

## **Item 8 Other planning issues.**

<b>Application Ref</b>	NP/17/0009/TPO		
<b>Case Officer</b>	Mike Higgins		
<b>Applicant</b>	Mr C Hopkinson		
<b>Agent</b>	Mr Paul Cleaver, Tree Works (West Wales) Ltd		
<b>Proposal</b>	1 x Cupressus macrocarpa - fell to ground level and leave stump in situ		
<b>Site Location</b>	Beach Court, The Strand, Saundersfoot, Pembrokeshire, SA69 9EU		
<b>Grid Ref</b>	SN13800502		
<b>Date Valid</b>	04-Jan-2017	<b>Target Date</b>	23-Mar-2017

The application is referred to the Development Management Committee for determination as the officer recommendation differs from that of the Community Council.

### **Application description**

The application seeks consent to fell a Cupressus macrocarpa tree located on a rocky outcrop at Beach Court , Saundersfoot beach and to leave the tree stump in situ. The tree is protected by Tree Preservation No. TPO33 (T12).

### **Consultee Response**

Saundersfoot Community Council: Object to the proposal and provided the following comments:-

‘The Council felt very strongly about the total felling of this fantastic tree. It has been a part of the landscape for many, many years and is an enhancement to the village and a part of our history.’

Two letters of objection were received, one from the Friends of Saundersfoot and the other from Saundersfoot and District Historic Society.

### **Policies considered**

Please note that these policies can be viewed on the Policies page of Pembrokeshire Coast National Park website -

<http://www.pembrokeshirecoast.org.uk/default.asp?PID=549>

LDP Policy 01 - National Park Purposes and Duty

LDP Policy 08 - Special Qualities

LDP Policy 11 - Protection of Biodiversity

LDP Policy 15 - Conservation of the Pembrokeshire Coast National Park

LDP Policy 30 - Amenity

### **Constraints**

Special Area of Conservation - within 500m

Special Protection Area - within 500m

LDP Mineral Safeguard  
Recreation Character Areas  
Surface Coal  
High Coal Risk  
Landscape Character Assessment  
Seascape Character Assessment

### **Officer's Appraisal**

#### **Description of Proposal**

- T1 – Cupressus Macrocarpa – Fell to ground leaving stump in situ

#### **Appraisal**

##### ***Amenity and location***

- The tree is a medium sized tree that is an identifiable landscape feature visible in an arc of 180° along the beach (**Appendix B**).
- The tree is a non-native specimen; however the species is common along the South Coast of Pembrokeshire and there are numerous other specimens of a similar age.
- It is clear to observe that it is growing on a rocky outcrop extending from the adjacent buildings onto the beach.

##### ***Root calculation***

- The tree has a stem diameter of 1080mm (**Appendix C**) which would suggest a calculated root zone radius of approximately 12.91m based upon BS5837:2012. (**Appendix D**)
- BS5837:2012 Table D.1 Annex D – Root protection area shows that this would result in a root area of approximately 519m<sup>2</sup> ( $\pi r^2$ )
- BS5837:2012 Clause 3.7 Terms and Definitions states that the Root Protection Area indicates the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability.

##### ***Outcrop observations***

- The outcrop is a narrow feature 5-6m wide with near vertical sides showing signs of historic and continuing erosion (**Appendix E**).
- From site investigations there appears to be a layer of soil varying in depth between approximately 0.5m - 2m deep above the rocky outcrop. (**Appendix F**)
- Based upon OS data the total area of the outcrop is approximately 145.6m<sup>2</sup> (**Appendix G**)
- OS data and aerial images show that approximately 48.3m<sup>2</sup> lacks soil coverage (**Appendix H**)
- The total area of the outcrop that will have soil coverage is approximately 97.3m<sup>2</sup>; suggesting that the medium on which the tree is growing is insufficient for the support of a tree this size long term.
- BS5837:2012 Table D.1 Annex D – Root protection area suggests that the calculated area of the outcrop (97.3m<sup>2</sup>) would be sufficient for a tree with a diameter of 450mm.

##### ***Root zone observations***

- There are several significant roots that have been exposed (**Appendix I**) which will also likely have a detrimental impact on the long-term structural stability, integrity and health of the tree.
- There are large areas of the outcrop that have undergone denudation of the soil through weathering and erosion back to the exposed outcrop; which have resulted in an additional loss of the total soil area.
- The erosion of the soil horizon is natural through weathering and possibly coastal storms as well as mechanical (man-made) erosion as a path runs along the outcrop from the adjacent building to the beach (**Appendix J**).
- It would appear that the outcrop is subject to erosion as the Northern side has protection methods installed (**Appendix K**)
- The tree shows exposed roots along the outcrop in an easterly direction from the trunk.
- The southern side shows signs of the soil being undercut which will reduce the structural stability of the soil to support the root zone in this area. (**Appendix F**)
- The size of the roots now exposed (**Appendix I**) also suggest that these initially developed within an area of soil which has been lost.
- It would appear that the erosion of the soil is dynamic as some grass is present around the exposed roots; however the soil in this area is predominantly bare (**Appendix I**) suggesting that the soil is continuing to erode away before grass etc can re-establish.

### **Rooting environment**

- The layer of soil varies in depth between approximately 0.5m - 2m deep above the rocky outcrop.
- This would theoretically be sufficient depth for typical root development as found in most trees; as the majority of the rooting structure of trees (80-90% of the roots) will be found in the top 1m of the soil profile' however the available area is significantly reduced (**Appendix D**).
- The majority of these roots will be also found at 0.6m or shallower; with only the occasional root penetrating to a depth of 2m or greater.
- The root development of this tree is likely to have developed in relation to the specific conditions; as the soil medium is situated on an outcrop it is likely to be free-draining which would allow the root system to develop unhindered into the available soil.
- Table 1 of the *Forestry Commission Information Note: The Influence of Soils and Species on Tree Root Depth* (2005) identified that the majority of trees growing on 'shallow soils over rock' will actually be restricted to a depth of <1.5m.
- The high bulk density of the rocky outcrop will result in mechanical resistance that will restrict root development' into the outcrop; limiting root formation to the soil horizon only.
- As such the root formation will be restricted to the limited available soil on the outcrop which in this instance is an insufficient area (m<sup>2</sup>) to support the rooting volume of a tree of this size (**Appendix D**).

### **Conclusion**

- The total area of soil present would be insufficient to allow the roots of this tree to have adapted unimpeded to the area expected for a structurally stable tree.
- The available soil area (97.3m<sup>2</sup>) is significantly smaller than the calculated root spread of this tree based upon *BS5837:2012 Annex D* calculations (519m<sup>2</sup>).
- It is therefore considered that although the tree is an identifiable landscape feature with likely locally historic relevance; it has outgrown its context and removal would be acceptable in terms of health and safety.

### **Replacement consideration**

- Although the tree is an individual specimen and a replacement would normally be conditioned; it is not felt that a replacement planted on this outcrop would be acceptable as the soil horizon on the outcrop will continue to erode and any future planting could be affected and become a future health and safety issue.

### **Works**

- **Macrocarpa** – Fell and leave stump in situ

### **Recommendation**

#### **APPROVE, subject to the following condition:**

1. All works hereby approved shall be carried out within two years of the date of this consent.  
Reason: Required to be imposed pursuant to Section 91 (1) of the Town and Country Planning Act 1990 (as amended).

**Appendices**

**Appendix A – Aerial Plan**



**Appendix B – Tree is visually prominent (image taken from slipway)**

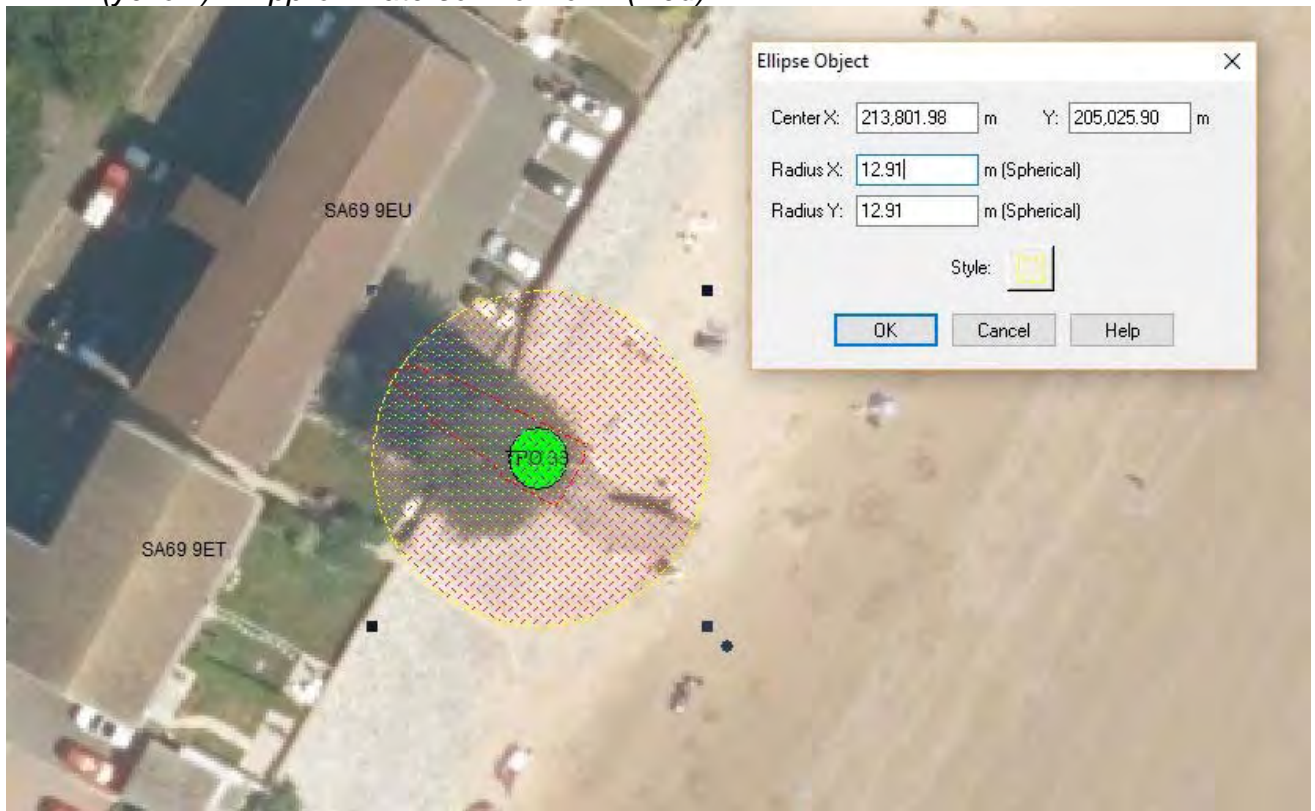




**Appendix C – Trunk diameter 338cm (3380mm)**



**Appendix D – Annotation of the calculated root protection area (12.91m) of the tree**  
*RPA - (yellow) Approximate soil horizon - (Red)*



**Appendix E** – *Outcrop and tree from Beach (showing Eastern section of outcrop does not have soil horizon)*

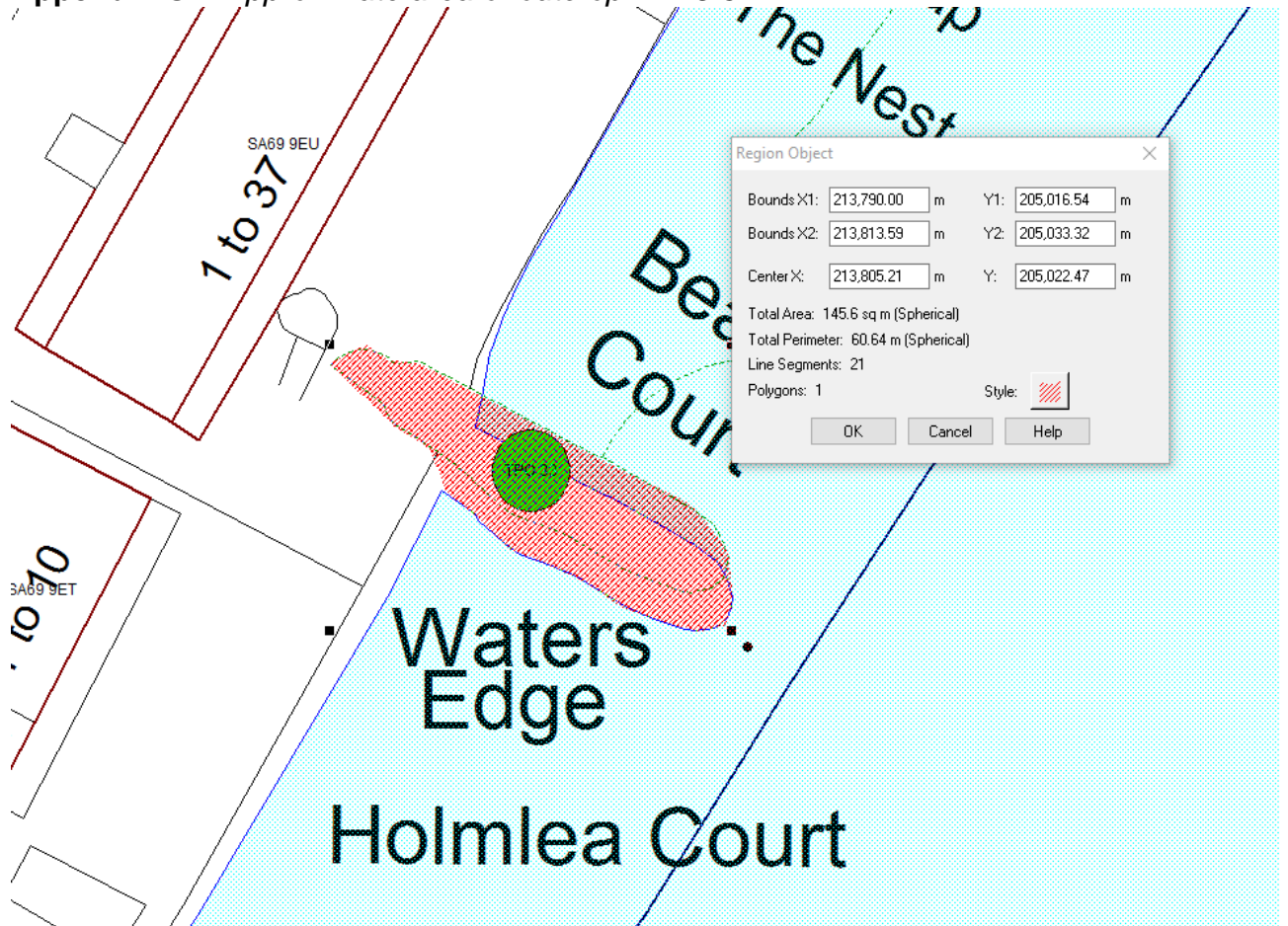


**Appendix F** – *Soil layer overlaying rocky outcrop showing undercut soil layer*





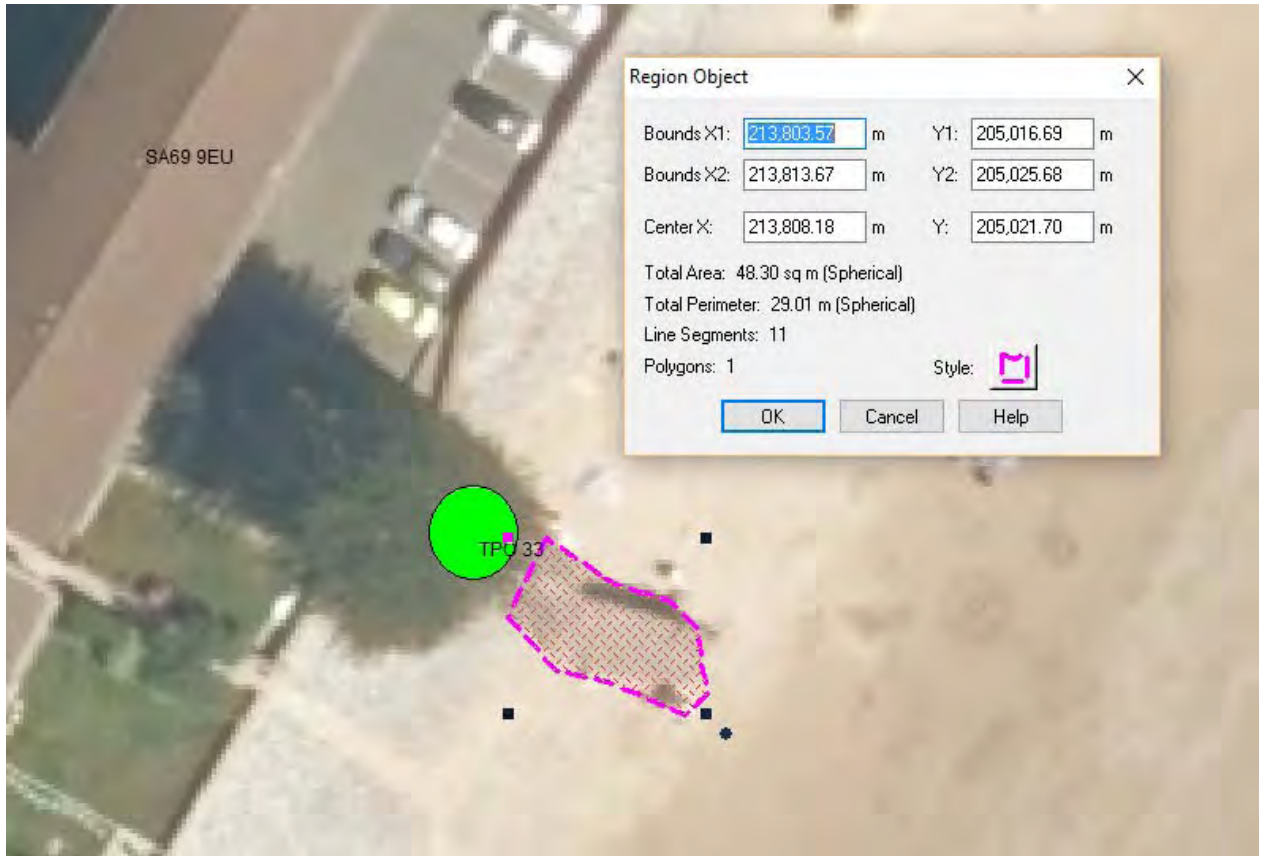
**Appendix G – Approximate area of outcrop – 145.6m<sup>2</sup>**



**Appendix H – Approximate area of outcrop without soil is 48.30m<sup>2</sup> –**

- Therefore maximum likely area with soil horizon is  $145.6 - 48.3 = 97.3\text{m}^2$





**Appendix I – Significant roots exposed – no grass present to suggest dynamic erosion**



**Appendix J – Footpath running from building to beach resulting in**



*compaction and erosion*

**Appendix K - Previous measures to curtail outcrop degradation (mesh netting)**

