

WOOLVERSTONE PARK AND HALL - WORLD WAR TWO

Observation staging on the roof of the Hall



Woolverstone had a small but important part to play during the Second World War 2, especially in the run up to D-Day.

After the Hall was sold to Oxford University in December 1937, it lay empty for over a year. Along with many other large country houses, it was commandeered by the government in 1939 for the war effort. Alterations were made to the Hall. WRNS quarters were erected. Initially it housed troops. First there were the Bedfordshire and Hertfordshire regiment. They were followed by Liverpool Scottish, 2nd battalion in 1940 and then various groups of both the Royal Artillery and also Engineers regiments.

Between October 1942 and May 1943, the concrete road from Main Road down to the river was constructed as well as the concrete hard and pier. Oil storage tanks were installed further up the hill. Also, in 1942, staging was erected on the roof of the Hall for the Royal Observer Corps, whose post had previously been in the field behind the Post Office at No 24 Main Road since 1926.

From late 1942, Woolverstone Park was, among other things, a landing craft base and training establishment for Combined Operations. Combined Operations was a department of the War Office whose purpose was to harass the occupying German forces in Europe. They utilised all three service arms: the Royal Air Force, the British Army and the Royal Navy. The main focus of the operations were the Commandos.

Staff had to plan operations and develop ideas and equipment to harass the enemy. It also incorporated all those who worked with landing craft up to and including landing ships that were used in the various amphibious operations. During this period many different classes of landing craft were stationed on the river Orwell: LCT (Landing Craft Tank), LCM (Landing Craft Mechanised), LCVP (Landing Craft Vehicle and Personnel) and LCA (Landing Craft Assault). There were around 70 of these smaller craft based at Woolverstone.

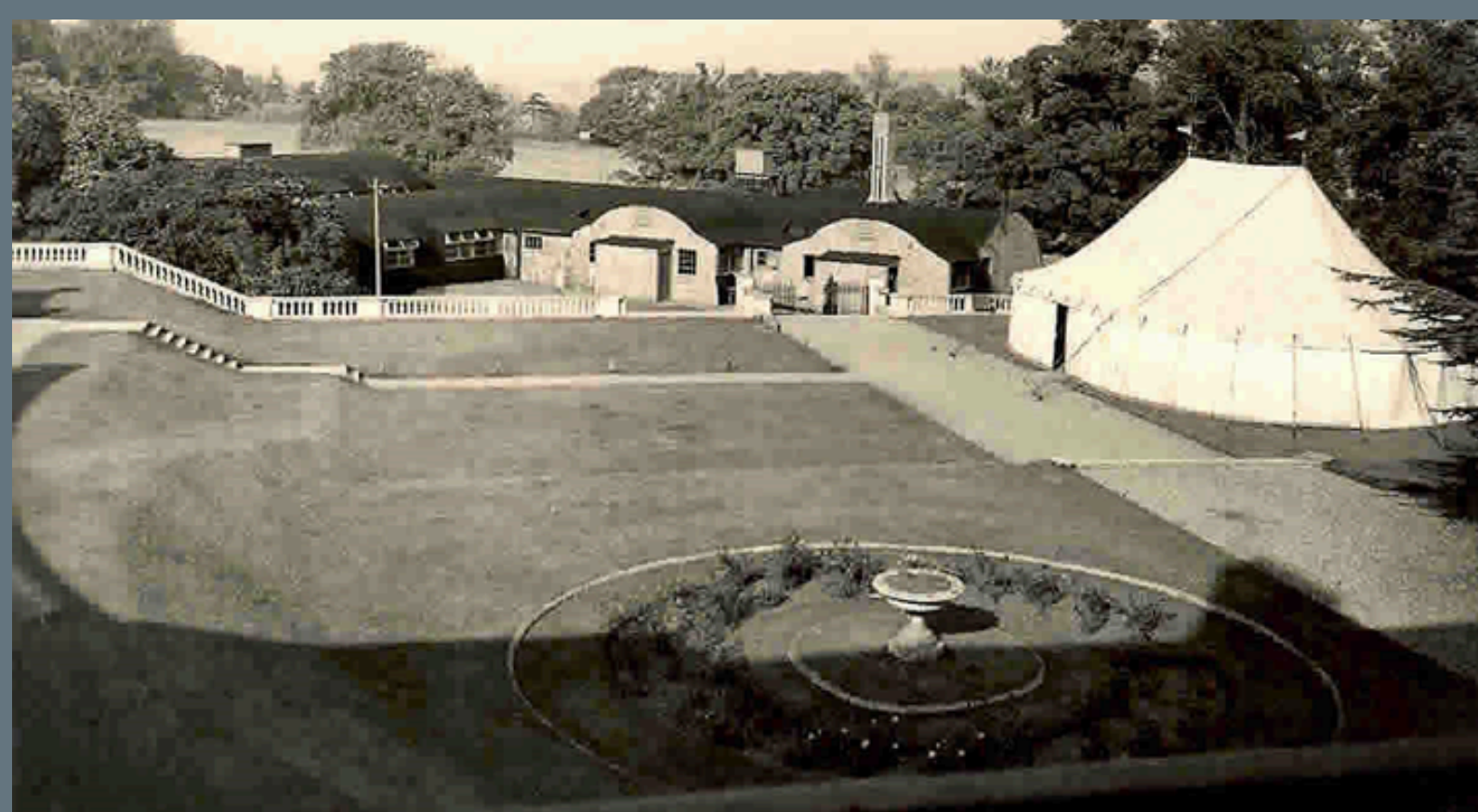
HMS Woolverstone - a stone frigate - was commissioned by the Admiralty in 1943. The base was commissioned on 1/1/1943, care and maintenance from 9/7/43, re-commissioned on 15/10/43 and paid off on 20/2/46



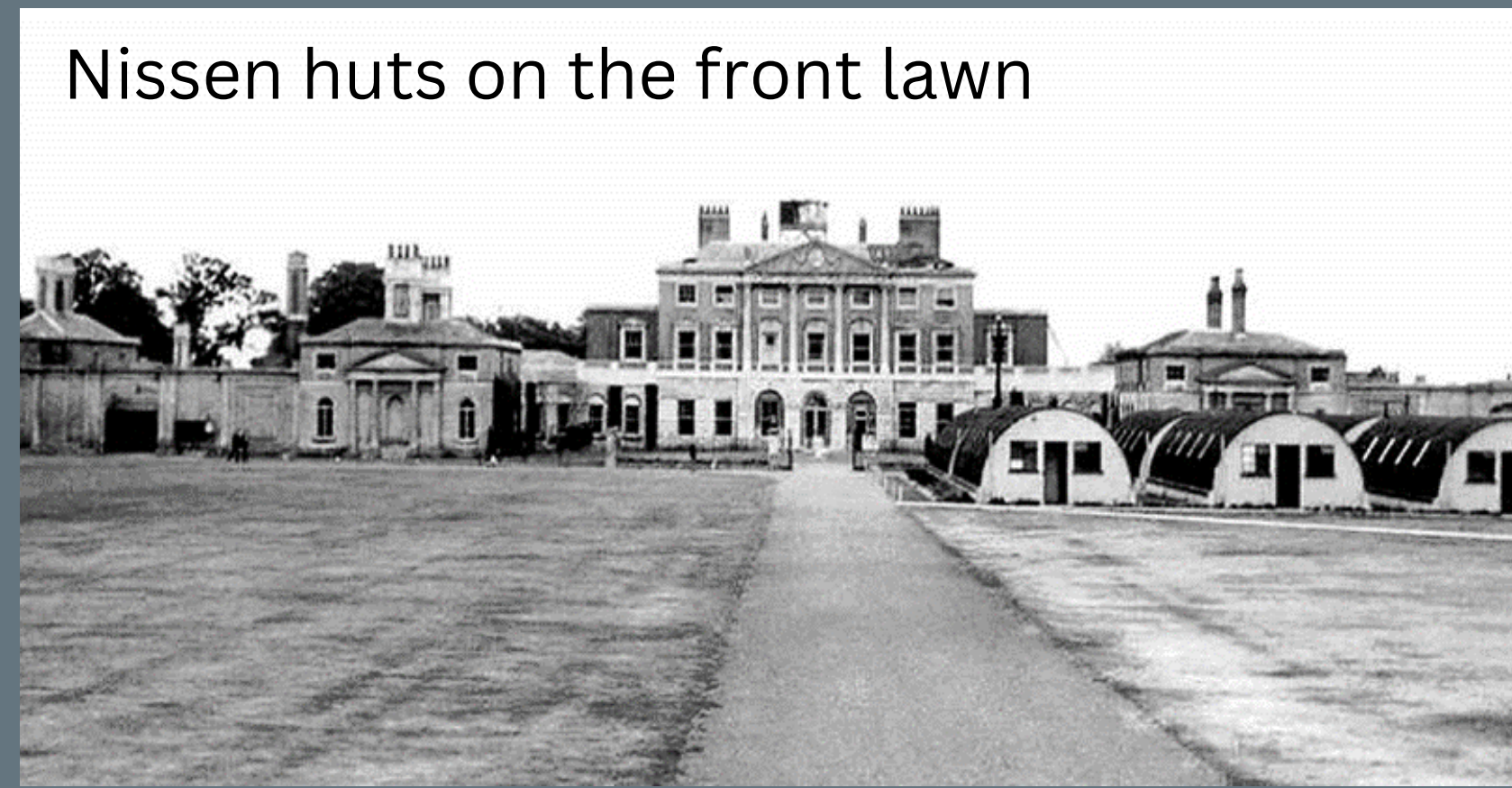
During the Autumn of 1943 several days of loading experiments and tests were carried out from the Cat House hard. These tests were carried out in great secrecy, tanks (Churchills, Crusaders and Shermans) and other vehicles were loaded onto the landing craft in several different orders the craft and tested on the river for stability.

Not only were landing craft anchored here before going south and on to Normandy, but also Woolverstone was part of the deception force working under the auspices of Operation Quicksilver where a fleet of dummy landing craft were assembled before being put out on the river to confuse the Nazis.

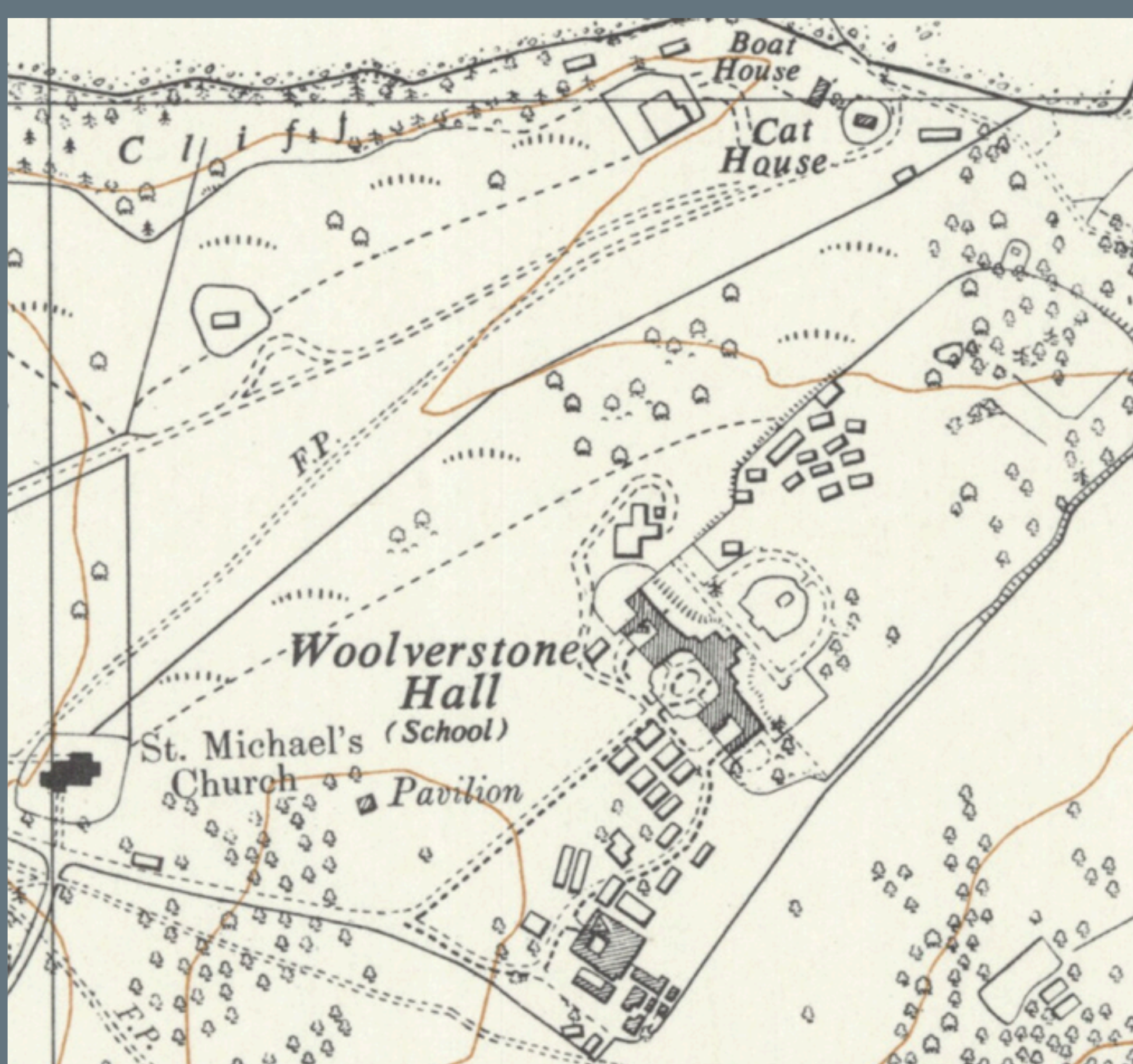
Officers were housed in the Hall, other ranks in Nissen huts dotted around the grounds. Stables used for stores.



Nissen huts on the front lawn



Nissen huts to the side of the western balustrade



St Michael's church was used by the Navy for worship.

There were over 1000 personnel present at HMS Woolverstone during the "lock down" month preceding D-Day on 6th June 1944.

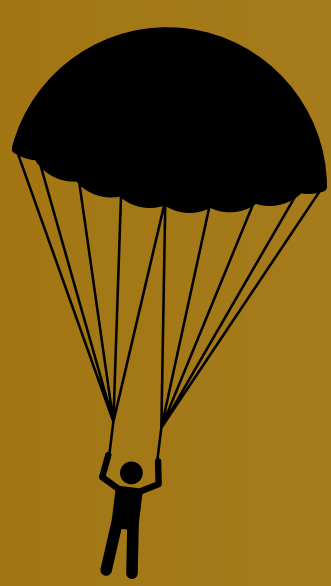
In one poignant account from WRNS officer, she described going to Woolverstone church on the morning of Sunday 4th June 1944 and on her return from the service she found the landing craft had slipped off down the Orwell on their way to Normandy.



Aerial photograph of Woolverstone Park - March 1944

On the morning of 5th June 30 fully loaded landing craft left the Cat House Point for the Normandy beaches. These had been loaded with troops and vehicles at Felixstowe on 2nd June and came up the river waiting for the signal to go which had been delayed by a day because of poor weather in the channel.

HMS Woolverstone continued to play a part in Operation Quicksilver and the construction of dummy landing craft after the Normandy landings. Later in the war, receiving landing craft for repair or decommissioning.



WOOLVERSTONE WORLD WAR TWO - TIMELINE



- War with Germany was declared on Sunday 3rd September 1939. Woolverstone Park, including the Hall, was requisitioned by the War Office.
- In late 1942 Landing Craft began to train in the rivers Orwell and Stour.
- Woolverstone Park a Combined Operations base.
- 1st January 1943 HMS Woolverstone commissioned by Admiralty.
- March 1943, plans debated to expand the base.
- 9th July 1943, HMS Woolverstone downgraded to a maintenance, repair and loading base
- 15th October 1943, HMS Woolverstone recommissioned
- Harwich Landing Ship Tank (LST) base comes under HMS Woolverstone command (early 1944, 17 LSTs on the Stour
- Landing Craft Assault (LCA) manned by Royal Marines
- Operation Neptune – Invasion of Normandy. “Force L” – to carry 7th Armoured Division “Desert Rats (based at Orwell Park)”, part of 51st Highland Division and HQs of 1st and 30th Corps to the invasion beachheads as immediate follow up to D-Day landings. D+1.
- Force L’s HQ at St Felix school, Southwold. Planned ship-loading, convoy mustering and routing, timetabling and security.

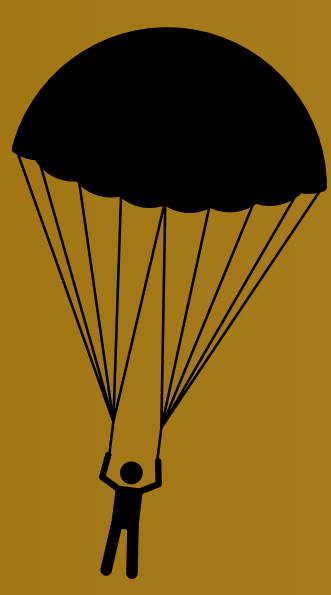


- Landing Craft divided into 3 fleets: L1 at Harwich, L2 at Lowestoft L3 on the Thames
- April 1 1944, whole East Coast for 1 mile inland was closed to all outside civilians, save someone on official business. All servicemen’s mail read by censors
- May 1944, L2 moved from Lowestoft to the Orwell. HMS Woolverstone temporarily took charge.
- L1and L2 sheltered underneath Harwich/Ipswich AA barrage. One part of this was located at Freston, another at Erwarton
- 31st May 21,000 troops and 3,600 vehicles moved in convoys to the outskirts of loading ports. 22nd Armoured Brigade with 200 tanks and 1,600 men commenced loading at Ipswich docks. Now called Sailing Group 2
- 2nd June, Desert Rats embark at Felixstowe

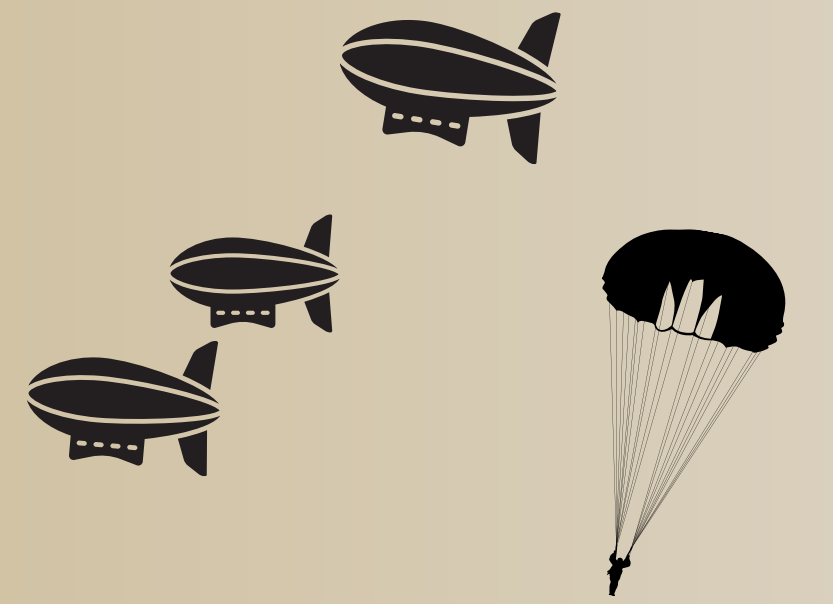
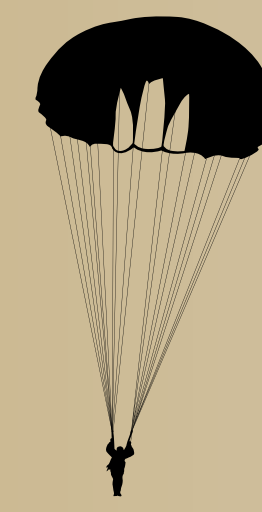
Desert Rats on the Orwell

- Morning of June 5th all craft ready to leave for France. Bad weather meant a 24- hour postponement. Troops and their armour sat in boats on the Orwell, rocking on the swell, Troops got edgy and weary.
- Night of 5th June 1944, planes from RAF Bomber Command headed to France to bomb Normandy in advance of the invasion. First wave on invasion forces closing in on the beaches.
- Same night, Force L left Stour and Orwell and Harwich harbour. 65 major landing craft and ships, escorted by destroyers and corvettes.
- Simultaneously, more dummy landing craft assembled at Woolverstone and set afloat to maintain deception that the Normandy invasion was a feint.
- All sections of force L unite on morning of 6th June at Knock John Fort – 9 nmi off the coast of Essex. Some 280 vessels headed for France later that night .
- Morning of 7th June 1944, troops and vehicles discharged onto the beach heads. D+1
- At HMS Woolverstone, dummy LCT continue to be built until 12th June. Total 63.
- Dummy fleet maintained for a further three weeks until the beginning of July, then recovered and dismantled.
- HMS Woolverstone continued as a depot and repair base, as well as a training base. It absorbed HMS Bunting (Ipswich) Many LCTs laid up there.
- Tuesday 8th May, 1945, German forces unconditionally surrendered. Victory in Europe was declared.
- HMS Woolverstone decommissioned on 20th Feb 1946.





XX



EMBARKATION HARDS UK



Even as battle raged in the skies over Britain in 1940, Winston Churchill was planning the invasion of Europe. When the United States entered the war after Pearl Harbour in 1941, Churchill persuaded Roosevelt to work with him. At the Casablanca Conference in January 1943, Roosevelt committed the United States to Operation Overlord – allied invasion of occupied north-western Europe - planned for 1944, an idea developed further at the Trident Conference in May.

To invade Europe from the sea required a huge flotilla of 7,000 vessels including 4,000 landing craft and 130 warships to land personnel and their equipment on the beaches. These personnel also needed to be resupplied. It was clear that to assemble such a huge force new, embarkation points needed to be constructed around the south and east coast of Britain.

In October 1941, Churchill summoned Lord Louis Mountbatten back to England from his command of HMS Illustrious in USA “by the fastest possible means” to meet him at Chequers. Mountbatten was appointed Combined Operations Adviser. Six months later, in April 1942, he was appointed Chief of Combined Operations and promoted to acting rank of Vice-Admiral, Lieutenant-General, and Air Marshal. The form of operation was “combined” in the sense that it placed equal demands upon all three arms of the services. His tasks were: firstly, to take charge of Combined Operations; secondly, develop a programme of Commando raids; and lastly, to prepare for the reinvasion of Europe. Combined Operations were to plan for offensive raids when much of the military was on the defensive.

A seaborne invasion would require a huge number of landing craft to ferry soldiers onto the beaches. These would require special “hards” over which they could be loaded and unloaded. In May 1942, Mountbatten ordered the construction of special hards around Britain’s south and east coasts. By March 1943, 68 such hards had been built. They were designed to load two types of landing craft, Landing Craft Tank (LCT) and Landing Ship Tank (LST). The cost was shared between the Admiralty and the War Office.

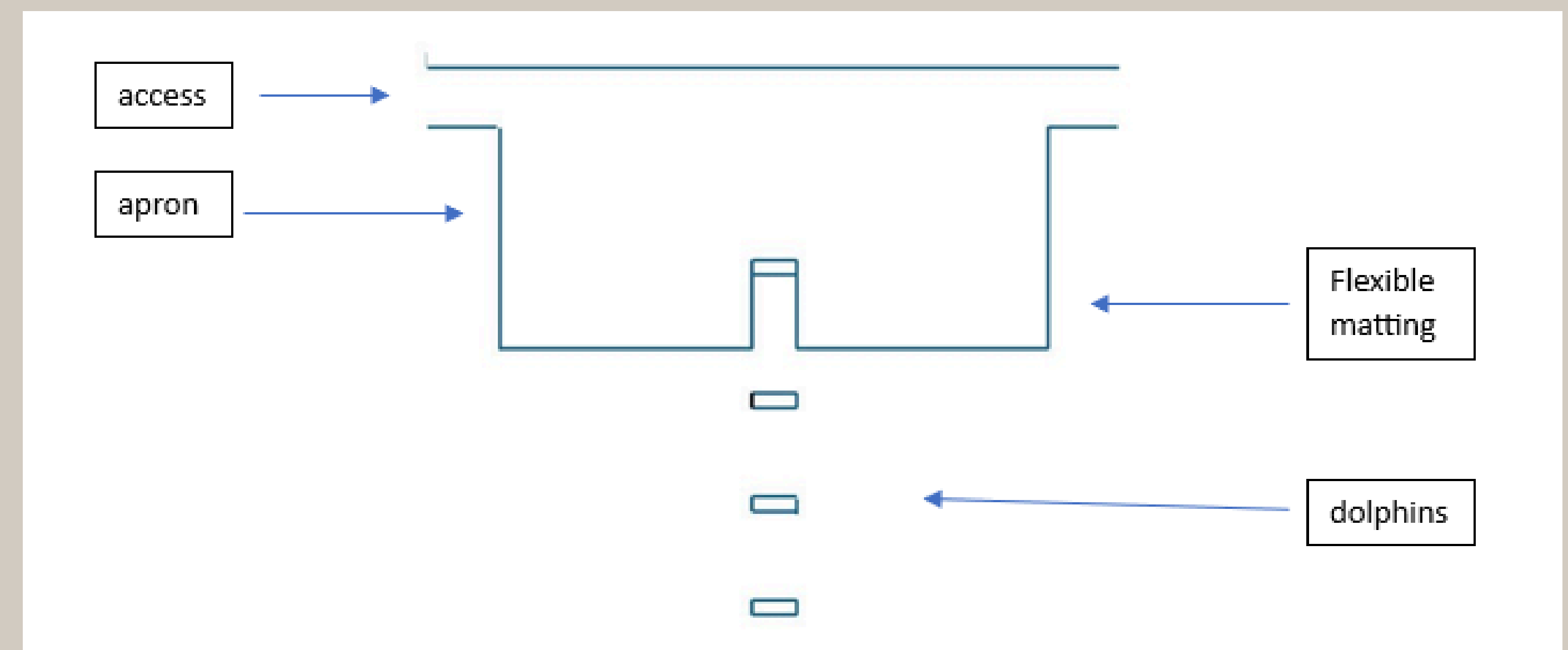
From 9th June, 1942, reconnaissance groups looked for suitable sites; beach defence sector commanders being warned in advance. Sites earmarked by grid reference subsequently received more detailed ground surveys. Construction took place in two phases. Phase 1 along the south coast. Phase 2 included the east coast. All 68 embarkation hards were to be complete by 31 March 1943.

There were two types of embarkation hard. A smaller one for Landing Craft Tank (LCT), usually 4-berth. A larger one for Landing Ship Tank (LST), between 1 and 4 berths.

Each hard required the following:

- a concrete weightbearing access road
- a concrete apron above the high-water mark
- pre-cast concrete beach hardening mats – “chocolate blocks” - in the intertidal area to enable loading of ships at all states of the tide
- Wood and steel “dolphins” for securing vessels during loading
- Accommodation, fuel supplies, and mains electricity

The hard aprons were generally built first, often in parallel with associated access road linking to the public highway. The public roads had been assessed for the ability to carry huge volumes of traffic that would be required. The hards were quite simple structures, constructed in similar ways and conforming to a limited design pattern.



“Dolphins” made of wood and steel, located in the water, acted like hand rails to guide the landing craft onto the beach. Flat bottomed landing craft were not easily manoeuvred in the best of conditions but once moored alongside the dolphin would be aligned to make loading and unloading more efficient. These dolphins formed the basis of a central jetty extended from the shoreline to beyond the low water mark. This allowed vessels to tie-up alongside for loading and unloading as well as re-fuelling. Large steel fair-leads (bollards) were situated to the sides of each hard for tying up.

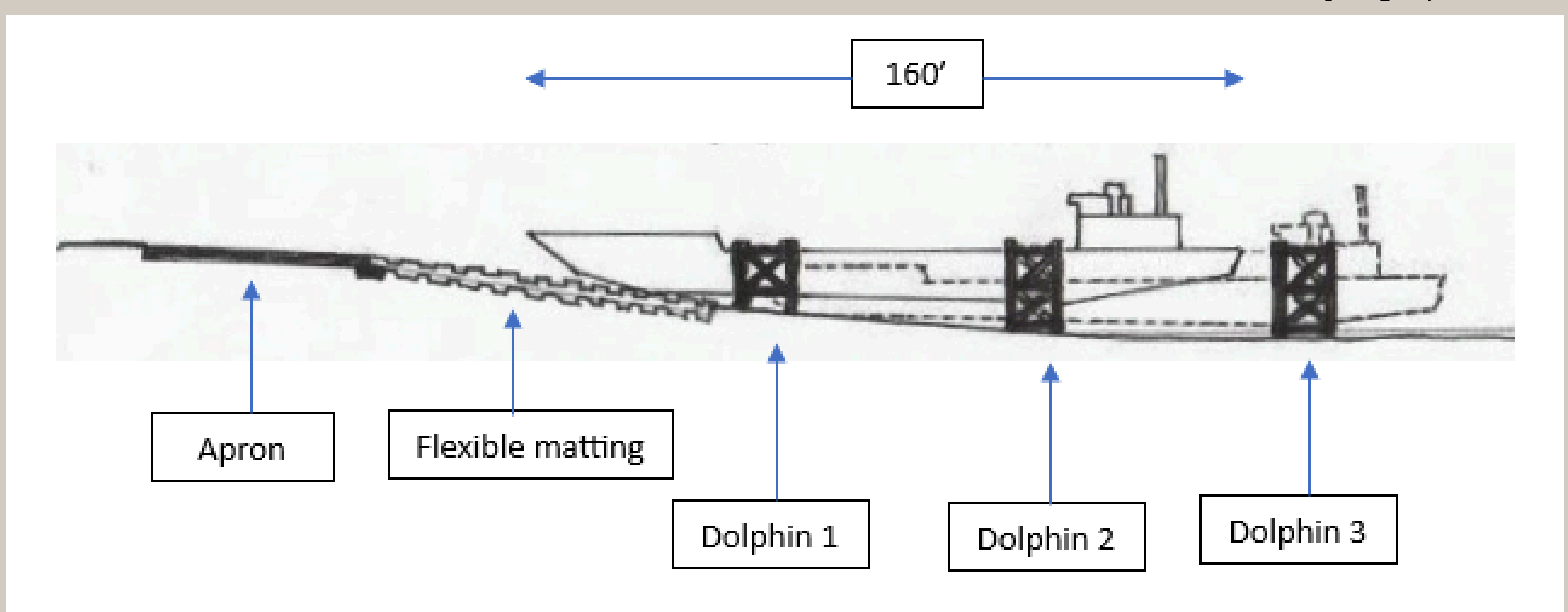


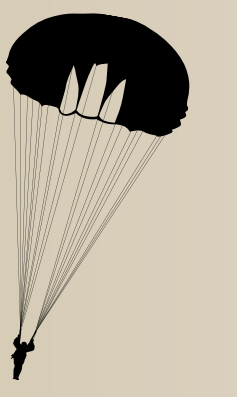
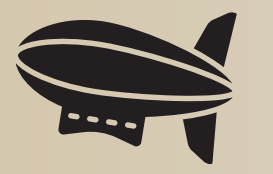
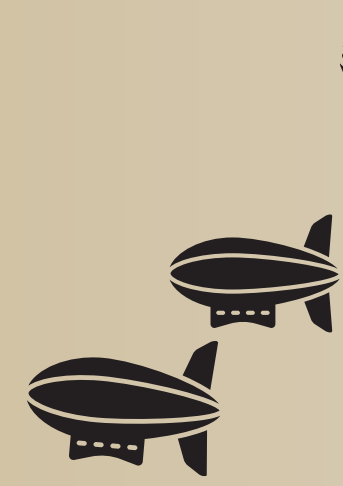
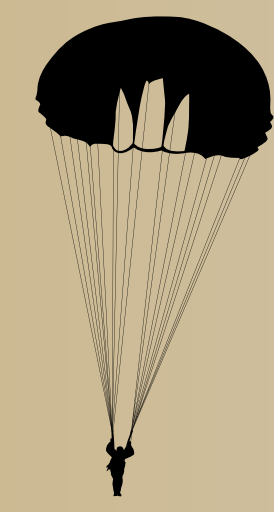
Woolverstone hard. N.K. showing apron, intertidal matting and dolphins



Mat laying on the South Coast at Leppe Bridge

The rectangular, reinforced concrete apron was, in general, around 8in (244cm) thick and around 200ft ((60.9m) wide with a depth to suit the local topography. The surface sloped slightly downwards towards the water at an angle of around 10%. The system of flexible concrete matting, blocks 5in (152cm) thick, hinged with steel hooks at the joints, were hung from a lip formed along the edge of the apron.





WOOLVERSTONE FROM THE AIR - 1944

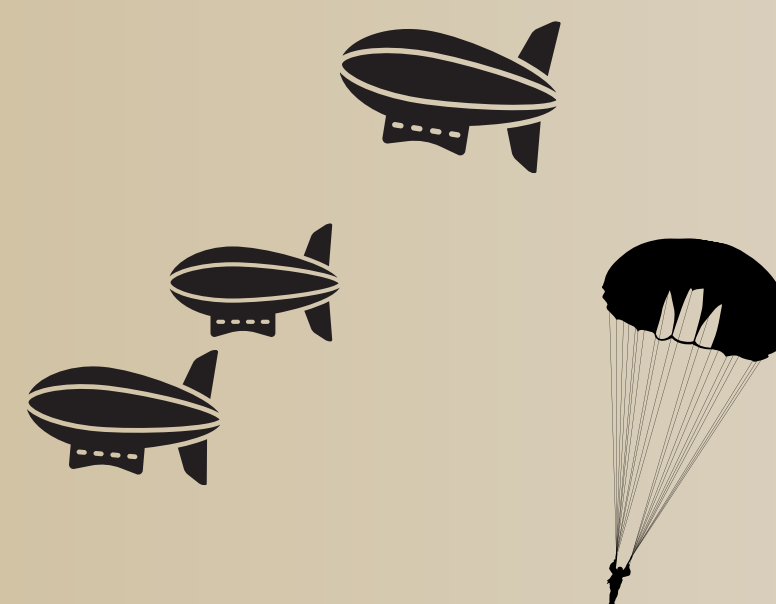
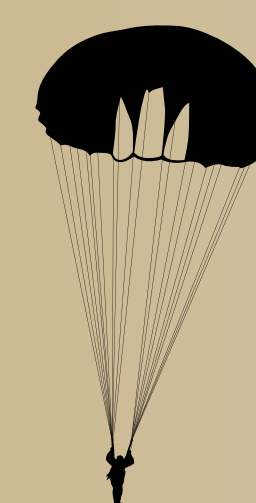
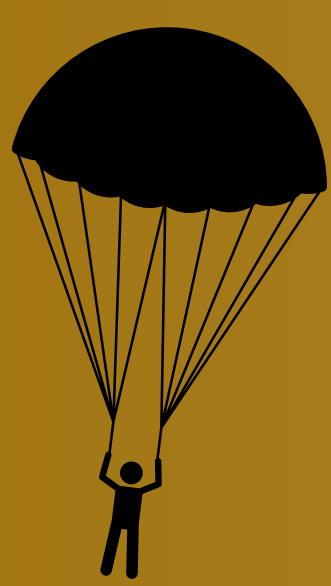
2nd March 1944 - Photo taken 2nd March 1944

The photograph was taken by RAF 541 Squadron, formed as a photographic reconnaissance squadron in WW2. This image shows the entirety of Woolverstone Park and some of the village.



- Various arrangements of Nissen huts in front and behind the Hall
- Base for two new Nissen huts
- Woolverstone beach and Cat House, embarkation hard. N.K.
- Some indication of tents having been pitched alongside the footpath to Chelmondiston
- 4 small landing craft at the "hard"
- Oil storage tanks, camouflaged with irregular boundaries
- Note: no lower road from the Hall

- B1456 – High Road. Mid right to top left.
- The full length of "Tank Road", now Cat House Lane
- Walled garden complex
- Building in the middle of Forty-acre field, which is made up of smaller fields
- Tradesmen's track running parallel to Nelson's Avenue, adjacent to forty-acre Field
- Guard House tucked into the trees, 100m south-east of St Michael's



EMBARKATION HARDS. CAT HOUSE, WOOLVERSTONE. SITE N.K.

Cat House, Woolverstone was chosen after the period of assessment as one of the 68 Embarkation sites to be constructed around the south and east coast for several reasons.

Firstly, Cat House sits on the south bank of the river Orwell, a broad, heavily wood fringed, tidal river close to Harwich and Felixstowe. The south bank is more shady, perhaps more hidden, than the north bank. Secondly, Woolverstone Hall was close by. The Hall had lain empty since its sale to Oxford University in 1937. The Hall and park offered an ideal space for accommodation, training and command organisation. Thirdly, Woolverstone was served by a good, wide road from Ipswich, the High Road, which could take a high volume of heavy traffic quite easily both from road and rail connections.

Work on Cat House hard, site N.K., began in late summer of 1942 and was completed by 7th May 1943, although the target date had been 31st March. Cat House hard was designed for Landing Craft Tank and constructed to take four 4 craft.

A long, re-enforced concrete access road was built from the High Road down to the river, known until recently as "Tank Road" by local people. This is over half-a-mile long. There is a carefully designed entrance which allows heavy vehicles turning off the High Road, a sweeping turn rather than tight corner. Immediately afterwards there is a passing place. Tank Road continues down to the river. There are seven passing places along its length. Two thirds of the way down there is a large turning circle where vehicles could off-load their secret cargoes, to be hidden under the trees and covered in camouflaged netting.

An apron fronting the river was constructed 64m (70yds) in total width. It varies in depth between 13.8 m (15 yds) and 16.5 m (18 yds).

A concrete retaining wall, three lengths of concrete tall, was required to retain the base of the cliff and built along the rear of the apron.

A jetty, or pier, comprising three square, wooden dolphins and two, smaller intermediate supports between 1st and 2nd dolphin, was constructed in the centre of the hard.

There were a further three wooden and steel dolphins built slightly further up the river. These can be seen in a photograph taken in late 1940s. They were used for tying up ships and off-loading diesel oil to the storage tanks.

Then there were ancillary buildings as well as use of the old Berner's boat house and Cat House. Four Nissen huts were erected close to the hard.

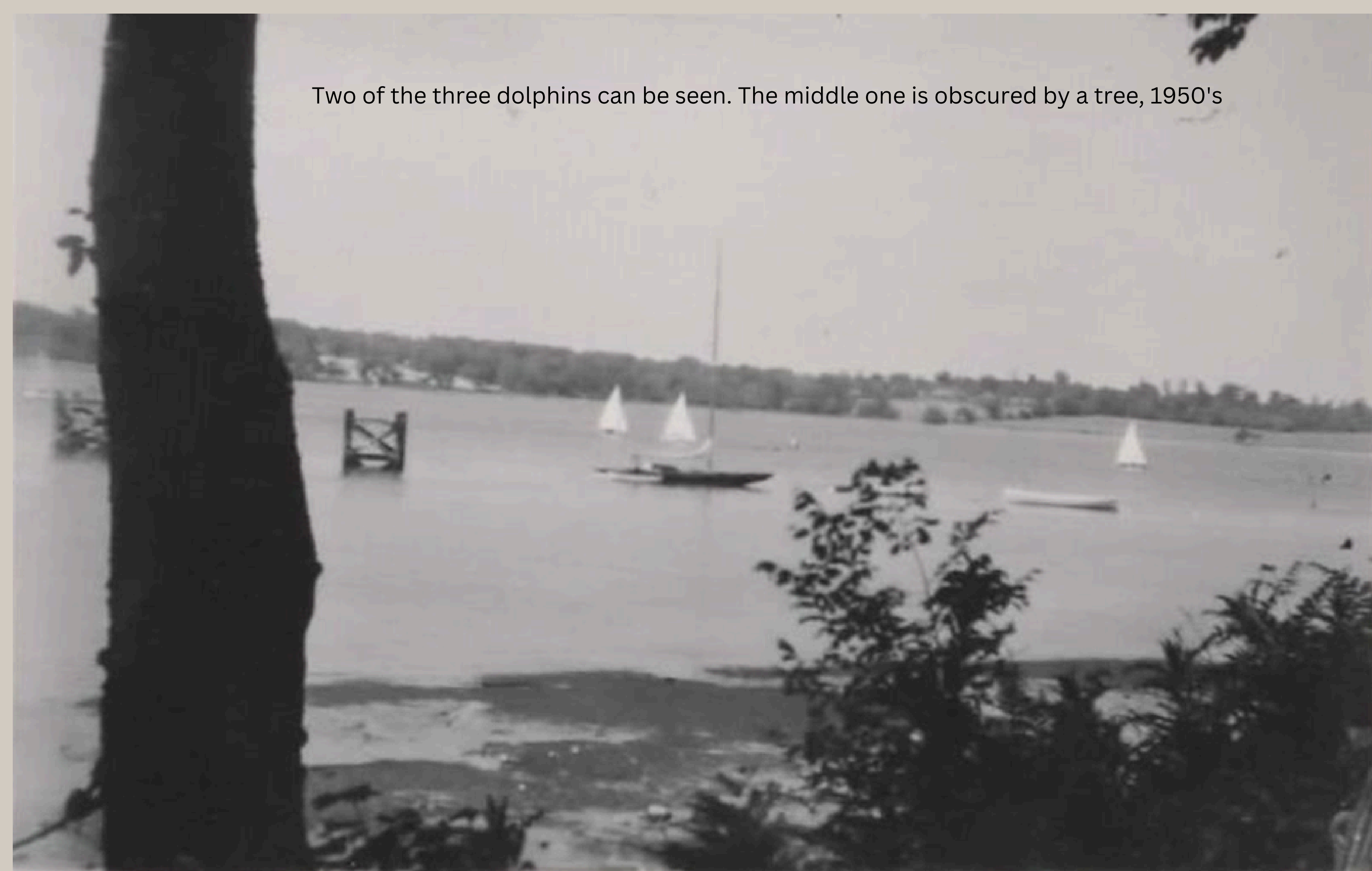
Two where the site of the RHYC now exists, plus two Nissen huts behind the retaining wall to the west of the jetty beneath the cliff and one small Nissen hut on top of the cliff that looked out across the river and to the embarkation hard below.

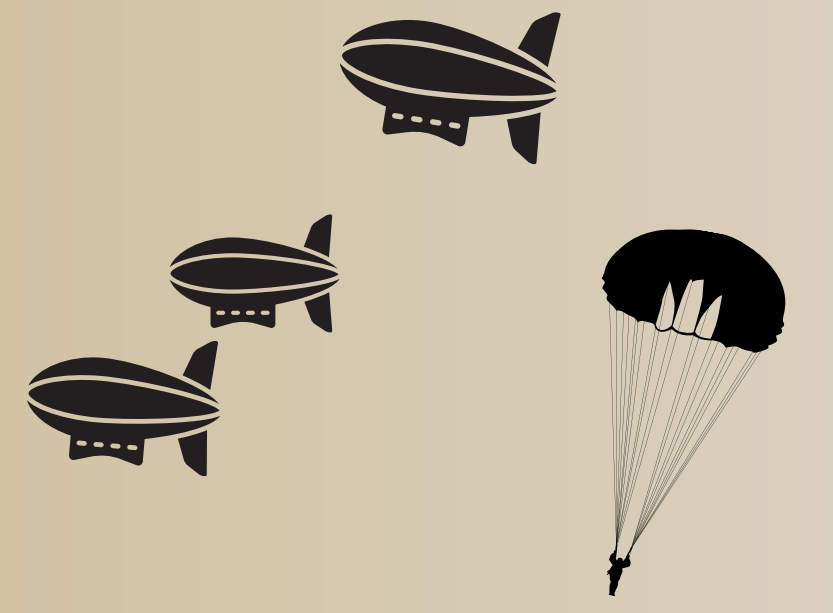
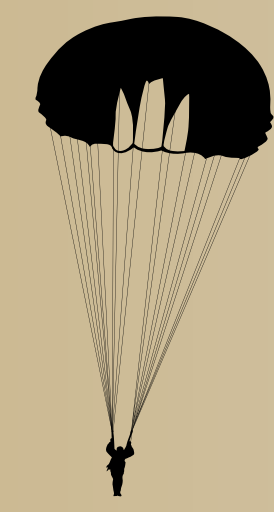
There was also a guard hut, control room, watch hut, workshops, stores, winches and latrines.

Two diesel storage tanks were built, one close to the cliff, a second one further up the site, close to where the football pitch is today.

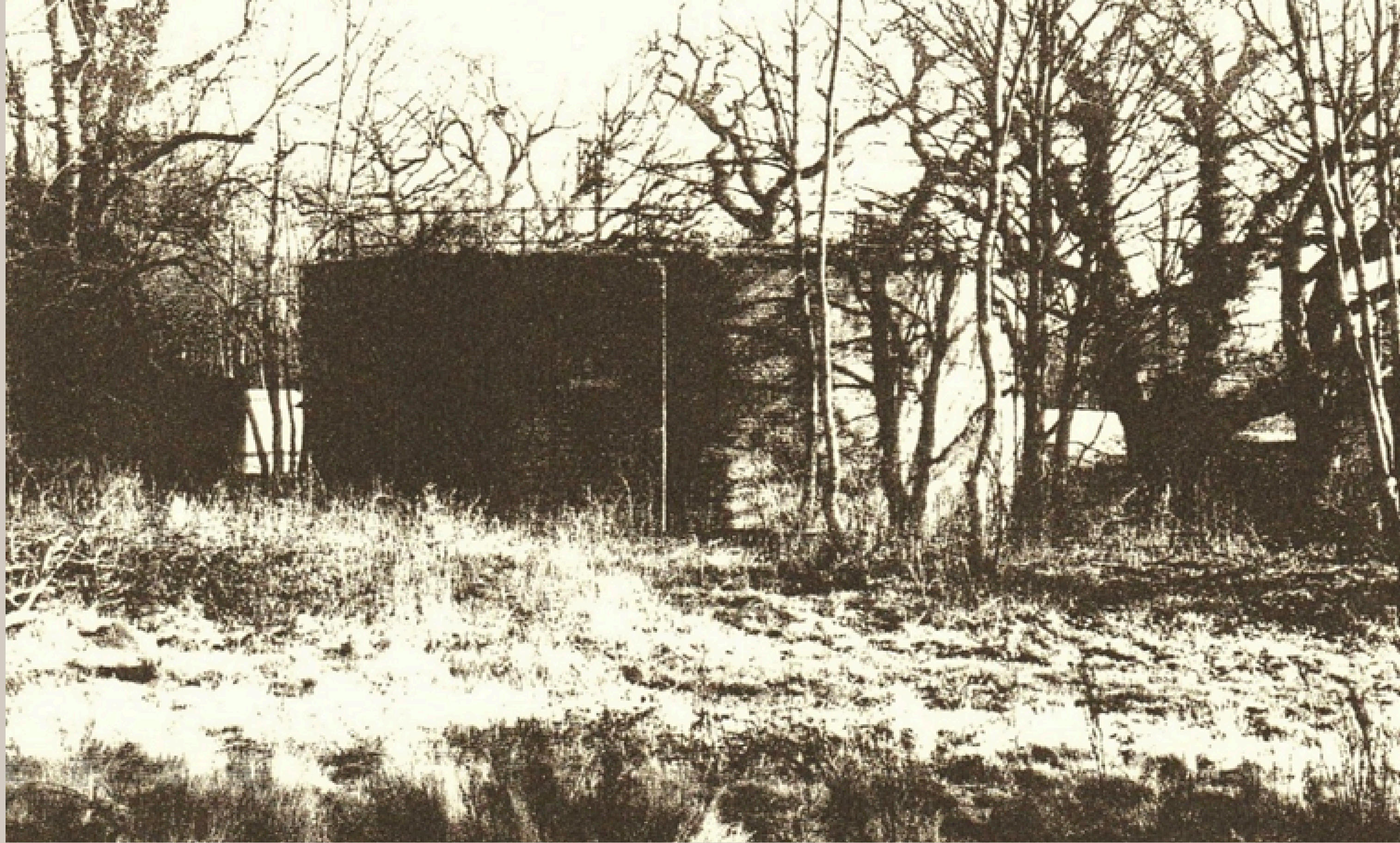


The intertidal zone was completed with flexible matting. This reaches down a further 11.8 m (13 yds) into the river giving a total depth of 27.3 m (30 yds). The mats were designed to provide a stable surface that could support the weight of heavy vehicles, even on sandy or uneven terrain, whatever the height of the tide.





EMBARKATION HARDS. CAT HOUSE, WOOLVERSTONE. SITE N.K.



Upper diesel storage tank in 1972



Lower diesel storage tank c. 1950

These storage tanks supplied diesel, fed by gravity, through 6in cast iron pipes to LCT moored against the jetty. The Army was responsible for the construction on land above the high water mark and the Navy on the intertidal area. In addition to Cat House hard, there was also use of the Slumpy Lane wharf, which was extended, at Freston.



The whole area along the river Orwell became a restricted zone from April 1, 1943. Heavy security was put in place. Guard houses were placed at Freston crossroads, Woolverstone, Hollow Lane in Chelmondiston to ensure secrecy and safety.

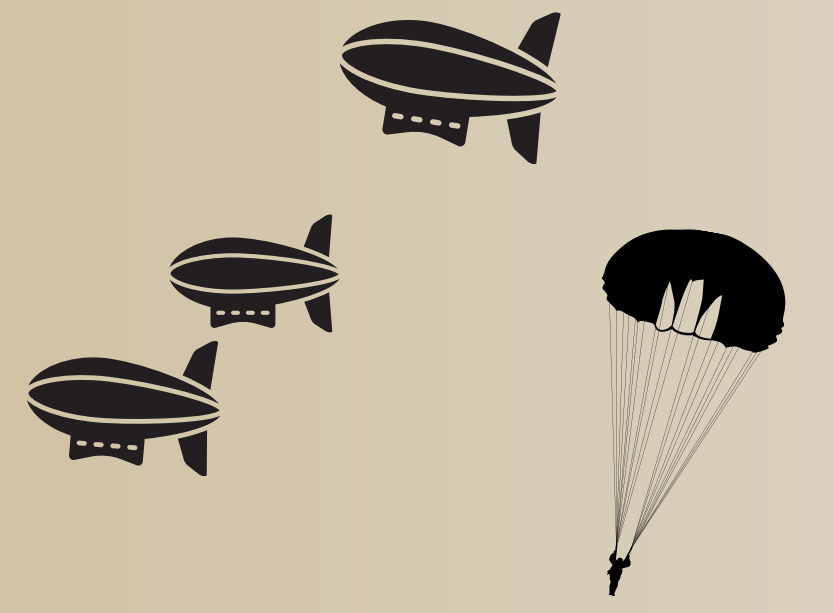
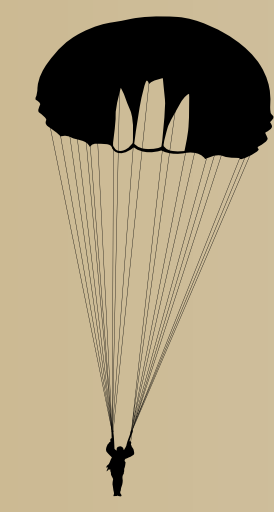
During the autumn of 1943, several days of loading experiments were carried out from Cat House hard. These tests were carried out with utmost secrecy. The tests were to find the optimum loading arrangements.

Tanks, including Churchill, Crusaders and Shermans, were loaded and unloaded in different configurations and tested on the river.

Much of Woolverstone site N.K. embarking hard can be seen today and is a reminder of the effort and sacrifice made by civilian workforce and the armed forces.

In the end, Woolverstone was not used to embark troops destined for Normandy but it had an important role to play in the success of Operation Overlord – the deception plan Operation Quicksilver.





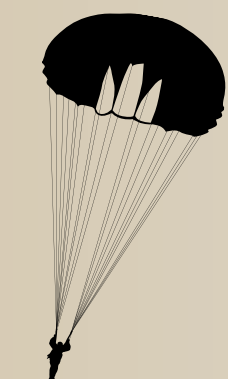
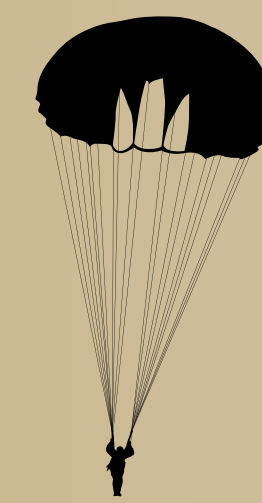
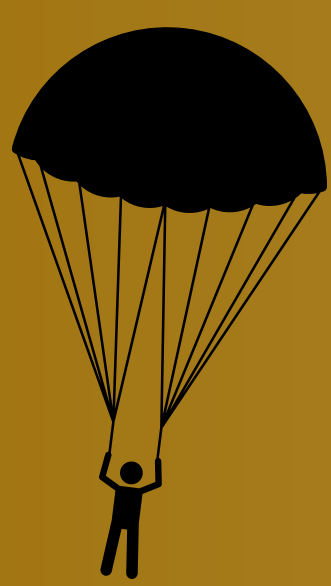
WOOLVERSTONE FROM THE AIR - 1944

26th March 1944 - Photo taken 26th March 1944

This photograph was taken at the end of the embarkation hard building programme and shows Cat Hose Hard, site N.K. has been completed. It was taken by RAF 542 Squadron, formed as a photographic reconnaissance squadron in WW2



- String of moored LCTS. Potters reach and Butterman's Bay
- Numerous unidentified craft beached upstream from Pin Mill.
- Mark IV and Mk V LCTs moored on river Orwell. The Mk V are the smaller ones. These must be genuine LCTs as the dummy craft programme has not started yet
- Large fuel tanker moored at Dolphins.
- Much greater tented area (See P. Tooley's sketch map)
- Camp between Woolverstone and Pin Mill
- Landing craft, possible LCA, on embarkation hard
- Increased path markings between building suggesting greater usage



OPERATION QUICKSILVER

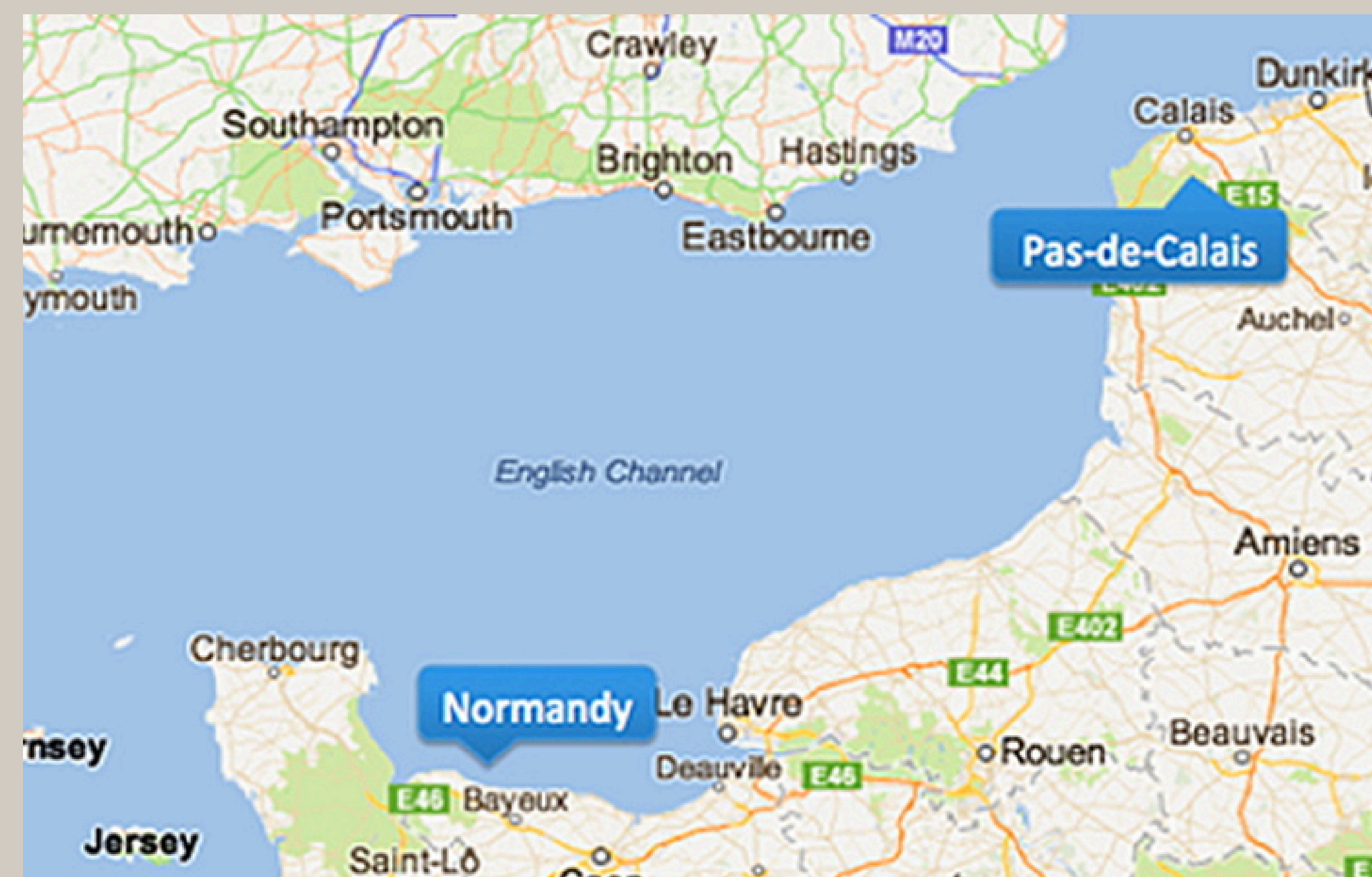
MAY AND JUNE 1944

“All warfare is based on deception. Hence, when we are able to attack, we must seem unable; when using our forces, we must appear inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near.” Sun Tze 771–256 BC

Operation Bodyguard was the codename given to the overall deception strategy in preparation for **Operation Overlord**, the invasion of western Europe in 1944 which culminated in **Operation Neptune**, the Normandy Landings on D-Day, 6th June.

The single, most important part of Operation Bodyguard was **Operation Fortitude**, the largest, most elaborate, most carefully planned, most vital, and most successful of all Allied deception operations. It was pursued in utmost secrecy.

Fortitude was divided in two parts. **Fortitude North** simulated a massive assault on Norway. **Fortitude South** simulated a massive attack on the Pas-de-Calais, which the Germans thought was the most likely location for an assault being the closest point to England. Both required the realistic presence of phantom field armies, presenting a genuine threat. The First United States Army Group (FUSAG), a phantom army, was at the centre of the deception, led by General Patton, with double agents convincing German High command that it would lead the main assault. And that the Normandy invasion force was a feint, with the main invasion taking place six weeks afterwards at Pas de Calais. Furthermore, this had to disguise the mustering of massive troops number and equipment in the south of England. Visible preparations had to be seen in Eastern England where there was “neglect of concealment”, whereas in the leafy lanes and fields of Hampshire there was a maximum concealment area. For any deception to work there had to be perfect security along the south coast of England. A coastal strip was “closed” from April 1 1944.



SUBJECT Dummy Craft Indication
GHQ Home Forces
1. The following is the proposed layout of dummy craft in Eastern and South Eastern Comds.

SERIAL	PLACE	QUANTITY OF CRAFT	SUGGESTED STORAGE PLACE	LAUNCHING HARD	AREA OF BERTHING
1	YARMOUTH ref OS 1 st to Mile. sheet	50 67	PITCHERS QUAY 986256 and Rly Yard 985258	PITCHERS QUAY and Rly Yard	BREYDON WATER
2	LOWESTOFT ref OS 1 st to 1 mile sheet 77	20	CHAMBERS YARD	CHAMBERS YARD	WATER 992105 - 996105
3	WALDRINGFIELD R. DEBEN ref. OS 1 st to 1 mile sheet 87	66	WALDRINGFIELD	WALDRINGFIELD R. DEBEN	
4	WOOLVERSTONE CAT HOUSE R. ORWELL ref. OS 1 st to 1 mile sheet 87	70	WOOLVERSTONE PK.	CAT HOUSE WOOLVERSTONE PIN MILL	R. ORWELL
5	DOVER ref OS 1 st to 1 mile sheet 117A	40	To be found by SECO	BEACH 760590 Hard below Castle	DOVER HARBOUR
6	FOLKESTONE ref OS 1 st to 11 mile sheet 117A	20	To be found by SECO	BEACH to EAST of Fish Market. Hard at Pier	FOLKESTONE HARBOUR

2. The above details have been drawn up as the result of a recce carried out by this HQ in conjunction with Naval officers in command of the areas concerned, as well as the Comd reps. Whilst the berthing areas might be slightly amended to conform with revised Naval berthing plans, the above are sufficiently firm for planning purposes. It is requested that this HQ may be informed as soon as possible as to the final craft storage areas for each launching site in order that the delivery of craft may commence as soon as possible.

3. The following data is given to assist in the selection of storage areas:
1 Bigbob occupies 100 square yards. Craft cannot be stored one on top of the other. If possible they should be stored in separate groups in order to facilitate assembly.

4. Please acknowledge receipt of the attached AF A16.

HQ 21 Army Group.
No 1 APDC
LONDON W1.
2 April 44.

(SGN) D. I. Strangeways Lt Col
(For General C-in C)

The six principal elements in the Fortitude South deception were codenamed **Quicksilver**.

Operation Quicksilver

Quicksilver I – fiction that main Allied assault would be directed at the Pas-de-Calais several weeks after the Normandy landings

Quicksilver II - radio deception through simulated radio traffic

Quicksilver III – display of landing craft around the east and south-east coast of England

Quicksilver IV – bombing of the Pas de Calais beaches and of communications in the area to suggest imminent assault

Quicksilver V – increase activity in Dover to suggest embarkation preparations.

Quicksilver VI – misleading and protective lighting schemes along the South Coast

Woolverstone had a part to play in Operation Quicksilver: Quicksilver III.

The idea was to construct a fleet of dummy landing craft which would be moored along the South-East and East coast. Woolverstone, Cat House hard, had been constructed two years previously. Access to the River Orwell and with a heavily wooded fringe was an ideal location for the secret construction of dummy landing craft.

To be successful, this part of the deception plan had to demonstrate that the means existed to carry assault troops from FUSAG to the Pas de Calais. Abundant signs of Landing Craft in the quiet rivers and estuaries of the East Coast would support this idea. As would the appearance of mustering points and encampments.

This deception programme, Operation Quicksilver, was masterminded by Colonel David Strangeways, DSO OBE.

Much of the information we have on Operation Quicksilver III comes from the experiences of a young Naval officer, **Peter Tooley**, who was tasked with the building and launching of Bigbobs from Cathouse hard, Woolverstone, onto the Orwell. His book, Operation Quicksilver (1988), takes the reader through the genesis of the plan, the secret trials and mounting the deception itself.

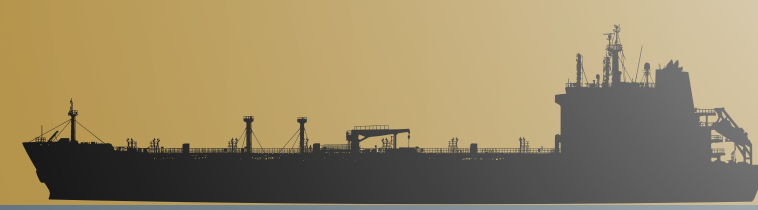
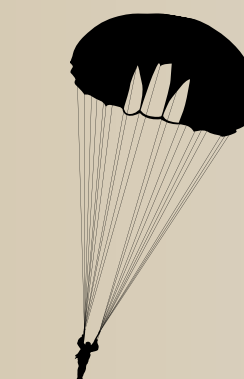
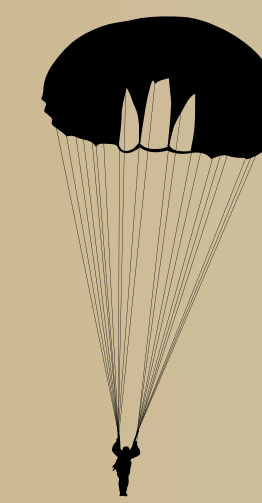
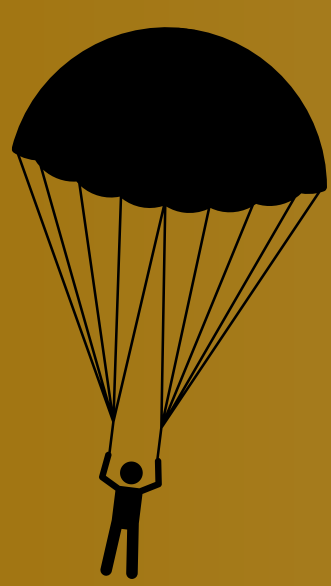
TOP SECRET
Appendix 'A'
"BIGBOB" – PHASE PROGRAMME

	Number to be launched each day						Sailing movements of real LCTs					
	Yarmouth	Lowestoft	River Deben	River Orwell	Dover	Folkestone	BUILD UP	Yar'h./Lowestoft	Yar'h./Deben	Yar'h./Orwell	Deben/Dover	Dover/Folk'n
May	20	4					4					
	21	4					8					
	22	4		4			16		4			
	23	4		4			24		4	4		
	24			4	4		32	3	4	4	5	
	25	4	3	4	4	5	52	3		4		
	26	4	3		4		63		4	4	5	
	27	4		4	4	5	80	4	4		5	4
	28		4	4	4	5	97		4	4		4
	29	4		4	4		113				4	5
	30	4		4	4	5	126		4	4	5	4
	31	4		4	4	5	147		3	4	5	4
June	1	4		3	4	5	159		3	4	2	2
	2	3		3	4	2	173		3	3		4
	3		3	3			183		2	3	4	4
	4	2	2	3	4	4	198			4	4	
	5			4	4		206		2	3	4	
	6		2	3	4		215		3	3	4	
	7		3	3	4		225			3	5	
	8			3		5	233			3	4	2
	9			3	4	1	241			2	4	
	10			3	4		248				4	
	11			4			252				3	
	12				3		255					
Total	49	20	59	63	46	18	255					



Sub-Lieutenant Peter Tooley RNVR





OPERATION QUICKSILVER III - BIGBOBS PART 1

Part of Col David Strangeways' Quicksilver plan required the limited display of dummy landing craft, which simulated the new Mark 4 Landing Craft Tank (LCT). Sites for these were chosen at the end of March 1944. 255 "Bigbobs", as they were known, were to be set out on rivers between Great Yarmouth and Folkestone between 20th May and 12th June. 70 were set out on the river Orwell. From 1st April 1944 there was a ten-mile exclusion zone along the South and East coast up to the Wash. Woolverstone and the Shotley Peninsula must have been literally sealed off. This zone was enforced until 15th August 1944.

The Dummy craft or "Bigbobs", as they were known, officially "Device 36" were designed by Chris Toon at Cox and Co (Watford) Ltd, an engineering company specialising in tubular furniture. The design had been trialled at Virginia Water and then Beaulieu and was successful. A decision was taken to make several hundred "kits". Parts were ordered in Dec 1943 for delivery in March 1944. A training base for construction was located at Waldringfield on the river Deben.

"First of all, we were to go on a course, a common enough event, as any ex-service chaps will know, only in this case whole companies at a time. My Company found itself at Waldringfield near Woodbridge, in a field with piles of metal tubes welded together to form a type of assembly kit, each sub-assembly had to be memorised and broken-down time and time again until we could do it all blindfolded. At this stage we practised in the dark until we could do it perfectly." Lance-Corporal Yardley

The Army was responsible for construction. "A" Company of 10th Worcestershire battalion, under Capt. J. G. Hayes, were assigned to Woolverstone. They were billeted on the Church Field, near St Michael's church.

Building at Woolverstone started on 22nd May. The weather was calm and dry. There was little moonlight. In early summer the hours of darkness were short, between 5 and 6 hours. It took a group of 30 trained men divided into three teams approximately six hours to assemble one Bigbob. Time was tight. An incomplete craft would have to be disassembled and hidden away. The first finished craft was run down the slipway into the river on its wheeled undercarriage at 03:00.

The Bigbobs arrived as kits. Each kit required 7, 3-ton lorries, 6 covered and 1 open, and was accompanied by a motorcycle despatch rider. After off-loading their cargo, the drivers spent the night asleep in their lorries before returning to Watford.

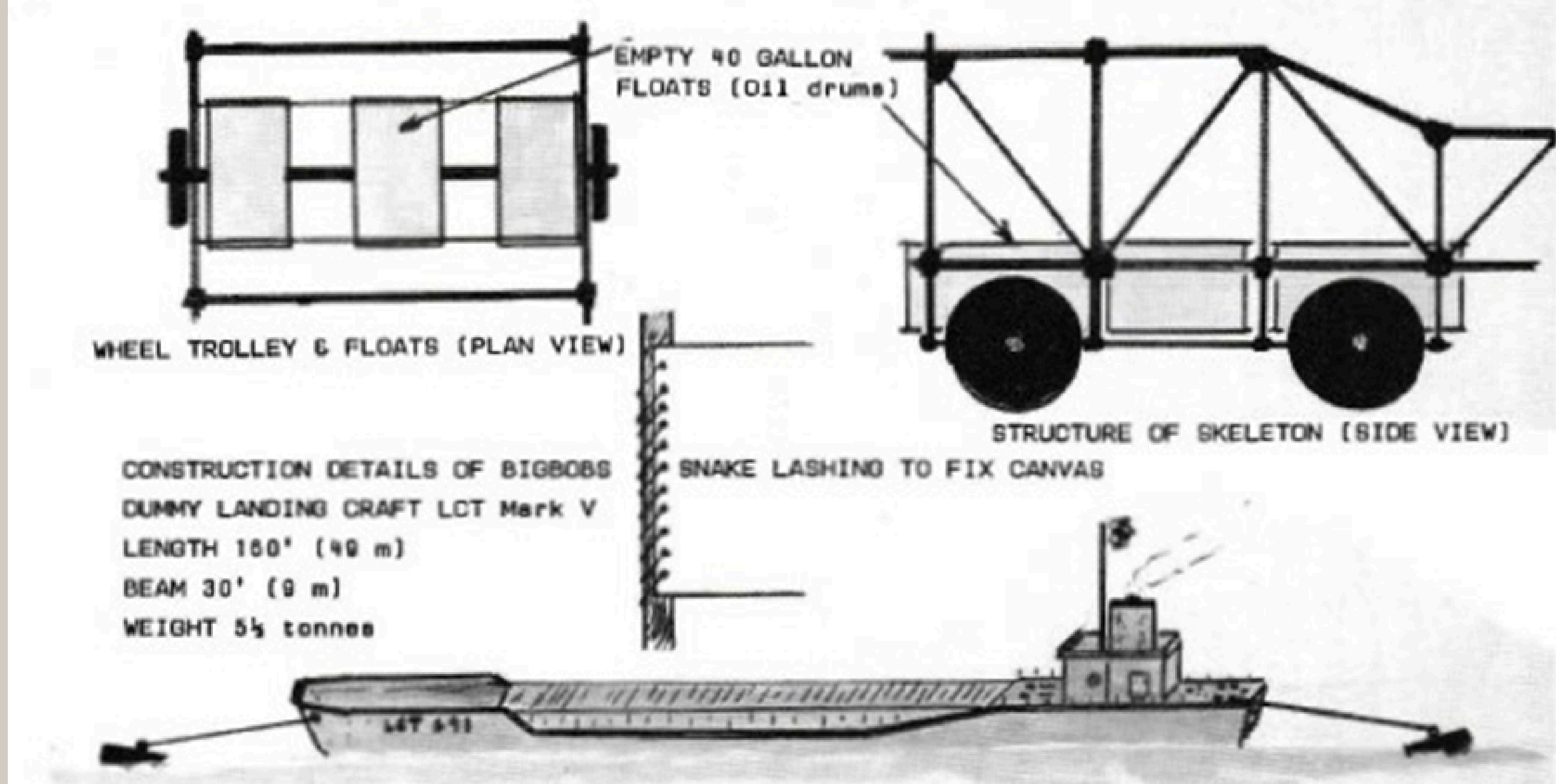
"Final stage of the route to (Woolverstone) was via country lanes and eventually ended in a wooded area. Here lorries were unloaded and the contents put out of sight under the hedgerows in the woods...In the morning, the completed LCT would be afloat and all that could be seen was a jeep towing a harrow over the field to erase all tell-tale activity." Driver. Mr R J Noyce

The construction area was **"an expanse of open parkland bounded by a line of trees close to the river banks, where the ground sloped steeply down to the water."**

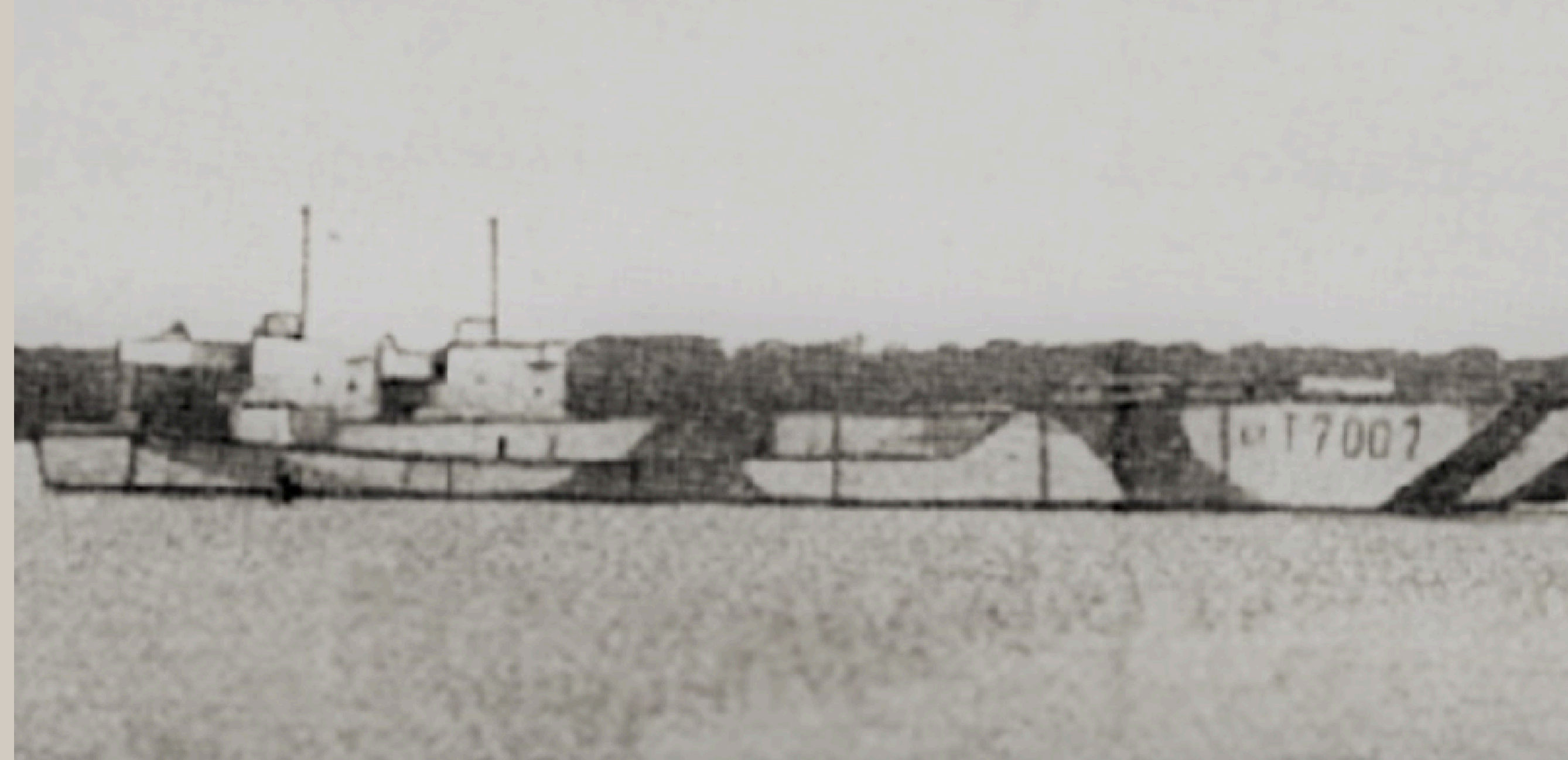
The kit consisted of 500 different pieces and had to be assembled in the dark and in near silence. For each Bigbob a construction area of roughly 100 m² was required.

Their skeleton was made of light weight 3 1/4" tubular steel held together by fish-plates and cotter pins. Light, steel pre-fabricated plates were bolted to the sides, bow and stern to achieve the exact shape. The frame was assembled in three sections - an articulated construction - which gave it some flexibility on entering the water. Canvas was then stretched over this and tied onto the frame by lacing. The final LCT was 49m (160 ft) long, beam 9 m (30 ft). She weighed around 5 1/2 tonnes. * A system of 30 wheels was attached to the base so the finished craft could be run down to the river's edge. They floated on an assemblage of around 30, 40-gallon oil drums.

Peter Tooley, Operation Quicksilver. 1988



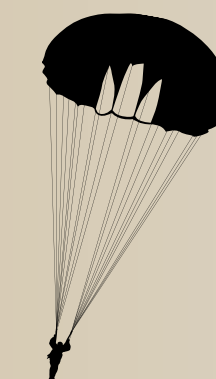
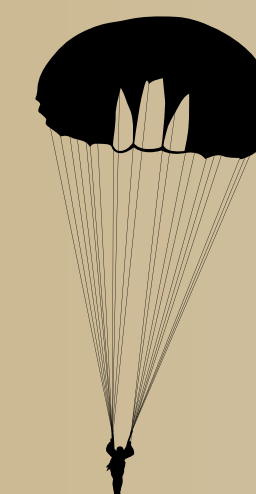
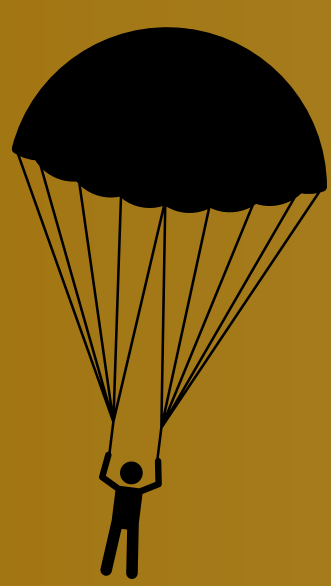
Bigbobs on the river Orwell



Once the basic craft had been completed the superstructure had to be added, wheelhouse, funnel, bow doors of the correct angle and a bridge, fashioned out of duck boards, were added. Coils of rope were placed on the decks. An ensign and halyards for the mast were included. "The completed LCTs were indistinguishable from the real thing at 25 yards." R J Noyce

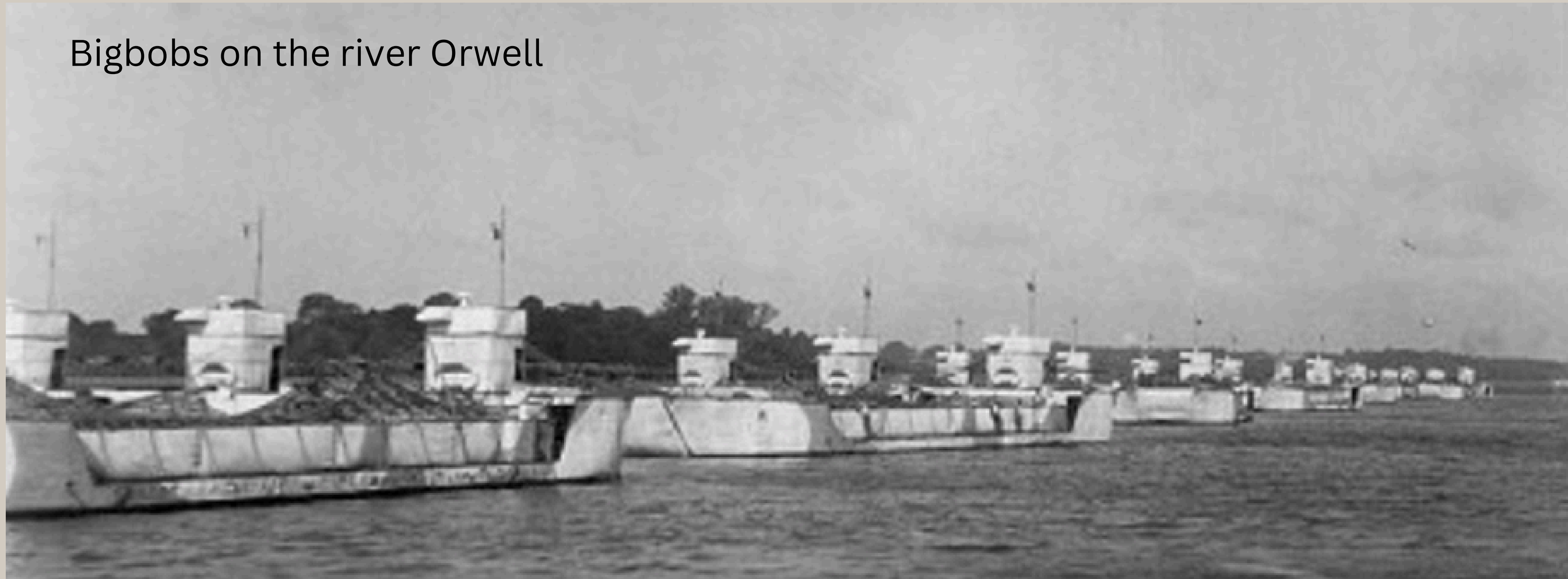
*There seems to be some discrepancies in accounts of the size of Bigbobs constructed and moored on the river Orwell. In essence, there were two types of LCT in production at this period of the war: Mk IV and Mk V. The Mk IV was 57m (187 ft) in length. Beam 11.5 m (38ft). Weight 13 1/2 tonnes. The Mk V was 35.8 m (117 ft) in length. Beam 9.8m (33ft) Weight 5 1/2 tonnes. Clearly, the Mk IV is much the larger craft. Neither fit the dimensions given by Lt. Peter Tooley. It appears that the dummy LCTs moored on the river Orwell were type Mk V. Genuine LCTs of both types can be seen on the Orwell in March 1944 but only type Mk V in July. Therefore, it is the Mk V dummy LCTs that were built at Woolverstone.





OPERATION QUICKSILVER III - BIGBOBS PART 2

Bigbobs on the river Orwell



Once the dummy LCT reached the water, the Army operation was handed over to the Navy. The Bigbob had to be guided out to its mooring. She had no engine, was light and had a shallow draught. This made her difficult to manoeuvre. Any wind or strong tide made the job even more challenging.

The articulated structure of the LCT made entry to the water slightly easier as the bow then mid-section could lift horizontally on the water as the remainder of the craft descended the angle on the sloping hard.

Each Bigbob had to be accompanied to its mooring by 4 small, agile craft, LCVP (Landing Craft Vehicle Personnel) manned by Royal Marines. Two LCVPs, with Royal Marine coxes to steer them, were tied either side of the bow by hand lines on entry to the river, one at each corner. A Naval officer stood precariously on the duckboard bridge between 20 and 30 feet above the water giving directions. With the Army team pushing from the stern and the Royal Marines tugging from the bow, the craft entered the river where two more LCVPs tied onto the stern. The LCVPs acted as the Bigbob engine and required skill to manoeuvre.

“There were no rudders, so if we wanted to turn to starboard then I had to get starboard craft to put their engines astern and the port craft to go full ahead.” Peter Tooley.

With deft instruction the newly completed Bigbob was steered to the trots of orange buoys moored along Potter’s Reach, and tied fore and aft about 64m (70yds) apart, in pairs or threes.

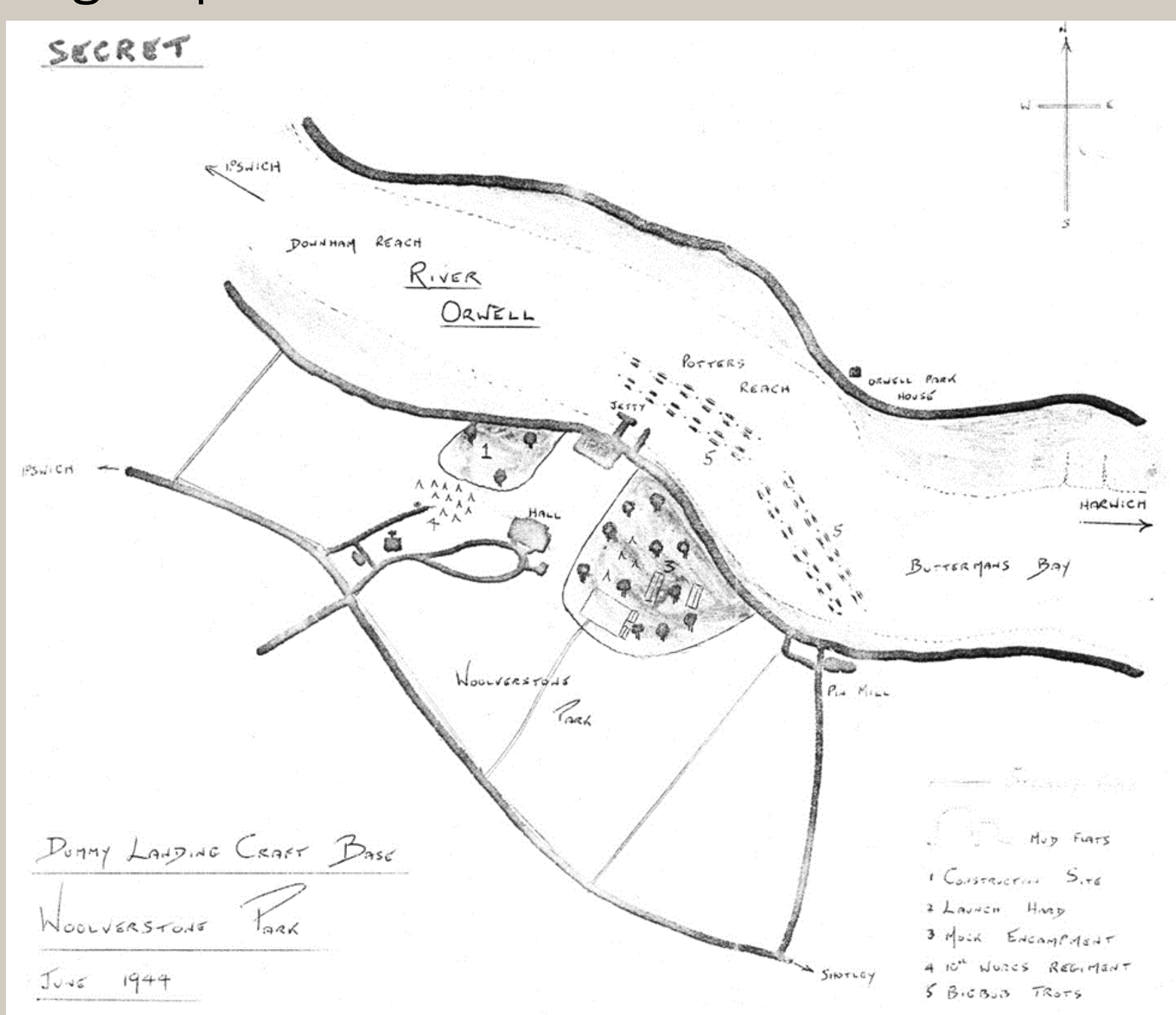
Great care had to be taken not to run the craft onto either river bank or mud bank. The articulated nature of the frame would have distorted the shape of the craft and shown it to be a dummy.

The vehicle hold was covered with camouflaged netting poked up with poles to simulate a cargo of tanks or lorries.

The Bigbobs themselves were serviced by a small number of personnel members of 446 Flotilla of Royal Marines who were camped in tents just outside the main gates leading to the rose garden in the Park grounds. The Bigbobs were moored with a White Ensign raised during the day and manned by skeleton crews who carried out a range of tasks, even fishing over the side. Laundry was hung out to dry. Specially designed oil burners were lit to produce puffs of smoke. Aldis lamps blinked signals ashore. Small boats delivered ammunition, mail bags and other essential stores. Liberty boats took men to and from the craft. Fuel Lighters moved up and down the line of craft, laying out oiling hoses to simulate re-fuelling. The mooring patterns were varied. And all the time, real LCTs chugged up and down the river, mingling with the dummies .

Four launches took place each night with 50 Bigbobs moored by June 6th. 13 further craft were added the following week.

While all this subterfuge was taking place, real landing craft and larger invasion ships were using Woolverstone for training. Some of the landing ships were so large that the only way they could turn about was to place their strengthened bows onto Cat House Hard and push the stern around under engine power.



Operation Quicksilver maintain the deception throughout June, only coming to an end in early July. On 10th June General Guingand, signalled to Colonel Wills, commanding the 10th Worcesters, as follows:

The Chief-of-Staff is anxious that the threat created to N. France by the dummy landing craft under your control be continued as long as possible. It is during the next fortnight that we may well obtain most benefit from these craft.

While it is realised that the launching and maintenance of the craft is an extremely arduous task it is requested that every possible effort be made to ensure that as much life and animation is given to them as possible.



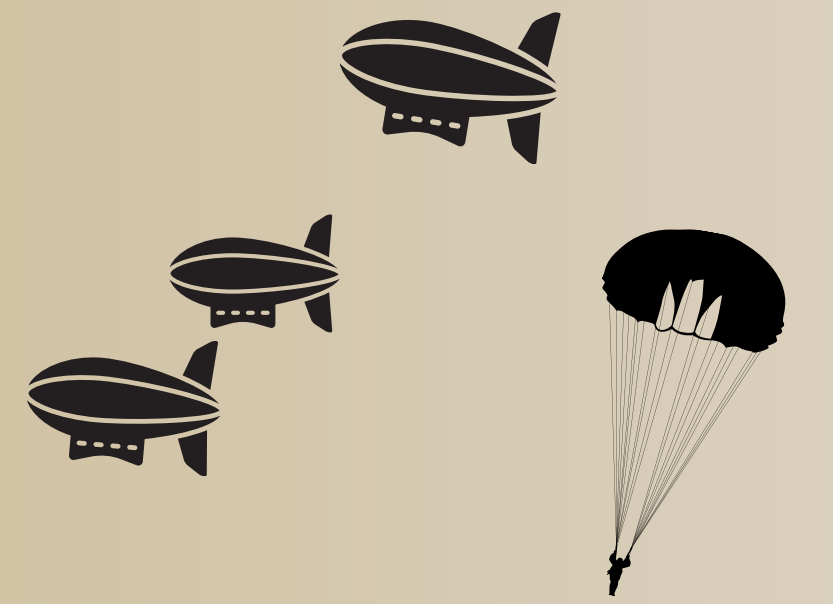
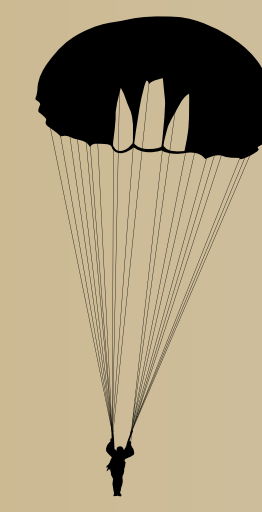
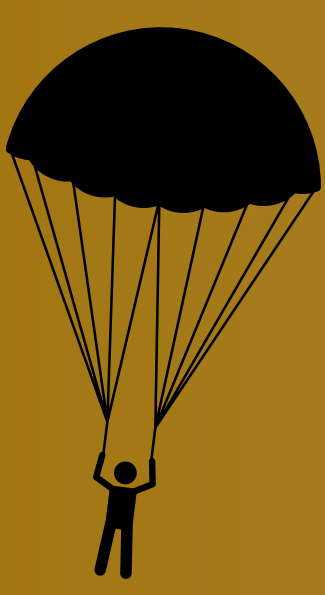
You should explain to all ranks that they are playing an extremely important part of the plan, and that in view of this they are required to make as great an effort as battalions deployed in the battle areas.

To maintain the deception a fake Army camp was constructed between Woolverstone and Pin Mill. Among other things, this had a Guard house, a parade square, tents, dummy equipment, smoking field kitchens, phantom convoys of army lorries delivering supplies and even fake wireless chatter to moored Bigbobs.

The German High Command was convinced that the Normandy landings were a distraction from the main invasion force. They believed an invasion force, including 500 landing craft, was massed in southeast England. This kept Panzer Divisions near Pas de Calais in readiness, thus keeping them away from the battle for Normandy. The Quicksilver deception was successful in its aims.

“These deception measures continued as planned after D-day and events were to show that they achieved outstanding results and in fact played a vital part in our successes in Normandy.”
Normandy to the Baltic Field-Marshal Lord Montgomery





WOOLVERSTONE FROM THE AIR - 1944

6th July 1944 - This photograph taken one month after D-Day invasion commenced, by 309 Squadron. This was a reconnaissance group made up of Polish - Land of Czerwien - pilots. The deception plan, Operation Quicksilver, was being maintained but in the next few days the operation would be wound down and the dummy craft recovered and dismantled. They had achieved their purpose.



We can see:

- 39 x Landing Craft, Tank Mk V dummy vessels moored along Potters Reach. Most are moored in threes, some in twos and occasional single craft.
- 3 x small landing craft on Woolverstone beach
- 5 x small landing craft moored to Dolphins and jetty
- Cat House
- Nissen hut on top of the cliff
- Lower of the two diesel storage tanks
- Irregular outline and bank for camouflage netting
- Nissen huts, where RHYC Club House would be established

- Paths between Woolverstone Hall and Cat House are various and well worn, especially below the block of Nissen to the west of the Hall
- Evidence of where tents had been pitched
- Observation tower on the Hall roof
- 2 x slit trenches, zig-zag lines, to the east of the stable block. Perhaps these were for training purposes, unlikely to be defensive.
- a clear white squiggly mark that appears in all three photographs at the same place. Could this be connected with the site of the Obelisk which had been demolished in 1943?
- Clear view of vista from the Hall.
- Note that the area is more wooded today.