

CONRAIL

RECEIVED

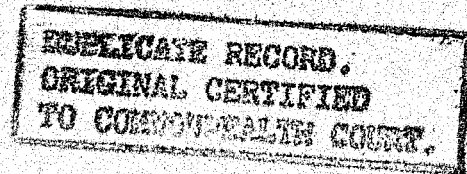
JUN 1 1984

SECRETARY'S OFFICE
Public Utility Commission

May 30, 1984

SUBJECT: Glenfield, Allegheny Co., PA - PUC Docket No.
C-80092154 - O.H. Bridge No. 9.22, Glenfield
Viaduct over Main Line Tracks, LC 2202, MP 9.22,
Pittsburgh Division, Central Region. (File:
Br. 9.22 - WRA)

Mr. Jerry Rich, Secretary
Pa PUC
P.O. Box 3265
Harrisburg, PA 17120



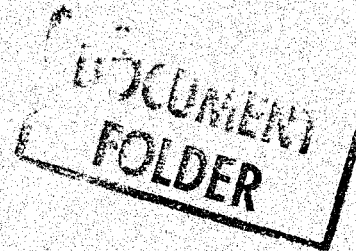
Dear Mr. Rich:

We attach a copy of Conrail's bridge inspection report concerning the subject bridge as required every six months by Commission Order until rehabilitation or reconstruction is accomplished.

The report indicates no significant change in the condition of the structure, with the exception of additional surface spalling of the concrete and several stair treads have loosened on the stairway. Our forces are currently making welding repairs to the stairway in accordance with the order. No change in the 16 ton load limit is recommended.

Very truly yours,

J. T. Sullivan
J. T. Sullivan, P.E.
Chief Engineer
Design and Construction



Room 1200

(215) 596-3843

cc: Mr. R. A. Peteritas, Director
Bureau of Rail Transportation
Pa PUC
P.O. Box 3265
Harrisburg, PA 17120

Mr. W. J. Clements, P.E.
Acting Chief Utility Engineer
Pa DOT
1120 T&S Building
Harrisburg, PA 17120

Mr. Jerry Rich, Secretary
May 30, 1984
Page Two

cc: Mr. John D. Drake
Chief Bridge Engineer
517 County Office Bldg.
Forbes Ross Streets
Pittsburgh, PA 15219

Mr. Albert G. Fecke, Jr., Solicitor
Glenfield Borough
800 Lawyers Building
Pittsburgh, PA 15219

CONSOLIDATED RAIL CORPORATION

BRIDGE INSPECTION REPORT

DIV. PITTSBURGH BRANCH Ft. Wayne Line BRIDGE NO. 922
 LOCATION Glenfield O.M. U.G. _____
 TYPE OF BRIDGE Deck Girder NO. SPANS 2 SPAN NO. _____ LENGTH 97
 NO. TRACKS 3 TRACK NO. _____

WATERWAY _____ (TANGENT _____)
 ROADWAY Glenfield Viaduct TRACK ALIGNMENT (CURVE _____)
 OTHER _____
 DATE LAST INSPECTION 9-27-83 DATE THIS INSPECTION 04/16/84

NOTE: USE SEPARATE SHEET FOR EACH SPAN FOR SPECIAL CONDITIONS.

| ITEM NO. | GENERAL | | | ITEM NO. | MASONRY (CONT.) | | | ITEM NO. | FLOOR SYSTEM (CONT.) | | | |
|----------|---------|---|---|---------------------------|-----------------|---|---|----------|----------------------|----------|---|---|
| | A | B | R | | A | B | R | | A | B | R | |
| 1 | | | X | 25 | | | | 53 | | | X | |
| 2 | | | | 26 | | | | 54 | | | X | |
| 3 | | | | 27 | | | X | 55 | | | X | |
| 4 | | | | GIRDERS, BEAMS OR TRUSSES | | | A | B | R | 56 | | X |
| 5 | | | X | 28 | | | X | 57 | | | X | |
| 6 | | | | 29 | | | X | 58 | | | X | |
| 7 | | | | 30 | | | X | 59 | | | X | |
| 8 | | | | 31 | | | X | 60 | | | | |
| 9 | | | | 32 | | | | 61 | | | X | |
| 10 | | | | 33 | | | | 62 | | | | |
| 11 | | | | 34 | | | X | 63 | | | | |
| 12 | | | | 35 | | | | 64 | | | | |
| 13 | | | | 36 | | | | 65 | | | | |
| 14 | | | | 37 | | | | 66 | | | | |
| 15 | | | | 38 | | | X | 67 | | | | |
| 16 | | | | 39 | | | X | 68 | | | | |
| 17 | | | | 40 | | | | 69 | | | | |
| 18 | | | | 41 | | | | 70 | | | X | |
| 19 | | | | 42 | | | X | 71 | | | X | |
| 20 | | | | 43 | | | | 72 | | | X | |
| 21 | | | | 44 | | | X | 73 | | | X | |
| 22 | | | | STEEL BRACING | | | A | B | R | TRETTLES | | |
| 23 | | | X | 45 | | | | 74 | | | | |
| 24 | | | | 46 | | | | 75 | | | | |
| 25 | | | | 47 | | | X | 76 | | | | |
| 26 | | | | 48 | | | X | 77 | | | | |
| 27 | | | | 49 | | | X | 78 | | | | |
| 28 | | | | 50 | | | | 79 | | | | |
| 29 | | | | 51 | | | | 80 | | | | |
| 30 | | | | 52 | | | X | 81 | | | | |
| 31 | | | | | | | | 82 | | | | |
| 32 | | | | | | | | 83 | | | | |
| 33 | | | | | | | | 84 | | | | |

DOCKETED

REMARKS: X JUN 4 - 1984

NOTE: DESCRIBE UNDER REMARKS LOCATION OF LOOSE RIVETS. USE BACK OF THIS FORM FOR SKETCHES OR NOTES.

A - GOOD CONDITION
 B - NOT HAZARDOUS - NOTE ANY CHANGE NEXT INSPECTION.
 R - PUT ON REPAIR PROGRAM

SIGNED: [Signature] INSPECTOR
 REVIEWED: [Signature] SUPVR. B. & B.
 NOTED: [Signature] DIVN. ENGR.

SPAN No. 1 refers to span over Rt 65. Span No 2 refers to span over RAILROAD

SPAN NO. 1 - concrete breaking ~~off~~ = off + falling at expansion joint ~~at~~ ~~the~~ where bridge meets ROAD.

SPAN NO 2 -

Steel is encased in concrete. HARD to determine condition. Some concrete is cracking + ready to fall from bottom flanges, laterals + sway frames + sidewalk.

Steel that is visible is rusting + rust is built up between members of sway frames.

Many rivets which are visible rusted badly + need built up especially rivets holding shoes to bottom flanges.

Both ends of this span spalling badly. Rebar + steel mesh CAN be seen.

Bottom of floor spalling some + REBAR CAN be seen.

Rollers at south end are deteriorated + appear to be frozen in EXPANDED position.

South west roller has west side-plate gone for 3" + one roller exposed. Also plate on south side of roller $\frac{1}{2}$ gone. This deterioration appears to have been caused by drainage coming off bridge + falling directly on roller.

concrete deteriorated spalling throughout, especially at bottoms of floor beams, tops of piers where girders have bearing + sides of piers.

Small wing wall at south end broken off + has created small void area which could allow road surface at end of bridge to settle.

South west abutment cracked at bottom

Sidewalk badly spalled leaving metal expansion joints sticking up, a tripping hazard.

Parapet wall ~~has~~ cracked + spalling in spots

South east ~~side~~ edge of bridge approach has lost shoulder + concrete side of approach cracking. Road side has started to break away.

→ East side of 2nd pier south of steps - top of pier + bottom of girder are spalled + breaking away, diminishing the bearing girder has on top of pier.

→ Many stair treads are loose - (bolts rusted away) + need re-bolting

East curb on bridge badly spalled away

Local residents using under side for storage

CONRAIL



RECEIVED

NOV 26 1984

SECRETARY'S OFFICE
Public Utility Commission

November 20, 1984

Mr. Jerry Rich, Secretary
Pennsylvania PUC
P. O. Box 3265
Harrisburg, PA 17120

SUBJECT: Glenfield, Allegheny County, Pennsylvania - PUC
Docket No. C-80092154 - O.H. Bridge No. 9.22,
Glenfield Viaduct Over Main Line Tracks, LC 2202,
MP 9.22, Pittsburgh Division, Central Region.
(File: Br. 9.22 - WRA)

Dear Mr. Rich:

We attach a copy of Conrail's bridge inspection report concerning the subject bridge as required every six months by Commission Order until rehabilitation or reconstruction is accomplished.

The report indicates no significant change in the condition of the structure, with the exception of additional surface spalling of the concrete and an additional crack is evident in the pier cap of Pier 8. Our forces have made repairs to the sidewalk and additional minor repairs will be made to the steps. No change in the 16 ton lead limit is recommended.

Very truly yours,

J. T. Sullivan
J. T. Sullivan, P.E.
Chief Engineer -
Design and Construction

Room 1200

(215) 596-3848

Attachment

DUPLICATE RECORD.
ORIGINAL CERTIFIED
TO COMMONWEALTH COURT.

DOCUMENT
FOLDER

Mr. Jerry Rich
November 20, 1984
Page 2

cc: Mr. R. A. Peteritas, Director
Bureau of Rail Transportation
Pennsylvania PUC
P. O. Box 3265
Harrisburg, PA 17120

Mr. W. J. Clements, P.E.
Acting Chief Utility Engineer
Pennsylvania DOT
1120 T & S Building
Harrisburg, PA 17120

Mr. John D. Drake
Chief Bridge Engineer
517 County Office Building
Forbes Ross Streets
Pittsburgh, PA 15219

Mr. Albert G. Fecke, Jr., Solicitor
Glenfield Borough
800 Lawyers Building
Pittsburgh, PA 15219

CONSOLIDATED RAIL CORPORATION

BRIDGE INSPECTION REPORT

DIV. PITTSBURGH BRANCH FOOT WAYNE LINE BRIDGE NO. 9.22

LOCATION GLENFIELD PA. O.M. U.S.

TYPE OF BRIDGE DB-ENCASED NO. SPANS 17 SPAN NO. _____ LENGTH 1197'

WATERWAY _____ NO. TRACKS B TRACK NO. _____

ROADWAY _____ TRACK ALIGNMENT _____ (TANGENT _____)

DYER Conrail RR TRACK ALIGNMENT _____ (CURVE _____)

DATE LAST INSPECTION 5-23-84 NOV 26 1984 DATE THIS INSPECTION 10-24-84

NOTE: USE SEPARATE SHEET FOR EACH SPAN FOR SPECIAL CONDITIONS.

DOCKETED

DOCUMENT FOLDER

| ITEM NO. | GENERAL | MASONRY | | | ITEM NO. | GENERAL | STEEL BRACING | | | ITEM NO. | FLOOR SYSTEM | TRESTLES | | | |
|-------------------|---|---------|---|---|---------------------------|------------------|---------------|---|---|----------|----------------------|------------|---|---|--|
| | | A | B | R | | | A | B | R | | | A | B | R | |
| 1 | Paint () yr | | | | 25 | Previous Gunite | | | | 53 | Fir Bm Top Flg | | | | |
| 2 | Clearance Signs | | | | 26 | Slab | | | B | 54 | Fir Bm Bot Flg | | | | |
| 3 | Highway minimum clearance () | | | | 27 | Cleanliness | | | B | 55 | Fir Bm Conn | | | | |
| 4 | PC Insignia | | | | GIRDERS, BEAMS OR TRUSSES | | | A | B | R | 56 | Str web | | | |
| 5 | Load Limit Signs (16) Tons | A | | | 28 | Top Flg or Chord | | | B | 57 | Str Top Flg | | | | |
| 6 | Fire Protection | | | | 29 | Bot Flg or Chord | | | B | 58 | Str Bot Flg | | | | |
| 7 | Action under trains | | | | 30 | Bearing Stiffs | | | B | 59 | Str Conn | | | | |
| 8 | Approach track | | | | 31 | Web or Diagonl | | | B | 60 | Steel Floor | | | B | |
| 9 | Track on bridge | | | | 32 | Hangers | | | | 61 | Conc Floor | | | | |
| STREAM CONDITIONS | | A | B | R | 33 | Counters | | | | 62 | Wood Floor | | | | |
| 10 | Paving through bridges | | | | 34 | Rivets* | | | | 63 | Waterproofing | | | | |
| 11 | Sheet piling protection | | | | 35 | Pins | | | | 64 | Ties | | | | |
| 12 | Scour (Distance top of rail to bed of stream _____) | | | | 36 | Cols or bents | | | | 65 | Tie Sealing | | | | |
| 13 | Rip rap | | | | 37 | Sole plates | | | | 66 | Timber or bar spacer | | | | |
| 14 | Fender System | | | | 38 | Masonry plates | | | B | 67 | Hook Bolts & Blks. | | | | |
| MASONRY | | A | B | R | 39 | Shoes | | | | 68 | Guard rails | | | | |
| 15 | Abutment N or E | | B | | 40 | Rollers | | | B | 69 | Deck hardware | | | A | |
| 16 | Abutment S or W | | B | | 41 | Shims | | | B | 70 | Footwalks | | | B | |
| 17 | Backwalls | | B | | 42 | Anchor bolts | | | B | 71 | Handrails | | | | |
| 18 | Wingwalls | | B | | 43 | Wood blocking | | | | 72 | Drainage | | | A | |
| 19 | Timber back walls | | B | | 44 | Cleanliness | | | B | 73 | Cleanliness | | | B | |
| 20 | Piers | | B | | STEEL BRACING | | | A | B | R | 74 | Bulkheads | | | |
| 21 | Pedestals | | | | 45 | Top Lat | | | B | 75 | Piles | | | | |
| 22 | Arches | | | | 46 | Top Lat Pls | | | B | 76 | Sills | | | | |
| 23 | Parapet Walls | | | | 47 | Bot Lat | | | B | 77 | Posts | | | | |
| 24 | Painting | | | | 48 | Bot Lat Pls | | | B | 78 | Caps | | | | |
| | | | | | 49 | Sway Frames | | | B | 79 | Corbels | | | | |
| | | | | | 50 | Portals | | | | 80 | Stringers | | | | |
| | | | | | 51 | Towers | | | | 81 | Cross Brace | | | | |
| | | | | | FLOOR SYSTEM | | | A | B | R | 82 | Long Brace | | | |
| | | | | | 52 | Fir Bm Web | | | | 83 | Foundations | | | A | |
| | | | | | | | | | | 84 | Welds | | | | |

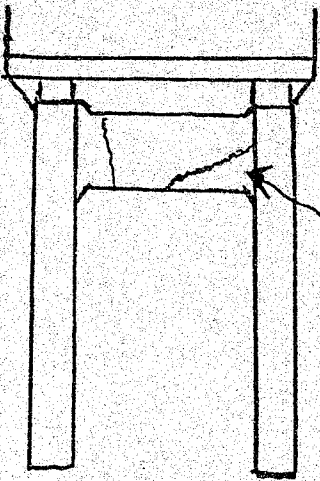
REMARKS: FEAR 1-17 AT CORNER SPALLING TO REBARS (REBARS EXPOSED) (2) AT CONC. FLOOR BEAMS BOTTOM CHORD IS EXPOSED TO REBARS (3) KNEE BRACES CONC SPALLED TO REBARS (4) CLEAN & GREASE BEARINGS (5) CONC ENCASUREMENT (DOMINANT) LOWER CHORD AT FLANGES (6) TOP STEP AND THIRD STEP FROM BOTTOM NEEDS TO BE REPAIRED (OVER BACK)

NOTE: DESCRIBE UNDER REMARKS LOCATION OF LOOSE RIVETS. USE BACK OF THIS FORM FOR SKETCHES OR NOTES.

A - GOOD CONDITION
 B - NOT HAZARDOUS - NOTE ANY CHANGE NEXT INSPECTION.
 R - PUT ON REPAIR PROGRAM

INSPECTOR: [Signature]
 REVIEWED: [Signature]
 NOTED: [Signature]

INSPECTOR
 SUPVR. B. & B.
 DIVN. ENGR.



← PEIR 7-8-9 HAS CRACKS AS SHOWN
ON CONC FLOOR BEAM ON PEIRS

PEIR 8 HAS A NEW CRACK IN CONC FLOOR BEAM BETWEEN
PEIRS

FOOTWALK HAS BEEN REPAIRED (NO TRIPPING
HAZARD)

PHILA, PA
CONRAIL
NOV 16 1984
CHIEF ENGINEER
DES & CONSTR



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

January 11, 1985

IN REPLY PLEASE
 REFER TO OUR FILE

Mr. W. J. Clements, Chief
 Right-of-Way and Utility Division
 Pennsylvania Department of Transportation
 509 Transportation and Safety Building
 Harrisburg, PA 17120

A-00104781
 A-00105164
 C-00019434
 C-80092154 ✓
 C-80122300
 I-78020294

Dear Mr. Clements:


This Commission adopted orders in the above referenced proceedings directing the Department to complete work as follows:

| | | |
|------------|--------------|----------|
| A-00104781 | Construction | 12-31-84 |
| A-00105164 | Construction | 12-31-84 |
| C-00019434 | Construction | 12-31-84 |
| C-80092154 | Study | 11-07-84 |
| C-80122300 | Plans | 10-29-84 |
| I-78020294 | Plans | 6-11-84 |

Our "PAST DUE" report indicates that the Department apparently has not complied with our orders. Please review these proceedings and if compliance is not anticipated within several months, please submit petitions requesting extension of time in which to comply with this Commission's orders.

Your attention to this matter will be greatly appreciated.

Very truly yours,


 R. A. Peteritas, P.E., Director
 Bureau of Rail Transportation

DRF:11r

DOCUMENT
 FOLDER

DOCKETED
 DEC 16 1984



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

June 3, 1985

IN REPLY PLEASE
 REFER TO OUR FILE

C-79081311
C-80092154
 C-80122300
 I-78020294
 I-830372

Mr. W. J. Clements, Chief
 Right-of-Way and Utility Division
 Pennsylvania Department of Transportation
 509 Transportation and Safety Building
 Harrisburg, Pa 17120

DUPLICATE RECORD.
 ORIGINAL CERTIFIED
 TO COMMONWEALTH COURT.

Dear Mr. Clements:

This Commission adopted orders in the above referenced proceedings directing the Department to complete work as follows:

| | | |
|------------|--------------|--------------------------|
| C-79081311 | Construction | 9-30-83 |
| C-80092154 | Study | 12-01-84 (Second Notice) |
| C-80122300 | Plans | 10-29-84 (Second Notice) |
| I-78020294 | Plans | 6-11-84 (Second Notice) |
| I-830372 | Plans | 1-09-85 |

Our "PAST DUE" report indicates that the Department apparently has not complied with our orders. Please review these proceedings and if compliance is not anticipated within several months, please submit petitions requesting extension of time in which to comply with this Commission's orders.

Your attention to this matter will be greatly appreciated.

Very truly yours,

R. A. Peteritas
 R. A. Peteritas, Director
 Bureau of Rail Transportation

DRE:11r

RECORDED
 INDEXED

RECORDED
 JUN 5 - 1985

CONRAIL

ORIGINAL

OFFICIAL RECORD
ORIGINAL CERTIFIED
TO COMMONWEALTH COURT.

RECEIVED

JUN 6 1985

SECRETARY'S OFFICE
Public Utility Commission

June 3, 1985

Mr. Jerry Rich, Secretary
Pennsylvania PUC
P.O. Box 3265
Harrisburg, PA 17120

Subject: Glenfield, Allegheny County, Pennsylvania - PUC
Docket No. C-80092154 - O.H. Bridge No. 9.22,
Glenfield Viaduct Over Main Line Tracks, LC 2202,
MP 9.22, Pittsburgh Division, Central Region
(File: Br. 9.22/WRA)

Dear Mr. Rich:

We attach a copy of Conrail's bridge inspection report concerning the subject bridge as required every six months by Commission Order until rehabilitation or reconstruction is accomplished.

The report indicates no significant change in the condition of the structure, with the exception of additional surface spalling of the concrete and an additional crack is evident in the Pier Caps of Piers 5 and 6. No change in the 16-ton load limit is recommended.

Sincerely yours,

J. T. Sullivan
J. T. Sullivan, P.E.
Chief Engineer
Design and Construction

Room 1200

(215) 596-3848

Attachment

FILED
FOLDED

Mr. Jerry Rich, Secretary
Page two
June 2, 1985

cc: Mr. R. A. Peteritas, Director
Bureau of Rail Transportation
Pennsylvania PUC
P. O. Box 3265
Harrisburg, PA 17120

Mr. W. J. Clements, P.E.
Acting Chief Utility Engineer
Pennsylvania DOT
1120 T & S Building
Harrisburg, PA 17120

Mr. John D. Drake
Chief Bridge Engineer
517 County Office Building
Forbes Ross Streets
Pittsburgh, PA 15219

Mr. Albert G. Fecke, Jr., Solicitor
Glenfield Borough
800 Lawyers Building
Pittsburgh, PA 15219

bc: D. F. Donovan - P-1138
F. D. Day - P-1634
H. J. Barnes - F-1201
A. B. Butler - Pittsburgh, PA
J. S. Richeter - Pittsburgh, PA
M. W. Weidner - Pittsburgh, PA
S. G. Hess - Pittsburgh, PA

JUN 6 1985

CONSOLIDATED RAIL CORPORATION

BRIDGE INSPECTION REPORT

SECRETARY'S OFFICE
Public Utility Commission

DIV. PITTSBURGH BRANCH PITTSBURGH-WOOD BRIDGE NO. 9.22
 LOCATION GLEN FLD O.H. X U.G. _____
 TYPE OF BRIDGE DECK GIRDER NO. SPANS 2 SPAN NO. 12 LENGTH 100'
 WATERWAY _____ NO. TRACKS 3 TRACK NO. _____
 ROADWAY _____ TRACK ALIGNMENT (TANGENT _____ (CURVE _____)
 OTHER _____ DATE LAST INSPECTION 9/27/84 DATE THIS INSPECTION 5/8/85
 NOTE: USE SEPARATE SHEET FOR EACH SPAN FOR SPECIAL CONDITIONS. 80092154

| ITEM NO. | GENERAL | A B R | | | ITEM NO. | MASONRY (CONT.) | A B R | | | ITEM NO. | FLOOR SYSTEM (CONT.) | A B R | | | | |
|-------------------|--|-------|----------|---|---------------------------|--------------------------------|----------|---|----------|----------|----------------------|-------------|----------|----------|---|---|
| | | A | B | R | | | A | B | R | | | A | B | R | | |
| 1 | Paint () yr | | | | 25 | Previous Gunite | | | <u>B</u> | 53 | Fir Bm Top Flg | | | | | |
| 2 | Clearance Signs | | | | 26 | Slab | | | | 54 | Fir Bm Bot Flg | | | | | |
| 3 | Highway minimum clearance () | | | | 27 | Cleanliness | | | | 55 | Fir Bm Conn | | | | | |
| 4 | CR Insignia | | | | GIRDERS, BEAMS OR TRUSSES | | | A | B | R | 56 | Str web | | | | |
| 5 | Load Limit Signs () Tons | | | | 28 | Top Flg or Chord | | | | 57 | Str Top Flg | | | | | |
| 6 | Fire Protection | | | | 29 | Bot Flg or Chord | | | <u>B</u> | 58 | Str Bot Flg | | | | | |
| 7 | Action under trains | | | | 30 | Bearing Stiffs | | | | 59 | Str Conn | | | | | |
| 8 | Approach track | | | | 31 | Web or Diagnls | | | <u>B</u> | 60 | Steel Floor | | | | | |
| 9 | Track on bridge | | | | 32 | Hangers | | | | 61 | Conc Floor | | | <u>B</u> | | |
| STREAM CONDITIONS | | A | B | R | 33 | Counters | | | | 62 | Wood Floor | | | | | |
| 10 | Paving through bridges | | | | 34 | Rivets * | | | | 63 | Waterproofing | | | | | |
| 11 | Sheet piling protection | | | | 35 | Pins | <u>A</u> | | | 64 | Ties | | | | | |
| 12 | Scour (Distance top of rail to bed of stream) | | | | 36 | Cols or bents | | | | 65 | Tie Sealing | | | | | |
| 13 | Rip rap | | | | 37 | Sole plates | <u>A</u> | | | 66 | Timber or bar spacer | | | | | |
| 14 | Fender System | | | | 38 | Masonry plates | <u>A</u> | | | 67 | Hook Bolts & Blks. | | | | | |
| MASONRY | | A | B | R | 39 | Shoes | | | <u>B</u> | 68 | Guard rails | | | | | |
| 15 | Abutment N or E | | | | 40 | Rollers | | | <u>B</u> | 69 | Deck hardware | | | | | |
| 16 | Abutment S or W | | | | 41 | Shims | | | | 70 | Footwalks | | <u>A</u> | | | |
| 17 | Backwalls | | | | 42 | Anchor bolts | <u>A</u> | | | 71 | Handrails | | | | | |
| 18 | Wingwalls | | | | 43 | Wood blocking | | | | 72 | Drainage | | <u>A</u> | | | |
| 19 | Timber back walls | | | | 44 | Cleanliness | | | <u>B</u> | 73 | Cleanliness | | <u>A</u> | | | |
| 20 | Piers | | <u>B</u> | | STEEL BRACING | | | A | B | R | TRETTLES | | | A | B | R |
| 21 | Pedestals | | | | 45 | Top Lat | | | | 74 | Bulkheads | | | | | |
| 22 | Arches | | | | 46 | Top Lat Pls | | | | 75 | Piles | | | | | |
| 23 | Parapet Walls | | | | 47 | Bot Lat <u>CONCRETE IN USE</u> | | | <u>B</u> | 76 | Sills | | | | | |
| 24 | Pointing | | | | 48 | Bot Lat Pls | | | <u>B</u> | 77 | Posts | | | | | |
| | | | | | 49 | Sway Frames | | | <u>B</u> | 78 | Caps | | | | | |
| | | | | | 50 | Portals | | | <u>B</u> | 79 | Corbels | | | | | |
| | | | | | 51 | Towers | | | | 80 | Stringers | | | | | |
| | | | | | FLOOR SYSTEM | | | A | B | R | 81 | Cross Brace | | | | |
| | | | | | 52 | Fir Bm Web | | | | 82 | Long Brace | | | | | |
| | | | | | | | | | | 83 | Foundations | | | | | |
| | | | | | | | | | | 84 | Welds | | | | | |

FOR IMMEDIATE ATTENTION: _____
 MARKS WHOLE SPAN WAS GUNITED AND IS SPALLING MAKING STEEL INSPECTION BRACKET HARD. CONCRETE SPALLING ON PARAPET WALLS AND PIERS CAUSING REINFORCEMENT RODS TO BE EXPOSED. ROLLER BEDS BADLY RUSTED
 NOTE: *DESCRIBE UNDER REMARKS LOCATION OF LOOSE RIVETS. USE BACK OF THIS FORM FOR SKETCHES OR NOTES.

A - GOOD CONDITION
 B - NOT HAZARDOUS - NOTE ANY CHANGE NEXT INSPECTION.
 R - PUT ON REPAIR PROGRAM
 SIGNED M. J. [Signature] INSPECTOR
 REVIEWED [Signature] SUPVR
 NOTES _____

RECEIVED

MW 203 R3 10-83
PRINTED IN USA MU

JUN 6 1985

CONSOLIDATED RAIL CORPORATION

BRIDGE INSPECTION REPORT

SECRETARY'S OFFICE
Public Utility Commission

DIV. PITTSBURGH BRANCH PITTSBURGH-WOOD BRIDGE NO. 9-22
LOCATION GLEW FLD O.H. Y U.G. _____
TYPE OF BRIDGE CONCRETE NO. SPANS 13 SPAN NO. 7 THRU 10 LENGTH 45' EACH
NO. TRACKS _____ TRACK NO. _____

WATERWAY _____ (TANGENT _____)
ROADWAY VIA DUCT TRACK ALIGNMENT (CURVE _____)
OTHER _____
DATE LAST INSPECTION 9/22/84 DATE THIS INSPECTION 5/8/84 C-80092154
NOTE: USE SEPARATE SHEET FOR EACH SPAN FOR SPECIAL CONDITIONS.

| ITEM NO. | GENERAL | | | | ITEM NO. | MASONRY (CONT.) | | | | ITEM NO. | FLOOR SYSTEM (CONT.) | | | |
|----------|---|---|---|---|----------|--------------------------------------|---|---|---|----------|----------------------|---|---|---|
| | | A | B | R | | | A | B | R | | | A | B | R |
| 1 | Paint () yr | | | | 25 | Previous Gunite | | | | 53 | Fir Bm Top Flg | | | |
| 2 | Clearance Signs | | | | 26 | Slab | | | | 54 | Fir Bm Bot Flg | | | |
| 3 | Highway minimum clearance () | | | | 27 | Cleanliness | | | B | 55 | Fir Bm Conn | | | |
| 4 | CR Insignia | | | | | GIRDERS, BEAMS OR TRUSSES | A | B | R | 56 | Str web | | | |
| 5 | Load Limit Signs () Tons | | | | 28 | Top Flg or Chord | | | | 57 | Str Top Flg | | | |
| 6 | Fire Protection | | | | 29 | Bot Flg or Chord <u>concrete - B</u> | | | | 58 | Str Bot Flg | | | |
| 7 | Action under trains | | | | 30 | Bearing Stiffs | | | | 59 | Str Conn | | | |
| 8 | Approach track | | | | 31 | Web or Diagonals <u>concrete - B</u> | | | | 60 | Steel Floor | | | |
| 9 | Track on bridge | | | | 32 | Hangers | | | | 61 | Conc Floor | | | A |
| | STREAM CONDITIONS | A | B | R | 33 | Counters | | | | 62 | Wood Floor | | | |
| 10 | Paving through bridges | | | | 34 | Rivets * | | | | 63 | Waterproofing | | | |
| 11 | Sheet piling protection | | | | 35 | Pins | | | | 64 | Ties | | | |
| 12 | Scour (Distance top of rail to bed of stream _____) | | | | 36 | Cols or beams <u>concrete - B</u> | | | | 65 | Tie Sealing | | | |
| 13 | Rip rap | | | | 37 | Sole plates | | | | 66 | Timber or bar spacer | | | |
| 14 | Fender System | | | | 38 | Masonry plates | | | | 67 | Hook Bolts & Blks. | | | |
| | MASONRY | A | B | R | 39 | Shoes | | | | 68 | Guard rails | | | |
| 15 | Abutment N or E | | | | 40 | Rollers | | | | 69 | Deck hardware | | | |
| 16 | Abutment S or W | | | | 41 | Shims | | | | 70 | Footwalks | | | A |
| 17 | Backwalls | | | | 42 | Anchor bolts | | | | 71 | Handrails | | | |
| 18 | Wingwalls | | | | 43 | Wood blocking | | | | 72 | Drainage | | | A |
| 19 | Timber back walls | | | | 44 | Cleanliness | | | | 73 | Cleanliness | | | A |
| 20 | Piers | | | B | | STEEL BRACING | A | B | R | | TRESTLES | A | B | R |
| 21 | Pedestals | | | | 45 | Top Lat | | | | 74 | Bulkheads | | | |
| 22 | Arches | | | | 46 | Top Lat Pls | | | | 75 | Piles | | | |
| 23 | Parapet Walls | | | B | 47 | Bot Lat | | | | 76 | Sills | | | |
| 24 | Pointing | | | | 48 | Bot Lat Pls | | | | 77 | Posts | | | |
| | | | | | 49 | Sway Frames | | | | 78 | Caps | | | |
| | | | | | 50 | Portals | | | | 79 | Corbels | | | |
| | | | | | 51 | Towers | | | | 80 | Stringers | | | |
| | | | | | | FLOOR SYSTEM | A | B | R | 81 | Cross Brace | | | |
| | | | | | 52 | Fir Bm Web | | | | 82 | Long Brace | | | |
| | | | | | | | | | | 83 | Foundations | | | |
| | | | | | | | | | | 84 | Welds | | | |

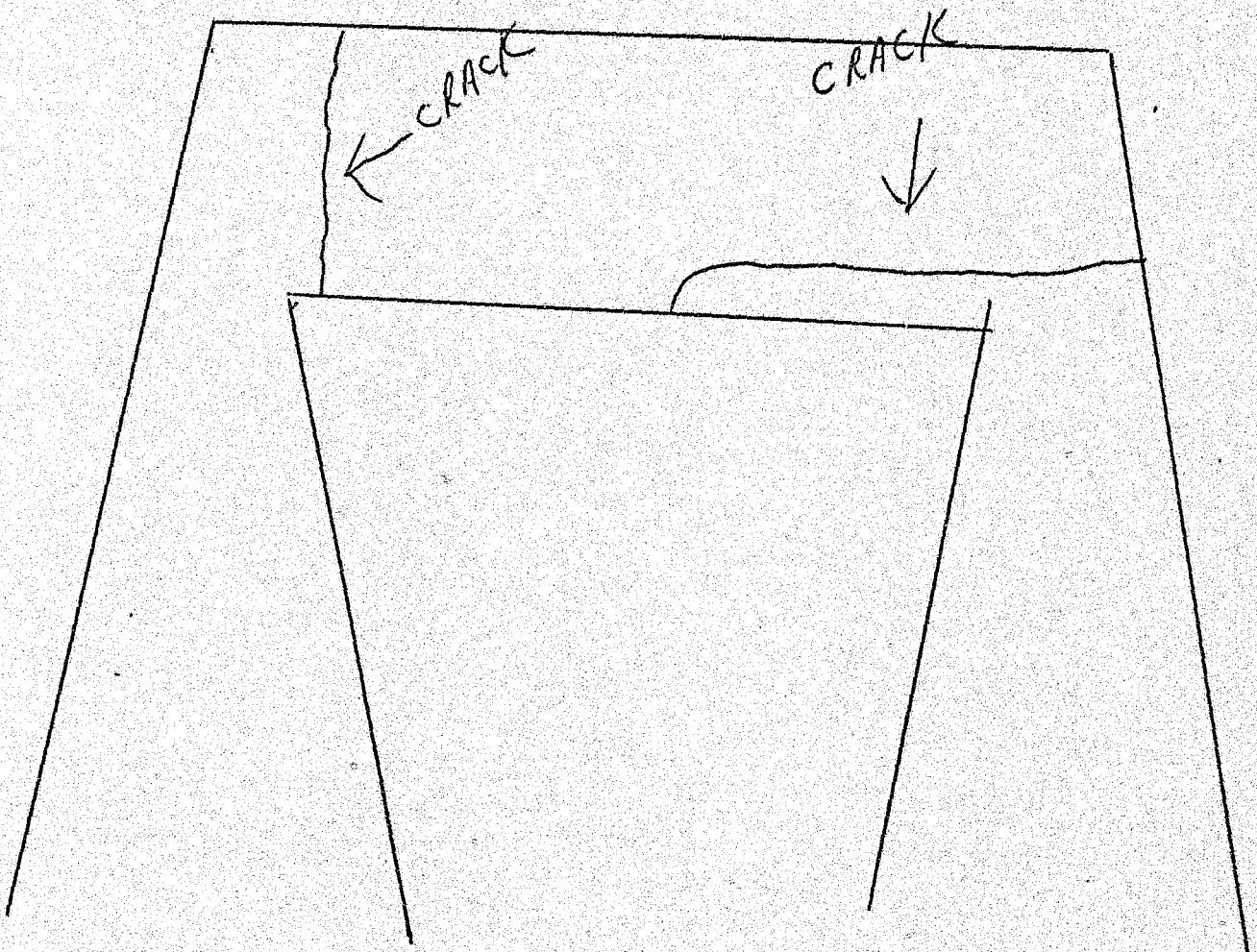
FOR IMMEDIATE ATTENTION:

REMARKS CONCRETE SPALLING AND REINFORCEMENT RODS EXPOSED ON PIERS AND PARAPET WALLS. CONCRETE COLUMNS SPALLING BADLY CAUSING REINFORCEMENT RODS TO BE EXPOSED. NORTH PIER ON SPAN NO 7 HAS 2 CRACKS IN TOP OF PIER (ON

NOTE: DESCRIBE UNDER REMARKS LOCATION OF LOOSE RIVETS. USE BACK OF THIS FORM FOR SKETCHES OR NOTES.

A - GOOD CONDITION
B - NOT HAZARDOUS - NOTE ANY CHANGE NEXT INSPECTION.

SIGNED M. J. ... INSPECTOR
REVIEWED ... SUPVR. B. & B.
NOTED ... DIVN. ENGR



CONSOLIDATED RAIL CORPORATION

JUN 6 1985

BRIDGE INSPECTION REPORT

DIV. PITTSBURGH BRANCH PITTS-WOOD BRIDGE NO. 9.22 SECRETARY'S OFFICE
 LOCATION GIRARD FLD O.H. X U.G. ✓ Public Utility Commission
 TYPE OF BRIDGE _____ NO. SPANS 13 SPAN NO. 11 THRU 15 LENGTH 45' EACH
 NO. TRACKS _____ TRACK NO. _____

WATERWAY _____ (TANGENT _____)
 ROADWAY VIADUCT TRACK ALIGNMENT (CURVE _____)
 OTHER _____
 DATE LAST INSPECTION 9/22/84 DATE THIS INSPECTION 5/8/84 E-80092154
 NOTE: USE SEPARATE SHEET FOR EACH SPAN FOR SPECIAL CONDITIONS.

| ITEM NO. | GENERAL | A B R | | | ITEM NO. | MASONRY (CONT.) | A B R | | | ITEM NO. | FLOOR SYSTEM (CONT.) | A B R | | |
|----------|---|----------|---|----------|----------|----------------------------------|-------|---|----------|----------|----------------------|-------|---|----------|
| | | A | B | R | | | A | B | R | | | A | B | R |
| 1 | Paint () yr | | | | 25 | Previous Gunite | | | | 53 | Fir Bm Top Flg | | | |
| 2 | Clearance Signs | | | | 26 | Slab | | | | 54 | Fir Bm Bot Flg | | | |
| 3 | Highway minimum clearance () | | | | 27 | Cleanliness | | | <u>B</u> | 55 | Fir Bm Conn | | | |
| 4 | CR Insignia | | | | | GIRDERS, BEAMS OR TRUSSES | A | B | R | 56 | Str web | | | |
| 5 | Load Limit Signs (16) Tons | <u>A</u> | | | 28 | Top Flg or Chord | | | | 57 | Str Top Flg | | | |
| 6 | Fire Protection | | | | 29 | Bot Flg or Chord <u>CONCRETE</u> | | | <u>B</u> | 58 | Str Bot Flg | | | |
| 7 | Action under trains | | | | 30 | Bearing Stiffs | | | | 59 | Str Conn | | | |
| 8 | Approach track | | | | 31 | Web or Diagonals <u>CONCRETE</u> | | | <u>B</u> | 60 | Steel Floor | | | |
| 9 | Track on bridge | | | | 32 | Hangers | | | | 61 | Conc Floor | | | <u>A</u> |
| | STREAM CONDITIONS | A | B | R | 33 | Counters | | | | 62 | Wood Floor | | | |
| 10 | Paving through bridges | | | | 34 | Rivets* | | | | 63 | Waterproofing | | | |
| 11 | Sheet piling protection | | | | 35 | Pins | | | | 64 | Ties | | | |
| 12 | Scour (Distance top of rail to bed of stream) | | | | 36 | Cols or bents <u>CONCRETE</u> | | | <u>B</u> | 65 | Tie Sealing | | | |
| 13 | Rip rap | | | | 37 | Sole plates | | | | 66 | Timber or bar spacer | | | |
| 14 | Fender System | | | | 38 | Masonry plates | | | | 67 | Hook Bolts & Blks. | | | |
| | MASONRY | A | B | R | 39 | Shoes | | | | 68 | Guard rails | | | |
| 15 | Abutment N or E | | | <u>B</u> | 40 | Rollers | | | | 69 | Deck hardware | | | |
| 16 | Abutment S or W | | | | 41 | Shims | | | | 70 | Footwalks | | | <u>A</u> |
| 17 | Backwalls | | | | 42 | Anchor bolts | | | | 71 | Handrails | | | |
| 18 | Wingwalls | | | <u>B</u> | 43 | Wood blocking | | | | 72 | Drainage | | | <u>A</u> |
| 19 | Timber back walls | | | | 44 | Cleanliness | | | | 73 | Cleanliness | | | <u>A</u> |
| 20 | Piers | | | <u>B</u> | | STEEL BRACING | A | B | R | | TRESTLES | A | B | R |
| 21 | Pedestals | | | | 45 | Top Lat | | | | 74 | Bulkheads | | | |
| 22 | Arches | | | | 46 | Top Lat Pls | | | | 75 | Piles | | | |
| 23 | Parapet Walls | | | <u>B</u> | 47 | Bot Lat | | | | 76 | Sills | | | |
| 24 | Pointing | | | | 48 | Bot Lat Pls | | | | 77 | Posts | | | |
| | | | | | 49 | Sway Frames | | | | 78 | Caps | | | |
| | | | | | 50 | Portals | | | | 79 | Corbels | | | |
| | | | | | 51 | Towers | | | | 80 | Stringers | | | |
| | | | | | | FLOOR SYSTEM | A | B | R | 81 | Cross Brace | | | |
| | | | | | 52 | Fir Bm Web | | | | 82 | Long Brace | | | |
| | | | | | | | | | | 83 | Foundations | | | |
| | | | | | | | | | | 84 | Welds | | | |

FOR IMMEDIATE ATTENTION: _____

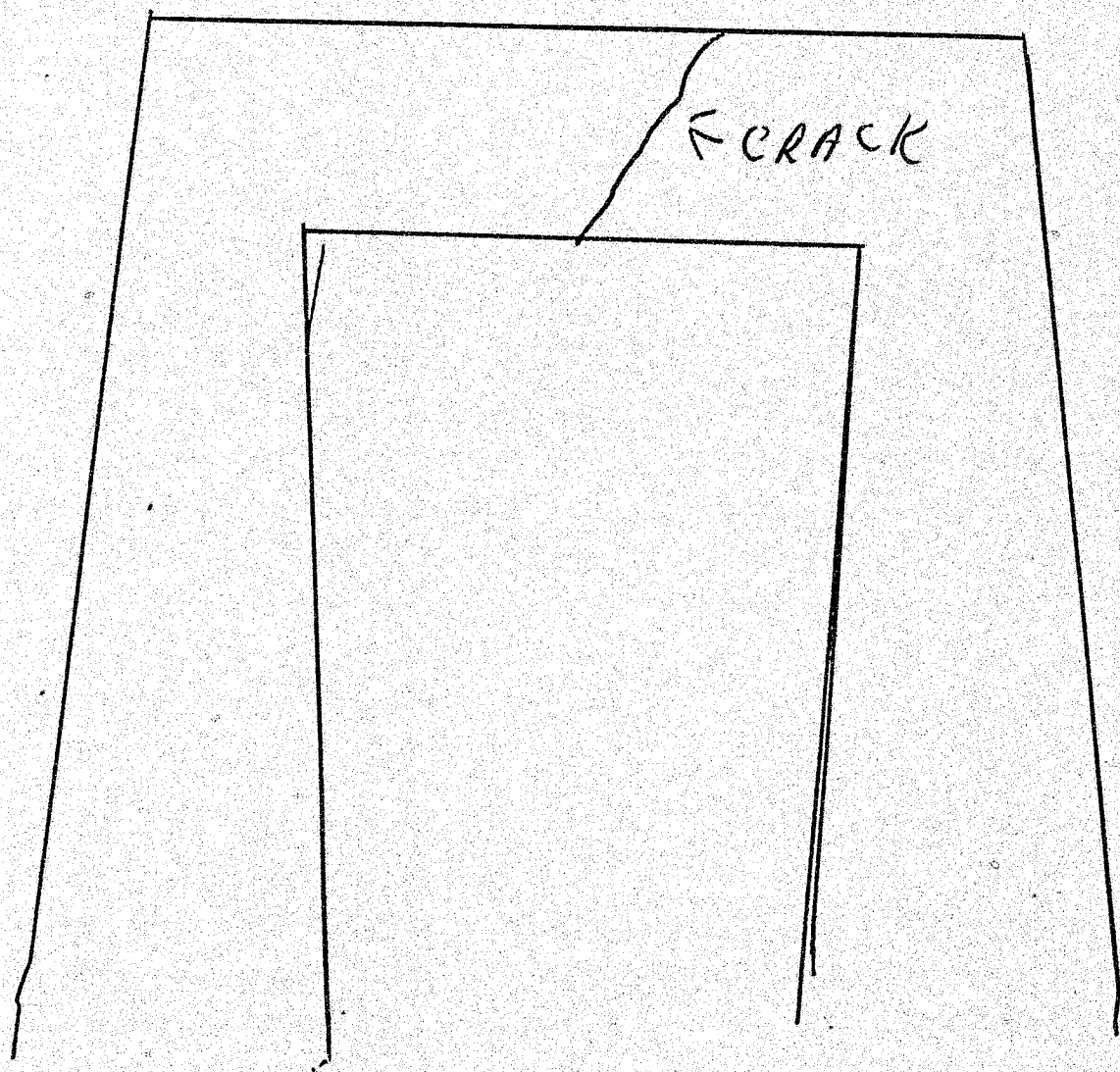
REMARKS CONCRETE SPALLING AND REINFORCEMENT RODS EXPOSED ON PIERS AND PARAPET WALLS. CONCRETE COLUMNS SPALLING BADLY CAUSING REINFORCEMENT RODS TO BE EXPOSED. WINGWALL HAS LARGE PIECE BROKEN OFF

NOTE: *DESCRIBE UNDER REMARKS LOCATION OF LOOSE RIVETS. USE BACK OF THIS FORM FOR SKETCHES OR NOTES.

A - GOOD CONDITION
 B - NOT HAZARDOUS - NOTE ANY CHANGE NEXT INSPECTION.
 R - PUT ON REPAIR PROGRAM

SIGNED M. J. [Signature] INSPECTOR
 REVIEWED [Signature] SUPVR. B. & B.
 NOTED [Signature] DIVN. ENGR.

AND REINFORCEMENT RODS EXPOSED SPAN NO 4
HAS STAIR WELL CONNECTED TO IT. HAND RAILING
BEAMS, HONGES, STAIR TREADS ARE IN GOOD CONDITION
CHAIRS FOR HOLDING STAIR TREADS BADLY RUSTED
NEED REPAIR. NORTH PIER ON SPANS 5+6
HAS CRACK AT TOP OF PIER



CONSOLIDATED RAIL CORPORATION

JUN 6 1985

BRIDGE INSPECTION REPORT

SECRETARY'S OFFICE
Public Utility Commission

DIV. PITTSBURGH BRANCH PITTSBURGH-WOOD BRIDGE NO. 9-22
 LOCATION GREEN FLD O.N. X U.G. _____
 TYPE OF BRIDGE _____ NO. SPANS 13 SPAN NO. 3 Thru 6 LENGTH 45' EACH
 NO. TRACKS _____ TRACK NO. _____
 WATERWAY _____ (TANGENT _____)
 ROADWAY VIADUCT TRACK ALIGNMENT (CURVE 2-80092154)
 OTHER _____
 DATE LAST INSPECTION 9/28/84 DATE THIS INSPECTION 5/8/85
 NOTE: USE SEPARATE SHEET FOR EACH SPAN FOR SPECIAL CONDITIONS.

| ITEM NO. | GENERAL | A B R | | | ITEM NO. | MASONRY (CONT.) | A B R | | | ITEM NO. | FLOOR SYSTEM (CONT.) | A B R | | |
|----------|---|-------|---|---|----------|---------------------------|-------|---|---|----------|----------------------|-------|---|---|
| | | A | B | R | | | A | B | R | | | A | B | R |
| 1 | Paint () yr | | B | | 25 | Previous Gunite | | | | 53 | Fir Bm Top Flg | | B | |
| 2 | Clearance Signs | | | | 26 | Slab | | | | 54 | Fir Bm Bot Flg | | | B |
| 3 | Highway minimum clearance () | | | | 27 | Cleanliness | | B | | 55 | Fir Bm Conn | | | B |
| 4 | CR Insignia | | | | | GIRDERS, BEAMS OR TRUSSES | A | B | R | 56 | Str web | | | |
| 5 | Load Limit Signs () Tons | | | | 28 | Top Flg or Chord | | | | 57 | Str Top Flg | | | |
| 6 | Fire Protection | | | | 29 | Bot Flg or Chord Concrete | | B | | 58 | Str Bot Flg | | | |
| 7 | Action under trains | | | | 30 | Bearing Stiffs | | | | 59 | Str Conn | | | |
| 8 | Approach track | | | | 31 | Web or Diagonal Concrete | | B | | 60 | Steel Floor | | | |
| 9 | Track on bridge | | | | 32 | Hangers | | | | 61 | Conc Floor | | A | |
| | STREAM CONDITIONS | A | B | R | 33 | Counters | | | | 62 | Wood Floor | | | |
| 10 | Paving through bridges | | | | 34 | Rivets * | | | | 63 | Waterproofing | | | |
| 11 | Sheet piling protection | | | | 35 | Pins | | | | 64 | Ties | | | |
| 12 | Scour (Distance top of rail to bed of stream) | | | | 36 | Cols or bents concrete | | B | | 65 | Tie Sealing | | | |
| 13 | Rip rap | | | | 37 | Sole plates | | | | 66 | Timber or bar spacer | | | |
| 14 | Fender System | | | | 38 | Masonry plates | | | | 67 | Hook Bolts & Blks. | | | |
| | MASONRY | A | B | R | 39 | Shoes | | | | 68 | Guard rails | | | |
| 15 | Abutment N or E | | | | 40 | Rollers | | | | 69 | Deck hardware | | | |
| 16 | Abutment S or W | | | | 41 | Shims | | | | 70 | Footwalks + steps | | | B |
| 17 | Backwalls | | | | 42 | Anchor bolts | | | | 71 | Handrails | | | |
| 18 | Wingwalls | | | | 43 | Wood blocking | | | | 72 | Drainage | | A | |
| 19 | Timber back walls | | | | 44 | Cleanliness | | | | 73 | Cleanliness | | A | |
| 20 | Piers | | B | | | STEEL BRACING | A | B | R | 74 | Bulkheads | | | |
| 21 | Pedestals | | | | 45 | Top Lat | | | | 75 | Piles | | | |
| 22 | Arches | | | | 46 | Top Lat Pls | | | | 76 | Sills | | | |
| 23 | Parapet Walls | | B | | 47 | Bot Lat | | | | 77 | Posts | | | |
| 24 | Pointing | | | | 48 | Bot Lat Pls | | | | 78 | Caps | | | |
| | | | | | 49 | Sway Frames | | | | 79 | Corbels | | | |
| | | | | | 50 | Portals | | | | 80 | Stringers | | | |
| | | | | | 51 | Towers | | | | 81 | Cross Brace | | | |
| | | | | | | FLOOR SYSTEM | A | B | R | 82 | Long Brace | | | |
| | | | | | 52 | Fir Bm Web | | | | 83 | Foundations | | | |
| | | | | | | | | | | 84 | Welds | | | |

FOR IMMEDIATE ATTENTION: 7th step from bottom on stairs needs welded STAIRS LOCATED ON 4TH SPAN

REMARKS CONCRETE SPALLING AND REINFORCEMENT RODS EXPOSED ON PIERS AND PARAPET WALLS. CONCRETE COLUMNS SPALLING BADLY AT TOP CAUSING REINFORCEMENT RODS TO BE EXPOSED. BRIDGE HAS CONCRETE MAIN BEAMS BADLY SPALLING (CURVED)

NOTE: *DESCRIBE UNDER REMARKS LOCATION OF LOOSE RIVETS. USE BACK OF THIS FORM FOR SKETCHES OR NOTES.

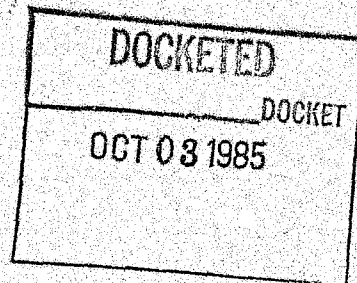
A - GOOD CONDITION
 B - NOT HAZARDOUS - NOTE ANY CHANGE NEXT INSPECTION.
 R - PUT ON REPAIR PROGRAM

SIGNED M. G. H. H. H. INSPECTOR
 REVIEWED J. P. H. H. H. SUPVR. B. & B.
 NOTED J. P. H. H. H. DIVN. ENGR.

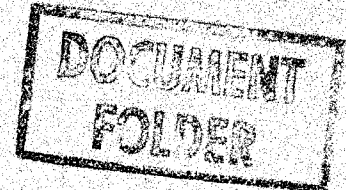
October 1, 1985

C-80092154

(See Attached List)



Glenfield Borough
v.
Consolidated Rail Corporation, Allegheny County
and Pennsylvania Department of Transportation



Dear _____:

This is to advise that a field investigation and conference will be held at the site of the crossing carrying The Glenfield Viaduct above the tracks of Consolidated Rail Corporation on October 15, 1985 at 2:00 p.m. to discuss the pre-final construction plans submitted by Pennsylvania Department of Transportation.

Please arrange to have a representative present.

Very truly yours,

Donald R. Fleisher, P.E.
Rail Safety Division
Bureau of Safety and Compliance

SIMILAR LETTER LIST

C-80092154

Mr. J. T. Sullivan, Chief Engineer
Design and Construction
Consolidated Rail Corporation
15 North 32nd Street
Philadelphia, PA 19104

Mr. W. J. Clements, P.E., Chief
Right-of-Way and Utility Division
Pennsylvania Department of Transportation
509 Transportation and Safety Building
Harrisburg, PA 17120

Mr. John F. Graham, P.E.
Department of Engineering and Construction
Allegheny County
5th Floor, County Office Building
Pittsburgh, PA 15219

Albert G. Feczko, Jr., Solicitor
Glenfield Borough
Professional Office Building
430 Boulevard of the Allies
Pittsburgh, PA 15219

Mr. R. Hilliard
The Bell Telephone Company of Pennsylvania
201 Stanwix Street
Pittsburgh, PA 15222

Mr. John R. Weber, P.E.
Columbia Gas of Pennsylvania, Inc.
61 East Wheeling Street
Washington, PA 15301

Mr. Raymond J. Wiehagen
Duquesne Light Company
One Oxford Center
301 Grant Street
Pittsburgh, PA 15279

ORIGINAL

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION**

Harrisburg
September 30, 1985



IN REPLY REFER TO

Allegheny County
L. R. 652, Sec. 041 (Glenfield Viaduct)
Glenfield Borough
PUC. C. 80092154

Mr. Jerry Rich, Secretary
Public Utility Commission
Harrisburg, PA 17120

RECEIVED

0

SECRET
Public Utility Commission

Dear Mr. Rich:

In accordance with Paragraph 5 of the subject Public Utility Commission Order adopted December 3, 1982 and subsequent modified Order adopted May 11, 1984, we are submitting three (3) sets of preliminary plans for acquisition of Right-of-Way and preliminary Structure Drawings for the replacement of the Glenfield Viaduct and approaches.

Due to the advanced deterioration of the present structure, the Department requests a field conference be arranged in the near future for all parties to discuss the Department's proposed plans and to determine how to advance this proceeding to construction.

One set of the plans is being submitted to each of the following parties of record and to each non-carrier utility company which has its facilities within the project limits:

- James H. McLean, Solicitor, County of Allegheny, 1200 Allegheny Bldg., Pittsburgh, PA 15219
- Albert G. Feczko, Jr., Solicitor, Borough of Glenfield, Professional Office Building, 430 Boulevard of the Allies, Pittsburgh, PA 15219
- J. T. Sullivan, P. E., Chief Engineer, Design and Construction, Consolidated Rail Corporation, 12th Floor, 15 N. 32nd Street, Philadelphia, PA 19104

-continued-

**DUPLICATE RECORD.
ORIGINAL CERTIFIED
TO COMMONWEALTH COURT.**

DOCKETED
OCT -2 1985

DO NOT
FOR

Mr. Rich, Secretary
PUC. C. 80092154

-2-

The Bell Telephone Company of PA, William L. Leonard, Vice-President
& General Counsel, Law Department, One Parkway, 16th Floor,
Philadelphia, PA 19102
Columbia Gas of PA, Inc., W. U. Jacoby, Attorney, 99 N. Front Street,
Columbus, Ohio 43215
Duquesne Light Company, 435 Sixth Avenue, Pittsburgh, PA 15219
Borough of Glenfield (Water Company), Ann Kipilo, 105 River Road,
Sewickley, PA 15143

Very truly yours,



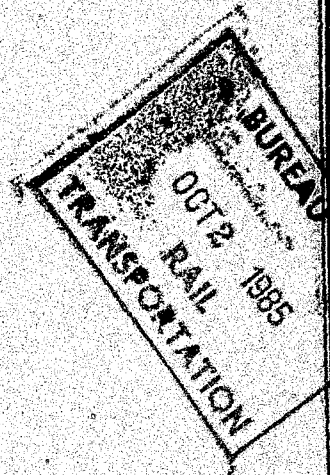
For: Alfred F. Lyng, P. E.
Chief Engineer
Highway Administration

Attachments

RECEIVED

OCT 1 1985

SECRETARY'S OFFICE
Public Utility Commission



BOROUGH OF GLENFIELD

ALLEGHENY COUNTY, PENNSYLVANIA

DRAWINGS AUTHORIZING ACQUISITION OF RIGHT OF WAY

FOR

GLENFIELD VIADUCT

IN ALLEGHENY COUNTY

From Sta. 0+2091 To Sta. 10+80.38 Length 1059.47 0.201 M.

THE PUBLIC UTILITY COMMISSION WILL APPROPRIATE
PROPERTY IN COMPLAINT DOCKET NO. 10180.38
BETWEEN STATION 10+02.00 AND STATION 10180.38
PURSUANT TO THE PROVISIONS OF SECTION 2702 (b) OF
THE ACT OF JULY 1, 1978, P.L. 598, NO. 116 (66 P.S. 2702)
THIS PLAN PREPARED PURSUANT TO SECTION 2003 (a)
OF THE ADMINISTRATIVE CODE (ACT OF APRIL 9, 1929,
P.L. 177, AS AMENDED BY ACT 1979-100), AND SECTION
402 (b) (3) OF THE EMINENT DOMAIN CODE OF 1964
AS AMENDED.

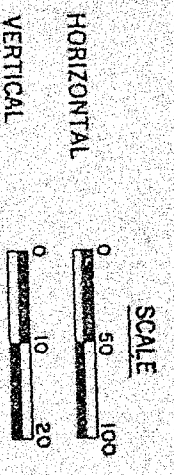
| FEDERAL PROJECT NUMBER | | | |
|------------------------|-----------|----------|-----------------------|
| DISTRICT | COUNTY | TOWNSHIP | BOROUGH |
| FCB 11-0 | ALLEGHENY | | GLENFIELD |
| | | | GLENFIELD VIADUCT ROW |
| | | | TOTAL SHEETS |
| | | | 9 |
| STATE PROJECT NUMBER | | | |
| SYS | LR | SPUR/PA | SECTION |
| B 61 | 16 | 512 | 0404 |
| | | | DIST |
| | | | CO |

C. 82092154

EXTRA COPY

DUPLICATE RECORD.
ORIGINAL CERTIFIED
TO COMMONWEALTH COURT.

ESTABLISHED AS A LIMITED ACCESS HIGHWAY FROM
STATION 402+50 E. TO STATION 448+50 E. BY PLAN OF
LEGISLATIVE ROUTE 652, SECTION 23, R/W APPROVED
BY GOVERNOR MILTON J. SHARP DATED AUGUST 9, 1972.

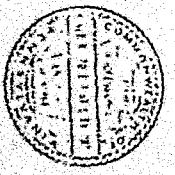


DESIGN DESIGNATION

| | | |
|-------------------------------|--------|------------|
| CLASS OF HIGHWAY - LOCAL ROAD | ADT | 700 (1968) |
| DESIGN SPEED - 25 M.P.H. | ADT | 980 (2005) |
| PAVEMENT SECTION - 2-12 LANES | D.H.V. | 98 |
| MEDIAN WIDTH | | 50% |
| MAX. - | | 1 |
| MIN. - | | NONE |

PLANS PREPARED BY
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
NEW CUMBERLAND, PENNSYLVANIA

Arthur R. Klepper
Project Manager
Reg. Prof. Engineer



RECOMMENDED _____ 19__

DISTRICT ENGINEER

APPROVED _____ 19__

DEPUTY SECRETARY

APPROVED _____ 19__

SECRETARY OF TRANSPORTATION

Recorded in the office for the recording of deeds, etc., in
County, Pennsylvania
Book _____ Page _____

Witness my hand and seal of office _____

Recorder

GLENFIELD BOROUGH

APPROVED _____ 19__

MAYOR

APPROVED _____ 19__

PRESIDENT - BOROUGH COUNCIL

APPROVED _____ 19__

SECRETARY - BOROUGH COUNCIL

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF DAUPHIN: SS

Before me, a notary public, personally known _____
Secretary of Transportation, who acknowledged the within plan, containing
separate sheets, to be an
official plan of the Pennsylvania Department of Transportation
and declared that the same be recorded as such.

Witness my hand and seal of office _____

Notary Public

C. 82092154

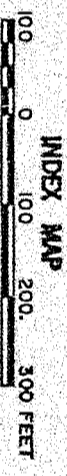
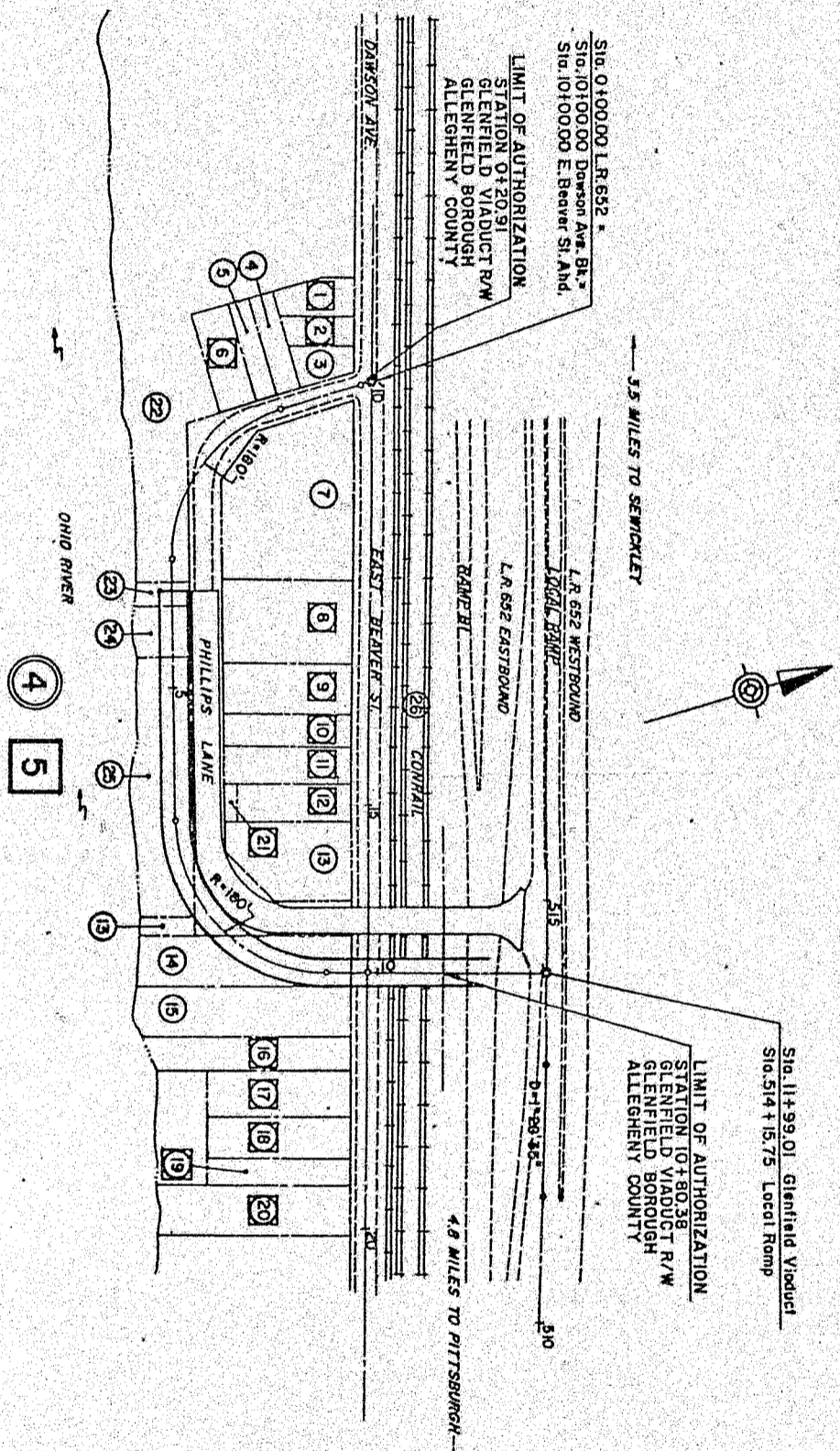
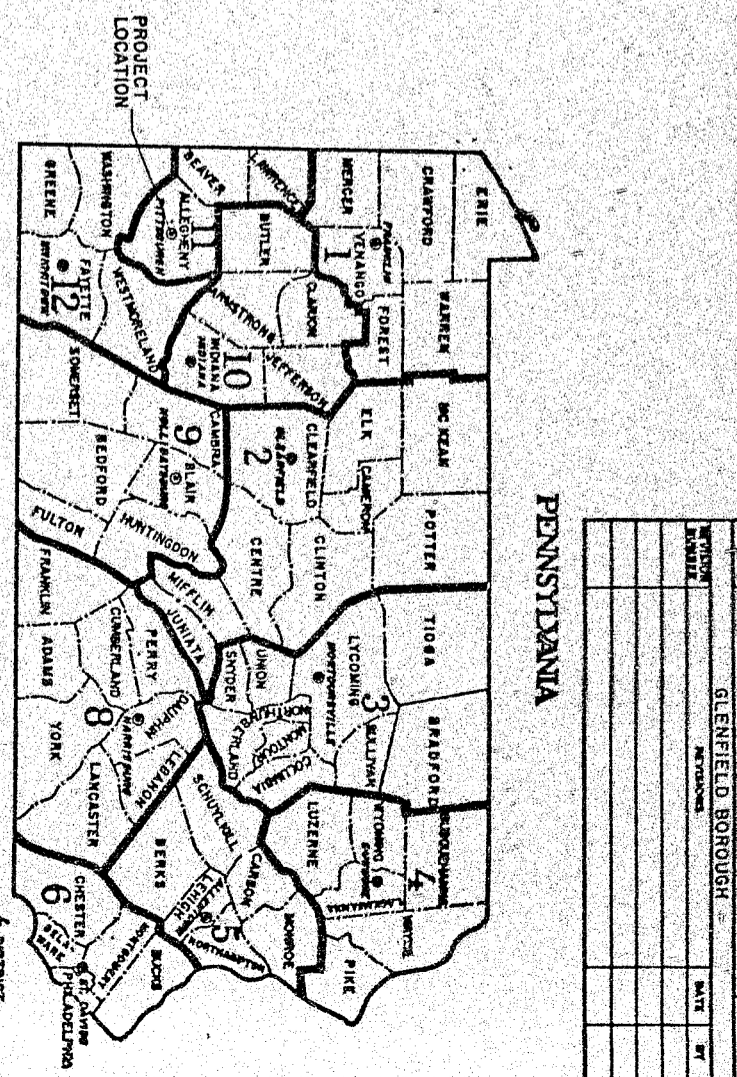
Feb 28, 1985

INDEX

| TITLE SHEET | DESCRIPTION | SHEET |
|--------------------|---------------------------------|-------|
| INDEX MAP | LOCATION MAP & TYPICAL SECTIONS | 2 |
| DETAIL PLAN SHEETS | PROPERTY PLATS | 3-5 |
| | | 6-9 |

TABULATION OF PROPERTY OWNERS

- 1 JAMES B. SAVAGE (NO TAKE)
- 2 JOHN J. HALLSTEIN & OEDNA M. SHIPPER (NO TAKE)
- 3 EDWARD WOODS & CAROLINE E. WOODS H/W
- 4 CYRIL E. YARAS & DEBORAH L. YARAS H/W
- 5 THOMAS STEEDLE
- 6 JOSEPH W. DEWITT & HILDA M. DEWITT H/W
- 7 VALLEY VETERANS ASSOCIATION
- 8 THOMAS MICHAEL GILMORE & PATRICIA JO GILMORE H/W (NO TAKE)
- 9 FRANCIS REICH & JOANNE REICH H/W (NO TAKE)
- 10 JAMES R. TUNNEY & MARY BERTHA TUNNEY H/W (NO TAKE)
- 11 PETER J. CERNANSKY & GAIL E. CERNANSKY H/W (NO TAKE)
- 12 JOHN A. O'NEIL & JOSEPHINE T. O'NEIL H/W (NO TAKE)
- 13 WILLIAM AUGUSTINE & VERNA AUGUSTINE H/W
- 14 GLENFIELD VOLUNTEER FIRE CO., INC.
- 15 CHARLES B. HAUSER & MARY RUTH HAUSER H/W
- 16 BOROUGH OF GLENFIELD, QUAKER VALLEY SCHOOL DISTRICT, & COUNTY OF ALLEGHENY (NO TAKE)
- 17 HARRY W. PFLUGH & ELIZABETH H. CARPT (NO TAKE)
- 18 RALPH G. FITCH & ELIZABETH FITCH H/W (NO TAKE)
- 19 FREDERICK BARONI & RUTH BARONI H/W (NO TAKE)
- 20 DEBORAH L. FITCH (NO TAKE)
- 21 COUNTY OF ALLEGHENY (NO TAKE)
- 22 CRAIN BROS., INC.
- 23 THEODORE F. BECKERT
- 24 H. KLEINMAN, A. KRUGH, JOSEPH WATERS, F.H. ANDERSON, T.M. SHOLES, & J.P. TAYLOR
- 25 CRAIN BROS., INC.
- 26 CONRAIL



LEGEND

- PLAN
- PROFILE
- PROPERTY IDENTIFICATION NUMBER
- PROPERTY IDENTIFICATION NUMBER (NO TAKE)

PUBLIC UTILITIES

BELL OF PENNSYLVANIA
201 STANWIX STREET
PITTSBURGH, PA 15222
ATTN: MR. R. HILLIARD
PHONE: (412) 633-3131

COLUMBIA GAS OF PENNSYLVANIA, INC.
61 EAST WHEELING STREET
P.O. BOX 2
WASHINGTON, PA 15301-0610
ATTN: JOHN R. WEBER, PE
PHONE: (412) 746-2600

DUQUESNE LIGHT COMPANY
1 OXFORD CENTER
301 GRANT STREET
PITTSBURGH, PA 15279
ATTN: RAYMOND J. WIEHAGEN
PHONE: (412) 393-6000

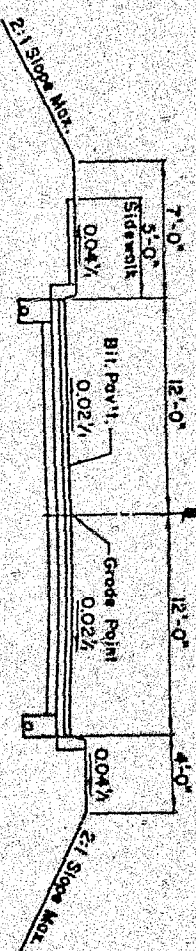
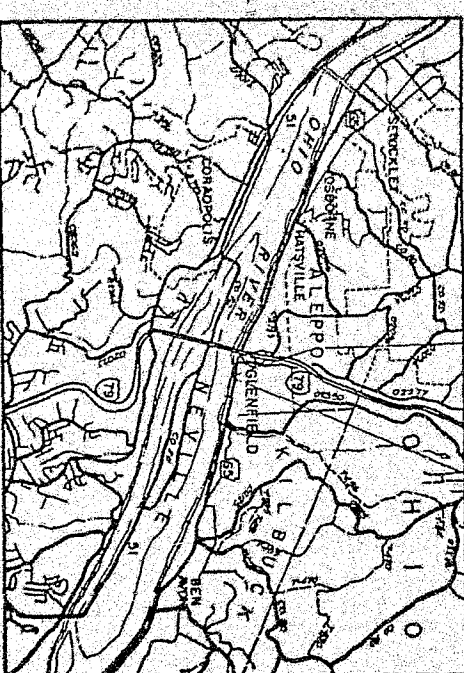
BOROUGH OF GLENFIELD (WATER LINE)
105 RIVER ROAD
SEWICKLEY, PA 15143
ATTN: ANN KIPLO
PHONE: (412) 741-8566

CONSOLIDATED RAIL CORPORATION - CONRAIL
15 N. 3RD STREET
PHILADELPHIA, PA 19104
ATTN: J.T. SULLIVAN
PHONE: (215) 596-3848

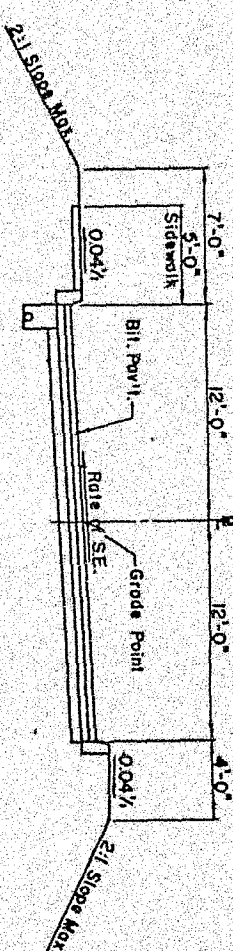
CENTRE VIDEO (CABLE TV)
192 OHIO RIVER BLVD.
AMBRIDGE, PA 15001
ATTN: RALPH YAGULLI
PHONE: (412) 922-5522

LIMIT OF AUTHORIZATION
STA. 0+20.91
GLENFIELD VIADUCT R/W
GLENFIELD BORO
ALLEGHENY CO.

LIMIT OF AUTHORIZATION
STA. 10+80.36
GLENFIELD VIADUCT R/W
GLENFIELD BORO
ALLEGHENY CO.



TANGENT SECTION



SUPERELEVATED SECTION

TYPICAL SECTIONS - ROADWAY

TABULATION OF OVERALL LENGTH

Sta. 0+20.91 to Sta. 10+80.36 Length 10584 FT. 0.201 Miles

LIST OF EQUALITIES

NONE

THE LEGAL RIGHT-OF-WAY ON THE GLENFIELD VIADUCT IS BASED ON CONRAIL PLAN NO. 21453 DATED JUNE 15, 1926. THERE IS NO OTHER RECORD OF THIS RIGHT-OF-WAY.

THE LEGAL RIGHT-OF-WAY ON DAWSON AVE. AND EAST BEAVER ST. IS 33 FEET, BASED ON THE ACT OF MAY 1, 1933, P.L. 103, SECTION 1109, AS AMENDED. THERE IS NO PUBLIC RECORD OF ANY OTHER WIDTH.

| GLENFIELD BOROUGH | | |
|-------------------|------|----|
| SECTION | DATE | BY |
| | | |

GENERAL NOTES

BUILDINGS AND STRUCTURES MARKED [C] ARE TO BE REMOVED OR ALTERED BY THE DEPARTMENT OR OTHER AUTHORITY RESPONSIBLE FOR THE PAYMENT OF PROPERTY DAMAGES.

THIS IS A FEDERAL AID PROJECT AND AS SUCH IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE FEDERAL HIGHWAY ADMINISTRATION.

INDICATES SCALED DIMENSIONS.

SURVEY IS BASED ON U.S.C. & G.S. DATUM.

KEY TO LIMIT OF SLOPE



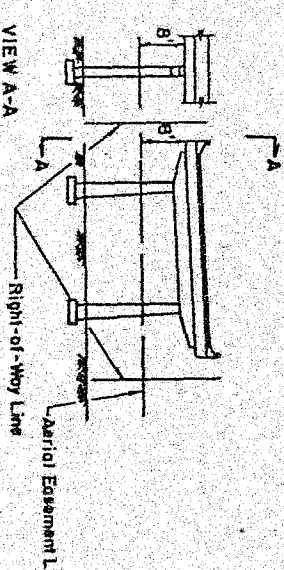
ABANDONMENTS AND/OR VACATIONS AS SHOWN ON THIS PLAN ARE EFFECTIVE ONLY AFTER THE ROAD HAS BEEN OPENED TO TRAFFIC AND PROPER NOTICE HAS BEEN GIVEN TO THE LOCAL AUTHORITIES.

TEMPORARY AREAS(S) REQUIRED UNTIL THE CONSTRUCTION OR WORK INDICATED BY THE PLAN IS COMPLETED, UNLESS SOONER REVERTED IN WRITING BY THE DEPARTMENT.

THE AERIAL EASEMENT TO BE ACQUIRED INCLUDES A SURFACE EASEMENT UNLIMITED IN VERTICAL DIMENSION FOR THE ACCOMMODATION OF PIERS AND OTHER APPURTENANCES, PLUS A TEMPORARY AREA FOR CONSTRUCTION AND FOR STORAGE OF MATERIALS DURING CONSTRUCTION. THE FOLLOWING LIMITATIONS ARE TO BE IMPOSED ON THE PROPERTY BENEATH THE AREA AFFECTED BY THE AERIAL EASEMENT:

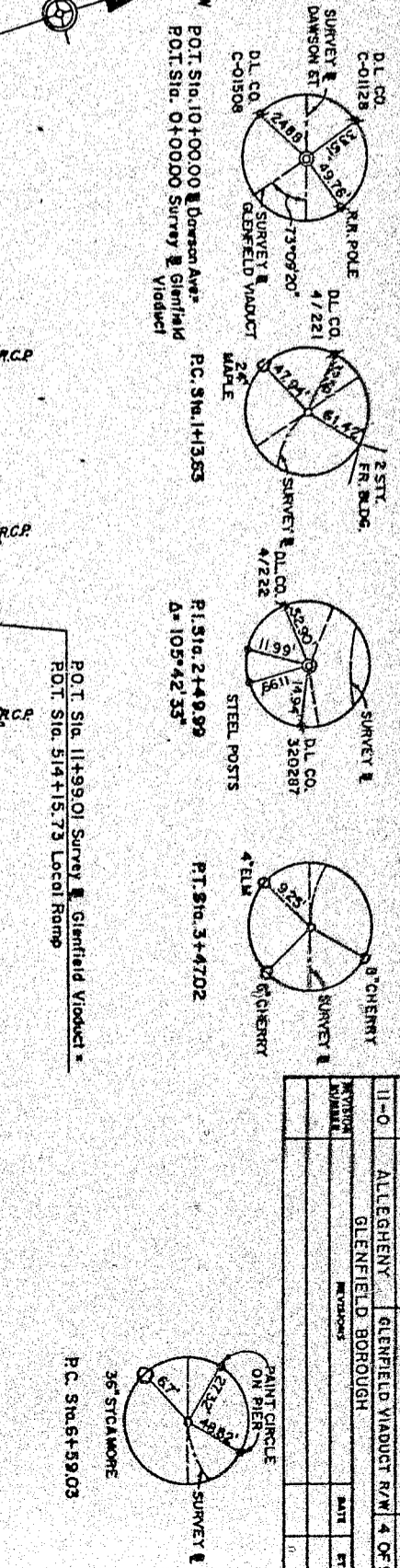
1. NO USE IS TO BE MADE OF THE PROPERTY WHICH ENDANGERS THE STRUCTURE OR THE HEALTH, SAFETY OR WELFARE OF THE TRAVELING PUBLIC.
2. NO FLAMMABLE, EXPLOSIVE, DANGEROUS OR HAZARDOUS MATERIAL BE USED, PLACED OR STORED ON THE PROPERTY.
3. NO CONSTRUCTION OF BUILDINGS OR OTHER FACILITIES IS PERMITTED ON THE PROPERTY WITHOUT PRIOR AUTHORITY OF THE DEPARTMENT OF TRANSPORTATION. IF AND WHEN SUCH AUTHORITY IS GRANTED, THE PLANS FOR THE BUILDING OR FACILITY AND CONSTRUCTION METHODS ARE SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION.
4. NO INTERFERENCE IS TO BE MADE WITH THE RIGHT OF THE DEPARTMENT OF TRANSPORTATION TO ENTER UPON THE PROPERTY FOR THE PURPOSE OF INSPECTION, MAINTENANCE, REPAIR, PAINTING, RECONSTRUCTION OR ALTERATION OF THE STRUCTURE OR APPURTENANCES. MOVABLE ITEMS MAY HAVE TO BE REMOVED BY THE OWNER DURING SOME OR ALL OF THE ABOVE OPERATIONS.
5. ANY SUBSTANTIAL CHANGE IN PROPERTY USE TO BE MADE SUBSEQUENT TO THE ACQUISITION OF THE EASEMENT IS SUBJECT TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION.
6. THE NOTES ON THESE DRAWINGS SHALL NOT BE CONSTRUED AS LIMITING OR INTERFERING IN ANY WAY WITH THE PRESENT AND FUTURE OPERATION, USE, MAINTENANCE, REPAIR, RENEWAL, CHANGE, ADDITION, BETTERMENT OR ALTERATION OF THE RAILROAD AND ITS SUPPORTING FACILITIES.

SKETCH SHOWING ESTATE TO BE ACQUIRED FOR A LIMITED AERIAL EASEMENT
From Sta. 8+07 to Sta. 10+80.36



| NO. | OWNER | ADJACENT PROPERTY | DATE |
|------|-----------|-----------------------|--------|
| 11-0 | ALLEGHENY | GLENFIELD VIADUCT R/W | 4 OF 9 |
| | | GLENFIELD BOROUGH | |
| | | REVISIONS | |
| | | DATE | |
| | | BY | |

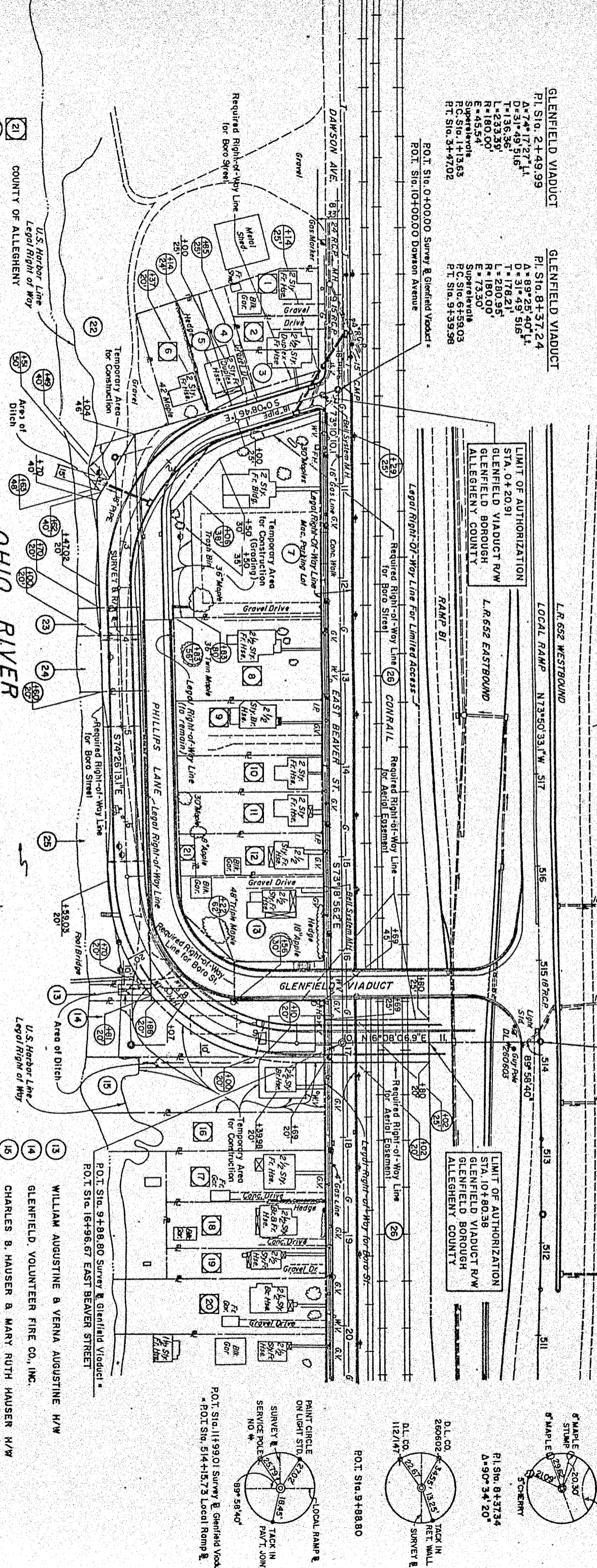
- 1 JAMES B. SAVAGE
- 2 JOHN J. HALLSTEIN & OEDNA M. SHIPPER
- 3 EDWARD WOODS & CAROLINE E. WOODS H/W
- 4 CYRIL E. YARAS & DEBORAH L. YARAS H/W
- 5 THOMAS STEEDLE
- 6 JOSEPH W. DEWITT & HILDA M. DEWITT H/W
- 7 VALLEY VETERANS ASSOCIATION
- 8 THOMAS MICHAEL GILMORE & PATRICIA JO GILMORE H/W
- 9 FRANCIS REICH & JOANNE REICH H/W
- 10 JAMES R. TUNNEY & MARY BERTHA TUNNEY H/W
- 11 PETER J. CERNANSKY & GAIL E. CERNANSKY H/W
- 12 JOHN A. O'NEIL & JOSEPHINE T. O'NEIL H/W



GLENFIELD VIADUCT
 P.I. Sta. 2+49.99
 A=74°17'27\"/>

GLENFIELD VIADUCT
 P.I. Sta. 8+37.24
 A=89°25'40\"/>

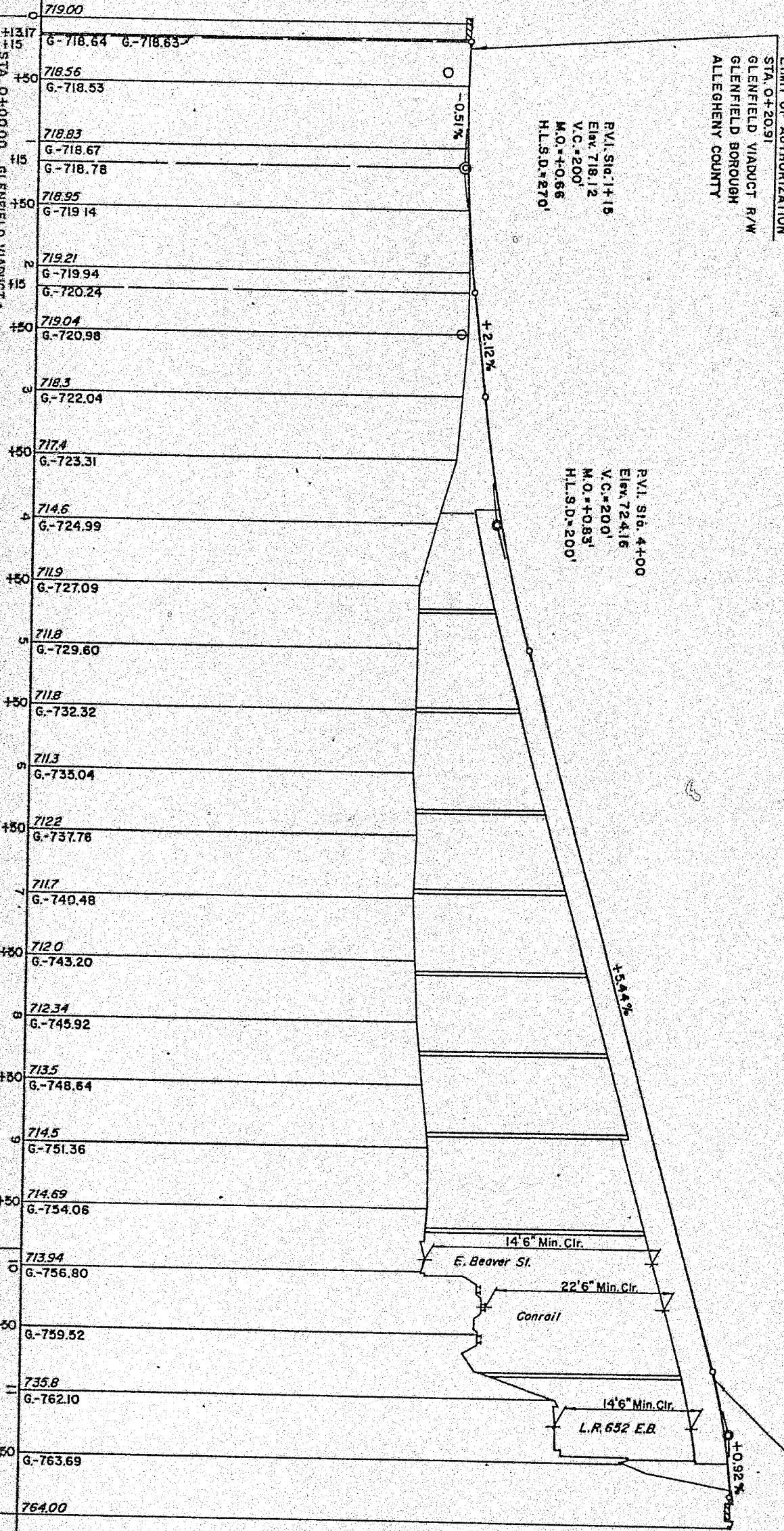
GLENFIELD VIADUCT
 P.I. Sta. 10+80.38
 A=90°34'20\"/>



- 21 COUNTY OF ALLEGHENY
- 22 CRAIN BROS., INC.
- 23 THEODORE F. BECKERT
- 24 H. KLEINMAN, A. KRUGH, JOSEPH WATERS, F.H. ANDERSON, T.M. SHOLES, & J.P. TAYLOR
- 25 CRAIN BROS., INC.
- 26 CONRAIL
- 13 WILLIAM AUGUSTINE & VERNA AUGUSTINE H/W
- 14 GLENFIELD VOLUNTEER FIRE CO., INC.
- 15 CHARLES B. HAUSER & MARY RUTH HAUSER H/W
- 16 BOROUGH OF GLENFIELD, QUAKER VALLEY SCHOOL DISTRICT, & COUNTY OF ALLEGHENY
- 17 HARRY W. PFLUGH & ELIZABETH H. CARPT
- 18 RALPH G. FITCH & ELIZABETH FITCH H/W
- 19 FREDERICK BARONI & RUTH BARONI H/W
- 20 DEBORAH L. FITCH

The Aerial Easement Acquired Between Stations 8+07 And 10+80.38 Includes A Surface Easement Unlimited In Vertical Dimension For The Accommodation Of Piers And Other Appurtenances Plus A Temporary Area For Construction And For Storage Of Materials During Construction.

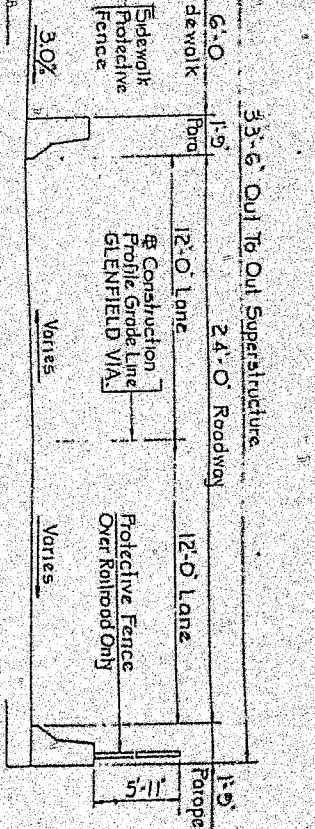
DATUM 650



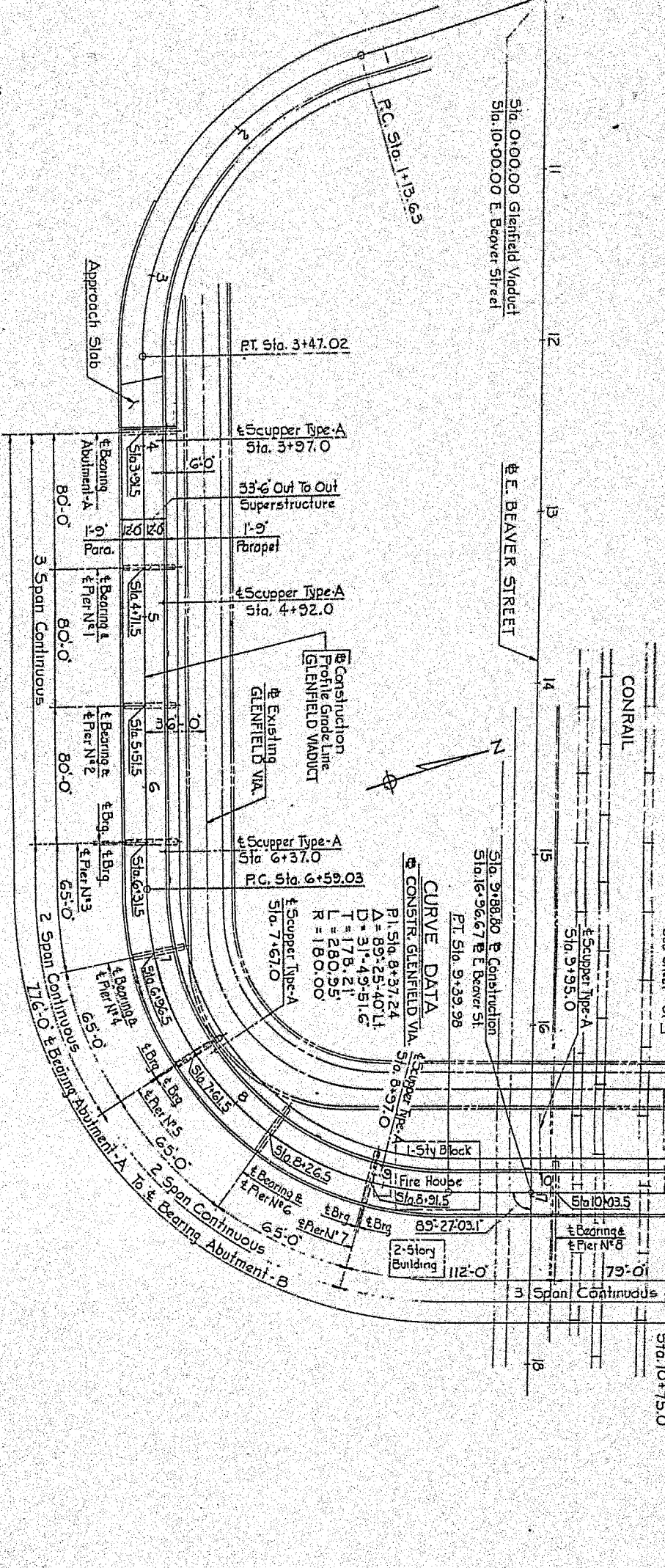
LIMIT OF AUTHORIZATION
 STA. 0+20.91
 GLENFIELD VIADUCT R/W
 GLENFIELD BOROUGH
 ALLEGHENY COUNTY

LIMIT OF AUTHORIZATION
 STA. 10+80.38
 GLENFIELD VIADUCT R/W
 GLENFIELD BOROUGH
 ALLEGHENY COUNTY

| DISTRICT | COUNTY | ROUTE | SHEET |
|----------------|------------|-----------------------|--------|
| 11-0 | ALLEGHENY | GLENFIELD VIADUCT R/W | 5 OF 5 |
| PROJECT NUMBER | IN VISIONS | DATE | BY |
| | | | |

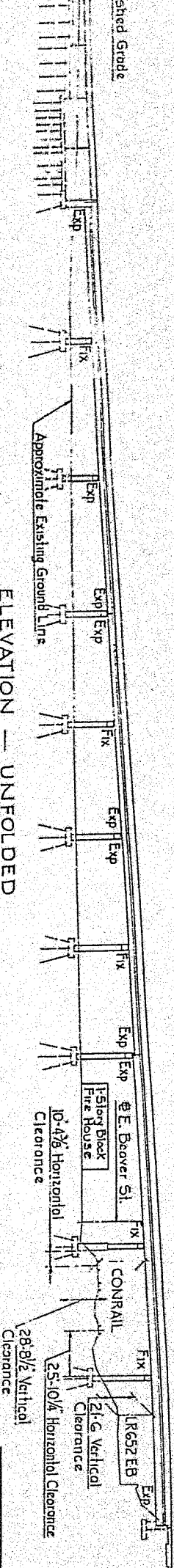


TYPICAL DECK SECTION
No Scale



PLAN
Scale: 1"=40'

ELEVATION - UNFOLDED
Scale: 1"=40'



Approach Slab - Construct Section Adjacent To Abutment Under Stage-1, Phase-1; The Remaining Section Under Stage-1, Phase-2

Sta. 514+15.73 @ Ramps Sta. 11+95.01 @ Constr.

INDEX OF SHEETS

| SHT N° | DRAWING TITLE | SHT N° | DRAWING TITLE |
|--------|---|--------|---|
| 1 | General Plan & Elevation | 21 | Camber & Elevation Schedules - Unit I |
| 2 | General Notes & Slope-Out Sketch | 22 | Forming Plan - Units II & III |
| 3 | Abutment-A, Plan, Elevation & Sections | 23 | Stringer Details - Units II & III |
| 4 | Walls A & B, Plan & Elevation | 24 | Camber & Elevation Schedules - Units II & III |
| 5 | Walls A & B, Sections & Schedule | 25 | Forming Plan - Unit IV |
| 6 | Abut-B & Wall-D, Plan & Elevation | 26 | Stringer Details - Unit IV |
| 7 | Wall-C, Plan, Elevation & Section | 27 | Stringer Splices & Details - Unit IV |
| 8 | Abut-B & Wall-D, Sections & Details | 28 | Camber & Elevation Schedule - Unit IV |
| 9 | Abut-B & Wall-C & D, Details & Schedule | 29 | Deck Plan - Unit I |
| 10 | Pier N° 1 | 30 | Deck Plan - Unit II & III |
| 11 | Pier N° 2 | 31 | Deck Plan - Unit IV |
| 12 | Pier N° 3 | 32 | Deck Details & Bar Schedules |
| 13 | Pier N° 4 | 33 | Miscellaneous Details |
| 14 | Pier N° 5 | 34 | Drainage And Miscellaneous Details |
| 15 | Pier N° 6 | 35 | Boring Logs |
| 16 | Pier N° 7 | 36 | Boring Logs |
| 17 | Pier N° 8 | 37 | Boring Logs |
| 18 | Pier N° 9 | 38 | Boring Logs |
| 19 | Forming Plan - Unit I | | |
| 20 | Stringer Details - Unit I | | |

SUPPLEMENTAL DRAWINGS

| DESCRIPTION | DWG. N° | APP. DATE |
|---|---------|-----------|
| Protective Fence | BC-301A | 3-2-81 |
| Pedestrian Traffic Barrier (Terminal Details) | BC-317A | 3-2-81 |
| Electrical Details | BC-321A | 6-20-80 |
| Lighting Pole Anchorage | BC-322A | 6-20-80 |
| Cement Concrete Slope Wall | BC-331A | 11-4-81 |
| Permanent Metal Deck Forms - Sht. 1 of 2 | BC-332B | 11-4-81 |
| Permanent Metal Deck Forms - Sht. 2 of 2 | BC-332B | 11-4-81 |
| Threaded Insert Anchor Assembly | BC-334A | 3-2-81 |
| Construction & Expansion Joint Details | BC-335A | 11-4-81 |
| Reinforcement Bar Fabrication Details | BC-337A | 3-2-81 |
| Rolling Anchor Systems | BC-337A | 3-2-81 |
| Bridge Drainage - Sheet 1 of 2 | BC-351 | 7-1-70 |
| Bridge Drainage - Sheet 2 of 2 | BC-351 | 7-1-70 |
| Concrete Deck Slab Details | BC-352 | 4-1-71 |
| Steel Girder Details | BC-353 | 4-1-71 |
| Steel Diaphragms | BC-354 | 7-1-70 |
| Bearings - Sheet 1 of 2 | BC-355A | 11-10-80 |
| Bearings (For Curved Steel Beam Bridges) | BC-356A | 11-10-80 |
| Armored Preformed Neoprene Compression Dam - 1 of 3 | BC-363 | 10-20-70 |
| Armored Preformed Neoprene Compression Dam - 2 of 3 | BC-363 | 10-20-70 |
| Armored Preformed Neoprene Compression Dam - 3 of 3 | BC-363 | 10-20-70 |
| Classification Of Framework For Structures | RC-11 | 5-2-83 |
| Backfill At Structures | RC-12 | 5-2-83 |
| Bridge Approach Slab | RC-23 | 5-2-83 |

For GENERAL NOTES See Sheet N° 2

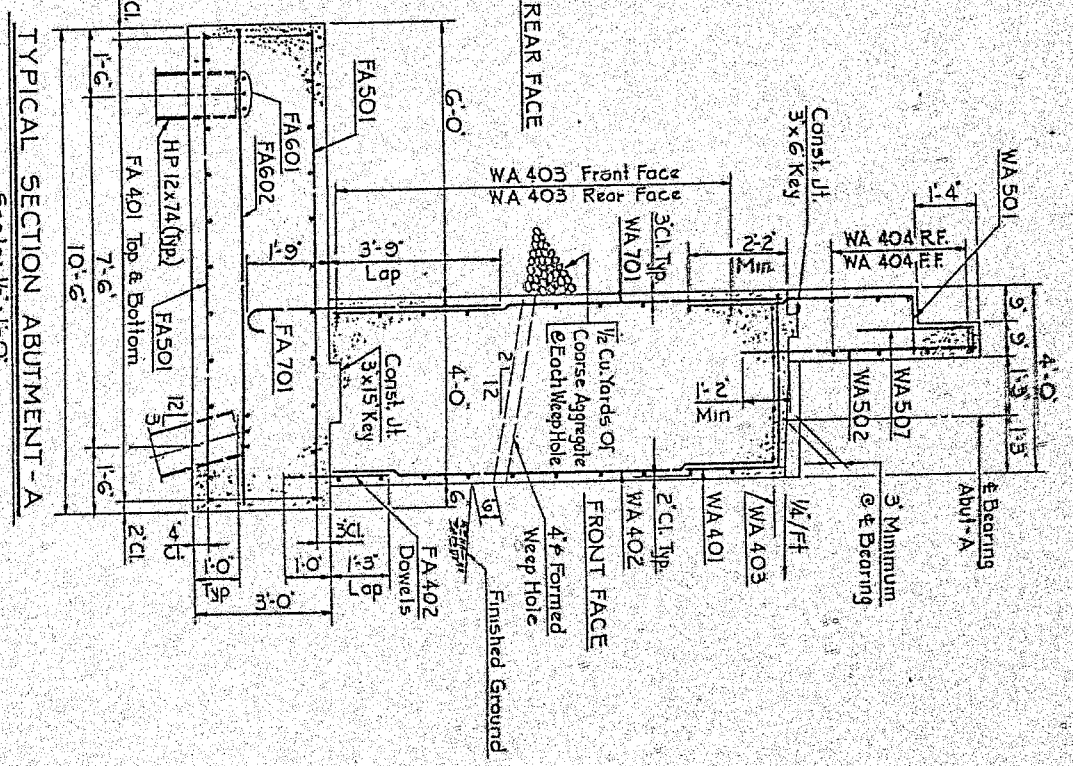
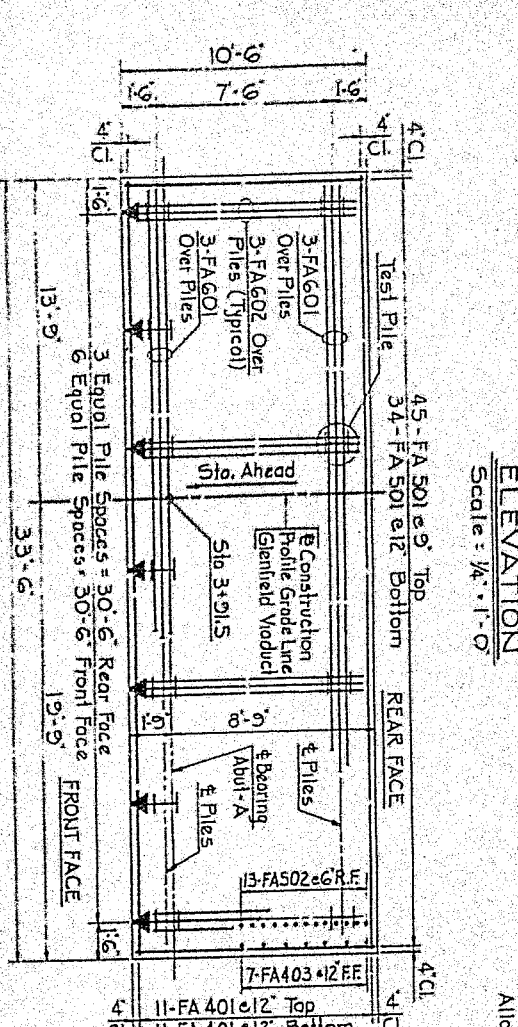
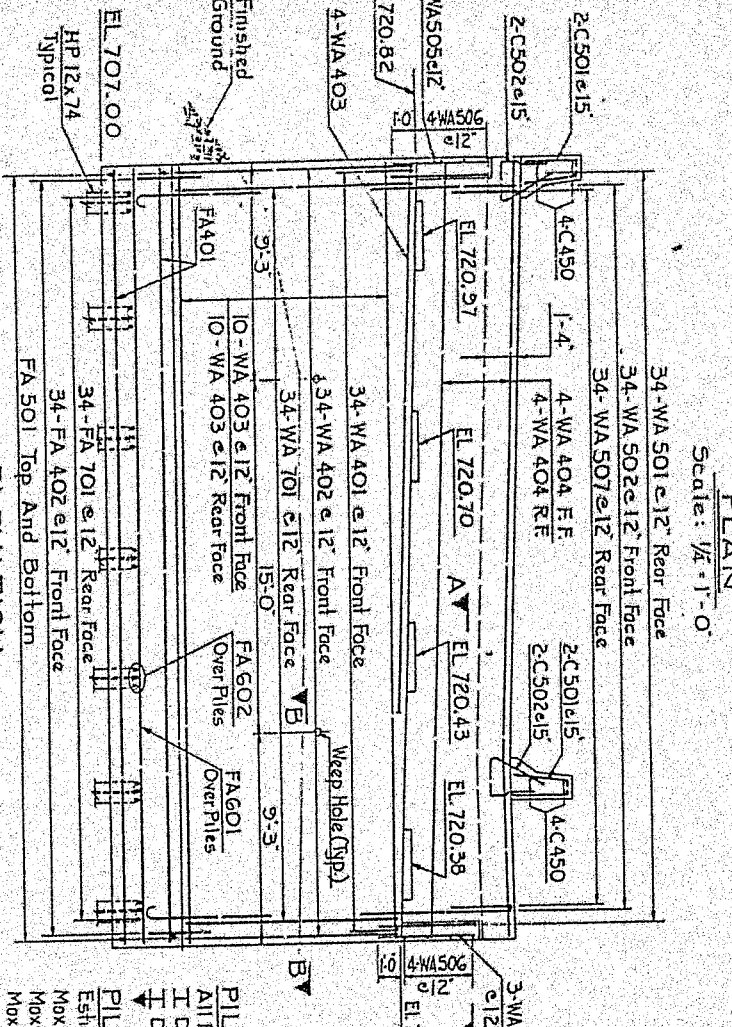
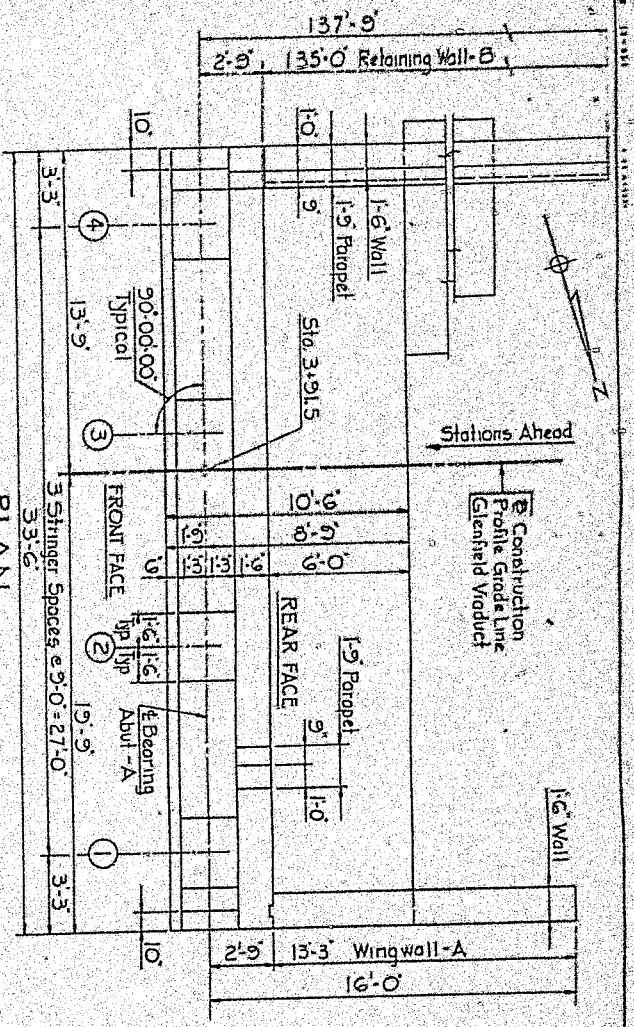
| Mark | Description | By | Chk'd | App'd. | Date |
|------|-------------|----|-------|--------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

Allegheny County
GLENFIELD VIADUCT
GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
GENERAL PLAN & ELEVATION

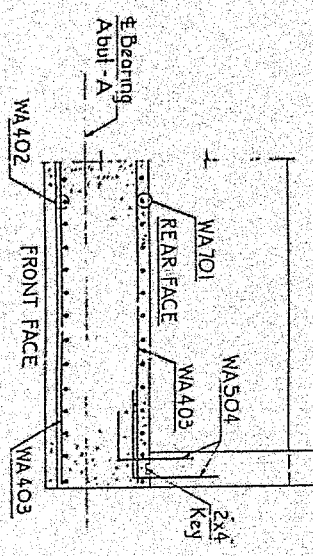
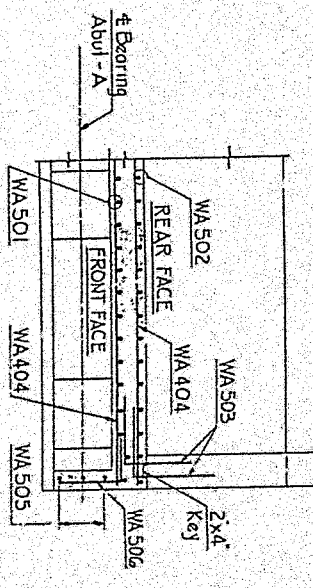
RECOMMENDED _____ SHEET 1 OF _____
BRIDGE ENGINEER _____ S-16201

Date: _____
Rommel Klepper & Kahl
1309 Bridge Street
New Cumberland, Pa.



PILE LEGEND
 All Piles Shall Be HP 12x74
 I Denotes Plumb Piles
 I Denotes Battered Piles 3:12

PILE NOTES
 Estimated Pile Tip Elevation — 661.0
 Maximum Allowable Pile Load At Tip — 98 Ton
 Maximum Allowable Pile Load At Footing — 78 Ton
 Maximum Design Pile Load — 70 Ton
 Allowable Load At Footing Is Reduced Due To Downdrag



| BAR TYPES | | BAR SCHEDULE | | | | |
|-----------|-----------------|--------------|-----|--------------|---------|--|
| MARK | SIZE | TYPE | NO. | LENGTH | REMARKS | |
| ① | 3-6" | Stl. | 22 | 10'-2" | | |
| | 5-6" | Stl. | 34 | 2'-3" | | |
| | 3-0" | Stl. | 7 | 2'-3" | | |
| | 2-0" | Stl. | 13 | 4'-6" | | |
| | 2-6" | Stl. | 79 | 33'-2" | | |
| ② | 6-1" | Stl. | 6 | 33'-2" | | |
| | 3-11" | Stl. | 12 | 10'-2" | | |
| | 1-1" | Stl. | 34 | 7'-2" | | |
| | 7' | Stl. | 34 | 5'-8" | | |
| | 1'-1" | Stl. | 34 | 5'-10" | | |
| | 1'-1" | Stl. | 22 | 6'-0" | | |
| | 6'-0" | Stl. | 8 | 6'-0" | | |
| | 4'-2" | Stl. | 6 | 4'-2" | | |
| | 3'-6" | Stl. | 34 | 3'-6" | | |
| | 2'-11" | Stl. | 34 | 2'-11" | | |
| | 9'-3" to 10'-4" | Stl. | 34 | Vary By 7/8" | | |
| | 1'-2" | Stl. | 8 | 1'-2" | | |
| | 5'-5" | Stl. | 4 | 5'-5" | | |
| | 6'-3" | Stl. | 4 | 6'-3" | | |

* Denotes Epoxy Coated Bars.

| Mark | Description | By | Chkd. | App'd. | Date |
|-----------|-------------|----|-------|--------|------|
| REVISIONS | | | | | |

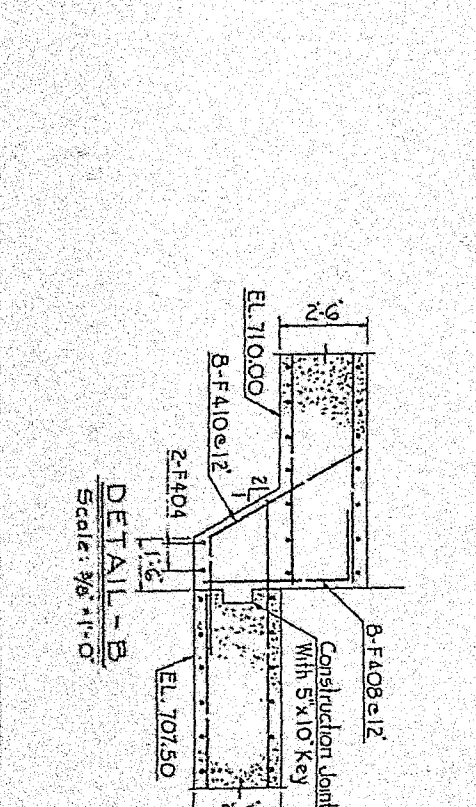
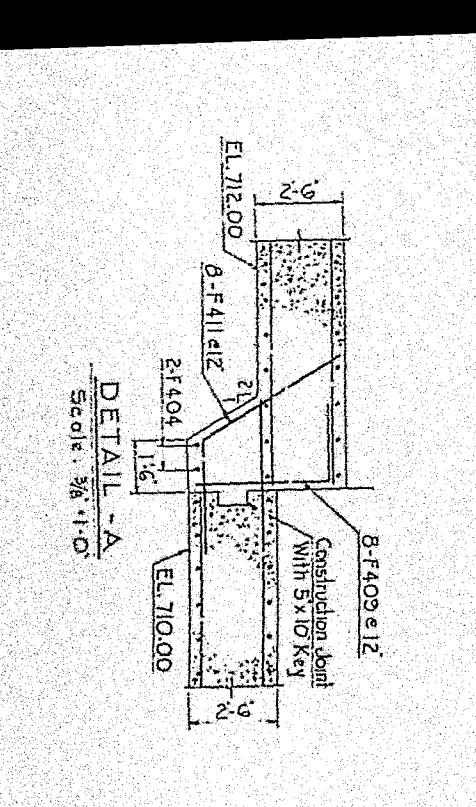
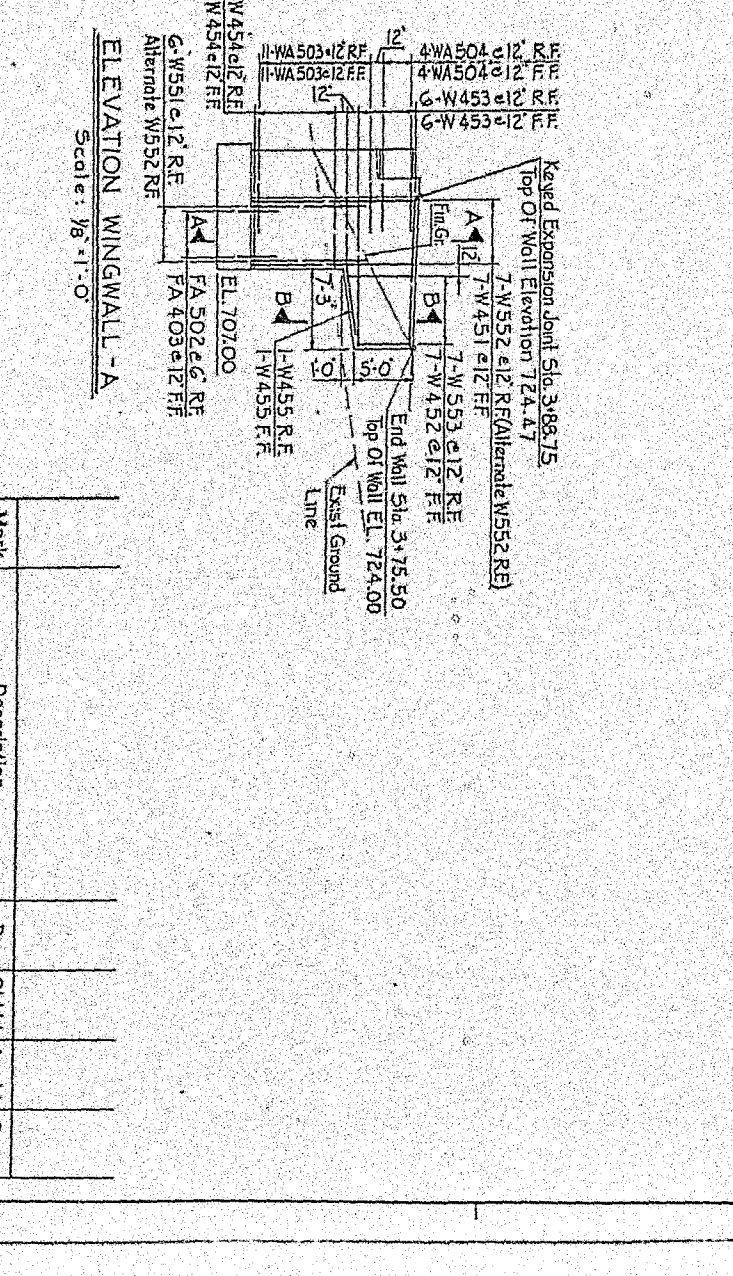
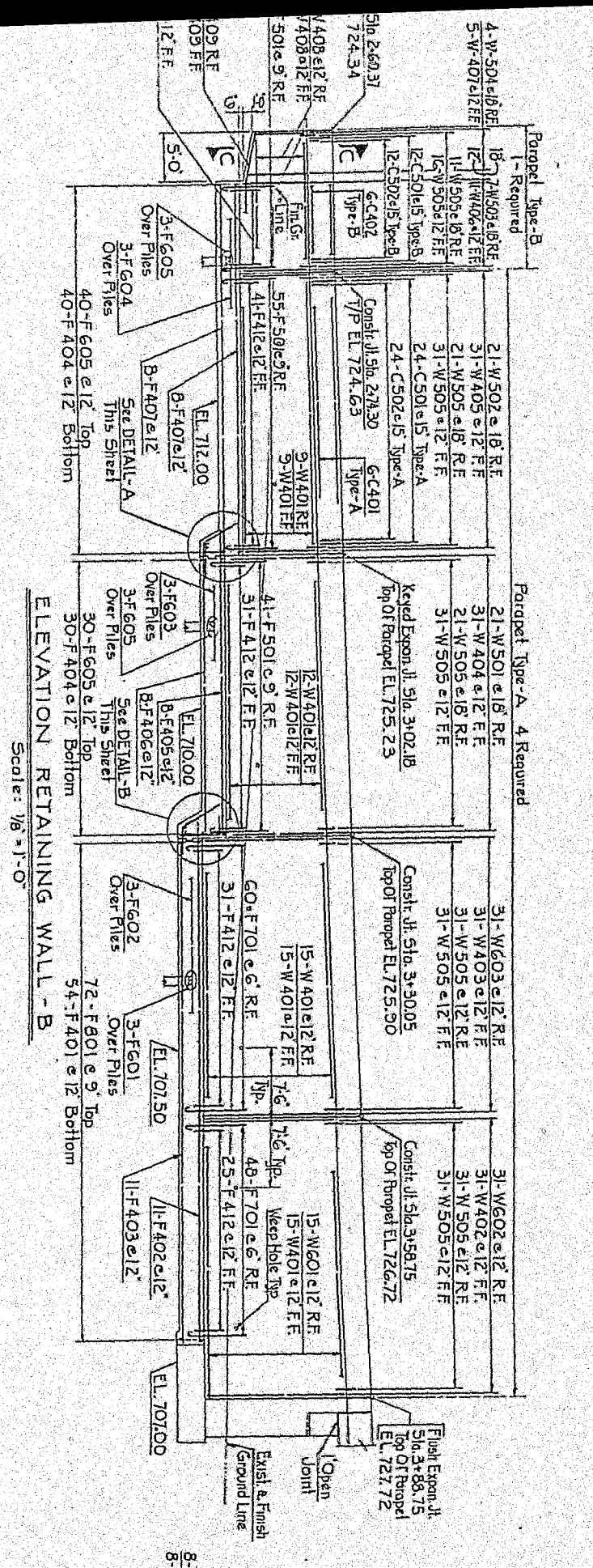
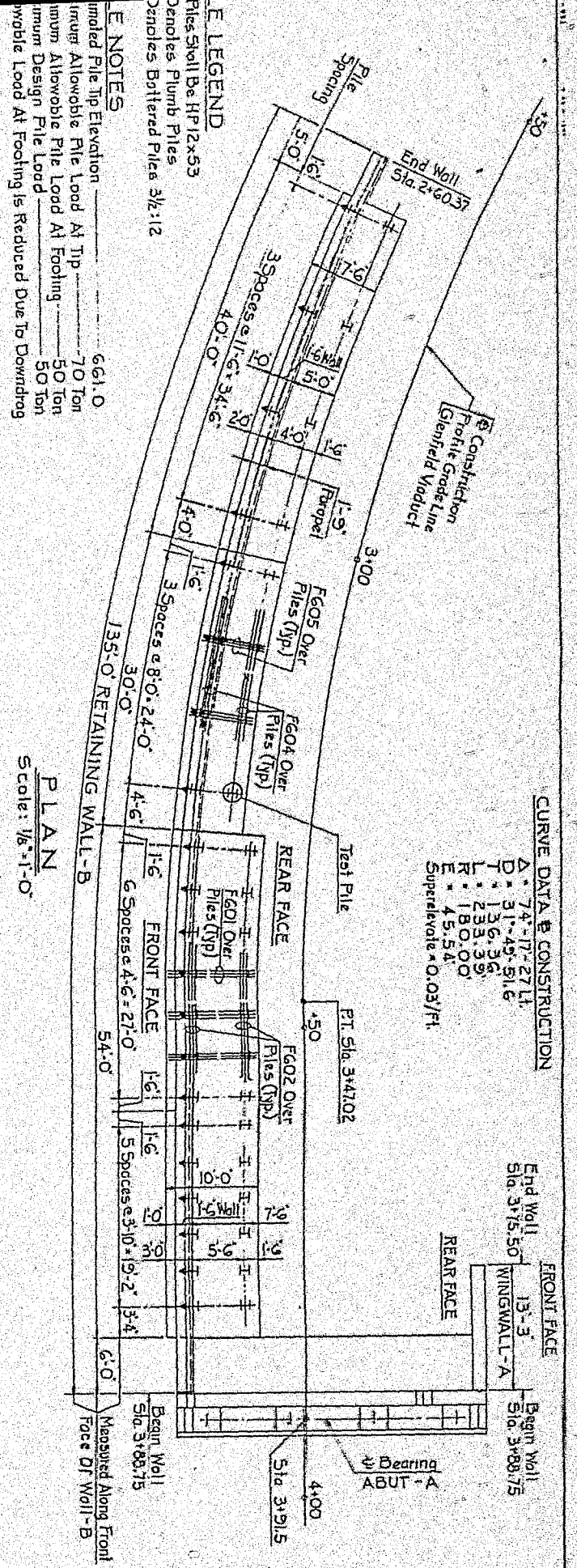
Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
 GLENFIELD VIADUCT

10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
 ABUTMENT A PLAN, ELEV, & SECTIONS

RECOMMENDED
 BRIDGE ENGINEER

SHEET 3 OF 10
 S-16201



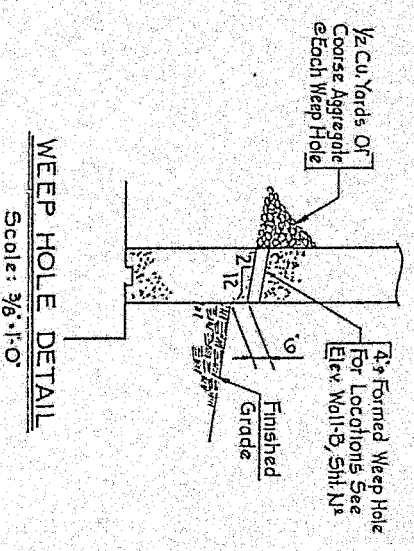
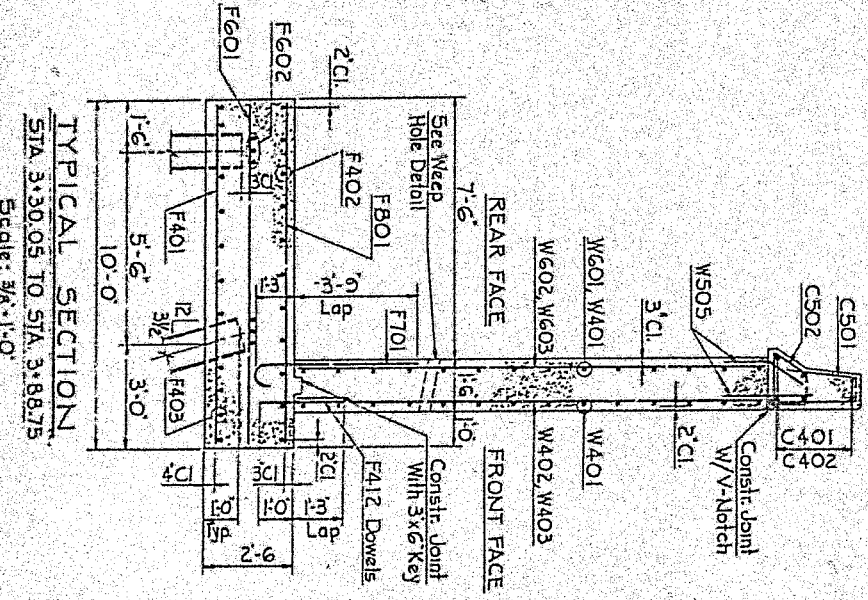
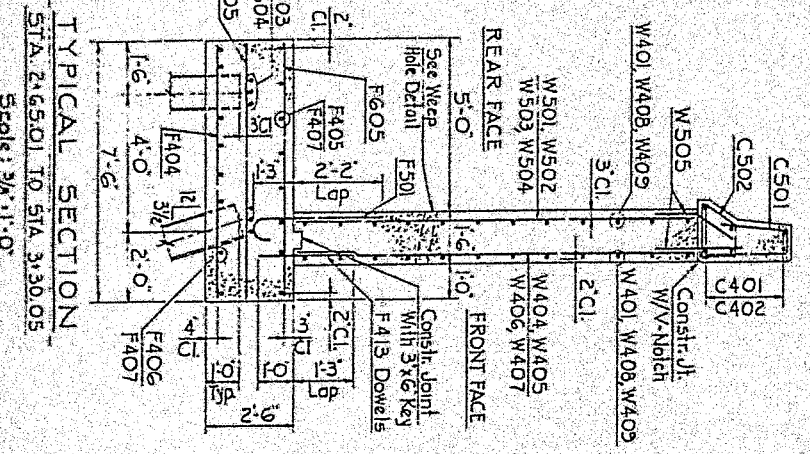
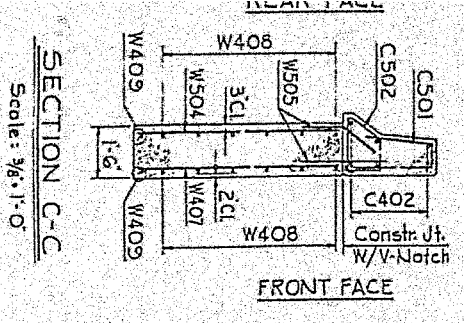
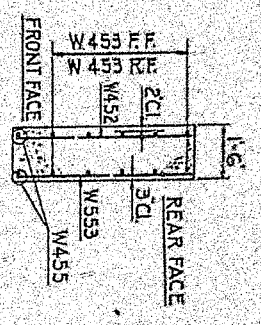
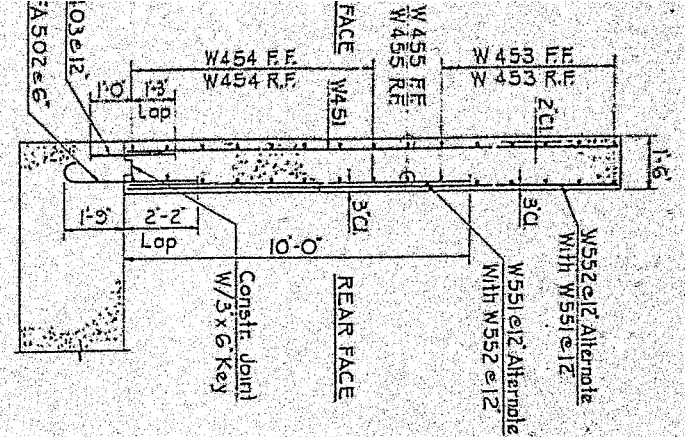
NOTE:
For Sections A-A, B-B, C-C And Typical Wall Sections,
See Sheet No.

Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT
GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
WALLS A & B, PLAN & ELEVATION

RECOMMENDED SHEET 4 OF

| Mark | Description | BY | CHK'd | App'd. | Date |
|-----------|-------------|----|-------|--------|------|
| REVISIONS | | | | | |
| | | | | | |

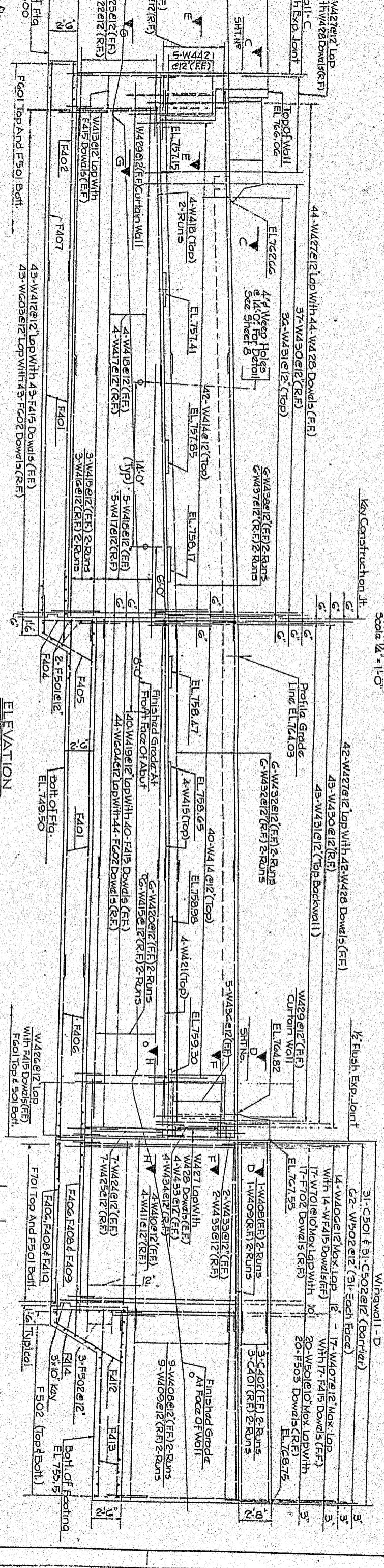
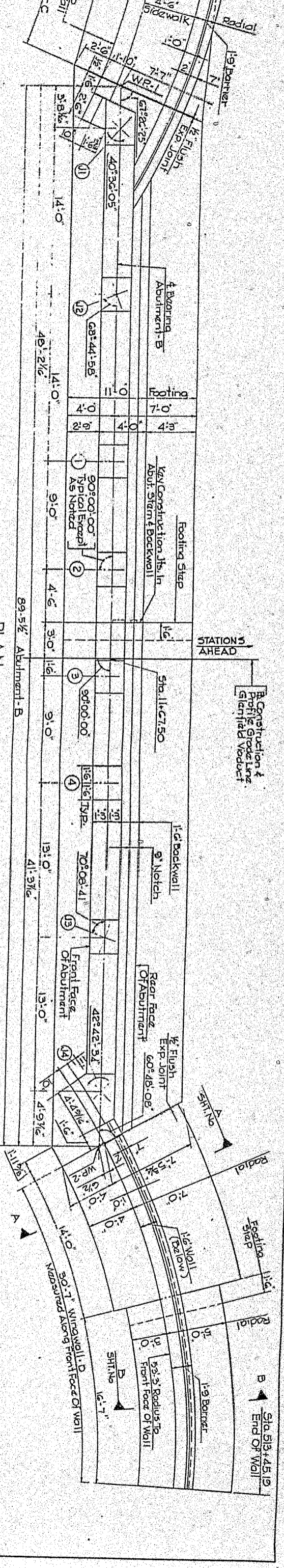


| BAR TYPES | | BAR SCHEDULE | | | | | | | | | |
|-----------|------|--------------|-----|--------|---------|------|------|------|-----|--------------------|----------------|
| MARK | SIZE | TYPE | NO. | LENGTH | REMARKS | MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
| F401 | 4 | Slt. | 54 | 9'-8" | | W401 | 4 | Slt. | 87 | 29'-8" | |
| F402 | 4 | Slt. | 11 | 56'-2" | | W402 | 4 | Slt. | 31 | 13'-10" to 14'-11" | Vary By 1/2" |
| F403 | 4 | Slt. | 11 | 55'-4" | | W403 | 4 | Slt. | 31 | 15'-0" to 13'-10" | Vary By 5/16" |
| F404 | 4 | Slt. | 74 | 7'-2" | | W404 | 4 | Slt. | 31 | 9'-10" to 10'-6" | Vary By 1/4" |
| F405 | 4 | Slt. | 8 | 32'-0" | | W405 | 4 | Slt. | 31 | 7'-4" to 7'-10" | Vary By 3/16" |
| F406 | 4 | Slt. | 8 | 31'-2" | | W406 | 4 | Slt. | 11 | 7'-0" | |
| F407 | 4 | Slt. | 16 | 38'-8" | | W407 | 4 | Slt. | 5 | 5'-6" to 6'-6" | Vary By 3" |
| F408 | 4 | Slt. | 8 | 6'-6" | | W408 | 4 | Slt. | 12 | 14'-8" | |
| F409 | 4 | Slt. | 8 | 6'-0" | | W409 | 4 | Slt. | 2 | 14'-5" | |
| F410 | 4 | Slt. | 8 | 8'-6" | | | | | | | |
| F411 | 4 | Slt. | 4 | 7'-10" | | | | | | | |
| F412 | 4 | Slt. | 139 | 2'-3" | | | | | | | |
| F501 | 5 | Slt. | 2 | 3'-9" | | W451 | 4 | Slt. | 7 | 14'-1" to 14'-4" | Vary By 1/2" |
| F601 | 6 | Slt. | 72 | 9'-8" | | W452 | 4 | Slt. | 7 | 14'-10" to 6'-0" | Vary By 2 3/8" |
| F602 | 6 | Slt. | 6 | 50'-0" | | W453 | 4 | Slt. | 12 | 13'-0" | |
| F603 | 6 | Slt. | 6 | 26'-0" | | W454 | 4 | Slt. | 16 | 5'-8" | |
| F604 | 6 | Slt. | 6 | 36'-6" | | W455 | 4 | Slt. | 2 | 12'-8" | |
| F605 | 6 | Slt. | 94 | 7'-2" | | | | | | | |
| F701 | 7 | Slt. | 108 | 5'-10" | | | | | | | |
| F801 | 8 | Slt. | 72 | 9'-8" | | | | | | | |
| *C401 | 4 | Slt. | 24 | 29'-8" | | | | | | | |
| *C402 | 4 | Slt. | 6 | 14'-8" | | | | | | | |
| *C501 | 5 | Slt. | 108 | 5'-3" | | | | | | | |
| *C502 | 5 | Slt. | 108 | 4'-9" | | | | | | | |

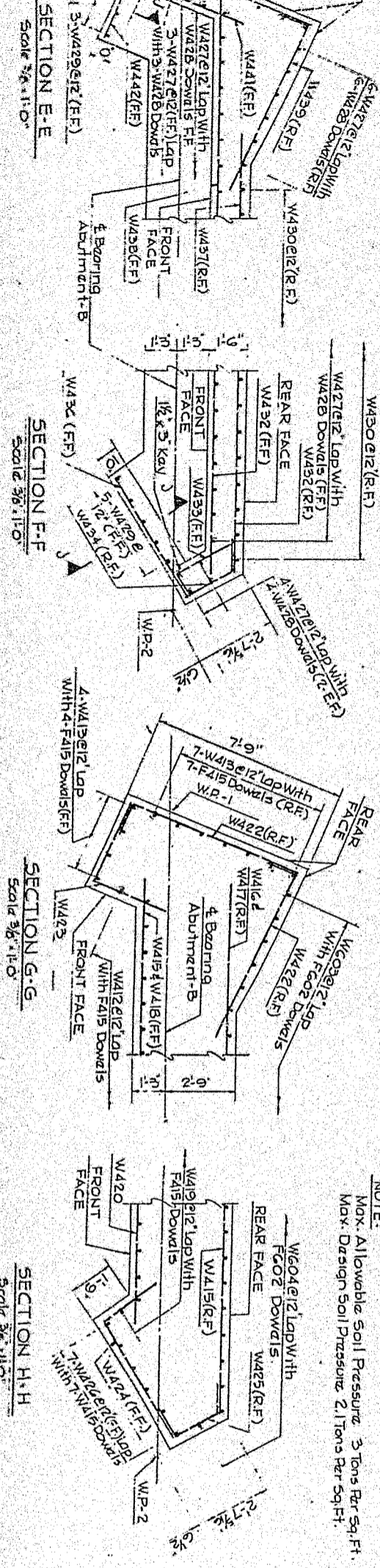
* Denotes Epoxy Coated Bars

| Mark | Description | By | Chk'd. | App'd. | Date |
|------|-------------|----|--------|--------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN
ALLEGHENY COUNTY
GLENFIELD VIADUCT
 GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67
 10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
 WALLS A & B SECTIONS & SCHEDULE
 RECOMMENDED _____



NOTE:
 Max. Allowable Soil Pressure: 3 Tons Per Sq. Ft.
 Max. Design Soil Pressure: 2.1 Tons Per Sq. Ft.



| Mark | Description | By | Chk'd | App'd | Date |
|------|-------------|----|-------|-------|------|
| | REVISIONS | | | | |

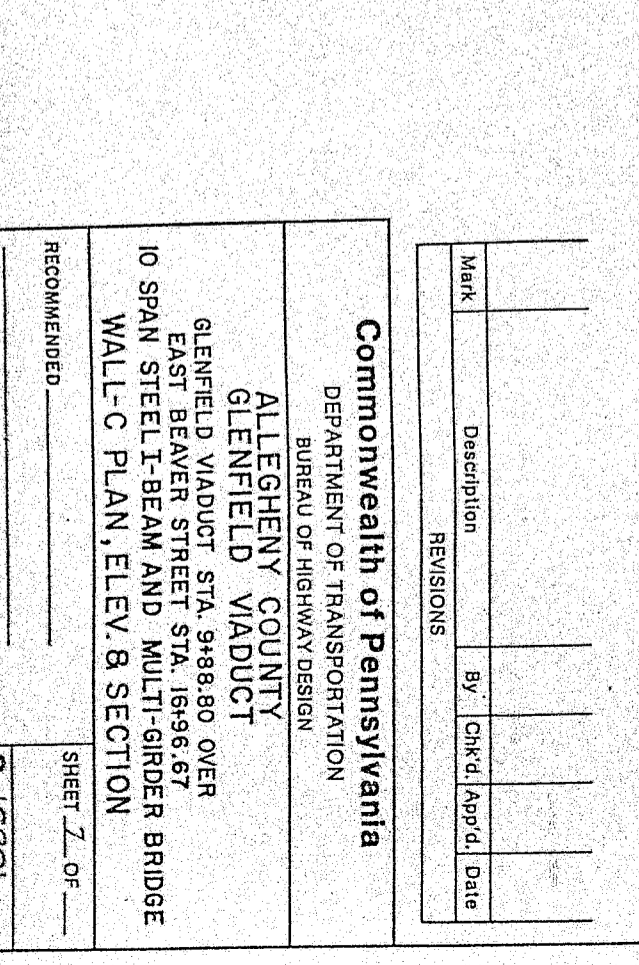
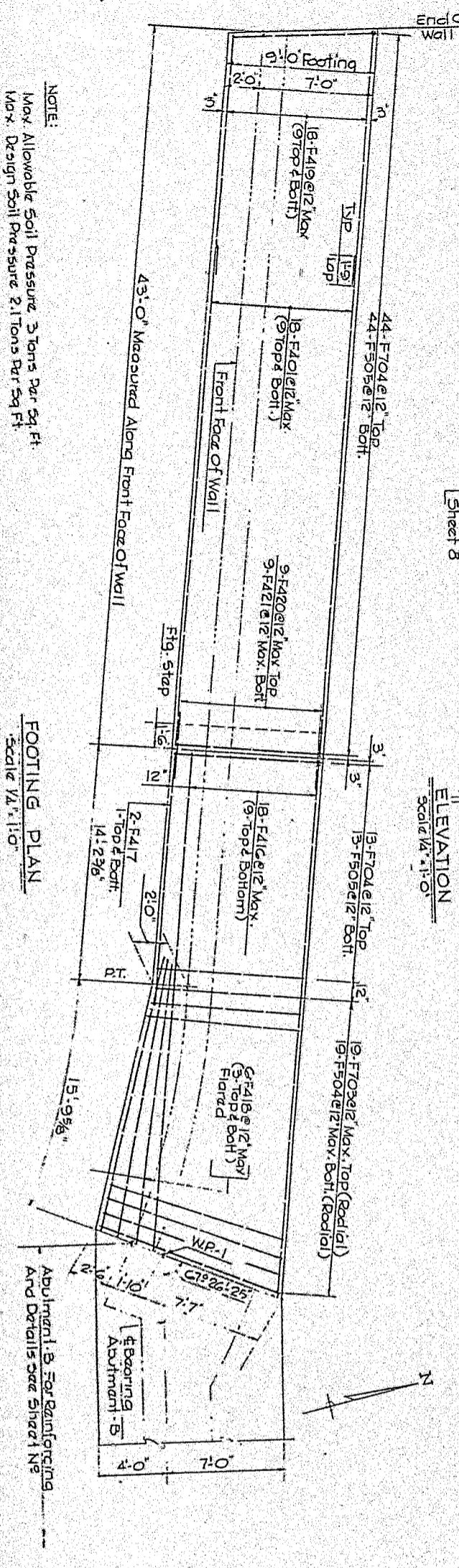
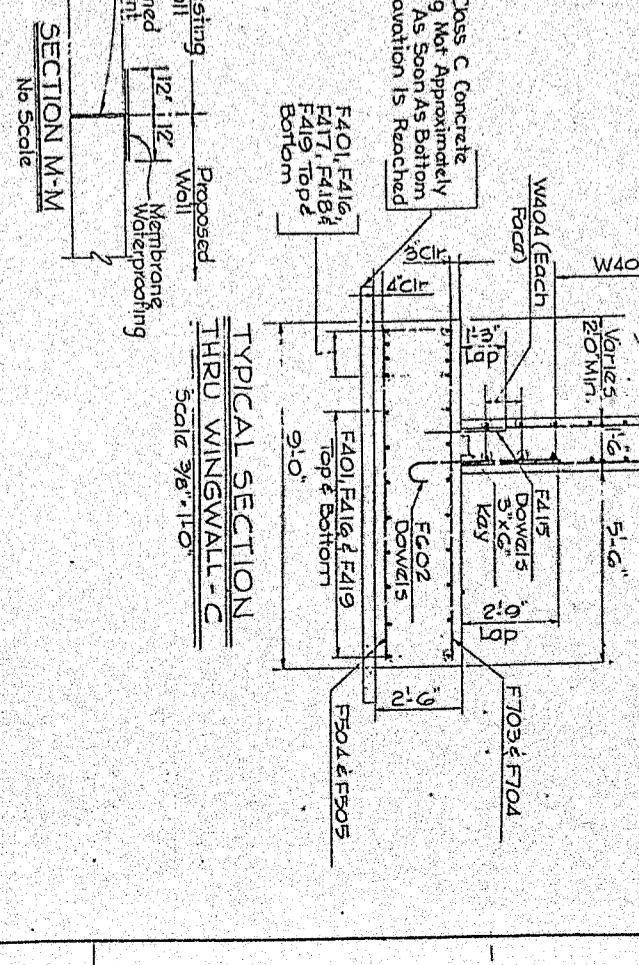
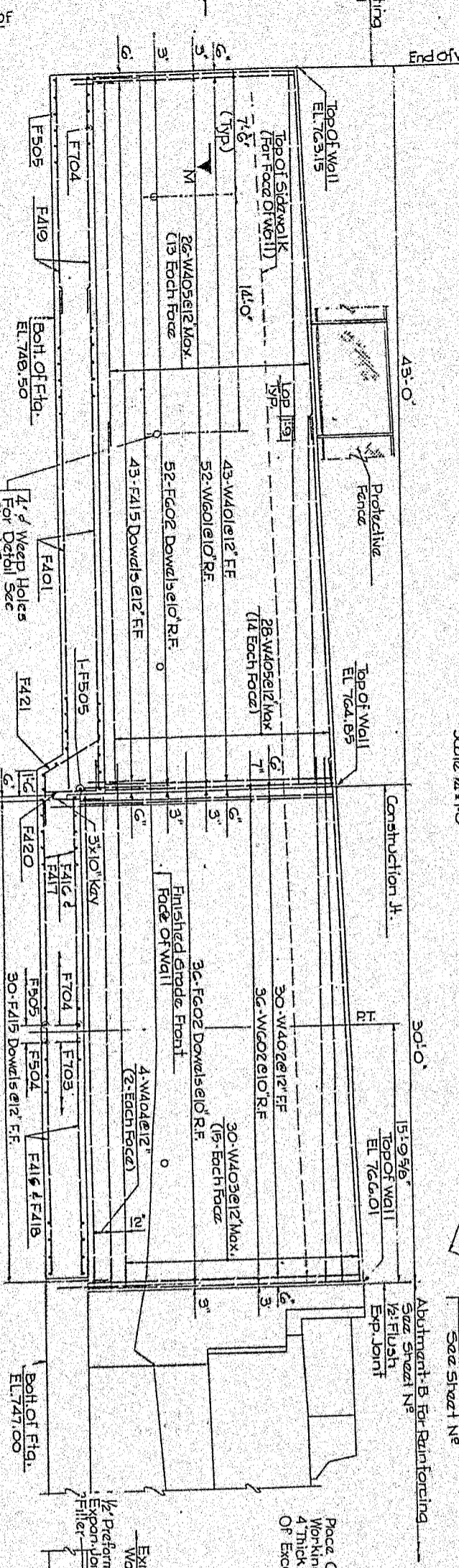
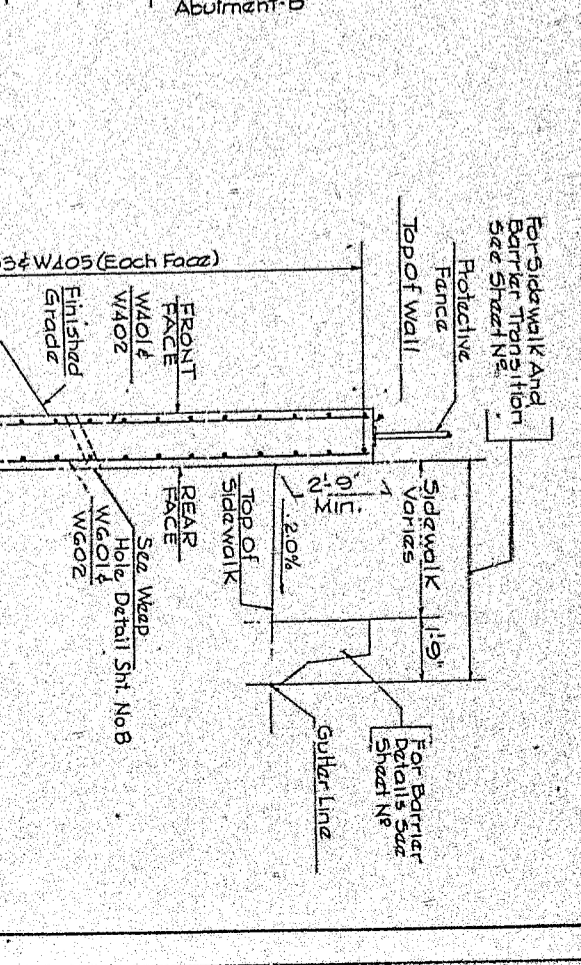
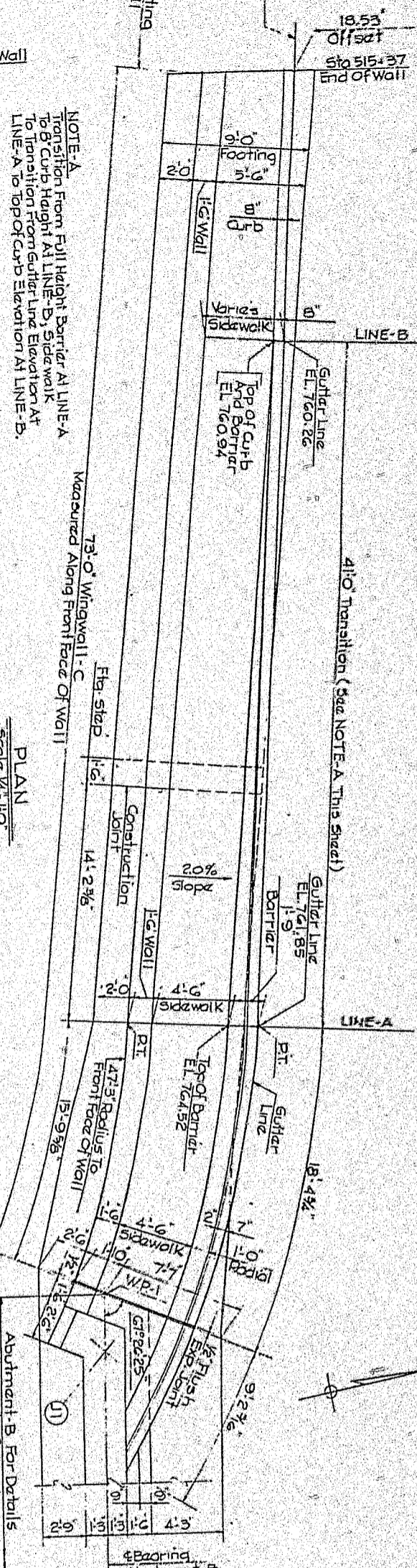
Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT

GLENFIELD VIADUCT STA. 9488.80 OVER
 EAST BEAVER STREET STA. 16496.67
 10 SPAN STEEL I-BEAM AND MULTI-GRIDER BRIDGE
 ABUT-B & WALL-D PLAN & ELEVATION

RECOMMENDED
 BRIDGE ENGINEER
 SHEET 5 OF 5



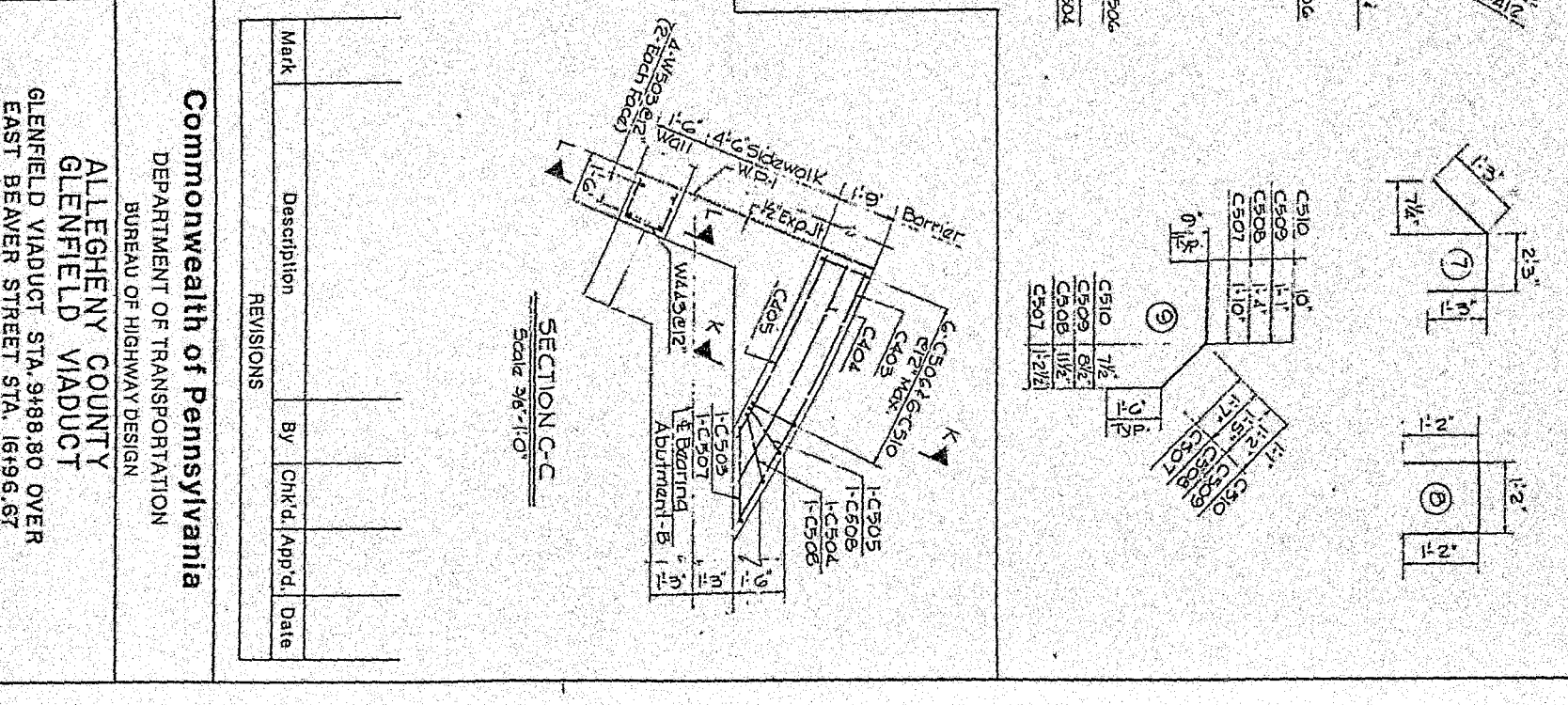
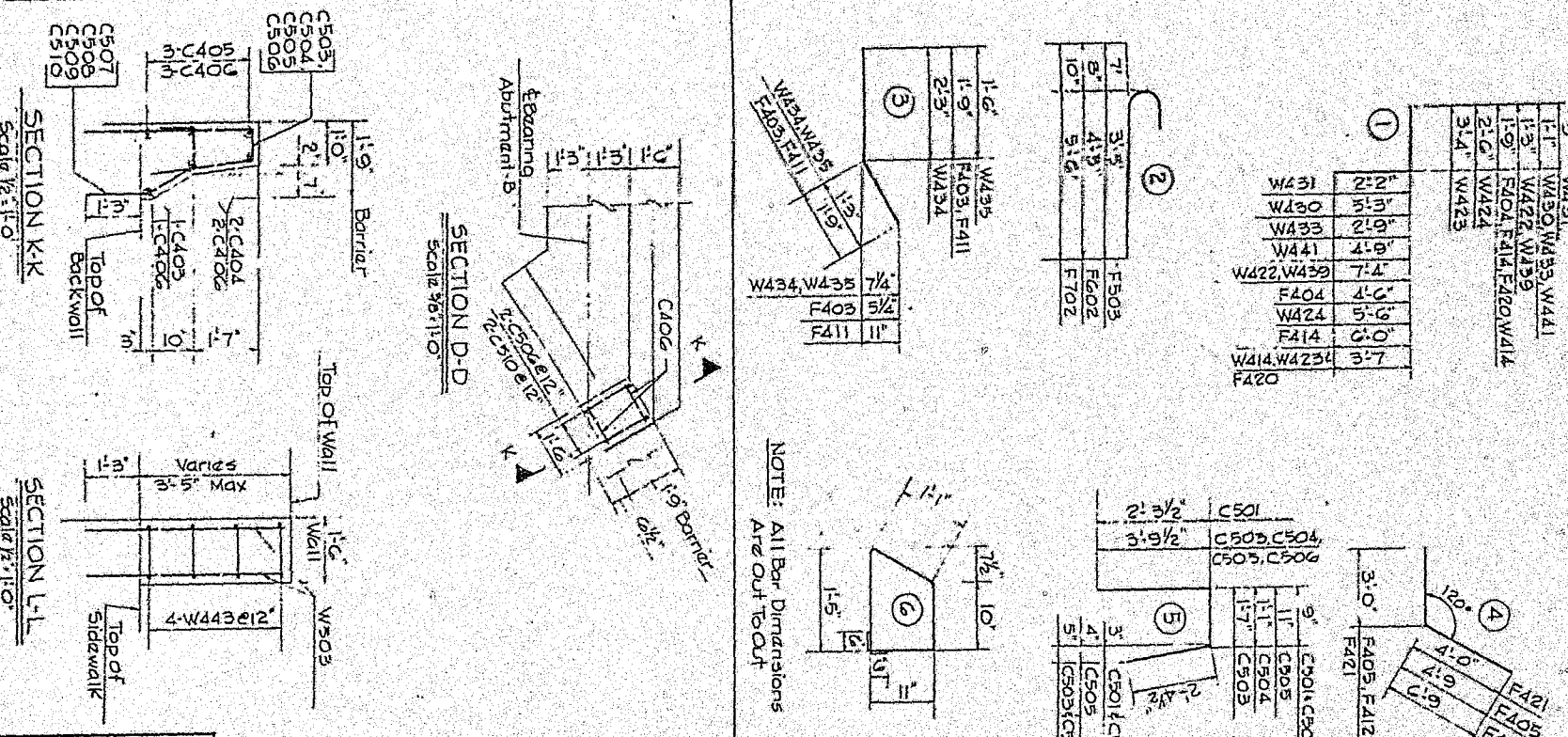
Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN
 ALLEGHENY COUNTY
 GLENFIELD VIADUCT
 GLENFIELD VIADUCT
 EAST BEAVER STREET STA. 16+96.67
 10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
 WALL-C PLAN, ELEV. & SECTION
 RECOMMENDED
 SHEET 2 OF
 S-16201
 BRIDGE ENGINEER

NOTE:
 Max. Allowable Soil Pressure 3 Tons Per Sq. Ft.
 Max. Design Soil Pressure 2.1 Tons Per Sq. Ft.

BAR SCHEDULE

BAR TYPES

| RK | SIZE | TYPE | NUMBER | | | LENGTH | REMARKS | MARK | SIZE | TYPE | NUMBER | | | LENGTH | REMARKS |
|----|------|------|--------|--------|--------|----------------------|------------------|-------|------|------|--------|--------|----------------------|-------------------|---------|
| | | | ABUT-B | WALL-C | WALL-D | | | | | | ABUT-B | WALL-C | WALL-D | | |
| 01 | *4 | Sfr | 52 | 18 | | 30'-0" | | *W428 | *4 | Sfr | 108 | | 2'-3" | | |
| 02 | *4 | Sfr | 13 | | | 20'-0" | | *W479 | *4 | Sfr | 82 | | 5'-5" | | |
| 03 | *4 | Sfr | 3 | | | 20'-0" | | *W450 | *4 | Sfr | 79 | | 2'-7" | | |
| 04 | *4 | Sfr | 13 | | | 21'-3" | | *W431 | *4 | Sfr | 24 | | 2'-2" | | |
| 05 | *4 | Sfr | 4 | | | 7'-9" | | *W432 | *4 | Sfr | 6 | | 3'-10" | | |
| 06 | *4 | Sfr | 13 | | | 17'-6" | | *W433 | *4 | Sfr | 4 | | 3'-6" | | |
| 07 | *4 | Sfr | 13 | | | 14'-9" | | *W434 | *4 | Sfr | 3 | | 2'-9" | | |
| 08 | *4 | Sfr | 8 | | | 17'-0" to 18'-9" | Vary Ea. By 3" | *W435 | *4 | Sfr | 5 | | 5'-6" | | |
| 09 | *4 | Sfr | 8 | | | 17'-0" to 18'-9" | Vary Ea. By 3" | *W436 | *4 | Sfr | 12 | | 2'-10" | | |
| 10 | *4 | Sfr | 8 | | | 15'-0" to 16'-9" | Vary Ea. By 3" | *W437 | *4 | Sfr | 12 | | 2'-10" | | |
| 11 | *4 | Sfr | 2 | | | 3'-6" | | *W438 | *4 | Sfr | 6 | | 8'-7" | | |
| 12 | *4 | Sfr | 4 | | | 9'-9" | | *W439 | *4 | Sfr | 1 | | 7'-4" | | |
| 13 | *4 | Sfr | 13 | | | 15'-4" to 17'-4" | Vary Ea. By 3" | *W440 | *4 | Sfr | 6 | | 5'-10" | | |
| 14 | *4 | Sfr | 9 | | | 7'-9" | | *W441 | *4 | Sfr | 6 | | 3'-7" | | |
| 15 | *4 | Sfr | 97 | | | 21'-3" | | *W442 | *4 | Sfr | 5 | | 3'-7" | | |
| 16 | *4 | Sfr | 18 | | | 30'-0" to 32'-4" | Vary Ea. By 3/2" | *W443 | *4 | Sfr | 4 | | 3'-6" | | |
| 17 | *4 | Sfr | 2 | | | 15'-6" | | | | | | | | | |
| 18 | *4 | Sfr | 6 | | | 17'-0" | | | | | | | | | |
| 19 | *4 | Sfr | 18 | | | 14'-3" to 14'-11" | Vary Ea. By 1" | | | | | | | | |
| 20 | *4 | Sfr | 9 | | | 5'-3" | | | | | | | | | |
| 21 | *4 | Sfr | 9 | | | 7'-0" | | | | | | | | | |
| 01 | *5 | Sfr | 9C | | | 10'-6" | | W501 | *5 | Sfr | 52 | | 9'-3" to 9'-10 1/2" | Vary Ea. By 3/8" | |
| 02 | *5 | Sfr | 88 | | | 7'-6" | | *W502 | *5 | Sfr | 4 | | 2'-6" | | |
| 03 | *5 | Sfr | | | | 4'-0" | | *W503 | *5 | Sfr | | | 3'-3" | | |
| 04 | *5 | Sfr | 19 | | | 8'-6" to 11'-6" | Vary Ea. By 2" | | | | | | | | |
| 05 | *5 | Sfr | 58 | | | 8'-6" | | | | | | | | | |
| 01 | *6 | Sfr | 92 | | | 10'-6" | | W601 | *6 | Sfr | 52 | | 12'-0" to 15'-7 1/8" | Vary Each By 3/8" | |
| 02 | *6 | Sfr | 87 | | | 4'-11" | | W602 | *6 | Sfr | 3C | | 15'-2" to 16'-3 1/8" | Vary Each By 3/8" | |
| 03 | *6 | Sfr | | | | 8'-6" to 11'-6" | Vary Ea. By 2" | W603 | *6 | Sfr | 43 | | 6'-11" to 8'-3 3/8" | Vary Each By 3/8" | |
| 04 | *6 | Sfr | | | | 8'-6" | | W604 | *6 | Sfr | 44 | | 5'-10 1/2" to 6'-9" | Vary Each By 1/4" | |
| 01 | *7 | Sfr | | | | 10'-6" | | | | | | | | | |
| 02 | *7 | Sfr | 2 | | | 6'-4" | | | | | | | | | |
| 03 | *7 | Sfr | 19 | | | 8'-6" to 11'-6" | Vary Ea. By 2" | | | | | | | | |
| 04 | *7 | Sfr | 57 | | | 8'-6" | | | | | | | | | |
| 01 | *7 | Sfr | | | | 11'-1" to 13'-8" | Vary Ea. By 1/2" | W701 | *7 | Sfr | 17 | | 12'-8" to 13'-2" | Vary Ea. By 3/8" | |
| 02 | *7 | Sfr | 43 | | | 15'-0 1/2" to 16'-3" | Vary Ea. By 1/2" | | | | | | | | |
| 03 | *7 | Sfr | 30 | | | 3'-1'-6" | | | | | | | | | |
| 04 | *7 | Sfr | 30 | | | 29'-6" | | | | | | | | | |
| 05 | *7 | Sfr | 4 | | | 22'-3" | | | | | | | | | |
| 06 | *7 | Sfr | 54 | | | 22'-3" | | | | | | | | | |
| 07 | *7 | Sfr | | | | 12'-8" to 13'-2 1/2" | Vary Ea. By 1/2" | | | | | | | | |
| 08 | *7 | Sfr | | | | 9'-2" to 9'-10" | Vary Ea. By 1/2" | | | | | | | | |
| 09 | *7 | Sfr | | | | 16'-4" | | | | | | | | | |
| 10 | *7 | Sfr | | | | 12'-4" | | | | | | | | | |
| 11 | *7 | Sfr | | | | 13'-8" | | | | | | | | | |
| 12 | *7 | Sfr | 43 | | | 7'-0" to 8'-3 3/4" | Vary Ea. By 3/8" | | | | | | | | |
| 13 | *7 | Sfr | 11 | | | 7'-0" | | | | | | | | | |
| 14 | *7 | Sfr | 82 | | | 5'-4" | | | | | | | | | |
| 15 | *7 | Sfr | 22 | | | 22'-10" | | | | | | | | | |
| 16 | *7 | Sfr | 13 | | | 20'-0" | | | | | | | | | |
| 17 | *7 | Sfr | 9 | | | 21'-0" | | | | | | | | | |
| 18 | *7 | Sfr | 17 | | | 21'-0" | | | | | | | | | |
| 19 | *7 | Sfr | 40 | | | 5'-10 1/2" to 6'-8" | Vary Ea. By 1/4" | | | | | | | | |
| 20 | *7 | Sfr | 12 | | | 20'-6" | Vary Ea. By 1/2" | | | | | | | | |
| 21 | *7 | Sfr | 16 | | | 19'-0" to 22'-0" | Vary Ea. By 1/2" | | | | | | | | |
| 22 | *7 | Sfr | 8 | | | 8'-7" | | | | | | | | | |
| 23 | *7 | Sfr | 8 | | | 7'-0" | | | | | | | | | |
| 24 | *7 | Sfr | 7 | | | 8'-0" | | | | | | | | | |
| 25 | *7 | Sfr | 7 | | | 4'-9" | | | | | | | | | |
| 26 | *7 | Sfr | 7 | | | 2'-9" | | | | | | | | | |
| 27 | *7 | Sfr | 7 | | | 5'-7" | | | | | | | | | |



| Mark | Description | By | Chkd | App'd | Date |
|------|-------------|----|------|-------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

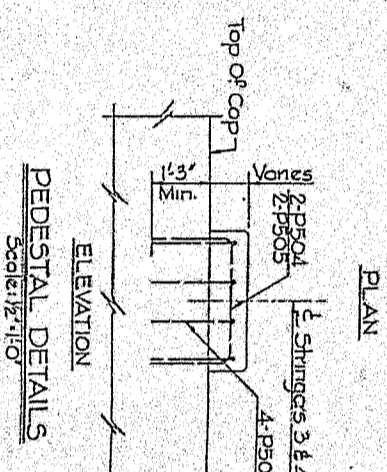
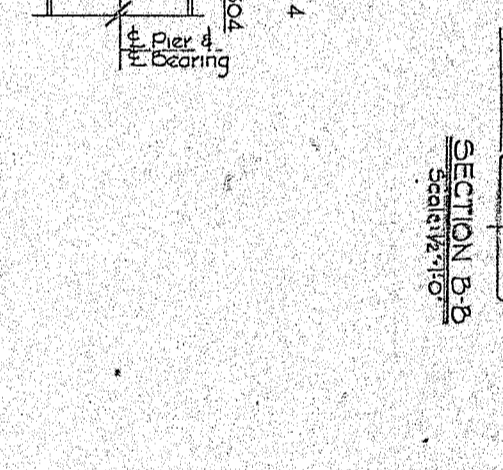
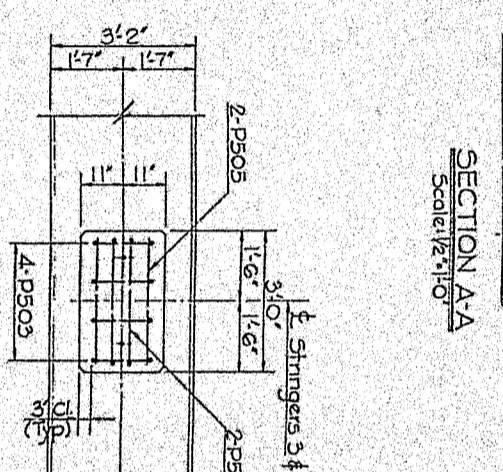
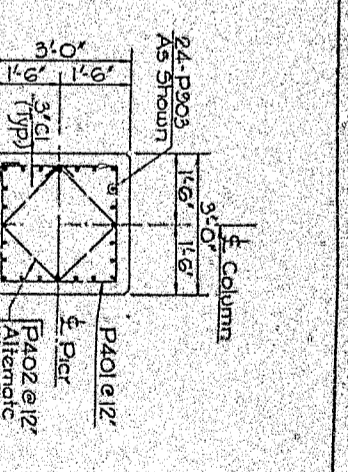
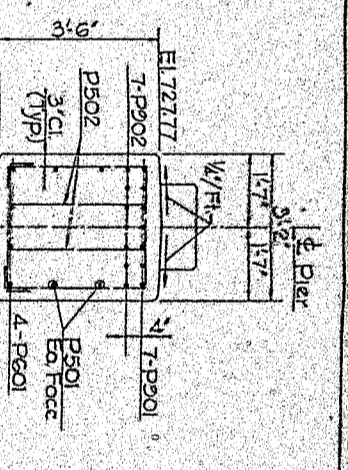
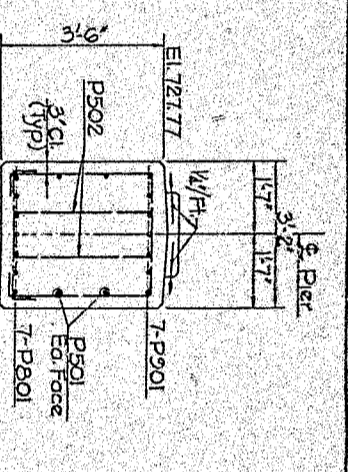
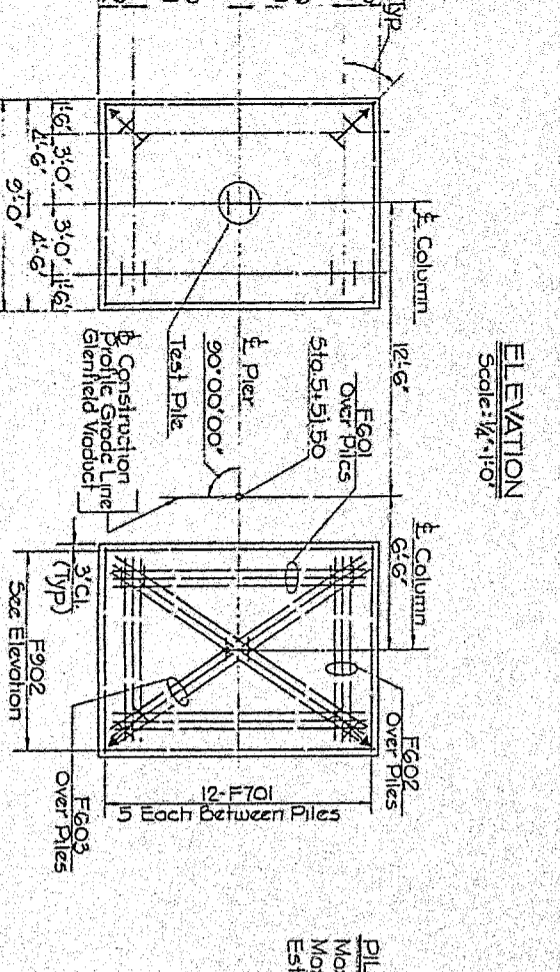
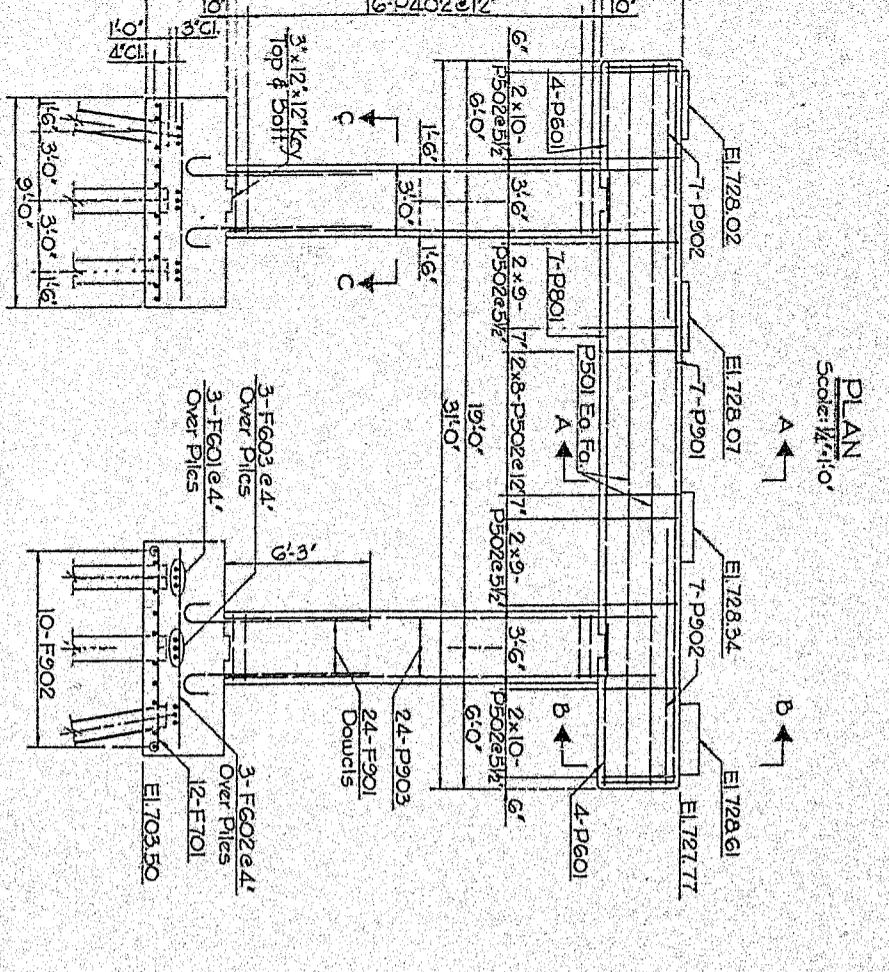
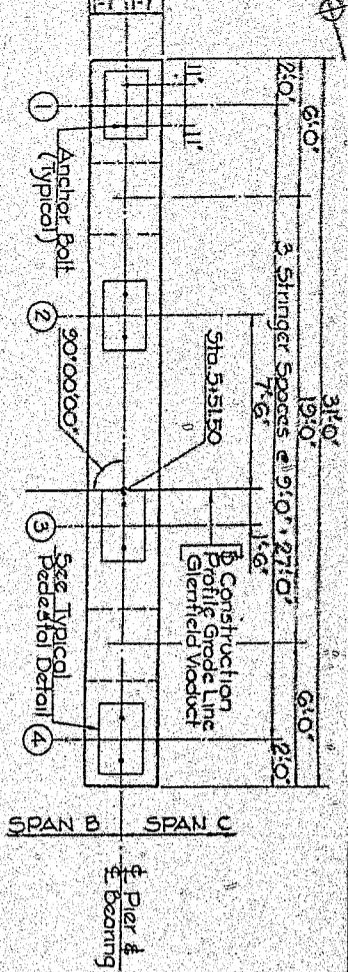
ALLEGHENY COUNTY
GLENFIELD VIADUCT

GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+95.67

IO SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
 ABUT-B & WALLS C & D DETAILS & SCHEDULE

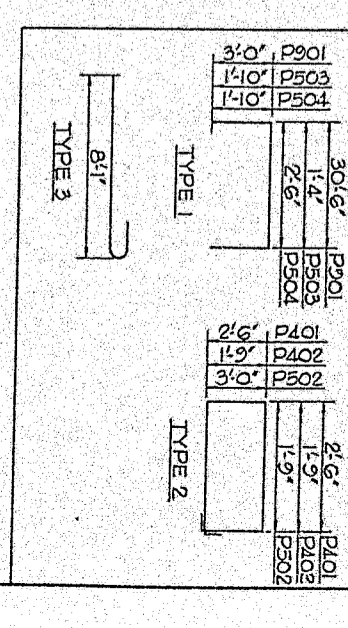
RECOMMENDED SHEET 2 OF

NOTE:
 * Denotes Epoxy Coated Bars



PILE NOTES
Maximum Allowable Pile Load 23 Tons
Maximum Design Pile Load 89 Tons
Estimated Pile Tip El. 665.00

| MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|------|------|------|-----|---------|---------|
| P401 | 4 | 2 | 34 | 10'-0" | |
| P402 | 4 | 2 | 32 | 7'-9" | |
| P501 | 5 | 51r | 4 | 30'-6" | |
| P502 | 5 | 2 | 92 | 9'-8" | |
| P503 | 5 | 1 | 8 | 5'-0" | |
| P504 | 5 | 1 | 4 | 6'-2" | |
| P505 | 5 | 51r | 4 | 2'-6" | |
| P601 | 6 | 31r | 6 | 6'-9" | |
| P901 | 8 | 51r | 7 | 20'-11" | |
| P902 | 9 | 51r | 7 | 36'-6" | |
| P903 | 9 | 51r | 14 | 10'-9" | |
| F701 | 6 | 51r | 12 | 11'-0" | |
| F702 | 6 | 51r | 12 | 7'-0" | |
| F703 | 6 | 51r | 12 | 13'-0" | |
| F701 | 7 | 51r | 24 | 8'-6" | |
| F901 | 9 | 3 | 48 | 9'-4" | |
| F902 | 9 | 51r | 20 | 11'-6" | |



| Mark | Description | By | CHK'd | App'd | Date |
|-----------|-------------|----|-------|-------|------|
| REVISIONS | | | | | |

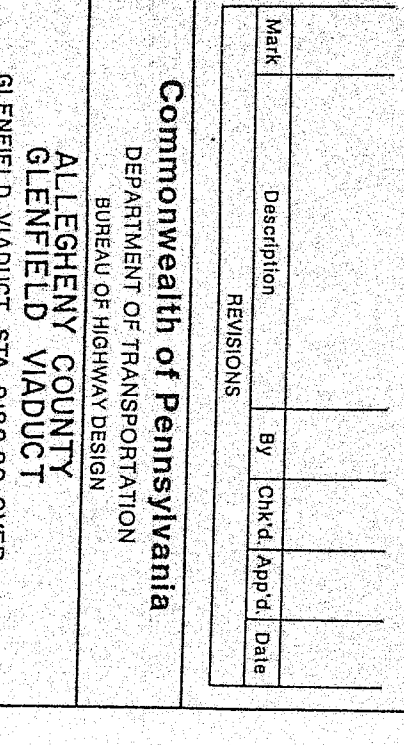
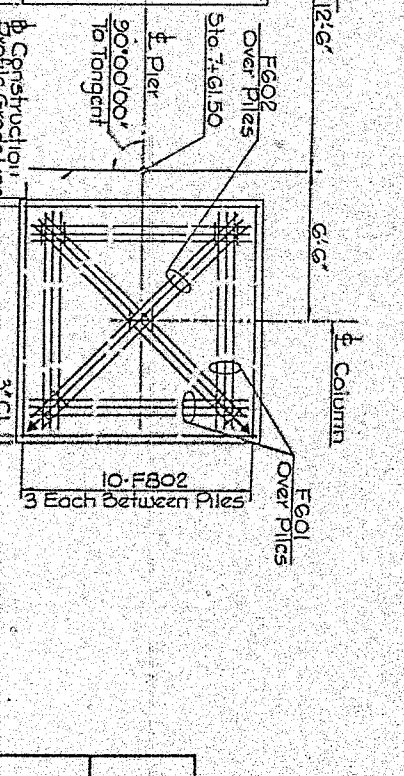
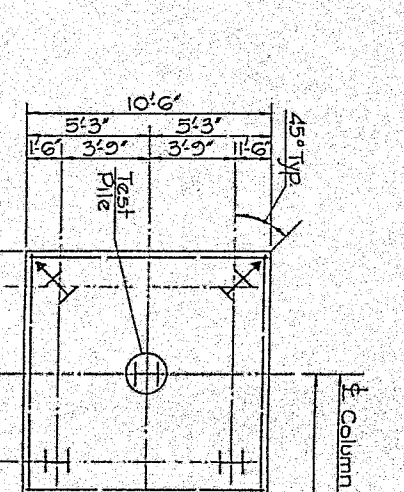
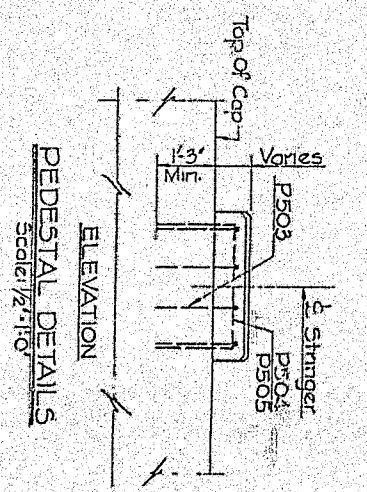
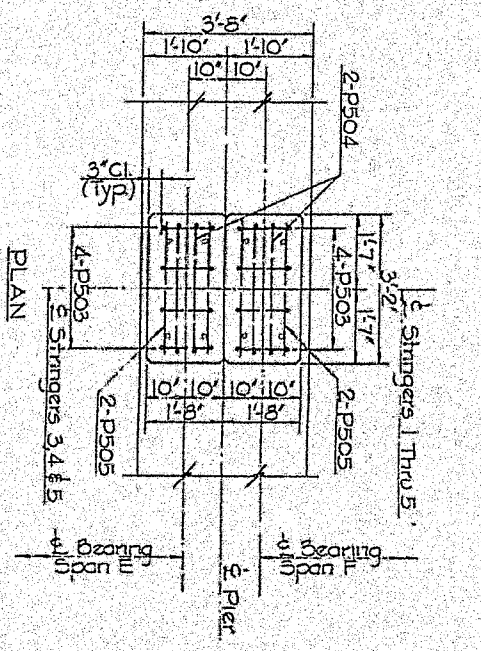
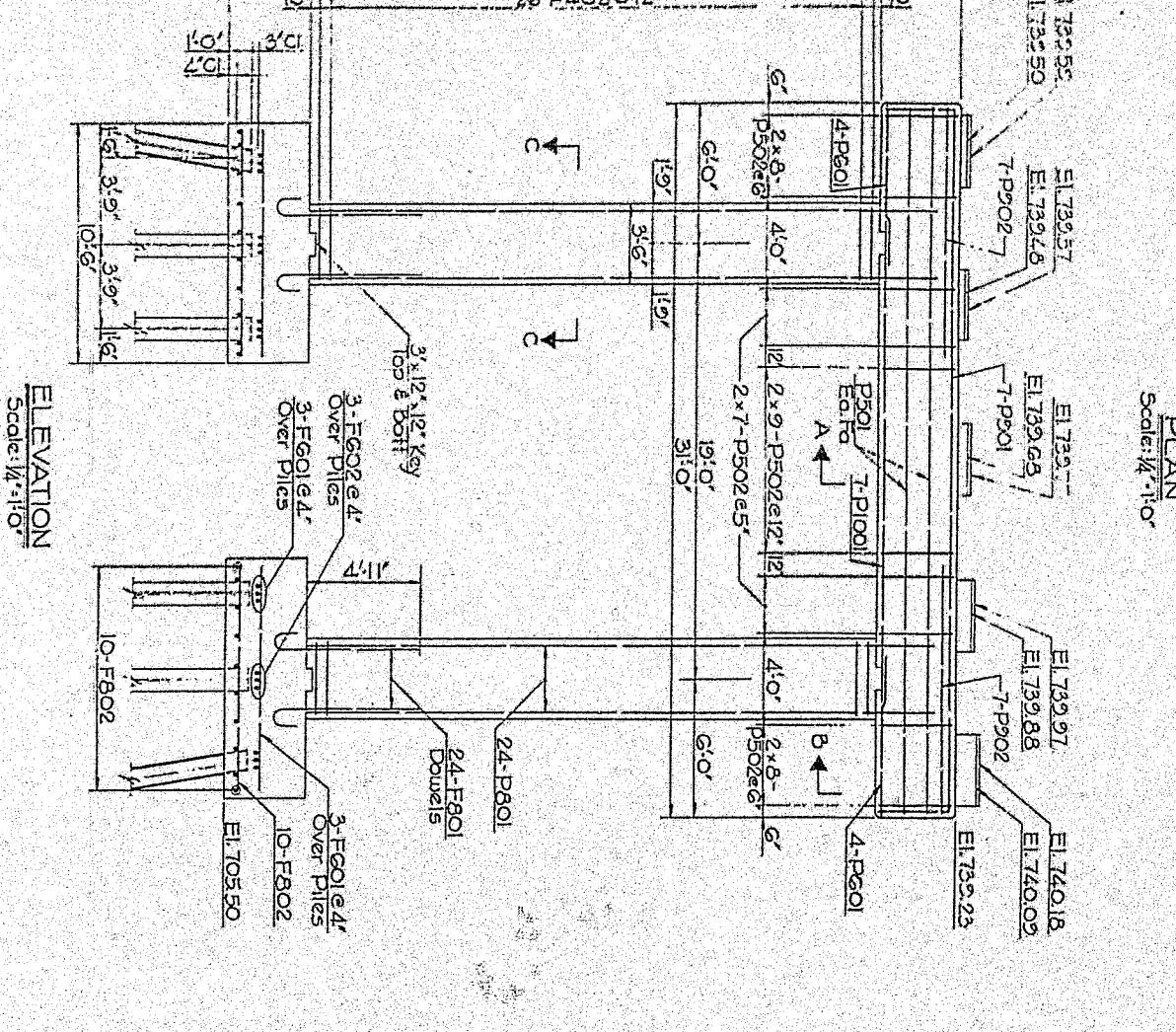
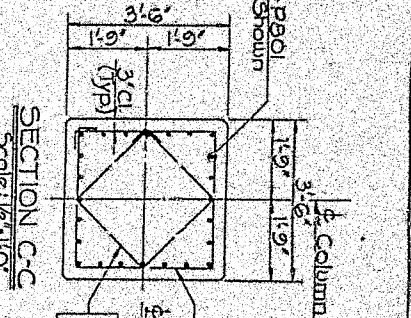
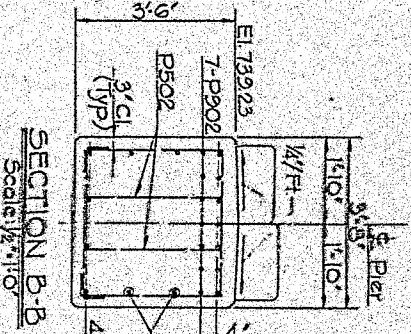
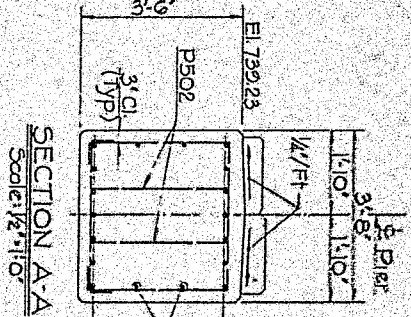
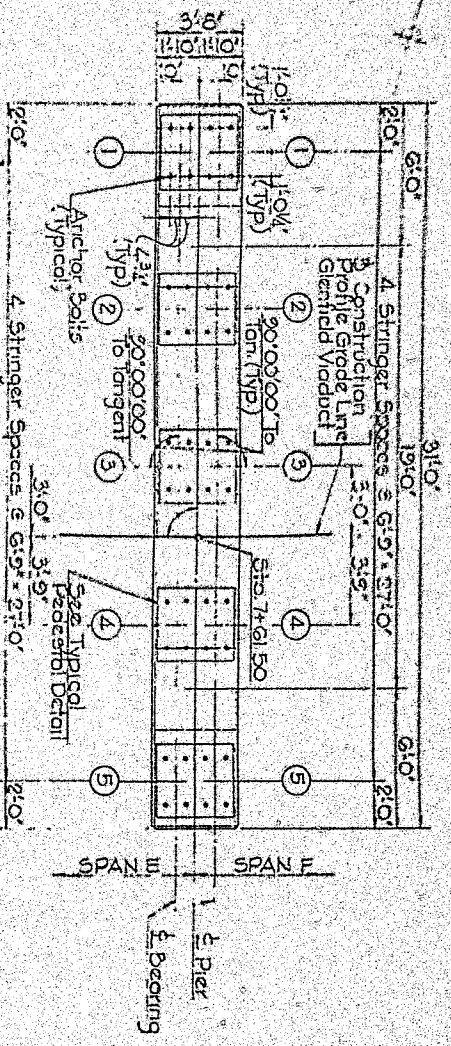
Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT

GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
PIER NO. 2

RECOMMENDED _____ SHEET 11 OF 11



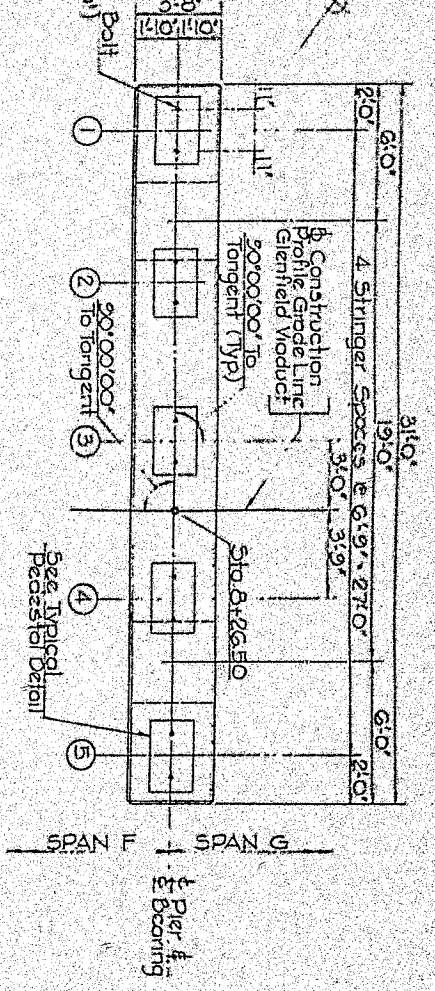
| MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|-------|------|------|-----|--------|---------|
| P401 | 4 | 2 | 54 | 12'9" | |
| P402 | 4 | 2 | 52 | 9'3" | |
| P501 | 5 | 5 | 4 | 30'6" | |
| P502 | 5 | 2 | 78 | 11'4" | |
| P503 | 5 | 1 | 32 | 5'0" | |
| P504 | 5 | 1 | 16 | 6'6" | |
| P505 | 5 | 5 | 16 | 2'8" | |
| P201 | 6 | 5 | 8 | 6'9" | |
| P301 | 8 | 5 | 48 | 29'3" | |
| P901 | 9 | 1 | 7 | 36'6" | |
| P902 | 9 | 5 | 14 | 10'9" | |
| P1001 | 10 | 5 | 7 | 20'1" | |
| F801 | 8 | 3 | 48 | 7'3" | |
| F802 | 8 | 5 | 40 | 10'0" | |

| MARK | DESCRIPTION | BY | CHK'd | APP'd | DATE |
|------|-------------|----|-------|-------|------|
| | REVISIONS | | | | |

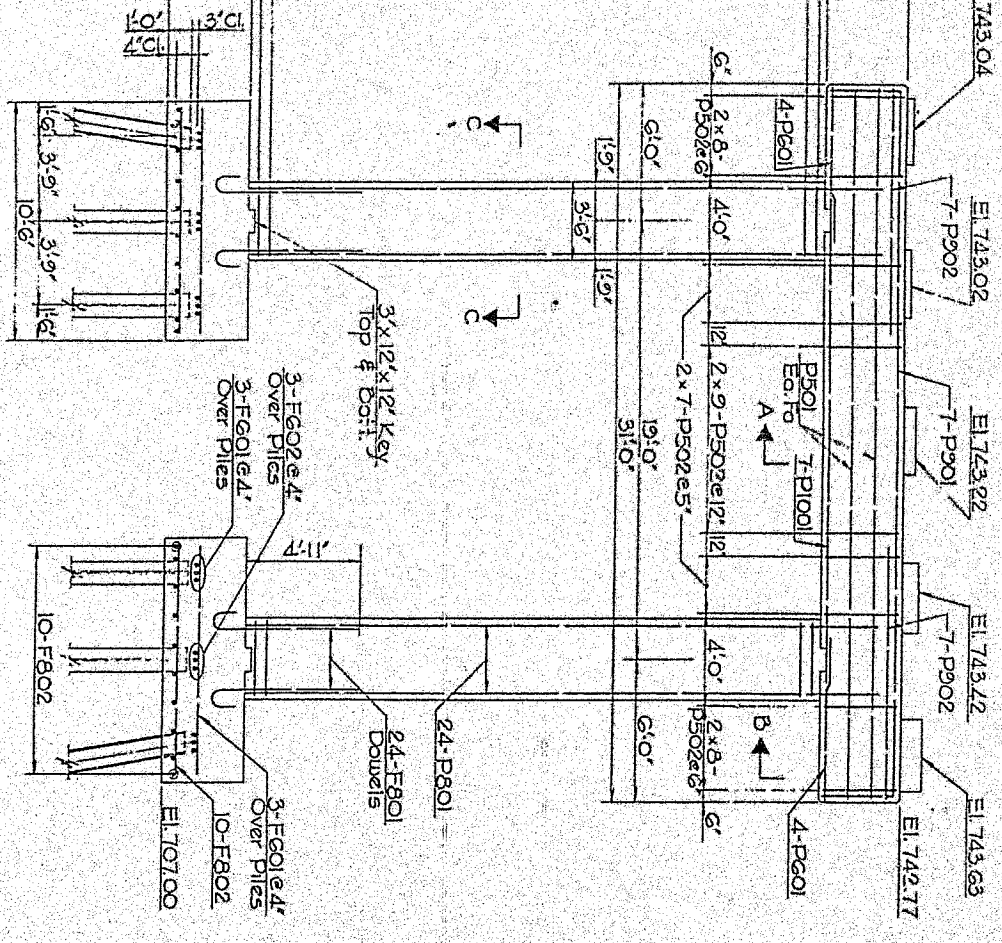
| MARK | DESCRIPTION | BY | CHK'd | APP'd | DATE |
|------|-------------|----|-------|-------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN
ALLEGHENY COUNTY
GLENFIELD VIADUCT
 GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67
 10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
 PIER NO. 5

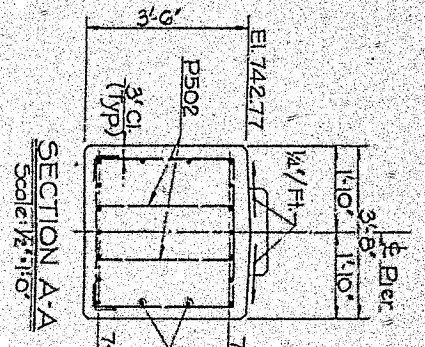
SHEET 44 OF 44
 RECOMMENDED



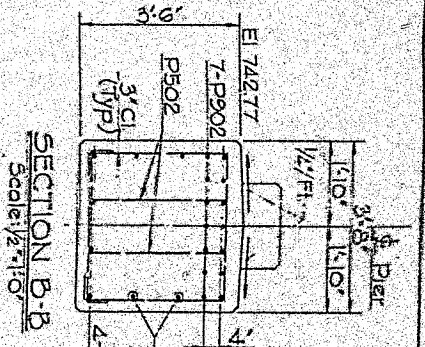
PLAN
Scale: 1/4" = 1'-0"



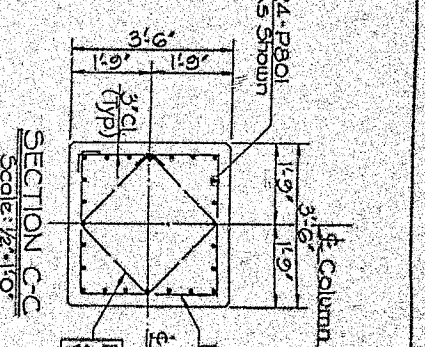
ELEVATION
Scale: 1/4" = 1'-0"



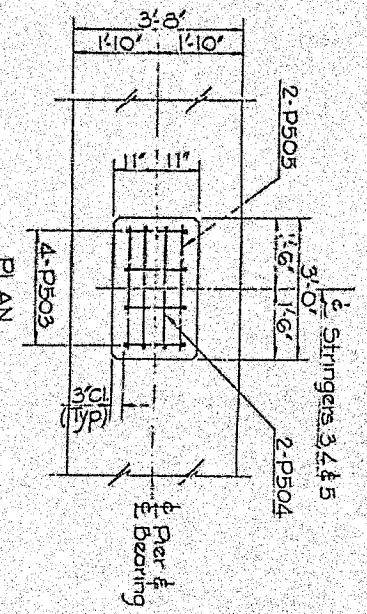
SECTION A-A
Scale: 1/2" = 1'-0"



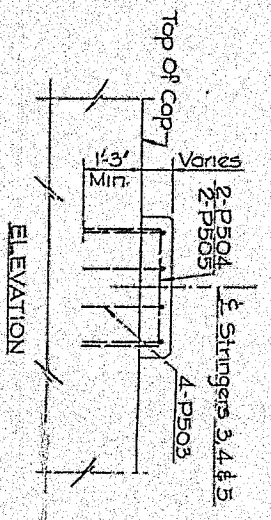
SECTION B-B
Scale: 1/2" = 1'-0"



SECTION C-C
Scale: 1/2" = 1'-0"

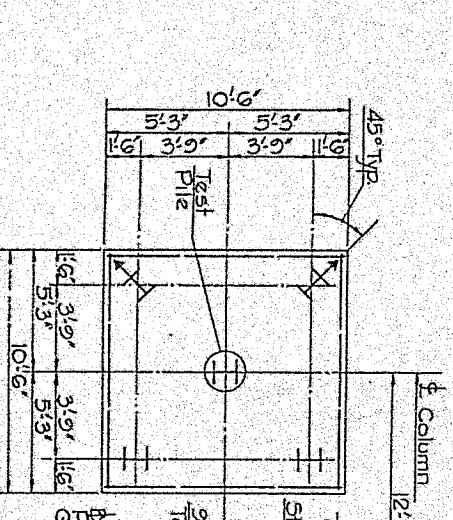


PLAN



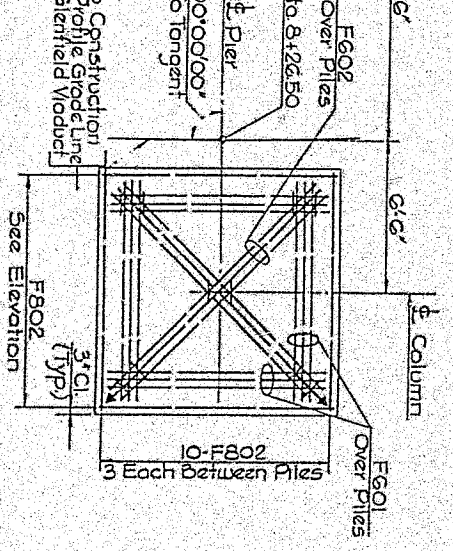
ELEVATION

PEDESTAL DETAIL
Scale: 1/2" = 1'-0"



PILE LEGEND

FOOTING PLAN
Scale: 1/2" = 1'-0"

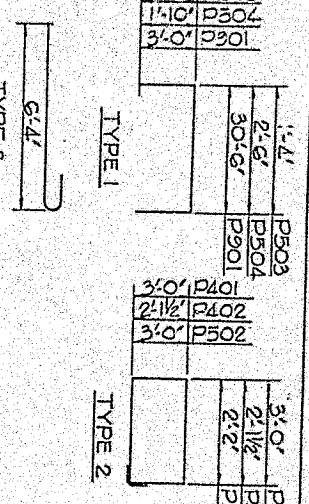


PILE NOTES

RECOMMENDED

| MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|-------|------|------|-----|---------|---------|
| P401 | 4 | 2 | 60 | 12'-0" | |
| P402 | 4 | 2 | 56 | 9'-3" | |
| P501 | 5 | 5 | 4 | 30'-0" | |
| P502 | 5 | 2 | 78 | 11'-4" | |
| P503 | 5 | 1 | 12 | 5'-0" | |
| P504 | 5 | 1 | 6 | 6'-2" | |
| P505 | 5 | 5 | 6 | 2'-0" | |
| P601 | 6 | 5 | 8 | 6'-0" | |
| P601 | 8 | 5 | 18 | 3'-3" | |
| P901 | 9 | 1 | 7 | 36'-0" | |
| P902 | 9 | 5 | 14 | 10'-9" | |
| P1001 | 10 | 5 | 7 | 20'-11" | |
| F601 | 6 | 5 | 24 | 9'-0" | |
| F602 | 6 | 5 | 12 | 12'-0" | |
| F801 | 8 | 3 | 48 | 7'-3" | |
| F802 | 8 | 5 | 40 | 10'-0" | |

BAR TYPES



| Mark | Description | By | Chk'd | App'd | Date |
|------|-------------|----|-------|-------|------|
| | REVISIONS | | | | |

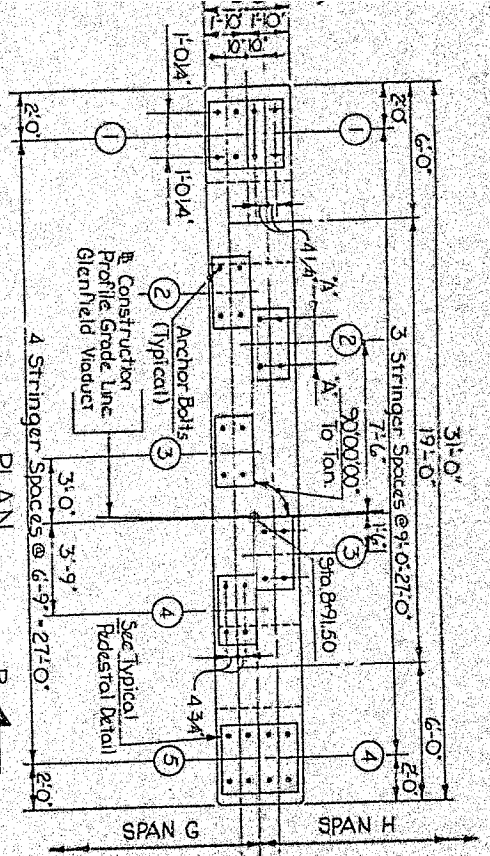
Commonwealth of Pennsylvania

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

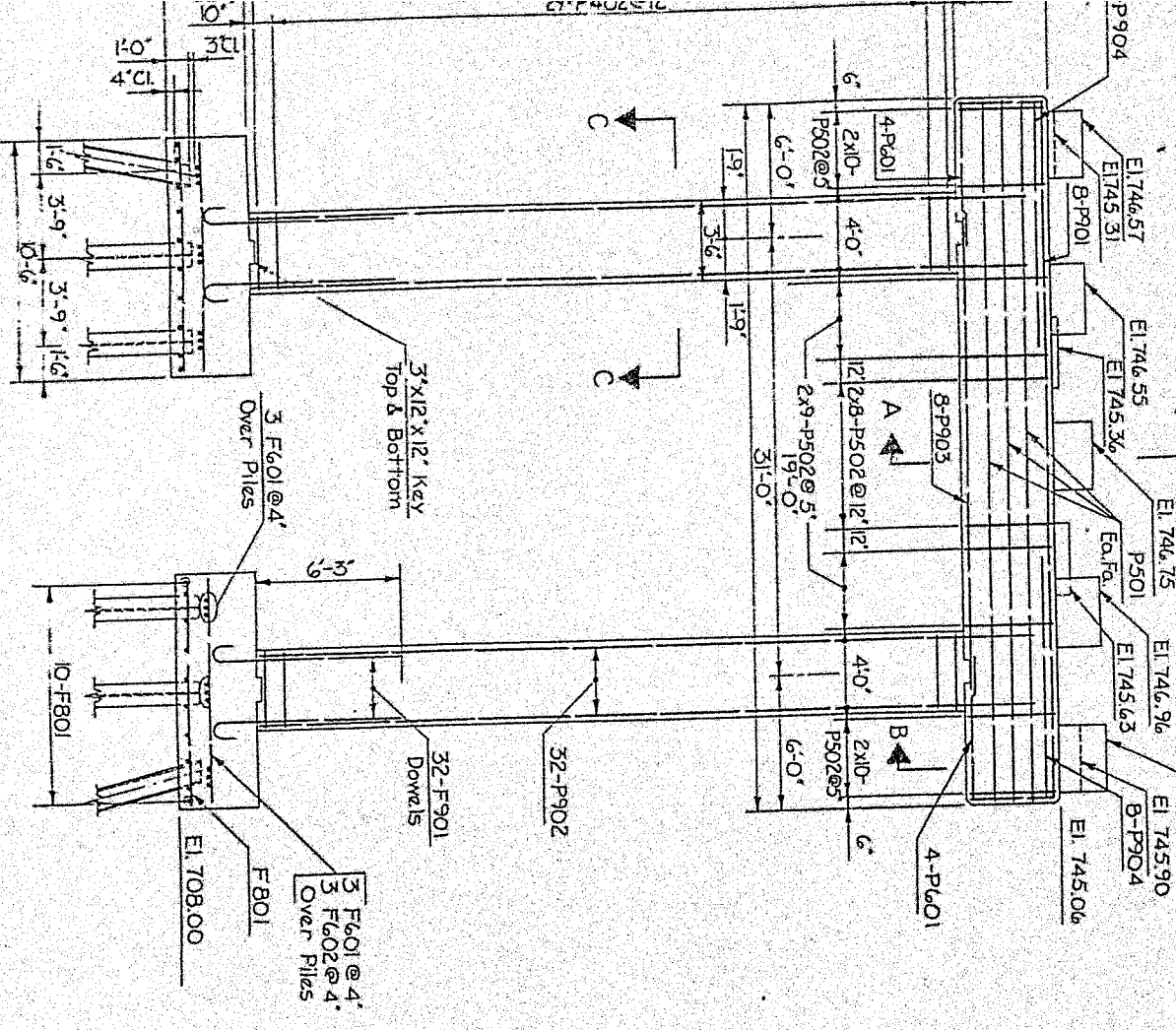
ALLEGHENY COUNTY
GLENFIELD VIADUCT

GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
PIER NO. 6

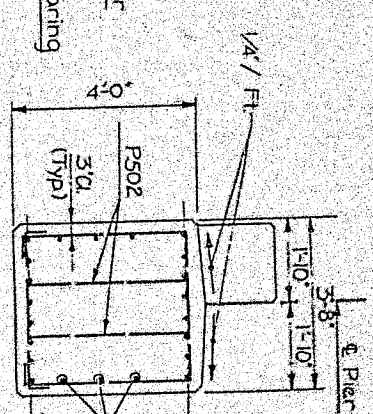
SHEET 45 OF 45



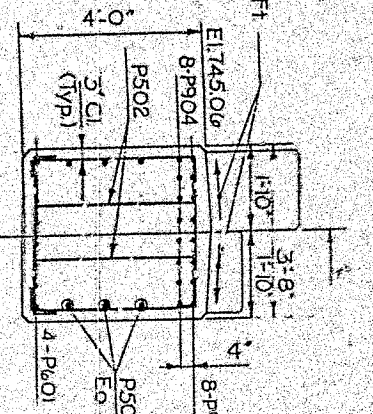
PLAN
Scale: 1/4" = 1'-0"



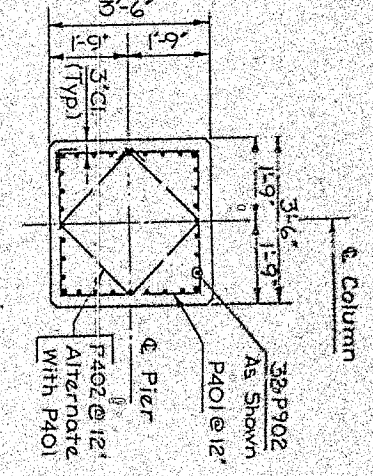
ELEVATION
Scale: 1/4" = 1'-0"



SECTION A-A
Scale: 1/2" = 1'-0"

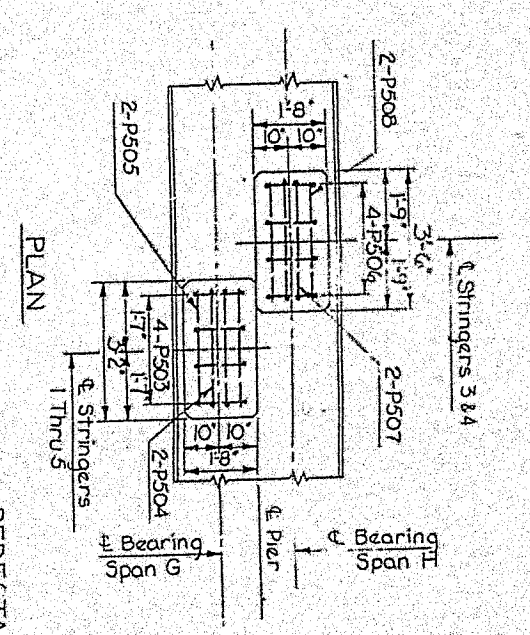


SECTION B-B
Scale: 1/2" = 1'-0"

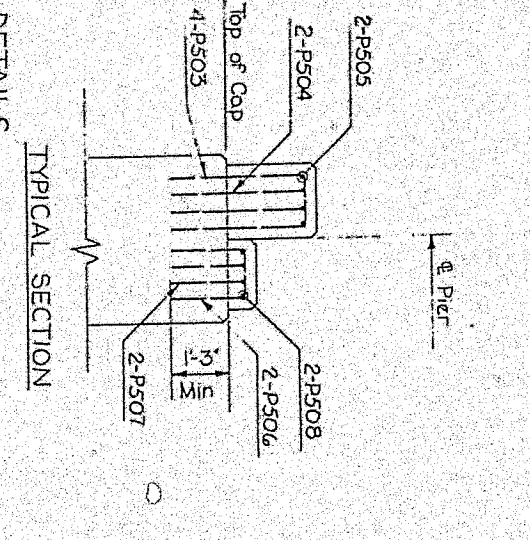


SECTION C-C
Scale: 1/2" = 1'-0"

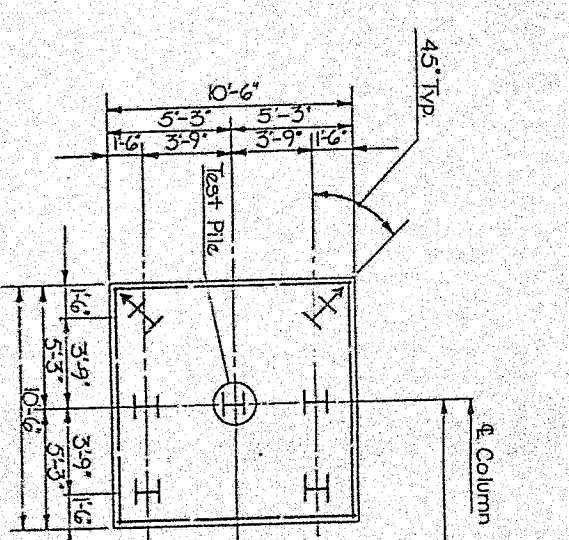
| ANCHOR BOLT LOCATION | STRINGER NO. | DIMEN. "A" |
|----------------------|--------------|------------|
| 1 | 11' | 11' |
| 2 | 12' | 12' |
| 3 | 12' | 12' |
| 4 | 12' | 12' |



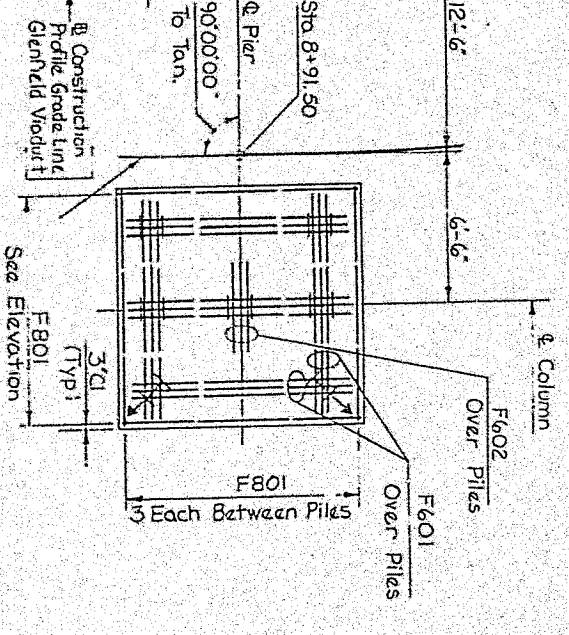
PEDESTAL DETAILS
Scale: 1/2" = 1'-0"



TYPICAL SECTION



PILE LEGEND



FOOTING PLAN
Scale: 1/4" = 1'-0"

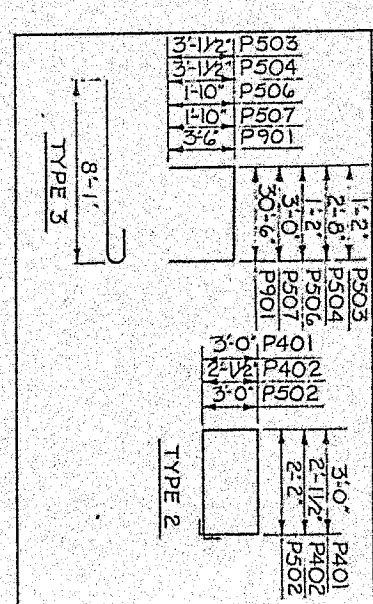


PILE NOTES

BAR SCHEDULE

| MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|------|------|------|-----|--------|---------|
| P401 | 4 | 2 | 60 | 12.9' | |
| P402 | 4 | 2 | 58 | 9.3' | |
| P501 | 5 | STR | 6 | 30.6' | |
| P502 | 5 | 2 | 92 | 12.4' | |
| P503 | 5 | 1 | 20 | 7.5' | |
| P504 | 5 | 1 | 10 | 8.1' | |
| P505 | 5 | STR | 10 | 2.8' | |
| P506 | 5 | 1 | 8 | 4.10' | |
| P507 | 5 | 1 | 4 | 6.8' | |
| P508 | 5 | STR | 4 | 3.0' | |
| P601 | 6 | STR | 8 | 6.9' | |
| P901 | 9 | STR | 8 | 37.6' | |
| P902 | 9 | STR | 64 | 32.7' | |
| P903 | 9 | STR | 8 | 20.11' | |
| P904 | 9 | STR | 16 | 10.9' | |
| F601 | 6 | STR | 30 | 9.6' | |
| F602 | 6 | STR | 6 | 4.0' | |
| F801 | 8 | STR | 40 | 10.0' | |
| F901 | 9 | 5 | 64 | 9.4' | |

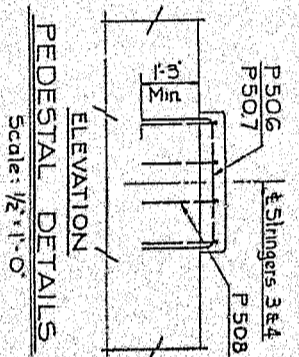
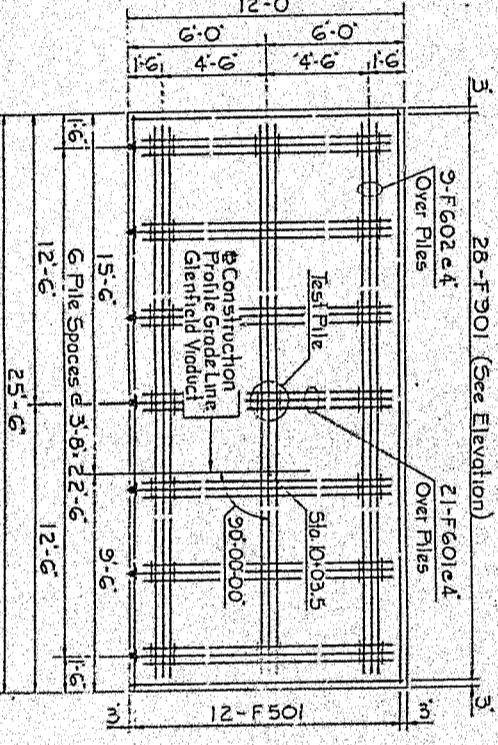
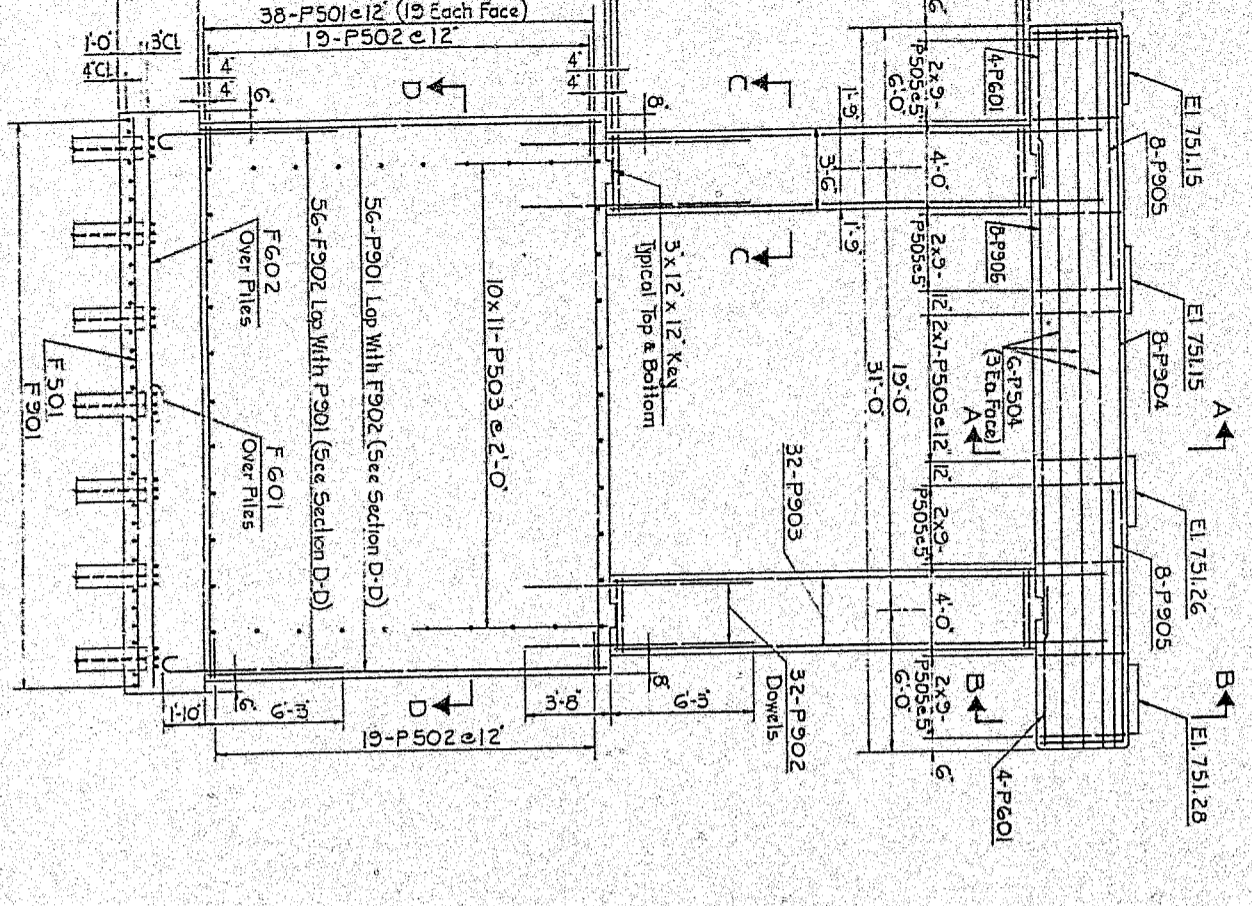
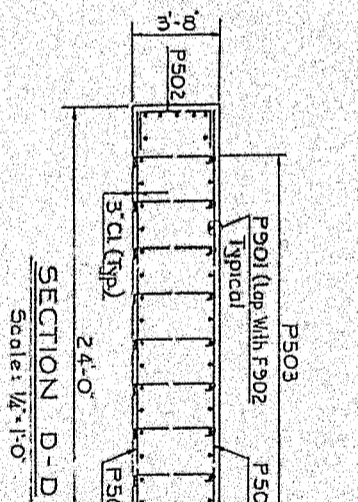
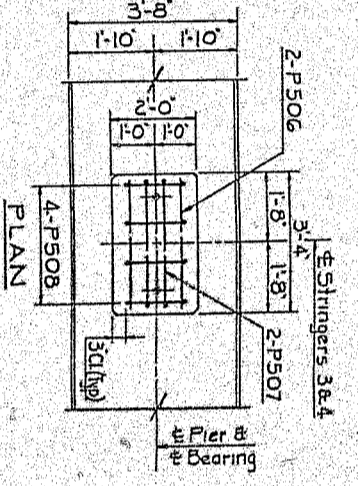
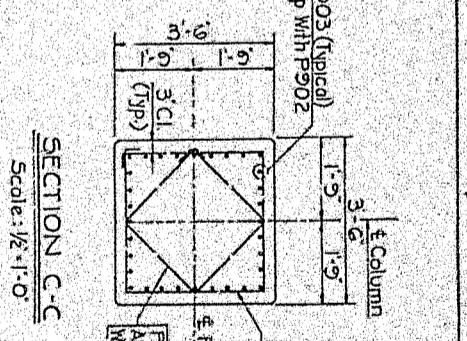
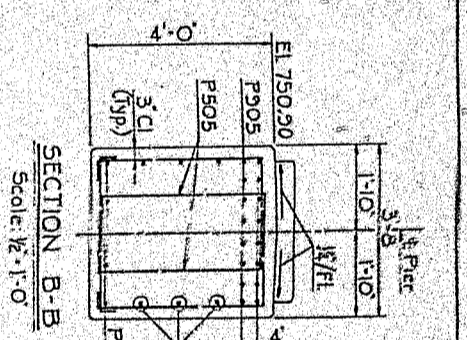
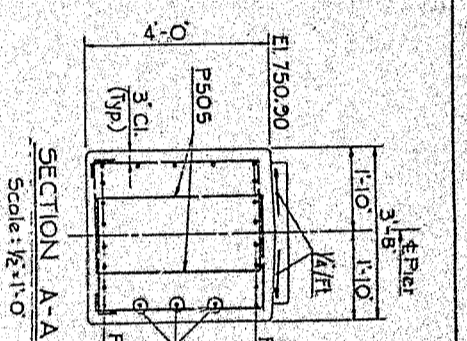
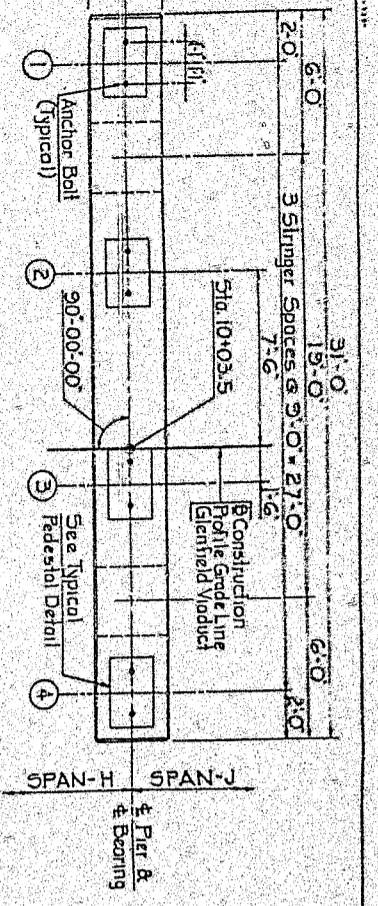
BAR TYPES



| Mark | Description | BY | Chk'd | App'd | Date |
|-----------|-------------|----|-------|-------|------|
| REVISIONS | | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN
ALLEGHENY COUNTY
GLENFIELD VIADUCT
 GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67
 IO SPAN STEEL-T-BEAM AND MULTI-GIRDER BRIDGE
 PIER NO. 7

RECOMMENDED
 SHEET 16 OF 16
 BRIDGE ENGINEER
S-16201



PILE LEGEND
 I Denotes Plumb Piles
 † Denotes Bolted Piles 3:1/2
 ‡ All Piles Shall Be HP 12 x 74

PILE NOTES
 Maximum Allowable Pile Load 28 Tons
 Maximum Design Pile Load 22 Tons
 Estimated Pile Tip El. 673.00

| MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|------|------|------|-----|---------|---------|
| F501 | 5 | Stk | 12 | 25'-2" | |
| F601 | 6 | Stk | 21 | 11'-8" | |
| F602 | 6 | Stk | 9 | 25'-2" | |
| F901 | 9 | Stk | 28 | 11'-8" | |
| F902 | 9 | Stk | 56 | 9'-4" | |
| P401 | 4 | 2 | 34 | 9'-9" | |
| P402 | 4 | 2 | 36 | 12'-5" | |
| P501 | 5 | Stk | 38 | 23'-8" | |
| P502 | 5 | Stk | 38 | 6'-4" | |
| P503 | 5 | 4 | 110 | 4'-4" | |
| P504 | 5 | Stk | 6 | 30'-6" | |
| P505 | 5 | 2 | 66 | 12'-0" | |
| P506 | 5 | Stk | 4 | 2'-10" | |
| P507 | 5 | Stk | 4 | 5'-10" | |
| P508 | 5 | Stk | 8 | 4'-6" | |
| P601 | 6 | Stk | 8 | 8'-0" | |
| P901 | 9 | Stk | 56 | 17'-4" | |
| P902 | 9 | Stk | 64 | 9'-11" | |
| P903 | 9 | Stk | 64 | 20'-5" | |
| P904 | 9 | Stk | 8 | 37'-6" | |
| P905 | 9 | Stk | 16 | 10'-10" | |
| P906 | 9 | Stk | 8 | 21'-10" | |

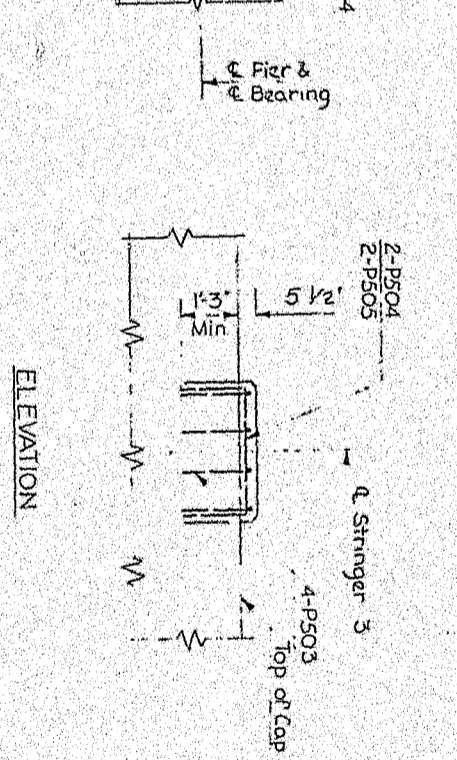
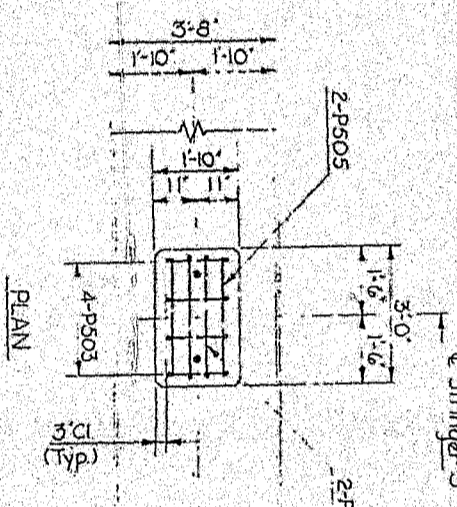
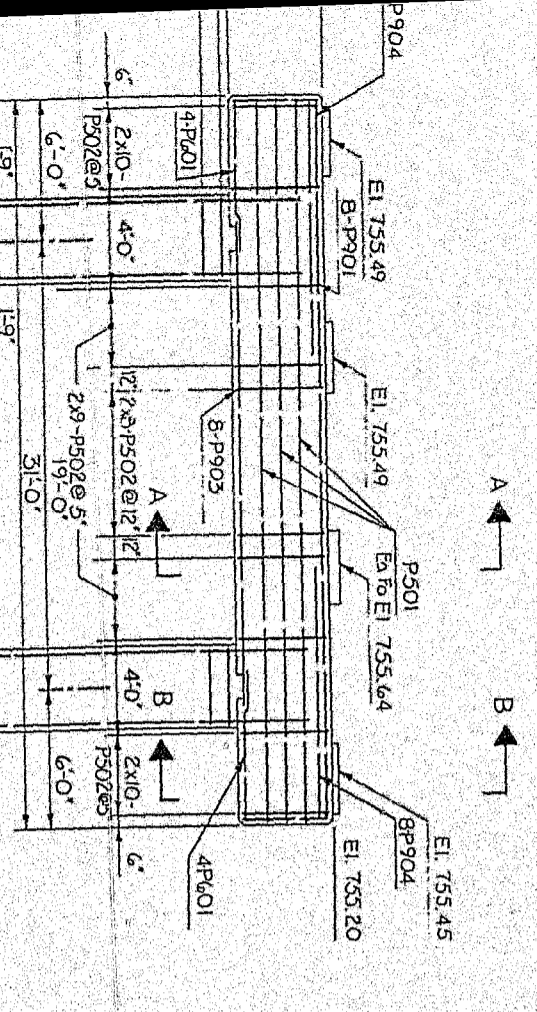
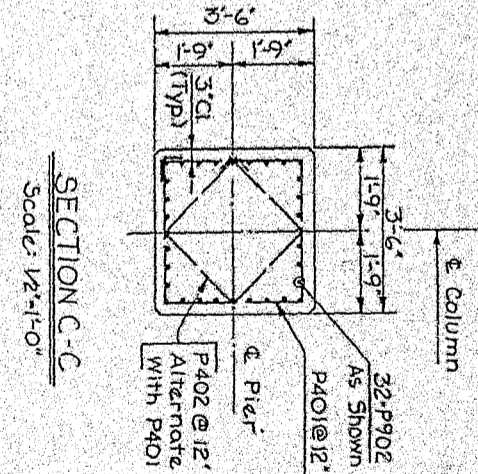
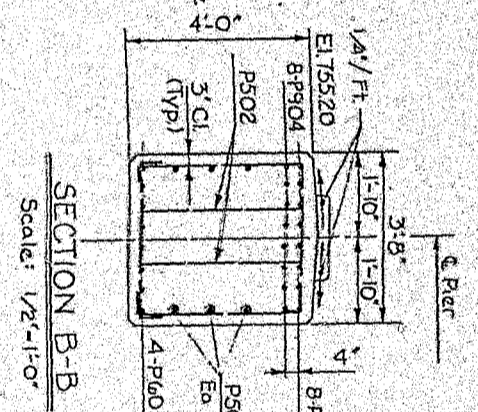
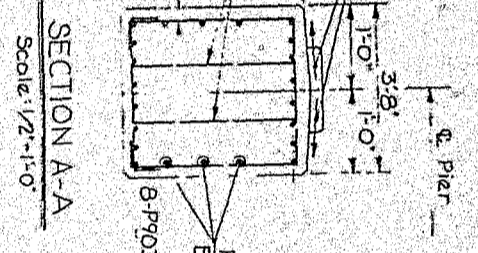
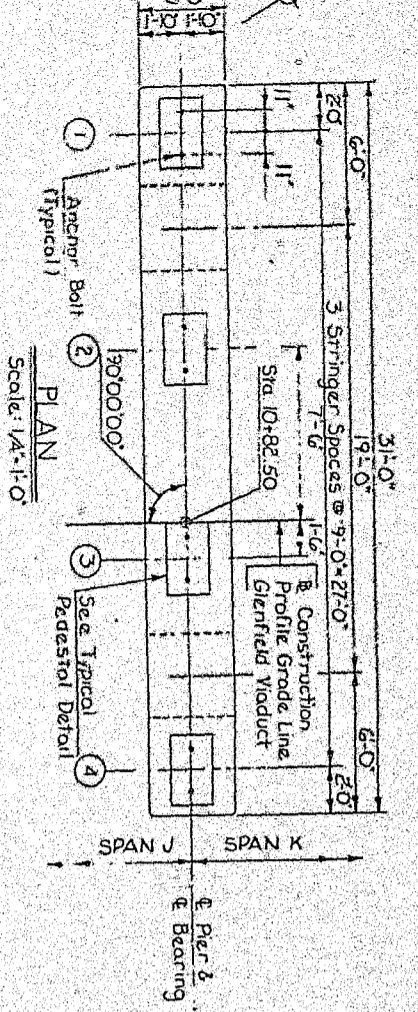
| TYPE | MARK | DESCRIPTION | NO. | LENGTH | REMARKS |
|--------|------------|-------------|-----|--------|---------|
| TYPE-1 | P507, P508 | 1'-6" | 38 | 23'-8" | |
| TYPE-2 | P504, P505 | 2'-10" | 110 | 4'-4" | |
| TYPE-3 | P502, P503 | 3'-2" | 66 | 12'-0" | |
| TYPE-4 | P501 | 3'-6" | 38 | 23'-8" | |
| TYPE-5 | P506 | 3'-0" | 4 | 2'-10" | |
| TYPE-6 | P507 | 2'-3" | 4 | 5'-10" | |
| TYPE-7 | P508 | 3'-2" | 8 | 4'-6" | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

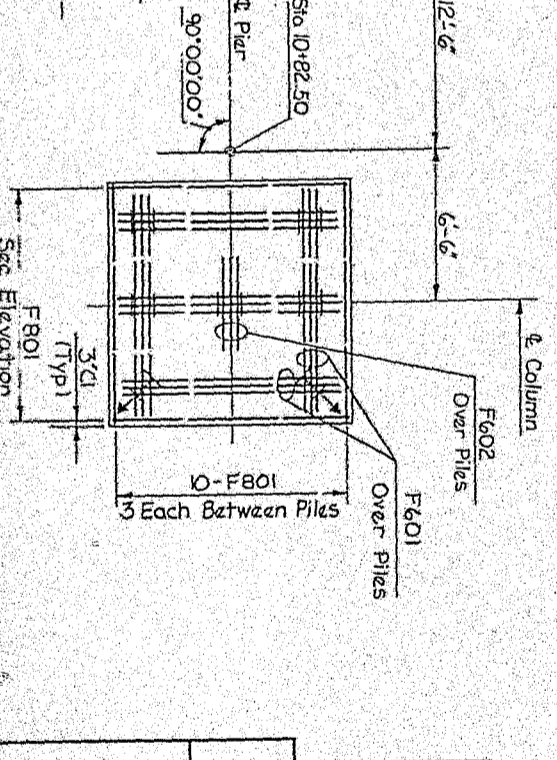
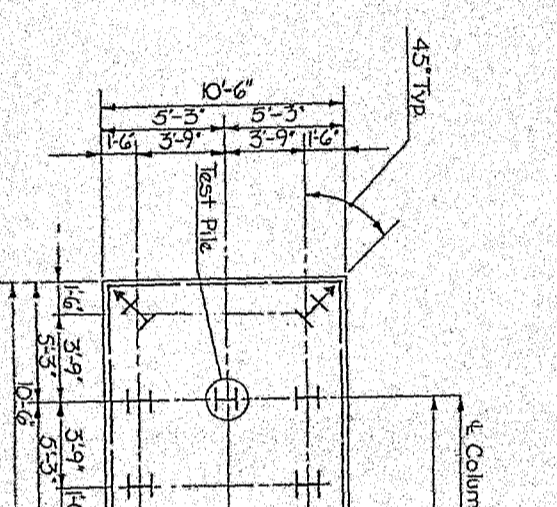
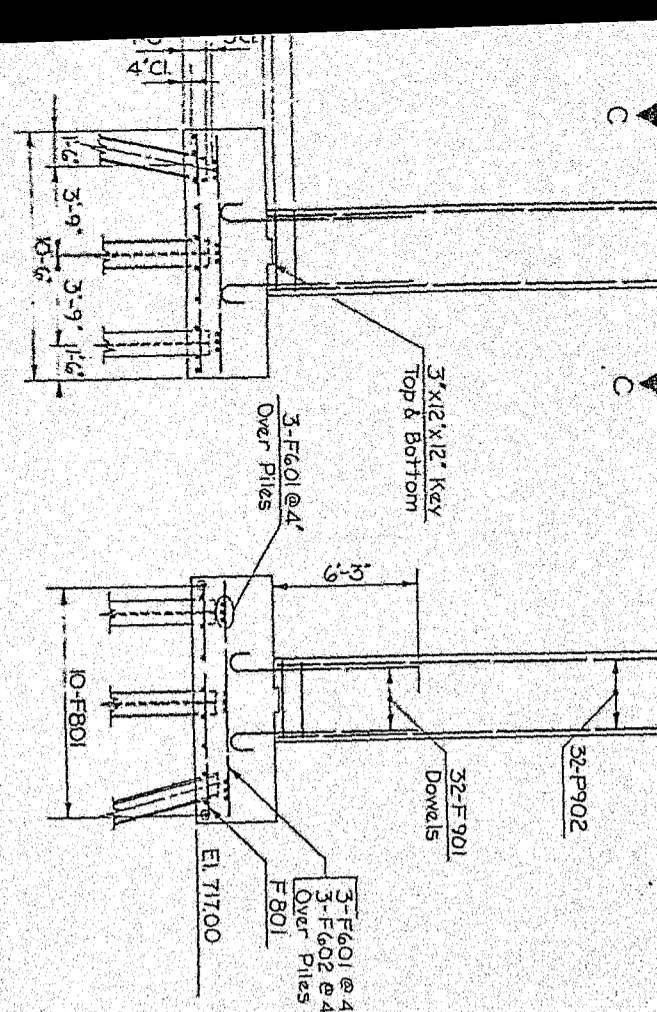
ALLEGHENY COUNTY
GLENFIELD VIADUCT
 GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67
 10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
 PIER NO. 8

RECOMMENDED: _____
 BRIDGE ENGINEER

SHEET 22 OF _____
 S-16201



PEDESTAL DETAILS
Scale: 1/2"=1'-0"



ELEVATION
Scale: 1/4"=1'-0"

PILE LEGEND

FOOTING PLAN
Scale: 1/2"=1'-0"

PILE NOTES

Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

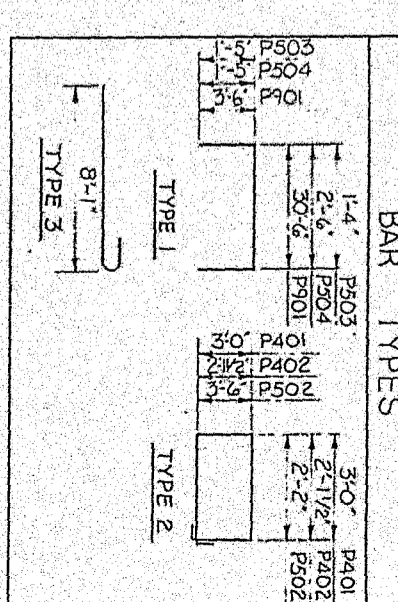
ALLEGHENY COUNTY
GLENFIELD VIADUCT
EAST BEAVER STREET STA. 16796.67
10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
PIER NO 9

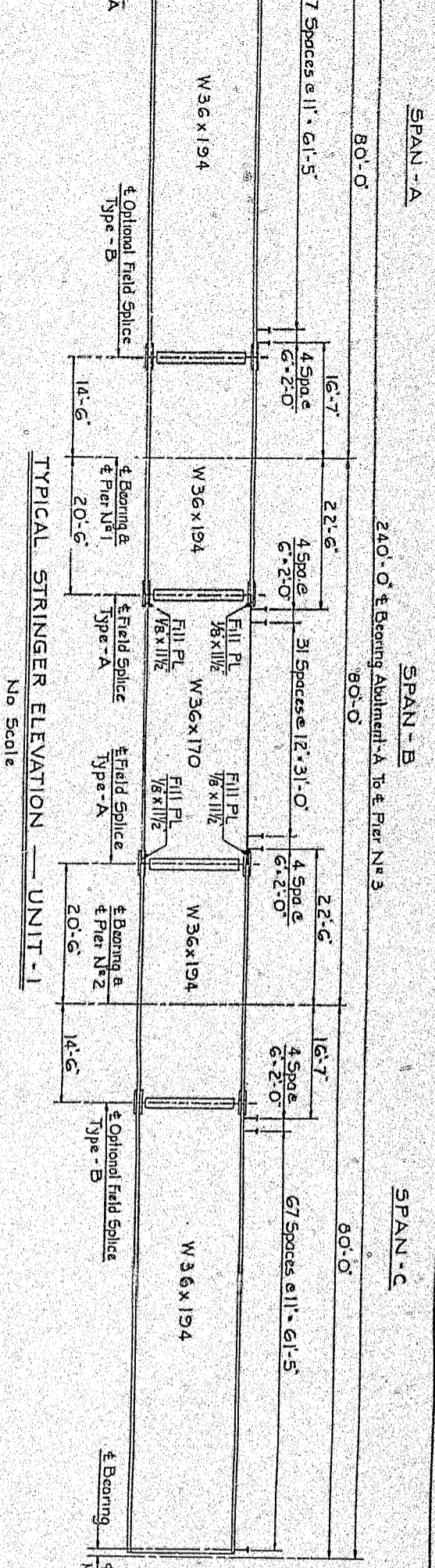
RECOMMENDED: _____
BRIDGE ENGINEER

SHEET 26 OF _____
S-16796

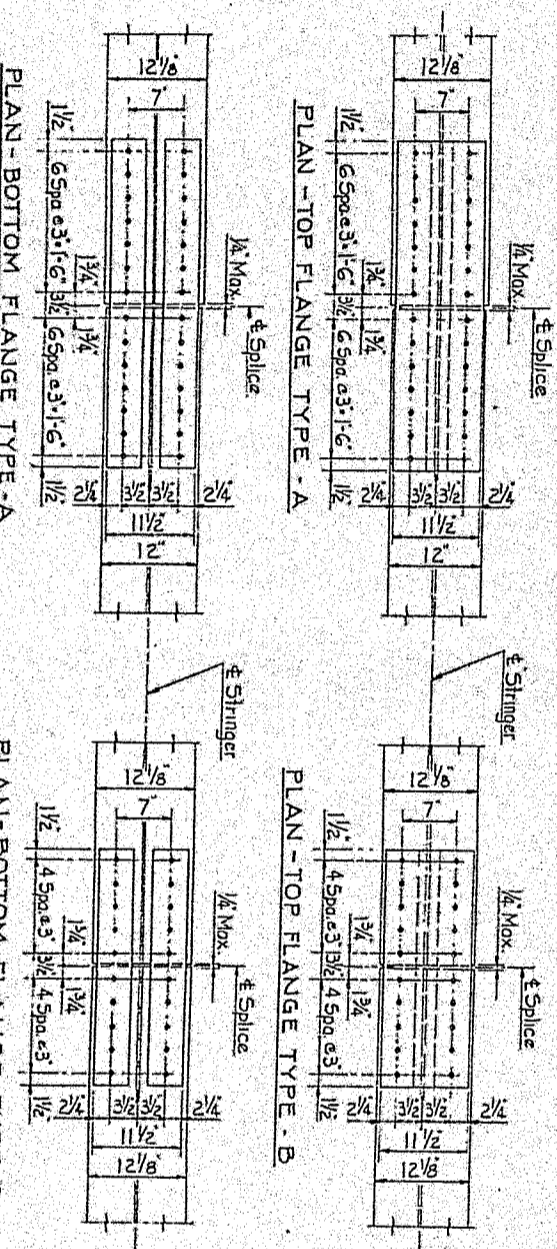
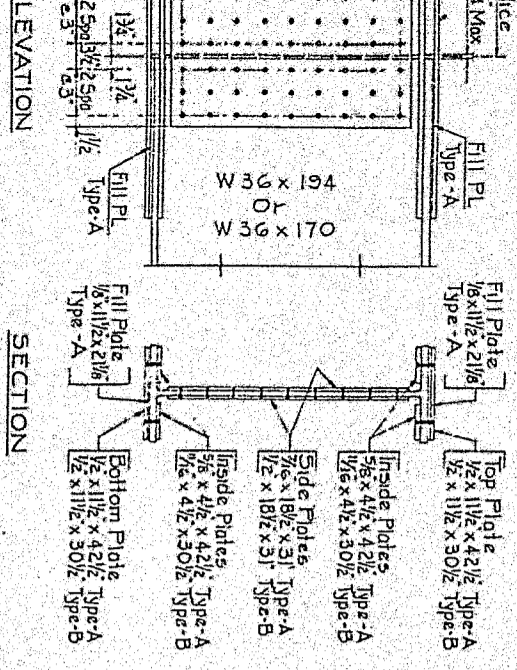
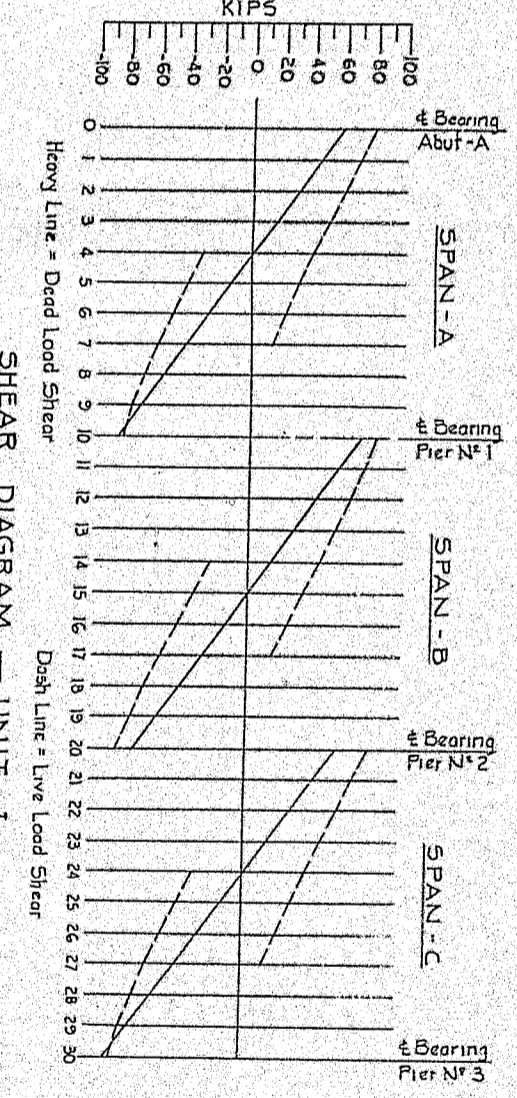
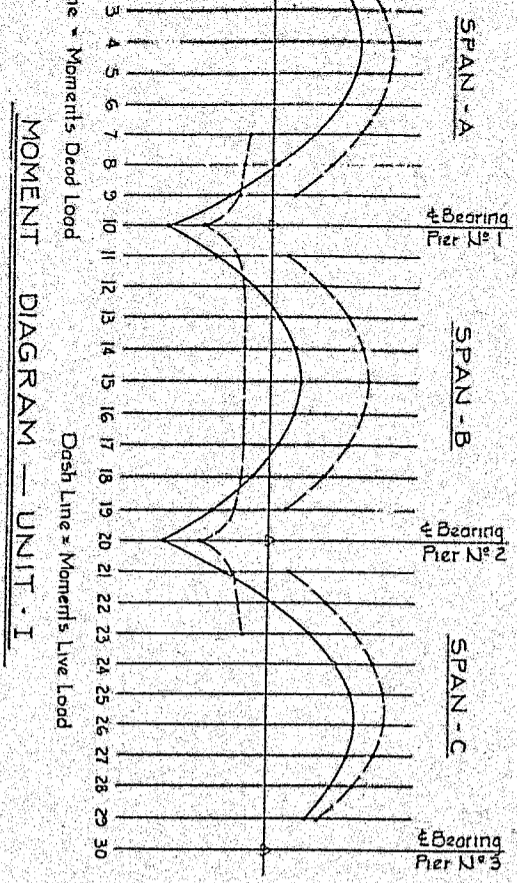
| Mark | Description | By | Chk'd. | App'd. | Date |
|------|-------------|----|--------|--------|------|
| | | | | | |

| MARK | SIZE | TYPE | NO | LENGTH | REMARKS |
|------|------|------|----|---------|---------|
| P401 | 4 | 2 | 62 | 12'-9" | |
| P402 | 4 | 2 | 60 | 9'-5" | |
| P501 | 5 | STR. | 6 | 30'-6" | |
| P502 | 5 | 2 | 92 | 12'-4" | |
| P503 | 5 | 1 | 4 | 4'-2" | |
| P504 | 5 | 1 | 2 | 5'-4" | |
| P505 | 5 | STR. | 2 | 2'-6" | |
| P601 | 6 | STR. | 8 | 6'-9" | |
| P901 | 9 | 1 | 8 | 37'-6" | |
| P902 | 9 | STR. | 64 | 33'-8" | |
| P903 | 9 | STR. | 8 | 20'-11" | |
| P904 | 9 | STR. | 16 | 10'-9" | |
| F601 | 6 | STR. | 30 | 9'-6" | |
| F602 | 6 | STR. | 6 | 4'-0" | |
| F801 | 8 | STR. | 40 | 10'-0" | |
| F901 | 9 | 3 | 64 | 9'-4" | |





Notes:
 All Web Plates, Flange Plates, Stiffener Plates, Connection Plates, Splice Plates, Fill Plates And Diaphragms Shall Be A572 Grade 50 Steel



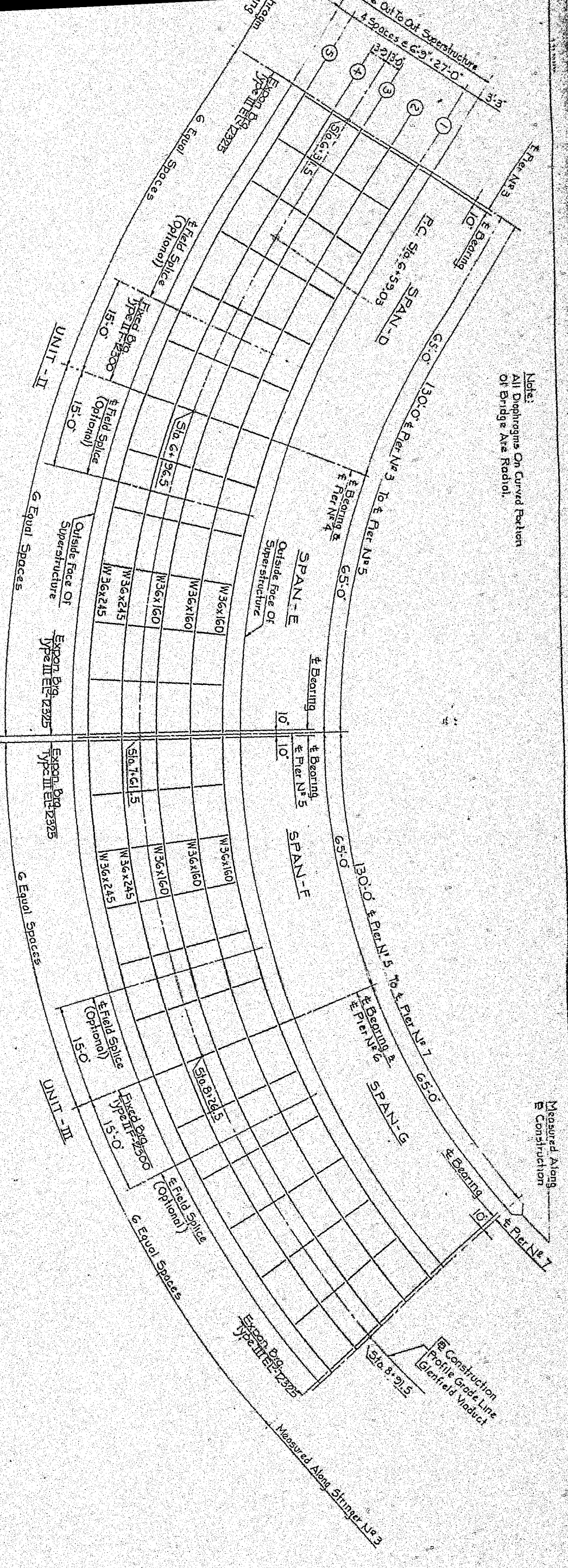
| Mark | Description | BY | CHK'd | App'd. | Date |
|------|-------------|----|-------|--------|------|
| | | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

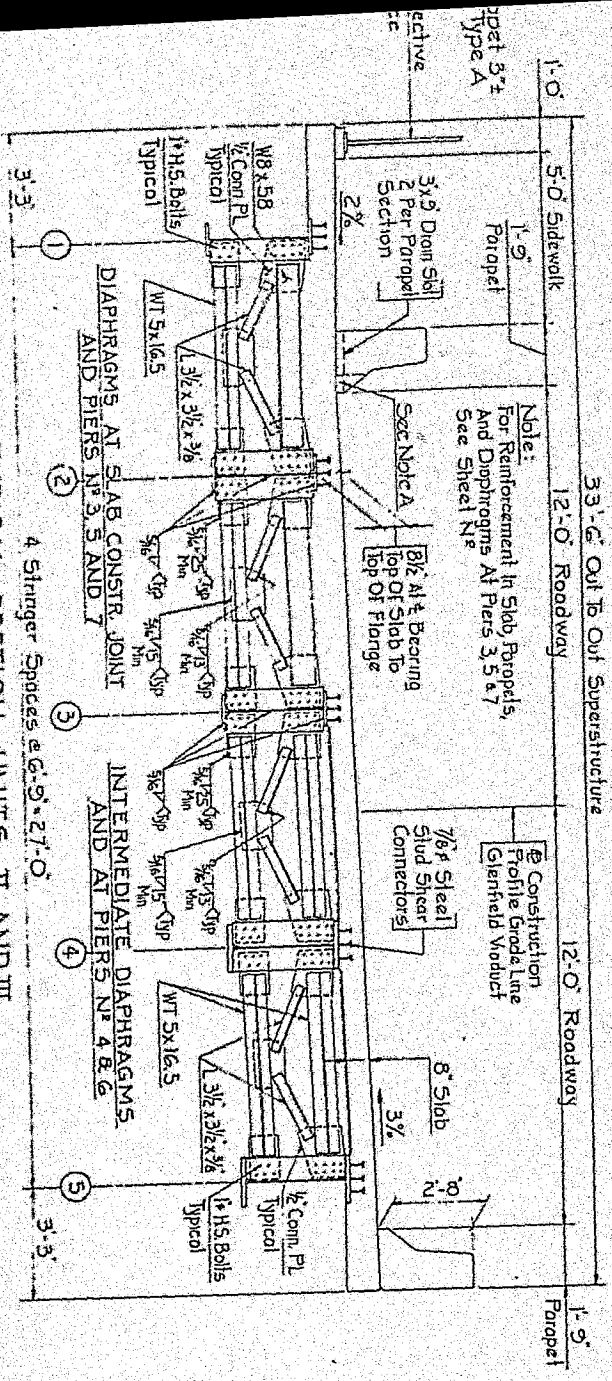
ALLEGHENY COUNTY
GLENFIELD VIADUCT
 GLENFIELD VIADUCT STA. 9488.80 OVER
 EAST BEAVER STREET STA. 16496.67
 IO SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
 STRINGER DETAILS, UNIT I

RECOMMENDED _____ SHEET 22 OF _____
 BRIDGE ENGINEER _____ S-16201

Note:
All Diaphragms On Curved Face
Of Bridge Are Radial.



FRAMING PLAN - UNITS II AND III
Scale: 1" = 10'



TYPICAL SECTION - UNITS II AND III
Scale: 3/8" = 1'-0"

| Mark | Description | By | Chkd. | App'd. | Date |
|-----------|-------------|----|-------|--------|------|
| REVISIONS | | | | | |
| | | | | | |

Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
FRAMING PLAN, UNITS II & III

RECOMMENDED _____

BRIDGE ENGINEER _____

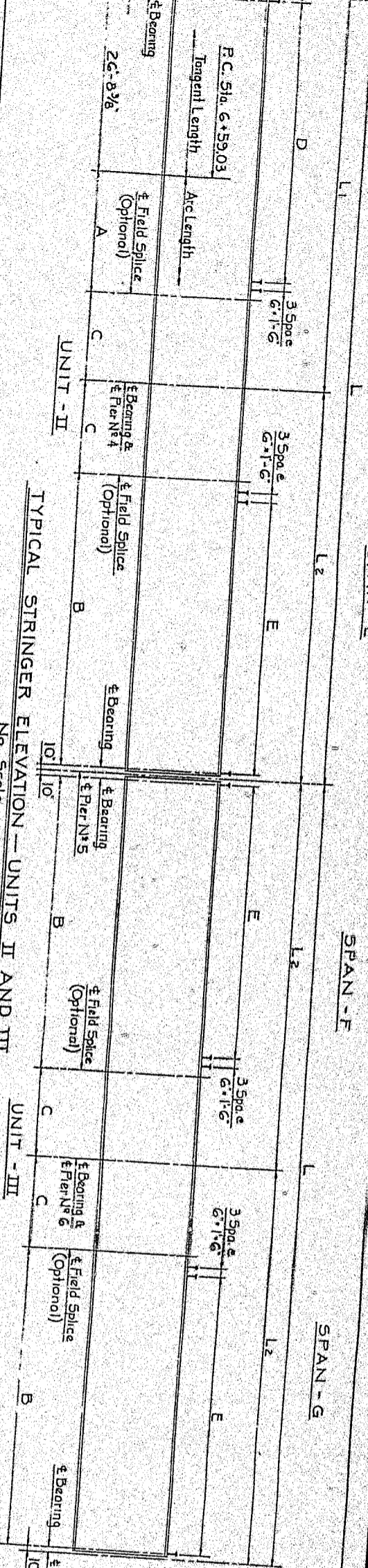
SHEET 22 OF _____
5-16201

SPAN - D

SPAN - E

SPAN - F

SPAN - G

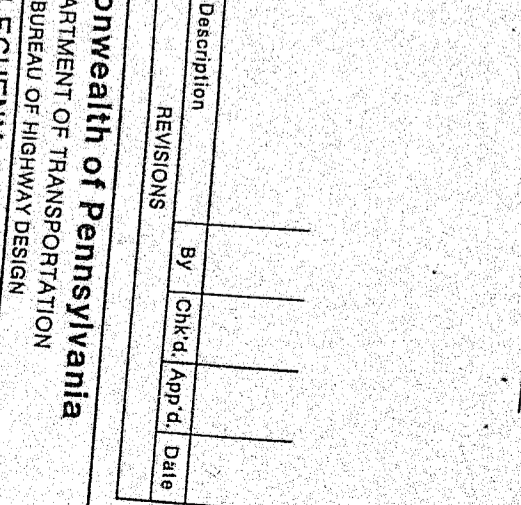
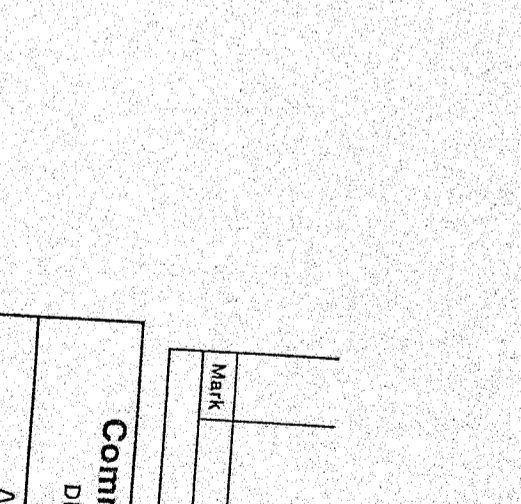
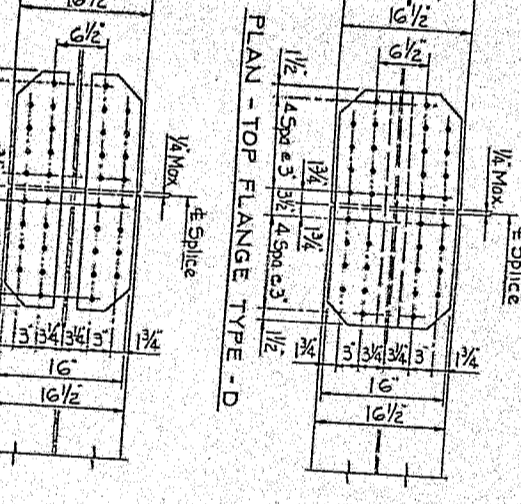
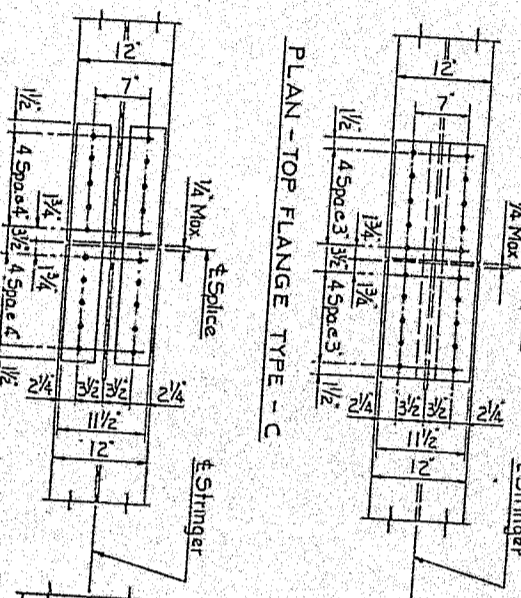
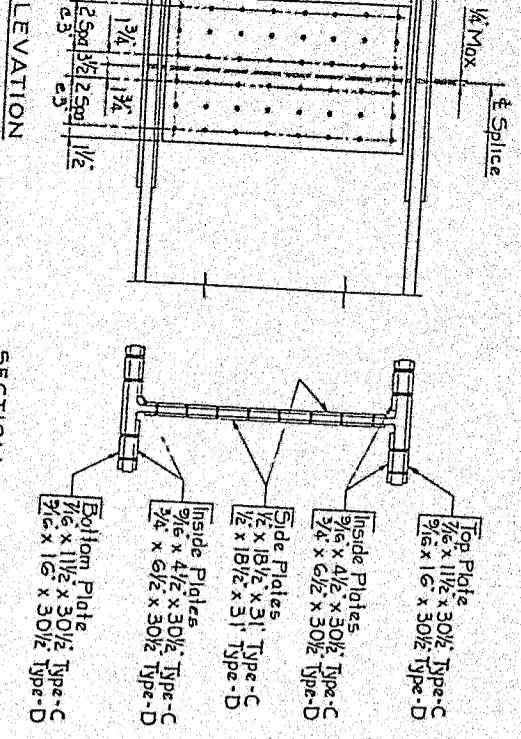
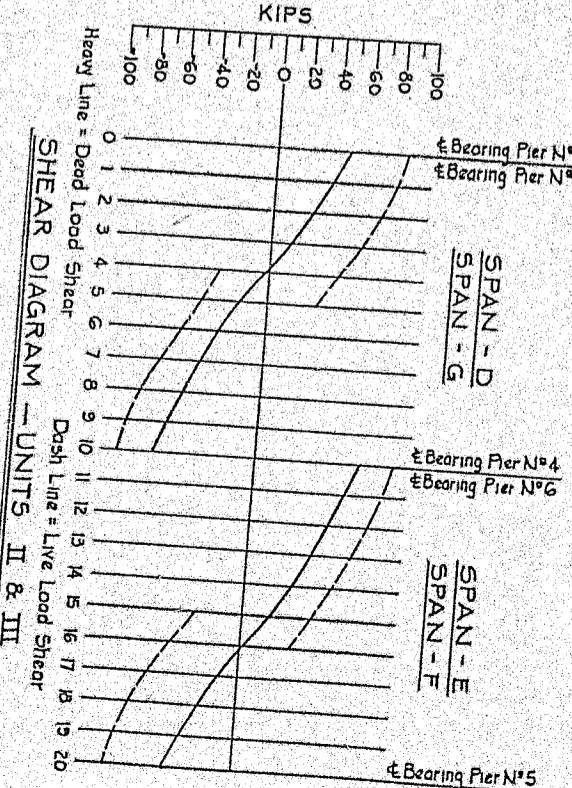
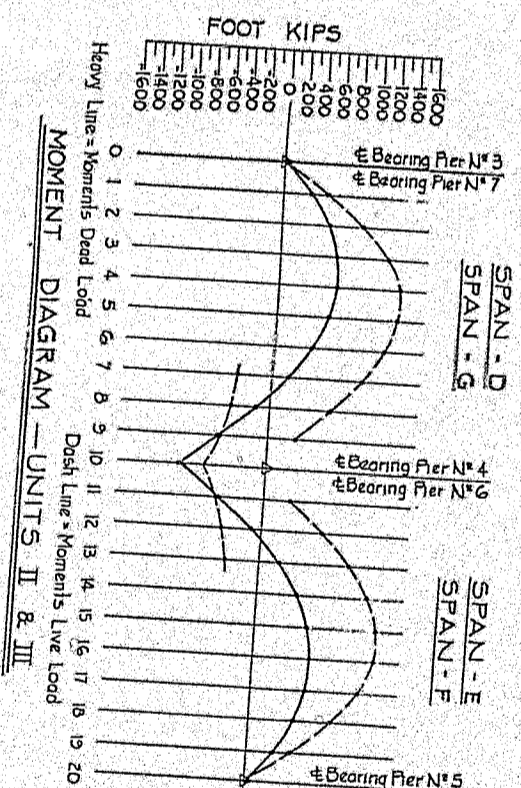


Note:
 All Web Plates, Flange Plates, Stiffener Plates, Connection Plates, Splice Plates, Fill Plates and Diaphragms Shall Be A572 Grade 50 Steel

STRINGER SCHEDULE

| SIZE | RADIUS | STRINGER LENGTHS | | | DIMENSIONS | | | | | SPICES | | | | | SHEAR DEVELOPERS | | | | |
|---------|--------|------------------|-------------|-------------|-------------|------------|-------------|-------------------|-------------------|--------|-------------|-------------------|-------------------|-------------------|-------------------|--|--|--|--|
| | | L | L1 | L2 | A | B | C | D | E | Type | C | D | E | D | E | | | | |
| W36x160 | 163.50 | 119'-0 1/4" | 60'-8 1/2" | 58'-3 7/8" | 20'-2 3/8" | 44'-5 3/8" | 13'-10 1/4" | 42 Splice 12 1/2" | 39 Splice 12 1/2" | C | 13'-10 1/4" | 42 Splice 12 1/2" | 39 Splice 12 1/2" | 48 Splice 11 1/2" | 50 Splice 11 1/2" | | | | |
| W36x160 | 170.25 | 122'-9 3/8" | 62'-1 5/8" | 60'-8 9/16" | 21'-0 1/8" | 46'-3 3/8" | 14'-5 1/2" | 42 Splice 12 1/2" | 41 Splice 12 1/2" | C | 14'-5 1/2" | 42 Splice 12 1/2" | 41 Splice 12 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |
| W36x245 | 183.75 | 126'-7 1/8" | 63'-6 1/2" | 63'-1 3/8" | 21'-10 1/8" | 48'-1 3/8" | 15'-0" | 43 Splice 12 1/2" | 43 Splice 12 1/2" | C | 15'-0" | 43 Splice 12 1/2" | 43 Splice 12 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |
| W36x245 | 190.50 | 134'-3 3/8" | 64'-1 3/8" | 64'-1 3/8" | 22'-8 1/2" | 49'-1 3/8" | 15'-6 1/8" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | D | 15'-6 1/8" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |
| W36x160 | 163.50 | 116'-6 1/8" | 58'-4 1/4" | 58'-3 7/8" | 23'-6 1/8" | 44'-5 3/8" | 16'-1 3/4" | 49 Splice 11 1/2" | 50 Splice 11 1/2" | D | 16'-1 3/4" | 49 Splice 11 1/2" | 50 Splice 11 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |
| W36x160 | 170.25 | 121'-4 3/8" | 60'-8 9/16" | 60'-8 9/16" | 21'-0 1/8" | 46'-3 3/8" | 13'-10 1/4" | 41 Splice 12 1/2" | 41 Splice 12 1/2" | C | 13'-10 1/4" | 41 Splice 12 1/2" | 41 Splice 12 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |
| W36x160 | 177.00 | 126'-2 3/8" | 63'-1 3/8" | 63'-1 3/8" | 21'-0 1/8" | 48'-1 3/8" | 15'-0" | 43 Splice 12 1/2" | 43 Splice 12 1/2" | C | 15'-0" | 43 Splice 12 1/2" | 43 Splice 12 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |
| W36x245 | 183.75 | 131'-0 1/8" | 65'-6 1/8" | 65'-6 1/8" | 23'-6 1/8" | 51'-9 3/8" | 15'-6 1/8" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | D | 15'-6 1/8" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |
| W36x245 | 190.50 | 135'-9 1/8" | 67'-10 1/2" | 67'-10 1/2" | 23'-6 1/8" | 51'-9 3/8" | 16'-1 3/4" | 48 Splice 11 1/2" | 50 Splice 11 1/2" | D | 16'-1 3/4" | 48 Splice 11 1/2" | 50 Splice 11 1/2" | 48 Splice 11 1/2" | 48 Splice 11 1/2" | | | | |

TYPICAL STRINGER ELEVATION - UNITS II AND III
 No Scale

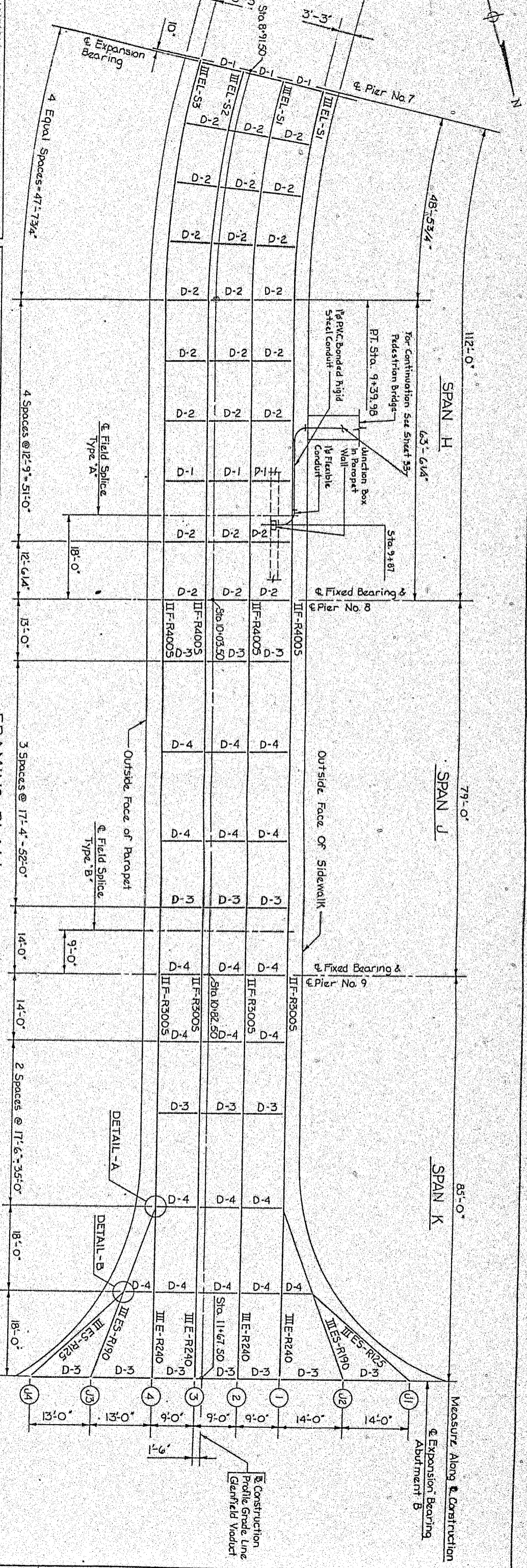


FIELD SPLICE DETAILS
 Scale: 1"=1'-0"

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
 GLENFIELD VIADUCT
 EAST BEAVER STREET STA. 16-96.67
 10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
 STRINGER DETAILS, UNITS II & III

RECOMMENDED



ANSION BEARINGS III EL

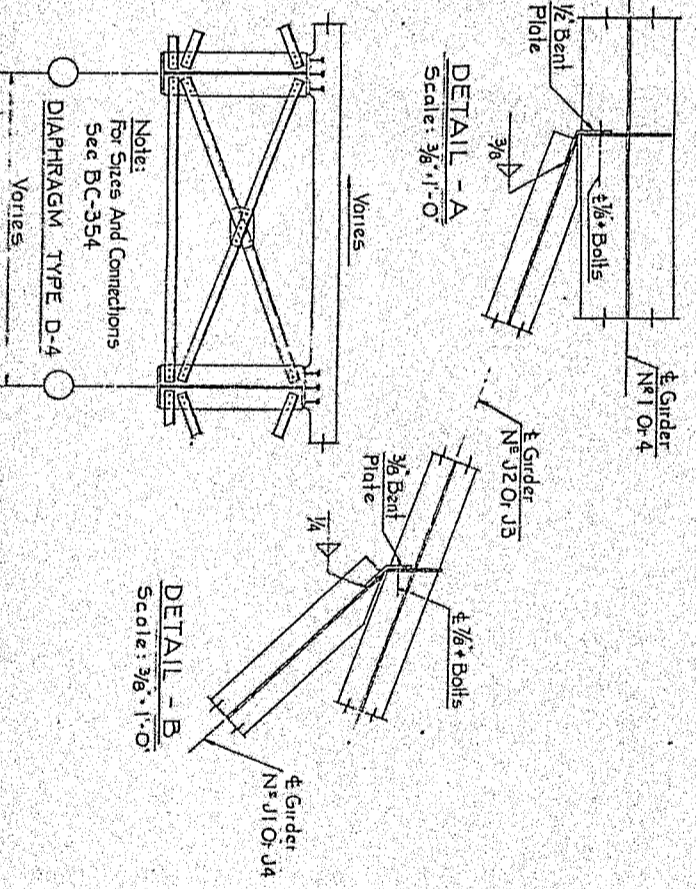
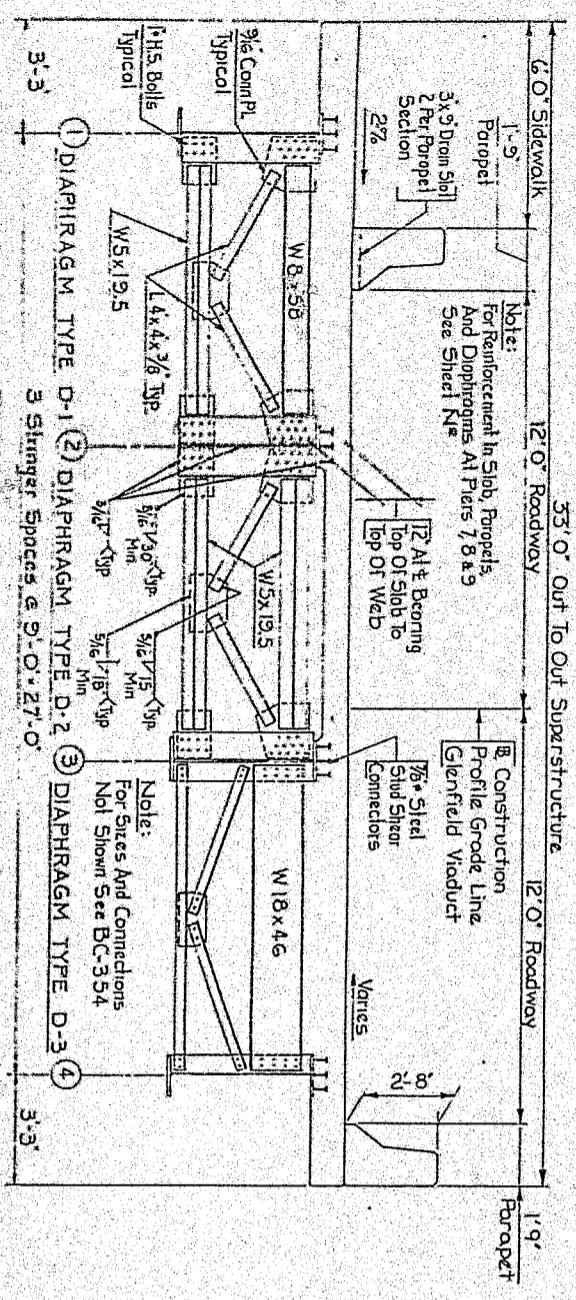
| MARK | DIMENSIONS (Inches) | | | WEIGHT (Lbs) |
|------|---------------------|----|--------|--------------|
| b | l | s | t | |
| B | 16 | 13 | 27 1/2 | 310 |
| B | 18 | 13 | 29 1/2 | 335 |
| B | 22 | 13 | 33 1/2 | 390 |

FIXED BEARINGS II F

| MARK | DIMENSIONS (Inches) | | | REACTION (Kips) | WEIGHT (Lbs) |
|------|---------------------|----|----|-----------------|--------------|
| S | T1 | T2 | T3 | | |
| 10 | 26 | 24 | 24 | R3005 | 520 |
| 11 | 30 | 3 | 3 | R4005 | 735 |

FRAMING PLAN

| MARK | DIMENSIONS (Inches) | | | REACTION (Kips) | WEIGHT (Lbs) |
|------|---------------------|----|----|-----------------|--------------|
| S | T1 | T2 | T3 | | |
| 10 | 26 | 24 | 24 | R3005 | 520 |
| 11 | 30 | 3 | 3 | R4005 | 735 |



REVISIONS

| Mark | Description | By | Chk'd | App'd | Date |
|------|-------------|----|-------|-------|------|
| | | | | | |

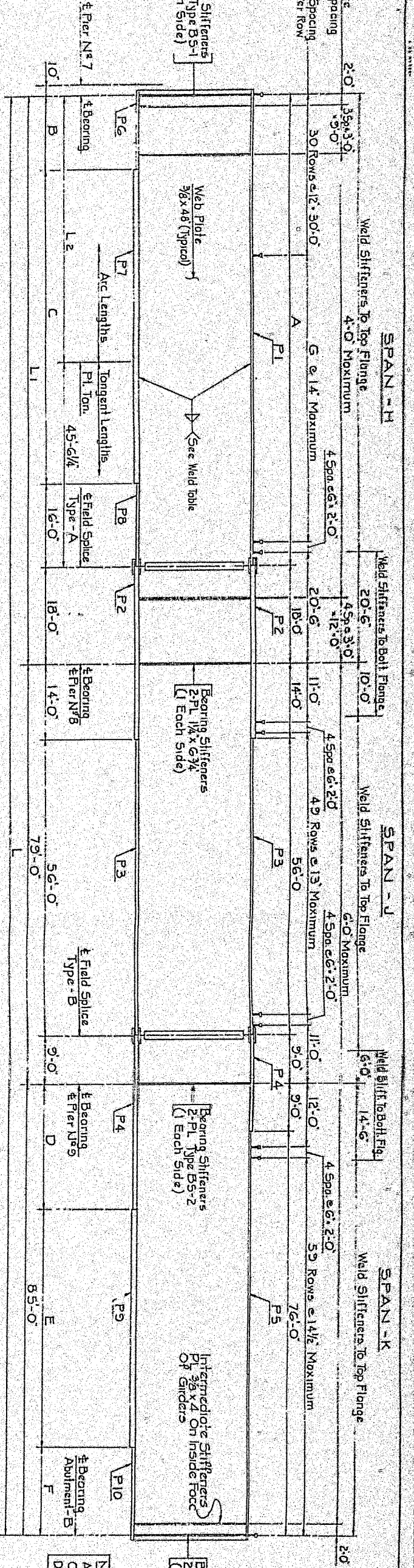
Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
 GLENFIELD VIADUCT

GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67

10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
 FRAMING PLAN - UNIT IV

RECOMMENDED: _____
 SHEET 25 OF _____
 BRIDGE ENGINEER: _____
 S-16201

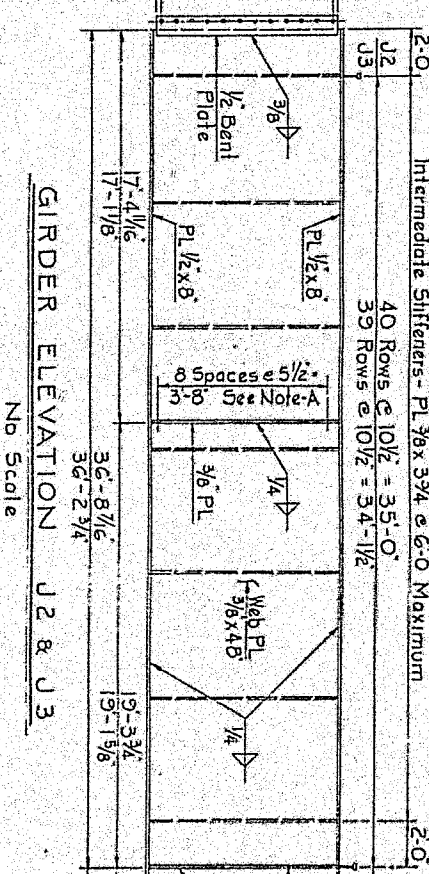
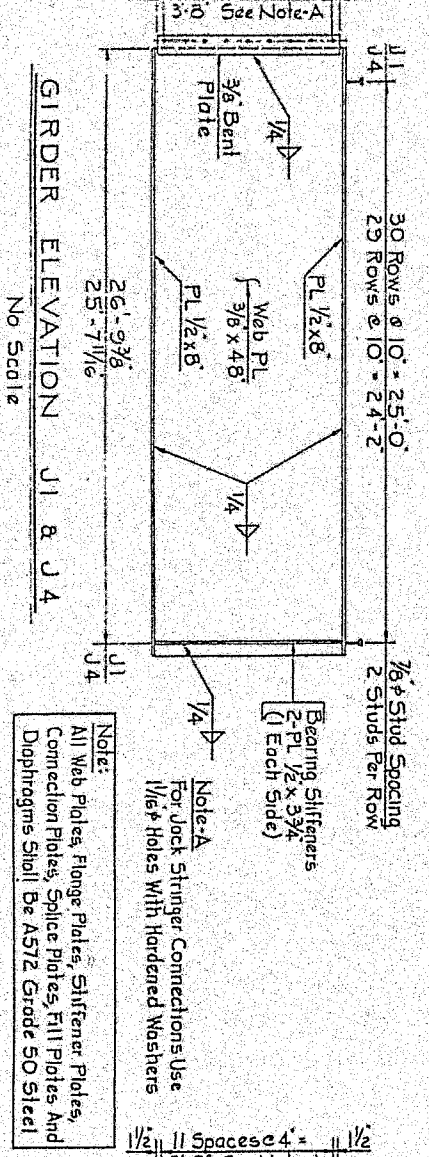


| WELD TABLE | |
|---------------------|-----------|
| FLANGE PL THICKNESS | WELD SIZE |
| Up To 1 1/2" | 5/16" |
| Over 1 1/2" | 3/8" |

Notes:
All Web Plates, Flange Plates, Stiffener Plates, Connection Plates, Splice Plates, Fill Plates And Diaphragms Shall Be A572 Grade 50 Steel

| RADIUS | GIRDER LENGTHS | | FLANGE PLATE LENGTHS | | | | | | | | | | STUD SPAC | FLANGE PLATE SIZES | | | | | | | | | | BEARING STIFFENER SIZES | | | SPLICE TYPES | | |
|--------|----------------|-------------|----------------------|------------|-------|------------|-------|-------|-------|---------|--------------|--------------|-----------|--------------------|------------|----------|--------------|----------|----------|------------------|---------------|---------------|------|-------------------------|----|----|--------------|--|--|
| | L1 | L2 | A | B | C | D | E | F | G | P1 | P2 | P3 | | P4 | P5 | P6 | P7 | P8 | P9 | P10 | B5-1 | B5-2 | B5-3 | A1 | A2 | A3 | B | | |
| 163.50 | 270-8 1/16 | 106-8 1/16 | 43-2 1/16 | 85-9 1/16 | 13-9" | 58-11 1/16 | 24-0" | 45-0" | 16-0" | 47 Rows | 1' x 14" | 1/2' x 14" | 1' x 14" | 1 1/8' x 16" | 1' x 16" | 2' x 16" | 1' x 16" | 2' x 16" | 1' x 16" | 1 1/8' x 7 3/4" | 1/4' x 7 3/4" | 7/8' x 7 3/4" | A1 | B | | | | | |
| 172.50 | 273-1 3/4 | 109-1 3/4 | 45-7 1/2 | 91-1 3/4 | 14-6" | 60-7 3/4 | 85-0" | — | — | 49 Rows | 1' x 14" | 1 1/2' x 14" | 1' x 14" | 1' x 14" | 3/4' x 14" | 1' x 16" | 2' x 16" | 1' x 16" | 2' x 16" | 1 1/8' x 7 3/4" | 1/4' x 6 3/4" | 7/8' x 6 3/4" | A1 | B | | | | | |
| 181.50 | 275-6 7/8 | 111-6 7/8 | 48-0 3/8 | 93-6 7/8 | 15-3" | 62-3 7/8 | 85-0" | — | — | 51 Rows | 1 1/4' x 16" | 2' x 14" | 1' x 14" | 1' x 14" | 3/4' x 14" | 1' x 18" | 2' x 18" | 1' x 18" | 2' x 18" | 1 1/8' x 8 3/4" | 1/4' x 6 3/4" | 7/8' x 6 3/4" | A2 | B | | | | | |
| 190.50 | 277-11 5/16 | 113-11 5/16 | 50-5 5/16 | 95-11 5/16 | 16-0" | 63-11 5/16 | 24-0" | 45-0" | 16-0" | 53 Rows | 1 1/4' x 16" | 2' x 14" | 1' x 14" | 1 1/8' x 16" | 1' x 22" | 2' x 22" | 1 1/8' x 22" | 2' x 16" | 1' x 16" | 1 1/8' x 10 3/4" | 1/4' x 7 3/4" | 7/8' x 7 3/4" | A3 | B | | | | | |

GIRDER DIMENSION SCHEDULE

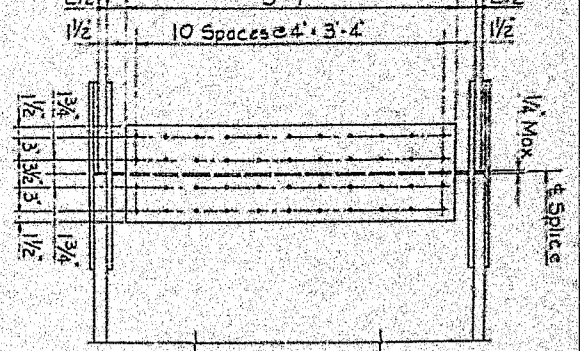


| Mark | Description | By | Chk'd | App'd | Date |
|------|-------------|----|-------|-------|------|
| | REVISIONS | | | | |

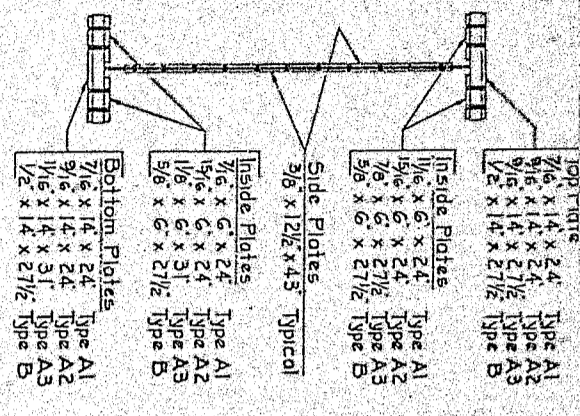
Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT
GLENFIELD VIADUCT
GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
STRINGER DETAILS - UNIT IV

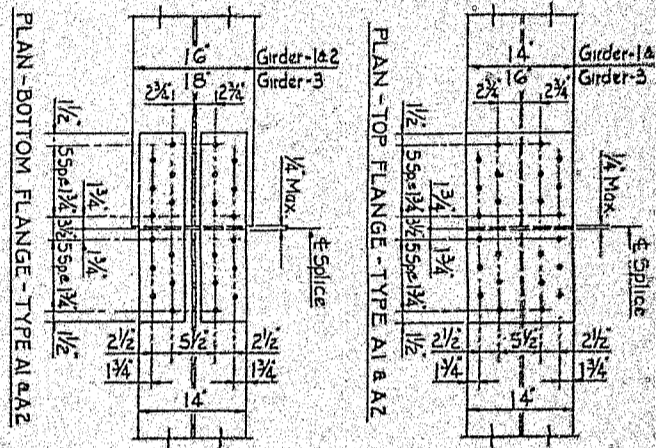
RECOMMENDED SHEET 26 OF 26



ELEVATION



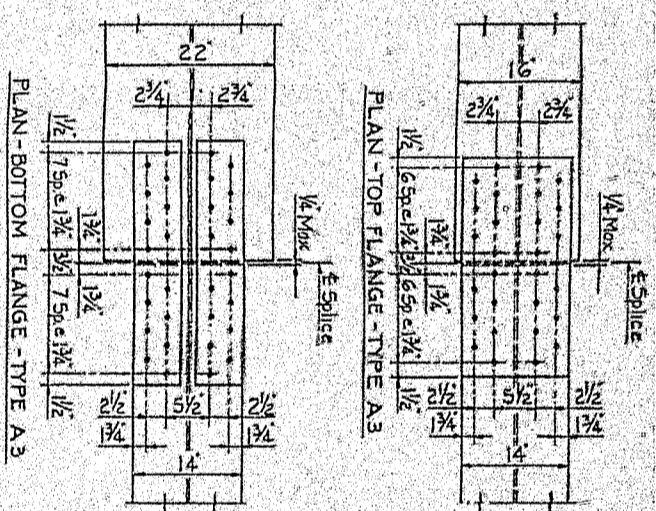
SECTION



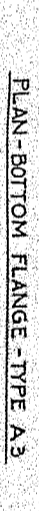
PLAN - TOP FLANGE - TYPE A1 & A2



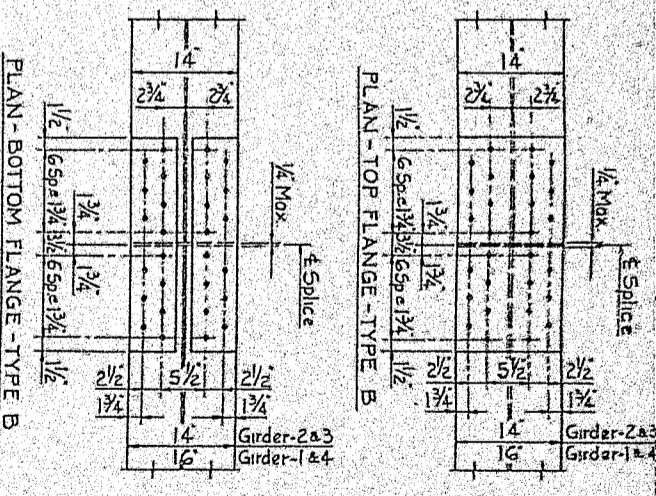
PLAN - BOTTOM FLANGE - TYPE A1 & A2



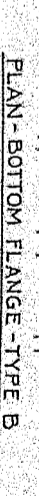
PLAN - TOP FLANGE - TYPE A3



PLAN - BOTTOM FLANGE - TYPE A3

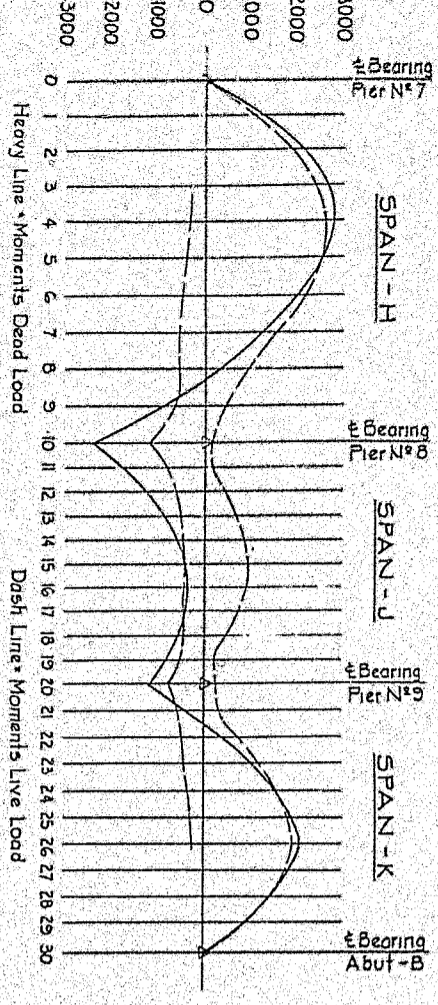


PLAN - TOP FLANGE - TYPE B

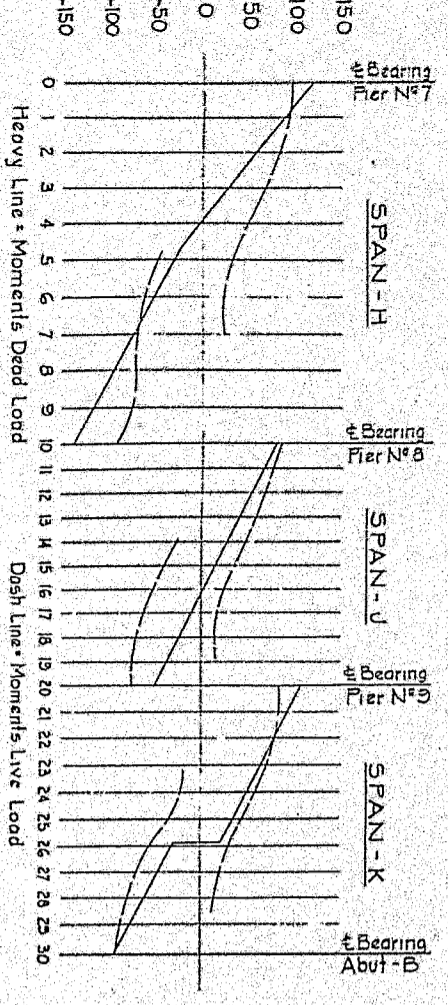


PLAN - BOTTOM FLANGE - TYPE B

FIELD SPlice DETAILS
Scale: 1"=1'-0"



MOMENT DIAGRAM - UNIT - IV



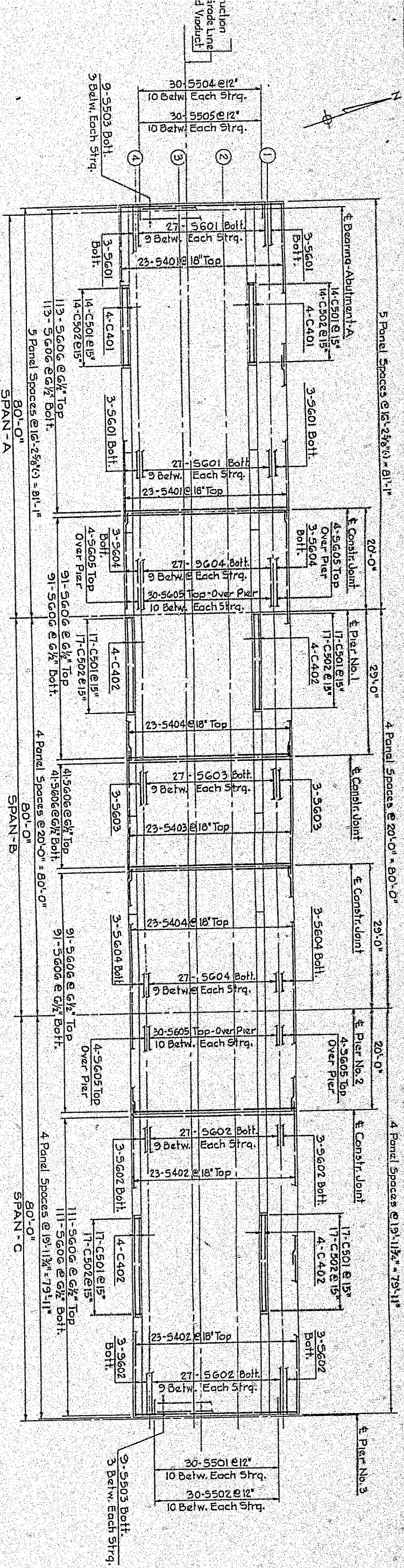
MOMENT DIAGRAM - UNIT - IV

| Mark | Description | By | Chk'd. | App'd. | Date |
|-----------|-------------|----|--------|--------|------|
| REVISIONS | | | | | |

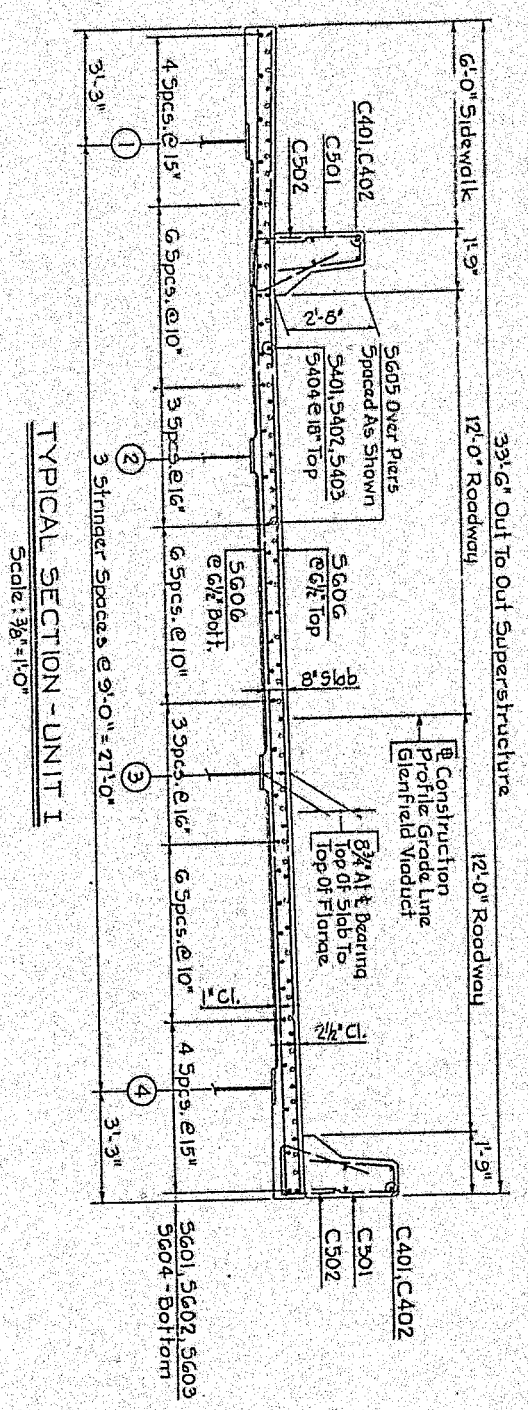
Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT
GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
STRINGER SPLICES & DETAILS - UNIT IV

RECOMMENDED _____ SHEET 22 OF _____



DECK PLAN - UNIT I
Scale: 1"=10'



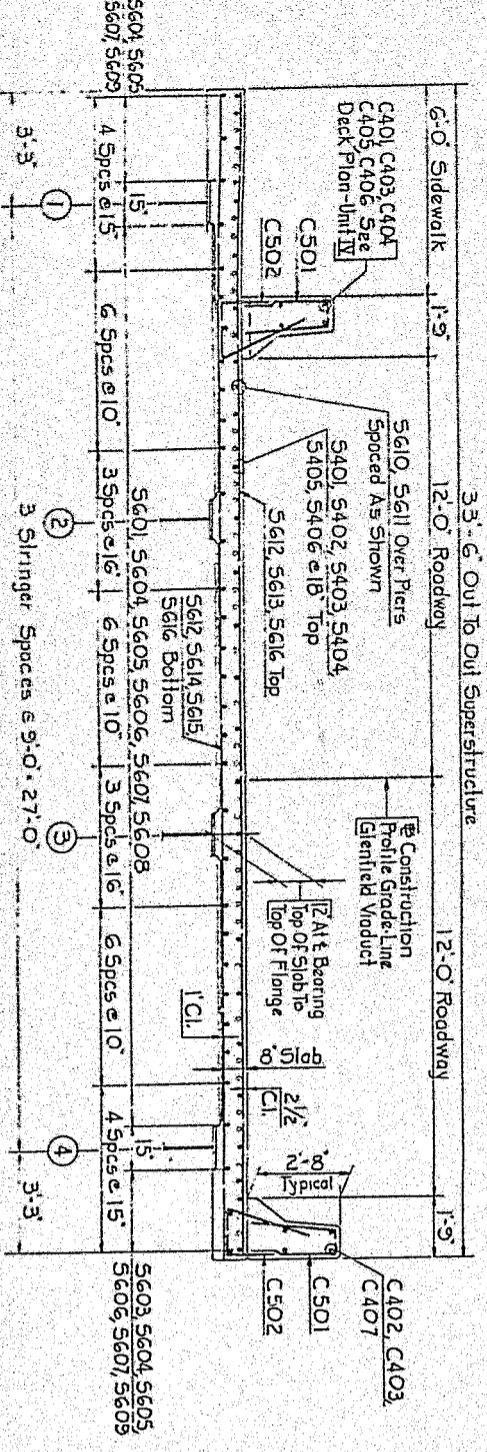
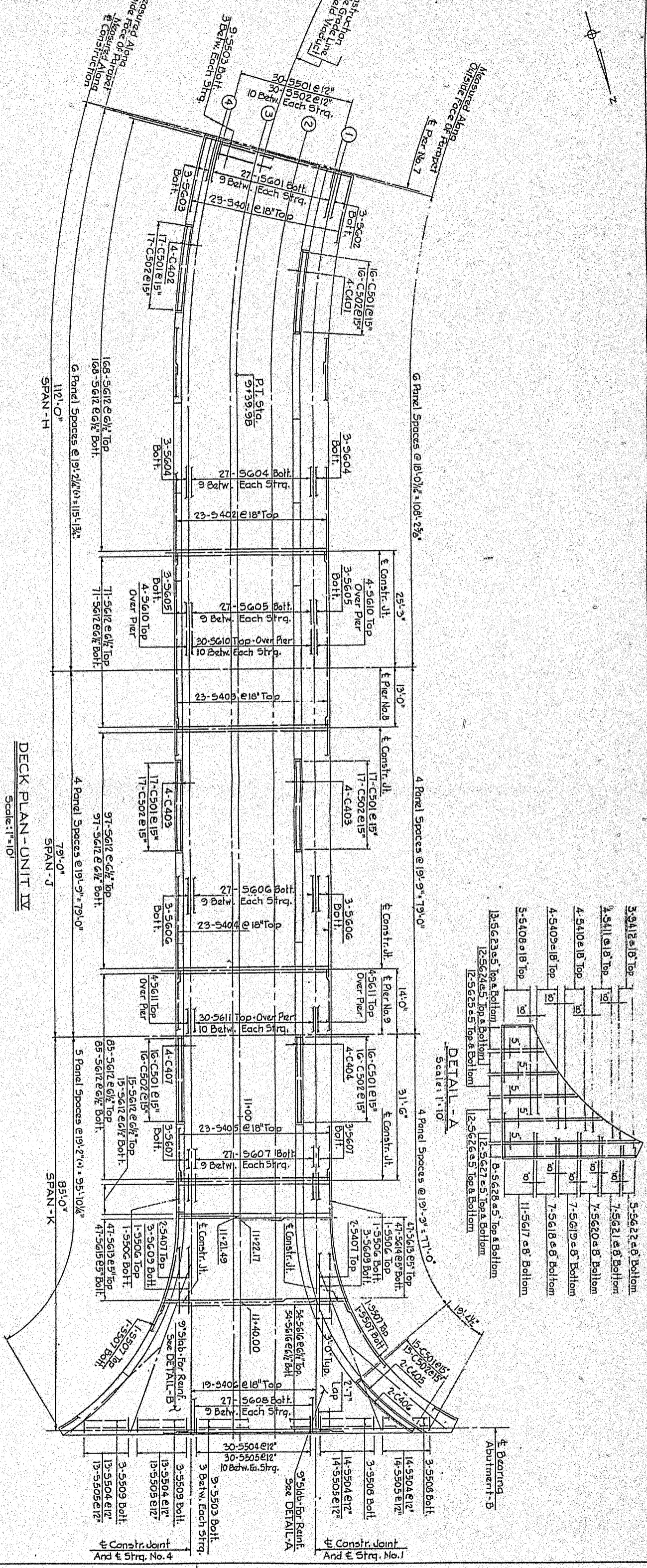
TYPICAL SECTION - UNIT I
Scale: 3/8"=1'-0"

| Mark | Description | By | Chkd. | App'd. | Date |
|-----------|-------------|----|-------|--------|------|
| REVISIONS | | | | | |
| | | | | | |

Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT
GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
DECK PLAN - UNIT I

RECOMMENDED _____ SHEET 22 OF _____
BRIDGE ENGINEER _____ S-16201



TYPICAL SECTION - UNIT IV
Scale: 3/8" = 1'-0"

DECK PLAN - UNIT IV
Scale: 1" = 10'

DETAIL - A
Scale: 1" = 10'

DETAIL - B
Scale: 1" = 10'

| Mark | Description | By | Chk'd | App'd | Date |
|-----------|-------------|----|-------|-------|------|
| REVISIONS | | | | | |
| | | | | | |

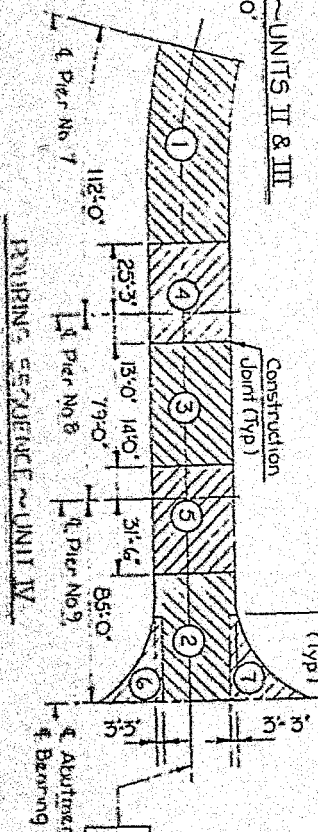
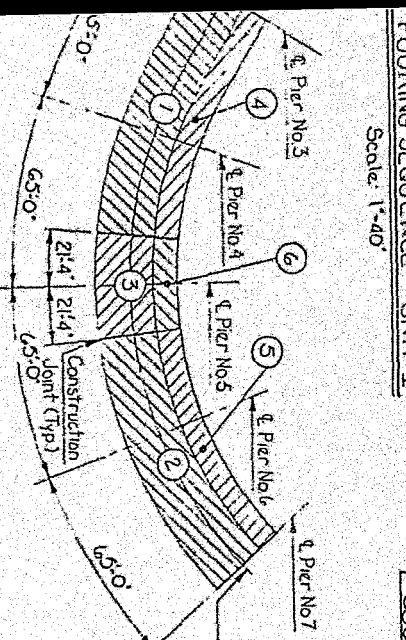
Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT
EAST BEAVER STREET STA. 18+96.67
10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
DECK PLAN - UNIT IV

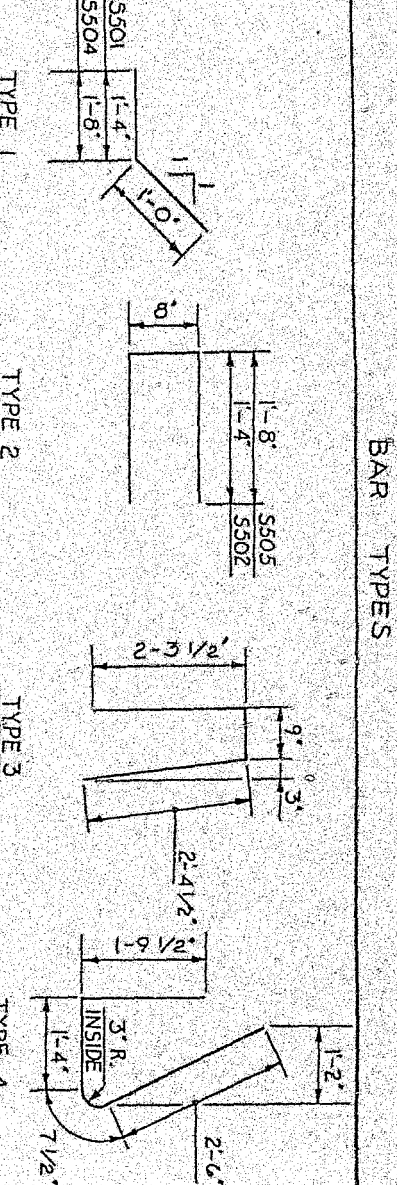
RECOMMENDED
BRIDGE ENGINEER
SHEET 37 OF 40
S-16201

| BAR SCHEDULE ~ UNIT I | MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|-----------------------|------|------|------|-----|-------------------|----------------------|
| # 4 | S401 | # 4 | STR. | 5 | 43'-0" TO 43'-4" | VARY EACH BY 7" |
| # 4 | S402 | # 4 | STR. | 2 | 42'-8" | |
| # 4 | S403 | # 4 | STR. | 2 | 45'-7" | |
| # 4 | S404 | # 4 | STR. | 16 | 43'-0" TO 45'-4" | VARY EACH BY 1/8" |
| # 4 | S405 | # 4 | STR. | 15 | 40'-1" TO 47'-4" | VARY 3 EA BY 1'-1/4" |
| # 4 | S406 | # 4 | STR. | 6 | 40'-3" | |
| # 4 | S407 | # 4 | STR. | 6 | 48'-1" | |
| # 5 | S408 | # 4 | STR. | 48 | 40'-11" TO 47'-4" | VARY 3 EA BY 5/16" |
| # 5 | S409 | # 4 | STR. | 10 | 38'-2" TO 44'-11" | VARY 2 EA BY 1'-1/4" |
| # 5 | S410 | # 4 | STR. | 4 | 37'-10" | |
| # 5 | S411 | # 4 | STR. | 4 | 45'-8" | |
| # 5 | S412 | # 4 | STR. | 4 | 38'-2" TO 44'-11" | VARY 2 EA BY 5/16" |
| # 5 | S501 | # 5 | 1 | 128 | 2'-4" | |
| # 5 | S502 | # 5 | 2 | 128 | 3'-4" | |
| # 5 | S503 | # 5 | STR. | 48 | 6'-3" | |

| BAR SCHEDULE ~ UNITS II & III | MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|-------------------------------|------|------|------|-----|-------------------|----------------------|
| # 6 | S601 | # 6 | STR. | 5 | 43'-8" TO 44'-0" | VARY EACH BY 7" |
| # 6 | S602 | # 6 | STR. | 2 | 43'-3" | |
| # 6 | S603 | # 6 | STR. | 2 | 46'-3" | |
| # 6 | S604 | # 6 | STR. | 20 | 43'-8" TO 46'-0" | VARY EACH BY 1/2" |
| # 6 | S605 | # 6 | STR. | 15 | 41'-7" TO 48'-0" | |
| # 6 | S606 | # 6 | STR. | 6 | 40'-11" | |
| # 6 | S607 | # 6 | STR. | 6 | 48'-9" | |
| # 6 | S608 | # 6 | STR. | 60 | 41'-7" TO 48'-0" | VARY 3 EA BY 4" |
| # 6 | S609 | # 6 | STR. | 10 | 38'-2" TO 44'-11" | VARY 2 EA BY 1'-1/4" |
| # 6 | S610 | # 6 | STR. | 4 | 37'-10" | |
| # 6 | S611 | # 6 | STR. | 4 | 45'-8" | |
| # 6 | S612 | # 6 | STR. | 40 | 36'-6" TO 44'-11" | VARY 2 EA BY 4" |
| # 6 | S613 | # 6 | STR. | 56 | 36'-6" TO 44'-11" | VARY 2 EA BY 2'-6" |
| # 6 | S614 | # 6 | STR. | 6 | 37'-10" | |
| # 6 | S615 | # 6 | STR. | 6 | 45'-8" | |
| # 6 | S616 | # 6 | STR. | 6 | 7'-11" | |
| # 6 | S617 | # 6 | STR. | 314 | 27'-10" | |
| # 6 | S618 | # 6 | STR. | 314 | 27'-10" | |
| # 6 | S619 | # 6 | STR. | 314 | 26'-1" | |
| # 4 | C401 | # 4 | STR. | 16 | 14'-10" | |
| # 4 | C402 | # 4 | STR. | 36 | 19'-7" | |
| # 4 | C403 | # 4 | STR. | 16 | 16'-4" | |
| # 4 | C404 | # 4 | STR. | 48 | 16'-11" | |
| # 5 | C501 | # 5 | 3 | 123 | 5'-5" | |
| # 5 | C502 | # 5 | 4 | 123 | 6'-3" | |



| BAR SCHEDULE ~ UNIT IV | MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|------------------------|------|------|------|-----|--------------------|----------------------|
| # 4 | S401 | # 4 | STR. | 23 | 42'-11" TO 51'-10" | VARY BY 4/8" (-) |
| # 4 | S402 | # 4 | STR. | 23 | 41'-1" | |
| # 4 | S403 | # 4 | STR. | 23 | 37'-11" | |
| # 4 | S404 | # 4 | STR. | 23 | 55'-0" | |
| # 4 | S405 | # 4 | STR. | 23 | 45'-2" | |
| # 4 | S406 | # 4 | STR. | 19 | 56'-1" | |
| # 4 | S407 | # 4 | STR. | 4 | 29'-0" | |
| # 4 | S408 | # 4 | STR. | 10 | 28'-3" | |
| # 4 | S409 | # 4 | STR. | 4 | 18'-2" TO 25'-8" | VARY BY 30" |
| # 4 | S410 | # 4 | STR. | 4 | 11'-0" TO 16'-0" | VARY BY 20" |
| # 4 | S411 | # 4 | STR. | 4 | 6'-8" TO 9'-8" | VARY BY 12" |
| # 4 | S412 | # 4 | STR. | 3 | 3'-8" TO 5'-8" | VARY BY 12" |
| # 4 | S413 | # 4 | STR. | 3 | 18'-10" TO 24'-8" | VARY BY 2'-11" |
| # 4 | S414 | # 4 | STR. | 4 | 10'-11" TO 16'-5" | VARY BY 1'-10" |
| # 4 | S415 | # 4 | STR. | 4 | 5'-6" TO 9'-6" | VARY BY 1'-4" |
| # 4 | S416 | # 4 | STR. | 3 | 2'-4" TO 4'-4" | VARY BY 1'-0" |
| # 5 | S501 | # 5 | 1 | 30 | 2'-4" | |
| # 5 | S502 | # 5 | 2 | 30 | 3'-4" | |
| # 5 | S503 | # 5 | STR. | 18 | 8'-6" | |
| # 5 | S504 | # 5 | STR. | 84 | 2'-8" | |
| # 5 | S505 | # 5 | 2 | 84 | 4'-0" | |
| # 5 | S506 | # 5 | STR. | 4 | 30'-10" | |
| # 5 | S507 | # 5 | STR. | 4 | 35'-8" | |
| # 5 | S508 | # 5 | STR. | 6 | 19'-0" | |
| # 5 | S509 | # 5 | STR. | 6 | 12'-0" | |
| # 6 | S601 | # 6 | STR. | 21 | 43'-11" TO 48'-10" | VARY BY 2' VARY (+) |
| # 6 | S602 | # 6 | STR. | 3 | 42'-11" TO 43'-7" | VARY BY 4" |
| # 6 | S603 | # 6 | STR. | 3 | 51'-2" TO 51'-10" | VARY BY 4" |
| # 6 | S604 | # 6 | STR. | 33 | 42'-5" | |
| # 6 | S605 | # 6 | STR. | 33 | 37'-11" | |
| # 6 | S606 | # 6 | STR. | 33 | 56'-4" | |
| # 6 | S607 | # 6 | STR. | 33 | 45'-2" | |
| # 6 | S608 | # 6 | STR. | 27 | 56'-7" | |
| # 6 | S609 | # 6 | STR. | 6 | 30'-4" | |
| # 6 | S610 | # 6 | STR. | 38 | 36'-10" | |
| # 6 | S611 | # 6 | STR. | 38 | 30'-10" | |
| # 6 | S612 | # 6 | STR. | 812 | 33'-2" | |
| # 6 | S613 | # 6 | STR. | 94 | 17'-11" TO 21'-4" | VARY 2 EA BY 15/16" |
| # 6 | S614 | # 6 | STR. | 47 | 13'-5" TO 16'-11" | VARY BY 5/16" (-) |
| # 6 | S615 | # 6 | STR. | 47 | 22'-5" TO 25'-8" | VARY BY 7/8" (-) |
| # 6 | S616 | # 6 | STR. | 54 | 33'-0" | |
| # 6 | S617 | # 6 | STR. | 21 | 28'-3" | |
| # 6 | S618 | # 6 | STR. | 7 | 19'-0" TO 24'-6" | VARY BY 15" |
| # 6 | S619 | # 6 | STR. | 7 | 13'-8" TO 18'-2" | VARY BY 9" |
| # 6 | S620 | # 6 | STR. | 7 | 8'-10" TO 12'-4" | VARY BY 7" |
| # 6 | S621 | # 6 | STR. | 7 | 5'-8" TO 8'-2" | VARY BY 5" |
| # 6 | S622 | # 6 | STR. | 5 | 3'-8" TO 5'-0" | VARY BY 4" |
| # 6 | S623 | # 6 | STR. | 26 | 6'-5" TO 8'-7" | VARY 2 EA BY 2 3/16" |
| # 6 | S624 | # 6 | STR. | 24 | 8'-9" TO 11'-4" | VARY 2 EA BY 2 3/16" |
| # 6 | S625 | # 6 | STR. | 24 | 11'-8" TO 15'-6" | VARY 2 EA BY 2 3/16" |
| # 6 | S626 | # 6 | STR. | 24 | 15'-8" TO 20'-10" | VARY 2 EA BY 5/8" |
| # 6 | S627 | # 6 | STR. | 24 | 21'-6" TO 28'-6" | VARY 2 EA BY 7/8" |
| # 6 | S628 | # 6 | STR. | 16 | 28'-8" TO 29'-10" | VARY 2 EA BY 1 3/4" |
| # 6 | S629 | # 6 | STR. | 26 | 7'-2" TO 8'-5" | VARY 2 EA BY 1 1/4" |
| # 6 | S630 | # 6 | STR. | 26 | 8'-8" TO 11'-5" | VARY 2 EA BY 2 3/4" |
| # 6 | S631 | # 6 | STR. | 26 | 11'-8" TO 15'-5" | VARY 2 EA BY 3 3/4" |
| # 6 | S632 | # 6 | STR. | 26 | 15'-8" TO 20'-8" | VARY 2 EA BY 5" |
| # 6 | S633 | # 6 | STR. | 26 | 21'-2" TO 27'-8" | VARY 2 EA BY 6 1/2" |
| # 6 | S634 | # 6 | STR. | 8 | 17'-8" TO 26'-8" | VARY 2 EA BY 3" |
| # 6 | S635 | # 6 | STR. | 8 | 10'-11" TO 16'-8" | VARY 2 EA BY 1 3/16" |
| # 6 | S636 | # 6 | STR. | 8 | 5'-11" TO 10'-5" | VARY 2 EA BY 7/4" |
| # 6 | S637 | # 6 | STR. | 8 | 2'-2" TO 5'-6" | VARY 2 EA BY 5/16" |
| # 6 | S638 | # 6 | STR. | 8 | | |



| BAR SCHEDULE ~ UNIT IV (CONT) | MARK | SIZE | TYPE | NO. | LENGTH | REMARKS |
|-------------------------------|------|------|------|-----|---------|---------|
| # 4 | C401 | # 4 | STR. | 24 | 17'-8" | |
| # 4 | C402 | # 4 | STR. | 24 | 18'-9" | |
| # 4 | C403 | # 4 | STR. | 32 | 19'-4" | |
| # 4 | C404 | # 4 | STR. | 16 | 18'-10" | |
| # 4 | C405 | # 4 | STR. | 2 | 18'-7" | |
| # 4 | C406 | # 4 | STR. | 2 | 16'-10" | |
| # 4 | C407 | # 4 | STR. | 20 | 18'-3" | |
| # 5 | C501 | # 5 | 3 | 493 | 5'-5" | |
| # 5 | C502 | # 5 | 4 | 493 | 6'-3" | |

NOTE
 This Schedule Does Not Include Reinforcement For Light Pole Anchorage Or The Approach Slabs. For Reinforcement Details Of These Items, See Supplemental Drawings BC-322A And RC-23
 All Reinforcement Shall Be Epoxy Coated

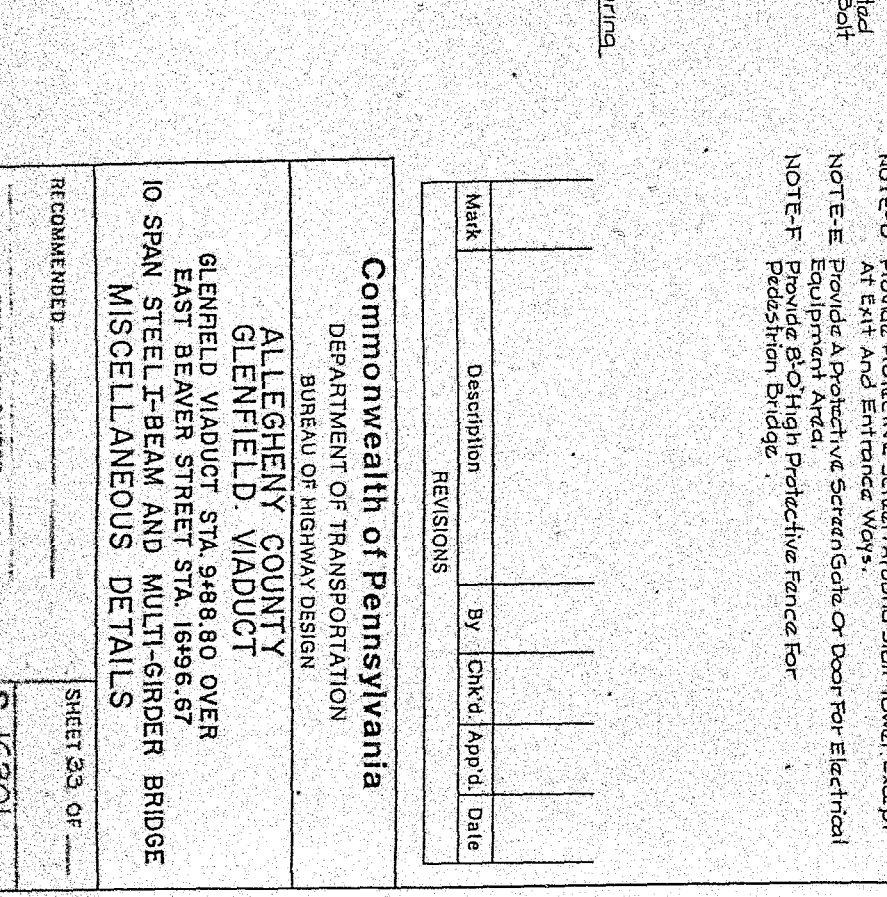
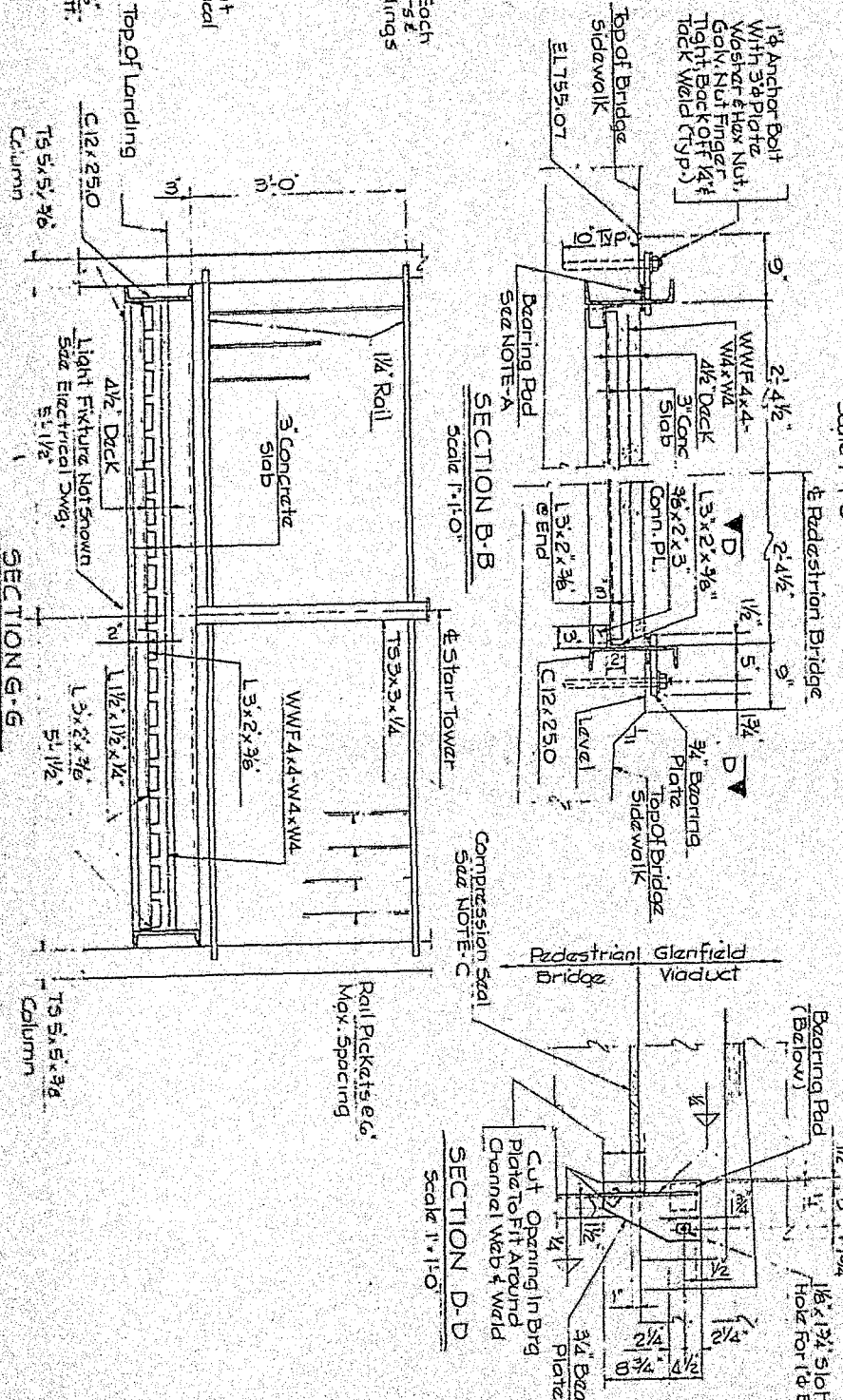
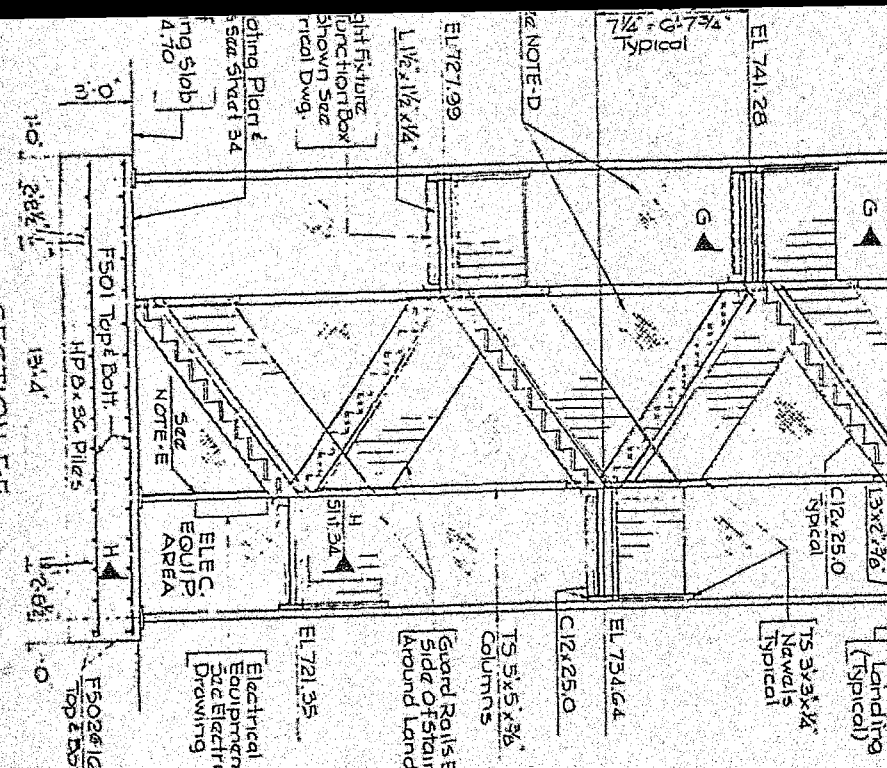
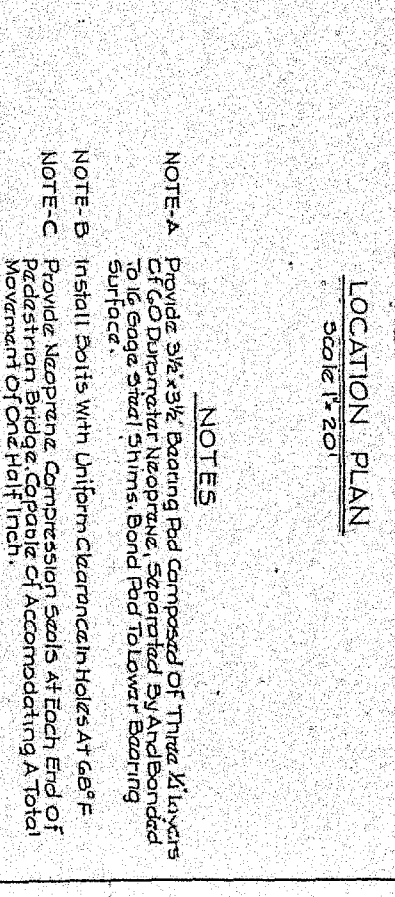
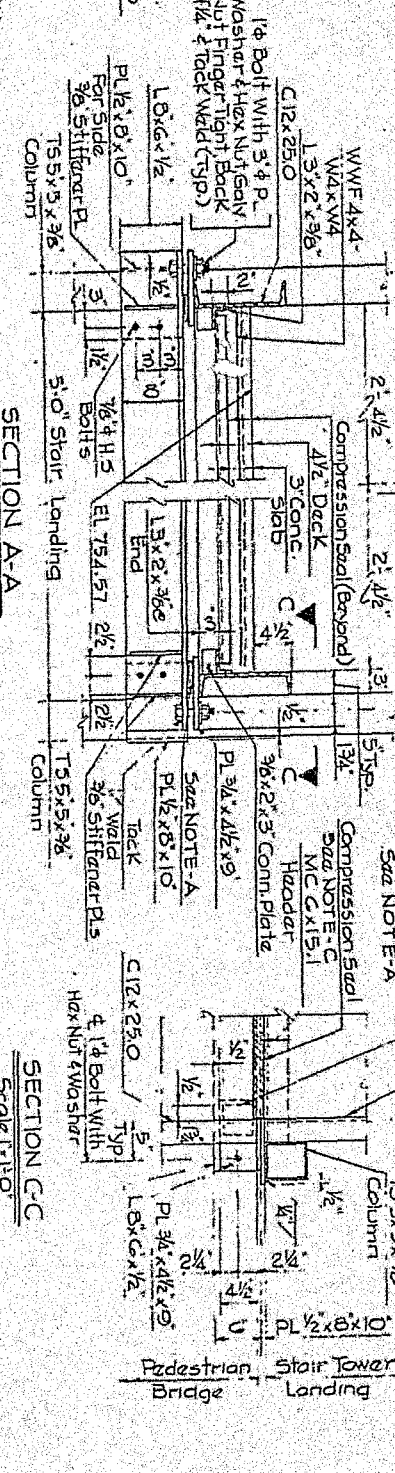
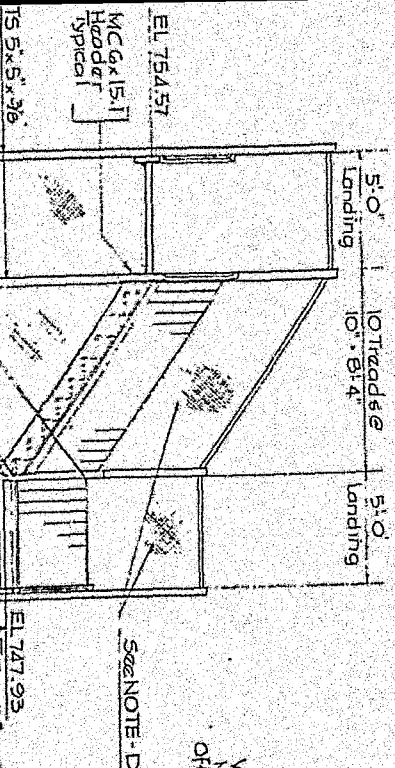
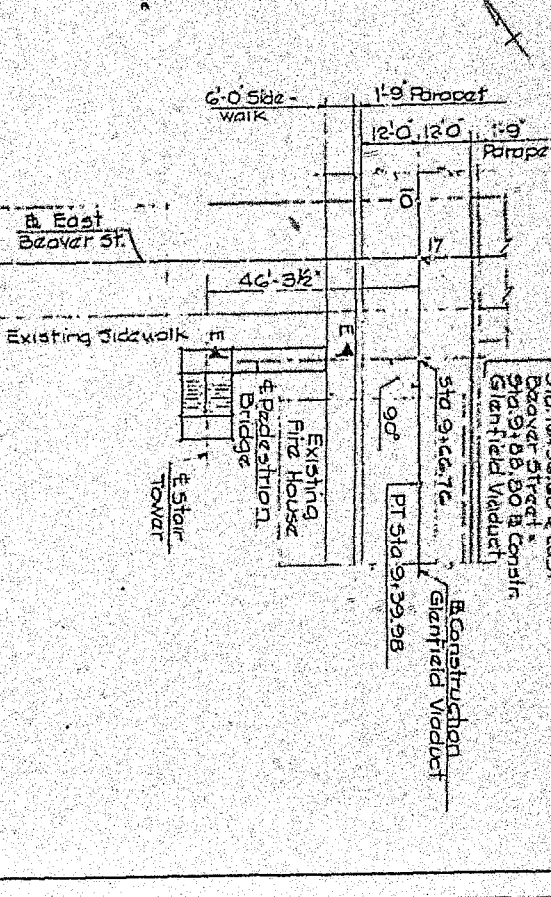
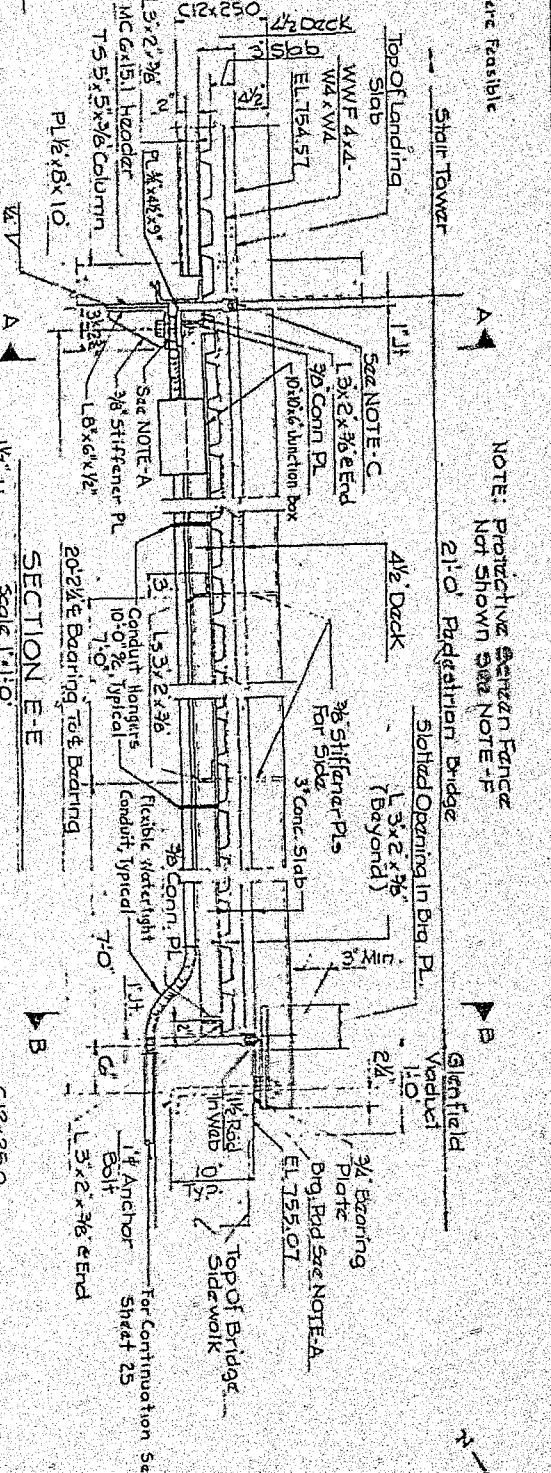
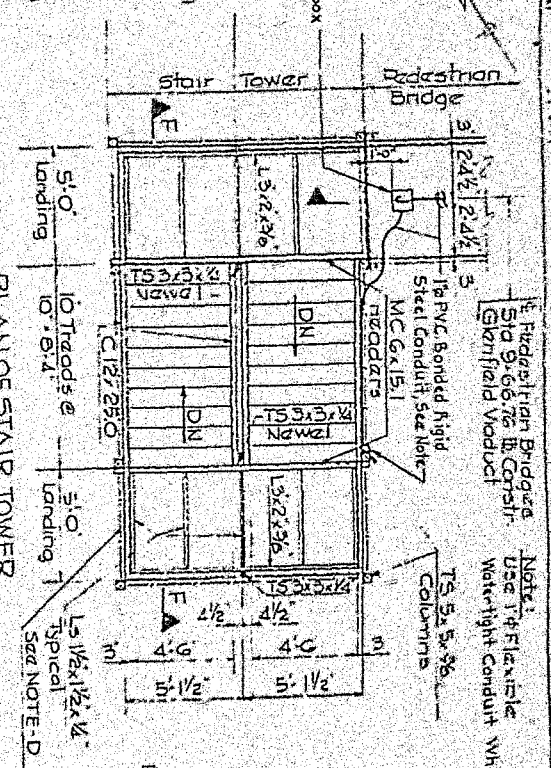
| Mark | Description | By | Chk'd | App'd. | Date |
|------|-------------|----|-------|--------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT

GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67
 10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
 DECK DETAILS & BAR SCHEDULES

RECOMMENDED _____ SHEET 32 OF _____
 BRIDGE ENGINEER _____ S-16201



NOTES

- NOTE-A Provide 3/8" x 3/8" Bearing Rod composed of Three 1/2" Layers of G.O. Diameter Neoprene, Separated by and Bonded to 1/8" Gauge Steel Shims, Bond Rod to Lower Bearing Surface.
- NOTE-B Install Bolts with Uniform Clearance in Holes at 60° F.
- NOTE-C Provide Neoprene Compression Seals at Each End of Pedestrian Bridge, Capable of Accommodating A Total Movement of One and Half Inch.
- NOTE-D Provide Protective Screen Around Stair Tower Except at Exit and Entrance Ways.
- NOTE-E Provide A Protective Screen Gate or Door for Electrical Equipment Area.
- NOTE-F Provide 8'-0" High Protective Fence For Pedestrian Bridge.

| REVISIONS | | | |
|-----------|-------------|----|--------------------|
| Mark | Description | By | Chk'd. App'd. Date |
| | | | |
| | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN
ALLEGHENY COUNTY
GLENFIELD VIADUCT
 EAST BEAVER STREET STA. 18+96.67
 10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
 MISCELLANEOUS DETAILS
 SHEET 33 OF
 S-16201

Note: Use of Flexible Water-tight Conduit Where Feasible
 Note: Protective Screen Fence Not Shown See Note - F

Note: Protective Screen Fence Not Shown See Note - F



BORING B-7

| A | B | STA | DEPTH | DESCRIPTION | MARK |
|------|-------|------|--------|--|---------------------|
| | | 6+30 | 15' LT | GE 712.1 | |
| 4.5 | B | | 6.0 | FILL - CLAY Sand, Silt w/ Rock Frags, Br-Ton, Dry | 707.1 |
| 6.5 | 20 | | 6.0 | FILL - CLAYERS, COAL, SAND, Silt, Some Rock Frags, Dry (0.5) | EL 703.5 |
| 8.0 | 14 | | 8.0 | FILL - CLAY, Silt w/ Rock Frags Br, Dry, Moist | Both Fig 2/27 No. 3 |
| 9.5 | 14 | | 8.0 | | |
| 11.0 | 6 | | 3.0 | | |
| 15.5 | 3 | | 21.5 | SAND Fine Clayey Silt, Dk Gray Moist to Wet | 699.1 |
| 20.0 | 3 | | 21.5 | Aluminum | 693.6 |
| 24.5 | 3 | | 25.5 | SAND Fine Little Silt, Tan Wet | 688.6 |
| 29.0 | 22 | | 36.7 | SAND Fine to Med, w/ Clayey Silt and Gravel, Dk Gray, Wet | 675.4 |
| 33.5 | 18 | | 36.7 | Aluminum | 675.4 |
| 37.0 | 50/51 | | 37.0 | SANDSTONE FRAGS Tan Dry | 675.1 |

BORING B-8

| A | B | STA | DEPTH | DESCRIPTION | MARK |
|------|-------|------|--------|--|---------------------|
| | | 6+33 | 10' RT | GE 710.5 | |
| 3.4 | 50/4 | | 3.4 | FILL - CLAY Sand, Silt, Dk Br Moist - Dry | 707.1 |
| 6.5 | 12 | | 6.5 | FILL - SANDSTONE BOULDERS w/ Br-Ton Clayey Sand, Silt, Dry | EL 704.5 |
| 8.0 | 91 | | 8.0 | | Both Fig 2/27 No. 2 |
| 9.5 | 91 | | 8.0 | | |
| 10.5 | 39 | | 10.5 | | |
| 12.0 | 17 | | 12.0 | | |
| 12.7 | 50/2 | | 12.7 | FILL - SANDSTONE COBBLES w/ Silt, Dry | 699.0 |
| 17.0 | 4 | | 17.0 | SAND Fine w/ Clayey Silt, Gray-Green Moist-Wet | 692.0 |
| 21.5 | 11 | | 21.5 | Aluminum | |
| 26.0 | 30 | | 26.0 | | |
| 30.5 | 15 | | 30.5 | SAND Fine to Cse w/ Gravel Trace Silt, Green-Gray, Wet-Sol | 683.5 |
| 35.0 | 44 | | 35.0 | SAND Fine to Cse w/ Weathered Rock Frags, Green-Gray and Silt Clay | 680.0 |
| 35.5 | 44 | | 35.5 | Aluminum | 680.0 |
| 37.0 | 50/51 | | 37.0 | SANDSTONE FRAGS Tan Dry | 675.1 |

BORING B-9

| A | B | STA | DEPTH | DESCRIPTION | MARK |
|------|-------|------|--------|---|---------------------|
| | | 6+95 | 15' LT | GE 712.0 | |
| 4.5 | 12 | | 4.5 | FILL - Silt Sand, w/ Rock Frags Silt, Chert, Br-Bk, Dry | 706.0 |
| 6.5 | 10 | | 6.0 | | EL 704.5 |
| 8.0 | 5 | | 8.0 | CLAY Some Silt, Little Sand Silt, Dry-Moist | Both Fig 2/27 No. 2 |
| 9.5 | 9 | | 9.5 | | |
| 11.0 | 7 | | 11.0 | FILL | |
| 12.5 | | | 12.5 | | |
| 15.5 | 2 | | 15.5 | SAND Fine B Silt Some Clay Dk Gray, Moist-Wet | 699.5 |
| 20.0 | 3 | | 20.0 | Aluminum | 691.0 |
| 22.0 | 100/2 | | 22.0 | CLAY, Fine SAND, Some Silt, Tan Gray, Moist | |
| 23.5 | 10 | | 23.5 | Aluminum | 685.5 |
| 26.5 | | | 26.5 | SAND Med Cse w/ Rock Frags Green-Gray, Moist | 683.0 |
| 28.0 | 12 | | 28.0 | CLAY Some Silt, Tan-Gray, Wet | 680.0 |
| 32.5 | 28 | | 32.5 | SAND Med Cse w/ Gravel Green-Gray, Wet | 680.0 |
| 37.0 | 45 | | 37.0 | Aluminum | |
| 40.1 | 50/1 | | 40.0 | SILT Fine Sand w/ Gravel Sandstone Frags, Moist | 672.0 |
| 43.5 | 50/51 | | 43.5 | SANDSTONE Slightly Decomposed, Fresh, Lt. Gray | 668.5 |
| 50.0 | 100/4 | | 50.0 | R.O.D. 70% | 662.0 |

BORING B-10

| A | B | STA | DEPTH | DESCRIPTION | MARK |
|------|-------|------|-------|--|---------------------|
| | | 6+95 | 9' RT | GE 711.5 | |
| 4.5 | 10 | | 4.0 | FILL - CLAY, SAND, SILT, w/ Rock Frags, Br-Ton-Bk, Moist | 707.5 |
| 6.5 | 8 | | 6.5 | FILL - SANDSTONE Boulders & Cobbles w/ Silt Clay & Sand Dry, Moist | EL 705.5 |
| 8.0 | 42 | | 8.0 | | Both Fig 2/27 No. 5 |
| 9.5 | 12 | | 9.5 | | |
| 11.0 | 11 | | 11.0 | CLAY, Sandy w/ Rock Frags Red Br, Moist | 700.8 |
| 15.5 | 11 | | 15.5 | SAND A Silt Some Clay Dk Green-Gray, Moist | 695.5 |
| 20.0 | 5 | | 20.0 | Aluminum | |
| 24.5 | 5 | | 24.5 | | |
| 29.0 | 27 | | 28.5 | ORGANIC BR Wet | 683.0 |
| 33.5 | 22 | | 33.5 | SAND Fine Cse w/ Gravel Little Clayey Silt, Green-Gray Wet | 682.9 |
| 38.0 | 82 | | 37.8 | SANDSTONE FRAGS Gray | 673.7 |
| 41.5 | 77/51 | | 41.5 | | 670.0 |

BORING B-11

| A | B | STA | DEPTH | DESCRIPTION | MARK |
|------|-------|------|--------|---|---------------------|
| | | 7+63 | 14' LT | GE 712.1 | |
| 4.5 | 18 | | 5.0 | FILL - Silt Sand, Clayey, w/ Wood, Coal, Chert, Br, Dry | 707.1 |
| 6.5 | 50/51 | | 6.0 | | EL 705.5 |
| 8.5 | 5 | | 8.0 | FILL - Sandstone Frags, Silt, Dry | Both Fig 2/27 No. 5 |
| 10.0 | 4 | | 10.0 | | |
| 11.5 | 7 | | 11.5 | SILT, Fine SAND, Some Clay, Br, Moist | 704.1 |
| 13.0 | 14 | | 13.0 | | |
| 17.5 | 4 | | 17.5 | | |
| 21.5 | 5 | | 21.5 | SILT a Fine SAND, Little Clay Gray, Moist | 689.6 |
| 23.5 | 10 | | 23.5 | Aluminum | 685.1 |
| 29.5 | 28 | | 28.5 | CLAY Some Silt, Br, Wet | 683.5 |
| 34.0 | 22 | | 34.0 | SAND Fine Some Clayey Silt w/ Rock Frags, Gray, Wet | 682.8 |
| 38.5 | 13 | | 38.5 | SAND Med Cse, w/ Rock Frags, Gravel, Clay, Gray, Wet | |
| 43.0 | 16 | | 43.0 | Aluminum | |
| 44.5 | 50/51 | | 45.0 | | 667.1 |

BORING B-12

| A | B | STA | DEPTH | DESCRIPTION | MARK |
|------|-------|------|--------|---|-------|
| | | 7+60 | 10' RT | GE 711.9 | |
| 4.5 | 19 | | 3.0 | FILL - Silt Sand, Clayey, w/ Rock Frags, Tan, Dry | 708.9 |
| 6.5 | 19 | | 6.5 | | |
| 8.0 | 8 | | 8.0 | FILL - ASH, CLAYERS | 708.4 |
| 9.5 | 12 | | 9.5 | | |
| 11.0 | 10 | | 11.0 | FILL - Silt Sand, Clayey w/ Rock Frags Tan Br Moist to Wet | |
| 15.5 | 12 | | 14.5 | SILT and Fine Sand, Some Clay Dk Gray, Moist to Wet | 697.4 |
| 20.0 | 7 | | 20.0 | CLAY, Silt, Br Moist to Wet | 695.9 |
| 24.5 | 5 | | 24.5 | Aluminum | |
| 29.0 | 40 | | 29.0 | | |
| 33.5 | 22 | | 33.5 | SAND Fine to Cse w/ Gravel | 679.4 |
| 38.0 | 99 | | 35.0 | Gray Wet-Sol, Colloidal | 676.9 |
| 41.0 | 50/01 | | 41.0 | SAND Fine Silt, Some Gravel & Weath. Sandstone, Gray, Moist | 670.9 |

| Mark | Description | By | Chkd. | App'd. | Date |
|------|-------------|----|-------|--------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
 GLENFIELD VIADUCT
 GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67
 IO SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
 BORING LOGS

RECOMMENDED _____ SHEET 26 OF _____
 BRIDGE ENGINEER _____ S-16201

BORING B-13

STA 8+28.13' LT GE 712.4

| | | | | | |
|----|------|------|----------|--|-------|
| 13 | 4.5 | 7 | 40 | SILT Clayey, Little Fine Sand Red-Ton, Moist | 670.9 |
| 19 | 6.0 | 7 | 40 | SILT Clayey, Little Fine Sand Alluvium | 671.4 |
| 22 | 2.5 | 9 | 40 | Br-Red, Moist Alluvium | 669.9 |
| 2 | 9.0 | 12 | 40 | Alluvium | 669.9 |
| 5 | 10.5 | 8 | 40 | Alluvium | 669.9 |
| 5 | 15.0 | 8 | 40 | Alluvium | 669.9 |
| 0 | 19.5 | 10 | 40 | Alluvium | 669.9 |
| 2 | 24.0 | 4 | 40 | SAND Fine to Med Silty, Gray, Moist Alluvium | 690.9 |
| 2 | 25.8 | 4 | 40 | SAND Med to Cse w/ Gravel We-Sd Alluvium | 686.6 |
| 5 | 28.5 | 12 | 40 | SAND Fine to Cse and Gravel, Some Silty & Clay, Wei-Sol Alluvium | 686.6 |
| 25 | 33.0 | 30 | 40 | SAND Fine to Med Silty, Gray, Moist Colluvium | 680.4 |
| 0 | 34 | 10 | 40 | SILT & SAND Fine, Little Clay, Dk Gray, Wet Colluvium | 676.4 |
| 5 | 37.5 | 10 | 40 | SAND Fine, Silty, Dk Gray-Tan Colluvium | 671.4 |
| 28 | 41.5 | 28 | 40 | SANDSTONE Very Weathered | 669.9 |
| 5 | 46.3 | 100% | ROD 887% | | |
| 5 | 48.7 | 100% | ROD 887% | | |

BORING B-14

STA 8+31.3' RT GE 712.7

| | | | | | |
|----|------|------|----------|---|-------|
| 13 | 4.5 | 8 | 40 | SILT Some Clay, Fine Sand Br, Moist | 708.7 |
| 19 | 6.5 | 15 | 40 | SILT Clayey, Little Sand Br-Red, Moist Alluvium | 708.7 |
| 22 | 8.0 | 16 | 40 | Br-Red, Moist Alluvium | 708.7 |
| 2 | 9.5 | 9 | 40 | Alluvium | 708.7 |
| 2 | 11.0 | 14 | 40 | Alluvium | 708.7 |
| 5 | 15.5 | 7 | 40 | Alluvium | 708.7 |
| 0 | 20.0 | 3 | 40 | Alluvium | 708.7 |
| 2 | 24.5 | 2 | 40 | SILT and Fine Sand, Some Clay Gray to Dk Gray, Sol Alluvium | 692.2 |
| 5 | 29.0 | 66 | 40 | SILT and Fine Dk Gray, Moist Colluvium | 686.2 |
| 5 | 33.5 | 22 | 40 | SILT and Fine Dk Gray, Moist Colluvium | 686.2 |
| 0 | 38.0 | 24 | 40 | SAND Fine to Cse w/ Gravel Little Silty, Dk Gray, Wet Colluvium | 675.2 |
| 5 | 42.3 | 60/8 | 42.3 | SANDSTONE Horiz. Joints Some Staining | 671.9 |
| 5 | 47.5 | 73% | ROD 887% | | |
| 5 | 48.7 | 100% | ROD 887% | | |

BORING B-15

STA 8+84.1' LT GE 714.2

| | | | | | |
|----|------|------|----------|---|-------|
| 13 | 4.5 | 8 | 40 | SILT Some Clay, Trace Sand Red Br, Moist to Wet to Sol | 692.2 |
| 19 | 6.5 | 15 | 40 | SILT Clayey, Trace Sand Br-Red, Moist Alluvium | 692.2 |
| 22 | 8.0 | 16 | 40 | Br-Red, Moist Alluvium | 692.2 |
| 2 | 9.5 | 9 | 40 | Alluvium | 692.2 |
| 2 | 11.0 | 14 | 40 | Alluvium | 692.2 |
| 5 | 15.5 | 7 | 40 | Alluvium | 692.2 |
| 0 | 20.0 | 3 | 40 | Alluvium | 692.2 |
| 2 | 24.5 | 2 | 40 | SILT and Fine Sand, Some Clay Gray to Dk Gray, Sol Alluvium | 692.2 |
| 5 | 29.0 | 66 | 40 | SILT and Fine Dk Gray, Moist Colluvium | 686.2 |
| 5 | 33.5 | 22 | 40 | SILT and Fine Dk Gray, Moist Colluvium | 686.2 |
| 0 | 38.0 | 24 | 40 | SAND Fine to Cse w/ Gravel Little Silty, Dk Gray, Wet Colluvium | 675.2 |
| 5 | 42.3 | 60/8 | 42.3 | SANDSTONE Horiz. Joints Some Staining | 671.9 |
| 5 | 47.5 | 73% | ROD 887% | | |
| 5 | 48.7 | 100% | ROD 887% | | |

BORING B-16

STA 9+30.40' LT GE 714.6

| | | | | | |
|----|------|------|---------|--|-------|
| 13 | 4.5 | 11 | 40 | SILT Some Clay, Trace Fine Sand Red-Ton, Moist | 686.6 |
| 19 | 6.0 | 19 | 40 | SILT Clayey, Trace Fine Sand Alluvium | 686.6 |
| 22 | 7.5 | 11 | 40 | Br-Red, Moist Alluvium | 686.6 |
| 2 | 9.0 | 16 | 40 | Alluvium | 686.6 |
| 2 | 12.5 | 13 | 40 | Alluvium | 686.6 |
| 5 | 17.0 | 5 | 40 | Alluvium | 686.6 |
| 0 | 21.5 | 5 | 40 | Alluvium | 686.6 |
| 2 | 26.0 | 4 | 40 | SILT and Fine Sand, Some Clay Dk Gray, Moist Wet Colluvium | 686.6 |
| 5 | 30.5 | 13 | 40 | SILT and Fine Sand, Some Clay Dk Gray, Moist Wet Colluvium | 686.6 |
| 5 | 35.0 | 11 | 40 | SILT and Fine Sand, Some Clay Dk Gray, Moist Wet Colluvium | 686.6 |
| 0 | 39.5 | 16 | 40 | SANDSTONE w/ Horiz. Joints L Gray, Some Staining | 673.1 |
| 5 | 47.4 | 100% | ROD 24% | | |
| 5 | 47.4 | 100% | ROD 24% | | |

BORING B-17

STA 9+63.38' LT GE 714.7

| | | | | | |
|----|------|------|--------|---|-------|
| 13 | 4.5 | 13 | 40 | SILT Clayey, Trace Fine Sand Dk Br, Moist to Wet Alluvium | 688.7 |
| 19 | 6.5 | 20 | 40 | SILT Clayey, Trace Fine Sand Alluvium | 688.7 |
| 22 | 8.0 | 15 | 40 | Br-Red, Moist Alluvium | 688.7 |
| 2 | 9.5 | 19 | 40 | Alluvium | 688.7 |
| 2 | 11.0 | 21 | 40 | Alluvium | 688.7 |
| 5 | 15.5 | 14 | 40 | Alluvium | 688.7 |
| 0 | 19.5 | 14 | 40 | Alluvium | 688.7 |
| 2 | 24.0 | 5 | 40 | SILT and Fine Sand Some Clay, Dk Gray, Wet Colluvium | 688.7 |
| 5 | 28.5 | 21 | 40 | SILT and Fine Sand Some Clay, Dk Gray, Wet Colluvium | 688.7 |
| 5 | 33.0 | 18 | 40 | SILT and Fine Sand Some Clay, Dk Gray, Wet Colluvium | 688.7 |
| 0 | 37.5 | 17 | 40 | SANDSTONE Fresh | 674.2 |
| 5 | 40.5 | 50/0 | 40.5 | SANDSTONE LI Gray | 674.2 |
| 5 | 45.5 | 96% | ROD 0% | | |
| 5 | 45.5 | 96% | ROD 0% | | |

BORING B-18

STA 9+66.9' RT GE 714.3

| | | | | | |
|----|------|------|------|--|-------|
| 13 | 4.5 | 15 | 40 | SILT Some Clay, Trace Fine Sand Tan, Moist Alluvium | 692.8 |
| 19 | 6.5 | 16 | 40 | SILT Clayey, Trace Fine Sand Alluvium | 692.8 |
| 22 | 8.0 | 13 | 40 | Br-Red, Moist Alluvium | 692.8 |
| 2 | 9.5 | 19 | 40 | Alluvium | 692.8 |
| 2 | 11.0 | 19 | 40 | Alluvium | 692.8 |
| 5 | 15.5 | 13 | 40 | Alluvium | 692.8 |
| 0 | 20.0 | 10 | 40 | Alluvium | 692.8 |
| 2 | 24.5 | 4 | 40 | SILT and Fine Sand, Little Clay Dk Gray, Moist Wet Alluvium | 692.8 |
| 5 | 29.0 | 27 | 40 | CLAY Little Silty, Few Spots Frogs Moist Colluvium | 688.3 |
| 5 | 33.5 | 21 | 40 | CLAY Little Silty, Few Spots Frogs Moist Colluvium | 688.3 |
| 0 | 36.2 | 43 | 40 | SAND Fine to Med Silty w/ Rock Frogs Green Gray, Moist Wet Colluvium | 678.1 |
| 5 | 39.0 | 43 | 40 | SAND Fine to Med Silty w/ Rock Frogs Green Gray, Moist Wet Colluvium | 678.1 |
| 5 | 41.0 | 50/0 | 41.0 | SANDSTONE LI Gray | 673.3 |

| Mark | Description | By | Chk'd | App'd | Date |
|------|-------------|----|-------|-------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
 GLENFIELD VIADUCT
 GLENFIELD VIADUCT STA. 9+88.80 OVER
 EAST BEAVER STREET STA. 16+96.67
 10 SPAN STEEL-BEAM AND MULTI-GIRDER BRIDGE
 BORING LOGS

RECOMMENDED _____ SHEET 27 OF _____
 RAINDGE ENGINEERS

DRILLED BY: _____
 PENNSYLVANIA DRILLING CO.

| BORING B-23 | | BORING B-24 | |
|-------------|--|-------------|--|
| A | B | A | B |
| 18 | CONCRETE | 08 | CONC |
| 18 | SLAG SUBBASE | 20 | SLAG |
| 760.9 | | 763.3 | |
| 35 | FILL - CLAY & SAND Fine-Med w/ Rock Frogs, tan-br, moist | 4.5 | FILL - SAND w/Rock Frogs Tan-Grey, Moist |
| 755.7 | | 758.3 | |
| 30 | Extremely weathered SHALE V. fract., shined, dry | 8.0 | Remixed SHALE, Br., Moist |
| 755.7 | | 758.3 | |
| 10 | Extremely weathered SHALE V. fract., shined, dry | 9.5 | |
| 755.7 | | 758.3 | |
| 5.5 | 34 | 11.0 | 29 |
| 755.7 | | 758.3 | |
| 9.5 | 38 | 11.0 | 29 |
| 755.7 | | 758.3 | |
| 11.0 | 63 | 11.0 | 29 |
| 755.7 | | 758.3 | |
| 12.5 | 47 | 11.0 | 29 |
| 755.7 | | 758.3 | |
| 15.5 | 50/0 | 14.4 | 50/4 |
| 755.7 | | 758.3 | |
| 19.5 | 70% | 20.0 | 84% |
| 755.7 | | 758.3 | |
| 22.0 | 84% | 25.0 | 100% |
| 755.7 | | 758.3 | |
| 26.0 | 98% | 25.0 | 100% |
| 755.7 | | 758.3 | |

BORING B-22

| BORING B-22 | |
|-------------|------|
| A | B |
| 4.5 | 12 |
| 6.5 | 23 |
| 8.0 | 27 |
| 9.0 | 71 |
| 14.0 | 58/2 |
| 14.0 | 58/2 |
| 19.0 | 35/2 |
| 20.5 | 24 |
| 22.0 | 100% |

BORING B-21

| BORING B-21 | |
|-------------|------|
| A | B |
| 4.5 | 21 |
| 6.5 | 54 |
| 8.0 | 60 |
| 9.5 | 32 |
| 11.0 | 49 |
| 19.0 | 35/2 |
| 20.5 | 24 |
| 22.0 | 100% |

BORING B-20

| BORING B-20 | |
|-------------|----|
| A | B |
| 4.5 | 19 |
| 6.5 | 25 |
| 8.0 | 24 |
| 9.5 | 34 |
| 11.0 | 22 |
| 15.5 | 13 |
| 20.0 | 5 |

BORING B-19

| BORING B-19 | |
|-------------|----|
| A | B |
| 4.5 | 19 |
| 6.5 | 25 |
| 8.0 | 24 |
| 9.5 | 34 |
| 11.0 | 22 |
| 15.5 | 13 |
| 20.0 | 5 |

| Mark | Description | By | Chkd. | App'd. | Date |
|------|-------------|----|-------|--------|------|
| | REVISIONS | | | | |

Commonwealth of Pennsylvania
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN

ALLEGHENY COUNTY
GLENFIELD VIADUCT

GLENFIELD VIADUCT STA. 9+88.80 OVER
EAST BEAVER STREET STA. 16+96.67
10 SPAN STEEL I-BEAM AND MULTI-GIRDER BRIDGE
BORING LOGS

RECOMMENDED _____
BRIDGE ENGINEER

SHEET 23 OF _____

Borough of Glenfield

105 RIVER ROAD, GLENFIELD, SEWICKLEY, PA 15143

October 16, 1985

C-80092159

RECEIVED

Mr. Donald R. Fleisher, P.E.
Bureau of Transportation
Pennsylvania Public Utility Commission
P. O. Box 3265
Harrisburg, PA 17120

U.C.
SECRET
Public Utility Commission

DUPLICATE SENT TO ORIGINAL CENTER TO COMMONWEALTH ARCHIVE

Dear Mr. Fleisher:

The purpose of this letter is to state the position of Glenfield Borough regarding the proposed weight limit on the existing viaduct and the status of the new bridge construction.

I have not reviewed the most recent bridge inspection report in detail, but did discuss the report with Mr. Jerry Johnson on October 15. Obviously, the interest of the borough is to assure the safety and usability of the existing structure until the new bridge is completed. Several factors should be considered relative to the proposed 3 ton weight limit.

At the P. U. C. hearing on August 24, 1982, testimony was offered by several parties regarding the sufficiency of the structure. Mr. Warren Parks from Conrail summarized Conrail's position by stating that the bridge was then safe for the 16 ton limit as posted. Mr. John Ekiert of the Department of Transportation did not disagree with the conclusions of the Conrail report. You stated that the earlier determinations by Conrail and Pennsylvania D.O.T. appeared reasonable. You also suggested an alternate loading that would permit the use of the structure by multi-axled vehicles without creating additional risk to the structure. This type of loading was apparently adopted by the P.U.C. Conrail did submit a bridge inspection report which can be used to establish a datum for subsequent changes to the structure.

Conrail was also ordered to conduct inspections of the structure at intervals not to exceed six months. We have copies of the inspection reports dated February 23, 1983 and September 27, 1983. Neither report recommended any change in the existing 16 ton weight limit. Although we have not received copies of the subsequent reports, these reports submitted to the P.U.C. can provide some measure of the rate of change in the structure.

OCT 23 1985

DOCUMENT FOLDER

The Richardson Gordon and Associates report on its own appears to be an accurate assessment of the existing condition of the bridge. However, it does not address the rate of change in the structure or the prior condition. All inspections and information relating to the condition of the structure should be considered before reaching any conclusion.

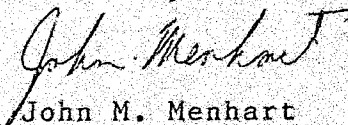
My recommendation regarding this situation is to reduce the weight limit to 8 tons immediately. Continue the inspections on a weekly basis to gather data relating to the rate of change in the structure. This could include concrete spalling rates, crack opening rates, shifting of the structure and other factors pertinent to the safety and soundness of the bridge. These data, combined with the findings of the earlier reports would provide the basis for a more accurate determination of the correct weight limit.

Our concerns relate to the needs of the borough residents and businesses for access, combined with the need for services that require a higher weight limit. Specifically, school bus transportation, ambulance and fire services, salting and plowing of streets, and trash removal will be seriously disrupted. The viability of the two businesses that must have higher weight deliveries is also in question. There must be an alternate access for the heavier vehicles that are needed to service the residents and businesses. The 8 ton weight limit would permit these services to continue with a minimum of interruption, and would also allow time to establish alternate access as required.

The question of local funding for the new bridge cannot be answered at this time. We will be pursuing alternates at the private, local, county, state and federal levels. My initial contacts have not had any results, but I will keep you informed of any actions that may affect the need for a hearing on this question.

Please consider these recommendations in light of the total situation regarding the Glenfield Viaduct and its impact on the community. If you have any questions or comments please contact me at (412) 741-4715.

Sincerely,



John M. Menhart
President
Glenfield Borough Council