15 April

THE COUNCIL OF THE BOROUGH OF TORBAY

AND

CAVANNA HOMES (SOUTH WEST) LIMITED

AND

LLOYDS BANK PLC

AND

MD INSURANCE SERVICES LIMITED

AGREEMENT

under Section 38 of the Highways Act 1980 and section 111 of the Local Government Act 1972 in connection with street works at Fusion A (Local Centre) (formerly Yannons Farm) Off Brixham Road Paignton in the Borough of Torbay

W:\CESRV\Legal Conveyancing\FILES\CH Highways S38 & S278\CH 0344 ~ Yannons Farm, Aldi Site\2015.01.13 S38 engrossment.doc

CONTENTS

CLAUSE	
1.	Interpretation1
2.	Statutory provisions
З.	Developer's obligations
4.	Developer's declaration
5.	Extension of time to complete the Works
6.	Suspension of the Works
7.	Access to the land
8.	Procedure for inspection and issue of certificates
9.	Part 1 Certificate
10.	Part 2 Certificate
11.	Certificates for part or parts of the Road7
12.	The Maintenance Period
13.	Final Certificate
14.	Adoption
15.	Materials sampling and testing
16.	New Roads and Street Works Act 199110
17.	Keeping the existing highway clean 10
18.	Connecting to existing services
19.	Occupation of buildings 11
20.	Grant of easements
21.	CDM Regulations
22.	Surety's obligations
23.	Council's covenants
24.	Commuted sum
25.	Specification to take precedence
26.	Technical advice
27.	Making up of private streets
28.	Indemnities
29.	Insurance
30.	Default events
31.	Council's power to execute works in default
32.	Disputes
33.	Mortgagee's consent
34.	Legal and other costs
35.	Assignment
36.	Local land charges register
37.	Notices
38.	Third party rights
39.	Governing law

SCHEDULE

SCHEDULE 1	PART 1 WORKS	
SCHEDULE 2	PART 2 WORKS	23
SCHEDULE 3	COMMUTED SUMS	24

- 31 Sectors of a sector process a state of a sector ball, but a sector
- P. Stationard Back Property Sector Provide Stationard Stationar

THIS AGREEMENT is dated

2015

PARTIES

(1) THE COUNCIL OF THE BOROUGH OF TORBAY of Town Hall Castle Circus Torquay Devon TQ1 3DR ("the Council")

15 April

- (2) CAVANNA HOMES (SOUTH WEST) LIMITED incorporated and registered in England and Wales with company number 4228424 whose registered office is at Cavanna House, Riviera Park, Nicholson Road, Torquay, Devon TQ2 7TD ("the Developer").
- (3) LLOYDS BANK PLC incorporated and registered in England and Wales under Company Number 00002065 and whose registered office is at 25 Gresham Street, London, EC2V 7HN ("the Mortgagee")
- (4) MD INSURANCE SERVICES LIMITED incorporated and registered in England and Wales with company number 03642459 whose registered office is at 2 Shore Lines Building, Shore Road, Birkenhead, Wirral CH41 1AU ("the Surety").

BACKGROUND

- (A) The Council is the local highway authority for the area in which the Land is situated.
- (B) The Developer owns the Land which includes the site of the proposed Road and all other land required for the Works.
- (C) The Developer has requested that after the Works have been completed and maintained, the Council shall adopt the Road as a highway maintainable at the public expense, which the Council has agreed to do on the terms and conditions of this agreement.
- (D) The Surety has agreed to enter into this agreement for the purposes set out in clause 22.
- (E) The Mortgagee is the registered proprietor of the charge dated 1 July 2014 referred to in entry no 8 and 9 of the charges register of Title number DN168569 and has agreed to enter into this agreement to grant the consent contained in clause 33.

AGREED TERMS

1. INTERPRETATION

The following definitions and rules of interpretation apply in this agreement.

1.1 Definitions:

Advance Payments Code: the advance payments code as defined in section 329(1) of the Highways Act 1980.

CDM Regulations: the Construction (Design and Management) Regulations 2007 (SI 2007/320).

Client: the client as defined by the CDM Regulations.

Commuted Sum: the sum of twenty thousand pounds (£20,000) as a commuted sum for future maintenance of the soakaways shown on Drawing P9857 H100 rev N

Default Cost: all of the following:

- (a) the cost of carrying out the Default Work;
- (b) the cost of maintaining the Works for the Maintenance Period; and
- (c) the usual establishment charges of the Council.

Default Notice: written notice given by the Proper Officer to the Surety under clause 22.1.

Default Work: work required to be carried out by or on behalf of the Surety so that the Works are constructed or completed in accordance with this agreement.

Drawings: the Drawings numbered

P9857 H103 rev H, P9857 H100 rev N, P9857 H101 rev G, P9857 H107 rev B; and P9857 H102 rev F

attached to this agreement and signed by or on behalf of the parties and any amended drawing signed by on or behalf of the Proper Officer.

Estimated Cost: the sum of £235,000 which, in the reasonable opinion of the Proper Officer, is the cost of carrying out the Works within the period specified in clause 3.1(f).

Final Certificate: the certificate to be issued on satisfactory completion of the Works under clause 13.

Health and Safety File: the health and safety file as required by the CDM Regulations.

Land: the freehold land formerly know as Yannons Farm, off Brixham Road, Paignton shown edged red on the attached plan being part of the land registered at HM Land Registry with absolute title under title number(s) DN168569

Maintenance Perlod: the maintenance period specified in clause 12.1(a).

Part 1 Certificate: the certificate to be issued under clause 9 on satisfactory completion of the Part 1 Works.

Part 1 Works: the works set out in & Schedde 1.

Part 2 Certificate: the certificate to be issued under clause 10 on satisfactory completion of the Part 2 Works.

Part 2 Works: the works set out in &. Schedule 2

Proper Officer: any officer of the Council for the time being appointed for the purposes of this agreement.

Road: the carriageway and footway of the private road shown on the Drawings, including:

- (a) any off-site highway drainage;
- (b) the footpaths, street lighting, all verges, service strips, service margins, vehicular crossings, road surface water drainage system (if any); and
- (c) all other ancillary items.

and Roads shall mean more than one of them.

Road Land: the freehold estate in the Land comprising the Road.

Sewer Adoption Agreement: an agreement made under section 104 of the Water Industry Act 1991.

Specification: the publication entitled "Highways in Residential and Commercial Estates Design Guide" and dated January 1996 by Devon County Council and the Design Guide Exception Report dated April 2003 by the Council

Statutory Undertaker: a statutory undertaker, as defined in section 329(1) of the Highways Act 1980 and including:

- (a) persons authorised under any enactment to carry on an undertaking for the supply of electricity, gas, water and any sewerage undertaking;
- (b) the Environment Agency;
- (c) a holder of a licence to operate telecommunication systems;
- (d) the Civil Aviation Authority; and
- (e) the holder of a licence to supply cable television.

Street Furniture: objects and pieces of equipment installed for various purposes on the carriageway and footway of the Road shown on the Drawings including street lighting, traffic lights and traffic signs.

Surety's Counter Notice: written notice of the Surety's intention to carry out the Default Work.

VAT: value added tax chargeable under the Value Added Tax Act 1994 and any similar replacement tax and any similar additional tax.

Working Day: any day which is not a Saturday, a Sunday, or a bank holiday or public holiday in England.

Works: the Part 1 Works and the Part 2 Works.

1.2 Clause, Schedule and paragraph headings shall not affect the interpretation of this agreement.

- A person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).
- 1.4 The Schedules form part of this agreement and shall have effect as if set out in full in the body of this agreement. Any reference to this agreement includes the Schedules.
- 1.5 A reference to a **company** shall include any company, corporation or other body corporate, wherever and however incorporated or established.
- 1.6 Unless the context otherwise requires, words in the singular shall include the plural and in the plural shall include the singular.
- 1.7 Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.
- 1.8 A reference to any party shall include that party's personal representatives, successors and permitted assigns and in the case of the Council the successors to its respective statutory functions.
- 1.9 Unless the context otherwise requires, a reference to a statute or statutory provision is a reference to it as amended, extended or re-enacted from time to time.
- 1.10 A reference to a statute or statutory provision shall include any subordinate legislation made from time to time under that statute or statutory provision.
- 1.11 References to clauses and Schedules are to the clauses and Schedules of this agreement and references to paragraphs are to paragraphs of the relevant Schedule.
- 1.12 Any obligation on a party not to do something includes an obligation not to allow that thing to be done.
- 1.13 Any words following the terms **including**, **include**, **in particular**, **for example** or any similar expression shall be construed as illustrative and shall not limit the sense of the words, description, definition, phrase or term preceding those terms.

2. STATUTORY PROVISIONS

This agreement is made under section 38 of the Highways Act 1980, section 111 of the Local Government Act 1972 and any other enabling powers of the Council.

3. DEVELOPER'S OBLIGATIONS

- 3.1 The Developer shall, at its own cost, use all reasonable endeavours to carry out and complete the Works:
 - (a) in a good and workmanlike manner;
 - (b) using only good quality materials approved by the Proper Officer;
 - (c) in accordance with this agreement, the Specification (a copy of which has been received by the Developer) and the Drawings;
 - (d) to the Proper Officer's reasonable satisfaction; and
 - (e) in compliance with all relevant British Standards, codes of practice and good building practice; and
 - (f) within twelve calendar months following the date of this Agreement
- 3.2 The Developer shall give to the Proper Officer not less than 10 Working Days written notice of the date of starting the Works.
- 3.3 The Developer shall maintain the Road until the date of issue of the Final Certificate.

4. DEVELOPER'S DECLARATION

The Developer declares and warrants to the Council that throughout the duration of this agreement the Developer has or will have full right, liberty and consent to carry out such works as may be necessary to connect the Road to a highway that is, or will be, maintainable at the public expense.

5. EXTENSION OF TIME TO COMPLETE THE WORKS

- 5.1 Without prejudice to any remedy of the Council, the Proper Officer may at any time, exercising absolute discretion grant an extension of time to complete the Works for a further period or periods by giving written notice to the Developer and providing
 - i. that if such extension of time (to be confirmed in writing by the Proper Officer) is granted the Developer shall pay to the Council such additional inspection fee (based on the estimated cost of any outstanding works) as shall be agreed between the Proper Officer and the Developer; and
 - ii. the Developer and the Proper Officer shall review the amount of the Bond (as specified in Clause 22) in force at that time and the Developer shall if required by the Proper Officer in writing arrange for the amount of the Bond to be increased to such reasonable amount as shall be required by the Proper Officer

6. SUSPENSION OF THE WORKS

- 6.1 If the Developer intends to suspend construction of the Works for a period of more than twenty Working Days, the Developer shall notify the Proper Officer in writing of:
 - the intended suspension not less than five Working Days before the start of the suspension; and
 - (b) the Developer's intention to re-commence construction of the Works not less than five Working Days before such re-commencement.
- 6.2 If the Developer fails to notify the Proper Officer under clause 3.2 and clause 6.1, the inspection fee referred to in clause 34 shall be increased by such amount as the Proper Officer, exercising absolute discretion, sees fit in order to reimburse the Council any additional cost incurred by the Council in inspecting the Works because of such failure.

7. ACCESS TO THE LAND

- 7.1 During construction of the Works, the Developer shall give to the Proper Officer and any other Council officer free access to every part of the Works and Land for the purpose of inspecting the Works and all materials used, or intended to be used, for the Works.
- 7.2 While carrying out any inspection under clause 7.1, the Proper Officer and any other Council officer shall comply with any reasonable health and safety requirements notified to them by the Developer.
- 7.3 During construction of the Works, the Proper Officer may require the Developer to open up or expose any of the Works that have been covered up without previously being inspected by the Proper Officer. If the Developer fails to comply with any such request, the Council may take up or expose the relevant part of the Works causing as little damage or inconvenience as possible to or in respect of any other part or parts of the Works. The Developer shall pay the Council's reasonable and proper costs of such taking up, exposure and reinstatement

8. PROCEDURE FOR INSPECTION AND ISSUE OF CERTIFICATES

- 8.1 The Developer must apply to the Proper Officer in writing for a:
 - (a) Part 1 Certificate;
 - (b) Part 2 Certificate; and
 - (c) Final Certificate.

- 8.2 Within ten Working Days following receipt of a written application from the Developer for the issue of a Part 1 Certificate or Final Certificate and within ten Working Days following written application from the Developer for the issue of a Part 2 Certificate, the Proper Officer shall:
 - (a) inspect the Works to which the application relates; and
 - (b) provide the Developer (where necessary) with a definitive written list of any works required to be carried out to remedy any defect or damage to the Road before the issue of that certificate.
- 8.3 The Developer must carry out the works referred to in clause 8.2(b) without delay and at its own cost.
- 8.4 The works referred to in clause 8.2(b) shall be subject to the same inspection procedure detailed in this clause 7.3 until such time as the works have been completed to the reasonable satisfaction of the Proper Officer.
- 8.5 The Proper Officer shall issue the relevant certificate in accordance with clause 9, clause 10 or clause 13.

9. PART 1 CERTIFICATE

Within 20 Working Days following completion of the Part 1 Works to the reasonable satisfaction of the Proper Officer, the Proper Officer shall issue the Part 1 Certificate to the Developer.

10. PART 2 CERTIFICATE

Within 20 Working Days following completion of the Part 2 Works to the reasonable satisfaction of the Proper Officer, the Proper Officer shall issue the Part 2 Certificate to the Developer provided that

- (a) a camera survey of the surface water drains serving the Road has been carried out and provided to the Proper Officer; and
- (b) the maintenance period of any sewer constructed on or under the Road in accordance with a Sewer Adoption Agreement is currently running or has expired.

11. CERTIFICATES FOR PART OR PARTS OF THE ROAD

11.1 The Developer can apply to the Proper Officer for a Part 1 Certificate or a Part 2 Certificate for any part of the Road (being the whole width of the Road between specified points to be agreed by the Proper Officer and defined in the application).

- 11.2 If the Proper Officer is satisfied that the part of the Road defined is suitable to be treated as a separate road for the purposes of construction and adoption under this agreement, the Proper Officer may issue a separate Part 1 Certificate or Part 2 Certificate, as the case may be, for that part of the Road.
- 11.3 The same procedures may then be taken in respect of the said part of the Road as if it were the subject of a separate agreement under which the terms of this agreement applied, but without affecting the application of this agreement to the remainder of the Road.
- 11.4 Following the date of issue of a Part 1 Certificate or a Part 2 Certificate, as the case may be, for part of the Road, the liability of the Surety shall be reduced pursuant to clause 22.1.

12. THE MAINTENANCE PERIOD

- 12.1 From and including the date of the Part 2 Certificate:
 - (a) the Maintenance Period shall commence to run for a period of twelve calendar months or, if construction vehicles continue to travel along the Road, such longer period as the Proper Officer may reasonably determine; and
 - (b) the Road shall become a highway open for use by the public at large, but shall not be regarded as a highway maintainable at the public expense.
- 12.2 During the Maintenance Period, the Developer shall, at its own cost and to the reasonable satisfaction of the Proper Officer:
 - (a) maintain the Works, including all grassed and planted areas, and carry out routine maintenance of the Road, including sweeping, gully emptying and snow clearance; and
 - (b) clear all abandoned vehicles, rubbish, or other unauthorised materials from the Road.
- 12.3 During the Maintenance Period the Council shall, at its own cost undertake routine maintenance of and be responsible for, the supply of energy all the street lights and illuminated traffic signs.
- 12.4 Before the Maintenance Period expires, the Developer shall, without delay and at its own expense, reinstate and make good any defect or damage to the Road, which may have arisen from any cause or be discovered, during the Maintenance Period (including any defect in, or damage to, the road surface water drainage system) of which the Developer has been notified in writing by the Proper Officer, so that the Works comply with the Specification and the Drawings.

13. FINAL CERTIFICATE

The Proper Officer shall issue the Final Certificate to the Developer provided that:

- (a) the Developer has paid to the Council all amounts due to the Council under this agreement including any commuted sum payable under clause 24;
- (b) any necessary reinstatement or other works notified in writing to the Developer in accordance with clause 12.4 have been completed to the reasonable satisfaction of the Proper Officer;
- (c) the Road connects directly to a highway maintainable at public expense;
- (d) the Developer has delivered to the Proper Officer each of the following:
 - (i) coloured drawings showing to a scale of 1:500 the Works as constructed, in a format specified by the Proper Officer;
 - (ii) one copy of the Health and Safety File in a format specified by the Proper Officer; and
 - (iii) highways inventory data in a format specified by the Proper Officer.
- (e) The Developer has at its own expense provided the Proper Officer with verification that any sewers constructed on or under the Road, in accordance with a Sewer Adoption Agreement, have been adopted by a Statutory Undertaker;
- (f) the Developer has obtained and delivered to the Council all necessary deeds of easement under clause 20;
- (g) the Developer has procured that an independent safety auditor, approved by the Council, has undertaken road safety audit stages 1, 2, 3 and (if required by the Proper Officer) 4 ("Road Safety Audits") on the Works in accordance with H.D 19/03 (Road safety audit volume 5: design manual for roads and bridges); and
- (h) The Developer has carried out, at its own expense, all the remedial works identified in the Road Safety Audits to the reasonable satisfaction of the Proper Officer;

14. ADOPTION

From and including the date of issue of the Final Certificate, the Road or any part of the Road, as the case may be, shall become a highway maintainable at the public expense and (providing it has satisfied all pre-adoption requirements of this Agreement) the Developer shall cease to have any liability pursuant to this Agreement save pursuant to clause 28.2.

15. MATERIALS SAMPLING AND TESTING

- 15.1 The Developer shall, if requested by the Proper Officer, make all necessary arrangements for an independent accredited testing facility, approved by the Council, to test the materials proposed to be used in connection with the Works. The Developer shall bear the full cost of such testing and give to the Proper Officer, at no expense to the Council, copies of all material testing certificates.
- 15.2 Any material rejected by the Proper Officer acting reasonably, as a result of the tests carried out under clause 15.1 shall not be used by the Developer for any of the Works.

16. New Roads and Street Works Act 1991

From the date of issue of the Part 2 Certificate until the date of issue of the Final Certificate, the Developer shall:

- (a) appoint a supervisor qualified in accordance with the provisions of section 67 of the New Roads and Street Works Act 1991; and
- (b) remain the street manager of the Road under section 49(4) of the New Roads and Street Works Act 1991.

17. KEEPING THE EXISTING HIGHWAY CLEAN

The Developer shall:

- (a) before commencing the Works provide suitable vehicle and wheel cleaning apparatus on the Land; and
- (b) during construction of the Works ensure the cleaning apparatus is well maintained and used by all vehicles immediately before leaving the Land to minimise the risk of mud and other materials being deposited on the highway.

18. CONNECTING TO EXISTING SERVICES

- 18.1 The Developer shall
 - (a) At its own cost and expense advise all Statutory Undertakers who have or may have apparatus or any part of their services affected by the Works
 - (b) carry out, at its own cost, any works or measures required by a Statutory Undertaker as a result of the Works; and
 - (c) indemnify the Council for the cost of any works or measures carried out, as a result of the Works, by the Council at the request of the Statutory Undertaker.
- 18.2 Before connecting the Road to the carriageway of a highway maintainable at the public expense, the Developer shall give notice to the relevant Statutory Undertaker

of any service or services laid in, on, or under the existing highway of the proposal to make such connection as if the connection were works for road purposes or major highway works as defined in section 86 of the New Roads and Street Works Act 1991.

19. OCCUPATION OF BUILDINGS

No buildings erected by or on behalf of the Developer that front, adjoin, abut or have access to the Road shall be occupied (save for occupation for the purposes of construction security and/or marketing) until:

- the Proper Officer has issued the Part 1 Certificate for the Road, or the part of the Road that will provide the occupier with access to a vehicular highway;
- (b) a base course pedestrian access (where applicable) to such highway has been provided;
- (c) the Road or that part of the Road referred to in clause 19(a) has operational street lighting columns erected in accordance with the Specification and the Drawings and the Developer has arranged with the service provider for an electricity supply to the lighting by glving at least six weeks' prior notice in writing or as may otherwise be agreed in writing by the Proper Officer; and
- (d) the Road or that part of the Road referred to in clause 19(a) has street name plates erected as agreed with the Proper Officer.

20. GRANT OF EASEMENTS

- 20.1 Before the Proper Officer issues a Final Certificate, the Developer shall, without cost to the Council, execute and complete or procure the execution and completion of:
 - (a) any deeds of easement that are in the opinion of the Council necessary to secure for the Council full drainage rights to such parts of the surface water drainage system of the Road Land that are not within the Road Land; and
 - (b) any other deeds of easement required by the Council for the future maintenance by the Council of any street furniture not within the Road Land.
- 20.2 The Developer shall pay the Council's proper and reasonable legal costs and disbursements in connection with the grant of any deeds of easement.
- 20.3 The Council shall not be liable for the payment of compensation or legal or any other costs or fees arising on account of the completion of any deeds of easement referred to in clause 20.1 or due to the subsequent use of the easement.

21. CDM REGULATIONS

- 21.1 The Developer elects to be treated for the purposes of the CDM Regulations as the only Client. The Council agrees with such election by the Developer.
- 21.2 The Developer agrees to undertake all the obligations of a Client and to use its best endeavours to ensure that the Works are carried out in accordance with the CDM Regulations.
- 21.3 Before commencement of the Works, the Developer shall ensure that the Works are properly notified to the Health and Safety Executive in accordance with the CDM Regulations and shall give the Council a copy of the notification and any acknowledgement from the Health and Safety Executive.
- 21.4 The Developer shall ensure that the Health and Safety File is maintained correctly and is available for inspection in accordance with the CDM Regulations.
- 21.5 The Developer warrants it has taken or shall take all reasonable steps to be satisfied that all contractors engaged on the Works are suitable and competent having regard to their responsibilities in relation to the Works and the CDM Regulations.
- 21.6 The Developer shall indemnify and keep the Council indemnified against any breach of the Developer's obligations under this clause 21.

22. SURETY'S OBLIGATIONS

- 22.1 If any of the default events listed in clause 30 occur, the Proper Officer may, without affecting any statutory rights or powers or any other right, claim, or remedy under this agreement for such non-performance or non-observance, give to the Surety a Default Notice:
 - (a) specifying the Default Work; and
 - (b) containing an estimate by the Proper Officer of the Default Cost. The Default Cost shall not exceed:
 - (i) the Estimated Cost;
 - (ii) £117,500 on and after the issue of the Part 1 Certificate;
 - (iii) £58,750 on and after the issue of the Part 2 Certificate; or
 - (iv) an amount to be determined by the Proper Officer, exercising absolute discretion, after the issue of either part of a Part 1 Certificate or part of a Part 2 Certificate.

- 22.2 Within 20 Working Days following the date of receipt of the Default Notice, the Surety shall:
 - (a) pay the Default Cost to the Council; or
 - (b) send the Surety's Counter Notice to the Council.
- 22.3 If the Surety, having sent the Surety's Counter Notice to the Council, fails to start the Default Work within 20 Working Days from and including the date of receipt by the Council of the Surety's Counter Notice, the Surety shall without delay, pay the Default Cost to the Council together with simple interest at a rate of 5% per annum above the base rate of National Westminster Bank PLC from time to time, calculated from and including the date on which the Default Notice was sent to the Surety to and including the date the payment is made.
- 22.4 If the Surety, having sent the Surety's Counter Notice to the Council, starts the Default Work, and the Default Work is not completed within four calendar months from and including the date the Surety's Counter Notice was received by the Council, or within such further period or periods as may be agreed by the Proper Officer, the Surety shall forthwith on demand by the Proper Officer, pay to the Council:
 - (a) such sum as the Proper Officer may determine as being the cost of carrying out any Default Work not carried out by the Surety or the cost of maintaining the Works for a period of twelve calendar months before the Road becomes maintainable at public expense (or the cost of both); and
 - (b) the amount determined by the Proper Officer as representing the usual establishment charges of the Council.
- 22.5 The sum payable under clause 22.4 shall not exceed the Default Cost.
- 22.6 A demand stated to be made under this agreement and signed on behalf of the Council shall be conclusive as to the Surety's obligation to pay the amount demanded and there shall be no obligation or duty on the Surety to serve a Surety's Counter Notice
- 22.7 Following the issue of a Final Certificate for:
 - (a) any part of the Road, the liability of the Surety shall be reduced by an amount as may be directed by the Proper Officer acting reasonably; or
 - (b) all of the Road or the final part of the Road, the Surety shall be released from all liability under this agreement.

23. COUNCIL'S COVENANTS

The Council covenants with the Developer and the Surety for the benefit of each and every building plot fronting, adjoining, abutting, or having access to the Road:

- (a) to use all reasonable endeavours in consultation with the Surety and/or the Developer (as appropriate) to mitigate any loss or damage sustained because of any default by the Developer, by taking such reasonable steps as the Council thinks fit;
- (b) to use all monies received from the Surety pursuant to clause 22 and/or the Developer pursuant to this Agreement towards the carrying out or completing the Works and maintaining and making good all defects for a period of twelve calendar months after completion of the Works. The amount received from the Surety shall be deducted from any sum that would otherwise be recoverable from the owners of premises fronting the Road under the Highways Act 1980;
- (c) if the sum paid by the Surety or the Developer to the Council exceeds the cost of carrying out or completing the Works and maintaining and making good all defects as set out in this agreement (together with the amount of the Council's usual establishment charges) to repay to the Surety or the Developer as appropriate within 20 Working Days following the date of the Final Certificate, the amount of any excess; and
- (d) on the issue of the Final Certificate to give such notices and do whatever else may be required for securing that the Road or any part thereof, as the case may be, shall become a highway maintainable at public expense.

24. COMMUTED SUM

On or before the date of issue of the Part 2 Certificate, the Developer shall pay to the Council the sums specified in the second column of the in respect of the future maintenance and/or replacement cost of the corresponding item described in the first column of the schedule 3

25. SPECIFICATION TO TAKE PRECEDENCE

If there is any conflict between the Specification and the Drawings, the Specification shall take precedence unless otherwise agreed in writing by the Proper Officer.

26. TECHNICAL ADVICE

If the Proper Officer determines that technical advice is required before any feature or structure included as part of the Works or that is under or over the Road can be approved, the Developer shall reimburse to the Council, within 20 Working Days following receipt of an invoice, all costs incurred by the Council in obtaining such technical advice.

27. MAKING UP OF PRIVATE STREETS

If the Developer fails to perform any of its obligations under this agreement, nothing in this agreement shall prevent or restrict the Council from exercising its powers under the Private Street Works Code contained in Part XI of the Highways Act 1980 or any other statutory provision.

28. INDEMNITIES

- 28.1 The Developer shall indemnify the Council in respect of any actions, charges, claims, costs, losses, damages, demands, liabilities and proceedings arising out of any breach or non-observance of the Developer's obligations in this agreement including (but not limited to):
 - (a) third party claims for death, personal injury or damage to property;
 - (b) statutory or other liability for the safety or security of the Land, working methods, employment practices, protection of the environment and control of pollution; and
 - (c) third party claims for unlawful interference with any rights of light, air, support, water, drainage or any other easement or right.
- 28.2 The Developer shall indemnify the Council in respect of any claims for compensation under section 10 of the Compulsory Purchase Act 1965 and claims under the Land Compensation Act 1973 arising out of, in connection with or incidental to, the carrying out of the Works and their subsequent use, other than those arising out of or in consequence of any negligent act default or omission of the Council.
- 28.3 The indemnification referred to in clause 28.2 includes:
 - (a) compensation payments under Part I of the Land Compensation Act 1973;
 - (b) all fees successfully claimed by claimants, and those fees reasonably and properly incurred by the Council or its agent or contractor, in negotiating any claims (together with VAT payable on the claimants' professional advisors' fees);
 - (c) statutory interest payments to claimants and their professional advisors; and
 - (d) the Council's reasonable and proper legal costs in making the compensation, fees and interest payments under clause 28.3.
- 28.4 The Developer shall only be required to indemnify the Council in accordance with this agreement if:
 - (a) the Council notifies the Developer as soon as reasonably practicable on becoming aware of any matter which becomes the subject of a claim for indemnity;

- (b) the Council keeps the Developer reasonably informed of all progress of which it is, or becomes, aware of in connection with that matter and of any proposed settlement;
- (c) where it is permitted by the Council's insurer, not settling or compromising that matter without the previous consent of the Developer, such consent not to be unreasonably withheld or delayed. Where the Developer does not consent it shall indemnify the Council against all costs incurred by the Council in litigating that matter and will assist the Council in such litigation by providing such witnesses and other evidence as it is able to do relating to any matter in contention.

29. INSURANCE

From and including the date of completion of this agreement until the date of issue of the Final Certificate, the Developer shall procure and maintain public liability insurance to cover claims for injury to or death of any person or loss or damage to any real or personal property for an indemnity of not less than £5,000,000 for any one occurrence or series of occurrences arising out of the same event.

30. DEFAULT EVENTS

The Council may terminate this agreement (except for clause 1, clause 3, clause 7, clause 18, clause 19, clauses 21-23, clause 26 and clauses 30-39) immediately by written notice to the Developer without prejudice to any other rights the Council may have, if any of the following events occur:

- (a) the Developer is in fundamental breach of any of its conditions, stipulations or obligations and liabilities in this agreement; or
- (b) the Developer is in substantial breach of any of its conditions, stipulations or obligations and liabilities in this agreement and has failed to rectify the breach within a reasonable time after receiving notice to rectify from the Proper Officer; or
- (c) where the Developer is a corporation:
 - (i) has an administrative receiver or receiver appointed over the whole or part of the Developer's assets or suffers the appointment of an administrator; or
 - (ii) any step is taken in connection with any voluntary arrangement or any other compromise or arrangement for the benefit of any creditors of the Developer; or
 - (iii) in relation to the Developer, the appointment of an administrator, the filing of documents with the court for the appointment of an administrator or the giving of notice of intention to appoint an administrator by the Developer or its directors, or by a qualifying

floating charge holder (as defined in paragraph 14 of Schedule B1 to the Insolvency Act 1986); or

- (iv) a receiver or manager is appointed in relation to any property or income of the Developer; or
- (v) a liquidator is appointed in respect of the Developer; or
- (vi) a voluntary winding-up of the Developer is commenced, except a winding-up for the purpose of amalgamation or reconstruction of a solvent company in respect of which a statutory declaration of solvency has been filed with the Registrar of Companies; or
- (vii) the Developer is struck-off from the Register of Companies; or
- (viii) the Developer otherwise ceases to exist; or
- (d) Where the Developer is an individual:
 - the taking of any step in connection with any voluntary arrangement or any other compromise or arrangement for the benefit of any creditors of the Developer; or
 - the presentation of a petition for a bankruptcy order or the making of a bankruptcy order against the Developer.

31. COUNCIL'S POWER TO EXECUTE WORKS IN DEFAULT

- 31.1 Without affecting clause 3 and clause 30, if the Developer fails to carry out or complete the Works in accordance with the Developer's obligations under this agreement, the Council, after giving to the Developer and the Surety not less than 20 Working Days written notice, shall be entitled to carry out or complete the Works in default, using the Council's own employees, or by contractors or otherwise and to recover from the Developer or Surety the cost or carrying out or completing the Works as certified by the Proper Officer.
- 31.2 The Developer hereby grants to the Council and the Council's agents, contractors and employees full right and licence to enter onto and remain on the Land together with all machinery plant and materials in order to carry out or complete the Works and remedy any defects or damage to the Road pursuant to clause 31.1.

32. DISPUTES

Any dispute, controversy or claim arising out of or relating to this agreement, including any question regarding its breach, existence, validity or termination or the legal relationships established by this agreement, shall be finally resolved by arbitration in accordance with the Arbitration Act 1996. It is agreed that:

(a) the tribunal shall consist of one arbitrator appointed jointly by the parties;

- (b) in default of the parties' agreement as to the arbitrator, the arbitrator shall be appointed on either party's request by the President for the time being of the Institution of Civil Engineers;
- (c) the costs of the arbitration shall be payable by the parties in the proportions determined by the arbitrator (or if the arbitrator makes no direction, then equally); and

33. MORTGAGEE'S CONSENT

The Mortgagee consents to the terms of this agreement but without liability save in the event that the Mortgagee becomes successor in title to the Developer at any time before the Developer has fully performed all its obligations contained in this agreement.

34. LEGAL AND OTHER COSTS

- 34.1 On the date of completion of this agreement or whenever demanded, within ten Working Days of written demand, the Developer shall pay to the Council:
 - (a) £14,100 in respect of the reasonable and proper costs and expenses incurred or to be incurred by the Council in connection with the technical assessment, and inspection of the Works being 6% of the total of the Estimated Cost and the Council acknowledges that it has received of £5,000 of this sum prior to the date of this agreement ;
 - (b) the Council's reasonable and proper legal costs and disbursements in connection with the preparation, completion and registration of this agreement;
 - (c) any costs incurred by the Council in making and implementing any orders that regulate traffic which the Proper Officer deems necessary because of the Works and whether made or implemented before, during or after completion of the Works; and
- 34.2 Receipt by the Council of the payment of any sum shall not create any contractual relationship between the Council and the Developer, nor absolve the Developer from any liability or obligation imposed on the Developer by the terms of this agreement, or by statute or at common law.

35. Assignment

The Developer may not assign this agreement without the prior written consent of the Council such consent not to be unreasonably withheld or delayed.

36. LOCAL LAND CHARGES REGISTER

As soon as practicable, following the date of completion of this agreement, the Council shall enter this agreement and its terms and conditions in the local land charges register.

37. NOTICES

- 37.1 A notice or other communication to be given under this agreement must be in writing and must be:
 - (a) delivered by hand; or
 - (b) sent by pre-paid first class post or other next working day delivery service (and by fax in the case of emergency).
- 37.2 Any notice [or other communication] to be given under this agreement must be sent to the relevant party as follows:
 - (a) to the Council at: the Highways and Engineering Department, Town Hall, Torquay TQ1 3DR marked for the attention of the Principal Engineer];
 - (b) to the Developer at: its registered office marked for the attention of Mark Patten
 - (c) to the Surety at: its registered office
 - (d) to the Mortgagee at: its registered office

or as otherwise specified by the relevant party by notice in writing to each other party.

- 37.3 Any notice or other communication given in accordance with clause 37.1 and clause 37.2 will be deemed to have been received:
 - (a) if delivered by hand, on signature of a delivery receipt or at the time the notice or other communication is left at the address provided that if delivery occurs before 9.00 am on a Working Day, the notice will be deemed to have been received at 9.00 am on that day, and if delivery occurs after 5.00 pm on a Working Day, or on a day which is not a Working Day, the notice will be deemed to have been received at 9.00 am on the next Working Day;
 - (b) if sent by pre-paid first class post or other next working day delivery service, at 9.00 am on the second Working Day after posting.
- 37.4 A notice or other communication required to be given under this agreement shall not be validly given if sent by e-mail.
- 37.5 This clause does not apply to the service of any proceedings or other documents in any legal action.

38. THIRD PARTY RIGHTS

A person who is not a party to this agreement shall not have any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this agreement.

39. GOVERNING LAW

This agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of England and Wales.

This agreement has been entered into on the date stated at the beginning of it.

Executed as a deed by affixing the COMMON SEAL of THE COUNCIL OF THE BOROUGH OF TORBAY was affixed to this document in the presence of :

ATCUDIN

The Council of The Borougi of Torbay S/N

Executed as a deed by CAVANNA HOMES (SOUTH WEST) LIMITED

acting by

(print name) a director, in the presence of:

[SIGNATURE OF WITNESS] [NAME, ADDRESS [AND

OCCUPATION] OF WITNESS]

Executed as a deed by MD INSURANCE SERVICES LIM acting by

(print name) a director, in the presence of:

[SIGNATURE OF WITNESS] [NAME, ADDRESS [AND OCCUPATION] OF WITNESS]



Executed as a deed by LLOYDS BANK PLC acting by

(print name) a director, in the presence of:

.....

[SIGNATURE OF WITNESS] [NAME, ADDRESS [AND OCCUPATION] OF WITNESS]

MH. No.	Cover	Invert Level	Depth to Invert	Diameter	Cover Depth	Backdrop Depth	Add. Inlets	Inlet Size		Frame Grade	Typical Details	Remarks	CONTRACT FIGURED I DISCREPA	WING IS COPIFICIENT CRS MUST CHECK ALL INDIGIOUS AFE TO BE NOLES MUST ER REPOR	HOACE FROM	
	(m)	(m)	(m)	(mm)	(m)	(m)		(mm)	(mm)	(class)			CONSULT	NG ELISINGERS BOFORS	PROCEEDING	
		NO	TE : EXIS	TING MAN	HOLEIL	's AND P	IPE SIZE	E TO BE	VERIFIED	BY CONTR	ACTOR BEFORE START O	OF DRAINAGE WORKS	Notes:			
			100											DRUP AGE LA TOUT DAU		
	HIGH	NAY DRA	NAGE										BS EN124	LE COVERS AND FRAM		
														LES (MINI CLEAN OP) S TO OP DHALCE (UP A		
		-											1	COVERS AND FRAMES		0100/35 5-011
HD1	70.408	68.850	1.558	225	1.333	•	2	150	1200	D400	TYPE B CHAMBER	SUMP MANHOLE	DOUBLE TO NUCOSE DO	RANDLE FOR 875M A BU	LARE OPENINGS AND LANAHOLE FRANCES	DBS PEO/DED W 1 SALL TYPICALL" B
HD2	71.220	69,405 69,480	1.815	225 150	1.590	-	-	225	1200	D400	TYPE B CHAMBER	1998	3 7 (SF414 10 CEV/201	P B. T JI ALL CASES SI AGE 174, THE WARKS I WORTAN	ATT COMMENTATION EL LORALES E MAIL DE	EBOCIEC CALACISEA EBOCIEC CALACISEA
HD3	72.850	71.425	1.425	225	1.200	-	2	150	1200	- D400	TYPE B CHAMBER					
HD4	71.000	69.650	1.350	150	1.200	-	2	150	1200	D400	TYPE B CHAMBER			1		
	11,000				11200			100	1200	0100			1	1		1
													8 2207 14	May Arrenaments	and and and firms did	ŞН
						1							A 1905 14	CARDINAL ISSUE		5.2
													Rev. Date	Description	ng kanang kalang kanang ka Kanang kanang	By
													Project		i na na na na na na na 1948. B	and the second secon
19														YANNO	NS FARM	
			1											AREA A		
			111											PAIC	NTON	
													Detau		a strange and the state	
]						<u> </u>		_								
			100											FOUL & SURFACE WATER		
													¹	NANHOLE	SCHEDU	JLE
-													Client/Archite	™ NNA HOMES		COT I TO
															(3001A M	631)110
-													Drawing No.	P9857 H10	7 Rei B	By S.H
								10000				A second se	Drawn by	S.H Date		19.05.14
			191										Checked by	J.D Date		19.05.14
_			1.0		-									14 B	- Mar	
														w.	22	
															La TUNEL (T) lasta	
						1								CONSULTING EN	GINEERS LIMITED	5
													1 der st.	117 8/2 6266	Carda	
														11792:4313		300 Stal 5
														19491 11112 9: 1020	Frank Press	52 197030
													10.	120 11:03		752 797301

YANNONS FARM

RESIDENTIAL A

SPECIFICATION

FOR

SECTION 38

SPECIFICATION NO: P9857 - H102(F)

Specification based on a CBR value of 4%.

Jubb Consulting Engineers Ltd Ensign House, Parkway Court, Longbridge Road, Devon PL6 8LR

Tel: 01752 797000 Fax: 01752 797001 E-Mail: <u>plymouth@jubb.uk.com</u>



SPECIFICATION CONTROL SHEET

Client: CAVANNA HOMES

Project: YANNONS FARM RESIDENTIAL A

Job No: P9857

Title: SPECIFICATION FOR S38 SURFACING

Specification No: H102

Prepared by: S. Hartley

Reviewed by:

Approved by:

Version	Date	Detail	Prepared	Reviewed	Approved
A	19/05/14	lssued for Technical Approval.	SH		
В	28/05/14	Specification 4 amended	SH		
С	27/06/14	Spec 3 amended & footway spec amended to suit planning	SH		
D	14/07/14	Updated following technical comment	SH		
E	05/08/14	Further changes to suit comments	SH		
F	21/08/14	Spec 1 amended to suit T.C request	SH		



P9857/H102F

CONTENTS

SPECIFICATION 1:	COMMERCIAL ESTATE ROAD
191 I.	

SPECIFICATION 2: RESIDENTIAL ACCESS ROAD

SPECIFICATION 3: FOOTWAYS - FLEXIBLE SURFACING

- SPECIFICATION 4: VEHICLE CROSS OVER
- SPECIFICATION 5: RUMBLE STRIPS / RAMPS

SPECIFICATION 6: BLOCK PAVIORS

SPECIFICATION 7: CROSSINGS

- SPECIFICATION 8: KERBING
- SPECIFICATION 9: EDGINGS

APPENDIX A

GRANULAR SUB-BASES TO ROADS/PAVINGS





ALL EXTERNAL WORKS TO BE IN ACCORDANCE WITH DEPARTMENT OF TRANSPORT SPECIFICATION FOR HIGHWAY WORKS

SPECIFICATION 1: COMMERCIAL ESTATE ROAD

WEARING COURSE:

Glenflex 10 surf PMB 35mm proprietary surface course 10mm nominal size aggregate Bitumen binder to be polymer modified bitumen. Aggregate types – Coarse Gritstone, Fine Gritstone, Filler Coarse aggregate: PSV 60

BINDER COURSE:

Glenflex 20 PMB 65mm proprietary binder course Bitumen binder to be polymer modified bitumen

ROAD BASE:

AC 40 base 40/60 150mm dense road base bitumen macadam to BS EN 13108:Part 1:2006 0/40mm dense base course Bitumen binder to be 40/60 pen

SUB-BASE + CAPPING LAYER

150mm minimum thick granular material Type 1 to DoT Specification Clause 803. Granular material laid in accordance with DoT Specification Clause 802.

Plus

300mm thick granular material Type 6F2 to DoT Specification. Granular material laid in accordance with Clause 802 DoT Specification Clause 612.

GEOTEXTILE:

Geotextile "LOTRAK 25R", or similar, over formation to be laid in accordance with the manufacturers recommendations.



P9857/H102F

SUBGRADE:

Upon achieving satisfactory levels at formation the area shall be proof rolled with 8 passes of a vibratory roller having a mass per metre width of roll between 2900 and 3600 kg.

NOTES:

- 1. Any soft spots encountered are to be removed and backfilled in compacted layers with Type 6F2 material.
- 2. Above construction based on lowest CBR of 4% and lowest plasticity index equating to this CBR value.

Further CBR tests required at formation level at 20 metre intervals in order to confirm construction.



SPECIFICATION 2: RESIDENTIAL ACCESS ROAD

WEARING COURSE:

SMA 10 surf 40/60 40mm SMA wearing course to BS EN 13108:Part 5:2006 10mm nominal size aggregate Bitumen binder to be 40/60 pen. Aggregate types – Coarse Gritstone, Fine Gritstone, Filler Coarse aggregate: PSV 60 Fine aggregate: PSV 60 Maximum AAV: 14 Fibres: Cellulose (from an approved source) 0.5% Average Void Content: 2.5% - 3.5% Maximum Void Content: 6% Binder Drainage at 175°C: 0.2% maximum

BINDER COURSE:

AC 20 bin 40/60 60mm dense binder course bitumen macadam to BS EN 13108:Part 1:2006 0/20mm dense binder course Bitumen binder to be 40/60 pen

ROAD BASE:

AC 40 base 40/60 80mm dense road base bitumen macadam to BS EN 13108:Part 1:2006 0/40mm dense base course Bitumen binder to be 40/60 pen

SUB-BASE + CAPPING LAYER

150mm minimum thick granular material Type 1 to DoT Specification Clause 803. Granular material laid in accordance with DoT Specification Clause 802.

<u>Plus</u>

300mm thick granular material Type 6F2 to DoT Specification. Granular material laid in accordance with Clause 802 DoT Specification Clause 612.

GEOTEXTILE:

Geotextile "LOTRAK 25R", or similar, over formation to be laid in accordance with the manufacturers recommendations.



SUBGRADE:

Upon achieving satisfactory levels at formation the area shall be proof rolled with 8 passes of a vibratory roller having a mass per metre width of roll between 2900 and 3600 kg.

NOTES:

- 1. Any soft spots encountered are to be removed and backfilled in compacted layers with Type 6F2 material.
- Above construction based on lowest CBR of 4% and lowest plasticity index equating to this CBR value.

Further CBR tests required at formation level at 20 metre intervals in order to confirm construction.



SPECIFICATION 3: FOOTWAYS – FLEXIBLE SURFACING

WEARING COURSE:

AC 6 surf 100/150 20mm SMA wearing course to BS EN 13108:Part 5:2006 0/6mm dense surface course

BINDER COURSE:

AC 20 bin 100/150 50mm dense binder course bitumen macadam to BS EN 13108:Part 1:2006 0/20mm dense binder course

SUB-BASE:

125mm minimum thick granular material Type 1 to DoT Specification Clause 803. Granular material laid in accordance with DoT Specification Clause 802.

GEOTEXTILE:

Terram 1000 or similar approved separation membrane

SUBGRADE:

Upon achieving satisfactory levels at formation the area shall be proof rolled with 8 passes of a vibratory roller having a mass per metre width of roll between 2900 and 3600 kg.

NOTES:

1. Any soft spots encountered are to be removed and backfilled in compacted layers with Type 6F2 material.



SPECIFICATION 4: VEHICLE CROSS-OVER

WEARING COURSE:

AC 6 surf 160/220 30mm SMA wearing course to BS EN 13108:Part 5:2006 0/6mm dense surface course

BINDER COURSE:

AC 20 bin 160/220 60mm dense binder course bitumen macadam to BS EN 13108:Part 1:2006 0/20mm dense binder course

SUB-BASE:

150mm minimum thick granular material Type 1 to DoT Specification Clause 803. Granular material laid in accordance with DoT Specification Clause 802.

GEOTEXTILE:

Terram 1000 or similar approved separation membrane

SUBGRADE:

Upon achieving satisfactory levels at formation the area shall be proof rolled with 8 passes of a vibratory roller having a mass per metre width of roll between 2900 and 3600 kg.

NOTES:

1. Any soft spots encountered are to be removed and backfilled in compacted layers with Type 6F2 material.



SPECIFICATION 5: RAMPS

SURFACING:

100 x 100 x 100mm charcoal coloured concrete setts. Conversation Setts by Marshalls or equivalent. All joints between setts to be 6-10mm pointed in Class 1 mortar. Concrete Setts to be bedded on 150mm minimum thick ST4 concrete.

RUNNING COURSE OVER SUB BASE

AC 32 base 40/60 80mm dense road base bitumen macadam to BS EN 13108:Part 1:2006 0/32mm dense base course Bitumen binder to be 40/60 pen.

This road base shall have holes (between 100mm and 150mm diameter) drilled at the rate of one per square metre and filled with 2,8/6,3mm clean chippings prior to laying paving blocks.

SUB-BASE + CAPPING LAYER

150mm minimum thick granular material Type 1 to DoT Specification Clause 803. Granular material laid in accordance with DoT Specification Clause 802.

Plus

300mm thick granular material Type 6F2 to DoT Specification. Granular material laid in accordance with Clause 802 DoT Specification Clause 612.

GEOTEXTILE:

Geotextile "LOTRAK 25R", or similar, over formation to be laid in accordance with the manufacturers recommendations.

SUBGRADE:

Upon achieving satisfactory levels at formation the area shall be proof rolled with 8 passes of a vibratory roller having a mass per metre width of roll between 2900 and 3600 kg.

NOTES:

 Any soft spots encountered are to be removed and backfilled in compacted layers with Type 6F2 material.



2. Above construction based on lowest CBR of 4% and lowest plasticity index equating to this CBR value.

Further CBR tests required at formation level at 20 metre intervals in order to confirm construction.




SPECIFICATION 6: BLOCK PAVIORS

SURFACING:

Concrete block paving Marshall's Tegula sett, penant grey colour or similar approved. Laying bond to be agreed.

Blocks to be 120x80mm, 120x120mm & 120x160mm block thickness to be 80mm. Blocks to be laid and sealed to manfacturer's recommendations.

Blocks shall be cut so that no individual block shall be less than half a block length.

To be laid on 35mm uncompacted thickness of sand. Bedding sand to comply with the following grading:

Grading of Bedding Sand for paviors -

Sieve (mm and µm)	Percentage passing			
6.3	100			
5	90-100			
2.36	75-100			
1.18	55-90			
600	35-70			
300	8-35			
150	0-10			
75	0-0.5			

The bedding sand shall be naturally occurring silica sand, free of deleterious salts and contaminants, with particles of a rounded or sub-rounded shape.

SUB-BASE:

125mm minimum thick granular material Type 1 to DoT Specification Clause 803.

Granular material laid in accordance with DoT Specification Clause 802.

GEOTEXTILE:

Terram 1000 or similar approved separation membrane

SUBGRADE:

Upon achieving satisfactory levels at formation the area shall be proof rolled with 8 passes of a vibratory roller having a mass per metre width of roll between 2900 and 3600 kg.



SPECIFICATION 7: CROSSINGS

SURFACING: RUMBLE

100 x 100 x 100mm charcoal coloured concrete setts. Conversation Setts by Marshalls or equivalent. All joints between setts to be 6-10mm pointed in Class 1 mortar. Concrete Setts to be bedded on 150mm minimum thick ST4 concrete.

SURFACING: CROSSING

Concrete block paving Marshall's Tegula sett, penant grey colour or similar approved. Laying bond to be agreed.

Blocks to be 120x80mm, 120x120mm & 120x160mm block thickness to be 80mm. Blocks to be laid and sealed to manfacturer's recommendations.

Blocks shall be cut so that no individual block shall be less than half a block length.

To be laid on 35mm uncompacted thickness of sand. Bedding sand to comply with the following grading:

Grading of Bedding Sand for paviors -

Sieve (mm and µm)	Percentage passing					
6.3	100					
5	90-100					
2.36	75-100					
1.18	55-90					
600	35-70					
300	8-35					
150	0-10					
75	0-0.5					

The bedding sand shall be naturally occurring silica sand, free of deleterious salts and contaminants, with particles of a rounded or sub-rounded shape.

RUNNING COURSE OVER SUB BASE

AC 32 base 40/60 80mm dense road base bitumen macadam to BS EN 13108:Part 1:2006 0/32mm dense base course Bitumen binder to be 40/60 pen.



This road base shall have holes (between 100mm and 150mm diameter) drilled at the rate of one per square metre and filled with 2,8/6,3mm clean chippings prior to laying paving blocks.

SUB-BASE + CAPPING LAYER

150mm minimum thick granular material Type 1 to DoT Specification Clause 803.

Granular material laid in accordance with DoT Specification Clause 802.

Plus

300mm thick granular material Type 6F2 to DoT Specification. Granular material laid in accordance with Clause 802 DoT Specification Clause 612.

GEOTEXTILE:

Geotextile "LOTRAK 25R", or similar, over formation to be laid in accordance with the manufacturers recommendations.

SUBGRADE:

Upon achieving satisfactory levels at formation the area shall be proof rolled with 8 passes of a vibratory roller having a mass per metre width of roll between 2900 and 3600 kg.

NOTES:

- 1. Any soft spots encountered are to be removed and backfilled in compacted layers with Type 6F2 material.
- Above construction based on lowest CBR of 4% and lowest plasticity index equating to this CBR value.

Further CBR tests required at formation level at 20 metre intervals in order to confirm construction.



SPECIFICATION 8: KERBING

Full kerbs to be SQ 205 x 225 Marshall conservation kerb or similar approved with 125mm upstand.

Kerbs to raised areas to be SQ 225 x 205 with 40mm upstand to be Marshall conservation kerb or similar approved .

Drop kerbs, to be SQ 225 x 205mm with 25mm upstand at vehicular crossing. and flush at pedestrian tactile crossing.

Dropper units, Types DL1and DR1 to be used where necessary square edge.

Quadrants to be 305 x 255mm solid quadrant square edge.

SPECIFICATION 9: EDGINGS - PEDESTRIAN AREAS ONLY

All edgings to be precast concrete to BS EN 1340 laid on GEN1 concrete bed and haunching.

Edgings to be 150 x 63mm conservation edging.



APPENDIX A

(To be read in conjunction with the specification for Earthworks) GRANULAR SUB-BASES TO ROADS/PAVINGS

- 120 CHECKING CBR OF SUBGRADE: The specified thicknesses of subbases are based on a subgrade of silty clay with an assumed CBR of 3%. If the subgrade material appears to be different from this, or if there are extensive soft spots, test CBR of subgrade, report results to CA, and if different from the assumed CBR obtain instructions before proceeding with laying sub-base.
- 130 HERBICIDE: Apply an approved type of herbicide in accordance with manufacturer's recommendations to subgrade of paved footpaths.
- 140 COMPACTION OF SUBGRADE:
 - Defer final excavation to formation level until immediately before compaction of subgrade.
 - Soft spots must be brought to the attention of the CA. Obtain instructions before proceeding.
 - Subgrade must be relatively dry at time of compaction.
 - Where use of a roller is impracticable use a suitable mechanical rammer.
 - Where local excavation and backfilling has taken place make additional passes of the roller.
- 151 SUBGRADE FOR VEHICULAR AREAS: Immediately before placing sub-base compact subgrade with not less than four passes of a roller weighing 8-10 tonnes or by equivalent other means.
- 160 SUBGRADE FOR PEDESTRIAN AREAS: Immediately before placing sub-base thoroughly compact subgrade with a roller weighing not less than 2.5 tonnes or equivalent other plant.
- 170 GEOTEXTILE FILTER:
 - Lay an approved type in accordance with manufacturer's recommendations to compacted subgrade of Main Access Road and Car park areas.
 - Do not allow construction or other vehicles over the geotextile until it is fully covered by the granular sub-base.
- 210 GRANULAR MATERIAL: To Highways Agency Specification for highway works, clause 803 (Type 1) or approved equivalent. Test materials as clause 803.5 if required by CA.
- 211 GRANULAR MATERIAL: Free from harmful matter and excessive dust, well graded, passing a 75 mm BS sieve and in any one layer only one of the following:



- Crushed hard rock or quarry waste (other than chalk), with not more binding material than is required to help hold the stone together
- Crushed concrete, crushed brick or tile, free from plaster, timber or metal
- Gravel or hoggin with not more clay content than is required to bind the material together, and with no large lumps of clay
- Sound blastfurnace slag (other than from steelmaking foundries)
- Unburnt colliery spoil (minestone).
- 220 FROST SUSCEPTIBLE GRANULAR MATERIAL, as defined by Highways Agency Specification for highway works clause 705.5 must not be used within 450mm of the final surface of the paving. Test materials used if required by CA and supply certificate(s).
- 225 SULPHATE CONTENT: Slag and other granular materials when placed within 500mm of cement-bound material, concrete pavements, structure or products, must comply with Highways Agency Specification for highway works clause 801.2.
- 230 PLACING GRANULAR MATERIAL GENERALLY:
 - Ensure that subgrade is free from loose soil, rubbish and standing water.
 - Take all necessary precautions to ensure stability of adjacent structures. Place and compact material against or over structures, membranes or buried services in a sequence and manner which will ensure stability and avoid damage.
- 240 LAYING GRANULAR SUB-BASE FOR VEHICULAR AREAS:
 - spread and level in layers and as soon as possible thereafter compact each layer.
 - Lay and compact to the Highways Agency Specification for highway works clauses 705.1, 705.2, 705.3, 801.3, 802.
 - Take particular care to compact fully around drainage fittings, inspection cover bases and at perimeters.
- 250 LAYING GRANULAR SUB-BASES FOR PEDESTRIAN AREAS: spread and level and, as soon as possible thereafter, compact with a roller weighting not less than 2.5 tonnes or other equivalent plant.
- 320 BLINDING: Surfaces to receive interlocking brick or block paving to have sufficient sand, fine gravel, PFA or other approved fine material applied and surface vibrated to provide a close and smooth surface.
- 330 COLD WEATHER WORKING:
 - Do not use frozen materials containing ice.
 - Do not lay materials on frozen surfaces.
- 340 PROTECTION:



- Cover sub-bases as soon as practicable with subsequent layers, specified elsewhere.
- Prevent damage to subgrades and sub-bases from construction traffic, construction operations and inclement weather.



Schedule 1- Part 1 Works

- All highway drainage.
- All other drainage contained within the Road.
- All kerb foundations and where appropriate, kerbs including lowering at vehicle crossings, pram-ramps, sub-base and base court surfacing to pedestrian way.
- Carriageway sub-base, road base, vehicle crossings and any supporting structures to the same.
- Carriageway base course surfacing and all vehicle crossings where appropriate.
- Demarcation of sight lines and clearance of vision splays.
- Operational street lighting.
- Temporary street name plates.

Schedule 2 - Part 2 Works

- All outstanding kerbing not completed as part of the Part 1 Works.
- Pedestrian ways and cycle ways.
- Carriageway wearing course and carriageway base course including (where appropriate) speed restraint measures.
- · Vision splays, verges and service strips.
- All outstanding street lighting and street furniture.
- Street name plates.
- Road markings and traffic signs.
- All other works described in the Specification and shown in the Drawings.

Schedule 3 - Commuted sums

ltem

Maintenance of soakaways (shown on Drawing P9857 H100 rev N) Commuted Sum £20,000







70.000 MH HD1 CL 70.408 IL 68.850 sump 68.550						- - -
65.000						
datum 63.000 ROAD D	:					
CHAINAGE	0.000	2.400		8.400 10.000	13.100	
EXISTING GROUND LEVEL	68.455		68.374	68.293	68.243	
ALIGNMENT LEVEL		70.346		70.270	70.239	
VERTICAL ALIGNMENT				<u>-1.00</u> -100.		
HORIZONTAL ALIGNMENT						
LEFT HAND CHANNEL				70.211 70.195	70.164	
RIGHT HAND CHANNEL				70.361	70.314	
HIGHWAY DRAIN			225mmø VC HD 1/100 1.7m Extra Strength EN 295–1 kiter S Bedding and			VC to BS narked Class Surround.

NOTES								
 (C) THIS DRAWING IS COPYRIGHT CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM. DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO JUBB CONSULTING ENGINEERS LIMITED BEFORE PROCEEDING. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE CURRENT ENGINEERING SPECIFICATIONS AND RISK ASSESSMENTS. ALWAYS CHECK FOR LATER REVISIONS OF THIS DRAWING. 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. 								
G 21:08:14 Soakaways revised to suit tests. S.H J.D F 02:07:14 Sections amended to Planning & S.H								
E Local Authority requirements. Image: Cocal Authority requirements. E 22:05:14 Sections amended to suit revised proposals. S.H Image: Cocal Authority requirements. D 03:03:14 Redesign following planning meeting S.H Image: Cocal Authority requirements. S.H Image: Cocal Authority requirements. C 03:03:14 Redesign following planning meeting. S.H Image: Cocal Authority requirements. S.H Image: Cocal Authority requirements. S.H Image: Concept requirements. Image: Concentents. Image:								
PRELIMINARY H&S FILE ISSUE TENDER REPORT Project YANNONS FARM AREA A								
Detail PROPOSED LONGITUDINAL SECTIONS Client/Architect CAVANNA HOMES								
Scale @ A0 1:500H 1:100V Project Ref Drawing No Rev								
P9857 H101 G								
CIVIL STRUCTURAL ENVIRONMENTAL CIVIL STRUCTURAL ENVIRONMENTAL CIVIL STRUCTURAL ENVIRONMENTAL CIVIL STRUCTURAL ENVIRONMENTAL CIVIL STRUCTURAL ENVIRONMENTAL CIVIL STRUCTURAL ENVIRONMENTAL								
BRISTOL FARNBOROUGH Image: Constraint of the state of the s								
CARDIFF PLTMOUTH TEL 02920 524444 TEL 01752 797000 FAX 02920 524445 FAX 01752 797001 E.MAIL:- E.MAIL:- CARDIFF@JUBB.UK.COM PLYMOUTH@JUBB.UK.COM								

SOAKAWAY 1 (HIGHWAY DRAINAGE) Infiltration tanks to be constructed using precast/concrete perforated drainage rings to Torbay Council Highway Design Guide Typical Soakaway Details SD25.

Each ring is 2.1mø with 2.0m effective depth. No. of units required= 4 units

PCC CHAMBER COVER LEVEL= 70.270 - 70.350 (Finished road level) INCOMING PIPE INVERT LEVEL= 68.820 TOP OF SOAKAWAY LEVEL = 67.858

BASE OF SOAKAWAY LEVEL= 65.658 SOAKAWAY DESIGNED TO 3.02 $x/10_{-5}$ INFILTRATION RATE.



0.00

<u>SOAKAWAY 2</u> (PRIVATE) Infiltration tanks to be constructed using Wavin Aquacell Infiltration Units to the manufacturer's Standard Details. Each crate is 1.0m long x 0.5m wide x 0.4m deep. No. of attenuation units required= 60 units

10 units long x 3 units wide x 2 units deep (10 metres) (1.5 metres) (0.8 metres) INCOMING PIPE INVERT LEVEL= 65.370 TOP OF SOAKAWAY LEVEL = 65.520BASE OF SOAKAWAY LEVEL= 64.720

SOAKAWAY DESIGNED TO 1.99 x 10-3 INFILTRATION RATE

<u>SOAKAWAY 4</u> (PRIVATE) Infiltration tanks to be constructed using Wavin Aquacell Infiltration Units to the manufacturer's Standard Details. Each crate is 1.0m long x 0.5m wide x 0.4m deep. No. of attenuation units required= 24 units 3 units long x 4 units wide x 2 units deep (3 metres) (2 metres) (0.8 metres) INCOMING PIPE INVERT LEVEL= 64.450

TOP OF SOAKAWAY LEVEL = 64.600 BASE OF SOAKAWAY LEVEL= 63.800

SOAKAWAY DESIGNED TO 4.39 x 10-4 INFILTRATION RATE.

<u>SOAKAWAY 3</u> (PRIVATE) Infiltration tanks to be constructed using Wavin Aquacell Infiltration Units to the manufacturer's Standard Details. Each crate is 1.0m long x 0.5m wide x 0.4m deep.

No. of attenuation units required= 70 units 7 units long x 5 units wide x 2 units deep (7 metres) (2.5 metres) (0.8 metres)

INCOMING PIPE INVERT LEVEL= 66.360 TOP OF SOAKAWAY LEVEL= 66.510 BASE OF SOAKAWAY LEVEL= 65.710 SOAKAWAY DESIGNED TO 8.28 \times 10-4 INFILTRATION RATE.

AREA IN ABEYANCE.

× >6.6~

