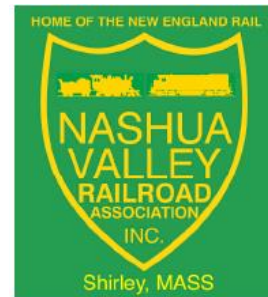




Layout Planning Report - April 2, 2023



Comments added at April 8 Layout Meeting or anything new

The layout planning committee, has been busy this month thinking about the possibilities for the upper deck branch line and the Boston line, along the outer wall. Also under consideration has been a storage track to provide a place for those members who have era-inappropriate equipment to store such equipment so it does not have to constantly taken off the rails.

One decision has been made. We had been talking about a third high line as being appropriate for storage. For a number of reasons this has not been found possible. Among them were difficulties in a scenic divider between the branch line and the upper storage, limitations on scenicking, and difficult grades.

A better solution is to have the storage below the Boston line, at a height in the region of 30 inches (Like Portland staging). (Thanks to those who hit the planning chairman up alongside the head and said "What are you thinking") This will be accessed by a second hole thought the TV wall, exact placement to be determined by a more thorough analysis of grades than we have been able to get to yet.

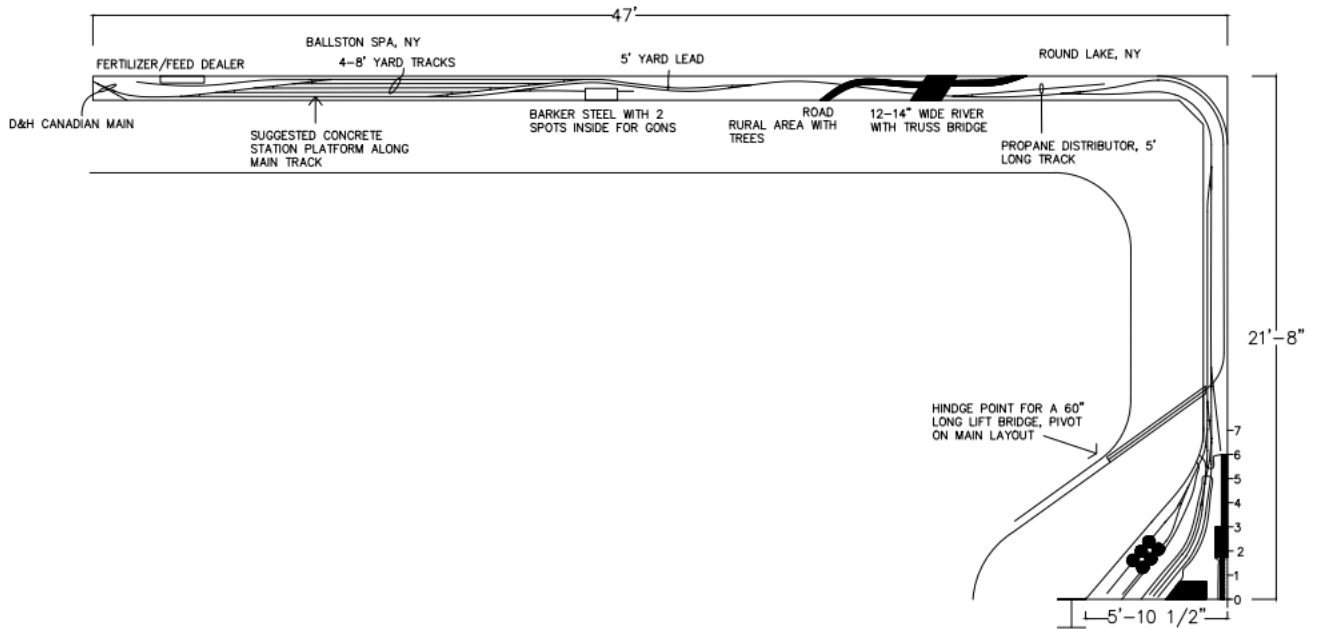
Matt has been hard at work capturing ideas in his CAD program so that we have images to discuss, seen below. He and I have been going back and forth by phone and text to flesh these out. I **emphasize** – these are starting points for discussion – the only thing that is fixed about them is the space, which is limited by our need to have a minimum 36 inch aisle width, and some of the elevations. I know Craig has some other ideas, as does Joe. All members are invited to contribute their ideas by text, email phone or smoke signal. But we need them fairly soon – we would like to be able to understand what we want to build and have benchwork costs worked out by the first meeting of the new year in June, so we can get club authorization to begin.

The concepts shown here are as follows:

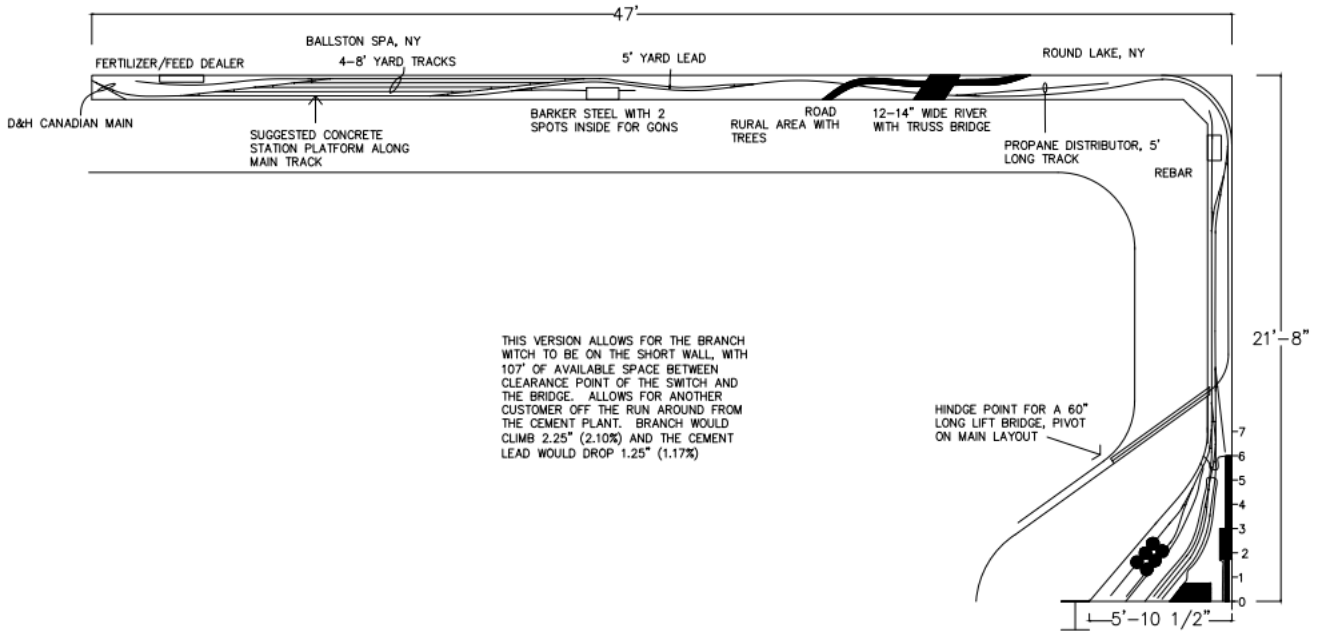


Upper deck to include a cement plant behind the TV wall. It would fill the space, yet have most of the track near enough to the front for convenience. Traffic would be coal, cement hoppers and 50 ft fly ash hoppers.

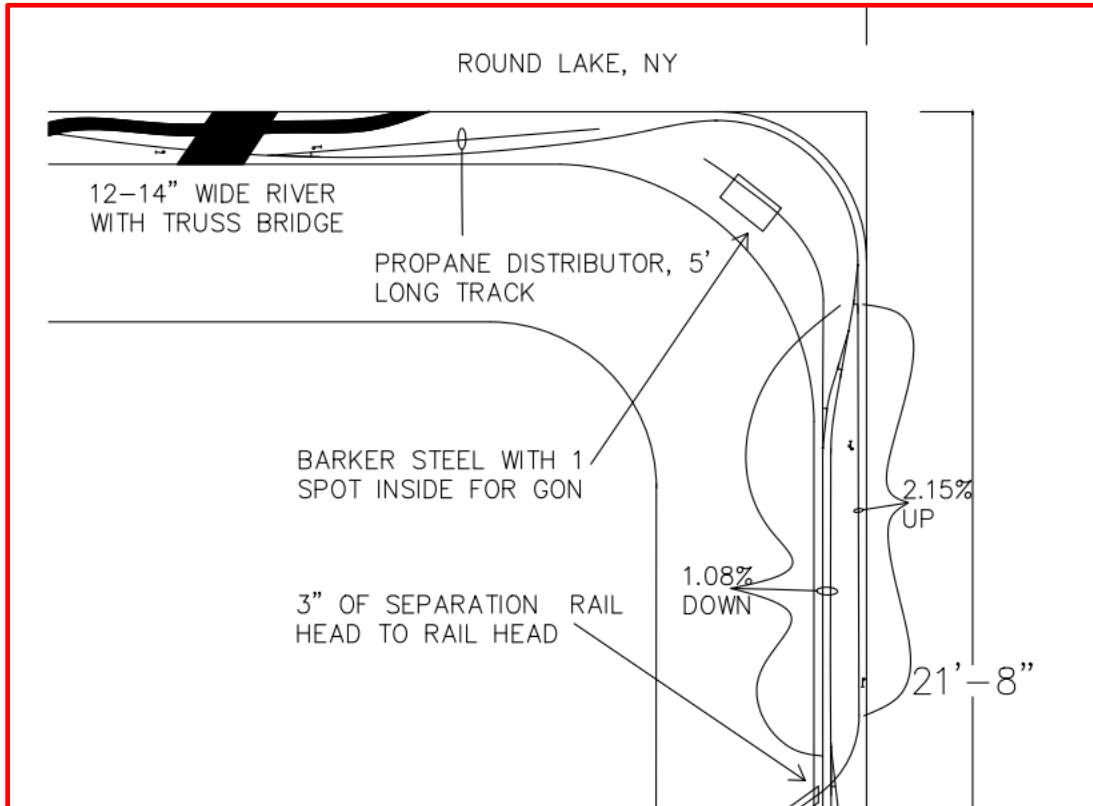
Moving along there would be a propane distributor, a steel processing plant, a fertilizer dealer, and a yard. Matt has produced two versions seen below. The top one has very easy grades leading to a turnout along the long wall to connect with the cement plant lead which goes below the bridge over the aisle. By having this arrangement, most of the branch would be at about 57 inch height, more convenient to most members than the 62 inch of the layout at Mechanicville.



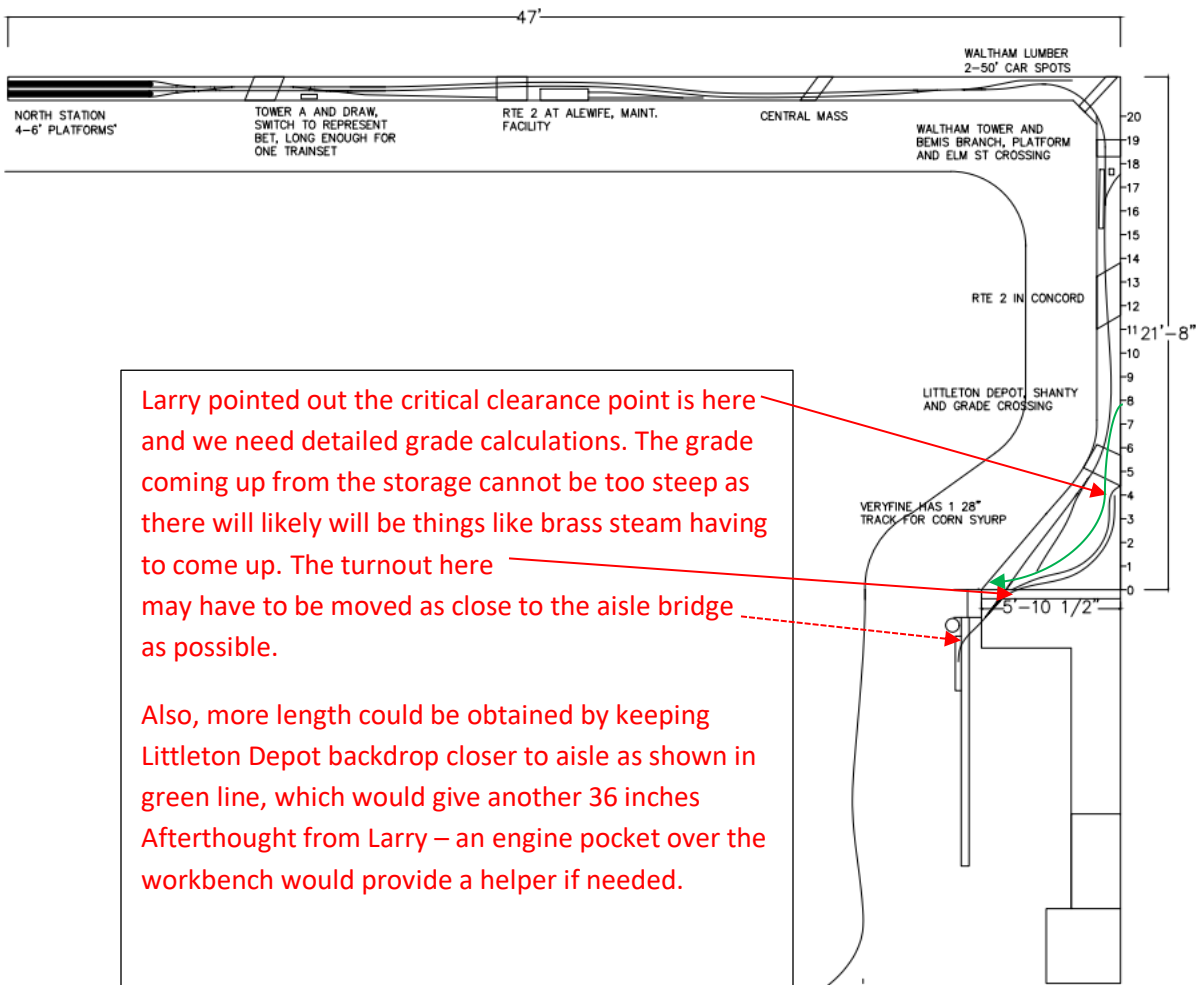
The alternate below has a turnout on the short wall. Right now the grades look ok, but fine tuning will be needed, and the cement plant will have to be about an inch higher. This gives another siding in the corner, adding switching interest



Larry pointed out that the corners at the joining of the short and long wall need to be re-drawn rounded, as having them angled like this gives up too much useful space, and is difficult to construct. Since the meeting discussion with Matt has given us the revised rendering of the corner, shown below. This also includes a grade calculation indicating this arrangement should work.



Below is the plan for the Boston line. The idea here is to have the iconic Littleton Depot – with the still extant B&M maroon and cream colored station and crossing shanty, the general store, and to the right the Veryfine beverage plant which could take corn syrup. As it would be under the cement plant, the backdrop would be forward so the depth was less than 2 feet. leaving space behind that for the line to storage. In the corner would be Waltham Tower A and Waltham lumber with a couple of car spots, and North station at the end, with 4 tracks and the platforms only. Matt proposes the MBTA maintenance building by Rte 2 at Alewife as another place we could switch.

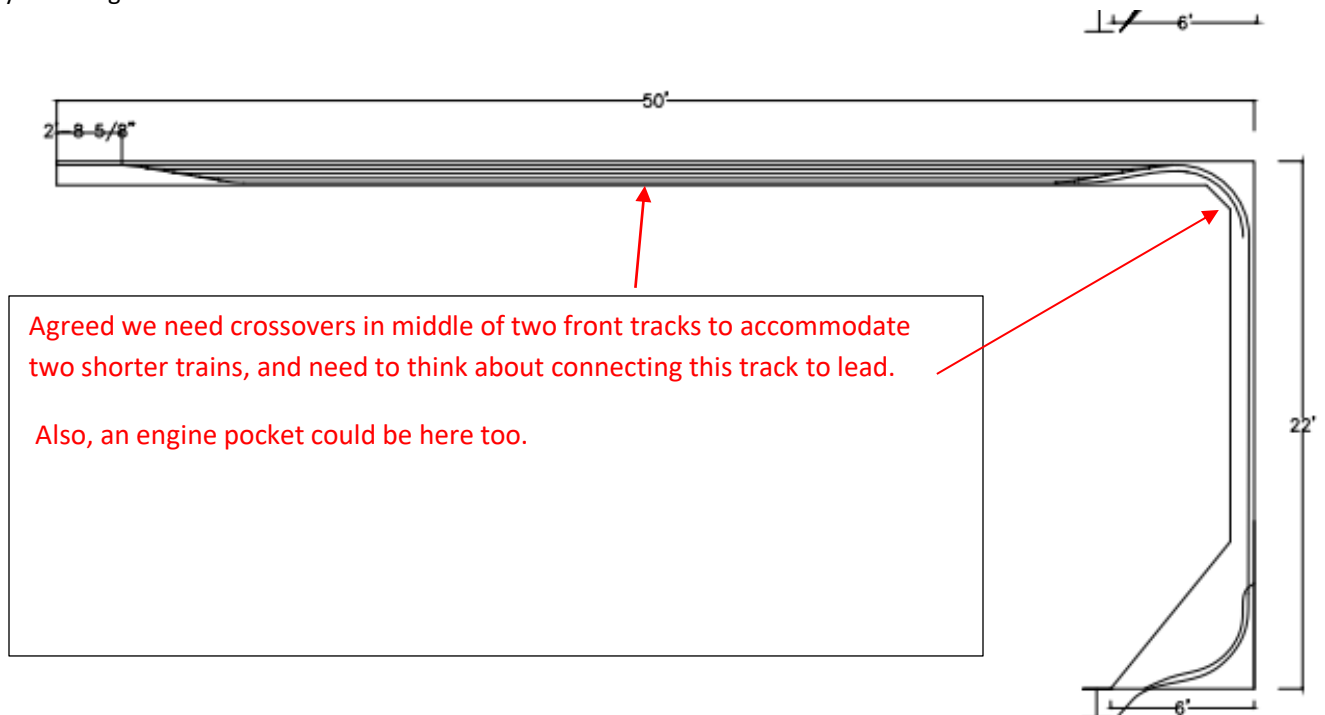


Larry pointed out the critical clearance point is here and we need detailed grade calculations. The grade coming up from the storage cannot be too steep as there will likely will be things like brass steam having to come up. The turnout here may have to be moved as close to the aisle bridge as possible.

Also, more length could be obtained by keeping Littleton Depot backdrop closer to aisle as shown in green line, which would give another 36 inches Afterthought from Larry – an engine pocket over the workbench would provide a helper if needed.

Finally, the storage tracks would look something like this, with the lead into it behind the Littleton Depot backdrop. We have a general idea of heights, but we may need to be creative to get the storage track line to dive down enough for clearance in the first few feet after it narrows to 1 foot wide.

Note this says long wall is 50 feet – that is incorrect so it would be a very little bit shorter at 47 feet. Matt and I have talked of maybe having one crossover in the middle so two short trains could be accommodated.



Again, these are IDEAS, not final plans. We need everyone's input to make this last section of the layout the best for everyone.

Some key points have to be addressed before we can proceed. These include:

1. The exact design of the upper level bridge over the aisle as it impacts the grade separation leading to the cement plant – if that's what we do there. Matt has one idea, Joe another, Doug was thinking about it. We have to get together and probably build a couple more mock-ups. **Everyone agreed mock-ups are critical. Don Carlton agreed to send diagrams and photos of his lifting bridge structure. Jim pointed out the hinge point of the bridge needs to be above the track.**
2. The grade separation of the line to the storage track under the Boston line has to be finely-tuned in order not to have too great a grade there. Likely a lot of trains stored may have less powerful engines. One idea is to carry the Boston line for a space on a grid system hanging from the front fascia girder, with a couple legs in front of the storage track line so joists don't have to go back to the wall for a few feet. It is also possible we will have to have the turnout separating the lines closer to where the bridge comes over from Willows, to get a couple extra feet of run. We also may be able to increase the length of the back track by having the first turnout of the ladder on the short wall. **See amplification this discussion on previous page insert.**

The layout planning committee activities having to do with Ayer have been reported by the Scenery Chairman in an excellent fashion.

Larry