

APPENDIX A

CUT AND FILL EARTHWORKS ANALYSIS DRAWINGS



WESTERN PLAYING FIELD

OVERVIEW: (OVERALL)

A POST DEMOLITION / SITE STRIP SURVEY IS REQUIRED TO VERIFY THE FIGURES BELOW AND ENSURE GREATER ACCURACY OF ANY FURTHER EARTHWORKS MODELLING.

OVERALL CUT = 27562.734m³ *

OVERALL FILL = 32,872.251m³

OVERALL NET FROM ANALYSIS = **5,309.516³ FILL ***

(SUBJECT TO CONFIRMATION ON TIMELINE OF WORKS & SUITABILITY OF MATERIAL, REMEDIATION WORKS ETC)

*BULKING FACTORS ARE TO BE APPLIED TO THESE FIGURES.
(BULKING FACTORS TO BE PROVIDED BY OTHERS).

ASSUMED FORMATION DEPTHS	
ASPHALT FOOTPATH	220mm
BLOCK PAVING FOOTPATH	645mm
ASPHALT ROAD (ACCESS & PARKING)	650mm
ASPHALT ROAD (BUS PARKING)	700mm
BODPAVE	220mm
BUILDING	VARIES
CONCRETE SLAB	450mm
MUGA POROUS ASPHALT	725mm
POROUS PAVING - ACCESS	880mm
POROUS PAVING - PARKING	730mm
SOFT LANDSCAPING	300mm
SPORTS FIELD	VARIES
SuDS FEATURES	VARIES

NOTE
CONTRACTOR SHALL MAKE ADDITIONAL ALLOWANCE FOR BULKING AND ARISINGS FROM DRAINAGE & SERVICES WORKS AND RETAINING WALL CONSTRUCTION.

NOTE
A POST DEMOLITION / TOPSOIL STRIP SURVEY AND ASSOCIATED VOLUMETRIC RESULTS ARE REQUIRED FOR ACCURATE EARTHWORKS MODELLING AND CUT & FILL ANALYSIS RESULTS.

SURFACE LEVEL DATA			
NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	COLOUR
1	-0.00	-0.50	
2	-0.50	-0.00	
3	-0.00	-0.50	
4	-0.50	-0.00	
5	-0.00	-0.50	
6	-0.50	-0.00	
7	-0.00	-0.50	
8	-0.50	-0.00	
9	-0.00	-0.50	
10	-0.50	-0.00	
11	-0.00	-0.50	
12	-0.50	0.00	
13	0.00	0.50	
14	0.50	1.00	
15	1.00	1.50	
16	1.50	2.00	
17	2.00	2.50	
18	2.50	3.00	
19	3.00	3.50	
20	3.50	4.00	
21	4.00	4.50	
22	4.50	5.00	
23	5.00	5.50	
24	5.50	6.00	
25	6.00	6.50	

SCHOOL SITE (NORTH)

NOTE
POTENTIAL FOR ARISING TO BE CONTAMINATED MATERIAL.
RISK ALLOWANCE TO BE MADE.

Cut/Fill Summary for Individual Parcels

Western Playing Field

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	18258.031sq.m	314.690 Cu. M.	19077.975 Cu. M.	18763.285 Cu. M.<Fill>
Totals			18258.031sq.m	314.690 Cu. M.	19077.975 Cu. M.	18763.285 Cu. M.<Fill>

North School Site

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	22193.286sq.m	21630.393 Cu. M.	4572.461 Cu. M.	17057.931 Cu. M.<Cut>
Totals			22193.286sq.m	21630.393 Cu. M.	4572.461 Cu. M.	17057.931 Cu. M.<Cut>

South School Site

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	22095.233sq.m	5967.830 Cu. M.	9220.585 Cu. M.	3252.756 Cu. M.<Fill>
Totals			22095.233sq.m	5967.830 Cu. M.	9220.585 Cu. M.	3252.756 Cu. M.<Fill>

THIS DRAWING IS COPYRIGHT © CAMBRIA CONSULTING LTD.

DO NOT SCALE FROM THIS DRAWING.

CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM. DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO CAMBRIA CONSULTING LIMITED BEFORE PROCEEDING.

THE CONTRACTOR IS TO REFER TO THE SPECIFICATION, FULL SCHEDULE OF RESIDUAL RISKS IN THE CONTRACT DOCUMENTATION AND ALSO TO INFORMATION FROM OTHER DESIGNERS. IN PARTICULAR THE M&E CONSULTANT REGARDING EXISTING LIVE SERVICES.

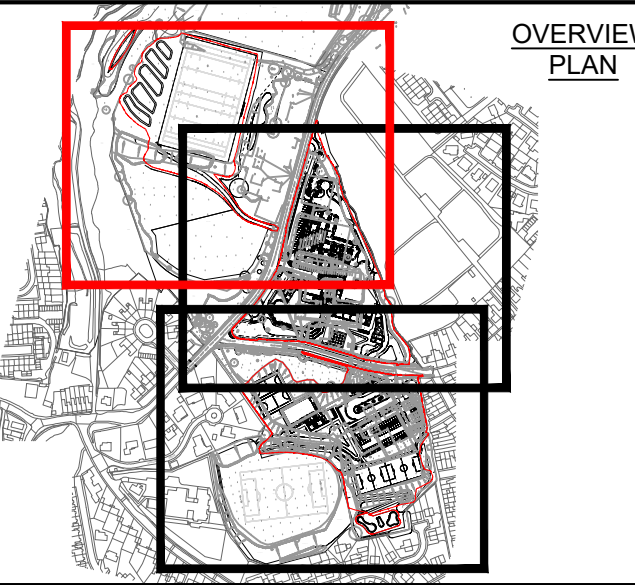
 THIS SYMBOL IS USED TO HIGHLIGHT INSTANCES OF RISK WITHIN THE CONSTRUCTION PROCESS. ALWAYS CHECK FOR LATER REVISIONS OF THIS DRAWING.

NOTES:

- EXISTING TOPSOIL STRIP IS ASSUMED AS 250mm IN THE CUT & FILL ANALYSIS THEREFORE APPROXIMATELY 10,822.871m³ OF EXISTING TOPSOIL MATERIAL IS ASSUMED TO BE REMOVED FROM SITE OR RE-USED WHERE POSSIBLE.
- CUT & FILL ANALYSIS OF THE ORIGINAL TOPO SURVEY (-TOPSOIL STRIP) VS PROPOSED FORMATION LEVEL PRODUCED A NET FILL FIGURE OF 5,309.516m³.
- NO ALLOWANCE HAS BEEN MADE FOR DRAINAGE ARISING AND RETAINING WALL FOUNDATIONS.
- ALL CUT & FILL ANALYSIS FIGURES ARE APPROXIMATE ONLY AND SHOULD NOT BE TAKEN AS EXACT MEASUREMENTS.

KEY:

 ANALYSIS BOUNDARY



P05	REVISED TO SUIT AMENDED SITE AND DRAINAGE LAYOUTS.	PY	BW	BW
			21/07/23	
P04	REVISED TO SUIT AMENDED SITE AND DRAINAGE LAYOUTS.	PY	BW	BW
			30/06/23	
P03	REVISED TO SUIT AMENDED LAYOUT.	PY	BW	BW
			09/05/23	
P02	INDIVIDUAL PARCEL VOLUME SUMMARY ADDED.	PY	BW	BW
			27/02/23	
P01	ISSUED FOR INFORMATION.	PY	BW	BW
			24/02/23	
Rev.	Description	By	Chk	App

Client:



Project:

BLESSED CARLO ACUTIS
CATHOLIC SCHOOL

Drawing Title:

CUT & FILL EARTHWORKS
ANALYSIS (SHEET 1 OF 3)

Drawing No:

BCA CAM VX XX DR C 0620

Project Originator Vol. Level Type Role Number

Status: S4 STAGE APPROVAL Scale @A1: 1:500 Rev: P05

CAMBRIA
Constructive Thinking

Civil & Structural Engineers
Cambria House
16 Plas St. Pol de Leon
Penarth Marina
Cardiff, CF64 1TR
T 029 2009 3333
E admin@cambria.co.uk
W www.cambria.co.uk
@cambriauk
uk.linkedin.com/in/cambriauk



SURFACE LEVEL DATA			
NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	CLOUR
1	-6.00	-5.50	27,562.734m³
2	-5.50	-5.00	
3	-5.00	-4.50	
4	-4.50	-4.00	32,872.251m³
5	-4.00	-3.50	
6	-3.50	-3.00	
7	-3.00	-2.50	NET FILL 5,309.516m³
8	-2.50	-2.00	
9	-2.00	-1.50	
10	-1.50	-1.00	
11	-1.00	-0.50	
12	-0.50	0.00	
13	0.00	0.50	
14	0.50	1.00	
15	1.00	1.50	
16	1.50	2.00	
17	2.00	2.50	
18	2.50	3.00	
19	3.00	3.50	
20	3.50	4.00	
21	4.00	4.50	
22	4.50	5.00	
23	5.00	5.50	
24	5.50	6.00	
25	6.00	6.50	

OVERVIEW: (OVERALL)

A POST DEMOLITION / SITE STRIP SURVEY IS REQUIRED TO VERIFY THE FIGURES BELOW AND ENSURE GREATER ACCURACY OF ANY FURTHER EARTHWORKS MODELLING.

OVERALL CUT = 27562.734m³ *

OVERALL FILL = 32,872.251m³

OVERALL NET FROM ANALYSIS IS = 5,309.516³ FILL *

(SUBJECT TO CONFIRMATION ON TIMELINE OF WORKS & SUITABILITY OF MATERIAL, REMEDIATION WORKS ETC)

*BULKING FACTORS ARE TO BE APPLIED TO THESE FIGURES.
(BULKING FACTORS TO BE PROVIDED BY OTHERS).

ASSUMED FORMATION DEPTHS	
ASPHALT FOOTPATH	220mm
BLOCK PAVING FOOTPATH	645mm
ASPHALT ROAD (ACCESS & PARKING)	650mm
ASPHALT ROAD (BUS PARKING)	700mm
BODPAVE	220mm
BUILDING	VARIES
CONCRETE SLAB	450mm
MUGA POROUS ASPHALT	725mm
POROUS PAVING - ACCESS	880mm
POROUS PAVING - PARKING	730mm
SOFT LANDSCAPING	300mm
SPORTS FIELD	VARIES
SuDS FEATURES	VARIES

NOTE
CONTRACTOR SHALL MAKE ADDITIONAL ALLOWANCE FOR BULKING AND ARISING FROM DRAINAGE & SERVICES WORKS AND RETAINING WALL CONSTRUCTION.

NOTE
A POST DEMOLITION / TOPSOIL STRIP SURVEY AND ASSOCIATED VOLUMETRIC RESULTS ARE REQUIRED FOR ACCURATE EARTHWORKS MODELLING AND CUT & FILL ANALYSIS RESULTS.

Cut/Fill Summary for Individual Parcels

Western Playing Field

Cut/Fill Summary						
Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	18258.031sq.m	314.690 Cu. M.	19077.975 Cu. M.	18763.285 Cu. M.<Fill>
Totals			18258.031sq.m	314.690 Cu. M.	19077.975 Cu. M.	18763.285 Cu. M.<Fill>

North School Site

Cut/Fill Summary						
Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	22193.286sq.m	21630.393 Cu. M.	4572.461 Cu. M.	17057.931 Cu. M.<Cut>
Totals			22193.286sq.m	21630.393 Cu. M.	4572.461 Cu. M.	17057.931 Cu. M.<Cut>

South School Site

Cut/Fill Summary						
Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	22095.233sq.m	5967.830 Cu. M.	9220.585 Cu. M.	3252.756 Cu. M.<Fill>
Totals			22095.233sq.m	5967.830 Cu. M.	9220.585 Cu. M.	3252.756 Cu. M.<Fill>

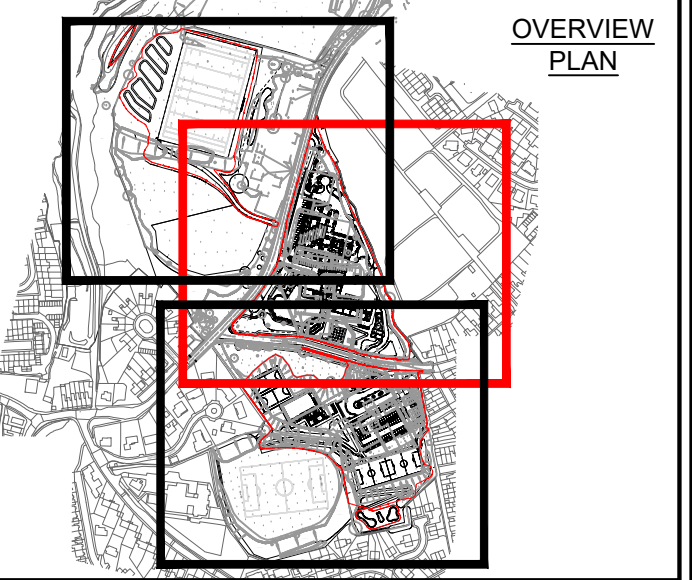
THIS DRAWING IS COPYRIGHT © CAMBRIA CONSULTING LTD.
DO NOT SCALE FROM THIS DRAWING.
CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM. DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO CAMBRIA CONSULTING LIMITED BEFORE PROCEEDING.
THE CONTRACTOR IS TO REFER TO THE SPECIFICATION, FULL SCHEDULE OF RESIDUAL RISKS IN THE CONTRACT DOCUMENTATION AND ALSO TO INFORMATION FROM OTHER DESIGNERS, IN PARTICULAR THE M&E CONSULTANT REGARDING EXISTING LIVE SERVICES.
! THIS SYMBOL IS USED TO HIGHLIGHT INSTANCES OF RISK WITHIN THE CONSTRUCTION PROCESS. ALWAYS CHECK FOR LATER REVISIONS OF THIS DRAWING.

NOTES:

- EXISTING TOPSOIL STRIP IS ASSUMED AS 250mm IN THE CUT & FILL ANALYSIS THEREFORE APPROXIMATELY 10,822.871m³ OF EXISTING TOPSOIL MATERIAL IS ASSUMED TO BE REMOVED FROM SITE OR RE-USED WHERE POSSIBLE.
- CUT & FILL ANALYSIS OF THE ORIGINAL TOPO SURVEY (-TOPSOIL STRIP) VS PROPOSED FORMATION LEVEL PRODUCED A NET FILL FIGURE OF 5,309.516m³.
- NO ALLOWANCE HAS BEEN MADE FOR DRAINAGE ARISING AND RETAINING WALL FOUNDATIONS.
- ALL CUT & FILL ANALYSIS FIGURES ARE APPROXIMATE ONLY AND SHOULD NOT BE TAKEN AS EXACT MEASUREMENTS.

KEY:

ANALYSIS BOUNDARY



P05	REVISED TO SUIT AMENDED SITE AND DRAINAGE LAYOUTS.	PY	BW	BW
				21/07/23
P04	REVISED TO SUIT AMENDED SITE AND DRAINAGE LAYOUTS.	PY	BW	BW
				30/06/23
P03	REVISED TO SUIT AMENDED LAYOUT.	PY	BW	BW
				09/05/23
P02	INDIVIDUAL PARCEL VOLUME SUMMARY ADDED.	PY	BW	BW
				27/02/23
P01	ISSUED FOR INFORMATION.	PY	BW	BW
				24/02/23
Rev.	Description	By	Chk	App

Client:



Project:

BLESSED CARLO ACUTIS CATHOLIC SCHOOL

Drawing Title:

CUT & FILL EARTHWORKS ANALYSIS (SHEET 2 OF 3)

Drawing No:

BCA CAM VX XX DR C 0621

Project Originator Vol. Level Type Role Number

Status: S4 STAGE APPROVAL Scale @A1: 1:500 Rev: P05

CAMBRIA
Constructive Thinking

Civil & Structural Engineers
Cambria House
16 Plas St. Pol de Leon
Penarth Marina
Cardiff, CF64 1TR
T 029 2009 3333
E admin@cambria.co.uk
W www.cambria.co.uk
@cambriauk
uk.linkedin.com/in/cambriauk