A better first impression of the railroad and the opportunity to "complete the run" led James McNab to rebuild a staging yard into the Iowa Interstate's (IAIS) Fleur Yard in Des Moines. Yard procedures also offered additional car movements: Here the Des Moines Switcher sorts outbound cars underneath the Martin Luther King Jr. Parkway overpass.

From hidden staging to visible yard

New opportunities in an under-used location

By James McNab//Photos by the author

Two words. Just two words made me decide to completely rebuild the staging area of my Grimes Line layout into a scenicked and functioning version of the Iowa Interstate Railroad's Fleur Yard in Des Moines, Iowa.

I'd just publicly stated that I was close to finishing my layout, a milestone that few model railroads ever reach. Among the accolades, suggestions, and words of support was an e-mail from *Model Railroad Planning* editor Tony Koester, asking me a very simple but pointed question about the future of my layout: "Then what?"

I was amazed that it only took two words to turn my model railroad world upside-down. After all, I'd spent the better part of 10 years observing, learning, and gathering every scrap of information I could about the Grimes Industrial Track. I thought I'd designed and built the best approximation of the Grimes Line I could in our basement, and I was looking forward to operating it for years to come. But those two words made me realize there was more that could be done.

After taking a few weeks to think about what additional modeling and operating opportunities I could apply to my layout, I realized that my staging area wasn't up to par. While the on-stage portion of the layout featured every track and customer from the prototype with little compression, the joint staging and fiddle area was a single track placed on an un-scenicked shelf.

In theory, it represented the Iowa Interstate's (IAIS) Fleur Yard in Des Moines, Iowa. But in practice it was a poor approximation of the real thing. Trains would appear and disappear on the modeled portion of the layout with no explanation of where they had come from or where they were going.

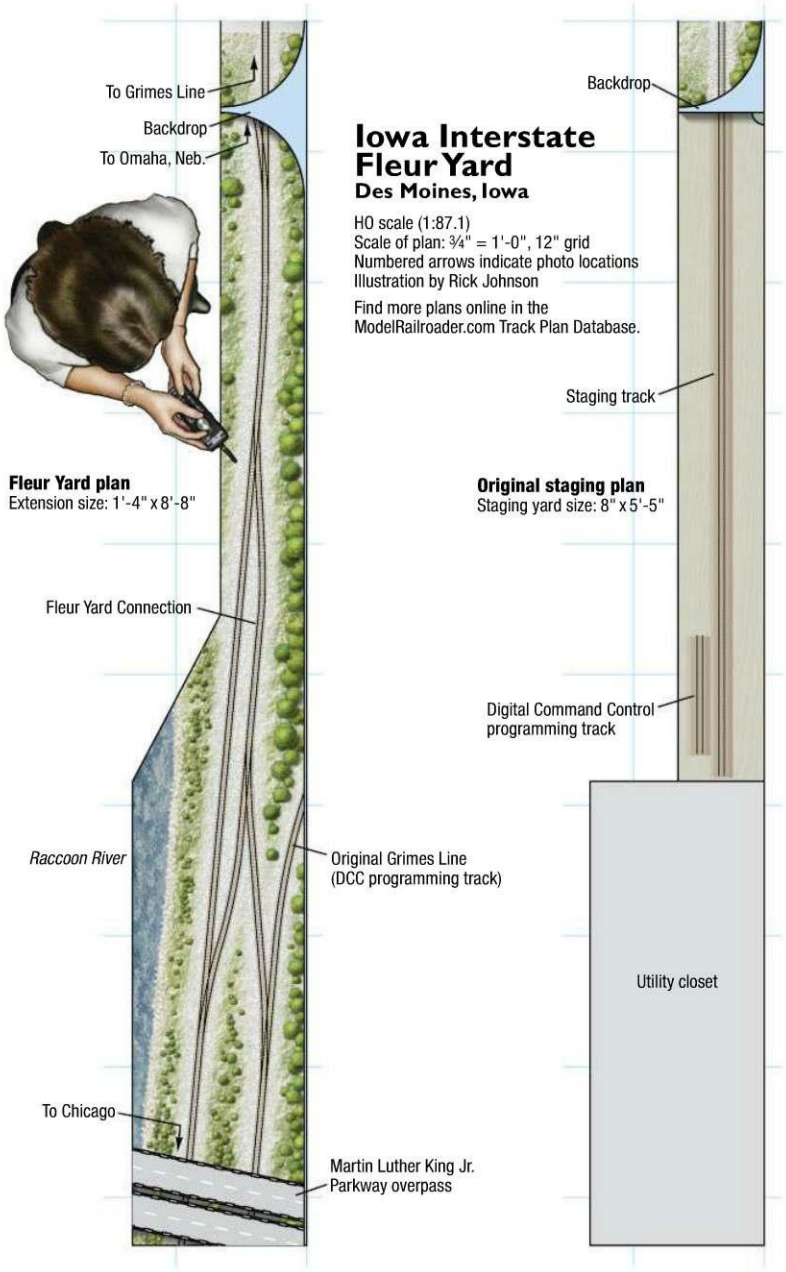
By having the yard represented by the plain staging area, it made a less than stellar first impression for the entire layout. If I were to change my staging area into a model of the Fleur Yard, it would serve as a better front door for my layout while offering a new set of operating possibilities.

The front-door effect

Accessibility and ease of maintenance are a high priority in my layout design, and staging is no different. Therefore, I designed an open and accessible area that allowed for quick

The layout at a glance

Name: Iowa Interstate Fleur Yard
Scale: HO (1:87.1)
Size: 1'-4" x 8'-10"
Prototype: Iowa Interstate RR
Locale: Des Moines, Iowa
Era: September 2008
Style: shelf
Mainline run: not applicable
Minimum radius: 22"
Minimum turnout: no. 6
Maximum grade: none
Train length: 5 feet
Benchwork: brackets cantilevered from studs
Height: 58"
Roadbed: extruded-foam insulation board
Track: Micro Engineering code 70 flextrack
Scenery: joint compound over foam board
Backdrop: aluminum flashing with photo murals
Control: CVP Products Digital Command Control



and easy fiddling of cars. Because of the way our basement is arranged, the staging area is the first thing you see when you enter the layout room. But since the space was un-scenicked, it didn't make a particularly good first impression. As progress continued and more of the layout was finished, the difference became even more apparent.

Originally, I worked to make the space as aesthetically pleasing as possible. The entire staging area was painted the same color as the fascia to help blend it with the rest of the layout, while still indicating that it was separate from the modeled portion. I added a full valance and lighting that matched the rest of the layout, and I mounted the electronics and Digital Command Control (DCC) system in a pullout drawer behind the fascia. As a final step, I built simple shelves along the back of the space to store my freight cars. The shelves allowed for cars to be quickly cycled into outbound trains, and also served as a display case for my car fleet.

While these steps brought a cleaner, unified, and more professional look to the staging area, it still paled in comparison to the developed layout that took up most of the space. Part of the decision to change the staging area into a scenicked and detailed classification yard came from the desire to give a better entrance to the room, and to set up the layout's concept and story from the first viewing. Yes, trains will no longer leave the modeled portion of the layout, nor will I have a dedicated staging area. But the addition of a fully scenicked, fully operating yard that can act as both visible staging and a better "front door" more than makes up for the losses.

A yard without the yard

My original layout design was based on maximizing the available space in our basement for the modeled portion of the Grimes Line. As part of the design process, I made sure to include adequate space for staging, which is always a good idea in any layout plan.

Learning points

- Operating on a prototype or prototype-based layout is enhanced when there's a clear start and finish to each job.
- Consider aesthetic value when planning and building staging.
- Tracks can be deleted from a model railroad yard design if they don't play a direct role in your operating scheme.
- Trains don't need to disappear from the modeled portion of a layout at the end of their runs.

"Before and after" views of the former staging yard, now IAIS' Fleur Yard, show the expansion. Car storage shelves are now below the benchwork and above magazine storage racks.

Fleur Yard serves as the linchpin for Iowa Interstate's operations in Des Moines. The yard sits on a narrow strip of land between the Raccoon River and Terrace Hill. James modeled the west end of the yard, as it offers better operation value.

Since my prototype is a single-train industrial branch serving three customers, a 5-foot-long area to fiddle cars and stage outbound trains was more than adequate.

When it came time to design a working version of Fleur Yard, I knew I was going need more space. Even the rather modest arrangement of the prototype (see "A simple setup" on the next page) takes up a respectable amount of land. I was able to steal a few more feet in the corner of the basement where several utility pipes entered the house, but I was left with a little more than 8 linear feet to work with. Not exactly an ideal size to build a modern-era yard.

Using XTrkCAD computer-aided design software created for model railroads, I was able to draft an accurate track layout that I knew would fit the available space. It also allowed me to simulate yard operations by using the software's built-in library of cars and locomotives. Both features were a major benefit when I needed to test whether or not a track arrangement would work with my planned operations, without having to either mock-up or build the plan.

To make the most out of the limited space I had, my design centers on the west end of the yard, including the Martin Luther King Jr. Parkway overpass, the Fleur Connection Track, and the junction between the IAIS main line and the Grimes Line. Luckily the low-volume nature of the Grimes Line, both on the prototype and on my layout, was an advantage. Average outbound train lengths are three to five cars.

So where's the rest of the yard? It's that-away! The overpass sits atop the turnout to Yard Tracks 1 and 2, just as it does on the prototype. The rest of the yard is theoretically to the east, or right, of the overpass. By including all the tracks, even ones that are purely cosmetic or don't contribute to the operating plan, the yard appears bigger than it actually is.

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The other side of town

The Iowa Interstate's Des Moines Switcher, while officially labeled as Train DMSW, is better known by its crew nickname, the "Tramp." While most of the Tramp's day is spent on the Grimes Line, the train is also responsible for working the two interchanges with the Class 1 railroads in town, the Union Pacific and the joint BNSF Ry./Norfolk Southern interchange. Both are located east and south of downtown Des Moines.

Because my layout space wasn't big enough to include the entire IAIS route through Des Moines, all other interchange points were originally represented in the staging area. With my decision to model Fleur Yard, I needed a way to bring the Class 1 interchanges into the operating plan. Since I didn't have any additional space to model the interchanges separately, and didn't want to further compress my yard design, the solution was to have the operating session start after the interchange work had been done.

I learned about this technique from Tony Koester's former layout, the HO scale Allegheny Midland. Tony had several branches that ran to and from an un-modeled interchange point. At the start of his operating sessions, he had several trains visibly staged on these tracks with cars bound for delivery to towns served by the Midland Road.

Basic construction methods are evident: 1 x 4 joists overlaid with 2"-thick extruded-foam insulation board. The backdrop is aluminum flashing with photos of the modeled location glued on.

The car-storage shelves and a utility closet were removed to make room for the new yard. James packed a lot of railroading into the available 8 linear feet.

Toward the end of his sessions, the trains would start back up their respective branch lines with any outbound cars, where they would finish their runs on the visible part of his layout.

Procedures at Fleur

In my case, I start my operating session after the Tramp has worked the east-side interchanges, but before its run up the Grimes Line. The day begins with cars from the previous night's road freights already spotted on the Connection Track.

The Tramp's first task will be to sort and block the cars in the yard. Since all the spurs on the Grimes Line are facing-point for outbound movements, and there's only one available runaround on the branch, crews don't want to leave Fleur Yard with a poorly blocked train.

After the outbound train is built, the crew will pull up to the switch connecting the IAIS main line to the Grimes Industrial Track. All IAIS tracks through Des Moines are within yard limits, which means trains can occupy and move on the main without specific authorization. However, the Grimes Line is "FRA Excepted Track" and is governed by a different authority. The IAIS dispatcher will give verbal permission to Train DMSW to occupy the track. Operators can then unlock the switch and proceed up the line. Regardless of whether the crew is governed by yard limits or excepted track, a restricted speed of 10 mph is enforced.

Once the work on the Grimes Line is complete, the Tramp returns to Fleur, where it sets out cars bound for other IAIS locations into east and west blocks. Those cars will be picked up by that night's road freights. Any cars bound for interchange with the Class 1 railroads are pulled to the east end of the main, where the session ends.

Working the yard at the beginning and end of each session has distinct benefits to an operating layout. In addition to giving my operators a clear start and finish to each session, the yard increases the time needed to complete the session. Initial tests have shown it takes nearly 30 real-time minutes to work the yard, a major enhancement for an 8-foot-long addition. **MRP**

James McNab is an award-winning producer and video editor with more than 400 production credits to his name. His HO IAIS Grimes Line layout was featured in Great Model Railroads 2015, *and this is his second byline in* MRP.

A simple setup

Set on a small strip of land between the Raccoon River and Terrace Hill on the west side of Iowa's capital city, the Iowa Interstate's (IAIS) Fleur Yard seems like an afterthought for the railroad. With only two yard tracks and one siding, it'll never be mistaken for a division point or full classification yard. Yet this small and unassuming collection of tracks serves as the linchpin for the railroad's operation in Des Moines.

Two daily road freights, one in each direction, set out a cut of cars blocked for Des Moines. The local switch crew sorts the cars for delivery to the various interchange points with the Class 1 railroads in town, or to customers on the IAIS Grimes Line, which I model in HO. After working the interchanges and the Grimes Line, the switch crew sorts the outbound cars into eastbound and westbound blocks in the yard for pickup by the appropriate road freights, where the process starts all over for the next day.

Iowa Interstate road freights will generally leave the Des Moines block on the Connection Track, a double-ended siding on the west end of the yard. It's more than long enough to handle the typical traffic levels on the IAIS, with eastbound and westbound cuts set out on opposite ends of the siding. On days with higher traffic levels, the two classification tracks, known simply as Yard Tracks 1 and 2, can handle the excess. Otherwise, they're used for sorting and organizing the cars for their final destinations. – *J.M.*