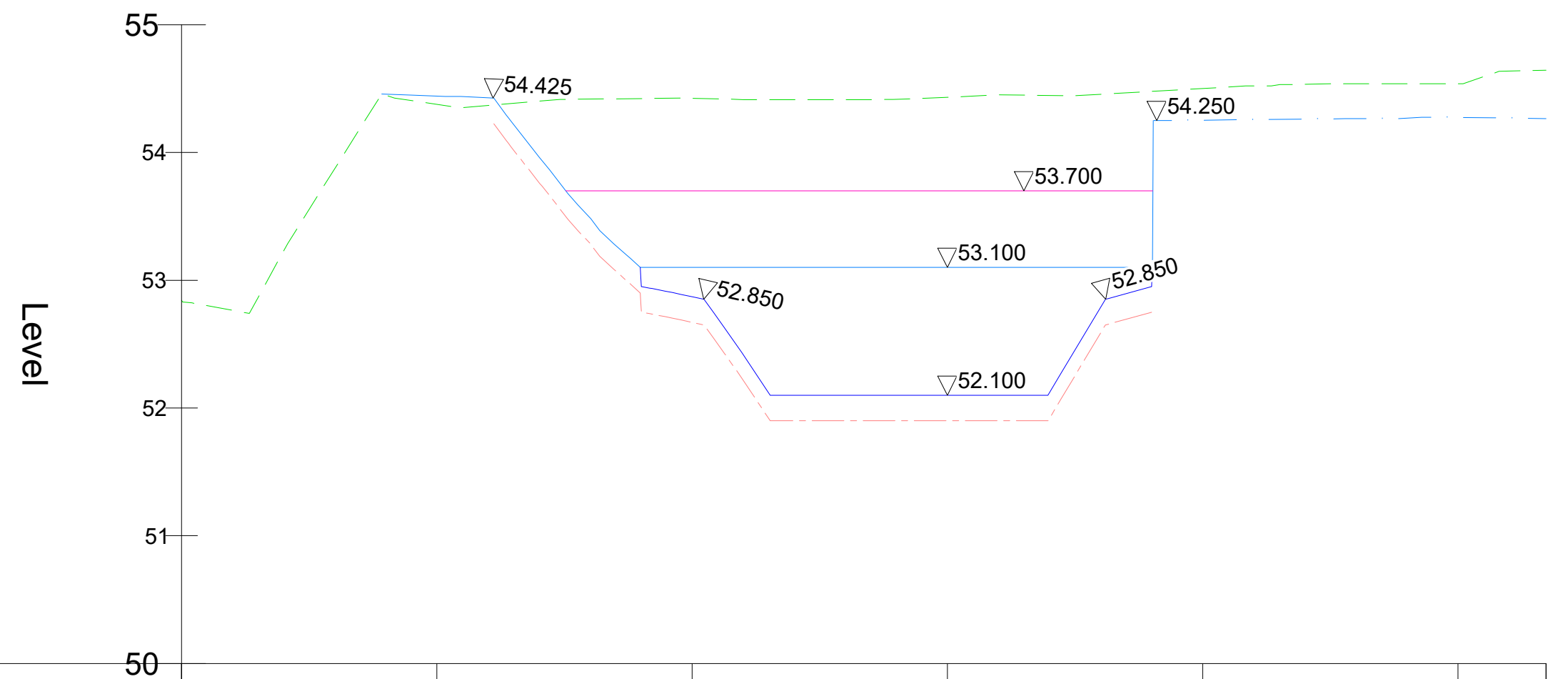
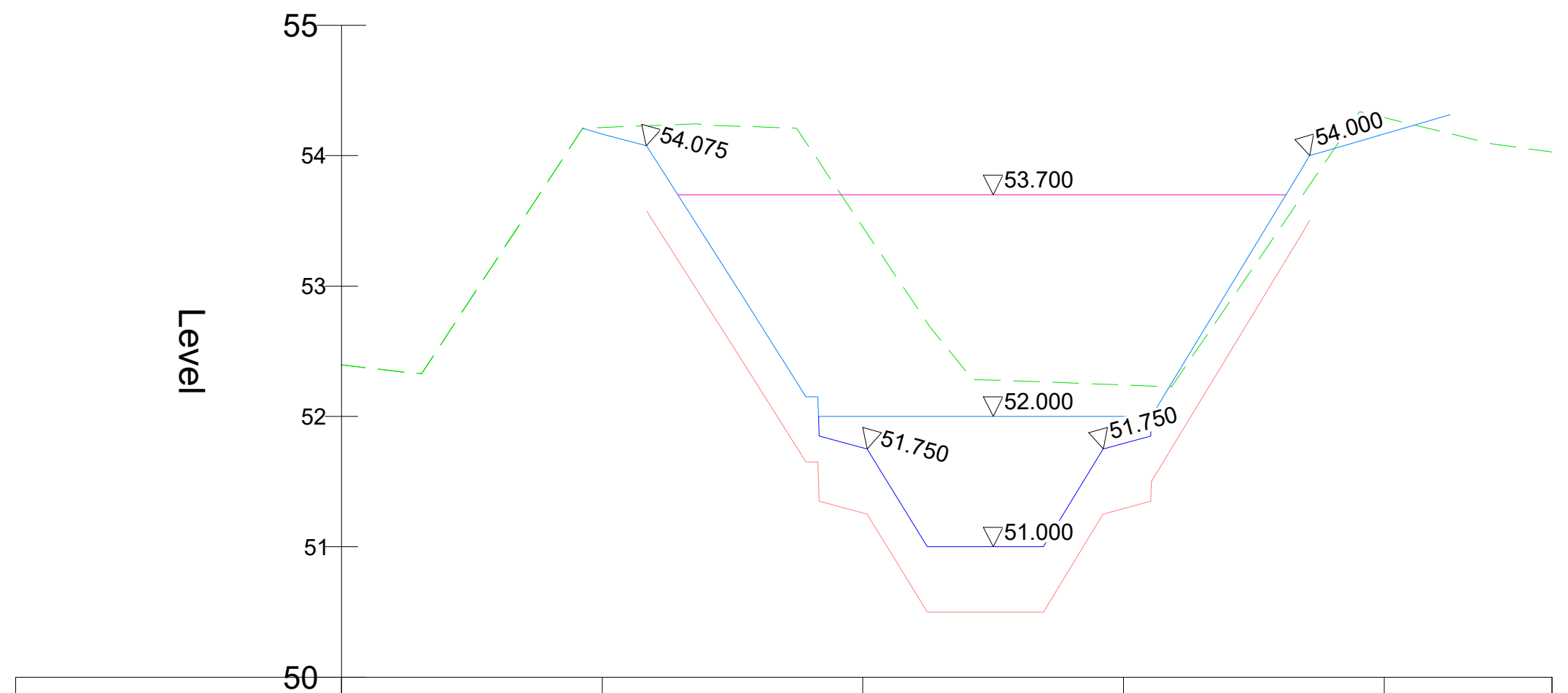
Filename: P:\PROJECTS\MUNICIPAL INFRASTRUCTURE - ARBORFIELD GARRISON SDL\DRAWINGS\CURRENT DRAWINGS\DISTRICT CENTRE DESIGN WORK\DISTRICT CENTRE SPINE ROAD SECTION 104\60312043-CIV-DC-3102 - DC CENTRAL POND - SECTIONS - SHEET 2.DWG Last saved by: RYAN.ABELL Last Plotted: 2024-09-13 Project Management Initials: Designer: ____ Checked: ____ Approved: ____ ISO A0 841mm x 1189mm



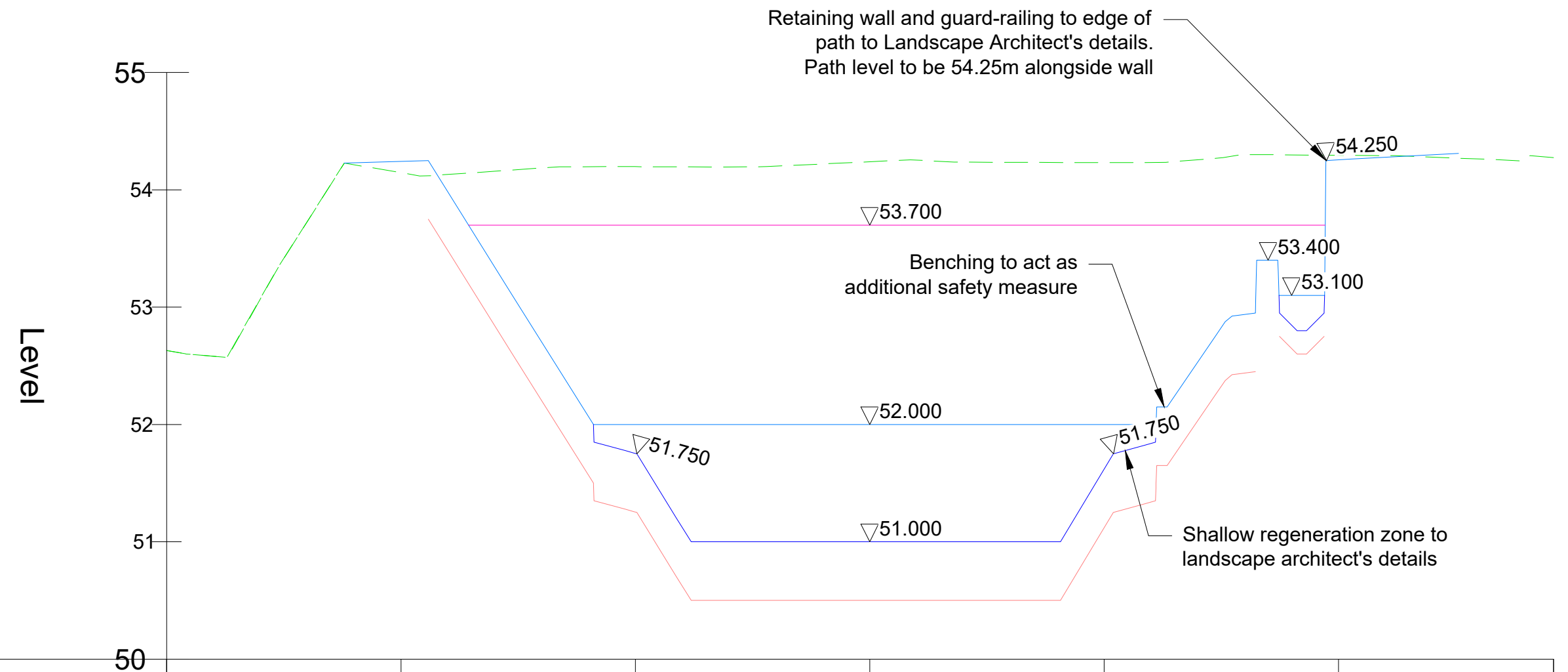
Chainage	0.000	10.000	20.000	30.000	40.000	50.000	53.457
Existing Levels	52.843	54.376	54.425	54.433	54.501	54.538	54.643
Proposed Surface Levels (During dry weather)		54.441	53.100	53.100	54.253	54.274	54.265
Proposed Base Levels			52.871	52.100			
Proposed Formation Levels (nominal 200mm upper, 500mm lower basin depth)			52.671	51.900			

DISTRICT CENTRE - ATTENUATION BASIN - SECTION 05 - LONGSECTION
SCALE: H 1:250,V 1:50. DATUM: 50.000



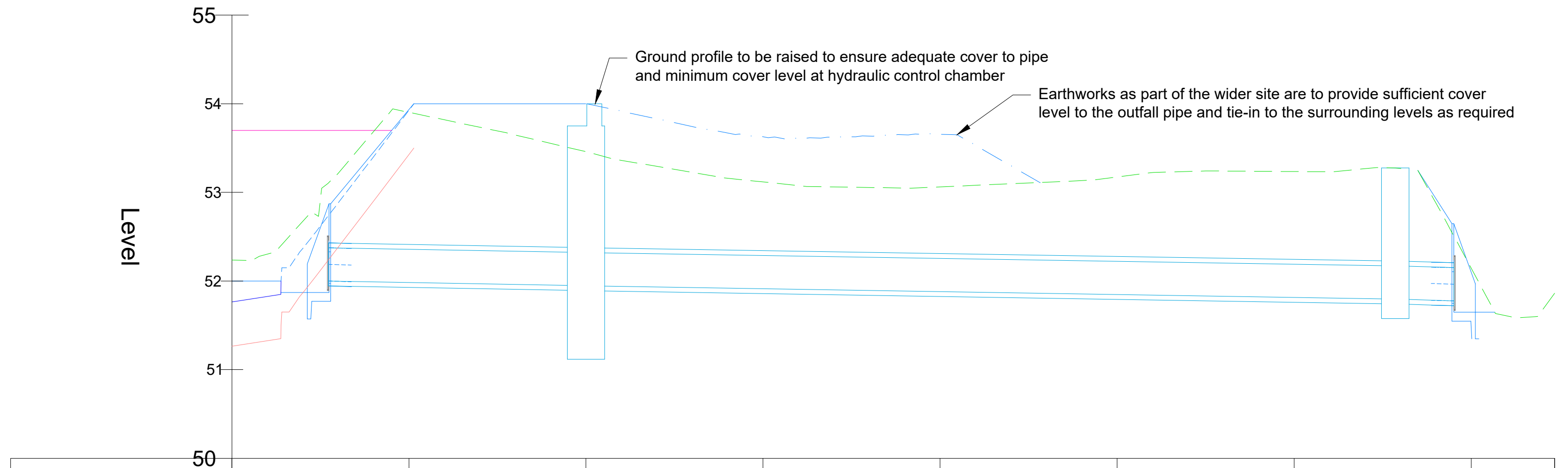
Chainage	0.000	10.000	20.000	30.000	40.000	46.433
Existing Levels	52.395	54.216	53.452	52.241	54.291	54.028
Proposed Base Levels			51.759	51.793		
Proposed Surface Levels (During dry weather)		54.166	52.000	52.000	54.166	
Proposed Formation Levels (nominal 200mm upper, 500mm lower basin depth)			51.259	51.293		

DISTRICT CENTRE - ATTENUATION BASIN - SECTION 07 - LONGSECTION
SCALE: H 1:250,V 1:50. DATUM: 50.000


55
54
53
52
51
50
Level
Retaining wall and guard-railing to edge of
path to Landscape Architect's details.
Path level to be 54.25m alongside wall
54.250
53.700
53.400
53.100
Benching to act as
additional safety measure
52.000
51.750
51.750
51.000
Shallow regeneration zone to
landscape architect's details

Chainage	0.000	10.000	20.000	30.000	40.000	50.000	59.182
Existing Levels	52.633	54.146	54.198	54.240	54.232	54.295	54.276
Proposed Surface Levels (During dry weather)		54.243	52.000	52.000	52.000	54.256	
Proposed Base Levels			51.754	51.000	51.618		
Proposed Formation Levels (nominal 200mm upper, 500mm lower basin depth)			51.254	50.500	51.118		

DISTRICT CENTRE - ATTENUATION BASIN - SECTION 06 - LONGSECTION
SCALE: H 1:250,V 1:50. DATUM: 50.000


55
54
53
52
51
50
Level
Ground profile to be raised to ensure adequate cover to pipe
and minimum cover level at hydraulic control chamber
Earthworks as part of the wider site are to provide sufficient cover
level to the outfall pipe and tie-in to the surrounding levels as required

Chainage	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	74.710
Existing Levels	52.236	53.903	53.459	53.118	53.062	53.174	53.235	52.143	51.863
Proposed Surface Levels (During dry weather)	52.000	53.926	54.000	53.628	53.656				
Proposed Base Levels	51.764								
Proposed Formation Levels (nominal 200mm upper, 500mm lower basin depth)	51.264	53.426							
SW Cover and Invert		US IL 52.000 DS IL 51.946	54.000		US IL 51.946 DS IL 51.796			53.277 US IL 51.796 DS IL 51.776	
SW Pipe Details		S1.016 L= 14.55m @ 1:269.4 375mmØ			S1.017 L= 45.71m @ 1:304.7 375mmØ			S1.018 L= 3.30m @ 1:164.8 375mmØ	

DISTRICT CENTRE - ATTENUATION BASIN - SECTION 08 - LONGSECTION - OUTFALL ROUTE TO WATERCOURSE
SCALE: H 1:250,V 1:50. DATUM: 50.000

Upstream IL's and downstream IL's are indicated in the order of section chainages, and are in the order of fall within the drainage network.

(1:250 H) 0 2.5 5 7.5 10 15 20 25m
(1:50 V) 0 0.5 1 1.5 2 3 4 5

Scale: 1:250H 1:50V @ A0

AECOM

PROJECT

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KEY - SECTIONS

— — —	Existing Ground Level
——	Proposed Finished Surface Profile, Including Permanent Water Level
— · —	Indicative Proposed Finished Level Profile of Parcel
——	Proposed Base Earthwork Profile of Permanent Water
——	Peak Design Water Level (1:100yr + 40% CC storm)
— · —	Proposed Formation Level Profile to be Overlain with Butyl Liner and Topsoil, to Landscape Architect's Detail. Nominal 200mm
——	Proposed Formation Level Profile to be Overlain with Puddle Clay Liner and Topsoil, to Landscape Architect's Detail. Nominal 500mm
═	Proposed Surface Water Drainage - S104

NOTES

1. This drawing is not to be scaled.
2. All errors and omissions are to be reported to the engineer for clarification.
3. All works must comply with current health and safety standards
4. The Contractor is to undertake all necessary investigative works to confirm the status, size, position, depths of the existing drainage network prior to the commencement of the works. The Engineer is to be notified of any omissions or variations.
5. Location of existing services and utilities to be confirmed prior to construction works commencing.
6. All levels are shown in m AOD
7. Drainage design subject to S104 approval.
8. Highway design subject to S38 approval.
9. Pond design subject to approval under a S104 adoption process to be undertaken by the relevant authority.
10. All main drainage works are to be in accordance with Design Construction Guidance, the Water Industries Act , Section 104 and to the approval of Thames Water Ltd
11. All proposed lengths of carrier drain are to be CCTV surveyed upon completion of the scheme.
12. All manhole covers to be minimum grade ductile iron Group 4 Class D400, non rocking type unless noted otherwise.
13. Pond landscaping to be in accordance with Landscape Architect's drawings 1501-GI-101 & 1501-GI-102.
14. Base profile of permanent water depth to Landscape Architect's requirements. Maximum 1.0m depth, with 1.8m nominal width shallow regeneration zone to perimeter of main basins.
15. Pond puddle clay liner construction to be in accordance with AECOM S104 standard details drawing 60312043/CIV/DC/3031. Butyl liner to be as specified by Landscape Architect, with installation to be in accordance with manufacturer's guidance and specification.
16. Allowances have been made within the earthwork volume as follows:
    - No topsoil strip due to stockpiling of material
    - For the upper basin (butyl lining)
        - 200mm allowance for topsoil to support landscaping of basin
    - For the lower basin (puddle clay lining)
        - 350mm allowance for the provision of the puddle clay liner
        - 150mm allowance for topsoil to support landscaping of basin
17. Butyl liner to form an impermeable seal at all interfaces with the gabion baskets (or similar as agreed). To be laid to the Landscape Architect's details and manufacturer's specification.
18. Coir roll matting to be installed along the entire perimeter of permanent water, with exceptions for headwalls, as detailed by the Landscape Architect.
19. Retaining wall and guard-railing to be provided along the southern edge of the pond, as detailed by the Landscape Architect.

ISSUE/REVISION

Rev	Date	Detail	Made	Chk'd	App'd
P01	12.09.24	First Issue	RA	DM	CLP

PROJECT NUMBER

60312043

SHEET TITLE

District Centre
S104 Attenuation Basins - Central
Longsections - Sheet 2

SHEET NUMBER

60312043/CIV/DC/3102

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