

**SR 202 Section CNM
Westtown and Thornbury Townships, Chester County, PA
(MPMS 95430)**

**Determination of Effects Report (July 2019) Comment Response Document
February 5, 2020**

CONSULTING PARTY: Pennsylvania State Historic Preservation Office (September 23, 2019)

COMMENT #1: “Based on the information received and available within our files, we concur with the findings of the agency that the proposed project will have No Effect on the Brandywine Battlefield NHL (Key No. 000690).

With regards to the National Register-eligible Westtown Inn (Key No. 067408), we are requesting additional information to complete our review. We continue to have concerns regarding the project’s potential to affect this historic property. The property was determined eligible in 2015, under Criterion C in the area of Architecture, as a locally significant Colonial-era Chester County example of serpentine stone construction. As discussed during the December 29, 2015 field meeting as well as subsequent consulting party meetings and correspondence from our office, our concerns regarding the preferred design alternative are specific to potential vibrational impacts, not only of the realigned/widened roadway but those areas of the project in close proximity to the National Register-eligible Westtown Inn. We understand that the Structural Conditions Assessment Report (February 2017) concluded that traffic vibrations have not impacted the structural integrity of the building, the assessment also noted that “special provisions and condition that could be included as part of the construction for the project, such as preparing a before and after construction building evaluation of the Westtown Inn, monitoring vibration levels during construction, use of lower impact construction equipment; techniques for providing a smooth riding surface; and installing a new retaining wall along the property to limit disturbance.” None of these “special provisions” are considered in the determination of effect analysis, except in summary reference to the Structural Conditions Assessment. Given the building’s masonry construction and the close proximity to which the realignment as well as construction activities will take [place], it is our opinion, that such provisions should be taken into account in the effects assessment as well as detailed as part of construction provisions. Factors that affect the potential for physical impacts to buildings include the building materials (wood and steel are more elastic than masonry) and interior finishes (lath and plaster are more susceptible to damage by vibration). Depending on the soils, excavation and/or significant grading may also have the potential to result in subsidence of soils and effects to nearby building foundations. Therefore, please detail how conditions to minimize potential adverse effects due to vibrations will be implemented and monitored during and after construction.”

RESPONSE #1: As you note, concerns about the structural integrity and the effects of the proximity of the roadway to the Westtown Inn were addressed in the *Structural Conditions Assessment Report for Westtown Inn* which was submitted to the PA SHPO and the Section 106 Consulting Parties for review and comment on April 10, 2017. The report’s conclusion is that the likelihood of damage from vibration is small. The report states that “Serpentine stone has a low absorption rate and high flexural strength. The flexural strength is approximately 4,000 psi and the compressive strength ranges from approximately 26,000 psi to 42,000 psi.”

We acknowledge that we did not make it clear in the finding of effect or the attached documentation that the assessment of effect is conditioned on the implementation of the minimization measures outlined in the *Structural Conditions Assessment Report for Westtown Inn*. The following steps are proposed to limit impacts to the Westtown Inn:

Pre-Construction

- Incorporate a special provision into the construction contract directing the contractor to prepare a before and after construction building evaluation of the Westtown Inn including photographic documentation.
 - Monitoring will be provided prior to construction as a baseline and will provide documentation of the condition of the Westtown Inn prior to construction for comparison to the condition of the Westtown Inn after construction. Effects (such as cracking) resulting from nearby construction for the intersection improvements can be detected and repaired. Section 106 Consulting Parties will be invited to attend the building evaluations. Section 106 Consulting Parties will be provided a copy of the evaluation report.

During Construction

- The special provision will also include language directing the contractor to monitor vibration levels during construction to avoid causing damage to the Westtown Inn.
 - The monitoring will notify the contractor of higher than acceptable vibration levels. If the acceptable level is exceeded, construction will be halted and an alternative method of construction will be implemented. Monitoring will be provided twice during the excavation of embankment in front of the Westtown Inn.
- The contractor will be prohibited from blasting or driving any piles in the vicinity of the Westtown Inn. Lower impact construction equipment will be specified for use in the vicinity of the building during excavation.
 - This will reduce the vibration levels during construction.

Post Construction

- The construction contract will include full depth pavement reconstruction, new inlets, and the resetting of manholes and valve boxes, providing for a smooth riding surface, thus limiting vibration.
 - This will limit the vibration levels after construction.
- There will be no increase to the existing posted speed limits near the intersection.
 - This will limit the vibration levels after construction.
- The proposed retaining wall along the Westtown Inn property will limit the amount of disturbance to the property.
 - The single face barrier wall will include a concrete core and will be faced with stone from the existing wall. If sufficient quantity of stone is not available on site, stone closely matching the existing stone will be obtained. Section 106 Consulting Parties will be invited to review a sample of the wall prior to its construction.

CONSULTING PARTY: Karen Marshall, Heritage Preservation Coordinator Community Planning, Chester County Planning Commission (September 7, 2019)

COMMENT #1: “I concur with the findings of the Pennsylvania State Historic Preservation Office.”

“We understand that the Structural Conditions Assessment Report (February 2017) concluded that traffic vibrations have not impacted the structural integrity of the building, the assessment also noted that “special provisions and condition that could be included as part of the construction for the project, such as preparing a before and after construction building evaluation of the Westtown Inn, monitoring vibration levels during construction, use of lower impact construction equipment; techniques for providing a smooth riding surface; and installing a new retaining wall along the property to limit disturbance.” None of these “special provisions” are considered in the determination of effect analysis, except in summary

reference to the Structural Conditions Assessment. Given the building's masonry construction and the close proximity to which the realignment as well as construction activities will take [place], it is our opinion, that such provisions should be taken into account in the effects assessment as well as detailed as part of construction provisions. Factors that affect the potential for physical impacts to buildings include the building materials (wood and steel are more elastic than masonry) and interior finishes (lath and plaster are more susceptible to damage by vibration). Depending on the soils, excavation and/or significant grading may also have the potential to result in subsidence of soils and effects to nearby building foundations. Therefore, please detail how conditions to minimize potential adverse effects due to vibrations will be implemented and monitored during and after construction."

RESPONSE #1: See Pennsylvania State Historic Preservation Office Comment Response #1.

CONSULTING PARTY: Mary Sue Boyle and Company LLC. (September 27, 2019)

COMMENT #1: "The Section 106 process has dragged on an on for this intersection. First, PennDOT hired a Historic Preservation Consultant that found the Westtown Inn NOT to be eligible for the National Register. So that was one dose of misinformation we consultants were fed to ease the consideration of adverse effect on a valuable historic resource. Four years later, we are still looking at the same plans, subsequent to the finding of eligibility no addition plan considerations were made to lessen the effects on the resource. Again to reiterate, on lands to the east of 202 would provide sufficient lane accommodation to lessen the impact. But of course PennDOT has spent all of this money drawing up engineering plans PRIOR to the determination of effect so now they claim it is too expensive to redraw the drawings, just better I guess, to sit and hammer the same drawings over and over again and hope for a different outcome."

RESPONSE #1: We respectfully disagree with your statement that PennDOT's consultant was seeking to "ease the consideration of adverse effect" during the eligibility phase of the project. PennDOT stands by our position that our consultant applied the National Register criteria as they saw the resource. After the PA SHPO stated that the Westtown Inn was in their opinion eligible for listing in the National Register of Historic Places (via a letter dated September 9, 2015), alternatives were evaluated.

As previously addressed in the *Alternative Analysis Report (July 12, 2016) Comment Response Document*, dated March 13, 2017, (Response #3 to the comment provided by Mary Sue Boyle and Company), "shifting the SR 202 mainline by one lane to the east would require a complete realignment and reconstruction of the highway in both the south and north bound directions. It would also require a realignment of the eastbound lanes of SR 926. Within the immediate intersection area, the Lukoil Station would become a total right-of-way acquisition. Additional total and partial right-of-way acquisitions would likely be required north and south along SR 202. The shift would also have significant impact to utilities along the corridor." The realignment of SR 926 south would require the replacement of an existing retaining wall within the CVS parking lot. All of these efforts would significantly increase the project scope, right-of-way acquisition, and the construction cost. In a September 20, 2016 PA SHPO letter, PA SHPO stated "we concur that investigation of the minimization alternative has been completed and that the preferred design alternative appears to be the most feasible option...". The preferred design alternative was then evaluated in the Determination of Effect report. It is not possible to evaluate effects without a sufficient evaluation of engineering alternatives. The preferred design alternative will incorporate the minimization measures outlined on page 2 of this document.

COMMENT #2: "The entire parcel that the house rests upon is historic, with contributing and non-contributing structures on the historic setting. The wall is 50 years or older and certainly contributes to the resource setting, it borders a historic setting. It is being demolished. The lines drawn in photo 5 and 6 are

VERY close to the front façade of the Inn which is a substantial intrusion to the historic setting. The south east corner of the Inn will be separated by one shrub width when the wall and roadway is constructed. Clearly a negative impact to the eligible historic resource.”

RESPONSE #2: As stated and shown in the Determination of Effect Report, the National Register boundary for the Westtown Inn follows the vegetative buffer, field patterns and roadway network that surrounds the building and contains 0.77 acres. The PA SHPO concurred with this boundary in a September 9, 2015 letter. The boundary is illustrated in Figures 3 and 4 of the Determination of Effect Report.

Concerning the wall, as previously addressed in the *Alternative Analysis Report (July 12, 2016) Comment Response Document*, dated March 13, 2017, (Response #3 to the comment provided by Pennsylvania State Historic Preservation Office) “based on a review of previous construction plans and historic aerial photographs, the existing retaining wall was constructed in the 1950’s. The condition of the wall varies from good to very poor. Because of its close proximity to the highway’s edge of pavement, it is periodically hit by vehicles that are attempting to make a right turn from SR 202 south to travel west on SR 926. The proposed PennDOT design calls for a new wall to be installed along both SR 926 and SR 202. The single face barrier wall will include a concrete core and will be faced with stone from the existing wall. If sufficient quantity of stone is not available on site, stone closely matching the existing stone will be obtained”. While the existing stone wall is included within the National Register boundary of the Westtown Inn, PA SHPO indicated that the wall is an uncounted landscape feature (PA SHPO letter dated September 9, 2015) and is not a contributing resource to the Westtown Inn. The circa 1950s stone retaining wall does not fall within the period of significance for the Westtown Inn, which is circa 1823.

PennDOT has minimized effects to the Westtown Inn setting to the extent possible. The minimum distance from the Westtown Inn foundation to the back of the proposed retaining wall is approximately 26 feet. As requested, the retaining wall location was staked out prior to the Section 106 Consulting Party Meeting held on July 10, 2017, and the consulting parties were invited to view the location of the proposed retaining wall. No comments about the staked out location of the retaining wall were received from the Section 106 Consulting Parties subsequent to the Section 106 Consulting Party Meeting.

COMMENT #3: “Now the re-alignment of Caleb Road at Brinton Village which is in a Landmark District of the Brandywine Battlefield has been thrown into the process and no review and comment has been asked of the Section 106 team of consultants, just thrown in there so the alignment can be noted as no adverse effect.”

RESPONSE #3: Caleb Drive is not proposed to be realigned. The proposed improvements at Caleb Drive has been part of the project scope of work since the project began (as presented in the Public Outreach Meetings on July 29, 2014 and October 23, 2014 and in the Consulting Party meetings on April 1, 2015 and July 10, 2017 as well as the Alternative Analysis Report dated July 12, 2016). These improvements include the construction of a curb at the southeast corner of Street Road and Caleb Drive. This curb line is closely aligned with the existing edge of Street Road to limit impacts to the Brandywine Battlefield NHL. The effect finding for the Brandywine Battlefield NHL is No Effect and the Pennsylvania State Historic Preservation Office concurred with the finding in a letter dated September 23, 2019.

COMMENT #4: “Further everyone is aware of the consideration of the impacts of the Crebilly Farm proposed subdivision but that project has not been approved and is in court, due to ROAD issues as well as other deficiencies in the proposed plan. So PennDOT wants to go ahead and intrude on the National

Register Eligible Resource, impact the Battlefield Landmark and build this project without consideration of the additional traffic patterns, and consideration of increased traffic in the area. There are substantial ways to minimize impact and better plan proposed increase in car population and protect our National Heritage and this project blatantly ignores such.”

RESPONSE #4: PennDOT and its consultants are aware of the potential development of the Crebilly Farm and its litigation. As discussed at the Public Outreach Meeting on October 23, 2014 and at Consulting Party Meeting on July 10, 2017, the intersection project is independent of the potential development at Crebilly Farm. The effect finding for the Brandywine Battlefield NHL is No Effect and the Pennsylvania State Historic Preservation Office concurred with the finding in a letter dated September 23, 2019.

Several Alternatives have been considered during the development of the project. The Design and Minimization Alternatives are presented in the *Alternative Analysis Report dated July 12, 2016*. This report recommended the Alignment presented in the Determination of Effect Report to limit impacts to several properties. As a consequence of maintaining the southern edge of S.R. 926, widening will be required on the northern edge of the roadway in front of the Westtown Inn. Within the immediate intersection area, the Lukoil Station would become a total right-of-way acquisition. Additional total and partial right-of-way acquisitions would likely be required north and south along SR 202. The shift would also have significant impact to utilities along the corridor. The realignment of SR 926 south would require the replacement of an existing retaining wall within the CVS parking lot. All of these efforts would significantly increase the project scope and the construction cost. The impacts of realigning 202 are discussed in Mary Sue Boyle and Company LLC Comment Response #1.

Traffic projections were presented at the Section 106 Consulting Party meetings on April 1, 2015 and July 10, 2017 and shows a current and future Level of Service rating of F for the existing lane configuration.

The intersection improvements are needed regardless of the potential development at Crebilly Farm.

COMMENT #5: “In summation, there is an Adverse Effect to the setting of the Westtown Inn and there will be an impact to the structure with the roadway planned at one shrub’s width away from the foundation of the Inn. The Inn is constructed of Serpentine Stone which is noted for its lack of strength and is susceptible to erosion. The stone structure will suffer greatly with the road bed a shrub’s width away from its foundation; this will alter the immediate setting of the historic resource.”

RESPONSE #5: Concerns about the structural integrity and the effects of the proximity of the roadway to the Westtown Inn were addressed in the *Structural Conditions Assessment Report for Westtown Inn* which was submitted to the PA SHPO and Section 106 Consulting Parties for review and comment on April 10, 2017. The report’s conclusion is that the likelihood of damage from vibration is small. The report states that “Serpentine stone has a low absorption rate and high flexural strength. The flexural strength is approximately 4,000 psi and the compressive strength ranges from approximately 26,000 psi to 42,000 psi.”

See Pennsylvania State Historic Preservation Office Comment Response #1 for a list of proposed steps to limit impacts to the Westtown Inn.

COMMENT #6: “As suggested in the past, the plan needs a re-write due to pending traffic, impact to history and lack of exploration of reasonable alternatives to avoid historic resources and landmarks.”

RESPONSE #6: Traffic projections were presented in the Consulting Party meetings on April 1, 2015

and July 10, 2017 and shows a current and future Level of Service rating of F for the existing lane configuration.

Several Alternatives have been considered during the development of the project. The Design and Minimization Alternatives are presented in the *Alternative Analysis Report dated July 12, 2016*. This report recommended the Alignment presented in the Determination of Effect Report to limit impacts to several properties. As a consequence of maintaining the southern edge of S.R. 926, widening will be required on the northern edge of the roadway in front of the Westtown Inn. Within the immediate intersection area, the Lukoil Station would become a total right-of-way acquisition. Additional total and partial right-of-way acquisitions would likely be required north and south along SR 202. The shift would also have significant impact to utilities along the corridor. The realignment of SR 926 south would require the replacement of an existing retaining wall within the CVS parking lot. All of these efforts would significantly increase the project scope and the construction cost. The impacts of realigning 202 are discussed in Mary Sue Boyle and Company LLC Comment Response #1.

CONSULTING PARTY: Nancy and Tom O'Brien (September 27, 2019)

COMMENT #1: The proximity of the proposed road work to the existing structure and the potentially long term deleterious effects this will have on the Westtown Inn's stability. Logic seem to indicate the volume of vehicular traffic (both personal and commercial) that exists today and is likely to increase with time, will certainly have the potential to cause structural problems to the Westtown Inn.

RESPONSE #1: See Pennsylvania State Historic Preservation Office Comment Response #1 and Mary Sue Boyle and Company LLC. Comment Response #5.

COMMENT #2: Since the proposed development of adjacent Crebilly Farm into housing remains in the court system, until a ruling is made and all appeals are exhausted it is not definitively known what impact this will have on traffic at the intersection. Based on this and considering the amount of time and money that has already been spent, it would seem logical and prudent to further delay any immediate road work until a ruling is made and it can be determined what impact the possible additional vehicular traffic might have on the intersection. Better to delay work than to proceed with construction that is inadequate for future traffic volume. Also, the worst position for PennDOT would be to spend time and money on the proposed plan only to have to perform additional engineering and historical studies requiring expenditure of additional money to upgrade the intersection. Which by that time, may have already destroyed this historic Inn.

Response #2: PennDOT and its consultants are aware of the potential development of the Crebilly Farm and its litigation. As discussed at the Public Outreach Meeting on October 23, 2014 and at Consulting Party Meeting on July 10, 2017, the intersection project is independent of the potential development at Crebilly Farm. The intersection improvements are needed regardless of the potential development at Crebilly Farm.