



Gannett Fleming

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June 12, 2008

Keith Orris
Executive Director
Franklin & Marshall College
P.O. Box 3003
Lancaster, PA 17604-3003

*Re: Lancaster, PA – Norfolk Southern Dillerville Yard Consolidation Project – Phase 2
Alternative Site Evaluation*

Dear Mr. Orris:

Reference is made to your request to evaluate the proposed alternative solution being posted on the TRRAAC.com website. As you are aware Gannett Fleming conducted an alternatives study early on in this project where we looked at options to expand Norfolk Southern's capabilities to serve rail freight customers in the Lancaster County area. The need for additional capacity as well as operational flexibility in the existing Dillerville Yard was paramount in our evaluations. The site that TRRAAC proposes was one of the locations that Gannett Fleming investigated for expansion. There are several issues that make the TRRAAC proposed site not feasible for expanded rail operations. While TRRAAC provides no formal engineering design for a detailed review, the basic problems with the site are as follows;

- The TRRAAC drawing would indicate that the existing yard could be extended eastward at its full width. The existing yard has 14 tracks, whereas the southern bridge opening under Dillerville Road only has room for 6 tracks. This feature in the middle of a yard severely restricts the capacity and flexibility of the yard and makes the design untenable.
- The main reason for Gannett's design to realign the existing yard to the north, running parallel to the existing Columbia Branch, but "necking down" at the northern freight railroad opening under the Dillerville Road bridge was to allow for a 2100 foot long Drill Track continuing to the east from Dillerville Road. This Drill Track will allow for switching of the main classification yard to the east. By providing this track, the longer train that arrives and departs for Enola can be broken down into smaller blocks or built up for departure with greater flexibility. No allowance has been made for this Drill Track in the TRRAAC design. If there would be one included it would be shorter than the present Drill Track which would be unacceptable for Norfolk Southern operations. This is the reason that Gannett eliminated the TRRAAC design location as feasible.
- The "Tail Track" or Drill Track must be continuous and act as an extension of the main classification yard to perform effective switching. The classification yard can not be independent from the Drill Track and make both work efficiently. If the Drill track were to be designed as Gannett proposes, as is needed, proceeding east beneath the northern freight railroad opening of Dillerville Road and if, per the TRRAAC design, the switching yard tracks were to bend beneath the southern opening beneath Dillerville Road, the yard engines would be constantly moving and double-handling the rail cars within the yard burning excessive fuel and wasting yard crew time. This orientation would require the locomotives to pull cars from the TRRAAC proposed yard to the west through the ladder track in the vicinity of Harrisburg Pike and most likely past the Little Conestoga Creek bridge then reverse and throttle up to push this large cut of railcars up the grade

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to the Drill track. This design would exacerbate the noise levels at the geographic location where the citizens have concerns.

- While the original switching yard's late 1800's design allowed for curved tracks with tight track centers, modern yard design does not allow for such criteria due to safety standards for the yard crews. Curved tracks generate poor sight lines and close track centers provide little walking room for the crews on the ground between trains. The TRRAAC design would perpetuate these poor and unacceptable conditions.
- Longer, straighter tracks have the advantage of allowing the Yardmaster to move longer cuts of rail cars into assigned tracks and leave them there until a Local train is put together or the main train departing for Enola is put together. Shorter stub-ended tracks require additional "in-yard" moves by the yard switchers burning additional fuel needlessly and creating longer switching operations.
- The TRRAAC drawing depicts stub-ended storage tracks. Again, stub-ended storage tracks are much more inefficient and require many more switcher engine moves to place the cars in the Local trains than if the Yardmaster has the flexibility of double-ended tracks for placing and sorting rail cars. Stub-ended yards also have the disadvantage of generating many shoving moves with a trainman/woman riding the rear of the cut of cars during switching which includes an element of risk. While NS and its predecessors who have worked Dillerville Yard have a very good safety record any new design should incorporate safety into the design and eliminate such potential hazards.

Gannett Fleming looked at many alternate sites and yard alignments over the 3 years we've been associated with this phase of the project to consolidate and increase the capacity of Dillerville Yard. This included properties owned by NS, Amtrak, Donnelly and the Penn Central Estate. These alternate designs each had a "fatal flaw" such as not creating enough yard capacity, elevation differences precluding a safe profile for rail operations, accommodating only curved tracks which are unsafe, not enough Drill track length for operations, close clearances to the overhead bridges, etc. These flaws were in addition to expected difficulties in acquiring land from property owners such as Amtrak. The design that we have recommended achieved all of the needed goals of capacity improvements, land control and minimal impacts to the corridor.

After studying many alternatives for the Dillerville Yard, we believe the proposed consolidation plan is the superior design as it meets the operational and safety needs of Norfolk Southern, and remediates a former municipal dump.

Sincerely,



Richard Cross IV, P.E.

Director of Track/Civil Design

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