

MICROFILMED  
JAN 26 1986

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
**HAM-25-15.60 &  
HAM-50B-22.02**  
HAMILTON COUNTY  
SPRINGFIELD & SYCAMORE TOWNSHIPS

LIMITED ACCESS		ACI-1101(16) ACI-1110(2)	FED. RD. DIVISION 2	STATE OHIO	PROJECT ACI-1101(16) ACI-1110(2)	317
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This improvement has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02, Revised Code of Ohio, and is especially designed for through traffic.

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

NOTE: All references to Federal Aid Project No. I-1101(16) and No. I-1110(2) appearing throughout this plan shall be considered to read ACI-1101(16) and ACI-1110(2) respectively.

JAN 12 1967  
GROUND PHOTOGRAPH

100 Yellow  
1-98

CONVENTIONAL SIGNS

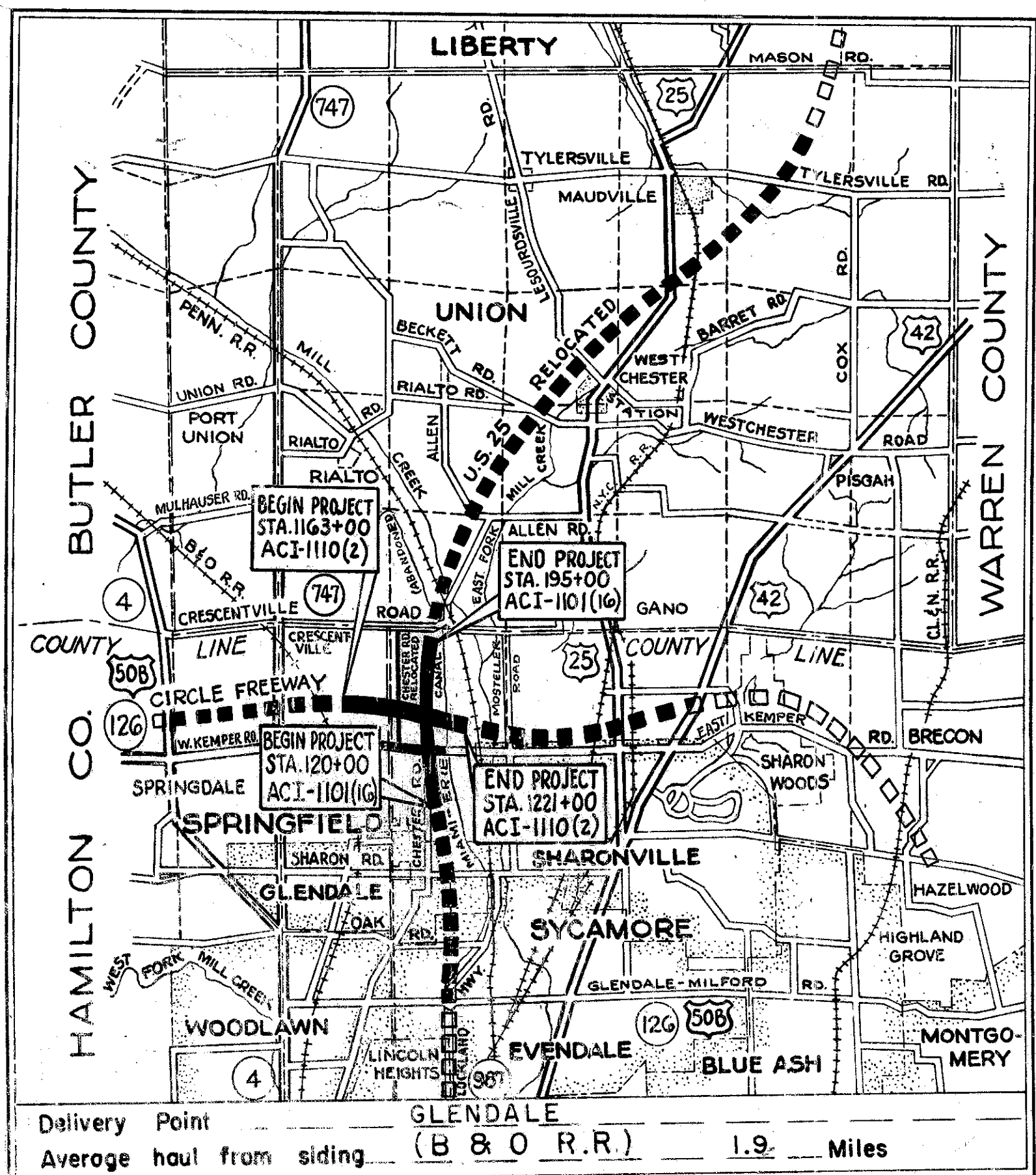
State Line	-----	-----
County Line	-----	-----
Township Line	-----	-----
Section Line	-----	-----
Center Line	-----	-----
Corporation Line	-----	-----
Limited Access and Right of Way	-----	-----
Limited Access Only	-----	-----
Right of Way Only	-----	-----
Existing Right of Way	-----	-----
Fence Line	-----	-----
Guard Rail (existing)	-----	-----
Guard Rail (proposed)	-----	-----
Steam Railroad	-----	-----
Power Poles	-----	-----
Telephone Poles	-----	-----
Trees or Stumps (existing)	-----	-----

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LINE DATA

LENGTH OF PROJECT (RURAL)	
Begin Project U.S. 25 Sta. 120+00	
End Project U.S. 25 Sta. 195+00	
Length of Project U.S. 25	7,500 Lin. Ft.
Begin Project U.S. 50B Sta. 1163+00	
End Project U.S. 50B Sta. 1221+00	
Length of Project U.S. 50B	5,800 Lin. Ft.
Net Length of Project (Rural)	13,300 Lin. Ft. or 2.518 Miles
LENGTH OF WORK (RURAL)	
Net Length of Project	13,300 Lin. Ft.
Add Work U.S. 25 Sta. 119+09 to Sta. 120+00	91 Lin. Ft.
Add Work U.S. 25 Sta. 195+00 to Sta. 195+76	76 Lin. Ft.
Add Work U.S. 25 Sta. 8+75 to Sta. 26+65	1,790 Lin. Ft.
Kemper Road (U.S. 25) Sta. 5+83 to Sta. 14+23	840 Lin. Ft.
Chester Road (U.S. 25) Sta. 1162+36 to Sta. 1163+00	64 Lin. Ft.
Add Work U.S. 50B Sta. 1221+00 to Sta. 1223+72	272 Lin. Ft.
Add Work U.S. 50B Sta. 0+69 to Sta. 55+37	5,468 Lin. Ft.
Chester Rd. Rel. (U.S. 50B) Sta. 0+69 to Sta. 55+37	21,907 Lin. Ft. or 4.147 Miles
Net Length of Work (Rural)	



LOCATION MAP

SCALE OF MILES



Portion to be Improved	-----
Under Separate Contract	-----
Future Construction	-----
State Roads	-----
Other Roads	-----

SCALE

Plan	1" = 50'
Profile: Horizontal	1" = 50'
Profile: Vertical	1" = 10'
Cross Sections	1" = 10'

The standard specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved *S. D. Ackerman*  
Date 10/14/58 Division Deputy Director

Approved *C. H. Makover*  
Date 11-6-58 Deputy Director of Planning & Programming

Approved *S. D. Ackerman*  
Date 11-3-58 Engineer of Bridges

Approved *P. E. Shultz*  
Date 11-4-58 Engineer of Location & Design

Approved *P. E. Mastitis*  
Date 11-4-58 Deputy Director of Design & Construction

Approved *George J. Shorngue*  
Date 11/5/58 First Assistant Director

Approved *J. M. Hill*  
Date 11/18/58 Director of Highways

Sheet 228 revised 12-22-58.  
Sheets 273, 274, 278, 279, 280, 281 & 299 revised 4-14-59.  
Sheets 246 & 247 revised 7-2-59.  
Sheet 247A added 7-2-59.

Sheets 132, 33, 34, 36, 58, 59, 61, 64, 65, 71, 76, 77, 81, 86, 87, 100, 101, 102, 103, 109, 113, 114, 115, 130, 136, 139, 242, 254 and 272 Revised 6-8-60  
Sheets 9R, 30R, 33R, 34R, 64R, 65R, 76R, 77R, 79R, 86R, 87R, 102R, 103R, 104R, 105R, 109R, 110R, 113R, 114R, 115R, 116R, 117R, 130R, 132R, 135R, 138R, 145R and 147R Added 6-8-60  
Sheets 9, 73, 104, 105, 110, 116, 117, 132, 135, 145 and 147 Deleted 6-8-60

JAN 12 1967  
GROUND PHOTOGRAPH

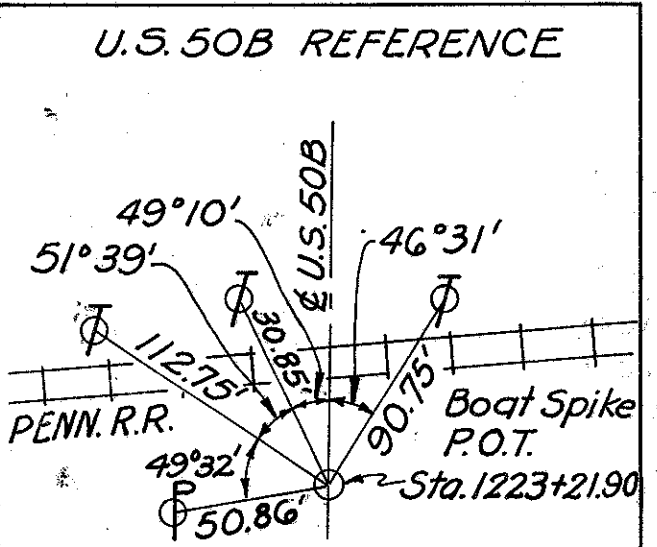
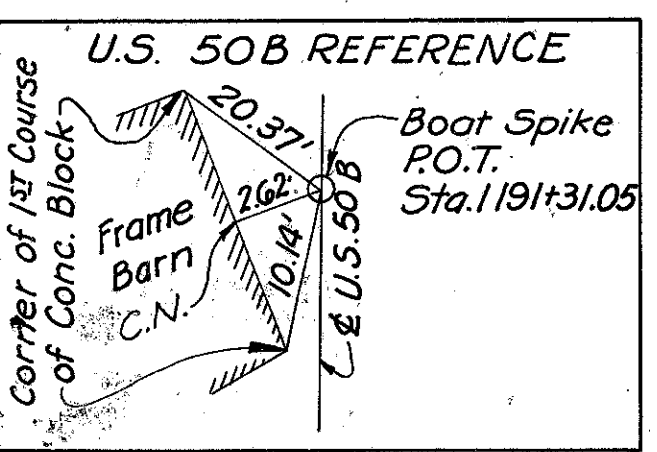
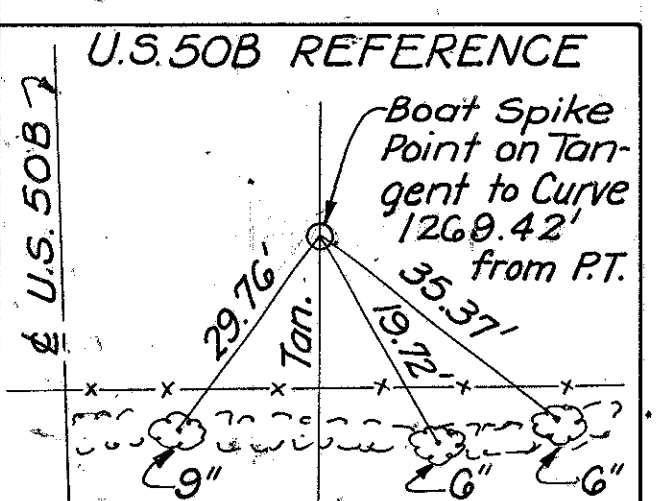
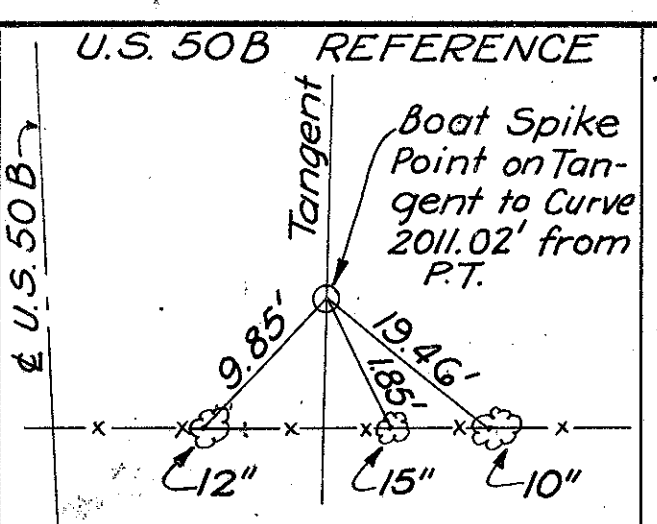
Supplemental Prints of Standard Construction Drawings			
B-T-50-70-71E No. 1	10-1-47 I-15 No. 5	12-9-57 RT-1	1-15-58 L-8 C.B. No. 5
B-T-71R	3-2-53 I-15 No. 6	12-9-57 T-35	1-2-56 I-8 C.B. No. 6
DR-1	1-3-55 I-15 No. 7	12-9-57 T.J.	5-1-56 L-8 I. No. 2
F-1	4-1-57 I-15 No. 8	12-9-57 AR-1-57	3-1-58 L-0 M.H. No. 1
C-7.07	6-1-56 I-21-23	8-1-56 AS-1-54	12-5-54 S-27 P.C. 4
I-12	7-1-54 L-1	4-1-50 C-8-2-56 (Sh. 2 & 3)	3-1-58 SF-53
I-15 No. 1	8-1-55 S-27 P.C. 3	2-20-45 RB-1-55	3-1-55 T-9 C.E. No. 3
I-15 No. 2-A	6-1-57 L-3A	4-1-50 I-1, 2, 3, & 4	4-24-58 L-3
I-15 No. 2-B	6-1-57 L.J. No. 1	7-1-55 I-8 C.B. No. 2 & 3	8-1-55 I-8 C.B. No. 4

Supplemental Specifications	
5	6-8-55 M-206.14
9	6-24-58 M-206.6 (b)
18	R 2-6-57 S-114
5-119	R 8-11-57
5-219	R 7-23-56
E-101	1-1-57
I-125	R 11-6-57
I-127	R 11-16-57
M-106.6 (d)	R 4-1-58

PREPARED BY  
VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI, OHIO CHICAGO, ILL.

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS  
APPROVED  
DIVISION ENGINEER DATE

Date of Letting \_\_\_\_\_ 19\_\_\_\_  
Contract No. \_\_\_\_\_



Note: References for Chester Road Relocated are on Plan and Profile Sheets.

**MICROFILMED**  
 JAN 26 1968

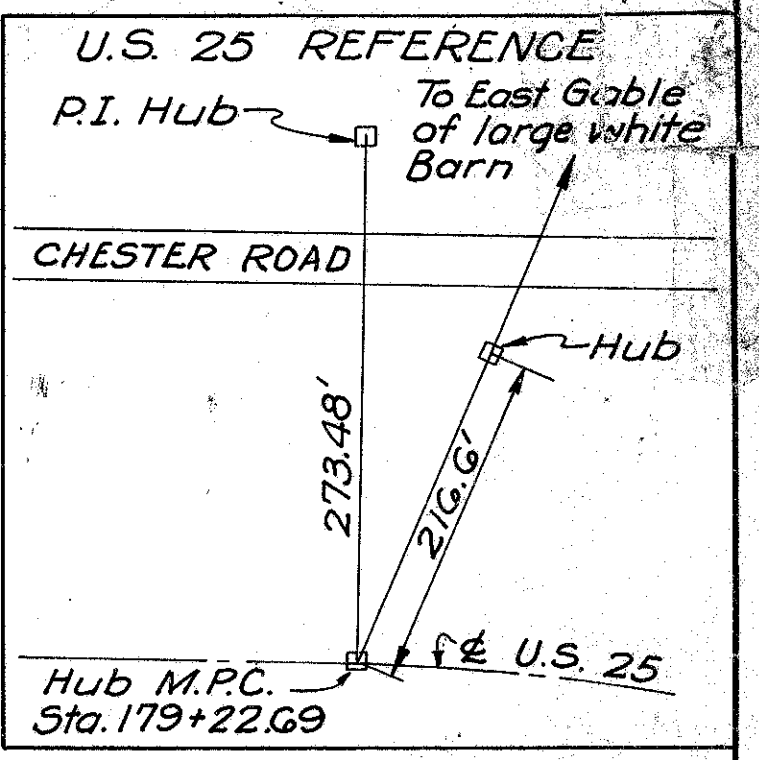
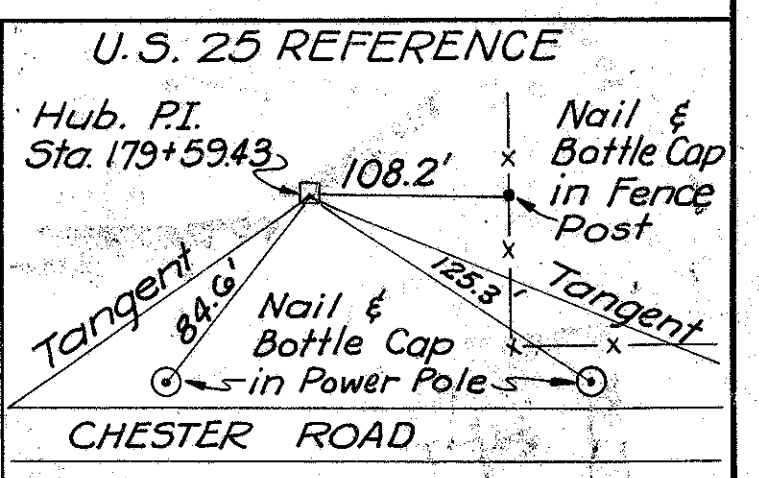
NOTE: Typical Section of Adjoining Pavement same as Normal Pavement Section Left and Right Half, 6 Lane Divided 18' Median

Marker will be furnished and erected on the right by the State of Ohio before acceptance of this project.

**CURVE DATA**  
 CIRCLE FREEWAY  
 Δ = 18°10'20" Rt.  
 D = 0'14'20" Rt.  
 R = 24,555.33'  
 T = 3,977.02'  
 L = 7,788.10'  
 E = 312.02'  
 P.I. Sta. = 1149+49.94

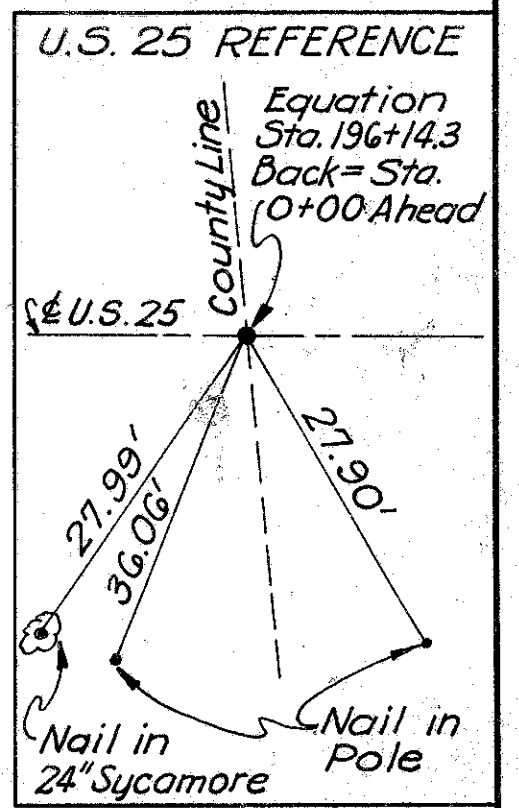
Marker will be furnished and erected on the right by the State of Ohio before acceptance of this project.

NOTE: Typical Section of Adjoining Pavement same as Normal Pavement Section 6 Lane Divided 60' Median



Marker will be furnished and erected on the left by the State of Ohio before acceptance of this project.

NOTE: Typical Section of Adjoining Pavement same as Normal Pavement Section Left and Right Half, 6 Lane Divided 18' Median



HAM-25-13.84  
 I-1101 (17)

Begin Work Sta. 119+09

N 1° 35' 37" W

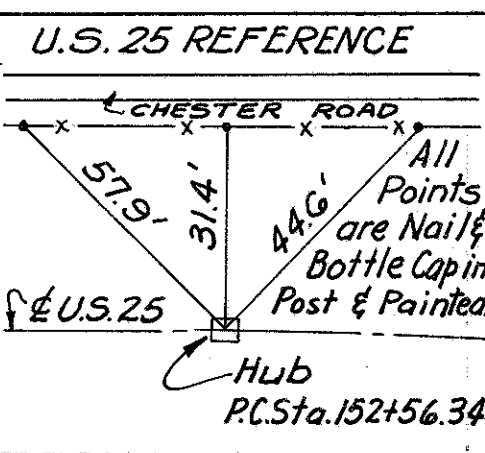
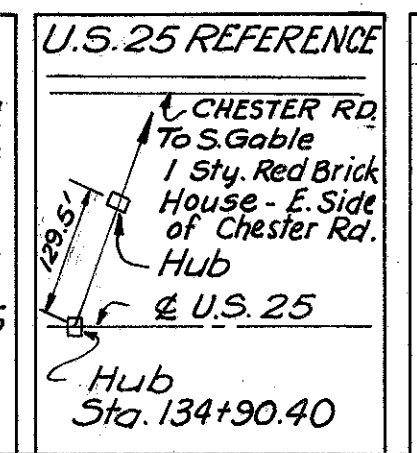
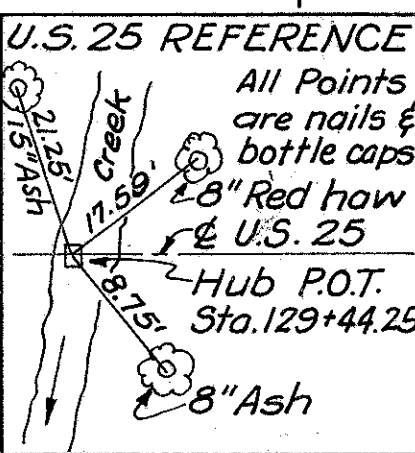
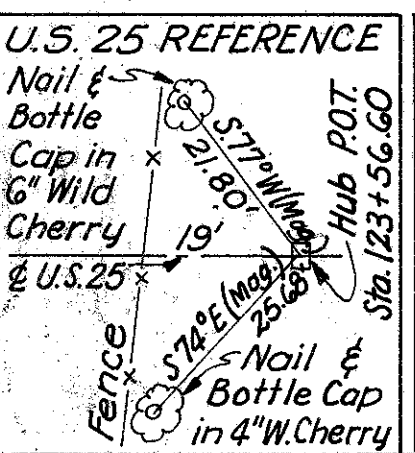
I-1101 (16)  
 BEGIN PROJECT  
 HAM-25-15.60  
 Sta. 120+00

0+00 Ramp D = 131+71.06 U.S. 25  
 17+00 Ramp D = 150+00 U.S. 25  
 0+00 Ramp C = 155+00 U.S. 25  
 0+00 Ramp B = 159+50 U.S. 25  
 0+00 Ramp A = 164+25 U.S. 25  
 0+00 Ramp F = 164+25 U.S. 25  
 0+00 Ramp E = 164+25 U.S. 25  
 0+00 Ramp G = 170+38.96 U.S. 25  
 0+00 Ramp I = 172+47 U.S. 25  
 0+00 Ramp H = 179+07.58 U.S. 25  
 0+00 Ramp J = 191+00 U.S. 25

NOTE: Typical Section of Adjoining Pavement same as Normal Pavement Section, 4 Lane Divided 60' Median.

**CURVE DATA U.S. 25**  
 Δ = 23° 06' 30" Rt.  
 D = 0' 26'  
 R = 13,222.11'  
 T = 2,703.09'  
 L = 5,332.69'  
 E = 273.48'  
 P.I. Sta. 179+59.43

End Work Sta. 195+76  
 I-1101 (15)  
 HAM-25-17.02  
 BUT-25-0.00



Marker will be furnished and erected on the left by the State of Ohio before acceptance of this project.

**LEGEND**  
 — Proposed Work  
 --- Existing Roads  
 + Steam Railroads

Scale: 1" = 300'

**LOCATION PLAN**

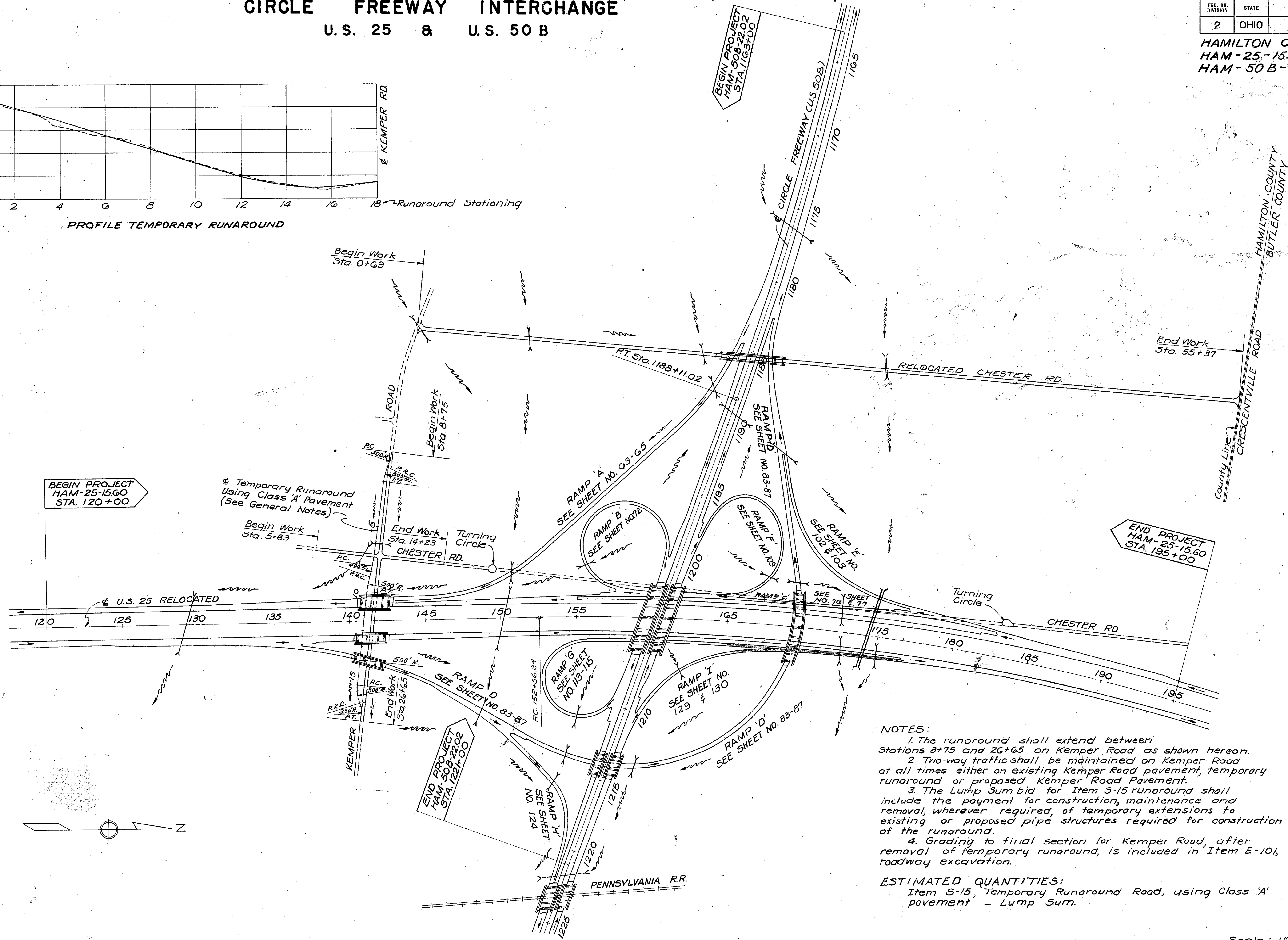
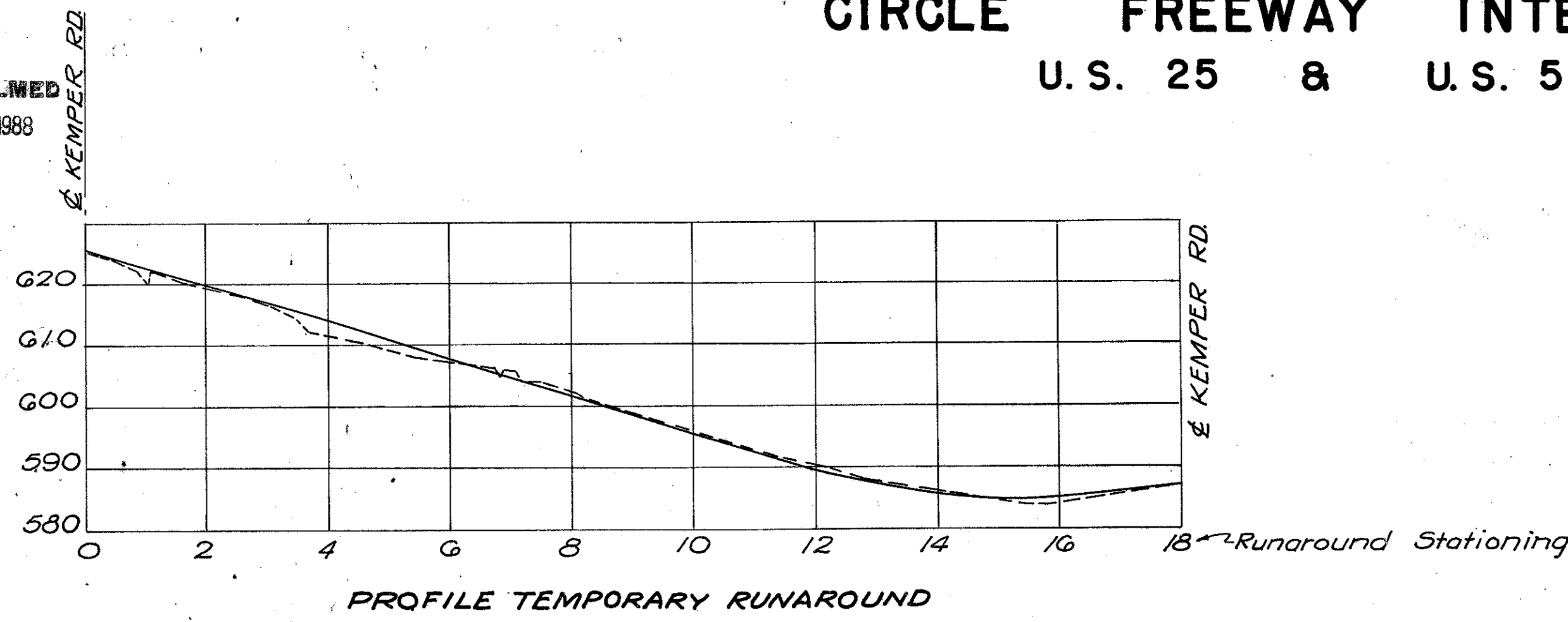
# CIRCLE FREEWAY INTERCHANGE

## U.S. 25 & U.S. 50 B

FED. RD. DIVISION	STATE	PROJECT	3 317
2	OHIO		

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

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- NOTES:**
1. The runaround shall extend between Stations 8+75 and 26+65 on Kemper Road as shown hereon.
  2. Two-way traffic shall be maintained on Kemper Road at all times either an existing Kemper Road pavement, temporary runaround or proposed Kemper Road Pavement.
  3. The Lump Sum bid for Item 5-15 runaround shall include the payment for construction, maintenance and removal, wherever required, of temporary extensions to existing or proposed pipe structures required for construction of the runaround.
  4. Grading to final section for Kemper Road, after removal of temporary runaround, is included in Item E-10, roadway excavation.

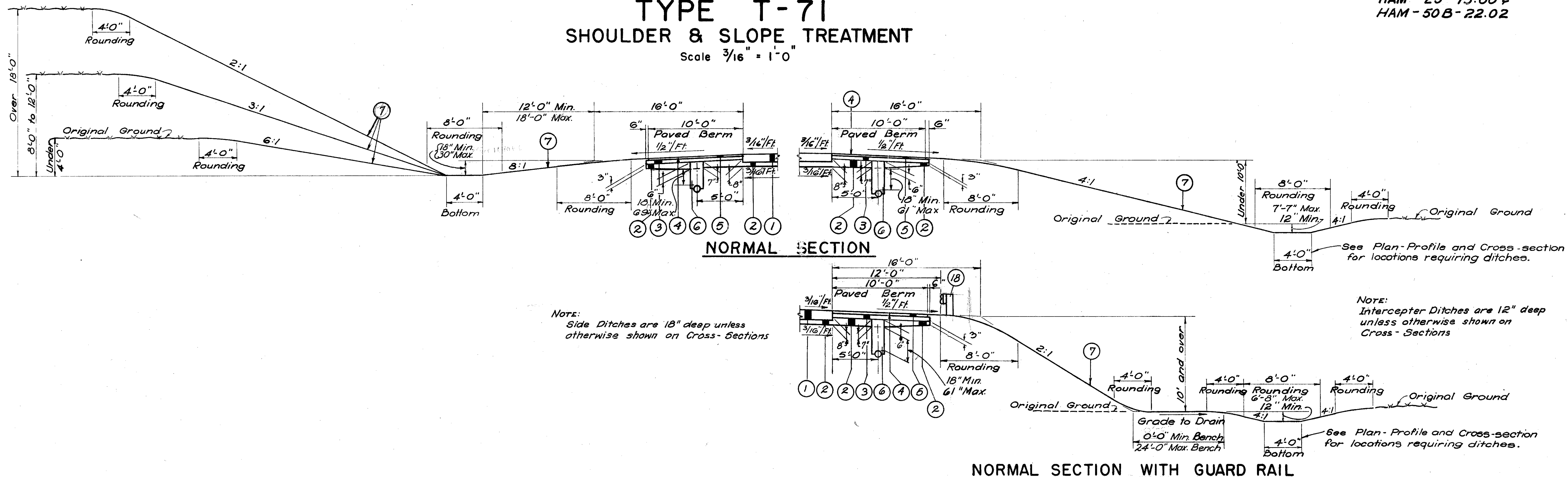
**ESTIMATED QUANTITIES:**  
Item 5-15, Temporary Runaround Road, using Class 'A' pavement - Lump Sum.

Scale: 1" = 300'

# TYPICAL SECTIONS TYPE T-71 SHOULDER & SLOPE TREATMENT

Scale  $\frac{3}{16}'' = 1'-0''$

HAMILTON COUNTY  
HAM - 25 - 15.60 &  
HAM - 50B - 22.02



NOTE:  
Side Ditches are 18" deep unless  
otherwise shown on Cross-Sections

NOTE:  
Interceptor Ditches are 12" deep  
unless otherwise shown on  
Cross-Sections

NOTE:  
See Plan-Profile and Cross-section  
for locations requiring ditches.

## ITEM LEGEND

- ① Item T-71 10" Reinforced Portland Cement Concrete Pavement
- ② Item I-22 6" Subbase (Except as Noted)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders
- ④ Item T-31 Bituminous Surface Treatment (See Proposal Note)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course, Type 'B'
- ⑥ Item I-4 6" Pipe Underdrain.
- ⑦ Item L-9 Seeding and Protecting
- ⑧ Item I-15 Guard Rail, Steel Beam, Standard Type (Deep), I-15 No. 2-B

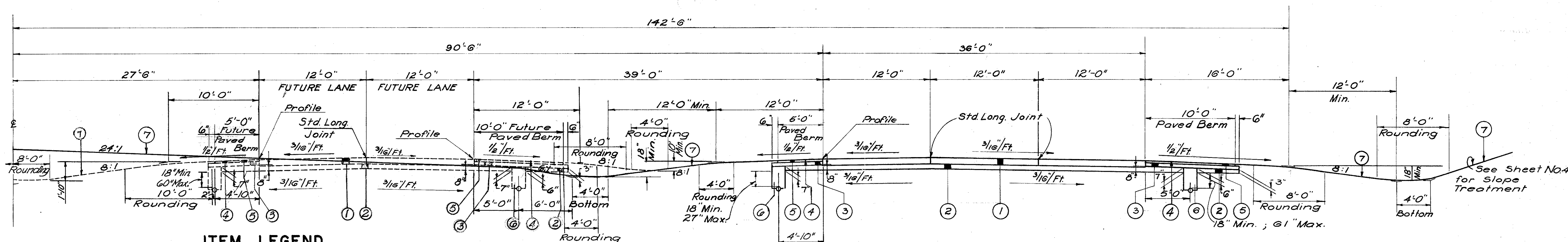
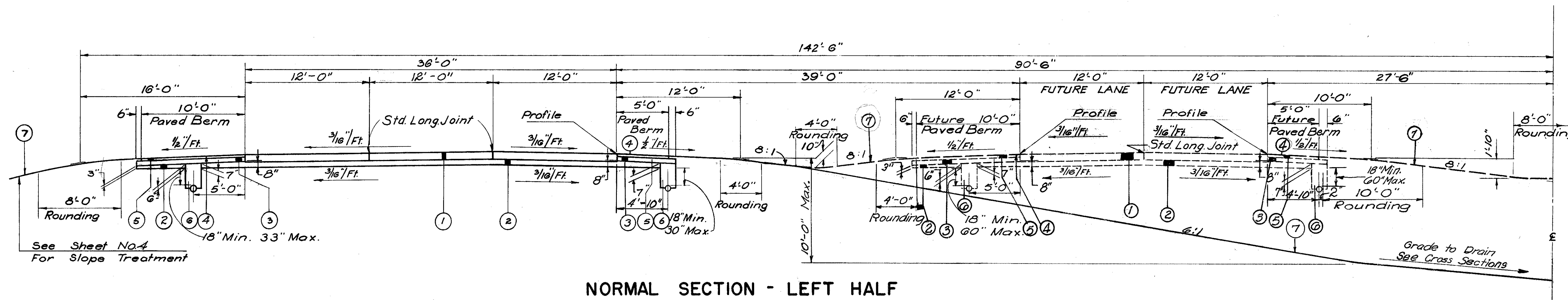
### NOTE:

Shoulder & paved berm widths are shown for  
Main Road Pavement; for Ramps and Collector-  
Distributor see Sheets No. 3, 10 & 11

# TYPICAL SECTIONS TYPE T-71

## 6 LANE DIVIDED 181 FT. MEDIAN

Scale  $\frac{3}{16}'' = 1'-0''$   
HAM-25-15.60



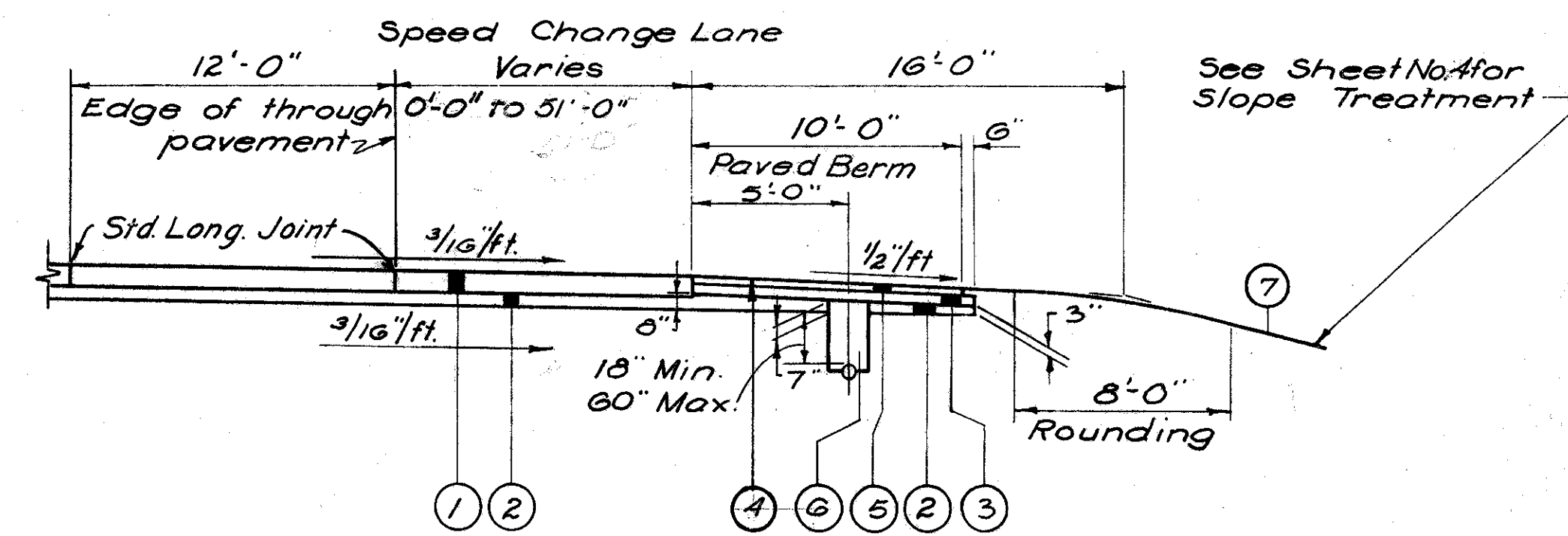
- ITEM LEGEND**
- ① Item T-71 10" Reinforced Portland Cement Concrete Pavement
  - ② Item I-22 6" Subbase (Except as noted)
  - ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders
  - ④ Item T-31 Bituminous Surface Treatment (See Proposal Note)
  - ⑤ Item B-219 3" Waterproofed Aggregate Base Course, Type 'B'
  - ⑥ Item I-4 6" Pipe Underdrain
  - ⑦ Item L-9 Seeding and Protecting

**NORMAL SECTION - RIGHT HALF**

**LIMITING STATIONS**

Sta. 120+00 to Sta. 195+00

**NOTE:**  
Ditch depths are as indicated unless shown otherwise on cross-sections.



**SPEED CHANGE LANE  
LIMITING STATIONS**

Ramp A: Sta. 125+58.5 to 143+00  
Ramp C: Sta. 143+00 to 155+00  
Ramp D: Sta. 124+00 to 137+12  
Ramp E: Sta. 195+00 to 182+59.42  
Ramp G: Sta. 179+07.58 to 192+15.25

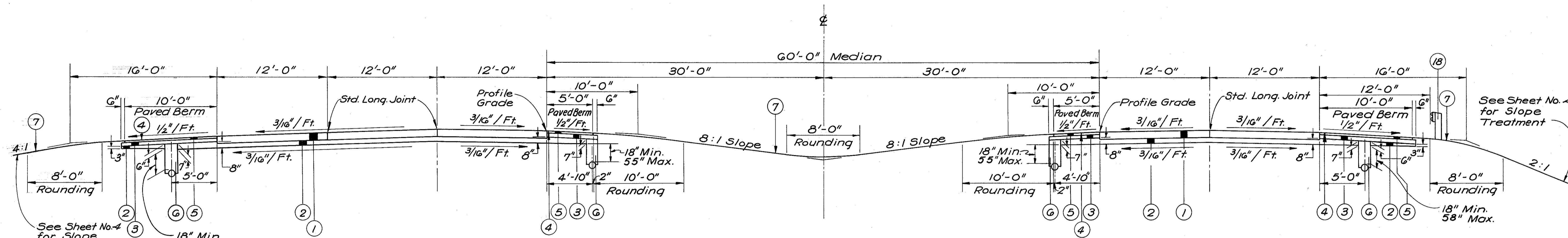
# TYPICAL SECTIONS TYPE T-71 4 AND 6 LANES DIVIDED 60 FT. MEDIAN

FED. RD. DIVISION	STATE	PROJECT	6 317
2	OHIO		

HAMILTON COUNTY  
HAM-25-15.60E  
HAM-50B-22.02

**HAM-50B-22.02**

Scale: 3/16" = 1'-0"



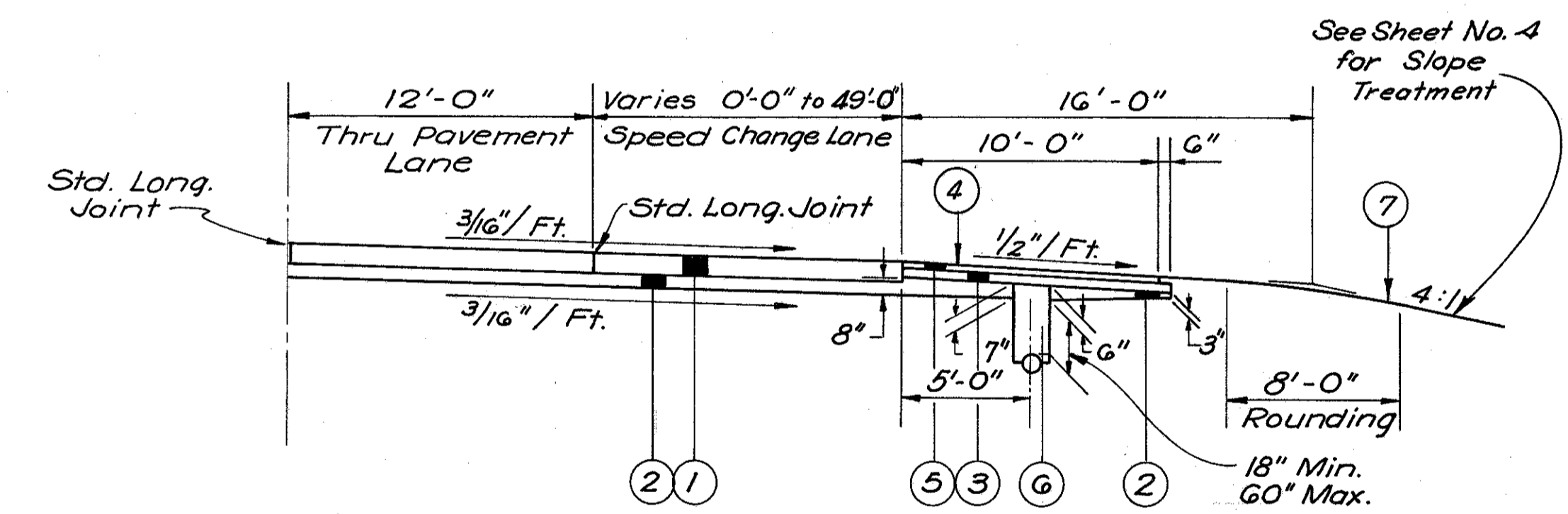
**6 LANE DIVIDED**  
**LEFT HALF**  
**RIGHT HALF (OPPOSITE HAND)**

**LIMITING STATIONS**  
Sta. 1163+00 to Sta. 1183+12 Left  
Sta. 1163+00 to Sta. 1185+79 Right

**NORMAL SECTION**

**4 LANE DIVIDED**  
**RIGHT HALF**  
**LEFT HALF (OPPOSITE HAND)**

**LIMITING STATIONS**  
Sta. 1183+12 to Sta. 1221+00 Left  
Sta. 1185+79 to Sta. 1221+00 Right



**SPEED CHANGE LANE**  
**LIMITING STATIONS**

U.S. 50 B Rt. Sta. 1184+79 to Sta. 1194+79 Taper 3 Lane to 2 Lane  
Ramp 'A' Sta. 1173+11 to Sta. 1184+79  
Ramp 'B' Sta. 1199+62 to Sta. 1220+21  
Ramp 'D' Sta. 1172+35 to Sta. 1183+12  
Ramp 'F' Sta. 1197+60 to Sta. 1208+42  
Ramp 'G' Sta. 1197+00 to Sta. 1210+21  
Ramp 'I' Sta. 1210+42 to Sta. 1221+00

**ITEM LEGEND**

- ① Item T-71 10" Reinforced Portland Cement Concrete Pavement
- ② Item I-22 6" Subbase (Except as Noted)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders
- ④ Item T-31 Bituminous Surface Treatment (See Proposal Note)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course. Type 'B'
- ⑥ Item I-4 Pipe Underdrains.
- ⑦ Item L-9 Seeding and Protecting.
- ⑧ Item I-15 Guard Rail, Steel Beam Standard Type (Deep) I-15 No. 2-B

# TYPICAL SECTIONS

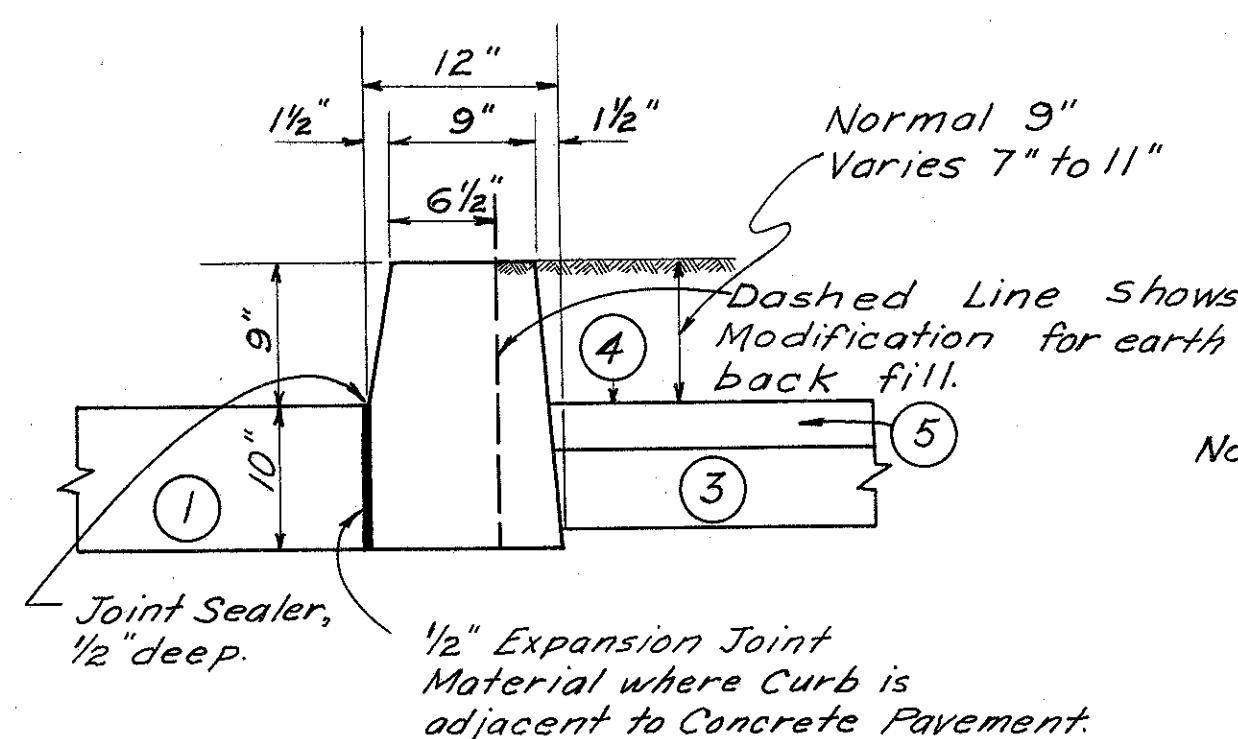
## TYPE T-71

### ENTRANCE TERMINALS

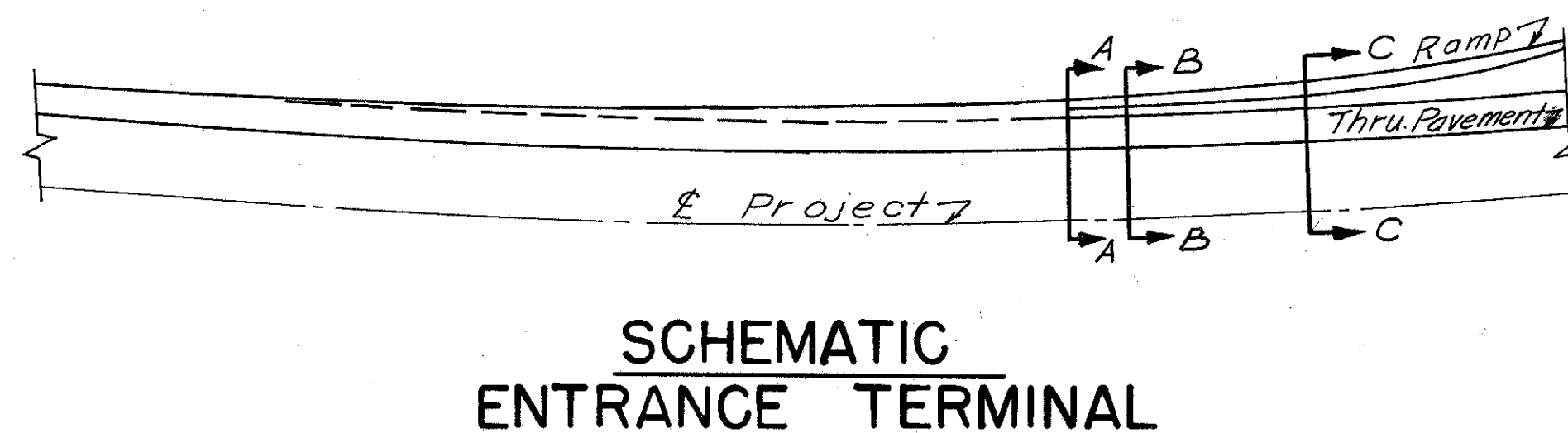
Scale: 1/4" = 1'-0"

### ITEM LEGEND

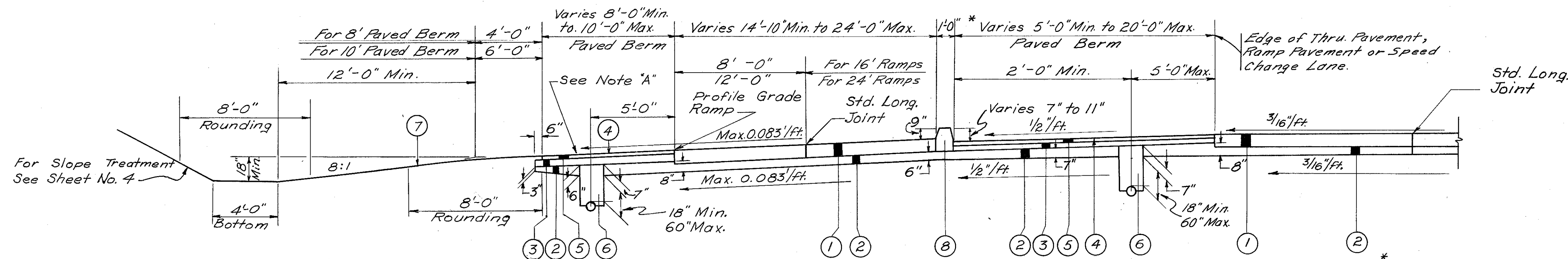
- ① Item T-71 10" Reinforced Portland Cement Concrete Pavement.
- ② Item I-22 6" Subbase. (Except as noted)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders.
- ④ Item T-31 Bituminous Surface Treatment. (See proposal note)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course, Type 'B'.
- ⑥ Item I-4 6" Pipe Underdrain.
- ⑦ Item L-9 Seeding and Protecting.
- ⑧ Item I-12 Special Curb, Concrete. (See detail below)



### SPECIAL CURB DETAIL



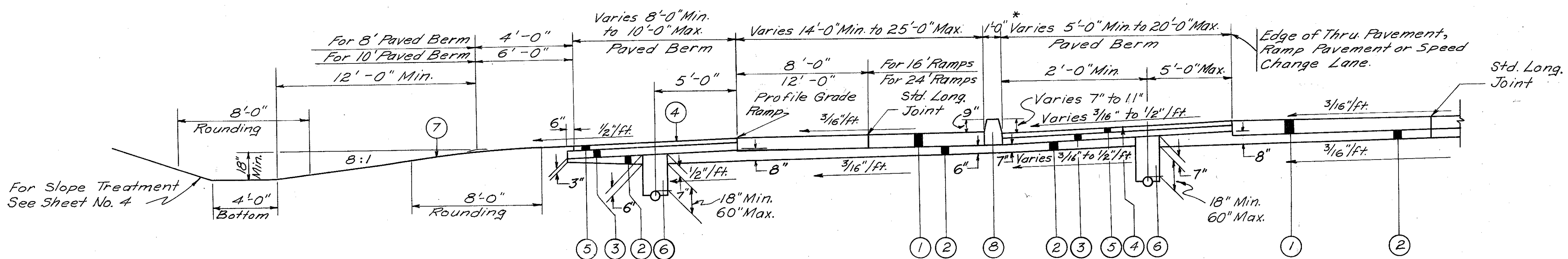
### SCHEMATIC ENTRANCE TERMINAL



### SECTION 'C-C'

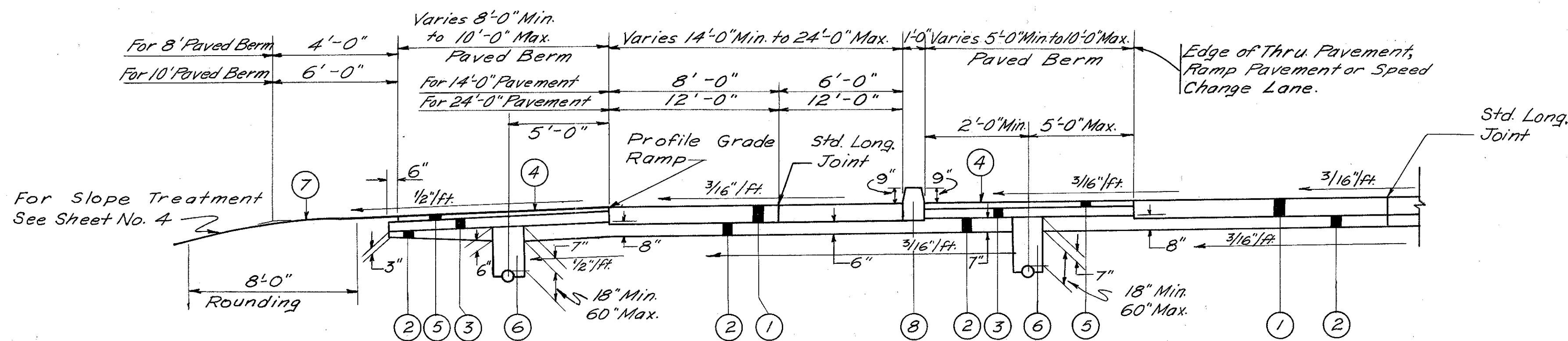
#### FROM SECTION B-B TO END OF PAVED BERM WIDENING BETWEEN PAVEMENTS

\* Does not include Ramps B & F, for dimensions and Paved Berm transition, see 20 Scale detail.



### SECTION 'B-B'

#### THRU BERM SLOPE TRANSITION



### SECTION 'A-A'

#### AT NOSE

Note: Ditches are 18" deep unless shown otherwise on cross-sections.

NOTE: For variable dimensions on each individual Ramp Terminal, see 20 Scale detail. Section B-B does not apply to Ramp 'I' due to no Paved Berm slope transition. Ramps C & G not included, for Typical see Collector Distributor, Sheet No. 9

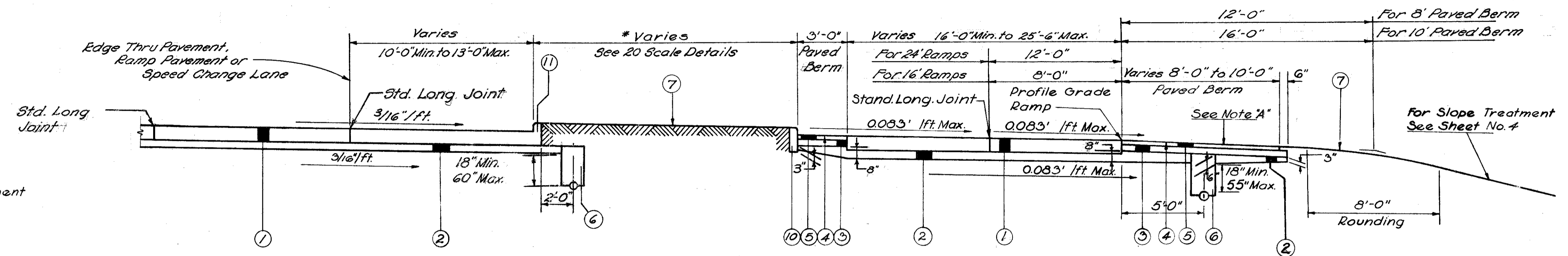
# TYPICAL SECTION TYPE T-71 EXIT TERMINAL

Scale 1/4"=1'-0"

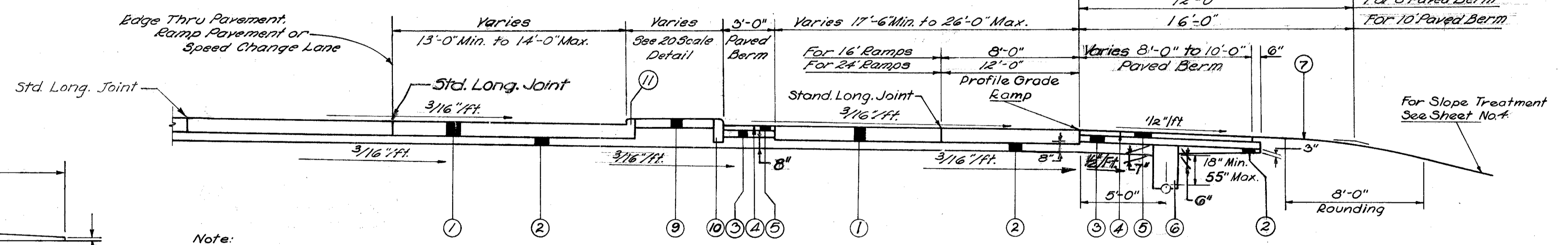
HAMILTON COUNTY  
HAM-25-15.60 E  
HAM-50B-22.02

### ITEM LEGEND

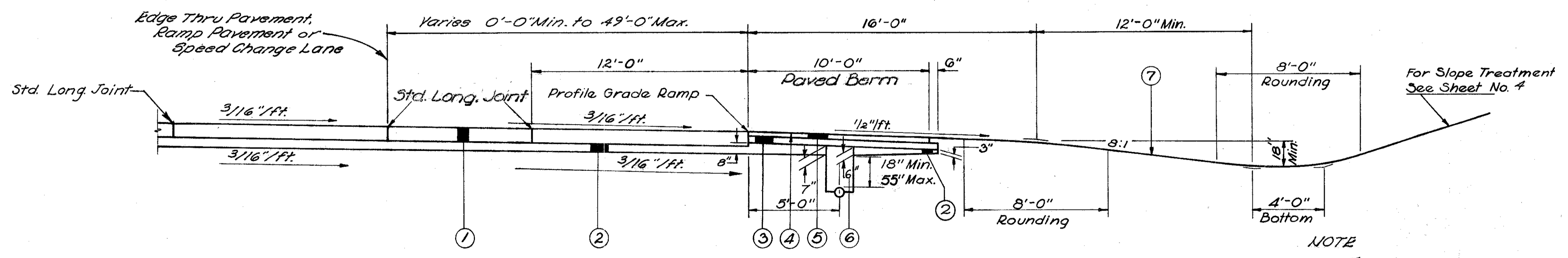
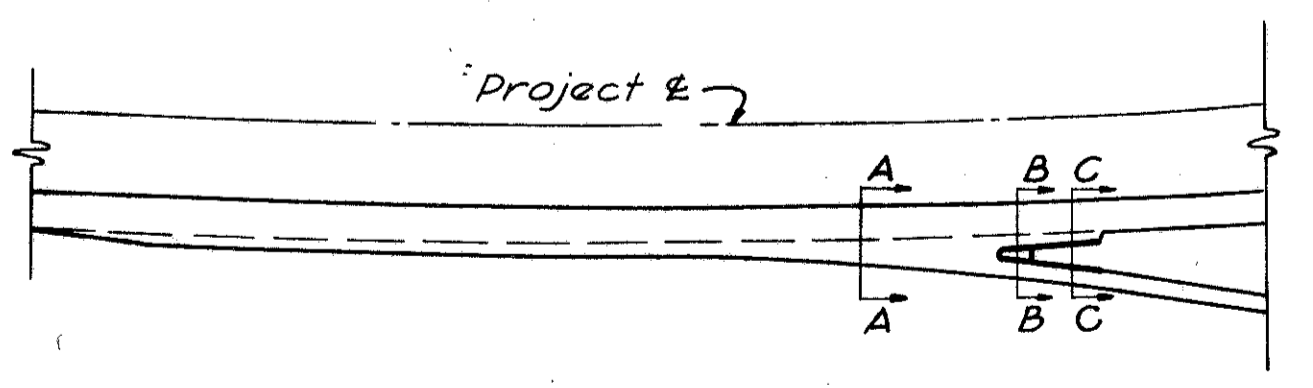
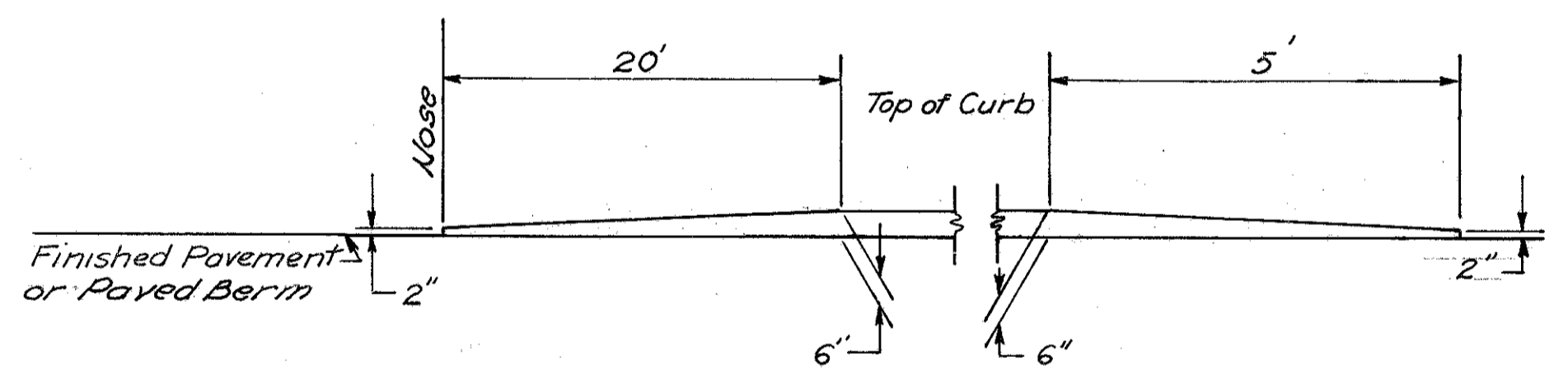
- ① Item T-71 10" Reinforced Portland Cement Concrete Pavement
- ② Item I-22 6" Subbase (Except as noted)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders
- ④ Item T-31 Bituminous Surface Treatment (See proposal note.)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course Type 'B'
- ⑥ Item I-4 6" Pipe Underdrain
- ⑦ Item L-9 Seeding and Protecting
- ⑧ Item I-21 4" Portland Cement Concrete Median Pavement Std. Type I.
- ⑨ Item I-12 Standard Type 6 Concrete Curb
- ⑩ Item I-12 Standard Type '2A' Concrete Curb



\* Does not apply to Ramp 'G' to U.S. 25 and Ramp 'C' to U.S. 25 due to paved median - See Collector-Distributor Typical, Sheet No. 9.



Note: 'A' Whenever superelevation is greater than 1/2" /ft., shoulder slope must be the same as pavement slope.  
Brace Standard Type 6 Curb when filling or paving alongside to prevent slipping.



NOTE For dimension see 20 Scale details of each individual terminal.

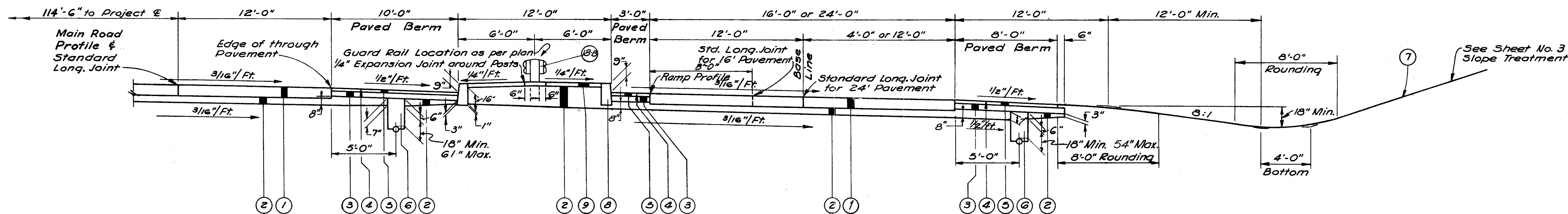


HAMILTON COUNTY  
HAM-25-15.60 E  
HAM-50B-22.02

# TYPICAL SECTIONS TYPE T-71

## COLLECTOR-DISTRIBUTOR RAMP

HAM-25-15.60  
Scale: 1/4" = 1'-0"



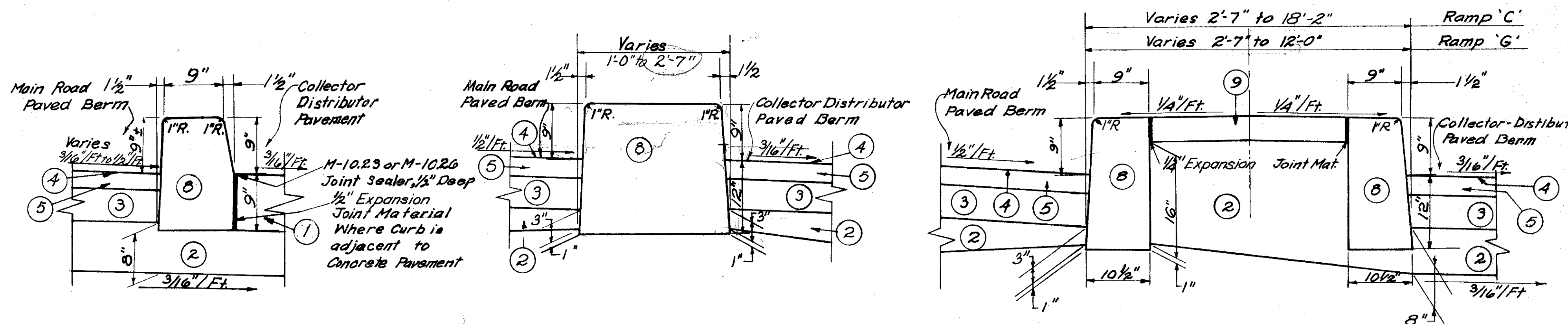
### NORMAL SECTION

### LIMITING STATIONS

Ramp 'C' Sta. 0+00 to Sta. 16+00  
Ramp 'G' Sta. 17+26 to Sta. 33+69.50

### ITEM LEGEND

- ① Item T-71-10" Reinforced Portland Cement Concrete Pavement
- ② Item I-22 6" Subbase (except as noted)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders
- ④ Item T-31 Bituminous Surface Treatment (See Proposal note)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course, Type B
- ⑥ Item I-4 6" Pipe Underdrain
- ⑦ Item L-9 Seeding and Protecting
- ⑧ Item I-12 Special Curb, Concrete (See Details)
- ⑨ Item I-21 4" Portland Cement Concrete Median Pavement, Std. Type I
- Ⓢ Item I-15 Barrier Guard Rail, Steel Beam Standard Type (Deep) I-15 No. 2-B



### SPECIAL CURBS

Scale: 1" = 1'-0"

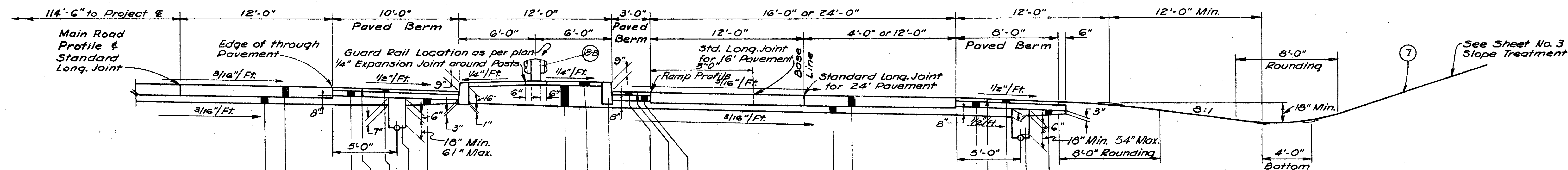
NOTE:  
Ditch depth 18" unless otherwise shown on cross sections.

# TYPICAL SECTIONS TYPE T-71

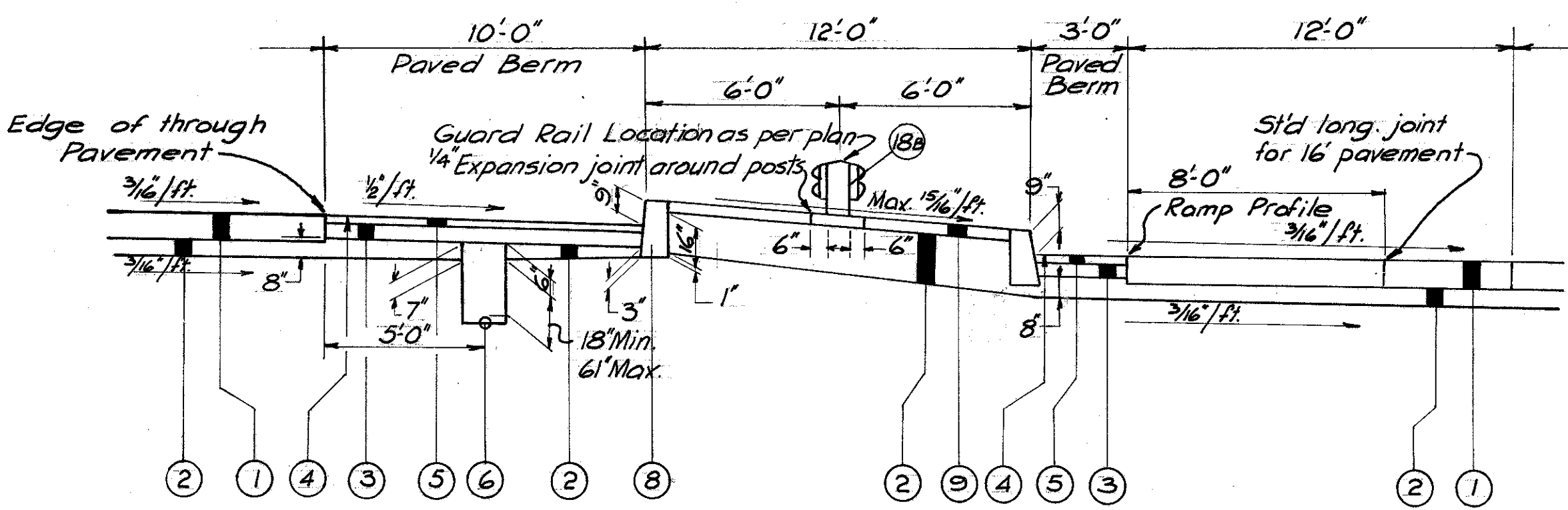
## COLLECTOR-DISTRIBUTOR RAMP

HAM-25-15.60

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



### TRANSITION BETWEEN NORMAL AND SLOPED SECTIONS



### NORMAL SECTION

### LIMITING STATIONS

Ramp 'C' Sta. 0+00 to Sta. 6+50  
Ramp 'G' Sta. 34+00 to Sta. 38+69.50

### LIMITING STATIONS

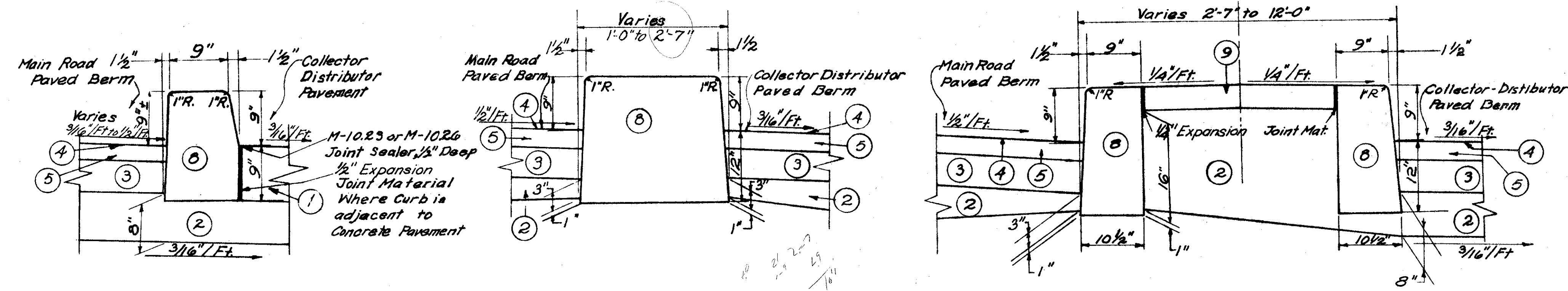
Ramp 'C' Sta. 6+50 to Sta. 8+00  
Ramp 'G' Sta. 32+50 to Sta. 34+00

### SLOPED SECTION LIMITING STATIONS

Ramp 'C' Sta. 8+00 to Sta. 16+00  
Ramp 'G' Sta. 17+26 to Sta. 32+50

### ITEM LEGEND

- ① Item T-71-10" Reinforced Portland Cement Concrete Pavement
- ② Item I-22 6" Subbase (except as noted)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders
- ④ Item T-31 Bituminous Surface Treatment (See Proposal note)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course, Type B
- ⑥ Item I-4 6" Pipe Underdrain
- ⑦ Item L-9 Seeding and Protecting
- ⑧ Item I-12 Special Curb, Concrete (See Details)
- ⑨ Item I-21 4" Portland Cement Concrete Median Pavement, Std. Type I
- ⓑ Item I-15 Barrier Guard Rail, Steel Beam Standard Type (Deep) I-15 No. 2-B



### SPECIAL CURBS

Scale: 1" = 1'-0"

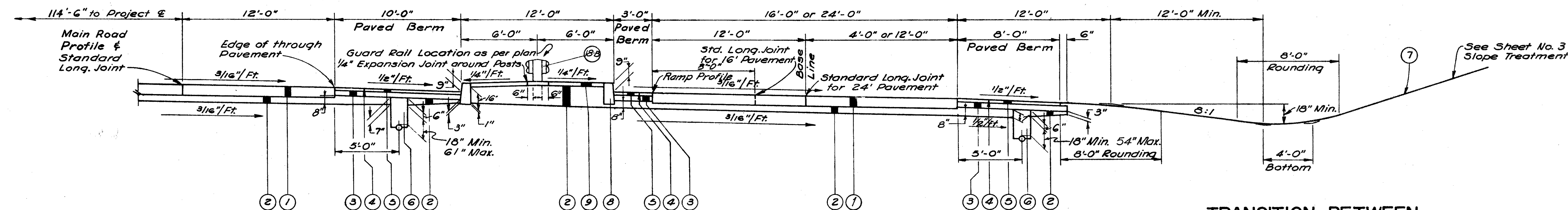
NOTE:  
Ditch depth 18" unless otherwise shown on cross sections.

HAMILTON COUNTY  
HAM-25-15.60  
HAM-50B-22.02

# TYPICAL SECTIONS TYPE T-71

## COLLECTOR-DISTRIBUTOR RAMP

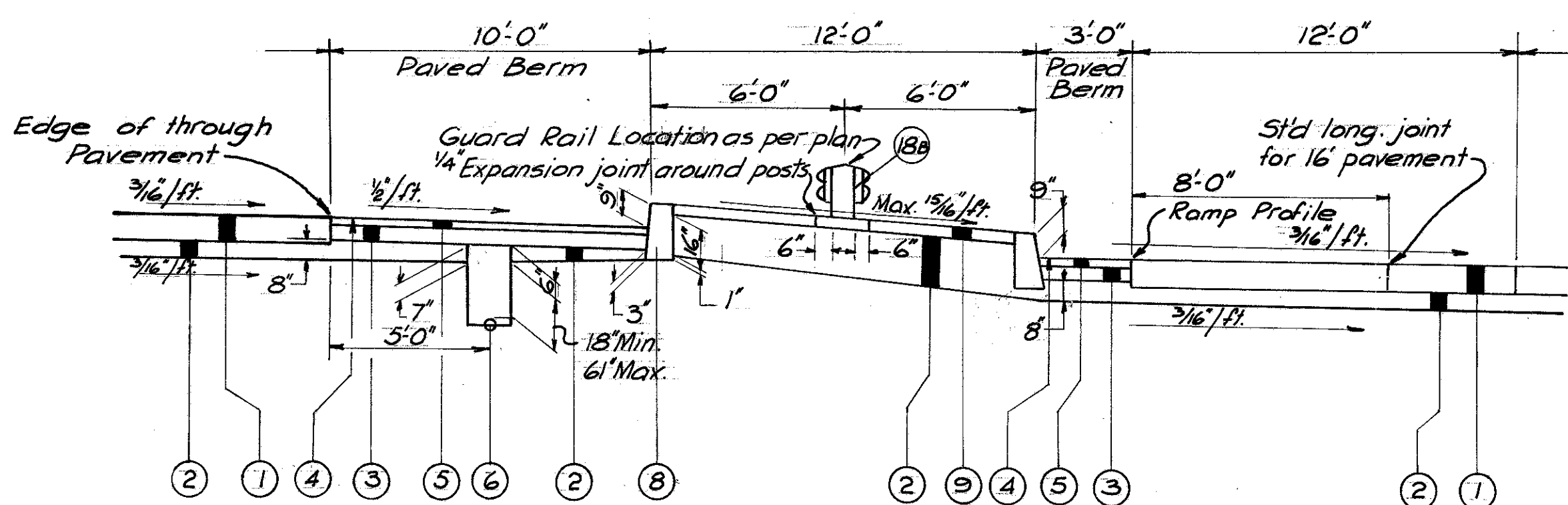
HAM-25-15.60  
Scale: 1/4" = 1'-0"



### TRANSITION BETWEEN NORMAL AND SLOPED SECTIONS

#### LIMITING STATIONS

Ramp 'C' Sta. 6+50 to Sta. 8+00  
Ramp 'G' Sta. 32+50 to Sta. 34+00



### NORMAL SECTION

#### LIMITING STATIONS

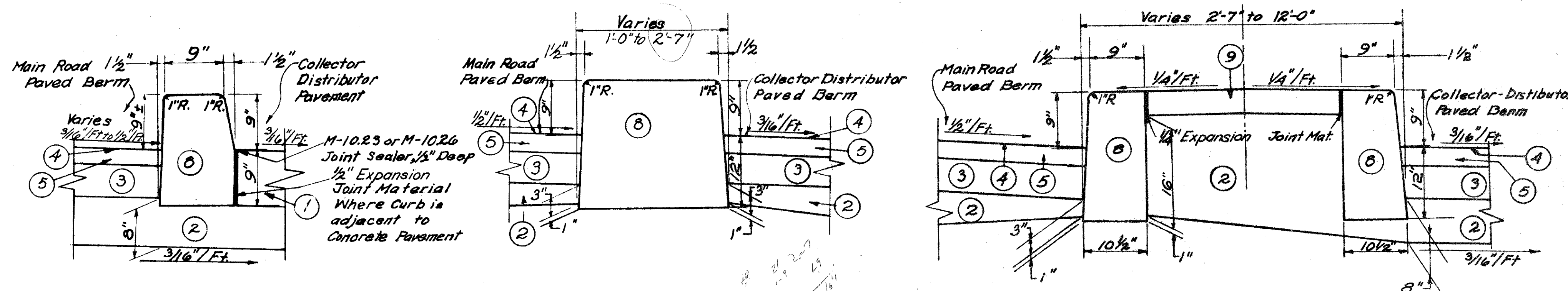
Ramp 'C' Sta. 0+00 to Sta. 6+50  
Ramp 'G' Sta. 34+00 to Sta. 38+69.50

### SLOPED SECTION LIMITING STATIONS

Ramp 'C' Sta. 8+00 to Sta. 16+00  
Ramp 'G' Sta. 17+26 to Sta. 32+50

### ITEM LEGEND

- ① Item T-71-10" Reinforced Portland Cement Concrete Pavement
- ② Item I-22 6" Subbase (except as noted)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders
- ④ Item T-31 Bituminous Surface Treatment (See Proposal note)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course, Type B
- ⑥ Item I-4 6" Pipe Underdrain
- ⑦ Item L-9 Seeding and Protecting
- ⑧ Item I-12 Special Curb, Concrete (See Details)
- ⑨ Item I-21 4" Portland Cement Concrete Median Pavement, Std. Type I
- ⑨B Item I-15 Barrier Guard Rail, Steel Beam Standard Type (Deep) I-15 No. 2-B



### SPECIAL CURBS

Scale: 1" = 1'-0"

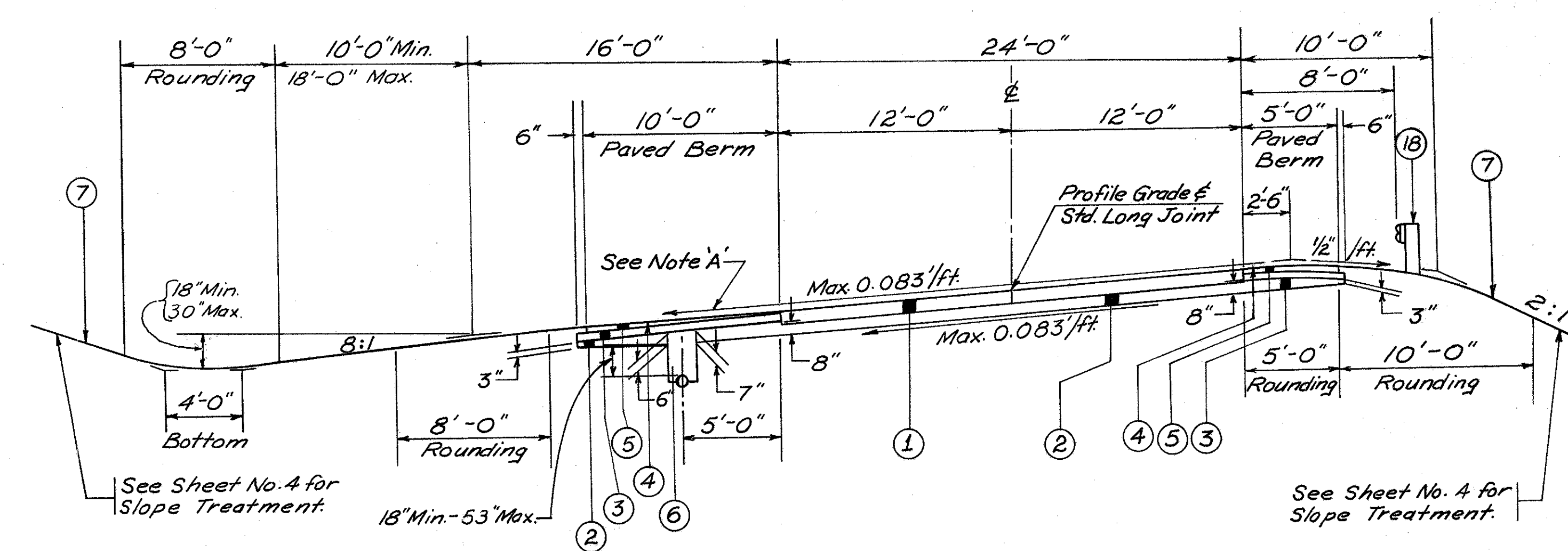
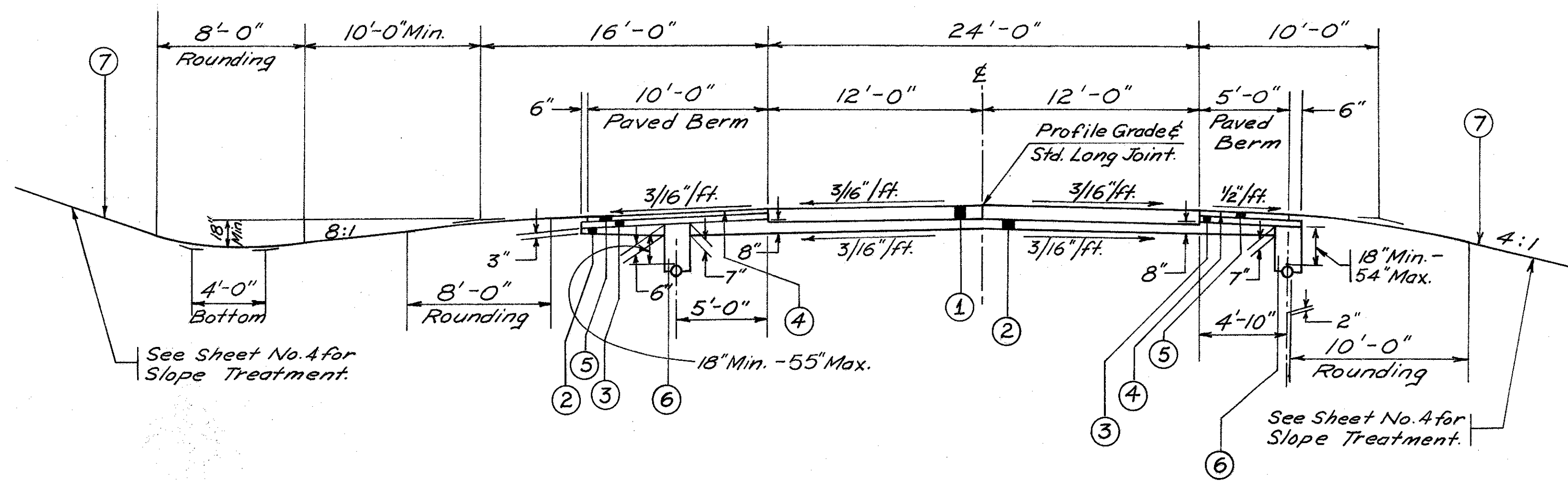
NOTE:  
Ditch depth 18" unless otherwise shown on cross sections.

This sheet supersedes Sheet No. 9 6-8-60 REC.

COLLECTOR-DISTRIBUTOR RAMP - TYPICAL SECTIONS

# TYPICAL SECTIONS 24'-0" RAMP TYPE T-71

SCALE: 3/16" = 1'-0"



### NORMAL SECTION

Ramp 'A' (As Shown.)  
Ramp 'D' (Opposite Hand.)

### LIMITING STATIONS

Ramp 'A' Sta. 11+80.48 to Sta. 18+72.38  
Ramp 'D' Sta. 17+00.00 to Sta. 22+17.13  
Sta. 49+37.05 to Sta. 56+25.95

### SUPERELEVATED SECTION

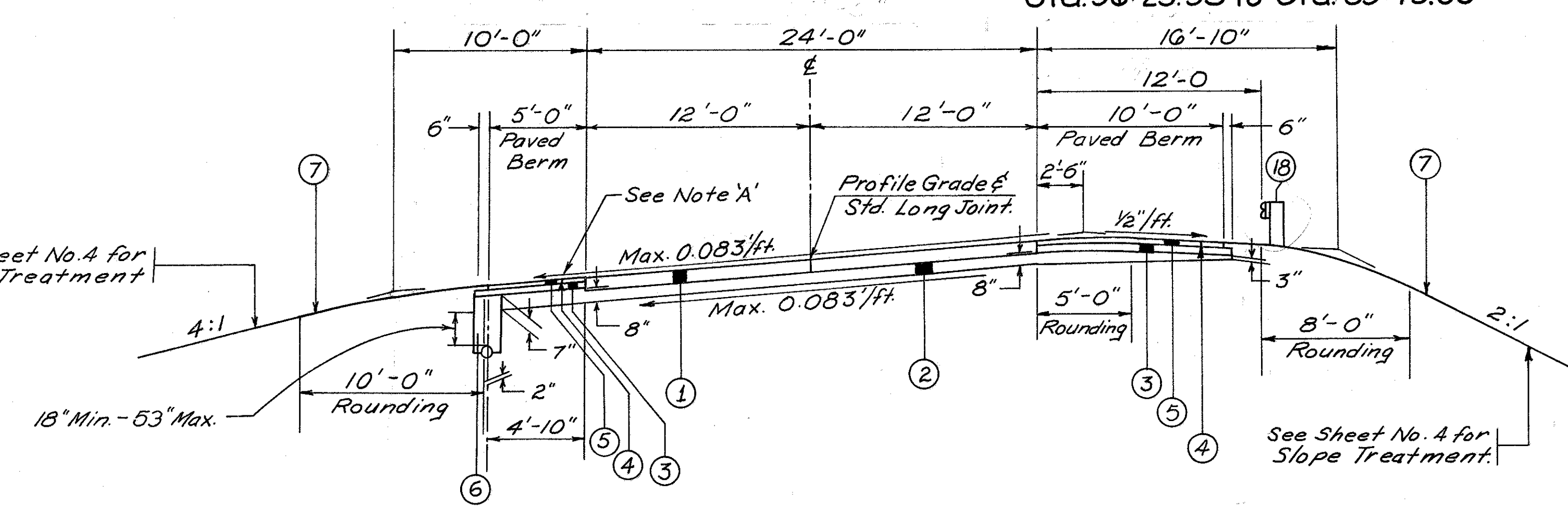
Ramp 'A' (As Shown.)  
Ramp 'D' (Opposite Hand.)

### LIMITING STATIONS

Ramp 'A' Sta. 5+93.09 to Sta. 11+80.48  
Sta. 18+72.38 to Sta. 28+63.73  
Ramp 'D' Sta. 6+31.80 to Sta. 17+00.00  
Sta. 56+25.95 to Sta. 59+75.00

### ITEM LEGEND

- ① Item T-71 10" Reinforced Portland Cement Concrete Pavement.
- ② Item I-22 6" Subbase (Except as Noted.)
- ③ Item I-18 5" Stabilized Crushed Aggregate Shoulders.
- ④ Item T-31 Bituminous Surface Treatment. (See proposal Note.)
- ⑤ Item B-219 3" Waterproofed Aggregate Base Course. Type B
- ⑥ Item I-4 6" Pipe Underdrain.
- ⑦ Item L-9 Seeding and Protecting.
- ⑧ Item I-15 Guard Rail, Steel Beam Standard Type (Deep) I-15 No. 2-B



See Sheet No. 4 for Slope Treatment

Note:  
These Typical Section apply only to Ramps 'A' & 'D'.  
Note 'A'  
When pavement slope is greater than 1/2"/ft. Shoulder slope is to be the same as the pavement slope.

### SUPERELEVATED SECTION

Ramp 'D'

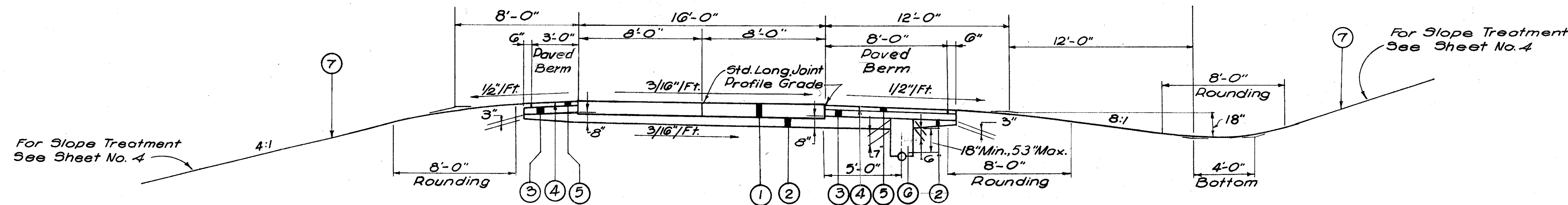
LIMITING STATIONS  
Ramp 'D' Sta. 22+17.13 to Sta. 49+37.05

# TYPICAL - SECTIONS 16'-0" RAMP TYPE T-71

Scale 1/4" = 1'-0"

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

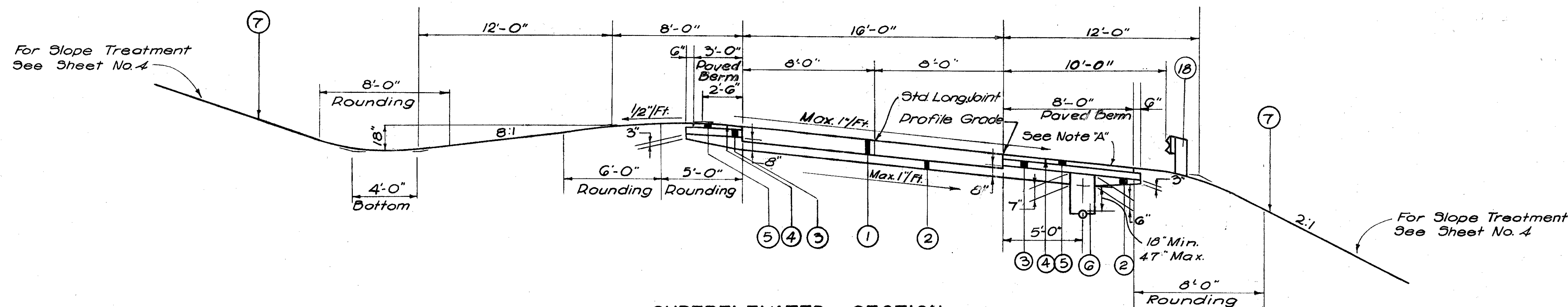
HAMILTON COUNTY  
 HAM-25-15.60 &  
 HAM-50B-22.02



**NORMAL SECTION**

**LIMITING STATIONS**

Ramp C' Sta. 16+00 to Sta. 20+97  
 Ramp E' Sta. 13+29 to Sta. 13+64



**SUPERELEVATED SECTION**

**LIMITING STATIONS**

Ramp B' Sta. 3+75 to Sta. 13+00  
 Ramp E' Sta. 4+85 to Sta. 13+29  
 Ramp F' Sta. 3+30 to Sta. 12+88  
 Ramp G' Sta. 4+79 to Sta. 17+26  
 Ramp H' Sta. 5+53 to Sta. 11+60  
 Ramp I' Sta. 5+53 to Sta. 10+80

**ITEM LEGEND**

- ① Item T-71, 10" Reinforced Portland Cement Concrete Pavement.
- ② Item I-22, 6" Subbase (Except as noted).
- ③ Item I-18, 5" Stabilized Crushed Aggregate Shoulders.
- ④ Item T-51, Bituminous Surface Treatment. (See Proposal Note)
- ⑤ Item B-219, 3" Waterproofed Aggregate Base Course, Type B.
- ⑥ Item I-4, 6" Pipe Underdrain.
- ⑦ Item L-2, Seeding and Protecting.
- ⑧ Item I-15, Guard Rail, Steel Beam Standard Type (Deep) I-15 No. 2-B

**NOTES:**

"A" - Whenever superelevation is greater than 1/2" / Ft. shoulder slope must be the same as pavement slope.

Depth of ditches are 18" unless otherwise shown on cross sections

HAMILTON COUNTY  
HAM - 25 - 15.60¢  
HAM - 50B - 22.02

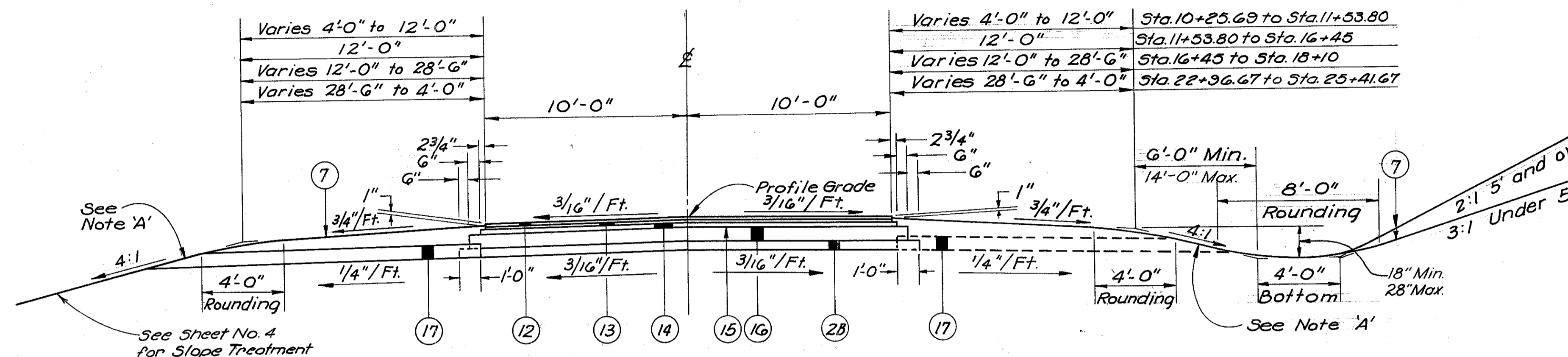
# TYPICAL SECTIONS TYPE T-35 ON B-119

## KEMPER ROAD

Scale: 1/4" = 1'-0"  
HAM - 25 - 15.60

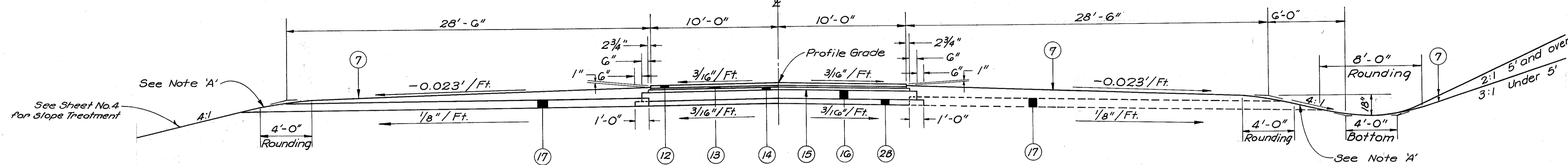
### ITEM LEGEND

- (1A) Item T-71 9" Reinforced Portland Cement, Concrete Pavement.
- (2) Item I-22 6" Subbase (Except as Noted)
- (2B) Item I-22 5" Subbase
- (3A) Item I-18 6" Stabilized Crushed Aggregate Shoulders.
- (6) Item I-4 6" Pipe Underdrain.
- (7) Item L-9 Seeding and Protecting.
- (9) Item I-21 4" Portland Cement Concrete Pavement, Std. Type I.
- (11) Item I-12 Standard Type 2-A Concrete Curb.
- (12) Item T-35 1 1/2" Asphaltic Concrete Surface Type 'A' (70-85)
- (13) Item B-35 1/4" Asphaltic Concrete Leveling Course (70-85)
- (14) Item B-35 2 3/4" Asphaltic Concrete Base Course (70-85)
- (15) Item T-30 Bituminous Prime Coat: Sec. M-5.3, MC-O or MC-1 or Sec. M-5.7, RT-2 or RT-3, applied at the rate of 0.35 Gals. per Sq. Yd.
- (16) Item B-119 8" Crushed Aggregate Base Course.
- (17) Item I-9 Stone Underdrain No. 2 (50 ft. on centers and staggered as directed by Engineer.)



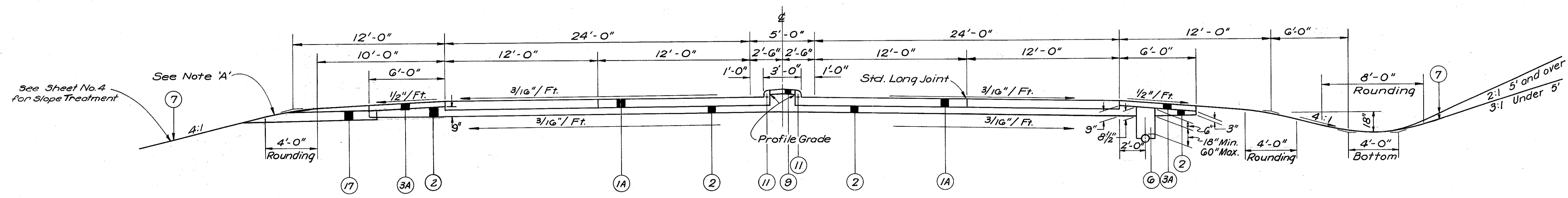
### NORMAL SECTION LIMITING STATIONS

Sta. 10+25.69 To Sta. 18+10  
Sta. 22+96.67 To Sta. 25+41.67



### NORMAL SECTION LIMITING STATIONS

Sta. 18+10 To Sta. 22+96.97

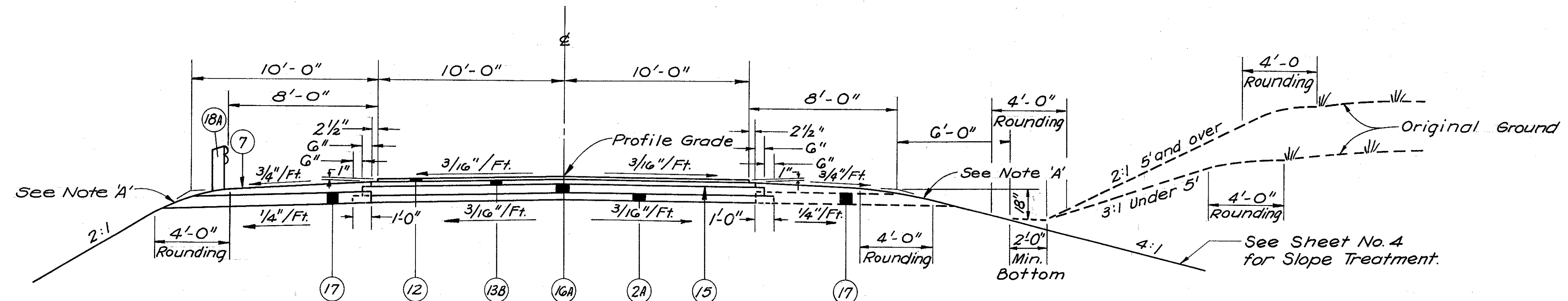


### ULTIMATE NORMAL SECTION

**NOTE:**  
A' - No topsoil or other material to be placed over end of Stone Underdrain to insure free drainage.  
Ditches are 18" deep unless otherwise shown on Cross-sections.

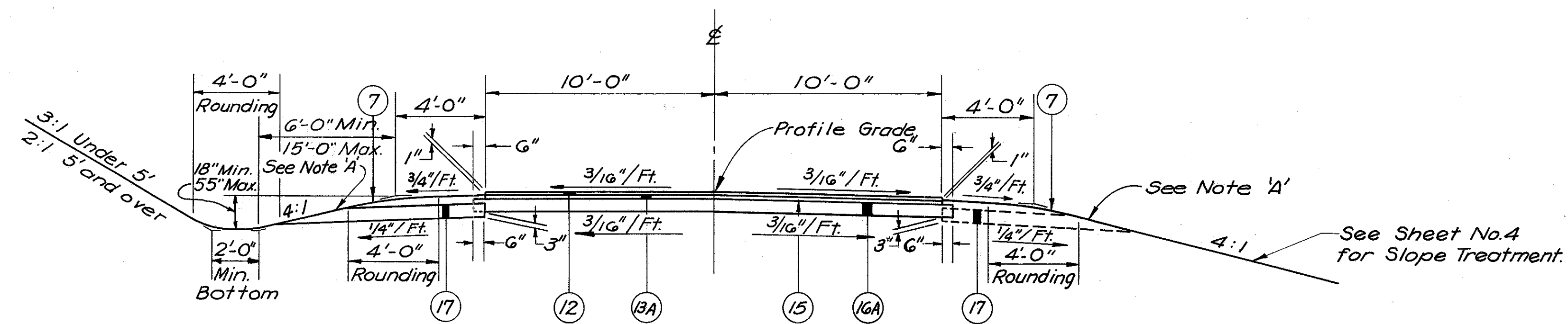
# TYPICAL SECTIONS TYPE T-35 ON B 119

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



**US 50B**  
**CHESTER ROAD RELOCATED**  
**NORMAL SECTION**  
**LIMITING STATIONS**

Sta. 0+69 to Sta. 55+37



**US 25**  
**EXISTING CHESTER ROAD**  
**NORMAL SECTIONS**  
**LIMITING STATIONS**

Sta. 6+03.97 to Sta. 14+02.19

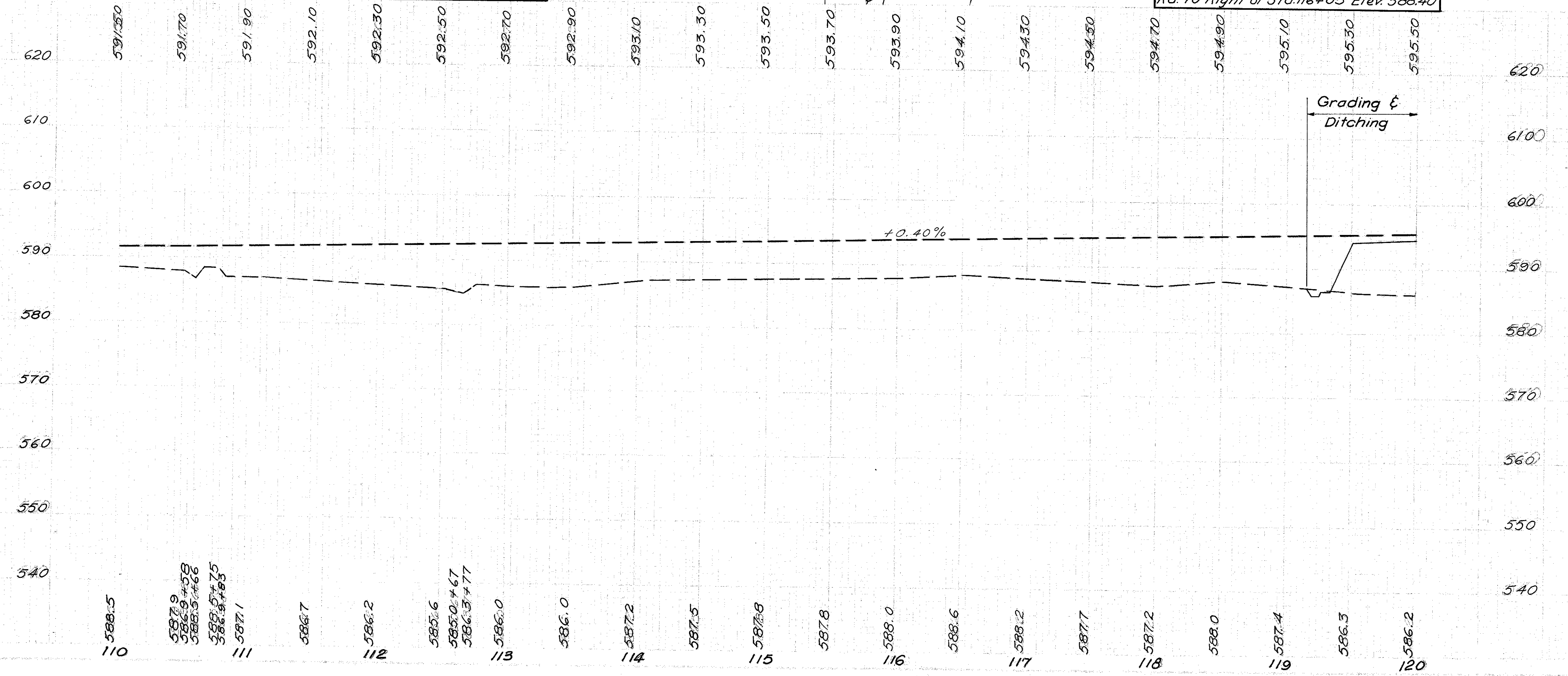
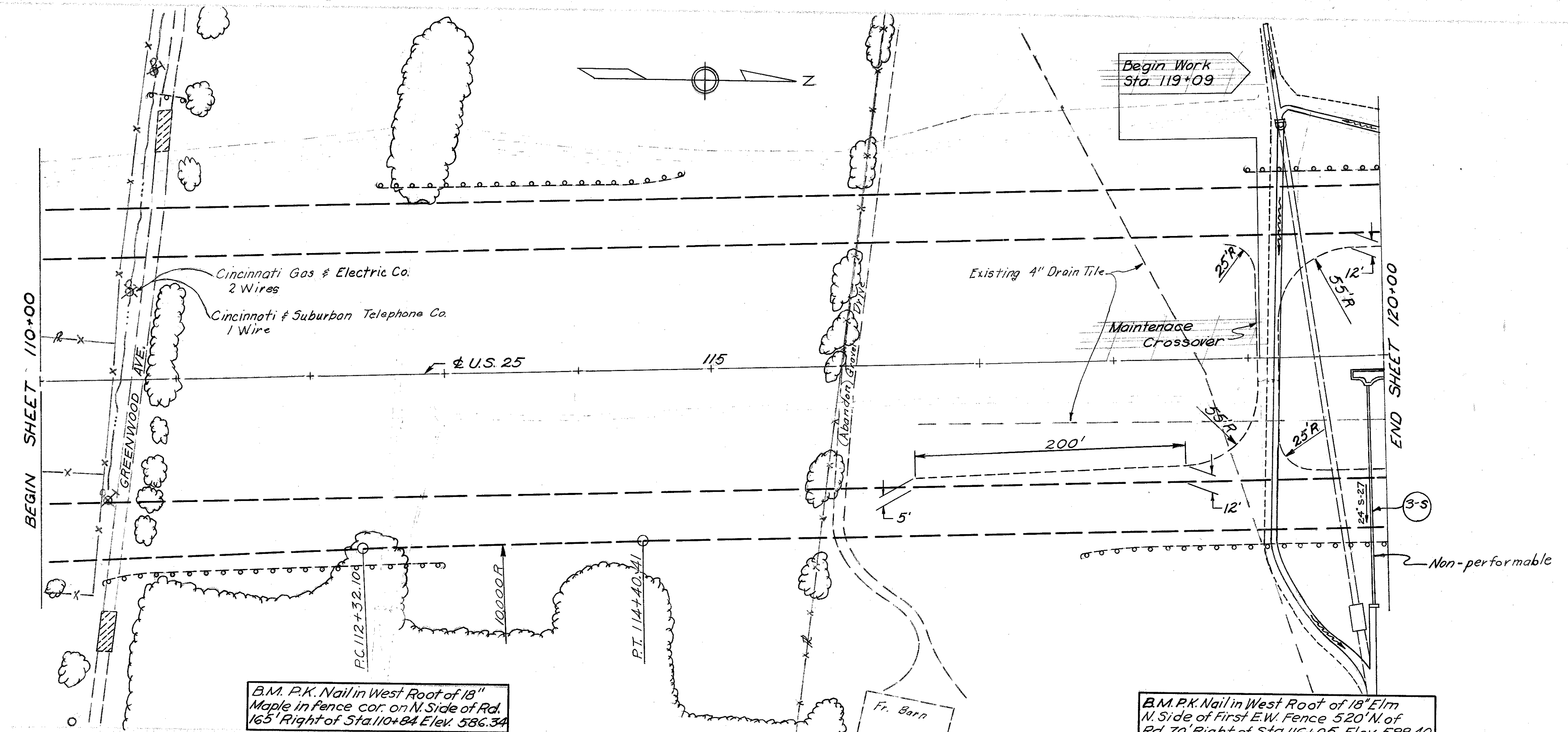
**ITEM LEGEND**

- (2A) Item I-22 4" Subbase
- (7) Item L-9 Seeding and Protecting
- (12) Item T-35 1/2" Asphaltic Concrete Surface Course Type A' (70-85)
- (13A) Item B-35 1/2" Asphaltic Concrete Leveling Course (70-85)
- (13B) Item B-35 2 1/2" Asphaltic Concrete Base Course (70-85)
- (15) Item T-30 Bituminous Prime Coat, Sec. M-5.3, MC-O or MC-1 or M-5.7, RT-2 or RT-3, applied at the rate of 0.35 Gals. per Sq. Yd.
- (16A) Item B-119 6" Crushed Aggregate Base Course.
- (17) Item I-9 Stone Underdrain No. 2 (50 ft. on centers and staggered as directed by Engineer).
- (18A) Item I-15 Guard Rail, Steel Beam Standard Type (Deep) I-15 No. 2-A

**NOTE:**

A' - No topsoil or other material to be placed over end of stone underdrain to insure free drainage.

Ditches are 18" deep unless shown otherwise on Cross-sections.

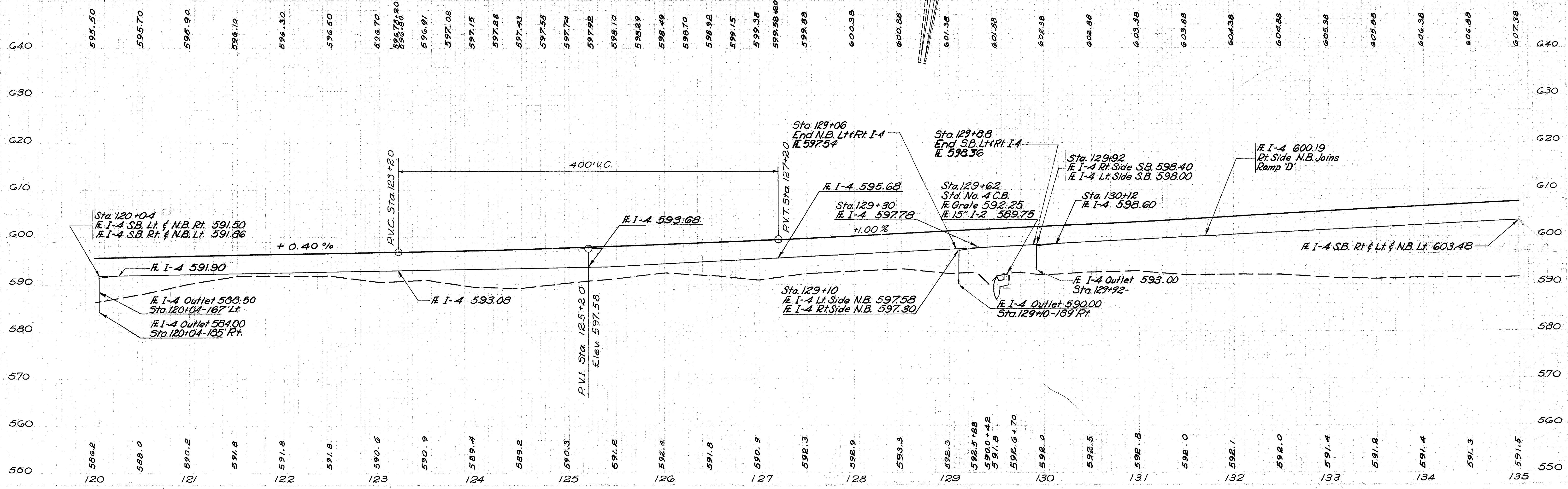
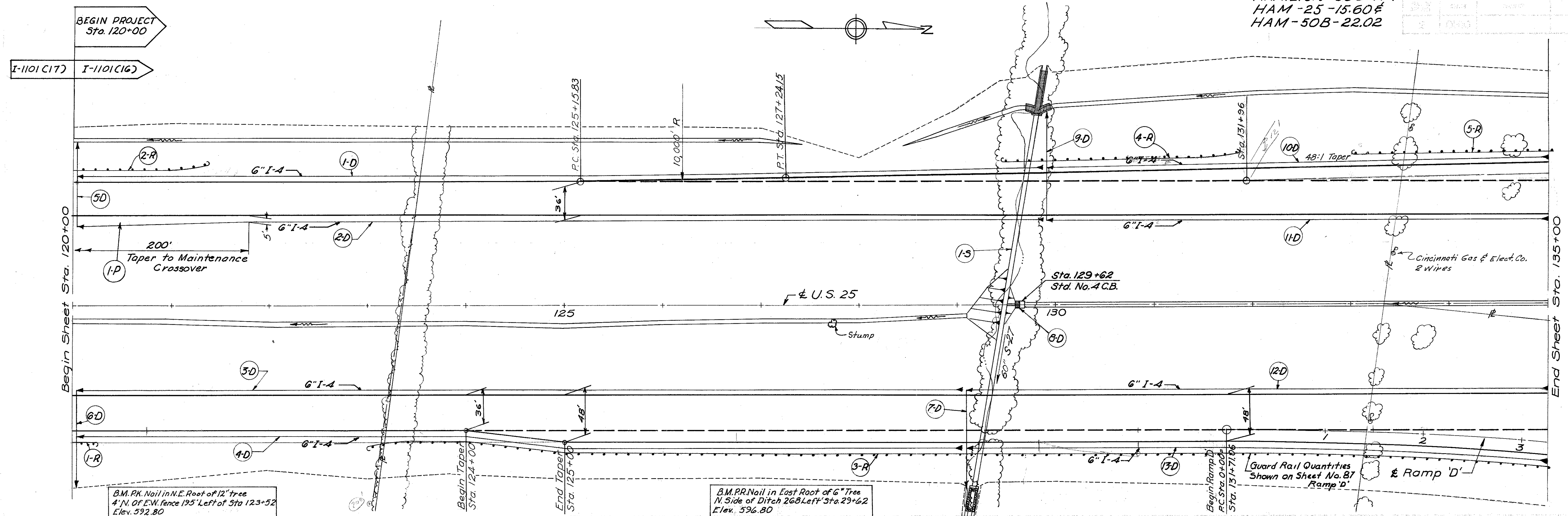


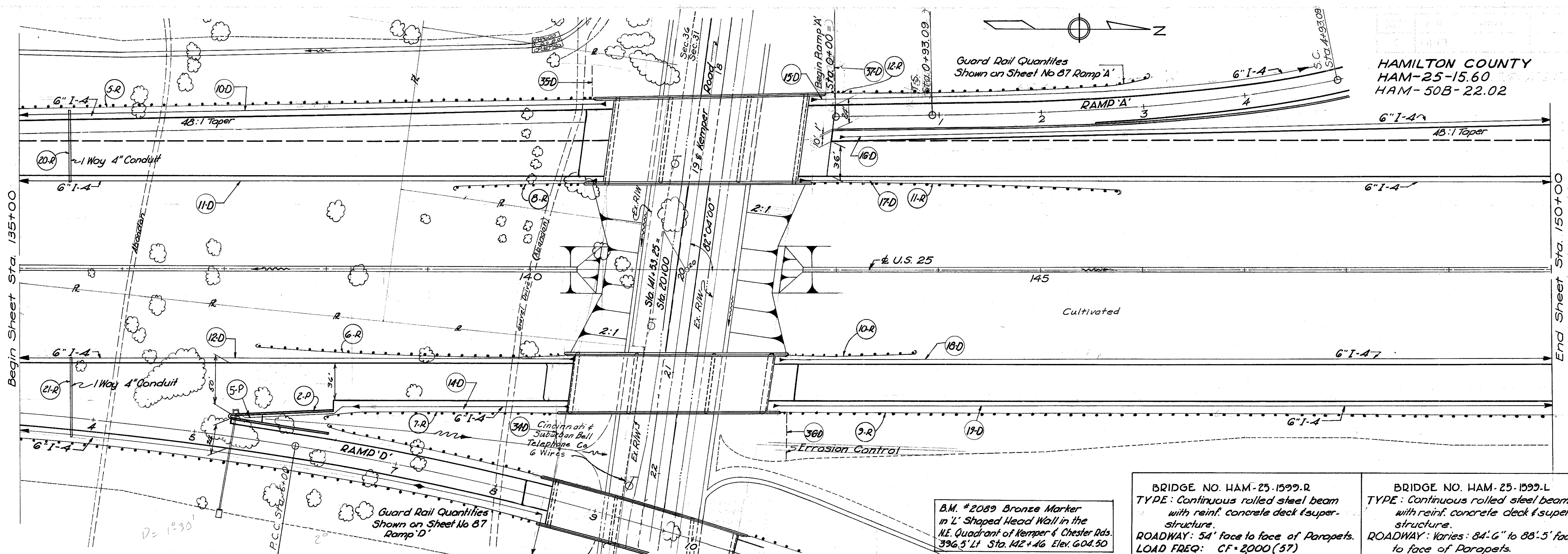
B.M. P.K. Nail in West Root of 18" Maple in Fence cor. on N. Side of Rd. 165' Right of Sta. 110+84 Elev. 586.34

B.M. P.K. Nail in West Root of 18" Elm N. Side of First E.W. Fence 520' N. of Rd. 70' Right of Sta. 116+05 Elev. 588.40

- 110 588.5
- 587.9
- 586.9 #58
- 586.5 #58
- 585.5 #75
- 586.4 #65
- 587.1
- 586.7
- 586.2
- 585.6
- 585.0 #67
- 586.5 #77
- 586.0
- 586.0
- 587.2
- 587.5
- 587.8
- 588.0
- 588.6
- 588.2
- 587.7
- 587.2
- 588.0
- 587.4
- 586.3
- 586.2



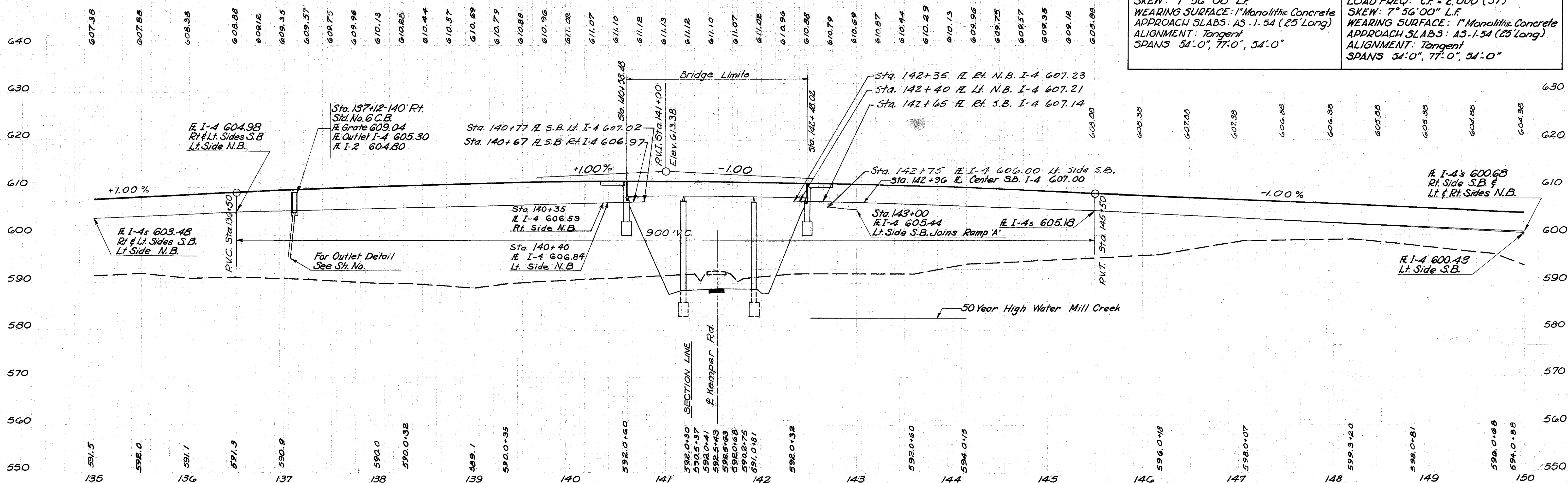




HAMILTON COUNTY  
HAM-25-15.60  
HAM-50B-22.02

<p>BRIDGE NO. HAM-25-1599.R TYPE: Continuous rolled steel beam with reinf. concrete deck &amp; super-structure. ROADWAY: 54' face to face of Parapets. LOAD FREQ: CF=2000 (57) SKEW: 7° 56' 00" L.F. WEARING SURFACE: 1" Monolithic Concrete APPROACH SLABS: AS-1.54 (25' Long) ALIGNMENT: Tangent SPANS 54'-0", 77'-0", 54'-0"</p>	<p>BRIDGE NO. HAM-25-1599.L TYPE: Continuous rolled steel beam with reinf. concrete deck &amp; super-structure. ROADWAY: Varies: 84'-6" to 88'-5" face to face of Parapets. LOAD FREQ: CF=2,000 (57) SKEW: 7° 56' 00" L.F. WEARING SURFACE: 1" Monolithic Concrete APPROACH SLABS: AS-1.54 (25' Long) ALIGNMENT: Tangent SPANS 54'-0", 77'-0", 54'-0"</p>
---	---

B.M. #2089 Bronze Marker  
in 'L' Shaped Head Wall in the  
NE. Quadrant of Kemper & Chester Rds.  
396.5' Lt Sta. 142+46 Elev. 604.50

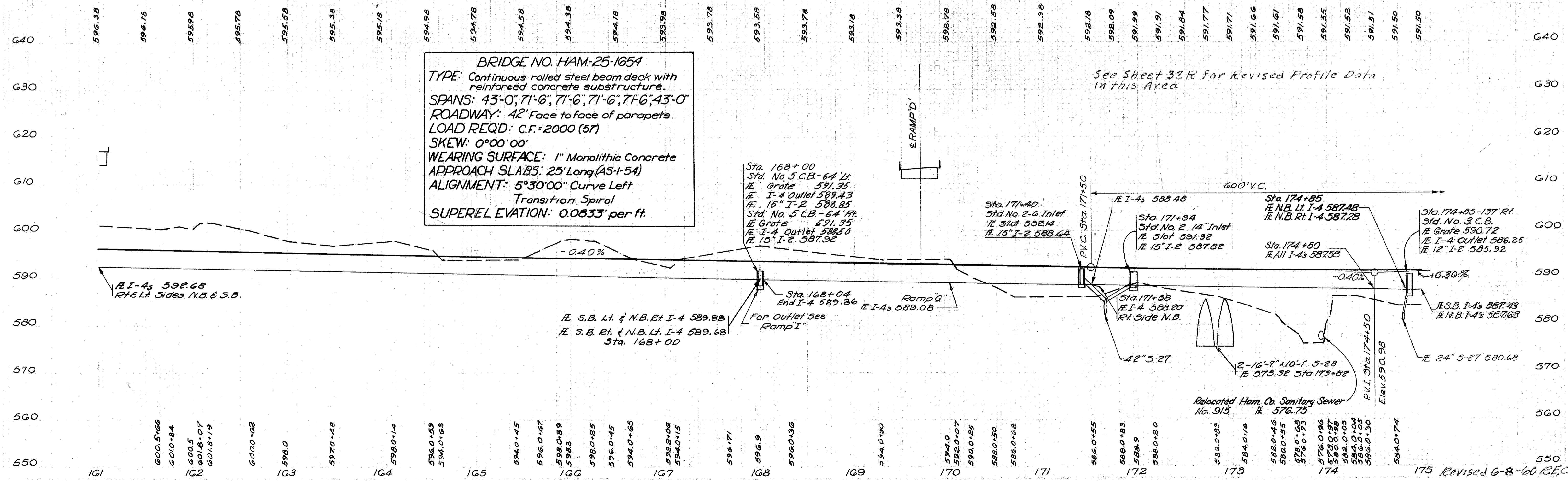
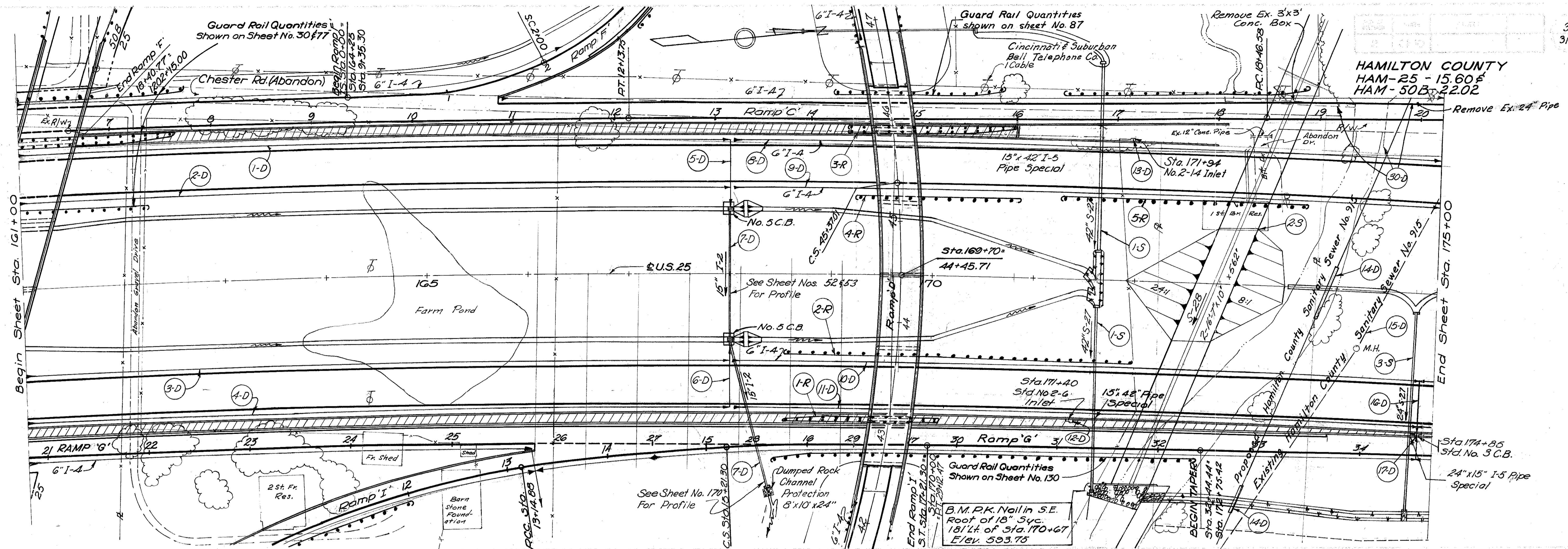




# ESTIMATED QUANTITIES

HAMILTON COUNTY  
HAM-25-15.00 E  
HAM-50B-22.02

REF. NO.	STATION TO STATION	SIDE	I-5 Pipe Specials					I-2 8" Class 'B' Storm Sewer U.P. Lin. Ft.	I-2 12" Class 'B' Storm Sewer U.P. Lin. Ft.	I-2 15" Class 'B' Storm Sewer U.P. Lin. Ft.	I-2 15" Class 'A' Storm Sewer Lin. Ft.	I-4 6" Under-drains Lin. Ft.	I-4 8" Pipe Outlets for Under-drains Lin. Ft.	I-8 Standard No. 2-2B C.B. Each	I-8 Standard No. 4 C.B. Each	I-8 Standard No. 5 C.B. Each	I-10 Dumped Rock Channel Protection Cu. Yds.	I-10 Riprap Type 'A' GROUT Filled Sq. Yds.	E-2 Excavation for Structures Cu. Yds.	E-3 Channel Excavation Cu. Yds.	S-1 Class 'E' Concrete Structures for Roadway M-G.G.(b) Cu. Yds.	S-27 60" Pipe for Roadway Culverts M-G.G.(b) Lin. Ft.	S-27 72" Pipe for Roadway Culverts M-G.G.(c) Lin. Ft.	L-10 Sodding Sq. Yds.	L-10 Sodding for Special Berm and Slope Protection Sq. Yds.	S-27 24" Pipe for Roadway Culverts (No. 8(B) or (C)) Lin. Ft.	SEE SHEET NO.	
			6" 90° Inrad. Bend. Each	6" 45° Wye Band. U.P. Each	8" 45° Wye Band. U.P. Each	12" 45° Wye Band. U.P. Each																						
<i>Drainage</i>																												
1-D	120+04	129+88	Lt.								982																	
2-D	120+04	129+88	Lt.								982																	
3-D	120+04	129+06	Rt.								900																	
4-D	120+04	129+06	Rt.								900																	
5-D	120+04	129+06	Lt.	1	1	1		54				10					0.3											214
6-D	120+04	129+06	Rt.	1	1	1		80				10					0.3											214
7-D	129+10	129+10	Rt.	1	1	1		82				10			1									55				214
8-D	129+02	129+02	Lt.						10																			214
9-D	129+92	129+92	Lt.	1	1	1		92				10																214
10-D	129+92	140+77	Lt.								1085																	
11-D	129+92	140+67	Lt.								1075																	
12-D	129+10	140+40	Rt.								1130																	
13-D	129+10	131+71	Rt.								251																	214
14-D	137+12	140+35	Rt.			3					303	10																
15-D	142+75	143+00	Lt.								25																	
16-D	142+98	150+50	Lt.								754																	
17-D	142+05	150+50	Lt.								785																	
18-D	142+40	150+50	Rt.								810																	
19-D	142+35	150+50	Rt.								815																	
20-D	150+50	150+50	Lt.	1	1	1		124				10																214
21-D	150+50	150+50	Rt.	1	1	1		110				10			1													214
22-D	150+50	150+50	Lt.						8															140				
23-D	150+54	155+00	Lt.								446																	
24-D	150+54	158+00	Lt.								740																	
25-D	150+54	158+00	Rt.								746																	
26-D	150+54	158+00	Rt.								746																	
27-D	155+00	161+00	Lt.								600																	
28-D	158+00	161+00	Lt. & Rt.				1		130	324		4	10	1		2	7		2		.3			108				214
29-D	158+00	158+00	Lt.	1								4	10															214
30-D	158+00	158+00	Rt.	1	1	1		46				10																214
31-D	158+04	161+00	Rt.								296																	
32-D	158+04	161+00	Rt.								296																	
33-D	158+04	161+00	Rt.								296																	
34-D	140+25	140+25	Rt.																							36		
35-D	140+60	140+60	Lt.																							36		
36-D	142+50	142+50	Rt.																							60		
37-D	142+95	142+95	Lt.																							36		
<b>Totals</b>				8	7	7	3	1	588	130	324	18	14983	90	1	2	2	7.9		2		.3			303	168		
<i>Structures</i>																												
1-S	129+48	129+48	Lt. & Rt.														50	93	883	28	6.4	386		23				193
2-S	150+60	150+60	Lt. & Rt.														25	93	766	98	8.1		398	31				194
3-S	119+89	119+89	Rt.														75	93	1750	134	15.3	386	398	5		162		211
<b>Totals</b>																	150	189	1750	260	30.7	770	434	28	162			
<b>TOTALS</b>				8	7	7	3	1	588	130	324	18	14983	90	1	2	2	82.9	93	1758	134	15.6	386	398	362	168	162	

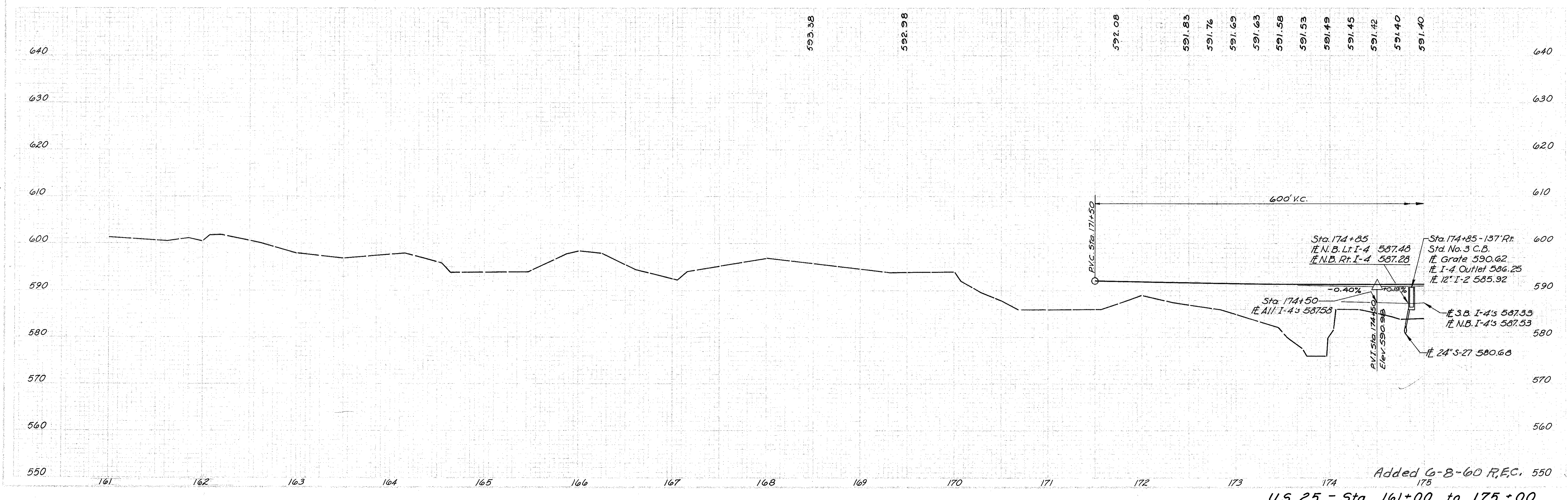


**BRIDGE NO. HAM-25-1654**  
 TYPE: Continuous rolled steel beam deck with reinforced concrete substructure.  
 SPANS: 43'-0"; 71'-6"; 71'-6"; 71'-6"; 43'-0"  
 ROADWAY: 42' Face to face of parapets.  
 LOAD REQD: C.F. 2000 (57)  
 SKEW: 0°00'00"  
 WEARING SURFACE: 1" Monolithic Concrete  
 APPROACH SLABS: 25' Long (A5+54)  
 ALIGNMENT: 5°30'00" Curve Left  
 Transition Spiral  
 SUPERELEVATION: 0.0833' per ft.

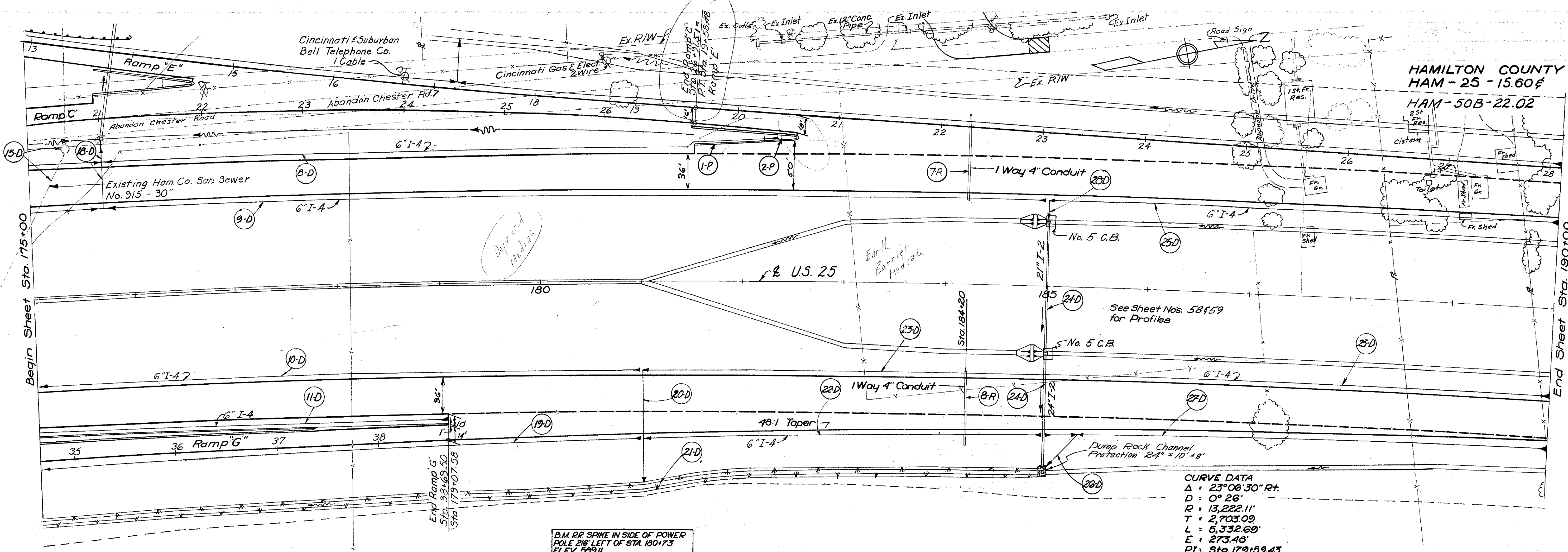
See Sheet 32R for Revised Profile Data  
in this Area

OTHER CONTRACT DWGS AFFECTED BY  
BRIDGE VERTICAL CLEARANCE REVISIONS AS FOLLOWS

SHEET NO.	STATION	OFFSET	DESCRIPTION
58	184+00	6'4"L	Revise Ditch Elev. to 590.6
	185+00	6'4"L	@ Std. No. 5 C.B., Revise # Grate to 590.70 and # 21" I-2 to 588.08
	186+00	6'4"L	Revise Ditch Elev. to 591.1
	187+00	6'4"L	Revise Ditch Elev. to 591.3
	188+00	6'4"L	Revise Ditch Elev. to 591.5
	189+00	6'4"L	Revise Ditch Elev. to 591.7
59	182+00	187'R	Revise Ditch Elev. to 585.3
	183+00	185'R	Revise Ditch Elev. to 585.6
	184+00	183'R	Revise Ditch Elev. to 585.9
		6'4'R	Revise Ditch Elev. to 590.6
	185+00	177'R	@ Std. P.C. - 4 Endwall Revise # 24" I-2 to 586.46 and
		182'R	Revise Ditch Elev. to 586.2
		6'4'R	@ Std. No. 5C.B. Revise # Grate to 590.70, # 21" I-2 to 587.61 and # 24" I-2 to 587.36.
	186+00	174.5'R	Revise Ditch Elev. to 587.3
		6'4'R	Revise Ditch Elev. to 591.1
	187+00	169.5'R	Revise Ditch Elev. to 588.6
		6'4'R	Revise Ditch Elev. to 591.3
	188+00	166'R	Revise Ditch Elev. to 590.0
	6'4'R	Revise Ditch Elev. to 591.5	
189+00	160.5'R	Revise Ditch Elev. to 591.4	
	6'4'R	Revise Ditch Elev. to 591.7	
60	190+00	64.5'L	Revise Ditch Elev. to 591.9
	191+00	64.5'L	Revise Ditch Elev. to 592.1
	192+00	64.5'L	Revise Ditch Elev. to 592.3
	192+70	64.5'L	Revise Ditch Elev. to 592.6
	193+70	64.5'L	Revise Ditch Elev. to 593.2
	195+00	64.5'L	Revise Ditch Elev. to 594.3
61	190+00	64.5'R	Revise Ditch Elev. to 591.9
	191+00	64.5'R	Revise Ditch Elev. to 592.1
	192+00	64.5'R	Revise Ditch Elev. to 592.3
	193+00	64.5'R	Revise Ditch Elev. to 592.7
	194+00	64.5'R	Revise Ditch Elev. to 593.4
	195+00	64.5'R	Revise Ditch Elev. to 594.3

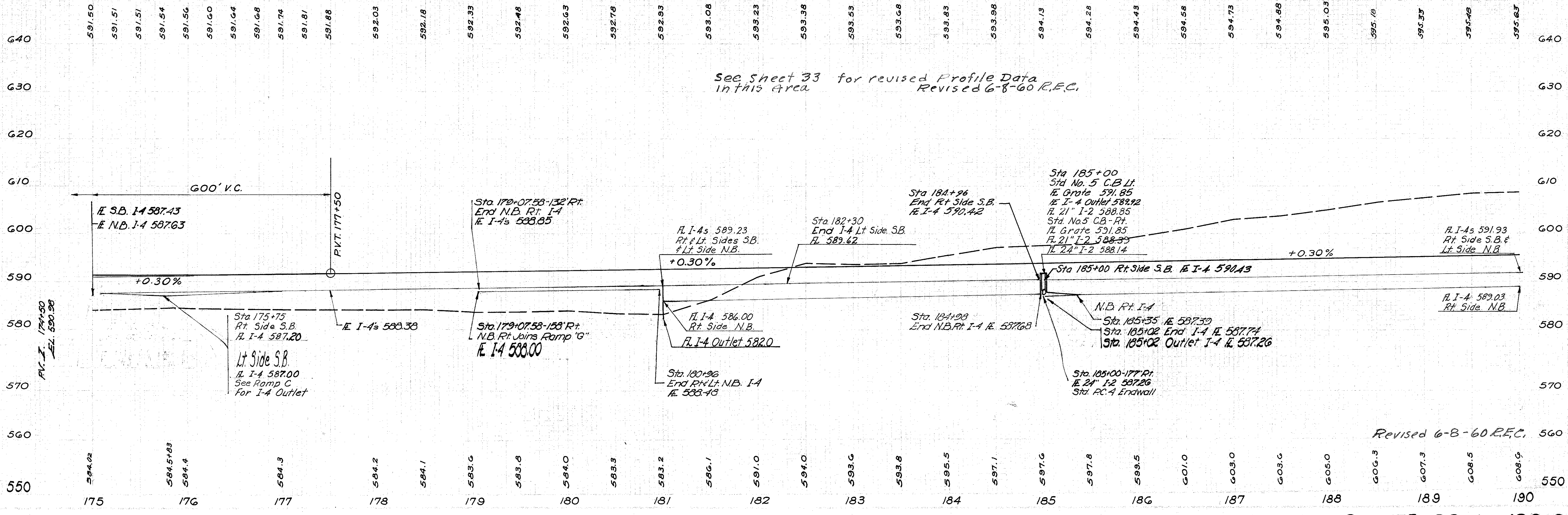


HAMILTON COUNTY  
HAM-25-15.60  
HAM-50B-22.02



CURVE DATA

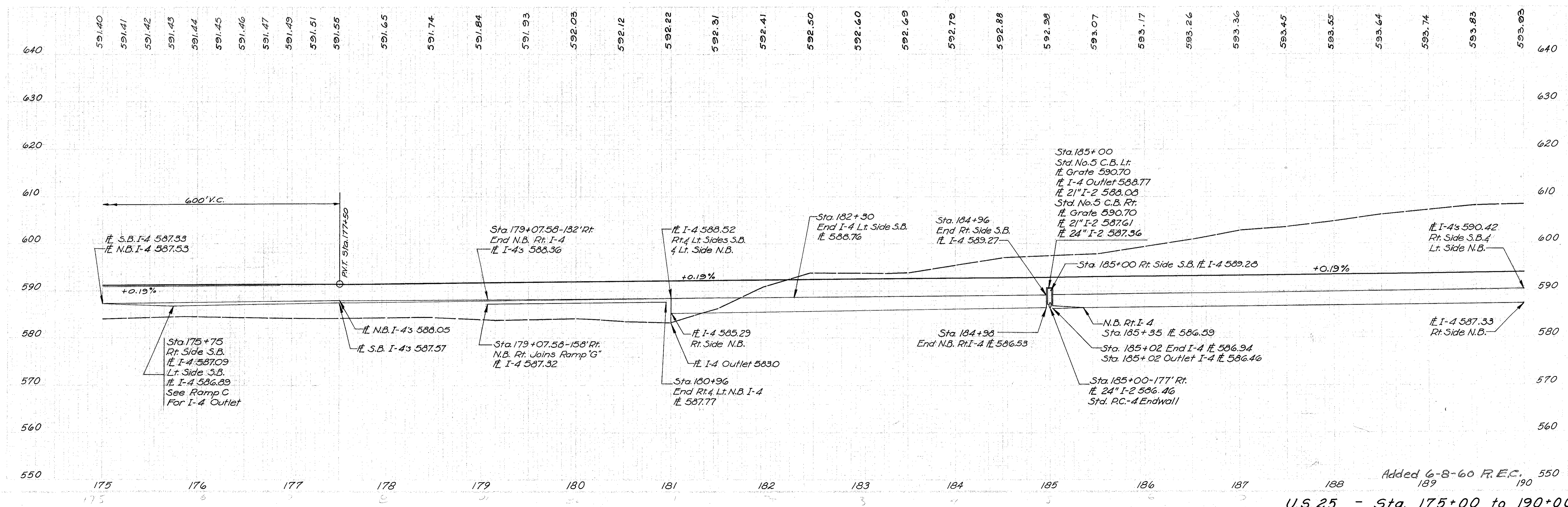
Δ	23° 06' 30" Rt.
D	0° 26'
R	13,222.11'
T	2,703.09'
L	5,332.69'
E	273.46'
PI	Sta. 179+59.43



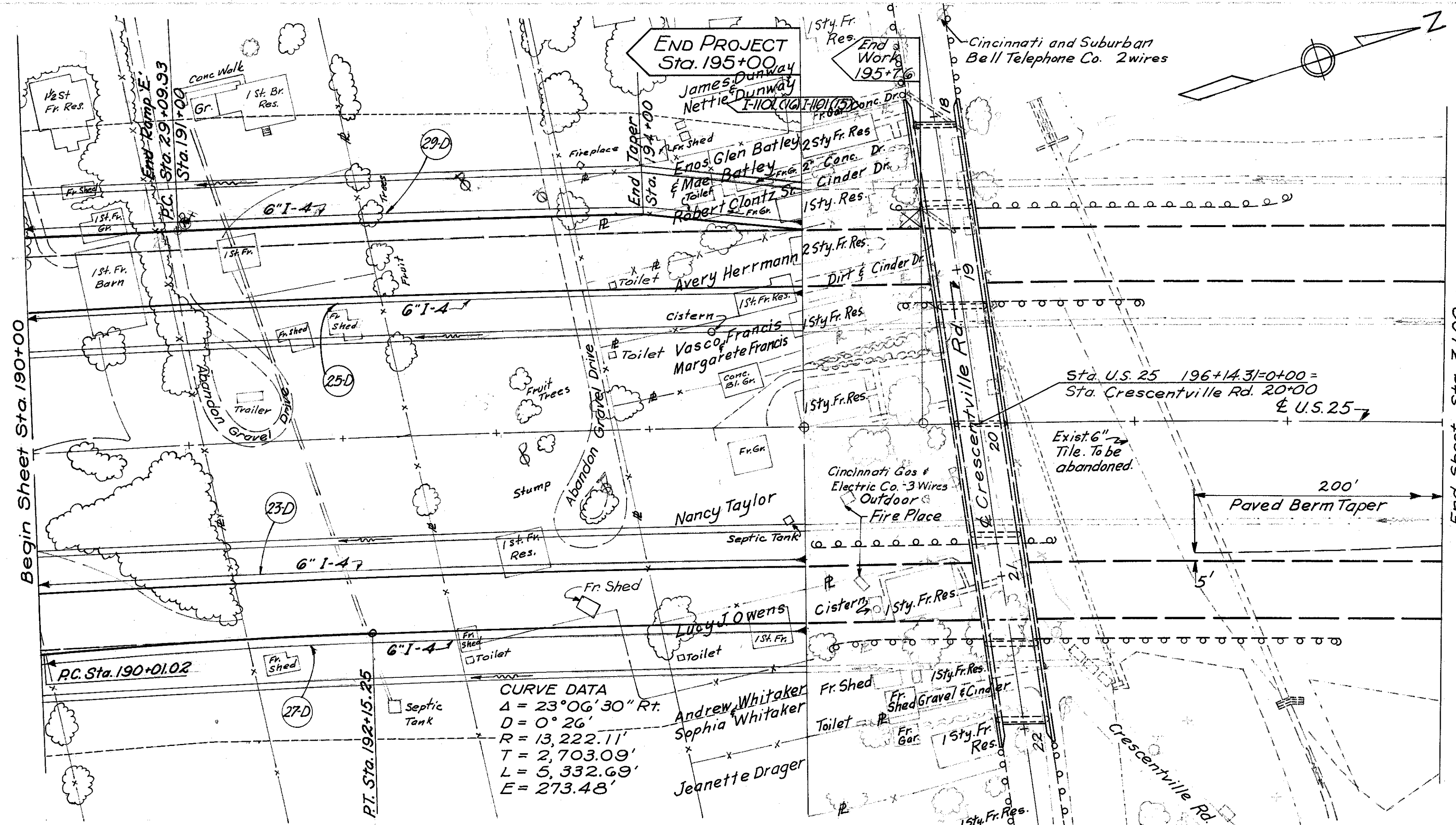
See sheet 33 for revised Profile Data  
in this area Revised 6-8-60 R.E.C.

Revised 6-8-60 R.E.C.

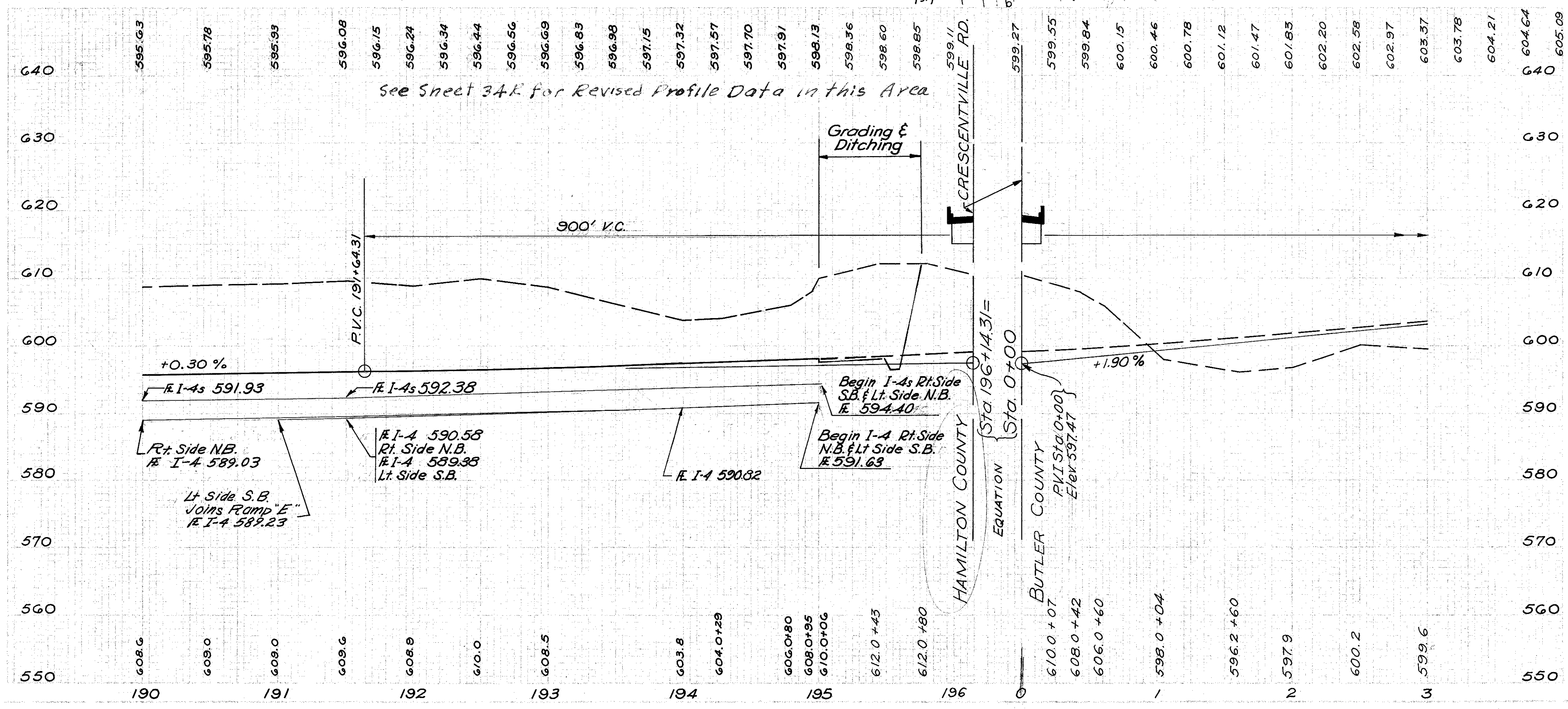
QUANTITY CHANGES STA. 171+50 to STA. 195+00									
E-101 Additional Roadway Excavation 26,239 Cu. yds.									
Additional Drainage									
STATION TO STATION	SIDE	E-2	E-12	I-6	I-6	I-8	I-16	S-1	S-24
		Excavation for Structures	Pipe Removal for Re-Use or Storage 21" to 24" inclusive	Relaying Pipe, 21" Class "B" Storm Sewers Under Pavement or Approaches	Relaying Pipe, 24" Class "B" Storm Sewers Under Pavement or Approaches	Standard No. 5 Catch Basins	Catch Basins Abandoned	Concrete for Structures Class "E"	Removal of Existing Structures
		Cu.Yds.	Lin.Ft.	Lin.Ft.	Lin.Ft.	Each	Each	Cu.Yds.	Lump
185+00	Lt. & Rt.	2.1	238	126	112	2	2	.41	Lump





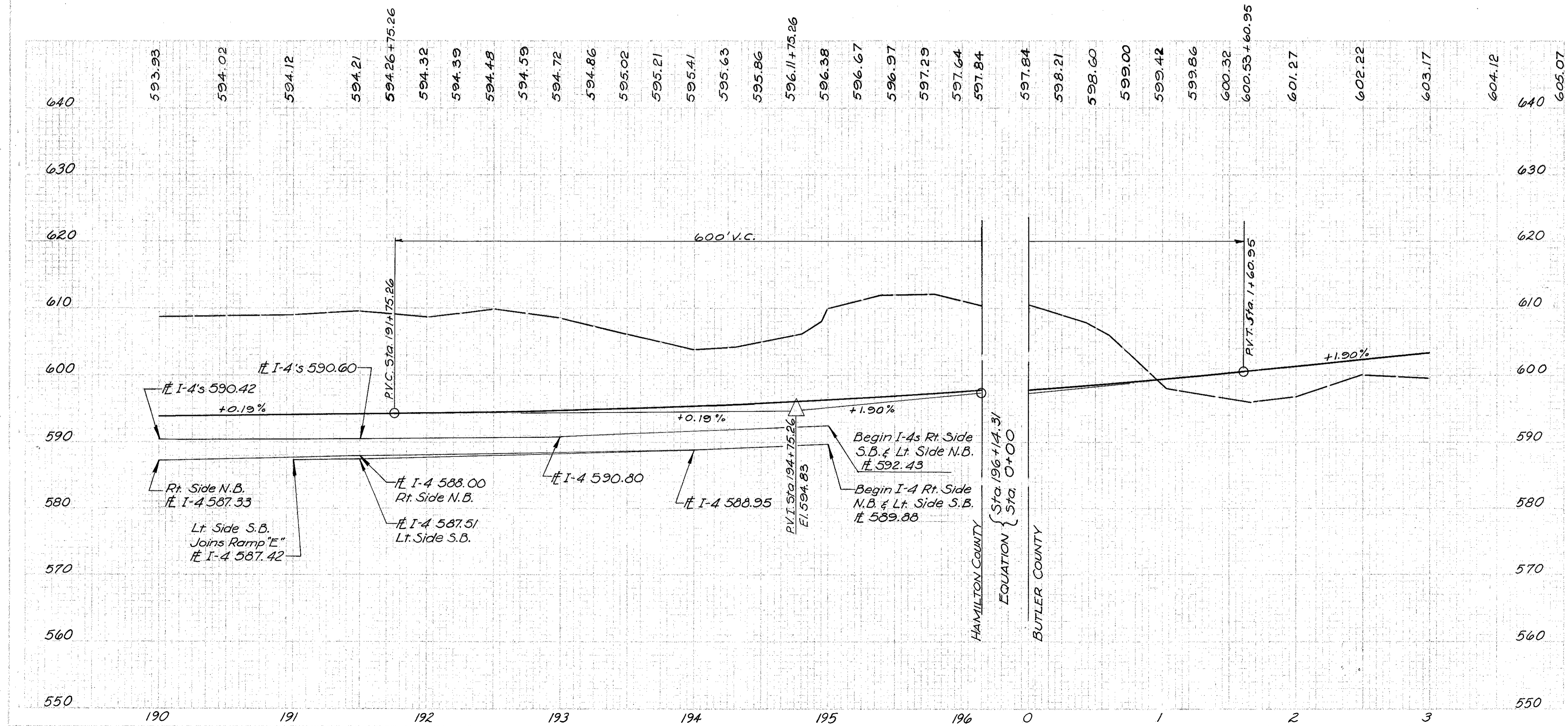


CURVE DATA  
 $\Delta = 23^{\circ}06'30''$  Rt.  
 $D = 0^{\circ}26'$   
 $R = 13,222.11'$   
 $T = 2,703.09'$   
 $L = 5,332.69'$   
 $E = 273.48'$



ITEM NO.	DESCRIPTION	QUANTITY	UNIT	AMOUNT
1-15	Guard Rail	300.0	Lt. Ft.	
1-15	Reinforced Concrete	337.5	Sq. Yds.	
1-15	Concrete	150.0	Cu. Yds.	
1-15	Shoulder	237.5	Sq. Yds.	
1-22	Sub-base	7,599	Cu. Yds.	2,571
1-22	Surface Treatment	2,571	Sq. Yds.	82
1-21	4" Med. Slab	101	Sq. Yds.	12
1-21	4" Appr. Slab	193	Sq. Yds.	
5-25	4" Asph. Conc. Lin. Ft.	84	Lin. Ft.	70

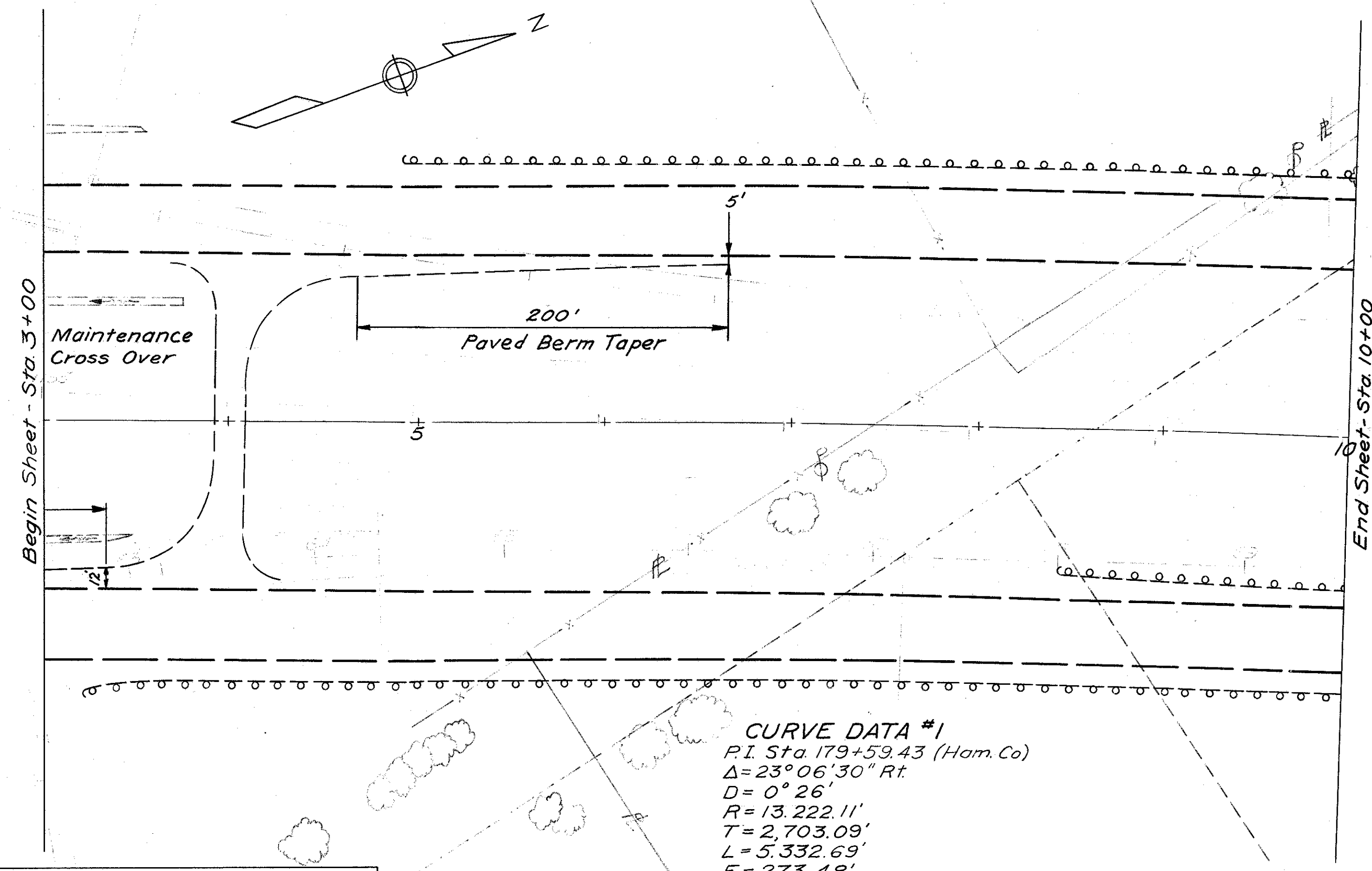
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	AMOUNT
1R	PAVEMENT	195+00	Lt.	
1R	PAVEMENT	181+56 to 182+56	Lt.	
1R	PAVEMENT	182+56 to 182+56	Lt.	



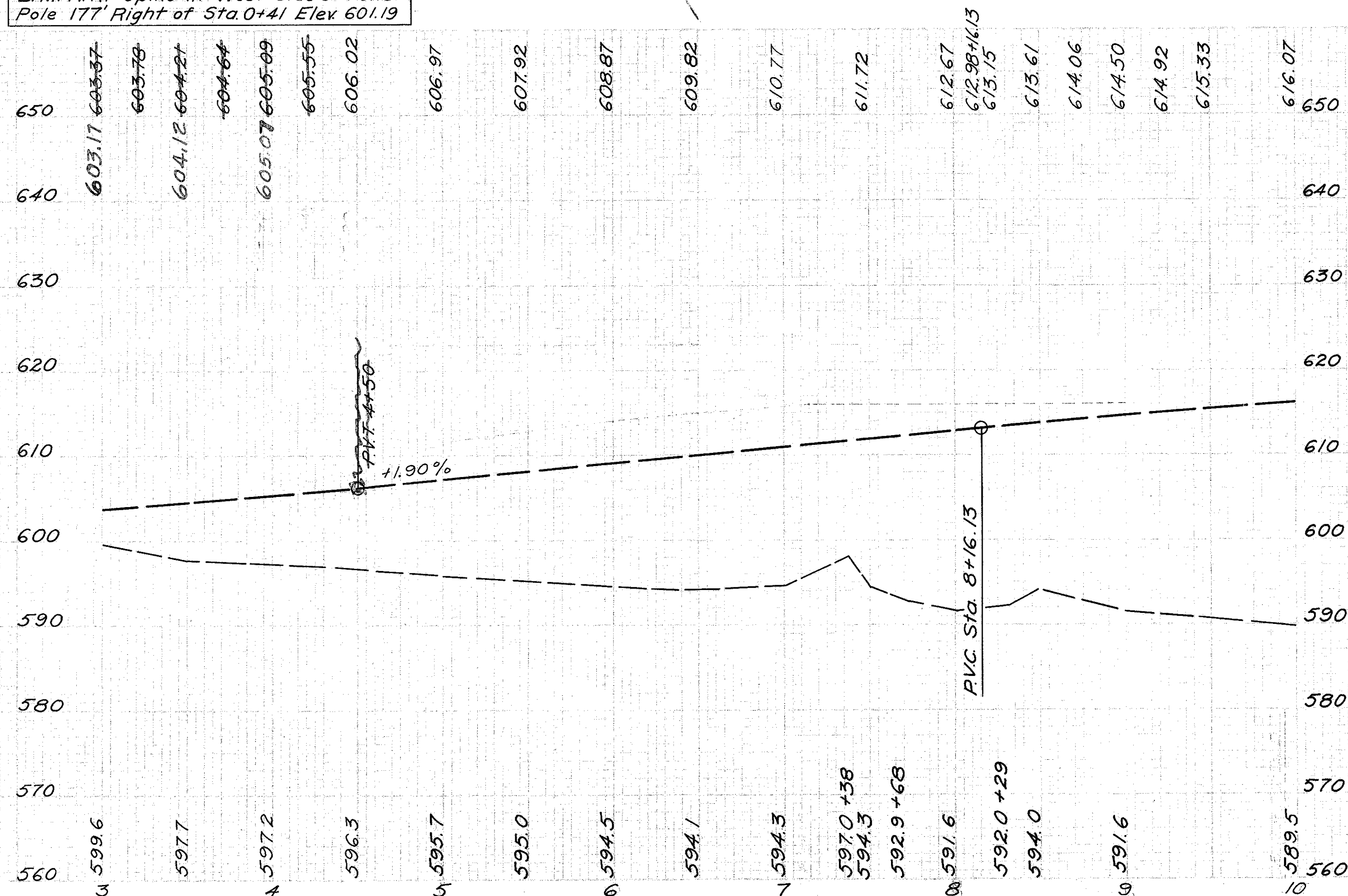
ESTIMATED QUANTITIES



HAMILTON COUNTY  
HAM-25-15.60¢  
HAM-50B-22.02



B. M. R. R. Spike in West Side of Power Pole 177' Right of Sta. 0+41 Elev. 601.19



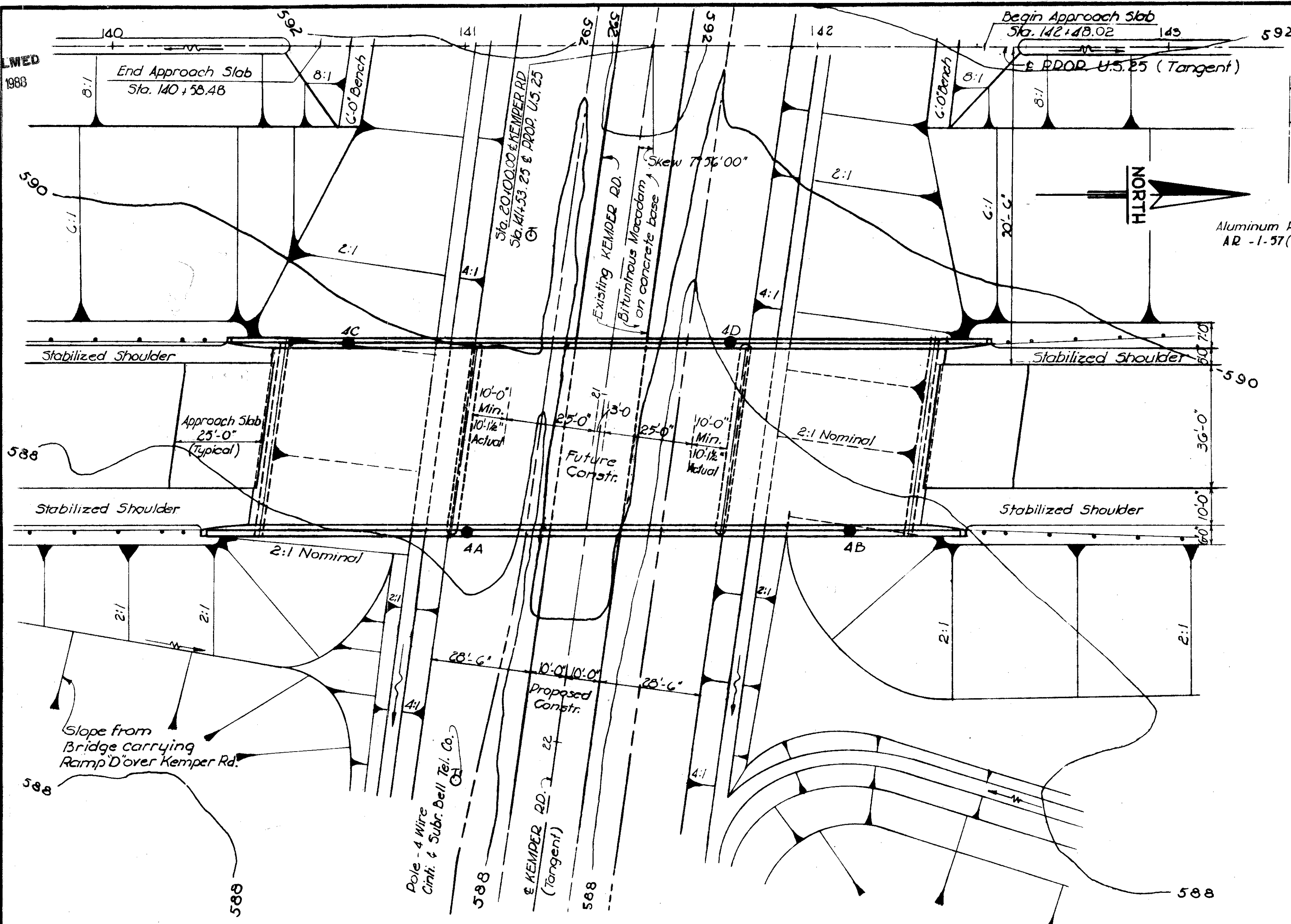
Revised 6-8-60 R.E.C.

MICROFILMED  
JAN 27 1983

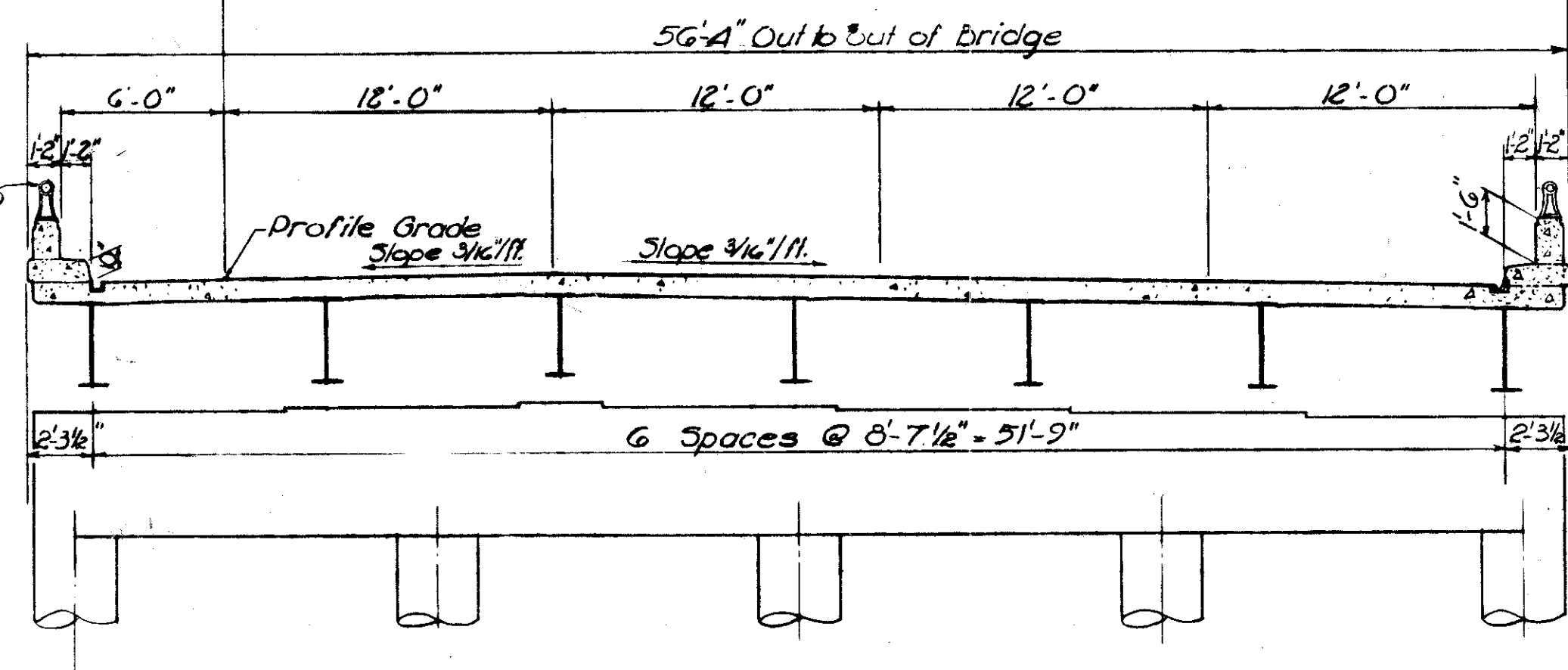
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

215  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



PLAN

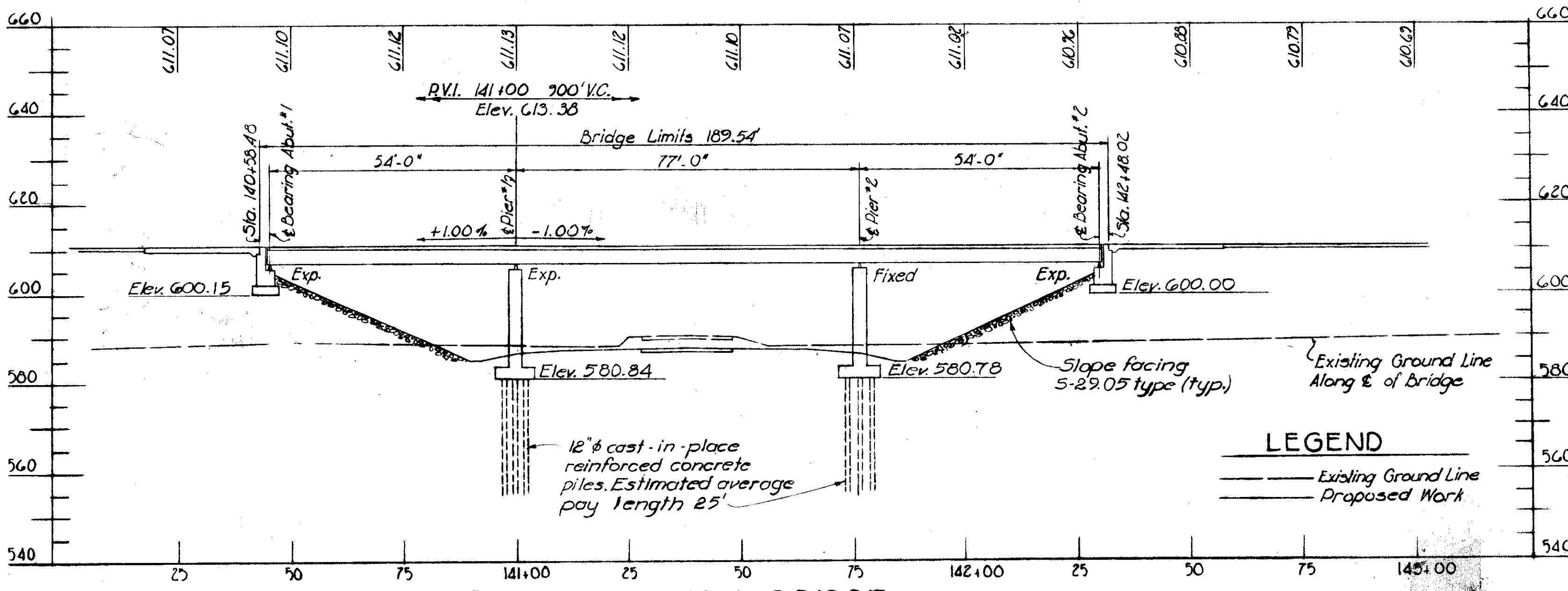


SECTION THRU BRIDGE

CITY OF CINCINNATI BENCH MARK 2089  
Elevation 604.504  
Bronze marker in "L" shaped headwall in  
N.E. quadrant of Kemper and Chester  
Roads, 396.5' left of Sta. 142+46.

NOTES

- Symbol denotes drill hole.
- See Sheet No. 219 for test boring data.
- Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.
- See Sheet No. 216 for Site Plan; Bridge No. HAM-25-1599 L and location of critical vertical clearance point.



PROFILE ALONG & BRIDGE

LEGEND

- Existing Ground Line
- Proposed Work

PROPOSED STRUCTURE

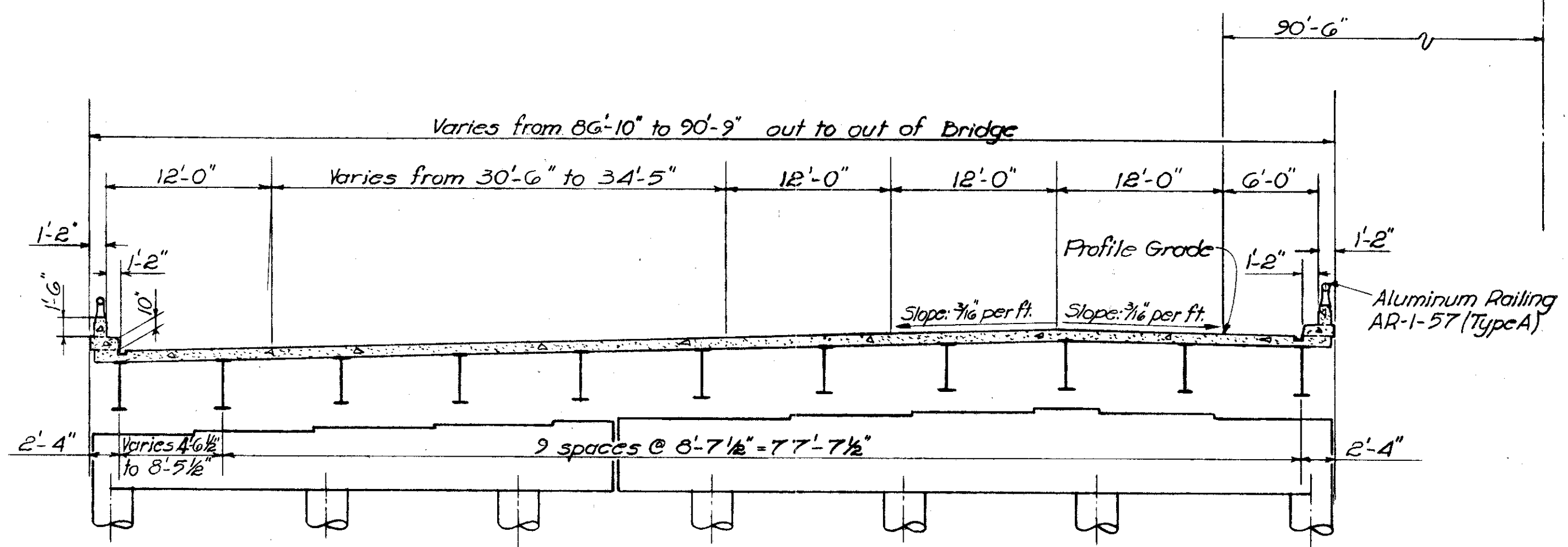
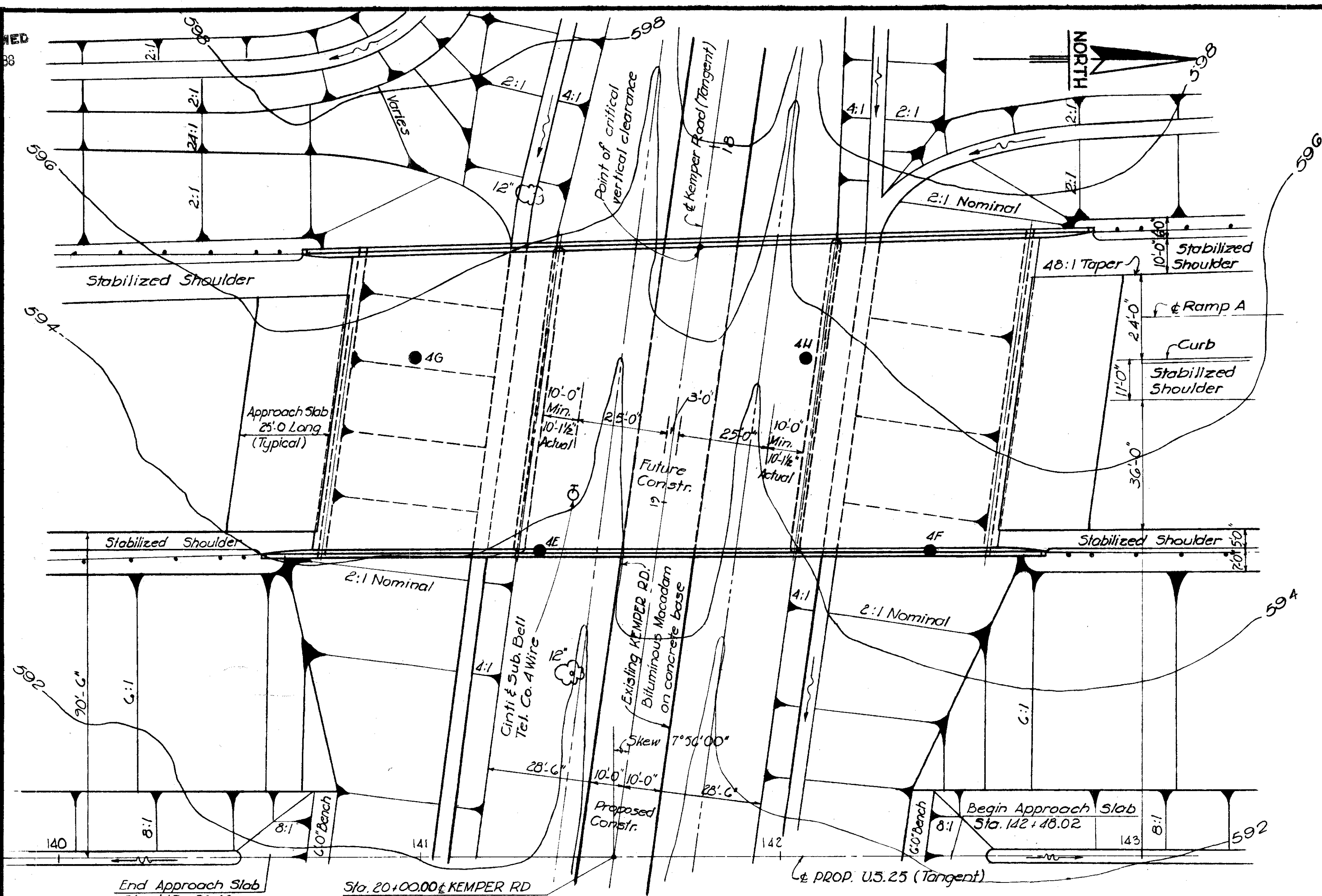
TYPE: Continuous rolled steel beam with reinforced concrete deck and substructure.  
ROADWAY: 54'-0" face to face of parapets  
LOAD FREQUENCY: CF-2,000(57) Adequate for AASHTO alternate loading  
SKEW: 7° 56' 00" L.F.  
WEARING SURFACE: 1" Monolithic Concrete  
APPROACH SLABS: A3-1.54 (25' Long)  
ALIGNMENT: Tangent  
SPANS: 54'-0"; 77'-0"; 54'-0"

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SITE PLAN**  
BRIDGE NO. HAM-25-1599 R  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
142+48.02

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIS
AERIAL	G.E.	LPH/JAP	LPH/CBS	J.P.F.	

U.S. 25



SECTION THRU BRIDGE

CITY OF CINCINNATI BENCH MARK 2069  
Elevation 604.504.  
Bronze marker in "L" shaped headwall in  
N.E. quadrant of Kemper and Chester  
Roads, 396.5' left of Sta. 142+48.02.

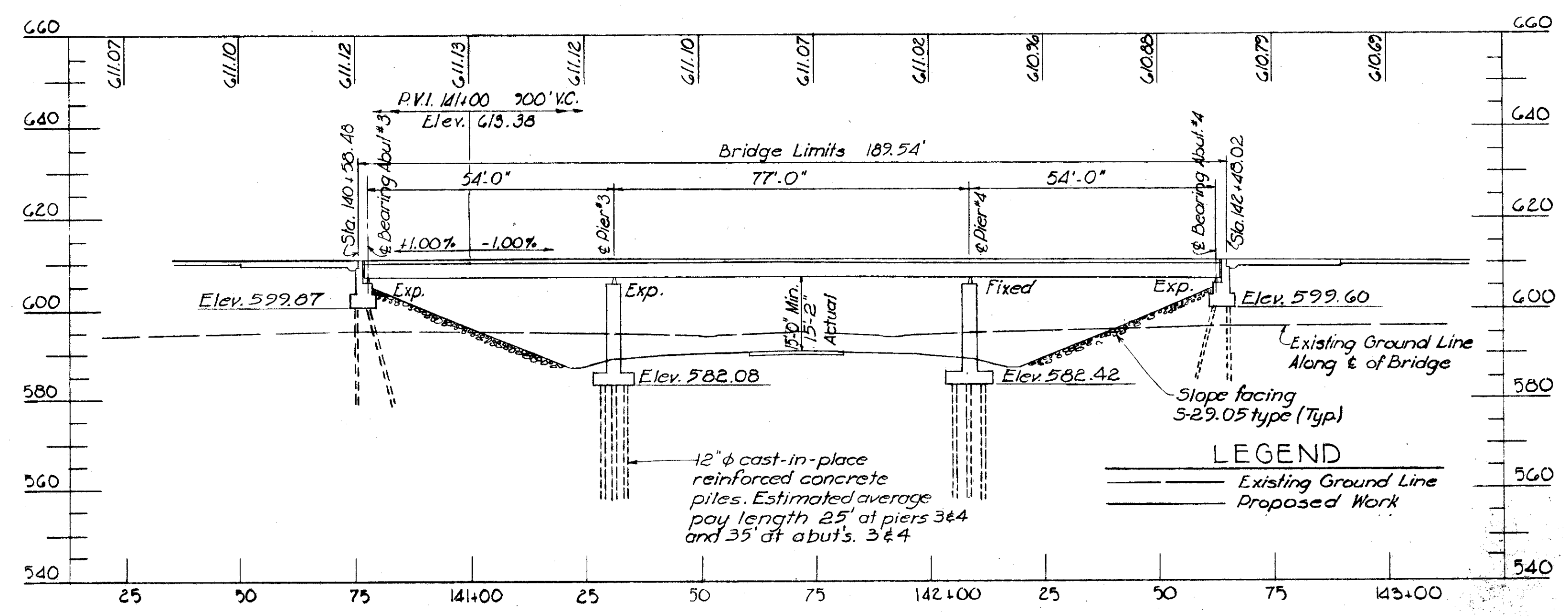
PLAN

NOTES

- Symbol denotes drill hole.
- See Sheet No. 219 for test boring data.
- Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.
- See Sheet No. 215 for Site Plan, Bridge No. HAM-25-1599R

PROPOSED STRUCTURE

TYPE: Continuous rolled steel beam with reinforced concrete deck and substructure.  
ROADWAY: Varies 8'-6" to 8'-5" face to face of parapets.  
LOAD FREQUENCY: CF-2000(57) Adequate for AASHTO alternate loading  
SKEW: 7° 56' 00" L.F.  
WEARING SURFACE: 1" Monolithic Concrete  
APPROACH SLABS: A S -1- 34 (25' Long)  
ALIGNMENT: Tangent  
SPANS: 54'-0", 77'-0", 54'-0".



PROFILE ALONG & BRIDGE

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SITE PLAN**  
BRIDGE NO. HAM-25-1599 L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	A.O.	LPH/JAP	LPH/CBS	J.P.F.	

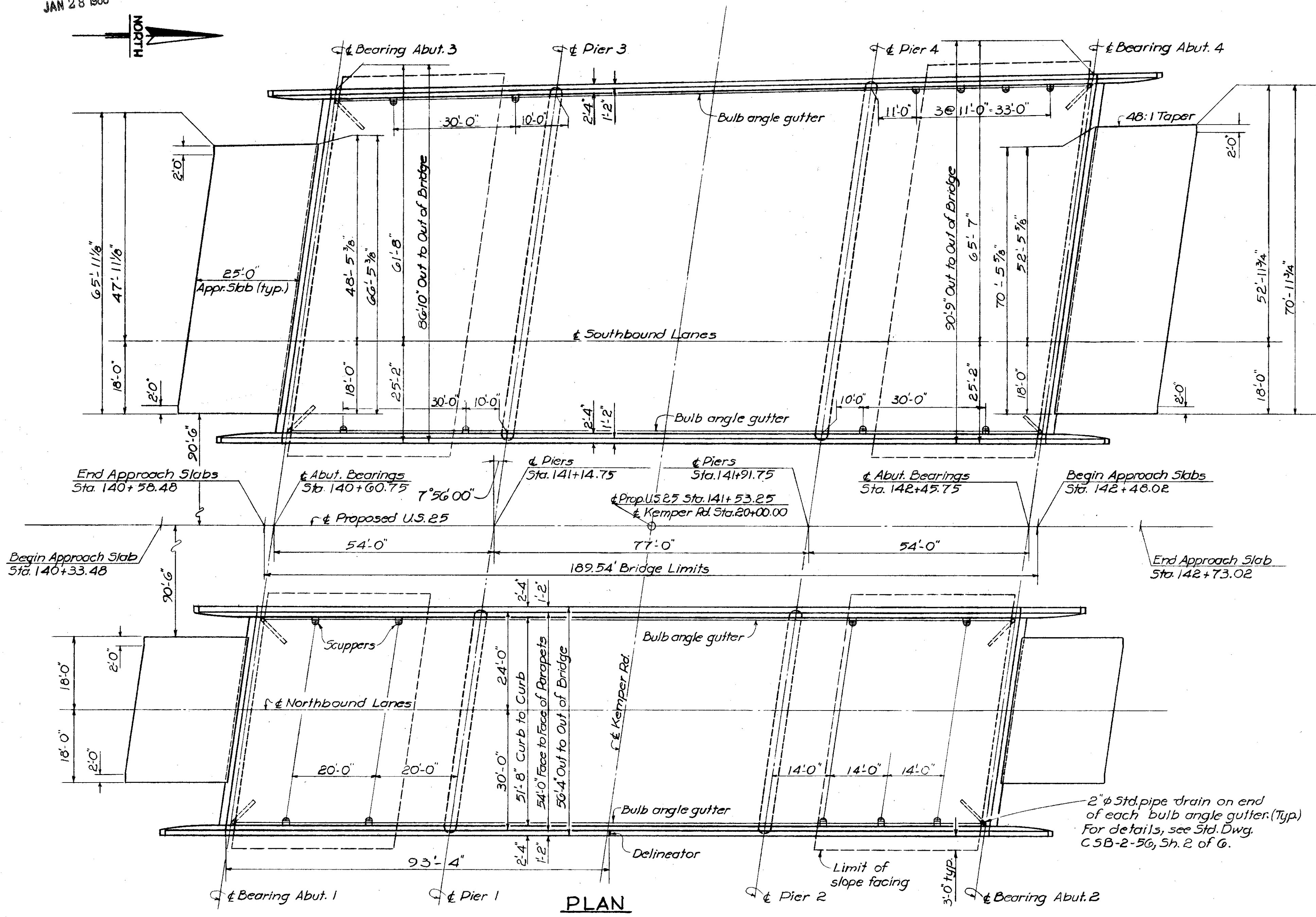
MICROFILMED  
JAN 28 1988



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

217  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

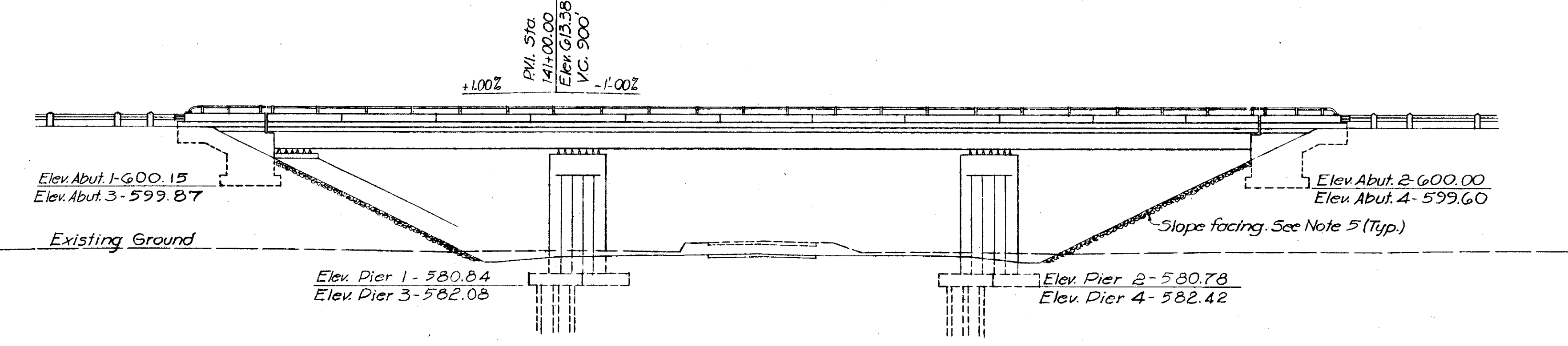


PLAN

PAVEMENT ELEVATIONS							
STATIONS	PROFILE GRADE EDGE OF PVMT. 90'-6" R&L OF & U.S.25	INSIDE CURB 85'-8" R&L OF & U.S.25	CROWN LINE 102'-6" R&L OF & U.S.25	EDGE OF PAVEMENT 126'-6" RIGHT OF & U.S.25	OUTSIDE CURB 137'-4" RIGHT OF & U.S.25	EDGE OF PAVEMENT VARIES LEFT OF & U.S.25	OUTSIDE CURB VARIES LEFT OF & U.S.25
140+25	611.07	610.99	611.26	610.88	610.71	610.42	610.25
140+50	611.10	611.03	611.29	610.91	610.75	610.45	610.28
140+75	611.12	611.05	611.31		610.77	610.46	610.29
141+00	611.13	611.05	611.32		610.77		610.29
141+25	611.12	611.05	611.31		610.77		610.28
141+50	611.10	611.03	611.29		610.75		610.25
141+75	611.07	610.99	611.26		610.71		610.20
142+00	611.02	610.94	611.21		610.66		610.15
142+25	610.96	610.88	611.14		610.60		610.08
142+50	610.88	610.80	611.07	610.69	610.52	610.16	609.99
142+75	610.79	610.71	610.98	610.60	610.43	610.06	609.89

NOTES

- Scupper spacing to be measured along curb side of bulb angle gutter.
- All abutment and pier centerlines are parallel.
- For scupper details, see Standard Drawing C5B-2-56, Sheet 3 of 6.
- For GENERAL NOTES and ESTIMATED QUANTITIES, see Sh. 218
- Slope facing (S 29.05 Type) shall be provided under the structure at all abutments. The facing shall be 12" thick and shall extend from the face of the abutment down to the bottom of the ditch and transversely to 3 feet outside the edge of the superstructure.
- Delineator shall be placed on east side of Right Bridge only. For details see Sh. 299
- For approach slab details, see Standard Drawing A5-1-54



ELEVATION

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**GENERAL PLAN & ELEVATION**

BRIDGE NO. HAM-25-1599 R&L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JPF	CBS	CBS	JAR	JAD	Oct. 58	

### ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	BRIDGE NO. HAM-25-1599 R					BRIDGE NO. HAM-25-1599 L					
				ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL		ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL		
E-2	1428	Cu. Yds.	Unclassified excavation	272	310					412	434			
S-1	813	Cu. Yds.	Class "C" concrete ~ Superstructure			322						491		
S-1	243	Cu. Yds.	Class "C" concrete ~ Piers above footings		95						148			
S-1	289	Cu. Yds.	Class "E" concrete ~ Abutments above footings	126						163				
S-1	415	Cu. Yds.	Class "E" concrete ~ Pier and abutment footings	61	91					136	127			
S-4	364,098	Lbs.	Reinforcing steel	10,105	33,583	98,407				16,300	53,162	152,541		
S-7	796,200	Lbs.	Structural steel			311,000						485,200		
S-8	796,200	Lbs.	Field painting of structural steel			311,000						485,200		
S-14	880	Lin. Ft.	Railing (Aluminum railing & supports & concrete parapet)	60		373				73		374		
S-29	109	Cu. Yds.	Porous backfill	41						68				
S-29	545	Cu. Yds.	Slope facing (S 29.05 type)				220						325	
I-127	1	Each	Bridge delineators				1							
S-16	Lump	Lump Sum	First test pile										Lump	
S-18	5820	Lin. Ft.	12" Cast-in-place reinforced concrete piles		1650					1820	2350			

NOTE: Materials in approach slabs are not included in the above estimated quantities.

### GENERAL NOTES

REFERENCE shall be made to the following:

Standard Drawings: AR-1-57 revised 3-1-58,  
CSB-2-50, sheets 2 & 3 of 6, revised 3-1-58  
AS-1-54 revised 12-1-54  
RB-1-55 dated 3-1-55

Supplemental Specifications: S-114 revised 8-1-57  
I-127 revised 11-16-57

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with revisions thereof dated 2-21-58.

FOUNDATION BEARING PRESSURE: Footings for Abutments 1 and 2 are designed for a maximum bearing pressure of 1.25 tons per square foot.

PROCEDURE: The embankment shall be in place (to subgrade elevation and 200 feet beyond the bridge limits) for a minimum of thirty days before starting construction of the abutments.

WELDED STEEL: The steel for all WF beams and 1/8" plates shall conform to ASTM Designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M-7.4(a) of the Construction and Material Specifications) or to A-373.

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

RAILING: Aluminum rail and supports, concrete parapet, reinforcing bars wholly within the concrete parapet, guard rail anchorage and sponge rubber for parapet joints shall be included in item S-14 for payment.

EXCAVATION QUANTITY includes removal of fill material required for construction of abutments.

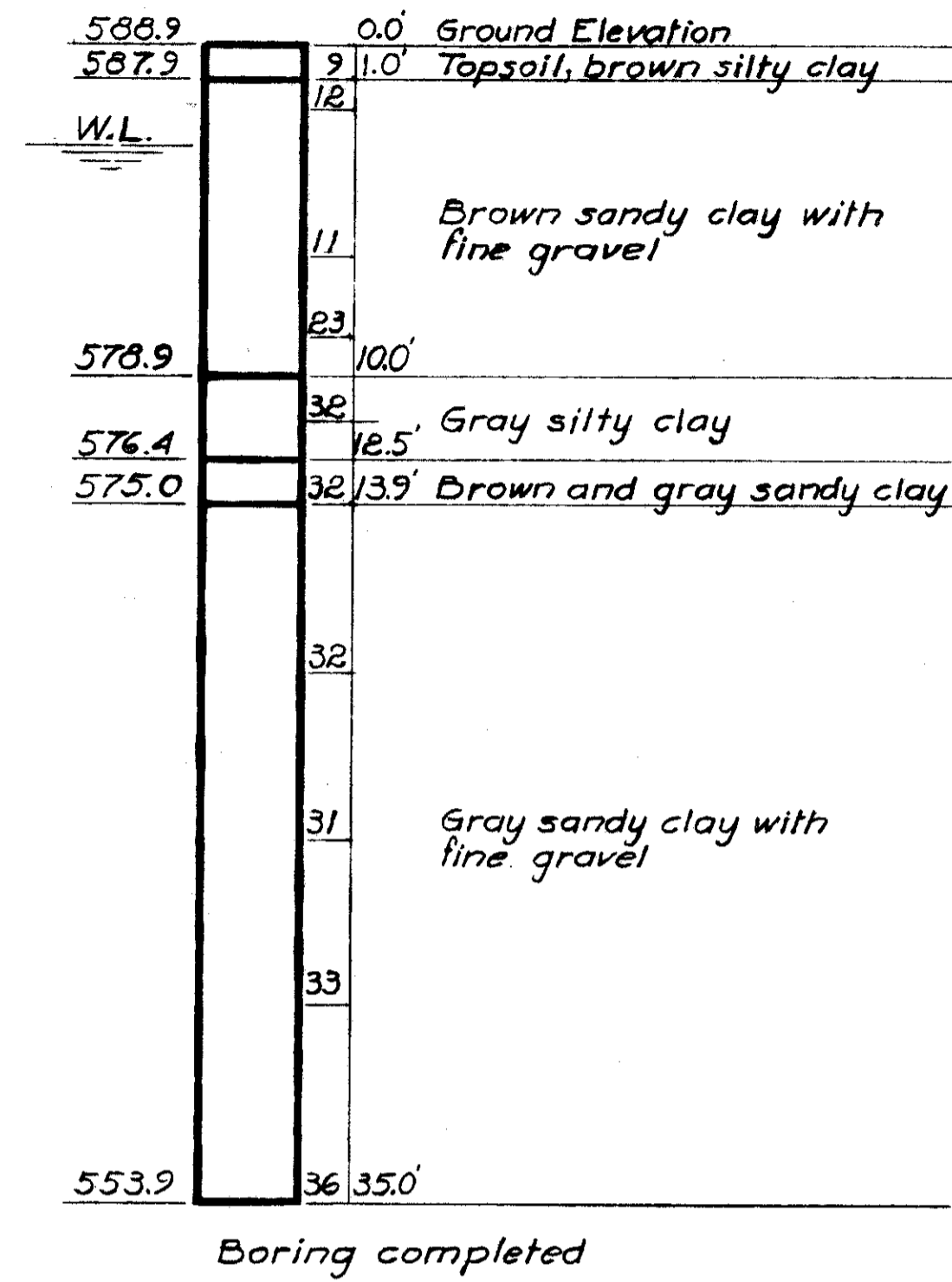
PILES shall be driven to a minimum bearing capacity of 35 tons per pile for the abutments and 35 tons per pile for the piers.

CONSTRUCTION CLEARANCE of 14'-0" vertically above the top of proposed Kemper Road and not less than 36'-0" width of road to be kept open at all times.

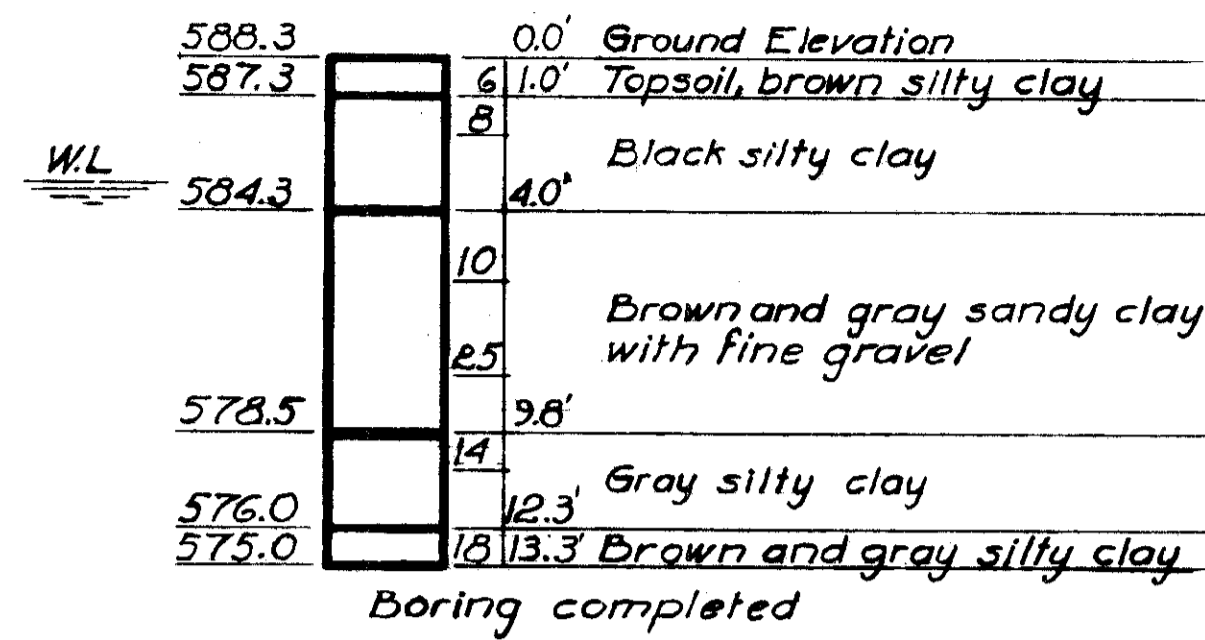
TRAFFIC: Adequate protection and maintenance of two-way traffic shall be provided at all times on Kemper Road.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO					
<b>GENERAL NOTES AND ESTIMATED QUANTITIES</b>					
BRIDGE NO. HAM-25-1599 R & L PROPOSED U.S. 25 OVER KEMPER ROAD HAMILTON COUNTY STA. 140+58.48 TO STA. 142+48.02					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
~	J.H.K.	~	R.J.K.	JAD Oct. 58	

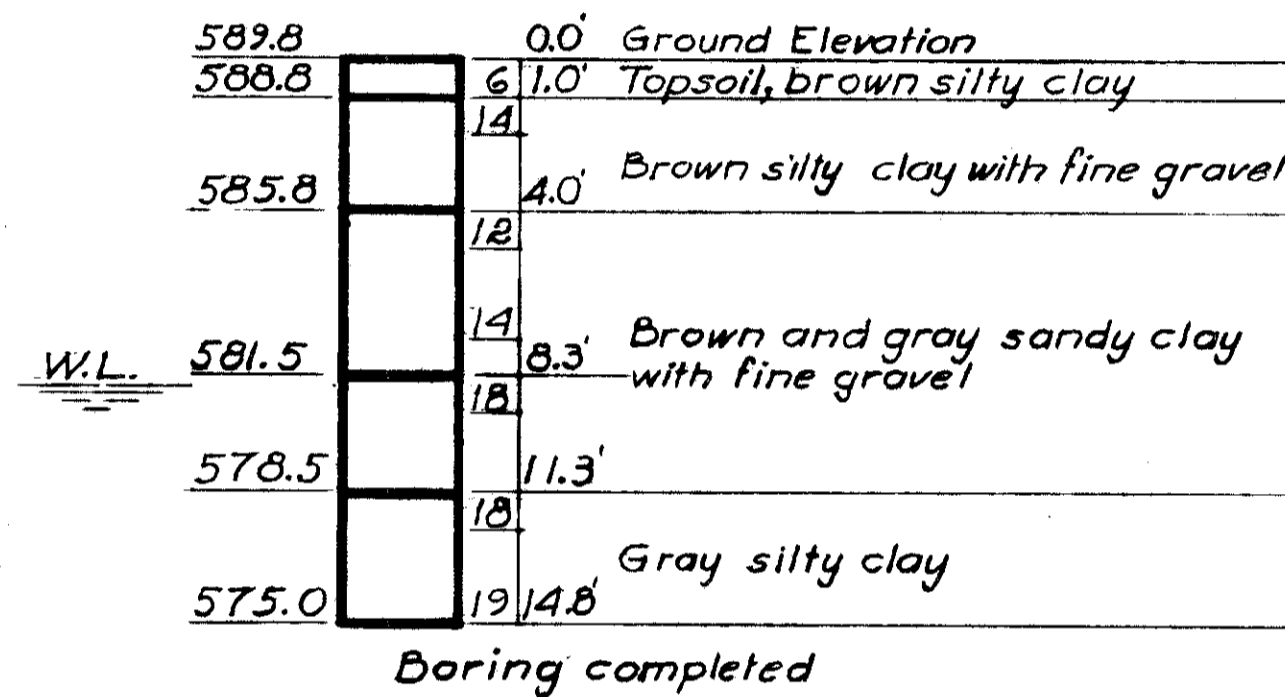




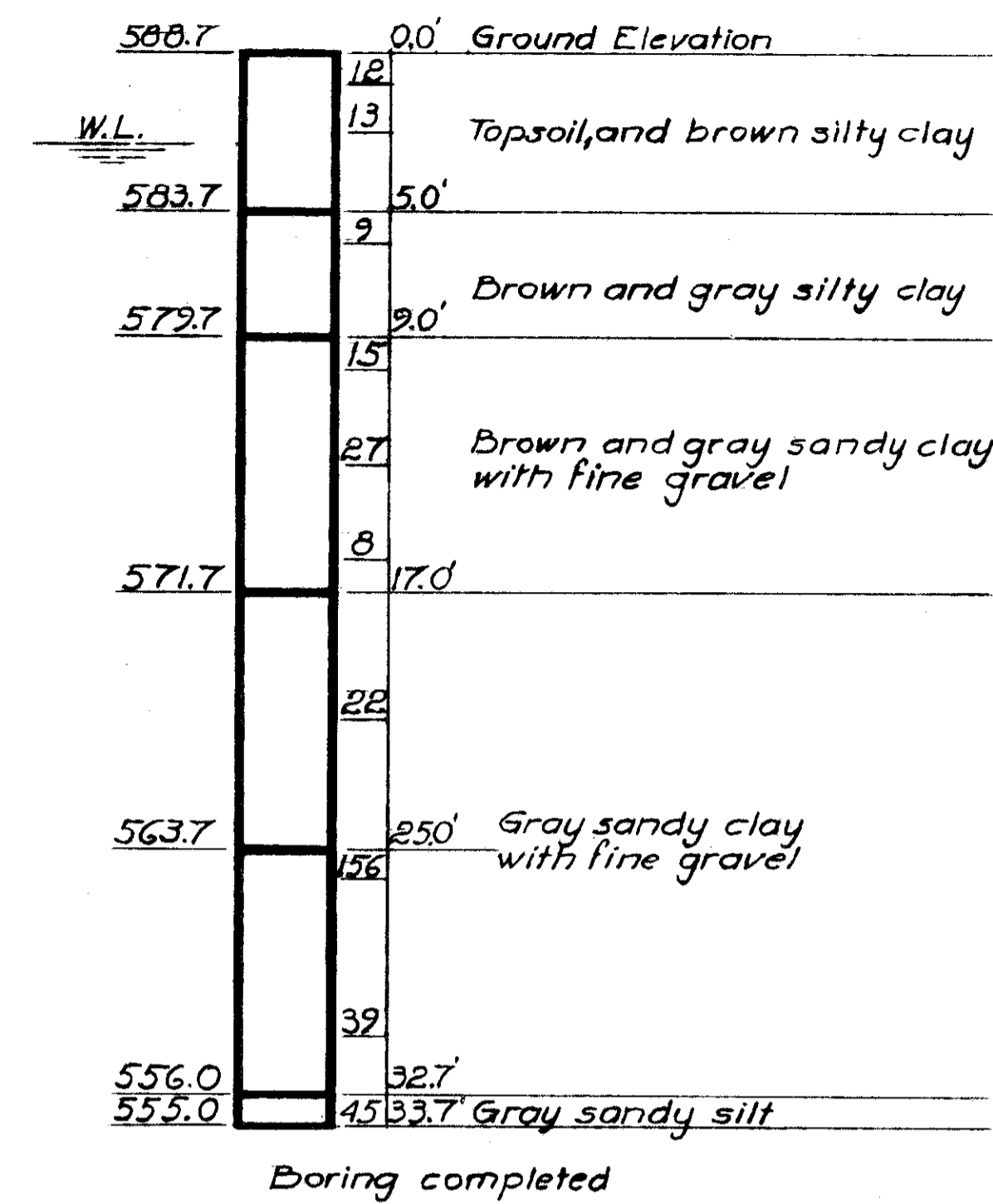
BORING 4A



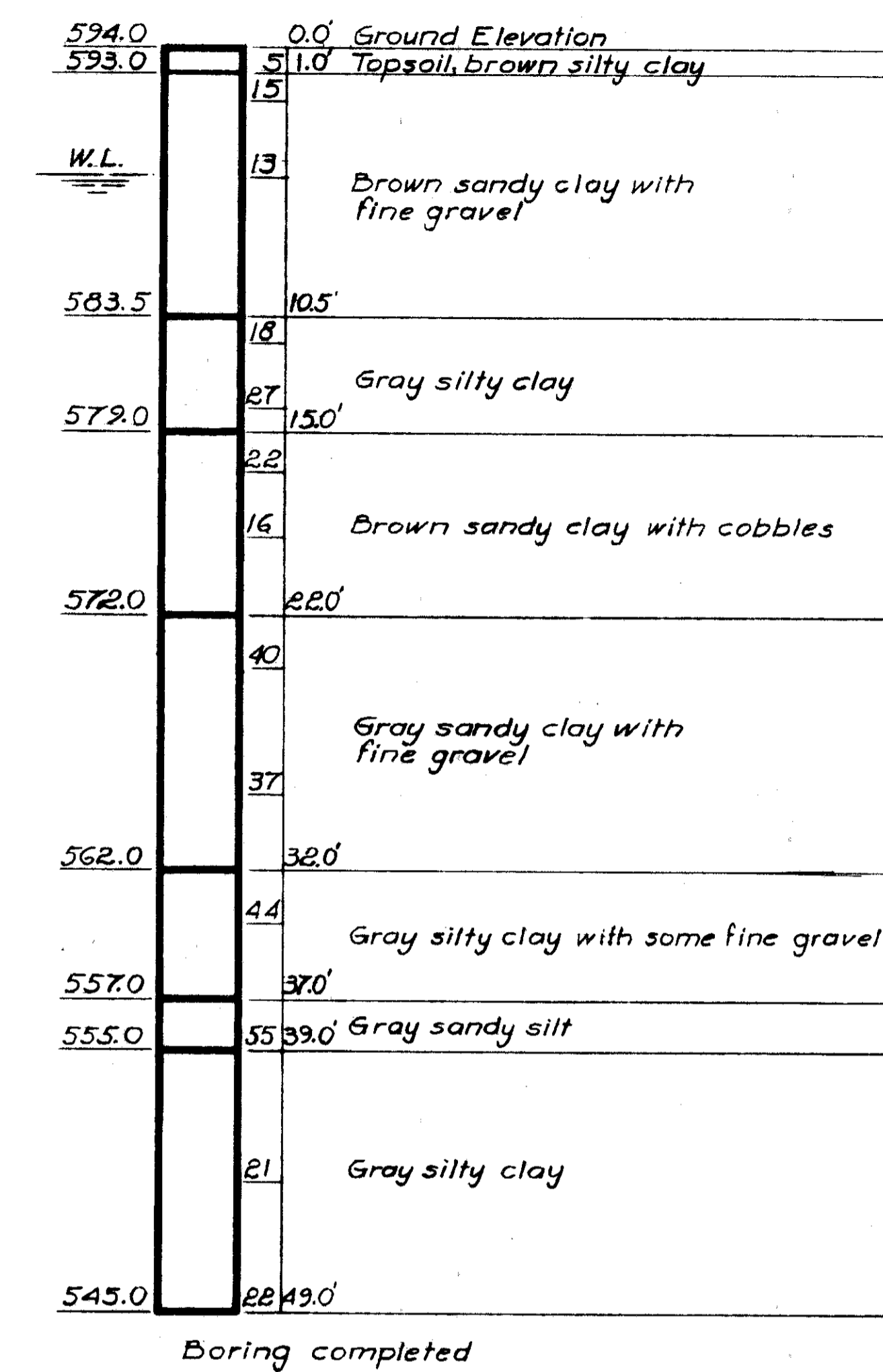
BORING 4B



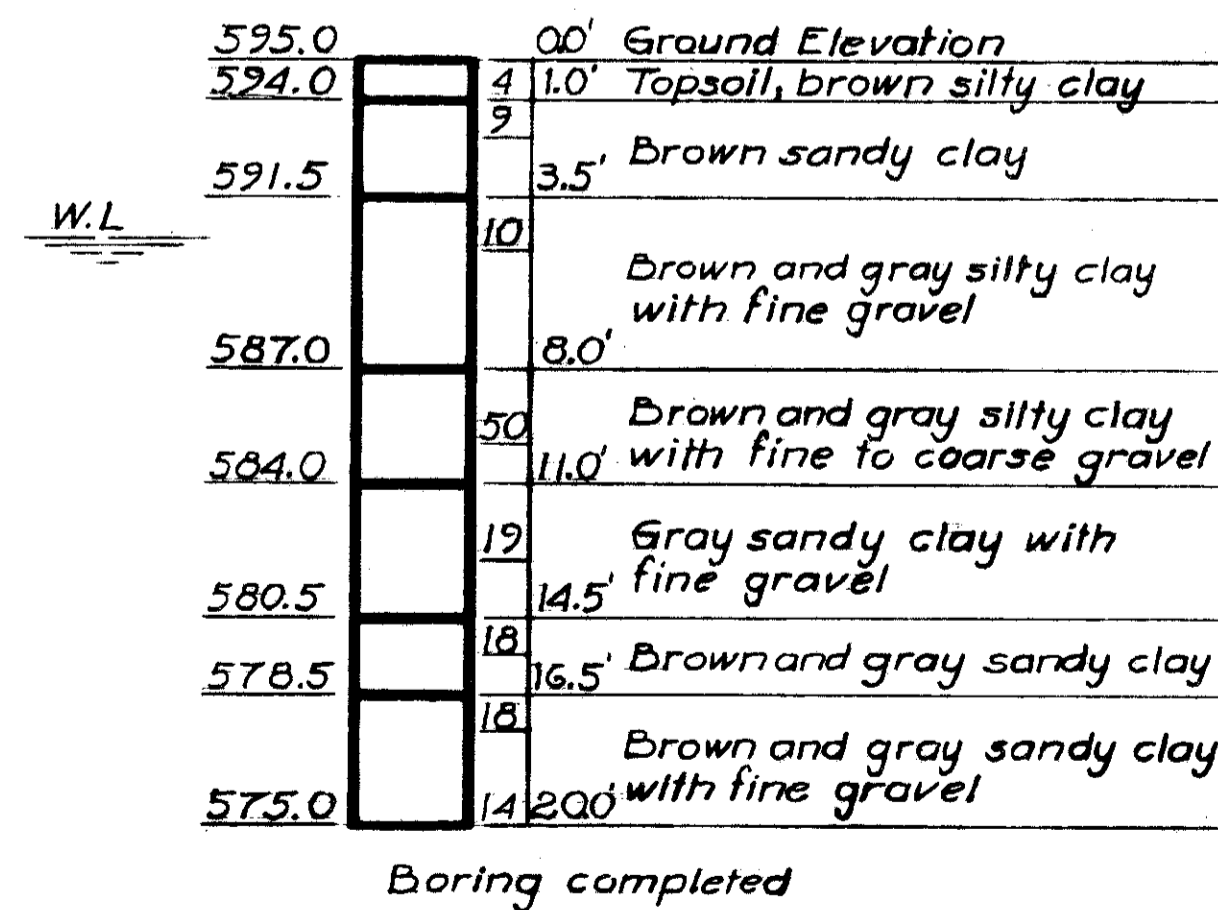
BORING 4C



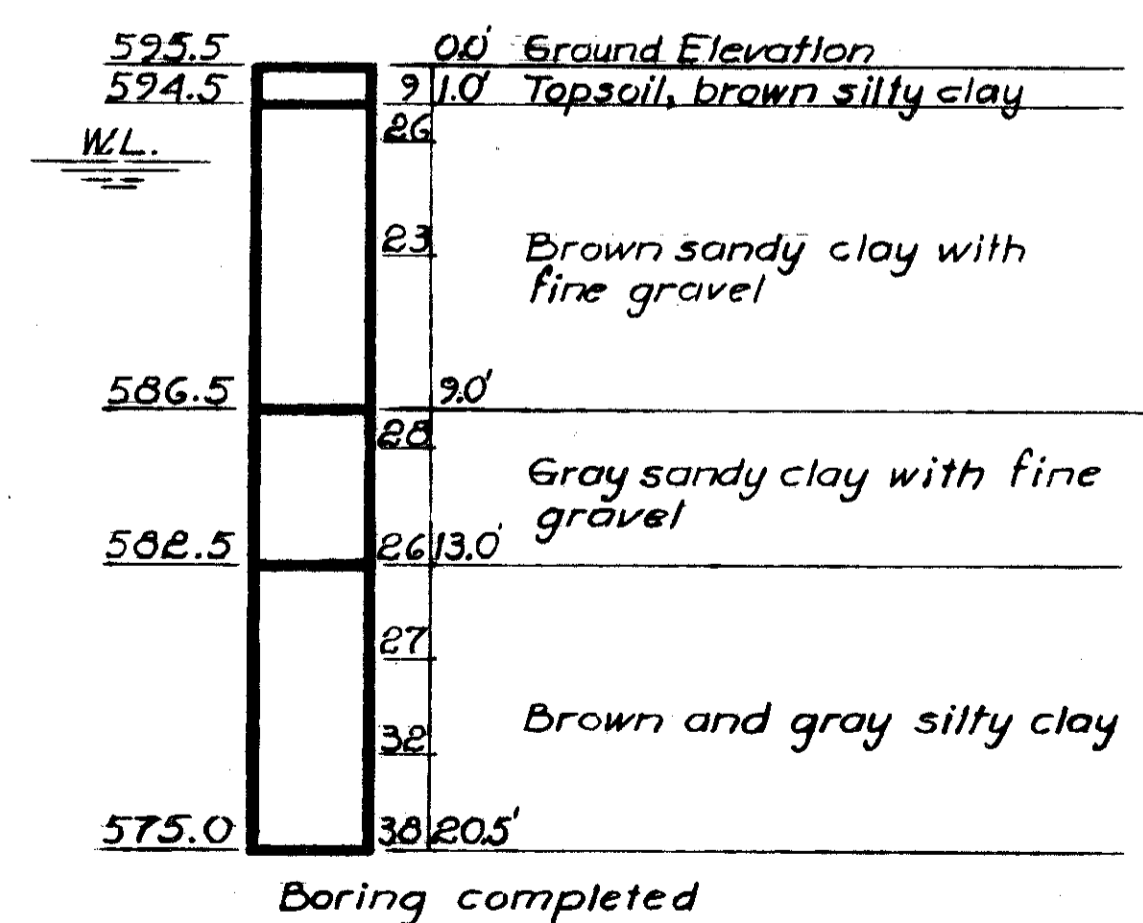
BORING 4D



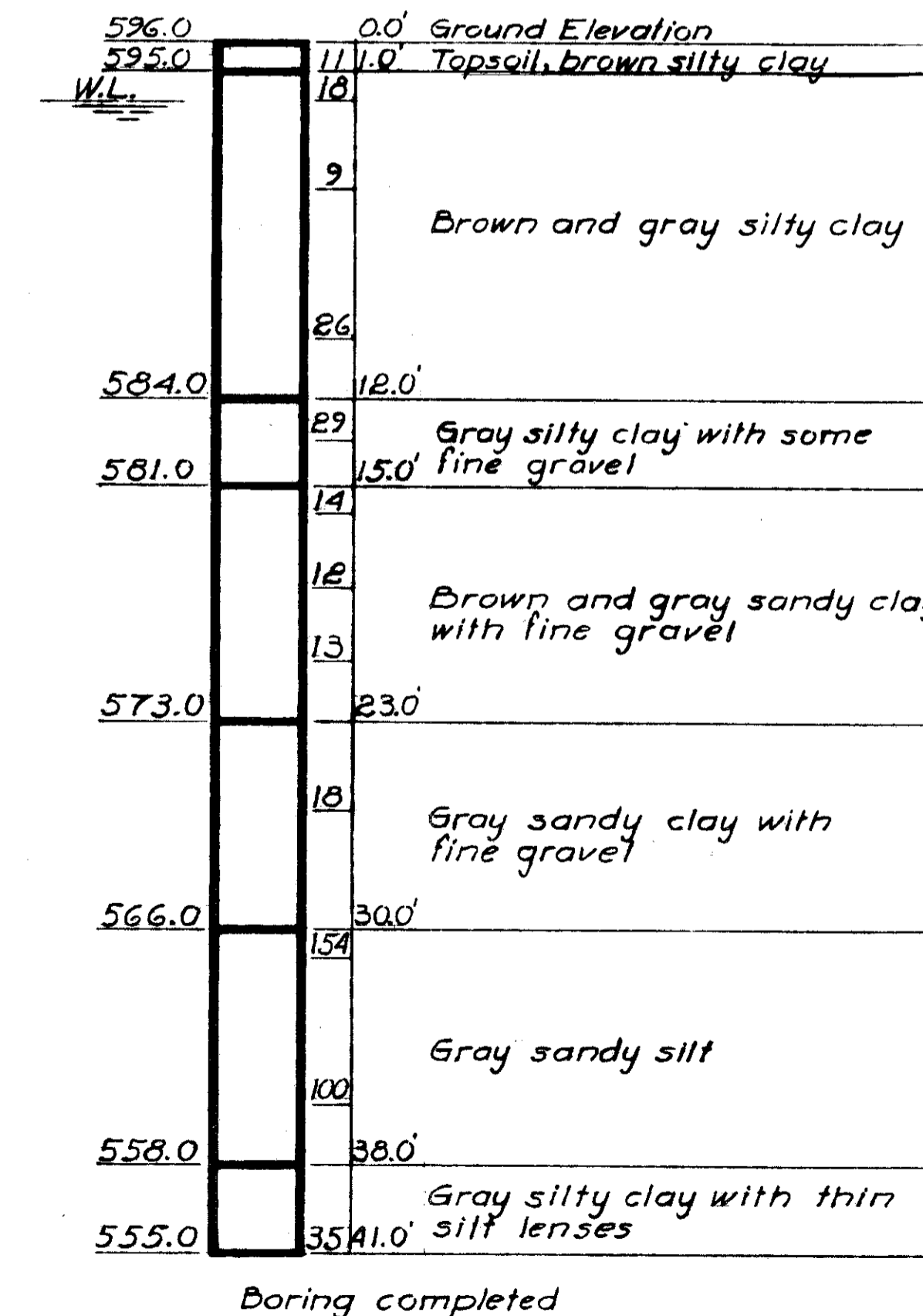
BORING 4E



BORING 4F



BORING 4G



BORING 4H

NOTES

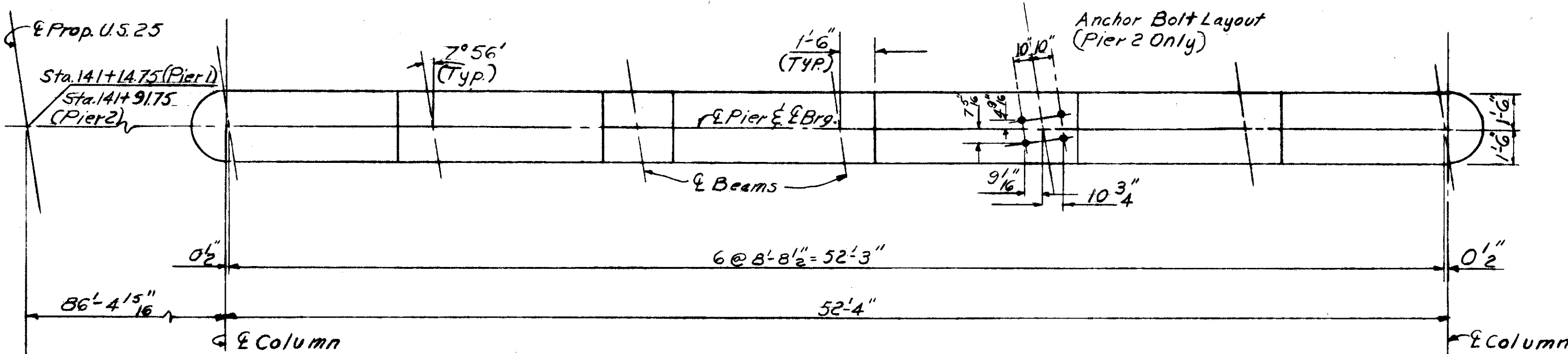
W.L. = Water Level in bore hole 24 hours after completion.  
Figures in right hand column indicate number of blows required to drive 2" O.D. sampling pipe one foot, using 140 lb. weight falling 30 inches.

Borings taken between July 1957 and December 1957.

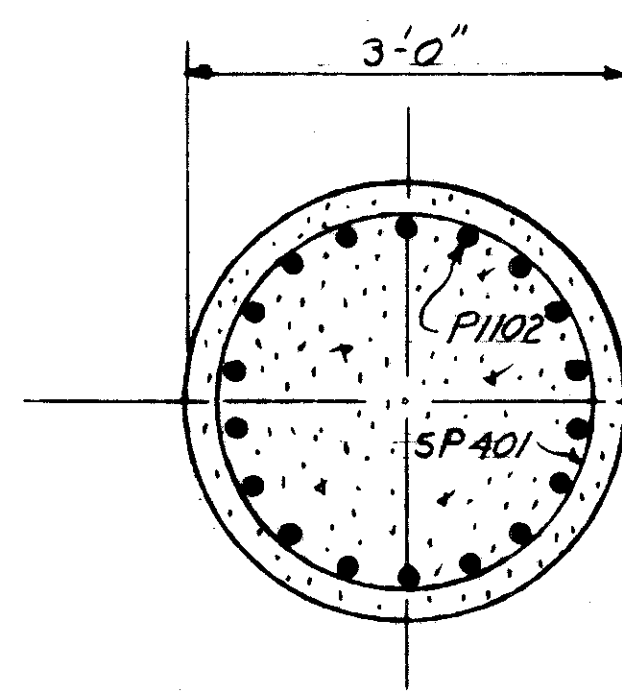
See Sh. 215 & 216 for location of borings.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS CINCINNATI		ARCHITECTS CHICAGO	
<b>BORINGS</b>			
BRIDGE NO. HAM-25-1599 R&L PROPOSED US. 25 OVER KEMPER ROAD			
HAMILTON COUNTY STA. 140+58.48 TO STA. 142+48.02			
DESIGNED	DRAWN	TRACED	CHECKED
CAW	CBS	CBS	HDJ
REVIEWED	DATE	REVISED	
JAD	Oct 58		

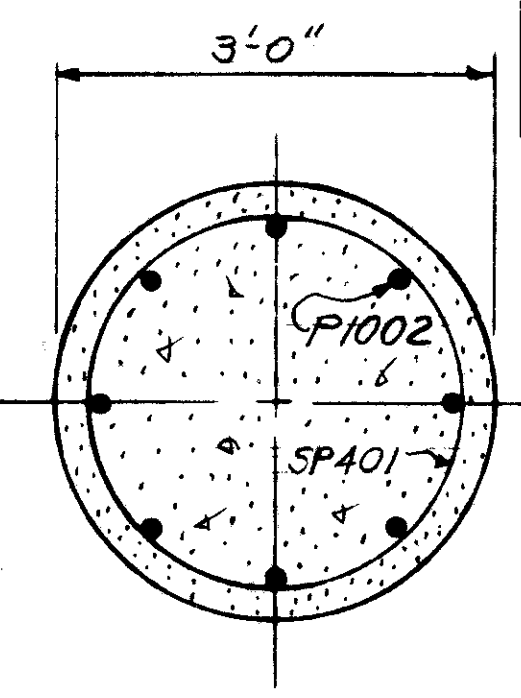
MICROFILMED  
JAN 28 1988



**PLAN**



**SECTION A-A**

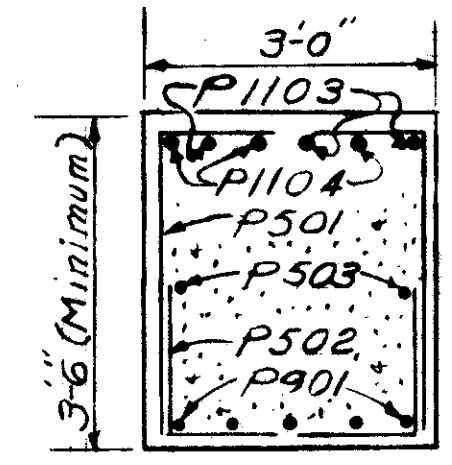


**SECTION B-B**

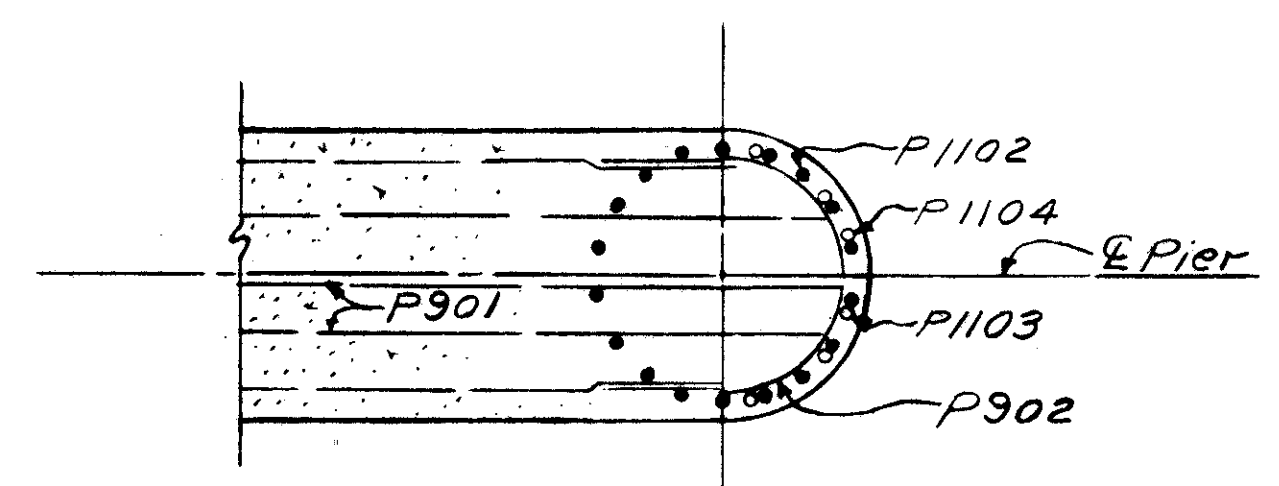
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

220  
317

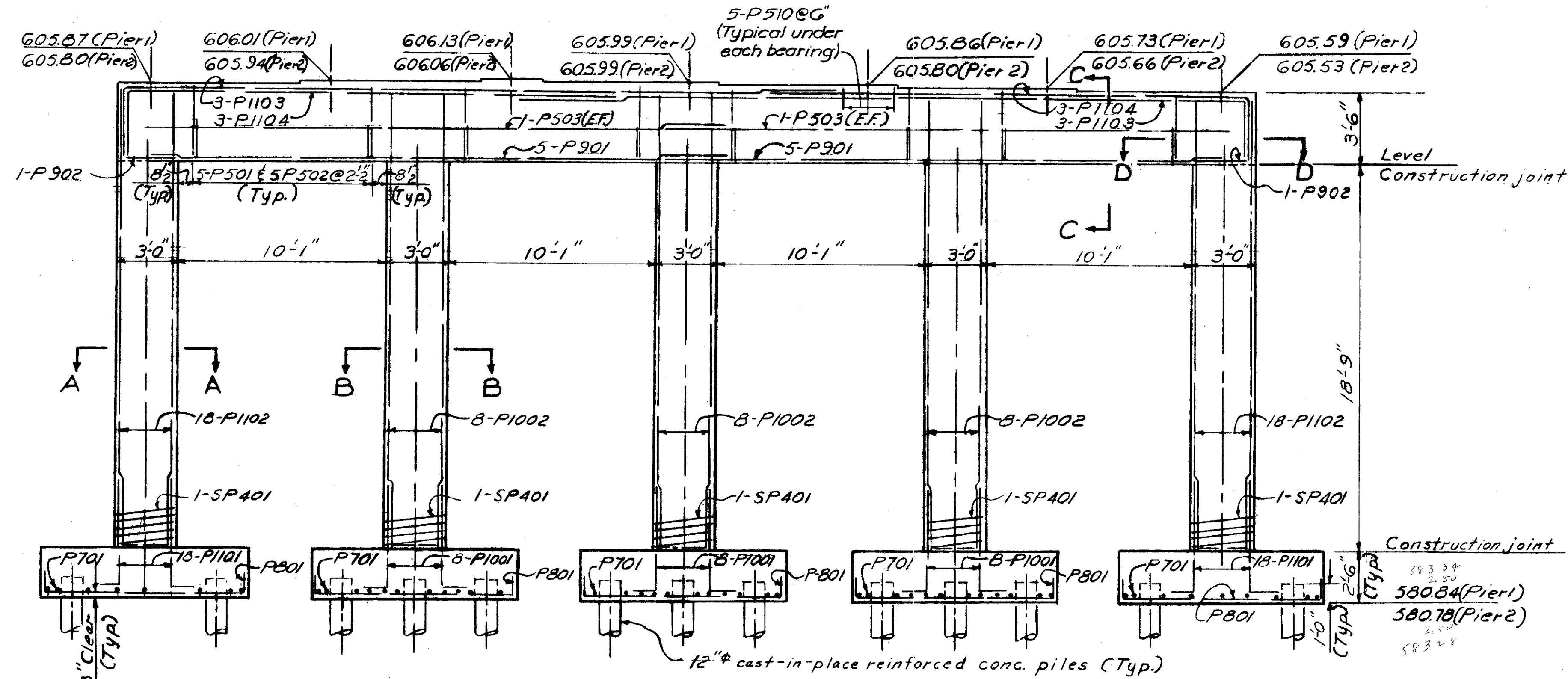
HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-508-22.02



**SECTION C-C**



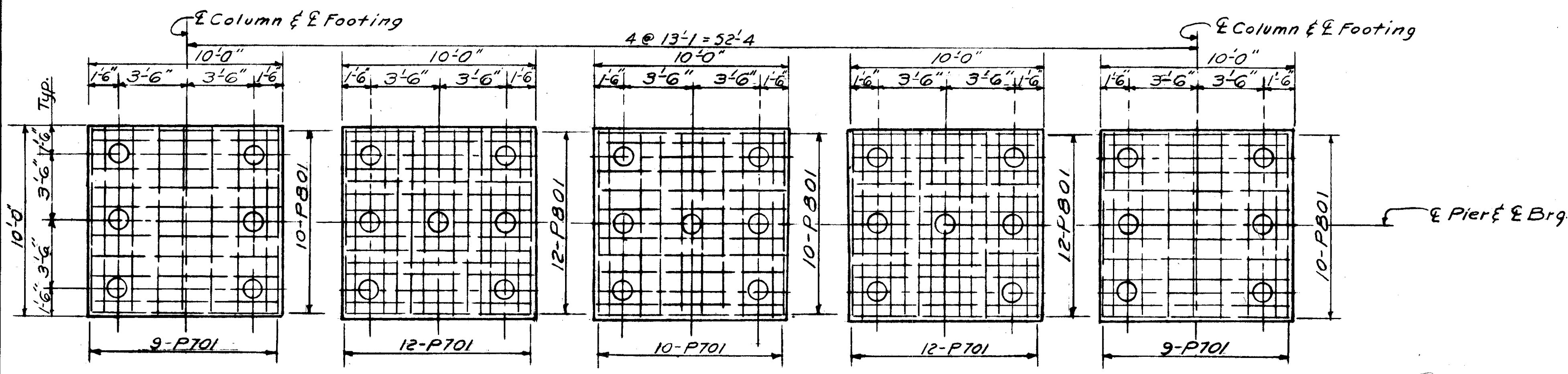
**SECTION D-D**



**ELEVATION**

**NOTES**

1. Anchor bolts are shown on Std. Dwg. RB-1-55.
2. Reinforcing steel in cap of Pier No. 2 shall be placed so as not to interfere with drilling of anchor bolt holes.
3. "E.F." designates "Each Face."
4. For reinforcing steel list see Sh.231



**FOOTING PLAN**

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO					
<b>PIERS 1 &amp; 2</b>					
BRIDGE NO. HAM-25-1599 R PROPOSED U.S. 25 OVER KEMPER ROAD HAMILTON COUNTY STA. 140+58.48 TO STA. 142+48.02					
DESIGNED RHH	DRAWN RHH	TRACED AJM	CHECKED DLV	REVIEWED DATE JAD Oct. 58	REVISED

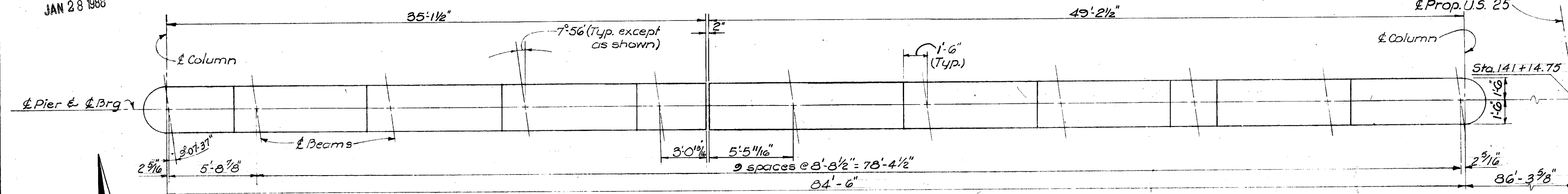
U.S. 25

MICROFILMED  
JAN 28 1988

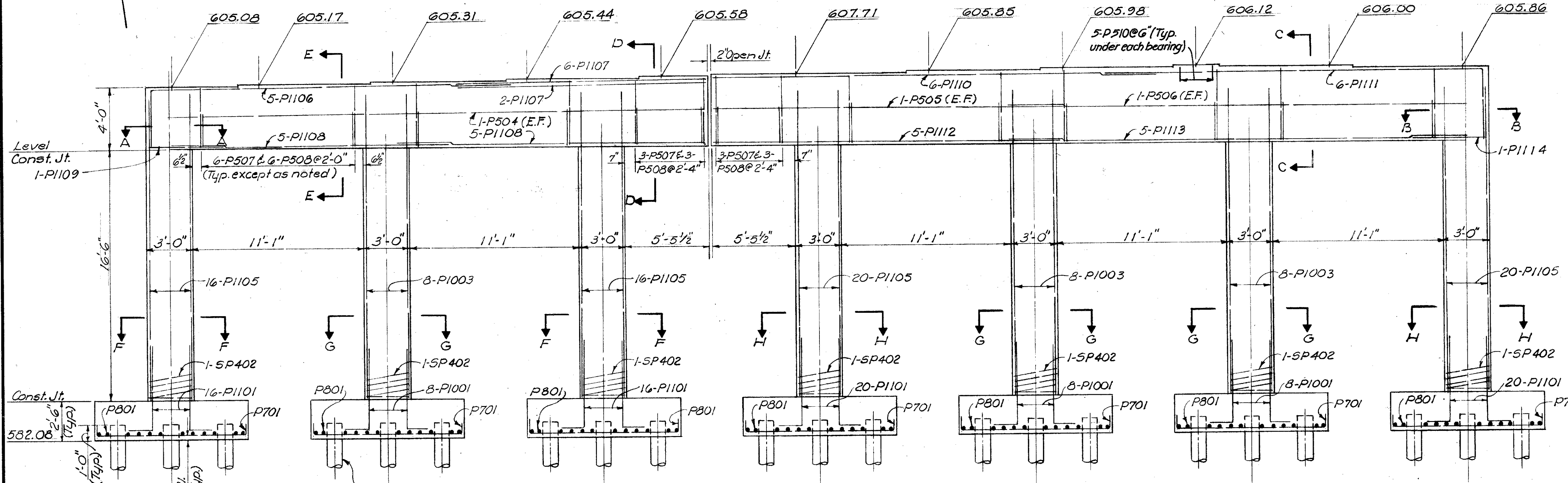
HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-50B-22.02

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

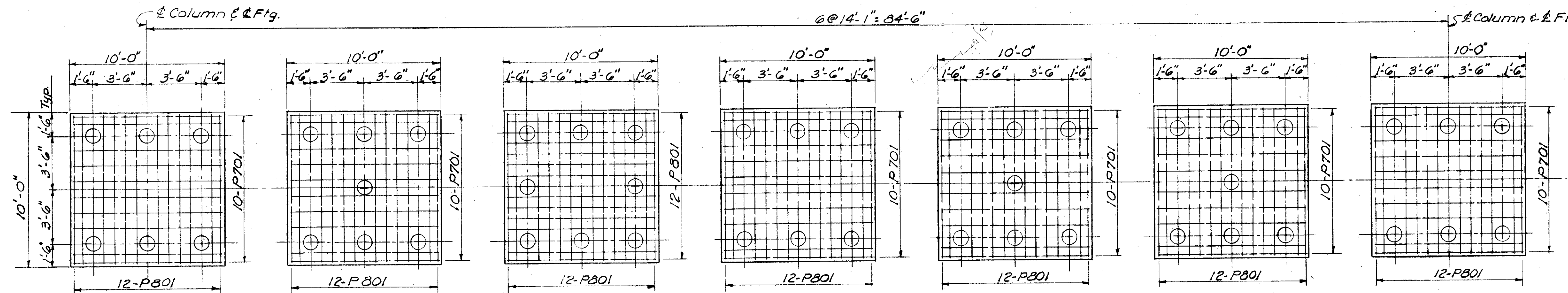
2.21  
317



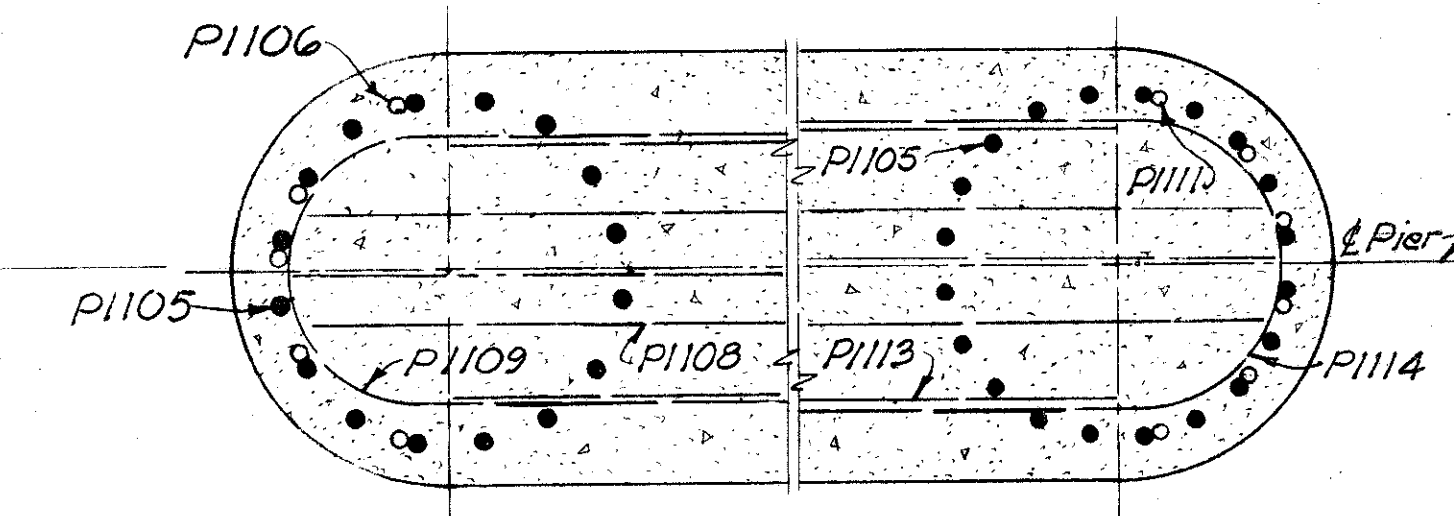
PLAN



ELEVATION

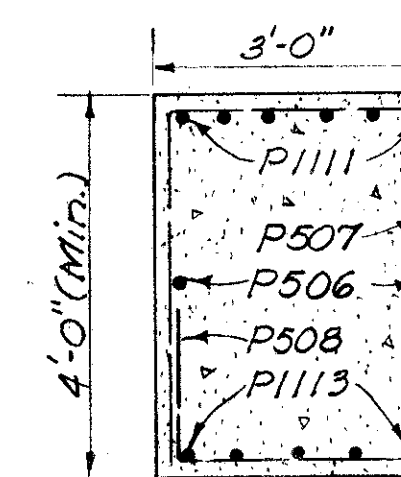


FOOTING PLAN

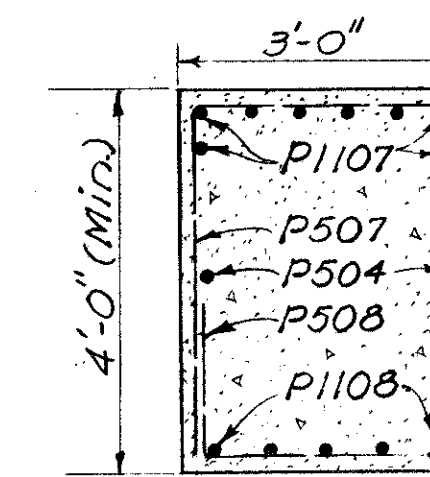


SECTION A-A

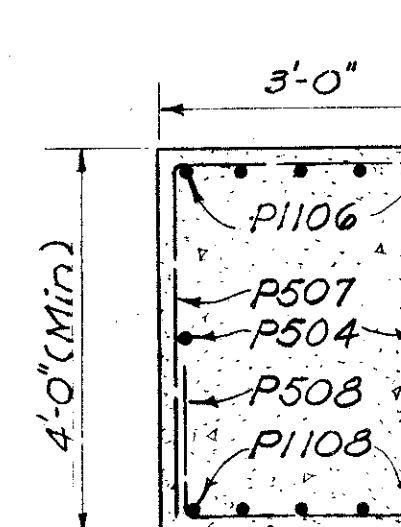
SECTION B-B



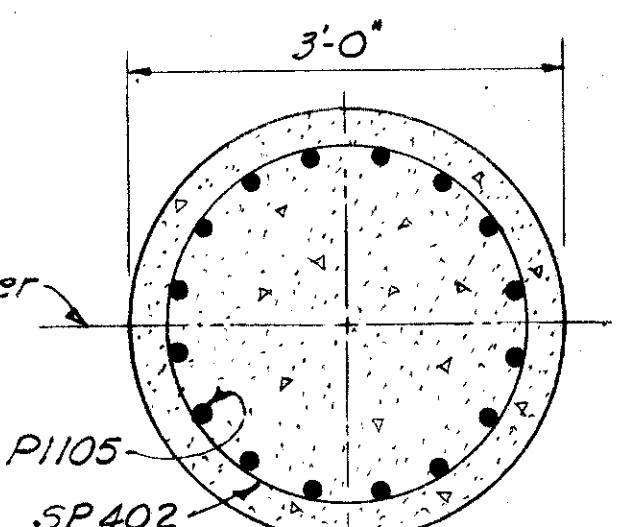
SECTION C-C



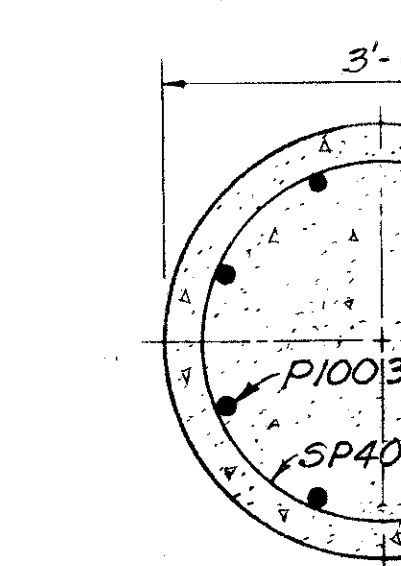
SECTION D-D



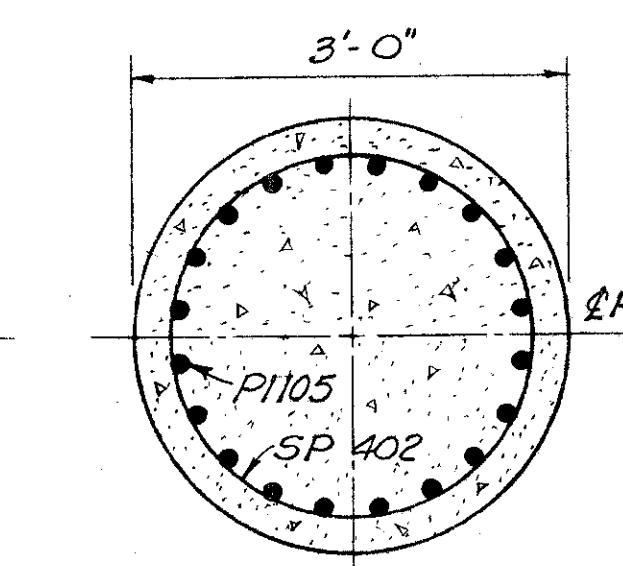
SECTION E-E



SECTION F-F



SECTION G-G



SECTION H-H

NOTES

- 1 "E.F." designates "Each Face".
2. For REINFORCING STEEL LIST see Sh. 231

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**PIER 3**  
BRIDGE NO. HAM-25-1599 L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
RHH	K.L.	K.L.	HEO	JAD	Oct. 58

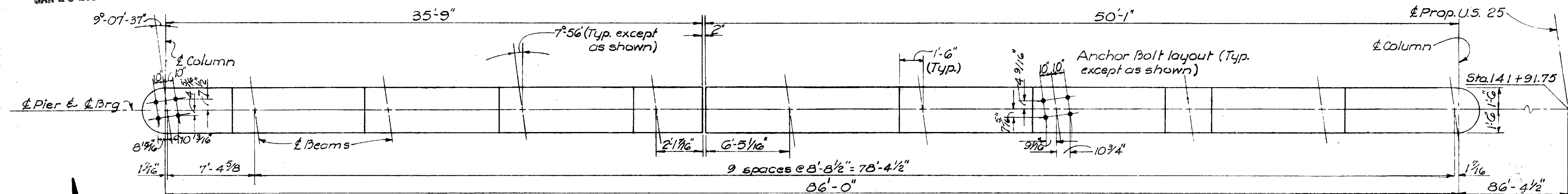
U.S. 25

MICROFILMED  
JAN 28 1988

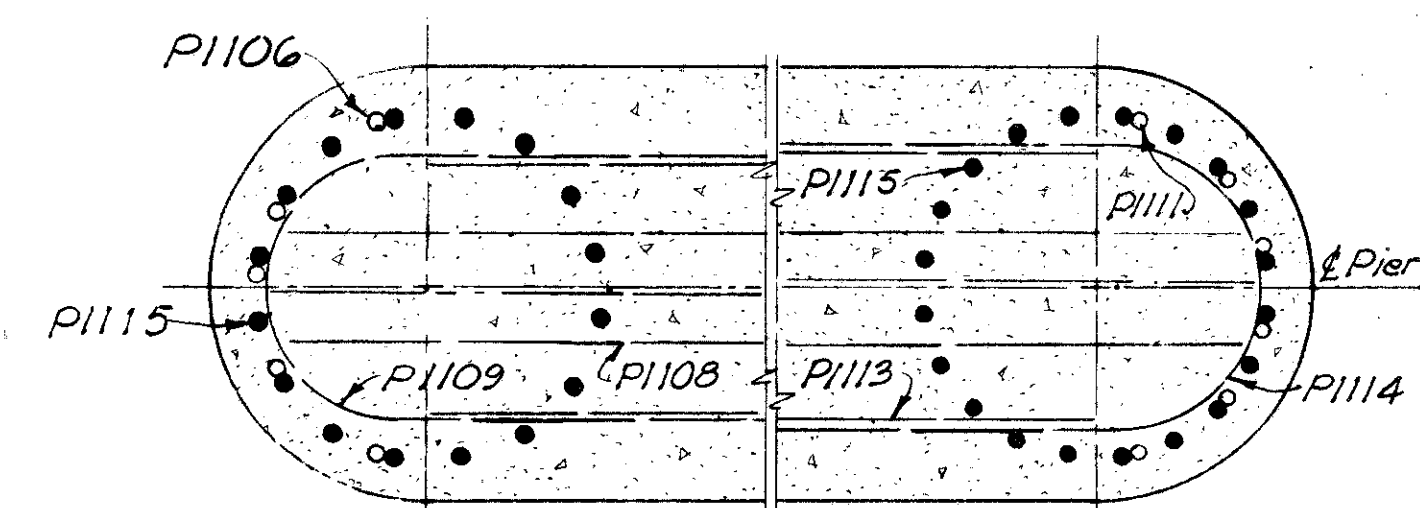
HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

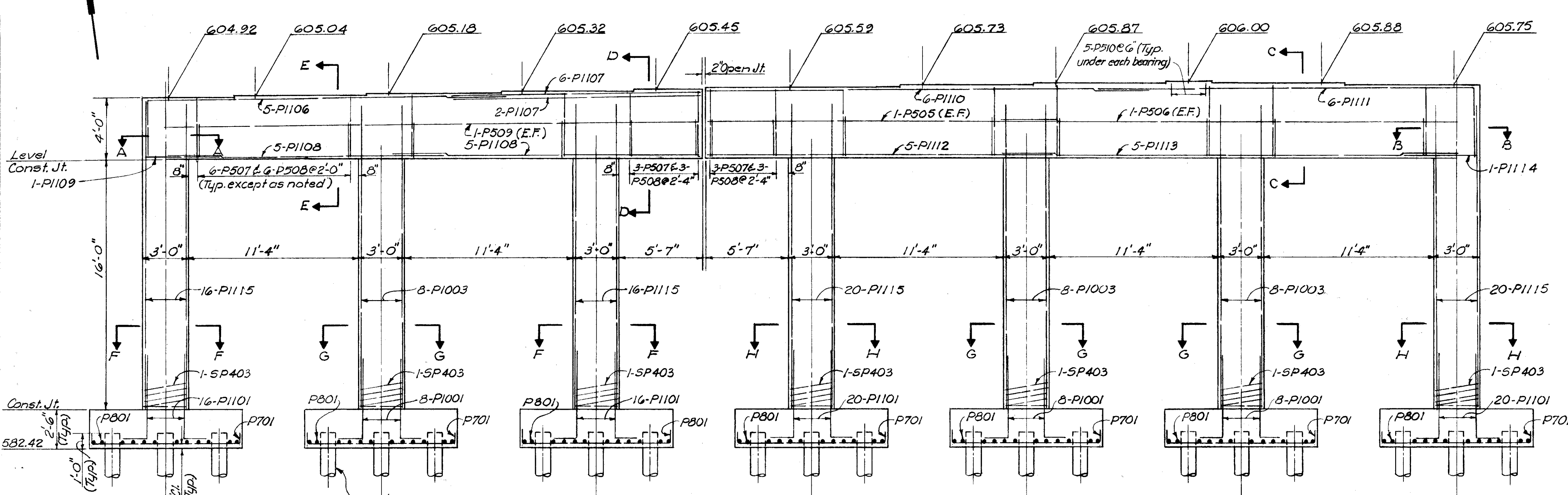
222  
317



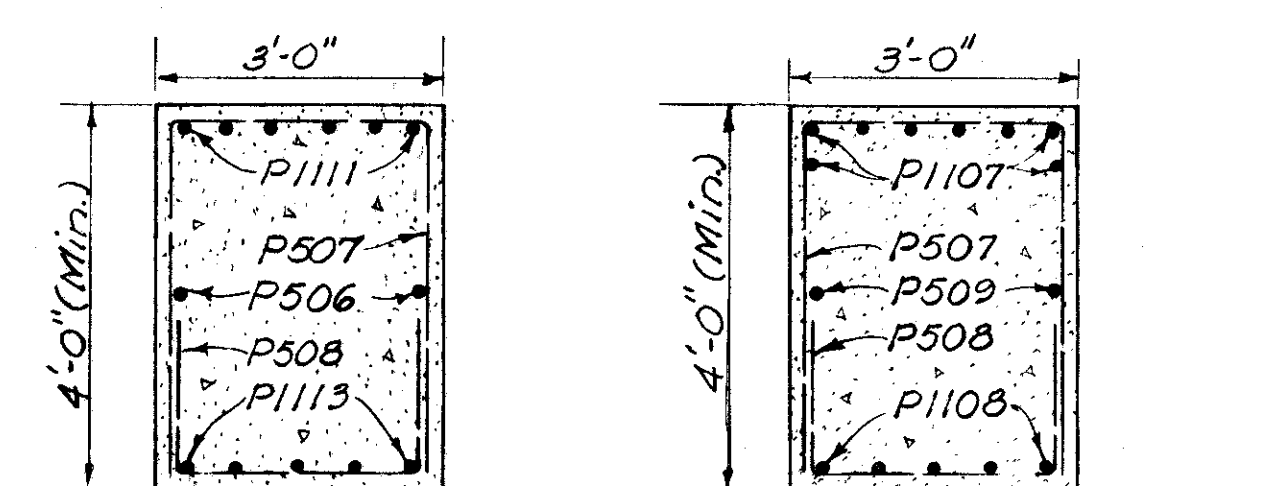
PLAN



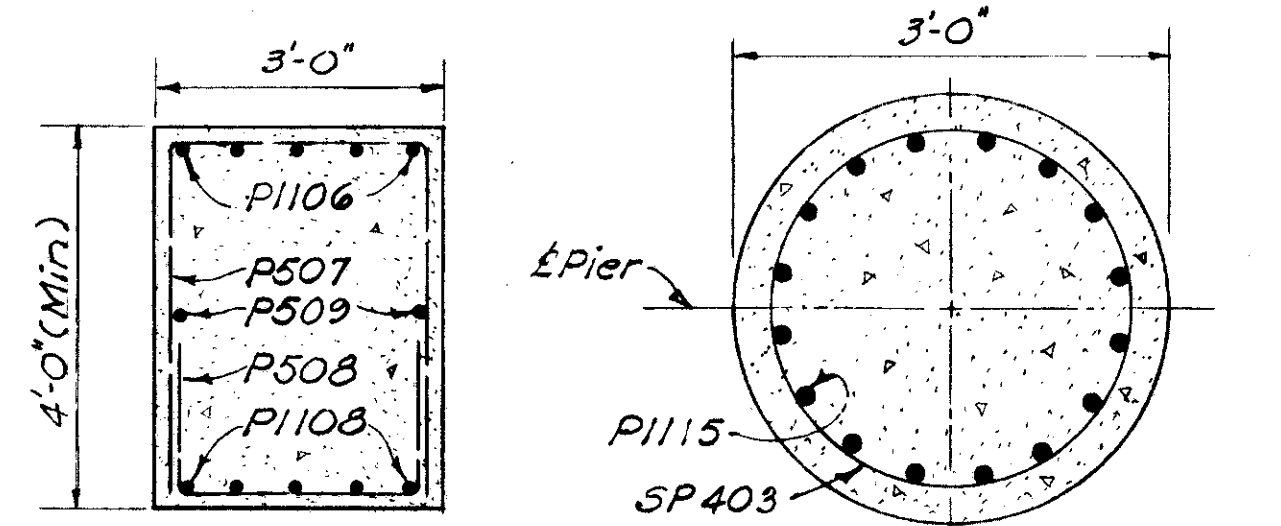
SECTION A-A SECTION B-B



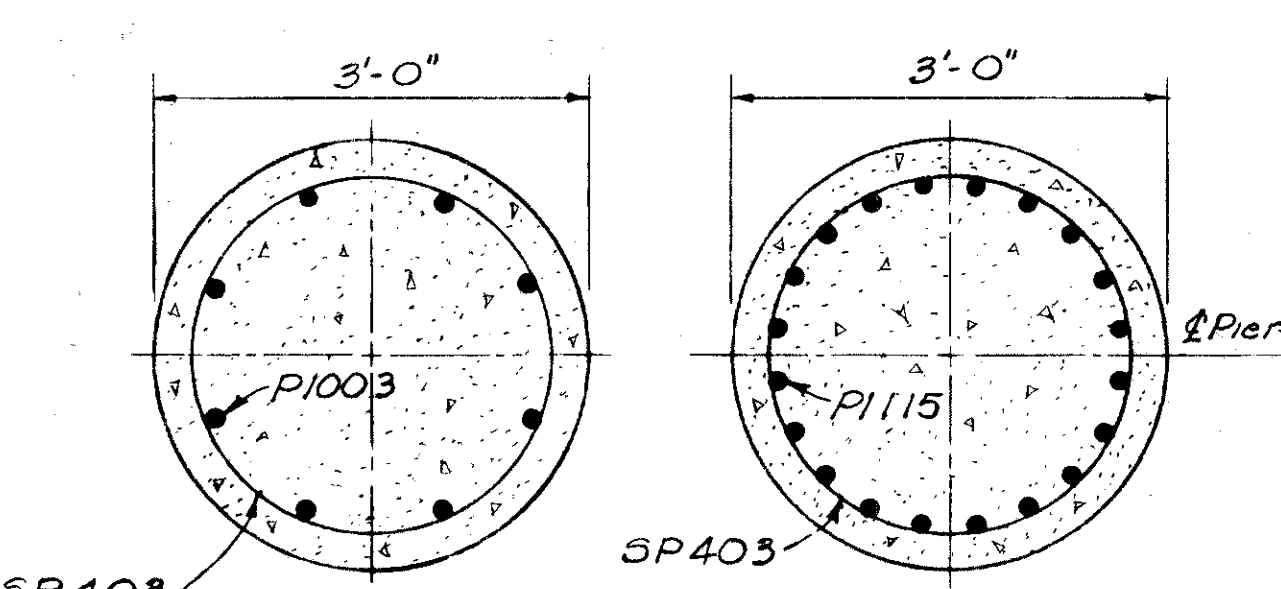
ELEVATION



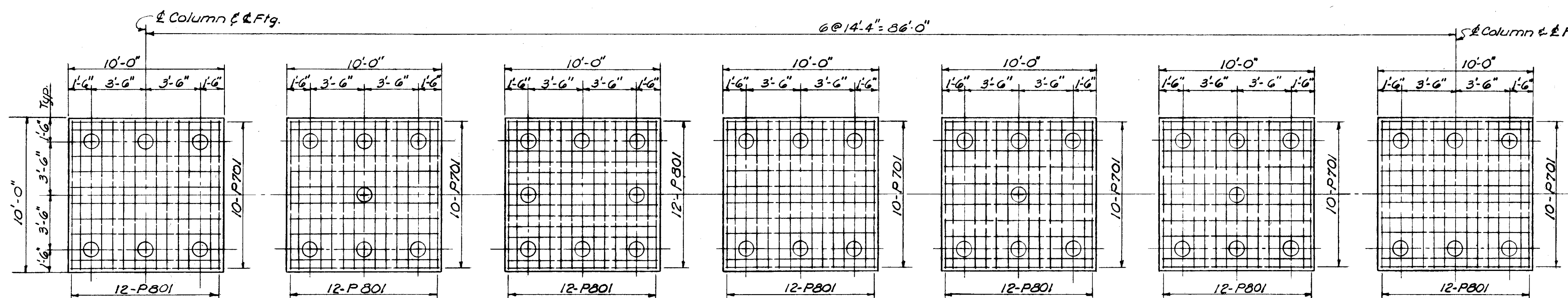
SECTION C-C SECTION D-D



SECTION E-E SECTION F-F



SECTION G-G SECTION H-H



FOOTING PLAN

- NOTES**
- Anchor bolts are shown on Std. Dwg. RB-1-55.
  - Reinforcing steel in pier cap shall be placed so as not to interfere with drilling of anchor bolt holes.
  - "E.F." designates "Each Face".
  - For REINFORCING STEEL LIST see Sh.231

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**PIER 4**  
BRIDGE NO. HAM-25-1599 L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

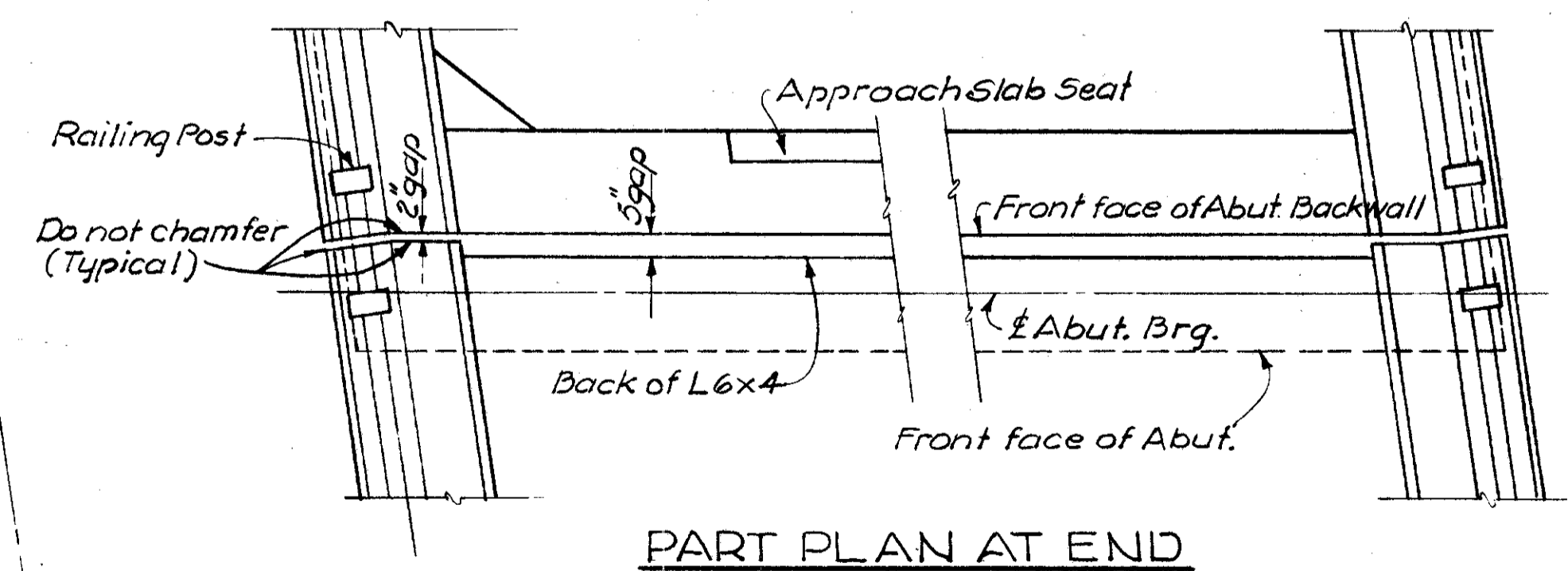
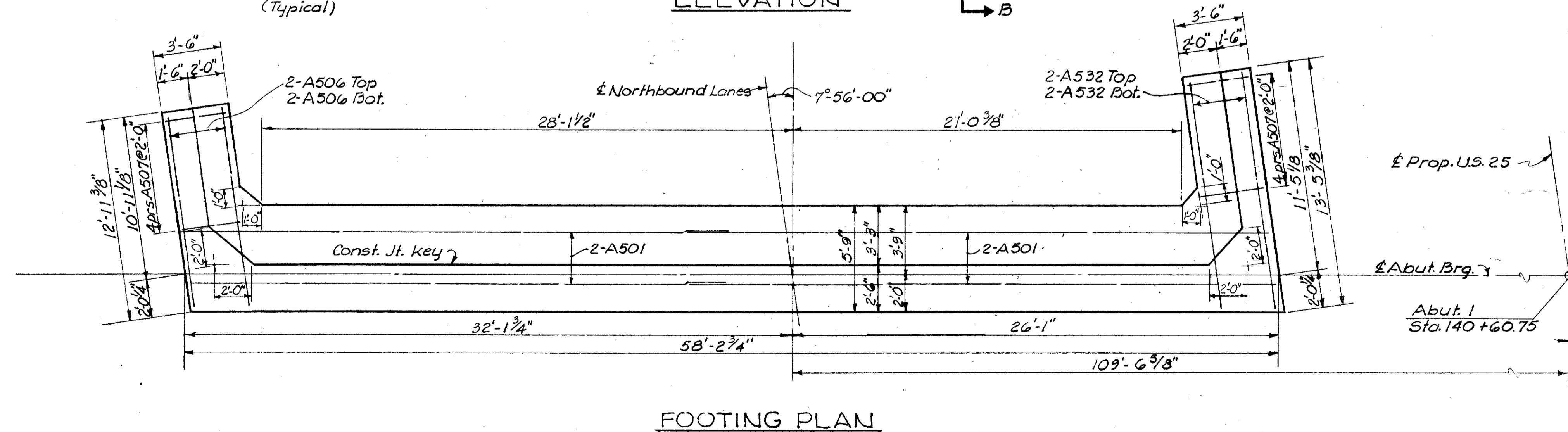
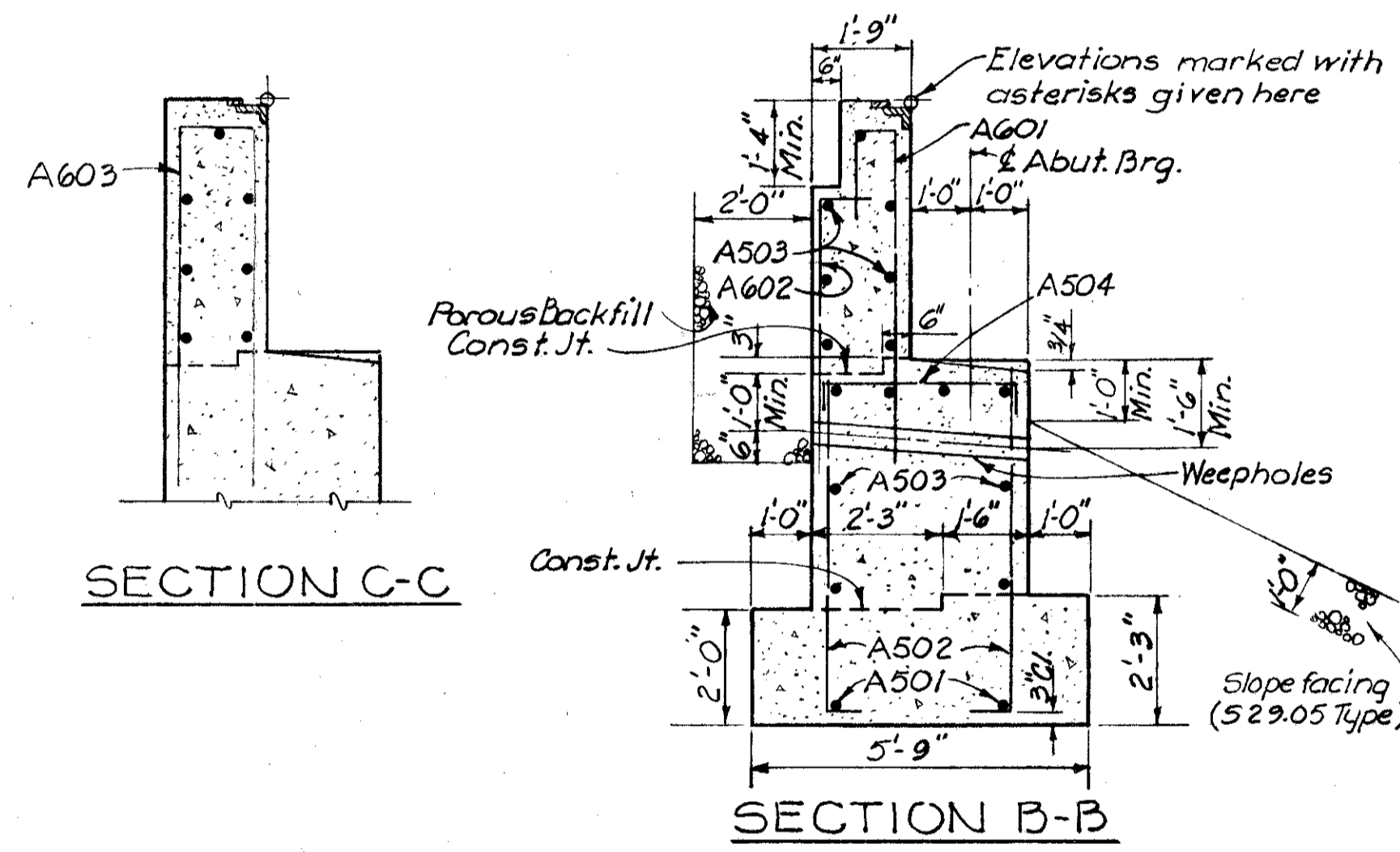
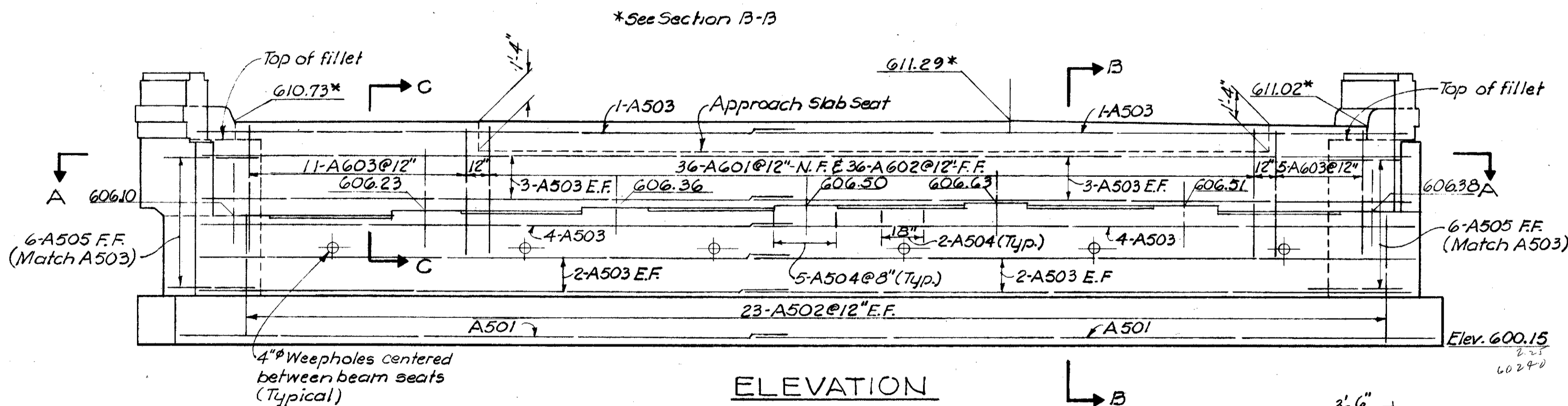
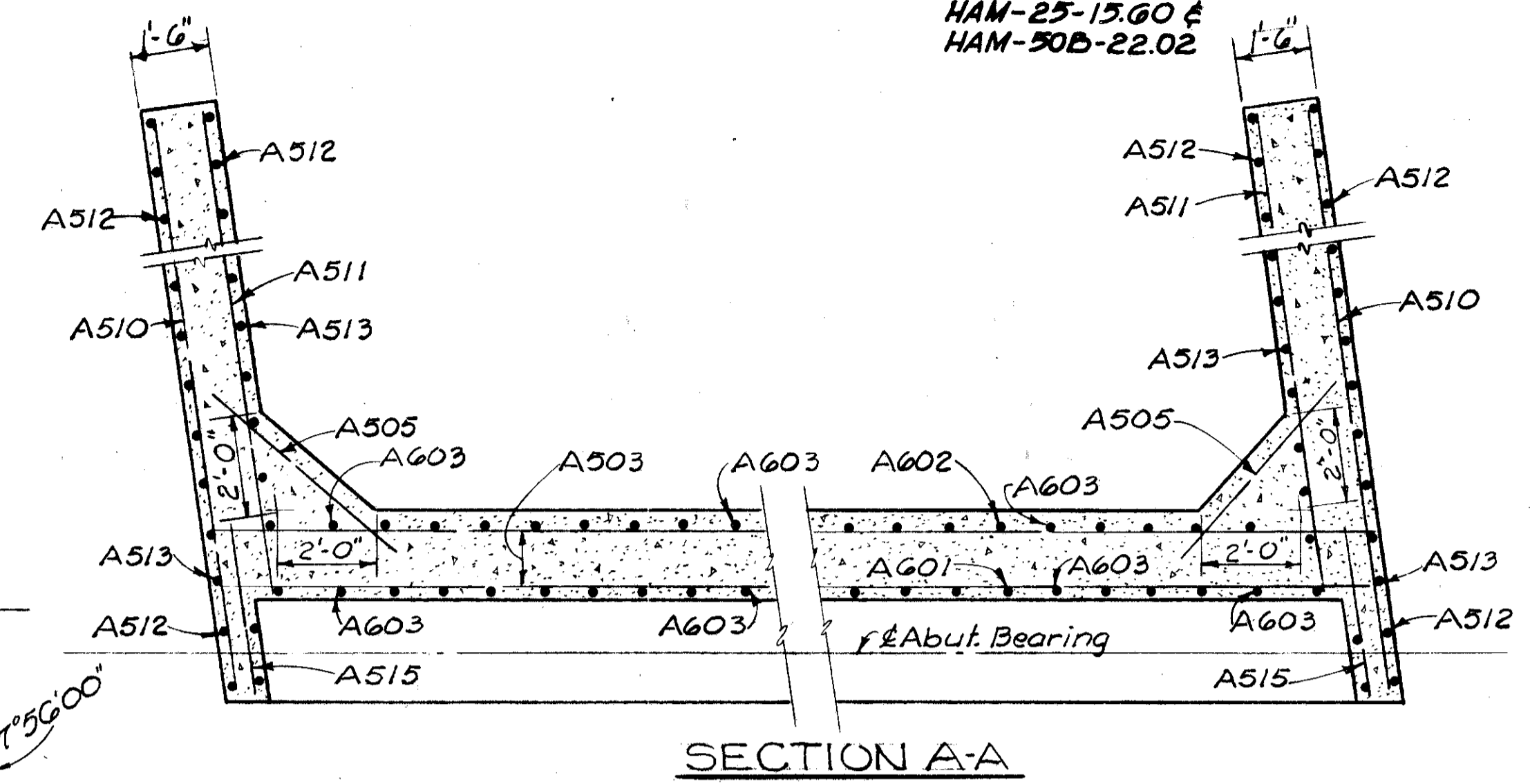
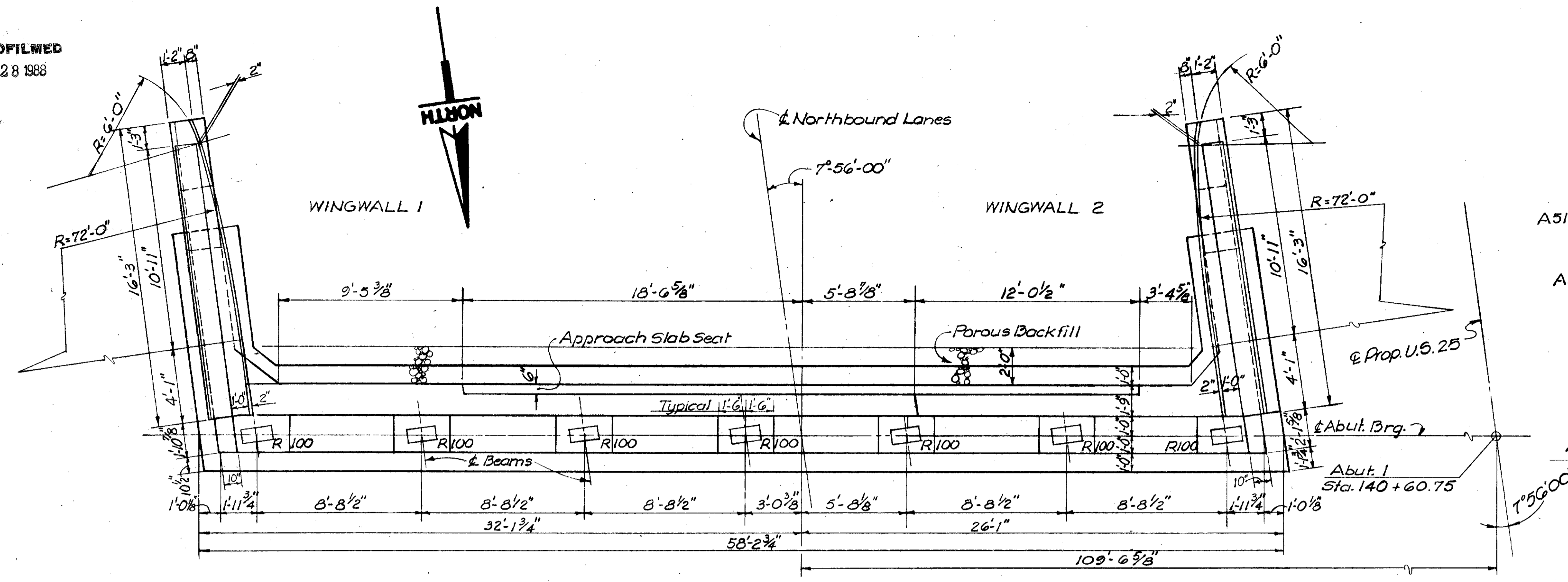
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RWH	TEC	TEC	H.E.O.	JAD	Oct. 58	

MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

223  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



- NOTES:
- Designations used are as follows:  
F.F. = Far Face  
N.F. = Near Face  
E.F. = Each Face
  - For reinforcing steel list see Sh. 231
  - Parapet concrete & A521 bars to be included with Item S-14 for payment.
  - POROUS BACKFILL: 2ft. thick, full length of the abutment; shall extend up to the underside of the approach slab or paved shoulder.
  - For approach slab details, see Std. Dwg. A5-1-54.

Work Sheets 223 & 224 together

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ABUTMENT NO. 1**  
BRIDGE NO. HAM-25-1599-R  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JAP	JAP	KL	RF	JAD	Oct 58	

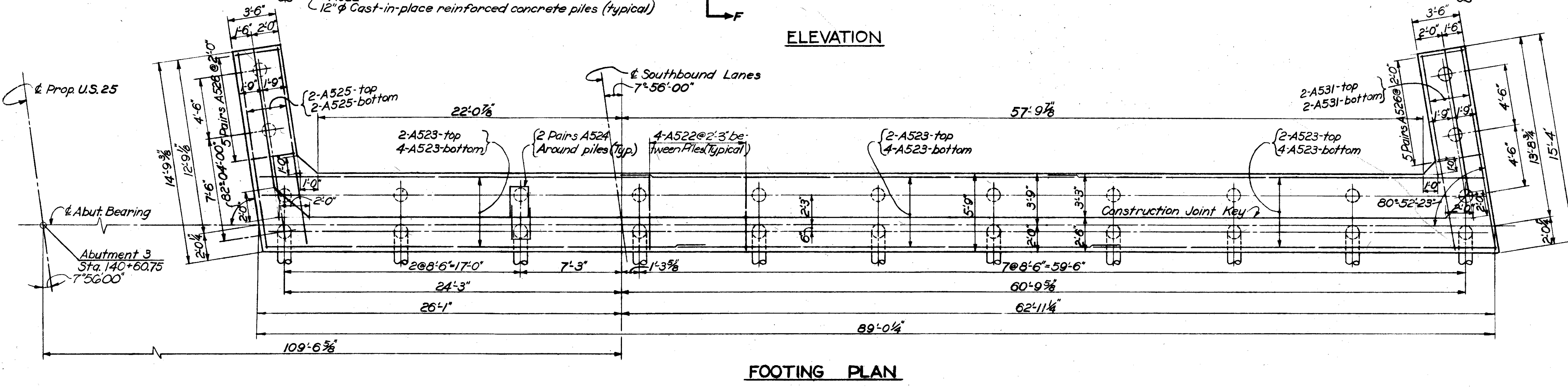
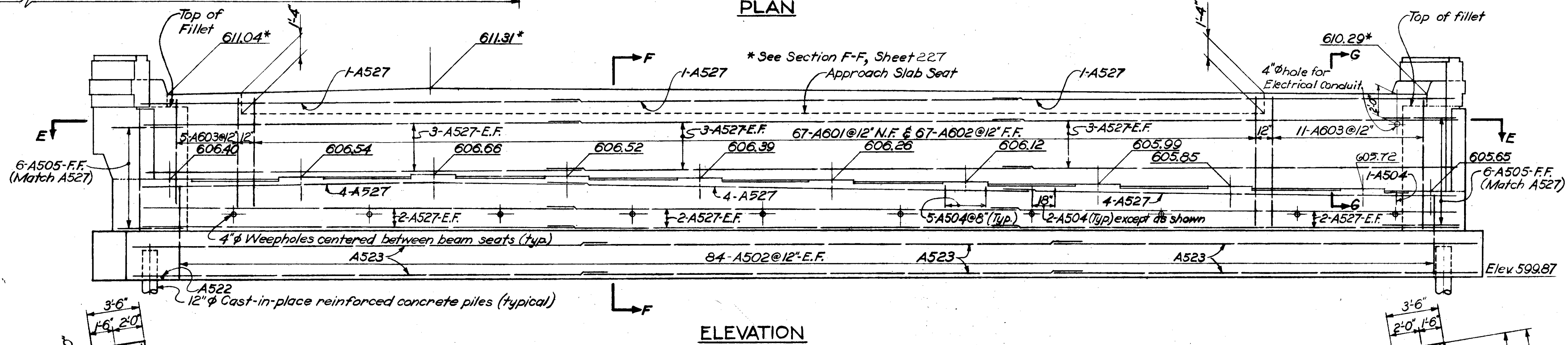
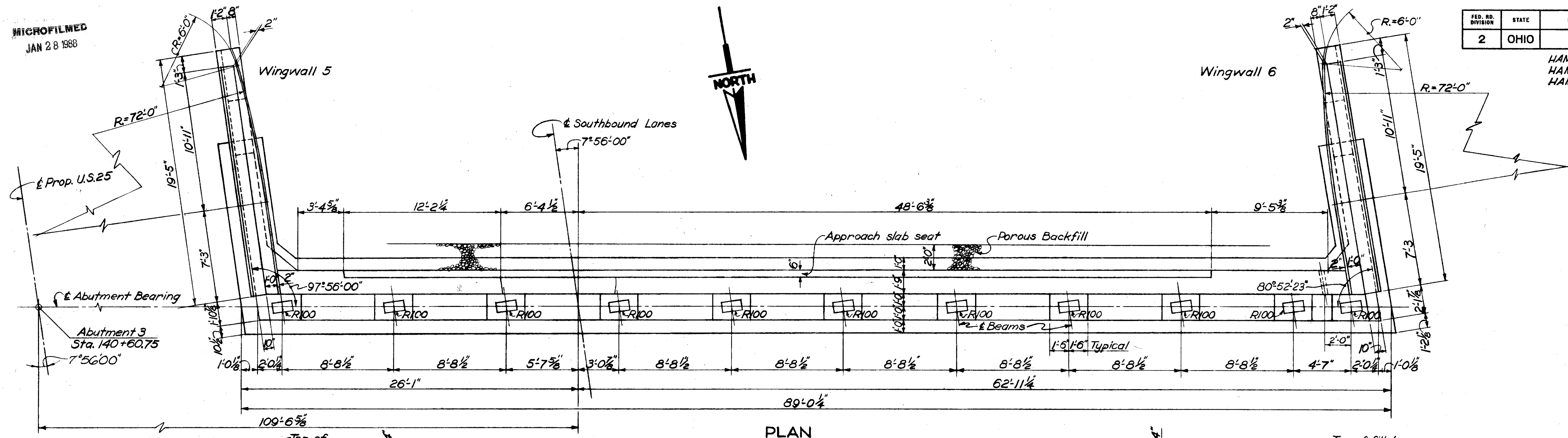
U.S. 25



MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT	225 317
2	OHIO		

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



**NOTES**

- Designations used are as follows:  
N.F. = Near Face  
F.F. = Far Face  
E.F. = Each Face
- For reinforcing steel list, see Sheet No. 231
- Parapet concrete and A530 bars to be included with item S-14 for payment.
- POROUS BACKFILL: 2 ft. thick, full length of the abutment, shall extend up to the underside of the approach slab on the paved shoulder.
- For approach slab details, see Std. Dwg. A5-1-54.

Work Sheets 225 & 227 together

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ABUTMENT NO. 3**  
BRIDGE NO. HAM-25-1599-L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

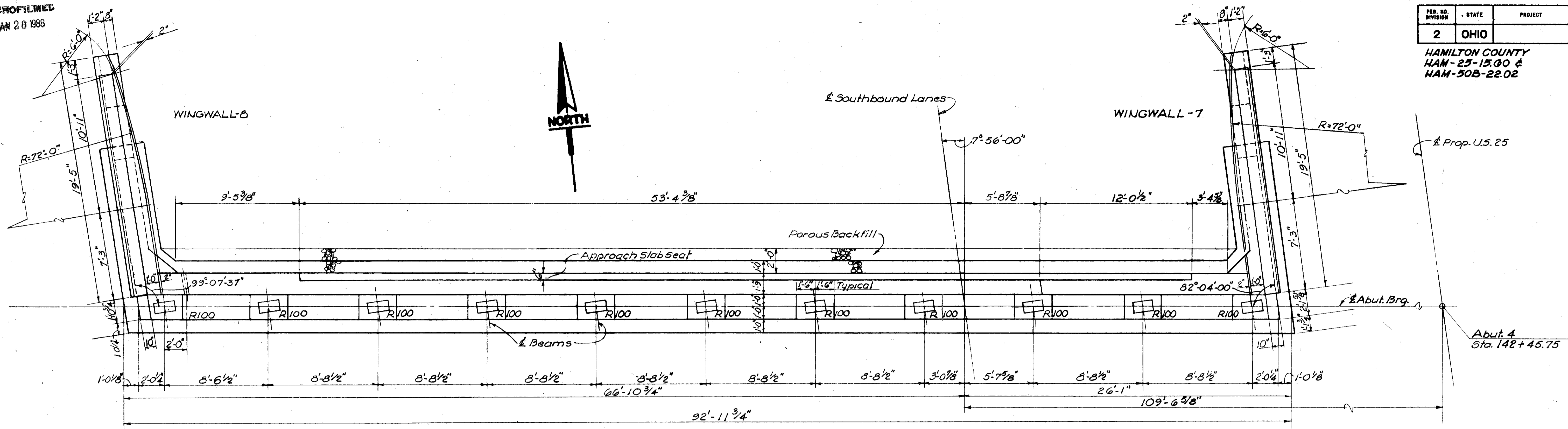
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JAP	JAP	HHS	RFC	JAD	Oct. 58	

U.S. 25

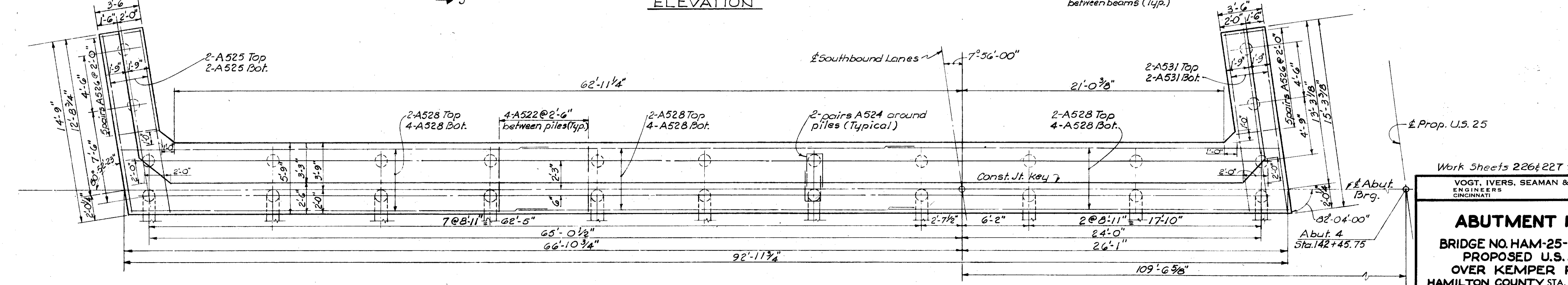
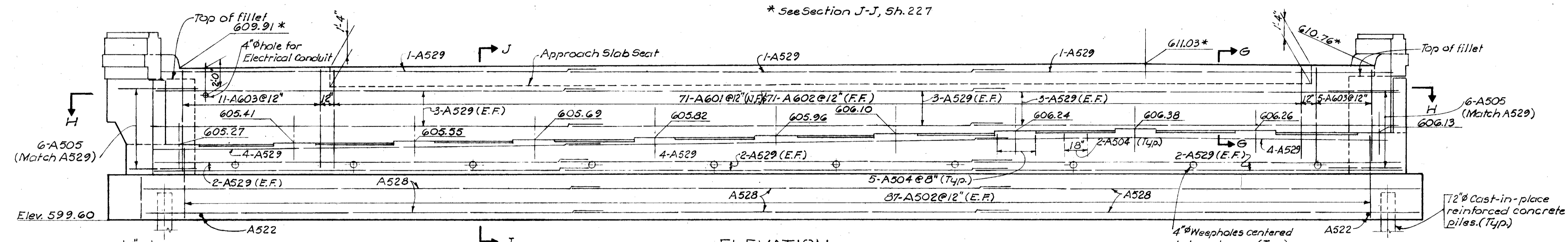
MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT	226 517
2	OHIO		

HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-50B-22.02



\* See Section J-J, Sh. 227



Work Sheets 226 & 227 together

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ABUTMENT NO. 4**  
BRIDGE NO. HAM-25-1599-L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
J.A.P.	J.A.P.	N.L.	R.F.C.	J.A.D.	Oct. 58

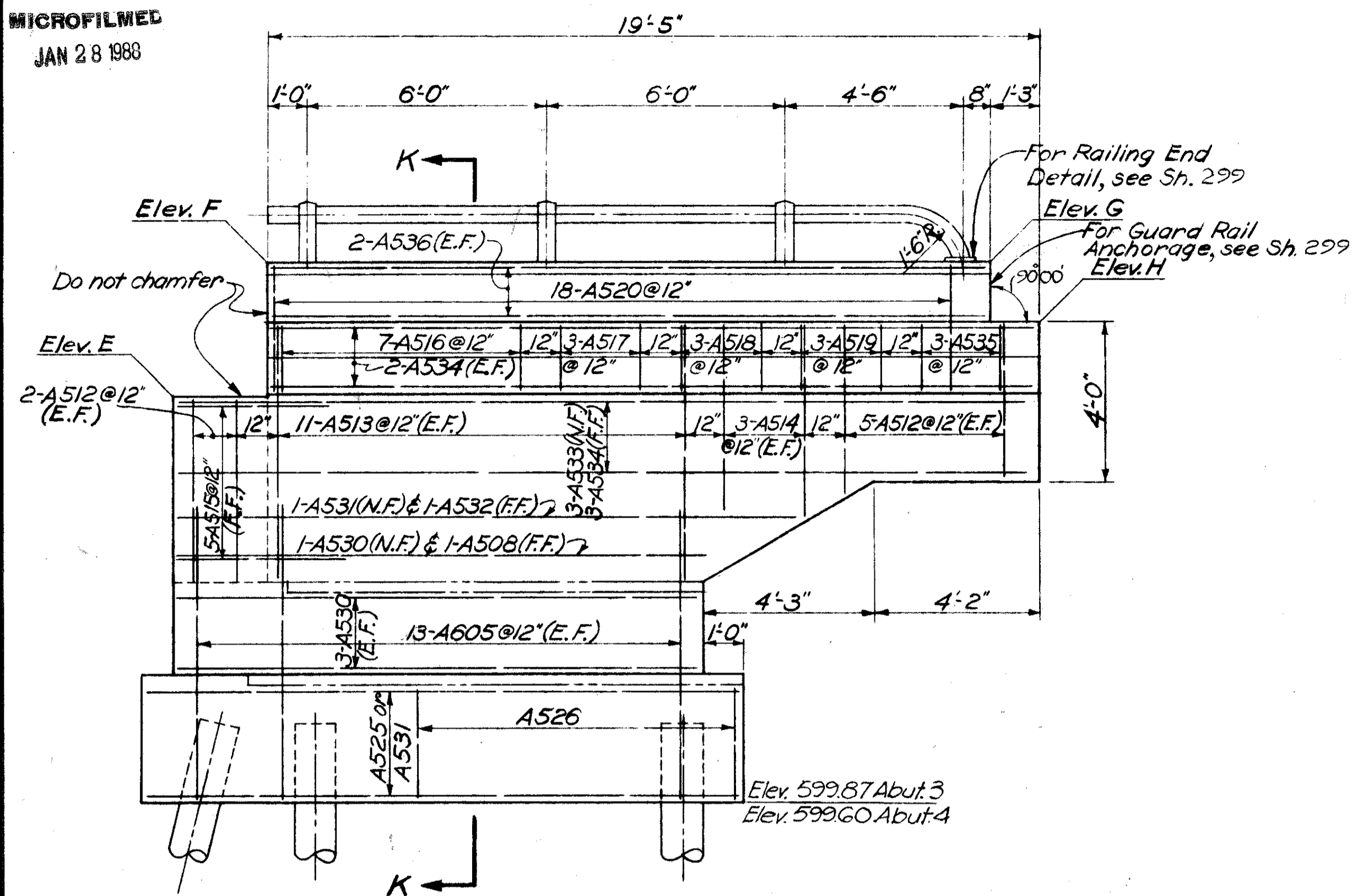
U.S. 25



MICROFILMED  
JAN 28 1988

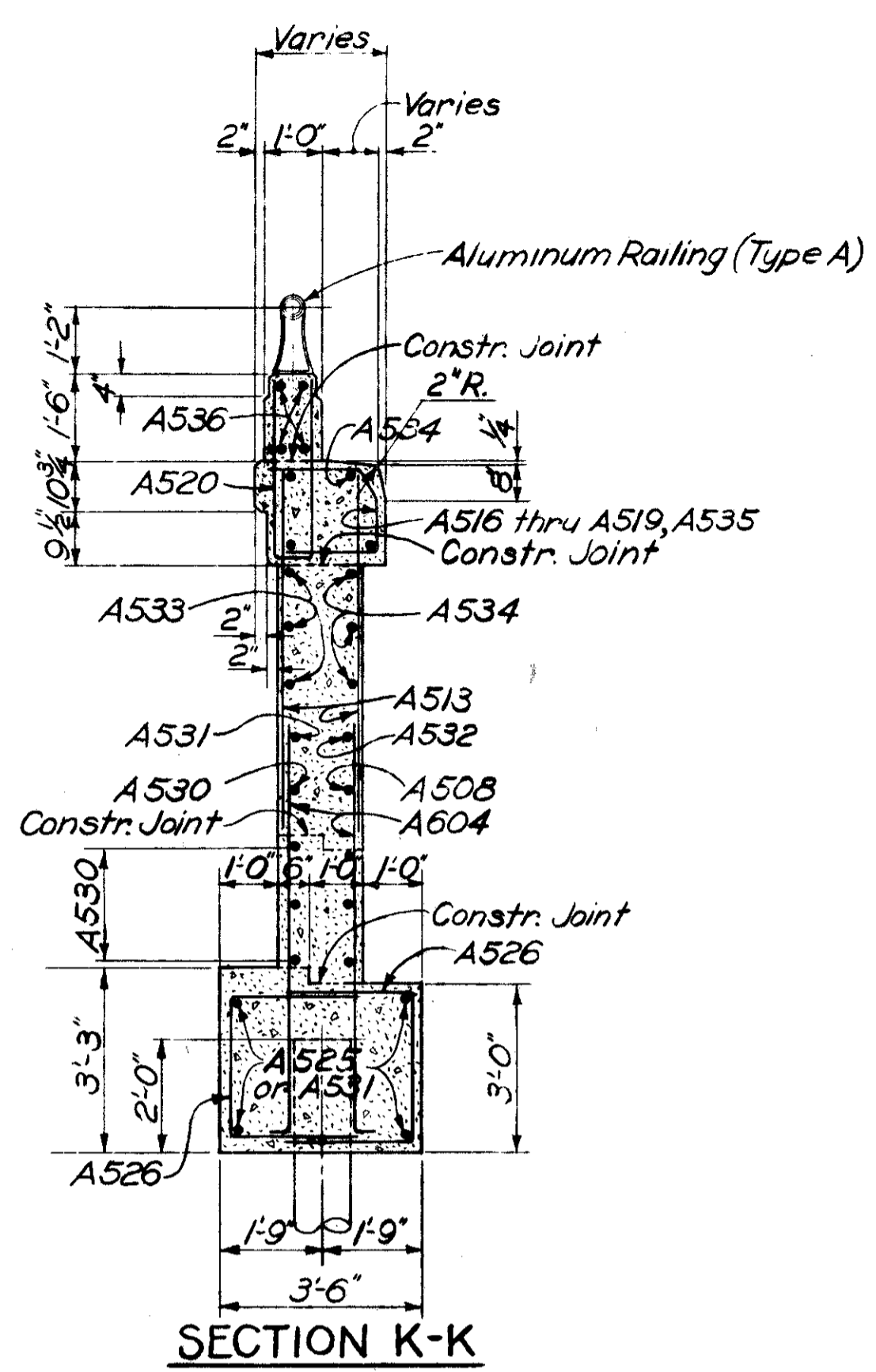
FED. RD. DIVISION	STATE	PROJECT	227 317
2	OHIO		

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

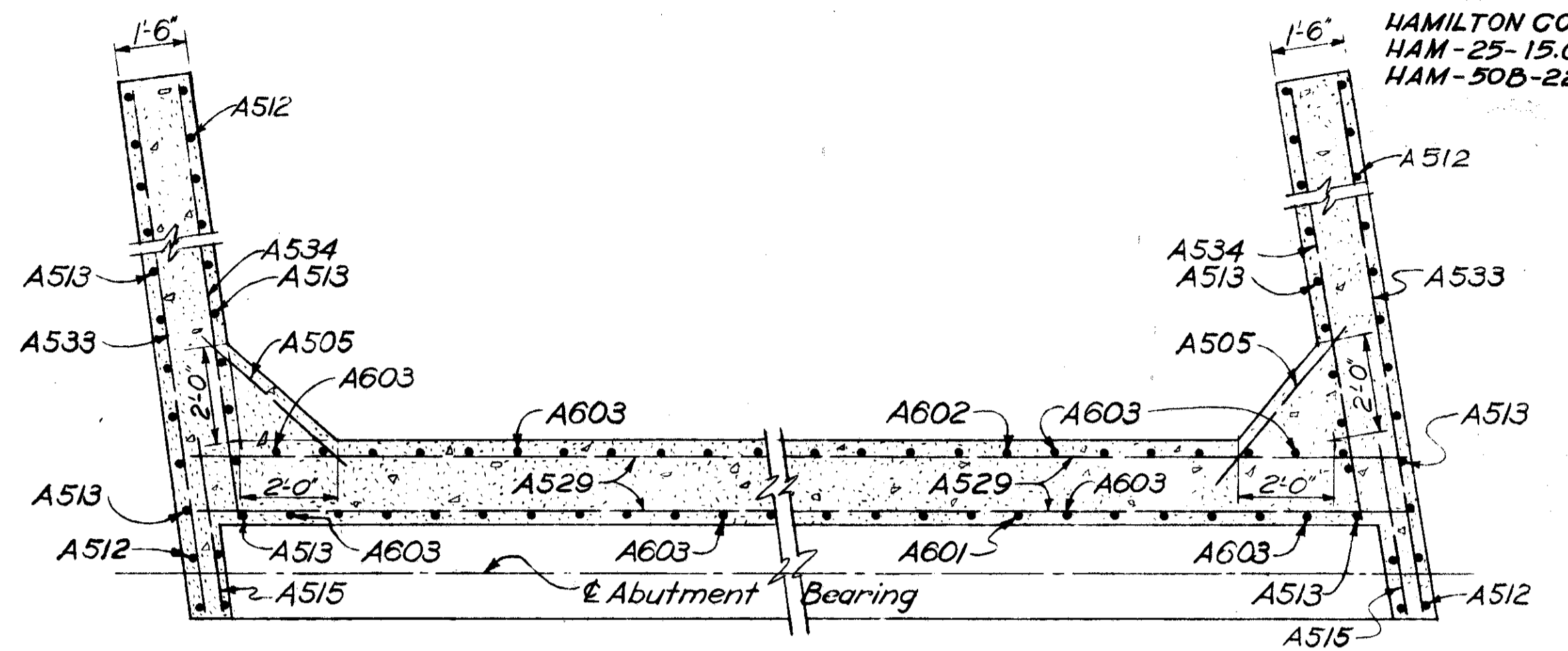


TYPICAL WINGWALL ELEVATION (LEFT BRIDGE)

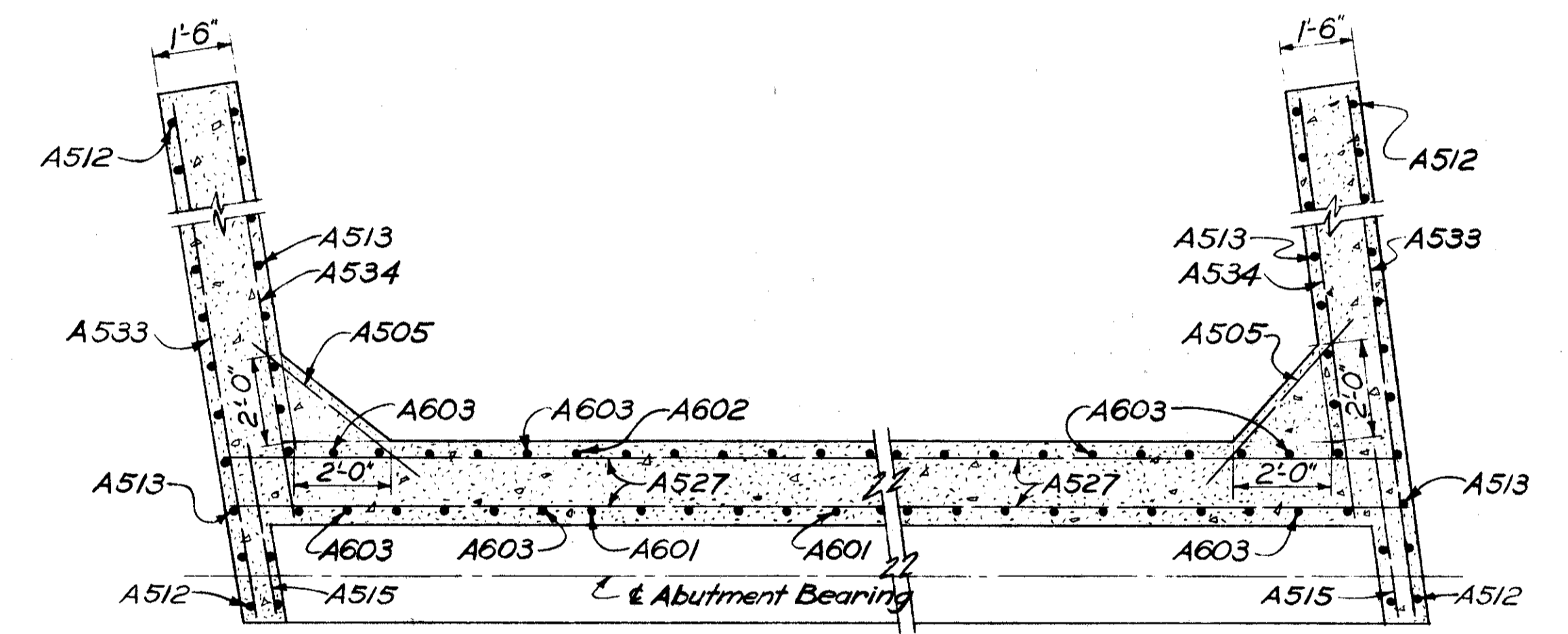
WINGWALLS	5	6	7	8
ELEV. E	610.12	609.37	609.86	609.00
ELEV. F	613.44	612.69	613.16	612.30
ELEV. G	613.42	612.67	613.10	612.23
ELEV. H	611.92	611.17	611.59	610.72



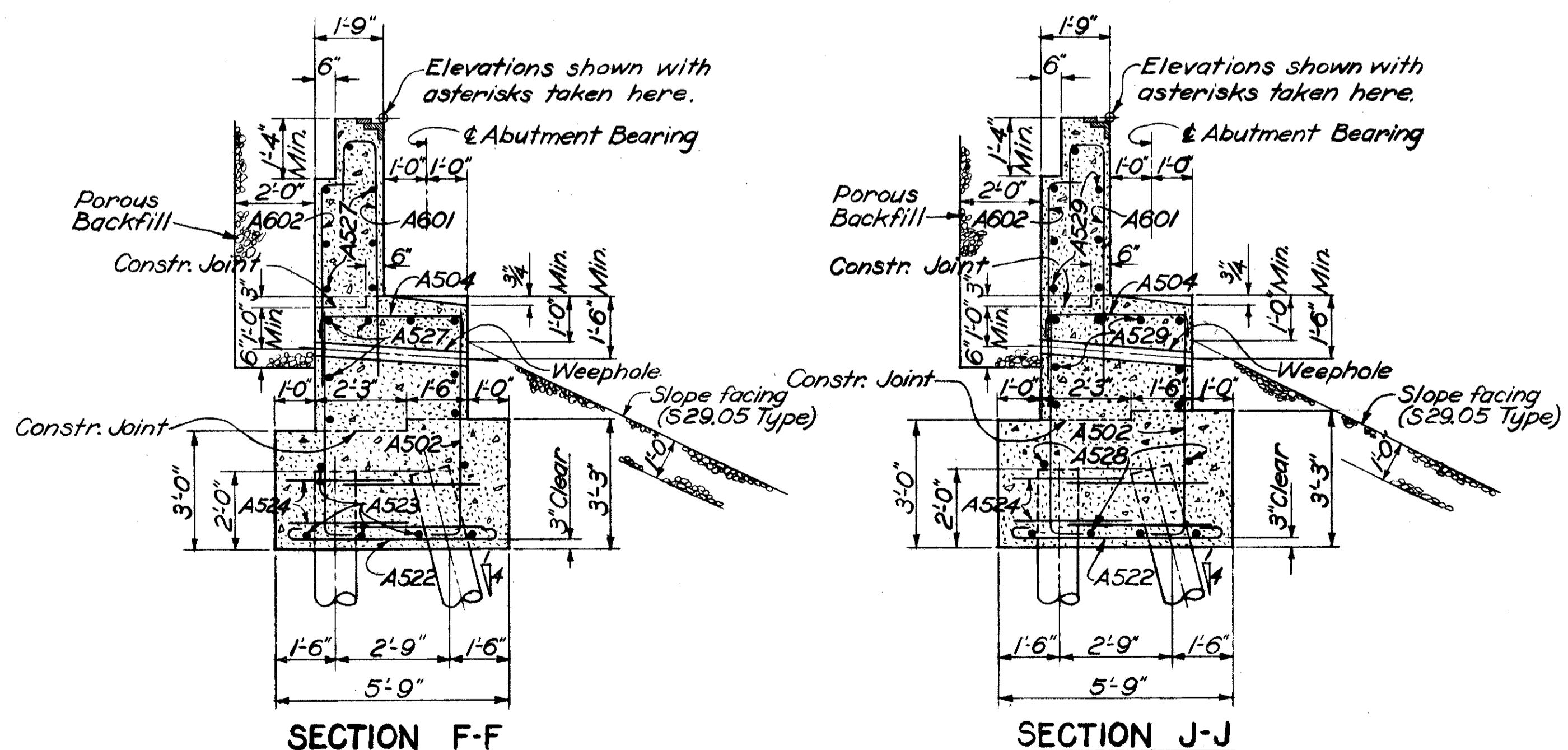
SECTION K-K



SECTION H-H



SECTION E-E



MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT	228
2	OHIO		317

HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-508-22.02

**NOTES**

1. For end cross frame details see Std. Dwg. CSB-2-56, Sheet 2 of 6.
2. For scupper details, see Std. Dwg. CSB-2-56, Sheet 3 of 6.
3. For location of scuppers, see Sheet No. 217.
4. Standard end dams to be used at all abutments. For details see Std. Dwg. CSB-2-56, Sheet 2 and 3 of 6.
5. For rocker and bolster details, see Std. Dwg. RB-1-55.
6. For additional notes, see Sheet 218.

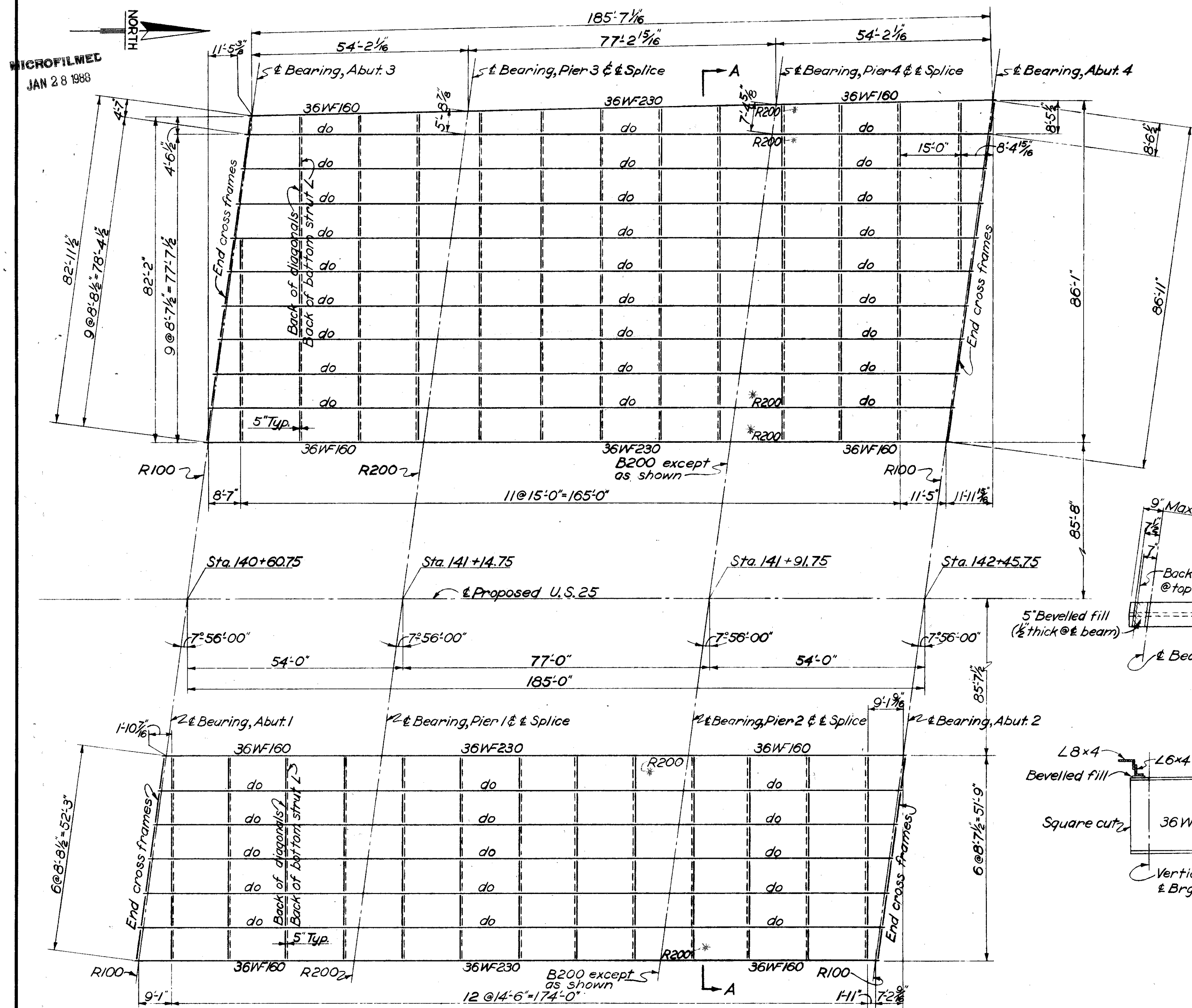
**DEFLECTION AND CAMBER**

BEAM	EXTERIOR		INTERIOR	
	@ End Span	@ Center Span	@ End Span	@ Center Span
Deflection due to weight of steel	0	3/16	0	3/16
Deflection due to remaining dead load	1/4	3/4	1/4	1/16
Camber required for vertical curve	1/16	3/16	1/16	3/16
Sum of deflection and camber	5/16	1 1/8	5/16	1 1/16
Required shop camber	0	1/4	0	1/4

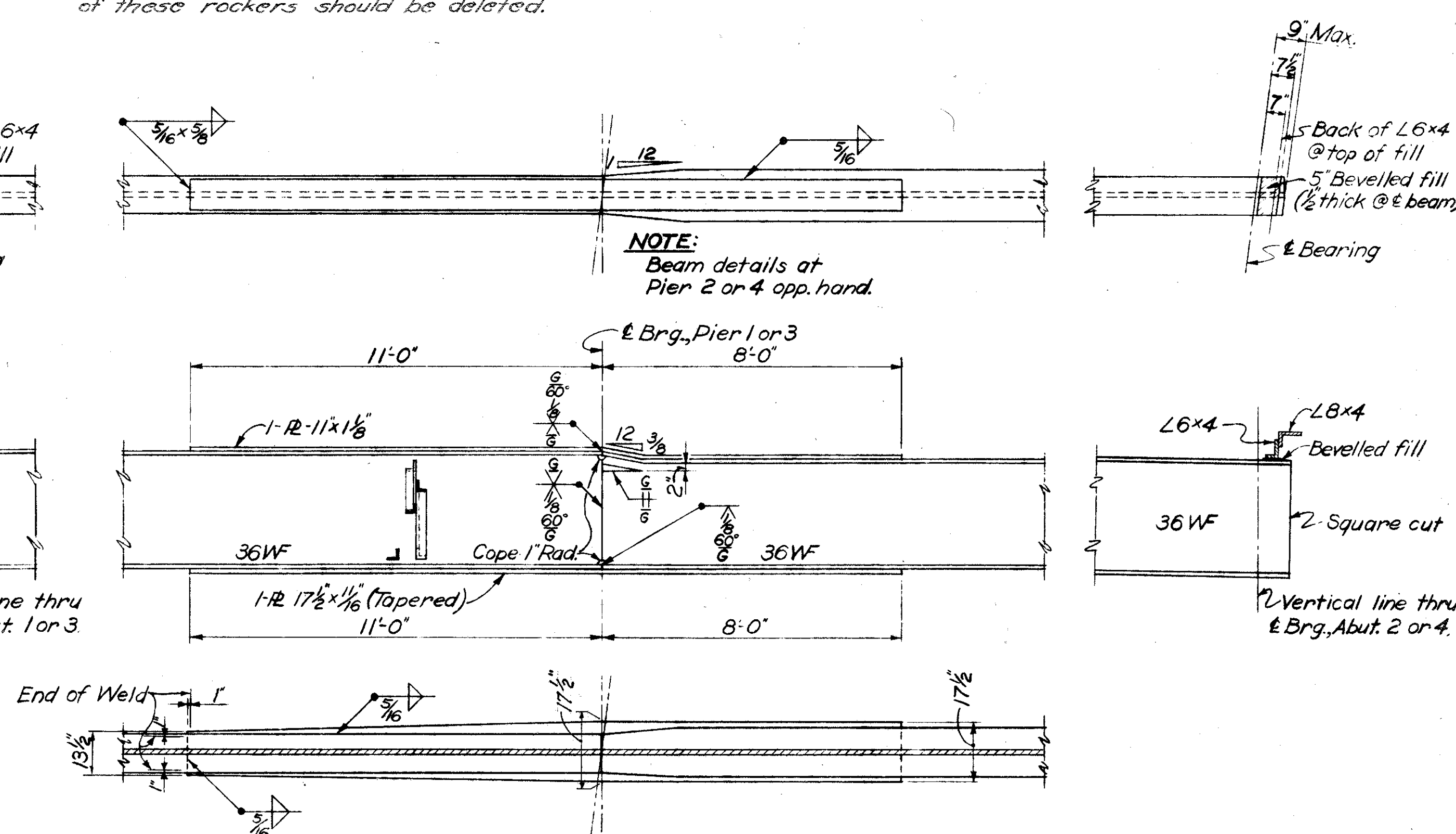
**BEAM SPLICE WELDING PROCEDURE**

1. Raise the ends of the beams 1/4" at Abutment No. 1 and 1/4" at Abutment No. 2.
2. Butt weld the beam flanges and web at the piers, using the following sequence: make one pass on each flange, then one on the web; repeat until welds are completed.
3. Weld the bottom and top moment plates.
4. Lower the ends of the beams to final position.
5. Repeat steps 1 thru 4 on other structure by raising the ends of the beams 1/4" at Abutment No. 3 and 1/4" at Abutment No. 4.

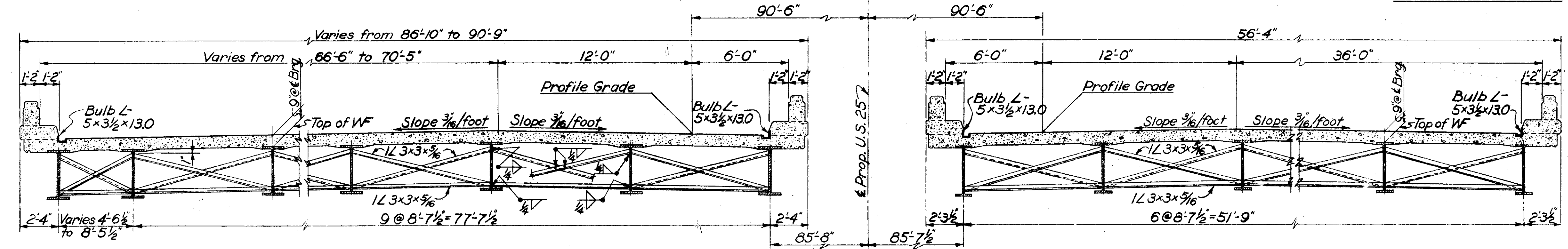
\* The 1/2" keeper bars welded to the sole plates of these rockers should be deleted.



**FRAMING PLAN**



**BEAM DETAILS**



**SECTION A-A**

Revised 12-22-58.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**STEEL FRAMING PLAN & DETAILS**

BRIDGE NO. HAM-25-1599 R & L  
PROPOSED U.S. 25  
OVER KEMPER ROAD

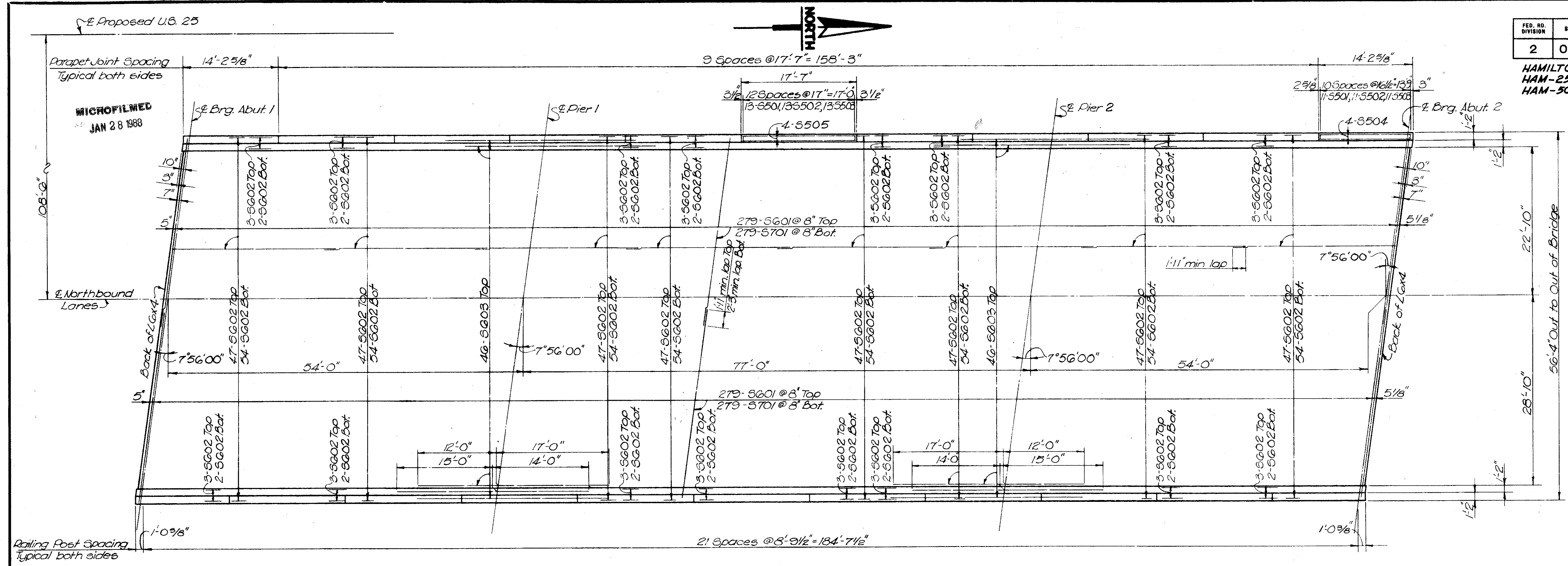
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SHM	RFC	FHS	JPF	JAD	Oct. 58	

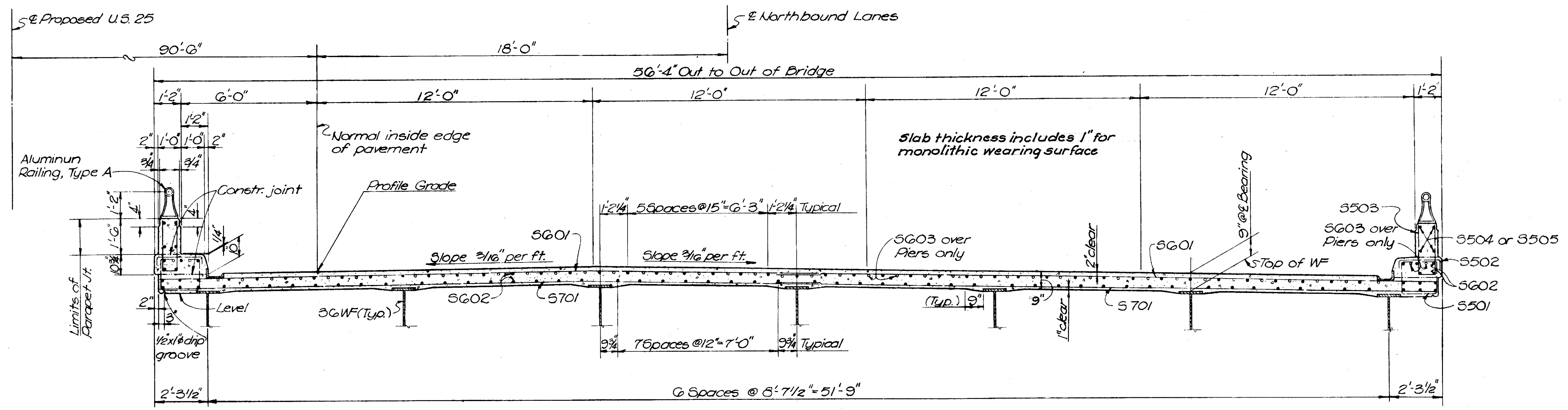
FED. NO. DIVISION	STATE	PROJECT
2	OHIO	

229  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



**ROADWAY SLAB REINFORCING**



**TYPICAL TRANSVERSE SECTION THRU ROADWAY**

**NOTES**

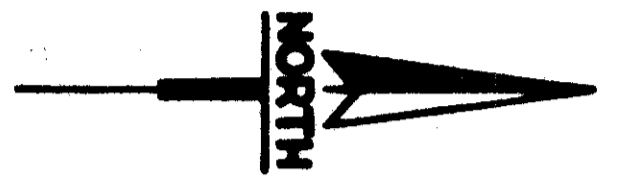
1. For location of scuppers, see Sheet No.217
2. Spread reinforcing in slabs as necessary to clear scuppers.
3. For pavement elevations, see Sheet No.217
4. For railing details and additional parapet joint details, see Standard Drawing AR-1-571
5. For reinforcing steel list, see Sheet No.231
6. Parapet concrete, S504, S505 and S506 bars to be included with item 5-14 for payment.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO					
<b>SUPERSTRUCTURE ROADWAY SLAB</b>					
BRIDGE NO. HAM-25-1599R PROPOSED U.S. 25 OVER KEMPER ROAD HAMILTON COUNTY STA. 140+58.48 TO STA. 142+48.02					
DESIGNED S.H.M.	DRAWN J.C.G.	TRACED L.F.P.	CHECKED R.J.K.	REVIEWED DATE J.A.D. Oct. 58	REVISED

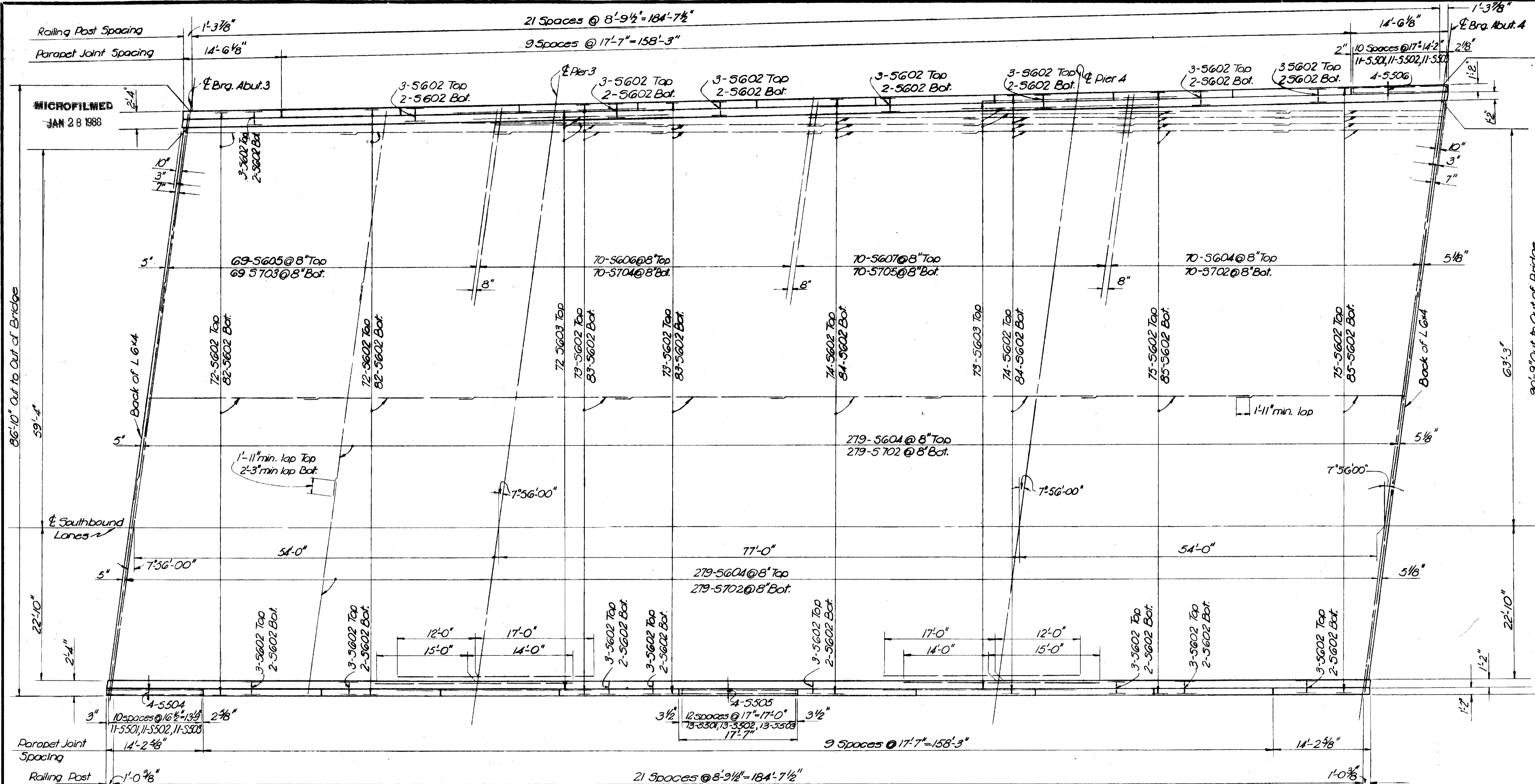
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

250  
317

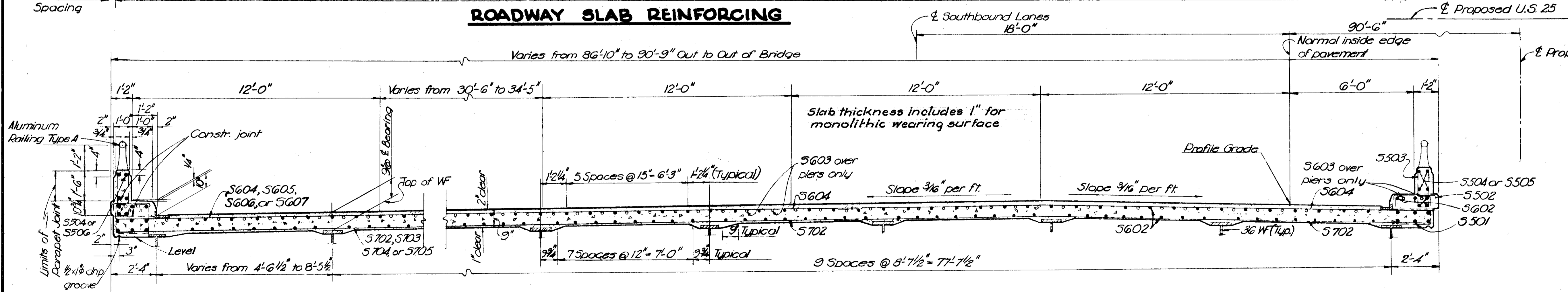
HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-30B-22.02



**NOTES**  
See Sheet No. 229



**ROADWAY SLAB REINFORCING**



**TYPICAL TRANSVERSE SECTION THRU ROADWAY**

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SUPERSTRUCTURE  
ROADWAY SLAB**

BRIDGE NO. HAM-25-1599 L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.48 TO  
STA. 142+48.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SHM	J.C.G.	H.S.H.	P.J.K.	J.A.D.	Oct. 58	

U.S. 25

ABUTMENTS							ROADWAY SLAB							PIERS															
			BRIDGE NO. HAM-25-1599 R		BRIDGE NO. HAM-25-1599 L					BRIDGE NO. HAM-25-1599 R		BRIDGE NO. HAM-25-1599 L					BRIDGE NO. HAM-25-1599 R		BRIDGE NO. HAM-25-1599 L										
MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT		
A 501	29'-9"	Str.	8	248			S 501	4'-8"	Bt.	278	1353	278	1353	P 501	8'-9"	Bt.	40	365											
A 502	5'-11"	Bt.	212	1309	342	2112	S 502	2'-5"	Bt.	278	701	278	701	P 502	5'-7"	Bt.	40	233											
A 503	28'-9"	Str.	60	1798			S 503	4'-9"	Bt.	278	1377	278	1377	P 503	27'-0"	Str.	8	225											
A 504	4'-2"	Bt.	94	409	149	648	S 504*	13'-11"	Str.	16				P 504	34'-11"	Str.								2	73				
A 505	4'-9"	Str.	24	119	24	119	S 505*	17'-3"	Str.	72				P 505	22'-1"	Str.								4	92				
A 506	12'-6"	Str.	8	104			S 506*	14'-2"	Str.					P 506	29'-6"	Str.									4	123			
A 507	6'-2"	Bt.	32	206										P 507	9'-9"	Bt.										72	732		
A 508	10'-6"	Str.	36	394	4	44								P 508	7'-7"	Bt.										72	509		
A 509	8'-6"	Str.	4	35										P 509	35'-7"	Str.											2	74	
A 510	17'-9"	Str.	12	222			S 601	29'-1"	Str.	558	24 375				P 510	3'-5"	Bt.	70	249	110	392								
A 511	15'-11"	Str.	28	465			S 602	24'-11"	Str.	888	33 233	1336	50 000																
A 512	3'-6"	Str.	72	263	56	204	S 603	29'-0"	Str.	92	4 007	145	6 316																
A 513	5'-4"	Str.	80	445	88	489	S 604	31'-8"	Str.			628	29 870																
A 514	4'-6"	Str.			24	113	S 605	28'-8"	Str.			69	2 971																
A 515	4'-0"	Str.	16	67	20	83	S 606	29'-8"	Str.			70	3 119																
A 516	3'-9"	Bt.	24	94	28	110	S 607	30'-8"	Str.			70	3 224																
A 517	3'-7"	Bt.	16	60	12	45																							
A 518	3'-5"	Bt.	12	43	12	43																							
A 519	3'-3"	Bt.	12	41	12	41																							
A 520	6'-0"	Bt.	60	375	72	451	S 701	29'-3"	Str.	558	33 361																		
A 521*	14'-8"	Str.	16				S 702	31'-10"	Str.			628	40 862																
A 522	6'-7"	Bt.			80	549	S 703	28'-10"	Str.			69	4 067																
A 523	30'-7"	Str.			18	574	S 704	29'-10"	Str.			70	4 269																
A 524	6'-5"	Bt.			88	589	S 705	30'-10"	Str.			70	4 412																
A 525	14'-5"	Str.			8	120																							
A 526	7'-2"	Bt.			40	299																							
A 527	30'-0"	Str.			45	1408																							
A 528	31'-11"	Str.			18	599																							
A 529	31'-3"	Str.			45	1467																							
A 530	12'-6"	Str.			28	305																							
A 531	14'-9"	Str.			12	185																							
A 532	12'-11"	Str.	8	108	4	54																							
A 533	20'-11"	Str.			12	202																							
A 534	19'-1"	Str.			28	557																							
A 535	3'-1"	Bt.			12	39																							
A 536*	17'-10"	Str.			16																								
A 601	8'-4"	Bt.	72	901	138	1727																							
A 602	5'-8"	Bt.	72	613	138	1175																							
A 603	13'-8"	Bt.	32	657	32	657																							
A 604	7'-10"	Bt.	96	1129																									
A 605	7'-6"	Bt.			104	1172																							

**REPLACEMENT BARS**

MARK	NO.	LENGTH	SHAPE
RE 4	1	5'-3"	Bt.
RE 5	2	5'-7"	Str.
RE 6	9	5'-11"	Str.
RE 7	5	6'-8"	Str.
RE 8	1	6'-6"	Str.
RE 9	1	6'-10"	Str.
RE 10	1	7'-5"	Str.
RE 11	3	7'-7"	Str.

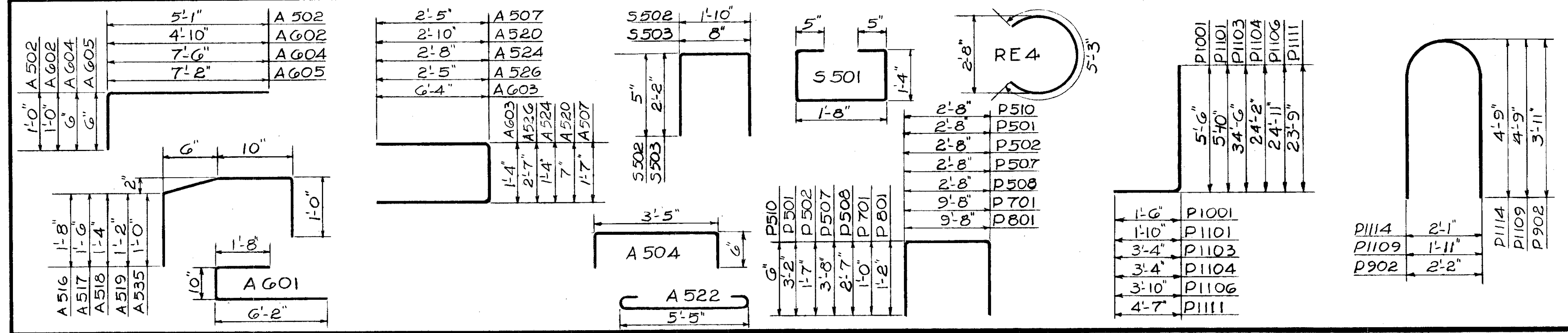
If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

**SPIRAL REINFORCING BARS:** The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap.

The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4. 1/2 closed coils shall be provided at the ends of each spiral unit.

Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

**BENDING DIAGRAMS**



- NOTE**
- Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.
  - Bars marked with single asterisks to be included for payment under Item 5-14 Railing.
  - All dimensions are out to out of bar.
  - The "Length" of bent bars is measured along the center line.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**REINFORCING STEEL LIST**

BRIDGE NO. HAM-25-1599 R&L  
PROPOSED U.S. 25  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 140+58.45 TO  
STA. 142+48.02

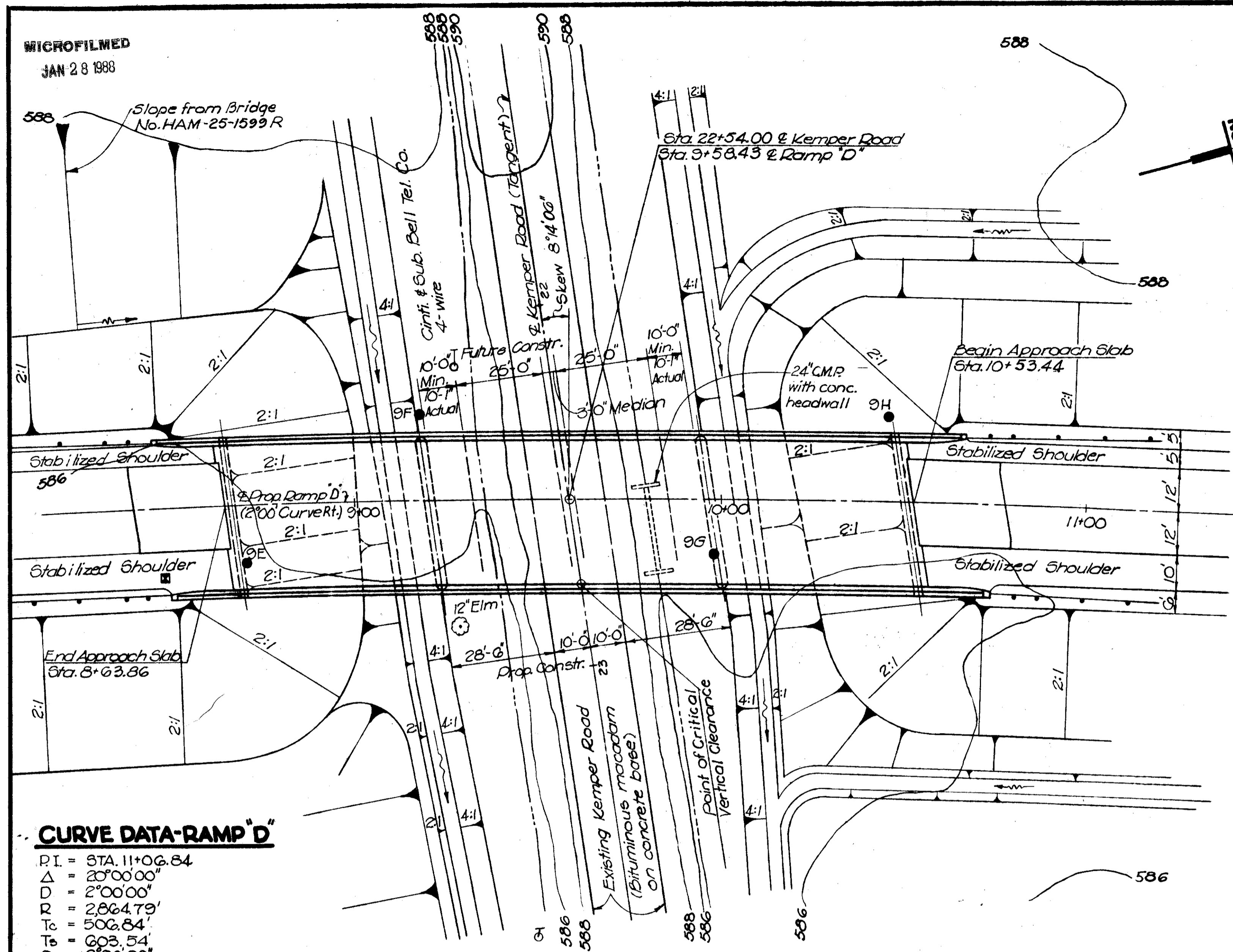
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
RFK	CB5	CB5	PJK	JAD	Oct. 58

MICROFILMED  
JAN 28 1988

FED. NO. DIVISION	STATE	PROJECT	
2	OHIO		

232  
377

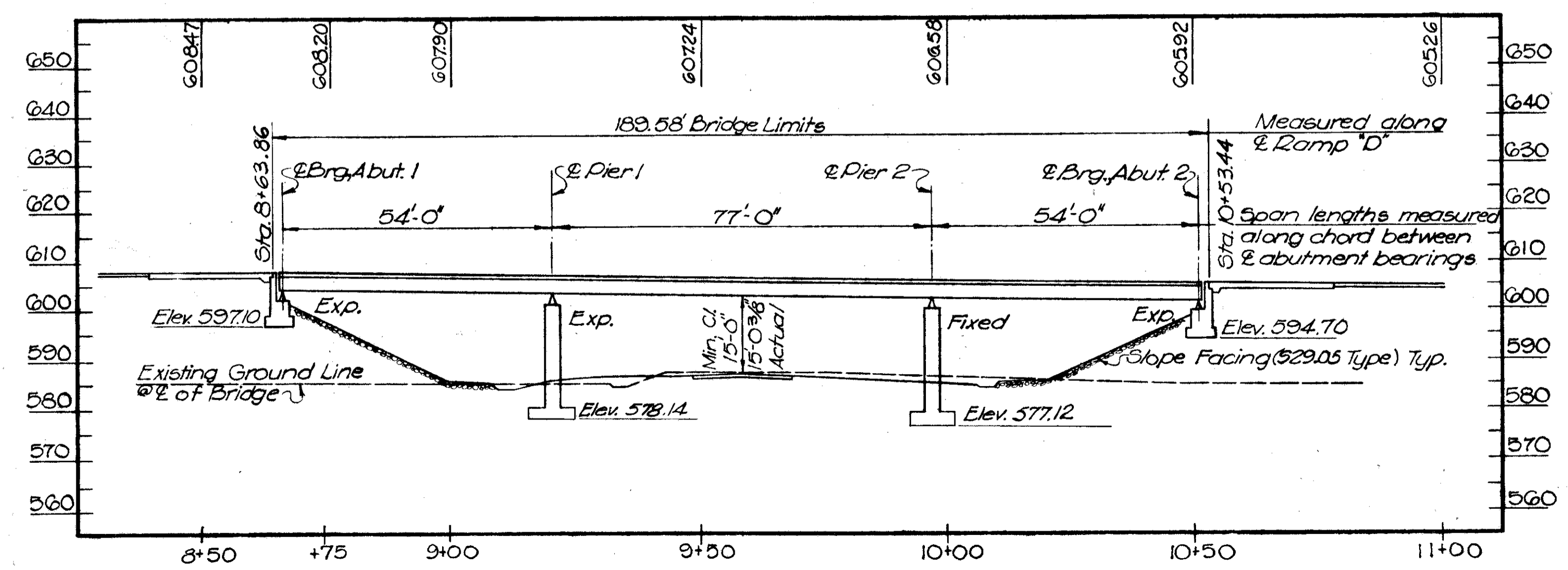
HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02



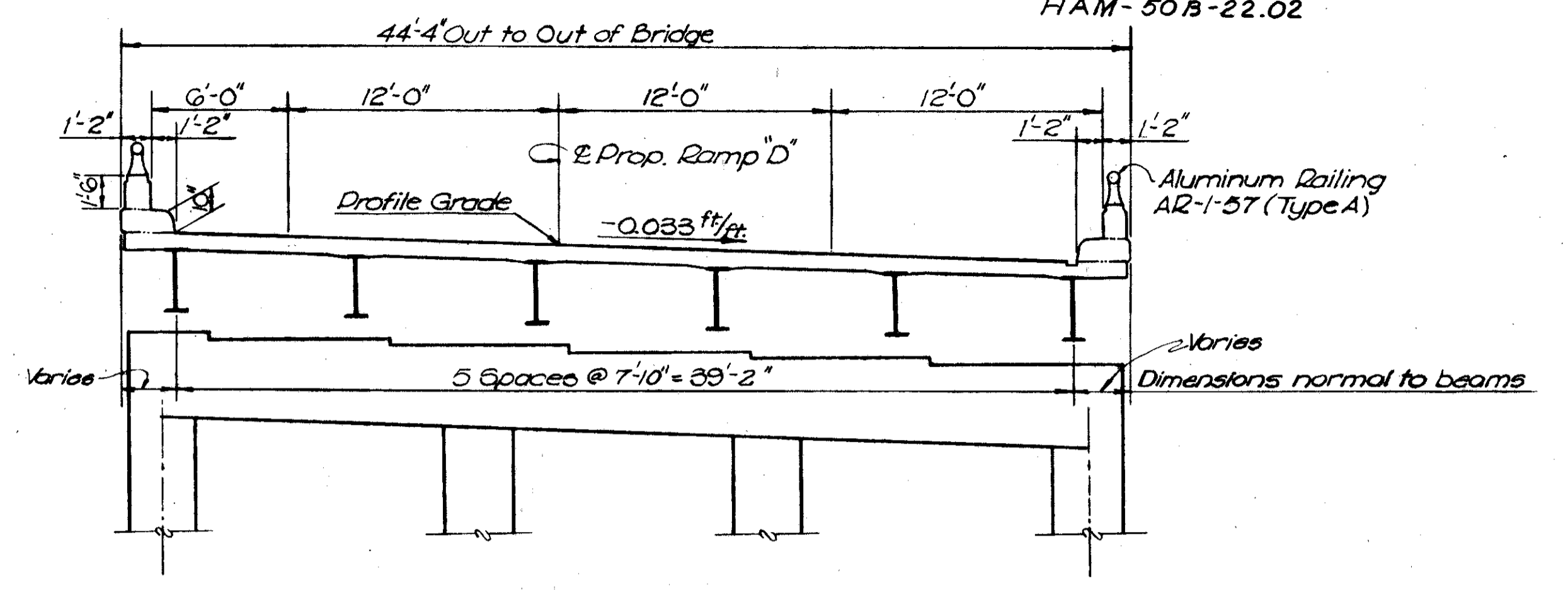
**PLAN**

**CURVE DATA-RAMP 'D'**

PI = STA. 11+06.84  
 $\Delta$  = 20°00'00"  
D = 2°00'00"  
R = 2,864.79'  
Tc = 506.84'  
Ts = 603.54'  
Es = 2°00'00"  
Lc = 900.00'  
Ls = 200.00'



**PROFILE ON CENTER LINE OF BRIDGE**



**SECTION THRU BRIDGE**

CITY OF CINCINNATI BENCH MARK 2080  
ELEVATION 604.504  
Bronze marker in "L" shaped headwall in N.E. quadrant of Kemper and Chester Roads, 392.5' left of Sta. 142+46, Prop. U.S. 25.

**NOTES**

- Symbol denotes drill hole.
  - Symbol denotes settlement hub.
  - See Sheet No. 235 for test boring data.
- Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the Office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.

**PROPOSED STRUCTURE**

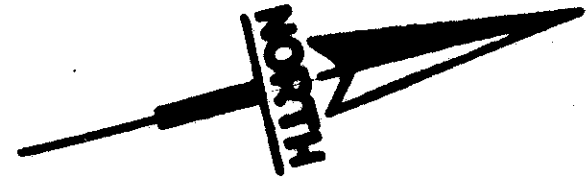
TYPE: Continuous rolled steel beam with reinforced concrete deck and substructure.  
SPANS: 54'-0"; 77'-0"; 54'-0"  
ROADWAY: 42'-0" face to face of parapets.  
LOAD FREQUENCY: CF 2000 (1957) Adequate for AASHTO alternate loading.  
SKEW: 8°14'06" R.F.  
WEARING SURFACE: 1" monolithic concrete.  
APPROACH SLABS: A6-1-54 (25' long)  
ALIGNMENT: 2°00'00" Curve Rt.  
SUPERELEVATION: 0.033 f/ft.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SITE PLAN**

PROPOSED RAMP 'D'  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 8+63.86 TO  
STA. 10+53.44

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	K.L.	J.D.B.	C.B./L.F.R.	R.J.S.	



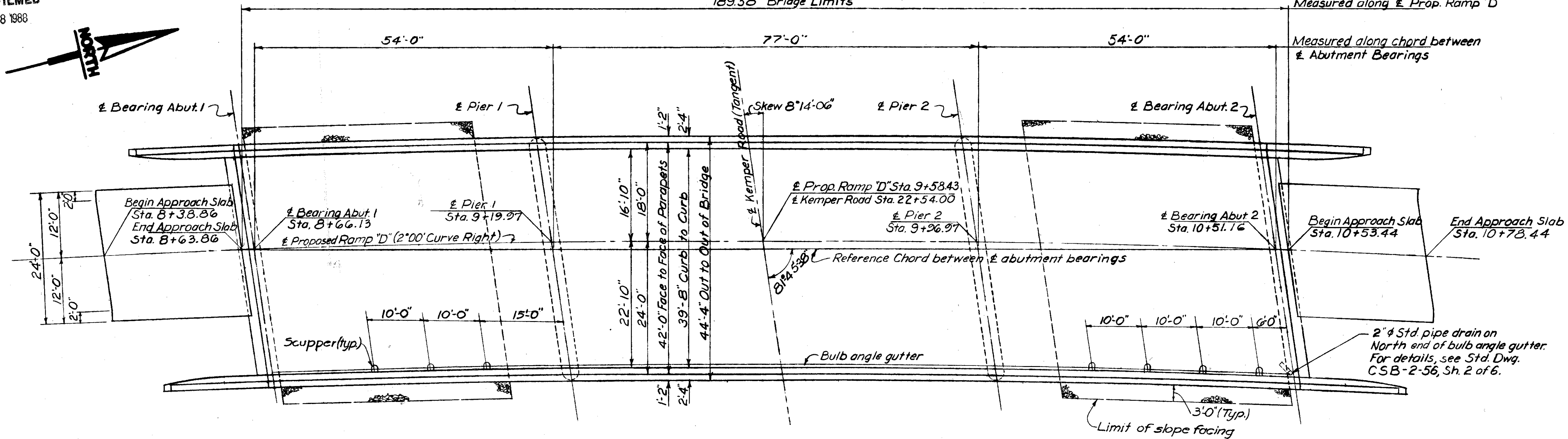
189.58' Bridge Limits

Measured along & Prop. Ramp "D"

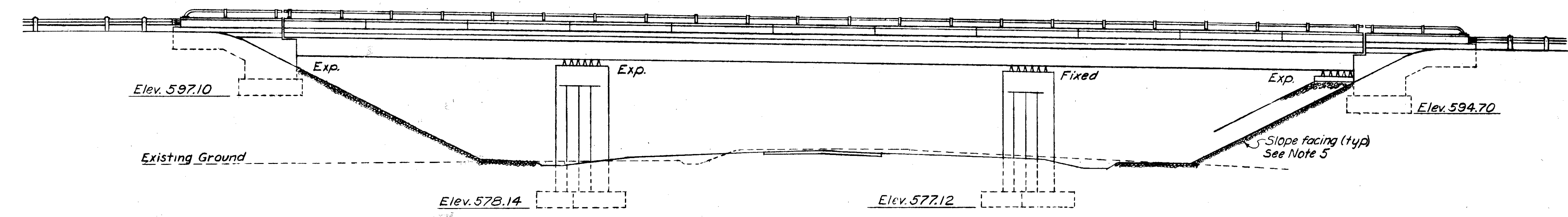
FED. NO. DIVISION	STATE	PROJECT
2	OHIO	

253  
517

HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02

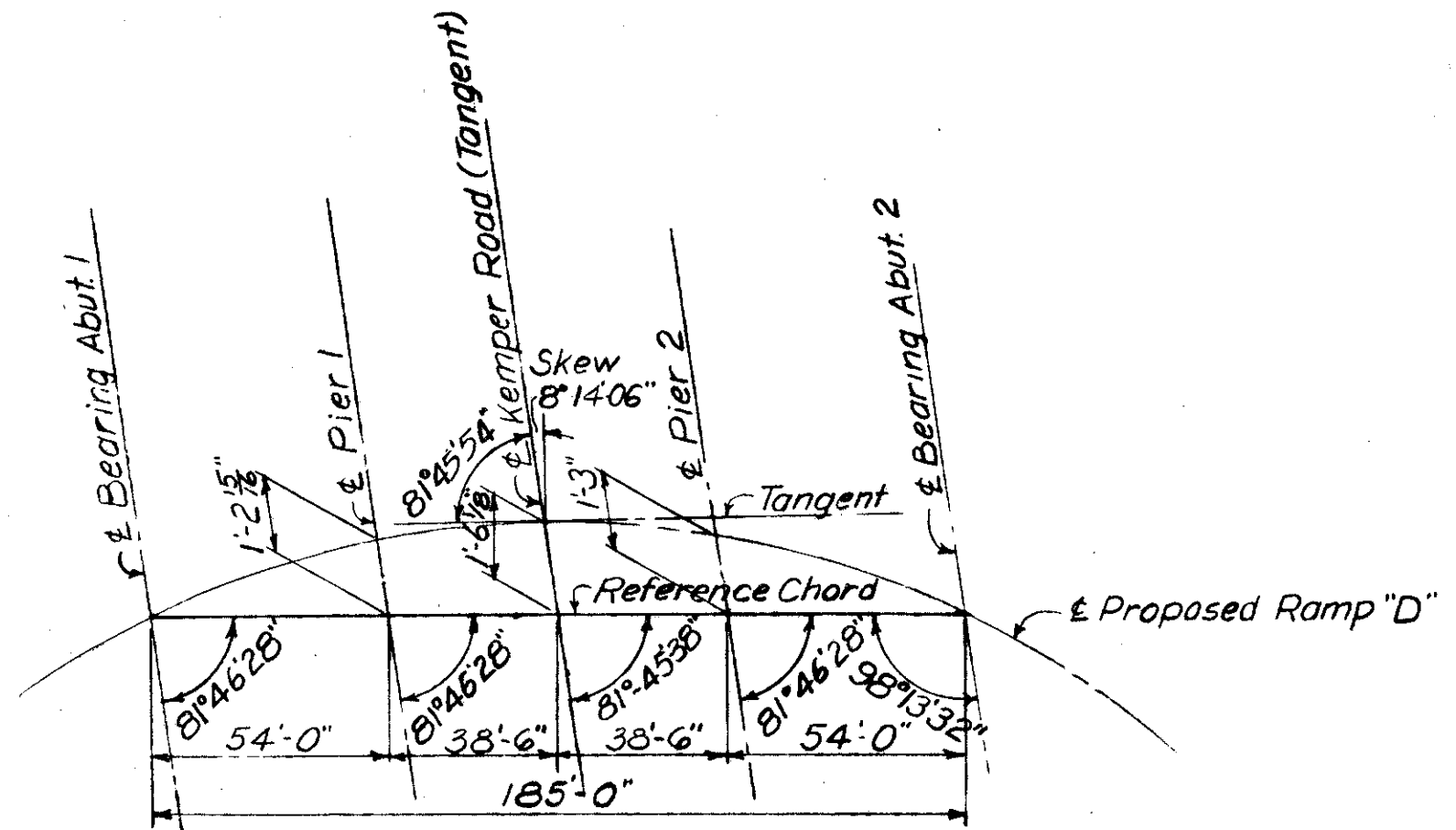


PLAN



ELEVATION

PAVEMENT ELEVATIONS					
STATION	PROFILE GRADE	CURB 16'-10" LEFT OF BRIDGE	CURB 22'-10" RIGHT OF BRIDGE	EDGE OF PAVEMENT 12'-0" LEFT OF BRIDGE	EDGE OF PAVEMENT 12'-0" RIGHT OF BRIDGE
8+25	608.70			609.09	608.30
8+50	608.47			608.86	608.07
8+75	608.20	608.76	607.45		
9+00	607.90	608.46	607.15		
9+25	607.57	608.13	606.82		
9+50	607.24	607.80	606.49		
9+75	606.91	607.47	606.16		
10+00	606.58	607.14	605.83		
10+25	606.25	606.81	605.50		
10+50	605.92			606.32	605.52
10+75	605.59			605.99	605.19



KEY PLAN

NOTES

1. Scupper spacing to be measured along curb side of bulb angle gutter.
2. All abutment and pier centerlines are parallel.
3. For scupper details, see Std. Dwg. CSB-2-56 Sh.3 of 6.
4. For GENERAL NOTES and ESTIMATED QUANTITIES, see Sh. 234.
5. Slope facing (S 29.05 Type) shall be provided under the structure at both abutments. The facing shall be 12" thick and shall extend from the face of the abutment down to the toe of the slope, over to the ditch, and transversely to 3 feet outside the edge of the superstructure.
6. For railing details, See Standard Drawing AR-1-57.
7. For approach slab details, see Std. Dwg. AS-1-54.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

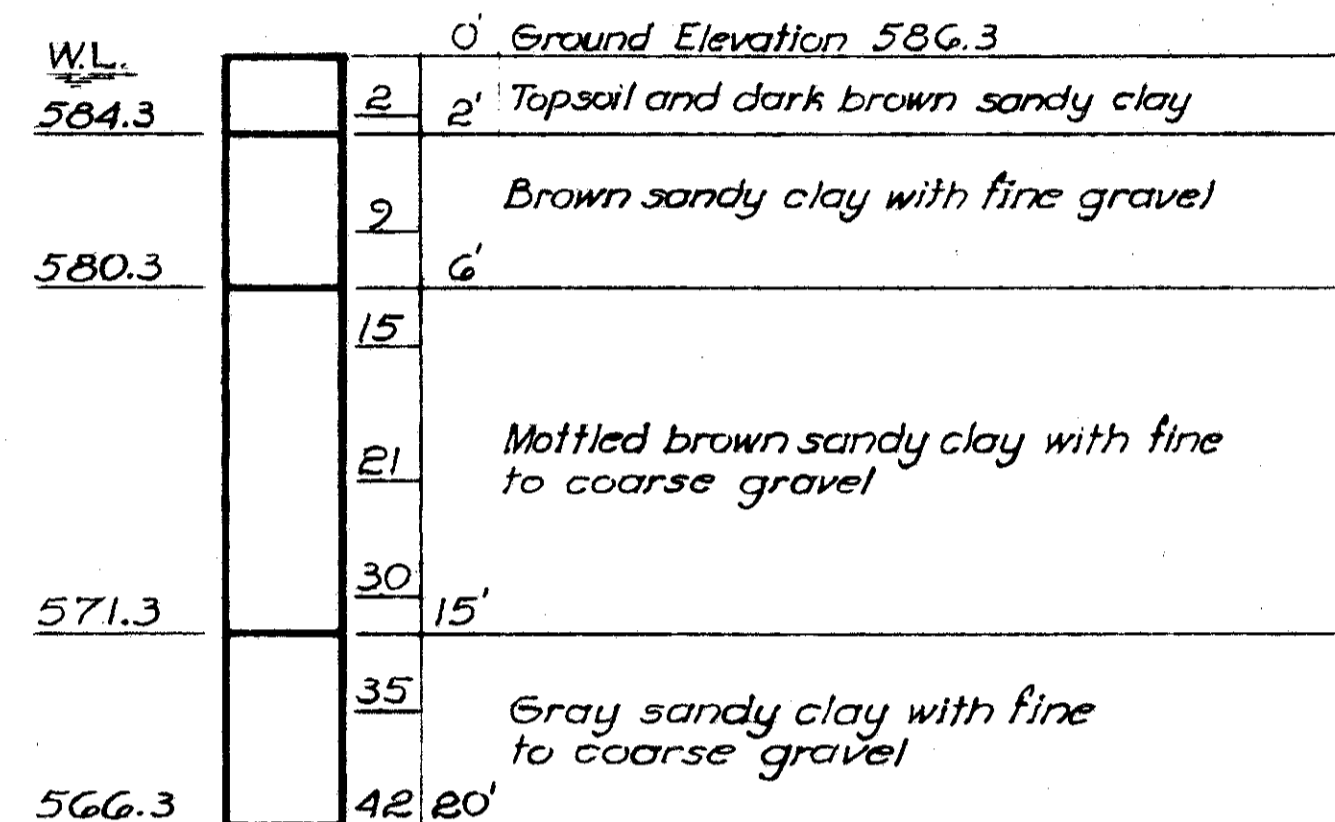
GENERAL PLAN & ELEVATION

PROPOSED RAMP "D"  
OVER KEMPER ROAD  
HAMILTON COUNTY STA. 8+63.86 TO  
STA. 10+53.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JPF	DJF	DJF	LLL	JAD	Oct 58	

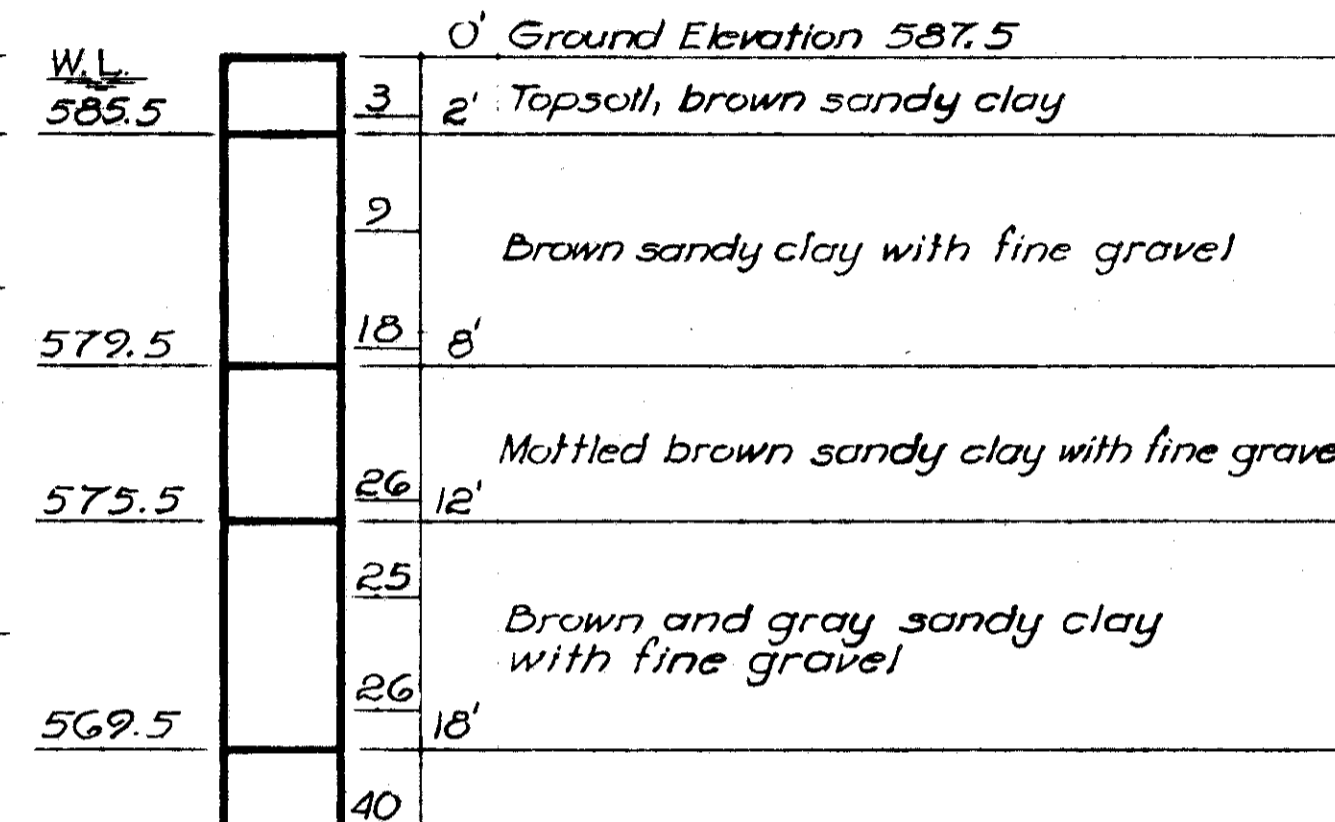






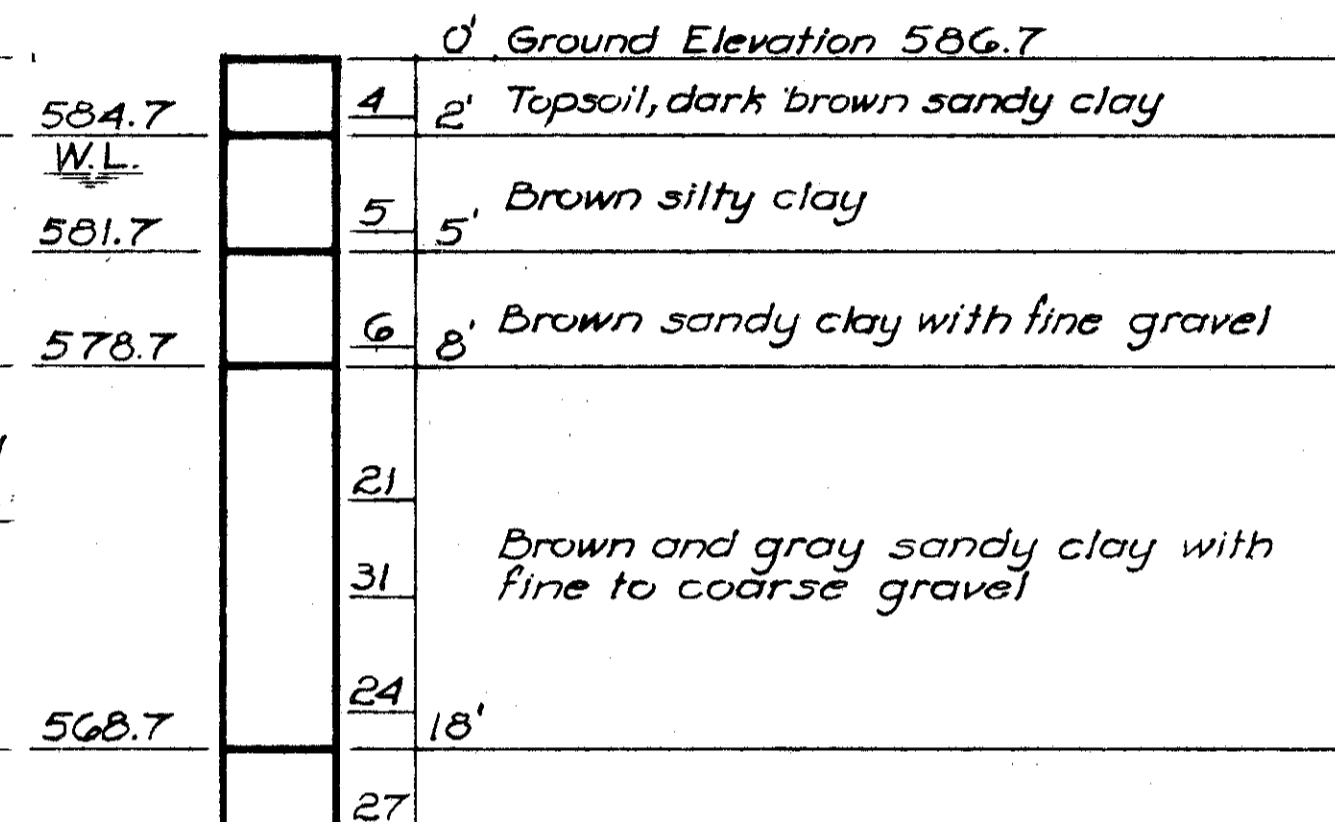
Boring completed

BORING 9 E



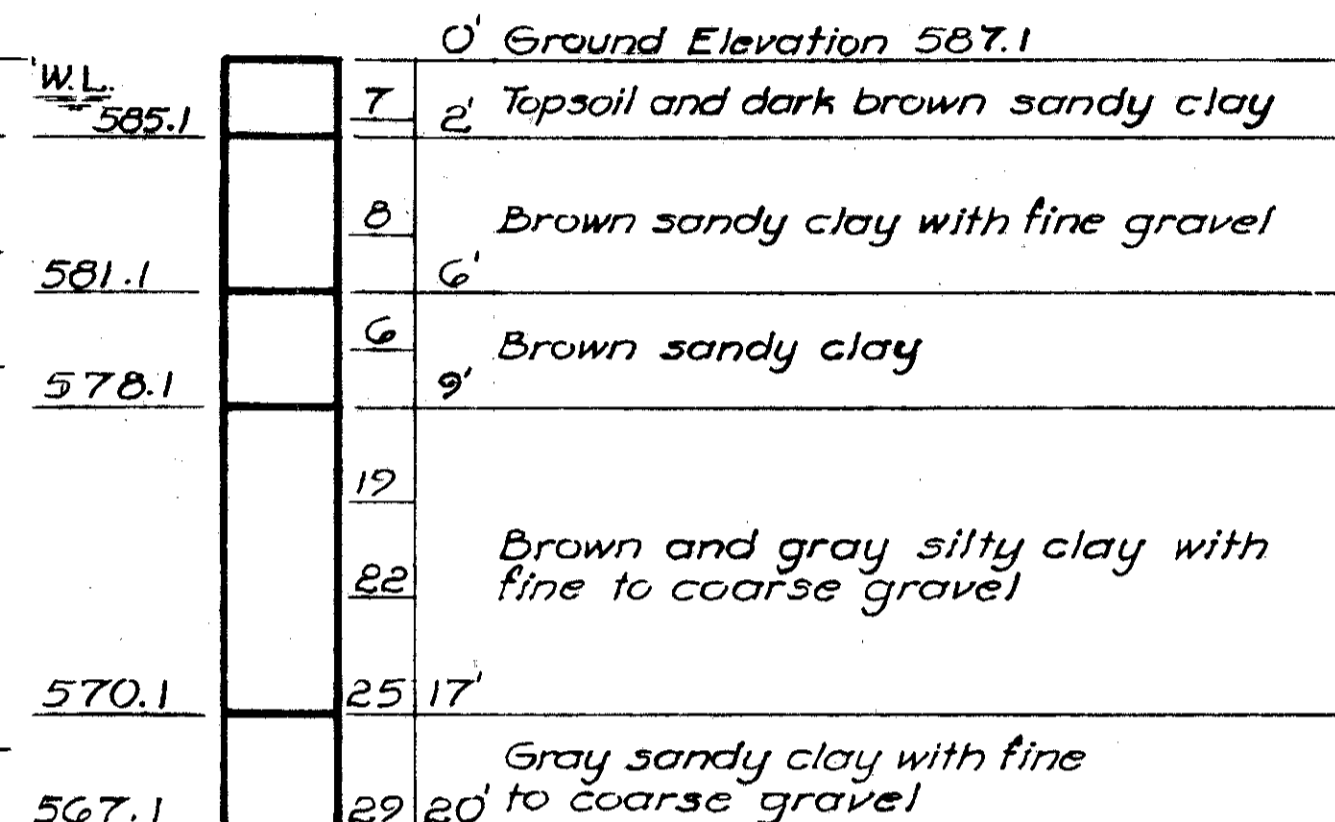
Boring completed

BORING 9 F



Boring completed

BORING 9 G



Boring completed

BORING 9 H

**NOTES**

W.L. - Water Level in bore hole 24 hours after completion.

Figures in right hand column indicate number of blows required to drive 2" O.D. sampling pipe one foot, using 140 lb. weight falling 30 inches.

Borings taken during January 1958.

See Sheet 232 for location of borings.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO	
<b>BORINGS</b> PROPOSED RAMP "D" OVER KEMPER ROAD	
HAMILTON COUNTY	STA. 8+63.86 TO STA. 10+53.44
DESIGNED CAW	DRAWN CBS
TRACED CBS	CHECKED RDW
REVIEWED J.A.D.	DATE Oct '58
REVISED	

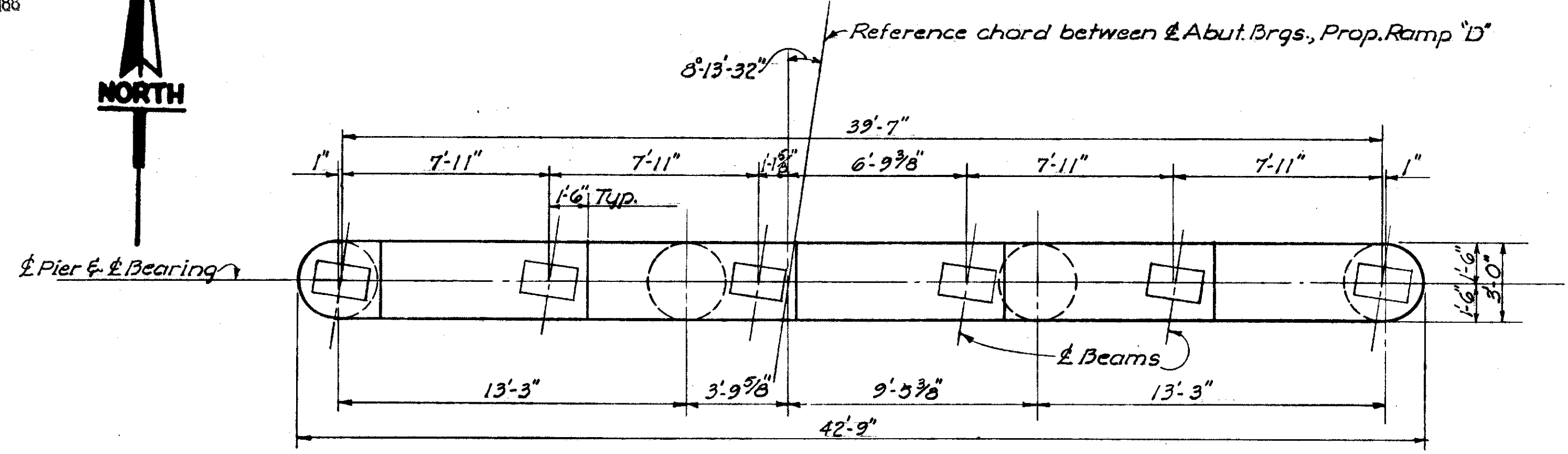
MICROFILMED  
JAN 28 1988



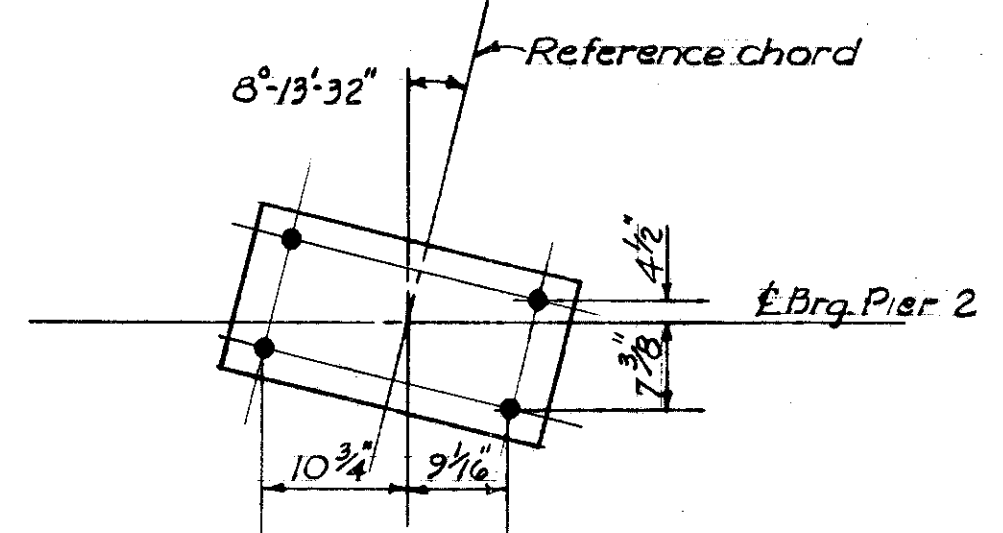
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

236  
317

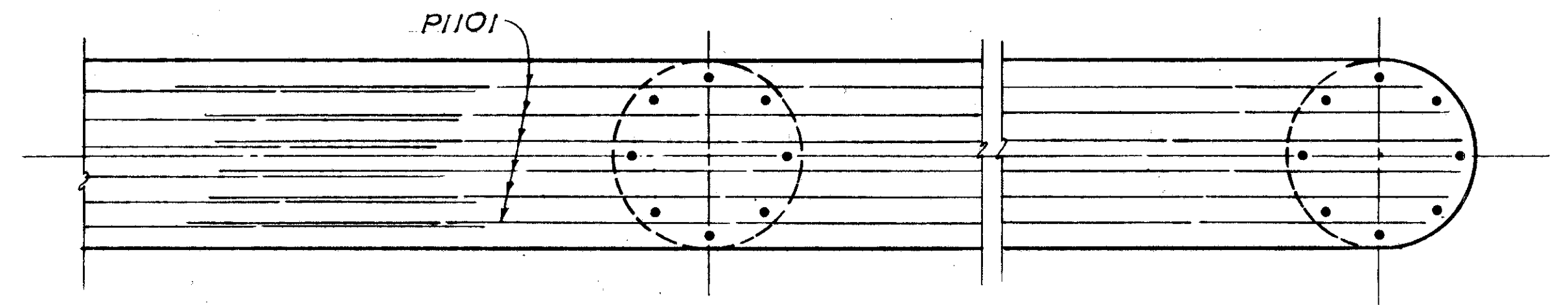
HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50.B-22.02



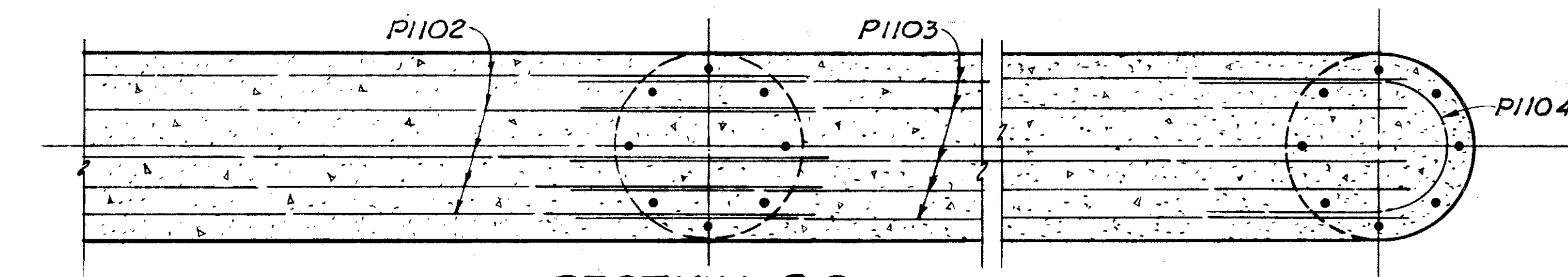
PLAN



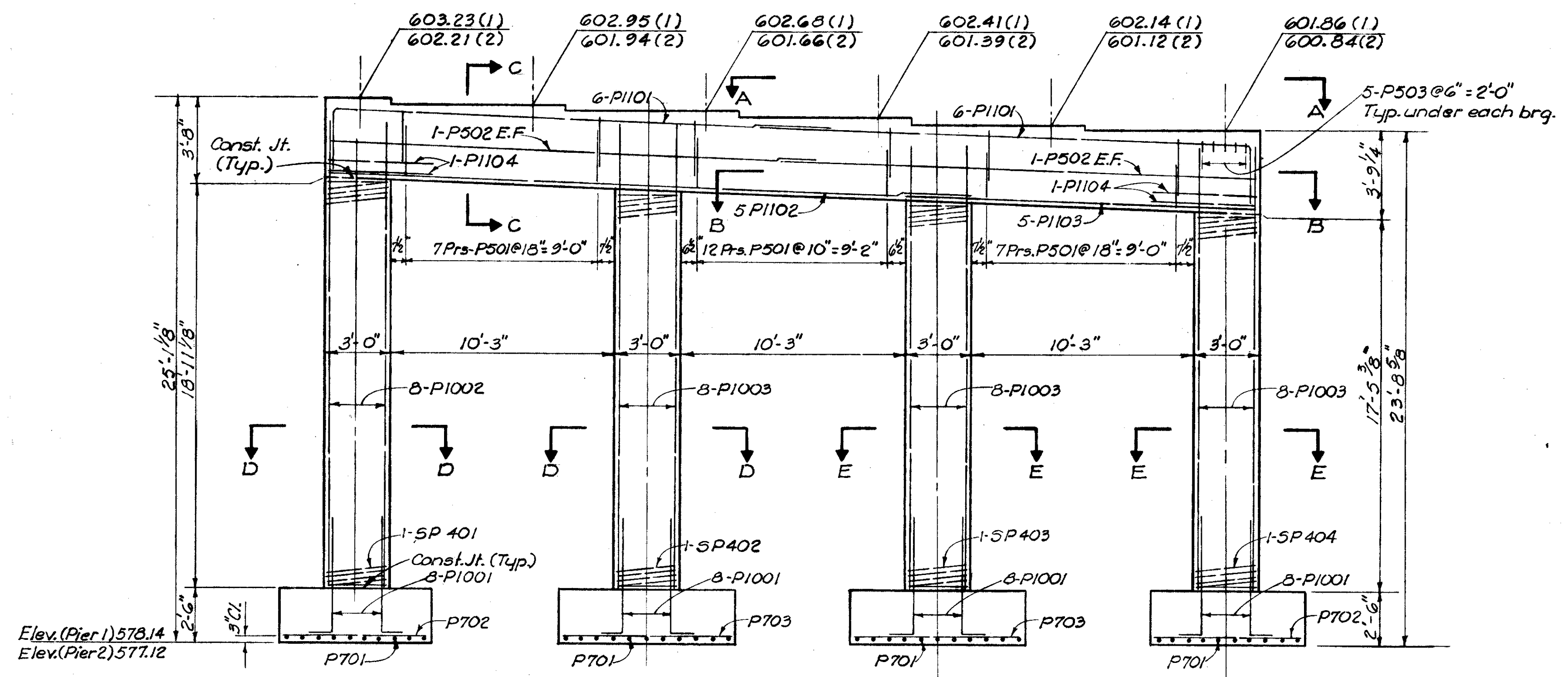
TYPICAL ANCHOR BOLT LAYOUT  
(PIER 2)



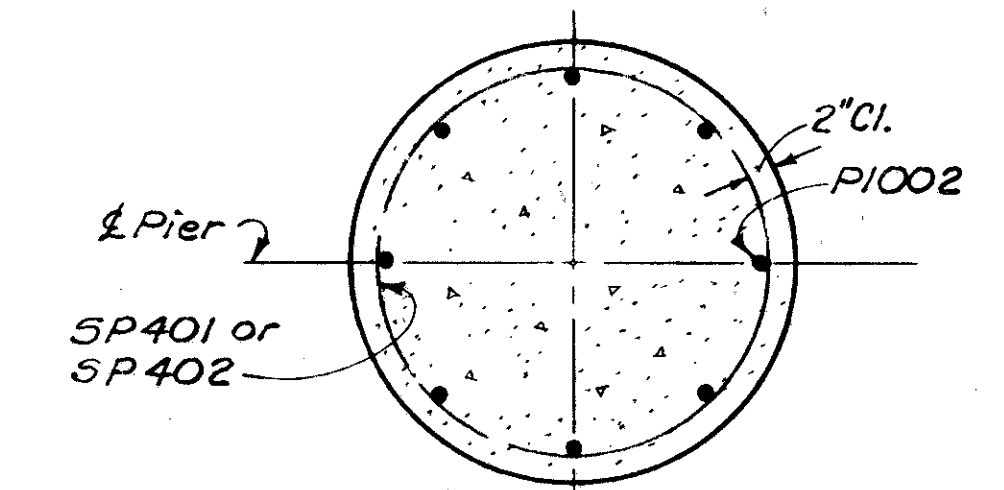
SECTION A-A



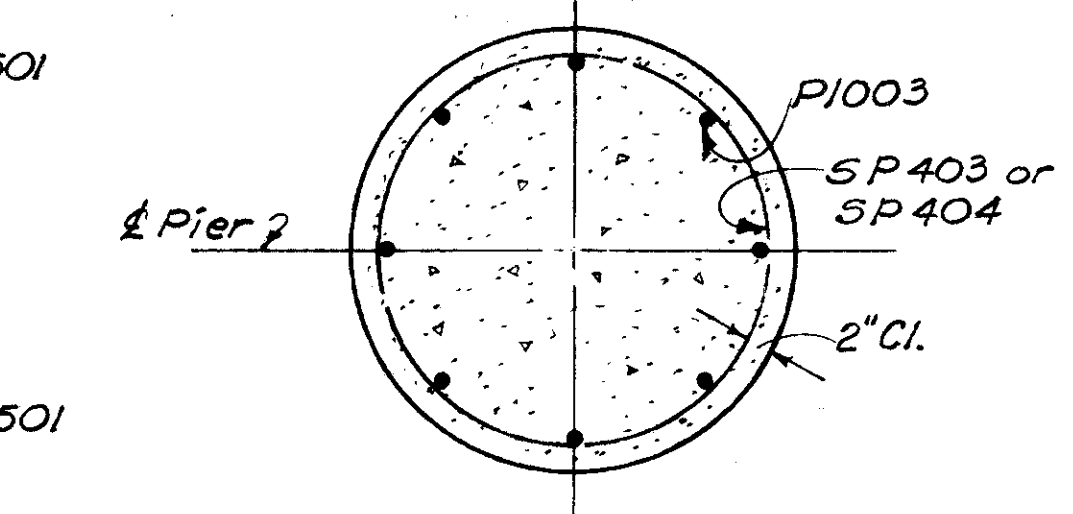
SECTION B-B



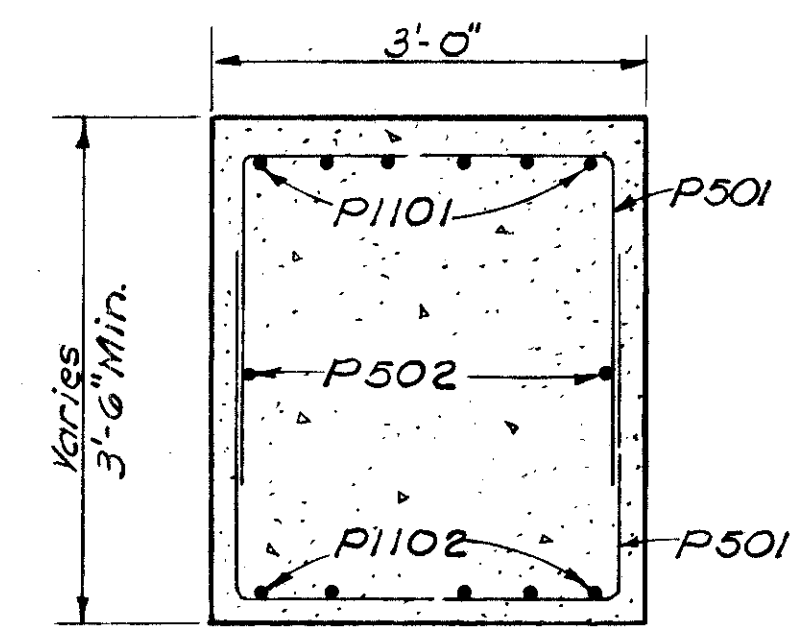
ELEVATION



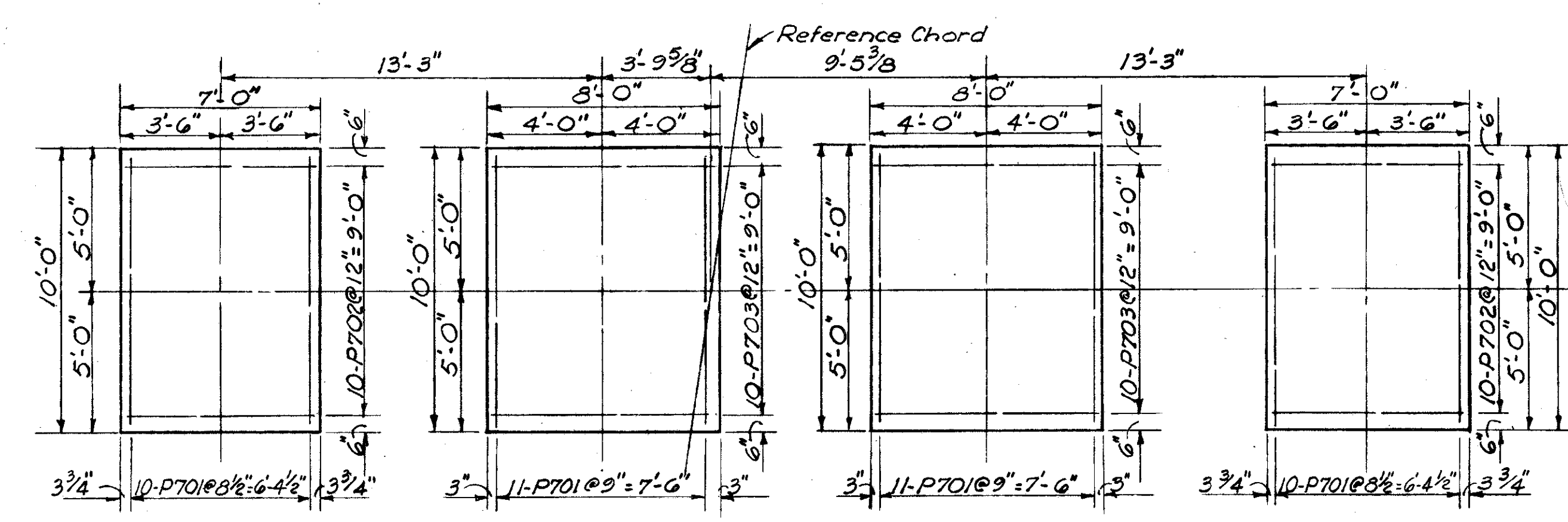
SECTION D-D



SECTION E-E



SECTION C-C



FOOTING PLAN

- NOTES:
1. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bolt holes.
  2. Place dowels in footing to insure correct spacing of main column steel.
  3. For reinforcing steel list see Sh. 241.
  4. E. F. denotes each face.
  5. For location of piers see Key Plan, Sh. 233.

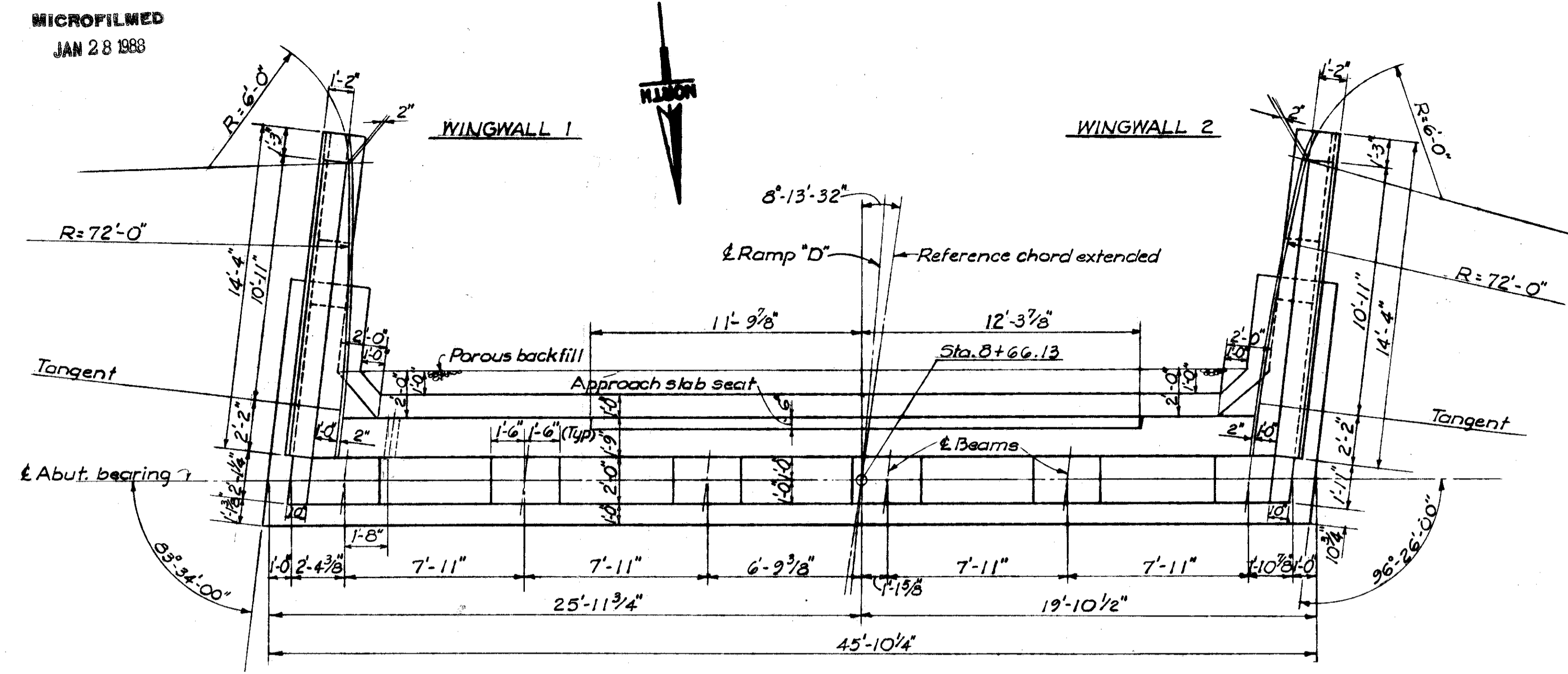
VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**PIERS**  
PROPOSED RAMP "D"  
OVER KEMPER ROAD

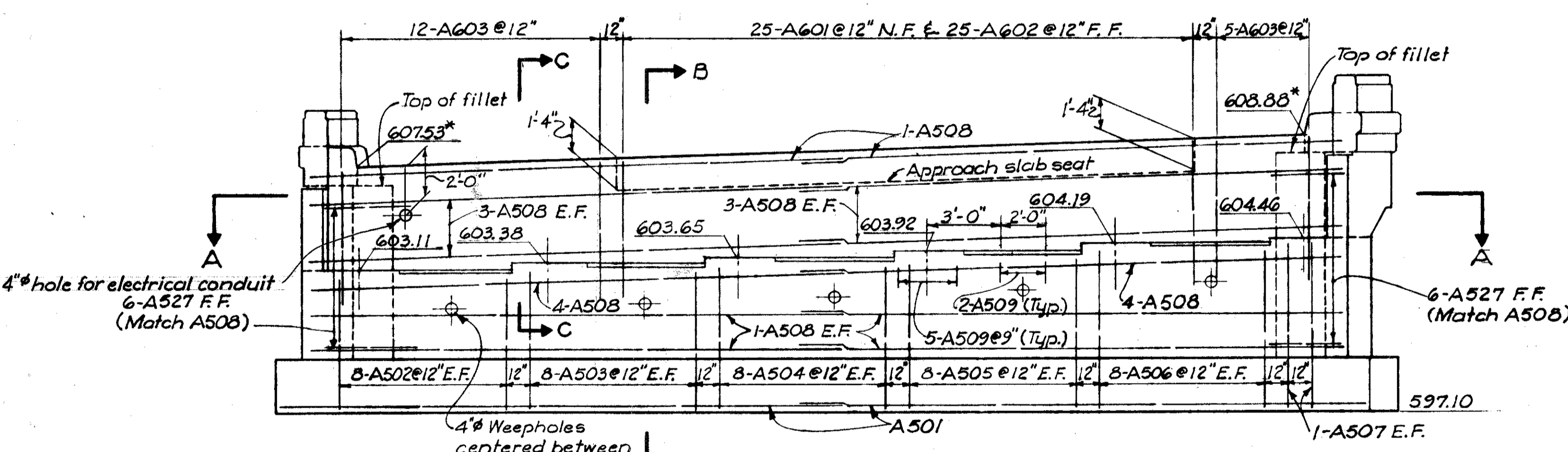
HAMILTON COUNTY STA. 8+63.86 TO  
STA. 10+53.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SHM	RPC	KL	JDB	J.A.D.	Oct. 58	

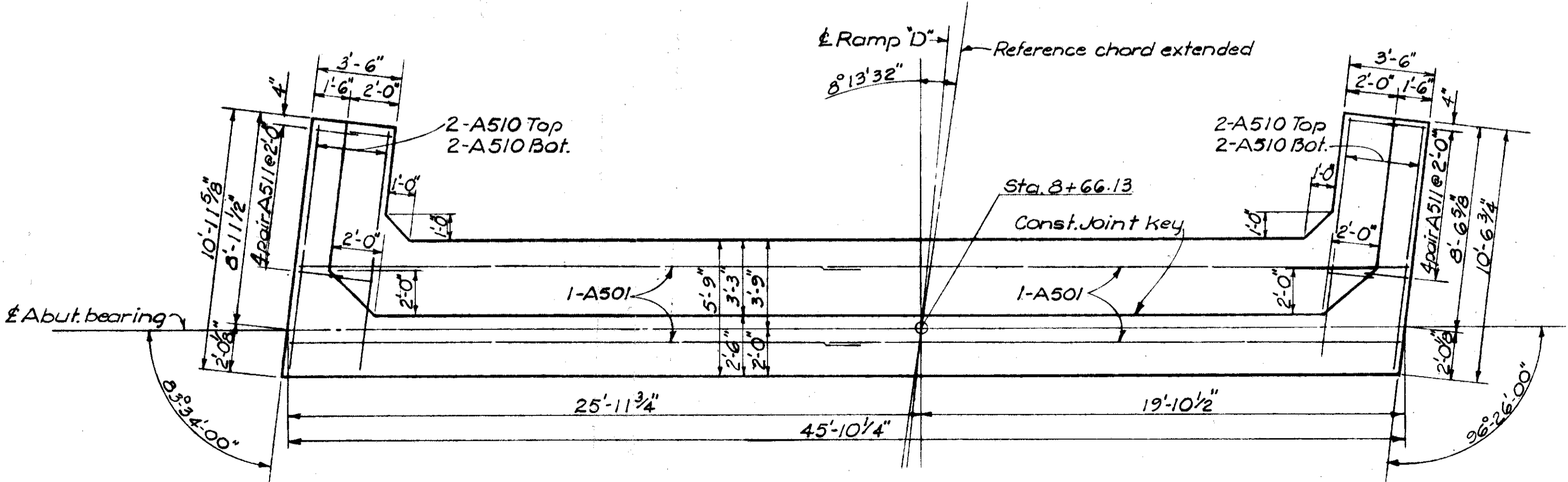
HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02



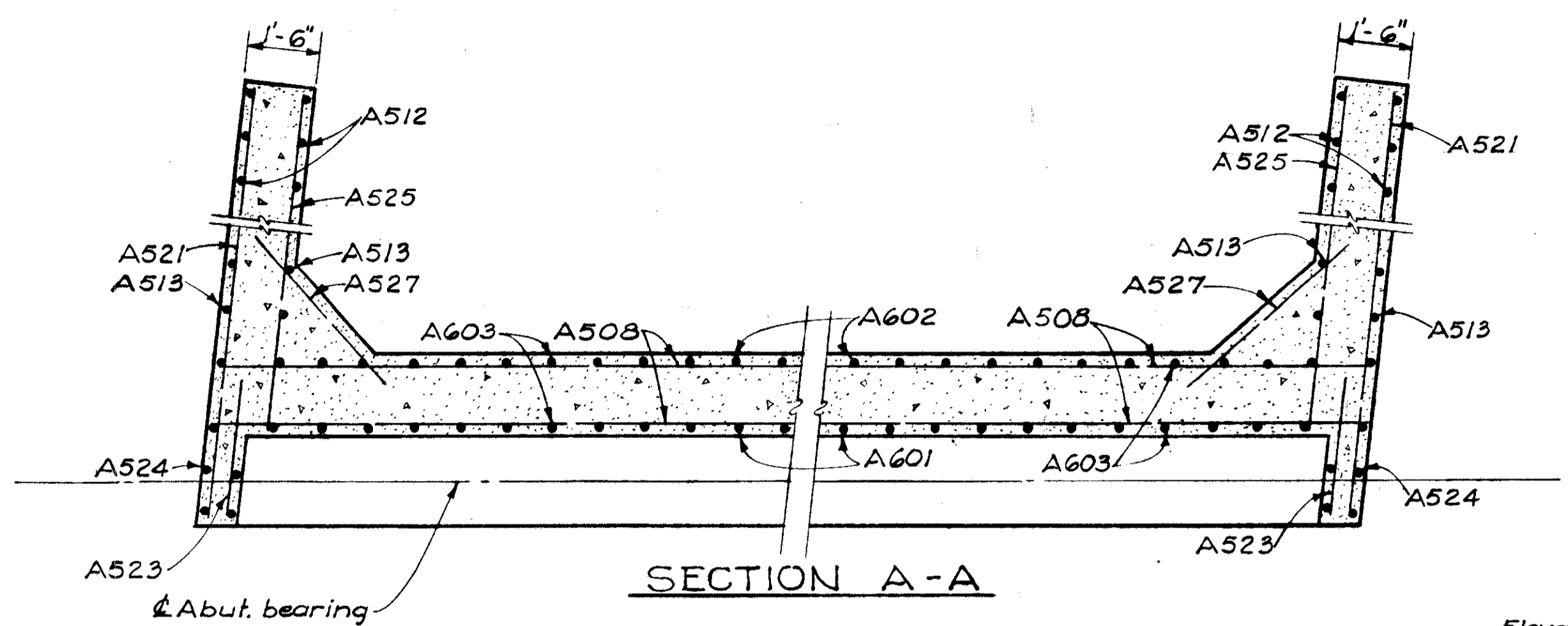
PLAN \*See Section B-B



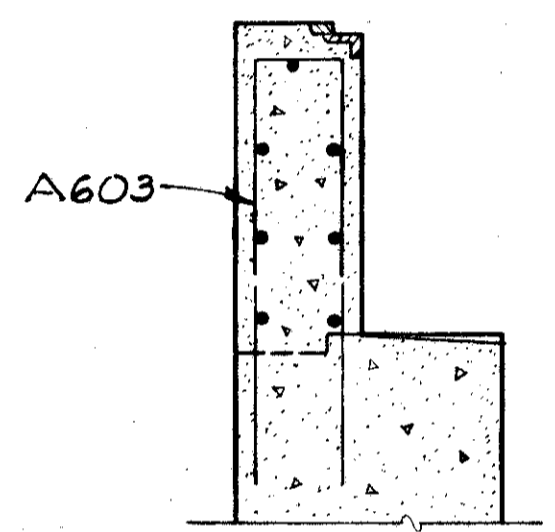
ELEVATION



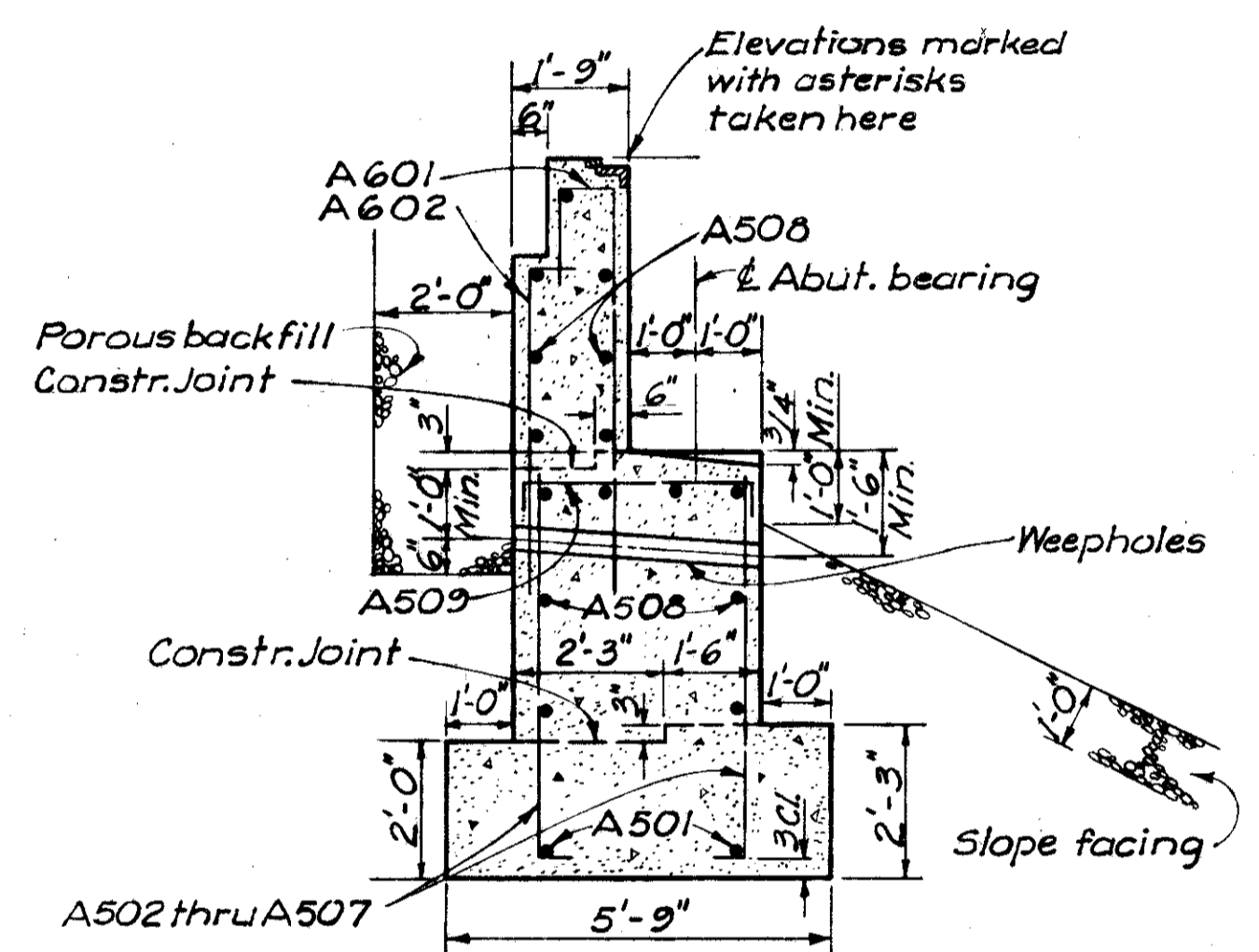
FOOTING PLAN



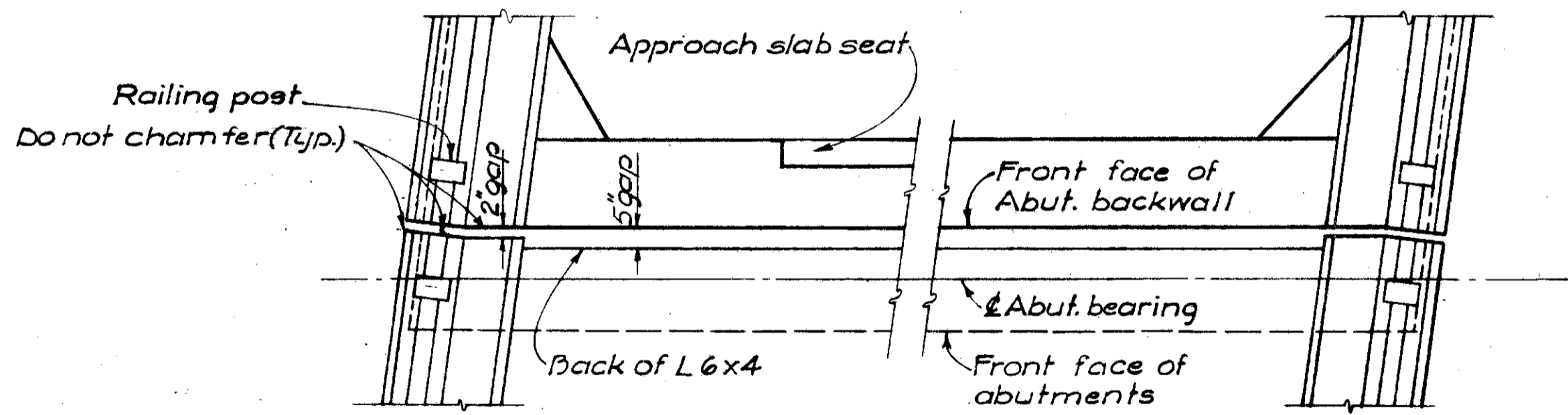
SECTION A-A



SECTION C-C



SECTION B-B



PART PLAN AT END

- NOTES:
- Designations used are as follows:  
F.F. = Far Face  
N.F. = Near Face  
E.F. = Each Face
  - For reinforcing steel list, see Sheet 241.
  - Parapet concrete and A526 bars to be included with Item S-14 for payment.
  - POROUS BACKFILL: 2 ft. thick, full length of the abutment shall extend up to the underside of the approach slab or paved shoulder.
  - For Approach Slab Details, see Std. Dwg. AS-1-54

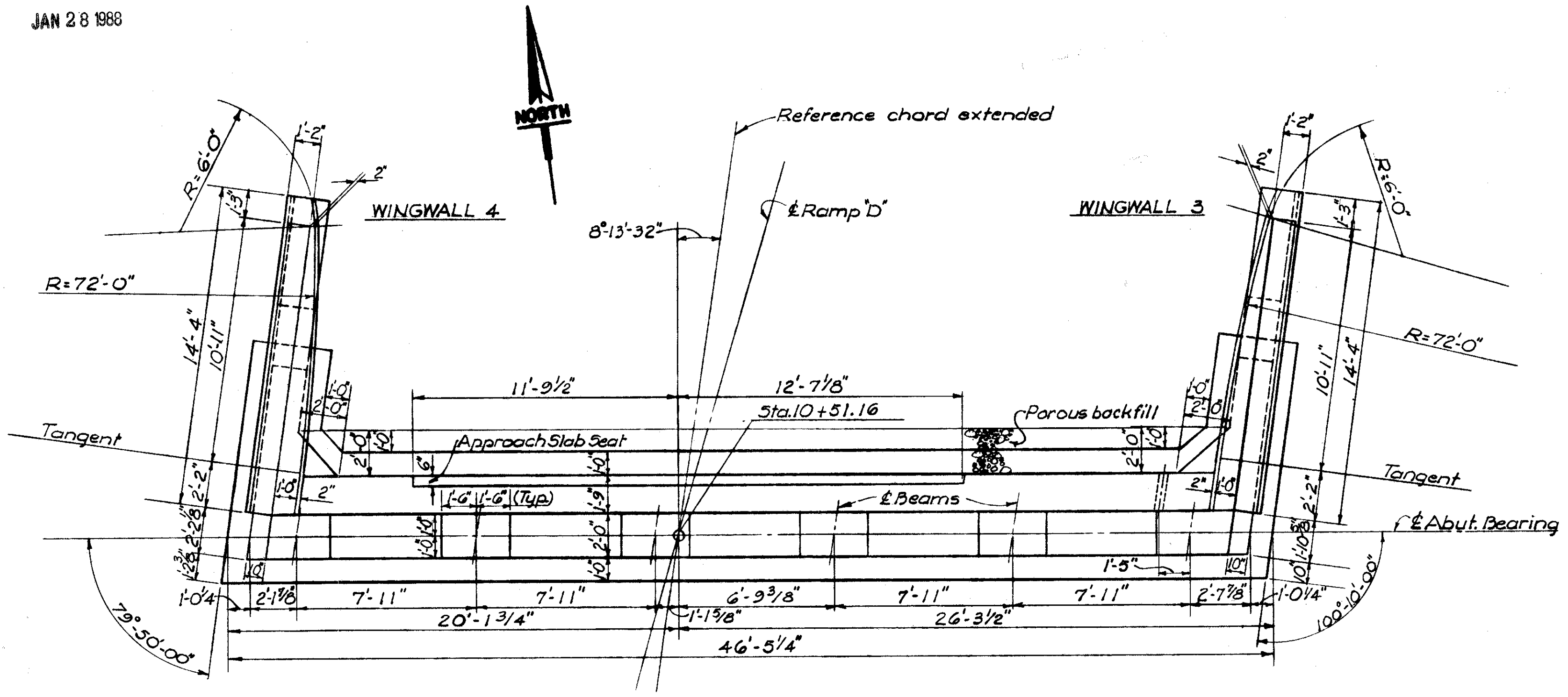
Work Sheets 237 & 238 together

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

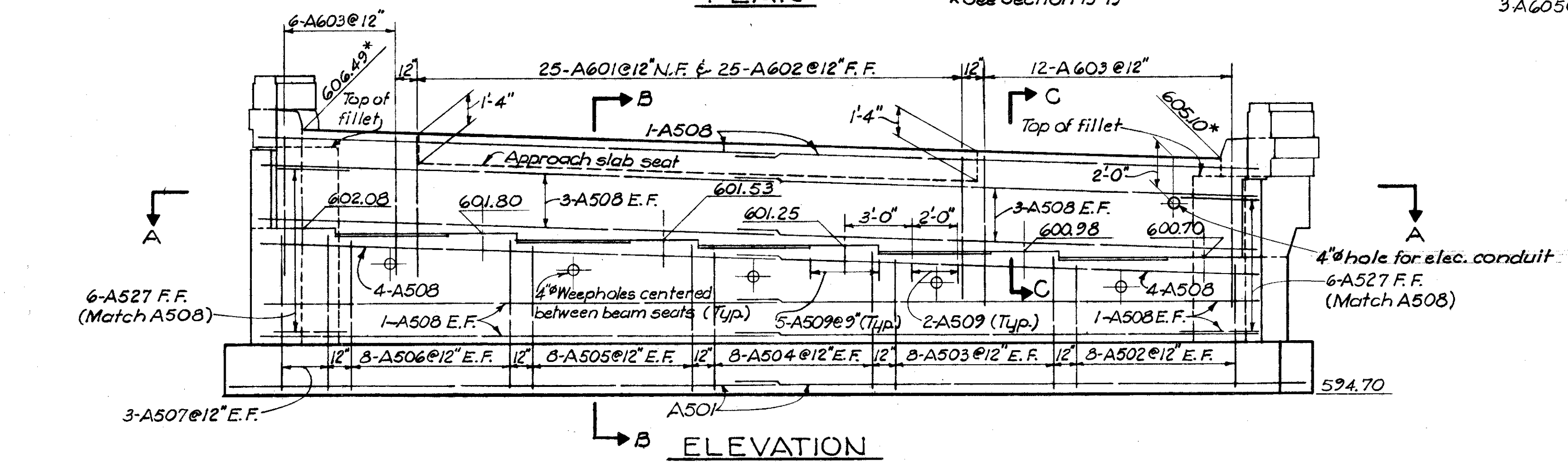
**ABUTMENT I**  
PROPOSED RAMP "D"  
OVER KEMPER ROAD

HAMILTON COUNTY STA. 8+63.86 TO  
STA. 10+53.44

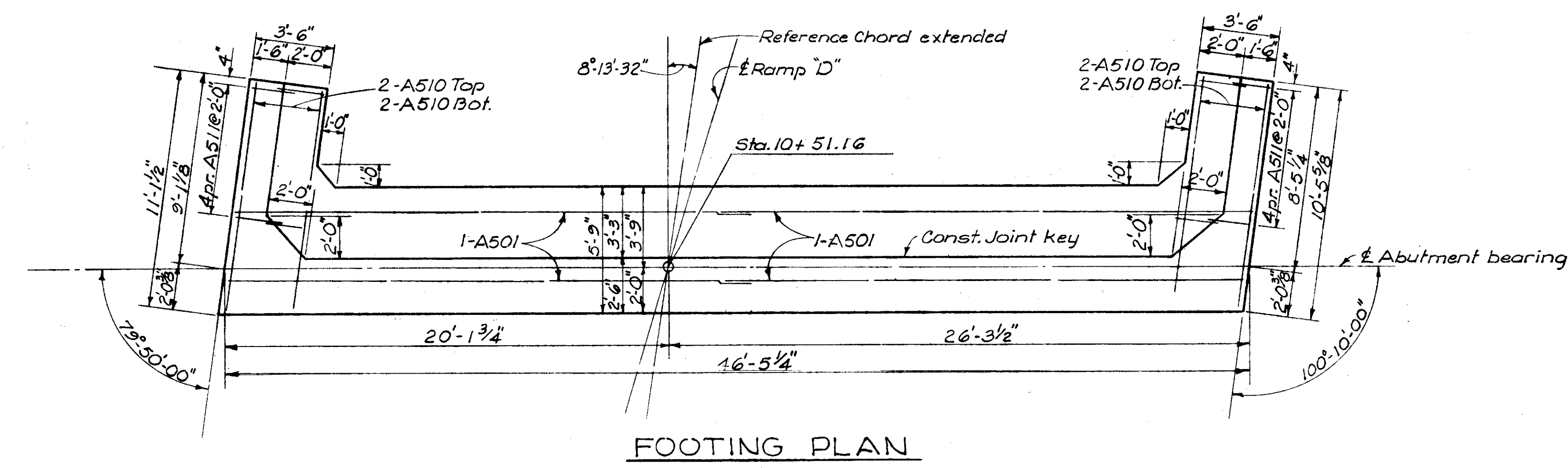
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
S.H.M.	S.H.M.	KL.	R.J.S.	J.A.D.	Oct. 58



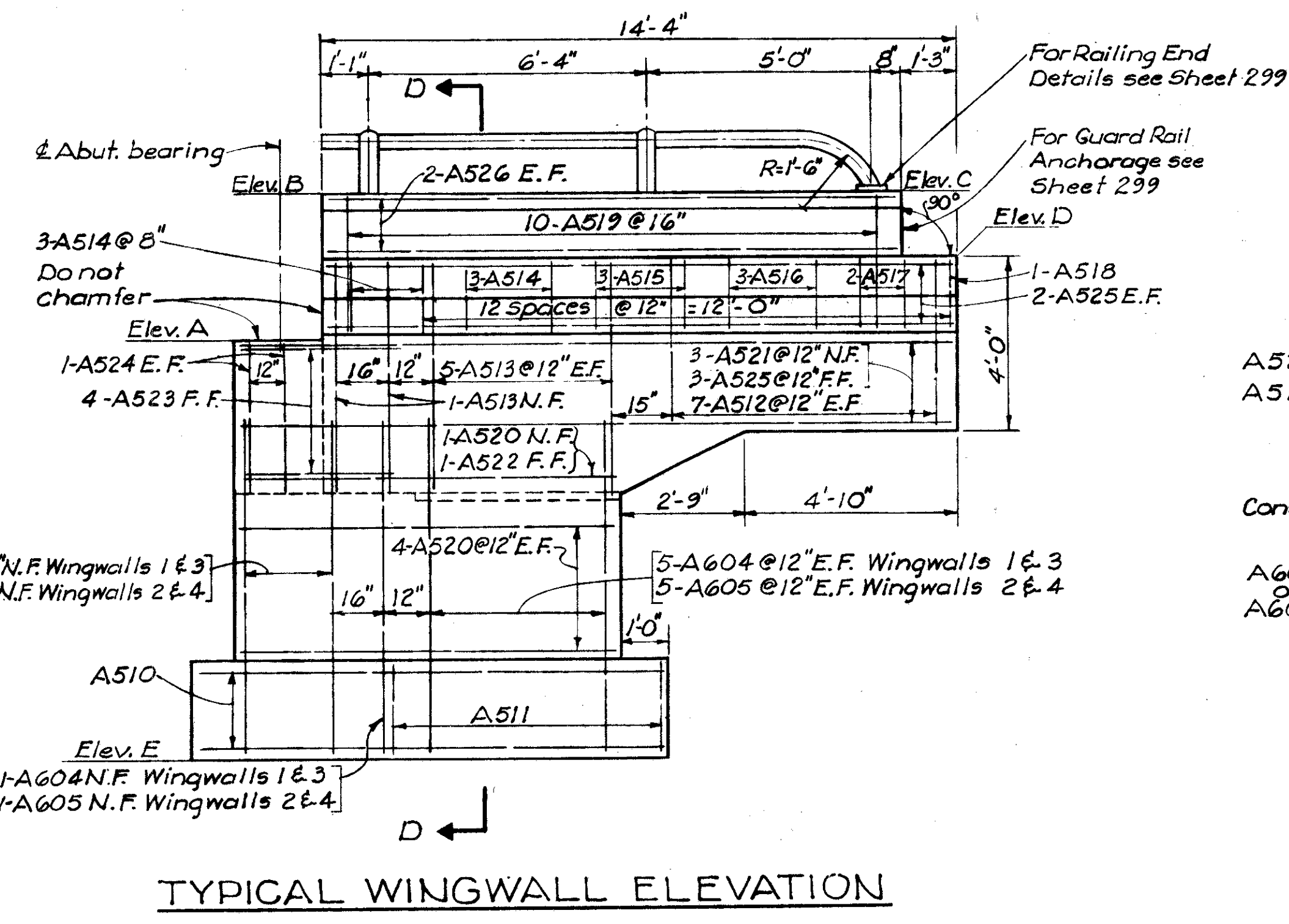
PLAN \*See Section B-B



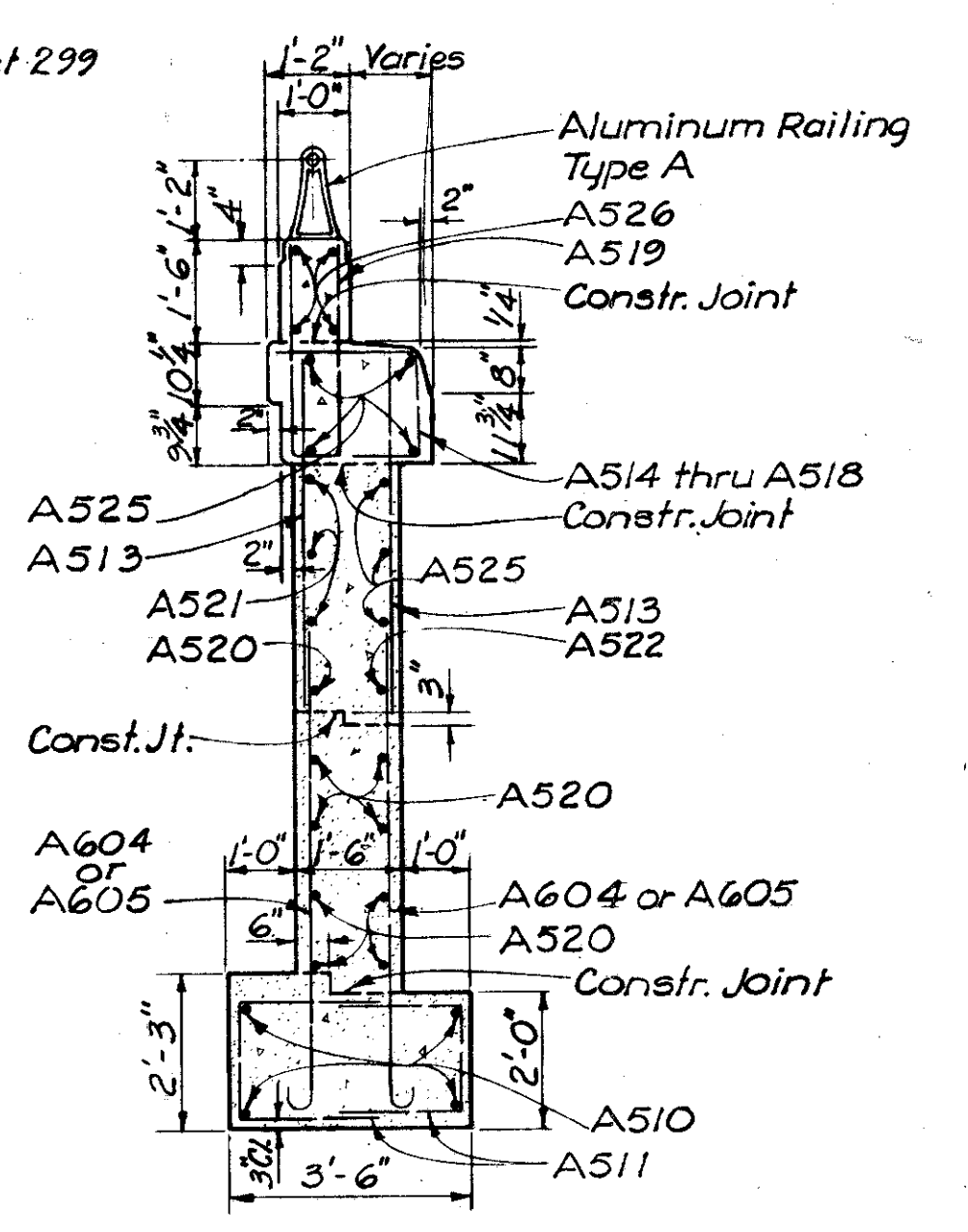
ELEVATION



FOOTING PLAN



TYPICAL WINGWALL ELEVATION



SECTION D-D

POINT	W. W. 1	W. W. 2	W. W. 3	W. W. 4
A	606.61	607.97	604.19	605.59
B	609.87	611.24	607.43	608.85
C	610.01	611.38	607.26	608.68
D	608.52	609.89	605.74	607.16
E	597.10	597.10	594.70	594.70

NOTE: See Sheet 231 for notes and additional Details

Work Sheets 237 & 238 together

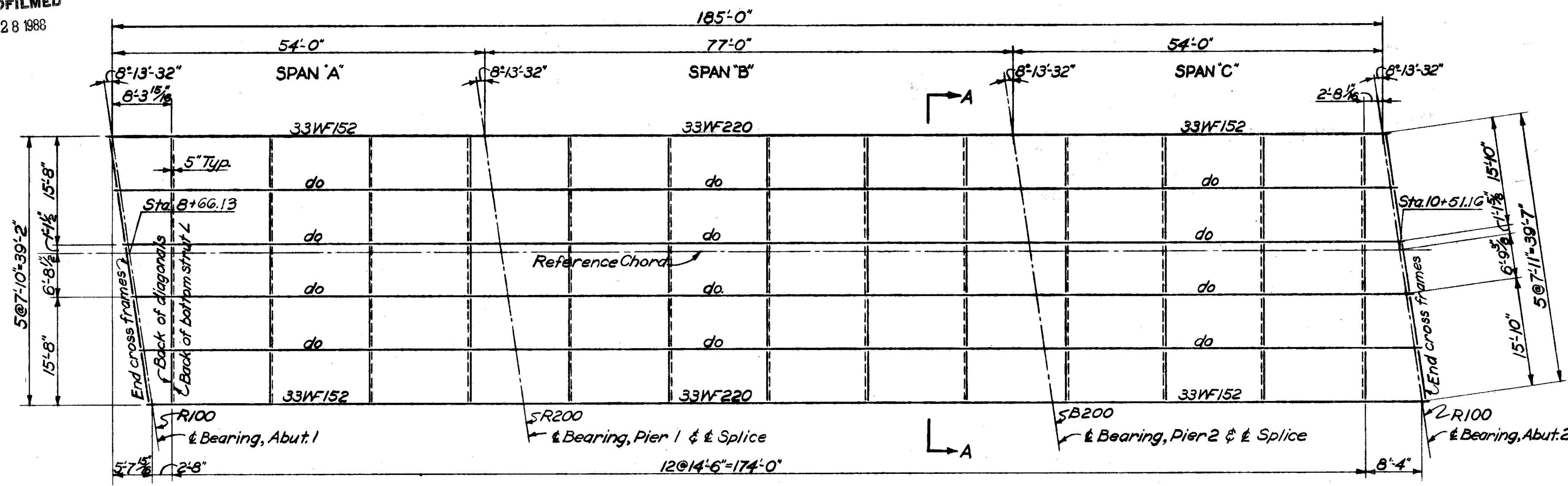
VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS CINCINNATI		ARCHITECTS CHICAGO	
<b>ABUTMENT 2</b>			
PROPOSED RAMP 'D' OVER KEMPER ROAD			
HAMILTON COUNTY		STA. 8+63.86 To STA. 10+53.44	
DESIGNED S.H.M.	DRAWN S.H.M.	TRACED K.L.	CHECKED R.J.S.
REVIEWED DATE I.A.D. Oct. 58		REVISOR	

MICROFILMED  
JAN 28 1988

FED. RD. DISTRICT	STATE	PROJECT	
2	OHIO		

239  
317

HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02



**FRAMING PLAN**

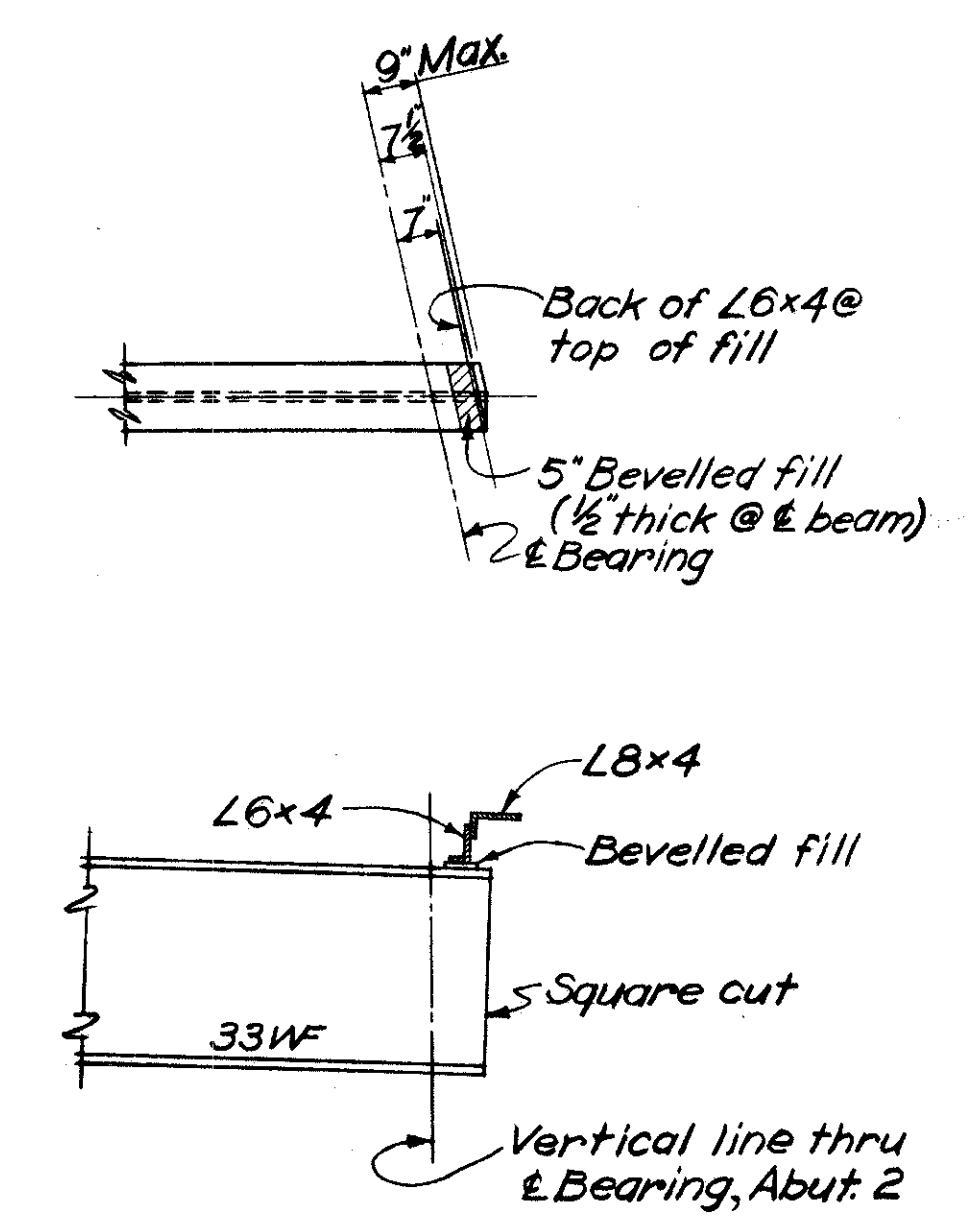
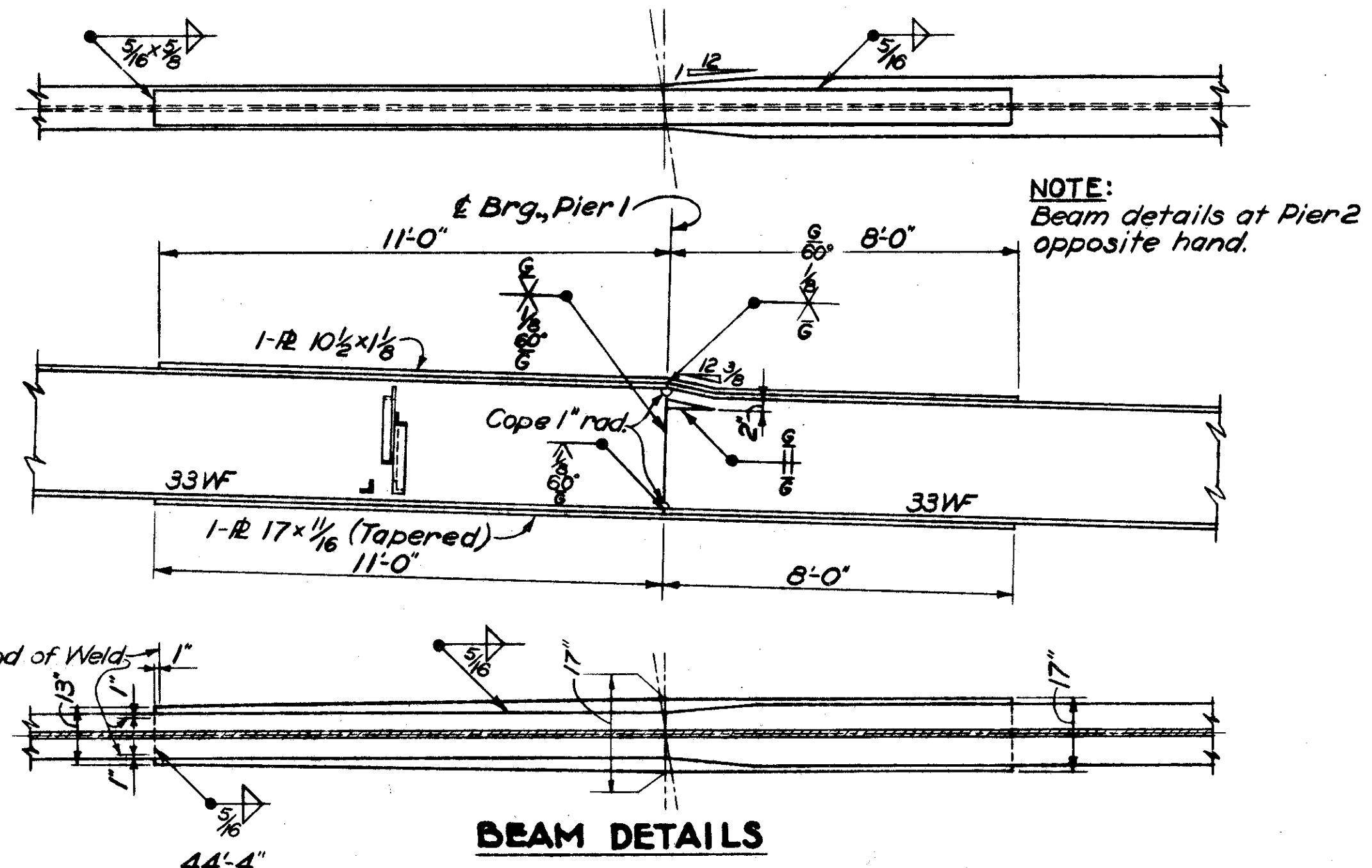
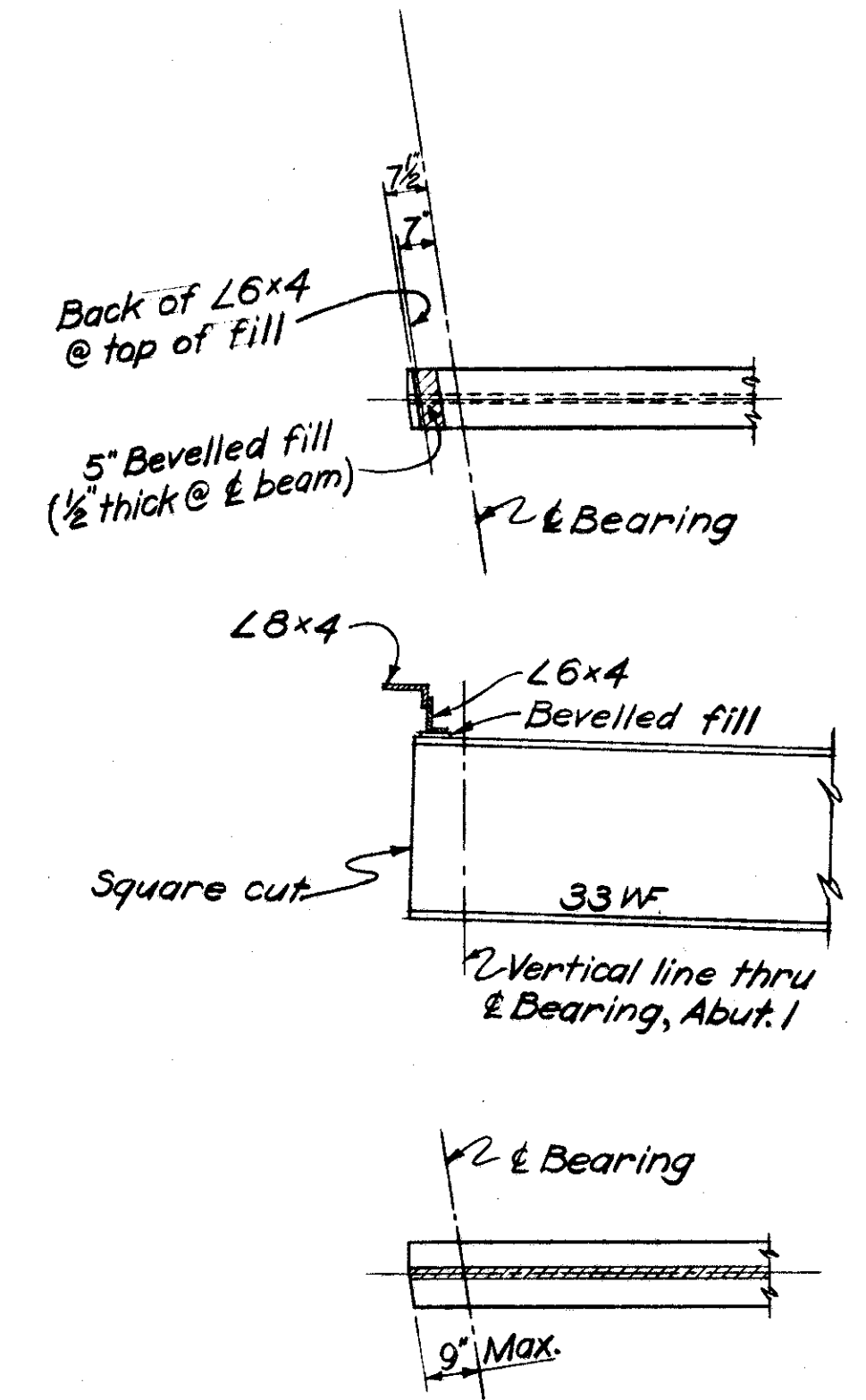
LOCATION	@ & SPAN "A"		@ & SPAN "B"		@ & SPAN "C"	
	EXT. BEAM	INT. BEAM	EXT. BEAM	INT. BEAM	EXT. BEAM	INT. BEAM
Deflection due to weight of steel	0	0	3/16"	9/16"	0	0
Deflection due to remaining dead load	1/16"	1/16"	3/8"	9/16"	1/16"	1/16"
Camber required for vertical curve	3/16"	3/16"	0	0	0	0
Sum of deflection and camber	1/4"	1/4"	13/16"	3/4"	1/16"	1/16"
Required Shop camber	0	0	1"	1"	0	0

**BEAM SPLICE WELDING PROCEDURE**

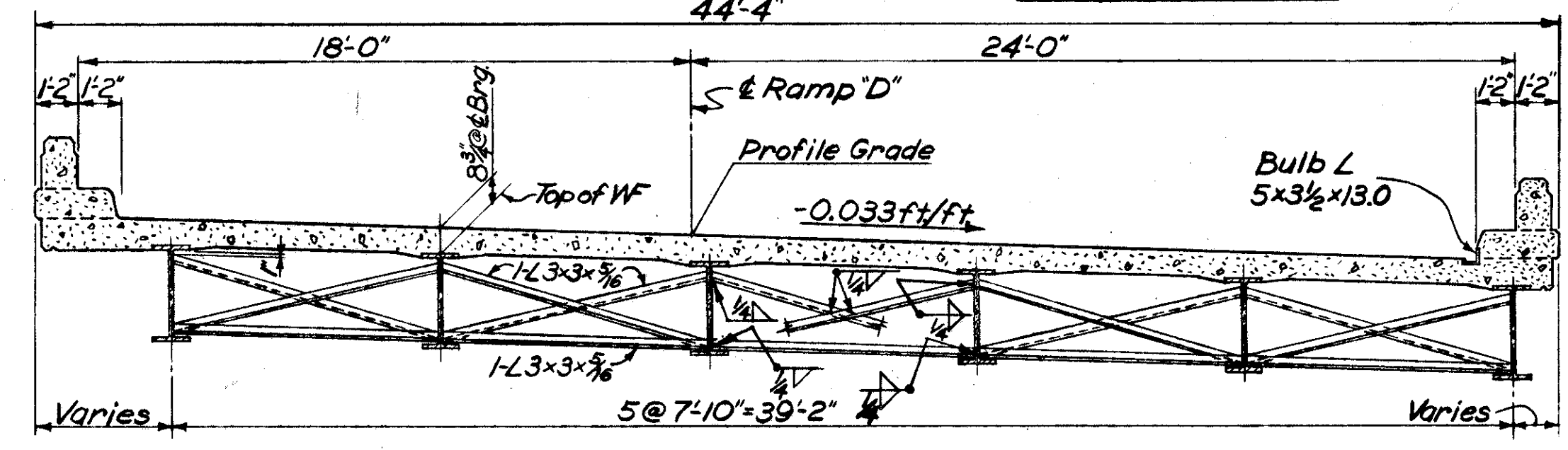
1. Raise the ends of the beams 1/2" at Abutment No. 1 and 1/2" at Abutment No. 2.
2. Butt weld the beam flanges and web at the piers, using the following sequence: make one pass on each flange, then one on the web; repeat until welds are completed.
3. Weld the bottom and top moment plates.
4. Lower the ends of the beams to final position.

**NOTES**

1. For end cross frame details, see Std. Dwg. CSB-2-56, Sheet 2 of 6.
2. For scupper details, see Std. Dwg. CSB-2-56, Sheet 3 of 6.
3. For location of scuppers, see Sheet No. 2-33.
4. For Rocker and Bolster details, see Std. Dwg. RB-1-55.
5. Standard end dams to be used at all abutments. For details see Std. Dwg. CSB-2-56, Sheets 2 & 3 of 6.
6. For additional notes, see Sheet 234.



**BEAM DETAILS**



**SECTION A-A**

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**STEEL FRAMING PLAN & DETAILS**

PROPOSED RAMP "D"  
OVER KEMPER ROAD

HAMILTON COUNTY STA. 8+63.86 TO  
STA. 10+53.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JWD	RFC	HHS	RJK	J.A.D.	Oct. '58	

MICROFILMED

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Railing Post Spacing

1'-0 1/2"

Parapet Joint Spacing

14'-2 3/4"

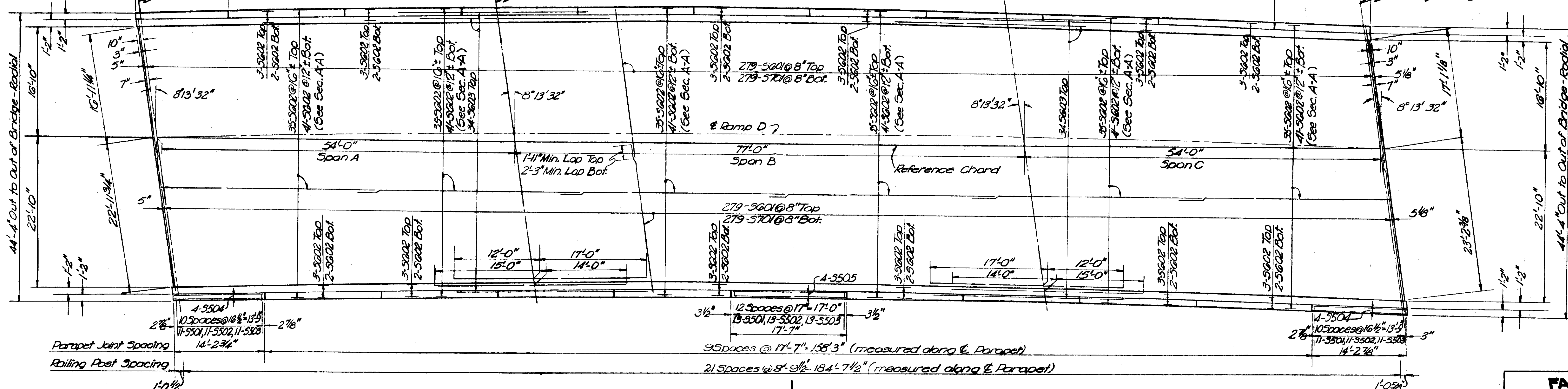
21 Spaces @ 8'-9 1/2" = 184'-7 1/2" (measured along & Parapet)

9 Spaces @ 17'-7" = 158'-3" (measured along & Parapet)

1'-0 3/8"

FED. RD. DISTRICT	STATE	PROJECT	240 317
2	OHIO		

HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50-B-22.02



### ROADWAY SLAB REINFORCING

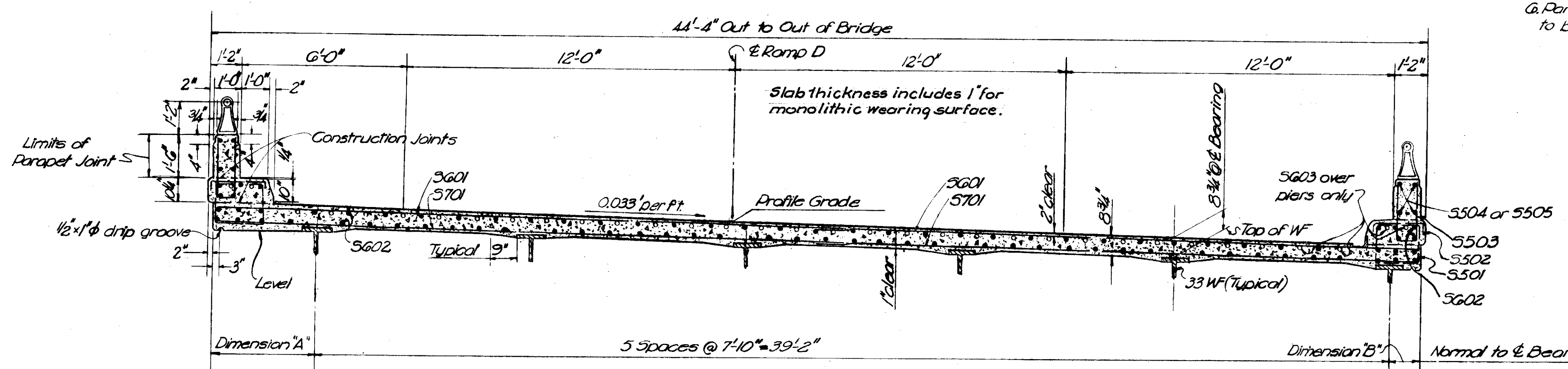
### NOTES

1. For location of scuppers, see Sheet No. 233.
2. Spread reinforcing steel in slab as necessary to clear scuppers.
3. For pavement elevations, see Sheet No. 233.
4. For railing details and additional parapet joint details, see Standard Drawing AR-1-57.
5. For reinforcing steel list, see Sheet No. 241.
6. Parapet concrete, 5504 and 5505 bars to be included with Item 5-14 for payment.

### FASCIA OFFSETS

(Given at tenth points along & Beams)

Location	Dimension A"	Dimension B"
& Brg. Abut. 1	2'-1 3/8"	2'-0 3/8"
1	2'-3 3/4"	2'-4 3/8"
2	2'-5 3/8"	2'-2 3/8"
3	2'-7 1/8"	2'-0 3/8"
4	2'-9 1/4"	1'-11 1/4"
5	2'-10 3/4"	1'-9 3/4"
6	3'-0 1/4"	1'-8 3/8"
7	3'-1 1/8"	1'-7 1/8"
8	3'-2 3/8"	1'-6 1/8"
9	3'-4"	1'-5 1/8"
& Pier 1	3'-4 7/8"	1'-4 1/4"
1	3'-6 1/8"	1'-3 1/4"
2	3'-7"	1'-2 3/8"
3	3'-7 3/4"	1'-1 7/8"
4	3'-8 1/4"	1'-1 3/8"
5	3'-8 3/8"	1'-1 3/8"
6	3'-8 3/8"	1'-1 7/8"
7	3'-8 3/8"	1'-2 1/4"
8	3'-7 1/2"	1'-2"
9	3'-6 3/4"	1'-4"
& Pier 2	3'-5 3/4"	1'-5 1/4"
1	3'-4 7/8"	1'-6 1/4"
2	3'-5 3/8"	1'-7 3/8"
3	3'-2 3/4"	1'-8 5/8"
4	3'-1 1/2"	1'-10"
5	3'-0 1/8"	1'-11 1/2"
6	2'-10 3/8"	2'-1 1/8"
7	2'-9"	2'-2 1/8"
8	2'-7 3/8"	2'-1 3/4"
9	2'-5 1/2"	2'-0 3/4"
& Brg. Abut. 2	2'-3 1/2"	2'-8 7/8"



### SECTION A-A

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SUPERSTRUCTURE ROADWAY SLAB**  
PROPOSED RAMP "D" OVER KEMPER ROAD  
HAMILTON COUNTY STA. 8+63.86 TO STA. 10+53.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.N.V.	R.N.V.	H.S.H.	R.J.K.	J.A.D.	Oct 58	

U.S.

ROADWAY SLAB							ABUTMENTS							PIERS							
			BRIDGE NO.		BRIDGE NO.					BRIDGE NO.		BRIDGE NO.					BRIDGE NO.		BRIDGE NO.		
MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	
S 501	4'-8"	Bt.	278	1353			A 501	23'-10"	Str.	8	199			P 501	7'-3"	Bt.	104	786			
S 502	2'-5"	Bt.	278	701			A 502	5'-7"	Bt.	32	186			P 502	22'-0"	Str.	8	184			
S 503	4'-9"	Bt.	278	1377			A 503	5'-10"	Bt.	32	195			P 503	3'-5"	Bt.	60	214			
S 504*	13'-10"	Str.	16	—			A 504	6'-2"	Bt.	32	206										
S 505*	17'-3"	Str.	72	—			A 505	6'-5"	Bt.	32	214										
							A 506	6'-8"	Bt.	32	223										
							A 507	6'-11"	Bt.	10	72										
							A 508	22'-10"	Str.	60	1429										
							A 509	5'-2"	Bt.	80	431										
S 601	23'-3"	Str.	558	19486			A 510	10'-2"	Str.	16	170										
S 602	32'-8"	Str.	516	25318			A 511	5'-7"	Bt.	32	186										
S 603	29'-0"	Str.	68	2962			A 512	3'-8"	Str.	56	214										
							A 513	5'-3"	Str.	48	263										
							A 514	3'-9"	Bt.	24	94										
							A 515	3'-6"	Bt.	12	44										
S 701	23'-5"	Str.	558	26708			A 516	3'-3"	Bt.	12	41										
							A 517	2'-5"	Bt.	8	20										
							A 518	2'-2"	Bt.	4	9										
							A 519	6'-5"	Bt.	40	268										
							A 520	8'-3"	Str.	36	310										
							A 521	15'-10"	Str.	12	198										
							A 522	6'-4"	Str.	4	26										
							A 523	3'-7"	Str.	16	60										
							A 524	3'-1"	Str.	16	51										
							A 525	14'-0"	Str.	28	409										
							A 526*	12'-9"	Str.	16	—										
							A 527	4'-0"	Str.	24	100										
							A 601	8'-4"	Bt.	50	626										
							A 602	5'-7"	Bt.	50	419										
							A 603	13'-7"	Bt.	35	714										
							A 604	8'-4"	Bt.	28	350										
							A 605	9'-8"	Bt.	28	407										

MARK	NO.	LENGTH	SHAPE
RE 4	1	5'-3"	Bt.
RE 5	1	5'-7"	Str.
RE 6	3	5'-11"	Str.
RE 7	2	6'-3"	Str.
RE 8	—	6'-6"	Str.
RE 9	—	6'-10"	Str.
RE 10	1	7'-3"	Str.
RE 11	1	7'-7"	Str.

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

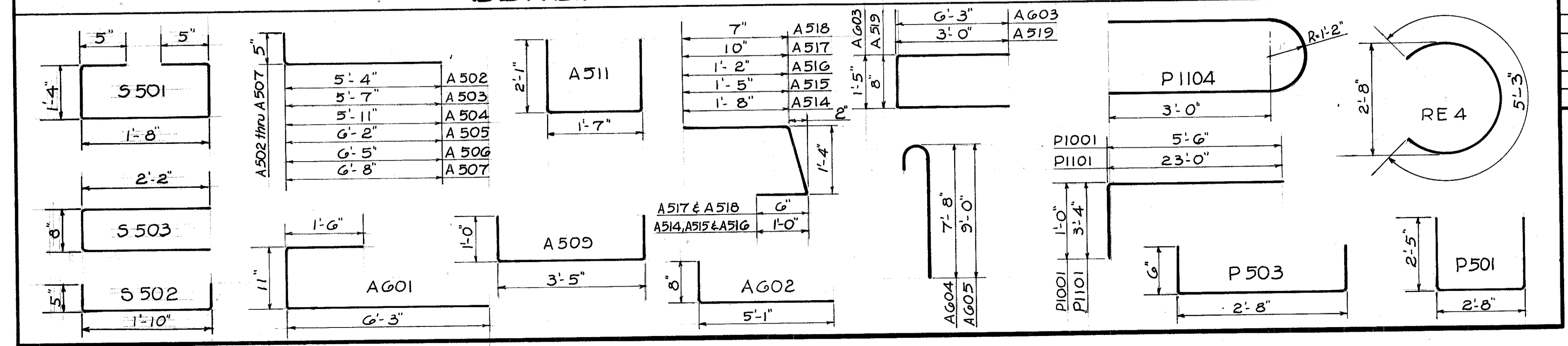
**SPIRAL REINFORCING BARS:** The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap.

The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4. 1/2 closed coils shall be provided at the ends of each spiral unit.

Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

	CORE DIA	% SPIRAL	PITCH	NO. TURNS
SP 401	18'-11"	Bt.	2	702
SP 402	18'-5"	Bt.	2	685
SP 403	17'-11"	Bt.	2	667
SP 404	17'-6"	Bt.	2	652

BENDING DIAGRAMS



- NOTE**
- Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.
  - Bars marked with single asterisks to be included for payment under Item 5-14 Railing.
  - All dimensions are out to out of bar.
  - The "Length" of bent bars is measured along the center line.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**REINFORCING STEEL LIST**

**PROPOSED RAMP "D" OVER KEMPER ROAD**

HAMILTON COUNTY STA. 8+63.86 TO STA. 10+53.44

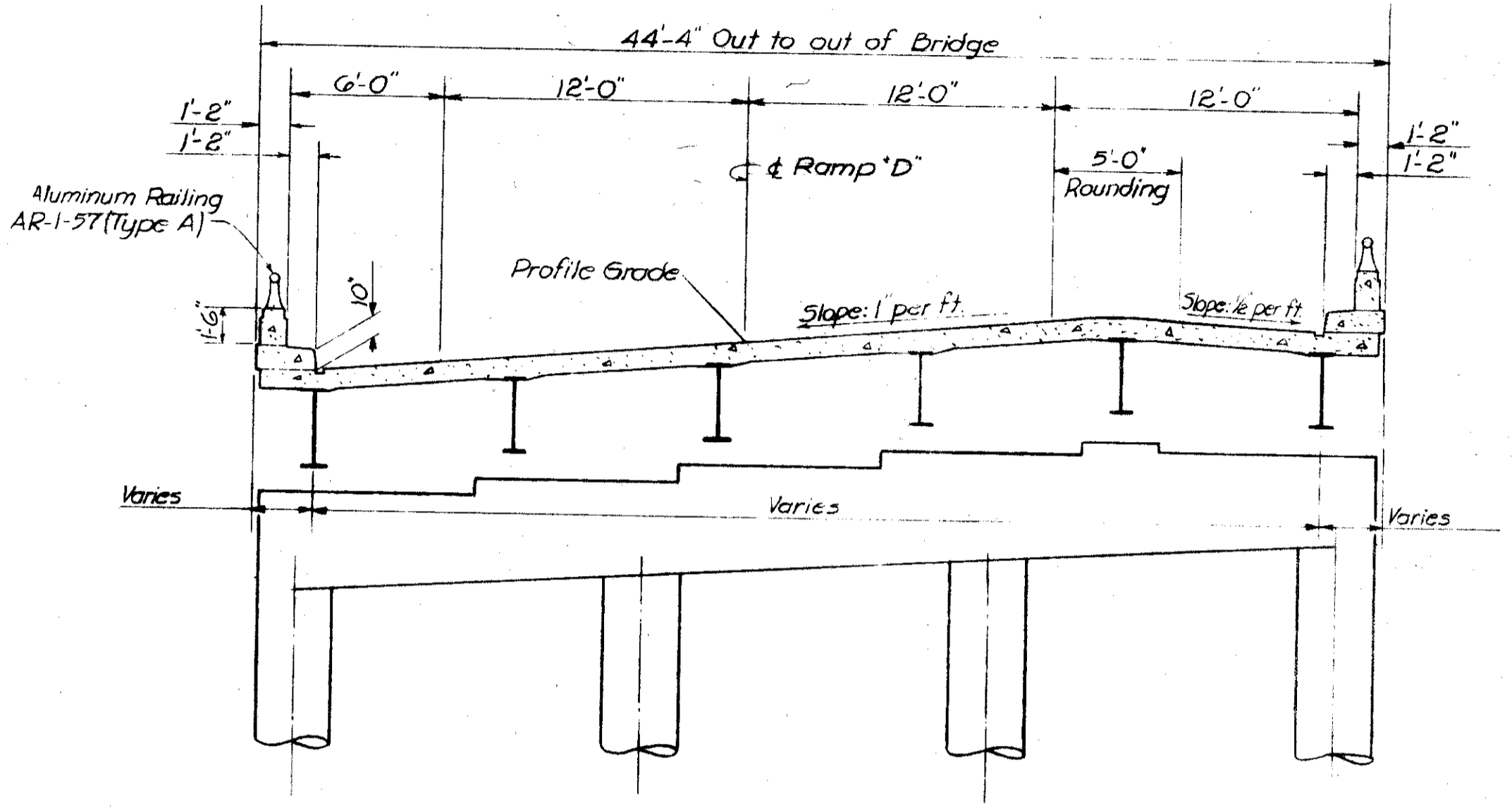
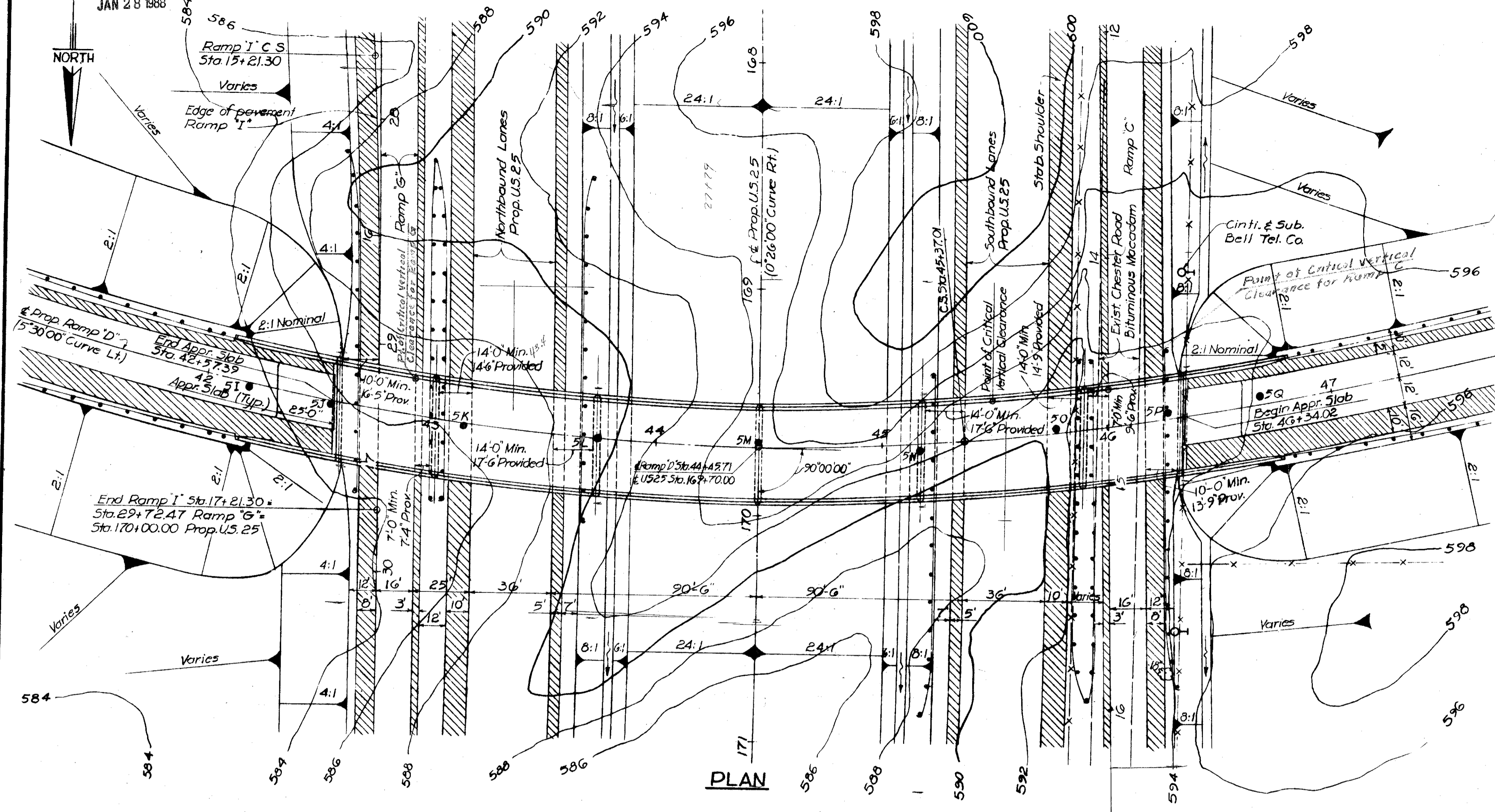
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	CBS	—	RFC	J.A.D.	Oct. '58	—

MICROFILMED  
JAN 28 1988

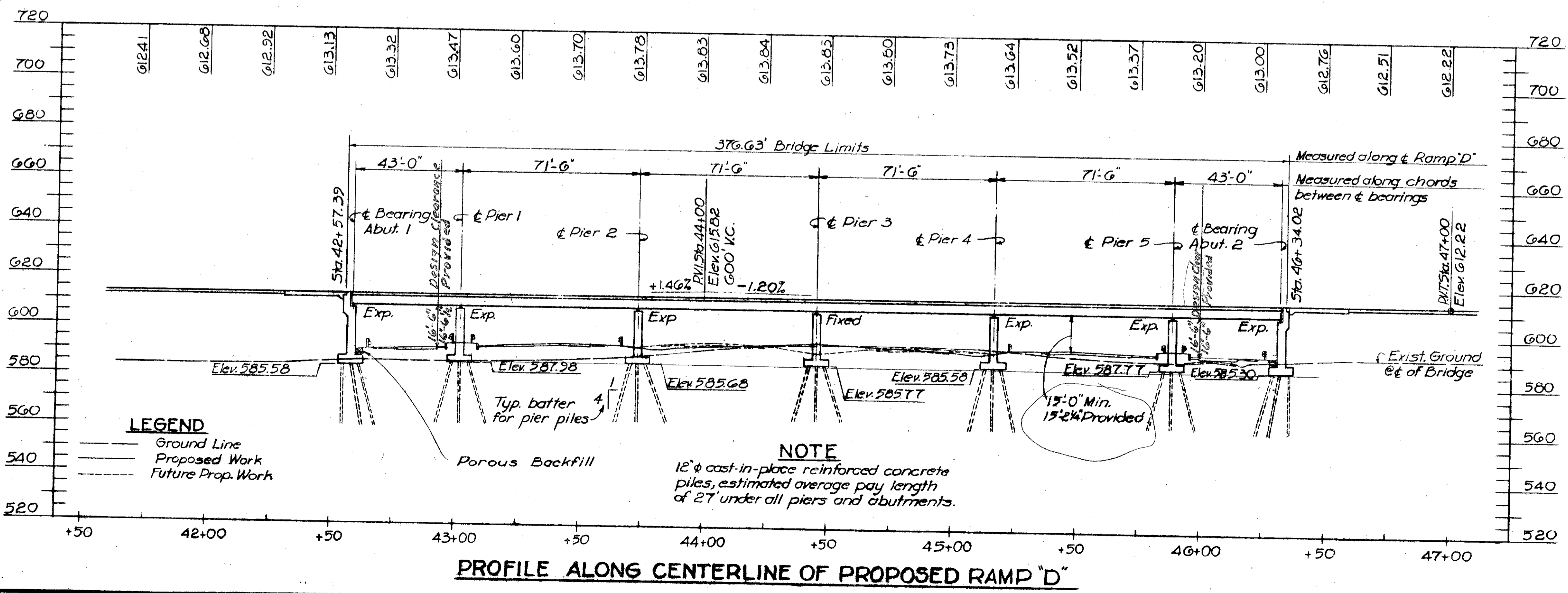
FED. NO. DIVISION	STATE	PROJECT
2	OHIO	

HAMILTON COUNTY  
HAM-25-1560 &  
HAM-50B-22.02

242  
317



BENCH MARK NO. 16  
P.K. Nail in S.E. Root of  
18" Sycamore 18' left  
of Sta. 170+67.00.  
Elev. 593.749



CURVE DATA			
PROPOSED U.S. 25			
PI. STA. = 179+59.43	T = 2703.09'		
Δ = 23°06'30"	L = 5332.69'		
D = 0°26'00"	E = 273.48'		
R = 13,222.11'			
PROPOSED RAMP "I"			
D <sub>c</sub> = 3°30'00"	L <sub>s</sub> = 200.00'		
R = 1637.02'	θ <sub>s</sub> = 3°30'00"		
L <sub>c</sub> = 206.42'			
PROPOSED RAMP "D"			
PI. STA. = 45+46.71	θ <sub>s</sub> = 11°00'00"		
D <sub>c</sub> = 5°30'00"	L <sub>s</sub> = 400.00'		
R = 1919.92'	T <sub>s</sub> = 2329.62'		
L <sub>c</sub> = 1041.74'	Δ = 127°35'44"		

**PROPOSED STRUCTURE**  
 TYPE: Continuous rolled steel beam with reinforced concrete deck and substructure.  
 SPANS: 43'-0"; 71'-6"; 71'-6"; 71'-6"; 43'-0".  
 ROADWAY: 42'-0" face to face of parapets.  
 LOAD FREQUENCY: CF=2000(57). Adequate for AASHTO alternate loading.  
 SKEW: 0°00'00".  
 WEARING SURFACE: 1" monolithic concrete.  
 APPROACH SLAB: 25' long (A5-1-54)  
 ALIGNMENT: 5°30'00" curve left and transition spiral.  
 SUPERELEVATION: 0.0833' per ft.

- NOTES**
- Symbol denotes drill hole.
  - See Sh.245 for test boring data.
  - Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the Office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.

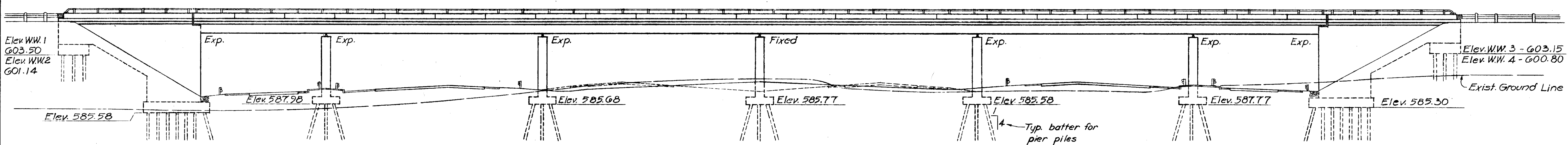
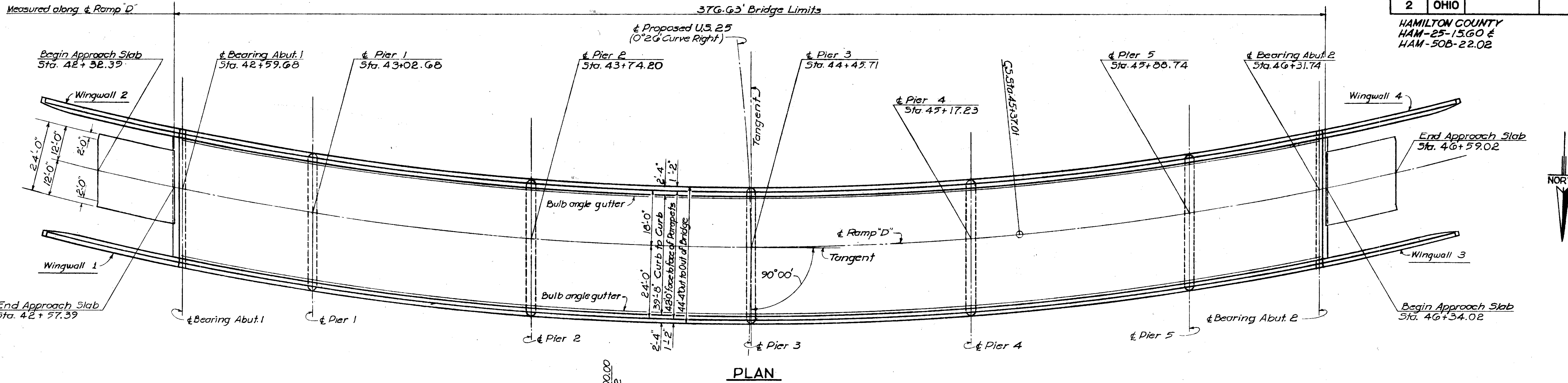
VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SITE PLAN**  
BRIDGE NO. HAM-25-1654  
PROPOSED U.S. 25 UNDER  
PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 42+57.39 TO  
STA. 46+34.02

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	CBS	RJS	CBS	JDB	

Revised 6-8-60 R.E.C.

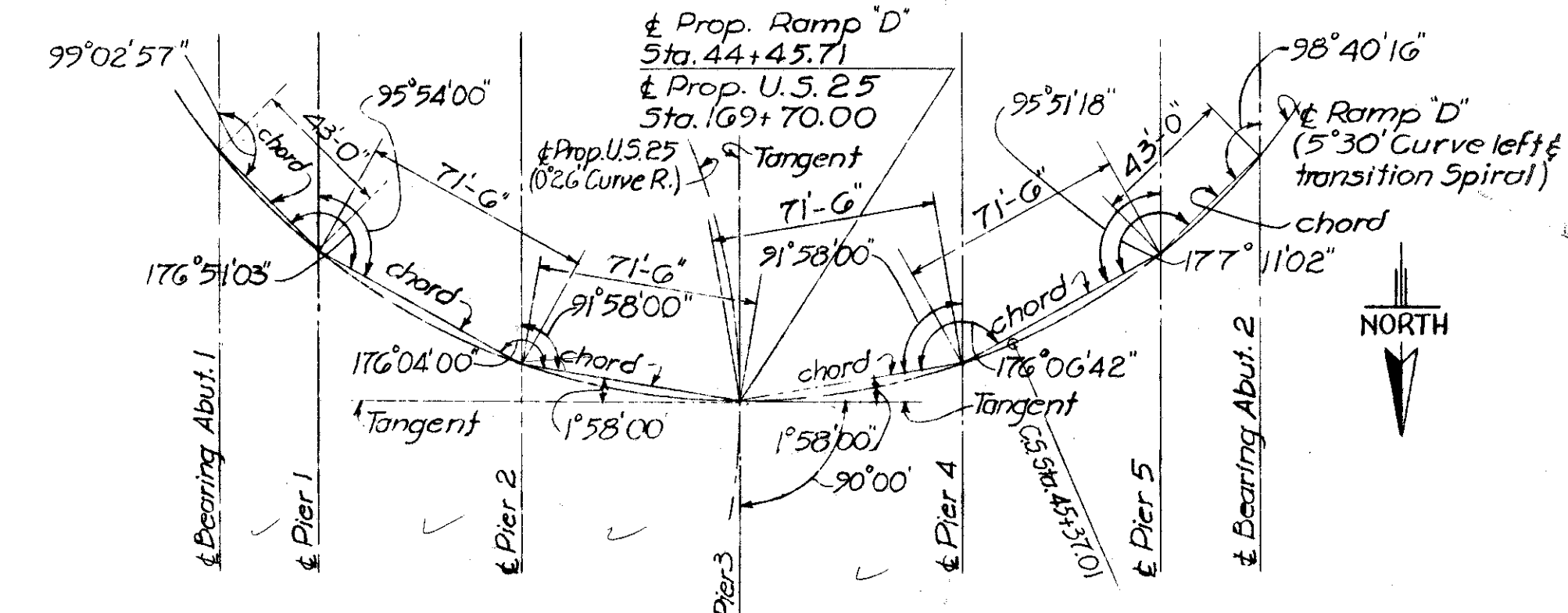




STATION	PAVEMENT ELEVATIONS					
	PROFILE GRADE	CURB 22'-10" RIGHT OF & RAMP 'D'	CURB 16'-10" LEFT OF & RAMP 'D'	EDGE OF PAVEMENT 12'-0" RIGHT OF & RAMP 'D'	EDGE OF PAVEMENT 12'-0" LEFT OF & RAMP 'D'	PAVEMENT 17'-0" RIGHT OF & RAMP 'D'
42+25	612.92			613.92	611.92	
42+50	613.13	613.99	611.73	614.13	612.13	614.24
42+75	613.32	614.18	611.91	614.32	612.32	614.42
43+00	613.47	614.33	612.07	614.47		614.58
43+25	613.60	614.46	612.20	614.60		614.71
43+50	613.71	614.57	612.30	614.71		614.81
43+75	613.78	614.64	612.38	614.78		614.88
44+00	613.83	614.69	612.42	614.83		614.93
44+25	613.84	614.71	612.44	614.84		614.95
44+50	613.84	614.70	612.43	614.84		614.94
44+75	613.80	614.66	612.40	614.80		614.90
45+00	613.73	614.59	612.33	614.73		614.84
45+25	613.64	614.50	612.24	614.64		614.75
45+50	613.52	614.38	612.12	614.52		614.63
45+75	613.37	614.24	611.97	614.37		614.48
46+00	613.20	614.06	611.80	614.20		614.30
46+25	613.00	613.86	611.59	614.00	612.00	614.10
46+50	612.77	613.63	611.36	613.77	611.77	613.87
46+75	612.51			613.51	611.51	

NOTES

- All abutment and pier centerlines are parallel.
- For GENERAL NOTES and ESTIMATED QUANTITIES, see Sh. 244.
- For drainage layout and details, see Sh. 253.
- For approach slab details, see Std. Dwg. AS-1-54.



VOGT, IVERS, SEAMAN & ASSOCIATES  
 ENGINEERS ARCHITECTS  
 CINCINNATI CHICAGO

**GENERAL PLAN & ELEVATION**

BRIDGE NO. HAM-25-1654  
 PROPOSED U.S. 25 UNDER  
 PROPOSED RAMP 'D'

HAMILTON COUNTY STA. 42+57.39 TO  
 STA. 46+34.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
---	CB3	---	JCG	JAD	Oct. '58	

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FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

244  
317

HAMILTON COUNTY  
HAM - 25 - 15.60 &  
HAM - 50B - 22.02

ESTIMATED QUANTITIES								
ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	
E-2	Lump	Lump Sum	Cofferdams, cribs and sheeting				Lump	
E-2	1548	Cu. Yds.	Unclassified Excavation	960	588			
S-1	505	Cu. Yds.	Class "C" Concrete ~ Superstructure			505		
S-1	181	Cu. Yds.	Class "C" Concrete ~ Piers above footings		181			
S-1	423	Cu. Yds.	Class "E" Concrete ~ Abutments above footings	423				
S-1	482	Cu. Yds.	Class "E" Concrete ~ Pier and abutment footings	293	189			
S-4	306,867	Lbs.	Reinforcing steel	78,609	68,589	159,669		
S-7	504,100	Lbs.	Structural steel			504,100		
S-8	504,100	Lbs.	Field painting of Structural Steel			504,100		
S-14	940	Lin. Ft.	Railing (aluminum railing & supports & concrete parapet)	192		748		
S-29	149	Cu. Yds.	Porous backfill	133			16	
S-29	2	Cu. Yds.	Slope facing (S 29.05 type)				2	
S-16	Lump	Lump Sum	First test pile				Lump	
S-18	6,318	Lin. Ft.	12" & Cast-in-place reinforced concrete piles	3,348	2,970			
S-3	94	Lin. Ft.	Waterproofing, premolded sealing strip	94				
S-9	250	Sq. Ft.	1" Preformed expansion joint filler	250				
S-29	165	Lin. Ft.	6" & Std. pipe downspouts and collectors, including specials				165	

NOTE: Materials in approach slabs are not included in the above estimated quantities

### GENERAL NOTES

REFERENCE shall be made to the following:

Standard Drawings: AR-1-57 revised 3-1-58  
 CSB-2-56, sheets 2 & 3 of 6, revised 3-1-58  
 RB-1-55 dated 3-1-55  
 AS-1-54 revised 12-1-54  
 Supplemental Specification: S114 revised 8-1-57

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with revisions thereof dated 2-21-58.

PILES shall be driven to a minimum bearing capacity of 40 tons per pile for the abutments and 40 tons per pile for the piers.

EXCAVATION QUANTITY includes removal of fill material required for construction of the pads at ends of wingwalls.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

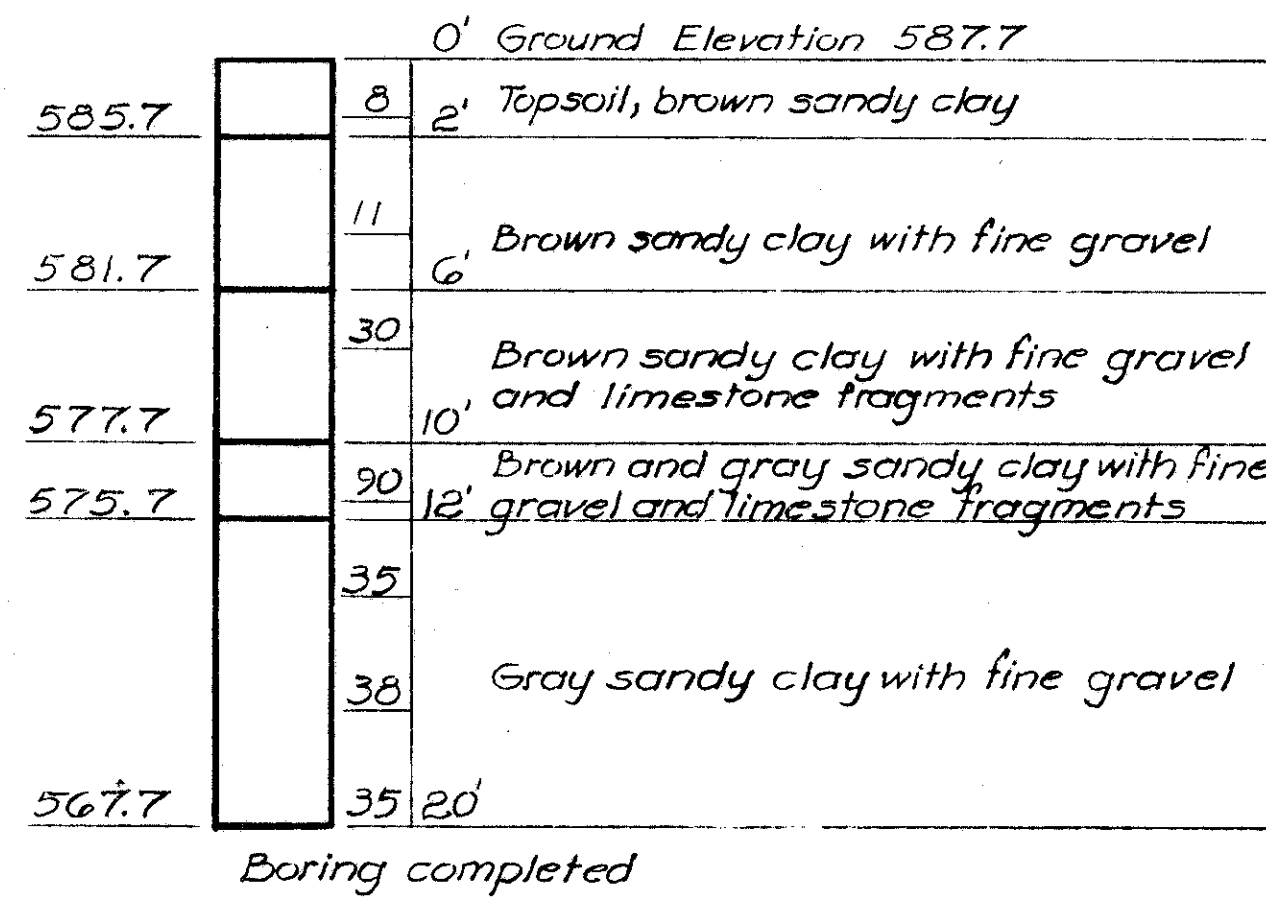
RAILING: Aluminum rail and supports, concrete parapet, reinforcing bars wholly within the concrete parapet, guard rail anchorage and sponge rubber for parapet joints shall be included in item S-14 for payment.

WELDED STEEL: The steel for the 36WF194 beams shall conform to ASTM Designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M-7.4(a) of the Construction and Material Specifications) or to A-373.

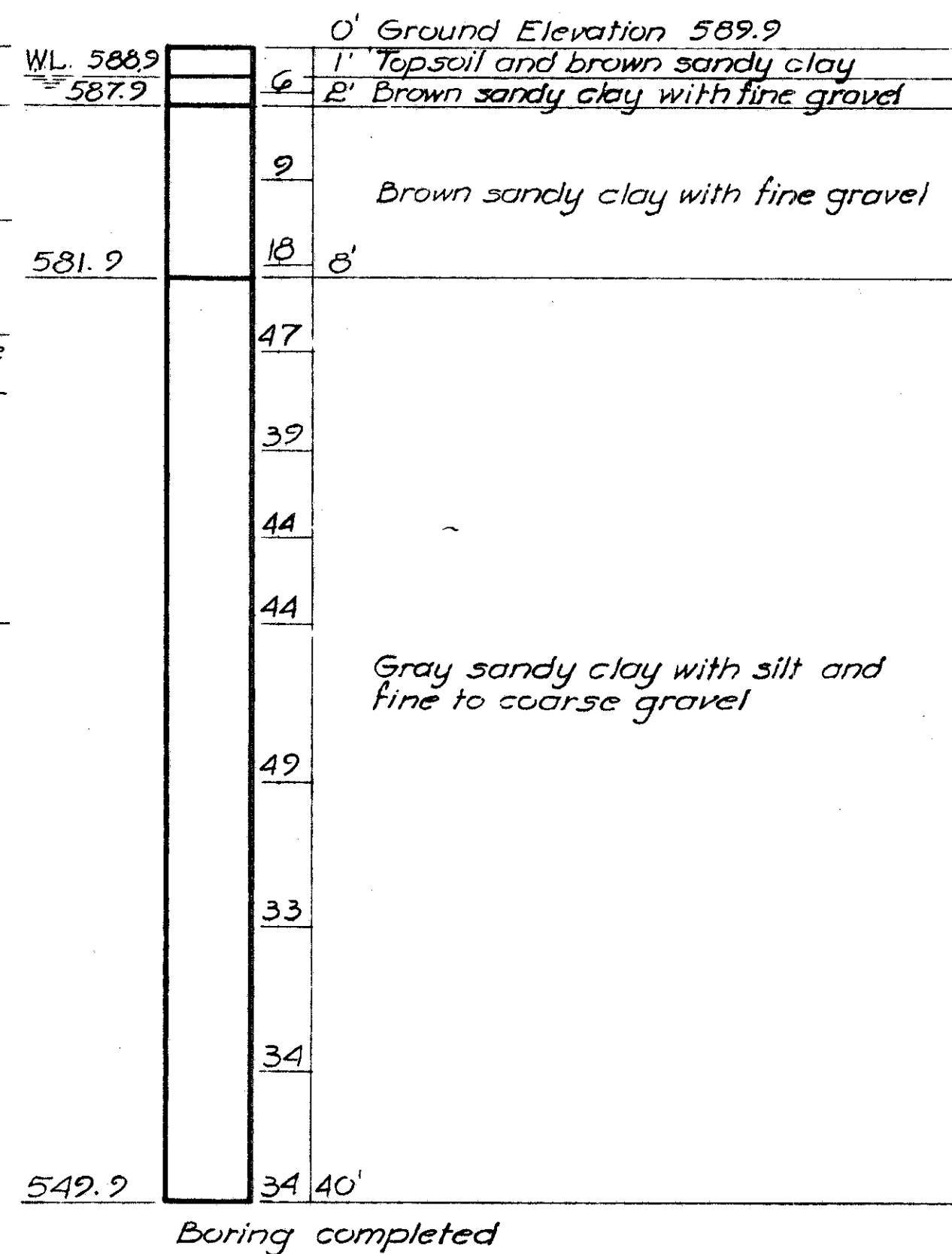
WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS CINCINNATI		ARCHITECTS CHICAGO	
<b>GENERAL NOTES AND ESTIMATED QUANTITIES</b>			
BRIDGE NO. HAM-25-1654 PROPOSED U.S. 25 UNDER PROPOSED RAMP "D"			
HAMILTON COUNTY		STA. 42+57.39 TO STA. 46+34.02	
DESIGNED	DRAWN	TRACED	CHECKED
~	J.H.K.	~	R.J.S.
			REVIEWED DATE
			J.A.D. Oct. 58
			REVISION

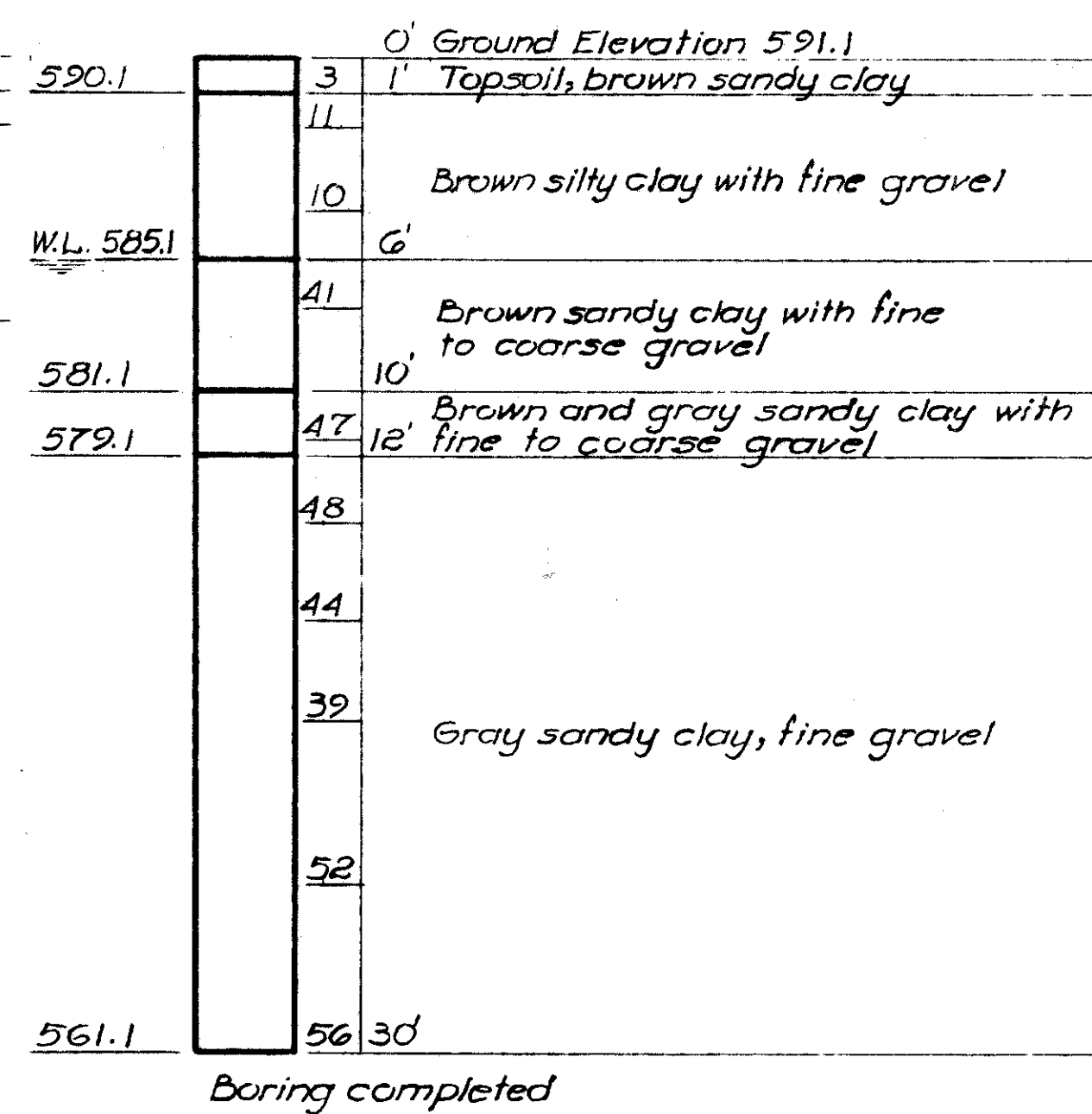
U.S. 25



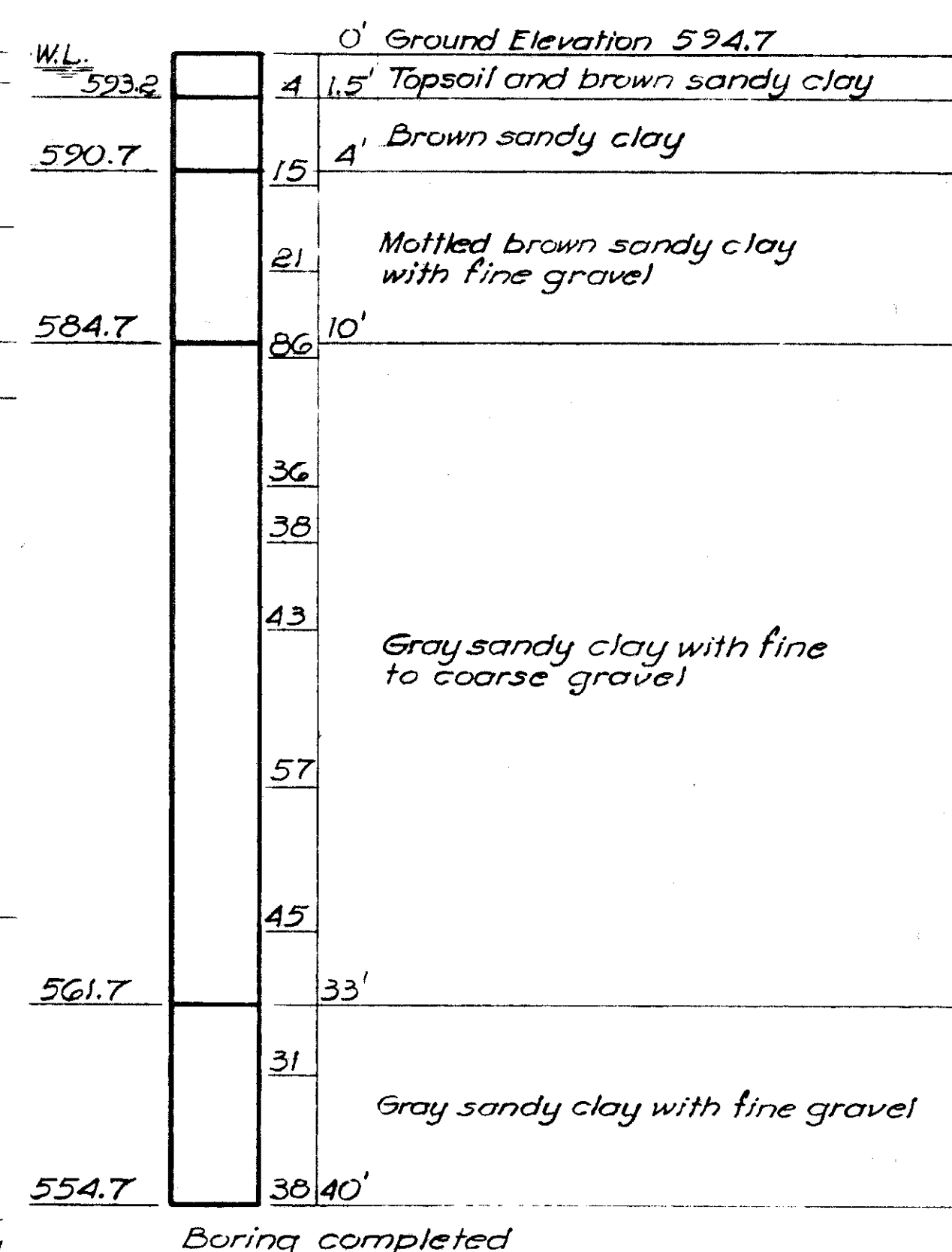
**BORING 5 I**



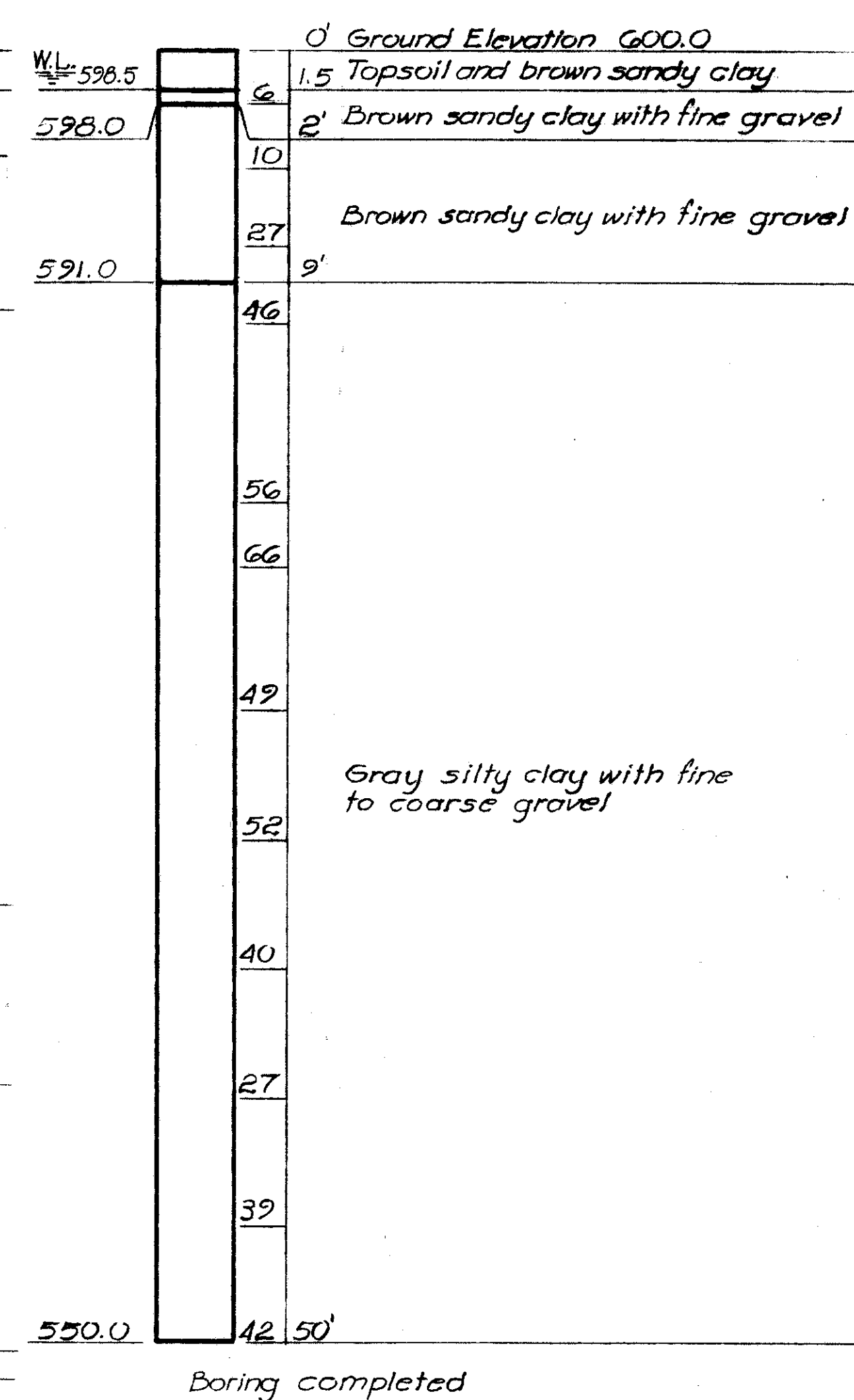
**BORING 5 J**



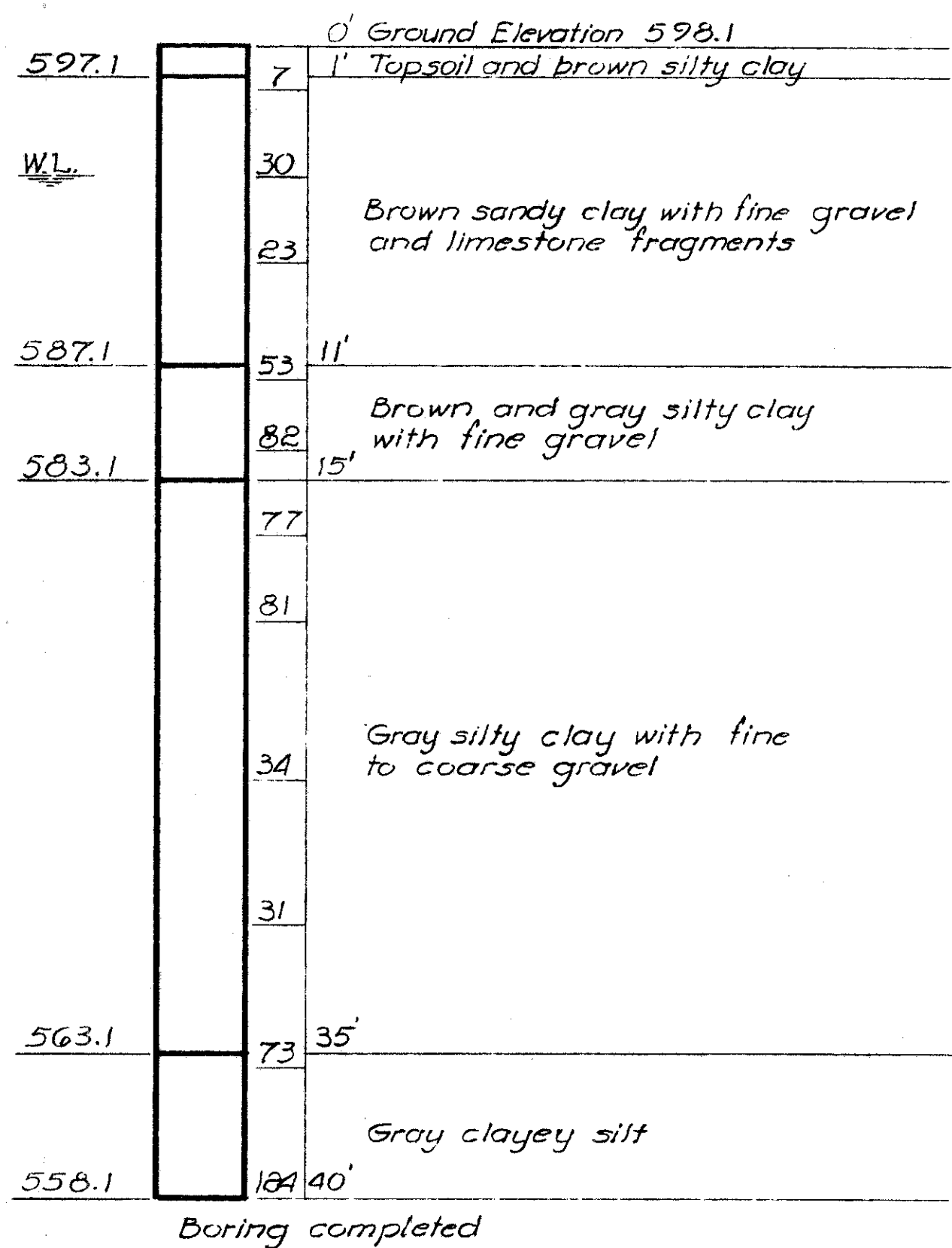
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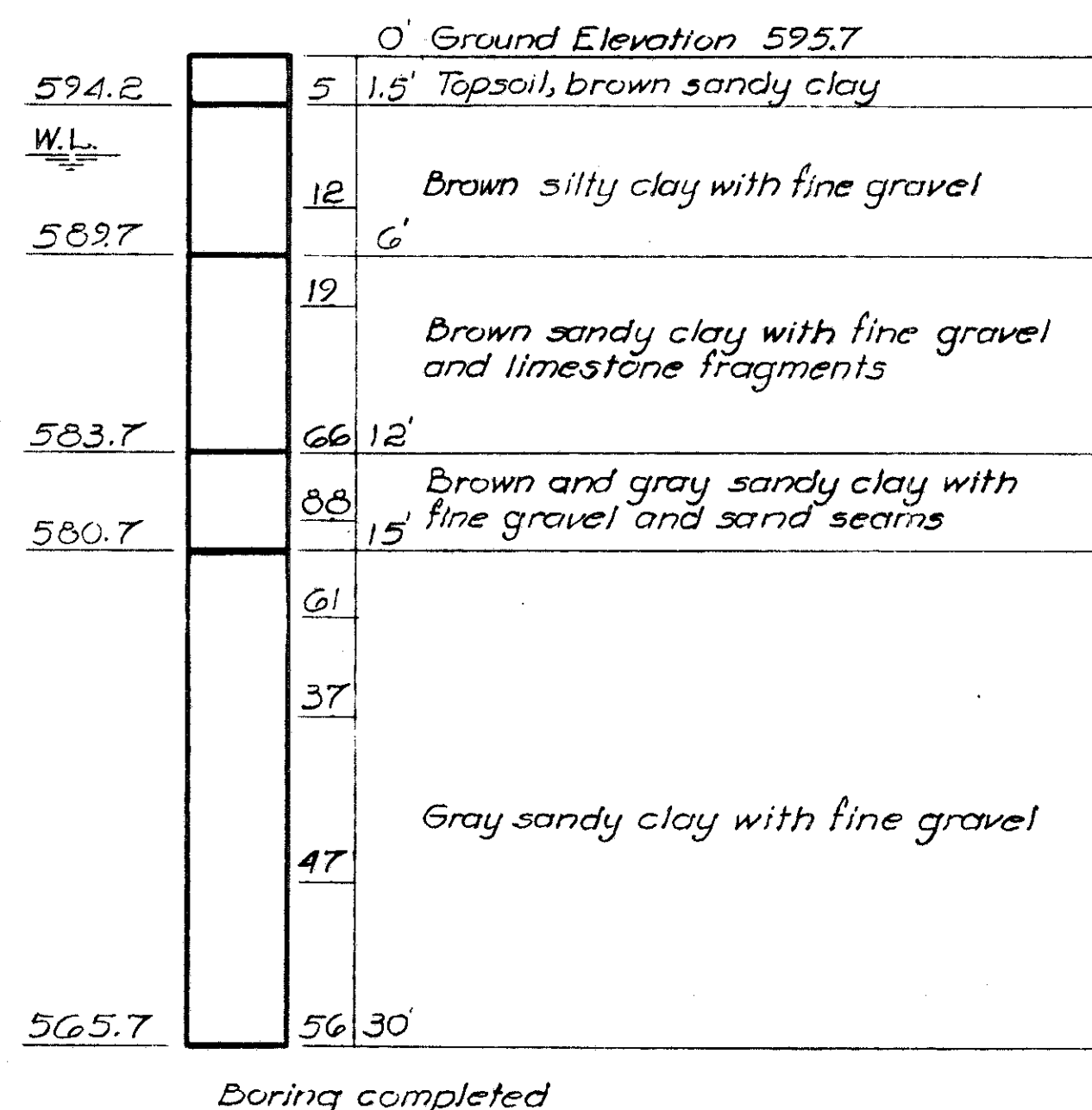
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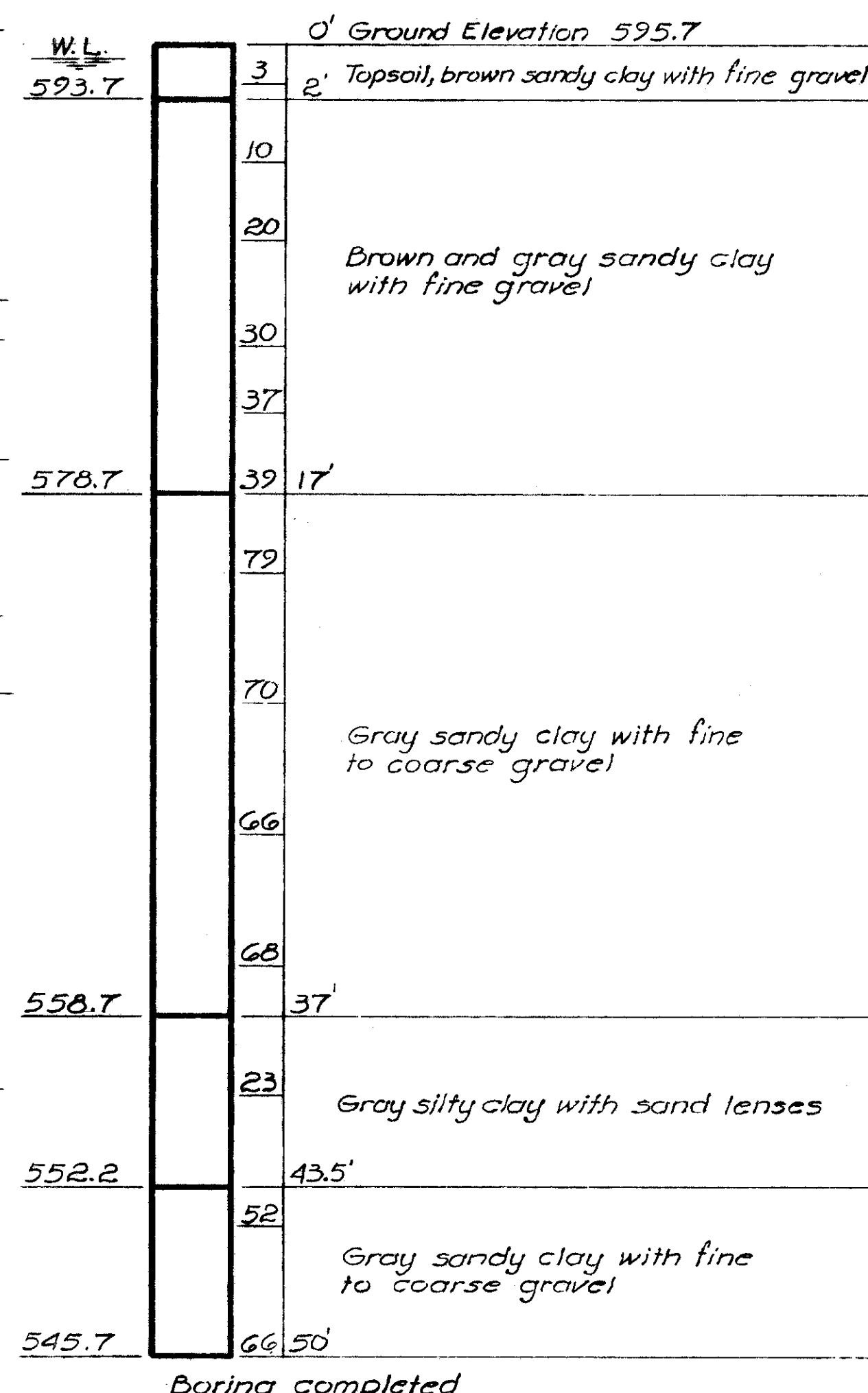
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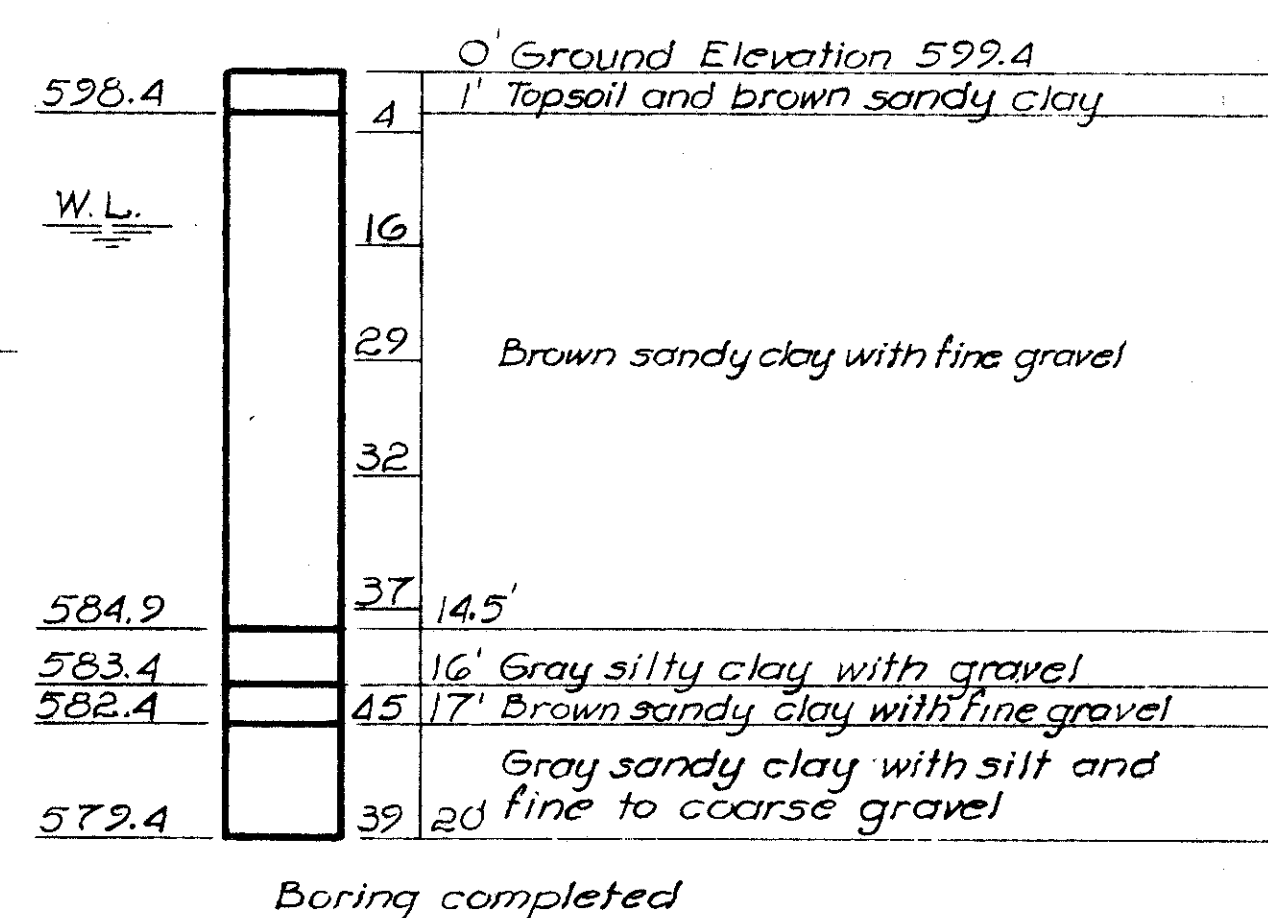
**BORING 5 N**



**BORING 5 O**



**BORING 5 P**



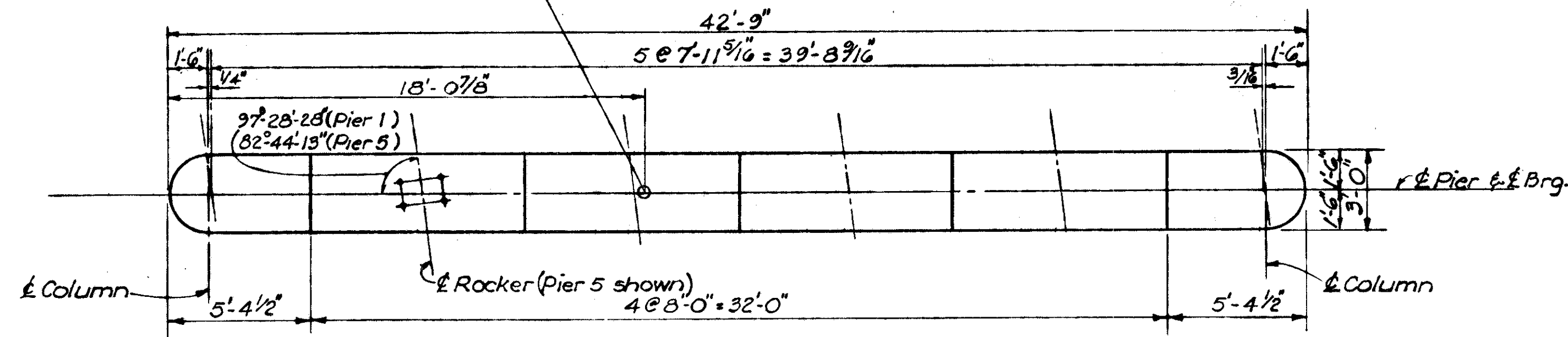
**BORING 5 Q**

**NOTES**

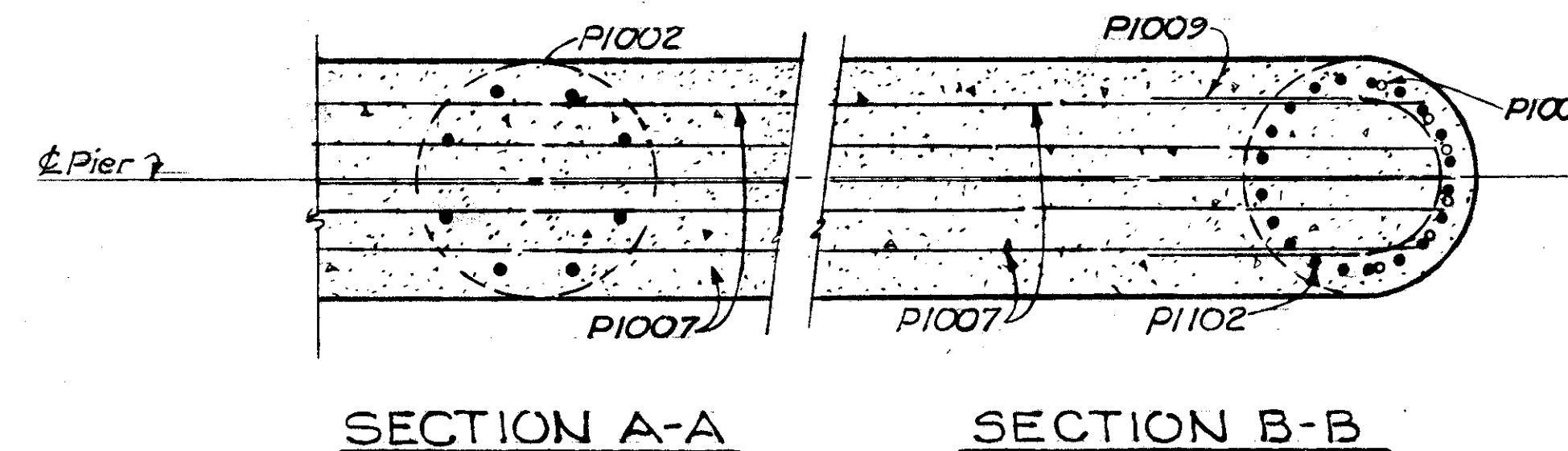
W.L. = Water Level in bore hole 24 hours after completion.  
 Figures in right hand column indicate number of blows required to drive 2" O.D. sampling pipe one foot, using 140 lb. weight falling 30 inches.  
 Borings taken during January 1958 and February 1958.  
 See Sheet No. 242 for location of borings.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO					
<b>BORINGS</b>					
BRIDGE NO. HAM-25-1G54 PROPOSED U.S. 25 UNDER PROPOSED RAMP 'D'					
HAMILTON COUNTY STA. 42 + 57.39 TO STA. 46 + 34.02					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
CAW	CBS	CBS	RDW	JAD	Oct. 1958
REVISED					

Pier 1 - Sta. 43+02.68 & Ramp 'D'  
Pier 5 - Sta. 45+88.74 & Ramp 'D'  
See Sheet 243 for layout.

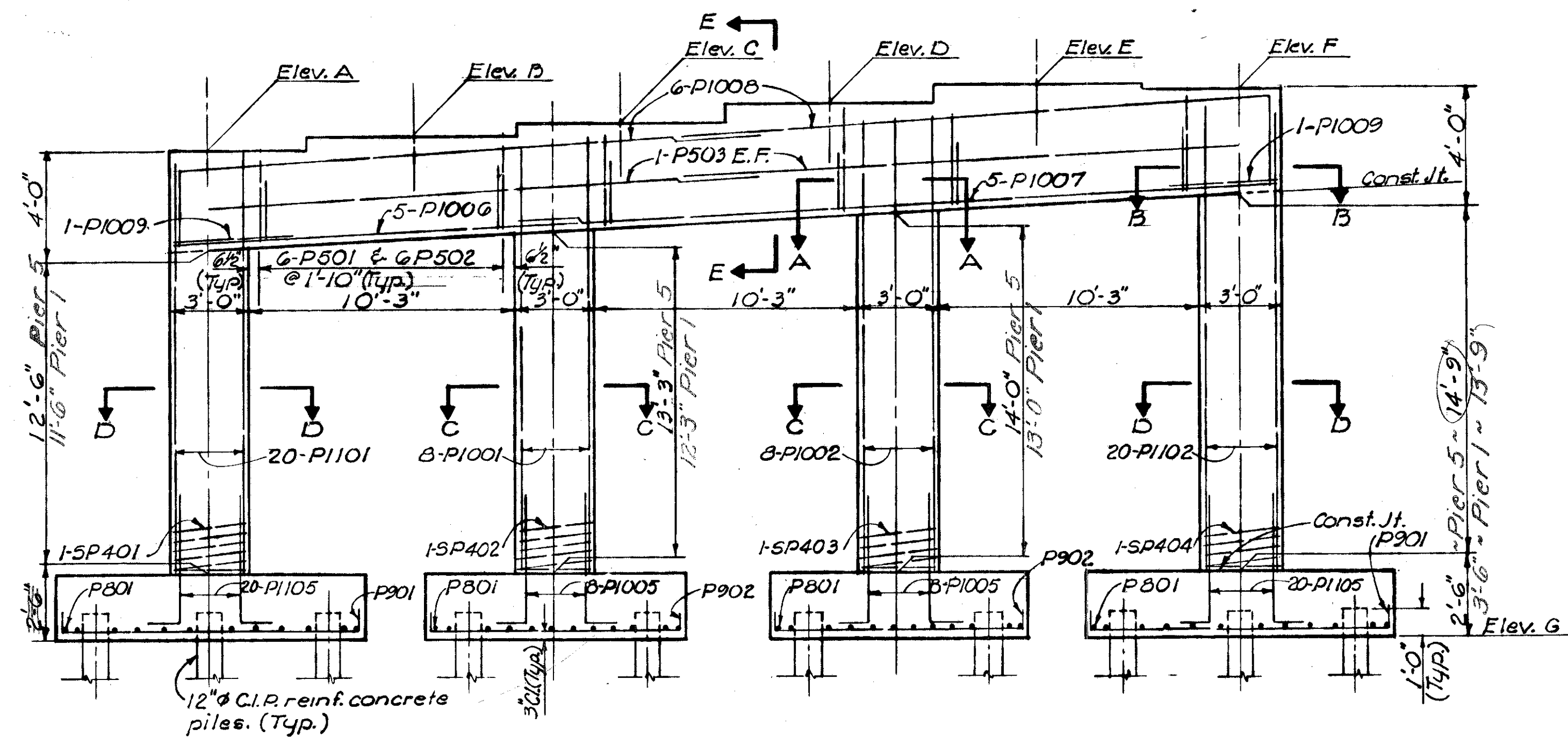


PLAN

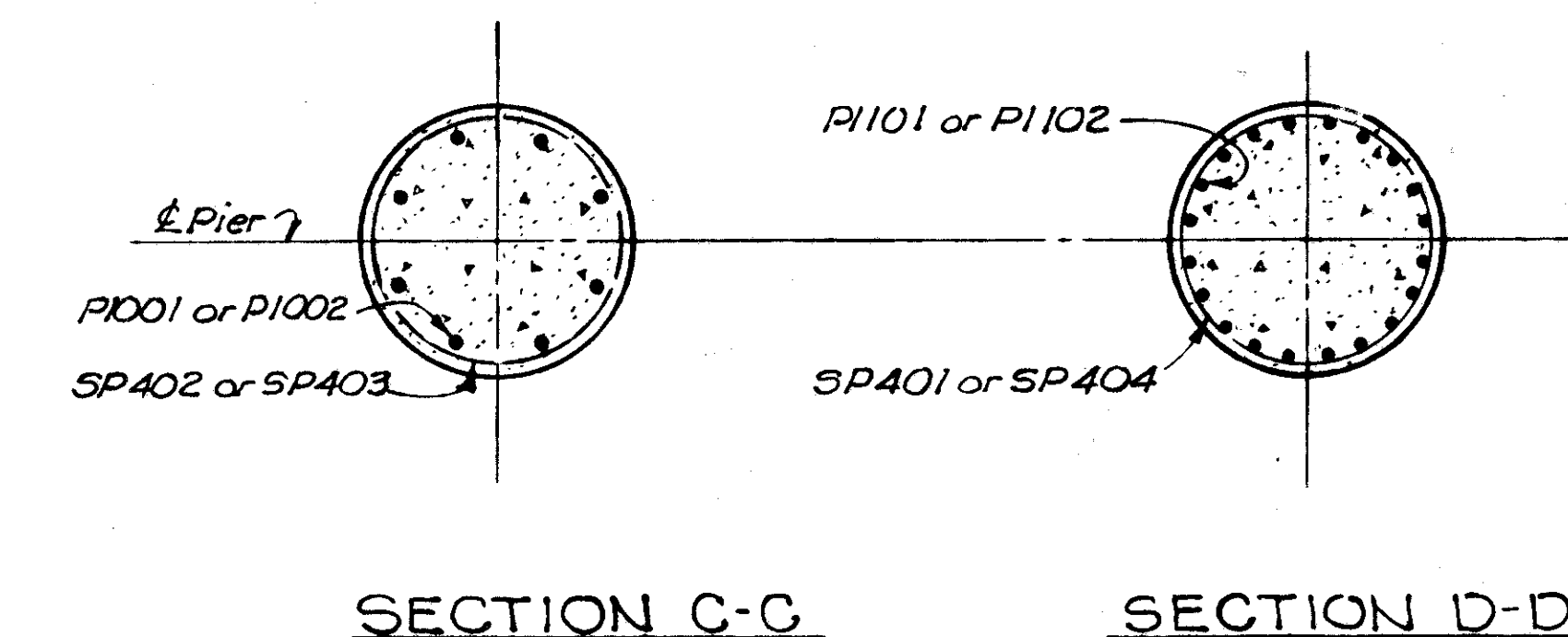


SECTION A-A

SECTION B-B

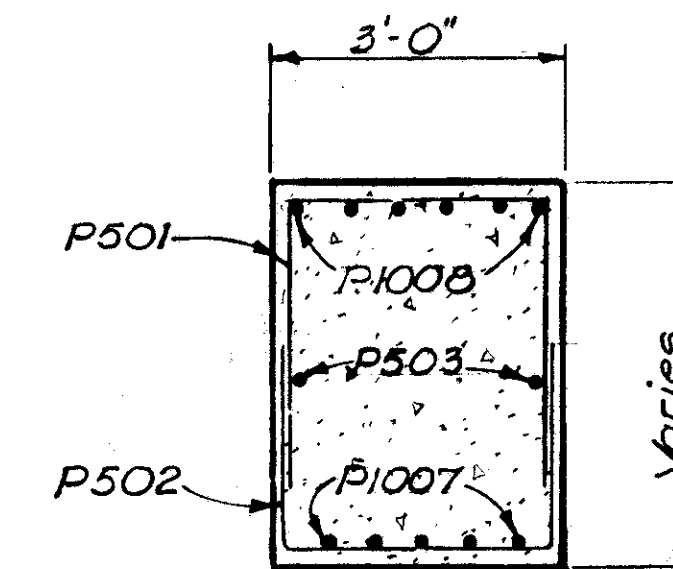


ELEVATION



SECTION C-C

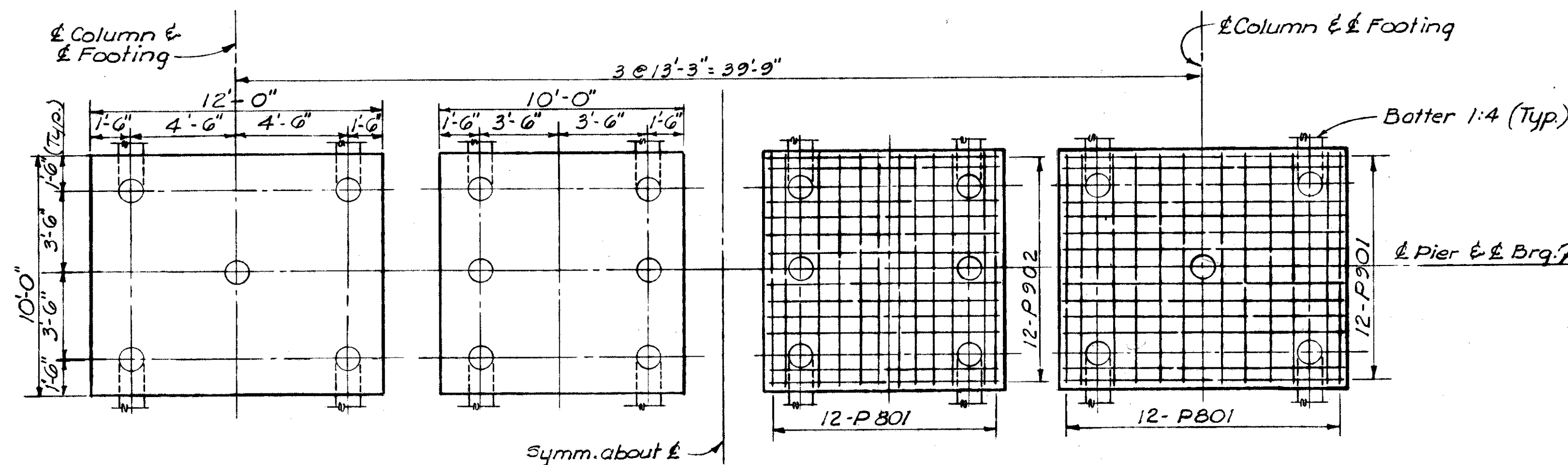
SECTION D-D



SECTION E-E

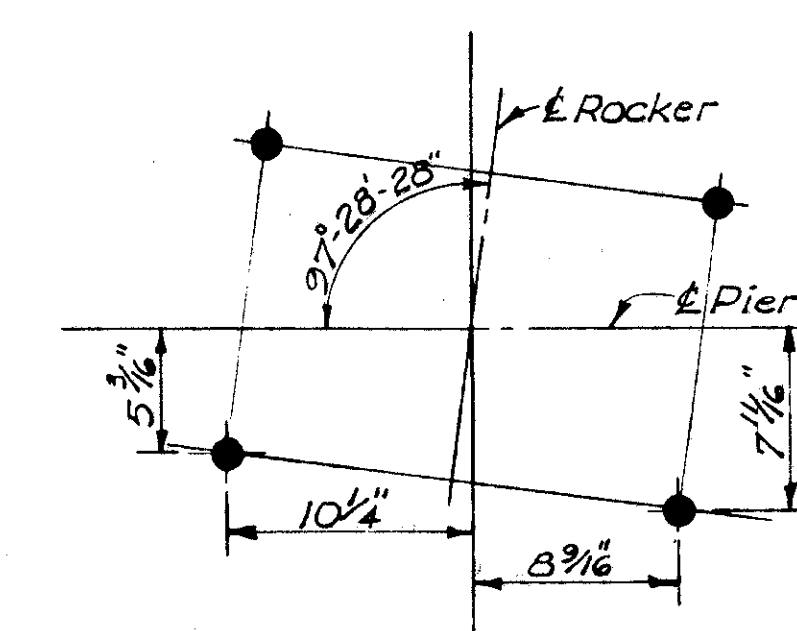
TABLE OF ELEVATIONS							
Pier	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G
1	606.98	607.64	608.30	608.96	609.52	609.23	587.28
5	606.77	607.43	608.09	608.76	609.32	609.02	587.77

- NOTES:
- E. F. = Each Face
  - Steel in cap shall be placed so as not to interfere with drilling of anchor bolt holes.
  - For reinforcing steel list see Sh. 252.

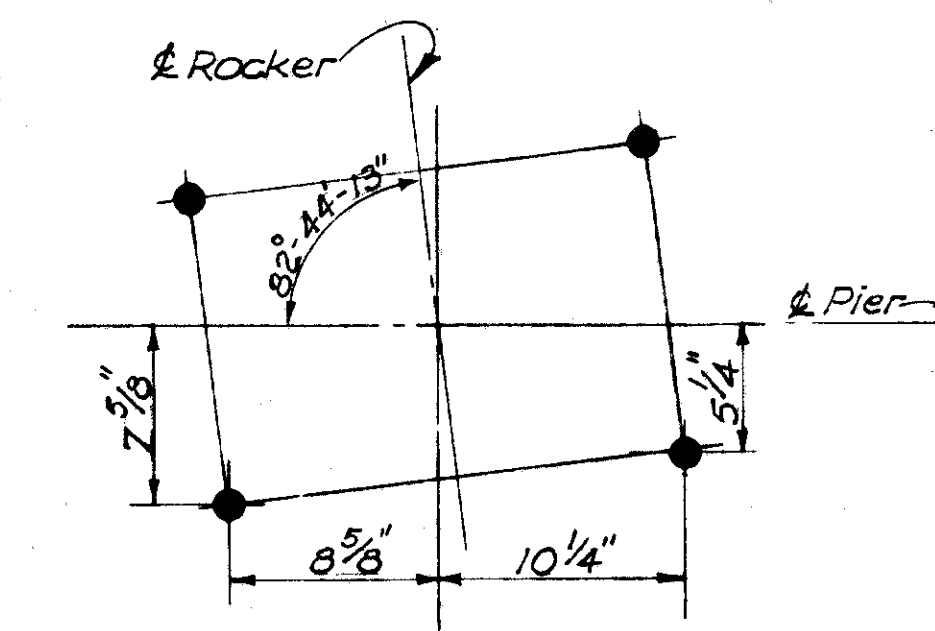


FOOTING PLAN - PIER 5

For footing layout, Pier 1, see Sh. 247A.



ANCHOR BOLT LAYOUT  
PIER 1



ANCHOR BOLT LAYOUT  
PIER 5

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

PIERS NO. 1 & 5  
BRIDGE NO. HAM-25-1654  
PROPOSED U.S. 25 UNDER  
PROPOSED RAMP 'D'  
HAMILTON COUNTY STA. 42+57.39 TO  
STA. 46+34.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
H.E.O.	K.L.	K.L.	D.L.V.	JAD	Oct. 58	7-2-59

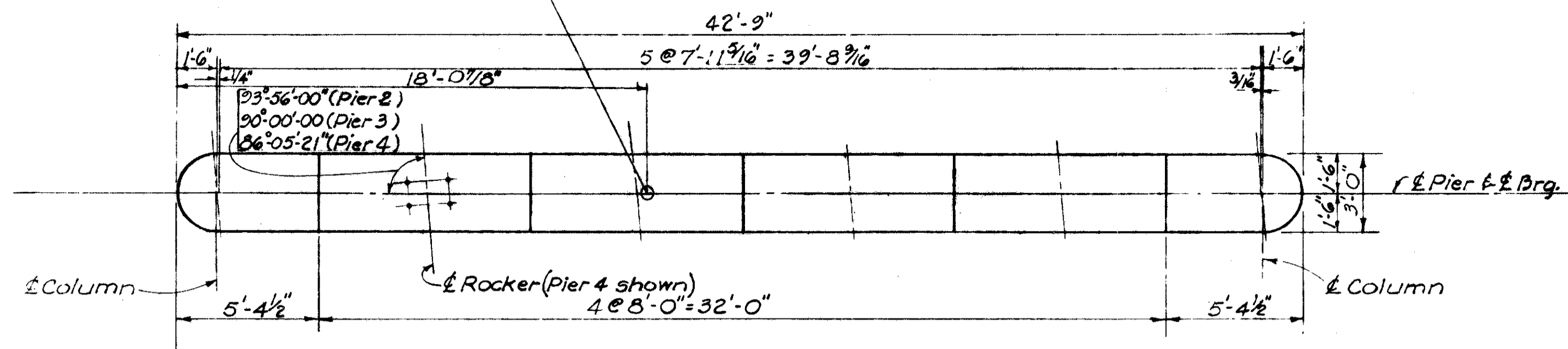
Pier 2 - Sta. 43+74.20  $\pm$  Ramp "D"  
Pier 3 - Sta. 44+45.71  $\pm$  Ramp "D"  
Pier 4 - Sta. 45+17.23  $\pm$  Ramp "D"  
See Sheet 243 for layout.



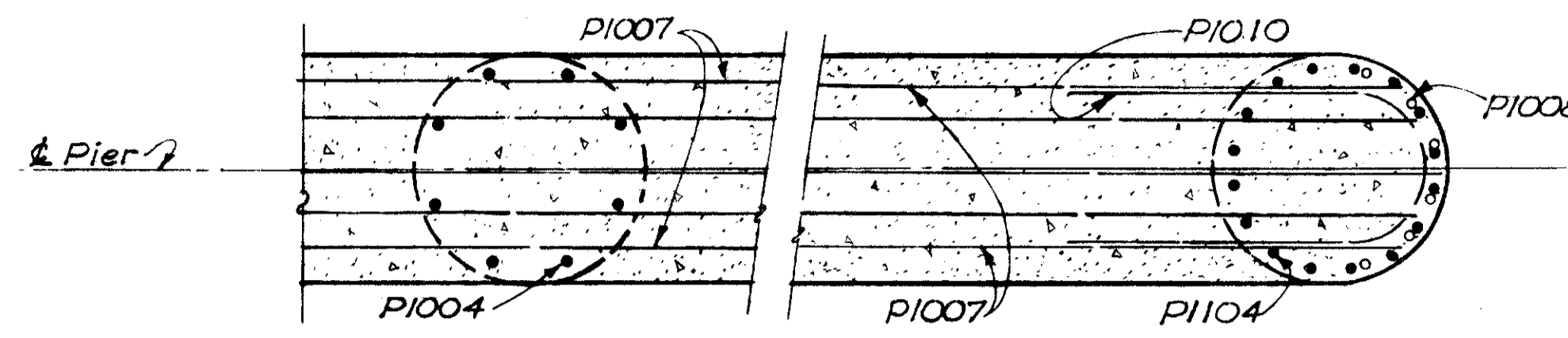
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

247  
317

HAMILTON COUNTY  
HAM-25-15.60  $\pm$   
HAM-50B-22.02

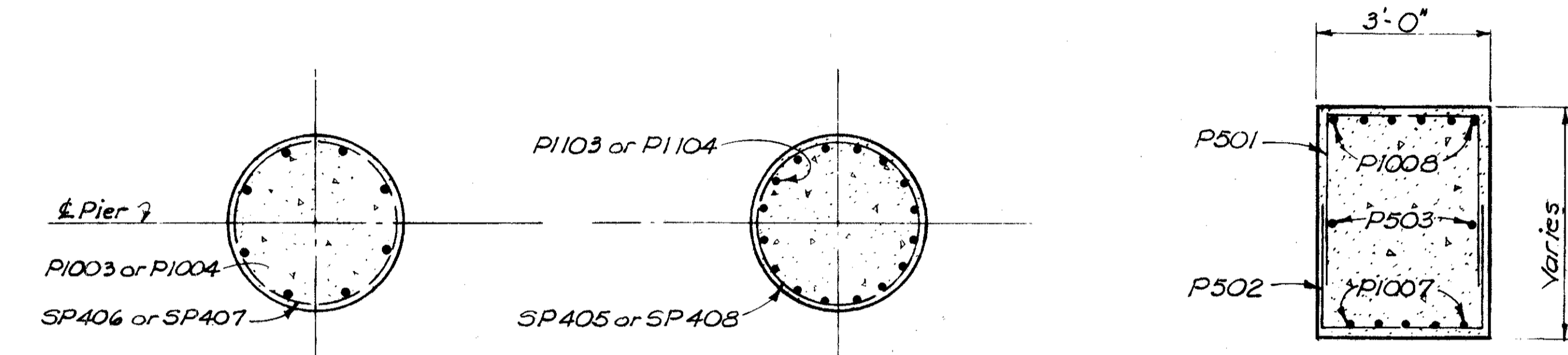


PLAN



SECTION A-A

SECTION B-B



SECTION C-C

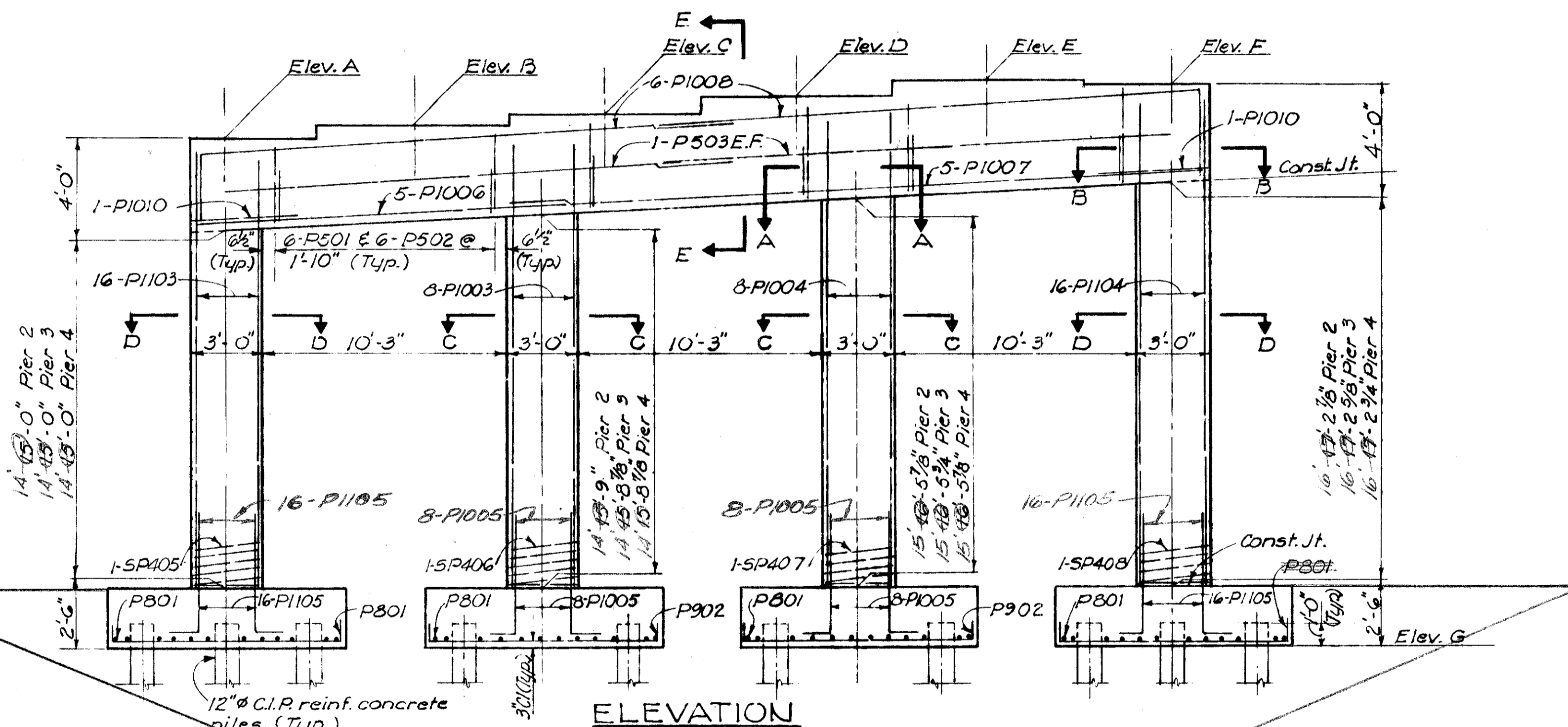
SECTION D-D

SECTION E-E

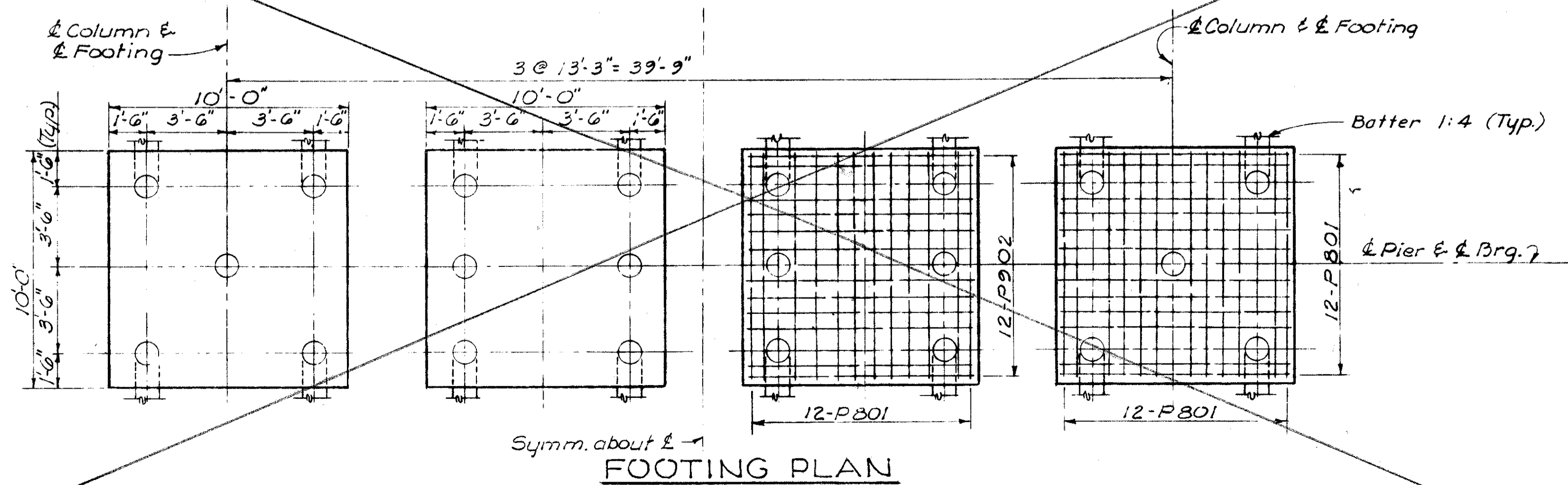
Pier	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F	Elev. G
2	607.18	607.84	608.51	609.17	609.73	609.42	685.68
3	607.27	607.93	608.59	609.25	609.81	609.49	685.77
4	607.08	607.74	608.40	609.07	609.63	609.31	685.58

NOTES

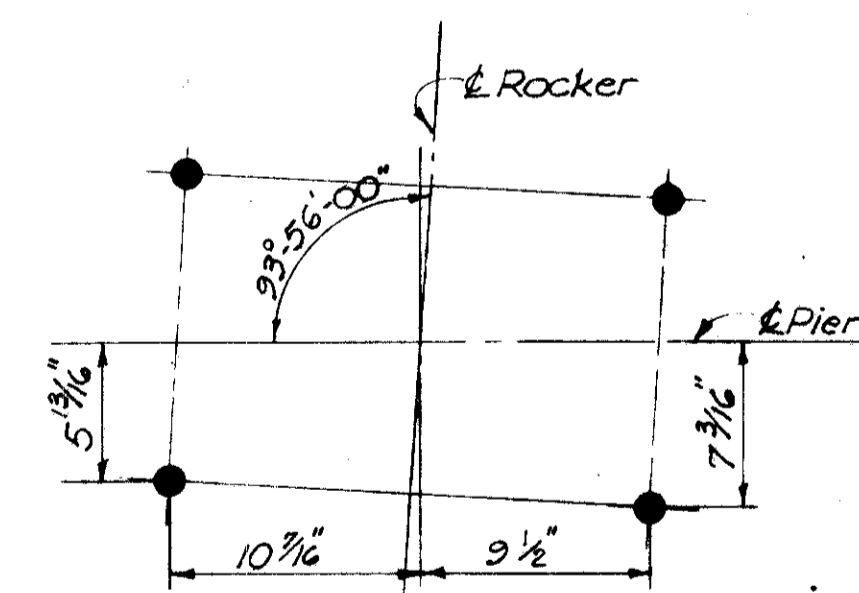
1. E.F. = Each Face
2. Steel in cap shall be placed so as not to interfere with drilling of anchor bolt holes.
3. For reinforcing steel list see Sh. 252.
4. For footing layout, see Sh. 247A.



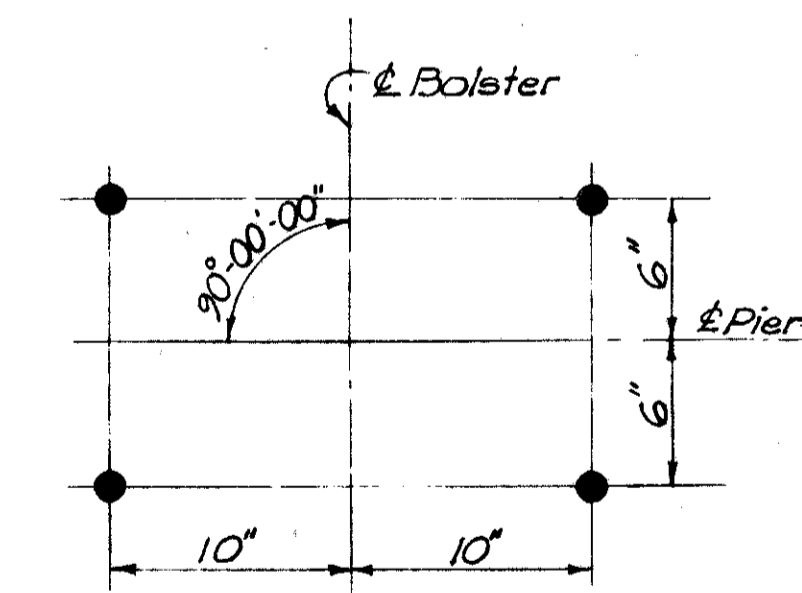
ELEVATION



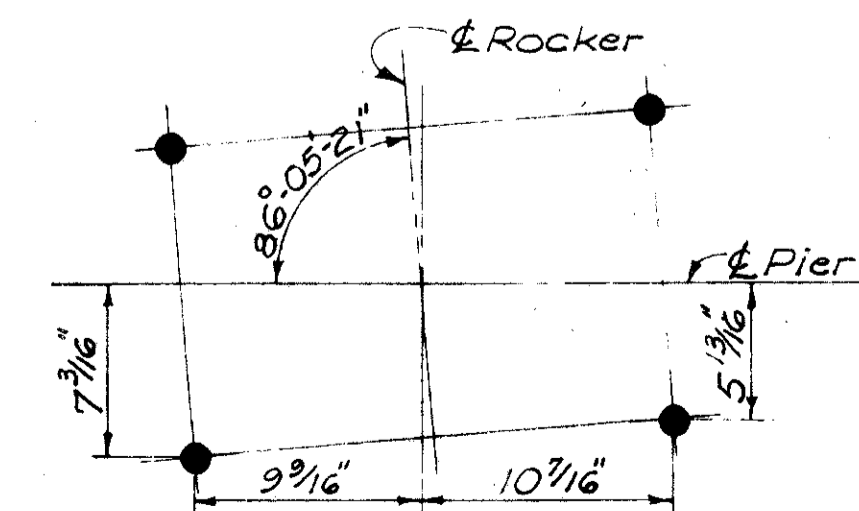
FOOTING PLAN



ANCHOR BOLT LAYOUT  
PIER 2



ANCHOR BOLT LAYOUT  
PIER 3



ANCHOR BOLT LAYOUT  
PIER 4

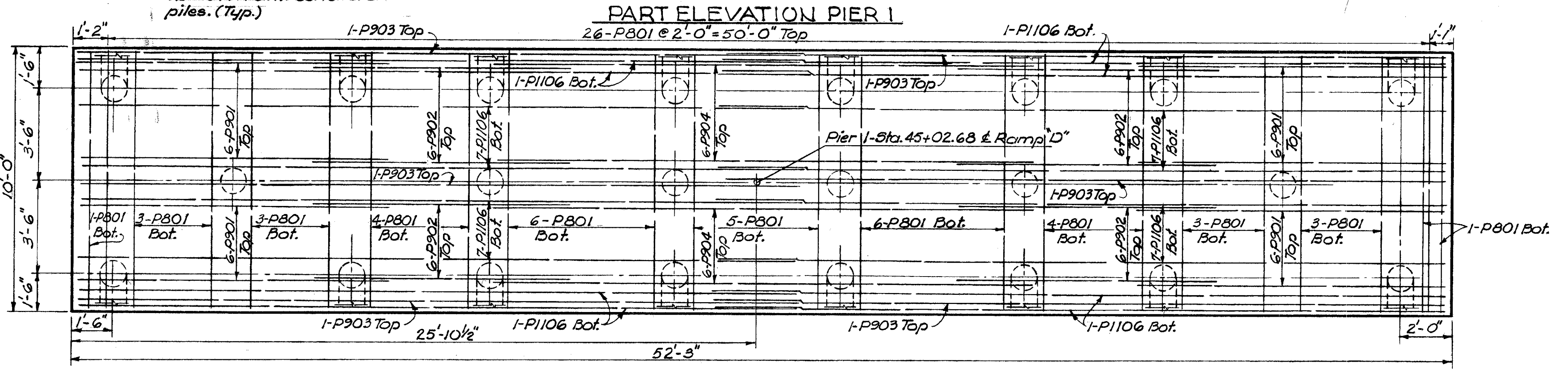
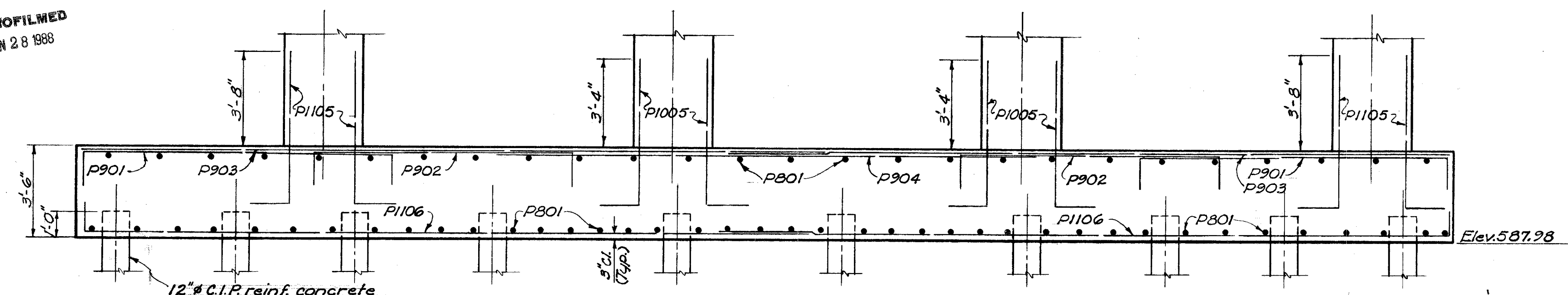
VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS CINCINNATI		ARCHITECTS CHICAGO	
<b>PIERS NO. 2, 3 &amp; 4</b>			
BRIDGE NO. HAM-25-1054 PROPOSED U.S. 25 UNDER PROPOSED RAMP "D"			
HAMILTON COUNTY STA. 42+57.39 TO STA. 46+34.02			
DESIGNED H.E.O.	DRAWN K.L.	TRACED K.L.	CHECKED D.L.V.
REVIEWED JAD Oct. 58	DATE	REVISED 7-2-53	

MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

247A  
317

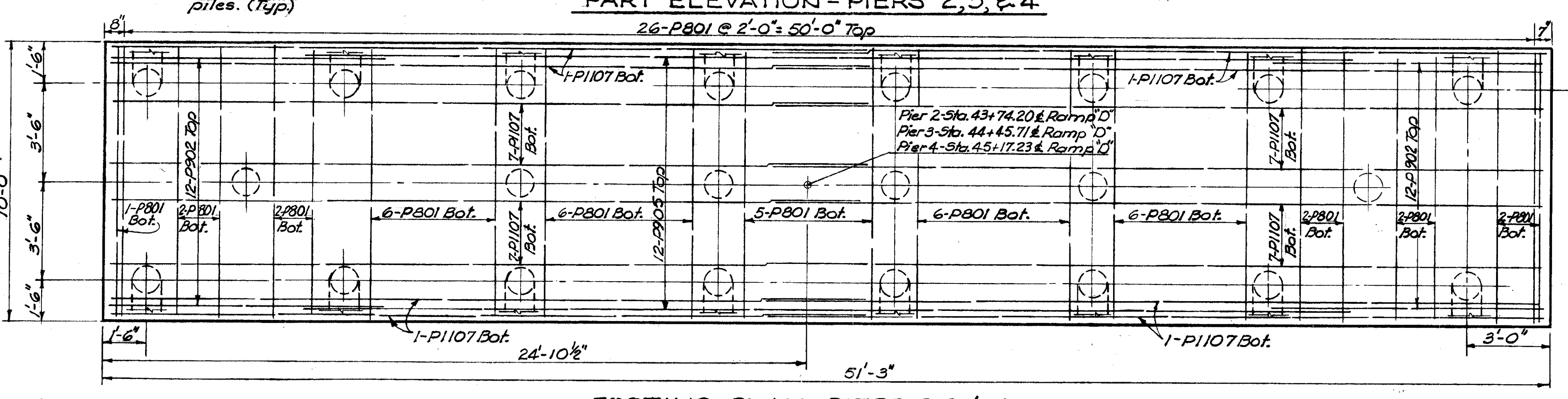
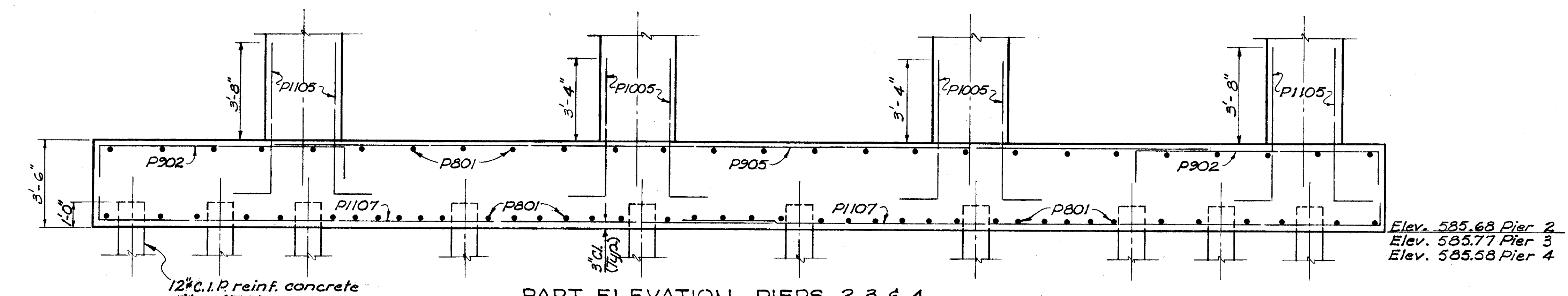
HAMILTON COUNTY  
HAM-25-1560 &  
HAM-50B-22.02



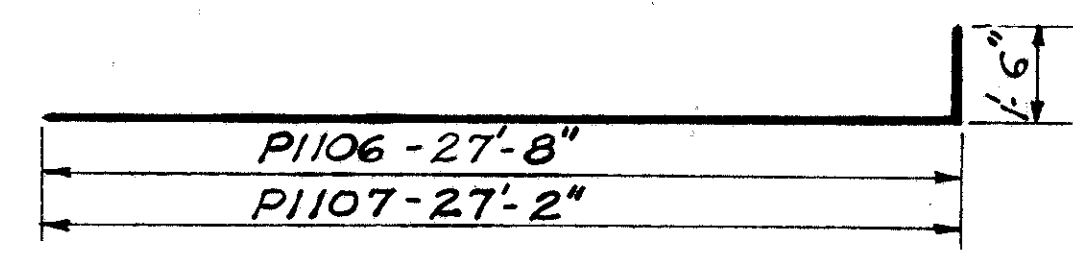
**REINFORCEMENT LIST**

MARK	LENGTH	SHAPE	NO.	WEIGHT
P903	27'-4"	St.	6	558
P904	20'-6"	St.	12	836
P905	37'-3"	St.	36	4559
P1106	28'-10"	Bt.	36	5515
P1107	28'-4"	Bt.	108	16,258

The above list is to be used with Sheet 252



**BENDING DIAGRAM**



- NOTES:**
- Column steel to be adjusted as required.
  - Work this sheet with sheets 246 & 247.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**REVISED FOOTINGS  
PIERS 1, 2, 3, & 4**  
BRIDGE NO. HAM-25-1654  
PROPOSED U.S. 25 UNDER  
PROPOSED RAMP "D"

HAMILTON COUNTY STA. 42+57.39 TO  
STA. 40+34.02

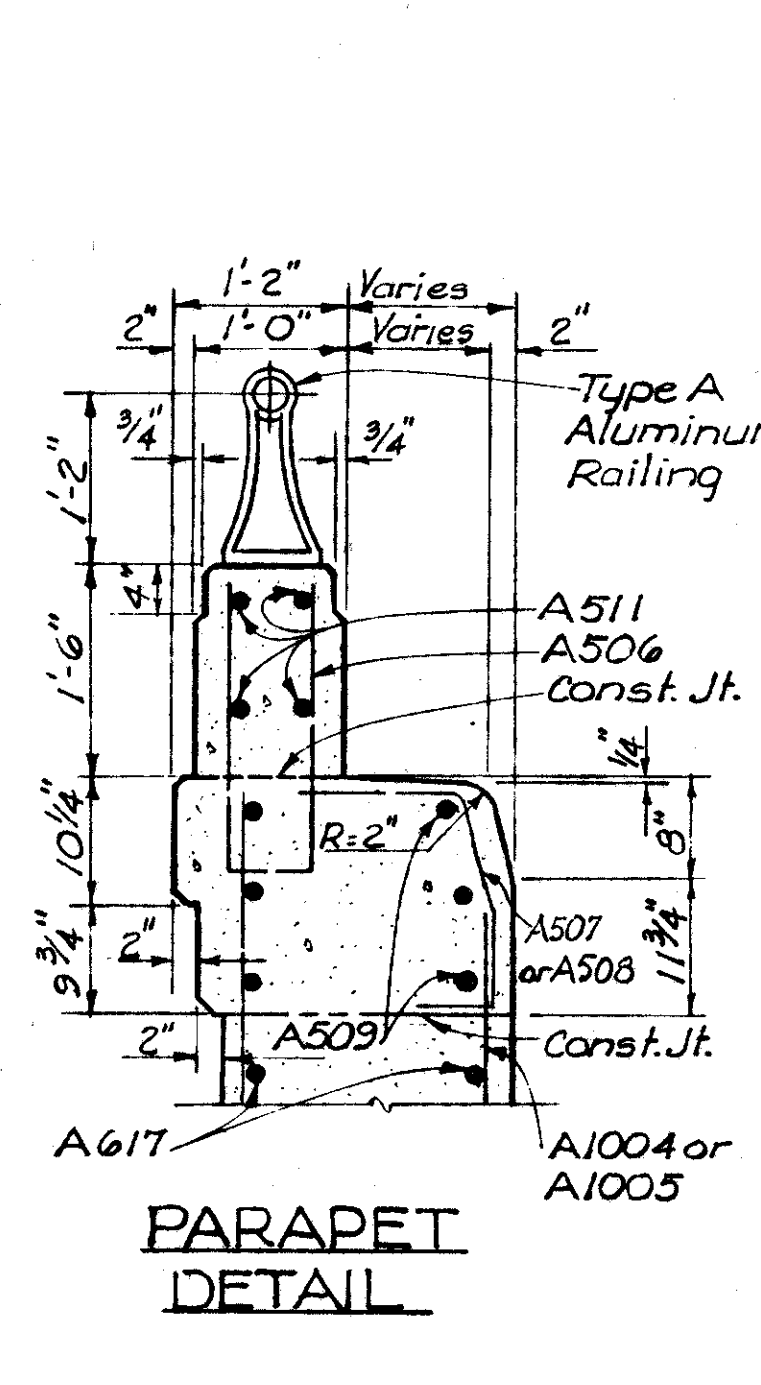
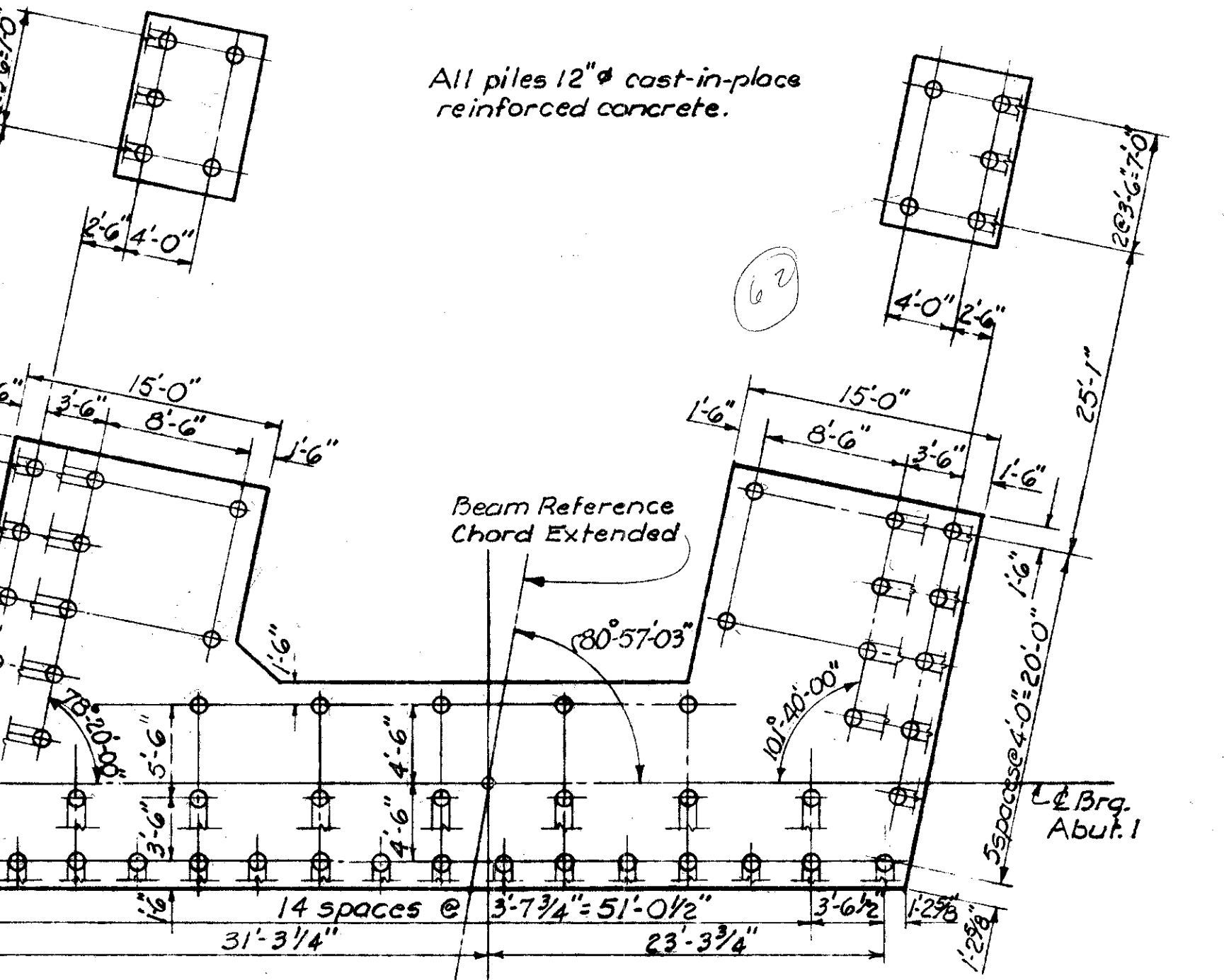
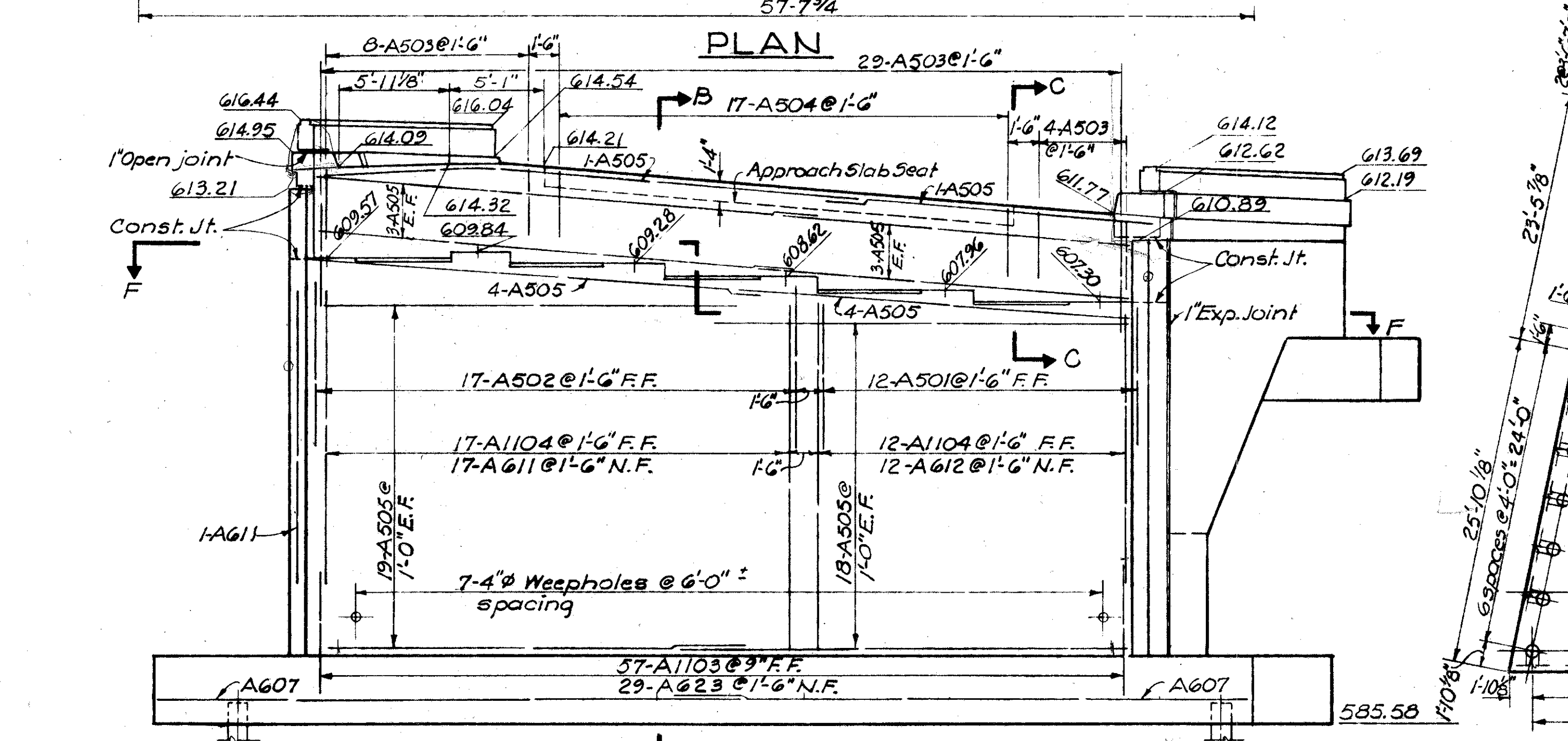
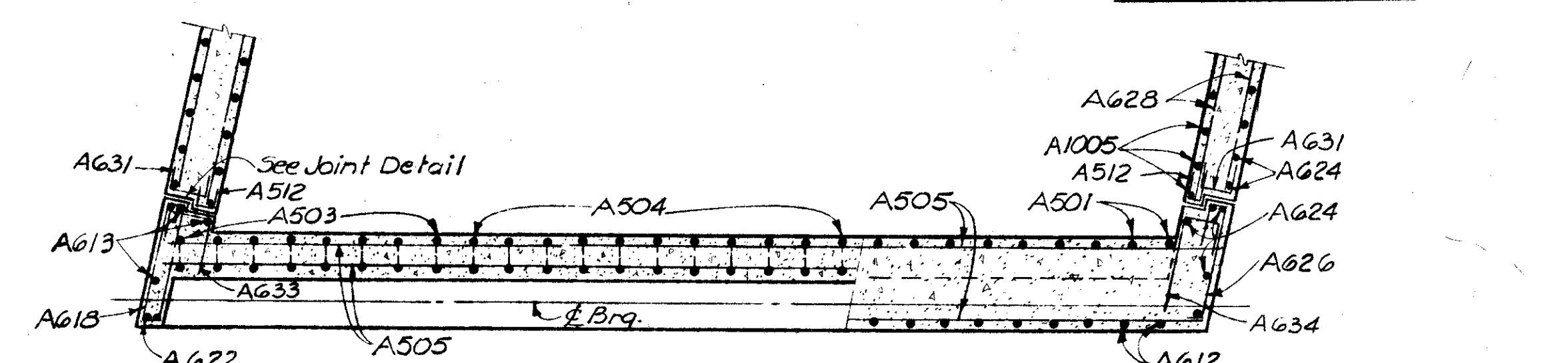
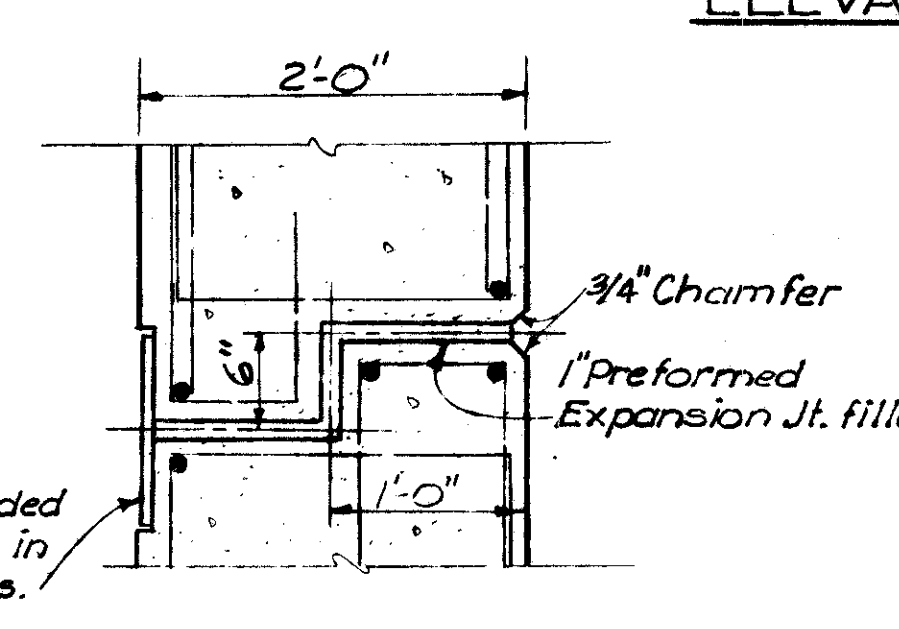
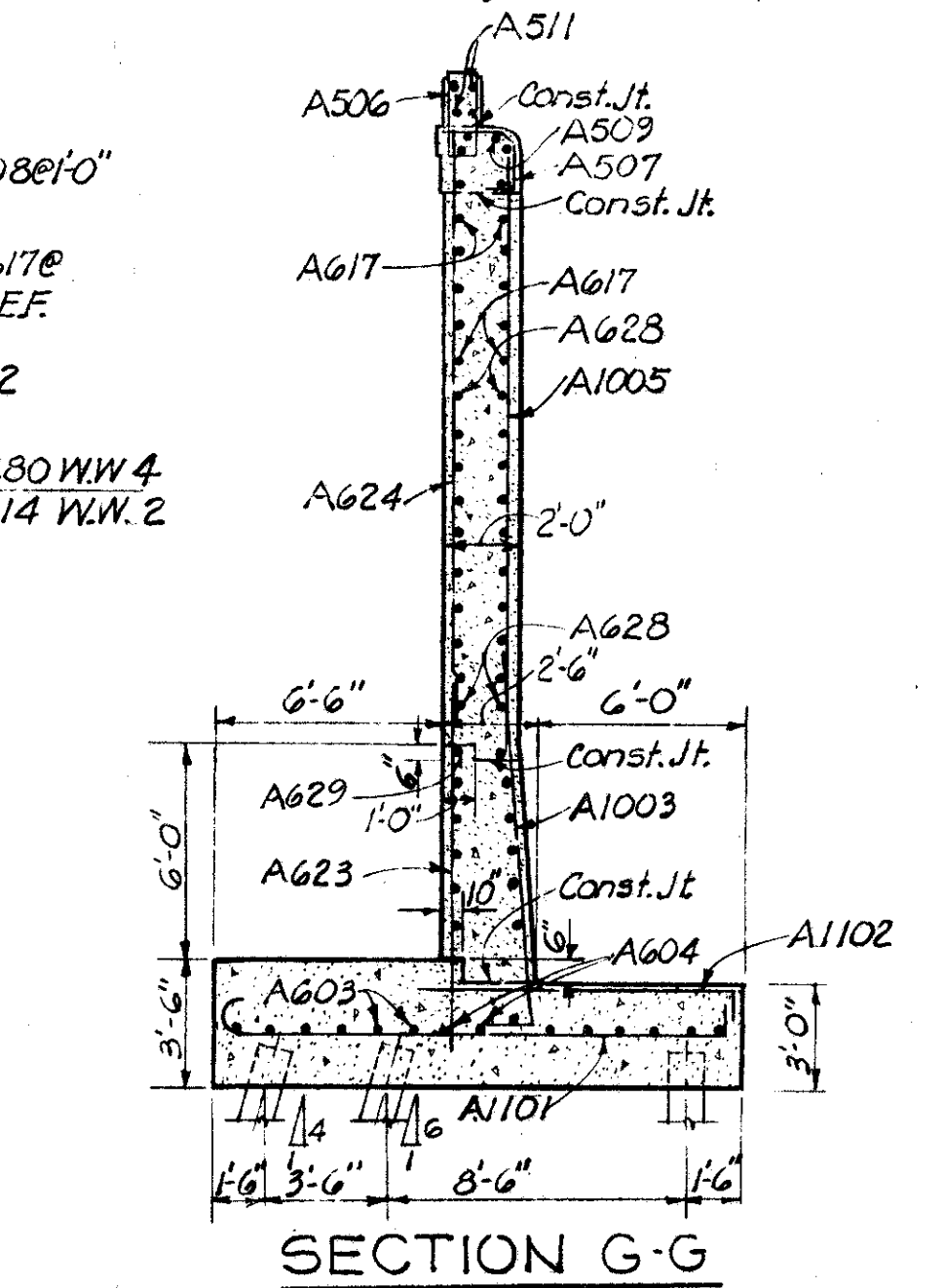
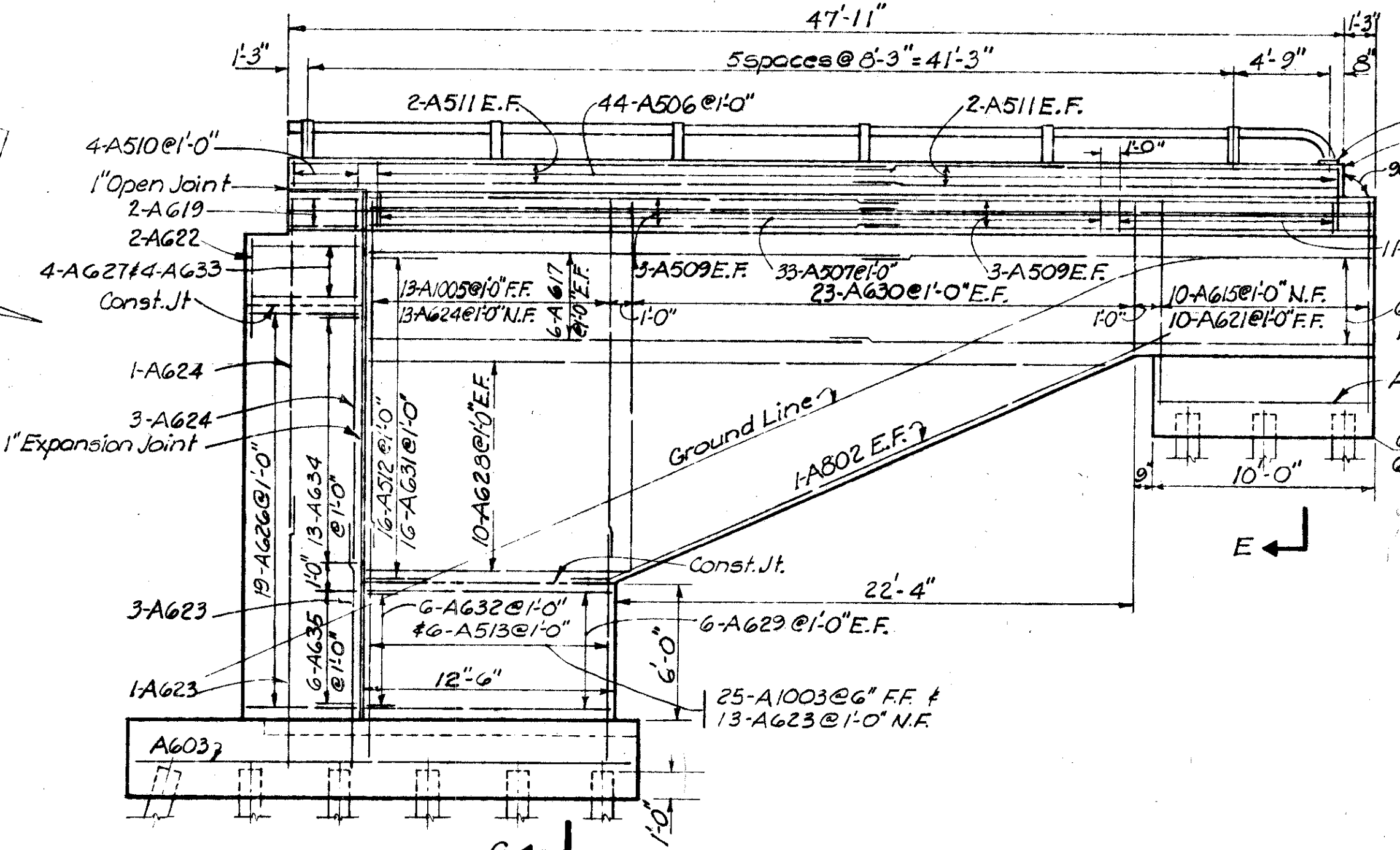
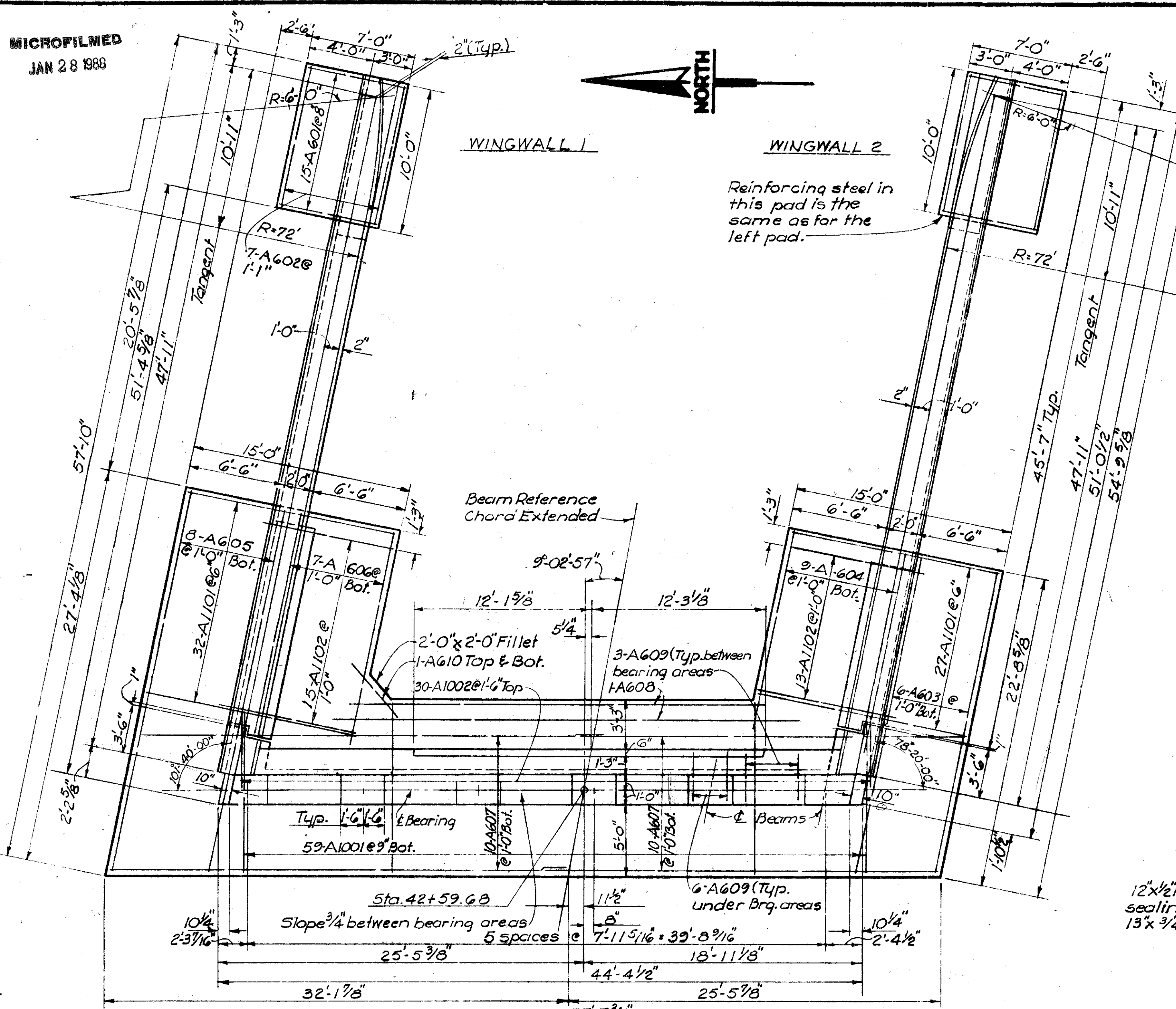
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
HEO	K.L.	K.L.	C.E.S.			

MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT	248 317
2	OHIO		

HAMILTON COUNTY  
HAM - 25 - 15.60 E  
HAM - 50 B - 22.02

For Railing End Details, see Sheet 299.  
For Guard Rail Anchorage, see Sheet 299.



- NOTES:
- Designations used are as follows:  
N.F. = Near Face.  
F.F. = Far Face.  
E.F. = Each Face.
  - For Reinforcing Steel List, see Sheet 252.
  - Parapet concrete and A510 and A511 bars to be included with Item 5-14 for payment.
  - Porous Backfill: 2 ft thick, full length of the abutment, shall extend up to the underside of the approach slab or paved shoulder.
  - In the area of the pads, the embankment shall be placed and compacted up to the elevation of the top of the pads, after which excavation shall be made for the pads and piles shall be driven.
  - For additional details, see Sheet 249.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

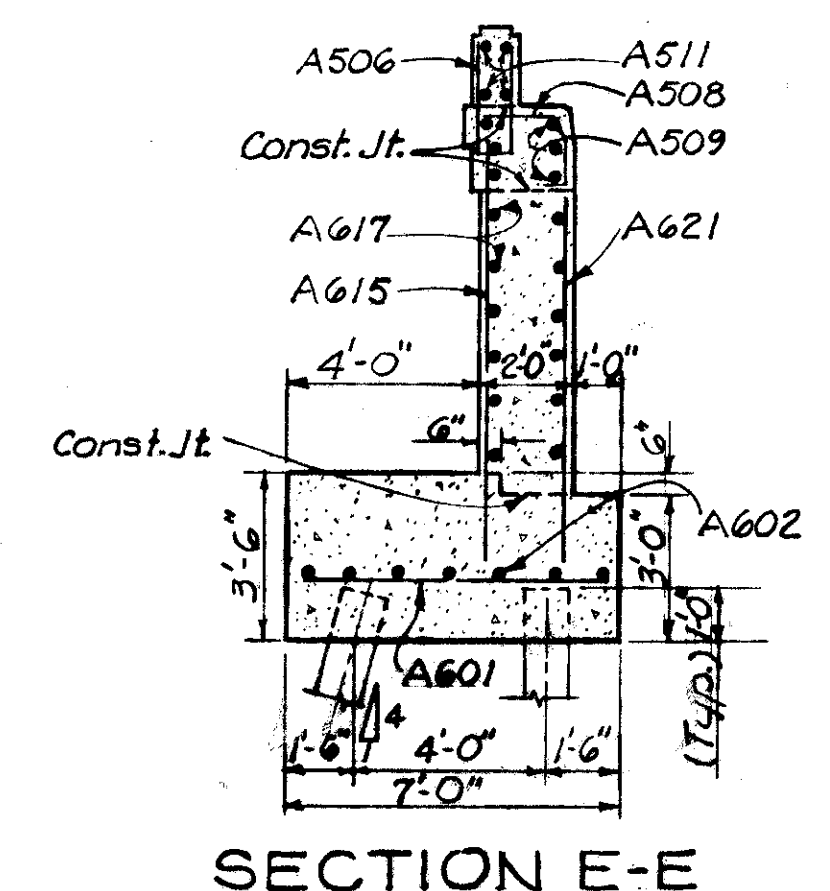
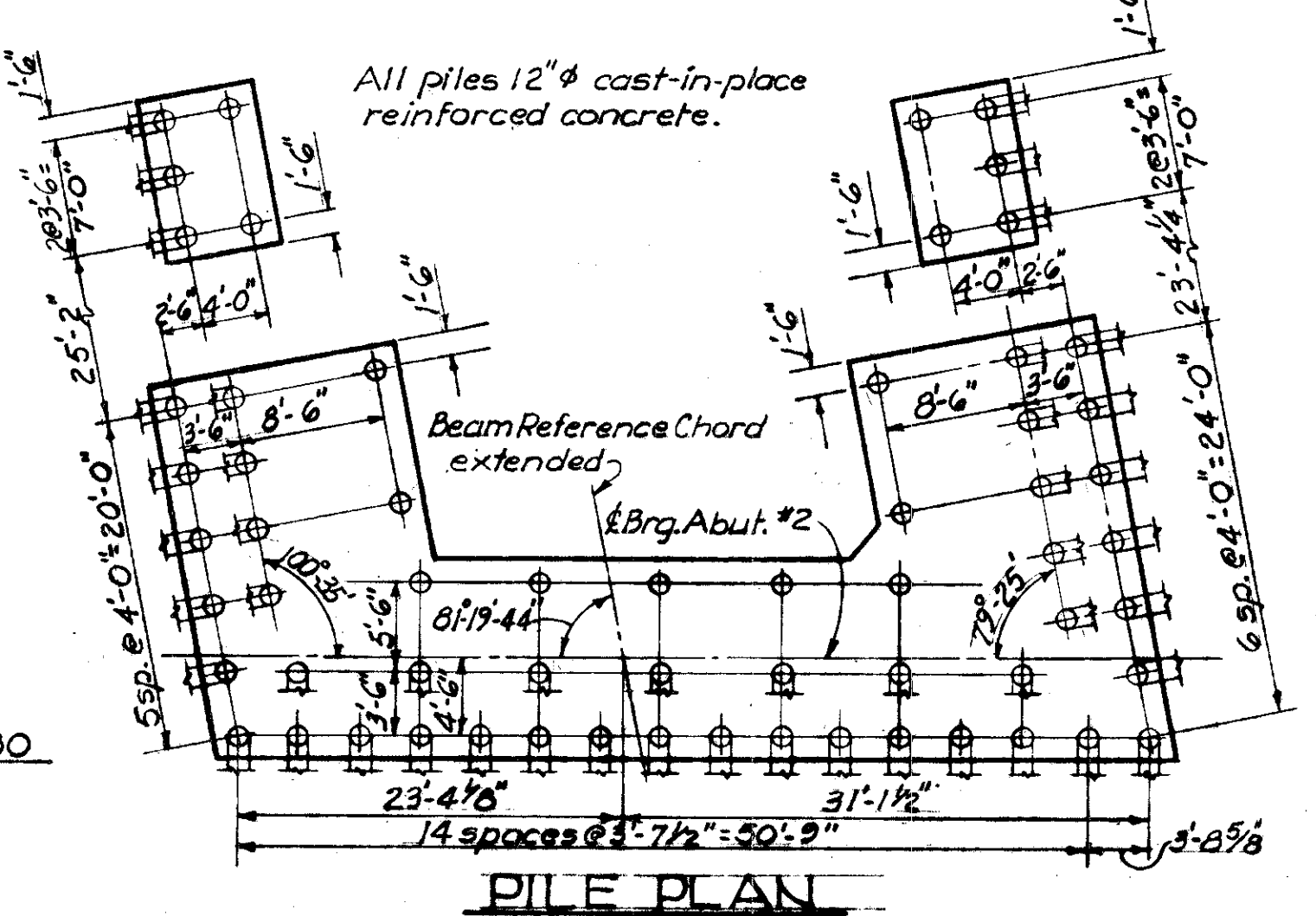
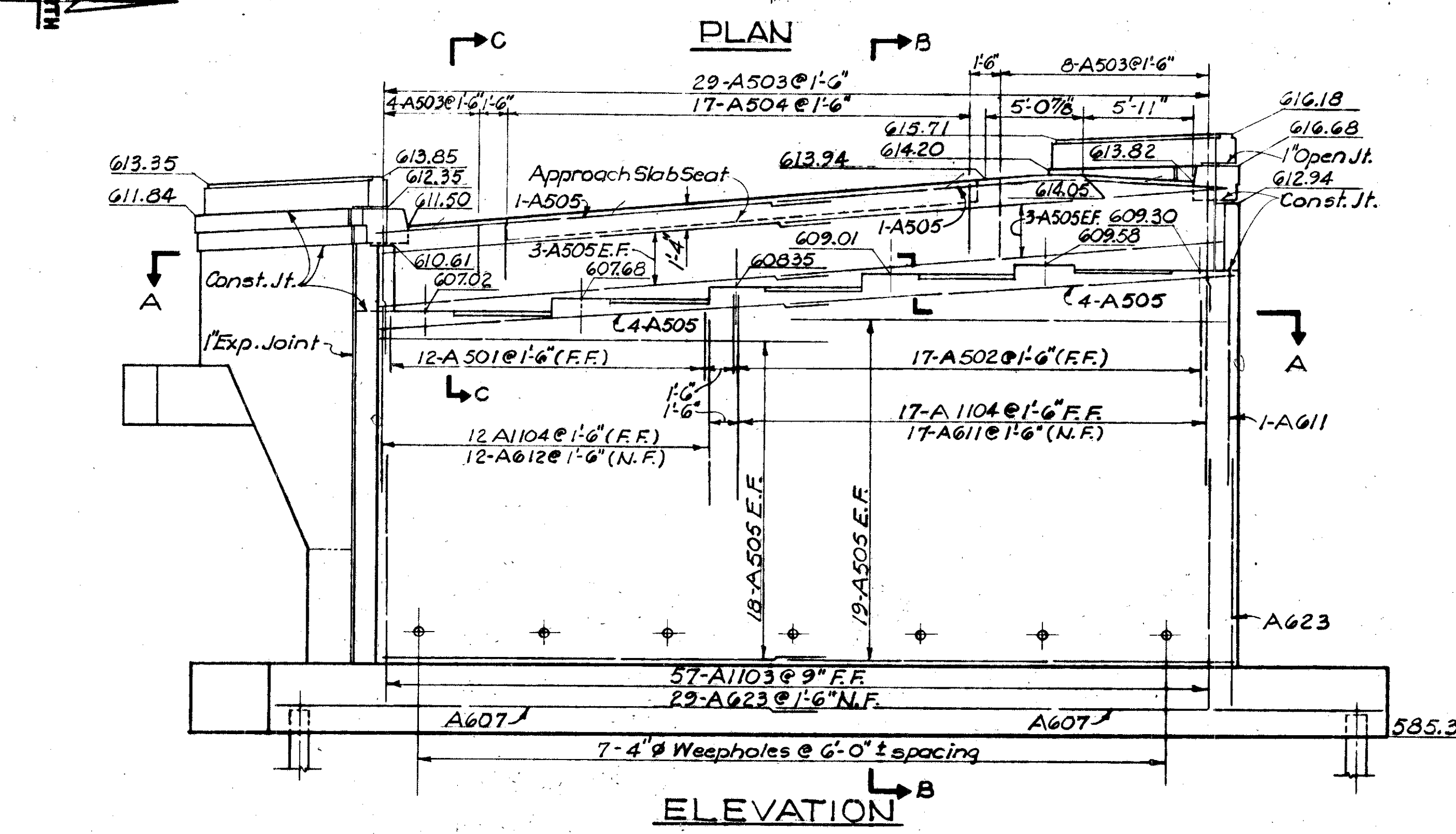
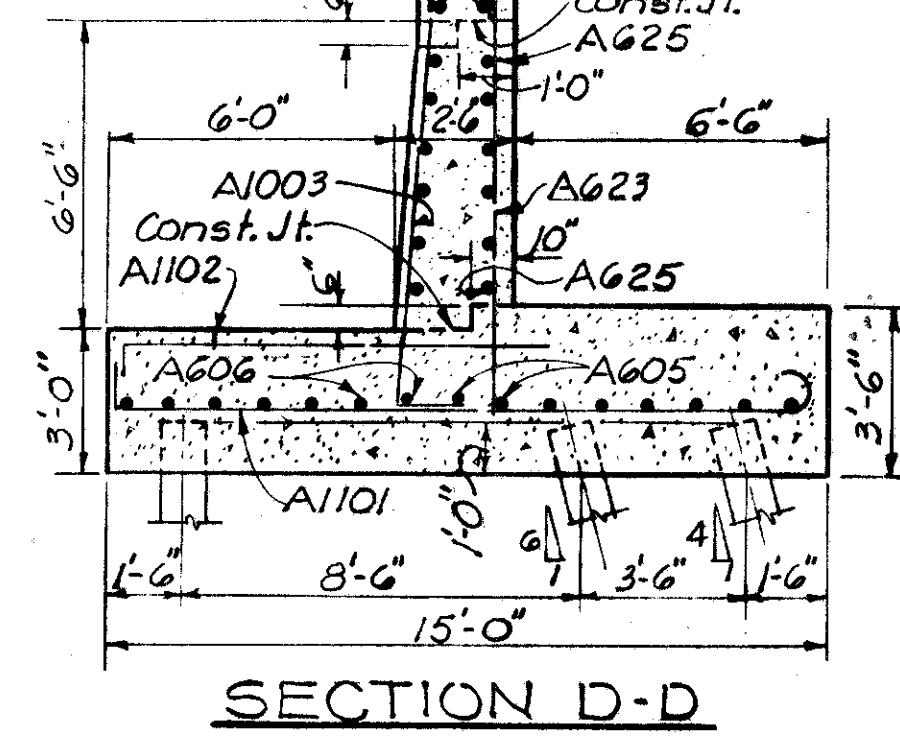
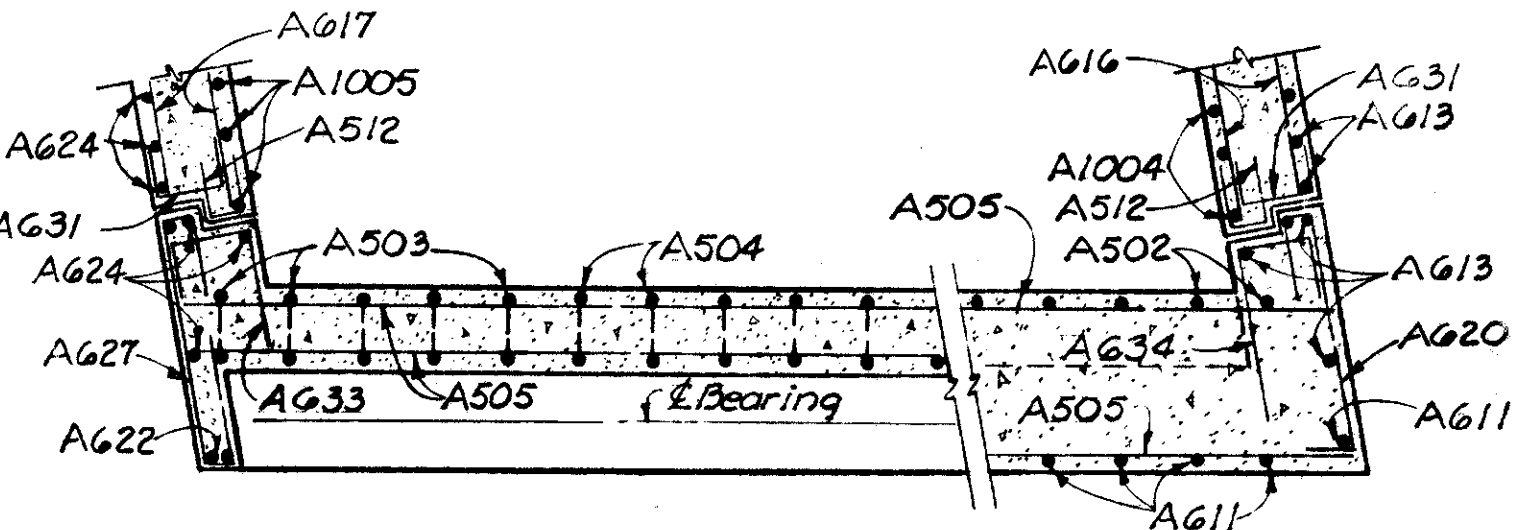
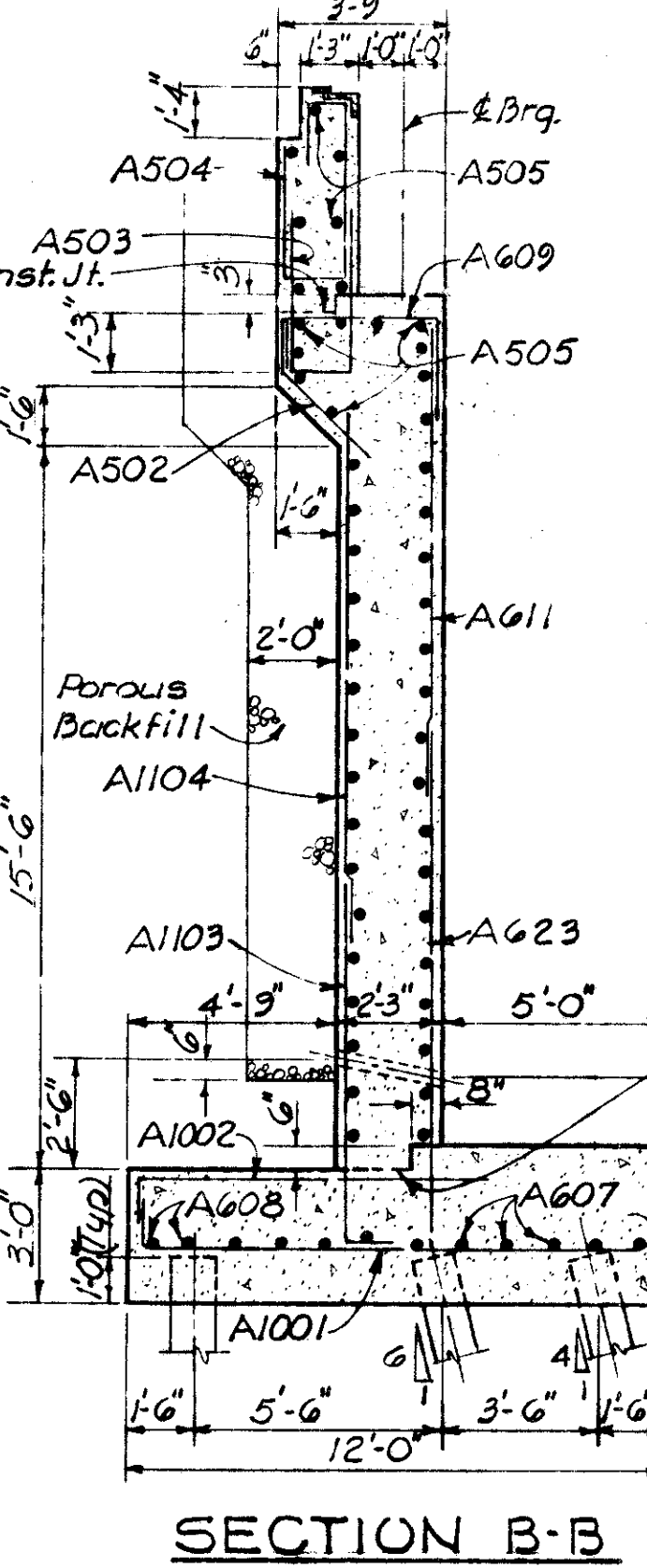
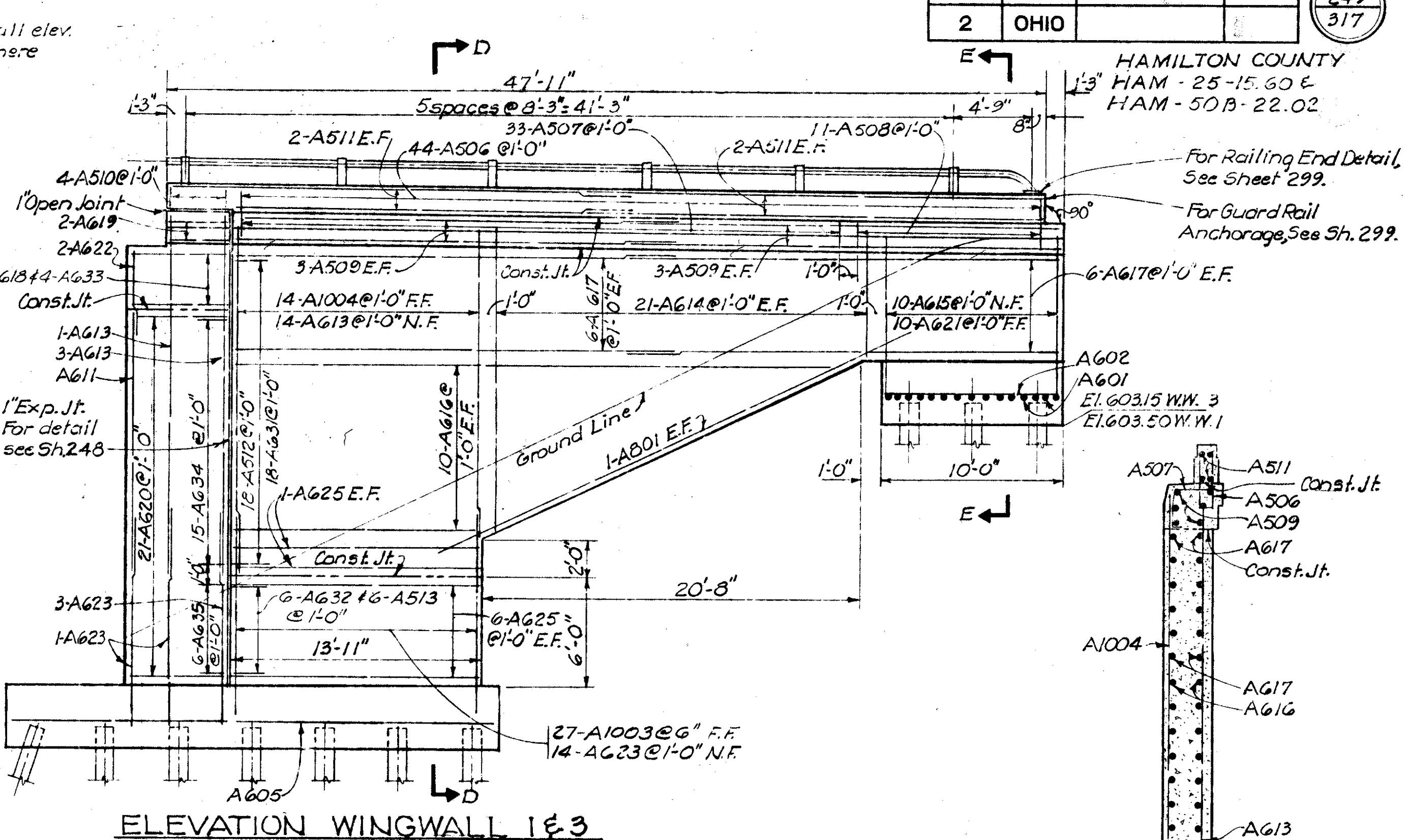
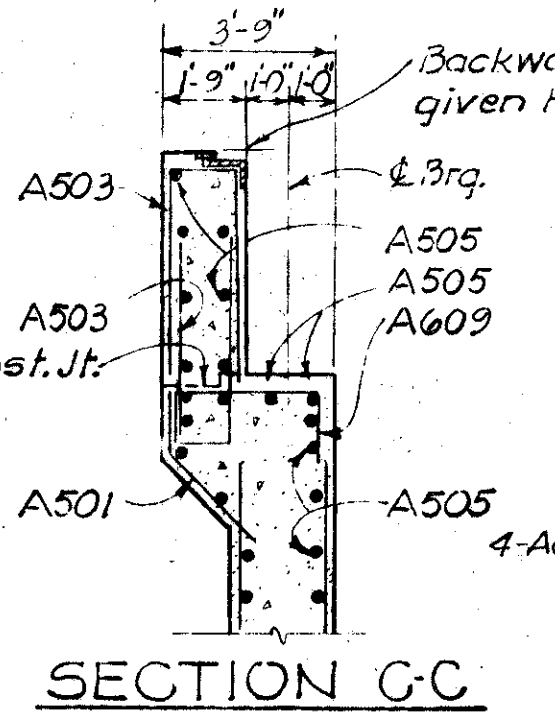
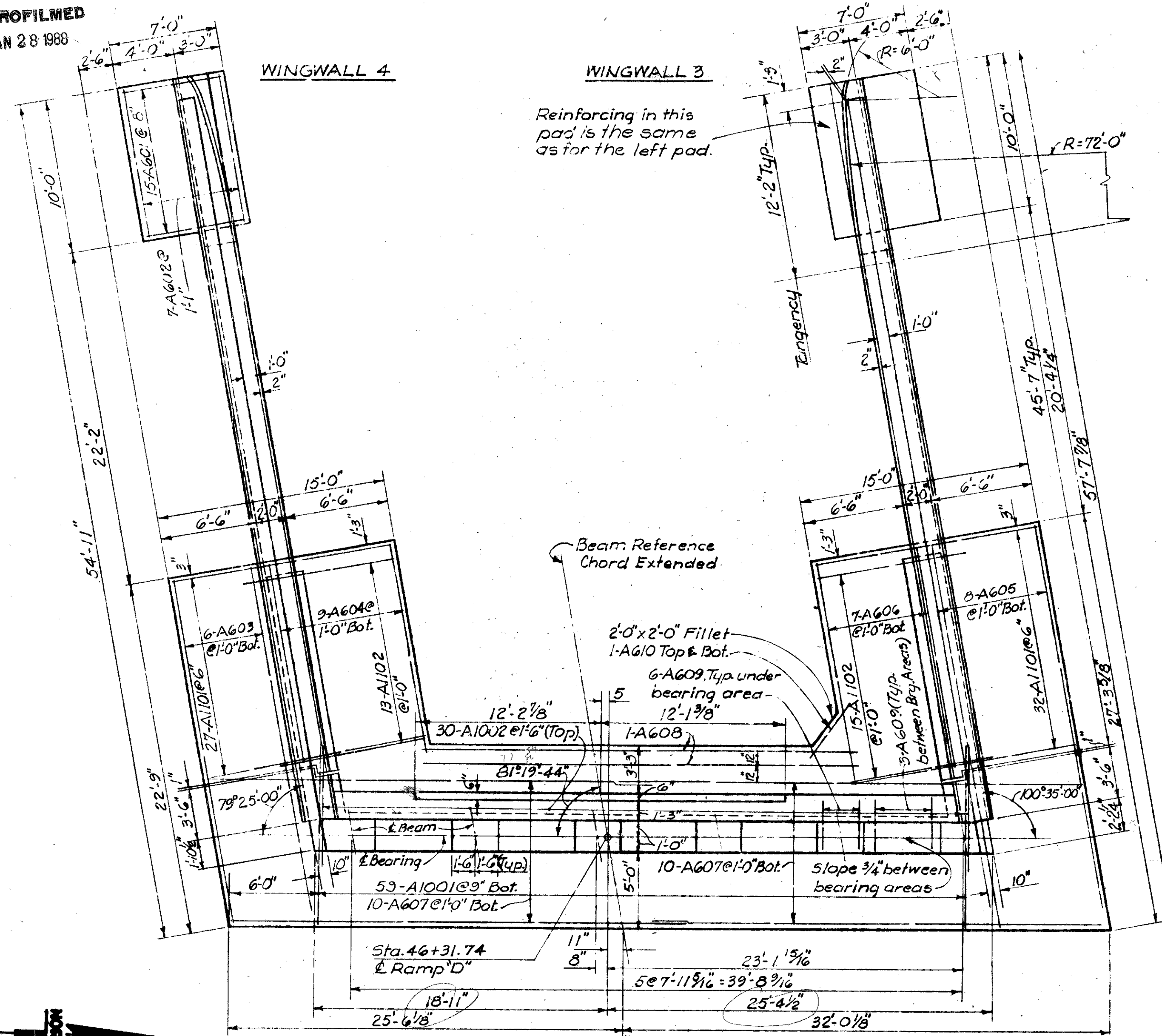
**ABUTMENT I**  
BRIDGE NO. HAM-25-1654  
PROPOSED US. 25 UNDER  
PROPOSED RAMP "D"

HAMILTON COUNTY STA. 42+57.39 TO  
STA. 46+34.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
A.H.H.	J.L.A.	K.L.	J.D.B.	J.A.D.	Oct '58	

HAMILTON COUNTY  
HAM-25-15.60 E  
HAM-50B-22.02

For Railing End Detail, See Sheet 299.  
For Guard Rail Anchorage, See Sh. 299.

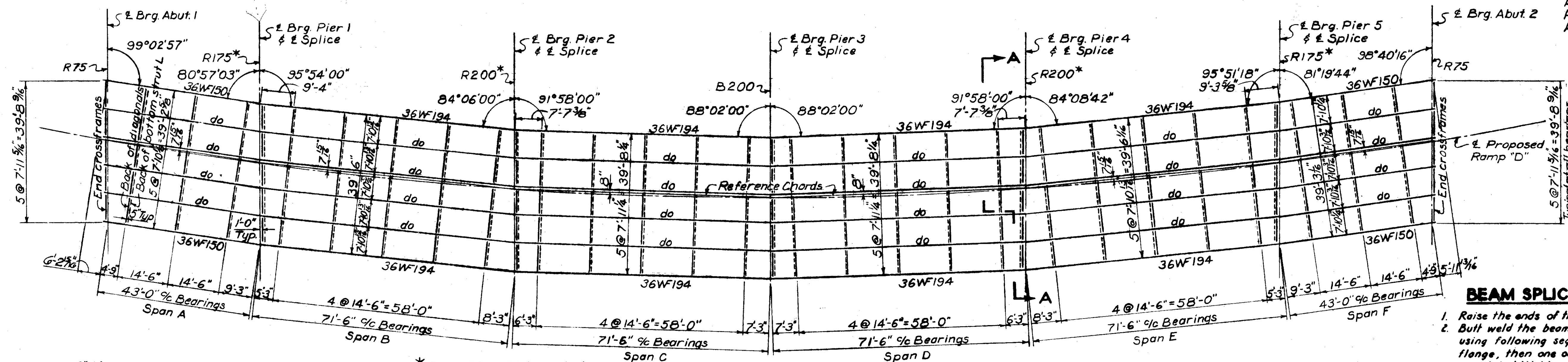


For notes & additional details see Sheet 248.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS CINCINNATI		ARCHITECTS CHICAGO	
ABUTMENT 2			
BRIDGE NO. HAM-25-1654 PROPOSED U.S. 25 UNDER PROPOSED RAMP 'D'			
HAMILTON COUNTY		STA. 42+57.39 TO STA. 46+34.02	
DESIGNED AHH	DRAWN AHH	TRACED KL	CHECKED HEO, RWS
DATE J.A.D. Oct. '53		REVIEWED	DATE



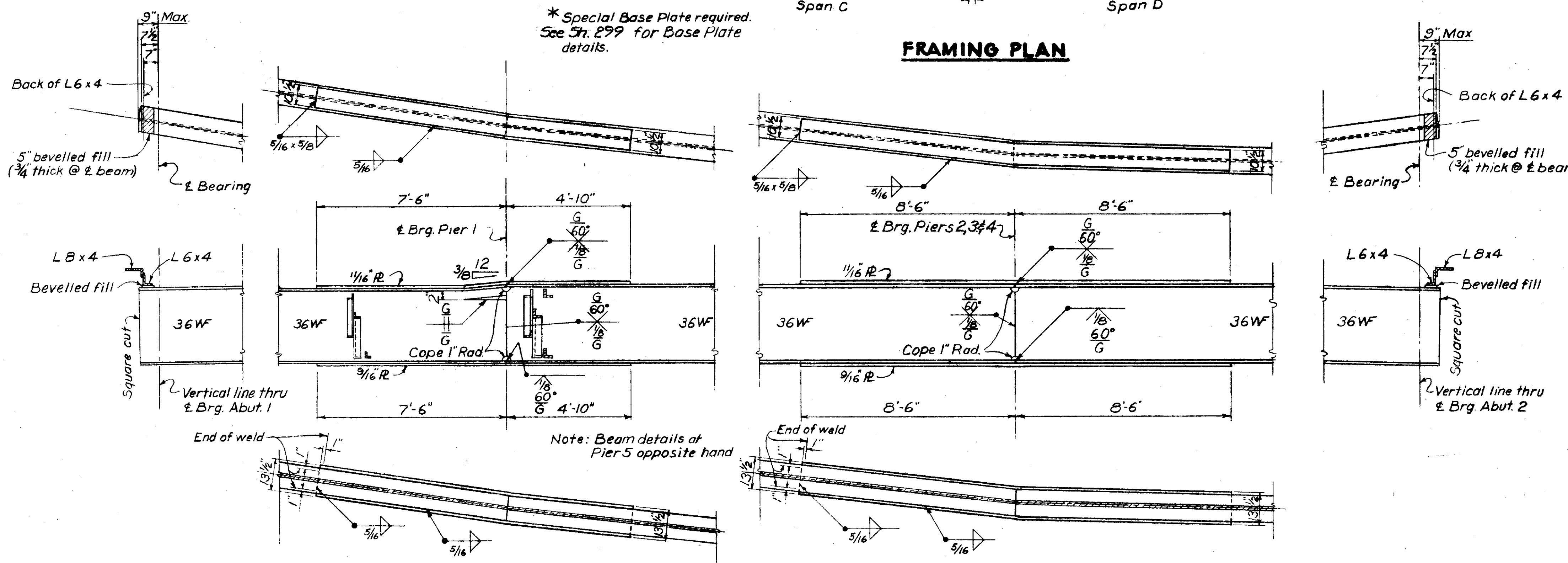
HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



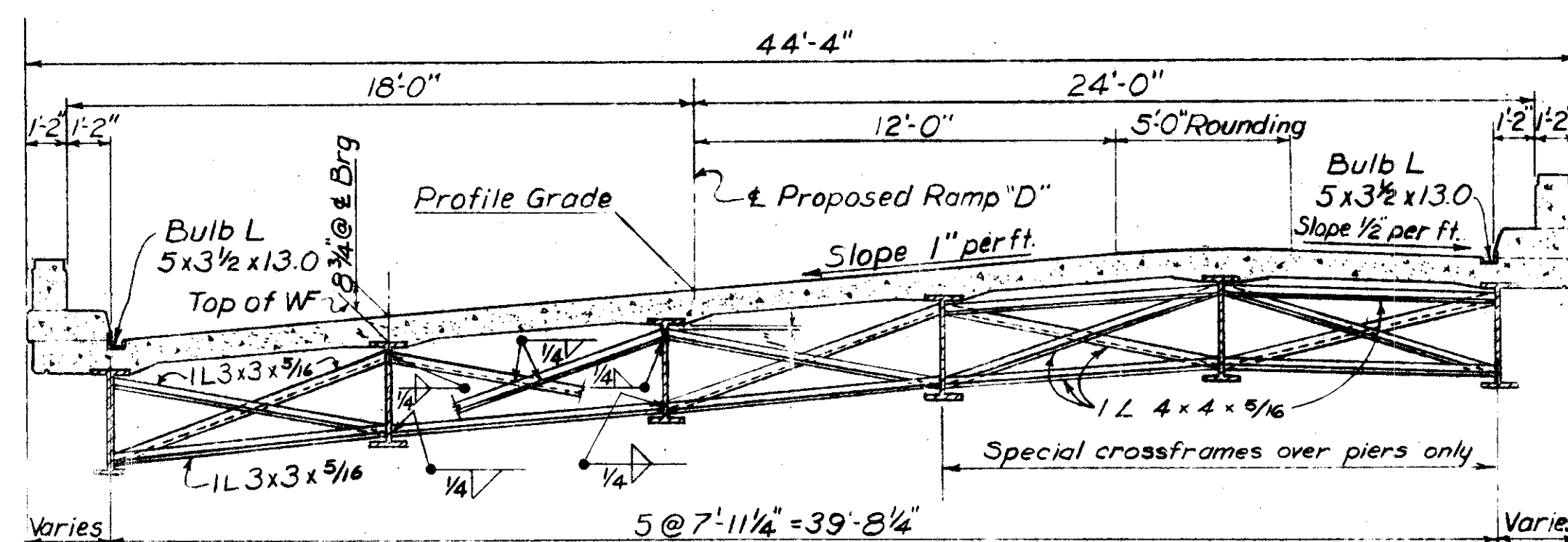
**BEAM SPlice WELDING PROCEDURE**

1. Raise the ends of the beams 2" at Pier No. 2.
2. Butt weld the beam flanges and web at Pier No. 3, using following sequence: make one pass on each flange, then one on the web; repeat until welds are completed. Weld special crossframes in place at Pier No. 3.
3. Weld the bottom and top moment plates at Pier No. 3.
4. Lower the ends of the beams of Pier No. 2.
5. Raise the ends of the beams 1/2" at Pier No. 1 and 1/2" at Pier No. 5.
6. Make the splice at Piers No. 2 and 4 in the same manner as steps 2 and 3.
7. Lower the ends of the beams of Piers No. 1 and 5.
8. Raise the ends of the beams 1/2" at Abutment No. 1 and 1/2" at Abutment No. 2.
9. Make the splice at Piers No. 1 and 5 in the same manner as steps 2 and 3.
10. Lower the ends of the beams to final position.

**FRAMING PLAN**



**BEAM DETAILS**



**SECTION A-A**

DEFLECTION & CAMBER						
BEAM SPAN	EXTERIOR			INTERIOR		
	A & F	B & E	C & D	A & F	B & E	C & D
Deflection due to weight of steel	0	1/16"	1/16"	0	1/16"	1/16"
Deflection due to remaining dead load	1/16"	7/16"	5/16"	1/16"	1/2"	5/16"
Camber required for vertical curve	0	0	0	0	0	0
Sum of deflection and camber	1/16"	1/2"	3/8"	1/16"	3/16"	3/8"
Required Shop Camber	0	0	0	0	0	0

**NOTES**

1. For end crossframe details, see Std. Dwg. CSB-2-56, Sh. 2.
2. Standard end dam to be used at both abutments. For details, see Std. Dwg. CSB-2-56, Sh. 2 & 3.
3. For scupper details, see Sh. 253 & Std. Dwg. CSB-2-56, Sh. 3.
4. For location of scuppers, see Sh. 253.
5. For rocker and bolster details, see Std. Dwg. RB-1-55 and Sh. 299.
6. For additional notes, see Sh. 244.

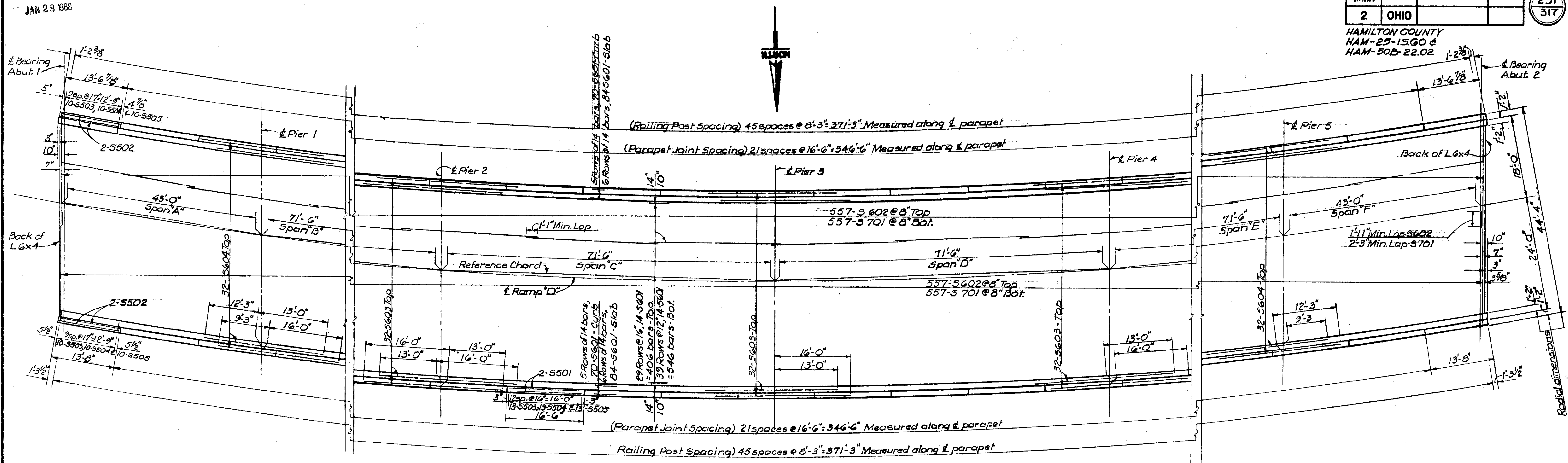
VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**STEEL FRAMING PLAN & DETAILS**

BRIDGE NO. HAM-25-1654  
PROPOSED U.S. 25 UNDER  
PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 42+5739 TO  
STA. 46+34.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RNV	DJF	DJF	RFC	JAD	Oct 58	

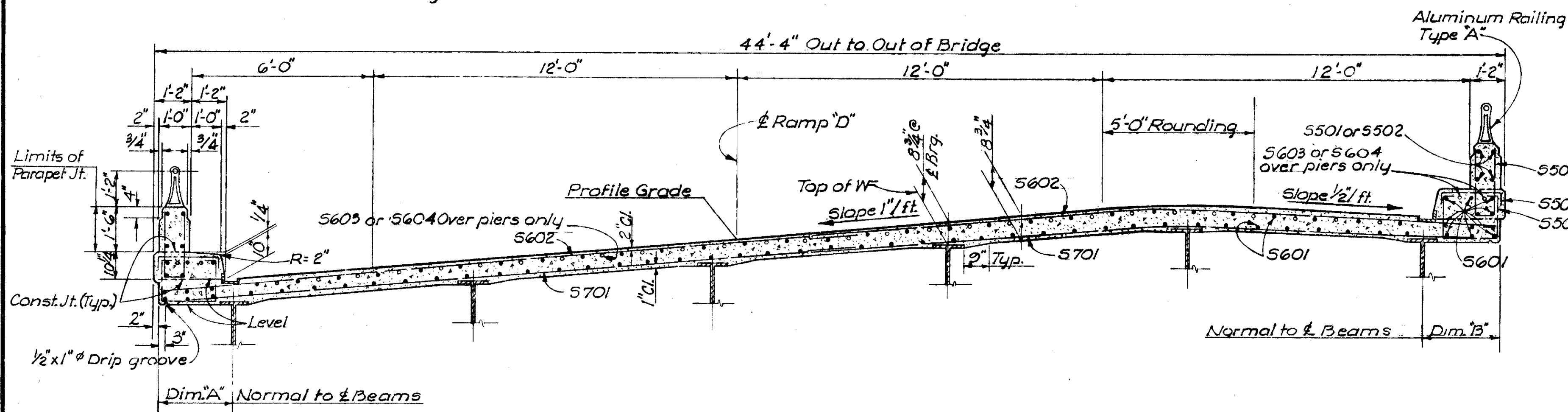
HAMILTON COUNTY  
HAM-25-1560 &  
HAM-50B-22.02



**ROADWAY SLAB REINFORCING**

- NOTES:**
1. For location of scuppers, see Sh. 253.
  2. Spread reinforcing steel in slab to clear scuppers as necessary.
  3. For pavement elevations, see Sh. 2A3.
  4. For railing details and additional parapet joint details, see Std. Dwg. A R-1-57.
  5. For reinforcing steel list, see Sh. 252.
  6. Parapet concrete, 5501 and 5502 bars to be included with item 5-14 for payment.

Slab thickness shown includes 1" for monolithic wearing surface.



**TYPICAL TRANSVERSE SECTION THRU ROADWAY**

**FASCIA OFFSETS**  
(Given at fifth or tenth points along & Beams)

LOCATION	Dim. A"	Dim. B"	LOCATION	Dim. A"	Dim. B"
Brq. Abut. 1	2'-8 3/8"	2'-2 3/8"	Pier 3	2'-5 3/8"	1'-10 1/8"
Span A			Span D		
1	2'-6 3/8"	2'-3 3/4"	1	2'-2 3/4"	2'-0 3/4"
2	2'-5 1/2"	2'-4 1/4"	2	2'-0 3/4"	2'-2 7/8"
3	2'-5 1/4"	2'-3 7/8"	3	1'-11 1/4"	2'-4 3/8"
4	2'-5 3/4"	2'-2 5/8"	4	1'-10 3/8"	2'-5 1/4"
Pier 1	2'-7 1/4"	2'-0 5/8"	5	1'-10 1/8"	2'-5 3/8"
1	2'-4 1/2"	2'-3"	6	1'-10 1/2"	2'-5 3/8"
2	2'-2 1/4"	2'-4 7/8"	7	1'-11 3/8"	2'-4 5/8"
3	2'-0 3/8"	2'-6 1/8"	8	2'-1"	2'-3 1/4"
Span B			Span E		
4	1'-11 1/2"	2'-6 3/4"	9	2'-3 1/8"	2'-1 1/4"
5	1'-11 3/8"	2'-6 7/8"	Pier 4	2'-5 7/8"	1'-10 3/4"
6	1'-11 1/4"	2'-6 3/8"	1	2'-3 3/8"	2'-1 1/2"
7	2'-0"	2'-5 3/8"	2	2'-1 1/2"	2'-3 5/8"
8	2'-1 3/8"	2'-3 3/4"	3	2'-0 1/8"	2'-5 1/8"
9	2'-3 1/4"	2'-1 1/2"	4	1'-11 1/2"	2'-6 1/8"
Pier 2	2'-5 7/8"	1'-10 3/4"	5	1'-11 3/8"	2'-6 5/8"
1	2'-3 1/8"	2'-1 1/4"	6	1'-11 3/8"	2'-6 3/8"
2	2'-1"	2'-3 1/4"	7	2'-0 3/4"	2'-5 3/4"
3	1'-11 3/8"	2'-4 5/8"	8	2'-2 3/8"	2'-4 1/2"
4	1'-10 1/2"	2'-5 3/8"	9	2'-4 1/2"	2'-2 3/4"
5	1'-10 1/8"	2'-5 5/8"	Pier 5	2'-7"	2'-0 3/8"
6	1'-10 3/8"	2'-5 1/4"	Span F		
7	1'-11 1/4"	2'-4 3/8"	1	2'-5 7/8"	2'-2 1/8"
8	2'-0 3/8"	2'-2 7/8"	2	2'-5 3/8"	2'-3 1/8"
9	2'-2 3/4"	2'-0 3/4"	3	2'-5 3/4"	2'-3 1/2"
Pier 3	2'-5 3/8"	1'-10 1/8"	4	2'-6 5/8"	2'-3"
Brq. Abut. 2	2'-8 3/8"	2'-2"	Brq. Abut. 2	2'-8 3/8"	2'-2"

**VOGT, IVERS, SEAMAN & ASSOCIATES**  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SUPERSTRUCTURE  
ROADWAY SLAB**

BRIDGE NO. HAM-25-1654  
PROPOSED U.S. 25 UNDER  
PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 42+57.39 TO  
STA. 46+34.02

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
A.H.H.	A.H.H.	K.L.	D.J.F.	JAD	Oct. 58	

HAMILTON COUNTY  
HAM-25-15.60 E  
HAM-50B-22.02

Table with columns for ROADWAY SLAB, ABUTMENTS, ABUTMENTS, and PIERS. Each section includes sub-columns for MARK, LENGTH, SHAPE, NO., and WEIGHT. It lists various structural elements like slabs, abutments, and piers with their specific dimensions and quantities.

REPLACEMENT BARS table with columns: MARK, NO., LENGTH, SHAPE. Lists replacement bars RE4 through RE11 with their respective lengths and shapes.

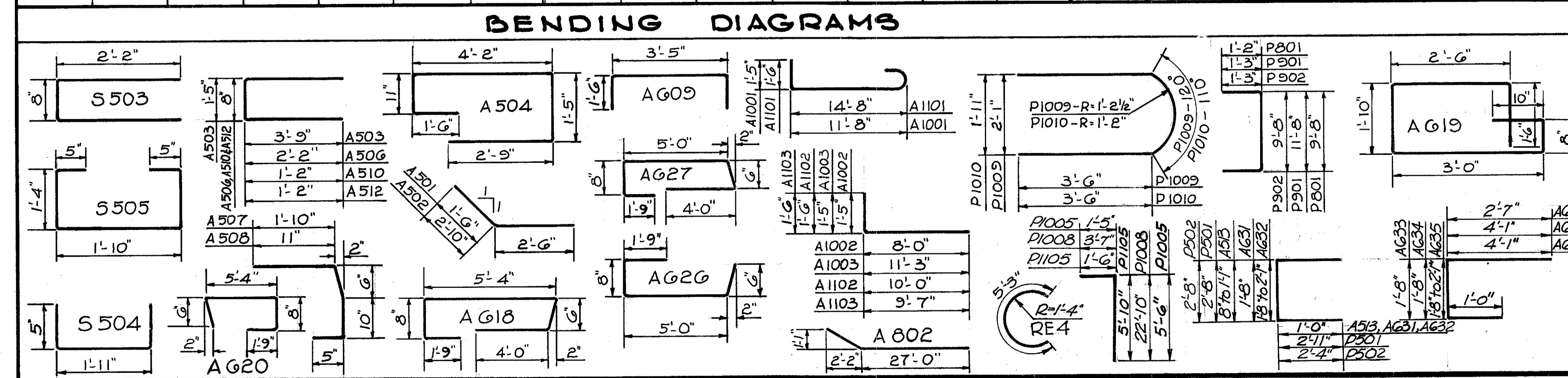
If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

SPIRAL REINFORCING BARS: The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap.

The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4.

Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

Table with columns: CORE DIA, PITCH, NO. SPIRAL, NO. TURNS. Lists spiral reinforcement details for items SP401 through SP408, including core diameter, pitch, number of spirals, and number of turns.



NOTE  
1. Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.  
2. Bars marked with single asterisks to be included for payment under Item 5-14 Railing.  
3. All dimensions are out to out of bar.  
4. The "Length" of bent bars is measured along the center line.

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CINCINNATI CHICAGO

REINFORCING STEEL LIST  
BRIDGE NO. HAM-25-1654  
PROPOSED U.S. 25 UNDER  
PROPOSED RAMP "D"

HAMILTON COUNTY STA. 42+57.39 TO  
STA. 46+34.02

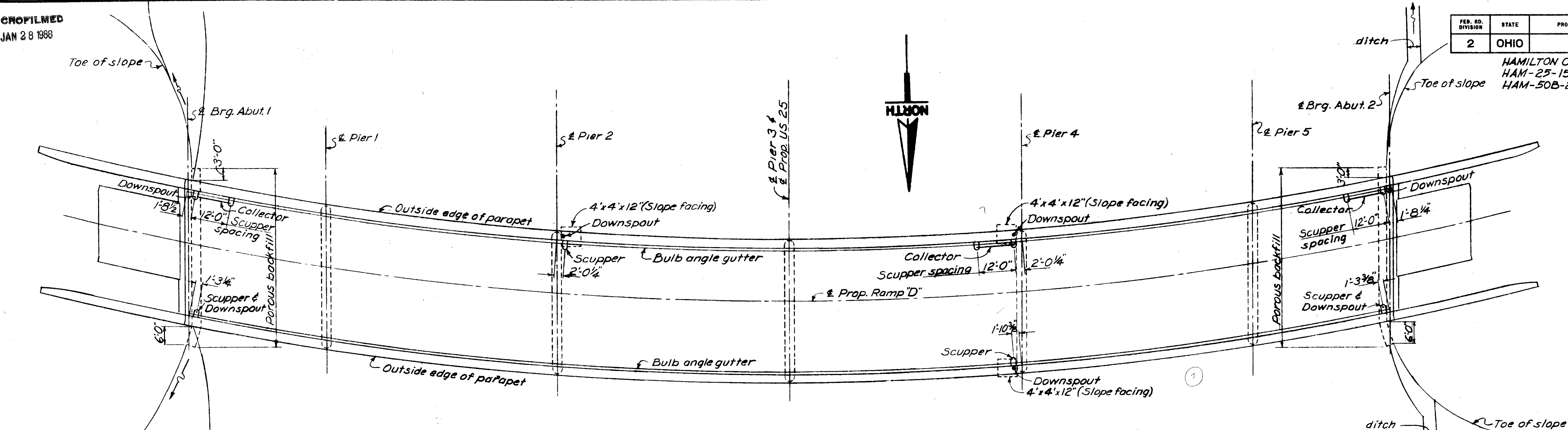
Table with columns: DESIGNED, DRAWN, TRACED, CHECKED, REVIEWED, DATE. Shows design and review information for JAD on Oct. 5, 1988.

MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

253
317

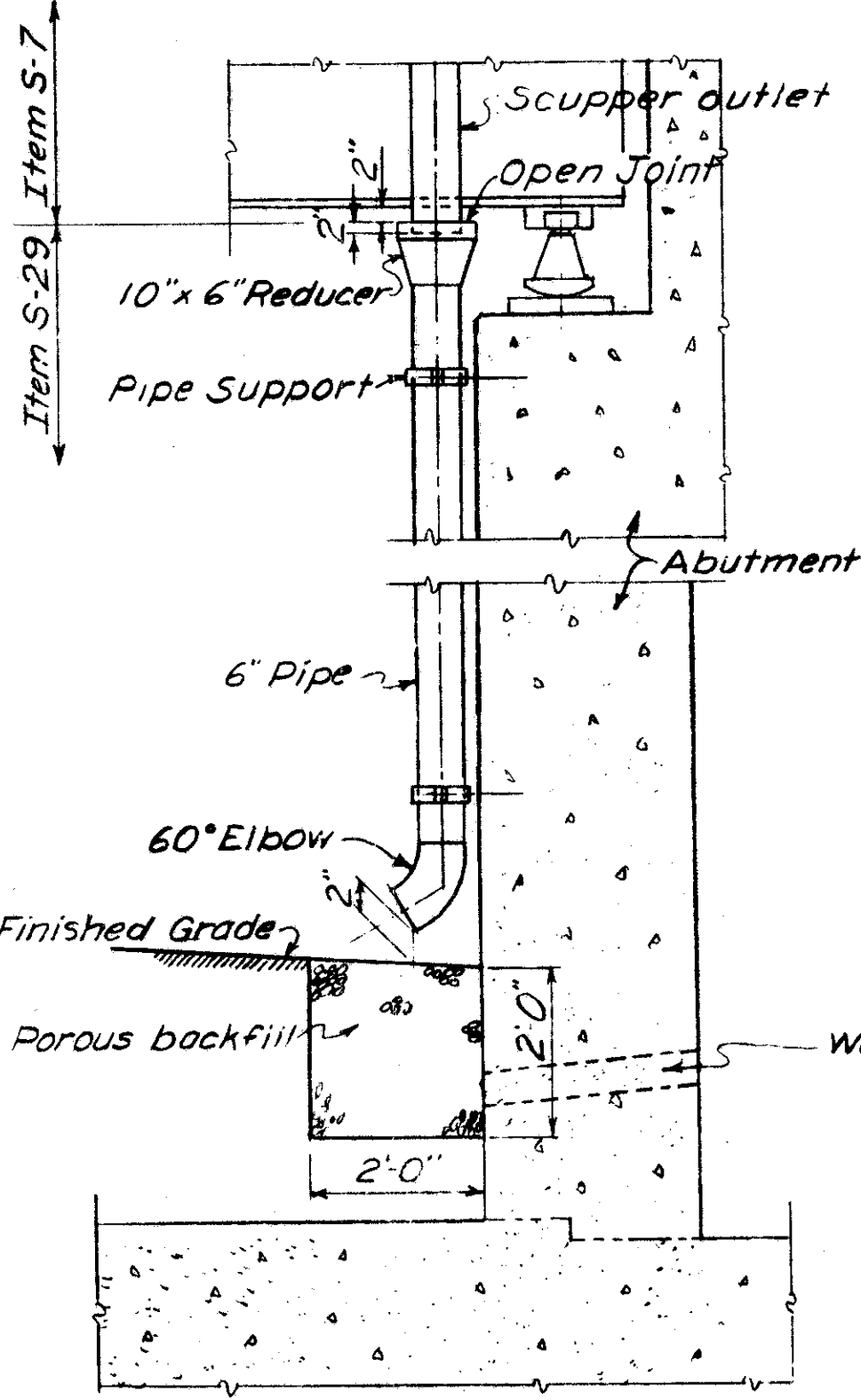
HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



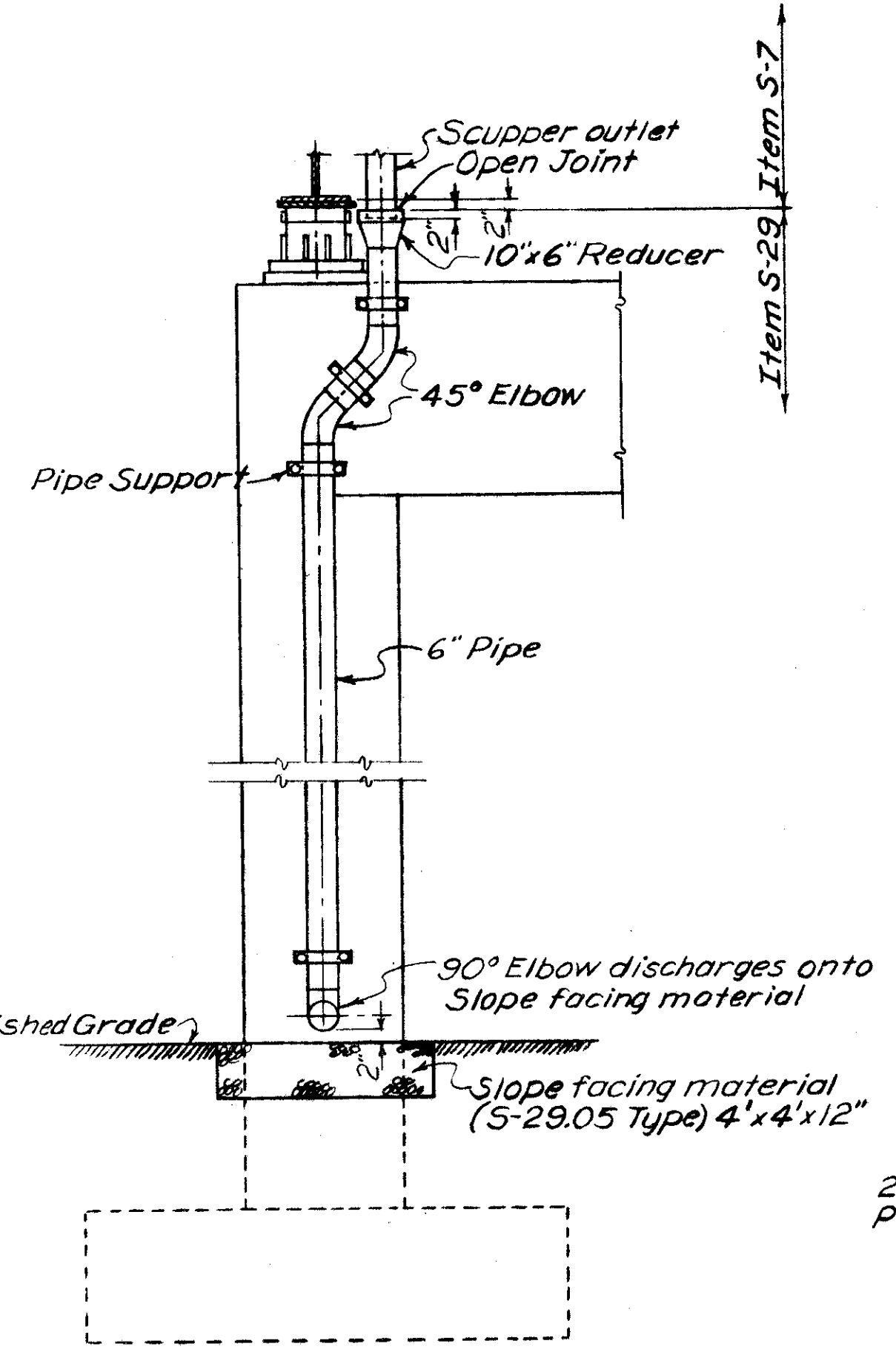
**BRIDGE DRAINAGE LAYOUT**

**NOTES**

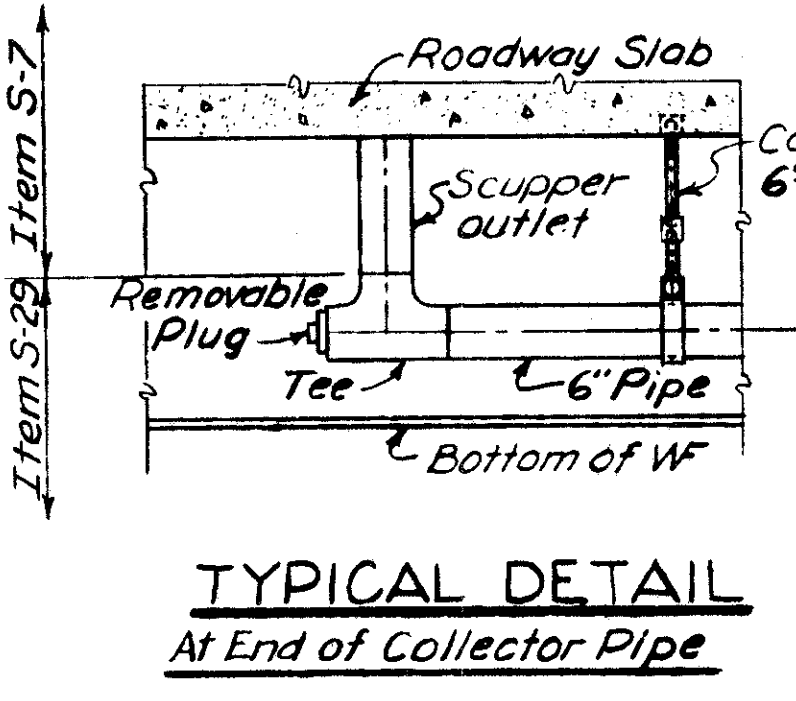
- Scupper spacing to be measured along the curb side of bulb angle gutter.
- Scuppers along south side of bridge shall be special scuppers. Scuppers along north side of bridge shall be standard scuppers. For details of standard scupper, see Std. Dwg. CSB2-56, sheet 3 of 6.
- Downspout and collectors, including tees and crosses, shall be 6" standard wrought iron pipe or hot dipped galvanized steel pipe. Joints shall be made by welding or by the use of a clamp-type coupling with a ring gasket. All welding shall be done before galvanizing. Straps or clamps for attaching these pipes shall be wrought iron or hot-dipped galvanized steel. Bolts shall be galvanized, but galvanizing need not be hot dipped.
- All pipe supports shall be included for payment in the unit price bid with Item S-29, pipe downspouts, collector pipes, including specials.
- Length of scupper outlet pipe to be adjusted as necessary to meet downspout and collector pipe.



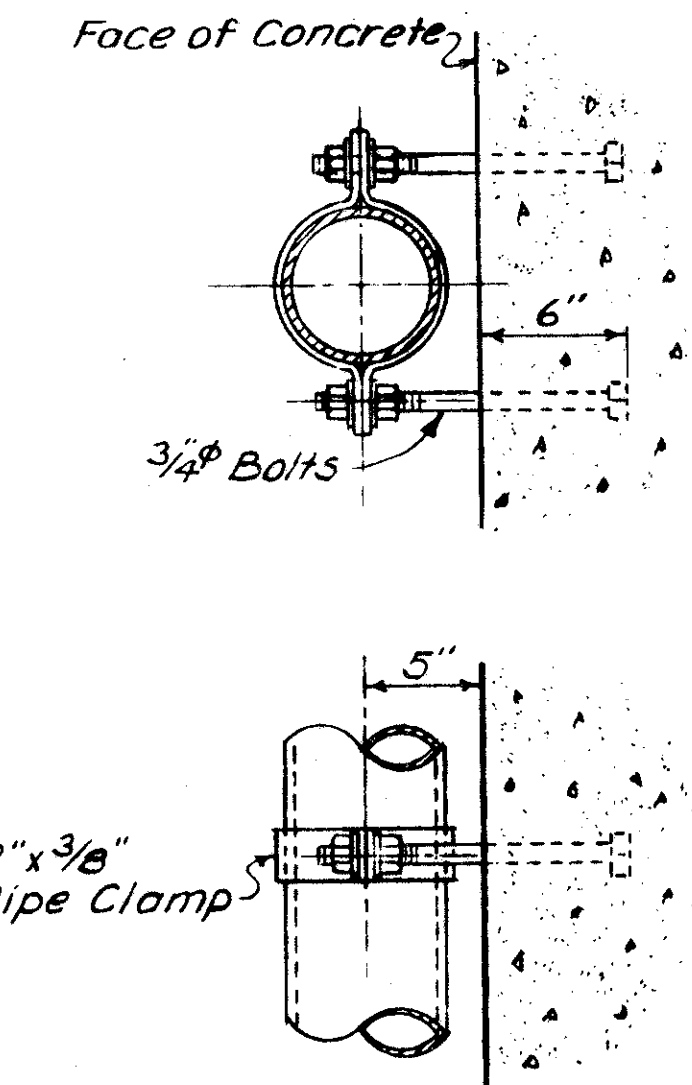
**DOWNSPOUT AT ABUTMENTS**



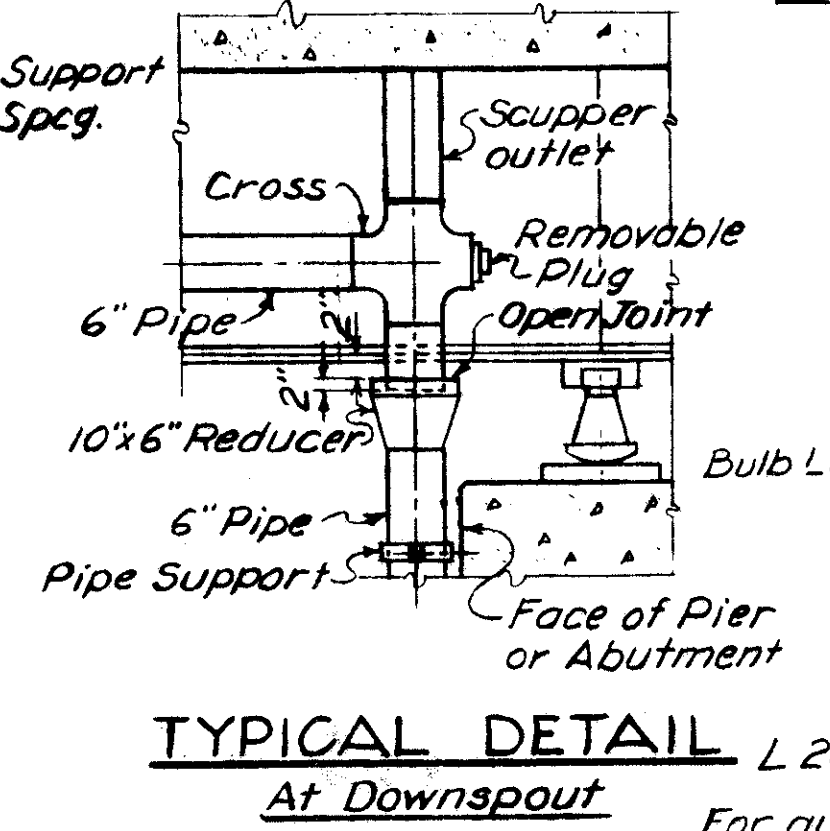
**DOWNSPOUT AT PIERS**



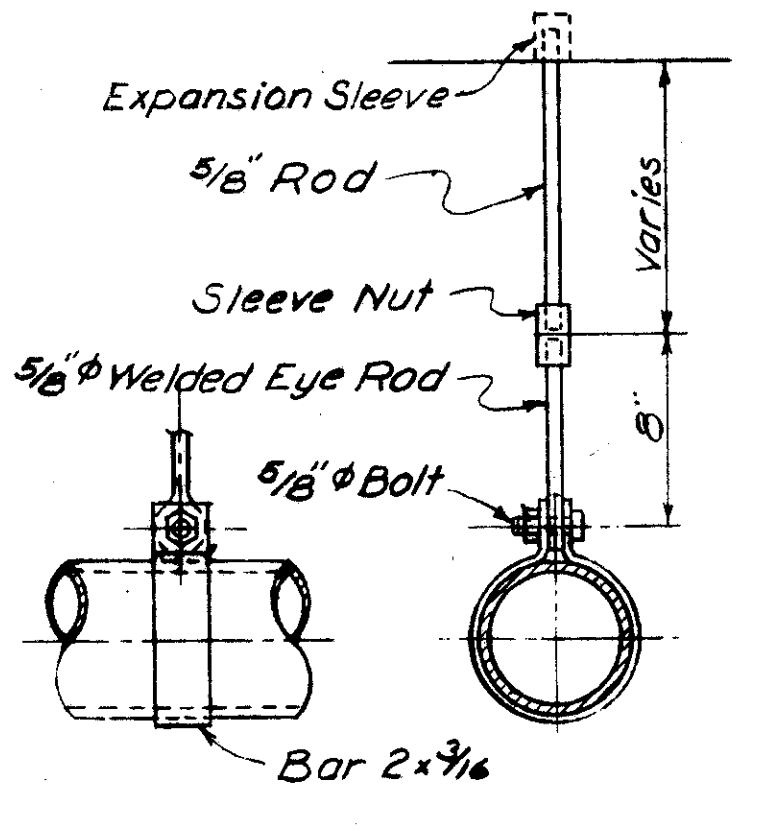
**TYPICAL DETAIL  
AT END OF COLLECTOR PIPE**



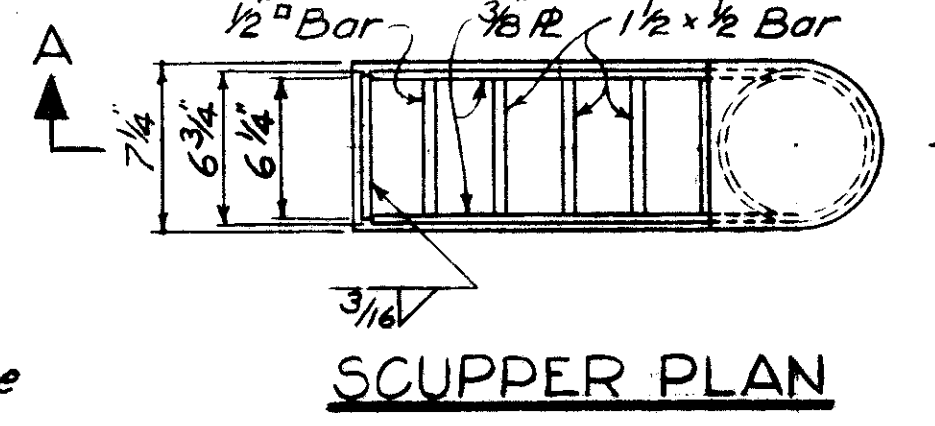
**PIPE SUPPORT**



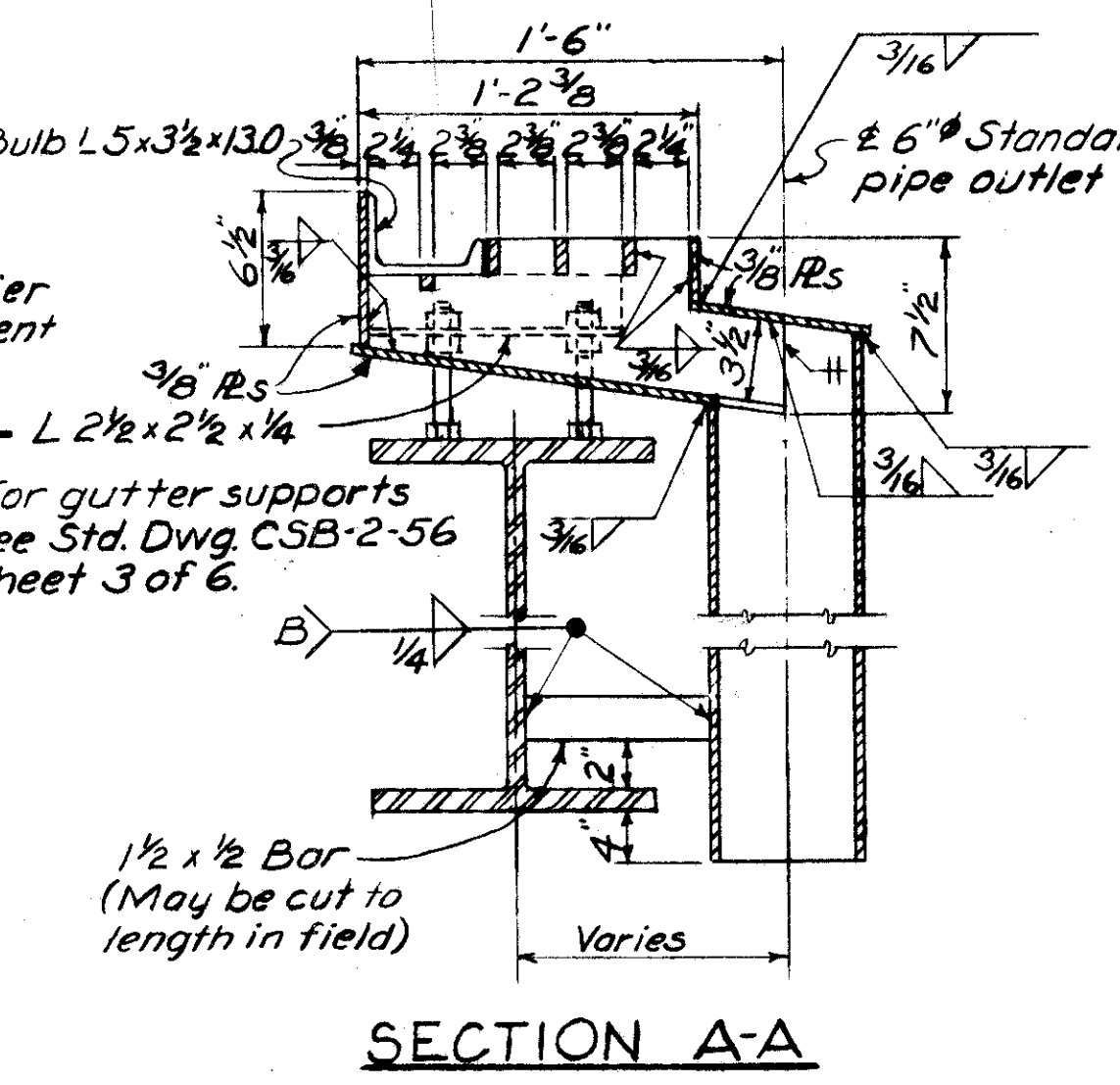
**TYPICAL DETAIL  
AT DOWNSPOUT**



**COLLECTOR PIPE SUPPORT**



**SCUPPER PLAN**



**SECTION A-A  
SPECIAL SCUPPER**

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**BRIDGE DRAINAGE**  
BRIDGE NO. HAM-25-1654  
PROPOSED U.S. 25 UNDER  
PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 42+57.39 TO  
STA. 46+34.02

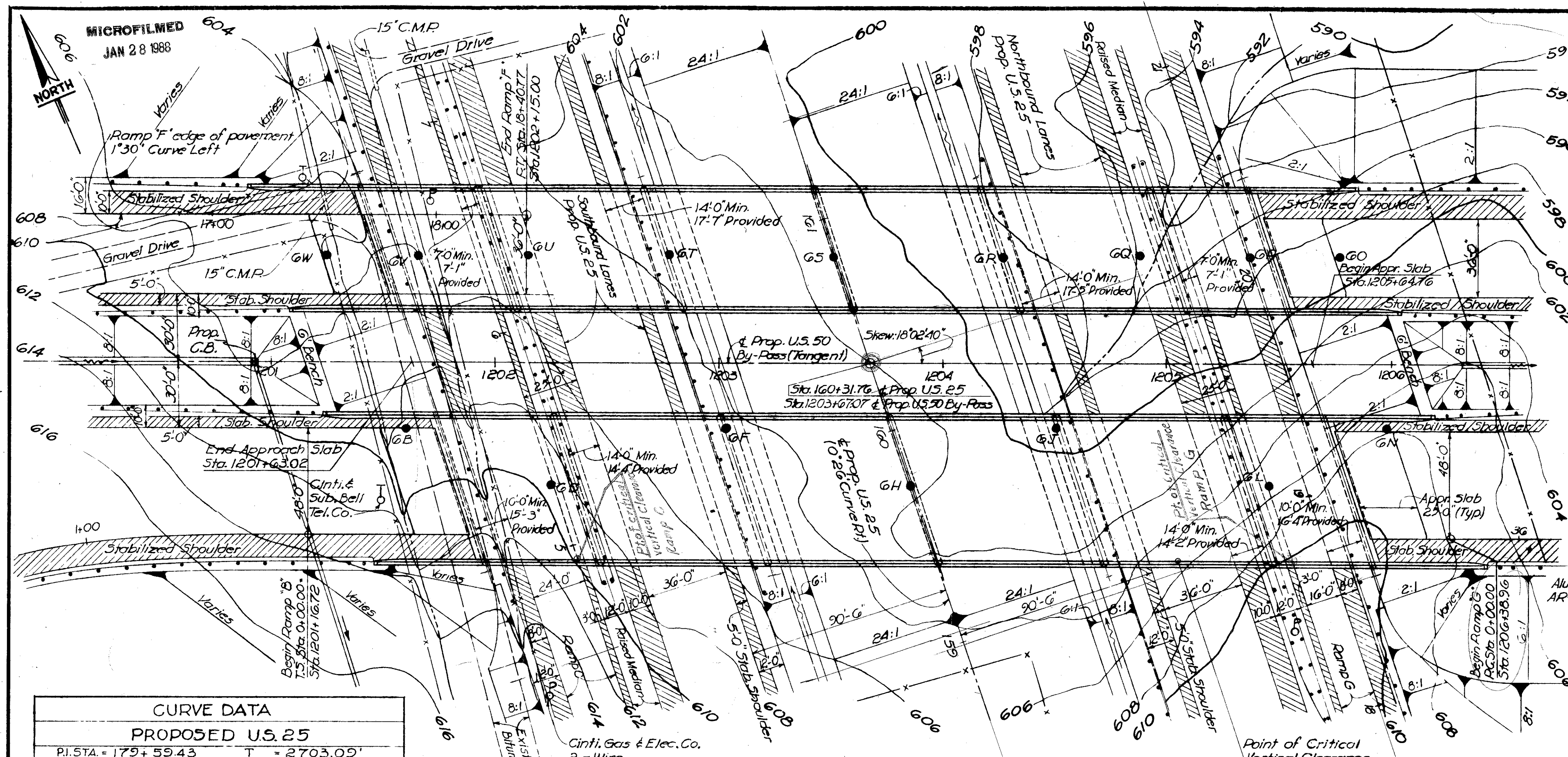
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
LLL	LLL	DJF	H.E.O.	JAD	Oct 58	

U.S. 25

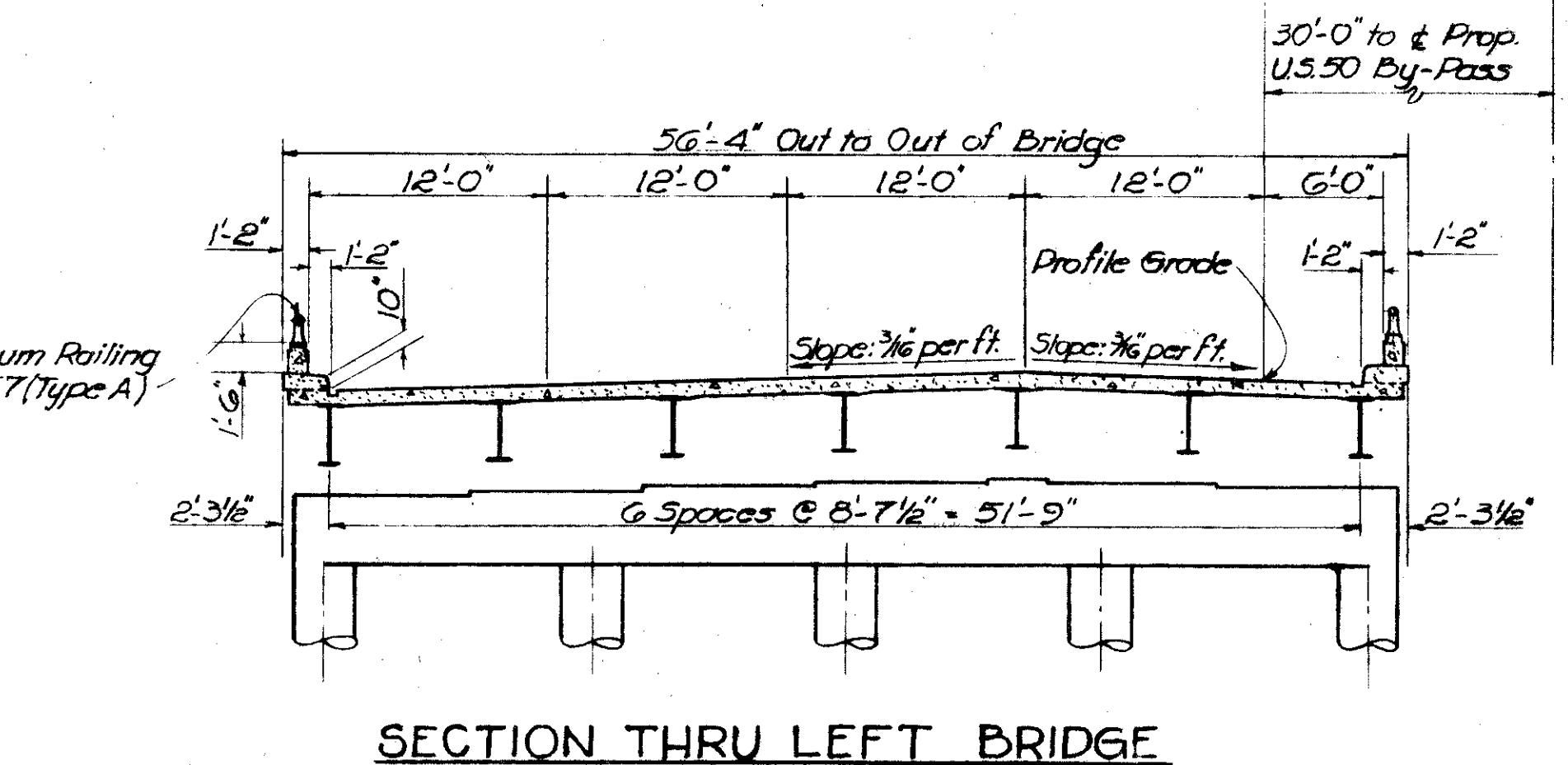
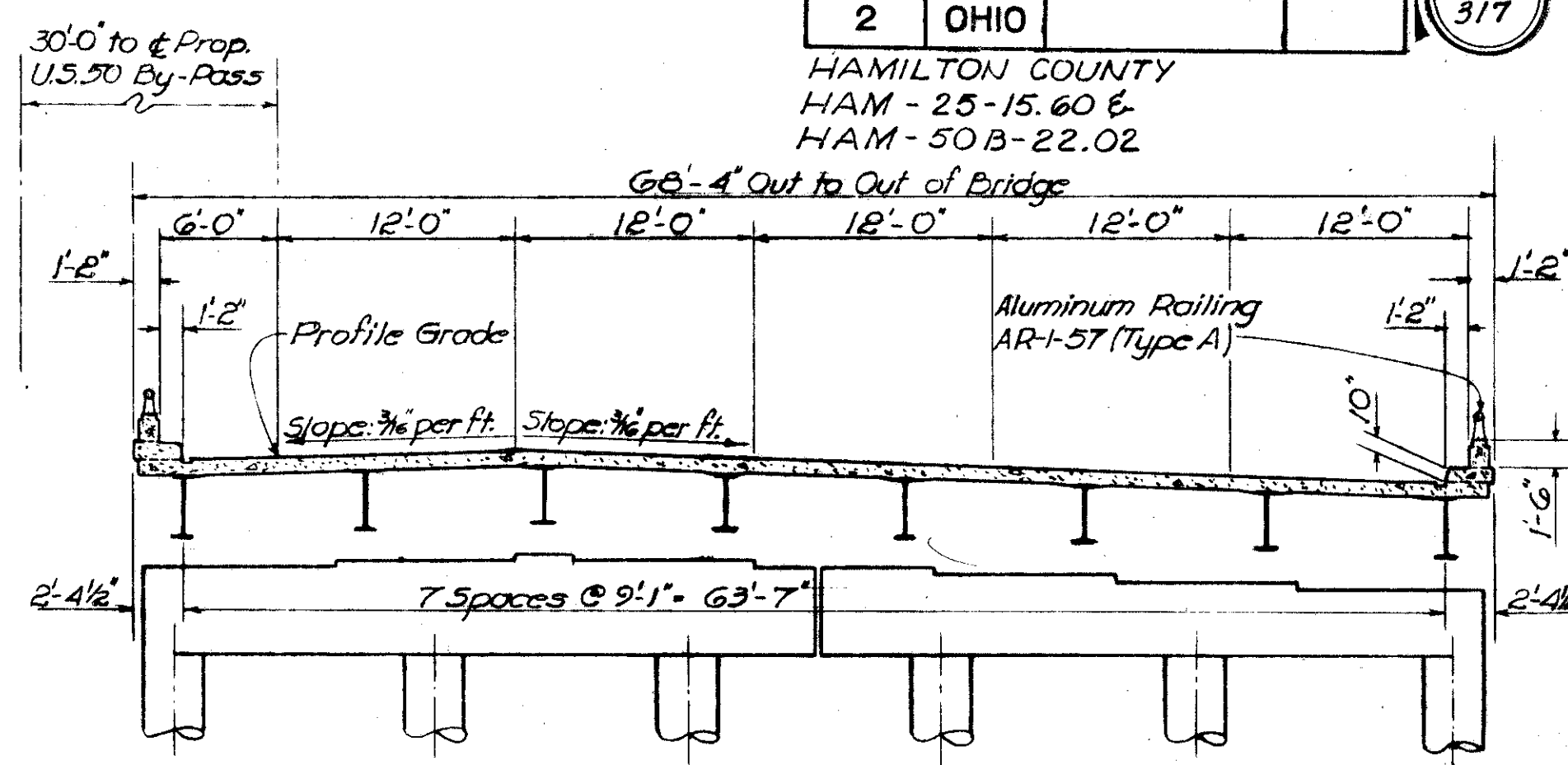
MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT	254 317
2	OHIO		

HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02

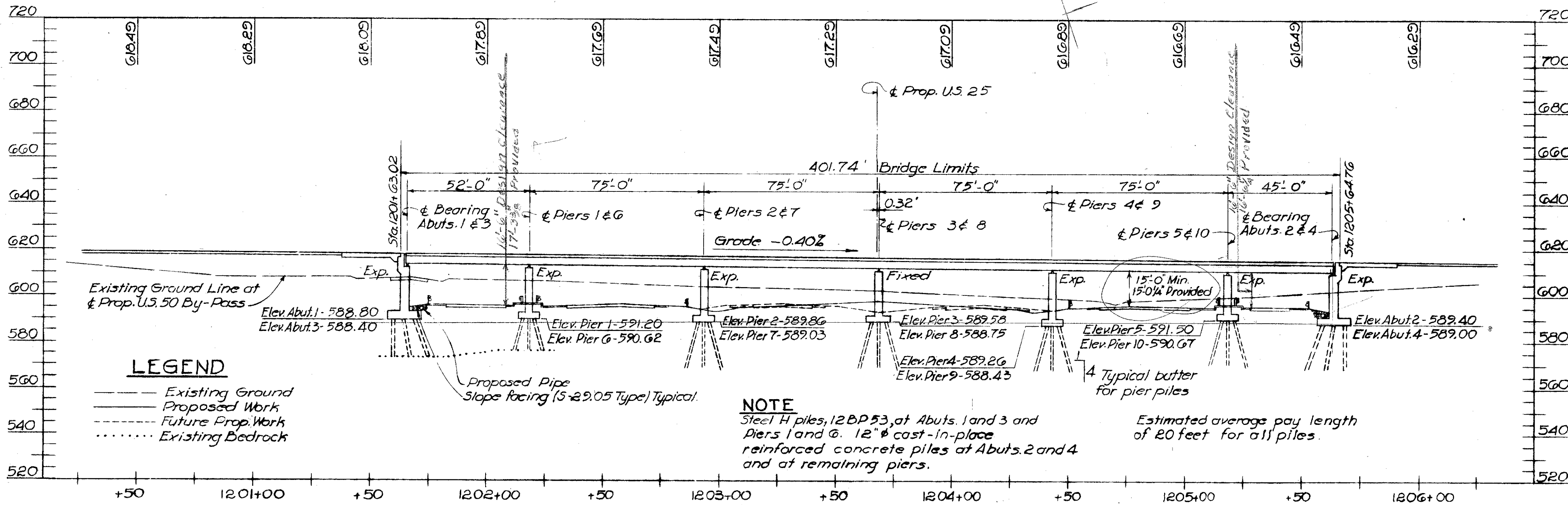


CURVE DATA			
PROPOSED U.S. 25			
P.I. STA. = 179+59.43	T = 2703.05'		
Δ = 23° 06' 30"	L = 5332.69'		
D = 0° 26' 00"	E = 273.48'		
R = 13,222.11'			
PROPOSED RAMP "F"			
R = 3819.72'	T = 229.65'		
Δ = 6° 52' 57"	L = 458.83'		
D = 1° 30' 00"			



PLAN

Bench Mark No. 15  
P.K. nail in S.E. root of 15'  
Hackberry, 192' left of  
Sta. 158+32, Elev. 615.560



**LEGEND**

—	Existing Ground
- - -	Proposed Work
.....	Future Prop. Work
.....	Existing Bedrock

**NOTE**  
Steel H piles, 12 BP 53, at Abuts. 1 and 3 and Piers 1 and 6. 12" cast-in-place reinforced concrete piles at Abuts. 2 and 4 and at remaining piers.

Estimated average pay length of 20 feet for all piles.

**NOTES**

- Symbol denotes drill hole.
- See Sta. 257 & 258 for test boring data.
- Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the Office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.

**PROPOSED STRUCTURE**

**TYPE:** Continuous rolled steel beam with reinforced concrete deck and substructure.

**ROADWAY:** Right Bridge: 66'-0" f. to f. of parapets.  
Left Bridge: 54'-0" f. to f. of parapets.

**LOAD FREQUENCY:** CF-2000 (1957) adequate for AASHTO alternate loading.

**SKEW:** 18° 02' 40" Right forward.

**WEARING SURFACE:** 1" Monolithic concrete.

**APPROACH SLABS:** A5-1-54 (25' long).

**ALIGNMENT:** Tangent.

**SPANS:** 52'-0", 75'-0", 75'-0", 75'-0", 75'-0", 45'-0".

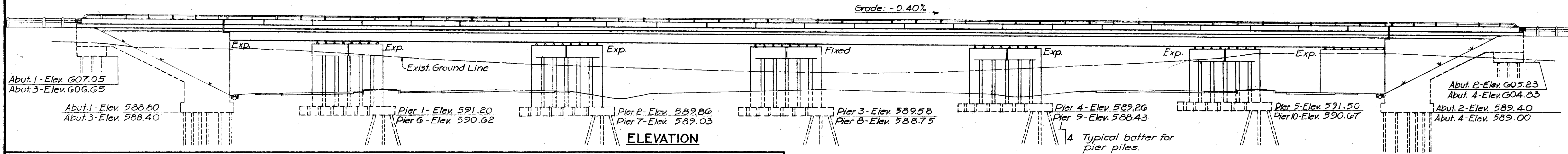
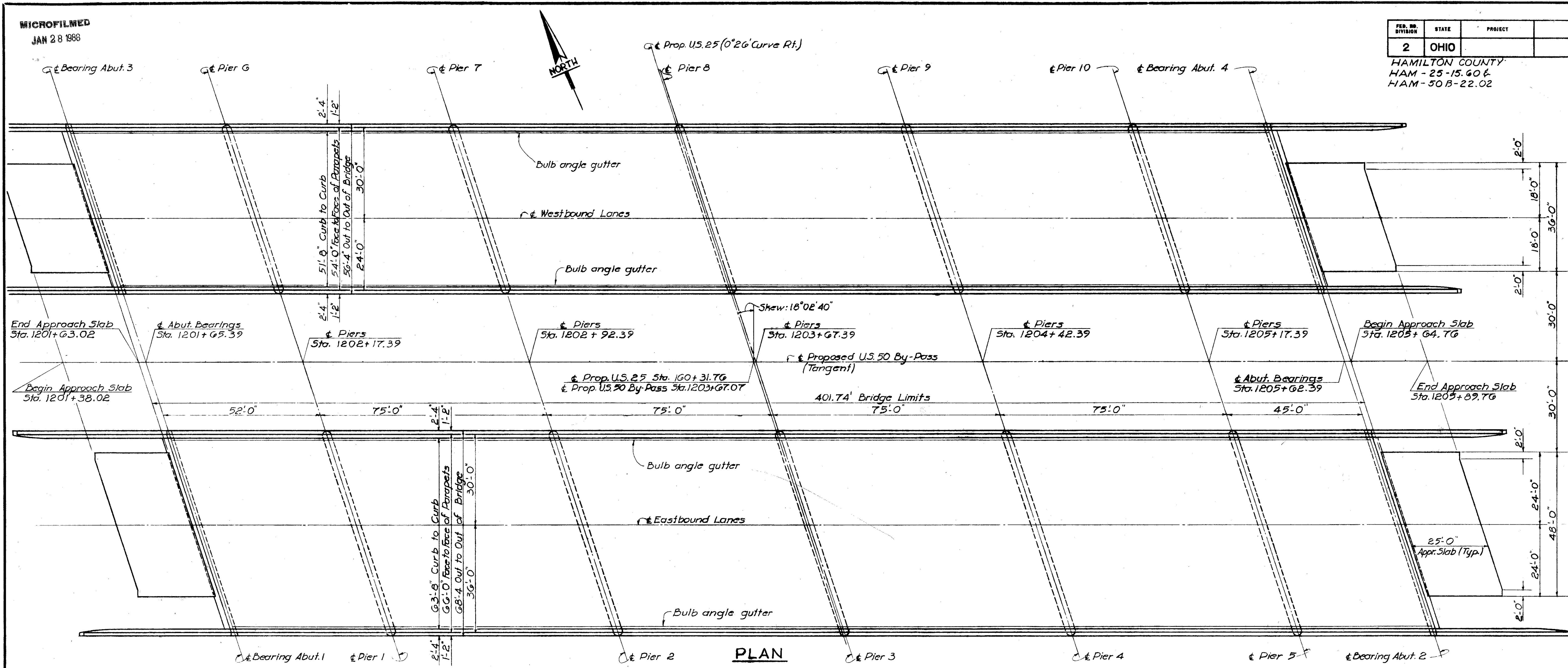
VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SITE PLAN**  
BRIDGE NO. HAM-25-1634 R&L  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS  
HAMILTON COUNTY STA. 1201+63.02 TO  
STA. 1205+64.76

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	KL	RJS	CBS	JDB	

Revised 4-B-60 R.E.C.

U.S. 50 F



PAVEMENT ELEVATIONS											
STATION	PROFILE GRADE	CROWN LINE		INSIDE CURB		EDGE OF PMVT		OUTSIDE CURB		EDGE OF PMVT	
		42'-0" R&L OF & U.S. 50 B	25'-2" R&L OF & U.S. 50 B	66'-0" LEFT OF & U.S. 50 B	76'-10" LEFT OF & U.S. 50 B	76'-10" RIGHT OF & U.S. 50 B	88'-10" RIGHT OF & U.S. 50 B	66'-0" LEFT OF & U.S. 50 B	76'-10" LEFT OF & U.S. 50 B	76'-10" RIGHT OF & U.S. 50 B	88'-10" RIGHT OF & U.S. 50 B
1201+00	G18.29	G18.48	G18.21	G18.10		G17.92					
1201+25	G18.19	G18.38	G18.11	G18.00		G17.83		G17.82			
1201+50	G18.09	G18.28	G18.01	G17.90		G17.73		G17.72			
1201+75	G17.99	G18.18	G17.91	G17.80		G17.63		G17.62		G17.45	
1202+00	G17.89	G18.08	G17.81			G17.53				G17.35	
1202+25	G17.79	G17.98	G17.71			G17.43				G17.25	
1202+50	G17.69	G17.88	G17.61			G17.33				G17.15	
1202+75	G17.59	G17.78	G17.51			G17.23				G17.05	
1203+00	G17.49	G17.68	G17.41			G17.13				G16.95	
1203+25	G17.39	G17.58	G17.31			G17.03				G16.85	
1203+50	G17.29	G17.48	G17.21			G16.93				G16.75	
1203+75	G17.19	G17.38	G17.11			G16.83				G16.65	
1204+00	G17.09	G17.28	G17.01			G16.73				G16.55	
1204+25	G16.99	G17.18	G16.91			G16.63				G16.45	
1204+50	G16.89	G17.08	G16.81			G16.53				G16.35	
1204+75	G16.79	G16.98	G16.71			G16.43				G16.25	
1205+00	G16.69	G16.88	G16.61			G16.33				G16.15	
1205+25	G16.59	G16.78	G16.51			G16.23				G16.05	
1205+50	G16.49	G16.68	G16.41			G16.13				G15.95	
1205+75	G16.39	G16.58	G16.31			G16.03				G15.85	
1206+00	G16.29	G16.48	G16.21			G15.92				G15.75	
1206+25	G16.19	G16.38	G16.11			G15.82					

**NOTES**

- All abutment and pier centerlines are parallel.
- For GENERAL NOTES and ESTIMATED QUANTITIES, see Sh. 256
- For drainage layout and details, see Sh. 271
- For approach slab details, see Standard Drawing A5-1-54.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**GENERAL PLAN & ELEVATION**

BRIDGE NO. HAM-25-1634 R&L  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS

HAMILTON COUNTY STA. 1201+G3.02 TO  
STA. 1205+G4.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	CBS		JCS	J.A.D. Oct. 58	

## ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	BRIDGE NO. HAM-25-1634 R					BRIDGE NO. HAM-25-1634 L					
				ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL		ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL		
E-2	Lump	Lump Sum	Cofferdams, cribs and sheeting				Lump					Lump		
E-2	3232	Cu. Yds.	Unclassified excavation	1101	630				940	561				
S-1	1523	Cu. Yds.	Class "C" concrete ~ Superstructure			831					692			
S-1	505	Cu. Yds.	Class "C" concrete ~ Piers above footings		268					237				
S-1	1080	Cu. Yds.	Class "E" concrete ~ Abutments above footings	560					520					
S-1	1129	Cu. Yds.	Class "E" concrete ~ Pier and abutment footings	386	220				340	183				
S-4	837,176	Lbs.	Reinforcing steel	91,084	96,253	256,465			82,802	96,502	214,070			
S-7	1,550,100	Lbs.	Structural steel			827,600					722,500			
S-8	1,550,100	Lbs.	Field painting of structural steel			827,600					722,500			
S-14	1982	Lin. Ft.	Railing (Aluminum railing & supports & concrete parapet)	193		798			193		798			
S-29	394	Cu. Yds.	Porous backfill	215					179					
S-16	Lump	Lump Sum	First test pile, 12" dia cast-in-place reinforced concrete				Lump							
S-18	9440	Lin. Ft.	12" dia cast-in-place reinforced concrete piles	1740	3120				1580	3000				
S-18	4760	Lin. Ft.	Steel piles, 12 BP 53	1740	720				1580	720				
S-9	508	Sq. Ft.	1" Preformed expansion joint filler	251					257					
S-3	203	Lin. Ft.	Waterproofing, premolded sealing strip	100					103					
S-29	5	Cu. Yds.	Slope facing (S29.05 type)				3					2		
S-29	574	Lin. Ft.	6" dia Std. pipe downspouts, collectors and catch basin outlets, including specials				310					264		

NOTE: Materials in approach slabs are not included in the above estimated quantities.

### GENERAL NOTES

**REFERENCE** shall be made to the following:

Standard Drawings: AR-1-57 revised 3-1-58,  
CSB-2-50, sheets 2&3 of 6, revised 3-1-58  
AS-1-54 revised 12-1-54  
RB-1-55 dated 3-1-55

Supplemental Specifications: S-114 revised 8-1-57  
I-127 revised 11-10-57

**DESIGN SPECIFICATIONS:** This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with revisions thereof dated 2-21-58.

**WELDED STEEL:** The steel for the 36 WF 230 beams and 1 3/16" plates shall conform to ASTM Designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M-7.4 [a] of the Construction and Material Specifications) or to A-373.

**EXCAVATION QUANTITY** includes removal of fill material required for construction of the pads at ends of the wingwalls.

**CONCRETE DECK PLACING:** In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

**RAILING:** Aluminum rail and supports, concrete parapet, reinforcing bars wholly within the concrete parapet, guard rail anchorage and sponge rubber for parapet joints shall be included in item S-14 for payment.

**PILES:** 12" dia cast-in place reinforced concrete piles shall be used at Abutments #2 and #4 and at Piers #2 thru #5 and #7 thru #10. These piles shall be driven to a minimum bearing capacity of 35 tons per pile. Steel H piles, 12 BP 53, shall be used at Abutments #1 and #3 and at Piers #1 and #6. Steel H piles shall be driven, with a hammer of not less than 11,000 ft. lbs. per blow, to firm contact with rock. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. S-18.05 is not less than the following value for a pile hammer of the indicated energy rating:

	Tons per pile using a 11,000 ft. lb. hammer	Tons per pile using a 15,000 ft. lb. or greater hammer
Abutment #1	53	46
Abutment #3	35	35
Pier #1	50	44
Pier #6	53	46

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 35 tons per pile for all steel H piles.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**GENERAL NOTES AND  
ESTIMATED QUANTITIES**

BRIDGE NO. HAM-25-1634 R & L  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS  
HAMILTON COUNTY STA. 1201+63.02 TO  
STA. 1205+64.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
✓	J.H.K.	✓	P.J.K.	J.A.D.	Oct. 58	

MICROFILMED  
JAN 28 1988

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

607.9		0' Ground Elevation 608.9	
	7	1'	Topsail, brown silty clay
	9		
	17		Brown sandy clay with fine gravel
WL 599.9	18	9'	
	15		Brown and gray sandy clay with fine gravel
592.9	16'		
	33		
	35		Gray sandy clay with fine gravel
	40		
	45		
580.0	49	28.9'	

Boring completed

BORING GB

607.6		0' Ground Elevation 608.6	
	8	1'	Topsail, brown silty clay
	11	3'	Brown silty clay
	20		
WL	32		Brown sandy clay with fine gravel
	12.5'		
596.1	35		Gray sandy clay with fine gravel and limestone fragments
	18'		
590.6	42		
	30		Gray sandy clay with fine gravel
	34		
580.6	52	28'	
	50		Gray silty clay, weathered shale with limestone fragments
576.1	32.5'		
	70		Layered gray shale
571.1	37.5'		

Boring completed

BORING GD

604.3		0' Ground Elevation 605.3	
WL	7	1'	Topsail, brown silty clay
	11	3'	Brown silty clay
	16		Brown sandy clay with fine gravel
	7'		
598.3	28		Brown and gray sandy clay with fine gravel
	13'		
592.3	11		Gray sandy clay with fine gravel
	13		
586.0	19.3		
	24		Brown and gray sandy clay with fine gravel
	28		
	23		
578.3	27'		
	37		Gray sandy clay with fine gravel
	24		
	31		
560.0	29	45.3'	

Boring completed

BORING GL

603.7		0' Ground Elevation 604.7	
	6	1'	Topsail, brown silty clay
	11		
	4'		Brown silty clay
	6		
WL	9'		Brown sandy clay with fine gravel
595.7	17		
	25		Brown and gray sandy clay with fine gravel
	39		
586.7	18'		
	36		Gray sandy clay with fine gravel
	41		
580.0	43	24'	

Boring completed

BORING GF

601.5		0' Ground Elevation 602.5	
WL	5	1'	Topsail, brown silty clay
	6		
	4'		Brown silty clay
	8		
	9'		Brown sandy clay with fine gravel
593.5	22		
	27		Brown sandy clay with fine gravel
	24	18'	
584.5	62		Gray sandy clay with fine gravel
	74		
577.5	25		
	21		
	17		Gray sandy clay with fine gravel
	35		
562.5	40'		
	23		
560.0	20	48.5'	Gray silty clay with fine sand lenses

Boring completed

BORING GH

605.3		0' Ground Elevation 606.3	
	8	1'	Topsail, brown silty clay
	16	3'	Brown silty clay
	15		
	24		Brown sandy clay with fine gravel
	12'		
594.3	11		Gray sandy clay with fine gravel
	13	19'	
587.3	16		
	22		Brown and gray sandy clay with fine gravel
580.0	27	26.3'	

Boring completed

BORING GN

596.8		0' Ground Elevation 599.8	
	4	3'	Topsail and brown silty clay
	8	5'	Brown silty clay
	28		Brown sandy clay with fine gravel and cobbles
	35	13'	
586.8	15'		Brown and gray sandy clay with fine gravel
	17		
580.0	24	19.8'	

Boring completed

BORING GJ

NOTES

W.L. - Water Level in bore holes 24 hours after completion.

Figures in right hand column indicate number of blows required to drive 2" O.D. sampling pipe one foot, using 140 lb. weight falling 30 inches, or percent of core recovery.

Borings taken between July 1957 and December 1957.

See Sheet 254 for location of borings.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**BORINGS**  
BRIDGE NO. HAM-25-1634R  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS

HAMILTON COUNTY STA. 1201+00 TO 1202+00  
STA. 1205+00 TO 1206+00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
CAW	CBS	CBS	RDW	JAN 26 1958		



O' Ground Elevation 598.8	
WL 597.8	2' 1' Topsoil, brown silty clay
595.8	8' 3' Brown sandy clay
	16' Brown sandy clay with fine gravel
590.8	17' 8' Wet Seam at 6'
	30' Brown sandy clay with fine to coarse gravel
	38' Brown sandy clay with fine to coarse gravel
	48' Brown sandy clay with fine to coarse gravel
577.8	101' 21' Gray sandy clay with fine to coarse gravel
	65' Gray sandy clay with fine to coarse gravel
568.8	55' 30' Boring completed

BORING G O

O' Ground Elevation 596.7	
595.7	4' 1' Topsoil, brown sandy clay
593.7	9' 3' Brown sandy clay
	13' Brown clayey sand with fine to coarse gravel
587.7	23' 9' Brown sandy clay with fine to coarse gravel
	32' Brown sandy clay with fine to coarse gravel
	34' Brown sandy clay with fine to coarse gravel
	44' Brown sandy clay with fine to coarse gravel
575.7	55' 21' Gray sandy clay with fine to coarse gravel
	71' Gray sandy clay with fine to coarse gravel
569.7	27' Brown and gray clayey fine to coarse sand and gravel
565.7	24' 31' Gray sandy clay, fine to coarse gravel
556.7	77' 67' 40' Boring completed

BORING G P

O' Ground Elevation 596.4	
595.4	3' 1' Topsoil, brown sandy clay
	11' Brown sandy clay with fine to coarse gravel
590.4	16' 6' Brown sandy clay with fine to coarse gravel and limestone fragments
	39' Brown sandy clay with fine to coarse gravel
	33' Brown sandy clay with fine to coarse gravel and limestone fragments
	34' Brown sandy clay with fine to coarse gravel
578.4	36' 18' Gray sandy clay with fine to coarse gravel
	37' Gray sandy clay with fine to coarse gravel
	38' Gray sandy clay with fine to coarse gravel
	32' Gray sandy clay with fine to coarse gravel
	37' Gray sandy clay with fine to coarse gravel
556.4	38' 40' Boring completed

BORING G Q

O' Ground Elevation 599.3	
598.3	2' 1' Topsoil, brown sandy clay
	7' 3' Brown silty clay
593.3	6' 6' Brown sandy clay with fine gravel
	18' Brown sandy clay with fine to coarse gravel
	38' Brown sandy clay with fine to coarse gravel
584.3	44' 15' Mottled brown and gray silty clay with fine gravel
	75' Brown and gray sandy clay with silt seams and fine gravel
	92' Gray sandy clay with fine to coarse gravel
	45' Gray sandy clay with fine to coarse gravel
569.3	46' 30' Boring completed

BORING G R

O' Ground Elevation 601.6	
WL 600.6	6' 1' Topsoil, dark brown sandy clay
597.1	4' 4.5' Brown sandy clay with fine gravel
593.6	19' 8' Brown sandy clay with fine gravel
	38' Brown sandy clay with fine to coarse gravel and cobbles
588.6	30' 13' Mottled brown and gray silty clay with fine gravel
585.6	24' 16' Brown and gray sandy clay with silt seams and fine gravel
583.6	52' 16' Gray sandy clay with fine to coarse gravel
	38' Gray sandy clay with fine to coarse gravel
	30' Gray sandy clay with fine to coarse gravel
	50' Gray sandy clay with fine to coarse gravel
	58' Gray sandy clay with fine to coarse gravel
	42' Gray sandy clay with fine to coarse gravel
	15' Gray sandy clay with fine to coarse gravel
	48' Gray sandy clay with fine to coarse gravel
553.1	125' 48.5' Gray weathered shale
551.6	125' 50' Boring completed

BORING G S

O' Ground Elevation 603.6	
602.6	4' 1' Topsoil and brown sandy clay
WL 600.6	7' 3' Brown sandy clay with fine gravel
	15' Brown clayey fine to medium sand with fine gravel
594.6	24' 9' Gray sandy clay with fine to coarse gravel
591.6	29' 12' Brown sandy clay with fine to coarse gravel
588.1	31' 15.5' Brown sandy clay with fine to coarse gravel
	21' Gray sandy clay with fine to coarse gravel
	28' Gray sandy clay with fine to coarse gravel
	37' Gray sandy clay with fine to coarse gravel
573.6	53' 30' Boring completed

BORING G T

O' Ground Elevation 605.0	
604.0	3' 1' Topsoil, brown sandy clay
602.0	6' 3' Brown silty clay
	8' Brown sandy clay with fine to coarse gravel
595.0	16' 10' Brown sandy clay with fine to coarse gravel
	22' Brown and gray sandy clay with fine to coarse gravel and limestone fragments
587.0	39' 48' 18' Gray weathered shale with gray silty clay and fine gravel
	31' Gray sandy clay with fine to coarse gravel
	26' Gray sandy clay with fine to coarse gravel
575.5	29.5' 31' Gray sandy clay with weathered shale and limestone fragments
574.0	85' 31' Refusal

BORING G U

O' Ground Elevation 606.6	
606.1	5' 1' Topsoil and brown silty clay
WL	0.5' with fine gravel
601.6	17' 5' Brown silty clay with fine gravel
	10' Brown sandy clay with fine gravel
	36' Brown sandy clay with fine gravel
595.1	11.5' 42' Gray sandy clay with fine gravel
	39' 16' Brown sandy clay with fine to coarse gravel
590.6	49' 20' Brown sandy clay with fine to coarse gravel
586.6	49' 20' Gray silty clay with fine to coarse gravel
581.1	125' 25.5' Gray weathered shale with gray silty clay and fine gravel
576.6	137' 30' Gray weathered shale and fossiliferous limestone
572.6	20% 34' Cored Gray weathered shale
568.6	18% 38' Cored Gray weathered shale
565.1	75% 41.5' Cored Gray weathered shale and fossiliferous limestone

BORING G V

O' Ground Elevation 606.7	
WL	3' 2' Topsoil, brown sandy clay
604.7	6' 5' Brown sandy silty clay
601.7	10' Brown sandy clay with fine gravel
594.7	46' 12' Gray sandy clay with fine to coarse gravel
	62' Gray sandy clay with fine to coarse gravel
	49' Gray sandy clay with fine to coarse gravel
	50' Gray sandy clay with fine to coarse gravel
	49' Gray sandy clay with fine to coarse gravel
576.7	47' 30' Boring completed

BORING G W

NOTES

W.L. = Water Level in bore holes 24 hours after completion.  
 Figures in right hand column indicate number of blows required to drive 2" O.D. sampling pipe one foot using 140 lb. weight falling 30 inches, or percent of core recovery.  
 Borings taken between December 1957 and February 1958.  
 See Sheet No. 254 for location of borings.

VOGT, IVERS, SEAMAN & ASSOCIATES  
 ENGINEERS ARCHITECTS  
 CINCINNATI CHICAGO

**BORINGS**  
 BRIDGE NO. HAM-25-1634 L  
 PROPOSED U.S. 25 UNDER  
 PROPOSED U.S. 50 BY-PASS

HAMILTON COUNTY STA. 1201+63.02 TO STA. 1205+64.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
CAW	CBS	CBS	RDW	J.A.D.	Oct. 58	

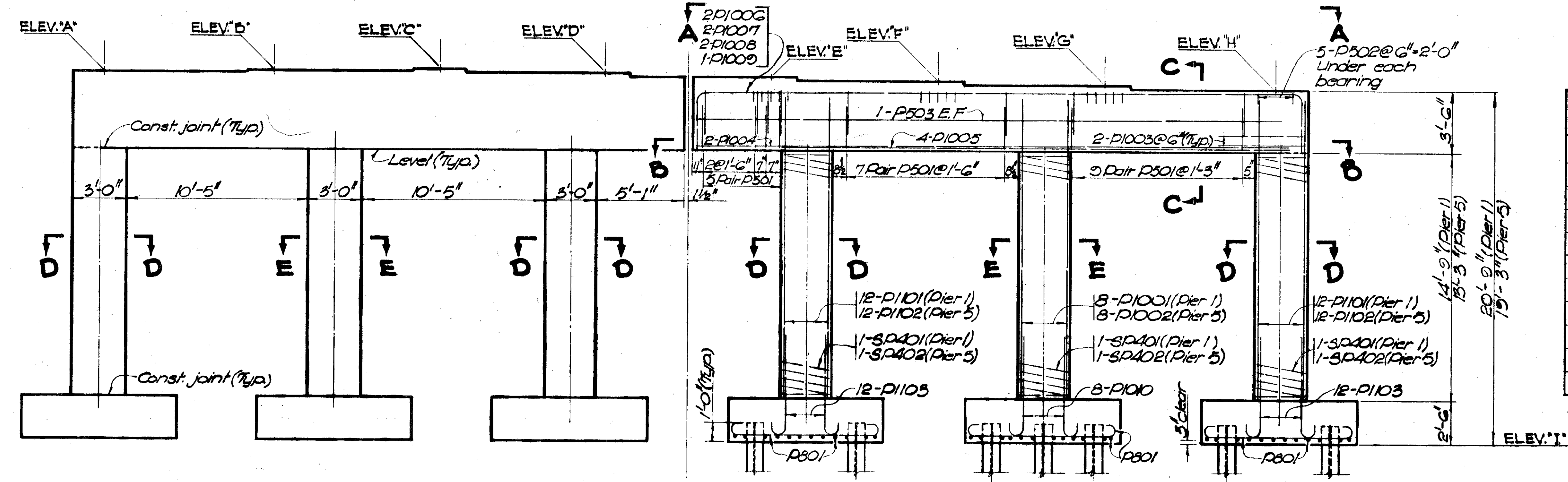
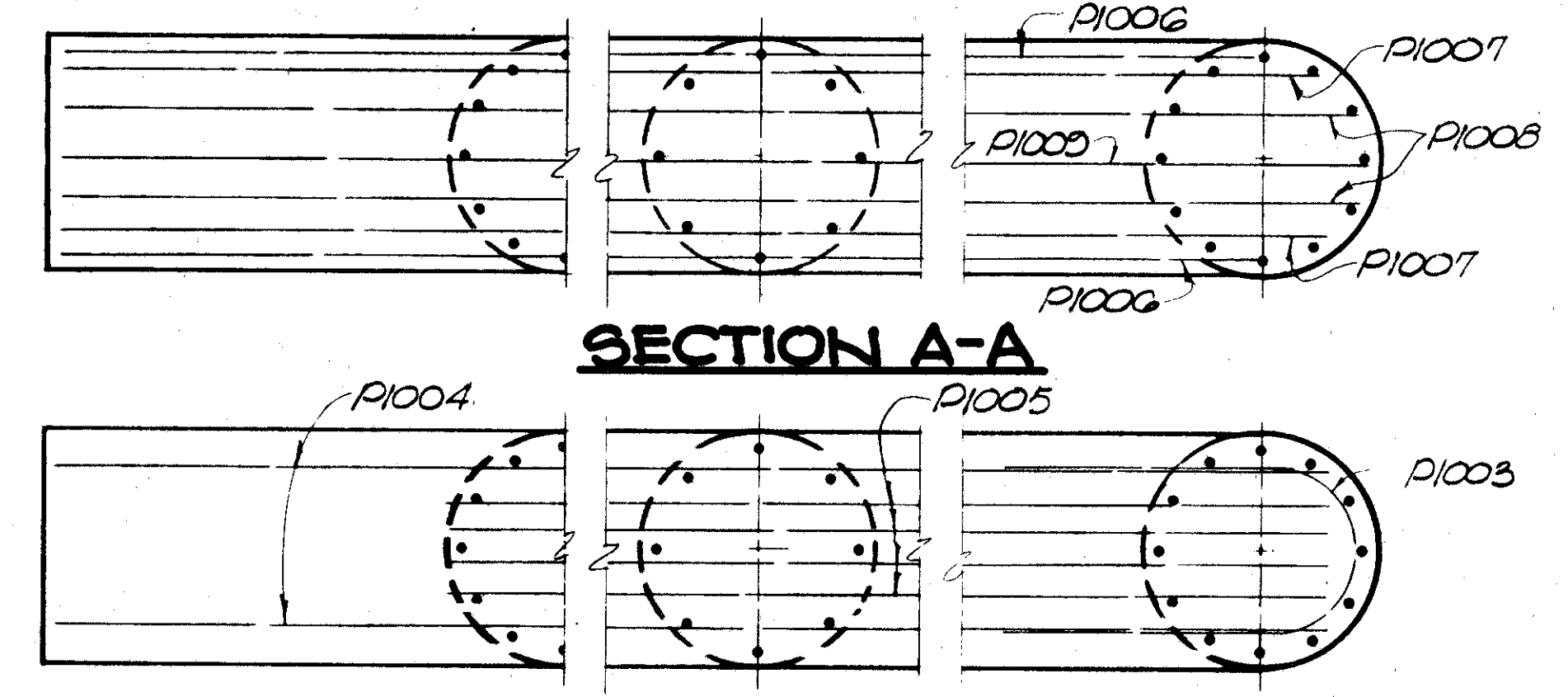
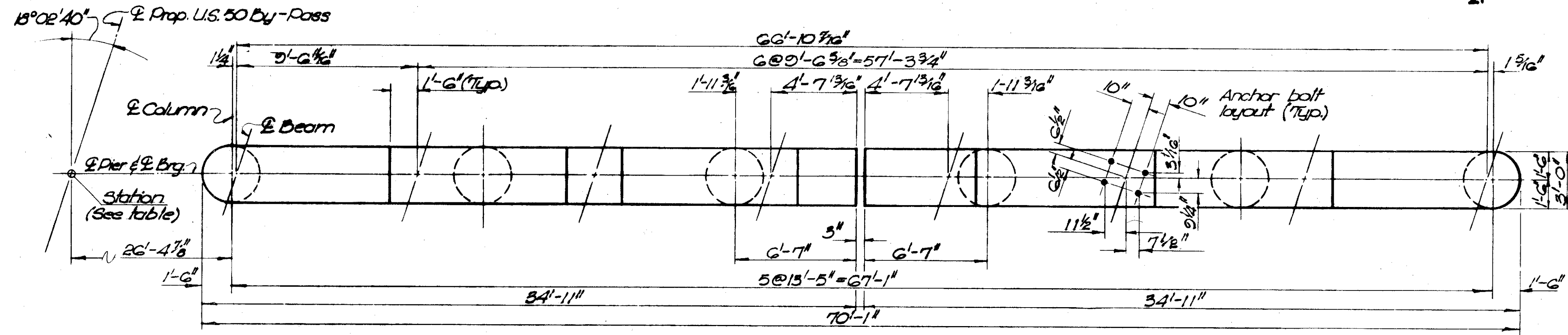
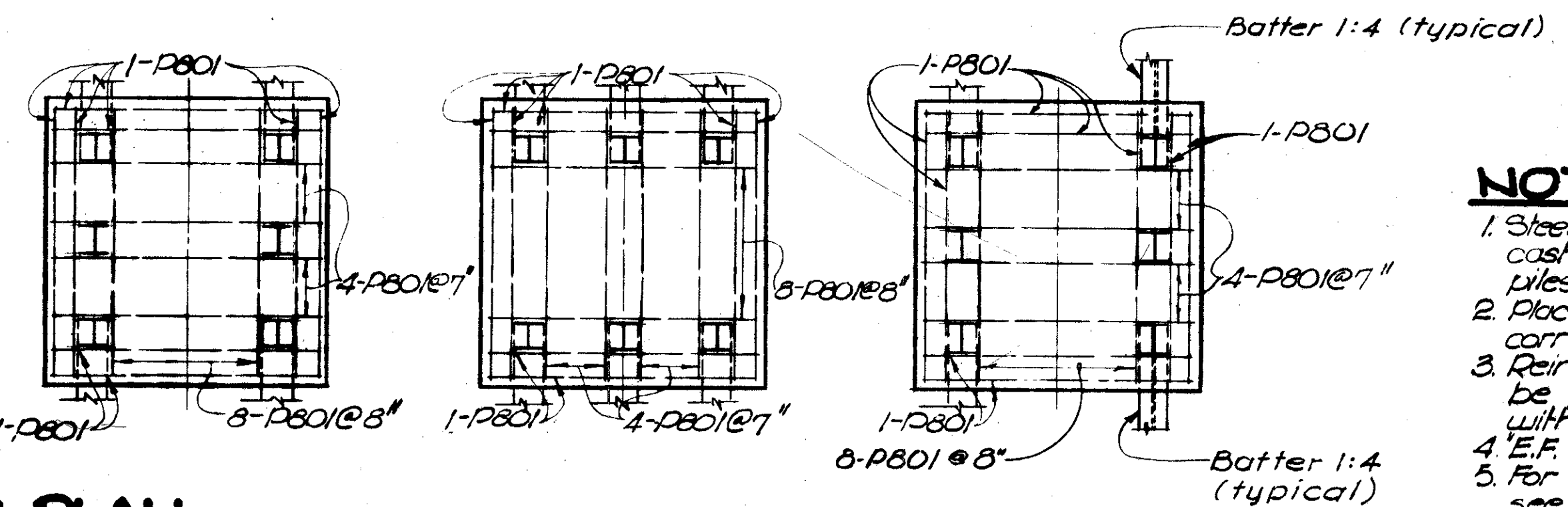
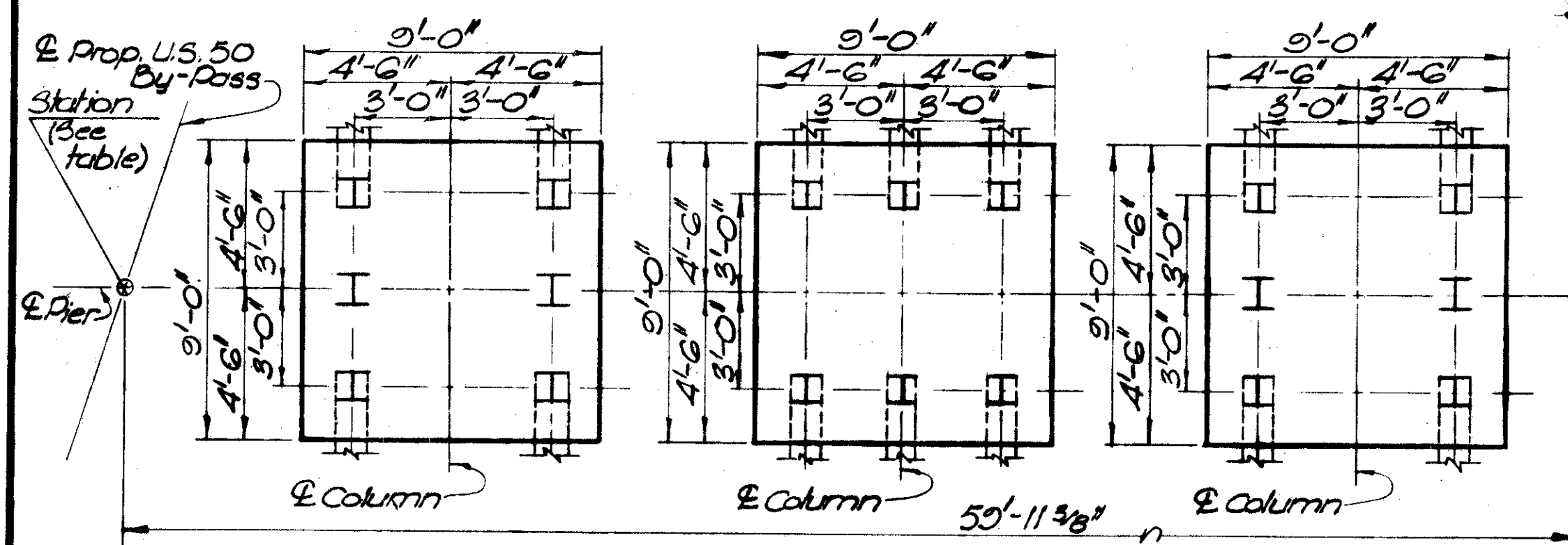
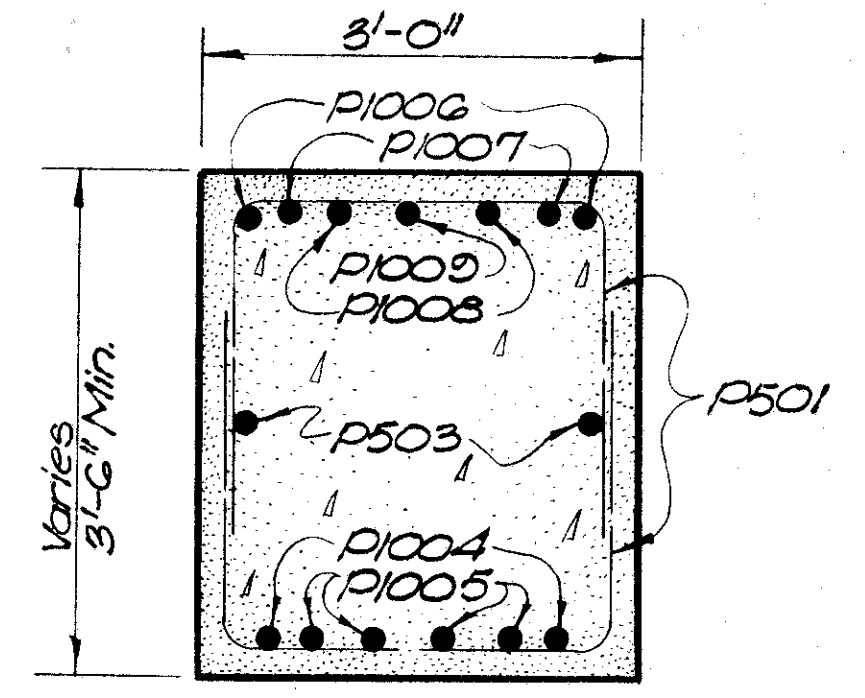


TABLE OF ELEVATIONS

	PIER 1	PIER 5
STATION	1202+17.30	1205+17.30
ELEV."A"	G12.50	G11.30
ELEV."B"	G12.63	G11.43
ELEV."C"	G12.72	G11.52
ELEV."D"	G12.56	G11.36
ELEV."E"	G12.41	G11.21
ELEV."F"	G12.26	G11.06
ELEV."G"	G12.10	G10.90
ELEV."H"	G11.95	G10.75
ELEV."I"	501.20	501.50



- NOTES
1. Steel H piles, 12.5 P53 @ Pier 1, and 12"  $\phi$  cast-in-place reinforced concrete piles @ Pier 5.
  2. Place dowels in footing to insure correct spacing of main column steel.
  3. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bolt holes.
  4. "E.F." designates "each face".
  5. For REINFORCING STEEL LIST, see Sheet No. 270.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**PIERS 1 & 5**  
BRIDGE NO. HAM-25-1634 R  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS  
HAMILTON COUNTY STA. 1201+63.02 TO  
STA. 1205+64.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
Y.J.B.	J.R.R.	J.R.R.	P.J.K.	J.A.D.	Oct. '58	

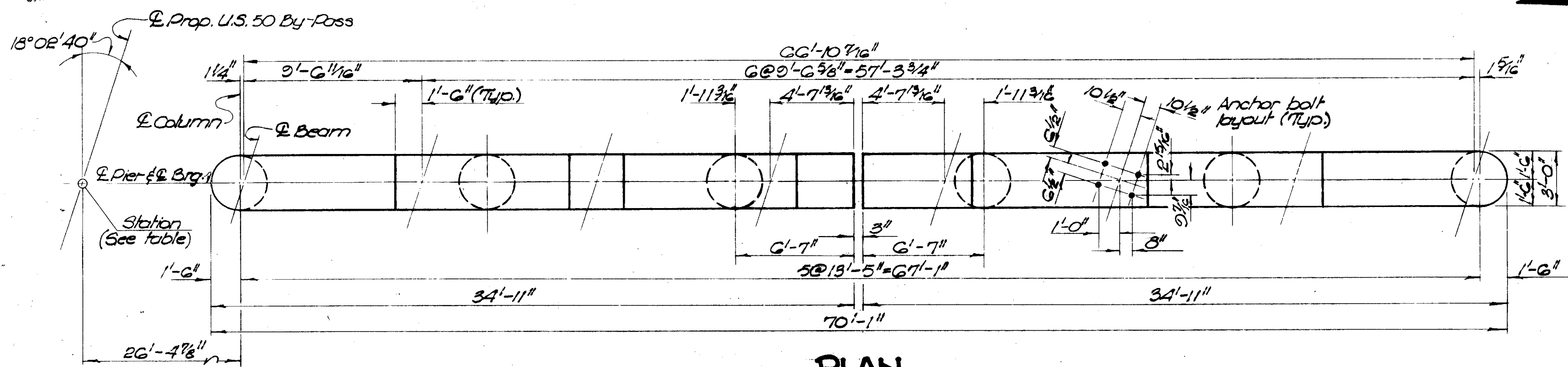
MICROFILMED  
JAN 28 1988



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

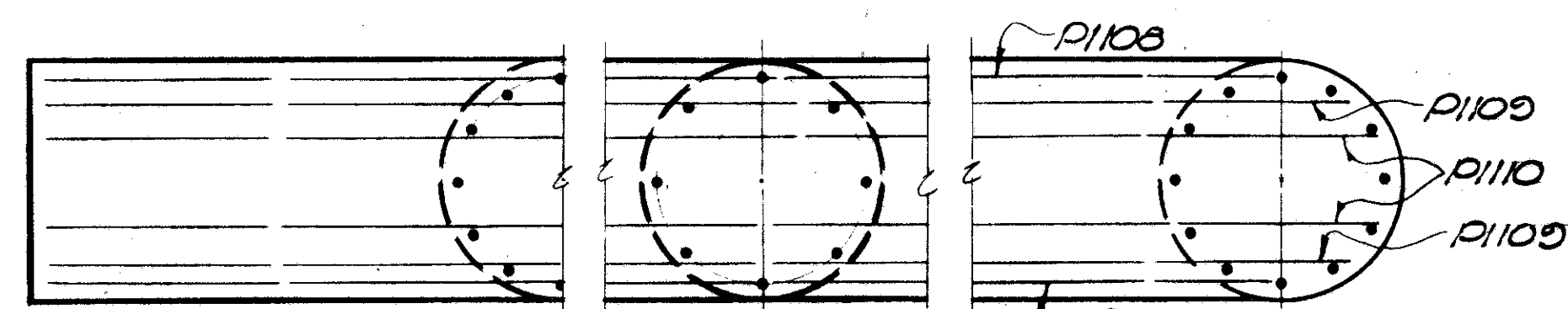
260  
317

HAMILTON COUNTY  
HAM-25-15.60 E-  
HAM-50B-22.02

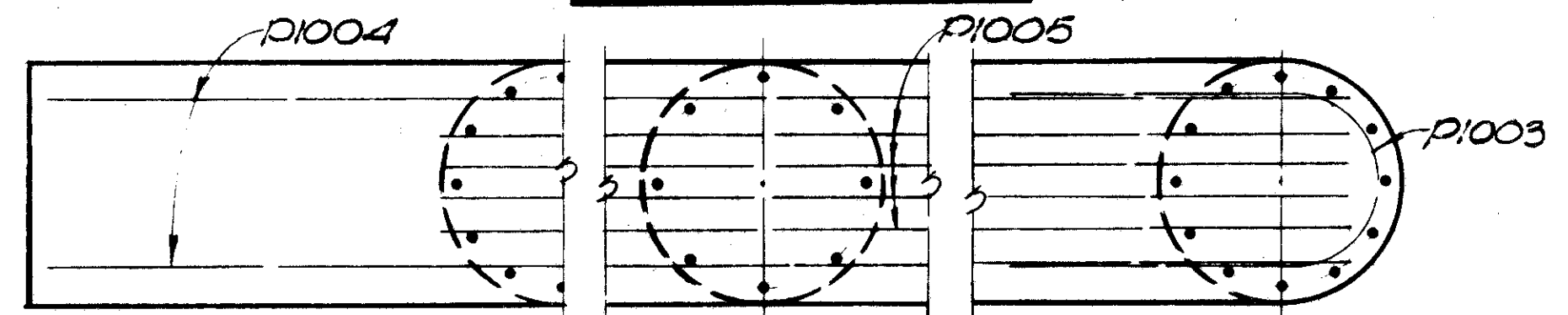


**PLAN**

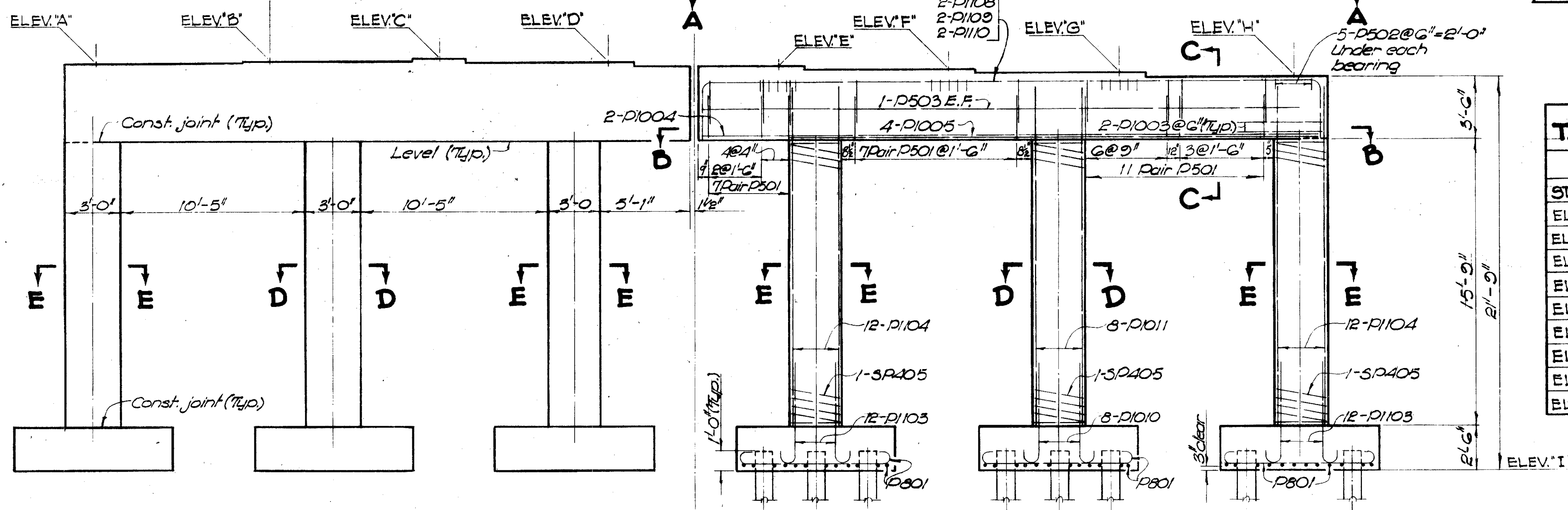
Symmetrical about  $\bar{C}$  except as shown



**SECTION A-A**



**SECTION B-B**

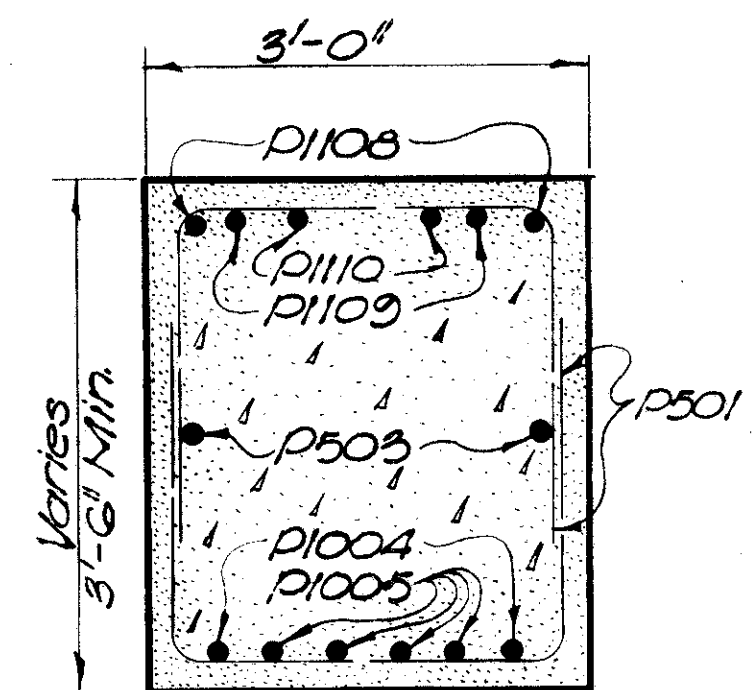


**ELEVATION**

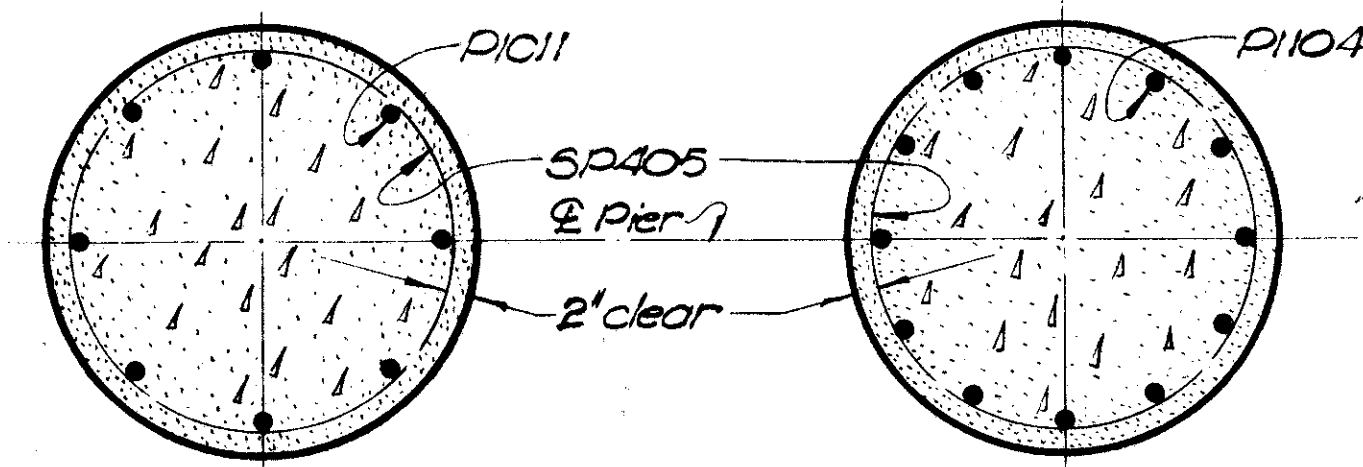
Symmetrical about  $\bar{C}$

**TABLE OF ELEVATIONS**

	PIER 2	PIER 3	PIER 4
STATION	1202+92.39	1203+67.39	1204+42.39
ELEV. A'	612.16	611.88	611.56
ELEV. B'	612.20	612.01	611.69
ELEV. C'	612.37	612.10	611.77
ELEV. D'	612.22	611.94	611.62
ELEV. E'	612.07	611.79	611.47
ELEV. F'	611.91	611.64	611.31
ELEV. G'	611.76	611.48	611.16
ELEV. H'	611.61	611.35	611.01
ELEV. I'	589.86	589.58	589.26

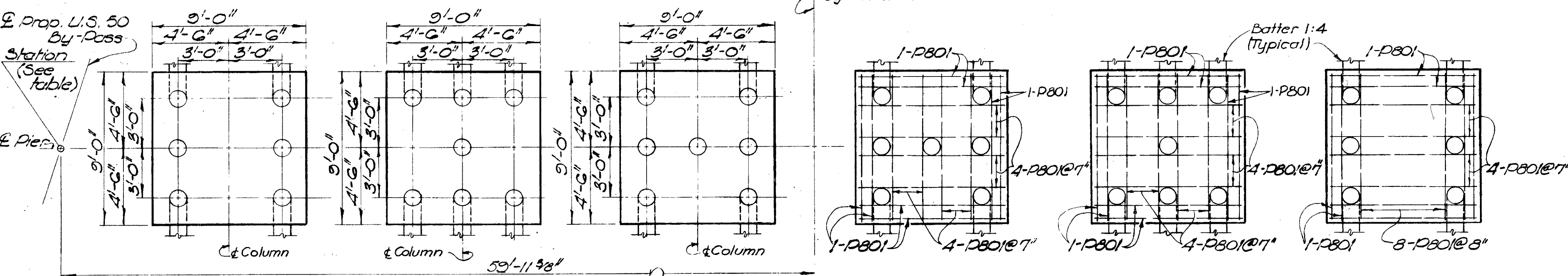


**SECTION C-C**



**SECTION D-D**

**SECTION E-E**



**FOOTING PLAN**

**NOTES**

- All piles 12"  $\phi$  cast-in-place reinforced concrete.
- Place dowels in footing to insure correct spacing of main column steel.
- Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bolt holes.
- E.F. designates 'each face'.
- For REINFORCING STEEL LIST, see Sheet No. 270.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**PIERS 2, 3 & 4**  
BRIDGE NO. HAM-25-1634 R  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS  
HAMILTON COUNTY STA. 1201+63.02 TO  
STA. 1205+64.76

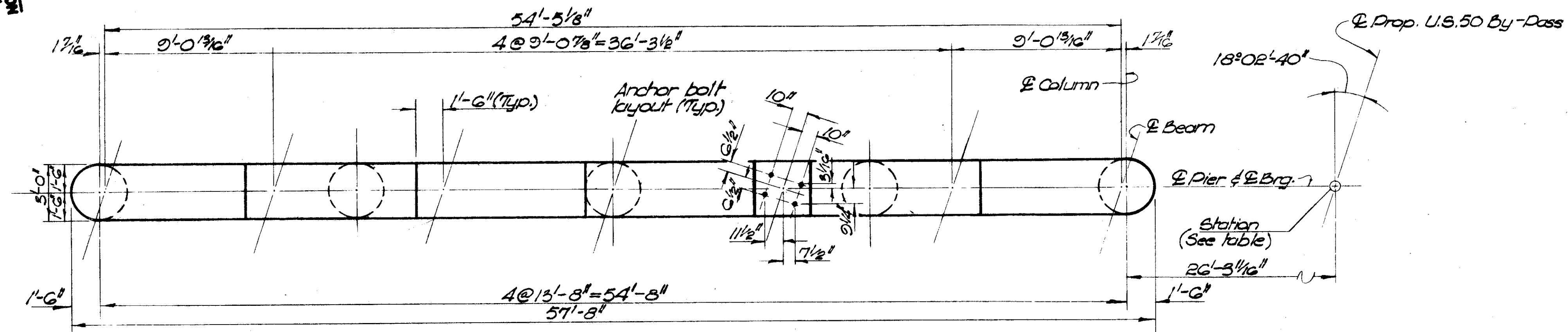
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Y.J.S.	J.R.R.	J.R.R.	P.J.V.	J.A.D.	Oct '58	



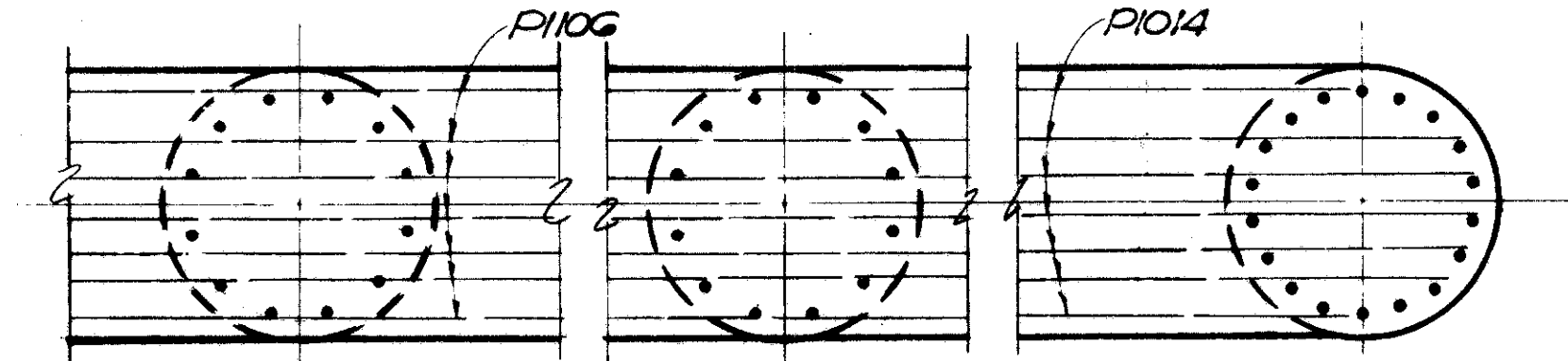
FED. NO. DIVISION	STATE	PROJECT
2	OHIO	

201  
317

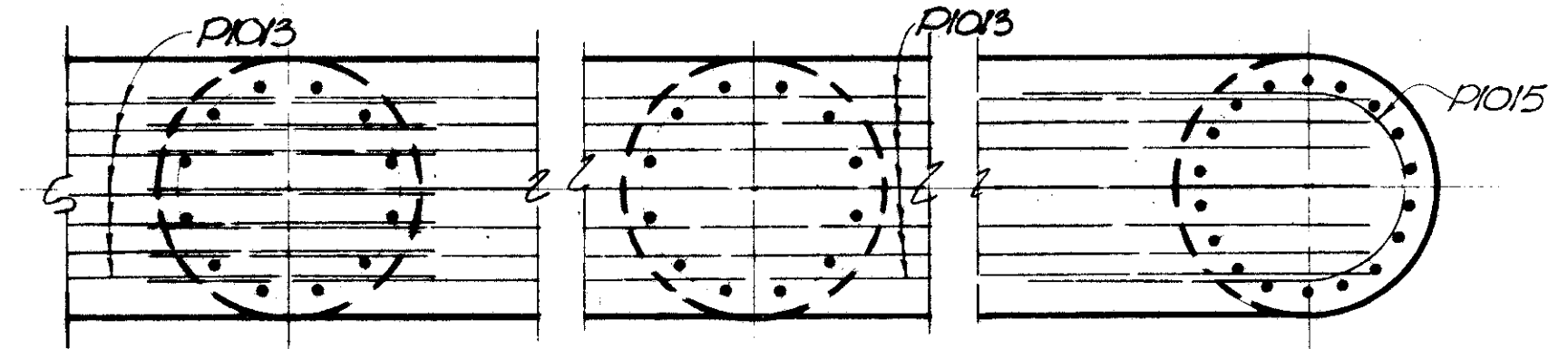
HAMILTON COUNTY  
HAM - 25-15.60  
HAM - 50 B-22.02



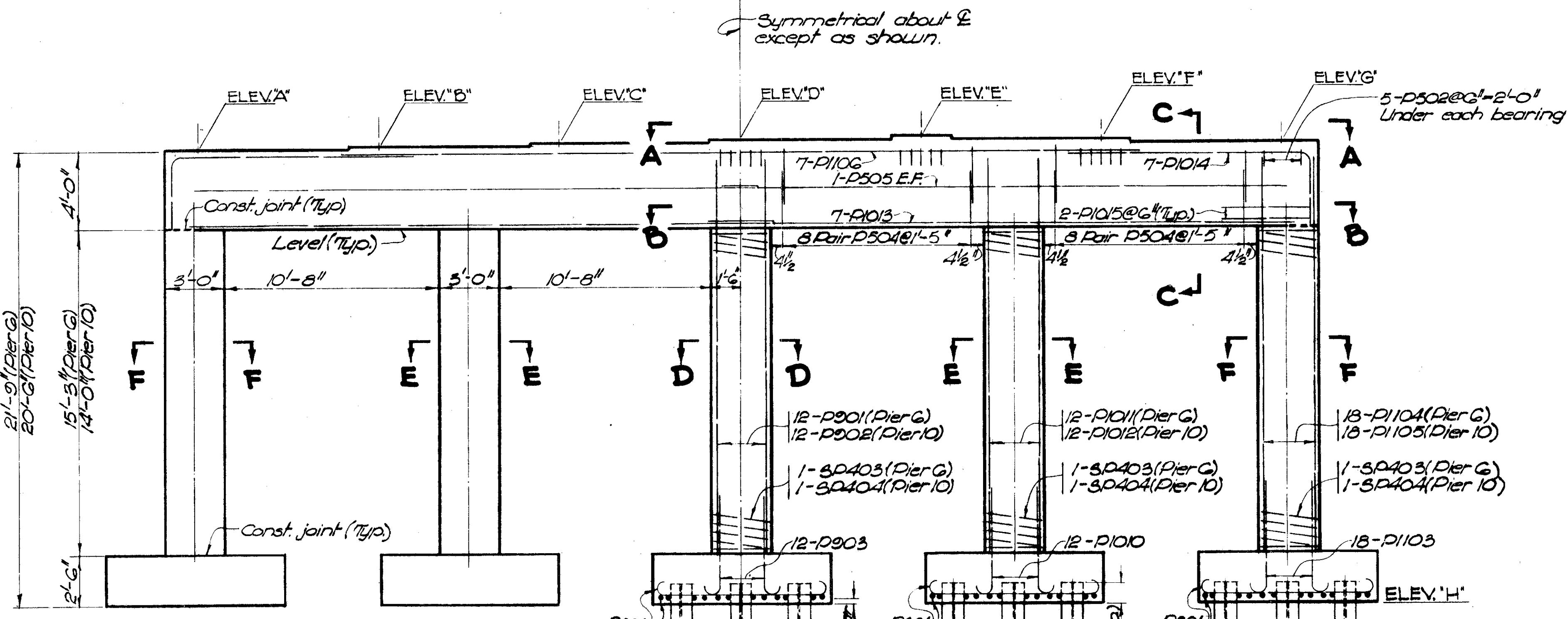
PLAN



SECTION A-A

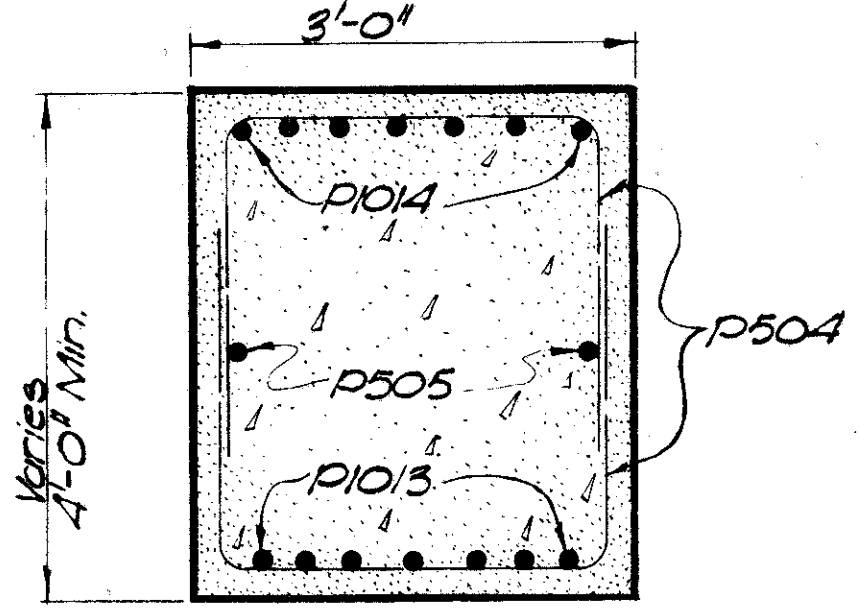


SECTION B-B

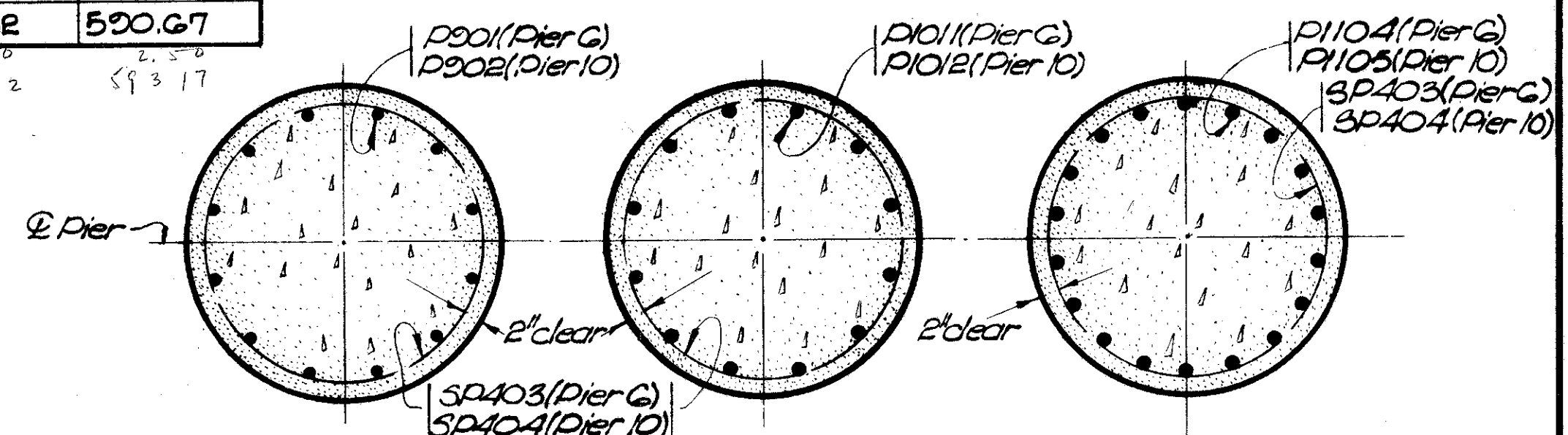


ELEVATION

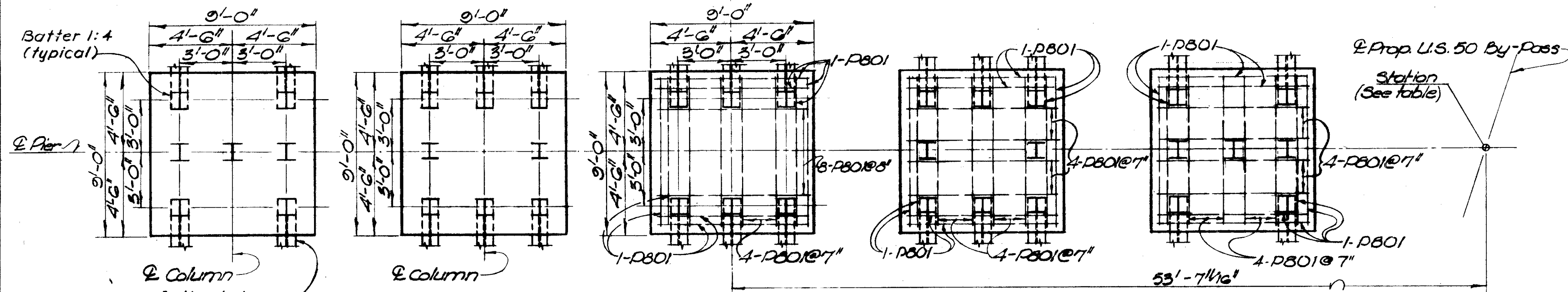
	PIER G	PIER 10
STATION	1202+17.39	1205+17.39
ELEV. "A"	G12.37	G11.17
ELEV. "B"	G12.49	G11.29
ELEV. "C"	G12.62	G11.42
ELEV. "D"	G12.74	G11.54
ELEV. "E"	G12.86	G11.66
ELEV. "F"	G12.73	G11.53
ELEV. "G"	G12.53	G11.33
ELEV. "H"	590.62	590.67



SECTION C-C



SECTION D-D SECTION E-E SECTION F-F



FOOTING PLAN

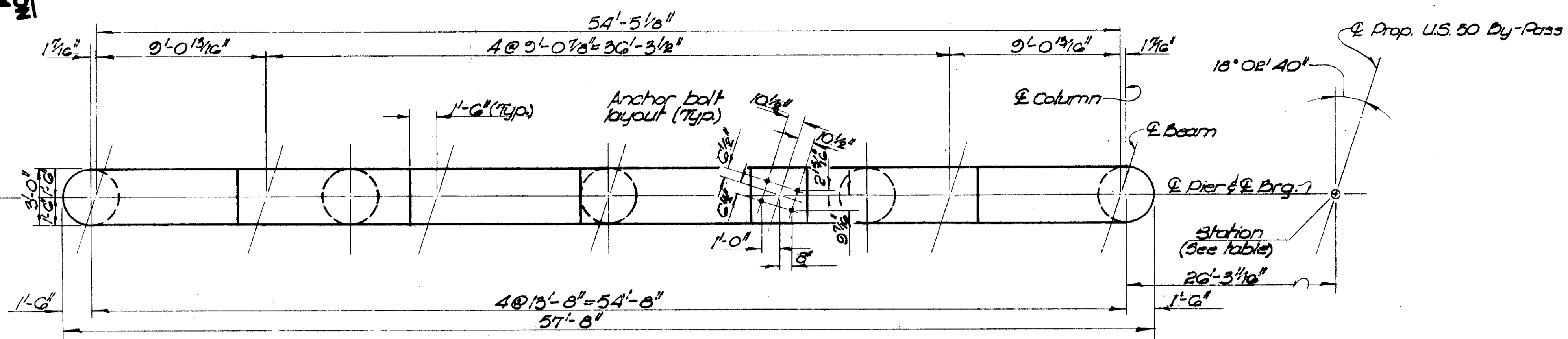
NOTES

1. Steel H piles, 12BP55 @ Pier G, and 12" of cast-in-place reinforced concrete piles @ Pier 10.
2. Place dowels in footing to insure correct spacing of main column steel.
3. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bolt holes.
4. "E.F." designates "each face".
5. For REINFORCING STEEL LIST, see Sheet No. 270.

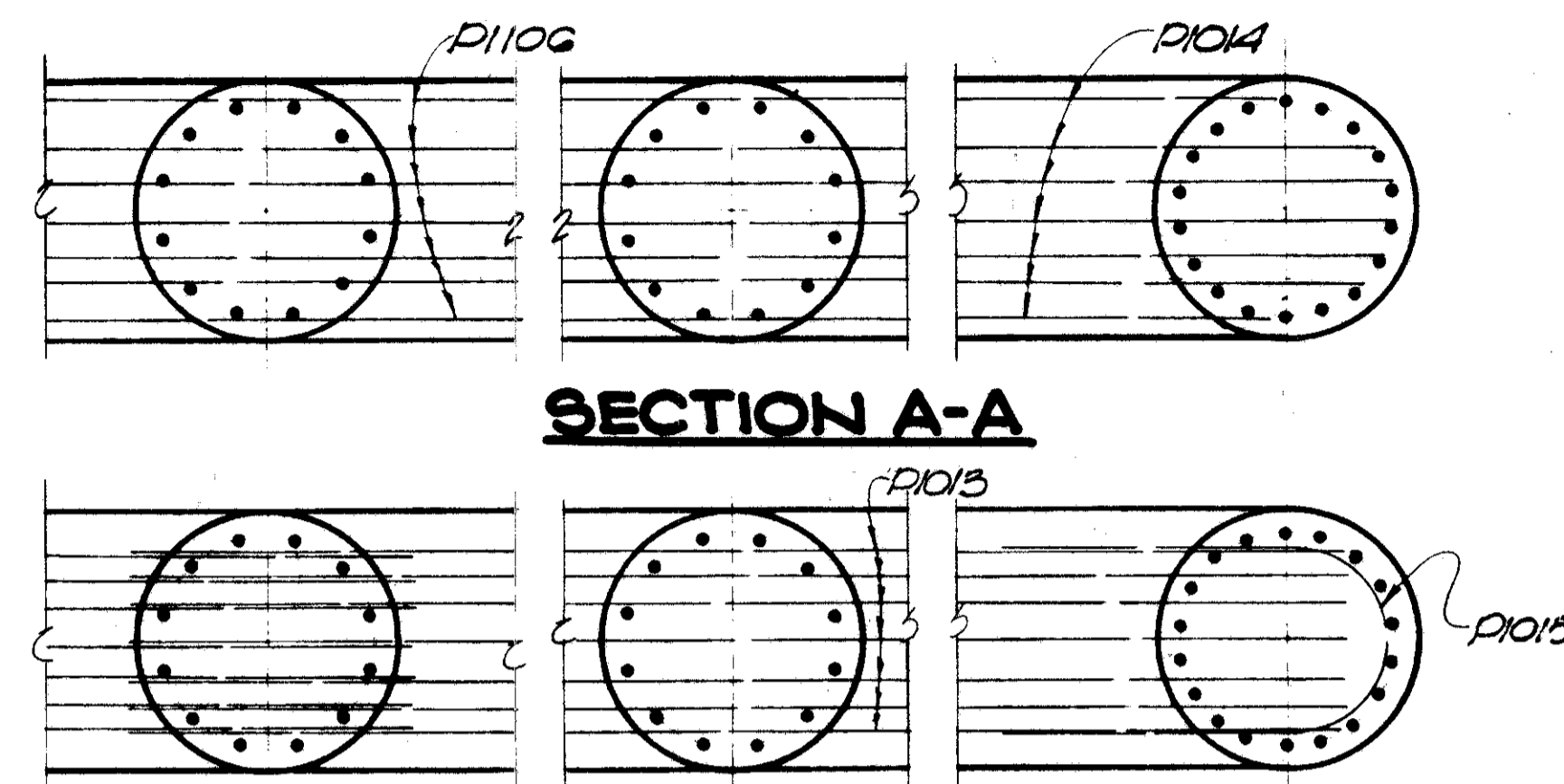
VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**PIERS G & 10**  
BRIDGE NO. HAM-25-1634L  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS  
HAMILTON COUNTY STA. 1201+63.02 TO  
STA. 1205+64.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
Y.S.	J.R.R.	J.R.R.	R.J.K.	J.A.D.	Oct '58

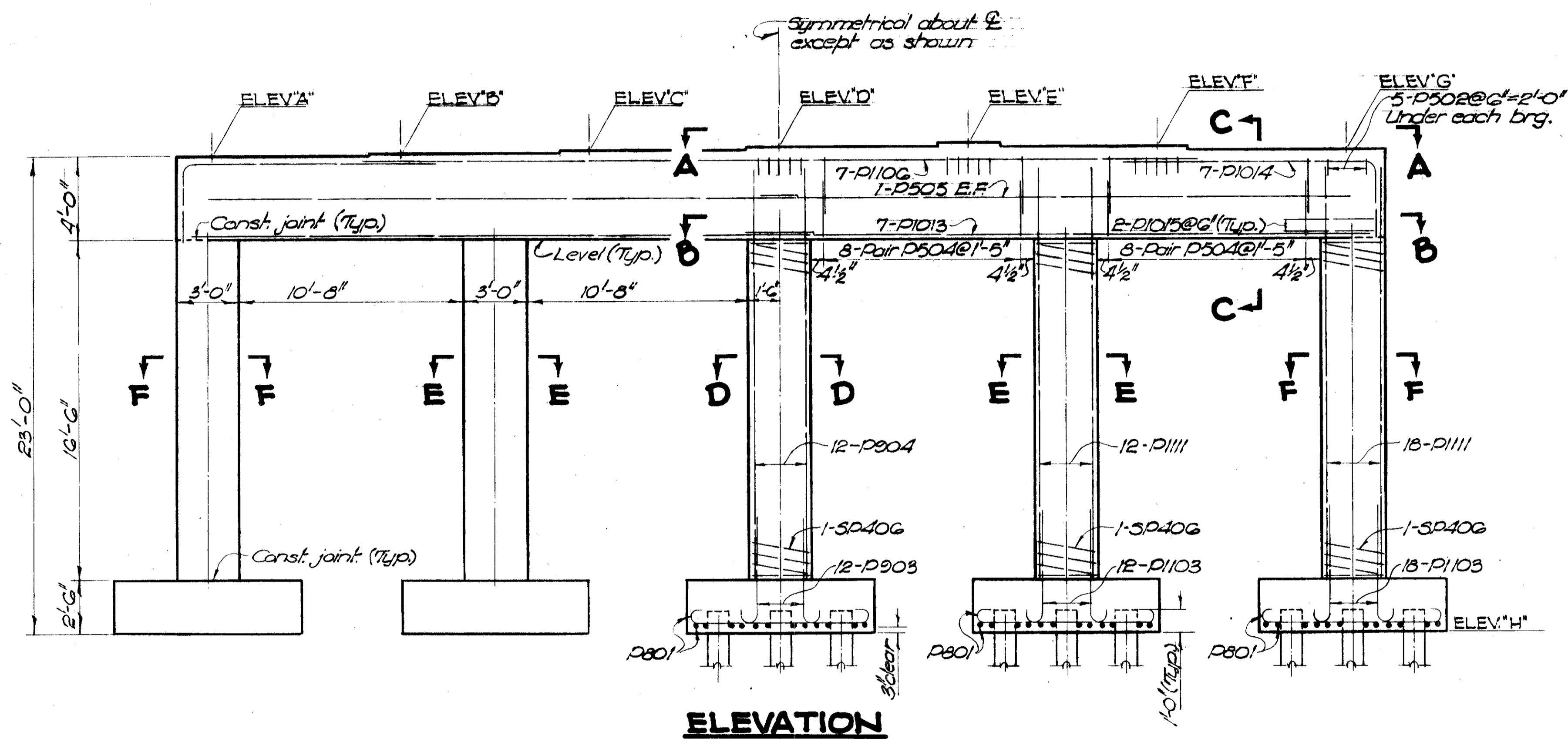


**PLAN**



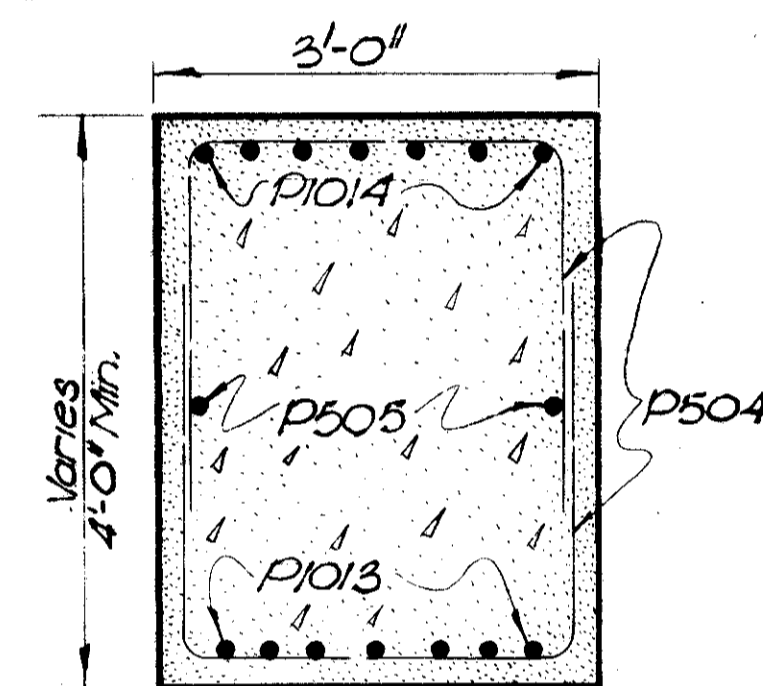
**SECTION A-A**

**SECTION B-B**

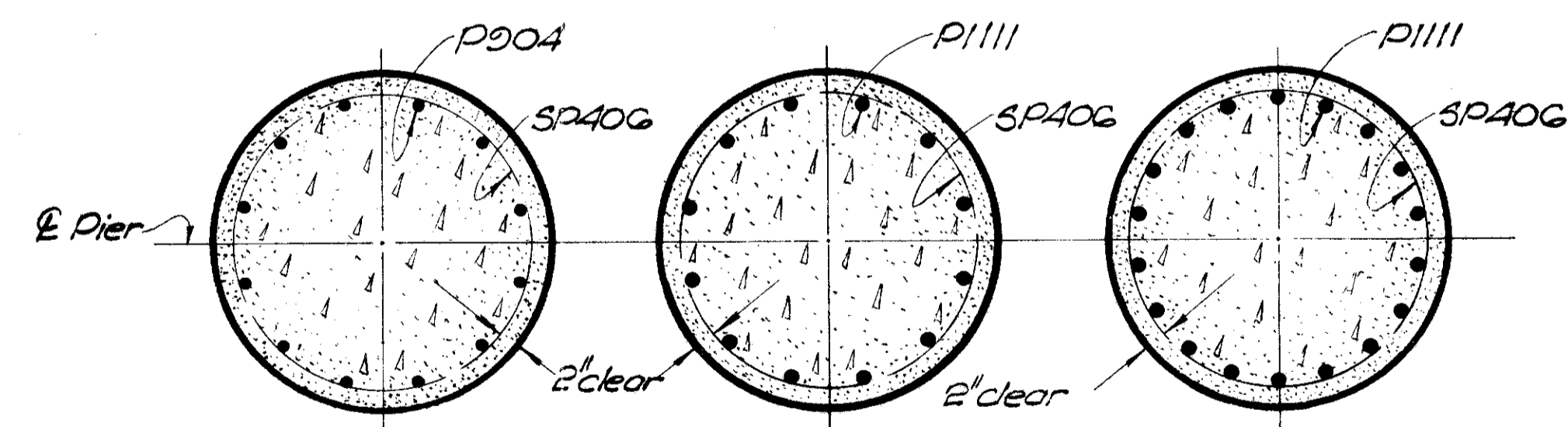


**ELEVATION**

STATION	PIER 7	PIER 8	PIER 9
ELEV. 'A'	G12.03	G11.75	G11.43
ELEV. 'B'	G12.15	G11.87	G11.55
ELEV. 'C'	G12.28	G12.00	G11.68
ELEV. 'D'	G12.40	G12.12	G11.80
ELEV. 'E'	G12.52	G12.24	G11.92
ELEV. 'F'	G12.30	G12.11	G11.79
ELEV. 'G'	G12.24	G11.96	G11.64
ELEV. 'H'	589.03	588.75	588.43



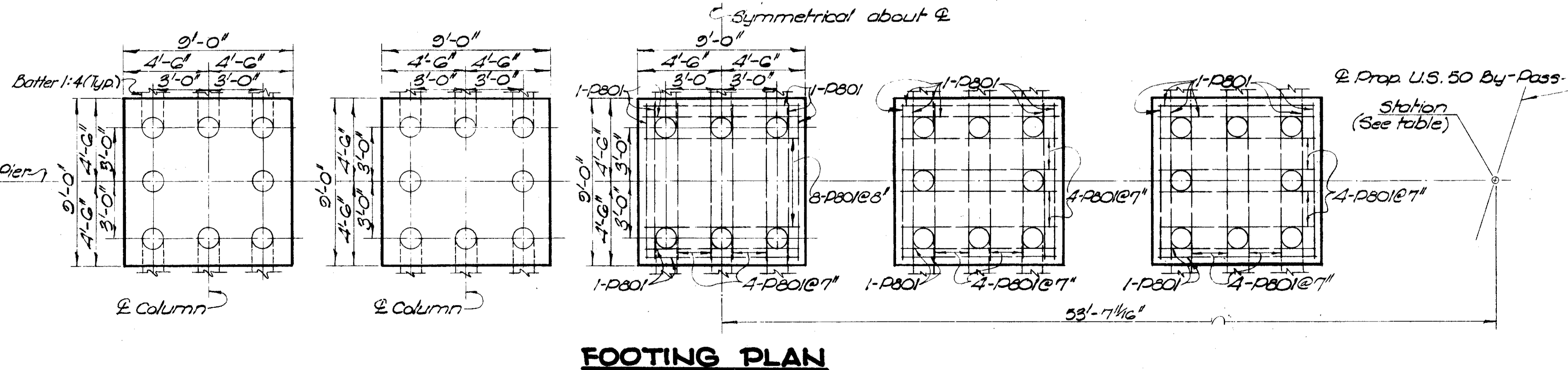
**SECTION C-C**



**SECTION D-D SECTION E-E SECTION F-F**

**NOTES**

- All piles 12" cast-in-place reinforced concrete.
- Place dowels in footing to insure correct spacing of main column steel.
- Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bolt holes.
- 'E,F' designates 'each Face'.
- For REINFORCING STEEL LIST, see Sheet No.



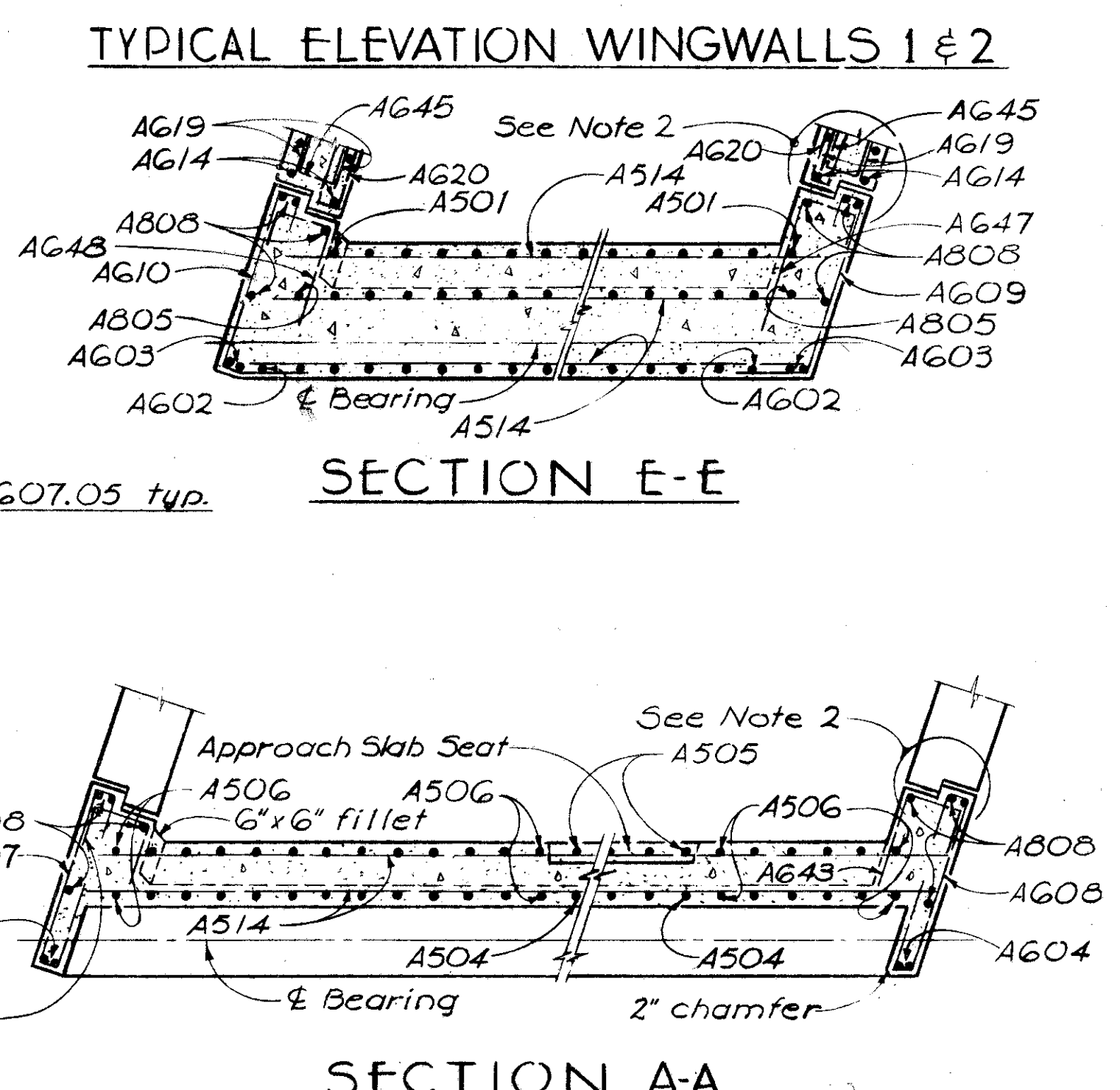
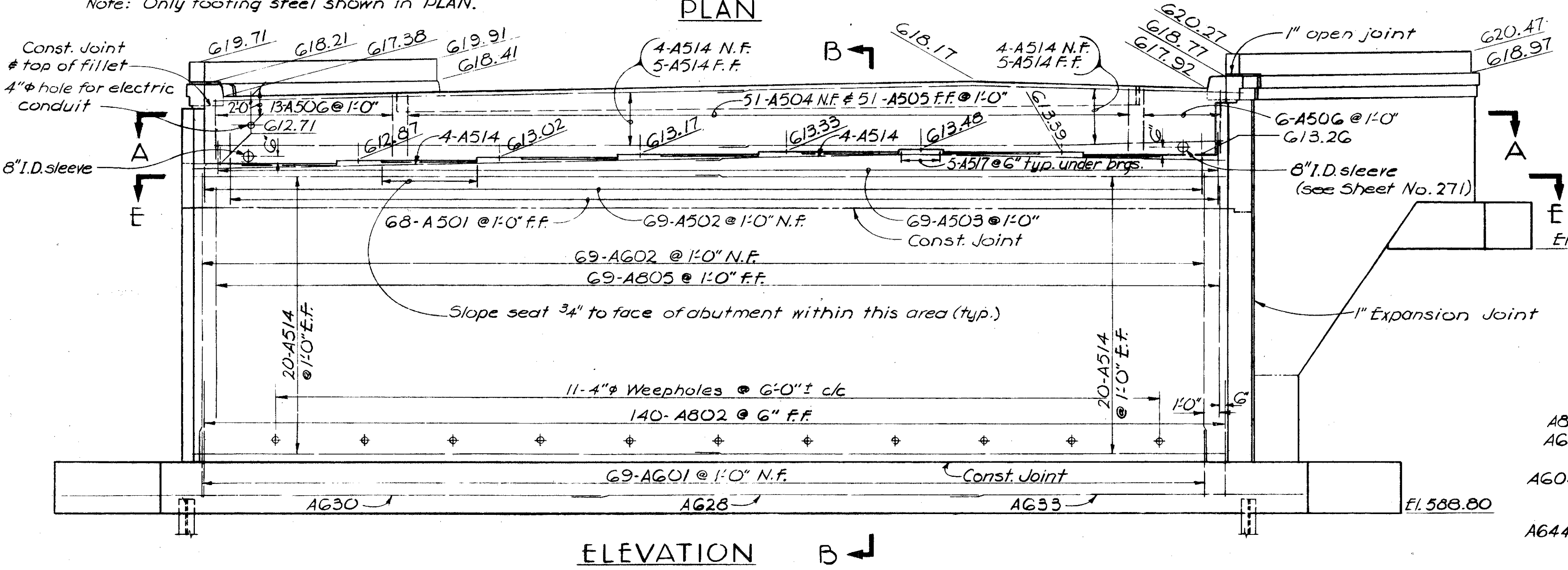
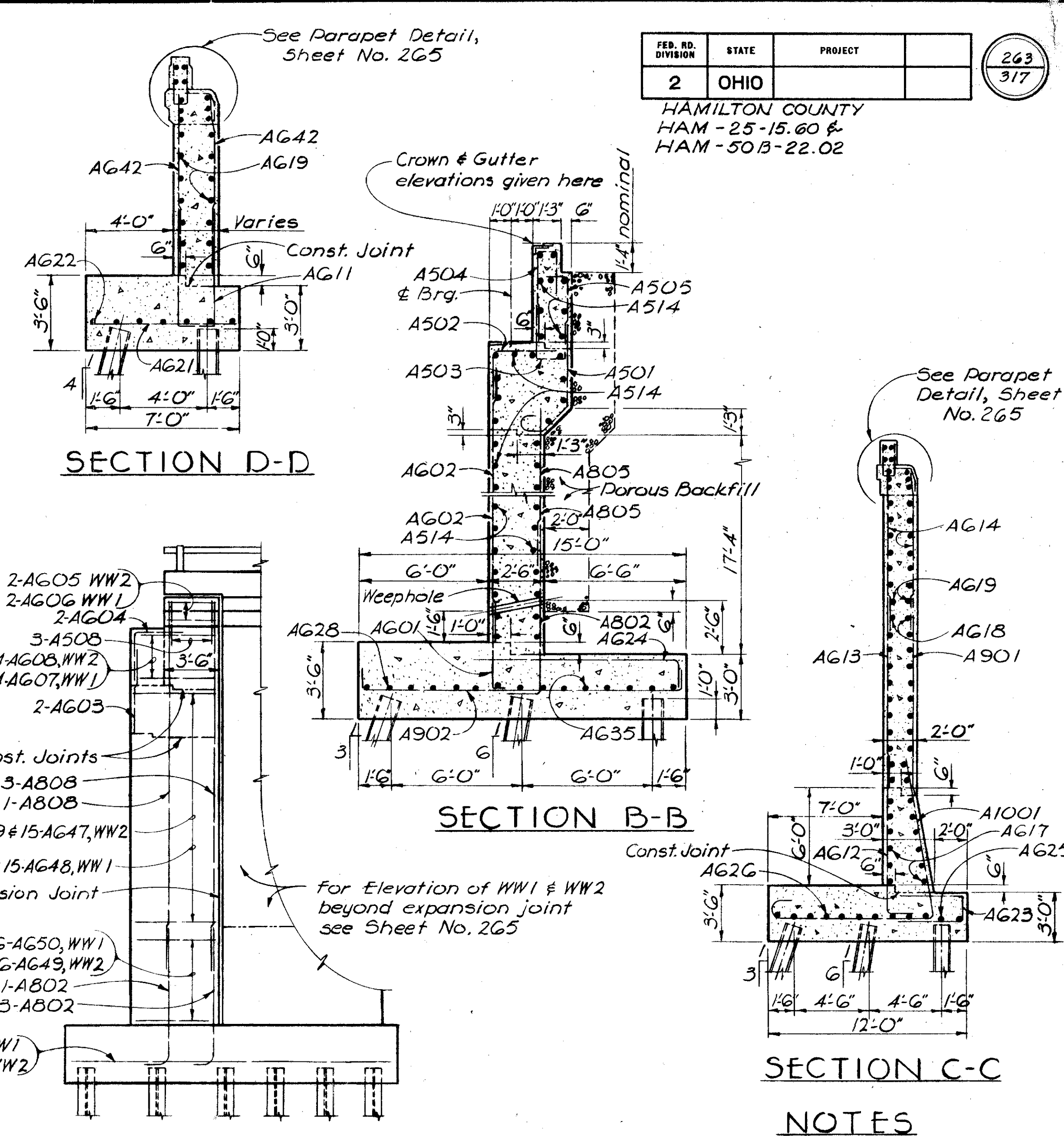
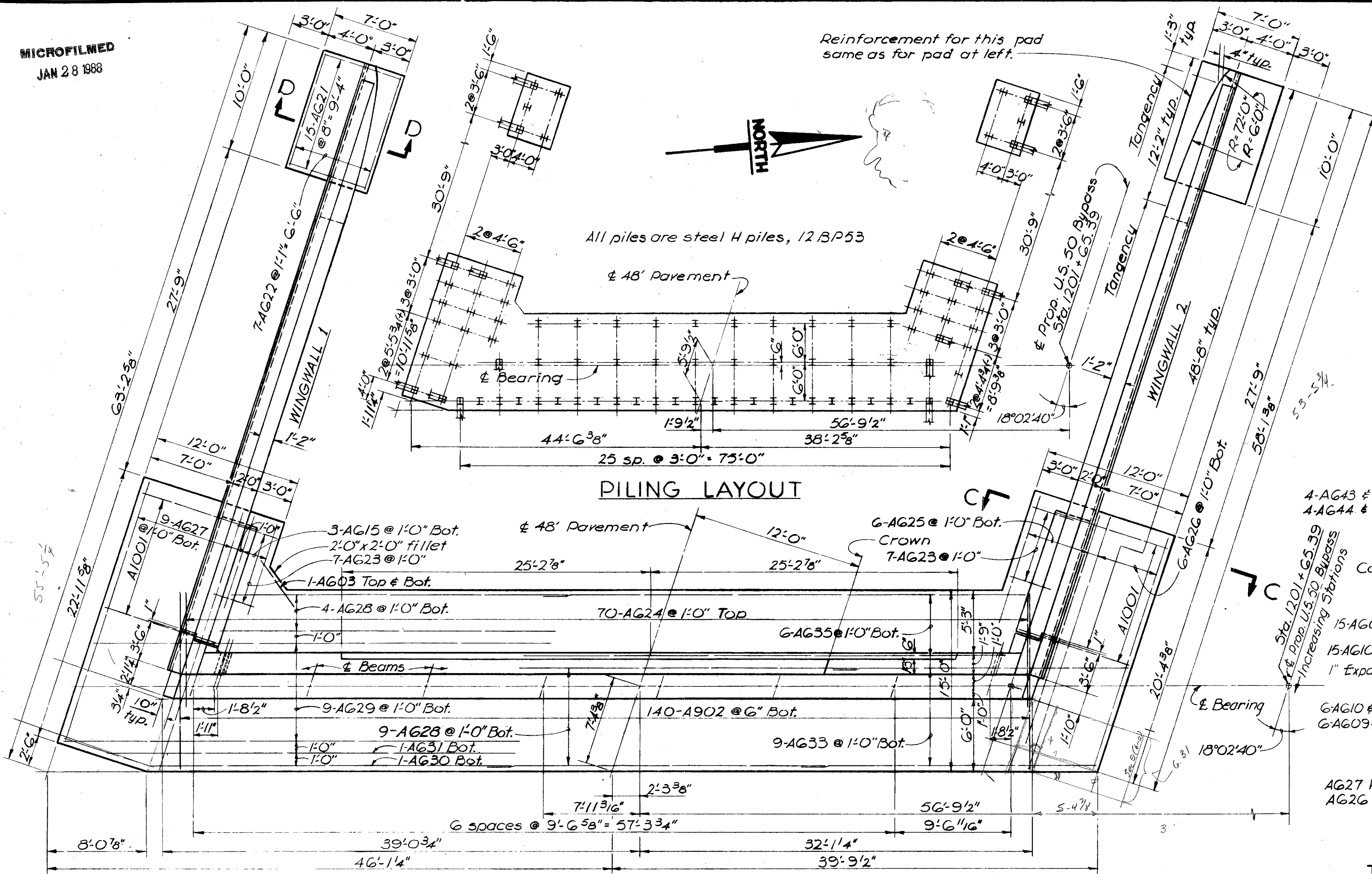
**FOOTING PLAN**

MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

263  
317

HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02



- NOTES**
- In the area of the pads, the embankment shall be placed and compacted up to elevation G10.55, after which excavation shall be made for the pads and piles shall be driven.
  - For detail of typical expansion joint, see Sheet No. 265.
  - For additional notes, see Sheet No. 264.

Work this sheet with Sheet No. 265.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ABUTMENT 1**

BRIDGE NO. HAM-25-1634-R

PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS

HAMILTON COUNTY STA. 1201 + G3.02 TO  
STA. 1205 + G4.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJM	TEC	TEC	PJK	JAD	OCT 58	

U.S. 50 B







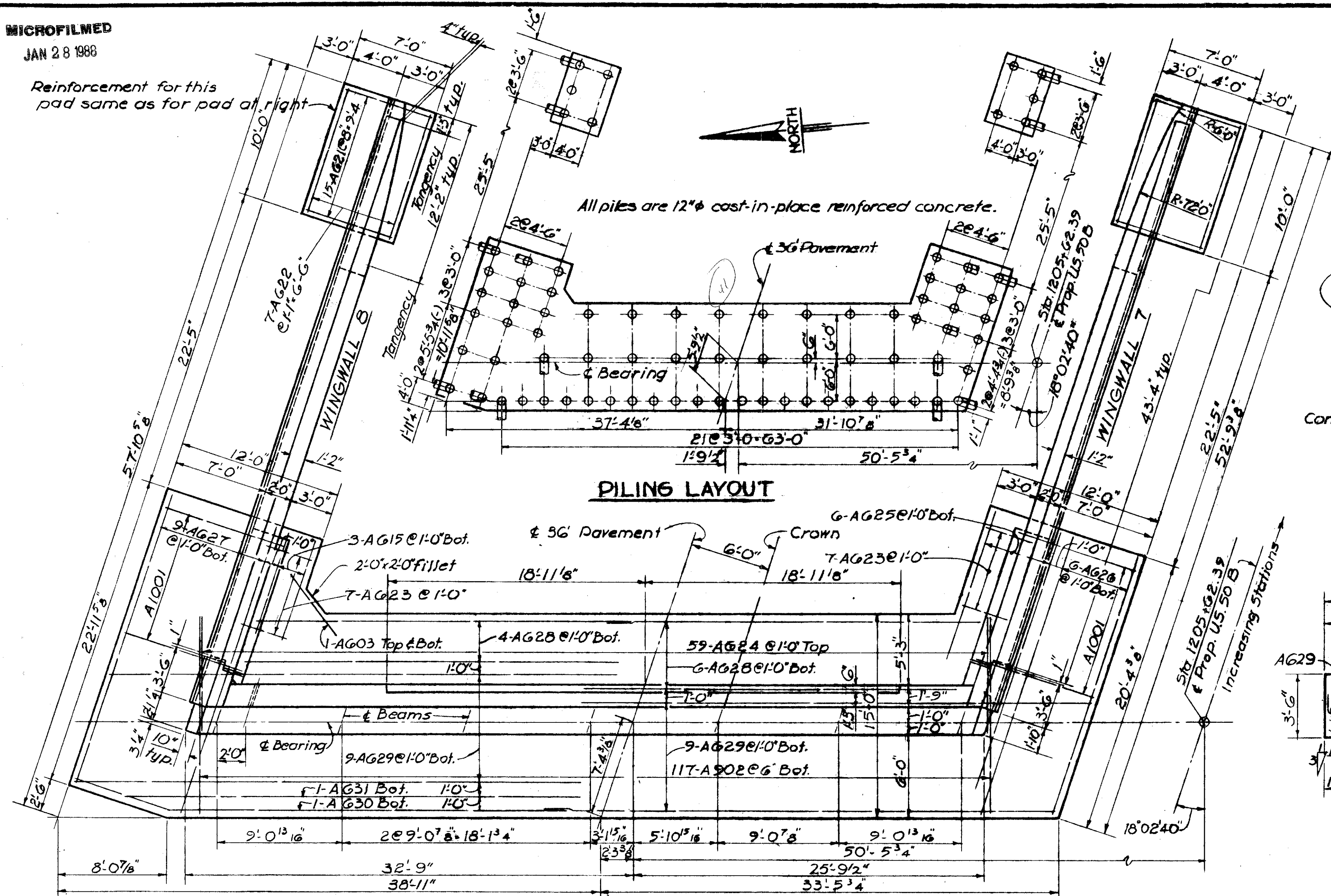
MICROFILMED  
JAN 28 1988

Reinforcement for this pad same as for pad at right

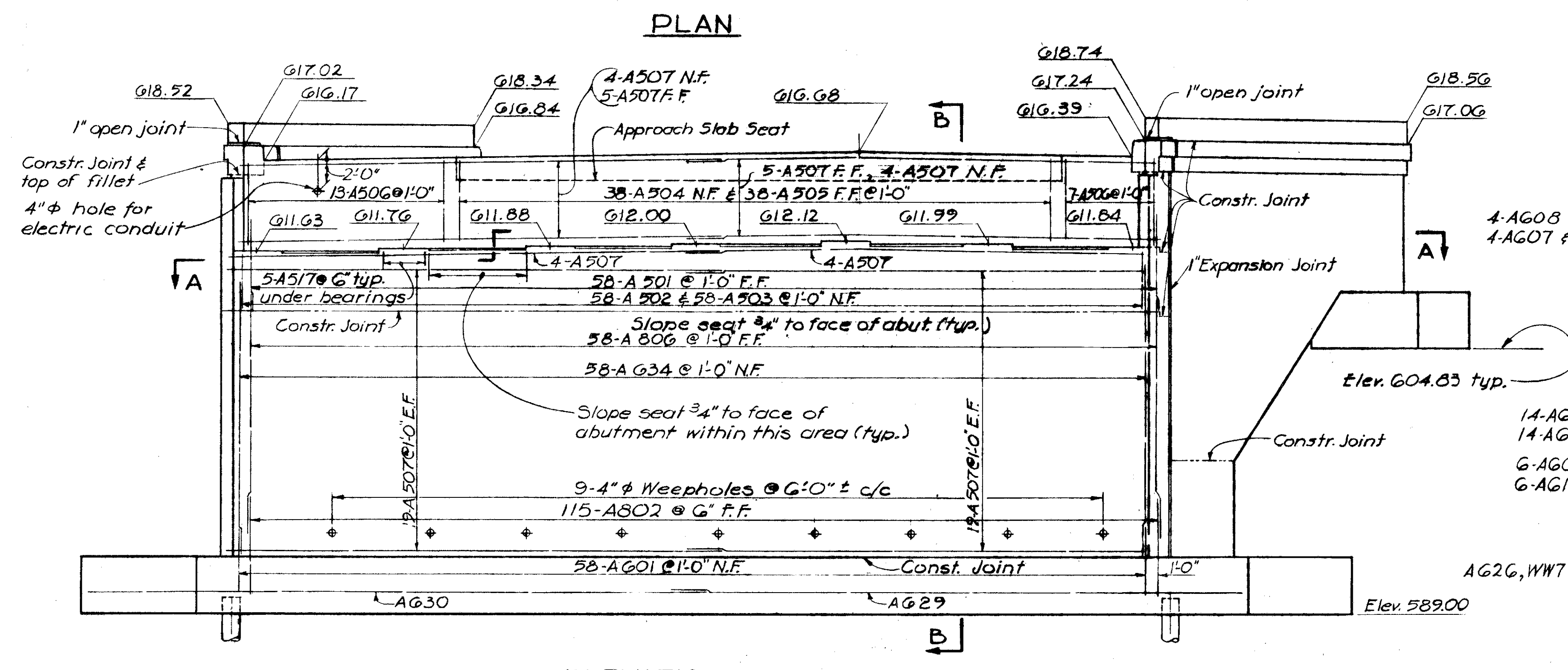
FED. NO. DIVISION	STATE	PROJECT
2	OHIO	



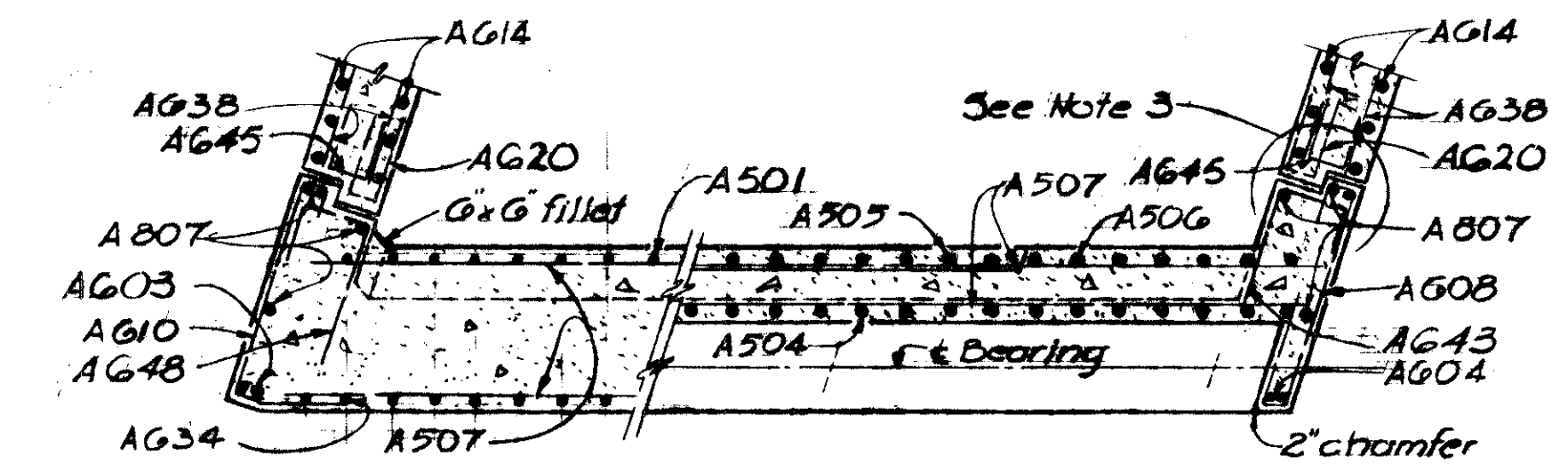
HAMILTON COUNTY  
HAM-25-15.60 #  
HAM-50B-22.02



### PILING LAYOUT

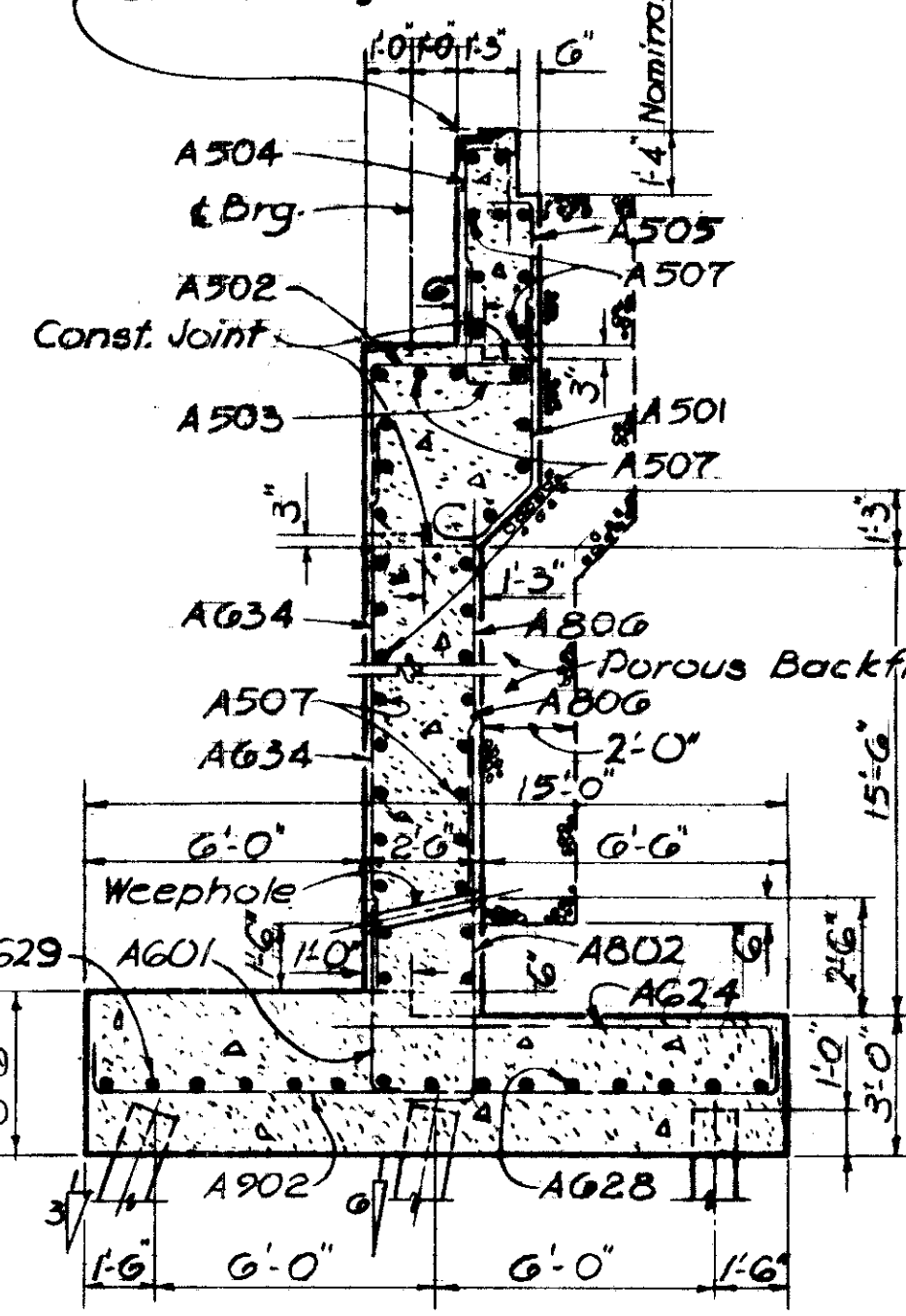


### ELEVATION



### SECTION A-A

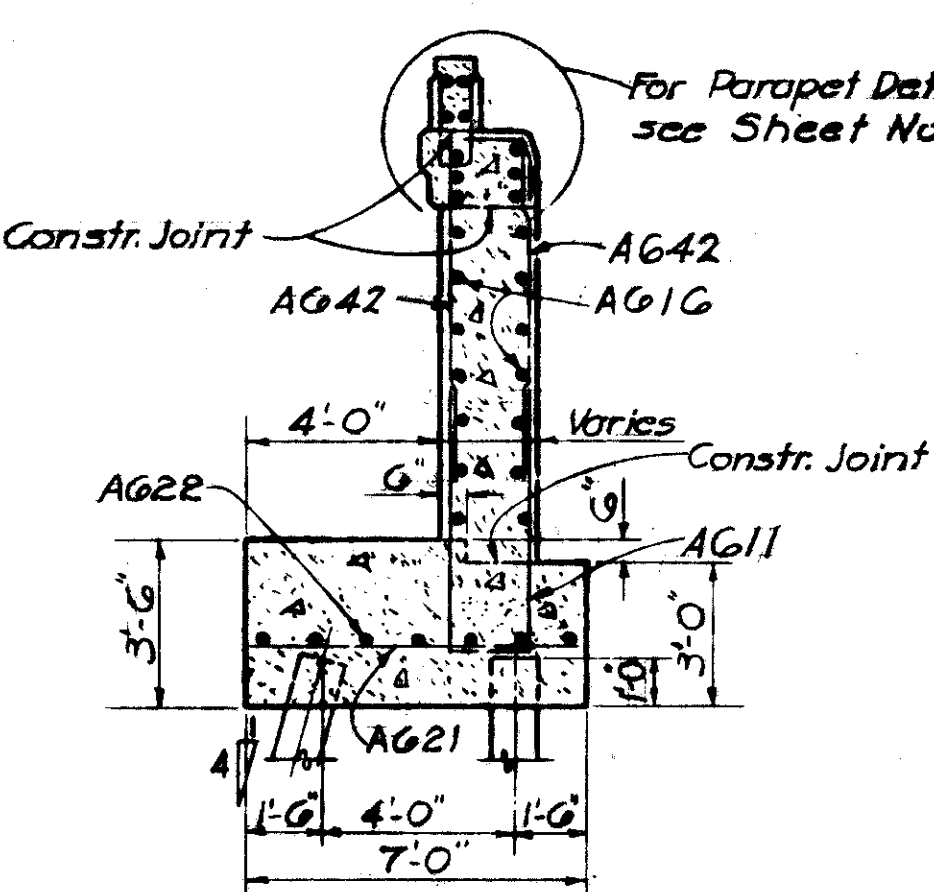
Crown & Gutter elevations given here



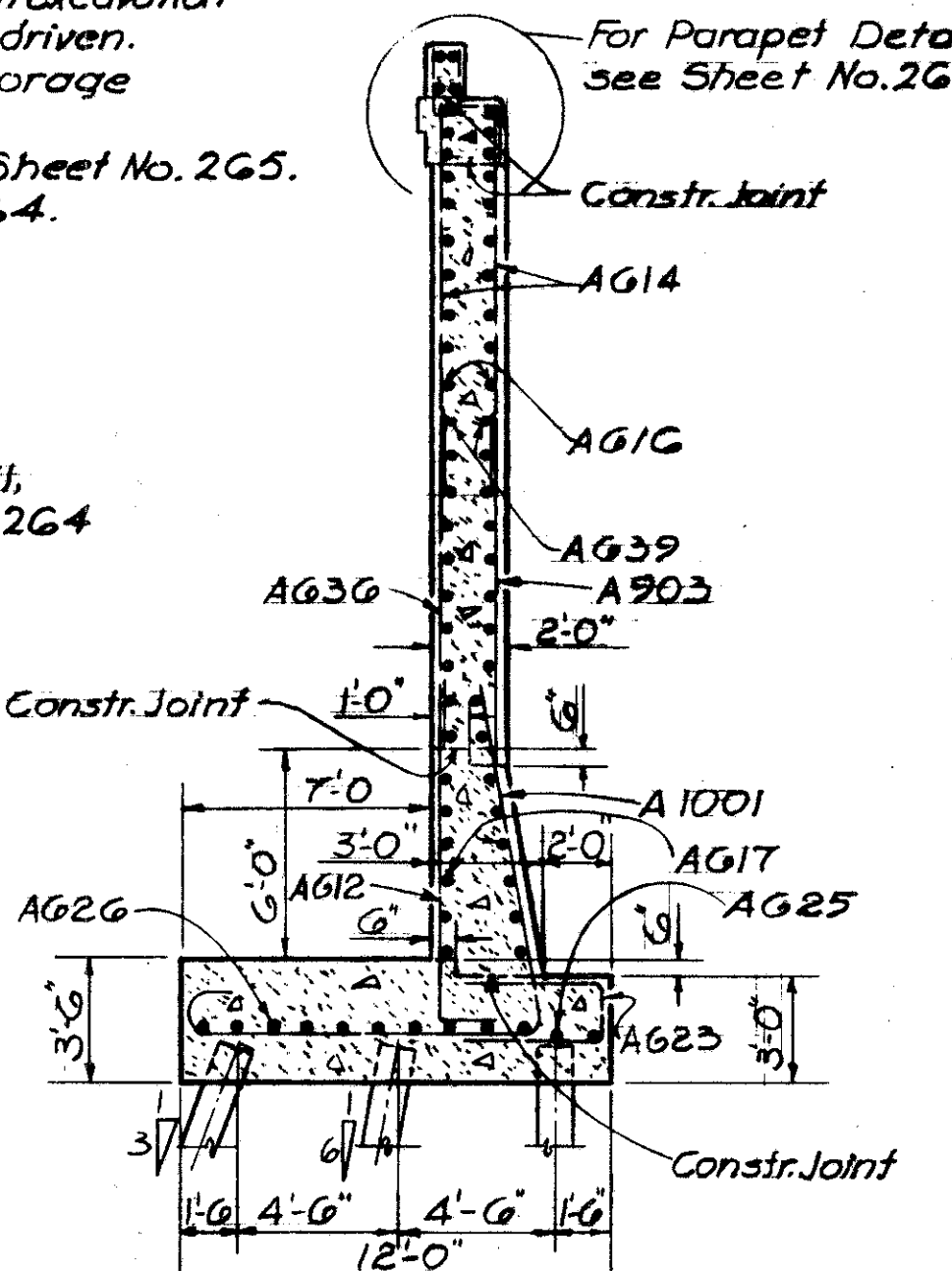
### SECTION B-B

### NOTES

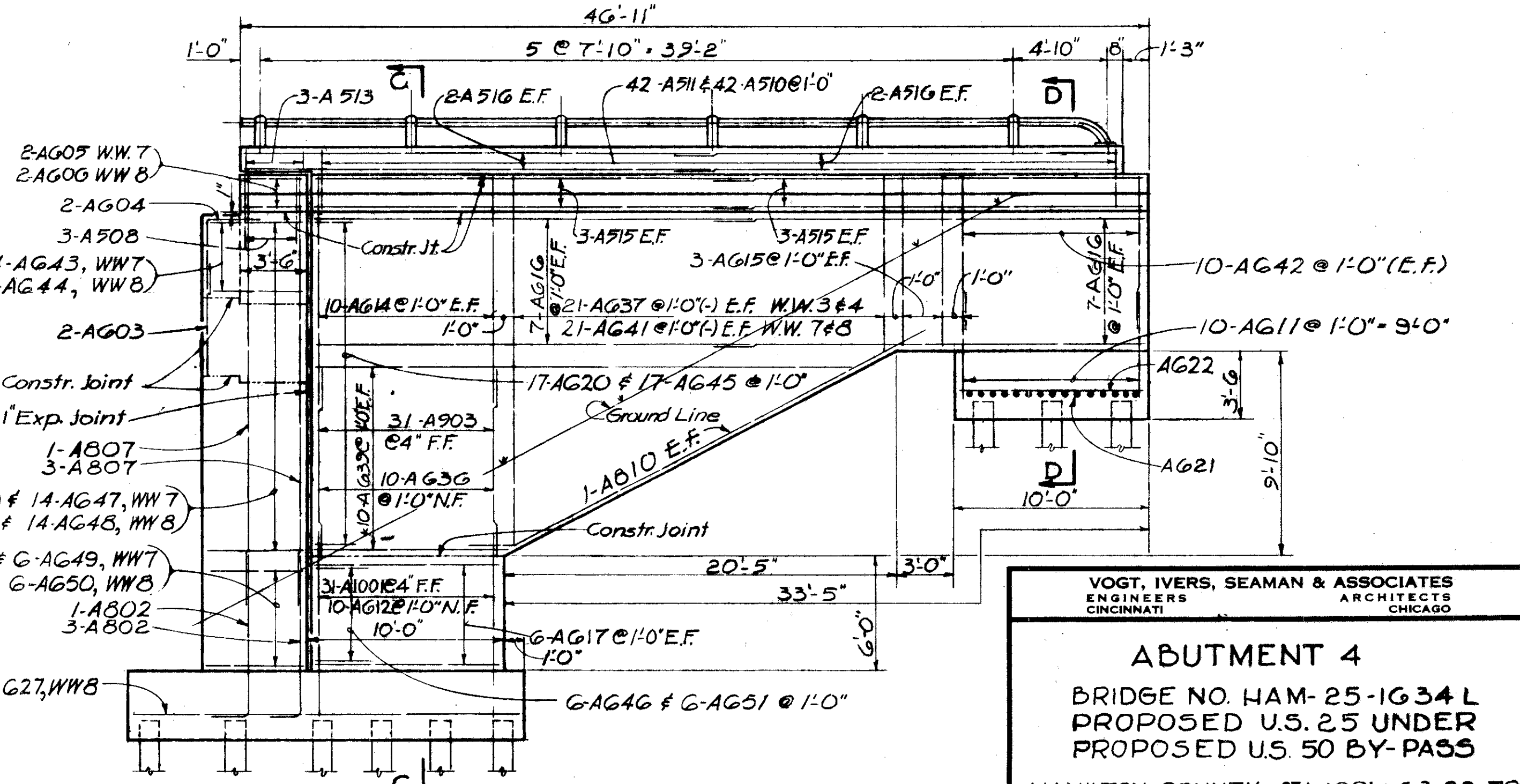
- 1 In the area of the pads, the embankment shall be placed and compacted up to elevation 604.33 after which excavation shall be made for the pads and piles shall be driven.
- 2 for railing end details and guard rail anchorage see Sheet No. 299.
- 3 For detail of typical expansion joint, see Sheet No. 2G5.
- 4 for additional notes see Sheet No. 2G4.



### SECTION D-D



### SECTION C-C



### ELEVATION-WINGWALLS 7 & 8

TYPICAL FOR WINGWALLS 3 & 4 BEYOND EXPANSION JOINT

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ABUTMENT 4**  
BRIDGE NO. HAM-25-1634 L  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS

HAMILTON COUNTY STA. 1201+03.02 TO STA. 1205+04.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJM	RJM	CBS	PJK	JAD	Oct 58	

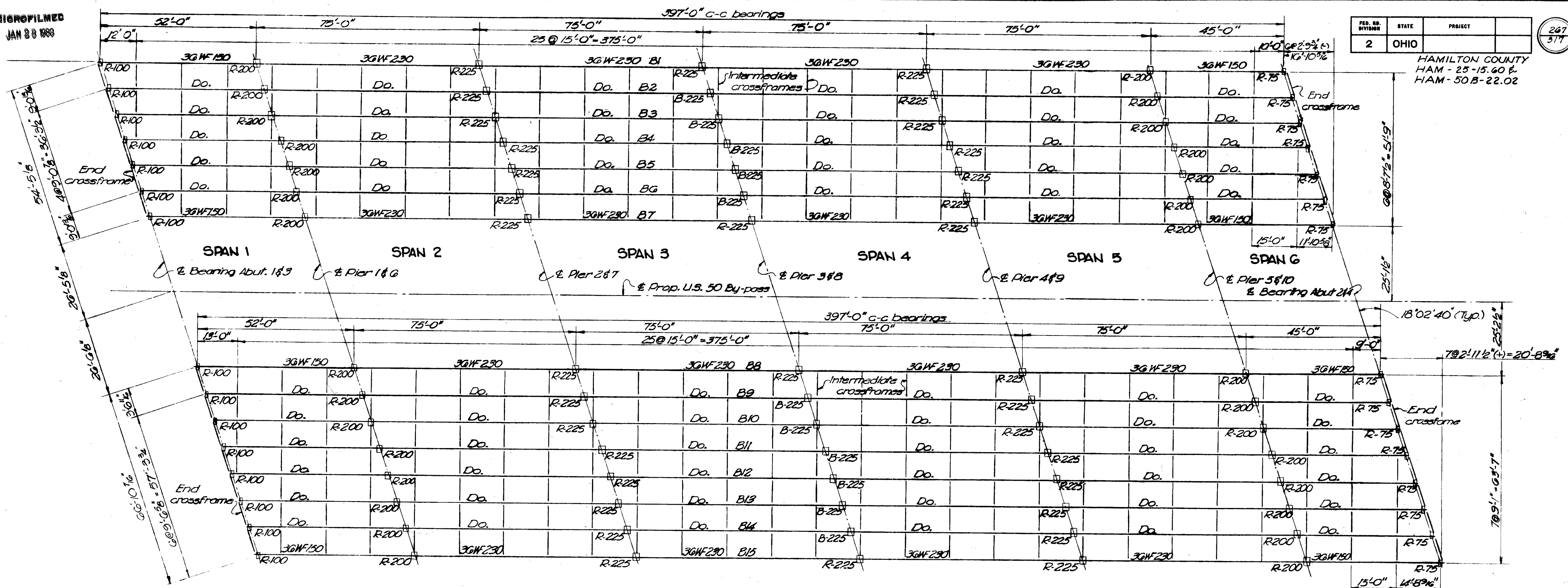
Work this sheet with Sheet Nos. 2G4 & 2G5

MICROFILMED  
JAN 28 1983

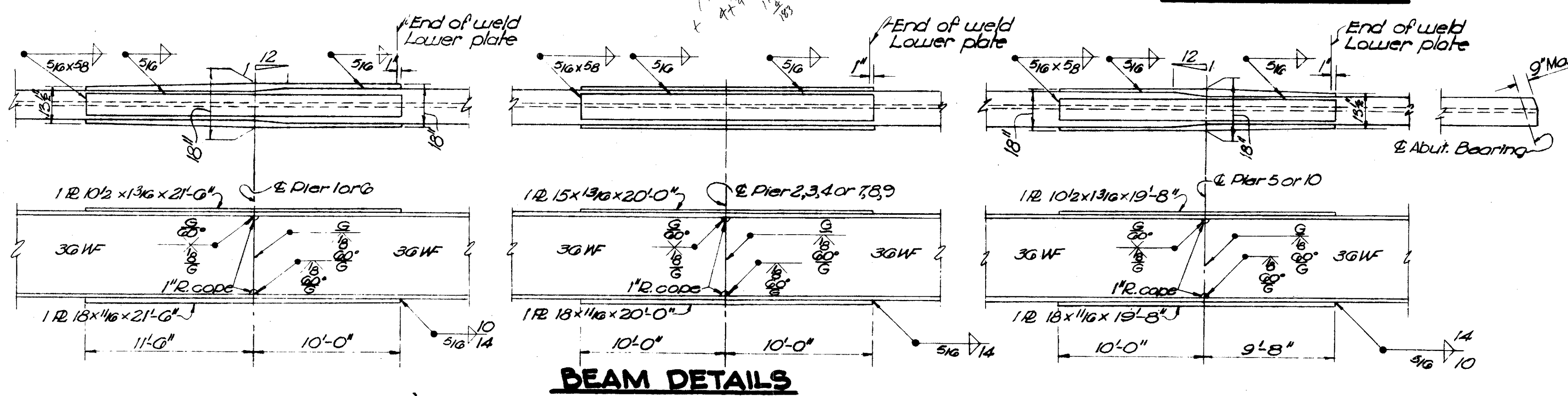
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

247  
317

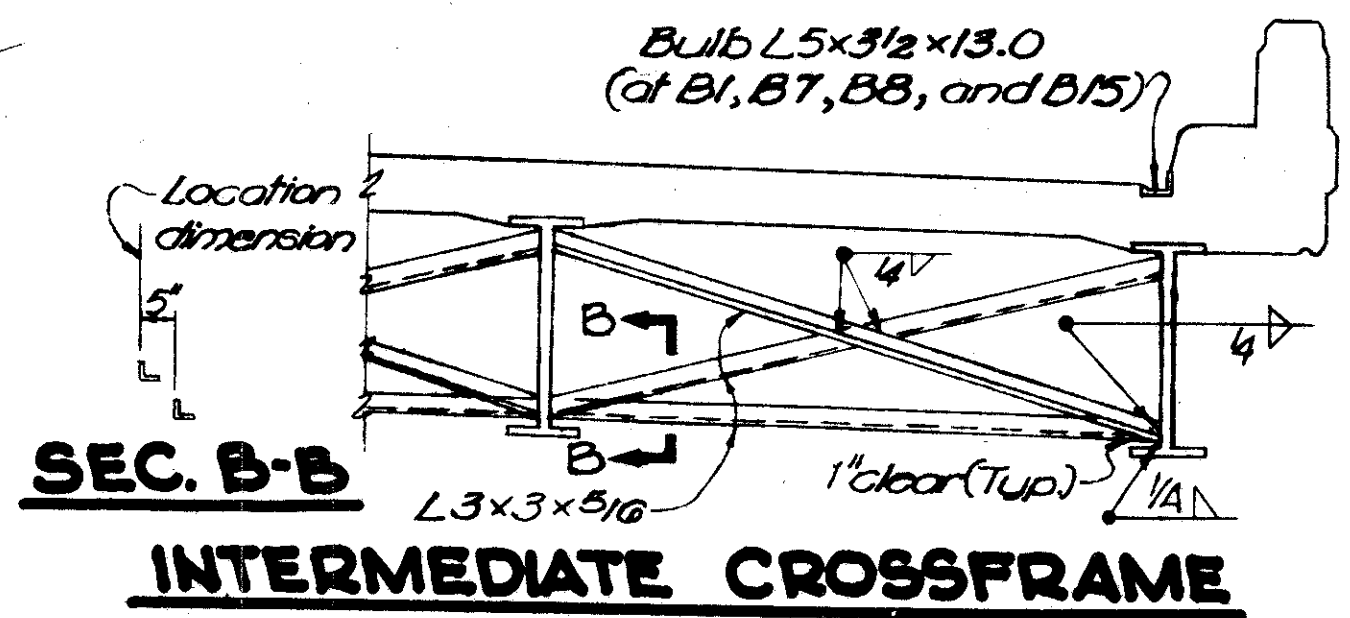
HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50.8-22.02



**FRAMING PLAN**



**BEAM DETAILS**



CAMBER OF BEAMS					
SPANS	1	2	3, 4	5	6
Deflection due to weight of steel	1/32"	3/32"	1/16"	3/32"	0"
Deflection due to remaining dead load	1/4"	5/8"	7/16"	23/32"	3/32"
Sum of deflections	9/32"	23/32"	1/2"	13/16"	3/32"
Required shop camber	0	0	0	0	0

**WELDING PROCEDURE FOR BEAM SPLICES**

1. Raise the ends of the beams 2 1/4" at Pier 2 or Pier 7.
2. Buff-weld the beam flanges and web at Pier 3 or 8 as follows:  
Make one pass on each flange, then one on the web; repeat until welds are completed.
3. Weld the bottom and top moment plates at Pier 3 or 8.
4. Lower the ends of beams at Pier 2 or Pier 7.
5. Raise the ends of the beams 1 1/8" at Piers 1 & 5 or 6 & 10.
6. Repeat steps 2 thru 4 of Piers 2, 4, 7 & 9.
7. Raise the ends of the beams 9/16" at Abut. 1 & 3.
8. Repeat steps 2 thru 4 at Piers 1 & 6.
9. Raise the ends of the beams 1 1/8" at Abut. 2 & 4.
10. Repeat steps 2 thru 4 at Piers 5 & 10.

**NOTES:**

1. Rockers and Bolsters are detailed on RB-1-35, except that special bearing plates and anchor bolts for R-200 and R-225 are on Sheet No. 239
2. End dams and end crossframes are on CSB-2-56, Sheet 243 of G.
3. Scupper locations are on Sheet No. 27.
4. Scuppers are on CSB-2-56, Sheet 3 of G.
5. Welding of structural steel shall be Class "A" unless otherwise shown.
6. Welds shown as field welds may, at contractor's option, be made in situ.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**STEEL FRAMING PLAN & DETAILS**

BRIDGE NO. HAM-25-163  
PROP. U.S. 25 UNDER  
PROP. U.S. 50 BY-PASS  
HAMILTON COUNTY, STA. 1201+63.1  
STA. 1205+64.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
RJM	J.R.R.	H.S.H.	R.J.M.	J.A.D.	Oct. 58

MICROFILMED  
JAN 28 1988

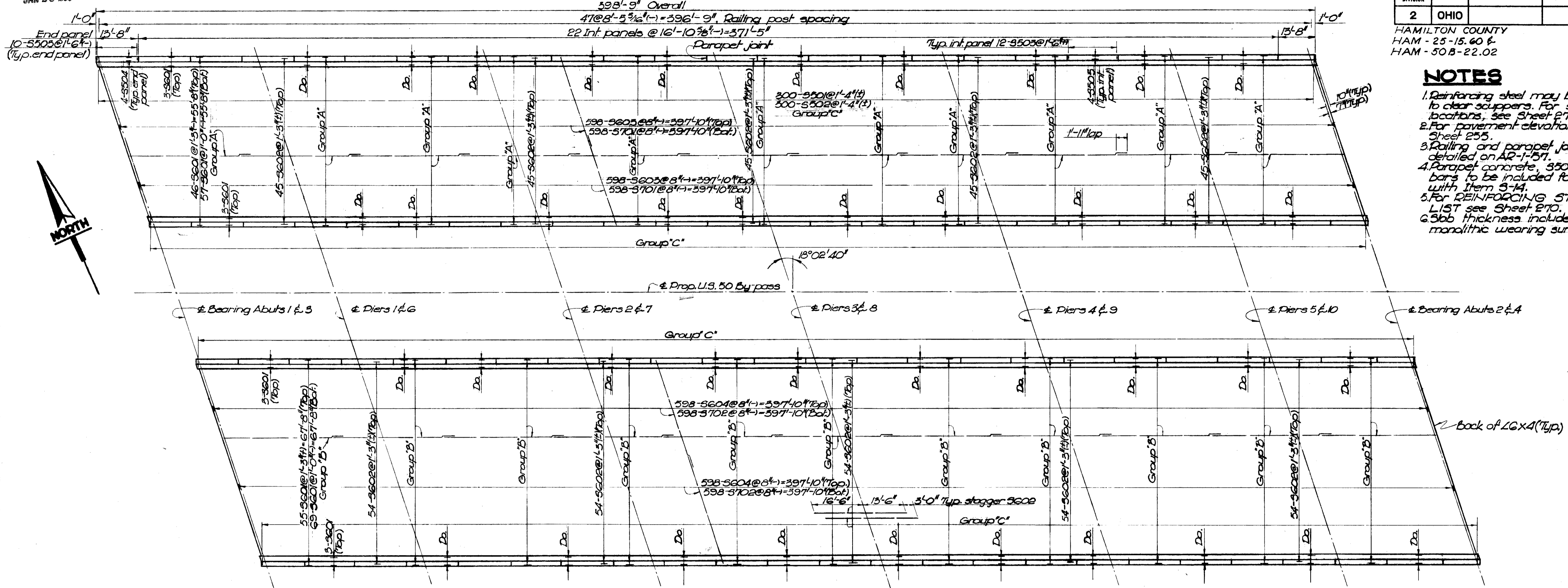
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

268  
317

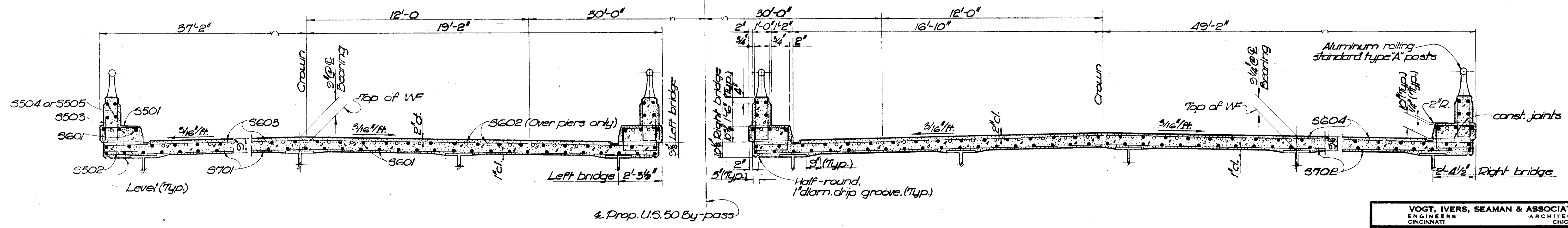
HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02

**NOTES**

1. Reinforcing steel may be spread to clear scuppers. For scupper locations, see Sheet 271.
2. For pavement elevations see Sheet 255.
3. Railing and parapet joints are detailed on AR-1-571.
4. Parapet concrete, 3504 & 3505 bars to be included for payment with Item 3-14.
5. For REINFORCING STEEL LIST see Sheet 270.
6. Job thickness includes 1" for monolithic wearing surface.



**SLAB PLAN**



**SECTION**

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

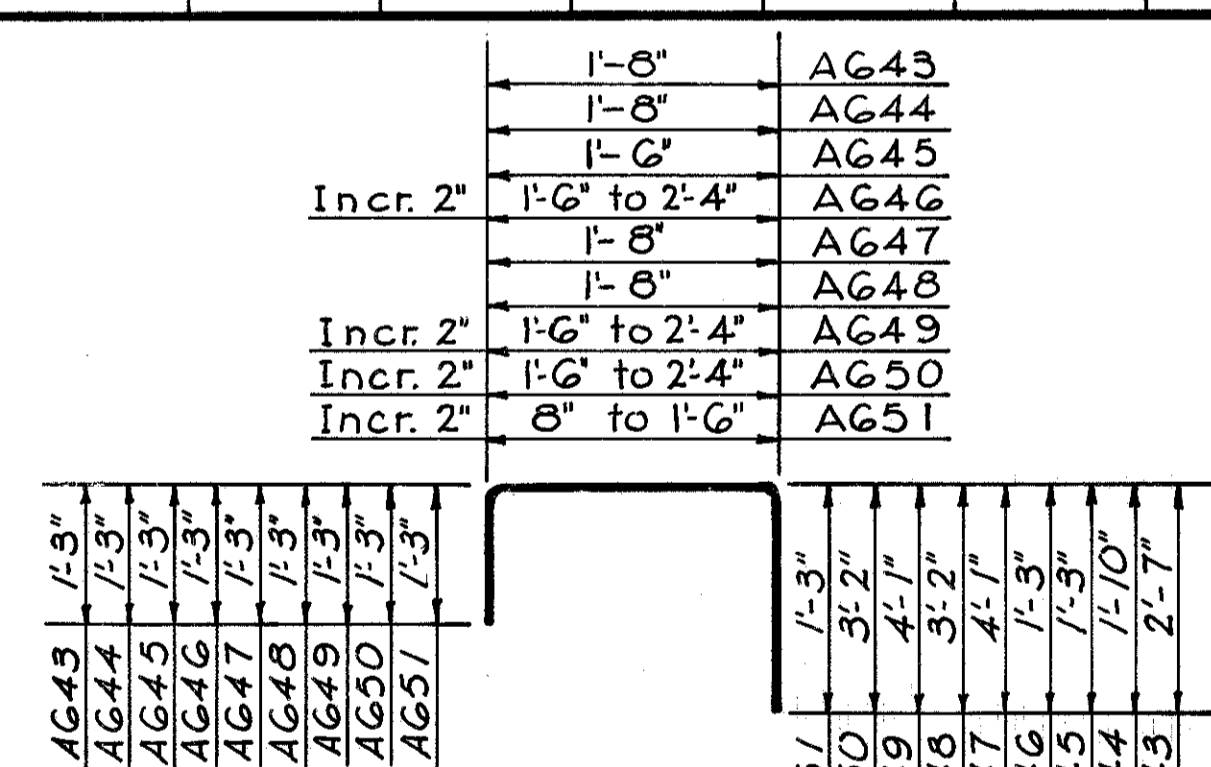
**SUPERSTRUCTURE  
DECK SLAB**

BRIDGE NO. HAM-25-1634 R&L  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS  
HAMILTON COUNTY STA. 1201+6302 TO  
STA. 1205+64.76

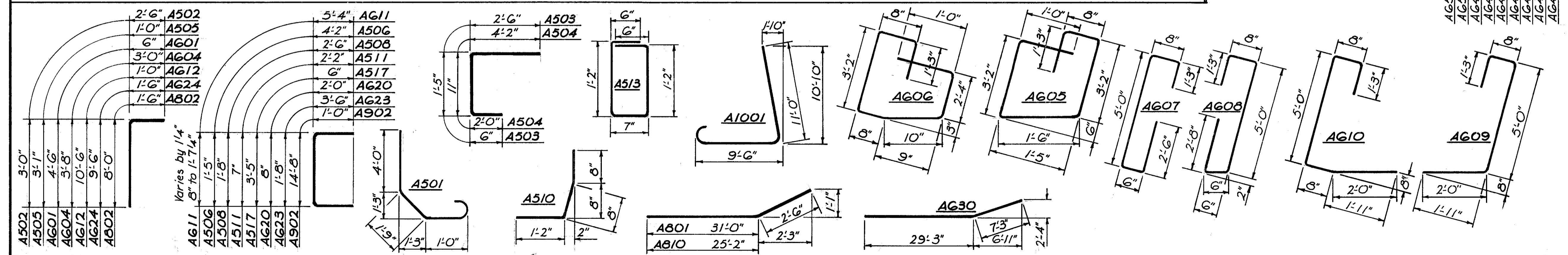
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RJM	JRR	JRR	RJM	JAD	Oct. '58	

HAMILTON COUNTY  
HAM-25-15.60 R  
HAM-50B-22.02

ABUTMENTS							ABUTMENTS							ABUTMENTS							ABUTMENTS														
			BRIDGE NO. HAM-25-1634R		BRIDGE NO. HAM-25-1634L					BRIDGE NO. HAM-25-1634R		BRIDGE NO. HAM-25-1634L					BRIDGE NO. HAM-25-1634R		BRIDGE NO. HAM-25-1634L					BRIDGE NO. HAM-25-1634R		BRIDGE NO. HAM-25-1634L									
MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	
A501	7'-3"	Bt.	136	1028	116	877	A601	4'-10"	Bt.	138	1002	116	842	A626	Varies 20'-0" to 21'-8" Incr. 4"	str.	25 Series of 6 Total=12	376	25 Series of 6 Total=12	376	A801	33'-6"	Bt.	4	358	4	358	A802	9'-3"	Bt.	296	7311	246	6076	
A502	5'-4"	Bt.	138	768	116	645	A602	20'-3"	Str.	69	2099	58	1764	A627	22'-5"	str.	18	606	18	606	A803	16'-9"	str.			58	2594	A804	22'-11"	str.			8	490	
A503	4'-2"	Bt.	138	600	116	504	A603	6'-2"	Str.	12	111	12	111	A628	28'-6"	str.	26	1,113	20	856	A805	16'-5"	str.	69	3,024	58	2,258	A806	14'-7"	str.	69	2,687	58	2,258	
A504	6'-10"	Bt.	102	727	76	542	A604	6'-6"	Bt.	8	78	8	78	A629	37'-6"	str.	18	1,014	36	2,028	A807	20'-7"	str.			8	440	A808	22'-6"	str.	8	481			
A505	4'-0"	Bt.	102	426	76	317	A605	10'-0"	Bt.	4	60	4	60	A630	36'-6"	Bt.	2	110	2	110	A809	20'-3"	str.	8	493			A810	27'-6"	Bt.	4	294	4	294	
A506	9'-6"	Bt.	40	396	40	396	A606	9'-2"	Bt.	4	55	4	55	A631	31'-7"	str.	2	95	2	95															
A507	30'-0"	Str.			212	6,633	A607	9'-4"	Bt.	8	112	8	112	A632																					
A508	6'-5"	Bt.	12	80	12	80	A608	9'-6"	Bt.	8	114	8	114	A633	24'-5"	str.	18	660																	
A509	25'-0"	Str.	24	626	24	626	A609	8'-6"	Bt.	40	511	42	536	A634	17'-9"	str.	69	1,840	58	1,546															
A510	2'-4"	Bt.	178	433	178	433	A610	9'-1"	Bt.	40	546	42	573	A635	38'-5"	str.	12	692																	
A511	4'-8"	Bt.	178	866	178	866								A636	9'-10"	str.	20	295	20	295	A901	12'-5"	str.	62	2,617	62	2,617	A902	16'-2"	Bt.	280	15,391	234	12,862	
A512*	26'-2"	Str.	16		16		A611	Varies 11'-0" to 11'-11" Incr. 1 1/4"	Bt.	45 Series of 10 Total=40	688	45 Series of 10 Total=40	688	A637	Varies 7'-7" to 17'-7" Incr. 6"	str.	45 Series of 21 Total=84	1,588				A903	10'-4"	str.	62	2,178	62	2,178							
A513*	3'-5"	Bt.	12		12								A638	Varies 8'-7" to 21'-1" Incr. 6"	str.			4 Series of 26 Total=104	2,317	A1001	21'-7"	Bt.	124	3,099	124	3,099									
A514	36'-3"	Str.	204	7,713			A612	11'-4"	Bt.	40	681	40	681	A639	Varies 10'-1" to 28'-10" Incr. 2'-1"	str.	45 Series of 10 Total=40	1,192	4 Series of 10 Total=40	1,192															
A515	22'-4"	Str.	24	559	24	559	A613	11'-11"	Str.	20	358	20	358	A640	Varies 7'-4" to 19'-10" Incr. 6"	str.	45 Series of 26 Total=104	2,122																	
A516*	23'-6"	Str.	16		16		A614	10'-7"	Str.	80	1,272	80	1,272	A641	Varies 8'-4" to 18'-4" Incr. 6"	str.			4 Series of 21 Total=84	1,682															
A517	4'-2"	Bt.	80	348	70	304	A615	7'-8"	Str.	30	345	30	345	A642	7'-6"	Str.	80	901	80	901															
							A616	22'-6"	Str.	56	1,893	56	1,893	A643	5'-2"	Bt.	8	62	8	62															
							A617	9'-7"	Str.	48	691	48	691	A644	4'-5"	Bt.	8	53	8	53															
							A618	Varies 10'-1" to 33'-0" Incr. 2'-1"	Str.	45 Series of 12 Total=48	1,553	45 Series of 12 Total=48	1,553	A645	3'-8"	Bt.	72	397	72	397															
							A619	25'-2"	Str.	56	2,117	56	2,117	A646	Varies 3'-8" to 4'-6" Incr. 2"	Bt.	45 Series of 6 Total=24	147	45 Series of 6 Total=24	147															
							A620	4'-4"	Bt.	72	469	72	469	A647	6'-8"	Bt.	28	280	30	300															
							A621	6'-8"	Str.	60	601	60	601	A648	5'-9"	Bt.	28	242	30	259															
							A622	9'-8"	Str.	28	407	28	407	A649	Varies 6'-6" to 7'-4" Incr. 2"	Bt.	25 Series of 6 Total=12	125	25 Series of 6 Total=12	125															
							A623	8'-4"	Bt.	28	350	28	350	A650	Varies 5'-7" to 6'-5" Incr. 2"	Bt.	2 Series of 6 Total=12	108	2 Series of 6 Total=12	108															
							A624	10'-10"	Bt.	140	2,278	118	1,920	A651	Varies 2'-10" to 3'-8" Incr. 2"	Bt.	4 Series of 6 Total=24	117	4 Series of 6 Total=24	117															
							A625	Varies 11'-0" to 19'-9" Incr. 1'-9"	Str.	25 Series of 6 Total=12	277	25 Series of 6 Total=12	277																						



**BENDING DIAGRAMS**



**NOTES**

- All dimensions are out to out of bar.
- Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.
- Bars marked with single asterisks to be included for payment under Item 5-14 Railing.
- The "Length" of bent bars is measured along the center line.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**REINFORCING STEEL LIST**

BRIDGE NO. HAM-25-1634 R&L  
PROPOSED U.S. 25 UNDER  
PROPOSED U.S. 50 BY-PASS

HAMILTON COUNTY STA. 1201+63.02 TO  
STA. 1205+64.76

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
	TEC	TEC	PKJK	JAD	Oct 58	

ROADWAY SLAB										PIERS																																																																
BRIDGE NO. HAM-25-1634 R					BRIDGE NO. HAM-25-1634 L					BRIDGE NO.					BRIDGE NO.																																																											
MARK	LENGTH	SHAPE	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT																																																							
S 501	2'-7"	Bt.	600	1617	S 502	4'-8"	Bt.	600	2920	S 503	4'-8"	Bt.	568	2765	S 504*	13'-4"	Str.	16	---	S 505*	16'-6"	Str.	176	---	P 501	7'-3"	Bt.	468	3539	P 502	3'-5"	Bt.	200	713	P 503	33'-3"	Str.	20	694	P 504	7'-9"	Bt.	---	---	P 505	28'-2"	Str.	---	---																									
S 601	37'-11"	Str.	1430	81439	S 602	30'-0"	Str.	270	12166	S 603	30'-2"	Str.	---	---	S 604	36'-7"	Str.	1196	65718	S 701	30'-4"	Str.	---	---	S 702	36'-9"	Str.	1196	89840	P 801	10'-10"	Bt.	720	20826	P 901	18'-9"	Str.	---	---	P 902	17'-6"	Str.	---	---	P 903	6'-2"	Bt.	---	---	P 904	20'-0"	Str.	---	---																				
P 1001	17'-9"	Str.	16	1222	P 1002	16'-3"	Str.	16	1119	P 1003	9'-6"	Bt.	20	818	P 1004	34'-1"	Str.	20	2933	P 1005	29'-2"	Str.	40	5020	P 1006	39'-3"	Bt.	8	1351	P 1007	39'-11"	Bt.	8	1374	P 1008	40'-4"	Bt.	8	1388	P 1009	40'-6"	Bt.	4	697	P 1010	6'-9"	Bt.	80	2324	P 1011	18'-9"	Str.	48	3873	P 1012	17'-6"	Str.	---	---	P 1013	29'-9"	Str.	---	---	P 1014	15'-5"	Bt.	---	---	P 1015	9'-9"	Bt.	---	---
P 1101	17'-9"	Str.	48	4527	P 1102	16'-3"	Str.	48	4144	P 1103	7'-3"	Bt.	240	9245	P 1104	18'-9"	Str.	144	14345	P 1105	17'-6"	Str.	---	---	P 1106	40'-0"	Str.	---	---	P 1107	---	---	---	---	P 1108	39'-3"	Bt.	12	2502	P 1109	39'-11"	Bt.	12	2545	P 1110	40'-4"	Bt.	12	2571	P 1111	20'-0"	Str.	---	---																				

**REPLACEMENT BARS**

MARK	NO.	LENGTH	SHAPE
RE 4	1	8'-3"	Str.
RE 5	3	5'-7"	Str.
RE 6	18	5'-11"	Str.
RE 7	9	6'-3"	Str.
RE 8	4	6'-6"	Str.
RE 9	3	6'-10"	Str.
RE 10	3	7'-3"	Str.
RE 11	5	7'-7"	Str.

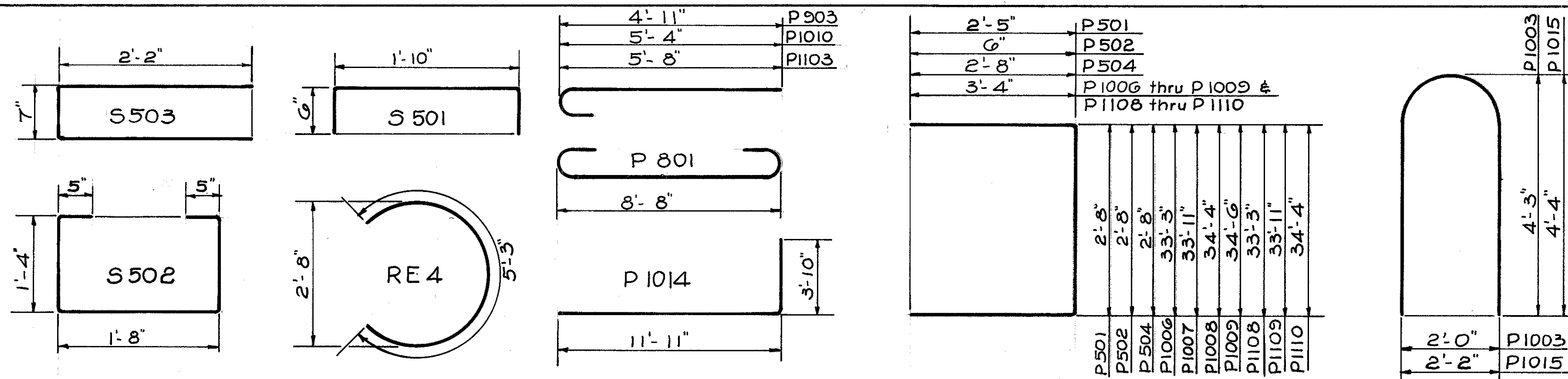
If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

**SPIRAL REINFORCING BARS:** The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap.

The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4. 1/2 closed coils shall be provided at the ends of each spiral unit.

Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

**BENDING DIAGRAMS**



**NOTE**

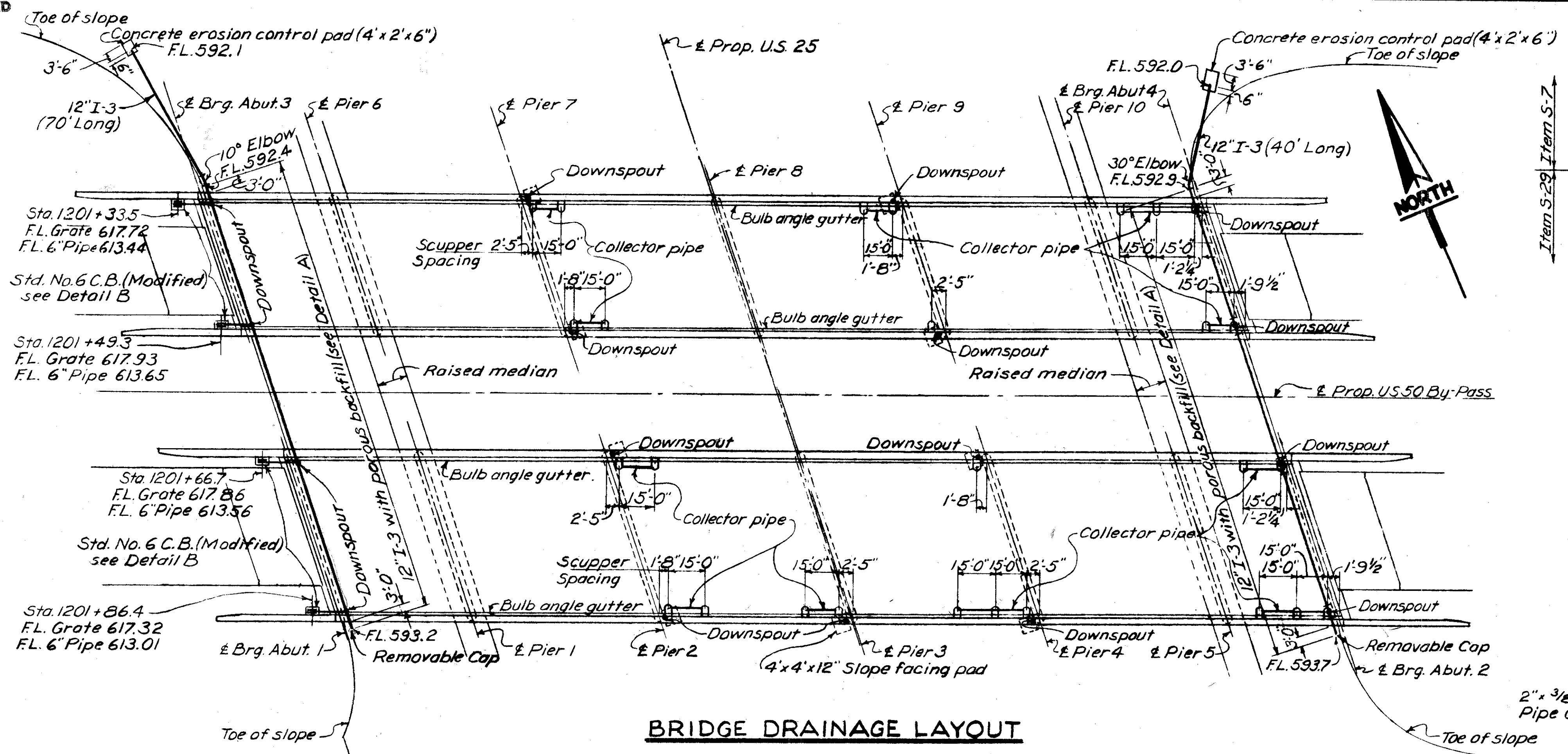
- Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.
- Bars marked with single asterisks to be included for payment under Item 5-14 Railing.
- All dimensions are out to out of bar.
- The "Length" of bent bars is measured along the center line.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

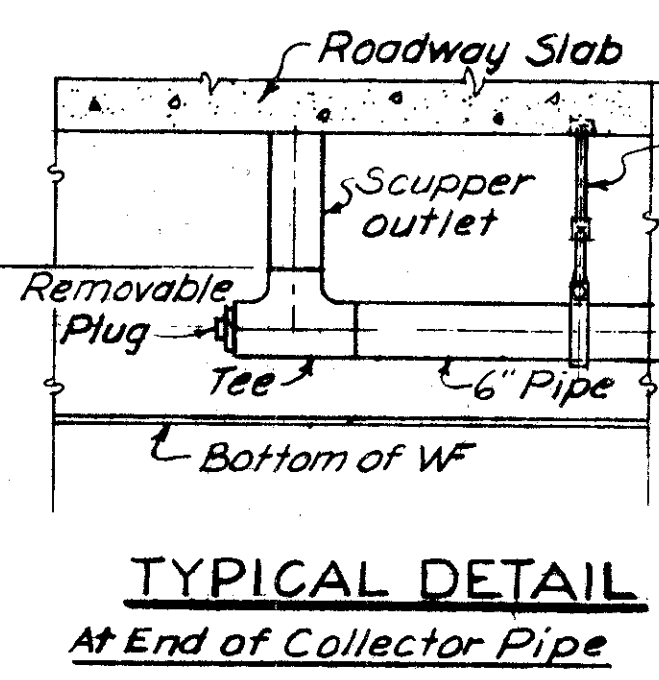
**REINFORCING STEEL LIST**  
BRIDGE NO. HAM-25-1634 R&L  
PROPOSED US 25 UNDER  
PROPOSED US 50 BY-PASS

HAMILTON COUNTY STA. 1201+63.02 TO  
STA. 1205+64.76

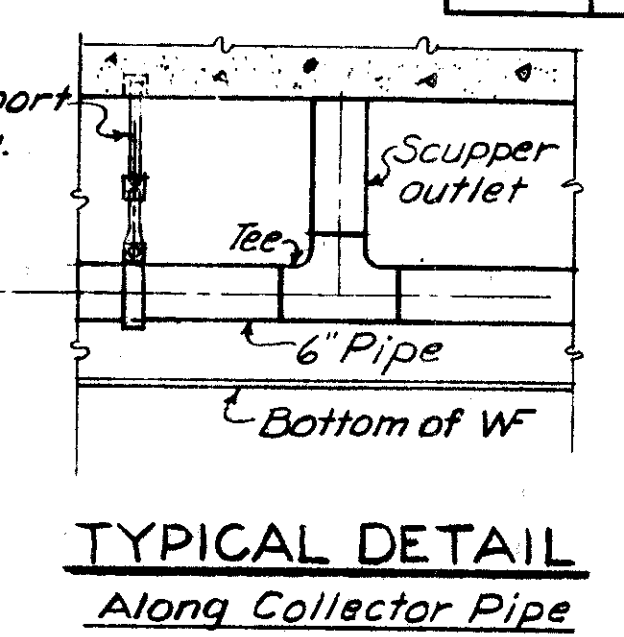
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	CB3		PJK	J.A.D. Oct. '58	



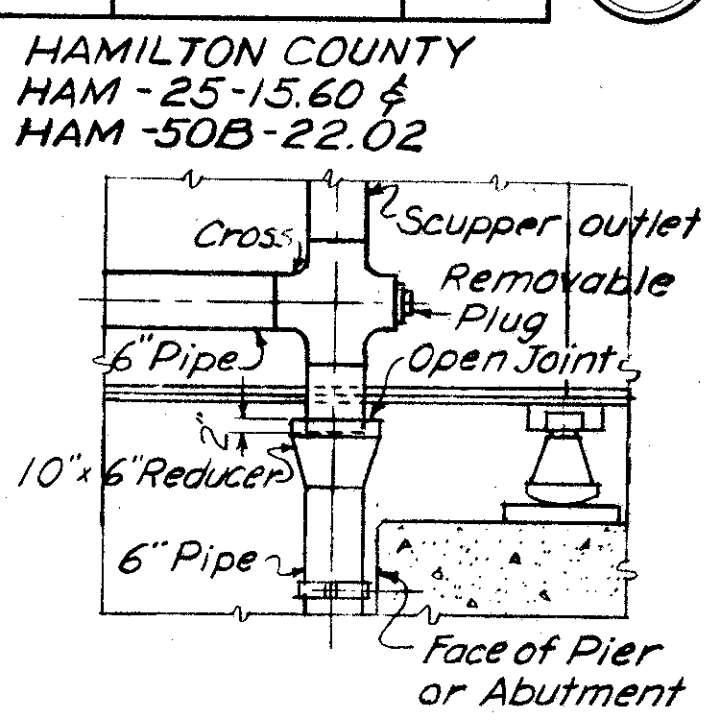
**BRIDGE DRAINAGE LAYOUT**



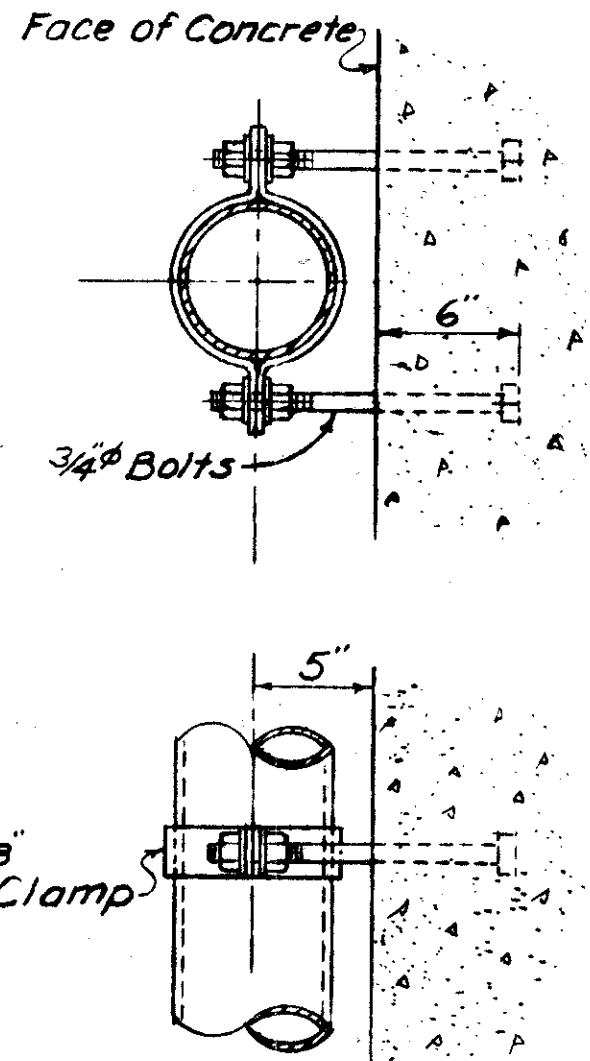
**TYPICAL DETAIL  
At End of Collector Pipe**



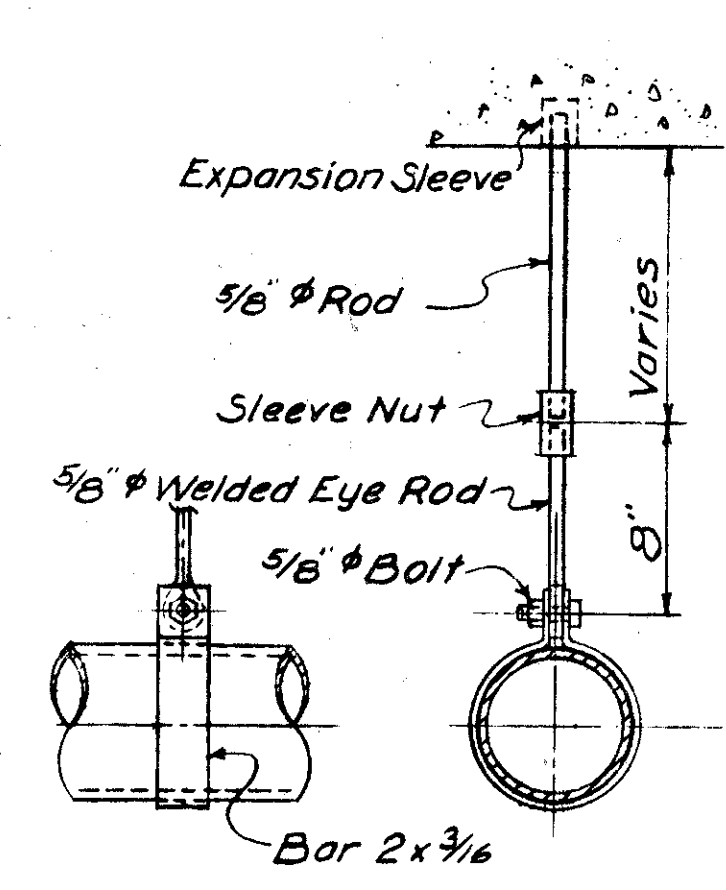
**TYPICAL DETAIL  
Along Collector Pipe**



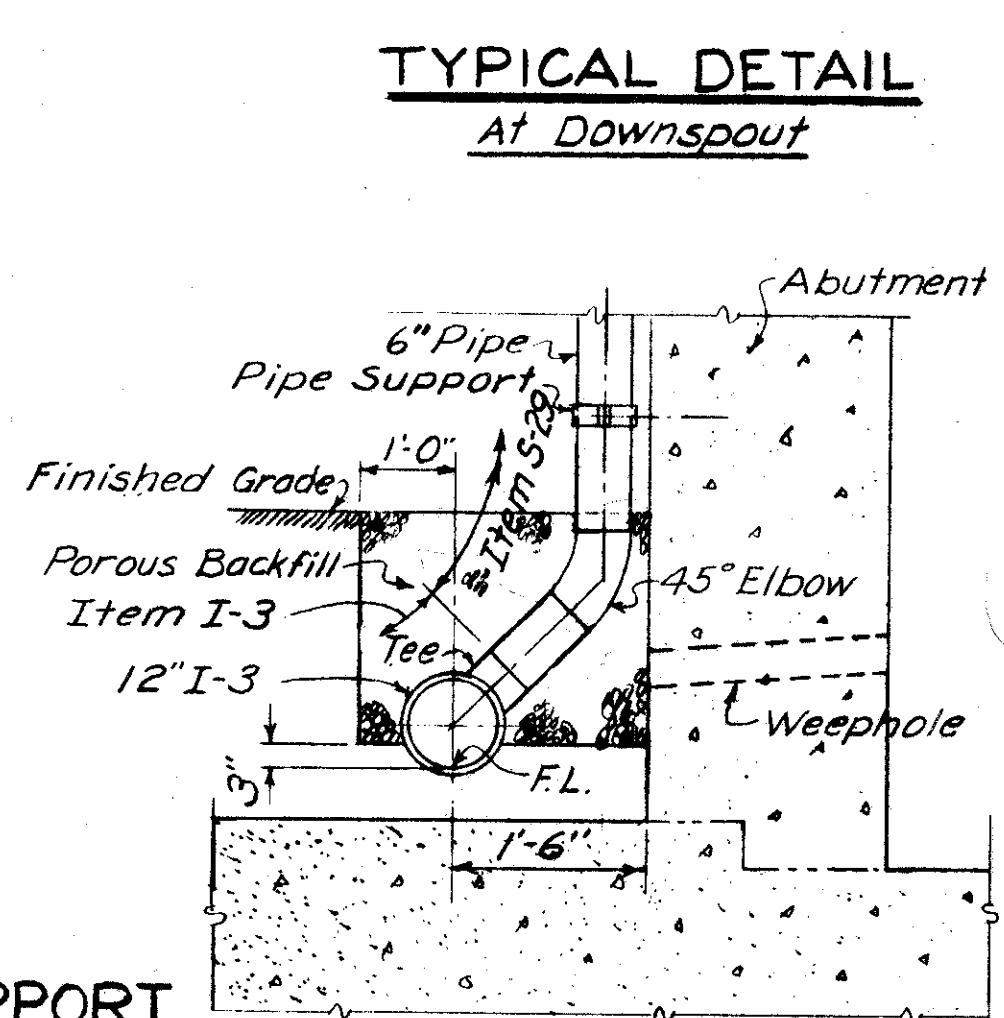
**TYPICAL DETAIL  
At Downspout**



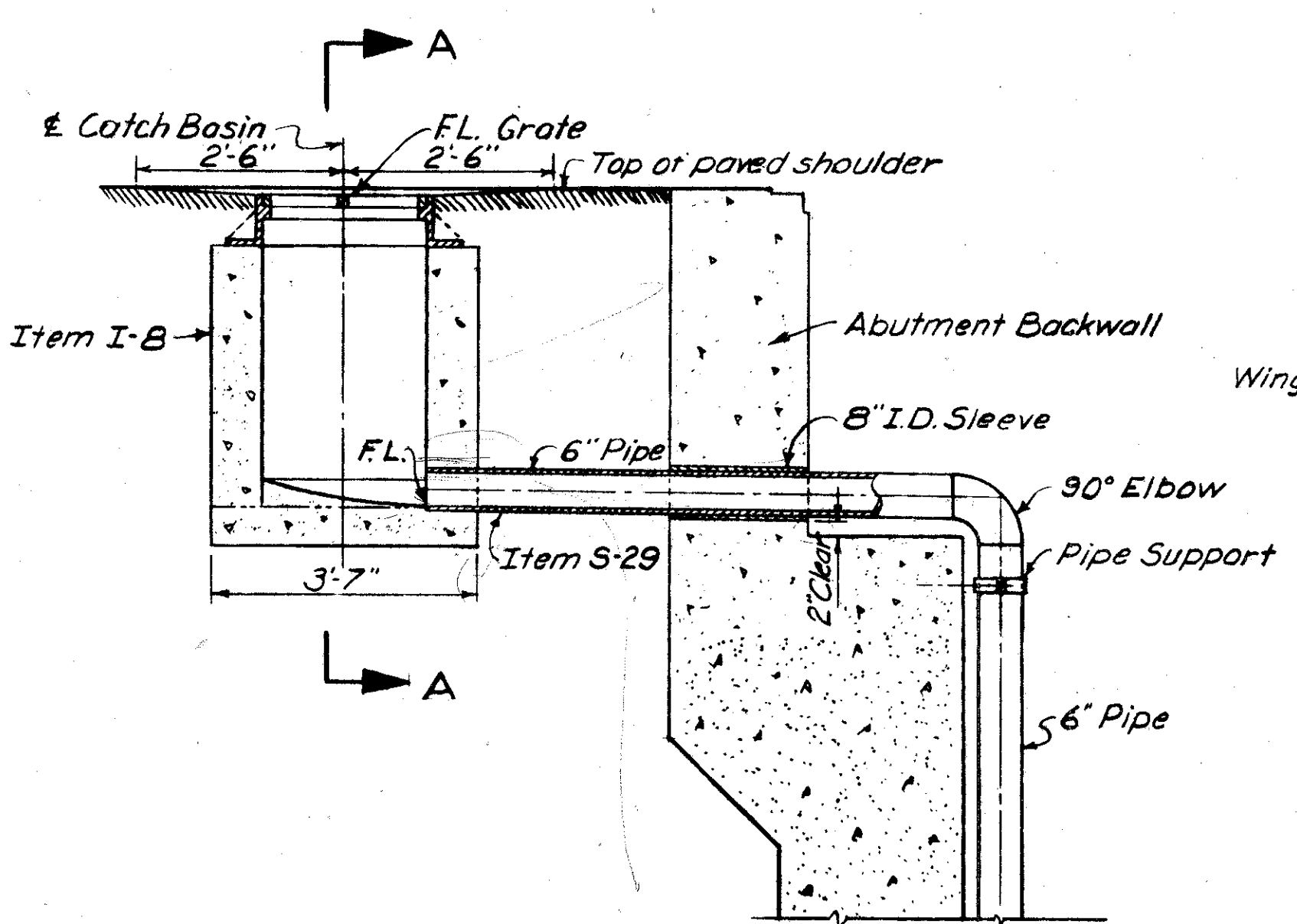
**PIPE SUPPORT**



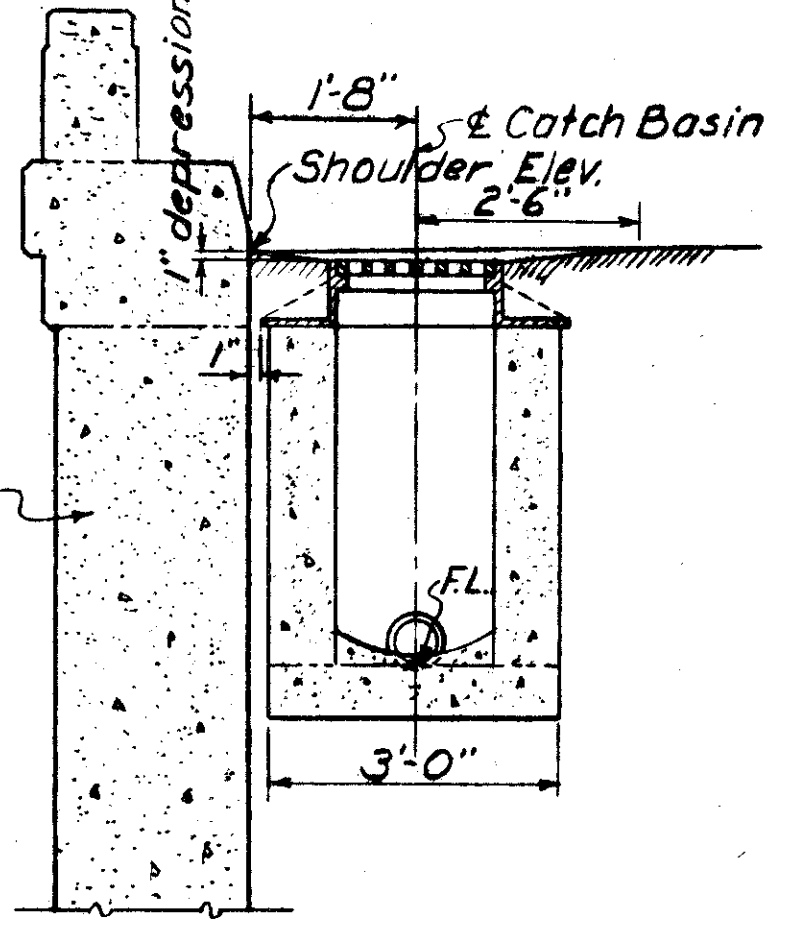
**COLLECTOR PIPE SUPPORT**



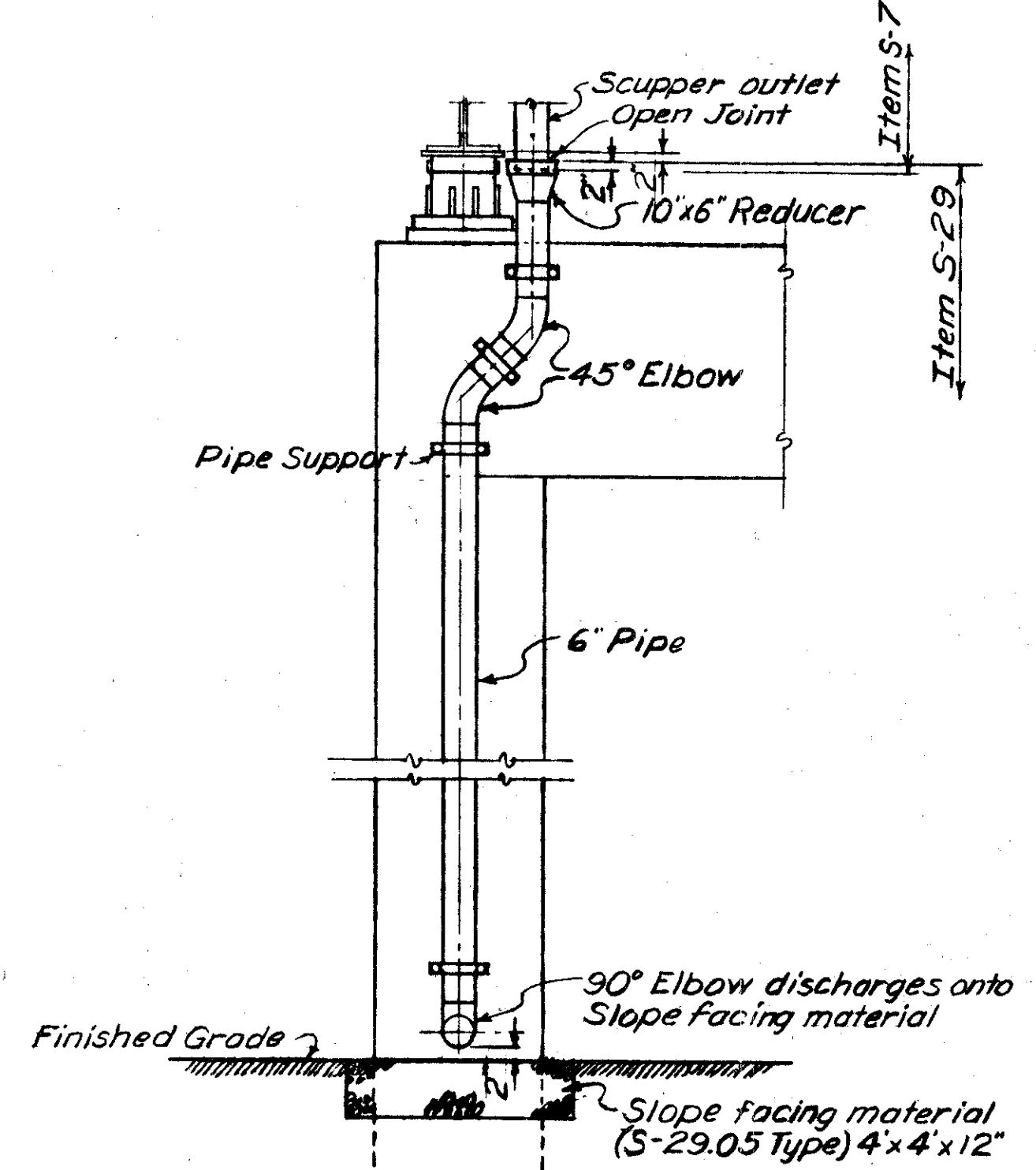
**DETAIL A**



**DETAIL B**



**SECTION A-A**



**DOWNSPOUTS AT PIERS**

**NOTES**

1. Scupper spacing to be measured along the curb side of bulb angle gutter.
2. For scupper details see Std. Dwg. CSB-2-56, Sheet 3 of 6.
3. Downspouts, collectors including tees and crosses, and catch basin outlets shall be 6" standard wrought iron pipe or hot-dipped galvanized steel pipe. Joints shall be made by welding or by the use of clamp-type couplings with ring gaskets. All welding shall be done before galvanizing. Straps or clamps for attaching these pipes shall be wrought iron or hot dipped galvanized steel. Bolts shall be galvanized, but galvanizing need not be hot-dipped.
4. Sleeves through abutment backwalls shall be of a type approved by the Engineer. Sleeves and all pipe supports shall be included in the unit price bid for Item S-29, Pipe downspouts, collectors and catch basin outlets, including specials.
5. 12" I-3 pipe shall be placed along side of the abutment walls and shall be drained onto type "A" riprap pads, as shown. The 12" I-3 with porous backfill shall meet the requirements of Sec. M-6.4 (b)(9). The remainder of the 12" I-3 shall be M-6.4(c) with the last 10' being 12" I-3 Outlets for Roadway Drainage. Quantities carried to General Summary, Sheet 23.

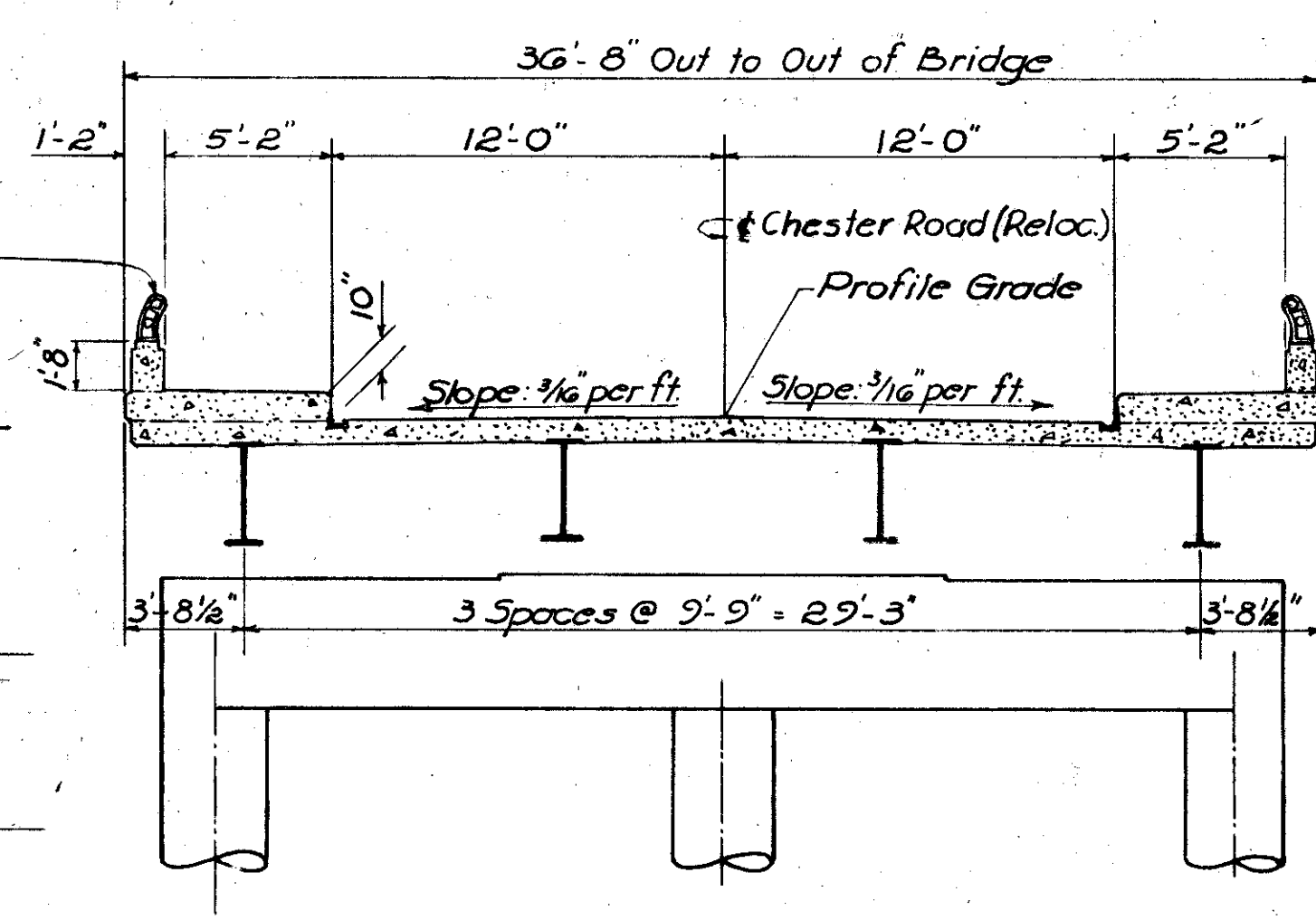
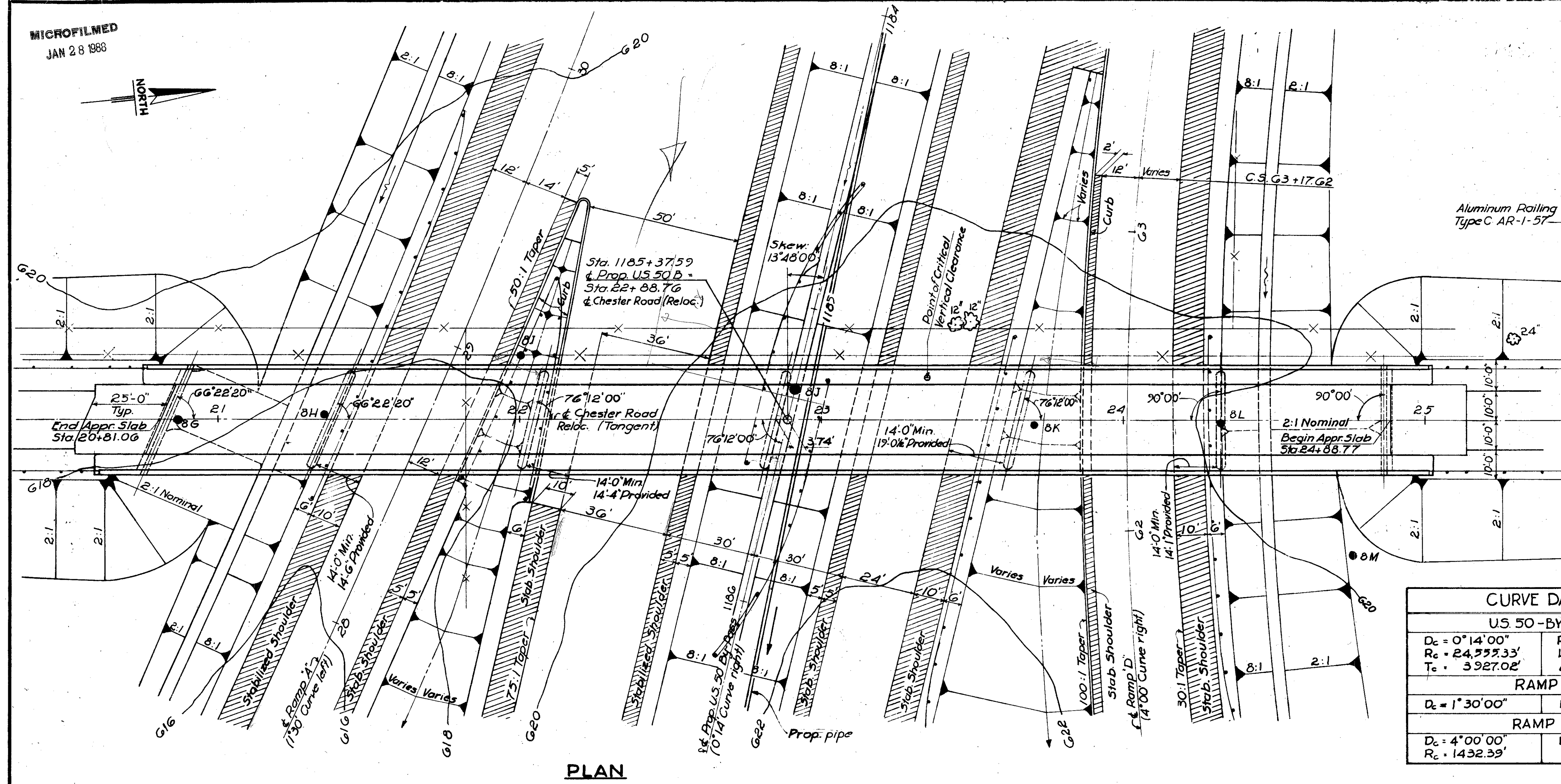
VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO	
<b>BRIDGE DRAINAGE</b>	
BRIDGE NO. HAM-25-1034 R&L PROPOSED U.S. 25 UNDER PROPOSED U.S. 50 BY-PASS	
HAMILTON COUNTY STA. 1201+63.02 TO STA. 1205+64.76	
DESIGNED	DATE
LLL	J.A.D. Oct '58
DRAWN	REVIEWED
LLL	J.P.F.
TRACED	CHECKED
DJF	J.P.F.

MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

272  
317

HAMILTON COUNTY  
HAM-25-13.60 &  
HAM-50B-22.02



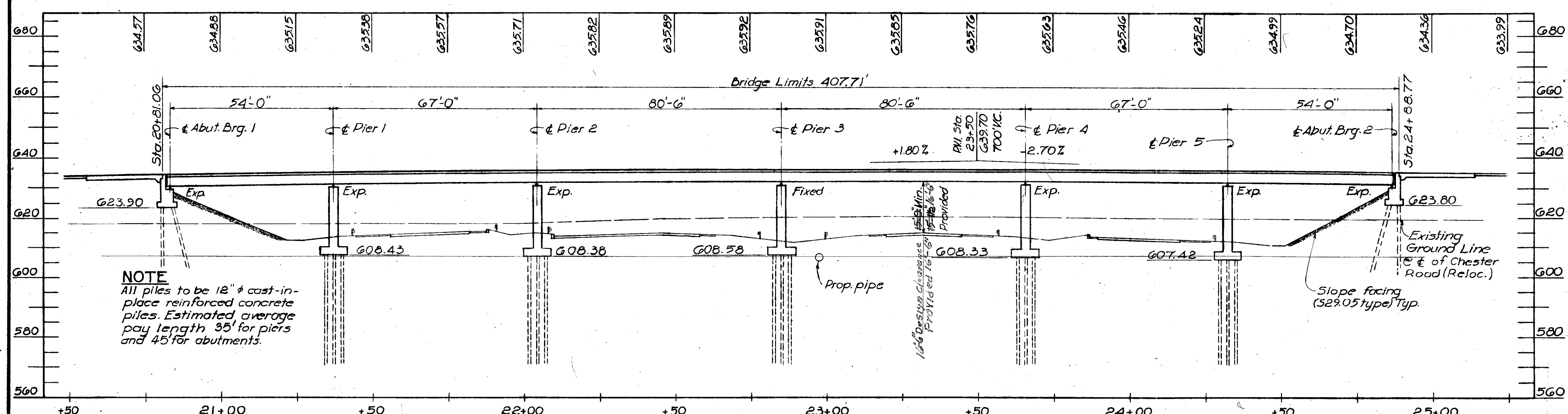
TYPICAL SECTION THRU BRIDGE

NOTES

- Symbol denotes drill hole.
- See Sh. 275 for test boring data.
- Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the Office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.

CURVE DATA	
U.S. 50-BYPASS	
$D_c = 0^{\circ}14'00''$	PI STA. = 1217+38.04
$R_c = 24,553.33'$	$L_c = 7786.10'$
$T_c = 3927.02'$	$\Delta = 18^{\circ}10'20''$
RAMP 'A'	
$D_c = 1^{\circ}30'00''$	$R_c = 3819.71'$
RAMP 'D'	
$D_c = 4^{\circ}00'00''$	$L_s = 400.00'$
$R_c = 1432.39'$	

PLAN



PROFILE ON CENTERLINE OF BRIDGE

PROPOSED STRUCTURE

TYPE: Continuous rolled steel beam with reinforced concrete deck and substructure.  
 SPANS: 54'-0"; 67'-0"; 80'-6"; 80'-6"; 67'-0"; 54'-0"  
 ROADWAY: 24'-0" face to face of 5'-2" sidewalks.  
 LOAD FREQUENCY: C F = 130 (57).  
 SKEW: 13°-48'-00" (R.F.)  
 WEARING SURFACE: 3/4" monolithic concrete.  
 APPROACH SLABS: A5-1-54 (25' long)  
 ALIGNMENT: Tangent.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

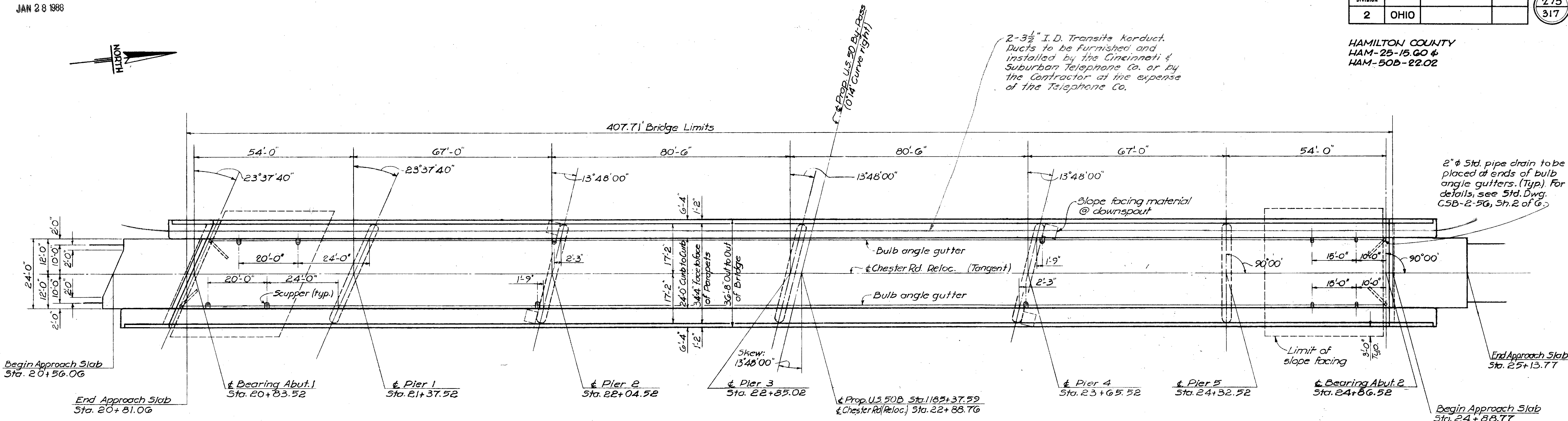
**SITE PLAN**  
BRIDGE NO. HAM-50B-2244  
PROPOSED U.S. 50 BY-PASS UNDER  
CHESTER ROAD RELOCATED  
HAMILTON COUNTY STA. 20+81.06 TO  
STA. 24+88.77

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL CBS	JDB	CBS	RJS		

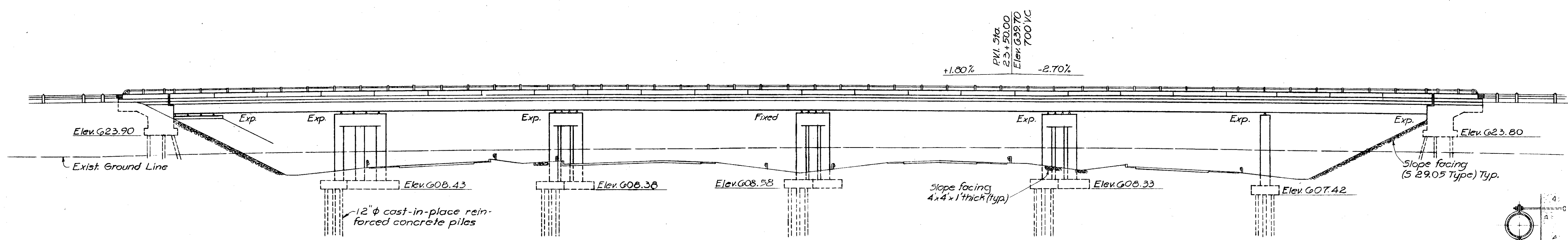
Revised 6-8-60 R.E.C.

U.S. 50B

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



PLAN

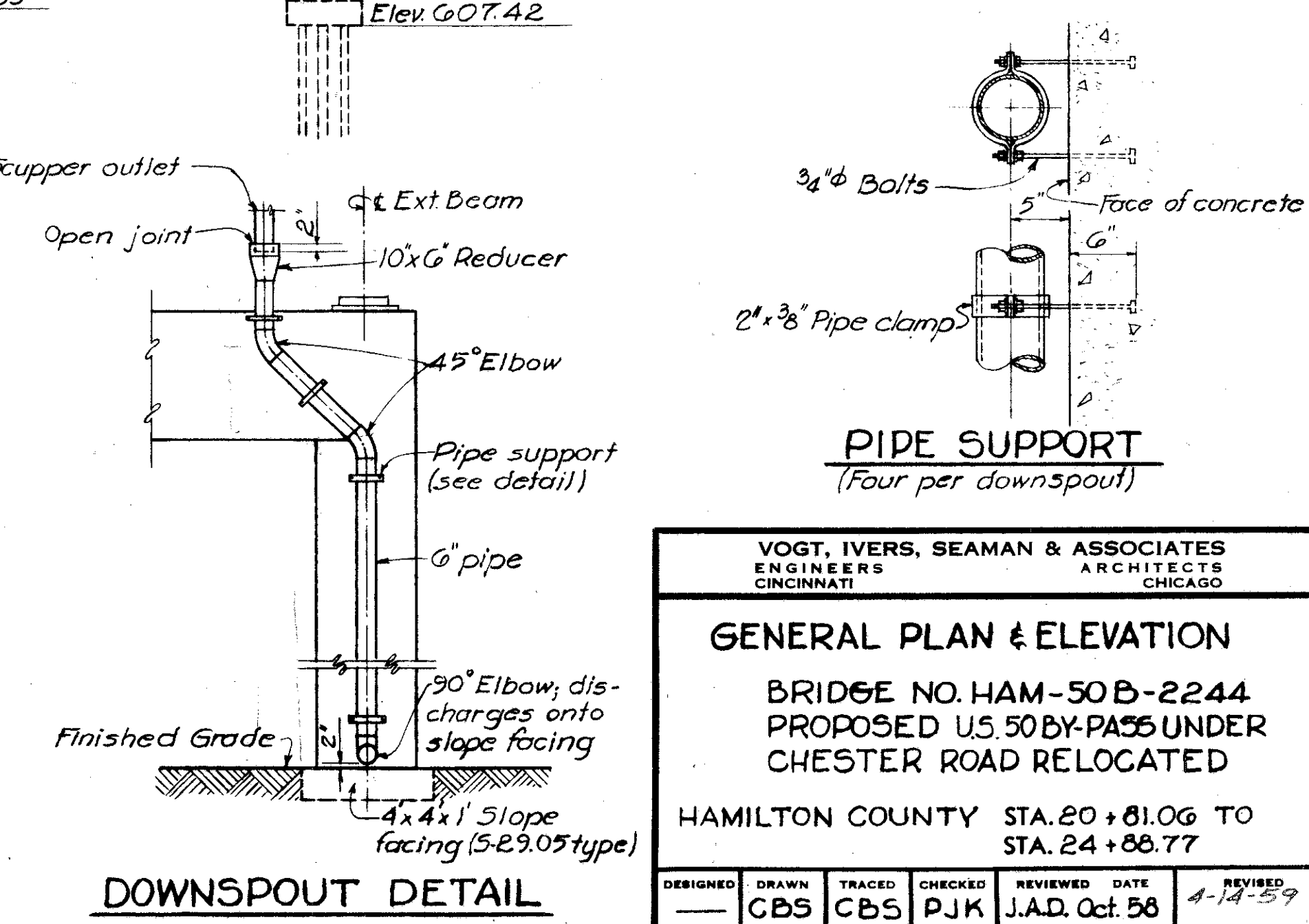


ELEVATION

PAVEMENT ELEVATIONS					
STATION	PROFILE GRADE	12'-0" R & L OF & BRIDGE	STATION	PROFILE GRADE	12'-0" R & L OF & BRIDGE
20 + 75	G34.57	G34.38	23 + 00	G35.91	G35.72
21 + 00	G34.88	G34.69	23 + 25	G35.85	G35.66
21 + 25	G35.15	G34.96	23 + 50	G35.76	G35.57
21 + 50	G35.38	G35.19	23 + 75	G35.63	G35.44
21 + 75	G35.57	G35.38	24 + 00	G35.46	G35.27
22 + 00	G35.71	G35.52	24 + 25	G35.24	G35.05
22 + 25	G35.82	G35.63	24 + 50	G34.99	G34.80
22 + 50	G35.89	G35.70	24 + 75	G34.70	G34.51
22 + 75	G35.92	G35.73	25 + 00	G34.36	G34.17

NOTES

- Scupper spacing to be measured along curb side of bulb angle gutter.
- For scupper details, see Standard Drawing CSB-2-56, Sheet 3 of 6.
- For GENERAL NOTES and ESTIMATED QUANTITIES, see Sh. 274
- For approach slab details, see Standard Drawing A5-1-54.
- Slope facing (5-29.05 Type) shall be provided under the structure at both abutments. The facing shall be 12" thick and shall extend from the face of the abutment down to the bottom of the ditch and transversely to 3 feet outside the edge of the superstructure.
- Downspouts shall be 6" standard wrought iron pipe or hot-dipped galvanized steel pipe. Joints shall be made by welding or by the use of a clamp-type coupling with a ring gasket. All welding shall be done before galvanizing. Straps or clamps for attaching downspouts shall be wrought iron or hot-dipped galvanized steel. Bolts shall be galvanized, but this galvanizing need not to be hot-dipped.
- Pipe supports shall be included for payment with Item 5-29, pipe downspouts and specials.
- Downspouts at exterior columns, piers 2 & 4 only.



DOWNSPOUT DETAIL

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**GENERAL PLAN & ELEVATION**

BRIDGE NO. HAM-50B-2244  
PROPOSED U.S. 50 BY-PASS UNDER  
CHESTER ROAD RELOCATED

HAMILTON COUNTY STA. 20 + 81.06 TO  
STA. 24 + 88.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
—	CBS	CBS	PJK	J.A.D.	Oct. 58	4-14-59



MICROFILMED  
JAN 28 1988

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

274  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

### ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL		
E-2	503	Cu.Yds.	Unclassified Excavation	163	340				
S-1	526	Cu.Yds.	Class "C" Concrete ~ Superstructure			526			
S-1	135	Cu.Yds.	Class "C" Concrete ~ Piers above footings		135				
S-1	92	Cu.Yds.	Class "E" Concrete ~ Abutments above footings	92					
S-1	174	Cu.Yds.	Class "E" Concrete ~ Pier and abutment footings	61	113				
S-4	186,018	Lbs.	Reinforcing steel	9,383	49,814	126,821			
S-7	<del>386,800</del>	Lbs.	Structural steel			<del>386,800</del>	387,725		
S-8	<del>386,800</del>	Lbs.	Field painting of Structural Steel			<del>386,800</del>	387,725		
S-14	805	Lin. Ft.	Railing (aluminum railing & supports & concrete parapet)	55		810			
S-29	45	Cu.Yds.	Porous backfill	45					
S-29	125	Cu.Yds.	Slope facing (S 29.05 type)				125		
S-16	Lump	Lump Sum	First test pile				Lump		
S-17	Lump	Lump Sum	First pile test load				Lump		
S-17	1	Each	Subsequent pile test load				1		
S-18	4,230	Lin. Ft.	12" $\phi$ Cast-in-place reinforced concrete piles	1,080	3,150				
S-29	70	Lin. Ft.	6" Std. pipe downspouts, including specials				70		

NOTE: Materials in approach slabs are not included in the above estimated quantities

### GENERAL NOTES

REFERENCE shall be made to the following:

Standard Drawings: AR-1-57 revised 3-1-58  
CSB-2-56, sheets 2&3 of 6, revised 3-1-58  
RB-1-55 dated 3-1-55  
AS-1-54 revised 12-1-54  
Supplemental Specification: S114 revised 6-1-57

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with revisions thereof dated 2-21-58.

WELDED STEEL: The steel for the 36 WF 230 and 36 WF 170 beams and 1/8" plates shall conform to ASTM Designation A-373. All other structural steel shall conform to either ASTM A-7 (as per Sec. M-7.4(a) of the Construction and Material Specifications) or to A-373.

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

RAILING: Aluminum rail and supports, concrete parapet, reinforcing bars wholly within the concrete parapet, guard rail anchorage and sponge rubber for parapet joints shall be included in item S-14 for payment.

PILES shall be driven to a minimum bearing capacity of 35 tons per pile for the abutments and 40 tons per pile for the piers.

EXCAVATION QUANTITY includes removal of fill material required for construction of abutments.

ITEMS S-17: The test loading shall be applied only if directed by the Engineer and at a location selected by the Engineer.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS CINCINNATI		ARCHITECTS CHICAGO	
<b>GENERAL NOTES AND ESTIMATED QUANTITIES</b>			
BRIDGE NO. HAM-50B-2244 PROPOSED U.S. 50 BY-PASS UNDER CHESTER ROAD RELOCATED HAMILTON COUNTY STA. 20+81.06 TO STA. 24+86.77			
DESIGNED	DRAWN	TRACED	CHECKED
~	J.H.K.	~	R.J.S.
REVIEWED	DATE	REVISED	
J.A.D.	Oct. 58	4-14-59	

U.S. 50 B

HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-50B-22.02

0' Ground Elevation G18.8	
616.8	7' 2' Topsoil, brown silty clay
	20' Brown sandy clay with fine to coarse gravel
609.8	43' 9' Gray sandy clay with fine to coarse gravel
606.8	27' 12' Gray silty clay with fine to coarse gravel
	28' Gray silty clay with fine to coarse gravel
	20' Gray silty clay with fine to coarse gravel
592.3	19' 26.5' Gray clayey fine to coarse sand
	40' Gray clayey fine to coarse sand
585.3	33.5' Gray clayey sandy silt with fine to coarse gravel
583.8	26' 35' fine to coarse gravel

Boring completed  
**BORING 8G**

0' Ground Elevation G17.8	
615.8	10' 2' Topsoil, dark brown silty clay
	28' Brown and gray sandy clay with fine to coarse gravel and limestone fragments
609.8	35' 8' Gray sandy clay with fine to coarse gravel
605.8	30' 12' Gray sandy clay with fine to coarse gravel
	36' Gray silty clay with fine gravel
	25' Gray silty clay with fine gravel
	24' Gray silty clay with fine gravel
587.8	22' 30' Boring completed

**BORING 8H**

0' Ground Elevation G18.8	
616.8	10' 2' Mottled brown silty clay
	11' Brown sandy clay with fine gravel
612.8	6' Brown sandy clay with fine gravel and medium sand seams
609.8	33' 9' Gray sandy clay with fine to coarse gravel
	28' Gray sandy clay with fine to coarse gravel
602.8	31' 16' Gray silty clay with fine gravel and sand seams
	24' Gray silty clay with fine gravel and sand seams
	19' Gray silty clay with fine gravel and sand seams
	21' Gray clayey sandy silt
	21' Gray clayey sandy silt
579.8	39' Gray clayey sandy silt
	28' Gray clayey sandy silt
573.8	34' 45' Boring completed

**BORING 8I**

0' Ground Elevation G20.7	
616.7	10' 2' Topsoil and brown silty clay
	30' Brown silty clay with fine to coarse gravel
614.7	6' Mottled brown and gray sandy clay with fine gravel
612.7	19' 8' Mottled brown and gray sandy clay with fine gravel
	40' Gray silty clay with fine to coarse gravel
	18' Gray silty clay with fine to coarse gravel
	17' Gray silty clay with fine to coarse gravel
	21' Gray silty clay with fine to coarse gravel
	21' Gray silty clay with fine to coarse gravel
	22' Gray silty clay with fine to coarse gravel
	21' Gray silty clay with fine to coarse gravel
	23' Gray silty clay with fine to coarse gravel
	23' Gray silty clay with fine to coarse gravel
565.7	27' 55' Boring completed

**BORING 8K**

0' Ground Elevation G20.9	
618.9	8' 2' Topsoil, brown silty clay
	24' Mottled brown and gray sandy clay with fine to coarse gravel
614.9	6' Mottled brown and gray sandy clay with fine to coarse gravel
612.9	35' 8' Brown sandy silt
	25' Gray sandy clay with brown fine sand seams and fine gravel
607.9	13' Gray silty clay with fine to coarse gravel
	32' Gray silty clay with fine to coarse gravel
	26' Gray silty clay with fine to coarse gravel
	26' Gray silty clay with fine to coarse gravel
590.9	23' 30' Boring completed

**BORING 8J**

0' Ground Elevation G18.4	
616.4	10' 2' Topsoil, dark brown silty clay
612.4	14' 6' Mottled brown and gray silty clay with fine to coarse gravel
609.4	35' 9' Mottled brown and gray sandy clay with fine gravel and medium sand seams
	34' Gray sandy clay with fine to coarse gravel
602.4	35' 16' Gray sandy clay with fine to coarse gravel
	27' Gray silty clay with fine gravel
	23' Gray silty clay with fine gravel
	19' Gray silty clay with fine gravel
	24' Gray silty clay with fine gravel
578.4	21' 40' Boring completed

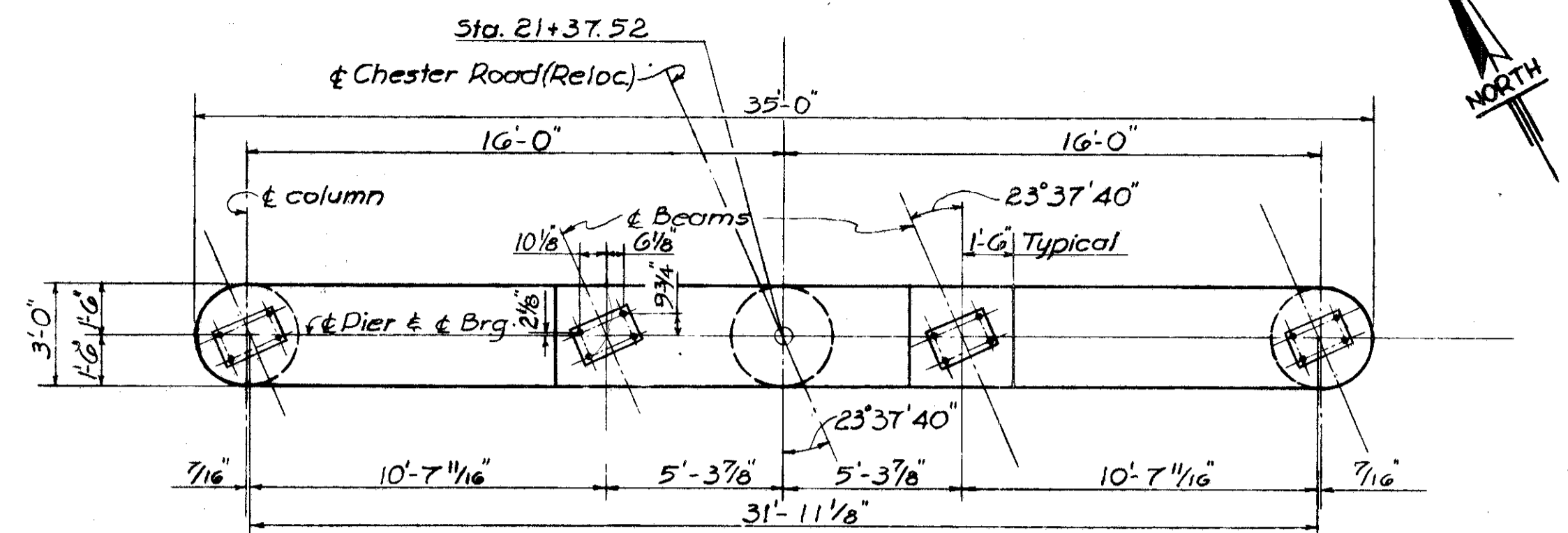
**BORING 8M**

0' Ground Elevation G19.2	
617.2	9' 2' Topsoil and dark brown silty clay
	23' Mottled brown and gray sandy clay with fine to coarse gravel
611.2	34' 8' Mottled brown and gray sandy clay with fine to coarse gravel
	27' Gray sandy clay with fine to coarse gravel
	26' Gray sandy clay with fine to coarse gravel
	60' Gray sandy clay with fine to coarse gravel
595.2	24' Gray silty clay with fine gravel and limestone fragments.
589.2	34' 30' Boring completed

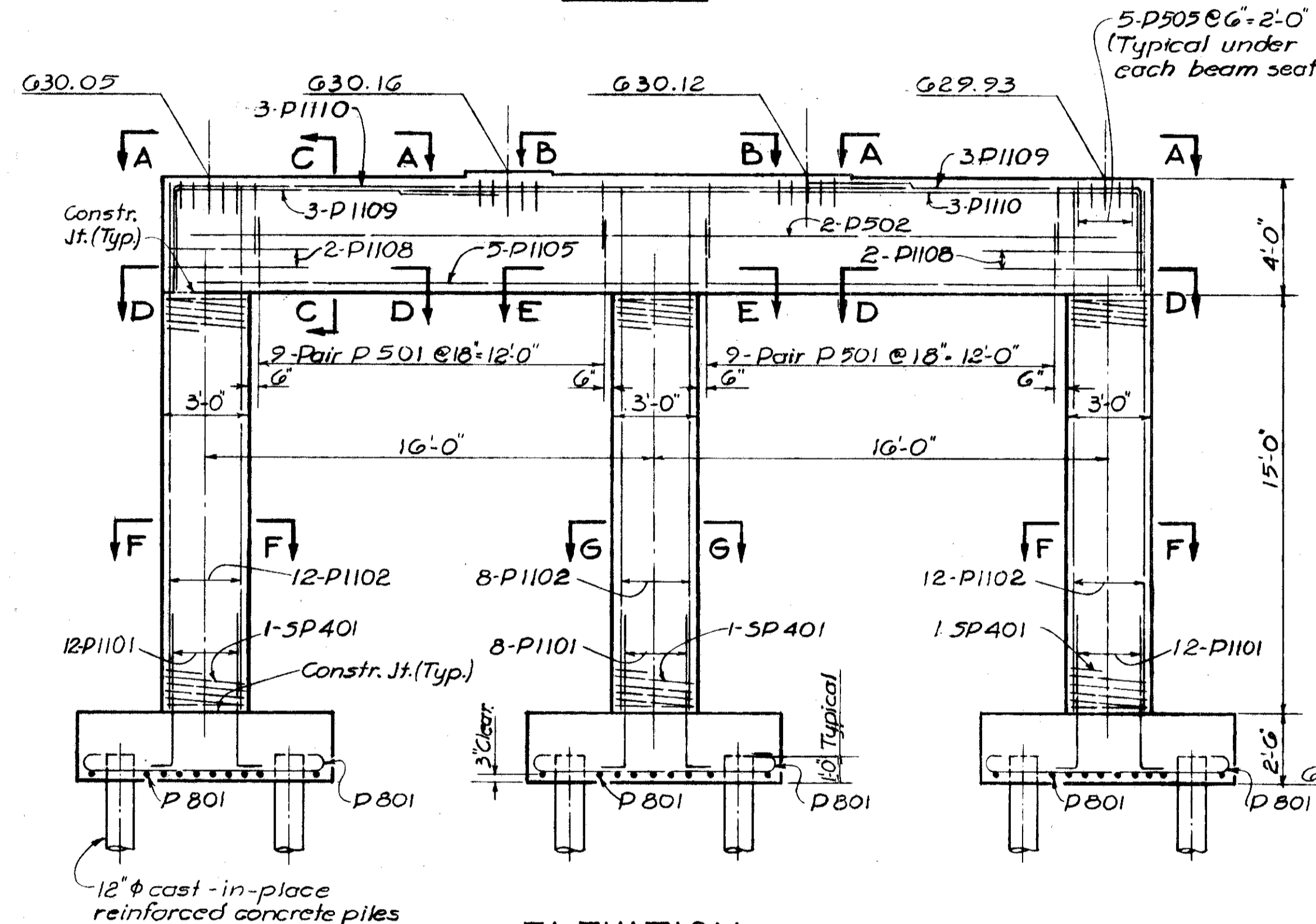
**BORING 8L**

**NOTES**  
W.L. = Water Level in bore hole 24 hours after completion.  
Figures in right hand column indicate number of blows required to drive 2" O.D. sampling pipe one foot, using 140 lb. weight falling 30 inches.  
Borings taken during April 1958.  
See Sheet No. 276 for location of borings.

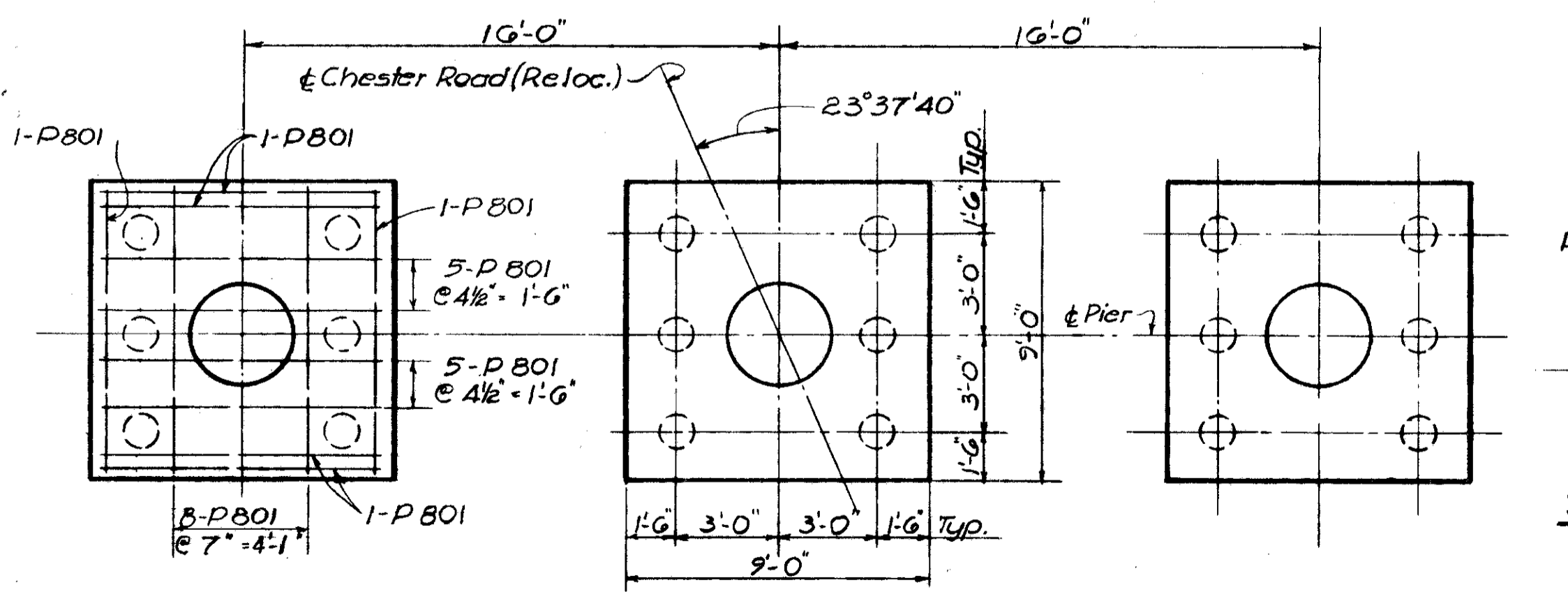
VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO			
<b>BORINGS</b>			
BRIDGE NO. HAM-50B-22.44 PROPOSED U.S. 50 BY-PASS UNDER CHESTER ROAD RELOCATED HAMILTON COUNTY STA. 20 + 81.06 TO STA. 24 + 88.77			
DESIGNED	DRAWN	TRACED	CHECKED
CAW	CB5	CB5	RDW
REVIEWED	DATE	REVISED	
J.A.D.	Oct. 58		



PLAN

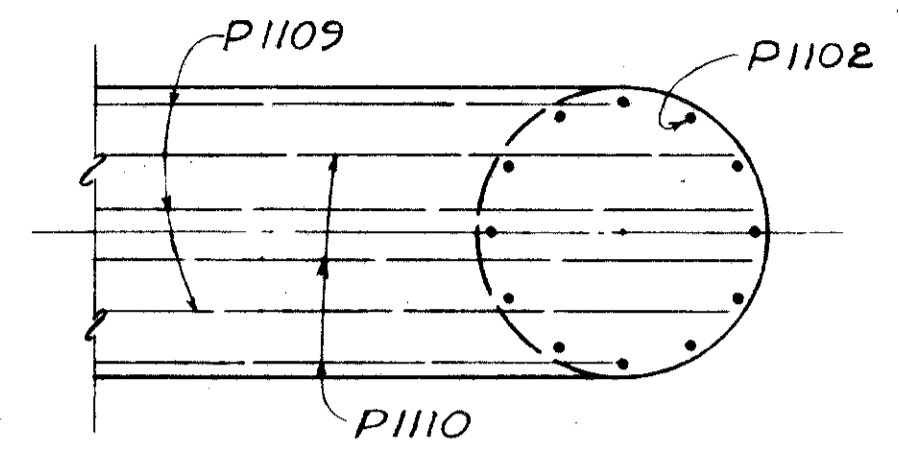


ELEVATION

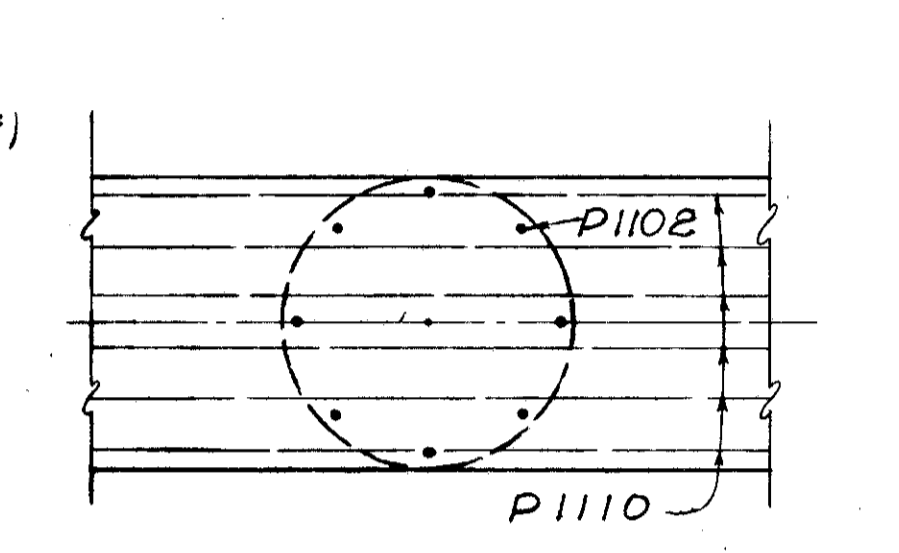


FOOTING PLAN

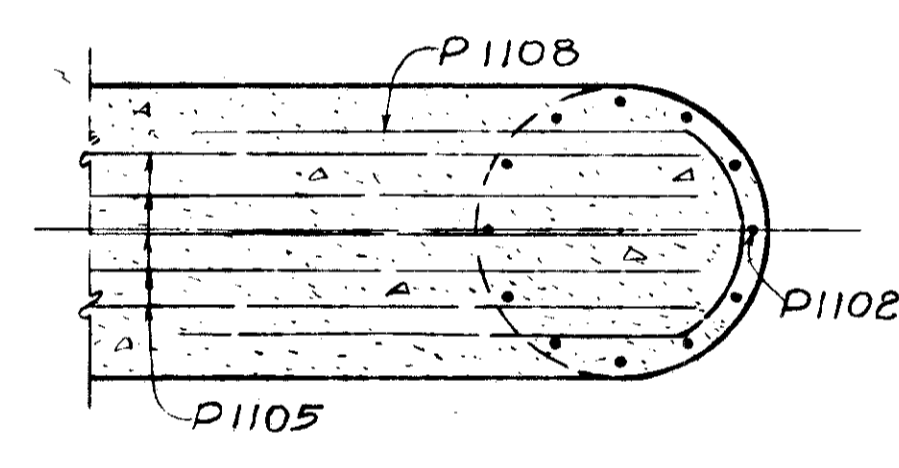
PIER NO. 1



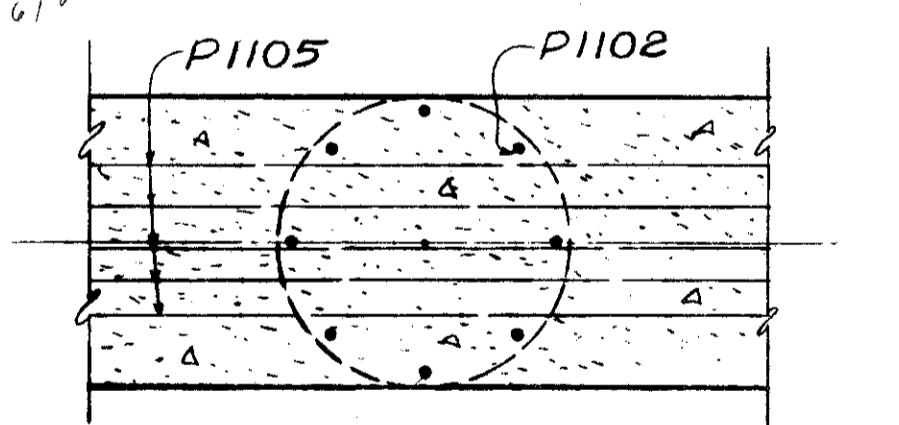
VIEW A-A



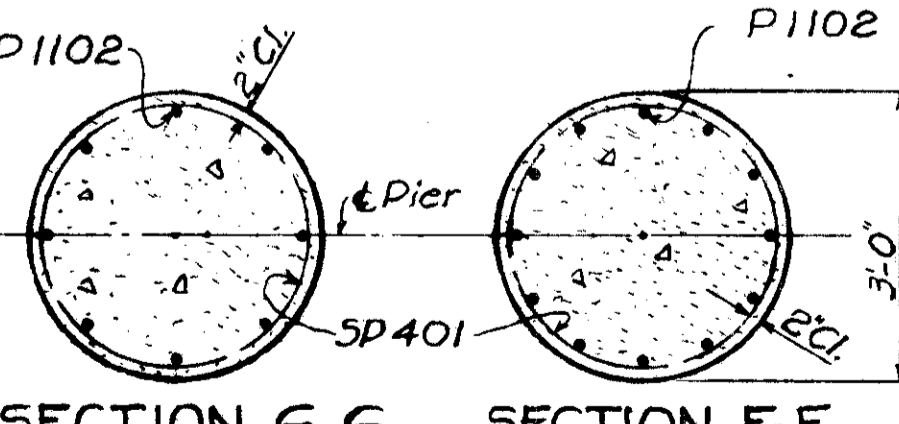
VIEW B-B



SECTION D-D

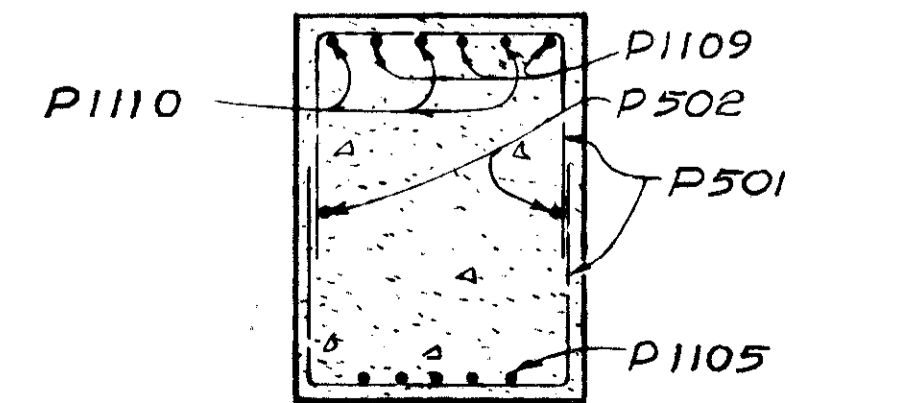


SECTION E-E

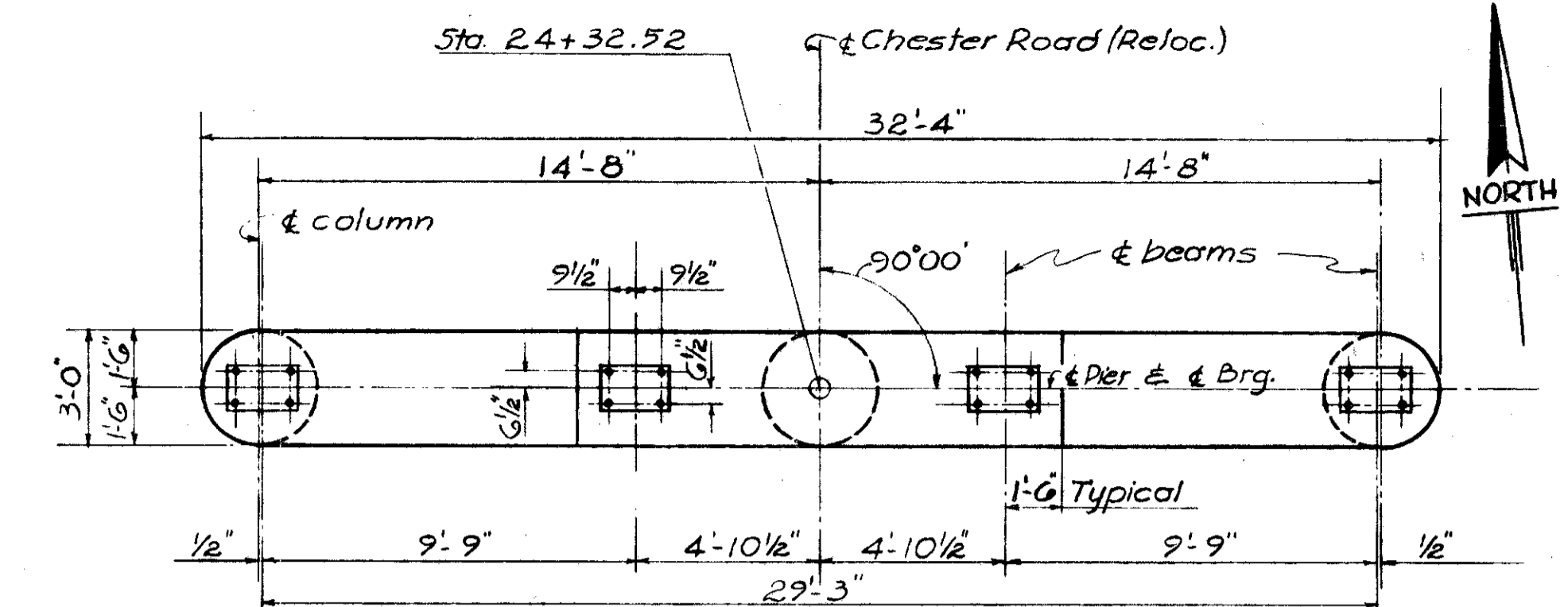


SECTION G-G

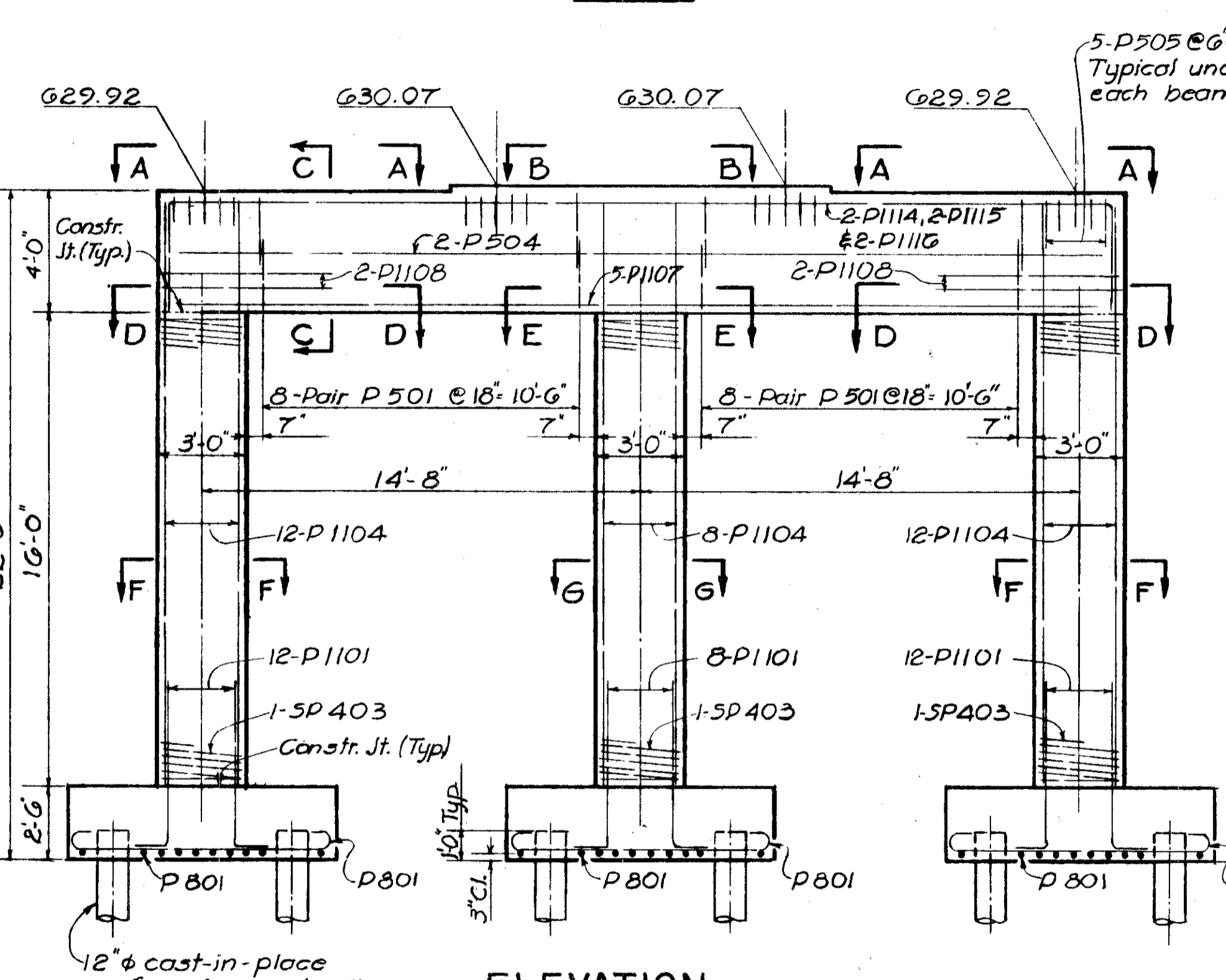
SECTION F-F



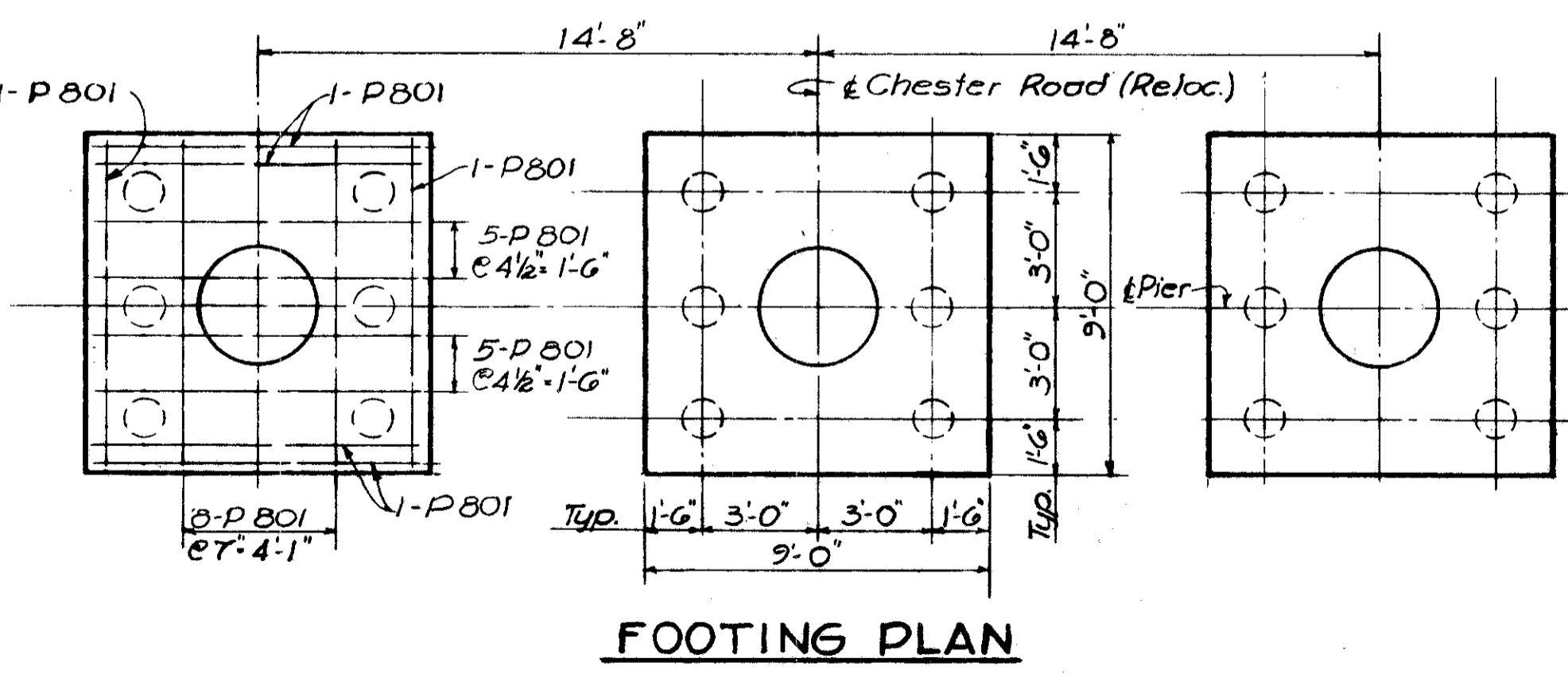
SECTION C-C



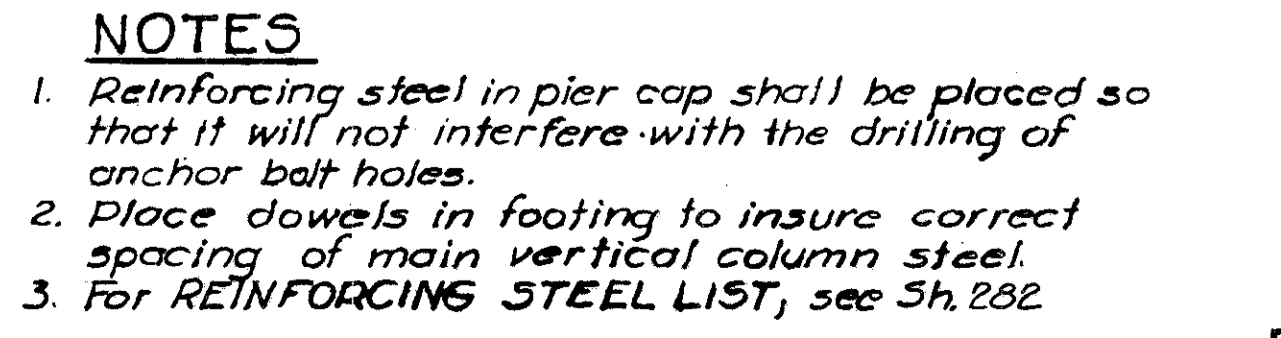
PLAN



ELEVATION



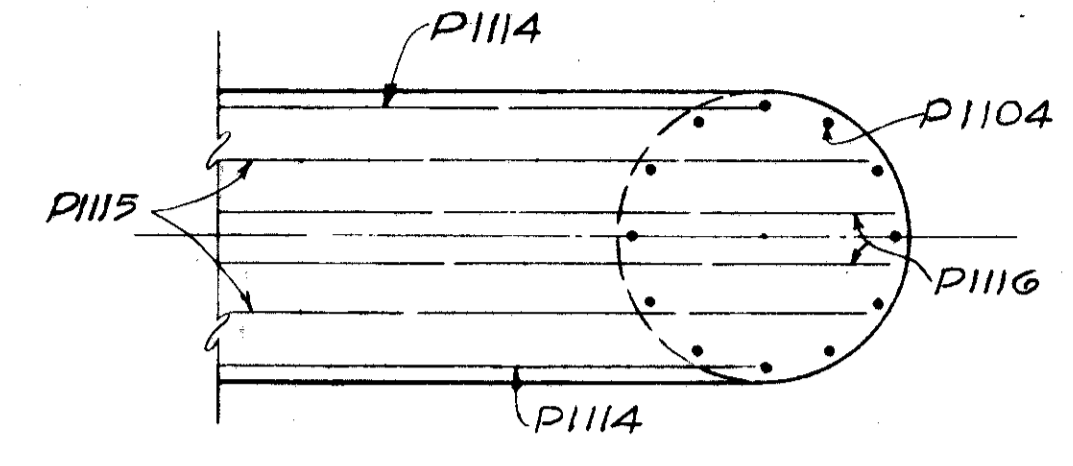
FOOTING PLAN



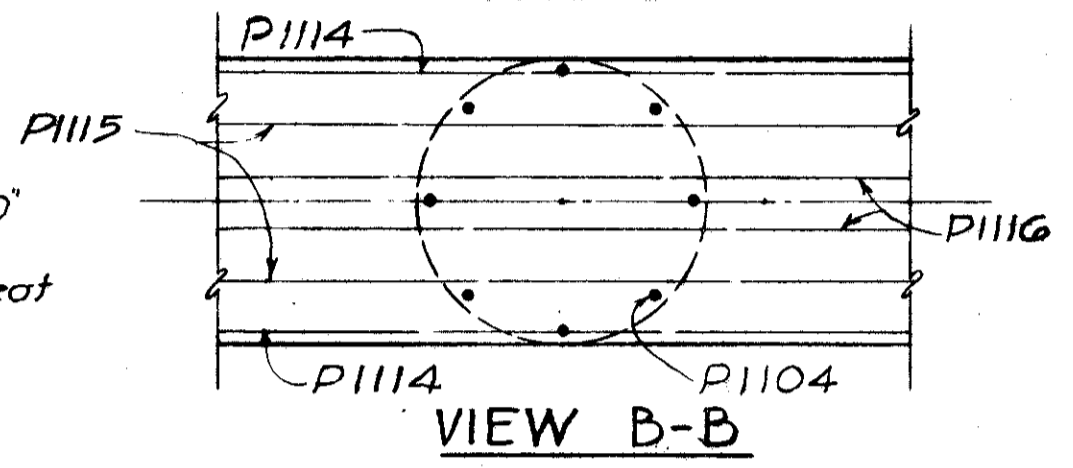
NOTES

1. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bolt holes.
2. Place dowels in footing to insure correct spacing of main vertical column steel.
3. For REINFORCING STEEL LIST, see Sh. 232.

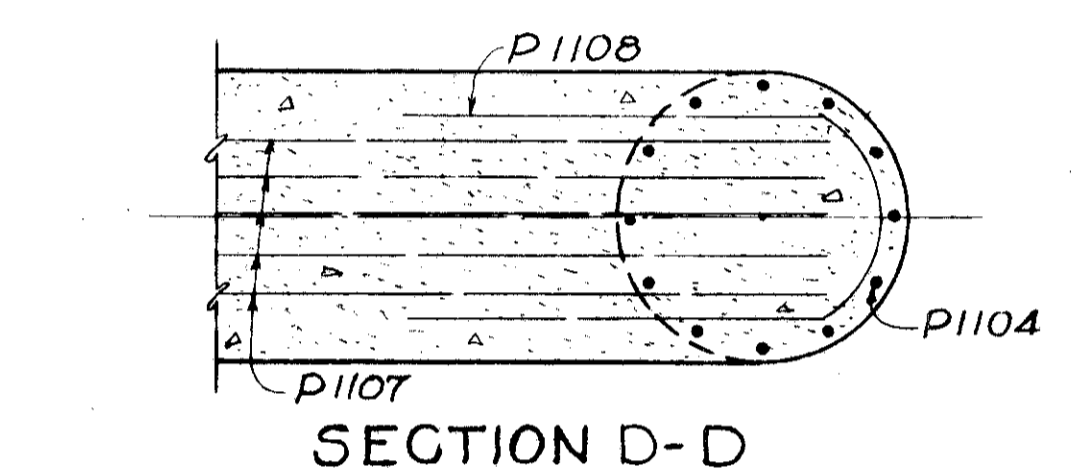
PIER NO. 5



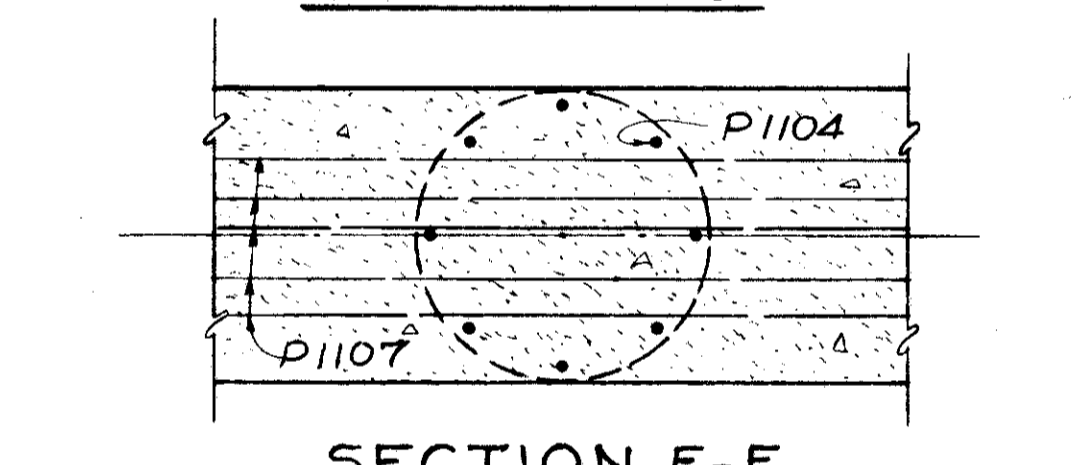
VIEW A-A



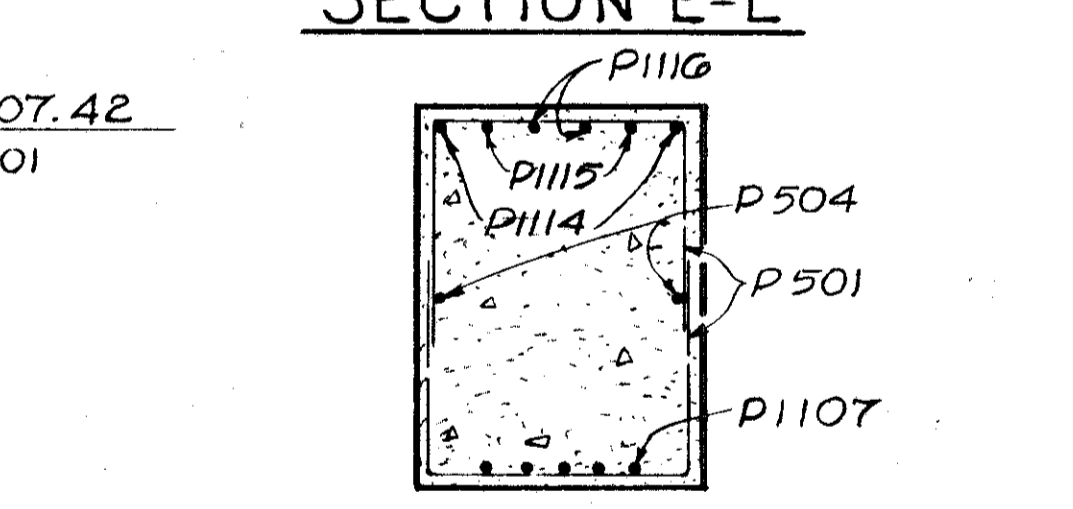
VIEW B-B



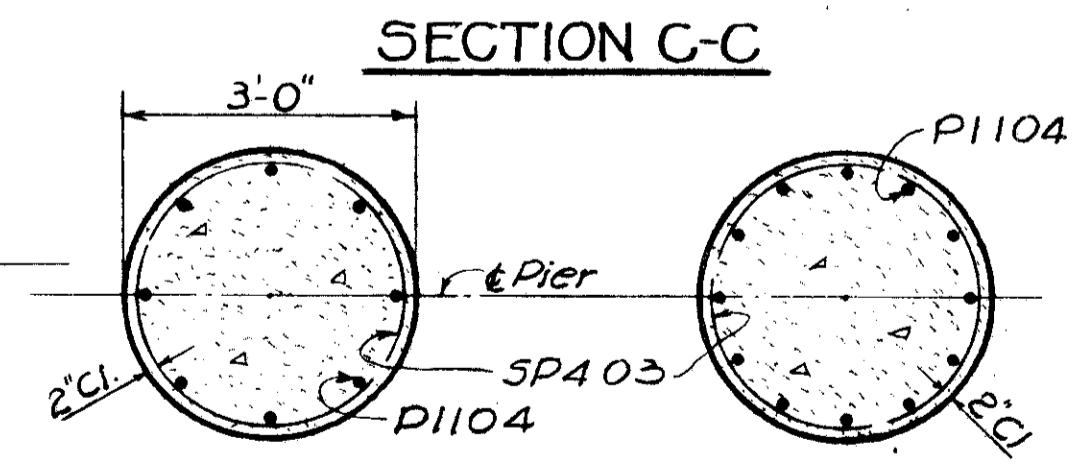
SECTION D-D



SECTION E-E



SECTION C-C



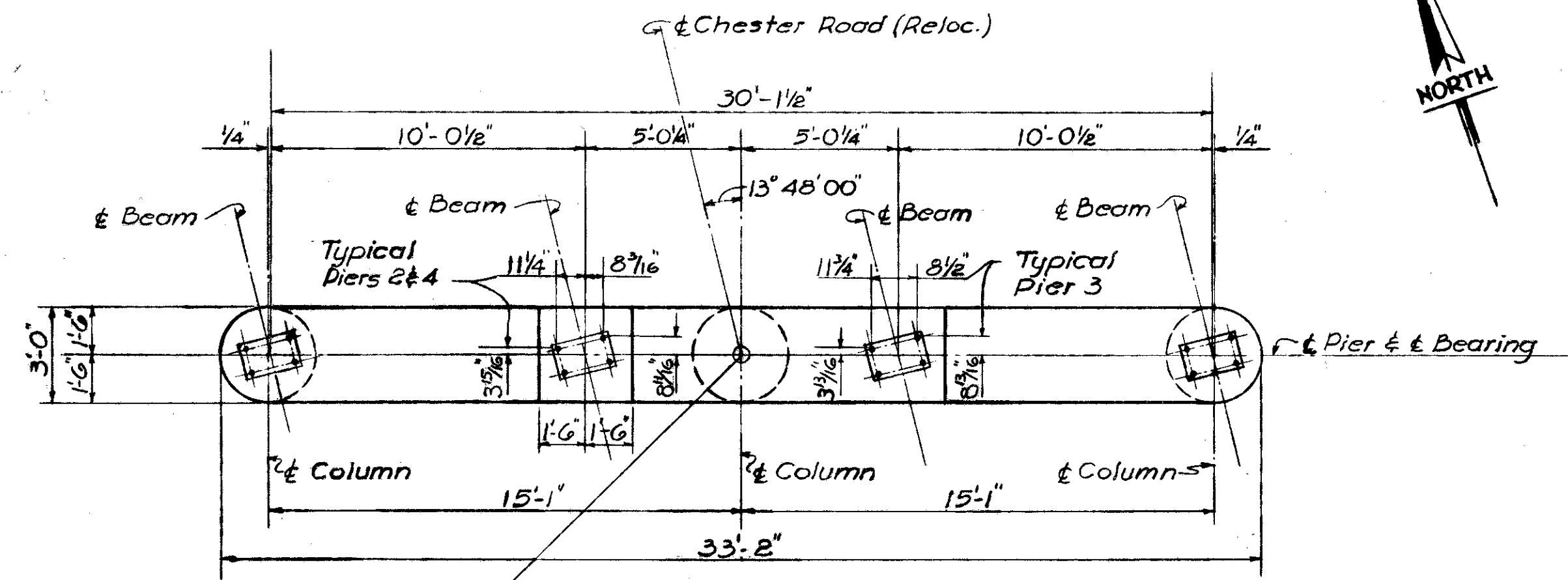
SECTION G-G

SECTION F-F

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

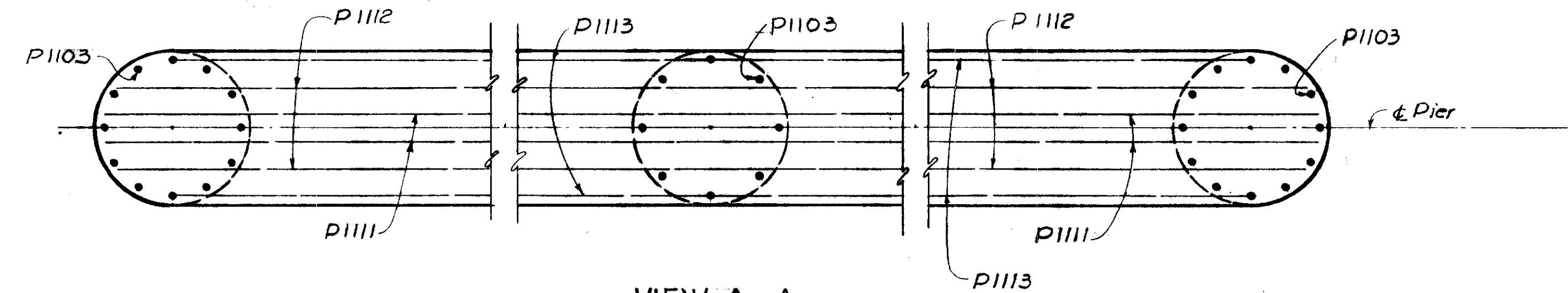
PIERS 1 & 5  
BRIDGE NO. HAM-50B-2244  
PROPOSED U.S. 50 BY-PASS UNDER  
CHESTER ROAD RELOCATED  
HAMILTON COUNTY STA. 20+81.06 TO  
STA. 24+88.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
HDP	CB5	CB5	AAN	J.A.D.	Oct. 58	

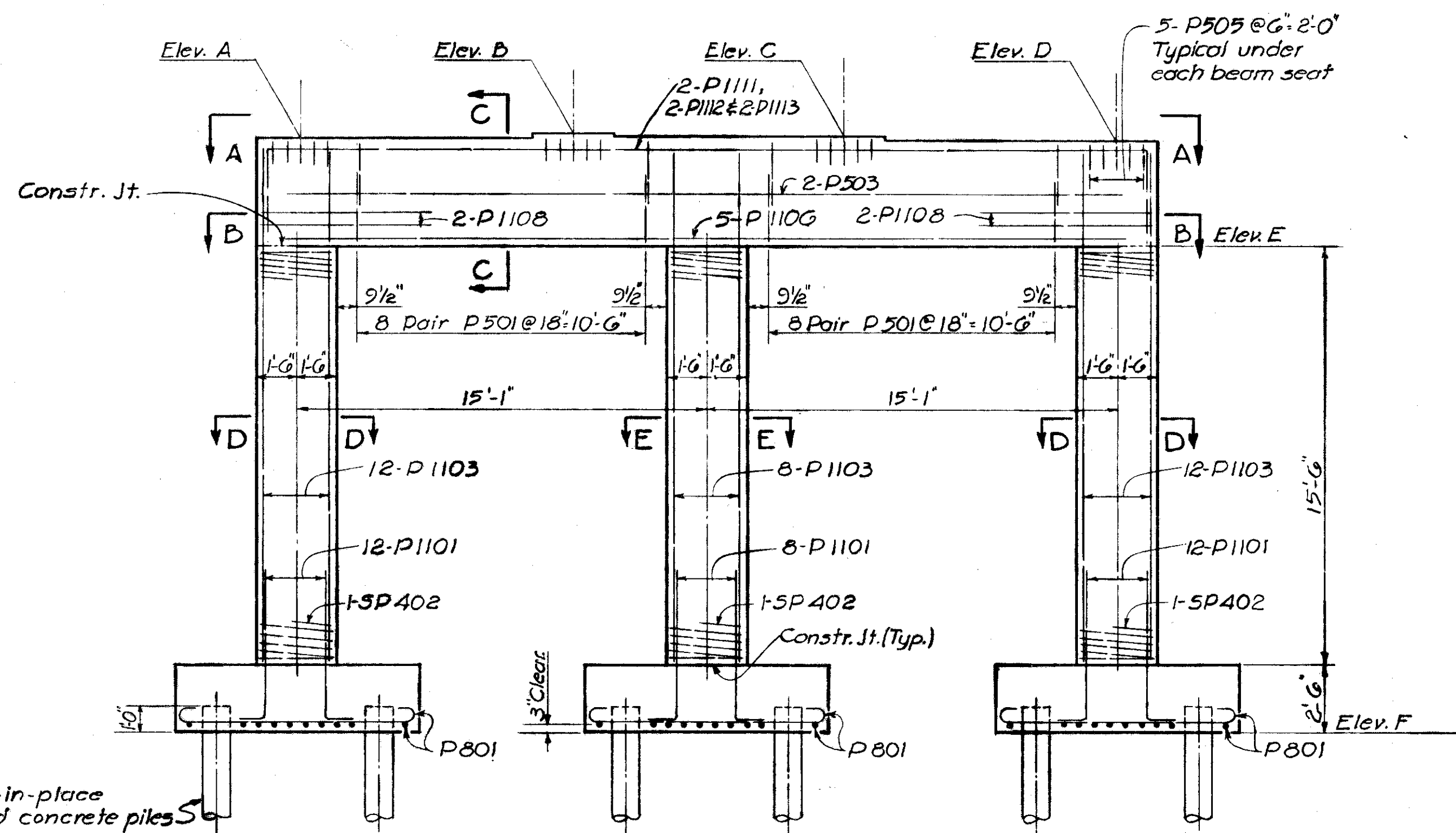


Pier 2 - Sta. 22+04.52  
Pier 3 - Sta. 22+85.02  
Pier 4 - Sta. 23+65.52

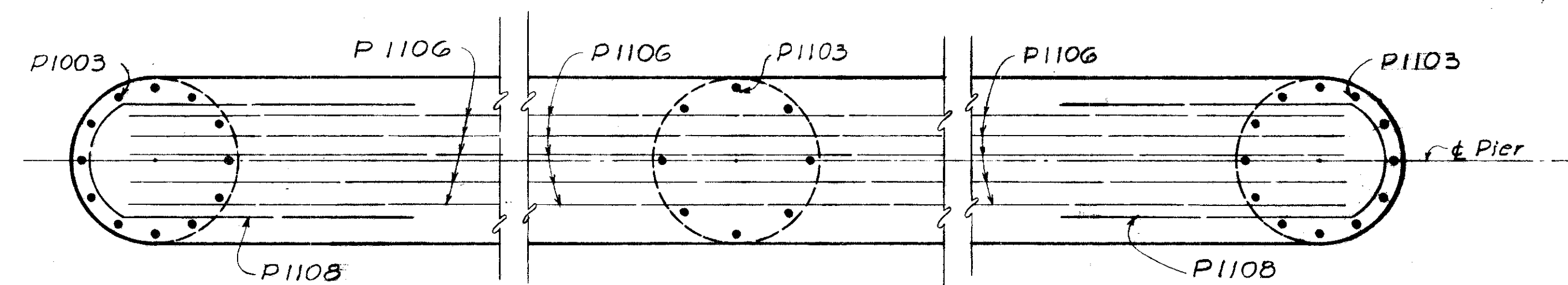
PLAN



VIEW A-A

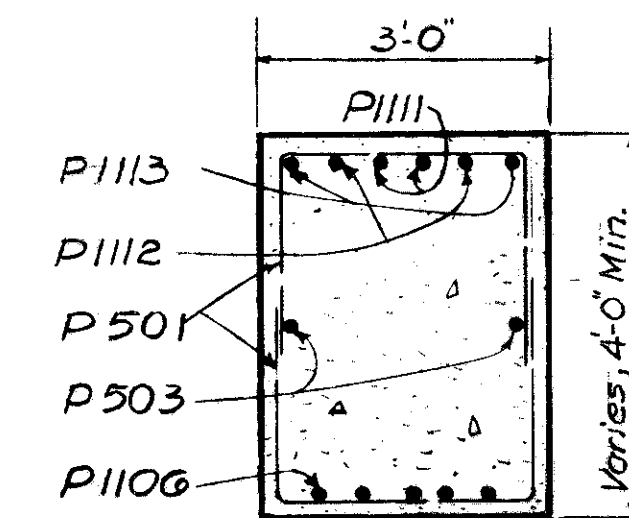


ELEVATION

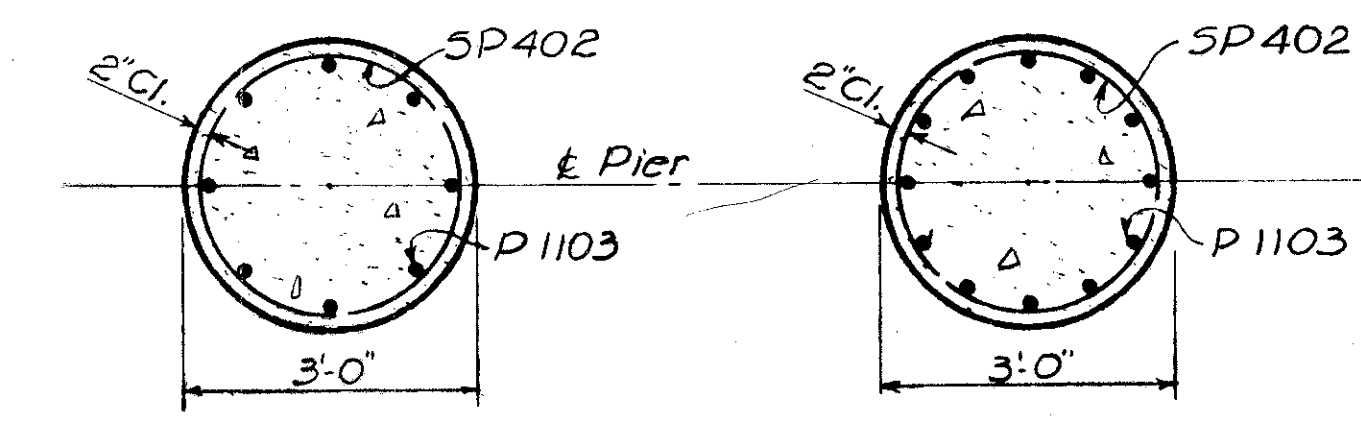


SECTION B-B

TABLE OF ELEVATIONS			
ELEVATION	PIER 2	PIER 3	PIER 4
A	630.42	630.58	630.33
B	630.56	630.73	630.49
C	630.55	630.73	630.51
D	630.38	630.58	630.37
E	626.38	626.58	626.33
F	608.38	608.58	608.33



SECTION C-C

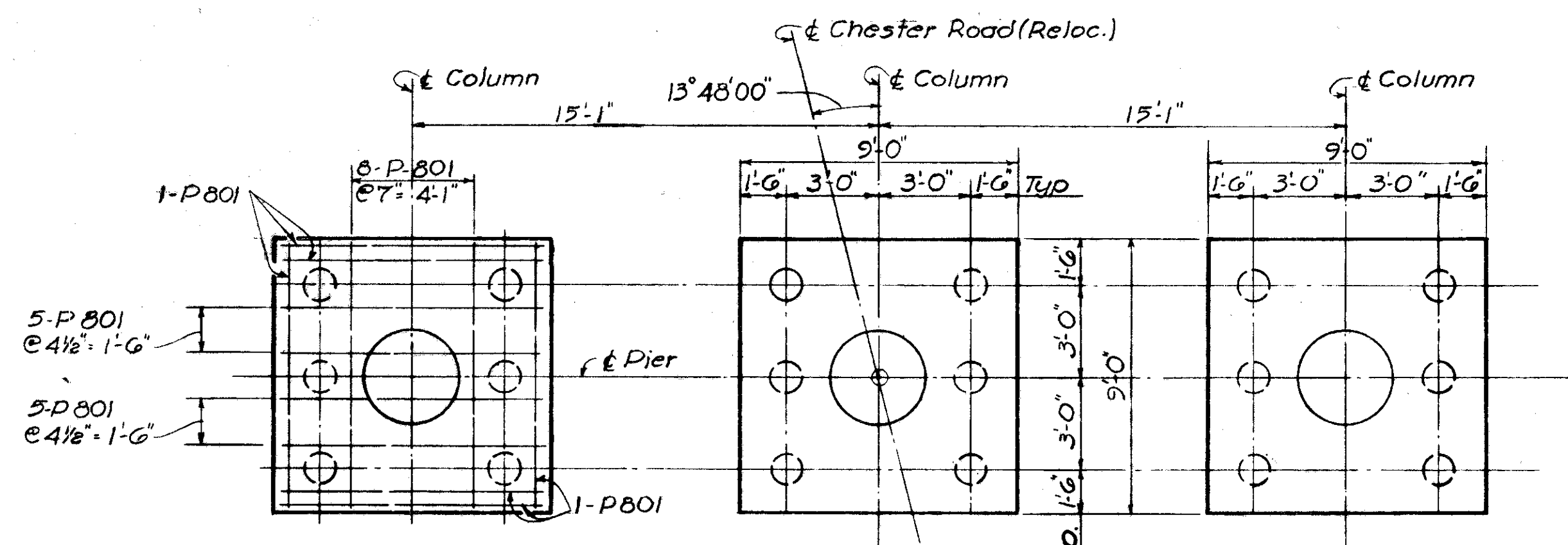


SECTION E-E

SECTION D-D

NOTES

1. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bolt holes.
2. Place dowels in footing to insure correct spacing of main vertical column steel.
3. For REINFORCING STEEL LIST, see 5h.282



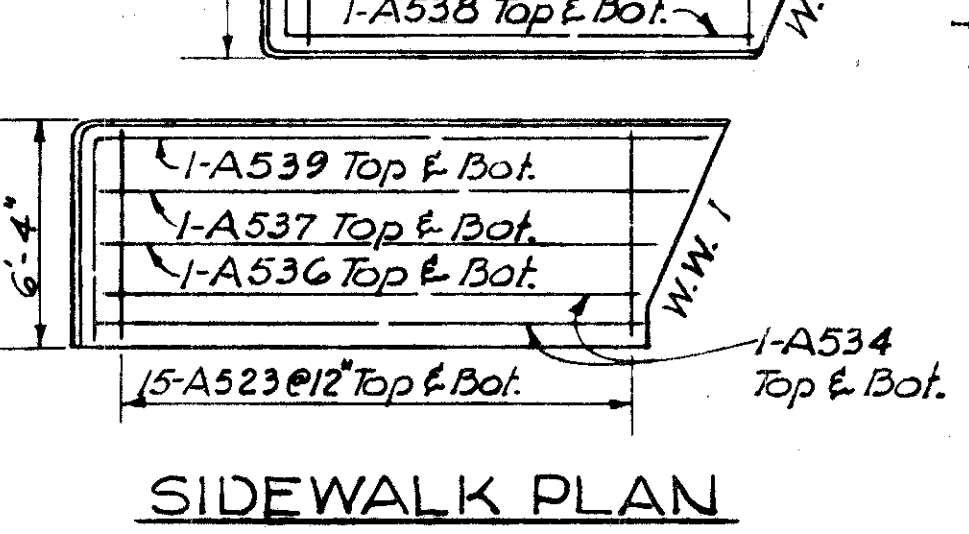
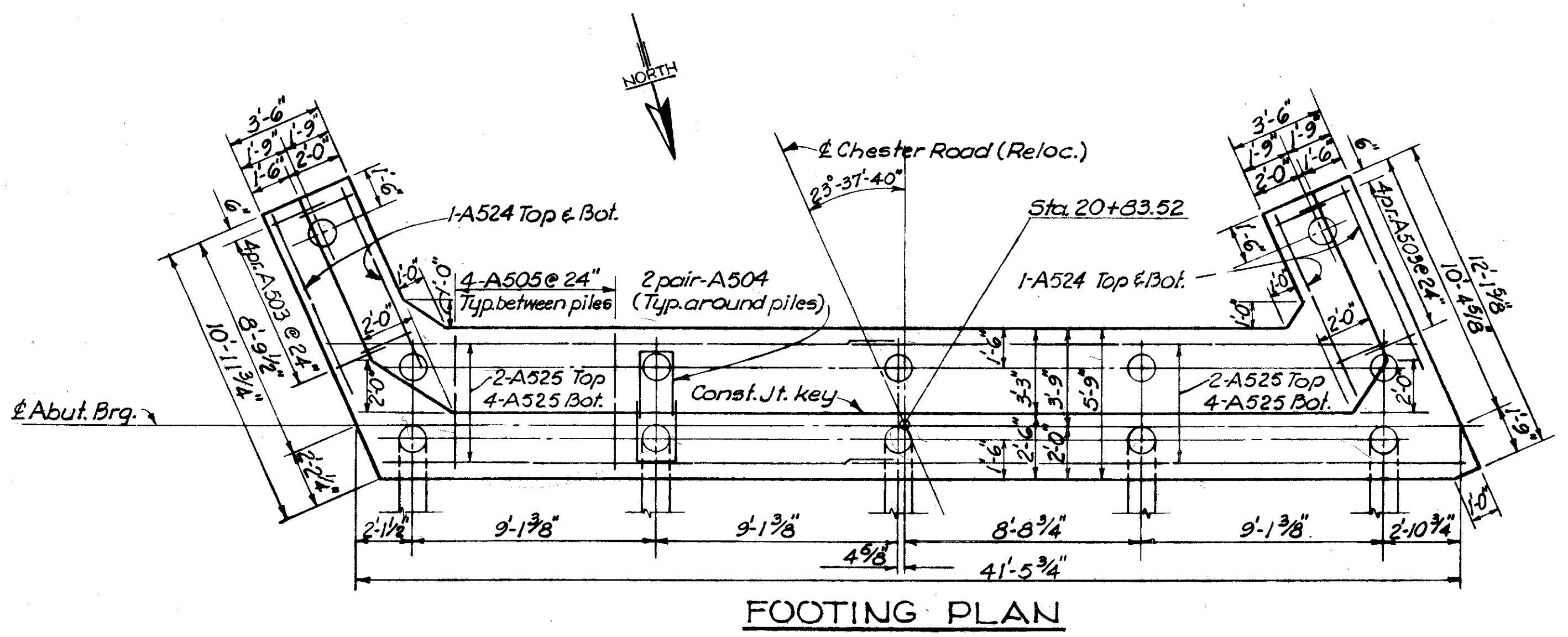
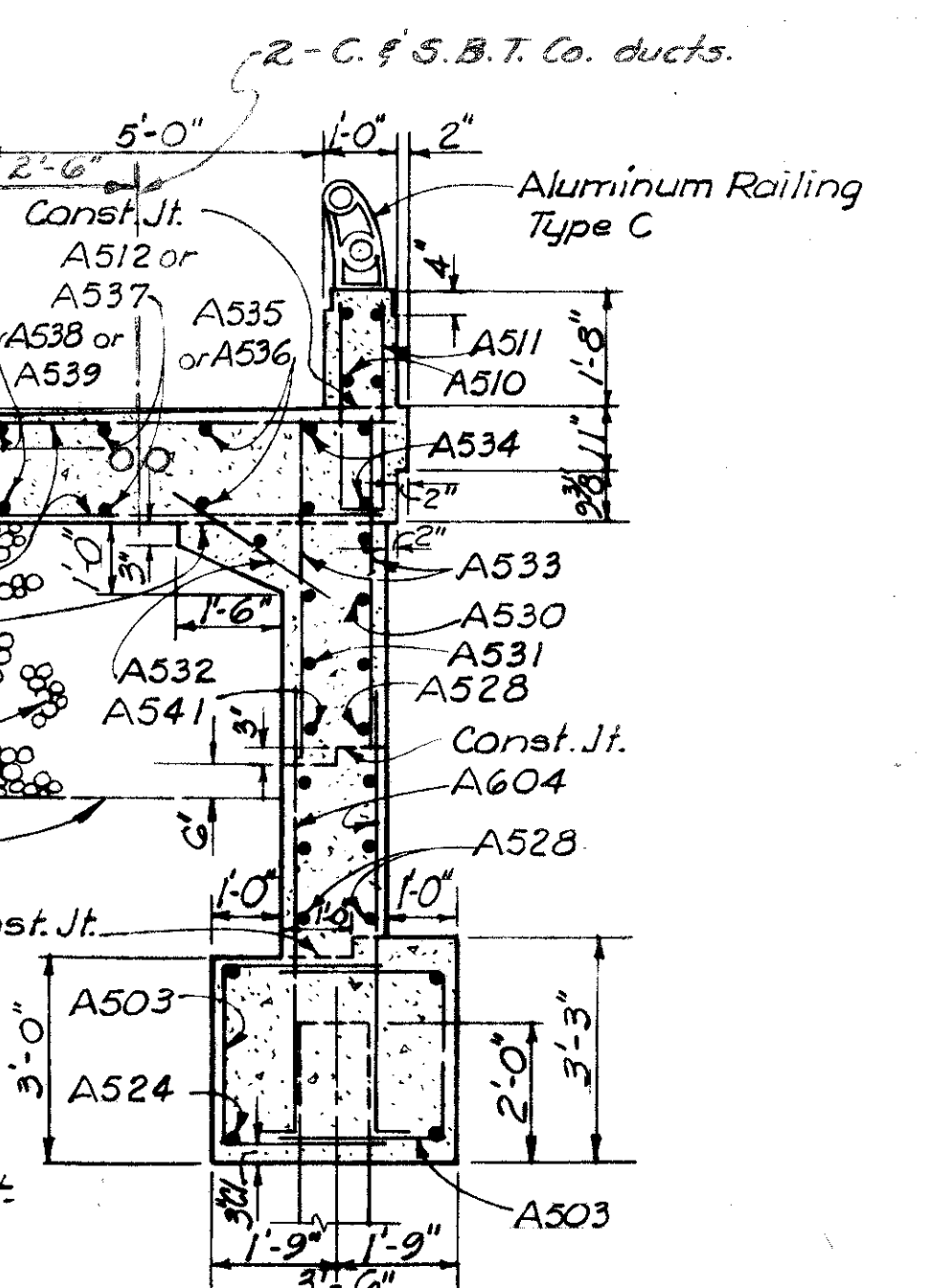
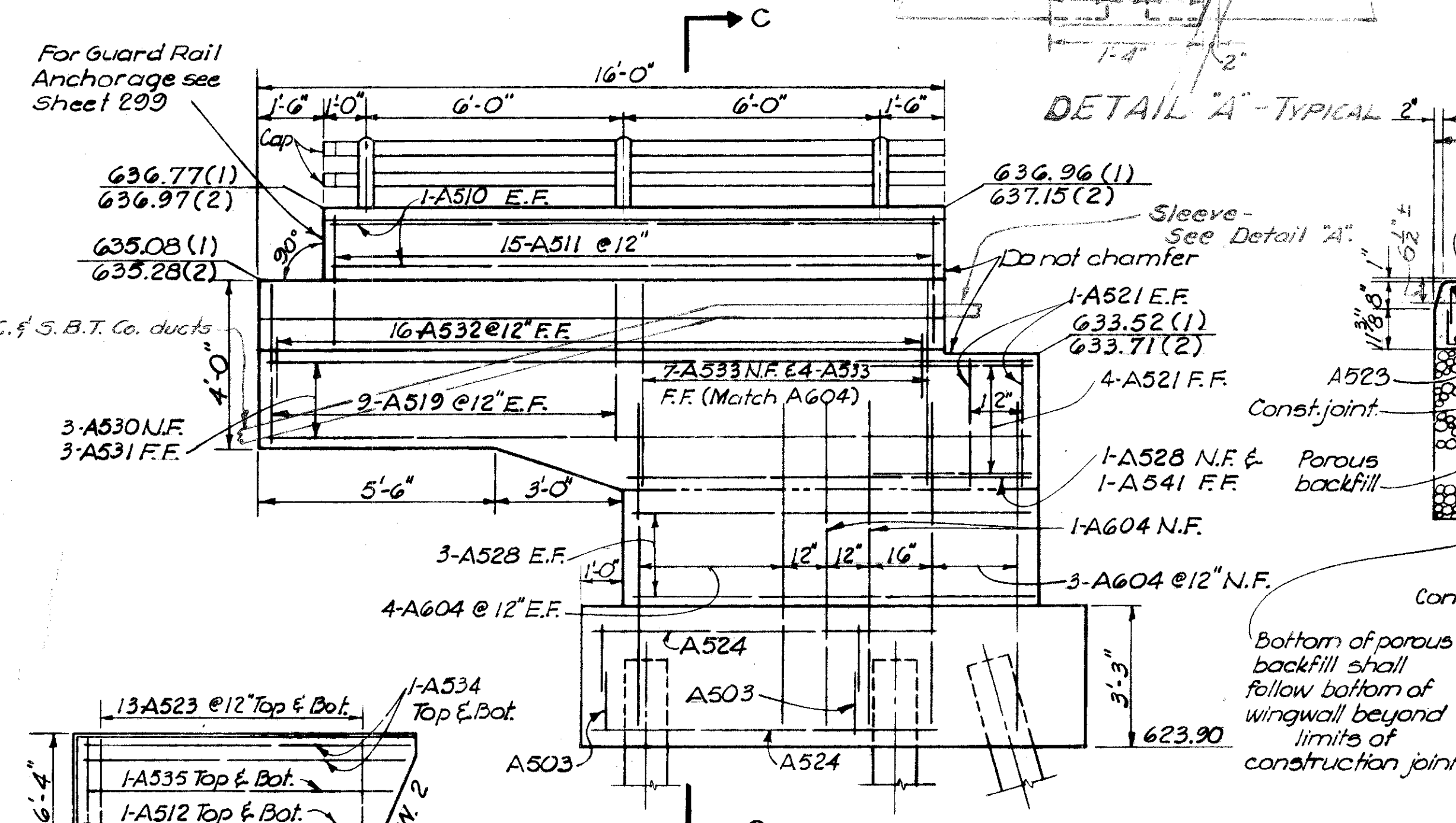
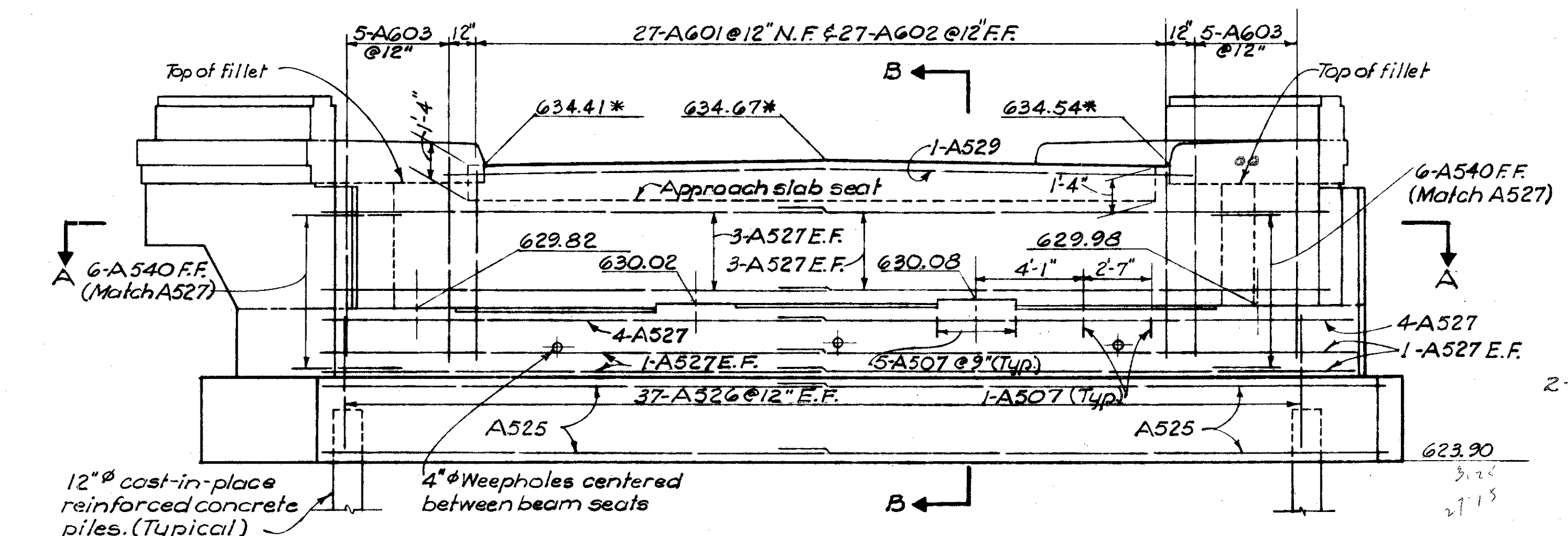
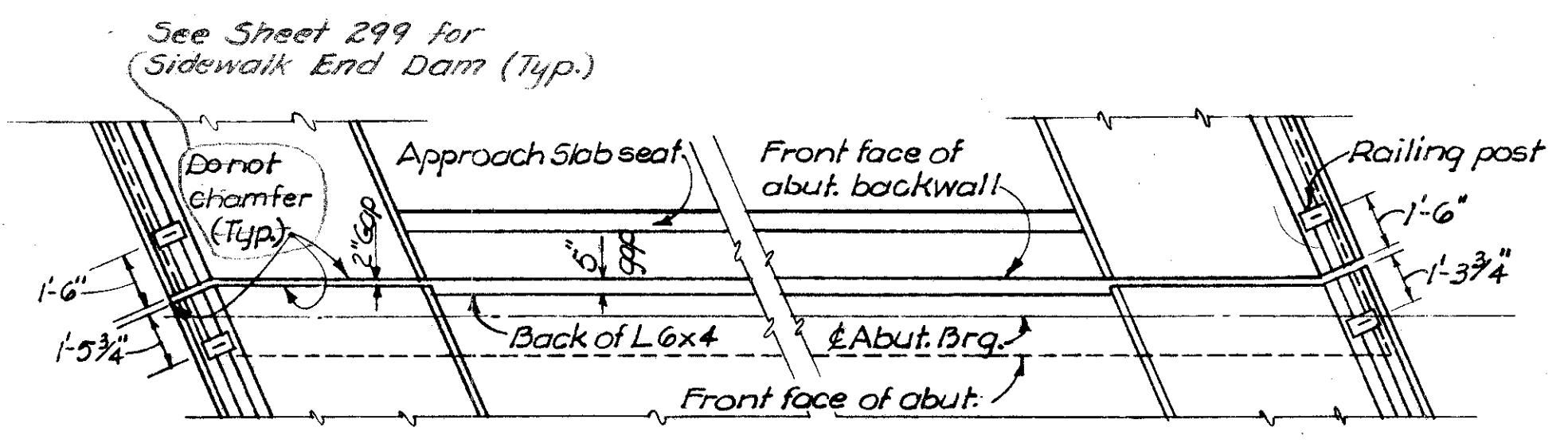
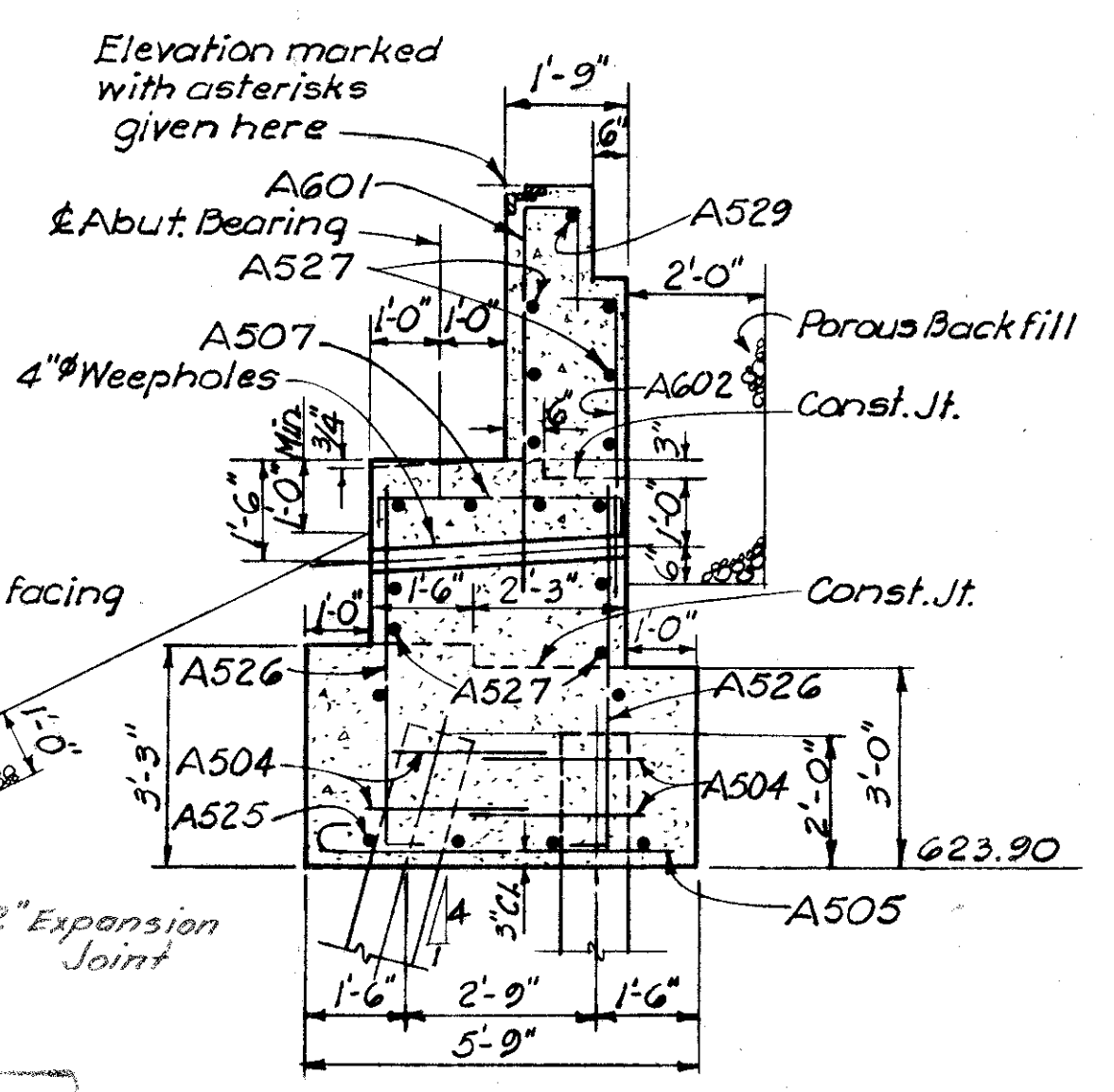
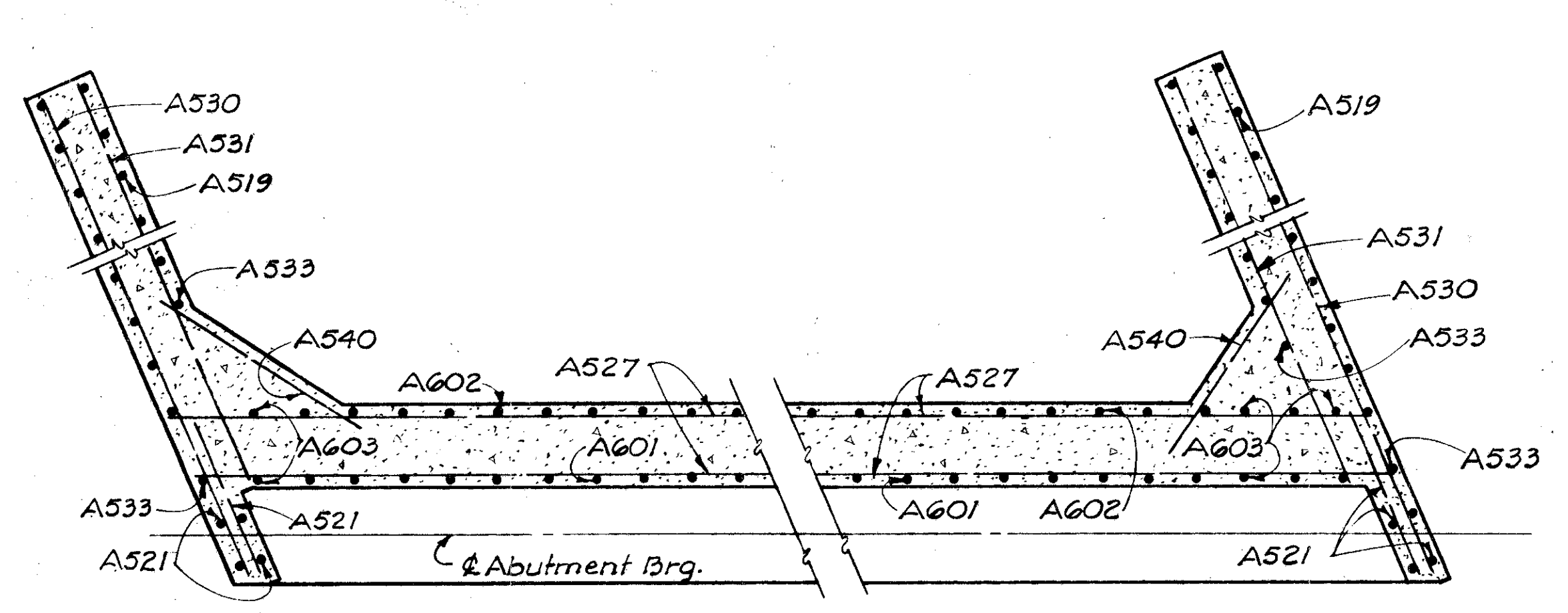
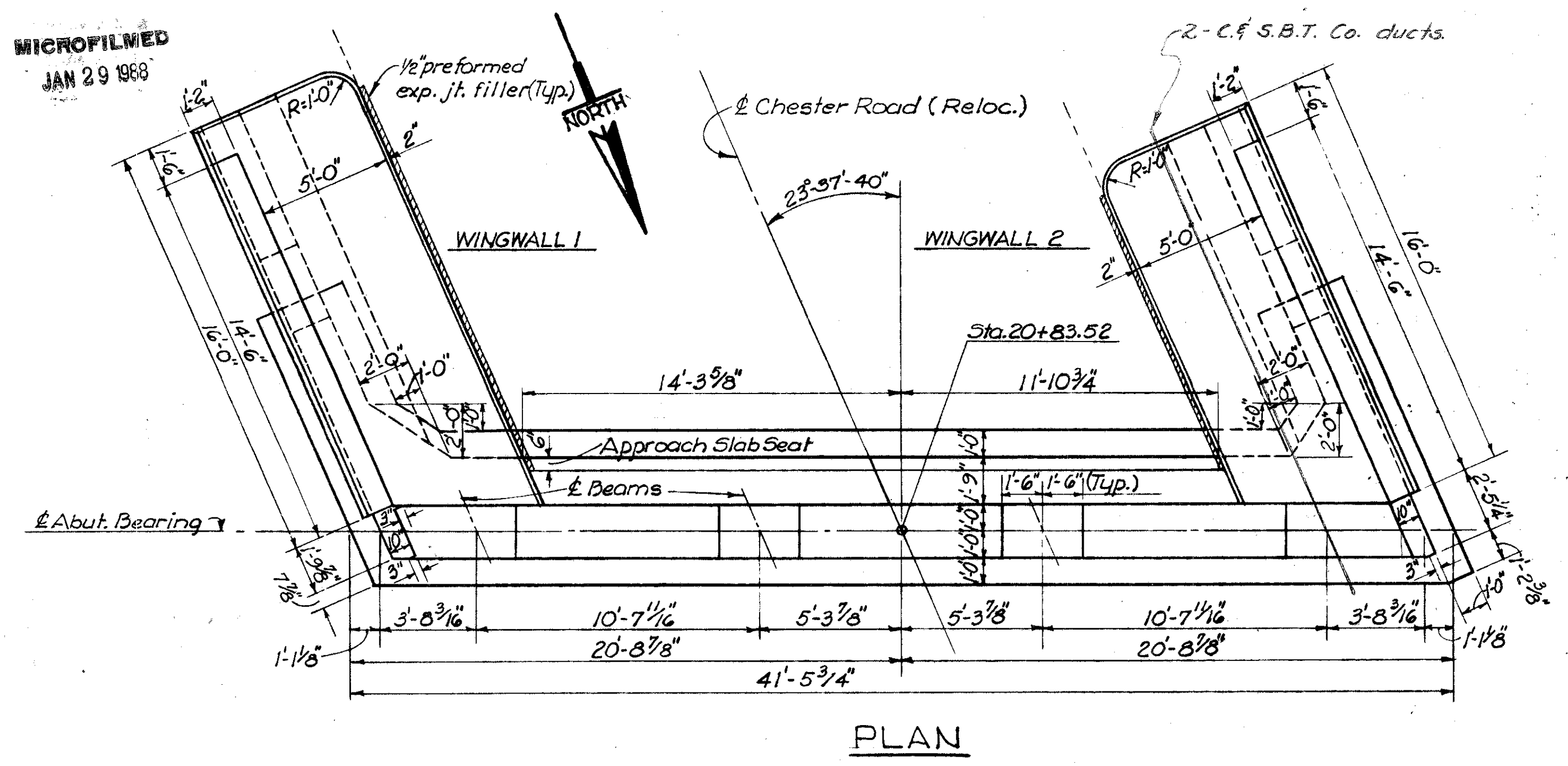
FOOTING PLAN

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO					
<b>PIERS 2,3&amp;4</b>					
BRIDGE NO. HAM-50B-2244 PROPOSED U.S. 50 BY-PASS UNDER CHESTER ROAD RELOCATED					
HAMILTON COUNTY STA. 20+81.06 TO STA. 24+88.77					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
HDP	GBS	CBS	AAN	J.A.D.	Oct. 58
REVISED					

MICROFILMED  
JAN 29 1968

FED. RD. DIVISION	STATE	PROJECT	278 517
2	OHIO		

HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-50B-22.02



- NOTES:
- Designations used are as follows: F.F. = Far Face, N.F. = Near Face, E.F. = Each Face, (1) = Wingwall 1, (2) = Wingwall 2.
  - For Reinforcing Steel List see Sheet 282.
  - Parapet concrete & A510 bars to be included with Item 5-14 for payment.
  - PROCEDURE: The embankment shall be placed and compacted to the finished spill-thru slope and to level of subgrade for a distance of 200' back of abutments after which excavation shall be made for abutment.
  - POROUS BACKFILL, full length of abutment and sidewalks shall extend up to the underside of the approach slab or sidewalk.
  - For Approach Slab Details, see Std. Dwg. A5-1-54.
  - 1/2" preformed expansion joint filler to be included in the unit price bid for Item 1-7, Approach Slabs.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ABUTMENT 1**  
BRIDGE NO. HAM-50B-22.4  
PROPOSED U.S. 50 BY-PASS UNDER  
CHESTER ROAD RELOCATED  
HAMILTON COUNTY STA. 20+81.00 TO  
STA. 24+88.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
R.J.S.	R.J.S.	KL.	D.L.V.	J.A.D.	Oct. 58	4-12-59

U.S. 50 B

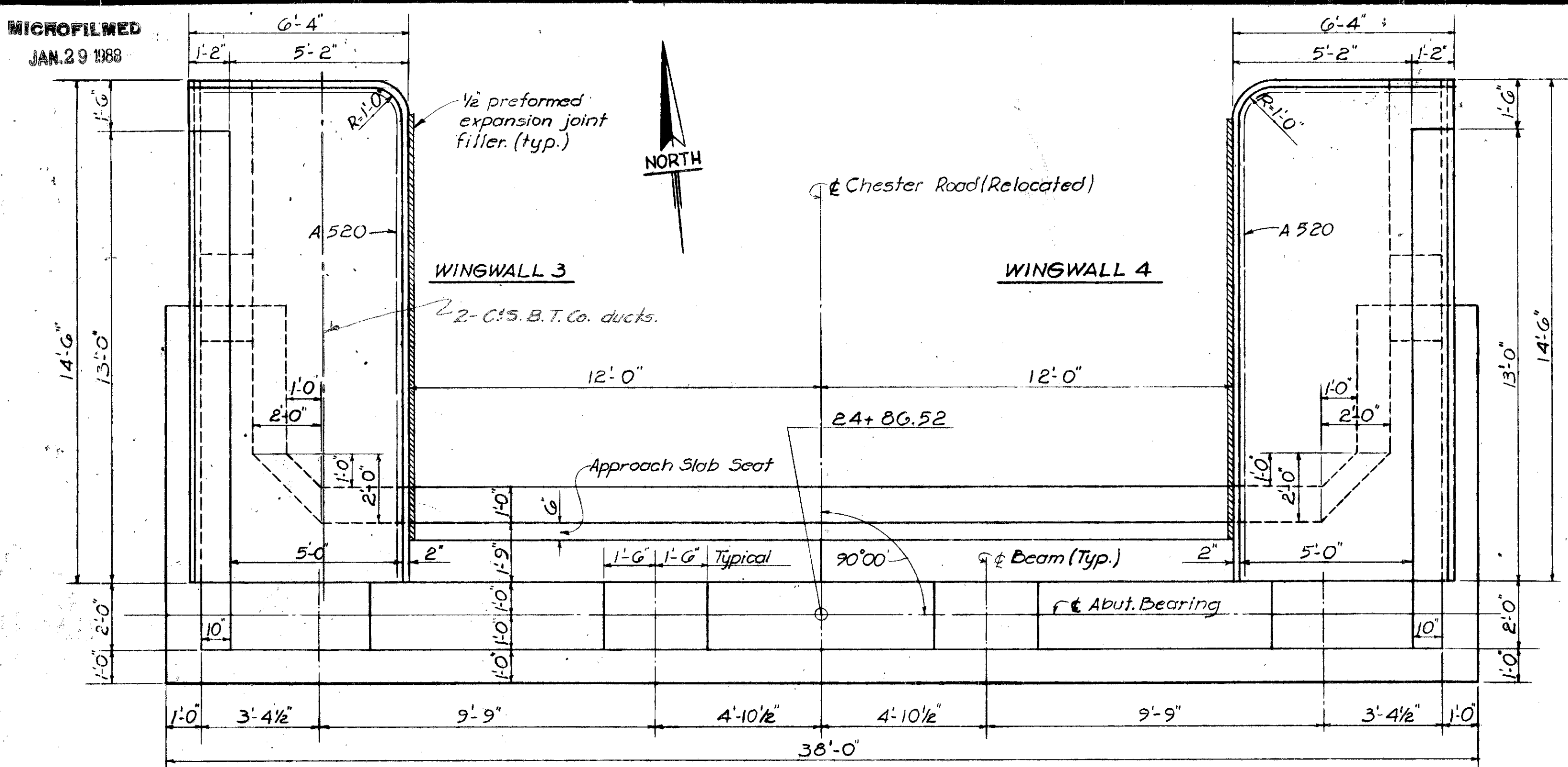
MICROFILMED  
JAN. 29 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

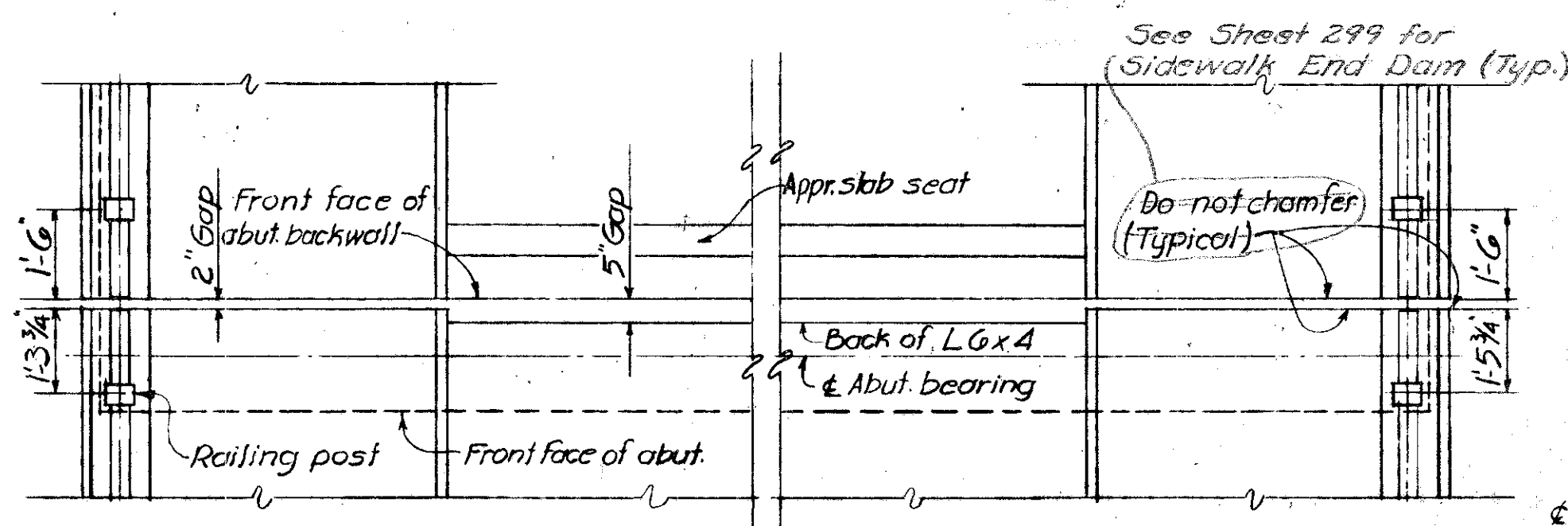
279  
317

HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-50B-22.02

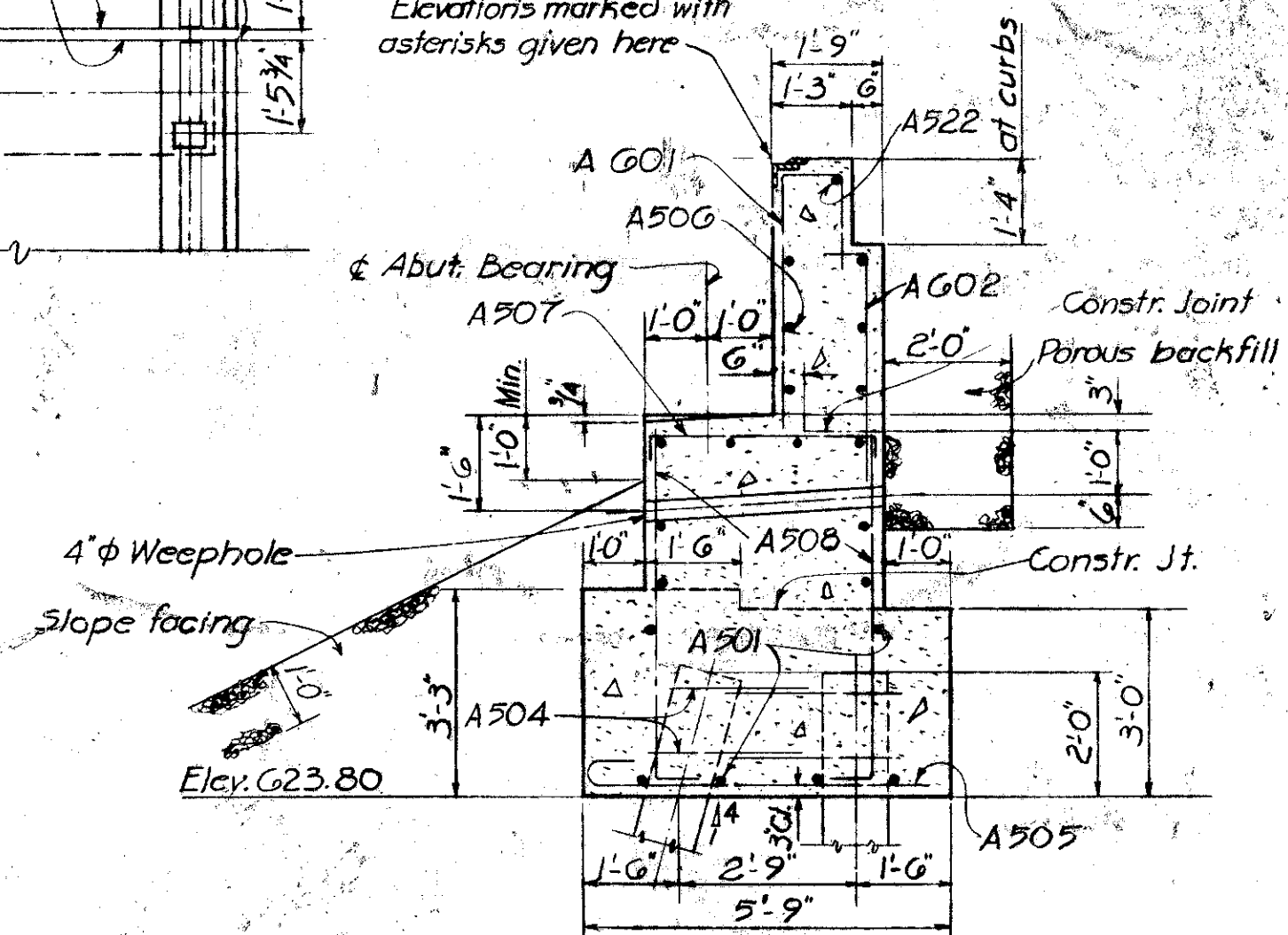
Elevations marked with  
asterisks given here



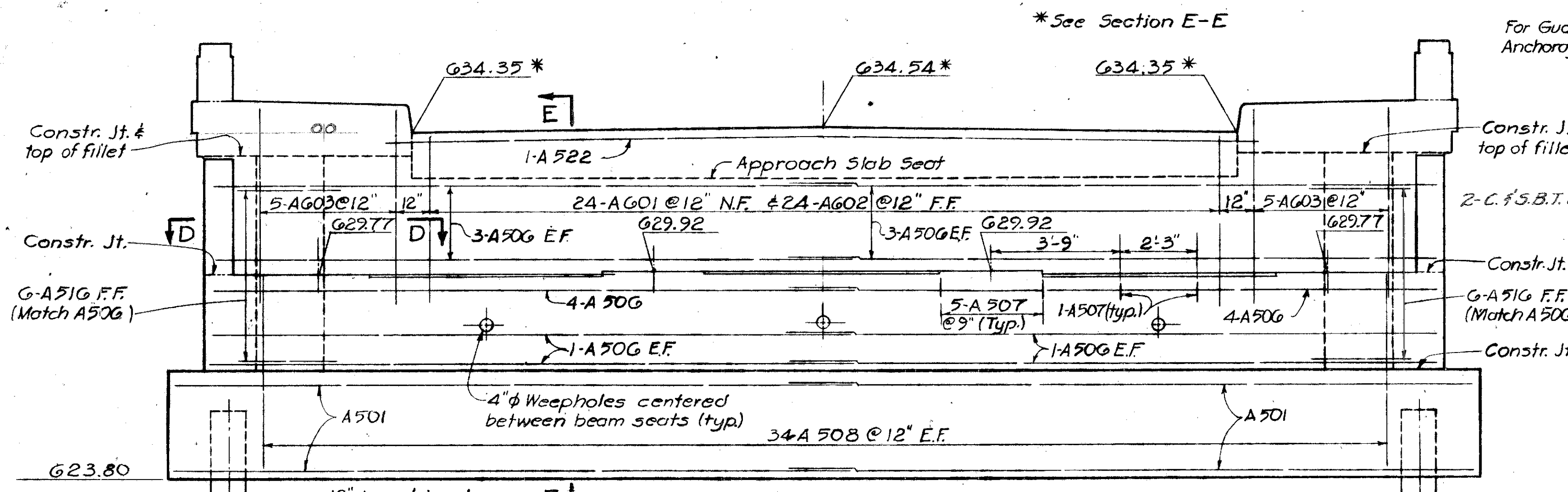
PLAN



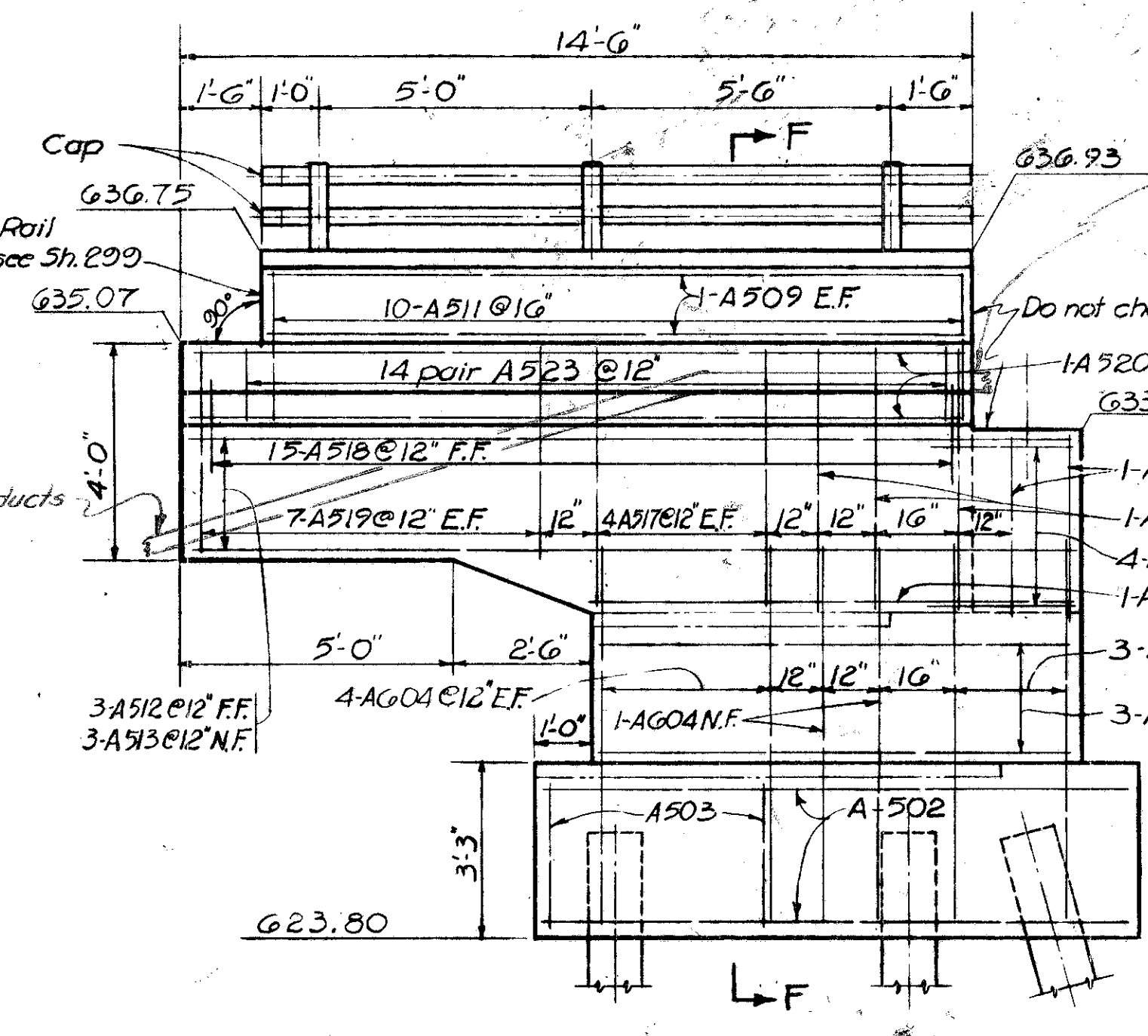
PART PLAN AT END



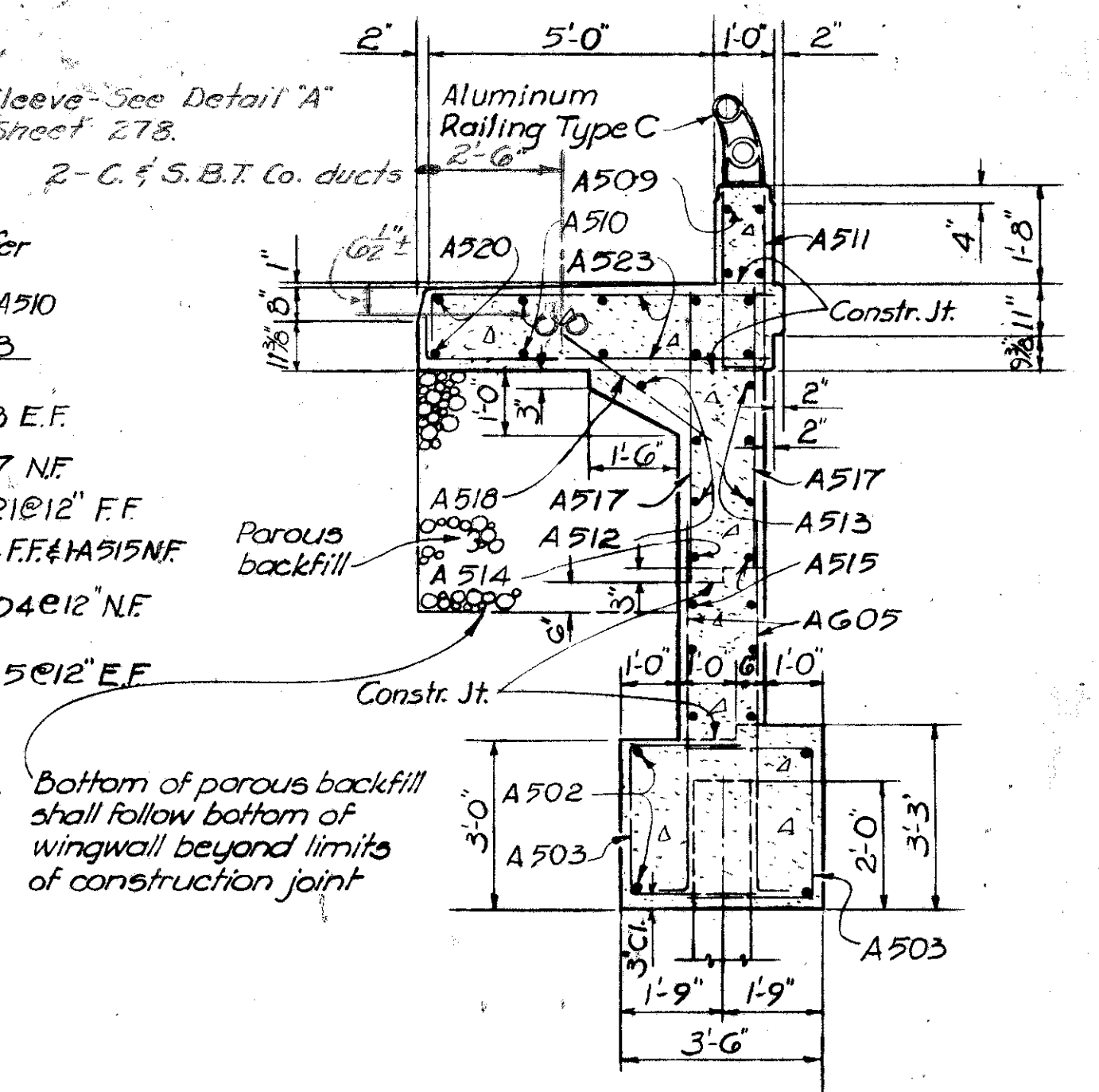
SECTION E-E



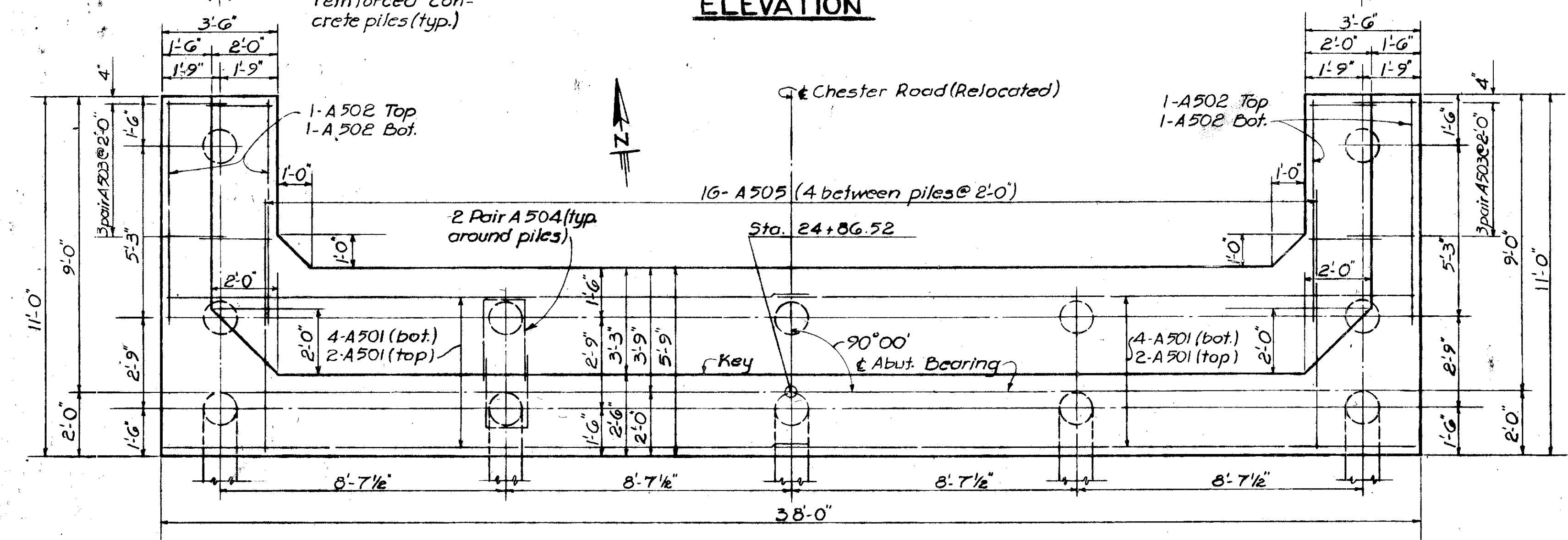
ELEVATION



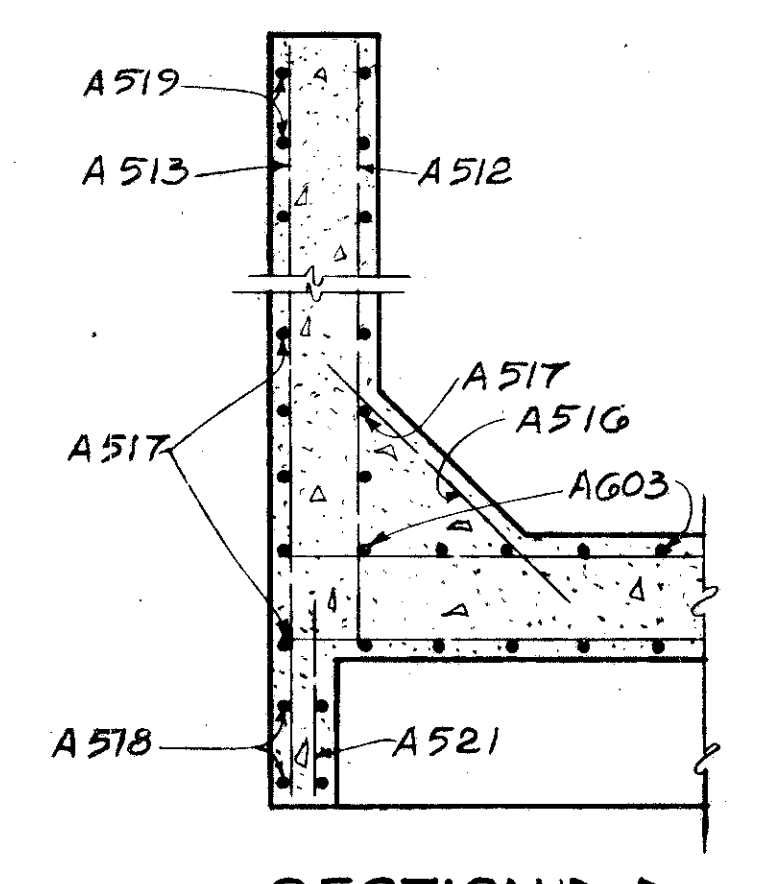
TYPICAL WINGWALL ELEVATION  
(WINGWALLS 3 & 4)



SECTION F-F



FOOTING PLAN



SECTION D-D

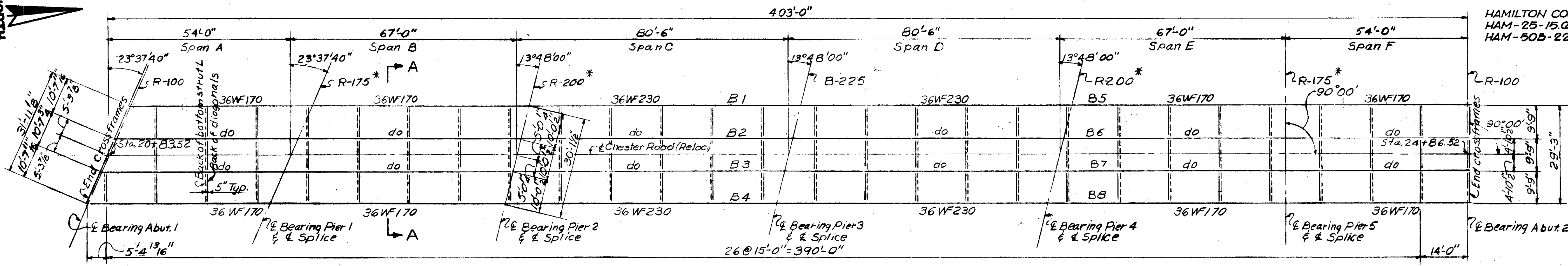
NOTES

- Parapet concrete & A509 bars to be included with Item 5-14 for payment.
- For additional notes, see Sh. 278

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO	
<b>ABUTMENT 2</b>	
BRIDGE NO. HAM-50B-2244 PROPOSED U.S. 50B BY-PASS UNDER CHESTER ROAD RELOCATED	
HAMILTON COUNTY	STA. 20+81.06 TO STA. 24+88.77
DESIGNED RJS	TRACED CB5
CHECKED CB5	DLV
REVIEWED DATE J.A.D. Oct. 56	REVISED 4-14-59

U.S. 50B

HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-50B-22.02



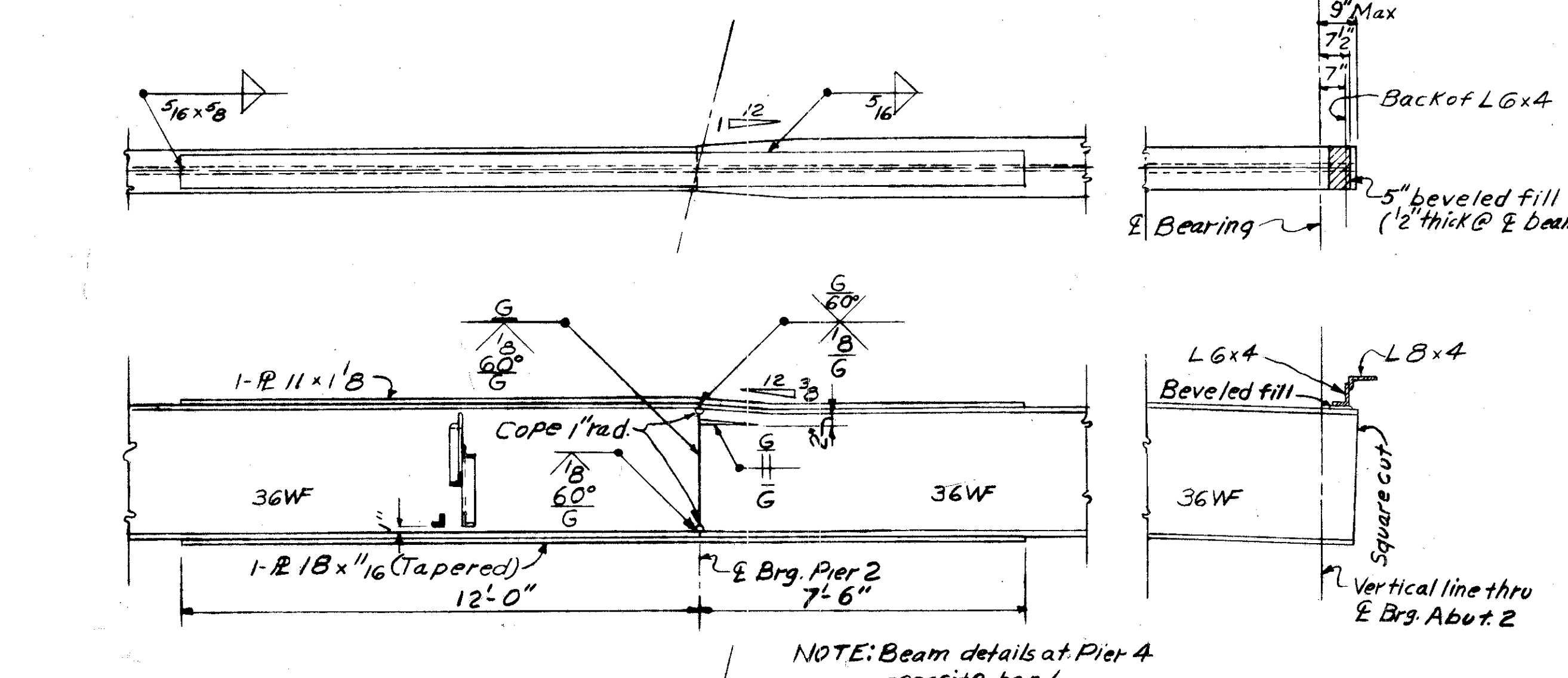
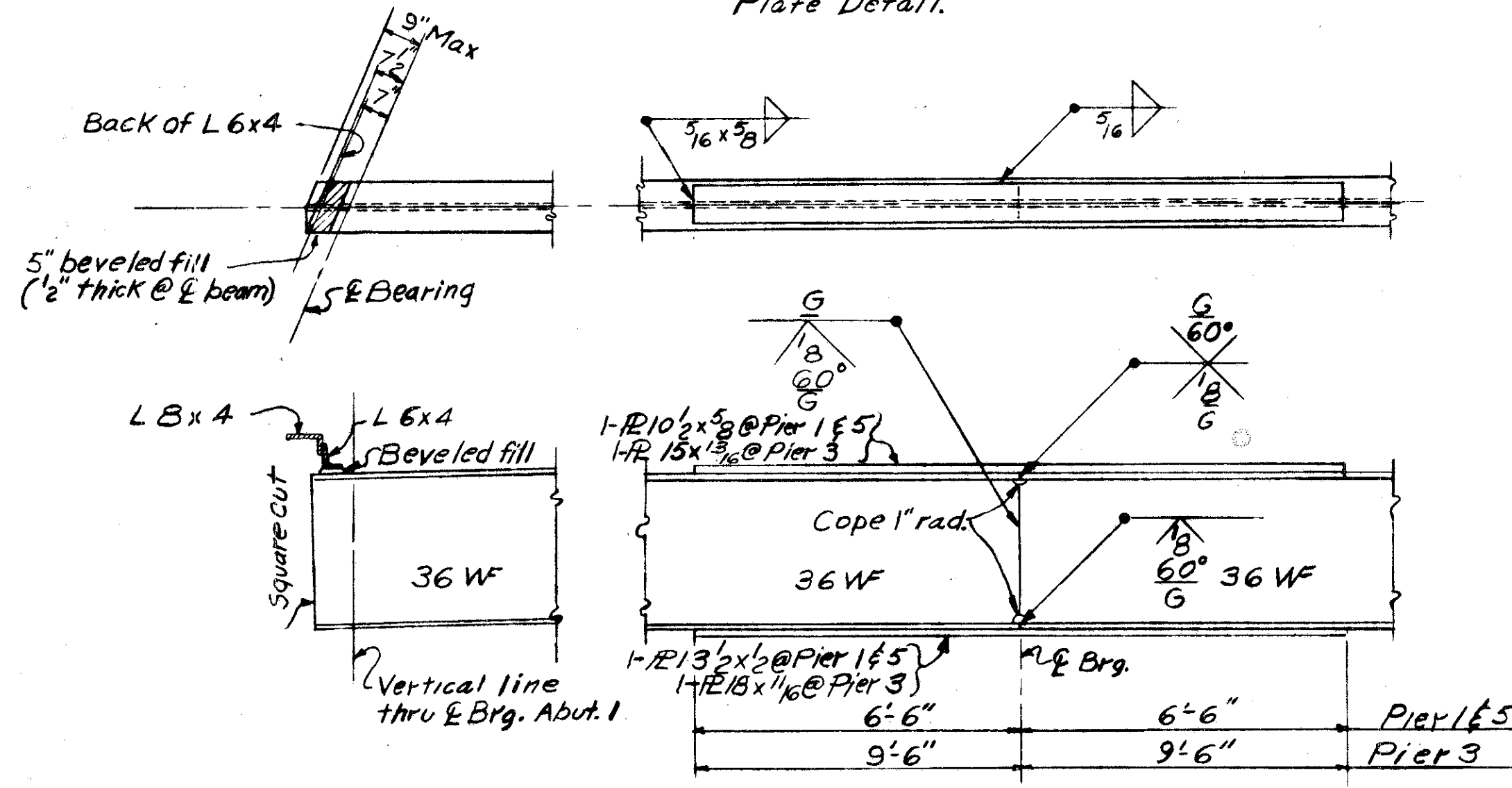
\* Special base plate required  
See Sheet No. 229 for Base  
Plate Detail.

**FRAMING PLAN**

BEAM	SPAN B	SPAN E
B1	64'-2 5/16"	63'-4 7/8"
B2	66'-0 3/4"	65'-9 5/8"
B3	67'-11 1/4"	68'-2 3/8"
B4	69'-9 1/16"	70'-7 7/8"

**BEAM SPLICE WELDING PROCEDURE**

1. Raise the ends of the beams 3/4" at Pier No. 2.
2. Butt weld the beam flanges and web of Pier No. 3, using following sequence: make one pass on each flange, then one on the web; repeat until welds are completed.
3. Weld the bottom and top moment plates at Pier No. 3.
4. Lower the ends of the beams at Pier No. 2.
5. Raise the ends of the beams 1/2" at Pier No. 1 and 1/2" at Pier No. 5.
6. Make the splice at Piers No. 2 and 4 in the same manner as steps 2 and 3.
7. Lower the ends of the beams at Piers No. 1 and 5.
8. Raise the ends of the beams 3/4" at Abutment No. 1 and 3/4" at Abutment No. 2.
9. Make the splice at Piers No. 1 and 5 in the same manner as steps 2 and 3.
10. Lower the ends of the beams to final position.



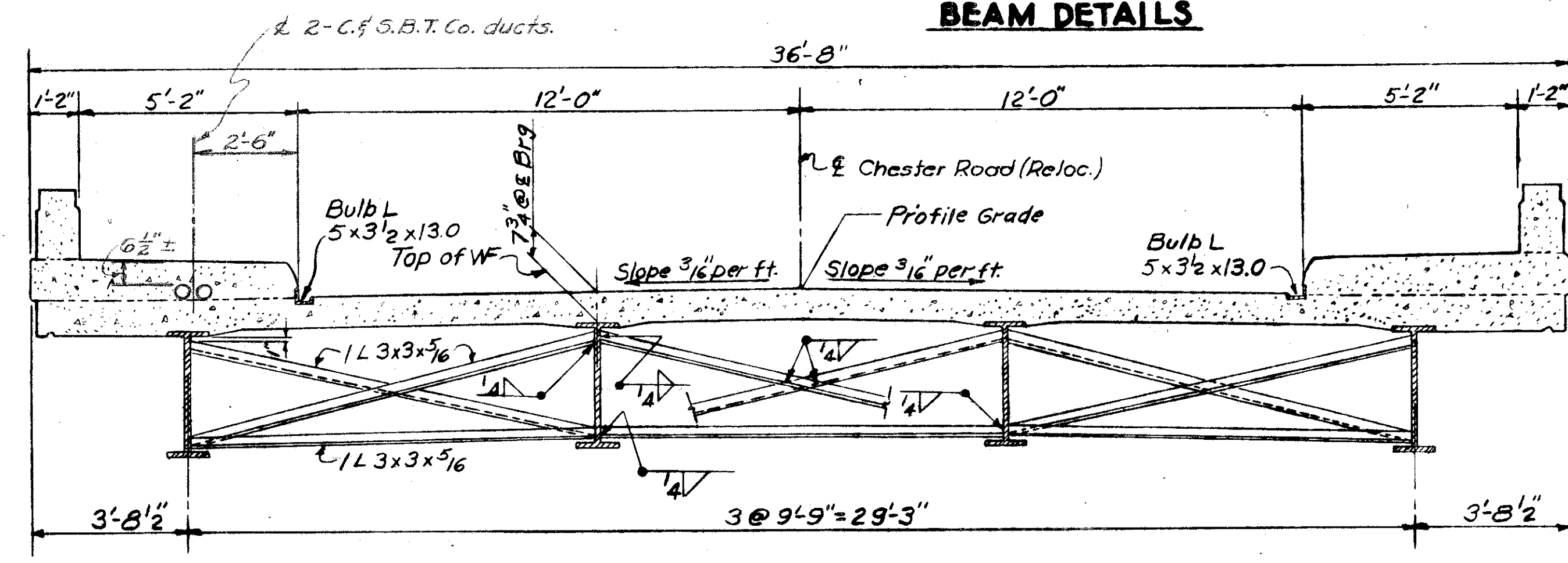
NOTE: Beam details at Pier 4  
opposite hand

**BEAM DETAILS**

**NOTES**

1. For end cross frame details, see Std. Dwg. CSB-2-56, Sh. 2 of 6.
2. Standard end dam to be used at both abutments. For details, see Std. Dwg. CSB-2-56, Sh. 2 & 3 of 6.
3. For scupper details, see Std. Dwg. CSB-2-56, Sh. 3 of 6.
4. For location of scuppers see Sh. 273.
5. For rocker & bolster details, see Std. Dwg. RB-1-55 & Sh. 299.
6. For additional notes see Sh. 274.
7. For Sidewalk End Dam see Sheet 299.

LOCATION	B1 & B4			B2 & B3		
	SPAN A	SPAN B	SPAN C	SPAN A	SPAN B	SPAN C
Deflection due to weight of steel	1/16"	0"	1/8"	1/16"	0"	1/8"
Deflection due to remaining dead load	3/8"	3/8"	13/16"	3/8"	1/2"	3/4"
Camber required for vertical curve	1/4"	7/16"	5/8"	1/4"	7/16"	5/8"
Sum of deflection and camber	11/16"	13/16"	1 9/16"	11/16"	11/16"	1 1/2"
Required shap camber	0"	1"	1 1/2"	0"	1"	1 1/2"



**SECTION A-A**

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

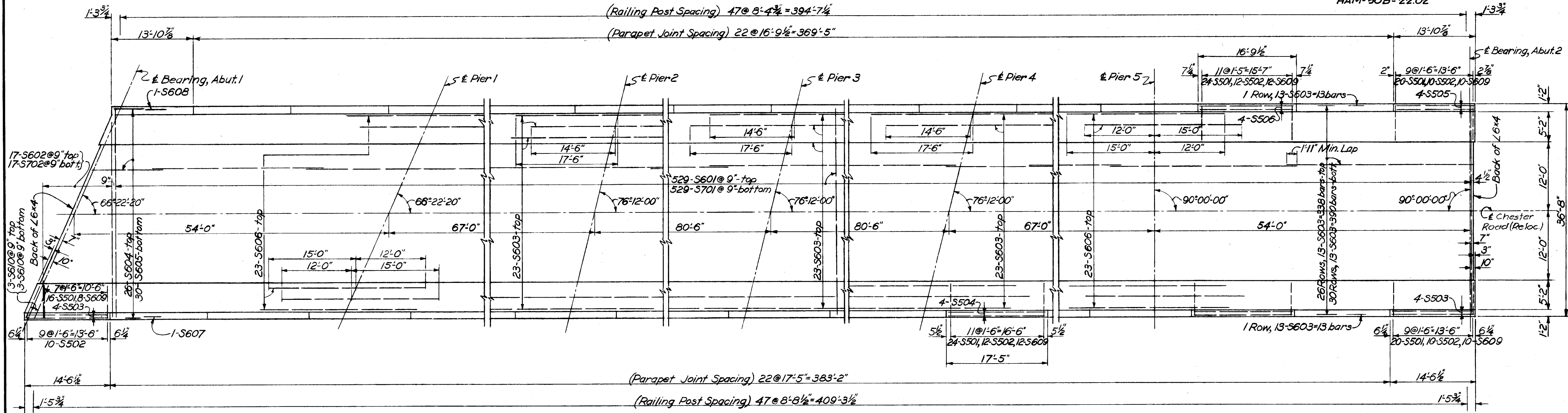
**STEEL FRAMING PLAN & DETAILS**

BRIDGE NO. HAM-50B-2244  
PROPOSED US 50 BY-PASS UNDER  
CHESTER ROAD RELOCATED  
HAMILTON COUNTY STA. 20+81.06 TO  
STA. 24+88.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
YJS	DJF	AJM	PJK	J.A.D.	Oct. 58	4-14-59



HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

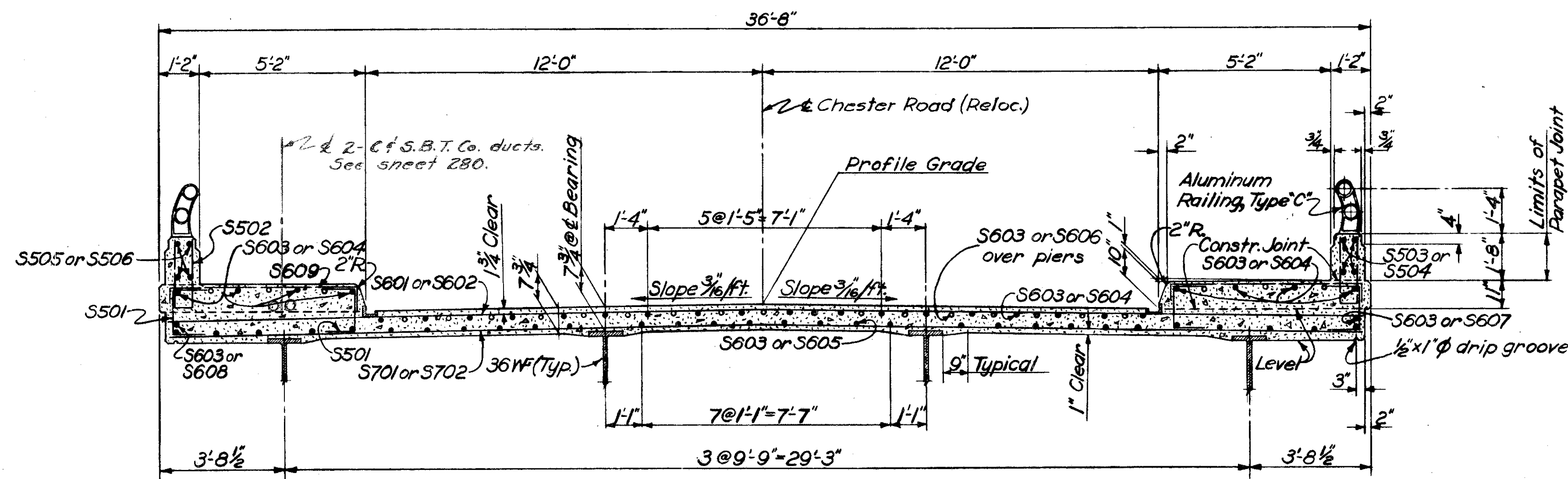


**ROADWAY SLAB REINFORCING**

**NOTES**

- 1. For location of scuppers, see Sheet No. 273
- 2. Spread reinforcing steel in slab to clear scuppers as necessary.
- 3. For pavement elevations, see Sheet No. 273
- 4. For railing details and additional parapet joint details, see Std. Dwg. AR-1-57.
- 5. For reinforcing steel list, see Sheet No. 282
- 6. Parapet concrete, S503, S504, S505, and S506 bars to be included with item S-14 for payment.
- 7. Bulb angle gutter and supports are not designed for superimposed loads prior to curing of slab concrete.

Slab thickness includes 3/4" for monolithic wearing surface



**TYPICAL TRANSVERSE SECTION THRU ROADWAY**

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ROADWAY SLAB**

BRIDGE NO. HAM-50B-22.44  
PROPOSED U.S. 50 BY-PASS UNDER  
CHESTER ROAD RELOCATED

HAMILTON COUNTY STA. 20+81.06 TO  
STA. 24+88.77

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
RFC	RFC	HHS	DJF	J.A.D.	Oct 58	4-12-59



HAMILTON COUNTY  
HAM-25-15.00 &  
HAM-50B-22.02

ROADWAY SLAB				ABUTMENTS						PIERS									
		BRIDGE NO. HAM-50B-2244		BRIDGE NO.		BRIDGE NO. HAM-50B-2244		BRIDGE NO.				BRIDGE NO. HAM-50B-2244		BRIDGE NO.					
MARK	LENGTH	SHAPE	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT
S 501	3'-0"	Bt.	1132	3542	A 501	19'-8"	Str.	12	246						P 501	7'-9"	Bt.	164	1326
S 502	4'-11"	Bt.	568	2513	A 502	7'-0"	Str.	8	58						P 502	32'-6"	Str.	2	68
S 503*	14'-2"	Str.	8	---	A 503	7'-2"	Bt.	28	209						P 503	30'-8"	Str.	6	192
S 504*	17'-0"	Str.	88	---	A 504	6'-5"	Bt.	40	268						P 504	29'-10"	Str.	2	62
S 505*	13'-6"	Str.	8	---	A 505	9'-0"	Bt.	32	200										
S 506*	16'-5"	Str.	88	---	A 506	18'-8"	Str.	28	545										
					A 507	4'-2"	Bt.	52	226										
					A 508	5'-10"	Bt.	68	414										
					A 509*	12'-8"	Str.	8	---						P 801	10'-10"	Bt.	360	10413
S 601	36'-0"	Str.	529	28604	A 510*	14'-2"	Str.	24	---										
S 602	Varies from 6'-8" to 34'-0" incr. 1'-8 1/2"	Str.	1 series of 17	519	A 511	6'-4"	Bt.	50	330						P 1101	6'-4"	Bt.	160	5384
S 603	32'-0"	Str.	823	39557	A 512	14'-0"	Str.	8	117						P 1102	18'-6"	Str.	32	3145
S 604	Varies from 5'-10" to 20'-11 1/4" incr. 7 1/4"	Str.	1 series of 26	523	A 513	16'-2"	Str.	6	101						P 1103	19'-0"	Str.	96	9691
S 605	Varies from 5'-10" to 20'-11 1/4" incr. 6 1/4"	Str.	1 series of 30	603	A 514	6'-8"	Str.	2	14						P 1104	19'-6"	Str.	32	3315
S 606	27'-0"	Str.	46	1865	A 515	8'-8"	Str.	14	127						P 1105	32'-6"	Str.	5	863
S 607	20'-11"	Str.	1	31	A 516	4'-0"	Str.	12	50						P 1106	30'-8"	Str.	15	2444
S 608	5'-10"	Str.	1	9	A 517	5'-6"	Str.	22	126						P 1107	29'-10"	Str.	5	793
S 609	6'-8"	Bt.	566	5668	A 518	3'-6"	Str.	38	139						P 1108	10'-6"	Bt.	20	1116
S 610	6'-2"	Str.	6	56	A 519	3'-8"	Str.	64	245						P 1109	14'-4"	Bt.	6	457
					A 520	19'-4"	Bt.	4	81						P 1110	30'-4"	Bt.	6	967
					A 521	3'-7"	Str.	24	90						P 1111	39'-4"	Bt.	6	1254
S 701	36'-0"	Str.	529	38926	A 522	27'-0"	Str.	1	28						P 1112	38'-11"	Bt.	6	1241
S 702	Varies from 6'-8" to 34'-0" incr. 1'-8 1/2"	Str.	1 series of 17	707	A 523	6'-9"	Bt.	112	789						P 1113	36'-9"	Bt.	6	1172
					A 524	7'-6"	Str.	8	63						P 1114	35'-10"	Bt.	2	381
					A 525	21'-4"	Str.	12	267						P 1115	38'-0"	Bt.	2	404
					A 526	5'-7"	Bt.	74	431						P 1116	38'-6"	Bt.	2	409
					A 527	20'-4"	Str.	28	594										
					A 528	9'-0"	Str.	14	131										
					A 529	29'-4"	Str.	1	31										
					A 530	17'-6"	Str.	6	110										
					A 531	15'-8"	Str.	6	98										
					A 532	2'-9"	Str.	32	92										
					A 533	5'-3"	Str.	22	120										
					A 534	15'-6"	Str.	8	129										
					A 535	14'-6"	Str.	2	30										
					A 536	16'-0"	Str.	2	33										
					A 537	17'-0"	Str.	2	35										
					A 538	18'-6"	Bt.	2	39										
					A 539	22'-8"	Bt.	2	47										
					A 540	5'-0"	Str.	12	63										
					A 541	6'-11"	Str.	2	14										
					A 601	8'-3"	Bt.	51	632										
					A 602	5'-8"	Bt.	51	434										
					A 603	16'-11"	Bt.	20	508										
					A 604	7'-11"	Bt.	52	618										

MARK	NO.	LENGTH	SHAPE
RE 4	1	5'-3"	Bt.
RE 5	1	5'-7"	Str.
RE 6	4	5'-11"	Str.
RE 7	2	6'-3"	Str.
RE 8	1	6'-6"	Str.
RE 9	---	6'-10"	Str.
RE 10	---	7'-3"	Str.
RE 11	2	7'-7"	Str.

If reinforcing bars are fabricated from stock which has previously been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. 5-4.02 need not be furnished and replacement bars will not be required.

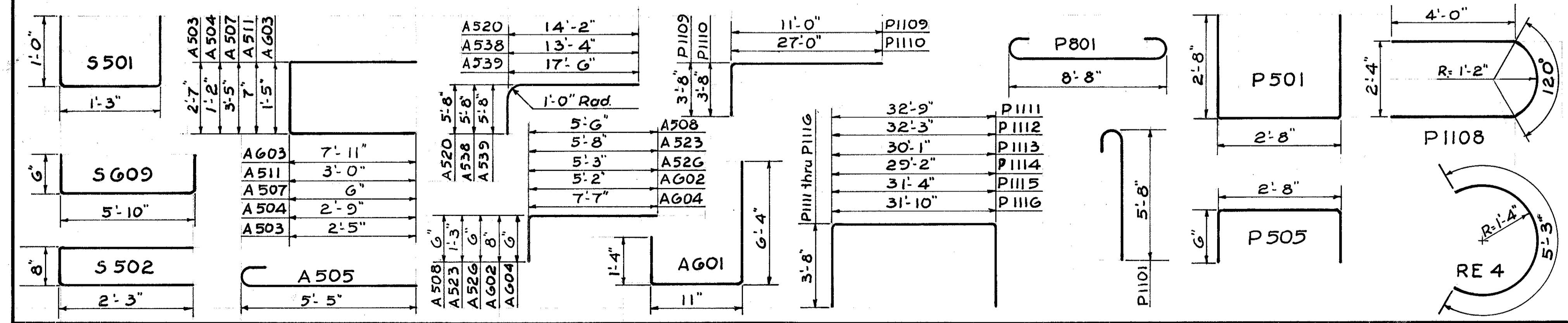
**SPIRAL REINFORCING BARS:** The "Length" shown in the steel list for the spiral bars is the distance from the top of the footing to the bottom of the pier cap.

The "No. of Turns" shown is the "Length" divided by the pitch, plus 3 turns (total number of closed coils), expressed as the nearest whole number. Spiral reinforcing bars shall not have deformations but shall in other respects conform to Item 5-4. 1/2 closed coils shall be provided at the ends of each spiral unit.

Four steel channel, tee or angle spacers, weighing approximately 0.68 lb. per lin. ft. of spacer, shall be provided for each spiral unit. They shall be equally spaced along the periphery of the coil. The number of pounds of these spacers, based on 0.68 lb. per lin. ft., will be paid for as reinforcing steel and is included in the tabulated quantity of spiral bars.

				CORE DIA % SPIRAL	PITCH	NO. TURNS	
SP 401	15'-0"	Bt.	3	846	32"	4 1/2"	43
SP 402	15'-6"	Bt.	9	2616	32"	4 1/2"	45
SP 403	16'-0"	Bt.	3	899	32"	4 1/2"	46

**BENDING DIAGRAMS**



**NOTE**

- Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.
- Bars marked with single asterisks to be included for payment under Item 5-14 Railing.
- All dimensions are out to out of bar.
- The "Length" of bent bars is measured along the center line.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**REINFORCING STEEL LIST**  
BRIDGE NO. HAM-50B-2244  
PROPOSED U.S. 50 BY-PA55 UNDER  
CHESTER ROAD RELOCATED  
HAMILTON COUNTY STA. 20+81.06 TO  
STA. 24+88.77

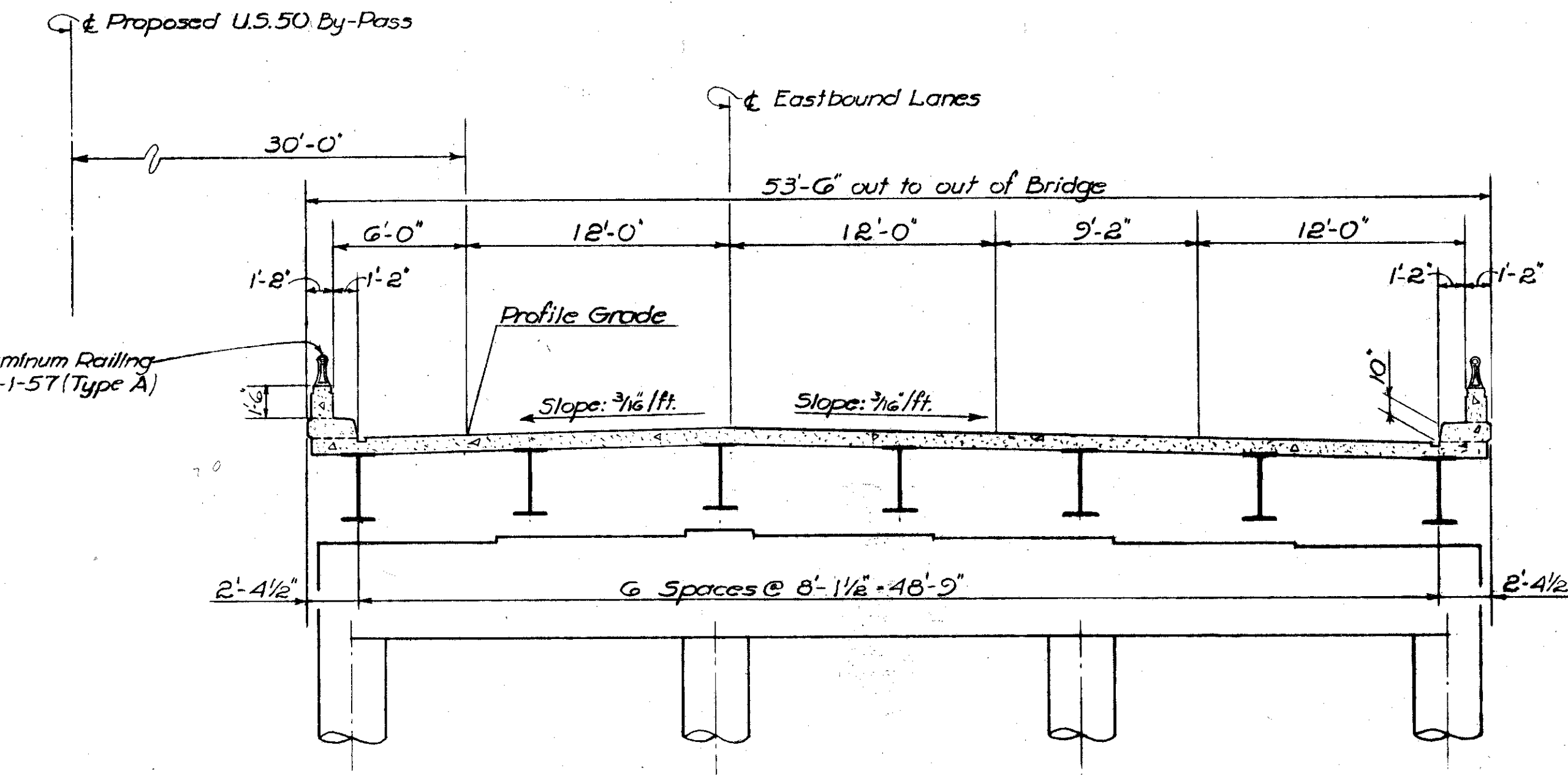
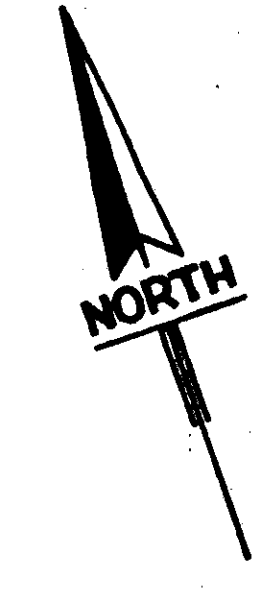
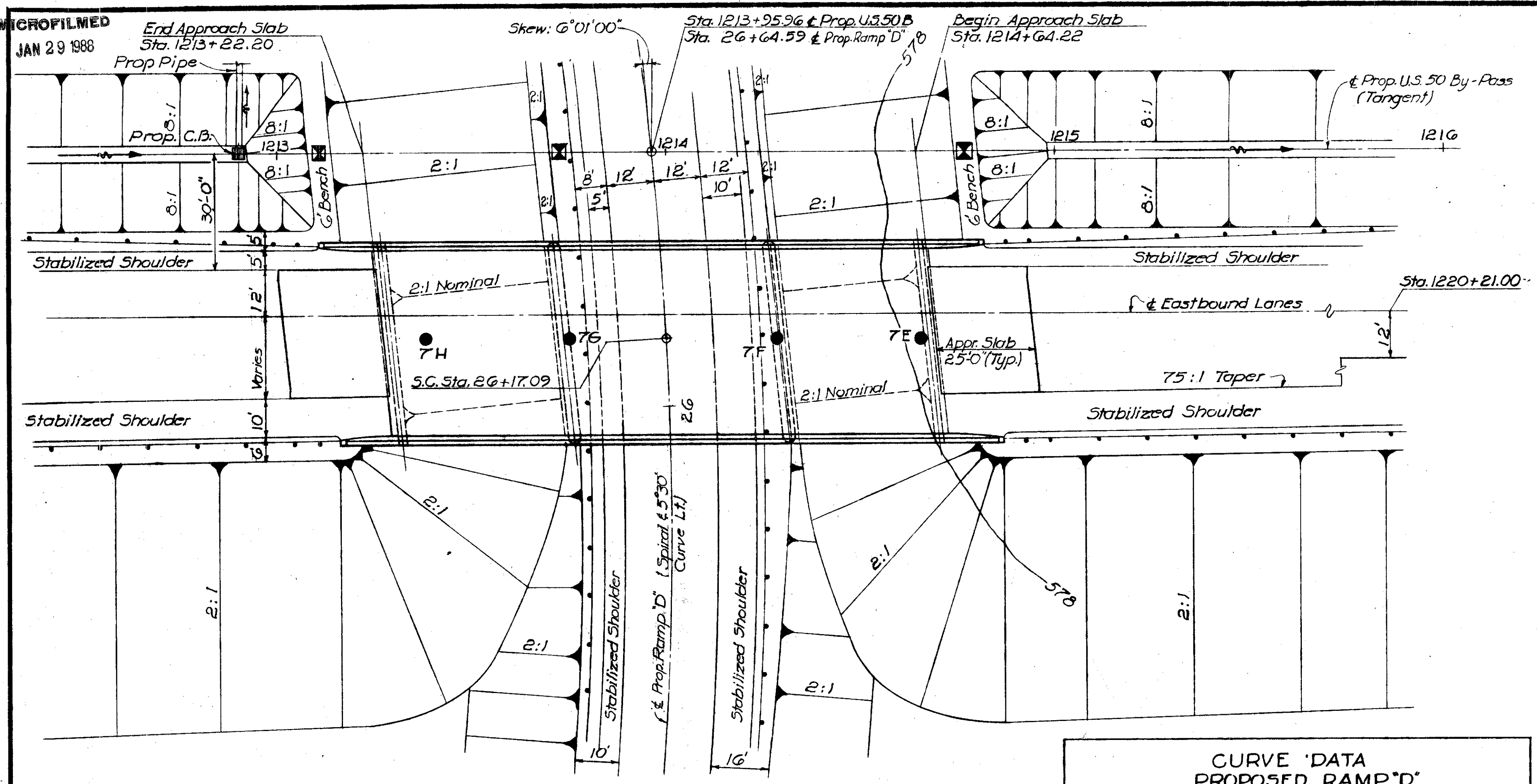
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---	CB5	---	RJ5	J.A.D.	Oct. 58	---

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JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT	
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HAM - 25-15.60 &  
HAM - 50B-22.02

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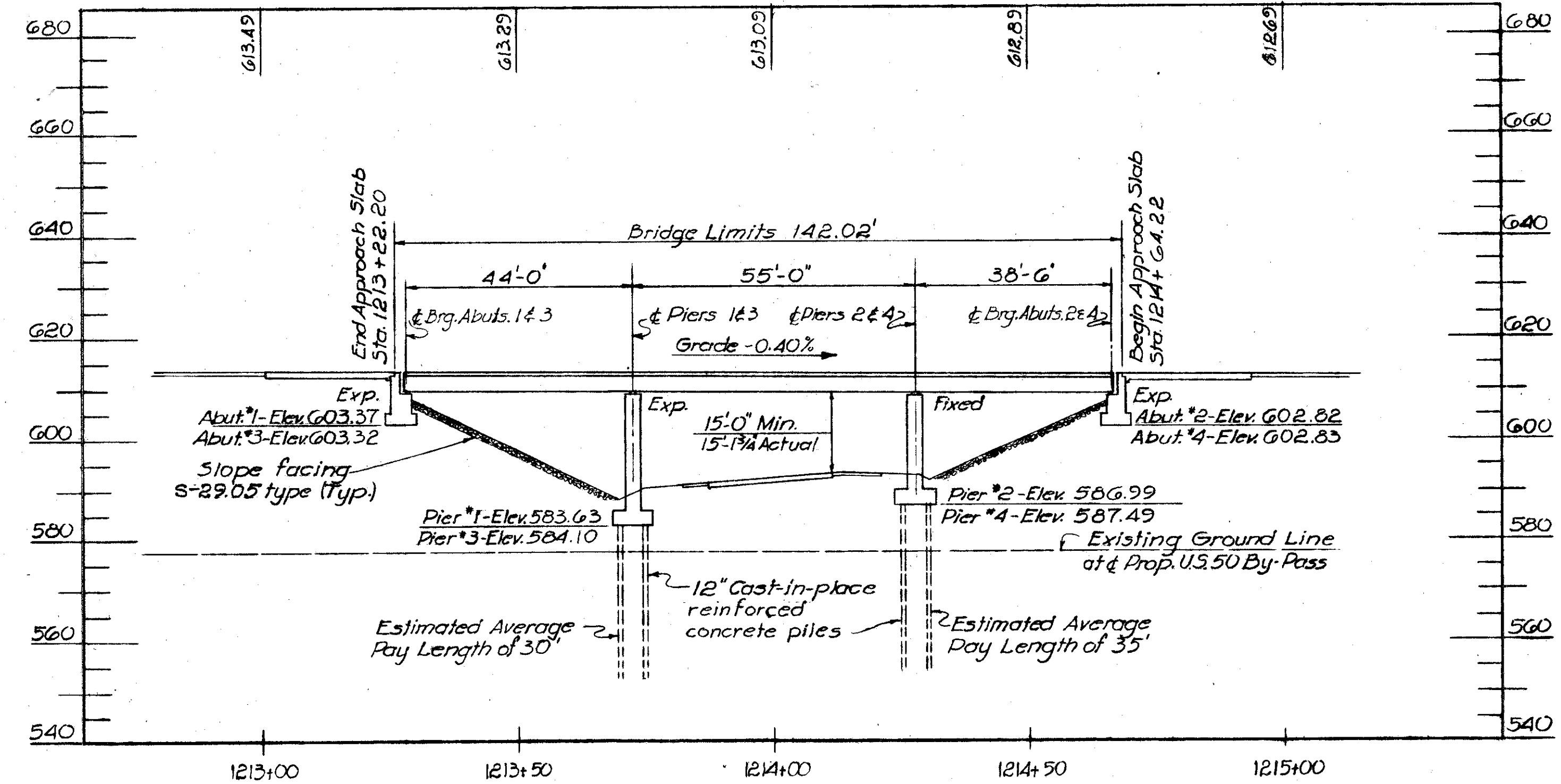


Bench Mark No. 15  
R.K. nail in northwest root of  
G Hackberry 150' right of  
Sta. 1211+60±, Elev. 581.641

PLAN

CURVE DATA PROPOSED RAMP "D"	
PI. STA. = 45+46.71	L = 1919.92'
D = 5° 30' 00"	L <sub>s</sub> = 400.00'
R = 1041.74'	Δ = 11° 00' 00"
Δ = 127° 35' 44"	T <sub>s</sub> = 2329.62'

SECTION THRU BRIDGE



PROFILE ON CENTERLINE OF PROPOSED US 50 BY-PASS

NOTES

- Symbol denotes drill hole.
- ⊠ Symbol denotes settlement hub.
- See Sheet No. 28T for test boring data.
- Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the Office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.
- See Sheet No. 28A for Site Plan, Bridge No. HAM - 50B - 2297L, and location of critical vertical clearance point.

PROPOSED STRUCTURE

TYPE : Continuous, rolled steel beam with reinforced concrete deck and substructure.

SPANS : 44'-0"; 55'-0"; 38'-6".

SKIEW : 6° 01' 00" R.F.

WEARING SURFACE: 1" Monolithic concrete.

ROADWAY : 51'-2" f.f. of parapets.

LOAD FREQUENCY: CF-2000 (57) adequate for AASHO alternate loading.

APPROACH SLABS: AS-1-54 (25' long).

ALIGNMENT: Tangent.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SITE PLAN**  
BRIDGE NO. HAM-50B-2297 R  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 1213+22.20 TO  
STA. 1214+64.22

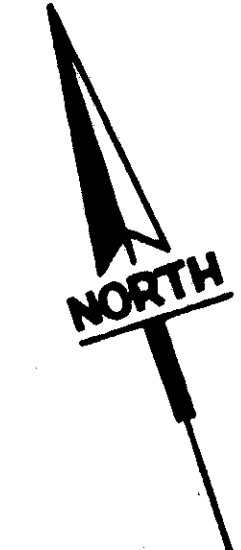
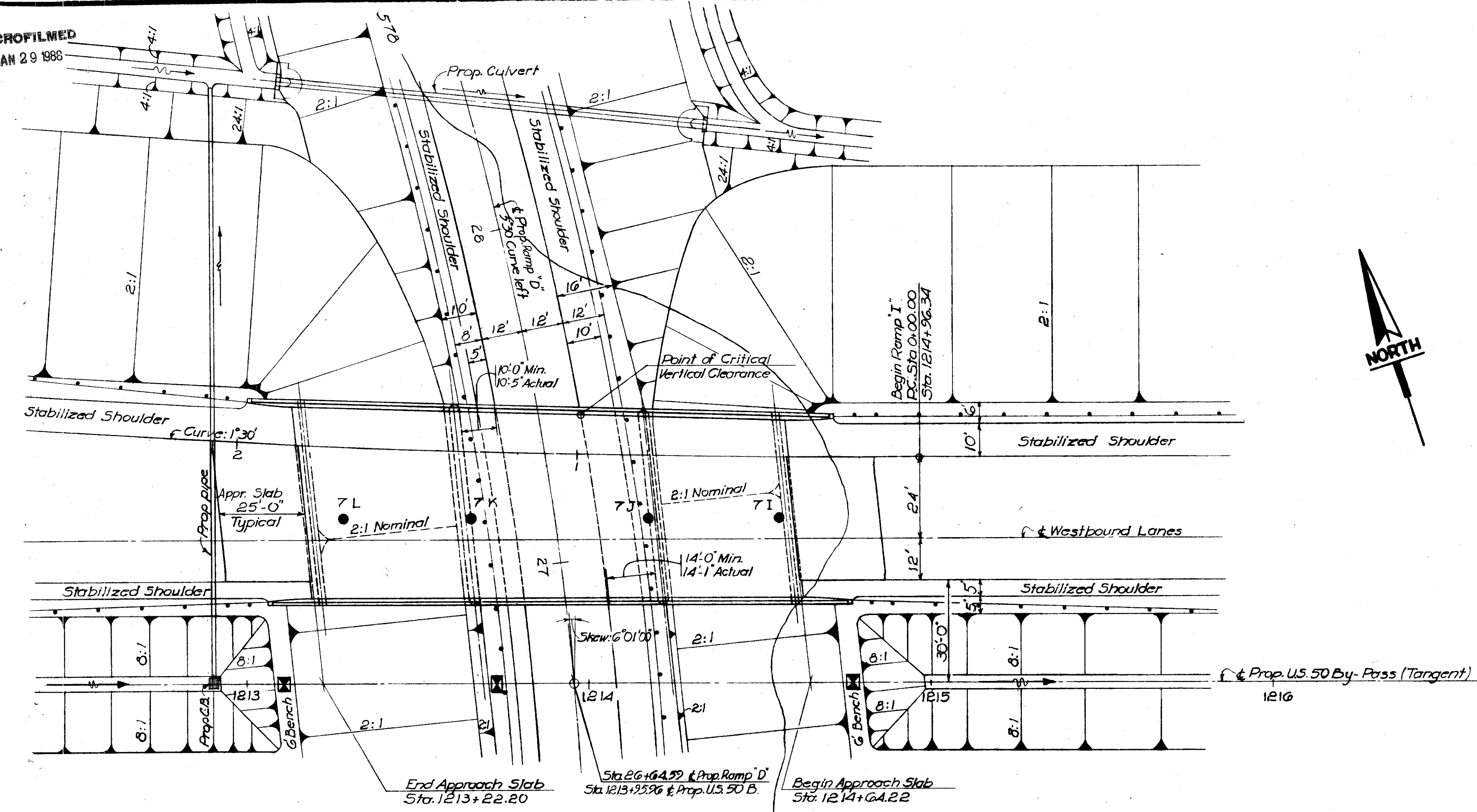
PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
AERIAL	CB5	SHM	CB5	RJS	

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JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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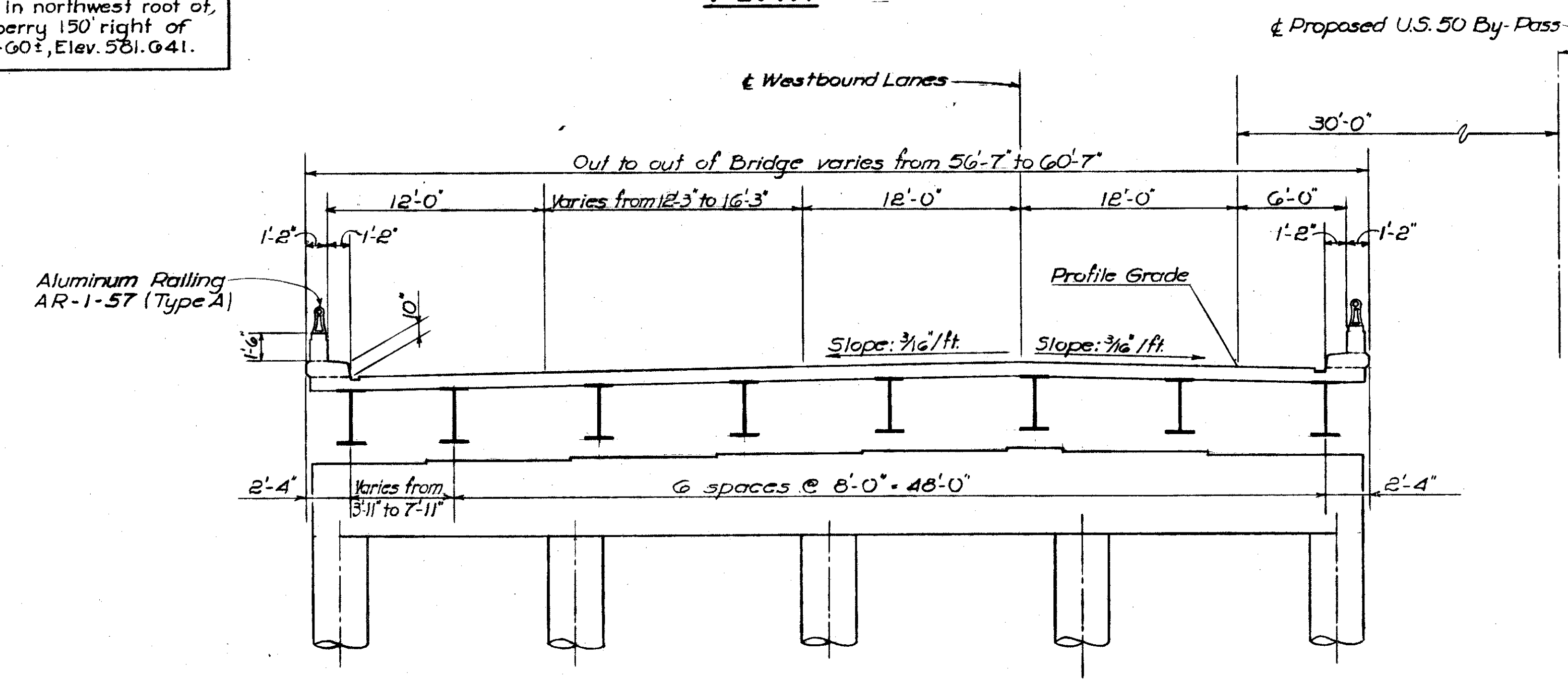
HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



CURVE DATA	
PROPOSED RAMP "D"	
P.I. STA. = 45+46.71	L = 1919.92'
D = 5° 30' 00"	L <sub>s</sub> = 400.00'
R = 1041.74'	Θ <sub>s</sub> = 11° 00' 00"
Δ = 127° 35' 44"	T <sub>s</sub> = 2329.62'
PROPOSED RAMP "I"	
P.I. STA. = 2+25.76	Δ = 6° 45' 00"
D = 1° 30' 00"	L = 450.00'
R = 3819.71'	T = 225.27'

Bench Mark No. 15  
P.K. nail in northwest root of  
G Hackberry 150' right of  
Sta. 1211+60±, Elev. 581.641.

**PLAN**



**SECTION THRU BRIDGE**

**NOTES**

- Symbol denotes drill hole.
- ⊠ Symbol denotes settlement hub.
- See Sheet No. 287 for test boring data.
- Foundation design and foundation quantities are based on a study of test borings and soil samplings made at the site. This sounding information may be inspected in the Office of the Bureau of Bridges in Columbus or in an abridged form in the Division Office, but the State assumes no responsibility for the accuracy thereof.
- See Sheet No. 283 for Site Plan, Bridge No. HAM-50B-2297 R, and Profile on Centerline of Proposed U.S. 50 B.

**PROPOSED STRUCTURE**

TYPE : Continuous rolled steel beam with reinforced concrete deck and substructure.

SPANS : 44'-0", 55'-0", 38'-6".

SKIEW : 6° 01' 00" R.F.

WEARING SURFACE: 1" Monolithic concrete.

ROADWAY: Varies from 54'-3" to 58'-3" w/ft. of parapets.

LOAD FREQUENCY: CF = 2000(57) - adequate for AA5HO alternate loading.

APPROACH SLABS: A.S.-1-54 (25' long).

ALIGNMENT: Tangent.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**SITE PLAN**  
BRIDGE NO. HAM-50B-2297 L  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 1213+22.20 TO  
STA. 1214+64.22

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVISIONS
Aerial	CBS	SHM	CBS	RJS	

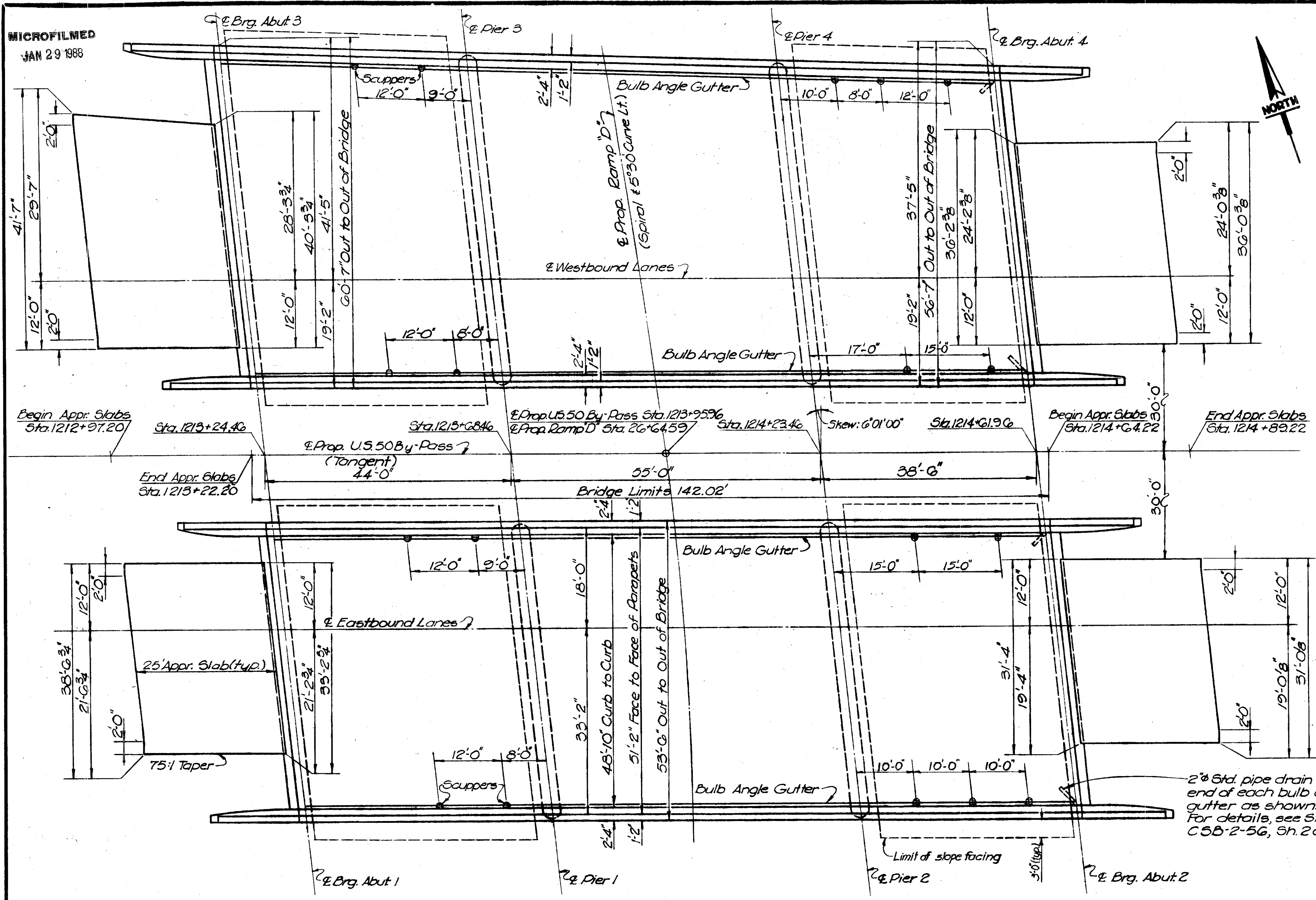
U.S. 50

MICROFILMED  
JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02

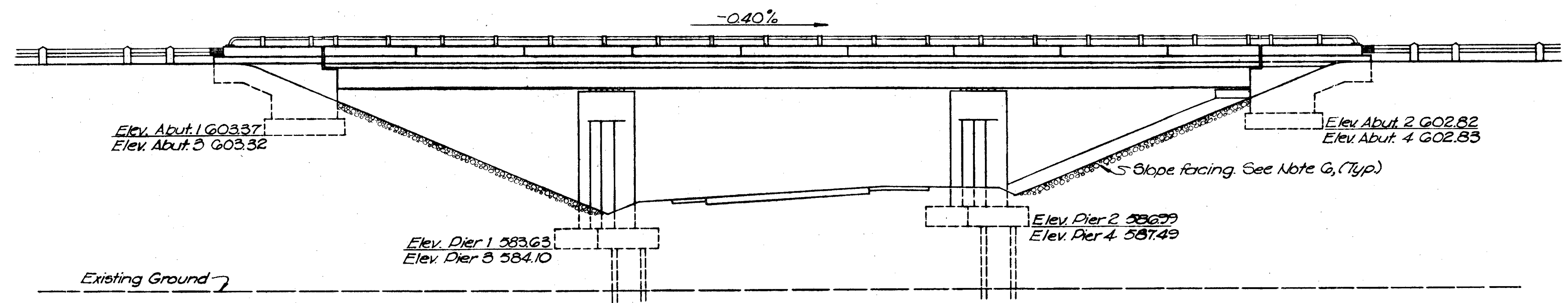


PAVEMENT ELEVATIONS							
STATIONS	PROFILE GRADE EDGE OF PVMT. 30'R/L OF € U.S. 50B	INSIDE CURB 25'-2" R/L OF € U.S. 50B	CROWN LINE 42'-0" R/L OF € U.S. 50B	EDGE OF PAVEMENT VARIES RIGHT OF € U.S. 50B	OUTSIDE CURB 74'-0" RIGHT OF € U.S. 50B	EDGE OF PAVEMENT VARIES LEFT OF € U.S. 50B	OUTSIDE CURB VARIES LEFT OF € U.S. 50B
1213 + 00	613.49	613.41	613.68	613.34	613.18	613.22	613.06
1213 + 25	613.39	613.31	613.58	613.24	613.08	613.14	612.97
1213 + 50	613.29	613.21	613.48	—	612.98	—	612.88
1213 + 75	613.19	613.11	613.38	—	612.88	—	612.79
1214 + 00	613.09	612.01	613.28	—	612.78	—	612.70
1214 + 25	612.99	612.91	613.18	—	612.68	—	612.61
1214 + 50	612.89	612.81	613.08	—	612.58	—	612.52
1214 + 75	612.79	612.71	612.98	612.68	612.48	612.60	612.43
1215 + 00	612.69	612.61	612.88	612.58	612.38	612.50	612.34

**NOTES**

- Scupper spacing shall be measured along curb side of bulb angle gutter.
- All abutment and pier centerlines are parallel.
- For scupper details, see Std. Dwg. C 5B-2-5G, Sh. 3 of G.
- For approach slab details, see Std. Dwg. A 5-1-54.
- For General Notes & Estimated Quantities, see Sh. 28G.
- Slope facing (S29.05 Type) shall be provided under the structure at all abutments. The facing shall be 12" thick and shall extend from the face of the abutment down to the bottom of the ditch and transversely to 3 feet outside the edge of the superstructure.

**PLAN**



**ELEVATION**

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**GENERAL PLAN & ELEVATION**  
BRIDGE NO. HAM - 50B-2297 R/L  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMP 'D'  
HAMILTON COUNTY STA. 1213+22.20 TO  
STA. 1214+24.22

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
RFC	LFP	—	DLV	JAD	Oct. 58

MICROFILMED  
JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

280  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

### ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	BRIDGE NO. HAM-50B-2297 R				BRIDGE NO. HAM-50B-2297 L			
				ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL
E-2	Lump	Lump Sum	Cofferdams, cribs and sheeting				Lump				Lump
E-2	812	Cu. Yds.	Unclassified excavation	239	150			254	169		
S-1	464	Cu. Yds.	Class "C" concrete ~ Superstructure			222				242	
S-1	183	Cu. Yds.	Class "C" concrete ~ Piers above footings		90				93		
S-1	229	Cu. Yds.	Class "E" concrete ~ Abutments above footings	110				119			
S-1	217	Cu. Yds.	Class "E" concrete ~ Pier and abutment footings	56	48			60	53		
S-4	215990	Lbs.	Reinforcing steel	8330	27522	66554		8869	31917	72798	
S-7	370800	Lbs.	Structural steel			173800				197000	
S-8	370800	Lbs.	Field painting of structural steel			173800				197000	
S-14	659	Lin. Ft.	Railing (Aluminum railing & supports & concrete parapet)	51		278		51		279	
S-29	65	Cu. Yds.	Porous backfill	31				34			
S-29	380	Cu. Yds.	Slope facing (S 29.05 type)				185				195
S-16	Lump	Lump Sum	First test pile				Lump				
S-18	2600	Lin. Ft.	12"φ Cast-in-place reinforced concrete piles		1170				1430		

NOTE: Materials in approach slabs are not included in the above estimated quantities.

### GENERAL NOTES

**REFERENCE** shall be made to the following:

Standard Drawings: AR-1-57 revised 3-1-58,  
CSB-2-56, sheets 2 & 3 of 6, revised 3-1-58  
AS-1-54 revised 12-1-54

Supplemental Specifications: S-114 revised 8-1-57

**DESIGN SPECIFICATIONS:** This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with revisions thereof dated 2-21-58.

**FOUNDATION BEARING PRESSURE:** Abutment footings are designed for a maximum bearing pressure of 1.4 tons per square foot.

**EXCAVATION QUANTITY** includes removal of fill material required for construction of abutments and piers.

**PILES** shall be driven to a minimum bearing capacity of 40 tons per pile for the piers.

**WELDING** of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop.

**CONCRETE DECK PLACING:** In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are normal to the centerline of bridge and are located near the center of any span.

**RAILING:** Aluminum rail and supports, concrete parapet, reinforcing bars wholly within the concrete parapet, guard rail anchorage and sponge rubber for parapet joints shall be included in item S-14 for payment.

**PROCEDURE:** The embankment shall be in place (to subgrade elevation and 200 feet beyond the bridge limits) for a minimum of thirty days before starting pier construction and ninety days before starting construction of the abutments. Three settlement hubs shall be placed on top of the embankments at the approximate locations shown on Sheets 283 & 284. Elevation readings shall be taken at intervals of one week in order to determine the rate of settlement of the embankment. The ninety day waiting period may be shortened if observation indicates settlement has ceased and approval of the Director is obtained. Construction of the substructure units will begin when directed by the Engineer.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**GENERAL NOTES AND ESTIMATED QUANTITIES**  
BRIDGE NO. HAM-50B-2297 R & L  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 1213+22.20 TO STA. 1214+64.22

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
~	J.H.K.	~	JCG	JAD	Oct. 58	

U.S. 50B

0' Ground Elevation 577.7	
575.7	27' 2" Topsoil and dark brown sandy clay
W.L.	11'
	Mottled brown silty clay
	5'
568.7	9'
	15'
	38'
	44'
	44'
	70'
542.7	66' 35'

Boring completed

**BORING 7 E**

0' Ground Elevation 577.6	
575.6	21' 2" Topsoil, dark brown silty clay
W.L.	11'
	Mottled brown and gray silty clay
	11' 8"
569.6	4' 11" Gray sandy clay with organic matter
	566.6
	Gray sandy clay with fine gravel
	561.6
	20' 16"
	22'
	22'
	Gray fine to coarse sand and gravel
	74'
	33'
537.6	76' 40"

Boring completed

**BORING 7 F**

0' Ground Elevation 577.4	
576.4	7' 1" Topsoil and dark brown silty clay
W.L.	12'
	Brown and gray silty clay
	8'
569.4	3' 11" Brown and gray sandy clay
	566.4
	Gray clayey fine to medium sand with silt
	563.4
	11' 14"
	19'
	25'
	Gray fine to coarse sand and gravel
	95'
	179' 34"
543.4	179' 34"
	Gray sandy clay with fine to coarse gravel
	537.4
	66' 40"
	Gray fine to coarse sand
	532.4
	85' 45"
	Gray clayey fine to medium sand with fine to coarse gravel
	527.4
	115' 50"

Boring completed

**BORING 7 G**

0' Ground Elevation 577.9	
575.4	11' 2.5" Topsoil and brown silty clay
W.L.	8'
572.9	5' Brown silty clay
	2'
568.9	9' Brown and gray sandy clay
	4'
	Gray sandy silty clay with organic matter
	564.4
	13.5'
	31'
	Gray medium to coarse sand and gravel
	547.6
	23'
	Gray silty clay with fine gravel
	542.6
	35'
	48'
	Gray silty clay
	537.6
	40'
	22'
	Gray silty clay with sand seams and fine gravel
	544.4
	33.5'
542.9	74' 35" Gray sandy clay with fine gravel

Boring completed

**BORING 7 I**

0' Ground Elevation 577.6	
W.L.	7'
575.1	2.5" Topsoil and brown silty clay
	2'
572.6	5' Brown and gray silty clay
	7'
570.6	Brown and gray sandy silty clay
	2'
569.1	8.5' Brown clayey medium to coarse sand and fine gravel
	4'
	Gray clayey medium to coarse sand and fine gravel
	564.6
	23'
	19'
	Gray fine to coarse sand and gravel
	547.6
	30'
	43'
	Gray silty clay with fine gravel
	542.6
	35'
	48'
	Gray silty clay
	537.6
	40'
	22'
	Gray silt
	527.6
	22' 50"

Boring completed

**BORING 7 J**

0' Ground Elevation 577.7	
W.L.	5'
575.2	2.5" Topsoil and brown silty clay
	8'
	Brown and gray silty clay
	569.2
	8.5'
	4'
	Gray clayey fine to coarse sand and fine gravel
	563.7
	14'
	21'
	21'
	Brown medium to coarse sand and fine gravel
	545.7
	25' 32"
	49'
	Gray clayey silt
	542.7
	35'
	37'
	Gray silty clay with layers of medium to coarse sand and fine gravel
	539.2
	38.5'
	25' 40" Gray silt
	537.7

Boring completed

**BORING 7 K**

0' Ground Elevation 577.5	
576.5	6' 1" Topsoil and dark brown silty clay
W.L.	4'
	Mottled brown and gray silty clay
	4' 8"
569.5	4' 8"
	3' 11" Gray silty clay with medium sand seams and organic matter
	566.5
	22'
	Gray fine to coarse sand and gravel
	33'
	35'
	27'
550.5	27'
	Gray clayey silt with fine to coarse sand and fine gravel
	546.0
	56' 31.5"
	Gray fine to coarse sand and gravel
	542.5
	42' 35"

Boring completed

**BORING 7 H**

0' Ground Elevation 577.7	
W.L.	6'
575.2	2.5" Topsoil and brown silty clay
	8'
	Mottled brown and gray silty clay
	571.7
	6'
	Mottled brown and gray silty clay with organic matter
	566.7
	11'
	5'
	Gray clayey fine to coarse sand and fine gravel
	562.7
	15'
	32'
	Gray fine to coarse sand and fine gravel
	557.7
	20'
	23'
	Gray medium to coarse sand and fine gravel
	544.2
	21'
	20'
	33.5'
	Gray medium to coarse sand with layers of gray silty clay
	542.7
	17' 35"

Boring completed

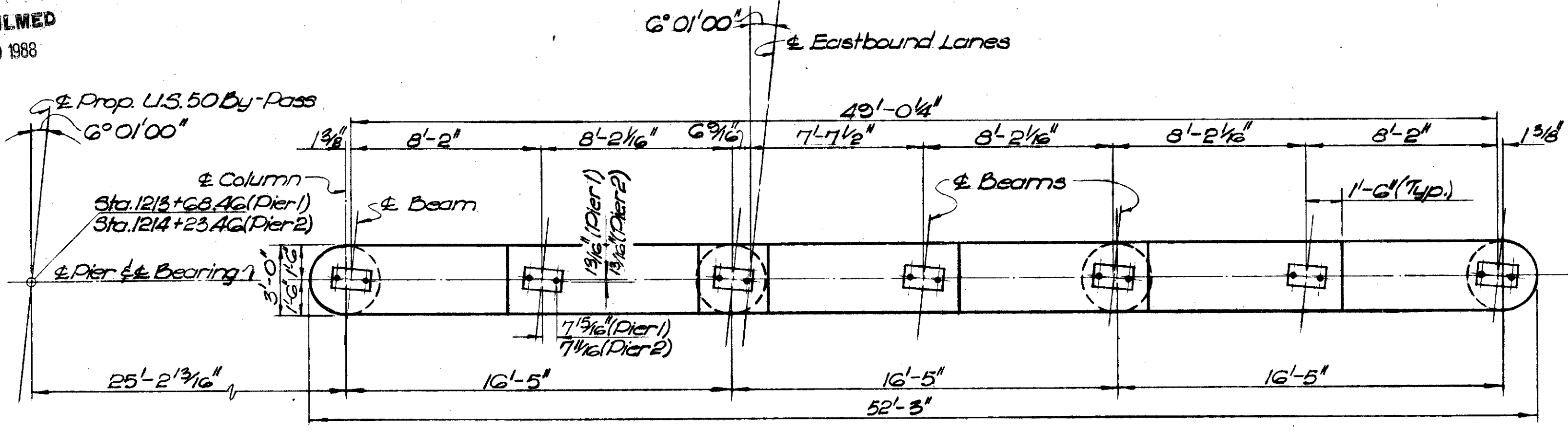
**BORING 7 L**

**NOTES**  
W.L. = Water Level in bore holes 24 hours after completion.  
Figures in right hand column indicate number of blows required to drive 2" O.D. sampling pipe one foot, using 140 lb. weight falling 30 inches.  
Borings taken during February 1958  
See 5h.283 & 284 for location of borings.

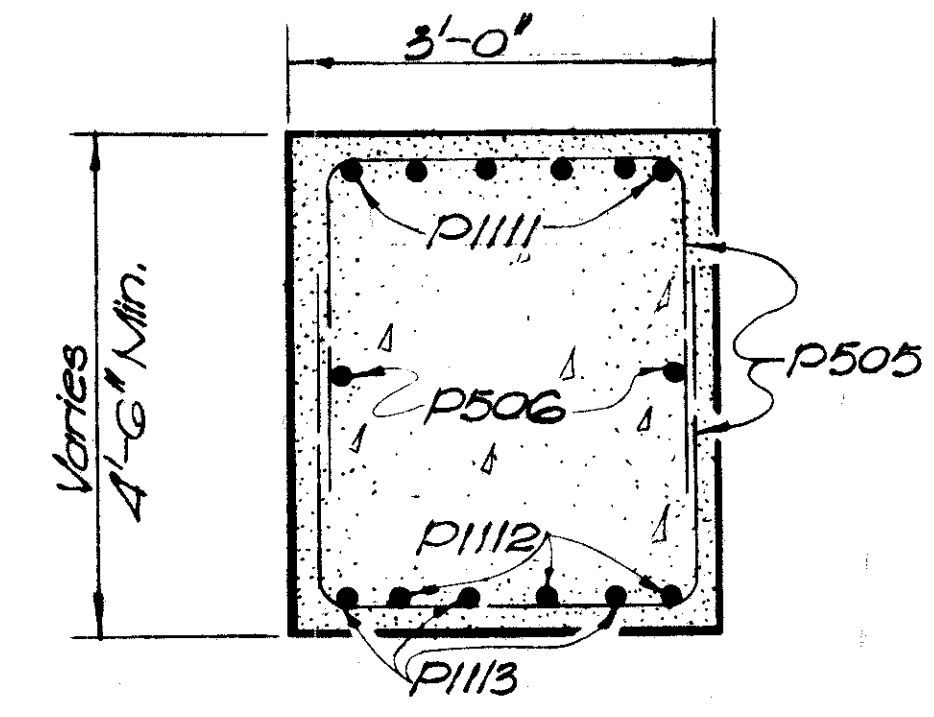
VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**BORINGS**  
BRIDGE NO. HAM-50B-2297 R&L  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMP "D"  
HAMILTON COUNTY STA. 1213+22.20 TO STA. 1214+64.22

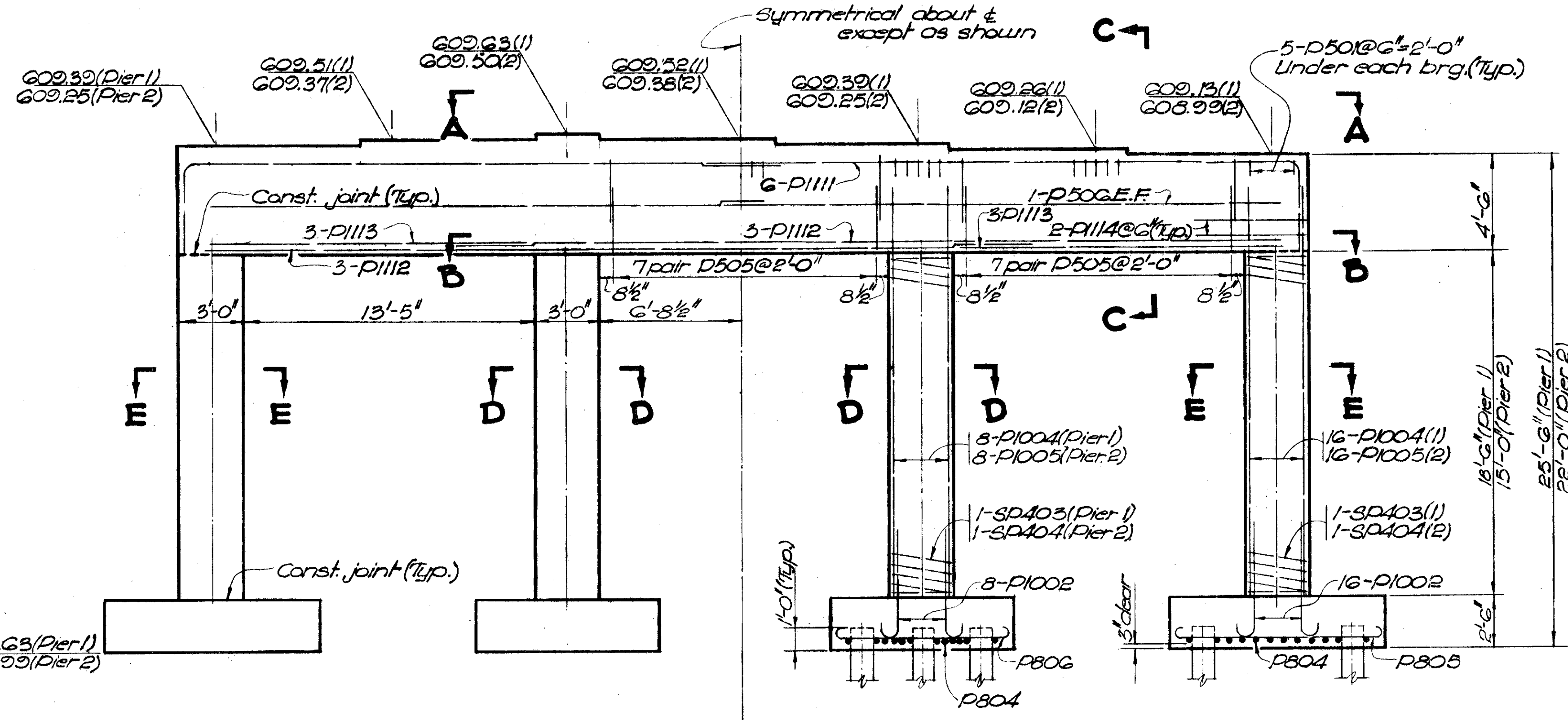
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CAW	CBS	CBS	RDW	JAD	Oct. 58	



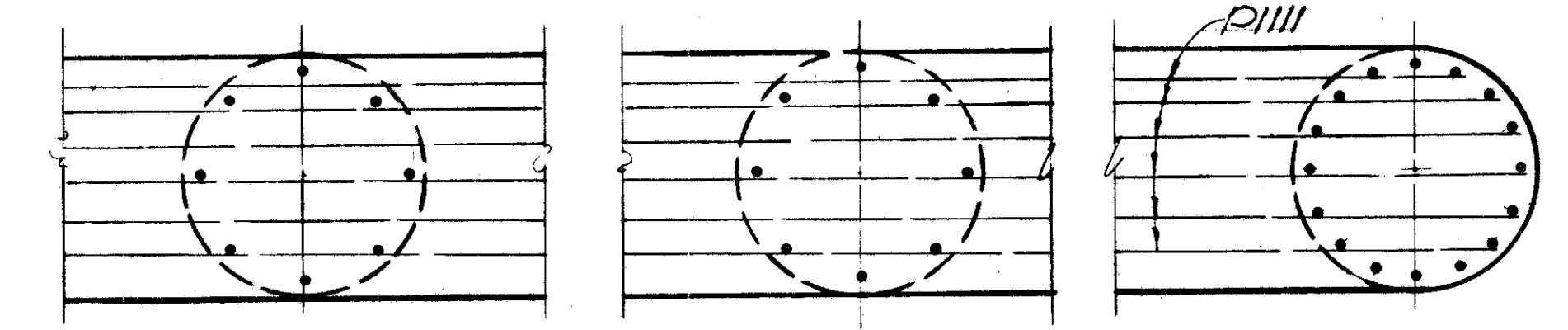
**PLAN**



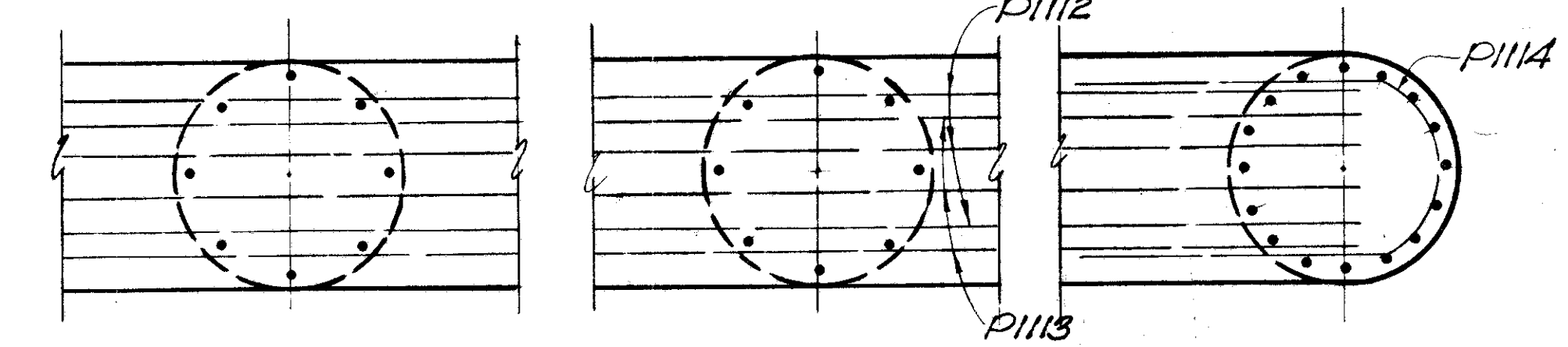
**SECTION C-C**



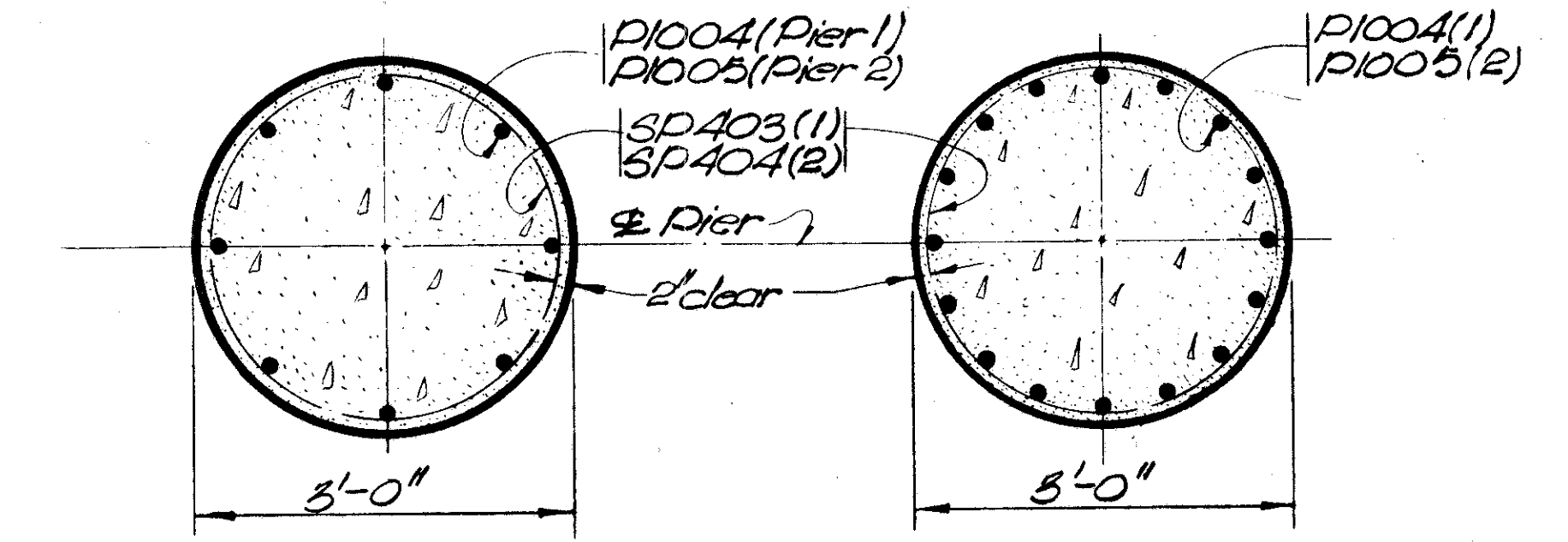
**ELEVATION**



**SECTION A-A**

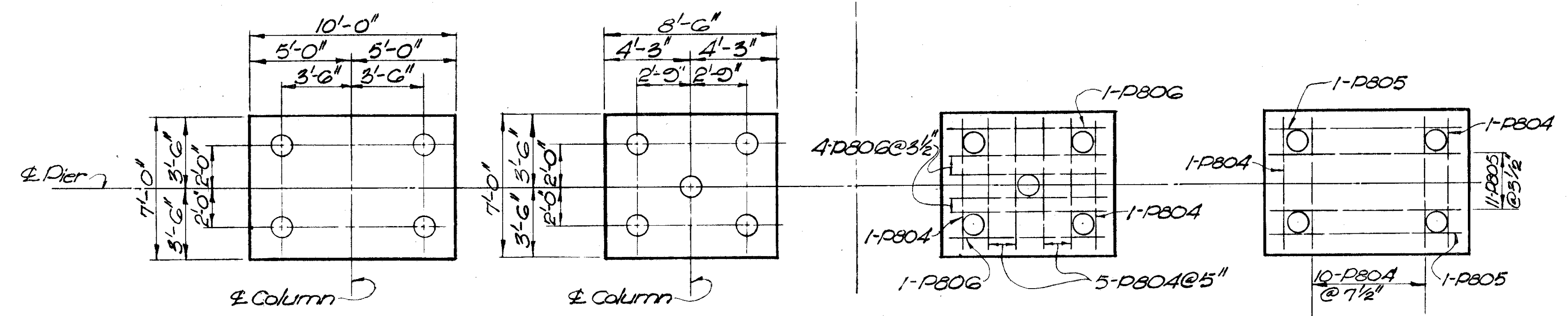


**SECTION B-B**



**SECTION D-D**

**SECTION E-E**



**FOOTING PLAN**

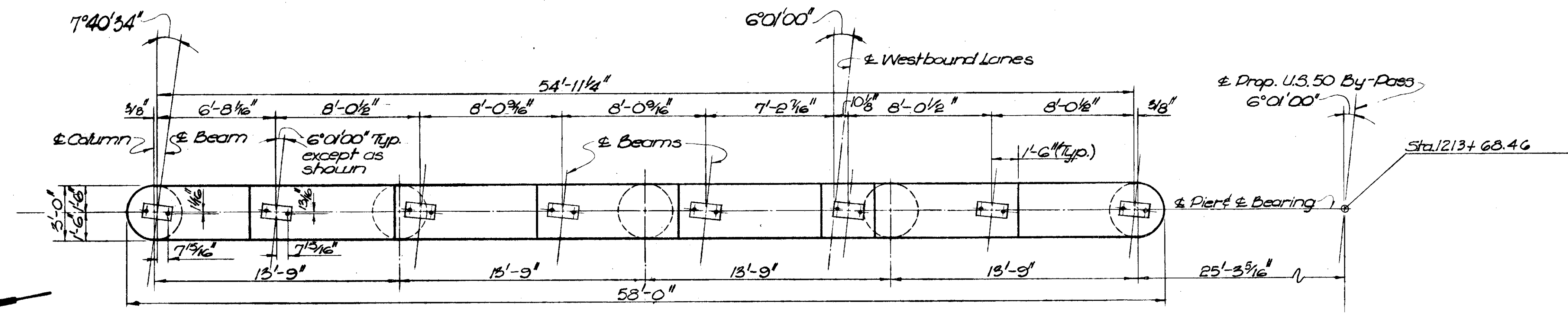
NOTE: All piles 12"  $\phi$  cast-in-place reinforced concrete.

**NOTES**

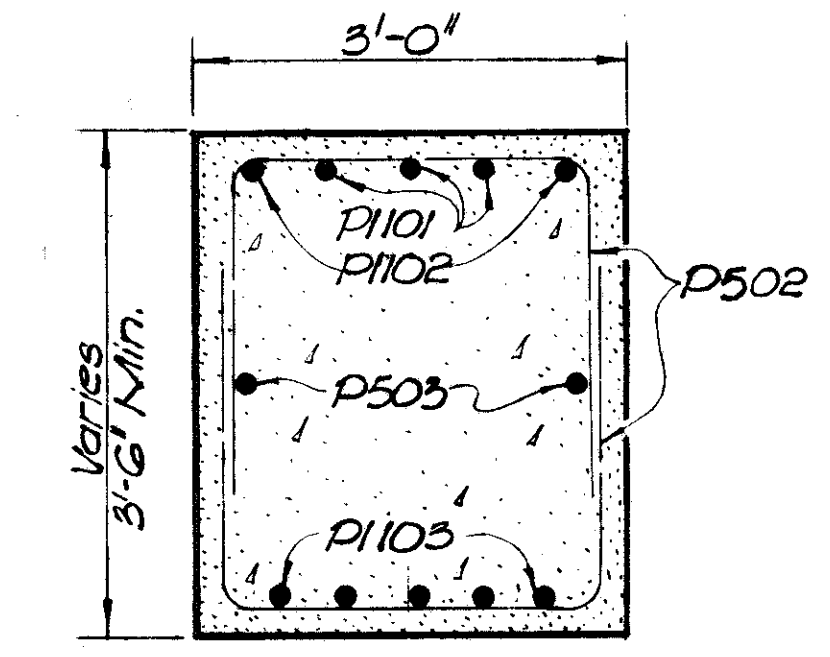
1. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bar holes.
2. Place dowels in footing to insure correct spacing of main vertical column steel.
3. For REINFORCING STEEL LIST, see Sheet No. 278.

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO					
<b>PIERS 1 &amp; 2</b>					
BRIDGE NO. HAM-50B-2207 R PROPOSED U.S. 50 BY-PASS OVER PROPOSED RAMP "D" HAMILTON COUNTY STA. 1215+22.20 TO STA. 1214+64.22					
DESIGNED J.D.B.	DRAWN J.R.R.	TRACED J.R.R.	CHECKED E.P.A.	REVIEWED JAD Oct 58	DATE OCT 58

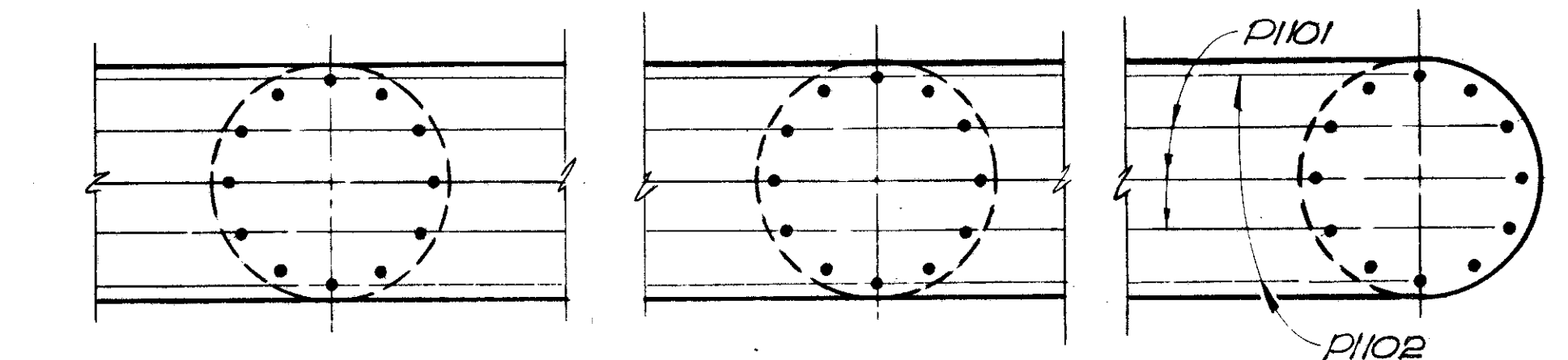
HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02



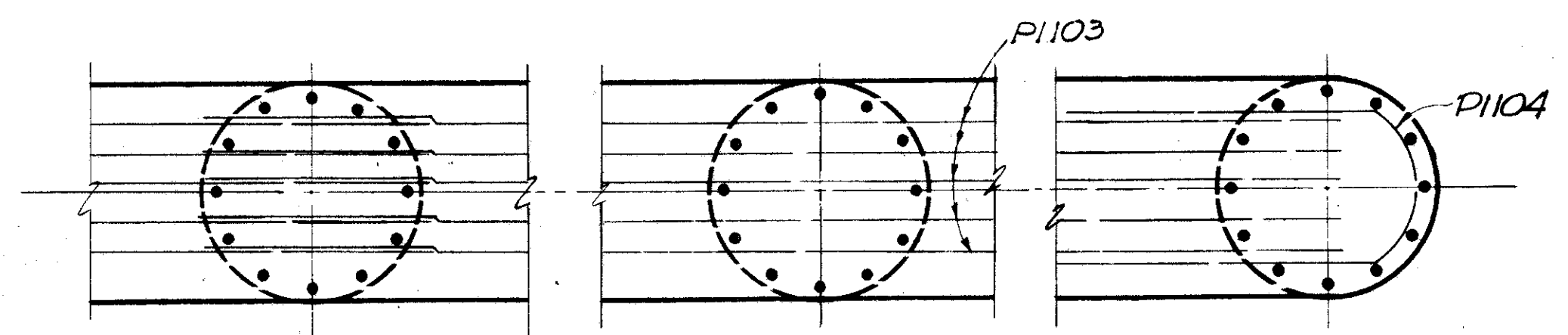
**PLAN**



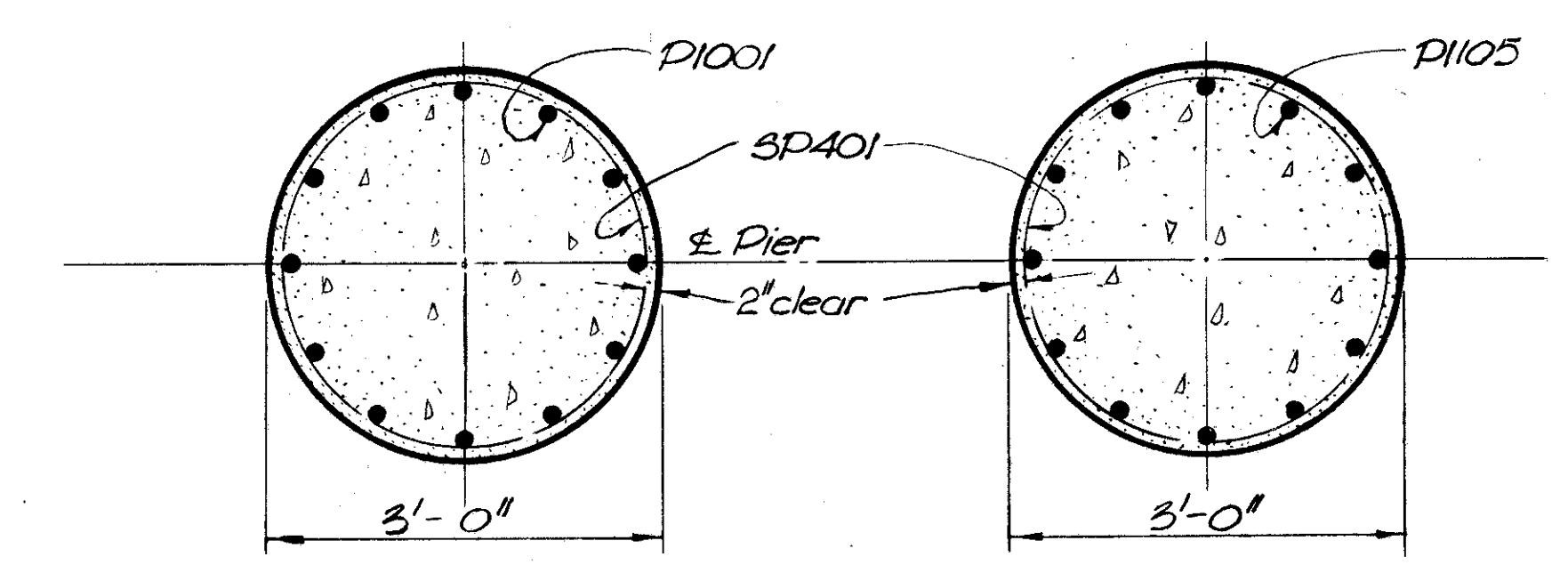
**SECTION C-C**



**SECTION A-A**



**SECTION B-B**

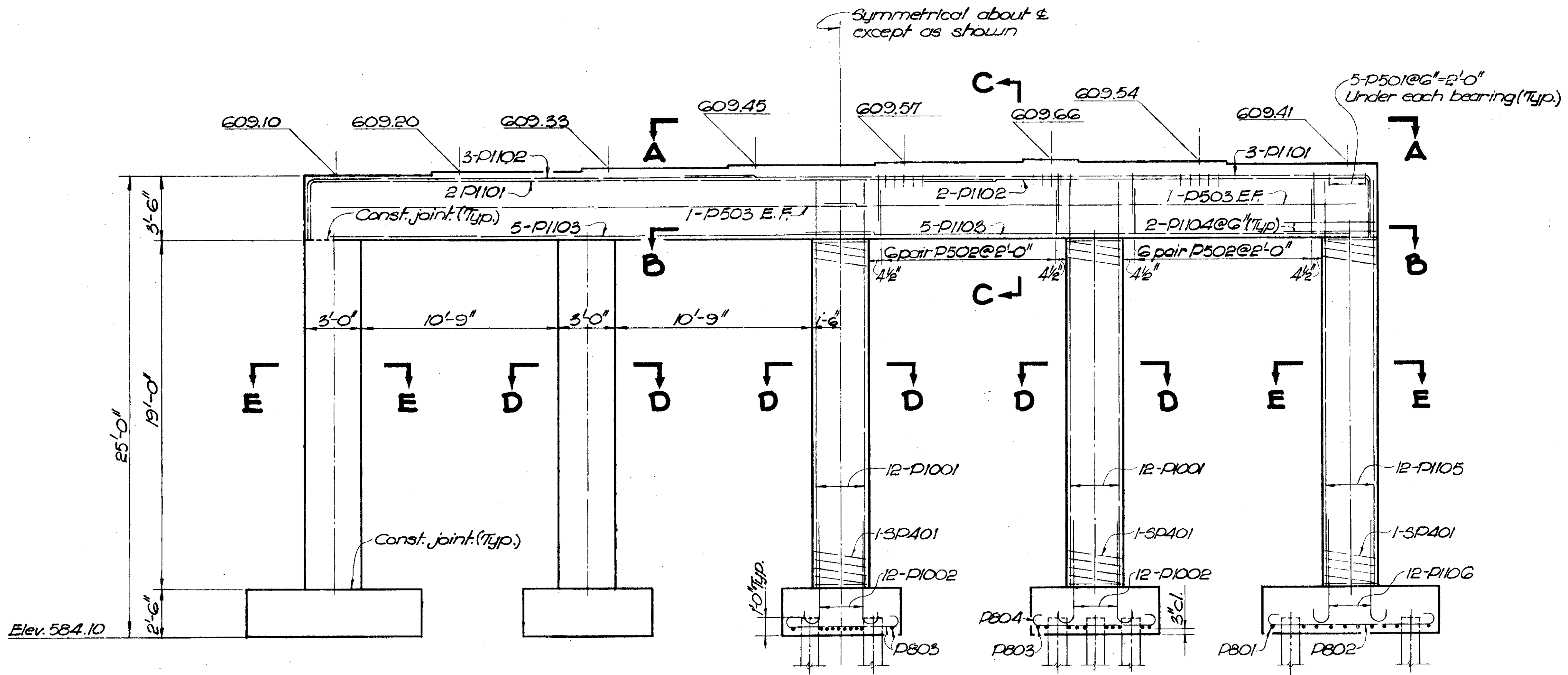


**SECTION D-D**

**SECTION E-E**

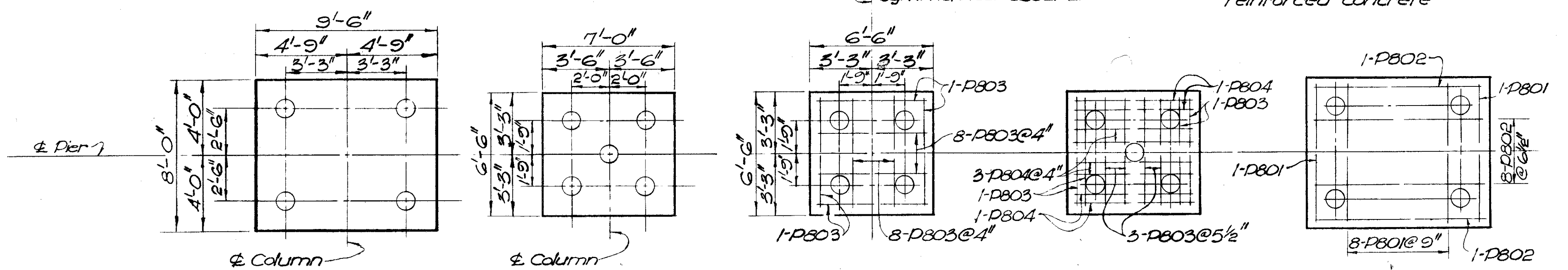
**NOTES**

1. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bar holes.
2. Place dowels in footing to insure correct spacing of main vertical column steel.
3. For REINFORCING STEEL LIST see Sheet No. 298.



**ELEVATION**

NOTE: All piles 12" φ cast-in-place reinforced concrete



**FOOTING PLAN**

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO					
<b>PIER 3</b>					
BRIDGE NO. HAM-50B-2297L PROPOSED U.S. 50 BY-PASS OVER PROPOSED RAMP "D" HAMILTON COUNTY STA. 1213+22.20 TO STA. 1214+64.22					
DESIGNED J.D.B.	DRAWN J.R.R.	TRACED J.R.R.	CHECKED E.P.A.	REVIEWED DATE JAD Oct. 58	REVISED



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JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

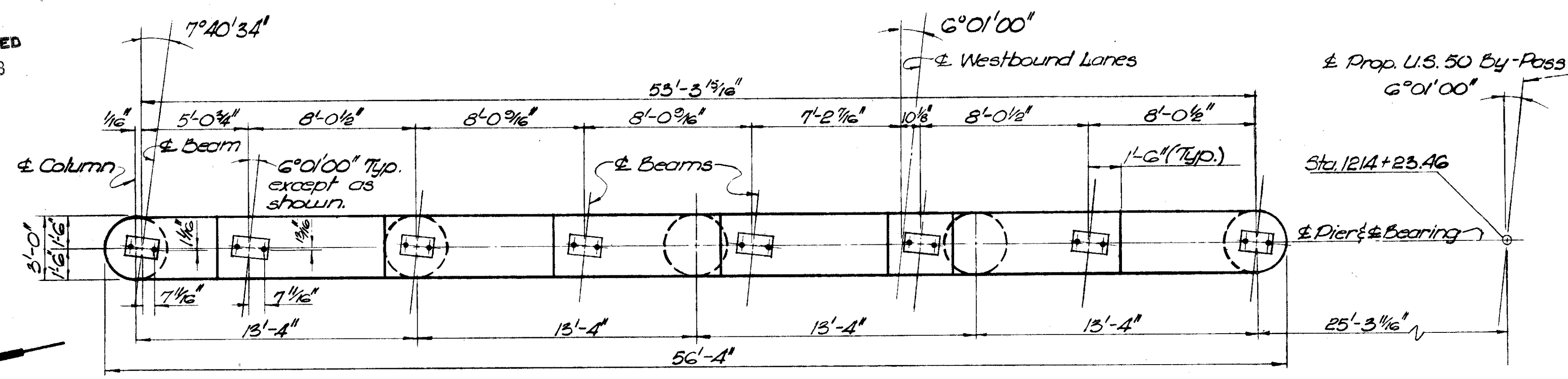
290  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02

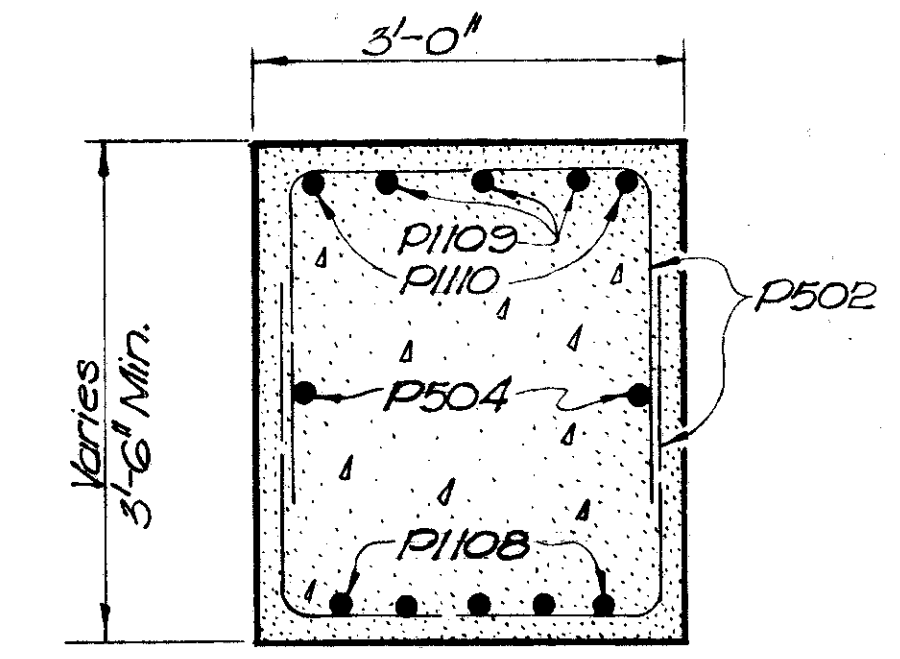
& Prop. U.S. 50 By-Pass  
6'01"00"

Sta. 1214+23.46

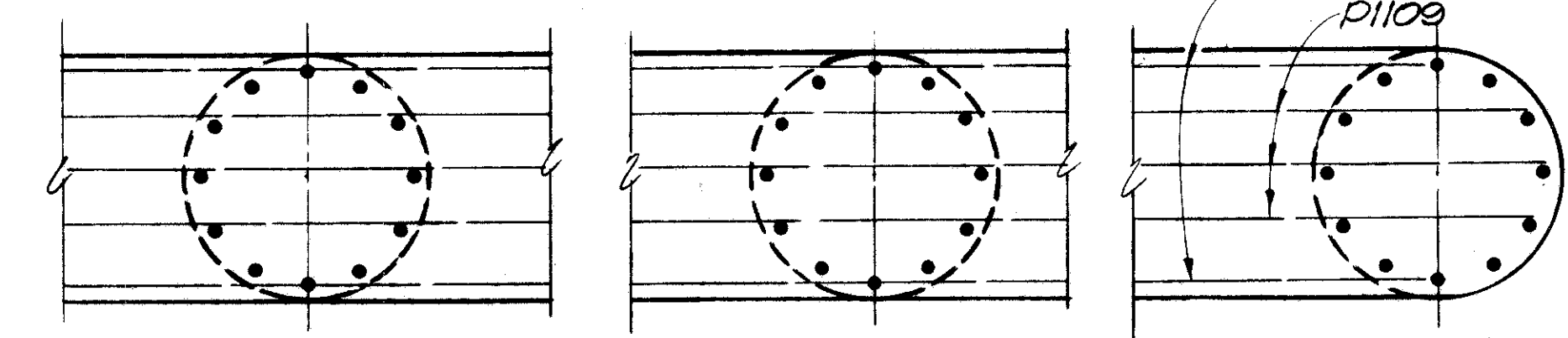
& Pier & Bearing



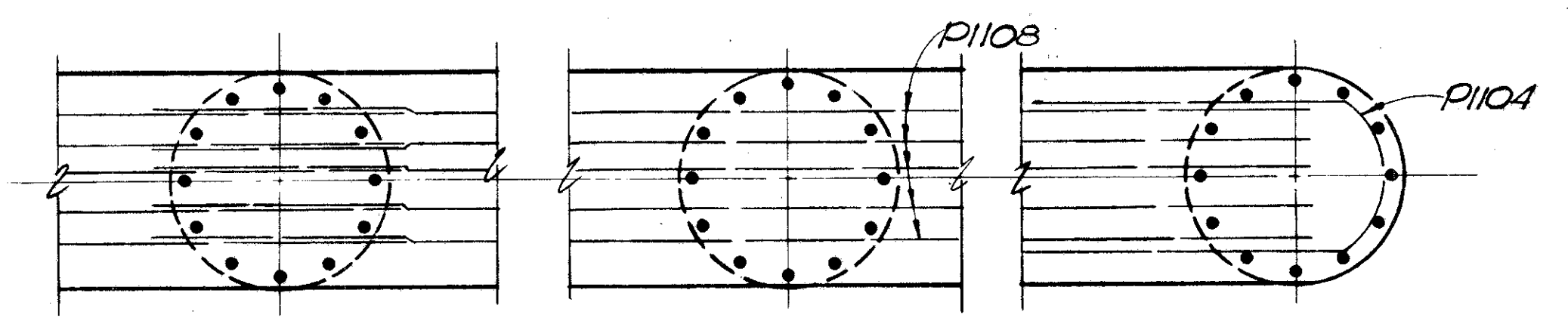
**PLAN**



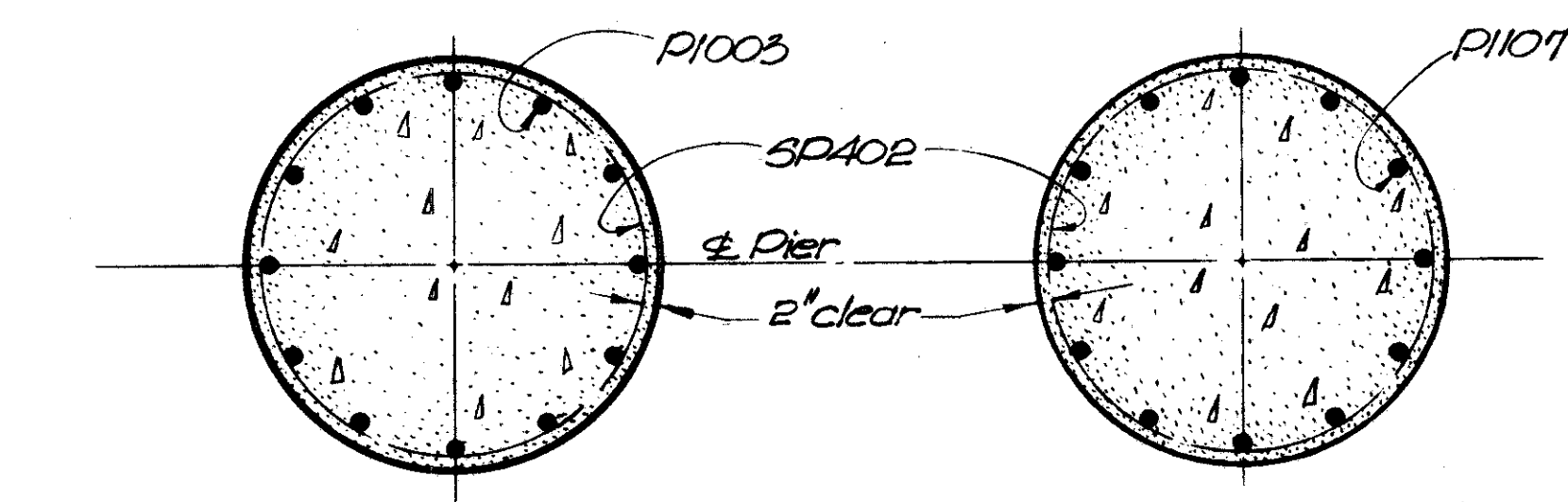
**SECTION C-C**



**SECTION A-A**

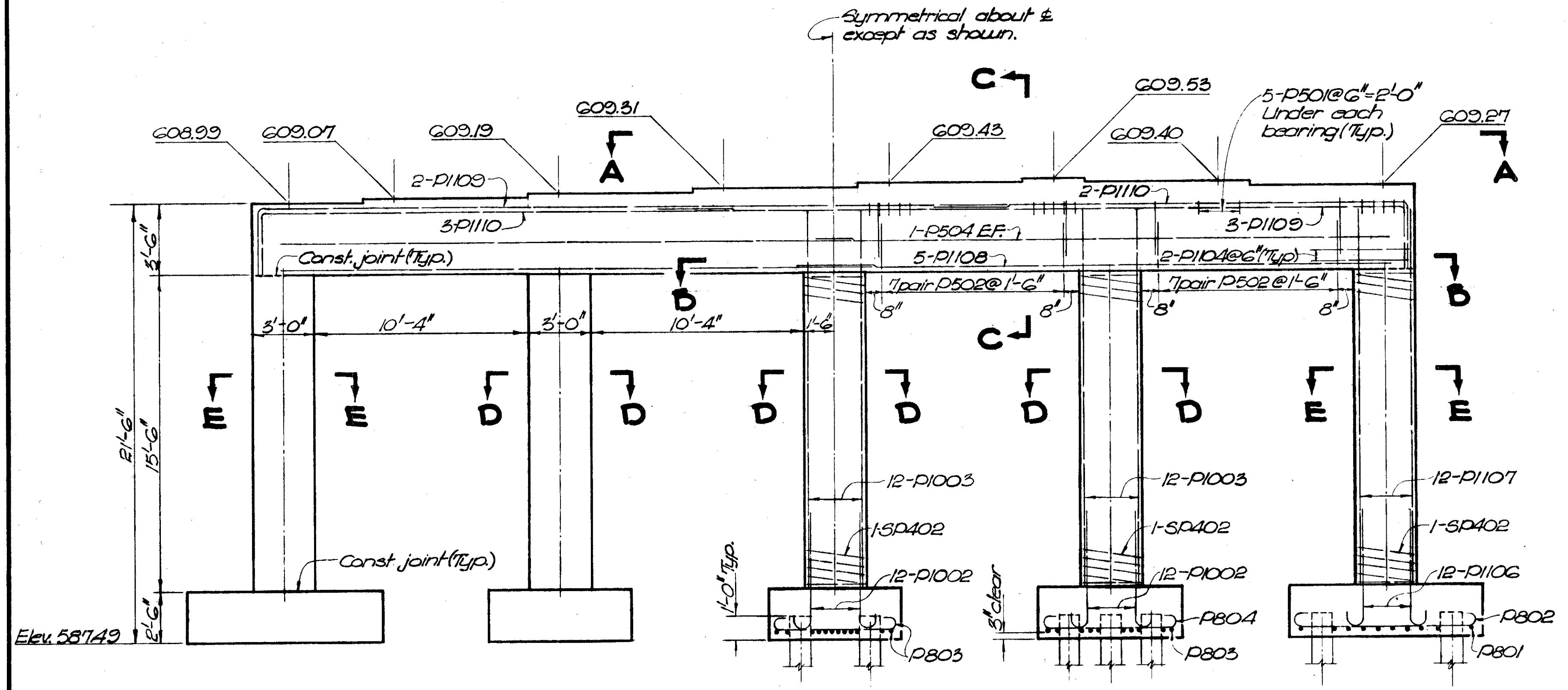


**SECTION B-B**



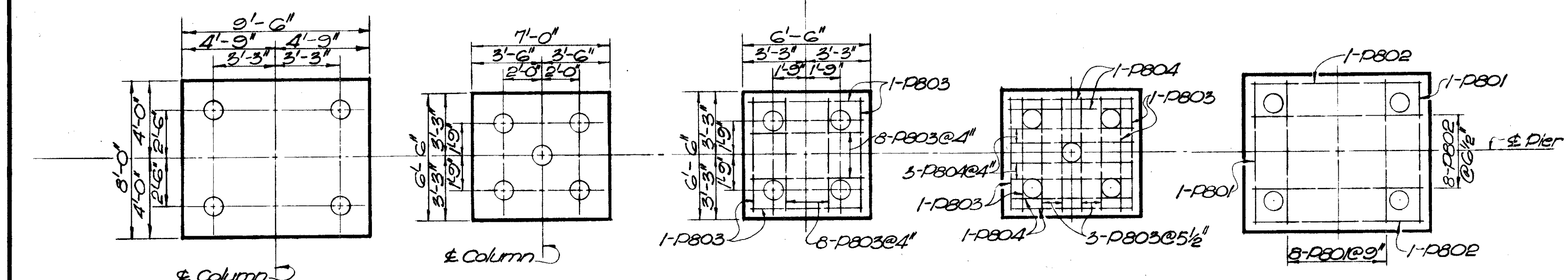
**SECTION D-D**

**SECTION E-E**



**ELEVATION**

NOTE: All piles 12" & cast-in-place reinforced concrete.



**FOOTING PLAN**

**NOTES**

1. Reinforcing steel in pier cap shall be placed so that it will not interfere with the drilling of anchor bar holes.
2. Place dowels in footing to insure correct spacing of main vertical column steel.
3. For REINFORCING STEEL LIST see Sheet No. 298.

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**PIER 4**  
BRIDGE NO. HAM-50B-2297L  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMPA "D"  
HAMILTON COUNTY STA. 1213+22.20 TO  
STA. 1214+64.22

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REV.
J.D.B.	J.R.R.	J.R.R.	C.E.S.	JAD	Oct. 58	

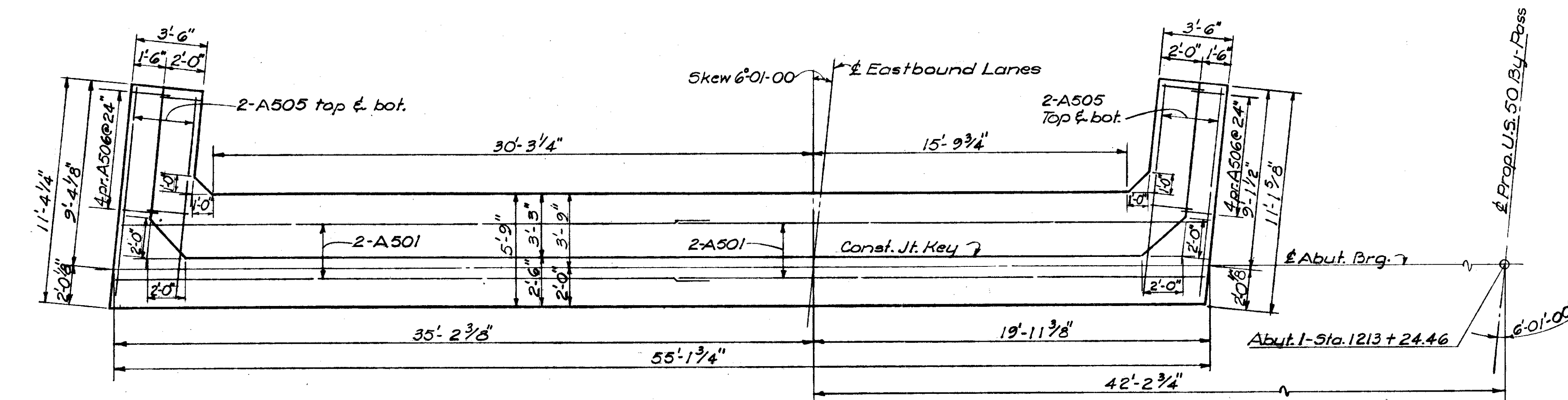
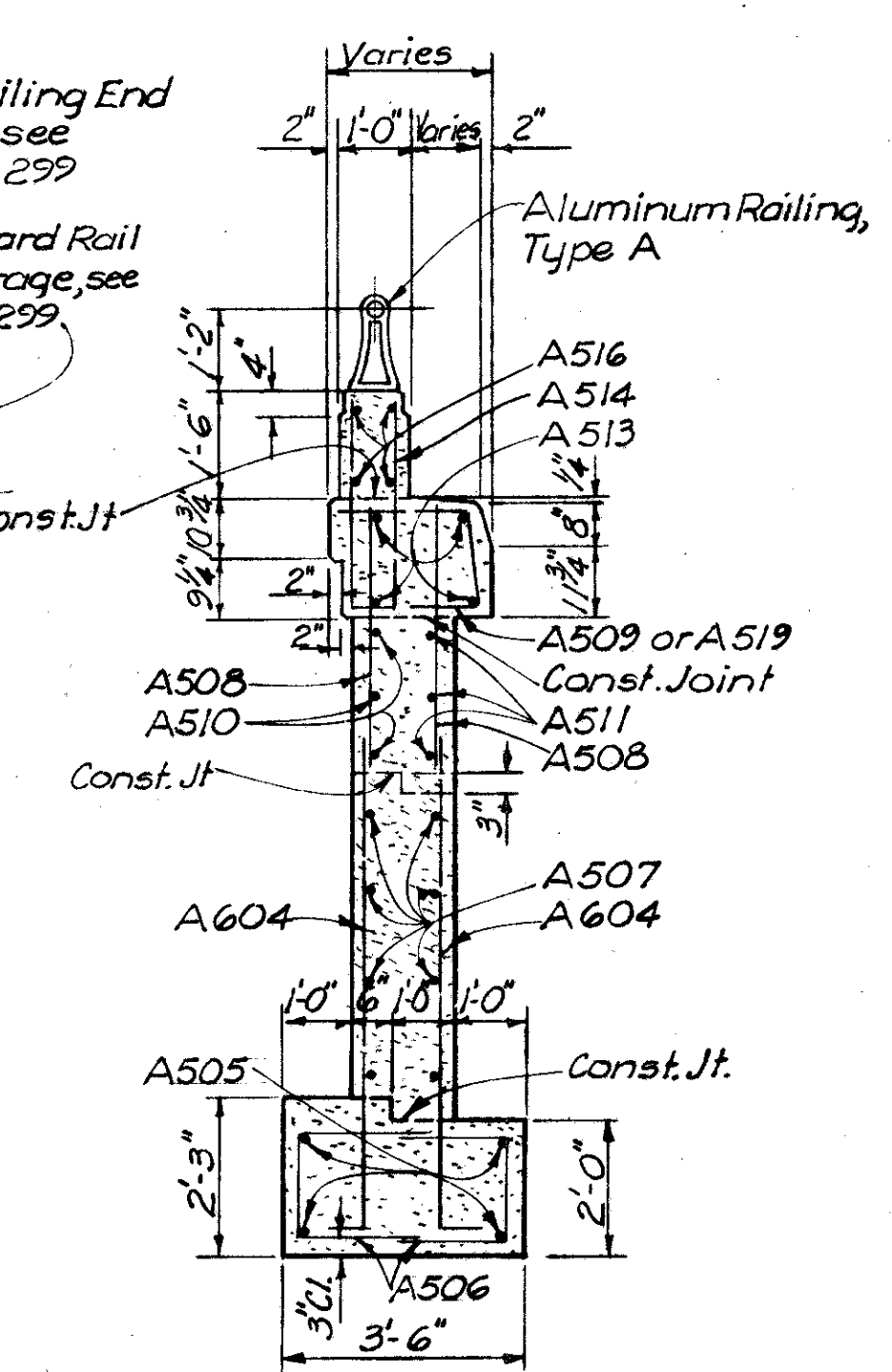
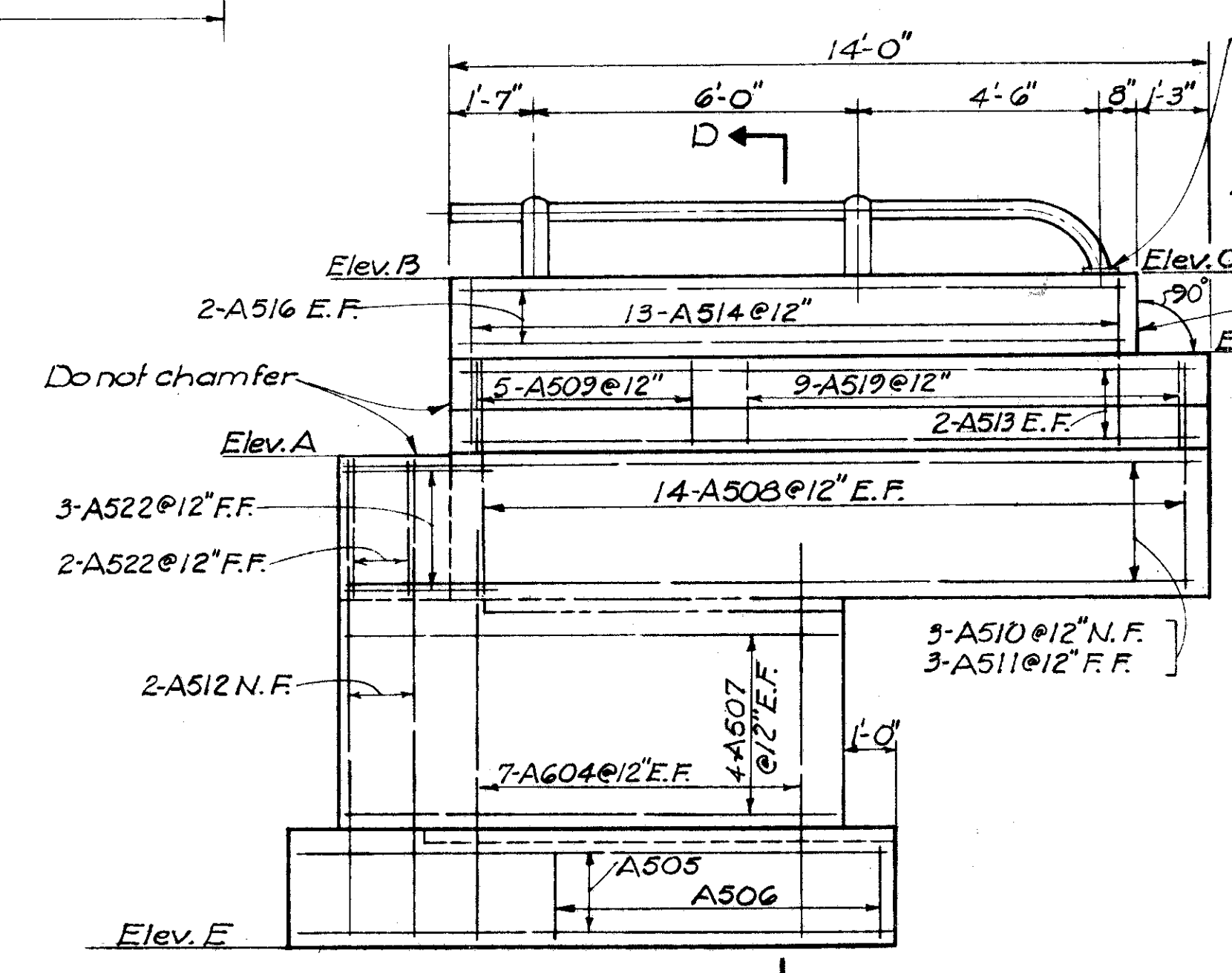
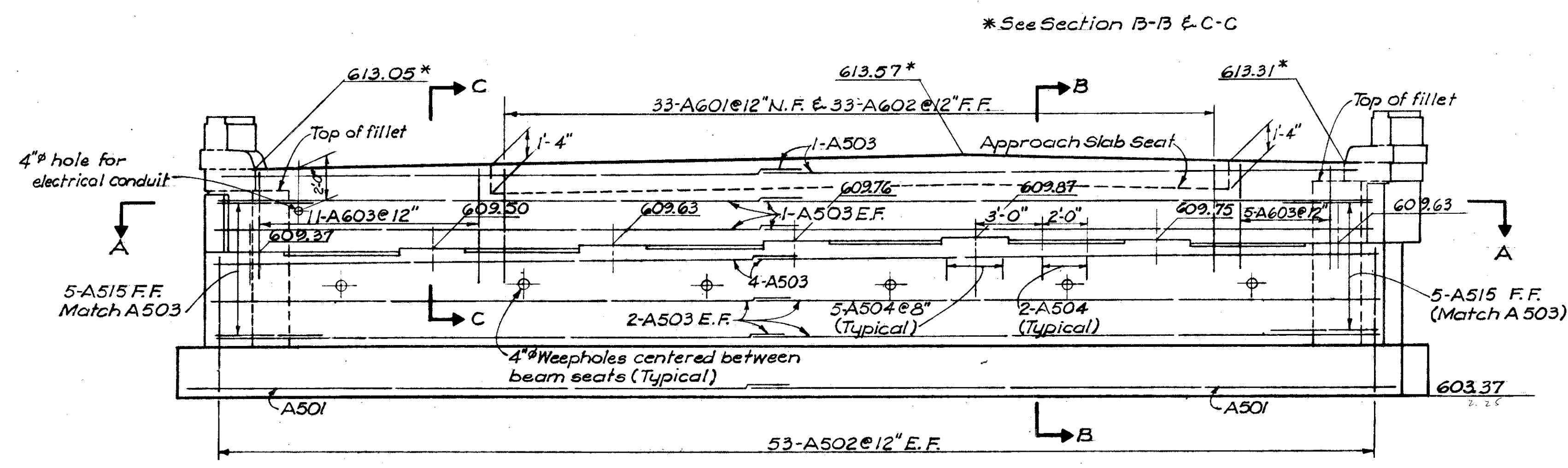
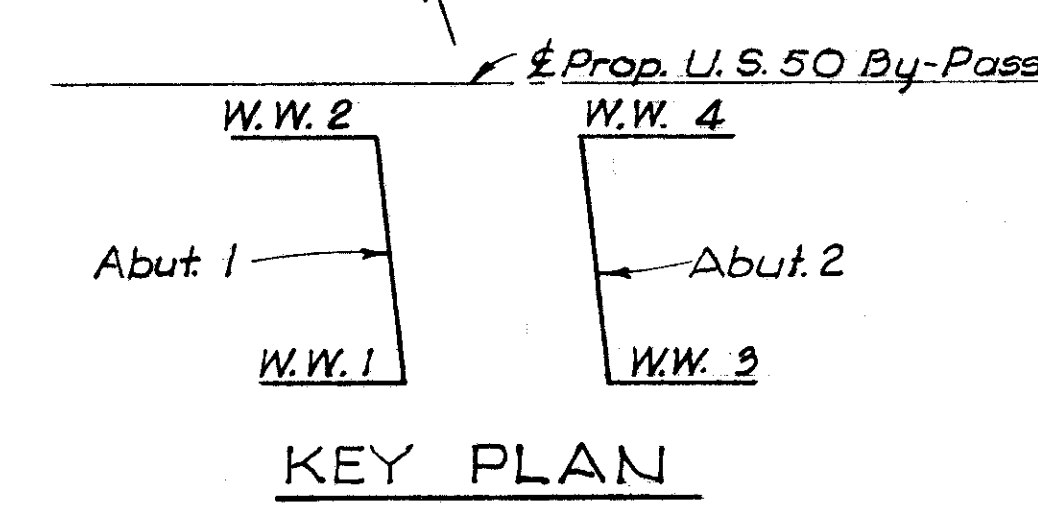
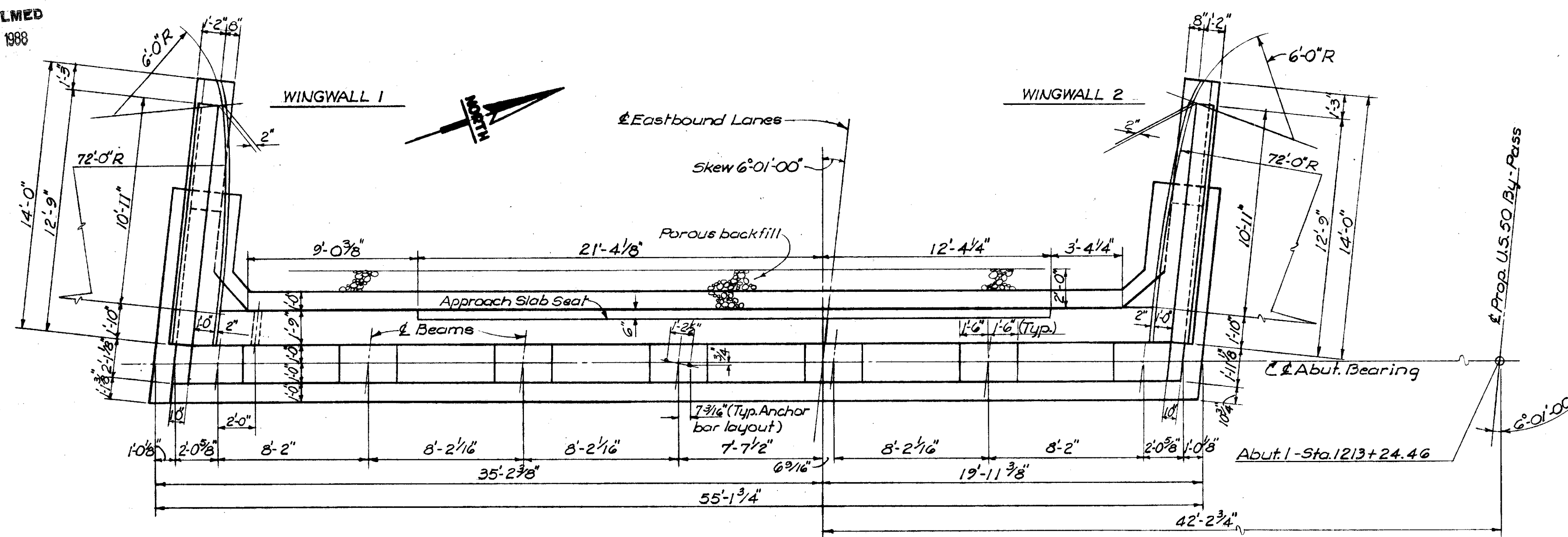
U.S. 5

MICROFILMED  
JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

291  
317

HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.02



ELEV.	W.W. 1	W.W. 2	W.W. 3	W.W. 4
A	612.14	612.40	611.60	611.86
B	615.40	615.66	614.84	615.10
C	615.45	615.71	614.79	615.05
D	613.96	614.22	613.29	613.54
E	603.37	603.37	602.82	602.82

Work Sheets 291 & 292 together

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

**ABUTMENT 1**

BRIDGE NO. HAM-50B-2297.R  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMP 'D'  
HAMILTON COUNTY STA. 1213+22.20 TO  
STA. 1214+64.22

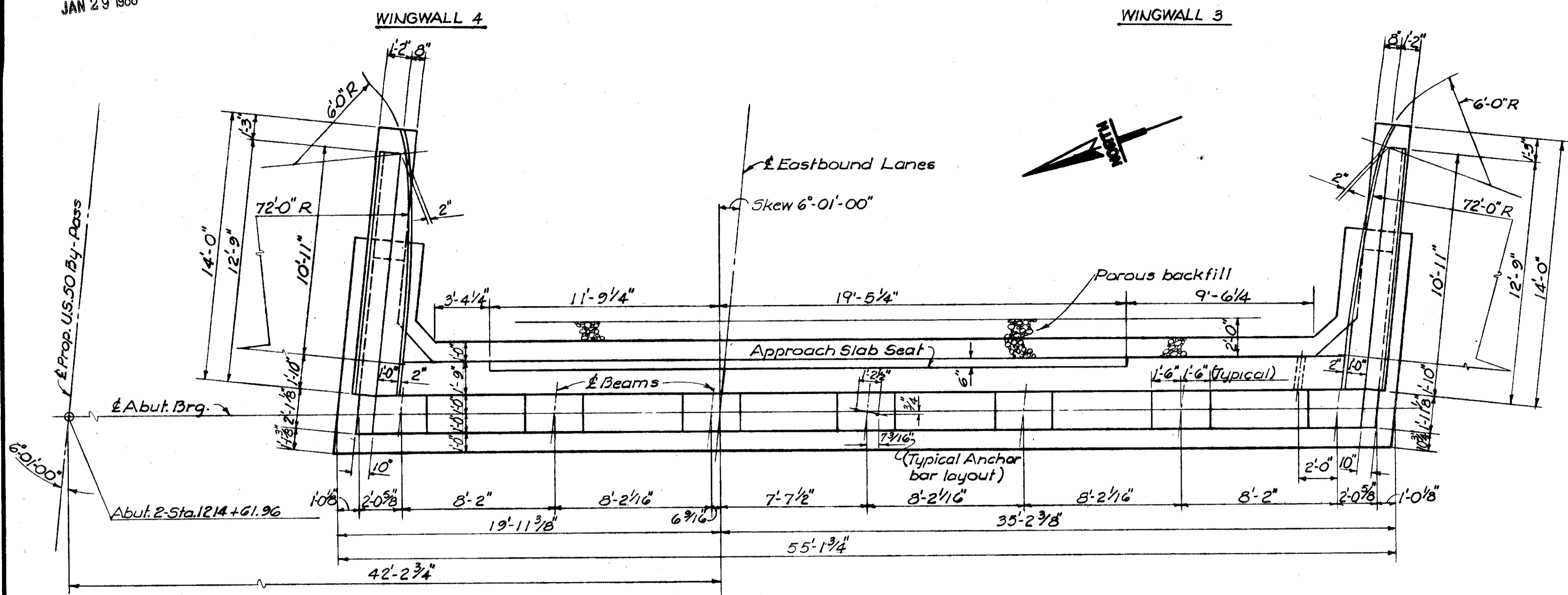
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
ERA	E.R.A.	K.L.	R.F.C.	JAR	02.52	

MICROFILMED  
JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

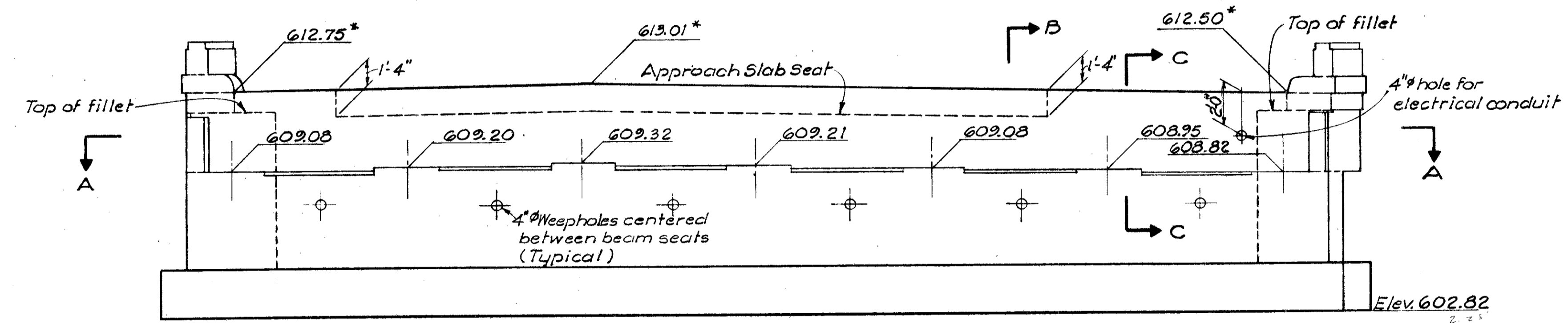
HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02

29  
317

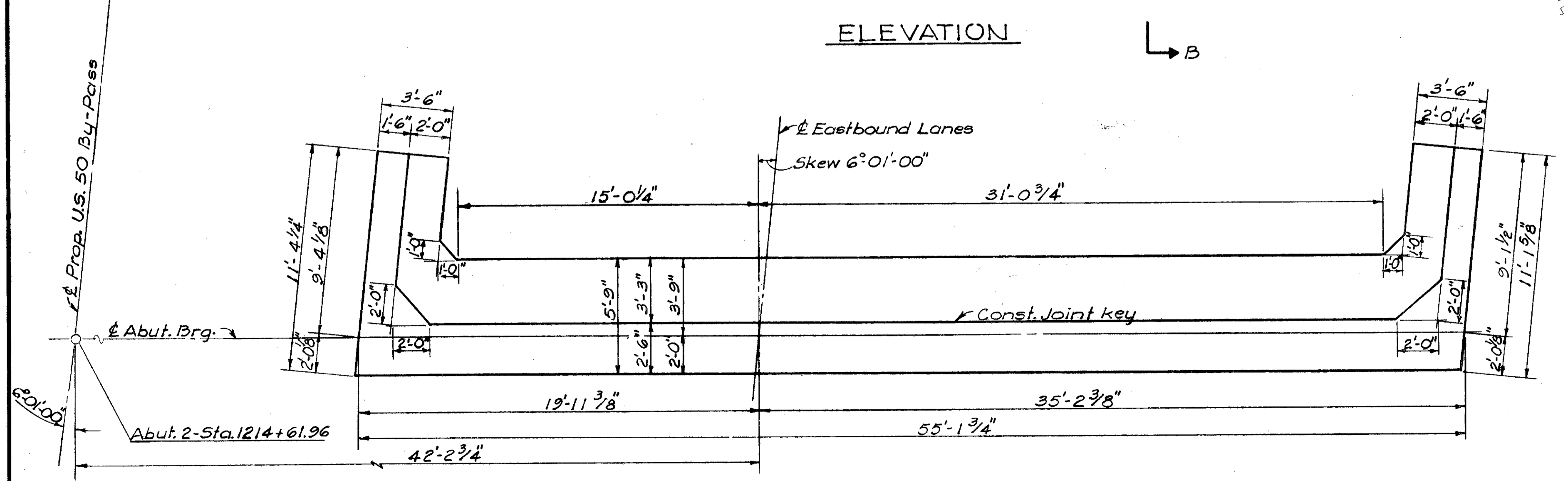


PLAN

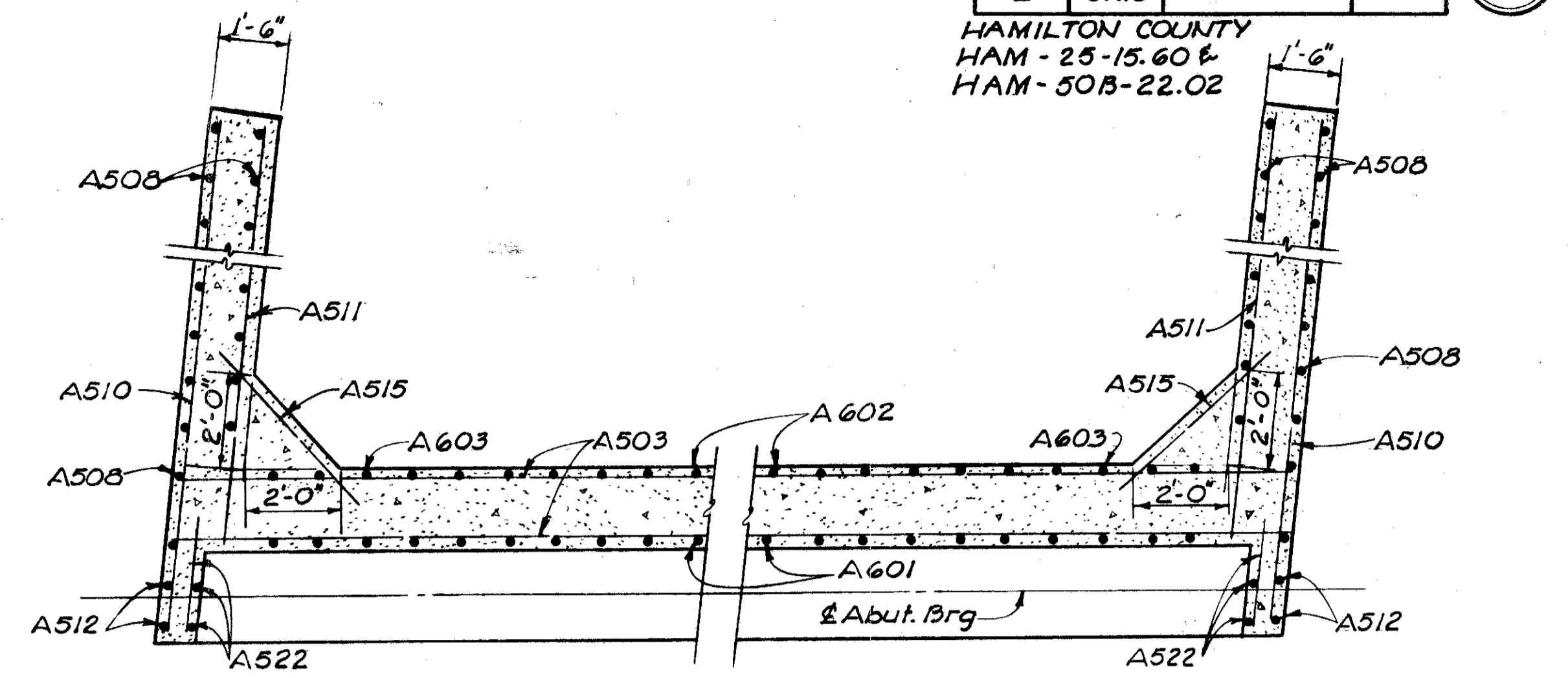
\* See Section B-B & C-C



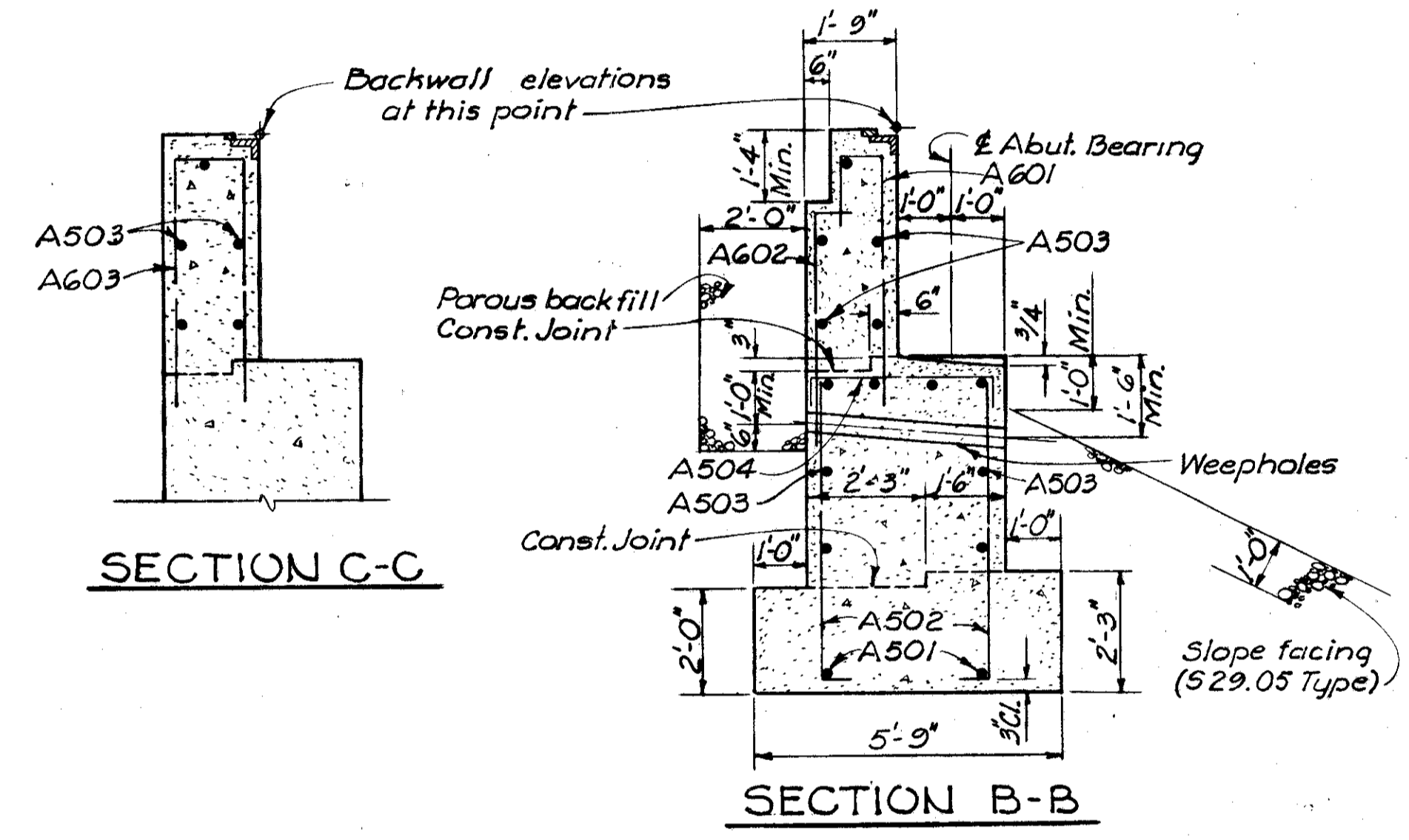
ELEVATION



FOOTING PLAN

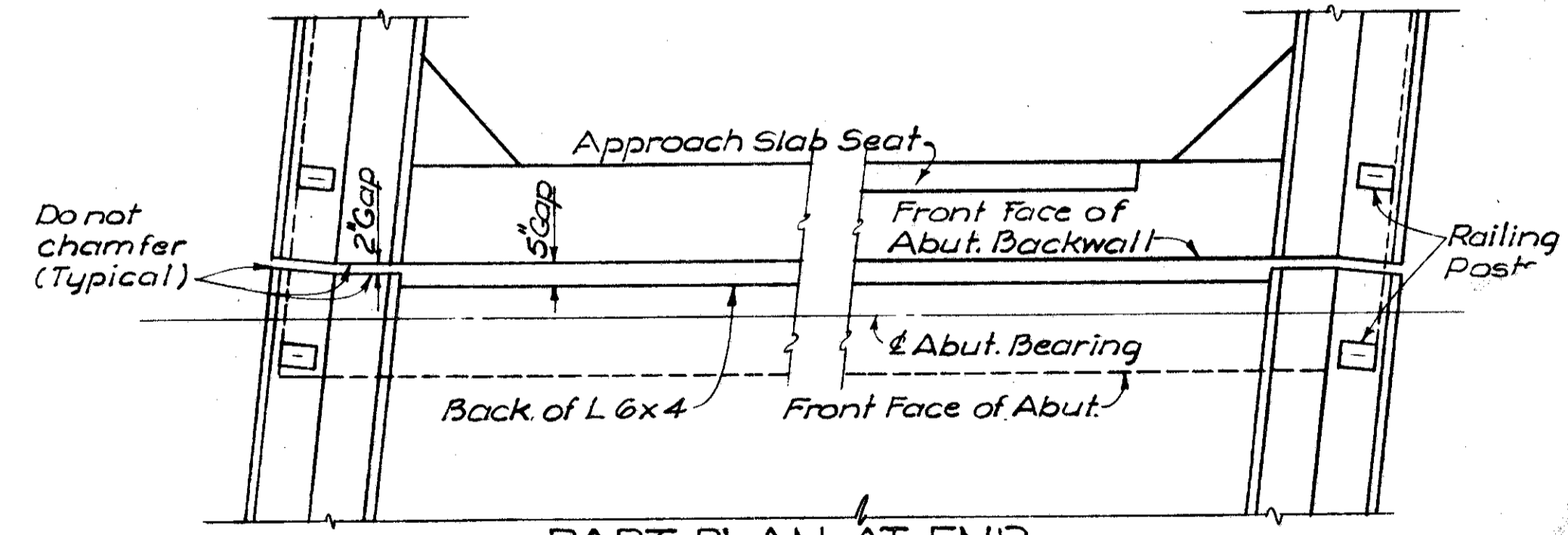


SECTION A-A



SECTION C-C

SECTION B-B



PART PLAN AT END

- NOTES:
- For Reinforcing Steel List see Sheet 298.
  - Designations used are as follows:  
N.F. = Near Face  
F.F. = Far Face  
E.F. = Each Face
  - Parapet concrete and A516 bars shall be included in item 5-14 for payment.
  - For Approach Slab Details, see Std. Dwg. AS-1-54.
  - POROUS BACKFILL: 2 ft. thick, full length of the abutment, shall extend up to the underside of approach slab or paved shoulder.

Work Sheets 291 & 292 together

VOGT, IVERS, SEAMAN & ASSOCIATES  
ENGINEERS ARCHITECTS  
CINCINNATI CHICAGO

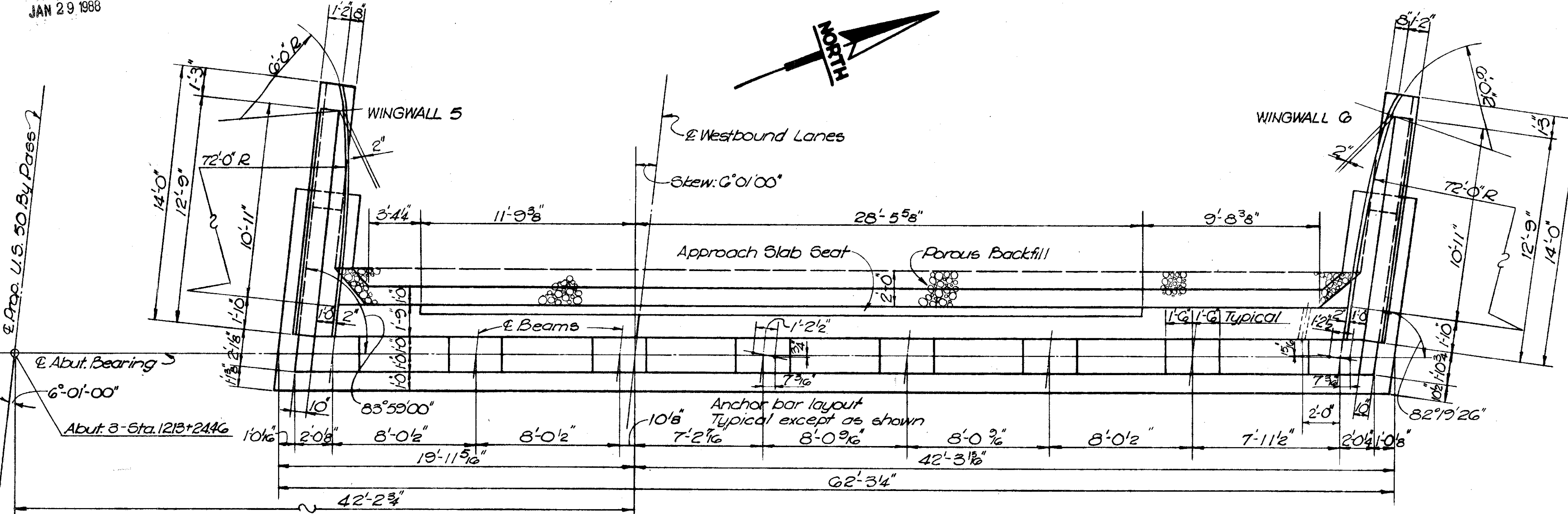
**ABUTMENT 2**

BRIDGE NO. HAM-50B-2297 R  
PROPOSED U.S. 50 BY-PASS  
OVER PROPOSED RAMP 'D'

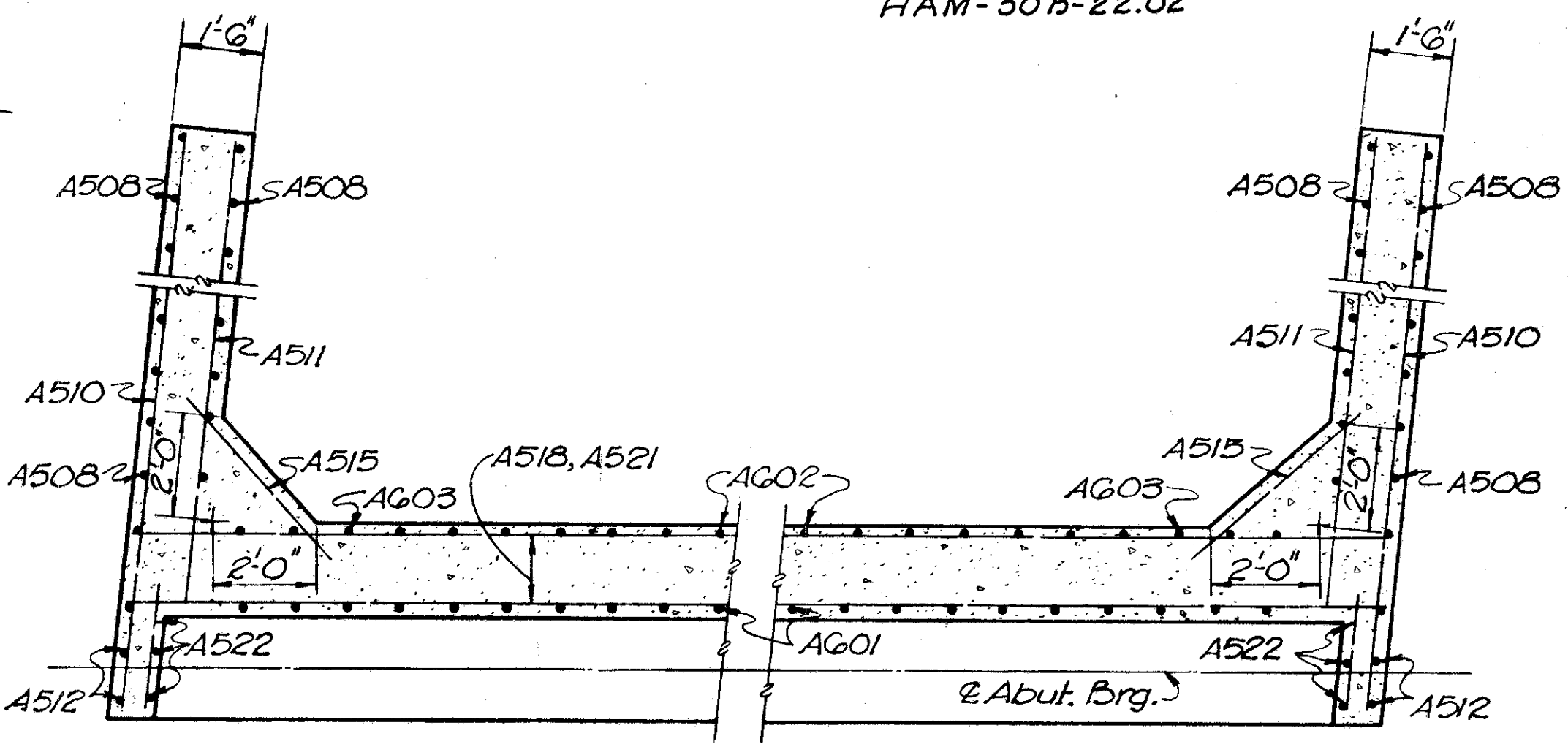
HAMILTON COUNTY STA. 1213 + 22.20 TO  
STA. 1214 + 64.22

DESIGNED	DRAWN	TRACE	CHECKED	REVIEWED	DATE	REVISION
EPA.	EPA.	K.L.	R.F.C.	JAD	Oct. 58	

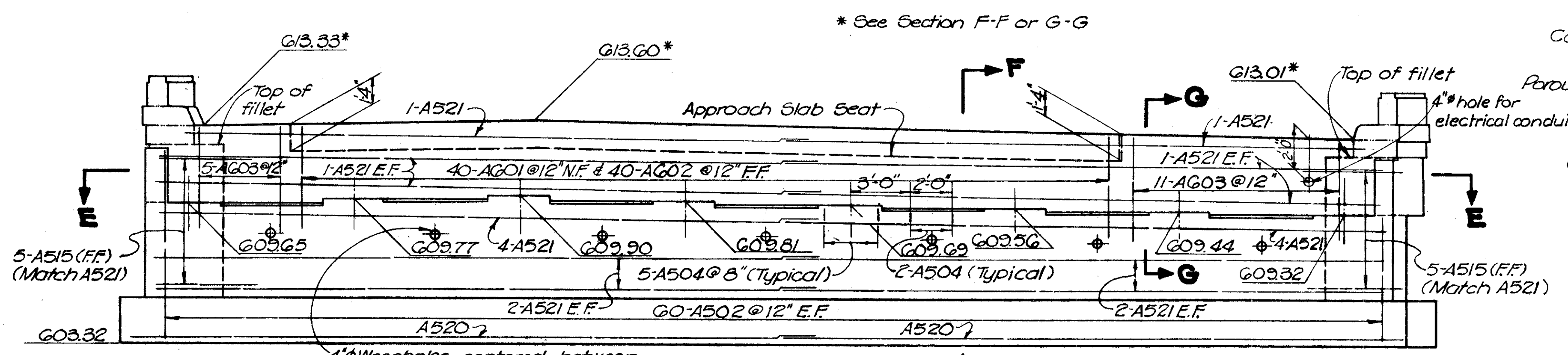
U.S. 50B



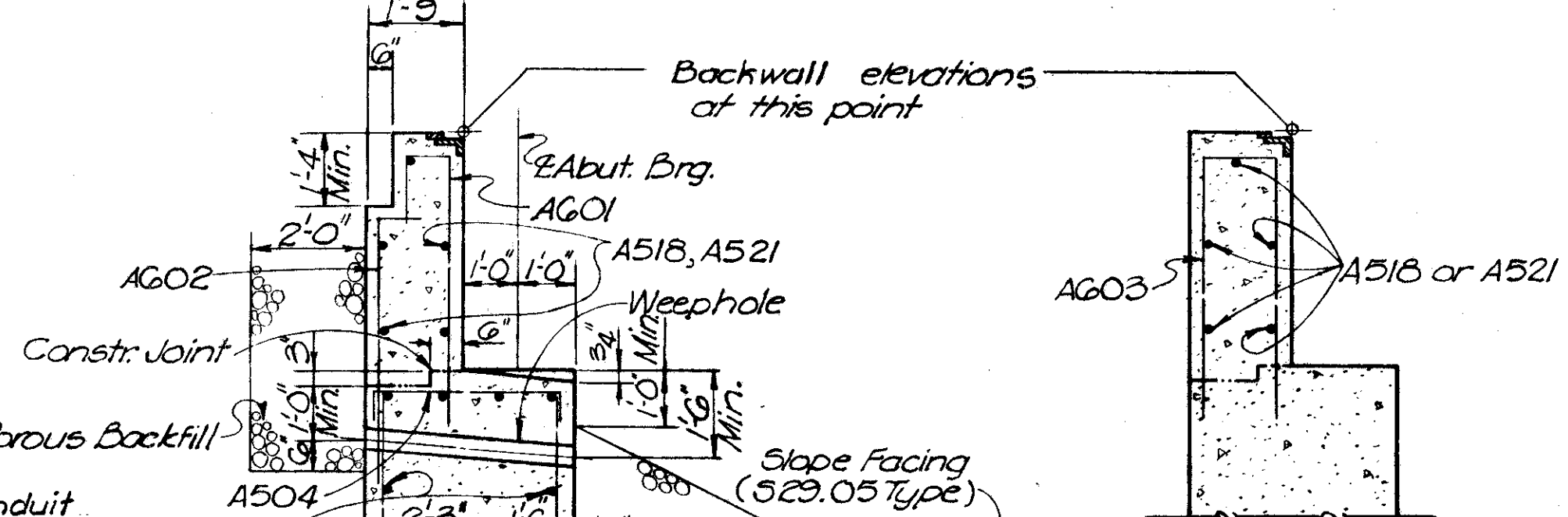
**PLAN**



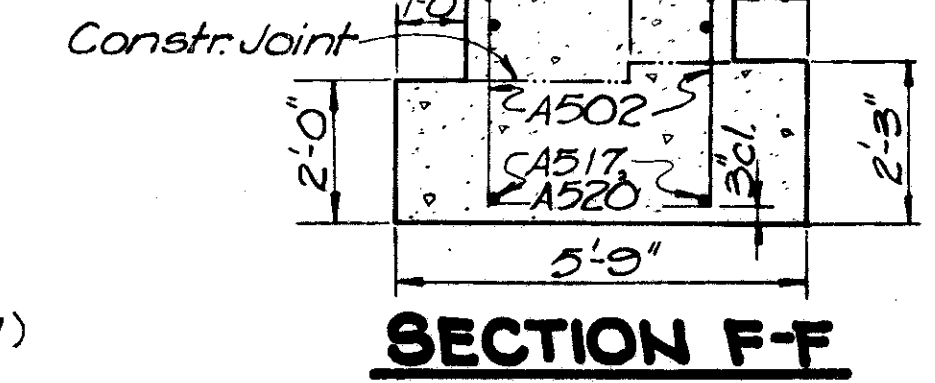
**SECTION E-E**



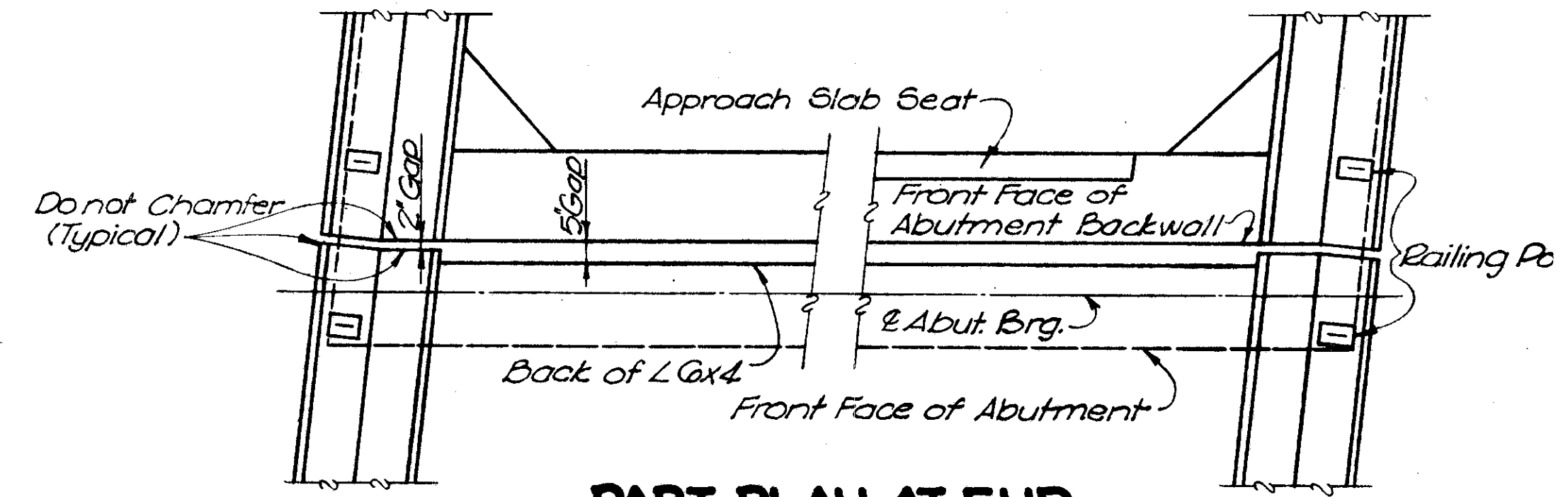
**ELEVATION**



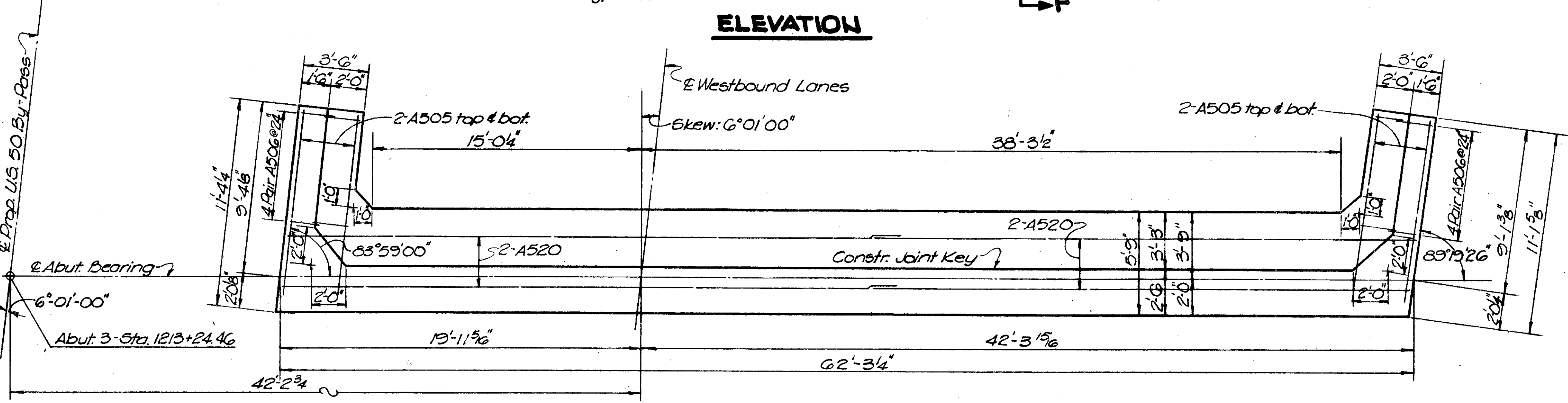
**SECTION G-G**



**SECTION F-F**



**PART PLAN AT END**



**FOOTING PLAN**

**NOTES**

- For Reinforcing Steel List, see sheet 298
- Designations used are as follows:  
N.F. = Near Face  
F.F. = Far Face  
E.F. = Each Face
- Parapet concrete and A516 bars shall be included in item 5-14 for payment.
- For Approach Slab details see Std. Dwg. A5-1-54.
- Porous Backfill: 2ft thick, full length of the abutment, shall extend up to the under side of approach slab or paved shoulder.

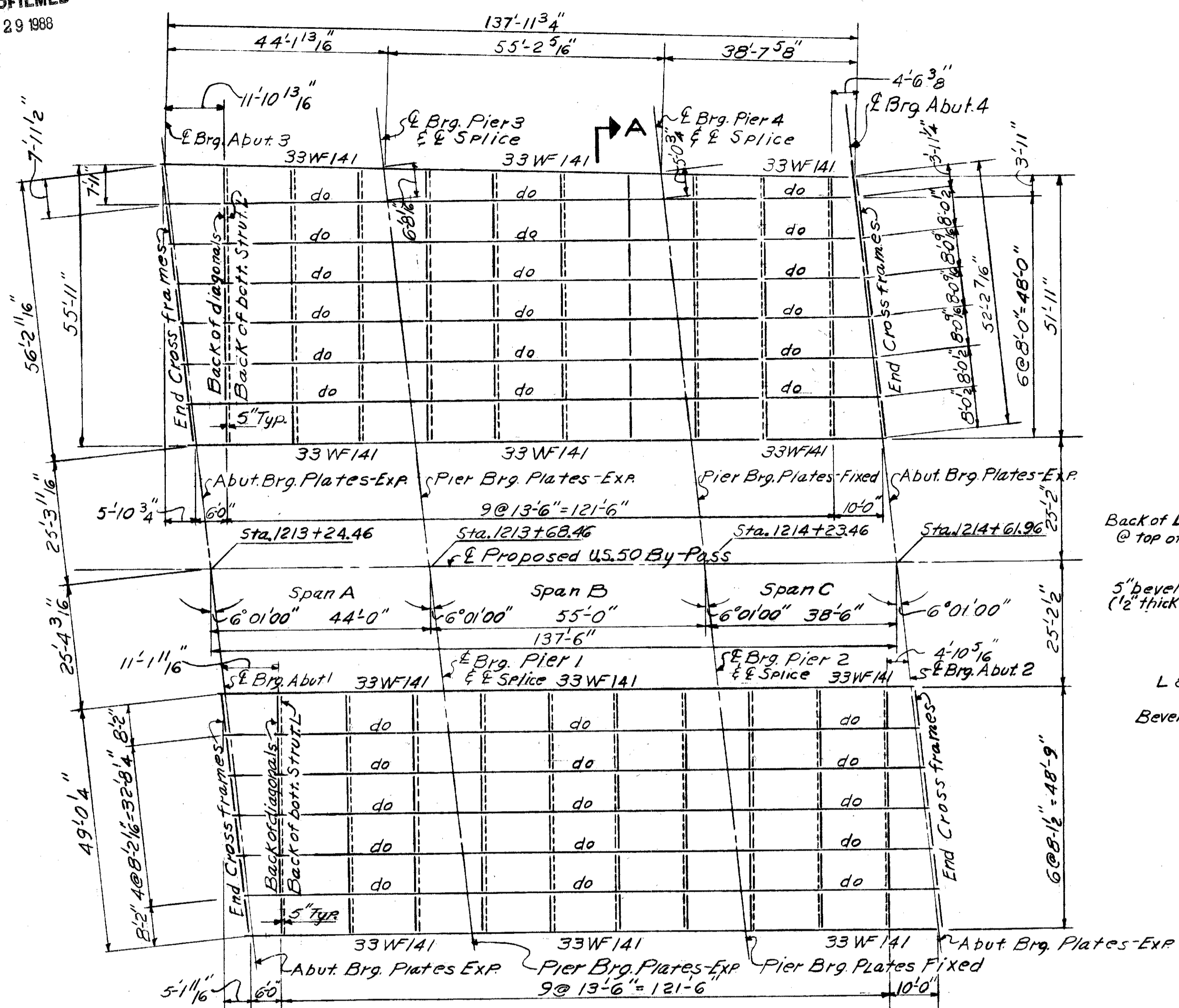
Work Sheets 293 & 294 together

VOGT, IVERS, SEAMAN & ASSOCIATES ENGINEERS ARCHITECTS CINCINNATI CHICAGO	
<b>ABUTMENT 3</b>	
BRIDGE NO. HAM-50B-2297L PROPOSED U.S. 50 BY-PASS OVER PROPOSED RAMP 'D'	
HAMILTON COUNTY	STA. 1213+22.20 TO STA. 1214+04.22
DESIGNED E.P.A.	DRAWN E.P.A.
CHECKED E.F.C.	REVIEW JAD

MICROFILMED  
JAN 29 1988

FED. RD. DIVISION	STATE	P
2	OHIO	

HAMILTON COUNTY  
HAM-25-15.60 E-  
HAM-50B-22.02



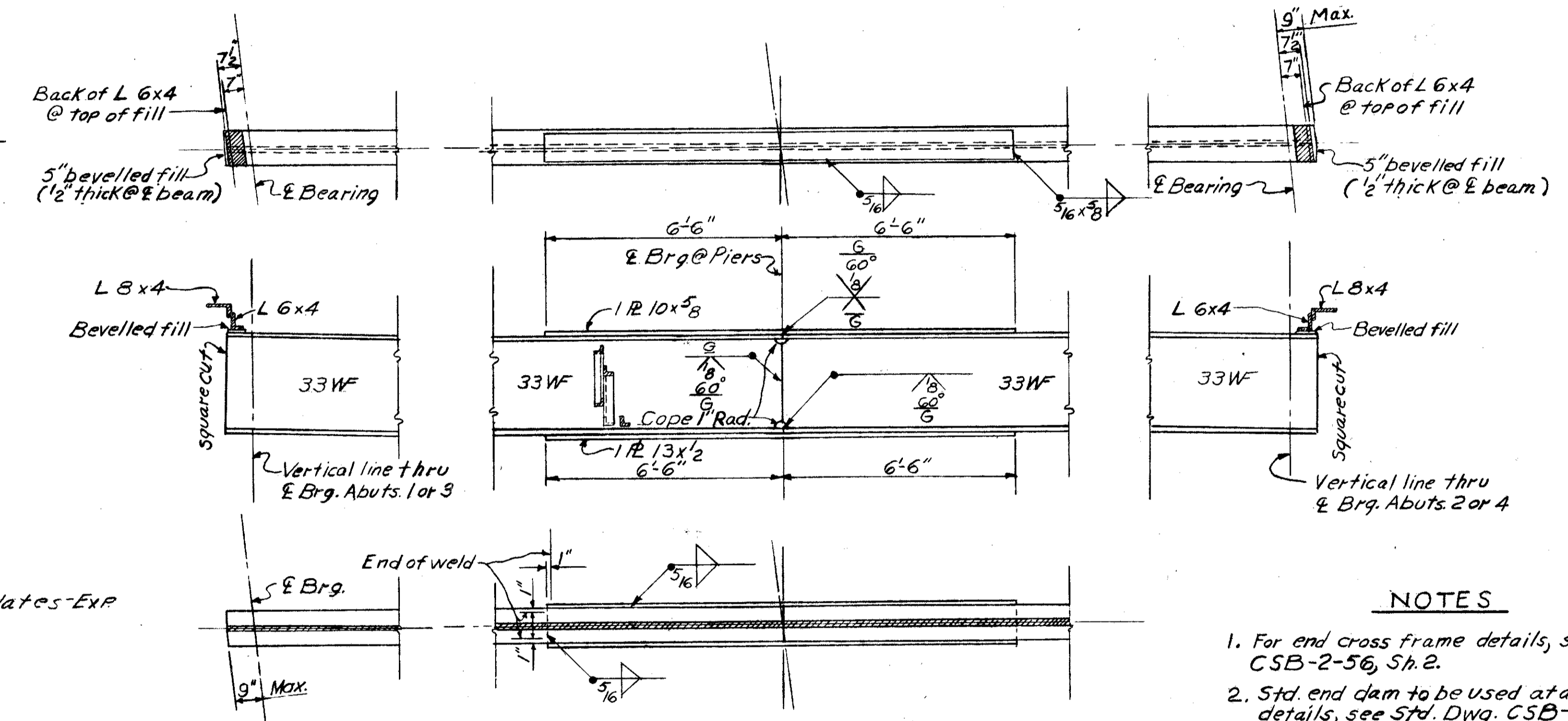
FRAMING PLAN



**BEAM SPICE WELDING PROCEDURE**

1. Raise the ends of the beams 1/2" at Abutment No. 1 and 3/8" at Abutment No. 2.
2. Butt weld the beam flanges and web at the piers, using the following sequence: make one pass on each flange, then one on the web; repeat until welds are completed.
3. Weld the bottom and top moment plates.
4. Lower the ends of the beams to final position.
5. Repeat steps 1 thru 4 on other structure by raising the ends of the beams 1/2" at Abutment No. 3 and 3/8" at Abutment No. 4.

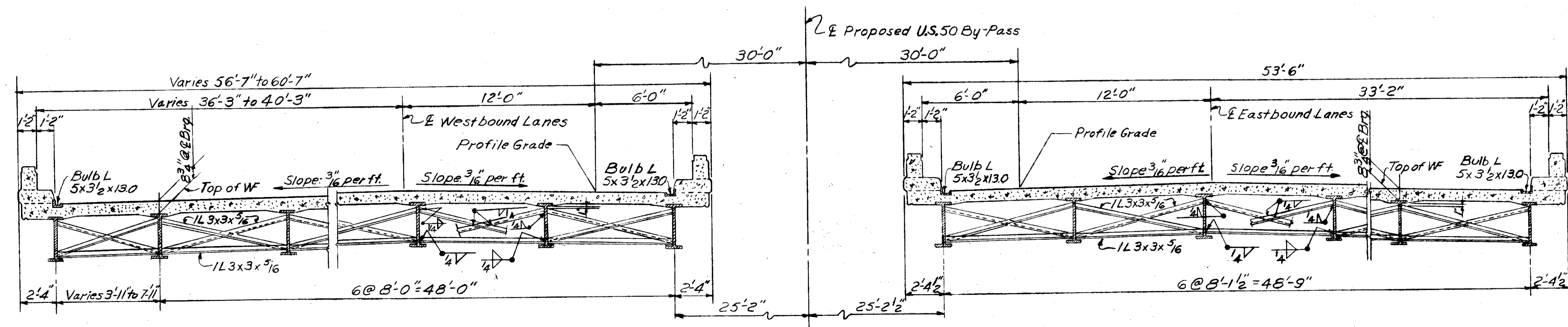
DEFLECTION & CA					
LOCATION	EXTERIOR BEAMS			INTERIOR	
	A	B	C	A	E
Span					
Deflection due to weight of steel	0	1/16"	0	0	0
Deflection due to remaining dead load	3/16"	5/16"	1/16"	1/8"	3/16"
Sum of deflection	3/16"	3/8"	1/16"	1/8"	1/4"
Required shop camber	0	0	0	0	0



BEAM DETAILS

**NOTES**

1. For end cross frame details, see Std. Dwg. CSB-2-56, Sh. 2.
2. Std. end dam to be used at all abutments. details, see Std. Dwg. CSB-2-56, Sh. 2 & 3.
3. For scupper details, see Std. Dwg. CSB-2-51.
4. For location of scuppers see Sh. 2B5.
5. For bearing plate details, see Std. Dwg. CSB-2-56.
6. For additional notes see Sh. 2B6.



SECTION A-A

VOGT, IVERS, SEAMAN &  
ENGINEERS  
CINCINNATI

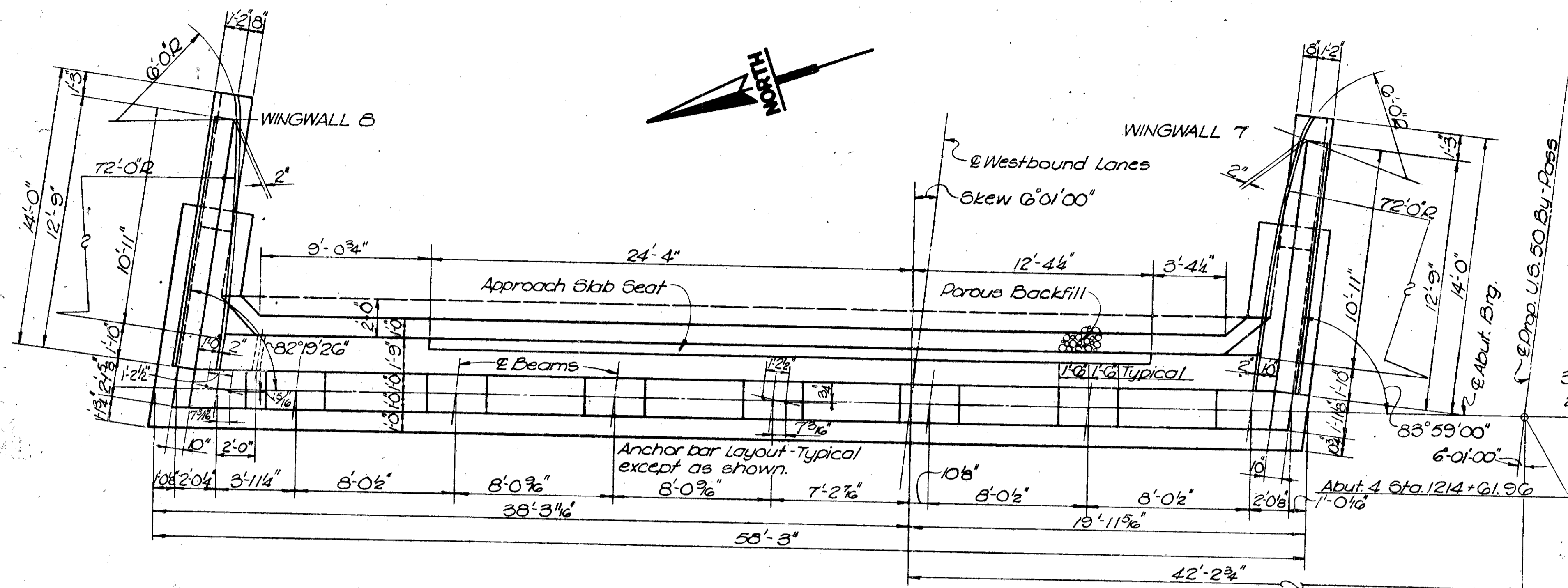
**STEEL FRAMING PL & DETAILS**  
BRIDGE NO. HAM-50E  
PROPOSED U.S. 50 BY  
OVER PROPOSED RAM  
HAMILTON COUNTY STA. 12'  
STA.

DESIGNED	DRAWN	TRACED	CHECKED
YJS	DJF	AJM	RF

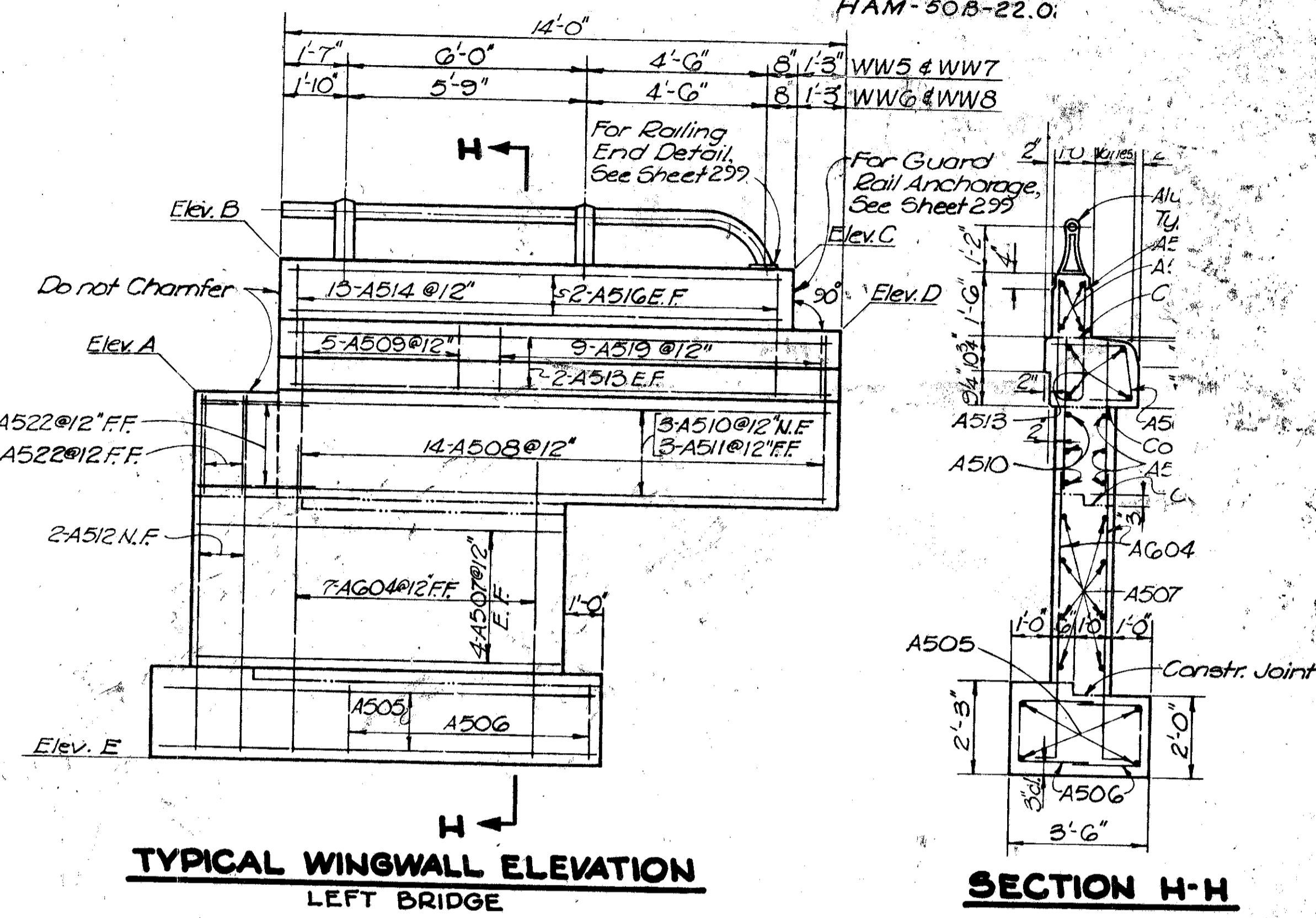
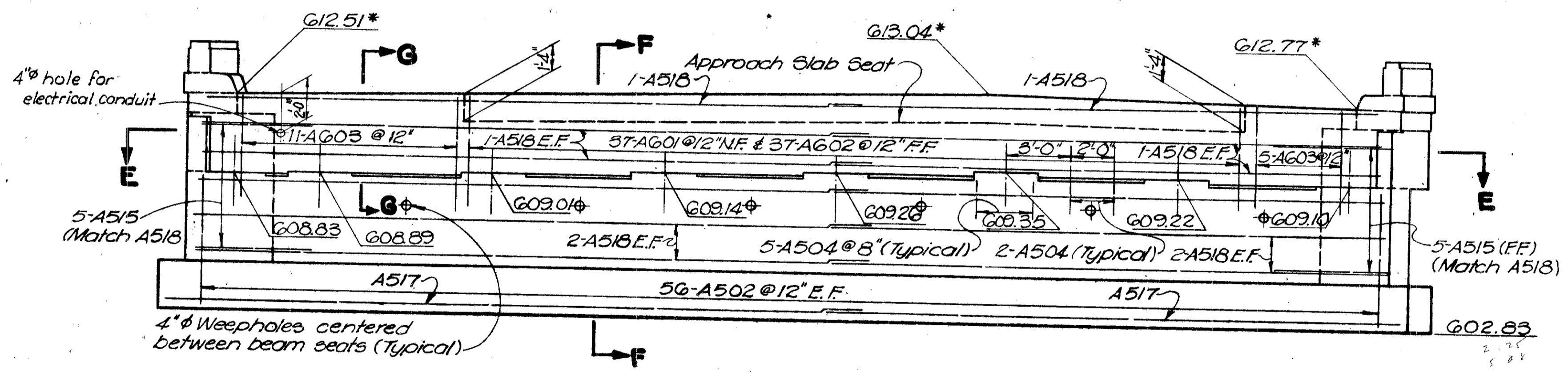
MICROFILMED  
JAN 29 1988

FED. RD. DIVISION	STATE	
2	OHIO	

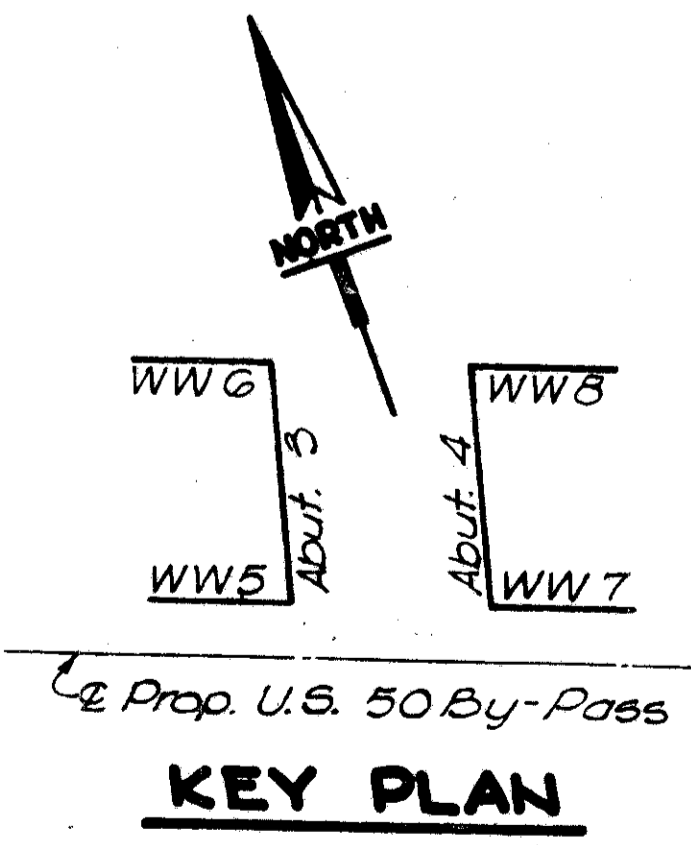
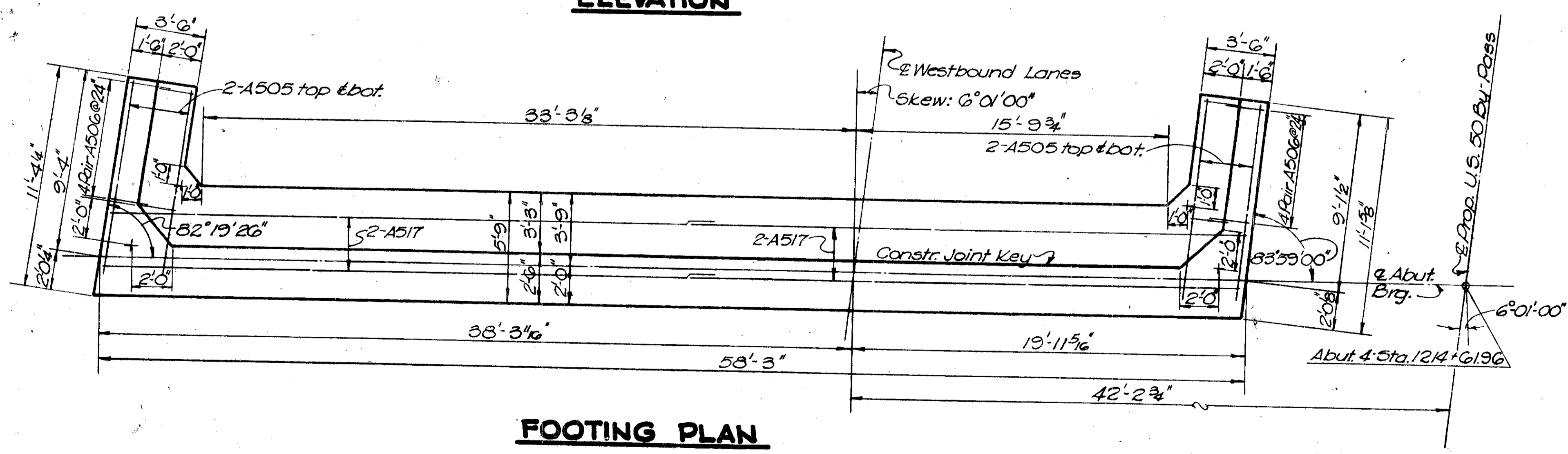
HAMILTON COUNTY  
HAM-25-15.60 &  
HAM-50B-22.0



\* See Section F For G-G



WINGWALLS	5	6	7
ELEV. A	G/2.42	G/2.10	G/1.88
ELEV. B	G/5.68	G/5.36	G/5.12
ELEV. C	G/5.73	G/5.41	G/5.07
ELEV. D	G/4.24	G/3.91	G/3.57
ELEV. E	G/3.32	G/3.32	G/2.83



Work Sheets 293 & 294 to  
VOGT, IVERS, SEAMAN &  
ENGINEERS  
CINCINNATI

**ABUTMENT**  
BRIDGE NO. HAM-  
PROPOSED U.S. 50  
OVER PROPOSED  
HAMILTON COUNTY

DESIGNED: E.P.A. DRAWN: E.P.A. TRACED: L.F.

MICROFILMED  
JAN 29 1988

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

HAMILTON COUNTY  
HAM - 25-15.60 &  
HAM - 50B-22.02

ROADWAY SLAB						ABUTMENTS								PIERS														
			BRIDGE NO. HAM-50B-2297R		BRIDGE NO. HAM-50B-2297L		BRIDGE NO. HAM-50B-2297R				BRIDGE NO. HAM-50B-2297L				BRIDGE NO. HAM-50B-2297R				BRIDGE NO. HAM-50B-2297L									
MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	MARK	LENGTH	SHAPE	NO.	WEIGHT	NO.	WEIGHT	
S 501	4'-8"	Bt.	208	1013	208	1013	A 501	28'-2"	Str.	8	235										P 501	3'-5"	Bt.	70	249	80	285	
S 502	2'-6"	Bt.	208	542	208	542	A 502	5'-10"	Bt.	212	1290	232	1411								P 502	7'-3"	Bt.			104	786	
S 503	4'-9"	Bt.	208	1030	208	1030	A 503	27'-3"	Str.	52	1478										P 503	28'-4"	Str.			4	118	
S 504*	13'-3"	Str.	16		16		A 504	4'-2"	Bt.	94	409	108	469								P 504	27'-6"	Str.			4	115	
S 505*	15'-8"	Str.	56		56		A 505	10'-9"	Str.	16	179	16	179								P 505	8'-3"	Bt.	84	723			
							A 506	6'-2"	Bt.	32	206	32	206								P 506	25'-5"	Str.	8	212			
							A 507	8'-9"	Str.	32	292	32	292															
							A 508	4'-2"	Str.	112	487	112	487															
S 601	27'-8"	Str.	416	17287			A 509	3'-3"	Bt.	20	68	20	68								P 801	9'-10"	Bt.			40	1050	
S 602	29'-2"	Str.	465	20371	511	22386	A 510	15'-7"	Str.	12	195	12	195								P 802	11'-4"	Bt.			40	1210	
S 603	22'-0"	Str.	80	2644	89	2941	A 511	13'-7"	Str.	12	170	12	170								P 803	8'-4"	Bt.			80	1780	
S 604	31'-1"	Str.			104	4855	A 512	8'-7"	Bt.	8	72	8	72								P 804	8'-10"	Bt.	96	2264	40	943	
S 605	30'-7"	Str.			104	4777	A 513	13'-8"	Str.	16	228	16	228								P 805	11'-10"	Bt.	52	1643			
S 606	30'-1"	Str.			104	4699	A 514	6'-1"	Bt.	52	330	52	330								P 806	10'-4"	Bt.	40	1104			
S 607	29'-7"	Str.			104	4621	A 515	4'-0"	Str.	20	83	20	83															
							A 516*	12'-5"	Str.	16		16																
							A 517	29'-9"	Str.			4	124															
							A 518	28'-9"	Str.			26	780															
S 701	27'-10"	Str.	416	23667			A 519	Varies 2'-7" to 3'-1" inc. 3/4"	Bt.	4 Series of 9 Total 36	106	4 Series of 9 Total 36	106									P 1001	22'-0"	Str.			36	3408
S 702	31'-3"	Str.			104	6643															P 1002	6'-9"	Bt.	96	2788	72	2091	
S 703	30'-9"	Str.			104	6537															P 1003	18'-6"	Str.			36	2866	
S 704	30'-3"	Str.			104	6430	A 520	31'-9"	Str.			4	132								P 1004	21'-6"	Str.	48	4441			
S 705	29'-9"	Str.			104	6324	A 521	30'-9"	Str.			26	834								P 1005	18'-0"	Str.	48	3718			
							A 522	2'-6"	Str.	20	52	20	52															
							A 601	7'-8"	Bt.	66	760	77	887									P 1101	40'-0"	Bt.			5	1063
							A 602	4'-6"	Bt.	66	446	77	520									P 1102	27'-1"	Bt.			5	719
							A 603	12'-2"	Bt.	32	585	32	585									P 1103	29'-7"	Str.			10	1572
							A 604	7'-10"	Bt.	56	659	56	659									P 1104	10'-2"	Bt.			8	432
																						P 1105	22'-0"	Str.			24	2805
																						P 1106	7'-5"	Bt.			48	1849
																						P 1107	18'-6"	Str.			24	2359
																						P 1108	28'-7"	Str.			10	1519
																						P 1109	39'-3"	Bt.			5	1043
																						P 1110	25'-11"	Bt.			5	688
																						P 1111	31'-9"	Bt.	24	4049		
																						P 1112	38'-2"	Str.	12	2433		
																						P 1113	15'-2"	Str.	12	967		
																						P 1114	10'-1"	Bt.	8	429		

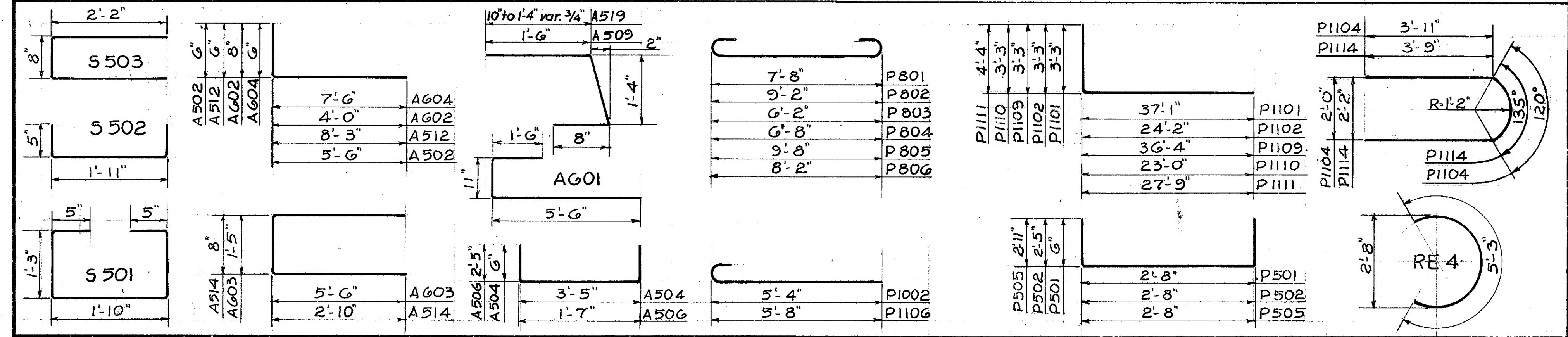
REPLACE	
MARK	NO.
RE 4	1
RE 5	2
RE 6	5
RE 7	3
RE 8	1
RE 9	—
RE 10	1
RE 11	2

If reinforcing from stock wt tested and ap Highway Testi samples as f need not be f ment bars will

SPIRAL REINF "Length" show the spiral bar the top of the of the pier cap. The "No. of Tu divided by the number of clos nearest whol bars shall r in other 1/8 c/c ends c four angle : 0.68 lb vided for ex equally spa the coil. The spacers, base will be paid r is included ii of spiral bars

			CORE DIA	PITCH	TU
	% SPIRAL				
SP401	18'-0"	Bt.	5	1763	32" 4 1/2"
SP402	15'-6"	Bt.	5	1453	32" 4 1/2"
SP403	18'-6"	Bt.	4	1375	32" 4 1/2"
SP404	15'-0"	Bt.	4	1127	32" 4 1/2"

BENDING DIAGRAMS



- NOTE**
- Bar size is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number.
  - Bars marked with single asterisks to be included for payment under Item 5-14. Railing.
  - All dimensions are out to out of bar.
  - The "Length" of bent bars is measured along the center line.

VOGT, IVERS,  
ENGINEERS  
CINCINNATI

**REINFORC**  
BRIDGE NO. 5  
HAMILT

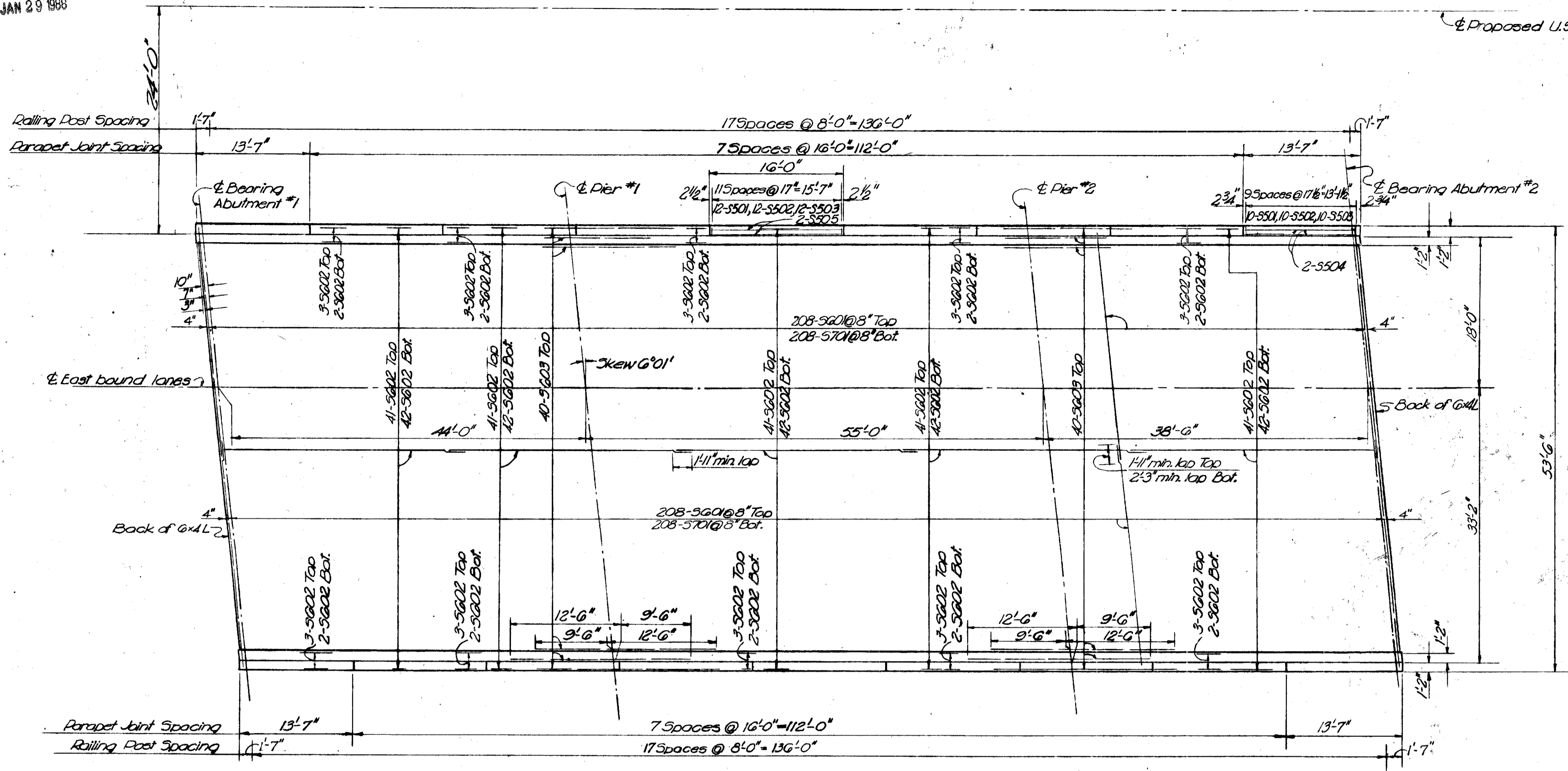
DESIGNED: CB  
DRAWN: CB

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JAN 29 1988

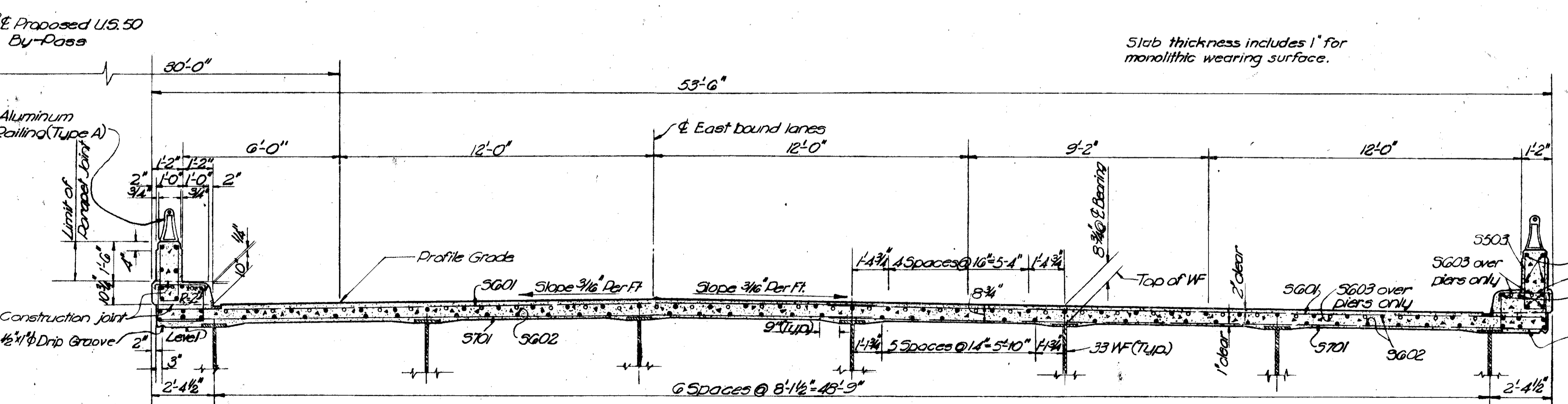
FED. RD. DIVISION	STATE
2	OHIO

HAMILTON COUNTY  
HAM - 25-15.00  
HAM - 50B-22.02

Proposed U.S. 50 By-Pass



**ROADWAY SLAB REINFORCING**



Slab thickness includes 1" for monolithic wearing surface.

**TYPICAL TRANSVERSE SECTION THRU ROADWAY**

**NOTES**

1. For location of scuppers see
2. Spread reinforcing steel in necessary to clear scuppers
3. For pavement elevations see
4. For railing details and additional joint details see standard
5. For reinforcing steel list see
6. Parapet concrete, 5504 are to be included with item 5 payment.

VOGT, IVERS, SEAMAN & ENGINEERS CINCINNATI

**SUPERSTRUCT ROADWAY S1**

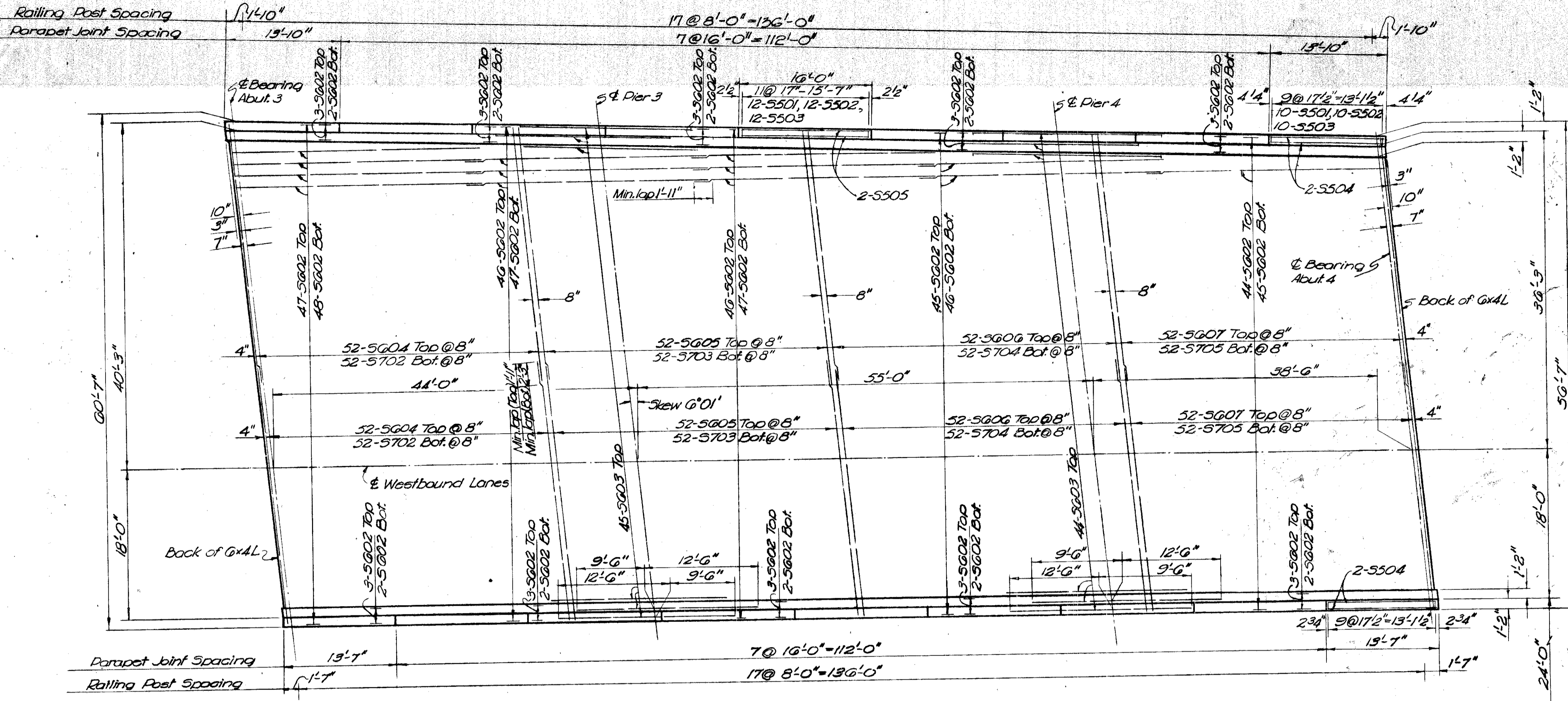
BRIDGE NO. H  
PROPOSED  
OVER PRO  
HAMILTON CO

DESIGNED DRAWN  
S.H.M. S.H.M.



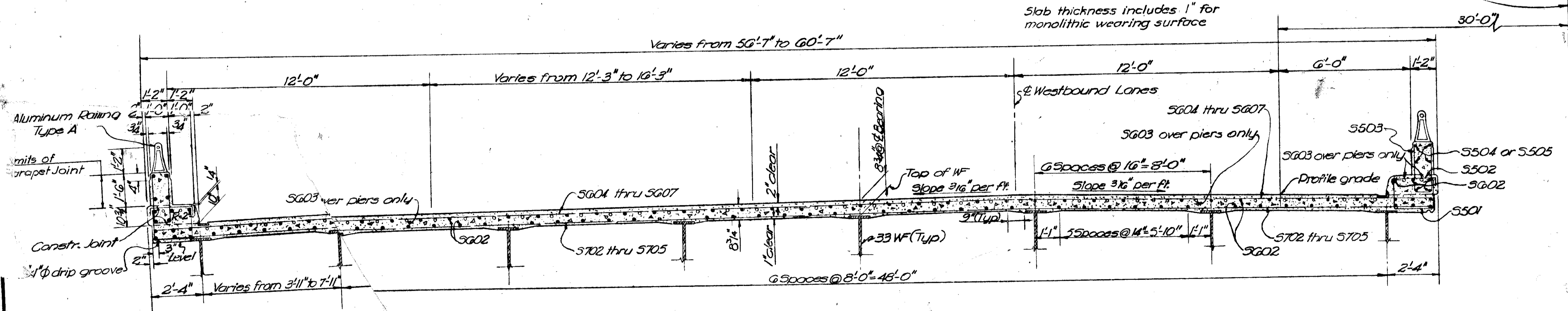
MICROFILMED  
JAN 29 1988

FED. DIVISION	STATE
2	OHIO
HAMILTON CO.	
HAM-25-15	
HAM-50B-2	



& Proposed U.S. 50 By-Pass

**ROADWAY SLAB REINFORCING**



**TYPICAL TRANSVERSE SECTION THRU ROADWAY**

**NOTES**

1. For location of scuppers see Sheet
2. Spread reinforcing steel in slab necessary to clear scuppers.
3. For pavement elevations see Sheet
4. For railing details and additional joint details see Standard Draw
5. For reinforcing steel list see Sheet
6. Parapet concrete, 5504 and 5505 to be included with item 5-14.1

VOGT, IVERS,  
ENGINEERS  
CINCINNATI

**SUPER ROAD!**

BRIDGE NO. PROPOSED  
OVER PRO.  
HAMILTON COUNTY

DRAWN TRA  
S.H.M. H.S.