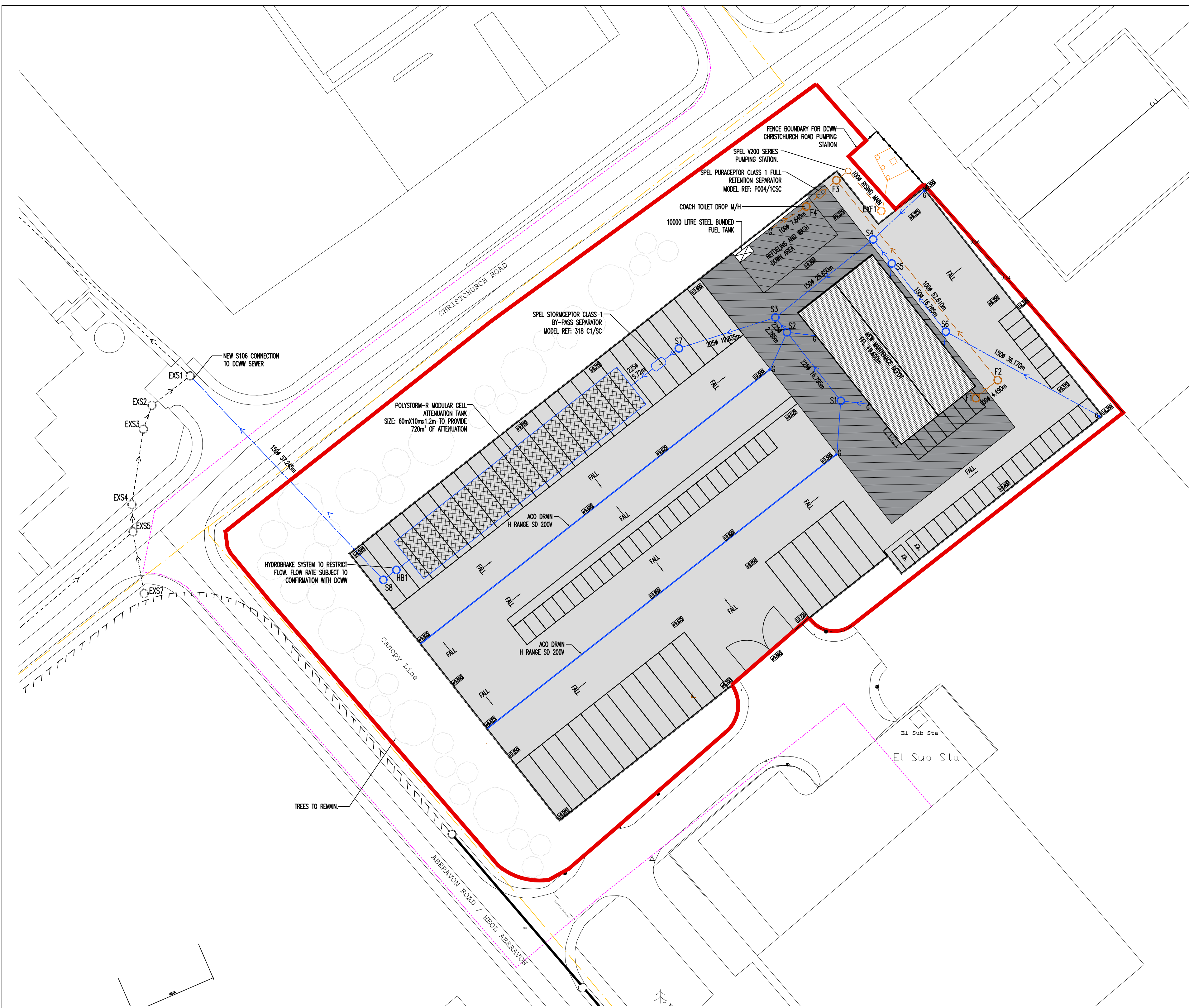




PROPOSED DRAINAGE LAYOUT
SCALE 1:500

FOUL MANHOLE SCHEDULE

M.H. REF.	COVER LEVEL	INVERT (N)	DEPTH (mm)	M.H. TYPE	Ø (mm)	COVER TYPE	NOTES
EXF/1	+9.300	+8.700	600	TBC	TBC	TBC	
F1	+9.450	+8.800	650	PLASTIC TYPE 3	450 Ø	D400	
F2	+9.450	+8.745	705	PLASTIC TYPE 3	450 Ø	D400	
F3	+9.375	+8.145	1230	PCC TYPE 3	900 Ø	D400	BACKDROP MANHOLE
F4	+9.375	+8.850	525	PLASTIC TYPE 3	450 Ø	D400	

STORM MANHOLE SCHEDULE

M.H. REF.	COVER LEVEL	INVERT (N)	DEPTH (mm)	M.H. TYPE	Ø (mm)	COVER TYPE	NOTES
EXS/1	TBC	TBC	TBC	TBC	TBC	TBC	
S1	+9.425	+8.230	1195	PCC TYPE 3	900 Ø	D400	
S2	+9.425	+8.173	1252	PCC TYPE 3	900 Ø	D400	
S3	+9.425	+8.158	1334	PCC TYPE 3	900 Ø	D400	
S4	+9.450	+8.091	1359	PLASTIC TYPE 3	450 Ø	D400	
S5	+9.450	+8.540	910	PLASTIC TYPE 3	450 Ø	D400	
S6	+9.450	+8.625	825	PLASTIC TYPE 3	450 Ø	D400	
S7	+9.650	+8.190	1460	PCC TYPE 3	900 Ø	D400	
S8	+9.775	+7.870	1905	PCC TYPE 2	1200 Ø	D400	
HB/1	+9.775	+7.890	1885	PCC TYPE 2	1200 Ø	D400	

SERVICES KEY

- WESTERN POWER (ELECTRICITY).
- BT POWER
- EXISTING SURFACE WATER
- EXISTING FOUL WATER
- PROPOSED SURFACE WATER
- PROPOSED FOUL WATER
- 100Ø RISING MAIN.
- PROPOSED LEVELS.
- GULLY.
- ACO-DRAIN

NOTES

1.0 GENERAL

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIVERSION AND OR PROTECTION OF ALL SERVICES WITHIN THE ZONE OF WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL SUCH SERVICES WITH THE VARIOUS UNDERTAKERS AND CONFIRMING THEIR LOCATION PRIOR TO UNDERTAKING ANY WORK.
- THE CONTRACTOR IS TO WORK IN ACCORDANCE WITH ALL APPROPRIATE GUIDANCE AND ACCEPTED GOOD PRACTICE INCLUDING HSE PUBLICATION HSG47.
- ALL DRAINAGE CONSTRUCTION TO BE DONE IN ACCORDANCE WITH SEWERS FOR ADOPTION 8th EDITION.
- MASS CONCRETE SPECIFICATION IN ACCORDANCE WITH BS8500-2
COMPRESSIVE STRENGTH = C20/25
MAX. WATER/CEMENT RATIO = 0.55
MAX. CEMENT CONTENT = 300kg/m³
ACEC CLASS = AC-1
DC CLASS = DC-1
MAX. AGGREGATE SIZE = 20mm.
CONSISTENCE CLASS = S3

2.0 PIPE BEDDING REQUIREMENTS AS FOLLOWS

- PIPES IN CARRIAGEWAY.
DEPTH TO CROWN < 1200mm. BELOW FINISHED SURFACE – CLASS Z BEDDING.
DEPTH TO CROWN < 900mm. BELOW FORMATION – CLASS Z BEDDING.
DEPTH TO CROWN > 900mm. BELOW FORMATION – CLASS S BEDDING.
AND > 1200mm. BELOW FINISHED SURFACE – CLASS S BEDDING.
 - PIPES IN SOFT LANDSCAPED AREAS.
DEPTH TO CROWN < 600mm. BELOW GROUND LEVEL – CLASS Z BEDDING.
DEPTH TO CROWN > 600mm. BELOW GROUND LEVEL – CLASS S BEDDING.
AND < 3100mm. BELOW GROUND LEVEL – CLASS S BEDDING.
- THE BEDDING BACK TO A LEVEL OF 300mm ABOVE THE CROWN OF THE PIPE IS TO BE LIGHTLY COMPACTED BY HAND.
 - SELECTED MAIN BACKFILL, TYPE B SHALL CONSIST OF UNIFORM READILY COMPATIBLE MATERIAL, FREE FROM VEGETATION MATTER, BUILDING RUBBISH AND FROZEN MATERIAL, OR MATERIALS SUSCEPTIBLE TO SPONTANEOUS COMBUSTION, AND EXCLUDING CLAY OF LIQUID LIMIT GREATER THAN 80 AND/OR PLASTIC LIMIT GREATER THAN 55 AND MATERIALS OF EXCESSIVELY HIGH MOISTURE CONTENT, CLAY LUMPS AND STONES RETAINED ON 75mm, 37.5mm SIEVES RESPECTIVELY SHALL BE EXCLUDED FROM THE FILL MATERIAL.

3.0 ROAD GULLIES

- ALL GULLY GRATING AND FRAMES TO BE 'HINGED' HEAVY DUTY DUCTILE IRON MINIMUM GRADE D400 IN ACCORDANCE WITH BS EN124:1994 & SECTION 508 OF THE SPECIFICATION OF HIGHWAY WORKS.
- ALL IRONWORK SHALL CARRY A BSI KITE MARK
- FRAMES SHALL BE BEDDED ON GAUGED CLASS 1 (3.1) SAND/CEMENT MORTAR TO CL2402 OF SHW MORTAR DESTINATION (i) AND EITHER 2 OR 3 COURSES OF ENGINEERING BRICKWORK CLASS 'B' TO BS EN771-1:2011
- GULLY SPACING IS TO BE DETERMINED FROM THE REQUIREMENTS OF HA 102/17, DESIGN MANUAL FOR ROADS AND BRIDGES, HOWEVER, MAXIMUM AREA TO BE DRAINED BY ONE GULLY: 180m²
- GULLY POTS USED FOR CARRIAGEWAY GULLIES SHALL BE PRECAST CONCRETE USING SULPHATE RESISTING CEMENT (SRC) IN ACCORDANCE WITH BS 5911, PART 230, 2004
- ALL GULLIES TO BE TRAPPED. ANY VARIATIONS TO THIS i.e 'NON TRAPPED', 'GULLY CHUTE' OR 'GRIP' MUST BE QUALIFIED AND THE ENGINEER SHALL REVIEW EACH LOCATION ON INDIVIDUAL BASIS.
- SELECTION OF GULLY GRATING TYPE SHALL BE TO BE SUIT THE APPLICATION AREA i.e CARRIAGEWAY, FOOTWAY/CYCLEWAY AND TO THE SATISFACTION OF THE HIGHWAY INSPECTOR.

Job No:	Drawing No:	No. REVISION	by	date	No. REVISION	by	date
20.17	C02						
Scales: 1:500 @ A1							

NOTES
1 Do not scale from this drawing
2 All dimensions to be checked on site
3 'As built' drawings are prepared, in part, based upon information furnished by others. While this information is believed to be reliable, James & Nicholas LLP assume no responsibility for the accuracy of 'As built' drawings or for any errors or omissions that may have been incorporated into them as a result of incorrect information provided to us by others. Those relying on an 'As built' drawing are advised to obtain independent verification of its accuracy.

STAGE
PRELIMINARY

REFER ALSO TO THE FOLLOWING:
Drawings:

Bending Schedules:

CLIENT

D.J THOMAS COACHES LTD

james&nicholas

Grove House, Grove Place, Port Talbot SA13 1XA • Tel 01639 885431 • Fax 01639 891687
admin@jamesandnicholas.com • www.jamesandnicholas.com
James & Nicholas Limited Liability Partnership. Registered in the UK No. OC303071

Job title
NEW MAINTENANCE DEPOT, PLOT 3,
BAGLAN INDUSTRIAL ESTATE

Drawing title
PROPOSED DRAINAGE PLAN

by	date
drawn K.J.T	14.09.20
checked K.J.T	14.09.20
approved K.J.T	14.09.20

Job No:	Drawing No:	Rev:
20.17	C02	
Scales: 1:500 @ A1		