

Optimized Limits of Disturbance

When conducting an Environmental Impact Statement (EIS), the Virginia Department of Transportation (VDOT) perceives “we are setting up a corridor of land that is ‘in harm’s way’ due to the planned construction.” During this process, they do not try to minimize the potential impact by squeezing the size of the footprint, but actually give FHWA the worst-case scenario. They realize and contend they do not know enough at the time of NEPA to try to get too fine with their estimate of the project’s footprint. They have found it very advantageous to submit the maximum amount of property they could conceivably use for construction to the NEPA process, thus setting themselves up for much smoother design and construction phases. They almost always end up shrinking the footprint as time goes on, instead of expanding it, but have found they can use the LOD process to give them some innovation during the RFQ period, while currying favor with FHWA and the permitting agencies in the process.

Because of the trust, hard earned since the fiascos referenced above, VDOT is able to do interesting things on this HRTB project. For example, if needed, it will be possible on this project for the design-builder to start work, say, on the Norfolk end of the project, while a NEPA Re-evaluation is conducted on the Hampton side, without splitting the project into two contracts. It would even be possible to isolate a portion of any geographic area of the project, and conduct a NEPA Re-evaluation of the isolated section, while still working on the non-isolated portion of the same area – again without splitting the project into multiple contracts.

The HRBT Environmental Manager reported with pride that the environmental consultant for the project completed the EIS on this massive project in under two years. The consultant credits the way FHWA’s Virginia office and VDOT interpreted their own regulations, for their ability to do this. Going into the NEPA process, the HRBT team did not prescribe what anyone should do. They call their conceptual plans “Illustrative Planning Level Designs.” They take these Illustrative Planning Level Designs through NEPA and the environmental-permitting process. If these plans pass through the NEPA and environmental-permitting processes, they give the plans to the D-B proposers. In the plans, they purposely add 30 feet to the width of each side of the land portion of the design footprint for NEPA. They also add width over water to the furthest point from which

they can get to the land connection point. In other words, they start at the location where they must enter a tunnel, then use the maximum allowable angles of curvature to go as far out of a straight line to the point where they must rejoin the roadway as possible, given the point at which they must reconnect. This gives them the largest footprint possible over water. They then tell FHWA and the public “somewhere within this box we will build this structure.”

The NEPA “numbers” they submit are “worst-case scenarios.” Therefore, they often exaggerate the negative impacts that actually result from the construction – impacts such as the number of properties to be taken through eminent domain, the number of acres of wetlands to be impacted, the feet of sound walls to be constructed, etc. They have found that, since they submit a much larger footprint to the NEPA process and the environmental-permitting process than is required, the FHWA and the regulatory agencies are very forgiving of a slight discrepancy “if we bump outside the footprint for a couple of acres.” In these cases, FHWA has not required a NEPA Re-evaluation, and so VDOT does not care, either.

VDOT started the NEPA process early on the NHBT project so they could get all of the ATC ideas with merit into the NEPA package. When they began the EIS process, individuals, groups, and local authorities wanted to add their pet projects to the HRBT contract. Especially popular among items to be added to the contract were interchanges. They found that because they were not getting into the details of designing things such as interchanges with these Illustrative Planning Level Designs (which were less than 15% plans), they could ignore these requests. This allowed them not to get bogged down in those details.

In summary, submitting a much larger project footprint to NEPA than is necessary for the (less than) 15% Illustrative Planning Level Design is the key. This places more land under analysis for things that would put the NEPA and environmental-permitting processes at risk, increase the possibility of impacting historical sites, increase the possibility of impacting politically sensitive properties, or increase the possibility of having to evict people from their homes and businesses via Eminent Domain. All these things increase the possibility of a failed NEPA Evaluation, and a failure to procure needed environmental permits. It also runs the risks the raising or the level of angst among the citizenry. However, the payoffs have been obvious: increased trust on the part of

the permitting agencies, early buy-in from those agencies for desired designs, a smoother NEPA and environmental-permitting process, and smoother design and construction project phases.

Because of their past experiences, VDOT puts a lot of emphasis on executing the NEPA and environmental-permitting process. Generally speaking, VDOT does not concern itself too much with a NEPA Re-evaluation, having executed many of them. When it comes to NEPA and the environmental-permitting process, the field people at the HRBT have the total support of VDOT top management. The HRBT Environmental Manager said, “I’ve never waited for more than 48 hours for a reply to an inquiry posted to the VDOT hierarchy. He marveled that at his level, “the VDOT Commissioner knows my name.”

If the Design-Builder comes up with a new idea after construction has commenced, the environmental team at HRBT will review it for how they think it would play out in the NEPA process, and give their opinion on: 1) whether it will require a NEPA Re-evaluation; and 2) how the case would fare in a NEPA Re-evaluation. They are not part of the decision; they only give their opinion. When it comes to approving an idea from the contractor or Design-Builder that would change the design of a project, VDOT proceeds under the assumption that since the Design-Builder (or contractor in a DBB contract) holds all the risk, they have to really believe in the idea to take it to a NEPA Re-evaluation. They reject ideas that would result in any number of situations that are not in the best interests of the people of Virginia – but never just to stay on schedule. They pointed out that “our culture is to allow the change if it is in the best interest of the project, if the contractor is ready to take the risk.” That said, they are, by necessity, very time-sensitive in one respect – if a delay will send a project into the next construction season, they are likely to reject it, even if it is a good idea.

Lastly, they made the point that sometimes (not on this project) during NEPA, they don’t know whether a project will be D-B or DBB. So the NEPA process is the same, regardless of the delivery system.