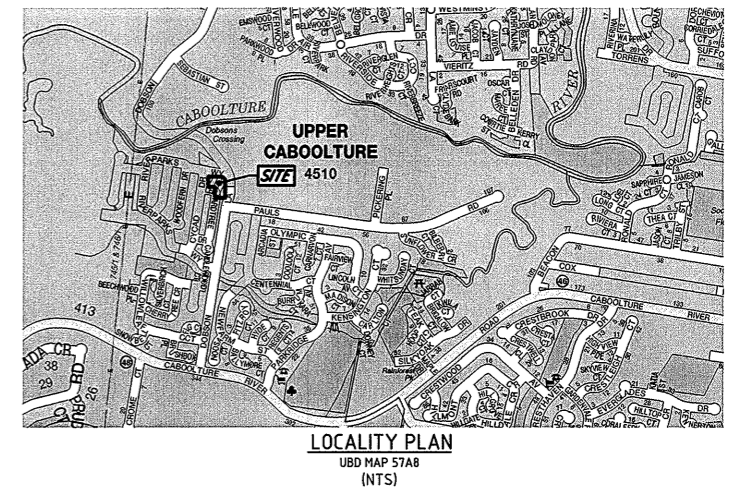


NAME OF ESTATE		RIVER PARKS
NAME OF SUBDIVIDER		NORTHERLY PROJECTS PTY LTD
SP DELEGATE APPROVAL DATE		
DRAWING/PLAN No.		
No. OF ALLOTMENTS		5
AREA IN HA		0.27
LENGTH OF SEWERS	100mm	
	150mm	53.0m
	225mm	

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 RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE SYSTEM.
- ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY UNITYWATER AT THE DEVELOPER'S EXPENSE, OR AS DIRECTED BY UNITYWATER.
- ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE SEQ SEWER DESIGN & CONSTRUCTION CODE "ACCEPTED PRODUCTS AND MATERIALS" LIST.
- EACH ALLOTMENT SHALL BE SERVED BY A DN100PVC PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN150 PVC PROPERTY CONNECTION SHALL BE PROVIDED.
- PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN ON THE DRAWINGS.
- PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 500mm 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 MATERIAL'S MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S.1289 (MODIFIED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATIVE 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 SEQ SEWER CODE.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
- SEWERS SHALL BE DISUSED/ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN SEQ SEWER CODE.
- BENCH MARK AND LEVELS TO AHD. REFER PLAN 8520-101 FOR DETAILS OF BENCH MARKS.
- AT THE TIME OF DEVELOPMENT ANY EXISTING DWELLING SERVED BY A SEPTIC SYSTEM, SHALL BE CONNECTED TO THE NEW SEWER BY A LICENSED PLUMBER IN ACCORDANCE WITH THE RELEVANT STATUTORY AND COUNCIL REQUIREMENTS. THE SEPTIC SYSTEM INCLUDING TRENCHES, SHALL BE REMOVED AT THE DEVELOPER'S COST. ALL FIXTURES SHALL BE UPGRADED IF REQUIRED BY PLUMBING CODE.
- EXISTING ALLOTMENTS REQUIRING A PROPERTY CONNECTION FROM EXISTING SEWERS SHALL BE PROVIDED BY THE SEQ SERVICE PROVIDER AT THE DEVELOPER'S COSTS
- ANY EXTERNAL SEWER PASSING THROUGH PRIVATE PROPERTY WILL REQUIRE PERMISSION IN WRITING FROM THE OWNER OF THE PROPERTY, PERMISSION TO BE FORWARDED TO UNITY WATER.
- ALL WATER AND SEWER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE WORKPLACE HEALTH AND SAFETY REGULATIONS - "EXCAVATIONS, TRENCHES, CAISSONS, COFFERDAMS AND TUNNELS" (REGULATION 125 TO REGULATION 131 INCLUSIVE). CONTACT YOUR NEAREST OFFICE OF THE DIVISION OF ACCIDENT PREVENTION FOR INFORMATION: PHONE NORTH: (07) 3857 9484 SOUTH: (07) 3896 1500
- DIMENSIONS ARE IN METRES UNLESS SHOWN OTHERWISE.
- THE CONTRACTOR IS TO VERIFY THE INVERT LEVELS OF THE EXISTING DOWNSTREAM MANHOLE OR SEWER LINE TO WHICH THE CONNECTION IS TO BE MADE, PRIOR TO THE COMMENCEMENT OF PIPE LAYING.
- ALL SEWER LINES SHALL BE 150mm DIAMETER UNLESS STATED OTHERWISE.
- THE CONTRACTOR SHALL VERIFY FINISHED SURFACE LEVELS ON SITE BEFORE CONSTRUCTION OF SEWERS AND PROPERTY CONNECTION BRANCHES.
- ALL MANHOLE AND END LOCATIONS HAVE BEEN PEGGED AND LEVELED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OFFSET SUCH LOCATIONS SO THAT THE MANHOLE POSITIONS CAN BE RE-ESTABLISHED AFTER EXCAVATION.
- THE FINISHED SURFACE LEVELS SHOWN ON MANHOLES ARE APPROXIMATE ONLY AND HAVE BEEN USED FOR ESTIMATING PURPOSES. THE CONTRACTOR SHALL NOT FINISH MANHOLE COVERS AND SURROUNDS UNTIL THE ENGINEER ADVISES THE CONTRACTOR OF THE REQUIRED FINISHED LEVEL TO WHICH EACH ONE IS TO BE BUILT. IF ALLOTMENT TRIMMING OR OTHER WORK NEEDS TO BE CARRIED OUT AFTER COVERS HAVE BEEN COMPLETED, THE AREA SHALL BE RETRIMMED FLUSH WITH THE COVER, OR IF DIRECTED BY THE ENGINEER, THE COVER SHALL BE RECONSTRUCTED TO THE FINAL TRIMMED LEVEL.
- THE SCHEDULED DEPTHS FOR PAYMENT OF EXCAVATION AND BACKFILLING OF TRENCHES ARE BASED ON THE AVERAGE OF THE TWO PIPE INVERT DEPTHS BELOW FINISHED LEVEL OF ADJACENT MANHOLES.
- WHERE ROOFWATER AND SEWERAGE RETICULATION CONNECTIONS ARE LOCATED IN THE SAME GENERAL LOCATION WITHIN AN ALLOTMENT, THE CONTRACTOR SHALL ENSURE THAT THE ENDS OF THE CONNECTIONS ARE LOCATED NO CLOSER THAN 500mm FROM EACH OTHER IN THE HORIZONTAL PLANE, WHILE MAINTAINING THE SPECIFIED MAXIMUM AND MINIMUM OFFSETS FROM PROPERTY BOUNDARIES TO THE CONNECTIONS. SEWER CONNECTIONS ARE TO BE EXTENDED 1.00m BEYOND ROOFWATER CROSSINGS OR PROPERTY BOUNDARIES AS APPLICABLE.
- ALL SEWER HOUSE CONNECTIONS SHOWN ARE THE HIGHEST POSSIBLE TO SERVICE THE RESPECTIVE ALLOTMENT(S). SHOULD THE CONTRACTOR CONSTRUCT THE CONNECTIONS TO A HIGHER LEVEL, THE COSTS ASSOCIATED WITH THE LOWERING OF THE CONNECTION(S) SHALL BE BOURN BY THE CONTRACTOR.
- FOR ENVIRONMENTAL CONDITIONS REFER TO THIS PLAN.
- THESE NOTES SHALL APPLY FOR ALL SECTIONS OF WORK WITHIN THE LIMITS OF THE CONTRACT.
- TANGENT POINT SETOUT INFORMATION FOR HORIZONTAL BENDS IS TO BE INCLUDED ON AS-CONSTRUCTED DRAWINGS.



ENVIRONMENTAL CONDITIONS

VEGETATION PROTECTION

- TREES LOCATED ALONG THE FOOTPATH SHOULD BE, WHERE POSSIBLE TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
- WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHOULD 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.
- WHERE POSSIBLE, TREE ROOTS SHOULD BE TUNNELLED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHOULD BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE.
- ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY COUNCIL'S METROPOLITAN TREE SERVICES.

SOIL

- TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY.
- CARE SHOULD BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.
- ACID SULPHATE SOILS EXIST IN THE WORKS AREA. THE OUTPUTS FROM THE RISK ASSESSMENT BASED ON QUEENSLAND ACID SULPHATE SOIL TECHNICAL MANUAL REQUIRES THAT ACID SULPHATE SOILS BE MANAGED AS FOLLOWS: REFER GUIDELINES.

CREEK CROSSING

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

REHABILITATION

- PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED.
- PREDISTURBANCE VEGETATION PATTERNS SHOULD BE RESTORED.

SAFETY

- THE DESIGN AND CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT A GRADE OF 1:60 AND A MAXIMUM DEPTH OF PROPERTY CONNECTION AT 1.5m. UNLESS OTHERWISE STATED. FOR JUNCTION DETAILS REFER SEQ-SEW-1104-1 AND SEQ-SEW-1105-1

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

ALL WATER AND SEWER CONSTRUCTION WORK UNDERTAKEN BY THE CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE QUEENSLAND WORK HEALTH AND SAFETY ACT 2011. CONTACT THE DIVISION OF WORK HEALTH AND SAFETY FOR INFORMATION. PHONE 1300 369 915.

NOTWITHSTANDING THAT EXISTING SERVICES MAY OR MAY NOT BE SHOWN ON THE JOB 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 ANY UNDERGROUND SERVICES IN THIS AREA AND SHALL BE RESPONSIBLE FOR MAKING GOOD ANY DAMAGE THERETO.

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SURVEYOR:

veris

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075 3600 030
MACKAY
075 493 2911

PROSERPINE
075 444 1722
CAIRNS
075 401 0722

CLIENT:

NORTHERLY
PROJECTS PTY LTD

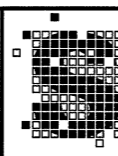
PROJECT:
RIVERPARKS ESTATE - PAULS
ROAD, UPPER CABOOLTURE
STAGE 8B2

DESIGNED:	FI
CHECKED:	PM
DRAWN:	BJ
CHECKED:	PM
DATE:	MAY '17
INITIALS:	

SCALES: AS SHOWN

DESIGNED: FI
CHECKED: PM
DRAWN: BJ
CHECKED: PM
DATE: MAY '17

CONSULT AUSTRALIA
Member Firm



SHEEHY & PARTNERS
PTY LIMITED
CONSULTING ENGINEERS
STRUCTURAL AND CIVIL
PH(07)3839 3644 FAX(07)3839 3856
A.C.N.009 899 905

SEWERAGE RETICULATION

LOCALITY PLAN AND
GENERAL NOTES

DRAWING NUMBER:

8520-110

FULL SIZE A1

No. OF DRAWINGS:

SHEEHY & PARTNERS
SIGNED: [Signature] DATE: 09/08/2017
NAME OF SIGNATORY (PRINT): SCOTT THOMAS
RPEQ NO.: 4618

COUNCIL REFERENCE No: DA/314/80/2016/VCHG/1

MANHOLE No.

MH TYPE & DROP
COVER TYPE
JUNCT. LINE No.
JUNCT. DROP TYPES
DEPTH TO HC
HC INVERT LEVEL
HC TYPE
HC LOT No.
CH FROM DS MH

MAINTENANCE HOLE TYPES: (SEQ-SEW-1101-2)
P2 - P3 = PRE-CAST CONCRETE
A = 1000φ CONCRETE
B = 1200φ CONCRETE
C = 1500φ CONCRETE
HB - HORIZONTAL BEND
MAINTENANCE SHAFTS: (SEQ-SEW-1314-1)
J = 225φ uPVC

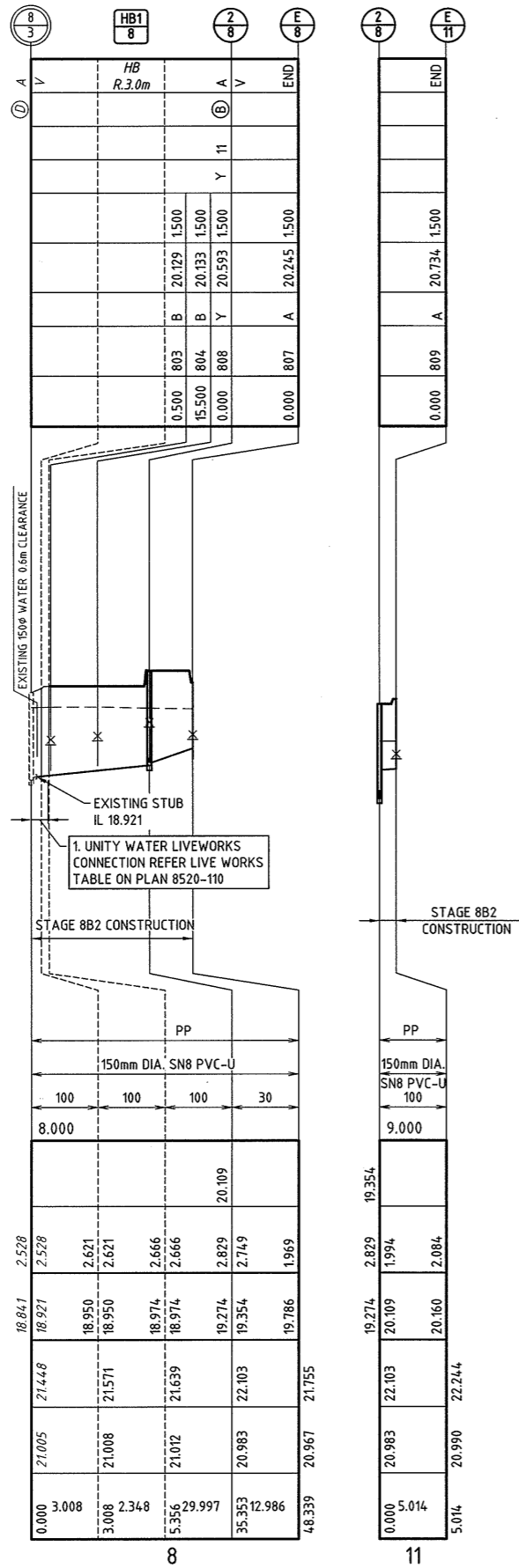
NOTE:
1. FOR MH DROP TYPES REFER SEQ-SEW-1303-1
2. FOR MS TYPE AND JUNCTIONS REFER SEQ-SEW-1314-1
3. FOR COVER TYPES REFER SEQ-SEW-1308-1
4. FOR HC TYPES AND DROPS REFER SEQ-SEW-1104-1 & SEQ-SEW-1105-1
5. HORIZONTAL BENDS TO BE CONSTRUCTED IN ACCORDANCE WITH SEQ-SEW-1314-3
6. AS CONSTRUCTED INFORMATION TO BE CONFIRMED WITH SITE SUPERINTENDENT PRIOR TO CONSTRUCTION OF SEWER MAINS.
7. ALL SEWER MANHOLES ARE TO BE INSTALLED WITH TWO (2) SHORT PIPES TO ALL LINES FROM MANHOLES IRRESPECTIVE OF MANUFACTURERS RECOMMENDATIONS FOR PRECAST BASES.
8. THE APPROVED SEWER PIPELINE MATERIAL FOR RIGS (PVC-U) IS SN8 PVC-U UNLESS WHERE SEWER IS GREATER THAN 3.0m DEEP OR WHERE SEWER HAS REDUCED COVER THEN PN12 PVC-U SHALL BE USED.

× LOT CONTROL POINT
INVERT LEVEL OF HOUSE
T DRAIN TO BE CONSTRUCTED.

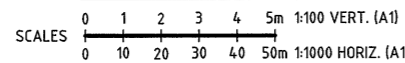
LEGEND:
FP = ROAD VERGE
PP = PRIVATE PROPERTY

PIPE LOCATION
PIPE DIA & TYPE
PIPE GRADE (1 in x)
DATUM RL

JUNCTION
INVERT LEVEL
DEPTH FROM FSL
INVERT LEVEL
FINISHED SURFACE
NATURAL SURFACE
PEGGED CHAINAGE
LINE NUMBER

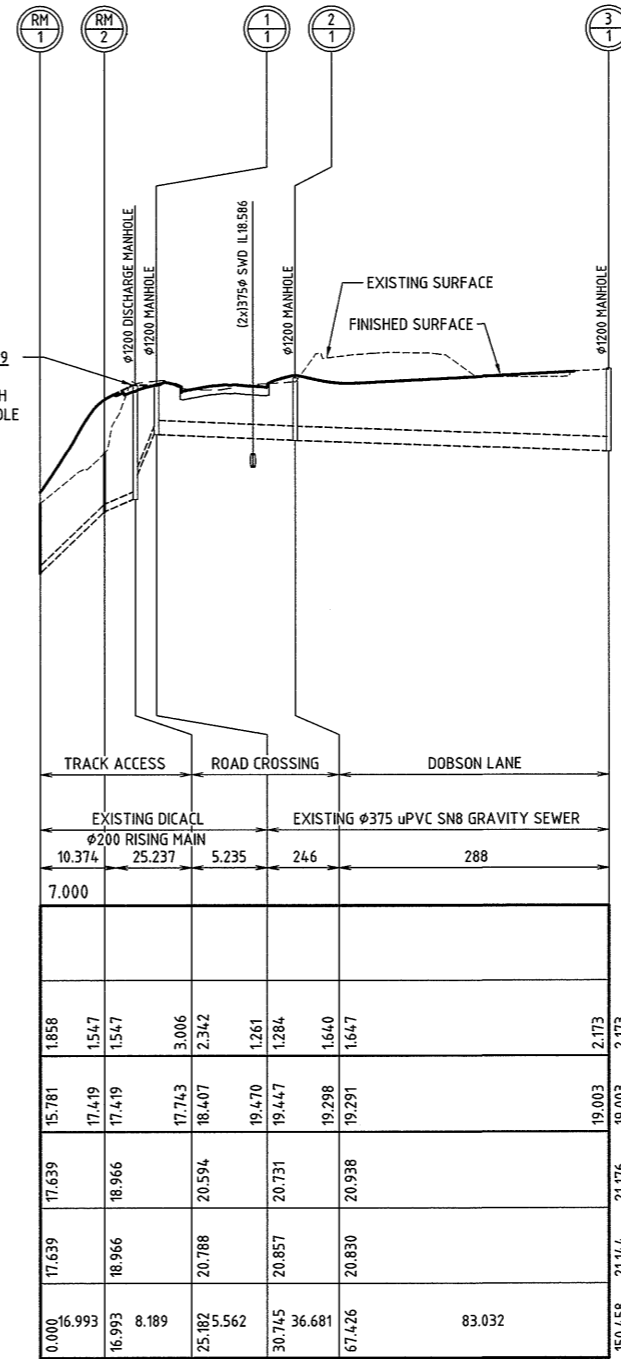


LONGITUDINAL SECTIONS

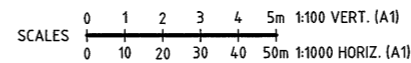


PIPE LOCATION
PIPE DIA & TYPE
PIPE GRADE (1 in x)
DATUM RL

JUNCTION
INVERT LEVEL
DEPTH FROM FSL
INVERT LEVEL
FINISHED SURFACE
NATURAL SURFACE
PEGGED CHAINAGE
LINE NUMBER



EXISTING Ø375 SEWER LONGITUDINAL SECTION



SHEEHY & PARTNERS
SIGNED: [Signature] DATE: 10/08/2017
NAME OF SIGNATORY (PRINT): SCOTT THOMAS
RPEQ NO. 4618

COUNCIL REFERENCE No. DA/31480/2016/VCHG/1

PLOT DATE: 10 Aug. 2017 9:05am CAD FILE: \\N:\B500041\B500041\B500041\B500041.dwg

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				A UNITY WATER AMENDMENTS AMENDMENTS				AUG '17 DATE