

RESCOM EVERGREEN MUIZENBERG

MINUTES OF THE RESCOM MEETING at 09h40 on 26 JULY 2022

PRESENT

RESCOM

OK Owen Kinahan

EF Ed Fletcher

MO Mike Odd

HT Hugh Till

EK Erik Kiderlen

APOLOGIES

SW Sue Wood

MANAGEMENT

DD Derek Drew

KW Kim Whitworth

MINUTES SECRETARY

Michelle Jones-Phillipson

ITEM	NARRATIVE	ACTION
1	The next meeting is scheduled for 16 August 2022 at 09h30. This is now a monthly meeting every second Tuesday of the month. Portfolio reports need to be delivered by the previous Thursday 11 August 2022 into the Rescom post-box. Agenda to be circulated by Monday 15 August 2022.	
2	Approval of minutes of 28 June 2022.	
3	Matters arising: EK reported back. Refer to his document attached. Fluctuations of hot water (Hot water is dependent on time of day, pressure and temperature, opening of taps reduces hot water pressure.) EK will report back by the next Rescom meeting. DD to appeal to HO to put up solar panels. DD responded that conversations were taking place with the City Council and the preference was for the Bistro block roof and not the apartment block roof.	EK

4	Energy partners have assessed Evergreen Muizenberg.	DD
5	Recycling letter – Derek to send out letter to residents.	DD / MO
6	Fire drill – Fire blankets have been installed. Current evacuation marshals, for the houses, are being recruited and being updated. These services are purely voluntary.	DD/KW
7	MO has confirmed that the security checks are effective and working well. Checking ID and registration. EK reported that a family member of his went through security without checking at 08h30 this morning. No phone call either. DD to follow up on this incident. -OK requested to Derek that a zebra crossing needs to be painted from the Bistro sidewalk to the board walk. DD to get a quote and report back.	DD
8	HT gave feedback on progress on Health talks – see attached proposal – Medical support person The best way forward is recommended to have a paramedic versus a nurse. The hours of the intermediate life support paramedic to be present 5 days a week, 9 hours a day. The emergency is the use of the telecare. The paramedic would be referred to as a medical support unit. This would cost R70 per person per month. Refer to the attached report by Hugh for further details. Once the Rescom agree on a way forward. Consult with Janice Behr. Then a referendum is required to send out to residents giving 2 x options for vote. OK thanked HT for this comprehensive report. OK asked HT how many call outs there was during the past 10 years. Telecare could report back on these calls. DD reported back that there are 2 emergency calls per month. 20 red button hits a month - a special Rescom meeting needs to be rescheduled for clarity re the health.	HT
9	-Bistro – DD has requested quotes from other food service suppliers to take it on risk. DD has organised a tour on 2 August at 11h30 to view WPC off-site Production kitchen facility. The Rescom are welcome to join. Liaise directly with DD or KW to arrange attendance. HT to ask catering committee to join the tour	RESCOM
10	-Security – MO holds the security portfolio. -Garden – EF holds the garden portfolio. See EF portfolio report for resident appeal to maintain their own verges.	MO EF
11	Christmas market – a team is collecting the White Elephant items. OK appealed to KW to keep sending documents appealing for white elephant donations. KW will send out WhatsApp.	OK KW
12	Library – Viv T'Hart is managing the library. Books no longer required for the library will be distributed to the white elephant and charities.	OK

	<p>Additional bookshelves are requested. Residents to be asked if the dartboard can be removed.</p> <p>-Camera club – is there an alternative for the photographs so as to create more space for additional bookshelves.</p> <p>-Mornay de Koker is employee of the month for July. Nominations for August to be submitted to the Rescom box by Thursday 11 August, 2022.</p> <p>-MO – see attached security report</p>	<p>RESCOM</p>
<p>13</p>	<p>-Mrs Turner A332 reported back that the staff were still using the residents' lift. Derek confirmed that they would be getting written warnings.</p> <p>-Audrey Marshal H63 has queried building and liability insurance and stated that it is the liability of Evergreen.</p> <p>-Marlene Burt A240 re electricity and water queries. Motla to be invited to explain to residents regarding their accounting and costing HT requested that accounting/management can give us a record of cost and recovery of hot and cold water. Are we paying too much or too little? The question being that what is being recovered by management is what is being spent.</p> <p>-Allyson Vine A25 re the bump in the carpet. Derek has requested a quote reduce the bump in the carpet in the passage.</p> <p>-Michelle Jones-Phillipson A6 – see letter attached requesting that management acknowledge that there has been an increase for Apartment residents this year.</p> <p>-RESCOM support the levy cycle date to 1 March. An addendum to each resident will follow.</p> <p>-Lydia Hirschmann A17 noted that residents are coming into the Bistro barefoot. She was referred to Rescom by management. DD addressed this.</p>	
	<p>Meeting adjourned 11h10</p>	

GARDEN INSPECTION – July 6th.
EDWARD FLETCHER

PHASE 1.

- Grass growing between the road and curb/driveway at Units 10 and 49.
- A very shabby section of the verge between Units 32 and 33.
- A very strong smell of urine outside Unit 48 and to a lesser extent around Units 40 to 42.

PHASE 3.

- Unlike Phase 1, there is a wide-spread incident of weeds growing at the junction of the brick road and the curb.
- Evidence of grass growing through the road is especially apparent on the south section of the road between Units 91 and 106, and at Unit 71.
- Verge vegetation growing through boundary fencing at Units 98, 99, and 110.
- Grass taking over in the verge by the Phase 3 units sign.
- Mildew (or aphids) on milkwood trees on verge the verg on the south side between Units 91 and 106.

UPDATE as at July 15th.

PHASE 1.

- Urine smell. Advised it is emanating from the type of compost used.

PHASE 3.

- Weeds in the road curb junction. Have been scoured out.

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Sunday Times
17 July

By GILL GIFFORD

● From R2m to get off the grid to ingenious solutions costing almost nothing, South Africans are on a mission to combat the devastating impacts of load-shedding.

Alternative energy solutions are top of mind for many after enduring several outages a day for the past three weeks, with no end in sight.

This month the cost of electricity went up an average of 9.6%, thanks to tariff hikes approved by the National Energy Regulator of SA. Based on an average price of about R2.50/kWh and working on Eskom's estimate of 900kWh a month for the average South African household, this equates to a hefty monthly bill of about R2,250.

Solar power – photovoltaic panels converting sunlight to energy – is increasing in popularity as prices drop and the technology improves, and it's more environmentally friendly than diesel generators.

For those desperate to dodge load-shedding, the options are vast, including the following:

Getting off the grid: R2m

Clinton Pepper is the owner and MD of MCR Energy, which specialises in solar power solutions and tailors its options to the household's specifications.

"Some guys will just base it on your electricity bill, but we don't work like that. We come in, attach a meter to your DV board and see what your consumption is at different times of day," he said.

"This is to give us an idea when your biggest need is, if you are pulling electricity when the sun is out or if you need power from batteries at night."

Going completely off the grid is an expensive exercise because it means banking enough power to continue for several days without sunshine in case of gloomy weather or persistent rain.

"It's not necessary, especially if you keep Eskom as a back-up for those times when you have four days of rain," Pepper said.

The cost of going completely off-grid and onto solar power would be about R1.5m for a four-bedroom family home.

"The most basic system would be a 5kW inverter with two 5kW batteries and a 5kW peak," he said, which is the average and accounts for about 80% of the systems he supplies.

"Of course you get much bigger systems –

trying to get off the grid," Pepper said. This client is now 95% independent and, about R2m later, is able to power "a heated pool, jacuzzis and all of that kind of thing without Eskom".

Rent to own: About R2,000 a month

Vincent Maphosa is the founder and CEO of Wetility, which offers rooftop hybrid solar systems of up to 1MW a month for single dwellings, residential complexes and small and medium enterprises.

"We received support from MultiChoice Accelerator and Dotcom, and we have partnered with two of the five leading banks that offer financing deals on our products. We also offer our own lease-to-own deals where customers pay zero upfront and pay for their system over a lease period that can be anything from 12 months to 10 years," he said, adding that an average 10-year deal would mean payments of about R2,000 a month.

"For a cash customer, you are looking at an outlay of about R170,000, including maintenance for five years, monitoring, remote management, compliance and registration with the council," Maphosa said.

The sign-up process involves registering on the Wetility website and submitting an average electricity bill and residential address to generate a calculation for a hybrid solar solution.

"From initial contact to fully installed, up and running, you are looking at no more than 14 days," said Maphosa.

The deal includes solar panels, an inverter and batteries.

"It doesn't take you completely off the grid, but you will experience between 50% and 75% saving on your electricity bill because of the power you receive from the sun," said Maphosa. In time, the system would pay for itself.

The generator option: from R5,000, plus fuel

Generator prices range from R3,000 to R200,000, and they run on petrol or diesel. The cheaper options can power the basics in a home, including television, lights and Wi-Fi, while the more expensive options can power most of your home.

But as petrol and diesel prices continue to rise, generators can be expensive to keep running.

For Neil Golding, who runs his shop, DC Coffee Company, in Fourways on generator power during load-shedding, three weeks of daily outages is taking its toll. Two years ago he purchased a 6.5kVA generator for R13,000. But with business having expanded and load-shedding intensified, he bought another 8kVA generator, also for about R13,000.

"With the current load-shedding having us go down for several hours a day, and our coffee machines pulling a lot of amps, particularly on busy days, we are spending about R700 on petrol every two or three days. So out of nowhere we have just incurred this

C W & M W Burt

1st July 2022

Apartment 240

Muizenberg

Re Water Account

We have just received our Water Account dated 27/04/2022 to 25/05/2022. Only to find that the total water consumption amounts to R68.13. Added to that is amount of R76.71 and R63.54. I'm told by Kim that those last two figures totalling R140.24 are for availability and heating.

HOW can the heating charge be for the full water consumption?

HOW is the figure of R76.71 arrived at?

I find it inconceivable to arrive at these figures. Surely when a building is erected and sold to occupants it wouldn't be able to be sold in the first place without the water connection BY THE BUILDERS/ OWNERS. The other problem which is peculiar to this building is that the taps are not separated hot and cold. In order to have a shower or wash dishes one has to run an excess of the required hot water to get it hot enough for the job in hand.

I look forward to an answer to this dilemma.

Yours faithfully

Marlene W Burt.



Yours faithfully

Monday, 11 July 2022

To : Owen Kinahan; Sue Wood
 Cc: Derek Drew, Kim Whitworth
 From: Ray and Pat van Eyssen
 RE: **Dates of the Meter Reading versus the Date on the Motla Statement**

Dear Owen & Sue,

Every day we read our own Water Meters and have recorded the readings since January 2020.

In the last week of the month the Meters in our passageway are read by representatives from Motla.

When we receive our Monthly Levy Statement / Motla Statement we always compare the readings – and to date our readings have compared favourably with those on the statement.

I would like to know why the date of the Meter Reading and the date on the Motla statements are totally different?

Although the Meter is read towards the end of the month – yet the date on the Motla Statement will reflect that the readings were taken almost 6 to 8 weeks prior.

See example:

Mr Raymond G. & Mrs Patricia A. Van Eyssen Apartment 231 Evergreen Lifestyle Village Sunrise Boulevard Muizenberg 7945		Tax Invoice No	3015VA03/202207
		For the Month	2022/07/01
		Deposit	
		Monthly Charges Generated on 2022/06/01	
		Queries	Sharon van der Horst debtorsevg@evergreenlife Tel: +27 21 702 3200 Fax
Print			
Allocation	Remarks	Exclusive	
6/01	Receipt (Debit Order)	Balance B/f	0.00
7/01	Recovery Water	Water Recovery for Period 27 April 2022 - 25 May 2022	130.44
7/01	Recovery Sewerage	Sewerage Recovery for Period 27 April 2022 - 25 May 2022	85.97
7/01	Recov Elec Consump Tariff	Recovery Electricity Consumption Tariff - Period 27 April 2022 - 25 May 2022	26.91
7/01	Recover Elec Avail Tariff	Recovery Electricity Availability Tariff	76.71

I don't understand! We look forward to your response.

Kind regards.

Ray & Pat van Eyssen (Apt. 231).



Mr Raymond G. & Mrs Patricia A. Van Eysen
 Apartment 231
 Evergreen Lifestyle Village
 Sunrise Boulevard
 Muizenberg
 7945

Tax Invoice & Statement

Entity	Evergreen Lifestyle Villages (Pty) Ltd		
Entity VAT No		Entity Reg No	2008/014187/07
Property	EGO - Muizenberg Operations (3015)		
Unit No	A231		
Tax Invoice No	3015VA03/202207	Recipient VAT No	
For the Month	2022/07/01	Recipient Reg No	
Deposit			
Monthly Charges Generated on 2022/06/21			
Queries	Sharon van der Horst debtorsevg@evergreenlifestyle.co.za Tel: +27 21 702 3200 Fax: +27 21 702 3201		

Printed: 2022/06/21 15:05:52 Page: 1

Date	Allocation	Remarks	Exclusive	Tax	Inclusive
		Balance B/f			4,498.47
2022/06/01	Receipt (Debit Order)		0.00	0.00	-4,498.47
2022/07/01	Recovery Water	Water Recovery for Period 27 April 2022 - 25 May 2022	130.44	0.00	130.44
2022/07/01	Recovery Sewerage	Sewerage Recovery for Period 27 April 2022 - 25 May 2022	85.97	0.00	85.97
2022/07/01	Recov Elec Consump Tariff	Recovery Electricity Consumption Tariff - Period 27 April 2022 - 25 May 2022	26.91	0.00	26.91
2022/07/01	Recover Elec Avail Tariff	Recovery Electricity Availability Tariff	76.71	0.00	76.71
2022/07/01	Levies Rec		3,709.23	0.00	3,709.23
2022/07/01	Recovery Rates		411.23	0.00	411.23
2022/07/01	Recovery Refuse non-muni.		28.26	0.00	28.26
Areas/Prepaid (-)					0.00
Current Month Charges					4,468.75
Amount Due					R4,468.75

PTO →

R4,468.75 will be recovered by Debit Order FROM Nedbank, Branche No: 198765, Account No: xxxxx0994 on day 1 as per agreement.

Debit Order Disclaimer

Evergreen Developments Group Amdec House Silverwood Close Steenberg Office Park Tokai 7945	
Queries	Sharon van der Horst debtorsevg@evergreenlifestyle.co.za Tel: +27 21 702 3200 Fax: +27 21 702 3201

Account No	3015VA03
Statement Period	202207
Resident	Mr Raymond G. & Mrs Patricia A. Van Eysen
Property	EGO - Muizenberg Operations (3015)
Unit No	A231
Amount Due	
R4,468.75	

MOTLA UTILITIES CAPE (PTY) LIMITED
 (Formerly CIMS Meter Readers)
 PO Box 3499 Cape Town 8000
 T: (021) 419 2984
 F: (021) 419 3059
 E: info@capemeter.co.za
 www.meter.co.za

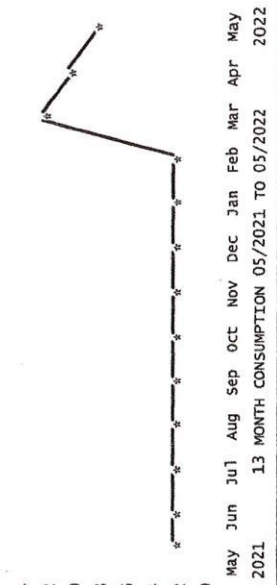
CONSUMER ADVICE
 FOR RECORD PURPOSES ONLY

MOTLA

3893/EVERGREEN MUIZENBERG		231: AVAILABILITY /				FROM 27/04/22 TO 25/05/22 28 Days				PAGE : 1			
Item	RX	Factor	%	Previous Reading	Current Reading	Consumption	Rate	Sub Total	Service Charge	Network Charge	Fee Charge	VAT	Amount
ELECTRICITY													
LC E2	.000		100.00	1	1	.000	.00000 CA 58	.00				10.00	76.71*
88 E2	.000		100.00	* 80615 *	* 80795 *	180.000	.13000 CA 38	23.40	* 80615 * READING ON 28/APRIL.		66.70	3.51	26.91*
TOTAL ELECTRICITY 180													
TIER													
87 W2	.000		100.00	* 178354 *	* 183681 *	5327	* 178354 * READING ON 27/APRIL.						
88 W2	.000		100.00	80615	80795	180	* 183681 * READING ON 25/MAY.						
TOTAL ELECTRICITY 5507.000													
TOTAL ELECTRICITY 5507.000													
TOTAL ELECTRICITY 53.90													
TOTAL ELECTRICITY 1089.703													
TOTAL ELECTRICITY 4956.000													
TOTAL ELECTRICITY 87.34													
TOTAL ELECTRICITY 87.34													
TOTAL ELECTRICITY 26.09													
TOTAL ELECTRICITY 17.01													
TOTAL ELECTRICITY 130.44*													
TOTAL ELECTRICITY 11.21													
TOTAL ELECTRICITY 85.99*													
TOTAL ELECTRICITY 41.74													
TOTAL ELECTRICITY 320.05*													

4794 + 162 = 4956.00

ITEMS USED		CONSUMPTION HISTORY - ELECTRICITY kWh	
DATE	CONSUMPTION	DATE	CONSUMPTION
5/2022	28	10/2021	28
4/2022	33	9/2021	33
3/2022	25	8/2021	30
2/2022	34	7/2021	32
1/2022	34	6/2021	30
12/2021	27	5/2021	29
11/2021	31		0



89

To: Owen Kinahan RESCOM Muizenberg Chairman
From: Sue Wood Apartment 232 (RESCOM Vice Chairman)
RE: Hot Water supply to apartments

6th July 2022

Dear Owen,

I address you as the LRA of Apartment 232, and as a member of RESCOM Muizenberg, on the question of the hot water supply to the apartments. I request that a meeting be set up with Patrick Maille, Erik Kiderln, Derek Drew, and RESCOM on this matter of the Hot water supply to the apartment building.

There is plenty of correspondence on record from Michelle Jones- Phillipson, Lydia Hirshmann, and others voicing concerns about the charges. We also have correspondence from Mrs Burt and Mrs Pat van Eyssen, and I now add my voice too.

The fluctuation in the Hot water supply has already been minuted in RESCOM minutes and is on the Agenda, and we understand that PM is aware of the problem, but has no solution at present.

Irrespective of the poor service supply of the Hot water, we are compelled to pay – is this a reasonable or fair approach by management? I believe not.

The following questions are raised:

1. There are 2 metres for measuring water usage per water supply per unit. One metre measures the Hot water usage, the second metre recording the usage of Cold water. Why on the Motla Invoice is there only one graph line?
For ease of reference and transparency, there should be two lines on the graph, one in blue and the other in red?
2. The first charge on the Invoice under the heading **Electricity** shows CALC E2 100.00% and a fee charge of R66.70 plus VAT R 10.00 = R76.71. This we are told is the fee for "availability" for the privilege of having Hot Water available to us in the apartments. If this is the case then the Hot Water should be instantly available on the switching on of a Hot water Tap.

3. Not a matter of "interpretation" as to cold water lying around in the pipes, but a fact being the charge is for availability then the hot water should be available ON TAP.
4. I have measured the amount of cold water flowing through the Hot Water taps daily for 30 days in A 232. A minimum of 4.5 litres per tap of cold water runs through the shower, the basin, the sink, on each use.
5. Conservative usage being 1 shower, washing up 2 x day, and 1 use of 1 hand basin renders 18 litres per day of cold water through the HOT Tap, for which I am charged 15c per litre incl VAT. This amounts to R 2.70 per day for the electricity, which is actually measured by the litres of water through the water metre.
6. Then there is a charge for City Council water supply at 0.01586 CA 73 per litre of water via the cold tap and the same charge via the Hot tap, in this example 483 litres of Hot water and 2041 litres of Cold water. **Added in to this water charge is yet another fee, that of R 26.09 plus Vat of R 9.91 = R 36.00** what is this "fee" for? It is not an 'availability fee' it is the carryover from the days of Drought and water shortage, by COCT and never been rescinded.
7. Then there is the effluent charge. Please supply the calculation as stated by the Cape Town City Council of the ratio per litre of water usage. On the copy Invoice attached to this letter, the charge for Effluent is for a total of 2272 litres of water, and the actual water usage is in fact 2254 litres. How can it be that 2272 litres of water out of a usage of 2524 litres is treated as effluent? This indicates that only 252 litres of water is not treated as effluent in a month.
8. How is the water, both hot and cold, and effluent charged for, to the Hairdresser?
9. How is the water charged for, both Hot and Cold, and effluent, to the Bistro?
10. The same query goes for the Frail Care section, how are they charged for water? Frail Care use the same water supply from the boilers as the apartments do.

11. The rationale behind the charge for Hot water is understood, that is not in question. The strong contention is paying "electricity" for COLD water. I propose that a reasonable, fair negotiation be entered into with all apartment residents. This consideration being an allowance of 4.5 litres per person occupying the apartment, per day per month discount for the cold water we receive instead of HOT.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Sue Wood', with a stylized, cursive script.

Sue Wood

8A

Sue Wood

From: Michelle Jones-Phillipson [michellejp50@gmail.com]
Sent: Saturday, 02 July 2022 2:01 PM
To: owen@owenkinahan.co.za
Cc: Sue Wood
Subject: Correction to AGM point 7 required

Good day Rescom

See below point no 7 from the AGM Document distributed to residents by management on 21 June 2022.

"7. Monthly Basic levy

We confirm:

- Your basic levy per month will remain as it is currently per your Life Right Agreement. No increase.
- The additional person levy is R500
- The next Basic levy increase will be on 01 March 2023 or on 01 September 2022 if the reporting period amendment is not adopted."

Management have made a mistake by confirming that there is no increase to our basic levy for the current year.

Management have imposed an increase on the apartments basic levy since February 2022.

Management have cited that the increase imposed due to the electricity charge for hot water is included in our Life Right Agreement.

The statement and confirmation by management above is not applicable to all apartment residents.

I, hereby, request that management correct the above statement and notify all apartment residents accordingly.

In my personal case the increase in my basic levy by the additional cost of hot water has already resulted in a 10% increase in my levy for this year to date.

Management have reassured residents on numerous occasions that any increases would be CPI plus 2. The 10% increase that I have is above that figure for 2022.

The two requests that I have from management as an apartment resident are:

-A formal written confirmation that the apartments have had an increase for this year.

-That the apartments will not receive a further increase for this year.

Best wishes

Michelle

Apartment 6

Mike Odd

SECURITY

I attended the monthly Muizenberg SAPS Joint Crime Meeting on 13th July. In attendance Muizenberg SAPS / Law Enforcement / Traffic Department / Ward Councillor / CPF / Neighbourhood Watch / Security Providers / Muizenberg Community Improvement Unit. Col Naidoo the Station Commander and Lt Rossouw his deputy have now returned to duty.

On the whole crime is down in the Muizenberg precinct but there is a concern of increased gang activity in neighbouring hot spots that doesn't affect us but we should be aware. We must also be aware of continuing robberies and attacks against pedestrians between Sunrise Circle and Capricorn, Sunrise Boulevard and Baden Powell Drive between 11am and 6pm. Continued focus by SAPS and others security providers.

Pleased to advise that our garden service have cut back and cleared the thick vegetation in Prince George Drive next to Evergreen which was a cause of concern with undesirable activities and could help to reduce the pedestrian attacks.

No security issues within the village.

Evergreen security does check visitors licence disks and driving licences with a scanner and adheres to all procedures required. They are 24 hour monitored by an independent security service with regular random systems and camera screening checks. We are in good hands.

STAY SAFE OUT THERE.

Orla

RESCOM MEETING @ EVG MB : 26 JULY 2022 : 09H30

Refer to Agenda:

- 4.a Fluctuations in HW supply temp
 - Z New Work
 - 4.b Lighting on
 - 4.3 Recycling letter to
 - 3.d House 99 HW flow
 - 3.e Fire Drill
 - 3.f Spot checks on admission by disc
-
- 4.a Fluctuations
 - i) EK set out need for accurate flow and temperature measurement to guide intervention (see attached)
 - ii) EK described existing Apartments HW circuit, which he developed from basic engineering principles. HW layout drawings were as yet not available to Rescom.
 - iii) EK authorised to acquire water thermometers. EVG MZB does not have any way to determine water temperatures. This hold back any positive intervention by EVG own staff.
 - Z New work.

Natural ventilation on internal passage of each floor is problematical.
Bathroom forced extract ventilation is also problematical.
 - 4.b Lighting
 - i) It was reported that lighting was inspected and approved. New bulbs were installed.
 - 4.3 Recycling letter
 - i) A visit to waste separation bins (lower ground) was proposed.
 - 3.d House 99 HW flow tests
 - i) EK explained what/when/how HW flows at H99 and H100 would be compared.
 - ii) Await HW thermometer
 - iii) He has full cooperation of residents of H99.
 - 3.e Fire Drill
 - i) Fire drills to be held, and documented, as prescribed by EVG management.
 - 3.f Spot Checks
 - i) Rescom has Safety and Security person on the committee. Regular checks will be held.

Drawn up : E M Kiderlen 23 July 2022 at EVG MZB

HW Supply and temperature measurements for EVG MZb – apartments.

ASSESSMENT

A Rationale

- 1 It is assumed each floor has horizontal ring main for HW, with pumped circulation.
- 2 Water temperature is measured and controlled at HW heating station. Cold Water feed is injected from municipal mains by pressure-controlled valve.
- 3 HW set point temperature is only adjusted at HW heating station.
- 4 It is assumed heating installation capacity (Kw) is based on flow rate and temperature differential.

B Problems

- 1 Irregular temperatures and flow rates are experienced at numerous outlets on each floor.
- 2 HW showers are thus practically not useable.

C Solutions

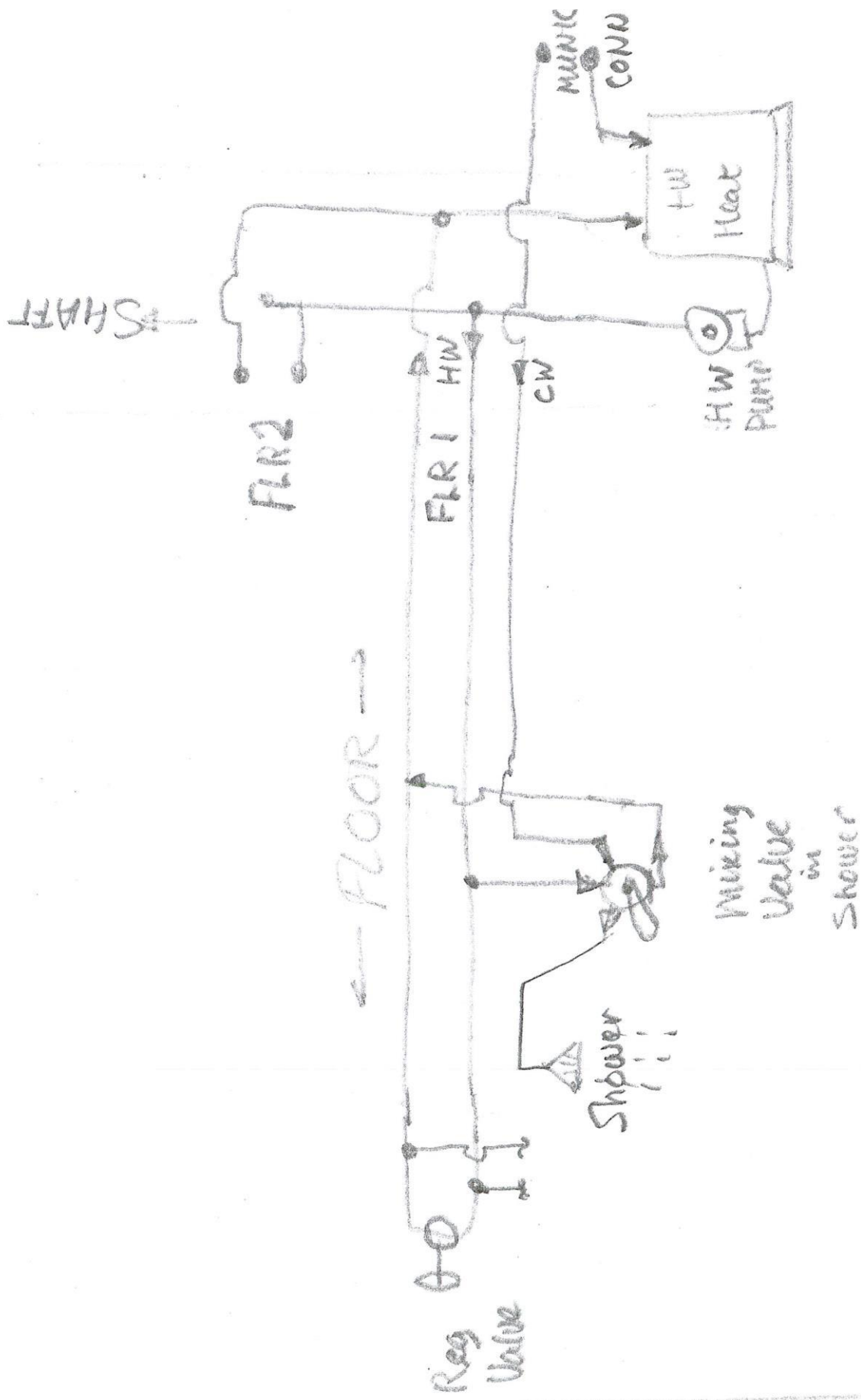
- 1 HW quality at outlet fitting is dependent on:
 - 1.1 flow (l/sec)
 - 1.2 temperature (°C)
 - 1.3 Length of use (mins)
- 2 HW supplied by heating installation is dependent on cold water and bypass water:
 - 2.1 CW inlet temperature (°C)
 - 2.2 CW inlet flow rate (l/sec)
 - 2.3 Length of use (mins)
 - 2.4 Set point of water heating installation (°C)
 - 2.5 Pressure differential between municipal main and ring main (Delta kPa)
- 3 HW delivered at each outlet fitting is controlled by
 - 3.1 Mains delivery pressure (kPa)
 - 3.2 Circulating pump pressure head (kPa)
 - 3.3 Allowable pressure drop at each outlet (kPa)

D Methodology

- 1 Take all readings, assuming steady-state OR set up selected outlet fittings to provide acceptable spray pattern.
- 2 Tabulate Pressure, flow, temperature, time interval.
- 3 Carry out D1 and D2 for both heating installation and for ring main distribution. Arrange readings to take place simultaneously, as far as practical.

E Options

- 1 This assessment will provide adequate data to evaluating main con adequacy of heating installation, ring main circuitry and user outlet pattern adequacy.
- 2 If adequate resources for 1 cannot be provided, an other way of measuring etc will only provide a temporary solution to a part of the apartments installation.



Minutes EUG M2B JUL