

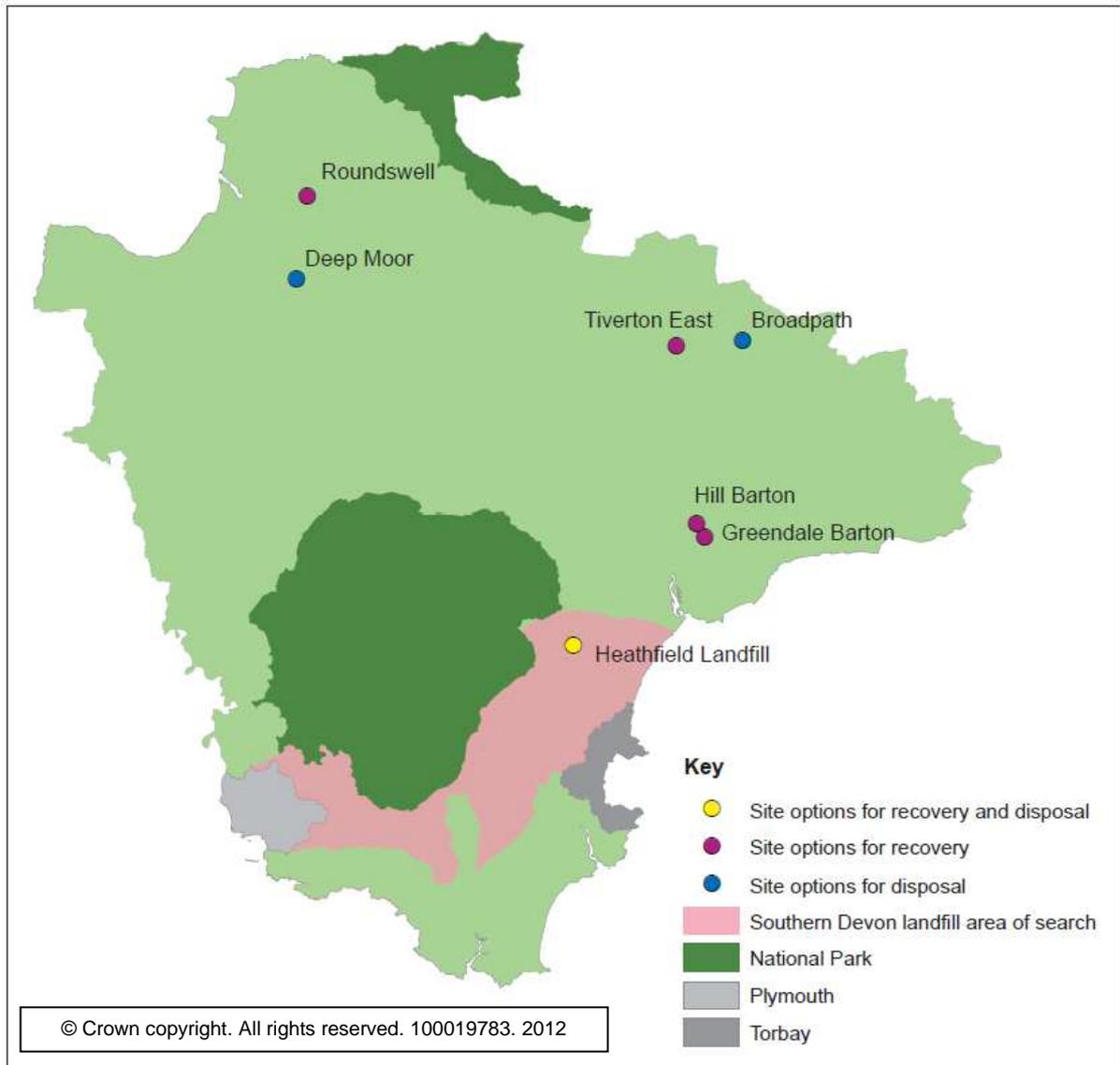
# **The Devon Waste Plan**

## Consultation Document Site Options Appraisal Reports

May 2012

**Devon County Council**  
County Hall  
Topsham Road  
Exeter  
Devon  
EX2 4QD





**Figure 1: The location of site options included within the Devon Waste Plan Consultation Document**

Site Details	
Site Reference:	Tiverton East
OS Grid Reference:	2983 1129
District:	Mid Devon
Parish:	Tiverton
Total site area (Ha):	Northern part of site: 34.6 Southern part of site: 74.2 Total: 108.8.
Current land use(s)	Mainly agricultural. Some dwellings and institutional buildings.
Historical land use(s)	Agricultural land, plantations, former Tiverton Joint Hospital.
Adjacent land use(s)	A361 adjacent to the northern boundary of the site. Tiverton golf club adjacent to the eastern boundary in addition to areas of open countryside. The Grand Western Canal Country Park is located to the south and the town of Tiverton to the west.
Relevant planning history:	The site is allocated in the Mid Devon Core Strategy and the Mid Devon Infrastructure and Allocations DPD as a strategic development proposal for residential and employment development.
Has the site been considered for waste development in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

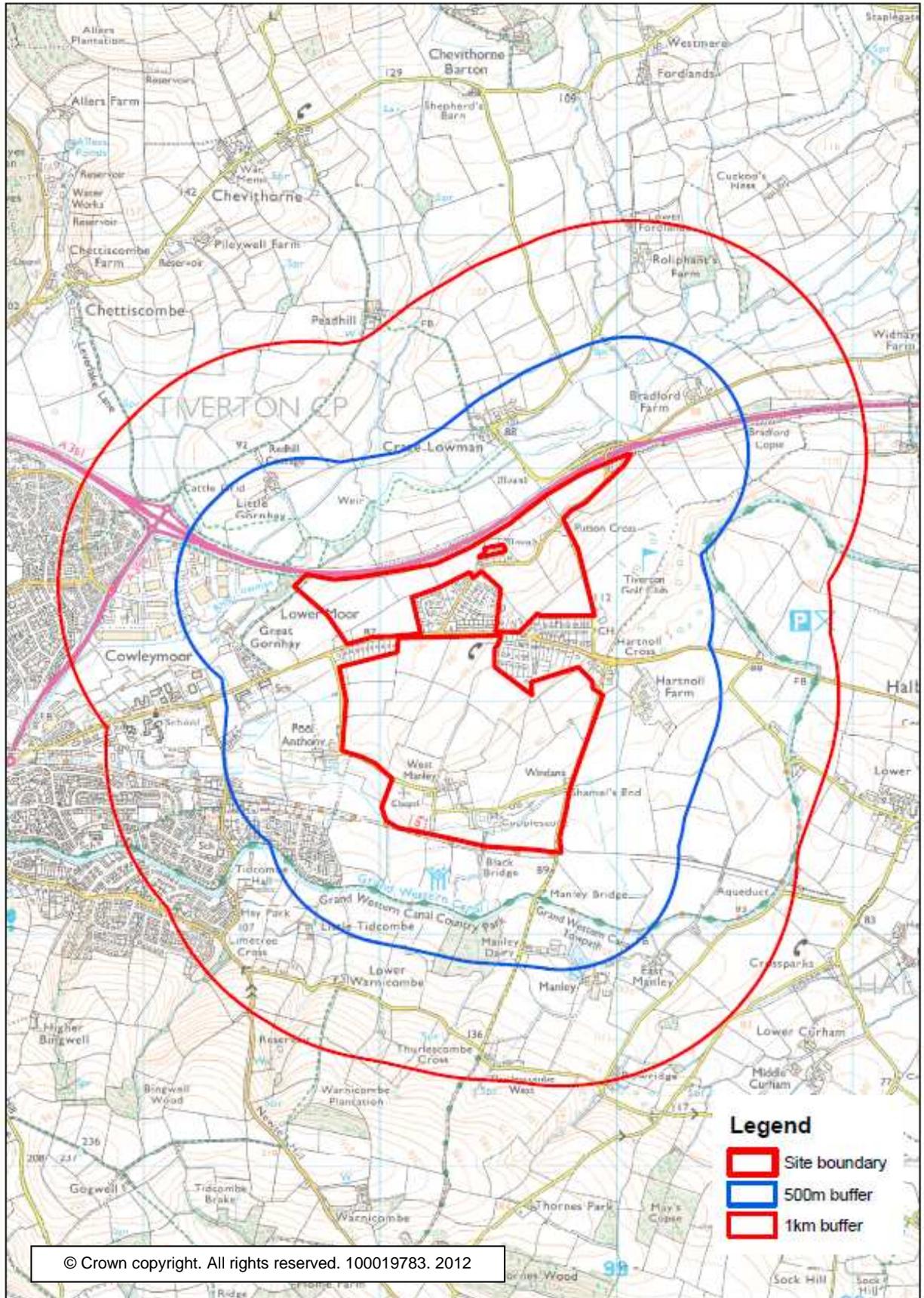
Nature of development	
Nature of operations to be considered at site:	<input checked="" type="checkbox"/> Recovery (Energy from waste) <input type="checkbox"/> Disposal (Landfill or land raise)

Availability and market interest	
Timescale for site availability.	<input type="checkbox"/> Immediately <input checked="" type="checkbox"/> Up to 5 years <input type="checkbox"/> 5-10 years <input type="checkbox"/> 10-15 years
If the site is not available immediately please state why:	Mid Devon District Council is anticipating that development of the urban extension may commence in 2014/2015, however the wider development of the site is likely to be ongoing during a number of years beyond that.
Are there any legal/ownership constraints on the site that might prohibit or delay development?	<input type="checkbox"/> Yes <input type="checkbox"/> No  Unknown at this stage
Is there known waste operator interest in the site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Access and transportation	
Point of access to public highway:	The site currently has access to the west end of Blundells Road leading on to Post Hill. Access into the site can also currently be gained by West Manly Lane.
Details of any improvements to the public highway that would be required prior to commencement of operations:	As part of the delivery of the urban extension it is likely that a new junction on the A361 to access the site will be required. Additional/improved highway access may also be required to provide access across the site broadly from east to west.
Means of transportation of waste to/from the site: (e.g. road, rail, water or a combination)	Road. Rail unlikely due to distance from existing line.

Basic site requirements	Y/N
Is the site within the area of search for the preferred spatial option?	Y
Is the site of an appropriate size (a minimum of 1ha) to contribute towards the delivery of the Waste Plan?	Y

Site Location Plan (Scale 1:20,000)



Consideration of constraints criteria

No.	Indicators	Stage 2	Stage 3	Additional Comments
1	Loss or impact on open space (including recreational land, tourist attractions, managed woodland, allotments and playing fields etc)	■■■	3	<p>This is a Greenfield site currently comprising largely of open fields, however these fields generally do not have public access. Tiverton golf course is located directly to the east of the northern section of the site, with playing fields adjacent to the west. The site provides the setting for these areas. In addition, a Public Right of Way (PROW) extends through a small part of the site (the north westerly edge) suggesting this area can be enjoyed as open space, with the remainder of the site providing the setting for this area. Despite this, the PROW may be able to be realigned.</p> <p>The Grand Western Canal Country Park is located to the south of the site within 500m of the site boundary. If a waste facility were to come forward in this area, the site would need to be sensitively located in regard to the canal.</p>
2	Impact on residential properties, businesses & services – including all noise, dust, air pollution, odour, vibration and visually sensitive receptors.	■■■	2	<p>There are a number of residential properties located within the southern part of the site at Copplestone and six residential properties in the northern part of the site. In addition the site has been identified by Mid Devon District Council as an area for strategic growth in the form of an urban extension which would incorporate a large number of dwellings (1550-2000) and a large area of employment space. Consequently the site could score red for this indicator, however, due to the large scale of the site, it is likely that it may be possible to sensitively locate the waste development within the site and there is also the opportunity to incorporate Combined Heat Power and district heating which could provide benefits to the local population. The site has therefore been scored high/medium in terms of potential impact.</p> <p>The site is divided by Blundells Road and Post Hill and there are a number of residential properties that are either side of these roads (not falling within the site boundary but between the two areas covered by the site).</p>
3	Impact on health deprived wards	-	-	<p>The site is within two Wards, neither of which is classified as being health deprived. The northern part of the site is within Lowman Ward (E01020066) in a Lower Super Output Area (LSOA) which has a health deprivation rating of 29,829. The remainder of the site is within Cranmore Ward (E01020051) which has a health deprivation rating of 25,588.</p>
4	Impact on Public Rights of Way and other countryside access	■■■	3	<p>Only a very small area of the site (the north westerly edge) has part of a Public Right of Way (PROW) extending through it, Tiverton Footpath 19, 20 and 25, Halberton Footpath 34 are all located within 500m of the site.</p> <p>The Grand Western Canal Country Park runs within 500m of the site. As a result the impact on PROW and public access is</p>

				considered to be medium.
5	Potential for physical constraints on areas allocated or emerging within District Development Plans for housing, tourism or recreation	☐☐☐	3	<p>The site itself is allocated for mixed residential and commercial development within the Mid Devon Allocations and Infrastructure Development Plan Document policies AL/TIV/1 - 7. There is the potential for nuisance subject to the type of recovery operation, location of the possible facility and mitigation measures which will be subject to a masterplanning process. Although the site does include substantial residential development, the site is large enough to mitigate the impact of a waste facility through the separation of incompatible landuses. Again, the masterplanning process will be important here.</p> <p>There is a potential emerging development site which may include a variety of uses including employment development at J27 of the M5 (as identified within a consultation draft of the MDDC Economic Development Strategy). J27 is approximately 6km east of the Tiverton East site. This is a considerable distance which reduces the likelihood of a negative impact. In addition, employment allocations are not considered to be particularly sensitive to waste development for the purpose of this exercise.</p>
6	Impact upon proposed Mineral Safeguarding Area or adopted Mineral Consultation Area	-	5	No impact on mineral resources.
7	Conflict with utilities infrastructure (electricity, gas and water)	-	3	<p><b>South West Water</b> The Waste Water Supply Demand Manager at South West Water has indicated that this site has minimal SWW assets including potable, surface water drain and combined sewer. He therefore scored this site as presenting a <b>medium risk</b> to SWW assets. It should be noted that at this stage the assessment is at a very high level and it is only when SWW see plans of what is proposed, along with foundation details will they be able to give a more definitive answer. Although SWW have said that a lot of their assets can be moved it could be a very expensive process and they would be looking for the developer to pay for this.</p> <p><b>Western Power Distribution</b> There are no overhead lines extending through the site. The Primary System Design Engineer in the Primary System Design Team at WPD has indicated that it may be necessary to divert circuits at a reasonable cost in most instances, however, these should not present a major constraint to development at the site (<b>Score medium/low</b>).</p> <p>Telecommunication companies, including BT and Virgin media, have not been contacted at this stage in the appraisal process as it is considered that any issues surrounding this type of infrastructure is likely to be addressed effectively at planning application stage.</p>

8	Conflict with Aerodrome Safeguarding Areas, MOD Safeguarding Areas and Cobbacombe Cross (weather radar) Areas	FF	3	The site is located within an area where restrictions are imposed as result of Cobbacombe Cross mast. Consultation is required for any building, structures or works exceeding 45.7m above ground level and for any large metal structure (e.g. pylons or silos). Due to uncertainty at this stage in relation to the detailed dimensions and potential stack height of waste development which may come forward at the site, this presents a significant constraint to potential recovery development in this location. However, the variation in design and development features across the energy from waste technologies may result in one type of recovery technology, for example, MBI, which typically requires a large stack to be unacceptable, but something with a smaller stack height, for example, gasification or pyrolysis being more acceptable. Detailed discussions would be required at pre-application stage to consider if mitigation is possible. A precautionary approach has been adopted at this stage in terms of the scoring of this site option.
9	Capacity of existing transportation network to deal with additional traffic		4	The existing road infrastructure would require adaptation to ensure suitable access to the site. This is more likely to be deliverable in the context of the access routes for the surrounding proposed development allocated within the Mid Devon local planning policy. Access to the A361 would be preferable.
10	Implication of potential routing of waste to site on highway network		4	<b>North of Blundells Road</b> Access from the east would be unlikely to be suitable as traffic would have to pass through Halberton and Sampford Peverell. Access from the west along Blundells Road may be acceptable depending on traffic generation. A new access from the A361 (provided by the Tiverton EUE) would be preferable. <b>South of Blundells Road</b> As above except that access from the A361 would be unlikely to be feasible. West Manley Lane would be unlikely to be suitable for additional traffic due to its restricted width and lack of passing places.
11	Impact on Special Areas for Conservation (SAC), Special Protection Areas (SPA) or Ramsar sites	-	5	No European Sites located within 10km.
12	Impact on South Hams Special Area for Conservation (SAC) greater horseshoe bat strategic flyways and sustenance zones	-	5	The sustenance zone of the SAC is over 30km away to the south. No impacts are likely.
13	Impact on biological Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) or Local Nature Reserve.	FF	3	The following SSSI is located within 5km of the site: Tidcombe Lane Fen is less than 100m SW (wetland with floral interest) of the site. The National Planning Policy Framework states that planning permission should be refused for development resulting in the loss or deterioration of SSSIs. The fen SSSI

				could have some level of sensitivity to potential emissions to water and air but common place mitigation technologies could keep these to within acceptable limits so that any potential impacts would be negligible. The SSSI is dependent on a continued supply of good quality (and quantity) of water. Any development would need to show that it would not impact upon ground or surface water low to the site.
14	Impact on County Wildlife Sites or non designated nature reserve	☞☞	3	<p><i>County Wildlife Site (CWS):</i> Snake's Wood comprises ancient woodland that can be particularly sensitive to atmospheric deposition of pollutants. Air quality modelling at the project stage would need to establish there would be no significant impact on this sensitive habitat. The National Planning Policy Framework states that planning permission should be refused for development resulting in the loss or deterioration of SSSIs and ancient woodland.</p> <p>NB: All emissions to air are controlled by Environment Agency permits which take deposition onto sensitive habitats into consideration; if emissions are within permitted limits, no significant effect should occur.</p> <p>The Grand Western Canal is also located south of the site and could be sensitive to any discharges to water originating from the waste recovery option. Operational failure of particular facilities (e.g. an anaerobic digester) could have significant consequences for the quality of water and the species that are dependent on that water course. With suitable mitigation technology and a worse-case scenario emergency plan, discharges from any waste recovery option could be limited so that any impact could be mitigated.</p>
15	Impact on Strategic Nature Areas (SNA)		5	Strategic nature area not within 1km of the site.
16	Impact on legally protected and Biodiversity Action Plan (BAP) priority species	☞☞☞	3	<p>There are four locations within site with recordings of legally protected species, including brown hairstreak, common dormouse, Buff Ermine, Cinnabar, Dark-Barred Twin-Spot Carpet, Dot Moth, Dusky Thorn, Green-Brindled Crescent, Grey Dagger, Knotgrass, Lackey, Mottled Rustic, Mouse Moth, Powdered Quaker, Rosy Minor, Rosy Rustic, Rustic, Shaded Broad-Bar, Shoulder-Striped Wainscot, Small Phoenix, Small Square-Spot, Spinach, Wall Brown, White Ermine, Sallow, Beaded Chestnut, otter and water vole.</p> <p>The site comprises mainly agricultural fields bordered by mature managed hedgerows with occasional mature trees. These habitats are highly likely to support breeding birds, dormouse, bats (roosting and commuting), badger, reptiles and a host of invertebrate species. Water courses to the south of the site are highly likely to support water vole and otter. Any discharge to water could have significant effects on a range of species that utilise</p>

				<p>those watercourses. Project level survey would be required to ascertain their likely presence and inform appropriate mitigation.</p> <p>Appropriate mitigation could suitably reduce any residual risk to protected species to acceptable levels.</p>
17	Potential to lead to loss or damage of ancient woodland	FF	3	<p>An area of ancient woodland is located within 500m of the site to the south (the same area covered by Snake's Wood County Wildlife Site).</p> <p>Snake's Wood comprises ancient woodland, a habitat that can be particularly sensitive to atmospheric deposition of pollutants. Air quality modelling at the project stage would need to establish there would be no significant impact on this sensitive habitat. The National Planning Policy Framework states that planning permission should be refused for development resulting in the loss or deterioration of ancient woodland.</p> <p>NB: All emissions to air are controlled by Environment Agency permits which take deposition onto sensitive habitats into consideration; if emissions are within permitted limits, no significant effect should occur.</p>
18	Impact upon Biodiversity Action Plan (BAP) priority habitats	FF	3	<p>There are two areas of BAP priority habitat located within 500m of the site. Lowland mixed deciduous woodland to the south (the same area covered by Snake's Wood CWS) and Fens to the west of the site (the same area covered by Tidcombe Lane Fen SSSI).</p> <p>The woodland BAP habitat is ancient woodland, a habitat that can be particularly sensitive to atmospheric deposition of pollutants. Air quality modelling at the project stage would need to establish there would be no significant impact on this sensitive habitat. The National Planning Policy Framework states that planning permission should be refused for development resulting in the loss or deterioration of ancient woodland while the fen habitat is afforded policy protection (in addition to legal SSSI protection) via Local Plans. The fen habitat is dependant on quantity and quality of water (ground and surface). Any development affecting water levels in the area would have to show there would be no change in supply to the fen. Both discharge to water and emissions to air are controlled by Environment Agency permit. Adherence to these limits should reduce potential for impact upon sensitive habitats.</p>
19	Impact on Tree Preservation Orders (TPOs) at site	FFF	3	<p>Advice from Mid Devon District Council has indicated that this site does contain a tree subject to a TPO (TPO11/00004/TPO at Post Hill), there are also trees with TPOs nearby – 94/00007/TPO (Post Hill) and 84/00001/TPO (Post Hill).</p> <p>This is however a large site and it may be possible to reduce the risk of harm to these trees through considering the location of a potential facility within the wider area.</p>

20	Impact on the Jurassic Coast World Heritage Site (WHS)	-	5	The site is a considerable distance from the Jurassic Coast WHS. Development of the site presents no risk of harm to the WHS.
21	Impact on a Regionally Important Geological Site (RIGS)	-	5	The site does not contain RIGS and there are no RIGS within 500m of the site. It is therefore reasonable to conclude that waste development of this site presents no risk of harm to RIGS.
22	Impact on a geological Site of Special Scientific Interest (SSSI)	-	5	The site does not contain a geological SSSI and there are no geological SSSIs within 500m of the site. It is therefore reasonable to conclude that waste development of this site presents no risk of harm to geological SSSI.
23	Potential impact on agricultural land (avoiding the use of Grades 1, 2 and 3a)	FF	2	Discussions with Natural England have underlined the potential for waste management development to have a varied severity of impact on agricultural land according to the longevity of the facility's presence. At this broad stage of assessment it has been assumed that the potential lifetime of all facilities is medium term at approximately 25 years.  Natural England holds information relating to agricultural land classification (ALC). A detailed ALC survey of the site was undertaken post 1988. This identified both the north and south plots of the site as being a variety of classifications, including other, grade 1, 2, 3b, and 3a. As a result development here will lead to the loss of agricultural land. However, it should be noted that this area is likely to be developed as per the current allocation in the District Council local planning policy, irrespective of its potential inclusion in waste planning policy.
24	Proximity to areas of contaminated land		4	Comments from the Mid Devon District Council Environmental Enforcement Manager have stated that a former infectious diseases hospital (1906) was located at Post Hill within the site at National Grid Reference 298553 113363. This is low risk. The site was subsequently used as a nursing home and is currently in use as a hospice which suggests that any contamination issues have been overcome. No other constraints have been identified. Historic OS mapping does not identify any additional current or former land uses on the site which could potentially cause land contamination. The accuracy of the information cannot be guaranteed and any waste proposal would require further assessment.
25	Proximity to areas of potential land instability	-	5	There are no records of features which can potentially cause land instability within the site. Furthermore, historic OS mapping does not show any former landuses which could cause land instability.
26	Impact on North Devon's Biosphere Reserve	-	5	The site is outside the Biosphere Reserve Transition Zone and therefore a facility at this location is unlikely to have an impact.

27	Impact on Areas of Outstanding Natural Beauty (AONB) and/or National Park		5	The site is not located within an AONB or National Park. There is no protected landscape within visual range of 5km.
28	Impact on Coastal Preservation Areas (CPA), undeveloped coast and heritage coast		5	The site is not located within a CPA, area of undeveloped or heritage coast and therefore there is no risk of harm.
29	Impact on landscape character and quality		3	<p>The site is within the lowlands plains of the Culm Valley Lowlands.</p> <p>The landscape of the site is <u>currently</u> rural farmland of high/medium sensitivity to waste development. Mature hedgerows and hedgerow trees are a distinctive feature of the landscape, notably in the area south of Blundells Road. A narrow rural lane and scattered rural dwellings fall within the site. The site is allocated for mixed use development (policy AL/TIV/1) in the Mid Devon Allocations and Infrastructure Development Plan Document and will be subject to a masterplanning exercise. Given that future development is going to significantly change the landscape character from rural to predominantly urban anyway, the site would be of medium landscape sensitivity to waste development in such a context.</p> <p>Should part of the site be allocated for an industrial estate, waste development that is comparable in scale to an industrial unit could in principle be accommodated without harming the character or quality of the landscape and townscape context. Large scale waste development with a tall stack could have a negative impact on the landscape or future townscape character of the area, detracting from the quality of local views, although some areas of the site are less sensitive than others (see below).</p> <p><b>Scope for mitigation:</b> Given the significant loss of high local quality rural landscape resulting from the urban extension, it is anticipated that the planned urban areas will be of the highest design quality that is sympathetic to the landscape and townscape character context. It is hoped that the area south of Blundells Road is masterplanned to allow retention of good quality mature hedgerow trees, retaining existing important hedgerows and green lanes, supplemented by strategic landscaping and tree planting. Such green infrastructure would help screen and integrate waste development whilst benefiting wildlife and amenity, and allowing retention of views within the new urban areas to the surrounding rim of rural hills to provide a sense of place. It would also protect the wooded landscape character and deliver other multiple benefits including regulating climate and reducing surface water runoff.</p> <p>Waste development with a large area (2-5 hectares) would be better accommodated in the north-western part, because: a) its footprint could affect fewer trees and</p>

				<p>other retained Green Infrastructure; b) the landscape quality is relatively lower, being already influenced by the A361; c) there would be a closer visual relationship between existing larger scale buildings of Tiverton Business Park to the west. d) Waste development should be located as far as practically possible from the Grand Western Canal (Country Park and County Wildlife Site) and Tidcombe Lane Fen (SSSI).</p> <p>The northern part is also lower lying therefore taller structures would be less prominent than in the central part of the southern site which is elevated and therefore more visually prominent. Tall stacks and very large structures could have a wide visual influence that could result in significant effects on sensitive rural views within the Culm Valley Lowlands (including from Grand Western canal country park and picnic sites) and elevated areas of Bampton and Beer Downs to the north (including from Knightshayes Court- historic parkland) and Cullompton Rolling Farmland area to the south which overlook the site.</p>
30	Impact on dark skies	☒	5	According to the 2003 CPRE data, the site is located within an area recognised as 'brighter'. As such development in this area is unlikely to have an impact on dark skies.
31	Impact upon Registered Historic Parks and Gardens including setting	-	4	Long distance views to and from Knightshayes will need to be assessed for any impacts and appropriate mitigation will be required.
32	Impact on registered battlefields including setting	-	5	Nothing within 1km of site. No risk of harm.
33	Impact on Scheduled Ancient Monuments (SAM) and archaeology of equivalent status (including setting)	☒☒	2	<p>There is a SAM described as "Long barrow immediately north of Blenheim House, 310m south west of Putson Cross" located to the north of the site. The area covered by the SAM has been omitted from the site boundary in order to reduce the risk of harm. Whilst this mitigates the potential for a direct impact, there could be impacts on setting, including associated prehistoric archaeology.</p> <p><b>Mitigation:</b> Pre-determination archaeological evaluation would be required. Recording will be needed should planning consent be granted for any subsequent detailed proposals in future. Possibility of work to enhance monument and setting.</p>
34	Impact on Cornwall and West Devon Mining Landscape World Heritage Site and setting		5	Nothing within 1km of site. No risk of harm.

35	Impact on Grade I / II* and II listed buildings including setting	■■■	4	<p>The site contains a listed building; grade 2 Prowses Farmhouse. There are only a small number (14) of additional listed buildings located within 1km of the site boundary.</p> <p>No direct impact. Impacts of specific proposals on setting would need to be assessed.</p> <p><b>Mitigation:</b> This would be likely to be covered by a masterplan for the area and design and screening/landscaping would mitigate impacts.</p>
36	Potential loss of or damage to non-designated heritage assets (including locally listed buildings, locally listed parks and gardens and archaeology)	■■■	2	<p>The northern part of the site contains four areas containing non designated heritage assets. These are described as:</p> <ol style="list-style-type: none"> <li>1. Undated square enclosure north of Putson Cross</li> <li>2. Neolithic long barrow north of Blenheim House</li> <li>3. Prehistoric ring ditch north west of Blundell's Preparatory School</li> <li>4. Two possible conjoined enclosures north of Putson Cottages</li> </ol> <p>The area contains a significant concentration of archaeological sites of prehistoric date. These include the above sites as well as additional features identified in a recent geophysical survey. The site also includes scatters of prehistoric stone tools. They are likely to be of at least county importance, but are associated with Scheduled sites such as the long barrow and a bowl barrow north of the A361. There is also the site of a medieval chapel and other evidence of a shrunken settlement around West Manley.</p> <p><b>Mitigation:</b> Archaeological evaluation is likely to be needed pre-determination, with a programme of recording should planning consent be granted for any subsequent proposals in future.</p>
37	Impact on Conservation Areas (CA)	■■	4	<p>Grand Western Canal CA extends around the site to the east and south within 500m.</p> <p>Impacts of specific proposals on the setting of the CA will need to be assessed.</p>
38	Proximity and impact upon surface water bodies and surface water courses	■■■	3	<p>The EA's GIS layer of detailed river network indicates a water course extending into the southern part of the site.</p> <p>Within the south-west corner of the site mapping indicates a potential wetland environment which would need to be protected from any runoff from the proposed development.</p> <p>Any development in the area should not increase any runoff into the local watercourses. Any associated infrastructure with the development could also increase the risk of surface runoff, which could carry any pollution from the site</p>

39	Proximity and impact on public or private water sources (ground and surface water)		4	<p>Part of the site is located within a Secondary A Aquifer superficial deposits designation and the whole site is within a Secondary A Aquifer bedrock designation. Permeable geology layers may be capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.</p> <p>The site is not within the Groundwater Source Protection Zones.</p>
40	Proximity to and impact upon Flood Zones 2 and 3		4	<p>Flood zone 2 enters a small section of the north-west corner of the site associated with the River Lowman. Flood Zone 3 enters the site just within the south west corner of the proposed development. This covers only a very small part of the site.</p> <p>PPS25 practice guide advises that all areas within Zone 3 should be considered as Zone 3b (functional floodplain) unless, or until, an appropriate site specific assessment shows to the satisfaction of the Environment Agency that it can be considered as falling within Zone 3a (High Probability).</p> <p>All development affects flood risk conditions; development increases impermeable surface area, reduces infiltration and alters natural drainage patterns, affecting the flow and velocity of run off into rivers and streams. It is essential to ensure that these flood risk conditions are not adversely affected when development occurs. This should be achieved through a sequential approach to flood risk. The risk-based sequential approach is a means by which to steer new development to areas that have the lowest likelihood of flooding. This provides the most sustainable approach to dealing with flood risk, avoidance. The Waste Development Plan Documents: Strategic Flood Risk Assessment provides the evidence base as a tool to apply the sequential approach to inform decisions on the determination of future waste planning applications combined with site specific flood risk assessments.</p> <p>It should be noted that Flood Zones have not been determined for minor watercourse that drain catchment areas less than 3sq km or areas that may be susceptible to surface water flooding.</p>
41	Impact upon ground water flooding vulnerability		2	<p>The site is located within an area with a susceptibility to groundwater flooding risk of <math>\geq 75\%</math>.</p> <p>Consideration of Areas Susceptible to Groundwater Flooding was based on a strategic scale map showing groundwater flood areas on a 1km square grid. In common with the majority of datasets showing areas which may experience groundwater emergence, this dataset covers a large area of land, and only isolated locations within the overall susceptible area are actually likely to suffer the consequences of groundwater flooding. The data should not be</p>

				<p>interpreted as identifying areas where groundwater is actually likely to flow or pond, thus causing flooding, but may be of use in identifying, for example, where further studies may be useful.</p> <p>A minimum of 12 months' groundwater monitoring is required to assess the groundwater characteristics found at each individual site in order for an informed decision to be made on the conditions.</p>
42	Impact upon surface water flooding vulnerability <sup>10</sup>	☐☐☐	3	<p>There are areas susceptible to surface water &gt;0.3m deep along the watercourse that runs through the Southern section of the site.</p> <p>Potential surface water also in the northern section of the site, up to &gt;0.3m deep close to the A361.</p> <p>Any associated infrastructure with any development could increase the risk of surface water flooding. The topography of the area also suggests that this low section of the site will be vulnerable to surface water ponding.</p> <p>A surface water drainage strategy is required for all sites to deal with any potential increase in surface water runoff generated by a new development, which includes for climate change. New developments should not increase the rate of runoff from a site's undeveloped state. Surface water flooding often occurs during extreme rainfall events when the capacity of conventional piped drainage systems are exceeded. Sustainable drainage systems (SuDS) require a new approach to surface water management, moving away from traditional piped drainage systems promoting wider environmental objectives, including amenity and biodiversity, as well as meeting the requirements of new legislation. SuDS aim to replicate natural drainage to control the flows at source, helping to manage flood risk and pollution control.</p>
43	Historic flooding vulnerability	☐☐☐	3	<p>There have been historic flood events identified within the proposed site boundary. These relate to surface water flooding of the fields. This ties in with the areas of deep surface water vulnerability as indicated within the surface water maps above.</p> <p>There are records of historic fluvial flooding associated with the River Lowman on the 10/12/1960 and 07/12/2000 slightly encroaching onto the site within the north -west boundary of the site.</p> <p>Historic flood evidence should be used in conjunction with development proposals.</p>

<sup>10</sup> Locally agreed surface water information is available for Great Torrington, Tavistock, Teignmouth, Horrbridge & Yelverton, Rockbeare and Ottery St Mary (assessed using Areas Susceptible to Surface Water Flooding). Therefore, this more locally specific data will be used at Stage Two for potential sites within areas.

44	Impact on Air Quality Management Areas (AQMAs)(including proposed)	-	4	There are no AQMAs in close proximity to the site. A site at this location could serve Mid Devon, East Devon and potentially northern Devon. Depending on vehicle routing, waste management development at this site could have an impact on the AQMAs at Crediton, Cullompton and Exeter although these impacts are unlikely to be significant.
45	Impact on level of tranquillity at site		3	According to the 2007 CPRE data, part of the site is located within an area recognised for having disrupted tranquillity (yellow on the GIS layer) however, most is more of an orange colour, indicating low tranquillity. The tranquillity scores at the site range from 80 to 126, owing to the location of the site on the edge of Tiverton and an industrial estate and close proximity to the A361. Tranquillity to the east of the site could be disrupted to a degree by waste development here.

Aggregated Stage 3 Score for constraints criteria: 164

### Consideration of opportunity criteria

46	Located within existing industrial estate <sup>11</sup>	-	2	Although the site is an allocated site for future mixed-use development, there is not an industrial estate on site currently. However, the site is within approximately 400m of Tiverton Business Park to the northeast which may provide some opportunities through similar and compatible landuses and local heat demand.
47	Alignment with District DPD allocation for employment land (B2 or B8) <sup>12</sup>		4	The entire site is allocated in District Council Local Development Framework. There is significant opportunity to masterplan the allocation to incorporate a recovery facility and plan for a district heating scheme whilst managing and reducing impact. A recovery facility could deliver significant benefits for the allocation in sustainability terms. A facility could also assist funding of highway infrastructure. The large scale of the allocation and mix of uses would suit linking up with this type of facility and would provide a local market for heat / power. Access and infrastructure issues would need to be addressed as already identified in local planning documentation.
48	Site within previously developed land	-	2	The majority of the site is in agricultural use and is largely greenfield. There is limited opportunity to develop on previously developed land in this area.
49	Potential to restore, or utilise unrestored land at former quarries	-	1	Site is not a mineral site therefore there is no opportunity to make use of a former minerals working area.

<sup>11</sup> Not applicable for consideration of landfill or land raise sites

<sup>12</sup> Not applicable for consideration of landfill or land raise sites

50	Potential for alternative modes of transport (rail or water)		1	Realistically there is no potential for transportation of waste to and from the site by alternative modes. The Great Western main line is located approximately 5km to the east of the site, but there is currently no railway siding at this location and no land identified to deliver one.
51	Access to the strategic road network		4	The site is bounded to the north by the A361. Whilst currently there is no direct access into the site from this point, as part of the delivery of the wider site, there are potential plans to deliver a new junction on the A361. There is likely to be a need for improvements to M5 J27 in order to ensure safe operation.
52	Ability to export electricity and/or gas to the national grid	-	4	<b>Electricity – high/medium</b> The national grid overhead power lines are located approximately 5km to the east of the site.  The Primary System Design Engineer in the Primary System Design Team at Western Power Distribution scored this site as having a significant opportunity to export electricity. Constraints are not likely to be substantial and therefore this site scored high/medium.  <b>Gas – high/medium</b> The nearest gas infrastructure present is a low pressure pipeline. This type of infrastructure is not generally suitable for the export of gas. The nearest suitable pipeline is an intermediate pipeline located approximately 420m from the site. There are no identified constraints which may reduce the realisation of this opportunity.
53	Ability to export heat to local user		3	The site does not currently have a high heat demand, however, as the urban extension is delivered this site holds great potential for the installation of district heating and Combined Heat and Power. Installing infrastructure in the early stages of the development will keep costs down and ensure benefits are maximised.

**Aggregated Stage 3 Score for opportunity criteria: 21**

**Consideration of cumulative impacts**

If this site is taken forward within the Waste Plan Consultation Report, cumulative impacts will be fully appraised through the Sustainability Appraisal.

The site boundary is that which has been allocated within the Mid Devon Local Development Framework as the Tiverton eastern urban extension and therefore will be developed for housing and employment space. Consequently there is potential for cumulative impacts in this location, however, it is likely that these will be mitigated at planning application stage. Furthermore, there is a possibility that cumulative impacts could result from recovery development in association with potential developments of various types at J27 as identified in a draft consultation version of the emerging Mid Devon District Council Economic Development Strategy. This would need to be considered in further detail in future if these developments were to come forward, however, the 6km distance between the two sites is likely to play a role in reducing the potential for cumulative impacts.

**Summary of Site Appraisal:**

This site holds great potential in relation to maximising the benefits which can be obtained through the recovery of waste. The site is well located strategically to serve large areas of northern and central Devon together with appropriate needs of Somerset if required (even though this is likely to be minimal). It also has good access to the strategic road network via the A361. The site is also an existing development allocation which will accommodate significant employment development which could be a potential local energy user alongside an existing industrial estate which is close to the site. A masterplanning process is currently underway which could improve the deliverability of a waste facility at this site through appropriate design of the surrounding development whilst also helping to facilitate the integration of energy infrastructure in the area.

Due to the large scale of the site based on the existing District development allocation in the area, there are inevitably constraints, including heritage assets, legally protected species, landscape impacts, the loss of agricultural land and the impact on existing properties. It should be noted, however, that these may be affected by development in the area, irrespective of the presence of waste facility. Impacts could be mitigated through the masterplanning process as it develops.

The boundary of a potential site allocation in this area could be revised to allow greater focus of site assessment and provide a potentially more defined site.

**Recommendation:**

This site should be considered as a site option for waste recovery development within the Waste Plan Consultation.