

Turning Zone Demarcation in Classic Technique Competitions

RED V – boards perpendicular at both sides of the track inside fencing line are the de facto indicators of the zone’s limits.

Caution! These cannot interfere with the course, half size V-boards may be used. These V-boards can be moved if the zone is adjusted and tracks can be left inside the turning zone.

2m 50

Branches or Whiskers
Placed between the tracks to provide a better visual marker for high level competition (Level 1 &2)

Skiing direction

1 m

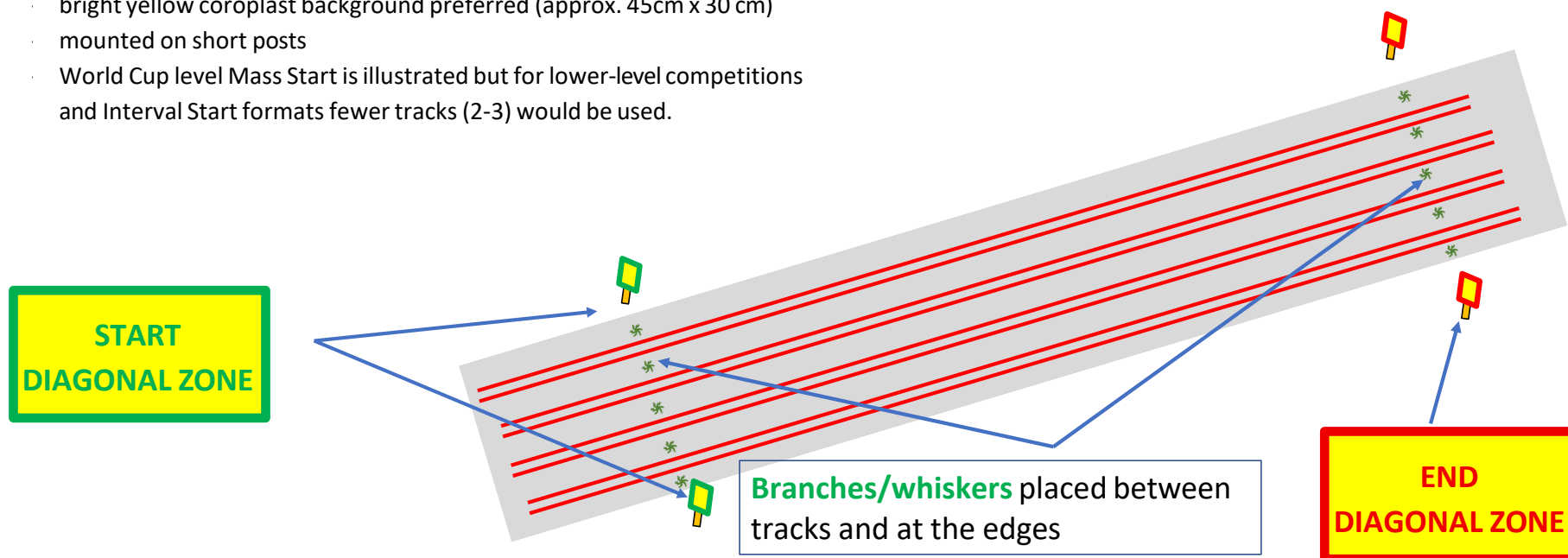
Placement details:

The positions for lifting and starting track-setting are marked with stakes as a reference for the course groomer. These are inspected/confirmed with the TD. Adjustments can be made following training and when changing course conditions dictate. Finishing turning zones too early is a common mistake that leads to un-necessary sanction considerations, better to extend them an extra metre or two after the tracks start, relative to the speed in the curve. Turning Zones can also be placed on long and short downhill during which skiers will need to turn in one or more directions, here tracks are optional but most often they are removed.

- No Signage required
- World Cup level Mass Start is illustrated but for lower competition and interval Start format fewer tracks (2-3) would be used and the branches or whiskers are eliminated

Technique Control Zone Demarcation – Classical Technique

- Signage only, no V-boards
- qty 4 Start and 4 End colours as shown will support 2 control zones
- bright yellow coroplast background preferred (approx. 45cm x 30 cm)
- mounted on short posts
- World Cup level Mass Start is illustrated but for lower-level competitions and Interval Start formats fewer tracks (2-3) would be used.



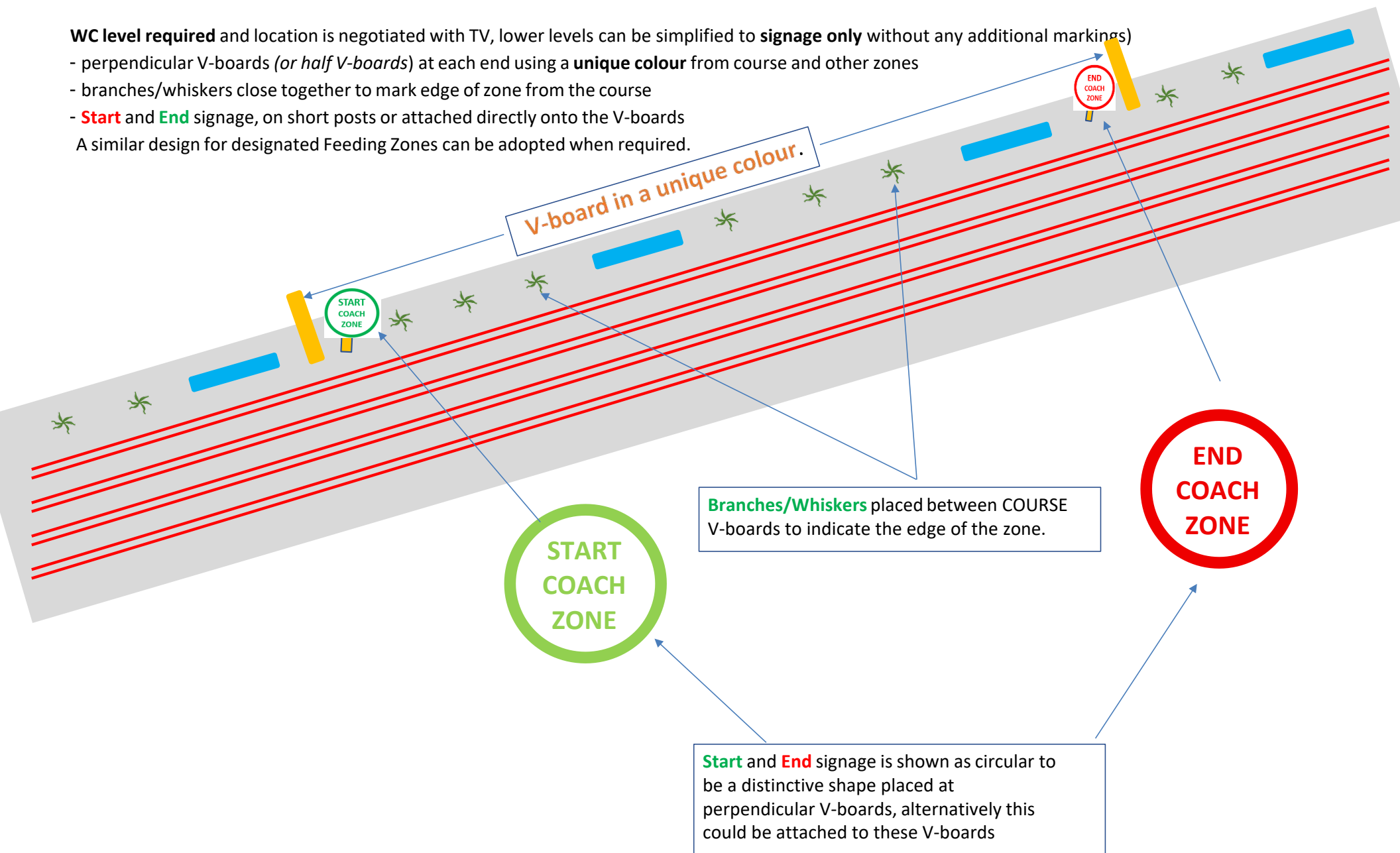
Placement Details: To be located on an uphill with **avg gradient 14-16%, zone length 50 – 70 m**, ideally straight or with slight curve and not too short. The START location must be placed part way up the hill 2-3 metres after the natural transition into Diagonal Technique, this point depends on the speed for the faster skiers in the day competition. The END should be marked just before the skier crests the top of the climb, these positions must be confirmed by the TD and observed during training. The most common error in setting this zone is that it starts too early and skiers with too much speed cannot easily or naturally make the change into diagonal technique until they slow down. It may be a fact that some courses do not offer any good possibilities, new courses should consider this need in designing good uphill. These technique control zones must be controlled by video recording if possible.

Coaching Zone Demarcation

WC level required and location is negotiated with TV, lower levels can be simplified to **signage only** without any additional markings)

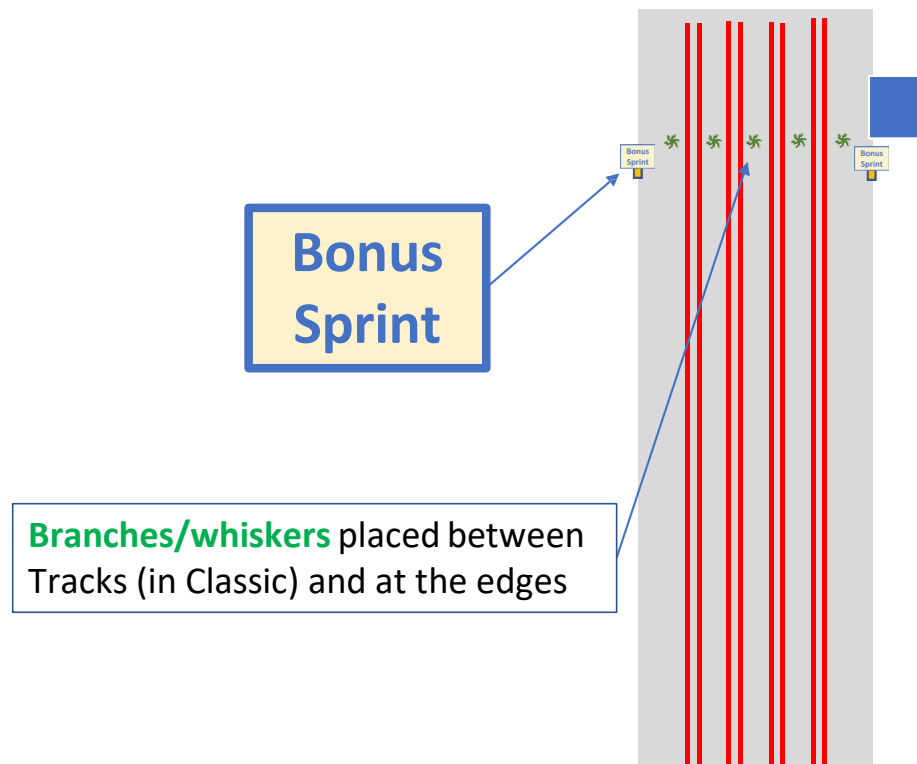
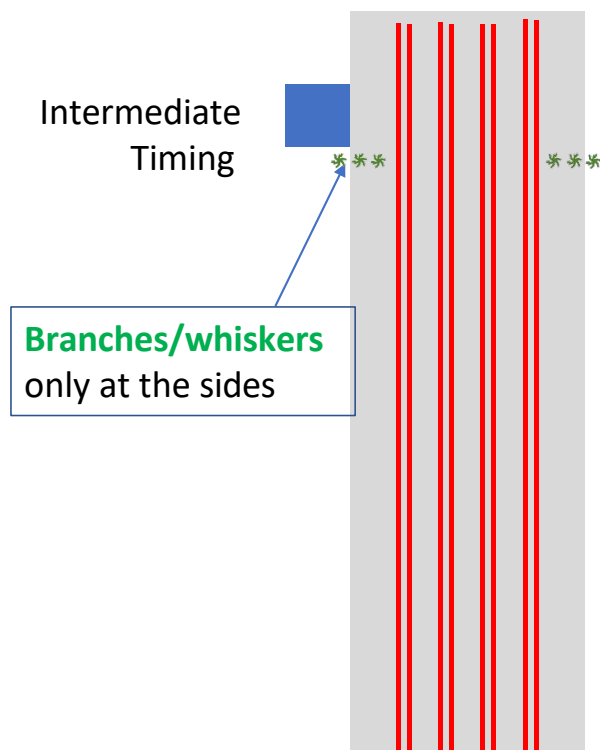
- perpendicular V-boards (or half V-boards) at each end using a **unique colour** from course and other zones
- branches/whiskers close together to mark edge of zone from the course
- **Start** and **End** signage, on short posts or attached directly onto the V-boards

A similar design for designated Feeding Zones can be adopted when required.



Timing Points Demarcation – Intermediate Times and Bonus Sprint (WC only)

- FIS Marketing towers on the side
- **No V-boards are required**



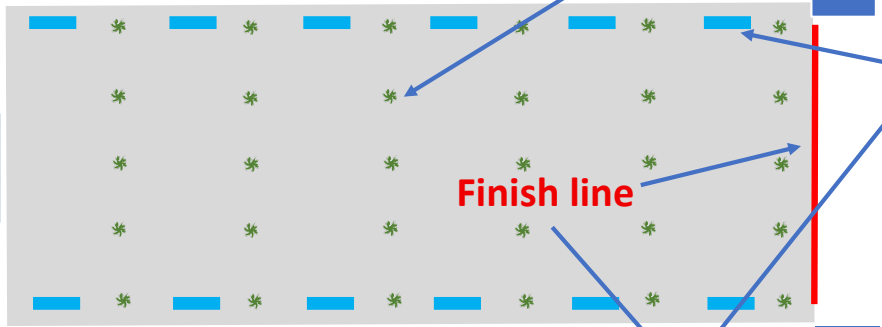
Finish Corridors & Finish Line

(fewer corridors/tracks required below WC level)

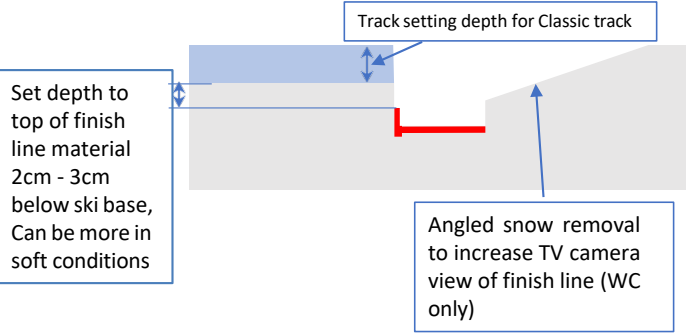
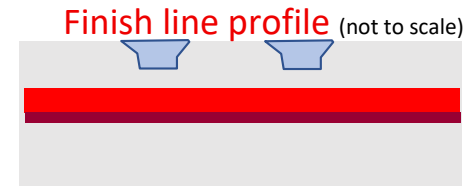
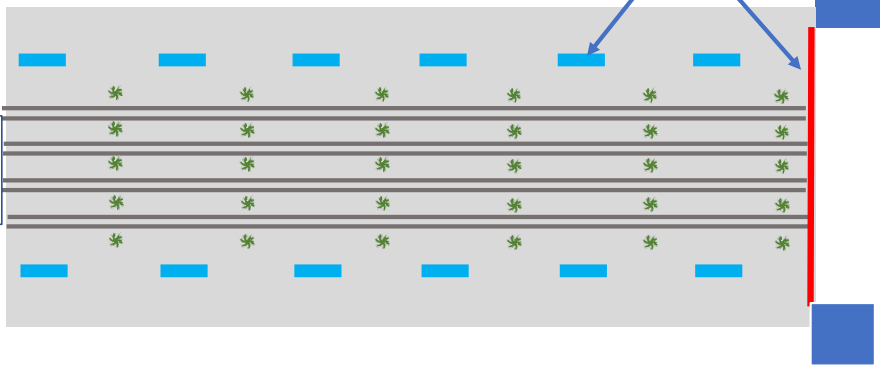
Branches/whiskers placed between tracks or corridors and at the edges
 Course V-boards on the edge of defined track

V-Boards are placed to define the edge of the course. When fewer corridors or tracks are used as per ICR, the v-boards should be moved in to within .5 m from the tracks or defined corridor. This is an ideal opportunity to use 'closed ended' v-boards to reduce risk of ski snags.

Free Technique
 - Marked corridors



Classic Technique
 - Marked corridors



Relevant FIS ICR technique references:

Section 310.2 Technique Definitions

Course, Start & Finish Zone specifications

Section C. Competition Formats

- 321.** Interval Start
- 322. Mass Start Comp.
- 323. Skiathlon Comp.
- 324. Pursuit Comp.
- 325. Individual Sprints
- 326. Team Sprints
- 327. Relay Comp.

Relevant FIS Homologation Manual references:

Sections - 4.6 Sprint Competitions

- 5.1 Uphill Terrain (last paragraph)