

499/3  
1987

FILE NO. 499/3.

POLLEN'S ISLAND - PROPOSED AIRPORT.

Also: SUGGESTED RECLAMATION SCHEME.

VARIOUS.

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EXTRACT FROM BOARD'S RESOLUTIONS OF TUESDAY 19th. SEPTEMBER, 1933.

4. RECLAMATION SCHEME, POLLEN'S ISLAND - UPPER HARBOUR.

Letter from Commissioner of Unemployment, 26.8.1933, stating that the Unemployment Board was considering a suggestion made by Mr, D.B. Russell that the present would be an opportune time for the undertaking of a reclamation scheme by relief labour at Pollen's Island, Upper Harbour, (including the reclaiming of a portion of the harbour) with the idea of later sub-dividing the area into farmlets; and asking for the Board's opinion on the suggestion in view of possible restriction of tidal scour in the vicinity; report of Engineer & Harbourmaster thereon 4.9.33.

That a reply be sent in terms of the Engineer's and Harbourmaster's report.

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4th. September 33

The Superintendent.

SUGGESTED RECLAMATION SCHEME AT POLLEN'S ISLAND AND WHAU RIVER.

- Unemployment Board's letter dated 26.8.1933. -

The Unemployment Board is considering a proposal for the reclamation by relief labour of two areas of approximately 160 Acres and 100 Acres, situated respectively on the N.E. and S.W. of the tongue of land which terminates at Pollen's Point on the eastern side of the Whau River.

These areas are correctly described in the Unemployment Board's letter, and the proposed reclamations would not in any way interfere with navigation or deleteriously affect tidal scour in respect of the main navigable channels.

Water access to the foreshore of allotments adjacent to the proposed reclamations would of course be obliterated and the Unemployment Board would require to settle with individual owners as to their claims in this regard.

With particular regard to the last paragraph of the Commissioner's letter:-

- (a). The exclusion of the small amount of water which would be shut off by the reclamations would be felt only at spring tides and then only at slack water when its effect on scour and the maintenance of water channels would be negligible;
- (b). The works appear to be peculiarly suitable for Unemployment Relief Works, as a large amount of labour can be absorbed without much expenditure on materials.

Letter returned herewith.

HARBOUR MASTER.

ENGINEER TO THE BOARD.

## COMMERCIAL AIRPORT.

1/2/32  
POLLEN'S ISLAND SCHEME.

### UTILISING UNEMPLOYED LABOUR REPRESENTATIONS TO MAYOR.

Recommendations concerning the suggested commercial airport on Pollen's Island, and the utilisation of unemployed labour to prosecute the scheme, were made to the Mayor, Mr. G. W. Hutchison, on Saturday by Mr. D. B. Russell, advocate engineer for the proposal. The representations were made in conjunction with the opening of the Avondale tramway extension and visiting local body officials were motored to the island to inspect the site. A special bus service was provided by the Auckland Transport Board to convey residents of the district between the Avondale tram terminus and Pollen's Island.

It was pointed out to Mr. Hutchison that the island was at the foot of Rosebank Road, Avondale, and therefore only 2½ miles from the new tramway terminus. If the scheme were proceeded with the stopbanking would provide a road bringing Te Atatu 2½ miles nearer the city and Helensville seven miles nearer. The island belonged to the City Council, so there would be no expenditure on the purchase of land. The bulk of the expenditure necessary would be absorbed by labour, and 300 men at present unemployed were ready to undertake the work. The matter was in the hands of the City Council as the body controlling relief works in the area.

Mr. Russell read a telegram from the Rt. Hon. J. G. Coates, Minister in Charge of Unemployment, regretting his inability to be present and inspect the island, and stating he had been informed that the Unemployment Board would consider the project at the earliest possible date. Mr. Coates was doing all he could to further the scheme.

Mr. Coates had written to him as follows:—"Presumably the Avondale Development Association will act as the employer in this case, as it is impossible for the Unemployment Board to act in this capacity. The required number of single men will be supplied to you on the same lines as those arranged with the Main Highways Board. If, therefore, you are ready to commence operations, the board will issue instructions for the men to be drafted to the work immediately."

Mr. Russell said all they were waiting for was the consent of the City Council to advance the material and facilities required to commence the work.

Mr. Hutchison said the matter would receive earnest consideration. He had recently visited the commercial airport at Wellington and felt convinced that the establishment of an airport was one of the works that the council would have to undertake in the near future.

## AIRPORT PROJECT.

1/2/32  
COMMERCIAL AVIATION.

### SITE AT POLLEN'S ISLAND. REPRESENTATIONS TO MAYOR.

Local body officials who attended the opening of the Mount Albert-Avondale tram extension on Saturday afternoon subsequently visited Pollen's Island to inspect the site upon which it is suggested a commercial airport should be established.

In an interview with the Mayor, Mr. G. W. Hutchison, Mr. D. B. Russell, engineer and advocate of the proposal, said that most of the expenditure necessary would be absorbed by labour, and 300 men at present unemployed were prepared to undertake the work. Advice had been received that the Unemployment Board would consider the project at an early date, and that the Rt. Hon. J. G. Coates was doing his utmost to further it. In a letter Mr Coates said he presumed the Avondale Development Association would act as employer, and said the required number of single men would be supplied on the same lines as those arranged with the Main Highways Board. Instructions would be issued for the men to be drafted as soon as operations were ready to start. Mr. Russell said that all that was now awaited was the consent of the City Council to advance the material and facilities required to commence the work.

In reply, the Mayor indicated that early consideration would be given the question. He felt convinced that the establishment of an airport was one of the works the council would have to undertake in the near future.

## AIRPORT FOR AUCKLAND.

1/2/32  
POLLEN'S ISLAND SCHEME.

### PROGRESS WITH PROPOSAL.

The proposal to establish a commercial airport on Pollen's Island, a partly submerged area at the foot of Rosebank Road, Avondale, was advanced a further step yesterday when Mr. David B. Russell, the advocate engineer for the scheme, received a communication from the Rt. Hon. J. G. Coates, Minister in charge of Unemployment, stating that the Unemployment Board had now consented to the proposal to utilise unemployed men in constructing the necessary stop-banks on the island.

At the suggestion of Mr. Coates, Mr. Russell will meet Mr. W. Slaughter, officer in charge of the Labour Department in Auckland, this morning, to discuss the employment of 300 registered unemployed on this work.

It was explained by Mr. Russell yesterday that the first work in the development of the scheme would be the erection of the stop-banks and the construction of two flood-gates. These works would have the effect of completely drying off any surplus water now lying on the island, and it was expected that from three to four months would be occupied in completing this part of the undertaking.

## AIRPORT FOR AUCKLAND.

5.2.32  
POLLEN'S ISLAND SCHEME.

### LOCAL BODIES TO CONFER.

Negotiations for the establishment of a commercial airport on Pollen's Island, a partly submerged area at the foot of Rosebank Road, Avondale, were continued yesterday, when Mr. David B. Russell, the advocate engineer for the scheme, conferred with Mr. W. Slaughter, officer in charge of the Labour Department in Auckland.

Commenting on the position after the conference, Mr. Slaughter said the arrangements were by no means definite. The present position was that the scheme had been approved by the Unemployment Board, subject to an arrangement being made by the interested local authorities, the Auckland City Council, the Waitemata County Council and the Auckland Harbour Board, for carrying out the work under the rules applying to the operation of the No. 5 scheme. The work could not be started until all or any of the local bodies intimated willingness to provide materials, tools, supervision and insurance.

Mr. Slaughter said a meeting of representatives of the local authorities would be held on Tuesday, when the proposal would be fully discussed.

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MR. D.B. RUSSELL'S PROPOSED UNEMPLOYMENT SCHEME.

- a. WHAU CANAL.
- b. AIR - PORT.

50N 25-11-20  
**Work for 1,000 Men**

**AVONDALE SCHEME OUTLINED**

**Road Across Whau to Te Atatu**

**PROPOSAL BEFORE PRIME MINISTER**

**A** COMPREHENSIVE scheme for immediate unemployment relief on a large scale has been placed before the Prime Minister, Sir Joseph Ward, by Mr. David B. Russell, of Avondale. It consists of two proposals, each of which he claims would absorb 500 men and provide work for considerable periods.

Mr. Russell has submitted, also, a method of financing the projects, based on the issue of premium bonds. He urges that the Government should legalise this without delay.

The scheme advanced by Mr. Russell consists of important and self-contained work of a highly useful nature preliminary to the Whau Canal proposal:—

In submitting it to the Prime Minister, he forwarded the following telegram:—

Can form strong syndicate to construct Whau Canal, employing 1,000 men four years continually, only condition that you and Government agree and approve of premium bond issue as financial basis.

Sir Joseph Ward's reply was:—

In reply to your proposals re Whau Canal, issue of premium bonds contrary to provision of Gaming Act, therefore illegal; consequently regret unable give matter favourable consideration.

In return, Mr. Russell forwarded the following telegram yesterday:—

If in sympathy with premium bond system, and desire to help unemployed, would you cause clause to be inserted in Gaming Bill to legalise premium bond issue? Auckland and Northern Permanent Co-operative Building Associations are decidedly premium bond systems, and are legalised? Why not the Whau Canal project to help the needy in Auckland? If sanctioned, would suggest as guarantee for your Government that the Public Trustee be appointed as trustee for the whole issue. If you are favourable, will submit small scheme employing 500 men immediately.

**MERGING OF INTERESTS**

Explaining his first proposal, Mr. Russell, an engineer of wide experience, says that three propositions have been before the public for many years—the building of a new bridge over the Whau River, on the Great North Road; the preparation of a reserve for Avondale at the foot of Rosebank Road; and the construction of a roadway from Pollen's Point to Te Atatu.

He suggests that the Government insert this session a clause in the Gaming Act, legalising premium bonds. "If premium bonds are illegal, the Auckland and Northern Permanent Co-operative Building Associations cannot be legal," he says, in referring to the Prime Minister's telegram. "If they have been legalised, why not legalise a worthy cause to help the needy of Auckland immediately?"

The whole scheme, he considers, could be carried out in four years, at a cost of £650,000. Utilising the premium bond system, the system would consist of securing the Government's £ for £ subsidy on a City Council vote of £25,000. That would produce £50,000, to which could be added the sum of £25,000 which, Mr. Russell understands, the Hospital Board intends to spend this year in charitable aid. In addition, there would be included £12,000, or less, being the cost of the Whau Bridge, to be borne by the Highways Board and the local bodies concerned.

Mr. Russell claims that one year's work for 500 men can be

provided for £120,000, the difference between that sum and the total of the preceding amounts being made up by the selling of premium bonds to the public.

He suggests, also, that to satisfy the Government, premium bonds should be issued on the City Council's share, the Government subsidy, the Highways Board, and the local bodies' contribution. Moreover, the whole could be guaranteed by the appointment of the Public Trustee as trustee for the enterprise.

**BENEFIT TO DISTRICTS**

"With the premium bonds issued, another year's work will go ahead to complete the whole comprehensive scheme of the Whau Canal," he says. "For the present, Avondale and Te Atatu would have the benefit of the work already done."

The details of Mr. Russell's scheme are:—

(1) The preparation of recreation grounds at the foot of Rosebank Road. Avondale is without suitable grounds, and this area has been lying idle for many years. A bitumen road  $2\frac{1}{2}$  miles in length leads to the reserve, and was built at a cost of £10,000. The inner side of this peninsula-like area would be left untouched save for the preparation of an A.A.A. parking area and the encouragement of trees. It is a natural grandstand.

(2) In making the playing areas, the spoil would be taken and used in the formation of a stop-bank across the mouth of the Whau estuary to Te Atatu, to compound the waters of the river for all time and give a full regatta course of five miles at all tides. Spoil from the Te Atatu end would complete the bank, in the centre of which would be constructed a provisional spillway. When the canal had been completed that would be replaced by a proper lock.

(3) The building of a new bridge over the Whau on the Great North Road.

**AIRPORT SUGGESTION**

Mr. Russell's second proposal has been submitted by him to Mr. G. W. Hutchison, who is working on the proposal for an Auckland airport.

Alongside the proposed recreation area for Avondale is a shell and sand island of 70 acres which is now owned by the City Council, as Avondale is included in the city area. With the stoppage of the intervening channel and the construction of an inexpensive retaining-wall, Mr. Russell considers that there is enough spoil available to extend the island to 150 acres, giving a margin of 10 acres over the area said to be required for a good-sized airport.

"If this is taken up it is practically a pick-and-shovel proposition," declares Mr. Russell. "The City Council could employ right away easily another 500 men, and the only skilled labour required would be a few foremen to oversee the building of the retaining-wall."

The Works Committee of the City Council has been invited to investigate this scheme.

"My opinion is and always has been that this island could not be excelled as an airplane or seaplane base and in time it would prove a gold mine to the City Council," adds Mr. Russell.

**SUN WORK AT AVONDALE 3-8-20**

Sir,—

When Mr. D. B. Russell announced, in the columns of *The Sun*, that he had presented to the Prime Minister a scheme for the relief of unemployment to the tune of 1,000 men, I laid a little wager with myself that it would be ignored. Now I am beginning to realise with bitter satisfaction that I was right. It is true that Budget affairs have been occupying the attention of Cabinet in the last week or so, but Sir Joseph Ward has had plenty of time to indicate his attitude toward unemployment relief on the lines of Mr. Russell's scheme. Can we not lustre this relief proposal from this end and compel an apathetic Government at least to give it full consideration? I suggest that a committee be formed consisting of Avondale representatives and interested local body men. Then a united representation could be made. Mr. Russell's scheme is too good to be forgotten by procrastination. Moreover, men are waiting for work—and food.

STEP LIVELY.

**SITE FOR AIRPORT.**

**AVONDALE SHORE SCHEME.**

*STAR. — 20.7.29.*

**USE OF POLLEN'S ISLAND.**

**SUITABILITY ADVOCATED.**

In an investigation of possible sites for an Auckland airport, attention has been drawn to Pollen Island, on the Avondale waterfront. A number of aviators who have inspected the vicinity have expressed the opinion that the nucleus of an admirable aerodrome exists there, and some have expressed surprise that the site was not cornered by the Air Force in preference to the Hobsonville property. Although the potentialities of the area were observed some months ago, the virtues of the site have now been made public by an Avondale engineer, Mr. D. B. Russell, who has suggested a reclamation scheme as an unemployment relief work.

The island lies slightly to the east of the Whau River, and the old Avondale Road Board acquired it on account of its large shell deposits. Later the Avondale Borough Council made good use of this source of shell supply, but since the merger with the city little has been done. The area of the island is about 70 acres, and at low tide it can be reached dry-shod from the mainland over a track which was made for the trolleys which were used in removing the shell.

The gap to the mainland is about a-quarter of a mile, and the nearest point is Rosebank Park Domain, a property of nearly 25 acres vested in the City Council. No part of the island is more than 4ft. above high-water mark and a large portion is covered at spring-tide. By suction dredging in deep water close by, it would be possible to build the island up to a level above the highest tide to unite with the mainland. There is an excellent permanent road to within half a mile of the island. The proximity of the public domain enhances the scheme.

At least two engineers have inspected the locality, and some residents of Avondale are enthusiastically encouraging the proposal. From an aviator's point of view the site has many virtues. Very safe approaches would be afforded with any wind condition and seaplanes could operate under ideal circumstances. Suction dredging would be essential to the scheme, but some experts are of opinion that for a club or municipal aerodrome the reclamation would satisfy the essentials of safety, unlimited accommodation and easy access.

**SUGGESTED AIRPORT.**

*STAR. — 26.7.29.*  
**POLLEN ISLAND MENTIONED.**

**QUEST BY AERO CLUB.**

**SITES BEING INVESTIGATED.**

The Auckland Aero Club has under consideration the selection of a permanent site for an airport, but so far no decision has been come to.

At a meeting of the committee of the Aero Club held this morning, Pollen Island, off the Avondale foreshore, was mentioned. The island is low-lying, about 70 acres in extent, and by an extensive reclamation scheme could probably be converted into an airport. It further has the advantage that it is comparatively close to the city.

"The club has to consider a number of possible sites," said the chairman of the committee, Mr. Spencer Mason, after the meeting. "We intend to go carefully into them from every point of view before any decision can be arrived at."

**AUCKLAND'S AIRPORT**

*Sun. — 5/8/29.*

Sir,— It is most pleasing, indeed, to those who have the true interest of Auckland City at heart, to read in *The Sun* that part of Mr. David Russell's scheme for the relief of unemployment provides for the construction of an airport on the tidal-sand island at the foot of Rosebank Road, Avondale.

It takes no H. G. Wells to predict the near future, when aviation will become a vital factor in our business and social life, and almost before we realise it, swift aerial carriers will be bearing their cargoes to every corner of the Dominion. The establishment of a carefully-designed, well-located airport would hasten the development of this new means of transportation and play an important part in bringing about the high standard of safety essential to its complete success.

That the island at the foot of Rosebank Road on the Whau Estuary would be ideal for the construction of an airport, has been confirmed by prominent flying men in Auckland. It has been argued that the Auckland Aero Club has established an aerodrome at Mangere and that it should be made the airport. Such a suggestion is futile, for the Mangere 'drome is situated too far away from the city and from the point of view of commercial aviation, the time lost in transporting goods and passengers from the aerodrome to the city would make flying in many cases hardly worth while. The Hobsonville base, apart from the fact that it is also a long drive from the city, is a military proposition and is out of the question.

While private flying may be purely the result of private enterprise, it actually falls to the lot of the Auckland City Council to construct an airport, for it is evident that in the near future any centre without its landing ground for commercial planes may be counted as being out of it. There appears to be no reason why private and commercial flying should not work hand in hand and occupy the same landing field, in fact such a proposition would have many advantages. It thus seems common sense for the City Council to fall in with the Auckland Aero Club and get the construction of the proposed airport on the Whau under way immediately. An airport so favourably situated and featuring many other advantages could serve all purposes of aviation.

**CONTACT.**

**AUCKLAND AIRPORT.**

**AERO CLUB PROPOSAL.**

*H. — 13.7.29.*

**RECLAMATION AT AVONDALE.**

**CITY COUNCIL APPROACHED.**

Details of an ambitious scheme for the provision of an air-port by using Pollen's Island on the Avondale waterfront as a nucleus for reclamation were placed before the City Council last evening by the Auckland Aero Club. The proposal was explained by a comprehensive plan prepared by a prominent local body engineer. The suggested site is nine miles from Queen Street and it is estimated an aerodrome adequate for immediate needs and capable of development as needs grow can be provided for less than £5000. The alternative of purchasing a property of about 100 acres within the same radius of the city is estimated by the Aero Club to cost from £20,000 to £30,000, exclusive of the levelling which would be required on any property of this size which might be available. The comparison shows a great balance in favour of the reclamation scheme, and there would remain scope for extension which could not be economically obtained if the purchase of ordinary lands were undertaken.

**Adequate Runways Possible.**

The island is owned by the city and its area is about 70 acres, its flat surface being about 2ft. above high water spring tides. Between the island and the mainland is a mudflat which is covered by high tides and experts are of the opinion that this flat can be reclaimed by means of two stop-banks and floodgates. This would furnish an area of 226 acres and from data gathered during survey it is estimated that the banks and gates would cost £2900. If it was not desired to purchase the private riparian rights an additional cost of £450 would be involved by extending the stop-bank to connect with the public reserve. It is estimated that the mangrove growth could be removed for £300 and for immediate needs the levelling required would be covered by £700.

The scheme would provide a runway of 800 yards in every direction, except through an arc of 20 degrees, through which the run available would be 500 yards. If future demands warranted 800 yards in every direction reclamation would be possible on the shallow seaward side of the island to embrace another 44 acres.

These dimensions will allow great latitude for any commercial machines which are likely to be put into service in the Dominion. Even without the advantage of a brisk head-wind the landing run of a light two-seater aeroplane is only from 100 yards to 130 yards and the take-off distance somewhat less.

In the communication placed before the council it was stated that the reclamation scheme would provide a firm surface naturally drained by the slope from the island to the mainland. It was pointed out that the scheme would enable the handling of seaplanes, while the approaches were conspicuously free from obstructions such as power lines and buildings.

**Engineer Preparing Report.**

The secretary of the Aero Club, Mr. L. W. Swan, stated:—"The club takes a very broad view of its functions in the establishment and carrying on of aviation, and offers to do everything in its power to assist the council in developing an aerodrome, particularly in technical mat-

ters. I believe the council has not yet decided whether it lies within its duty to provide an airport, but whatever conclusion is arrived at, I desire to point out that this city is the only one of the four municipalities which has made no provision for an aerodrome. Several smaller centres have already good grounds either prepared or contemplated."

Reporting to the council, the acting-engineer, Mr. J. Tyler, stated that there was still a quantity of useful shell on Pollen's Island. Any operations would not impair the site if it was deemed suitable for an aerodrome. Mr. Tyler expressed the opinion that the Aero Club's estimates were inadequate for the provision of a good aerodrome surface over an area which would be suitable in all weathers. He was preparing a report on the establishment of an air base for Auckland, and this would be placed before the Works Committee.

## AIRPORT PROPOSAL.

### AERO CLUB'S PLAN.

*Star. — 13.9.29*

### USE OF POLLEN ISLAND.

#### RECLAMATION NECESSARY.

Pollen Island, on the Avondale waterfront, was suggested as the centre of reclamation work for the provision of an airport, details of which, accompanied by a plan, were placed before the City Council by the Auckland Aero Club last night.

Considerable investigation had been made, stated the club's letter, both from the air and on the ground, and the site had been found most suitable. It was nine miles from the Chief Post Office, and at such a distance the initial cost of acquiring, say, at least 100 acres, would probably be between £20,000 and £30,000, besides which a large sum would be required for levelling. One of the greatest difficulties was that in order to make provision for seaplanes a sea frontage would be required.

The island, which covers 70 acres, is owned by the council, is about two feet above high water spring tide. It is considered by experts that it would be possible to reclaim the mudbank between the island and the mainland, providing a total of 226 acres. For the present, according to the club's proposal, not more than £700 need be spent on the surface, making a total cost of £5,000, including £2,900 for the construction of stop-banks and floodgates for reclamation work, £300 for the clearance of mangroves and £450 for the extension of the bank to connect up with the public reserve should it not be desired to purchase the private riparian rights.

#### Runway of 800 Yards.

The runway provided would be 800 yards in every direction, except through an arc of 20 degrees, through which it would be 500 yards. Provision could be made for any future requirement to make the runway 800 yards in every direction, by reclaiming the shallow water seaward, giving an extra area of 44 acres.

Natural drainage would be provided, as the ground sloped gently from the island to the mainland, with a large channel along its edge. The ground would be firm, and by cultivation and sowing in grass would keep a sufficiently dry surface.

The features stressed by the club in urging the council to develop the landing ground were:—The extraordinary low cost compared with any other possible scheme; the close access to good water for seaplanes; the short distance from the centre of the city by roads permanently surfaced for nearly the whole distance, and the good approaches from the air (the absence of obstructions such as power lines and buildings).

In return for the use of the ground

the club offered to undertake the management and supervision of the area by a technical staff. It would require the right to erect buildings.

#### "First-class Ground Essential."

In requesting the council to consider the proposal, the secretary of the Aero Club, Mr. L. W. Swan, said:—"The club takes a very broad view of its functions in the establishment and, carrying on of aviation, and offers to do everything in its power to assist the council in developing an aerodrome, particularly in technical matters. I believe that the council has not yet decided whether it lies within its duty to provide an airport, but whatever conclusion it arrives at in that respect, I desire to point out that the city is the only one of the four main centres which has no provision made for an aerodrome, and that several smaller centres already have good grounds either prepared or contemplated. The club has already taken steps with a view to having grounds set aside through the province, but all such efforts will be heavily discounted if not nullified, unless the City of Auckland, the centre, shortly provides a first-class ground."

A report from the acting city engineer stated that Pollen Island had been purchased by the late Avondale Council for obtaining supplies of shell and sand. A quantity had already been removed, and a good deal still remained in the south-east portion, but he considered that this should not debar the development of the island as an air base. He pointed out, however, that the works provided for and the estimates furnished in the letter were quite inadequate to do what would be necessary to provide a surface that would be suitable for use by aeroplanes in all weathers. He recommended that consideration of the proposal be deferred until a report which he was preparing in respect of the establishment of an air base at Auckland had been dealt with by the Works Committee.

The Aero Club's proposal was referred to the Works Committee.

## Harbour Island Seen As a Future Airport *Star. — 13.9.29* OFF POLLEN'S POINT

### AERO CLUB'S PROPOSAL

An island off Pollen's Point, Avondale, is regarded by the Auckland Aero Club as eminently suited to the formation of an airport for Auckland. The land, which comprises about 70 acres, could be developed, the club believes, for a cost of under £5,000.

THE club's proposals were submitted to the City Council last evening as requested by the Works Committee, upon which the club waited early this month. The club reports that the proposed ground is situated nine miles from the General Post Office and at such a distance the initial cost of acquiring say, at least 100 acres required for a suitable aerodrome would be probably from £20,000 to £30,000. A large sum would be required for levelling, removing obstructions such as buildings, fences and hedges. One of the greatest difficulties is that in order to make adequate provision for seaplanes a sea frontage is required.

"The City owns an area of 70 acres, an island off Pollen's Point, which is about 2 feet above high-water spring tides, the mud flat between the island and the mainland being covered by the same tides. By means of two

stopbanks and floodgates it is possible to reclaim the flat, thus providing an area of 226 acres. An estimate based on a survey places the cost of the banks and gates at £2,900, but should it not be desired to purchase the private riparian rights the extension of the bank to connect up with the public reserve would mean an additional cost of £450. The cost of removing mangroves is estimated at £300. In addition to this a certain amount of levelling would have to be done, but in this regard it is to be observed that for present-day requirements only a small portion of the area need be put in condition for landing purposes, while the remainder could be developed as required. For the present not more than £700 need be spent on the surface, thus making a total cost of under £5,000.

"The runway provided would be 800 yards in every direction, except through an arc of 20 degrees, through which it would be 500 yards. If at any future time it is required to make the runway 800 yards in every direction, this could be effected by reclaiming the shallow water seaward. Experience elsewhere shows that the ground thus formed will be firm, and that by cultivation and sowing in grass it will keep a sufficiently dry surface. In this regard it is to be observed that the ground slopes gently from the island to the mainland, which has a large channel along its edge, thus providing natural drainage.

"The club urges the council to develop the landing-ground on account of the following features:—(a) The extraordinary low cost compared with any other possible scheme; (b) the close access to good water for seaplanes; (c) the short distance from the centre of the City by roads permanently surfaced nearly the whole distance; (d) good approaches from the air (absence of obstructions such as power-lines and buildings).

"The club offers to supervise the ground for the City in return for the use of the land and the right to make such reasonable charges as may be agreed upon for landings by aircraft and other matters in which the services of the club's staff might be used.

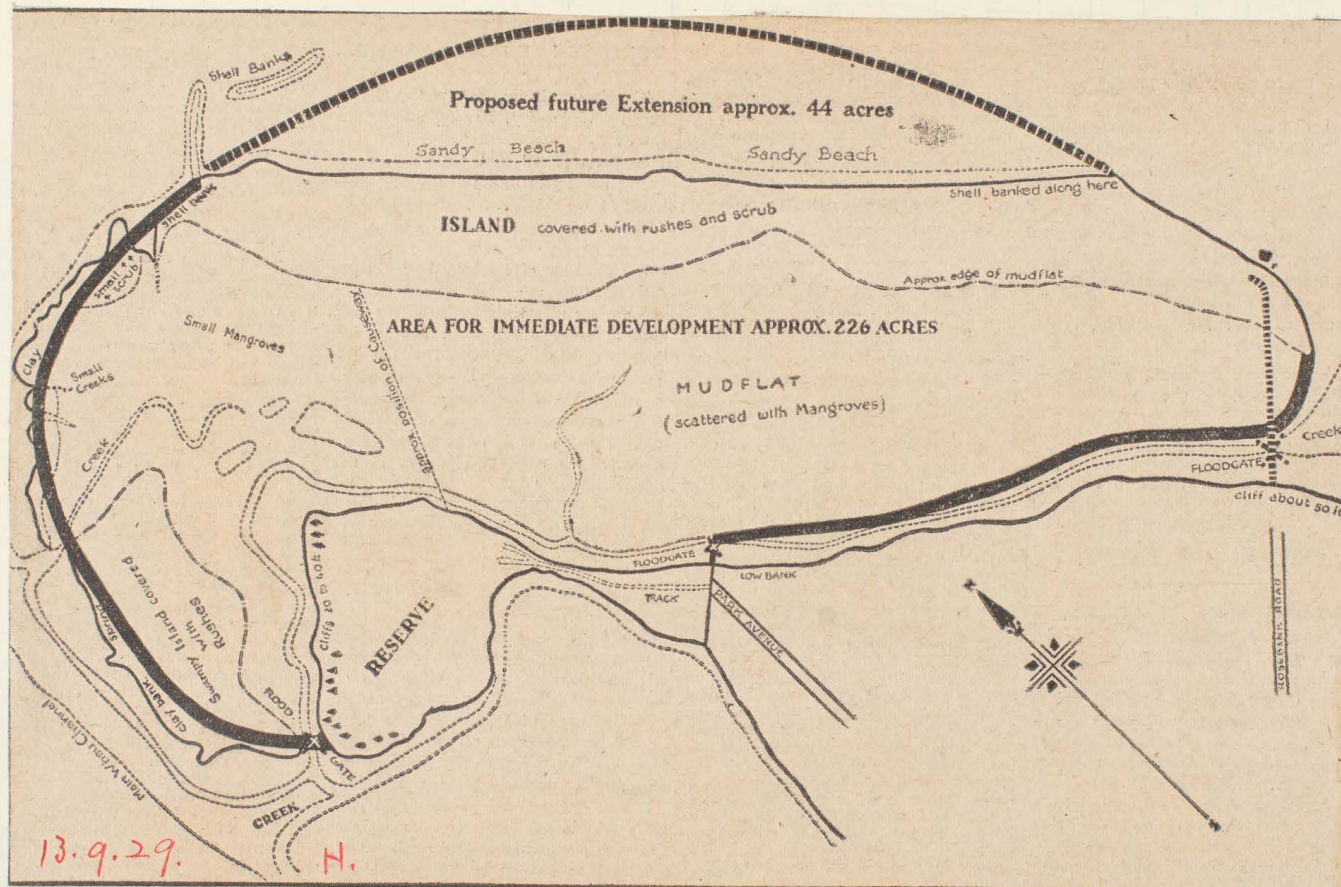
"The club takes a very broad view of its functions in the establishment and carrying on of aviation, and offers to do everything in its power to assist the council in developing an aerodrome, particularly in technical matters. I believe that the council has not yet decided whether it lies within its duty to provide an airport, but whatever conclusion it arrives at in that respect, I desire to point out that the city is the only one of the four main centres which has no provision made for an aerodrome, and that several smaller centres already have good grounds either prepared or contemplated. The club has already taken steps with a view to having grounds set aside right through the province, but all such efforts will be heavily discounted, if not nullified, unless the City of Auckland, the centre, shortly provides a first-class ground."

#### ESTIMATES INADEQUATE

The acting-city engineer, Mr. J. Tyler, reported that Pollen Island was purchased by the former Avondale Borough Council for the purpose of obtaining supplies of shell sand. A quantity had already been removed, and a good deal still remains on the south-eastern portion, but he is of opinion that this should not debar the development of the island as an air base. He pointed out that the works provided for and the estimates furnished in the letter were quite inadequate to do what would be necessary to provide a surface that would be suitable for use by airplanes in all weathers, but recommended that consideration of this letter be deferred until the report he was now preparing in respect of the establishment of an air base at Auckland was dealt with by the Works Committee.

The letter and the report were referred to the Works Committee for report.





AUCKLAND AIRPORT SCHEME.

The Aero Club's proposal for reclamation with stop banks on the Avondale waterfront. The heavy black lines show two suggested banks, which would connect a low island with the mainland and furnish 226 acres. The dotted lines show how the area would lend itself to development by reclamation in shallow water.

## AUCKLAND'S AIRPORT.

Shan. — 18.9.29

### SEARCH FOR SITE.

#### CLAIMS OF PAPATOETOE.

#### FRINGED BY SUITABLE AREAS.

Auckland's isthmus should be combed by surveyors before a site is selected for an airport, submitted a deputation to the Papatoetoe Town Board last evening. Areas on the upper reaches of both harbours, that are tidal flats, easily reclaimable, were numerous south of the city, and the board was asked by the deputation to make immediate representations to the Government, in the interests of southern suburbs.

Papatoetoe was fringed by suitable sites for an airport, said Colonel S. J. E. Closey, president of the Papatoetoe Welfare League, who headed the deputation. Principals in the Aero Club had taken a commercial view of the position, and had decided that land in the district was too expensive for their purposes. Because of Papatoetoe's situation on the direct route from Wellington to Auckland a landing-ground in the vicinity would be highly desirable for air transport.

Auckland was behind the other three main centres in its development, continued Colonel Closey, but a rapid advance should be expected in the near future. Any action the Aero Club might contemplate should be restrained until the location of an airport was considered, as a part of a national scheme. The attention of the Government should be drawn to the fact that the club had considered a site at Papatoetoe, but could go no further for lack of finances. In view of the effect that aerial service would have on existing transport facilities and traffic routes, the question should be considered without delay. Papatoetoe would be an easy landing point at night, and areas of a sufficient size could be found on the Manukau and Waitemata close to the city and conveniently situated for a large number of residential suburbs.

Mr. H. C. Ernest, president of the Papatoetoe Chamber of Commerce, said the question had been considered by the chamber and it had been decided to ask the board for its support.

Mr. T. R. Smytheman, chairman of the board, said although there was no suitable area in the town district, there were undoubtedly a number of possible landing-grounds in the vicinity.

It was decided to make representations to the Government through Mr. A. W. Hall, M.P. for the district.

## AIRPORT SCHEME.

### POLLEN ISLAND PROPOSAL.

#### WORKS COMMITTEE DISCUSSION.

The Pollen Island airport scheme is being considered to-day by the works committee of the City Council. If the port is established aeroplanes and seaplanes will have a starting and landing place within six miles of Queen Street.

Messrs. David B. Russell, F. E. Powell and R. Henshall, engineers, have prepared plans showing the method proposed to enlarge and level the island to provide an area of between 110 and 145 acres for the use of planes. It is proposed to build a stop bank around the island to shut off the water that at present runs through a channel between the island and the mainland, thus making a flat area 75 chains in length and 28 chains wide for road communication. Provision is made for another stopbank between Pollen's Point and Te Atatu to impound the waters of the Whau River, a lock being included as an aid to navigation. This work would add another 100 acres to the landing area.

Pollen Island is vested in the City Council as an endowment and has been set apart as a recreation area. The extension of Rosebank Road, Avondale, is included in a comprehensive scheme to provide a playing ground as part of the area, the plans providing for tennis, croquet, football and cricket grounds, with a grandstand for the public.

## PROPOSED AIRPORT.

### POLLEN'S ISLAND SCHEME.

#### COUNTY COUNCIL'S SUPPORT.

#### COMMITTEE TO INVESTIGATE.

A decision to support the proposed formation of a commercial airport at Pollen's Island, Avondale, on the upper reaches of the harbour, was made at a meeting of the Waitemata County Council yesterday.

Mr. David B. Russell, the engineer-advocate for the scheme, gave a detailed outline of the suggested work. He said that apart from providing facilities for the landing and departure of aeroplanes and seaplanes within easy reach of the city, valuable new recreation reserves would be formed. A bridge over the Whau River linking Pollen's Point with Te Atatu would bring Helensville and Dargaville and other northern centres closer to the city by road. The scheme, if adopted, would provide work for several hundred men at present unemployed.

The chairman, Mr. W. A. Bishop, said that sooner or later there must be a proper commercial airport in Auckland. He thought the council should support the Avondale project and endeavour to interest the Unemployment Board in the matter.

On the motion of Mr. Bishop it was agreed to set up a committee consisting of the chairman, Messrs. R. Glasgow, H. Paltridge and W. Potter, and the county engineer, Mr. L. F. Faram, to confer with the Unemployment Board and the Auckland City Council.

## COMMERCIAL AIRPORT.

### POLLEN ISLAND SCHEME.

#### REPORT BY CITY ENGINEER.

#### COST OF RECLAIMING AREA.

The proposal to establish a commercial airport at Pollen Island is discussed in detail in a report prepared by the city engineer, Mr. J. Tyler, and submitted to a meeting of local body representatives yesterday. When the City Council recently considered various sites for an airbase, Pollen Island was discarded in favour of other areas, but its claims were advanced by a deputation which later waited upon the council.

In his report, Mr. Tyler stated that there were no major engineering difficulties involved. It was a question whether a sufficiently firm surface would result by the shutting out of the sea and if it would remain firm under all weather conditions. He was convinced that, although there was a reasonable prospect of the area becoming firm when the sea was excluded, it was essential that ample provision should be made for the ready disposal of all rainwater falling on the area, as it was only by preventing the surface from becoming water-logged that a firm surface could be obtained.

Mr. Tyler said he had inspected various reclamation works carried out on the northern side of the harbour on somewhat similar sites. He believed that statements to the effect that within 12 months of the completion of the embankment and with no further treatment of the surface the area at Pollen Island would be a grass sward were decidedly optimistic.

The site consisted of a bank of sea mud of about 71 acres lying about 18 chains from the mainland. The island, about one-third of which rose two feet above ordinary high-water on the east to six inches above on the west side, was covered with a mixed growth of rushes. The area between it and the mainland, about 99 acres, was covered at high tide from 18 inches to just awash and was overgrown with mangroves. The third area of 50 acres, lying north of the reserve, was a mud flat awash at ordinary high tide.

Mr. Tyler stated it was intended to erect a mud bank enclosing the three areas. To satisfactorily protect the bank it would be necessary to have a grouted stone facing on the outside and it might be necessary to turf the top and inner side. After dealing with questions of clearing, draining and constructing embankments, Mr. Tyler stated that he was convinced that only with constant maintenance by dragging, rolling and filling uneven patches could an all-weather surface be attained.

The cost of roading to the area was estimated at £7061. The estimated cost of other work to make a permanent surface was £15,344. The estimated amount for unemployed labour was £8410, leaving £14,015 to be borne by way of materials, cartage and skilled and semi-skilled labour.

Mr. Tyler referred to the proposal to form playing fields on the recreation reserve, but stated that he had not prepared plans for its development, owing to the remoteness of the area, lack of access and its apparent unsuitability at the present time.

## New Airport Scheme Will be Considered

SUN. 26.7.29.

### KEEN INTEREST ROUSED

#### PROPOSAL FOR AVONDALE

Keen interest has been roused, particularly in aviation circles, by the announcement in yesterday's SUN of Mr. David B. Russell's scheme for the relief of unemployment. Portion of his proposal provides for the construction of Auckland's air port on the tidal sand island at the foot of Rosebank Road, Avondale.

This island lies beside Pollen's Point, a peninsula-like area, now an unimproved reserve, which forms the extremity of the eastern side of the Whau estuary.

In detailing, in yesterday's Sun, a scheme by which this reserve could be transformed into recreation areas, and a stop-bank and roadway built across to Te Atatu, Mr. Russell contended that it would be a comparatively simple matter to throw a retaining wall round the sandy island and, by filling and reclaiming, produce an area of 150 acres as an airport site.

The old Avondale Road Board acquired the island because of its large shell deposits, and, at a later date, the Avondale Borough Council made good use of the supplies available. Since the merger, however, little has been done. The present area is of about 70 acres, and a small channel separates it from the mainland, although it may be reached dryshod at low tide.

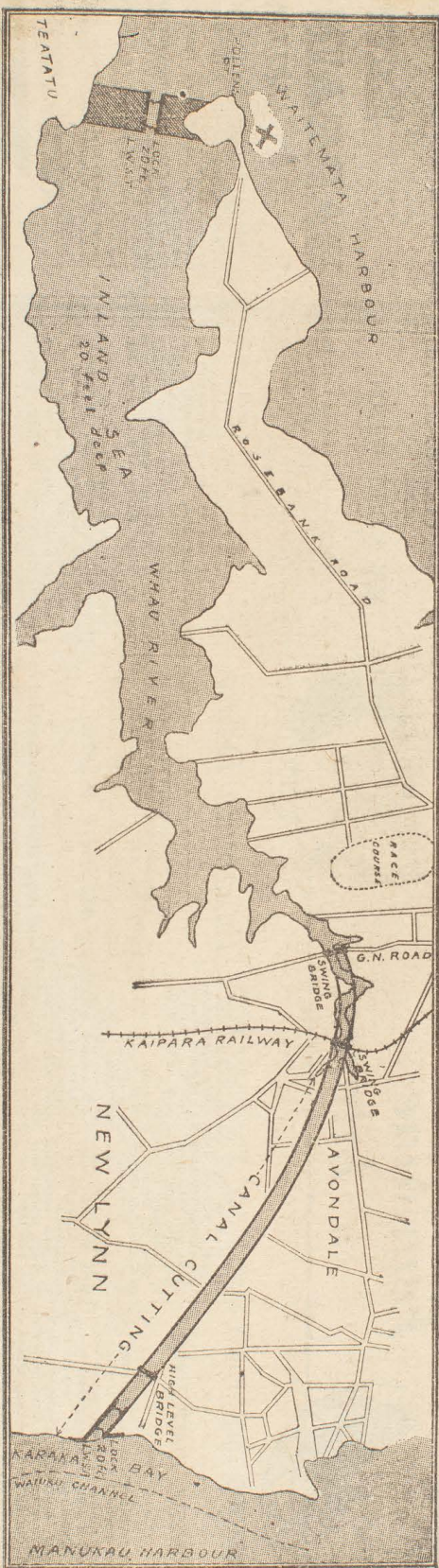
At least two engineers have inspected the locality which, admittedly, has much to commend it, as there are safe air approaches under practically any conditions.

After a meeting held at mid-day today, Mr. Spencer Mason, chairman of the executive committee of the Auckland Aero Club, when invited to discuss the proposition, said:—

"The club has had numerous propositions before it. All will receive very careful consideration."

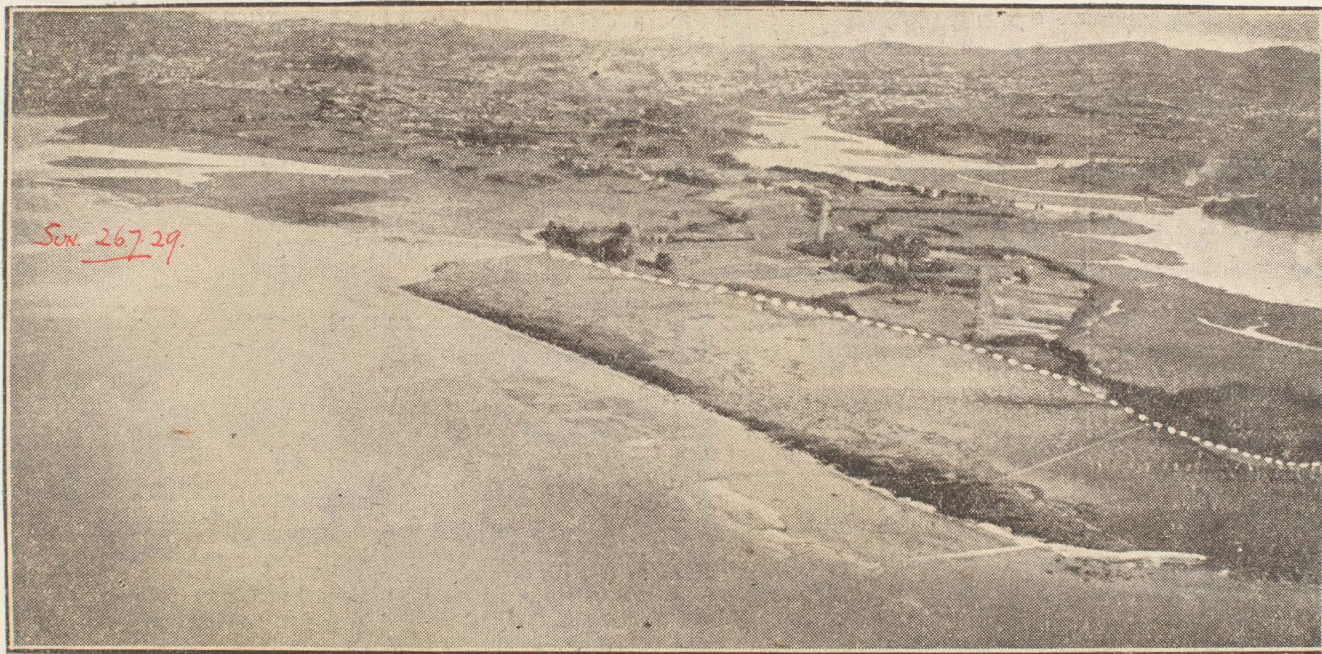
The Sun's photographic section today contains an unusually interesting picture of the proposed airport at Avondale as it would be viewed by an airman approaching from the direction of Auckland City.

Sun 25/7/29. MR. DAVID B. RUSSELL'S UNEMPLOYMENT RELIEF SCHEME



WORK FOR 1,000 MEN.—This map of the Whau Estuary and environs illustrates Mr. David B. Russell's scheme for unemployment relief by the building of a stop-bank and road (marked in black) from the foot of Rosebank Road to Te Atatu. His first proposal, as described in an article in this issue, includes also the formation of playing areas on the reserve—the peninsula at the foot of Rosebank Road. Beside it is the island (marked X) which, he contends, can be reclaimed and enlarged for use as an airport.

Manukau & Airport



**SUGGESTED AS SITE FOR AUCKLAND AIRPORT.**—The tidal area bordering on Pollen's Point, near Avondale, which it has been proposed should be reclaimed for use as an airport. The land, most of which at present is under water at high tide, lies between the dotted line and the reef shown in the foreground. It consists of 70 acres. The Whau estuary can be seen on the right, and in the distance is the Manukau Harbour. The picture shows the comparatively short cut necessary to link the two harbours by a canal at this point.

Mr. Cadman,  
Auckland Aero Club,  
AUCKLAND.

22nd. July 29

Dear Sir;

PROPOSED AIRPORT AT POLLEN'S POINT - AVONDALE.

As requested I have made a flying survey of the area adjacent to Pollen's Point - Avondale with a view to deciding upon its suitability as a site for an airport, and the most economical method of developing it.

The area proposed is bounded by a long narrow low lying island lying generally in a south-east to north-westerly direction approximately parallel to the shore line at the foot of Park Avenue and with its outer boundary from 1,400ft. to 1,800ft. from the mainland. A chain of smaller islands curves round from the north-western end of this island towards the mainland. The main island, on its seaward side is from a foot to eighteen inches above the level of H.W.S.T. The smaller islands are approximately level with H.W.S.T. The south-eastern end of the main island curves in towards the mainland about opposite Rosebank Road.

The enclosed area between the mainland and this group of islands is approximately 226 acres and in general slopes gently back from the seaward side of the main island to two well defined tidal creeks which hug the coastline of the mainland. The area below high water is covered with mangroves and the two tidal creeks referred to form the channels by which the area is flooded and drained as the tide flows and ebbs. The level of the outer bank of the creek is approximately 2 feet below the level of H.W.S.T.

The whole area is eminently suitable for reclamation by excluding the sea by means of earth embankments with provision for drains and floodgates to carry off stormwater and drainage. The accompanying plan shews the area and it will be seen that at the north west it abuts onto a public reserve. From Park Avenue to Rosebank Road the foreshore is privately owned.

In considering the question of reclamation it has been assumed that in the interests of the establishment of an airport, the City Council might be prepared to surrender its riparian rights and on this assumption it is proposed to construct an embankment shown in red from the North-western end of the main island sweeping round in an easy curve, crossing the creek, and joining the mainland about the south-western point on the reserve. The level of this embankment would be three feet above H.W.S.T. and floodgates would be provided where it crosses the main creek.

At the south-eastern end of the main island, the most economical procedure would be to run an embankment across to about the foot of Rosebank Road (as shown in purple), but there might be difficulty in making suitable arrangements with the riparian owners,

and in order to preserve the waterway to these properties an embankment is shewn in red skirting the outer bank of the creek up to the foot of Park Avenue where the creek would be crossed by an embankment with floodgates. It is however quite possible that suitable arrangements could be made with the owners in which case the much shorter embankment shewn in purple would be sufficient with consequent reduction in cost.

It is understood that an essential to a first-class airport is a clear run of 800 yards in any direction, and that while this provision may not be required in the immediate present it should at least be possible to satisfy this condition at reasonable cost in the future.

The area which would be provided by the construction of works shewn in red provides a clear run of 550 yards in any direction, and 800 yards through about 310 degrees from about 210 degrees through west and north to about 5 degrees, and again from 30 degrees through east and south to 185 degrees. The blind areas being 25 degrees from about 5 degrees to about 30 degrees and 25 degrees from 185 degrees to 210 degrees.

It would therefore appear to be desirable to acquire an additional area to seaward of the main island which can be reclaimed at a later date in order that the full requirements of a first-class port may be made available. A suitable additional area for this purpose is shewn enclosed by embankment indicated by a green line. This being in deeper water and facing the full force of the north-east seas would require a stronger and more costly embankment, suitably protected. It might also be desirable to partially fill in the area to avoid drainage difficulties and give a more uniform level. The additional area thus enclosed would be approximately 44 acres making a total of 270 acres.

The estimated cost of providing the stop banks, shewn in red, together with necessary floodgates, would be say .....£2,900, which includes stone facing for the whole of the bank at north western end of airport where it is exposed to north-west winds and also stone facing for about 500 feet of the bank at the south eastern end of the base. It would not be necessary to pitch the bank running up alongside the creek. Should it be possible to carry this south eastern bank straight across to the mainland the saving in cost would be about .....£450.

After the water has been excluded by the construction of the embankments the ground would require clearing of mangroves. This should not cost more than .....£300.

As pointed out above the area slopes naturally from the seaward side towards the shore, and this would provide natural drainage to the existing creeks adjacent to the shore which would be left in their present condition to act as storm and surface water drains. It is probable that the capacity of these creeks, together with the drains formed when constructing the embankments would be sufficient to provide storage for rainfall during the short periods at H.W.S.T. when the sea is above the general level of the reclamation.

Some additional surface drainage system may be found necessary but this would be a difficult or costly matter in view of the favourable lie of the land.

It would also be necessary to do a certain amount of levelling to remove a few small hummocks, but this again would be a

matter of little expense and could probably be deferred until a later date.

Should it be possible to secure the freehold of the main island at reasonable cost and to acquire the additional areas from the Marine Department, the exceedingly low cost of reclamation and preparation of the area for an airport make the proposition extremely attractive and it would be difficult, if not impossible, to secure a site more suitable or capable of such economical development within such a short distance from the heart of the city.

I enclose wind diagram prepared from Government Meteorological records with sectors marked over which 800 yards is available without the additional 44 acre reclamation.

Yours truly,

M. Inst. C.E.

Mr. Cadman,  
Auckland Aero Club,  
AUCKLAND.

22nd. July 29

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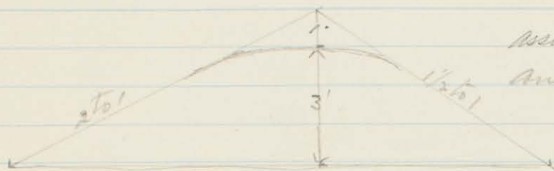
I enclose wind diagram prepared from Government Meteorological records with sectors marked over which 800 yards is available without the additional 44 acre reclamation.

Yours truly,

M. Inst. C.E.

Report at Pollens Point.

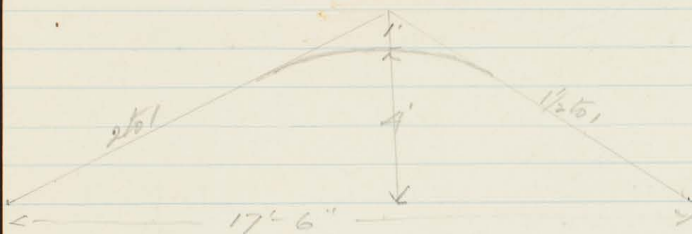
Embankment 3ft high at Northern end 3,600 feet long  
if shaped as under:-



assume 2 to 1 slopes on seaward side & 1 1/2 to 1  
and allow 1ft extra height

$$\text{Volume} = \frac{3600 \times 14 \times 4}{2 \times 27} = 3760 \text{ C. Yds.}$$

Embankment at Southern end 4ft high 3000 ft long  
shaped as under:-



$$\text{Volume} = \frac{3000 \times 17.5 \times 6}{2 \times 27} = 4860 \text{ Cub. Yds.}$$

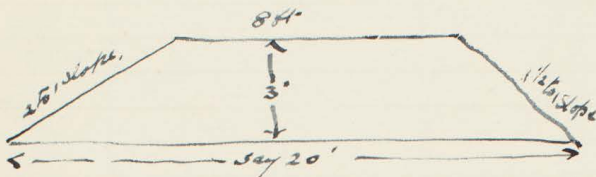
Total banks 8610 cub yds at 5/7. £ 2150

If done by manual labour this work would  
employ 50 men say 8 weeks.

# Proposed Airport at Pollens Point

Banks at N.W. South West end of proposed port

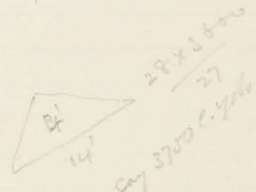
ounded at say HWST. & carried to 3ft above HWST.



filling outer slope  
 $\frac{36}{45} \text{ say } 1, \frac{7 \times 3600}{9} = 2800 \text{ cu yds } \text{d}/\text{ft} = \frac{1}{1400}$

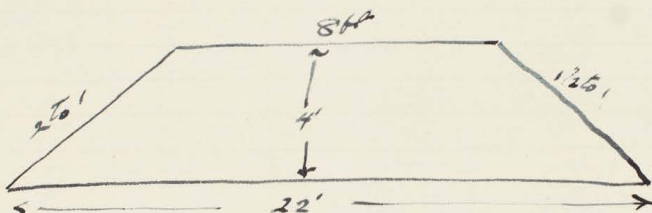
Banks 3600ft long x 14' mean width x 3ft high

$$= \frac{3600 \times 14 \times 3}{27} = 5650 \text{ Cub. yds.}$$



Banks at S.E. end of port

~~3000ft~~ founded at say 2ft below HWST & carried to 2ft above HWST.



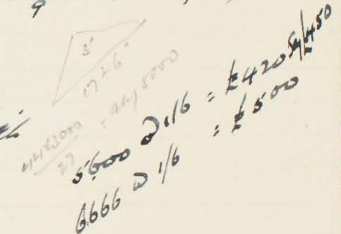
$\frac{16}{20} \text{ W } 50 = 2009$

filling 500ft at SE end

$\frac{500 \times 9}{9} = 500 \text{ d}/\text{ft} = \frac{1}{250}$

Banks 3000ft long x 15' mean width x 4' high

$$\frac{3000 \times 15 \times 4}{27} = 6666 \text{ Cub. yds}$$



Total filling for banks obtained from drainage channels dug immediately inside 5600 + 6666

= say 12266 C. yds d/16 = say 766.6

Two embankments across creeks where shown including flood gates each say 150

300

regarding rainfall Area say 5000' x 1800' x 2" rainfall per hour

= 18,000,000 cu. ins rain per hour  
 = say 10,000 cu ft per hour  
 = 1.66 cu ft per min  
 = 2.75' excess.

8700 d/ft  
 252000

note: if bank at SE end is carried straight across to mainland

say it wd be  $\frac{300 \times 5 \times 4}{27} = 6000 \text{ C. yds } \text{d}/\text{ft} = \frac{1}{450}$

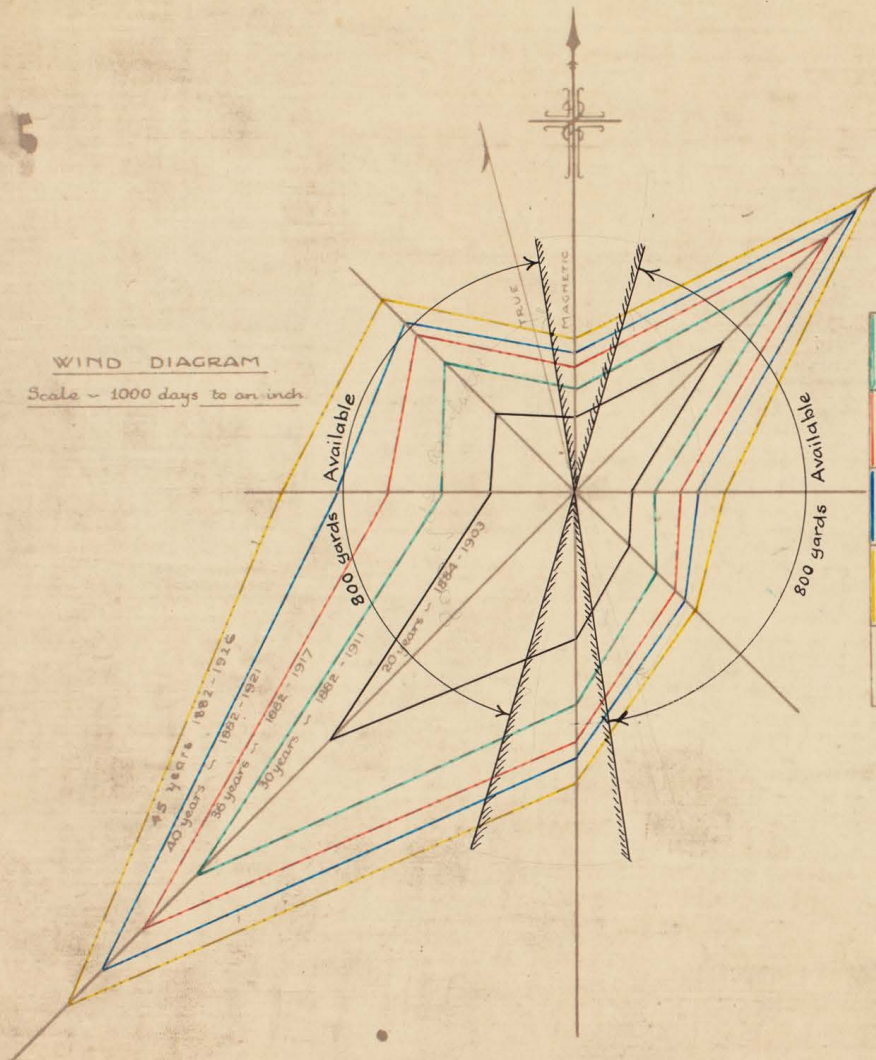
NW bank filling 1400 1850 + flood gates 2000

SW bank 500 750 + ... 900

if embankment carried straight to shore about 400

Clearing area of mangroves  
226 acres @ 30¢ = cost \$ 6780.

Drainage & grading



			N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm	Total
30 years	1882 to 1911	No. of Days	650	2059	501	742	1367	3523	874	1204	Not previously recorded	10920
		Percentage of Whole Period.	5.9%	18.9%	4.6%	6.8%	12.5%	32.3%	8.0%	11.0%		
36 years	1882 to 1917	No. of Days	810	2338	676	902	1609	4015	1244	1456	Not previously recorded	13050
		Percentage of Whole Period.	6.2%	17.9%	5.2%	6.9%	12.3%	30.8%	9.5%	11.2%		
40 years	1882 to 1921	No. of Days	865	2538	784	987	1717	4402	1565	1563	70	14511
		Percentage of Whole Period.	6.2%	17.5%	5.4%	6.8%	11.8%	30.3%	10.8%	10.7%	0.5%	
45 years	1882 to 1926	No. of days	992	2738	977	1088	1875	4718	1917	1779	253	16337
		Percentage of Whole Period.	6.07%	16.76%	5.98%	6.66%	11.46%	28.89%	11.73%	10.98%	1.55%	
50 years	1882 to 1931	N° of Days										
		Percentage of Whole Period										

— A. H. B. —

### RECORD OF WIND DIRECTION

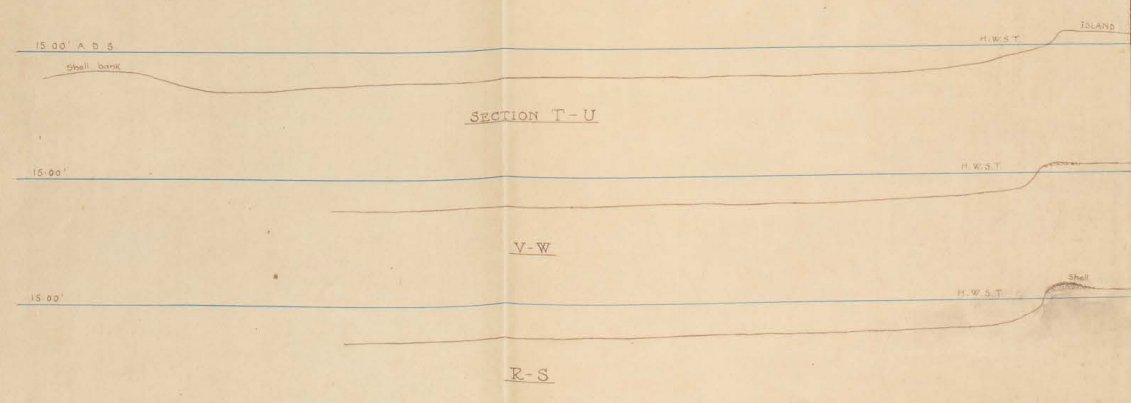
From Government Meteorological Records.

FOR PERIOD OF 45 YEARS (1882-1926 inclusive)

*Observations taken at 9 a.m. daily at Albert Park, Auckland. Height 161¾ feet above Mean Sea Level.*



PLAN  
Scale 400' to 1"



15 00' A.D.S. Shell H.W.S.T.

B-C

Island Mud Flat

C-D

Beach Shell Mud Flat

D-E

Beach Shell Mud Flat

E-F

Mangroves Island

G-H

15 00' A.D.S. Island H.W.S.T.

Mud

H-J

SECTIONS

Scales  
Horizontal 40 to 1"  
Vertical 10 to 1"

PROPOSED SITE FOR  
— AIRPORT —  
AT POLLENS PT.  
WAITEMATA HARBOUR

• Scales as Noted •



# Auckland Harbour Board.

## MEMORANDUM

499  
FROM  
2 Drawing Office

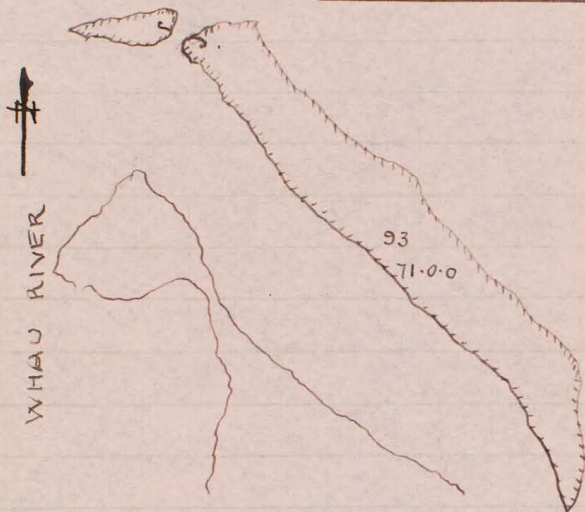
18<sup>th</sup> June 1929

To

THE ENGINEER  
AIR PORT. (CIVIL)

### Islands at Entrance of Whau River (E. side)

see attached sketch



A search was made this morning at the Land & Deeds Office to ascertain particulars of these Islands.

The table below which was taken from book A2 page 271 shows the various ownerships to date.

<u>Number</u>	<u>Receipt of Instrument</u>	<u>Nature of Instrument</u>	<u>Parties</u>	<u>Date of Instrument</u>	<u>Where recorded.</u>
17898	26/3/1861	Crown grant	Pollen, grantee	10/3/1858	69.739
139134	5/7/1897	Probate	Pollen D.	29/5/1896	R59.92
224330	4/12/1912	order	Public Trustee	3/10/1912	R218.82
265477	14/2/1919	Conveyance	Public Trustee to Auckland R.C. Bd.	16/12/1918	R292.287

A plan shown on deed No 17898 and a plan shown on deed No 265477 shows the area of 71 acres to apply to the larger island only, the other island in both cases being ill defined; whereas a plan at the Lands & Survey Dept. would indicate the area of 71 acres to apply to both islands.

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S. I. Spencer

