Development team has done few iterations using the event file and road file you have provided

and here are their findings:

 The steer controller feedback term is based on the yaw velocity of the vehicle. As this fluctuates a lot, we can see these fluctuations instantaneously in the steer angle. By setting LatPth P to 0.0, we can remove the direct impact of yaw velocity on steer angle (but have the I integral effect still there).

So here LatPth parameters set as below.

ry Planning	PID Speed & Path	PID Steering O	utput Filters				
Path/Curvat	ture yaw rate control g	ains (LatPth*)					
P 0.0	I 0.1	D 0.0	Restore Defaults				
Lateral acc	eleration steering curv	ature control gain	s (LatAy*)				
P 1.0	I 10.0	D 0.0	Restore Defaults				
Lateral acceleration steering acceleration control gains (LatAyC*)							
P 10.003	1 J U.UU1		Restore Defaults				

2. By setting SteTrq P100 I 1000 steering torque controller performs much better, so these parameters set as below.

anning Pl	D Speed &	Path	PID	Steering Ou	itput	Filters
Steering	torque outp	out control	l gai	ns (SteTrq*)		
P 100.0	I 10	0.00	D	10.0	Restore De	faults

- 3. Braking has been set to machine. Previously it was set to Open.
- 4. Steering has been set to trans to improve steering performance.

Name RAMP_	STEER		Comment
ering Throttle	Braking	Gear (Clutch Conditions Actuators Linear
Actuator Type	trans	•	
Control Method	machine	•	Steer Control file
Control Type	data_map	Ŧ	File Name TwistTrack_300mm_1.crg
C Absolute	Relative		Lat. Path Offset 0.0

 Environment variable MSC_ADAMS_VDM_SI2FLAG=0 has been set so that Adams Car will define steering actuators to accommodate corresponding solver integrator; (0=I3, 1-HHT, 3=SI2). After making above changes I ran the simulation using the road file you have provided and I can see there is significantly reduce in the steering wheel angle as below.



Steering angle is down from 150 deg to about **38** degrees on one steering direction and to **70** degrees on the other steering direction .

This steering angle looks good to me considering the shape of the obstacle.