

Dimartino
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Copy to:
Mr. Ahmet Gursoy
Project Manager
Parsons Brinckerhoff Quade & Douglas, Inc.
One Penn Plaza
New York, NY 10119

Dispatched

JUL 12 1987

Bureau of Heavy Construction
Mail Room

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July 6, 1987

Mr. A. E. Shaw, Jr., P. E.
Amtrak
National Railroad Passenger Corp.
30th. Street Station Suite 330
Philadelphia, PA 19104

RE: Westside Connection Project, North Access Tunnel from W. 33rd St. to W. 34th Street, Borough of Manhattan

Dear Mr. Shaw:

In reply to your letter dated June 4, 1987 with which you submitted three (3) sets of "90%" drawings, please be advised of the following comments of this department:

1. The drawings have not been revised in accordance with comment No.3 of our letter dated April 15, 1987. The size of the existing sewers, invert elevations etc. must be per as-built records. In case the existing inverts are different from the as-built records, a copy of field survey must be submitted to authenticate the same.
2. All elevations should be shown in reference to a sewer datum plane which is 2.27 ft. above the U.S.C.G.S. mean sea level at Sandy Hook, N.J. These elevations will not be computed as per note No.1 on drawing No. C-7.
3. Abandon existing 15" combined sewer as shown on drawing No. C-11. All existing connections to this sewer should be picked up by the proposed 3'-6"x 3'-6" combined sewer.
4. Manhole Nos.1,2 and 3 shall be chambers.
5. Label existing combined sewers, catch basin connections and internal yard drains on drawings No. C-11, C-12, and C-13 as discussed in a meeting held on July 2, 1987. All yard drain connections to the sewer system should be shown as house connections for which a permit is required from our Permit Control Section.

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6. There is no 15" D. 1 pipe. It should be 16" D.1. It is advised that it be clear with push-on joints on concrete cradle.
7. All sewers in the area are combined sewers and should be labeled as such.
8. Show the size of the house connection from manhole No.7 to the flow acceptor chamber. The 8" connection from the reservoir to manhole No.1 should not be broken. It should be straight. In case this flow is through a force main, a pressure relief valve will be required before being discharged into manhole #1 as discussed in the meeting on July 2, 1987.
9. Use standard N.Y.C. D.E.P. catch basins instead of inlets. Show type of catch basins. It is preferable not to use more than two catch basins in series as shown on drawing No. C-13.
10. Delete profile for catch basin connections and house connections. Invert elevations for the proposed catch basins shall be determined in the field and as such should not be shown on the plans.
11. The profile for the proposed sewers as shown on drawing No.S-32 must be drawn in accordance with D.E.P. standards. It must show type of manholes, type of pipe, distance between manholes, slope, size, surface elevation, cover, bedding, etc. All profiles must be drawn with a vertical scale such that the information/data can be properly interpreted. The scale 1"=10' is too small.
12. Drawing Nos.S-33, S-34, S-35, S-36, S-60, S-61 and S-62 can not be checked as no structural computations per comment No.11 of our letter dated April 15, 1987, have been submitted to this office.
13. Comply with comment Nos. 5,9,12 and 13 of our letter dated April 15, 1987, to you.
14. All sewers having cover of less than 4.0' need to be encased or submit structural computations that the proposed sewers can take the load at the proposed cover of less than 4.0'.
15. Submit easement and maintenance agreements.

-3-

16. Show the existing columns and footings along the route of the proposed sewer and inverted siphon. Show the details of reinforcement in all the chambers and footings of the siphon.
17. The design of the inverted siphon does not meet D.E.P. criteria. An inverted siphon for peak sanitary flow should be provided. This was conveyed to the contractor by phone previously and in a meeting held on June 23, 1987.
18. A meeting was held on July 2, 1987 in which details of underpinning as shown on drawing Nos. S-45 and S-46 were discussed. Comments were given at this meeting and it was agreed that plans will be revised accordingly.
19. The title sheet should have a N.Y.S.P.E. seal and signatures.

Add the following notes:

- i) All proposed drainage work shall be done in conformance with the latest standards of the Department of Environmental Protection.
- ii) All existing standard basins should be repaired, if damaged, and cleaned, and finished as necessary, to make them operable. Damaged castings should be replaced. Existing non-standard basins at locations where basins are required shall be replaced with new standard basins.
- iii) Abandoned drainage structures as shown on contract plans are to be cut out (2) feet below subgrade and filled with compacted clean sand. All open basins are to be abandoned and fall into this category. Basin connections not required shall be bulkheaded at both ends.
- iv) All existing sewer manholes within the contract limits should be adjusted as necessary so that they will be flush with the finished grades after completion of the work. Any of these manholes which have damaged, worn or non-standard frames and covers should be provided with new 27" castings in accordance with the latest standards of N.Y.C.D.E.P. including any necessary modifications of the manhole masonry. Any damage to the manhole caused by this work shall be repaired, or replaced by the contractor, as directed by the engineer, and at no cost to the City.
- v) Where the height of an existing manhole permits more than one (1) basin connection to be made on the same wall, special precaution shall be taken to protect the structural integrity of the manhole. The minimum clearance between the outside walls of any two basin connections or between a basin connection and a sewer, vertically or horizontally, shall be 12 inches.

- vi) New catch basin connections should be 12" diameter ductile iron pipe, class 56, internally locked "Push-On" joints laid on 6" of broken stone for the bottom of the trench and for one-half the pipe diameter. The broken stone shall be unweathered stone uniformly graded from $\frac{1}{4}$ " to $\frac{3}{4}$ " in diameter. It shall be to commercial $\frac{1}{4}$ " to $\frac{3}{4}$ " stone.
- vii) Flush and clean all existing basin connections to be utilized to receive flow from all catch basins. Where the existing basin connections are found to be damaged or in deteriorating condition they should be replaced with new 12" diameter ductile iron pipe in accordance with the latest Department of Environmental Protection Standards.
- viii) All catch basins should have a hood on the outletting pipe.
- ix) All new proposed catch basins should be connected to an existing sewer at a manhole. Catch basins shall not under any circumstance be connected to a storm sewer.
- x) All scuppers should be repaired, damaged, and cleaned and flushed as needed to make them operable. Damaged castings should be replaced. At locations where existing scuppers do not have 12" pipe or have deteriorated pipe, the pipe shall be replaced with new 12" diameter class 56 D.I. Pipe.

The hydraulic computations as submitted by you are being reviewed by our Drainage Review Section. Their comments will be related to you when received from that office. No approval can be accorded before the hydraulics of the proposed project are approved.

Please submit three (3) complete sets of contract drawings revised in accordance with these comments and those marked in red on the plans for our review.

Very truly yours,

MAGDI FARAG, P.E., CHIEF
Division of Sewer Regulations &
Control, Bureau of Sewers

AMTRAK
National Railroad Passenger Corporation
2000 Market Street, 6th Floor
Philadelphia, PA 19103

6/9/87

June 4, 1987

Mr. Magdi Farag
 Chief Division of Sewer
 Regulation and Control
 Bureau of Sewers
 40 Worth Street, 9th Floor
 New York, NY 10013

RECEIVED
 D.E.P. BUREAU OF SEWERS
 JUN 9 1987
 DIVISION OF
 SEWER REGULATION
 AND CONTROL

Subject: Westside Connection Project
New York, New York
North Access Tunnel Project - 90% Submission

Dear Mr. Farag:

Enclosed for your review and comments are three sets of the 90% Submission of the Contract Documents for the subject project.

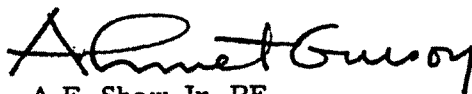
Please review and return your comments to Amtrak with copy to Parsons Brinckerhoff no later than Tuesday, June 23, 1987, using the attached Design Review Comment Sheet for this project. If there are no comments, please return Comment Sheet marked "No Comment".

The Design Review Meeting will be held at Parsons Brinckerhoff's office on June 30, 1987 at 10:00 AM to review all comments and progress of the project.

Parsons Brinckerhoff
 One Penn Plaza
 Fifth Floor
 New York, New York 10119
 Telephone: 212-613-5202
 Attention: Mr. Ahmet Gursoy, Project Manager

Thank you for your cooperation.

Sincerely,



A.E. Shaw Jr. PE
 Director of Engineering
 Track Structures

AES/AG/am/029

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DISPATCHED

APR 17 1987

WATER POLLUTION CONTROL
MAIL ROOM

30089

CHS-1

April 15, 1987

Mr. A.E. Shaw, Jr., P.E.,
Amtrak
National Railroad Passenger Corp..
30th Street Station, Suite 330
Philadelphia, PA 19104

RE: Westside Connection Project North Access Tunnel from W. 33rd Street to W. 38th Street, Borough of Manhattan

Dear Mr. Shaw:

In reply to your letter dated March 24, 1987 and a letter dated April 6, 1987 from Parsons Brinckerhoff Quades & Douglas Inc., with which you submitted three (3) sets of "60%" drawings and two (2) sets of sewer relocation design drawings for the above referenced project, please be advised of the following comments of this department:

1. Show all elevations in reference to a sewer datum plane which is 2.75 ft. above the U.S. C.G.S. mean sea level at Sandy Hook, N.J.
2. Show 11th Avenue in relation to the existing tunnel and sewers on drawing Nos. C-9, C-10, C-11, C-13 and C-14.
3. There are several locations where existing sewer information as shown does not match our as-built records. A copy of the North River I&I study and as-built drawings for Capital Project SEN 00243 are enclosed for your reference. Drawings must be revised accordingly. In case you have more recent drawings, submit the same for our review.
4. Show legend for the proposed catch basin to be different than the proposed manhole.
5. Show existing invert elevation on the existing sewer whenever a new manhole or chamber is proposed. Show invert elevations at manholes, one U/S end and the other D/S end of this location.
6. Show the limits of abandonment of the existing sewer in W. 34th Street.

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7. Clarify whether a proposed 15" E.S.V.P. sewer shown as connecting catch basins is a sewer or a catch basin connection. Be advised no more than two catch basins can be connected in series and that catch basin connection should be 12" D.I. Class 56 pipe with push-on joints on stone ballast. See NYC Standard.
8. Show the existing sewer to be picked up at manhole No. 1 and the existing sewer openings to be plugged at manhole No.2.
9. Show on the plan and profile the existing and proposed structures.
10. There is no record of a 12" storm sewer to be removed on drawing No. C-12, 12" C.M.P. on drawing No. C-12, 12" to be removed or abandoned on drawing No. C-13, 12" on drawing No. C-13A.
11. Submit structural computations signed and sealed by a N.Y.S.P.E. for flow distribution chamber, twin maintenance chamber A and B, flow adopter chamber. No bend of sewer is allowed between flow adopter chamber and manhole No. 2. Show type of manholes. Submit borings for the area. Show type of catch basins. Show type of proposed sewer.
12. Show the deflection angles, radius etc. for all the chambers.
13. Indicate that all sewers shown as to be abandoned have no house connections.
14. Submit drawing No. C-21 as part of contract drawings.
15. There is no need to show standard details of catch basin type 2, cast iron grating, cast iron manhole frame and cover, cast iron steps, manhole frame and cover, and vitrified clay pipe on conc. cradle on earth or rock as shown on drawing Nos. C-19 and C-20.

The hydraulic computations as submitted by you are being reviewed by our Private Drainage Review Section. Their comments will be related to you when received from that office.

Please submit three (3) complete sets of contract drawings revised in accordance to these comments for our review. Drawing Nos. S-28, S-29, S-29A, S-30 and S-30A should be made part of the set.

Very truly yours,

DOUGLAS SMITH, P.E., ACTING CHIEF
Engineering Review Section,
Bureau of Sewer