

How to Avoid (Big) Mistakes and Learn Faster

**NNJR Track Side Classroom Series
Watkins Glen Advanced 2021**



Disclaimer

The techniques shown here have been compiled from experienced sources believed to be reliable and to represent the best current opinions on driving on track. But they are advisory only. Driving at speed at Watkins Glen, or any other track, requires skill, judgment and experience. These techniques assume the reader has high performance driving knowledge and applies them as applicable to their level of driving experience.

High-performance driving can be very dangerous, carries inherent risks and may result in injury or death. NNJR and PCA make no warranty, guarantee or representations as to the absolute correctness or sufficiency of any representation contained herein. Nor can it be assumed that all acceptable safety measures are contained herein or that other or additional measures may not be required under particular or exceptional conditions or circumstances.

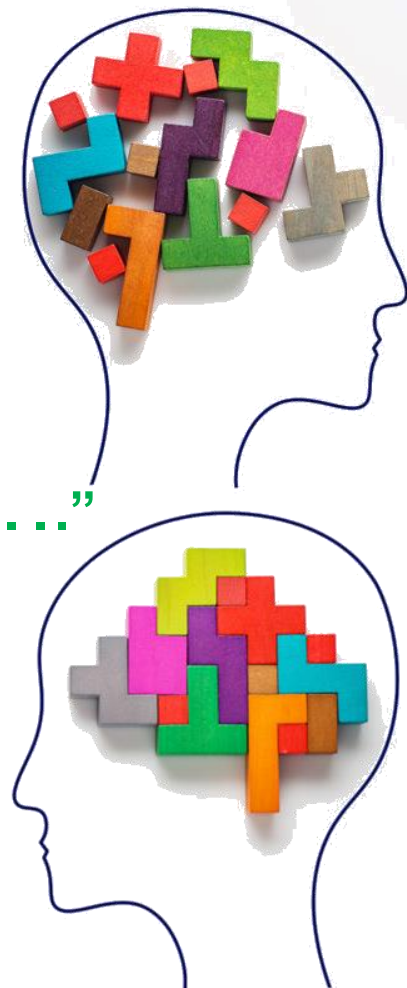
“I never drove a perfect lap” Stirling Moss



NNJR Mistakes = Learning



- Accept that you will make mistakes
 - “Mistake” is another word for “learning opportunity”
 - Keep your mistakes small and single
 - **Catch** your mistake, **collect** the car, and **carry on**
- Convert self-judgments into learning goals
 - Instead of saying “**I’m bad at . . .**” say “**I’m working on . . .**”
 - Then figure out **how** you’ll work on that skill
- Stay mentally focused in the moment
 - Learn to recognize when losing focus or judging yourself
 - Use a key word or phrase to refocus (e.g., “**Eyes up**”)



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Slide 4



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NNJR How to Avoid Big Mistakes



- "The best reason to practice driving the correct line? The correct line never leaves the track..."
 - Unknown
- "It's better to go into a corner slow and come out fast than it is to go into a corner fast and come out dead."
 - Sir Stirling Moss
- "You can't exit a corner (as) a hero if you enter (as) a fool."
- "Never run out of real estate, traction and ideas at the same time."

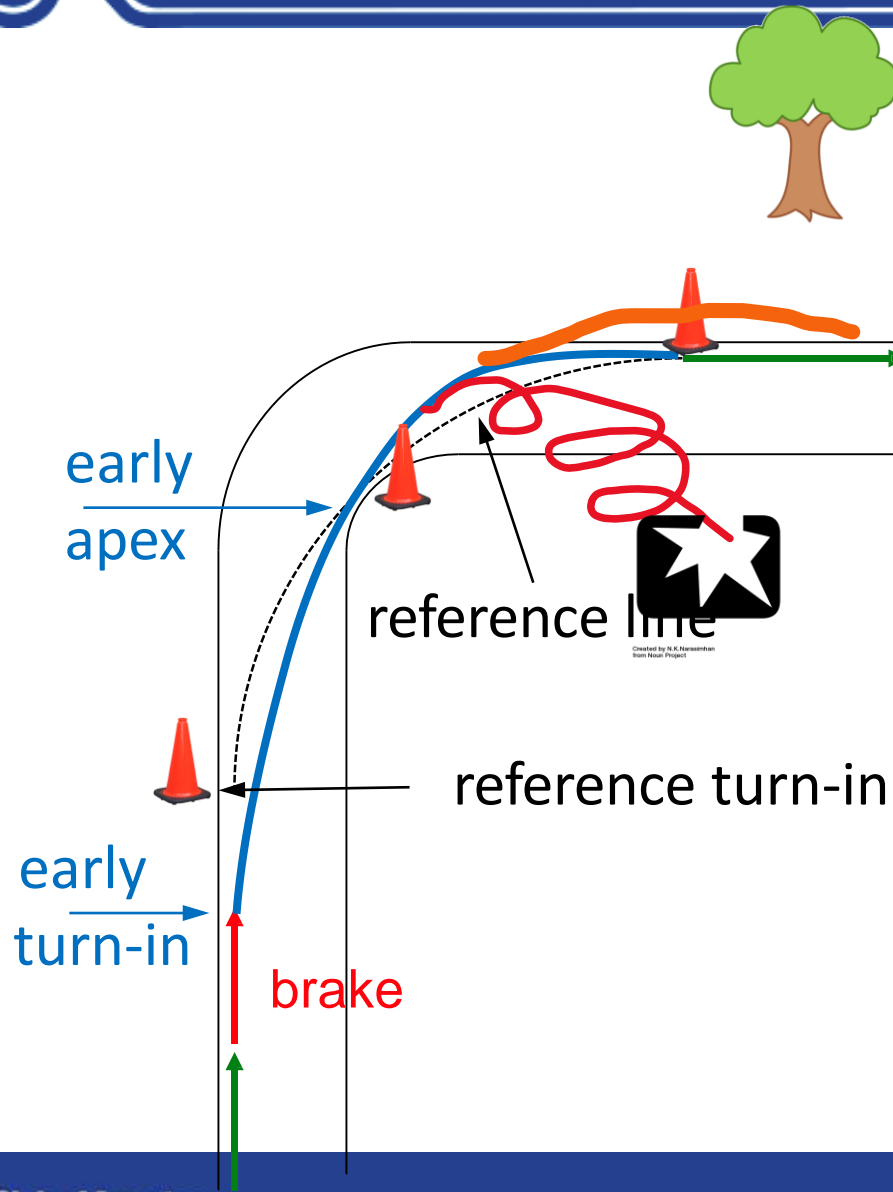


- Early. Really Early!!
- In a turn
- In a braking zone
- In a skid
- Mechanical Failure



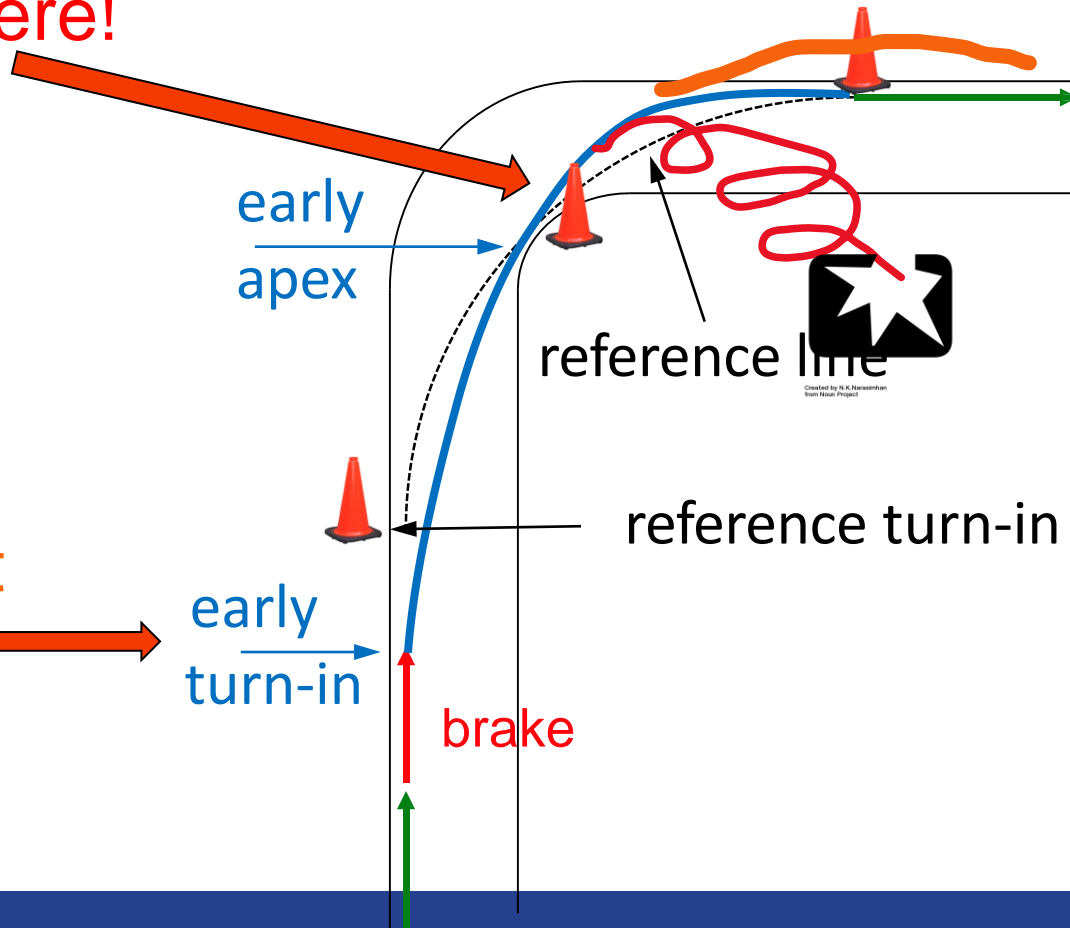
Skip Barber: "If you're any good, the instant you turn your hands into the corner, you know if you've made a mistake."

NNJR Early = Bad!



Not Here!

Must Recognize
Early or Too Fast
Here



NNJR Car Control Helps!



- Skid pad is the BEST car control exercise, autocross next, including slalom and lane change
- Reinforce the idea of your “3000-pound dance partner”
- Spin recovery: “When you spin, both feet in (3-pedal),” “When in doubt, both feet out”
- C-P-R, “Correct, Pause and Recover” to prevent tank slappers and subsequent impact

*Adapted from Peter Krause
NNJR 2021 Instructor Seminar
NNJR 2021 Drivers Seminar*





- How to avoid Big Mistakes and Learn Faster?



- **Best Execution of Fundamental Skills**
- Consistency in speed, car placement, control input speed and amplitude
- Practice deliberately, add speed incrementally
- Balance risk versus reward
- Overtaking car ALWAYS responsible for safe pass



*Adapted from Peter Krause
NNJR 2021 Instructor Seminar
NNJR 2021 Drivers Seminar*

NNJR Importance of Consistency



- The NUMBER ONE best execution of fundamental skills is driving consistency during on-track sessions
- Lateral car position, braking force, entry speed
- Work on corner exit before corner entry
- Develop a “go/no-go” system
- IF the car is out of position or not on the correct trajectory, “no-go” on the next control input



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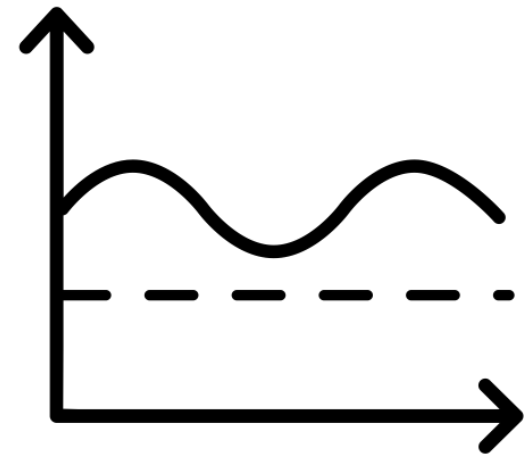
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- All drivers learn in increments
 - Experienced drivers advance in small steps
- How to measure progress?
 - Against a baseline
- Baseline
 - Much more than a lap time
 - Braking points and rate
 - Corner entry speed
 - EOB, TAP, WOT
 - Etc.



Created by Megan Chown
from Noun Project

. . . is there is no single, big idea



- Progress at the advanced level is the sum of many small improvements
- A gain of a few tenths of a second—a gain you can **repeat**—is excellent progress
- As you get better, you go after smaller gains

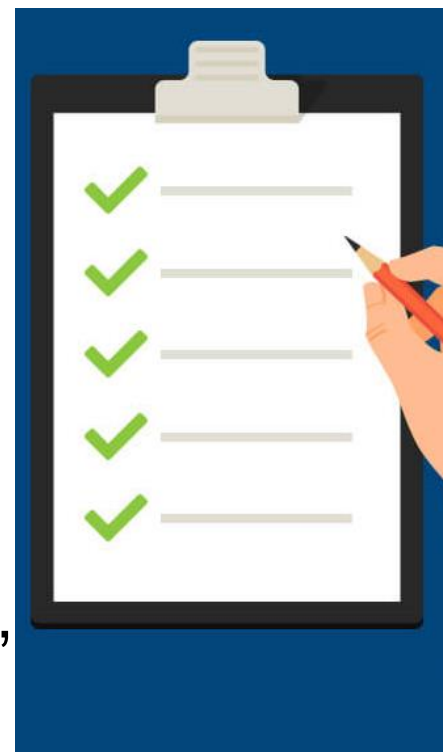
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NNJR Skills to Practice



- Utilize the full width of the track unless there is a compelling reason not to
- Shift at same RPM, brake at the same point
- Brake at a consistent decelerative force
- Look at apices as “areas,” not singular points
 - Touch every inside curb
- Keep your eyes moving, landmarks at track level, eye level and above
 - Clear plastic tape trick for keeping eyes up
- Different speed corners require different speed inputs



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- There is NO car that cannot be driven quicker by someone else...
 - But you may NOT HAVE their skills!
- Smooth does NOT have to mean “slow” control inputs
- Number one: optimize fore/aft axis control input execution



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NNJR Common Mistakes Opportunities for Improvement



- Trying to go too fast in the slow parts
- Inconsistent braking performance
- Throttle on too early, “waiting” to finish the corner
- Sloppy car placement as speed increases
- Too much trail braking

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- Deliberate Practice
 - One or two priorities per session
- Add speed incrementally
- Balance risk versus reward
 - Develop “Go/No-Go”



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NNJR High Priority: Go / No-Go



- “Go/No-Go” is a simple assessment that every driver should **must** develop to prevent incidents
- Big mistakes are the result of lots of little ones accumulating without recognition and mitigation
- “Go/No-Go” works for car path, vehicle speed, approaching traffic and recovering from driver errors
- Requires constant evaluation to “go” on the next control input, or “no-go” and recover / bail out

Created by Musmellow
from Noun Project

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NNJR Incident Avoidance



- Better situational awareness means “360 degrees,” NO SURPRISES
- Requires good judgment, good decisions
 - Emotions get in the way
- When mistakes are made, make it a learning opportunity
- Beware the “big jump” or the “big lunge”



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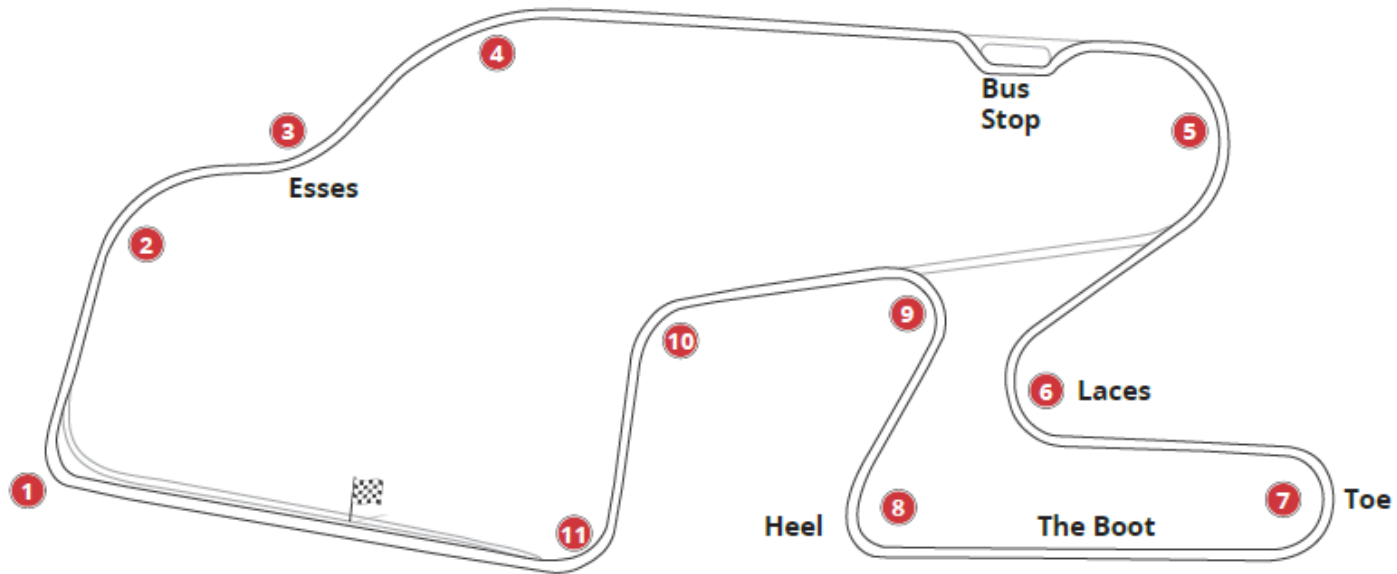


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- Everyone makes mistakes
 - Most are a learning opportunity
 - But Early and Too Fast are dangerous
 - Learn to identify mistakes early and correct
- Learn and use Go / No-Go
- Work on Skill Development
 - Deliberate Practice
- The NUMBER ONE best execution of fundamental skills is **driving consistency**

WATKINS GLEN TURN BY TURN





NJR Passing Zones

Notes:



1. Mandatory side to pass in most passing zones: All Groups
2. Run groups with Expanded Passing may pass anywhere with a signal except the Esses



NNJR One Lap w/Partial References



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Slide 25



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NJR Watkins Glen

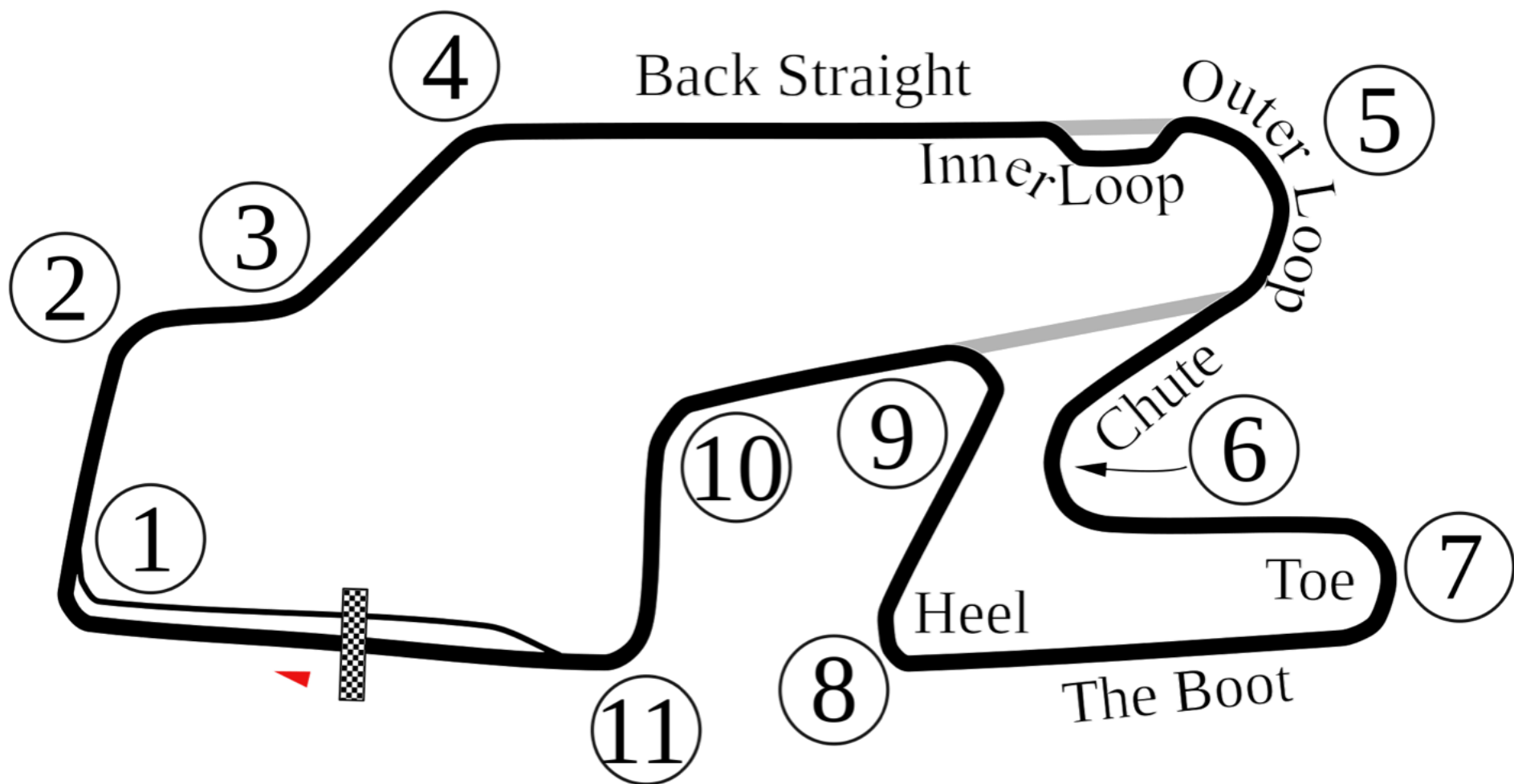


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NJR Watkins Glen Turns

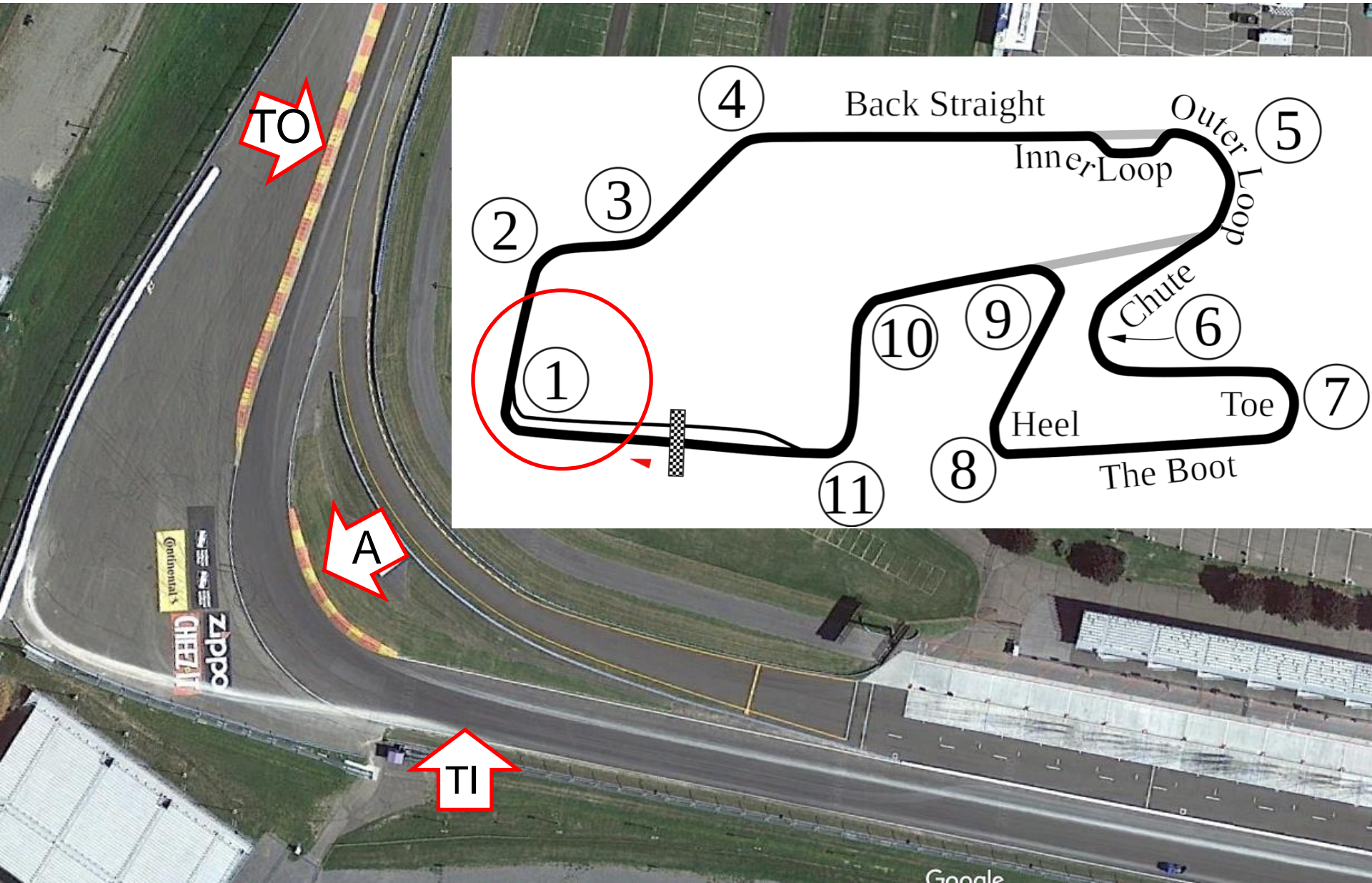


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NJR Turn 1





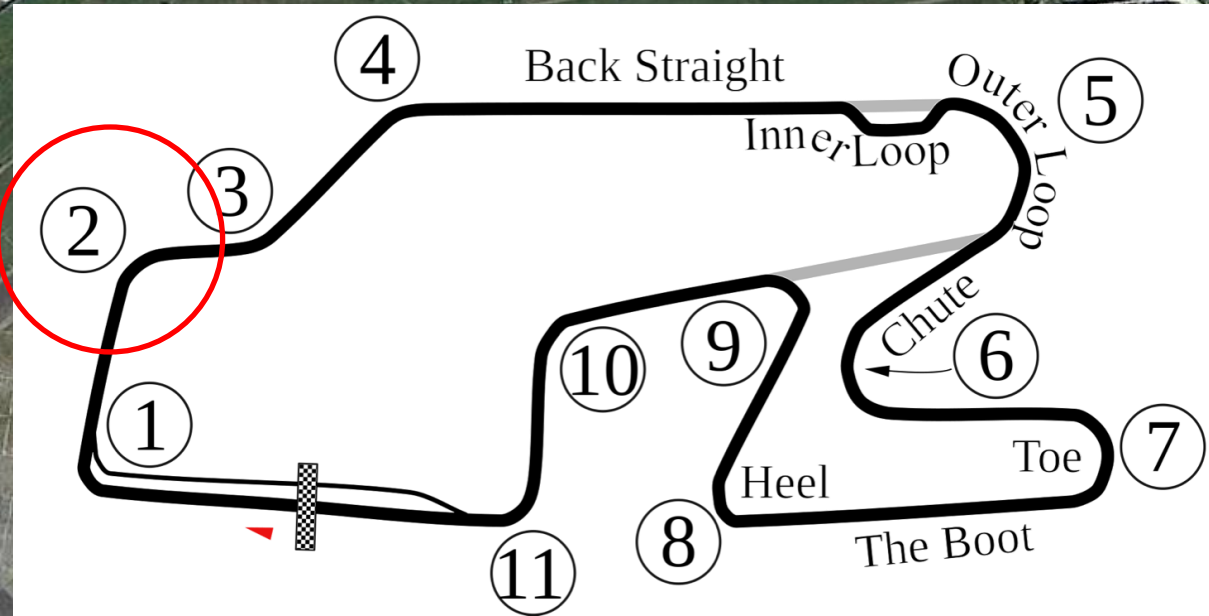
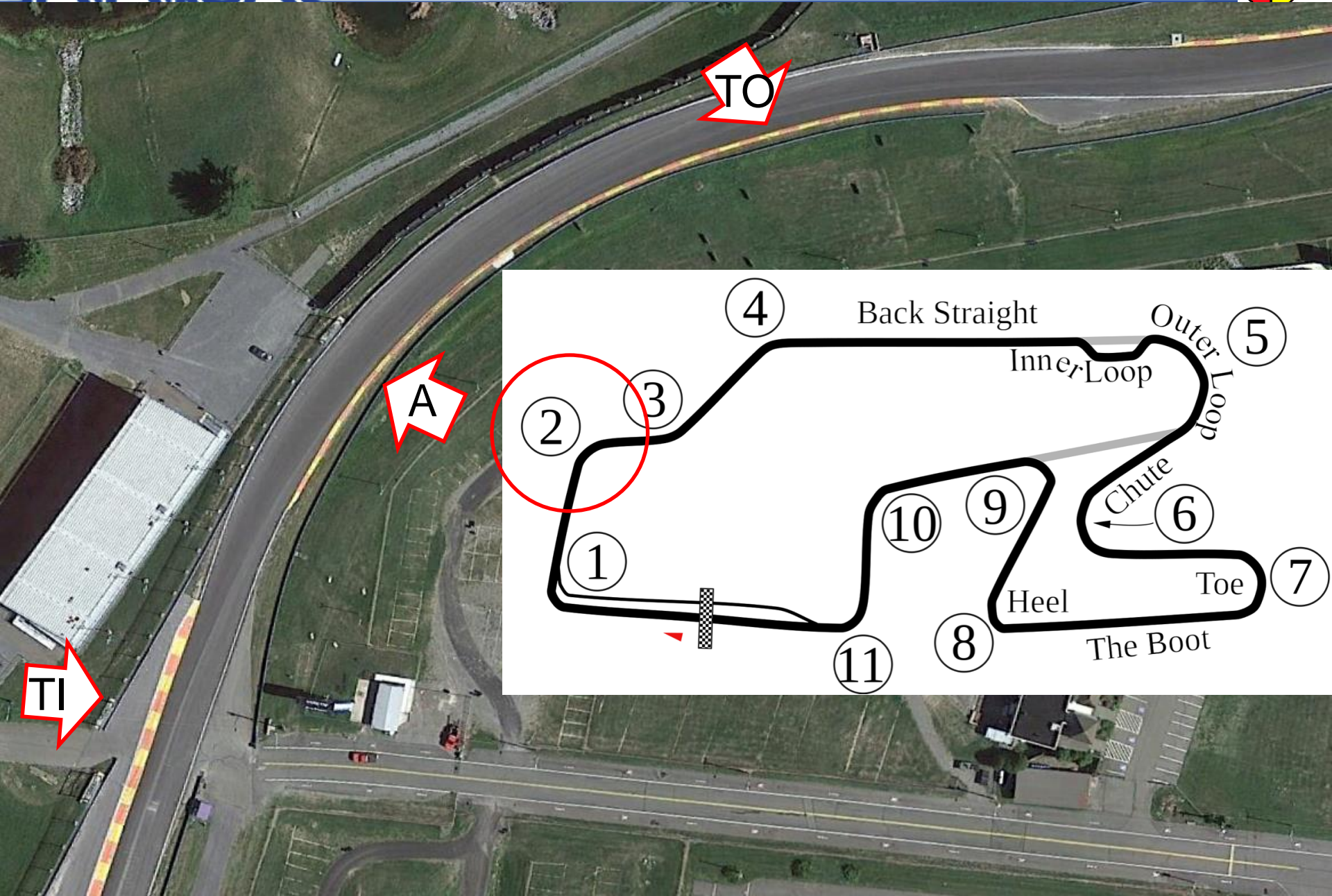








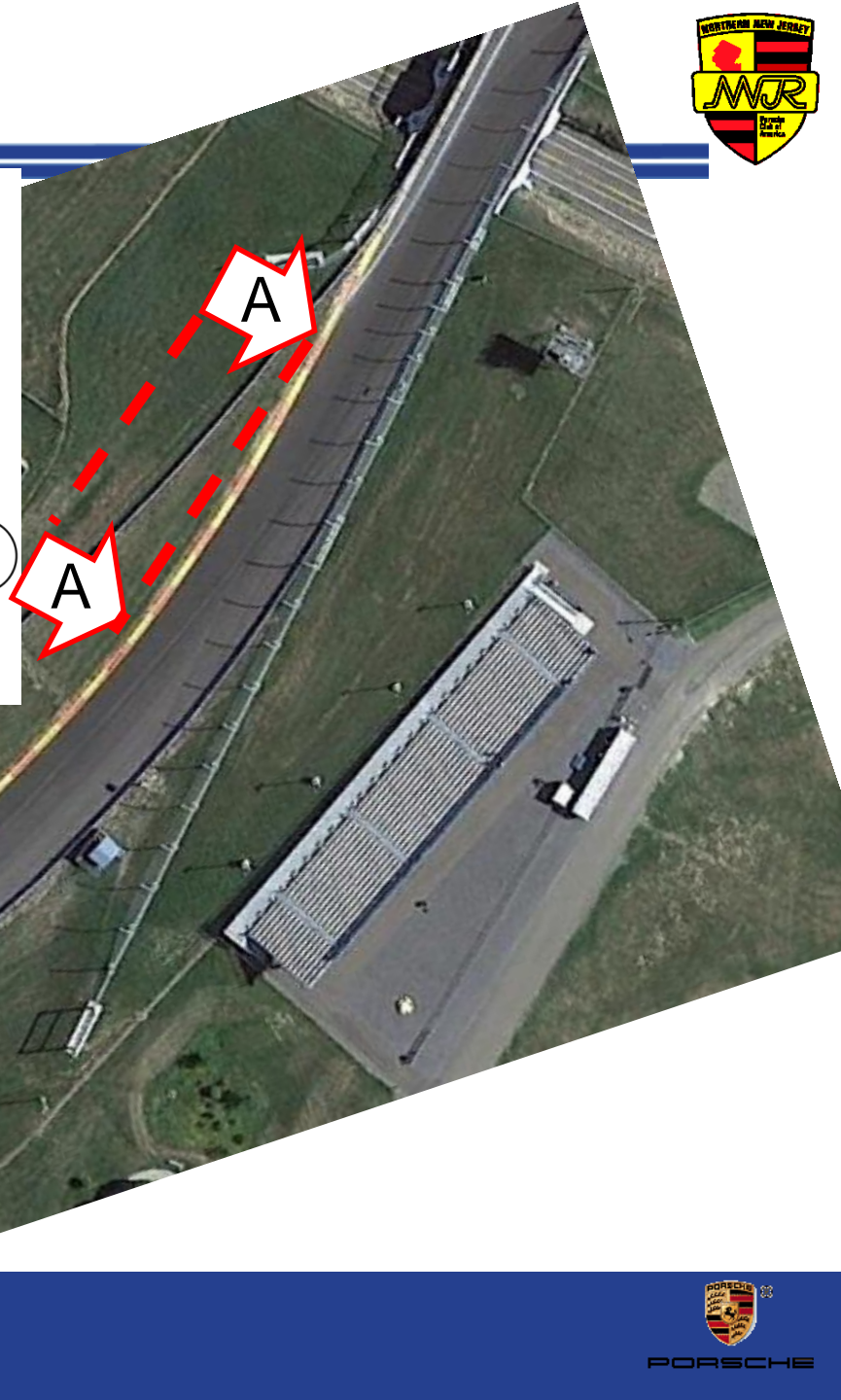
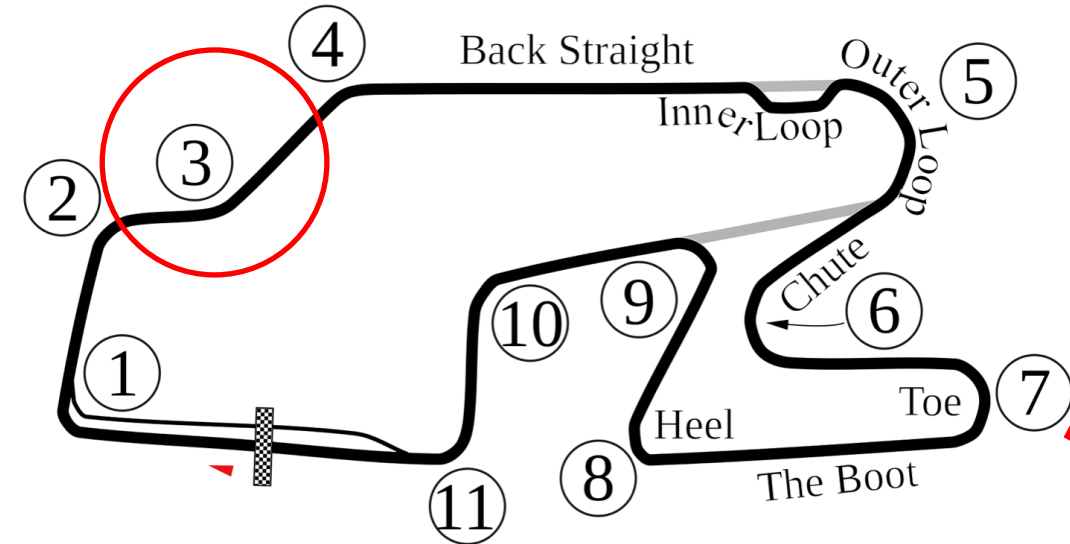
NJR Turn 2







Turn 3



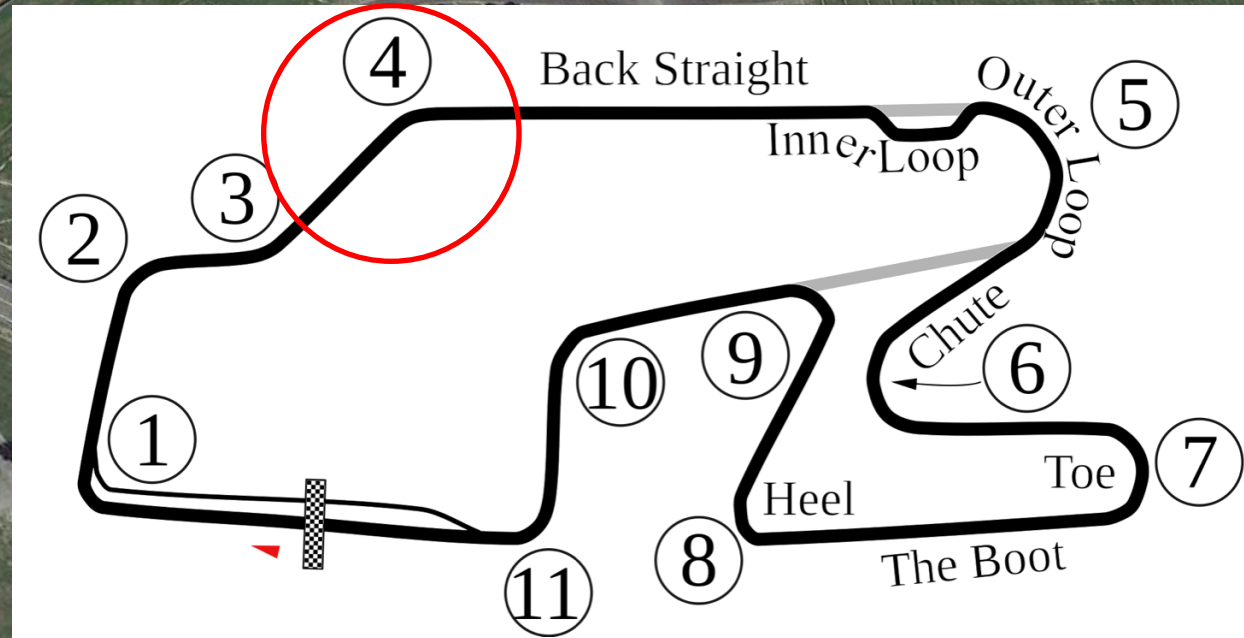
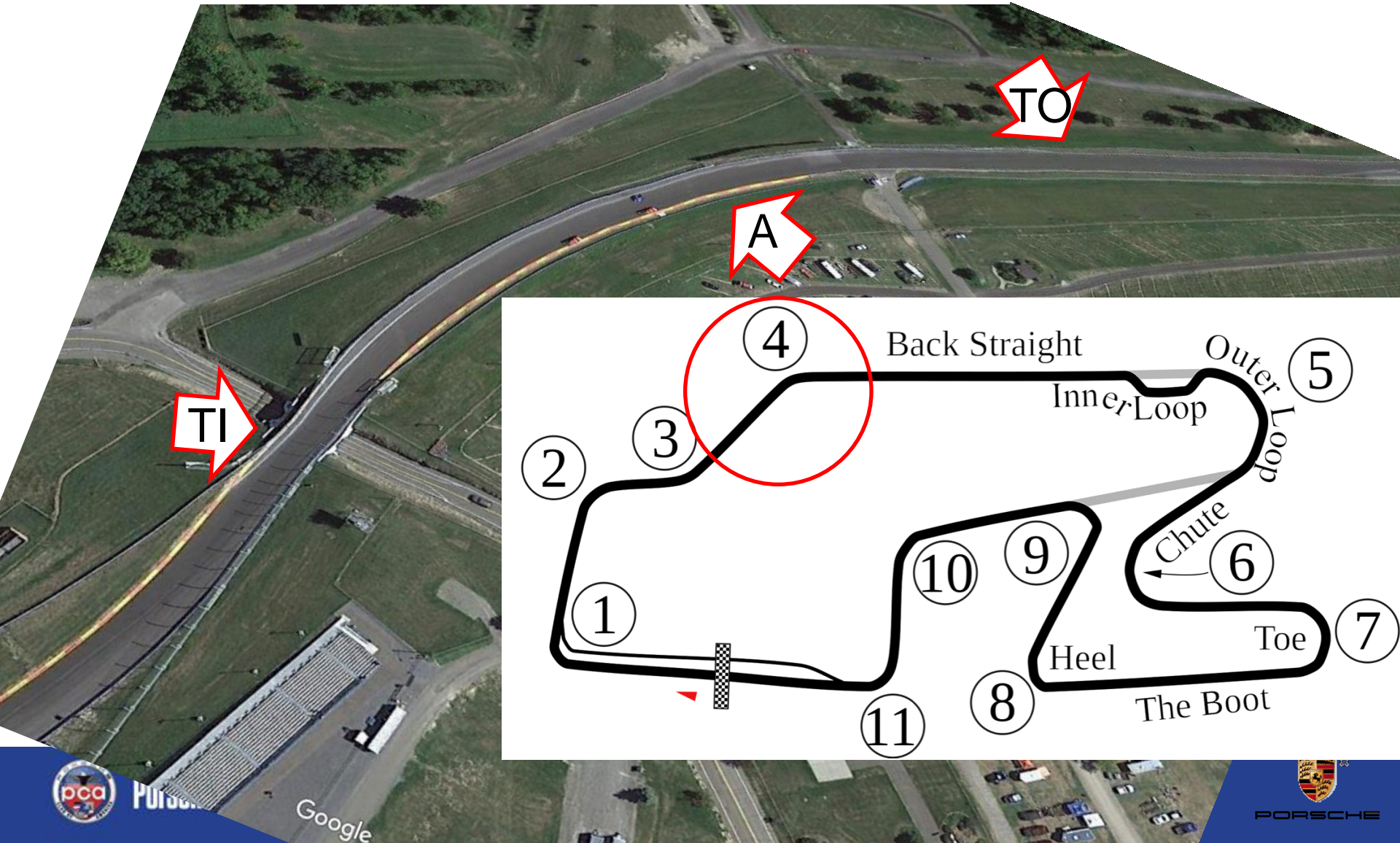
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Turn 4



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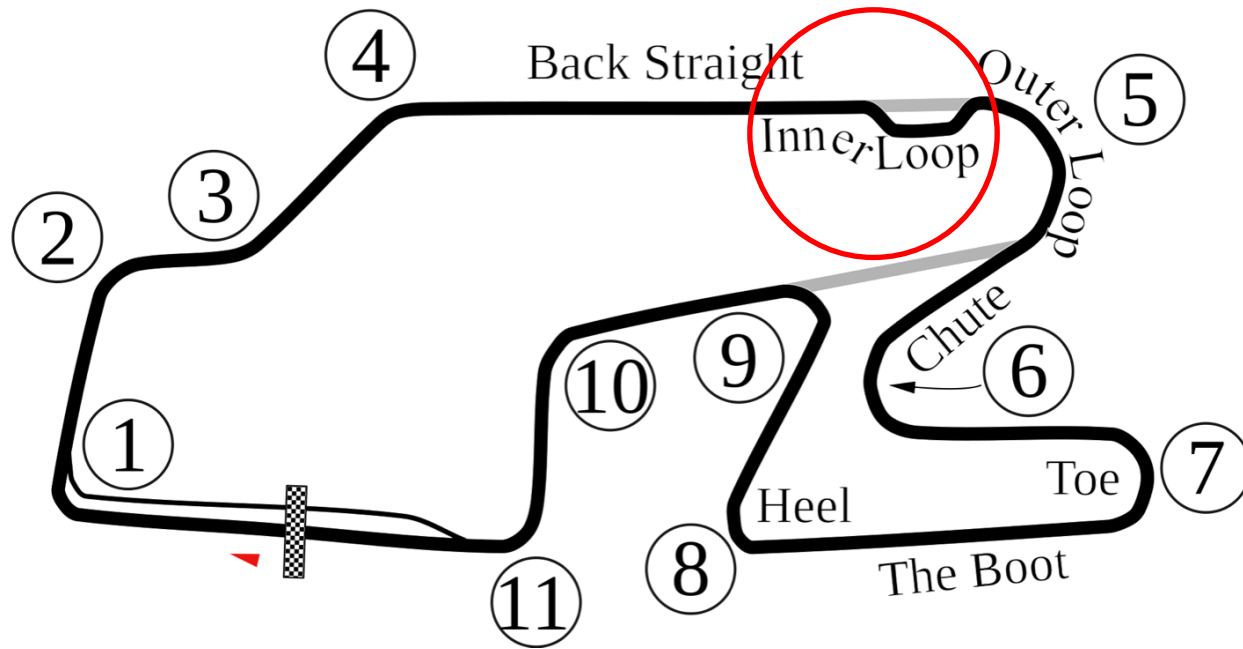
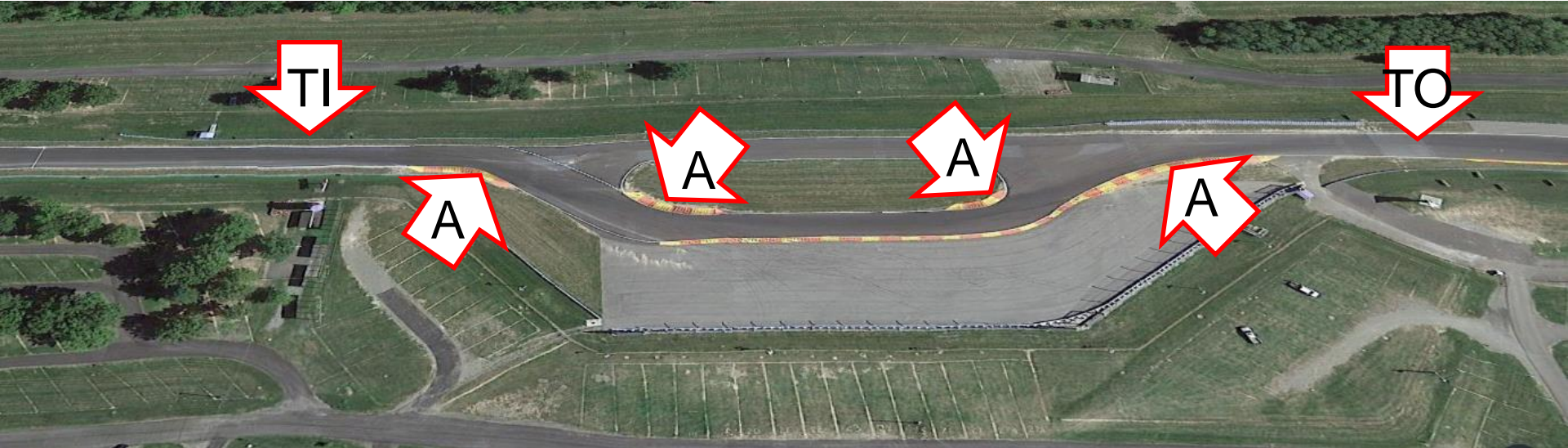


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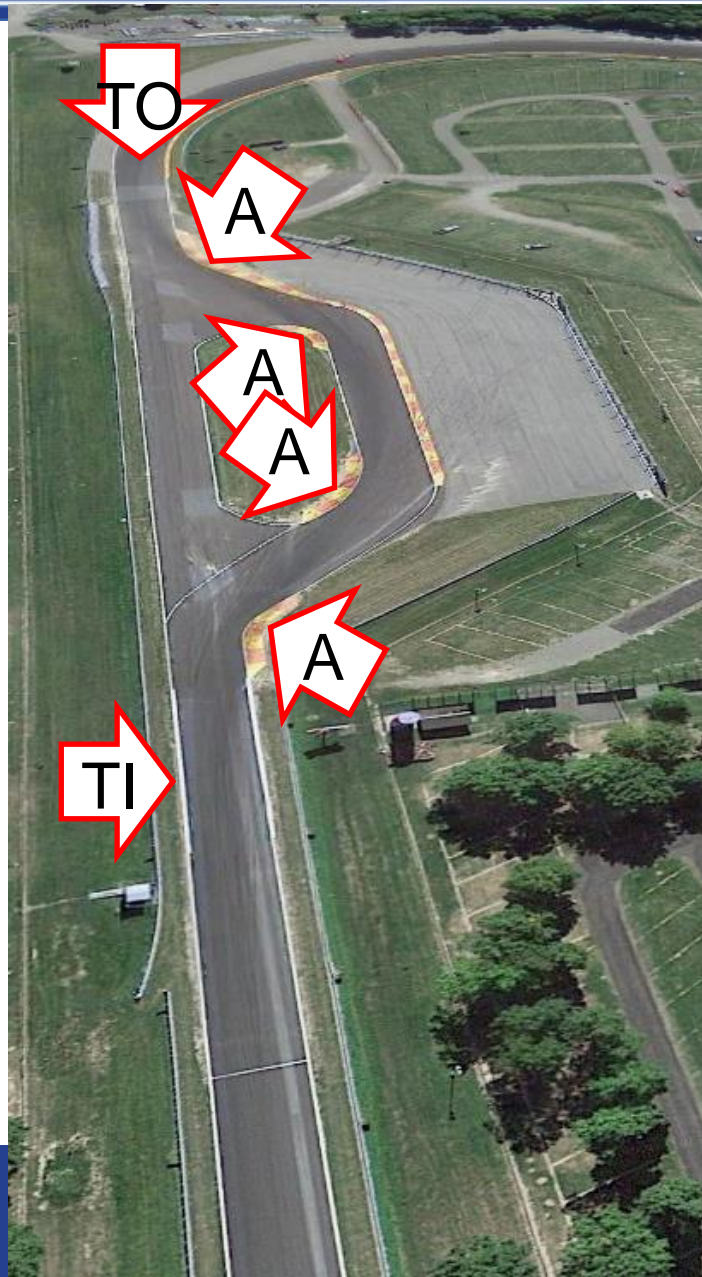
NJR Inner Loop (Bus Stop)



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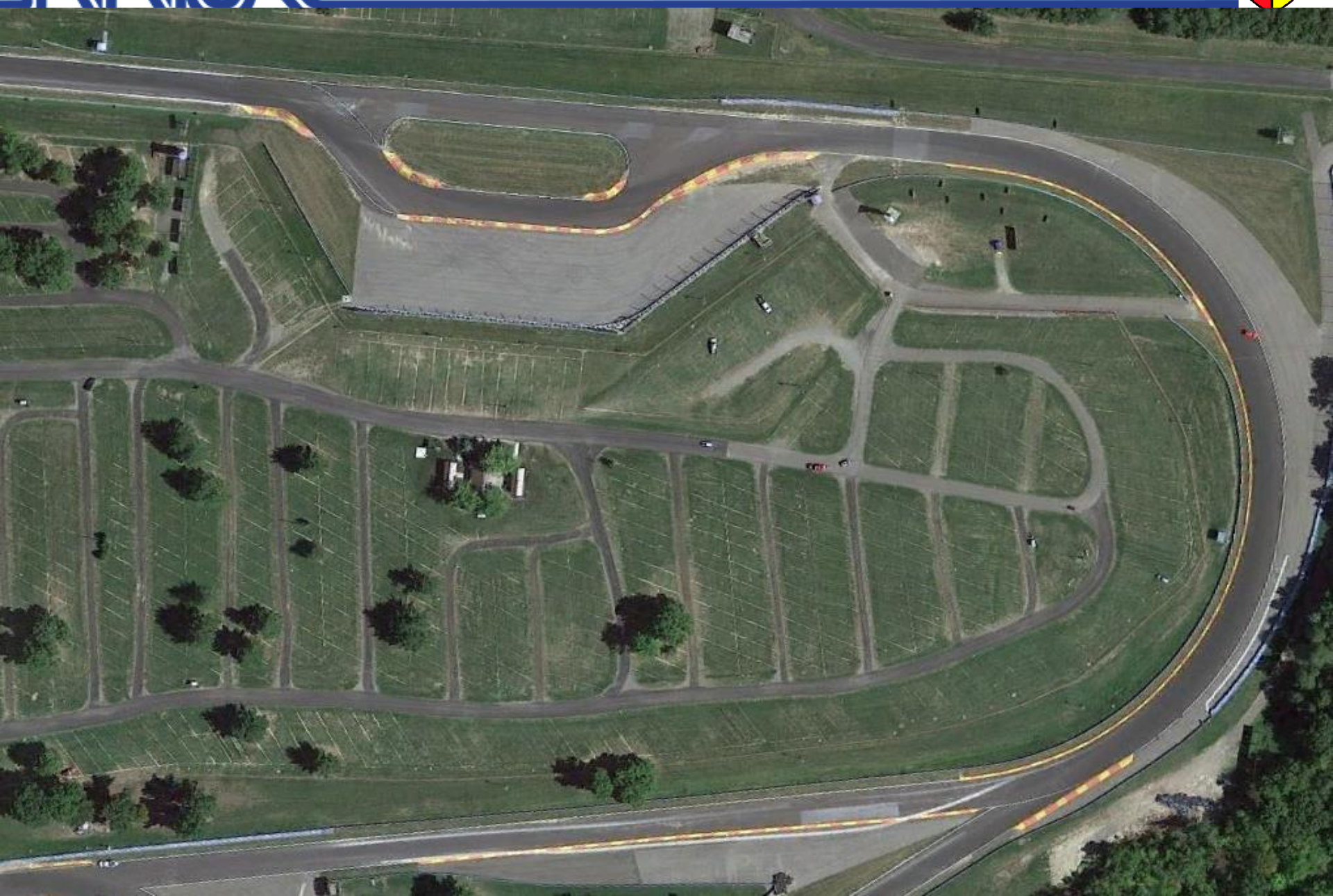


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Bus Stop and Turn 5





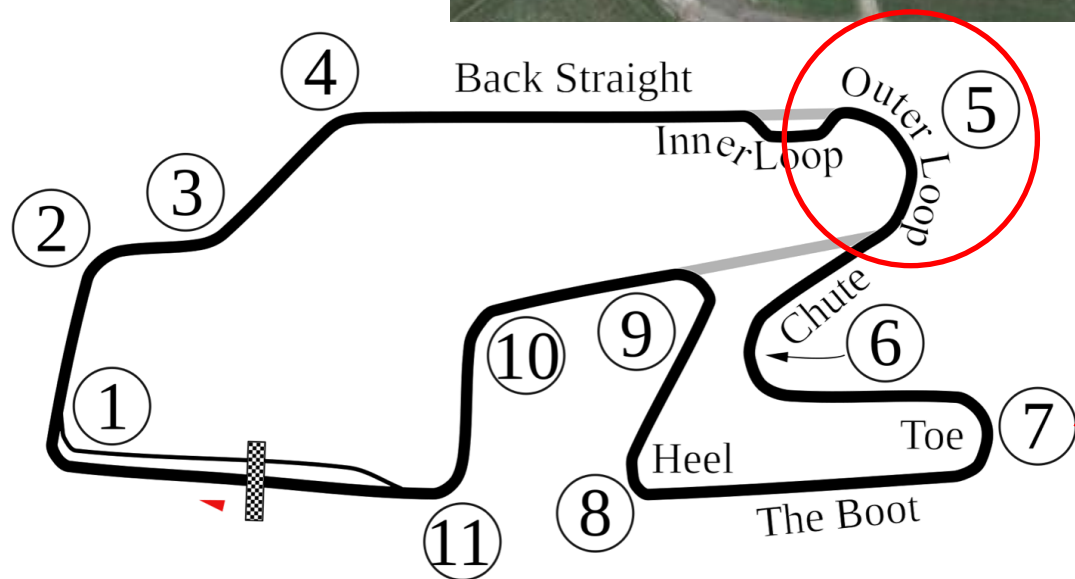
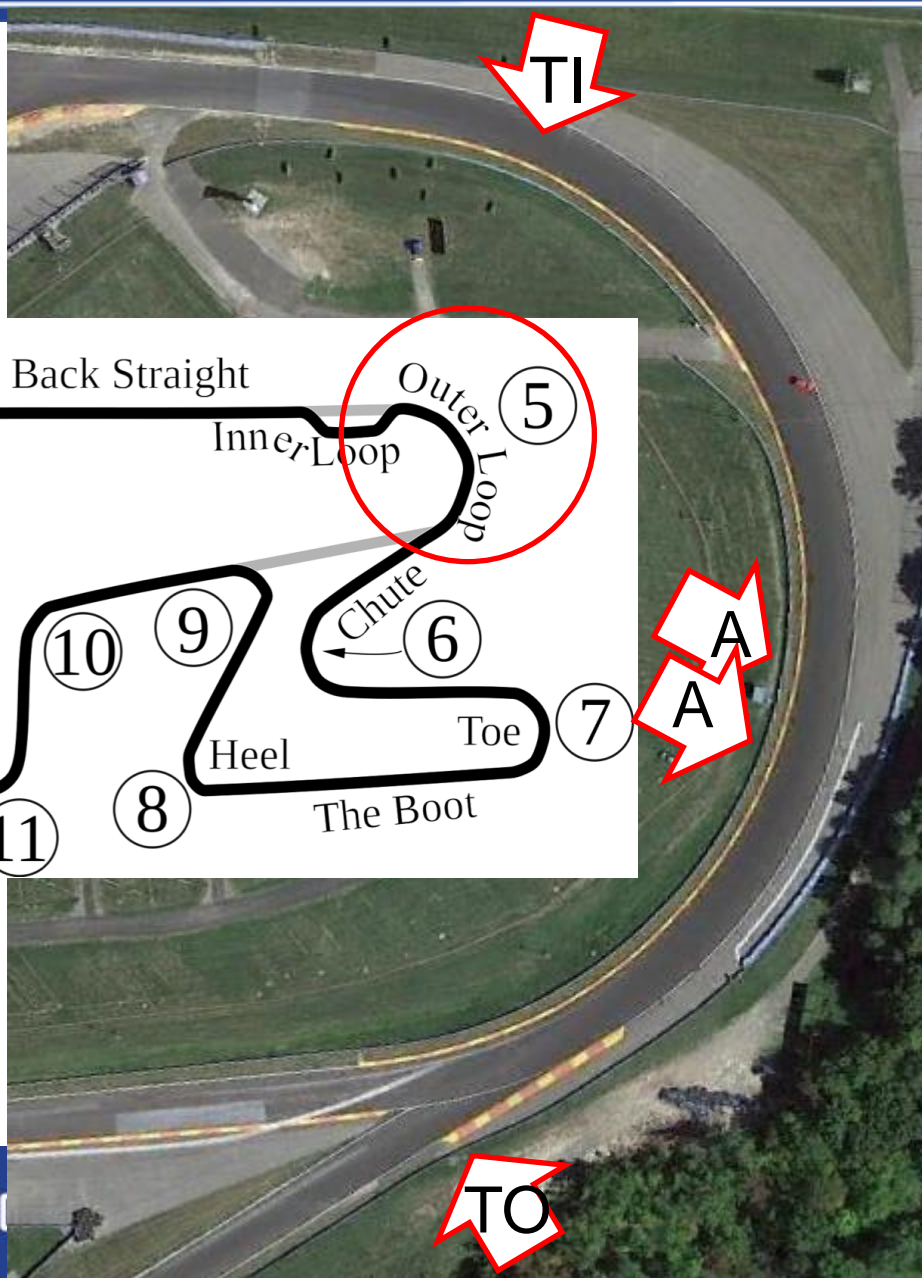








NJR Turn 5: Carousel



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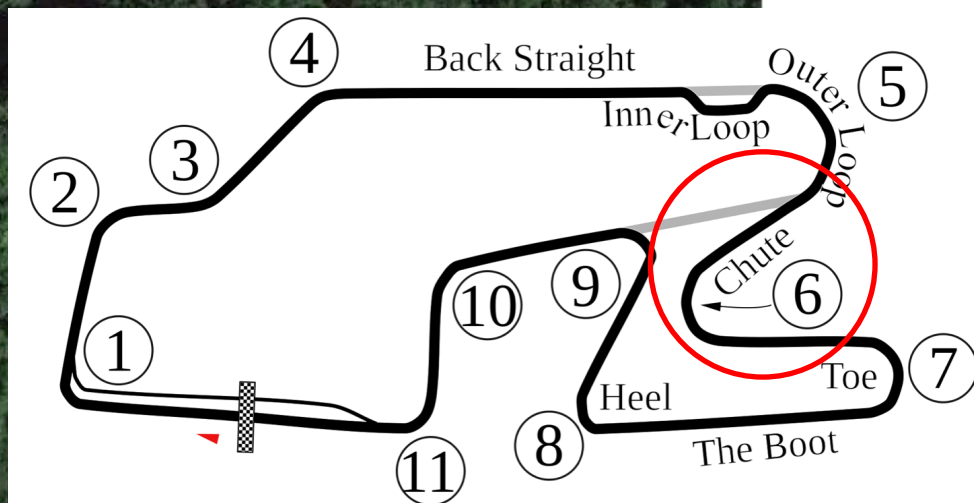
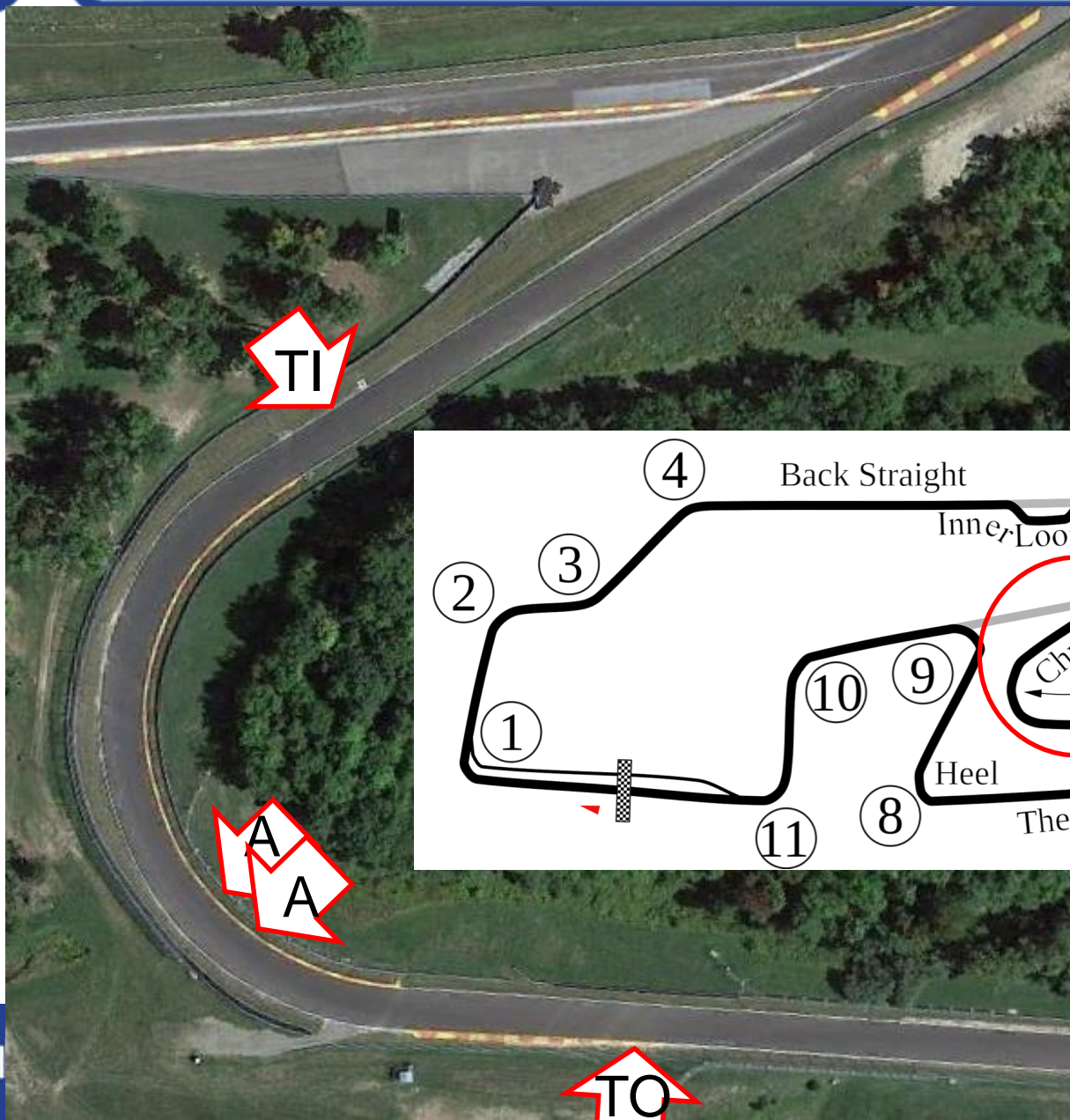








NNJR Turn 6: Laces

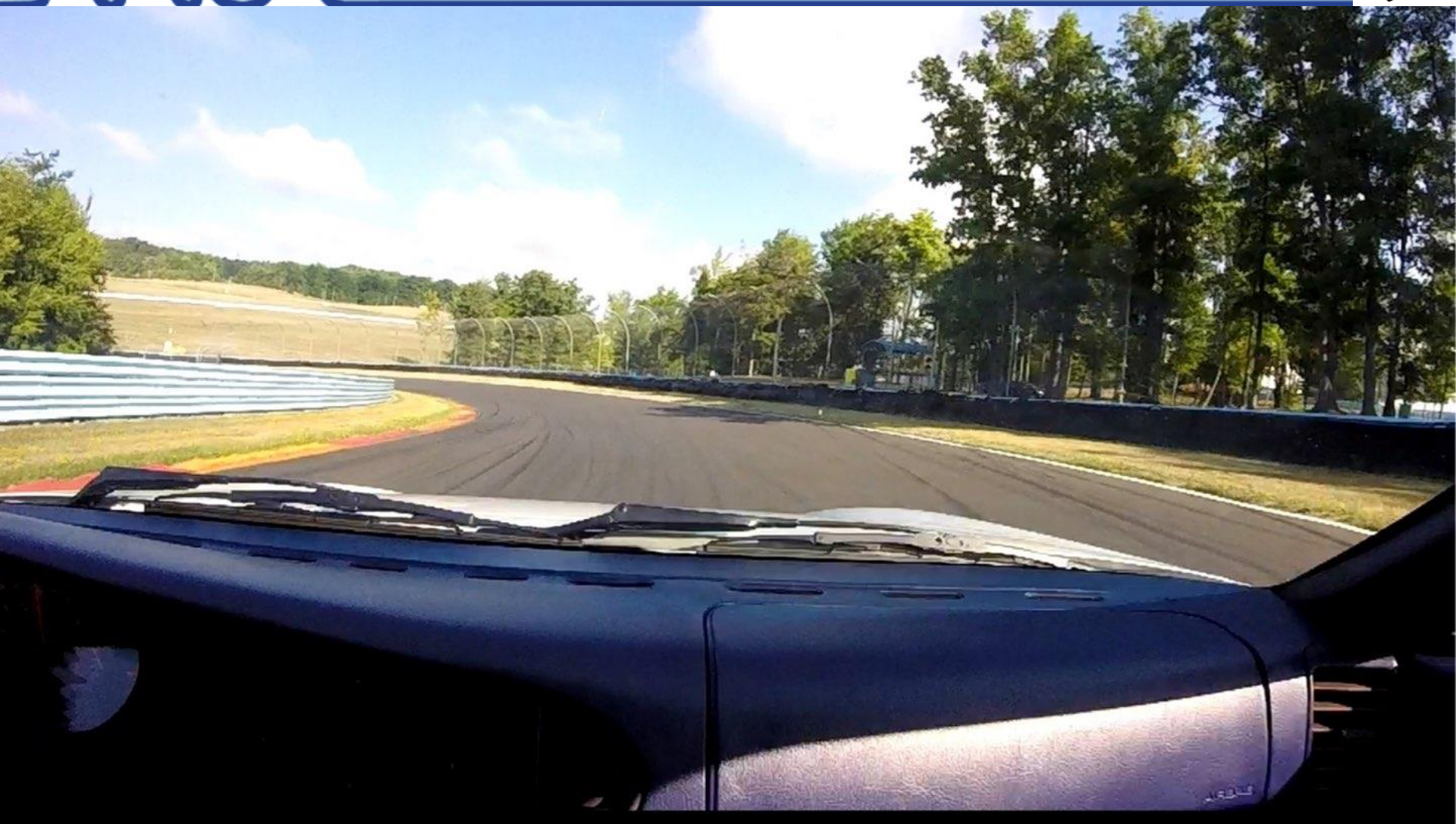


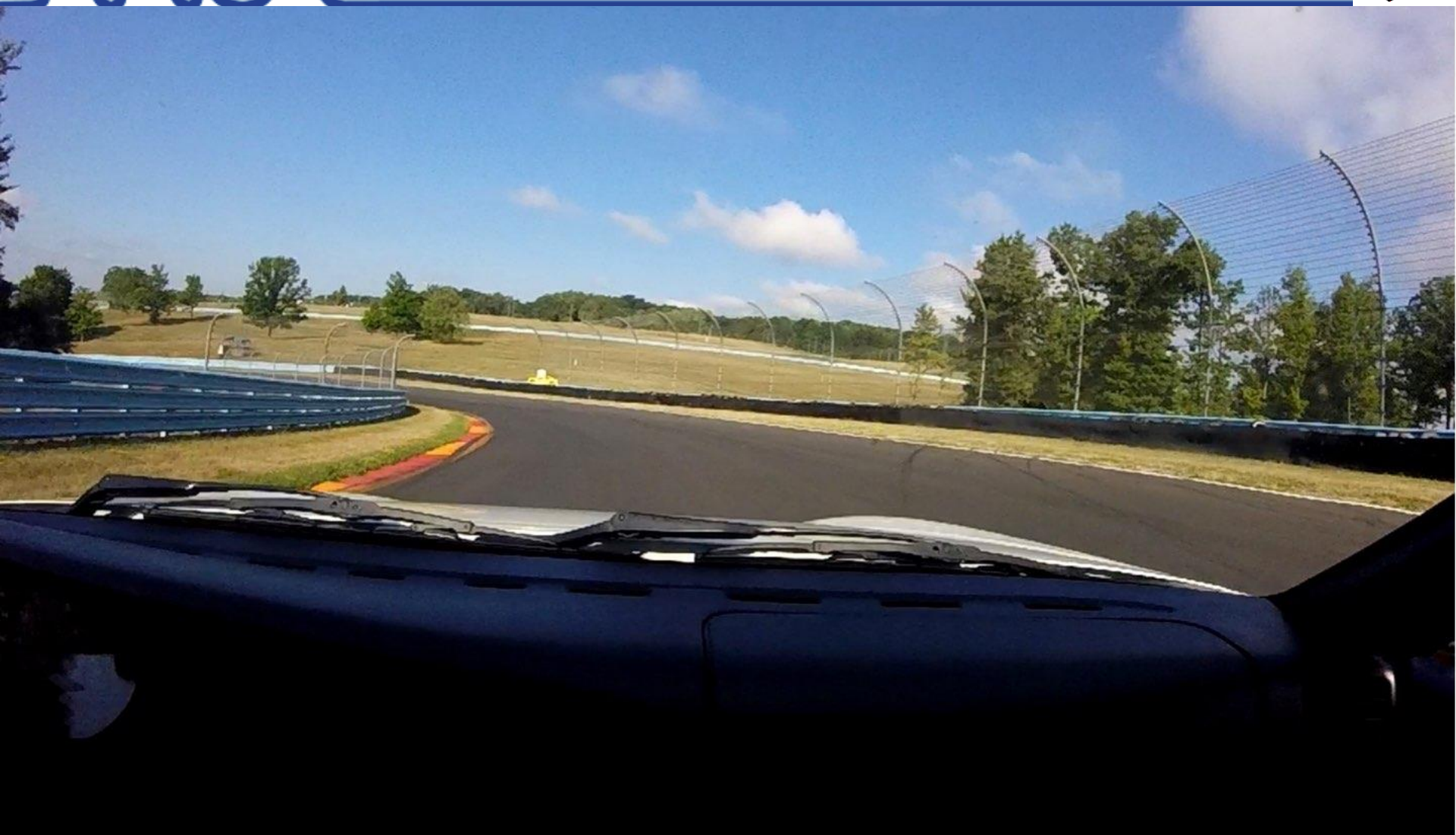
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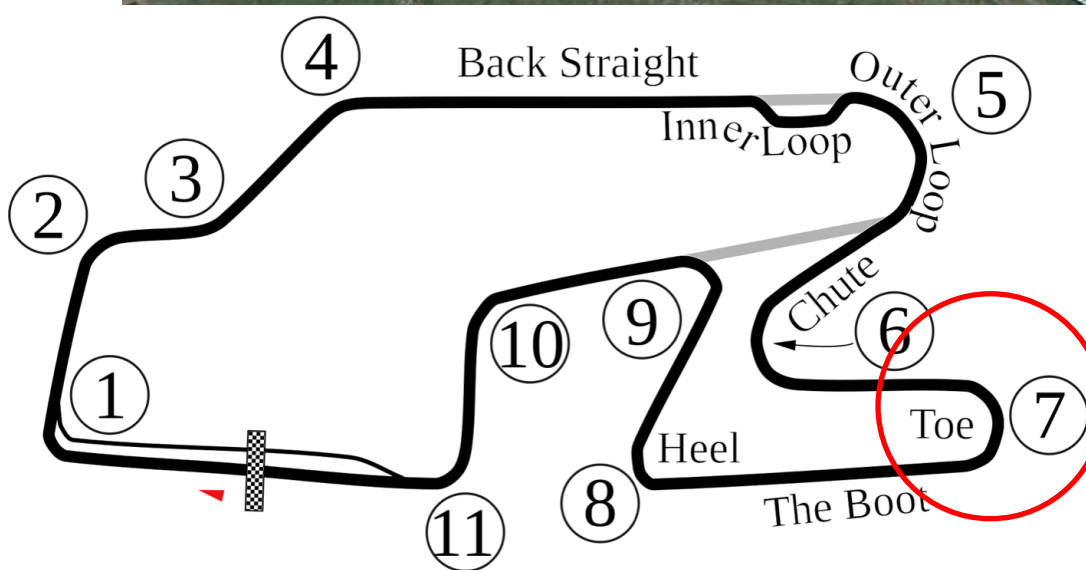
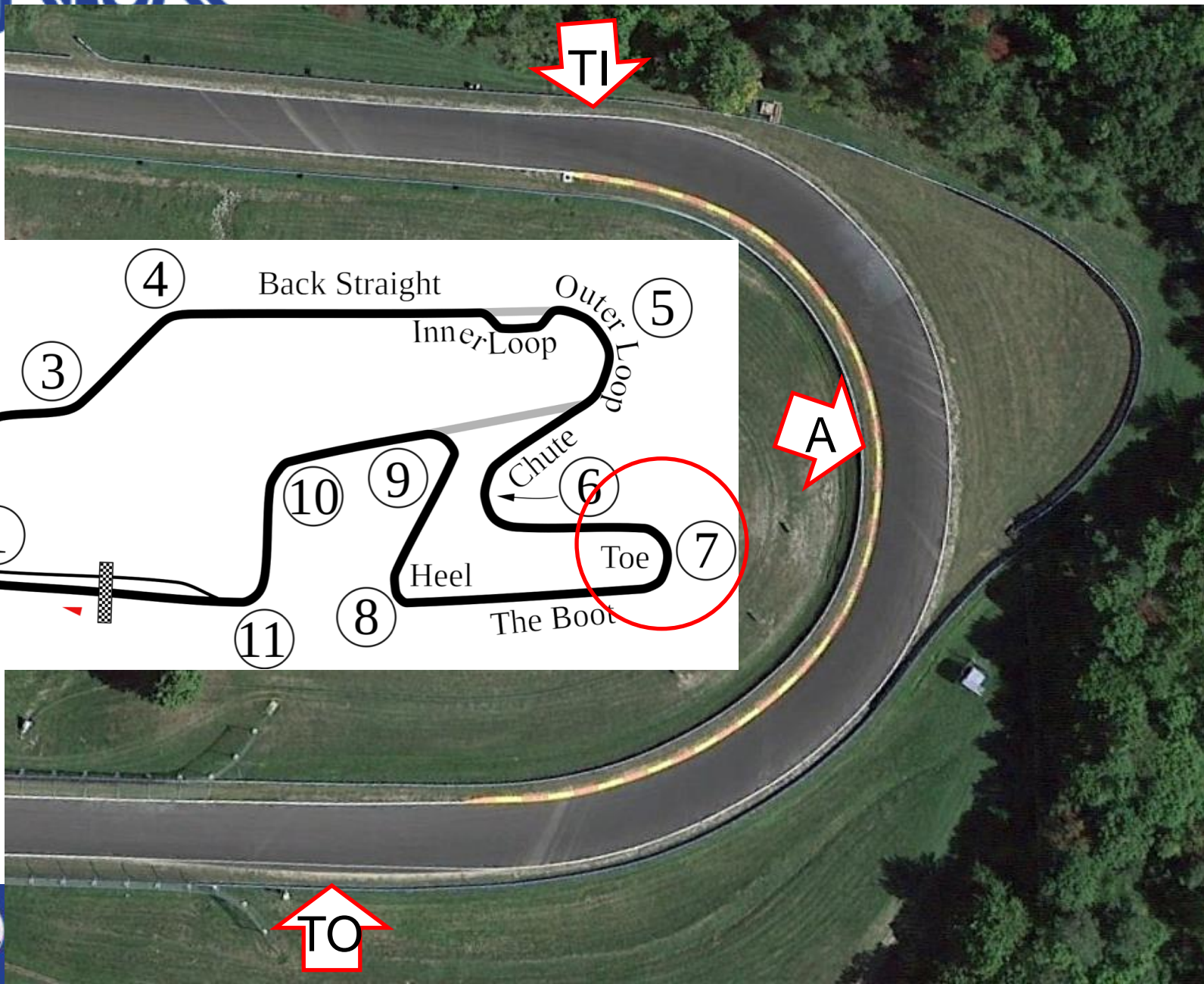








Turn 7: Toe



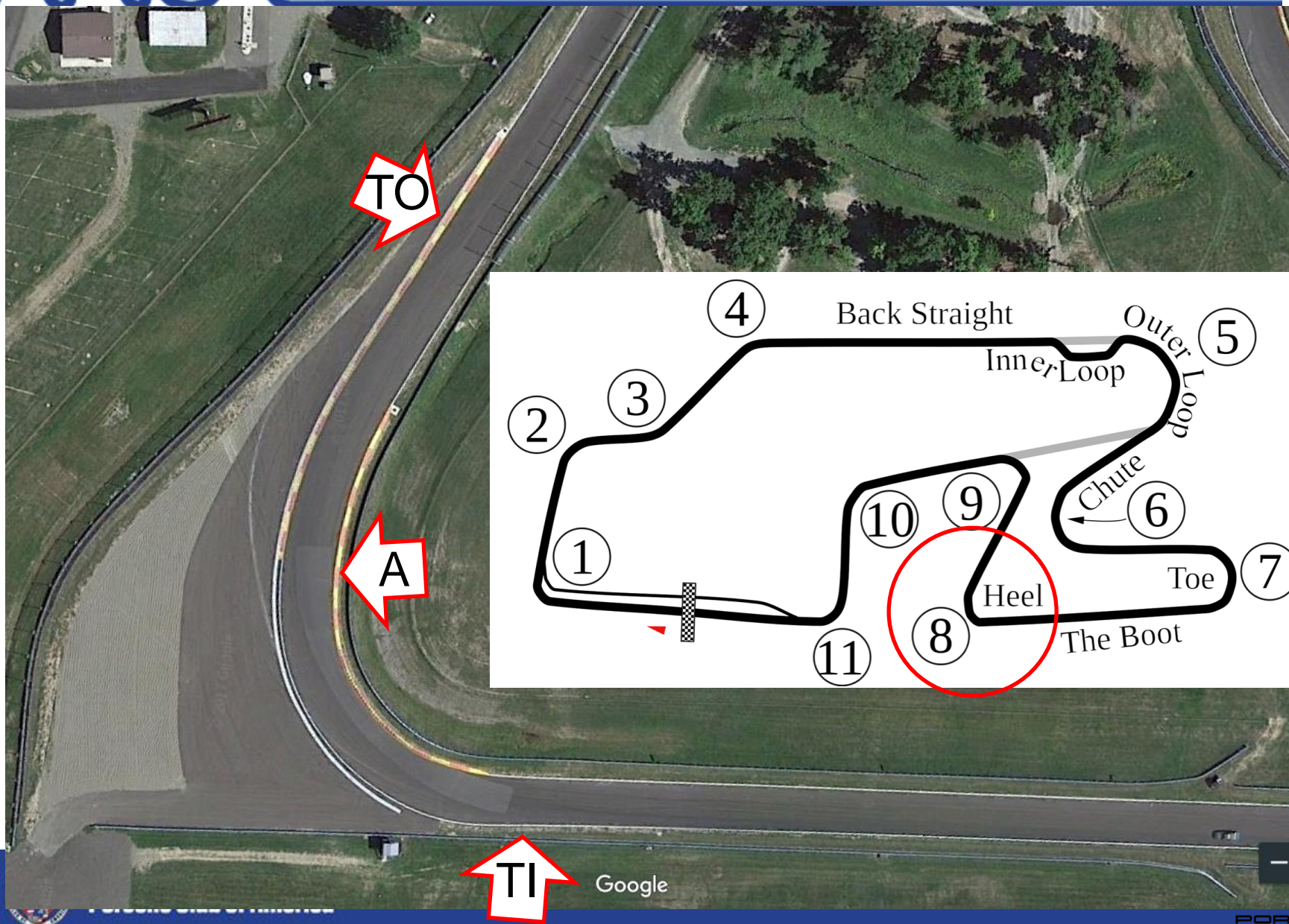








NJR Turn 8: Heel



Google



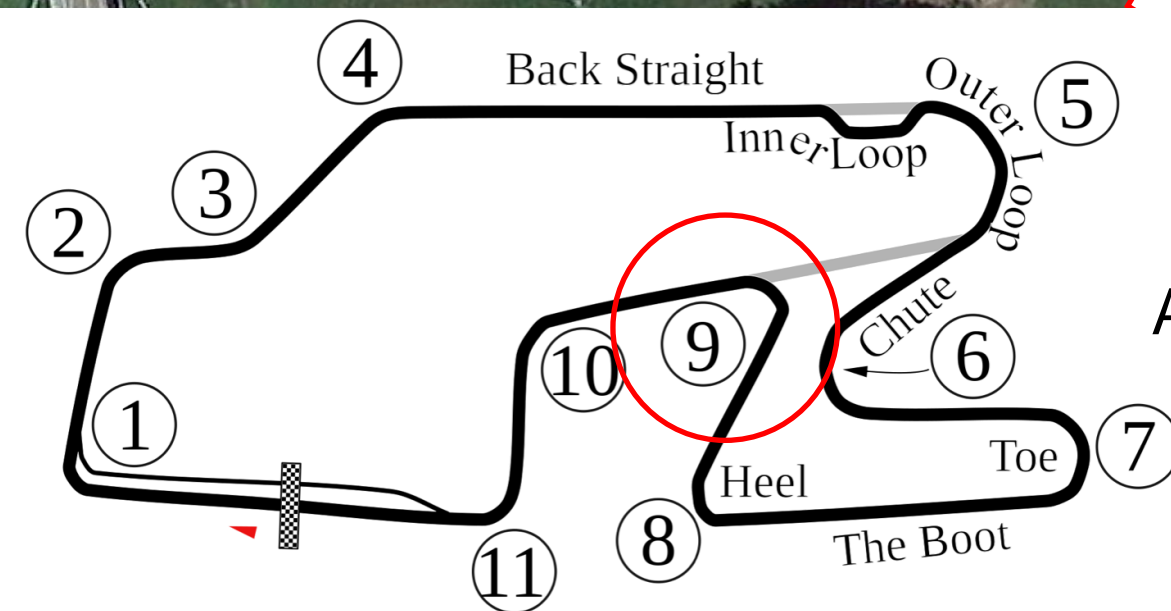
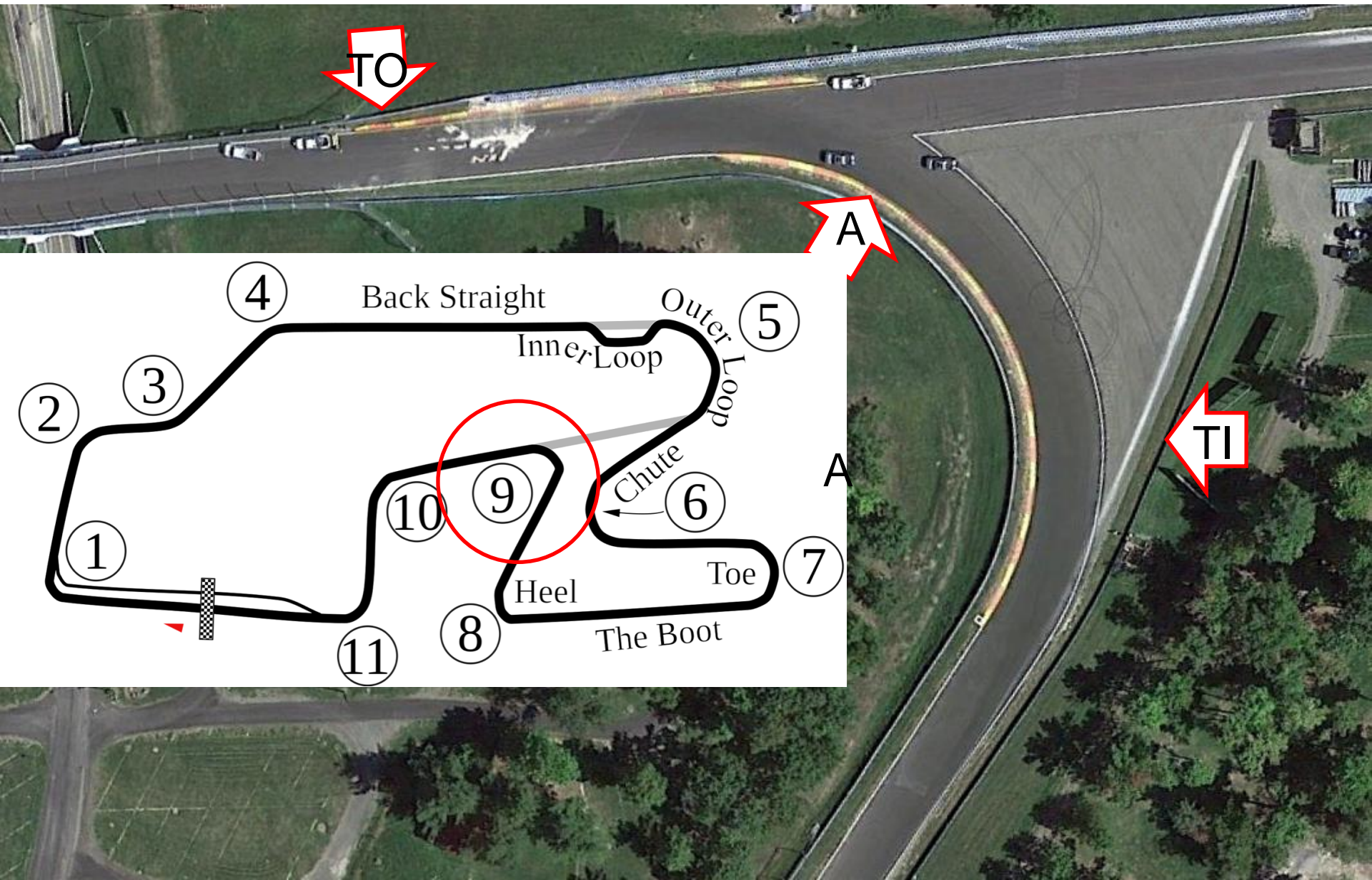
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Turn 9: Off Camber





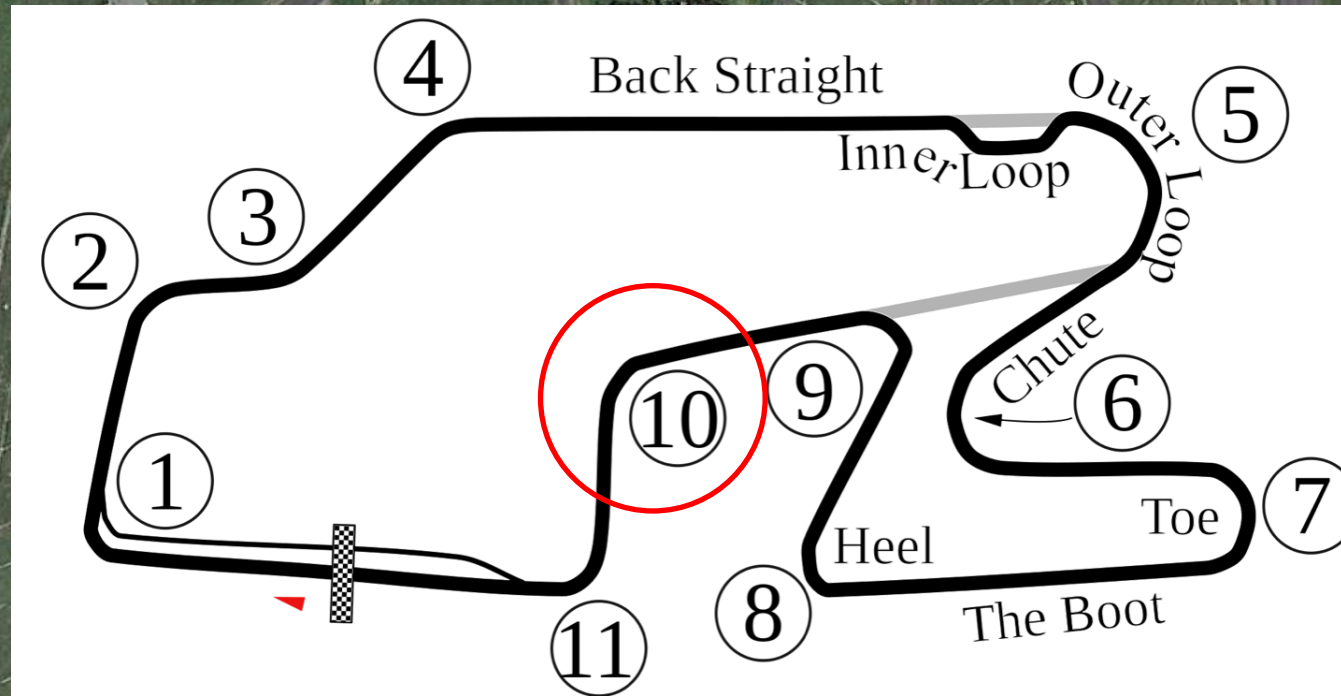






GOPR0251 yellow flag laps no traffic

Turn 10



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Turn 11

