

18077-01-001

Proposed Residential Development at Athgarvan, Co. Kildare

ROAD SAFETY AUDIT STAGE 1

July 2018



7, Ormonde Road
Kilkenny.
R95 N4FE

Tel: 056 7795800
info@roadplan.ie

1. INTRODUCTION

- 1.1 This report describes a Stage 1 Road Safety Audit carried out at Athgarvan, Co. Kildare on behalf of Waterman Moylan Consulting. The audit was carried out on 11th July 2018 in the offices of Roadplan Consulting, Kilkenny.
- 1.2 The audit team members were as follows:-

George Frisby, BE CEng MIEI;

Harry Cullen, BE CEng MIEI
- 1.3 Both audit team members visited the site. The audit comprised an examination of the drawings relating to the scheme supplied by Waterman Moylan and an examination of the site.
- 1.4 This Stage 1 Audit has been carried out in accordance with the relevant sections of TII GE-STY-01024. The team has examined only those issues within the design relating to the road safety implications of the road access to the scheme, and has therefore not examined or verified the compliance of the design to any other criteria.
- 1.5 All of the problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise accident occurrence.
- 1.6 Appendix A describes the audited drawings.

2. STAGE 1 AUDIT

2.1 Problem

The sight distance at the entrance to the proposed housing scheme is constrained by an existing neighbouring boundary wall on the eastern side of the development.



From an examination of the drawings provided, the following issues were identified:

- An ‘x’ distance of 2.0m may be tight at this location, particularly in light of proposing to move the existing southern road edge north of its current location in order to achieve visibility to the right.
- The taper from the existing to new road edge occurs through the junction mouth and as a result the proposed kerbline on the west side of the access may protrude out into the mainline carriageway.
- The taper lengths are short which results in an abrupt change in direction of the kerbline. This may lead to vehicles colliding with the kerbline.

Westbound drivers approaching the new junction may be following the existing road edge and may either collide with the new kerbline on the west side of the junction or a vehicle exiting the junction which is protruding onto the mainline in order to achieve adequate visibility of approaching vehicles.

Recommendation

A longer taper should be provided in advance of the junction, and a set-back of 2.4m for visibility splays should be provided at the access.

2.2 Problem

There is no footpath on the southern side of the public road. There is, however, a footpath on the northern side of the public road, which extends in both the easterly (towards the village) and westerly (towards the school) directions.



Pedestrians from this development would need to cross to road, at both the easterly and westerly end of the development, and the lack of adequate pedestrian crossing facilities could lead to an increase in pedestrian collisions at these locations

Recommendation

Pedestrian crossing facilities should be provided at each end of the development.

2.3 Problem

The parking bays, shown below, for the houses fronting onto the main road, are shown on the opposite side of the road from the houses. This means that people exiting their vehicles will have to cross an increasingly busy road in order to access their houses. There is also an increased risk to children exiting the vehicles, as there is just a small grass verge between them and the public road.

**Recommendation**

Relocate the parking bays to the south side to the access road to remove the need for crossing the access road.

2.4 Problem

From an examination of the drawings provided it appears that the footpath on the northern side of the road, near the western end of the site, may well be reduced in width as part of these works. As can be seen from the photo below, this footpath is already quite narrow and any reduction in width could mean that pedestrians would have to step onto the road, leading to an increased likelihood of collisions.

**Recommendation**

The width of the existing footpath should be maintained.

2.5 Problem

There is public lighting, extending from the eastern side of the site, finishes just where the road narrows and goes into a series of bends, near the northern end of the site. If this public lighting is not extended as part of a new scheme it could lead to increased likelihood of collisions in the hours of darkness.



Recommendation

Extend the public lighting to the western end of the site, as part of the development.

3. AUDIT TEAM STATEMENT

- 3.1 We certify that we have examined the drawing listed in Appendix A and have inspected the site. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified to improve the safety of the scheme.

Signed  George Frisby

Date 11th July 2018.....

Signed  Harry Cullen

Date 11th July 2018.....

APPENDIX A

List of Drawings Examined:

Drawing numbered P001 and entitled 'Site Location Plan' provided electronically in PDF format by Waterman Moylan

Drawing numbered P002 and entitled 'Proposed Road Layout Levels and Water Supply Layout' provided electronically in PDF format by Waterman Moylan

Drawing numbered P004 and entitled 'Autotrack Swept Path Analysis' provided electronically in PDF format by Waterman Moylan

Drawing numbered P005 and entitled 'Proposed Entrance Sightlines' provided electronically in PDF format by Waterman Moylan

Drawing numbered 1646-PP-0100 and entitled 'Proposed Site Plan' provided electronically in PDF format by Waterman Moylan from Deaton Lysaght Architects

Drawing numbered P002 Rev B and entitled 'Proposed Road Layout Levels and Water Supply Layout' provided electronically in PDF format by Waterman Moylan

Drawing numbered P005 Rev B and entitled 'Proposed Entrance Sightlines' provided electronically in PDF format by Waterman Moylan



NOTES:
 1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

TOPOGRAPHICAL LAYOUT COLOURED
GREEN FOR CLARITY

10 April 2018
-- DRAFT --
Graham Byrne

COMHAIRLE CONAE CHILL DARA
KILDARE COUNTY COUNCIL

Devoy Park, Nass, Co. Kildare

Phone (045) 980200 Fax (045) 980240

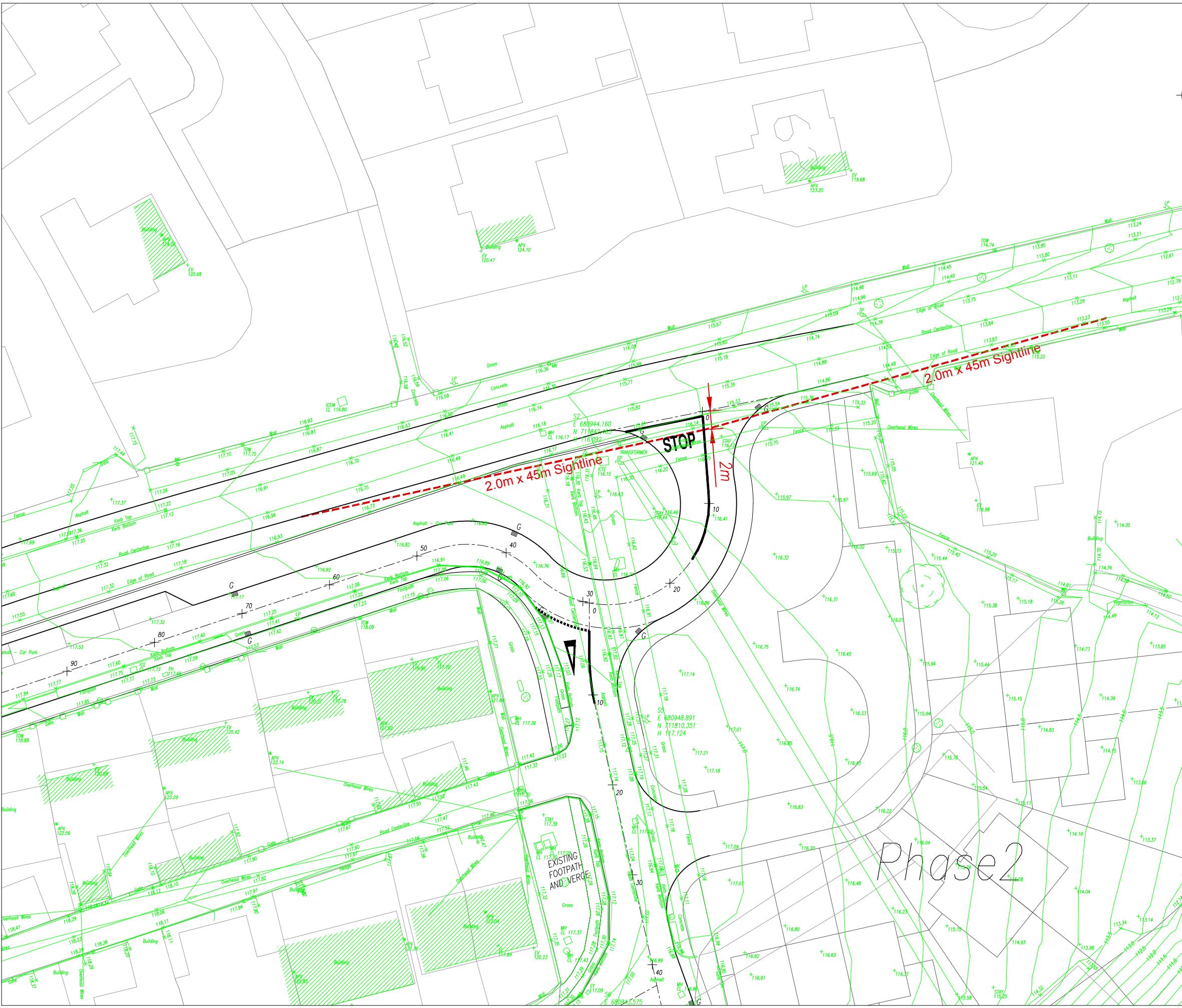


REV. DATE	AMENDMENT	DRN APPD
FOR PLANNING (PART 8)		

Waterman Moylan
Engineering Consultants

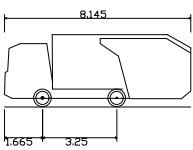
BLOCK 5, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD,
DUBLIN D03 HSF4 IRELAND. Tel: (01) 664 9900
Email: info@waterman-moylan.ie www.waterman-moylan.ie

CLIENT	KILDARE COUNTY COUNCIL		
ARCHITECT	DEATON LYSACHT ARCHITECTS		
PROJECT	HOUSING UNITS IN ATHGARVAN VILLAGE, CO. KILDARE		
TITLE	PROPOSED ENTRANCE SIGHTLINES		
DRAWN	B.W.	DESIGNED	J.G
SCALE	1:200 OA1	JOB NO.	P005
REVISION		DRG. NO.	



NOTES:
 1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

LEGEND:



Phoenix 2-09N (with Elite 2 4x2 chassis)
 Overall Length 8.145m
 Overall Width 3.153m
 Overall Body Height 0.358m
 Track Width 3.25m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 6.800m

10 April 2018
 11:33
 DRAFT --
 Graham Byrne

COMHAIRLE CONAE CHILL DARA
 KILDARE COUNTY COUNCIL
 Devoy Park, Nass, Co. Kildare
 Phone (045) 980200 Fax (045) 980240



REV. DATE	AMENDMENT	DRN APPD

STATUS FOR PLANNING (PART 8)

Waterman Moylan
Engineering Consultants

BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD,
 DUBLIN D03 H5F4 IRELAND. Tel: (01) 664 8900
 Email: info@waterman-moylan.ie www.waterman-moylan.ie

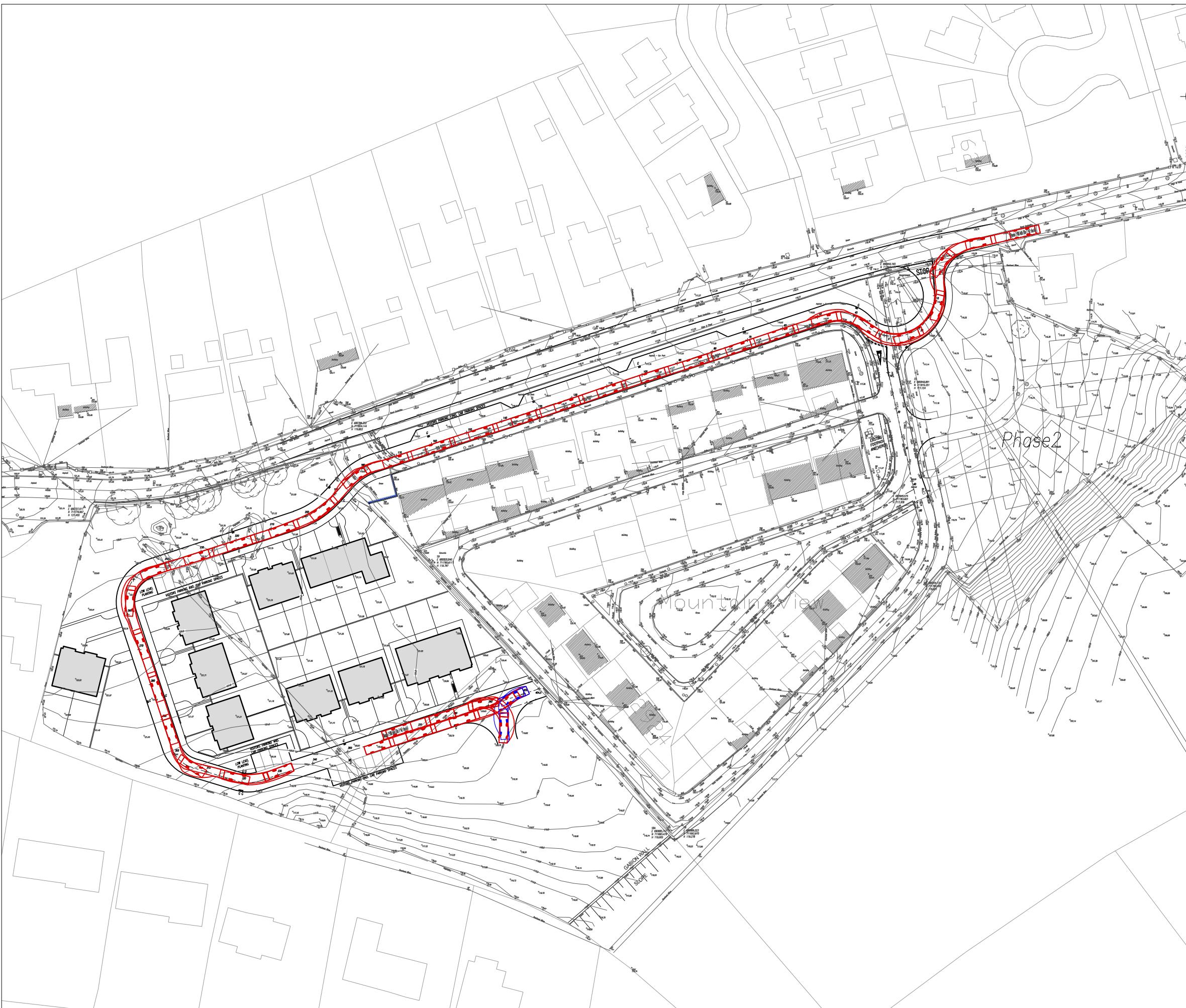
CLIENT KILDARE COUNTY COUNCIL
 ARCHITECT DEATON LYSACHT ARCHITECTS

PROJECT
 HOUSING UNITS IN
 ATHGARVAN VILLAGE, CO. KILDARE

TITLE
 AUTOTRACK SWEEP PATH ANALYSIS

DRAWN G.Byrne	DESIGNED B.W.	APPROVED J.G	DATE APRIL '18
SCALE 1:500	JOB NO. 041	DRG. NO. P004	REVISION

© 2012. This drawing is complete. No part of this document may be reproduced or transmitted in any form or stored in any retrieval system of any nature without the written permission of the consulting engineer or copyright holder except as agreed for use on the project for which this document was originally issued.



NOTES:
 1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

LEGEND:	INDICATES PROPOSED 100mm PE WATERMAIN
H	INDICATES PROPOSED HYDRANT
S.V.	INDICATES PROPOSED SLUICE VALVE
BB	INDICATES PROPOSED BOUNDARY BOX AND HOUSE CONNECTION
FFL 120.1m	INDICATES PROPOSED FINISH FLOOR LEVEL
116.95m	INDICATES PROPOSED ROAD LEVEL
30	INDICATES PROPOSED ROAD CENTRE LINE AND CHAINAGE
118.5	INDICATES EXISTING GROUND CONTOUR
Existing WATERMAIN WM	INDICATES EXISTING PUBLIC WATERMAIN
—	INDICATES LANDS SUBJECT TO THIS PLANNING APPLICATION

10 April 2018
DRAFT
 Graham Byrne

COMHAIRLE CONAE CHILL DARA
 KILDARE COUNTY COUNCIL
 Devoy Park, Nass, Co. Kildare
 Phone (045) 980200 Fax (045) 980240



REV. DATE	AMENDMENT	DRN APPD
FOR PLANNING (PART 8)		

Waterman Moylan
 Engineering Consultants

BLOCK 5, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD,
 DUBLIN D03 HSF4 IRELAND. Tel: (01) 664 9900
 Email: info@waterman-moylan.ie www.waterman-moylan.ie

CLIENT	KILDARE COUNTY COUNCIL					
ARCHITECT	DEATON LYSAGHT ARCHITECTS					
PROJECT						
HOUSING UNITS IN ATHGARVAN VILLAGE, CO. KILDARE						
TITLE	PROPOSED ROAD LAYOUT LEVELS AND WATER SUPPLY LAYOUT					
DRAWN	DESIGNED	APPROVED	DATE			
G.Byrne	B.W.	J.G	'18			
SCALE	JOB NO.	DRG. NO.	REVISION			
1:500 0A1	17-028	P002				

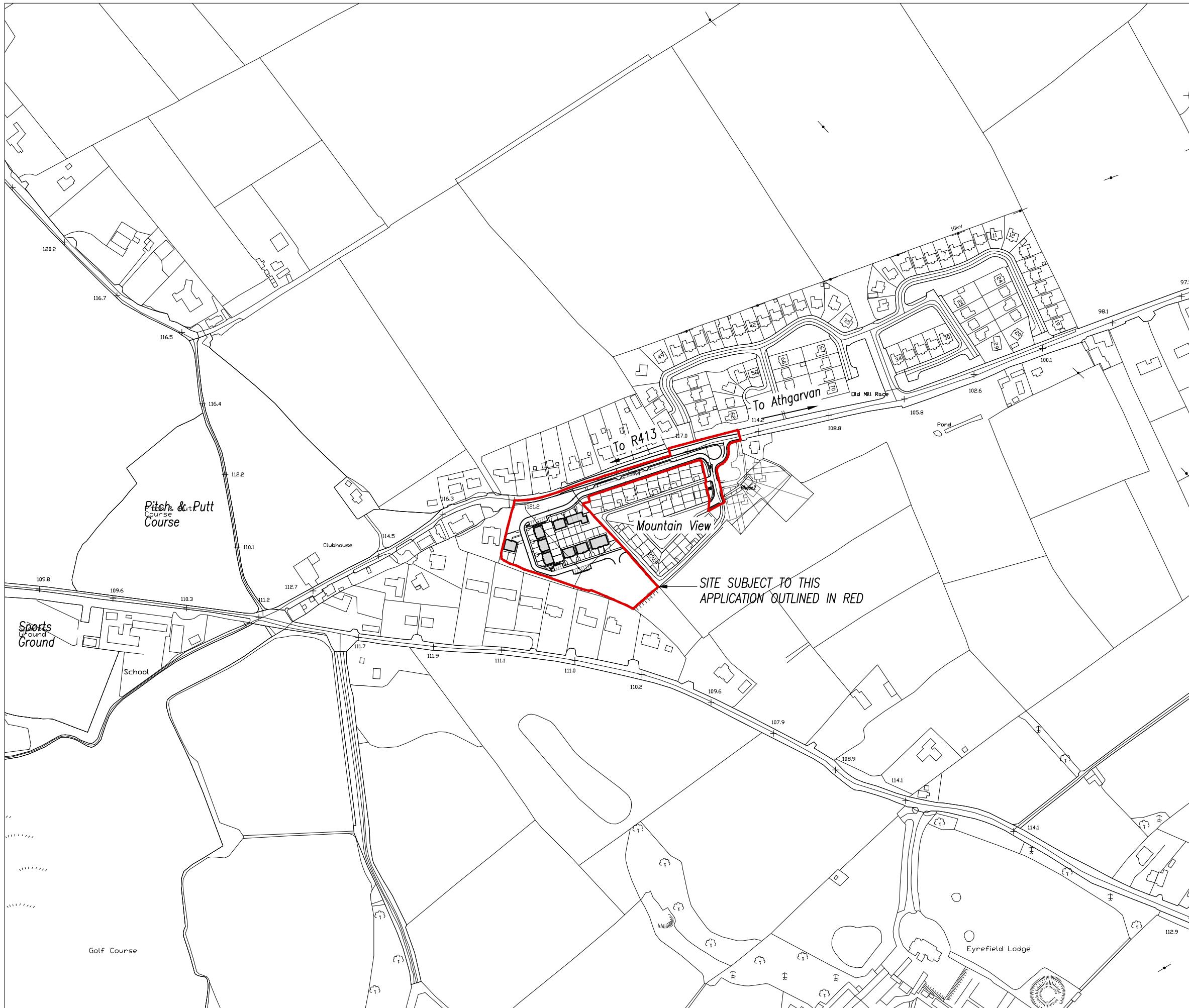
© 2017. This drawing is copyright. No part of this document may be reproduced or transmitted in any form or stored in any retrieval system, in whole or in part, without the written permission of the consulting engineer or copyright holder except as agreed for use on the project for which this document was originally issued.



NOTES:

1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

10 April 2018
-- DRAFT --
Graham Byrne



COMHAIRLE CONAE CHILL DARA
KILDARE COUNTY COUNCIL
Devoy Park, Nass, Co. Kildare
Phone (045) 980200 Fax (045) 980240



Ordnance Survey Ireland Licence No. EN 0006018
© Ordnance Survey Ireland/Government of Ireland.

REV. DATE	AMENDMENT	DRN APPD
-----------	-----------	----------

STATUS FOR PLANNING (PART 8)

Waterman Moylan
Engineering Consultants

BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD,
DUBLIN D03 HSF4 IRELAND. Tel: (01) 664 8900
Email: info@waterman-moylan.ie www.waterman-moylan.ie

CLIENT KILDARE COUNTY COUNCIL
ARCHITECT DEATON LYSACHT ARCHITECTS

PROJECT
HOUSING UNITS IN
ATHGARVAN VILLAGE, CO. KILDARE

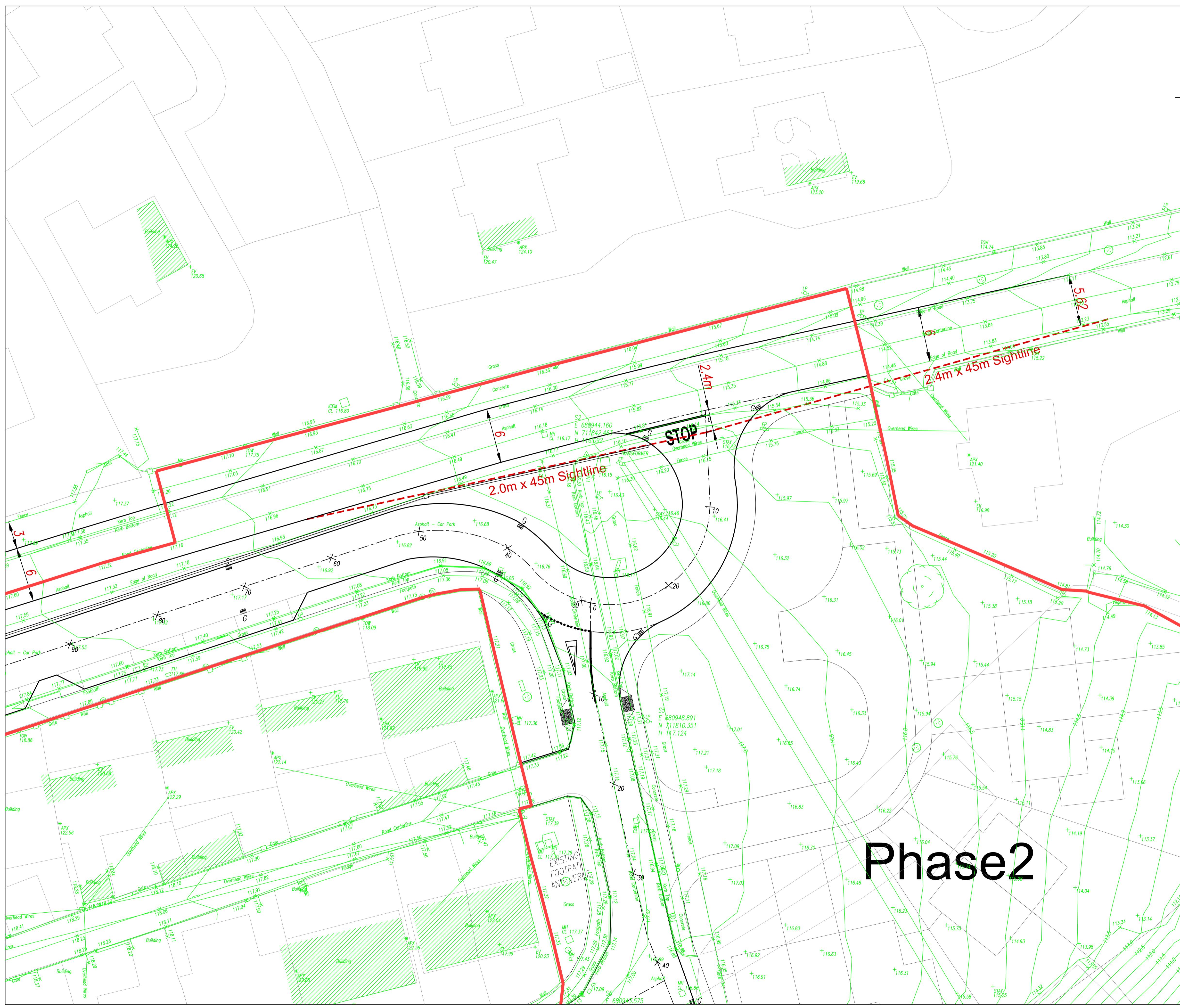
TITLE
SITE LOCATION PLAN

DRAWN G.Byrne	DESIGNED B.W.	APPROVED J.G	DATE APRIL '18
SCALE 1:2000	JOB NO. P001	DRG. NO. P001	REVISION

© 2017. This drawing is complete. No part of this document may be reproduced or transmitted in any form or stored in any retrieval system of any nature without the written permission of the consulting engineer or copyright holder except as agreed for use on the project for which this document was originally issued.

NOTES:
 1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

TOPOGRAPHICAL LAYOUT COLOURED GREEN FOR CLARITY



COMHAIRLE CONAE CHILL DARA
KILDARE COUNTY COUNCIL
Devoy Park, Nass, Co. Kildare
Phone (045) 980200 Fax (045) 980240



B	30/07/18	UPDATED LAYOUT	PW	BW
A	24/07/18	UPDATED LAYOUT	PW	BW
REV.	DATE	AMENDMENT	DRN	APPD

STATUS FOR PLANNING (PART 8)

Waterman Moylan
Engineering Consultants

BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD,
DUBLIN D03 H3F4 IRELAND. Tel: (01) 684 8900
Email: info@waterman-moylan.ie www.waterman-moylan.ie

CLIENT KILDARE COUNTY COUNCIL
ARCHITECT DEATON LYSAGHT ARCHITECTS

PROJECT HOUSING UNITS IN
ATHGARVAN VILLAGE, CO. KILDARE

TITLE PROPOSED ENTRANCE SIGHTLINES

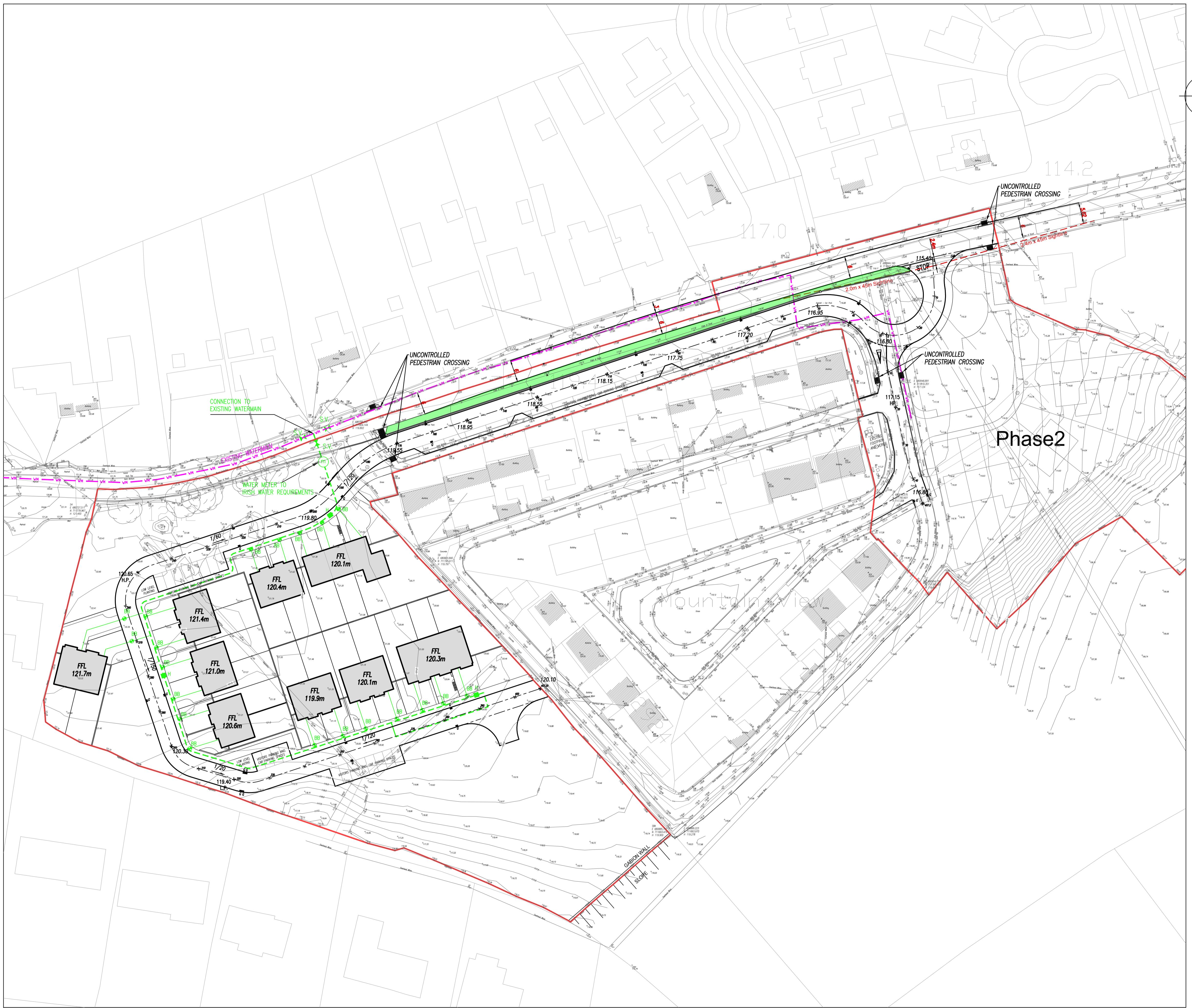
DRAWN G.Byrne	DESIGNED B.W.	APPROVED I.W.	DATE JULY '18
SCALE 1:200 0A1	JOB NO. 17-028	DRG. NO. P005	REVISION B

NOTES:

1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.

LEGEND:

	INDICATES PROPOSED 100mm PE WATERMAIN
	INDICATES PROPOSED HYDRANT
	INDICATES PROPOSED SLUICE VALVE
	INDICATES PROPOSED BOUNDARY BOX AND HOUSE CONNECTION
	FFL 120.1m INDICATES PROPOSED FINISH FLOOR LEVEL
	116.95m INDICATES PROPOSED ROAD LEVEL
	30 INDICATES PROPOSED ROAD CENTRE LINE AND CHAINAGE
	119.5 INDICATES EXISTING GROUND CONTOUR
	EXISTING WATERMAIN WM INDICATES EXISTING PUBLIC WATERMAIN
	INDICATES LANDS SUBJECT TO THIS PLANNING APPLICATION
	GRASS VERGE GENERALLY 2m WIDE



SAFETY AUDIT FEEDBACK FORM

Scheme: Proposed Residential Development Athgarvan, Co. Kildare

Document Number: 18077-01-001

Audit Stage: Stage 1

Date Audit Completed: 11th July 2018

Paragraph No. In Safety Audit Report	To Be Completed By Designer			To Be Completed by Audit Team Leader
	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting recommended measure	Alternative measures or reasons accepted by auditors (yes/no)
2.1	Yes	Yes – drawing has been revised as per the recommendations. See attached Drg. 17-091-P002B and 17-091-P005B.	—	—
2.2	Yes	Yes – uncontrolled pedestrian crossings have been added at each end of the development.	—	—
2.3	Yes	Yes – parking bays have been relocated to the southern side of the access road.	—	—
2.4	Yes	Yes – the road re-alignment has been adjusted to maintain the existing footpath width in the narrow section.	—	—
2.5	Yes	Yes – public lighting to be included at detailed design stage as per the recommendations.	—	—

Safety Audit *J. Womell* **Signed off** **Design Team Leader** **Date** *30/07/18*

Safety Audit *L. Hannatty* **Signed off** **Employer** **Date** *30.07.18*

Safety Audit *G. Fahey* **Signed off** **Audit Team Leader** **Date** *30/7/18*

Please complete and return to: **Roadplan Consulting Ltd.**
7, Ormonde Road
Kilkenny
E-mail: info@roadplan.ie