

2020



Vermessungscode: AUT 20 001 RS

Dipl.-Ing. Reinhard Sachs

MEASUREMENT REPORT – (13. WILHELMSBURG STADTLAUF)

Name of the race: 13. Wilhelmsburg Stadtlauf

Race Distance: 5km bzw. 10km (Hauptlauf)

Date of the event: 25. Juli 2020

Race Director: Dörflinger Günther, wilhelmsburgerstadtlauf@gmx.at

Type of the course:

5km – circuit

10km – circuit

Place to Start: Stadtpark 1, 3150 Wilhelmsburg

Place to Finish: Stadtpark 1, 3150 Wilhelmsburg

Name of measurer: Dipl.-Ing. Reinhard Sachs, reinhard.sachs@gmx.at, +43 676 6308507

Date of Measurement: 29.02.2020, 09:00, 2°C

Calibration course (Bretschneiderstraße)



Length of the calibration course: 200m

Date and temperature: 29.2.2020, 2°

Measurement: steel tape, 50 meters

$$4 \times 50 = 200m$$

$$4 \times 50 + 0,022 = 200,022 \text{ m}$$

$$200 + 200,02 = 400,022 \text{ m}$$

average length: $200,02 : 2 = \mathbf{200,011 \text{ m}}$

Corrected average length: $200,011 \times [1 + (2 - 20) \times 0.0000115] = 199.969598 \approx \mathbf{199.97 \text{ m}}$

=> add 3cm to Point 1



Pre-calibration

	recorded count	elapsed count
Start count	89000	
End 1st ride	91331	2331
End 2nd ride	93663	2332
End 3rd ride	95994	2331
End 4th ride	98325	2331
average counts:		2331,25

Counts per meters (200m) 11,65625
 Counts per meters (200m) with 1‰ 11,668

Post-calibration

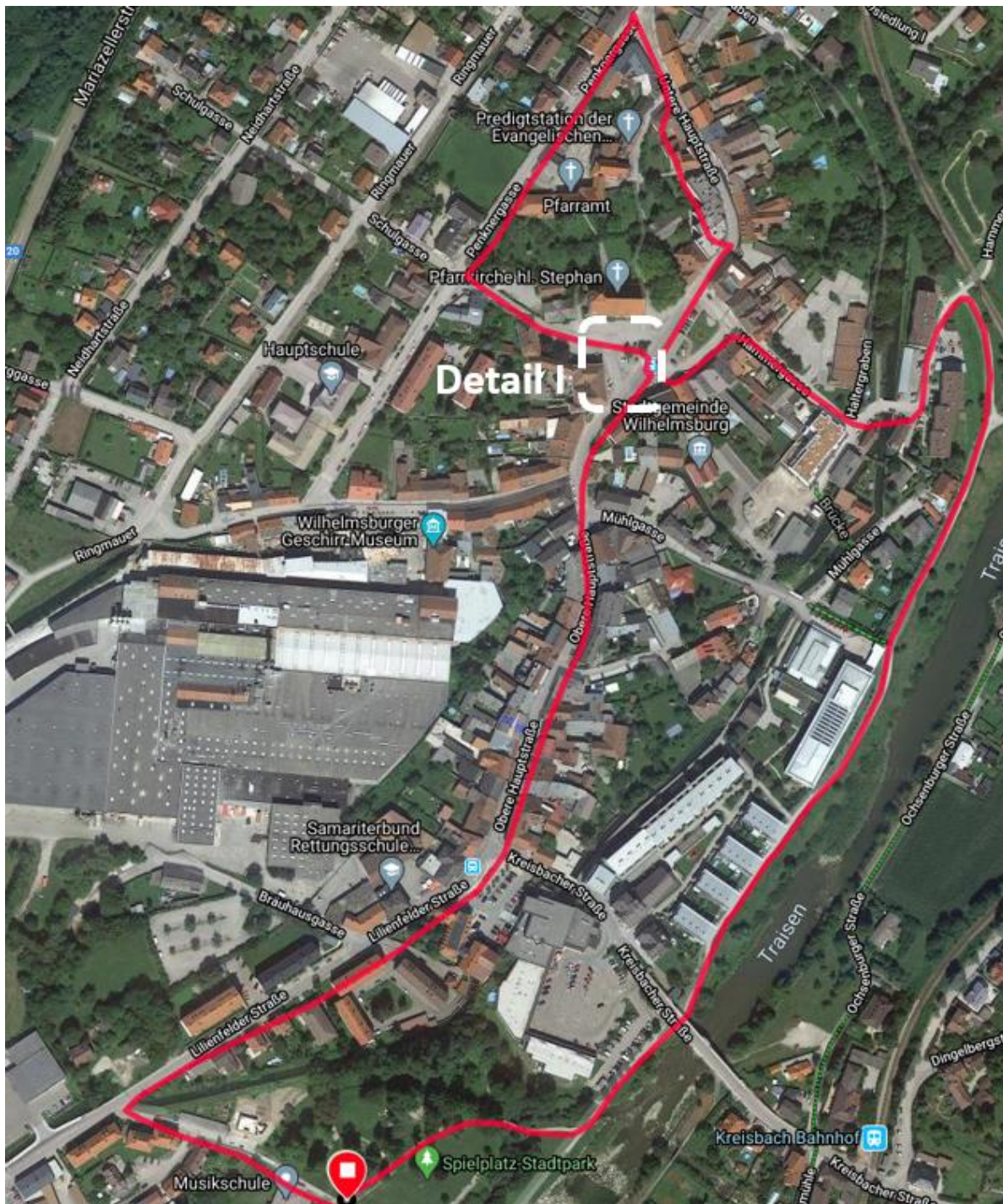
	recorded count	elapsed count
Start count	40000	
End 1st ride	42332	2332
End 2nd ride	44665	2333
End 3rd ride	46997	2332
End 4th ride	49329	2332
average counts:		2332,25

Counts per meters (200m) 11,66125
 Counts per meters (200m) with 1‰ 11,673

Working constant for that day **11,670** counts per meter

5km bzw. 10km course

Short overview (2,5km each round)



<i>Measured point</i>	<i>Counter reading</i>	<i>counts</i>	<i>distance [m]</i>
<i>Start/finish line</i>	2400		
<i>Start/finish line</i>	31530	29130	2496,057
		sum	2496,057 m

The course should be 2500m long. So it is **3,943m** too short.

⇒ New route has to be found.

Detail I



<i>Measured point (Detail I)</i>	<i>Counter reading</i>	<i>counts</i>	<i>distance [m]</i>
<i>old course (red)</i>			
<i>point 1</i>	64430		
<i>point 2</i>	64772	342	29,305
<i>new course (green)</i>			
<i>point 1</i>	65600		
<i>point 2</i>	65988	388	33,246
		dif.	3,942

New course (green) => extension for the course => **3,942m longer**. => The new course is **2500m** long.

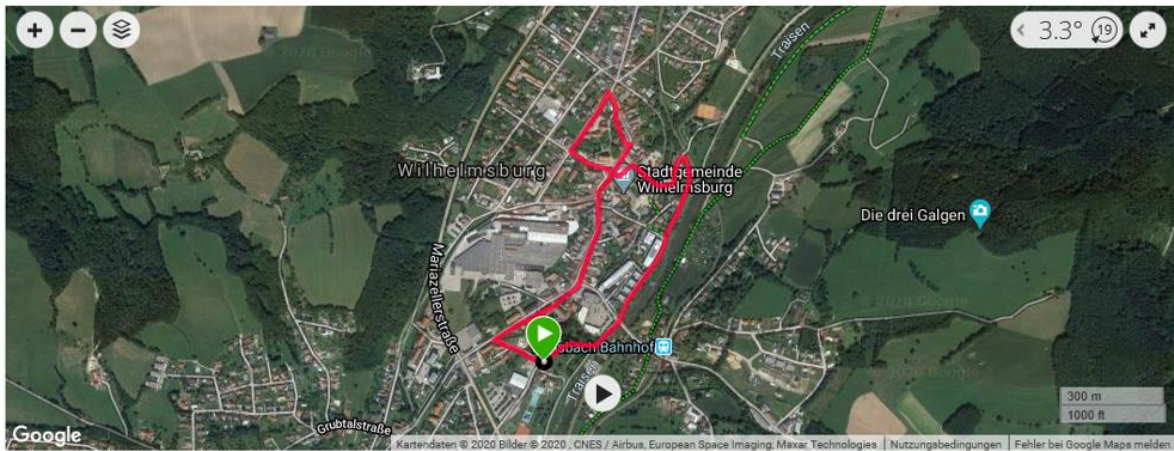
Detail from Garmin (GPS)

2.50 km
Distanz

14:34
Zeit

10.3 km/h
Ø Geschwindigkeit

4 m
Positiver Höhenunterschied



Zeit Distanz

● Höhe

400



Children course (400m)



<i>Measured point</i>	<i>Counter reading</i>	<i>counts</i>	<i>distance [m]</i>
<i>Start/finish line</i>	31000		
<i>Start/finish line</i>	35632	4632	396,901
		sum	396,901

The course should be 400m long. So it is **3,099m** too short. The green line shows the extension to 400m. => Barrier at the last curve.