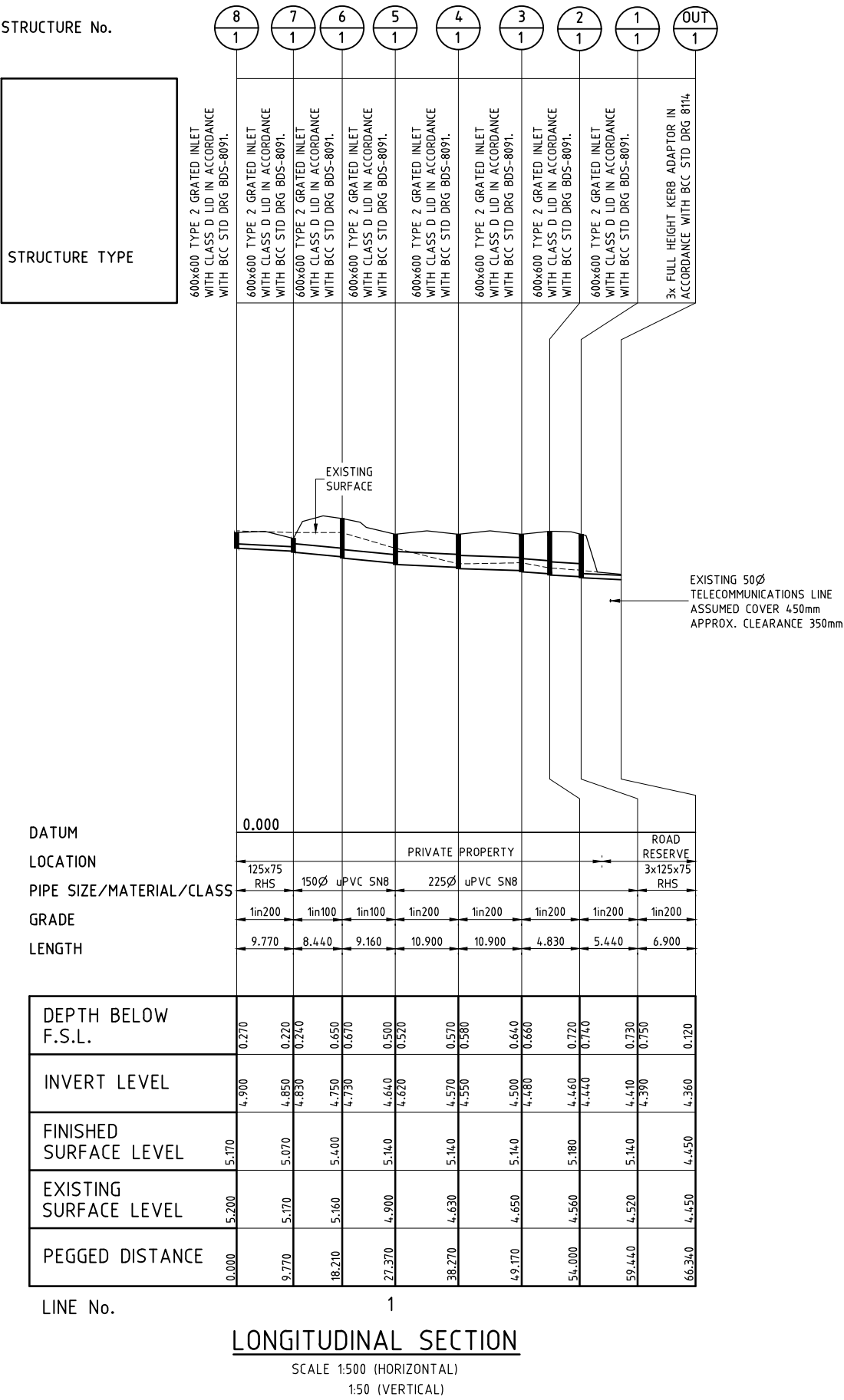
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<div><div></div><div><div><div>HCE Engineers</div><div>Hydraulic • CIVIL • Environmental</div><div>P.O Box 7214, Redland Bay, QLD, 4165</div><div>Phone: (07) 3829 1399</div><div>mail@hce-engineers.com.au</div><div>6 Marine Street, Redland Bay</div></div></div></div>	PROJECT	TITLE	CLIENT	CERTIFICATION		REVISION	AMENDMENT	DATE	DO NOT SCALE. Copyright © CONFIRM ALL DIMENSIONS ON SITE.			
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				RPEQ 5317					Approval No.		A005430425	
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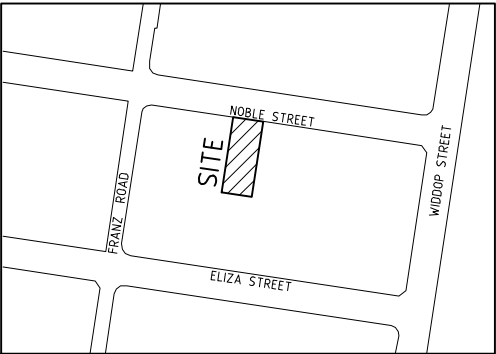


RESIDENTIAL TOWNHOUSE DEVELOPMENT

LOTS 188-189 ON RP33870

47-49 NOBLE STREET, CLAYFIELD, QLD 4011, 20-PNT-47499

DRAWING INDEX	
DRAWING No.	DESCRIPTION
20191-S01	SEWERAGE LOCALITY PLAN, DRAWING INDEX AND GENERAL NOTES
20191-S02	SEWERAGE RETICULATION PLAN



LOCALITY PLAN

SCALE 1:2500

NAME OF ESTATE		47-49 NOBLE STREET
		CLAYFIELD
SUBDIVIDER		QUU
APPLICATION NO.		20-PNT-47499
SP DELEGATE		URBAN UTILITIES
APPROVAL DATE		17.09.20
DRAWING/PLAN NO.		
No. OF ALLOTS.		1
AREA IN ha.		0.5
LENGTH OF SEWER	DN110	7.140m
	DN160	
	DN250	
REFERENCE		

HOUSE CONNECTIONS HAVE BEEN DESIGNED TO CONTROL ALL OF THE LOT AT A GRADE OF 1:100

IT IS THE DEVELOPERS RESPONSIBILITY TO ENGAGE A STRUCTURAL ENGINEER (RPEQ) TO ENSURE THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING AND ITS FOUNDATIONS, PRIOR TO, DURING AND AFTER THE CONSTRUCTION OF SEWER. ANY RECTIFICATION WORK TO BE AT THE DEVELOPERS EXPENSE.

THESE WORKS ARE CONSIDERED MINOR WORKS AND WORKS ARE TO BE CONSTRUCTED BY A PRIVATE CONTRACTOR. INSPECTIONS ARE TO BE ARRANGED BY CONTACTING THE ENDORSED MINOR WATER AND SEWER PROVIDER IDENTIFIED ON THIS PLAN (HCE ENGINEERS). FOR AS CONSTRUCTED PLANS THE CONTRACTOR IS TO CONTACT HCE ENGINEERS (3829 1399) 7 DAYS PRIOR TO THE WORKS COMMENCING.

SEWER NOTES

GENERAL

- ALL CONSTRUCTION WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION BY PHONE ON 1300 362 128.
- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT GRAVITY SEWERAGE CODE OF AUSTRALIA – SEQ EDITION STANDARDS AND URBAN UTILITIES ADDITIONAL REQUIREMENTS.
- 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 RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO URBAN UTILITIES SEWERAGE SYSTEM.
- ALL LEVELS TO A.H.D.
- CLEARANCES TO OTHER SERVICES TO BE IN ACCORDANCE WITH TABLE 5.4 OF THE SEQ GRAVITY SEWERAGE CODE OF AUSTRALIA SPECIFICATIONS UNLESS NOTED OTHERWISE.
- HORIZONTAL TOLERANCES TO BE +/- 100mm LATERAL DISPLACEMENT FROM THE DESIGN ALIGNMENT FOR SEWER MAINS AND PROPERTY SERVICES.
- ALL SEWER LENGTHS AND GRADES ARE MEASURED FROM CENTRE OF MAINTENANCE HOLE/SHAFT UNO.

EXISTING FEATURES

- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO COMMENCING WORKS.
- IF EXISTING CONCRETE PATHWAYS/DRIVEWAYS NEED TO BE MODIFIED OR CUT, FULL WIDTH PANELS OF PATHWAYS/DRIVEWAYS BETWEEN EXISTING JOINTS ARE TO BE REMOVED, NO PATHWAYS/DRIVEWAYS TO BE CUT LONGITUDINALLY IN HALF OR OTHER PART THEREOF. REINSTATEMENT TO BE IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARD DRAWINGS FOR FOOTPATHS AND DRIVEWAYS. WHEN MAINTENANCE STRUCTURES NEED TO BE INSTALLED WITHIN COUNCIL CONCRETE FOOTPATHS, LOCALISED REINSTATEMENT OF IMMEDIATE FITTING SURROUND IS NOT PERMITTED. NEW CONCRETE PANELS SHALL BE PROVIDED IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARD DRAWINGS, WITH NEW AND EXISTING JOINTS SPACING NO LESS THAN 1m.

PERMITS

- PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL ARRANGE FOR ROAD OPENING AND TRAFFIC PERMITS FROM THE RELEVANT AUTHORITIES. WORK MAY BE REQUIRED TO BE CARRIED OUT DURING WEEKENDS AND / OR LATE AT NIGHT ONLY.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS ASSOCIATED WITH VEGETATION REMOVAL/MANAGEMENT.

CONSTRUCTION NOTES

- ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED CIVIL PRODUCTS AND MATERIALS LIST".
- EACH ALLOTMENT SHALL BE SERVED BY A DN110 PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN160 PROPERTY CONNECTION SHALL BE PROVIDED. A MAXIMUM OF 2 RESIDENTIAL PREMISES IS ALLOWED ON A DN110. PROPERTY CONNECTION SEWER DETAILS SHALL COMPLY WITH THE DETAILS GIVEN IN GRAVITY SEWERAGE CODE OF AUSTRALIA – SEQ EDITION STANDARD DRAWINGS SEQ-SEW-1106-1 TO 1106-6.
- PROPERTY CONNECTIONS JUNCTIONS SHALL BE LOCATED 1.20m FROM THE DOWNSTREAM ALIGNMENT. IF THIS IS NOT POSSIBLE PROPERTY CONNECTION JUNCTIONS SHALL NOT BE GREATER THAN 3.50m FROM THE DOWNSTREAM ALIGNMENT.
- PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300mm AND A MAXIMUM OF 750mm.
- WHERE PROPERTY CONNECTION IS IN A DRIVEWAY, PROVIDE A 1mX1m REMOVABLE CONCRETE SLAB WITH SUITABLE LIFTING LUGS CENTRALLY OVER THE CONNECTION AS REQUIRED UNDER THE URBAN UTILITIES "BUILD OVER ASSETS" POLICY.
- 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 AS 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 COUNCIL UNLESS CERTIFICATES ARE PROVIDED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED. PE SEWERS SHALL BE INSTALL IN ACCORDANCE WITH THE REQUIREMENTS FOR NON-PRESSURE PIPELINES SPECIFIED IN WSA POLYETHYLENE PIPELINE CODE.
- WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULK HEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CL.9.10 OF GRAVITY SEWERAGE CODE OF AUSTRALIA – SEQ EDITION.
- SEWERS SHALL BE DISUSED/ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN CL.5.2.9 OF GRAVITY SEWERAGE CODE OF AUSTRALIA -SEQ EDITION.
- EMBEDMENT AND TRENCHING TO BE 'TYPE 4' UNLESS NOTED OTHERWISE IN ACCORDANCE WITH THE GRAVITY SEWERAGE CODE OF AUSTRALIA – SEQ EDITION STD DRG SEQ-SEW-1201-1.
- CONSTRUCT BULKHEADS AND TRENCH STOPS TO SEQ-SEW-1206-1 AND TRENCH DRAINS TO SEQ-SEW-1207-1.
- CONSTRUCT MHs TO SEQ-SEW-1301-1, 1301-2 AND -3 (TYPE G), 1301-4 AND -5 (TYPE F), 1301-6, -8, -10, -11 (TYPE X) 1304-1, 1305-1, 1307-4 (STUB CUT-IN), 1313-1 (CONNECTION) AND 1502-1 (INSERTION MH AND REPAIR SYSTEM), 1301-12 (LADDERS).
- CONSTRUCT MAINTENANCE SHAFTS AND TERMINAL ENTRY POINT TO SEQ-SEW-1315-1 AND 1316-1 AND 1502-1 (INSERT MS).
- INSTALL MH/MS TYPE B COVERS TO SEQ-SEW-1308-2 TO 1308-7.
- INSTALL MH/MS TYPE D COVERS TO SEQ-SEW-1308-8 TO 1308-11.
- CONSTRUCT PROPERTY CONNECTIONS TO SEQ-SEW-1106-1 TO 1106-6.
- INSTALL DETECTABLE MARKER TAPE ON ALL SEWER MAINS AND PROPERTY CONNECTIONS.
- NEW MANHOLES THAT MEET ANY ONE OR MORE OF THE FOLLOWING CONDITIONS SHALL BE PE LINED:
 - THE MH IS A RECEIVING MH FOR A SEWER RISING MAIN OR WITHIN 100m OF SUCH A RECEIVING MH.
 - THE MH IS THE COLLECTION MH IMMEDIATELY UPSTREAM OF A SEWAGE PUMPING STATION.
 - THE MH HAS AN INTERNAL DIAMETER OF 1500mm OR MORE.
 - THE MH EXCEEDS 4m DEPTH TO THE INVERT OF ITS OUTLET SEWER.
 - THE OUTFLOW SEWER FROM THE MH HAS A DIAMETER GREATER THAN 300mm.
 - THE MH IS SERVICING AN INDUSTRIAL AREA.
 - WHERE AN ASSESSMENT OF CORROSION OR ODOUR HAS INDICATED PROTECTION IS REQUIRED.
- CONCRETE FOR MH CONSTRUCTION SHALL BE SPECIAL CLASS TO WSA PS-358 WITH REQUIREMENT FOR CALCAREOUS AGGREGATE.

SOIL CLASSIFICATION

- THE CONTRACTOR SHALL ASSESS SOIL CONDITIONS TO DETERMINE CLASSIFICATION IN ACCORDANCE WITH SEQ-SEW-1200-1.
- IF THE CONTRACTOR ENCOUNTERS SOIL IN TRENCHES WITH AN ALLOWABLE BEARING PRESSURE OF LESS THAN 50kPa, THEY SHALL IMMEDIATELY CONTACT THE RPEQ AND AWAIT DIRECTION.

TESTING AND CONNECTING

- ALL SEWERS AND MAINTENANCE STRUCTURES SHALL BE INSPECTED BY CCTV. THE FIRST CCTV INSPECTION SHALL BE MADE PRIOR TO COMMISSIONING AFTER ALL BACKFILLING OPERATIONS HAVE BEEN SATISFACTORILY COMPLETED AND ALL JUNCTIONS HAVE BEEN INSTALLED.
- A SECOND CCTV INSPECTION IS REQUIRED PRIOR TO BUT NOT MORE THAN 2 WEEKS BEFORE, THE ON-SITE INSPECTION FOR OFF-MAINTENANCE CERTIFICATION.
- CCTV EQUIPMENT IN ACCORDANCE WITH SECTION 21.8 OF THE GRAVITY SEWERAGE CODE OF AUSTRALIA AND THE WSAA CONDUIT INSPECTION REPORTING CODE OF AUSTRALIA WSA05 AND THE RESULTS SUBMITTED TO URBAN UTILITIES FOR COMPLIANCE CHECKING.
- TESTING AND QA REQUIREMENTS SHALL BE UNDERTAKEN IN ACCORDANCE WITH GRAVITY SEWERAGE CODE OF AUSTRALIA.
- VACUUM / PRESSURE TESTING AS PER SECTION 21.1. ON ALL NEW MAINS, STRUCTURES, PROPERTY SERVICES 12m OR GREATER IN LENGTH.
- CCTV FOOTAGE AND REPORT FOR ALL SEWER MAINS AND ALL PROPERTY SERVICES THAT ARE 12m OR GREATER. TO BE SUBMITTED AS PER SEQ CODE FORMAT AND REQUIREMENTS.
- CONCRETE DELIVERY DOCKETS FOR ALL CONCRETE USED AS PART OF MANHOLES.
- COMPACTION TEST RESULTS FOR ALL NEW SEWER MAINS AND PROPERTY SERVICES CROSSING ROADS IN ACCORDANCE WITH SECTION 21.3 OF GRAVITY SEWERAGE CODE OF AUSTRALIA.
 - FREQUENCY – TRAFFICABLE AREAS – ONE TEST IN EACH 300mm LAYER OF FILL FOR EACH 50 LINEAL METRES OF SEWER OR PART THEREOF. THE ROAD OWNER MAY SPECIFY ADDITIONAL COMPACTION TESTING REQUIREMENTS.
 - FREQUENCY – NON-TRAFFICABLE AREAS – ONE TEST IN EACH 900mm LAYER OF FILL FOR EACH 100 LINEAL METRES OF SEWER OR PART THEREOF.
 - FREQUENCY – FOR MAINTENANCE AND INSPECTION STRUCTURES – ONE TEST WITHIN EACH 1m DEPTH AT ONE LOCATION WITHIN 300mm OF EACH.
- RE-FILLING OF "EXCESSIVE EXCAVATION" TO BE IN ACCORDANCE WITH SECTION 14.9. CONTRACTOR SHALL SEEK SITE SPECIFIC DIRECTION FROM THE CERTIFYING CONSULTING ENGINEER IF DEPTH AND WIDTH OF EXCAVATION EXCEEDS THOSE SPECIFIED IN SECTION 22 – TOLERANCES ON AS CONSTRUCTED WORK.

MISCELLANEOUS

- IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT 'DIAL BEFORE YOU DIG' PH.1100 FOR THE LOCATION OF EXISTING PUBLIC UTILITIES PRIOR TO EXCAVATION. ANY DAMAGE CAUSED TO EXISTING PUBLIC UTILITIES BY THE CONTRACTOR WILL BE REPAIRED BY THE RELEVANT AUTHORITY AT THE CONTRACTORS EXPENSE.

REHABILITATION

- ALL DISTURBED AREAS TO BE REINSTATED TO THEIR ORIGINAL CONDITION.

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 MUST 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 ARBORIST FOR FURTHER ADVICE.
- ANY TREE LOPPING REQUIRED SHALL BE UNDERTAKEN BY AN APPROVED ARBORIST.

CONTRACTOR ACCREDITATION

- DURING ANY CONSTRUCTION ACTIVITY AT LEAST ONE PERSON ON SITE MUST HAVE COMPLETED A PIPE LAYING TRAINING COURSE APPROVED BY THE PIPE SUPPLIER OR MANUFACTURER AND APPROPRIATE TO THE PIPELINE UNDER CONSTRUCTION. THE TRAINING COURSE MUST HAVE BEEN COMPLETED WITHIN THE LAST TEN YEARS.
- ALL SITE AND FACTORY PE WELDING SHALL BE CARRIED OUT BY A PERSON WHO HAS COMPLETED RELEVANT NATIONALLY ACCREDITED TRAINING COURSES FOR BUTT WELDING/ELECTROFUSION AND HOLD A VALID WELDING CERTIFICATION IN ACCORDANCE WITH AUSTRALIA/NEW ZEALAND AND STANDARD 2033.
- THE CONTRACTOR SHALL PROVIDE DOCUMENTED EVIDENCE OF ACCEPTABLE QUALIFICATIONS.

LIVE WORKS

- ALL LIVE WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH A VALID NETWORK ACCESS PERMIT. ALL LIVE WORKS SHALL COMPLY WITH THE NETWORK ACCESS PERMIT CONDITIONS.
- ALL WORK ON EXISTING SEWER, TO BE CARRIED OUT BY THE CONTRACTOR UNDER URBAN UTILITIES SUPERVISION, AT THE DEVELOPERS EXPENSE.
- LIVE WORKS MAY NOT COMMENCE UNTIL ALL RELEVANT TEST CERTIFICATES HAVE BEEN PROVIDED TO AND ACCEPTED BY URBAN UTILITIES, AND ALL ADJOINING WORKS HAVE BEEN ACCEPTED BY URBAN UTILITIES.

CURRENCY

- CONTRACTOR TO ENSURE CURRENCY OF STANDARDS AT TIME OF CONSTRUCTION.



URBAN UTILITIES CERTIFICATION SCHEME ENDORSED CONSULTANT (PLANS SUBMITTED ARE TO URBAN UTILITIES STANDARDS AND SATISFY THE WATER APPROVAL CONDITIONS)	
WATER APPROVAL REFERENCE NUMBER 20-PNT-47499	
ENDORSED CONSULTANT.....HCE ENGINEERS.....	
NOMINATED RPEQ:.....GREG HENWOOD..... RPEQ NO. 5317.....	
RPEQ SIGNATURE	DATE.....22.09.20.....
RPEQ CONTACT DETAILS.....07 3829 1399.....	

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INDEX	DATE	REVISIONS					DRAWN	CHECKED	PASSED

DRAWN	TM	16/09/20			
CHECKED	TM				
PASSED	GH				
	INITIALS	DATE			



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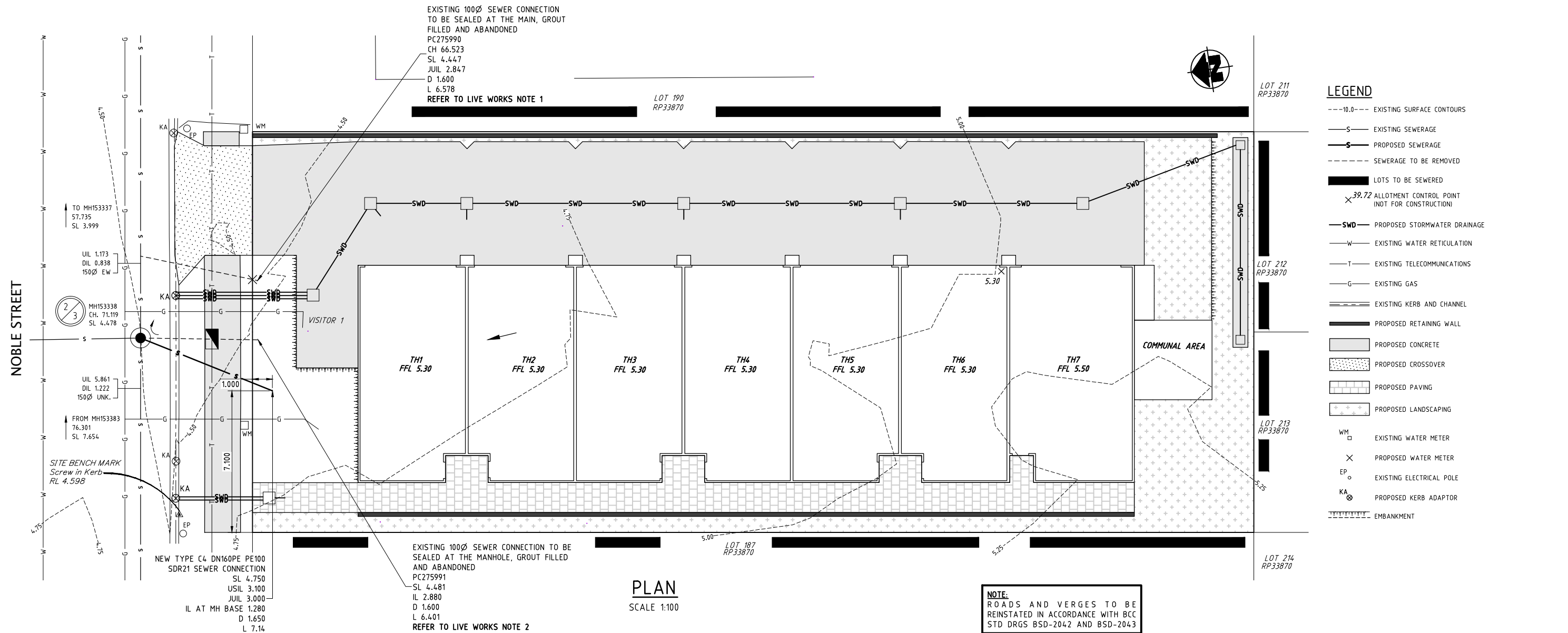
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Urban Utilities

47-49 NOBLE STREET, CLAYFIELD
LOT 188-189 ON RP33870
SEWERAGE LOCALITY PLAN, DRAWING INDEX AND GENERAL NOTES

SCALE	AS SHOWN
SHEET	1 OF 2 SHEETS
DRAWING NO.	
20191-S01	
	A



CONTRACTOR LIVE SEWER WORK

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

No.	DESCRIPTION	DIA. SEWER	MH No.	MH TYPE	COVER TYPE	LOT No.	F.S.L.	E.S.L.	IL	DEPTH
1	LICENSED PERSON TO SEAL EXISTING 100Ø HOUSE CONNECTION (AT THE MAIN)	150	-	-	-	ROAD RESERVE	4.500	4.500	1.150	3.350
2	LICENSED PERSON TO SEAL EXISTING 100Ø HOUSE CONNECTION (AT THE MANHOLE)	-	MH153338 2/3	G	D	ROAD RESERVE	4.478	4.478	1.173	3.305
3	CONTRACTOR TO PROVIDE NEW TYPE C4 DN160PE PE100 SDR21 SEWER CONNECTION	-	MH153338 2/3	G	D	ROAD RESERVE	4.478	4.478	1.173	3.305

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DRAWN	TM	16/09/20
CHECKED	MN	18.09.20
PASSED	GH	22.09.20
INITIALS	DATE	



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47-49 NOBLE STREET, CLAYFIELD
LOT 188-189 ON RP33870
SEWERAGE PLAN

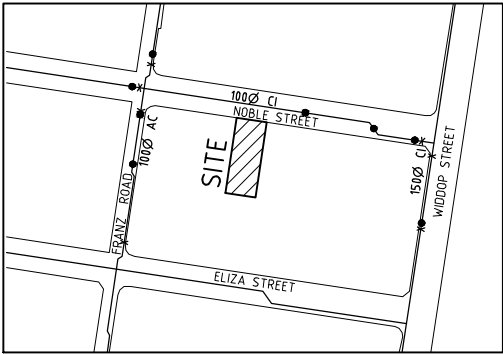
SCALE	AS SHOWN
SHEET	2 OF 2 SHEETS
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20191-S02	

RESIDENTIAL TOWNHOUSE DEVELOPMENT

LOTS 188-189 ON RP33870

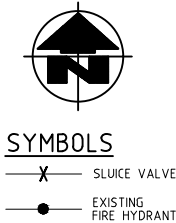
47-49 NOBLE STREET, CLAYFIELD, QLD 4011, 20-PNT-47501

DRAWING INDEX	
DRAWING No.	DESCRIPTION
20191-W01	WATER LOCALITY PLAN, DRAWING INDEX AND GENERAL NOTES
20191-W02	WATER RETICULATION PLAN



LOCALITY PLAN

SCALE 1:2500



WATER RETICULATION NOTES

GENERAL

- ALL CONSTRUCTION WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORKPLACE HEALTH AND SAFETY FOR INFORMATION BY PHONE ON 1300 362 128.
- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT SEQ WATER SUPPLY CODE, URBAN UTILITIES ACCEPTED PRODUCTS AND MATERIALS LIST (IPAM LIST) AND URBAN UTILITIES ADDITIONAL REQUIREMENTS.
- UNLESS SPECIFIED OTHERWISE, ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
- 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 URBAN UTILITIES RETICULATION SYSTEM.
- ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
- CLEARANCES TO OTHER SERVICES TO BE IN ACCORDANCE WITH TABLE 5.5 OF THE SEQ WATER SUPPLY CODE SPECIFICATIONS UNLESS NOTED OTHERWISE.
- HORIZONTAL TOLERANCES TO BE +/- 100mm LATERAL DISPLACEMENT FROM THE DESIGN ALIGNMENT FOR WATER MAINS, PROPERTY SERVICES AND WATER METERS.
- ENERGEX PILLARS ARE TO BE 1.10m MINIMUM CLEAR OF WATER METERS AND HYDRANTS.

EXISTING FEATURES

- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF EXISTING SERVICES PRIOR TO COMMENCING WORKS.
- IF EXISTING CONCRETE PATHWAYS/DRIVEWAYS NEED TO BE MODIFIED OR CUT, FULL WIDTH PANELS OF PATHWAYS/DRIVEWAYS BETWEEN EXISTING JOINTS ARE TO BE REMOVED, NO PATHWAYS/DRIVEWAYS TO BE CUT LONGITUDINALLY IN HALF OR OTHER PART THEREOF. REINSTATEMENT TO BE IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARD DRAWINGS FOR FOOTPATHS AND DRIVEWAYS. WHEN VALVE OR HYDRANTS NEED TO BE INSTALLED WITHIN COUNCIL CONCRETE FOOTPATHS, LOCALISED REINSTATEMENT OF IMMEDIATE FITTING SURROUND IS NOT PERMITTED. NEW CONCRETE PANELS SHALL BE PROVIDED IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARD DRAWINGS, WITH NEW AND EXISTING JOINTS SPACING NO LESS THAN 1 METRE.

PERMITS

- PRIOR TO THE COMMENCEMENT OF WORK THE CONTRACTOR SHALL ARRANGE FOR ROAD OPENING AND TRAFFIC PERMITS FROM THE RELEVANT AUTHORITIES. WORK MAY BE REQUIRED TO BE CARRIED OUT DURING WEEKENDS AND / OR LATE AT NIGHT ONLY.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS ASSOCIATED WITH VEGETATION REMOVAL/MANAGEMENT.

PIPE WORKS

- CONSTRUCT EMBEDMENT AND TRENCHFILL TO SEQ-WAT-1200-2, SEQ-WAT-1201-1 TO SEQ-WAT-1204-1 (TYPE D) SUPPORT UNLESS GEOTECHNICAL INVESTIGATIONS DEMONSTRATE THAT TYPE C SUPPORT IS ADEQUATE AND RELEVANT AUTHORITY OR QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS STANDARDS FOR ROADWAY CROSSINGS, WHICHEVER IS MORE ONEROUS.
- PROVIDE BULKHEADS/TRENCHSTOPS IN ACCORDANCE WITH SEQ WATER SUPPLY CODE TABLE 7.5 AND SEQ-WAT-1209-1 AND 1210-1.
- CONSTRUCT THRUST BLOCKS ON ALL VALVES, BENDS, TEES, TAPERS, DEAD ENDS, AND TRANSITIONS TO UNRESTRAINED PIPEWORK TO SEQ-WAT-1205-1 AND 1206-1.
- INSTALL DETECTABLE MARKER TAPE ON ALL WATER MAINS AND PROPERTY SERVICES.
- CONSTRUCT FIRE HYDRANTS AND STOP VALVES TO SEQ-WAT-1301-1, 1302-1, 1303-2, 1305-1, 1306-1 AND 1409-1.
- CONSTRUCT SCOURS TO SEQ-WAT-1307-2 WHERE NECESSARY. SCOURS WITHIN IPSWICH CITY COUNCIL REGION MUST DISCHARGE INTO AN OPEN STORMWATER GULLY PIT, NOT TO THE INVERT OF KERB AND CHANNEL. DISCHARGE TO KERB AND CHANNEL VIA A STANDARD KERB ADAPTOR THROUGH THE FACE OF THE KERB IS NOT ACCEPTED BY URBAN UTILITIES
- 316SS BACKING RINGS SHALL BE USED WITH FULL-FACE PE FLANGES. PE STUB-FLANGES ARE NOT ACCEPTED.
- COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN ON STD DRG SEQ-WAT-1200-2.
- FLANGED JOINTS SHALL NOT BE ENCASED IN CONCRETE
- SCL UNDER OTHER SERVICES SHALL BE CONCRETE ENCASED WITH MINIMUM 150mm THICK CONCRETE ENCASEMENT, WITH A FURTHER MINIMUM 150mm (300mm DESIRABLE) CLEARANCE TO SERVICES. SERVICES WITH DEPTH TO INVERT OVER 1.50m SHALL BE FULLY CONCRETE ENCASED. CONCRETE ENCASEMENT SHALL STOP NOMINALLY 300mm BEFORE FLANGES TO ALLOW FOR MAINTENANCE ACCESS.
- SCL WORK SHALL BE UNDERTAKEN BY A LICENSED CONTRACTOR EXPERIENCED IN WELDING OF PRESSURE PIPELINES. CONTRACTOR ACCREDITATION SHALL BE PROVIDED.
- PROVIDE A TEST POINT AT EACH END OF THE SCL SERVICE CROSSING
- PROTECTION METHODS TO ELECTRICAL INFRASTRUCTURE SHALL INCORPORATE THE REQUIREMENTS OF AS/NZS 3000 AND ENERGEX.
- ALL MILD STEEL PIPE TO BE SINTAKOTED.
- ALL FLANGES AND WELDED JOINTS TO BE PROTECTED WITH DENSO WRAPPING TAPE.

SOIL CLASSIFICATION

- THE CONTRACTOR SHALL ASSESS SOIL CONDITIONS TO DETERMINE CLASSIFICATION IN ACCORDANCE WITH SEQ-WAT-1200-1
- IF THE CONTRACTOR ENCOUNTERS SOIL IN TRENCHES WITH AN ALLOWABLE BEARING PRESSURE OF LESS THAN 50kPa, THEY SHALL IMMEDIATELY CONTACT THE RPEQ AND AWAIT DIRECTION.

WATER SERVICE ≤ 32mm ID

- CONSTRUCT SMALL DIAMETER PROPERTY SERVICES TO SEQ-WAT-1107-1 AND 1107-3.
- PROVIDE DN40PE (OR DN32 CU) WATER SERVICES FOR ROAD CROSSINGS SERVICING TWO DWELLINGS. PROVIDE DN32PE (OR DN25 CU) WATER SERVICES FOR ROAD CROSSINGS SERVICING A SINGLE DWELLING. IF THE LONGTERM STATIC HEAD OF THE PROPERTY SERVICE IS LESS THAN 350 KPA (35M) OR IF PRIVATE BOOSTER IS REQUIRED, THE MINIMUM SIZE OF PROPERTY SERVICE SHALL BE 32mm ID.
- WATER METERS LESS THAN OR EQUAL TO DN25, SUPPLIED AT THE DEVELOPER'S COST, ARE TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH SEQ-WAT-1107-3.
- WATER METERS GREATER THAN DN25, SUPPLIED AT THE DEVELOPER'S COST, ARE TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH QUU-WAT-002 AND QUU-WAT-003.
- CONTRACTOR TO PROVIDE METER NUMBERS AND READINGS FOR NEW AND RECLAIMED METERS.

- ALL DISUSED SERVICES SHALL BE PLUGGED AT THE MAIN AND FERRULE CLOSED OR TAPPING BAND REMOVED.
- PROPOSED AND EXISTING WATER METER BOXES TO BE FREE OF DIRT AND DEBRIS PRIOR TO PLAN SEALING.

WATER SERVICE > 32mm ID

- UNRESTRICTED ACCESS FROM THE STREET FRONTAGE OF THE SITE MUST BE PROVIDED TO THE WATER METER AT ALL TIMES FOR READING AND MAINTENANCE PURPOSES.
- CONTRACTOR TO PROVIDE METER NUMBERS AND READINGS FOR NEW AND RECLAIMED METERS.
- LARGE DIAMETER SERVICES SHALL BE DISUSED BY REMOVING ANY PROPERTY SERVICE PIPEWORK AT THE POINT OF CONNECTION TO THE MAIN (INCLUDING VALVE), AND INSTALLING A BLANK FLANGE DIRECTLY ON THE TEE (OR OTHERWISE REMOVE THE TEE ALTOGETHER AND REPLACE WITH STRAIGHT PIPE).

TESTING AND CONNECTING

- CONSTRUCT TEST POINTS TO SEQ-WAT-1410-1 AT THE ENDS OF ALL NEW MAINS BEFORE THE SCOUR AND WHERE REQUIRED FOR COMMISSIONING PURPOSES. URBAN UTILITIES PREFERENCE IS TO AVOID TAPPING BANDS FOR TEST POINTS AND PROVIDE EITHER A TEMPORARY (RESTRAINED) DUCKFOOT HYDRANT OR FLANGED SHORT PIPE WITH A TEMPORARY TAPPED BLANK FLANGE. TESTING AGAINST LIVE MAINS AND VALVES IS NOT PERMITTED.
- TESTING LOCATIONS AND TEMPORARY FITTINGS ARE REQUIRED ON SERVICES OVER 10m LONG UNLESS APPROVED IN WRITING FOR WORKS TO BE UNDERTAKEN AS LIVE WORKS.
- WHEN JOINING TO EXISTING UNRESTRAINED PIPELINES, PROVIDE A DICL SHORT PIPE WITH THRUST FLANGE AND THRUST BLOCK. BOLT ON UNI FLANGES SHALL NOT BE USED AS THRUST FLANGES. THRUST (PUDDLE) FLANGES SHALL BE AN APPROVED PREFABRICATED DICL/SCL SHORT PIPE WITH PREFABRICATED THRUST FLANGE.
- AC MAINS SHALL BE REPLACED COLLAR-COLLAR. REFER TO URBAN UTILITIES DOCUMENTS PR0377, REF204 AND SWMS10 FOR SAFE HANDLING AND REMOVAL OF MATERIALS THAT CONTAIN ASBESTOS.
- ALL LIVE WORKS TO BE UNDERTAKEN BY THE CONTRACTOR IN ACCORDANCE WITH A VALID NETWORK ACCESS PERMIT. WORKS TO BE DONE UNDER THE SUPERVISION OF THE CERTIFYING RPEQ AND URBAN UTILITIES AT THE DEVELOPERS EXPENSE.
- LIVE WORKS MAY NOT COMMENCE UNTIL ALL RELEVANT TEST CERTIFICATES HAVE BEEN PROVIDED TO AND ACCEPTED BY URBAN UTILITIES AND HCE ENGINEERS AND ALL ADJOINING WORKS ARE TO HAVE HAVE BEEN ACCEPTED BY URBAN UTILITIES.
- PRE-CHLORINATED FITTINGS SHALL BE USED FOR WATER SUPPLY LIVE-WORKS CONNECTIONS.

MISCELLANEOUS

- INSTALL PAVEMENT MARKERS TO SEQ-WAT-1300-1 AND 1300-2.
- SERVICE CONDUITS SHALL EXTEND 300mm BEYOND ALL EXISTING OR PLANNED CONCRETE. FOOTPATHS, BIKEWAYS AND OTHER HARD STANDING AREAS AND INSTALLED IN ACCORDANCE WITH THE SEQ WATER SUPPLY CODE.
- IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT 'DIAL BEFORE YOU DIG' PH.1100 FOR THE LOCATION OF EXISTING PUBLIC UTILITIES PRIOR TO EXCAVATION. ANY DAMAGE CAUSED TO EXISTING PUBLIC UTILITIES BY THE CONTRACTOR WILL BE REPAIRED BY THE RELEVANT AUTHORITY AT THE CONTRACTORS EXPENSE.

REHABILITATION

- ALL DISTURBED AREAS TO BE REINSTATED TO THEIR ORIGINAL CONDITION.

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 MUST 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 ARBORIST FOR FURTHER ADVICE.
- ANY TREE LOPPING REQUIRED SHALL BE UNDERTAKEN BY AN APPROVED ARBORIST.

THESE WORKS ARE CONSIDERED MINOR WORKS AND WORKS ARE TO BE CONSTRUCTED BY A PRIVATE CONTRACTOR. INSPECTIONS ARE TO BE ARRANGED BY CONTACTING THE ENDORSED MINOR WATER AND SEWER PROVIDER IDENTIFIED ON THIS PLAN (HCE ENGINEERS). FOR AS CONSTRUCTED PLANS THE CONTRACTOR IS TO CONTACT HCE ENGINEERS (3829 1399) 7 DAYS PRIOR TO THE WORKS COMMENCING.

URBAN UTILITIES
CERTIFICATION SCHEME ENDORSED CONSULTANT
(PLANS SUBMITTED ARE TO URBAN UTILITIES
STANDARDS AND SATISFY THE WATER APPROVAL CONDITIONS)

WATER APPROVAL REFERENCE NUMBER 20-PNT-47501

ENDORSED CONSULTANT.....HCE ENGINEERS.....

NOMINATED RPEQ:.....GREG HENWOOD.....RPEQ NO. 5317.....

RPEQ SIGNATURE DATE.....22.09.20.....

RPEQ CONTACT DETAILS.....07 3829 1399.....

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A	22.09.20	ISSUED FOR COMMENT	TM	TM	GH
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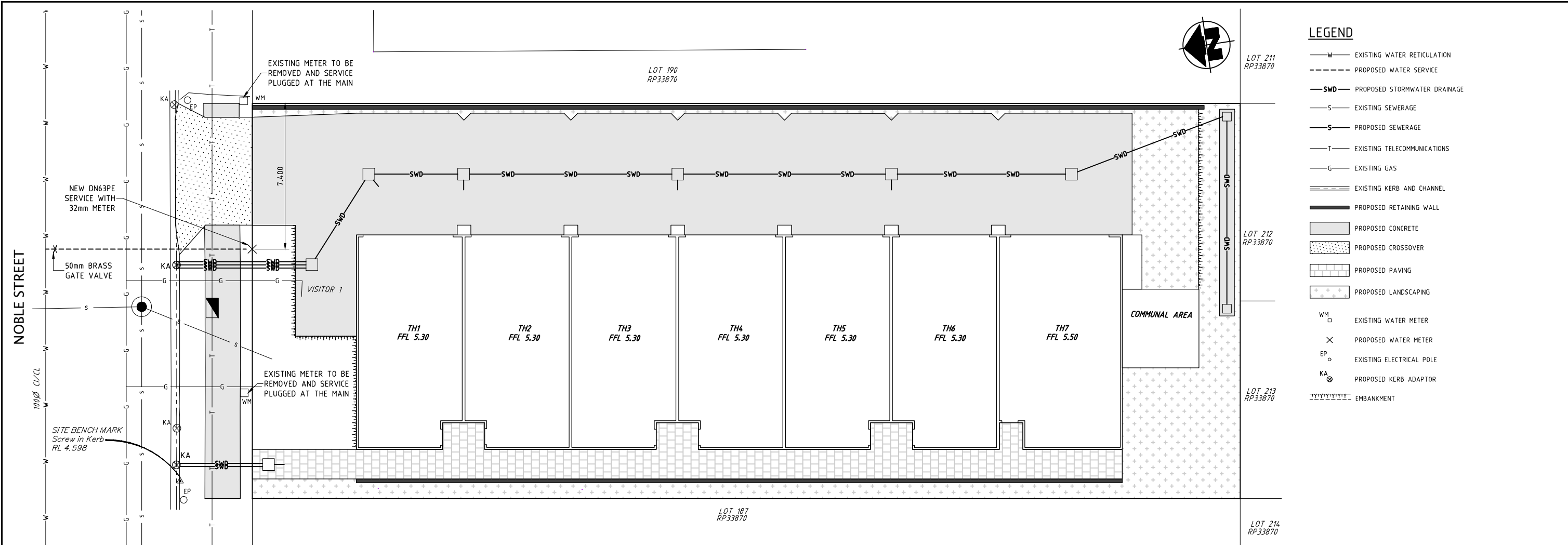


UrbanUtilities

Urban Utilities

47-49 NOBLE STREET, CLAYFIELD
LOT 188-189 ON RP33870
WATER LOCALITY PLAN, DRAWING INDEX AND GENERAL NOTES

SCALE	AS SHOWN
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NOTE:
CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING NEAR GAS MAIN AND COMPLY WITH ALL APA GAS REQUIREMENTS FOR WORKING NEAR GAS INFRASTRUCTURE, WHICH MAY INCLUDE WORKING UNDER THE DIRECTION OF A SPOTTER.

NOTE:
CONTRACTOR TO DOCUMENT THE METER NUMBER AND READING OF ANY REMOVED METER ON THE URBAN UTILITIES METER INSTALLATION FORM. PHOTOGRAPHIC EVIDENCE CLEARLY SHOWING THE METER NUMBER AND READING TO BE PROVIDED TO HCE ENGINEERS

NOTE:
UNRESTRICTED ACCESS FROM THE STREET FRONTAGE OF THE SITE MUST BE PROVIDED TO THE WATER METER AT ALL TIMES FOR READING AND MAINTENANCE PURPOSES.

NOTE:
PRESSURE TESTING NOT REQUIRED IF NEW SERVICE CONSTRUCTED FROM CONTINUOUS LENGTH OF PE PIPE

NOTE:
FOR INTERNAL WATER SERVICES REFER TO CHILTON WOODWARD HYDRAULIC DESIGN DRAWINGS

NOTE:
ROADS AND VERGES TO BE REINSTATED IN ACCORDANCE WITH BCC STD DRGS BSD-2042 AND BSD-2043

PLAN

SCALE 1:100

SERVICE DETAILS

No.	SIZE	LOT NUMBERS
	DN40	△
	DN32	○
	DN25	○
1	OTHER	DN63PE SERVICE
		EXISTING SERVICE TO BE PLUGGED AT THE MAIN

ASSET REGISTER - WATER RETICULATION

ESTATE/STAGE		RESIDENTIAL TOWNHOUSE DEVELOPMENT			
SITE ADDRESS		47-49 NOBLE STREET, CLAYFIELD			
FILE/APPLICATION		20-PNT-47501			
URBAN UTILITIES APPROVAL DATE		17.09.20			
CLIENT		HOMA GROUP PTY LTD			
JOB. REF. No.					
MAINS	DIAMETER	MATERIAL DESIGN CONST		LENGTH DESIGN CONST	
	63mm	MDPE		-	
	100mm	UPVC MSCL DICL		-	
				-	
				-	
	150mm	UPVC DICL		-	
SERVICES	DIAMETER	MATERIAL DESIGN CONST		LENGTH DESIGN CONST	
	DN25	PE		-	
	DN32	PE		-	
	DN40	PE		-	
	DN63	PE		10.220m	
	100	DICL		-	
METERS	DIAMETER	NUMBER			
	20	-			
	25	-			
	32	1			
	OTHER	-			

THESE WORKS ARE CONSIDERED MINOR WORKS AND WORKS ARE TO BE CONSTRUCTED BY A PRIVATE CONTRACTOR. INSPECTIONS ARE TO BE ARRANGED BY CONTACTING THE ENDORSED MINOR WATER AND SEWER PROVIDER IDENTIFIED ON THIS PLAN (HCE ENGINEERS). FOR AS CONSTRUCTED PLANS THE CONTRACTOR IS TO CONTACT HCE ENGINEERS (3829 1399) 7 DAYS PRIOR TO THE WORKS COMMENCING.

URBAN UTILITIES
CERTIFICATION SCHEME ENDORSED CONSULTANT
(PLANS SUBMITTED ARE TO URBAN UTILITIES STANDARDS AND SATISFY THE WATER APPROVAL CONDITIONS)

WATER APPROVAL REFERENCE NUMBER 20-PNT-47501

ENDORSED CONSULTANT..... HCE ENGINEERS.....

NOMINATED RPEQ: GREG HENWOOD RPEQ NO. 5317

RPEQ SIGNATURE DATE 22.09.20

RPEQ CONTACT DETAILS 07 3829 1399

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Urban Utilities

47-49 NOBLE STREET, CLAYFIELD
LOT 188-189 ON RP33870
WATER RETICULATION PLAN

SCALE	AS SHOWN
SHEET	2 OF 2 SHEETS
DRAWING NO.	20191-W02