

HO Scale Committee Meeting – 3/20/22

Bob Witwer:

It's time to start doing the first draft of the expansion plan on SCARM. Let's start very simply. Attached a sketch of the new area as a starting point. The dimensions of the expansion are

9.0' top to the left from the end of the existing layout

13.0' down across the back

16.0' back to the right

3.0' up to a 45° turn to the right which connects to the existing layout.

Below are some descriptions of the stuff on the sketch

1. Track 1 -Red line

- Starting at the top of the layout, remove the turntable and extend track1 straight into the new area..
- Track 1 follows the outside perimeter all the way around the expansion area and connects into existing track 1 with a new turnout.
- Elevate track 1 up 2.5° along the back edge and then lower it back to where it connects back to existing track 1.
- Old track 1 that follows the curve around the end module may be removed.

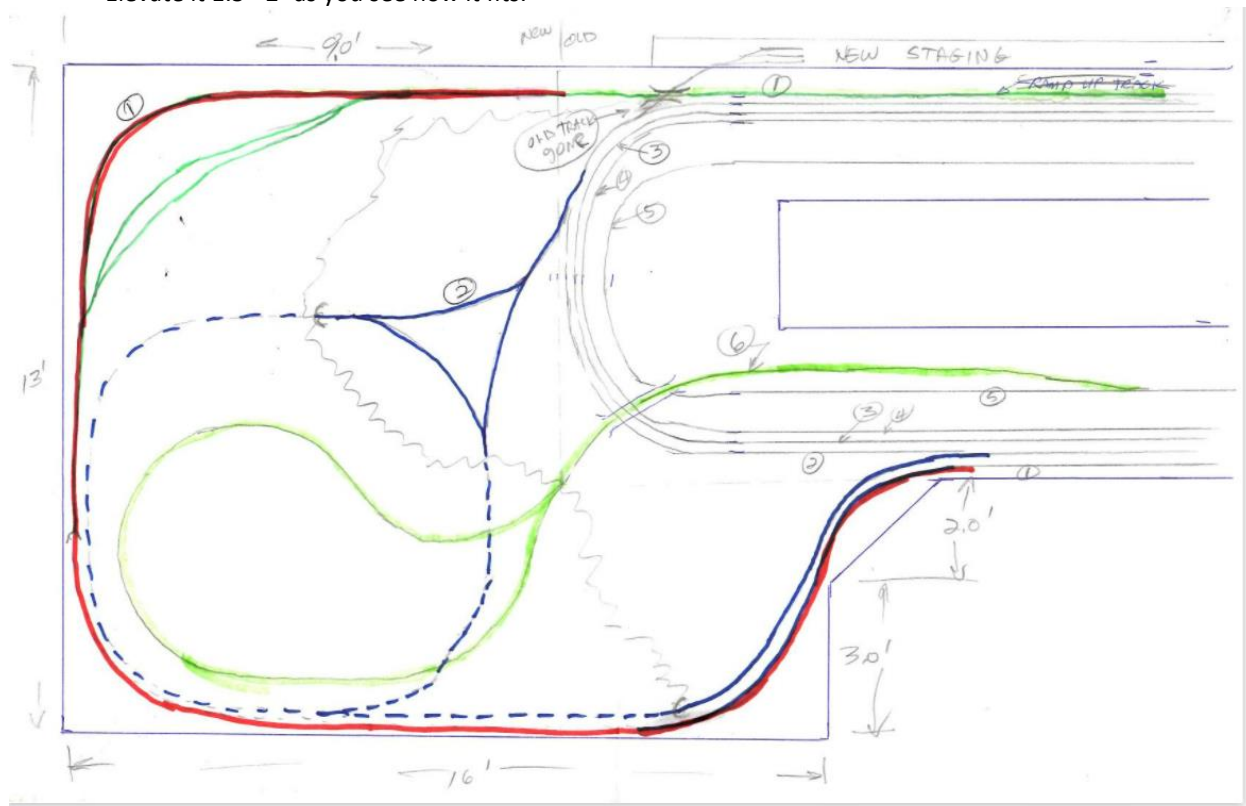
2. Track 2 - blue line

- Follow the 2nd blue line pattern with the "Y".
- Maybe push the "Y" up towards track 1. I think we will want some sidings for industries off of this later

3. Tracks 3, 4, 5 - no change at this time.

4. Track 6 - green line

- add as shown
- Elevate it 1.5 - 2° as you see how it fits.



Ted Kunstling:

I agree that having a 13' X 16' expanse with no access would be an enormous challenge for both construction and operation, but I think a pop-up hatch would be difficult and very inconvenient. We really must consider access. This seems major. What is the maximum distance we can work across? Two or three feet?

If the redline track goes all the way around the mountain, there would be no "back" of the mountain to leave open for access to trains in the tunnels ("derailment magnets").

Rather than remove modules from our existing layout, perhaps we could preserve the nice long lines across the top side and integrate the bottom tracks with the expansion. Perhaps tracks 1 & 2 could continue as a double line and track 3 become the interior line with the wye.

I suggest we inventory our current industries and decide what additional industries we want to develop. Nice looking industries take space and rail connections planned to serve them. Shouldn't we do more of this planning before we start benchwork and track laying? An approach I have been taking on my home layout has been to develop "zones" with distinct functions and characteristics when ultimately determine where the track is laid rather than the other way around. Since I am using E-Z Track, it has not been difficult to relocate tracks as needed before adding ballast and other scenery. (See attached).

Bob Witwer:

Yes, we definitely need to have an idea of industries we want to serve as well as comfortable access to all areas of the layout. We will definitely not build any benches or lay any track until we have a plan. It is an enormous challenge and there is a lot of work ahead of us. This first draft sketch of the layout was presented only to get this ball rolling and generate discussion so we can figure out what will fit in the expansion space we have. Access to the layout, whether it is an island, a hatch, a lift-up bridge or whatever will be a major component of the track plan.

One of the items on the "to-do" list is to identify what industries we would like to have. How about you start up a list of the industries that should be included as that will help put some focus into the layout plan.. It is important to know how much space should be allocated for each, are they located on the flat land or in the mountains, what number of tracks, turnouts, etc. would be required, stuff like that. If you could start that, I'm sure there are others that would like to join your efforts. Let Ken know your thoughts.

Jake Forbes:

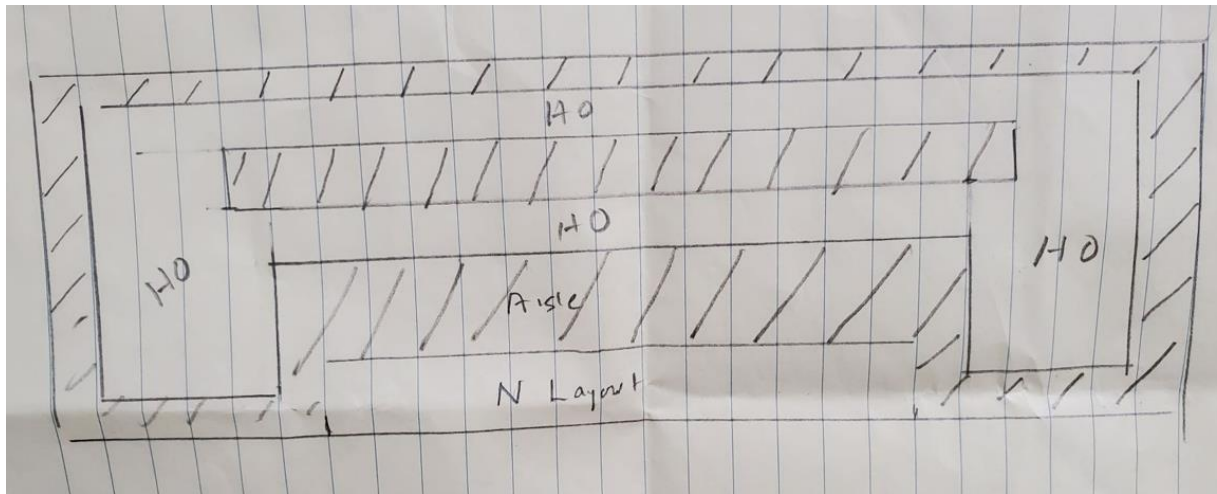
Only industry I would like to see would be a coal tower or locomotive facilities. I also wouldn't mind some rural scenes as well.

Ted Kunstling:

I like coal mines and coal hoppers. Check out the Port of Morehead City – NC Ports link in email with the railyard and variety of cargoes including wood chips, phosphates, oil, coal (in past), general cargo, containers, you name it. A spectacular list bridge crosses to Radio Island where there are oil tanks and the tracks once passed through Beaufort to plywood and menhaden plants. There are tugs and barges on the ICW so it would not be necessary to model a large ship. Both Morehead and Beaufort had charming passenger stations which still stand in good condition. All sorts of rolling stock serving all sorts of industries including coal can be seen there. Coal trains could run from a mine to the port. The terminal tracks could double as a staging yard. A model could be done on a smaller scale without the vast warehouses.

I looked at the phosphate mine in Aurora which has a lot of rail, but it is a huge open pit, so a coal mine would be better. and more practical. I doubt the big steam engines made it to Morehead - they mostly went to Hampton Roads coal piers, I think. To my recall, coals was shipped through Morehead for only a brief period in recent years, probably as a trial, but that doesn't mean we couldn't do it.

For those of you who may not have seen posted at club house, I suggested option of moving N layout to middle of wall and having smaller expansions at both ends, hoping this would improve access for construction and maintenance. Even 3' arm access could be an issue. We need to measure. Most large layouts I have seen are narrower and next to the walls, allowing backdrops. I am sure we can come up with many other options.



Jake Forbes:

I was going off the "A Little Southern Railroad That Grew Up" but that we pulled the map from. The book mentions coal being shipped out of Morehead City so that's kinda what I was thinking of maybe doing with the coal mines or something like the pictures I sent. My friend Collin Martinko and I would really like some rural areas on the layout. With some country houses, little freight/passenger stations, trees and maybe a pond or something.

George Lasley:

There is no reason the NRV could not have a coal port at Morehead even though there never was in real life. Coal is very dirty and coal dust gets everywhere. Thirty years ago some folks wanted export coal at Morehead and don't know how lucky they are that it did not happen. The town would have been split in half by multiple mile long coal trains.

The coal structures that Jake shows are not mine tipples or export structures. They are large locomotive fuel facilities. They were primarily in engine terminals but also located between terminals on main lines.

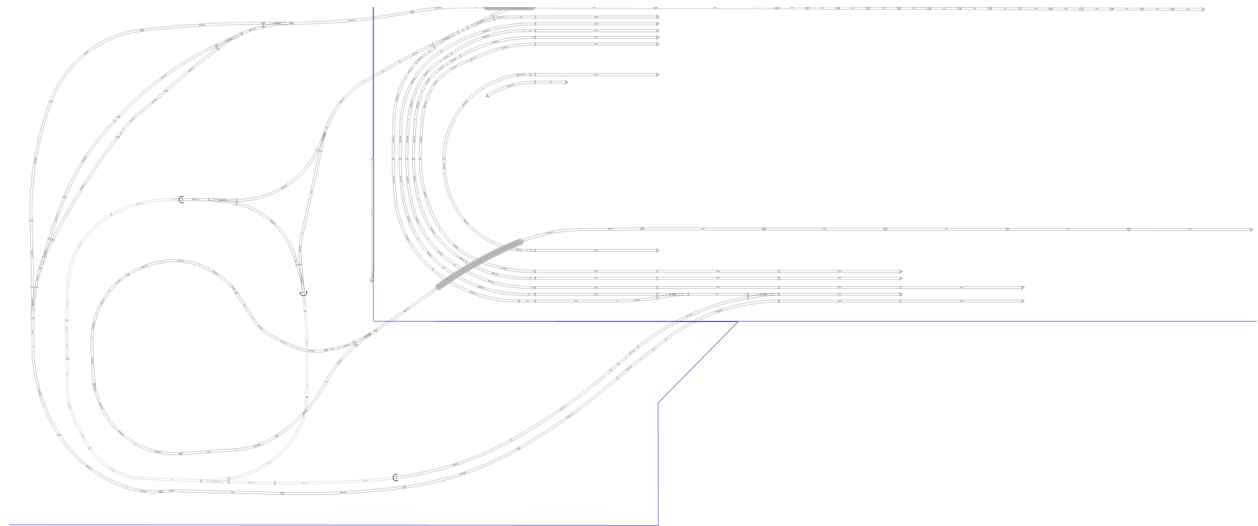
A coal export facility has HUGE storage yards for both inbound loads and outbound empties. There are also dumpers and piers for loading ships. Look at photos of Norfolk (N&W, VGN) and Newport News (C&O). Several books are in our library's collection.

Laurence Pearlman:

Suggest we think about what visitors would like to see. Things that move. Details to find. Switching to perform. Maybe a steel plant and a scrap yard. A container lift. Or just a densely packed industrial area. Maybe we think green and have a wind turbine plant and a solar farm. I love coal and ore but not sure young visitors relate.

Peter Ring:

Attached a draft of what this could look like in SCARM. The maximum grade is 2%, so the plan shows the lengths of track necessary to accomplish that. The height difference between the bridges and the baseboard is four inches; that height has worked for me on my layout, but if it needs to be raised, that can be done. (At the expense of longer ramps.) Additionally, I cut off the end of the layout before it actually stops, so the baseboard does continue to the right of where it does on the plan. I also tried to keep a minimum radius of 22 inches, although I'm sure I could work to widen that if need be.



Randy Foulke:

I believe I did not send the following to all - I would like to see a small engine terminal, including a diesel refueling stand, sand filling station, and water filling station. I may have a Walthers kit that includes sanding towers for both steam and diesel up in my attic, if I can find it. I may also have an ash pit/cinder conveyor kit from Walthers, if I can find it. If I can find these items, I would be willing to donate them.

In addition to the comments above, consider the following. Since the NRV travelled through eastern NC, a good deal of traffic would have been generated by pulp and paper mills and wood product mills. Both Weyerhaeuser and International Paper would have had many mills stretching from Roanoke Rapids to Brunswick County during the history of the NRV (Weyerhaeuser had a wood product mill north of Kinston). Traffic would have included boxcars carrying product and raw materials (including cotton fiber), tank cars for supply of chemicals and kaolin clay and outbound shipping of waste liquor, woodchip hoppers (NS trains today through Raleigh and Cary will often include numerous woodchip hoppers), and gondolas with recycle bails. Many of the paper products are transported in insulated boxcars as they are sensitive to temperature and moisture. These mills also require a great deal of energy: coal, fuel oil, or LNG, which is shipped by rail. This traffic could be routed onto a branch from the main line, or it could be on the mainline. Wood product mills can be compact, but pulp and paper mills can be quite large. One idea for a mainline industry could be a yard lead disappearing into a backdrop with the backdrop a photo of the mill and some short staging tracks behind the backdrop. Beginning in the 1970s, quite a bit of wood products were sent to the coast to be transported overseas. Today there is a wood pellet export facility at the port in Morehead City. The wood pellets are processed elsewhere in NC and shipped for transloading onto ships. (In case you are wondering, the wood pellets are sent to Europe to be used for generating electricity to satisfy their "commitment" to renewable energy sources. Considering the amount of fuel used to transport the wood pellets across the Atlantic, how is this better for the environment?)

Tom Tieman:

There are some small coal ports, mostly on lakes or rivers, but we could use them as a basis for Morehead City—see Ogdensburg, NY or Paducah, KY. OR, we could have a power generating station and move coal (10-15 cars?) from a mine to power station and have some other stuff in Morehead.

Bob has the (good) idea of following the NRVRR myth of a RR from WV to Morehead. We obviously can't model it all, maybe we should pick 2 or 3 towns along the line and model industries (real or imagined) in those places, leaving some rural spaces between.

Tom Garren:

I will add another suggestion for consideration. In year's past Carolina Power & Light had a coal-fired power plant in Goldsboro. We might consider a small power plant to use some of the coal we haul. I am attaching a poor-quality picture of the little switcher that was used there in the early seventies. If memory serves me correctly, it had only one traction motor and the two axles were tied together by a chain inside the frame

Bob Witwer:

Attached are 2 suggestions for the HO expansion plan, for 2 different access areas. Both are an attempt to have a maximum 3' arm access to any track position from the side, an aisle or a hole opening. One is a 3' square opening in the new area that will allow that reach, but it is a climb under, which is not optimum. The other is an aisle cut in through the back with a lift up bridge or trestle.

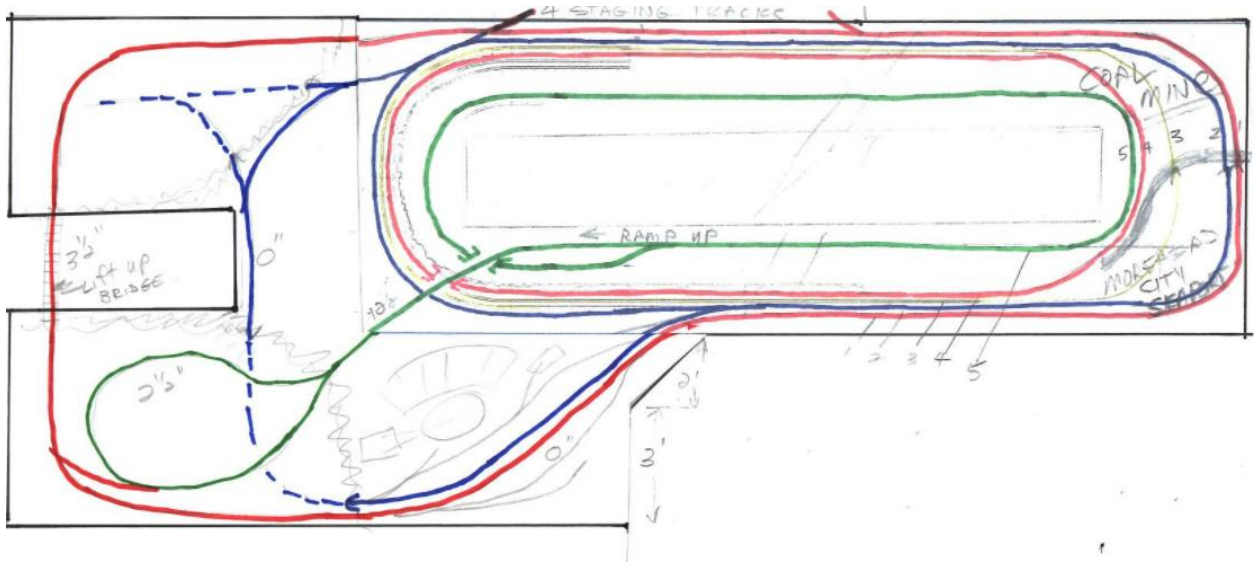
How do other members or clubs gain access under the mountain areas to covered track? Do we leave the back side of a mountain open or with a fold down door to reach the track? Or from underneath? If anyone has an idea as to a better way to gain access, please bring them to the meeting.

I would also propose a lift up or swing out section on the back side tracks of the original layout to gain access to the middle aisle.

Included is an area for engine servicing, turntable and roundhouse, all prominently displayed which many have mentioned as wanting to include. Jake has submitted pics of locomotive fuel facilities which someone can model. Suggested is an appropriate sized coal terminal at Morehead to be supplied by a coal mine. I suggest a backdrop divider between the Morehead seaport (NC end of the NRVRR) and a coal mine on the other side of the backdrop (WV end of the NRVRR). The seaport can support a variety of cargos along with coal, including wood chips, phosphates, oil, containers - all valid commodities.

Ted has cataloged the existing structures which can be the starting point for what can be positioned where on the layout. Suggestions for industries have come in as follows to be used for operating sessions.





Collin Martinko: I have to second Jacob on preferring that first plan for the "West/Western Virginia" end of the layout, which to my understanding is what is being planned right now, with Morehead City on the other end of the layout to come later. I also like that you're bringing in some ideas that represent industries and areas local to us, I'll add my take to a few of those suggestions.

I really like the idea of a Coal power plant, it appeals to most popular modeling eras and also provides the opportunity for operations, especially if we were to add a coal mine somewhere on the mountainous (or once again "WV") end of the layout. Export coal from said mine could also be a part of our future "Morehead City" section of the layout, similar to Norfolk's role in exporting coal brought in from the Appalachian coal mines. An important note regarding coal power plants, they are almost always placed next to a body of water (typically a river), as the water is required for cooling water. I believe the Cape Fear Plant in Moncure would be a good example for us, mostly due to its relatively small size. This plant received unit coal trains from Norfolk Southern before shutting down about a decade ago, I've attached a nice overhead view of the plant when it was still in operation.

I like the scrapyard idea quite a bit, although I think a Steel Mill may be a bit much especially if a coal plant is agreed upon, heavy industry takes up a lot of space (at least I would think), plus I would say a Steel Mill isn't as representative of NC. For the scrapyard though, 'Wall Recycling' in Goldsboro is a rail served scrapyard, should be able to find it if you search it on Google Maps, it would serve as a good reference.

For the intermodal facility, I could see some sort of Intermodal facility being integrated into the future port area. I believe Norfolk and Wilmington have something like that.

The Phosphate Plant in Aurora would probably be a bit large to integrate (to my understanding that place is massive), but the phosphate commodity could perhaps be integrated in some way. A dense industrial area is another thing I could see working around the "Morehead City" port area, many different warehouses with rail spurs. Some realistically done rural areas, that's probably the simplest, but best idea here. Nothing says North Carolina like a good 'ol pine tree forest and some tobacco fields!

Some suggestions of my own, the first is one that may be beneficial when foresting the mountainous parts of the layout, that is the use of chicken wire to create dense background forests. Also attached is a photo from the Facebook page 'The River: Barry Silverthorn's CSX Elkhorn Subdivision' that shows this. My only industry suggestion would be a pulpwood log loadout, these were EVERYWHERE in North Carolina prior to the 1990's, a few still exist, for reference there is one in Youngsville, NC (36.030638, -78.478945) and another just east of Spring Hope, NC (35.955345, -78.068384). If you look up the coordinates on Google Maps it should take you to those, for the Spring Hope one go to the street view to see it in its current operational state. The Youngsville one is near me, so I could go grab pictures if need be. These are small industries that would fit with any rural area, such as a small community, or right along a state highway.