

The background image shows a large, dark industrial structure, likely a bridge or a transfer station, spanning across a body of water. The structure has a complex framework of beams and supports. In the distance, a city skyline is visible with several lit-up buildings. The overall scene is dimly lit, suggesting dusk or dawn, with a soft, hazy atmosphere.

Riverside Transfer

New and Improved Concept

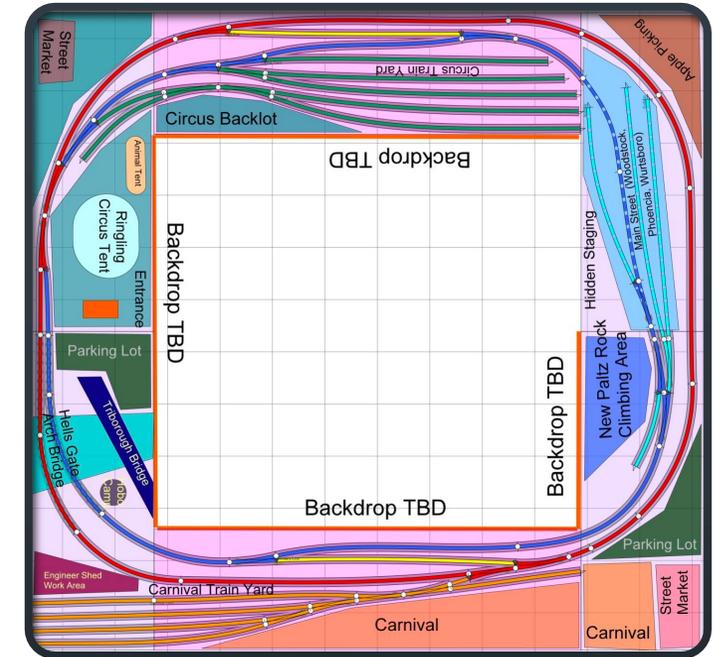
June 24, 2023

I have come a long way since my early attempts at layout design.

But I still have a long way to go, and this is why I am looking to work with a professional model railroad layout designer.

I am looking for a layout designer to take the concepts laid out in this presentation and do the following.

- Validate the design concepts
- Update anything that does not work
 - If needed making mass changes.
- Adjust all track, including but not limited to,
 - Redesign yards
 - Adjust track spacing
 - Track to track, wall to track and edge of layout to track
 - Add easements
- Adjust benchwork shapes
- Summary of Operations scheme



Example of terrible design

The focus on my next layout is prototypical operations, but the concept/story is freelance, a railroad of lies.

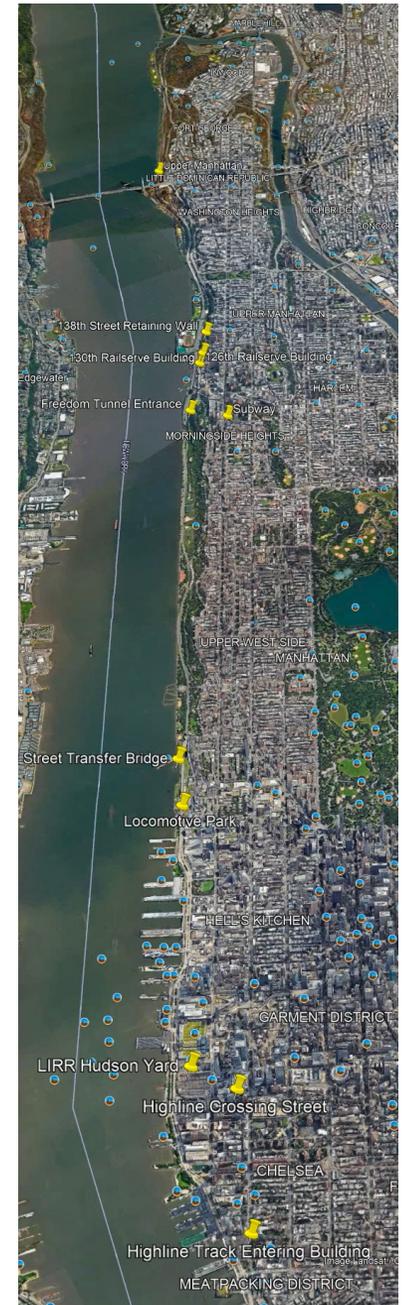
The layout location is the West Side of Manhattan.

The story of my railroad empire starts with a purchase by the Human[c]ity Junction Leasing Company, HCJX. When the New York Central was ending freight service into Manhattan, they offered to sell all of their Pacemaker Boxcars (40') and the West Side branch line from the tip of Manhattan in Inwood, the Float Bridges and Yards around 69th Street, all the way down to the elevated tracks from Hudson Yards to the Meatpacking District.

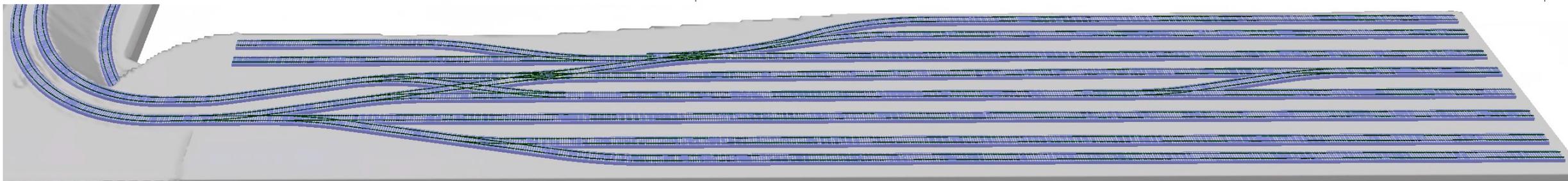
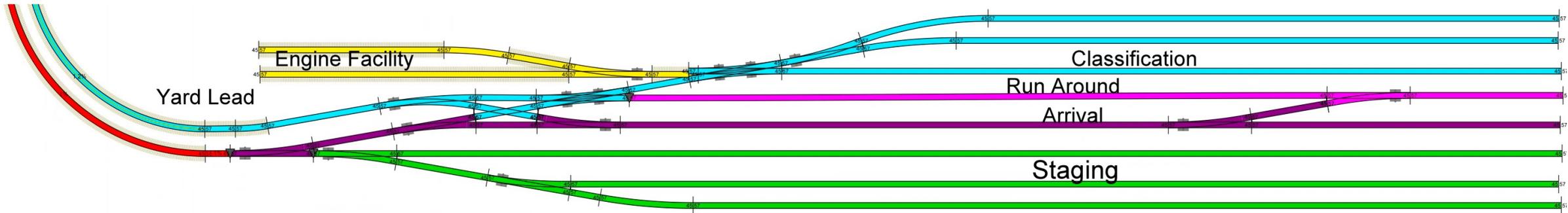
The HCJX started a company called "Riverside Transfer" to take over the car float and freight terminal. The Riverside Transfer interchanges at the Croton-Harmon Yard to the North, the West Side Float Bridge and a fictitious yard at the South.

As in the prototype, the trains are sometimes at street level, sometimes on bridges and sometimes emerging from tunnels.

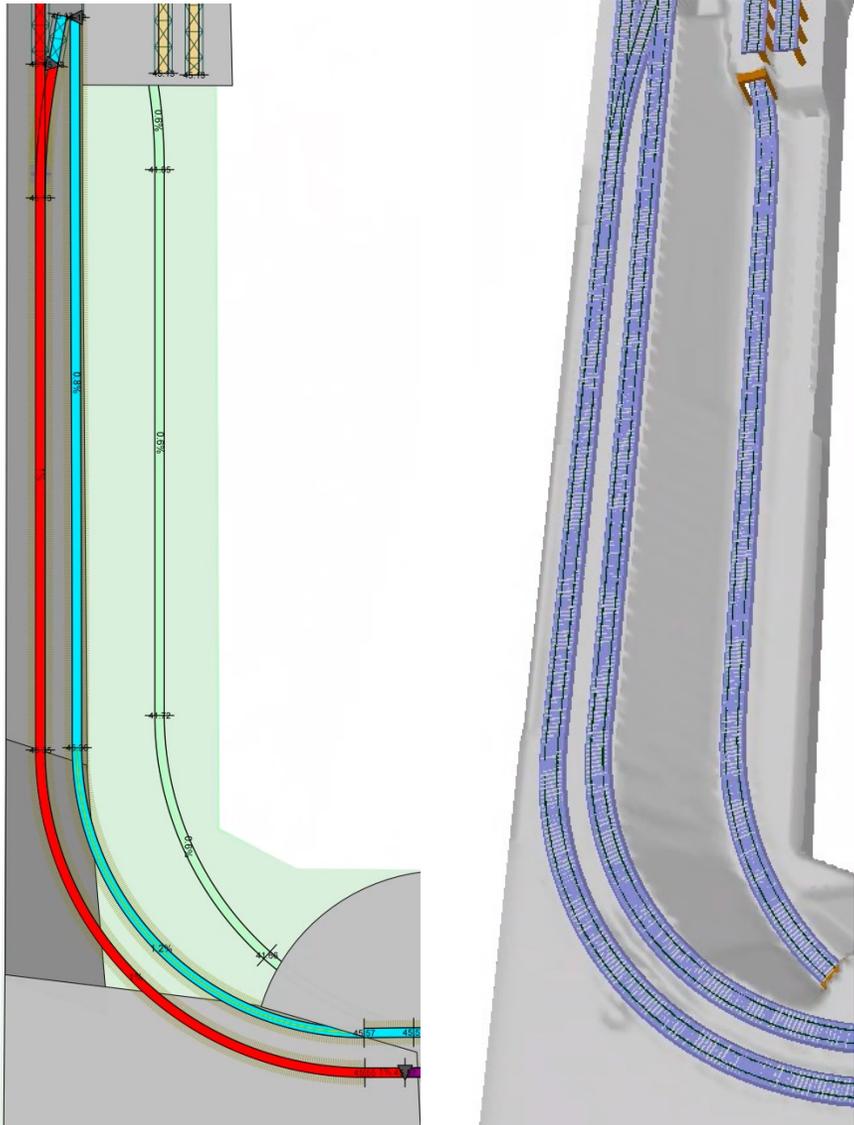
Over the next few pages, I will show the prototypical locations and my initial thoughts on how to include them in my space. Locations are Prototypical, Track Plans are completely made up.



The journey starts in Croton Harmon Yard, the North interchange location. In order to keep operations flowing, this yard has both staging tracks and a small interchange yard.

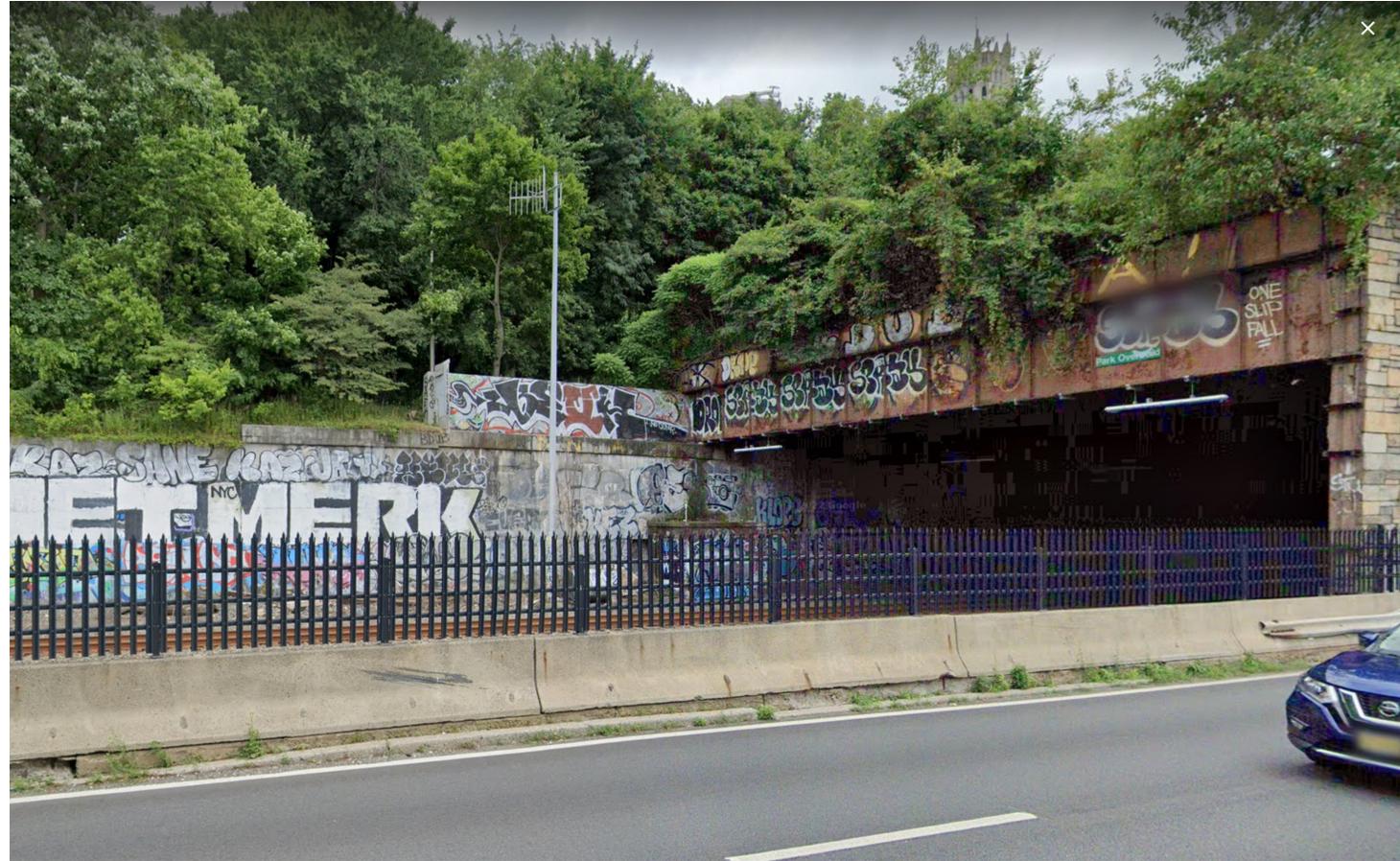
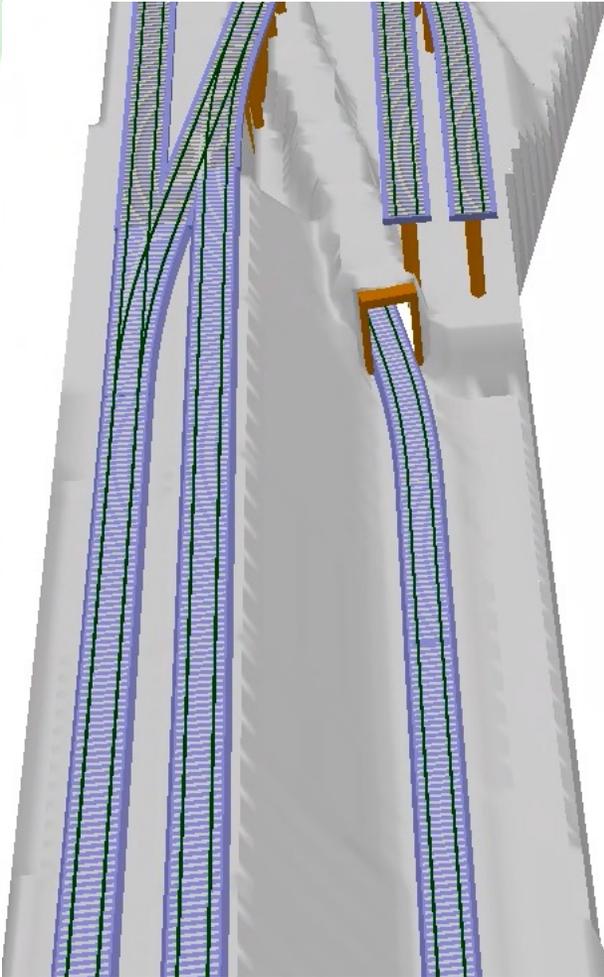
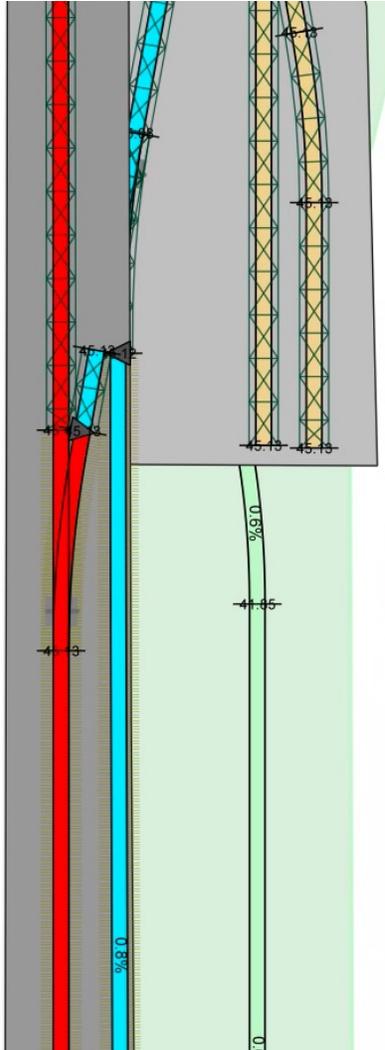


Entering the island of Manhattan from the North, we pass through Inwood park. As in the prototype, there are multiple elevations of transportation with the tracks on the lower level and a road on the top. I am looking to utilize these elevation differences to extend the length of the mainline run. Using a similar methodology that Phil Monat used on his D&S layout.



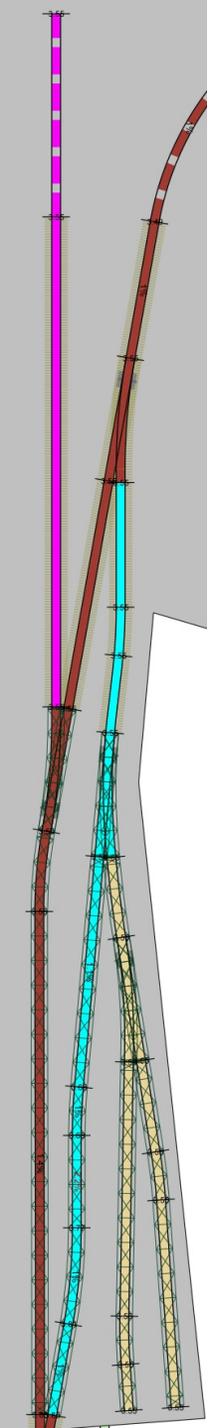
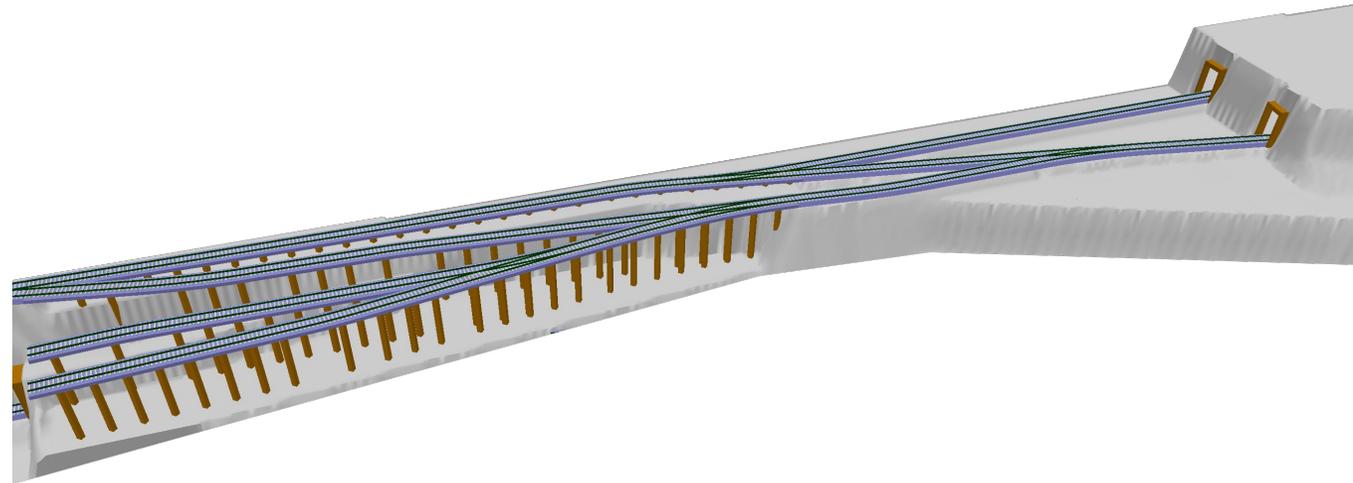
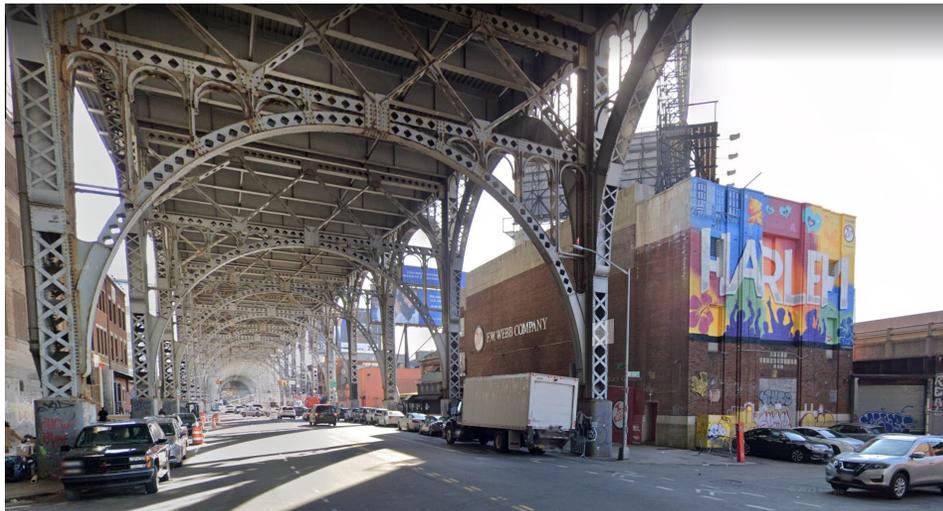
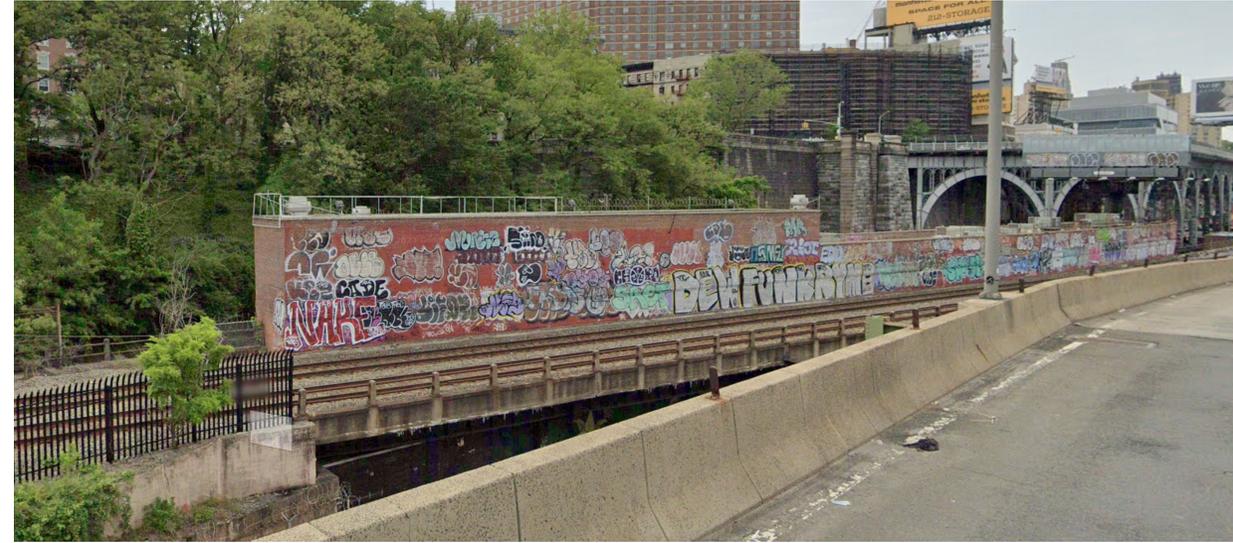
The Freedom Tunnel entrance/exit. Today, utilized by Amtrak, these tracks were originally built by the New York Central.

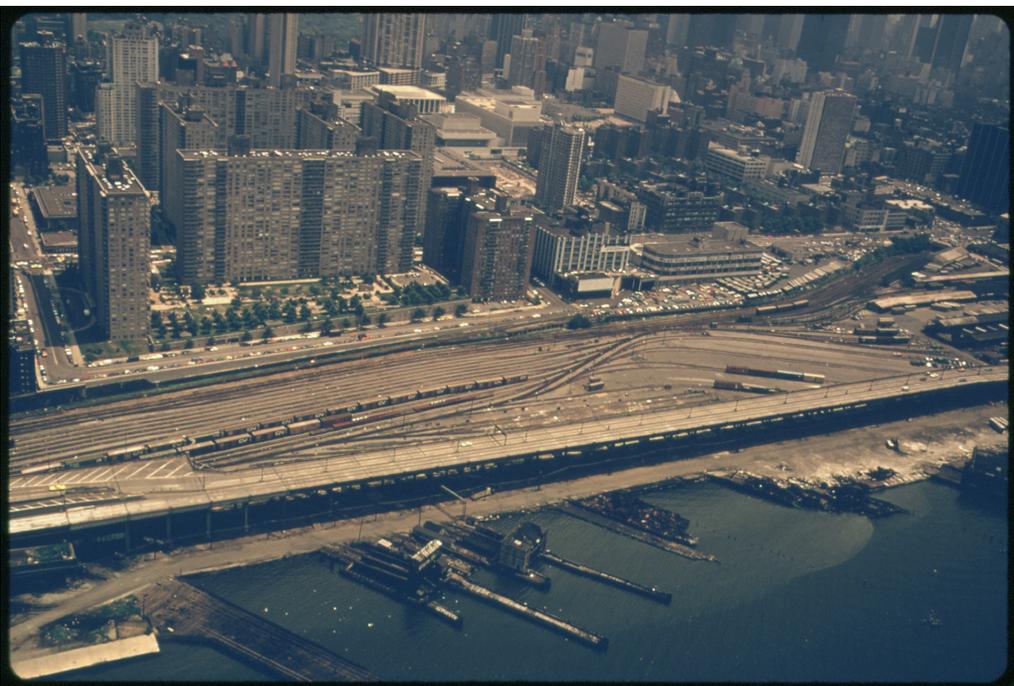
This is another prototypical example that provides a feature that can be integrated as a tunnel portal.



Manhattanville has several prototypical railroad related features.

An elevated mainline with rail side buildings provide opportunities for rail served industries off the top of a bridge. The viaduct is an iconic NYC landmark, both from above and below. At one time, a trolley ran on top of the viaduct. The bottom left photo shows of the original New York Central power stations, now decommissioned.

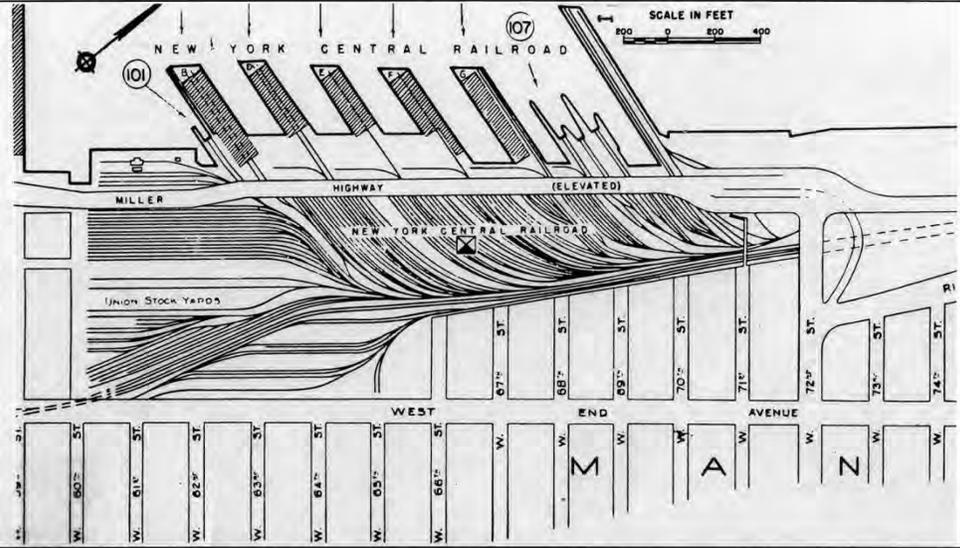




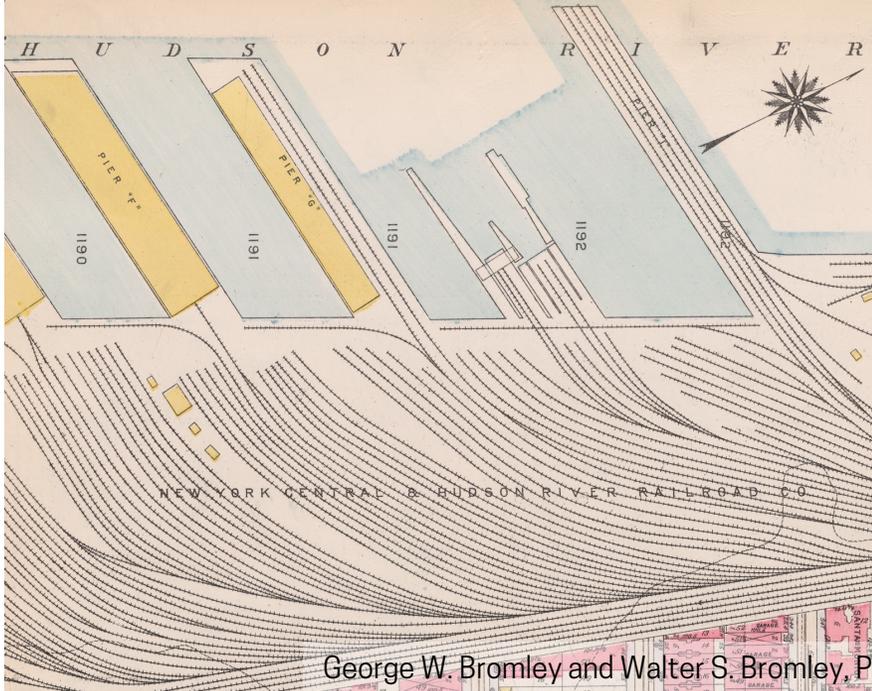
Here is a view of New York Central's 60th Street Terminal waterfront as it appeared in 1926, before the Miller Elevated (West Side) Highway was built over it in the 1930's. The rightmost pier is Pier B, with a float bridge just to the right (south) of it. That float bridge was installed about 1906 and lasted until 1956. The main three float bridges are just visible at far left. This early aerial photo appeared in a commemorative book, *The One Hundredth Anniversary 1826 - April 17 - 1926 of The New York Central Railroad*, issued by the railroad. T. Flagg Collection.

Signature Scene

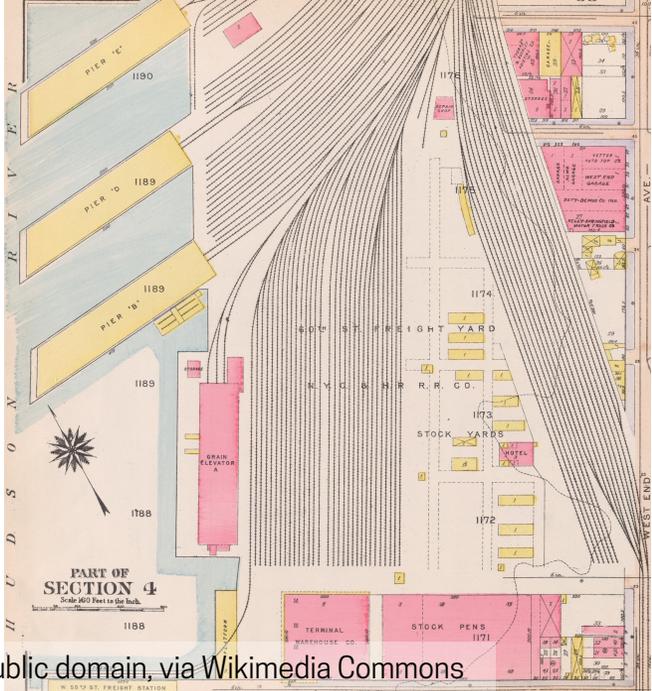
The signature scene and the namesake of my model railroad is the 69th street transfer bridge and the previous location of the New York Central Upper West Side Yard. This is the heart of the story.



This map of the 60th St. terminal was part of Map #4 of the 1953 edition of "Port Series No. 5" issued by the Army Corps of Engineers. The elevated highway passes over the yard. Just above the word "MILLER" was the former location of Grain Elevator A; that bulkhead is now used to transfer bulk cement from covered hoppers to barges. The "101" points to Float Bridge No.1, no longer in use. The next pier, B, is used to transfer autos from car to barges. The next three piers, D, E, and F (there was no pier C), are used to ship out general cargo via lighters, while Pier G receives general cargo. The "107" points to the three active float bridges, and the uppermost pier, I, was used primarily to handle large items using floating cranes.



George W. Bromley and Walter S. Bromley, Public domain, via Wikimedia Commons



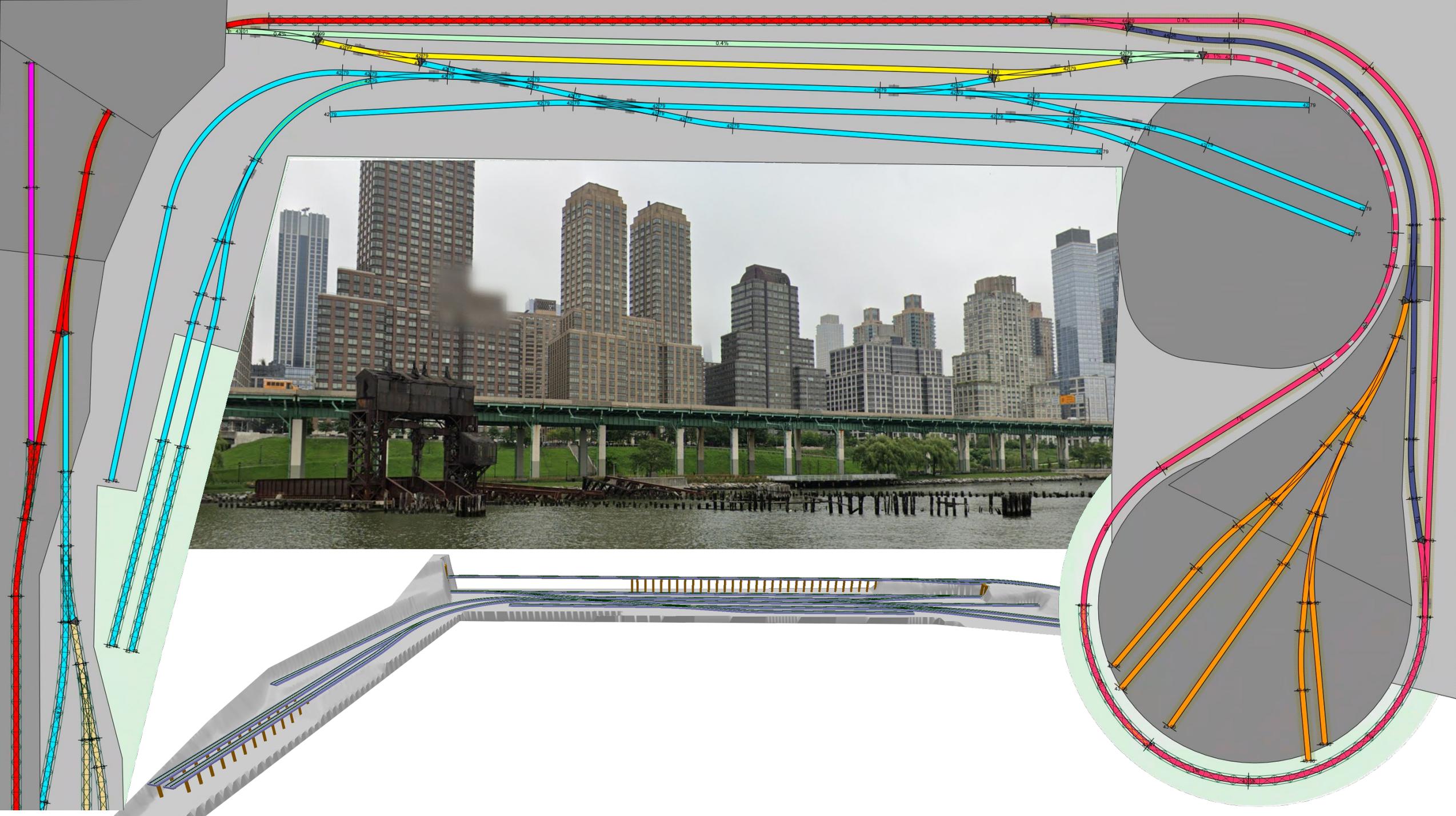
The 69th street transfer bridge provides the opportunity to include a car float on my layout. As previously stated, while based on prototypical stories and locations, the track plan is completely made up and designed with the intent of providing an interesting operations session.

To the south side, in the former location of the New York Central Yard, I have added a Freight Terminal and Team Track.

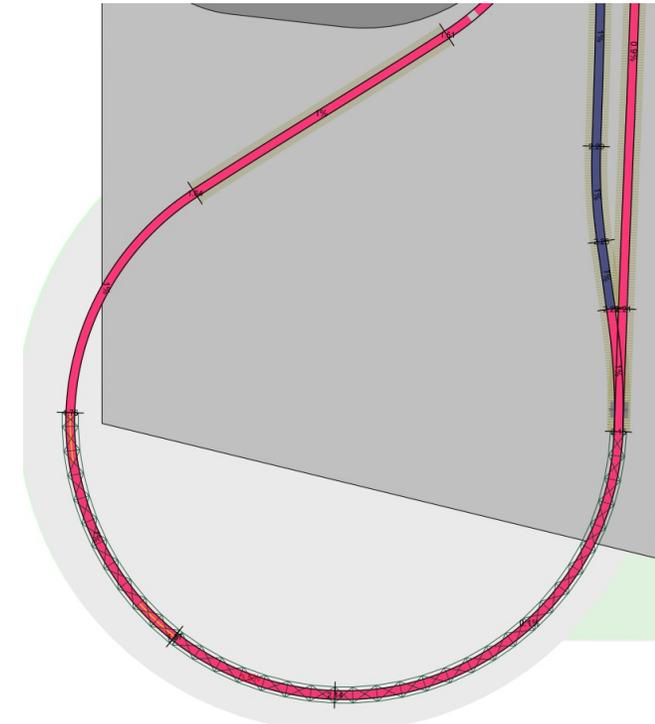
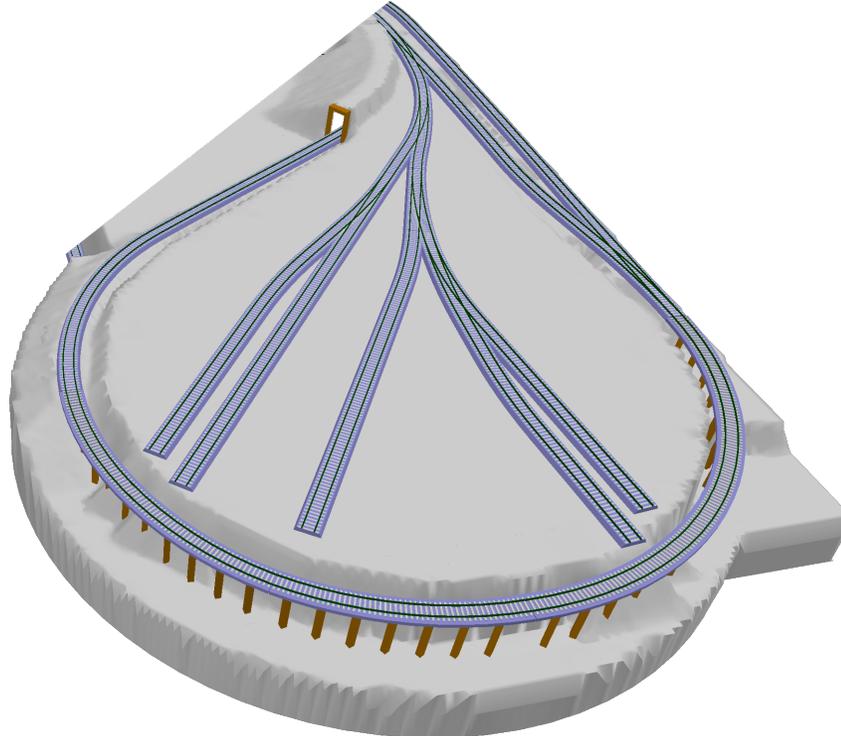
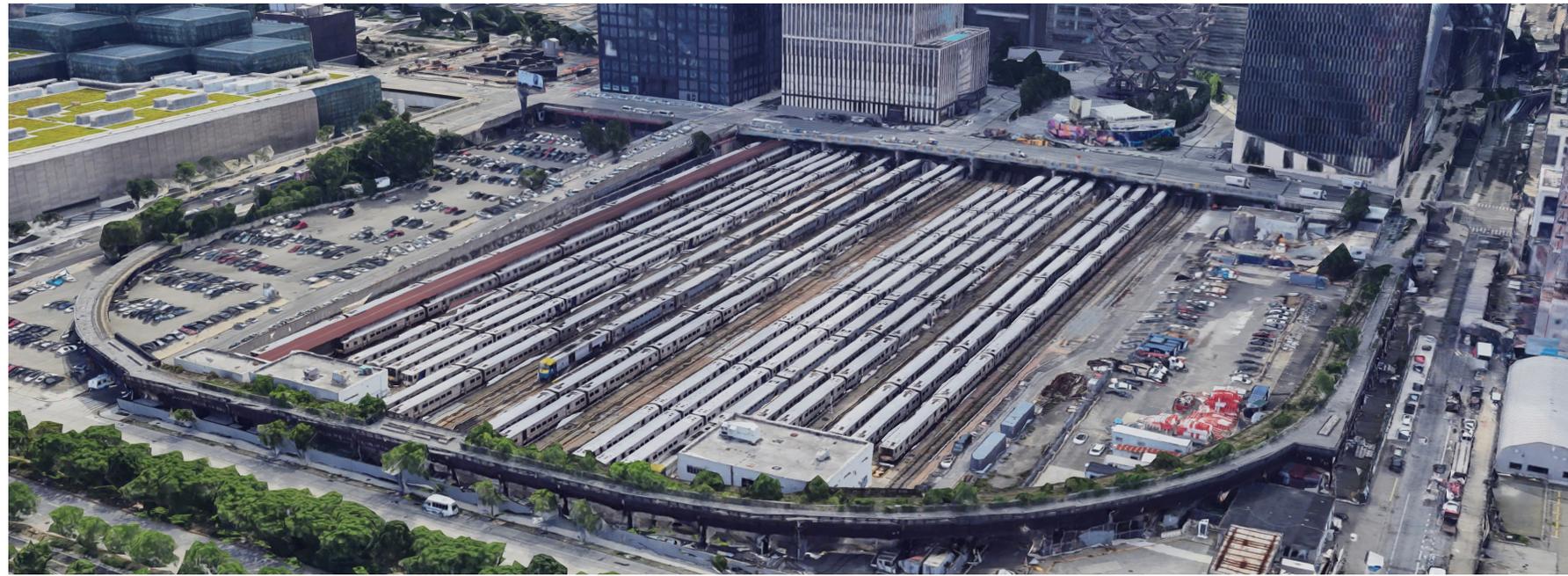
Looming over the yard is the Westside Highway, providing the opportunity for an elevated mainline track for longer runs between industries.



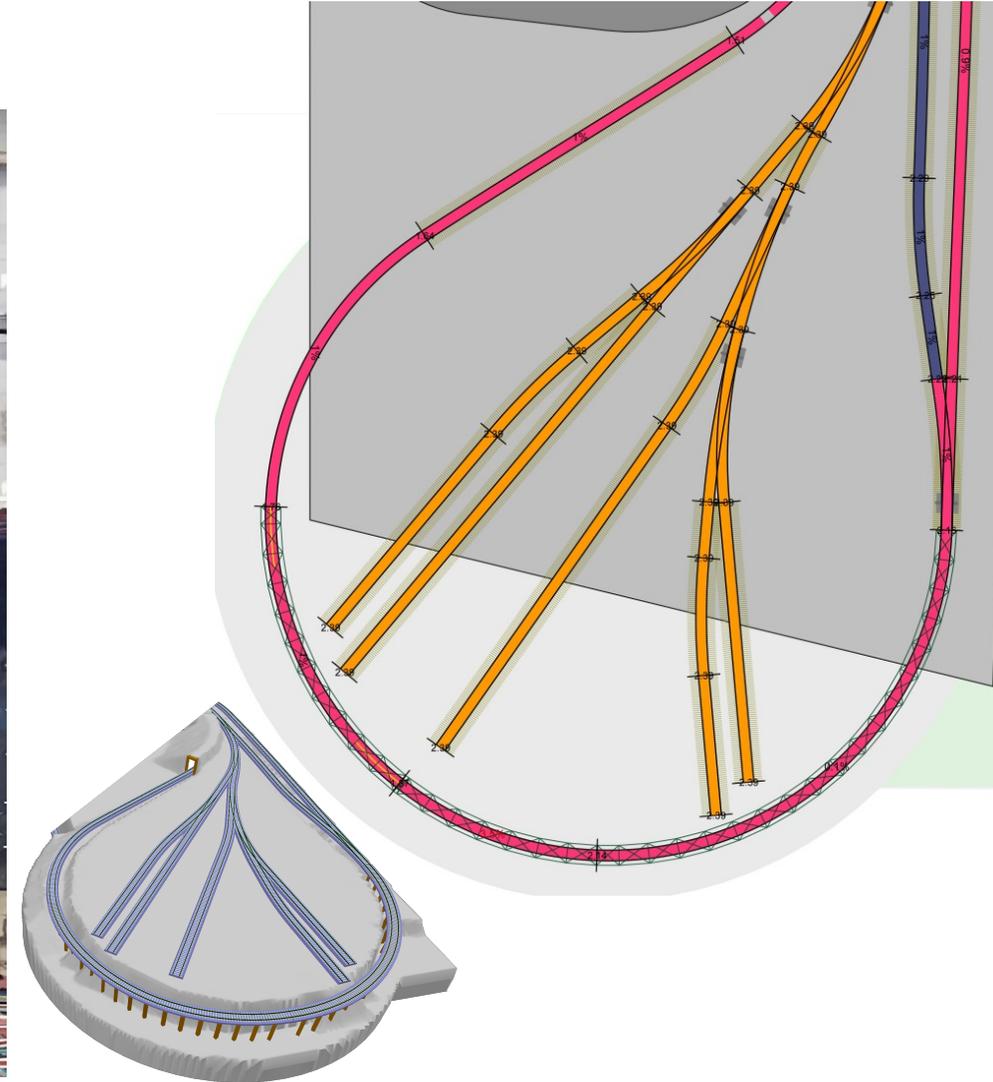
This painting by Gifford Beal was done on site c.1915. He was looking west from above the 60th Street Yard toward the Hudson River, with plenty of work going on in the yard on a rather wintry day. On the left is the 69th Street floatbridge, which was quite new at the time. To the right is the open lighterage Pier I, used for unloading non-perishable cargo directly from open cars onto scows. And in the distance right across the Hudson can be seen the two grain elevators at the West Shore Railroad's Weehawken Terminal, with Bergen Hill behind them. This is from a postcard issued in 1915. T. Flagg Collection.

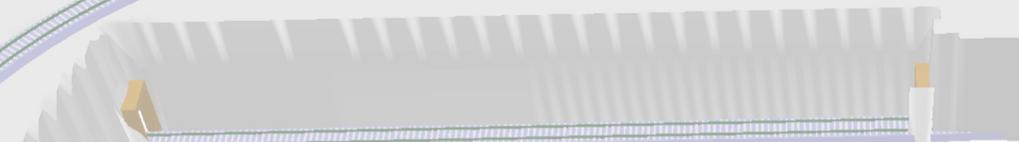


On previous pages we explored prototypical locations that provide inspiration for a multiple level transportation scheme based on the West Side of NYC. On this page, we see the incline that that previously took New York Central trains onto the Highline elevated tracks. On my layout, this will bridge the upper and lower levels.



Another elevated, rail served location in Manhattan is the famous High Line. As seen prototypically modeled on many shelf layouts, this area gives me another opportunity for industrial tracks on top a bridge. Currently drawn as an Inglenook puzzle style switching location to add another operational destination.

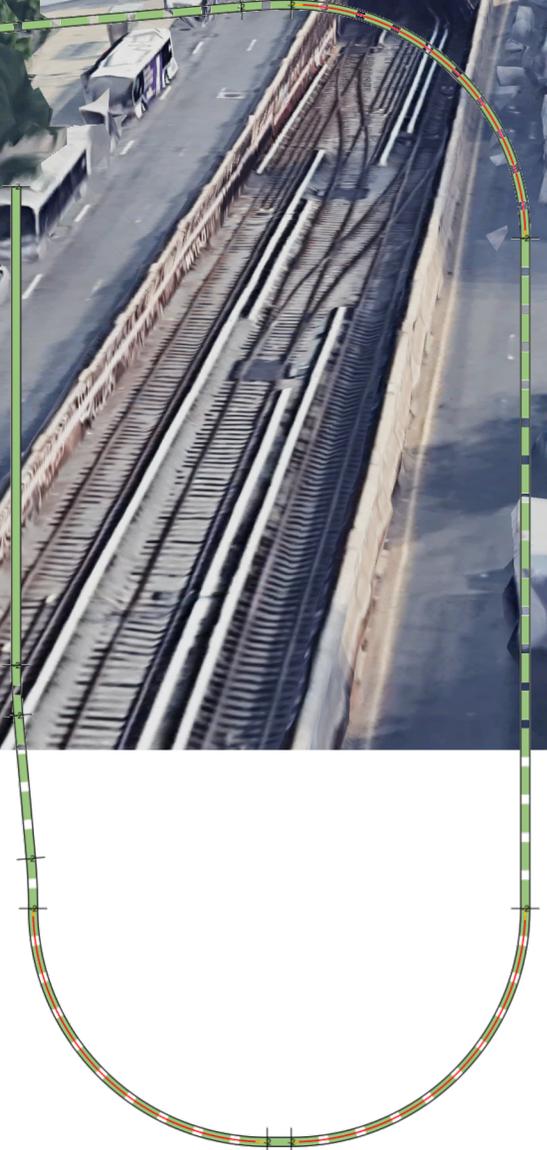
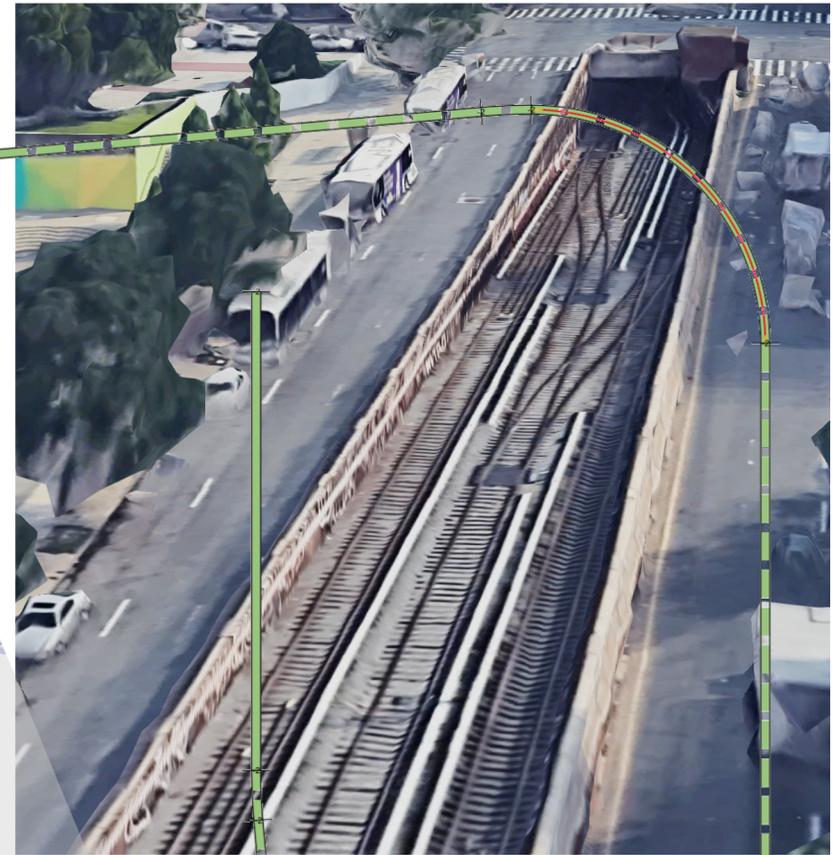




What would a NYC based layout be without a subway.

Only visible on either side of the peninsula, the IRT subway system 1 train will be a self contained, point to point section of my transportation system. Stations will be built at the end of tracks further solidifying the location of the layout.

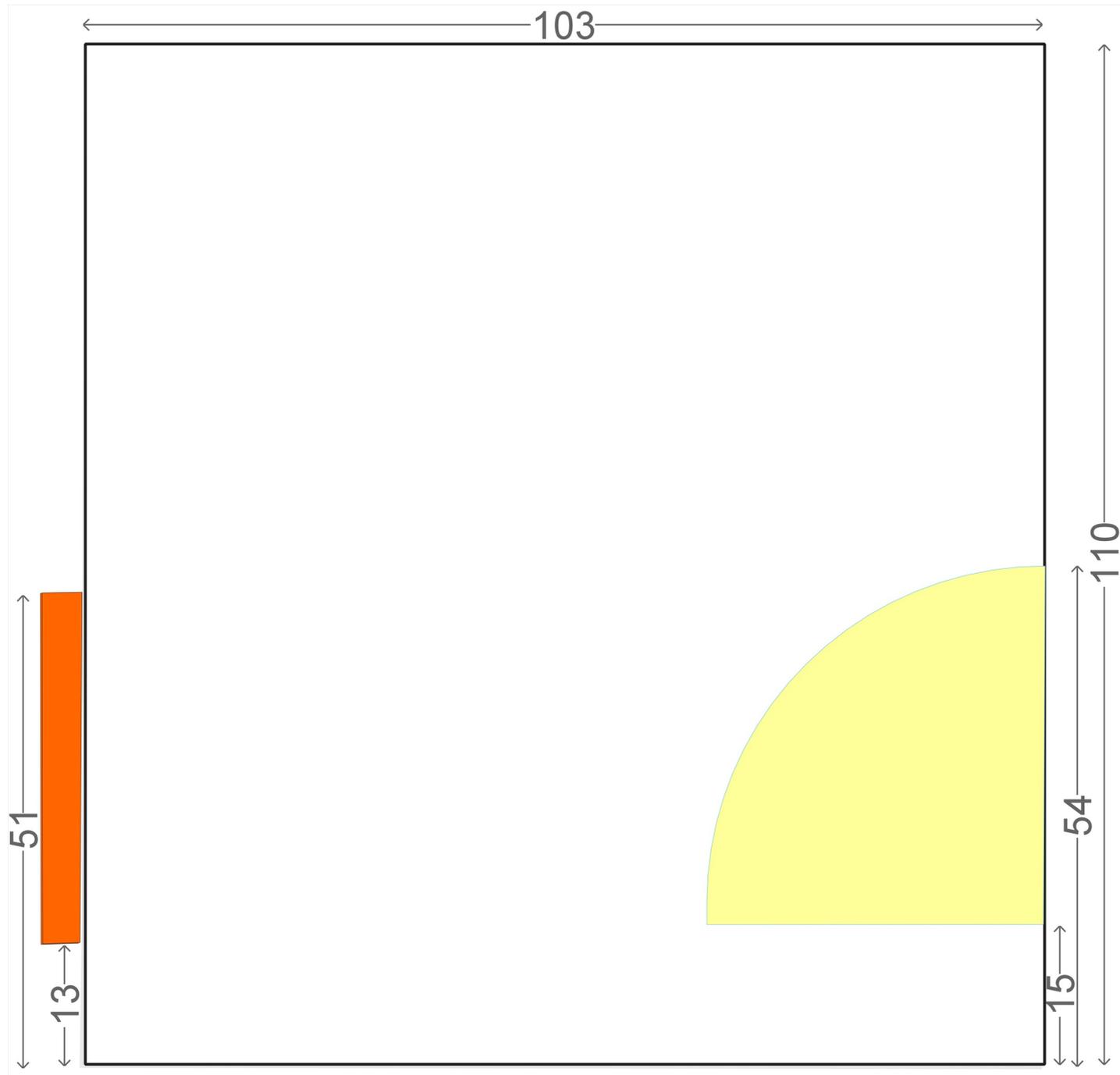
The subway will be electrically isolated from the main layout and controlled via an Iowa Scaled Engineering Motorman. This track will be able to run DC or DCC.

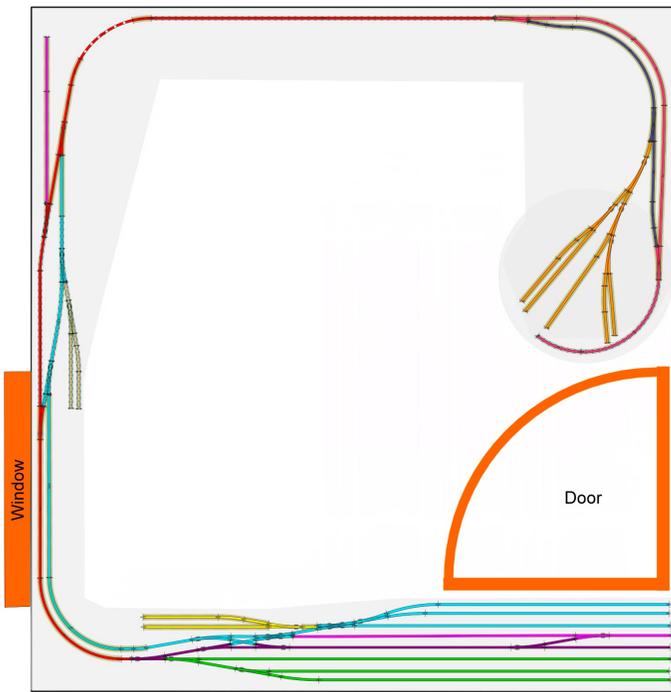


Constrained by limited space, my scale of choice is N scale.

The design should first and foremost be designed for operations. While the prototype guides decisions, specifics should be put aside to provide a complex yet attainable operations experience for everyone.

I started putting these ideas on paper, CAD too soon?





Upper Elevation

- Classification Yard
- Visible Staging
- Manhattanville
- Highline

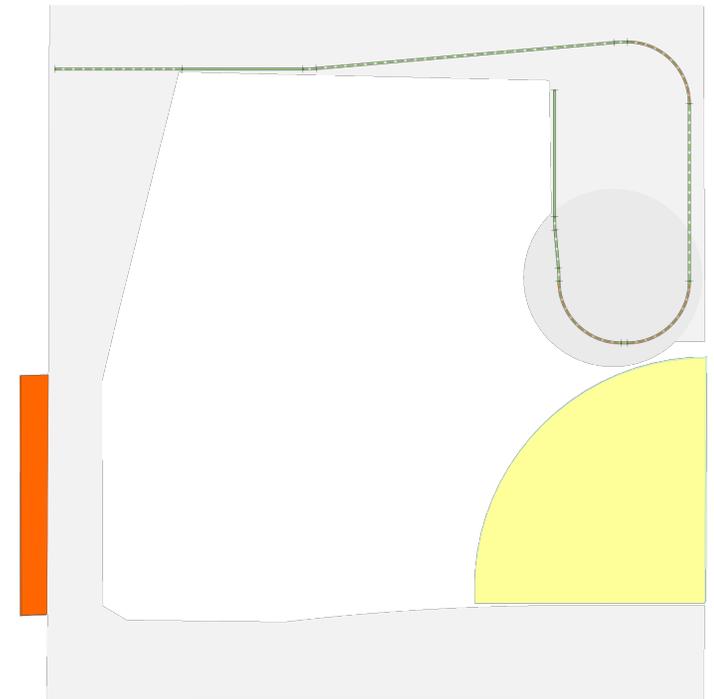


Lower Elevation

- Signature Scene
- Inwood
- Tunnel
- Hidden Staging

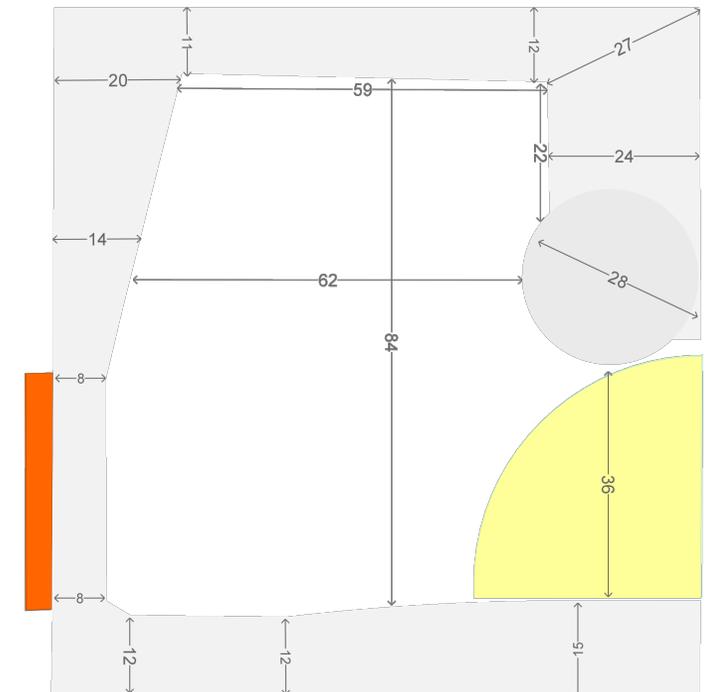
Subway

- Point to Point
- Self Contained

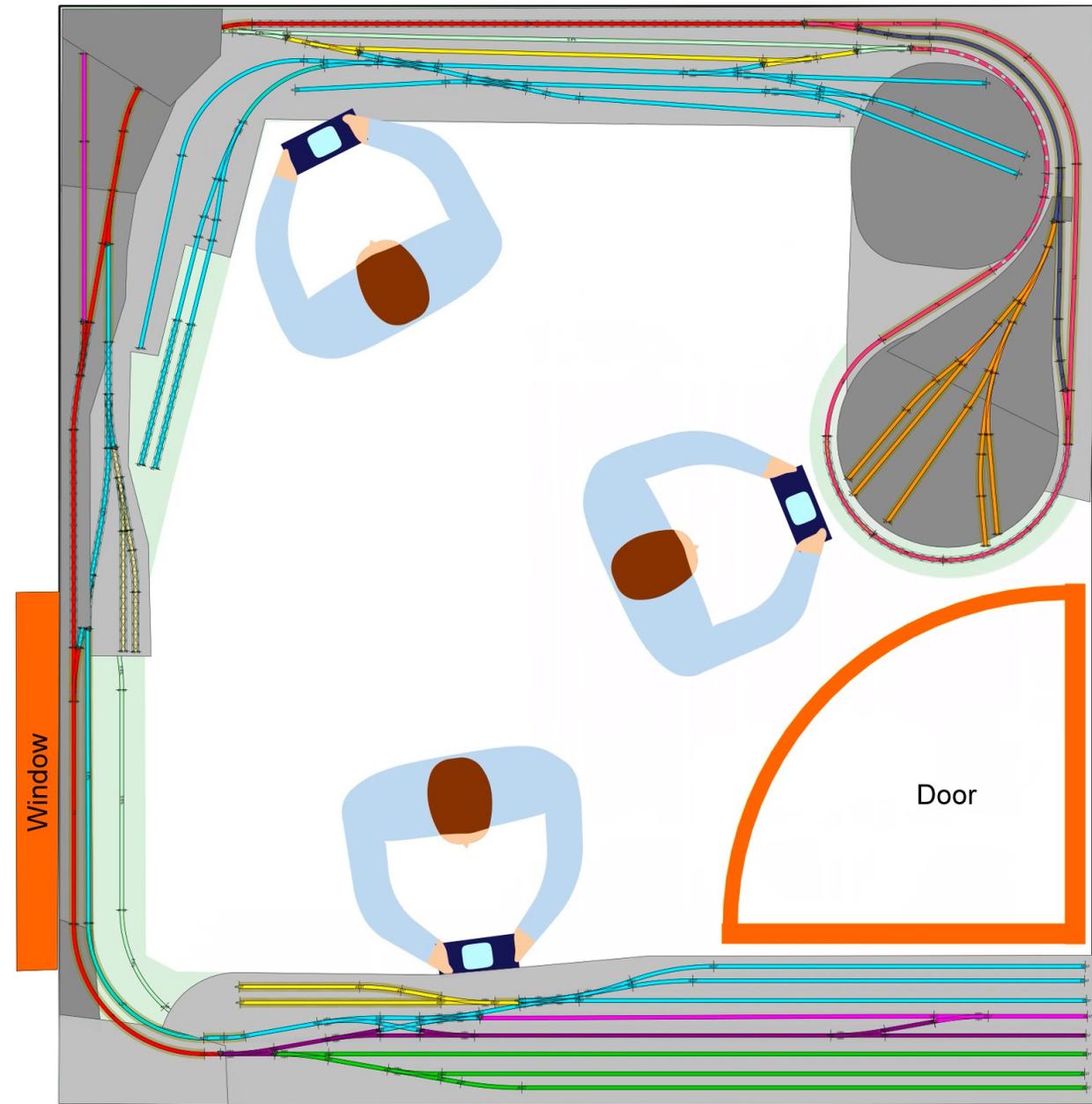
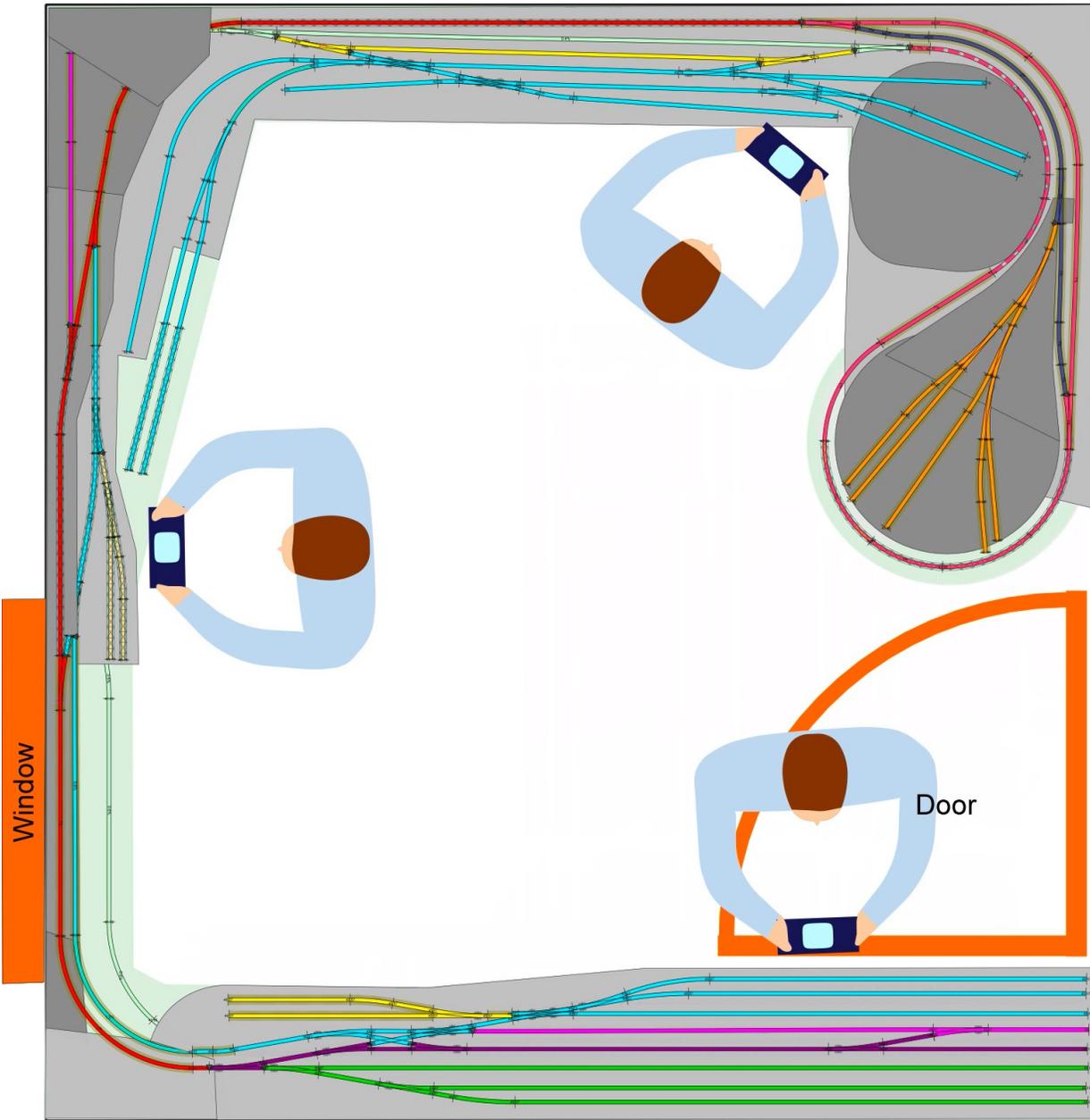


Baseboard

- Under 30" Reach
- Over 30" Aisles
- Minimal Track in front of window
- Multi Level, but Single Deck



My goal is to build a layout that is fun and challenging to operate for 2-3 local operators and a remote dispatcher.



Track Spacing Needs Review

Per NMRA Standards RP-7.2, for parallel tracks, the C-C spacing can be a minimum of 1-1/16”.

MINIMUM CURVED TRACK CENTERS

Curvature (degrees)	0	5	10	15	20	25	30	35	40	45
N SCALE										
Radius (in.)	Tangent	85 31/32"	43 1/32"	28 23/32"	21 19/32"	17 5/16"	14 1/2"	12 15/32"	10 31/32"	9 13/16"
Old-Time/NG (in.)	29/32"	15/16"	1"	1 1/16"	1 3/32"	1 5/32"	1 3/16"	1 1/4"	1 9/32"	1 5/16"
Classic (in.)	31/32"	1 1/16"	1 5/32"	1 1/4"	1 11/32"	1 13/32"	1 1/2"	1 9/16"	1 21/32"	1 23/32"
Early Modern/Modern (in.)	1 1/16"	1 1/8"	1 3/16"	1 1/4"	1 11/32"	1 13/32"	1 15/32"	1 1/2"	1 9/16"	1 5/8"

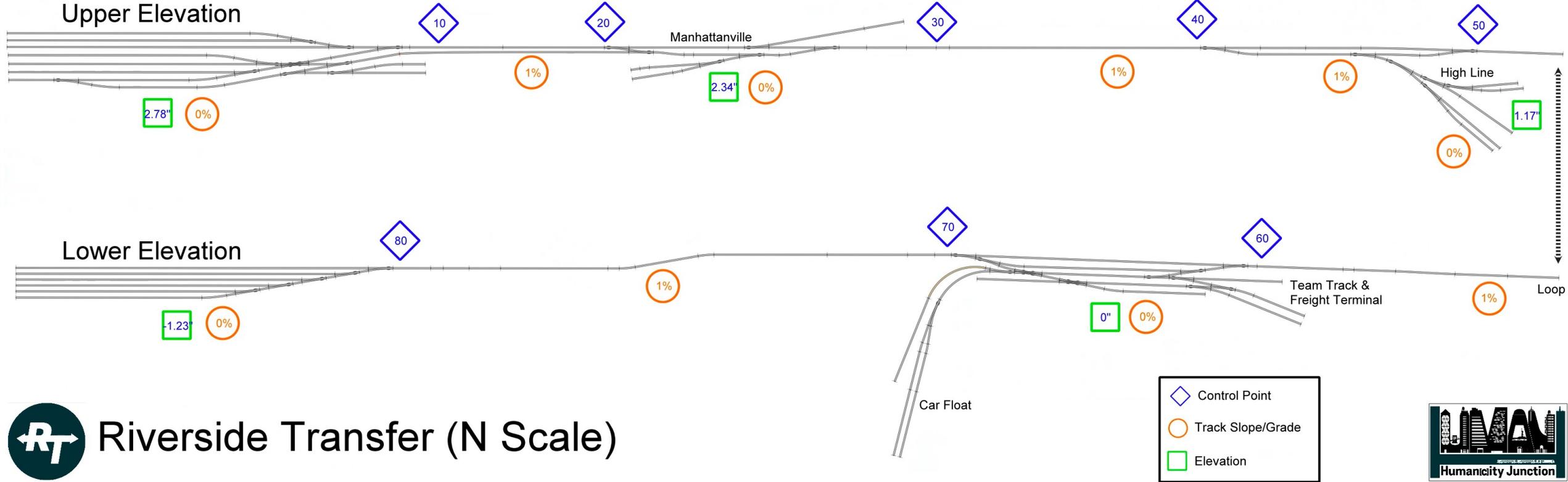
On an operations-based layout in N scale, using the minimum recommended spacing makes the reporting marks very difficult for the operators to read on the sides of the cars. For this reason, I have chosen to employ a system that moves the reporting marks to the tops of the rolling stock for easy identification. The identifying marks are printed out using a label maker and then attached to a piece of I-beam styrene that then sits on the top of the car. These are not permanently attached and can be removed for photos, etc...



Operations Plan

Upper Elevation

Lower Elevation



 Riverside Transfer (N Scale)

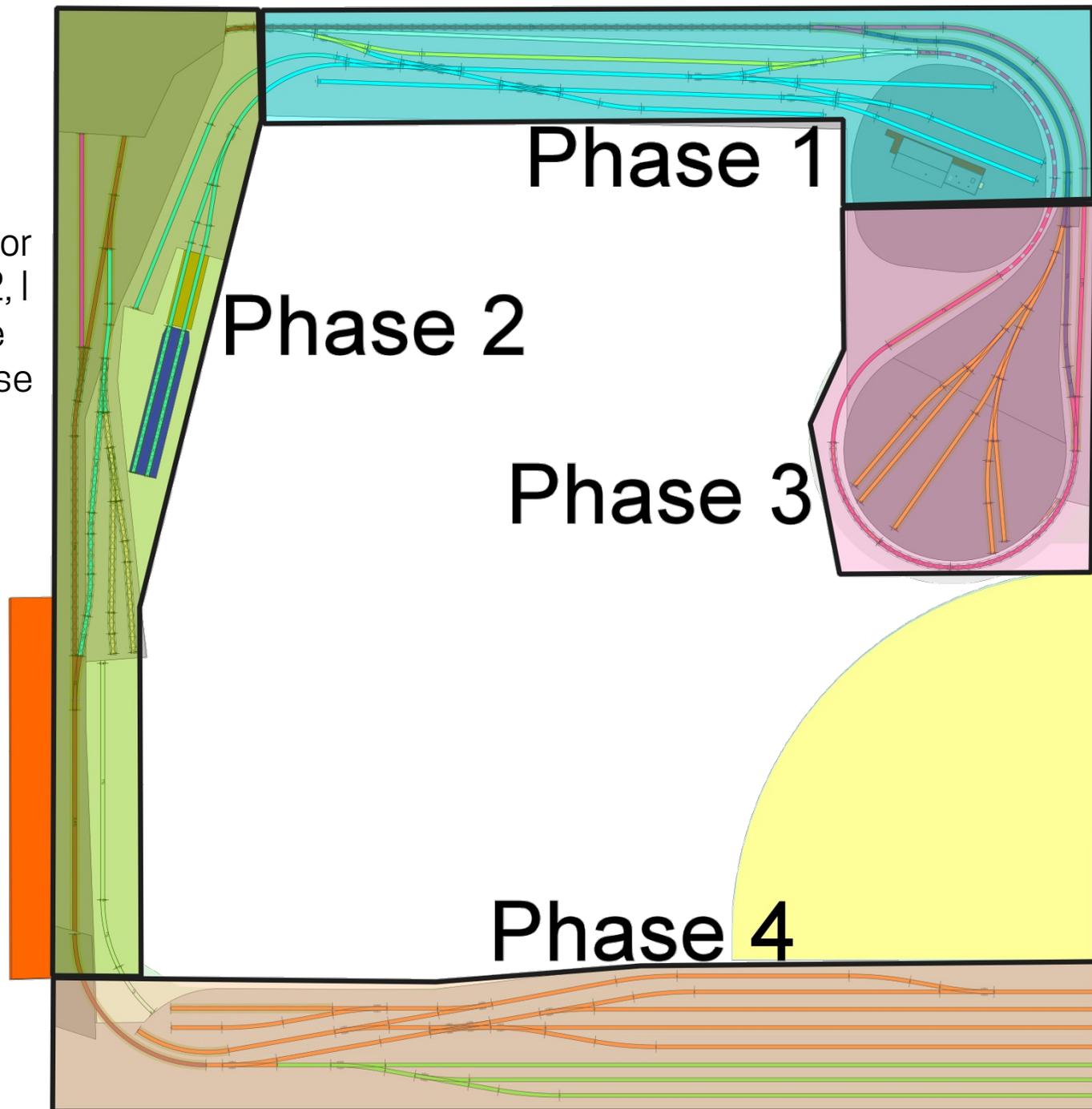


Phasing Plan

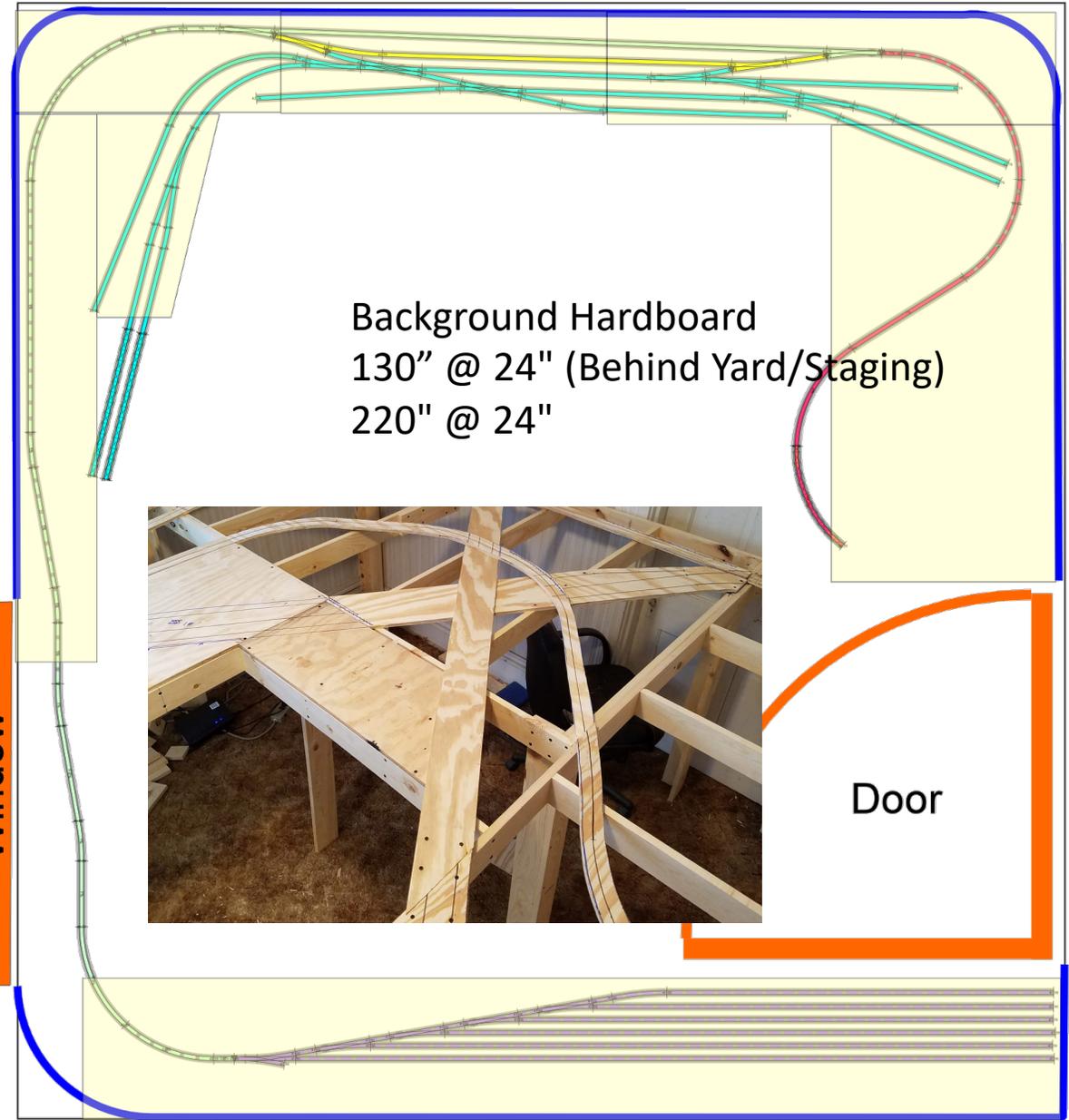
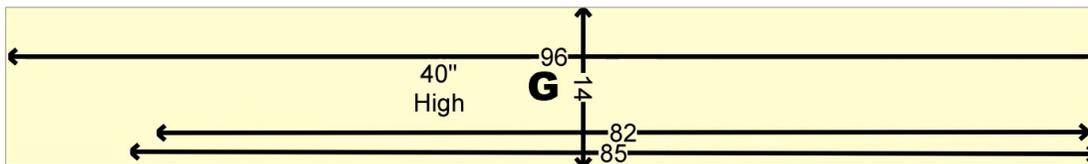
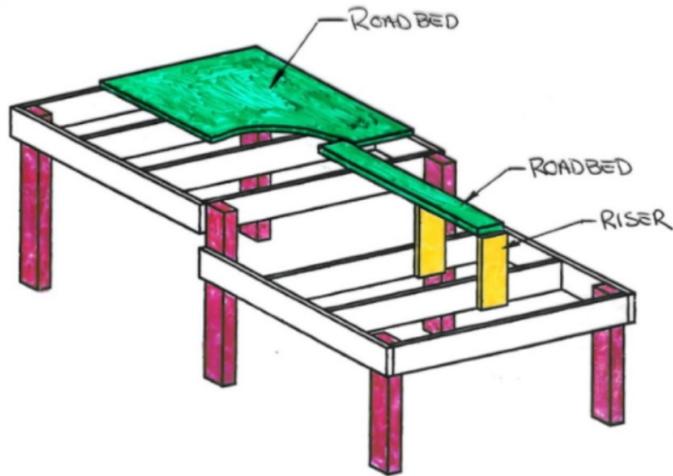
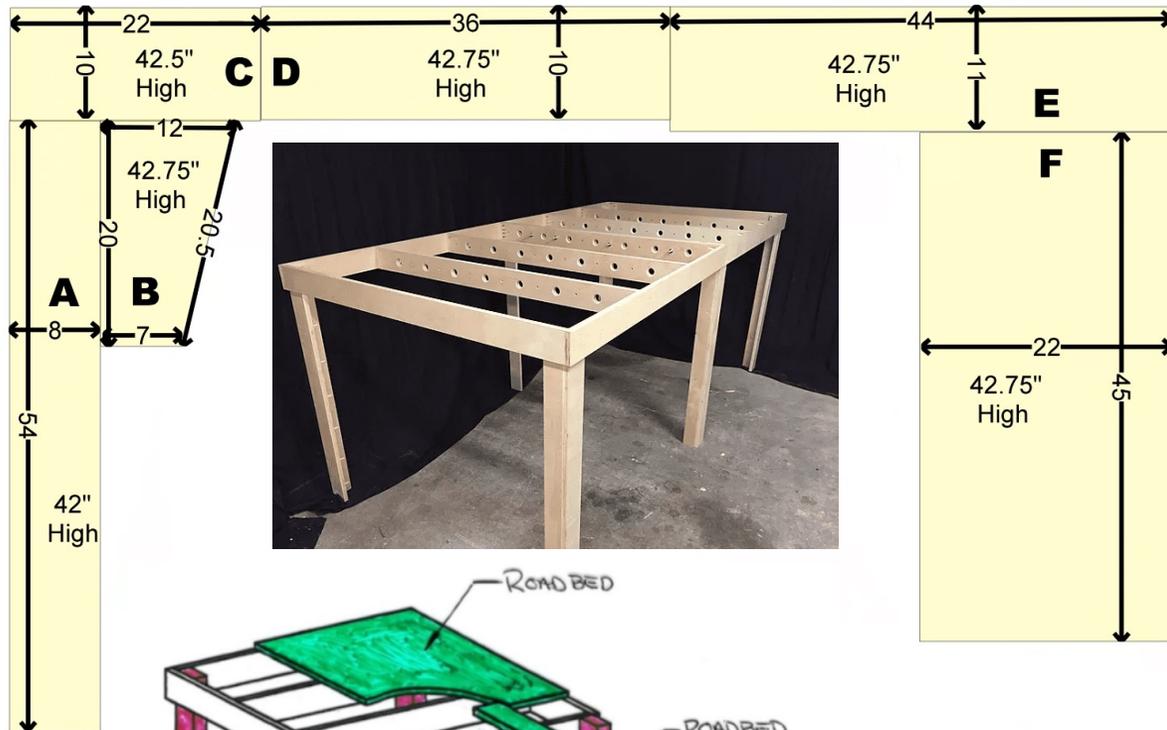
Due to the size and complexity of the plan, the layout will be built in four phases for each category of build. For example, when assembling the benchwork for Phase 2, I will be laying the track for Phase 1. When installing the benchwork for Phase 3, I will be laying the track in Phase 2, and wiring Phase 1.

I am planning to build the layout in the following order.

- Benchwork
 - Hire out planning and construction
 - On-site assembly labor self
- Laying Track
- Wiring Main Bus and Track Feeders
- Test Running Trains
- Test Operations Scheme
 - 1 Year Goal for Phases 1,2 & 3
 - Does any trackwork need adjustment?
- Wiring for Turnout Motors, Signals, Lighting, etc...
- Bridges, Scenery, Structures, etc...

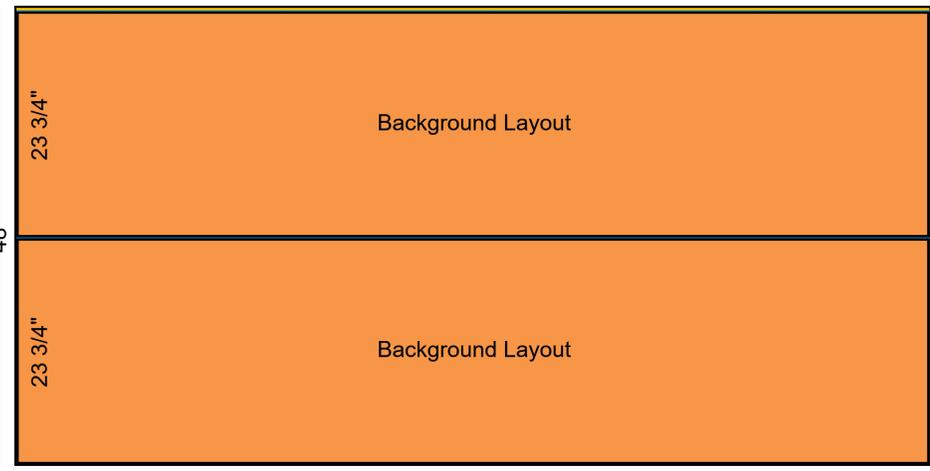
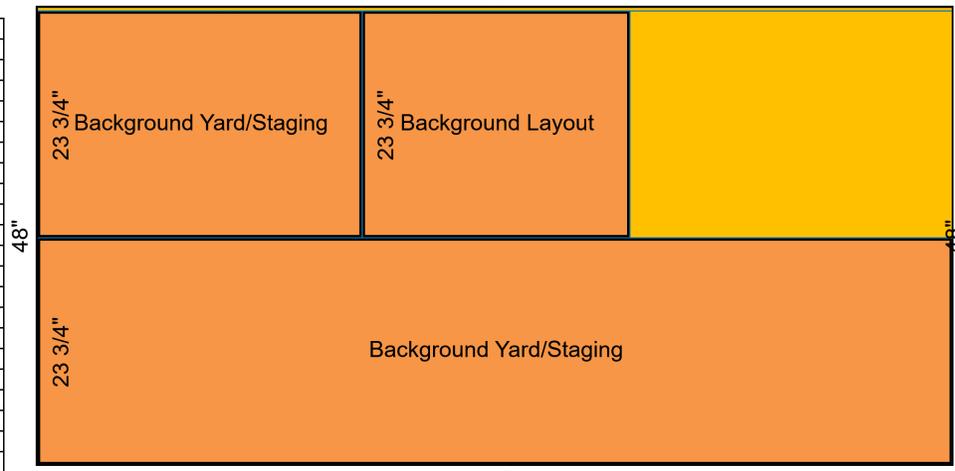


Benchwork Framing Plan

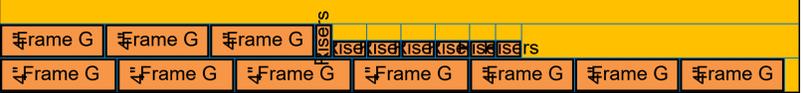
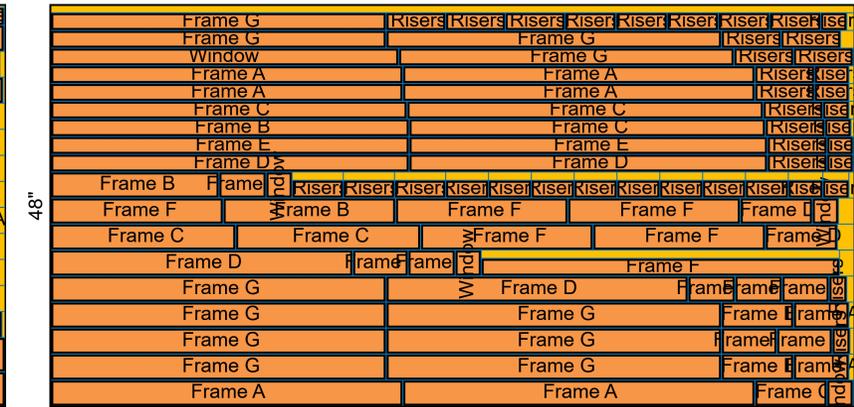
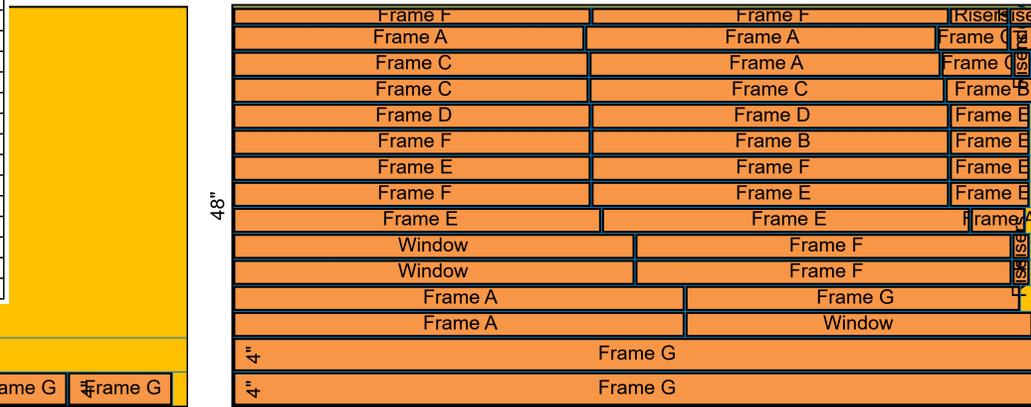


Benchwork Cut List

ID	Description	Size	QTY	Note
A	54"x8"x42"	3/4"x3"x54"	2	
		3/4"x3"x6.5"	6	Wiring Holes & PH
		3/4"x3"x42"	5	Legs: Ends (L) and Center
		3/4"x2"x42"	4	Legs: Ends (L)
B	20"x12"x42.75"	3/4"x3"x20"	1	Wiring Holes
		3/4"x3"x10.5"	1	Wiring Holes & PH
		3/4"x3"x5.5"	1	Wiring Holes & PH
		3/4"x3"x20.5"	1	
		3/4"x3"x42.75"	1	Leg (L)
		3/4"x2"x42.75"	1	Leg (L)
C	22"x10"x42.5"	3/4"x3"x22"	2	
		3/4"x3"x8.5"	2	Wiring Holes & PH
		3/4"x3"x8.5"	1	PH
		3/4"x3"x42.5"	3	Leg (L)
		3/4"x2"x42.5"	3	Leg (L)
D	36"x10"x42.75"	3/4"x3"x36"	2	
		3/4"x3"x8.5"	4	Wiring Holes & PH
		3/4"x3"x42.75"	2	Leg (L)
		3/4"x2"x42.75"	2	Leg (L)
		1/2"x96"x12"	1	Benchtop
E	44"x11"x42.75"	3/4"x3"x44"	2	
		3/4"x3"x9.5"	2	PH
		3/4"x3"x9.5"	2	Wiring Holes & PH
		3/4"x3"x42.75"	2	Leg (L)
		3/4"x2"x42.75"	2	Leg (L)
F	45"x22"x42.75"	3/4"x3"x45"	2	
		3/4"x3"x20.5"	2	PH
		3/4"x3"x20.5"	3	Wiring Holes & PH
		3/4"x3"x42.75"	3	Leg (L)
		3/4"x2"x42.75"	3	Leg (L)
G	96"x14"x39.5"	3/4"x4"x96"	2	
		3/4"x4"x12.5"	1	PH
		3/4"x4"x12.5"	5	Wiring Holes & PH
		3/4"x3"x40"	8	Legs: Ends (L) and Center
		3/4"x2"x40"	4	Leg (L)
		3/4"x4"x14"	4	Drawer Slide Supports
		1/2"x82"x15"	1	Lower Staging Top
		1/2"x85"x15"	1	Upper Yard/Staging Top
		3/4"x3"x5.5"	4	Upper Spacers (5.5" Long)
Risers	3/4"x2"x3"	14		
		3/4"x2"x4"	8	
		3/4"x2"x5"	8	
		3/4"x2"x6"	8	
		3/4"x2"x7"	14	
		3/4"x3"x3"	5	PH
Window	3/4"x3"x48"	2		
		3/4"x3"x41.5"	1	Leg (L)
		3/4"x2"x41.5"	1	Leg (L)
Benchtops	1/2"x96"x24"	1		
		1/2"x96"x8"	2	
Background	130"x24"	1	Masonite	
		220"x24"	1	Masonite



Risers	3/4"x2"x3"	14	
	3/4"x2"x4"	8	
	3/4"x2"x5"	8	
	3/4"x2"x6"	8	
	3/4"x2"x7"	14	
Window	3/4"x3"x48"	2	
	3/4"x3"x3"	5	PH
	3/4"x3"x41.5"	1	Leg (L)
	3/4"x2"x41.5"	1	Leg (L)
Benchtops	1/2"x96"x24"	1	
	1/2"x96"x8"	2	
Background	130"x24"	1	Masonite
	220"x24"	1	Masonite



While I have completed the initial conceptual ideas, there is still a lot of work to do to bring my vision to reality.

What I am looking for is a layout designer to take the concepts laid out in this presentation and improve the potential operation schemes on the layout by improving the track plan.

Thank you for your time and consideration.

Please reach out to me at the following contacts.

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Heath@Humancity.org
<http://www.humancity.org>

