

3011

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR
THROUGH TRAFFIC AND 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.

MICROFILMED
JAN 26 1989

MICROFILMED
JAN 26 1989

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

UI-1052(12)

FED. ROAD DIV. NO.	STATE	FED. AID. PROJ. NO.	W.P.A. FLDS.
2	OHIO	UI-1052(12)	213

LUCAS COUNTY
TOLEDO EXPRESSWAY SYSTEM
WOO-120-8.38 LUC-120-0.00

TOLEDO EXPRESSWAY SYSTEM

WOO-120-8.38 LUC-120-0.00

ROSS TOWNSHIP-WOOD COUNTY - OREGON TOWNSHIP-LUCAS COUNTY
EXPRESSWAY - PART 8

WOODVILLE ROAD TO TOLEDO CORPORATION LIMITS

INDEX OF SHEETS

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- 17-GENERAL NOTES
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- 20-23-TYPICAL CROSS SECTIONS
- 24-41-PAVEMENT DETAILS
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- 45-PLAN & PROFILE OF CURTICE ROAD
- 46-48-PLAN & PROFILE OF BROWN ROAD
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- 52-53-PLAN & PROFILE OF WHEELING
- 54-PLAN & PROFILE OF ANSONIA STREET 180-186-BRIDGE NO.LU-120-03 BROWN ROAD
- 55-PLAN & PROFILE OF GRASSER STREET 187-195-BRIDGE NO.LU-120-08 PICKLE STREET
- 56-57-PLAN & PROFILE OF NAVARRE STREET 196-204-BRIDGE NO.LU-120-12 WHEELING STREET
- 58-59-PLAN & PROFILE OF DEARBORN STREET 205-213-BRIDGE NO.LU-120-16 NAVARRE AVENUE
- 60-61B-MISCELLANEOUS DETAILS
- 156A-156B-STORM SEWER QUANTITIES
- 62-APPROACH SLABS
- 63-63A-FENCE DETAILS
- 64-153-CROSS SECTIONS
- 154-173-DRAINAGE PLANS
- 174-175-17'-6" X 8'-9" REINFORCED CONC. BOX.
- 176-177-GENERAL NOTES & QUANTITIES-BRIDGES
- 178-179-COMMON DETAILS - BRIDGES

LINE DATA

BEGIN PROJECT UI-1052(12) STA. 18-54.81
END PROJECT UI-1052(12) STA. 160+00.00
NET LENGTH PROJECT UI-1052(12) 14,459 LF OR 2.679 MI.

ADDITIONS

BROWN ROAD
PICKLE STREET
WHEELING STREET
NAVARRE AVENUE
RAMP "C"
RAMP "D"
NET LENGTH ADDITIONS 18,54.81
NET LENGTH OF WORK 22,456.62 OR 4.155 MI.

REVIEWED & APPROVED
DATE

ENGINEER OF TRAFFIC & SAFETY

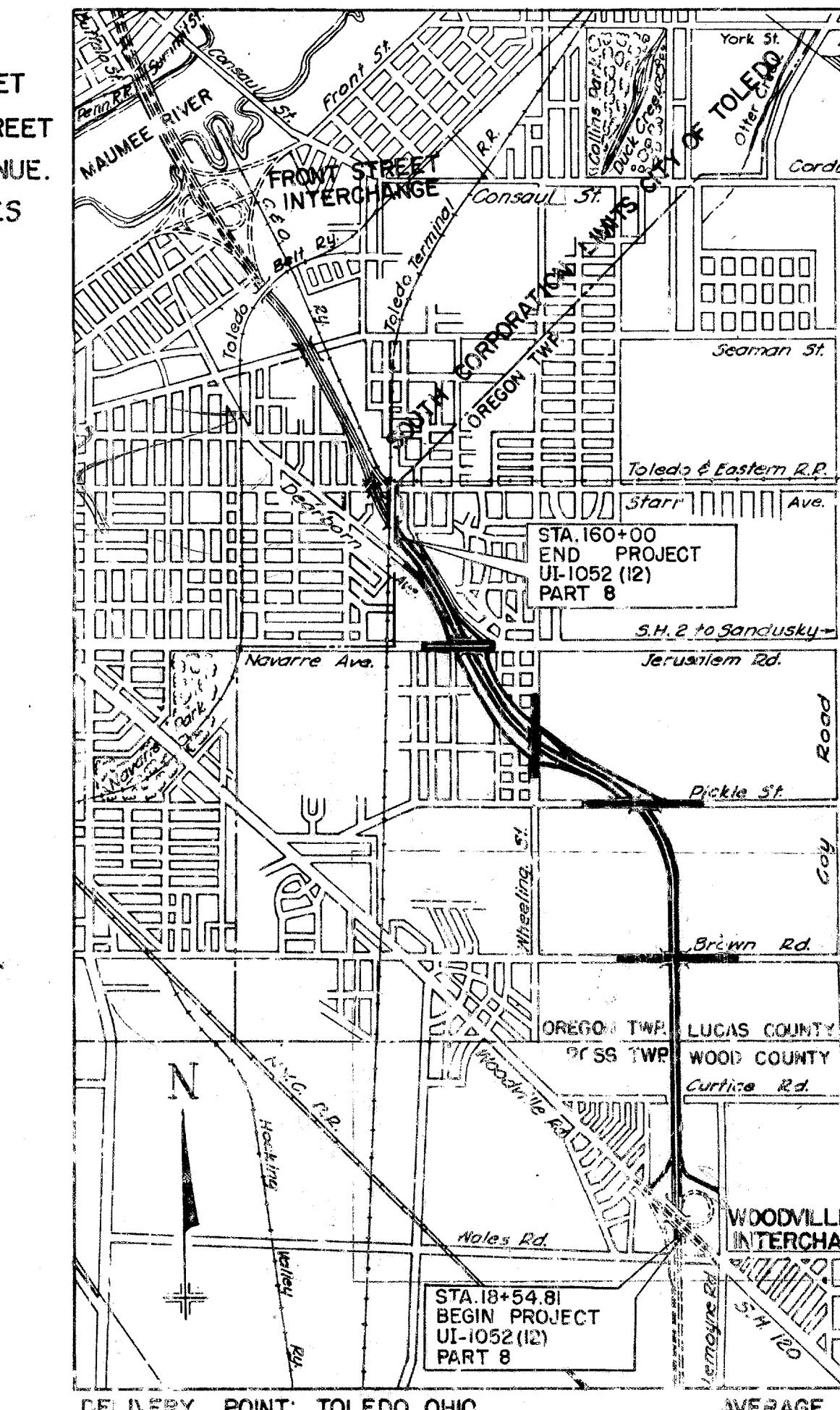
PREPARED AND RECOMMENDED BY
WARD NEEDLES TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
ANSAS CITY, CLEVELAND, NEW YORK

H. G. SOURS
ASSOCIATE
COLUMBUS

WOOD & LUCAS COUNTIES
SEC WOO-120-8.38 LUC-120-0.00
DATE OF SITTING 195
CONTRACT

SUPPLEMENTAL
SPECIFICATIONS

NUMBER	DATE	NUMBER	DATE
18 REV	9-20-54	M-110.27	9-9-52
M-206.14	7-15-49	M-109.23 REV	5-28-54
L-209.12	7-17-54		
B-119	REV 12-1-54		



LOCATION PLAN

Scale
1/4 1/2 3/4 1 Mile

STANDARD DRAWINGS

NUMBER	DATE	NUMBER	DATE
L-3	4-1-50	I-8 M.H. NO.1	5-1-52
L-3A	4-1-50	I-8 M.H. NO.2	5-1-52
B-T-71R	3-2-53	I-8 M.H. NO.3	5-1-52
L.J. NO.1	3-2-53	I-12	7-1-54
T.J. NO.1	3-2-53	I-15 NO.1 **	12-1-54
T.J. NO.2	3-2-53	I-15 NO.2 **	12-1-54
T.J. NO.3	10-1-54	I-21	1-2-55
I-15 S. 4 S. 5	2-20-45	BTSO-70-71E NO.1	Q-1-47
I-8CB NO.2 2A BB	5-1-52	S-27 P.G.1	5-1-52
I-8CB NO.3	5-1-52	I-70	1-2-53
I-8CB NO.34	5-1-52	N1	1-2-53
	4-1-53	S-27 P.G.1	5-1-52
		S-27 P.G.1	5-1-52

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DISTRICT ENGINEER

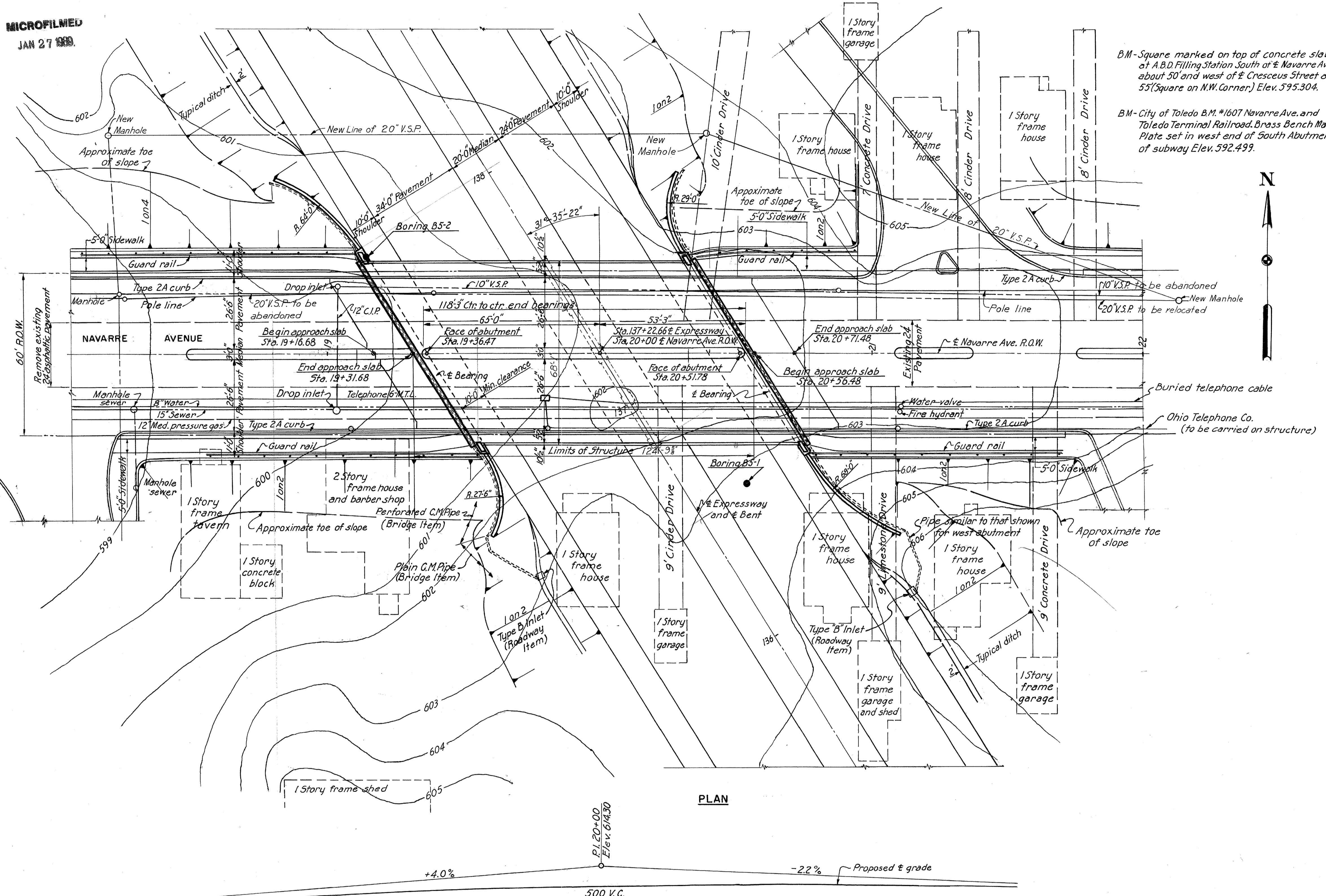
DATE

Revised 4-11-55
Revised 7-12-55
Revised 8-15-55
Revised 4-11-55

MICROFILMED
JAN 27 1989.

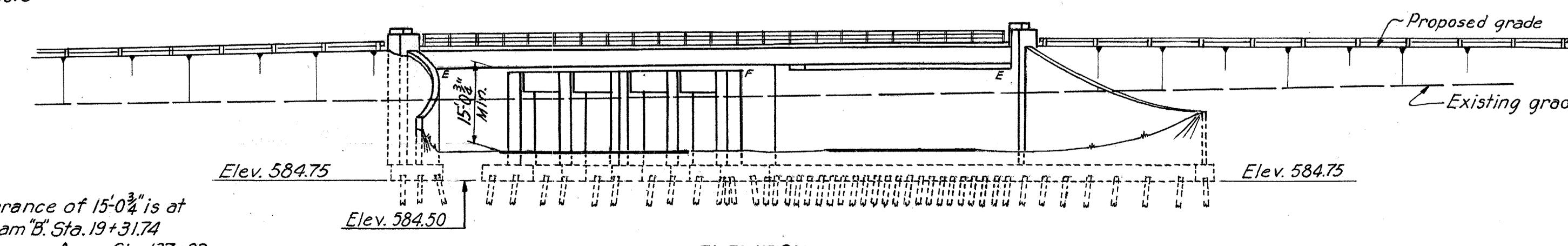
JAN 27 1980

JAN 27 1980



Note:
All piling to be 14" Cast-in-place
reinforced concrete with an estimated
average length of 45'. This estimate is
based on borings shown and is approximate
only. The contractor shall assume full
responsibility for lengths of piling
selected for driving.

Note:
Clearance of 15'-0 $\frac{3}{4}$ " is at
Beam "B" Sta. 19+31.74
Navarre Ave. = Sta. 137+82
Expressway.



PROPOSED STRUCTURE

PROPOSED STRUCTURE

Type: Two span continuous rolled beam with reinforced concrete slab.

Spans: $65'0'' + 53'3'' = 118'3''$.

Roadway: 2 @ 26'6", 3'-0" Median.

Sidewalk: 2 @ 5'-2".

Loading: Ohio CF400.

Skew: $31^{\circ}35'22''$.

Surface Course: 2 $\frac{1}{2}$ " Asphaltic Concrete surface course.

N.T.B. BR. NO. 5 **PART 8**

TOLEDO EXPRESSWAY SYSTEM

NAVARRE AVENUE UNDERPASS

BB NO 111-180 16

SITE PLAN

PART 8

N.T.B. BR. NO. 5 **PART 8**

TOLEDO EXPRESSWAY SYSTEM

NAVARRE AVENUE UNDERPASS

BB NO 111-180 16

SITE PLAN

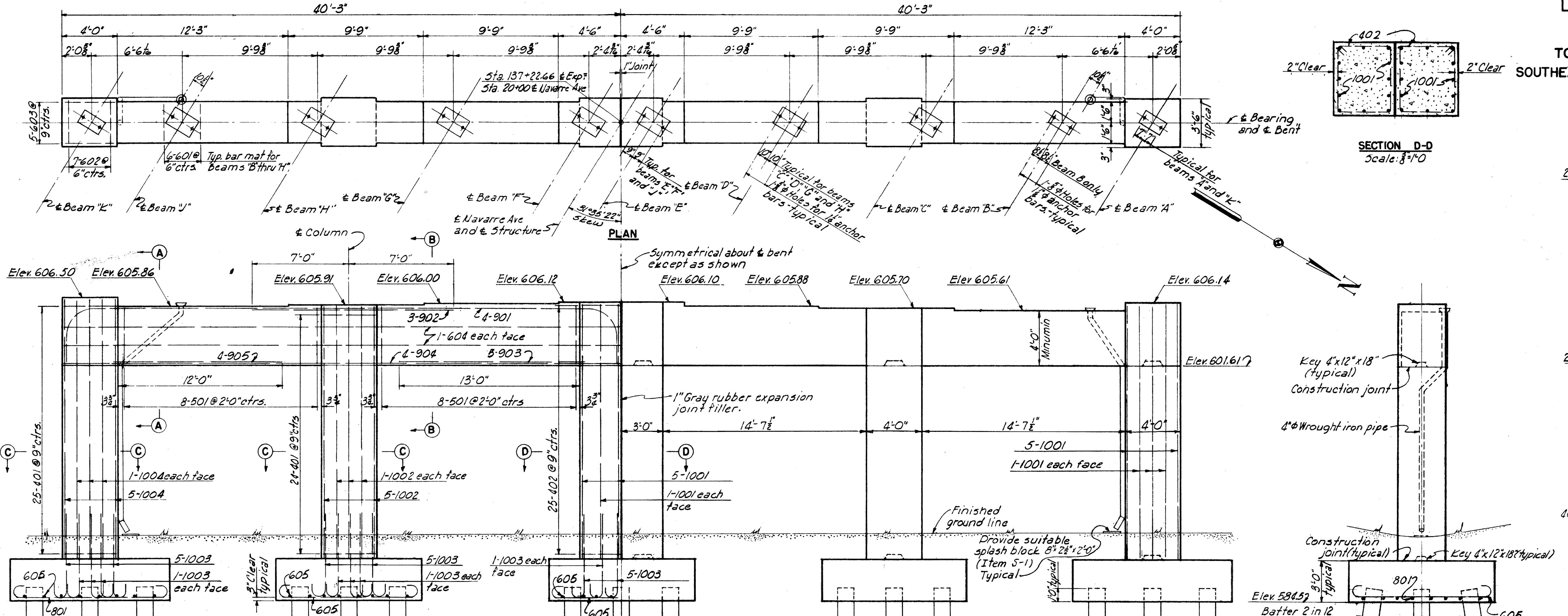
LEDO LUCAS COUNTY, OHIO
LE 1" = 20' 0"
DE J.D.P. DATE 6-29-53
D C.T.H. DATE 3-29-54
D.L.L. DATE 10-29-54
HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY NEW YORK
SHEET 205

MICROFILMED
JAN 27 1969.

JAN 27 1968

ROAD NO	STATE	FED. AID PROJ. NO.	TYPE FUND	
2	OHIO	UI 1052 (12)		206 213

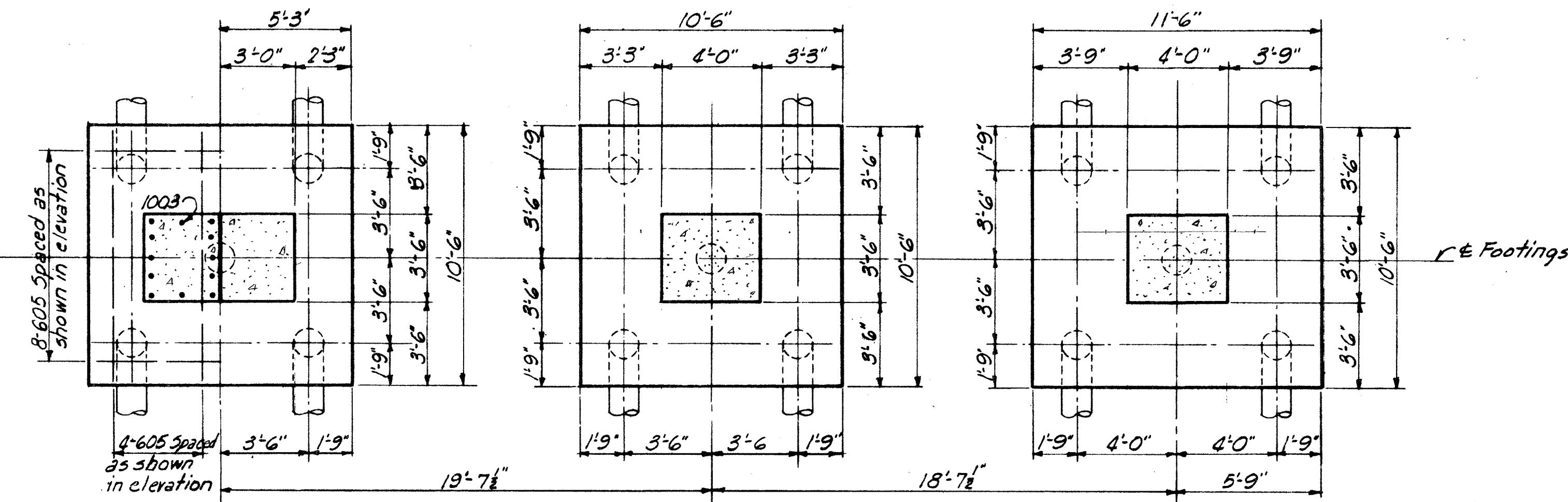
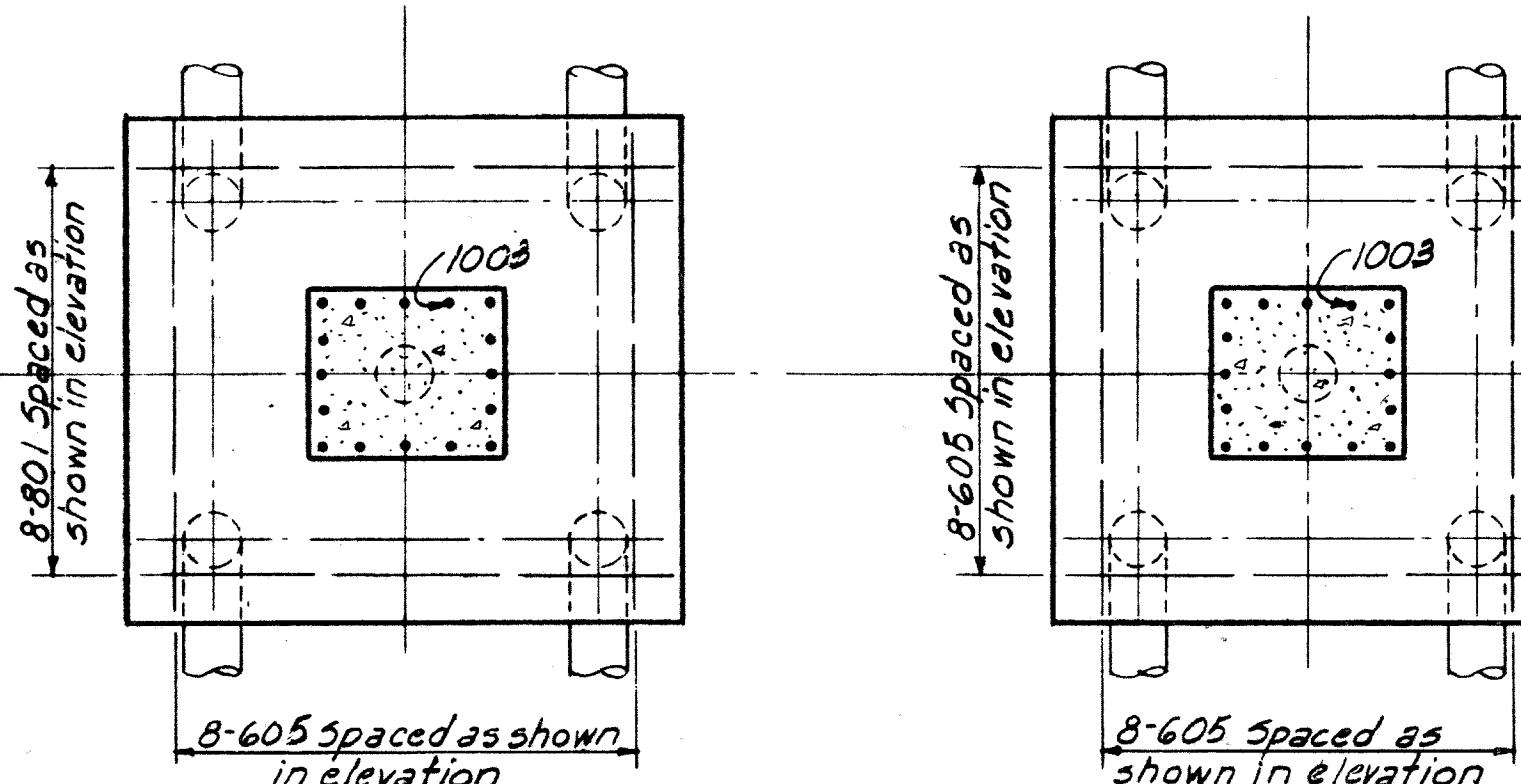
**LUCAS COUNTY
CITY OF TOLEDO
TOLEDO EXPRESSWAY SYSTEM
SOUTHEAST SEGMENT STRUCTURES**



ELEVATION

END ELEVATION

Notes:
All piles to be 14" butt diameter
inforced concrete.
For shoe details and drainage
details see Sheet 178



FOOTING PL

H.N.T.B. BR. NO.5 **PART 8**

TOLEDO EXPRESSWAY SYSTEM

NAVARRE AVENUE UNDERPASS

NAVARRE AVENUE UNDERPASS

R. NO. LU-120-16

EDO LUCAS COUNTY, OHIO
 $\frac{4}{4} = 1-0^*$
L.L. DATE 11-24-53 HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CB DATE 10-21-54 CONSULTING ENGINEERS
D.L.L. DATE 10-27-54 KANSAS CITY NEW YORK
810 SHEET- 206

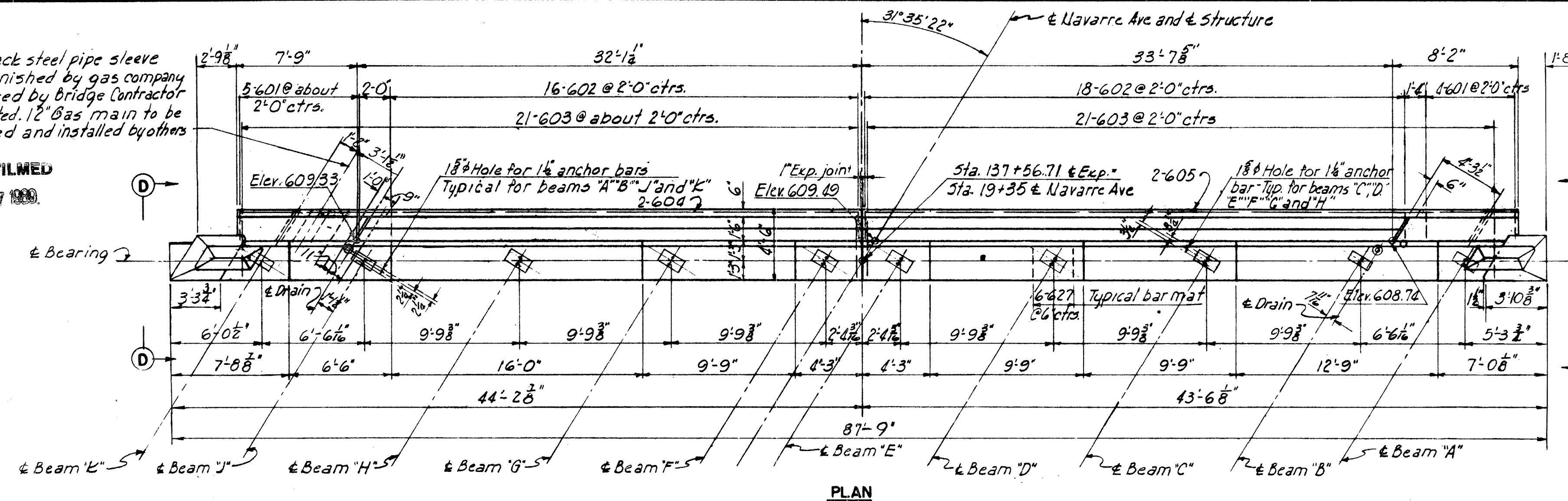
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2	OHIO	UI 1052 (12)		

07
13

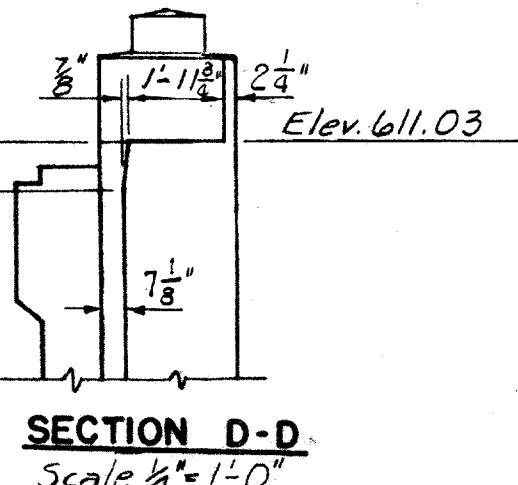
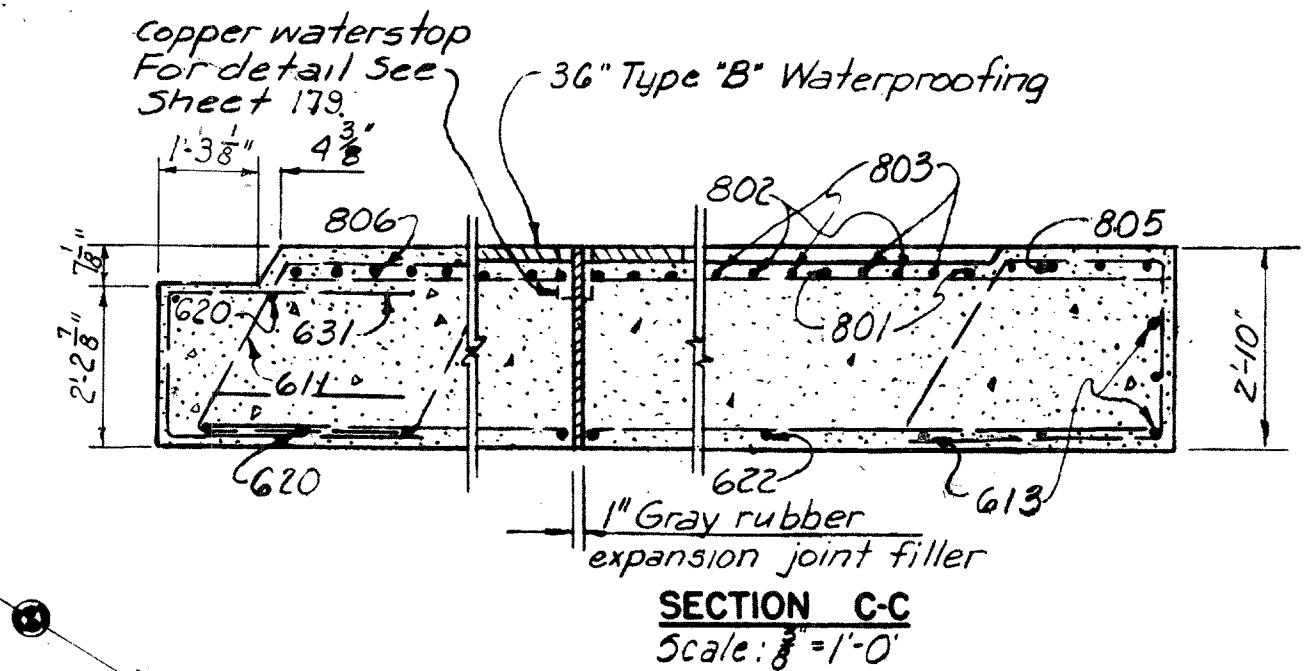
LUCAS COUNTY
CITY OF TOLEDO
TOLEDO EXPRESSWAY SYSTEM
SOUTHEAST SEGMENT STRUCTURES

• \$14" Black steel pipe sleeve
to be furnished by gas company
and placed by bridge contractor
as directed. 12" Gas main to be
furnished and installed by other

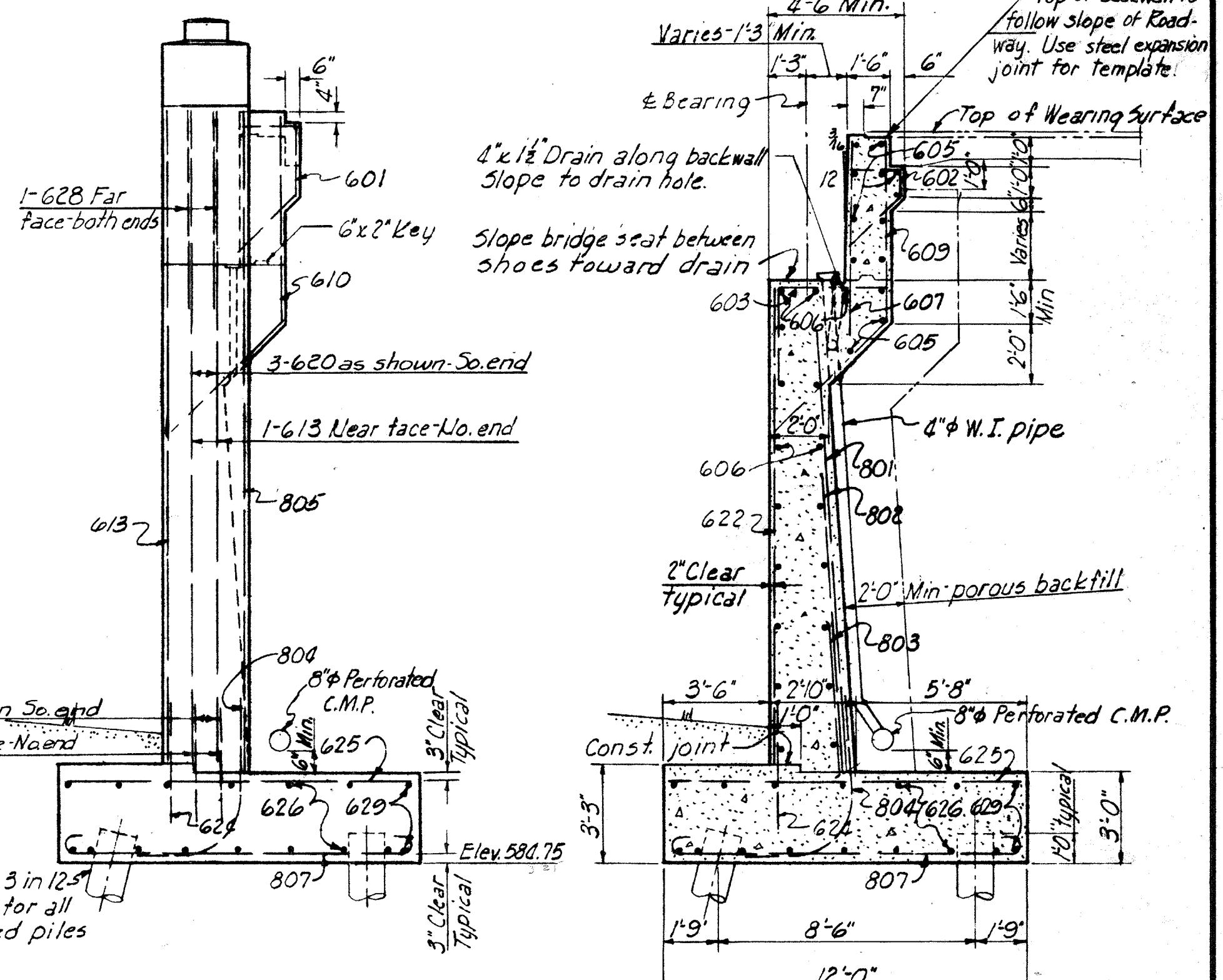
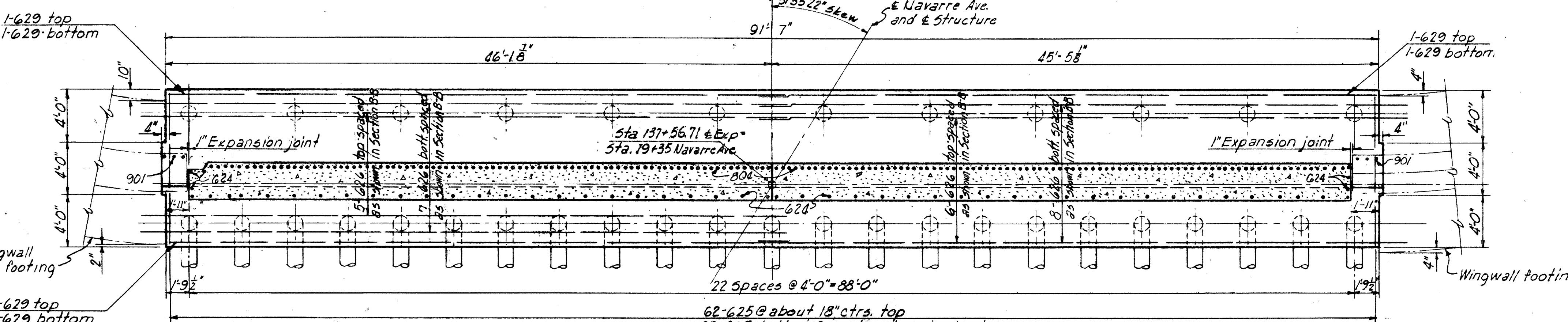
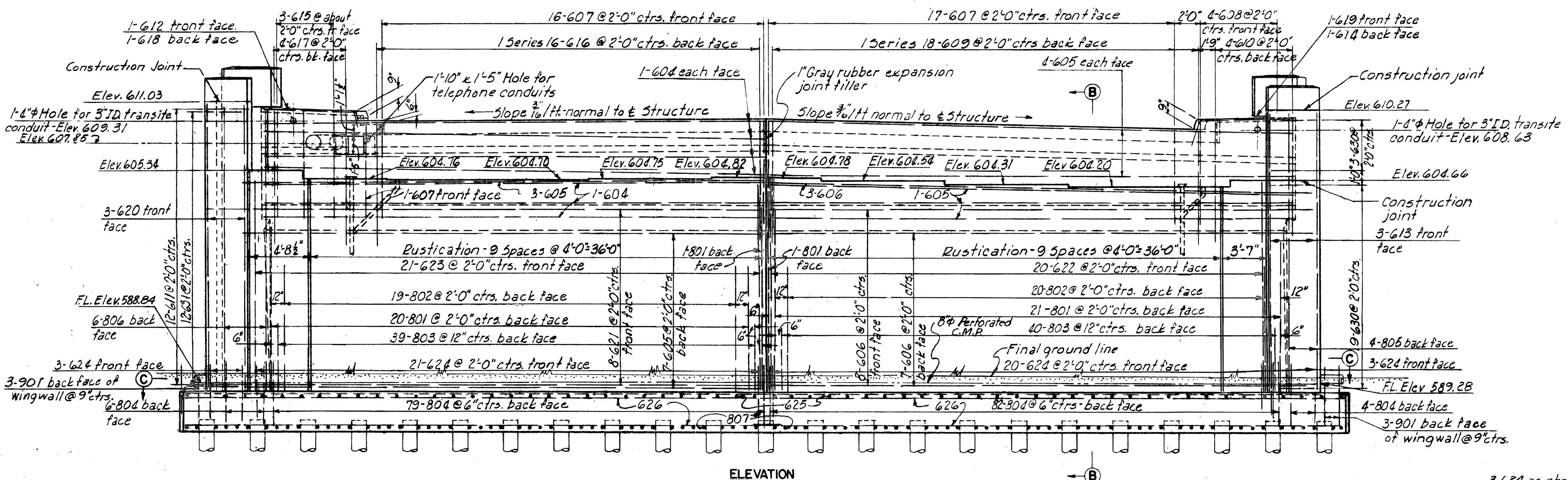
MICROFILMED
JAN 27 1989.



Note: Elevations shown in plan are
back of L6K 4x $\frac{1}{2}$ elevations.



For expansion joint detail see sheet 178. Note that back wall is to be poured after expansion joint steel has been attached to ridge superstructure



Notes:
For rustication details see Sheet 179
All piles 14" diameter reinforced concrete
For shoe detail see Sheet 178
For detail of End Posts see sheet 179

H.N.T.B. BR. NO. 5 **PART 8**

OLEDO EXPRESSWAY SYSTEM

BR. NO. LU-120-16

WEST APARTMENT

EDO LUCAS COUNTY, OHIO
3" = 1' 0"
LL DATE 12-3-53 HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CB DATE 10-21-54 CONSULTING ENGINEERS
L.L. DATE 10-27-54 KANSAS CITY NEW YORK
810 SHEET 207

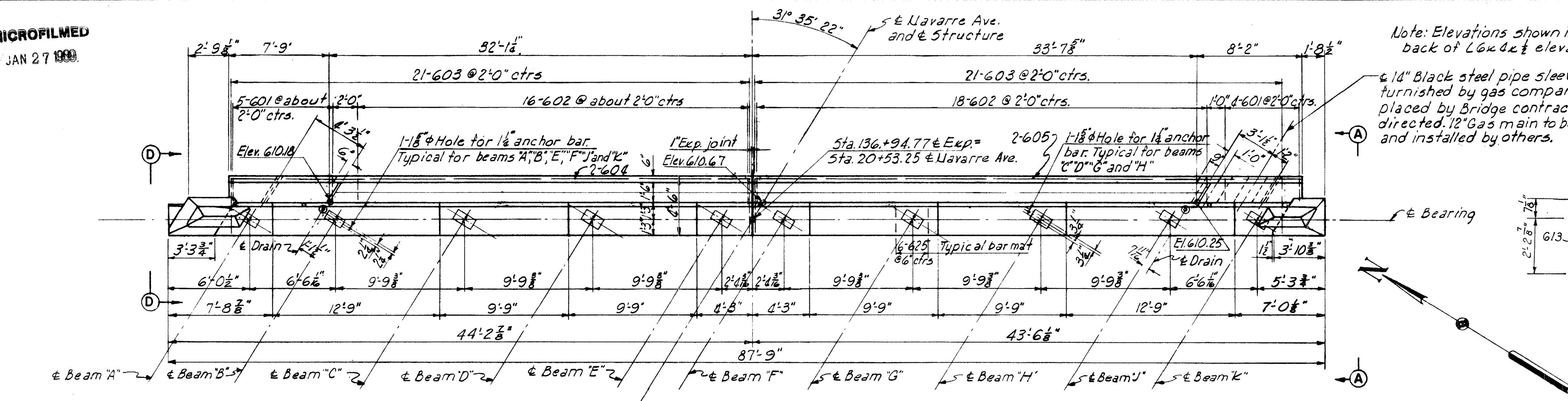
MICROFILMED

JAN 27 1980

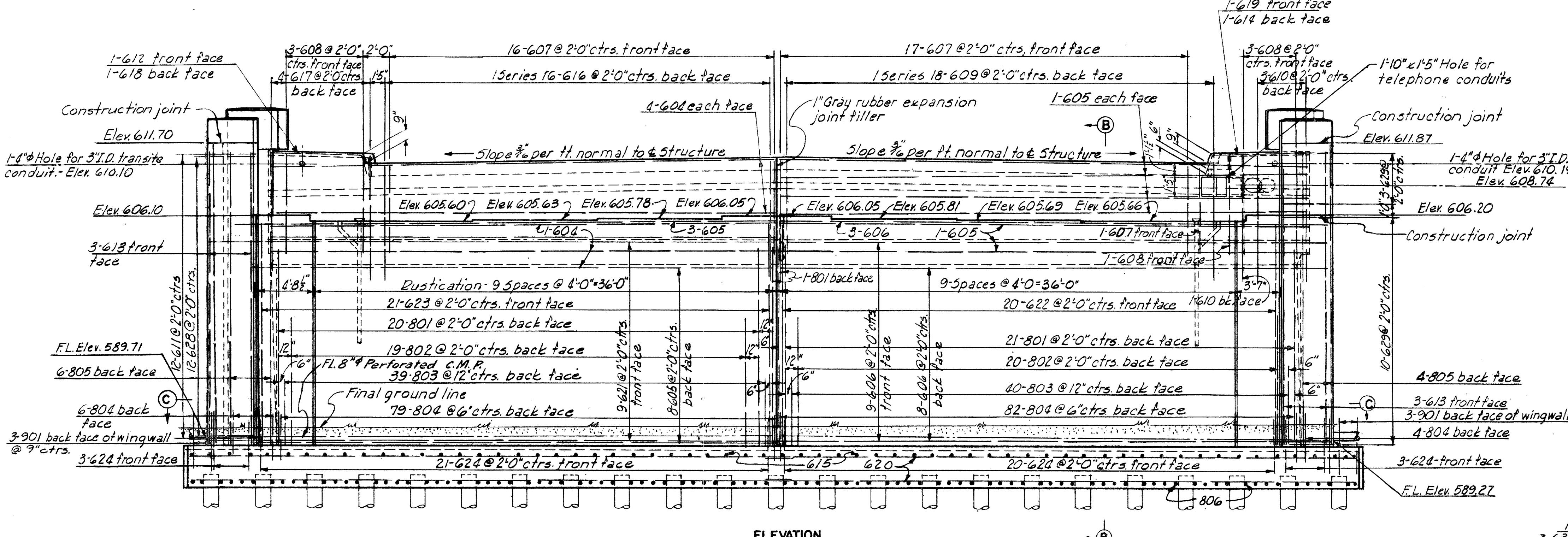
ROAD NO.	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO	UI 1052 (12)	

08
3

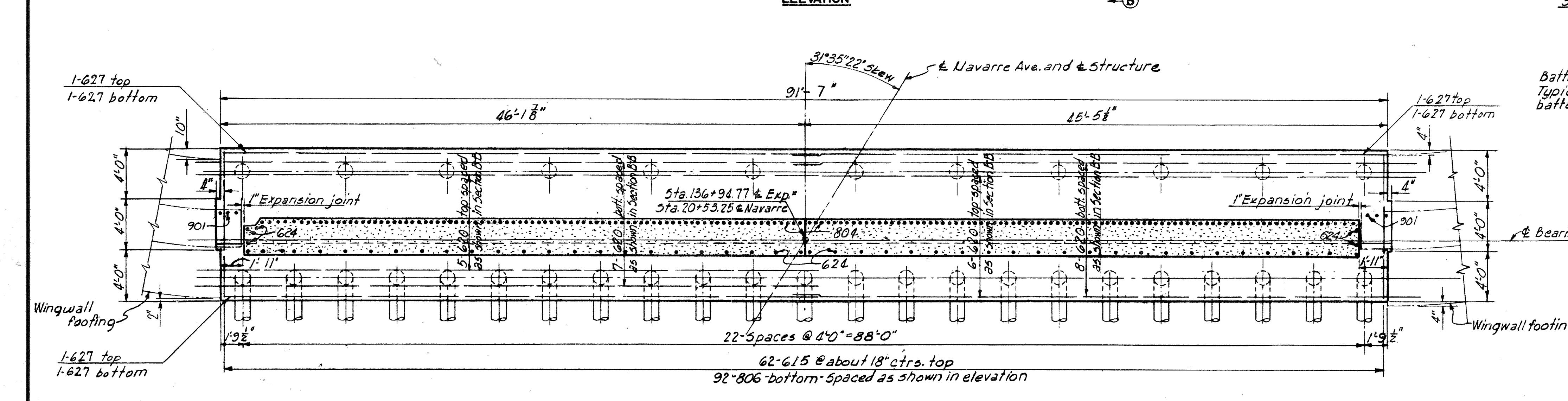
**LUCAS COUNTY
CITY OF TOLEDO
TOLEDO EXPRESSWAY SYSTEM
OUTHEAST SEGMENT STRUCTURES**



PLAY



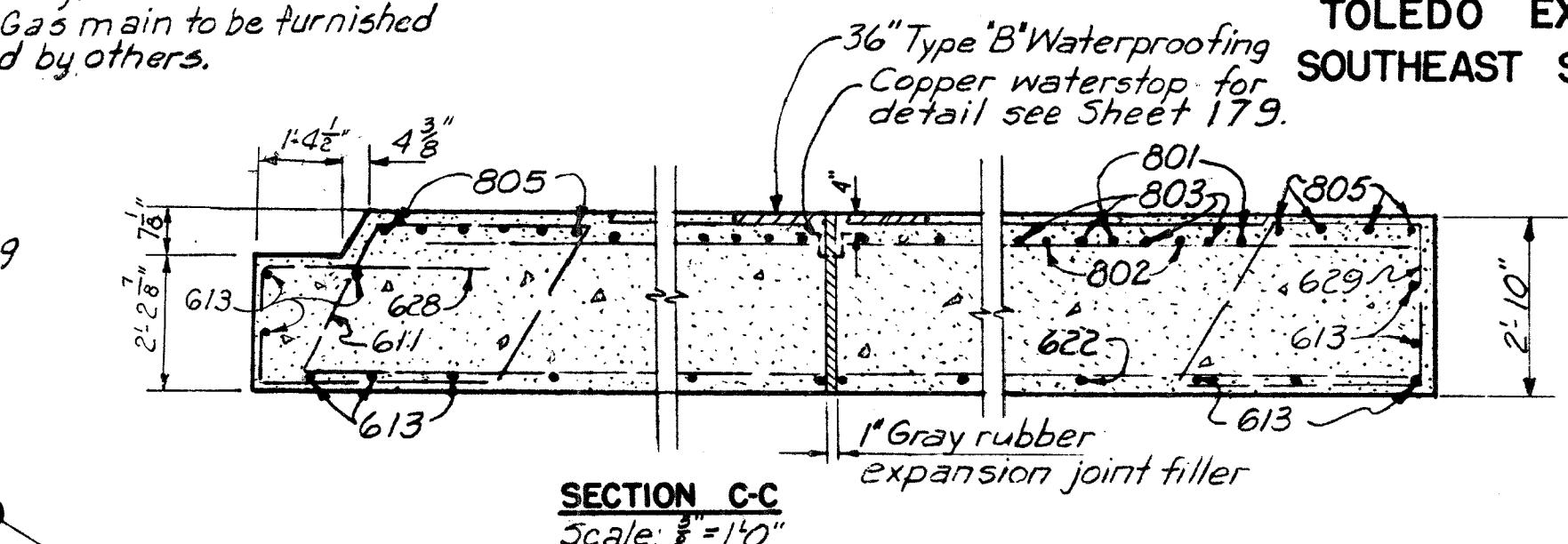
ELEVATION



FOOTING PL

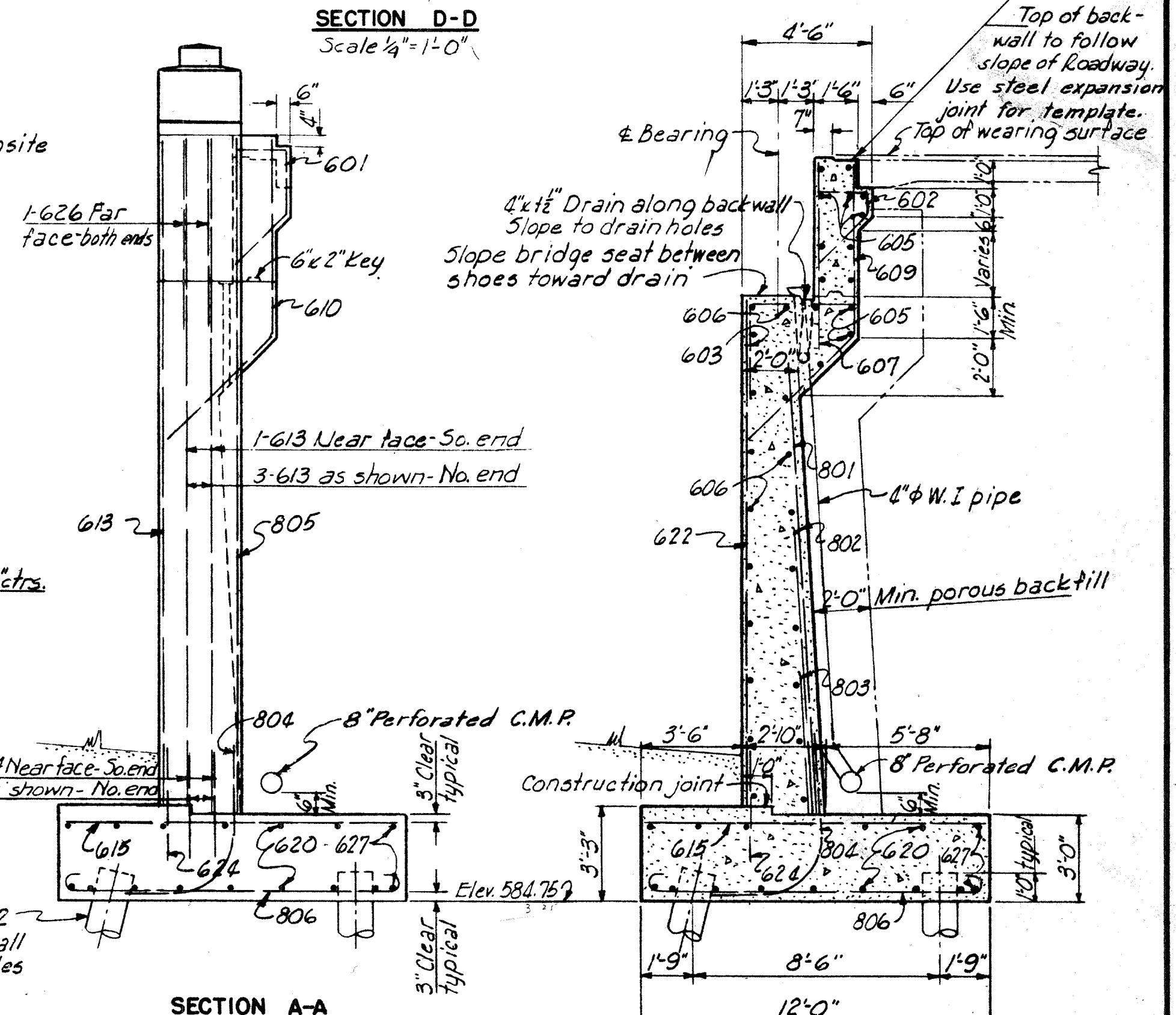
Note: Elevations shown in plan are back of L6x4ft elevations.

A **6 1/4" Black steel pipe sleeve to be furnished by gas company and placed by Bridge contractor as directed. 12" Gas main to be furnished and installed by others.**



SECTION C-C

For expansion joint detail see sheet 178. Note that backwall is be poured after expansion joint steel has been attached to ridge superstructure.



SECTION A-A

Notes:
For rustication detail see Sheet 179.
All piles 14" diameter reinforced concrete.
For shoe detail see Sheet 178
For detail of End posts see sheet 179

H.N.T.B. BR. NO. 5 PART 8

TOLEDO EXPRESSWAY SYSTEM

NAVARRE AVENUE UNDERPASS

NAVARRÉ AVENUE UNDERPASS

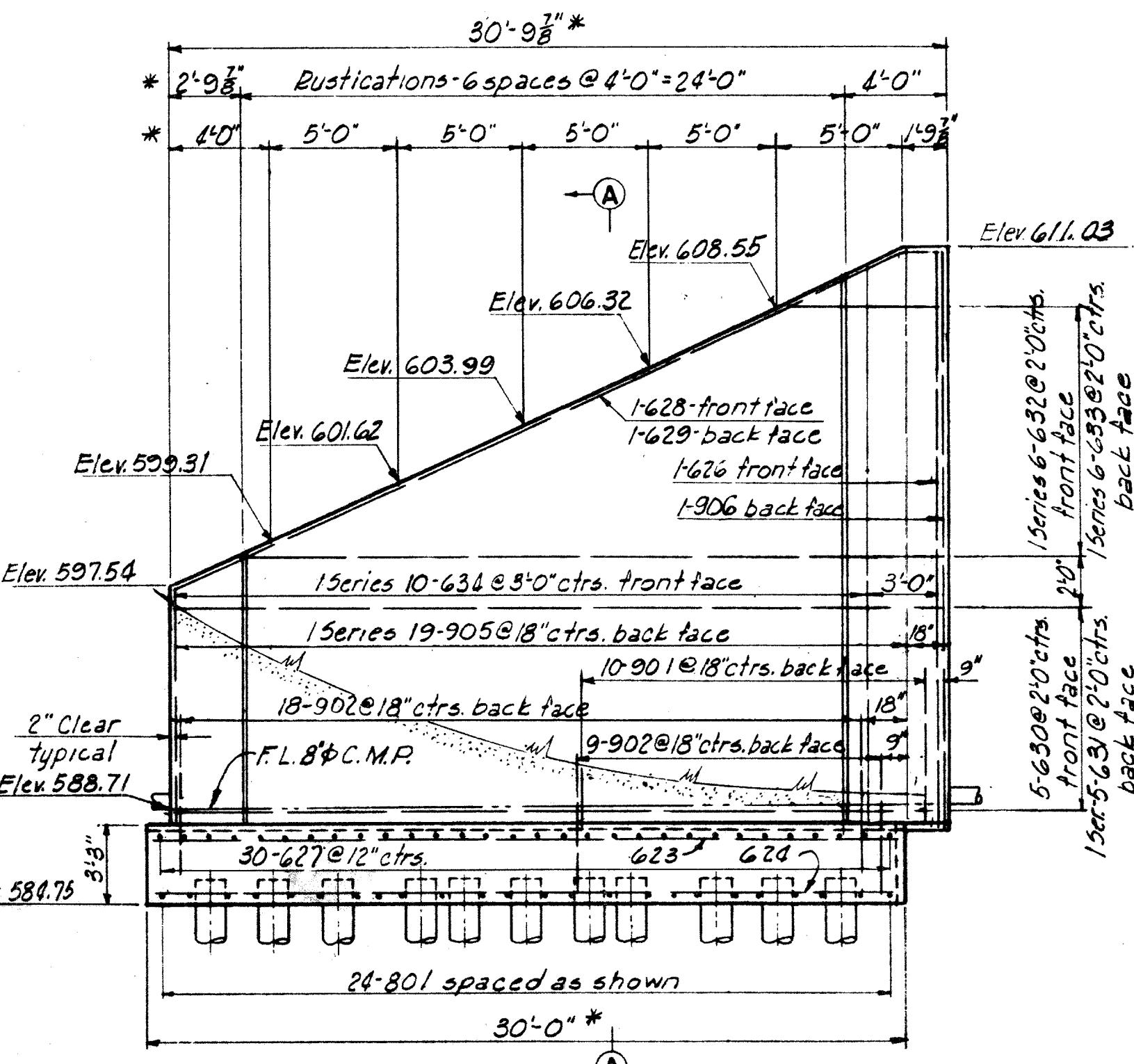
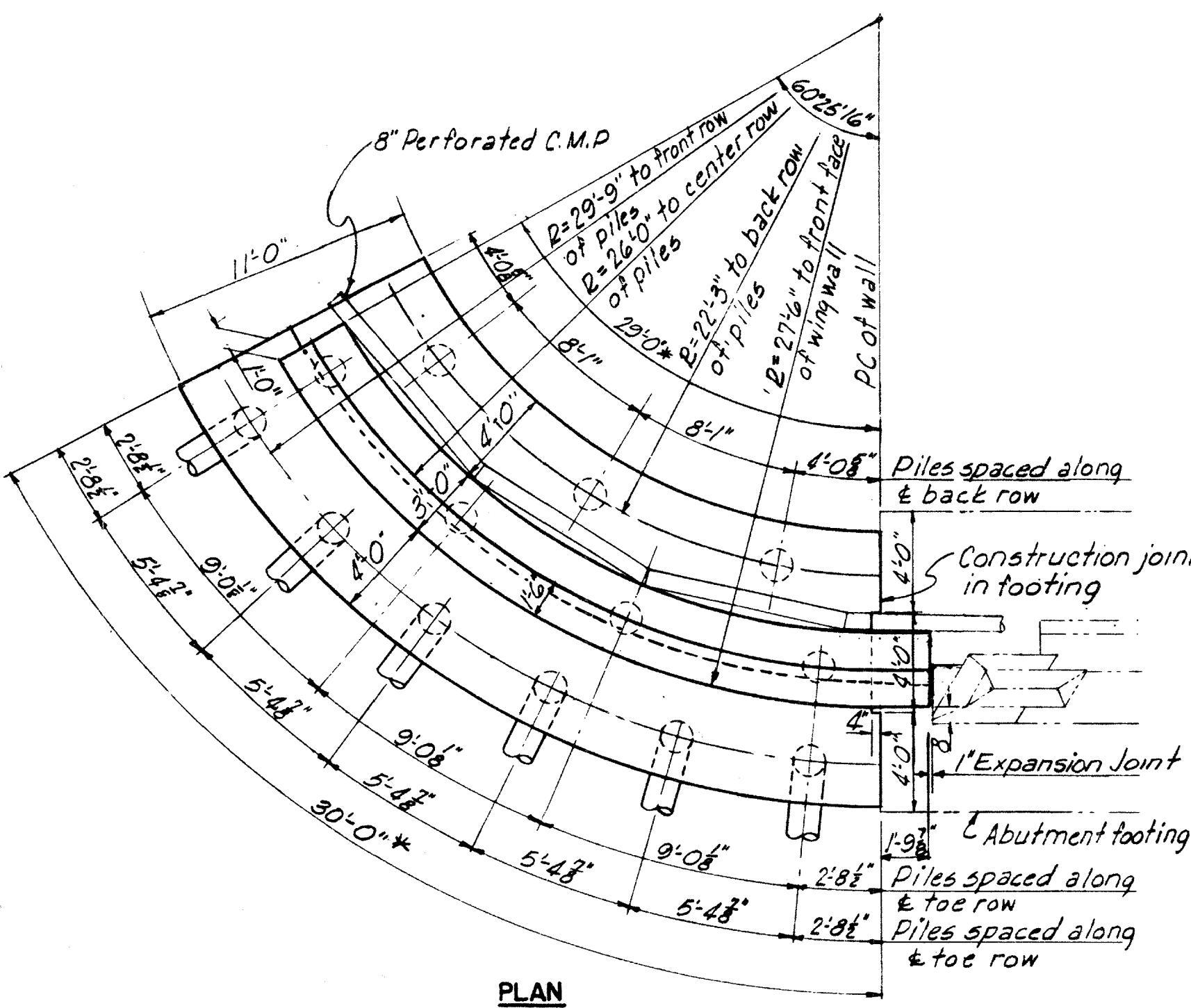
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LUCAS COUNTY, OHIO

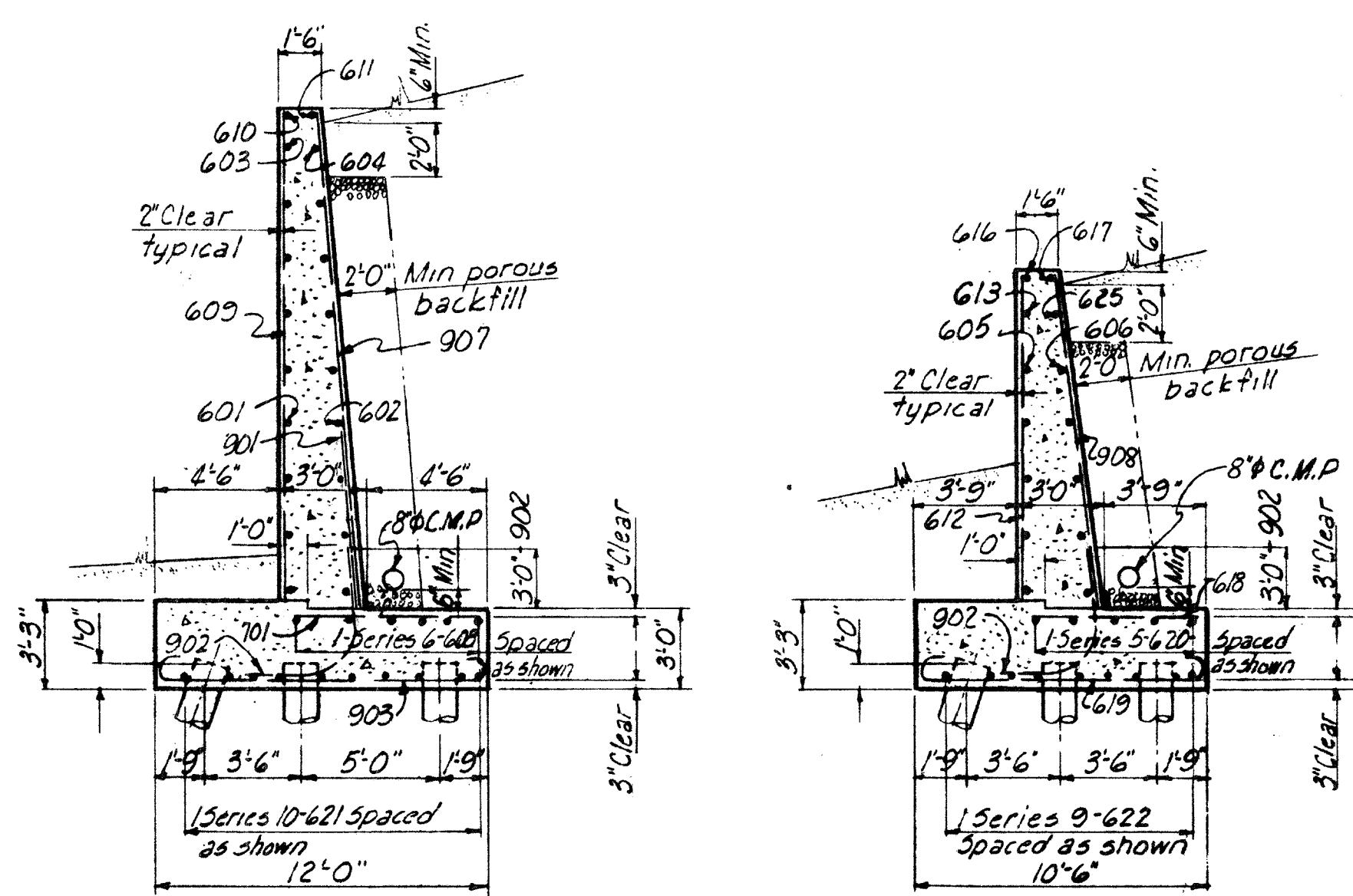
MICROFILMED
JAN 27 1969

FED. ROAD DIV. NO	STATE	FED. AID PROJ. NO.	TYPE FUNDS
2	OHIO	UI 1052 (12)	209 213

LUCAS COUNTY
CITY OF TOLEDO
TOLEDO EXPRESSWAY SYSTEM
SOUTHEAST SEGMENT STRUCTURES

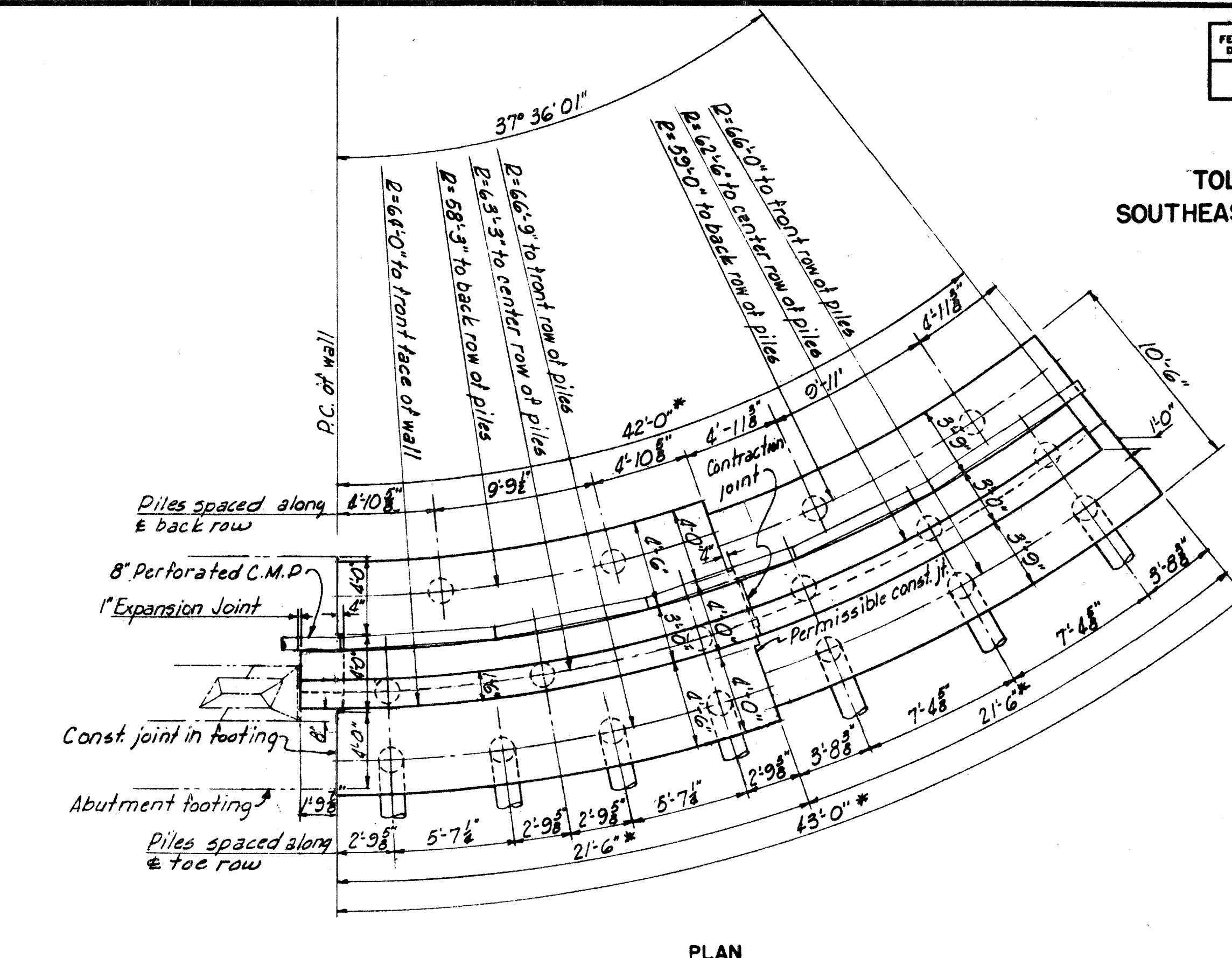
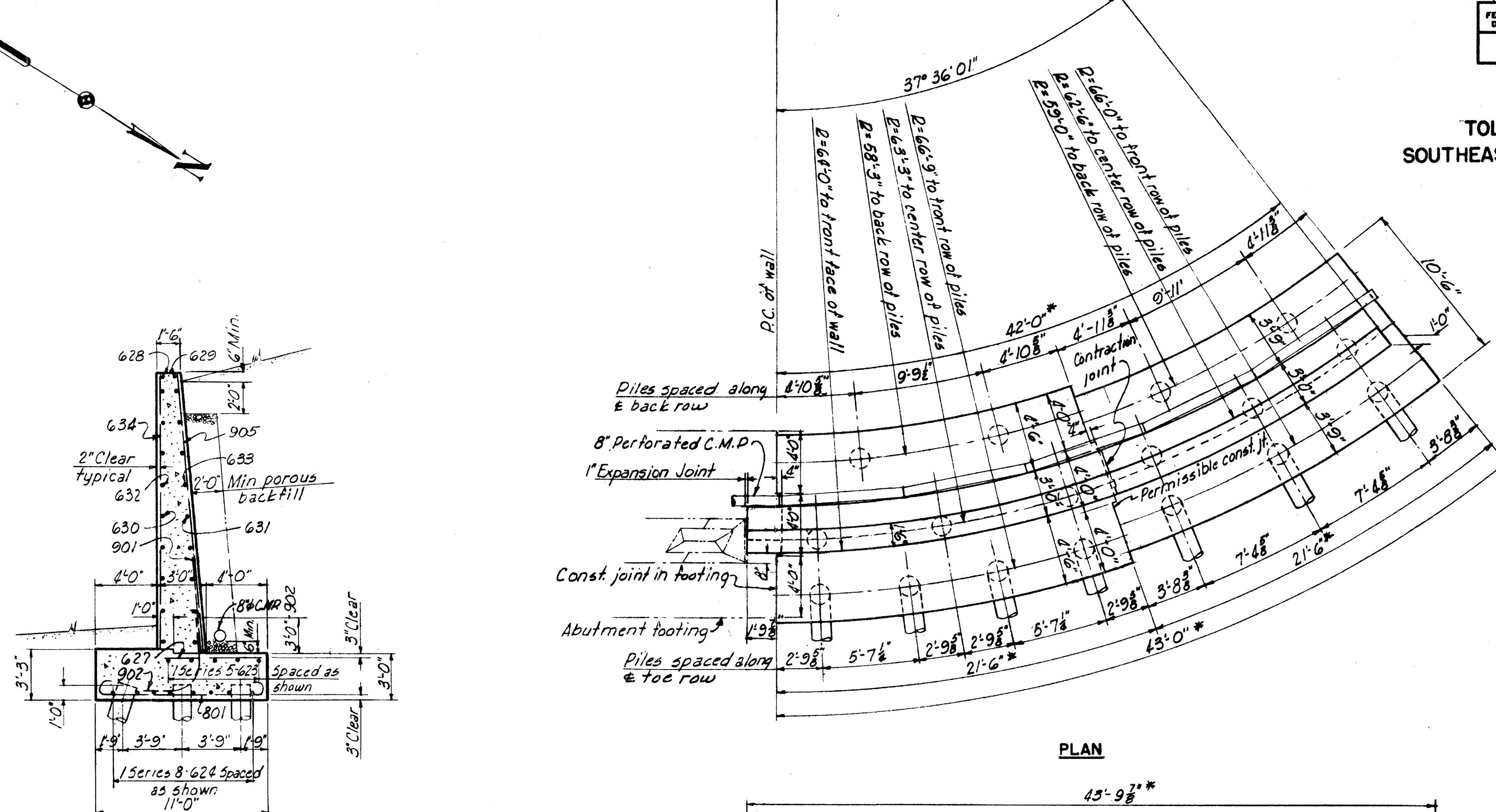


* Dimensions measured along front face of wingwall

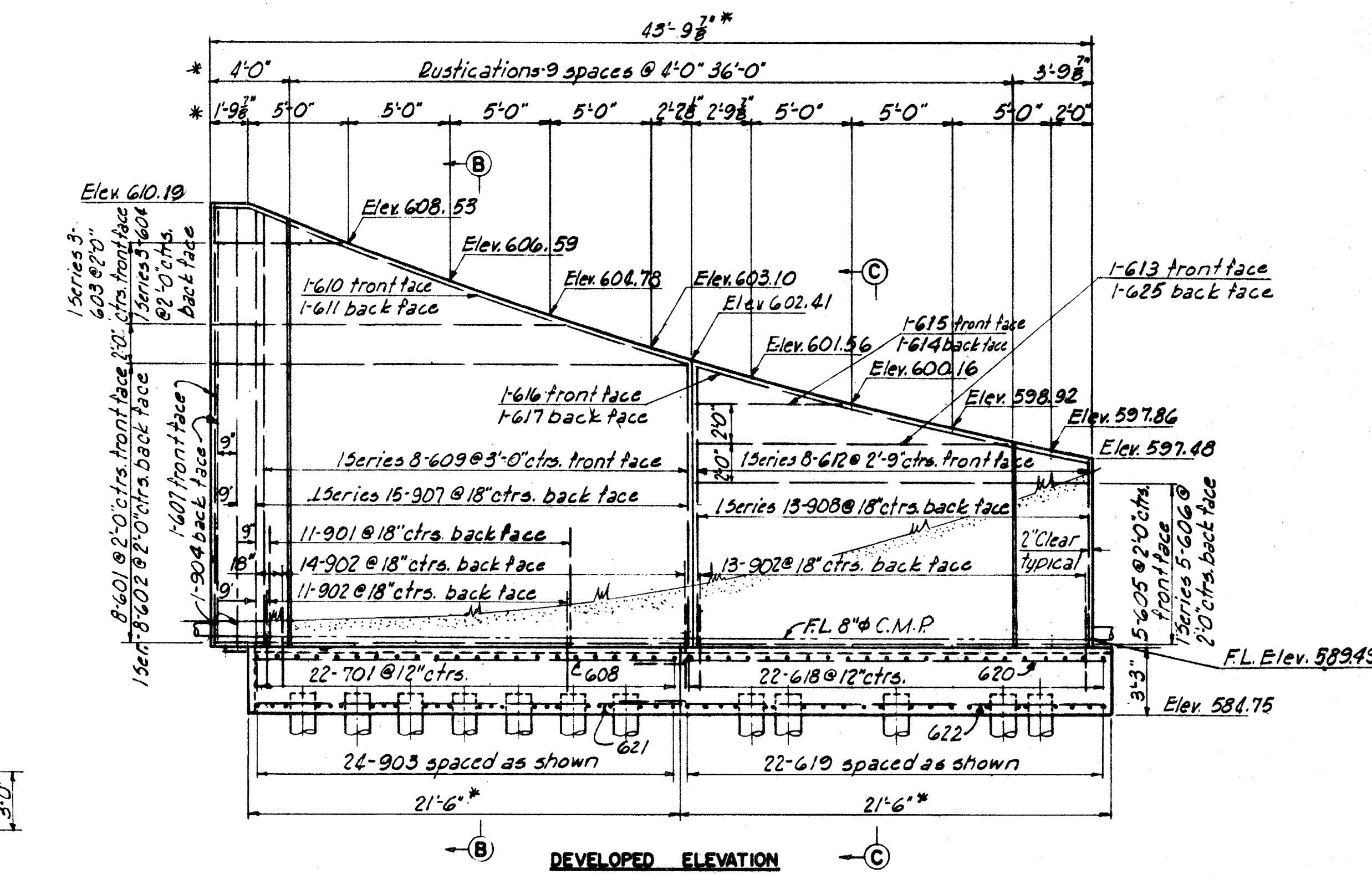


SECTION B-B

SECTION C-C



PLAN



* Dimensions measured along front face of wingwall

Notes:
All piles to be 14" butt diameter reinforced concrete.
For expansion joint detail, contraction joint detail and rustication detail, see sheet 179.
Transverse footing reinforcement is to be placed radially, spaced along front face of wall.

Batter all front piles 4 in 12

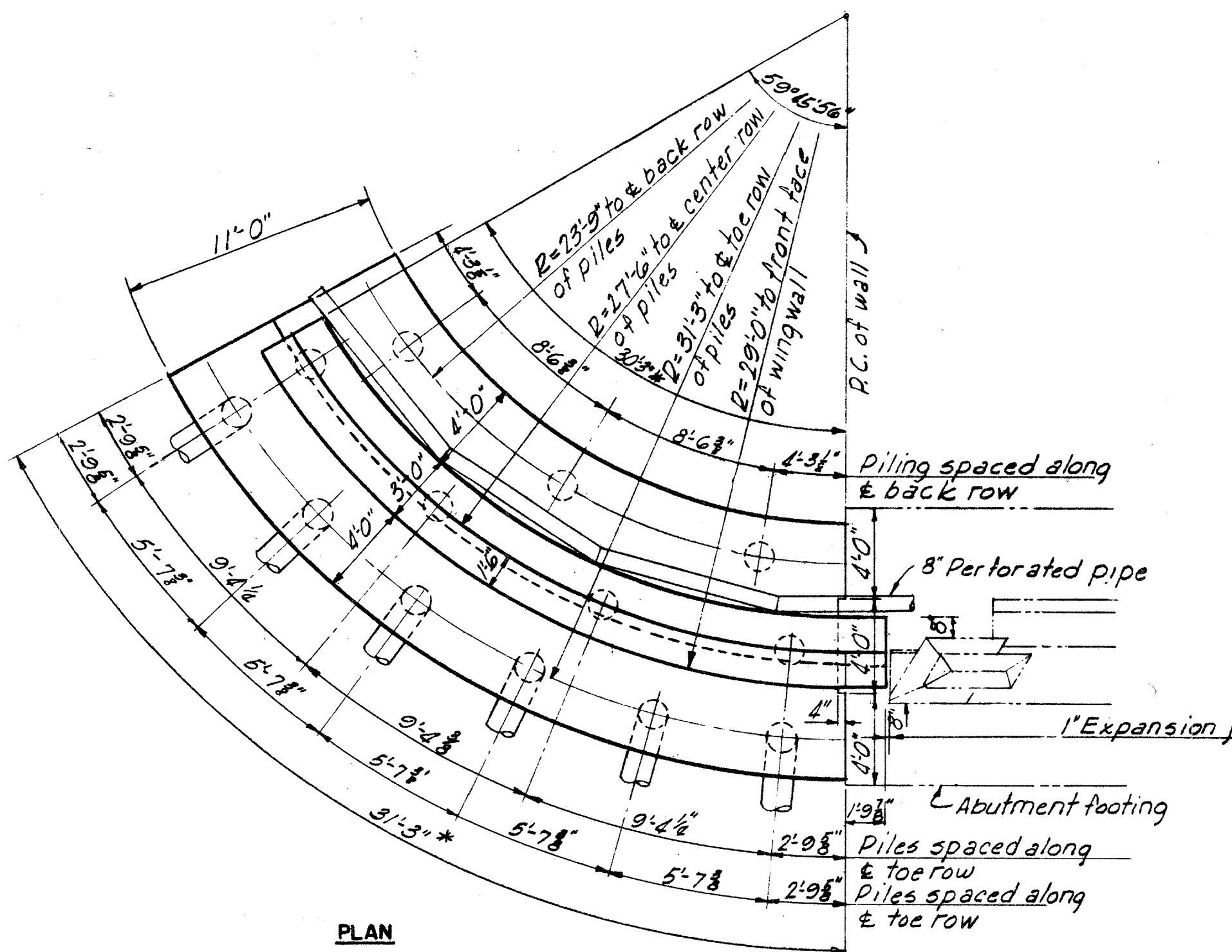
H.N.T.B. BR. NO. 5 PART 8
TOLEDO EXPRESSWAY SYSTEM
NAVARRE AVENUE UNDERPASS

BR. NO. LU-120-16
NORTHWEST AND SOUTHWEST WINGWALLS

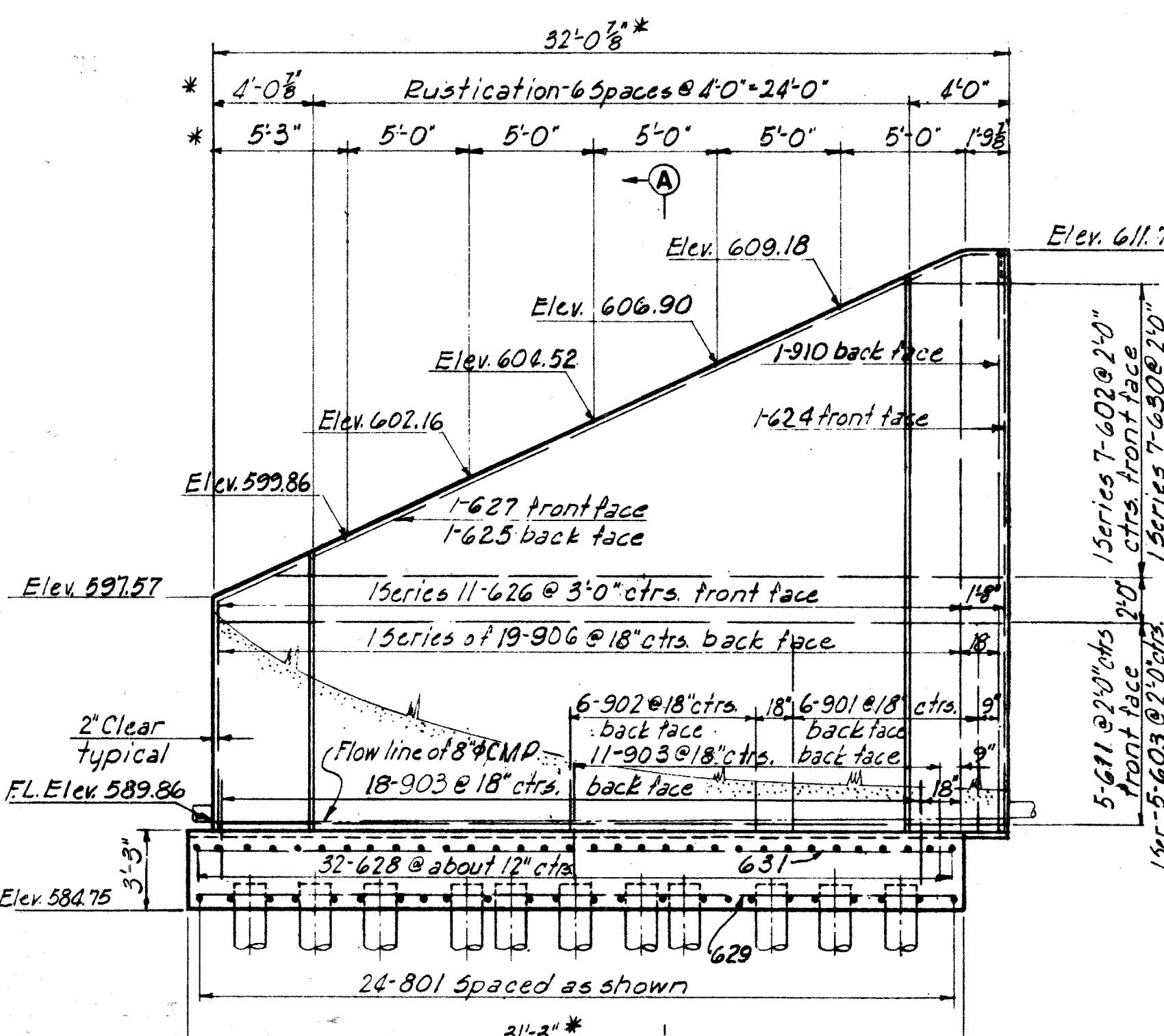
TOLEDO LUCAS COUNTY, OHIO

SCALE % = 1'-0"
MADE LL DATE 11-3-53 HOWARD, NEEDLES, TAMMEN & BERGENDORF
TRCD CB DATE 10-21-54 CONSULTING ENGINEERS
CKD DCL DATE 10-26-54 KANSAS CITY NEW YORK
810 SHEET 209

LUCAS COUNTY
CITY OF TOLEDO
TOLEDO EXPRESSWAY SYSTEM
SOUTHEAST SEGMENT STRUCTURES

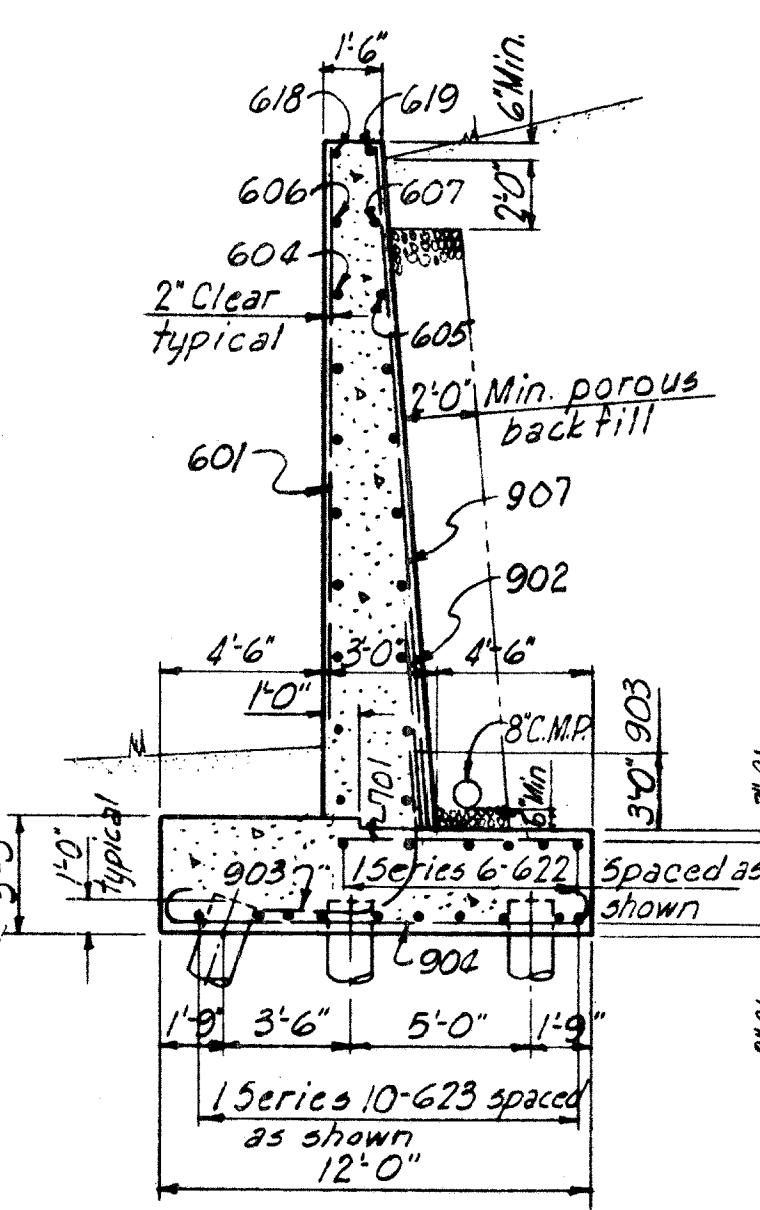


PLAN

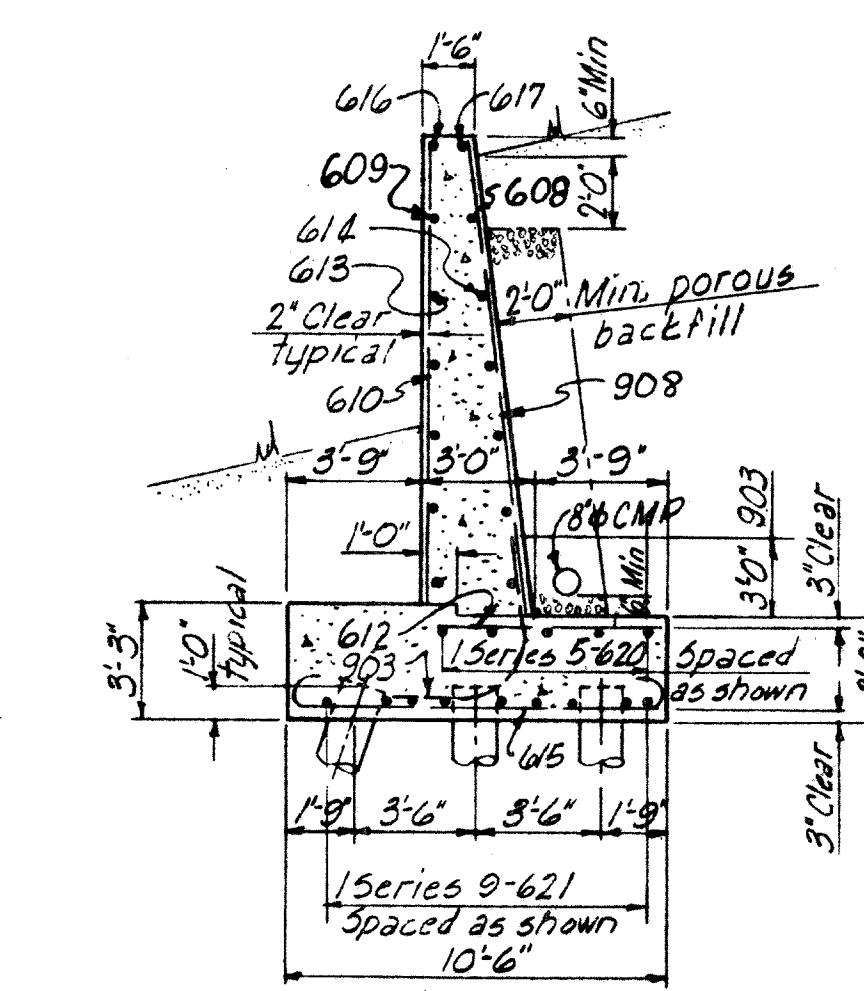


DEVELOPED ELEVATION
NORTHEAST WINGWAL

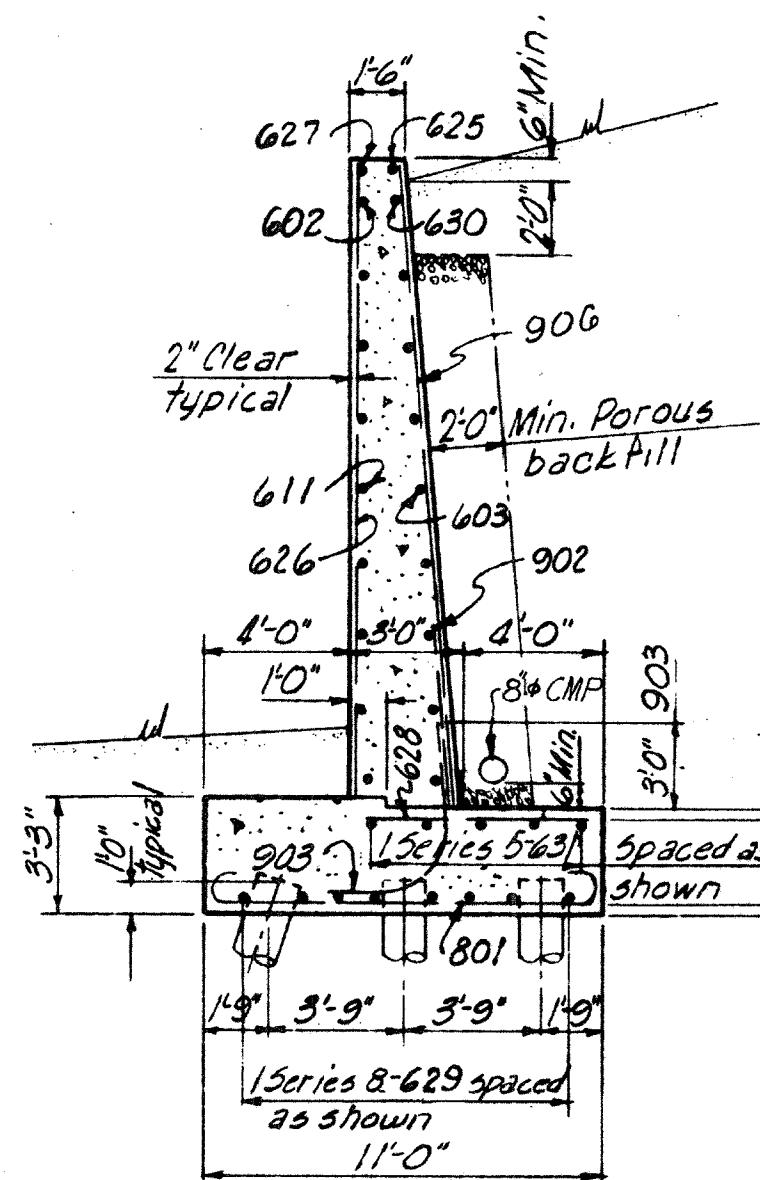
*Dimensions measured along front face of wingwall



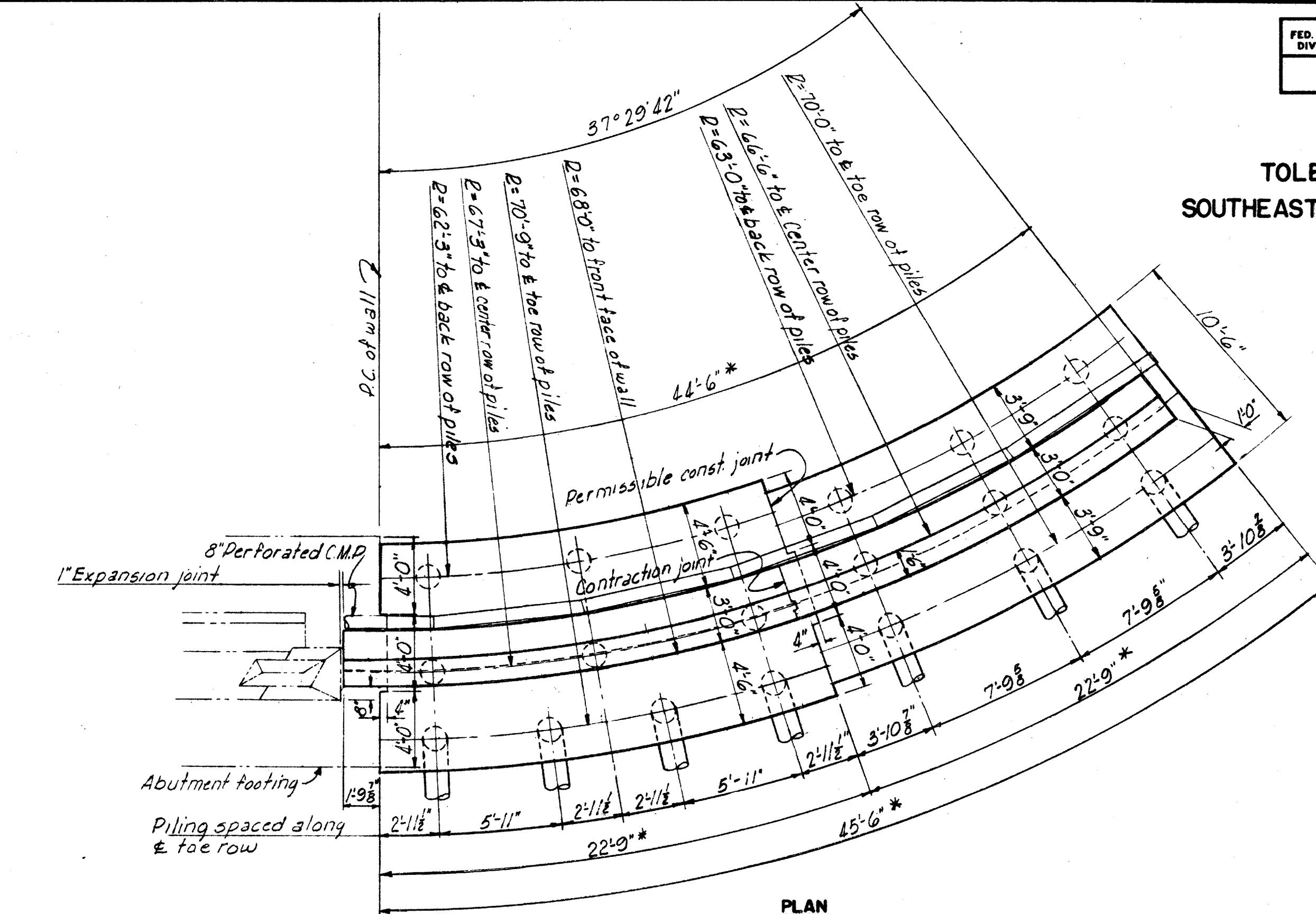
SECTION



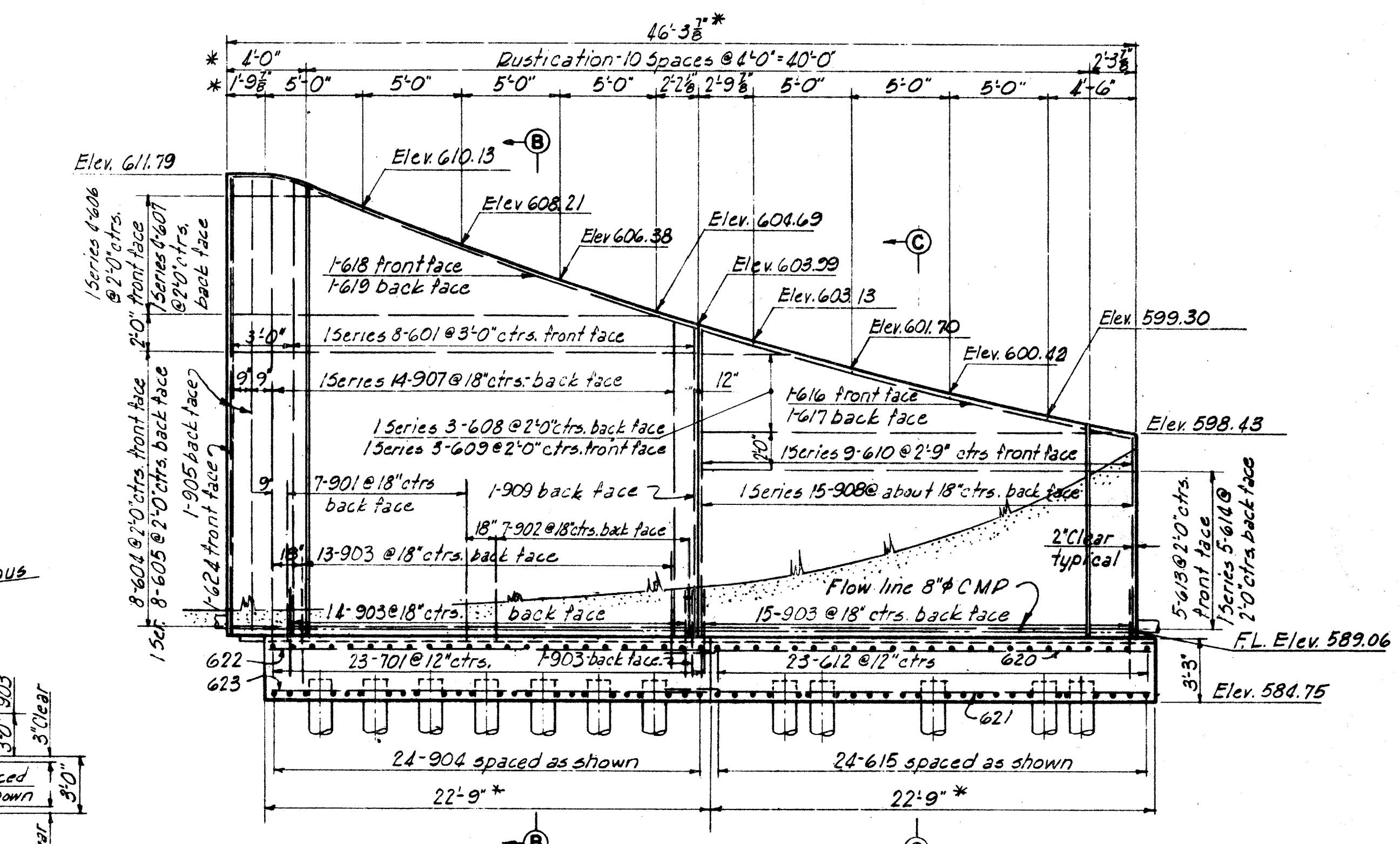
SECTION



SECTION A



PLAN



DEVELOPED ELEVATION

*Dimensions measured along front face of wingwall.

Notes: All piles to be 11" butt diameter - no faces or caps.

All piles to be 14 butt diameter reinforced concrete.
For expansion joint detail, contraction joint detail and

For expansion joint detail, contraction joint detail and
rustication detail, see sheet 179

Transverse footing reinforcement to be placed radially around shear wall.

spaced along front face of wall.

Batter all front piles 4 in 12.

H.N.T.B. BR. NO.5 **PART 8**

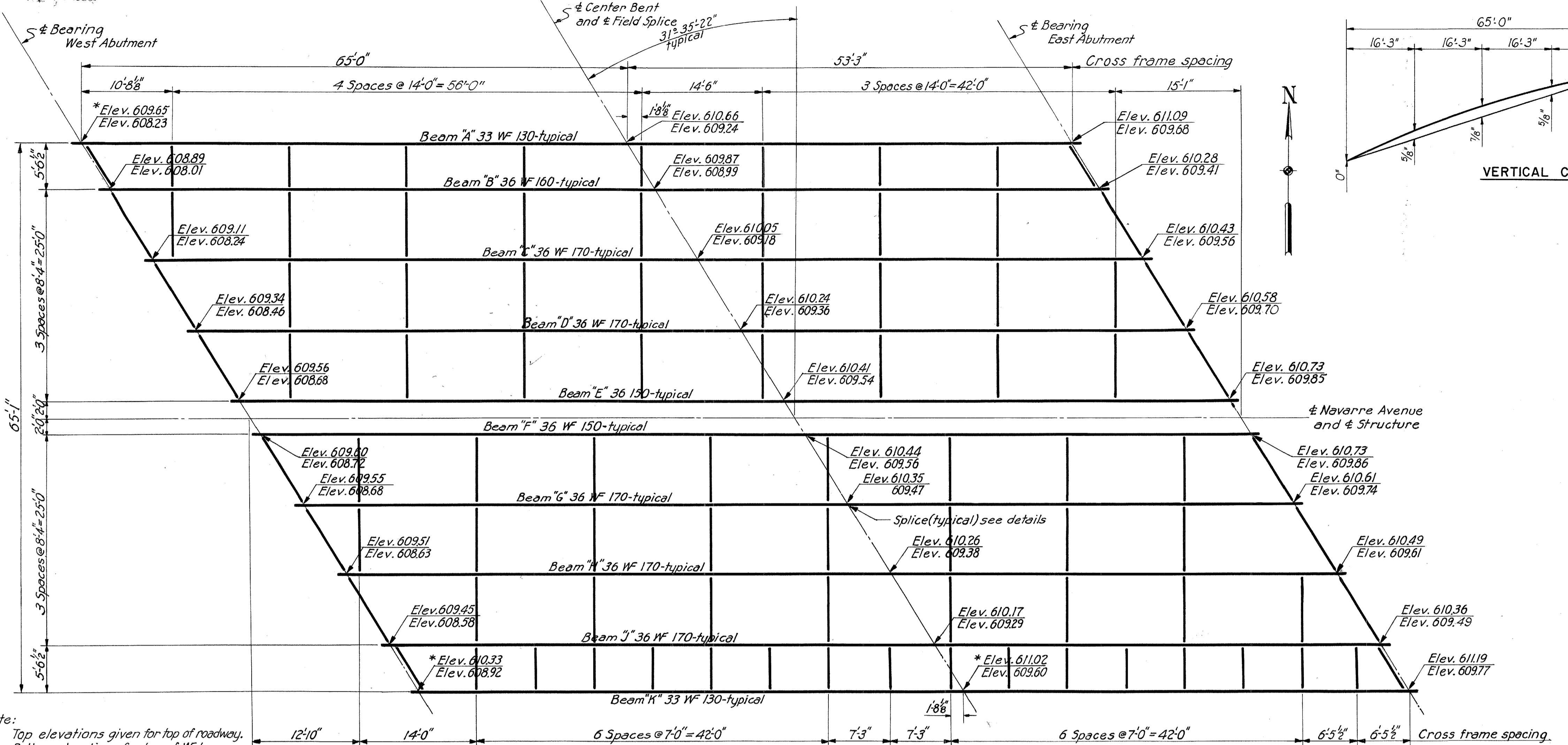
LEDO EXPRESSWAY SYSTEM

VARRE AVENUE UNDERPA

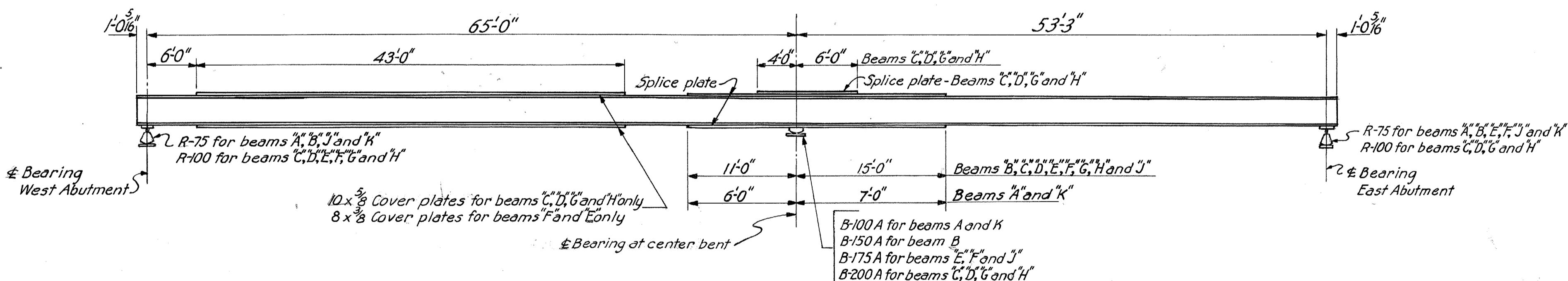
BR. NO. EG-120-16

10. The following table shows the number of hours worked by each employee.

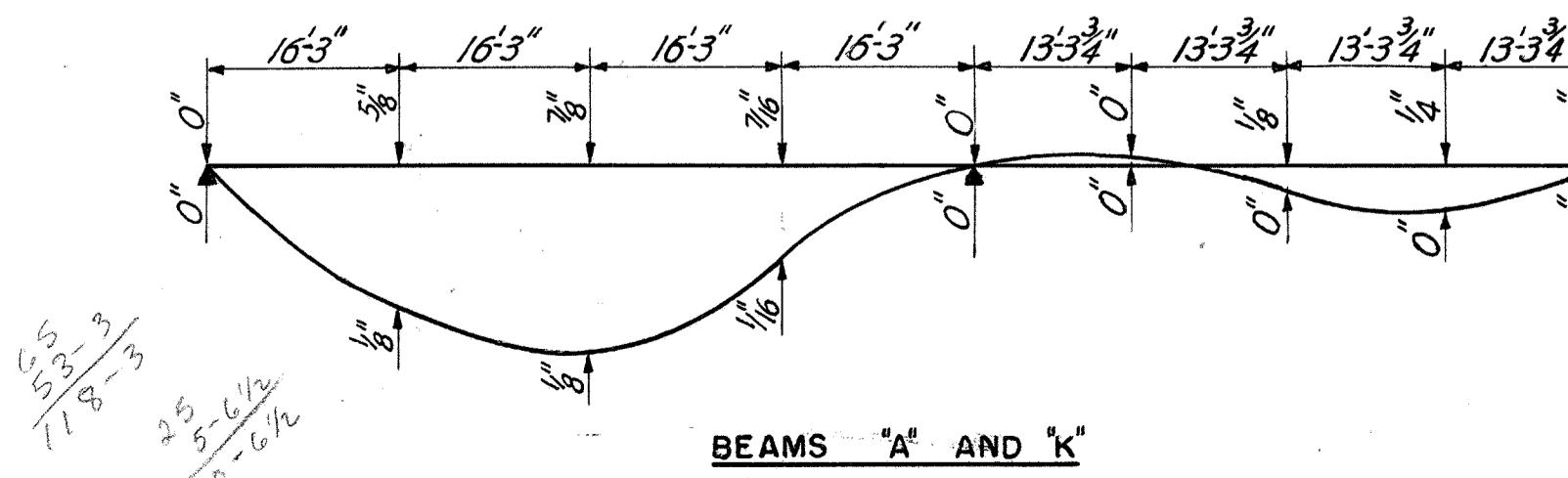
JAN 30 1980



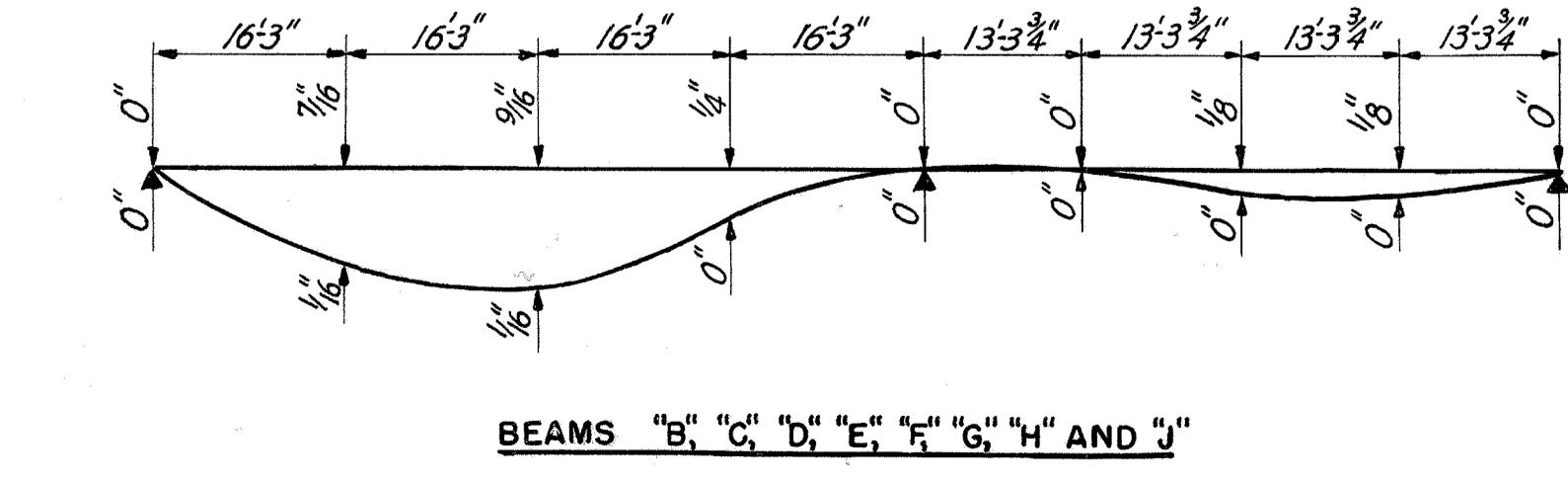
FRAMING PLAN



Note:
Dimensions shown below base line are deflections to be expected in the beams when in place.
Dimensions shown above base line are additional deflections to be expected when concrete is in place.
Deflections are measured to the nearest $\frac{1}{16}$. Values less than $\frac{1}{16}$ are shown as 0.



DEAD LOAD DEFLECTION DIAGRAMS

Horiz. Scale = $\frac{1}{16} = 1'$ Vert. Scale = $1'' = 1''$ 

Notes:
For details of shoes and expansion joints, see Sheet 178.
For typical cross section through deck, see Sheet 212.
Camber shall be equal to the dead load deflection and offset from vertical curve.

PART 8		TOLEDO EXPRESSWAY SYSTEM	
NAVARRE AVENUE UNDERPASS		BR. NO. LU-120-16	
FRAMING PLAN		TOLEDO LUCAS COUNTY, OHIO	
SCALE $\frac{1}{16} = 1'$		HOWARD, NEEDLES, TAMMEN & BERGENDOFF	
MADE LL DATE 11-17-53		CONSULTING ENGINEERS	
TRCD. CTH DATE 4-12-54		KANSAS CITY NEW YORK	
CKD. D-L DATE 10-27-54			

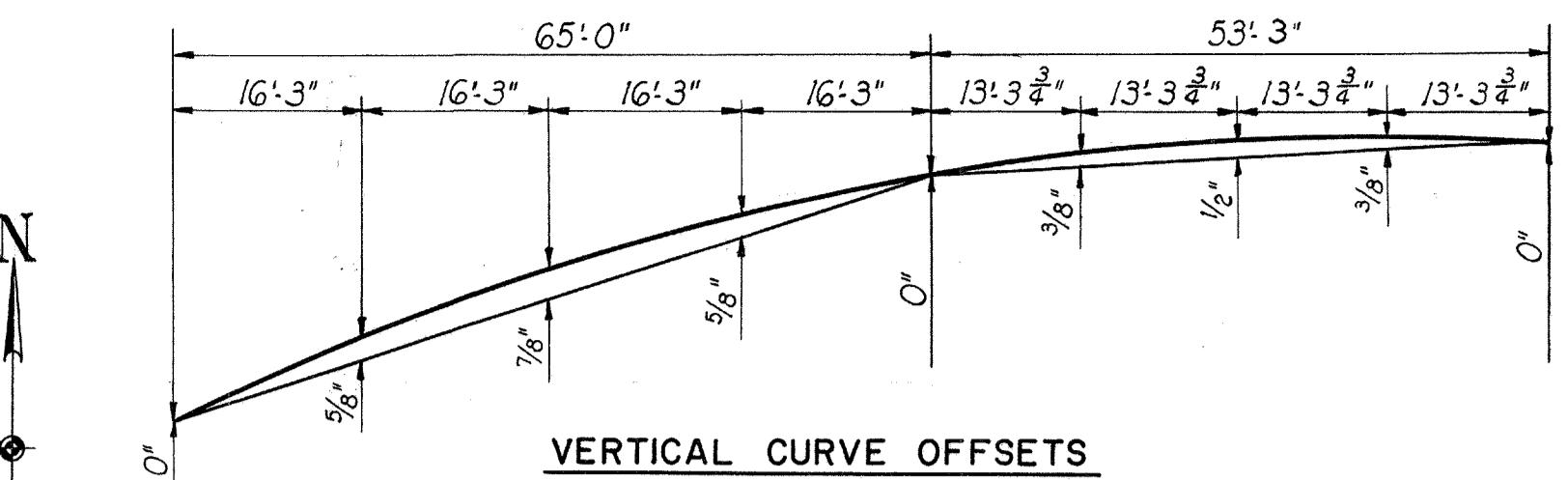
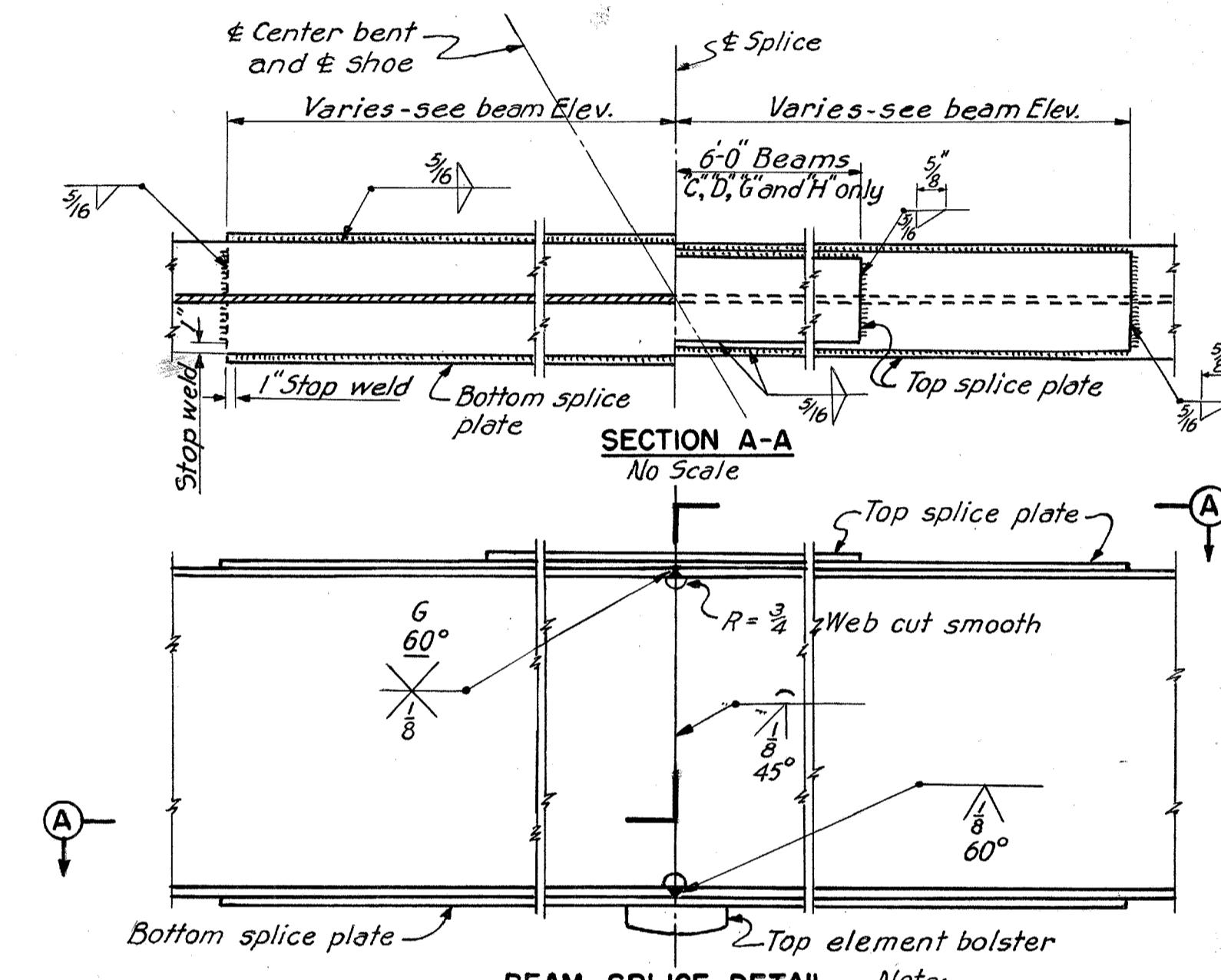
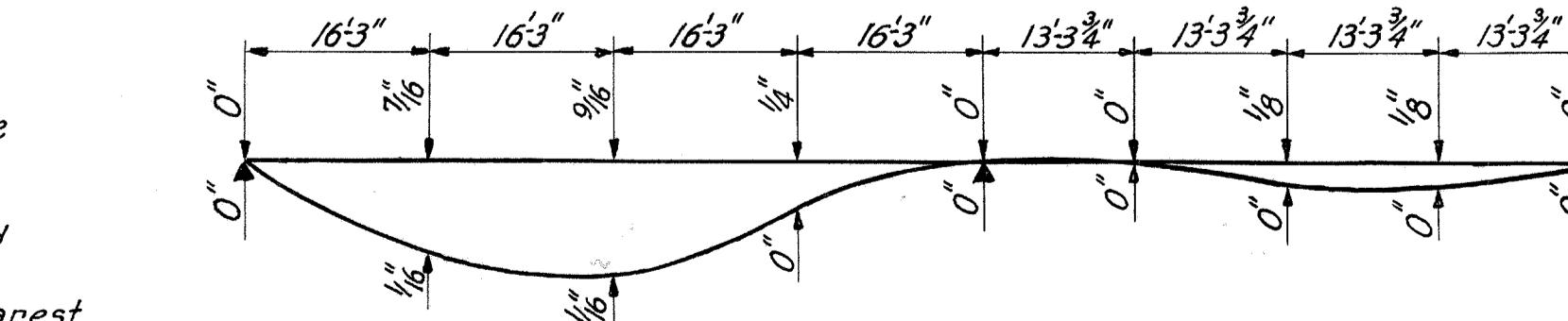


TABLE OF SPLICE PLATES					
Beam	Top	Bottom	Beam	Top	Bottom
AandK	$8 \times \frac{3}{8} \times 13\frac{1}{2}$	$13 \times \frac{1}{2} \times 13\frac{1}{2}$	C, D	$10 \times \frac{1}{2} \times 10\frac{1}{2}$	
B	$10 \times \frac{1}{2} \times 26\frac{1}{2}$	$13 \times \frac{1}{2} \times 26\frac{1}{2}$	GandH and I, J	$14 \times 1 \times 26\frac{1}{2}$	
EandF	$11 \times \frac{3}{4} \times 26\frac{1}{2}$	$13 \times \frac{3}{4} \times 26\frac{1}{2}$	I	$10 \times \frac{3}{8} \times 26\frac{1}{2}$	$13 \times \frac{1}{2} \times 26\frac{1}{2}$



BEAM SPLICE WELDING PROCEDURE

- Weld bottom flange splice plate to beam on west side of joint only.
 - Raise beam end at East Abutment the following amount:
33 WF 130 Beams A and K - $1\frac{1}{16}$ inch.
36 WF 150 Beams E and F - $\frac{1}{8}$ inch.
36 WF 160 Beam B - $\frac{1}{8}$ inch.
36 WF 170 Beams C, D, G and J - $\frac{1}{8}$ inch.
 - Butt weld the beam flange and web.
 - Weld the top splice plate on each side of joint.
 - Complete welding of bottom splice plates.
 - Lower the beam end to final position.
- Note: Contractor may submit alternate scheme for weld connecting lower splice plate and top element of bolster.



BEAMS "B", "C", "D", "E", "F", "G", "H" AND "J"

