

C.S.

P. W. D.

1924.

No. 24/24.

C.S.O

SUBJECT.

1924

H. J. Jany

Previous Paper.

Stanley Improvement Scheme.

Quotation for Incinerator.

M. P. 722/20 142/25

MINUTES.

- Copy of Report by Mr. A. P. Neave from M. P. 722/20 8 Aug 1923 (1)
- Cutting of 'Meldrum' Rejuc Destructor. (1a)
- Copy of Minutes from Ag. Committee M. P. 722/20 13 Aug 1923 (2)
- Letter to Crown Agents (withdrawn from 722/20) 16 Aug 1923 (3)
- Specification for incinerator Encl to 3. (3a)
- Letter from Crown Agents 28 Nov 1923 Encls in separate envelope. (4)

Y. J. Submitted before passing on to Mr. Neave. G. H. 13
 Oic/sec
 4 July 1924

~~Handwritten signature~~
 5 Jan. 24

Subsequent Paper.

Mr. Keave.

Referred

GRH:17

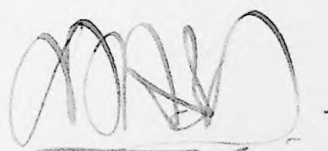
DiC/see

5 Jan'y 1924

Hon C.S.

The only incinerator offered is a thoroughly good type but its price (£2433. f.o.b. Liverpool) would appear to rule out the possibility of accepting this tender in view of the limited amount of funds available for public works.

I consider that a very much simpler form of incinerator could be devised locally which would meet requirements at only a fraction of the cost.



29 Feb 24.

Please attach ref. to which a form of incinerator was proposed by the C.S. Inspector and on which the C.S. gave his views

~~W. J. Keave~~ 3 March 24

W. J. Keave

M. P. 722/20 attached
GRH:17
DiC/see
4/3/24

Par this to G. and to G.
 Super fluen

ttlll 24 wacl 24

Colonial Engineer.
 Hon Colonial Surgeon.

Passed to you accordingly.

G.H. 17
 Officer
 24 March 1924

The Hon. Col. Secy.,

Though greatly in favour of the introduction of modern methods and appliances for the improvement of the sanitary conditions in Stanley, I would respectfully draw attention to the following:

- (1) Messrs Heenan & Froude's specification provides for the destruction of 8 to 10 tons of refuse per day of 8 hours; the quantity named includes "house and trade refuse, nightsoil together with an added proportion of dry peat to assist combustion".
- (2) As previously reported (vide 722/20) only about 2.7 tons per day of house refuse would have to be dealt with, there being practically no trade refuse. It is estimated that the collection of nightsoil during 5 nights of each week does not amount to more than 80 to 90 gallons per night and of this amount at least 50% is liquid. To absorb this moisture before tipping on to the drying hearth would necessitate a considerable quantity of peat loam and considering that the peat sheds are only cleared once a year (in November and December), ~~xx~~; for a

great part/

great part of the year the supply of peat loam would have to be specially provided.

(3) In my opinion the amount of refuse from all sources would not average, at the most, more than four tons per day.

R. M. ...
Colonial Engineer.

9/4/24.

Hon Col. Secretary

I agree with Mr. ... suggestion please.

J. H. ...

21.4.24 Colonial Surgeon

*Y. G. Submitted
9th. 17
Di. C. Sec
23 April 1924.*

Can the Consulting Engineer devise an appropriate form of indemnity?

H. H. W. 23 April 24

*Mr. A. P. Neave
Referred
9th. 17
Di. C. Sec
23 April 1924*

*Returned by request
10/5/24*

Crown Agents Letter of 21st Feb. 1924 - Encl (5)
 Copy of Letter from Incinerator Co
 of 14th December 1923 - " (5a)

To: A.A. P. Neave,

(5) and the enclosure
 transmitted for former of
 your views

~~W.H.H.~~ 17 Aug '24

W.H.H.

The incinerator offered by
 The Incinerator Company is a useful
 type but requires some modification as
 regards feeding arrangement in view of the
 foul nature of the L.C. paid contents
 to be incinerated.

I regard an overhead feeding
 platform with hopper feed and ramped
 cart approachway as mentioned in my
 report of 8th August 1923 essential to
 satisfactory working.

Encl (6)

The necessary arrangement is
 indicated on the attached rough sketch.
 If the 'two paid' system is adopted this
 platform need not be very large - a
 width equal to the length of the incinerator.

under review (6'-11" on blueprint)
should be ample but the headroom
under must be at least 6'-6" clear
for attention of fire removal of
ashes etc.

The intake should be covered
with a steel L framed corrugated
iron shelter enclosed from the prevalent
West winds but may be open to the East.

Careful selection of site
in order to reduce excavation or
work involved in approach road will
be desirable.

The quotation is for the
ironwork only & does not include for
brick or firebrick etc. I suggest a revised
quotation embodying the features above
mentioned to be obtained from the firm
in question, such quotation to be inclusive
of all brickwork, firebrick linings etc.
Complete.

If an incinerator is adopted
it will be necessary to rigidly enforce
Local By-law No 14 clause 3 regarding
"effectual application" of peat coals to
pail contents - such application
can only be regarded as "effectual"
when the amount of peat coals is
sufficient to thoroughly dry the pail
contents.

Enclosure - Sketch



14 June 1924.

Y.S.

Submitted.

Mr. Neaves proposal is to do away with the large opening of 3' x 6' 2" and to substitute a hopper feed and also to raise the height of the brickwork from 3' 8" to 6' 6" to permit of easier stocking.

2. The opening as proposed in the design appears suitable and likely to facilitate dumping and with the provision of the feeder platform and shed protection on three sides no objection should exist. A good copy could be provided if thought desirable. The increase in the height of the brickwork seems unnecessary feet — we would have thought 5' 6" would be sufficient.

3. I do not think that there should be much difficulty in making and enforcing a bye law as proposed by Mr. Neave.

4. In addition to the purchase

Of an incinerator a proper cart
for the two part system would have
to be bought. They are probably expensive
Those I know have two obies and
carry I think about 24 buckets.
The whole being completely covered,
the sides ~~the sides~~ consist of doors.

5. The one serious matter for
consideration is whether the proposed
incinerator will in fact incinerate. The
C.C. thinks not and Mr. Neave I
understand knows of no reason why
~~they~~ ^{it} should not. It is not a
satisfactory basis for launching into
expenditure?

~~W.H.~~ 15 June

H.C.S.

Will you please have this circulated
for consideration in Ex. Co in connection
with 254/1923 + 465/24

~~W.H.~~

12 July 1924

Hon. Secy. Treasurer.

Hon. Colonial Surgeon.

Circulated

W.H. Brown

for Colonial Secretary

14 July 1924

The Honourable the Colonial Secretary.

The question of disposal of refuse has been dealt with in paragraphs 69 to 75 of my preliminary report on Port Stanley dated the 23rd February, 1933 in which the provision of an incinerator for the destruction of general household refuse (as distinct from peat ashes) was advocated. The question of incineration of E.C. pail contents was not at that time contemplated as I so strongly urged the adoption of a proper water borne sewage system for the town.

2. The position has however altered owing to the decision of the Executive Council at their meeting held on 29th March, 1933 that the expense of such sewage scheme could not be met, at any rate at present, although the drainage scheme is to be designed in such manner that it can ultimately be adapted to carry sewage and that the E. C. system is to be continued but on more sanitary lines than those now in existence. It will therefore be necessary to provide for the incineration of earth closet refuse in addition to household refuse.

3. The type of incinerator I recommend is one which has an overhead feed in which the refuse is shot on to a drying hearth situated between the furnace proper and the main flue outlet so that the hot and flaming gases passing over it exercise a drying effect prior to the refuse being raked into the furnace proper. This is preferably arranged with a ramp so that carts can reach the high level and shoot the refuse direct into a hopper leading down to the drying hearth without double handling.

4. The process of fractional distillation and recovery of ammoniacal liquor advocated by the Colonial Surgeon whilst admirable in suitable situations could not under local conditions be recommended as an economic

proposition. The provision of forced draught either by way of steam or compressed air from a centrifugal fan or 'Roots' blower is advantageous but it is not absolutely essential to satisfactory incineration.

5. Whilst a suitable incinerator can be designed locally in view of local conditions regarding construction I do not recommend this course.

6. The Colony is totally lacking in natural resources in way of brick, firebrick or iron or steel and practically the whole of the materials (with the exception of aggregate for concrete foundations) would have to be imported, and owing to the scarcity of skilled labour or modern workshops I do not consider that any advantage would be gained over the practical course already proposed in paragraph 75 of my preliminary report above mentioned of obtaining competitive tenders for supply from one of the several English firms who specialise in this class of work, and whose wide experience doubtless covers destruction of refuse in places where peat is the commonly used fuel.

7. I attach specification and submit that tenders for supply of an incinerator be invited through the Crown Agents from the following firms:-

Messrs Manlove & Alliott & Co. Ltd.,

Broomsgrave Works,

Nottingham.

✓ Messrs The New Destructor Co,

Walter House,

Bedford Street,

Strand, W.C. 2

✓ Makers of the Horsfall Destructor.

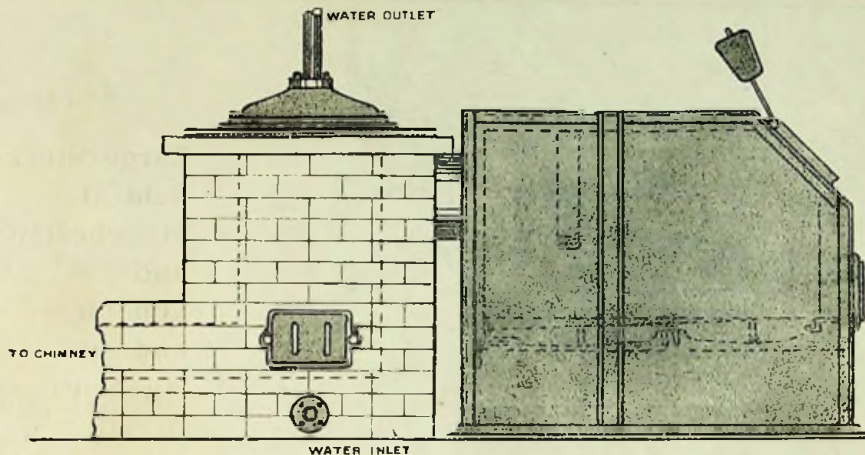
Messrs Haldrams Ltd.,
108 Victoria Street,
Westminster, S W. 1.

Messrs Heenan & Frowde Ltd.,
Lorchester Engineering Works,
Lorcestester.

8th August, 1913.

(sgd) A. A. P. Heave,
Assoc M. Inst. C. E.

MELDRUMS LIMITED



WORKSHOP HEATING
FROM
INDUSTRIAL REFUSE
BY MEANS OF
THE "MELDRUM"
REFUSE DESTROYER
AND
WATER HEATER.

REAL TANGIBLE ECONOMY.

Live steam — using Coal — is an expensive means of Works Heating — but a "Meldrum" Destructor will efficiently transform waste into useful heat for that purpose at practically no cost. Any waste from dry paper and sawdust to wet spent tan, hops, fruit pulp, etc. Many and varied are the industries to which we have applied our experience — one Tannery consumes 120 tons per week of wet spent tan and tan-pit refuse and heats a Lancashire Boiler; another Tannery uses 20 tons per day of Myrabolums and Mimosa Bark and heats a Babcock Water Tube Boiler; a big Shipyard burns 40 tons per 24 hours and so raises all the steam required in its Smithy; another big Shipyard burns 50 tons per day, and so on; **WRITE US — WE MAY BE ABLE TO GIVE YOU A SIMILAR SAVING.** Ask for List 106 D and tell us just what waste you have for disposal. Small quantities may have possibilities

7283

Ask for List No. 106 D. or above; 106 F. and S. on Forced Draught and Mechanical Stokers; 106 C. on Chemical Plant.

London Office: 108, Victoria Street, Westminster, S.W.1.

TIMPERLEY nr. MANCHESTER

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A

Copy of Minute from the Acting Governor, dated the 15th of August, 1953.

.....

Letter to Crown Agents please requesting them to call for tenders on the lines of the draft and stating that this Government will be glad to receive the tenders for consideration, as in the absence of knowledge as to cost, it has not yet been definitely decided to install an incinerator.

.....

RECEIVED

[Faint handwritten text, possibly a signature or date]

722/20.

16th August,

23.

Gentlemen,

I am directed by the Acting Governor to inform you that the question of disposing of the refuse of Stanley by incineration is at present receiving attention, and that although, in the absence of a knowledge of the cost of an incinerator, it has not yet been definitely decided to adopt this method, it would be of great assistance if, in the meantime, quotations could be obtained for consideration.

2. A list is attached of firms which have been suggested as makers of the plant required and I am to request that you will be so good as to call for tenders from them on the lines of the enclosed specification.

I am,

Gentlemen,

Your obedient servant,

G. R. L. Brown.

The Crown Agents
for the Colonies,

4, Millbank, Westminster,

London, S.W. 1.

for Colonial Secretary.

In duplicate.

5 copies.

LIST OF FIRMS SUGGESTED AS MAKERS OF INCINERATORS.

Messrs Manlove & Alliott & Co: Ltd:,
Brooms Grove Works,
Nottingham.

ø Messrs The New Destructor Co.,
Walter House, Bedford Street,
Strand, W.C. 2.

Messrs Meldrums Ltd.,
108 Victoria Street,
Westminster, S.W. 1.

Messrs Heenan & Frowde Ltd.,
Worcester Engineering Works,
Worcester.

ø Makers of the Horsfall Destructor.

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3a

PORT STANLEY, FALKLAND ISLANDS.

INCINERATOR.

Tenders are invited for the supply f.o.b. Liverpool of a small incinerator suitable for dealing with the whole of the general refuse and E.C. pail contents of the town.

The contractor is to base his tender on the following information :-

The town is a small one consisting a population of about 900 dwelling in about 200 houses and workshops etc which latter are small in numbers and size; a margin of at least 10% is to be allowed on these figures for future development. The climate is very similar to the North of Scotland, i.e. generally cold with a good deal of wet and very windy.

The fuel universally used is peat which burns to a fine ash the calorific value of which is practically negligible. There are no trees in the Colony and wood is consequently extremely scarce and practically all odd waste wood is used for lighting fires. Consequently refuse to be destroyed will have a low calorific value which will be obtained mostly from the fresh peat combs, (i.e. sifted unburnt peat dust from the peat store floor) which is used in the earth closets in lieu of loam or sand.

The incinerator

The incinerator should be capable of properly incinerating on trial run 1 ton per hour or 8 tons per 8 hours day of general domestic refuse including offal from butcher's shops and E.C. pail contents, and the design is to include for ample arrangements for readily and efficiently getting rid of peat ashes from under the furnace observing that the combustion of peat leaves a large quantity of fine ash which tends to choke the draught unless raked clear from the fire and also tends to burn out the fire bars.

The site of the incinerator will be one sloping downhill from North to South situated to the East of the town; prevailing winds being from the West. The general slope of the ground is about 1 in 10 but a position could probably be found with a slope of about 1 in 5., and it will be desirable to have something in the nature of an inclined road and tipping platform so that refuse can be shot from carts direct into the hopper feeding the drying hearth without lifting by hand. In view of the objectionable nature of the E. C. pail contents the hopper mouth should be of suitable design and dimensions to readily take refuse. A natural draught system is to be preferred as no electric power is available for forced draught, and if forced draught is required the source of power will have to be taken from a boiler in the incinerator flue and steam led to steam jet or fan all to be included in the tender if required.

Concrete foundations and reinforced concrete tipping platform if required will be provided locally.

The contractor is to give particulars as to the capacity of the plant for which he quotes and is to state whether a natural or forced draught system is intended, and special attention is drawn to the nature of the household refuse in its lack of coal ashes. He is to state also the approximate quantity of fresh peat or peat comb likely to be required (if any) to be added to the general refuse in order to sufficiently raise its calorific value sufficiently for the proper hygienic destruction of the refuse. He should also give some indication as to the extent of concrete foundations etc: required for the plant observing a good foundation is to be met at a comparatively shallow depth in the stiff clay and rock on the site.

The contractor is to include in his tender for the supply f.o.b. Liverpool of the whole and complete installation including steel plate smoke stack and guys and fixings etc: all properly crated or bundled for safe transit and ready for erection on site and all properly marked and lettered to agree with erection drawings or key plans to accompany the materials, and also two spare sets of firebars as replacements.

4



ALL COMMUNICATIONS
TO BE ADDRESSED TO THE
CROWN AGENTS FOR THE COLONIES.

THE DATE OF THIS LETTER BEING QUOTED,
AND THE FOLLOWING REFERENCE: 148 W/Falkland Is.1700 4, MILLBANK,
TELEGRAMS. "CROWN, LONDON."
TELEPHONE. 7730 VICTORIA.

WESTMINSTER,
LONDON, S.W. 1.

28th November 1923.

Sir,

W/Falkland Islands Requisition No.1700

I have the honour to acknowledge the receipt of your letter No.722/20 of the 16th August, relative to the question of disposing of the refuse of Stanley by incineration, and the question of obtaining a suitable incinerator for this purpose.

2. We invited tenders for the supply of an incinerator to the specification which accompanied your letter, and I enclose for your information, Messrs Heenan & Froude's tender, accompanying letter of the 31st October, specification and prints, from which it will be clear to you, the type of machine the firm propose to supply.

31.10.23

4

3. Messrs Manlove, Alliott & Co.Ltd., state that they are unable to supply an incinerator sufficiently large to meet your requirements. Messrs Meldrums Ltd., and The New Destructor Co. did not quote.

4. In the event of you wishing us to place an order for an incinerator similar to that quoted for by Messrs Heenan & Froude we shall be glad if you will return their tender and accompanying papers with your indent.

I have the honour to be,

Sir,

Your obedient Servant,

for Crown Agents

The Colonial Secretary,
Falkland Islands.

GRL

s ls



5

ALL COMMUNICATIONS
TO BE ADDRESSED TO THE
CROWN AGENTS FOR THE COLONIES,
THE DATE OF THIS LETTER BEING QUOTED,
AND THE FOLLOWING REFERENCE: 31 V/Falkland Is. 1700
TELEGRAMS, "CROWN, LONDON."
TELEPHONE, 7730 VICTORIA.

4, MILLBANK,
WESTMINSTER,
LONDON, S.W. 1.
21st February 1924.

Sir,

Falkland Islands Requisition No. 1700

With reference to our letter No. 148 dated 28th
November, with which we enclosed a tender from Messrs.
Hosken & Froude for a refuse destructor, I have the
14th Dec: '23
honour to enclose a letter dated 14th December from the
Incinerator Company, together with shipping specification
and blue print which furnishes particulars of a small
incinerator for night soil for a population of 1,000
people

I have the honour to be,

Sir,

Your obedient servant,

W. H. Birchall

For Crown Agents.

The Colonial Secretary,
Falkland Islands.

h.

WHE

25.

THE INCINERATOR COMPANY.

G. WATSON.
M. INST. C.E.
MEM. I. MECH. E.

TELEPHONE:
GERRARD 1840.

54
WALTER HOUSE,
BEDFORD STREET,
STRAND,
LONDON, W.C.2.

14th. Dec. 1923.

GW/ACM.

The Chief Engineer's Office,
Crown Agents for the Colonies,
4, Millbank,
S.W. 1.

15 DEC 1923

Dear Sir,

With reference to the enquiry received this morning from Mr. Fraud, we have much pleasure in sending you herewith in duplicate, a blue print of our "Duplicate D", destructor, as designed for the use of Urban District Councils and other local Authorities.

This furnace as you will see is practically two of the "D" type built together to form one large combustion chamber 6 ft x 3 ft. on plan. This enables rather bulky articles, such as condemned mattresses and such like to be burnt without cutting up.

It is also a most efficient furnace for burning refuse of the kind indicated, and will take the place of sanitation in any community such as you mentioned, having a population of from 900 to 1,000 people. It is difficult without having exact data of the proportion of moisture and fuel value of the refuse to give exact particulars, and of course anything in the nature of a definite guarantee is impossible, but it is well ~~known~~ *assumed* that with an apparatus such as this and with sufficient heat added to absorb the moisture you would easily be able to do the whole sanitation for a population of 1,000 people. Assuming that the peat is fairly dry, we should think that a mixture of about half and half of wet night soil and peat should burn all right.

Our price for the ironwork, packed for shipment and delivered f.o.b. in this country would be £92, plus

10% for the cost of packing and putting f.o.b.
= £9/4/- giving a total of £101/4/-.
Enclosed we send you approximate shipping specification
to enable you to calculate freight.

We are entirely at your service for any further
information which might be of use.

We are, dear Sir,

Yours faithfully,
For THE INCINERATOR COMPANY.

H. Watson

THE INCINERATOR COMPANY.

G. WATSON.
M. INST. C.E.
MEM. I. MECH. E.

TELEPHONE:
GERRARD 1840.

WALTER HOUSE,
BEDFORD STREET,
STRAND,
LONDON, W.C.2.

14th. Dec. 1923.

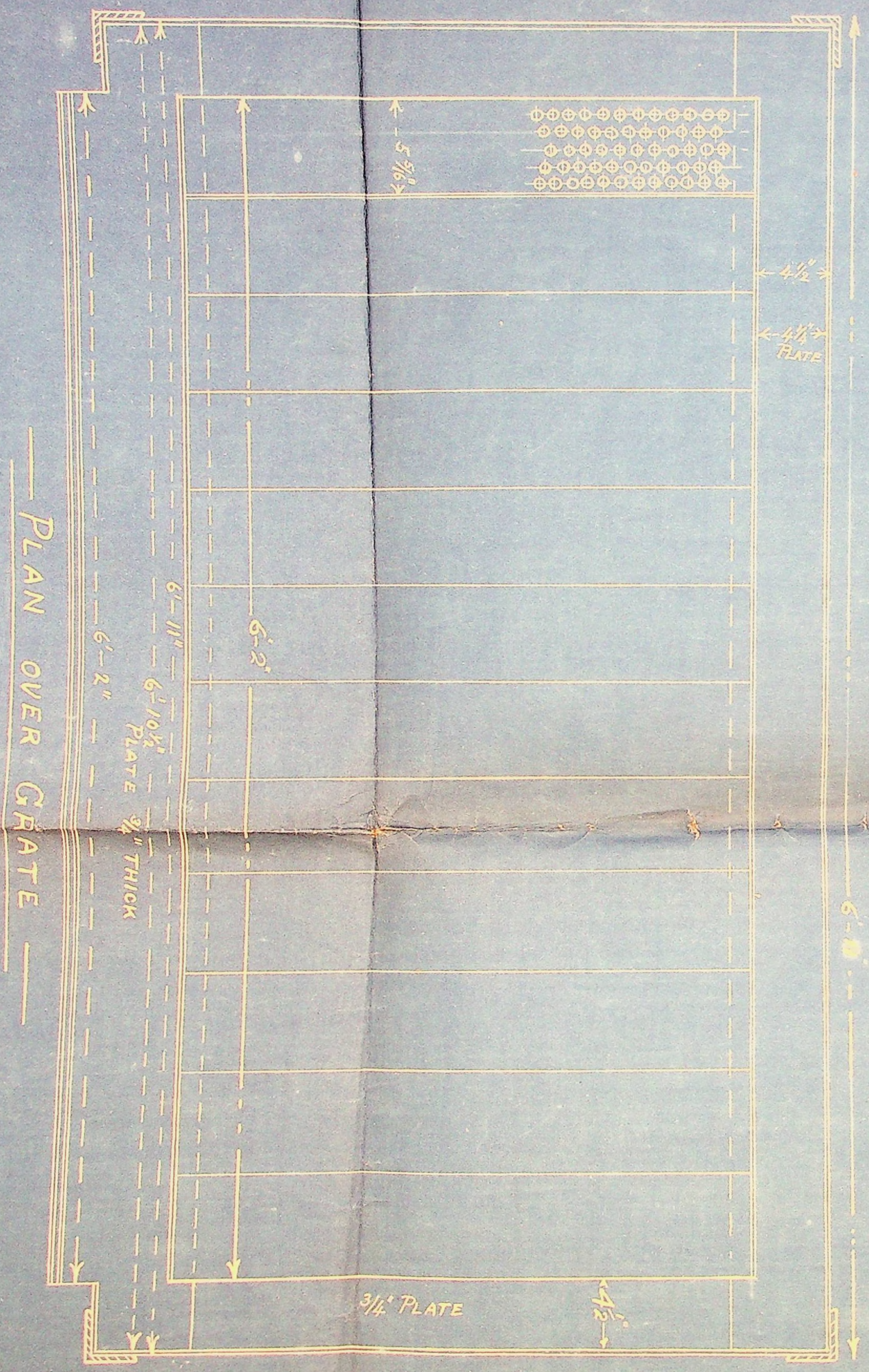
Approximate Shipping Specification for the
"Duplicate D" Type, Incinerator.

4 Cases Two 3'6" cube.
Two 5'6" x 1'6" x 1'6".
One bundle of rods 7'0" long x 4" diam.

Gross weight 1 ton 4 cwts.

PATENT INCINERATOR TYPE

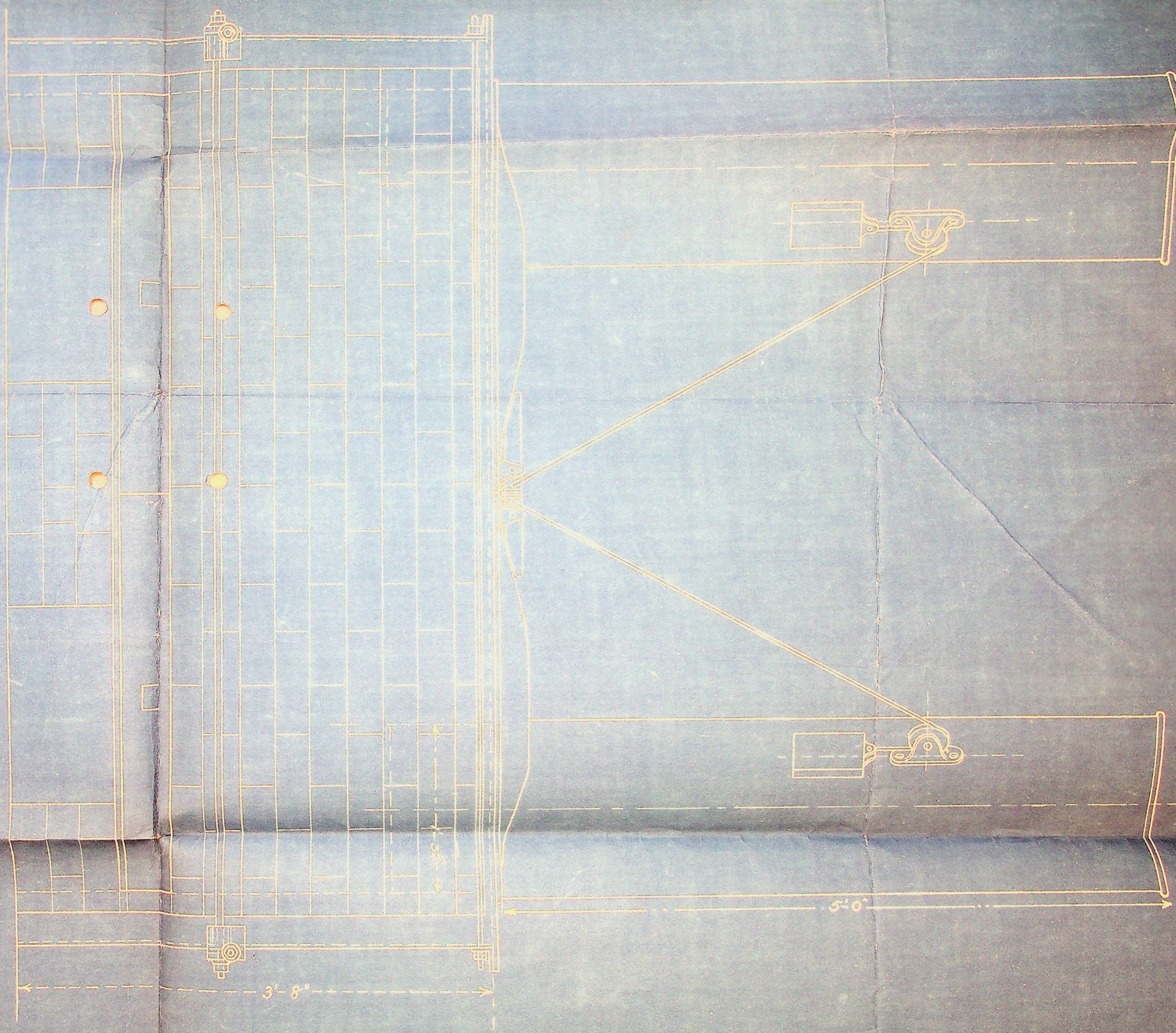
SCALE:



1/2 INS. = 1 FT.

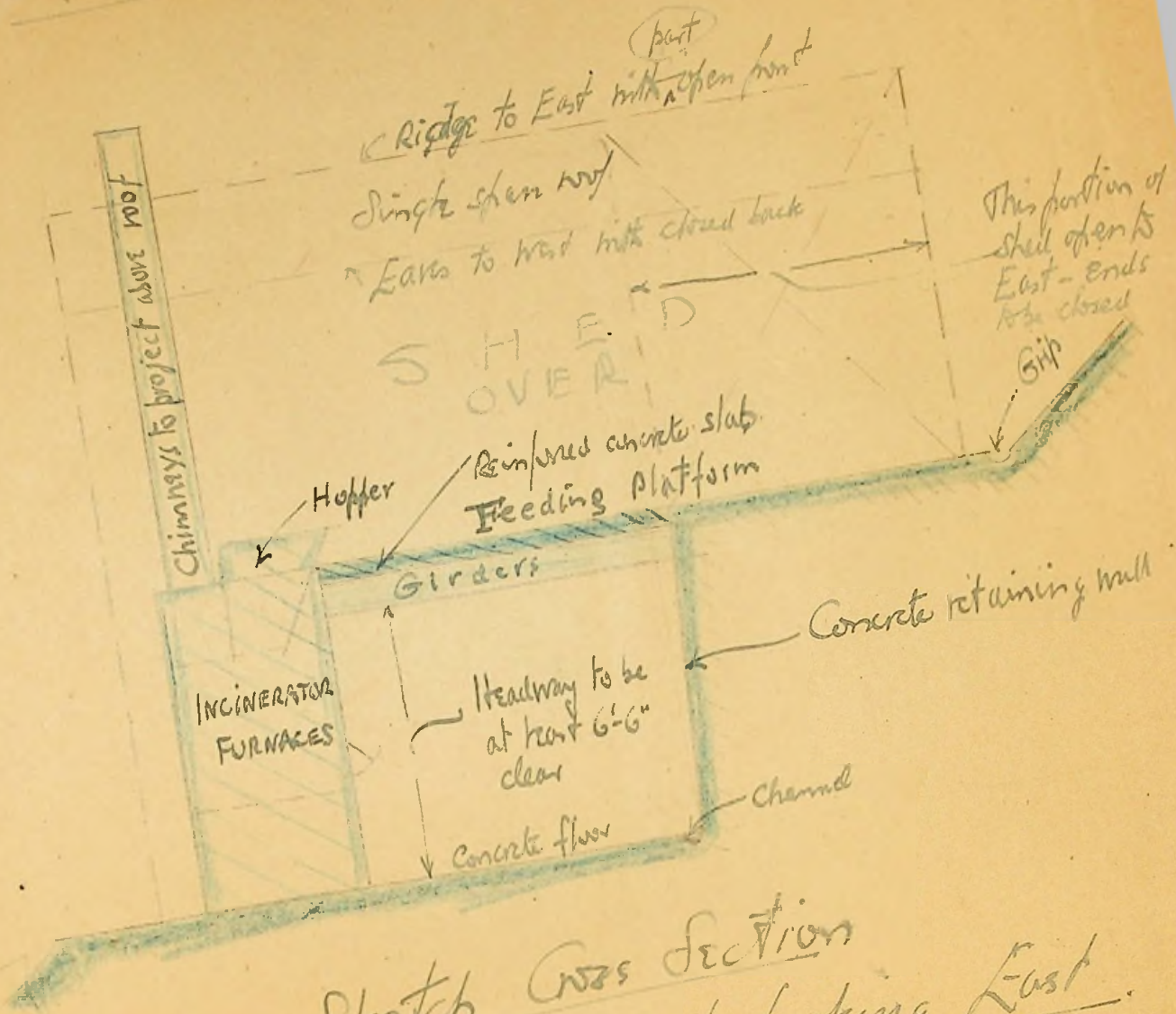
"DUPLICATE"

ELEVATION



THE INCINERATOR COMPANY
 C. WATSON M.C.E., M.I.M.E.
 WALTER HOUSE
 STRAND, W.C.

Proposed Arrangement for Incinerator



Sketch Cross Section
from West looking East

N.B. Rough sketches for guidance - not to scale

[Signature]
14/6/24