Timahoe North Project – Environmental Impact Assessment Report 160727 – EIAR – 2018.12.07 – F

# Appendix 12-&

Archaeological Monitoring Report

## Site Investigations at Timahoe North, Co. Kildare

## Monitoring of trial pits

Licensee:	Annette Quinn
Excavation Licence No.	17E0321

Client: Bord na Mona Powergen Ltd., C/O McCarthy Keville O'Sullivan

By:	Tobar Archaeological Services
	Saleen,
	Midleton,
	Co. Cork
	E-mail: <i>info@tobararchaeology.ie</i>
	Tel: 021-4652305



August 2017

## **TABLE OF CONTENTS**

1	INTRODUCTION	5
2	METHODOLOGY	7
3	ARCHAEOLOGICAL BACKGROUND	8
4	RESULTS OF ARCHAEOLOGICAL MONITORING	13
5	CONCLUSION	17
6	BIBLIOGRAPHY	17
7	APPENDIX 1 – PHOTOGRAPHIC RECORD OF TRIAL PITS	18

### **List of Figures**

Figure 1: Site location map.	6
Figure 2: Red line boundary in relation to recorded archaeological monuments	(RMPs) 10
Figure 3: Trial pits layout	

#### **List of Plates**

Plate 1: Timbers in TP88	13
Plate 2: Logs cut by drain (arrow) in TP66	14
Plate 3: TP19 showing portion of plank exposed in upper levels of peat	15
Plate 4: Detail of plank in TP19.	15
Plate 5: TP3	18
Plate 6: TP4	18
Plate 7: TP5	19
Plate 8: TP6	
Plate 9: TP7	19
Plate 10: TP8	
Plate 11: TP9	
Plate 12: TP10	20
Plate 13: TP11	21
Plate 14: TP14	21
Plate 15: TP15	21
Plate 16: TP16	22

Plate 17: TP17	22
Plate 18: TP18	22
Plate 19: TP19	23
Plate 20: TP20	23
Plate 21: TP21	23
Plate 22: TP22, tree trunk in foreground in basal peat layer	24
Plate 23: TP23	24
Plate 24: TP24	24
Plate 25: TP25	25
Plate 26: TP26	25
Plate 27: TP27	25
Plate 28: TP28	26
Plate 29: TP29	26
Plate 30: TP30	26
Plate 31: TP31	27
Plate 32: TP33	27
Plate 33: TP34	27
Plate 34: TP35	28
Plate 35: TP36	28
Plate 36: TP37	28
Plate 37: TP38	29
Plate 38: TP39	29
Plate 39: TP40	29
Plate 40: TP41	30
Plate 41: TP42	30
Plate 42: TP43	30
Plate 43: TP44	31
Plate 44: TP45	31
Plate 45: TP46	31
Plate 46: TP47	32
Plate 47: TP48	32
Plate 48: TP49	32
Plate 49: TP50	33
Plate 50: TP51	33
Plate 51: TP52	33
Plate 52: TP53	34
Plate 53: TP54	34
Plate 54: TP55	34
Plate 55: TP56	35
Plate 56: TP57	35
Plate 57: TP58	35

Plate 58: TP60	. 36
Plate 59: TP61	. 36
Plate 60: TP62	. 36
Plate 61: TP63	. 37
Plate 62: TP64	. 37
Plate 63: TP65	. 37
Plate 64: TP66	. 38
Plate 65: TP67	. 38
Plate 66: TP68	. 38
Plate 67: TP69	. 39
Plate 68: TP70	. 39
Plate 69: TP71	. 40
Plate 70: TP72	. 40
Plate 71: TP73	. 41
Plate 72: TP74	. 41
Plate 73: TP75	. 42
Plate 74: TP76	. 42
Plate 75: TP77	. 43
Plate 76: TP78	. 43
Plate 77: TP79	. 44
Plate 78: TP80	. 44
Plate 79: TP81	. 45
Plate 80: TP82	. 45
Plate 81: TP83	. 45
Plate 82: TP84	. 46
Plate 83: TP85	. 46
Plate 84: TP86	. 46
Plate 85: TP87	. 47
Plate 86: TP88	. 47
Plate 87: TP89	. 47
Plate 88: TP90	. 48
Plate 89: TP91	. 48
Plate 90: TP92	. 48
Plate 91: TP93	. 49
Plate 92: TP94	. 49
Plate 93: TP95	. 49
Plate 94: TP96	. 50
Plate 95: TP97	. 50
Plate 96: TP98	. 50
Plate 97: TP99	. 51
Plate 98: TP100	. 51

## **1 INTRODUCTION**

#### 1.1 Scope of work

This archaeological report was prepared by Miriam Carroll and Annette Quinn of Tobar Archaeological Services. It presents the results of monitoring of site investigation trial pits at Drehid and Mulgeeth townlands, in Timahoe North bog, Co. Kildare. The trial pits were excavated over a period of 10 days in July 2017 in a Bord na Móna peat bog which is no longer in production. It is proposed to develop a solar farm on the site in the future. Archaeological monitoring of the site investigations, under excavation licence No. 17E0321, was undertaken in order to ensure that accidental damage to any archaeological finds, features or deposits that may exist within the peat would not occur and that any such finds would be adequately recorded and protected.

#### **1.2 Site Description and Receiving Environment**

Timahoe raised bog extends across the townlands of Drehid, Mulgeeth, Coolcarrigan and Timahoe West in north County Kildare. It is situated c. 1km south-west of the village of Johnstown Bridge and c. 11km east of Edenderry, Co. Offaly. The bog which is now out of production forms part of the Derrygreenagh group of Bord na Móna bogs. The portion of Timahoe bog subject to site investigations is located in the townlands of Drehid and Mulgeeth, to the north-east of a narrow public road, L5025. Drehid 5MW Landfill Gas Utilisation Plant is situated to the south-west in the southern portion of Timahoe Bog.

The area subject to site investigations now comprises cut-over raised bog which is no longer in production. Consequently, large portions of the site are overgrown with grass, heather and scrub. Large drains still extend through the bog in a north-west south-east direction, although many are now colonised with vegetation. The bog is under the ownership of Bord na Móna, and was used primarily for the industrial exploitation of peat. Industrial production ceased c. 1990, although small scale production for domestic purposes continues at the margins of the commercially cutaway bog, in particular at the south-west side of the area subject to site investigations. During peat production the site was serviced by a railway system, the embankment and rails of which are visible and continue to act as a means of access despite being disused and overgrown.

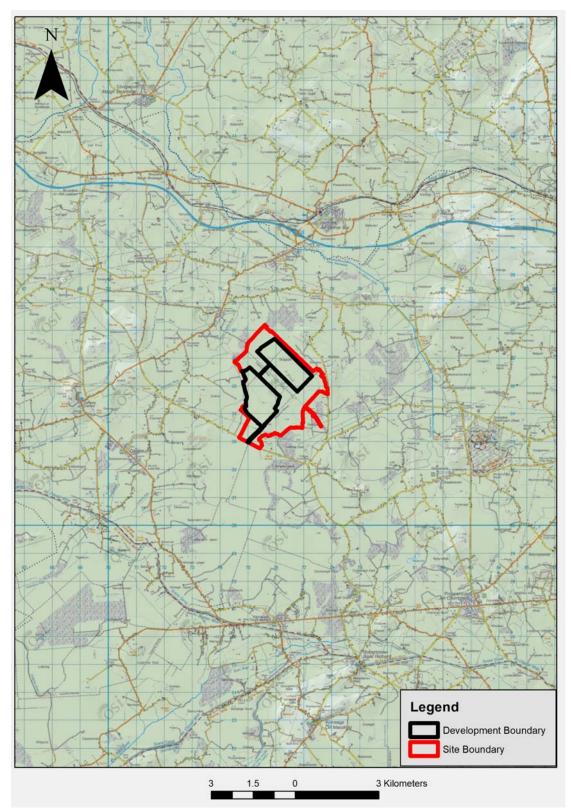


Figure 1: Site location map.

#### **1.3 Statutory context**

#### **1.3.1** Current Legislation (Archaeological)

**Archaeological monuments** are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The Record of Monuments and Places affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Environment, Heritage and Local Government) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004).

#### 2 METHODOLOGY

The archaeological work for the site investigations carried out at Timahoe Bog was undertaken in three phases:

- 1. Licence application for archaeological monitoring Licence No. 17E0321
- 2. Archaeological monitoring of site investigations
- 3. Report on archaeological monitoring

The following methodology was agreed by the National Monuments Service:

<u>Archaeological monitoring of each slit trench will take place. Each slit trench location will be</u> tied into the national grid using GIS and a coordinate taken for each area excavated. A photographic and descriptive record of the works will be made. In the event that any potential archaeological features or deposits are uncovered it is proposed to undertake some minor manual investigation/cleaning of same to establish the nature of the find. This will Licence No. 17E0321

depend on the depth at which the potential find is uncovered. Health and Safety may dictate otherwise. If the feature turns out to be archaeological in nature, then excavation will cease at this level and the trench will be backfilled after a full description of the find is made including photographs and a coordinate. The National Monuments Service will be informed of such findings immediately and all works in the area will stop pending a decision on how best to proceed. The features will also be described in the archaeological monitoring report.

#### Finds Retrieval Strategy

The National Museum is the repository for all archaeological artefacts. Any finds recovered during the archaeological monitoring will be bagged according to Museum standards, catalogued and stored in a temporary location until such time as they are lodged with the National Museum of Ireland accompanied by the monitoring report and catalogue of finds.

#### Osteo-archaeologist

It is not anticipated that the services of an osteo-archaeologist will be required during the course of the monitoring. Should the need arise, however, osteo-archaeologist Linda G Lynch will be retained to provide the appropriate services if human remains are uncovered. The DAHRRGA and the National Museum will be informed immediately should such remains be uncovered.

#### <u>Reporting</u>

A report on the archaeological monitoring will be submitted to the DAHRRGA and National Museum on completion of the work. The report will be illustrated with relevant plans and photographs.'

### 3 ARCHAEOLOGICAL BACKGROUND

The raised bogs of the Irish midlands are rich in archaeological remains and an internationally important repository of archaeological sites and artefacts. A review of the recorded find spots in the Topographical Files of the National Museum of Ireland (see section 3.2 below) for the townlands in which Timahoe Bog is located clearly demonstrates the archaeological and artefact bearing potential of the area. While only one recorded monument is located within the red-line boundary for the area of Timahoe bog subject to site investigation, several monuments are situated within the wider bog, in particular to the south and south-west in Drehid and Timahoe West townlands.

#### 3.1 Recorded Monuments

One recorded monument, KD008-025, is located within the redline boundary for the site, while three additional monuments are situated outside the boundary a short distance to the south-west, within Timahoe Bog. The monument types are typical of those found within raised bogs and comprise timber or stone trackways.

#### KD008-025 - Road - unclassified togher

Townland: DREHID

Description: A scatter of broken and displaced timbers was noted in the N face of an old turfbank and apparently extended into an area of uncut peat (SMR file). It may have run for c. 2,200m from dry ground in Drehid townland at NW, across the bog to Drumachon 'island' in Timahoe East townland to the SE.

#### KD008-039 Road - gravel/stone trackway - peatland

#### Townland: DREHID

Description: Towards the W edge of 'Timahoe Bog'. Visible as a thin layer (T 0.2-0.25m) of grey, stony marl overlying a thinner layer (T 0.08-0.12m) of compacted vegetation in the N face of a turf bank, 0.8m below the present, heather-clad bog surface, and traceable for a length of 10m on an ENE-WSW orientation. The Irish Archaeological Wetland Unit (UCD) subsequently visited (26 March 2004) and recorded four separate archaeological horizons with natural peat above and below. The lower peat horizon was fen (min D. 0.95m) which was unusual and suggested either an early date for the site or a late transition from fen to raised bog peats in the area. All four phases were present through the entire longitudinal exposure, however, Phase 1 was not evident in the partial transverse section at the NE end. This may indicate that either Phase 1 was narrower than subsequent phases or that there was some divergence in the lines of construction. The site is covered by a poorly humified Sphagnum peat representing a developed raised bog environment.

The centre point for the latter is located on or just outside the south-western site boundary although outside the area proposed for development.

#### KD008-027 - Road - unclassified togher

Townland: DREHID

No description for this monument is available and it is located outside the red line boundary as well as the development boundary.

#### KD008-026 - Road - unclassified togher

#### Townland: DREHID

Description: Near the W edge of a large expanse of bog. Discovered in 1955 during Bord na Móna drainage operations and investigated by Mr. B O'Riordáin of the NMI, who described the site as 'a timber structure some 5m wide, 0.17m in thickness, 1.6m below the present (shrunken) surface of the bog. It was composed of light branches 'laid crosswise on each other .... but not interwoven in any regular fashion ....(and) in other cuttings inspected some large hewn timbers were observed, one of which measured over 1.05m in length 0.22m in width and 0.08m in thickness' (SMR file; NMI File 1A 21/55).

Licence No. 17E0321

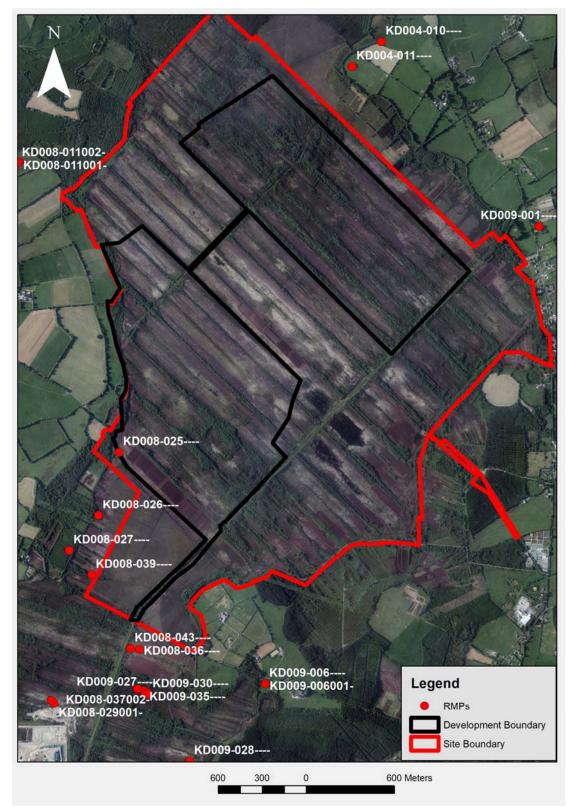


Figure 2: Red line boundary in relation to recorded archaeological monuments (RMPs).

#### 3.2 Topographical Files of the National Museum of Ireland

The following find spots are recorded in the National Museum of Ireland for Drehid, Mulgeeth and Timahoe East and West townlands.

Townland Drehid Registration No. 1972:355 A&B Find Type Bent wooden stake (in two parts) Found 4ft deep in bog cutting

Townland Mulgeeth Registration No. 1980:46 Find Type wooden object Found in bog of unknown depth

Townland Timahoe East Registration No. 1943:132 Find Type Portion of solid wooden wheel Found Bog

Townland Timahoe East Registration No. 1938:8560 Find Type Fragment of large stone axehead Found

Townland Timahoe East Registration No. 1943:286 Find Type Silver bracelet Found Bog

Townland Timahoe East Registration No. 1943:130-131 Find Type Wooden yoke and long perforated timber Found Bog

Townland Timahoe East Registration No. 1950:7 Find Type Iron axe Found at depth of 6ft during cutting operations

Townland Timahoe Bog Registration No. Find Type Bog body –human forearm Found in 1959 during hand-work operations

Townland Timahoe Registration No. 1950:4a, 4b, 4c Find Type 3 portions of wooden vessel Found in bog at depth of 7ft.

Townland Timahoe (Derrymahon Bog) Registration No. 1942:409 Find Type Wooden object Found 3 ft. below bog

Townland Timahoe East or West Registration No. 1978:3 Find Type Leather shoe Found

Townland Timahoe Registration No. 1941:1120 Find Type Bronze spearhead Found

Townland Timahoe Bog, Timahoe West Registration No. 1966:2 Find Type Flint arrowhead (barbed) Found

Townland Timahoe West Registration No. 1970:139 Find Type Rough out for two handled wooden vessels Found

Townland Timahoe Bog Registration No. -Find Type Human skeletal remains Found in area of Drummond or Ballynakill Lower Townland Licence No. 17E0321

## 4 RESULTS OF ARCHAEOLOGICAL MONITORING

Archaeological monitoring of site investigation trial pits was carried out over a period of 10 days between the 4<sup>th</sup> and 17<sup>th</sup> July 2017. A total of 96 pits were excavated, the majority of which were located within cut-over bog. A photographic and descriptive record was made of each pit which is presented in Appendix 1. The vast majority of pits excavated did not contain any archaeological finds, features or structures. The stratigraphy varied in depth throughout the site but typically comprised 2-3 layers of fibrous peat overlying a grey natural subsoil. Throughout the site the basal layer of peat contained tree roots and trunks which would appear to represent trees that were growing in the area prior to the formation of the raised bog. A total of three pits contained timbers which may have archaeological potential, although no definitive structures were identified. In all cases the timbers were preserved in situ and are described below.

#### **TP88**

Trial pit 88 was excavated towards the south-west side of the site in grass-covered cut-over bog. Two horizontally placed timbers were noted within the pit at a depth of 1.3m. It is not clear if the timbers represent part of a structure and no further potentially related timbers were noted in the remainder of the trench. The timbers were exposed for a length of 1.5m-1.8m and were orientated approximately E/W. They are not parallel being closer at the west where they are c. 0.2m apart, splaying to 0.35m apart at the east. The total peat depth within this pit measured 2.1m and overlay a grey natural subsoil.



Plate 1: Timbers in TP88.

#### TP66

TP66 was excavated in heather-covered bog towards the south-west side of the site. At the north-west end of the pit two parallel logs cut by a modern drain were exposed at a depth of 0.7m below present ground level. They were orientated NW/SE and measured *c*. 0.7m in length. The total peat depth in this pit measured 1.25m overlying a grey natural subsoil.



Plate 2: Logs cut by drain (arrow) in TP66.

#### TP19

TP19 was excavated towards the north-east side of the site in heather and grass-covered peat. A portion of a timber plank was exposed after the removal of *c*. 0.25m of loosely compacted rooty peat. It was exposed for a length of 0.65m and was orientated roughly E/W. It extended under the NE baulk of the pit and was left in situ. Given its position within the upper layer of peat it is possible that it relates to modern peat extraction activities, however, this cannot be stated with certainty. The total peat depth in this pit measured 1.85m overlying a grey natural subsoil.



Plate 3: TP19 showing portion of plank exposed in upper levels of peat.



Plate 4: Detail of plank in TP19.

Licence No. 17E0321

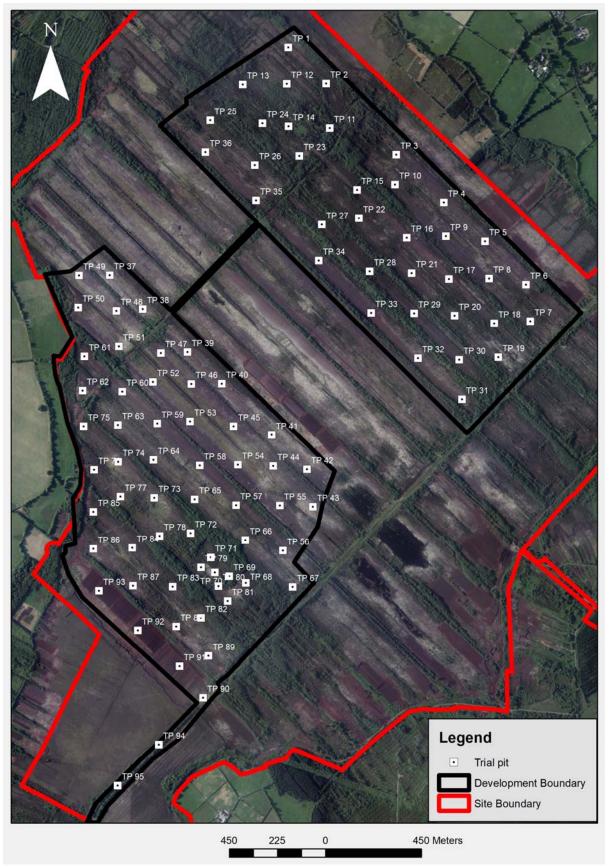


Figure 3: Trial pits layout.

## 5 CONCLUSION

The excavation of 96 site investigation trial pits at Timahoe Bog, Drehid and Mulgeeth, Co. Kildare was archaeologically monitored over a period of 10 days in July 2017. The monitoring was carried out under excavation licence 17E0321. No archaeological finds, features or deposits were identified in the majority of pits excavated. Three pits produced timbers with archaeological potential which were preserved in situ. A photographic and descriptive record was made of all pits which are detailed in this report and the associated appendix.

## 6 **BIBLIOGRAPHY**

Department of Arts, Heritage, Gaeltacht and the Islands, 1999, Framework and Principles for the Protection of the Archaeological Heritage, 1999.

#### **Other Sources**

Record of Monuments and Places (RMP) for County Kildare. 1<sup>st</sup> Edition 6 inch OS map. 2<sup>nd</sup> Edition 25 inch OS map. *www.webgis.archaeology.ie/historicenvironment* 

## 7 APPENDIX 1 – PHOTOGRAPHIC RECORD OF TRIAL PITS



Plate 5: TP3



Plate 6: TP4

Licence No. 17E0321



Plate 7: TP5



Plate 8: TP6



Plate 9: TP7

Licence No. 17E0321



Plate 10: TP8



Plate 11: TP9



Plate 12: TP10

Licence No. 17E0321



Plate 13: TP11



Plate 14: TP14



Plate 15: TP15



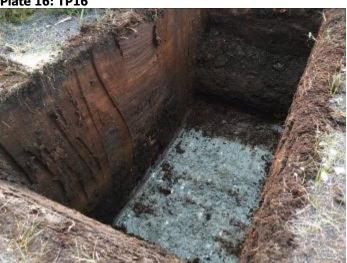


Plate 17: TP17



Plate 18: TP18



Plate 19: TP19



Plate 20: TP20



Plate 21: TP21



Plate 22: TP22, tree trunk in foreground in basal peat layer.



Plate 23: TP23



Plate 24: TP24







Plate 26: TP26



Plate 27: TP27

Licence No. 17E0321



Plate 28: TP28



Plate 29: TP29



Plate 30: TP30

Licence No. 17E0321



Plate 31: TP31



Plate 32: TP33



Plate 33: TP34

Licence No. 17E0321



Plate 34: TP35



Plate 35: TP36



Plate 36: TP37

Licence No. 17E0321



Plate 37: TP38



Plate 38: TP39



Plate 39: TP40

Licence No. 17E0321



Plate 40: TP41



Plate 41: TP42



Plate 42: TP43



Plate 43: TP44



Plate 44: TP45



Plate 45: TP46

Licence No. 17E0321



Plate 46: TP47



Plate 47: TP48



Plate 48: TP49



Plate 49: TP50



Plate 50: TP51



Plate 51: TP52



Plate 52: TP53



Plate 53: TP54



Plate 54: TP55







Plate 56: TP57



Plate 57: TP58



Plate 58: TP60



Plate 59: TP61



Plate 60: TP62

Licence No. 17E0321



Plate 61: TP63



Plate 62: TP64



Plate 63: TP65



Plate 64: TP66





Plate 66: TP68

Licence No. 17E0321



Plate 67: TP69



Plate 68: TP70



Plate 70: TP72





Plate 72: TP74



Plate 74: TP76





Plate 76: TP78

Licence No. 17E0321



Plate 77: TP79



Plate 78: TP80



Plate 79: TP81



Plate 80: TP82



Plate 81: TP83



Plate 82: TP84



Plate 83: TP85



Plate 84: TP86



Plate 85: TP87



Plate 86: TP88



Plate 87: TP89



Plate 88: TP90



Plate 89: TP91



Plate 90: TP92

Licence No. 17E0321





Plate 92: TP94



Plate 93: TP95

Licence No. 17E0321



Plate 94: TP96



Plate 95: TP97



Plate 96: TP98





Plate 98: TP100