

## WEST WINDSOR DEVELOPMENT REVIEW BOARD

Draft Minutes

June 4, 2012

Present: Shannon Harrington, Hal Pyke, Genevieve Lemire, Barbara Truex, Glenn Seward (representing the Town, as applicant), Martha Harrison

1. Site visit – At 6:45 PM, the DRB conducted a site visit to the Bowers Covered Bridge in connection with application #2485.
2. Call to Order – DRB Vice Chair Shannon Harrington called the meeting to order at 7:10 PM. Glenn Seward was present on behalf of the Town, not as a member of the DRB.
3. Changes to the agenda - None
4. Public Hearing - Shannon opened the public hearing on application #2485 by the Town of West Windsor to rebuild the covered bridge and associated abutments destroyed during Tropical Storm Irene in the town right-of-way on Bible Hill Road. According to Section 3.14(3) of the West Windsor Zoning Regulations, the replacement of existing transportation infrastructure within public rights-of-way is exempt from local zoning. However, according to Section 1.3(B), when development “is also subject to other town or state regulations, the most...restrictive regulations apply.” Because the covered bridge is in a special flood hazard area, reconstruction is subject to West Windsor’s Flood Hazard Area Regulations and must be reviewed by the DRB as a conditional use. The application is subject to review under Sections 3.9(A), 3.14, 3.14-1, and 5.3 of the West Windsor Zoning Regulations. The application is also subject to review under the West Windsor Flood Hazard Area Regulations. Shannon noted that there are no interested parties present other than the applicant, as represented by Glenn Seward. The DRB members confirmed that there has been no ex parte communication. Shannon swore Glenn in and asked him for an overview of the project. Glenn said the Bowers Covered Bridge was washed downstream during Tropical Storm Irene, damaging one end of the bridge and destroying one abutment. Utilizing FEMA funding, the town began reconstruction of the south abutment and contracted a local timber framer to repair the bridge. Except for the bridge deck, the project was a full restoration of the upper structure. Initially, Glenn said, FEMA and state officials would not allow the town to change the north abutment because they felt that it was structurally sound. Months later, the town was notified that funding would be provided for the north abutment as well, so the town contracted to have that done. Glenn said the work will be done in about a month, at which time the bridge will be set back in place. Glenn said the abutments will be one foot higher based on the recommendation of historic preservation officials from FEMA and the state. Glenn said a hydraulic study was done by the Vermont Agency of Transportation (AOT), which suggested a wider channel, but the historic preservation recommendations trumped the hydraulic study. Glenn said the bridge itself is substantially complete and will be set back in place with historically correct guardrails, all disturbed areas restored, and native trees planted at each end of the bridge. Glenn said the hydraulic study suggested that the span be increased so the channel could be widened but the historic preservation officials would not allow that since it would require a major change in the bridge. Barbara asked if the historic officials have a problem with the one foot increase in the height of the abutments, given that the bridge itself will stay the same. Glenn said no, but the town had requested a height increase of 18” to 24” and the historic officials felt that would throw things out of perspective so they wouldn’t allow that much of an increase. Barbara noted that one branch of AOT wanted it bigger and another branch of AOT said no, it has to be historically accurate, so the compromise is to allow the abutments to be one foot higher. Glenn said yes, the historic officials seem to have ultimate authority. Barbara asked if the historic officials have inspected the reconstructed bridge. Glenn said no; FEMA looked at the drawings from Steve Bodley and then they got passed along to the state for placement in the archives but there were no site visits by historic officials after the initial site visit. Shannon noted a string of emails between Glenn and Scott Newman, AOT’s Historic Preservation Officer, indicating

Scott's intention to come back and look at the bridge. Shannon said it appears that four agencies have been involved in this review: the Army Corps of Engineers, the Agency of Transportation, FEMA, and the state Stream Alteration Engineer. Shannon asked if the bridge that is being installed has been approved by all those agencies. Glenn said yes. Glenn said the question that he and Martha have been wrestling with is how this interfaces with the flood hazard regulations and we don't have answers to that. Glenn said it's his sense that the historic nature of the project trumps everything else but we couldn't get confirmation of that from Rebecca Pfeiffer today. Martha said Rebecca has 30 days to comment. Shannon said the flood regulations appear to require PE-stamped plans and we don't have those. Glenn agreed that we don't have those; the abutments were design/build projects, which was satisfactory to FEMA and the state Historic Preservation Officer. Glenn said there was a lengthy site visit before any work was started, with officials from FEMA and the state, as to exactly how we were going to go about this. Glenn said state and federal officials reviewed the bid documents and concurred with our choice of contractors but everything was verbal until we had the confusion over the north abutment. Glenn said that's the way FEMA works; you're not assured of funding until you get a notification that funds have been committed. Shannon asked if there were plans with specifications. Glenn said yes; it was noticed in the paper and there were 4 or 5 bidders. Glenn said the town selected the second lowest bid and had to justify that choice. Glenn said the lowest bid was for repairing the upper structure and the next lowest bid was to reconstruct it. Shannon asked if the decking was okay. Glenn said yes. Barbara asked if the arches are part of the decking. Glenn said yes; the arches are the truly historic part of the bridge. Glenn said there are only two tied arch bridges in the state and both of them are in West Windsor. Regarding the volume of potential flood water coming out of the drainage basin that goes into Mill Brook, Barbara asked how much over that Irene went. Glenn said he doesn't know but he thinks the issue there was the impact of the hay bales, which clogged up the channel and raised the height of the water and then took the bridge out. Glenn said that volume of water went down Mill Brook and was responsible for the damage to properties down stream, including the fire station and Scott Smith's house. Barbara said the bridge had been there for 100+ years before the storm so if we raise it by a foot and get people to move their hay bales away from the edge of the brook, that bridge could be fine for another 100-200 years. Glenn said the flood insurance rate map (FIRM) indicates that there was a reference marker elevation on the guardrail adjacent to the bridge, and that was 725.94'. Glenn said according to the Flood Insurance Study, the stream bed elevation is 712' so, if you add the abutment height of 9' to that, you get up to 721'. Glenn said the original bridge was not anchored to the abutments. Shannon said our flood regulations say that it has to be. Glenn said, according to the historic preservation officials, since it wasn't anchored before, it doesn't need to be anchored now; that way, if this happens again, it won't be destroyed, it will simply float down the stream like it did before and hopefully we can retrieve it. Shannon said that makes sense. Shannon said she thinks the purpose of our regulations is to prevent structures from damaging someone's property downstream. Glenn said if the DRB would like the bridge to be anchored, he will bring that up with the state. Regarding the conditional use review, Shannon noted that Glenn has submitted written responses to the criteria, which he read into the record. Shannon noted that not having the bridge in place has a negative effect on the neighborhood so getting it back will have a positive impact. Regarding Section 5.3(4), Glenn said he feels it complies with all bylaws in effect. Shannon said she was wondering about that with regard to the flood regulations. Glenn said he would be glad to address that if he can get some guidance from the state floodplain coordinator. Regarding Section 3.9(A), Shannon asked Martha why the bridge is a pre-existing non-conforming structure. Martha said the bridge pre-dates zoning so it's not a permitted structure. Martha added that the bridge doesn't conform to the hydraulic specifications that it would have to conform to if it were a new bridge being constructed in that location. Glenn added that there are load ratings that it does not comply with. Genevieve noted that the regulations state that "legal nonconforming structures exist as a result of construction prior to adoption of bylaws." Martha added that Section 3.9(A)(1) says that "a nonconforming structure may be restored or

reconstructed after unintentional loss...” Shannon noted that the reconstruction has to take place within 2 years and not increase the degree of nonconformance. Hal noted that, if it had been intentionally demolished, the town would have to rebuild it to meet current specifications. Regarding Section 3.14, Shannon said we can rely on the Stream Alteration Engineer’s approval. Glenn said the town has blanket approval from the Stream Alteration Engineer to do whatever is necessary post-Irene. Glenn said he confirmed with the Stream Alteration Engineer that the north abutment would fall under the existing permit. Shannon noted that the documentation submitted with the application references the south abutment. Glenn said he contacted Todd Menees about the north abutment specifically and has an email somewhere documenting the conversation. Genevieve asked if the bridge will require a Certificate of Occupancy, as indicated in Section 3.14-1. Martha said this is another place where the nonconformity comes into play because she can’t imagine that it’s going to comply with H-20 loading capacity and other standards. Shannon said she thinks it would comply with H-20. Martha noted that a ladder truck can’t cross the bridge. Shannon agreed that the height of the opening would not allow a ladder truck. Genevieve noted that Section 3.14(1) refers to Section 3.14-1. Martha said it’s up to the DRB to determine whether the allowance for the replacement of a nonconforming structure trumps other considerations. Martha said if someone were building a new bridge, it would have to comply with Section 3.14-1. Martha said increasing the height of the abutments by one foot is decreasing the degree of nonconformance by increasing the size of the waterway. Barbara noted that the main structure, the bridge, is exactly the same size. Shannon said the findings should reflect that the town has sign offs from all the state and federal agencies, even though the project may not comply with our own flood regulations. Martha said she wants to ask Rebecca Pfeiffer about Section 8(c) of the Flood Hazard Area Regulations because it doesn’t make sense to do an engineering study if the town has already been told by state and federal agencies that the reconstruction has to be done a certain way. Shannon asked Martha if she has emailed Rebecca. Martha said she has sent the entire application to Rebecca and Rebecca has 30 days to respond. Martha said she had a lengthy phone conversation with Rebecca a few weeks ago and Rebecca mentioned a post-Irene Memorandum of Understanding between the Agency of Natural Resources and AOT that has some guidance for situations like this. Glenn said it’s an unusual set of circumstances to have a flood of this magnitude affecting historic structures over waterways, so it’s not surprising that there are regulatory issues here. Shannon said Sections 7, 8 and 9 of the flood hazard area regulations are the relevant sections. Shannon said each section indicates the need for approved plans stamped by an engineer, which we don’t have. Shannon suggested that the DRB might rely on the emails of record from the various agencies and the plans submitted by Steve Bodley. Martha asked the DRB if they would like to see the plans. Shannon said if the other agencies have seen and approved them, she doesn’t feel like she needs to see them. The DRB agreed. Shannon said the restorations to her property and several other properties in town did not require a set of plans stamped by a PE, but she can’t recall the basis for those decisions. Martha said it was her position that it was not “development” to take rocks that were washed down stream and put them back where they were. Glenn said, in some ways, this is not development either because we are just putting back what was there, however we did improve the foundation. Glenn asked if that constitutes development. Glenn said it’s questionable how this fits in with the flood regulations due to the restrictions placed on the town by the historic nature of the project. Glenn said he doesn’t see how the town can comply with the local flood regulations given that we have been told specifically what we can and cannot do. Hal agreed that the project has been done in conformance with state and federal regulations, as well as town zoning regulations. Glenn said the bridge had to go back into its exact position, although one foot higher, there was no latitude there. Glenn said the footprint of the abutments is the same. Barbara said, by raising the bridge, the town is making it possible for more water volume to pass under it. Glenn said that was everyone’s intent. Barbara said it appears that the intent of the flood regulations is to have structures higher than they would otherwise be. Shannon suggested language indicating that it is the consensus of the DRB that the project, as presented, meets the intent of the flood regulations.

Shannon noted that the bridge is being replaced in kind and noted the plans presented and the agencies that have reviewed the plans. Glenn noted that the bridge had to be reconstructed within the parameters set by state and federal agencies. Barbara noted that the bridge is not increasing the potential for flood damage and it could be argued that, because of the one foot increase in the height of the abutments, the potential for flood damage is reduced. Shannon reiterated that it was an unintentional loss with no increase in the degree of nonconformance. Genevieve said the project meets the intent of the flood regulations while conforming with the parameters set forth by state and federal regulatory agencies, and the approved plans reduce the degree of nonconformance by elevating the structure one foot. Martha noted that, on page 3 of the Flood Hazard Area Regulations, it says that she can't issue a permit until she hears from Rebecca Pfeiffer. Glenn said indications are that the base flood elevation (BFE) is 721' and, with the additional height on the new abutments, the bridge is close to or slightly above that. Martha said, based on the 1991 Flood Insurance Study, there are two cross sections, "Q" and "R," on either side of the bridge. The stream bed elevation at "Q" is 712.1' and at "R" it's 712.3' so you can reasonably estimate that the stream bed elevation in between is 712.2'. Martha said Glenn measured the distance from the stream bed to the top of the abutment at 9 feet, which results in an elevation of 721.2'. The base flood elevation at "Q" is 721.1' and the base flood elevation at "R" is 723', so the base flood elevation at the bridge is somewhere between those two points. Martha added that the bridge sits on 8" beams which increase the elevation to 721.867'. Martha said the flood regs require the structure to be at or above the base flood elevation and indications are that it is either at the base flood elevation or within an inch or two one way or the other. Glenn said state and federal officials would not allow the town to increase the height by more than one foot. Martha said if the BFE is slightly higher than the base of the bridge, it's not that the town was unwilling to increase the elevation; the town was not allowed to increase the elevation beyond one foot. Shannon said it sounds like our hands are tied. Hal said the findings should indicate that the elevation of the bridge is at the direction of FEMA and was approved by the state. **Genevieve moved to enter deliberative session. Barbara seconded the motion, which passed unanimously.** Following the deliberative session, the DRB resumed the hearing and Glenn presented an email stream between state and federal officials acknowledging that the Bowers Covered Bridge is an historic structure on the National Register of Historic Places and there are restrictions by the state and federal government for the rehabilitation of the structure. Barbara noted other emails attached to the application, which should be incorporated in the findings. Martha agreed and noted also the attached permits and the project review sheet. **Barbara moved to close the public hearing on application #2485. Genevieve seconded the motion, which passed unanimously.**

5. Minutes - January 10, 2012; May 8, 2012 & May 21, 2012: **Shannon moved to approve the minutes of January 10<sup>th</sup>, May 8<sup>th</sup> and May 21<sup>st</sup>. Barbara seconded the motion, which passed unanimously. March 13<sup>th</sup>: Barbara moved to approve the minutes of March 13<sup>th</sup>. Genevieve seconded the motion, which passed with Shannon abstaining.**
6. Adjourn – **Shannon moved to adjourn at 8:15 PM. Genevieve seconded the motion, which passed unanimously.**

Respectfully submitted,

Martha Harrison