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MICROFILMED DEC 21 1982

ISSUE NO. 1

FHWA REGION	STATE	PROJECT	
5	OHIO	I-480-4(31)174	

1 / 390

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
CUY-480-21.40

CUYAHOGA COUNTY
CITY OF GARFIELD HTS.
CITY OF MAPLE HTS.
GRADE SEPARATION WITH PENN CENTRAL TRANSPORTATION COMPANY AND NORFOLK AND WESTERN RY. CO.

CUYAHOGA COUNTY
CUY-480-21.40

PROJECT DESIGNATION CUY. 80-21.40 APPEARING THOUGHOUT THIS PLAN SHALL BE CONSIDERED TO READ CUY.-480-21.40.

"FEDERAL ROAD DIVISION 2" APPEARING IN THE UPPER RIGHT HAND BLOCKS SHALL BE CONSIDERED TO READ FHWA REGION 5.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF TRANSPORTATION IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02, REVISED CODE OF OHIO.

CONVENTIONAL SIGNS

PROPERTY LINE — P
EXISTING RIGHT OF WAY
SUBDIVISION LINE
SUBLOT LINE OR EXISTING EASEMENT — Z — Z
ORIGINAL TOWNSHIP LOT LINE
CORPORATION LINE
LIMITED ACCESS LINE — LA
LIMITED ACCESS LINE AND RIGHT OF WAY LINE — LA & RW
RIGHT OF WAY LINE AND HIGHWAY EASEMENT LINE — R/W
AERIAL EASEMENT LINE — AERIAL
TEMPORARY RIGHT OF WAY — T
SEWER EASEMENT LINE — S — S
SLOPE EASEMENT LINE — SL — SL
CHANNEL EASEMENT — X — X
PARTICIPATION LINE — P — P — P
CENTER LINE
FENCE LINE — x — x
GUARD RAIL (EXISTING)
GUARD RAIL (PROPOSED)
RAILROAD
POWER POLES
TELEPHONE POLES
POWER AND TELEPHONE POLES
LIGHT POLES
TREES (EXISTING)
ELECTRICAL TOWER
WATER LINE — / — /
GAS LINE — G — G
TELEPHONE CONDUIT — T — T
EXISTING SEWERS (R/W PLANS) — S — S
EXISTING STORM SEWER (DRAINAGE PLANS)
EXISTING SANITARY SEWER (DRAINAGE PLANS)
OIL LINE
FIRE HYDRANT (EXISTING)
FIRE HYDRANT (PROPOSED)
MANHOLE (EXISTING)
MANHOLE (PROPOSED STORM)
MANHOLE (PROPOSED SANITARY)
CATCH BASIN OR INLET (EXISTING)
CATCH BASIN OR INLET (PROPOSED)

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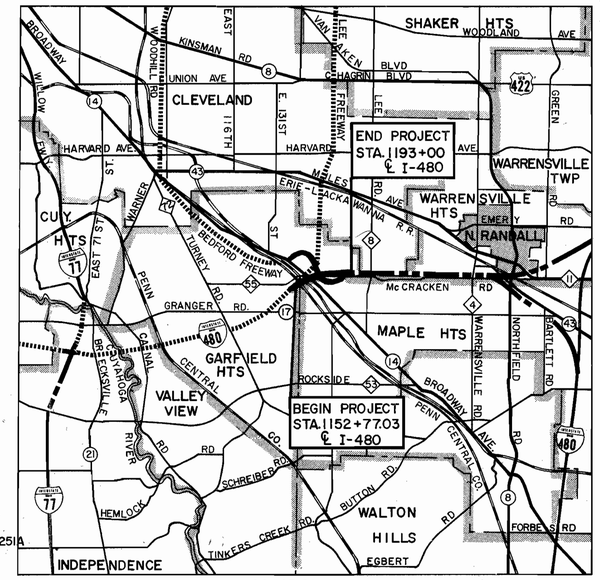
SHEETS DELETED 38, 284, 285, 362

Sheets 331 & 332 revised 9-27-74 EBL
Sheets 311, 319, & 321 revised 12-27-74 EBL



LOCATION MAP
SCALE
0 1 2 3 MILES

PORTION TO BE IMPROVED
EXISTING FREEWAYS — 77
STATE ROADS — 8
COUNTY ROADS — 4
OTHER ROADS
FUTURE CONSTRUCTION
UNDER CONSTRUCTION

SCALE
PLAN 1" = 20', 50' PROFILE HOR 1" = 20', 100'
CROSS SECTIONS 1" = 10' PROFILE VERT 1" = 5', 10', 20'

SUPPLEMENTAL SPECIFICATIONS

NUMBER	DATE	NUMBER	DATE
		839	11-25-70
			65
808	1-1-71		
		941	11-25-70
815	9-20-72	1001	9-20-72
816	9-20-72		
836	1-1-71		
838	3-18-70		

LINE DATA

Begin Project I-480 — Sta. 1152+77.03
End Project I-480 — Sta. 1193+00.00
Net Length of Project = 4,022.97 Lin. Ft. or 0.761 Miles

Work Additions

WB I-480 Sta. 1149+42 & To Sta. 1152+77.03 = 335.03 Lin. Ft.
Bedford Freeway Sta. 35+31.29 To Sta. 74+54.29 = 3,923.00 Lin. Ft.
Orchard Road Sta. 4+66 To Sta. 11+00 = 634.00 Lin. Ft.
Net Length of Work: 8,915 Lin. Ft. or 1.688 Miles

STANDARD DRAWINGS

NUMBER	DATE	NUMBER	DATE
BR-2-67	10-15-71	HW-E	6-1-65
BP-1	6-1-65	GR-5	1-1-71
BP-2	12-1-68	GR-6	1-1-71
BP-3	1-1-71	HL-1, HL-4 thru HL-10	9-6-73
BP-4	1-1-71	HL-2, HL-3	7-27-73
BP-5	6-1-72	HL-11, HL-12	4-6-73
I-2	6-6-69	HL-17A, HL-17B	4-6-73
BP-7	1-1-66	HW-4	1-1-70
CB-2-2A & B	6-1-65	I-2A	6-6-69
CB-3A	6-1-65	I-3	1-20-70
CB-4	9-1-69	L-1	6-1-73
CB-5	9-1-69	MC-1	6-13-69
CB-6	6-1-65	MC-3	6-1-73
F-1	6-1-72	MC-4	6-13-69
F-2	1-1-71	MC-5	6-1-73
F-3	3-10-69	MC-7	10-1-68
F-6	10-1-66	MC-8	12-1-67
HL-15, HL-16	4-6-73	MH-1	10-1-68
		MH-1A	10-1-68
GR-2A	1-1-71	AS-1-67	6-12-69
GR-2B	11-9-71	BR-1-67 1 of 3	10-15-71
GR-3	11-9-71	RB-1-55	2-2-59
GR-4	11-9-71	SD-1-69 1-4	6-12-69

I-480-4(31)174

1973 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, 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 DATE 9-26-73 — Joseph F. Powell — DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION
APPROVED DATE 2-15-74 — Robert B. Pfeifer — ENGINEER, BUREAU OF BRIDGES
APPROVED DATE 11-26-73 — C. J. Schaefer — ENGINEER, BUREAU OF ROADWAY DESIGN
APPROVED DATE 11-26-73 — William E. Slack — ASSISTANT DEPUTY DIRECTOR FOR HIGHWAY DESIGN
APPROVED DATE 11-26-73 — Julian J. Greenway — ASSISTANT DEPUTY DIRECTOR FOR REAL ESTATE
APPROVED DATE 11-26-73 — William Burkley — ASSISTANT DEPUTY DIRECTOR FOR PROGRAM DEVELOPMENT
APPROVED DATE ____ — CHIEF ENGINEER, DIVISION OF HIGHWAYS
APPROVED DATE 11-26-73 — William W. Baker — DEPUTY DIRECTOR, DIVISION OF HIGHWAYS
APPROVED DATE 11-27-73 — William P. McKenna — ASSISTANT DIRECTOR, DEPARTMENT OF TRANSPORTATION
APPROVED DATE 11-28-73 — Phillip Ruedy — DIRECTOR, DEPARTMENT OF TRANSPORTATION

PREPARED AND RECOMMENDED BY

HOWARD NEEDLES TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

H.G. SOURS
ASSOCIATE
COLUMBUS

Browning Crow
BROWNING CROW

STATE OF OHIO BROWNING CROW 16873 REGISTERED PROFESSIONAL ENGINEER

FILE NO.	CUYAHOGA COUNTY 00351 CUY.480-21.40 DATE OF LETTING CONTRACT NO.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ENGINEER — DATE

Rev. 1-9-74
Rev. 12-7-73

MICROFILMED
DEC 21 1982

SCHEMATIC PLAN

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

CUYAHOGA COUNTY
CUY. 480—21.40

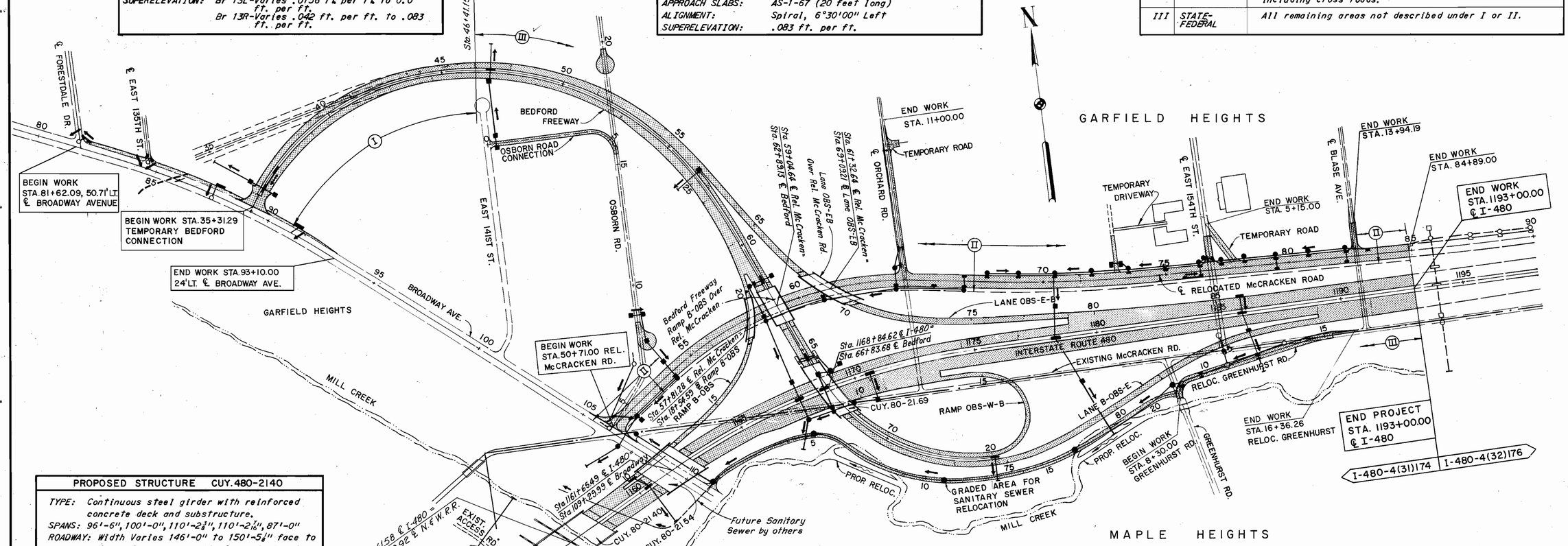
PROPOSED STRUCTURE —BEDFORD FREEWAY AND RAMP B-OBS OVER RELOCATED McCRACKEN ROAD

TYPE: Continuous rolled beams with reinforced concrete deck and substructure.
SPANS: Br 13L 38'-9", 64'-3", 40'-3"
Br 13R 48'-9 3/8", 69'-3 7/16", 48'-7 3/8" (Measured along ℄ Ramp B-OBS)
ROADWAYS: Br 13L 76'-0" f.f. of parapet with raised Concrete Barrier Median.
Br 13R 28'-0" f.f. of parapet
DESIGN LOAD: HS20-44
SKEWS: Br 13L-07°46'02" Left forward to local tangent
Br 13R-23°50'55" Right forward to local tangent
WEARING SURFACE: 1 1/2" Asphalt Concrete on 13L, 2 1/2" on 13L
APPROACH SLABS: AS-1-67 (20 feet long)
ALIGNMENT: Br 13L-Tangent
Br 13R-13°30'00" Left, Spiral
SUPERELEVATION: Br 13L-Varies .0156 ft. per ft. to 0.0 ft. per ft.
Br 13R-Varies .042 ft. per ft. to .083 ft. per ft.

PROPOSED STRUCTURE -LANE OBS-E-B OVER RELOCATED McCRACKEN ROAD

TYPE: Continuous steel girders with reinforced concrete deck and substructures
SPAN: 61'-8 3/8", 95'-1 7/16", 66'-5" (Measured along ℄ Lane OBS-E-B)
ROADWAY: 42'-0" f.f. of parapets (Initial)
DESIGN LOAD: HS20-44
SKEW: 46°51'13" Left Forward
WEARING SURFACE: 2 1/2" Asphalt Concrete
APPROACH SLABS: AS-1-67 (20 feet long)
ALIGNMENT: Spiral, 6°30'00" Left
SUPERELEVATION: .083 ft. per ft.

CODE	TYPE	PARTICIPATION LIMITS
I	100% STATE	From Sta. 81+62.09 to Sta. 93+10.00 Broadway Ave. From Sta. 35+31.29 to Sta. 46+41.15 Bedford Freeway
II	COUNTY, STATE-FEDERAL	From Sta. 50+71 to Sta. 84+89 ℄ Relocated McCracken Rd. Bounded on the South by a line 40' Rt. of the ℄ and Bounded on the North by the Construction Limits not including cross roads.
III	STATE-FEDERAL	All remaining areas not described under I or II.



PROPOSED STRUCTURE CUY. 480-2140

TYPE: Continuous steel girder with reinforced concrete deck and substructure.
SPANS: 96'-6", 100'-0", 110'-2 3/8", 110'-2 7/16", 87'-0"
ROADWAY: Width Varies 146'-0" to 150'-5 1/8" face to face of parapets, with Concrete Barrier Median.
LOAD FREQUENCY: HS20-44 and Interstate Alternate Loading.
SKEW: Varies
WEARING SURFACE: 2 1/2" Asphalt Concrete
APPROACH SLABS: AS-1-67 (25 feet long)
ALIGNMENT: Tangent
SUPERELEVATION: Varies, .0156 ft. per ft. to 0.00 ft. per ft.

PROPOSED STRUCTURE CUY. 480-2154

TYPE: Continuous rolled beam with reinforced concrete deck and substructure.
SPANS: 51'-11 3/16", 74'-9 3/8", 52'-9 3/16" (Measured along ℄ I-480)
ROADWAY: Width varies-160'4" to 170'-2 3/8" face to face of parapets, with Concrete Barrier Median.
DESIGN LOAD: HS20-44 and Interstate Alternate Loading
SKEW: 22°44'03" Right Forward
WEARING SURFACE: 2 1/2" Asphalt Concrete
APPROACH SLABS: AS-1-67 (25 feet long)
ALIGNMENT: Spiral, 2°00'00" Right
SUPERELEVATION: I-480 Varies .0156 ft. per ft. to .047 ft. per ft. Ramp B-OBS .0156 ft. per ft.

PROPOSED STRUCTURE CUY. 480-2169

TYPE: Continuous steel girder with reinforced concrete deck and substructure.
SPANS: 92'-2 3/8", 120'-9 3/8" (Measured along ℄ Bedford Expressway
ROADWAY: 76'-0" face to face of parapet with concrete barrier median
DESIGN LOAD: HS20-44
SKEW: 16°57'37" Left. Forward to Local Tangent
WEARING SURFACE: 1 1/2" Asphalt Concrete
APPROACH SLABS: AS-1-67 (25 feet long)
ALIGNMENT: Spiral, 8°00'00" Left
SUPERELEVATION: Varies .0156' ft. per ft. to .083 ft. per ft.

URBAN RADIAL (WITH OUT LEE & BEDFORD FREEWAYS)

Design Designation	East of Broadway	West of Broadway
Current A.D.T. (1972)	67,884	79,644
Design Year A.D.T. (1992)	77,582	91,022
D.D.H.V.	4,460	5,230
D (Directional Distribution)	67-33	55-45
T (Per cent B.C. Trucks)	3%	3%
V (Design Speed)	60	60

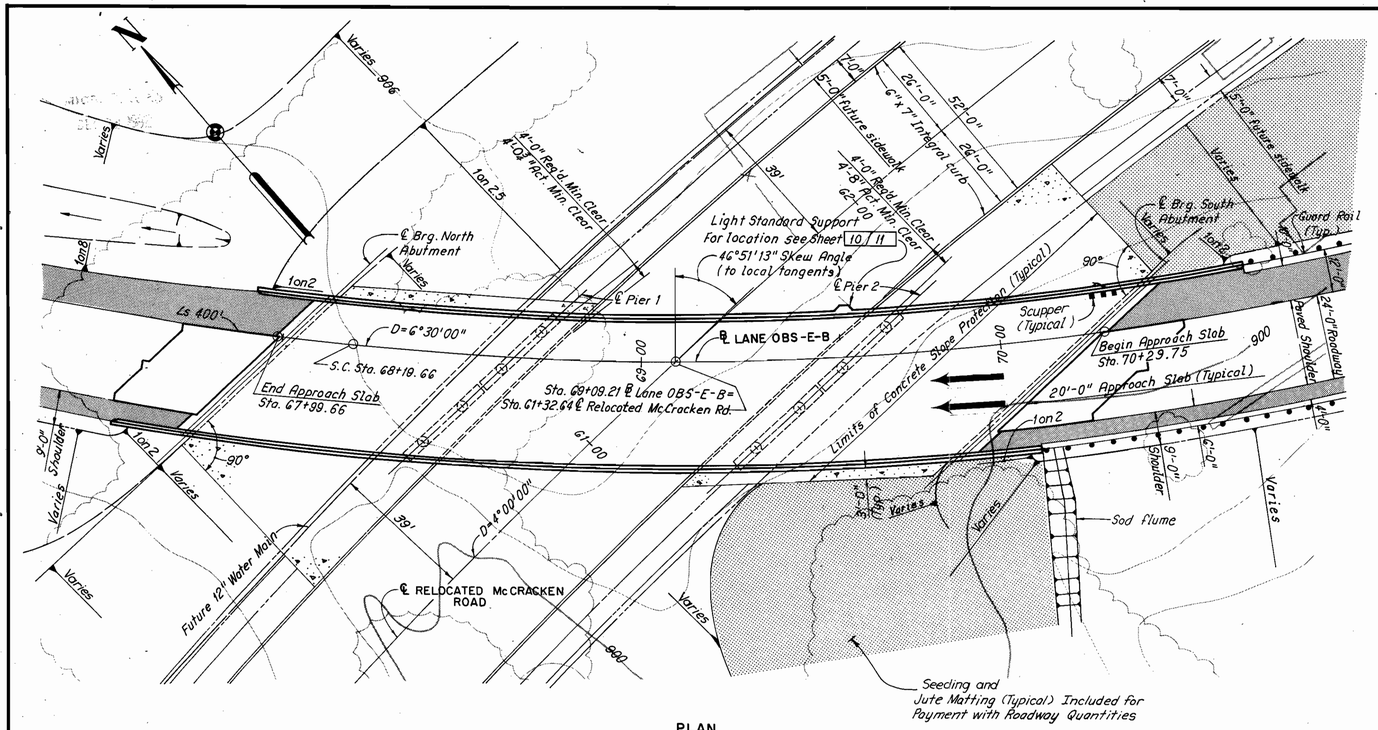
100 0 100 200 300 400
SCALE IN FEET

SCALE 1"=200' HOWARD, NEEDLES, TAMMEN & BERGENDOFF
MADE ERA DATE 5-21-69 CONSULTING ENGINEERS
TRCD. ____ DATE ____
CKD. TM DATE 6-21-69 KANSAS CITY CLEVELAND NEW YORK

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

350
390

CUYAHOGA COUNTY
CUY - 80-21.40

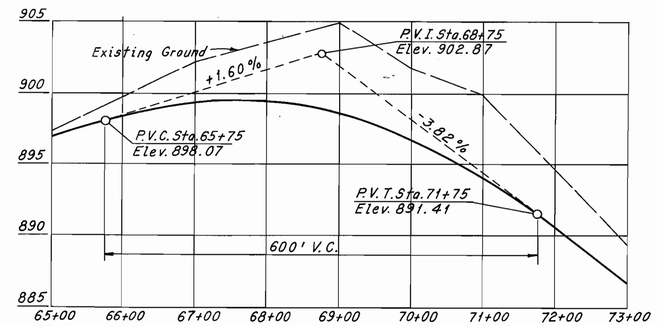


PLAN
Scale: 1"=20'

℄ LANE OBS-E-B	
P.I. Sta.	70+54.74
Δ	= 52°11'29"
D_c	= 6°30'00"
L_c	= 402.95'
T_s	= 635.08'
θ_s	= 13°00'00"
L_s	= 400.00'
Es	= 108.48'

℄ RELOCATED McCRACKEN RD.	
P.I. Sta.	= 59+67.96
Δ	= 44°51'07"
D_c	= 4°00'00"
R	= 1432.39'
T	= 591.15'
L	= 1121.30'
E	= 117.19'

PROPOSED STRUCTURE
TYPE: Continuous steel girders with reinforced concrete deck and sub-structures.
SPAN: 61'-8 15/16", 95'-1 5/16" and 66'-5" (Measured along ℄ Lane OBS-E-B)
ROADWAY: 42'-0" face to face of parapets.
DESIGN LOAD: HS 20-44
SKEW: 46°51'13" Left Forward
WEARING SURFACE: 2½" Asphalt Concrete
APPROACH SLABS: AS-1-67 (20 feet long)
ALIGNMENT: Spiral, 6°30'00" Left
SUPERELEVATION: .083 ft. per ft.

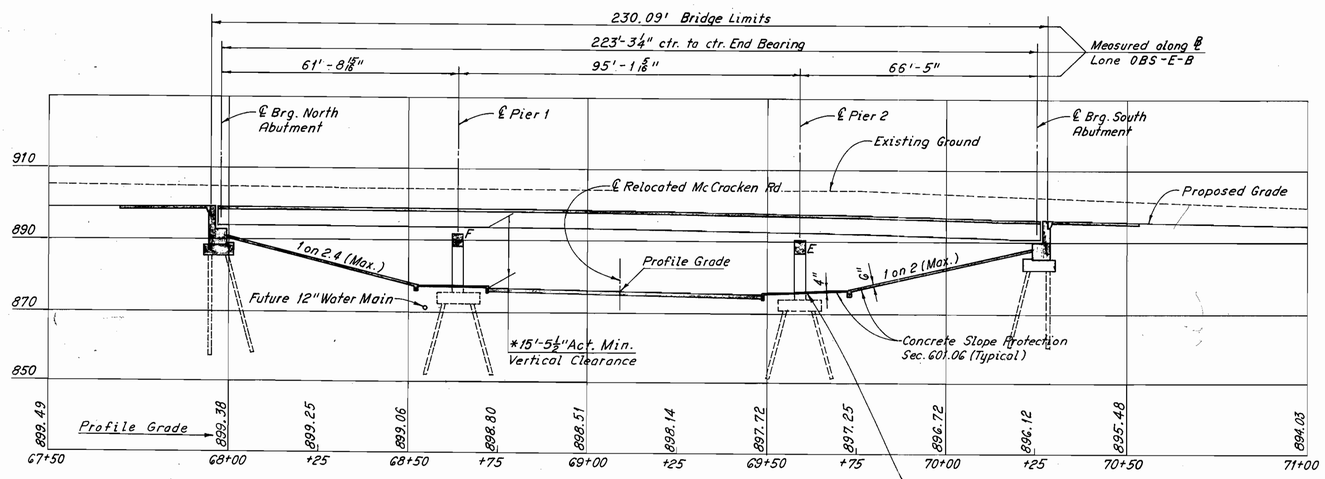


PROFILE - LANE OBS-E-B
Scale: Horiz. 1"=100'
Vert. 1"= 5'

TRAFFIC DATA:

1991	Initial Construction:
A.D.T.	16,417
D.D.H.V.	2,267

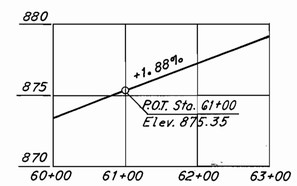
Notes:
Earthwork limits shown are schematic. Actual slopes shall conform to plan cross-sections.
The 12" water main north of Pier 1 shall be set in place after the construction of Pier 1 footings.



ELEVATION
Scale: Horiz. 1"=20'
Vert. 1"=20'

Note:
*14'-6" Required minimum vertical clearance. Minimum vertical clearance occurs at the north edge of pavement of the westbound lanes of Relocated Mc Cracken Road and the outside edge of the east exterior girder of Bridge No. 14

½" Preformed Expansion Joint Filler (Typ. around columns at piers). Included with Item 601 Concrete Slope Protection (4" thick) for payment.



PROFILE - RELOCATED Mc CRACKEN ROAD
Scale: Horiz. 1"=100'
Vert. 1"=5'

Notes:
Roadway excavation shall be completed to the finish spill-thru slopes and to the level of the subgrades before excavating or driving piles for the abutments and piers.
All piles are 12" Ø C.I.P. reinforced concrete at the abutments and HP 12x53 at the piers. The estimated average pay lengths are as follows:

North Abutment	- 29 ft.
Pier 1	- 20 ft.
Pier 2	- 20 ft.
South Abutment	- 21 ft.

The piles at the abutments shall be driven to a minimum bearing capacity of 35 tons per pile. The piles at the piers shall be driven to a minimum bearing capacity of 40 tons per pile.
For underpass lighting details see Lighting Plans.

MAINTENANCE OF TRAFFIC
Two lanes of traffic with a minimum horizontal width of 26'-0" and a minimum vertical clearance of 13'-6" shall be maintained on Relocated McCracken Road at all times.

H.N.T.B. BR. NO. 14

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

SITE PLAN
LANE OBS-E-B OVER
RELOCATED Mc CRACKEN ROAD

STA. 67+99.66 TO
STA. 70+29.75

CUYAHOGA COUNTY OHIO

DRAWN G.L	TRACED DLR	CHECKED KYH	REVIEWED	REVISED
DATE 8-16-67	DATE 8-23-67	DATE 5-8-69	DATE	SHEET 1 / 11

MICROFILMED
DEC 22 1982

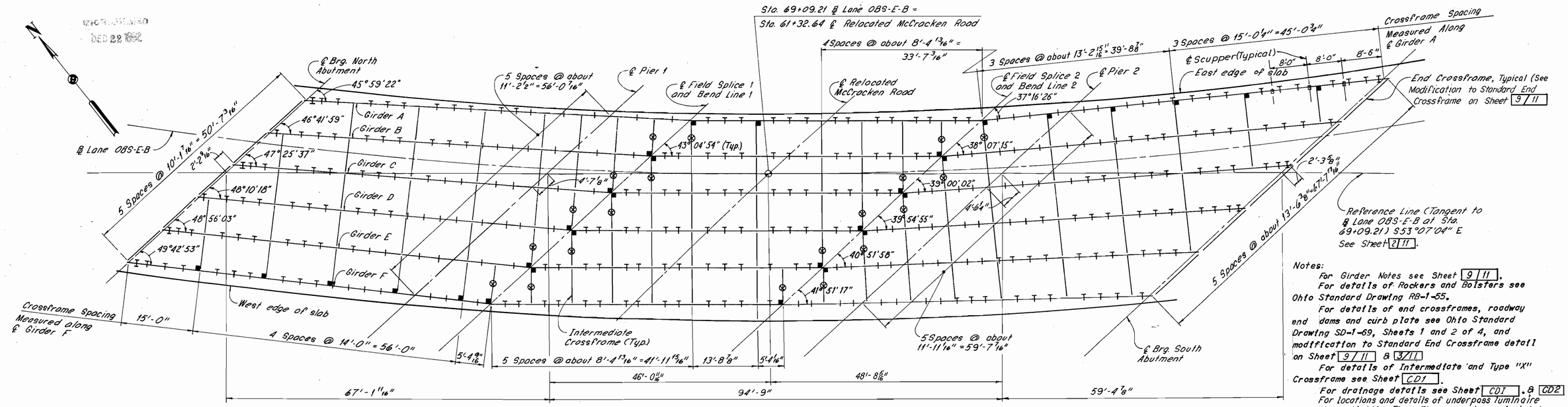
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

357
390

CUYAHOGA COUNTY
CUY-80-21.40

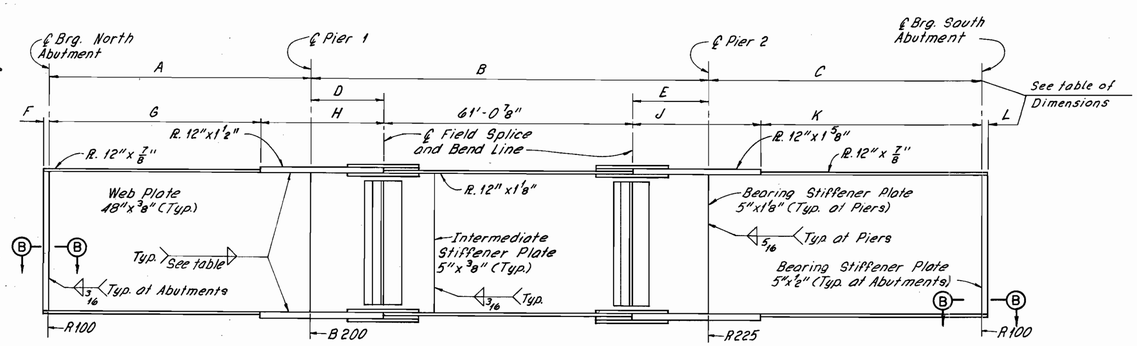
HORIZONTAL OFFSETS TO EDGE OF SLAB													
LOCATION	℄ Brg. N. Abut.	1/4	1/2	3/4	℄ Bend Line 1	1/4	1/2	3/4	℄ Bend Line 2	1/4	1/2	3/4	℄ Brg. S. Abut.
℄ Girder A to East edge of slab	3'-0 5/8"	2'-0 3/8"	1'-5 3/8"	1'-4 7/8"	1'-9 3/8"	1'-7 3/4"	1'-9"	2'-1 1/8"	2'-9 1/4"	1'-11 3/8"	1'-7 7/8"	1'-10 1/2"	2'-7 1/4"
℄ Girder F to West edge of slab	1'-11 7/8"	2'-4"	2'-3 7/8"	1'-11 3/8"	1'-2 5/8"	2'-0 3/8"	2'-7 5/8"	2'-11 7/8"	3'-0 7/8"	3'-2 5/8"	2'-11 7/8"	2'-4 1/8"	1'-3 3/8"

Note: The 1/4, 1/2 and 3/4 points are measured between the ℄ of Abutment Bearing and Field Splice or between Field Splices. Horizontal offsets are given perpendicular to ℄ Girder.



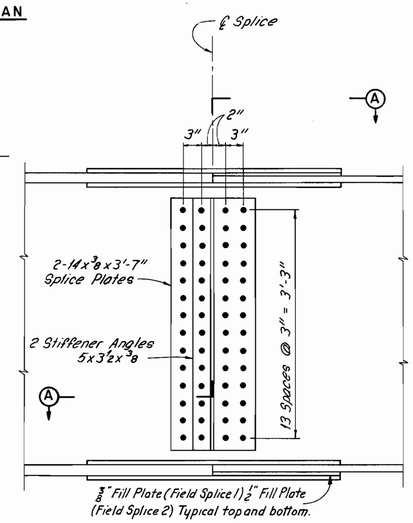
FRAMING PLAN

Notes:
For Girder Notes see Sheet 9/11.
For details of Rockers and Bolsters see Ohio Standard Drawing RB-1-55.
For details of end crossframes, roadway end dams and curb plate see Ohio Standard Drawing SD-1-69, Sheets 1 and 2 of 4, and modification to Standard End Crossframe detail on Sheet 9/11 & 3/11.
For details of Intermediate and Type "X" Crossframe see Sheet CD1.
For drainage details see Sheet CD1 & CD2.
For locations and details of underpass luminaire supports see Lighting Plans. The supports are included with the Lighting Quantities for payment.

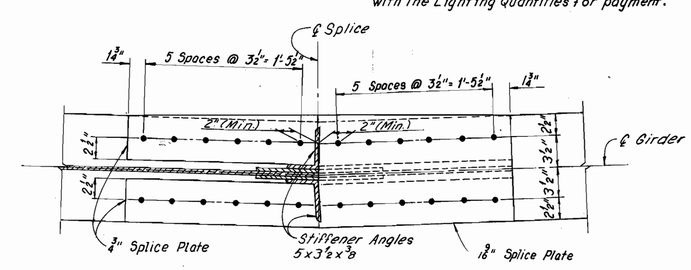


TYPICAL GIRDER ELEVATION

Note: For Section B-B see Sheet 9/11



TYPICAL FIELD WEB SPLICE



SECTION A-A

		DIMENSIONS										
		A	B	C	D	E	F	G	H	J	K	L
GIRDER	A	63'-10 1/4"	95'-11 3/16"	67'-1"	17'-2 1/16"	17'-8 5/8"	1'-0 3/16"	52'-10 1/4"	28'-2 1/16"	29'-8 5/8"	55'-1"	1'-2 3/8"
	B	63'-1 1/16"	95'-5 1/4"	65'-9 1/4"	16'-11 3/8"	17'-4 3/8"	1'-0 3/8"	52'-1 1/16"	27'-11 3/8"	29'-4 3/8"	53'-9 3/4"	1'-2 3/8"
	C	62'-4 3/8"	94'-10 3/8"	64'-6 11/16"	16'-9 1/4"	17'-0 3/8"	1'-0 1/16"	51'-4 3/8"	27'-9 1/4"	29'-0 3/8"	52'-6 11/16"	1'-2 1/16"
	D	61'-7 3/8"	94'-4 7/16"	63'-3 13/16"	16'-6 7/16"	16'-8 11/16"	11 15/16"	50'-7 3/8"	27'-6 7/16"	27'-8 11/16"	52'-3 13/16"	1'-1 13/16"
	E	60'-10 13/16"	93'-10 1/4"	62'-1-1 1/4"	16'-4 13/16"	16'-4 13/16"	11 3/4"	49'-10 13/16"	27'-4 13/16"	27'-4 13/16"	51'-1 1/8"	1'-1 13/16"
	F	60'-2 1/4"	93'-4 3/8"	60'-10 11/16"	16'-2 1/4"	16'-1"	11 3/8"	49'-2 1/4"	27'-2 1/4"	27'-1"	49'-10 11/16"	1'-1 1/4"

WELD SIZE WEB TO FLANGE	
FLANGE PLATE THICKNESS	FILLET WELD SIZE
7/8"	5/16"
1 1/8" and 1 1/2"	3/16"
1 5/8"	3/8"

FRAMING PLAN LEGEND

- Indicates Type "X" Crossframe
- Indicates 90°
- Indicates intermediate stiffeners having contact bearing with the top flange.
- Indicates intermediate stiffeners having contact bearing with the bottom flange.
- Indicates intermediate stiffeners at one-half normal stiffener spacing having contact bearing with the top flange. See girder notes for stiffener spacing.

Note: Intermediate stiffeners located at crossframes are shown in the "Framing Plan" only at places where contact bearing with the flange changes adjacent to the crossframe.

Intermediate stiffeners shall have contact bearing with both flanges. Stiffeners shall be located at all crossframes.

H.N.T.B. BR. NO. 14

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

FRAMING PLAN
LANE OBS-E-B OVER
RELOCATED McCRACKEN ROAD

STA. 67+99.66 TO
STA. 70+29.75

CUYAHOGA COUNTY OHIO

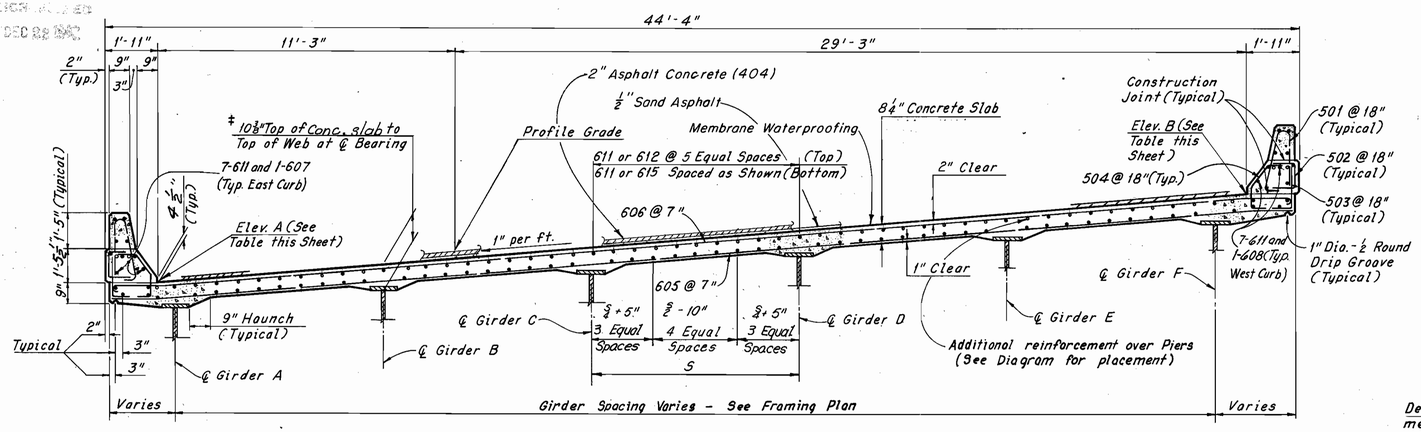
DRAWN T.J.S.	TRACED A.J.J.	CHECKED L.J.G.	REVIEWED	REVISED
DATE 3-1-68	DATE 4-18-68	DATE 6-28-68	DATE	SHEET 8/11

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

359
390

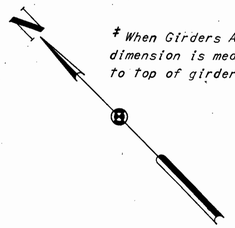
CUYAHOGA COUNTY
CUY - 80 - 21.40

NOTE:
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.



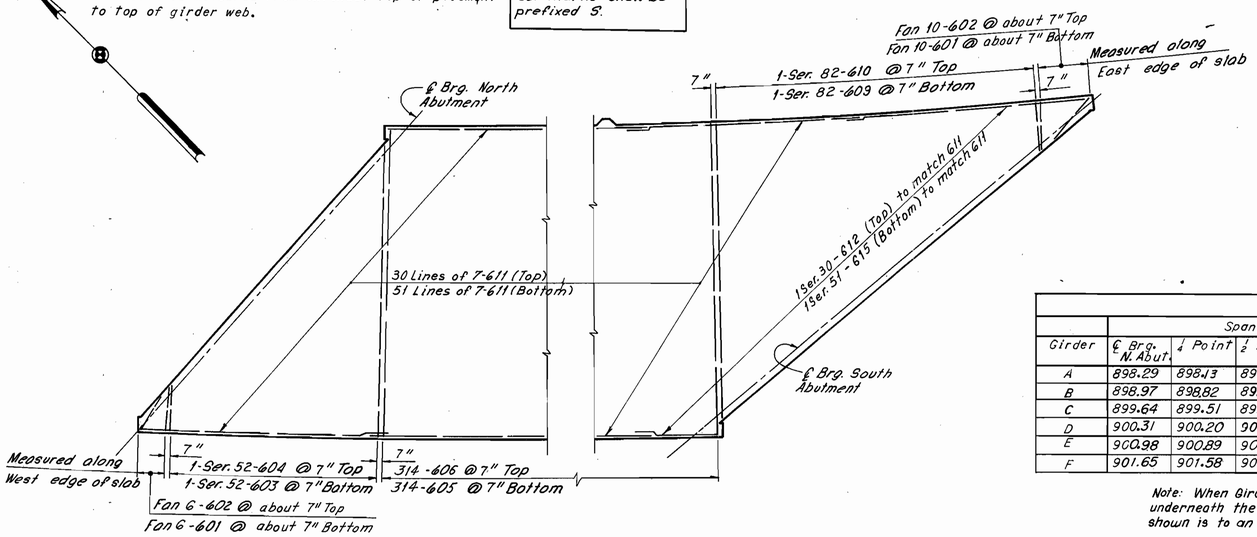
Provide subdrainage for wearing surface as per sheet CD2 at low curb line only

TYPICAL CROSS SECTION

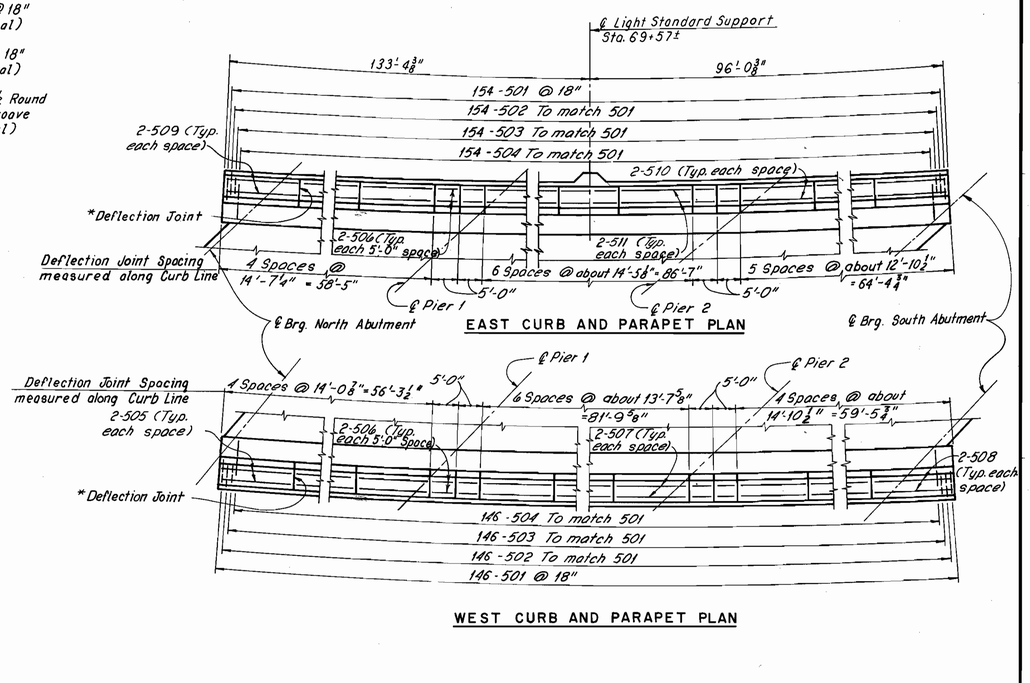


‡ When Girders A and F are underneath the curb this dimension is measured from extended top of pavement to top of girder web.

Note: All reinforcing bar marks shall be prefixed S.



PART SLAB PLAN



EAST CURB AND PARAPET PLAN

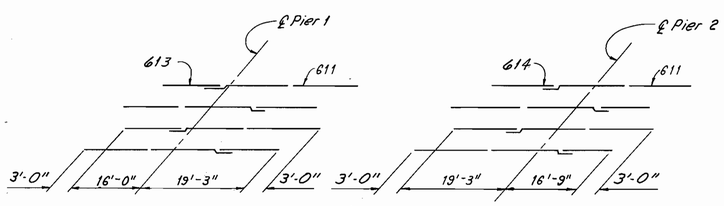
WEST CURB AND PARAPET PLAN

TOP OF REINFORCED CONCRETE DECK														
	Span 1					Span 2				Span 3				
Girder	℄ Brg. N. Abut.	¼ Point	½ Point	¾ Point	℄ Pier 1	¼ Point	½ Point	¾ Point	℄ Pier 2	¼ Point	½ Point	¾ Point	℄ Brg. S. Abut.
A	898.29	898.13	897.96	897.79	897.63	897.35	897.01	896.66	896.17	895.79	895.41	895.03	894.65
B	898.97	898.82	898.67	898.52	898.38	898.12	897.78	897.44	896.98	896.63	896.28	895.93	895.58
C	899.64	899.51	899.38	899.25	899.13	898.89	898.55	898.22	897.78	897.46	897.14	896.82	896.51
D	900.31	900.20	900.09	899.98	899.87	899.66	899.32	898.99	898.59	898.29	898.00	897.71	897.43
E	900.98	900.89	900.80	900.71	900.62	900.43	900.09	899.77	899.39	899.12	898.86	898.60	898.34
F	901.65	901.58	901.51	901.44	901.37	901.19	900.86	900.54	900.19	899.95	899.72	899.49	899.26

Note: When Girders A and F are underneath the curb the elevation shown is to an extended top of concrete deck.

FACE OF CURB ELEVATIONS (TOP OF REINFORCED CONCRETE DECK)														
	Span 1					Span 2				Span 3				
Elevation	℄ Brg. N. Abut.	¼ Point	½ Point	¾ Point	℄ Pier 1	¼ Point	½ Point	¾ Point	℄ Pier 2	¼ Point	½ Point	¾ Point	℄ Brg. S. Abut.
A	898.18	898.09	897.97	897.82	897.66	897.39	897.06	896.63	896.14	895.78	895.41	895.00	894.55
B	901.67	901.63	901.57	901.47	901.38	901.22	901.00	900.70	900.33	900.08	899.82	899.53	899.20

Note:
The preformed expansion joint filler in the railing parapet deflection joints may be either ¼" gray sponge rubber or ¼" gray cellular polyvinylchloride (P.V.C.) sponge.
The deflection joint extends from top of parapet to first construction joint and is included for payment with Superstructure Concrete.



PLACEMENT OF ADDITIONAL REINFORCEMENT OVER PIERS

Note:
The elevations shown at the face of curbs are those which are required before concrete is placed. Proper allowance has been made for the dead load deflection caused by the weight of the concrete.

Notes:
For notes see Sheet 8/11.
For Light Standard Support Details see Sheet CD1.

H.N.T.B. BR. NO. 14

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

TYPICAL CROSS SECTION AND SLAB PLAN

LANE OBS-E-B OVER RELOCATED McCRACKEN ROAD

STA. 67+99.66 TO STA. 70+29.75

CUYAHOGA COUNTY OHIO

DRAWN T.J.S.	TRACED A.J.J.	CHECKED J.T.G.	REVIEWED	REVISED
DATE 3-1968	DATE 4-17-68	DATE 8-7-68	DATE	SHEET 10/11