

Table 3.2: Catchment B Photographs



7. View of watercourse flowing from east to west. View looking west. Watercourse shown to take flows from ditch separating Catchments A and B. Topography sloping from east to west.



8. View looking south from north of catchment. Topography visibly sloping from south to north.



9. View of Catchment B looking north from the west of the catchment. Topography visibly sloping from south to north and east to west.



10. View of Catchment B looking west from the northeast of the catchment. Topography visibly sloping from south to north leaving localised low point in northeast of catchment.



11. View of Catchment B looking west from southeast of catchment. Topography visibly sloping from west to east in the east of the catchment.



12. View of Catchment B looking north from southeast of catchment. Topography sloping from west to east in the east of the catchment.

Catchment C

Photographs for Catchment C are presented in Table 3.3 below.

Table 3.3: Catchment C Photographs



13. View of Catchment C looking north along western boundary of site. Topography sloping from east to west and northeast to southwest.



14. View of Catchment C looking east. Topography sloping from east to west. Likelihood is that any potential swale will need to be placed further from the site boundary to ensure a massive depth is not needed.

Catchment D

Photographs for Catchment D are presented in Table 3.4 below.

Table 3.4: Catchment D Photographs



15. View of Catchment D looking west from northeast of catchment. Topography visibly sloping from west to east.



16. View of Catchment D looking north from northwest of catchment. Topography visibly sloping from north to south.



17. View of Catchment D looking northwest from the east of the catchment. Topography visibly sloping from north to south.



18. View of Catchment D looking south along the western boundary. Topography visibly sloping from west to east.

	north to south down toward existing watercourse that separates Catchments D and E.
 <p>19. View of Catchment D looking east from the southwest of the catchment. Topography visibly sloping from north to south.</p>	 <p>20. View of Catchment D looking east from the south of the catchment. Bridge over watercourse visible in top right of image. EA Surface Water Flood Risk mapping suggests a surface water flow path is present to the south of this watercourse in Catchment E. The EA mapping does not account for culverts (like the one beneath this bridge) and the indication therefore is that the surface water flow path shown to the south of the existing watercourse is the result of the EA model assuming a blockage in the watercourse at this location.</p>

Catchment E

Photographs for Catchment E are presented in Table 3.5 below.

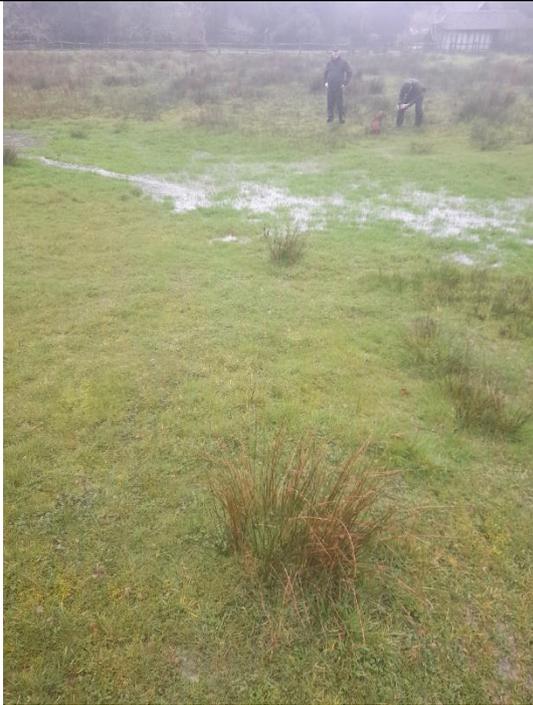
Table 3.5: Catchment E Photographs



21. View of Catchment E looking northwest from north of catchment, towards existing watercourse. Topography sloping down toward watercourse. Marshy ground ideally suited for an attenuation feature.



22. View of Catchment E looking southeast from west of catchment. Topography sloping from east to west and south to north, toward the existing watercourse.



23. Overland surface water flow path flowing from north to south toward the existing watercourse. View looking west.



24. View of Catchment E looking northwest from the south of the site. Topography sloping from east to west and southeast to northwest toward existing watercourse.



25. View of Catchment E looking east from the south of the site. Topography sloping from north to south toward the south of the site.



26. View of Catchment E looking west from the southeast of the site. Topography shown to be sloping from east to west but is gentle at location photograph was taken.

Catchment F

Photographs for Catchment F are presented in Table 3.6 below.

Table 3.6: Catchment F Photographs



27. View of watercourse between Catchments E and F flowing from east to west. View looking west from atop existing footbridge.



28. View of Catchment F looking south from the south of the catchment. View looking toward existing watercourse. Steeply sloping toward existing watercourse apparent.



29. Existing tributary watercourse flowing from north to south along eastern boundary of site. View looking north/upstream from atop existing footbridge.



30. View of tributary watercourse flowing from northeast to southwest along eastern boundary of site. Adjacent ground very saturated. View looking south.



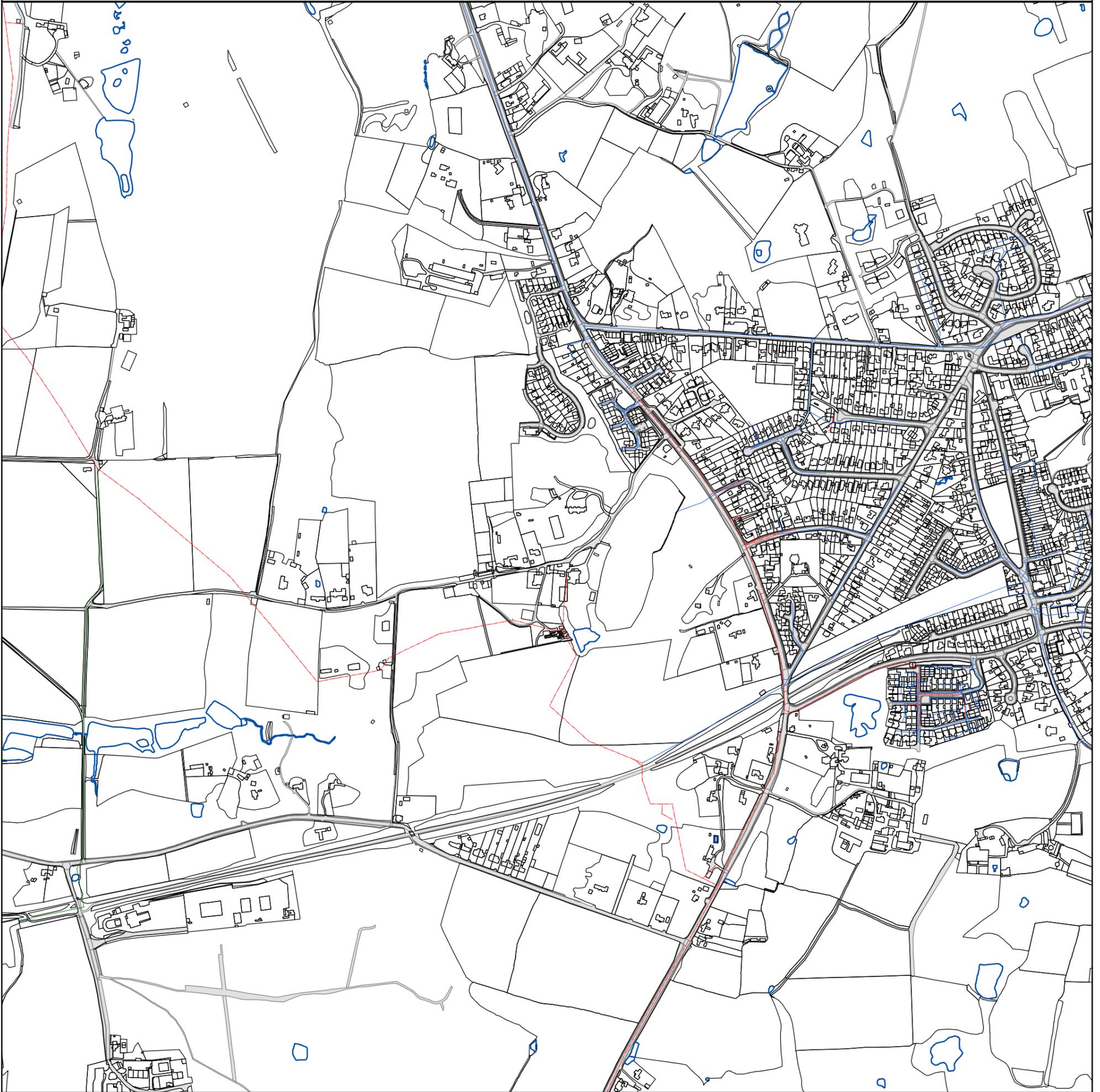
31. View of Catchment F looking northwest from east of catchment. Ground very saturated. Topography gently sloping from north to south.



32. View of headwall and culvert along tributary watercourse flowing from northeast to southwest along

	<p>eastern boundary of site. Further tributary ditch visible in top of image.</p>
 <p>33. View of Catchment F looking approximately west from the northeast of the catchment. Ground very saturated and topography indicative of potential surface water flow path in part due to lowered edge of small ditch ("tributary watercourse"). See Photo 34 for source of overland flow.</p>	 <p>34. View of the tributary watercourse in the northeast of the catchment, beneath tree cover. Backing up and overspill of watercourse onto main catchment area visible. Local land management and potential localised ground raising required to ensure flow remains in the tributary watercourse and is not directed through centre of catchment.</p>

Appendix D Thames Water Sewer Records



0 45 90 180 270 360
Meters

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified before any works are undertaken. Crown copyright Reserved

Scale: 1:7161
Width: 2000m
Printed By: TSOMASUN
Print Date: 26/02/2024
Map Centre: 533768,137565
Grid Reference: TQ3337NE

Comments:

Appendix E Long Sections and Additional Information/Figures

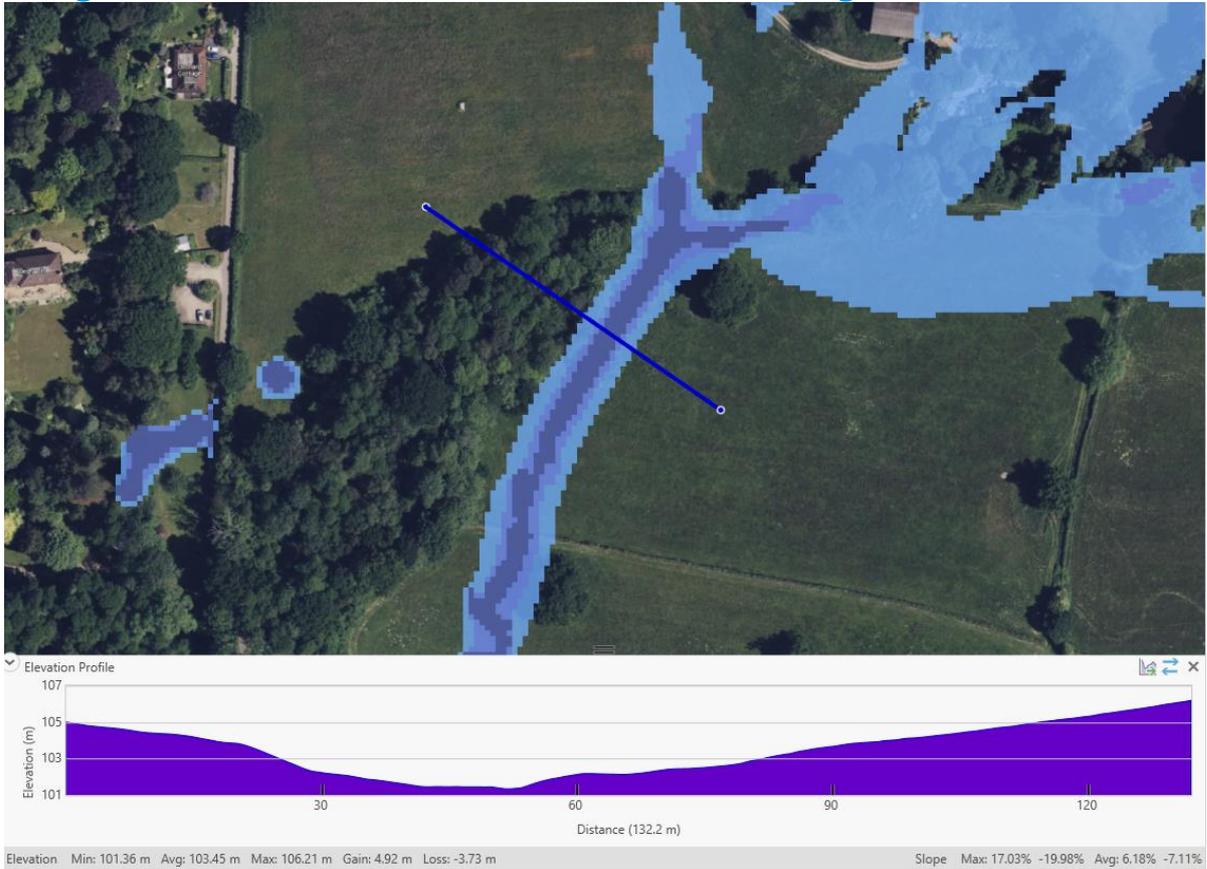


Figure AE.1: Fields 3 & 4 Long Section

The cross section profile presented in Figure AE.1 shows the topography of the dark blue line drawn in the above related image, as it moves across the land from approximately northwest to southeast.

The dark blue line measures approximately 132 m in length. At a chainage of 0 m, at its northwestern most point, the elevation stands at approximately 105 m AOD. At a chainage of approximately 52 m, where the existing east to west watercourse is located beneath the tree cover, the elevation stands at approximately 101 m AOD. At a chainage of approximately 81 m, where an area at a High risk of surface water flooding is located, the elevation stands at approximately 103 m AOD.

Hence, it is not possible for the area part way up the southeastern slope to be at a higher surface water flood risk than that to the northwest where the existing watercourse is located.

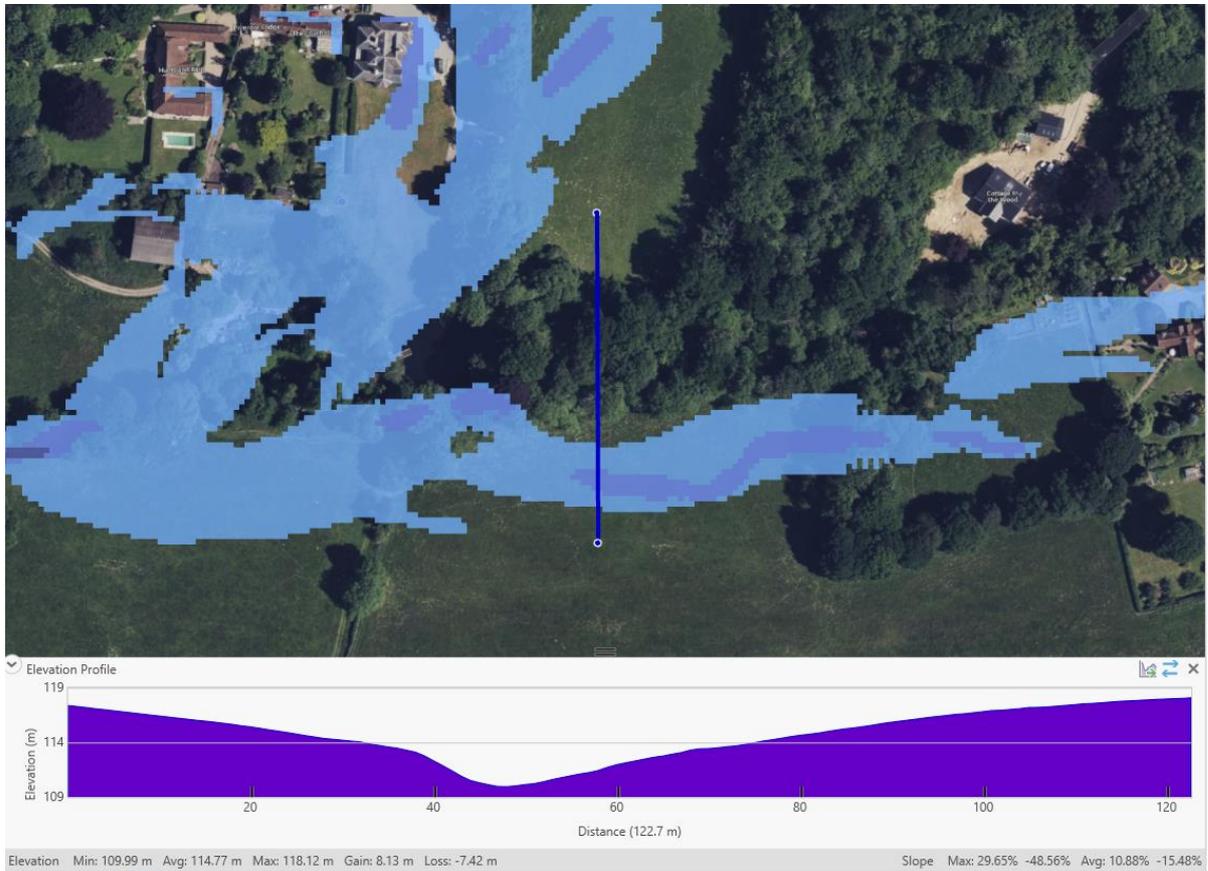


Figure AE.2: Fields 5 & 6 Long Section

The cross section profile presented in Figure AE.2 shows the topography of the dark blue line drawn in the above related image, as it moves across the land from approximately north to south.

The dark blue line measures approximately 123 m in length. At the northernmost point, at a chainage of 0 m, the elevation stands at approximately 117 m AOD. At a chainage of approximately 48 m, where the existing east to west watercourse is located beneath the tree cover, the elevation stands at approximately 110 m AOD. At a chainage of approximately 99 m, where an area at a Medium risk of surface water flooding is located, the elevation stands at approximately 117 m AOD.

Hence, it is not possible for the area part way up the southern slope to be at a higher surface water flood risk than that to the north where the existing watercourse is located.

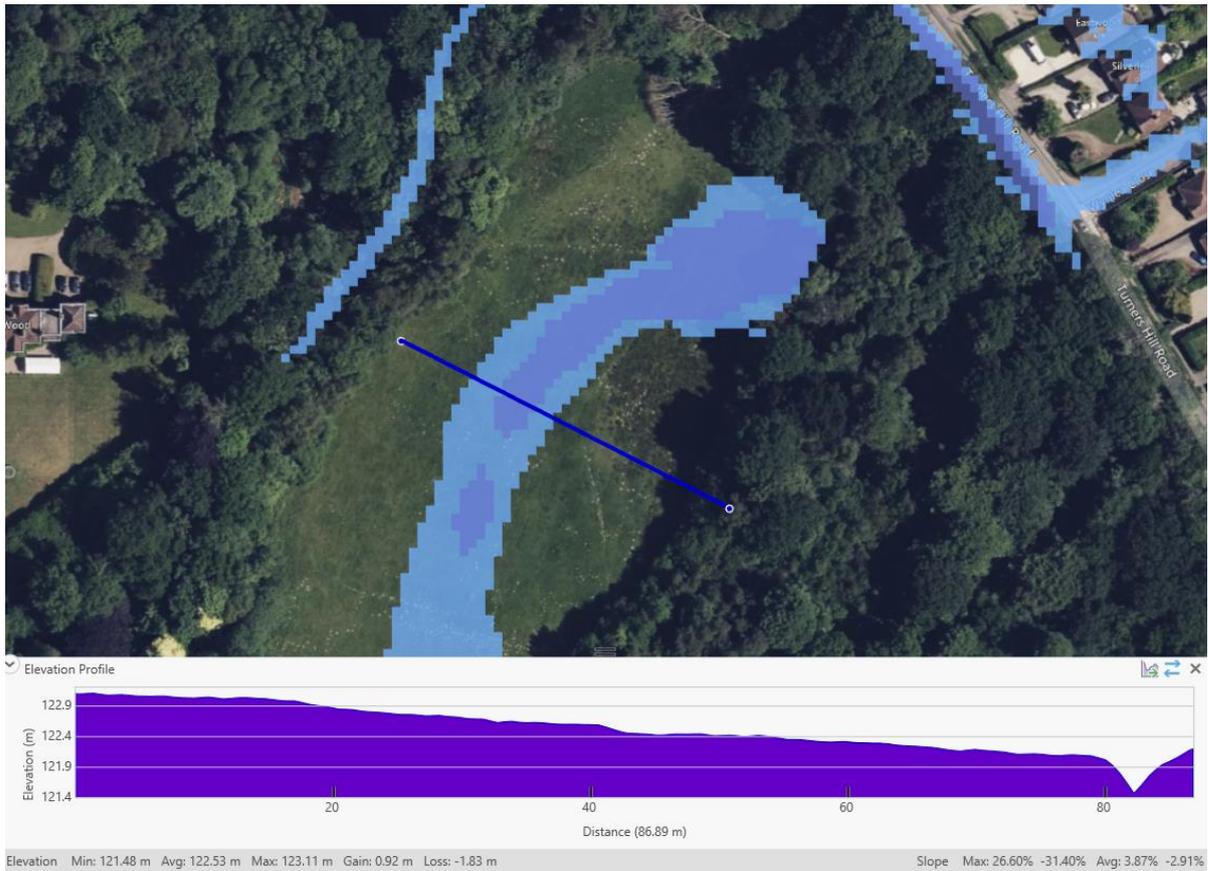


Figure AE.3: Field 5 Long Section

The cross section profile presented in Figure AE.3 shows the topography of the dark blue line drawn in the above related image, as it moves across the land from approximately northwest to southeast.

The dark blue line measures approximately 87 m in length. At the western edge of Field 5, at a chainage of 0 m, the elevation stands at approximately 123.1 m AOD. At a chainage of approximately 32 m, where an area at a Medium risk of surface water flooding is located, the elevation stands at approximately 122.7 m AOD. At the eastern edge of Field 5, at a chainage of approximately 75 m, the elevation stands at approximately 122.1 m AOD.

Hence, while the land is inclined to fall from north to south across Field 5, as indicated by the surface water flow path, the reality is that surface water would also fall toward the east where levels are lower, outside the area of proposed dwellings.

Furthermore, the ditch that is shown on the long section profile at an approximate chainage of 83 m is not identified as an area at risk from surface water flooding despite a base elevation of

approximately 121.5 m AOD, over 1 m lower than the area of Medium surface water flood risk located approximately 50 m to the northwest.

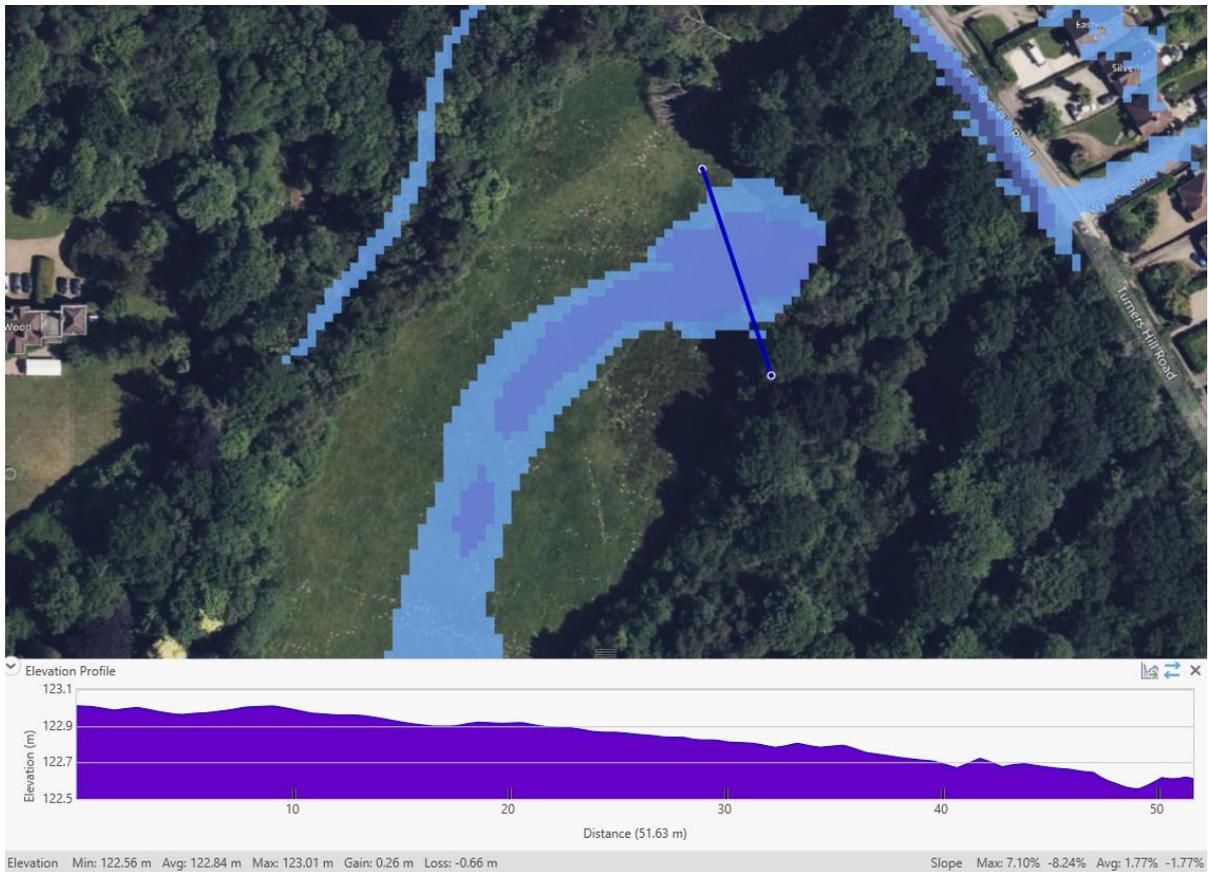


Figure AE.4: Field 5 Long Section 2

The cross section profile presented in Figure AE.4 shows the topography of the dark blue line drawn in the above related image, as it moves across the land from approximately north to south.

The dark blue line measures approximately 52 m in length. At the northernmost point, at a chainage of 0 m, the elevation stands at approximately 123 m AOD. At a chainage of approximately 25 m, where an area at a Medium risk of surface water flooding is located, the elevation stands at approximately 122.9 m AOD. At a chainage of approximately 49 m, where an existing ditch is located and no surface water flood risk is identified by the mapping, the elevation stands at approximately 122.6 m AOD.

Hence, it is not considered feasible for the area at a higher elevation to be at a higher surface water flood risk than the area of the existing ditch approximately 25 m to the south which is shown to be approximately 300 mm lower.

Furthermore, maintenance works have been undertaken in this area of the site to de-silt the existing ditch network where this was observed onsite to be full of silt. This will increase future capacity for surface water runoff from Turners Hill Road. A regular maintenance regime has been

recommended as part of the site wide surface water drainage strategy to ensure no silt build-up in the future.

Furthermore, as part of the surface water drainage strategy, a new network of swales and surface water attenuation areas have been proposed for Field 5 along the entire eastern corridor which will capture any overland runoff from the existing ditches in the event these were to overflow.

Furthermore, among mitigation measures recommended for the management of surface water, all Finished Floor Levels and threshold levels are proposed to be raised between 150 mm and 200 mm above surrounding ground levels.

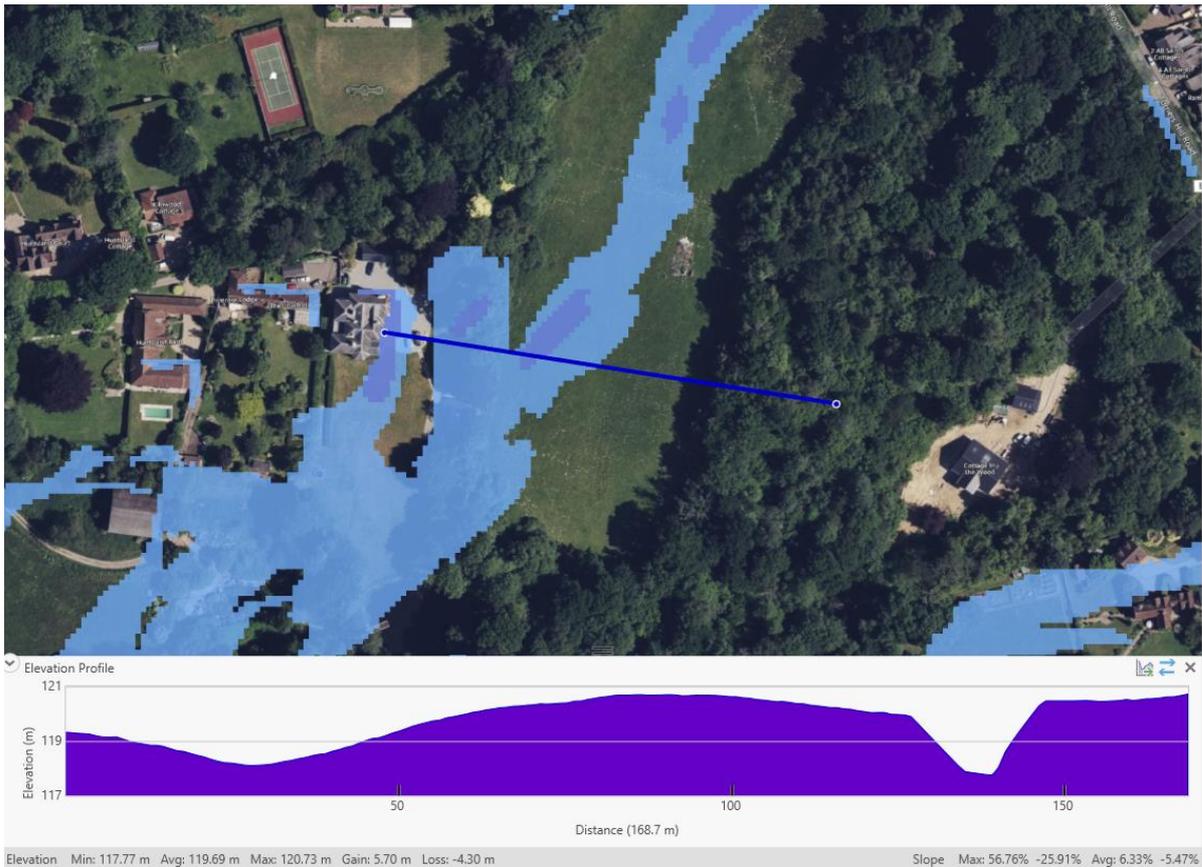


Figure AE.5: Field 5 Long Section 3

The cross section profile presented in Figure AE.5 shows the topography of the dark blue line drawn in the above related image, as it moves across the land from approximately west to east.

The dark blue line measures approximately 170 m in length. At a chainage of approximately 55 m, where an area at a Medium risk of surface water flooding is located, the elevation stands at approximately 119.7 m AOD. At a chainage of approximately 42 m, where an area at a Low risk of surface water flooding is located, the elevation stands at approximately 118.8 m AOD.

It is not considered realistic for the area at a higher elevation to be at a higher surface water flood risk. Furthermore, were surface water to follow the topography as indicated in Figures AE.3, AE.4, AE.6, and AE.7, any surface water that reached this part of Field 5 from the north and east would

naturally drain into the existing ditch network located to the east of Field 5. This is indicated on Figure AE.5 between approximate chainages 126 m and 148 m.

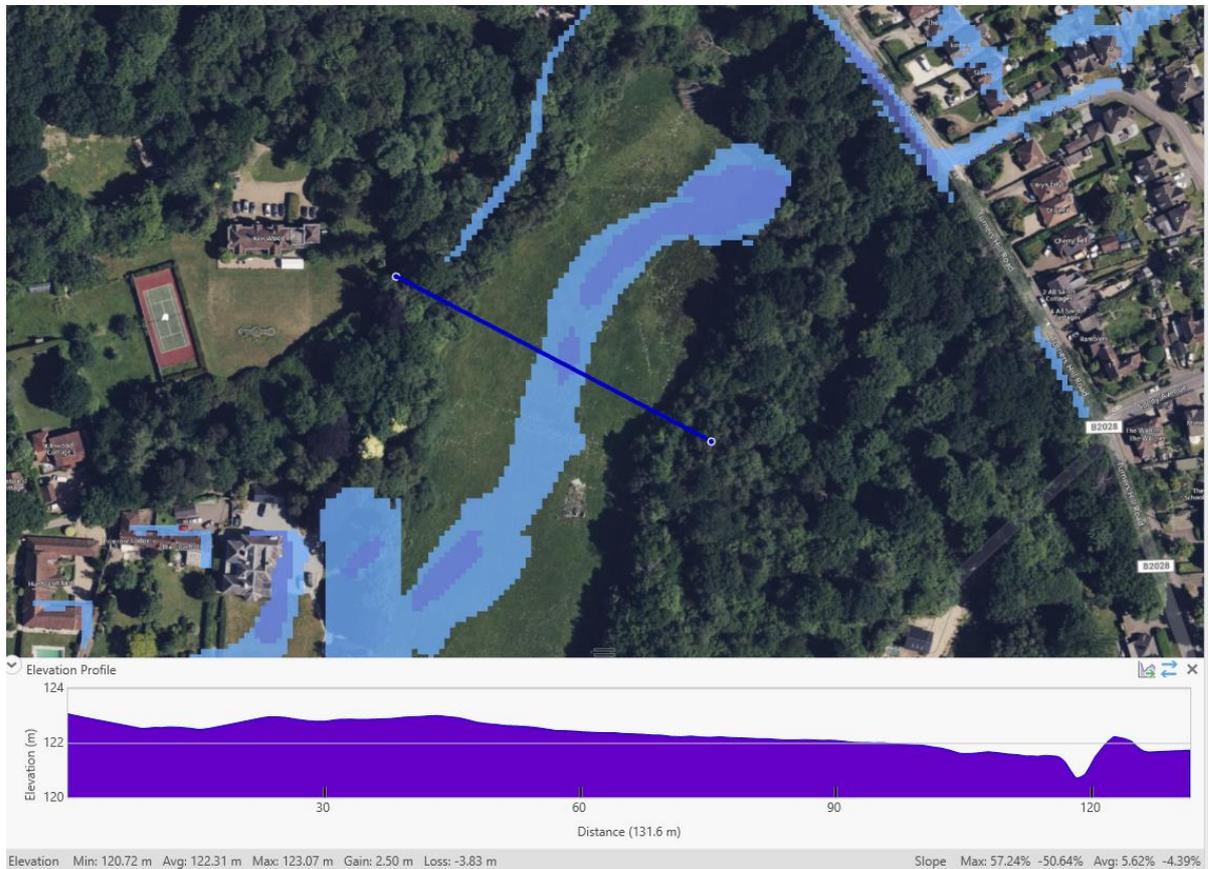


Figure AE.6: Field 5 Long Section 4

The cross section profile presented in Figure AE.6 shows the topography of the dark blue line drawn in the above related image, as it moves across the land from approximately northwest to southeast.

The dark blue line measures approximately 132 m in length. Toward the southeast end of the line, at a chainage of approximately 119 m, the elevation stands at approximately 120.7 m AOD. This is at the base of the existing ditch to the east of Field 5 toward which the topography is shown to fall. The area is not shown to be at risk. At a chainage of approximately 73 m, where the area at a Medium risk of surface water flooding is met, the elevation stands at approximately 122.3 m AOD.

It is not considered realistic for the area at a higher elevation to be at a higher surface water flood risk than that further southeast along the line.

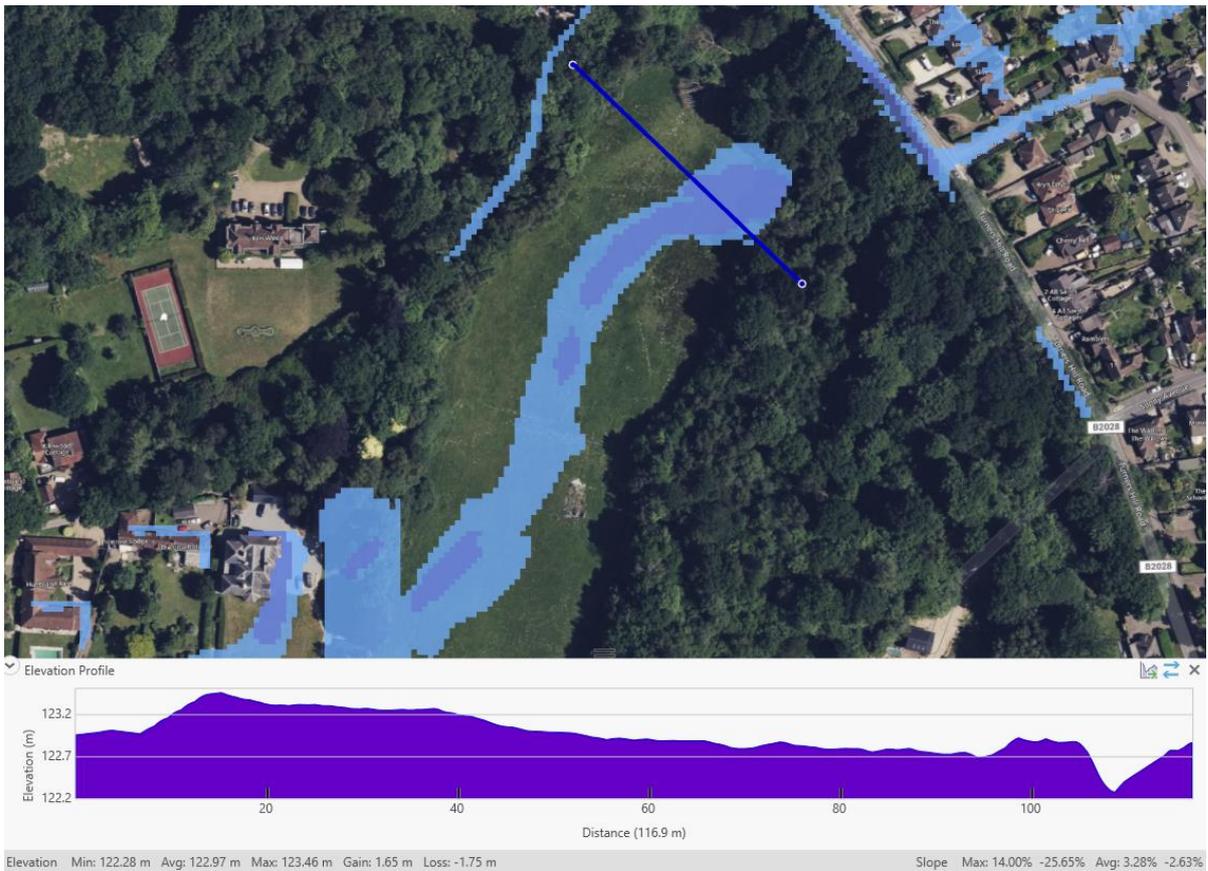


Figure AE.7: Field 5 Long Section 5

The cross section profile presented in Figure AE.7 shows the topography of the dark blue line drawn in the above related image, as it moves across the land from approximately northwest to southeast.

The dark blue line measures approximately 117 m in length. Toward the southeast end of the line, at a chainage of approximately 95 m, the elevation stands at approximately 122.7 m AOD. At a chainage of approximately 86 m, where the area at a Medium risk of surface water flooding is met, the elevation stands at approximately 122.8 m AOD.

It is not considered realistic for the area at a higher elevation to be at a higher surface water flood risk than that further southeast along the line. The existing ditch to the east of Field 5, indicated on Figure AE.7 at a chainage of approximately 109 m, stands at its base at an elevation of approximately 122.3 m AOD. This ditch is not shown to be at risk of surface water flooding despite its low level.

In addition to the above, maintenance and debris removal works have been undertaken in this area of the site to de-silt the existing ditch network as this was observed onsite to be silted up to a significant level. This will increase future capacity for surface water runoff from Turners Hill

Road. A regular maintenance regime has been recommended as part of the site wide surface water drainage strategy to ensure no silt build-up in the future.

Furthermore, as part of the surface water drainage strategy, a new network of swales and surface water attenuation areas have been proposed for Field 5 along the entire eastern corridor which will capture any overland runoff from the existing ditches in the event these were to overflow.

Furthermore, among mitigation measures recommended for the management of surface water, all Finished Floor Levels and threshold levels are proposed to be raised between 150 mm and 200 mm above surrounding ground levels.



Figure AE.9: Existing Watercourses Banks with 3m Buffers Indicated