ANNEXURE G: SPECIALIST REPORTS

ANNEXURE G1: HERITAGE IMPACT ASSESSMENT

PATERNOSTER GROEPBELANGE DEVELOPMENT FARM 1259, PATERNOSTER HERITAGE WESTERN CAPE CASE NO. 21053106 OLD CRAYFISH FACTORY SITE HERITAGE REPORT



The old crayfish factory buildings at Paternoster, 1915

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1. BACKGROUND: PROPOSED DEVELOPMENT AND CURRENT ZONING

Paternoster Groepbelange wishes to redevelop the existing buildings on the crayfish factory site on Farm 1259, Paternoster, and therefore to rezone the relevant portion of Farm 1259 (approximately 1,21ha) to Business Zone I, to be used as a mixed-use business site integrated with the existing waterfront attraction on the abutting property (Erf 2063, Paternoster). This redevelopment of the existing buildings will include 11 apartments at ground floor level, a laundry, restaurant, and recreational facilities. At the same time, some of the existing crayfish tanks and fishery related product storerooms are to be retained as a public attraction and as part of the crayfish factory operations in the Waterfront.

This proposed redevelopment of the existing aquaculture facility to create a mixeduse business, residential accommodation, and tourist attraction facility complementary of the abutting development on Erf 2063, requires Environmental Authorisation (EA) as it entails amongst others the decommissioning of the aquaculture facility. The site forms a part of the larger waterfront area (Erf 2063) with access off Kreeftegang, but is currently used for aquaculture purposes.

The proposed rezoning of an area larger than 10 000m² requires authorisation in terms of Section 38 of the National Heritage Resources Act, 1999, Act 25 of 1999 (NHRA). A notice of intent to develop will be submitted and permission sought for the rezoning and redevelopment of the existing buildings, which will follow on the decommissioning of the facility. Currently Farm 1259 is under-utilised and only partially used as an aquaculture (fish farming and crayfish holding) facility. Due to the continually decreasing quotas for catching crayfish and fish, the conditions of use and lease of the aquaculture facility have changed.

As part of the development proposal, Erven 1751 - 1753, Paternoster have to be consolidated, rezoned and subdivided, to create a widening of Kreeftegang, the main entrance to the Waterfront. As consolidation and subdivision of three or more erven is a listed activity, application is also made for a permit to undertake this activity.

Decommissioning of crayfish factory buildings

Due to the reduction in the available catch and quotas for crayfish and a lack of skilled operators to manage a feasible fish or perlemoen farm, the Paternoster Belanggroep no longer requires the use of the aquaculture facilities currently existing on Farm 1259. The owner therefore wishes to decommission the facility and redevelop the existing buildings by the internal alteration and renovation thereof to retain some of the aquaculture activities in significantly smaller space with separate product stores for sale of the produce; also to create 11 flats for tourism accommodation (approximately 2 562m²) and with some parking inside of the existing converted buildings. The applicant will retain crayfish tanks for a maximum of 10 000kg wet weight stock in 551m² of the existing buildings.

The site area is completely disturbed and inside of the urban area, thus only the decommissioning needs to be considered as a listed activity. The existing buildings and facility make no meaningful contribution to the Paternoster economy and the redevelopment proposal will not have any effect on the local character elements and architecture, scale, or form of the site. The existing buildings on the site will be retained and reconfigured for economic use without any significant external changes. It is understood that once rezoned, the site and the buildings could be redeveloped in accordance with the land use parameters applicable to the zoning.

2. NOTICE OF INTENT TO DEVELOP (NID)

A Notice of Intent to Develop (NID) was submitted to Heritage Western Cape on 17 June 2021 (CASE NO: 21053106), in which Paternoter Groepbelange indicated that it believes that a HIA is required. Apart from the Section 38(3) requirements of the NHRA, the applicant included the following envisaged studies:

- 1) Heritage resource-related guidelines and policies.
- 2) Local authority planning and other laws and policies.
- 3) Details of parties, communities, etc. to be consulted: Saldanha Bay Municipality; West Coast Aboriginal Council.

4) Specialist studies, eg: History/Heritage; Archaeology; Paleontology; Visual Impact Assessment.



Figure 1. The crayfish/fish factory buildings at the top of the photograph are earmarked for development as an hotel on the Paternoster peninsula. *(WC Prov Govt)*



Figure 2. View of the underutilised crayfish/fish factory to be developed (Author)



Figure 3. View of the waterfront area, with the large dune at the back. The former crayfish/fish factory stands in the far background on the extreme right *(Author)*



Figure 4. The factory building seen from the small bay on the Waterfront (Author)

3. HISTORICAL BACKGROUND TO THE SITE

Geographic location

The picturesque Paternoster is one of the oldest fishing villages on the West Coast and has always been well-known for its abundance of fish and crayfish, although that situation of abundance has altered drastically over the years. It lies about 145km north of Cape Town and 25km from Saldanha.

A likely explanation for the name comes from the string of black rocks "De Paternosters" (now named Seal Islands, near Britannia Bay), stretching about 3km from the present Paternoster Point into the ocean. This string of rocks would appear on the old seafarers' port side as they approached from the north past St Helena Bay, and resemble a string of prayer beads, giving rise to the name "Paternoster". According to another theory it was called after the "Our Father" or "Paternoster" prayer by Portuguese sailors struggling past the Bay during stormy weather. The name appears to have been used as early as 1732. Near De Paternosters lies St Martin's Bay, named such by Portuguese navigator Vasco da Gama in 1497 while journeying in this area on the feast day of the holy St Martin. To the south of Paternoster lies Cape Columbine, named after the British wooden scow "Columbine" which was wrecked in 1929 about 1,5km north of the present day Cape Columbine lighthouse (built 1936).

Early Inhabitants *

Some of the richest archaeological sites in Southern Africa are found in the West Coast, including Paternoster. Excavated shell middens at these sites indicate the former presence of San hunter gatherers who had been living in the area for thousands of years, and who had easy access to water and marine mammals and shellfish. Most notable is the megamidden "Paternoster Midden", containing a large percentage of faunal remains and cultural items rarely found in middens; including stone artefacts. It was declared a provincial heritage site by Heritage Western Cape in 2009. Both shell and cultural debris dating back to the 1st millennium A.D. have been discovered in Paternoster's Kliprug area and successive studies indicated intensive shellfish collecting over the past 3000 years.

Archaeological Resources

According to the Archaeological Report by Jonathan Kaplan of ACR in 2021, traces of archaeological remains were recorded in the footprint area for the proposed boutique hotel, but the deposits have already been severely impacted by the development of the crayfish and fishing factory over decades. Some relatively well-preserved archaeological resources were also recorded among a cluster of large granite boulders on the rocky promontory. The report states that unmarked Khoisan remains (i. e. burials) may be exposed or uncovered during construction related excavations.*

* (also see Archaeological Report by Jonathan Kaplan).

European settlement

The first Portuguese navigators were already familiar with the West Coast crayfish - *Jasus Ialandii*. When Vasco da Gama visited St. Helena Bay on his first sea voyage in November 1497, his sailors found crayfish in abundance in the bay to supplement their supply of refreshments. During later colonial times, crayfish continued to be an important marine resource, as will be seen during the era of the well-known Stephan Brothers.

The first European seamen found a wealth of pelts and guano from the huge seal and seabird populations, setting off a rivalry between Dutch and French sealers for the control of the islands around the bay. Within the first years of Van Riebeeck's settlement at the Cape (1652), the Dutch had already thoroughly explored the West Coast Peninsula. During the late16th century, propective settlers started moving further up the West Coast.

THE WEST COAST AND STEPHAN BROTHERS

The Stephans

With the moving of European farmers to the area, the first systematic fishing industry commenced with a few locals making a living from supplying fish as food for the farm labourers. Then, around the beginning of the 19th century, Johann Daniel Stephan appeared on the West Coast scene from Germany to become a master mariner and merchant who made the most of fishing and related opportunities along the coast. At the time there was a fair sprinkling of European settlers in the area, and living far from the Cape, they were keen to barter their wheat and other agricultural products to Stephan. By the 1830's, merchant cutters were running a growing trade in grain and other commodities and the lower reaches of the Berg River became an important market for these farmers.

Johann Stephan established the first permanent trading station on the West Coast in a sheltered cove named Soldaten Post in St Helena Bay, and over the years he extended his operation to Steenberg's Cove and then to every suitable site around the coast as far as Lamberts Bay to the north. But it was the fourth generation of the family, Johann Carl and Hendrik Rudolf, who created the largest fishing and trading concern of its kind at the time in South Africa. During the 1860s, Johann Carl Stephan bought a piece of land at Stompneus Point and later at Steenberg's Cove, where he erected his fish factory and by 1900, nearly every suitable bay from Lamberts Bay to Saldanha Bay was controlled by the Stephan brothers.

From Soldaten Post their influence spread to virtually every area in St Helena Bay, Paternoster, Vredenburg, Berg River and Lamberts Bay, and Carl settling at Laaiplek at the mouth of the Berg River. The village's historic core developed around the site occupied by Stephan Brothers' operations during the latter half of the 19th century, and until 1944, the hamlet developed on the periphery of the Berg River. By 1885 they had about 80 large fishing boats and more than 600 men in their employ at the various operations. Their fleet was eventually bought by Mitchell Cotts in 1916.

The Stephans and Paternoster

In the history of Paternoster, the Stephan family had arguably the greatest influence on the development of the area and its communities, although their impact spread much wider along the West Coast than just the village of Paternoster.

According to court records of the Cape Provincial Division of the Supreme Court of 1916, Stephan Brothers were "the owners of several properties at Paternoster" with the boundary of their property being "the foreshore to the point of high-water mark at medium tides". For well over 30 years the public had "freely and uninterruptedly as of right" drawn up boats on the Stephans' land "so far as the limits of the highest tide of the Atlantic Ocean ... the whole of the land in the vicinity was comparatively recently crown land. The earliest grants seem to have taken the shape of what were called fishing licenses...more to the westward of Paternoster Bay. These fishing leases were from time to time acquired by Stephans, and as far as this portion of land which we have to deal with in this case is concerned, it was first granted to Stephan brothers in 1891. Before that time they had acquired the lease of the ground. The whole of these fishing leases have now fallen into abeyance. They were acquired by Stephans from the original licensees and were then allowed to fall into abeyance on this land being granted by government. At the present moment no fishing leases in this locality are in existence. The grants of the other lands adjoining this piece [the court case disputed site] have all been acquired by Stephans and the boundary on the northwards is described in these grounds as being either the sea or the Atlantic Ocean or Paternoster Bay."

The court documents also stated that some of the fishermen landed on this beach and drew up their boats in the Stephans' time, but they came either to visit their friends or to trade with Stephan Brothers at their store or to buy liquor at Stephans' canteen. Other boats which came to the beach came mainly for the purpose of selling fish to the Stephans who had their fishery close to the foreshore, or to make purchase at their store. According to the evidence any of these who had fishing leases landed their boats and took them up on the beach contiguous to the land leased to them round the corner in Little Paternoster and Steins Bay, and also what is known as Back Bay.

PATERNOSTER AND THE SOUTH AFRICAN CRAYFISH INDUSTRY

The West Coast contains countless coastal middens and cave floor deposits that confirm the importance of crayfish as a seasonal staple in the diets of pre-colonial hunter-gatherers. As mentioned earlier, the West Coast crayfish was enjoyed by the first Portuguese navigators, with Vasco da Gama's men probably the first on their late 15th-century visit to St. Helena Bay. In the centuries to follow, crayfish remained an important marine resource to locals, the VOC and British authorities .

About the abundance of crayfish, an observer mentioned in 1892 how "you see them coming in, in banks, like a bank of snoek or harders, ten or twelve feet deep, piled one on top of another". But because of its prolificness, crayfish were socially undervalued as food by the Cape colonists, who compared it unfavourably to the Northern Hemisphere's more familiar lobster, and it was regarded as "a food for the poor". The prominent fish merchant Hendrik Rudolph Stephan pointed out that, "It is not a lobster, it has quite a different flavour to an English lobster." Many fisherfolk also merely used it as bait for catching of line fish.

The First Crayfish Canneries

A start to the crayfish industry was made as early as 1874, when John X Merriman, the later Prime Minister of the Cape Colony, started a cannery at the Cape, but he had hardly started off when he sold it, and it failed a few years later. It was only around 1890/91, when markets abroad started to show an increasing interest in crayfish, that fishermen began to can the product. Three small canneries began operating, and by 1902, canning and exporting crayfish from along the West Coast in canned and later frozen form as a cheap substitute for lobster on the European (to France in particular) and American markets were going well. Initially the canneries were successful because of the abundance of crayfish at nominal prices at a time when lobster became increasingly scarce in the USA and Europe, but the industry collapsed when defective processing techniques led one after the other to go bankrupt.

It was only after the influx of expatriates with experience in the canning industries of Europe and North America, and new crayfish resources opening up at Hout Bay, Saldanha Bay and St Helena Bay, that the crayfish industry gained a new lease on life in the 1900s. It also helped that the American lobster industry shifted from canning for export to freezing for the home market.

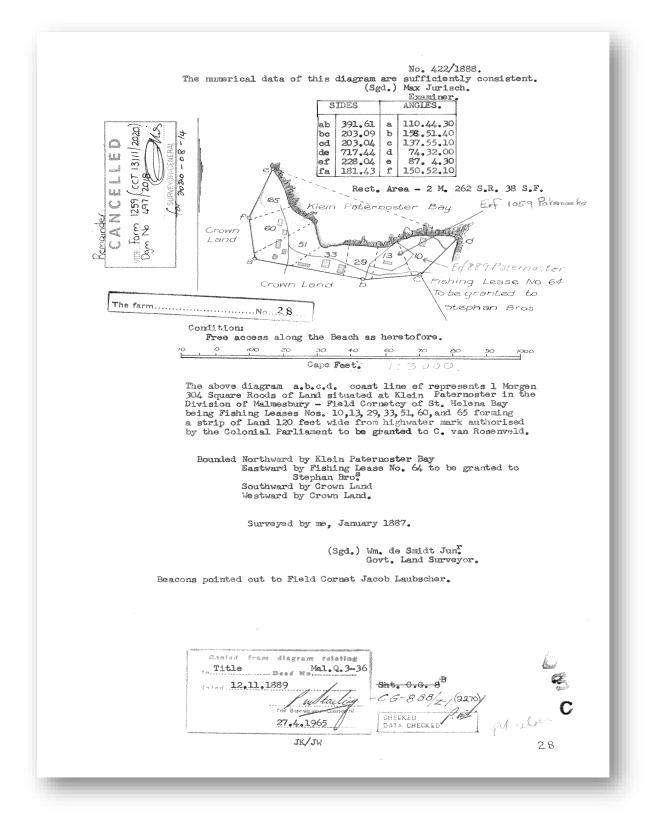


Figure 5. Survey diagram of Klein Paternoster Bay 1887 (Deeds Office)

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Figure 5. 1916 Map of Paternoster showing Stephan Brothers' properties and leases along the shoreline *(Cape Archives)*



Figure 6. Fish houses and fishermen's cottages at Paternoster beach, circa 1915, with the site of the Stephans' crayfish cannery to the top left.

In the early years, these factories were no more than sheds of wood and iron. The few pieces of machinery were operated by an arrangement of wheels and belts driven by a steam engine and the factory operator had to make the cans, fill them, seal them and pack them into cases. Around the turn of the century, the North Bay Cannery Company was formed at North Bay, some 5 miles from the present town of Saldanha, and the 18-year-old Ellis Silverman, a tinsmith by trade, who had arrived at the Cape in 1903, was offered a job here. He recalled that, arriving at Saldanha, he looked for the canning factory but all he was shown were a few iron huts along a long strip of beach. He was then instructed to set to shaping and making cans from sheets of tinplate.

Fishing for the factory was done by two small sailing boats which went to grounds nearby and return with some 5 000 crayfish. In his first season as a canner, Silverman canned 250 cases of crayfish. As there were no exhausting boxes or cooking retorts, the canned crayfish had to be placed in wooden boxes and steam turned on to cook them. Then each can top had to be pierced to let the air out and then sealed immediately with a drop of solder. After two seasons, Silverman and a local boat owner, James Kasner, established a rival cannery, the Saldanha Bay Canning Company – the second cannery on the West Coast.

Enter the Stephans

Once the towns of Piketberg and Hopefield had been connected by rail to the Cape in 1902, the fortunes of Stephan Brothers and Laaiplek went into decline and they were forced to shift their focus to the crayfishing industry. Their hopes to exploit the inshore area near the Berg River mouth to have a local crayfish area opened came to nothing, however, with the result that they moved their focus to Paternoster and St Helena Bay. After 1906, the Stephans largely withdrew from land ownership and sold more than 75,000 morgen in the Agterbaai (Back Bay) area to concentrate on the potential of the new cannery industry. In 1909 they opened a factory at Steenberg's Cove and shortly afterwards a third factory at Lambert's Bay. In 1913, Stephan Brothers commenced canning crayfish at its new Paternoster factory, processing 52 000 crayfish in just two months of operation in 1913 and 1.7 million fish in its first full season. Following this success, they opened a second factory at Steenbergs' Cove.

From 1910 to 1920, when the trawling industry was expanding and large companies like Irvin & Johnson were venturing into whaling and sealing, the crayfish catch rose to about 7 500 tons per year and in the following decade it reached 15 000 tons. The number of canneries working along the West Coast during this time varied from ten to fifteen.

Through political connections, canners secured export quotas and used local fishermen to provide stock while often the fishermen's wives worked in the factories themselves, as was the case at Paternoster. Overall there was a heavy reliance on these factories and businesses for livelihood and employment.

Stephan Brothers wrote to the Administrators on 4 March 1914 that, even when concessions were refused, the system of staggered closed seasons and their weak enforcement, especially on the West Coast, enabled companies to poach in adjacent closed areas and continue operating after their own area was closed to fishing.



Figure 7. The Crayfish factory site, with the large dune to the left, circa 1915 (Cape Archives)

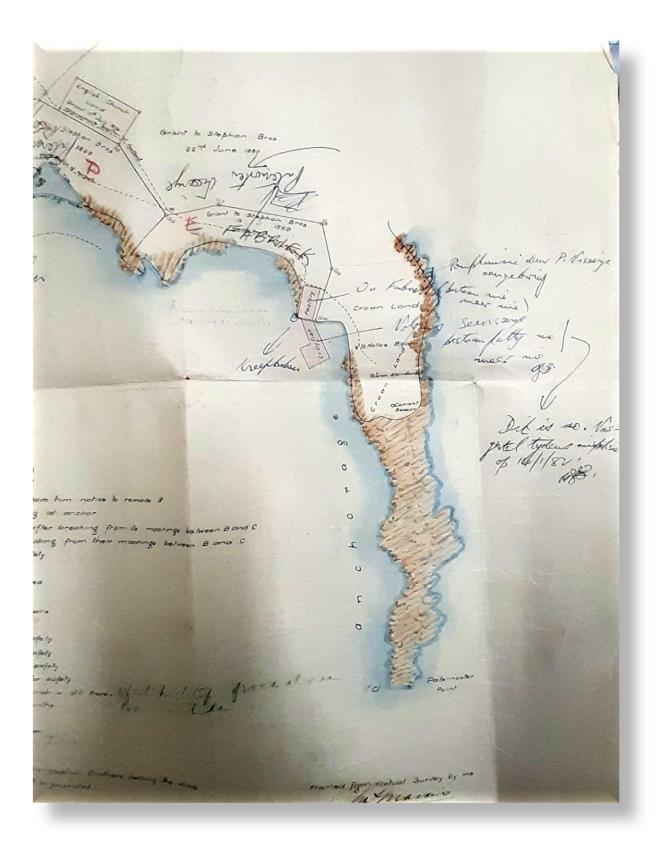


Figure 8. A 1916 map of Paternoster Peninsula, inscribed in 1982 by a land surveyor, indicating the former location of the crayfish factory *(Cape Archives)*



Figure 9. This aerial photo of 1934 of part of Paternoster shows the old crayfish factory on the peninsula (circled) with fishermen's cottages alongside the edge of the town *(Trigonometrical Survey Office).* Below is the factory interior *(Cape Archives)*

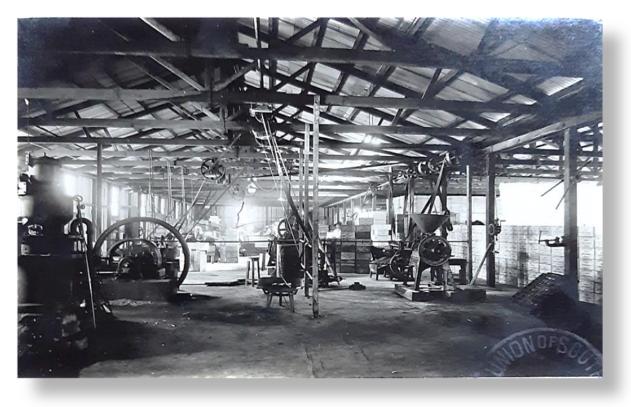




Figure 10 & 11. Crayfish factory workers (above) and (below) (Cape Archives)



As early as 1914, the fishing authorities at the Cape made efforts to track the migration of crayfish, and issued a notice "to fishermen and other fishing in or near Table Bay", stating that brass disks bearing certain numbers had been attached to some crawfish which have been liberated on the fishing grounds. "Any person capturing or finding any crawfish so marked will be rewarded at the rate of six pennies per fish on lodging them with the Fisheries Officer No 3 Wale Street and furnishing information as to the place and date of capture."

On the eve of World War I, catches and exports to Europe had reached new heights as crayfish became much in demand amongst the bourgeois class in France. By the early 1920s South African crayfish were firmly established on the European market and the canning industry and the export boom - fuelled by rising prices - peaked in 1922. However, the devaluation of the franc, growing competition from Japanese canned crab, the steady fall in prices and declining catches on the Cape Peninsula and Southern West Coast spurred a search for new sources. New factories were therefore established at Lamberts Bay and Port Nolloth in 1918 and Luderitz in 1922, Hondeklipbaai in 1925 and Doringbaai in 1927, while the old Cape Town industry declined swiftly because of falling catches and these relocations. The West Coast canneries had easy access to cheap raw material and by the late 1920s they were making an average profit per case of 15 shillings.

On 30 May 1924, Stephen Brothers wrote to the Board of Trade and Industries with regard to experiments in shipping bulk crayfish in cold storage. The company expressed concern about the potential harmful effects for the local industry: "We do not think this will result in success but should it be so it would mean a considerable loss to the canning industry, not only in regard to the depletion of supplies, but would seriously affect the capital which has been spent in the erection of factories, machinery and boilers, etc., besides affecting their wages of those employed in the canning industry which amounts to a considerable sum per year. We have not mentioned this point to the provincial authorities as we think this is a matter that should be taken up by the Union Government."

The Board of Trade and Industries in Pretoria informed the Government Marine Biologist in Cape Town on 10 June that it had approached a number of the leading crayfish canners "for their views on the suggestion to export to live crayfish to Europe and that the consensus of opinion is against the proposal.

"The weightiest objection comes from Messrs Stephan Brothers Ltd, who state that, whilst there is no doubt that crayfish could be carried live to any European Port, they are concerned as to the effect such a trade would have on the canning industry." They also quoted from Stephan Brothers' letter: 'If this trade developed into any volume it would mean that the existing industry, paying an enormous amount of wages to the factory hands, would practically cease to exist. As it is the export for the year ending 1926 shows a decrease of 17,700 cases short shipped on the previous year, and the prospects are by no means rosy for the future of the canning industry.

'We would urge the board very seriously to consider the question of allowing export of crayfish in bulk whether it be alive or by a cold storage, more particularly cold storage, as the day this takes place my firm would have to shut down their factory and immediately go in for this class of business. The firm have a very large community on the coast depending entirely on the fishing industry, and we cannot urge too strongly that serious consideration should be given to this matter before any propaganda work takes place as regards to the export of crayfish in bulk.'

The Board continued: "Two points arise out of these observations:

"One] are the numbers of crayfish available in South African waters sufficient to support both a canning industry of the present dimensions and also an export trade in live fish?

"Two] Is there any likelihood of the present trade in the canned article being killed by the competition of fresh crayfish?

"On the latter point the Commissioner for Commerce in Europe is being asked for advice; but the Board would be very glad to have your opinion in regard to the question of the sufficiency of supplies of crayfish in South African waters."

On 4 July 1927, the Fisheries Survey Committee of the Department of Mines and Industries reported from Cape Town on the export of live crayfish: "There is ample evidence that the numbers of crawfish available in South African waters are amply sufficient to support both the canning industry and and export trade. In connection with this it must be borne in mind that the deep sea crawfish area discovered by the S S Pickle off the Natal coast has not yet been exploited to any appreciable extent, and any depletion caused on the West Coast through overfishing can be rectified by an abundant supply on the East Coast."

The Committee further warned: "It is evident that the canners would be seriously hit if the crawfish were exported in cold storage. I do not think that live crawfish could be sold in Europe at a price comparable with the canned article. In any case I fail to see how anything can be done to stop the export." On 10 September, Stephan Brothers informed the Secretary of the Mines and Industries Division: "Two crates of crayfish have been shipped to Melbourne, two crates to Sydney, 12 crates to Antwerp, 16 crates to Havre and four crates to London, each crate containing approximately 100 to 120 fish. We have heard a distinct rumour of these being put into operation on a large scale."

Later that year (17 November), the Survey Committee also reported: "The Cape crawfish is neither a crayfish nor a true lobster. It is variously known as 'Kreef' and spiny lobster (owing to a superficial resemblance to the true lobster) or sea crawfish. It differs from the true lobster in not having the large pincers on the first pair of legs. The crayfish, being a fresh water form, is entirely absent from South Africa. There is a true lobster found on very rare occasions in South Africa, but it is quite different from the crawfish. The crawfish is closely related to the 'Langouste' of France." The report also gave the average weight of a crawfish at about 2 lbs. The Committee also referred to the export of frozen crayfish. "On making inquiries I understand a shipment of Australian craw fish passed through here to England and was successful, but that the fish loses flavor and becomes toughened by freezing."

Along the West Coast, the crayfish could be found anywhere between low water to the 15/20 fathom line. Only the tail could be frozen or canned, and represented about 28 to 35% of the crayfish's total weight. By 1965, when Paternoster Visserye had already come into operation, this equated to a yearly catch of 15 000 tons. The bodies that were left after processing were dried and then ground to meal which was used as fertilizer.

Formation of the SA Lobster Canners Association

In 1928, the desperate Cape canneries formed the South African Lobster Canners Association (SALCA) to control output at home through a production quota and maintaining a minimum price abroad to allow all canneries to make a profit. But SALCA failed to win full industry support and the onset of the Great Depression, the Gold Standard crisis and the expansion of a crayfish freezing industry in Cape Town led to the collapse of SALCA only three years later.

To make things worse, the French government raised tariffs on crayfish and then imposed an import quota in 1934 which amounted to a mere fraction of the annual exports of the early 1930s. Subsequent closure of some of the canning factories and rising unemployment along the West Coast created a minor political crisis for the South African government. It was now forced to finally intervene in the industry and introduce legislation to allocate production quotas to individual companies. But the canners' search for alternative markets to compensate for the shrunken French market failed to bear fruit and prices in France fell back to their pre-Depression low in the late 1930s. Consequently, between 1933 and 1935 almost 500 factory workers were laid off by the industry.

By contrast, the freezing industry pioneered a new market for its product in the United States after 1936. Low overheads enabled the packers to invest in large motorized vessels capable of remaining out at sea for a week at a time, paid higher prices for crayfish and so drew both raw material and labour away from the struggling canning industry. Yet it was hampered by a poor quality product resulting in the threat of a total ban on frozen crayfish imports to the United States.

By 1939 therefore, both canners and packers - under the banner of the South African Food Canners Council - were lobbying for direct state intervention to streamline export marketing and control the quality of production. This led to the Crawfish Export Act (1939) that laid the foundation of the modern crayfish industry and provided the legislative framework for the reorganisation of crayfish processing and export to Europe and North America after the Second World War. By 1965, the export quota was restricted to 6,8 million lbs for South Africa and for South West Africa to 3,6 million. The main trade for crayfish by then lay in the export of frozen tails to the United States, which amounted to the equivalent of R7,5 million a year.

During World War II the West Coast lost its luxury market for crayfish products as the War Supplies Board had a demand for unlimited quantities of canned fish for the Allies. This led to the large scale canning of pilchards, and within four years of the end of World War II, no less than 15 modern factories were all operating at full capacity along the West Coast. One of these was Laaiplek Visserye (Marine Products), owned by Federale Volksbeleggings, which bought Laaiplek Farm from Stephan Brothers in 1942, while another was the African Inshore Fishing Development Corporation (1945), a subsidiary of Irvin & Johnson. Stephan Brothers and other Sandveld landlords were spent forces by 1939, selling up their land at the Berg River. To ensure their post-war survival, the factories combined canning with the production of by-products such as fish oil and fish meal. By 1951, pelagic fish had overtaken crayfish as the industry's chief export earner. The fishing industry hit a peak in the 1960s but gradually declined because of the presence of fishing fleets of many foreign countries.

Since 1977 the South African government has enforced an exclusive South African fishery zone of 200 nautical miles, and later also reduced the foreign fishing quotas. In an attempt to curb unemployment and to bring about a level of redistribution of

quota's within these communities, "community trusts" were established during the 1990's.

THE CRAYFISH FACTORY AND JETTY ON PATERNOSTER PENINSULA

The jetty adjoining the crayfish canning factory at Paternoster was already built when Stephan Brothers' submitted a late application in 1917 for permission to erect a jetty alongside their crayfish factory. The application records provide a good idea of the jetty's construction and the location of the factory. On 1 March that year, Coulter & Co Attorneys, applying on behalf of Stephan Brothers, reported to the Secretary of Lands: "The jetty is not projected from the ground adjoining Lots 10 to 65 but from the rocks forming part of Lots 10 to 65 which is bounded by the high-water mark. The factory stands entirely on our client's land and the jetty on piles driven into the rocks and sea." At the time, the little bay was indicated on an old 1916 map as "Steins Bay".

The Secretary of Lands then wrote to the Magistrate at Malmesbury on 12 March, stating: "I have to state that Messrs Stephan Brothers have erected a Crayfish Canning Factory on their land, known as fishing leases numbers 10, 13, 29, 33, 51, 60, 65, Klein Paternoster Bay, and a jetty, placed on piles driven into the sea, to serve as a means of landing fish, stores, etc. in connection with their operations.

"As Government's consent has never been obtained, application has now been made by that firm for permission to erect the jetty."

Coulter & Co reported four days later: "There is no beach or foreshore at the point where the factory is built, the ebb of the tide merely leaving a greater expanse of practically perpendicular rock exposed. Our clients will have photographs taken from various viewpoints and these we hope to place before you [see figures ??, ?? and ??]. Messrs Stephan Brothers wish us to express the hope that the application may come before Parliament during the present session."

The site was soon inspected by the Magistrate of Malmesbury, who on 29 March reported to the Secretary of Lands: "I have the honour to report that I proceeded on the 24th instant to Klein Paternoster and inspected the jetty in question. I would recommend that a lease be entered into for 10 years with the option of renewal at 2 pounds per annum.

"The factory is well built on rocky ground, stands on Lot 65 leased by Stephan Bros and extends over about 30 feet of foreshore to the sea. A jetty about 200 feet long extends from the factory. There is no beach near the spot. "At present no nuisance is occasioned by the mode of disposal of refuse... The rights of the public are not affected to any appreciable extent. No landing could be made at the spot. I attach a plan showing the exact position of the jetty."

The Stephan Brothers' lease was approved by both the House of Assembly (20 June 1917) and the Senate (25 June 1917). The resolution read: "The lease from year to year to Stephan Bros at an annual rental of 2 pounds reckoned from the 1st January 1917, of a certain piece of land, about 200 feet in length, below high-water mark and adjoining the land granted to J C and H R Stephan on the 12th November, 1889, situated at Klein Paternoster Bay, division of Malmesbury, Province of the Cape of Good Hope, for the purpose of erecting there on a jetty to be used in connection with the Crayfish Canning Factory, their lease to be subject to termination on 12 months' notice and to such further conditions as the Government may approve."

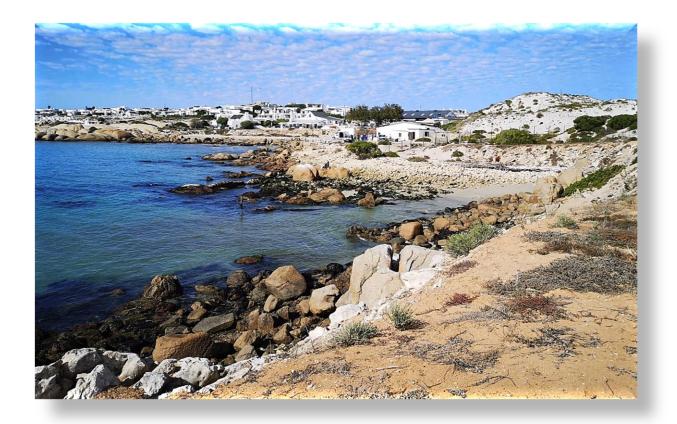


Figure 12 The approximate position from where the old crayfish factory buildings and jetty extended northwards along the promontory. *(Author)*



Figures 13 & 14. Views of the old crayfish factory buildings, 1916. (Cape Archives)



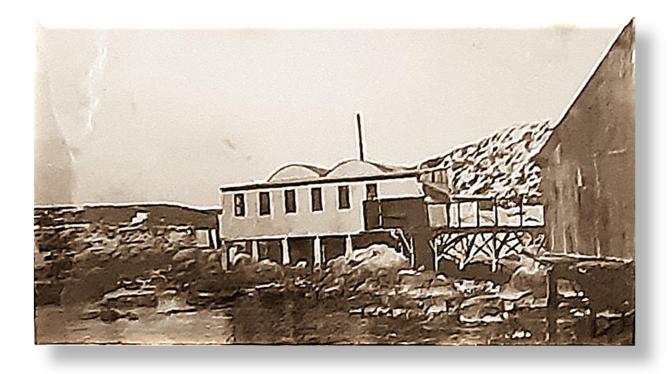


Figure 15. View of the old crayfish factory, 1916, showing the existing large sand dune in the background (*From File PAN 70 K59/7 – Cape Archives*)

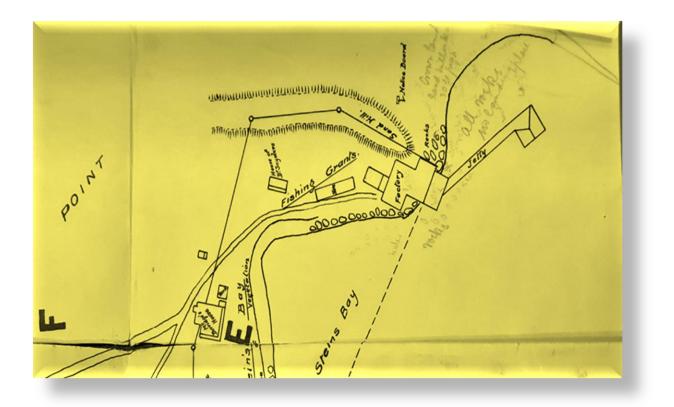


Figure 16. A 1916 drawing of the Paternoster shore showing the position of the crayfish factory and jetty and still existing sand dune on the peninsula *(Cape Archives)*

Cape Archives records show that decades later, in 1953, Stephan Brothers were still leasing the factory jetty site at Paternoster, as well as the one at Steenberg's Cove, which lease seem to have been concluded with the Government in 1943 during World War II. The Department of Fisheries reported that in both cases the leases were for one year and were renewed from 1 January. In both cases the rental of £2 per year had been paid up to 31 December 1953. The question now was whether the rental should be increased to £10 per year.

On the Paternoster Bay factory jetty site the report stated that the lease was concluded from 1/1/1917 in accordance with a decision of Parliament dated 20/6/1917 and 25/6/1917. The factory jetty site was still being used by the lessee and it was understood that the company would not object to the increase of the rental amount.

On the Steenberg's Cove factory jetty site it was reported that the lease was concluded from 1/1/1943 in terms of Section 4(1) of the Strandwet 1935, at £2 per year. The lease had been renewed yearly until 31 December 1952. A draft agreement was drawn up for the increase in rental from £2 per year to £10 per year from 1 January 1953 (Dept of Fisheries 17/6/1953)

It is not clear what the jetty at Paternoster had been used for at that stage; one source (Stohr) mentions that around 1945/46, Stephan Brothers Ltd was planning to close down its cannery at Paternoster and to open a new modern cannery at Steenberg's Cove. Documentation at the Fisheries Museum in Velddrif show that Stephan Brothers did terminate their crayfish activities at the factory site at Paternoster in December 1949 and that they continued with operations at Steenberg Cove in January 1950.

For the years 1947 to 1951, crayfish catches at Paternoster factory varied between 11,000 and 15,000 tons per season. This tonnage was calculated on the weight of raw crayfish tails brought ashore. Apart from these catches there were also crayfish caught for use as bait, as well as meal portions for use by commercial crayfishers. This did not include any dead crayfish thrown overboard during fishing operations. Crayfish was bought outright by the various crayfish factories from the crayfishers at 10 shillings per 100 crayfish. Crayfishers from Jacobsbaai, for instance, used to travel up the coast and deliver their catches at the factory at Paternoster.

Aerial photos of Paternoster of 1934 clearly show the old factory, while those of 1960 – when the factory was no longer in operation - show what might be the last

remnants of the old structures. Aerial photos of 1977 show the new (present) fish factory firmly in place on the promontory.

Apart from their activities at St Helena Bay, Stephan Brothers also built up a significant business in the guano industry, dating from 1877 with contracts for extracting guano from an island off Lamberts Bay, Dassen Island and Jutten Island. They also earned income through freight of guano to Cape Town. Guano prices remained high until the 1950s when artificial fertilizers were first produced at competitive prices.

PATERNOSTER VISSERYE

One of the most closely associated personalities with the fishing industry in Paternoster was Mr Dawie Walters. His father migrated from the rural hinterland to the West Coast in 1911 and bought land at Paternoster where he set up a fishery. When Stephan Brothers opened the crayfish cannery at Paternoster, Walters snr supplied the company with crayfish but he did not export the product himself. Along with his two sons, Antonie and Dawie, he combined crayfish fishing with the production of cured and dried fish for the rural market. But in 1949, Stephan Brothers sold out to the emerging South African Sea Products (SASP), and shut its Paternoster cannery. Walters now had to diversify into shark fishing to compensate for his loss of the crayfish fishery.

Then, in November 1957, Paternoster Visserye (Pty) Ltd, with the assistance of Santam, was launched as a limited liability company, with Dawie Walters (Jnr) as the majority shareholder. Walters' crayfish fleet was increased five times and his housing stock tripled by buying all Stephan Brothers' land and buildings at Paternoster. The venture had a positive effect on the village of Paternoster, as it helped to reverse the its depopulation. By the end of the 1950s, Walters' work force had grown to over 500. His success led to him being anointed by the Cape Town Afrikaans press in 1961 as the "Lobster King of South Africa".

But soon after the tide turned and in 1963 Walters sold his Paternoster Visserye shares to Santam, who in mid-1964 sold to a new consortium comprised of no less than four West Coast National Party Members of Parliament and some private investors from the Cape Afrikaner community. The new owners then announced plans to restructure Paternoster Visserye as a public company with a share capital of R400,000, 40% of which would be reserved for 'bona fide members of the fishing community of the West Coast'.

In 1965 the South African Minister of Economic Affairs made fish meal licenses available to persons in the Cape fishing industry "who do not at this stage have any direct financial interest in any other fish meal factory". One license went to Paternoster Visserye and two fishermen, Johnny Eigelaar and "Kinnie" Boonzaaier. The Paternoster Visserye also received a crayfish license and a ten ton per hour fish meal license. The company could not process its own fish meal at Paternoster, so it was processed at the Silverman's West Point factory at St Helena Bay. The existing crayfish factory was built when this new Paternoster Visserye company was established and it remained in operation until its closure in 2019.

A former employee since the company's foundation, Mr Daantjie de Beer of Paternoster, recalls that from the early years until 1976, black labourers had been recruited from the Transkei – some 300 at a time – for a crayfish season as they could not recruit sufficient labour numbers from the local population at St Helena Bay. They were accommodated in a *kampong* situated about a kilometre from the factory site on the road towards Tieties Bay/Cape Columbine, but today there's nothing left of the former accommodation premises. An estimated 500 Paternoster locals were also employed at the factory, not all at once, but staggered over shifts, etc.

The old crayfish factory consists amongst others of a large concrete building with a floor area in excess of 550m² with an asbestos-cement roof. Within the building are about twenty concrete tanks (2m square and 1m deep), arranged in two rows, with each tank in the row a little lower than the tank next to it. The building was built on land that slopes down to the sea. A pump in one corner of the building pumped sea water into the two highest tanks; the water then overflows into the lower tanks, in order, and finally ran back into the sea. In this way there was a constant flow of sea water through the tanks, and several thousand crayfish could be kept alive for a week or more. It was not always possible to carry away the crayfish at once, and since it was also necessary that the crayfish that were to be exported live should be "purged" - kept for some time without food - these tanks were an essential part of the operation.

Buyers who flew the crayfish live to France could only buy at certain times, often at fairly short notice when they knew air freight would be available. The crayfish had to be in good condition at this time. Buyers who exported frozen crayfish tails were less concerned about delivery dates and a certain quantity of crayfish could be kept in the cold store next to the factory until the buyer was ready to collect them. By 1976, crayfish was sold by weight: live, R1.30 per kilo, whole weight; and dead, R1 per kilo, whole weight.

Other buildings on the site were used for packing and storage of the crayfish and storage of the packing materials, infrastructure and a site manager's dwelling. These buildings, with a floor area of no less than 3 700m², are covered with asbestos cement roof sheets and are less than 3m in height. The buildings are set back from the granite rocks and shoreline.



Figures 17 & 18. The existing factory building, and the factory as seen from the beach side Steinsbaai side) *(Author)*



THE PATERNOSTER CRAYFISHERS

As mentioned earlier, from itsearliest years until 1976, the company used to recruit black labourers from the Transkei – some 300 at a time - under contract to work as fishermen for six months. The contracts were signed by each migrant worker before he left the Transkei, but many being illiterate, they would have had only a rough idea of its content. It was nevertheless explained to them by an official before signing.

Workers from the Transkei were also used as recruiters, and were rewarded when they brought new workers to the factory, some returning year after year and bringing friends with them. Thus the work force was maintained, yet it was difficult as crayfish fishing was hard and unpleasant work. Workers were also offered a bonus at the end of their contract period, which was an incentive to dissuade them from leaving before the contract period is over.

The employer advanced up to R1 per week during the contract period, which was recoverable from future earnings. The rand a week in advance was for food money. Sometimes the weather was so bad that little fishing could be done, when some workers earned nothing, and had it had not been for the advance, they might have gone hungry. Because opportunities for fishing were entirely dependent on weather and sea conditions, there were no set hours of employment, no prescribed holidays or rest days.

Suitable accommodation was to be provided by the employer against payment by the worker of a sum equivalent to one cent per kreef or two cents per kilogram of whole kreef. Payment was effected by direct deduction from the fisherman's earnings at the end of each pay day week. At Paternoster, as at other factories, the Black fishermen had to live in a *kampong* (compound) and no alternative accommodation was available to them.

The employer also provided free medical attention to a maximum of R200.00 per Black worker in respect of all injuries sustained at sea and/or arising out of and in the course of his employment. In the case of death or permanent total disablement the employer was to pay to the next-of-kin of the deceased or to the disabled worker the sum of R500.00.

Each worker worked on average, five or six days a week. The busy and slow times were quite irregular; sometimes there would be work day after day without a break for several weeks; then a period of perhaps almost a week when the weather made fishing impossible. Apart from the Transkei migrant fishers, local Coloured and White crayfishers also earned their living at Paternoster. According to information from the Fisheries Museum in Velddrif, all fishermen were paid the same for their catches, whether White, Coloured or Black. Each crayfisher was allocated as a member of a two-man crew of a *bakkie*. Payment was based on the number of kreef legally caught and landed by the two-man crew, and was divided equally between them:

Each member of the crew was allocated 5 cents (in 1970) for every kreef landed that complies with the legal requirements (i.e. not in berry, soft-shelled, undersized, etc.; these must be returned to the sea). By 1975 it has increased to 7,5 cents. In addition, a further one cent per kreef was paid to each crew member upon completion of the his contract period. Where the practice of the company was to pay by weight of the catch, each member of the crew was allocated 15,5 cents per kilogram of whole kreef. A further 2 cents per kilogram of such whole kreef were to be paid to each crew member upon completion of the his contract period.

To catch the crayfish, the crayfishers went out in the *bakkies* of wood or fibreglass at first light each morning - provided the weather was suitable. The fishermen would arrive at the factory dressed in old pullovers, greatcoats, oilskins, rubber boots, knitted balaclavas, as it could be cold out at sea. The first task was to load up the dinghies with ring-nets, oars, other equipment and crayfish bait.

These *bakkies* were carried out by larger boats to the known crayfish areas. Manned by two crayfishers, one would row and the other set the nets. The net consisted of a metal ring about three feet in diameter with a small conical net hanging beneath; a fish head is hung as bait in the centre of the ring and the net lowered by a rope. Some seven or eight nets are laid, their position marked by floats and then later pulled up. By the time the last one has been put out, it is time to go back to the first one; pull it up, extract any rock lobsters, re-bait it; and lower it again. The captured rock lobster are thrown into a small "hold" in the centre of the *bakkie*.

Once loaded, the dinghies return to the mother vessel. When crayfish were plentiful, boats used to travel a short distance for the catch, but later on they had to travel great distances. Main factories were served by vessels of 55 feet and more in length and crews of 12 to 14 men and six/seven dinghies. Some of these boats were known to return with as many as 24 000 crayfish after one voyage. The rock lobster are collected in trucks sent by the buyers; about half are sold dead, for export as frozen tails, and half live, to be flown to Europe.

Once back at the factory, the crayfish are taken out of the hold, thrown into a large wicker basket, and carried into the factory, where they are counted and entered by one of the foremen. As each fisherman brings in his catch, it is counted and entered against his name in a book. They are told to make sure the figure entered is correct, but not all of them did, some being illiterate.

With their day's work done, the crayfishers returned to their living quarters, about a kilometre from the factory. Their accommodation was a compound consisting of several asbestos cement sheds surrounded by a barbed wire fence, in an area rather bleak and windswept.

Certain extra payments (referred to as "bonuses" and "presents") not mentioned in the contract were also made. These "presents" were gifts of meat given occasionally at Christmas to the crews manning particularly successful dinghies, and sometimes several sheepis heads, cooked in the compound.

It should be noted that what interested the Transkei crayfishers most was not how much was given to them while at work, but how much they could take or send back home. Not all of the Black labourers had gone back to their homeland over the years, some staying behind so that today there are a few of their descendants still to be found in the town of Paternoster.

RELATED HERITAGE RESOURCES

No. 1 Kreeftegang, Erf 2603

Situated within a short distance from the factory site are two old buildings with strong links to the former crayfish/fishing industry on the small peninsula. On Erf 2603 stands No. 1 Kreeftegang, which also belongs to Paternoster Groepbelange. The building currently houses the offices of Paternoster Groepbelange, the Paternoster Fish Shop and De Seekat Restaurant.

Old diagrams of 1916 from the Cape Archives indicate the building on the site as "Mr Burridge's House". While it has been added to and renovated over the years, the building still contains the old fabric which is well over 60 years old.



Figure 19. The little bay at the Paternoster Waterfront, showing No. 1 Kreeftegang (right) and the historical cottage on Erf 1060 (Louw's House) to the left. A hundred years ago the little bay was indicated as Steins Bay on old survey maps of the area. The rocks in front indicate more or less where the old crayfish factory and jetties started along the eastern bank of the promontory's rock series. *(Author)*





Figures 20 and 21. The building on Erf 2603 (No. 1 Kreeftegang) seen from the Waterfront and from the beach (Author)

Louw's House, Erf 1060

At an oblique angle to No.1 Kreeftegang and closer to the beach lay "Louw's House", which is still standing on Erf 1060. The building is not part of the Paternoster Groepbelange properties but due to its proximity is worth mentioning. The name of the house on the 1916 map may well refer to the brothers Tobie and Martin Louw, who according to their grandson Jaco Louw of Velddrif had been the boat builders for the Stephans from the early 1900s, until the family started their own boatbuilding business in Cape Town before WWII. The house has been altered but with its thatch roof and whit-washed walls still retains a general West Coast vernacular character. During very stormy ocean conditions, the old slipway in the little bay where the boats were launched in the old days can sometimes still be observed.



Figure 22. The house on Erf 1060 (Louw's House) seen from the Steinsbaai beach. It has been altered but retained much of its original fabric *(Author)*

Dr Snyders' House

Close to the existing large sand dune and the old crayfish factory stood a small rectangular building indicated as "House of Dr Snyders" on the same 1916 map. It has since disappeared and the site where it stood is now occupied by The Hungry Monk Restaurant in the Paternoster Waterfront area.

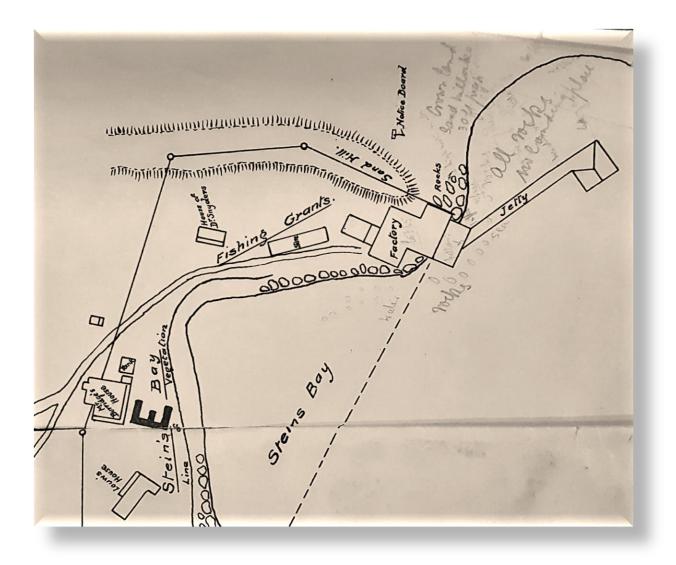
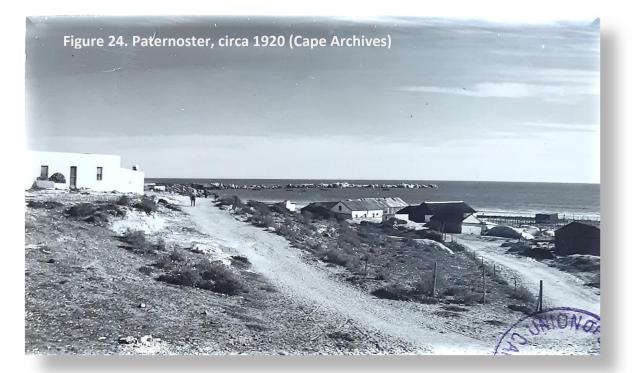


Figure 23. Map showing the positions of Burridge's House, Louws' House and (now extinct) Dr Snyders' House. To the right of the map it shows the old crayfish factory structures and the jetty where the boats came in to unload the catch.

PATERNOSTER VILLAGE

With hundreds of local people having been involved in the crayfish industry at Paternoster over decades, the crayfish/fishing factory site has definite strong social and cultural links to the town. Permanent fishing hamlets such as Paternoster began to emerge in the late 19th century, along with those in Saldanha Bay, at the mouth of the Berg River and along the Langebaan Lagoon (Stofbergsfontein and Churchhaven). West Coast landowners began renting plots and homes to communities of tenant fishermen, while large merchant fishing companies such as the Stephan brothers brought migrant (Italian) workers to the region as well as employing seasonal farmworkers, providing basic accommodation. Some 30/40 years ago, Paternoster was mainly populated by fishermen employed by the fish factory. Old Cape Archives photographs from around the end of the 19th century show vernacular fishermen's cottages being quite common in the area. The Paternoster settlement was loosely arranged along the linear corridor of St Augustine Road, but since then many have disappeared or shed its original appearance.

Today Kliprug is still the historical centre of Paternoster and the centre of the community, mostly from families that have been in Paternoster for a few generations. Many of the houses in Kliprug are still the original houses built by Mr Dawie Walters, the owner of Paternoster Visserye, for his workers. With the deterioration of the fishing industry along the West Coast during the second half of the 20th century, the village has increasingly become a tourist destination.



Cultural Significance of the Crayfish Factory Site.

In terms of the NHRA's Section 2(vi) definition of cultural significance, it includes "....aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological significance". In terms of Section 3(2) of the Act, heritage resources that need to be considered include places, buildings and structures of cultural significance, historical elements and townscapes and archaeological sites and objects. Section 3(3) of the Act sets out the criteria to determine cultural significance, including whether or not a site or building:

i) is considered to have cultural significance to the community;

- ii) is considered a rare example of its type;
- iii) could yield information about heritage;

iv) is important in exhibiting particular aesthetic characteristics valued by a cultural group;

v) is important in exhibiting a high degree of technical achievement at a particular period;

vi) is associated with the life and work of an important person; and/or

vii) whether it has significance in relation to the history of slavery.

With regard to these criteria, the following of the above would apply to the site:

i) has cultural significance to the community, considering the highly important role of fishing in the development of Paternoster;

iii) could yield information about heritage, relative to the archaeological record (see Archaeological Report);

v) is important in exhibiting a high degree of technical achievement at a particular period – the former and later crayfish factory since the early 20th century in canning and exporting crayfish;

vi) is associated with the life and work of an important person – directly associated with the role of Stephan Brothers and later Paternoster Visserye in Paternoster.

Social/Industrial Significance

The crayfish factory has a social and industrial significance for the people of Paternoster having been an important hub of employment for the community since the early days of the Stephans' fishing operations. There will surely be some Paternoster citizens left who had been involved with the Stephans' company before the closure of the crayfish factory on the peninsula. Subject to implementation of the heritage indicators, the development reinforces the existing character of the site and the positive aspects seen within the context, to ensure the visual integrity of the development with its surrounds, and the retention of the contributing character of the site as a background element to the Village and any other heritage resources within it.

ENVIRONMENTAL INDICATORS

The shoreline to remain clear of any interventions. Indigenous Strandveld vegetation to be reinstated after construction and no foreign tree species to be used in landscaping.

Granite outcrops and rock clusters to be retained as features.

The sand dune south of the access road to be retained as a visual feature and for conservation of any shell midden contained therein.

BUILDING ORIENTATION

Building intervention to be cognisant of the current building orientation and view lines from the east. Roof structures to create breaks and solid multi-storey buildings to be avoided.

Balconies can be added to multi-storey buildings to recreate the feeling of the old jetty.

CONTEXTUAL FORM AND SCALE

The landmark nature of the old crayfish factory complex must be enhanced and responded to as a prominent civic node within the wider context.

1	CANNED	FROZEN	TOTAL	ATOUO I
1924	3.6		3.6	
1930	4.7	0.2	4.9	
1940	3.5	2.3	5.8	
1944	1.7	0.1	1.7	
1949-50	3.4	3,1	6.5	6.9(1)
1952-3	3.7	3.7	7.4	7.3
1953-4	3.7	3.7	7.4	7.3
54-5	2.9	4.2	7.1	7.3
55-6	1.1	6.1	7.2	
- 56-7	0.4	5.0	5.4	7.3
57-8	0.1	4.4	4.4	7.3 7.4
58-9	0.1	7.3	7.3	7.4
59-60	0.1	7.3	7.4	
61-2	0.1	6.7	6.7	7.4
62-3	0.1	6.9	0.9	6.7
63-4	0.1	6.9(2)	6.9	6.9
64-5	0,1	6.9	6.9	6.9
65-6	1.1	6.1	6.1	6.9
66-7		4,7	4,7	6.9 6.9
67-8		4.1	4.1	6.9
60-9	1	1.1	111	5.2
69-70	2 - C - C	3.9	3.9	5.6
70-1		3.7	3.7	3.5
71-2		3.5	3.5	3.5
72-3	1 14	3,7	3.7	3.7

Western Cape crayfish production and quotas 1924-74 (* One pound = 0.453592 kg)

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Mr Jaco Louw, Chairman Sea Fisheries Museum, Velddrif

Photographs

Elliot Collection, Cape Archives AG Collection, Cape Archives Trigonometrical Survey Office, Mowbray

Author's Personal Collection.

STATEMENT OF INDEPENDENCE AND EXPERTISE

Chris Schoeman, the author of this report and consulting for Virdus Works, has no financial interest in the property or development other than remuneration for professional services rendered. He has a Master's degree in Historic Preservation from Colorado State University, United States, and a Master's degree in History from the University of Port Elizabeth, and is a Member of the Assocation for Professional Heritage Practitioners (APHP). He has some 30 years experience in the conservation environment with the SA Archives and Museums Service, the National Monuments Council, the City of Cape Town Conservation Unit and also with Nasionale Pers in specialised reporting in Conservation, Tourism & Travel. He has published several books on local and regional histories and the Anglo-Boer War from 1994 to the present with large publishers such as Penguin Random House and NB Publishers, including District Six: The Spirit of Kanala, The Historical Karoo and The Historical Overberg. His membership of cultural societies includes the Nederlands Zuid-Afrikaanse Vereniging (NZAV, Amsterdam), the South African Society for the Netherlands and Flanders (SASNEF); the Friends of the Anglo-Boer War Museum; the Academic and Non-Fiction Authors' Association of South Africa (ANFASA) and Pen Afrikaans (Afrikaans Writers Group).

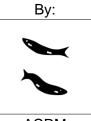
ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED DEVELOPMENT OF FARM 1259 PATERNOSTER

Assessment conducted under Section 38 (3) of the National Heritage Resource Act (No. 25 of 1999)

Report prepared for:

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On behalf of: PATERNOSTER GROEPBELANGE



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Executive summary

1. Introduction

ACRM was requested by Heritage Consultant Christian Schoeman to conduct an Archaeological Impact Assessment (AIA) for a development proposal on Farm 1259 in the harbour area in Paternoster.

2. The development proposal

An ambitious, mixed-use development on Farm 1259 is envisaged. Many of the existing buildings in the harbour have in recent years been repurposed (restaurants, pubs, craft shops, multi-function venue, art galleries, etc) as part of a major waterfront development, drawing many more visitors to the small coastal village.

For the purpose of this study, however, the specialist archaeological study is confined to open space areas that have not yet been developed.

In essence, the development proposal comprises the construction of 12 residential units on Erven 1751-1753 on the ridge above the existing parking area, just after the entrance to the harbour.

One hundred and fifty-four new parking areas will be created across Erven 1606-1609 (the existing parking area), which can be increased to 296.

Twelve new residential units and parking will also be developed on Erven 582 and 1613, alongside Sonkwas Street, near the entrance to the harbour.

The proposal includes construction of a new entrance road (Bitou Road) to the harbour from Sonkwas Street. The new road will be built across a prominent dune cordon that overlooks the harbour, and Bekbaai in the south. Nineteen parking areas, at intervals along the dune cordon, are also planned, while an additional 24 new parking areas will be created alongside the gravel near the entrance to the crayfish factory.

A private, double story boutique hotel and outside private area for guests and residents is also proposed on the rocky promontory on the site of the crayfish factory, which is still in operation. The existing buildings surrounding the factory will also be upgraded and converted for residential, hotel and recreational purposes. Up to 72 new parking areas will also be developed inside the currently fenced off area.

The proposed activities will involve considerable earthmoving that may have a negative impact on potentially important archaeological resources.

3. Aim of the study

The overall purpose of the study is to assess the sensitivity of archaeological resources in the open space areas on the farm, to determine the potential impacts of development on such resources, and to avoid and/or minimize such impacts by means of management and/or mitigation measures.

The significance of archaeological resources was assessed in terms of their content and context. Attributes considered in determining significance include artefact and/or ecofact types, rarity of finds, exceptional items, organic preservation, aesthetic appeal, potential for future research, density of finds, and the context in which archaeological traces occur.

4. Results of the study

4.1 Proposed double story boutique hotel and private outside area

Traces of archaeological remains were recorded in the footprint area for the proposed double story boutique hotel, but the deposits have been severely impacted by historical development of the crayfish and fishing factory.

Relatively well-preserved archaeological resources were also recorded among a cluster of large granite boulders on the rocky promontory. This area has been identified as a private outside area for guest to the boutique hotel.

Huge volumes of archaeological (i. e. shell midden) deposits have been severely damaged by the development of the factory, where 32 new parking areas are planned at the entrance to the site.

4.2 Erven 1605-1610 & Erven 1751-1753

Well preserved archaeological deposits were recorded in Erven 1751 and 1752, on the calcrete ridge/dune overlooking the existing, and future parking area. The deposits are dominated by Black Mussel and limpet species, while several silcrete and limestone flakes were also counted. Fragments of shellfish are also associated with dune mole rat burrowing, indicating that sub-surface archaeological deposits may occur in this area as well. A few fossil dune snails (*Trigonephrus*) encased in the calcareous aeolianite were noted at the bottom of the calcrete ridge alongside the parking area.

Patches of preserved shellfish deposits, dominated by Black Mussel and limpets were recorded in Erven 1609 and 1610 (proposed future parking area) at the base of the dune cordon. An elliptical grindstone was found buried in soft sand in Erf 1610, while a miscellaneous upper grindstone/hammerstone was found in Erf 1609, on the edge of the parking lot.

4.3 Erven 1613 & 583

No archaeological resources were encountered in Erven 1613 and 583 alongside St Augustine Road and Sonkwas Street.

4.4 Proposed new Bitou Road and parking

Archaeological resources were recorded on the dune cordon. The large dune is a prominent landscape feature on the farm. Excavations led by Dr Peter Robertshaw were undertaken here in 1977. Archaeological remains in this area have also been severely impacted by historical development including roads and infrastructure.

Well preserved shell midden deposits are visible above the 2-track road (proposed future walking trail), on the gentle, south facing slopes of the dune cordon overlooking Bekbaai. Stone flakes, cortex chunks and fragments of ostrich eggshell were also noted, but no pottery was found. A half buried elliptical grindstone was recorded in the side of the dune, just above the 2-track road.

In-situ shell midden deposits were also recorded on the crest of the steep, west facing dune slopes overlooking the crayfish/fishing factory, where large volumes of displaced shellfish have spilled down the slopes. Archaeological deposits were also noted among large piles of sand alongside the road. Deposits in this area have been severely damaged as a result of the construction of the gravel road that has bisected the dune cordon.

Well preserved shell midden deposits, pottery, ash, and stone flakes were recorded on the edge of a large dune blowout overlooking the harbour. Shellfish, pottery and stone flakes were also noted in the large wind eroded basin.

Well preserved shell midden deposits, stone flakes, ostrich eggshell and pottery were also recorded in an extensive dune slack between vegetated hummocks on the crest of the dune cordon.

5. Impact statement

Potentially significant archaeological deposits in Erven 1751, 1752, 1609 and 1610 will be impacted by proposed development activities (i. e. construction of residential units & parking areas), on Farm 1259.

The proposal to construct a new entrance road (i. e. Bitou Road) and parking on the dune cordon will likely have a severe, negative and irreversible impact, on threatened and fragile archaeological deposits

Proposed construction of new parking areas alongside the gravel near the crayfish factory, as well as inside the precinct of the fenced off factory, will likely impact on already severely damaged archaeological deposits.

Proposed construction of a double story boutique hotel and private outside area on the rocky promontory, may impact on potentially important archaeological heritage resources.

6. Conclusion

The study has shown that Farm 1259 is a threatened archaeological and cultural landscape.

Proposed activities will involve considerable earthmoving that will have a negative impact on important archaeological resources.

Unmarked Khoisan remains (i. e. burials) may also be exposed or uncovered during construction related excavations.

An increase in new residents and potentially 1000s of visitors to the waterfront and harbour, will potentially impact on vulnerable and fragile archaeological resources.

Development of existing open spaces on Farm 1259, especially the proposed new Bitou Road entrance across the dune cordon, must be sensitive to archaeological constraints.

7. Recommendations

Regarding a proposed mixed-use development on Farm 1259 in Paternoster, the following recommendations are made:

1. Test excavations must be conducted in the footprint area of the proposed double story boutique hotel on the rocky promontory, to establish the significance of sub surface archaeological deposits, prior to construction activities commencing.

2. Sampling of archaeological deposits in the private outside area on the rocky promontory must also be conducted.

3. Test excavations must be conducted in the footprint area of the crayfish factory, where up to 32 new parking areas are envisaged at the entrance to the facility. These deposits have been severely impacted by historical development of the factory.

4. Test excavations and sampling of archaeological deposits must be conducted in Erven 1751, 1752, 1609 and 1610.

5. The dune cordon should be set aside as a `No-Go' Area. If this is not feasible, or desirable, extensive archaeological mitigation (i. e. excavations & sampling of deposits) will have to be undertaken, prior to any construction activities (i. e. proposed new Bitou Road) commencing.

Alternatively, the road will have to be carefully designed to avoid sensitive archaeological deposits.

6. A proposed walking trail/wandelpad around the perimeter of the farm and in front of the dune cordon, is supported in principle, subject to archaeological management measures.

7. A Heritage Management Plan must be implemented in order to protect and maintain the integrity of archaeological resources that occur on Farm 1259. This is in particular reference to the dune cordon, which is a prominent landscape feature on the property.

8. All construction related excavations, earthworks, landscaping and shaping (of dunes) must be monitored by a professional archaeologist.

9. Any demolition of existing buildings on the factory site must be monitored by a professional archaeologist. Shell midden deposits and possibly burials may be exposed or uncovered during these activities.

10. Stabilization of the dune cordon must be supervised and monitored by a professional archaeologist

11. If any unmarked human remains, or caches of ostrich eggshell water containers, for example, are uncovered, exposed, or disturbed during construction activities and excavations, work must immediately stop on the site, and the archaeologist informed. Burials must not be removed until inspected by the archaeologist.

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1. INTRODUCTION

ACRM was requested by Heritage Consultant Christian Schoeman, on behalf of the Paternoster Groepbelange, to conduct an Archaeological Impact Assessment (AIA) for a development proposal on Farm 1259 in Paternoster (Figures 1 & 2).

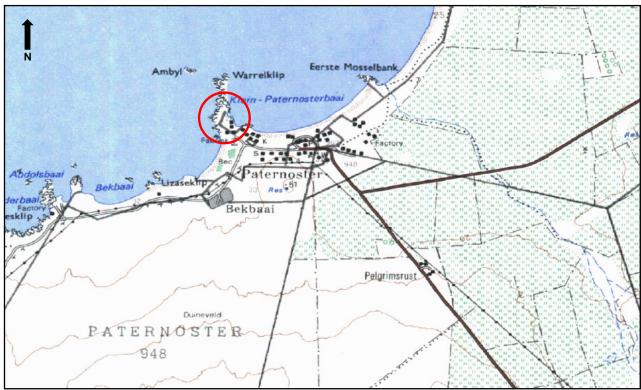


Figure 1. Locality map (3217 DB & DD Vredenburg). Red polygon indicates the study site



Figure 2. Google Earth satellite map indicating the study site (red polygon)

2. THE DEVELOPMENT PROPOSAL

An ambitious, mixed-use development on Farm 1259 is envisaged (Figure 3).

Many of the existing buildings in the Paternoster harbour have in recent years been repurposed (restaurants, pubs, craft shops, multi-function venues, art galleries, etc), as part of a major Waterfront Development, drawing many visitors to the small coastal village located about 130kms north of Cape Town.

For the purpose of this study, however, the specialist archaeological study is confined to open space areas that have not yet been developed (Figure 3).

In essence, the development proposal comprises construction of 12 residential units and 12 new parking areas on Erven 1751-1753 on the calcrete ridge/sand dune above the existing parking area, just after one enters the harbour.

One hundred and fifty-four new parking spaces will also be developed across Erven 1606-1609 (the existing parking area), which can be increased to 296.

Twelve new residential units will also be developed on Erven 582 and 1613, alongside St Augustine Road and Sonkwas Street, near the entrance to the harbour.

The proposal includes construction of a new entrance road (Bitou Road) from Sonkwas Street. The new road will be built across a prominent dune cordon that overlooks the harbour, and Bekbaai in the south. Nineteen parking areas, at intervals along the dune cordon, are also planned, while an additional 24 new parking areas will be created alongside the gravel near the entrance to the crayfish/fishing factory.

A private, double story boutique hotel and outside private area for guests is also proposed on the rocky promontory on the site of the Paternoster Crayfish Factory. Existing industry buildings surrounding the factory will be repurposed for residential, hotel and recreational purposes. Up to 72 new parking areas will also be developed inside the currently fenced off area.

Proposed activities will involve considerable earthmoving that may have a negative impact on potentially important archaeological resources.

3. LEGISLATION

The National Heritage Resources Act (NHRA No. 25 of 1999) protects archaeological and palaeontological sites and materials, as well as graves/cemeteries, battlefield sites and buildings, structures and features over 60 years old.

The South African Heritage Resources Agency (SAHRA) administers this legislation nationally, with Heritage Resources Agencies acting at provincial level. According to the Act (Sect. 35), it is an offence to destroy, damage, excavate, alter of remove from its original place, or collect, any archaeological, palaeontological and historical material or object, without a permit issued by the SAHRA or applicable Provincial Heritage Resources Agency, *viz.* Heritage Western Cape (HWC).

Notification of HWC is required for proposed developments exceeding certain dimensions (Sect. 38), upon which they will decide whether or not the development must be assessed for heritage impacts (an HIA) that may include an assessment of archaeological heritage.



Figure 3. Proposed Site Development Plan

4. TERMS OF REFERENCE

• Determine whether there are likely to be any important archaeological resources that may be impacted by the proposed development;

• Indicate any constraints that would need to be taken, into account in considering the development proposal;

Recommend mitigation action

5. THE STUDY SITE

The study site is the harbour precinct in Paternoster, which includes the crayfish/fishing factory located on the rocky promontory (Figures 4-9). The harbour has in the past few years undergone major commercial transformation, with a waterfront development repurposing many of the older prefabricated buildings, sheds, and associated infrastructure. Art galleries, pubs, restaurants, craft shops, delis/coffee shops, and multi-purpose function venues have all been developed, drawing many more visitors to the historic fishing village. The proposed development is designed to complement the existing development activities on the property.



Figure 4. Google Earth satellite map of the study area. Note the prominent dune cordon overlooking the harbour and crayfish factory. Note where the gravel road has bisected the dune near the crayfish factory.



Figure 5. Erven 1751 and 1752 on the ridge above the existing parking area. View facing south west



Figure 6. Erven 1609 and 1610 on the edge of the existing parking area below the dune cordon. View facing south. Erven 1605-1608 (unseen) comprises the existing and future parking area.



Figure 7. The proposed new Bitou entrance road and parking will be built over the dune cordon. Arrows indicate the position of well-preserved shell middens above the 2-track road (proposed walking trail). View facing south east toward Bekbaai



Figure 8. Erf 1613 & 581 alongside St Augustine Road and Sonkwas Street. View facing south west. Erven 1608-1610 and the existing and future parking area can be seen in the background of the plate, behind the fenced off harbor precinct.



Figure 9. Site for the proposed double story boutique hotel. View facing south. The Cape Columbine Lighthouse can be seen on the hill in the far distance

6. APPROACH TO THE STUDY

6.1 Aim of the study

The overall purpose of the study is to assess the sensitivity of archaeological resources on Farm 1259, to determine the potential impacts of development on such resources, and to avoid and/or minimize such impacts by means of management and/or mitigation measures.

The significance of archaeological resources was assessed in terms of their content and context. Attributes considered in determining significance include artefact and/or ecofact types, rarity of finds, exceptional items, organic preservation, aesthetic appeal, potential for future research, density of finds and the context in which archaeological traces occur.

6.2 Constraints and limitations

There were no constraints or limitations associated with the study. Access to the study site was easy, and archaeological visibility was high.

6.3 Identification of potential risks

Indications are that archaeological heritage resources will be severely impacted by proposed development activities.

7. ARCHAEOLOGICAL CONTEXT

The archaeological importance of Paternoster was already recognised in the early 1970s, when a systematic survey of the Vredenburg Peninsula was undertaken under the auspices of the South Africa Museum (Thackery & Cronin 1973). Buchanan *et al* (1978) later, sampled surface scatters of shellfish from a number of sites in Paternoster, with a view to establishing Later Stone Age (LSA) seasonal occupation in the area. Robertshaw (1977) also excavated shell middens on the dunes overlooking the crayfish/fishing factory that exposed several stratigraphic layers of shellfish dominated by the remains of Black Mussel and limpets. Radiocarbon dates around 800 years were obtained from layers containing Black Mussel, pottery and ostrich eggshell beads, while a date of around 3000 years was obtained from a layer containing limpets and a modest number of stone implements.

Since the early 1990s, a large number of AIAs have been undertaken in the Paternoster area and surrounds (Halkett & Hart 1992a, b; Halkett & Mutti 1998; Hart & Halkett 1995, 1998a, b; Kaplan 1993, 2002a, b, 2003, 2004a; 2005a, b, 2008a, b, c, 2009; Yates 1998), as a response to speculative residential development in the area. Many sites (mostly shell middens) have been recorded during the course of these surveys, of which several have been excavated, and sampled (Hart & Halkett 1996; Halkett 1996; Kaplan 2016, 2005c, d, e, 2018; Nilssen 2007a, b; Yates 2003, 2004, Yates and Kaplan 2004b; Patrick 2008; Patrick *et al* 2009; Smith 2006a, b; Smith *et al* 2008, 2009).

Collectively, excavations at Paternoster reveal intensive shellfish resource exploitation over at least the last 3000 years, overlapping the period both before and after the arrival of Khoekhoe pastoralists with domestic stock and pottery about 2000 years ago (Smith & Mütti 2013). Pottery dated to the 1st millennium AD was recovered from the Paternoster Fisheries site behind the Paternoster Fish Market (Patrick 2008; Smith *et al* 2008; Smith *et al* 2009), while a few coarse pot fragments were encountered during test excavations near Mosselbank (Yates 2004b). Pottery (some decorated) was also recovered in a stratified context during test excavations for the proposed Paternoster CBD development alongside St Augustine Road near the hotel (Kaplan 2016).

Excavations by Smith (2006a) at the shell midden known as PNNB on the north bank of the Mosselbank River produced radiocarbon dates of between 2860 and 2810 BP, while the site known as PNNA on the south bank of the river, produced a series of dates between 2880 BP and 2590 BP (Smith 2006b; Yates 2003). These pre-2000 BP dates resulted in the formation of sites known as `megamiddens'. Megamiddens characterized a period during which (LSA people exploited marine shellfish on an intensive scale on the Cape west coast. These types of sites were first identified at Elands Bay and St. Helena Bay more than 100 kms further to the north (Jerardino 2010). The excavations at PNNA (Yates 2003; Yates & Kaplan 2004b) revealed compacted in-situ stratified shellfish deposits with dispersed bone and stone artefacts more than 2m below the surface. Unlike most megamiddens, however, the deposits around PNNA were rich in bone remains, which is why this occurrence ranks high amongst the few rich, faunal bearing middens of the Cape west coast. Because of its high significance in a regional context, PNNA was declared a Provincial Heritage Site (PHS) in 2009. Smith and Mütti (2013) also suggested that the large midden in front of the Paternoster Hotel may also contain deposits dating to the megamidden period. A small test excavation by Halkett and Mutti (1998) on the sand mound revealed a 20cm thick layer of shellfish below the surface. A few small, flaked pieces of stone was observed while some bone was also present, but no indigenous ceramics were seen, indicating a pre-2000 BP date for the site. Halkett and Mütti (1998) suggested the Paternoster Midden may possibly be the remnant of the old dune cordon that originally ran through the Vaalplaas settlement but was flattened to make way for the building of houses in the past. Excavations by Nilssen (2007a, b) at several localities on Farm 23 alongside Mosselbank Road also generated substantial, complex, well-stratified in-situ archaeological deposits up to 1.5m below the surface. Special finds included features such as a cooking hearth, a combination hammer stone/upper grindstone, worked bone including a bone point, ostrich eggshell beads, a grindstone with adhering ochre residue, and a decorated ostrich egg shell "disc". A relatively large number of marine and terrestrial fauna was also recovered from these undated excavations. The absence of pottery also suggest a date older than 2000 years.

7.1 Burials

Pre-colonial graves can occur at any location where sand suitable for excavation and burial exists. This is particularly the case in coastal areas where dunes are common.

Shovel testing in Mosselbank revealed the chance discovery of a Khoisan burial (Yates 2004a), while two more burials were uncovered during monitoring of excavations for the same housing development (Peter Nilssen pers. comm.). The remains of several burials were also exposed during excavations at `Die Kom' a housing development located behind the Paternoster Fish Market (Patrick 2008; Smith *et al* 2008), and in 2008 Kaplan recovered the remains of a skeleton from a trench prior to tarring the road leading to the market. According to Smith and Mutti (2013), three skeletons were disturbed while digging a trench for the foundations of new classrooms at St Augustine School in the village.

A human burial was apparently `excavated' by unknown persons from the dune cordon, but the whereabouts of the remains are unclear, or unknown.

8. RESULTS

A detailed field assessment of the study site was conducted on 6 August, in which the following observations were made (Figure 10 & Table 1).



Figure 10. Track paths (in red) and waypoints of archaeological finds

Well-preserved archaeological deposits (Point 020) were recorded in Erven 1751 and 1752 on a calcrete ridge overlooking the existing and future parking area, near the entrance to the harbour (Figures 9, 10 & 14). Several silcrete and limestone flakes and a milky white quartz chunk were also counted, but no pottery was found. The fairly compacted shellfish comprises mostly fragmented Black Mussel (*Choromytilus meridionalis*) and limpet species (*Scutellastra argenvillei* & *Cymbula granatina*), including a few whole shells, while some small whelks were also noted.

Shellfish fragments are also associated with dune mole rat burrowing on the softer dune slopes (Point 019) indicating that sub surface archaeological deposit may occur in this area as well.

A few fossil dune snails (*Trigonephrus*) encased in the calcareous aeolianite were also noted at the bottom of the calcrete ridge on the edge of the future parking area (Figure 11).



Figure 9. Shell midden deposits (Point 020) in Erven 1751 & 1752



Figure 10. Shell midden deposits (Point 020) in Erven 1751 & 1752.



Figure 11. Fossil dune snails (*Trigonephrus*) encased in the calcareous aeolianite were noted below the calcrete ledge on the edge of the future parking area

Patches of preserved shellfish deposits (Points 022 & 025) were recorded on the loose sandy soils in Erven 1609 and 1610 (future parking area), at the base of the dune cordon. An elliptical grindstone was found half buried in the soft sand in Erf 1610 about 10m from the edge of the dune, while a miscellaneous upper grindstone/hammerstone was also found on the edge of the parking area. Steel eye beams, building rubble, and old and rusted factory equipment covers much of Erf 1609, but some of the deposits appear to be intact (Figures 12 & 13). The shellfish comprises mostly Black Mussel and limpet species (*S. argenvillei, C. granatina, C cochlear*), with a few whelks and perlemoen (*Haliotis sp.*) also noted. Dumping of sand on the edge of the erven has also taken place, which most likely occurred when the parking area was levelled and cleared.



Figure 12. Relatively well-preserved patches of shell midden deposits (Points 022 & 025) occur in Erven 1609 & 1610. Arrow indicates the half buried elliptical grindstone .



Figure 13. Shell midden deposits (Point 025) among the steel eye beams in Erf 1609.



Figure 14. Cropped portion of the proposed Site Development Plan, indicating Erven1751 & 1752, Erven 1605-1610, & Erven 1613 & 583, alongside Sonkwas Street & St. Augustine Road

No archaeological resources were encountered in Erven 1613 and 583 alongside St Augustine Road and Sonkwas Street.

Archaeological resources (Points 026, 027, 034 & 035) were recorded on the dune cordon. The large dune is a prominent landscape feature on the farm. Excavations led by Dr Peter Robertshaw were undertaken here in 1977. Archaeological remains in this area (Points 028-031 & 039) have also been severely impacted by historical development, including roads and infrastructure.

Well preserved archaeological deposits (Point 026), extending about 50m along the dune cordon, are highly visible above the 2-track road (proposed walking trail) on the more, gentle south facing slopes of the dune cordon overlooking Bekbaai (Figures 15-18 & 27). A buried elliptical grindstone was also found in the side of the dune just above the 2-track road (Figure 18). The shellfish comprises Black Mussel and limpet species, including some large whole limpets, while quartzite, shale and silcrete stone flakes and cortex chunks were also counted. A large fragment of ostrich eggshell was also found, but no pottery was encountered.



Figure 15. Well-preserved shell midden deposits (Point 026) Overlooking the 2-track road. View facing south west



Figure 16. Well-preserved shell midden deposits (Point 026) Overlooking the 2-track road. View facing south west



Figure 17. Well-preserved shell midden deposits (Point 026) overlooking the 2-track road. View facing south west



Figure 18. Point 028. Arrow indicates half buried elliptical grindstone above the 2-track road (proposed walking trail)

Remains of *in-situ* shell midden deposits (Points 032 & 033) comprising black Mussel and limpets, including many large whole limpets were recorded on the crest of the west facing dune slopes overlooking the crayfish factory (Figure 19). Large volumes of displaced shellfish have spilled down the steep sandy slopes (Figure 20). Archaeological deposits were also noted among large piles of sand alongside the road. Deposits in this area have been severely damaged as a result of the construction of the gravel road that has bisected the dune cordon (refer to Figure 4).



Figure 19. Points 033 & 032. Well preserved *in-situ* shell midden deposits (Points 032 & 033) on the crest of the high dune.



Figure 20. Large amounts of shell midden deposits have been displaced down the steep dune slopes. Shellfish also occurs on the sand dumps alongside the gravel road. 24 new parking spaces will be created in this area (refer to Figure 27)

Scatters of shell midden deposits (Point 035) were recorded in a large wind eroded basin overlooking the harbour and factory area (Figures 21 & 22). A few small pot sherds and several pieces of artefactual stone were also found. Remains of well-preserved, *in-situ* shell midden deposits occur on the crest of the eroded dune (Figures 23 & 24), where fragments of pottery and stone flakes were also found.



Figure 21. Site 035. View facing north west with the crayfish factory in the distance. Note the Eskom line which cuts across the dune basin



Figure 22. Site 035. View facing north west with the crayfish factory in the distance. Note the Telkom line which cuts across the dune basin



Figure 23. Point 035. *In-situ* shell midden deposits occur on the crest of the north facing dune



Figure 24. Point 035. *In-situ* shell midden deposit occur on the crest of the dune cordon overlooking the harbour.

Well preserved archaeological deposits (Point 034) were recorded in a shallow dune slack between sandy hummocks on the crest of the dune (Figure 25). The deposits, which comprise mostly black mussel and limpet species, including many whole limpet shells, extend for about 40m south in the direction of Bekbaai. A small cluster of seven fragments of black burnished clay pottery, probably from a single vessel, were also found (Figure 26), as well as a number of shale, quartzite and silcrete flakes and chunks. Fragments of ostrich eggshell and isolated fragments of pottery were also found.

Shell midden deposits (Point 027) and fragments of pottery and shellfish have also been displaced by erosion on the relatively steep north facing slopes just above some of the harbour buildings.



Figure 25. Point 035.Well preserved shell midden deposits on the crest of the dune. View facing south toward Bekbaai



Figure 26. Pointy 036. Pottery from a single vessel



Figure 27. Cropped portion of the proposed Site Development Plan, indicating the new Bitou entrance road and parking areas

Crushed and fragmented shellfish deposits (Point 037) were recorded on the raised and levelled piece of ground at the site of the proposed double story boutique hotel on the rocky promontory of Farm 1259 (Figure 28). The deposits in this area are severely degraded by old earthworks and construction related activities.

Relatively well-preserved shell midden deposits were also recorded among a cluster of large granite boulders (Point 038) in front of the old crayfish/fishing factory building (Figure 29), which forms part of the private boutique hotel outside area (refer to Figure 32).



Figure 28. Crushed shell midden deposits (Point 037). Site for the proposed double story boutique hotel and private outside area



Figure 29.Well preserved shell midden deposits (Point 038) among a cluster of granite boulders in the private boutique hotel outside area. The structure in the background will be replaced by a proposed boutique hotel (4 in Figure 32).

Thirty-two parking areas are also envisaged at the entrance to the currently fenced off crayfish factory, where huge volumes of archaeological (i. e. shell midden) deposits have been disturbed by historical development of the farm, including construction of the gravel road bisecting the dune, dumping of building rubble and concrete, shade netting, etc (Figures 30 & 31).



Figure 30. Point 036. Thirty-two new parking areas (11 in Figure 32) will be constructed across this Portion of the site



Figure 31. Point 036. Thirty-two new parking areas (11 in Figure 32)) will be constructed across this Portion of the site



Figure 32. Cropped portion of the proposed Site Development Plan, indicating the proposed development on the rocky promontory. Note the position of the proposed 32 new parking areas where large volumes of shell middens were recorded. The area is fairly severely degraded by historical development and dumping.

GPS Point	Farm name	Lat/long	Description of finds	Grading	Suggested mitigation
	Farm 127				
019		S32°48'29.34 E17°53'5.27	Traces of shellfish among dune mole heap	Low (Grade 3C)	Test excavations to establish significance of sub surface deposits
020		S32° 48.490' E17° 53.082'	Well preserved shellfish deposits on ledge overlooking car park	Medium (Grade 3B)	Test excavations & sampling
022		S32° 48.501' E17° 53.037'	Patches of relatively well- preserved shell midden deposits. Elliptical g/stone	Medium (Grade 3B)	Test excavations & sampling
025		S32° 48.497' E17° 53.034'	Some preserved shellfish deposits among dumping	Medium (Grade 3B)	Test excavations & sampling
026		S32° 48.500' E17° 53.018'	Extensive, well preserved shell midden deposits along dune littoral above 2-track road. Stone tools, ostrich eggshell	High (Grade 3A)	No Go Area Management Plan required. Alternatively, extensive mitigation required
027		S32° 48.431' E17° 53.035'	Small Patch of well- preserved shellfish, deposits. Shell displaced down slope as well. 2 fragments of pottery	Low-Medium (Grade 3A & B)	Test excavations & sampling
028		S32° 48.443' E17° 53.042'	Historically damaged shell midden deposits	Low (Grade 3C)	None required
029		S32° 48.435' E17° 53.043'	Historically damaged shell midden deposits	Low (Grade 3C)	None required
030		S32° 48.423' E17° 53.045'	Historically damaged shell midden deposits	Low (Grade 3C)	None required
031		S32° 48.419' E17° 53.044'	Disturbed and damaged shell midden deposits on steep slope, but in-situ deposits dune on crest of the dune	Medium (3B)	Proposed No Go Area. Management Plan required. Alternatively, extensive mitigation required
032		S32° 48.404' E17° 53.014'	Disturbed and damaged shell midden deposits on steep slope, but well preserved in-situ deposits dune on dune crest	Medium (3B)	Proposed No Go Area. Management Plan required. Alternatively, extensive mitigation required
033		S32° 48.401' E17° 53.025'	Severely damaged shell midden deposits on steep dune slope, but well preserved in-situ deposits on crest of the dune crest	Medium (3B)	Proposed No Go Area. Management Plan required. Alternatively, extensive mitigation required
034		S32° 48.415' E17° 53.023'	Extensive Well preserved shell midden deposit in dune slack. Numerous pieces of pottery	High (3A)	Proposed No Go Area. Management Plan required. Alternatively, extensive mitigation required
035		S32° 48.411' E17° 53.030'	Shell midden excavated by Robertshaw (1978). Some in-situ shell midden deposits still intact. Pottery noted.	High (3A)	Proposed No Go Area. Management Plan required. Alternatively, extensive mitigation required
036		S32° 48.385' E17° 53.013'	Severely damaged & destroyed shell midden deposits as a result of building works	Low (3C)	None required

037	S32° 48.334' E17° 52.982'	Crushed and fragmented shell midden deposits in severely disturbed context	Low (3C)	None required
038	S32° 48.333' E17° 52.986'	Well preserved shell midden deposits among cluster of granite boulders		Test excavations / sampling

Table 1. Spreadsheet of waypoints and description of archaeological resources

9. IMPACT STATEMENT

Potentially significant archaeological deposits in Erven 1751, 1752, 1609 and 1610 will be impacted by proposed development activities (i. e. construction of residential units & parking areas), on Farm 1259.

The proposal to construct a new entrance road (i. e. Bitou Road) and parking on the dune cordon will likely have a severe, negative and irreversible impact, on threatened and fragile archaeological deposits

Proposed construction of new parking areas at the bottom of the steep dunes alongside the gravel near the crayfish factory, as well as inside the precinct of the fenced off factory, will likely impact on already severely damaged archaeological deposits.

Proposed construction of a double story boutique hotel and private outside area on the rocky promontory, may impact on potentially important archaeological heritage resources.

10. CONCLUSION

The study has shown that Farm 1259 is a threatened archaeological and cultural landscape.

Proposed activities will involve considerable earthmoving that will have a negative impact on important archaeological resources.

Unmarked Khoisan remains (i. e. burials) may also be exposed or uncovered during construction related excavations.

An increase in new residents and potentially 1000s of visitors to the waterfront and harbour, will potentially impact on vulnerable and fragile archaeological resources.

Development of existing open spaces on Farm 1259, especially the proposed new Bitou Road entrance across the dune cordon, must be sensitive to archaeological constraints

11. RECOMMENDATIONS

Regarding the proposed development of Farm 1259 in Paternoster, the following recommendations are made.

1. Test excavations must be conducted in the footprint area of the proposed double story boutique hotel on the rocky promontory, to establish the significance of sub surface archaeological deposits, prior to construction activities commencing.

2. Sampling of archaeological deposits in the private outside area on the rocky promontory must also be conducted.

3. Test excavations must be conducted in the footprint area of the crayfish factory, where up to 32 new parking areas are envisaged at the entrance to the facility. These deposits have been severely impacted by historical development of the factory.

4. Test excavations and sampling of archaeological deposits must be conducted in Erven 1751, 1752, 1609 and 1610.

5. The dune cordon should be set aside as a `No-Go' Area. If this is not feasible, or desirable, extensive archaeological mitigation (i. e. excavations & sampling of deposits) will have to be undertaken, prior to any construction activities (i. e. proposed new Bitou Road) commencing.

Alternatively, the road will have to be carefully designed to avoid sensitive archaeological deposits.

6. A proposed walking trail/wandelpad around the perimeter of the farm and in front of the dune cordon, is supported in principle, subject to archaeological management measures.

7. A Heritage Management Plan must be implemented in order to protect and maintain the integrity of archaeological resources that occur on Farm 1259. This is in particular reference to the dune cordon, which is a prominent landscape feature on the property.

8. All construction related excavations, earthworks, landscaping and shaping (of dunes) must be monitored by a professional archaeologist.

9. Any demolition of existing buildings on the factory site must be monitored by a professional archaeologist. Shell midden deposits and possibly burials may be exposed or uncovered during these activities.

10. Stabilization of the dune cordon must be supervised and monitored by a professional archaeologist

11. If any unmarked human remains, or caches of ostrich eggshell water containers, for example, are uncovered, exposed, or disturbed during construction activities and excavations, work must immediately stop on the site, and the archaeologist informed. Burials must not be removed until inspected by the archaeologist.

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