



*caring about you & your environment*

File No.: B/18/2/1

30 November 1999

Mr Gary O'Meara  
Water Supply Manager  
Hutt City Council  
Private Bag 3 1-9 12  
Lower Hutt

Dear Gary

### **Petone Water Supply**

Thank you for your letter advising the results of surveying Petone residents about whether or not their water supply should be fluoridated.

Further information was promised by the Wellington Regional Council as part of the decision making process. We have now completed the following:

- A detailed preliminary budget for changes to the wholesale water supply system so Petone could be supplied with unfluoridated water. The maximum estimated capital cost is \$410,000 which includes a contingency sum of 15 percent. The total is less than the \$550,000 initially suggested. This was based on no more than a concept.

If the work proceeds then it is possible that a liquid form of fluoride, rather than a powder form, may be used at Gear Island. This would reduce the capital costs by \$30,000. There are other factors to consider and these have not been fully explored at this stage. Out of interest, I have attached the draft process and instrumentation diagrams for the changes at Waterloo and Gear Island.

- Consultants have provided a budget price of \$3,000 for applying for a variation to the Gear Island resource consent. Costs associated with processing the application and a hearing are additional.

We have been asked to comment on the difference in operating costs by closing Buick Street and supplying Petone water from the Waterloo water treatment plant. An attachment provides the details.

As far as I am aware this completes the process of providing outstanding information to Hutt City Council.

Yours sincerely



M D KENNEDY  
Strategy and Assets Manager

Copies to: ~~Tim Davin  
Group Manager, Utilities Policy  
Porirua City Council  
PO Box 50218  
PORIRUA~~

~~Eachlan Wallach  
Director of Operations  
Upper Hutt City Council  
Private Bag 907  
UPPER HUTT~~

Charles Willmot  
Manager, Water and Waste  
Wellington City Council  
PO Box 2199  
WELLINGTON

Encl.



## Operational Changes

1. Petone water supplied from Waterloo Water Treatment Plant (WTP) instead of Buick Street Pumping Station.
2. Petone is provided with unfluoridated water, if requested by Hutt City and agreement is reached on funding the capital works.

## Buick Street Costs 1998/99

- Recorded optional costs for 1998/99; \$69,215  
These costs will not be incurred once Buick Street was closed.

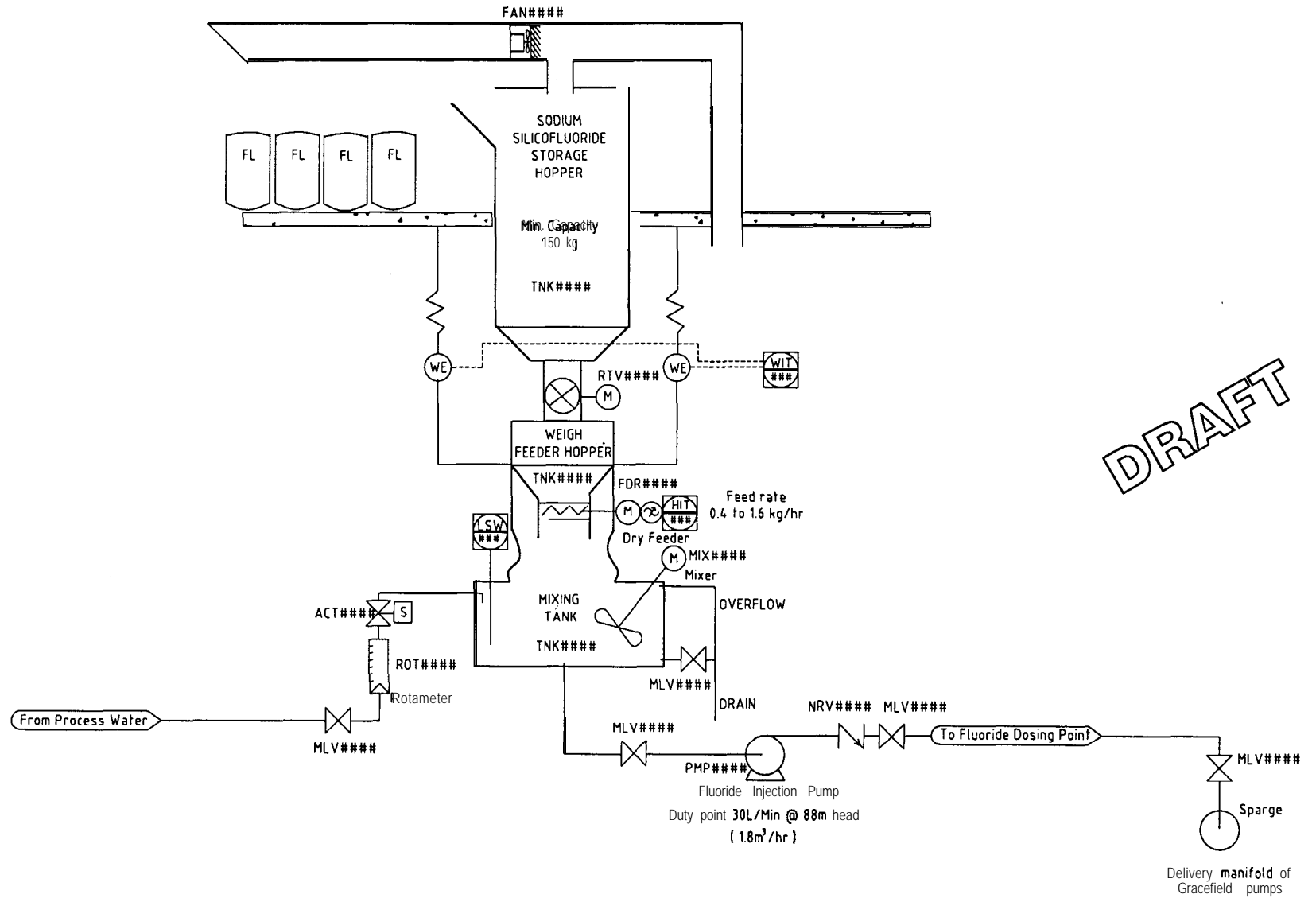
## Waterloo Water Treatment Plant to Supply Petone (Rahui Reservoir)

- Energy costs as per Buick Street (network costs are avoided) \$19,000
- Additional energy to pump to new Rahui reservoir 20m higher than old reservoir \$6,200
- Allowance for marginal pump maintenance at Waterloo WTP \$1,000
- Allowance for maintaining Wellington Regional Council main along Petone foreshore \$10,000
- \$36,200
- Saving from closing Buick Street \$33,000

## Fluoridation

Costs if Petone is supplied with unfluoridated water

- Maintenance and operation of new fluoridation equipment at Waterloo and Gear Island WTP \$10,000
- Depreciation \$12,000
- \$22,000
- Annual saving from closing Buick Street and providing Petone with unfluoridated water \$11,000



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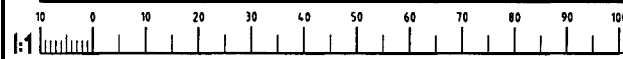


UTILITY SERVICES DIVISION OPERATIONS GROUP		
DESIGN	JOHN DUGGAN	
DRAWN	JAYTUNGA MILLA	11/99
CHECKED		
RECOMMENDED		
APPROVED		

**WATERLOO WATER TREATMENT PLANT**  
**PROCESS AND INSTRUMENTATION DIAGRAM**  
**PROPOSED SODIUM SILICOFLUORIDE DOSING SYSTEM**  
**FOR GRACEFIELD RESERVOIR SUPPLY**

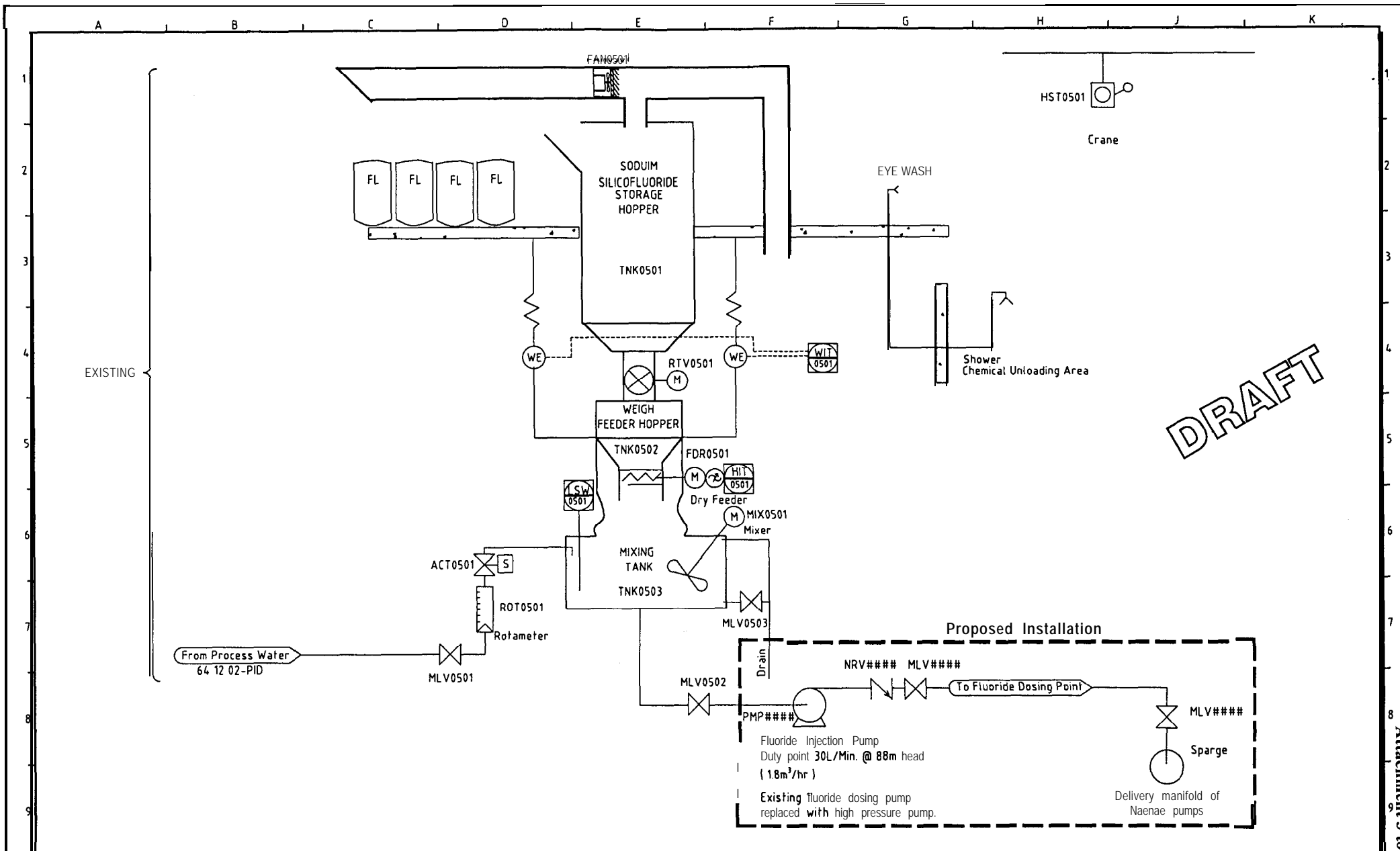
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M.F. B/15/5/1  
SCALE NTS SHEET N° 1 OF 4 SHEETS  
DRAWING N° P1187/1



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Attachment 3 to Report 99.179



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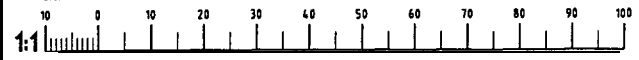
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<b>UTILITY SERVICES DIVISION OPERATIONS GROUP</b>		
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**WATERLOO WATER TREATMENT PLANT**

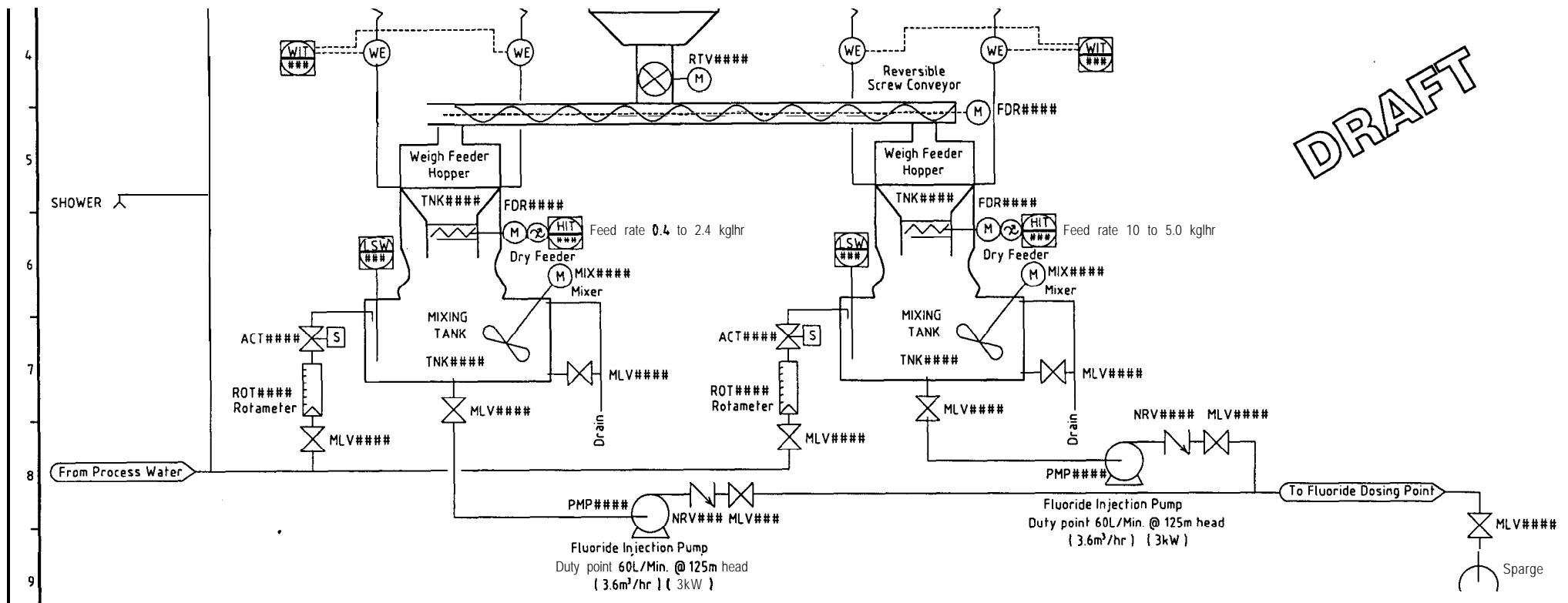
**PROCESS AND INSTRUMENTATION DIAGRAM  
PROPOSED ALTERATIONS TO FLUORIDE DOSING SYSTEM  
FOR NAENAE RESERVOIR SUPPLY**

REVISION	-	FILE
M.F.		B/15/5/1
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DRAWING N°	P1187/2	



Attachment 5 to Report 99/728  
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AMENDMENT	DWN	CHK	DATE

**THE REGIONAL COUNCIL**

**UTILITY SERVICES DIVISION OPERATIONS GROUP**

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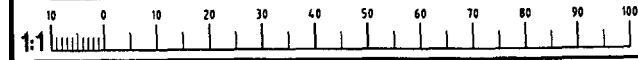
**GEAR ISLAND WATER TREATMENT PLANT**

**PROCESS AND INSTRUMENTATION DIAGRAM**

**PROPOSED SODIUM SILICOFLUORIDE DOSING SYSTEM**

**FOR WELLINGTON SUPPLY**

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3 to Report 99.729

