

PUC-77

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Uniform Cover and Calendar Sheets

1. <u>REPORT DATE:</u>	:	2. <u>BUREAU AGENDA NO.</u>
May 8, 1987	:	MAY-87-SG-RS-270*
3. <u>BUREAU:</u>	:	
Safety & Compliance	:	
4. <u>SECTION</u>	:	5. <u>PUBLIC MEETING DATE:</u>
Rail Safety	:	
6. <u>APPROVED BY:</u>	:	May 29, 1987
Director: Nicely 3-3846	:	
Supervisor: Lehman 7-9732	:	
7. <u>MONITOR:</u>	:	
	:	
8. <u>PERSON IN CHARGE:</u>	:	
Fleisher 7-5936	:	
9. <u>DOCKET NO.:</u>	:	
C-00018838	:	
10. (a) <u>CAPTION</u> (abbreviate if more than 4 lines)	:	
(b) Short summary of history & facts, documents & briefs	:	
(c) Recommendation	:	

DOCKETED
JUN 4 - 1987

(a) Pennsylvania Public Utility Commission

v.

Pennsylvania Department of Transportation,
City of Coatesville, Chester County,
Amtrak, et al.

**DOCUMENT
FOLDER**

(b) Investigation instituted on November 26, 1969. Initial order adopted January 10, 1987, abolished crossing. Further hearings held January 17, September 14, 1974 and January 16, 1975. Second order adopted October 21, 1975, rescinded abolition of crossing and directed City to prepare plans for reconstruction of bridge. City submitted plans and hearing held April 28, 1977. Further order adopted May 23, 1978, directed City to reconstruct. City filed petition February 26, 1981, requesting rescission of order directing reconstruction and reinstatement of order abolishing crossing. Further hearing held October 5, 1981. Further order adopted February 5, 1982, abolished crossing again and directed structure demolished. Department filed petition May 5, 1983, requesting modification of prior order to permit substructure to remain in place. Further order adopted June 24, 1983, granted the Department's petition and stayed the removal of the substructure. Department filed petition May 27, 1986, requesting approval to construct a replacement superstructure providing a minimum vertical clearance of 18'-6".

(Continued)

11. <u>MOTION BY:</u>	Commissioner Chm. Shane	Commissioner Taliaferro - Yes
		Commissioner
<u>SECONDED:</u>	Commissioner Fischl	Commissioner

CONTENT OF MOTION: Staff recommendation adopted.

(c) The Bureau of Safety and Compliance recommends that the Commission deny the Department's petition to construct a replacement superstructure, remove the stay on the removal of the old substructure and direct Amtrak to complete the removal of the substructure.



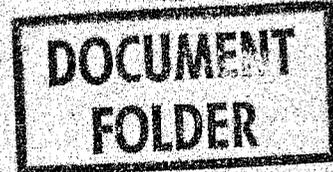
COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P. O. BOX 3265, HARRISBURG, Pa. 17120

June 5, 1987

IN REPLY PLEASE
REFER TO OUR FILE

C-00018838

To All Parties



Pennsylvania Public Utility Commission
v.
Department of Highways of the Commonwealth of Pennsylvania,
City of Coatesville, Chester County, National Railroad
Passenger Corporation and Consolidated Rail Corporation.

To Whom It May Concern:

This is to advise you that an Order has been adopted
by the Commission in public meeting held May 29, 1987.

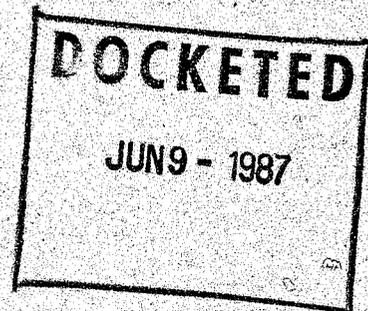
A Copy of an Order has been enclosed for your records.

Very truly yours,

Jerry Rish, Secretary

lg
Encls.
Cert. Mail

Bureau of S & C
Similar letter to: See attached list.

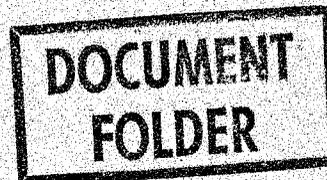


PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

Public Meeting held May 29, 1987

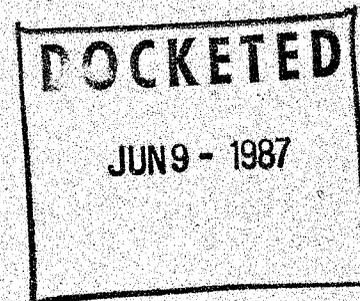
Commissioners Present:

Bill Shane, Chairman
Linda C. Taliaferro
Frank Fischl



C-00018838

Pennsylvania Public Utility Commission
v.
Department of Highways of the Common-
wealth of Pennsylvania, City of
Coatesville, Chester County, National
Railroad Passenger Corporation and
Consolidated Rail Corporation.



Appearances:

Richard S. Herkovitz, Esquire for Pennsylvania Public Utility
Commission.
Herbert G. Zahn, Esquire for Pennsylvania Department of Transportation.
Harold K. Cohen, Esquire for National Railroad Passenger Corporation.
Daniel F. Donovan, Esquire for Consolidated Rail Corporation.
T.-H. Maher Cornell, Esquire for Philadelphia Electric Company.
Janet Colliton, Esquire for Chester County.
Thomas L. Whiteman, Esquire for Chester County.

ORDER

BY THE COMMISSION:

This matter is before us by reason of a petition filed May 27, 1986, by Pennsylvania Department of Transportation. The petition requests this Commission to modify its order adopted February 5, 1982, by approving the construction of a replacement structure to carry Graham Avenue (L.R. 15122) over and above the involved rail line and grant an exemption from the minimum overhead clearance requirements of 52 Pa. Code §33.121, so as to permit the construction of a replacement structure with a minimum overhead clearance of 18.5 feet.

By order adopted February 5, 1982, the subject crossing was abolished. In Paragraph No. 7, National Railroad Passenger Corporation was directed to remove the substructure and superstructure of the existing crossing structure. The superstructure was removed in September of 1982.

Before the substructure was removed, Pennsylvania Department of Transportation filed a petition on May 27, 1983, requesting that this Commission modify its order adopted February 5, 1982, so as to permit the substructure to remain in place. Act 1982-235 listed the Graham Avenue bridge as a replacement project, and City of Coatesville indicated to the Department that it desired to have the crossing reconstructed. The Department's request was made to permit it time to determine whether the existing abutments would be used in reconstructing the crossing.

By order adopted June 24, 1983, the Department's petition was granted, the requirement that Amtrak remove the substructure was stayed, and the Department was directed to report to this Commission within one year from the date the order was entered whether the crossing was to be replaced and whether the existing substructure would be incorporated as part of the replacement crossing structure.

A hearing was scheduled and held on January 15, 1987 on the Department's petition filed on May 27, 1986. The Bell Telephone Company of Pennsylvania, Octoraro Water Company and Penn Central Corporation were notified of the time and place of the hearing, but were not represented thereat and did not present any evidence or testimony. The City of Coatesville was not represented by counsel, but Dennis Paul Elko, City Manager was present and testified.

The Department's witness, Milton H. Davis, presented testimony identifying and explaining PennDOT Exhibit No. 1 (1-15-87), which was admitted into evidence at the hearing. The exhibit consists of four (4) half-sized drawings. The first sheet is a plan view of the area of the proposed replacement bridge and the approach highways. The second sheet is a profile drawing showing a proposed bridge keeping the south approach profile grade line the same as the prior profile grade line and providing a minimum vertical clearance over the most southerly railroad track of approximately 18.5 feet. The third sheet is a type, size and location plan for the proposed bridge providing a minimum vertical clearance from the top of the most southerly track to the bottom of structure equal to 18.63 feet. The fourth sheet is a profile drawing showing a proposed bridge providing for a minimum vertical clearance of 21'-3" and a proposed profile on the south approach with a 12.5 percent ascending grade toward the bridge, as opposed to an approximate 10.63 percent existing grade.

The witness stated that the vertical clearance of 21'-3" was the minimum that National Railroad Passenger Corporation (hereinafter Amtrak) has requested at this location to permit its operations. He stated that the construction of a crossing providing the requested vertical clearance, thus requiring an increase in the steepness of the south approach grade line, would result in a more hazardous condition than existed before. The safe design speed for the resulting profile grade line, based on stopping sight distance, is almost zero miles per hour.

In addition, the witness stated that if this crossing were not reconstructed, there is adequate means of getting from one side of the railroad to the other, because there are three (3) below grade crossings within a two block distance either east or west of the subject crossing.

Under cross examination, the witness stated there are safety problems associated with either of the proposed bridges at this location. He stated that as traffic would cross the bridge in a southerly direction, it would approach the intersection of Graham Avenue with Elm Street, where a stop condition exists. Graham Avenue does not extend south beyond Elm Street, therefore, all traffic must turn right or left onto Elm Street. This is a bad condition with grades of the magnitude that will be present with either of the proposed bridges, in any kind of weather, and extremely bad in winter time with snow and ice on the highway. The witness stated that he would not recommend that the bridge be reconstructed.

Amtrak's witness, Richard H. Cooper, stated that its request for a minimum vertical clearance from the top of rail to the trolley wire of 19'-0" is based on the fact that the current minimum trolley wire height along this rail line is 18'-5". This clearance is about the minimum to allow Conrail to safely operate its freight trains under a bridge. The requested 19'-0" allows for about six inches of raise in track during maintenance. The standard distance between trolley wire and the bottom of bridge superstructure is 2'-3", thus 21'-3" from top of rail to bottom of superstructure.

The witness stated that in view of the fact that the lack of a usable crossing at this site apparently has not been a great hardship on any party and that it is not feasible to construct a safe crossing structure with more than 18'-6" underclearance, that the proposal to construct the crossing be abandoned.

Amtrak agreed to file as a late-filed exhibit information regarding the absolute minimum distance permissible between the trolley wire and the underside of the superstructure. This information was submitted in a letter dated February 5, 1987, sent to all parties:

- (1) Catenary system attached to bridge - standard minimum distance between trolley wire and underside of superstructure 1'-8" (absolute minimum 1'-1 $\frac{1}{2}$ ").
- (2) Catenary system not attached to bridge - standard minimum distance between trolley wire and underside of superstructure 3'-0" (absolute minimum 2'-1").

Dennis Paul Elko, testified for City of Coatesville, stating that the city's position is that it would like to have the bridge replaced. Although there are alternate routes across the railroad tracks, there are several concerns with these alternatives, which are underpass structures. There is concern for lack of vertical clearance and occasional flooding at these underpasses.

Under cross examination, the witness stated that he could not give any information as to the magnitude of the vertical clearances provided at these crossings but would be glad to submit such information as a late-filed exhibit. He was ordered to also include as part of a late-filed exhibit on behalf of City of Coatesville information regarding accidents or vehicles becoming stuck under these underpasses, whether the existing clearances prevent fire trucks and ambulances from using the underpasses and width of roadway and horizontal clearances under these structures.

A letter was received on February 5, 1987, from Mr. Elko. In the letter, it is stated that the matters regarding this complaint were discussed at City Council meeting on January 26, 1987. During citizen's hearings, two area residents representing the immediately affected neighborhood requested City Council to do whatever it could to have the Graham Avenue Bridge restored. Council formally agreed to do this and again stated its desire to have the bridge replaced.

Mr. Elko reviewed access problems to the area with the Chief of Police and the Fire Chief. Neither determined that replacement of the bridge was critical to their respective operations. They were in agreement that at certain times the bridge would be enormously helpful, but both felt that the number of these occasions would not be great.

Data submitted regarding the various underpasses is as follows:

Third Avenue

Roadway very rough
Walkways on both sides - good condition
Three lights on both sides - not very bright
Drainage at both sides and ends
Water dropping from above and freezing
Columns and underside badly deteriorated
Width 25'-11" - Height 14'-2½"

Fourth Avenue

Roadway very rough
No walkways and no lighting
Drainage both sides and ends
Width 23'-8"
Height 11'-6" at center of roadway, 6' at sides

North Chester Avenue

Roadway in good condition
Walkways both sides - good condition
No lighting provided
Drainage at north end on both sides, needs patching
Water draining out of west side onto pavement
Width 21'-7" - Height 12'-10"

The County's witness, Richard Craig, stated that the county does not approve the construction of a replacement structure that does not conform to the current design criteria as established by American Association of State Highway and Transportation Officials and the Pennsylvania Department of Transportation. He stated that the proposed bridge providing vertical clearance requirements as requested by Amtrak would not be a safe crossing.

Conrail's witness, Roger Heebner, stated that the bridge should not be replaced due to the facts that have been presented at this hearing. He stated that the maximum size cars used on the railroad system are covered tri-level automobile carriers that require a vertical clearance of 19'-4".

After consideration of the record in this proceeding, we make the following findings:

1. The prior existing bridge has been closed to vehicular traffic since 1972.
2. By order adopted January 10, 1972, the subject crossing was abolished and the structure ordered removed but it was never removed by Penn Central Transportation Company.
3. By order adopted October 21, 1975, the subject crossing was directed to be reconstructed and City of Coatesville was directed to prepare complete detailed construction plans for a replacement superstructure.
4. City of Coatesville submitted complete construction plans on August 28, 1976.
5. By order adopted May 31, 1978, City of Coatesville was directed to demolish the old superstructure and construct the new superstructure on or before June 30, 1980.
6. City of Coatesville filed a petition on February 26, 1981, requesting the Commission to rescind its order adopted May 31, 1978 and reinstate its order adopted January 10, 1972.
7. By order adopted February 5, 1982, the prior order adopted May 31, 1978, was rescinded, the crossing was abolished and Amtrak was directed to remove the complete structure.
8. By letter received October 18, 1982, Amtrak reported to this Commission that it removed the superstructure of the subject bridge on September 28, 1982.
9. Pennsylvania Department of Transportation submitted a petition May 5, 1983, requesting the Commission to modify its order adopted February 5, 1982, so as to permit the existing substructure to remain in place until it had developed plans for a possible replacement

of the structure, to see whether the existing substructure could be incorporated into the replacement structure.

10. By order adopted June 24, 1983, the Department's petition was granted, the requirement for Amtrak to remove the substructure was stayed and the Department was directed to report to this Commission within one year from the date the order is entered whether it requests that the superstructure be replaced and whether the existing substructure will be incorporated into the replacement structure or whether the substructure will not be incorporated and can be removed as directed by the order adopted February 5, 1982.

11. The Department filed a petition on May 27, 1986, requesting modification of the order adopted February 5, 1982, by approving a plan attached to the petition for a replacement superstructure and granting an exemption from the overhead clearance requirements of 52 Pa. Code §33.121, so as to permit the construction of a replacement structure with a minimum overhead clearance of 18.5 feet.

12. Amtrak submitted a letter received July 18, 1986, stating that the superstructure that it removed in 1982 had the lowest under clearance of all overhead bridges between Philadelphia and Harrisburg. The existing bridges carrying Traffic Route 30 over the railroad, east and west of Coatesville, provide a minimum vertical clearance of 20'-6" from the top of rail to the underside of the overhead structure. Therefore, the minimum vertical clearance it could accept at the subject crossing for a proposed new bridge is 19'-0" from top of rail to the trolley wire. The standard distance from trolley wire to the underside of an overhead structure is 2'-3.

13. The proposed replacement structure presented by the Department will use the existing abutments. The south approach grade profile would be held as is and the minimum vertical clearance provided from the top of rail to the underside of the superstructure would be 18.63 feet.

14. The alternate proposed replacement structure to provide the minimum vertical clearance requirement of 21'-3" from the top of rail to the underside of the superstructure would require that the grade profile of the south approach be increased from 10.63 percent to 12.5 percent grade descending from the south end of the superstructure.

15. The safe design speed for the grade profile resulting from the alternate proposed replacement structure approaches zero miles per hour.

16. There is an undergrade crossing structure at Third Avenue, two blocks west of the former Graham Avenue crossing. Highway traffic passes under the railroad tracks at this location. The minimum roadway width is 25'-11". The minimum vertical clearance provided for vehicular traffic is 14'-2½". There are walkways on both sides of the

roadway providing for pedestrian traffic. The underpass is lighted by three fixtures on each side of the roadway.

17. There is an undergrade crossing structure at Fourth Avenue, one block west of the former Graham Avenue crossing. Highway traffic can pass under the railroad tracks at this location but the vertical clearance is limited to a maximum of 11'-6" at the centerline of the roadway and 6 feet at the edges of a 23'-8" roadway. There are no walkways for pedestrian traffic.

18. There is an undergrade crossing structure at North Chester Avenue, two blocks east of the former Graham Avenue crossing. Highway traffic passes under the railroad tracks at this location. The minimum roadway width is 21'-7". The minimum vertical clearance provided for vehicular traffic is 12'-10". There are walkways on both sides of the roadway providing for pedestrian traffic. There is no lighting at this location.

19. Graham Avenue terminates at a T-intersection with Elm Street approximately 200 feet south of the south end of the proposed bridge at the bottom of the grade profile proposed. By providing the vertical clearance Amtrak requests, the approach grade would be 12.50 percent for the alternate proposal and as opposed to 11.63 percent for the Department's proposal.

20. The absolute minimum vertical clearance required to provide the 19'-0" from top of rail to trolley wire requested by Amtrak is 20'-1½", which provides the absolute minimum of 1'-1½" from trolley wire to underside of superstructure and would require direct attachment to the bridge superstructure for support of the catenary system.

21. The Chief of Police and Fire Chief for City of Coatesville do not consider the replacement of the subject crossing critical to their respective operations.

22. City of Coatesville is the only party that has expressed any interest in having the crossing re-established, but did not offer an opinion as to whether the crossing should be re-established if the south approach grade profile were to be increased in steepness as a result.

23. The prior existing crossing did not meet present design criteria.

24. Neither of the proposed crossing alternates meet present design criteria.

25. Department does not recommend that the bridge be reconstructed because there are safety problems associated with either proposal.

26. There are adequate alternate crossings in the vicinity of Graham Avenue.

This proceeding was initiated on motion by this Commission on November 17, 1969. The crossing structure was ordered closed to use by order adopted January 10, 1972. There has not been any vehicular traffic across the structure since closure as a result of the aforesaid order. The existing superstructure was removed by Amtrak in 1982. In the period of time since 1972 to date, 15 years, this Commission has not received any complaints concerning the absence of a crossing for vehicular traffic.

The crossing was abolished and the removal of the structure was directed by the order adopted January 10, 1972. Subsequently, as a result of actions by certain parties, the Commission reopened the record and held further hearing. As a result of testimony of City of Coatesville witnesses and the position taken by the City, an order was adopted October 21, 1975, directing the subject crossing to be reconstructed and directed the City to prepare plans for a replacement structure. The City prepared plans and submitted same on August 28, 1976. Further hearing was held, following which an order was adopted May 31, 1978, directing the City to demolish the old superstructure and construct the new superstructure. The City filed a petition on February 26, 1981, requesting the Commission to rescind the order directing that the bridge be rebuilt and to reinstate the order abolishing the crossing. By order adopted February 5, 1982, the requirement that the crossing be reconstructed was rescinded, the crossing abolished for the second time and the existing structure was directed to be removed.

The Department's instant petition was filed to obtain approval to reconstruct the crossing, which is an improvement project contained in Act 1982-235. The requested exemption from minimum overhead clearance requirements of 52 Pa. Code §33.121, which is 22'-0", to a minimum overhead clearance requirement of 18.5 feet, is extreme. Amtrak has stated that the minimum overhead clearance provided at adjacent structures east and west of Graham Avenue is 20'-6".

In order to provide a minimum overhead clearance of 20'-6", it will be necessary to increase the steepness of the south approach grade profile. The affect on the grade profile across the structure and on the north approach is to increase the hazardous conditions and decrease the safety to the vehicular traffic that would use the crossing, as compared to the prior existing crossing.

As evidenced by PennDOT Exhibit No. 1 admitted at the hearing held January 15, 1987, the steepness of the south approach grade profile would be increased to 12.50 percent in order to provide a minimum overhead clearance of 21'-3" as requested by Amtrak. The resulting grade profile across the structure and on the north approach would increase the hazardous conditions and decrease the safety to the vehicular traffic that would use the crossing to the point that the safe design speed for that grade line would approximate zero miles per hour.

If we were to consider permitting the construction of a replacement superstructure providing for the minimum overhead clearance

equal to the existing minimum clearance of 18'-5" along the rail line, between top of rail and trolley, the desired minimum overhead clearance to underside of structure would be 20'-1" and require the attachment to the structure for support of the catenary system. The absolute minimum overhead clearance would be 19'-6½". In other words, it is not possible to construct a structure at this location with a minimum vertical clearance from top of rail to underside of structure equal to 18'-6" without reducing the minimum clearance between the top of rail and the trolley wire along the rail line below that which presently exists.

There are three existing crossings of the rail line within a distance of two blocks on either side of the Graham Avenue site. Two of these crossings, one east and one west, are adequate to handle most vehicular traffic. Both have walkways for pedestrian traffic. The crossing at Third Avenue is of adequate dimension to handle all legal height vehicles. The crossing at North Chester Avenue has a maximum height restriction of 12'-6".

Upon full consideration of all matters involved, we determine that the Department's petition should be denied. The reconstruction of the subject crossing cannot be accomplished without reducing the overhead clearance along the involved rail line below the existing minimum overhead clearance or holding the existing prior south approach grade profile. The reconstruction of the subject crossing by providing a reasonable overhead clearance above the top of rail cannot be accomplished without increasing the south approach grade profile. The resulting crossing would not be a safe crossing.

In addition, we determine that the stay of the requirement that Amtrak remove the substructure should be rescinded, and Amtrak should be ordered to remove the abutments within six (6) months in accordance with the requirements of our order adopted February 5, 1982; THEREFORE,

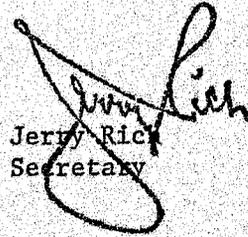
IT IS ORDERED:

1. That the petition filed by Pennsylvania Department of Transportation on May 27, 1986, be and is hereby denied.
2. That the stay contained in Paragraph 2 of the order adopted June 24, 1983 (entered July 11, 1983), be and is hereby rescinded.
3. That National Railroad Passenger Corporation, at its initial cost and expense, on or before November 30, 1987, furnish all material and perform all work necessary to complete the removal of the subject bridge by removing the substructure to a minimum distance of one foot below a plane which slopes upward at an angle of one vertical to one and one half horizontal in a direction away from the railroad tracks from a point at the face of abutments at the existing ground line; and submit a progress report in writing no later than September 30, 1987, as to the progress of the required work to that date.

4. That City of Coatesville, at its sole cost and expense, on or before November 30, 1987, furnish all material and perform all work necessary to install permanent type barricades at a proper location on each side of the crossing abolished in the order adopted February 15, 1982 (entered March 2, 1987).

5. That in all respects not inconsistent herewith, our order adopted February 5, 1982 (entered March 2, 1982), remain in full force and effect.

BY THE COMMISSION,



Jerry Rich
Secretary

(SEAL)

ORDER ADOPTED: May 29, 1987

ORDER ENTERED: JUN 05 1987