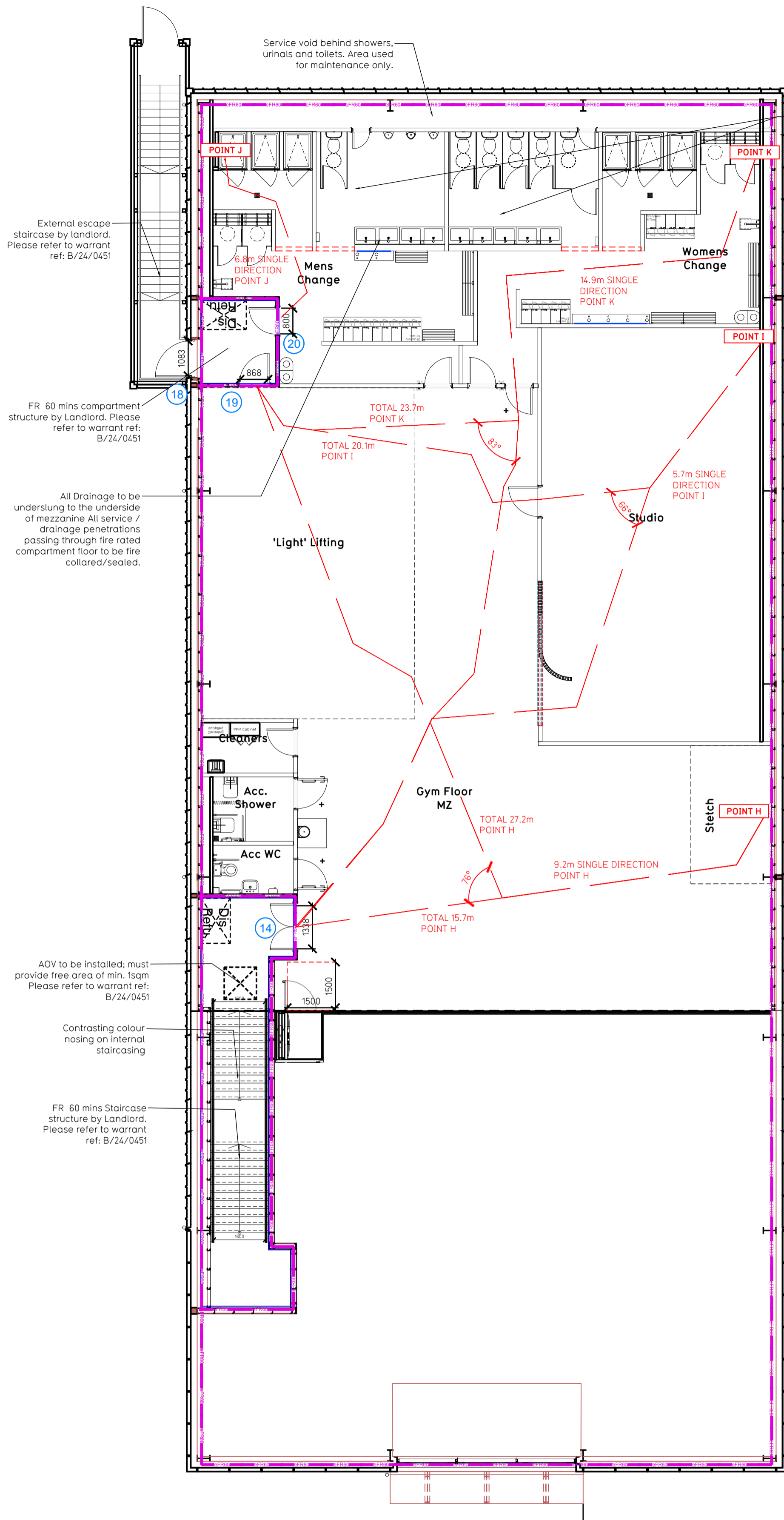


Proposed Ground Floor Plan



Proposed Mezzanine Floor Plan

**Escape Distance and Angle of Divergence**

**Position A**  
Total escape to nearest Final Exit No. 1 = 12.5 m  
The total escape distance is less than 15m and thus complies.

**Position B**  
Total escape to nearest Final Exit No. 1 = 13.1 m  
The total escape distance is less than 15m and thus complies.

**Position C**  
Total escape distance to nearest Final Exit No. 9 = 17.9 m  
Distance before divergence is 5.5m  
A.O.D to be > (2.5 X 5.5) + 45 = 59°  
Drawn A.O.D = 66° thus complies

**Position D**  
Total escape distance to nearest Final Exit No. 13 = 14.0 m  
The total escape distance is less than 15m and thus complies.

**Position E**  
Total escape distance to nearest Final Exit No. 13 = 17.0 m  
Distance before divergence is 5.2m  
A.O.D to be > (2.5 X 5.2) + 45 = 58°  
Drawn A.O.D = 74° thus complies

**Position F**  
Total escape distance to nearest Final Exit No. 11 = 16.7 m  
Distance before divergence is 2.8m  
A.O.D to be > (2.5 X 2.8) + 45 = 52°  
Drawn A.O.D = 60° thus complies

**Position G**  
Total escape to nearest Final Exit No. 12 = 4.8 m  
The total escape distance is less than 15m and thus complies.

**Position H**  
Total escape distance to nearest Final Exit No. 14 = 15.7 m  
Distance before divergence is 9.2m  
A.O.D to be > (2.5 X 9.2) + 45 = 68°  
Drawn A.O.D = 76° thus complies

**Position I**  
Total escape distance to nearest Final Exit No. 19 = 19.5 m  
Distance before divergence is 5.7m  
A.O.D to be > (2.5 X 5.7) + 45 = 59.25°  
Drawn A.O.D = 66° thus complies

**Position J**  
Total escape to nearest Final Exit No. 20 = 6.8 m  
The total escape distance is less than 15m and thus complies.

**Position K**  
Total escape distance to nearest Final Exit No. 19 = 24.5 m  
Distance before divergence is 15.0 m  
A.O.D to be > (2.5 X 15.0) + 45 = 82°  
Drawn A.O.D = 83° thus complies

Based on Pure Gym clubs of a similar size and location, it is anticipated that PG Rutherglen maximum designed occupancy will be 198 people.

Based on Building standards technical handbook 2022: non-domestic: 3.12.5 Table 3.8. Rutherglen Pure Gym is designed to have the sanitary provision below:

- A 49%:51% Female and male mix
- Female: 5 WC + 98 person
- Male: 1 WC + 3 Urinals = 100 persons

This would result to a total designed maximum occupancy of 198 person (Female 98 + Male 100)

**Fire Evacuation Key**

	Existing wall to achieve min 30 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor)		Fire Escape Route
	Existing wall to achieve min 60 minute fire rating (suitability of wall to be confirmed on site by Pure Gym Main Contractor)		Minimum Clear Widths
	New wall to achieve min of 30min fire rating		Exit No.
	New wall to achieve min of 60min fire rating		Shared Escape Route
	Protected areas: walls, floors, ceilings and doors to achieve 30minute fire resistant construction.		FD30 / FD60 Fire Door Rating - 30min. / 60min.
	Protected areas: walls, floors, ceilings and doors to achieve 60 minute fire resistant construction.		FDKS / AFDK / FDKL Fire Door Signage - Fire Door Keep Shut / Automatic Fire Door Keep Clear / Fire Door Keep Locked
	Existing Protected areas: walls, floors, ceilings and doors 60 minute fire resistant construction provided by Landlord		

**Escape Route Widths**

In line with Section 2.9.8 of the Technical Handbook - Non Domestic, the aggregate unobstructed width in mm of all escape routes from a room, or storey, should be at least 5.3 x the occupancy capacity of the room or storey.

**Ground Floor**

Aggregate Clear Opening Width of Escape Routes Calculation:  
 Final Fire Exit No. 11 restricted by door No.2 clear opening width = 1060mm (allows 222 persons to escape)  
 Final Fire Exit No. 9 clear opening width = 1060mm (allows 222 persons to escape)  
 Final Fire Exit No. 11 clear opening width = 1050mm (allows 209 persons to escape)  
 Final Fire Exit No. 12 clear opening width = 1083mm (allows 226 persons to escape, largest opening to be discounted)

Total Aggregate Width for Floor (Less Largest Opening Width of 1083mm from Exit No. 12) = 3717mm  
 Total Estimated Occupancy Capacity = 198 Persons  
 Ground Floor Maximum Occupancy Capacity = Total Aggregate Width for Floor (Less Largest Opening Width of 1083mm from Exit No. 12) / 5.3 = 3717mm / 5.3 = 588 people

**Mezzanine Floor**

Aggregate Clear Opening Width of Escape Routes Calculation:  
 Final Fire Exit No. 7 clear opening width = 1083mm (allows 226 persons to escape)  
 Final Fire Exit No. 8 clear opening width = 1083mm (allows 209 persons to escape, largest opening to be discounted)

Total Aggregate Width for Floor (Less Largest Opening Width of 1083mm from Exit No. 17) = 1083mm

Fire Floor Total Estimated Occupancy Capacity = 198 Persons  
 Mezzanine Floor Maximum Occupancy Capacity = Total Aggregate Width for Floor (Less Largest Opening Width of 1083mm from Exit No. 12) / 5.3 = 1083mm / 5.3 = 204 people

**Combined Occupancy Provision**

Ground floor maximum occupancy: 588 NO.  
 Mezzanine floor maximum occupancy: 204 NO.  
 Total occupancy provision: 802 NO.

Based on PG existing occupancy data of comparable sites, Pure Gym designed maximum occupancy of a Pure Gym at this size will not exceed 198 people, which sits in line with the proposed sanitary ware provision (section 3.12.5) and is smaller than the max. no of 802 persons (see calculation above). Therefore thought to meet with the Section 2.9 of Technical Handbook - Non Domestic.

The designed maximum occupancy of 198 people derives from the vast amount of data collected via 340+ Pure Gyms of comparable size; data collection is conducted through access control noninvasively at turnstiles and can be viewed on Pure Gym app and website.

Rev	Date	Description	Drawn/Checked
PROJECT TITLE		DRAWING TITLE	
Glasgow Rutherglen Commercial Unit, Cunninghame Road, G73 1PP		Fire Evacuation Strategy Plan Ground and Mezzanine Floor Plan	
DRAWN / CHECKED	DATE	DRAWING PURPOSE	SCALE
KMCKL	12.12.24	CONSTRUCTION	1:100 @ A1
2223-XX-003-FEP-C00			
		Pure Gym Ltd Town Centre House The Meridian Centre Leeds LS2 8LY e: architecture@puregym.com w: www.puregym.com	