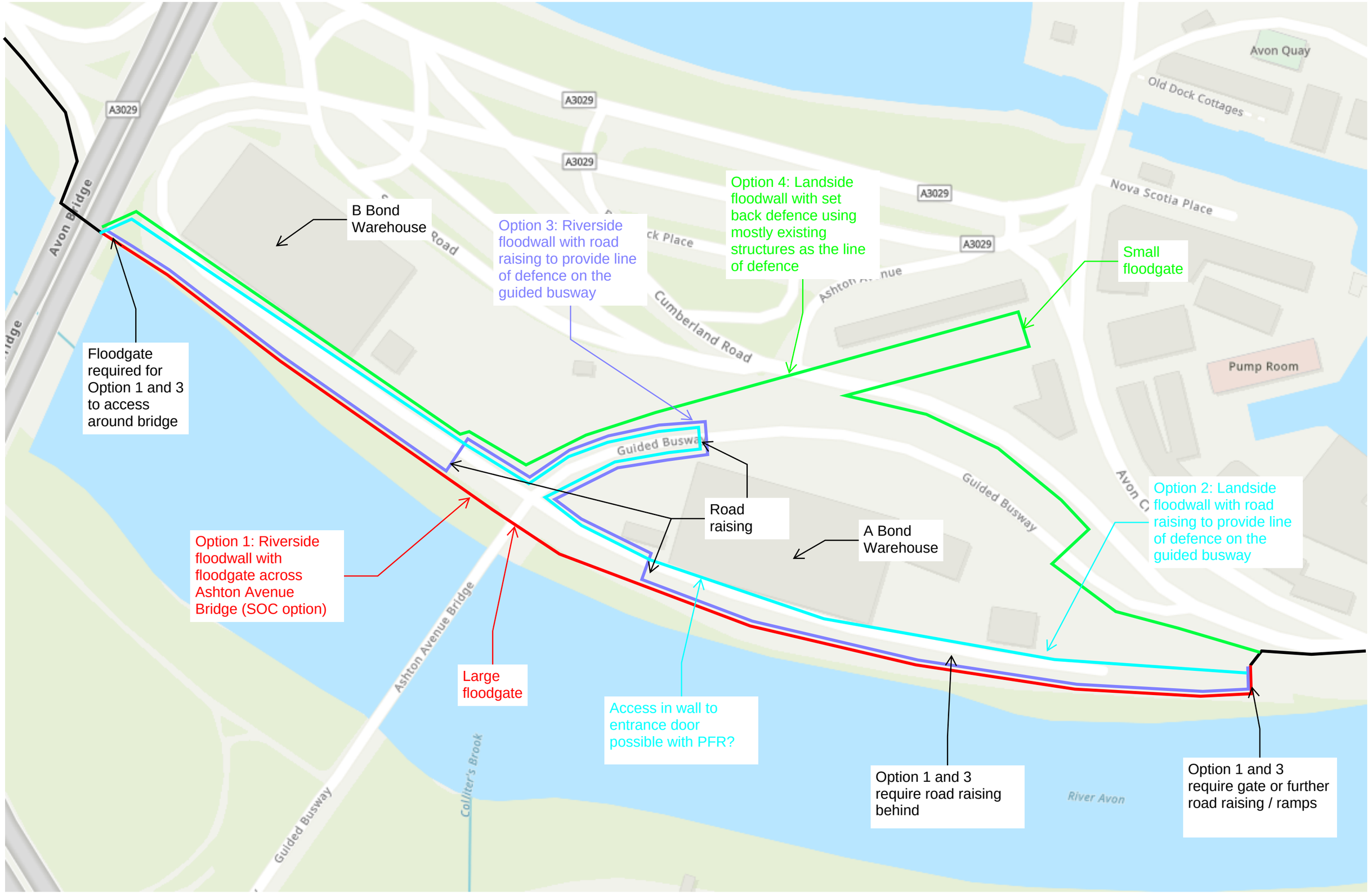
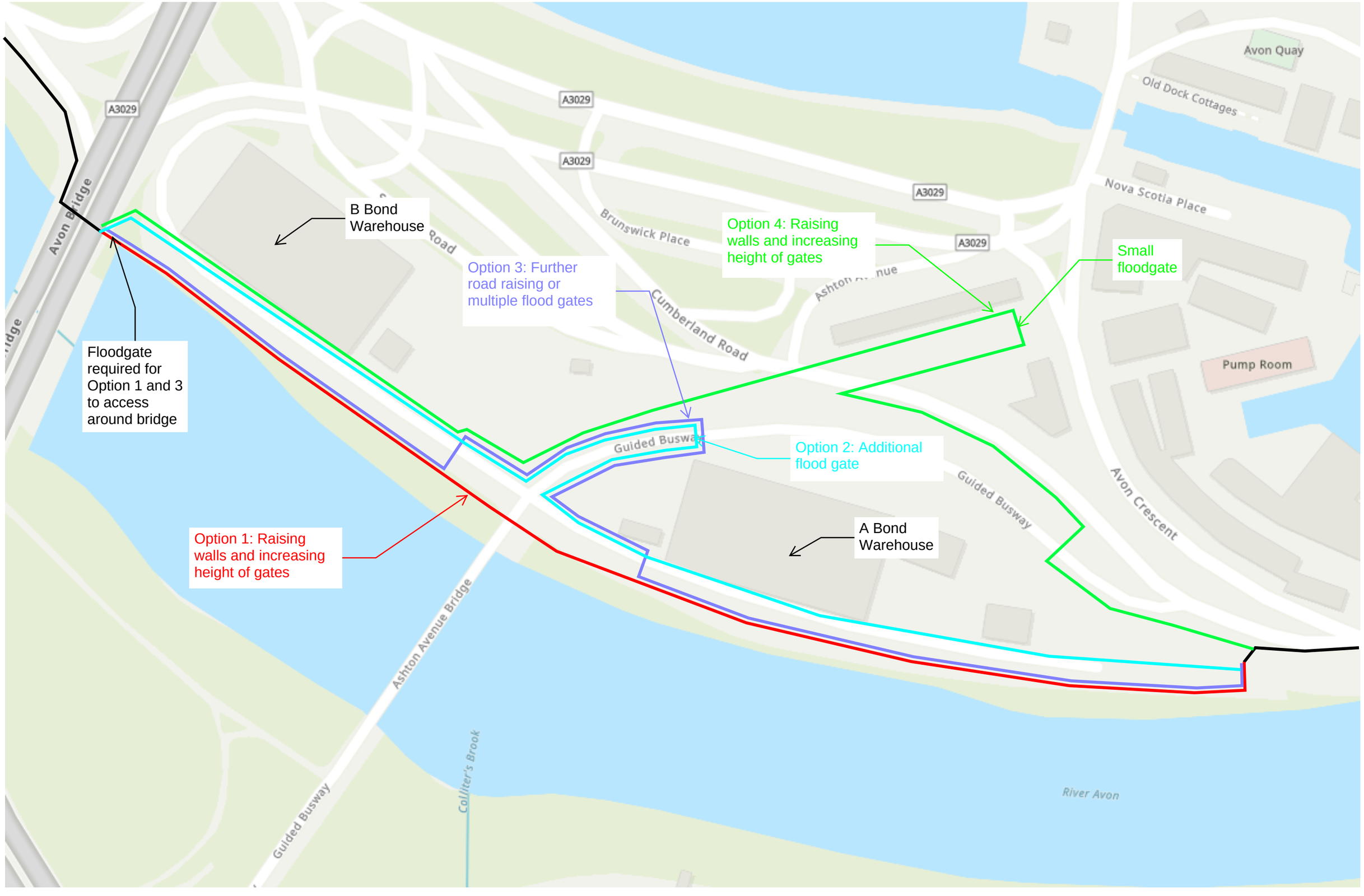
Summary - Line of Defence



Summary - phase 2



Option 1

Estimated
Phase 1
defence height
~10.15m

Two door
~0.9m
flood-gate that
swings or
slides to close

Ground level
~9.25m

Option 1

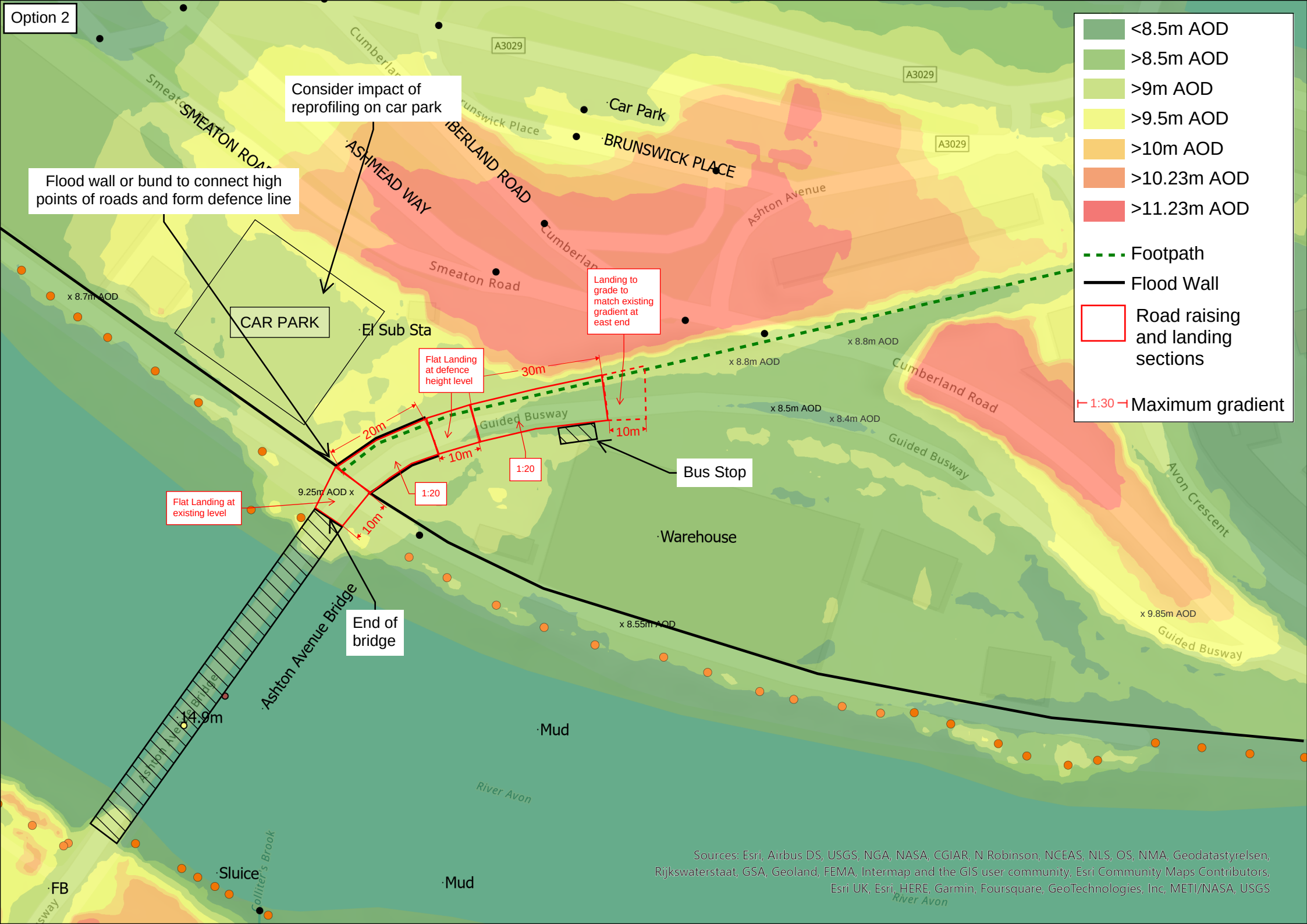
Estimated Phase 2 defence height ~10.9m

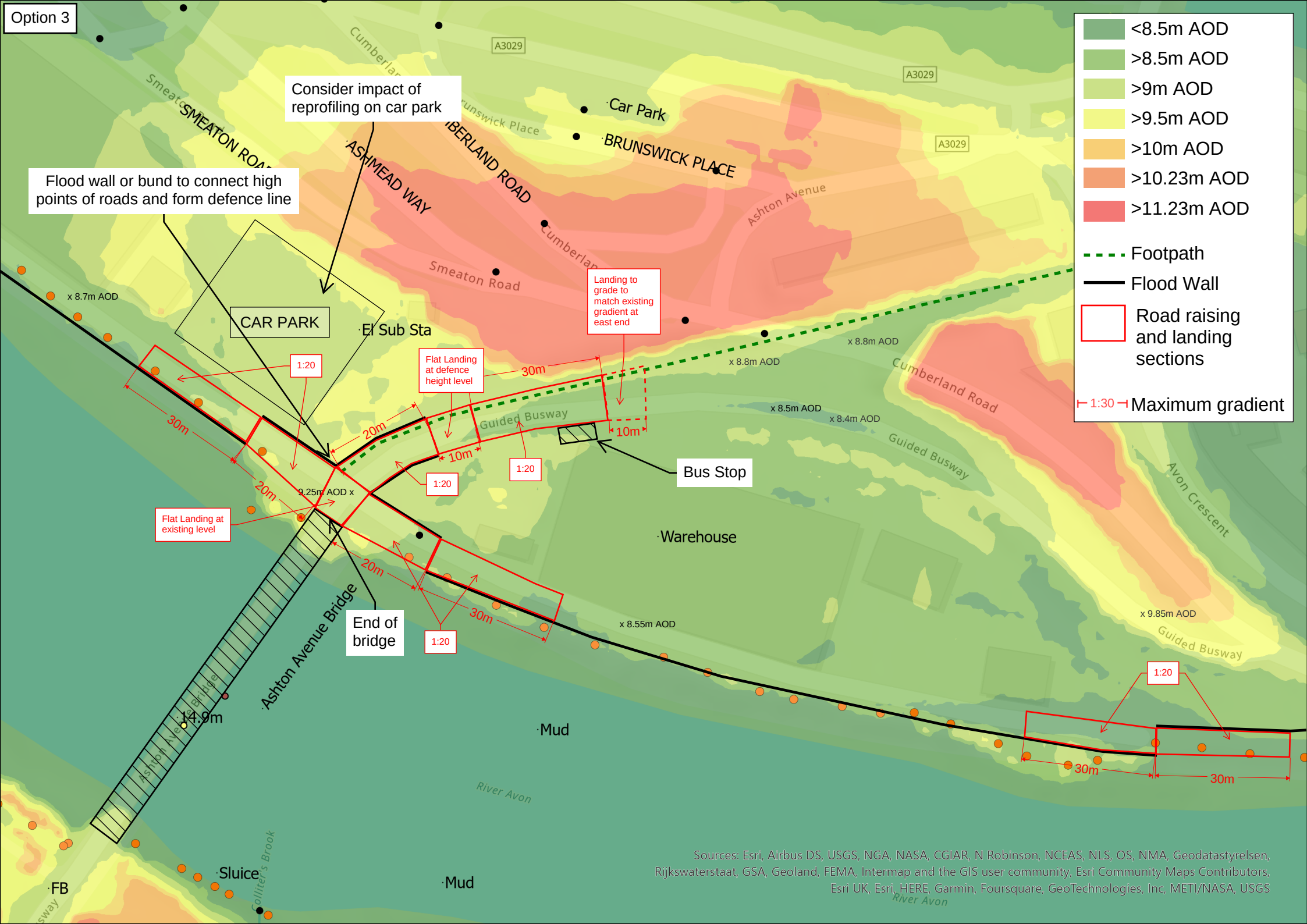
Estimated Phase 1 defence height ~10.15m

Potential to add ~0.75m section on top of gate or have full ~1.65m gate from Phase 1.

Two door ~0.9m flood-gate that swings or slides to close

Ground level ~9.25m


Option 2
Consider impact of reprofiling on car park
Flood wall or bund to connect high points of roads and form defence line
CAR PARK
El Sub Sta
Car Park
BRUNSWICK PLACE
ASHMEAD WAY
SMEATON ROAD
Smeaton Road
Cumberland Road
Ashton Avenue
A3029
Landing to grade to match existing gradient at east end
Flat Landing at defence height level
30m
20m
10m
10m
1:20
1:20
Guided Busway
Bus Stop
Flat Landing at existing level
9.25m AOD x
Warehouse
Ashton Avenue Bridge
End of bridge
14.9m
Mud
Mud
Sluice
FB
River Avon
Collitt's Brook
x 8.7m AOD
x 8.8m AOD
x 8.8m AOD
x 8.5m AOD
x 8.4m AOD
x 8.55m AOD
x 9.85m AOD
Avon Crescent
<8.5m AOD
>8.5m AOD
>9m AOD
>9.5m AOD
>10m AOD
>10.23m AOD
>11.23m AOD
Footpath
Flood Wall
Road raising and landing sections
1:30 Maximum gradient
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS


Option 3
Consider impact of reprofiling on car park
Flood wall or bund to connect high points of roads and form defence line
CAR PARK
El Sub Sta
Car Park
BRUNSWICK PLACE
ASHMEAD WAY
SMEATON ROAD
Smeaton Road
Cumberland Road
Ashton Avenue
A3029
Landing to grade to match existing gradient at east end
Flat Landing at defence height level
Flat Landing at existing level
1:20
30m
20m
10m
Guided Busway
Bus Stop
Warehouse
End of bridge
Ashton Avenue Bridge
x 8.7m AOD
x 8.8m AOD
x 8.5m AOD
x 8.4m AOD
9.25m AOD x
x 8.55m AOD
x 9.85m AOD
14.9m
Mud
Sluice
FB
River Avon
Avon Crescent
<8.5m AOD
>8.5m AOD
>9m AOD
>9.5m AOD
>10m AOD
>10.23m AOD
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Flood Wall
Road raising and landing sections
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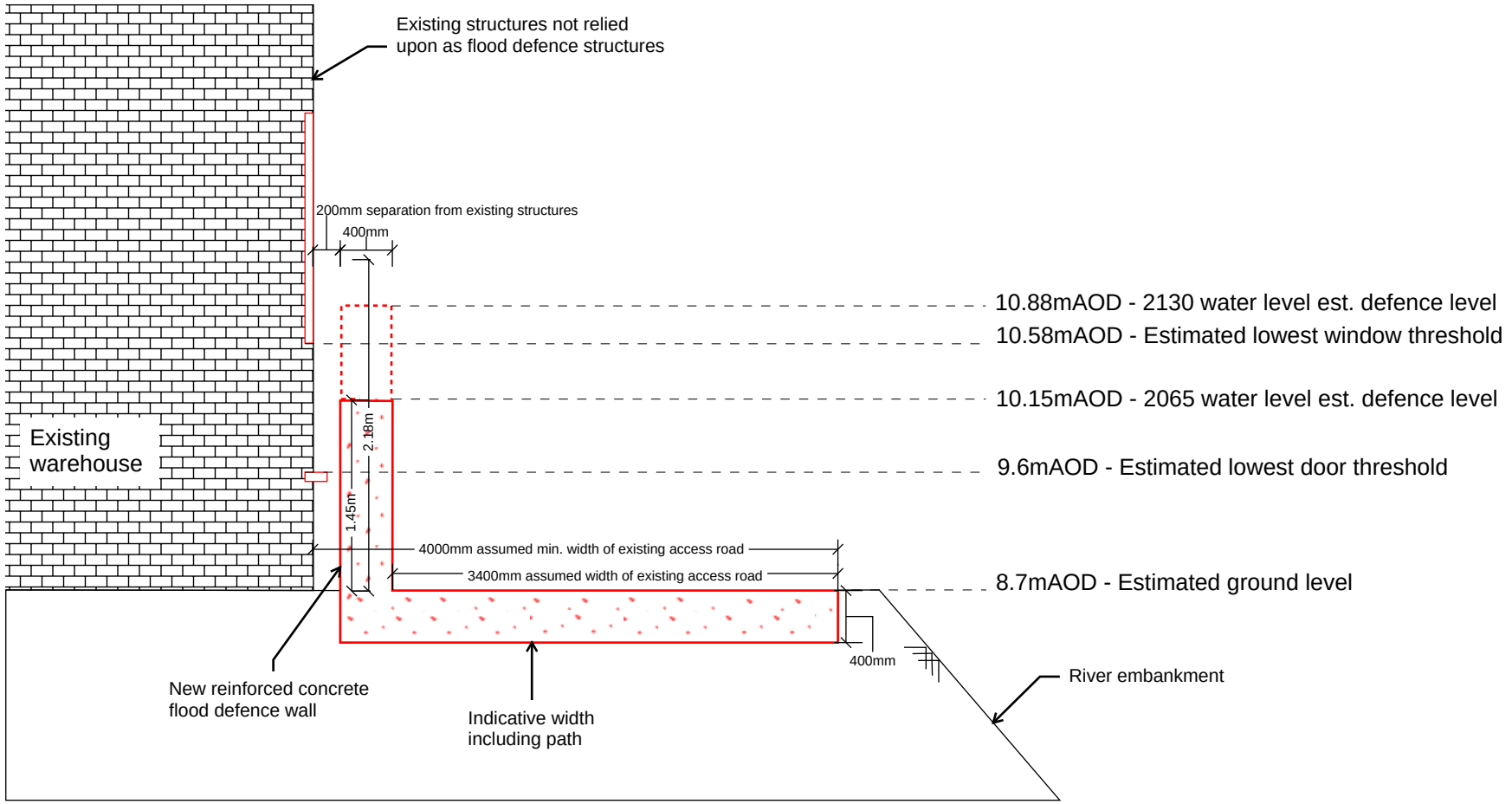
Existing structures not relied upon as flood defence structures
200mm separation from existing structures
400mm
10.88mAOD - 2130 water level est. defence level
10.58mAOD - Estimated lowest window threshold
10.15mAOD - 2065 water level est. defence level
9.6mAOD - Estimated lowest door threshold
8.7mAOD - Estimated ground level
Existing warehouse
2.18m
1.45m
4000mm assumed min. width of existing access road
3400mm assumed width of existing access road
400mm
River embankment
New reinforced concrete flood defence wall
Indicative width including path