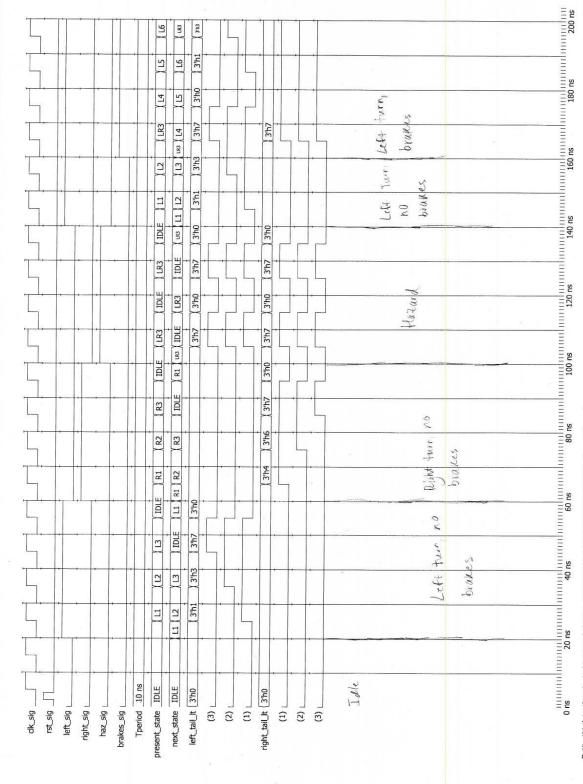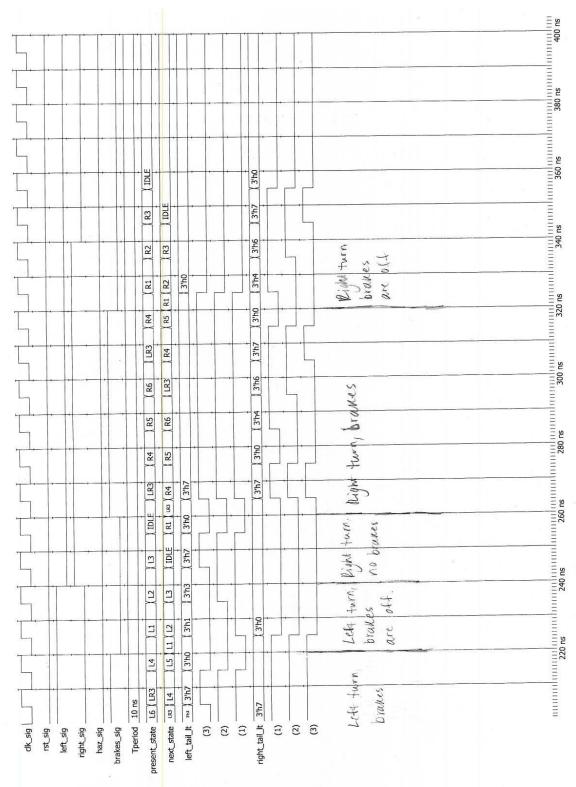Appendix B
Simulation Output Waveforms

Entity:tbird_testbench Architecture:behavior Date: Tue Oct 31 14:17:32 AKDT 2017 Row: 1 Page: 1

clk_sig
rst_sig
left_sig
right_sig
haz_sig
brakes_sig
Tperiod 10 ns
present_state
next_state
left_tail_lt
(3)
(2)
(1)
right_tail_lt
(1)
(2)
(3)

present_state: L6 | LR3 | L4 | L5 | L1 | L2 | L3 | IDLE | LR3 | R6 | R5 | R4 | R3 | LR3 | R4 | R5 | R1 | R2 | R3 | IDLE
next_state: LR3 | L4 | L5 | L1 | L2 | L3 | IDLE | R1 | LR3 | R4 | R6 | R5 | R4 | R1 | R2 | R3 | IDLE
left_tail_lt: 3'h7 | 3'h0 | 3'h1 | 3'h3 | 3'h7 | 3'h0 | 3'h7 | 3'h0
right_tail_lt: 3'h7 | 3'h0 | 3'h7 | 3'h0 | 3'h4 | 3'h6 | 3'h7 | 3'h0 | 3'h4 | 3'h6 | 3'h7 | 3'h0

220 ns   240 ns   260 ns   280 ns   300 ns   320 ns   340 ns   360 ns   380 ns   400 ns

Left turn brakes

Left turn, Right turn, brakes are off.

Right turn, no brakes

Right turn, brakes

Right turn brakes are off

Entity:tbird_testbench Architecture:behavior Date: Tue Oct 31 14:17:32 AKDT 2017   Row: 2 Page: 2