



JP Structural Design

DRAINAGE STRATEGY REPORT

MEGELLAN AEROSPACE

LLAY INDUSTRIAL ESTATE, WREXHAM

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JOB NO: 85001

REF: DR01

REV: P01

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1.0 INTRODUCTION

1.1 COMMISSION

In August 2020, TACP, on behalf of Megellan Aerospace appointed JP Structural Design (JPS) to undertake this Drainage Strategy Report in support of a Full Detailed Planning Application for the construction of a new industrial facility adjacent to Megellan existing plant at the Llay Industrial Estate, Wrexham.

1.2 EXISTING SITE

The site covers an area adjacent to Miners Road which is currently an undeveloped plot within the industrial estate. The site covers an area of approximately 1.48 Ha as shown on the SABs information drawing in Appendix 4.1

The site is generally rectangular and shares a boundary to the east side with the existing Megellan plant.

1.3 EXISTING DRAINAGE

On-site investigations suggest that the site is not served by any drainage although the existing Megellan plant has separate private foul and surface water systems as well as a Foul Sewer crossing through the site North to South.

The existing drainage arrangements at the unit comprise of separate foul and surface water systems with the surface water discharging in two directions. The top half of the site utilises a restricted outflow connection to the Surface Water Public Sewer in Miners Road, although reviewing the Public Sewer record drawing, this system discharges to the Llay Brook, which ultimately forms a tributary to the River Alyn. The restriction is via vortex flow control device at 15.7 l/s.

The bottom half of the site discharges to a local unadopted system which also discharges to the Llay brook located approximately 200m South of the Site and is locally throttled by a catchpit and 150 dia outfall pipe.

The foul drainage generated by the site is served by various legs and the public sewer system before all connecting to the Foul public sewer network in the B5102 Llay Road.

Appendix 4.2 contains a copy of the public sewer record drawing and 4.3 a sketch of the existing site drainage systems.

1.4 EXISTING FLOOD RISK

As stated above, the site covers an area of approximately 1.42 Ha, of which approximately all is currently permeable surfacing. In accordance with the NRW Developers Advice Maps (shown in on the Site Information drawing in Appendix 4.1, the site is located within Flood Zone 1 – Land having less than



1 in 1000 annual probability of river or sea flooding. The NRW Flood Risk Map is also shown and has confirmed the site to be free from any flood concerns.

Due to the topography of the area, the risk of flooding from adjoining properties or roads is considered minimal, and therefore, the management of the surface water run-off generated by the post development site will be the principle flood risk associated with this scheme.

1.5 PROPOSED DEVELOPMENT

The scheme consists of the construction of a new industrial unit with associated new access provision, car parkin, as well as hardstanding and service yard type areas.

Based upon the latest development plans the final impermeable area generated by the proposals will be approximately 1.8 Ha as shown on the impermeable area drawing on SK01. The drainage proposals drawings are contained in appendices 4.4 and surface water drainage calculations are contained in Appendix 4.5.

2.0 DRAINAGE PROPOSALS

2.1 FOUL DRAINAGE

The foul drainage peak discharge will increase slightly following completion of the scheme with the creation of additional office space and welfare facilities, however this is still anticipated of being less than 1.0 l/s additional peak flow.

(Based upon 200 l/person/day residential usage rate, as suggested in the British Water Code of Practice's Table of Loadings for Sewerage Disposal Facilities).

For the foul design proposals, we would therefore advocate a new separate foul drainage system is designed to serve the proposed development and connected to the existing foul network serving the estate.

2.2 SURFACE WATER DRAINAGE

In accordance with the Welsh Assembly Government's implementation of Schedule 3, the Surface Water Drainage strategy adheres to the principles of;

- Reducing Flood Risk
- Improving Water Quality
- Protecting and Improving the Environment
- Ensuring the Stability & Durability of Drainage Systems

The site will be subject to a SAB application and the detailed Pre-Application Advice form is therefore contained in Appendix 4.6.

3.0 RECOMMENDATIONS & CONCLUSIONS

3.1 RECOMMENDATION

At detailed design stage we would recommend that percolation testing in accordance with the BRE365 digest is undertaken to verify the on-site infiltration rate or likely failure of this method.

In the likely event the on-site percolation testing proves that infiltrations systems are not suitable for the disposal of surface water run-off, then a restricted discharge of 15.7 l/s to the public sewer / watercourse should be maintained and adequate on-site attenuation provided as demonstrated within the calculations.

3.2 CONCLUSIONS

The proposed site is free from any existing flood risk and there are suitable points of connection for the disposal of the foul effluent and surface water run-off generated by the proposed development.

We would expect the proposed development to be free from general objections in respect to draining the site but anticipate that the use of infiltration techniques will not be possible. There will also be suitable conditions imposed to ensure that the drainage proposals are designed and constructed in accordance with relevant statutory requirements.

4.0 APPENDICES

4.1 - Drawing SK01 – SABs Site Information

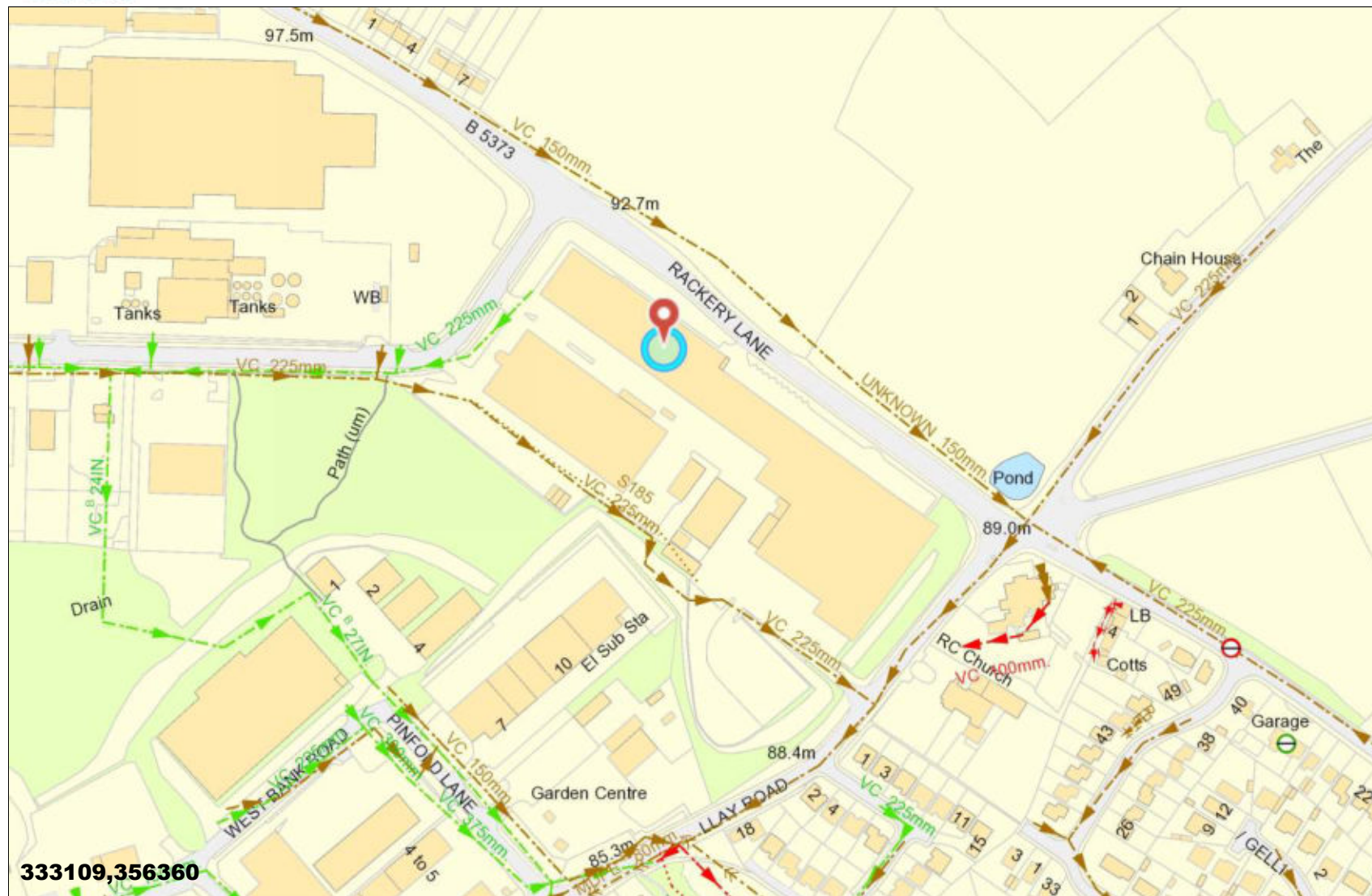
4.2 - Public Sewer Records

4.3 - Existing Site Drainage Sketch

4.4 - Preliminary Drainage Drawings

4.5 - Surface Water Calculations

4.6 - SABs Pre-Application Advice Form

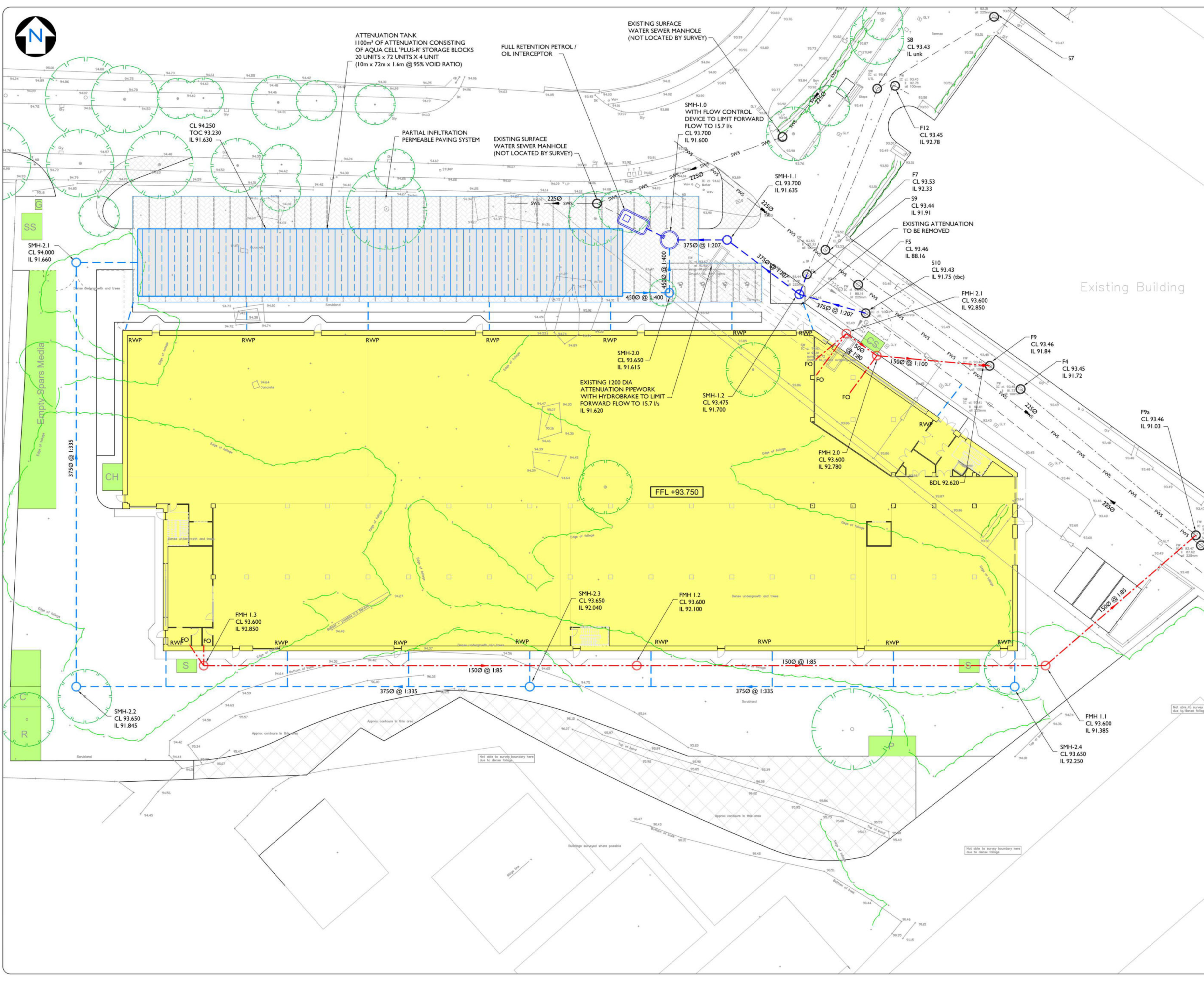


Dwr Cymru Cyfyngedig ('the Company') gives this information as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. The information which is supplied hereby by the company, is done so in accordance with statutory requirements of sections 198 and 199 of the water industry Act 1991 based upon the best information available and in particular, but without prejudice to the generality of the foregoing, it should be noted that the records that are available to the Company may not disclose the existence of a drain sewer or disposal main laid before 1 September 1989, or if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of this information is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the company's right to be compensated for any damage to its apparatus.

**EXACT LOCATION OF
ALL APPARATUS TO
BE DETERMINED ON
SITE**

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Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be Asbestos Cement (AC) or Pitch Fibre (PF). It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation



NOTE

- THE WORKS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, NATIONAL BUILDING SPECIFICATION (NBS) AND SEWERS FOR ADOPTION, 7TH EDITION.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS, ARCHITECTS DRAWINGS, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
- THE LOCATION, LINE & LEVEL OF ALL KNOWN EXISTING BURIED SERVICE MAINS AND DRAINAGE PIPEWORK INDICATED ON THE DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE PURPOSES ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXACT LINE & LEVEL BY WAY OF HAND EXCAVATED TRIAL PITS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS ON SITE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL ABOVE AND BELOW GROUND SERVICE MAINS / DRAINAGE INSTALLATIONS.
- THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.
- THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.
- THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE MITIGATION OF ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.
- THE CONTRACTOR SHALL MAKE ALLOWANCE FOR RAISING / LOWERING ALL EXISTING ACCESS COVERS & FRAMES TO SUIT NEW FINISHED LEVELS.
- ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED UPON COMPLETION OF THE WORKS. ALL SURFACE MARKINGS DAMAGED BY THE WORKS SHALL BE FULLY REINSTATED.
- ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED OF OFF SITE.
- ALL LEVELS ARE TO ORDNANCE DATUM

KEY

- FWS EXISTING FOUL WATER SEWER
- SWS EXISTING SURFACE WATER SEWER
- SWD EXISTING SURFACE WATER DRAIN
- FWD EXISTING FOUL DRAIN
- PFD PROPOSED FOUL DRAIN
- PSW PROPOSED SW DIVERSION
- PSD PROPOSED SW DRAINAGE
- PAC PROPOSED ATTENUATION CRATES
- PCPS PERMEABLE CAR PARK SYSTEM

REV	DESCRIPTION	BY	CHK	APR	DATE

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PURPOSE OF ISSUE	STATUS
INFORMATION	P

PROJECT
NEW FACILITY LLAY INDUSTRIAL ESTATE WREXHAM

TITLE
PROPOSED DRAINAGE FACILITY OUTLINE LAYOUT

CLIENT
MAGELLAN AEROSPACE

DRAWN BY	CHECKED BY	APPROVED BY
MM	RAH	JP

DATE	SCALE (@ A1)	PROJECT NUMBER
SEPT 20	1:200	85001

DRAWING NUMBER	REV
SK02	S1



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SURFACE WATER CALCULATIONS

MEGELLAN AEROSPACE
LLAY INDUSTRIAL ESTATE, WREXHAM

JOB NO: 85001

REF: CA01

REV: P01

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Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	17.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.300	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	4.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
Depth/Area 1	1.817	4.00	94.500		-18.297	68.470	2.000
1			93.750	150	67.239	67.638	2.688

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	Depth/Area 1	1	85.540	0.600	92.500	91.062	1.438	59.5	375	4.61	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	2.353	259.8	246.2	1.625	2.313	1.817	0.0	293	2.660

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	17.000	Drain Down Time (mins)	240
Ratio-R	0.300	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
100	30	10	0

Node Depth/Area 1 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Downstream Link	1.000	Sump Available	✓
Replaces Downstream Link	✓	Product Number	CTL-SHE-0170-1570-1600-1570
Invert Level (m)	92.500	Min Outlet Diameter (m)	0.225
Design Depth (m)	1.600	Min Node Diameter (mm)	1500
Design Flow (l/s)	15.7		

Node Depth/Area 1 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	92.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	720.0	0.0	1.600	720.0	0.0	1.601	0.0	0.0

Results for 100 year +30% CC +10% A Critical Storm Duration. Lowest mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	Depth/Area 1	570	93.991	1.491	106.0	1102.9710	0.0000	SURCHARGED
15 minute summer	1	1	91.062	0.000	15.6	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Discharge Vol (m³)
600 minute winter	Depth/Area 1	Hydro-Brake®	1	15.6	635.5

1. Applicant Details**Applicant Name and Address**

Title and Name		
Company		Megellan Aerospace
Suffix (unit/name/number)		
Address line 1		Rackery Lane
Address line 2		Llay Industrial Estate
Address line 3		
Town		Llay
County		Wrexham
Postcode		LL12 0NT
Phone number	Mobile	
	Works	
	Home	
e-mail address		

Agent Name and Address

Title and Name		Russell Hardy
Company		JP Structural Design
Suffix (unit/name/number)		Regus House
Address line 1		Chester Business Park
Address line 2		
Address line 3		
Town		Chester
County		Cheshire
Postcode		CH4 9QR
Phone number	Mobile	07711107672
	Works	
	Home	
e-mail address		russell@jpstructural.co.uk

Preferred contact	Applicant ☐	Agent ☒
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2. Site Details

A general description of site location supported by a plan specifying the construction area and the extent of the drainage system should be submitted. Plans shall be at a scale of 1:2500. All plans should show the direction of North.

Name of proposed development	Proposed New Facility Megellan Wrexham
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Grid Reference (E/N)	332920	356392
Suffix (unit/name/number)	Megellan Aerospace	
Address line 1	Rackery Lane	
Address line 2	Llay Industrial Estate	
Address line 3		
Town	Llay	
County	Wrexham	
Postcode	LL12 0NT	

Description of proposed development	Construction of new industrial facility as an extension to Megellan's existing plant on the Llay Industrial Estate. The new plant is to include office space as well as associated new access provision, car parking as well as hardstanding and service yard type areas.
Total application site area (Ha)	1.42
Is the site currently developed i.e. Brownfield, or is it currently undeveloped i.e. Greenfield?	Greenfield
Existing land use	None – it is an undeveloped plot within Llay Ind Est.
Proposed land use	Industrial

3. Application

Has any prior advice been sought from the SuDS Approving Body (SAB) about this application?	Yes ☐	No ☐
If Yes, please complete the following information about the advice you were given. This will help the SAB to deal with this application more efficiently.		

Does this application relate to any other SAB application already made?	Yes ☐	No ☐
If "Yes", please provide SAB Reference number		

Is this application part of a phased approach to development of the site, or one of multiple applications for the same site?	Yes ☐	No ☐
If "Yes", please provide brief details		

4. Environmental Impact Assessment (EiA) Statement

Does this application relate to a development that is the subject of an EiA application under the Town & Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017(1)?	Yes ☐	No ☐
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Officer Name					
Reference		Date	DD	MM	YYYY
Details of pre-application advice received					



5. Compliance with Statutory National Standards for Sustainable Drainage Systems (SuDS)

All sustainable drainage systems **MUST** comply with the [Statutory National Standards for Sustainable Drainage Systems \(SuDS\) for Wales](#). You are advised to refer to the detailed text in the Standards that relate to the information required below. The Standards are re-produced, in the [Guidance](#) to assist in completing this application form.

Standard Principles

The Principles listed below will underpin the design of surface water management schemes to meet the Statutory National Standards. Where possible, please provide a brief summary in each of the boxes below relating to each of the bulleted Standard Principles and itemised Standards 1 to 6, showing how your proposed surface water drainage scheme complies with this statutory requirement.

Compliance with Standard Principles

My proposed surface water drainage scheme will comply in the following way/s:

In accordance with the Welsh Assembly Government's implementation of Schedule 3, the Surface Water Drainage strategy adheres to the principles of;

- Reducing Flood Risk
- Improving Water Quality
- Protecting and Improving the Environment
- Ensuring the Stability & Durability of Drainage Systems

The proposed scheme represents an extension to the existing Megellan Aerospace industrial facility.

The existing drainage arrangements at the unit comprise of separate foul and surface water systems with the surface water discharging in 2 directions. The top half of the site utilises a restricted outflow connection to the Surface Water Public Sewer in Miners Road, although reviewing the Public Sewer record drawing, this system discharges to the Llay Brook, which ultimately forms a tributary to the River Alyn. The restriction is via vortex flow control device at 15.7 l/s.

The bottom half of the site discharges to a local unadopted system which also discharges to the Llay brook located approximately 200m South of the Site.

The Foul flow generated from the site discharges to the public foul sewer system within the adjacent B5102 Llay Road.

The ground is expected to be clayey in nature with pockets of gravel.

In keeping with the ideology of a SUDs Management Train we have therefore incorporated the following;

Prevention

It is proposed that the new car park will be a permeable paving design to manage the water generated at source. Although noting that the soil is likely to be of poor infiltration characteristics, it is considered that this is likely to be a semi-infiltration system.

There will be limited scope for the service yard areas as due to the industrial nature, they will be required to be concrete slabs.

Local Source Controls

As outlined above, it is intended to utilise permeable paving for the front area of the site. The RWP's from this elevation will also connect to the granular reservoir which will have a significant impact on reducing the time of concentration.

Site Source Controls

It is proposed to provide additional attenuation for the new development area with the vortex flow control device maintaining the connection to the public sewer at 15.7 l/s.

Regional Controls

The remainder of the site is controlled by means of a catchpit and 150 dia pipe which throttles the total site discharge to the brook

Where possible, relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance should be listed below and all relevant material submitted.

1. Drawings SK01 & 02
2. Existing Site sketches and Design Drawing Extract

Standards 1 to 6

Compliance with Standard S1 - Surface water runoff destination

My proposed surface water drainage scheme will comply in the following way/s:

In determining a suitable methodology for disposal of surface water flows from the proposed development, the technical options outlined under Standard S1 of the Statutory National Standards for Sustainable Drainage System (SuDS) for Wales have been explored. This states that surface water disposal should be made through the hierarchical approach as outlined and discussed below, in order of preference:

Priority Level 1 - Surface Water runoff collected for use:

Collecting water for re-use is not considered to be a viable solution for the site, as is common with industrial developments, there is a significant roof area and external footprint, but limited usage for water comprising basic welfare facilities for the staff.

There is also limited irrigation requirements or any need for domestic type cleaning, laundry etc.

Priority Level 2 - Surface Water runoff is infiltrated to ground:

Infiltration testing has been carried out on site, and the results are awaited, although from the historical borehole information available the sub-strata is expected to be clayey in nature. It is therefore hoped that the proposed permeable paving car park can be a semi-infiltration system although this is subject to confirmation.

Priority Level 3 - Surface water runoff is discharged to a surface water body:

Taking into consideration the infiltration of surface water is not a complete solution, the next consideration in the hierarchical approach is to discharge to a surface water body. As stated earlier there is a known Public Surface Water system within the Industrial Estate which discharges to the Llay Brook. It is therefore intended to restrict the new development and the portion of site affected by the proposals to the existing agreed runoff of 15.7 l/s. The site will therefore have no impact on the existing arrangements or increase runoff from the site.

Storage tanks will then be provided to accommodate a 1:100 year return period and allow for 30% climate change and 10% urban creep. A total of 1100m³ storage is required to satisfy the design criteria. The forward flow from the storage tank will be controlled via a vortex flow control device.

Priority Level 4 - Surface water runoff is discharged to a surface water sewer, highway drain, or another drainage system:

Although surface water is discharging from site to a public sewer system, this is a relatively short network which discharges to a watercourse.

Priority Level 5 - Surface water runoff is discharged to a combined system:

No surface water from the site is proposed to discharge to a combined system.

Where possible, relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance should be listed below and all relevant material submitted.

1. SK01 & 02
2. Surface Water Calculations CA01
3. Pubic Sewer Records

Compliance with Standard S2 - Surface water runoff hydraulic control

My proposed surface water drainage scheme will comply in the following way/s:

In accordance with statutory guidelines, the development of this site should not increase flood risk elsewhere and as such, all runoff from attenuated areas on site should be contained within the site boundary for up to and including a 1 in 100-year design period storm, plus 30% climate change and 10% urban-creep allowances.

As outlined above, a proportion of the existing site will be incorporated into the new design and we have taken the total catchment area as 18,165m², and the existing connection of 15.7 l/s will be maintained, so as not increasing run-off from the site.

The calculated attenuation requirements are therefore demonstrated to be 1100m³ which will be provided by a mixture of the granular reservoir to the permeable paving and storage tanks.

Where possible, relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance should be listed below and all relevant material submitted.

1. Drainage Calculations CA01
2. Drawings SK01, 02

Compliance with Standard S3 – Water Quality

My proposed surface water drainage scheme will comply in the following way/s:

The installation of permeable paving will act as filters for the car park area, removing many pollutants through collection and biodegradation before returning cleansed water to the natural environment. Runoff from the roof area is considered to be a low risk in terms of pollution controls.

The service yard area will be served by a network of trapped sump units within gullies and linear drainage channels. A petrol / oil interceptor will also be provided to treat the forward flow prior to connection to the existing surface water system.

Where possible, relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance should be listed below and all relevant material submitted.

1. Drawings SK02

Compliance with Standard S4 – Amenity

My proposed surface water drainage scheme will comply in the following way/s:

Due to the scale and industrial nature of the site, it is not possible to add amenity benefits enjoyable by the general public, however the treated and cleansed water from the proposed development, will continue to serve the natural environment by flowing to the Llay brook and ultimately the River Alyn as part of the local ecosystem.

Where possible, relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance should be listed below and all relevant material submitted.

- 1.
- 2.

Compliance with Standard S5 – Biodiversity

My proposed surface water drainage scheme will comply in the following way/s:

Due to the scale and industrial nature of the site, it is not possible to add biodiversity benefits enjoyable by the general public, however the treated and cleansed water from the proposed development, will continue to serve the natural environment by flowing to the Llay brook and ultimately the River Alyn as part of the local ecosystem.

Where possible, relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance should be listed below and all relevant material submitted.

- 1.
- 2.
- 3.

Compliance with Standard S6– Design of drainage for Construction and Maintenance and Structural Integrity

My proposed surface water drainage scheme will comply in the following way/s:

To confirm, the proposed system will not be required for adoption as it does not serve more than one property. However, it will still be designed to the standards set out in Ciria C753 & Sewers for Adoption 7th Edition. The proposed drainage scheme consists of predominantly standard products and methods of construction that should not concern a suitably experienced and qualified contractor.

An O&M manual will also be provided to the client in due course, including the final 'As Built' constructions drawings and a maintenance schedule for the drainage system.

Where possible, relevant items of supporting information (e.g. evidence, technical documents, plans and drawings etc.), as shown in [Table A](#) and [Table B](#) of this Guidance should be listed below and all relevant material submitted.

1. Drawing SK02

6. Initial Assessment of Flood Risk

	☐	☐
Is the site within an area at risk of flooding? Refer to Natural Resources Wales Development Advice maps. (Natural Resources Wales / Development and flood risk)	Yes ☐	No ☐
If the proposed development is within the area at risk of flooding, you will need to consider whether it is appropriate to submit a flood consequences assessment. (Refer to Technical Advice Note 15 (TAN15)).		

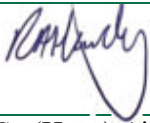
Is the site located within an area susceptible to surface water flooding? Refer to NRW Surface Water Flood Maps .	Yes ☐	No ☐
Is the site located within an area susceptible to groundwater flooding?	Yes ☐	No ☐
Is there a watercourse (as defined under Section 72 Land Drainage Act 1991) located within 20m of the proposed development?	Yes ☐	No ☐

7. SuDS Scheme Application - Checklist

Please complete the following checklist and make sure you have read the Guidance on Making SuDS Applications for SAB Approval , the Guidance on completing the Pre-Application Form , and provided all the necessary information in support of your application:	
Pre-Application fee (where required)	☐ PLEASE ADVISE ON FEE REQUIRED
Completed, signed and dated Pre-Application Form.	Yes
Considered further questions and technical information in the Guidance, required to help assess your Pre-Application and assist your Full Application proposals at a later date.	Yes

9. Declaration

I/ we hereby apply for SuDS Pre-Application Advice as described in this form and the accompanying plans/drawings and additional information. I confirm that, to the best of my knowledge, any facts stated are true and accurate and any opinions given are the genuine opinions of the persons giving them.
This form is completed using accurate information and can be used as a summary of concept of the surface water drainage strategy on this site.

Form completed by	Russell Hardy
Signature	
Qualification of person responsible for signing off this application	BSc (Hons) Civil Engineering
Company	JP Structural Design
On behalf of (Client's details)	Megellan Aerospace
Date	25/09/20

Disclaimer

Information provided on this form and in supporting documents may be published on the SABs SuDS register and website and be made publicly available.

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