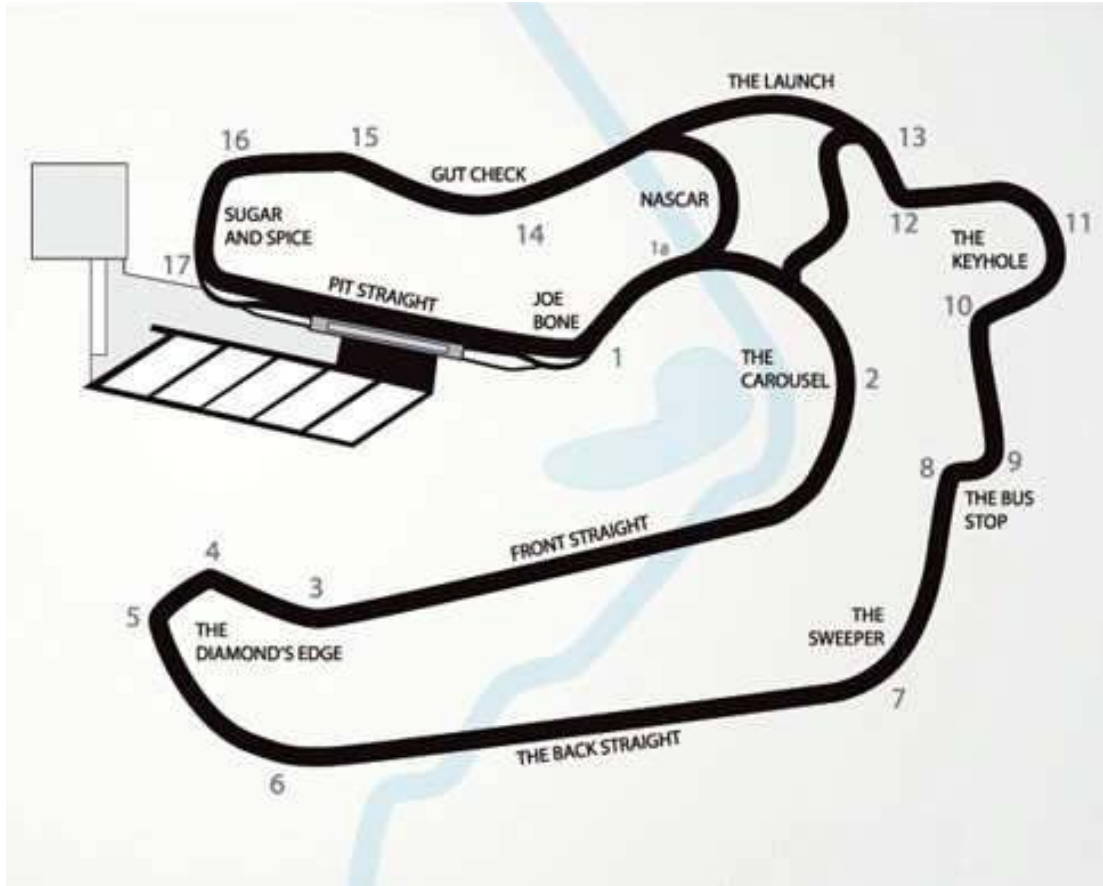


## A CCW LAP AROUND MOTORSPORTS RANCH HOUSTON ©

### LONE STAR REGION OF THE PORSCHE CLUB OF AMERICA



FOR PURPOSES OF THE LONE STAR REGION HIGH SPEED DRIVING EDUCATION EVENTS (“DE’s”), BELOW IS A DESCRIPTION OF A DRIVING LINE AROUND MSR. THIS DESCRIPTION SHOULD PROVIDE A GENERALLY SAFE APPROACH TO THIS TRACK.

#### Turn 1 & 1A

You set up for Turn 1 as you cross the Start/Finish on the Pit Straight. You should stay about 5 feet from the right wall. Any closer to this wall increases the likelihood of picking up debris, such as rubber, nut & bolts, old fan belts, etc.

Near the end of the Pit Straight, you will get to the right in preparation for making a left turn at the end of the straight. Be very certain to look for cars entering the track at pit out, as they will be in your direct line of sight, and the speed differentials here will be extreme. BE AWARE THAT CARS ENTERING THE TRACK MAY NOT BE ABLE TO SEE YOU ON THE PIT STRAIGHT.

As you prepare to enter Turn 1, most cars are probably in 4<sup>th</sup> gear. Brake in a straight line (and possibly downshift), then, with a constant throttle, turn in for a slightly late apex on the left curb side. Kiss the apex on the left curb, and then straighten up the car to kiss the edge of the pit out rumble strip. This will bring the car across the blend line on the right side of the track and apex on the right for Turn 1A.

## **Turn 2 – The Carousel**

As you leave Turn 1A, let the car run in the middle of the Carousel almost all the way around. Look for the paving done in 3 lanes or sections; use the “center lane”

You will have to manage the throttle in order to keep control, but still trying to increase speed. In some cars, if you downshifted into Turn 1, an upshift below redline may provide more stability here. As you get toward the end of the Carousel, move to the right (“the right lane”) and apex near the middle of the yellow curbing on the right.

At this point, keep a constant radius and you will track out near the yellow curbing on the left under increasing acceleration, thus leading you onto the Front Straight. The Front Straight is one of the fastest straights on the track.

Right after track out on the left side into the Front Straight, you will probably upshift (if you didn’t do it earlier in the Carousel) and drive at full throttle toward Turn 3. Be observant of major bumps in the asphalt.

## **Turns 3, 4, 5 and 6**

This set of turns will take you a full 180 degrees. Remember that you will have to both brake and downshift to 3<sup>rd</sup> gear through this complex. You will have to do hard braking, and this is not a place for LATE BRAKING. For some drivers, this might mean lifting or braking into the previous corner Turn 3.

As you approach these corners, you will first see two yellow curbs – the first at Turn 3 on the right and then the second at Turn 4 on the left. You will thread the needle through them.

Turn 3 is a slight 20-degree turn to the right. You will probably need to brake lightly before Turn 3 with a slightly early apex at Turn 3, aiming for the yellow curbing which marks the beginning of Turn 4. Then, in a straight line, you will have to do some HARD braking just prior to turn in at Turn 4.

Turn in for Turn 4. It is very important to displace the apex of Turn 4 by 6-10 feet or more. The heavier the car, the more displacement is needed. You must continue to carry speed through this turn. After apexing Turn 4, get back on the throttle and take the car all the way to the outside edge of the track before turning in for Turn 5.

As you turn into Turn 5, plan to apex this turn late and EXACTLY. You should be at the curb or on the curb on the left very late in the turn. With accelerating throttle, you open up your steering immediately and let the car run out to the right edge of the track.

From there, you are accelerating toward Turn 6. Turn 6 is merely a slight 20 degree bend in the road and should not require any speed adjustments. Take it on the inside, but it is not necessary to be exactly on the curb. Once through Turn 6, you are now on the Back Straight heading for The Sweeper. The Back Straight is a very fast straight. You will gradually move to the right side of the track to set up for The Sweeper.

## **Turn 7 – The Sweeper**

Turn 7 is a broad 45 degree turn which can be taken at speed; though some cars may require a lift or a slight brake before turn-in.

You want to begin your entry into Turn 7 from the right side of the track. As you reach the turn-in point, you may wish to lift or brake slightly and then gradually bring the car left for a super-late long apex at Turn 7.

After the late apex, you will need to immediately STRAIGHTEN THE CAR and then HARD on the brakes and downshifting in preparation for The Bus Stop. In other words, you need to have the car straight as you pass the apex of Turn 7, which begins the braking zone for the Bus Stop. You should end up in the middle of the track while braking.

### **Turn 8 & 9 – The Bus Stop**

This is a right, then left combo. And both are slow “throw-away” corners.

Turn 8 is a right-hand similar to Turn 13 at TWS. Treat this corner the same way with a very late apex. Almost immediately you prepare for a sharp left-hander at Turn 9. The important thing is to set up for a hard launch out of Turn 9. When taken properly, you will only need to track out part of the way toward the right side of the track coming out of Turn 9.

### **Turn 10 & 11 – The Keyhole**

You are now moving toward the left side of the track and accelerating up to Turn 10. Brake and then late apex on the right side curb at Turn 10. Again, this is a throw-away corner, but be sure to maintain speed through it.

Then as you enter the Keyhole, it is best entering slightly right of mid-track.

Turn 11 is a very late apex. This is a slow part of the track. Accept it as slow and then work to make it as minimally slow as possible. Enter the corner on the right and begin your turn-in so as to finish the Keyhole immediately adjacent and parallel to the inside of the track as the turn ends. The Keyhole is just like the Carousel at TWS (but in the opposite direction). Treat it the same way by late apexing the car on the left.

A partial lift in the throttle in the latest stages of the turn might help rotate the car and reduce the dependence on steering input and front tire grip or just maintain throttle through Turn 11 so you don't have to lift prior to Turn 12. When the car is properly aligned on exit, you will be on the left edge of the track, parallel to the track edge and under slight acceleration.

### **Turn 12**

After holding that parallel exit from Turn 11, turn into Turn 12 so as to put your right front wheel at the edge of the right curbing of Turn 12. This is a mid-to-late apex turn as a setup for Turn 13. You should be accelerating slightly through this turn, but be careful not to over-do it, as understeer is very easy here, and it will really mess up your approach for Turn 13. Remember, the purpose here is to get set up for Turn 13, the Launch and the following Straight.

### **Turn 13 & The Launch**

There are sort of 2 apexes at Turn 13, on either side of where the pavement intersects on the left from one of the other track configurations. Displace the first one by several feet, and then clip the 2nd one. In other words, get the car all the way track left AFTER the intersecting pavement in order to apex the second curb.

Your view of track-out over The Launch is out of sight so practice it slowly at first in order to properly position the car.

The Launch is the only elevation on the track; and it is over a culvert crossing the creek. It is best to have the car under control as you hit The Launch. Release steering input as you approach this hump, in order to come off it fast AND STRAIGHT. With straight steering, you will track out all the way to the right, and then begin moving left as you proceed down the Back Straight. If you go over the hump with any appreciable steering lock, you will either get loose or run out of track as you re-compress the suspension at exit.

### **Turn 14 – Big Bend**

At the end of this straight is Big Bend. Stay 1 car width away from track left entering Big Bend, and then move to the right. You will see long yellow curbing on the right side. PARALLEL IT for the last 2/3 of its length. This is Turn 14. Then you will have a straight shot to the apex of Turn 15. By driving this way, you can stay on the throttle longer, and literally thread the needle into the entry to Turn 16. Very little steering is needed if done right. In many ways, this approach is similar to that of Turns 3-4-5 earlier. However, since the next series of corners require hard braking and downshifting, you might want to lift or brake in Turn 14, so you will not have to brake as hard into Turn 15.

### **Turns 15, 16 & 17**

Most cars coming into this sequence are in 4<sup>th</sup> gear. Remember that you will have to both brake and downshift to 3<sup>rd</sup> gear in this complex. You will have to do hard braking, and this is not a place for LATE BRAKING. For some drivers, this might mean lifting or braking in the previous corner Turn 14.

Graze the left curb at Turn 15, then in a straight line brake hard and downshift. You should bring your right front tire all the way to the track-out curb on driver's right after Turn 15. Come off the brakes in a straight line here, and let the car settle. Make sure you straighten the wheels after Turn 15. You should be on the right side of the track as you are in the entry of Turn 16.

Think of these three corners as one big 180 degree turn. Note that cars entering Pit-In will exit on the extreme right in Turn 16. Be sure to look at the cars ahead to determine if the car ahead is entering Pit-In.

Turn in for Turn 16. It is very important to displace the apex at Turn 16 by 6-10 feet or more. The heavier the car, the more displacement is needed. You must continue to carry speed through this turn. After apexing Turn 16, let the car go all the way to track right. Note that cars entering Pit-In will exit on the extreme right at Turn 16. Be sure to look at the cars ahead to determine if the car ahead is entering Pit-In. Some cars will straddle the curbing on the right between Turns 16 and 17 but you should be able to manage your speed to just touch that curbing with your right tires. Then let your momentum carry you to the apex of Turn 17 with throttle.

At the apex of Turn 17, it is imperative that you be at the curbing or on the curbing. It is important to apex late at this corner, in order to get good acceleration off this turn. But, more importantly, an early apex is not advisable as it may result in contact with the Pit Wall. When driven as described, there is plenty of room for track out, and you will use all of it.

**NOTE:** Drivers new this track should go through Turns 16 & 17 slowly at first. It is very easy to get this section wrong, either by early apexing one of these linked corners or by applying

too much power. Done incorrectly, the results could be grave. If there is any place on this track where Slow In, Fast Out applies, it is in Turns 16 & 17.

As you enter The Pit Straight, you will continue to accelerate and shift to a higher gear shortly after Turn 17.

You are now running down The Pit Straight approaching Turn 1 and another lap.

Good luck and have fun!

Written by: Jake Taylor, Kerry Bonner and Jack Smyth

