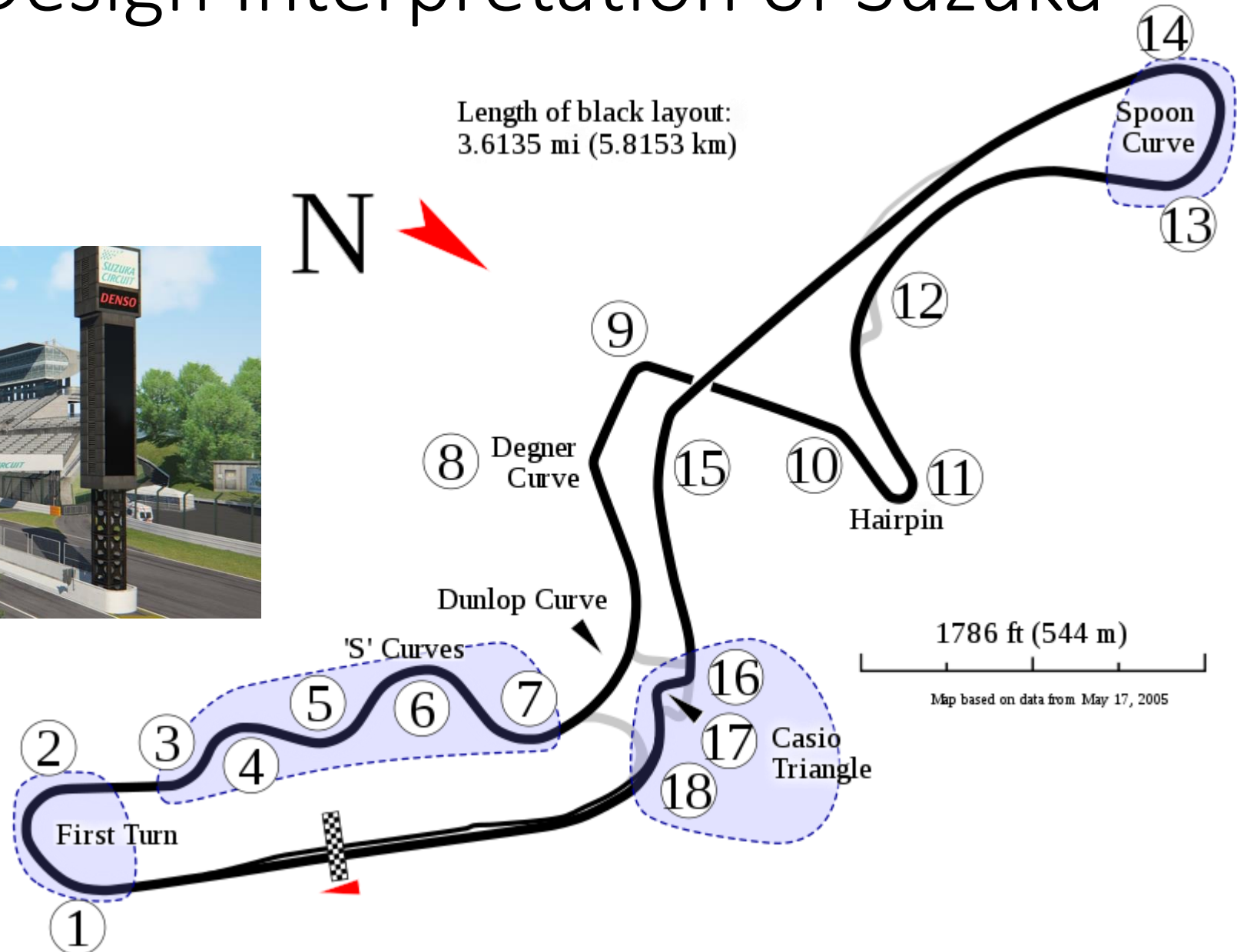


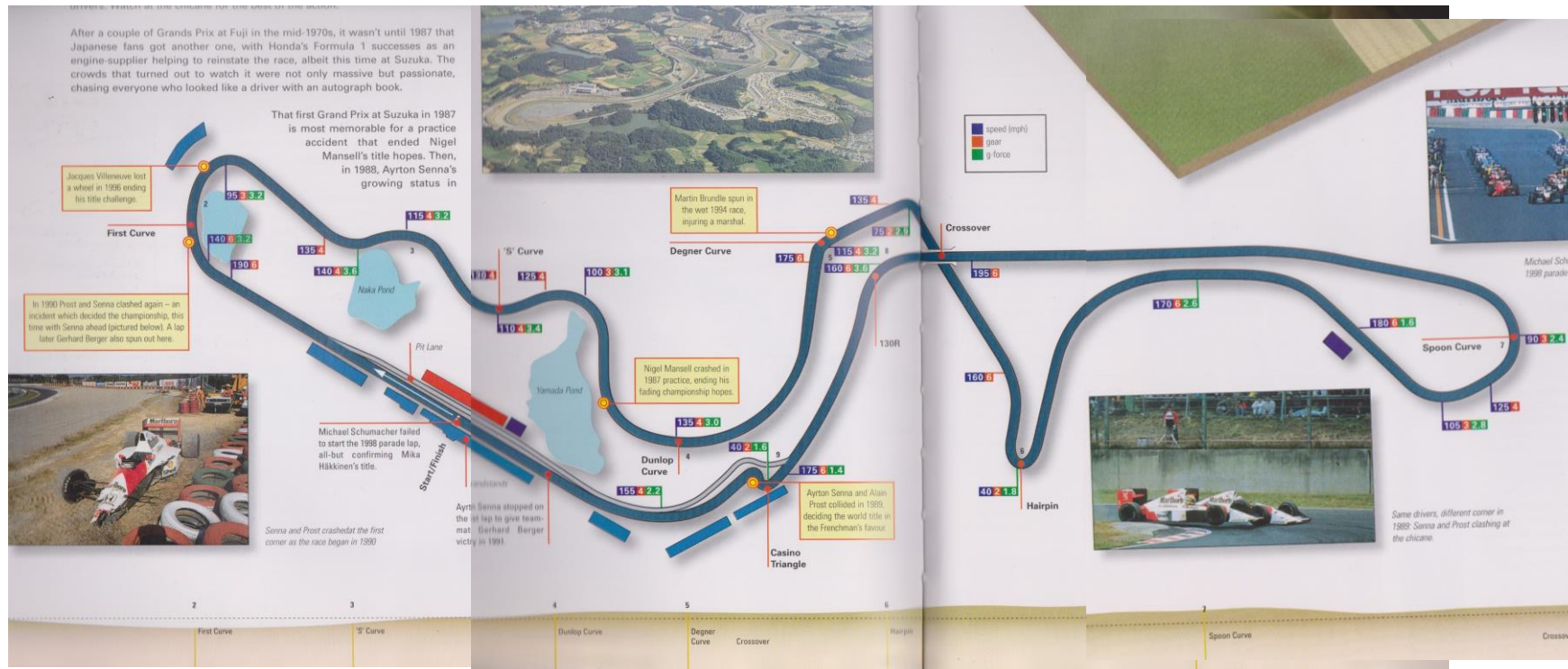
# CNC Track Design Interpretation of Suzuka



# CNC Track Design Interpretation of Suzuka

The CNC Track Design “Suzuka” layout is a simplified interpretation of the F1 circuit in Japan. Slot car Hobbyists have been modeling this circuit (built by Honda) since it opened in 1962, because the figure 8 cross-over design results in equal lane lengths. It has many design elements that people like to see in a slot car layout:

- Long straights, fast/slow technical turns.
  - Decreasing radius First Curve.
  - ‘S’ Curves.
  - Hairpin Curve.
  - Spoon Curve feeding onto a long straight.



Suzuka track image from a book you should own:

World Motor Racing Circuits,  
A Spectator's Guide, pp 176-177.  
Peter Higham/Bruce Jones  
The Square Book Company Ltd  
ISBN 0-233-99619-2

Note: The Earth colored profile at the bottom of the image is the track circuit elevation change.

# CNC Track Design Interpretation of Suzuka



Of course we could not replicate the real 3.614 mile Suzuka circuit in a 6' x 20' space, even in 1/32 scale. So CNC Track Design tried to keep the theme and significant elements while making it fun to drive. Your Suzuka slot car track layout will have a 604.6" +/- 1.1" lap length, (50.38 foot average).

Significant design time was spent making the layout low jerk. It was also made less crash prone by expanding the lane spacing in the hairpin, and providing "Momentum Compensation".

"What is Momentum Compensation?", you ask...

Since the LH and RH turn radii are not "balanced", due to the single LH hairpin turn, some compensation was made for the Driver on the inside lane of the hairpin. The inside lane of the hairpin is the most difficult turn on the layout:

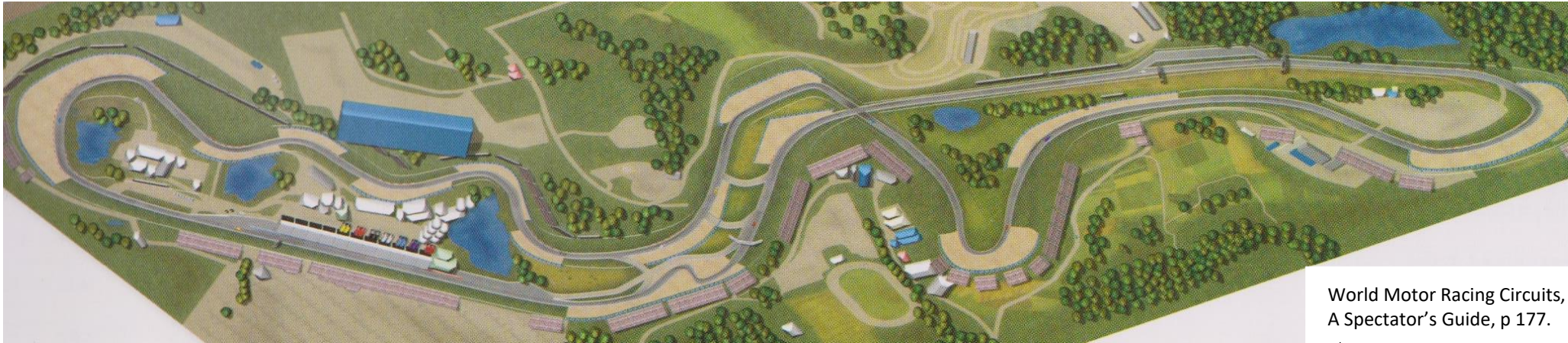
- Most likely crash point, due to severity of bend.
- Scrub the most speed/momentum.
- Difficult to gauge the braking point, due to the cars approaching the Driver's head-on.

So the lap length for the inside lane of the hairpin is 1.1" shorter than average, and the outer lane 1.1" longer.

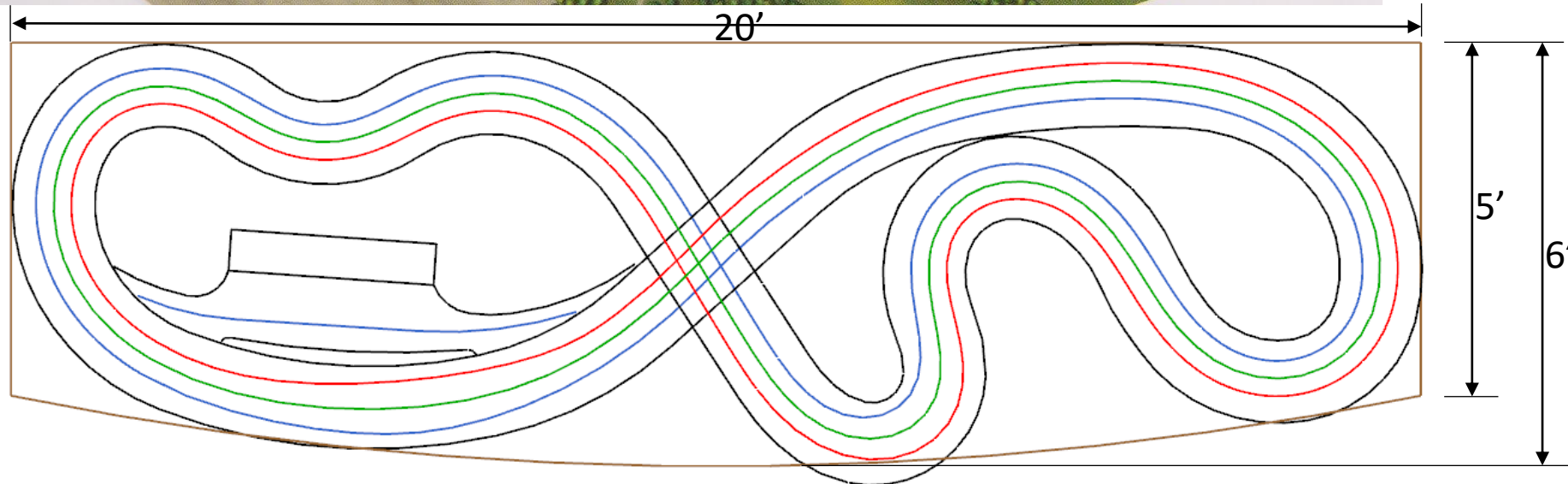
# CNC Track Design Interpretation of Suzuka

## 1/32 Scale Slot Car Track Layout Designed with a Suzuka Overpass Theme

- 6' Width (at center), 5' width (ends) x 20' overall length.



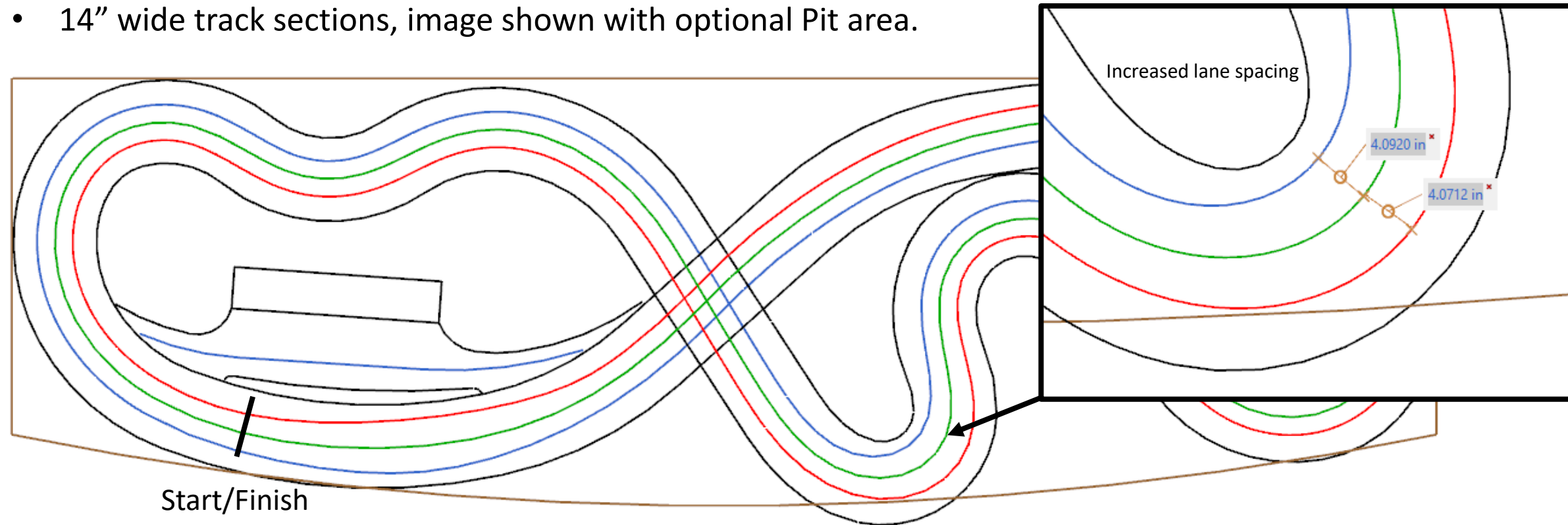
World Motor Racing Circuits,  
A Spectator's Guide, p 177.



# CNC Track Design Interpretation of Suzuka

## 1/32 Scale Slot Car Track Layout Designed with a Suzuka Overpass Theme

- 3 Lanes with Variable Lane Spacing to minimize drift induced bumping/crashes.
  - Maximum 4" lane spacing occurs in the Hairpin, to avoid drift induced bumping/crashing.
  - Increased 3.75" lane spacing for Wide Open racing to the Finish Line.
  - Rest of track has 3" lane spacing for tight Racing Line appearance with 4" skid aprons.
- 14" wide track sections, image shown with optional Pit area.



# CNC Track Design Interpretation of Suzuka

1/32 Scale Slot Car Track Layout Designed with a Suzuka Overpass Theme

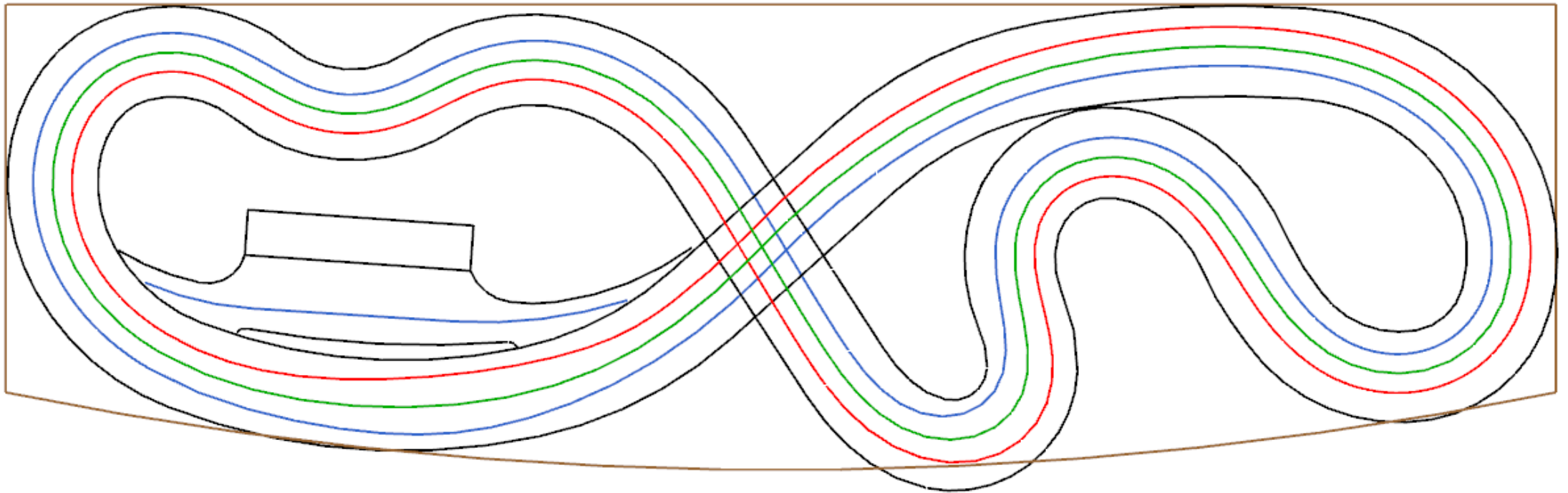
- 50.38' Average Lap Length with *Momentum Compensation*.

Lap Lengths

603.5"

604.6"

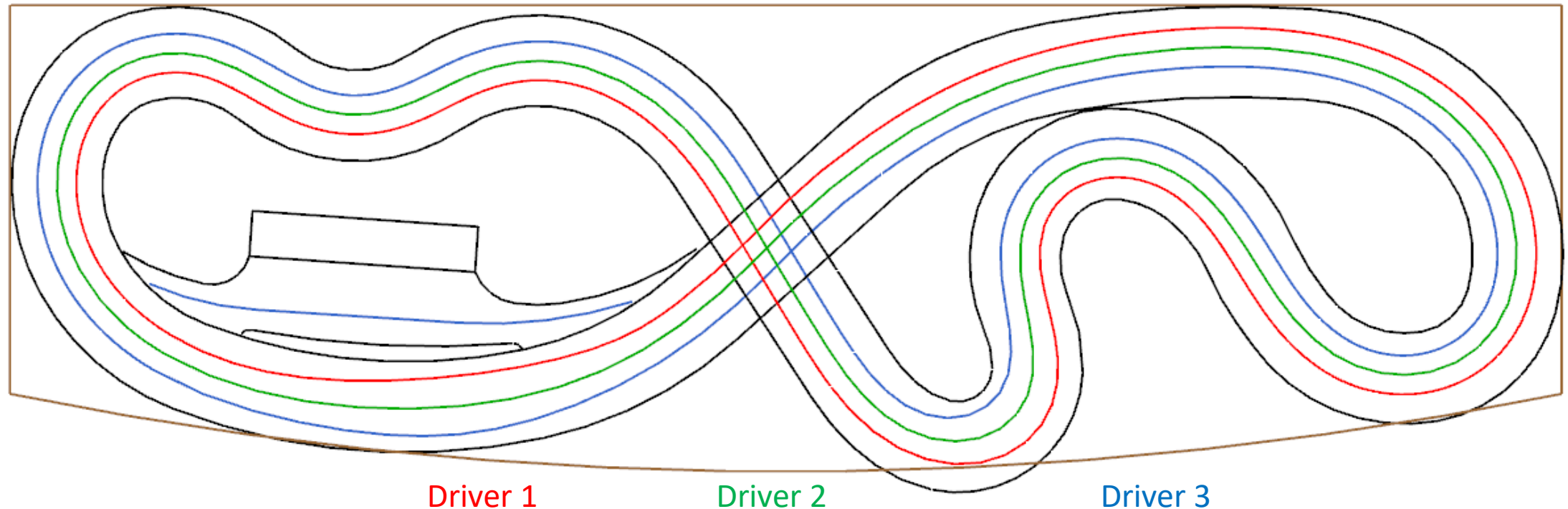
605.7"



# CNC Track Design Interpretation of Suzuka

## 1/32 Scale Slot Car Track Layout Designed with a Suzuka Overpass Theme

- Curved edge of layout for improved line-of-sight for Drivers.
  - Ends reduce to 5' wide to aid reach for Marshalling cars.
  - Back side of layout is straight, to butt against wall. For Example could “hinge” against garage wall to pivot out of the way when not in use.



# CNC Track Design Suzuka Images

The 6' x 20' layout has been broken into 8 relatively large sections of track that fit on 4 sheets of MDF.

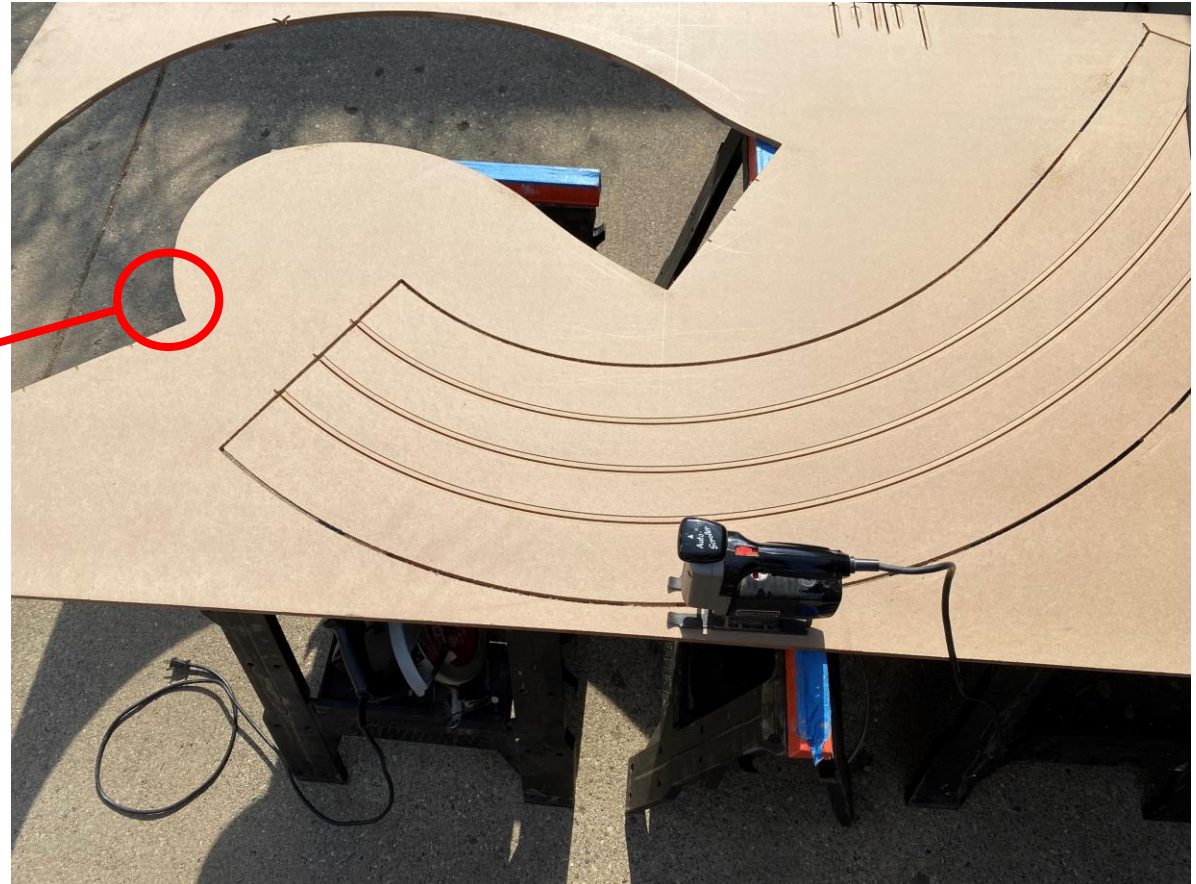
- Image below includes optional routing of gains.



# CNC Track Design Suzuka Images

The track sections are held in place by numerous short, half depth connections that will need to be cut to liberate the track sections from the MDF.

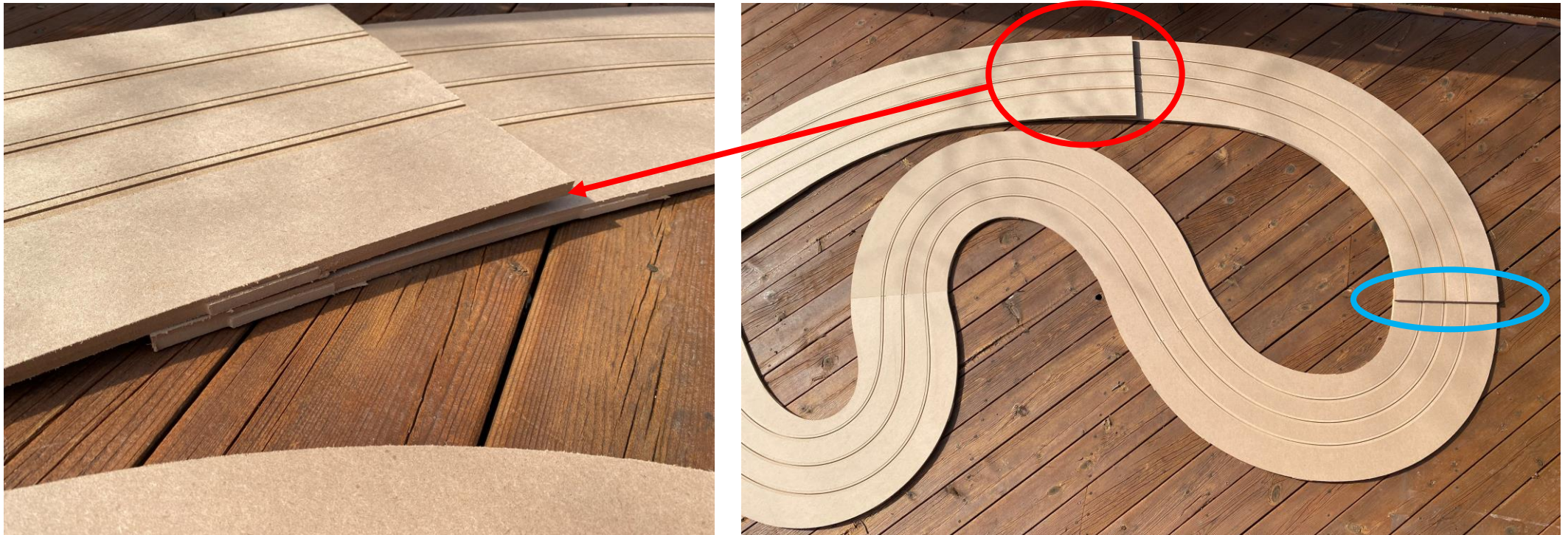
- This is an optional service, if you don't want to rent a trailer to pick up the 4' x 8' sheets.
  - The track sections will fit in most large SUV's or Mini-Vans.
- Image at right includes optional routing of gains.



# CNC Track Design Suzuka Images

A very generous amount of length has been added to compensate for elevation changes along the 20' span, (red circled area). A smaller overlap has been added (blue circled area) to compensate for overall width changes due to added banking.

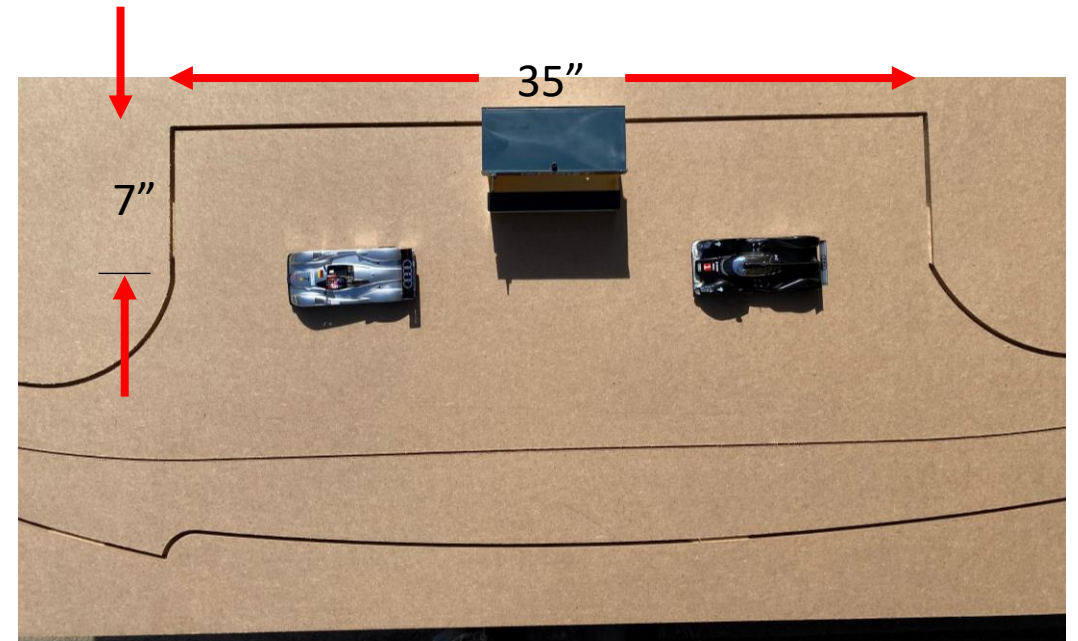
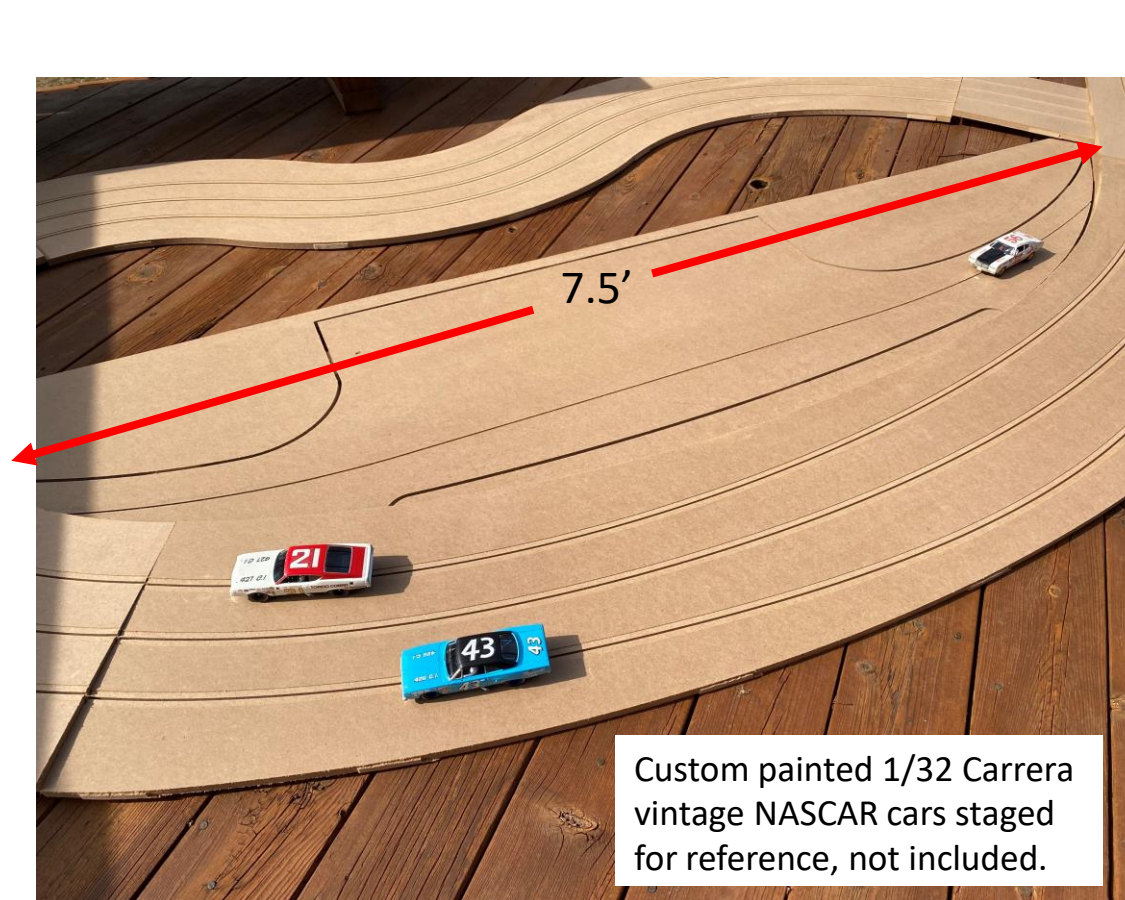
- These are “Trim to Fit” pieces to compensate for elevation and banking, since we don’t know how you will be manipulating the road course. Note: Recommend banking < 4 degrees.
- Images below include optional routing of gains, removal of track sections from MDF.



# CNC Track Design Suzuka Images

This is a big layout, and requires all of the 20' span.

- Be sure this will fit in your space before ordering, all orders are final!
- Images shown below include optional routing of gains, removal of track sections from MDF, and pit stop area.



The optional pit lane is almost 7.5' long, has plenty of room for 3 Scalextric pit boxes (one shown along with two 1/32 Slot.it LMP cars for visual reference, not included), and a routed pit lane for staging cars.

# CNC Track Design Suzuka Images

The racing lines, expanded lane spacing in the hairpin, and track sections overall look much more impressive in real life!

Images shown below include optional routing of gains and removal from MDF.



Staged 1/32 Scalextric 2005(ish) era F1 cars, not included.



Staged custom painted 1/32 Carrera vintage NASCAR cars, not included.

# CNC Track Design Suzuka Pricing

<u>Pricing/Options</u>	<u>\$Cost (USD)</u>
<b>CNC Routed track sections captured in premium MDF, (ready for pick-up).</b>	\$1250.00*
<b>Option</b> - Add routed gains (recessed step) for braids.	\$740.00
<b>Option</b> - Add pit area.	\$60.00
<b>Option</b> - Remove Track Sections from MDF sheets, (fit in most large SUV/Mini Vans)	\$160.00

**Note:** Cost does NOT include shipping. I highly recommend that you plan to pick up your track, I am 40 miles North of Detroit, MI. So factor your travel time and cost into the price of the track.

The advantage of picking up your track is you can see how mine is constructed. CNC Track Design wants you to have the best possible/error free build experience. Your visit to pick up your track should help you avoid any mistakes, and possibly give you some ideas for your layout.

If you don't want to rent an enclosed trailer, then you should opt to have the track sections removed from the MDF sheets. The MDF sheets are quite heavy. Most shippers will not deliver to a home address, (must be a business with a loading dock). CNC Track Design will not arrange or be responsible for shipping your track. Please make the effort to pick it up yourself! A \$35 pallet charge will be added to shipped orders.

**\*Note: Price subject to change due to market fluctuation of MDF. Contract will have current price.**

# CNC Track Design Interpretation of Suzuka



## How to Order

OK, so you are committed to building a 3 lane Suzuka layout from CNC Track Designs.

**Step 1.** Send Patrick Baer an email at [Dodgekid2@gmail.com](mailto:Dodgekid2@gmail.com) to request a Suzuka contract form.

If you can't or don't want to open the link, call me at (248) 877-3894 and I will fill it out for you and create a .pdf.

**Step 2.** Add your name, address, email and phone number to the form. See red text on form.

**Step 3.** Check your options if you want more than just the CNC routed track sections captured within the 4' x 8' sheets of MDF. See red check boxes on form. Cost will automatically be updated.

**Step 4.** Sign and date the contract form.

**Step 5.** Save the contract form as a .pdf file so it can not be altered. Email your completed form to: [Dodgekid2@gmail.com](mailto:Dodgekid2@gmail.com)

**Step 6.** A 50% deposit is required to start processing your order. Once your payment is received via PayPal or Cashier's certified check, Patrick Baer will contact you to discuss your delivery (visit) date. Typical manufacturing time is 2 weeks, (could change based on material availability).

Additional documents will be sent to you, with suggestions for assembling and painting your layout.