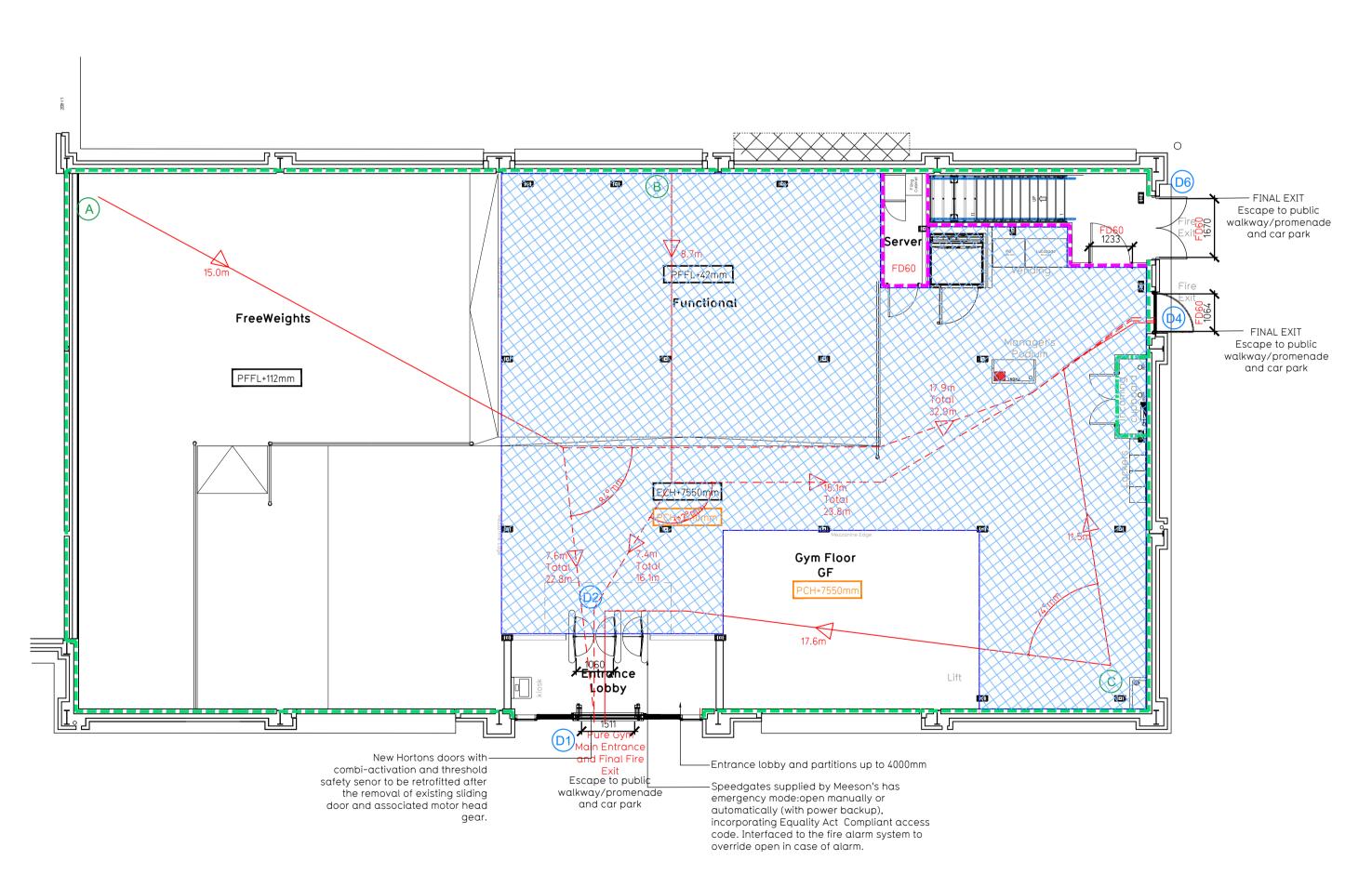
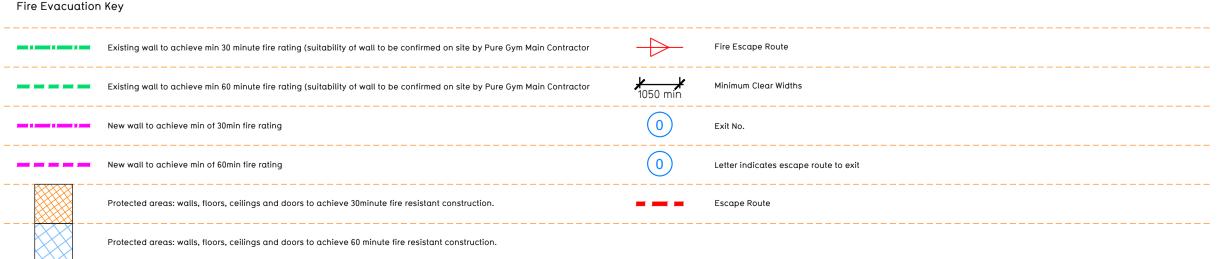


Proposed Mezzanine Floor Plan



Proposed Ground Floor Plan



Fire Alarm L1 Category Fire Alarm designed and installed to BS 5839. Smoke & heat detection / emergency lighting by specialist. Please refer to M&E Escape Lighting
Emergency escape lighted designed and installed in accordance with BS 5266: Part 1. Please refer to M&E Engineer's drawings for final layout and specification. Smoke Extract
Smoke Extract System to be designed and installed in accordance with BS 7346: Part 8. Please refer to M&E Engineer's drawings for final layout

Escape Signage and emergency lighting is CDP under the M&E specification. Details of contractors proposals to be provided to Building Control

Clear head-room/ floor build-up key

ECH+XXXXmm Existing Ceiling Heights

EBH+XXXXmm Existing Beam Heights

build-up

EMH+XXXXmm Existing Mechanical Heights

PFFL+XXXXmm

Key - Floor Build-ups

40mm ViBsorb RF250 / 40 foam

Free-weights = 40mm Sportec Style tile

10mm Sportec Colour 15 15mm ViBsorb 20

15mm ViBsorb 20 17mm ViBsorb 10

Total = 112mm

Functional =

17mm ViBsorb 10

Studio = Total 10mm 10mm Sportec Colour 15

15mm ViBsorb 20

17mm ViBsorb 10

Total = 42mm

Total = 42mm

Proposed Ceiling Heights inclusive of floor build-ups

Proposed Heights to underside of

beam including acoustic floor

Existing Finished Floor Level

Proposed Finished Floor Level

Proposed Mechanical Heights

· Proposals must comply with all acoustic, fire & building regulation

No dimensions are to be scaled from this drawing. The contractor is responsible for checking all dimensions on site

Escape Route Widths

ESH+XXXXmm Existing Soffit Heights 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 Proposed Soffit Heights room, or storey, should be at least 5.3 x the occupancy capacity of the room or storey.

<u>Ground Floor</u>

Aggregate Clear Opening Width of Escape Routes Calculation: Final Fire Exit DR2,clear opening width = 1060mm Final Fire Exit DR4, clear opening width = 1064mm

Total Aggregate Width for Ground Floor 2114mm(Less Largest Opening Width 1064mm from Fire Exit DR4) = 1060mm

Ground Floor Maximum Occupancy Capacity = 1060 / 5.3 = 200 people

<u>Mezzanine Floor</u>

Aggregate Clear Opening Width of Escape Routes Calculation: Storey Exit DR7, leading to Final Fire Exit DR6 at GF level = 1065mm

Total Aggregate Width for Mezzanine Storey 1065mm

Mezzanine Floor Maximum Occupancy Capacity = 1065 / 5.3 = 200

Due to use of a single mean of escape from mezzanine level, occupancy from mezzanine level is restricted to 60 person in accordance with Section 2.9.7 of the Technical Handbook -Non Domestic.

Combined Occupancy Provision

Ground floor maximum occupancy: 200 Mezzanine floor maximum occupancy: Total occupancy provision:

Based on PG existing occupancy data of comparable sites, the average total occupancy of a Pure Gym at this size will be unlikely to exceed 70 people, which is smaller than the max. no of 260 persons (see calculation above) and is therefore thought to meet with the Section 2.9 of Technical Handbook - Non Domestic.

Escape Distance and Angle of Divergence

Total escape distance to nearest Final Exit DR1 = 22.6m Distance before divergence is 15.0m A.O.D to be > (2.5 X 15.0)+45 = 82.5° Drawn A.O.D = 84° thus complies

Total escape to nearest Final Exit DR2 = 16.1m

Distance before divergence is 8.7m A.O.D to be > $(2.5 \times 8.7) + 45 = 66.75^{\circ}$ Drawn A.O.D = 122° thus complies

otal escape to nearest Final Exit DR4 = 11.5m

The total escape distance is less than 15m and thus complies.

Total escape to nearest Final Exit DR7 = 11.4m

The total escape distance is less than 15m and thus complies.

<u>Position E</u> Total escape to nearest Final Exit DR7 = 14.5m The total escape distance is less than 15m and thus complies.

Total escape to nearest Final Exit DR7 = 9.8m The total escape distance is less than 15m and thus complies.

