KJ Ecology Ltd

Habitat Regulations Assessment for an old haulage yard at Waterside Road, Barton upon Humber.

February 2024

Client :
Keir Taylor,
Keir Architecture Ltd,
6, Orchard Fields,
Healing,
N.E. Lincolnshire,
DN41 7AF.

Prepared by :
Kevin Johnson BSc PgD PGCE MCIEEM,
KJ Ecology Ltd,
17, The Meadow,
Caistor,
Lincs,
LN7 6XD.

Contents

1 Introduction

1.1 Terms of Instruction

Keir Taylor of Keir Architecture on behalf of Mr and Mrs Chapman are applying to construct 34 dwellings on an old haulage yard at Waterside Road, Barton upon Humber as per planning application. As part of the planning requirements a Habitat Regulations Assessment is required. To comply with this criteria, Keir Taylor of Keir Architecture on behalf of Mr and Mrs Chapman commissioned Kevin Johnson of KJ Ecology Limited to carry out a Habitat Regulations Assessment on the 30th November 2023.

The purpose of the Habitats Regulations Assessment (HRA) is to screen any potential effects that may harm the protected features of a habitat under the Conservation of Habitats and Species Regulations 2017 (as amended). If any effects are identified then alternative plans need to be implemented to avoid or minimise the risk as much as possible. This screening will be evaluated by a competent authority who will decide if the project can go ahead or not. When there are adverse effects on the site's integrity and there are no alternative solutions, the project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured.

1.2 Site Location

The proposed development is located on the Northern side of Barton upon Humber off the West side of Waterside Road and to the West of Tesco superstore at Grid Ref SE 8019 1598), (Map 1, Appendix 1). The project is on the South-west edge of the village of Eastoft with the town of Crowle 3.5kms to the South-west and Scunthorpe 9kms to the South-east.

1.3 Site Description

The East boundary is a palisade fence (Photo 1, Appendix 2). The Southern boundary is a brick wall with wooden fence above at the Eastern end, then a palisade fence which is covered in vegetation (Photos 2 and 3, Appendix 2). The Western boundary is a mixture of vegetation from shrubs to grasses next to a ditch (Photo 4, Appendix 2). The Northern boundary is a brick wall at the Western end, then palisade fence for the rest, except for the house wall at the Eastern end (Photos 5 to 6, Appendix 2). The site consists of concrete areas, tarmac areas, piles of rubbish/ rubble, Tall Ruderal herb area along the South-eastern boundary and a grass area near the Northern boundary (Photos 7 to 10 and 2, Appendix 2). There is Bramble (*Rubus fruticosus agg.*) scrub along the Northern boundary. The hard surfaces are being vegetated by mosses, grasses, herbaceous plants and shrubs.

The immediate vicinity consists of dwellings with gardens, grass areas, trees, ditch and Barton Haven.

1.4 Proposed Development

It is proposed to construct 36 dwellings on an old haulage yard at Waterside Road, Barton upon Humber as per planning application.

1.5 Report Limitations

This report is for the sole use of the client and its' reproduction or use by anyone else is forbidden unless written consent is given by the author.

1.6 Background to KJ Ecology Ltd

On the 30th November 2023 KJ Ecology Ltd was appointed to carry out a Habitat Regulations Assessment on an old haulage yard at Waterside Road, Barton upon Humber. KJ Ecology Ltd is an independent Ecological Consultancy run by Kevin Johnson BSc Pgd PGCE MCIEEM (Member of the Charted Institute of Ecology and Environmental Management) and has several years of experience in environmental consultancy work. This work has ranged from working on the rail, roads, airports, house building projects, barn conversions and pipeline work. Kevin Johnson was initially an Ecology and Environmental Lecturer at various colleges and taught students how to carryout surveys and about the environment. Kevin Johnson then went on to work for a number of ecological consultancies such as Penny Anderson Associates, which is one of the original environmental consultancy companies and is well respected.

2 Humber Estuary Designations

The Humber Estuary has many designations, but for the purpose of this HRA report only SAC, SPA and RAMSAR designations will be considered.

2.1 Humber Estuary – Special Area of Conservation

The Humber Estuary is designated a SAC under article 4(4) of the Directive (92/43/EEC) as it hosts the following:

2.1.1 Habitats listed in Annex I

1.10 Coastal habitats

- Dunes with *Hippophae rhamnoides*
- Embryonic shifting dunes
- Fixed dunes with herbaceous vegetation ('grey dunes')
- Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')

1.11 Coastal habitats (sensitive to abstraction)

- Coastal lagoons

1.12 Estuarine and intertidal habitats

- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Salicornia and other annuals colonising mud and sand

1.13 Submerged marine habitats
- Sandbanks which are slightly covered by sea water all the time

2.1.2 Species listed in Annex II

2.05 Anadromous fish
- River Lamprey (*Lampetra fluviatilis*)
- Sea Lamprey (*Petromyzon marinus*)

2.12 Marine mammals
- Grey seal (*Halichoerus grypus*)

2.2 Humber Estuary – Special Protection Area

The Humber Estuary qualifies as a SPA under article 4.1 of the Directive (79/409/EEC) as it is used regularly by 1% or more of Great Britain's populations of the following species listed in Annex I in any season:
- Avocet (*Recurvirostra avosetta*) – Wintering and breeding;
- Bittern (*Botaurus stellaris*) - Wintering and breeding;
- Hen Harrier (*Circus cyaneus*) - Wintering and breeding;
- Golden Plover (*Pluvialis apricaria*) - Wintering;
- Bar-tailed Godwit (*Limosa lapponica*) – Wintering;
- Ruff (*Philomachus pugnax*) – Passage;
- Little Tern (*Sterna albifrons*) – Breeding.

The Humber Estuary also qualifies under article 4.2 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed in Annex I) in any season:
- Shelduck (*Tadorna tadorna*) – Wintering;
- Knot (*Calidris canutus*) – Wintering and passage;
- Black-tailed Godwit (*Limosa limosa*) – Wintering;
- Dunlin (*Calidris alpina*) – Wintering and passage;
- Redshank (*Tringa tetanus*) – Wintering and passage;

Other SPA qualifying features:
- Used regularly by over 20,000 waterbirds. In addition to the species listed above, the assemblage includes: Dark-bellied Brent Geese (*Branta bernicla bernicla*), Wigeon (*Anas penelope*), Teal (*Anas crecca*), Mallard (*Anas platyrhyncos*), Pochard (*Aythya farina*), Scaup (*Aythya marila*), Goldeneye (*Bucephala clangula*), Cormorant (*Phalacrocorax carbo*), Oystercatcher (*Haematopus ostralegus*), Ringed Plover (*Charadrius hiaticula*), Grey Plover (*Pluvialis squatarola*), Lapwing (*Vanellus vanellus*), Sanderling (*Calidris alba*), Whimbrel (*Numenius phaeopus*), Curlew (*Numenius arquata*), Greenshank (*Tringa nebularia*) and Turnstone (*Arenaria interpres*).

The SPA waterbird assemblage is also considered to include the following six species based on recent Humber Estuary WeBS data

exceeding international or national importance thresholds: Pink-footed Goose (*Anser brachyrhynchus*); Tundra Bean Goose (*Anser serrirostris*); Greylag Goose (*Anser anser*); Common Scoter (*Melanitta nigra*); Little Egret (*Egretta garzetta*); and Green Sandpiper (*Tringa ochropus*).

Non-qualifying species of interest: The SPA is used by non-breeding Merlin (*Falco columbarius*), Peregrine (*Falco peregrinus*) and Short-eared Owl (*Asio flammeus*) and breeding Common Tern (*Sterna Hirundo*) and Kingfisher (*Alcedo atthis*) (all species listed in Annex I to the EC Birds Directive) in numbers of less than European importance (less than 1% of the GB population).

2.3 Humber Estuary – RAMSAR Site

The Humber Estuary is designated a RAMSAR for the following features:

- Ramsar Criterion 3: Grey seal and Natterjack Toad (*Bufo calamita*);
- Ramsar Criterion 5: Assemblages of international importance: 153,934 waterfowl, non-breeding season (5- year peak mean 1996/97-2000/2001)
- Ramsar Criterion 6: Species/populations occurring at levels of international importance:
    - Golden plover;
    - Knot;
    - Dunlin;
    - Black-tailed Godwit;
    - Bar-tailed Godwit;
    - Redshank;
    - Common Shelduck.

2.4 Conservation Objectives of the Humber Estuary

2.4.1 Humber Estuary – Special Area of Conservation

With regard to the natural habitats and/or species for which the site has been designated (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;
- The populations of qualifying species; and,

- The distribution of qualifying species within the site.

2.4.2 Humber Estuary – Special Protection Area

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and,
- The distribution of the qualifying features within the site.

2.4.3 Humber Estuary – RAMSAR Site

Currently there are no conservation objectives for RAMSAR on the Humber Estuary, so the SAC and SPA criteria will be used.

3 Habitat Regulations Assessment

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
Humber Estuary SAC					
Estuary	Changes in water chemistry Changes in physical regime Change in flow or velocity regime Turbidity	The site is outside of the estuarine water environment and the use of standard good working practices will remove potential pollution pathways affecting these habitats. Therefore, there will be no indirect effects from the works potentially changing water chemistry, physical regime, flow or velocity regime or turbidity. **No effect.** Once the housing estate is built, the household grey water will enter the mains sewage system. The run-off from the roads will enter the SUDs, which will filter the water and reduce the pollution input into the local drainage system. **No effect**	No	No potential for effects in combination with other Projects.	No
River Lamprey Sea Lamprey	Disturbance (e.g. visual, noise, gulls) Habitat loss Habitat/community simplification Changes in water chemistry Changes in physical regime	No direct effects during building works from habitat loss, habitat/community simplification, physical damage or disturbance (noise/vibration) as works will be outside the estuarine water environment. Also, no effects changing water chemistry, physical regime, flow or velocity regime or turbidity because the works will be outside of the estuarine water environment and the use of standard good working practices will remove	No	No potential for effects in combination with other Projects.	No

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
	Change in flow or velocity regime Turbidity	potential pollution pathways affecting Lamprey habitat. **No effect**. Once the housing estate is built, the household grey water will enter the mains sewage system. The run-off from the roads will enter the SUDs, which will filter the water and reduce the pollution input into the local drainage system. **No effect**			
Grey seal	Changed water chemistry Changes in physical regime Change in flow or velocity regime Disturbance (e.g. visual, noise, gulls) Turbidity Extra people	There will be no effect as the noise and vibration will be outside of the estuarine water environment and there are no haul out sites located within the vicinity. The nearest known site is at Donna Nook 45.3kms to the South-east. There will be no effects from air or water pollution as the use of standard good working practices will remove potential pollution pathways affecting seal habitat. Therefore, there will be no indirect effects from the works potentially changing water chemistry, physical regime, flow or velocity regime or turbidity. **No effect**. Once the housing estate is built, the household waste water will enter the mains sewage system. The run-off from the roads will enter the SUDs, which will filter the water and reduce the pollution input into the local drainage system. The extra housing will not create any	No	No potential for effects in combination with other Projects.	No

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
		extra noise or disturbance to the seals at their haul out sites. The pupping grounds are fenced off so there will be no extra disturbance to them with any extra people visiting the site at Donna Nook or if the seals haul up at any other time of the year. **No effect**			
Humber Estuary SPA					
Article 4.1 species: Avocet (B,W), Bittern (W), Hen harrier (W), Golden plover (W), Bar-tailed godwit (W), Ruff (P), Bittern (B), Marsh harrier (B), Little tern (B) Article 4.2 species: Shelduck (W), Knot (W), Dunlin (W,P), Black-tailed godwit (W,P), Redshank (W,P), Knot (W) Waterbird assemblage.	Disturbance (e.g. visual, noise, vibration, light, gulls) Changed water chemistry Changes in physical regime Change in flow or velocity regime Turbidity Extra people Functionally linked land	The proposed development is 660m South of the Humber Estuary but is within the town of Barton upon Humber and is surrounded by dwellings, industrial units, and a supermarket. As there is no suitable habitat on site or functionally linked land for SPA birds in the immediate vicinity, then there will be no effect upon SPA birds within the estuary during the construction phase of the proposed development. The site is outside the estuarine water environment and the use of standard good working practices will remove potential pollution pathways affecting the SPA birds. Therefore, there will be no indirect effects from the works potentially changing water chemistry, physical regime, flow or velocity regime or turbidity. **No effect** Once the housing estate is built, the household waste water will enter the mains sewage	No	There are a number of planning applications within the local area including PA/2023/1803 for 3 town houses, PA//2021/1661 for 9 dwellings and several further afield such as PA/2023/149 at New Holland for 6 dwellings. The proposed development in combination with the other proposed developments and current populated areas will not affect the water quality of the Humber Estuary. **No effect** There is no Functionally linked land around the local developments, so in combination there will be no effect on SPA birds.	No

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
[B:breeding, P:passage, W:wintering]		system. The run-off from the roads will enter the SUDs, which will filter the water and reduce the pollution input into the local drainage system. The "SUDS Strategy" for the proposed development is to store run-off in attenuation devices under the private roads and grassed green open space and have them fitted with flow control devices that will outfall into the existing ditch on the Western boundary of the site. The outfall discharge rate is to be agreed with the EA/ NE as this is only outline planning application. The extra housing and people will not create any extra noise or disturbance to the local area as the site is within the town of Barton upon Humber and is surrounded by dwellings, industrial units, and a supermarket. This means the SPA birds will not be affected by the development directly. **No effect** Once the housing estate is built and using the accepted value that a household will have 2.4 people in, these 34 dwellings will create 81.6 more people. In the 2021 census, Barton upon Humber had a population of 11,919 people, so this housing proposal has the potential to raise the local population by 0.68%. There is no beach at Barton upon Humber but locals regularly walk their dogs along the sea wall and there are purpose built tourist attractions such		**No effect** The potential extra 81.6 people the proposed development will bring along with the other proposed developments will have minimal impact on the local part of the Humber Estuary as there is no beach and the walkers etc. go along the sea wall which has had a HRA carried out on it by Natural England which removed the possibility of disturbance by removing CROW access to the saltmarsh at Barton upon Humber. If any of the residents do go to the beach at Cleethorpes, then this will be less than 0.01% of the visitors, so again will have minimal impact on the Humber estuary. Mr and Mrs Chapman are willing to make a small contribution to the management of the Humber Estuary to safe guard the SPA birds. **No effect**	

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
		as Waters' Edge Country Park, which is in walking distance of the new housing scheme. This has the potential to slightly raise the recreational pressure on the Humber Estuary. A 2012 report by Fearnley et al on the 'Results of the recreational visitor surveys across the Humber Estuary' interviewed 614 people (Less than 1% of the population within 4kms of the Humber Estuary) and found that 80% were local and were from 4.4kms of the site they were interviewed at, especially during the Winter months. The Summer months had people from a wider area, especially in places such as Cleethorpes. Of the people interviewed it was found that 45% of groups had at least one dog in the Winter months and this figure was 41% in the Summer months. This means that 16 of the households on the new proposed development could have dogs. This has the possibility of adding recreational pressure to SPA birds. At Barton the saltmarsh and intertidal mud are used by SPA birds, with roosting often occurring on the saltmarsh at high tide. This includes small numbers of Redshank, Dunlin, Curlew, Bar-tailed Godwit, Black-tailed Godwit, Lapwing, Wigeon and Shelduck on the intertidal mud. The saltmarsh and associated reed beds are also used by breeding bird species, such as Reed Bunting (amber-listed), as well as			

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
		providing suitable habitat for breeding Marsh Harrier. The England Coastal path runs along Barton to the Humber Bridge where it crosses the estuary. To establish this footpath, Natural England carried out a HRA (England Coast Path Stretch: Mablethorpe to Easington, Habitat Regulation Assessment (May 2021)). This HRA found that 'Disturbance of breeding habitat for nationally important breeding ground nesting birds and passage & over-wintering SPA waterbirds and SPA assemblage from the public exercising their CROW rights within the coastal access margin.' The report also found that 'From the Strava Global Heatmap data, usage of the public footpath around the Humber decreases, as you move away from the centres of Barton-upon-Humber in the west and Immingham in the south east. When compared against each other, it can be broken into sections of current use: • Immingham to East Halton Skitter – highest • East Halton Skitter to New Holland - least • New Holland to Barrow Haven – lower • Barrow Haven to Humber Bridge – highest As the saltmarsh is accessed from a slipway with some access evidenced close to the upper shore at Barton Haven. There is potential to increase the access to the accessible saltmarsh used as a high tide roost and for breeding birds. To mitigate this risk and allow the coastal path			

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
		to pass Barton upon Humber, the Coastal Path project removed all CROW access rights under section 26(3a) of the Act year round from the saltmarsh. Therefore, there will be no significant effect on the SPA birds of the Humber Estuary. **No effect**			
Humber Estuary Ramsar					
Criterion 1: Near natural estuary	Changes in water chemistry Changes in physical regime Change in flow or velocity regime Turbidity	See above for Humber Estuary SAC habitats **No effect.**	No	No potential for effects in combination with other PPPs.	No
Criterion 3: Grey seal	Changed water chemistry Changes in physical regime Change in flow or velocity regime Disturbance (e.g. visual, noise, gulls) Turbidity	See above for Humber Estuary SAC 2.12 Grey seal. **No effect.**	No	No potential for effects in combination with other Projects.	No
Criterion 3: Natterjack toad	Changes in physical regime	No Natterjack toads present within the proposed working area. (The known population is located at Saltfleetby and Theddlethorpe	No	No potential for effects in combination with other Projects.	No

Qualifying Feature	Risk	Likely significant effect alone	Yes or No	Likely significant effect in combination	Yes or No
	Disturbance (e.g. visual, noise, gulls) Turbidity	Dunes NNR, approx. 55km to the South-east of the proposal.) **No effect.**			
Criterion 5: Assemblages of international importance – waterbird assemblage Criterion 6: Species/populations occurring at levels of international importance - Golden plover - Knot - Dunlin - Black-tailed godwit - Bar-tailed godwit - Redshank - Common shelduck	Disturbance (e.g. visual, noise, vibration, light, gulls) Changed water chemistry Changes in physical regime Change in flow or velocity regime Turbidity	See above for Humber Estuary SPA birds. **No effect.**	No	No potential for effects in combination with other Projects as there are plans to implement measures to reduce the recreational pressures on the Humber Estuary SPA birds.	No

4 Project Assessment

The proposal to construct 34 dwellings on an old haulage yard at Waterside Road, Barton upon Humber, will have no significant effect upon the Wildlife of the Humber Estuary during construction or while in use. This is because the site is within the town of Barton upon Humber and is surrounded by dwellings, industrial units, and a supermarket. During construction of the estate, good standard practices will remove pollution pathways and there will be no noise disturbance, due to it being surrounded by other buildings and 660m South of the Humber Estuary. There is no beach at Barton upon Humber, but there are visitor attractions such as Water; Edge Country Park. It is also known that people walk their dogs along the sea wall. The sea wall is now part of the English Coastal path and a HRA has been carried out by Natural England to see what effect people and dog walkers will have on SPA birds. To mitigate against any effects of people entering the saltmarsh and disturbing SPA birds, Natural England have removed all access rights to the saltmarsh under Section 26(3) of the Countryside Rights of Way Act 2000. This will reduce the likelihood of disturbance to SPA birds near to Barton. The nearest beach is at Cleethorpes and as not all households will visit the beach on the same day, their effect on this area will be minimal. When the project is constructed, the household waste water will enter the main sewage system and the road run-off will enter the SUDs system which will prevent pollution entering the ditch system and control the amount of water entering the ditch. The light and noise levels are not expected to go beyond normal levels and will be concealed by the surrounding buildings.

In conclusion the project to create 34 dwellings on an old haulage yard at Waterside Road, Barton upon Humber will have **No Effect** upon the Humber Estuary.

5 In combination with other projects Assessment

There are small schemes within the area from single dwellings to nine dwellings in Barton Upon Humber. These are all within the town so will have minimal impact on the local part of the Humber Estuary. The nearest beach is at Cleethorpes and the number of people from the new estate visiting the beach will have minimal impact on that part of the Humber Estuary compared with the number of visitors Cleethorpes regularly receives. To help with the management of the Humber Estuary and SPA birds, Mr and Mrs Chapman are willing to make a small contribution.

In conclusion the project to create 34 dwellings on an old haulage yard at Waterside Road, Barton upon Humber will have **No Effect** upon the Humber Estuary.

6 References

Countryside Rights of Way Act 2000 (c.37) London: HMSO

Fearnley, H., Liley, D. & Cruickshanks, K. (2012). Results of the recreational visitor surveys across the Humber Estuary. Footprint Ecology, unpublished report for Humber Management Scheme

Lincolnshire Environmental Records Centre (2024) 2km radius of TA 0278 2274. Available at: https://search.glnp.org.uk/ [accessed 24th January 2024]

Natural England (2021) England Coast Path Stretch: Mablethorpe to Easington - Habitat Regulation Assessment. Coastal Path Assessment Unit and Adam Gretton (National ECP Team), Natural England

Woodward, I.D. Calbrade N.A. & Austin, G.E. (2018) Analysis of Wetland Bird Survey (WeBS) Data for The Humber Estuary SSSI, SAC, SPA and Ramsar site: Third appraisal – sector-level trends to winter 2016/17, Thetford, BTO

7 Natural England's advice on the screening for likely significant effects

Date sent to Natural England	
Date response received from Natural England:	
Do Natural England have concerns about the assessment and/ or decision?	

Write here….

Name of Natural England Officer	
Job Title:	
Date	

Appendix 1

Map

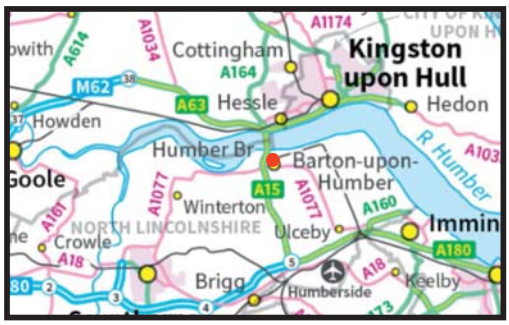
Map 1: Location map of the old haulage yard off Waterside Road, Barton upon Humber.

0 0.5 1km

Site Plan 1:40,000

Legend

Location of site



KJ Ecology Ltd
Drawn by : KJ
Date : 26/01/2024

Appendix 2

Photos

Photos for Waterside Road, Barton upon Humber.

Photo 1: East boundary

Photo 2: East end of South boundary

Photo 3: Southern boundary and Tall Ruderal area

Photo 4: West boundary

Photo 5: North boundary, Western end

Photo 6: North boundary, Eastern end

Photo 7: West view of Southern end of site

Photo 8: North view of West end of site

Photo 9: Rubble pile

Photo 10: Grass area, Bramble scrub and scattered scrub along Northern boundary