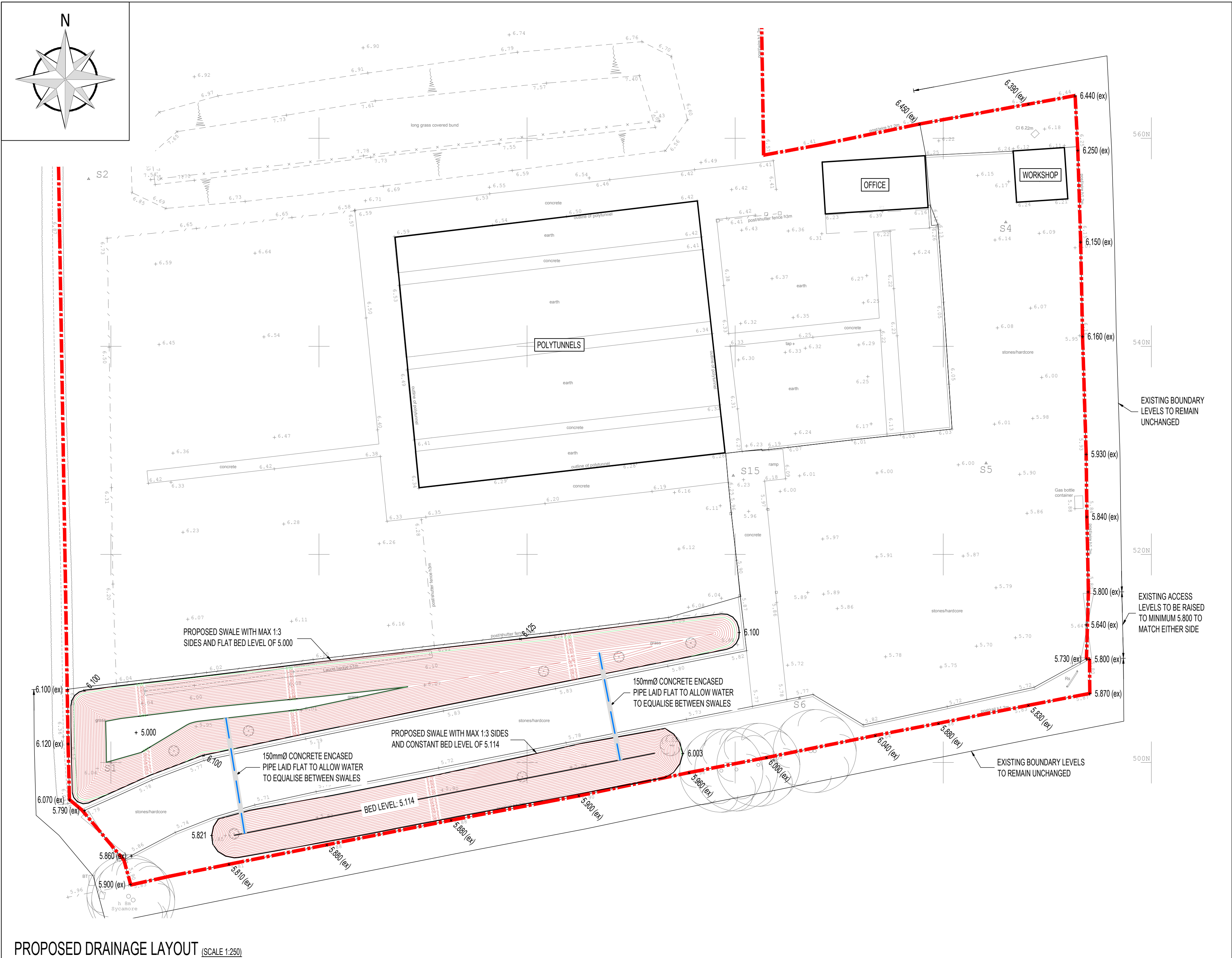




PRIVATE DRAINAGE DETAIL NOTES

ALL WORK TO PRIVATE SEWERS IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE CURRENT BRITISH STANDARDS, BUILDING REGULATIONS AND EUROCODES.

THE PRINCIPLE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE EXISTING LINE, INVERT LEVELS AND PIPE DIAMETER OF THE EXISTING CONNECTION POINTS FOR BOTH THE FOUL AND SURFACE WATER SYSTEMS, PRIOR TO UNDERTAKING INSTALLATION OF ANY NEW DRAINAGE WORKS. ANY DEVIATION TO THE LEVELS AND POSITIONS INDICATED ON THE DRAWING SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE PROJECT ENGINEER.

THE FOLLOWING PIPE STRENGTHS SHALL BE ADOPTED UNLESS NOTED OTHERWISE:-

PRIVATE PIPES UP TO AND INCLUDING 300mm DIAMETER TO BE CLAY WARE TO BS EN 295 CLASS 160 OR PLASTIC TO BS EN 1401-1:2009 AND BS EN 13598.

PRIVATE PIPES OVER 300mm DIAMETER TO BE CONCRETE TO BS5911 CLASS M.

WHERE PIPES AND OTHER DRAINAGE COMPONENTS ARE TO RECEIVE TRADE EFFLUENT THE PRINCIPAL CONTRACTOR SHALL ENSURE THEY ARE ADEQUATE TO RECEIVE THE DISPOSAL OF CHEMICALS (FROM THE LABORATORY) AS LISTED IN THE CONTRACT DOCUMENTS.

ALL PIPE RUNS TO BE LAID WITH FLEXIBLE JOINTS.

PIPES LOCATED IN HIGHWAYS TO BE LAID A MINIMUM OF 1m FROM THE KERB EDGE. THE OUTSIDE EDGE OF MANHOLES TO BE A MINIMUM OF 0.5m FROM THE KERB EDGE.

ALL PIPES ENTERING AND EXITING MANHOLES ARE TO BE CONNECTED WITH PIPE SOFFITS LEVEL UNLESS NOTED OTHERWISE.

ALL INVERTS SPECIFIED ARE OUTGOING (EXCEPT BACKDROP)

CONNECTIONS TO BE MADE BY PURPOSE MADE JUNCTIONS AS FAR AS PRACTICABLE, OR USING PIPE BENDS TO BE TURNED IN DIRECTION OF FLOW.

ALL DRAINS TO BE PRESSURE TESTED PRIOR TO BACKFILLING, AND UPON COMPLETION OF SURFACING. ALL DRAINS TO BE INSPECTED BY CCTV IMMEDIATELY PRIOR TO PRACTICAL COMPLETION.

PRE-FORMED CHANNELS ARE TO BE USED IN MANHOLES WHERE APPLICABLE.

GRANULITHIC CONCRETE BENCHING TO BE STEEL TROWELLED TO A DENSE SMOOTH FACE NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS.

THE FIRST MANHOLE UPSTREAM FROM THE CONNECTION TO THE CONNECTION TO THE EXISTING DRAINAGE SHOULD BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE EXISTING SEWER/DRAIN. THE SCREEN SHOULD NOT BE REMOVED UNTIL IMMEDIATELY PRIOR TO THE OCCUPATION OF THE PREMISES TO BE SERVED BY THE SEWER.

ROAD GULLY CONNECTIONS TO BE 150mm DIAMETER LAID AT A MINIMUM GRADIENT OF 1:150 UNLESS NOTED OTHERWISE.

ALL PETROL INTERCEPTORS ARE TO BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. ADDITIONAL MANUFACTURERS REQUIREMENTS FOR TRAFFICKED AREAS TO BE ACCOMMODATED.

CONCRETE MIXES

THE FOLLOWING CONCRETE MIXES ARE TO BE USED (IN ACCORDANCE WITH BS 8500):-

CONCRETE SPECIFICATION	
DC-CLASS	CONCRETE MIX
DC1	ST4 / GEN 3
DC2	FND 2
DC2	FND 2:
DC3	FND 3
DC3:	FND 3:
DC4	FND 4
DC4:	FND 4:
DC4+	FND 4:
SUMP CLASS S3 FOR ALL DRAINAGE WORKS	

PIPE BEDDING AND TRENCH KEY

- GRANULAR MATERIAL COMPLYING WITH TABLE
- SELECTED EXCAVATED MATERIAL COMPLYING WITH CLAUSE 2.116 IN ACCORDANCE WITH THE CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 5TH EDITION IN LAYERS NOT EXCEEDING 225mm
- GRANULAR SUB-BASE MATERIAL (DOT TYPE 1) DEPOSITED IN LAYERS NOT EXCEEDING 225mm UNCONSOLIDATED THICKNESS THEN FULLY COMPACTED
- CONCRETE SURROUND FOR MIX SEE DRAINAGE NOTES

TRENCH WIDTHS TABLE	
DIAMETER OF DRAIN (mm)	TRENCH WIDTH (mm)
100	550
150	600
225	700
300	750

GRANULAR MATERIAL TABLE	
DIAMETER OF DRAIN (mm)	AGGREGATE
100	10mm SINGLE SIZE
150	10 OR 14mm SINGLE SIZE OR 14-5mm GRADED
150-500	10, 14 OR 20mm SINGLE SIZE OR 20-5mm GRADED
OVER 500	10,14, 20 OR 40mm SINGLE SIZE OR 40-5mm GRADED
NOTE: NO MECHANICAL COMPACTION WITHIN 300mm OF CROWN OF PIPE	

TYPICAL PIPE BEDDING AND TRENCH DETAILS

NOTE: NO MECHANICAL COMPACTION WITHIN 300mm OF CROWN PIPE.

PIPE RUNS WITH CLASS A CONCRETE BED AND SURROUND

TYPE 'A' APPLICABLE UNDER FOOTPATHS, VERGES AND OTHER NON-TRAFFICKED AREAS WHERE DRAINS HAVE LESS THAN 600mm COVER

TYPICAL PIPE BEDDING AND TRENCH DETAILS

NOTE: NO MECHANICAL COMPACTION WITHIN 300mm OF CROWN PIPE.

PIPE RUNS WITH CLASS S GRANULAR BED AND SURROUND

TYPE 'S' APPLICABLE UNDER FOOTPATHS VERGES AND OTHER NON-TRAFFICKED AREAS WHERE DRAINS HAVE MORE THAN 600mm COVER

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- DO NOT SCALE THIS DRAWING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS ON SITE PRIOR TO COMMENCING THE WORKS.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
- ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE. ALL LEVELS IN METRES UNLESS NOTED OTHERWISE.
- ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
- THIS DRAWING IS BASED ON ADA SOLUTIONS LTD DRAWING No. 0618-DB4115-T1a2 DATED JULY 2018.

CONTRACTUAL RESIDUAL CDM RISK

EXCAVATIONS ADJACENT TO SITE BOUNDARY
CONTRACTOR TO NOTE CLOSE PROXIMITY OF EXCAVATIONS TO SITE BOUNDARY AND NEIGHBOURING PROPERTY AND TAKE APPROPRIATE MEASURES NOT TO UNDERMINE.

EXISTING PRIVATE ROAD
CONTRACTOR TO NOTE POSITION OF EXISTING PRIVATE ROAD ON SITE AND ENSURE THAT IT ISNT UNDERMINED DURING EXCAVATION.

KEY

- DENOTES SITE BOUNDARY
- DENOTES PROPOSED SURFACE WATER DRAINAGE WITH CONCRETE ENCASEMENT

P01	11.10.18	ISSUED FOR INFORMATION	EG	MPW
Rev.	Date	Revision Description	Drawn	Auth'd
Client				

QUERCUS NURSERY

Project Title

QUERCUS NURSERY, FERRING

Description

PROPOSED DRAINAGE LAYOUT AND DETAILS

Date	OCT 2018	Drawn	EG
Scale	1:250 @A1	Authorised	MPW
JPL Ref.	JD101497		

BIM Ref.

Project	Orig.	Vol.	Level	Type	Role	Number
001497	JPL	ZZ	XX	DR	D	4100

Suitability

S2 - Suitable for Information

Revision

P01

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