Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



# **COURSE MEASUREMENT REPORT**

### - REPORT FOR NATIONAL CERTIFIED COURSE -

INFORMATION ABOUT EVENT AND COURSE				
Event: Gloppen Halvmaraton				
	Technical Organiser: Fjellhug/Vereide IL			
City/Place: Sanda	ane			
Date of Arrangem	nent: 01.10.2022			
Date and time for	r measurement: 18.08.2022 at	10.00 AM		
Measured distance	ce(s): Half Marathon			
	ion course: 350m			
Terrain: Flat  Slightly hilly  Hilly  Terrain  Other   Type of course route: Closed loop  Back and forth  A to B  Other   Race surface: Asphalt   Elevation Start - Finish: 0 m  Description of start: In Sandane stadium, details on Figure 1  Description of finish: Same as Start   Distance, in a straight line, between start & finish: 0 m  Start and Finish marked: Yes  No    Km-markings: Yes  No   Opposite running direction  National record can be approved: Yes  No				
CONTACT INFORM	MATION			
	Measured by:	Organizer:		
Contact person:	Ivar Andreas Sandø	Dagfinn Ny	Dagfinn Nyhammer	
Phone:	+4791648793 +4741227968			
Email:	Ivarsando53@gmail.com <u>dagfinn.nyhammer@enivest.net</u>			
It is hereby confirmed that the course has been measured by a national certified course measurer from Norwegian Athletics. The course is measured in accordance with Norwegian athletics regulations, and the distance(s) has the minimum reported length(s). The survey is valid for 5 years, except if the route is changed.				
21.08.2022 IVAF	R A. SANDØ	5.9.2022	Peer Jensen	
Date Signature by Course measurer Date Signature by NFIF				



Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



CALIBRATION COURSE AND PROCEDURE		
Length of measuring tape (steel measuring tape only)	50m	
Length of calibration course 1st measurement	350.00m	
Length of calibration course 2nd measurement	350.02m	
Possible 3rd measure (max. 1 cm diff per 100m 1st and 2nd)		
Average of measurements before adjustments	350.01m	
Temperature (road or measuring tape)	+21.1 ° C on asphalt	
Adjustment : Dcorr= Dmeas*0,0000115*(temp-20)	0,4 cm	
Measured calibration distance after adjustment	350,00m	
Distance from start/finish to calibration distance	11 k	

<b>CALIBRATION INFORMATION</b> - (max 8 counts difference of 1000 m between 4 measurements, ie 2 counts of 300m and 3 count of 400m)						
	Pre-measurement:			Post measurement:		
	Date and Time: 10.00 AM, 18.08.22			Date and Time: 1.00 PM, 18.08.22		
	Start	End	Diff.	Start	End	Diff.
1st measure	845228	840372	4856	655321	650465	4856
2nd measure	840372	835517	4855	650465	645608	4857
3rd measure	835517	830662	4955	645608	640752	4856
4th measure	830662	825806	4856	640752	635897	4855



Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



	Pre	Post	
	measurement	measurement	
Average			Today's constant. Either
(1+2+3+4) / 4	4855,5	4856,0	highest or average of before
			and after measurement
Constant 1 km	13872,85	13874,28	
Addn. +1‰	13,87	13,87	
Measurement constant (rounded)	13887	13888	13887,5

MEASUREMENT PROCEDURE		
Measurement constant	13887	
Measured Distance	Counter Description of place	
0	811646	Turning point ( 10549 m from start/finish)
451m	805383	11K marked with spray on asphalt
1451m	791496	12K marked with spray on asphalt
2451m	777609	13K marked with spray on asphalt
3451m	763722	14K marked with spray on asphalt
4451m	749835	15K marked with spray on asphalt
5451m	735948	16K marked with spray on asphalt
6451m	722061	17K marked with spray on asphalt
7451m	708174	18K marked with spray on asphalt
8451m	694287	19K marked with spray on asphalt
9451m	680400	20K marked with spray on asphalt
10451m	666513	21K marked with spray on asphalt
10549m	665159	Start/finish line



Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



#### **CONCLUSION OF MEASUREMENT**

### 1. Measurement method

The measurement was done in the running direction, from turning point for the half marathon to the (common) finish/start line.

### 2. Measurement procedure

The organizer has pre-determined a fixed turning point for the course due to practical issues. Also, the start/finish lines are identical. Figures 1 and 2 shows the details associated with these critical points in the course. In the measurement, we measured the distance from the fixed turning point and marked the start/finish line when the quarter marathon distance was reached.

The running course, apart from the first and last 200m follows the main road Sørstrandsvegen westward from Sandane. Along Sørstrandsvegen, the whole width of the road is available for the runners, with no deviations from the shortest possible path. From the start/finish line to Sørstrandsvegen, the course follows Firdavegen. At the crossing, the runners shall follow the street and not use the sidewalk, details in Figure 3.

The start/finish line was marked 15 m inside the stadium measured from the flagpole at the entrance to the stadium ( Figure 1)

#### 3. Course adjustment

The average constant is 13887,5 which is 0,5 count larger than the pre measurement constant. This would give a minor post measurement adjustment of 0.36m of the start/finish line further into the stadium. However, in the measurement we rounded the quarter half marathon distance from 10548,75m to 10459m. Thus, the adjustment would then be insignificant = 0,11m. We therefore kept the start/finish line at 15m from the flagpole.

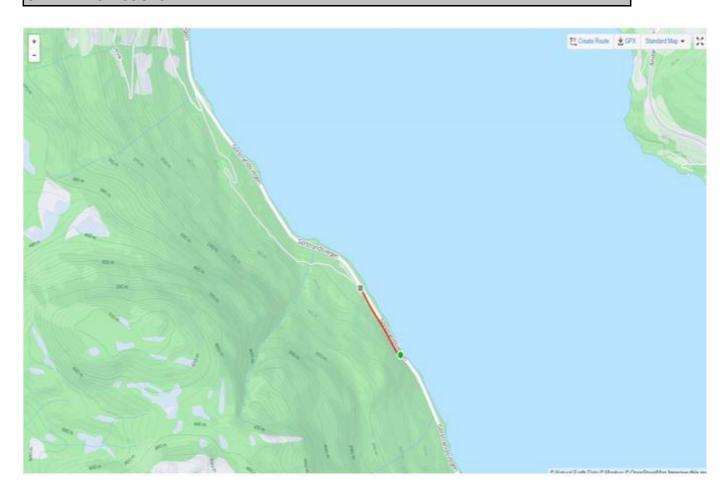


Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



### **CALIBRATION COURSE MAP**



The calibration course is a 350m straight, flat stretch along Sørstrandvegen approximately 1K north of the half marathon turning point.

Strava link

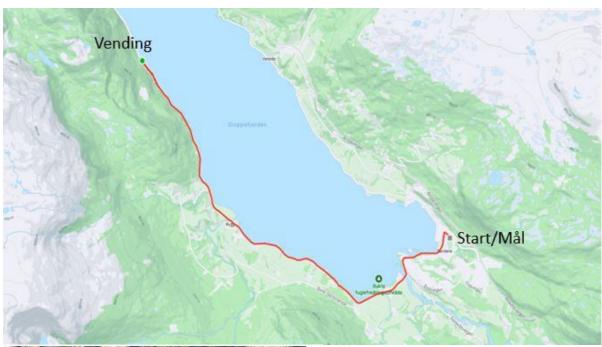


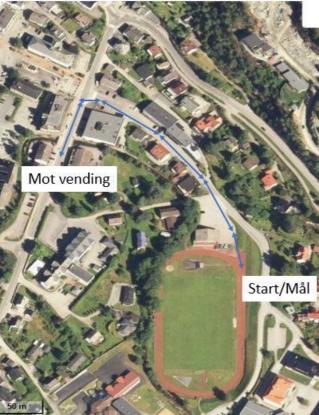
Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



### **COURSE MAP & DESCRIPTION**





The start/finish is in Sandane stadium, details given in figure 1. The course follows Firdavegen to the crossing with Sørstrandsvegen. The course continues on Sørstrandsvegen to the turning point. The runners follow the same route back



Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26

to the finish.



Figure 1: Overview Start/ Finish area.





Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



Figure 2: Turning point



The turning point is predetermined at the end of the safety rail. The measurement started at this point towards start/finish line.

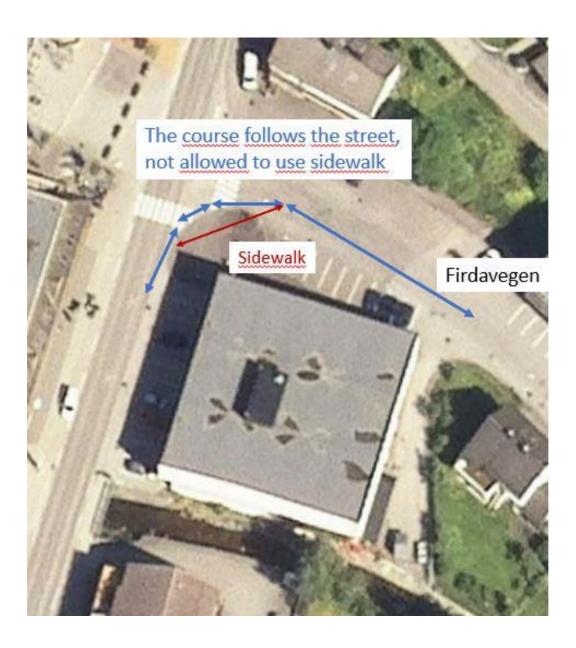


Ullevaal stadion Sognsveien 75 J 0840 Oslo NORWAY

E-mail: <a href="mailto:friidrett.no">friidrett@friidrett.no</a>
Phone: +47 94 83 33 26



Figure 3: Deviation from shortest path



The only location along the course where the shortest path is not allowed to use by the runners is at the crossing Firdavegen/Sørstrandvegen approx. 200m from start/finish.

