SYC2 Staging Yard Controller Configuration Yard Name: _____

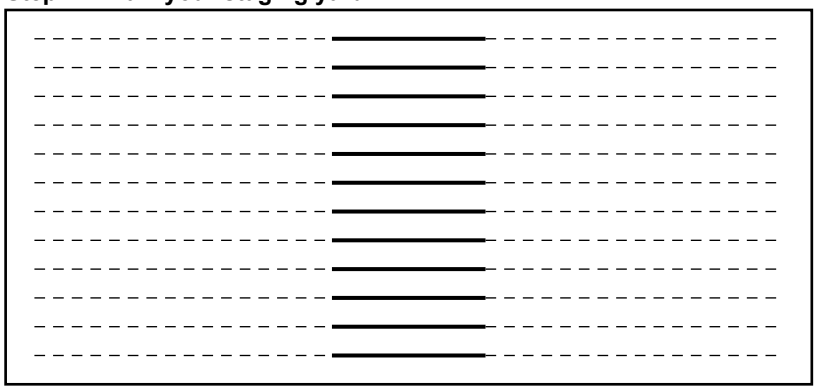
Please enter the yard name above, then complete these three tables and include this sheet with your order.

Step 1. Draw your staging yard with the throat on the left or right end of the solid track lines. Only one main line track can lead into the throat. Number each track. Tracks may be numbered in any order, starting with any number, but don't leave gaps. Label each turnout with a letter.

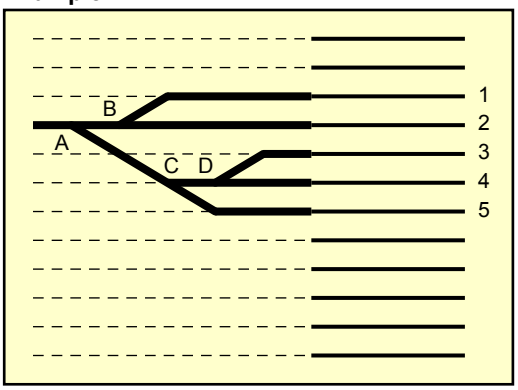
Step 2: Complete the route table. Trace the route on the yard diagram from the main line to each staging track. Every time you encounter a turnout, make an entry in this table to indicate that turnout's position for the route. At the intersection of the turnout column and track row, write **N** if the turnout is in the normal ("straight") position, or **R** if the turnout is in the reversed ("thrown") position. Leave blank or write **X** if the turnout is not used on the route.

Step 3: Select time dalays. Read the instructions in the table, then enter your choices.

Step 1: Draw your staging yard



Example



Step 2: Complete the route table

Track \ Turnout	A	B	C	D	E	F	G	H	I	J	K	Notes
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Example

Track \ Turnout	A	B	C	D	E	F	G	H	
1	N	R							
2	N	N							
3	R		R	R					
4	R		R	N					
5	R		N						
6									
7									
8									
9									
10									
11									
12									

Step 3: Select time delays

Item	Suggested	Your Choice	Description
Motor Delay	3 seconds		Time period to wait for turnout motors to actuate. Measure the time it takes for your motors to fully align.
Power-on Delay	1 second		Time period to wait for track power relays to actuate. Use the suggested value unless you have a specific reason for wanting something different.
Occupancy Detector Delay	2 seconds minimum		Time period that ***your*** occupancy detector waits before reporting a change in occupancy. Many detectors ignore brief changes that may occur between moving cars. When the detector output finally changes, it's fairly certain that is reporting truthfully. Measure or estimate this delay.
Power-off Delay	1 second		Time period to wait after the occupancy detector reports that the throat is vacant, before turning off the track power. Choose a short time (e.g., half a second) to stop incoming trains automatically. Choose a longer time such as 10-15 seconds if you want operators to stop their own trains. The total time from the throat becoming vacant until the track power turns off is the sum of the Occupancy Detector Delay plus the Power-off Delay. If your Occupancy Detector Delay is too short (less than two seconds), you may compensate by increasing this Power-off Delay.
Timeout Delay	45 seconds		Time period after pressing the Start button during which a train must enter the yard throat. If this does not occur, the staging yard controller cancels the operation. Measure how long it takes a train to start and run at normal speed into the throat, then add a generous amount to give operators plenty of time.
Final Delay	15 seconds		"Grace period" following a Timeout Delay. If a train enters the throat during this time, normal operation continues. If not, the operation is canceled.