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FLOOD RISK ASSESSMENT

& DRAINAGE STRATEGY

305 Oldham Road

305 Oldham Road, Manchester M40 7PS

CLIENT	DOCUMENT REF	REVISION	DATE	FLOOD ZONE	GRID REF
Myleson Group Ltd	**FA-FRA-0194**	**P01**	**23 September 2026**	**Zone 1**	**385645 399664**

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Document control

PROJECT	305 Oldham Road
REPORT	Flood Risk Assessment & Drainage Strategy
SITE	305 Oldham Road, Manchester M40 7PS
CLIENT	Myleson Group Ltd
DOCUMENT REF	FA-FRA-0194
REVISION	P01
DATE	23 September 2026
PLANNING STAGE	Full planning application
PREPARED BY	Fortress Associates
AUTHOR	M Nagani - CEng MSc

This report has been prepared for the sole use of the named client for the purposes of the planning application described. Flood risk information reflects the datasets listed in the Data Sources section as at the date of access; conditions may change. No liability is accepted to third parties.

Executive summary

This Flood Risk Assessment and Drainage Strategy supports the full planning application for the change of use of the yard at 305 Oldham Road, Manchester M40 7PS, to a manual car wash. The 860 m² site is a paved commercial yard with two single-storey buildings, which take the staff WC, office and reception; the yard is resurfaced in concrete.

A car wash is less vulnerable development under Annex F of the National Planning Policy Framework (August 2026) and is appropriate in Flood Zone 1, where the whole site lies. Policy F4(2)(c) calls for this assessment because the Flood Map for Planning shows surface water risk on part of the site. Neither the sequential test nor the exception test applies to this change of use.

Surface water is the only source mapped within the site: 99 m² (11.5%), almost all on the strip between the buildings and the railway embankment and along the buildings' rear edge, plus 1.25 m² of the 1 in 1,000 year band at the exit. Depths stay at 300 mm or less in every event up to 1 in 1,000 with the 2070s upper end climate change allowance. The wash bay, the queuing space and the entry are clear of every modelled extent; the floor of the buildings, 58.84 m AOD, is above the modelled water, and their rear wall is made water-resistant to 300 mm. Risk from rivers, groundwater, sewers, reservoirs and the Rochdale Canal is low or very low.

The car wash operates in the daytime with staff present and has no sleeping accommodation; the operator's flood plan stops washing under amber and red Met Office rainfall warnings, and staff and customers wait on the yard plateau while water stands in the streets.

The impermeable area stays at 860 m², so runoff to the public sewer is unchanged and no attenuation is required. Drawing FA/SW-01 keeps the two flows apart: wash water from a bunded 56 m² wash bay passes through a silt trap and a sampling chamber to the sewer under a United Utilities trade effluent consent, and rain on the yard passes through a Class 1 bypass separator of nominal size NSB 3. The operator maintains the system to the schedule on the drawing.

The development is safe for its lifetime, does not increase flood risk elsewhere and improves the quality of the water leaving the site. It accords with policies F7 and F8 of the Framework, and the policy chapter answers Manchester Core Strategy policies EN14 and EN17 and Places for Everyone policy JP-S4.

Key flood risk information

Item	Value
Site address	305 Oldham Road, Manchester M40 7PS
OS grid reference	385645 399664
Local planning authority	Manchester
Lead Local Flood Authority	Manchester
Development	Change of use of the commercial yard to a manual car wash, with a C25 concrete wearing surface across the yard and the staff WC, office and reception in the existing single-storey buildings
Vulnerability classification (Framework Annex F)	Less vulnerable
Flood zone (EA Flood Map for Planning)	Zone 1
Annex F table 3 compatibility	Appropriate development
Surface water risk at site (RoFSW)	Medium on 9.5% of the site, Low on 2%
Historic flooding recorded	No EA record - see assessment
Reservoir flood extent	Outside
Site ground level	57.50 to 58.86 m AOD (EA LIDAR 1 m)
Finished floor level	58.84 m AOD, existing floor unchanged
EA flood warning coverage	Site outside all warning areas; three within 1 km
Surface water discharge destination	Public sewer, existing connection
Discharge rate off site	Existing rate - no flow control required
Attenuation storage provided	Not required - no increase in impermeable area
Lifetime assessed	75 years

Site and development description

The application site is located at 305 Oldham Road, Manchester M40 7PS, National Grid Reference 385645 399664, within the administrative area of Manchester.

The site is an 860 m² commercial yard with a made surface and two single-storey buildings along its north-west side.

The proposal comprises: Change of use of the commercial yard to a manual car wash, with a C25 concrete wearing surface across the yard and the staff WC, office and reception in the existing single-storey buildings. The development is classified as 'Less vulnerable' development under Annex F (table 2) of the National Planning Policy Framework. The assessment covers a development lifetime of 75 years.

Area schedule

Surface	Area	Note
Total site area	860 m²	
Existing impermeable area	860 m²	
Roofs of the existing buildings	140.8 m²	
Yard, resurfaced in concrete	719.2 m²	
Proposed impermeable total	860 m²	



Figure 1 - Site location plan (application site outlined red)

Planning policy context

National Planning Policy Framework (August 2026): policies F1 to F9 set national policy on planning and flood risk. Development should be steered to areas at lowest risk of flooding from any source (policy F5, the sequential test); where development is proposed in a location known to be at risk it must not present a risk to occupiers, users or visitors and must not increase flood risk elsewhere (policy F7), with the exception test applied where Annex F, table 3 requires it (policy F6). Surface water must be managed through sustainable drainage in accordance with policy F8.

Planning Practice Guidance - Flood risk and coastal change: sets out how the flood zones, vulnerability classifications (now Annex F of the Framework), site-specific flood risk assessment requirements, climate change allowances and the sequential approach are applied in decision making. This assessment addresses each of the matters the Environment Agency expects a site-specific flood risk assessment to cover and satisfies the PPG's site-specific assessment requirements in full.

Policy F4(2)(c) of the Framework requires a site-specific flood risk assessment in Flood Zone 1 where the Flood Map for Planning or the SFRA shows land at risk of flooding from any source, and section 7.2.2 of the City of Manchester Level 1 SFRA (2026) applies the same trigger. The Flood Map for Planning shows part of this site at risk of surface water flooding.

Local policy: the Local Plan of Manchester and its Strategic Flood Risk Assessment (SFRA), together with the Lead Local Flood Authority standards, set the local requirements for flood risk and surface water drainage.

Local policy compliance

Manchester Core Strategy (2012) policy EN14 requires the sequential approach across all sources of flooding, runoff minimised through sustainable drainage, and regard to the runoff rates of the Manchester, Salford and Trafford SFRA User Guide; the drainage chapter sets out the rate position. Policy EN17 requires development, construction included, to have no adverse effect on water quality: the separator, the bunded wash bay, the silt trap and the trade effluent consent keep oil, silt and detergent out of the surface water system. Places for Everyone (2024) policy JP-S4 requires development located and designed to minimise flood risk, sustainable drainage with greenfield rates where practicable, and no possibility of hazardous substances discharging to ground: the uses sit on the lowest-risk part of the site, the rear wall of the buildings is made water-resistant, and no drainage discharges to ground. Draft policy EN 9 of the emerging Manchester Local Plan (Regulation 18, 2025) carries limited weight; the drainage chapter addresses its rate standard. The council's validation checklist asks how oil runoff from parked vehicles is intercepted and whether the effect on foul sewerage has been considered: the separator serves the 663.2 m² of yard outside the wash bay, and wash water enters the public sewer only under a United Utilities trade effluent consent.

Assessment of flood risk - all sources

All potential sources of flooding are assessed: rivers and the sea, surface water, groundwater, sewers, reservoirs and artificial sources, together with the effects of climate change over the development lifetime. Data: Environment Agency datasets accessed 23/09/2026.

Rivers and the sea (fluvial & tidal)

Flood zone classification & compatibility

The site lies wholly in Flood Zone 1 on the Environment Agency Flood Map for Planning (Figure 2): land with less than a 0.1% (1 in 1,000) annual probability of flooding from rivers or the sea. Probes of the flood zone layer across the plot return Flood Zone 1 throughout. A car wash is 'Less vulnerable' development under Annex F, table 2 of the National Planning Policy Framework (August 2026), and Annex F, table 3 classes it as appropriate development in Flood Zone 1.

Assessment of fluvial / tidal risk

The nearest statutory main river is Moss Brook, 456 m north-west of the site; the River Irk runs 725 m to the west. The site stands at 57.50 to 58.86 m AOD, outside the Flood Zone 2 and 3 extents and outside the Environment Agency climate change mapping for rivers and the sea. Fluvial and tidal flood risk is low.

Flood defences & areas benefiting

Environment Agency spatial flood defence data identifies no formal flood defence assets within approximately 250 m of the site. The development does not rely on flood risk management infrastructure for its safety.

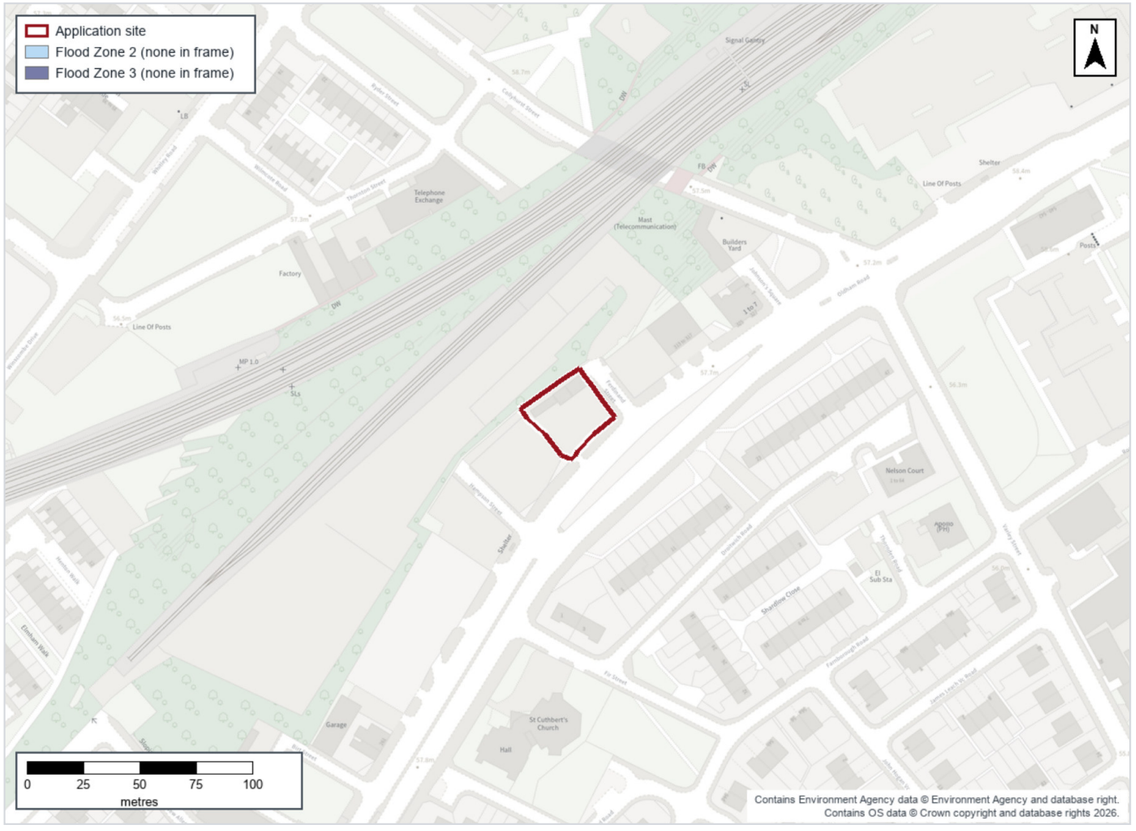


Figure 2 - Flood Map for Planning - Flood Zones 2 and 3 (application site outlined red)

Surface water

Risk of flooding from surface water (RoFSW)

The Environment Agency surface water mapping, measured across the whole plot at 0.5 m resolution, places 99 m² of the site (11.5%) inside the modelled extents: 82 m² in the Medium band (1 in 100 annual chance) and 17 m² in the Low band (1 in 1,000). Of this, 79 m² is the strip, 2.6 to 3.4 m wide, between the back walls of the existing buildings and the north-west boundary, at the foot of the railway embankment, which stands at 62.8 m AOD, about 4 m above the site; 19 m² runs up to 1.8 m in under the rear of the buildings; and 1.25 m² of the Low band lies at the exit, the lowest corner of the yard. The wash bay, the queuing and drying space and the entry lie outside every modelled extent. The mapped depth exceeds 0.2 m over 37 m² and nowhere exceeds 0.3 m, and the hazard rating nowhere exceeds 0.75. The High band (1 in 30) lies outside the site, along Ferdinand Street (Figures 3, P3, P4 and P11).

Overland flow routes & low spots

The yard is a level plateau at 58.84 to 58.86 m AOD (Environment Agency LIDAR, 1 m) that falls to its edges: to 57.92 m AOD at the exit and 57.36 m AOD in Ferdinand Street to the east, to 58.10 m AOD at the entry to the south and to 58.06 m AOD at the west corner. The modelled flow direction around the site is east and north-east, towards Ferdinand Street (Figures 4 and P12). The strip behind the buildings lies at 57.98 to 58.46 m AOD, with two low points, at its west end and behind the east end of the block, where water reaching it from the embankment gathers.

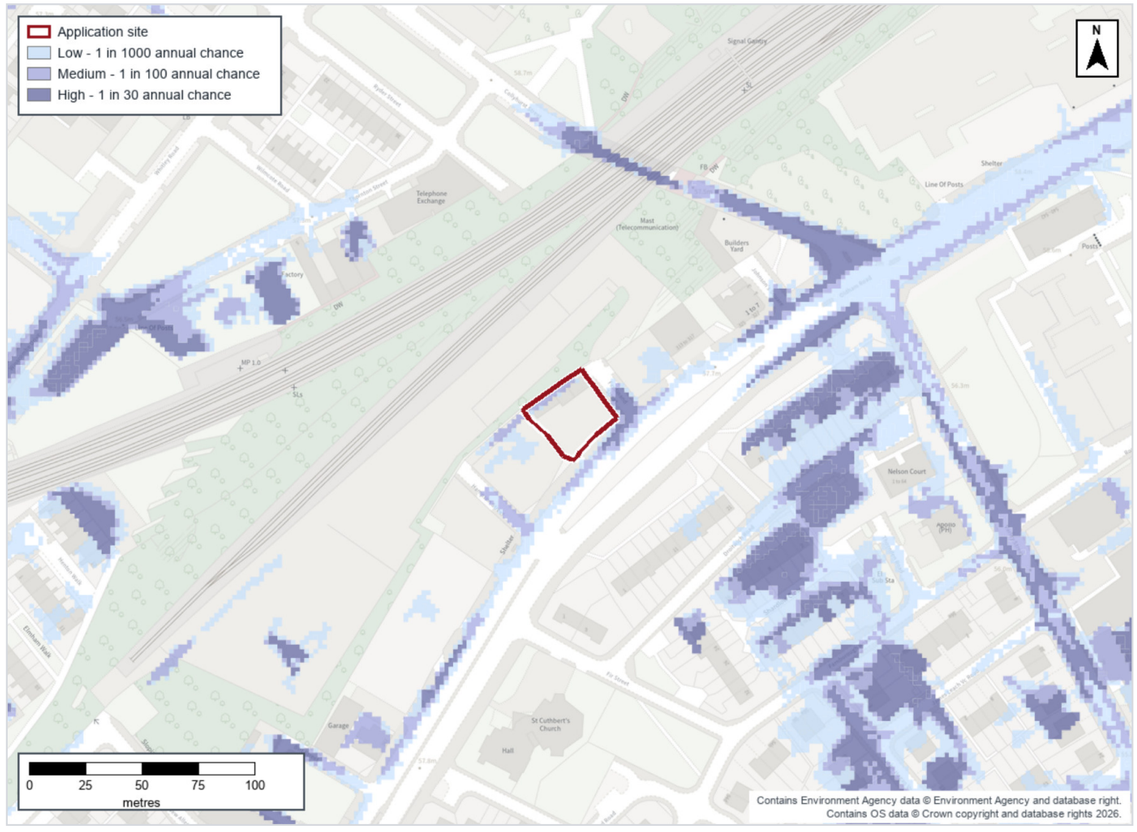


Figure 3 - Risk of Flooding from Surface Water (application site outlined red)

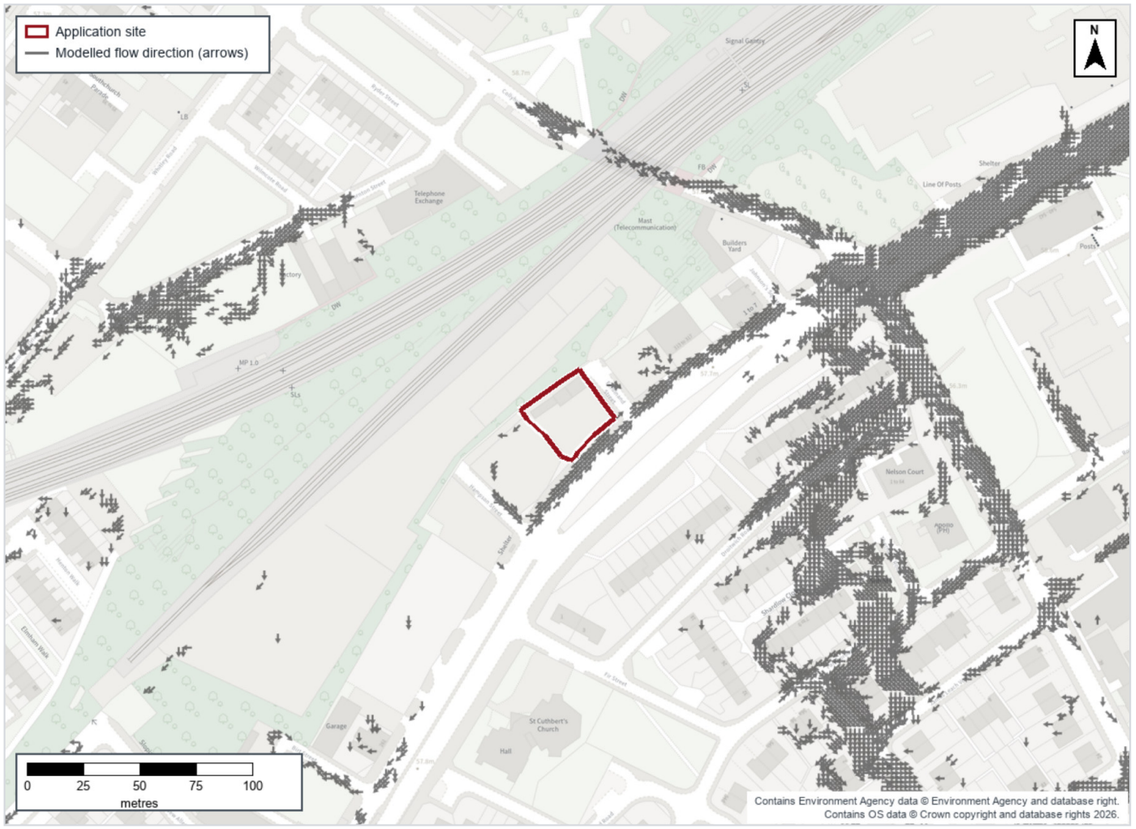


Figure 4 - Modelled surface water flow direction (application site outlined red)

Other sources

Groundwater

The British Geological Survey maps till (Devensian diamicton) over mudstone, siltstone and sandstone of the Pennine Upper Coal Measures Formation beneath the site, both of low permeability. The use has no basement or below-ground space, and the works place nothing below ground other than shallow drainage. Groundwater flood risk is low.

Sewers

United Utilities is the sewerage undertaker. Sewer flooding records are not published at address level; the City of Manchester Level 1 SFRA (2026) names Chorlton, Withington, West Didsbury and Levenshulme as the areas with the most recorded sewer flooding. The site discharges through its existing manhole and connection, and its impermeable area is 860 m² before and after the works, so the change of use adds no surface water to the public sewer. Wash water enters the sewer only under a trade effluent consent from United Utilities (Water Industry Act 1991, section 118). The floor of the buildings, 58.84 m AOD, stands 0.25 m above the yard surface at the site's existing manhole MH (58.59 m AOD), as section 8.2 of the SFRA advises, and the yard falls from MH to the entry, so water surcharging from the sewer would spill onto the yard below the floor and run away from the buildings.

Sewer flood risk is low.

Reservoirs

The site lies outside the Environment Agency's mapped maximum reservoir flood extents. Reservoir flood risk is very low.

Canals & other artificial sources

The Rochdale Canal passes 513 m south-east of the site. The Canal & River Trust records breaches of the canal at Miles Platting in 2010 and 2018 and overtopping there and at Newton Heath between 2012 and 2018 (City of Manchester Level 1 SFRA, 2026). The canal water level is 54.6 m AOD and its bank 55.5 m AOD, 2 to 3 m below the site, so the site is not below canal bank level within 1 km and water from a breach or overtopping would run away from it. No other reservoir, lodge or pond lies within 1 km. Risk from artificial sources is low.

Historic flooding record

The Environment Agency Historic Flood Map and Recorded Flood Outlines hold no record of flooding at the site (Figure 5).

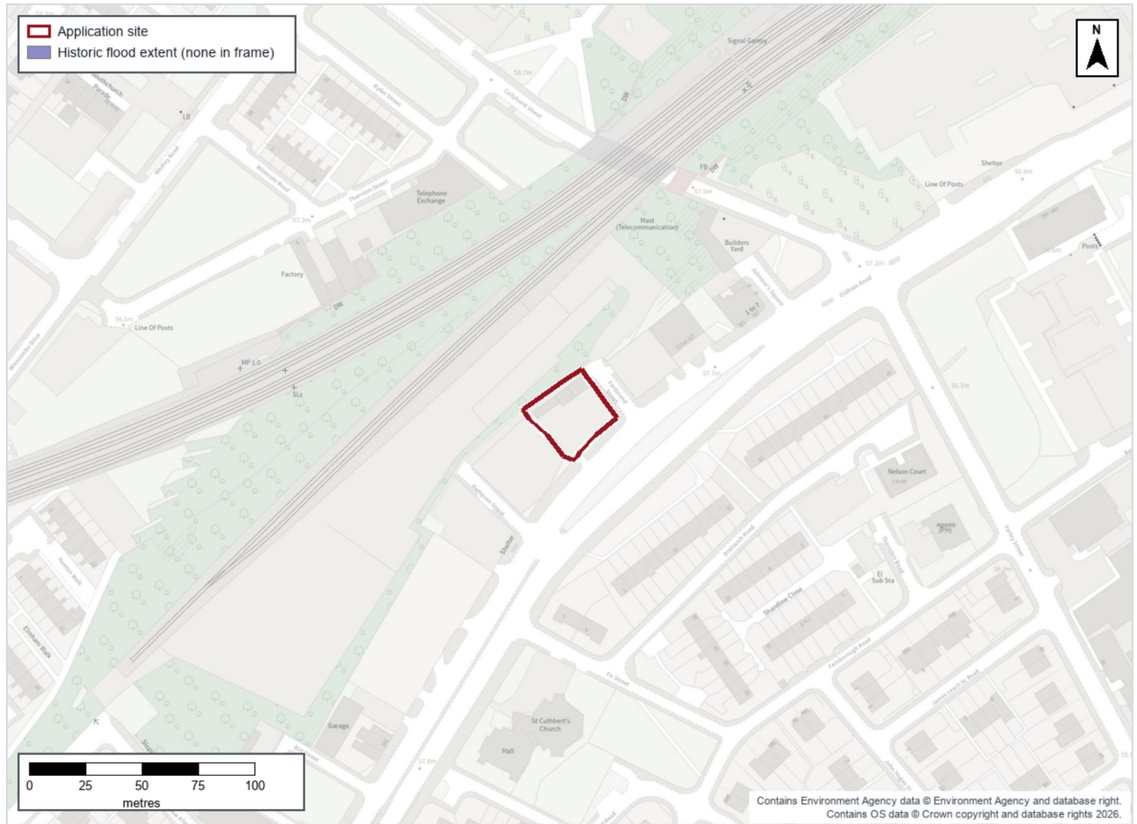


Figure 5 - Historic flood map (application site outlined red)

Climate change

Climate change allowances over the development lifetime

The assessment covers a 75-year lifetime, the starting point the City of Manchester Level 1 SFRA (2026, section 5.2) sets for non-residential development; it runs beyond 2100. The Environment Agency climate change allowances therefore apply the upper end peak rainfall allowances for the 2070s epoch: for the Irwell management catchment, +40% for the 3.3% annual exceedance probability event and +45% for the 1% event. The Environment Agency surface water climate change mapping (May 2026) models these cases: within the site the 1 in 100 year extent lies on the strip behind the buildings and along their rear edge, 150 to 300 mm deep over about 60 m² and under 150 mm over about 30 m², and no event up to 1 in 1,000 exceeds 300 mm anywhere in the site. The site is outside the climate change mapping for rivers and the sea, so peak river flow allowances do not affect it.

Summary of flood risk by source

Source	Risk to development	Basis
Rivers and the sea	Low	Flood Zone 1
Surface water	Managed (Medium band on site; High band nearby)	82 m² Medium and 17 m² Low, on the strip and the rear edge of the buildings; depth 300 mm or less
Groundwater	Low	No below-ground accommodation
Sewers	Low	Existing connection retained; no additional burden
Reservoirs	Very low	Outside mapped extents
Artificial sources	Low	Rochdale Canal 513 m away, 2 to 3 m below the site
Climate change	Allowed for	+45% peak rainfall (1% AEP, 2070s upper end); outside the river climate change mapping

Avoiding, controlling, mitigating and managing flood risk

The hierarchy required by the NPPF: avoid flood risk through location and layout; control it through levels and flow routes; mitigate what remains through resistant and resilient construction; manage residual risk through warnings and planning.

Avoid - sequential approach

Sequential Test position

The proposal is a change of use of an existing yard and its buildings. The City of Manchester Level 1 SFRA (2026, section 3.4.1) confirms that a change of use does not require the sequential test. The site is also in Flood Zone 1 with surface water as its only source of flood risk, and the layout and drainage design in this report keep its users safe from that risk for the lifetime of the development (policy F5(2)(b)(ii) of the National Planning Policy Framework, August 2026). No sequential test is therefore required.

Sequential approach within the site

The uses sit on the lowest-risk part of the site, in line with policy F7(2)(a) of the Framework: the wash bay and the queuing and drying space are on the yard plateau outside every modelled extent, and the staff WC, office and reception occupy the existing buildings, whose floor stands 0.4 to 0.9 m above the ground of the strip behind them. The strip carries no use.

Exception Test (where required)

The exception test is not required for 'Less vulnerable' development in Flood Zone 1 (Framework Annex F, table 3; policy F6).

Control - levels & flow routes

Finished floor levels

The buildings are existing and their floor is unchanged. It is level with the yard in front of them, 58.84 m AOD (Environment Agency LIDAR, 1 m), and drawing P7 shows the street 230 mm below it at the Ferdinand Street end. The strip behind the buildings lies at 57.98 to 58.46 m AOD, and the modelled water there is no more than 300 mm deep in any event assessed, climate change included, so its surface stays below the floor, by 80 mm at the highest point of the strip. The rear wall is made water-resistant to that depth, as set out under Mitigate below. No change to floor levels is needed.

Flood flow routes across the site

The works keep the existing surface water flow routes open: the concrete surface is laid to the existing profile, the 50 mm roll-over bund round the wash bay is the only raised element, and no wall, kerb or building is added across a route (Figure 7).

Floodplain storage / compensation

The site is outside Flood Zones 2 and 3 and the proposals cause no loss of floodplain storage. No compensation is required.

Mitigate - resistance & resilience

Flood resistance & resilience measures

The rear wall of the WC, office and reception block faces the strip, where the model places up to 300 mm of water. Any opening, airbrick or service entry in that wall lower than 300 mm above the strip is sealed, so the wall excludes water to that depth, and the new gullies G drain the strip. The fit-out is resilient to minor water entry: electrical sockets and the supplies and controls for the pressure washers are mounted at least 600 mm above floor level, chemicals are kept in a bunded store off the floor, and the floor and wall finishes of the WC, office and reception are water-resistant.

Essential services & utilities

The car wash provides no essential service to the wider community. Its electrical supply, meters and controls are inside the existing buildings, at least 600 mm above floor level.

Manage - warnings & evacuation

Safe access & escape

Access and egress are by the yard and its two vehicle openings, the entry to the south and the exit to Ferdinand Street. The entry is clear of every modelled extent; the Low band (1 in 1,000) touches 1.25 m² at the exit, where the yard falls to Ferdinand Street, and the High band lies outside the site along Ferdinand Street. In an intense storm staff and customers stay on the yard plateau until water on the streets has drained away. The car wash operates in the daytime with staff on site, and no one sleeps on the premises.

Flood warning availability

The site is outside every Environment Agency Flood Warning Area and Flood Alert Area. Three lie within 1 km: the Lower River Irwell catchment including areas in Greater Manchester (flood alert area), and the River Irk at Cheetham Hill and the River Irk at Vale Park Industrial Estate (flood warning areas). Environment Agency warnings do not cover surface water flooding; the operator follows the Met Office weather warnings for Greater Manchester and acts on amber and red rainfall warnings as set out below.

Emergency / evacuation plan

The operator keeps a flood plan for the car wash, proportionate to the risk. Staff sign up to Met Office weather warnings. When an amber or red rainfall warning is in force, or water stands in Ferdinand Street, washing stops and customers' vehicles wait on the yard plateau until the streets have drained. The yard channel YC, the gullies G and the wash bay channel CH are checked clear before forecast storms, and the power to the washing equipment is isolated if water reaches the buildings. The plan names the staff responsible and the contact numbers (Floodline 0345 988 1188; emergency services 999), is kept on site and is reviewed each year.

Residual risk

The residual risks are a storm beyond the design event, a blockage of the channels, gullies or separator, and climate change beyond the allowances used. They are managed by the exceedance routes off the yard, the water-resistant rear wall, the maintenance schedule on drawing FA/SW-01 and the operator's flood plan.

Surface water drainage strategy (SuDS)

Sustainable drainage designed to the drainage hierarchy, managing runoff and providing treatment, in accordance with the PPG, the National Standards for Sustainable Drainage Systems (Defra, 2025) and the CIRIA SuDS Manual (C753).

Discharge strategy

Discharge hierarchy assessment

The drainage follows the hierarchy of the Planning Practice Guidance and the National Standards for Sustainable Drainage Systems (Defra, 2025). Infiltration is not used: the ground is low-permeability till over mudstone, and the whole site is a vehicle yard whose runoff carries oil and silt. The nearest watercourse, Moss Brook, is 456 m away across third-party land. The site therefore keeps its existing connection to the public sewer through its existing manhole MH. Two separate drains serve the car wash (drawing FA/SW-01, Figure 7): wash water from the wash bay runs through a silt trap and a sampling chamber under a trade effluent consent from United Utilities, and rain on the yard runs through a Class 1 bypass separator. Roof water from the existing buildings joins downstream of the separator.

Runoff rates

The runoff rate to the public sewer stays at its existing level, because the impermeable area is 860 m² before and after the works: 12.4 l/s in the 1 in 1 year storm and 36.4 l/s in the 1 in 100 year storm, by the Modified Rational Method of the Greater Manchester Sustainable Drainage Design Guide (runoff coefficient 1, routing coefficient 1.3, rainfall intensities 40 and 117 mm/h). The greenfield QBAR of the site is 0.20 l/s.

Attenuation storage

No attenuation storage is provided. The Manchester, Salford and Trafford SFRA User Guide (2010, section 3.4.1), to which Core Strategy policy EN14 refers, seeks at least a 50% reduction in the runoff rate from previously developed land, with greenfield rates as the aim; draft policy EN 9 repeats that standard, and Places for Everyone policy JP-S4 looks for greenfield rates where practicable. The proposal is a change of use that adds no building and no impermeable area, and the resurfaced yard keeps its existing connection, so the development has no adverse effect on flood risk elsewhere.

Drain-down time

There is no attenuation storage to drain down. The silt trap holds 1.0 m³, 17 minutes of the wash bay peak inflow of 0.96 l/s (rain on the 56 m² bay at 40 mm/h plus two pressure-washer lances at 10 l/min), and passes the flow through continuously.

SuDS measures

Proposed SuDS measures

The drainage components are shown on drawing FA/SW-01 (Figure 7) and in the management train (Figure 6): the designated wash bay WB, 7.0 x 8.0 m, with a 50 mm roll-over bund all round and a slab falling 1:60 to its central channel CH (section A-A); the silt trap ST, 1.0 m³, and the sampling chamber SC on the wash water drain; the yard channel YC across the exit and along the low south-east side; the gullies G at the two low points of the strip behind the buildings, joined by a carrier drain; and the Class 1 bypass separator SEP to BS EN 858-1, nominal size NSB 3 for the 663.2 m² of yard that drains to it (0.0018 x 663.2 = 1.2), with an oil level alarm.

Water quality treatment

The yard carries the pollution hazard of a car park, oil and silt from vehicles, and the wash water carries detergent and silt. The separator retains oil from the yard runoff. The wash water is kept apart from it, because detergent emulsifies oil and stops a separator retaining it, and United Utilities sets the conditions of the trade effluent consent and samples at SC. Detergents are biodegradable, chemicals are kept in a bunded store and a spill kit is kept at the wash bay. Drain covers are colour coded, red on the wash water drain and blue on the surface water drains.

Exceedance routing

Flow beyond the capacity of the channels, or from a blocked channel, runs over the surface on the existing routes: off the yard plateau to Ferdinand Street at the exit and out at the entry, away from the buildings, which stand on the highest part of the yard. Water gathering in the strip behind the buildings drains to the gullies G; beyond their capacity it spills west along the strip and round the west end of the long single-storey building onto the yard.

Wider design & construction

Biodiversity & vegetated SuDS

The site is a fully paved commercial yard with two existing buildings and no planting, before and after the works. The drainage protects the public sewer from oil and silt.

Amenity, health & safety

The drainage has no open water. The channels carry D400 gratings rated for vehicle loads, the separator and the chambers have lockable covers, and a licensed waste carrier empties the separator and the silt trap from the yard, so staff make no confined-space entry.

Construction-phase surface water management

The works resurface the yard and lay the new drains, chambers and separator. During construction the existing manhole and connection are protected from concrete, cement washings and silt; concrete washout is contained in a lined skip; stockpiles are covered and kept away from the manhole; and the new drains are connected once the separator and the silt trap are in place.

Maintenance

Ownership & maintenance regime

The drainage stays in private ownership and the operator of the car wash maintains it to the schedule on drawing FA/SW-01: the wash bay and its channel swept and cleared daily; the silt trap checked monthly and emptied by a licensed carrier when half full; the sampling chamber kept clear for United Utilities; the separator inspected every six months, with its oil and silt levels checked and its alarm tested; the yard channel and gullies cleared every three months; and the spill kit restocked after use. The schedule stays with the site and passes to any future operator.

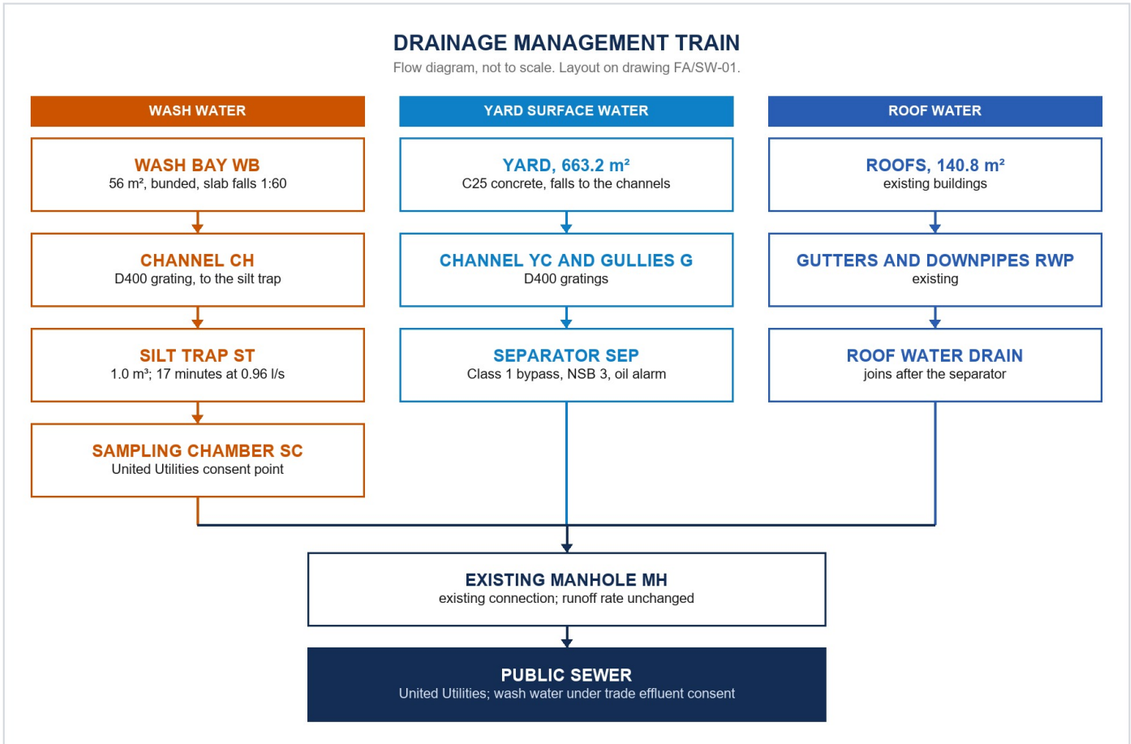


Figure 6 - Drainage management train (not to scale)

Drainage calculation summary

Parameter	Value
Total site area	860 m²
Existing impermeable area	860 m²
Proposed impermeable area (roofs + hardstanding)	860 m²
Proposed permeable / soft area (garden and soft landscaping)	0 m²
Greenfield runoff rate - QBAR (2.3 l/s/ha)	0.2 l/s
Greenfield runoff rate - 1 in 1 yr / 1 in 30 yr / 1 in 100 yr	0.17 / 0.45 / 0.63 l/s
Discharge arrangement	Existing drainage retained - no flow control required
Existing runoff rate, 1 in 1 yr / 1 in 100 yr (Modified Rational Method)	12.4 / 36.4 l/s
Runoff volume from new impermeable area in the design event	0 m³
Attenuation storage provided	Not required - no increase in impermeable area
Interception	Not applicable - no source-control component proposed

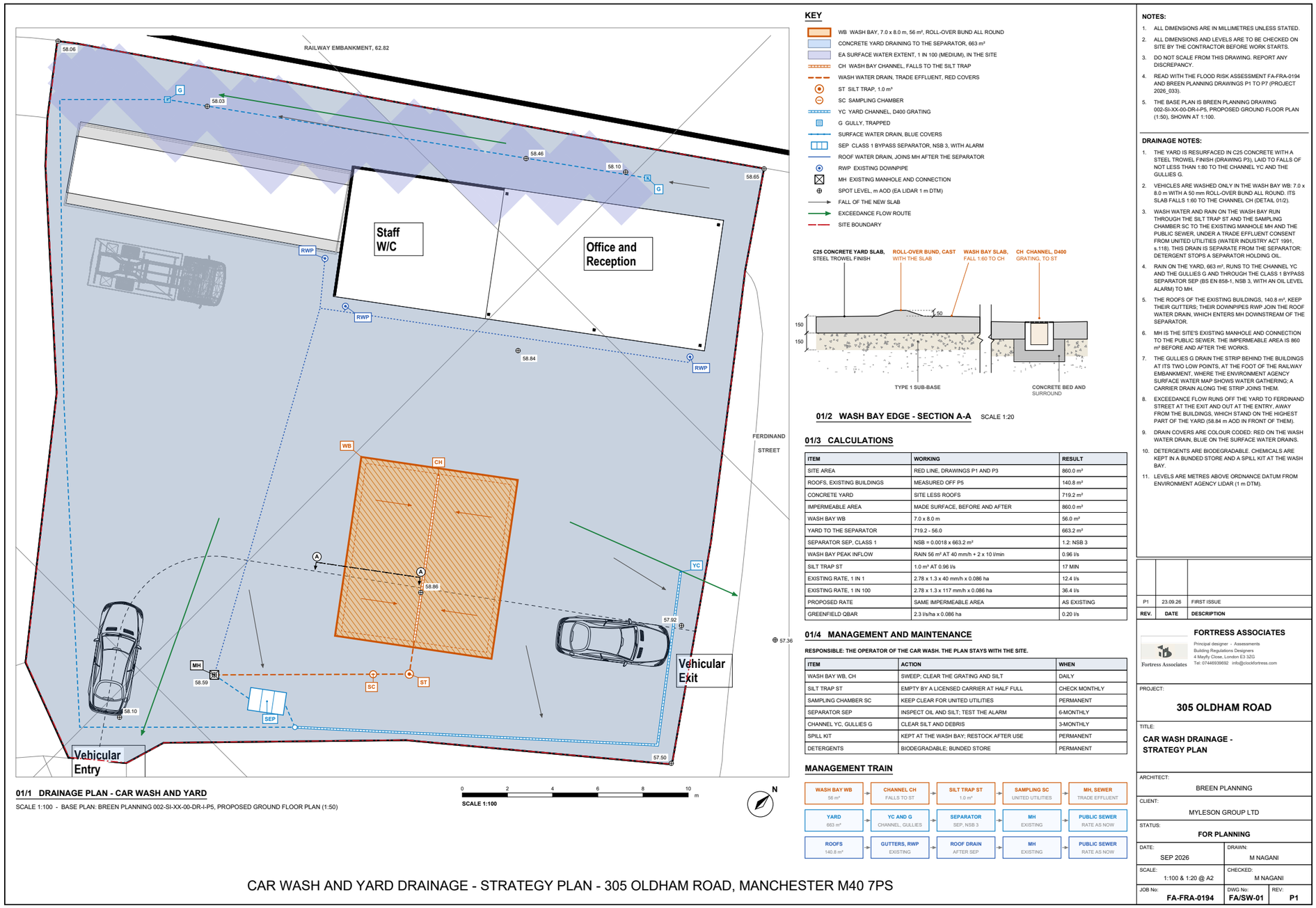
Schedule of SuDS measures

Measure	Application on this site	Design notes
Designated wash bay	56 m² bay with a 50 mm roll-over bund all round, its slab falling to its own channel	Bunded all round and falling to its own channel; wash water drains to the public sewer under a trade effluent consent, never to the separator
Silt trap and sampling chamber	1.0 m³ silt trap and a sampling chamber on the wash water drain: 17 minutes at the peak inflow of 0.96 l/s	Settles grit before the wash water reaches the sewer; the sampling chamber is the undertaker's consent point
Class 1 bypass separator (BS EN 858-1)	NSB 3 for the 663.2 m² of yard that drains to it (0.0018 x 663.2 = 1.2)	Nominal size NSB = 0.0018 x drained area in m², with an oil level alarm; roof water joins downstream
Linear channels and gullies	Linear channels and gullies collect the 663.2 m² of yard to the separator	Heavy-duty gratings rated for vehicle loads, collecting the yard to the separator

SuDS maintenance schedule

Component	Activity & frequency	Responsibility
Designated wash bay	Sweep the bay and clear the channel grating and silt daily	Car wash operator
Silt trap and sampling chamber	Check monthly; empty by a licensed waste carrier when half full; keep the sampling chamber clear for the sewerage undertaker	Car wash operator
Class 1 bypass separator (BS EN 858-1)	Inspect every six months; check the oil and silt levels; test the alarm; empty by a licensed waste carrier	Car wash operator
Linear channels and gullies	Clear silt and debris from the gratings every three months	Car wash operator

Figure 7 - Car wash and yard drainage strategy plan



Drawing FA/SW-01: the wash bay through a silt trap to the sewer under consent, the yard through a separator, levels and exceedance

Summary of measures

The measures below are incorporated in the design, classified against the NPPF hierarchy so the local planning authority can secure them by condition where appropriate.

Class	Measure
Avoid	Wash bay and queuing on the yard plateau, outside every modelled surface water extent; Flood Zone 1
Avoid	No sleeping accommodation; daytime use with staff on site
Control	Existing floor unchanged at 58.84 m AOD, above the modelled water behind the buildings
Control	Concrete surface laid to the existing profile; flow routes to Ferdinand Street and the entry kept open
Mitigate	Rear wall water-resistant to 300 mm above the strip; electrics and washer controls 600 mm above floor level; water-resistant finishes; bunded chemical store
Manage	Operator's flood plan: Met Office rainfall warnings; washing stopped under amber and red warnings; drains checked before storms
SuDS	Wash bay to the public sewer through a silt trap and sampling chamber under a trade effluent consent; yard through a Class 1 bypass separator
SuDS	No added impermeable area; runoff rate to the sewer unchanged; no attenuation
SuDS	Maintenance by the car wash operator to the schedule on drawing FA/SW-01

Data sources and basis of assessment

Dataset	Publisher	Licence
Flood Map for Planning - Flood Zones 2 & 3 (Rivers and Sea)	Environment Agency	OGL v3
Risk of Flooding from Surface Water - extent and hazard rating	Environment Agency	OGL v3
Historic Flood Map	Environment Agency	OGL v3
Recorded Flood Outlines	Environment Agency	OGL v3
Reservoir Flood Extents - Wet Day	Environment Agency	OGL v3
Spatial Flood Defences	Environment Agency	OGL v3
Statutory Main River Map	Environment Agency	OGL v3
Flood warning / alert area coverage	Environment Agency real-time flood monitoring API	OGL v3
Ground elevation - LIDAR Composite DTM 1 m	Environment Agency	Open
Site boundary polygon	Ordnance Survey National Geographic Database	OS Data Hub licence

All datasets were accessed on 23 September 2026 under the Open Government Licence v3.0. Contains Environment Agency data © Environment Agency and database right; base mapping © Crown copyright and database rights (Ordnance Survey) 2026.

Basis of assessment

- This is a professional flood risk assessment prepared in accordance with the Planning Practice Guidance and Environment Agency standing advice, applying the industry-standard methodologies used by flood risk practitioners across the UK to the authoritative national datasets listed above, current at the date of access and specific to this site.
- Drainage calculations follow the stated methods: existing runoff rates by the Modified Rational Method of the Greater Manchester Sustainable Drainage Design Guide, greenfield rates at 2.3 l/s/ha with IH124 growth factors, and separator sizing to BS EN 858-1, in accordance with the National Standards for Sustainable Drainage Systems (Defra, 2025).
- The drainage components are designed to the standards stated and are built to the design values.
- The assessment addresses flood risk, surface water drainage and the discharge of wash water from the car wash.

Closure

This Flood Risk Assessment and Drainage Strategy demonstrates that the proposed development satisfies the requirements of the NPPF and PPG: flood risk from all sources has been assessed for the lifetime of the development including climate change; the development is appropriate development in its flood zone; it is safe for its lifetime; it does not increase flood risk elsewhere; and surface water is managed sustainably with no increase over the existing position.

Prepared by [redacted]

For Fortress Associates

FA-FRA-0194 | 23 September 2026

Figure P1 - Site location - close up



Figure P1a - Site location - street context

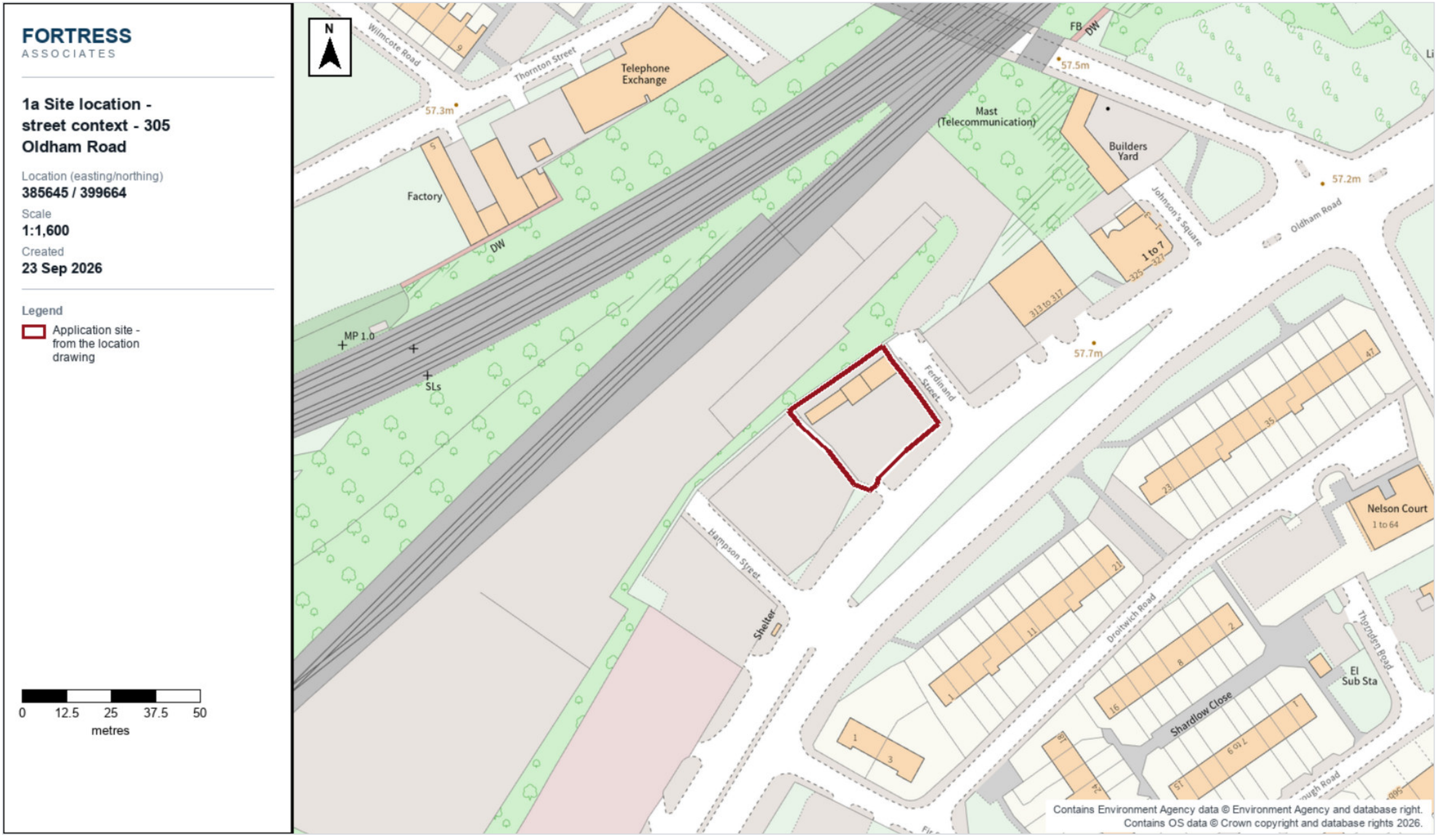


Figure P3 - Risk of Flooding from Surface Water

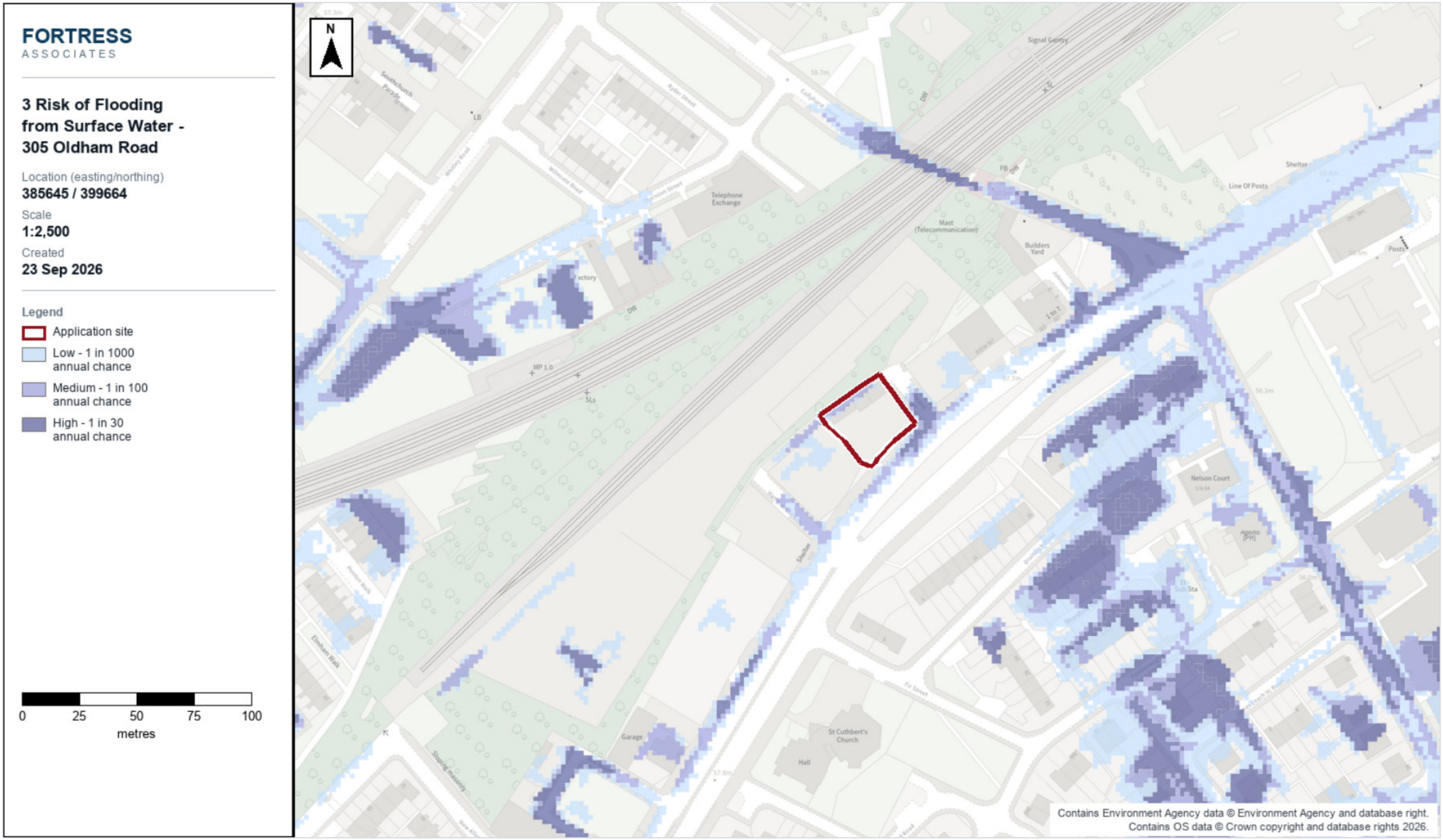


Figure P4 - Surface water depth over 0.3 m

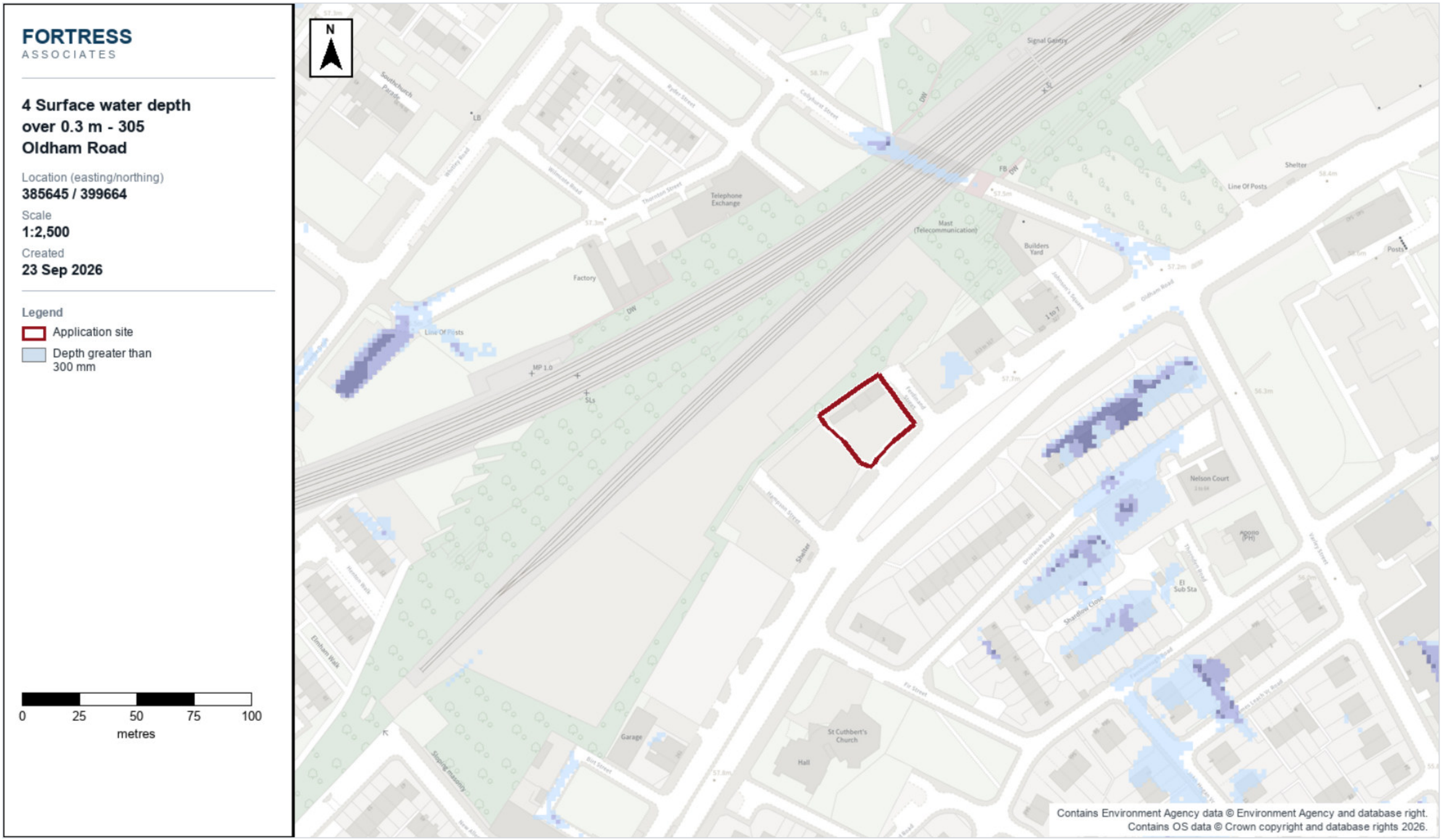


Figure P11 - Flood hazard FD2320 above 0.75



Figure P12 - Surface water flow direction

FORTRESS
ASSOCIATES

12 Surface water flow direction - 305 Oldham Road

Location (easting/northing)
385645 / 399664

Scale
1:2,500

Created
23 Sep 2026

Legend
- Application site
- Modelled flow direction (arrows)

0 25 50 75 100
metres

