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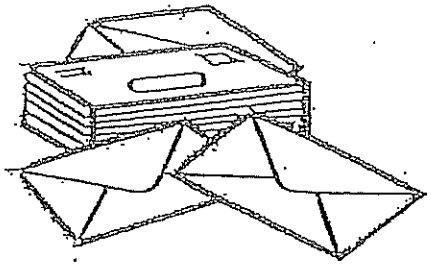
SCANNING INFORMATION SHEET

OTHER DOCUMENTS



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MTC

Flood Risk Assessment
Herons Creek
Thames Drive
Charvil

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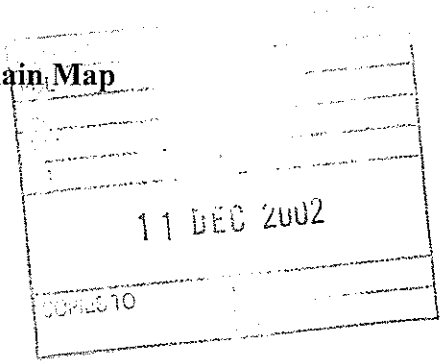

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Flood Risk Assesssment

Herons Creek

Thames Drive

Charvil

1 Introduction

1.1 Michael Thomas Consultancy LLP has been instructed to produce a Flood Risk Assessment on behalf of Halmers of London in accordance with Appendix F of Planning Policy Guidance Note 25. The Report has been revised to take into account the points raised by the Environment Agency in their letter dated 26th September 2002 to the Planning Authority.

2 Site Location

2.1 The site is located in an area of existing residential development between Thames Drive, Charvil and the River Thames.

2.2 To the west of the site is the River Thames with residential properties to the north and south of the site. Thames Drive to the east of the site and further east across open land is a tributary of the River Thames.

2.3 A Location Plan is attached as Appendix 1 showing the existing property on the site and a Plan showing ground levels for the site based on ordinance Datum is attached as Appendix 2.

2.4 The site as can be seen from the attached documents is already developed with one large residential property which is to be replaced.

3 Potential Sources Of Flooding

3.1 The Environment Agency's Indicative Flood Plain Map (Appendix 3) indicates that the site is in an area of land subject to flooding from the River Thames and the Environment Agency have indicated that the 1 in 100 year flood level for this site (Appendix 5) is estimated at 35.06 m above Ordnance Datum Newlyn.

3.2 The existing ground levels on the site range from 34.3m adjacent to the River Thames rising to 35.02m with the existing building finished floor level of 35.088m.

3.3 The drive level of the property is between around 34.6m up to 34.7m which means that in extreme flood conditions there will be 400mm of water over the drive and between 200mm and 600mm of water on Thames Drive in a 1 in 100 year event.

3.4 Based on the Environment Agency's predicted flood levels it is likely that Thames Drive at the site entrance will have sufficient water on it once every ten years to make access difficult except in a four wheel drive vehicle. In a one in one hundred year event the depth of flood water on Thames Drive would vary between 200m to 600m deep at the site. Water at these depths can be driven through by most of the four by four off road vehicles currently available.

3.5 The 1 in 100 year flood level for the River Thames at this point is 35.06m and the floor level of the new building will be raised to a minimum of 35.36m which is 300m above the predicted 1 in 100 year flood level and higher than the floor level of the current building. The building will be constructed with flood resistant construction including a solid concrete floor with seals around any incoming pipework to precent water ingress in extreme conditions.

3.6 The bottom section of the walls of the building will be constructed in conventional brick construction and provision made in the door openings for a facility to take dam boards if necessary.

3.7 The site is relatively flat and flood water would come across the site relatively quickly but would not get high enough to effect the property until well into a major flood giving the occupiers ample time to leave whilst the flood waters are still shallow and operate any flood defence measures built into the property.

3.8 The indications are that in the worst case flood water will be approximately 400m deep on the drive to the house and that the house itself will not be flooded.

3.9 A ground floor footprint of the existing house is 244.45m² and the footprint of the proposed replacement dwelling is 268.33m². The proposed building also includes the majority of the raised patio area of 78m² with existing levels between 35.02 a nd 34.875. Therefore between the average garden level adjacent to the existing building of 34.6m and the 1 in 100 year flood level of 35.06m there is a net gain of 12.4m² of storage.

4 Flood Flow

4.1 Herons Creek is an existing building in a line of other existing building approximately parallel to the River Thames and the new building is in a similar line as it stands on the footprint of Herons Creek and it will not obstruct flood flow any more that the current development does.

4.2 The residual flood risk for the building at the floor levels proposed are significantly below the 1% annual probability for flood waters coming up to the floor level of the building with the defence measures proposed the risks of flood water entering the building are even lower.

5 Conclusion

5.1 The site is currently developed and is bounded by existing development. The development itself will not be flooded by 1 in 100 year event and thus it falls within Table 1 Zone 2 of the Planning Policy Guidance Note 25 and is suitable for all redevelopment.

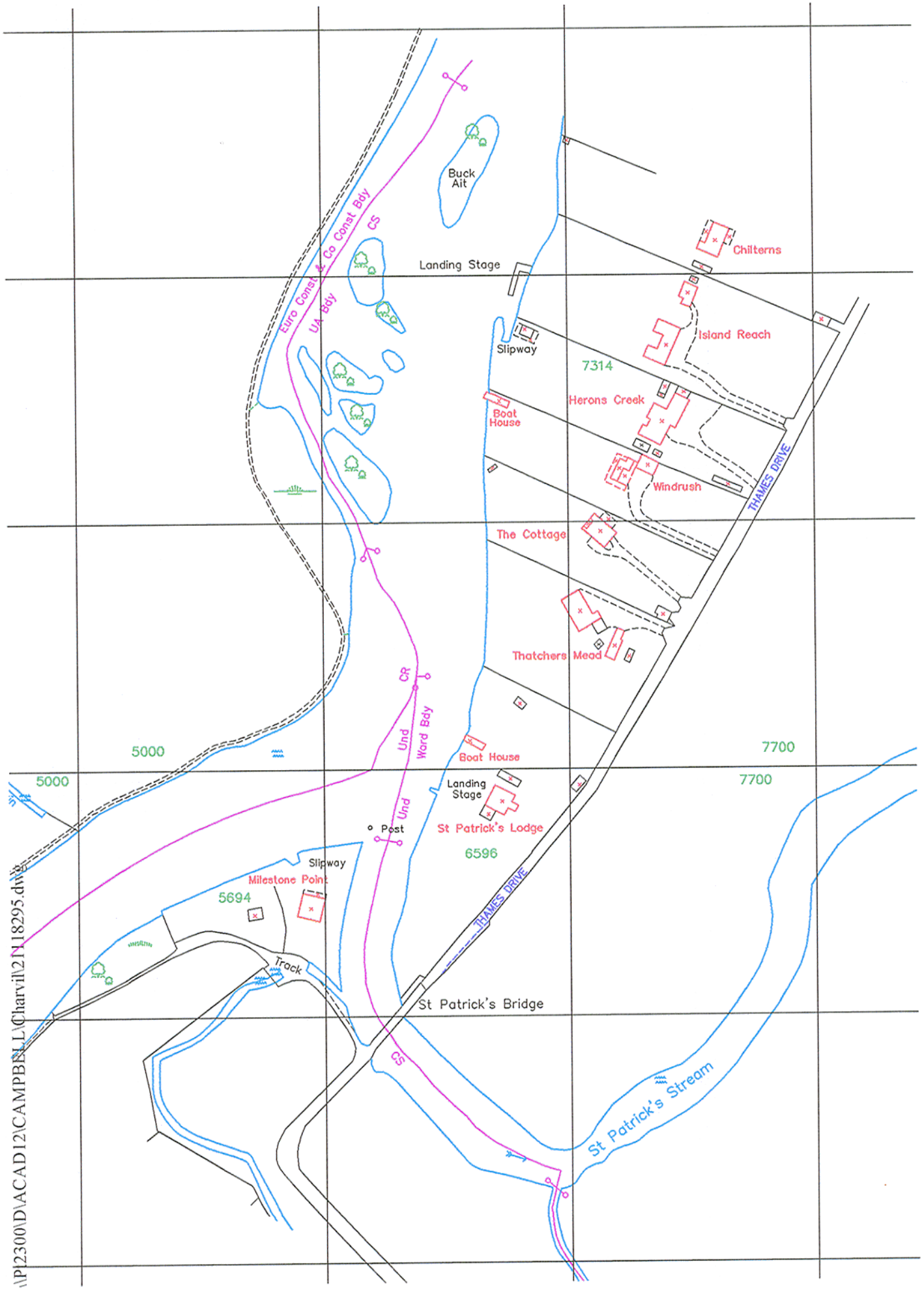
5.2 The site is already developed with a residential unit in a line of other residential properties and the existing building is not known to have flooded in the past.

5.3 The new building will be at a higher floor level than the existing building and will be less likely to flood.

5.4 The property will be on the Environment Agency's automated flood warning system. The residents can monitor the progress of any flood and evacuate to an area outside the flood plain when necessary.

APPENDIX 1

LOCATION PLAN



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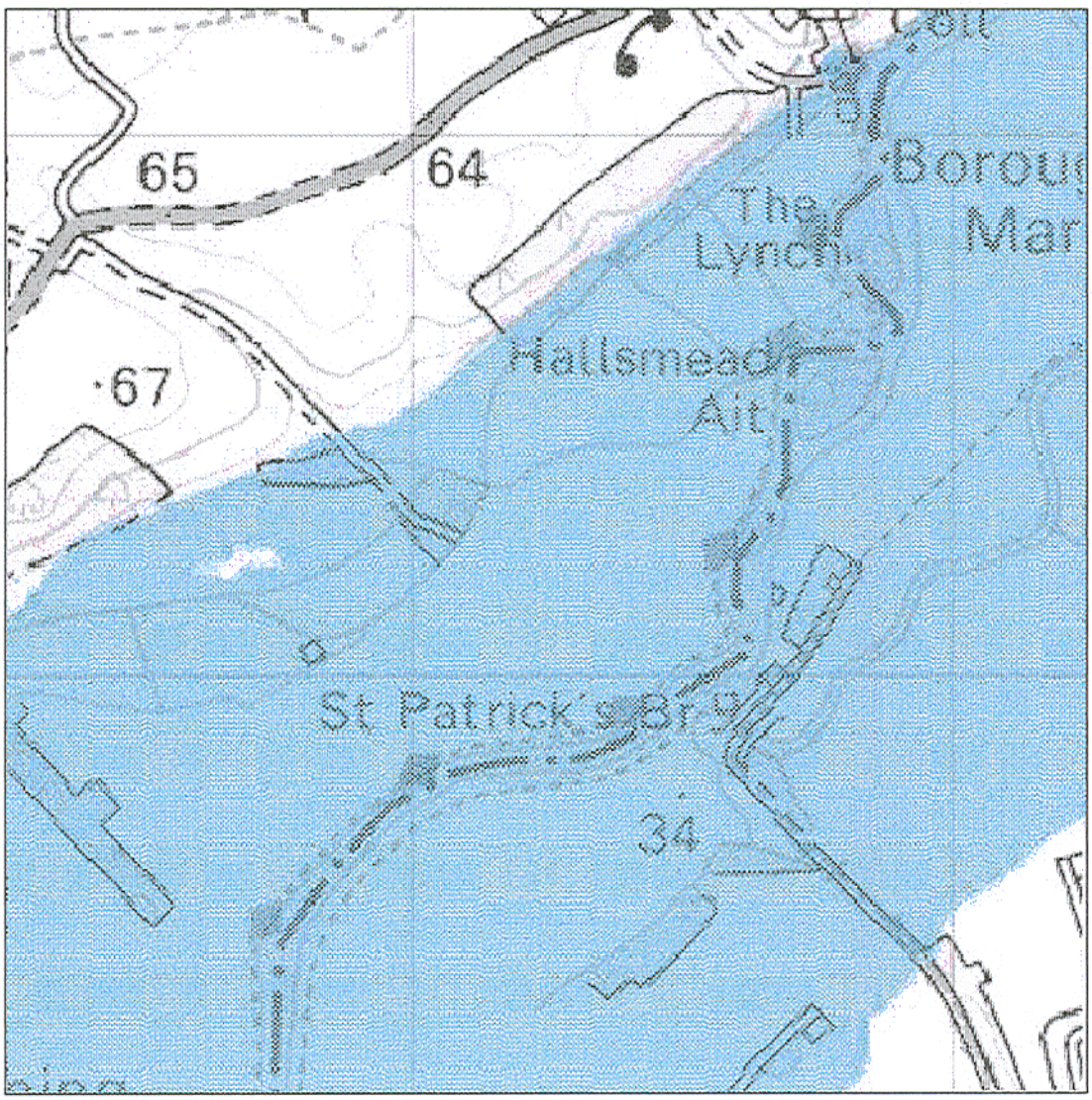
APPENDIX 2

SURVEY

APPENDIX 3

ENVIRONMENT AGENCY'S INDICATIVE FLOOD PLAIN MAP

ENVIRONMENT AGENCY
INDICATIVE FLOOD PLAIN MAP



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