Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 4/8/25

ROUTE I-80 DESCRIPTION Noise Wall B23 LOGGED BY SD

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG Mobile B-57 Latitude , Longitude
DRILLING METHOD HSA HAMMER TYPE Auto
HAMMER EFF (%) 89

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-20A
Station 10+21.36
Offset 52.82ft RT
Ground Surface Elev. 612.61 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Asphalt 612.28				
Gray, Moist FILL: SILTY CLAY, with gravel, some sand		10		
		7 5	4.5 P	
609.11				
Very Stiff Brown and Black, Moist SILTY CLAY, trace gravel, trace sand (CL/ML)	-5	7 8 8	2.0 P	
606.61				
Very Stiff to Hard Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		6 8 8	4.5 P	
		9		
Cobbles at 9 feet	-10	8 10	4.5 P	
		5		
		8 11	4.5 P	
598.61		7		
WEATHERED LIMESTONE 598.11 Auger refusal at 14.5 feet	-15	50/3"	3.0 P	
End of Boring				
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 4/8/25

ROUTE I-80 DESCRIPTION Noise Wall B23 LOGGED BY SD

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG Mobile B-57 Latitude , Longitude
DRILLING METHOD HSA HAMMER TYPE Auto
HAMMER EFF (%) 89

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-21
Station 8+10.23
Offset 43.12ft RT
Ground Surface Elev. 612.43 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Asphalt 612.10				
Light Brown and Black, Moist FILL: GRAVEL, with sand, little slag 610.68		6		
Stiff Brown, Moist SILTY CLAY, trace gravel, trace sand (CL/ML)		4 2		
		4		
	-5	3 4	1.5 P	
606.43				
Hard Brown, Moist SILTY CLAY, trace gravel, trace sand (CL/ML)		4 6 10	4.3 P	
		6		
	-10	11 18	4.5 P	
601.43				
WEATHERED LIMESTONE 600.93 Auger refusal at 11.5 feet		50/3"		
End of Boring			4.5 P	
	-15			
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 5/21/25

ROUTE I-80 DESCRIPTION Noise Wall B23 LOGGED BY SB

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG CME-75 Latitude , Longitude
DRILLING METHOD HSA HAMMER TYPE Auto
HAMMER EFF (%) 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-22
Station 0+03.71
Offset 84.40ft RT
Ground Surface Elev. 598.26 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2 inches of Asphalt 598.09 10 inches of Gravel 597.26				
Hard Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		7 10 13	4.5 P	
		6		
	-5	9 9	4.5 P	
		8		
		13 17	4.5 P	
		7		
	-10	10 14	4.5 P	
		7		
		11 13	4.5 P	
		8		
583.26	-15	9 14	4.5 P	
End of Boring				
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	
	CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 0:2,000 ':" / in.	DRAWN - BK/GM	REVISED -	
PLOT DATE = 6/9/2025	CHECKED - MS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 1
NOISE ABATEMENT WALL B23B - SN 099-N1026
SHEET SL-07 OF SL-09 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	801
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

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6/9/2025 2:49:20 PM

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 3/27/25

ROUTE I-80 DESCRIPTION Noise Wall B23 LOGGED BY DV

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG CME-75 Latitude , Longitude

DRILLING METHOD HSA HAMMER TYPE Auto

HAMMER EFF (%) 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-23A
Station 4+35.97
Offset 182.46ft RT
Ground Surface Elev. 624.36 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
1 inch of Topsoil / 624.28				
Hard Brown, Moist SILTY CLAY LOAM, trace gravel (ML/CL)		5		
		9 11	5.0 B	23
		7		
	-5	13 13	4.6 B	17
/ 618.36				
Very Stiff to Hard Brown, Moist SILTY CLAY, trace gravel (CL/ML)		7		
		10 12	4.4 B	18
		6		
	-10	13 9	4.1 B	13
		5		
Some Gravel at 12 feet		8 11	3.5 B	17
		5 7 11	3.1 B	16
609.36	-15			
End of Boring				
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 3/27/25

ROUTE I-80 DESCRIPTION Noise Wall B23 LOGGED BY DV

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG CME-75 Latitude , Longitude

DRILLING METHOD HSA HAMMER TYPE Auto

HAMMER EFF (%) 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-24A
Station 4+31.70
Offset 306.00ft RT
Ground Surface Elev. 623.14 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
1 inch of Topsoil / 623.05				
Stiff Brown, Moist SILTY CLAY, with sand, little gravel (CL/ML)		2		
		3 4	1.9 B	22
/ 619.64				
Hard Brown, Moist SILTY CLAY, with sand, little gravel (CL/ML)		8		
	-5	10 12	6.0 B	11
/ 617.14				
Very Stiff to Hard Brown, Moist SILTY CLAY, trace gravel (CL/ML)		7		
		12 15	7.7 D	19
		6		
	-10	9 10	7.1 B	19
		6		
		7 9	3.3 B	13
		7 12 15	4.8 B	15
608.14	-15			
End of Boring				
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 4/22/25

ROUTE I-80 DESCRIPTION Noise Wall B23 LOGGED BY SB

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG CME-75 Latitude , Longitude

DRILLING METHOD HSA HAMMER TYPE Auto

HAMMER EFF (%) 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-26
Station 36+49.00
Offset 139.26ft LT
Ground Surface Elev. 605.14 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6 inches of Asphalt / 604.64				
2 inches of Aggregate Base / 604.47				
Stiff Brown, Moist SILTY CLAY, little sand, little gravel (CL/ML)		22		
		5 4	1.8 P	
/ 601.64				
Very Stiff to Hard Brown and Gray, Moist SILTY CLAY, with gravel, little sand (CL/ML)		3		
	-5	5 5	3.5 P	
		5		
		6 11	4.5 P	
		7		
	-10	8 11	4.5 P	
		5		
		8 11	4.5 P	
		5		
		8 6	4.5 P	
590.14	-15			
End of Boring				
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	
	CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 0:2,000 ':" / in.	DRAWN - BK/GM	REVISED -	
PLOT DATE = 6/9/2025	CHECKED - MS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 2
NOISE ABATEMENT WALL B23B - SN 099-N1026

SHEET SL-08 OF SL-09 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	802
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Date 5/21/25

ROUTE I-80 DESCRIPTION Noise Wall B23 LOGGED BY SB

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG CME-75 Latitude , Longitude
DRILLING METHOD HSA HAMMER TYPE Auto
HAMMER EFF (%) 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-29
Station 41+01.01
Offset 140.78ft LT
Ground Surface Elev. 596.42 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
4 inches of Topsoil 596.09				
Stiff Brown, Moist SILTY CLAY, trace gravel (CL/ML)	3			
	3 4	1.0 P		
	5			
-5	6 7	1.3 P		
	4			
	4 4	1.5 P		
	3			
-10	4 4	1.3 P		
Low recovery at 11 feet	1			
	1 1			
582.92				
Medium Dense Light Brown, Moist GRAVEL, with sand (GP) 581.42	6 2 13			
-15				
End of Boring				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

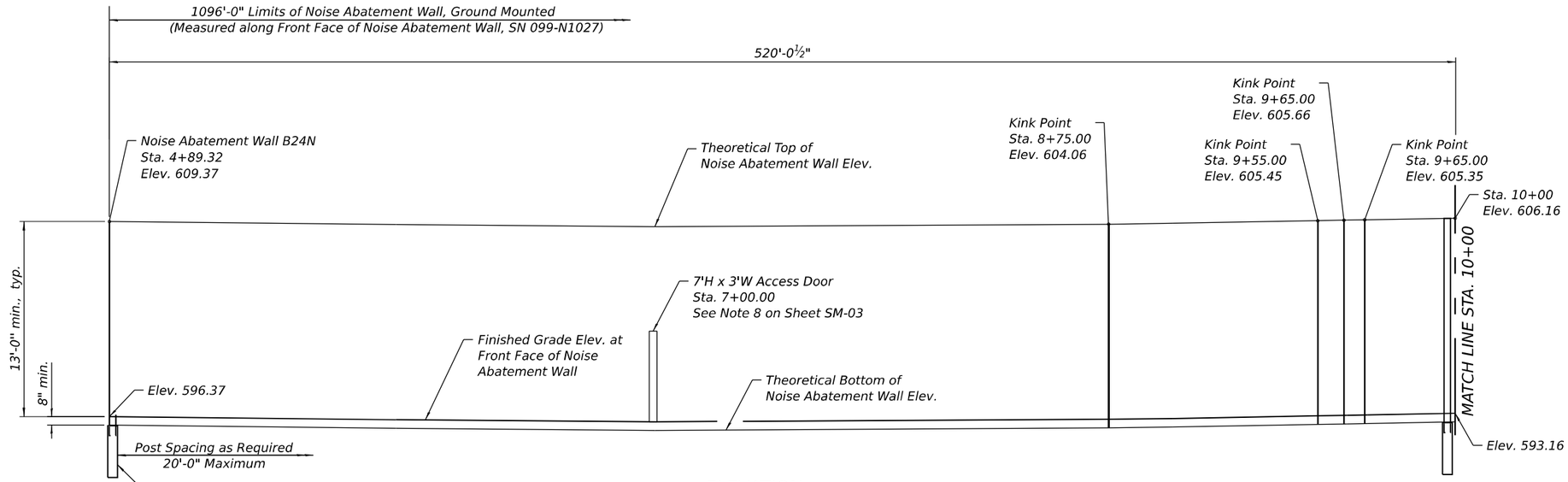
WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	
	CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 0:2,000 ':" / in.	DRAWN - BK/GM	REVISED -	
PLOT DATE = 6/9/2025	CHECKED - MS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

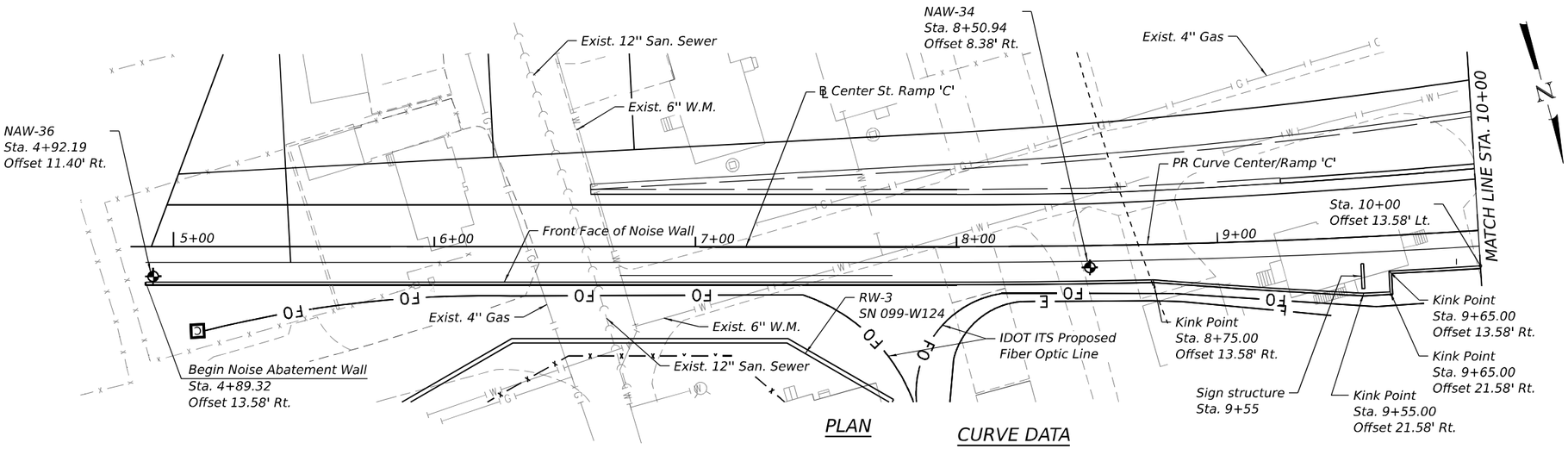
SOIL BORING LOGS 3
NOISE ABATEMENT WALL B23B - SN 099-N1026
SHEET SL-09 OF SL-09 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	803
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

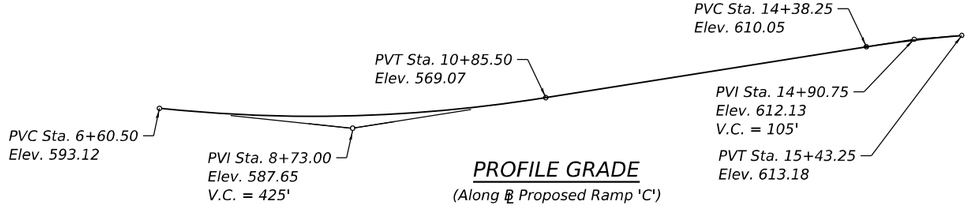


ELEVATION

(Unfolded - Looking South)



PLAN



PROFILE GRADE

(Along ℄ Proposed Ramp 'C')

CURVE DATA

PR Curve Center / Ramp 'C'
PI Sta. = 9+07.47
Δ = 03°49'25" (LT)
D = 01°46'54"
R = 3,216.00'
T = 107.35'
L = 214.63'
E = 1.79'
e = 3.20%
TR = 64.0'
SE Run = 102.4'
PC Sta. = 8+00.12
PT Sta. = 10+14.75

NOTES:

1. For General Notes and Total Bill of Material, see Sheet SM-03.
2. Stations are measured along and Offsets are measured to BL Prop. Ramp C/BL Center St.
3. Length of ground mounted wall is measured along Front Face of Noise Abatement Wall.

INDEX OF SHEETS

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design
Specifications, 9th Edition

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (Struct. Steel, M270 Grade 50, posts)
fy = 36,000 psi (Struct. Steel, M270 Grade 36, all other structural steel)

PRECAST UNITS

f'c = 4,500 psi
fy = 60,000 psi (Reinforcement)
fy = 65,000 psi (Welded Wire Reinforcement)

DESIGN LOADS

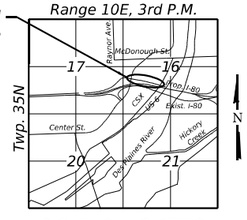
Strength III or V Wind : 35 psf
Service I Wind : 15 psf

Note:
All existing utilities are at least 2'-0" below existing Grade and 23'-0" min. below Finished Grade along the wall.

LEGEND

- Proposed ROW line
- FO — Proposed Fiber Optic line
- E — Proposed Electric line
- T — Existing Telephone line
- A — Existing Aerial line
- E — Existing Electric line
- Existing ROW line
- G — Existing Gas line
- Existing Sanitary Sewer
- Existing Storm Sewer
- W — Existing Water main
- CTV — Existing Cable TV line
- Indicates Soil Boring location

Proposed Structure



LOCATION SKETCH

GENERAL PLAN AND ELEVATION 1
NOISE ABATEMENT WALL ALONG RAMP-C
F.A.I. RTE. I-80 SEC. FAI 80 21 INTERCHANGE
WILL COUNTY
STA. 4+89.32 TO STA. 33+09.23
STRUCTURE NO. 099-N1027 (NOISE WALL B24N)

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	
	CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 50:0 ':" / in.	DRAWN - BK/GM	REVISED -	
PLOT DATE = 6/9/2025	CHECKED - MS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET SM-01 OF SM-06 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	804
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

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6/9/2025 2:51:03 PM

1096'-0" Limits of Noise Abatement Wall, Ground Mounted
(Measured along Front Face of Noise Abatement Wall, SN 099-N1027)

575'-0½"

Kink Point
Sta. 32+45.61
Elev. 624.82

Theoretical Top of
Noise Abatement Wall Elev.

Kink Point
Sta. 14+50.43
Elev. 623.78

Kink Point
Sta. 32+27.62
Elev. 624.70

Kink Point
Sta. 32+64.34
Elev. 624.77

Sta. 10+00
Elev. 606.16

End Noise Abatement Wall B24N
Sta. 33+09.23
Elev. 624.44

13'-0" min., typ.

8" min.

MATCH LINE STA. 10+00

Kink Point
Sta. 14+15.65
Elev. 622.06

Kink Point
Sta. 14+67.76
34.03' Rt./
Sta. 32+11.81
Elev. 624.35

Theoretical Bottom of
Noise Abatement Wall Elev.

Kink Point
Sta. 14+33.44
Elev. 623.01

Finished Grade Elev. at
Front Face of Noise
Abatement Wall

Elev. 611.44

Elev. 593.16

Drilled shaft, typ.

ELEVATION
(Unfolded - Looking South)

℄ Center St. Ramp 'C'

IDOT ITS
Proposed Fiber Optic Line

FO

NAW-33
Sta. 10+50.74
Offset 11.70' Rt.

Kink Point
Sta. 14+15.65
13.58' Rt.

Front Face of Noise Abatement Wall

15+00

14+00

13+00

12+00

11+00

32+00

33+00

NAW-31
Sta. 32+26.77
Offset 73.63' Rt.

MATCH LINE STA. 10+00

Kink Point
Sta. 14+33.44
15.70' Rt.

Kink Point
Sta. 14+50.43
22.30' Rt.

Sta. 10+00.00
13.58' Rt.

℄ Center St.

24" RCP

Kink Point
Sta. 14+67.76
34.03' Rt./
Sta. 32+11.81
87.71' Rt.

18" RCP

Exist. 4" Gas

Exist. 2" Gas

Kink Point
Sta. 32+27.62
76.93' Rt.

NAW-30
Sta. 33+67.90
Offset 55.98' Rt.

Kink Point
Sta. 32+45.61
70.40' Rt.

Kink Point
Sta. 32+64.34
66.49' Rt.

End Noise Wall
Sta. 33+09.23
Offset 61.59' Rt.

PLAN

Sta. 31+00.00
Elev. 613.82

-0.74%

Sta. 33+50.00
Elev. 611.96

PROFILE GRADE
(Along ℄ Center St.)

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	
	CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 50.000 ' / in.	DRAWN - BK/GM	REVISED -	
PLOT DATE = 6/9/2025	CHECKED - MS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION 2
NOISE ABATEMENT WALL B24N - SN 099-N1027

SHEET SM-02 OF SM-06 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	805
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES:

1. Theoretical Top of Wall Elev., Theoretical Bottom of Wall Elev., Finished Grade Elev. at Front Face of Wall and Finished Grade Elev. at Back Face of Wall shall be taken as straight lines in the segments between the stations shown in the Noise Wall Data Table.

2. See NOISE ABATEMENT WALL, GROUND MOUNTED Special Provision for material, design, fabrication, construction and erection and other requirements for installation of the proposed Noise Abatement Wall.

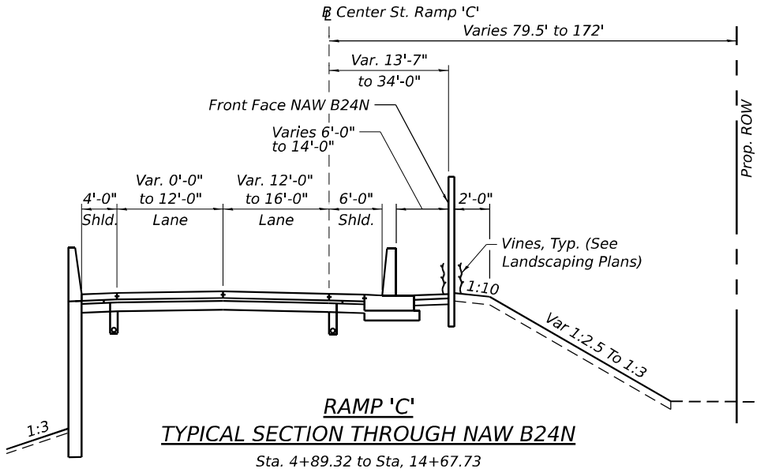
3. The existing utilities will be adjusted. The Contractor shall field verify location of the existing utilities prior to construction. The Contractor shall take precautions not to damage existing utilities. Any such damage shall be repaired by the Contractor at no additional cost.

4. Noise Abatement Wall drilled shaft foundation diameter, depth and spacing to be determined by the Contractor in accordance with the Special Provision.

5. Contractor shall provide Ashlar Stone Finish on both faces of Noise Abatement Wall.

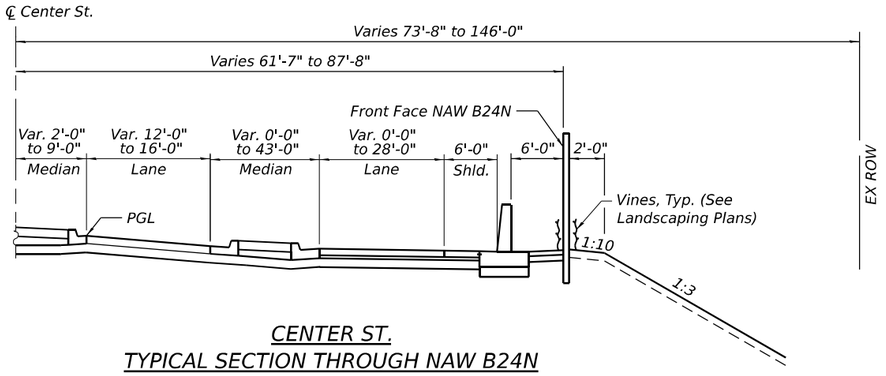
6. The default color of both sides of the NAW panels, posts and other visible elements shall be Federal Standard 30279 - Sand.

7. Access door location shown in the plans is approximate and may be adjusted to accommodate final fire hydrant locations provided by the City of Joliet. This work shall be included as part of the respective Noise Abatement Wall costs.



RAMP 'C'
TYPICAL SECTION THROUGH NAW B24N

Sta. 4+89.32 to Sta, 14+67.73
(Looking West)

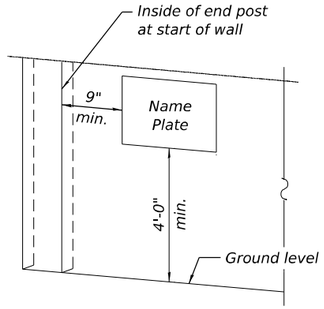


CENTER ST.
TYPICAL SECTION THROUGH NAW B24N

Sta. 32+11.81 to Sta. 33+09.23
(Looking West)

NOISE ABATEMENT WALL
BUILT 202_ BY
STATE OF ILLINOIS
F.A.I. RTE. I-80
SECTION FAI 80 21 INTERCHANGE
FROM STA. 4+89.32 TO STA. 33+09.23
STRUCTURE NO. 099-N1027

NAME PLATE
See Std. 515001



FOR NOISE ABATEMENT WALL GROUND MOUNTED

NOISE ABATEMENT WALL B24N (DATA TABLE)

Station	Offset (Rt.) to Front Face of Wall (ft.)	Theoretical Top of NAW Elev.	℄ Ramp C/ ℄ Center St. Elev	Finished Grade Elev. at Front Face of NAW	Finished Grade Elev. at Back Face of NAW	Ex. Grade Elev. at Front Face of NAW	Theoretical Bottom of NAW Elev.	Theoretical Wall Height (ft)
4+89.32	13.58	609.37	596.46	596.37	596.37	551.66	595.70	13.67
5+00.00	13.58	609.18	596.25	596.18	596.18	552.48	595.51	13.67
5+50.00	13.58	608.31	595.28	595.31	595.31	555.74	594.64	13.67
6+00.00	13.58	607.30	594.30	594.30	594.30	558.54	593.63	13.67
6+50.00	13.58	606.26	593.32	593.26	593.26	561.53	592.59	13.67
7+00.00	13.58	605.14	592.22	592.14	592.14	564.92	591.47	13.67
7+50.00	13.58	604.36	591.43	591.36	591.36	566.68	590.69	13.67
8+00.00	13.58	603.95	591.03	590.95	590.95	568.25	590.28	13.67
8+50.00	13.58	603.93	591.01	590.93	590.93	568.07	590.26	13.67
8+75.00	13.58	604.06	591.14	591.06	591.06	569.36	590.39	13.67
9+00.00	16.08	604.39	591-37	591.39	591.39	569.61	590.72	13.67
9+50.00	21.08	605.34	592.41	592.34	592.34	569.76	591.67	13.67
9+55.00	21.58	605.45	592.12	592.45	592.45	569.97	591.78	13.67
9+65.00	21.58	605.66	592.42	592.66	592.66	570.61	591.99	13.67
9+65.00	13.58	605.35	592.63	592.35	592.35	570.88	591.68	13.67
10+00.00	13.58	606.16	593.25	593.16	593.16	571.83	592.49	13.67
10+50.00	13.58	607.68	594.76	594.68	594.68	572.32	594.01	13.67
11+00.00	13.58	609.56	596.65	596.56	596.56	574.29	595.89	13.67
11+50.00	13.58	611.54	598.63	598.54	598.54	576.28	597.87	13.67
12+00.00	13.58	613.52	600.61	600.52	600.52	579.16	599.85	13.67
12+50.00	13.58	615.50	602.59	602.50	602.50	582.93	601.83	13.67
13+00.00	13.58	617.48	604.57	604.48	604.48	585.23	603.81	13.67
13+50.00	13.58	619.46	606.55	606.46	606.46	589.75	605.79	13.67
14+00.00	13.58	621.44	608.54	608.44	608.44	594.13	607.77	13.67
14+15.65	13.58	622.06	609.16	609.06	609.06	592.60	608.39	13.67
14+33.44	15.70	623.01	609.86	610.01	610.01	589.40	609.34	13.67
14+50.43	22.30	623.78	610.52	610.78	610.78	589.21	610.11	13.67
14+67.76 /32+11.81	34.03/87.71	624.35	612.99	611.35	611.35	590.10	610.68	13.67
32+27.62	76.93	624.70	612.87	611.70	611.70	590.86	611.03	13.67
32+45.61	70.40	624.82	612.74	611.82	611.82	591.47	611.15	13.67
32+64.34	66.49	624.77	612.60	611.77	611.77	592.03	611.10	13.67
33+09.23	61.59	624.44	612.27	611.44	611.44	594.58	610.77	13.67

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Name Plates	Each	1
Noise Abatement Wall, Ground Mounted	Sq. Ft.	14,980

NOISE REDUCTION DATA

Face	From Sta.	To Sta.	Noise Reduction Coefficient	Comments
I-80 face	4+89.32	33+09.23	Reflective	-
Residential face	4+89.32	33+09.23	Reflective	-

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780		DESIGNED - MS	REVISED -	
		CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 50.000 ' / in.		DRAWN - BK/GM	REVISED -	
PLOT DATE = 4/23/2025		CHECKED - MS	REVISED -	

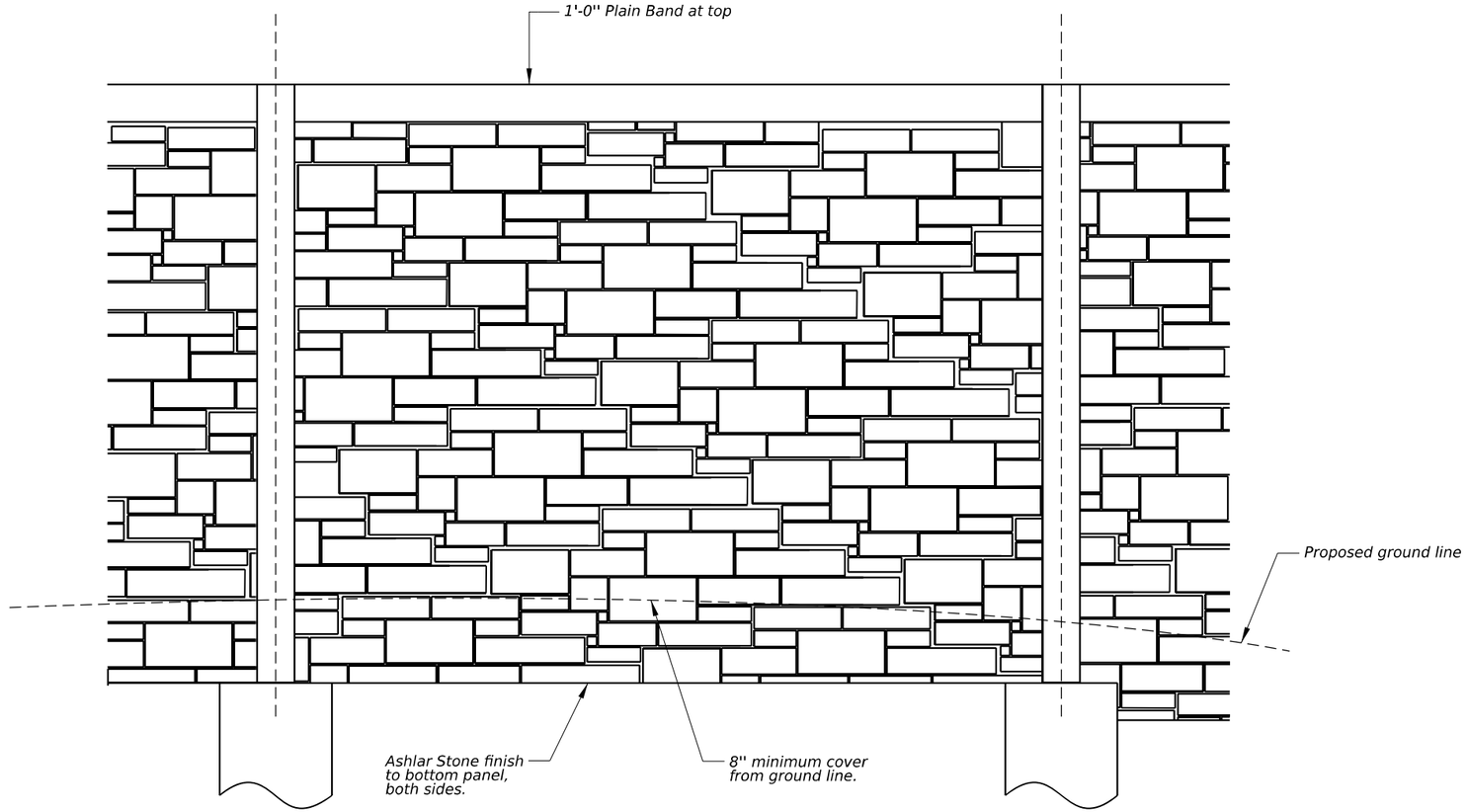
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

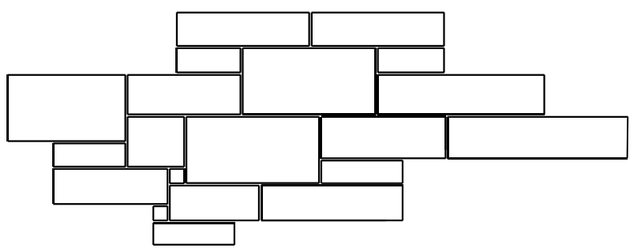
GENERAL NOTES AND TOTAL BILL OF MATERIAL
NOISE ABATEMENT WALL B24N - SN 099-N1027

SHEET SM-03 OF SM-06 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	806
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

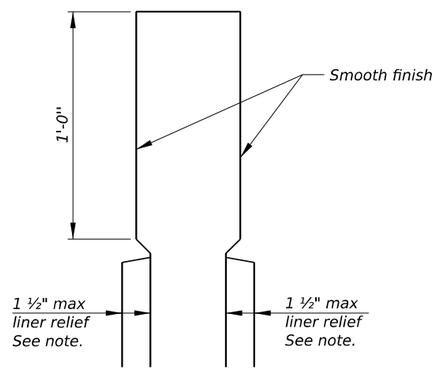
Notes:
Each side of the noise wall panels shall have a rolled ashlar stone finish. The finish shall have a 1 ½" relief for noise abatement wall, ground mounted. The color of both sides of the panels, plain band, posts and all other visible elements shall follow the special provisions.





Stone Pattern Sizes:
3" x 3" - 14" x 28"

ENLARGED PATTERN DETAIL



ENLARGED CAP DETAIL

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	
	CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	DRAWN - BK/GM	REVISED -	
PLOT DATE = 4/23/2025	CHECKED - MS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS
NOISE ABATEMENT WALL B24N - SN 099-N1027
SHEET SM-04 OF SM-06 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	807
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

MODEL: NOISE WALLS DETAILS
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4/23/2025 10:25:05 AM

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

ROUTE I-80 DESCRIPTION Noise Wall B24 LOGGED BY SD Date 4/30/25

SECTION C-91-109-22 LOCATION SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG Geoprobe DRILLING METHOD HSA Latitude , Longitude HAMMER TYPE Auto HAMMER EFF (%) 99

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-30
Station Sta. 33+67.90
Offset Offset 55.98' Rt.
Ground Surface Elev. 599.18 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
3 inches of Topsoil 598.93			
Brown, Moist FILL: SILTY CLAY, little sand, trace roots, trace gravel	3		
	2	0.8	
	3	P	
	2		
	1	0.5	
-5	1	P	
593.18			
3 inches of Concrete 592.93	35		
Brown, Moist FILL: SILTY CLAY, little gravel, little roots	9	2.0	
	9	P	
590.68			
Stiff	3		
Dark Brown, Moist SILTY CLAY, trace gravel (CL/ML)	4	1.3	
-10	4	P	
588.18			
Gray, Moist WEATHERED LIMESTONE	50/5"		
	50/3"		
584.18 -15			
End of Boring			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

ROUTE I-80 DESCRIPTION Noise Wall B24 LOGGED BY SD Date 4/30/25

SECTION C-91-109-22 LOCATION SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG Geoprobe DRILLING METHOD HSA Latitude , Longitude HAMMER TYPE Auto HAMMER EFF (%) 99

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-31
Station Sta. 32+26.77
Offset Offset 73.63' Rt.
Ground Surface Elev. 589.66 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Topsoil 589.32			
Stiff Brown, Moist SILTY CLAY, trace gravel, trace roots (CL/ML)	50/3"	1.3	
588.16		P	
Gray, Moist WEATHERED LIMESTONE			
586.66			
Auger refusal at 3 feet End of Boring			
-5			
10			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

ROUTE I-80 DESCRIPTION Noise Wall B24 LOGGED BY SB Date 3/20/25

SECTION C-91-109-22 LOCATION SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG Mobile B-57 DRILLING METHOD HSA Latitude , Longitude HAMMER TYPE Auto HAMMER EFF (%) 92.1

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-33
Station 10+50.74
Offset 11.70ft RT
Ground Surface Elev. 573.95 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4 inches of Topsoil 573.61			
Very Dense Brown, Moist GRAVEL, with sand, trace clay (GP)	50/4"		28
571.45			
Gray, Moist WEATHERED LIMESTONE 570.95			
Auger refusal at 3 feet End of Boring			
-5			
10			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	
	CHECKED - NBR/PJL	REVISED -	
PLOT SCALE = 0:2,000 ':" / in.	DRAWN - BK/GM	REVISED -	
PLOT DATE = 6/9/2025	CHECKED - MS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 1
NOISE ABATEMENT WALL B24N - SN 099-N1027
SHEET SM-05 OF SM-06 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	808
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 3/20/25

ROUTE I-80 DESCRIPTION Noise Wall B24 LOGGED BY SD

SECTION C-91-109-22 LOCATION SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG Latitude , Longitude Mobile B-57

DRILLING METHOD HSA HAMMER TYPE Auto

HAMMER EFF (%) 92.1

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-34
Station 8+50.94
Offset 0.30ft RT
Ground Surface Elev. 571.15 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6 inches of Topsoil	570.65			
Soft Black, Moist SILTY CLAY, little gravel, trace roots (CL/ML)	569.15	4 7 50/2"	0.3 P	52
WEATHERED LIMESTONE	568.15			
Auger refusal at 3 feet				
End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants

SOIL BORING LOG

Page 1 of 1

Date 4/29/25

ROUTE I-80 DESCRIPTION Noise Wall B24 LOGGED BY EH

SECTION C-91-109-22 LOCATION , SEC. , TWP. , RNG. ,

COUNTY Will DRILLING RIG Latitude , Longitude CME-75

DRILLING METHOD HSA HAMMER TYPE Auto

HAMMER EFF (%) 78.8

STRUCT. NO. N/A
Station N/A

BORING NO. NAW-36
Station Sta. 4+92.19
Offset Offset 11.40' Rt.
Ground Surface Elev. 551.92 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion N/A ft
After ____ Hrs. N/A ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray, Moist FILL: GRAVEL, with sand	550.92			
Black, Moist SILTY CLAY, with gravel (CL/ML)	550.42	6 10 50/1"		7
Very Dense Brown, Moist SAND, with gravel (SP)	548.92			
Auger refusal at 3 feet				
End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USGM717780	DESIGNED - MS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS 2 NOISE ABATEMENT WALL B24N - SN 099-N1027	
	CHECKED - NBR/PJL	REVISED -			
PLOT SCALE = 0:2,000 ':" / in.	DRAWN - BK/GM	REVISED -			
PLOT DATE = 6/9/2025	CHECKED - MS	REVISED -		SHEET SM-06 OF SM-06 SHEETS	

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	FAI 80 21 INTERCHANGE	WILL	1209	809
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

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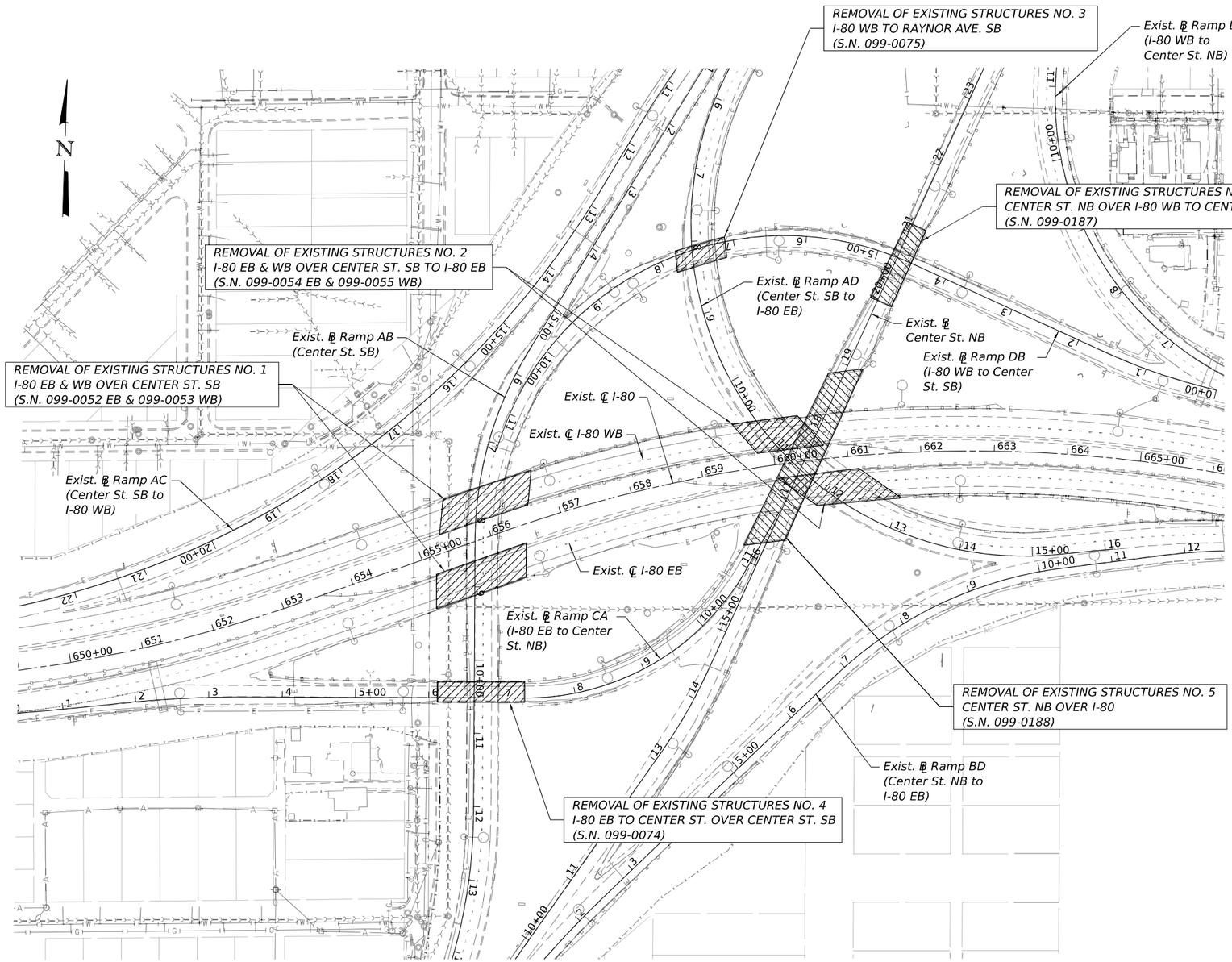


KEY PLAN

INDEX OF SHEETS

LEGEND

Removal of Existing Structure

Notes:

1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering materials. Such variations shall not be cause of additional compensation for a change in scope of work, however, the Contractor will be paid for quantity actually furnished at the unit price bid for the work.
2. Removal of Existing Structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include concrete removal of the bridge concrete deck, superstructure, protective shield, and partial removal of the abutment down to a minimum elevation as noted in the plans.
3. The existing structural steel coating contains lead. The Contractor shall take appropriate cautions to deal with the presence of lead on this project.
4. Contractor shall not scale dimensions from the contract plans for construction purposes. Scales are shown for information only.
5. The Contractor shall take all necessary precautions to protect existing utilities, foundations and adjacent structures during removal/construction of the bridge.
6. For suggested stages of construction and sequencing requirements, see Roadway Plans and Special Provisions.

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 1	Each	1
Removal of Existing Structures No. 2	Each	1
Removal of Existing Structures No. 3	Each	1
Removal of Existing Structures No. 4	Each	1
Removal of Existing Structures No. 5	Each	1
Removal of Existing Structures No. 6	Each	1
Protective Shield	Sq. Yd.	90
Deck Slab Repair (Partial)	Sq. Yd.	225

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

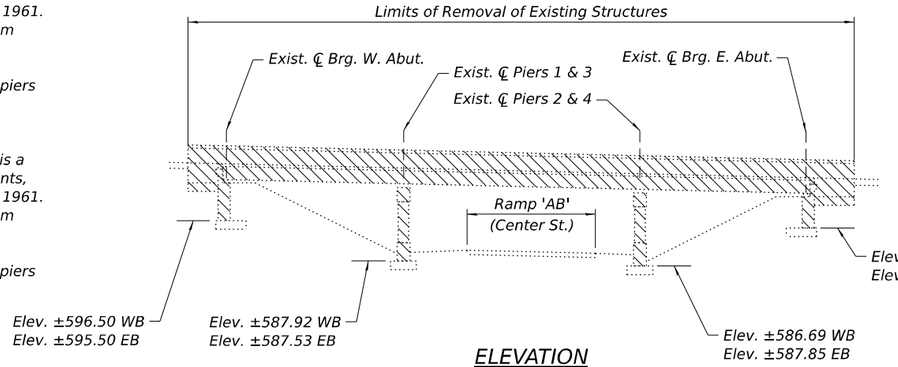
USER NAME = USSJ696614	DESIGNED - MHD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	KEY PLAN BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS	SHEET SN-1 OF SN-11 SHEETS
	DRAWN - MHD	REVISED -			
PLOT SCALE = 166.7.9200 '-" / in.	CHECKED - PJL	REVISED -			
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	810
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

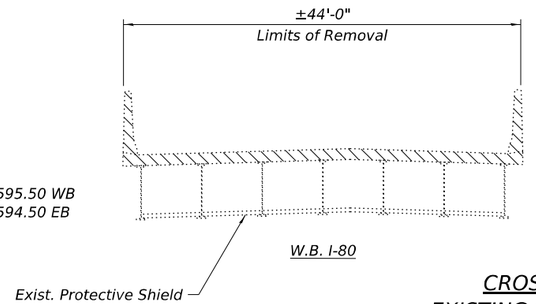
MODEL: Default
FILE NAME: pw:\transystems-pw.bentley.com:transystcorp-pw1-hosted\Documents\Projects_2018\CH401\401180022\03-WSP\CAD\62R22-INT-4 (Center)\Sheets\Structural\Exist_Struct_Removal\D0990052-62R22-ESHT001.dgn

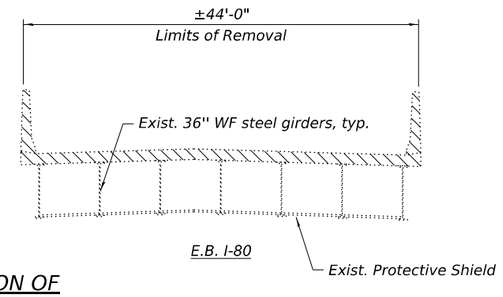
Existing EB Structure: S.N. 099-0052 is a ±131'-10" long back to back of abutments, three span structure originally built in 1961. The existing structure has a multi-beam non-composite superstructure with an overall width of ±44'-0". The existing pedestal abutments and multicolumn piers with tapered columns are founded on spread footings.

Existing WB Structure: S.N. 099-0053 is a ±128'-4" long back to back of abutments, three span structure originally built in 1961. The existing structure has a multi-beam non-composite superstructure with an overall width of ±44'-0". The existing pedestal abutments and multicolumn piers with tapered columns are founded on spread footings.

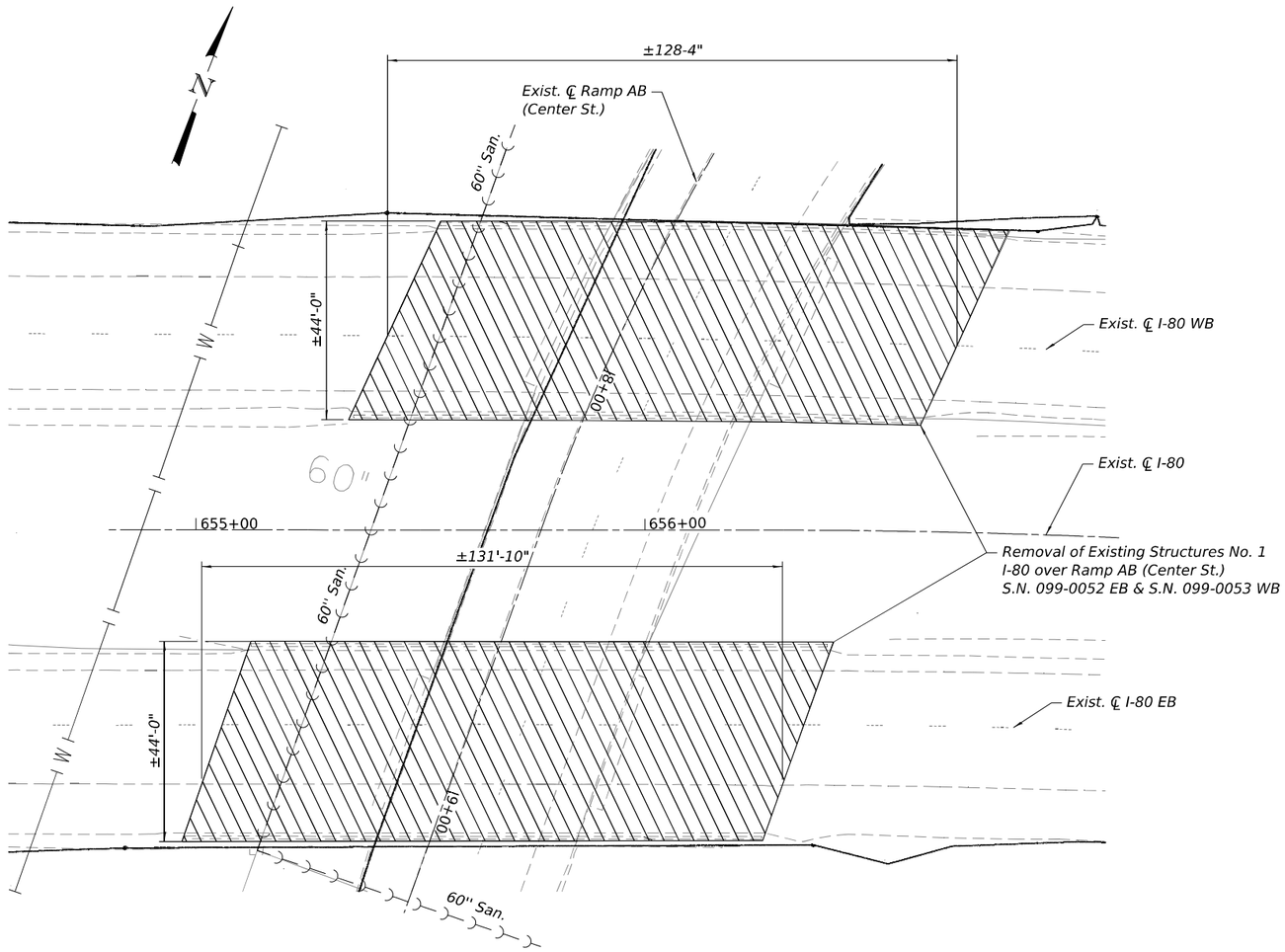


ELEVATION





CROSS SECTION OF EXISTING SUPERSTRUCTURES



PLAN

LEGEND

Removal of Existing Structure

Water Line

Notes:

1. *Removal of Existing Structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include concrete removal of the bridge concrete deck, superstructure, protective shield, and partial removal of the abutments and piers down to a minimum elevation as noted in the plans.*
2. *Deck slab repair areas are based upon 5% of the deck needing partial depth repairs. Actual location and size of patches to be placed shall be determined by the Engineer in the field at the time of construction and shown on As-built plans. See Special Provision "Bridge Deck Maintenance Patching".*

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 1	Each	1
Deck Slab Repair (Partial)	Sq. Yd.	64

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USSJ696614	DESIGNED - MHD	REVISED -	
	DRAWN - MHD	REVISED -	
PLOT SCALE = 33:3.9840 '=' / in.	CHECKED - PJL	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

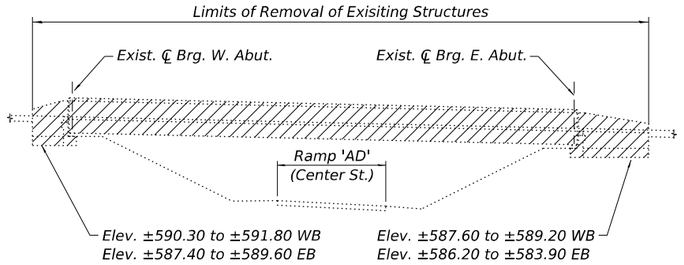
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-0052 EB & 099-0053 WB
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-2 OF SN-11 SHEETS

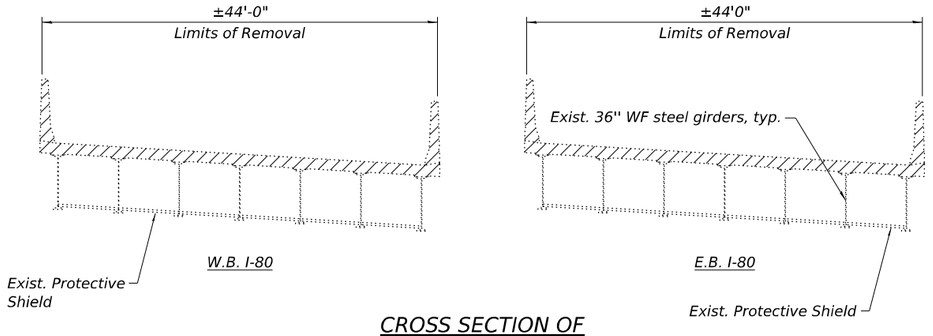
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	811
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

Existing EB Structure: S.N. 099-0054 is a ±118'-5" long back to back of abutments, four span structure originally built in 1961. The existing structure has a multi-beam composite superstructure with an overall width of ±44'-0". The existing pedestal abutments are founded on piles and the piers are founded on spread footings.

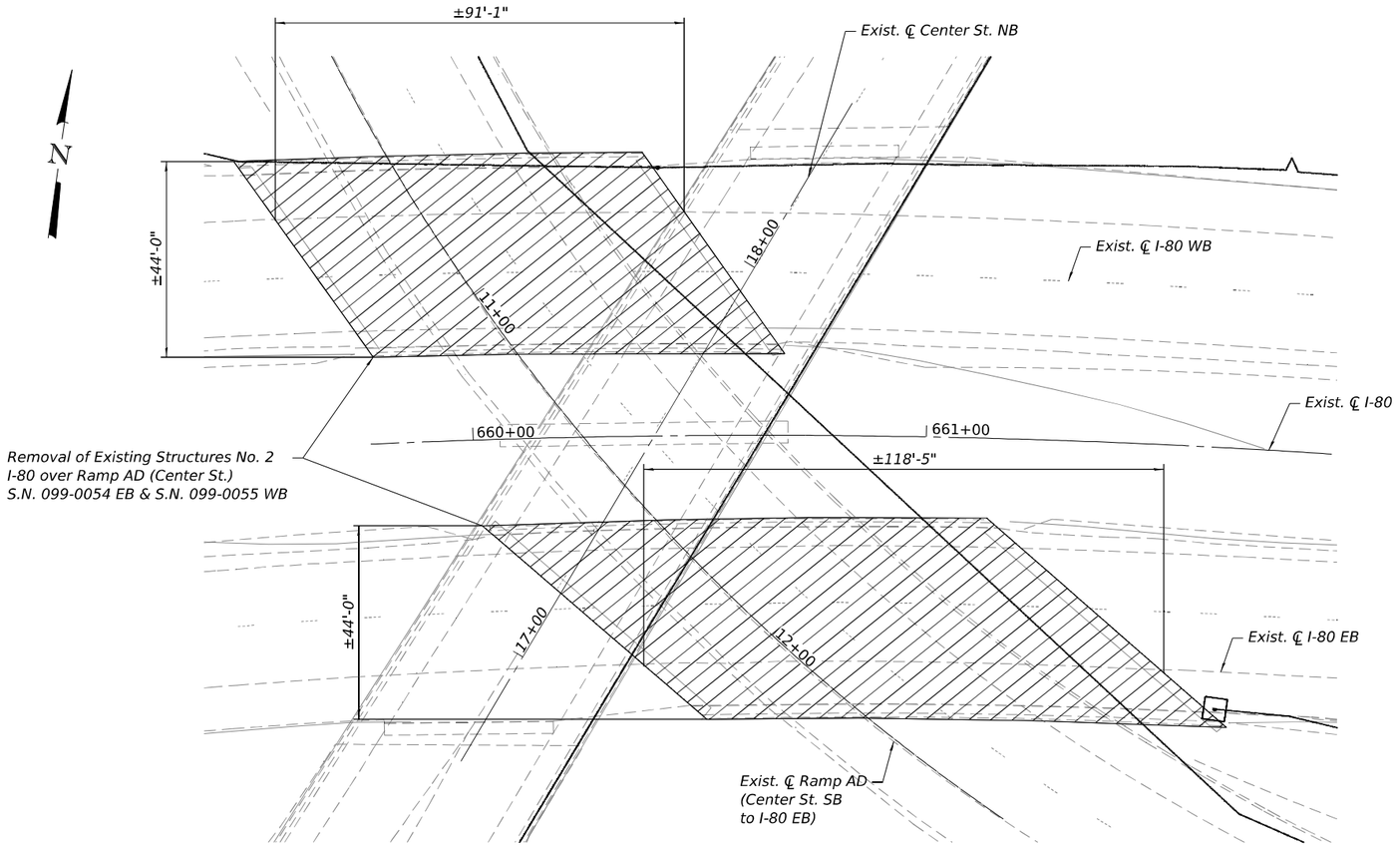
Existing WB Structure: S.N. 099-0055 is a ±91'-1" long back to back of abutments, four span structure originally built in 1961. The existing structure has a multi-beam composite superstructure with an overall width of ±44'-0". The existing pedestal abutments are founded on piles and the piers are founded on spread footings.



ELEVATION



CROSS SECTION OF EXISTING SUPERSTRUCTURES



PLAN

LEGEND

Removal of Existing Structure

Notes:

1. *Removal of Existing Structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include concrete removal of the bridge concrete deck, superstructure, protective shield, and partial removal of the abutments down to a minimum elevation as noted in the plans.*
2. *Deck slab repair areas are based upon 5% of the deck needing partial depth repairs. Actual location and size of patches to be placed shall be determined by the Engineer in the field at the time of construction and shown on As-built plans. See Special Provision "Bridge Deck Maintenance Patching".*

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 2	Each	1
Deck Slab Repair (Partial)	Sq. Yd.	50

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

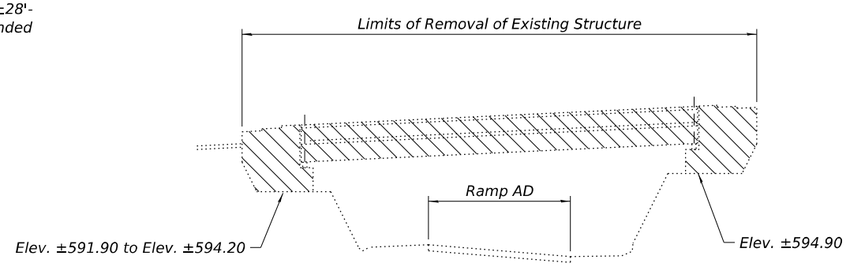
USER NAME = USSJ696614	DESIGNED - MHD	REVISED -	
	DRAWN - MHD	REVISED -	
PLOT SCALE = 33:3.9840 '=' / in.	CHECKED - PJL	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

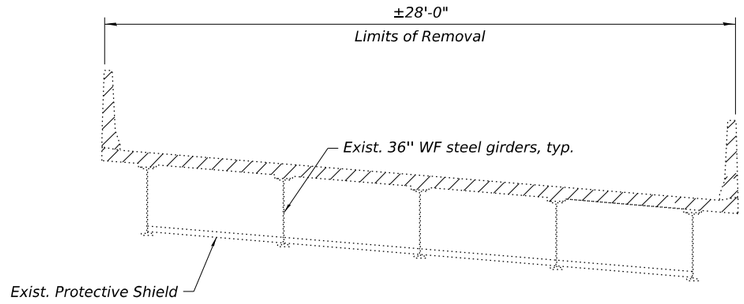
STRUCTURE NO. 099-0054 EB & 099-0055 WB
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-3 OF SN-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	812
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

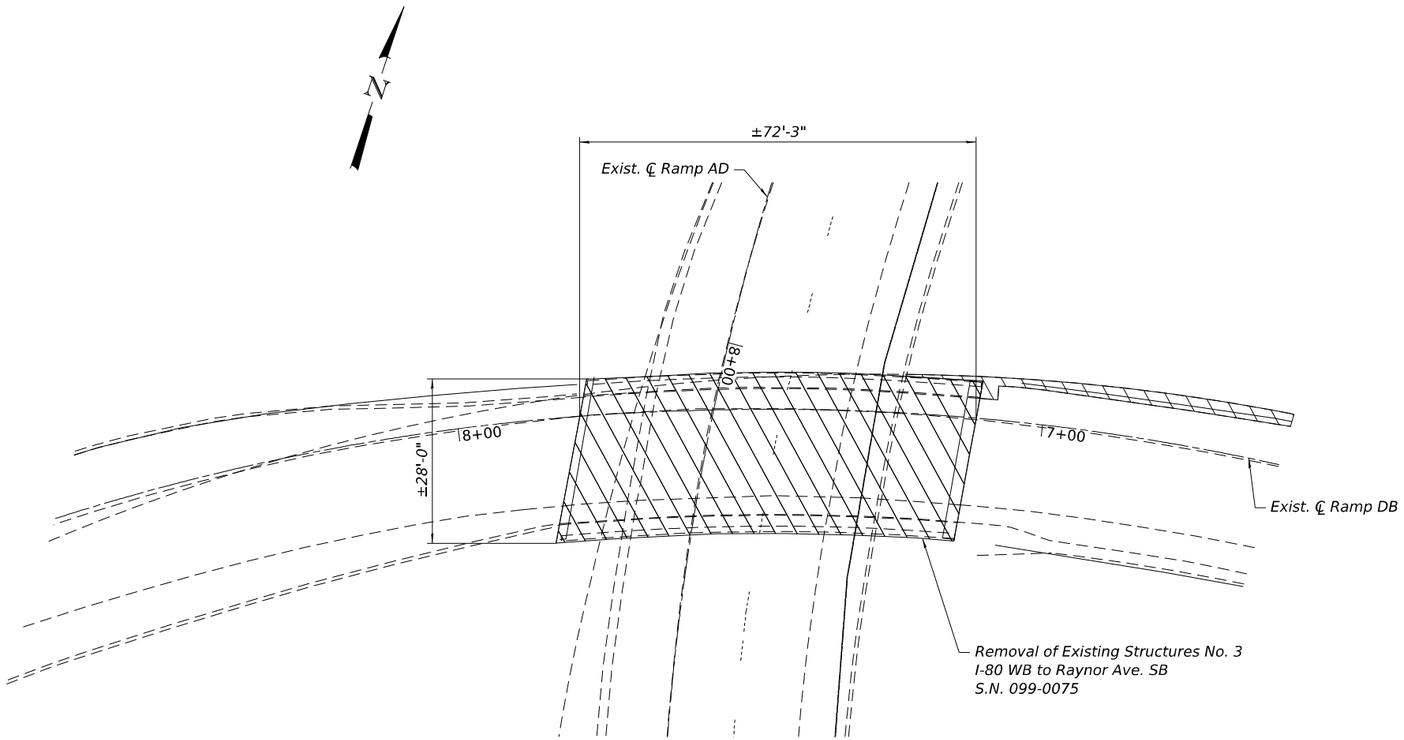
Existing Structure: S.N. 099-0075 is a ±72'-3" long back to back of abutments, single span structure originally built in 1961. The existing structure has a multi-beam composite superstructure with an overall width of ±28'-0". The existing stub abutments are founded on spread footings.



ELEVATION



CROSS SECTION OF EXISTING SUPERSTRUCTURE



PLAN

LEGEND

Removal of Existing Structure

Notes:

1. *Removal of Existing Structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include concrete removal of the bridge concrete deck, superstructure, protective shield, and partial removal of the abutments down to a minimum elevation as noted in the plans.*
2. *Deck slab repair areas are based upon 5% of the deck needing partial depth repairs. Actual location and size of patches to be placed shall be determined by the Engineer in the field at the time of construction and shown on As-built plans. See Special Provision "Bridge Deck Maintenance Patching".*

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 3	Each	1
Deck Slab Repair (Partial)	Sq. Yd.	11

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

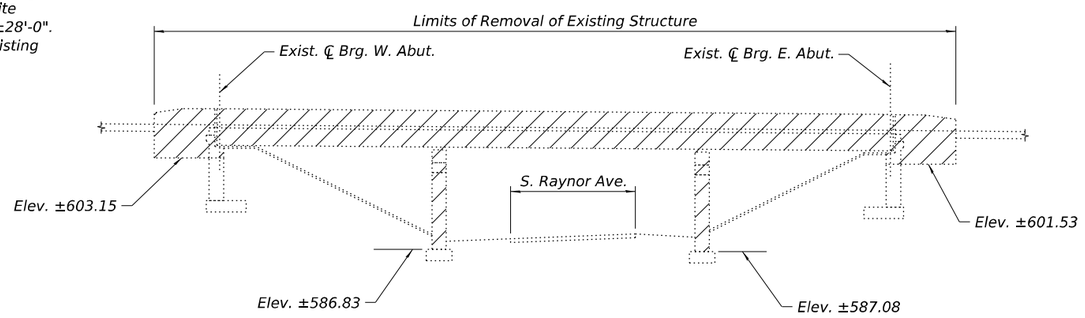
USER NAME = USSJ696614	DESIGNED - MHD	REVISED -	
	DRAWN - MHD	REVISED -	
PLOT SCALE = 26:7.9872 ':' / in.	CHECKED - PJL	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

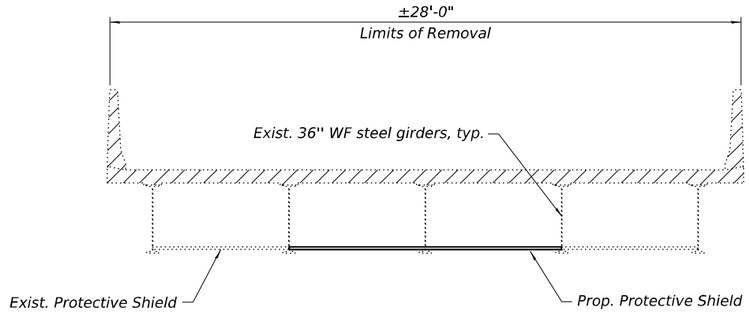
STRUCTURE NO. 099-0075
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-4 OF SN-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	813
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

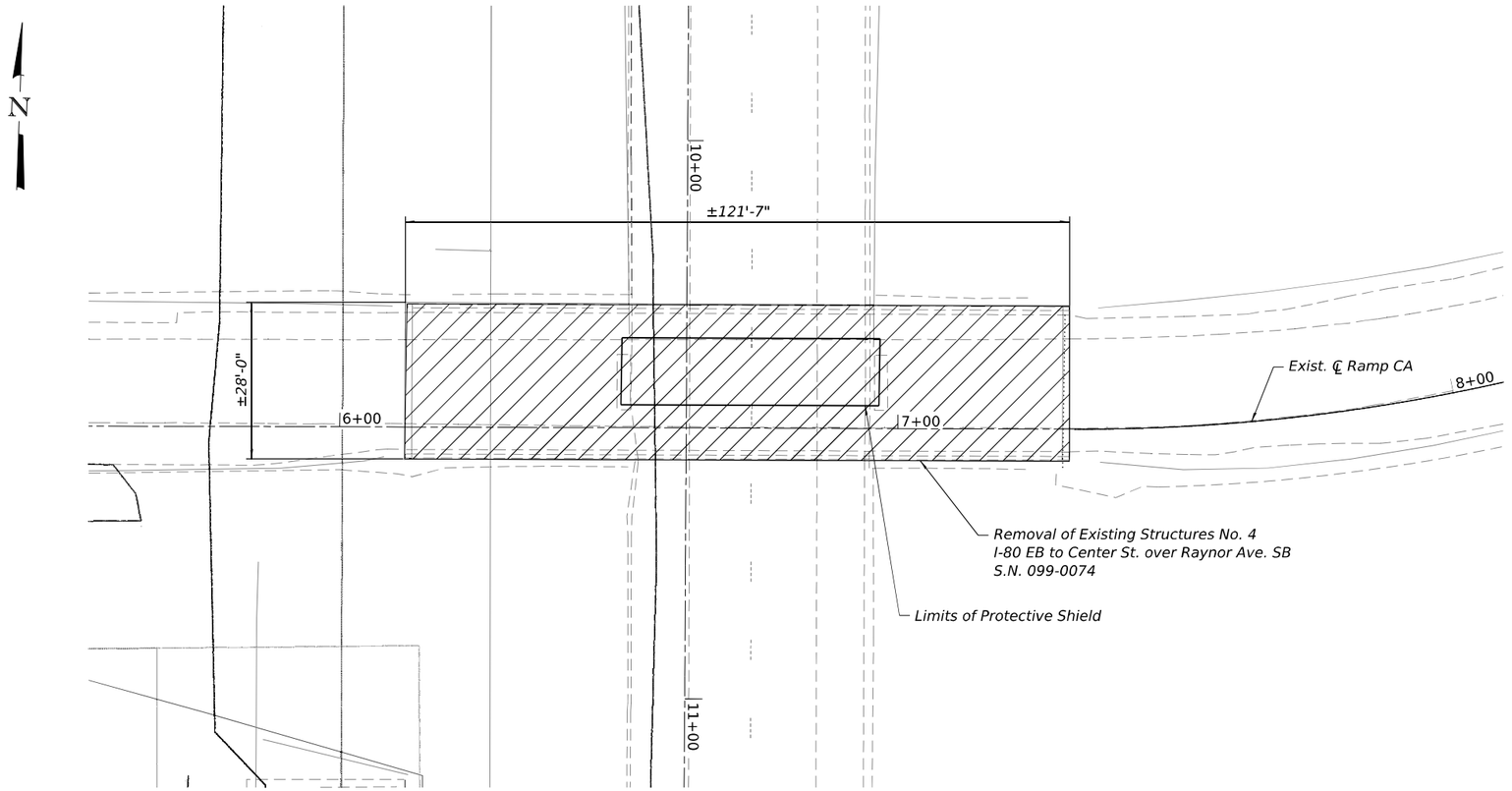
Existing Structure: S.N. 099-0074 is a ±121'-7" long back to back of abutments, three span structure originally built in 1961. The existing structure has a multi-beam non-composite superstructure with an overall width of ±28'-0". The existing pedestal abutments and existing piers are founded on spread footings.



ELEVATION



CROSS SECTION OF EXISTING SUPERSTRUCTURE



PLAN

LEGEND

Removal of Existing Structure

Notes:

1. *Removal of Existing Structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include concrete removal of the bridge concrete deck, superstructure, protective shield, and partial removal of the abutments and piers down to a minimum elevation as noted in the plans.*
2. *Deck slab repair areas are based upon 5% of the deck needing partial depth repairs. Actual location and size of patches to be placed shall be determined by the Engineer in the field at the time of construction and shown on As-built plans. See Special Provision "Bridge Deck Maintenance Patching".*

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 4	Each	1
Protective Shield	Sq. Yd.	90
Deck Slab Repair (Partial)	Sq. Yd.	19

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Exist_Struct_Removal/099074-62R22-ESR005.dgn

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

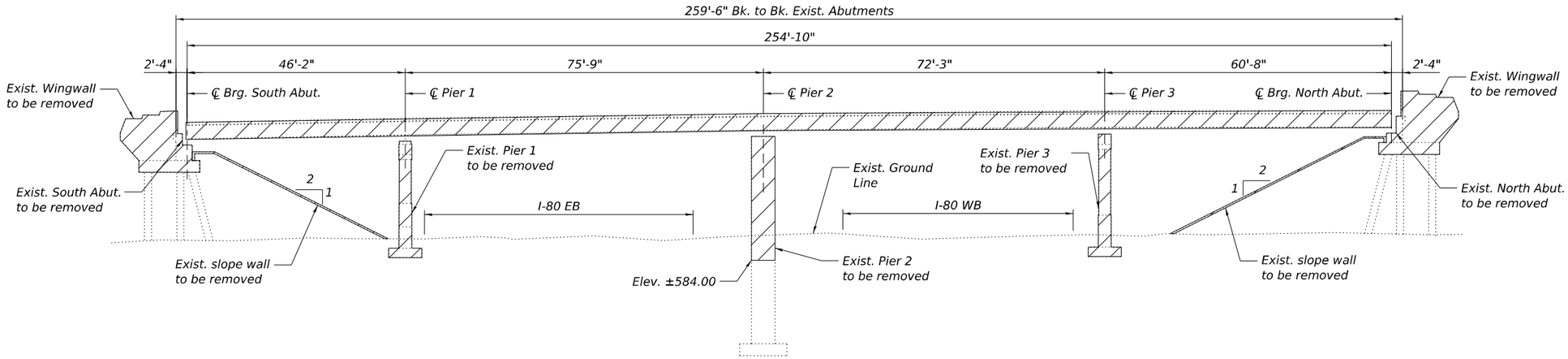
USER NAME = USSJ696614	DESIGNED - MHD	REVISED -	
	DRAWN - MHD	REVISED -	
PLOT SCALE = 26:7.9872 ':" / in.	CHECKED - PJL	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

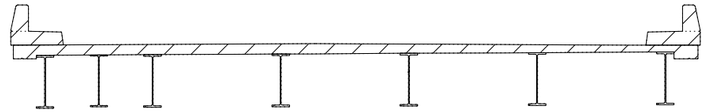
STRUCTURE NO. 099-0074
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-5 OF SN-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	814
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

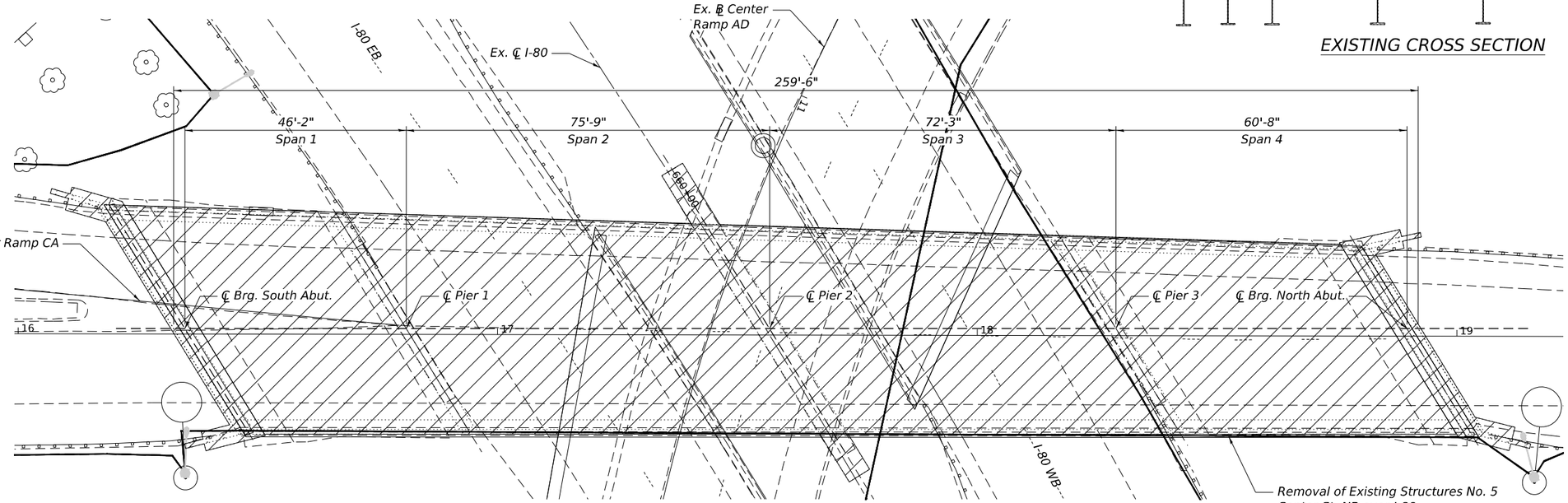
Existing Structure: S.N. 099-0188 is a 259'-6" long back-to-back abutments, four span structure originally built in 1961. The existing structure has a multi-beam non-composite superstructure with a varying width of ±39'-5 1/2" to ±47'-10". The existing abutments are founded on piles and the mulitcolumn piers and straddle bent pier are founded on spread footings.



REMOVAL ELEVATION



EXISTING CROSS SECTION



REMOVAL PLAN

NOTES:

1. *Removal of Existing Structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include concrete removal of the bridge concrete deck, superstructure, protective shield, and partial removal of the abutments and piers down to a minimum elevation as noted in the plans.*
2. *Deck slab repair areas are based upon 5% of the deck needing partial depth repairs. Actual location and size of patches to be placed shall be determined by the Engineer in the field at the time of construction and shown on As-built plans. See Special Provision "Bridge Deck Maintenance Patching".*
3. *For substructure removal details, see sheets SN-7 through SN-10.*
4. *The existing metal handrail removal shall not be paid separately but shall be included in the cost of Removal of Existing Structures No. 5.*

LEGEND

Removal of Existing Structures

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 5	Each	1
Deck Slab Repair (Partial)	Sq. Yd.	63

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HBM ENGINEERING GROUP, LLC

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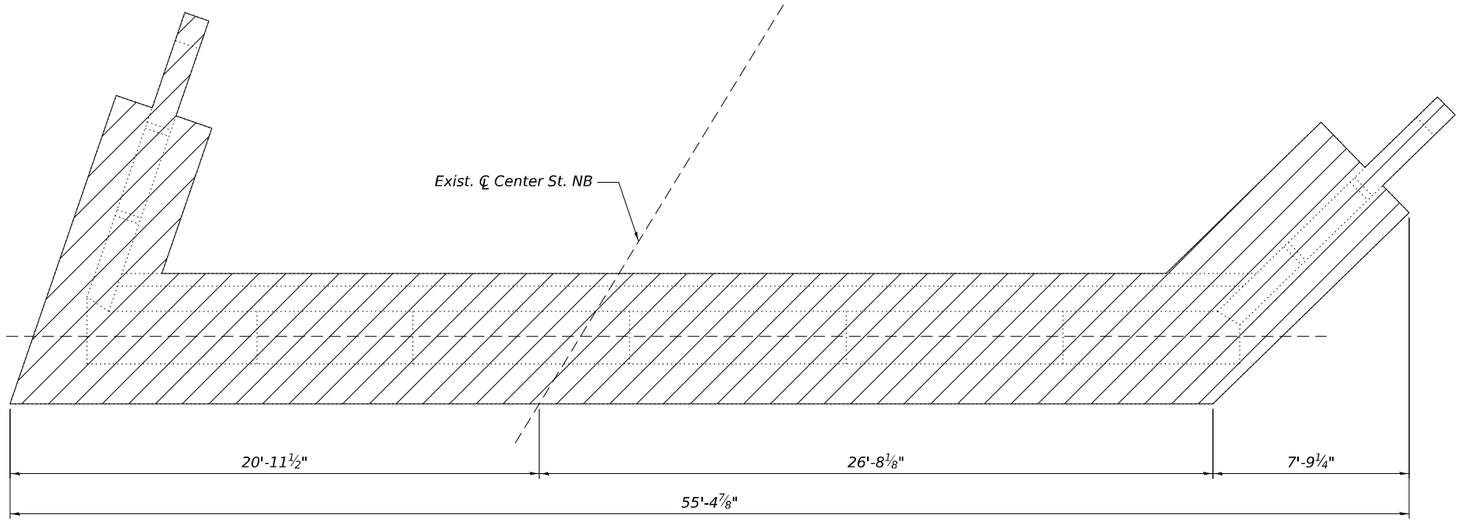
	DRAWN - PG	REVISED -	
PLOT SCALE = 25.999 ' / in.	CHECKED - MI	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

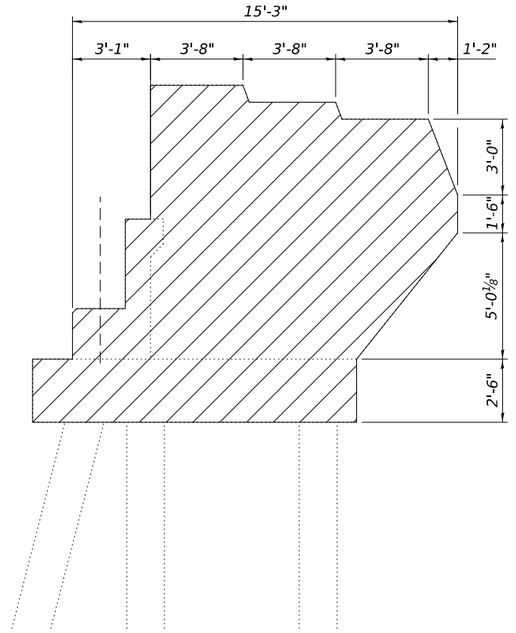
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-0188
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-6 OF SN-11 SHEETS

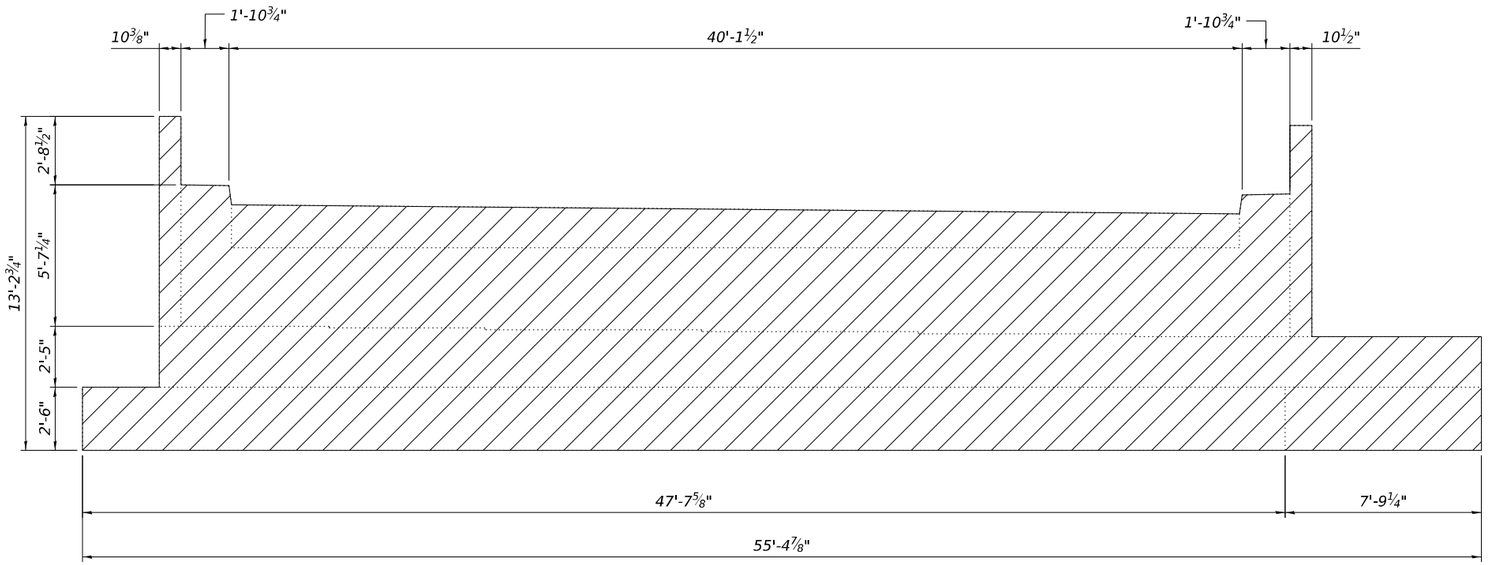
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	815
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			



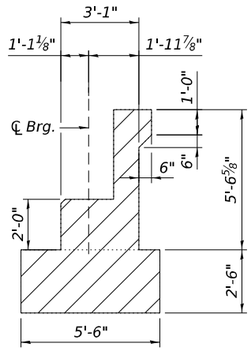
PLAN - NORTH ABUTMENT REMOVAL



ELEVATION - TYPICAL WINGWALL REMOVAL



ELEVATION - NORTH ABUTMENT REMOVAL



SECTION THRU NORTH ABUTMENT

NOTES:

1. Existing Piles shall not be removed.

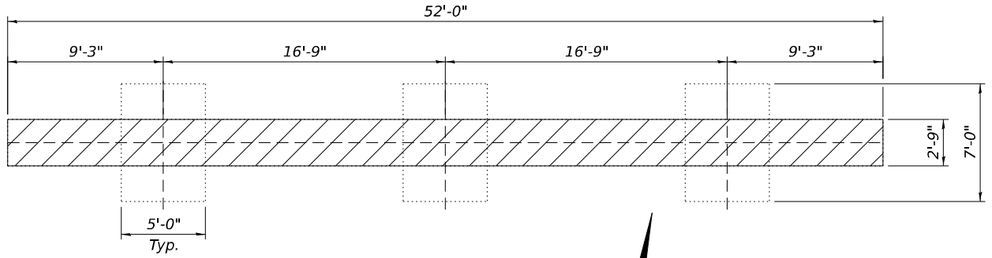
LEGEND

Removal of Existing Structures

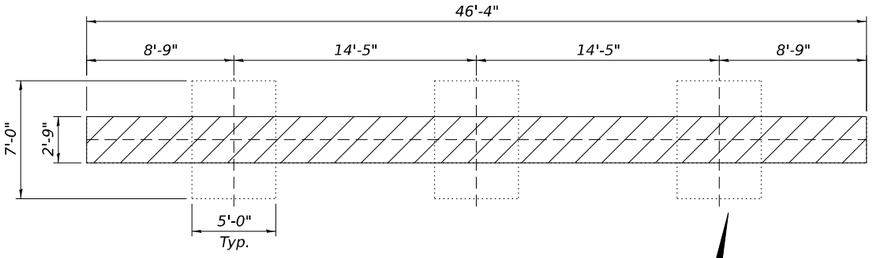
MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-Hosted/Documents/Projects_2018/CH4011401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Exist_Struct_Removal/099018B-62R22-ESN007.dgn

HBM ENGINEERING GROUP, LLC	USER NAME = USSJ696614	DESIGNED - PG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 099-0188
		DRAWN - PG	REVISED -		BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
	PLOT SCALE = 6.000 ' / in.	CHECKED - MI	REVISED -		SHEET SN-7 OF SN-11 SHEETS
	PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -		

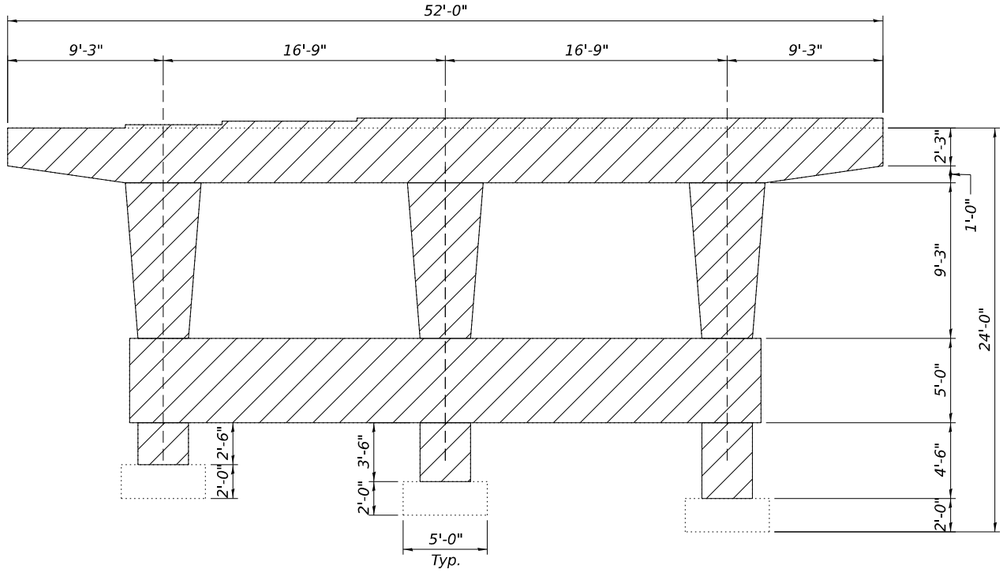
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	816
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		



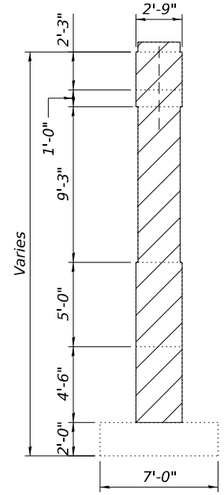
PLAN - PIER 1 REMOVAL



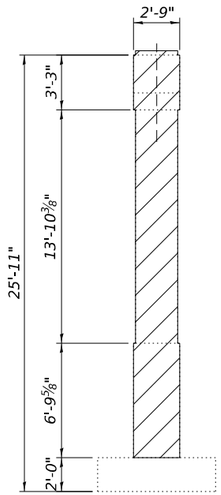
PLAN - PIER 3 REMOVAL



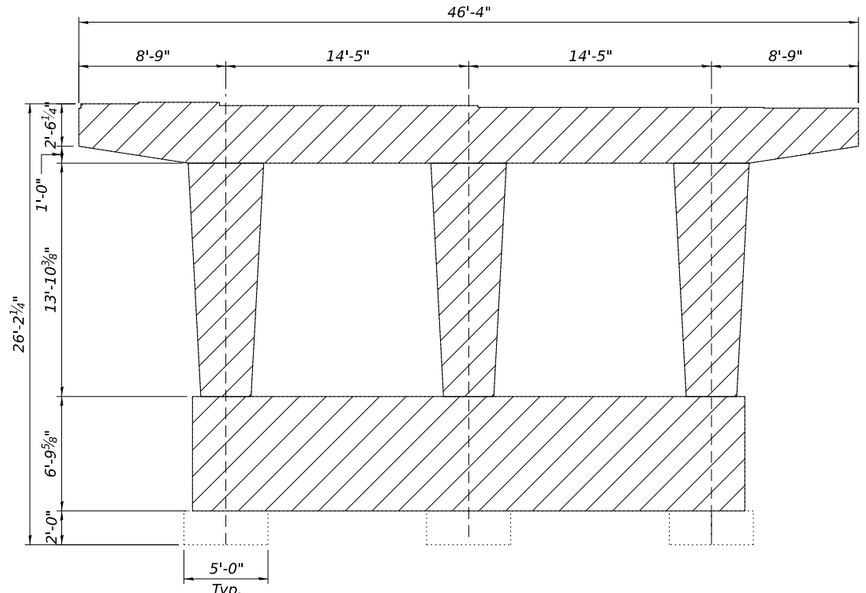
ELEVATION - PIER 1 REMOVAL



SIDE ELEVATION - PIER 1



SIDE ELEVATION - PIER 3



ELEVATION - PIER 3 REMOVAL

LEGEND

Removal of Existing Structures

MODEL: Default
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HBM ENGINEERING GROUP, LLC

USER NAME = USSJ696614	DESIGNED - PG	REVISED -	
	DRAWN - PG	REVISED -	
PLOT SCALE = 9.000 ' / in.	CHECKED - MI	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-0188
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-8 OF SN-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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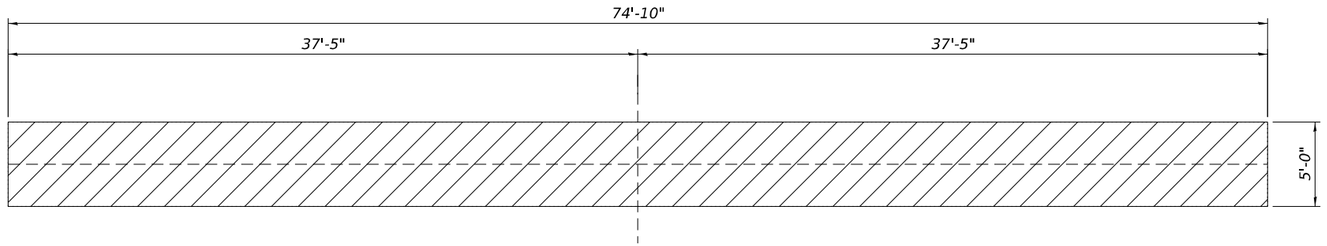
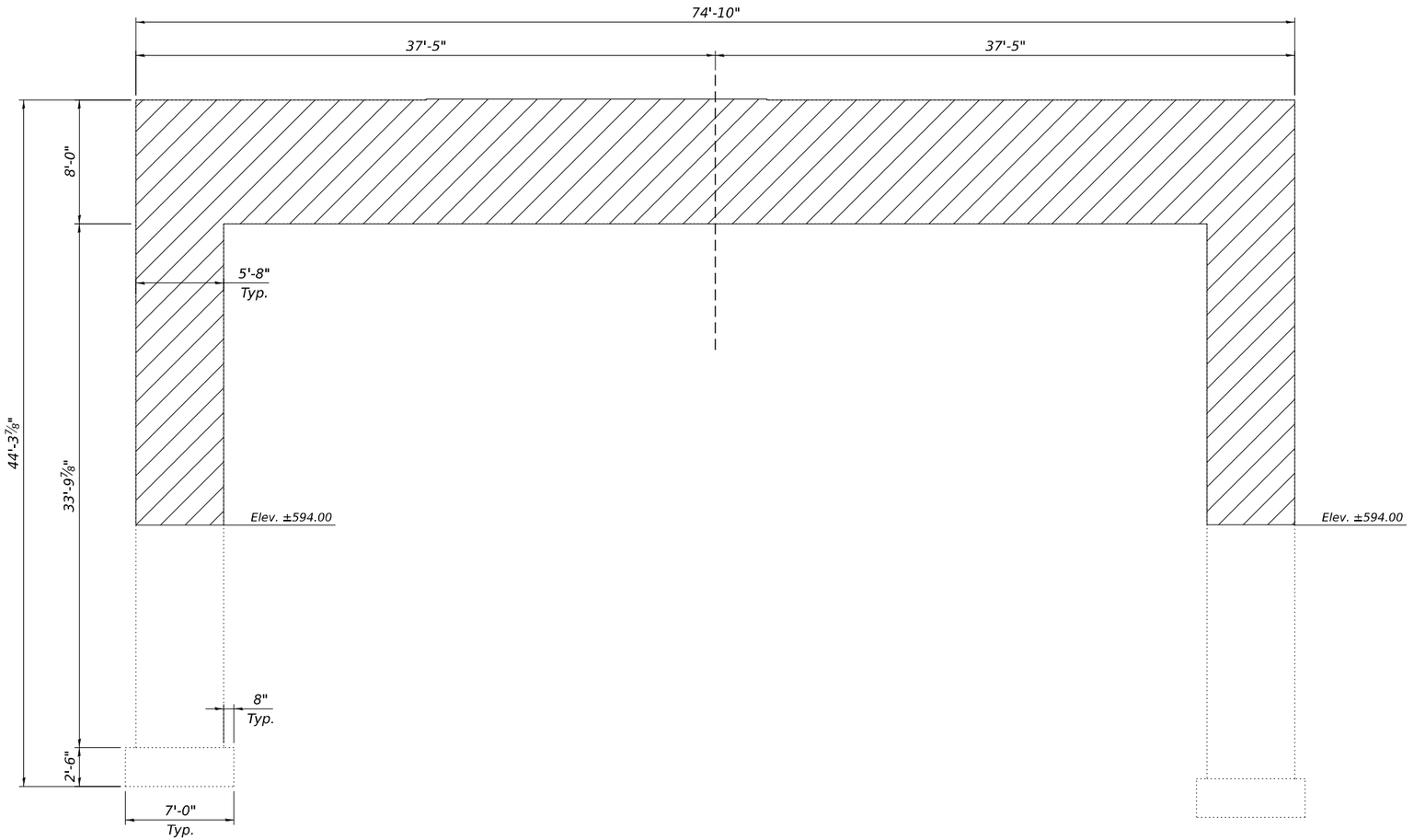
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

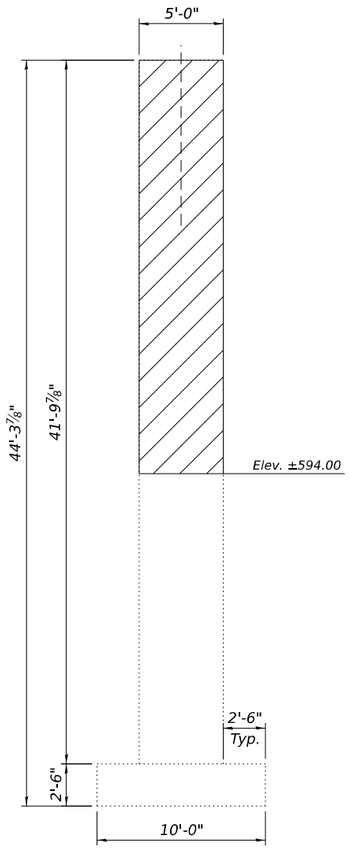


LEGEND

Removal of Existing Structure

PLAN - PIER 2 REMOVAL





ELEVATION - PIER 2 REMOVAL

SIDE ELEVATION - PIER 2

MODEL: Default
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HBM ENGINEERING GROUP, LLC

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	DRAWN - PG	REVISED -	
PLOT SCALE = 9.000 ' / in.	CHECKED - MI	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-0188
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-9 OF SN-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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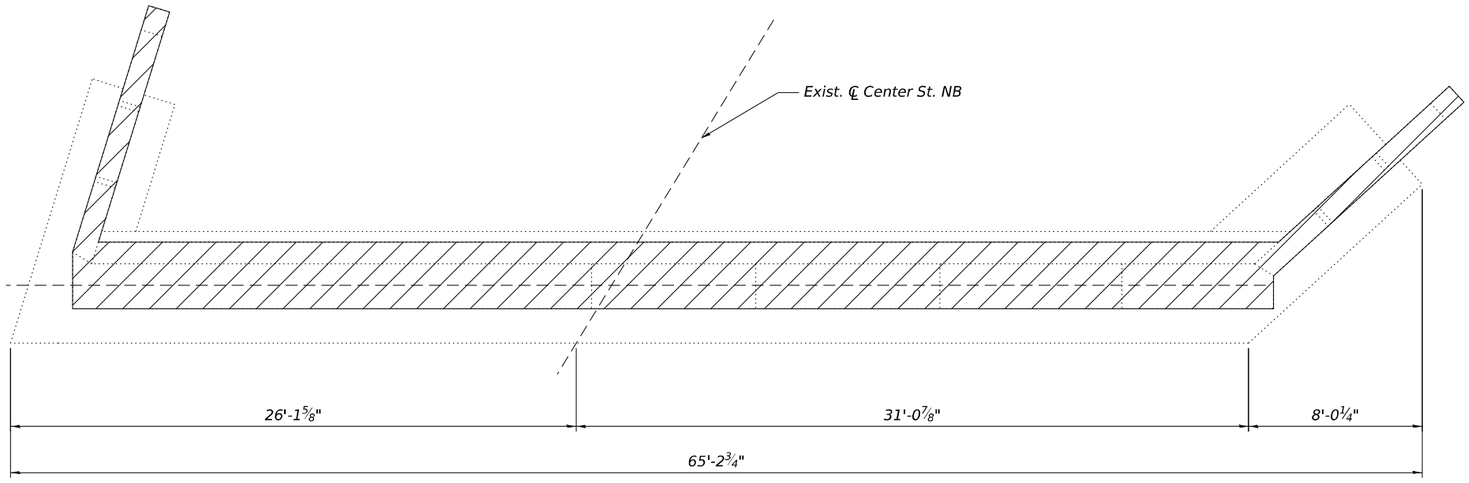
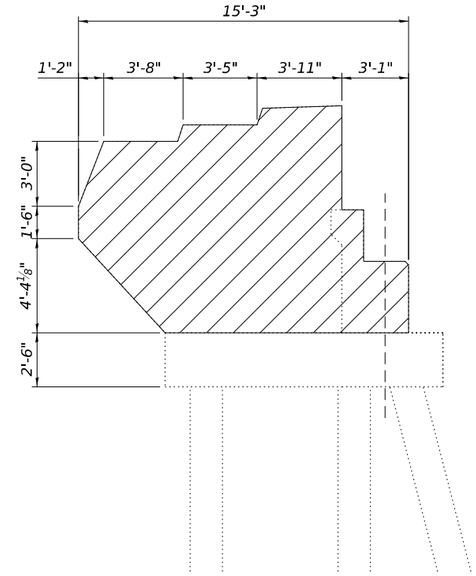
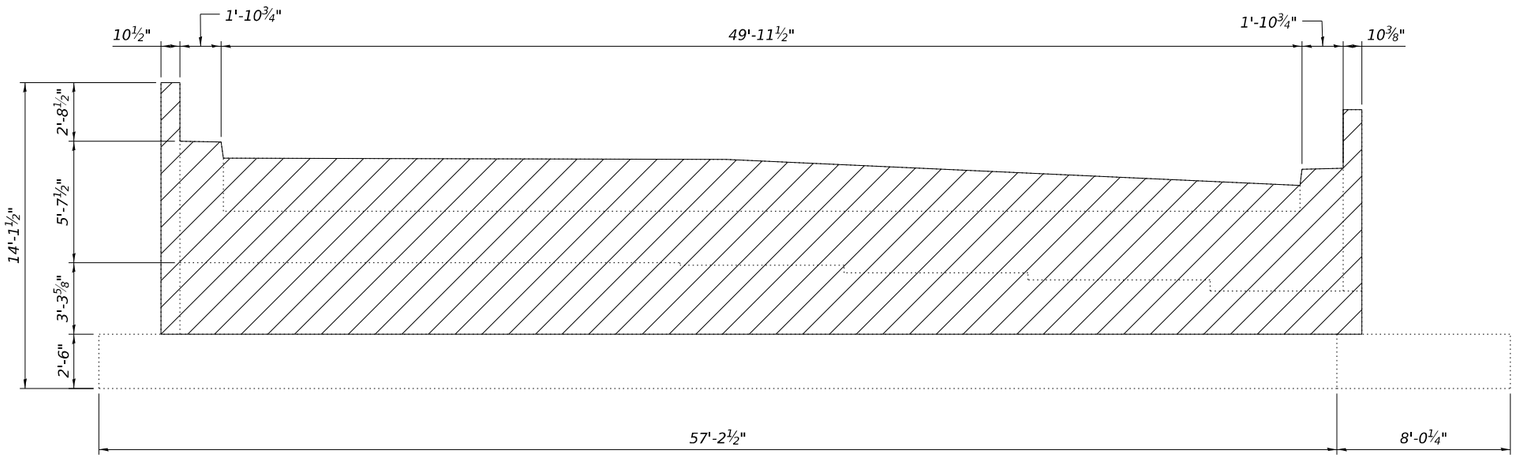
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

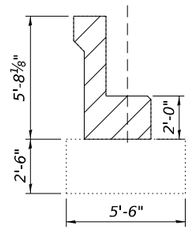


PLAN - SOUTH ABUTMENT REMOVAL





ELEVATION - SOUTH ABUTMENT REMOVAL



SECTION THRU SOUTH ABUTMENT

LEGEND

Removal of Existing Structures

MODEL: Default
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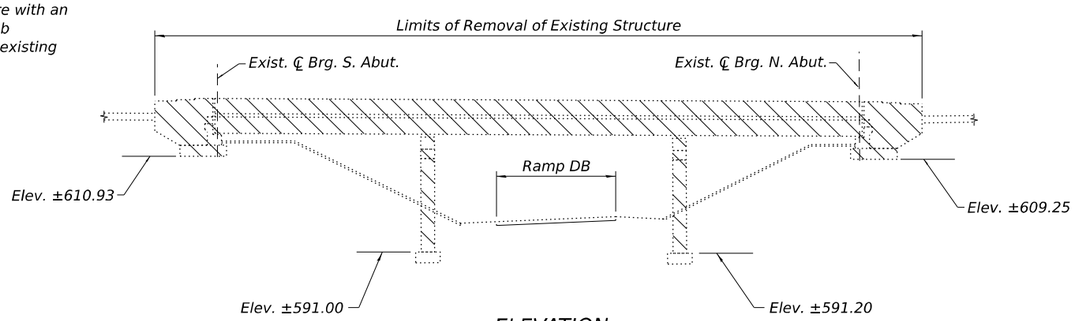
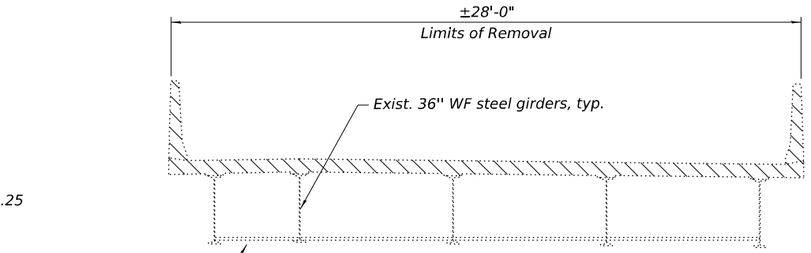
HBM ENGINEERING GROUP, LLC	USER NAME = USSJ696614	DESIGNED - PG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 099-0188 BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS SHEET SN-10 OF SN-11 SHEETS
		DRAWN - PG	REVISED -		
	PLOT SCALE = 7.000 ' / in.	CHECKED - MI	REVISED -		
	PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	819
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

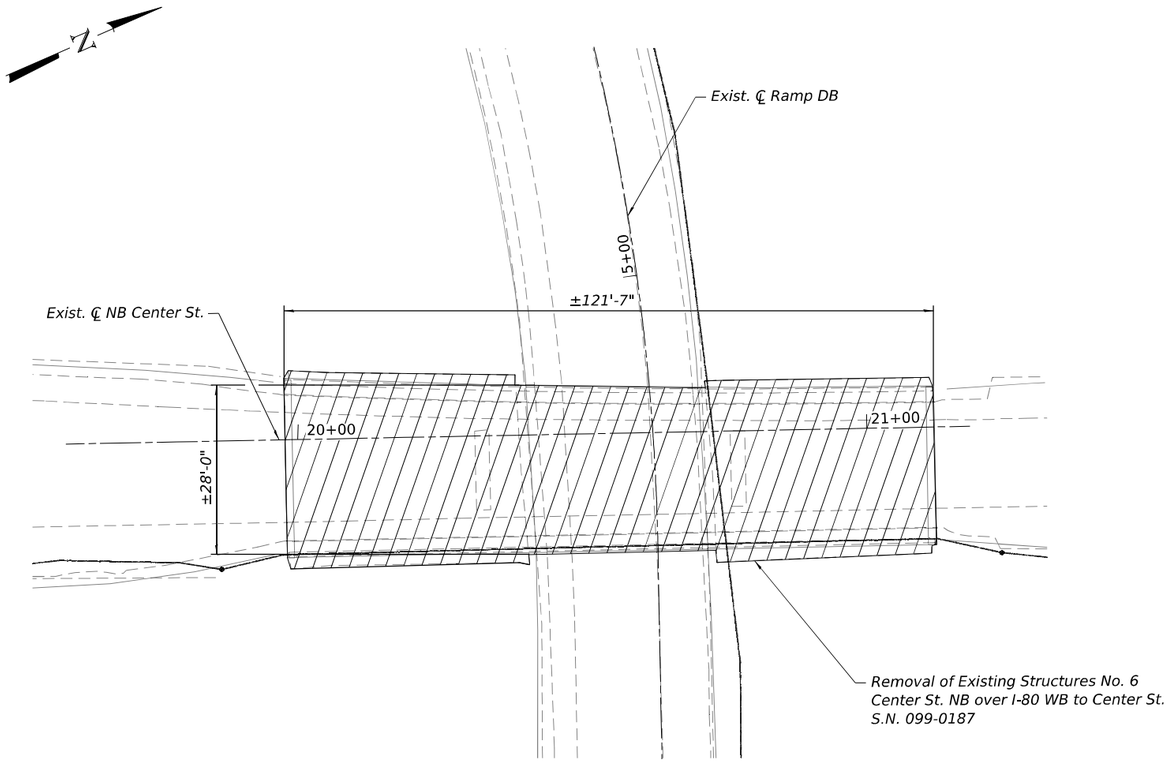
Existing Structure: S.N. 099-0187 is a ±121'-7" long back to back of abutments, three span structure originally built in 1961. The existing structure has a multi-beam non-composite superstructure with an overall width of ±28'-0". The existing stub abutments are founded on piles and the existing piers are founded on spread footings.



ELEVATION



CROSS SECTION OF EXISTING SUPERSTRUCTURE



PLAN

LEGEND

Removal of Existing Structure

Notes:

1. *Removal of Existing Structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include concrete removal of the bridge concrete deck, superstructure, protective shield, and partial removal of the abutments and piers down to a minimum elevation as noted in the plans.*
2. *Deck slab repair areas are based upon 5% of the deck needing partial depth repairs. Actual location and size of patches to be placed shall be determined by the Engineer in the field at the time of construction and shown on As-built plans. See Special Provision "Bridge Deck Maintenance Patching".*

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 6	Each	1
Deck Slab Repair (Partial)	Sq. Yd.	18

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USSJ696614	DESIGNED - MHD	REVISED -	
	DRAWN - MHD	REVISED -	
PLOT SCALE = 26:7.9872 '' / in.	CHECKED - PJL	REVISED -	
PLOT DATE = 4/22/2025	DATE - 6/14/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-0187
BRIDGE MAINTENANCE PATCHING & EXIST. STR. REMOVAL PLANS
SHEET SN-11 OF SN-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	820
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

Bench Mark No 468 Top of Ring (for chains to caps on outlets) on Fire Hydrant S Side Hyd, N W Corner Munroe and Illinois Sts Elev 585.365

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

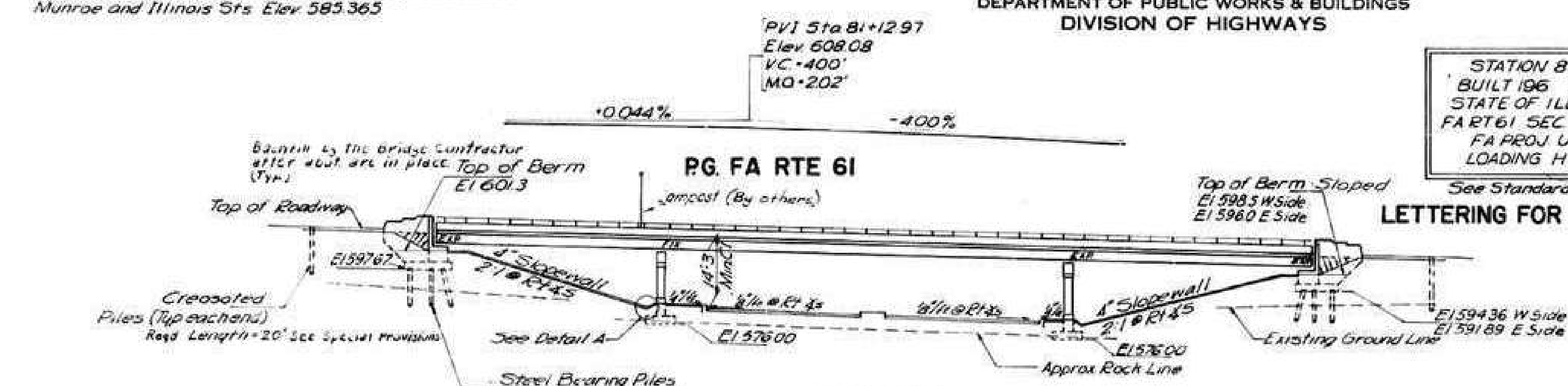
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 80 / FA 61 / FAI	2-B2 / 10 / 99-3	WILL	197	136
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	U-184(21)	

SHEET NO. 1
SHEETS 10

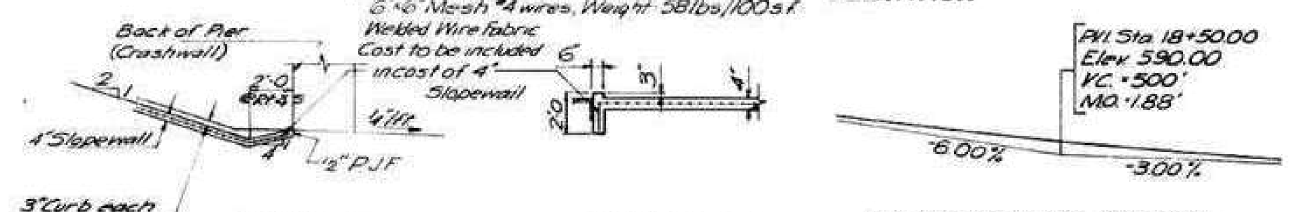
STATION 81+12.97
BUILT 196 BY
STATE OF ILLINOIS
FA RT 61 SEC 10 HB-2
FA PROJ. U-184(21)
LOADING HS-20

See Standard 2113-1

LETTERING FOR NAME PLATE



ELEVATION



DETAIL A **SECTION B-B** **P.G. McDONOUGH STREET**

DESIGN STRESSES

Reinforced Concrete
f'c = 3,500 psi
fs = 20,000 psi
n = 10
fc = 1,400 psi (without Earth Pressure)
fc = 1000 psi (with Earth Pressure)
vc = 90 psi (without Earth Pressure)
vc = 75 psi (with Earth Pressure)
Structural Steel
fs = 20,000 p.s.i (ASTM A36)
Loading HS 20-44

GENERAL NOTES

Class X Concrete shall be used throughout Coarse aggregate used in parapets and end posts shall be free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

All welding shall comply with the requirements of the Standard Specifications for Welded Highway and Railway Bridges, of the American Welding Society.

All Rockers, Bolsters, Bearing Plates, Lead Plates, Pintles, and Anchor Bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in quantity of Structural Steel.

Anchor Bolts shall be set before connecting diaphragms over support. Space reinforcing to miss Anchor Bolts.

Expansion guards and plates shall be fabricated and erected in accordance with Article 51.13(d) of the Standard Specifications and are in quantity of Structural Steel.

Except as otherwise provided all Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 inclusive of the Standard Specifications.

All surfaces of expansion guards inaccessible after erection shall be given two shop coats of red lead paint. The ¾"φ welded studs shall not be painted.

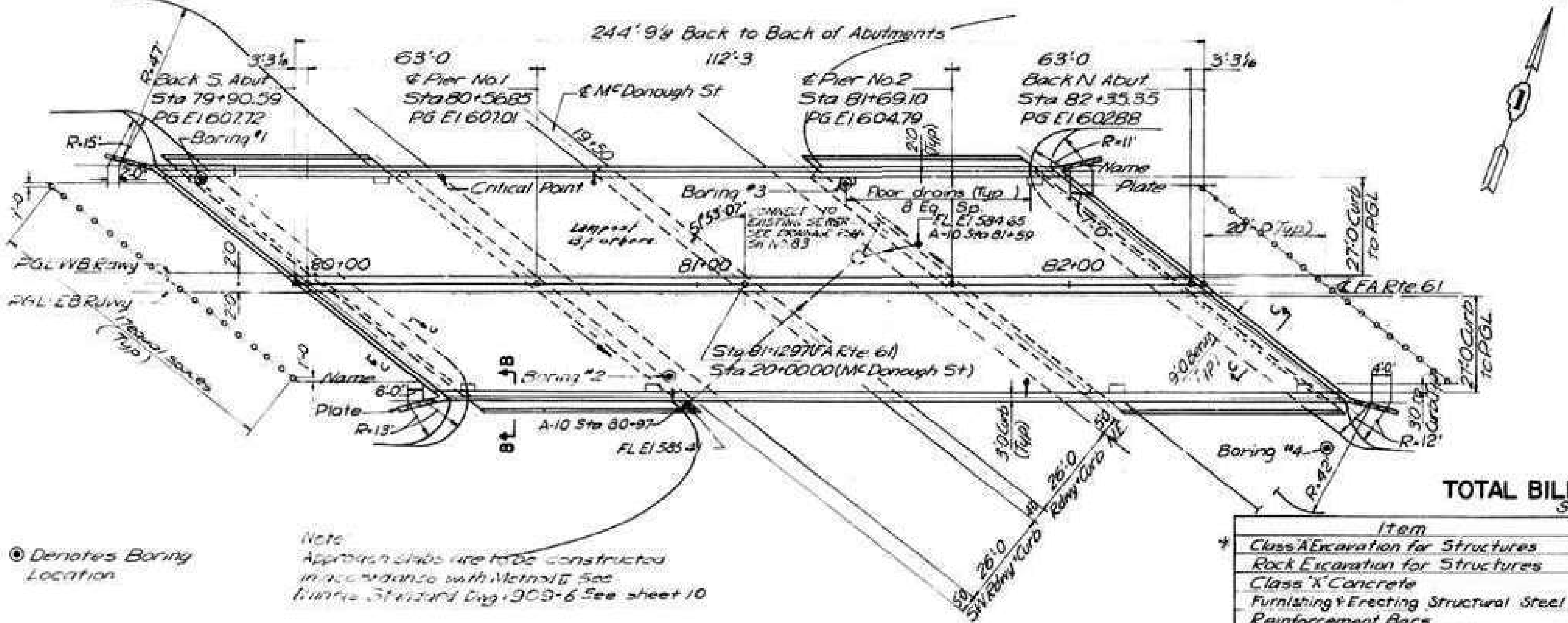
The Contractor shall drive two (2) test piles in permanent locations as directed by the Engineer, before ordering remainder of piles. One each of either one of the East and West Abutments.

No rock larger than 3" shall be placed in fills in the area where piles are to be driven.

All steel bearing piles are to be driven to refusal.

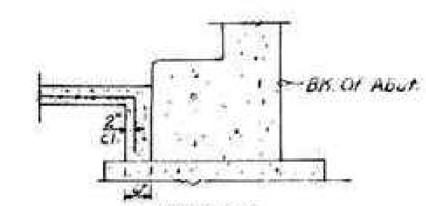
Rivets shall be ¾"φ with 13/16 φ open holes unless noted.

Structural steel shall conform to the specifications for structural steel, ASTM - A36.



Note
Approach slabs are to be constructed in accordance with Illinois Standard Dwg 909-6 See sheet 10

PLAN



SEC. C-C

LOCATION PLAN

Note: Excavation for portions of structure in the embankments shall not be classified

TOTAL BILL OF MATERIALS
Sec 10 Str 7

Item		Unit	Super	Sub	Total
* Class 'A' Excavation for Structures		Cu Yd	—	361	361
Rock Excavation for Structures		Cu Yd	—	21	21
Class 'X' Concrete		Cu Yd	436.0	594.8	1030.8
Furnishing & Erecting Structural Steel		Lb	608,970	—	608970
Reinforcement Bars		Lb	118,500	57,770	176,270
Fur Creo Piles up to 20 ft		Lin Ft	—	720	720
Driving Timber Piles		Lin Ft	—	720	720
Furnishing Steel Piles 10BP42		Lin Ft	—	1040	1040
Test Piles Steel 10BP42		Each	—	2	2
Driving Steel Piles		Lin Ft	—	1040	1040
Name Plates		Each	2	—	2
Slopewall 4"		Sq Yd	—	1134	1134
Aluminum Handrail		Lin Ft	483	—	483
** Bridge Seat Sealant		Lump Sum		0.1	0.1
Protective Coat		Sq Yd	1880	—	1880

* Includes excavation for Slope Walls
** Applied at abutments.

DESIGNED	GMN
CHECKED	CS
DRAWN	GMN
CHECKED	HSR

Prepared and recommended by Blauvelt Engineering Co. Structural Engineer #81-2251

GENERAL PLAN & ELEVATION
FA 61 OVER
McDONOUGH STREET
FA 61 STA. 81+12.97
F A ROUTE 61 PROJECT U-184 (21)
SECTION 10 Str 7 WILL COUNTY
Scale NO SCALE Date NOV 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

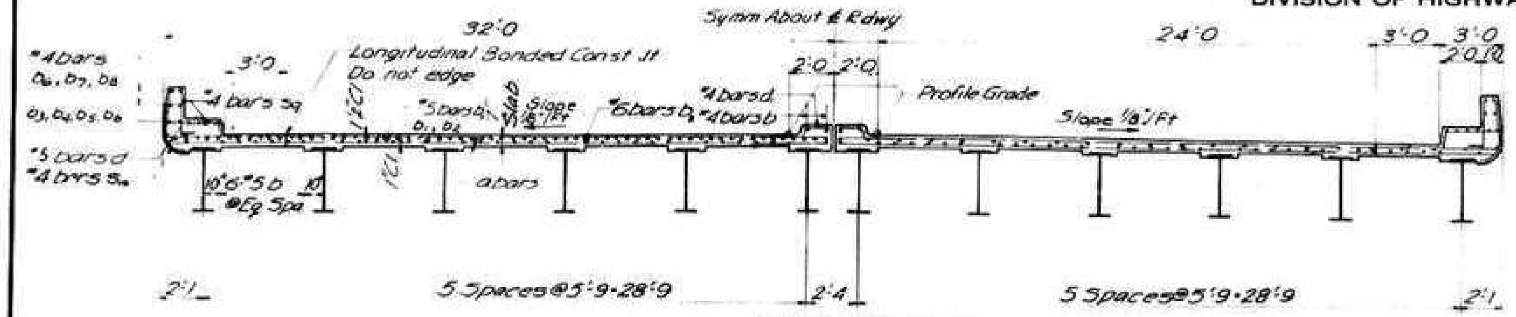
Revised Change leng. of Cre. Piles from 22' to 20'.
Change Furn. & Driving Cre. Timber Piles from 792 to 720 Lin Ft.
Rev. 12-19-62 Prot Coat - 1880 Sq. Yd.
12-1-64 J.M.J. Rev. class x conc. 1030.4 to 1030.8 cu yds, reinf bars from 168,170 to 176,270. Slope wall from ... to 1134 sq yd added bridge seat sealant.

FOR INFORMATION ONLY

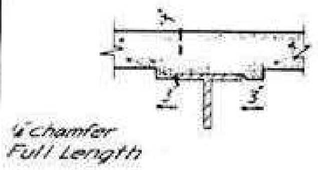
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 61	10	WILL	197	136

SHEET NO. 2
SHEETS 10

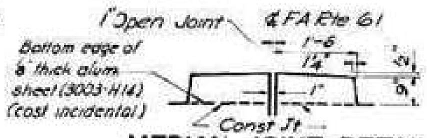


CROSS SECTION



After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at int. shown on D.L. Defl. Diag. From these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so attained subtracted from the theoretical grade elevations minus floor thickness equals the fillet heights above top of beam.

METHOD OF DETERMINING FILLET HEIGHT "t"

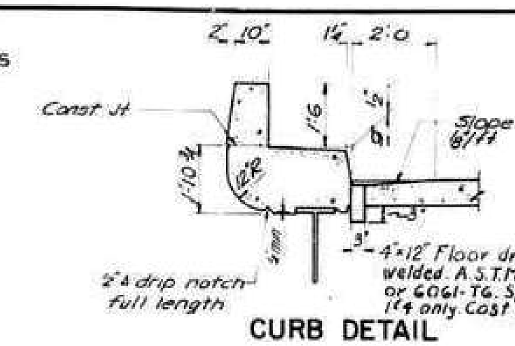


MEDIAN JOINT DETAIL

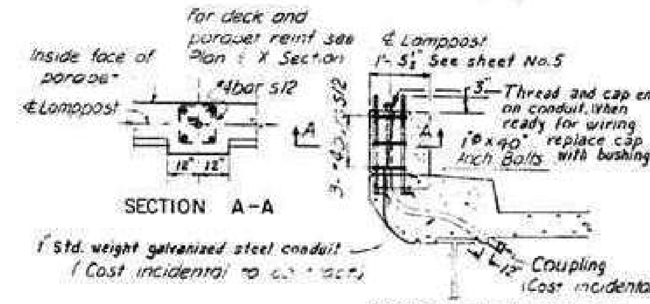
BILL OF MATERIALS

Class X Concrete	Cu. Yds.	436.0
Reinf. Bars	Lbs.	118,500
*Structural Steel	Lbs.	608,970

*Structural Steel includes weight of rockers, bolsters, bearing plates, lead plates, pintles, and anchor bolts. Estimated Wt. = 14,530#



CURB DETAIL



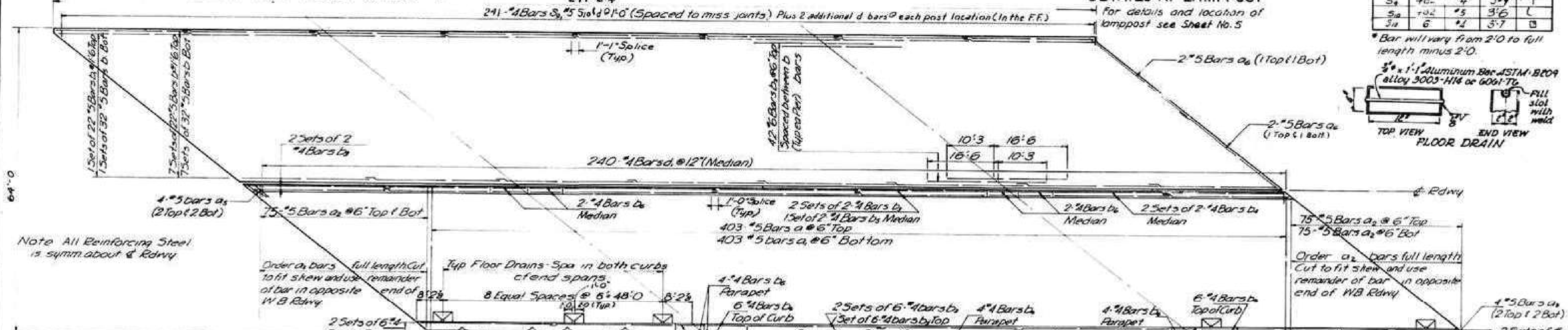
DETAILS AT LAMPPOST

For details and location of lamppost see Sheet No. 5

BILL OF REINFORCEMENT

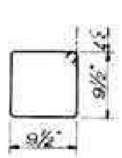
Bar	No	Size	Lgth	Shape
a	806	*5	31'-8	—
a_1	806	*5	31'-2	—
a_2*	300	*5	32'-0	—
a_5	16	*5	4'-0	—
a_6	18	*5	26'-6	—
b	756	*5	30'-0	—
b_1	108	*5	38'-6	—
b_2	168	*6	26'-9	—
b_3	64	*4	30'-0	—
b_4	32	*4	28'-0	—
b_5	16	*4	39'-0	—
b_6	104	*4	7'-0	—
b_7	96	*4	14'-6	—
b_8	16	*4	11'-6	—
d	[illegible]	*5	3'-4"	⌐
d_1	480	*4	3'-4	⌐
s_9	[illegible]	*4	3'-7	⌐
s_{10}	[illegible]	*5	3'-6	(
s_{12}	6	*4	3'-7	□

*Bar will vary from 2'-0 to full length minus 2'-0.

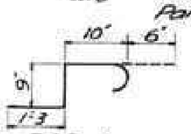


PLAN

Const. Jts. in curbs & median to top of slab (Aluminum sheets typ.) @ Piers. For spacing see Sheet #5.

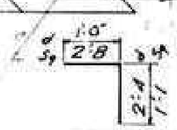


BAR S12



BAR d_1

BAR s_{10}



BARS s_9 & d

ELEVATIONS - TOP OF SLAB**

(See sheet #3 for locations of points)

	1	2	3	4	5	6	7	8	9	10	11	12
A	60763	60758	60752	60746	60738	60728	60718	60707	60695	60682	60668	60653
B	60766	60760	60754	60746	60737	60728	60711	60705	60692	60678	60663	60647
C	60768	60762	60755	60746	60737	60726	60714	60702	60688	60673	60658	60641
D	60770	60763	60755	60746	60735	60724	60711	60698	60684	60668	60652	60635
E	60771	60763	60754	60744	60733	60721	60708	60694	60679	60663	60645	60627
F	60772	60763	60754	60743	60731	60718	60704	60689	60673	60656	60639	60620
G	60769	60761	60751	60740	60728	60714	60700	60685	60668	60651	60633	60614
H	60757	60748	60737	60725	60712	60698	60683	60667	60650	60632	60613	60593
J	60745	60734	60723	60710	60697	60682	60666	60649	60632	60613	60593	60572
K	60732	60721	60708	60695	60680	60665	60648	60631	60612	60599	60572	60551
L	60718	60706	60693	60679	60664	60647	60630	60611	60592	60572	60551	60529
M	60704	60691	60677	60664	60646	60629	60611	60592	60572	60551	60529	60506

	13	14	15	16	17	18	19	20	21	22	23	24
A	60637	60619	60601	60582	60561	60540	60516	60492	60466	60440	60412	60383
B	60630	60612	60593	60573	60552	60529	60505	60480	60454	60427	60398	60369
C	60623	60605	60585	60564	60542	60519	60494	60468	60441	60413	60384	60353
D	60616	60596	60576	60554	60531	60508	60482	60455	60427	60399	60369	60337
E	60608	60588	60566	60544	60520	60496	60470	60442	60413	60384	60353	60321
F	60600	60578	60556	60533	60509	60484	60456	60428	60399	60368	60337	60304
G	60594	60572	60550	60526	60502	60476	60449	60420	60390	60360	60328	60295
H	60572	60550	60527	60503	60477	60451	60423	60393	60363	60331	60299	60263
J	60550	60527	60504	60479	60453	60425	60396	60366	60335	60303	60269	60233
K	60528	60504	60480	60454	60427	60399	60369	60339	60307	60273	60239	60204
L	60505	60481	60455	60429	60401	60373	60342	60310	60278	60244	60209	60173
M	60482	60457	60430	60405	60375	60345	60314	60282	60248	60213	60178	60147

** Where Curb or Raised Median is over stringer, elevation shown is that of the projection of top of slab along its cross slope

DESIGNED	GMN
CHECKED	CS
DRAWN	GMN
CHECKED	HSR

SLAB PLAN & CROSS SECTION
FA 61 OVER
McDONOUGH STREET

FA 61 STA. 81+12.97

F.A. ROUTE 61 — PROJECT
SECTION 10 — WILL COUNTY
Scale: NO SCALE — Date: NOV. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. — NEW YORK, N.Y. — CRYSTAL LAKE, ILL.

12-1-64 J.M.J. Rev. *4 s_{10} & d @ 18" cts. to *5 @ 1'-0", *4 s_9 @ 18" cts. to *4 @ 12" cts. and rec. rein. bars from 115,410 to 118,500 lbs.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME	= USCP702533	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
PLOT SCALE	= 7:11.99616 ' :" / in.	CHECKED	-	REVISED	-
PLOT DATE	= 4/22/2025	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

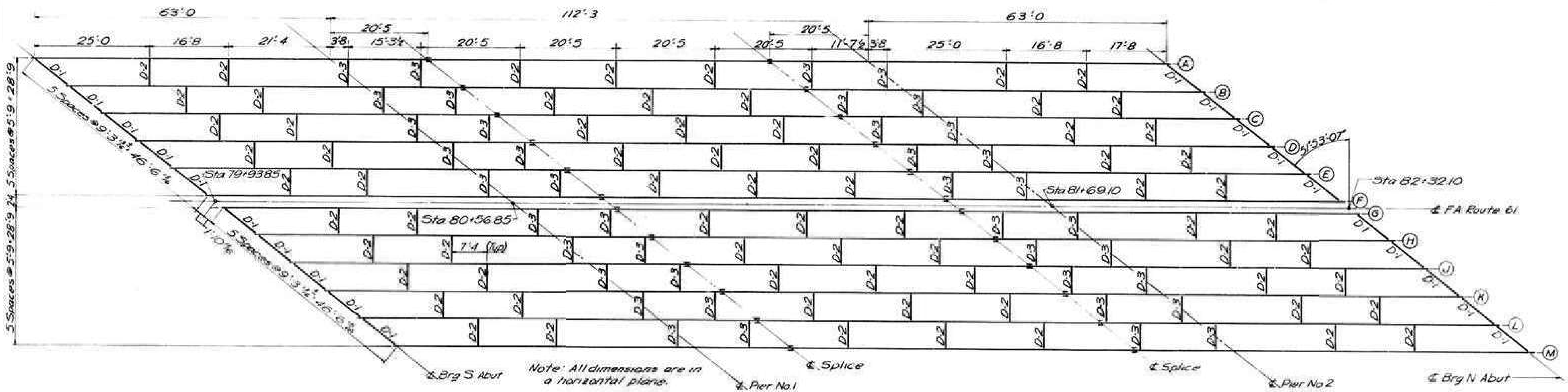
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	822
		CONTRACT NO. 62R22		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing02.dgn

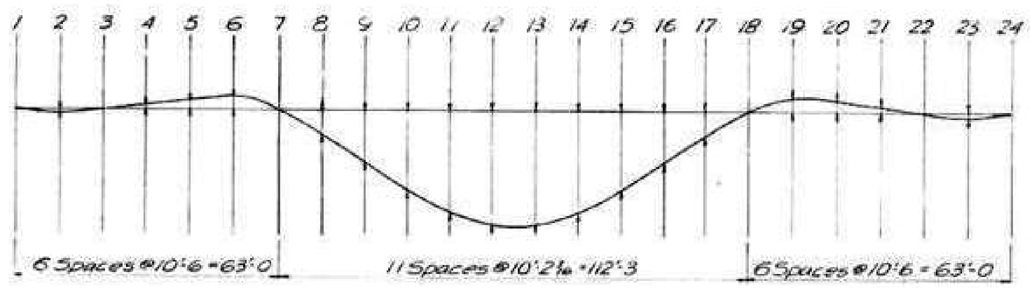
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 61	10	WILL	197	137

SHEET NO. 3
SHEETS 10



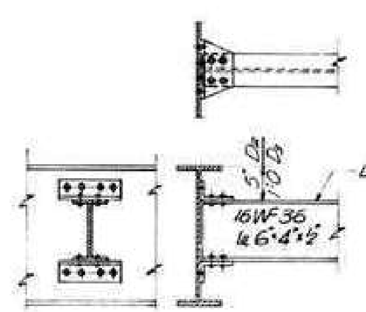
FRAMING PLAN



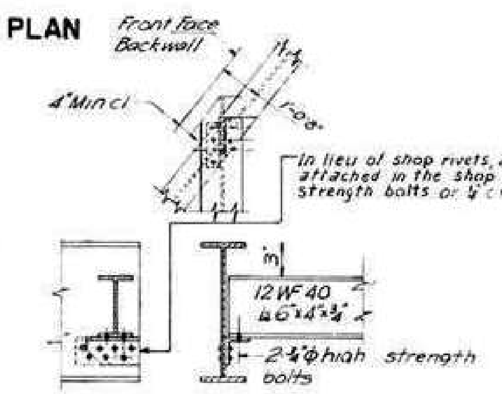
Str \ Pt	Δ 2 & 23	4 & 21	5 & 20	6 & 19	8 & 17	9 & 16	10 & 15	11 & 14	12 & 13
A & M	00035	0.0064	00136	0.0187	00314	0.0651	0.1079	0.1369	0.1549
B thru L	00025	00046	00097	00134	00235	00486	0.0807	0.1021	0.1159

Δ = Dead load deflection in feet due to weight of slab

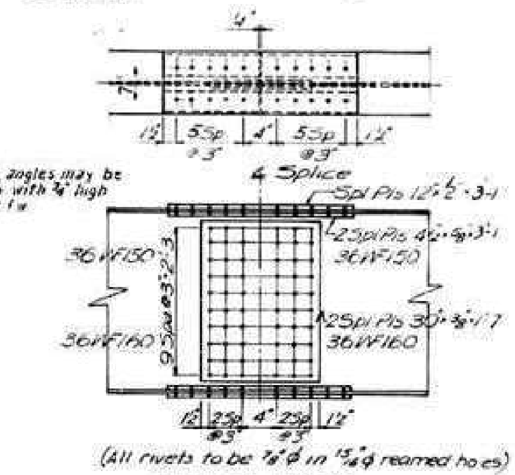
DEAD LOAD DEFLECTIONS



DIAPHRAGM D-2 & D-3

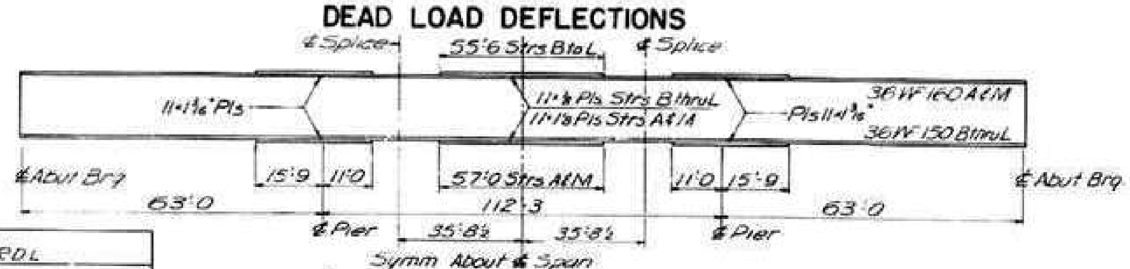


DIAPHRAGM D1

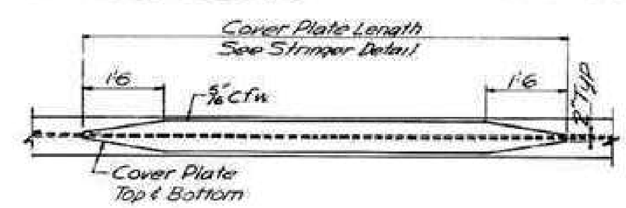


SPLICE DETAIL

Note: For top of stringer elevations see Sheet 4.



STRINGER DETAIL



COVER PLATE DETAIL

At ℄ Span 2 and At Piers 1 and 2
For Cover Plate Length See Stringer Detail

DESIGNED	RDL
CHECKED	CS
DRAWN	GMN
CHECKED	HSR

FRAMING PLAN AND STEEL DETAILS
FA 61 OVER
McDONOUGH STREET
FA 61 STA. 81+12.97

F A ROUTE 61 PROJECT
SECTION 10 WILL COUNTY
Str 1
Scale NO SCALE Date NOV. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

Revised: Remove note regarding Struct Steel - A-333.

FOR INFORMATION ONLY

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WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -
PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

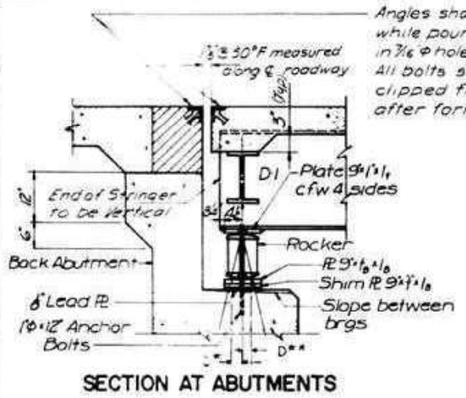
SHEET 3 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	823
		CONTRACT NO. 62R22		
		ILLINOIS	FED. AID PROJECT	

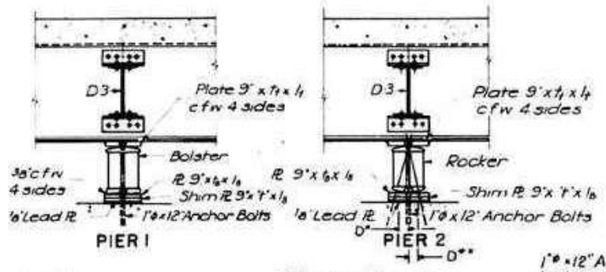
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 80	10-AB 11-3	WILL	197	138
STA. EQUATION NO. 1	ILLINOIS	PROJECT		

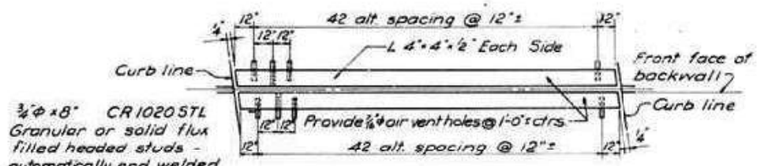
SHEET NO. 4
SHEETS 10



SECTION AT ABUTMENTS



PIER 1 PIER 2

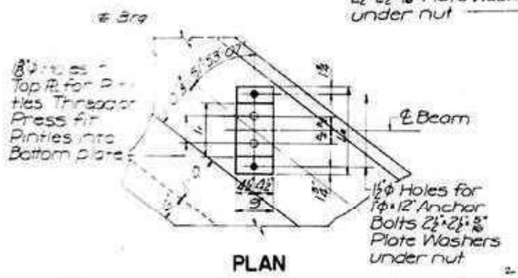


¾"Φ x 8" CR 1020 STL Granular or solid flux filled headed studs - automatically end welded at 12"± ctrs.

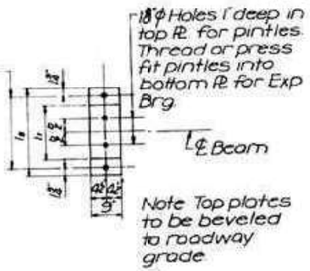
ANGLE GUARD DETAILS
(4 sets req'd)

1"Φ x 12" Anchor Bolts to be grouted into drilled holes after beams are in place, or bolts at fixed pier may be built into the masonry.

D* = 1/100 ft. of exp. for every 15°F below the normal temp. of 50°F.
D** = 1/100 ft. of exp. for every 15°F above the normal temp. of 50°F.

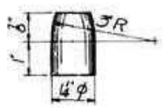


PLAN

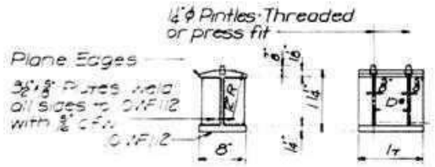


PLAN

DETAIL OF EXPANSION BEARING



DETAIL OF PINTLE



DETAIL OF FIXED BEARING

DIMENSIONS FOR BEARINGS

Str	Location	Type	l1	l8	c fw	t8	t1	b
A thru M	S & N Abuts	Exp	13"	20⅝"	½"	1⅝"	1"	6½"
A thru M	Pier 1	Fix.	14"	21½"	⅜"	1"	1½"	2@4½"
A thru M	Pier 2	Exp	14"	21½"	⅝"	1⅜"	1½"	2@4½"

TABLE OF "t" DIMENSIONS

Str	S Abut	Pier 1	Pier 2	N Abut	Str	S Abut	Pier 1	Pier 2	N Abut
A	—	⅜"	—	—	G	—	—	—	—
B	—	⅝"	—	—	H	—	—	—	—
C	¼"	⅝"	—	—	J	—	—	—	—
D	7/16"	—	—	—	K	—	—	—	—
E	⅝"	7/16"	—	—	L	—	—	—	—
F	7/16"	—	—	—	M	—	—	—	—

AS AWARDED

TOP OF STRINGER ELEVATIONS

	S ABUT	PIER 1	SPLICE	SPLICE	PIER 2	N ABUT
A	606 90	606 45	606 22	605 09	604 67	603 10
B	606 94	606 45	606 20	605 01	604 57	602 97
C	606 96	606 42	606 16	604 92	604 47	602 81
D	606 98	606 39	606 12	604 82	604 36	602 65
E	606 99	606 36	606 07	604 72	604 24	602 49
F	607 00	606 32	606 01	604 61	604 12	602 32
G	606 97	606 28	605 96	604 54	604 04	602 23
H	606 85	606 17	605 78	604 31	603 79	601 93
J	606 73	605 94	605 60	604 07	603 53	601 68
K	606 60	605 76	605 40	603 82	603 27	601 32
L	606 46	605 58	605 20	603 57	603 01	601 01
M	606 31	605 38	604 99	603 30	602 72	600 88

These elevations are at top of top flange of stringers (exclusive of cover and splice plates) and are for fabrication of structural steel (no allowance for deflections)

AS BUILT

* TOP OF STRINGER ELEVATIONS

	S ABUT	PIER 1	SPLICE	SPLICE	PIER 2	N ABUT
A	606 90	606 47	606 33	605 19	604 68	603 11
B	606 94	606 48	606 33	605 14	604 61	602 97
C	606 97	606 45	606 28	605 03	604 49	602 81
D	606 98	606 42	606 24	604 94	604 38	602 65
E	607 00	606 39	606 18	604 83	604 26	602 49
F	607 00	606 34	606 13	604 73	604 14	602 32
G	606 97	606 30	606 09	604 55	604 06	602 23
H	606 85	606 13	605 90	604 42	603 81	601 93
J	606 73	605 96	605 71	604 19	603 56	601 63
K	606 60	605 78	605 51	603 93	603 29	601 32
L	606 46	605 60	605 32	603 69	603 03	601 00
M	606 31	605 40	605 11	603 41	602 74	600 68

BEARING & MISC. STEEL DETAILS
FA 61 OVER
McDONOUGH STREET

FA 61 STA. 81+12.97
F A ROUTE 61 PROJECT
SECTION 10 Str 7 WILL COUNTY
Scale: NO SCALE Date: NOV. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

DESIGNED	GMN
CHECKED	CS
DRAWN	GMN
CHECKED	HSR

Rev. Top Of Stringer Elevations - As Built 4.12.66 L.H.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

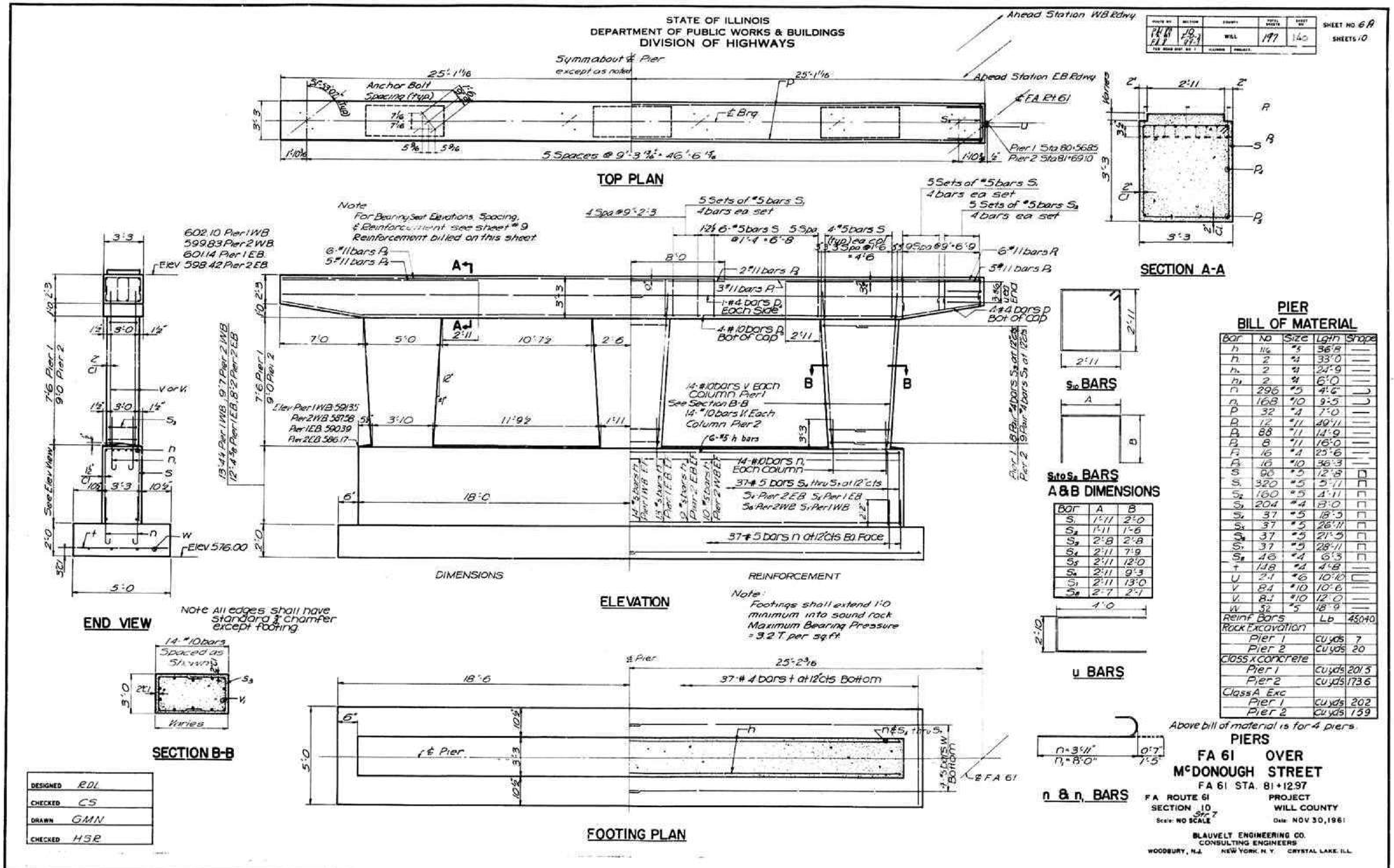
USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '-" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 4 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	824
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		



PIER BILL OF MATERIAL

Bar	No	Size	Lgth	Shape
h	116	#5	36'-8	
h1	2	#4	33'-0	
h2	2	#4	24'-9	
h3	2	#4	6'-0	
n	296	#5	4'-6	
n1	168	#10	9'-5	
P	32	#4	7'-0	
R	12	#11	49'-11	
R1	88	#11	14'-9	
R2	8	#11	16'-0	
R3	16	#4	25'-6	
R4	16	#10	36'-3	
S	96	#5	12'-8	
S1	320	#5	5'-11	
S2	160	#5	4'-11	
S3	204	#4	8'-0	
S4	37	#5	18'-3	
S5	37	#5	26'-11	
S6	37	#5	21'-5	
S7	37	#5	28'-11	
S8	46	#4	6'-3	
t	138	#4	4'-8	
U	24	#6	10'-10	
V	84	#10	10'-6	
V1	84	#10	12'-0	
W	52	#5	18'-9	
Reinf Bars			Lb	45040
Rock Excavation				
Pier 1			cu yds	7
Pier 2			cu yds	20
Class X Concrete				
Pier 1			cu yds	201.5
Pier 2			cu yds	173.6
Class A Exc				
Pier 1			cu yds	202
Pier 2			cu yds	159

11-2-64 J.M.J. Rev. Reinf. bars from 40,010 to 45,040 lbs

FOR INFORMATION ONLY

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing05.dgn

WSP USA Inc.
30 N. LASALLE STREET SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

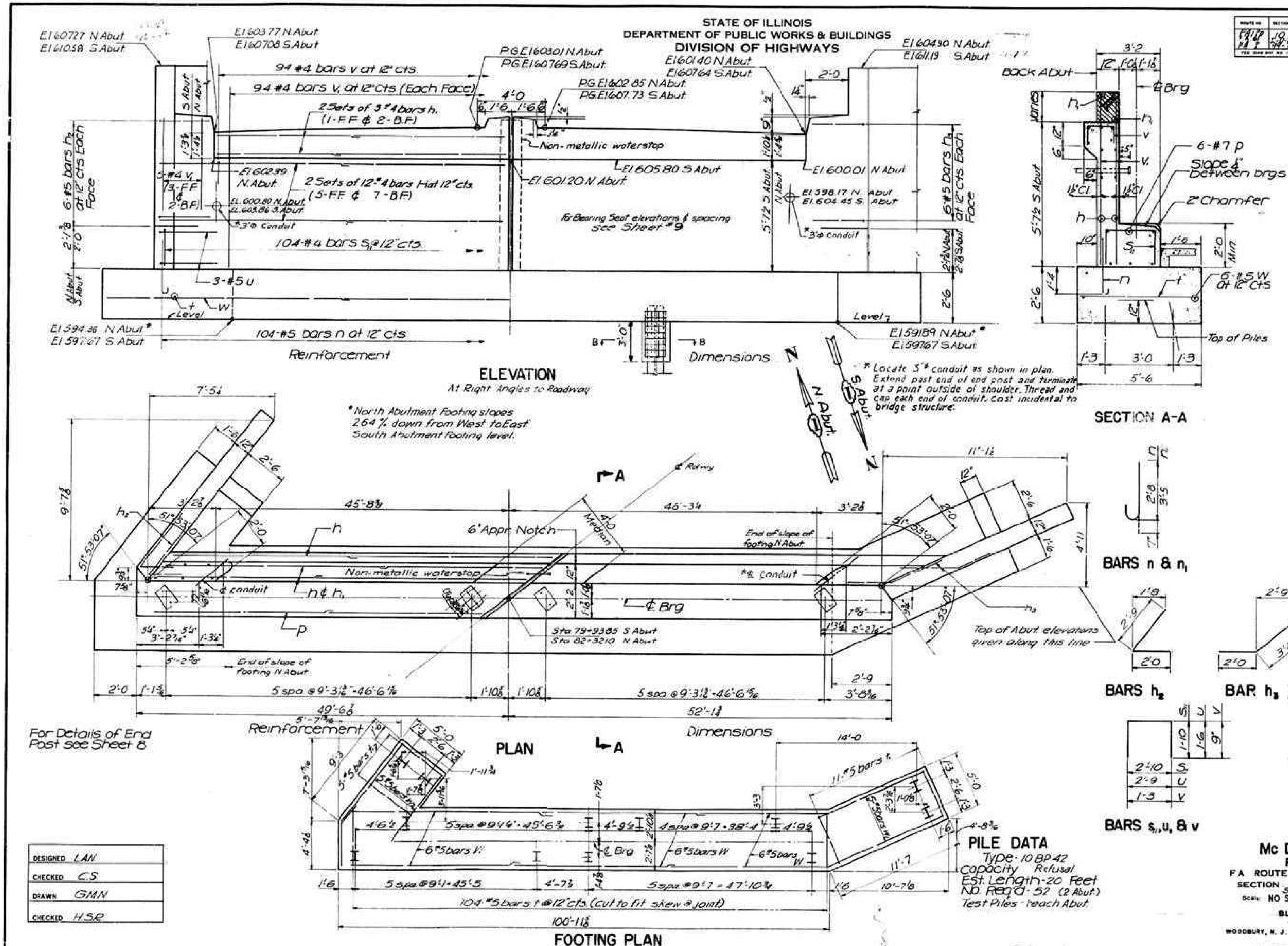
USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -
PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
SHEET 5 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	825

CONTRACT NO. 62R22
ILLINOIS | FED. AID PROJECT



SHEET NO. 7
SHEETS 10

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 61	10	WILL	197	141

NO. & SO. ABUTMENTS BAR LIST

Bar	No.	Size	Lgth	Shape
h	96	#4	27'-3	—
h_1	24	#4	23'-9	—
h_2	12	#5	4'-9	∟
h_3	12	#5	5'-0	⌣
n	208	#5	3'-3	⊃
n_1	56	#5	4'-0	⊃
p	48	#7	27'-3	—
S_1	208	#4	6'-6	⊓
t	208	#5	5'-0	—
t_1	32	#5	4'-6	—
U	12	#5	5'-9	⊓
V	188	#4	2'-9	⊓
V_1	396	#4	6'-6	—
W	36	#5	34'-1"	—
W_1	10	#5	11'-0	—
W_2	10	#5	8'-9	—

NO. & SO. ABUTMENTS BILL OF MATERIALS

Item	Unit	Quan
Class X Concrete	Cu Yds	219.7
Reinf. Bars	lbs	12750
Steel Piles (10BP42)	L F	1040
Test Piles Steel 10BP42	Each	2

Note: Bill of Materials includes Reinforcement and Class X Concrete for End Posts. Quantities for each abut are equal i.e. One half total quantities per abut.

ABUTMENTS
FA 61 OVER
Mc DONOUGH STREET
FA 61 STA. 81+12.97

F.A. ROUTE 61 PROJECT
SECTION 10 WILL COUNTY
Scale: NO SCALE Date: NOV. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

DESIGNED	LAN
CHECKED	CS
DRAWN	GMN
CHECKED	HSR

12-2-64 J.M.J. Rev. class x from 213.3 to 219.7 cu. yds.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

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	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
SHEET 6 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	826

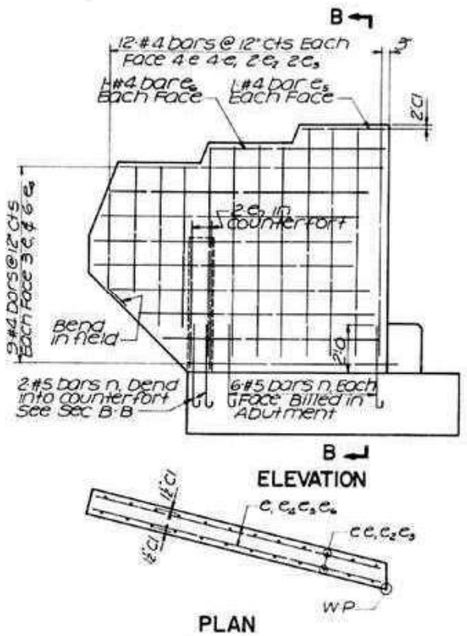
CONTRACT NO. 62R22
ILLINOIS FED. AID PROJECT

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystems-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing06.dgn

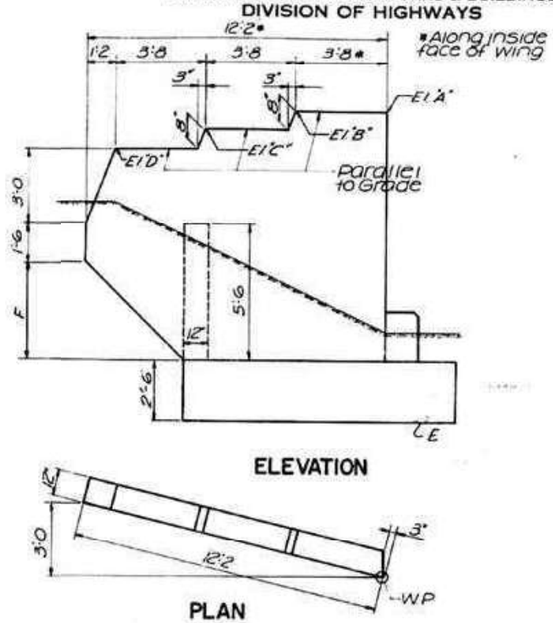
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

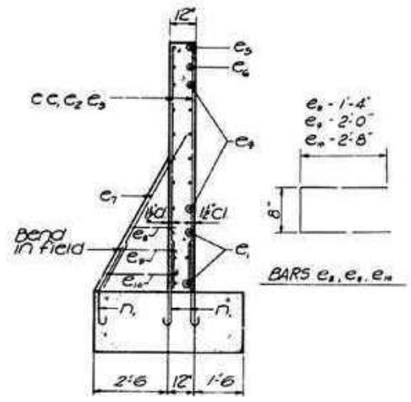
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 80	10	WILL	197	142
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT		

SHEET NO. 8
SHEETS 10



Note Piles not shown. For spacing see sheet # 7





SECTION B-B

ONE END POST BILL OF MATERIAL

Bar	No.	Size	Lgth	Shape
c	8	#4	9'-3	—
c_1	14	#4	8'-6	—
c_2	4	#4	6'-6	—
c_3	4	#4	5'-0	—
c_4	12	#4	10'-6	—
c_5	2	#4	3'-6	—
c_6	2	#4	7'-0	—
c_7	2	#5	7'-0	—
e_3	1	#4	3'-2"	n
e_5	1	#4	4'-6"	n
e_6	1	#4	5'-10"	n
Reinforcement Bars			lbs	280
Class X Conc				
North Abut			cuyds	8.3
South Abut			cuyds	8.7

*Included in Quantity on sheet #7

Elev	N. Abut.		S. Abut.	
	WWW	EWW	WWW	EWW
A	607.27	604.90	611.19	610.58
B	607.17	604.77	611.20	610.62
C	606.40	603.97	610.54	609.99
D	605.62	603.17	609.88	609.36
E	594.34	591.89	597.67	597.67
F	5'-10⅝"	6'-0⅛"	6'-6¼"	5'-10⅝"

DESIGNED	GMN
CHECKED	CS
DRAWN	GMN
CHECKED	HSR

ABUTMENT DETAILS
FA 61 OVER
Mc DONOUGH STREET
FA 61 STA. 81+12.97

F.A. ROUTE 61 — PROJECT
SECTION 10 STCP — WILL COUNTY
Scale NO SCALE — Date NOV 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

12-2-64 (M.) Rev. class x conc. N. abut. from 8.1 to 8.3 cu yd. S. abut from 8.5 to 8.7 cu yds.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ " / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 7 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	827
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-80	10	WILL	197	148

SHEET NO. 9
SHEETS 10

Boring No.1
Boring located at Sta 79+67
28' Left

Elev	N	Ground El 588.0
		Bituminous Surface Treatment
		Medium dense white gravel fill
585	19	Qu=1.9
		Stiff brown silty clay, trace of gravel
	35	Qu=3.0
580	80% Rec	Medium hard stratified limestone with lenses of soft brown limestone

Boring No.2
Boring located at Sta 80+93
25' Right of ℄

Elev	N	Ground El 584.4
		Medium stiff black topsoil
	24	Qu=2.6
580		Very stiff brown silty clay, trace of gravel
	30	Qu=2.9
575	80% Rec	Medium hard stratified limestone with lenses of soft brown limestone

Boring No.3
Boring located at Sta 81+40
27' Left of ℄

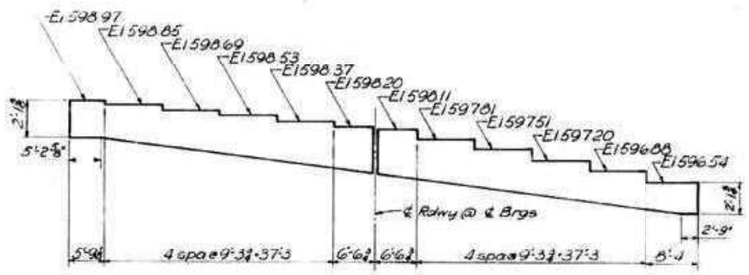
Elev	N	Ground El 584.9
		Bituminous Surface Treatment
		Medium dense white gravel fill
		Qu=2.0
	20	Stiff brown silty clay, trace of gravel
580		
575	71.1% Rec	Medium hard stratified limestone with lenses of soft brown limestone

Boring No.4
Boring located at Sta 82+69
44' Right of ℄

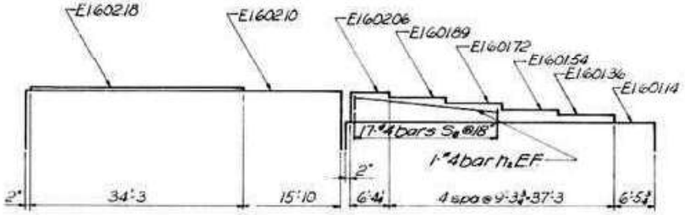
Elev	N	Ground El 581.9
		Loose black cinders and clay fill
580		Medium dense brown sand and large gravel with clay
	55.2% Rec	Medium hard stratified limestone with lenses of soft brown limestone
575		

Note N=Blows per ft. of penetration of sampling spoon Hamer Wt.=140lbs. Drop=30"
Qu=Unconfined compressive strength in tons per square foot.

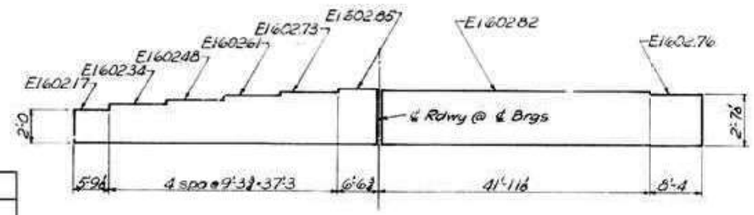
BORING DATA



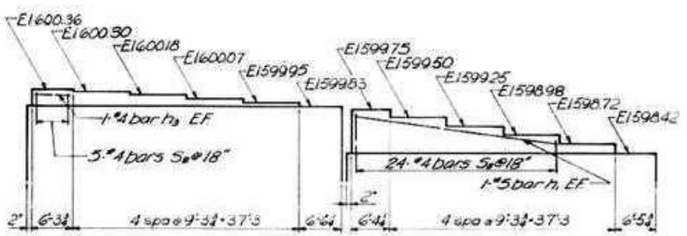
NORTH ABUTMENT
Looking Ahead



PIER 1
Looking Ahead



SOUTH ABUTMENT
Looking Back



(Pad Reinforcement Drilled on Sheet "6")

PIER 2
Looking Ahead

DESIGNED	CS
CHECKED	GMN
DRAWN	ER
CHECKED	MSR

ELEVATIONS & BORING DATA
F.A.61 OVER
MC DONOUGH STREET
F.A.61 STA. 81+12.97

F A ROUTE 61 — PROJECT
SECTION 10 — WILL COUNTY
Scale NO SCALE — Date NOV. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

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	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '=' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

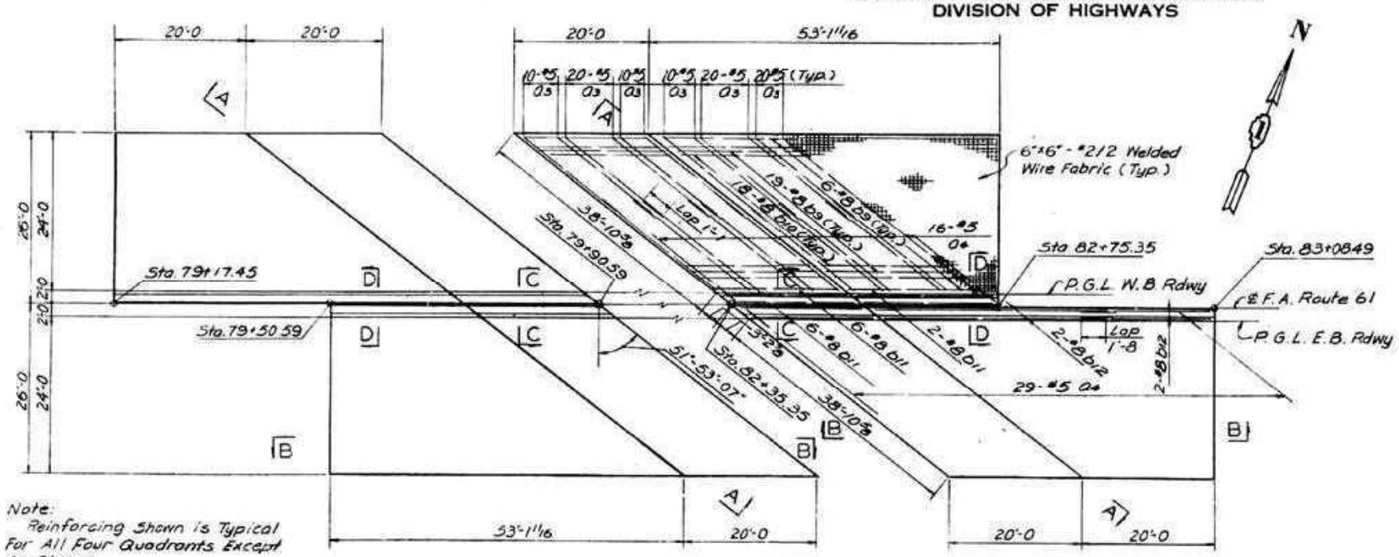
EXISTING BRIDGE PLANS
SHEET 8 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	828
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

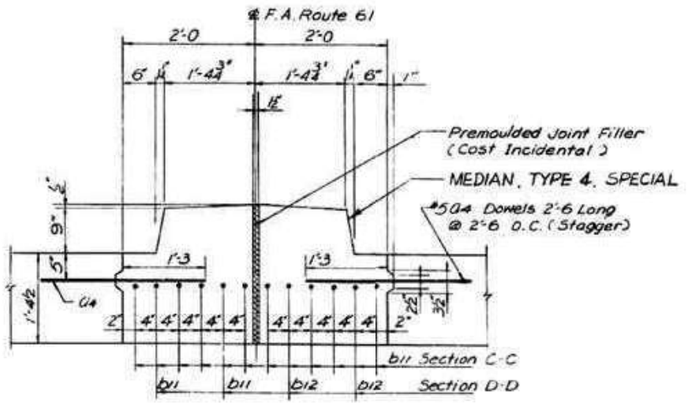
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 80	7-10	WILL	199	144
FED. ROAD ACT. NO.	ILLINOIS	PROJECT		

SHEET NO. 10
SHEETS 10

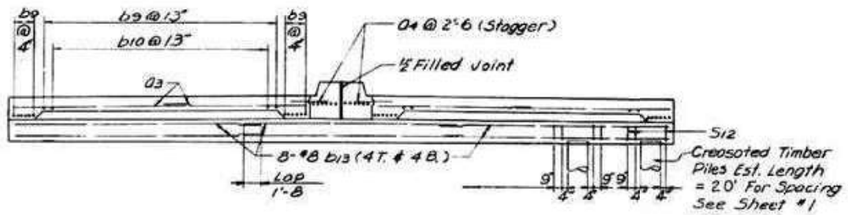


PLAN

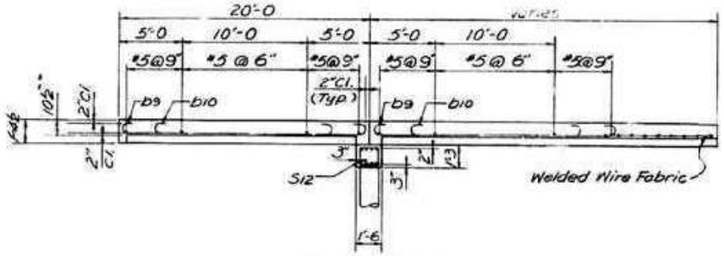
Note:
Reinforcing Shown is Typical For All Four Quadrants Except As Shown
For Additional Notes And Details See Illinois Std. 1909-6



SECTION C-C & D-D



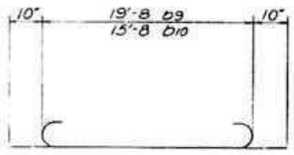
SECTION A-A



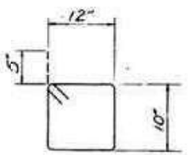
SECTION B-B

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
a3	320	#5	19'-10	
a4	90	#5	2'-6	
b9	248	#8	21'-4	
b10	144	#8	17'-4	
b11	28	#8	19'-8	
b12	8	#8	27'-3	
b13	48	#8	29'-0	
S12	140	#4	4'-6	



BARS b9 & b10



BAR S12

DESIGNED	J. J. H.
CHECKED	R. H. W
DRAWN	J. J. H
CHECKED	R. H. W.

APPROACH SLABS
F.A. ROUTE 61 OVER McDONOUGH ST.
F.A. ROUTE 61 STA. 81+12.97
F.A. ROUTE 61 SECTION 10 (STR 7)
PROJECT WILL COUNTY
Scale: No Scale
Date: Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
MOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

Revised Sect AA Cre Piles change len. from 22' to 30'.
1-28-63 Bill of Matl Cre Piles-change from 792 to 720 lin ft
V.D.S.

FOR INFORMATION ONLY

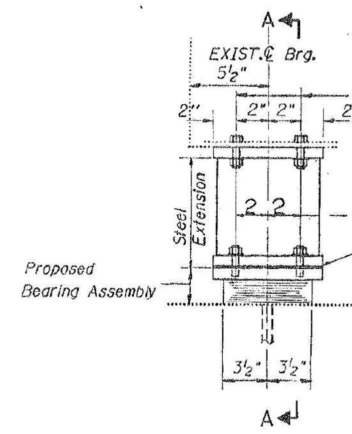
WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

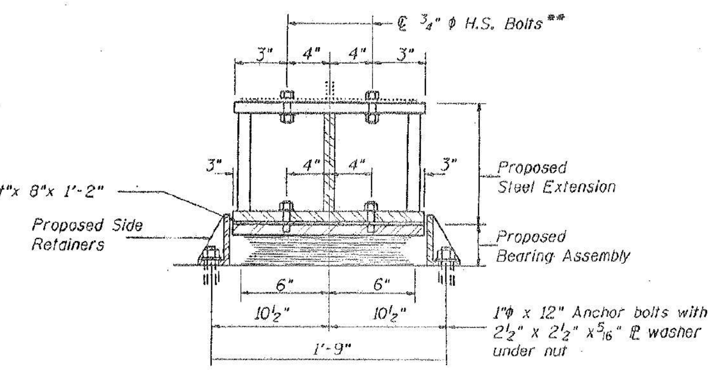
EXISTING BRIDGE PLANS
SHEET 9 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	829
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		



ELEVATION AT SOUTH ABUTMENT

(12 Required)

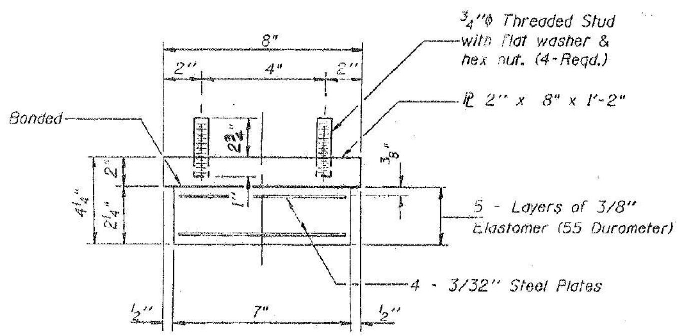


SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

GIRDER REACTIONS

R_{DL}	(K)	18.4
$R_{LL+Imp.}$	(K)	39.0
R (Total)	(K)	57.4



BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

Table Of Dimension "t" For Shim Plates												
Beam No.	A	B	C	D	E	F	G	H	J	K	L	M
So. Abutment			¼"	7/16"	⅝"	11/16"						

(See Sheet 9 for Beam Locations)

NOTES:

Before installing the new bearing, remove the top plate of the existing bearing assembly from the bottom flange using the air-arc method and grind smooth all weld material remaining on the existing bottom flange. Burn existing anchor bolts flush with existing concrete surface. Grind smooth and seal with epoxy. The cost is incidental to Jack And Remove Existing Bearings. See Existing Bearing Removal Detail.

New side retainers, shim plates, connection bolts, and anchor bolts are included in Furnishing and Erecting Structural Steel.

** 13/16" diameter holes are to be drilled in the field in the bottom of existing beams. Cost incidental to Furnishing and Erecting Structural Steel.

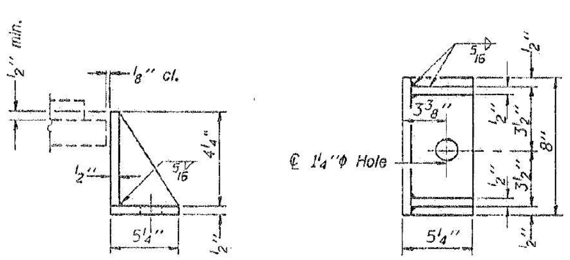
For the details of existing bearings see sheet 10.

Contractor shall submit jacking details for approval by the bridge office.

For anchor bolt details see sheet 14.

Prior to ordering any material, the contractor shall verify in the field all bearing heights and shim plate thickness dimensions

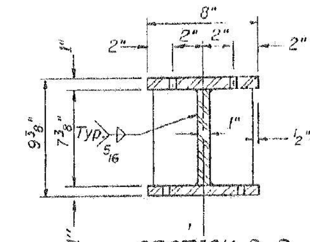
Diaphragm removal and replacement may be required to facilitate drilling holes in the bottom flange for bearing attachment. Cost incidental to Furnishing and Erecting Structural Steel.



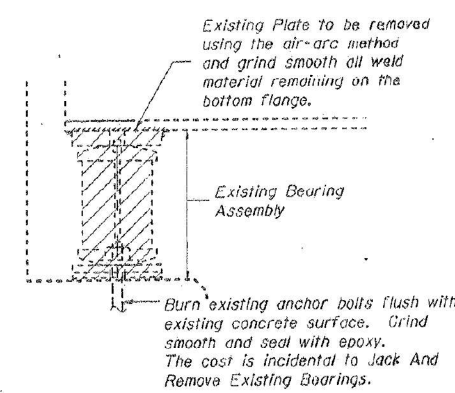
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.

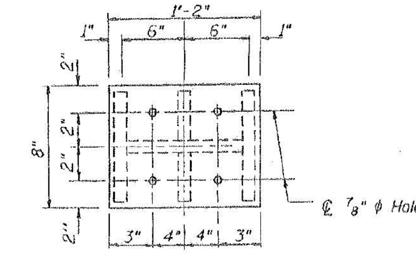
(24 REQUIRED)



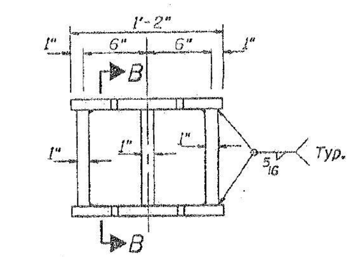
SECTION B-B



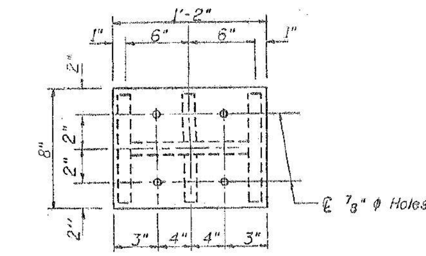
EXISTING BEARING REMOVAL



PLAN TOP PLATE



STEEL EXTENSION DETAIL



PLAN BOTTOM PLATE

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Furnishing And Erecting Structural Steel	lbs.	2100
Jack And Remove Existing Bearings	Each	12

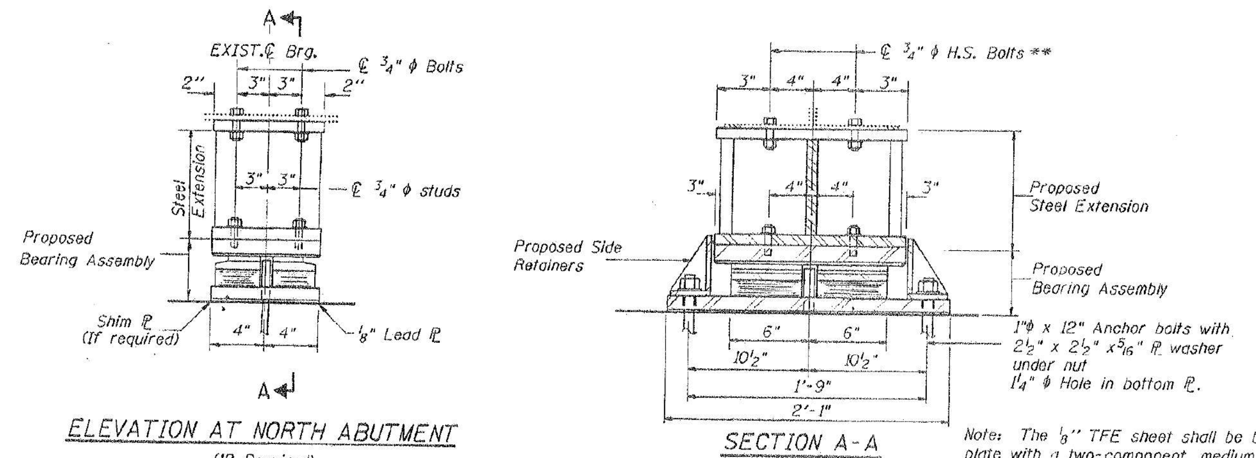
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CENTER STREET
OVER U.S. ROUTE 52
ELASTOMERIC BEARING DETAIL
FOR SOUTH ABUTMENT
S.N. 099-0186

SCALE: 50'=1" DRAWN BY CADD
DATE 02/21/95 CHECKED BY JAF

I-2-E1 2-26-93

FOR INFORMATION ONLY



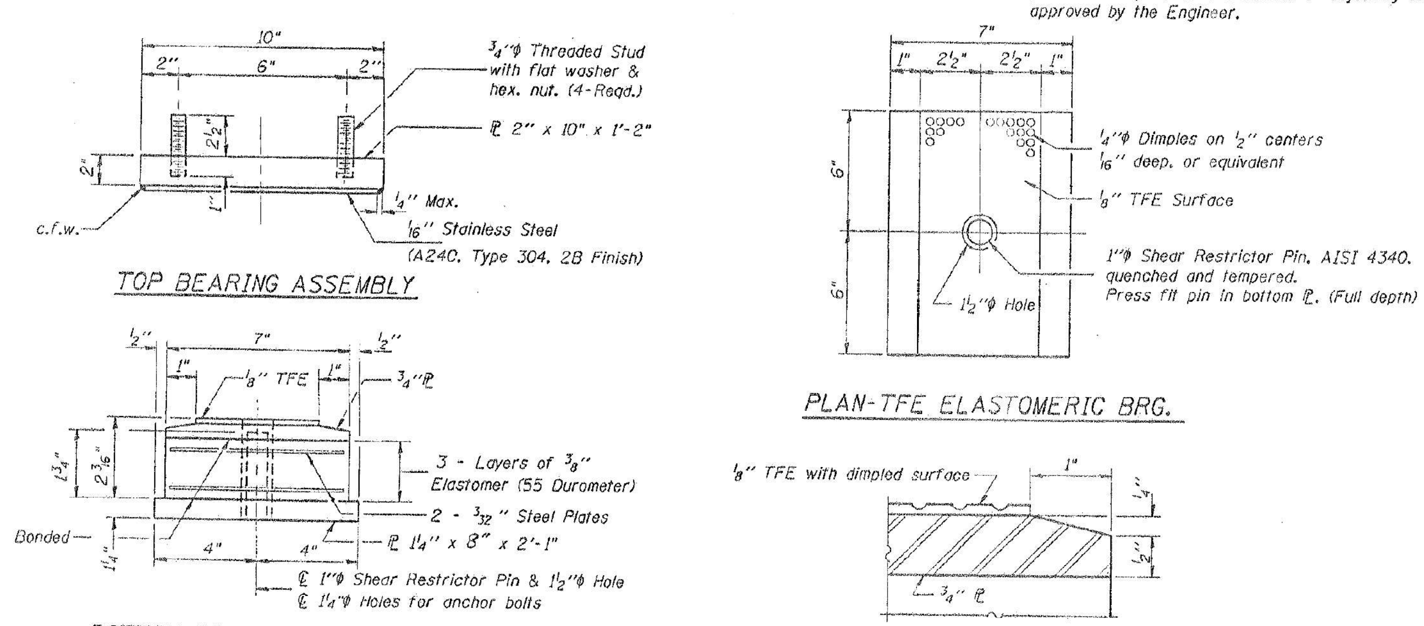
ELEVATION AT NORTH ABUTMENT
(12 Required)

SECTION A-A

TYPE III ELASTOMERIC EXP. BRG.

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

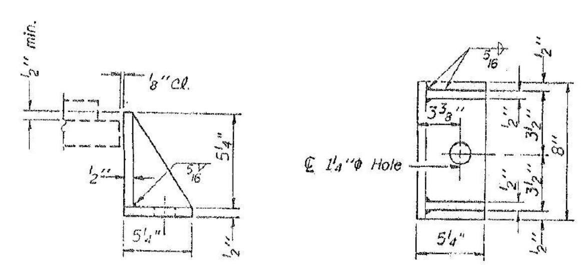


TOP BEARING ASSEMBLY

PLAN-TFE ELASTOMERIC BRG.

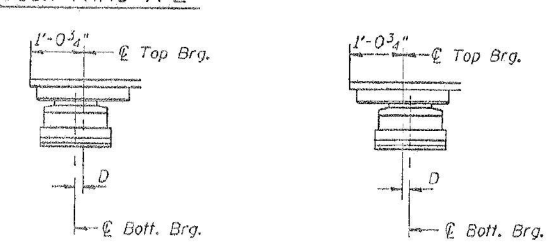
BOTTOM BEARING ASSEMBLY

SECTION THRU TFE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.
(24 REQUIRED)



BELOW 50° F.
(Move bott. brg. away from fixed brg.)

ABOVE 50° F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61	10HB-1,1	WILL	16	8

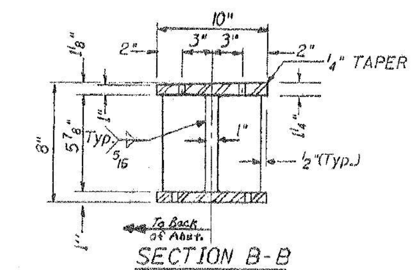
STA. TO STA.

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

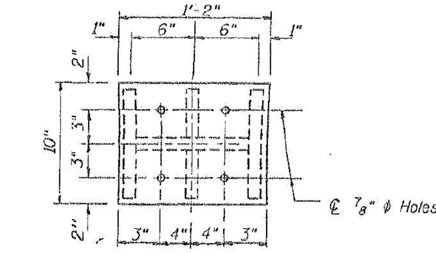
Sheet 8 of 16

GIRDER REACTIONS

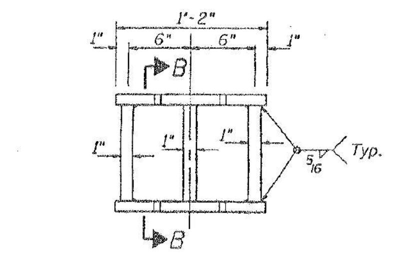
R DL	(K)	18.4
R LL+Imp.	(K)	39.0
R (Total)	(K)	57.4



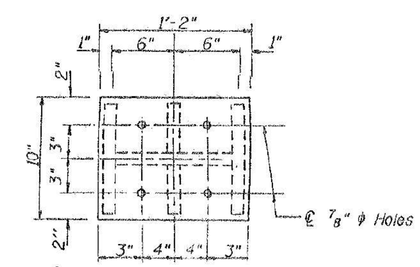
SECTION B-B



PLAN TOP PLATE



STEEL EXTENSION DETAIL



PLAN BOTTOM PLATE

NOTES:

Before installing the new bearing, remove the top plate of the existing bearing assembly from the bottom flange using the air-arc method and grind smooth all weld material remaining on the existing bottom flange. Burn existing anchor bolts flush with existing concrete surface. Grind smooth and seal with epoxy. The cost is incidental to Jack And Remove Existing Bearings. See Existing Bearing Removal Detail (See sheet 6 of 16).

New side retainers, shim plates, connection bolts, and anchor bolts are included in Furnishing and Erecting Structural Steel.

** 13/16" diameter holes are to be drilled in the field in the bottom of existing beams. Cost incidental to Furnishing and Erecting Structural Steel.

For the details of existing bearings see sheet 10.

Contractor shall submit jacking details for approval by the bridge office.

For anchor bolt details see sheet 14.

Prior to ordering any material, the contractor shall verify in the field all bearing heights and shim plate thickness dimensions.

Diaphragm removal and replacement may be required to facilitate drilling holes in the bottom flange for bearing attachment. Cost incidental to Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type III	Each	12
Furnishing And Erecting Structural Steel	lbs.	2450
Jack And Remove Existing Bearings	Each	12

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CENTER STREET
OVER U.S. ROUTE 52
ELASTOMERIC BEARING DETAIL
FOR NORTH ABUTMENT
S.N. 099-0186

SCALE: 50'=1" DRAWN BY CADD
DATE 02/21/95 CHECKED BY JAF

I-2-E3 2-26-93

FOR INFORMATION ONLY

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WSP USA Inc.
30 N. LASALLE STREET SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 7:11.99616 ':' / in.	CHECKED -	REVISED -
PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 11 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	831

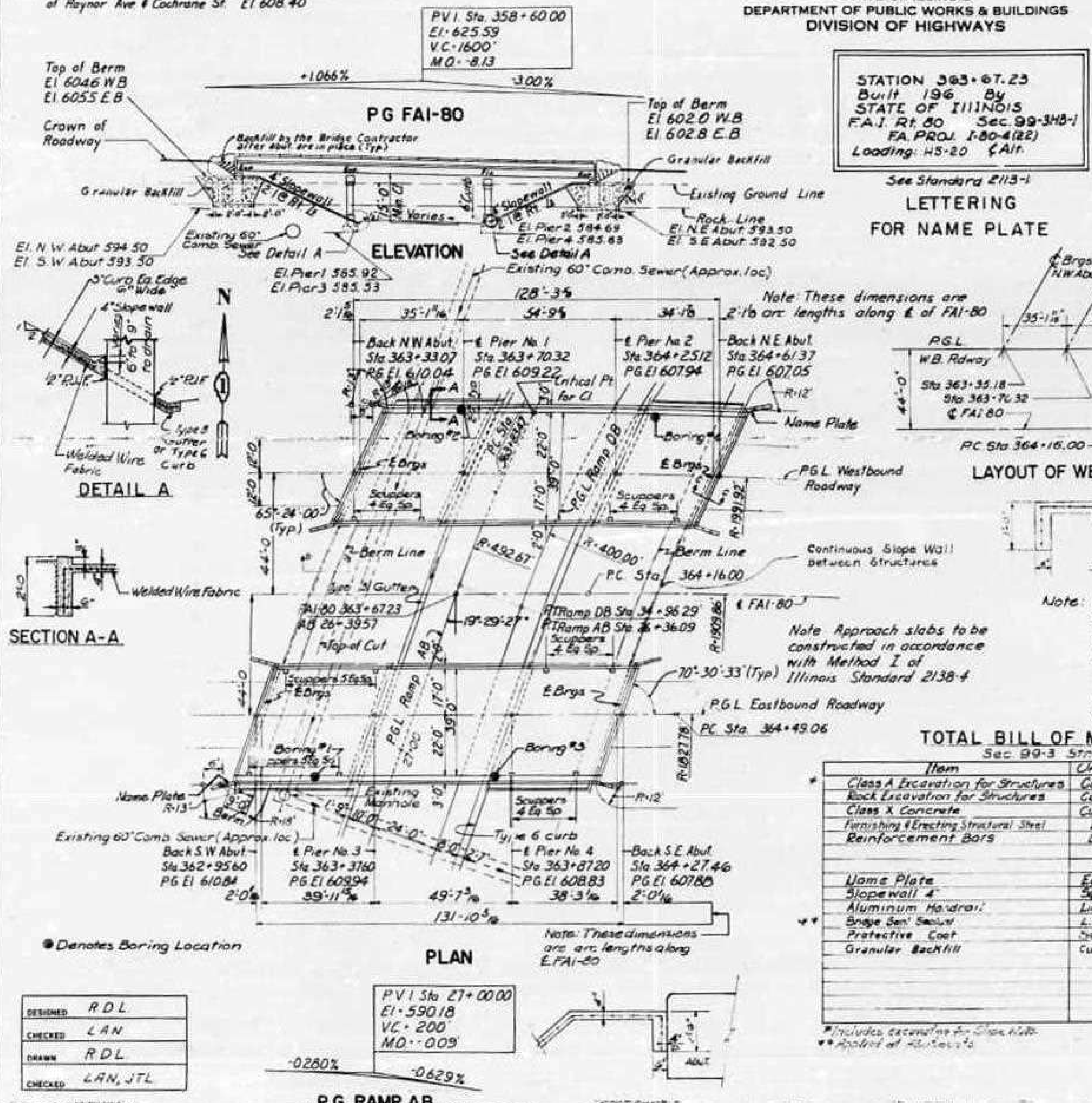
CONTRACT NO. 62R22

ILLINOIS | FED. AID PROJECT

Bench Mark #45: Top of "O" on open fire hydrant, NW corner of Raynor Ave & Cochrane St. El 608.40

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 1
10 SHEETS



STATION 363+67.23
Built 196_ By
STATE OF ILLINOIS
F.A.I. Rt. 80 Sec. 99-3HB-1
F.A. PROJ. I-80-4(22)
Loading: HS-20 & Alt.

See Standard 2113-1

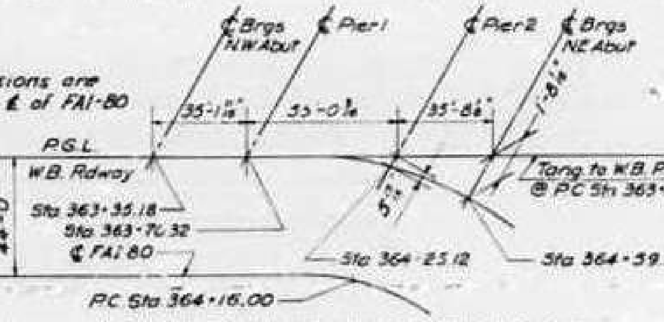
LETTERING FOR NAME PLATE

DESIGN STRESSES

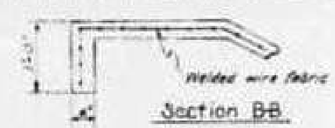
Reinforced Concrete:
- fc = 3500 psi
- fs = 20,000 psi
- n = 10
- fc = 1,400 psi (except footings)
- fc = 1,000 psi (footings)
- Vc = 90 psi (except footings)
- Vc = 75 psi (footings)

Structural Steel:
- fs = 20,000 psi

Maximum Soil Pressure = 5 Tons/sf
Loading: HS-20-44 & Alternate



LAYOUT OF WESTBOUND STRUCTURE



Section B-B

Note: Welded Wire Fabric in slopewall shall be 6"-6" mesh, #4 wires, 58 lbs/100 sf. Cost of Welded Wire Fabric shall be included in cost of 4" slopewall.

Cost of premoulded joint filler shall be incidental to the contract.

GENERAL NOTES

STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL STEEL, A.S.T.M. DESIGNATION A 36

RIVETS SHALL BE 3/4" ⌀ WITH 13/16" ⌀ OPEN HOLES UNLESS NOTED.

CLASS X CONCRETE SHALL BE USED THROUGHOUT. COARSE AGGREGATE USED IN PARAPETS AND END POSTS SHALL BE FREE OF CHERT, FLINT, LIMONITE, LIGNITE AND SOFT SANDSTONE.

THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.13 OF THE STANDARD SPECIFICATIONS.

ALL WELDING SHALL COMPLY WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, OF THE AMERICAN WELDING SOCIETY.

ALL ROCKERS, BOLSTERS, BEARING PLATES, LEAD PLATES, PINTLES, AND ANCHOR BOLTS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 51.15 OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

ANCHOR BOLTS SHALL BE SET BEFORE CONNECTING DIAPHRAGMS OVER SUPPORT. SPACE REINFORCING TO MISS ANCHOR BOLTS.

EXPANSION GUARDS AND PLATES SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 51.13 [illegible] OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

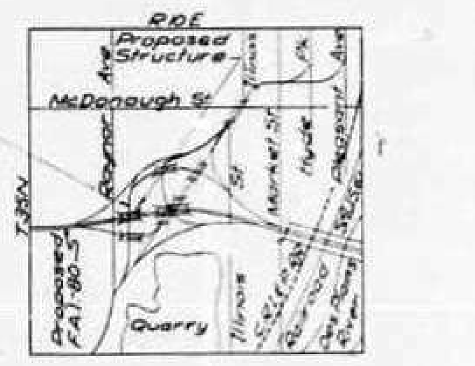
EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. SEE ARTICLES 56.1 TO 56.5 INCLUSIVE OF THE STANDARD SPECIFICATIONS.

ALL SURFACES OF EXPANSION GUARDS INACCESSIBLE AFTER ERECTION SHALL BE GIVEN TWO SHOP COATS OF RED LEAD PAINT. THE 3/4" ⌀ WELDED STUDS SHALL NOT BE PAINTED.

NO ROCK LARGER THAN 3" SHALL BE PLACED IN FILLS IN THE AREA WHERE PILES ARE TO BE DRIVEN.

PERMANENT FORMS WILL NOT BE PERMITTED IN FORMING THE CONCRETE FLOOR.
Excavation for portions of structures in the embankments shall not be classified

Note: This route has been selected as a 15'-0" vertical clearance route.



LOCATION PLAN

TOTAL BILL OF MATERIAL

Sec. 99-3 Str. 1

	Item	Unit	Super	Sub	Total
*	Class A Excavation for Structures	Cu. Yd.	——	2680	2680
	Rock Excavation for Structures	Cu. Yd.	——	104	104
	Class X Concrete	Cu. Yd.	319.1	379.1	698.2
	Furnishing & Erecting Structural Steel	Lb.	234,500	——	234,500
	Reinforcement Bars	Lb.	76,620	55,780	132,400
	Name Plate	Each	2	——	2
	Slopewall 4"	Sq. Yd.	——	1329	1329
	Aluminum Handrail	Lin. Ft.	513	——	513
**	Bridge Seat Sealer	L.S.		0.2	0.2
	Protective Coat	Sq. Yd.	1392	—	1392
	Granular Backfill	Cu. Yd.		1657	1657

*Includes excavation for Slope Walls
**Applied at Abutments

Prepared and Recommended by
Blauvelt Engineering Co.
Structural Engineer
781-2251

GENERAL PLAN & ELEVATION
FAI-80 OVER RAMP AB
STA. 363+67.23

F.A.I. ROUTE 80
SECTION 99-3HB-1
Scale NO SCALE

PROJECT I-80-4(22)133
WILL COUNTY
Date Nov 30 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

DESIGNED	R.D.L.
CHECKED	L.A.N.
DRAWN	R.D.L.
CHECKED	L.A.N., J.T.L.

FOR INFORMATION ONLY

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/40118002203-WSP\CAD\62R22-INT-4 (Center)\Sheets\Structural\Existing Bridge Plans\0990186-62R22-Existing12.dgn

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
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PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

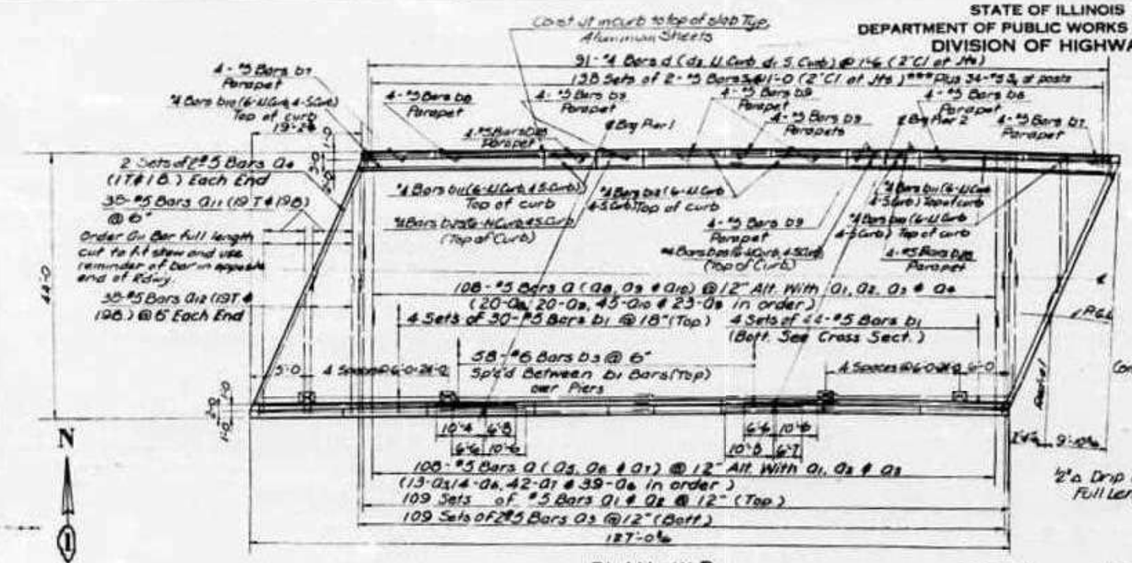
SHEET 12 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	832
		CONTRACT NO. 62R22		
		ILLINOIS	FED. AID PROJECT	

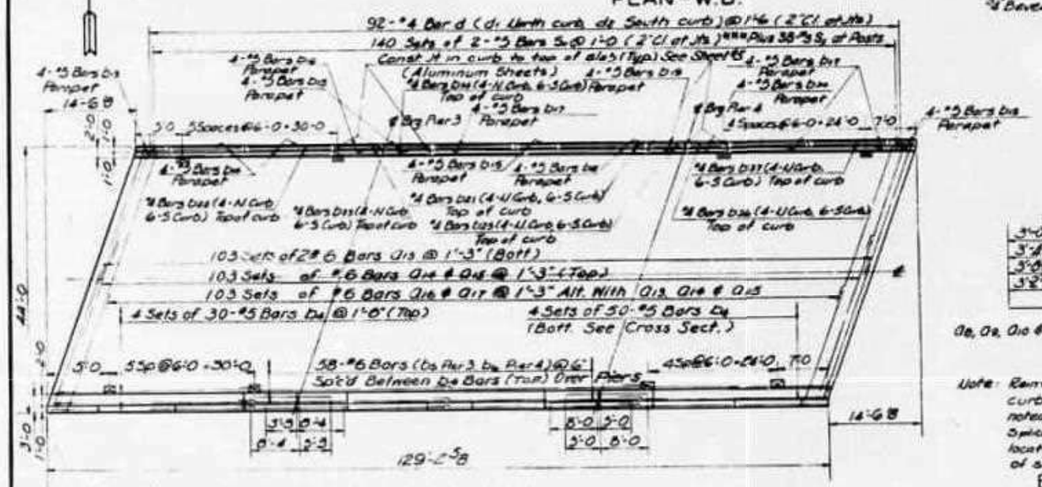
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 2
10 SHEETS

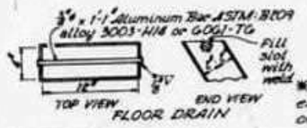
After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on D.L. Deflection Diagram. From these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations minus floor thickness equals the fillet heights above top of beams.



PLAN - W.B.



PLAN - E.B.

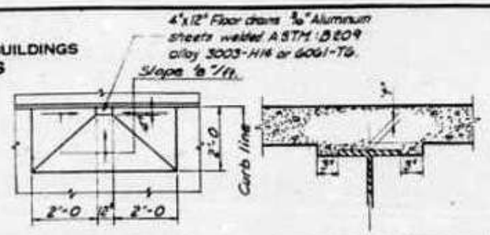


DESIGNED	JJH
CHECKED	JTL
DRAWN	AME
CHECKED	JTL

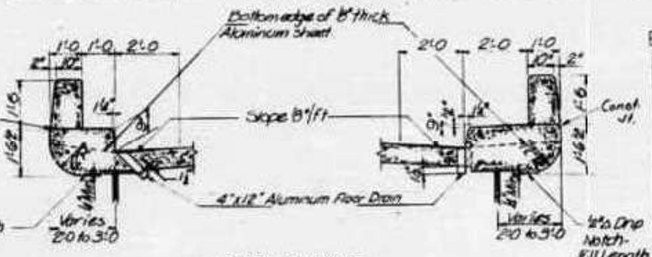
*** Where curb is over stringer elevation shown is that of the projection of top of slab along its cross slope

See Sheet 3 for Locations of Points, See Sheet 4 for Cross Section

**** Place 2-#3 S. bars at each rail post or insure face (road side) of parapet.



DRAIN DETAILS



CURB DETAILS

METHOD OF DETERMINING FILLET HEIGHT 't'

After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on D.L. Deflection Diagram. From these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations minus floor thickness equals the fillet heights above top of beams.

DETAILS OF 1/8" ALUMINUM SHEETS
Used in Curb Joints.
ASTM B209 alloy 3003-H14

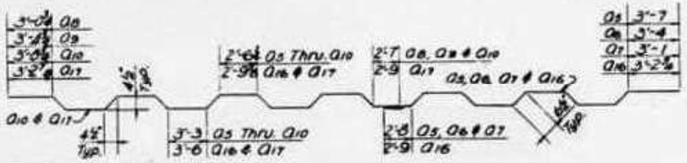
BILL OF MATERIALS

Class X Concrete	Cu Yds	397
Reinforcement Bars	Lbs.	76,080
*Structural Steel	Lbs.	234,500

*Structural Steel includes weight of rockers, bolsters, bearing plates, load plates, pintles, and anchor bolts.
Estimated Wt. = 14,343 lbs
Cost of furnishing and installing drains, aluminum sheets shall be incidental to the contract.

BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
Q1	109	#5	26'-1	
Q2	109	#5	19'-7	
Q3	218	#5	22'-6	
Q4	8	#5	24'-1	
Q5	13	#5	20'-5	
Q6	58	#5	20'-2	
Q7	42	#5	19'-11	
Q8	20	#5	26'-9	
Q9	43	#5	27'-1	
Q10	45	#5	21'-5	
Q11*	76	#5	24'-8	
Q12	76	#5	22'-0	
Q13	206	#6	23'-10	
Q14	103	#6	27'-4	
Q15	103	#6	20'-3	
Q16	103	#6	21'-6	
Q17	103	#6	28'-9	
b1	2996	#5	32'-6	
b2	116	#6	17'-0	
b3	320	#5	33'-1	
b4	58	#6	19'-7	
b5	58	#6	13'-0	
b6	16	#5	12'-4	
b7	16	#5	13'-2	
b8	24	#5	6'-3	
b9	20	#4	27'-11	
b10	20	#5	7'-4	
b11	20	#4	21'-1	
b12	16	#5	4'-2	
b13	16	#5	14'-2	
b14	16	#5	6'-8	
b15	8	#5	6'-10	
b16	24	#5	13'-8	
b17	8	#5	14'-8	
b18	8	#5	6'-3	
b19	8	#5	6'-10	
b20	10	#4	33'-4	
b21	10	#5	6'-10	
b22	10	#4	6'-8	
b23	10	#5	33'-8	
b24	30	#5	6'-4	
b25	10	#5	6'-10	
b26	10	#4	32'-3	
b27	16	#5	7'-5	
b28	16	#5	16'-1	
d1	183	#4	2'-9	
d2	183	#4	3'-9	
S*	1256	#3	2'-10	



Note: Reinforcement in parapet and curb symmetrical about ℄ unless noted otherwise.
Splices of adjacent truss bars to be located on opposite sides of center of structure.

BAR Q

BARS d & s

ELEVATIONS - TOP OF SLAB * * (Elevations are not adjusted for dead load deflections)

Sta.	Pt.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
W.B.	A	609.52	609.36	609.24	609.01	608.86	608.70	608.54	608.38	608.15	607.92	607.68	607.45	607.32	
	B	609.67	609.50	609.39	609.07	608.90	608.71	608.53	608.34	608.07	607.86	607.62	607.38	607.26	
	C	609.83	609.64	609.45	609.13	608.92	608.74	608.55	608.32	608.01	607.79	607.56	607.32	607.19	
	D	609.95	609.74	609.53	609.20	608.98	608.75	608.53	608.29	607.96	607.73	607.50	607.26	607.13	
	E	610.02	609.79	609.56	609.22	608.98	608.75	608.51	608.26	607.91	607.67	607.43	607.19	607.07	
	F	610.01	609.78	609.55	609.19	608.95	608.71	608.47	608.22	607.86	607.61	607.37	607.13	607.00	
	G	609.95	609.72	609.49	609.13	608.89	608.65	608.41	608.16	607.80	607.55	607.31	607.07	606.94	
E.B.	H	610.44	610.25	610.01	609.80	609.58	609.36	609.18	608.91	608.68	608.46	608.26	608.08	607.90	607.75
	I	610.62	610.41	610.20	609.99	609.77	609.55	609.33	609.10	608.87	608.65	608.45	608.25	608.01	607.86
	J	610.75	610.58	610.33	610.12	609.90	609.68	609.46	609.25	609.01	608.79	608.56	608.35	608.10	607.91
	K	610.81	610.60	610.39	610.17	609.96	609.74	609.52	609.29	609.07	608.84	608.61	608.37	608.13	607.93
	L	610.78	610.57	610.36	610.15	609.94	609.72	609.50	609.27	609.05	608.83	608.60	608.35	608.11	607.91
	M	610.70	610.49	610.28	610.07	609.85	609.63	609.41	609.19	608.97	608.75	608.52	608.28	608.03	607.83
	N	610.61	610.40	610.19	609.98	609.76	609.53	609.32	609.11	608.88	608.66	608.43	608.20	607.95	607.75

SLAB PLAN
FAI 80 OVER RAMP AB
STA. 363+67.23 *

F.A.I. ROUTE 80 SECTION 99-3 (Str. *1)
PROJECT WILL COUNTY
Scale NO SCALE
Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

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PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 13 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	833
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
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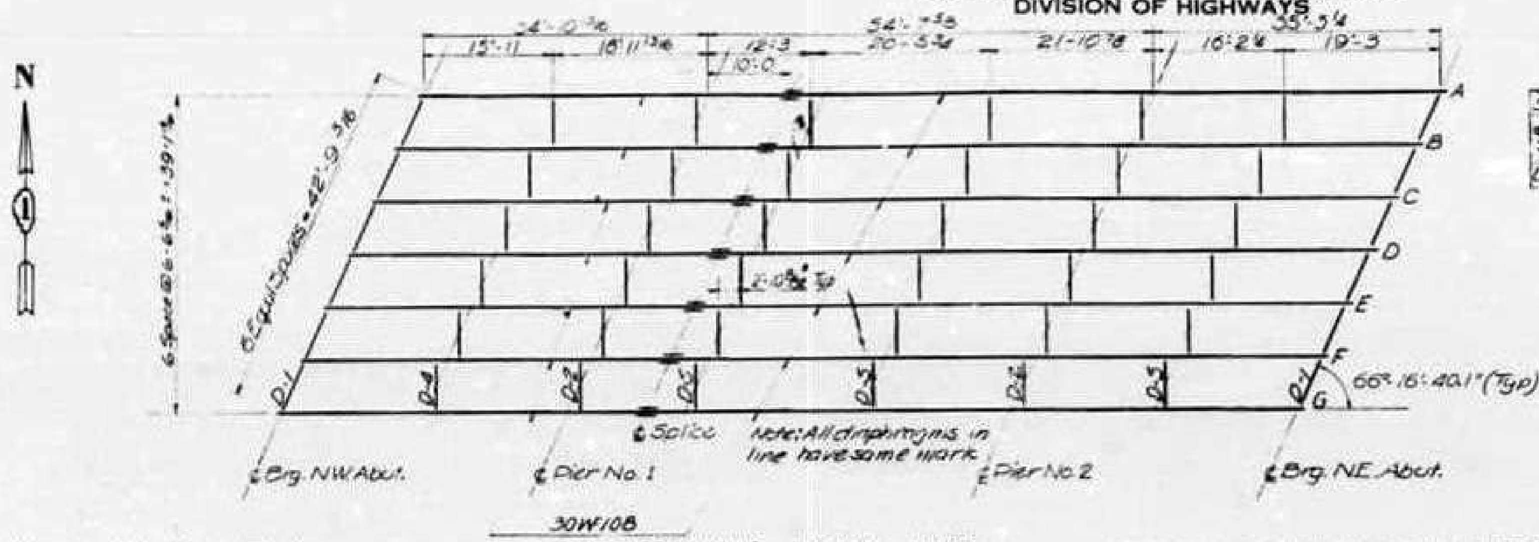
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 80	19-3 (Str.)	WILL	197	77

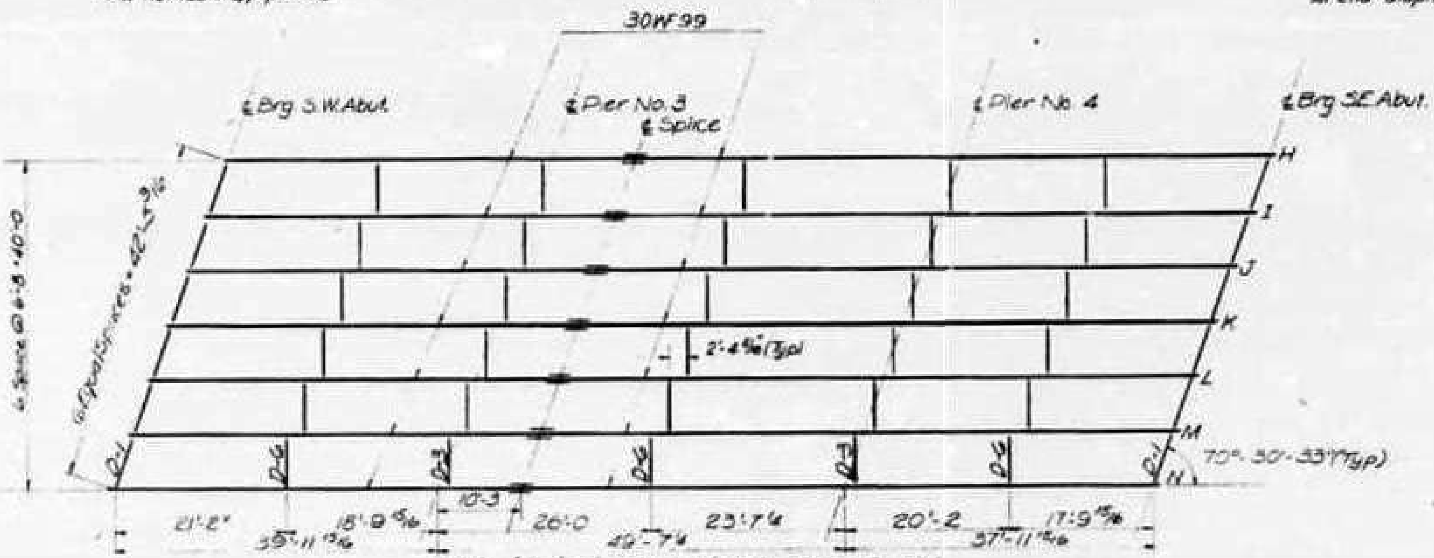
SHEET NO. 3
10 SHEETS



FRAMING PLAN - W.B.

Note: All dimensions are measured in a horizontal plane

Note: All interior diaphragms to be 12 WF 36
All end diaphragms to be 12 WF 40



FRAMING PLAN - E.B.

DEAD LOAD DEFLECTIONS (+ = downward deflection)

Stgr. / Pt.	a	b	c	d	e	f	g	h	i
W.B. A, G	+1/32	+1/32	-1/32	+3/16	+1/2	+3/16	-1/32	+1/32	+1/32
W.B. B, C, D, E, F	+1/32	+1/32	0	+3/16	+3/16	+3/16	0	+1/32	+1/32
E.B. All Stgrs.	+1/8	+1/8	+1/16	+3/32	+3/16	3/32	+1/16	+1/8	+1/8

Above deflections are in inches and include weight of concrete only.

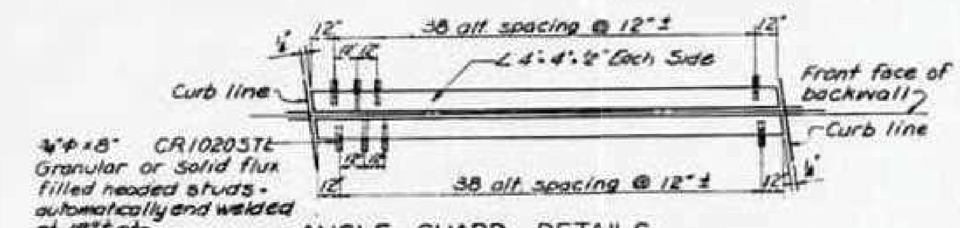
AS AWARDED TOP OF STRINGER ELEVATIONS*

	Stgr. / Pt.	W. Abuts	Piers 1 & 3	Splice	Piers 2 & 4	E. Abuts
W.B.	A	608.89	608.38	608.23	607.32	606.69
	B	609.04	608.44	608.27	607.44	606.63
	C	609.20	608.32	608.32	607.38?	606.36
	D	609.32	608.57	608.35	607.35?	606.30
	E	609.39	608.39	608.35	607.28?	606.44
	F	609.38	608.56	608.32	607.23	606.37
	G	609.32	608.30	608.26	607.17	606.31
E.B.	H	609.81	608.95	608.73	607.83	607.12
	I	609.99	609.14	608.92	608.02	607.21
	J	610.12	609.27	609.05	608.16	607.25
	K	610.18	609.33	609.11	608.21	607.30
	L	610.13	609.31	609.09	608.20	607.25
	M	610.07	609.22	609.00	608.12	607.20
	N	609.98	609.13	608.92	608.03	607.12

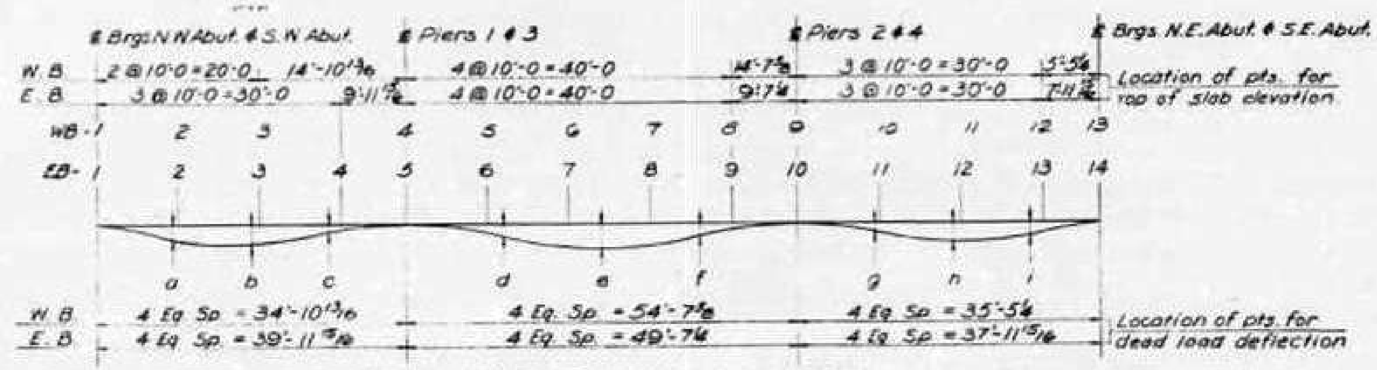
*These elevations are at top of top flange of stringer; exclusive of deflections.

**AS BUILT

	Stgr. / Pt.	Splice	Pier 2 & 4
W.B.	A		607.37
	B		607.36
	C		607.34
	D		607.32
	E	608.36	607.29
	F		
	G		
E.B.	H		607.91
	I		608.05
	J		608.15
	K		608.19
	L		608.17
	M		608.08
	N	608.91	608.00



ANGLE GUARD DETAILS



DEAD LOAD DEFLECTION DIAGRAM

DESIGNED	GF
CHECKED	LD
DRAWN	[illegible]
CHECKED	JTL

FRAMING PLAN
FAI 80 OVER RAMP AB
STA. 363+67.23
F A I ROUTE 80 PROJECT
SECTION 19-3 (Str. #1) WILL COUNTY
Scale NO SCALE Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

Top of Stringer Elevations ... As Awarded

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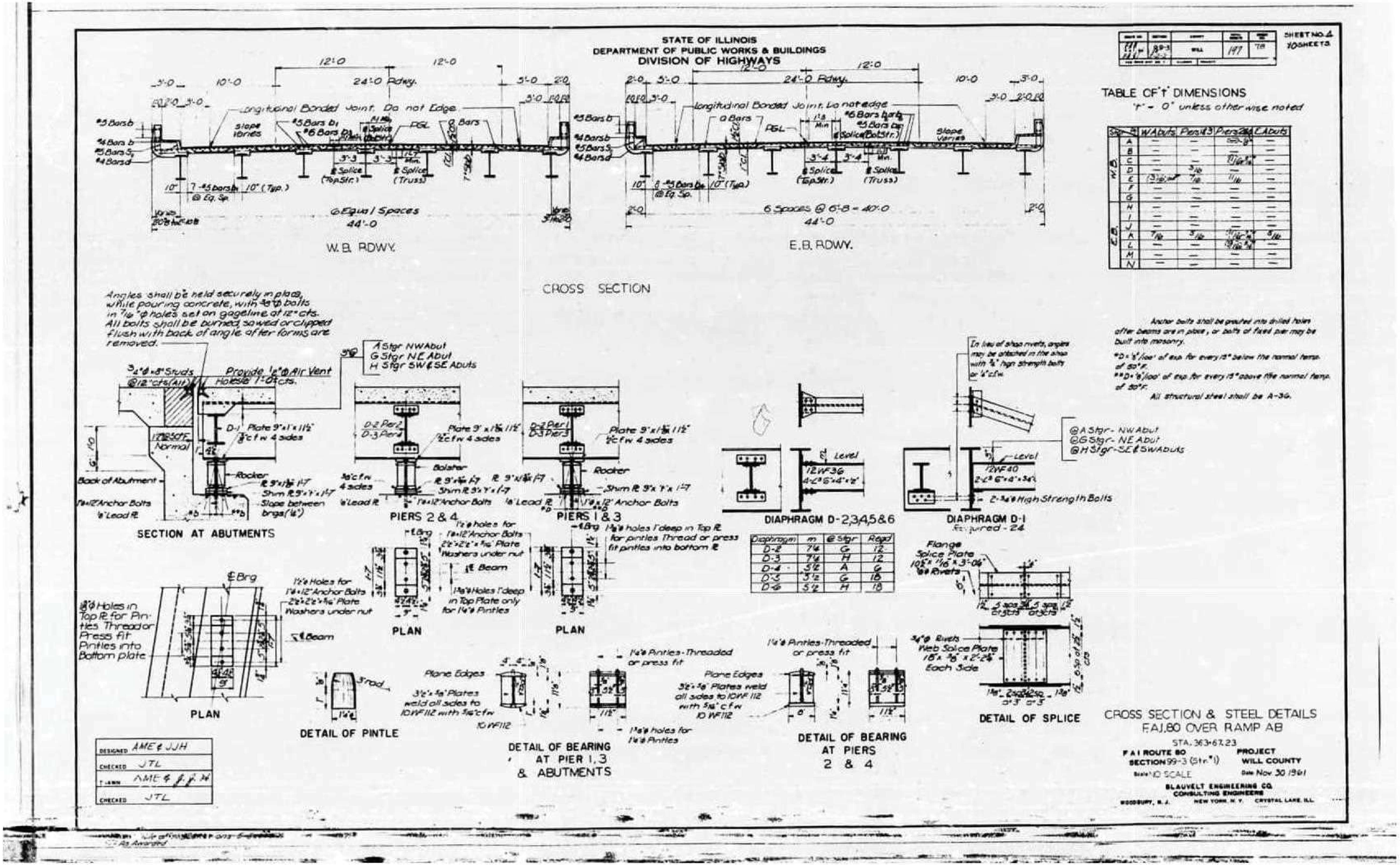
WSP USA Inc. 30 N. LASALLE STREET SUITE 4200 CHICAGO, IL 60602 TEL: (312) 782-8150 FAX: (312) 782-1684	USER NAME = USCP702533	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS	F.A.I. RTE. 80	SECTION FAI 80 21 INTERCHANGE	COUNTY WILL
		DRAWN -	REVISED -			TOTAL SHEETS 1209	SHEET NO. 834	
	PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -			CONTRACT NO. 62R22		
	PLOT DATE = 4/22/2025	DATE -	REVISED -		SHEET 14 OF 62 SHEETS	ILLINOIS	FED. AID PROJECT	


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
SHEET NO. 4
70 SHEETS
24'-0 Rdwy.
Longitudinal Bonded Joint. Do not Edge
PGL
6 Equal Spaces
44'-0
6 Spaces @ 6'-8 = 40'-0
W.B. RDWY.
E.B. RDWY.
CROSS SECTION
TABLE OF 'T' DIMENSIONS
'T' = 0" unless otherwise noted
Angles shall be held securely in place, while pouring concrete, with 3/8"ϕ bolts in 7/16"ϕ holes set on gageline at 12" cts. All bolts shall be burned, sawed or clipped flush with back of angle after forms are removed.
Provide 1/2"ϕ Air Vent Hole @ 1'-0" cts.
A Stgr NW Abut
G Stgr NE Abut
H Stgr SW & SE Abuts
Back of Abutment
SECTION AT ABUTMENTS
PIERS 2 & 4
PIERS 1 & 3
DIAPHRAGM D-2,3,4,5 & 6
DIAPHRAGM D-1
Diaphragm | m | @ Stgr | Reqd
D-2 | 7¼ | G | 12
D-3 | 7¼ | H | 12
D-4 | 5½ | A | 6
D-5 | 5½ | G | 18
D-6 | 5½ | H | 18
@ A Stgr - NW Abut
@ G Stgr - NE Abut
@ H Stgr - SE & SW Abuts
Anchor bolts shall be grouted into drilled holes after beams are in place, or bolts of fixed pier may be built into masonry.
All structural steel shall be A-36.
PLAN
PLAN
PLAN
DETAIL OF PINTLE
DETAIL OF BEARING AT PIER 1, 3 & ABUTMENTS
DETAIL OF BEARING AT PIERS 2 & 4
DETAIL OF SPLICE
CROSS SECTION & STEEL DETAILS
FAI 80 OVER RAMP AB
STA. 363+67.23
F A I ROUTE 80
SECTION 99-3 (Str.#1)
PROJECT
WILL COUNTY
Scale NO SCALE
Date Nov 30 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
DESIGNED AME & JJH
CHECKED JTL
CHECKED JTL

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30 N. LASALLE STREET
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PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

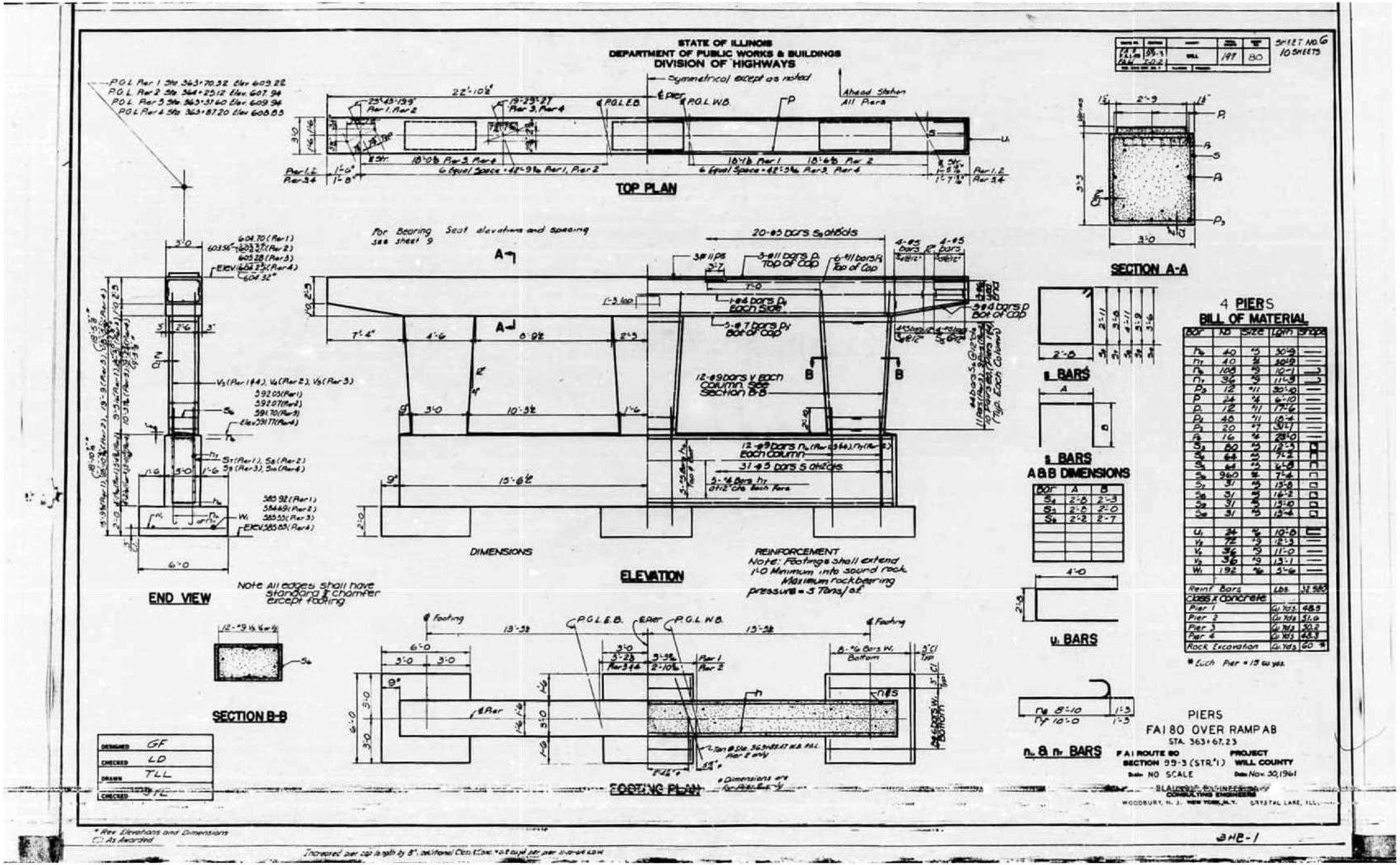
EXISTING BRIDGE PLANS

SHEET 15 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	835

CONTRACT NO. 62R22

ILLINOIS | FED. AID PROJECT



4 PIERS

BILL OF MATERIAL

Bar	No	Size	Lgth	Shape
n_6	40	#3	30'-9	—
n_7	40	#3	30'-9	—
n_8	108	#9	10'-1	hooked
n_9	36	#9	11'-3	hooked
P_3	12	#11	30'-10	—
P	24	#4	6'-10	—
P_1	12	#11	17'-6	—
P_2	40	#11	18'-4	—
P_4	20	#7	30'-1	—
P_5	16	#4	28'-0	—
S_3	80	#5	12'-3	▯
S_4	64	#5	7'-2	▯
S_5	64	#5	6'-8	▯
S_6	960	#4	7'-4	▯
S_7	31	#5	13'-8	▯
S_8	31	#5	16'-2	▯
S_9	31	#5	15'-0	▯
S_{10}	31	#5	13'-4	▯
U_1	24	#6	10'-8	⊏
V_3	72	#9	12'-3	—
V_4	36	#9	11'-0	—
V_5	36	#9	13'-1	—
W_1	192	#6	5'-6	—
Reinf. Bars			Lbs	32,980
Class X Concrete				
Pier 1			Cu. Yds.	48.5
Pier 2			Cu. Yds.	51.0
Pier 3			Cu. Yds.	50.2
Pier 4			Cu. Yds.	48.3
Rock Excavation			Cu. Yds.	60 *

* Each Pier = 15 cu. yds.

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PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 16 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	836

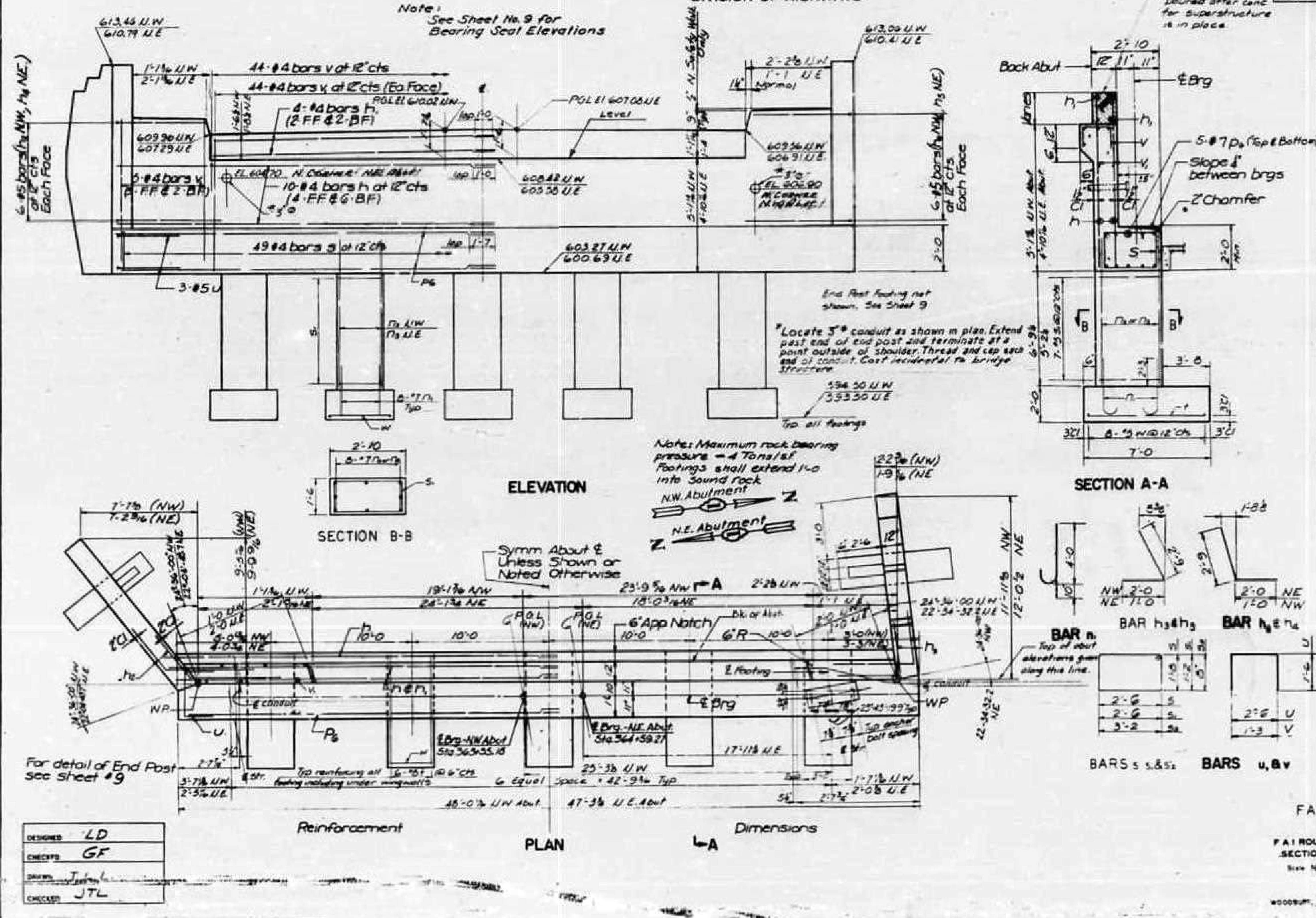
CONTRACT NO. 62R22

ILLINOIS | FED. AID PROJECT

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing16.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 7 — 10 SHEETS — WILL — 197 — 81



Note: See Sheet No. 9 for Bearing Seat Elevations
613.46 N.W.
610.79 N.E.
44-#4 bars v at 12" cts
44-#4 bars v1 at 12" cts (Ea Face)
4-#4 bars h1 (2-FF & 2-BF)
P.G.L. El. 607.08 N.E.
Level
6-#5 bars (h2-NW, h4-NE) at 12" cts Each Face
5-#4 bars v (3-FF & 2-BF)
10-#4 bars h at 12" cts (4-FF & 6-BF)
49-#4 bars s at 12" cts
3-#5 U
603.27 N.W.
600.69 N.E.
613.06 N.W.
610.41 N.E.
End Post footing not shown. See Sheet 9
*Locate 3" conduit as shown in plan. Extend past end of end post and terminate at a point outside of shoulder. Thread and cap each end of conduit. Cost incidental to bridge structure.
594.50 N.W.
533.30 N.E.
Top all footings
ELEVATION
SECTION B-B
Notes: Maximum rock bearing pressure = 4 Tons/sf. Footings shall extend 1'-0 into sound rock.
N.W. Abutment
N.E. Abutment
Back Abut
℄ Brg
5-#7 p6 (Top & Bottom)
Slope 1/4" between brgs
2" Chamfer
Shaded area to be poured after conc for superstructure is in place.
SECTION A-A
Symm About ℄ Unless Shown or Noted Otherwise
6" App Notch
℄ Footing
℄ Brg
℄ Brg-NW Abut Sta 363+55.18
℄ Brg-NE Abut Sta 364+59.21
6 Equal Space = 42-9 3/4 Typ
48'-0 1/4 N.W. Abut
47'-3 1/8 N.E. Abut
For detail of End Post see Sheet #9
Top reinforcing all footings including under wingwalls
Top of abut elevations given along this line.
Reinforcement
PLAN
Dimensions
BAR n1
BAR h3 & h5
BAR h2 & h4
BARS s, s1 & s2
BARS u & v

2 ABUTMENTS BILL OF REINFORCEMENT

Bar	No	Size	Lgth	Shape
h	40	#4	24'-4	
h1	14	#4	21'-9	
h2	12	#5	4'-9	
h3	12	#5	4'-9	
h4	12	#5	3'-9	
h5	12	#5	3'-9	
n1	104	#7	4'-10	
n2	52	#7	8'-7	
n3	52	#7	7'-0	
P6	40	#7	24'-7	
s	98	#4	9'-2	
s1	70	#5	8'-4	
s2	28	#5	8'-8	
v	88	#4	2'-9	
v1	196	#4	5'-10	
u	12	#5	5'-6	
t	84	#5	6'-6	
w	112	#5	2'-6	

2 ABUTMENTS BILL OF MATERIAL

Item	Unit	Quan
Reinforcement Bars	Lbs	11,120
Class X Concrete		
N.W. Abut	Cu Yds	46.6
N.E. Abut	Cu Yds	43.3
Rock Excavation		
N.W. Abut	Cu Yds	5
N.E. Abut	Cu Yds	14
Class A Excavation		
N.W. Abut	Cu Yds	670
N.E. Abut	Cu Yds	750

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

NW & NE ABUTMENTS
FA I 80 OVER RAMP AB
STA. 363+67.23
F A I ROUTE 80 — PROJECT
SECTION 99-3 (Str. 17) — WILL COUNTY
Scale NO SCALE — Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. — NEW YORK, N.Y. — CRYSTAL LAKE, ILL.

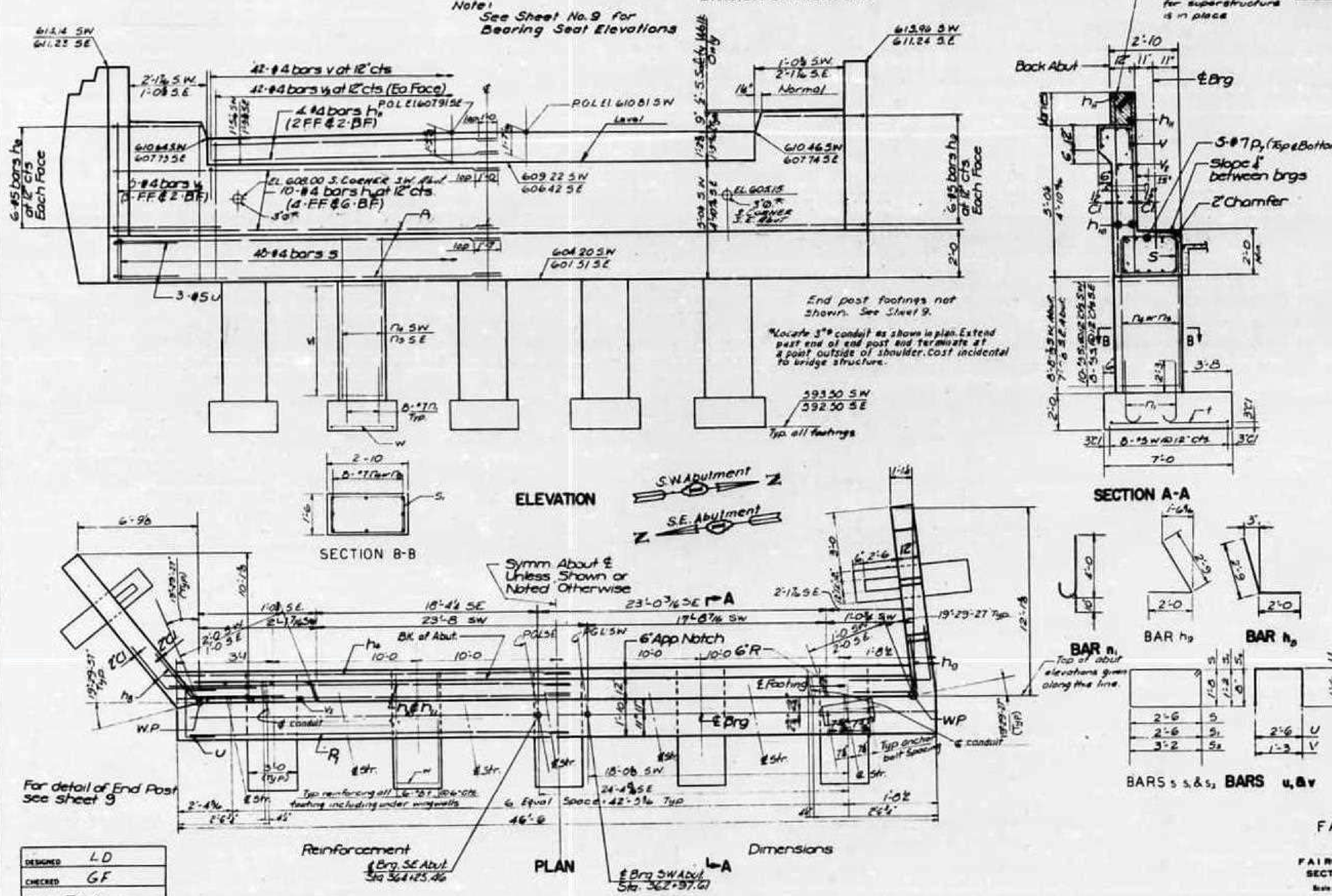
DESIGNED	LD
CHECKED	GF
DRAWN	
CHECKED	JTL

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 8
10 SHEETS

F.A.I. 80	99-5	WILL	197	82



2 ABUTMENTS
BILL OF REINFORCEMENT

Bar	No.	Size	Lgth	Shape
h_8	24	#5	4'-9	
h_9	24	#5	4'-9	
h_{10}	40	#4	23'-9	
h_{11}	16	#4	21'-0	
n_1	104	#7	4'-10	
n_4	52	#7	10'-6	
n_3	52	#7	8'-10	
P_1	40	#7	24'-0	
S	96	#4	9'-2	
S_1	90	#5	8'-4	
S_2	36	#5	8'-8	
V	84	#4	2'-9	
V_2	188	#4	5'-11	
U	12	#5	3'-6	
t	84	#8	6'-6	
w	112	#5	2'-6	

2 ABUTMENTS
BILL OF MATERIAL

Item	Unit	Quan
Reinforcement Bars	Lbs	11,680
Class X Concrete		
S.W. Abut	Cu. Yds	47.2
S.E. Abut	Cu. Yds	43.4
Rock Excavation		
S.W. Abut.	Cu. Yds	11
S.E. Abut.	Cu. Yds	14
Class A Excavation		
S.W. Abut.	Cu. Yds.	650
S.E. Abut.	Cu. Yds.	600

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

Note: Maximum Rock Bearing Pressure = 4 Tons/sf. Footings shall be extended 1'-0" into sound rock.

SW & SE
ABUTMENTS
FAI 80 OVER RAMP AB

STA. 363+67.23
F A I ROUTE 80
SECTION 99-5 (Str.-1)
PROJECT
WILL COUNTY
Scale NO SCALE
Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. — NEW YORK, N. Y. — CRYSTAL LAKE, ILL.

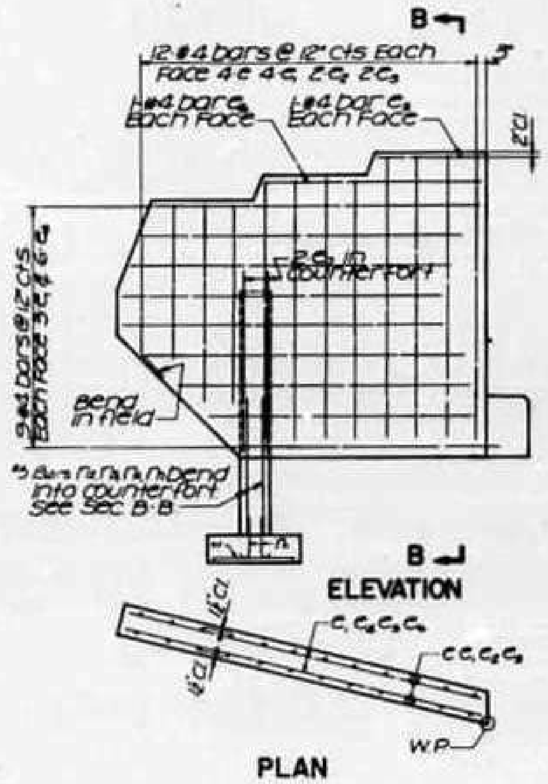
DESIGNED	LD
CHECKED	GF
DRAWN	T.L.L.
CHECKED	JTL

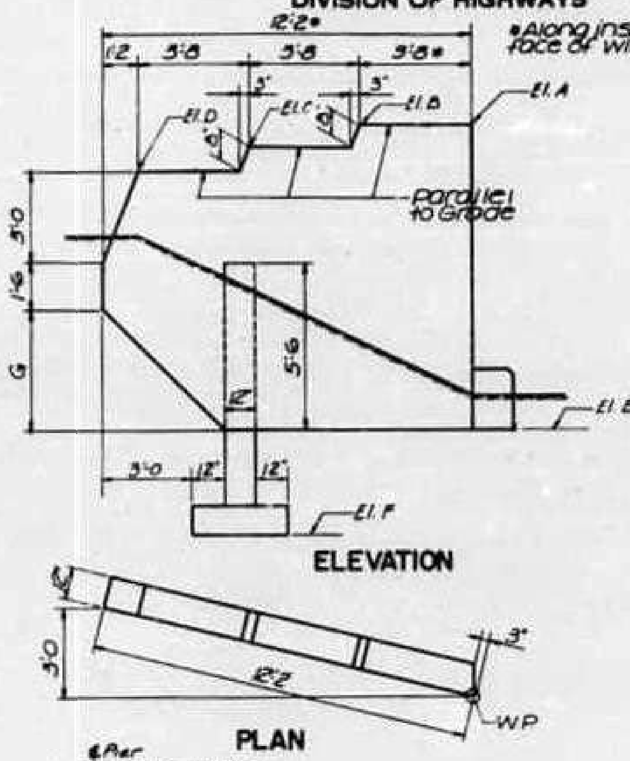
Revised ... Sta. ... Added Conc. ... per abut.
Raised end post for 12" rail (gutter elev. plus 3") 11-6-64 L.D.W.

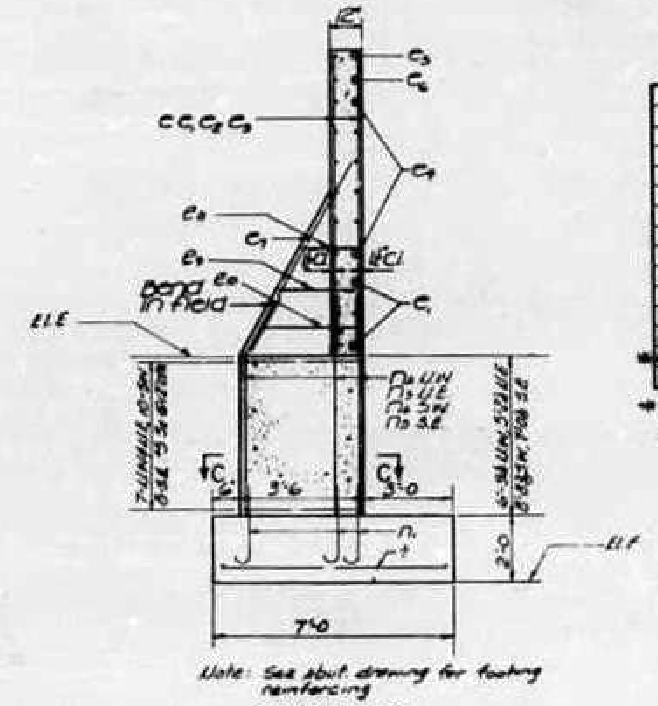
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 9
10 SHEETS





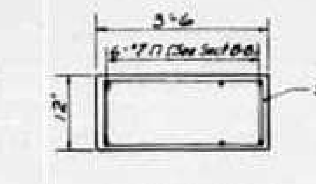


SECTION B-B

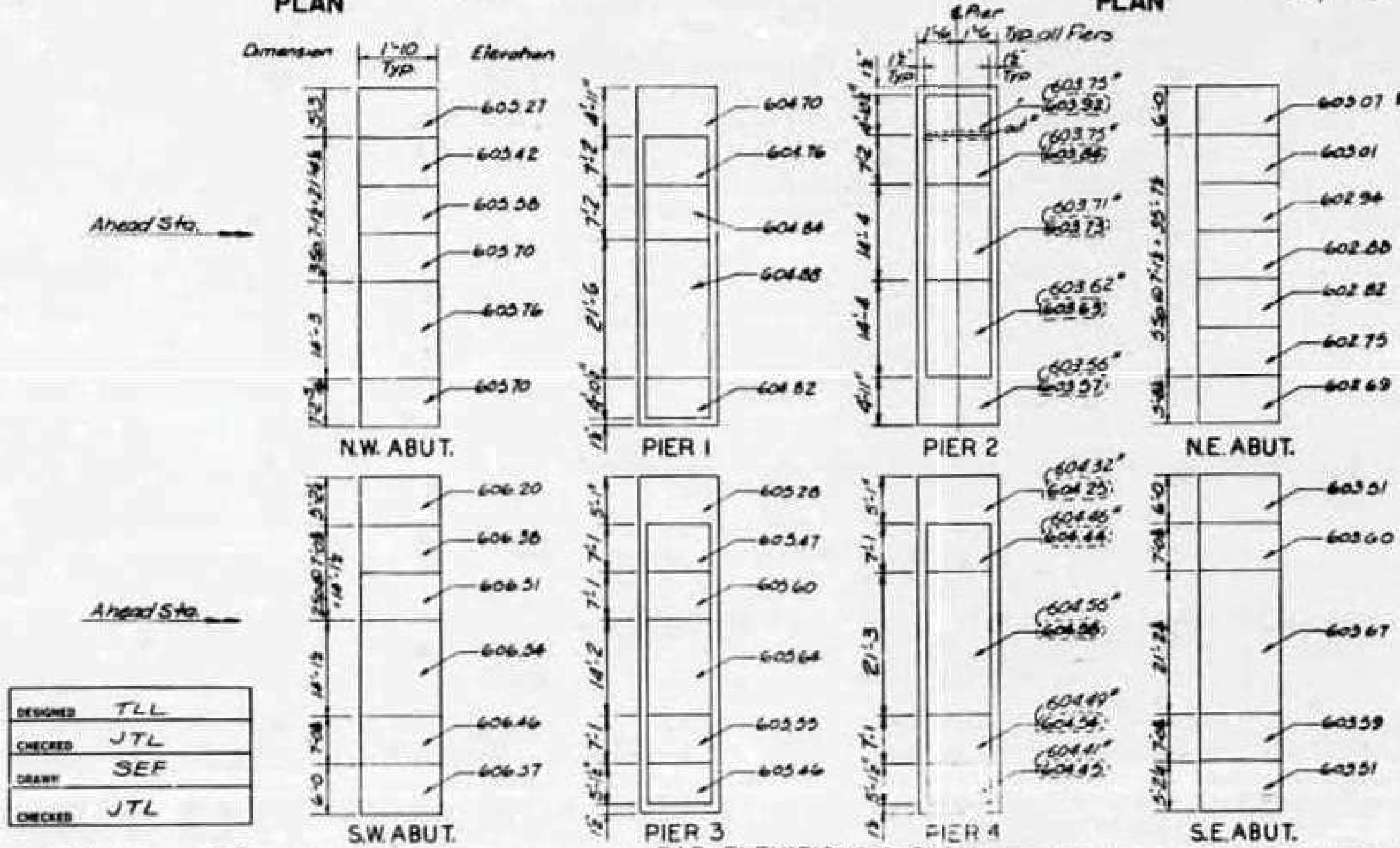
ONE END POST BILL OF MATERIAL

Bar	No.	Size	Lgth	Shape
c	8	#4	9-3	—
c_1	14	#4	8-6	—
c_2	4	#4	6-6	—
c_3	4	#4	5-0	—
c_4	12	#4	10-6	—
c_5	2	#3	3-6	—
c_6	2	#4	7-0	—
c_7	2	#5	7-0	—
e_8	1	#4	3-2"	⊏
e_9	1	#4	4-6"	⊏
e_{10}	1	#4	3-10"	⊏
* Reinforcement Bars			lbs	280

* Included in quantities on Sheets 7 & 8



SECTION C-C



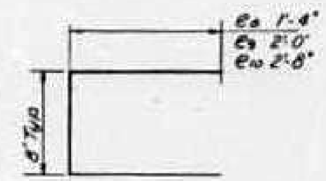
PAD ELEVATIONS & PLAN

* Class X Concrete		
N.W. Abut	Cu Yds	8.3
N.E. Abut	Cu Yds	8.0
S.W. Abut	Cu Yds	8.2
S.E. Abut	Cu Yds	7.0

* Included in quantities on Sheets 7 & 8

TABLE OF WINGWALL ELEVATIONS & DIMENSIONS

Abut	Pt.	A	B	C	D	E	F	G
N.W. Abut	N. Wall	613.00	613.14	612.84	611.95	603.27	594.50	4'-2⅜"
	S. Wall	613.46	613.54	612.96	612.35	603.27	594.50	4'-7"
N.E. Abut	N. Wall	610.79	610.70	609.95	609.19	600.69	593.50	4'-0"
	S. Wall	610.41	610.32	609.57	608.81	600.69	593.50	3'-7⅝"
S.W. Abut	N. Wall	613.96	614.04	613.44	612.85	604.20	593.50	4'-1⅝"
	S. Wall	614.14	614.22	613.62	613.03	604.20	593.50	4'-4"
S.E. Abut	N. Wall	611.23	611.16	610.39	609.63	601.51	592.50	3'-7⅝"
	S. Wall	611.24	611.15	610.40	609.64	601.51	592.50	3'-7⅝"



BARS e_8, e_9 & e_{10}

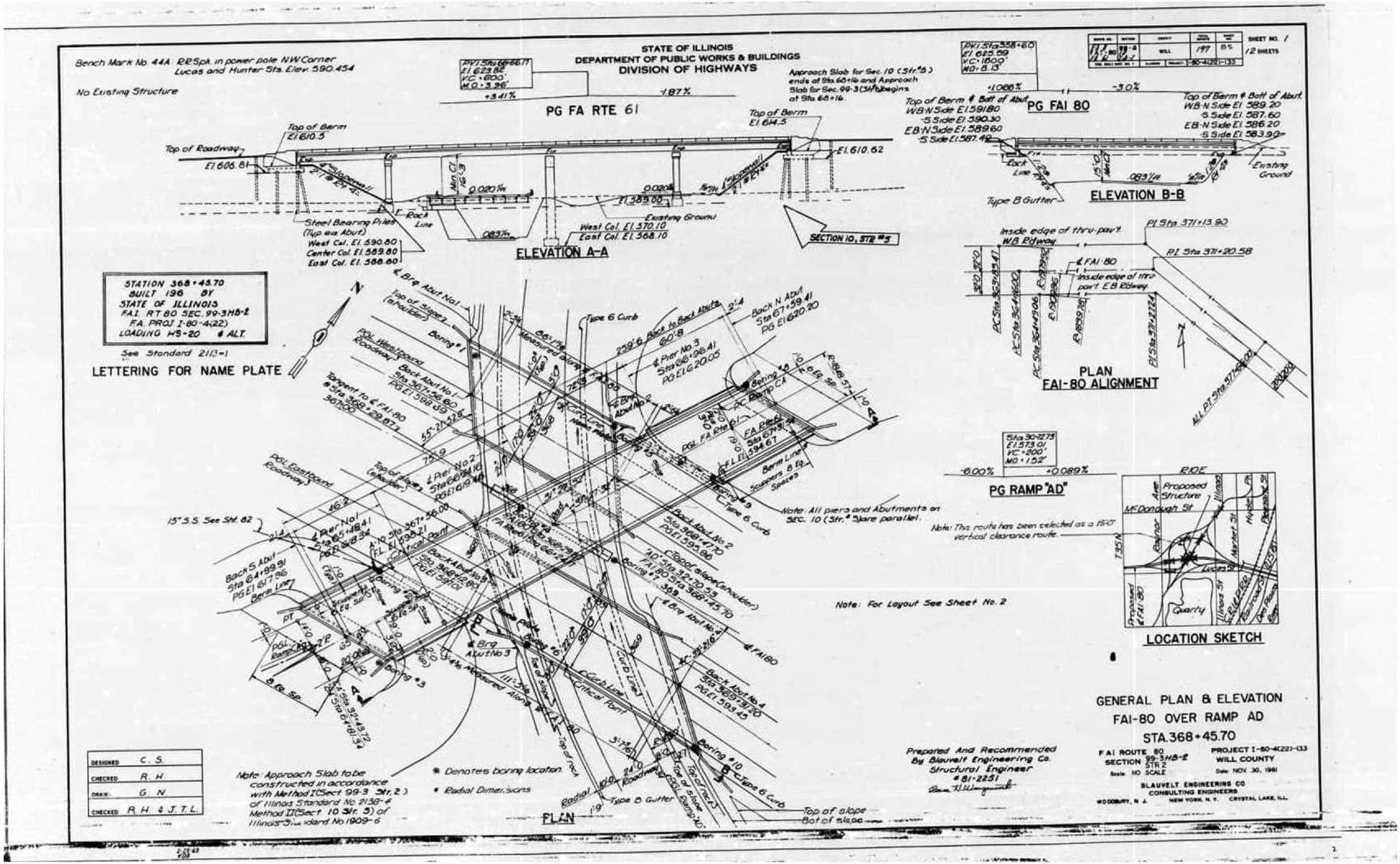
PIER ELEVATIONS & ABUTMENT DETAILS
FAI 80
OVER RAMP AB
STA. 363+67.23
F A I ROUTE 80 — PROJECT
SECTION 99-3 (Str. 1) — WILL COUNTY
Scale NO SCALE — Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBRIDGE, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

DESIGNED	TLL
CHECKED	JTL
DRAWN	SEF
CHECKED	JTL

Revised: Conc X Cu Yd...; Corrected wing wall elev...

FOR INFORMATION ONLY



STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
Bench Mark No. 44A R.R.Spk. in power pole N.W.Corner Lucas and Hunter Sts. Elev. 590.454
No Existing Structure
PG FA RTE 61
PG FAI 80
Approach Slab for Sec. 10 (Str. #5) ends at Sta. 68+16 and Approach Slab for Sec. 99-3 (Str. 2) begins at Sta. 68+16.
Top of Berm El. 610.5
Top of Berm El. 614.5
Top of Roadway
El. 606.81
El. 610.62
Steel Bearing Piles (Typ. ea. Abut.)
West Col. El. 590.80
Center Col. El. 589.80
East Col. El. 588.80
West Col. El. 570.10
East Col. El. 568.10
Existing Ground
ELEVATION A-A
SECTION 10, STR #5
Top of Berm & Bott of Abut.
W.B.-N Side El. 591.80
S Side El. 590.30
E.B.-N Side El. 589.60
S Side El. 587.40
W.B.-N Side El. 589.20
S Side El. 587.60
E.B.-N Side El. 586.20
S Side El. 583.90
Existing Ground
Type B Gutter
ELEVATION B-B
STATION 368+45.70
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 80 SEC. 99-3HB-2
F.A. PROJ. I-80-4(22)
LOADING HS-20 & ALT.
See Standard 2113-1
LETTERING FOR NAME PLATE
PI Sta. 371+13.90
PI Sta. 371+20.58
Inside edge of thru-pavt. W.B. Rdway.
Inside edge of thru-pavt. E.B. Rdway.
PLAN
FAI-80 ALIGNMENT
PG RAMP "AD"
Note: All piers and Abutments on Sec. 10 (Str. #5) are parallel.
Note: This route has been selected as a 15'-0" vertical clearance route.
Note: For Layout See Sheet No. 2
LOCATION SKETCH
Proposed Structure
McDonough St
Quarry
GENERAL PLAN & ELEVATION
FAI-80 OVER RAMP AD
STA. 368+45.70
F.A.I. ROUTE 80
SECTION 99-3HB-2 STR. 2
Scale: NO SCALE
PROJECT I-80-4(22)-133
WILL COUNTY
Date: NOV. 30, 1961
BLAUVELT ENGINEERING CO
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.
Prepared And Recommended By Blauvelt Engineering Co. Structural Engineer #81-2251
Note: Approach Slab to be constructed in accordance with Method I (Sect. 99-3 Str. 2) of Illinois Standard No. 2138-4 Method II (Sect. 10 Str. 5) of Illinois Standard No. 1909-6
Denotes boring location
Radial Dimensions
PLAN
DESIGNED C. S.
CHECKED R. H.
DRAWN G. N.
CHECKED R. H. & J.T.L.

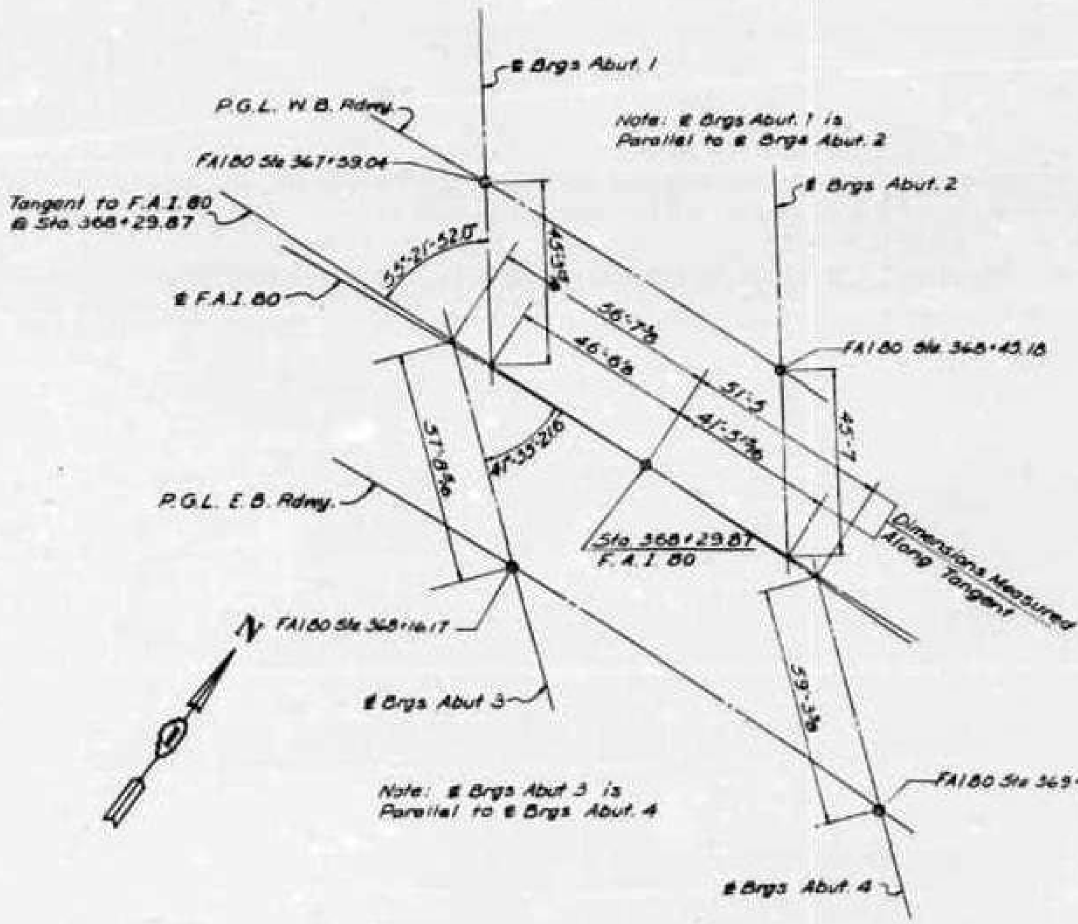
FOR INFORMATION ONLY

WSP USA Inc. 30 N. LASALLE STREET SUITE 4200 CHICAGO, IL 60602 TEL: (312) 782-8150 FAX: (312) 782-1684	USER NAME = USCP702533	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS	F.A.I. RTE. 80	SECTION FAI 80 21 INTERCHANGE	COUNTY WILL
		DRAWN -	REVISED -			TOTAL SHEETS 1209	SHEET NO. 840	
	PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -			CONTRACT NO. 62R22		
	PLOT DATE = 4/22/2025	DATE -	REVISED -		SHEET 20 OF 62 SHEETS	ILLINOIS FED. AID PROJECT		

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing20.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 2
12 SHEETS



LAYOUT OF ABUTMENTS

DESIGN STRESSES

Reinforced Concrete:
- fc' = 3,500 psi.
- fs = 20,000 psi.
- n = 10.
- fc = 1,400 psi. (Except Footings)
- fc = 1,000 psi. (Footings)
- Vc = 90 psi. (Except Footings)
- Vc = 75 psi. (Footings)

Structural Steel:
- fs = 20,000 psi.

Maximum Soil Pressure = 3½ Tons/S.F.
Loading: HS-20-44 & Alt.

GENERAL NOTES

STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL STEEL, A.S.T.M. DESIGNATION A36.

RIVETS SHALL BE 3/4" ⌀ WITH 13/16" ⌀ OPEN HOLES UNLESS NOTED.

CLASS X CONCRETE SHALL BE USED THROUGHOUT. COARSE AGGREGATE USED IN PARAPETS AND END POSTS SHALL BE FREE OF CHERT, FLINT, LIMONITE, LIGNITE AND SOFT SANDSTONE.

THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.19 OF THE STANDARD SPECIFICATIONS.

ALL WELDING SHALL COMPLY WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, OF THE AMERICAN WELDING SOCIETY AND THE SPECIAL PROVISIONS.

ALL ROCKERS, BOLSTERS, BEARING PLATES, LEAD PLATES, PINTLES, AND ANCHOR BOLTS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 51.15 OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

ANCHOR BOLTS SHALL BE SET BEFORE CONNECTING DIAPHRAGMS OVER SUPPORT. SPACE REINFORCING TO MISS ANCHOR BOLTS.

EXPANSION GUARDS AND PLATES SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 51.13 (d) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. SEE ARTICLES 56.1 TO 56.5 INCLUSIVE OF THE STANDARD SPECIFICATIONS.

ALL SURFACES OF EXPANSION GUARDS INACCESSIBLE AFTER ERECTION SHALL BE GIVEN TWO SHOP COATS OF RED LEAD PAINT. THE 3/4" ⌀ WELDED STUDS SHALL NOT BE PAINTED.

PERMANENT FORMS WILL NOT BE PERMITTED IN FORMING CONCRETE FLOOR.

Excavation for portions of structures in the embankment shall not be classified.

TOTAL BILL OF MATERIALS
Section 99-3 (Str. 2)

Item	Unit	Super	Sub.	Total
Rock Excavation for Structures	Cu. Yd.	—	55	55
Class X Concrete	Cu. Yd.	260.3	192.2	452.5
Furnishing & Erecting Structural Steel	Lb.	443,890	—	443,890
Reinforcement Bars	Lb.	62,490	14,890	75,380
Name Plate	Each	2	—	2
Aluminum Handrail	Lin. Ft.	407	—	407
Bridge Seat Sealant	L.S.		0.1	0.1
Protective Coat	Sq. Yd.	1082	—	1082

DESIGNED	G.F.
CHECKED	J.T.L.
DRAWN	J. J. H.
CHECKED	J.T.L.

GENERAL NOTES & LAYOUT
FAI 80 OVER RAMP AD
STA. 368+45.70

F.A.I. ROUTE 80
SECTION 99-3 (STR. 2)
Scale: No Scale
PROJECT
WILL COUNTY
Date: Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

USER NAME = USCP702533	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS	F.A.I. RTE. 80	SECTION FAI 80 21 INTERCHANGE	COUNTY WILL	TOTAL SHEETS 1209	SHEET NO. 841
PLOT SCALE = 7:11.99616 ':" / in.	DRAWN -	REVISED -							
PLOT DATE = 4/22/2025	CHECKED -	REVISED -		SHEET 21 OF 62 SHEETS	CONTRACT NO. 62R22				
	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

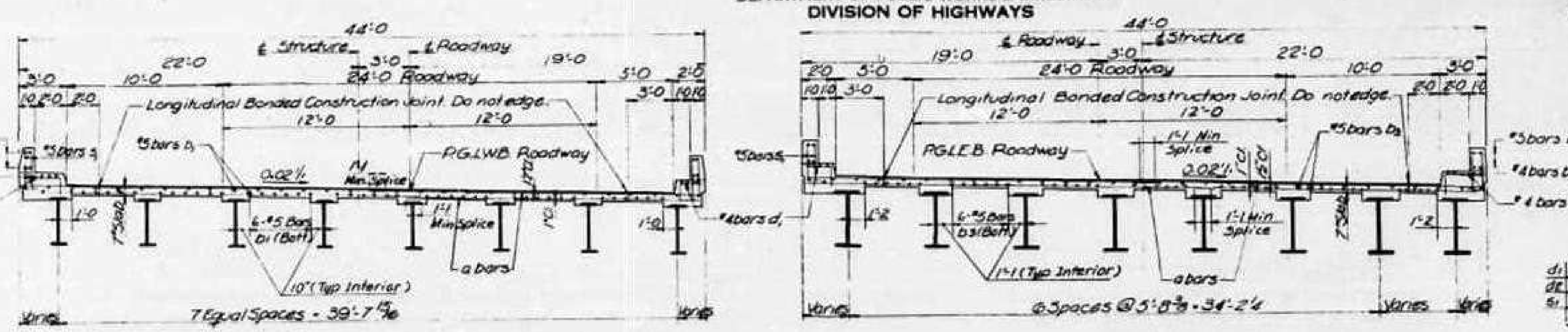
WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

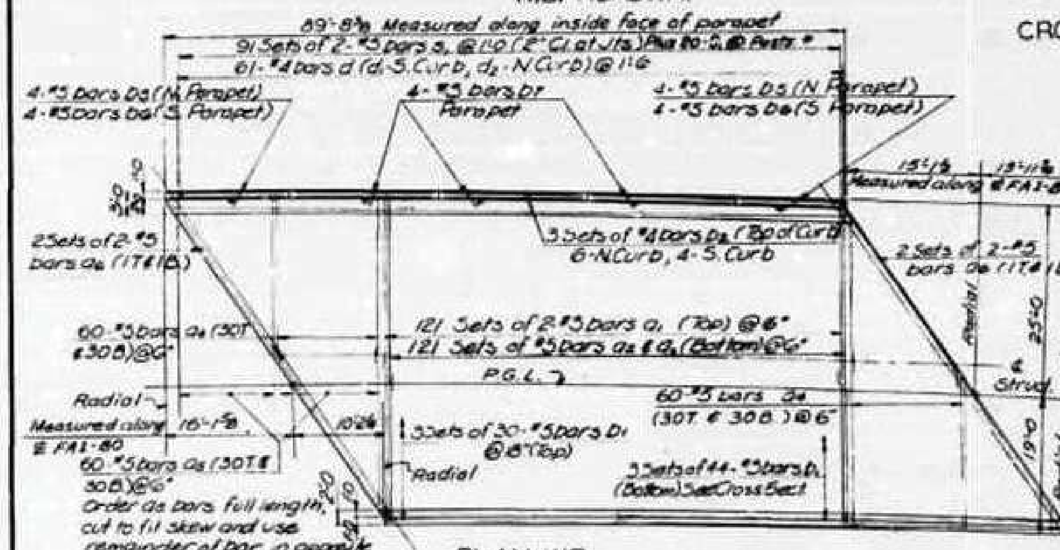
MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing21.dgn

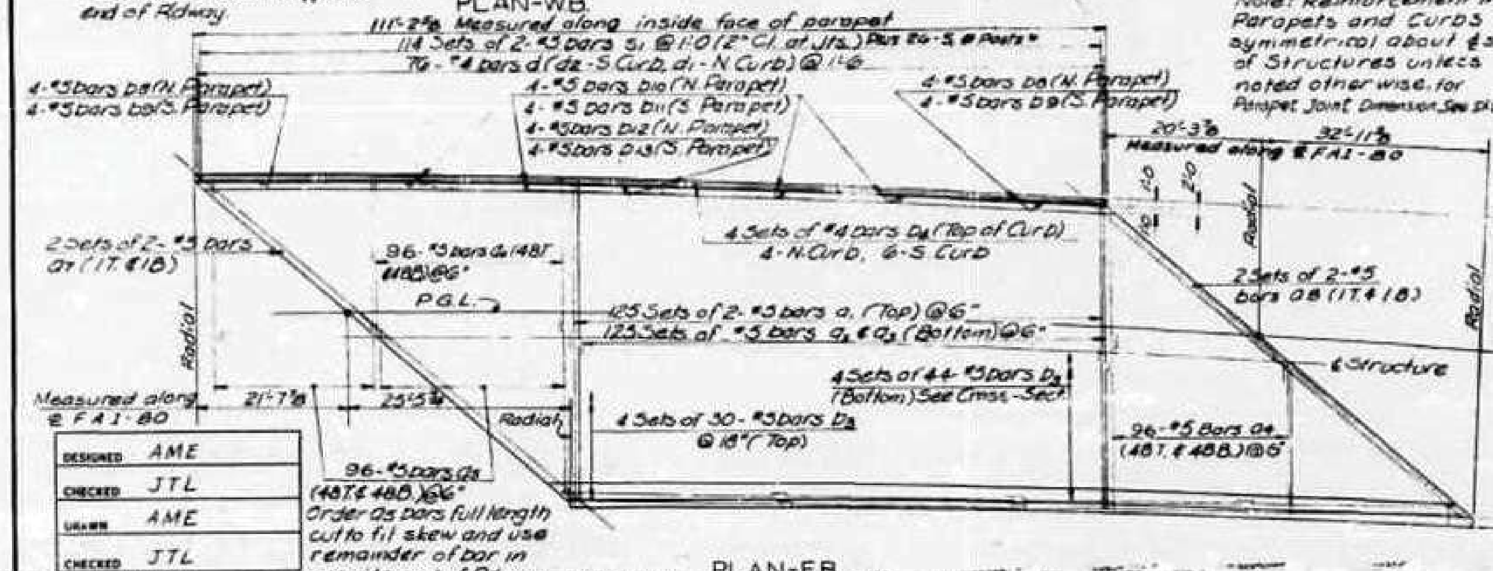
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

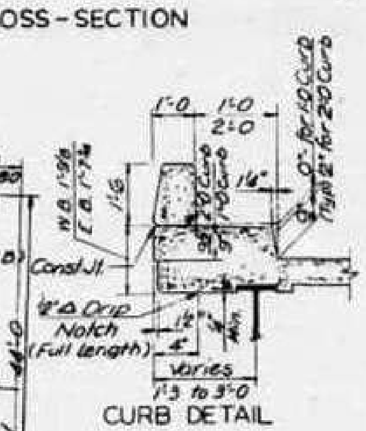
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-3	WILL	197	87

SHEET NO. 3
12 SHEETS

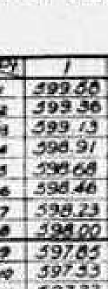




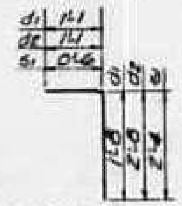




Note: Reinforcement in Parapets and Curbs symmetrical about ℄s of Structures unless noted otherwise. for Parapet Joint Dimension See Sht 6



* Place 2-#5 S_1 bars at each handrail post on inside (roadway) face of parapet. (92 S_1 bars included for posts)



BARS d & s

BILL OF REINFORCEMENT

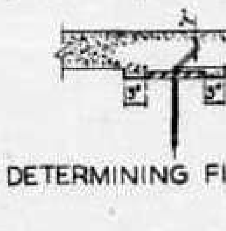
Bar	No.	Size	Length	Shape
a1	492	3	22'-4	——
a2	246	3	23'-0	——
a3	246	3	19'-8	——
a4	312	3	21'-6	——
a5	312	5	23'-6	——
a6	8	3	27'-6	——
a7	4	5	32'-9	——
a8	4	5	35'-0	——
b1	222	5	30'-10	——
b2	30	4	30'-10	——
b3	296	5	28'-11	——
b4	40	4	28'-11	——
b5	8	3	13'-3	——
b6	8	3	13'-10	——
b7	24	3	19'-2	——
b8	8	3	14'-7	——
b9	8	3	14'-0	——
b10	16	3	17'-10	——
b11	16	3	18'-6	——
b12	4	3	8'-9	——
b13	4	3	8'-1	——
d1	137	4	2'-9	
d2	137	4	3'-9	
S1	912	5	2'-10	

After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on the D.L. Deflection Diagram. From these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so attained subtracted from the theoretical grade elevations minus floor thickness equals fillet heights above top of beams.

BILL OF MATERIALS

Class "X" Concrete	Cu.Yd.	260.3
Reinforcement Bars	Lbs.	60,490
Structural Steel**	Lbs.	449,890

** Structural Steel includes weight of Rockers, Bolsters, Bearing Plates, Lead Plates, Pintles and Anchor Bolts
Estimated Wt. = 10,537 #



METHOD OF DETERMINING FILLET HEIGHT "t"

ELEVATIONS - TOP OF SLAB***

Elevations are not adjusted for dead load deflections.

	Sta. / Pt.	1	2	3	4	5	6	7	8	9	10	11	12
West Bound	S1	599.58	599.28	598.98	598.68	598.38	598.08	597.78	597.49	597.19	596.96	——	——
	S2	599.36	599.06	598.75	598.45	598.15	597.86	597.56	597.26	596.96	596.73	——	——
	S3	599.13	598.83	598.53	598.23	597.93	597.63	597.33	597.03	596.74	596.51	——	——
	S4	598.91	598.61	598.30	598.00	597.70	597.40	597.10	596.80	596.51	596.28	——	——
	S5	598.68	598.38	598.08	597.77	597.47	597.17	596.87	596.57	596.28	596.05	——	——
	S6	598.46	598.15	597.85	597.55	597.24	596.94	596.64	596.34	596.05	595.81	——	——
	S7	598.23	597.93	597.62	597.32	597.02	596.71	596.41	596.11	595.82	595.58	——	——
	S8	598.00	597.70	597.39	597.09	596.79	596.48	596.18	595.88	595.58	595.35	——	——
East Bound	S9	597.85	597.54	597.23	596.92	596.61	596.30	596.00	595.69	595.39	595.09	594.78	594.50
	S10	597.53	597.22	596.91	596.60	596.29	595.99	595.68	595.38	595.07	594.77	594.47	594.19
	S11	597.22	596.91	596.60	596.29	595.98	595.67	595.36	595.06	594.76	594.45	594.15	593.87
	S12	596.90	596.59	596.28	595.97	595.66	595.35	595.05	594.74	594.44	594.14	593.83	593.55
	S13	596.59	596.27	595.96	595.65	595.34	595.04	594.73	594.42	594.12	593.82	593.52	593.23
	S14	596.27	595.96	595.65	595.33	595.03	594.72	594.41	594.11	593.80	593.50	593.19	592.91
	S15	595.95	595.64	595.33	595.02	594.71	594.40	594.09	593.79	593.48	593.18	592.88	592.59
	S16	595.69	595.37	595.06	594.75	594.43	594.12	593.82	593.51	593.20	592.90	592.59	592.27

*** Where curb is over stringer, elevation shown is that of the projection of top of slab along its cross slope.
See sheet 4 for locations of points.

SLAB PLAN & CROSS-SECTION
FAI 80 OVER RAMP AD

FAI 80 STA. 368+45.70
F A I ROUTE 80 PROJECT
SECTION 99-3 (STR. #2) WILL COUNTY
Scale None Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

DESIGNED	AME
CHECKED	JTL
DRAWN	AME
CHECKED	JTL

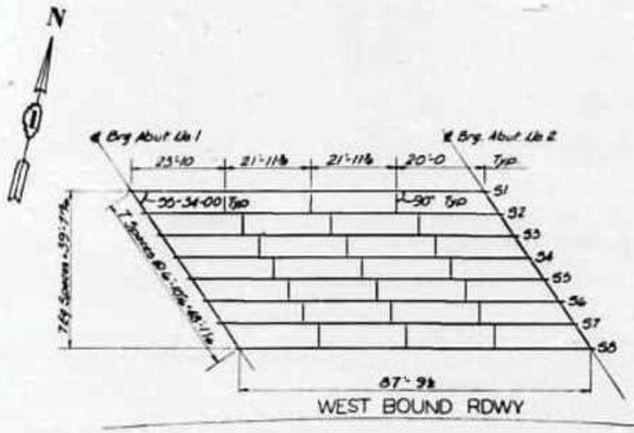
Revised quantities: Reinf. Bars 60,220 to 60,490 lb., Structural Steel Bars 448,440 to 449,890 lb. 11-13-64 L.A.W.

FOR INFORMATION ONLY

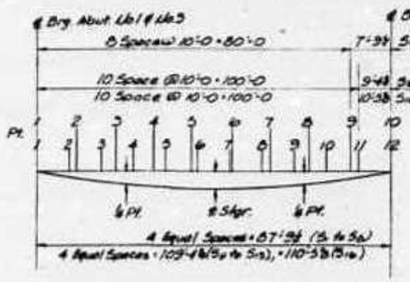
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

		WILL	199	88

SHEET NO. 4
12 SHEETS



WEST BOUND RDWY



DEAD LOAD DEFLECTION DIAGRAM

W.B STRINGERS

Skyr. \ Pt	℄ Pts	8
S1	1 7/16"	2 5/32"
S1 to S8	1 1/16"	1 7/8"
S8	1 1/16"	1 21/32"

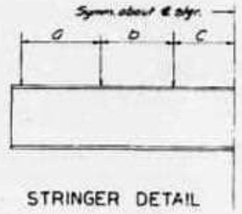
Deflections for W.B. stringers are for concrete only.

E.B STRINGERS

Skyr. \ Pt	℄ Pts.			8		
	Steel	Conc	Total	Steel	Conc	Total
S8	5/8"	2 3/16"	2 13/16"	1 5/16"	2 7/32"	3 1/32"
S8 to S9	1 3/16"	1 3/16"	2 3/8"	1 9/16"	2 9/16"	3 3/8"
S9	1 23/32"	2 5/32"	2 7/8"	1 1/16"	3 1/16"	4 1/8"

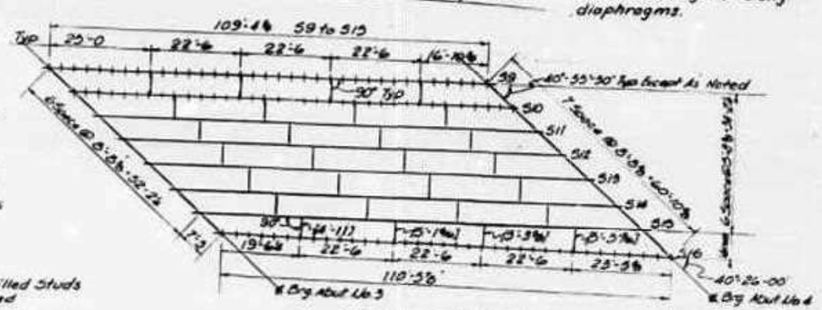
E.B. Stringers shall be cambered for total dead load deflection.

DEAD LOAD DEFLECTIONS



STRINGER DETAIL

Dimensions shown thus [7] are c. to c. stringers along diaphragms.



EAST BOUND RDWY

FRAMING PLAN

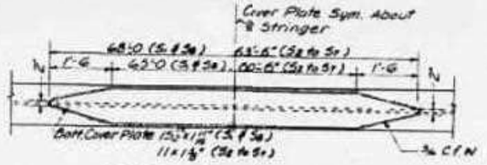
Note:
E.B. interior stringer intermediate stiffeners shown are typical for all E.B. interior stringers.
Flange and web splices to clear intermediate stiffeners by 1'-0. Intermediate stiffeners to be spaced equally between cross frames with number as shown on framing plan.

Skyr. \ Pt		Abuts 1&3	Abuts 2&4
West Bound	S1	598.98	596.96
	S2	598.76	596.73
	S3	598.53	595.91
	S4	598.31	595.68
	S5	598.08	595.45
	S6	597.86	595.21
	S7	597.63	594.98
	S8	597.40	594.75
East Bound	S9	597.19	593.84
	S10	596.87	593.53
	S11	596.56	593.21
	S12	596.24	592.89
	S13	595.93	592.57
	S14	595.61	592.25
	S15	595.29	591.93
	S16	595.02	591.60

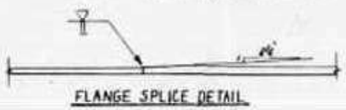
ELEVATIONS
TOP OF BEAM

Skyr. Mark	Size	Shear Connector C Pitch	C Lgth	D Pitch	D Lgth	C Pitch
S1 to S8	36 WF 260	9½"	14'-3"	14"	15'-2"	18"
S8 to S9	36 WF 194	9⅝"	14'-3"	14"	15'-2"	18"
S9 to S16	See Detail This Sheet	11"	10'-1"	13"	9'-9"	18"

BEAM SCHEDULE &
SHEAR CONNECTOR SPACING

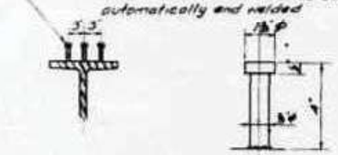


DETAIL OF COVER PLATE



FLANGE SPLICE DETAIL

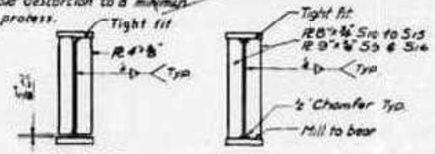
Note:
-Electrodes conforming to either the E60XX or the E70XX series of Tentative Specifications for Mild Steel Arc Welding Electrodes (AWS Designation A5.1; ASTM Designation A233) shall be used for A36 steel in thicknesses of ½inch or less. Only E70XX low hydrogen electrodes shall be used on thicknesses of A36 steel over ½inch.



SHEAR CONNECTOR DETAILS

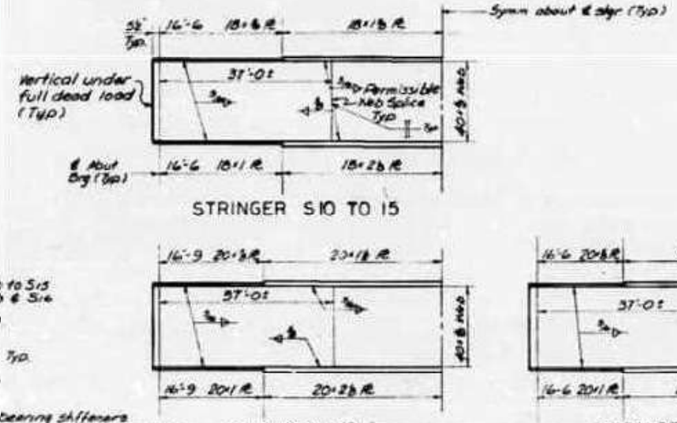
Shear connectors included in quantity of structural steel.
Welding Notes see Special Provisions for Welding.
The contractor shall submit to the Engineer for his approval a welding procedure for the fabrication of all parts.
All welding shall be done in accordance with the "Standard Specifications for welded Highway and Railway Bridges" The contractor shall provide the proper weld details as provided in paragraphs 221 or 220 (preference shall be given to detail as per paragraph 221) in accordance with the welding procedure and positions that are approved by the Engineer.
Preference shall be given to flat position welding where feasible. In general all welded splices in webs and flanges shall be made before welding flanges to webs.
Stringer sections shall be assembled for position welding with adequate supports to maintain proper dimensions and alignments and to hold distortion to a minimum.
All welding shall be by the submerged arc process.

DESIGNED	G. F.
CHECKED	R. H. W.
DRAWN	T. L. L.
CHECKED	G. F. & J. T. L.



STIFFENER DETAILS

Note: All bearing stiffeners to be vertical. All intermediate stiffeners to be normal to flanges.



STRINGER S10 TO 15

STRINGER S9

STRINGER S16

FRAMING PLAN & STEEL DETAILS
FAI 80 OVER
RAMP AD
STA. 368+45.70
FAI ROUTE 80
SECTION 59 R (STR. 2)
PROJECT
WILL COUNTY
Scale NO SCALE
Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS

Revised: Add Electrode note for welding A36 Steel, and note Shear connectors included in quantity of Struct Steel. 12-26-61 Add note. All welding by submerged arc process. Add Flange splice detail.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

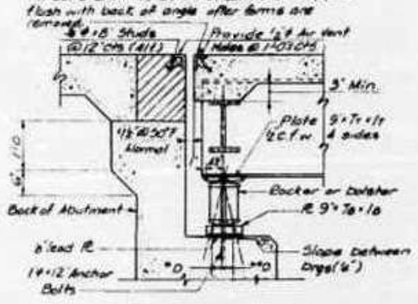
SHEET 23 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	843
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

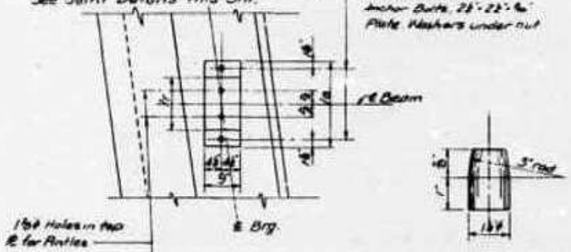
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

F.A.I. RTE. 80	SECTION 99-3 (Str-2)	WILL	177	69	SHEET NO. 5 12 SHEETS

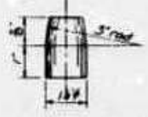
Angles shall be held securely in place, while pouring concrete, with ⅝"ϕ bolts in ⅞"ϕ holes set on gageline at 12" Ctrs. All bolts shall be burned, sawed or chipped flush with back of angle after forms are removed.



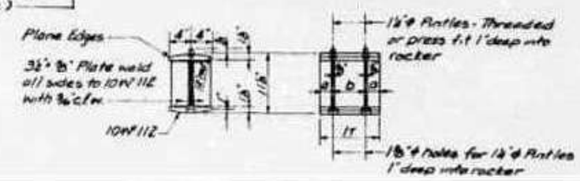
SECTION AT ABUTMENTS
Abuts. 2 & 4 Shown
Abuts 1 & 3 Similar but use fixed brg. See Joint Details this Sht.



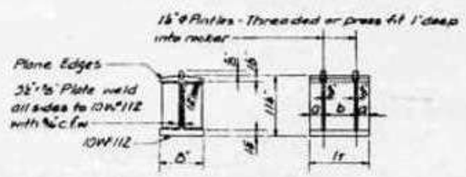
PLAN



DETAIL OF PINTLE



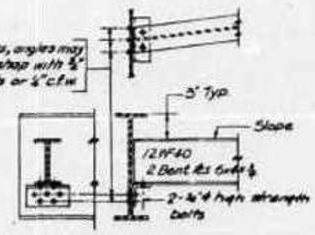
DETAIL OF EXPANSION BEARING



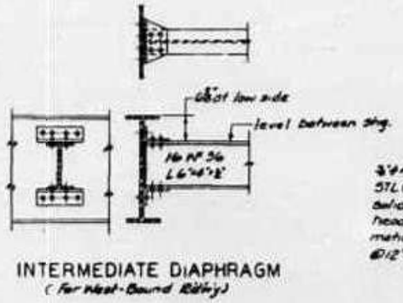
DETAIL OF FIXED BEARING

DESIGNED	T.L.L.
CHECKED	G.F. & J.T.L.
DRAWN	T.L.L.
CHECKED	G.F. & J.T.L.

In lieu of shop rivets, angles may be attached in the shop with ⅞" high strength bolts or ⅜" c.f.w.



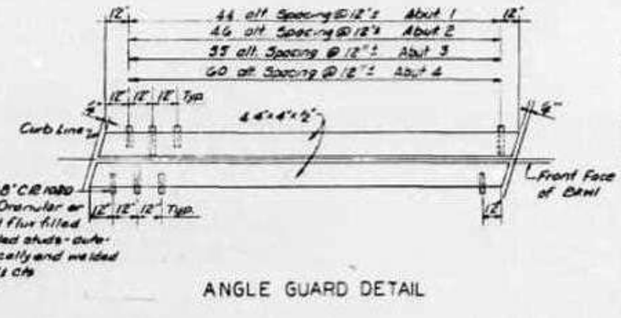
END DIAPHRAGM
(For West-Bound Rdwy)



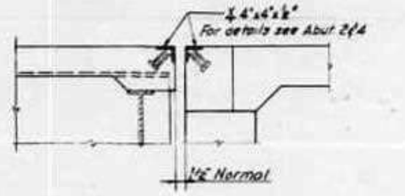
INTERMEDIATE DIAPHRAGM
(For West-Bound Rdwy)

DIMENSIONS FOR BEARINGS

Stgr.	Bearing	Tr	Tb	lr	lb	D	a
S1 & S6	Exp.	1"	1⅛"	18'	258'	2'6"	3"
S8	Fix	1"	1"	18'	228'	2'0"	3"
S2 to S7	Exp.	1"	1⅛"	13'	208'	4'8"	3½"
	Fix	1"	1"	13'	208'	4'8"	3½"
S9 & S16	Exp.	1"	1⅛"	21'	268'	2'6"?	3"
	Fix	1"	1"	21'	268'	2'6"?	3"
S10 to S15	Exp.	1"	1⅛"	13'	268'	2'6"?	3"
	Fix	1"	1"	13'	268'	2'6"?	3"



ANGLE GUARD DETAIL

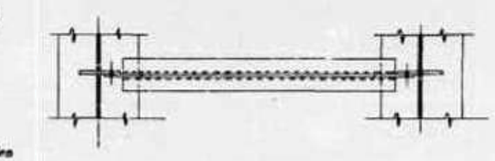


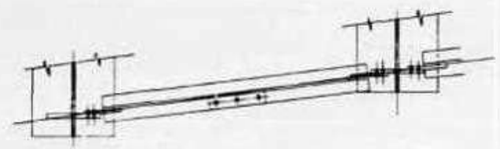
FIXED JOINT DETAILS
AT ABUTMENTS 1 & 3

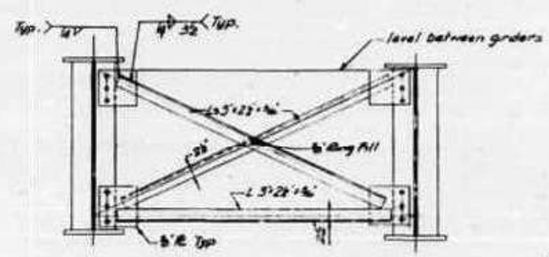
Anchor bolts shall be grouted into drilled holes after beams are in place, or bolts at fixed abutments may be built into the masonry.

"D" = ⅛"/100' of exp. for every 15° below the normal temp. of 50°F.

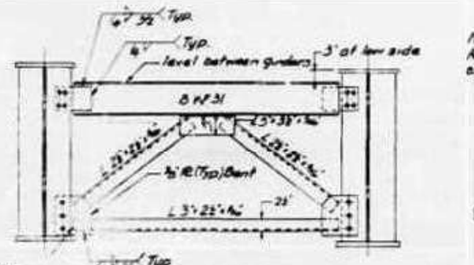
"D" = ⅛"/100' of exp. for every 15° above the normal temp. of 50°F.







INTERMEDIATE CROSS FRAME
(For East-Bound Rdwy)



END CROSS FRAME
(For East-Bound Rdwy)

Notes:
All field connections on welded Plate Girders are to be made with high strength ⅞"ϕ bolts

BEARING & DIAPHRAGM DETAILS
FAI 80 OVER RAMP AD
STA 368+45.70
FAI ROUTE 80
SECTION 99-3 (Str-2)
PROJECT
WILL COUNTY
Scale: No Scale
Date: Nov 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
MOBERLY, MO. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

Revised 2-26-62 Plate of 4 Stgr. Diaphragms, as shown on final Sht. 4, Sec. "Steel" Bridge Intermediate Cross Frames (Typ. new)

Added guard angles at Abuts 1 & 3 (1A80 "B", 2A80 "B") Added notes for anchor bolts and setting brgs.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '=' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 24 OF 62 SHEETS

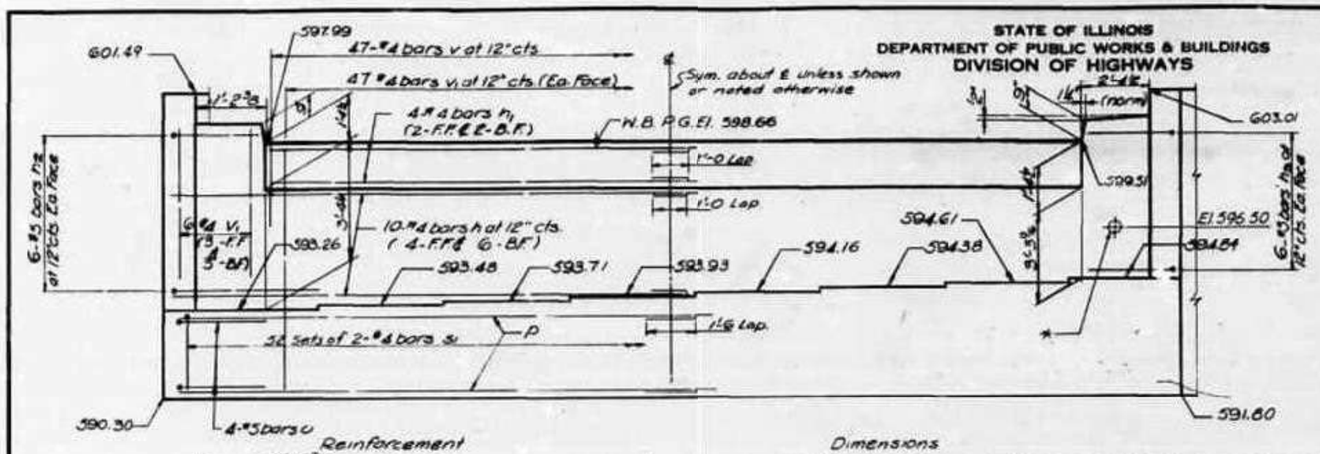
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	844
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
FILE NAME: pw:\transystems-pw.bentley.com:transyscorp-pw1-hosted\Documents\Projects_2018\CH401140118002203-WSP\CAD\62R22-INT-4 (Center)\Sheets\Structural\Existing Bridge Plans\0990186-62R22-Existing24.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

		WILL	197	91

SHEET NO. 7
12 SHEETS

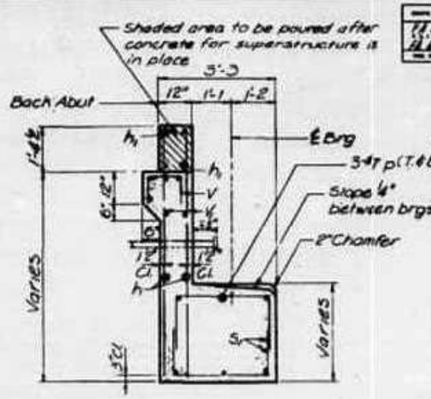


Reinforcement

Dimensions

* Locate 3" ℄ conduit as shown in plan. Extend past end of end post and terminate at a point outside of shoulder. Thread and cap each end of conduit. Cost incidental to bridge structure.

Note: For Details of End Post See Sheet No. 11



SECTION A-A

ONE ABUTMENT
BILL OF REINFORCEMENT

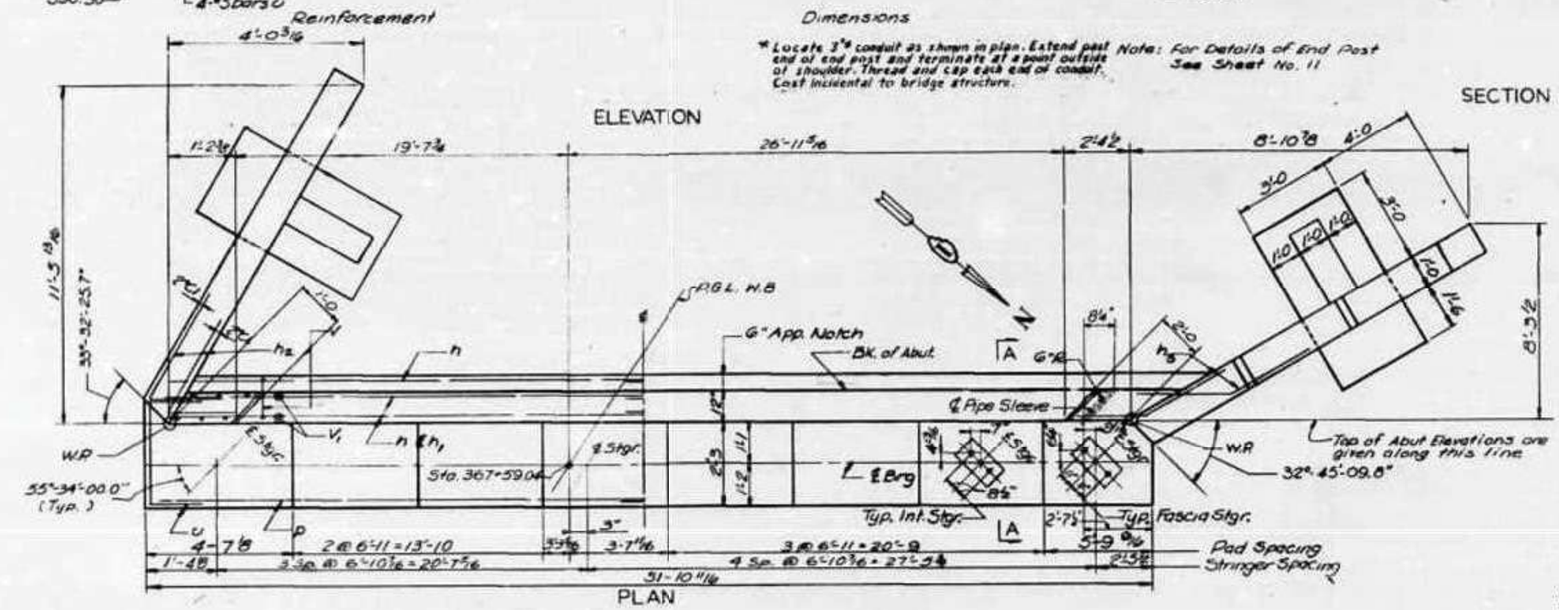
Bar	No	Size	Lgth	Shape
h	20	#4	26'-6	
h1	8	#4	23'-10	
h2	12	#5	3'-9	
h3	12	#5	4'-9	
p	12	#7	26'-3	
si	104	#4	6'-9	
u	8	#5	5'-10	
v	47	#4	2'-9	
v1	100	#4	7'-3	

ONE ABUTMENT
BILL OF MATERIAL

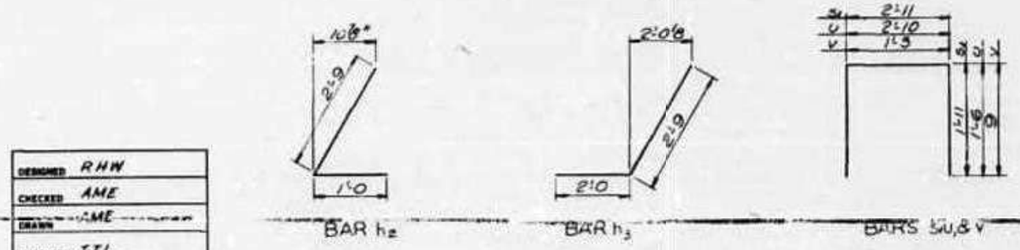
Item	Unit	Quan
Class X Concrete Cu Yds		38.8
Reinforcement Bars	lbs	3200
Rock Excavation	Cu Yds	14

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

ELEVATION



Note: All footings to be founded on Rock. Maximum Bearing Pressure = 3.5 Tons/s.f.



DESIGNED	RHW
CHECKED	AME
DRAWN	AME
CHECKED	JTL

ABUTMENT NO. 1
FAI 80 OVER RAMP AD
STA 368+45.70
FAI ROUTE 80
SECTION 99-3 (STR-2)
PROJECT
WILL COUNTY
Date: Nov. 30, 1987
SCALE
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
NEW YORK, N.Y. CRYSTAL LAKE, ILL.

Based end posts (gutter elev. plus 3'-6") for new rail, conc. plus 0.2 cu. yds. 11-13-84 L.D.W.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 7:11.99616 '-" / in.	CHECKED -	REVISED -
PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

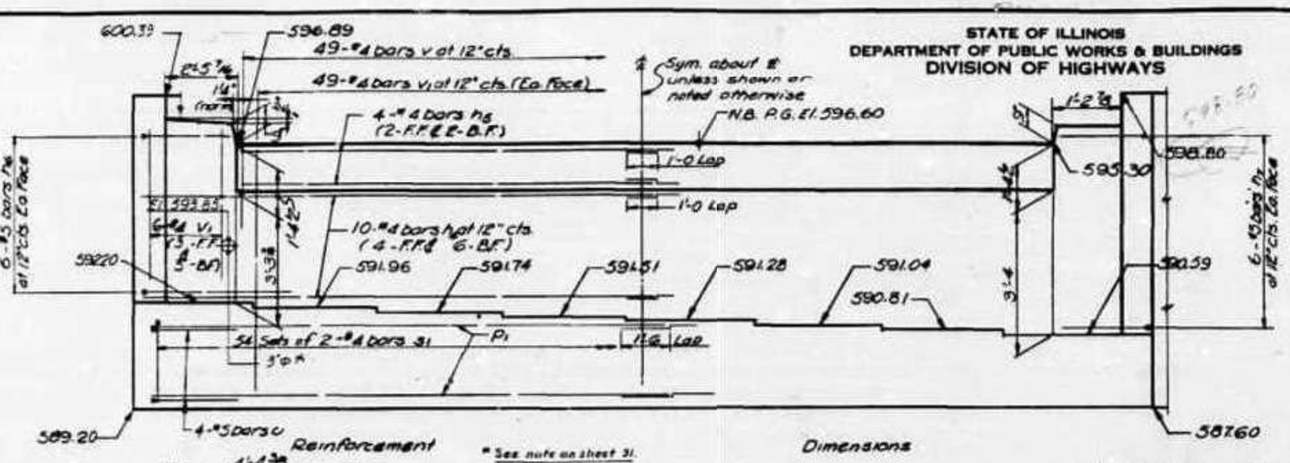
SHEET 25 OF 62 SHEETS

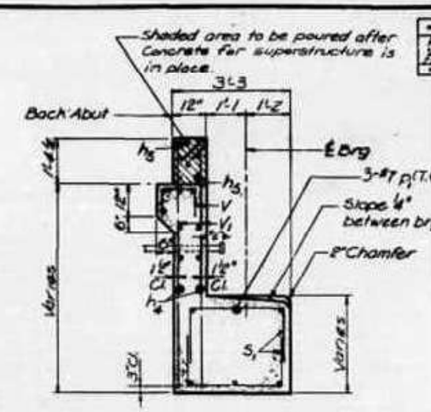
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	845
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

117	77-3	WILL	197	92

SHEET NO. 8
12 SHEETS





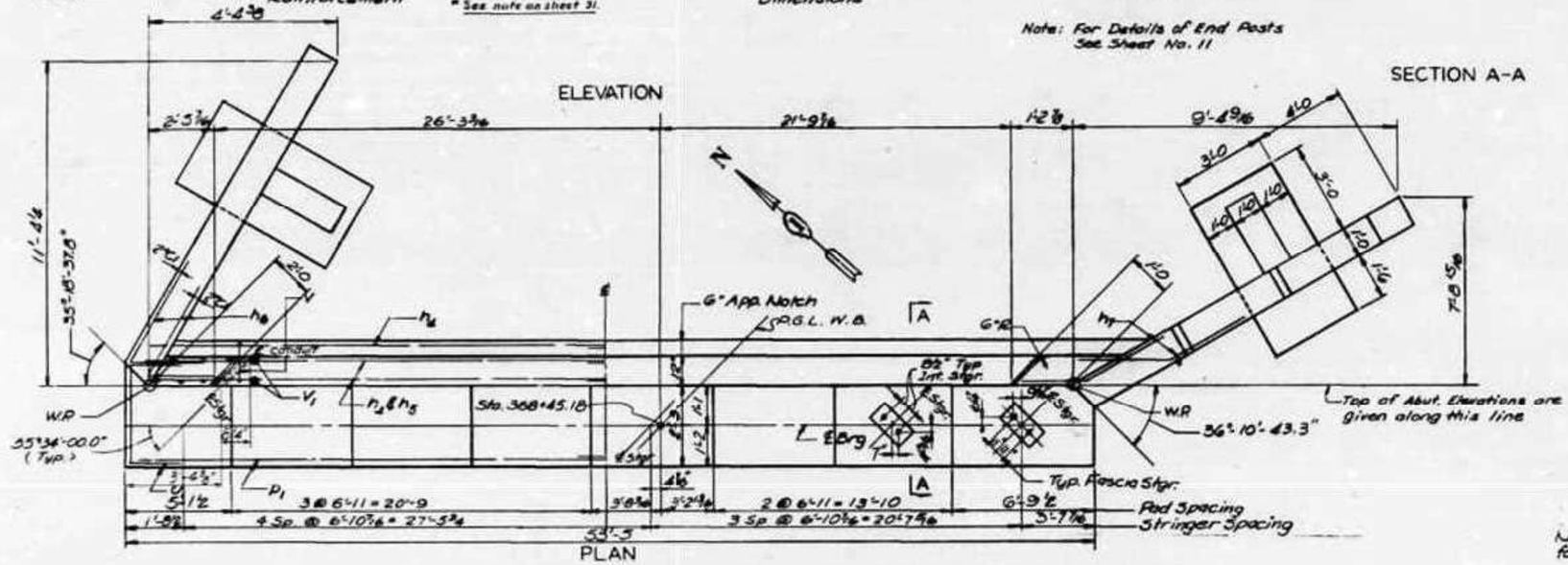
ONE ABUTMENT
BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
h6	20	#4	27'0	—
h5	8	#4	24'6	—
h8	12	#5	41'9	L
h7	12	#5	34'9	/
P1	12	#7	27'6	—
S1	108	#4	6'9	□
U	8	#5	3'10	□
V	49	#6	2'9	□
V1	110	#6	7'3	—

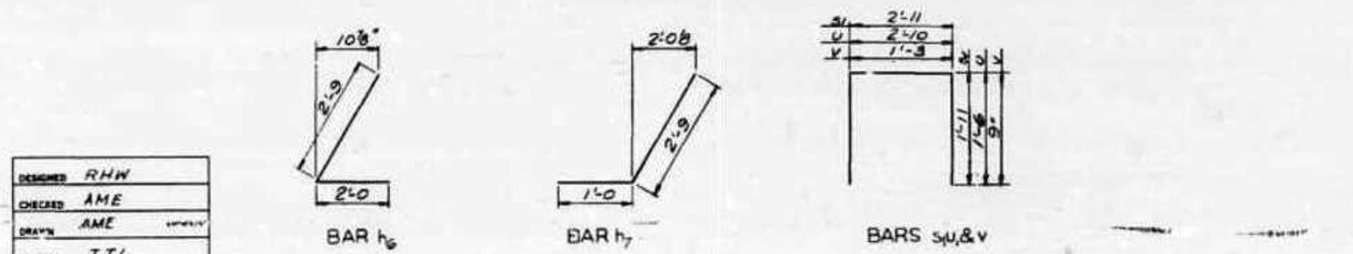
ONE ABUTMENT
BILL OF MATERIAL

Item	Unit	Quan.
Class 'X' Concrete	Cu Yds	318.1
Reinforcement Bars	lbs	3270
Rock Excavation	Cu Yds	21

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.



Note: All footings to be founded on Rock.
Maximum Bearing Pressure = 3.5 Tons/□'



DESIGNED	RHW
CHECKED	AME
DRAWN	AME
CHECKED	JTL

ABUTMENT NO. 2
FAI 80 OVER RAMP AD
STA. 368+45.70
FAI ROUTE 80
SECTION 99-3 (STR-4E)
Scale: NO SCALE
PROJECT
WILL COUNTY
Date: Nov. 30, 1961
CLAUDE UVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

8-12-69 J.M.L. Rev. Class X Conc. from 37.9 to 38.1 cu yds.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

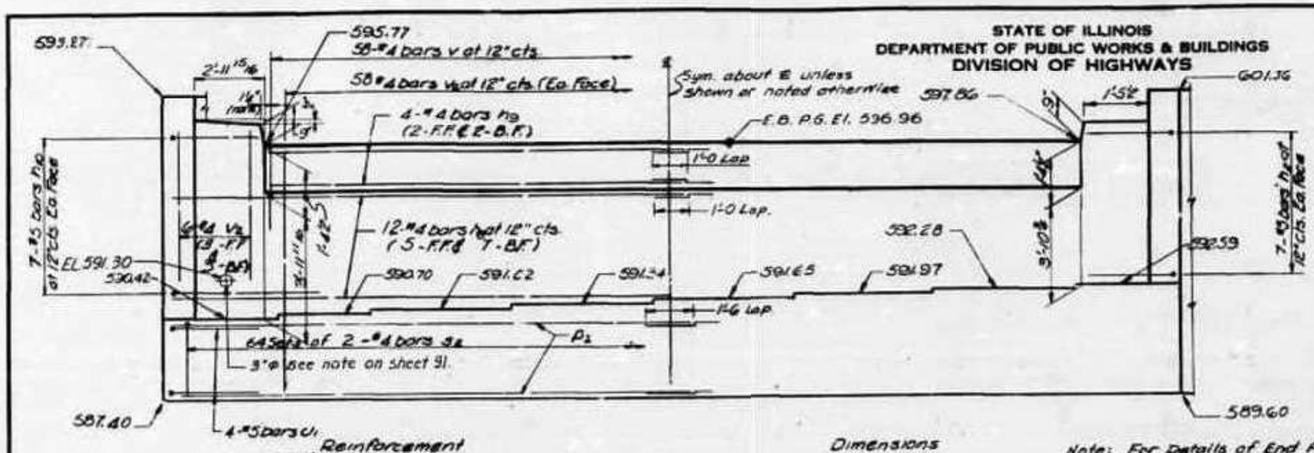
EXISTING BRIDGE PLANS

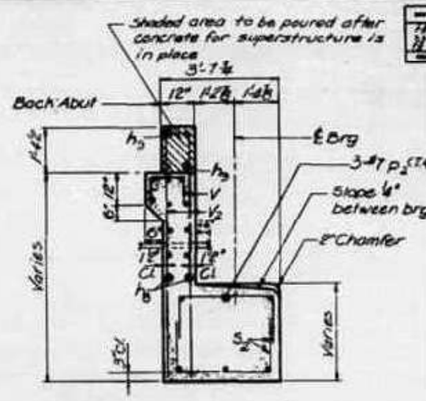
SHEET 26 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	846
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 9
12 SHEETS





ONE ABUTMENT
BILL OF REINFORCEMENT

Bar	No	Size	Lgth	Shape
h8	24	#4	32'0	
h9	8	#4	29'3	
h10	14	#5	41'9	
h11	14	#5	35'9	
P2	12	#7	32'3	
S2	128	#4	7'2	
U1	8	#5	6'3	
V	58	#4	2'9	
V2	128	#4	7'10	

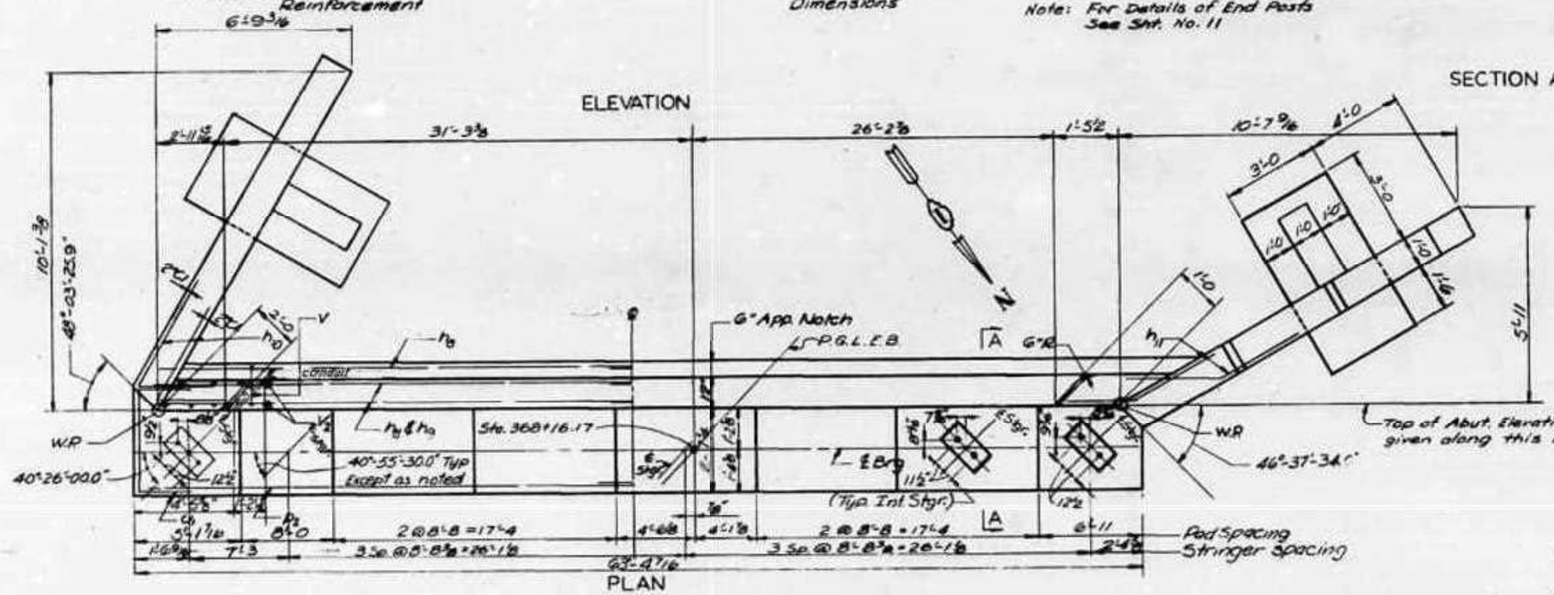
ONE ABUTMENT
BILL OF MATERIAL

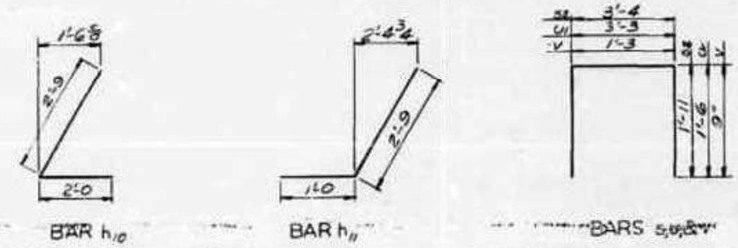
Item	Unit	Quan.
Class 'X' Concrete	Cu Yds	50.5
Reinforcement Bars	lbs	3890
Rock Excavation	Cu Yds	18

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

SECTION A-A

ELEVATION





Note: All footings to be founded on Rock. Maximum Bearing Pressure = 3.5 Tons/ft²

ABUTMENT NO. 3
FAI 80 OVER RAMP AD
STA 368+45.70
FAI ROUTE 80
SECTION 99-3 (STR-4)
Scale: NO SCALE
PROJECT
WILL COUNTY
Date: Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

DESIGNED	RHN
CHECKED	AME
QUANTITIES	AME
CHECKED	JTL

11-16-64 J.T.L. Rev. Class X Con. from 50.3 to 50.5 cu yds.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '-" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

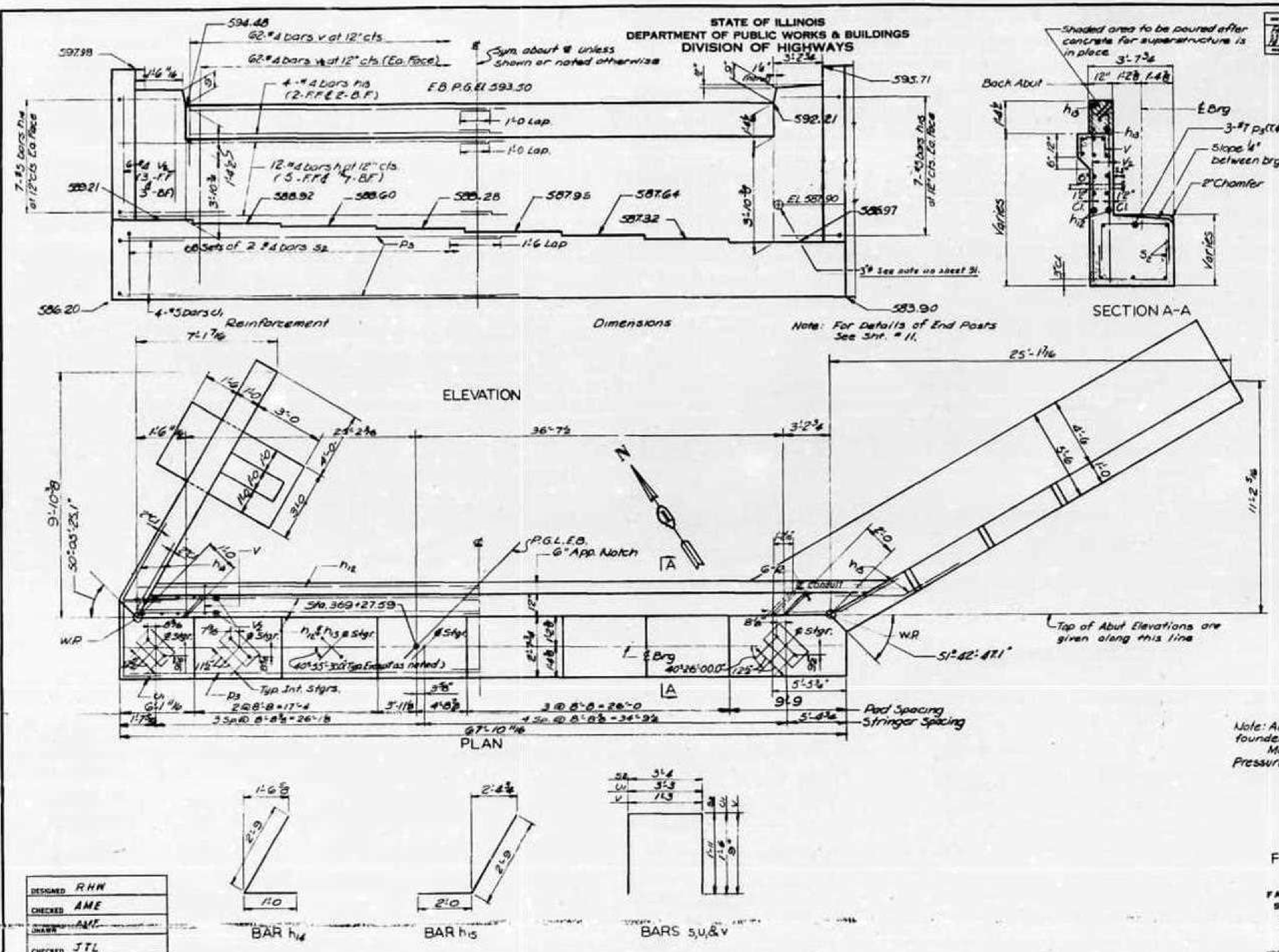
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 27 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	847
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



ONE ABUTMENT BILL OF REINFORCEMENT

Bar	No	Size	Lgth	Shape
h12	24	#4	34'-3	—
h13	8	#4	34'-5	—
h14	14	#5	3'-9	L
h15	14	#5	4'-9	⌐
P3	12	#7	34'-6	—
S2	136	#4	7'-2	⊓
U1	8	#5	6'-3	⊓
V	62	#4	2'-9	⊓
V2	136	#4	7'-10	—

ONE ABUTMENT BILL OF MATERIAL

Item	Unit	Quan.
Class X Concrete	Cu. Yds.	64.8
Reinforcement Bars	lbs	4540

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

Note: All footings to be founded on Rock. Maximum Bearing Pressure = 3.5 Tons/□'

ABUTMENT NO. 4
FAI 80 OVER RAMP AD
STA 368+45.70

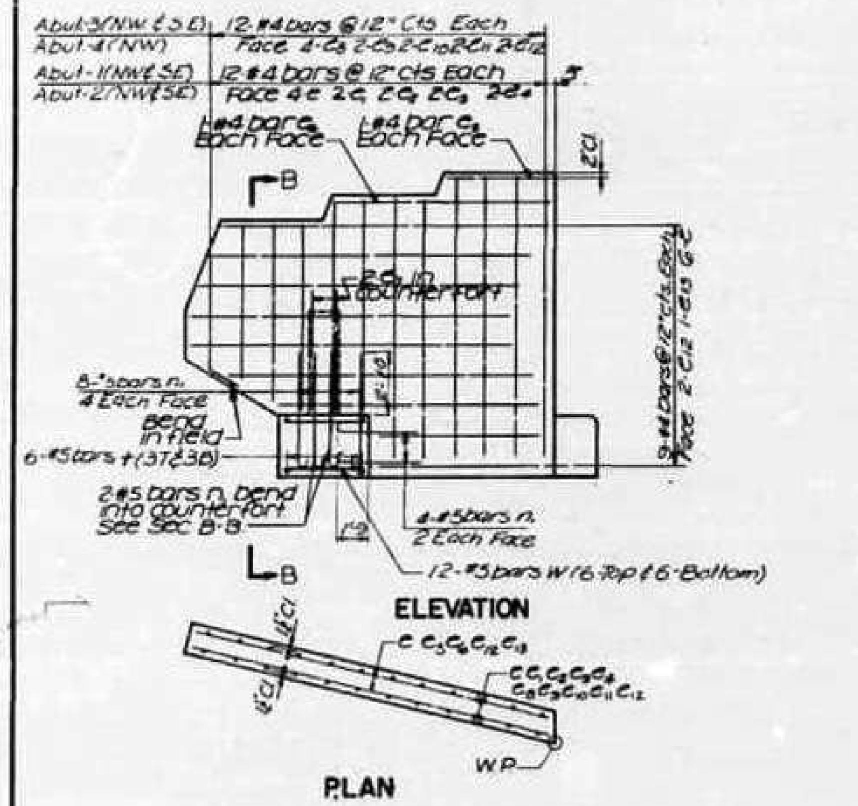
FAI ROUTE 80
SECTION 99-3 (S.B.-2)
Scale: NO SCALE
PROJECT
WILL COUNTY
Date: Nov. 30, 1961

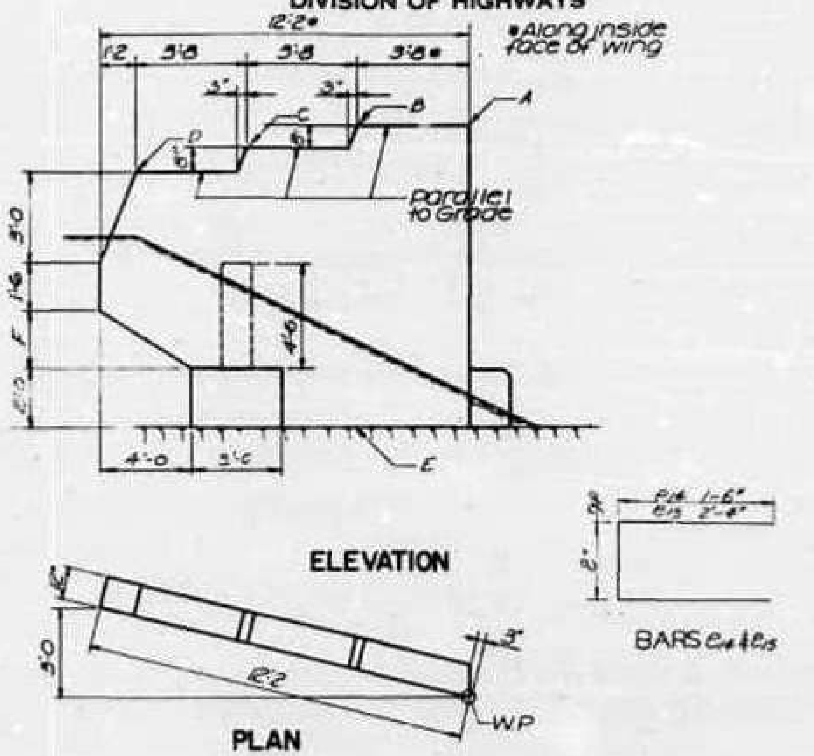
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

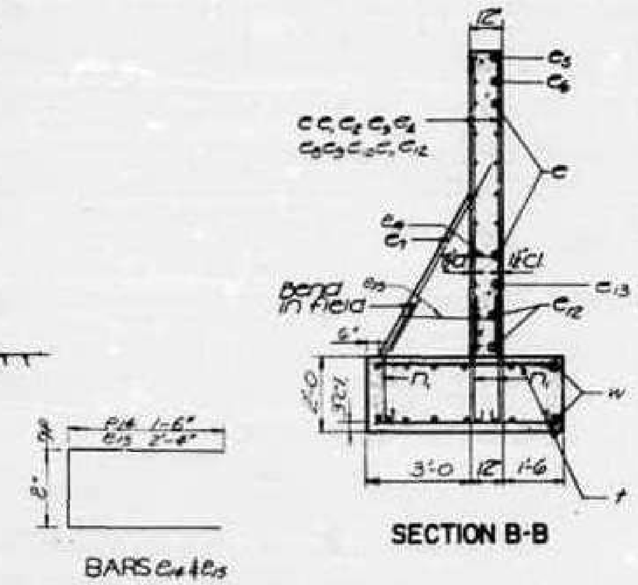
11-16-64 J.M.J. Rev. Class X Con. from 64.4 to 64.8 cu.yds.

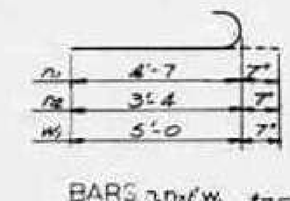
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS









END POSTS - ABUTS. NO. 1,2,3 & N.W. END POST - ABUT. NO. 4

Note: All footings to be founded on rock. Maximum Bearing Pressure = 1.5 Tons/□'

END POST ELEVATIONS & DIMENSIONS

Abut.	End Post	Elevations A	B	C	D	E	F
1	NW	603.01	603.12	602.56	602.00	591.80	3'-8⅝
	SE	601.49	601.60	601.04	600.48	590.30	3'-8⅝
2	NW	600.39	600.78	599.51	598.77	589.20	3'-0⅛
	SE	598.80	598.63	597.31	597.14	587.60	3'-0⅛
3	NW	601.36	601.46	600.90	600.34	589.60	4'-2⅞
	SE	599.27	599.38	598.82	598.26	587.40	4'-4⅜
4	NW	597.98	597.88	597.10	596.33	586.20	3'-7½

***7-END POSTS BILL OF MATERIAL**

Bar	No	Size	Lgth	Shape
e	116	#4	10'-6	—
e1	14	#4	9'-10	—
e2	16	#4	7'-10	—
e3	16	#4	6'-10	—
e4	16	#4	3'-7	—
e5	14	#4	3'-6	—
e6	14	#4	7'-0	—
e7	14	#5	6'-0	—
e8	24	#4	11'-2	—
e9	12	#4	10'-5	—
e10	12	#4	8'-5	—
e11	12	#4	7'-5	—
e12	40	#4	5'-6	—
e13	14	#4	6'-8	—
e14	7	#4	3'-6"	⊏
e15	7	#4	5'-2"	⊏
n1	98	#5	5'-2	⊃
t	42	#3	5'-0	—
w	84	#5	2'-6	—

*Bill of Material is for End Posts of Abuts. No. 1, 2, 3 & N.W. End Post of Abut. No. 4.

****1-END POST BILL OF MATERIAL**

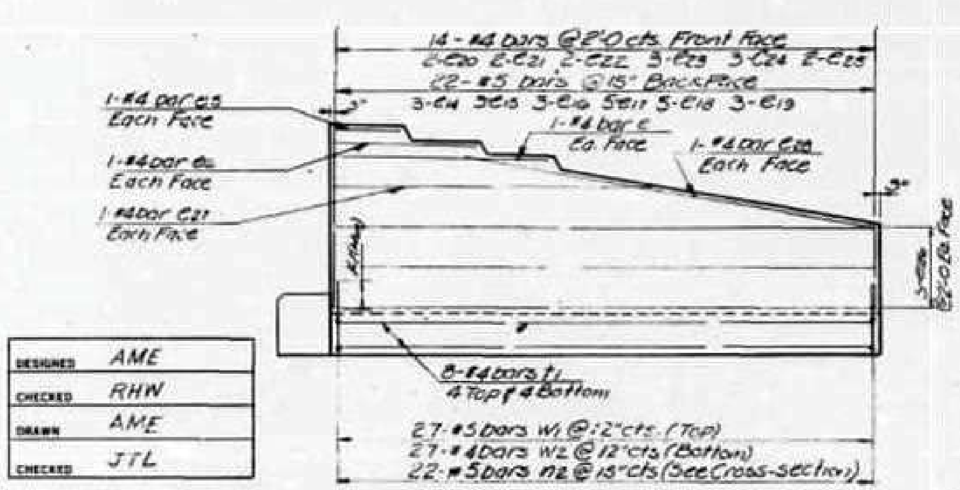
Bar	No	Size	Lgth	Shape
e	2	#4	10'-6	—
e5	2	#4	3'-6	—
e6	2	#4	7'-0	—
e14	3	#5	9'-7	—
e15	3	#5	8'-10	—
e16	3	#5	8'-1	—
e17	3	#5	6'-7	—
e18	3	#5	3'-7	—
e19	3	#5	4'-10	—
e20	2	#4	9'-7	—
e21	2	#4	8'-10	—
e22	2	#4	8'-1	—
e23	3	#4	6'-7	—
e24	3	#4	3'-7	—
e25	2	#4	4'-10	—
e26	6	#4	26'-6	—
e27	2	#4	15'-6	—
e28	2	#4	21'-0	—
n2	22	#5	3'-11	⊃
t1	8	#4	26'-6	—
w1	27	#5	3'-7	⊃
w2	27	#4	3'-0	—
Class X concrete			Cu Yds	16.3
Reinforcement Bars			lbs	890

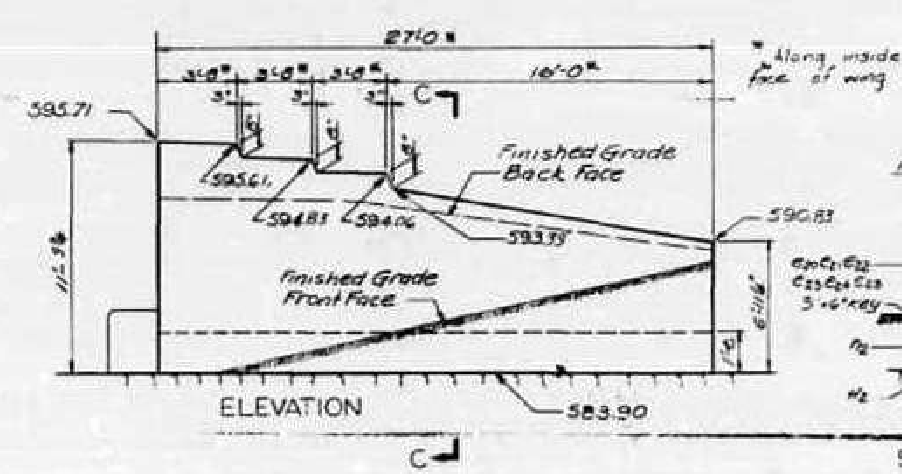
**Bill of Material is for S.E. End Post Abut. 4. Reinf. quantities included with Abutments.

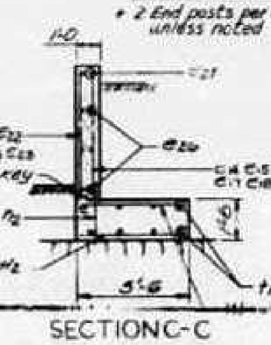
***7 END POSTS BILL OF MATERIAL**

Class X Concrete in Cu Yds	
Abutment 1	10.2
Abutment 2	9.1
Abutment 3	10.7
Abut. 4 N Wall	5.4
Reinforcement Bars in lbs	
Abutment 1	840
Abutment 2	840
Abutment 3	850
Abut. 4 N Wall	430

* 2 End posts per abutment unless noted







S.E. END POST - ABUT. NO. 4

DESIGNED	AME
CHECKED	RHW
DRAWN	AME
CHECKED	JTL

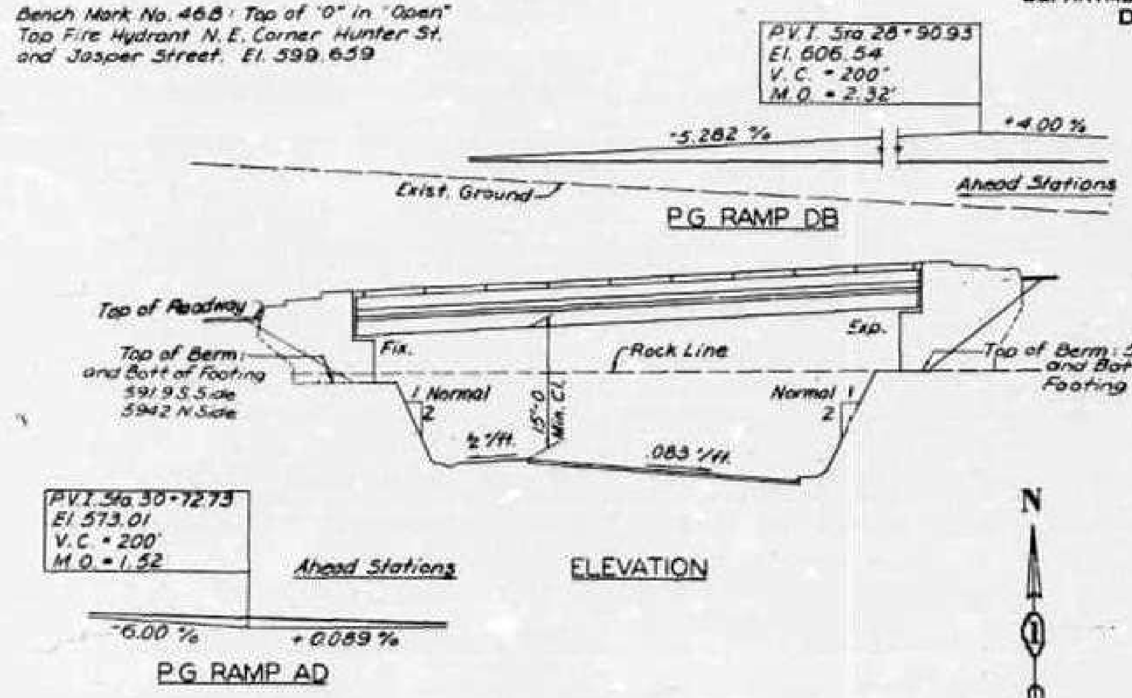
ABUTMENT DETAILS
FAI 80 OVER RAMP AD
FAI 80 STA. 368+45.70
F A I ROUTE 80 PROJECT
SECTION 99-3(STR-#2) WILL COUNTY
Scale NO SCALE Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

SHEET NO. 11 / 12 SHEETS

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Bench Mark No. 468 : Top of "O" in "Open" Top Fire Hydrant N.E. Corner Hunter St. and Jasper Street. El. 599.659



STATION 29+73.44
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 80 SEC. 99-3HB-3
F.A. PROJ. I-80-4(22)
LOADING HS-20

See Standard 2113-1.

LETTERING FOR NAME PLATE

DESIGN STRESSES

Reinforced Concrete:
- f'c = 3,500 p.s.i.
- fs = 20,000 p.s.i.
- n = 10
- fc = 1,400 p.s.i. (Except Footings)
- fc = 1,000 p.s.i. (Footings)
- vc = 90 p.s.i. (Except Footings)
- vc = 75 p.s.i. (Footings)

Structural Steel:
- fs = 20,000 p.s.i.

Maximum Bearing Pressure = 4 Tons/S.F.
Loading: HS 20-44

GENERAL NOTES

STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL STEEL, A.S.T.M. DESIGNATION A36

RIVETS SHALL BE 3/4" ϕ WITH 13/16" ϕ OPEN HOLES UNLESS NOTED.

CLASS X CONCRETE SHALL BE USED THROUGHOUT. COARSE AGGREGATE USED IN PARAPETS AND END POSTS SHALL BE FREE OF CHERT, FLINT, LIMONITE, LIGNITE AND SOFT SANDSTONE.

THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.19 OF THE STANDARD SPECIFICATIONS.

ALL WELDING SHALL COMPLY WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, OF THE AMERICAN WELDING SOCIETY.

ALL ROCKERS, BOLSTERS, BEARING PLATES, LEAD PLATES, PINTLES, AND ANCHOR BOLTS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 51.15 OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

ANCHOR BOLTS SHALL BE SET BEFORE CONNECTING DIAPHRAGMS OVER SUPPORT. SPACE REINFORCING TO MISS ANCHOR BOLTS.

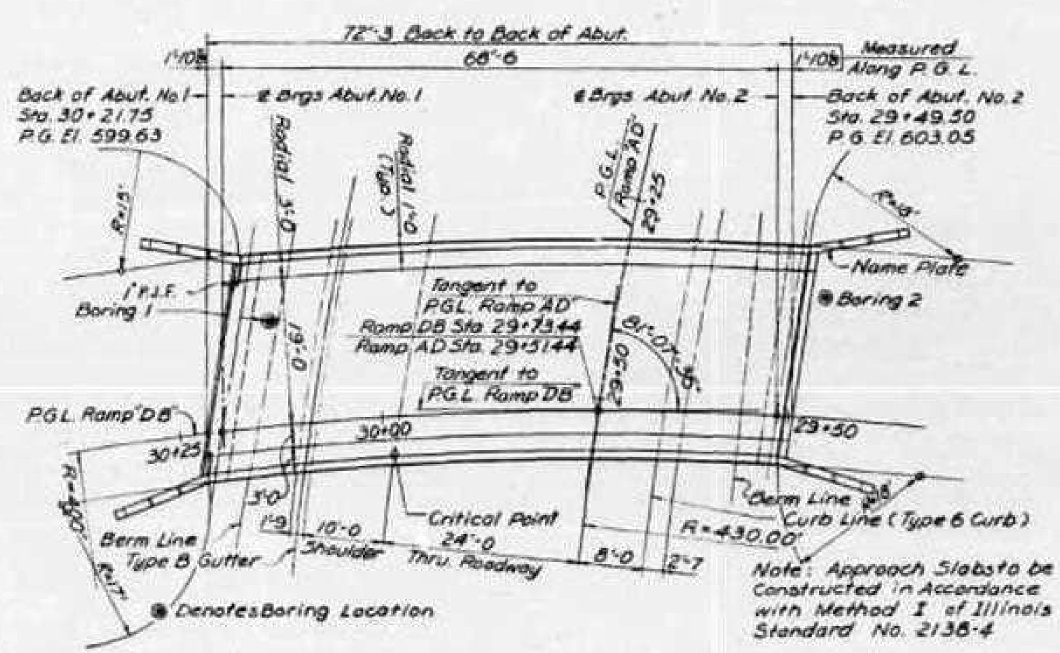
EXPANSION GUARDS AND PLATES SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 51.13 (d) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. SEE ARTICLES 56.1 TO 56.5 INCLUSIVE OF THE STANDARD SPECIFICATIONS.

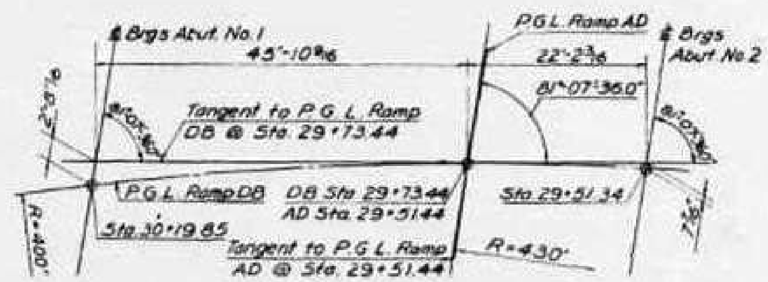
ALL SURFACES OF EXPANSION GUARDS INACCESSIBLE AFTER ERECTION SHALL BE GIVEN TWO SHOP COATS OF RED LEAD PAINT. THE 3/4" ϕ WELDED STUDS SHALL NOT BE PAINTED.

Permanent forms will not be permitted in forming the concrete Floor

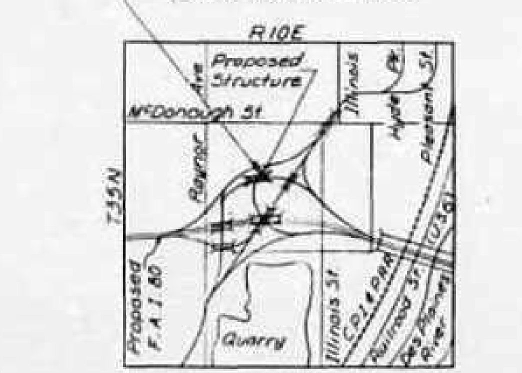
Note: This route has been selected as a 15'-0" vertical clearance route.



Note: Approach Slabs to be Constructed in Accordance with Method I of Illinois Standard No. 2138-4



ABUTMENT LAYOUT



LOCATION PLAN

TOTAL BILL OF MATERIALS
Sec. 99-3 (Str. 3)

Item	Unit	Super	Sub	Total
Class X Concrete	Cu. Yd.	66.2	57.5	123.7
Furnishing + Erecting Structural Steel	Lb.	63,900	—	63,900
Reinforcement Bars	Lb.	14,310	4300	18,610
Name Plates	Each	1	—	1
Aluminum Handrail	Lin. Ft.	140	—	140
Rock Excavation	Cu. Yd.	—	6	6
Bridge Seat Sealant	L.S.		0.1	0.1
Protective Coat	Sq. Yd.	253	—	253

Note:- Excavation for portions of structure in the embankments shall not be classified.

GENERAL PLAN & ELEVATION
RAMP DB OVER RAMP AD
RAMP DB STA. 29+73.44
FAI ROUTE 80
SECTION 99-3HB-3 (Str. 3)
Scale: No Scale
PROJECT I-80-4(22)133
WILL COUNTY
Date: Nov. 30, 1961

DESIGNED	R. D. L.
CHECKED	J. T. L.
DRAWN	
CHECKED	J. T. L.

Prepared and Recommended by
Blauvelt Engineering Co.
Structural Engineer #81-2251
CONSULTING ENGINEERS

11-17-64 Rev. Class X Conc. from 123.3 to 123.7 cu. yd.; bars from 18,640 to 18,610 & added Bridge seat sealant L.S.
Rev. 12-19-62 Prot. Coat - 253 Sq. Yd.
Rev. 2-14-63 Change Sect. 99-3 to Sect. 99-3HB-3

FOR INFORMATION ONLY

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 30 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	850

CONTRACT NO. 62R22

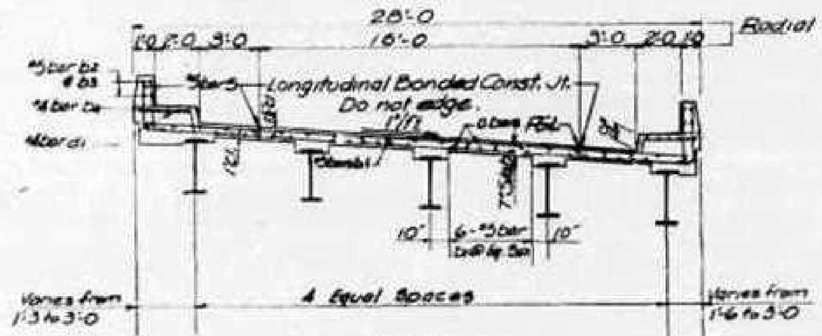
ILLINOIS FED. AID PROJECT

WSP USA Inc.
30 N. LASALLE STREET SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

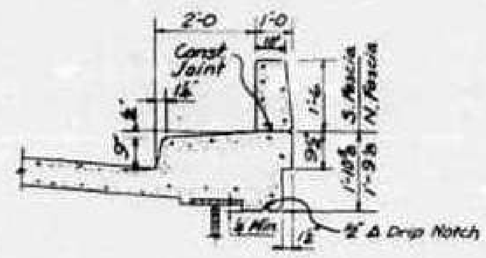
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	99-5 / 21-2	WILL	197	98

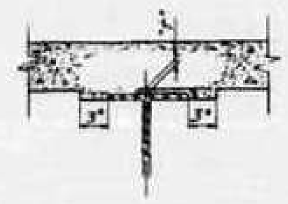
SHEET NO. 2 / 8 SHEETS



SECTION A-A

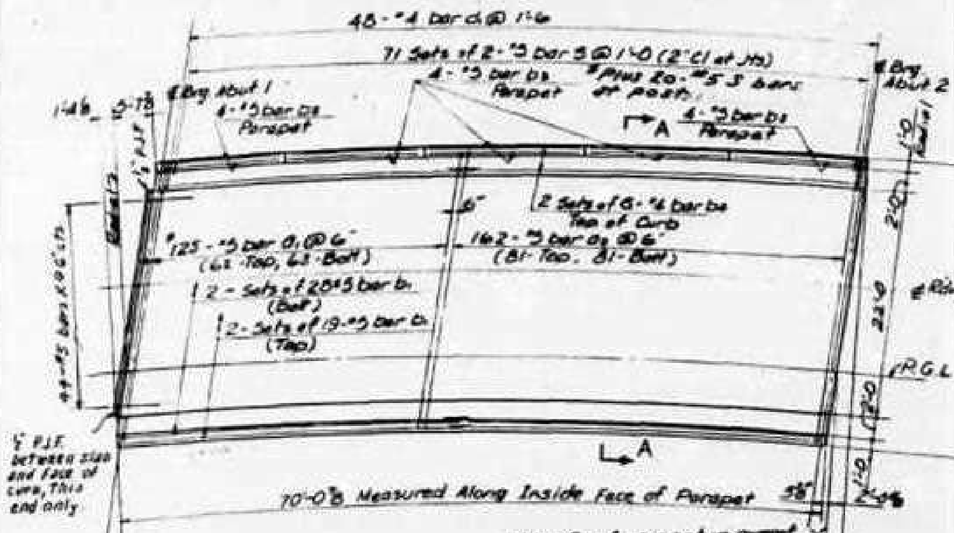


CURB DETAIL



METHOD OF DETERMINING FILLET HEIGHT "t"

After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on D.L. Deflection Diagram. From these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations minus floor thickness equals fillet heights above top of beams.



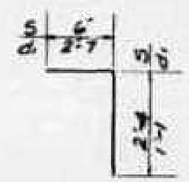
PLAN

Note: Reinforcement in parapet and curb shown for North Side, South Side Similar.

For Parapet Joint Spacing See Sheet No. 4

* Cut or bend in the field to fit - See fixed jt. sheet #3 (22-#top, 34-#bott)

*Place 2-#5 S bars on inside face (road side) at each rail post



BARS s & d₁

BILL OF REINFORCEMENT

Bar	No.	Size	length	Shape
a₁	123	#5	28'-0	—
a₂	162	#5	27'-7	—
b₁	94	#5	35'-6	—
b₂	16	#5	12'-0	—
b₃	24	#5	14'-9	—
b₄	24	#4	35'-6	—
d₁	96	#4	5'-8	⌐
S	324	#5	2'-10	⌐
X	44	#5	4'-0"	⊃

BILL OF MATERIALS

Class X Concrete	Cu Yds	66.2
Reinforcement Bars	Lbs	14,310
Structural Steel	Lbs	63,900

* Structural Steel includes weight of rockers, bolsters, bearing plates, lead plates, pintles, and anchor bolts
Estimated Wt. = 2520

ELEVATIONS - TOP OF SLAB** (Elevations are not adjusted for dead load deflections)
(See sheet 3 for locations of points)

Sec. / Pt.	1	2	3	4	5	6	7	8
A	601.67	602.12	602.59	603.09	603.56	604.01	604.44	604.78
B	601.11	601.57	602.05	602.52	603.05	603.49	603.92	604.27
C	600.55	601.01	601.50	602.01	602.50	602.96	603.40	603.75
D	599.99	600.46	600.94	601.46	601.96	602.44	602.88	603.24
E	599.45	599.90	[illegible]	[illegible]	[illegible]	[illegible]	602.36	602.79

** Where curb is over stringer, Elevation shown is that of the projection of top of slab along its cross slope.

DESIGNED	AME
CHECKED	G.F.
DRAWN	LAF
CHECKED	G.F.

SLAB PLAN & SECTION
RAMP DB OVER RAMP AD
RAMP DB STA. 29+73.44
F.A.I. ROUTE 80 SECTION 99-5 (21-2) PROJECT WILL COUNTY
NO SCALE Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODRUFF, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

11-17-64 J.M.J. Rev. Class X Conc. from 66.7 to 66.2 cu yds, Rein. bars from 13,860 to 14,310 lbs.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

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PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

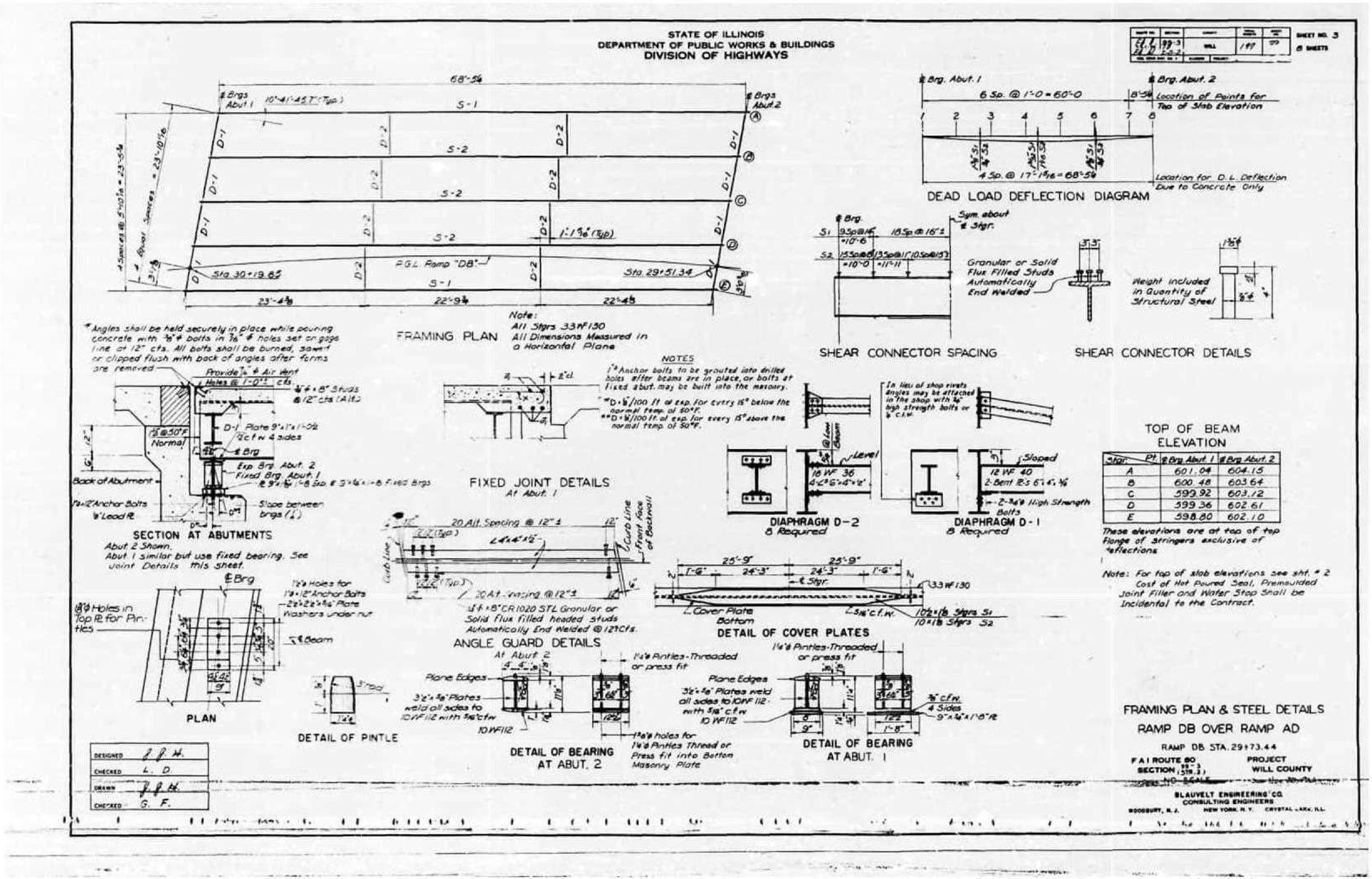
EXISTING BRIDGE PLANS

SHEET 31 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	851

CONTRACT NO. 62R22

ILLINOIS FED. AID PROJECT


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
SHEET NO. 3
8 SHEETS
FRAMING PLAN
Note:
All Stgrs 33WF130
All Dimensions Measured in a Horizontal Plane
DEAD LOAD DEFLECTION DIAGRAM
SHEAR CONNECTOR SPACING
SHEAR CONNECTOR DETAILS
SECTION AT ABUTMENTS
Abut. 2 Shown.
Abut. 1 similar but use fixed bearing. See Joint Details this sheet.
FIXED JOINT DETAILS
At Abut. 1
NOTES
DIAPHRAGM D-2
8 Required
DIAPHRAGM D-1
8 Required
TOP OF BEAM ELEVATION
These elevations are at top of top flange of stringers exclusive of deflections
Note: For top of slab elevations see sht. # 2
Cost of Hot Poured Seal, Premoulded Joint Filler and Water Stop Shall be Incidental to the Contract.
ANGLE GUARD DETAILS
DETAIL OF COVER PLATES
PLAN
DETAIL OF PINTLE
DETAIL OF BEARING AT ABUT. 2
DETAIL OF BEARING AT ABUT. 1
FRAMING PLAN & STEEL DETAILS
RAMP DB OVER RAMP AD
RAMP DB STA. 29+73.44
F.A.I. ROUTE 80
SECTION
PROJECT
WILL COUNTY
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
DESIGNED J. J. H.
CHECKED L. D.
DRAWN J. J. H.
CHECKED G. F.

TOP OF BEAM ELEVATION

Stgr. \ Pt.	℄ Brg Abut. 1	℄ Brg Abut. 2
A	601.04	604.15
B	600.48	603.64
C	599.92	603.12
D	599.36	602.61
E	598.80	602.10

FOR INFORMATION ONLY

WSP USA Inc. 30 N. LASALLE STREET SUITE 4200 CHICAGO, IL 60602 TEL: (312) 782-8150 FAX: (312) 782-1684	USER NAME = USCP702533	DESIGNED -	REVISED -	
		DRAWN -	REVISED -	
	PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
	PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 32 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	852

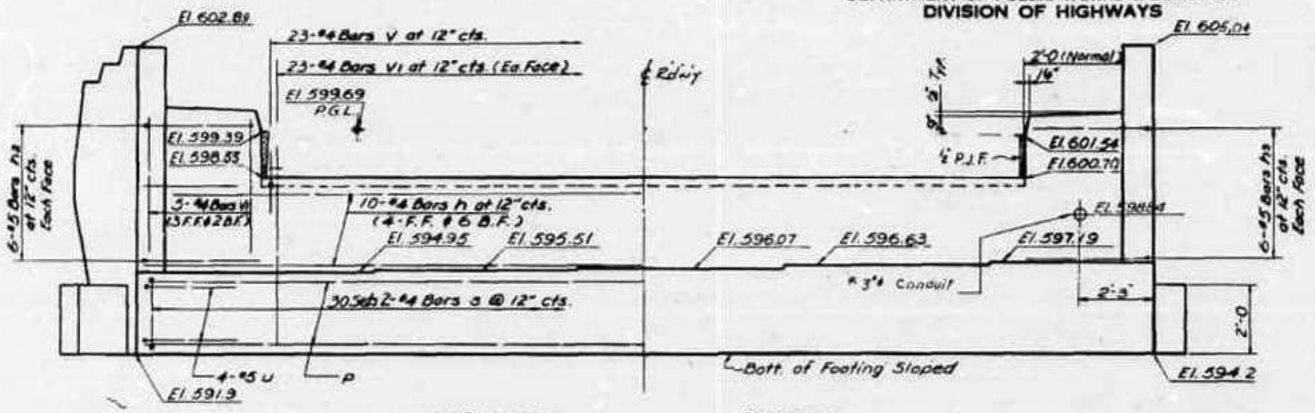
CONTRACT NO. 62R22

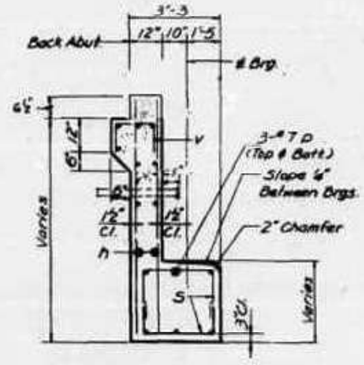
ILLINOIS FED. AID PROJECT

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/40118022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing32.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

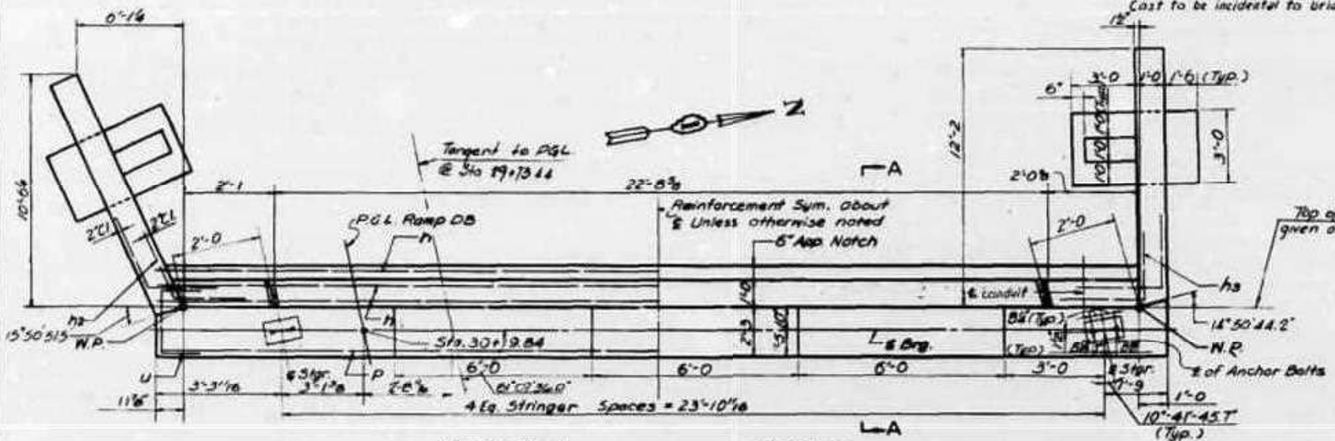
SHEET NO. 5
8 SHEETS





SECTION A-A

*Locate 3" conduit as shown on plan. Extend past end of end post and terminate at a point outside of shoulder. Thread and cap each end of conduit. Cost to be incidental to bridge structure.



BARS U V & S

Top of Abut. Elevs. given along this line

BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
h	10	#4	28'-7	—
h3	12	#5	3'-0	⌐
h3	12	#5	5'-0	⌐
s	60	#4	7'-0	⊓
V	23	#4	2'-9	⊓
VI	56	#4	6'-0	—
P	6	#7	28'-7	—
U	8	#5	5'-11	⊓

BILL OF MATERIAL

Item	Unit	Quan
Class X Concrete	Cu. Yds	26.1
Reinforcement Bars	Lbs	2050
Rock Excavation	Cu. Yds	5

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

Note: For End Post Details See Sht. #7
Footings shall be founded on sound rock.

DESIGNED	J. J. W.
CHECKED	G. F.
DRAWN	J. J. W.
CHECKED	G. F.

ABUTMENT NO. 1
RAMP DB OVER RAMP AD
RAMP DB STA. 29+73.44

F.A.I. ROUTE 80
SECTION 99-3 (Str. 3)
Scale: NO SCALE

PROJECT
WILL COUNTY
Date: Nov. 20, 1964

SLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

11-17-64 J.M.J. Rev. class X conc. from 25.4 to 26.1, Rein. bars from 2150 to 2050 lbs.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

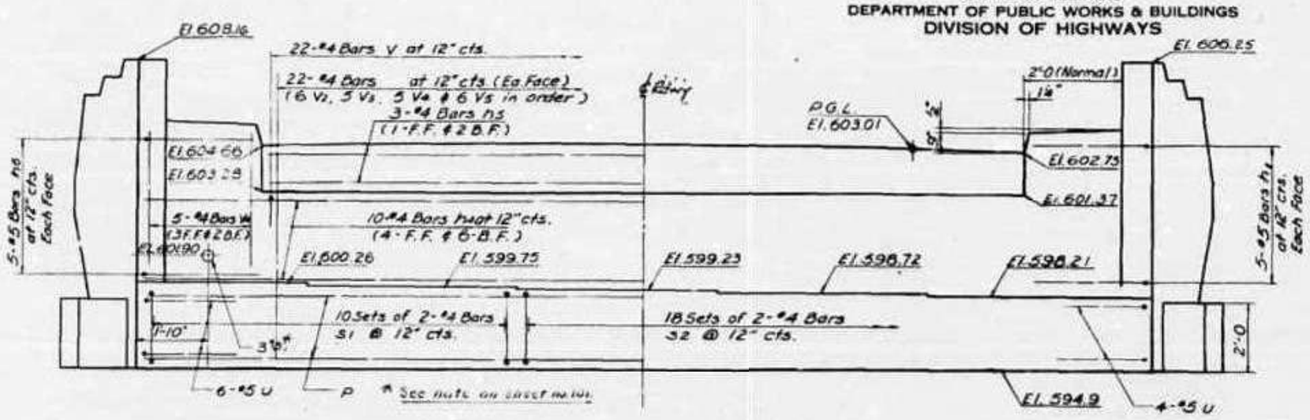
EXISTING BRIDGE PLANS

SHEET 33 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	853
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

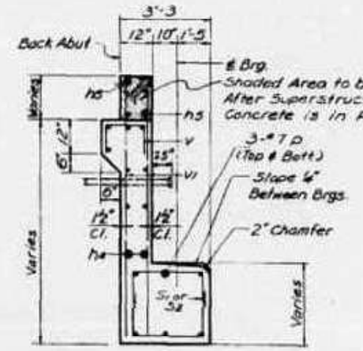
	99-3	WILL	1209	1202	SHEET NO. 6 OF 8 SHEETS



Reinforcement Dimensions

ELEVATION

Note: Abut. to be founded on rock



SECTION A-A

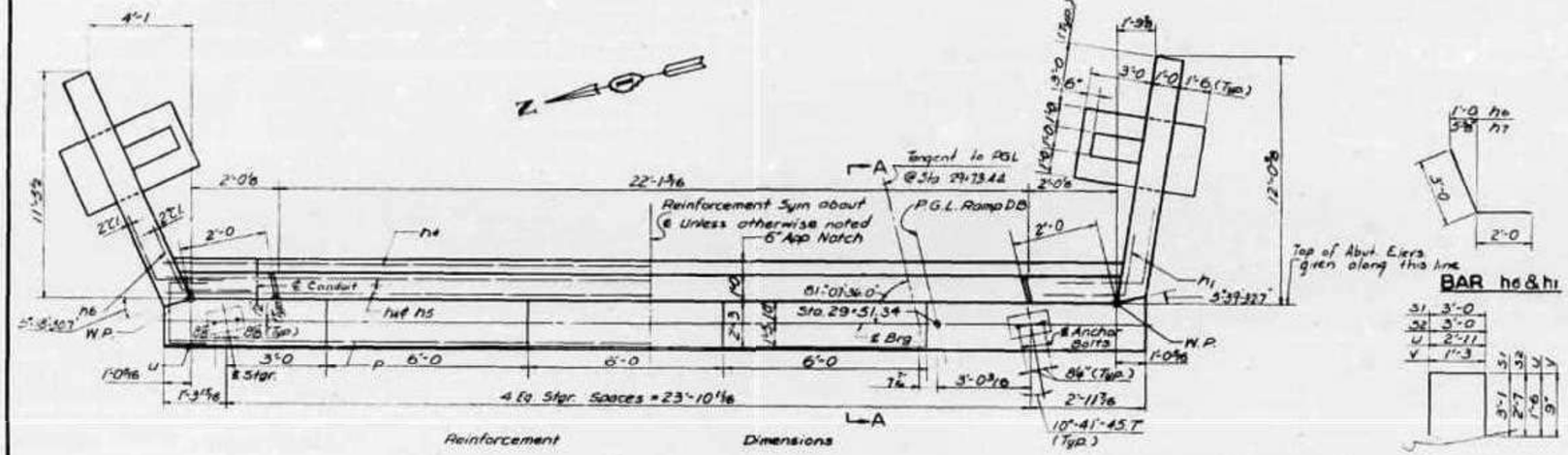
BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
h4	10	#4	27'-8	
h5	4	#4	21'-8	
h6	10	#5	5'-0	
h1	10	#5	5'-0	
P1	6	#7	27'-8	
S1	20	#4	9'-2	
S2	36	#4	8'-2	
U	10	#5	5'-11	
V2	12	#4	9'-0	
V3	10	#4	8'-6	
V4	10	#4	8'-0	
V5	12	#4	7'-6	
V	22	#4	2'-9	

BILL OF MATERIAL

Item	Unit	Quan
Class X Concrete	Cu Yds	31.4
Reinforcement Bars	Lbs	2250
Rock Excavation	Cu Yds	1

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.



Reinforcement Dimensions

PLAN

BAR S1, S2, U & V

Note: For End Post Details see Sht. # 7
Footings shall be founded on sound rock.

DESIGNED	J. P. M.		
CHECKED	G. F.		
DRAWN	J. P. M.		
CHECKED	G. F.		

ABUTMENT NO. 2
RAMP DB OVER RAMP AD
RAMP DB STA. 29+73.44
F.A.I. ROUTE 90 PROJECT
SECTION 99-3 (Str. 3) WILL COUNTY
Scale: NO SCALE Date: Nov. 30, 1964

BLAUVELT ENGINEERING CO
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK N.Y. CRYSTAL LAKE, ILL.

11-17-64 J.M.J. Rev. class X conc. from 31.2 to 31.4 cu. yds.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

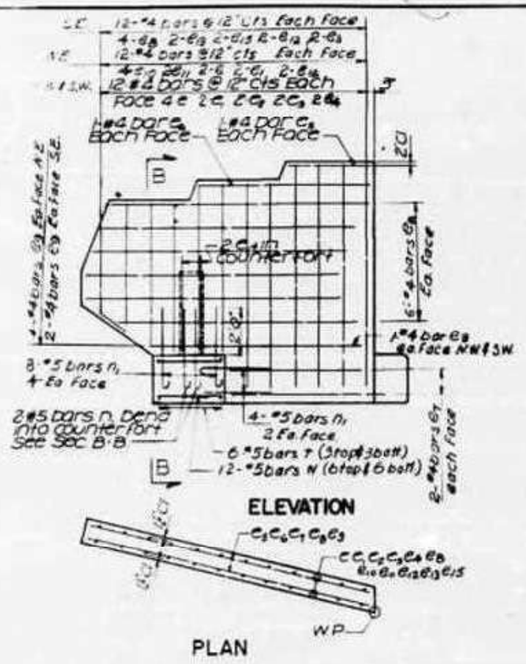
USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

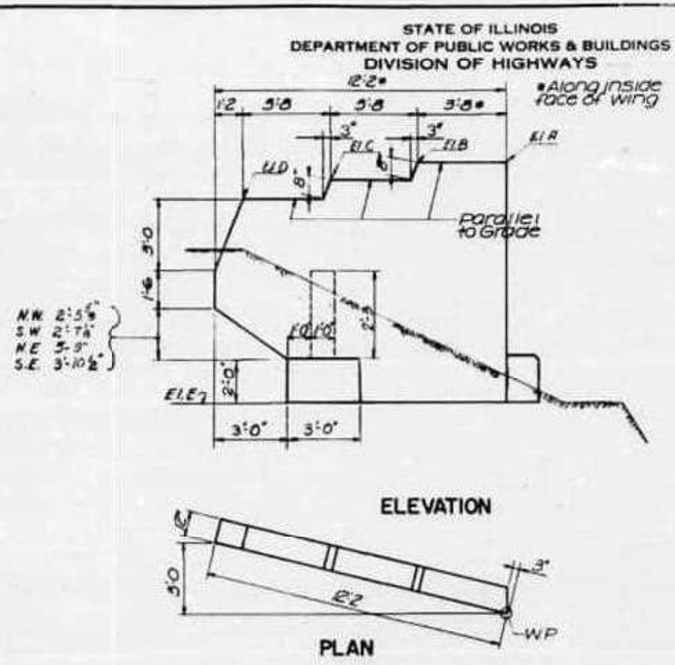
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

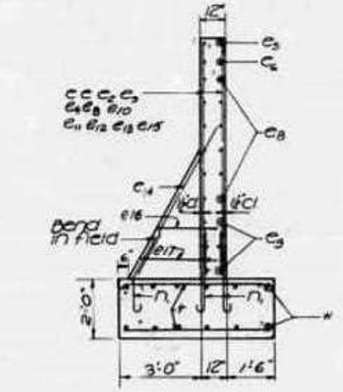
EXISTING BRIDGE PLANS

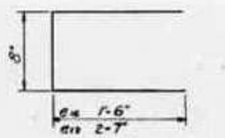
SHEET 34 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	854
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			









FOUR END POSTS
BILL OF MATERIAL

Bar	No.	Size	Lgth	Shape
C	20	#4	10'0	—
C1	16	#4	9'3	—
C2	8	#4	7'3	—
C3	12	#4	6'3	—
C4	8	#4	5'0"	—
C5	8	#4	3'4	—
C6	8	#4	7'0"	—
C7	16	#4	5'6"	—
C8	56	#4	10'8	—
B9	16	#4	8'10	—
B10	8	#4	12'6"	—
B11	4	#4	12'0	—
B12	8	#4	7'6"	—
B13	4	#4	10'3"	—
B14	8	#5	4'3"	—
B15	4	#4	8'3	—
B16	4	#4	3'6	—
B17	4	#4	5'8	—
T	24	#5	5'0	—
n1	56	#5	4'0	—
W	48	#3	2'6	—
Reinforcement Bars				
* Abut. 1 (2 End Posts)			Lbs	790
^ Abut. 2 (2 End Posts)			Lbs	900
Class X Concrete				
*Abut. 1 (2 End Posts)			Cu Yds	10.2
^Abut. 2 (2 End Posts)			Cu Yds	12.0

Notes: Reinf. includes Fig. Sheet.
* included in quantity on sheet # 5
^ included in quantity on sheet # 6

END POST ELEVATIONS

End Post / Elev.	Abut No. 1 NW	Abut No. 1 SW	Abut No. 2 NE	Abut No. 2 SE
A	608.04	602.85	608.16	606.25
B	604.86	602.70	608.28	606.57
C	604.02	601.84	607.72	605.82
D	603.17	600.99	607.15	605.27
E	594.2	591.9	594.3	594.3

DESIGNED	G F
CHECKED	J J H
DRAWN	SEF & G F
CHECKED	J J H

ABUTMENT DETAILS
RAMP DB OVER RAMP AD
RAMP DB STA. 29+73.44
F A I ROUTE 80 PROJECT
SECTION 99-3 (Str. 3) WILL COUNTY
Scale NO SCALE Date Nov. 30, 1961
CLAUSELT ENGINEERING CO
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK N. Y. CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '-" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 35 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	855
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

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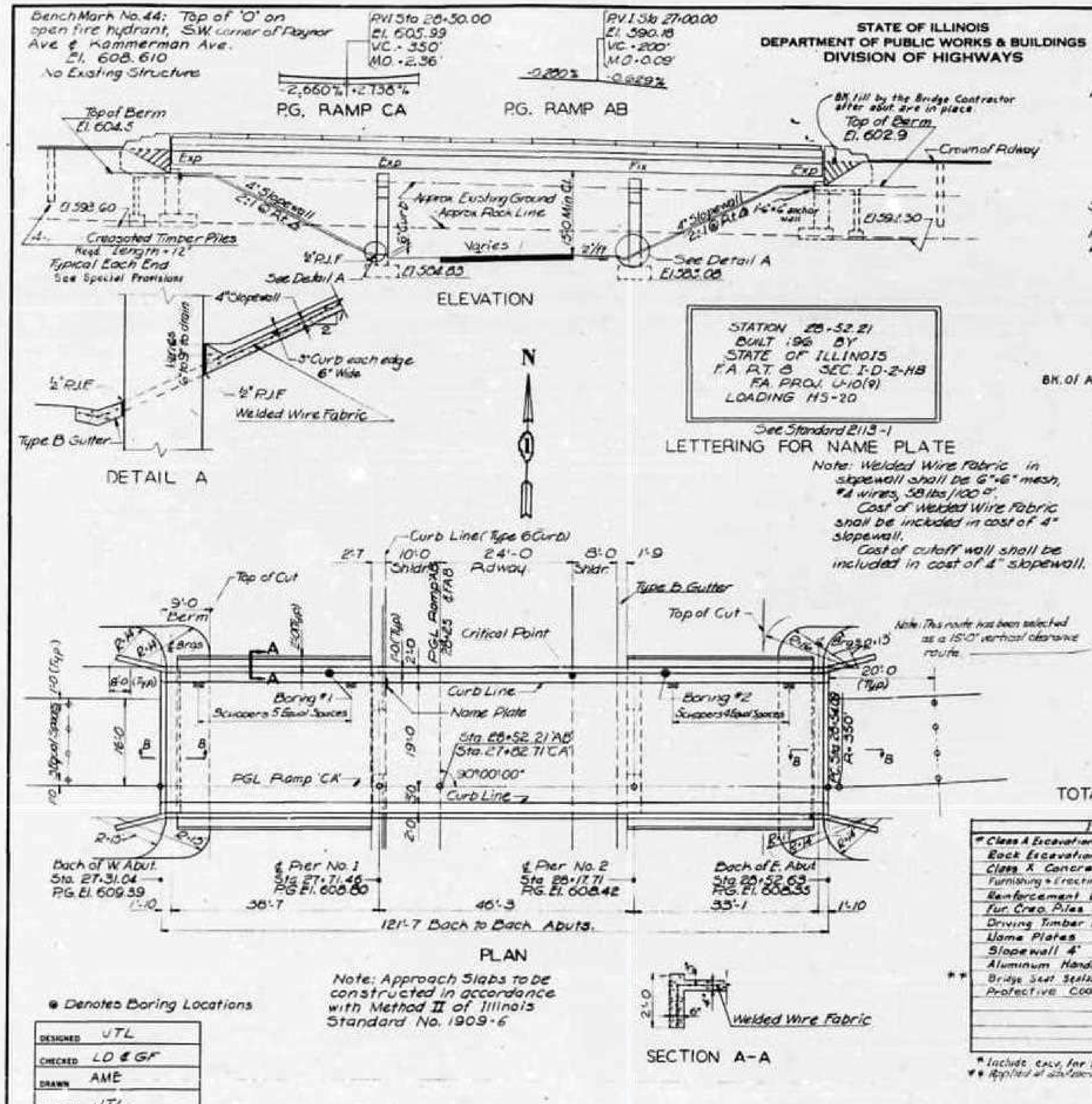
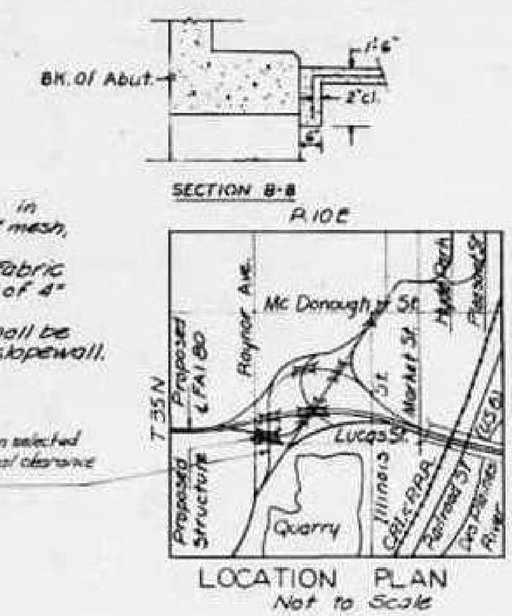




STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 1
6 SHEETS

DESIGN STRESSES

Reinforced Concrete:
- f'c = 3,500 psi
- fs = 20,000 psi
- n = 10
- fc = 1400 psi (except footings)
- fc = 1000 psi (footings)
- vc = 90 psi (except footings)
- vc = 75 psi (footings)

Structural Steel:
- fs = 20,000 psi

Maximum Soil Pressure - 6½ Tons/s.f.
Loading - H S 20-44

GENERAL NOTES

STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL STEEL, A.S.T.M. DESIGNATION A36.

RIVETS SHALL BE 3/4" ø WITH 13/16" ø OPEN HOLES UNLESS NOTED.

CLASS X CONCRETE SHALL BE USED THROUGHOUT. COARSE AGGREGATE USED IN PARAPETS AND END POSTS SHALL BE FREE OF CHERT, FLINT, LIMONITE, LIGNITE AND SOFT SANDSTONE.

THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.19 OF THE STANDARD SPECIFICATIONS.

ALL WELDING SHALL COMPLY WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, OF THE AMERICAN WELDING SOCIETY.

ALL ROCKERS, BOLSTERS, BEARING PLATES, LEAD PLATES, PINTLES, AND ANCHOR BOLTS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 51.15 OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

ANCHOR BOLTS SHALL BE SET BEFORE CONNECTING DIAPHRAGMS OVER SUPPORT. SPACE REINFORCING TO MISS ANCHOR BOLTS.

EXPANSION GUARDS AND PLATES SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 51.13 (d) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. SEE ARTICLES 56.1 TO 56.5 INCLUSIVE OF THE STANDARD SPECIFICATIONS.

ALL SURFACES OF EXPANSION GUARDS INACCESSIBLE AFTER ERECTION SHALL BE GIVEN TWO SHOP COATS OF RED LEAD PAINT. THE 3/4" ø WELDED STUDS SHALL NOT BE PAINTED.

Excavation for portion of structure in the embankment shall not be classified.

NO ROCK LARGER THAN 3" SHALL BE PLACED IN FILLS IN THE AREA WHERE PILES ARE TO BE DRIVEN.

PERMANENT FORMS WILL NOT BE PERMITTED IN FORMING THE CONCRETE FLOOR.

TOTAL BILL OF MATERIALS

Sec. I-D-2 (Str. #4)

Item	Unit	Super	Sub	Total
* Class A Excavation for Structures	Cu. Yd.	—	287	287
Rock Excavation for Structures	Cu. Yd.	—	40	40
Class X Concrete	Cu. Yd.	1063	1233	2296
Furnishing + Erecting Structural Steel	Lb.	70,670	—	70,670
Reinforcement Bars	Lb.	21,400	14,430	35,850
Fur. Creo. Piles up to 20'	Lin. Ft.	—	96	96
Driving Timber Piles	Lin. Ft.	—	96	96
Name Plates	Each	1	—	1
Slopewall 4"	Sq. Yd.	—	296	296
Aluminum Handrail	Lin. Ft.	239	—	239
** Bridge Seat Sealant	L. Sum		0.1	0.1
Protective Coat	Sq. Yd.	430	—	430

* Include only for toe wall
** Applied at abutments

GENERAL PLAN & ELEVATION
RAMP CA
OVER F.A. ROUTE 8

F.A. RTE. 8 STA 28+52.21
F.A. ROUTE 8 PROJECT U-10(9)
SECTION I-D-2 (STR. 4) WILL COUNTY
Scale NO SCALE Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

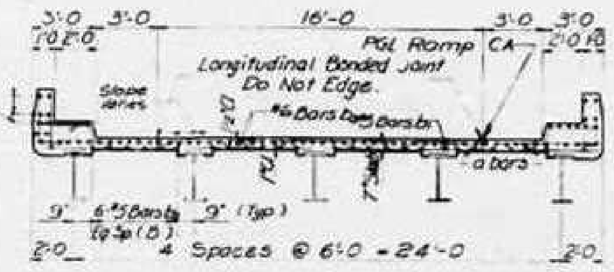
Prepared and Recommended by
Blauvelt Engineering Co.
Structural Engineer

DESIGNED	UTL
CHECKED	LD & GF
DRAWN	AME
CHECKED	UTL

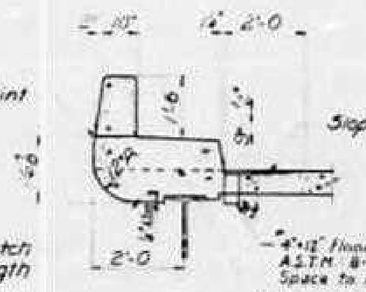
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

F.A. RTE.	SECTION	COUNTY			SHEET NO. 2
F.A. 8	1-D-2	WILL	199	106	8 SHEETS



CROSS SECTION

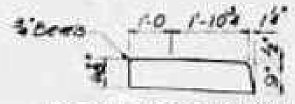


"4"x12" floor drains 1/8" aluminum sheets welded A.S.T.M. B-209 alloy 3003 H-14 or 6061-T6 Space to miss diaphragms.

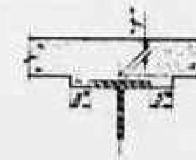
*Bottom edge of 1/8" thick Aluminum sheet (3003-H14) as shown on Deck Plan

CURB DETAILS

*Cost of alum. sheets incidental to class X conc.

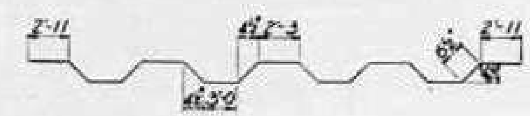


DETAILS OF 1/8" ALUMINUM SHEETS Used in Curb Joints (3003-H14)

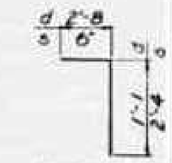


After all structural steel has been erected elevations of the top flanges of the beams shall be taken at intervals shown on D.L. Deflection Diagram. From these elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so attained subtracted from the theoretical grade elevations minus floor thickness equals the fillet heights above tops of beams.

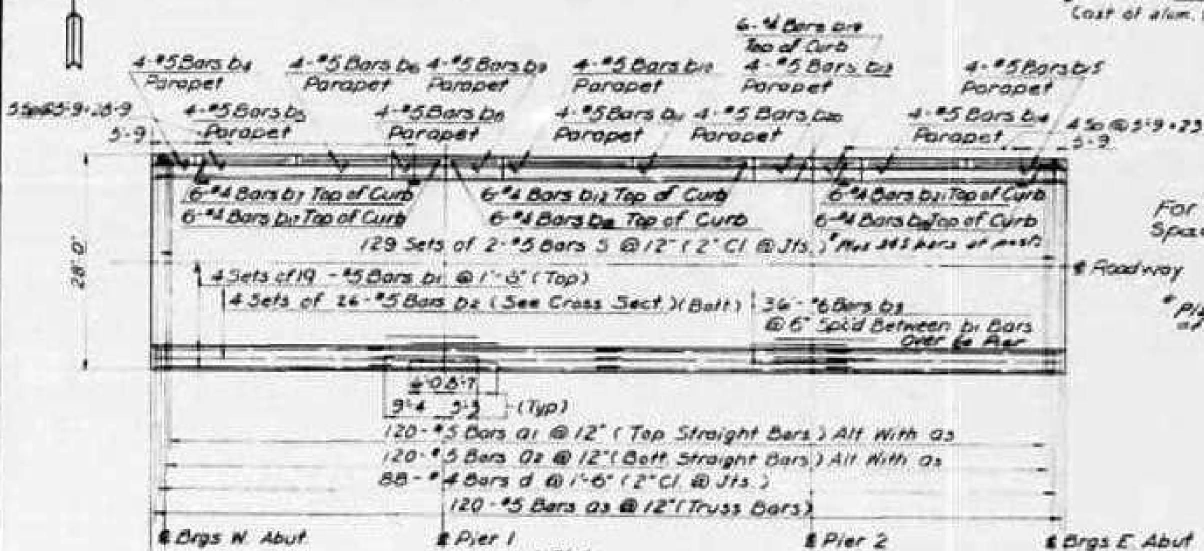
METHOD OF DETERMINING FILLET HEIGHT "t"



BAR a



BARS d & s

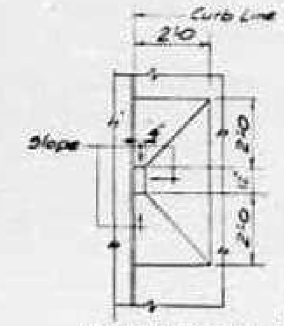


For Location of Parapet Joint Spacing See Sheet #4.

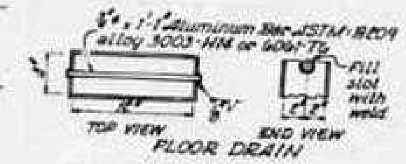
*Place 2-S bars on inside face of each Post

PLAN

Note: Bar reinforcement and jt spacing symmetrical about ℄ roadway



DRAIN DETAIL



FLOOR DRAIN

BILL OF REINFORCEMENT

Bar	No.	Size	Lgth	Shape
a1	120	#5	27'-7	—
a2	120	#5	27'-3	—
a3	120	#5	28'-11	~
b1	76	#5	30'-9	—
b2	104	#5	30'-7	—
b3	72	#5	14'-7	—
b4	8	#5	3'-6	—
b5	8	#5	13'-10	—
b6	8	#5	14'-0	—
b7	12	#4	31'-11	—
b8	8	#5	6'-8	—
b9	8	#5	5'-11	—
b10	8	#5	16'-9	—
b11	8	#5	16'-6	—
b12	12	#4	33'-8	—
b13	8	#5	6'-2	—
b14	8	#5	15'-4	—
b15	8	#5	11'-4	—
b16	12	#4	26'-11	—
b17	12	#4	6'-8	—
b18	12	#4	5'-11	—
b19	12	#4	3'-8	—
b20	8	#5	3'-8	—
b21	12	#4	6'-2	—
d	176	#4	3'-9	⌐
S	384	#5	2'-10	⌐

*Structural Steel includes weight of rockers, bolsters, bearing plates, lead plates, pintles and anchor bolts.
Estimated Weight = 4830 lbs.

Class "X" Concrete	Cu.Yd.	106.5
Reinforcement Bars	Lbs.	21,400
Structural Steel*	Lbs.	70,670

BILL OF MATERIALS

Cost of furnishing and installing drains, aluminum sheets, waterstop, premoulded joint filler and joint sealing compound shall be incidental to the contract.

ELEVATION - TOP OF SLAB ** (Elevations are not adjusted for D.L. deflection)

Stgr \ Pt.	1	2	3	4	5	6	7	8	9	10	11	12	13
A	609.15	608.94	608.72	608.54	608.38	608.23	608.07	607.96	607.83	607.78	607.68	607.62	607.53
B	609.21	609.01	608.82	608.65	608.50	608.37	608.23	608.12	608.02	607.97	607.89	607.84	607.78
C	609.28	609.09	608.91	608.76	608.63	608.50	608.39	608.29	608.20	608.16	608.10	608.06	608.03
D	609.34	609.17	609.01	608.87	608.76	608.64	608.54	608.46	608.39	608.36	608.31	608.29	608.27
E	609.41	609.25	609.11	608.98	608.88	608.78	608.70	608.63	608.58	608.55	608.52	608.51	608.52

See Sheet No. 3 For Locations Of Points.
** Where curb is over stringer, elevation shown is that of the projection of top of slab along its cross slope

DESIGNED	J.J.H
CHECKED	L.D
DRAWN	AME & J.J.H
CHECKED	L.D.

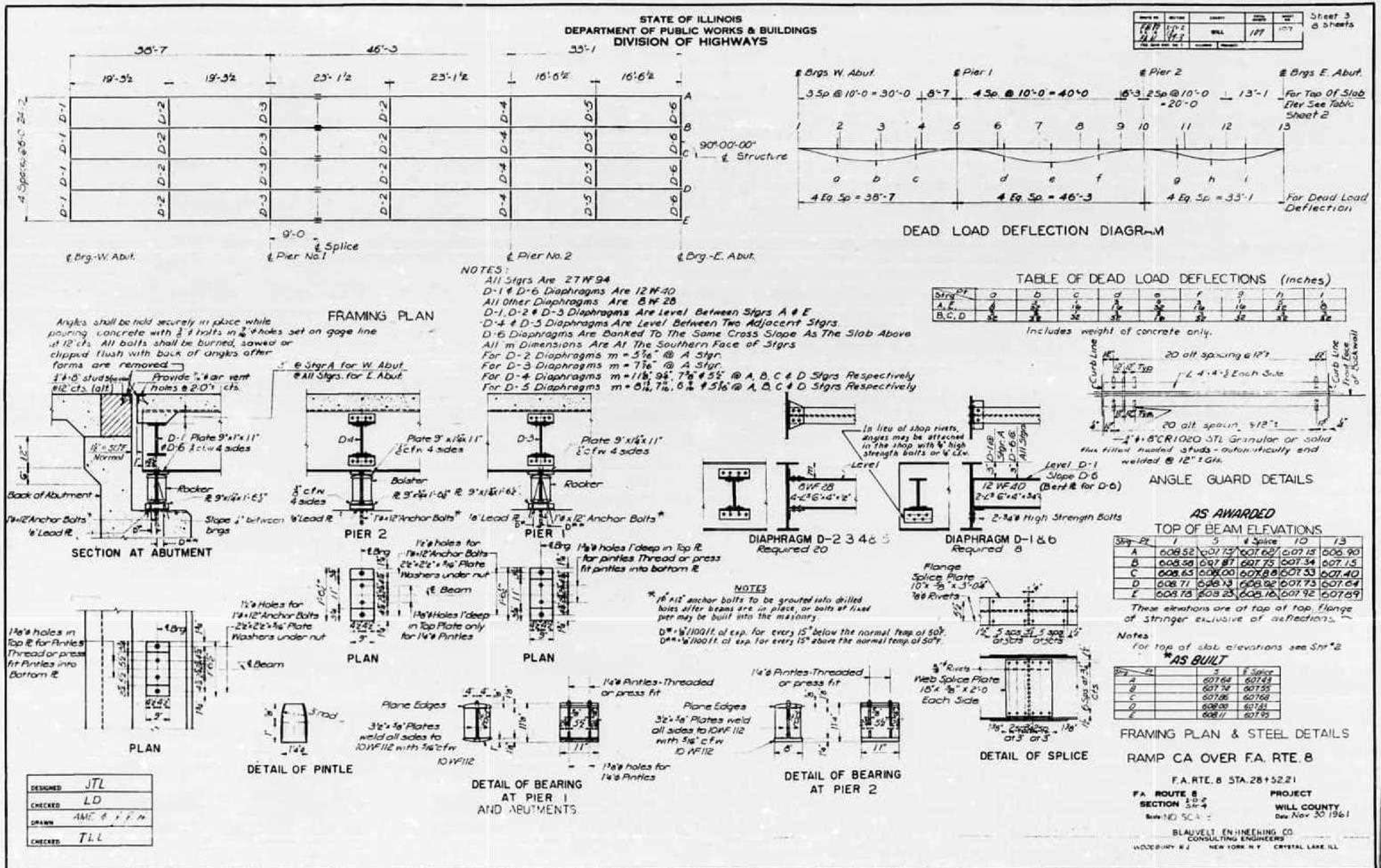
SLAB PLAN & CROSS SECTION
RAMP CA
OVER F.A. RTE. 8

F.A. RTE. 8 STA. 28+52.21
F.A.-ROUTE 8 PROJECT
SECTION 1-D-2 (3R-4) WILL COUNTY
Scale NO SCALE Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

Revised when 28-0 to Plan ... Corrected Reinforcement from 21,210 to 21,400 lbs.

FOR INFORMATION ONLY



NOTES:
All Stgrs Are 27 WF 94
D-1 & D-6 Diaphragms Are 12 WF 40
All Other Diaphragms Are 8 WF 28
D-1, D-2 & D-3 Diaphragms Are Level Between Stgrs A & E
D-4 & D-5 Diaphragms Are Level Between Two Adjacent Stgrs.
D-6 Diaphragms Are Banked To The Same Cross Slope As The Slab Above
All m Dimensions Are At The Southern Face of Stgrs

Angles shall be held securely in place while pouring concrete with 3/4" ∅ bolts in 7/8" ∅ holes set on gage line at 12" cts. All bolts shall be burned, sawed or clipped flush with back of angles after forms are removed.

NOTES
* 1 1/4" x 12" anchor bolts to be grouted into drilled holes after beams are in place, or bolts at fixed pier may be built into the masonry.

TABLE OF DEAD LOAD DEFLECTIONS (inches)

Stgr / Pt	a	b	c	d	e	f	g	h	i
A, E	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B, C, D	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Includes weight of concrete only.

AS AWARDED
TOP OF BEAM ELEVATIONS

Stgr / Pt	1	5	℄ Splice	10	13
A	608.52	607.73	607.62	607.15	606.90
B	608.58	607.87	607.75	607.34	607.15
C	608.65	608.00	607.88	607.53	607.40
D	608.71	608.13	608.02	607.73	607.64
E	608.78	608.25	608.16	607.92	607.89

These elevations are of top of top flange of stringer exclusive of deflections.

Notes
For top of slab elevations see Sht #2

*AS BUILT

Stgr / Pt		5	℄ Splice
A		607.64	607.43
B		607.74	607.55
C		607.86	607.68
D		608.00	607.81
E		608.11	607.95

FRAMING PLAN & STEEL DETAILS
RAMP CA OVER F.A. RTE. 8

F.A. RTE. 8 STA. 28+52.21
F.A. ROUTE 8 SECTION
PROJECT WILL COUNTY
Scale NO SCALE Date Nov 30 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS

DESIGNED	JTL
CHECKED	LD
DRAWN	AME
CHECKED	TLL

* Revised Elevations 4-28-66 L.W.

FOR INFORMATION ONLY

WSP USA Inc. 30 N. LASALLE STREET SUITE 4200 CHICAGO, IL 60602 TEL: (312) 782-8150 FAX: (312) 782-1684	USER NAME = USCP702533	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS	F.A.I. RTE. 80	SECTION FAI 80 21 INTERCHANGE	COUNTY WILL	TOTAL SHEETS 1209	SHEET NO. 858
		DRAWN -	REVISED -							
	PLOT SCALE = 7:11.99616 ' / in.	CHECKED -	REVISED -			CONTRACT NO. 62R22				
	PLOT DATE = 4/22/2025	DATE -	REVISED -		SHEET 38 OF 62 SHEETS	ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Ahead Stationing

SHEET NO. 5
8 SHEETS

TOP PLAN

SECTION A-A

END VIEW

ELEVATION

FOOTING PLAN

DIMENSIONS

REINFORCEMENT

Note
All edges shall have standard ¾" chamfers except footings.

s BARS

u BARS

n BARS

A & B DIMENSIONS

Bar	A	B
S1	2'-2	2'-5
S2	2'-2	2'-2
S3	2'-2	2'-10
S4	2'-2	2'-0
S5	2'-2	1'-9

2 PIERS
BILL OF MATERIAL

Bar	No	size	Lgth	Shape
h	8	#5	23'-10	—
h1	4	#5	17'-8	—
h2	40	#5	9'-8	—
n	44	#6	4'-3	⊃
p	18	#11	23'-10	—
p1	16	#5	8'-4	—
s1	44	#5	7'-0	⊏⊐
s2	32	#5	6'-6	⊏⊐
s3	20	#5	7'-10	⊏⊐
s4	16	#5	6'-2	⊏⊐
s5	32	#5	5'-8	⊏⊐
t	30	#5	4'-0	—
U	12	#6	10'-2	⊏
V	20	#6	15'-6	—
V1	12	#6	16'-2	—
V2	12	#6	15'-4	—
W	6	#5	13'-8	—
Rock Exc. Pier #1		Cu yds	15	
Rock Exc. Pier #2		Cu yds	15	
Reinf. Bars		lbs	6020	
Conc. Pier #1		Cu yds	277	
Conc. Pier #2		Cu yds	259	

Maximun bearing pressure
• 6½ Tons/Sq. Ft.

DESIGNED	L.D.
CHECKED	G.F.
DRAWN	J.J.H.
CHECKED	T.L.L.

PIERS
RAMP CA OVER F.A. RTE. 8
F.A. RTE. 8 STA. 28+52.21

F.A. ROUTE 8 — PROJECT
SECTION 1-D-F STR. 4 — WILL COUNTY
State NO SCALE — Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

* Revised Dimensions / Elevation 4-28-66 L.W.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystems-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0090186-62R22-Existing39.dgn

USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 7:11.99616 '-" / in.	CHECKED -	REVISED -
PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

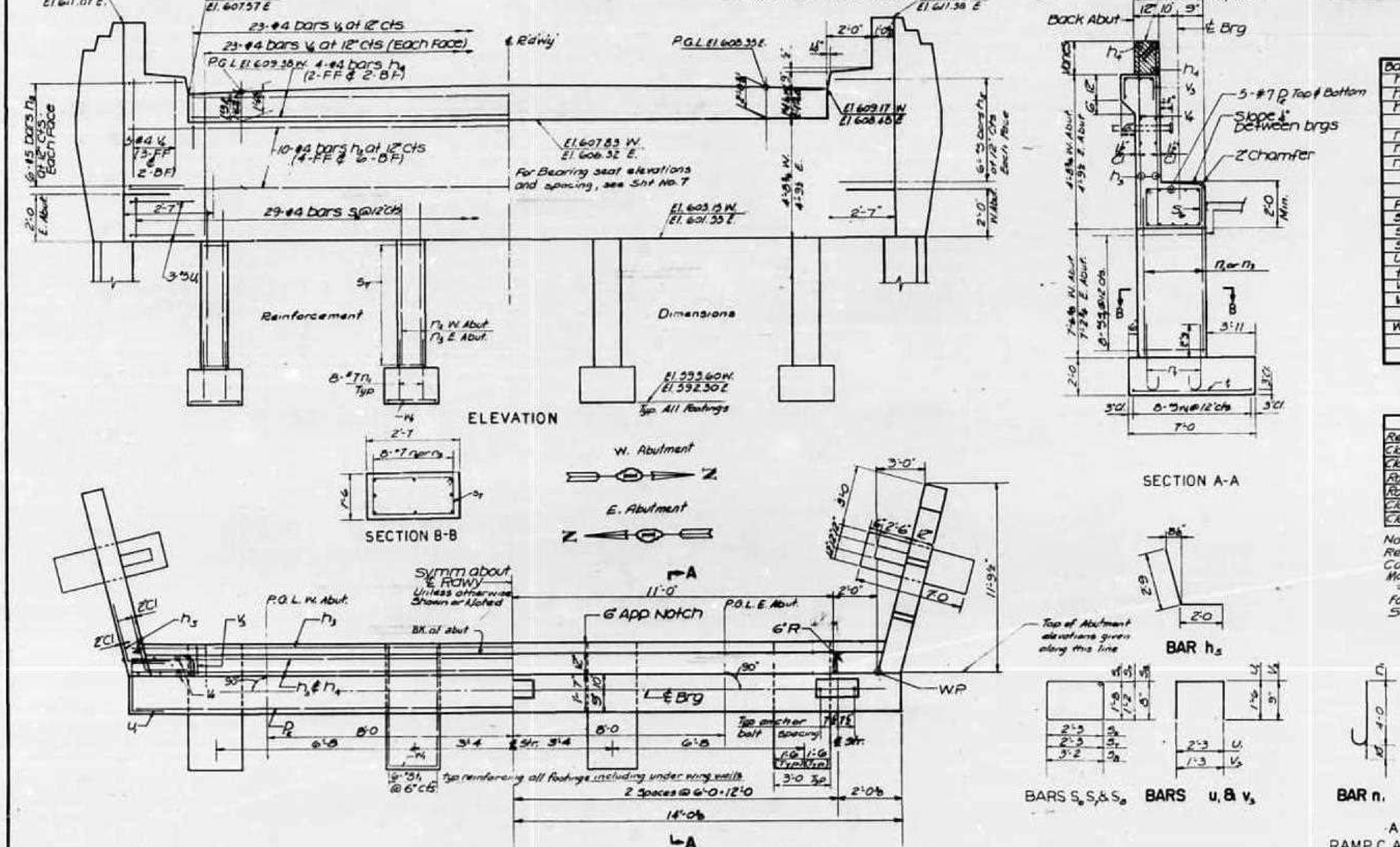
SHEET 39 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	859
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. RTE. 8	I-D-2 STR.-4	WILL	197	110

SHEET NO. 6 OF 6 SHEETS



2 ABUTMENTS BAR LIST

Bar	No	Size	Lgth	Shape
h₁	20	#4	27'-8	—
h₂	8	#4	21'-8	—
h₅	24	#5	4'-9	L
n₁	88	#7	4'-10	hooked
n₂	44	#7	9'-4	—
n₃	44	#7	9'-0	—
P₁	20	#7	27'-8	—
S₆	58	#4	8'-8	▭
S₇	64	#5	7'-10	▭
S₈	32	#5	8'-8	▭
U₁	12	#5	5'-3	⊓
t₁	72	#8	6'-6	—
V₃	46	#4	2'-9	⊓
V₄	66	#4	5'-8	—
W₁	96	#5	2'-6	—

2 ABUTMENTS BILL OF MATERIAL

Item	Unit	Quan.
Reinf. Bars	lbs.	8430
Class X Conc E. Abut.	Cu. Yds.	34.8
Class X Conc W. Abut.	Cu. Yds.	33.9
Rock Exc E. Abut.	Cu. Yds.	5
Rock Exc W. Abut.	Cu. Yds.	5
Class A Exc. E. Abut.	Cu. Yds.	108
Class A Exc. W. Abut.	Cu. Yds.	146

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.
Maximum bearing pressure = 3½ ton/S.F.
Footing should extend 1'-0 into Sound Rock.

DESIGNED	L.D.
CHECKED	GF
DRAWN	SEF
CHECKED	JJH

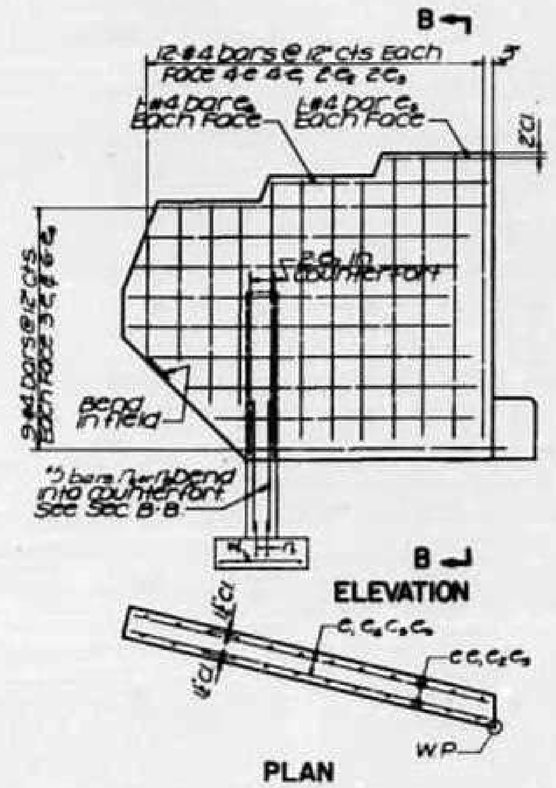
ABUTMENTS
RAMP C.A. OVER F.A. RTE. 8
F.A. RTE. 8 STA. 28+52.21
F.A. ROUTE 8 SECTION I-D-2 STR.-4 — PROJECT WILL COUNTY
Scale NO SCALE — Date Nov. 30 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. — NEW YORK, N. Y. — CRYSTAL LAKE, ILL.

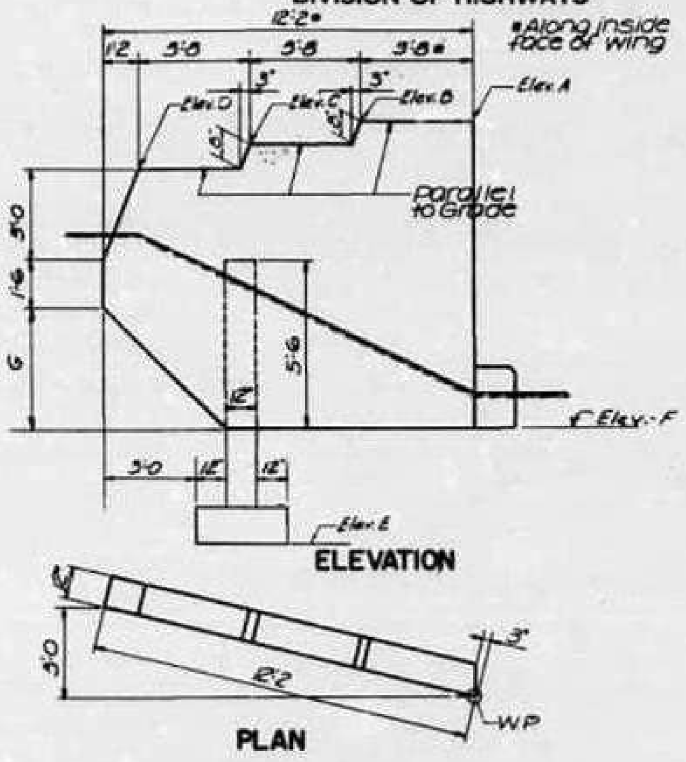
11-13-64 Chg'd Class X E. abut. from 34.6 to 34.8 cu yds & W. abut. from 33.7 to 33.9 cu yds.

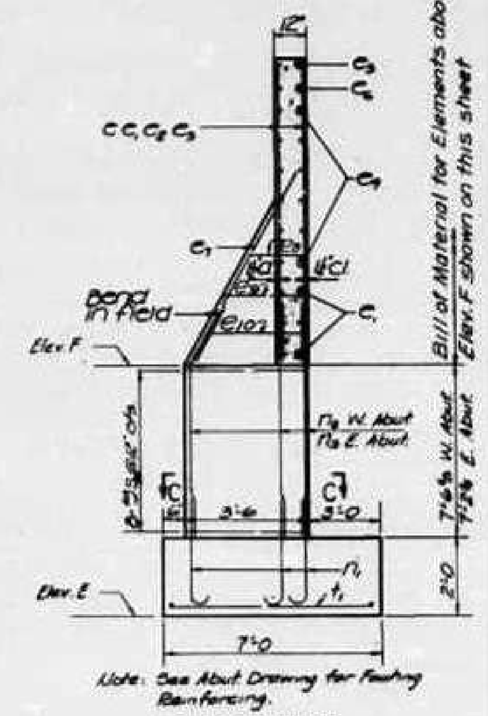
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Sheet 7
8 Sheets







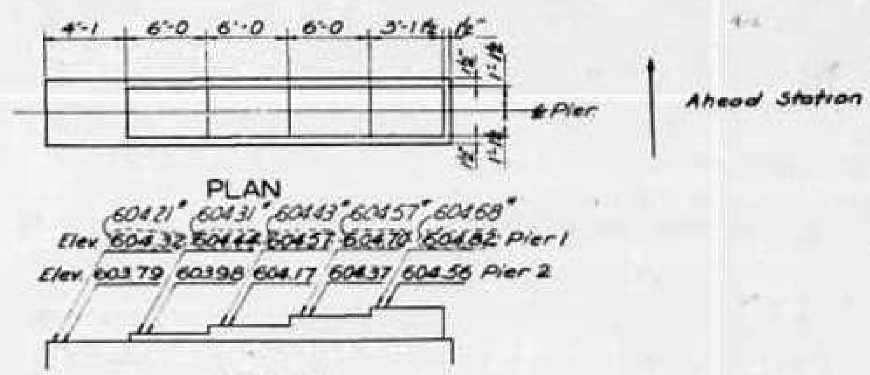
ONE END POST BILL OF MATERIAL

Bar	No.	Size	Lgth	Shape
c	8	#4	9-5	—
c1	14	#4	8-6	—
c2	4	#4	6-6	—
c3	4	#4	5-0	—
c4	12	#4	10-6	—
c5	2	#4	3-6	—
c6	2	#4	7-0	—
c7	2	#5	7-0	—
e8	1	#4	3-2	
e9	1	#4	4-6	
e10	1	#4	5-10	
*Reinforcement Bars			lbs	280
*Class X conc.				
W. Abut. Two Posts			Cu.Yd.	8.0
E. Abut. Two Posts			Cu.Yd.	8.2

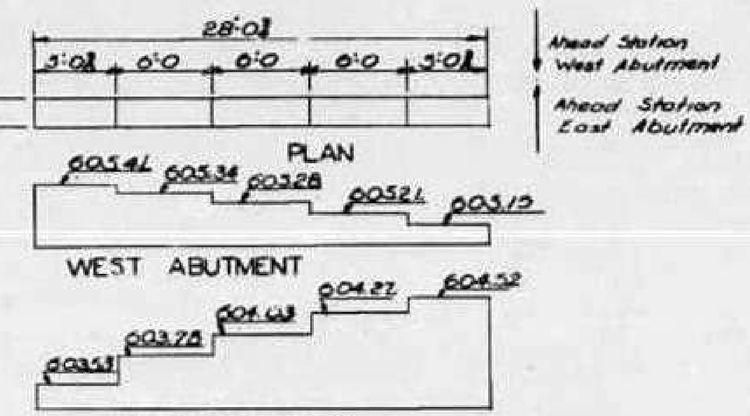
*Included in quantity on Sht. No. 6

TABLE OF WINGWALL ELEVATIONS & DIMENSIONS

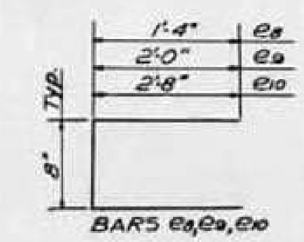
Wingwall	Pt.	A	B	C	D	E	F	G
E. Abut.	N.E.W.	611.07	611.08	610.42	609.76	592.30	601.35	3'-11⅝"
	S.E.W.	611.98	611.98	611.32	610.66	592.30	601.35	4'-7½"
W. Abut.	N.W.W.	612.67	612.74	611.25	611.54	593.60	603.15	3'-10⅝"
	S.W.W.	612.91	612.98	612.35	611.78	593.60	603.15	4'-1⅝"



PAD ELEVATIONS OF PIERS



PAD ELEVATIONS OF ABUTMENTS



DESIGNED	L.D.
CHECKED	G.F.
DRAWN	J.J.H.
CHECKED	T.L.L.

PIER ELEVATIONS & ABUTMENT DETAILS
RAMP CA
OVER F.A. RTE. 8
F.A. RTE. 8 STA. 28+52.21
F.A. ROUTE 8
SECTION I-D-2 (STR-4)
PROJECT
WILL COUNTY
Scale NO SCALE
Date Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

*Revised Elevations 4-28-66 L.W.

11-19-64 J.H.J. Rev. all end post elevations, class x conc. w. abut. from 7.8 to 8.0 cu yds. E. abut. from 8.0 to 8.2 cu yds.

FOR INFORMATION ONLY

Bench Mark No. 44A: RR Spk. in power pole N.W. Corner Lucas and Hunter Sts. Elev. 590.454

No Existing Structure

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PG FA RTE 61

PG FAI 80

PG RAMP "AD"

ELEVATION A-A

ELEVATION B-B

PLAN
FAI-80 ALIGNMENT

LOCATION SKETCH

PLAN

STATION 66+24.16
BUILT 196 BY
STATE OF ILLINOIS
F.A. RT. 61 SEC. 10HB
F.A. PROJ. U-184(20)
LOADING H5-20

See Standard 2113-1

LETTERING FOR NAME PLATE

DESIGNED	C. S.
CHECKED	R. H.
DRAWN	C. N.
CHECKED	R. H. & J. T. L.

Note: Approach Slab to be constructed in accordance with Method I (Sect 99-3 Str. 2) of Illinois Standard No 2138-4 Method II (Sect 10 Str. 3) of Illinois Standard No 1909-6

● Denotes boring location

* Radial Dimensions

Note: For Detail "A", 6'-1"-6" anchor wall detail and Section C-C See Sheet No 2

Note: Approach Slab for Sec. 10 (Str. 5) ends at Sta 65+16 and Approach Slab for Sec. 99-3 (Str. 2) begins at Sta 66+16

Note: This route has been selected as a 15'-0" vertical clearance route.

GENERAL PLAN & ELEVATION
F.A. ROUTE 61 OVER F.A.I. ROUTE 80
F.A. RTE. 61 STA. 66+24.16

F.A. ROUTE 61 — PROJECT U-184(21)
SECTION 10 (STR. 5) — WILL COUNTY
Scale: NO SCALE — Date: NOV. 30, 1961

Prepared and Recommended By: Blauvelt Engineering Co.
Structural Engineer
81-2251

BLAUVELT ENGINEERING CO
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. FROSTAL LAKE, ILL.

SHEET NO. 1
12 SHEETS

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '-' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 42 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	862
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

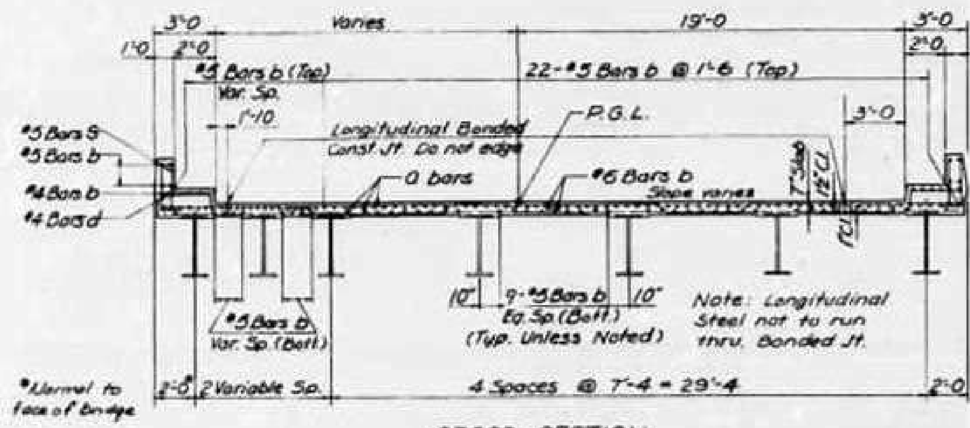
MODEL: Default
FILE NAME: pw:\transystems-pw.bentley.com:transyscorp-pw1-hosted\Documents\Projects - 2018\CH401\401180022\03-WSP\CAD\62R22-INT-4 (Center)\Sheets\Structural\Existing Bridge Plans\09901862-62R22-Existing42.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

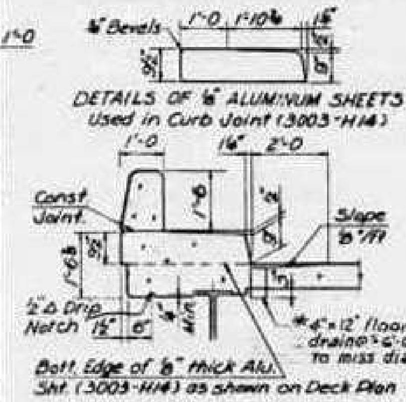
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
61	10-STR 5	WILL	197	119

SHEET NO. 3
12 SHEETS

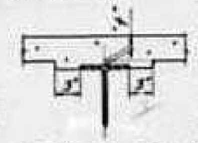
* 4" x 12" floor drains 1/4" aluminum sheets welded ASTM B-209 alloy 3003 H-14 or 6061-T6. Cost of all alum. sheets incidental to class X conc.



CROSS SECTION



CURB DETAILS

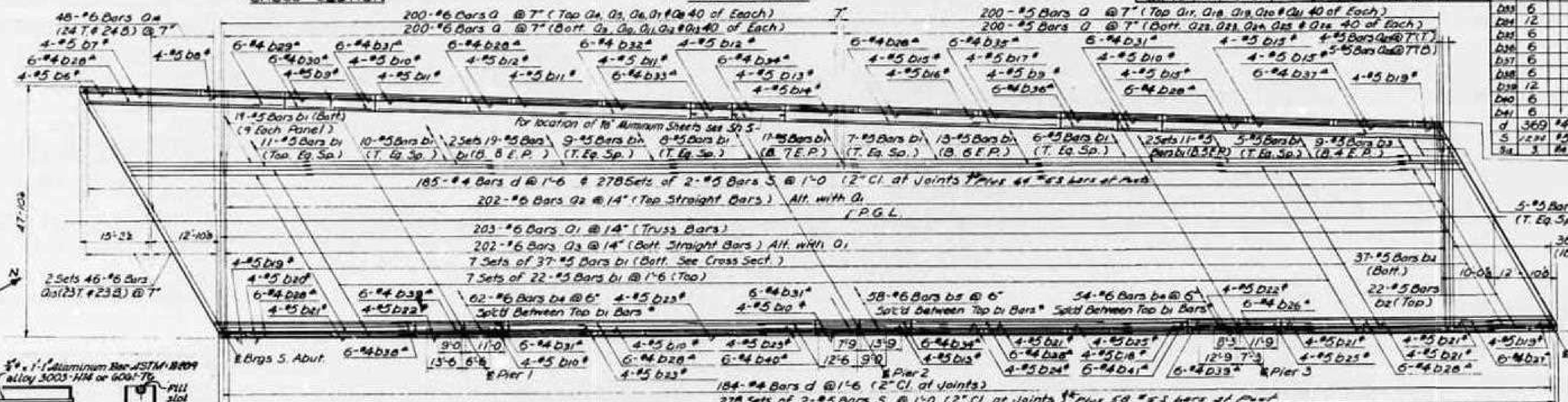


After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on Dead Load Deflection Diagram. From these Elevations subtract the increment of deflections for these points determined from the D.L. Deflection Diagram. The elevations so attained subtracted from the theoretical grade elevations minus floor thickness equals the fillet heights above tops of beams.

METHOD OF DETERMINING FILLET HEIGHT "t"

BILL OF REINFORCEMENT * Bars will vary from 2'-0 to full length.

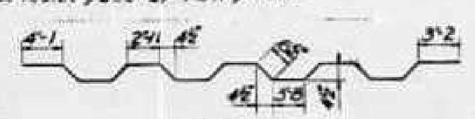
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
a1	203	#6	35'-0		a21	40	#5	6'-2		b13	8	#5	9'-8	
a2	202		33'-8		a22			11'-7		b14	4		14'-0	
a3	202		31'-8		a23			10'-9		b15	16		16'-1	
a4	40		13'-11		a24			9'-11		b16	4		7'-8	
a5			13'-1		a25			9'-0		b17	4		15'-1	
a6			12'-2		a26	40		8'-2		b18	4		14'-9	
a7			11'-4		a27	4		5'-0		b19	12		5'-2	
a8			10'-6		a28	5		7'-0		b20	4		16'-4	
a9			15'-11		b1	572		36'-0		b21	20		15'-8	
a10			15'-1		b2	59		11'-6		b22	8		8'-8	
a11			14'-2		b3	14	#5	17'-3		b23	12		16'-6	
a12			13'-4		b4	116	#6	20'-0		b24	4		13'-6	
a13	40		12'-6		b5	58	#6	21'-6		b25	8	#5	7'-7	
a14	48		24'-1		b6	4	#5	5'-4		b26	6	#4	7'-7	
a15	92		24'-6		b7	4		16'-8		b27	6		18'-6	
a16	36	#6	32'-9		b8	4		15'-11		b28	48		36'-0	
a17	40	#5	9'-7		b9	8		8'-11		b29	6		3'-8	
a18			8'-9		b10	20		8'-0		b30	6		8'-11	
a19			7'-11		b11	12		16'-8		b31	24		8'-0	
a20	40	#5	7'-0		b12	8	#5	8'-3		b32	6		24'-9	
										b33	6		8'-4	
										b34	12		9'-8	
										b35	6		29'-0	
										b36	6		9'-1	
										b37	6		20'-0	
										b38	6		2'-11	
										b39	12		8'-8	
										b40	6		23'-7	
										b41	6		17'-8	
										d	369	#4	3'-9	
										S	[illegible]	#5	2'-10	
										Sa	3	#4	3'-7	



PLAN

# Denotes Bars in Parapet.
Δ Denotes Bars in Top of Curb.
* over Piers

FLOOR DRAIN



BAR a1

Note: For Parapet and parapet reinf. details at Lamppost, see Sheet No. 5

ELEVATION - TOP OF SLAB ** (Elevations are not adjusted for dead load deflections)

Stgr. \ Pt.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	616.17	616.52	616.86	617.19	617.50	617.72	618.02	618.30	618.57	618.84	619.03	619.30	619.43	619.52
B	616.58	616.89	617.19	617.48	617.75	617.93	618.19	618.44	618.68	618.91	619.13	619.30	619.43	619.51
C	616.97	617.23	617.49	617.74	617.98	618.12	618.34	618.56	618.77	618.97	619.15	619.29	619.42	619.49
D	617.32	617.55	617.77	617.98	618.18	618.30	618.49	618.66	618.83	618.99	619.14	619.27	619.40	619.47
E	617.43	617.65	617.85	618.06	618.24	618.35	618.52	618.69	618.84	618.99	619.13	619.26	619.38	619.44
F	617.45	617.66	617.86	618.06	618.24	618.35	618.52	618.68	618.83	618.97	619.11	619.23	619.35	619.41
G	617.47	617.68	617.88	618.06	618.24	618.35	618.52	618.67	618.82	618.96	619.09	619.21	619.32	619.38

Stgr. \ Pt.	15	16	17	18	19	20	21	22	23	24	25	26	27
A	619.64	619.75	619.85	619.94	620.02	620.09	620.18	620.23	620.27	620.31	620.33	620.35	620.36
B	619.62	619.73	619.83	619.92	620.00	620.07	620.15	620.20	620.24	620.28	620.30	620.32	620.32
C	619.60	619.71	619.81	619.90	619.97	620.04	620.12	620.17	620.21	620.25	620.27	620.29	620.29
D	619.58	619.68	619.77	619.86	619.93	620.00	620.07	620.12	620.15	620.18	620.20	620.22	620.22
E	619.55	619.65	619.73	619.82	619.89	619.95	620.01	620.06	620.09	620.12	620.13	620.14	620.14
F	619.52	619.61	619.70	619.77	619.84	619.90	619.96	620.00	620.03	620.05	620.06	620.07	620.06
G	619.48	619.57	619.65	619.73	619.79	619.85	619.90	619.94	619.96	619.98	619.99	619.99	619.98

See Sheet No. 4 for Location of Points. ** Where curb is over stringer, elevation shown is that of the projection of top of slab along its cross slope.

DESIGNED	J. P. S.
CHECKED	L. D.
DRAWN	J. J. N.
CHECKED	L. D.

TOP OF BEAM ELEVATIONS

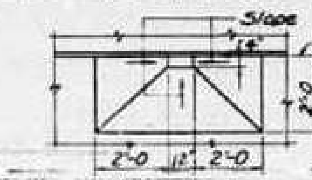
Stgr. \ Pt.	S. Abut.	Pier 1	℄ Splice	Pier 2	℄ Splice	Pier 3	℄ Splice	N. Abut.
A	615.50	617.05	617.43	618.65	619.05	619.51	619.58	619.69
B	615.91	617.26	617.59	618.84	619.03	619.46	619.55	619.65
C	616.30	617.45	617.73	618.82	619.01	619.45	619.52	619.62
D	616.65	617.63	617.87	618.80	618.98	619.40	619.46	619.55
E	616.76	617.66	617.90	618.77	618.95	619.34	619.40	619.47
F	616.78	617.68	617.89	618.74	618.92	619.29	619.34	619.39
G	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	619.23	619.25	[illegible]

These Elevs are at Top of Top Flange of Stgrs. exclusive of Deflections

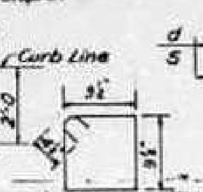
BILL OF MATERIALS

Item	Unit	Quantity
Class "X" Concrete	Cu. Yd.	329.1
Reinforcement Bars	Lbs.	86,010
Structural Steel*	Lbs.	355,700

* Structural Steel includes Weight of Rockers, Bolsters, Bearing Plates, Lead Plates, Pintles and Anchor Bolts. Estimated Wt. = 10,147 lbs.



DRAIN DETAILS



BARS d & S

SLAB PLAN & CROSS SECTION
F.A. ROUTE 61 OVER F.A.I. ROUTE 80
F.A. ROUTE 61 STA. 66+24.16
F.A. ROUTE 61 PROJECT
SECTION 10-STR 5 WILL COUNTY
Scale: No Scale Date: Nov. 30, 1961
CLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
NEW YORK, N.Y. CRYSTAL LAKE, ILL.

AS AWARDED

12-21-66 Provided 2-#5 S bars on each rail post. Revised quantity of Reinforcement.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 7:11.99616 ' / in.	CHECKED -	REVISED -
PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 43 OF 62 SHEETS

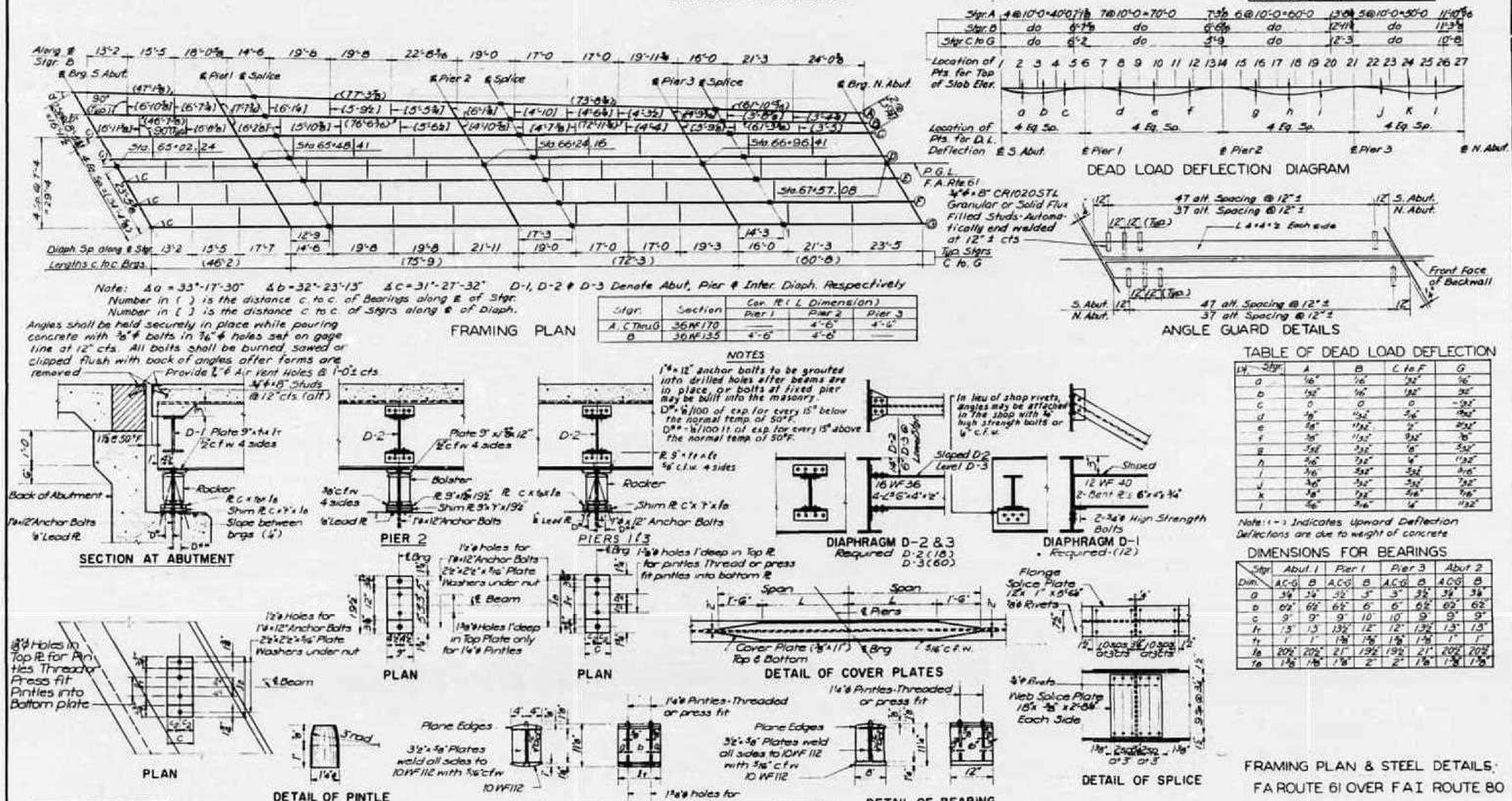
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	863

CONTRACT NO. 62R22

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 4 — 12 SHEETS



Angles shall be held securely in place while pouring concrete with ⅜"ϕ bolts in 7/16"ϕ holes set on gage line at 12" cts. All bolts shall be burned, sawed or clipped flush with back of angles after forms are removed.

Stgr.	Section	Cov. ℞ (L Dimension) Pier 1	Pier 2	Pier 3
A, C Thru G	36 WF 170	—	4'-6"	4'-6"
B	36 WF 135	4'-6"	4'-6"	—

NOTES

1¼" × 12" anchor bolts to be grouted into drilled holes after beams are in place, or bolts at fixed pier may be built into the masonry.
D* = ⅛/100 of exp. for every 15° below the normal temp. of 50°F.
D** = ⅛/100 of exp. for every 15° above the normal temp. of 50°F.

TABLE OF DEAD LOAD DEFLECTION

Pt. \ Stgr.	A	B	C to F	G
a	1/16"	1/16"	1/32"	1/16"
b	1/32"	1/16"	1/32"	3/32"
c	0	0	0	-1/32"
d	1/8"	11/32"	5/16"	15/32"
e	5/8"	11/32"	1/2"	21/32"
f	3/8"	11/32"	9/32"	7/8"
g	3/32"	3/32"	1/8"	3/32"
h	3/16"	7/32"	1/4"	11/32"
i	3/16"	3/32"	3/32"	9/16"
j	3/16"	3/32"	3/32"	7/32"
k	3/8"	7/32"	5/16"	5/16"
l	5/8"	3/16"	1/4"	11/32"

Note: (-) Indicates Upward Deflection
Deflections are due to weight of concrete

DIMENSIONS FOR BEARINGS

Dim. \ Stgr.	Abut. 1 AC-G	Abut. 1 B	Pier 1 AC-G	Pier 1 B	Pier 3 AC-G	Pier 3 B	Abut 2 AC-G	Abut 2 B
a	3¼"	3¼"	3½"	3"	3"	3½"	3¼"	3¼"
b	6½"	6½"	6½"	6"	6"	6½"	6½"	6½"
c	9"	9"	9"	10"	10"	9"	9"	9"
t₁	13"	13"	13½"	12"	12"	13½"	13"	13"
t₂	1"	1"	1⅝"	1⅝"	1⅝"	1⅝"	1"	1"
la	20½"	20½"	21"	19½"	19½"	21"	20½"	20½"
lb	1⅝"	1⅝"	1⅞"	2"	2"	1⅞"	1⅝"	1⅝"

*AS BUILT
SHIM (t) THICKNESS

Stgr.	A	B	C	D	E	F	G
Abut 1	[illegible]	—	—	—	—	[illegible]	[illegible]
Pier 1	—	—	—	[illegible]	[illegible]	[illegible]	[illegible]
Pier 2	[illegible]	[illegible]	—	—	[illegible]	[illegible]	—
Pier 3	—	—	[illegible]	—	[illegible]	—	—

* Rev. Shim thickness 4-28-65 L.W.

AS AWARDED
SHIM (t) THICKNESS

Stgr.	A	B	C	D	E	F	G
Abut. 1	—	—	—	—	—	[illegible]	[illegible]
Pier 1	—	—	—	—	[illegible]	[illegible]	[illegible]
Pier 2	—	[illegible]	[illegible]	[illegible]	—	[illegible]	—
Pier 3	—	[illegible]	[illegible]	—	[illegible]	—	—
Abut 2	—	[illegible]	—	—	—	—	—

11-20-64 J.M.J. Rev. C.R. L dim. from 2'-6" Pier 1, 3'-6" Pier 2 & 2'-0"

DESIGNED	G. F.
CHECKED	J.P.S. & J.T.L.
DRAWN	J.J. H.
CHECKED	L. D.

FRAMING PLAN & STEEL DETAILS
F.A. ROUTE 61 OVER F.A.I. ROUTE 80
F.A. ROUTE 61 STA. 66+24.16
F.A. ROUTE 61 SECTION 10-STR. 5
PROJECT WILL COUNTY
Scale NO SCALE Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

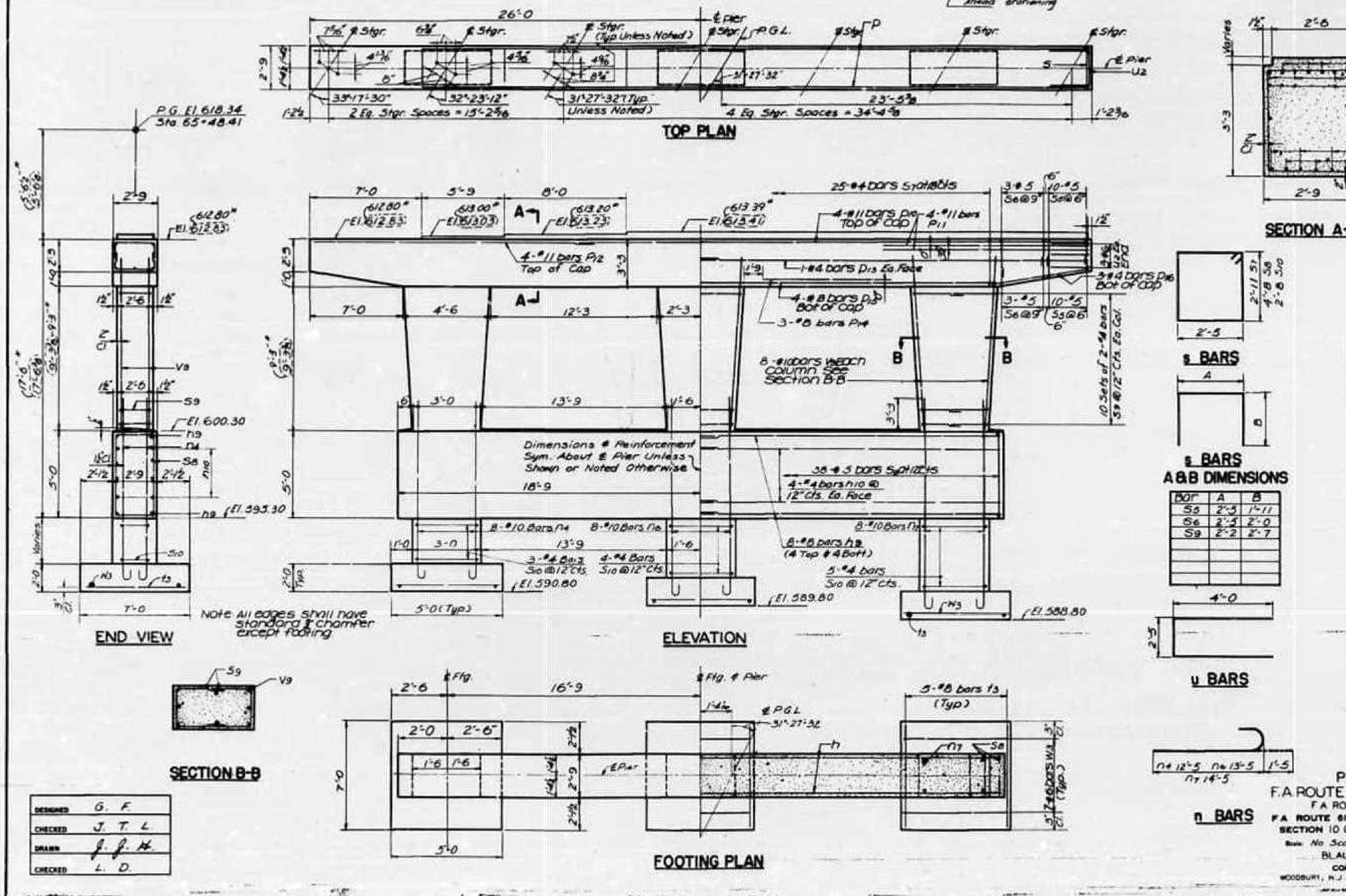
EXISTING BRIDGE PLANS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	864

CONTRACT NO. 62R22
ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 6 12 SHEETS



PIER BILL OF MATERIAL

Bar	No	Size	Lgth	Shape
h9	16	#8	19'-7	—
h10	16	#4	19'-1	—
n4	8	#10	13'-10	⊃
n6	8	#10	14'-10	⊃
n7	8	#10	15'-10	⊃
P10	4	#11	36'-0	—
P11	16	#11	12'-10	—
P12	4	#11	19'-3	—
P13	4	#4	26'-4	—
P14	6	#8	7'-9	—
P15	4	#8	36'-0	—
P16	6	#4	7'-3	—
S5	40	#5	6'-3	⊓
S6	12	#5	6'-5	⊓
S7	23	#4	11'-6	▢
S8	38	#3	15'-0	▢
S9	60	#4	7'-4	⊓
t3	15	#8	6'-6	—
S10	12	#4	11'-0	▢
U2	6	#6	10'-5	⊏
V9	24	#10	12'-4	—
W3	21	#6	4'-6	—
Class X Concrete			Cu Yd	38.3
Reinf. Bars			Lb	8730
Rock Excavation			Cu Yds	4
Class A Excavation			Cu Yd	40

PIER NO. 1
F.A. ROUTE 61 OVER F.A.I. ROUTE 80
F.A. ROUTE 61 STA. 66+24.16
F.A. ROUTE 61 SECTION 10 (STR 5) PROJECT WILL COUNTY
Scale No Scale Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

DESIGNED	G. F.
CHECKED	J. T. L.
DRAWN	J. J. H.
CHECKED	L. D.

* Rev. Pier Elevations & Height of Column 4-28-65 L.W.
As Awarded

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 7 / 12 SHEETS

		WILL	197	119

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
P1	36	#11	25'-8	
P2	26		36'-0	
P3	4		26'-1	
P4	16		18'-7	
P5	6		27'-6	
P6	8	#11	24'-10	
P7	24	#5	25'-7	
S1	96	#5	22'-8	□
S2	144	#5	17'-4	□
S3	72	#5	15'-2	□
T	14	#9	9'-6	
U	18	#6	14'-7	⊏
V1	34	#11	40'-6	L
V2	102		21'-7	
V3	34		22'-8	
V4	20		12'-2	
V5	34	#11	20'-6	
W	20	#6	6'-6	
n	68	#11	7'-8	C

Class A Concrete for str.	Cu. yds.	85
Class X Concrete	Cu. Yds	1938
Reinf. Bars	Lbs	52560
Rock Excavation	Cu. Yds	114

TOP PLAN

END VIEW

ELEVATION

FOOTING PLAN

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

S BARS

V1 BARS

W BARS

n BARS

DESIGNED	G. F.
CHECKED	J. T. L.
DRAWN	J. J. H.
CHECKED	L. D.

*Rev. Pier Elevations & Height of Columns 4-28-66 L.W. As Awarded

11-20-64 J.M.J. Rev. Rock excav. from 21 to 114 cu. yds. & added 25 cu. yds. of class A conc. for strc.

PIER NO. 2
F.A. ROUTE 61 OVER F.A.I. ROUTE 80
F.A. ROUTE 61 STA. 66+24.16
F.A. ROUTE 61 — PROJECT
SECTION 10-STR. 5 — WILL COUNTY
Scale: NO SCALE — Date: Nov. 30, 1964

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

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30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '-" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

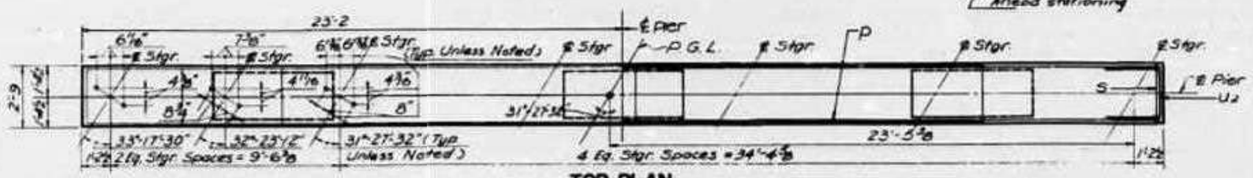
SHEET 46 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	866
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

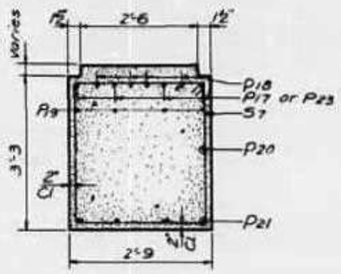
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

		WILL	197	120	SHEET NO. 8 12 SHEETS

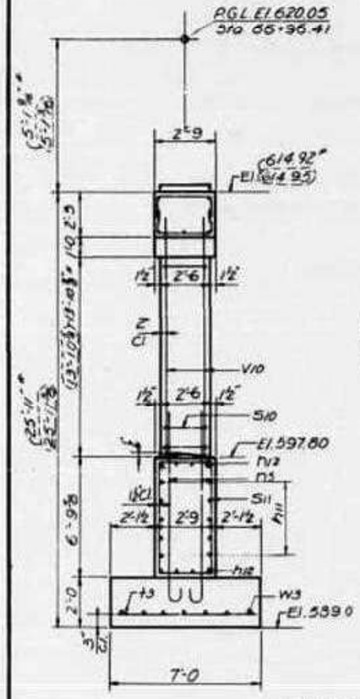
Ahead stationing



TOP PLAN

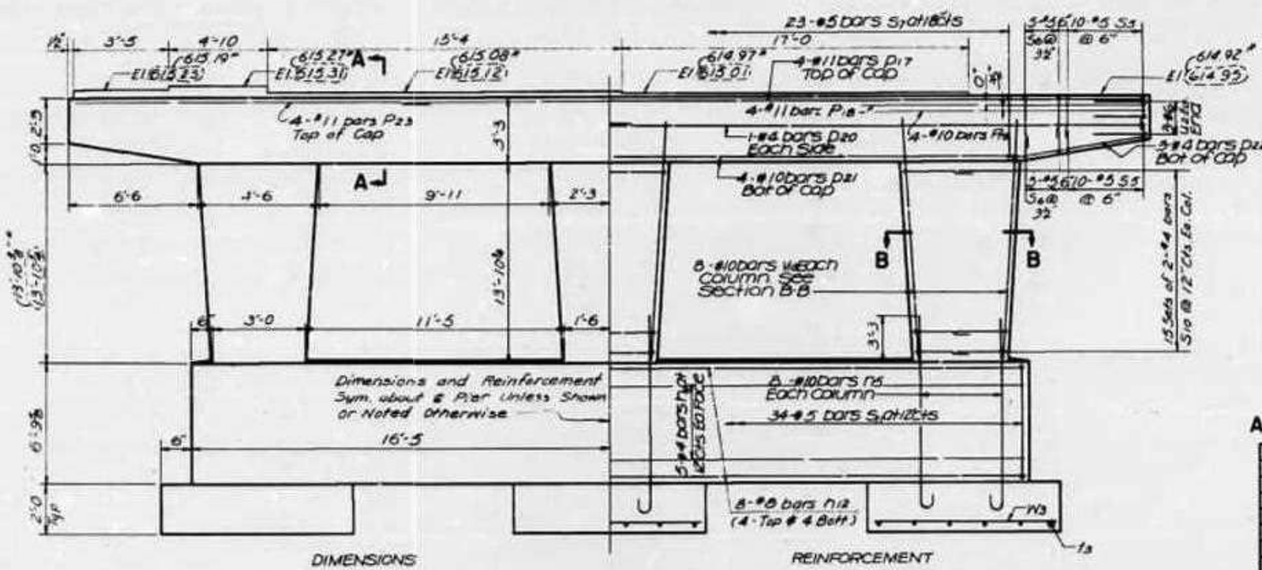


SECTION A-A



END VIEW

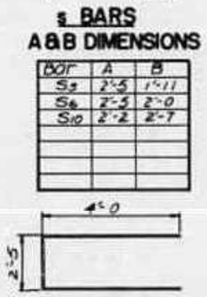
Note All edges shall have standard ¾ chamfer except footing



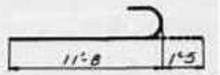
ELEVATION

℄ BARS
A & B DIMENSIONS

Bar	A	B
S5	2'-5	1'-11
S6	2'-5	2'-0
S10	2'-2	2'-7



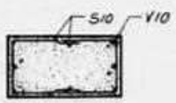
U2 BARS



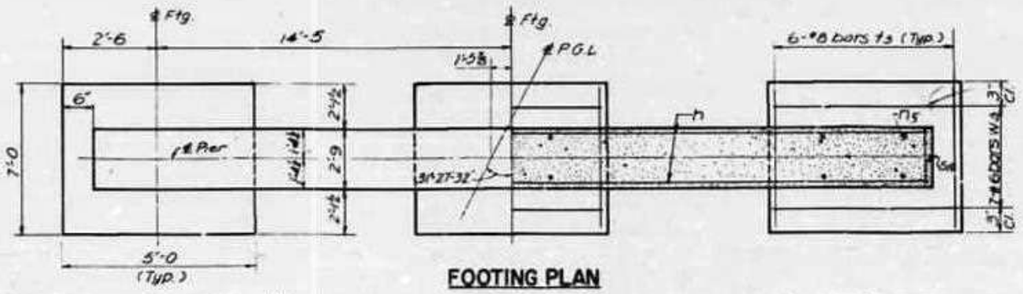
N5 BARS

PIER
BILL OF MATERIAL

Bar	No	Size	Lgth	Shape
N11	10	#4	32'-6	—
N12	8	#8	32'-6	—
N5	24	#10	13'-1	⌒
P17	4	#11	31'-0	—
P18	8	#11	15'-4	—
P19	8	#10	11'-9	—
P20	4	#4	23'-6	—
P21	4	#10	33'-0	—
P22	6	#4	6'-9	—
P23	4	#11	17'-9	—
S5	40	#5	6'-3	□
S6	20	#5	6'-5	□
S7	23	#5	11'-8	□
S10	90	#4	7'-4	□
S11	34	#5	16'-8	□
T3	18	#8	6'-6	—
U2	6	#6	10'-5	⊂
V10	24	#10	17'-0	—
W3	21	#6	4'-6	—
Class X Concrete		Cu Yds	60.4	
Reinf. Bars		Lbs	8950	
Rock Excavation		Cu Yds	9	
Class A Excavation		Cu Yds	51	



SECTION B-B



FOOTING PLAN

DESIGNED	G. F.
CHECKED	J. T. L.
DRAWN	J. H.
CHECKED	L. D.

PIER NO. 3
F A ROUTE 61 OVER F A I ROUTE 80
F A ROUTE 61 STA 66+24.16

F A ROUTE 61	PROJECT	
SECTION 10 (STR. S)	WILL COUNTY	
Scale No Scale	Date Nov. 30, 1961	

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
PHILADELPHIA, PA. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

* Rev Pier Elevations (Height of Column 4-28-66 L.W.
(—) As Awarded

11-20-64 (M.) Rev. class A exc. from 40 to 51 cu yds. ℄ Rock exc. from 9 to 3 cu. yds.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

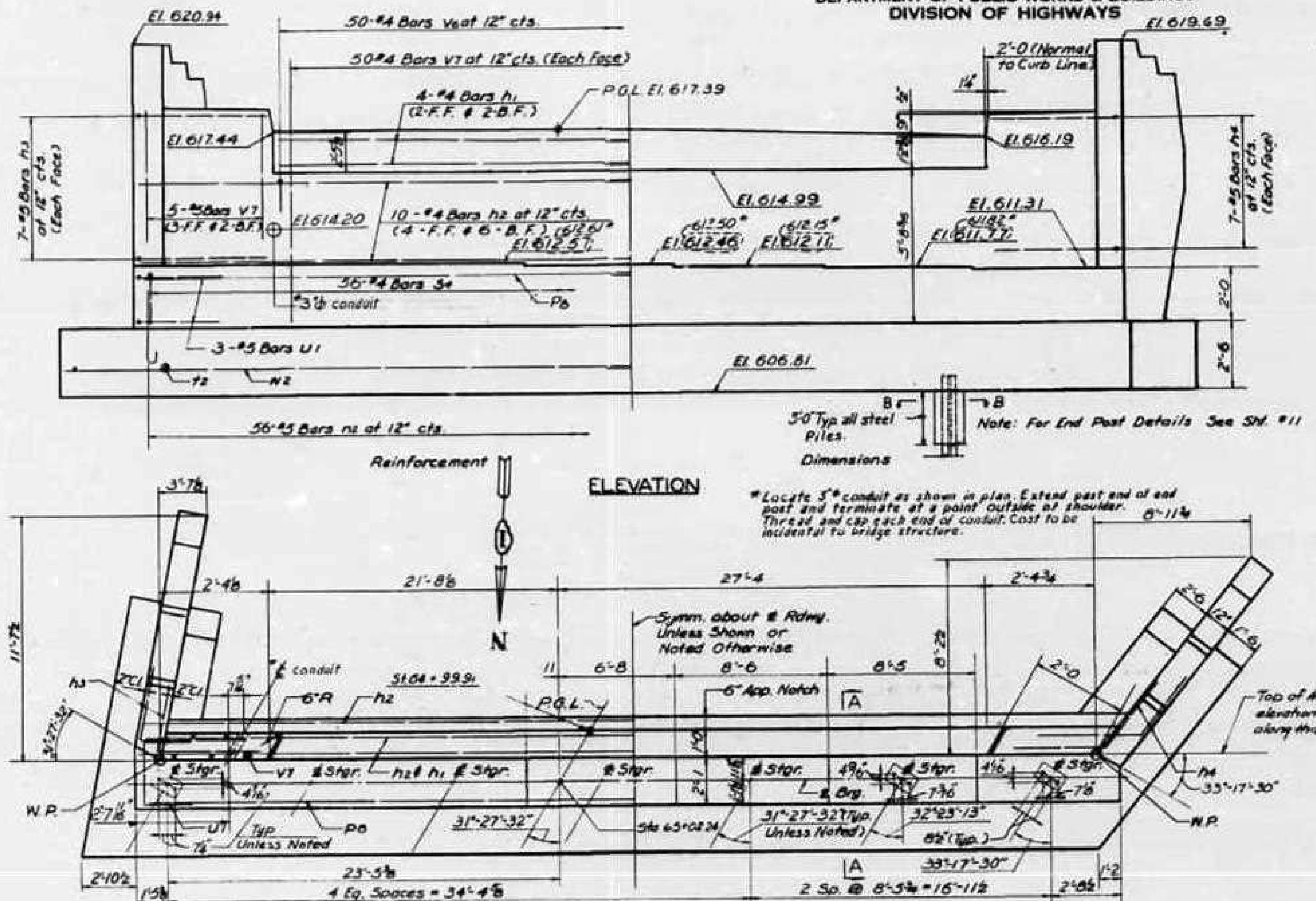
USER NAME = USCP702533	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS	
	DRAWN -	REVISED -			
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -			
PLOT DATE = 4/22/2025	DATE -	REVISED -		SHEET 47 OF 62 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	867
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

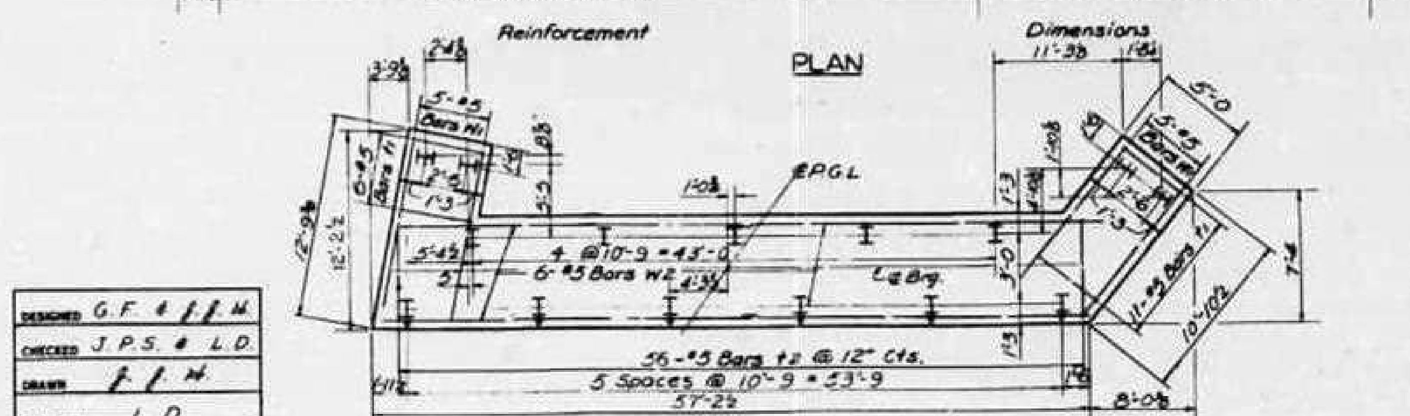
		WILL	197	121

SHEET NO. 9 / 12 SHEETS

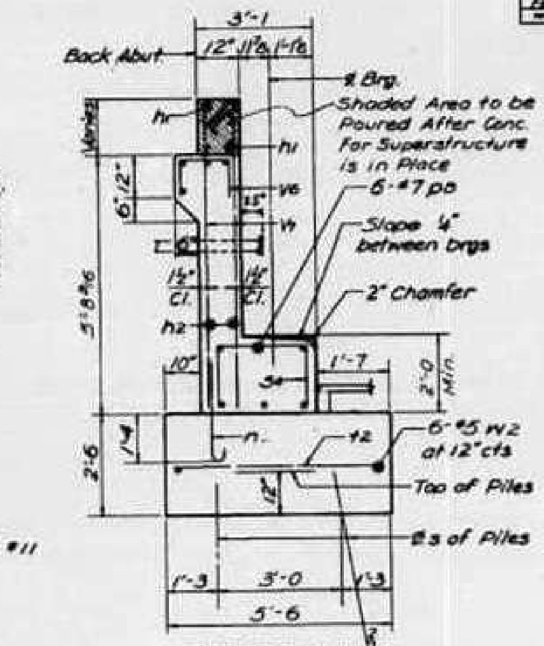


ELEVATION

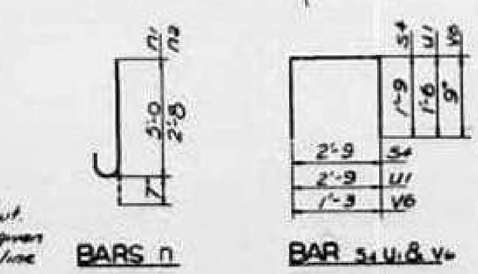
PLAN



FOOTING PLAN ⟂ Denotes Battered Piles

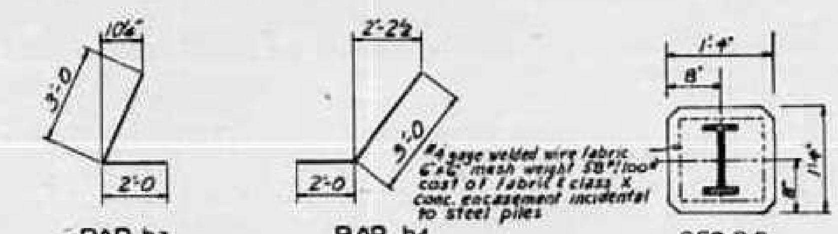


SECTION A-A



BARS n

BAR S4 U1 & V6



BAR h3

BAR h4

SEC. B-B

BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
h1	8	#4	24'-10	—
h2	20	#4	28'-1	—
h3	14	#5	5'-0	∟
h4	14	#5	5'-0	∟
n1	28	#5	5'-7	⊏
n2	56	#5	3'-3	⊏
t1	17	#5	4'-6	—
t2	56	#5	5'-0	—
U1	6	#5	5'-9	⊓
V6	50	#4	2'-9	⊓
V7	110	#4	6'-8	—
D8	12	#7	28'-4	—
S4	56	#4	6'-3	⊓
W1	10	#5	10'-4	—
W2	12	#5	28'-11	—

BILL OF MATERIAL

Item	Unit	Quan.
Class X Concrete	Cu. Yds.	73.9
Reinforcement Bars	Lbs.	3,960
Steel Piles (10BP42)	Lin. Ft.	252
Test Pile (St. 10BP42)	Each	1

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

PILE DATA

Type: Steel 10 BP 42
Capacity: Refusal
Est. Length: 18 Feet
No. Req'd: 13+1 Test Pile

S ABUTMENT
F.A. ROUTE 61 OVER F.A.I. ROUTE 80
F.A. ROUTE 61 STA. 66+24.16

F.A. ROUTE 61 SECTION 10 - STR. 5
PROJECT WILL COUNTY
Scale: No Scale
Date: Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

DESIGNED	G.F. & J.J.H.
CHECKED	J.P.S. & L.D.
DRAWN	J.J.H.
CHECKED	L.D.

* Rev. Abut. Elevations 4-28-66 L.W.
As Awarded

11-20-64 J.M.J. Rev. class X conc. from 73.7 to 73.9 cu. yds.

FOR INFORMATION ONLY

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/4011800022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing48.dgn

WSP USA Inc.
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USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 48 OF 62 SHEETS

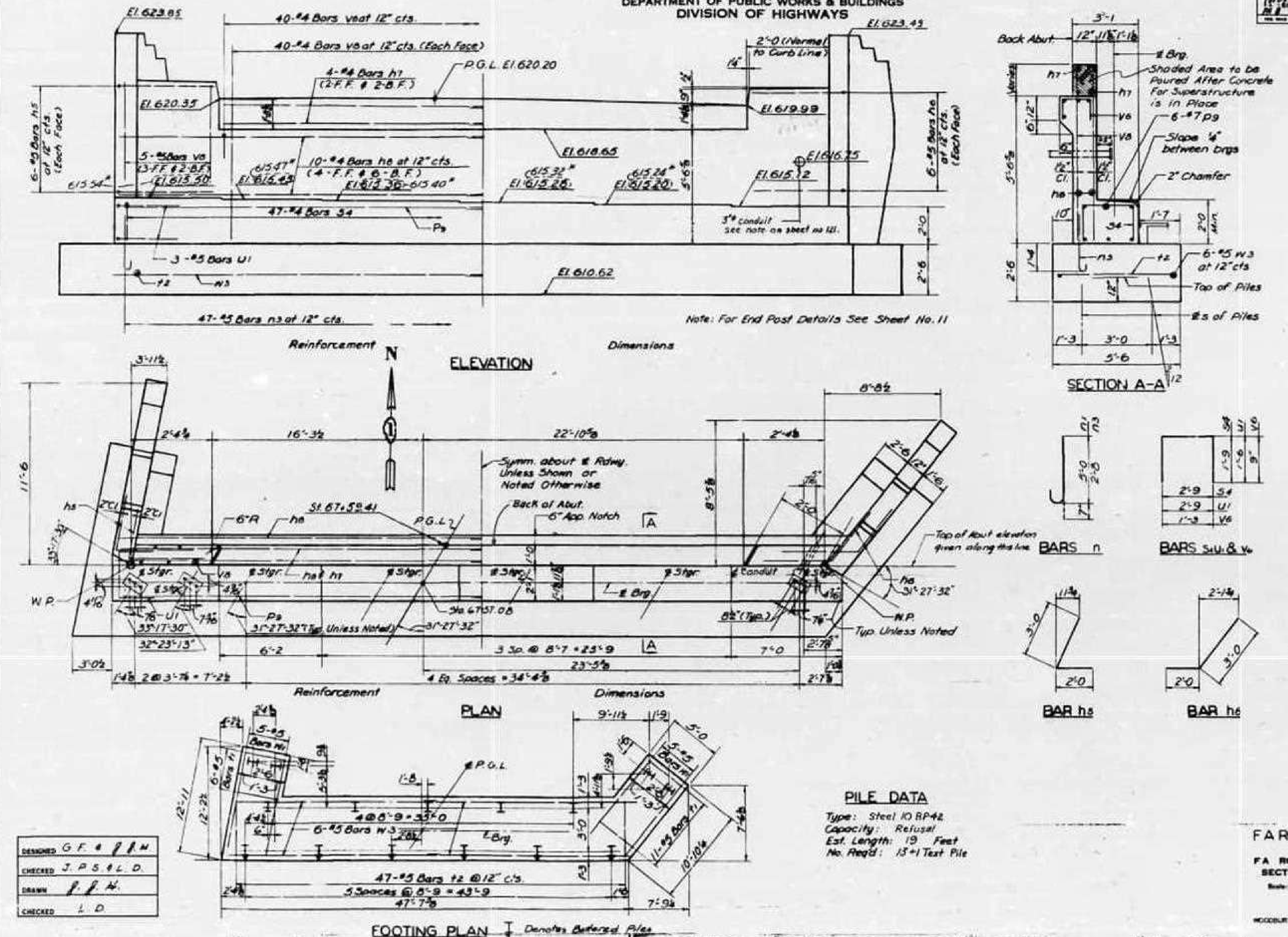
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	868

CONTRACT NO. 62R22

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

[illegible]	[illegible]	WILL	119	122	SHEET NO. 10 / 12 SHEETS



BILL OF REINFORCEMENT

Bar	No.	Size	Length	Shape
h5	12	#5	5'-0	
h6	12	#5	5'-0	
h7	8	#4	19'-11	
h8	20	#4	23'-2	
n1	28	#5	5'-7	
n3	47	#5	3'-3	
P9	12	#7	23'-5	
S4	47	#4	6'-3	
t1	17	#5	4'-6	
t2	47	#5	5'-0	
U1	6	#5	5'-9	
V6	40	#4	2'-9	
V8	90	#4	6'-7	
W1	10	#5	10'-4	
W3	12	#5	24'-1	

BILL OF MATERIAL

Item	Unit	Quan.
Class X Concrete	Cu. Yds.	60.5
Reinforcement Bars	Lbs.	3440
Steel Piles (10BP42)	Lin. Ft.	266
Test Pile (St. 10BP42)	Each	1

Note: Bill of Material includes Reinforcement and Class X Concrete for End Posts.

DESIGNED	G.F. & J.J.H.
CHECKED	J.P.S. & L.D.
DRAWN	J.J.H.
CHECKED	L.D.

N. ABUTMENT
F A ROUTE 61 OVER F A I ROUTE 80
F A ROUTE 61 STA. 66+24.16
F A ROUTE 61 PROJECT
SECTION 10 - STR. 5
WILL COUNTY
Scale: No Scale
Date: Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

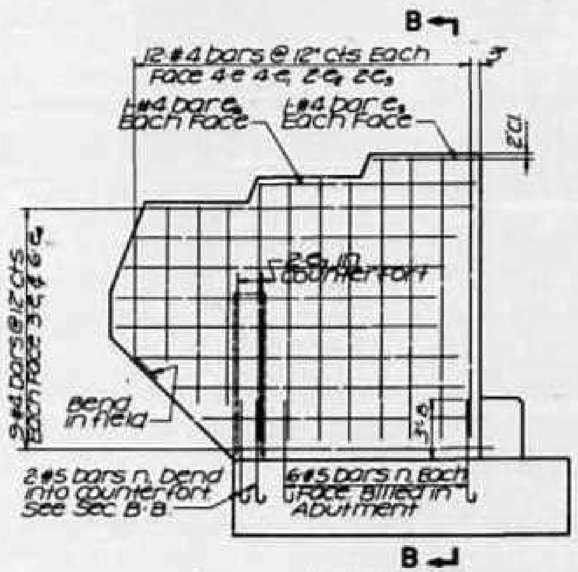
* Rev. Abut. Elevations 4-28-66 L.W.
As Awarded
11-20-64 M.J. Rev. class X conc. from 60.3 to 60.5 cu. yds.

FOR INFORMATION ONLY

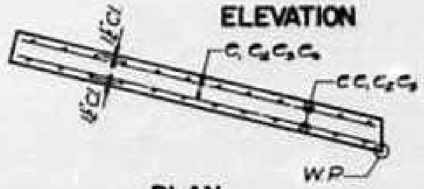
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77-80 F.A.-61 F.A.B.	476 E 19-7	WILL	197	123

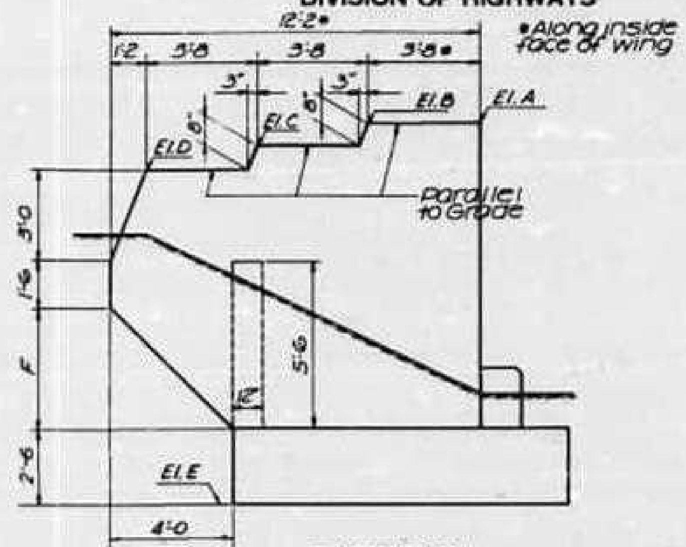
SHEET NO. 11
12 SHEETS



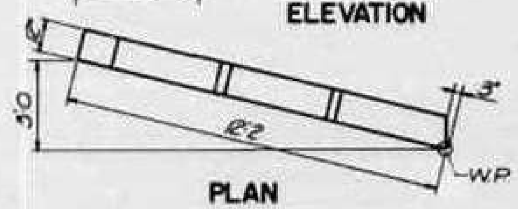
ELEVATION



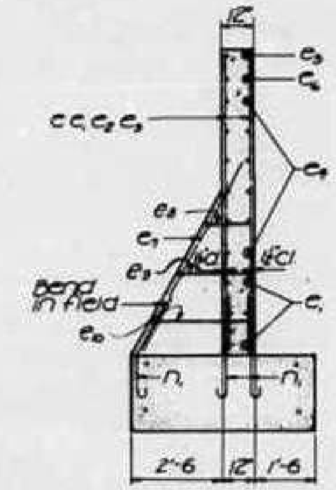
PLAN



ELEVATION



PLAN



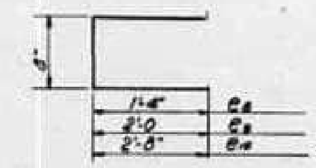
SECTION B-B

Note: See Abut. Dwg. for Ftg. Reinforcement.

ONE END POST
BILL OF MATERIAL

Bar	No	Size	Lgth	Shape
e	8	#4	9-3	—
e_1	14	#4	8-6	—
e_2	4	#4	6-6	—
e_3	4	#4	5-0	—
e_4	12	#4	10-6	—
e_5	2	#4	3-6	—
e_6	2	#4	7-0	—
e_7	2	#5	7-0	—
e_8	4	#4	3'-2"	⊔
e_9	4	#4	4'-6"	⊔
e_{10}	4	#4	5'-10"	⊔
* Reinforcement Bars			105	280
* Class X Concrete				
South Abut. 2 Posts			Cu. Yds.	8.8
North Abut. 2 Posts			Cu. Yds.	8.7

*Included in Quantity on Sheets 9 and 10



BARS e_8, e_9, e_{10}

END POST ELEVATIONS

Elev. \ End Post	S. Abut. S.W.	S. Abut. S.E.	N. Abut. N.W.	N. Abut. N.E.
A	619.69	620.94	623.85	623.49
B	619.57	620.87	623.85	623.48
C	618.80	620.02	623.18	622.81
D	618.04	619.39	622.51	622.13
E	606.70	606.70	610.50	610.50
F	4'-4½	5'-9¼"	5'-0⅛"	4'-7⅝"

DESIGNED	J.J.H.
CHECKED	L.D.
DRAWN	SEF & J.J.H.
CHECKED	L.D.

ABUTMENT DETAILS
F.A. ROUTE 61 OVER F.A.I. ROUTE 80
F.A. ROUTE 61 STA. 66+24.16
F.A. ROUTE 61 — PROJECT
SECTION 10-STR.5 — WILL COUNTY
Scale No Scale — Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. — NEW YORK, N.Y. — CRYSTAL LAKE, ILL.

11-20-64 J.M.J. Rev. class X con. S. abut. from 8.6 to 8.8 & N. abut. from 8.5 to 8.7 cu. yds.

FOR INFORMATION ONLY

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing50.dgn

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -
PLOT DATE = 4/22/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 50 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	870

CONTRACT NO. 62R22

ILLINOIS | FED. AID PROJECT

Bench Mark No 469 Top of "O" in "Open" fire hydrant N.E corner Hunter St & Jasper St El 599.66

No Existing Structure

PVI Sta 66+66.17
El 623.82
VC 600'
M.O 3.96'

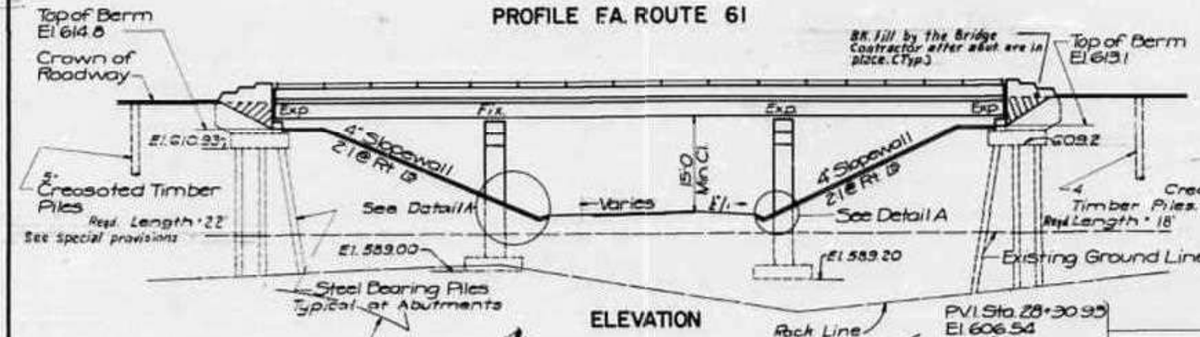
+3.41 % -1.87 %

PROFILE F.A. ROUTE 61

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Design Stresses
Reinforced Concrete
f'c = 3500 P.S.I.
fs = 20,000 P.S.I.
n = 10
fc = 1400 P.S.I (except footings)
fc = 1000 P.S.I (footings)
Vc = 90 (except footings)
Vc = 75 (footings)

Structural Steel
fs = 20000 P.S.I.
Max. Foundation Pressure
= 3 1/2 Tons/S.F.
Loading H S 20-44



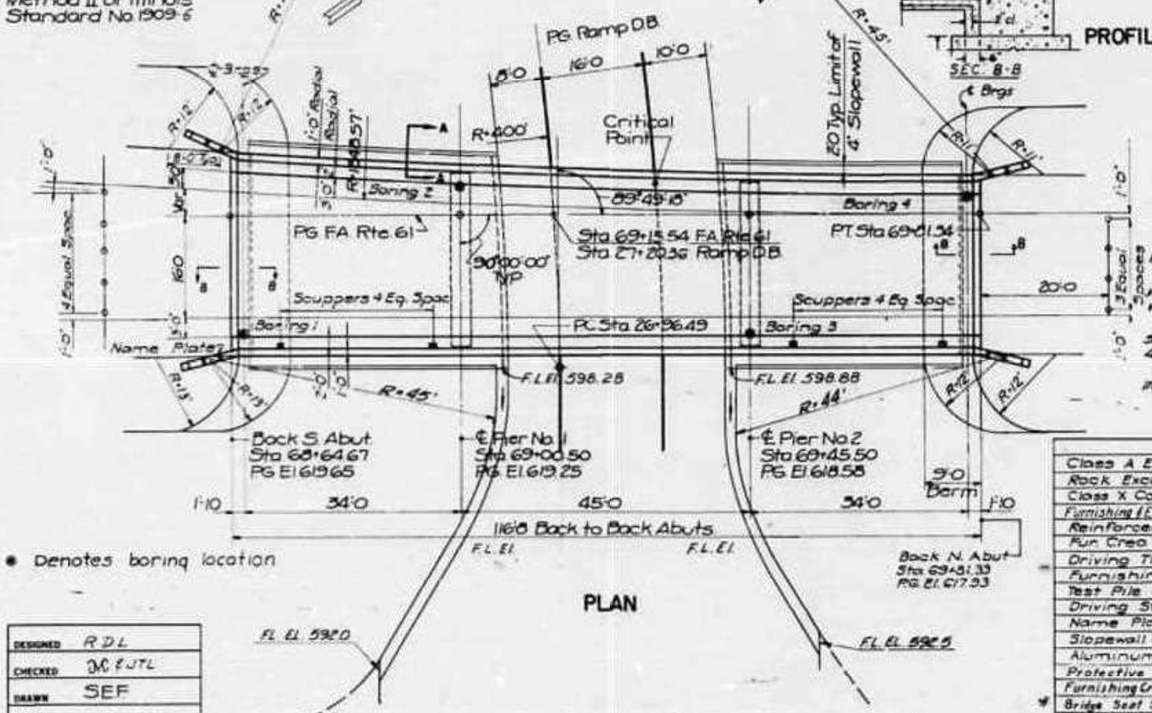
ELEVATION

Note:
Approach slab to be constructed in accordance with Method II of Illinois Standard No. 1909-6

PVI Sta 28+30.95
El 606.54
VC = 200'
M.O = 2.32'

+4.00 % -5.282 %

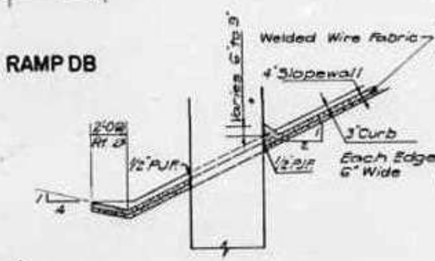
PROFILE RAMP DB



PLAN

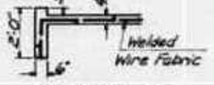
DESIGNED	R.D.L.
CHECKED	M.F.J.T.L.
DRAWN	S.E.F.
CHECKED	M.F.J.T.L.

Prepared and Recommended by
Blauvelt Engineering Co.
Structural Engineer 781-2251



DETAIL A

Note:
Welded wire fabric in Slopewall shall be 6"x6" mesh #4 wires, 58 lbs/100'.
Cost of welded wire fabric shall be included in cost of 4" Slopewall.
Cost of cutoff wall shall be included in cost of 4" Slopewall.



SECTION AA

BILL OF MATERIALS

Sec. 10 (Str. 6)

Item	Unit	Super	Sub	Total
Class A Excavation for Structures	Cu. Yd.		120	120
Rock Excavation for Structures	Cu. Yd.		6	6
Class X Concrete	Cu. Yd.	105.7	170.0	275.7
Furnishing & Erecting Structural Steel	Lb.	69,900		69,900
Reinforcement Bars	Lb.	24,390	13,250	37,640
Fur. Creo Piles 20.1 to 38 Feet	Lin. Ft.		110	110
Driving Timber Piles	Lin. Ft.		182	182
Furnishing Steel Piles 10BP42	Lin. Ft.		490	490
Test Pile Steel 10BP42	Each		2	2
Driving Steel Piles	Lin. Ft.		490	490
Name Plates	Each	1		1
Slopewall 4"	Sq. Yd.		291	291
Aluminum Handrail	Lin. Ft.	229		229
Protective Coat	Sq. Yd.	436		436
Furnishing Creosoted Piles up to 20 Ft.	Lin. Ft.		72	72
Bridge Seat Sealant	Lump Sum		0.1	0.1

Applied at abutments

STATION 69+15.64
BUILT ISC BY
STATE OF ILLINOIS
FA. RT 61 SEC. 10(HB-1
FA. PROJ. U-184-(21)
LOADING HS-20

See Standard 2113-1

LETTERING FOR NAME PLATE

GENERAL NOTES

STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL STEEL, A.S.T.M. DESIGNATION A36.

RIVETS SHALL BE 3/4" ϕ WITH 13/16" ϕ OPEN HOLES UNLESS NOTED.

CLASS X CONCRETE SHALL BE USED THROUGHOUT. COARSE AGGREGATE USED IN PARAPETS AND END POSTS SHALL BE FREE OF CHERT, FLINT, LIMONITE, LIGNITE AND SOFT SANDSTONE.

THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.19 OF THE STANDARD SPECIFICATIONS.

ALL WELDING SHALL COMPLY WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES, OF THE AMERICAN WELDING SOCIETY.

ALL ROCKERS, ROLLERS, BEARING PLATES, LEAD PLATES, PINTLES, AND ANCHOR BOLTS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 51.15 OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

ANCHOR BOLTS SHALL BE SET BEFORE CONCRETING DIAPHRAGMS OVER SUPPORT. SPACE REINFORCING TO MISS ANCHOR BOLTS.

EXPANSION GUARDS AND PLATES SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 51.13 (d) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.

EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. SEE ARTICLES 56.1 TO 56.5 INCLUSIVE OF THE STANDARD SPECIFICATIONS.

ALL SURFACES OF EXPANSION GUARDS INACCESSIBLE AFTER ERECTION SHALL BE GIVEN TWO SHOP COATS OF RED LEAD PAINT. THE 3/4" ϕ WELDED STUDS SHALL NOT BE PAINTED.

THE CONTRACTOR SHALL DRIVE TWO (2) TEST PILES IN PERMANENT LOCATIONS AS SHOWN ON THE PLANS, BEFORE ORDERING REMAINDER OF PILES.

NO ROCK LARGER THAN 3' SHALL BE PLACED IN FILLS IN THE AREA WHERE PILES ARE TO BE DRIVEN.

Excavation for backfill of structures in the embankments shall not be classified.

ALL STEEL BEARING PILES ARE TO BE DRIVEN TO REFUSAL.

PERMANENT FORMS WILL NOT BE PERMITTED IN FORMING THE CONCRETE FLOOR.

Note: This route has been selected as a 15'-0" vertical clearance route.

SW¼ Sec 14

LOCATION PLAN

GENERAL PLAN & ELEVATION
F.A. ROUTE 61 OVER RAMP DB

F.A. ROUTE 61 STA. 69+15.64
F.A. ROUTE 61 — PROJECT U-184-(21)
SECTION 10(Str. 6) — WILL COUNTY
Scale: NO SCALE — Date: Nov. 30, 1981

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

SHEET NO. 1
10 SHEETS

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME	= USCP702533	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
PLOT SCALE	= 7:11.99616 '-" / in.	CHECKED	-	REVISED	-
PLOT DATE	= 4/22/2025	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

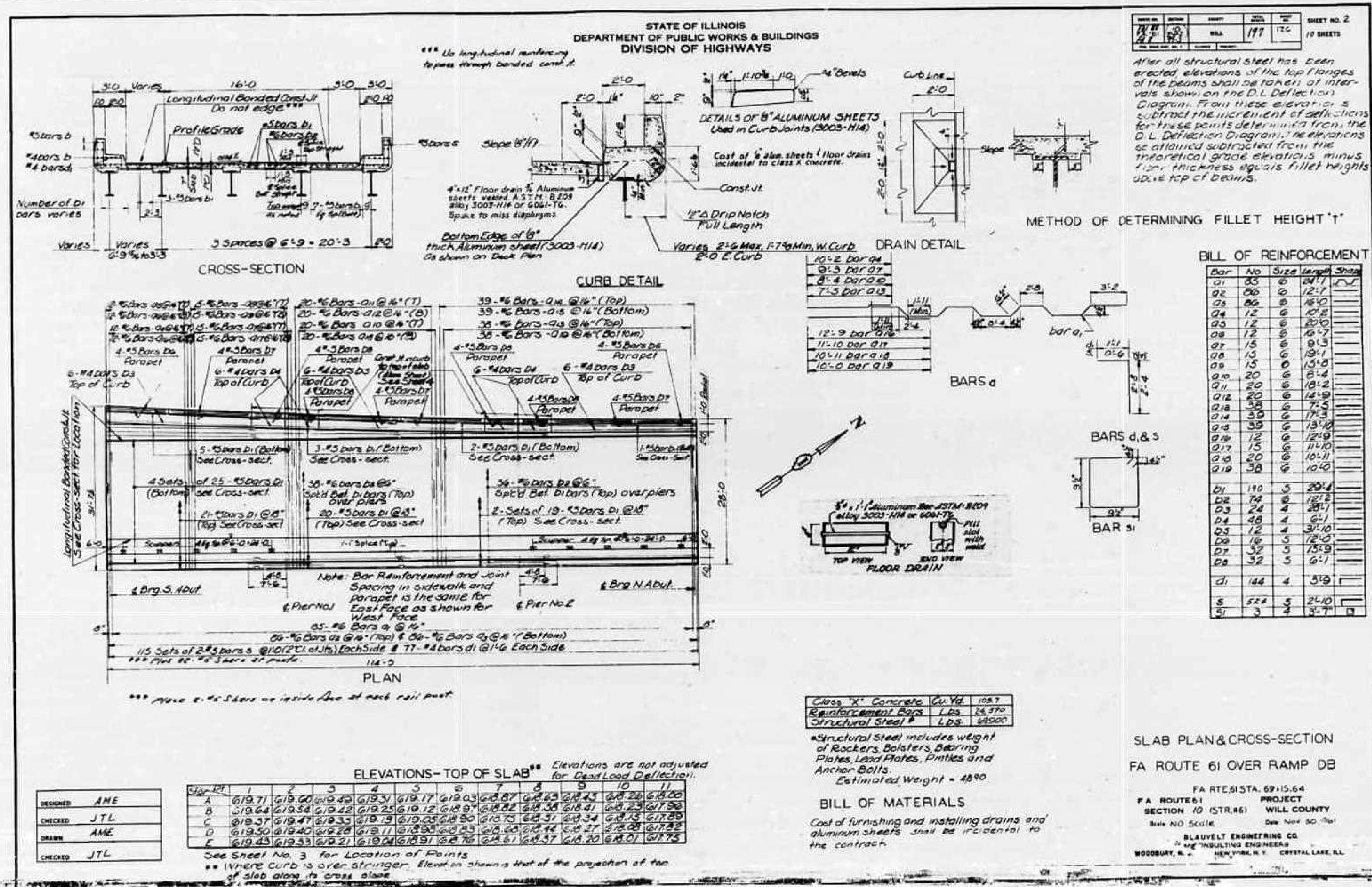
SHEET 51 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	871
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-1 (Center)/Sheets/Structural/Existing51.dgn

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 2 — 10 SHEETS



BILL OF REINFORCEMENT

Bar	No	Size	Length	Shape
a1	85	6	24'-1	
a2	86	6	12'-1	
a3	86	6	16'-0	
a4	12	6	10'-2	
a5	12	6	20'-0	
a6	12	6	16'-7	
a7	15	6	8'-3	
a8	15	6	19'-1	
a9	15	6	15'-8	
a10	20	6	6'-4	
a11	20	6	18'-2	
a12	20	6	14'-9	
a13	38	6	7'-5	
a14	39	6	17'-3	
a15	39	6	13'-10	
a16	12	6	12'-9	
a17	15	6	11'-10	
a18	20	6	10'-11	
a19	38	6	10'-0	
b1	190	5	29'-4	
b2	74	6	12'-2	
b3	24	4	28'-1	
b4	48	4	6'-1	
b5	12	4	31'-10	
b6	16	5	12'-0	
b7	32	5	15'-9	
b8	32	5	6'-1	
d1	144	4	3'-9	
s	524	5	2'-10	
s1	3	4	3'-7	

ELEVATIONS-TOP OF SLAB**

Elevations are not adjusted for Dead Load Deflection.

Str. \ Pt.	1	2	3	4	5	6	7	8	9	10	11
A	619.71	619.60	619.49	619.31	619.17	619.03	618.87	618.63	618.45	618.26	618.00
B	619.64	619.54	619.42	619.25	619.12	618.97	618.82	618.58	618.41	618.23	617.96
C	619.37	619.47	619.33	619.19	619.05	618.90	618.75	618.51	618.34	618.15	617.89
D	619.50	619.40	619.28	619.11	618.98	618.83	618.68	618.44	618.27	618.08	617.82
E	619.43	619.33	619.21	619.04	618.91	618.76	618.61	618.37	618.20	618.01	617.75

See Sheet No. 3 for Location of Points
** Where curb is over stringer, Elevation shown is that of the projection of top of slab along its cross slope.

BILL OF MATERIALS

Class "X" Concrete	Cu. Yd.	105.7
Reinforcement Bars	Lbs.	24,370
Structural Steel*	Lbs.	64900

*Structural Steel includes weight of Rockers, Bolsters, Bearing Plates, Lead Plates, Pintles and Anchor Bolts. Estimated Weight = 4890

Cost of furnishing and installing drains and aluminum sheets shall be incidental to the contract.

DESIGNED	AME
CHECKED	JTL
DRAWN	AME
CHECKED	JTL

SLAB PLAN & CROSS-SECTION
FA ROUTE 61 OVER RAMP DB
FA RTE. 61 STA. 69+15.64
F A ROUTE 61 SECTION 10 (STR. #6) — PROJECT — WILL COUNTY
Scale NO Scale — Date Nov. 30, 1961
BLAUVELT ENGINEERING CO. & CONSULTING ENGINEERS
WOODBURY, N.J. — NEW YORK, N.Y. — CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing52.dgn

WSP USA Inc.
30 N. LASALLE STREET SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

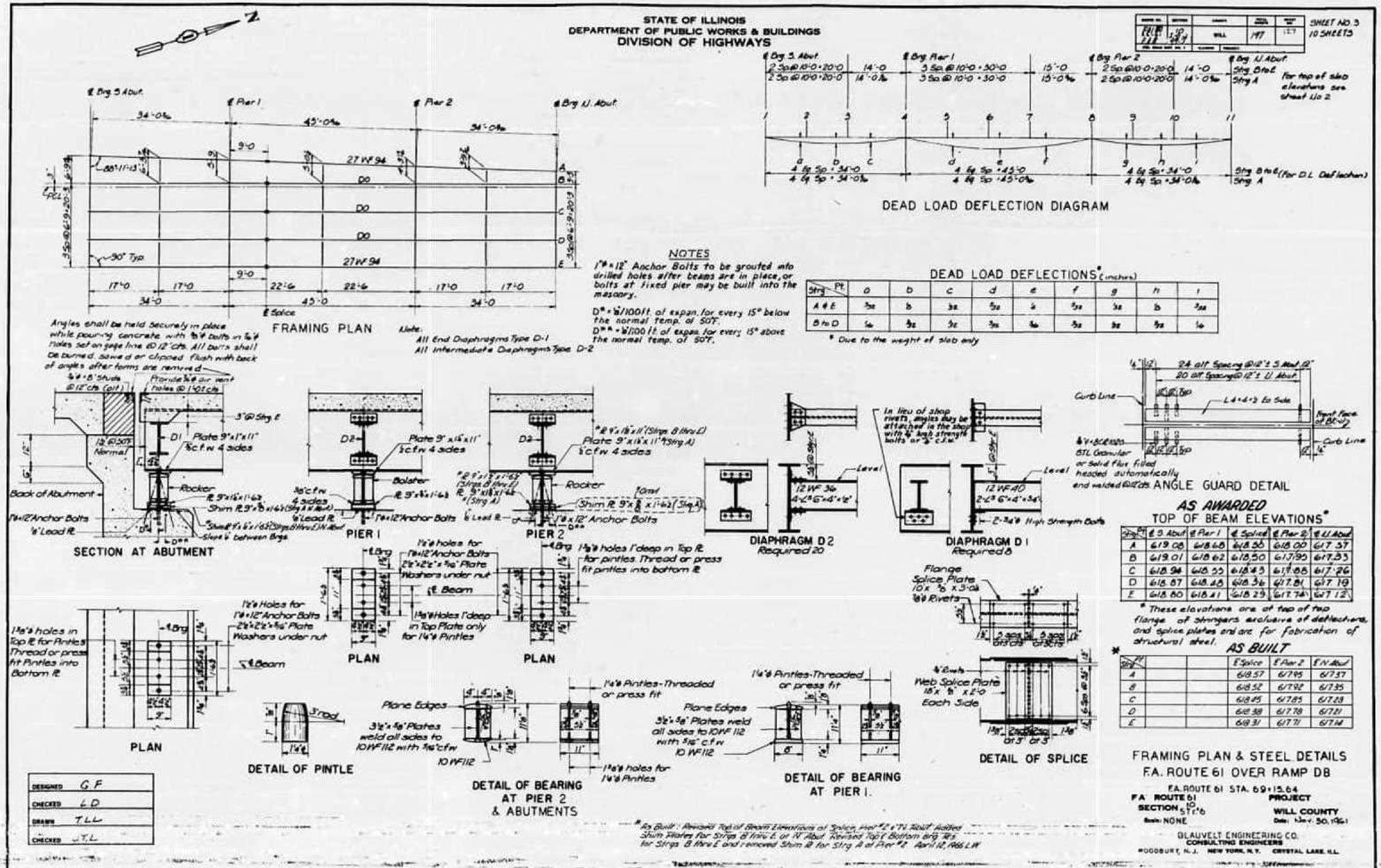
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 52 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	872

CONTRACT NO. 62R22
ILLINOIS FED. AID PROJECT



NOTES

1"Ø × 12" Anchor Bolts to be grouted into drilled holes after beams are in place, or bolts at fixed pier may be built into the masonry.

D* = ⅛"/100 ft. of expan. for every 15° below the normal temp. of 50°F.
D** = ⅛"/100 ft. of expan. for every 15° above the normal temp. of 50°F.

DEAD LOAD DEFLECTIONS* (inches)

Strg. \ Pt.	a	b	c	d	e	f	g	h	i
A & E	3/32	1/8	3/32	5/32	1/8	5/32	3/32	1/8	3/32
B to D	1/16	3/32	3/32	5/32	1/16	3/32	3/32	3/32	1/16

* Due to the weight of slab only

AS AWARDED
TOP OF BEAM ELEVATIONS*

Strg. \ Pt.	℄ S. Abut	℄ Pier 1	℄ Splice	℄ Pier 2	℄ N. Abut
A	619.08	618.68	618.56	618.00	617.37
B	619.01	618.62	618.50	617.95	617.33
C	618.94	618.55	618.43	617.88	617.26
D	618.87	618.48	618.36	617.81	617.19
E	618.80	618.41	618.29	617.74	617.12

* These elevations are at top of top flange of stringers exclusive of deflections and splice plates and are for fabrication of structural steel.

AS BUILT *

Strg. \ Pt.			℄ Splice	℄ Pier 2	℄ N. Abut
A			618.57	617.95	617.37
B			618.52	617.92	617.35
C			618.45	617.85	617.28
D			618.38	617.78	617.21
E			618.31	617.71	617.14

* As Built: Revised Top of Beam Elevations at Splice, Pier #2 & N. Abut. Added Shim Plates for Strgs. B thru E at N. Abut. Revised Top of Bottom Brg. Pl. for Strgs. B thru E and removed Shim Pl. for Strg. A at Pier #2. April 12, 1966 L.W.

FRAMING PLAN & STEEL DETAILS
F.A. ROUTE 61 OVER RAMP DB

F.A. ROUTE 61 STA. 69+15.64
F.A. ROUTE 61 PROJECT
SECTION 10 STR. 6
WILL COUNTY
Scale: NONE
Date: Nov. 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

DESIGNED	G F
CHECKED	L D
DRAWN	T.L.L.
CHECKED	J.T.L.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 53 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	873
		CONTRACT NO. 62R22		
		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 5
105 SHEETS

TOP PLAN

SECTION A-A

END VIEW

ELEVATION

DIMENSIONS

REINFORCEMENT

FOOTING PLAN

s BARS

u BARS

n BARS

A & B DIMENSIONS

BOP	A	B
S1	2'-2	1'-9
S1a	2'-2	2'-3
S2	2'-2	2'-6
S2a	2'-2	2'-2
S3	2'-2	3'-5
S3a	2'-2	3'-5

PIER I
BILL OF MATERIAL

BOP	NO.	SIZE	LGTH	SHAPE
h	4	#5	27'-10	—
h1	2	#5	19'-7	—
h2	30	#5	11'-4	—
n	32	#7	4'-10	⌐
P	8	#5	8'-9	—
P1	2	#9	27'-10	—
P2	2	#10	27'-10	—
S1	12	#5	5'-8	⊏⊐
S1a	16	#5	6'-8	⊏⊐
S2	24	#5	7'-2	⊏⊐
S2a	14	#5	6'-6	⊏⊐
S3	14	#5	9'-0	⊏⊐
T	18	#7	7'-6	—
U	6	#6	10'-2	⊏
V	24	#7	22'-8	—
V1	8	#7	22'-1	—
W	6	#5	16'-9	—
Class X Concrete		Cu Yd	458	
Reinf. Bars		lbs.	41,750	
Rock Excavation		Cu Yd	6	
Class A Exc.		Cu Yd	69	

Maximum rock pressure = 3½ Tons/s.f.

Footings shall extend 1' into sound rock.

Note:
All edges shall have standard ¾" chamfers except footings.

DESIGNED	G F
CHECKED	L D
DETAILED	T. L. L
CHECKED	J T L

PIER I
F.A. ROUTE 61 OVER RAMP DB
F.A. ROUTE 61 STA 69+15.04
F.A. ROUTE 61 PROJECT
SECTION (STR-6) WILL COUNTY
Scale NONE Date Nov 30, 1964

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
FOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

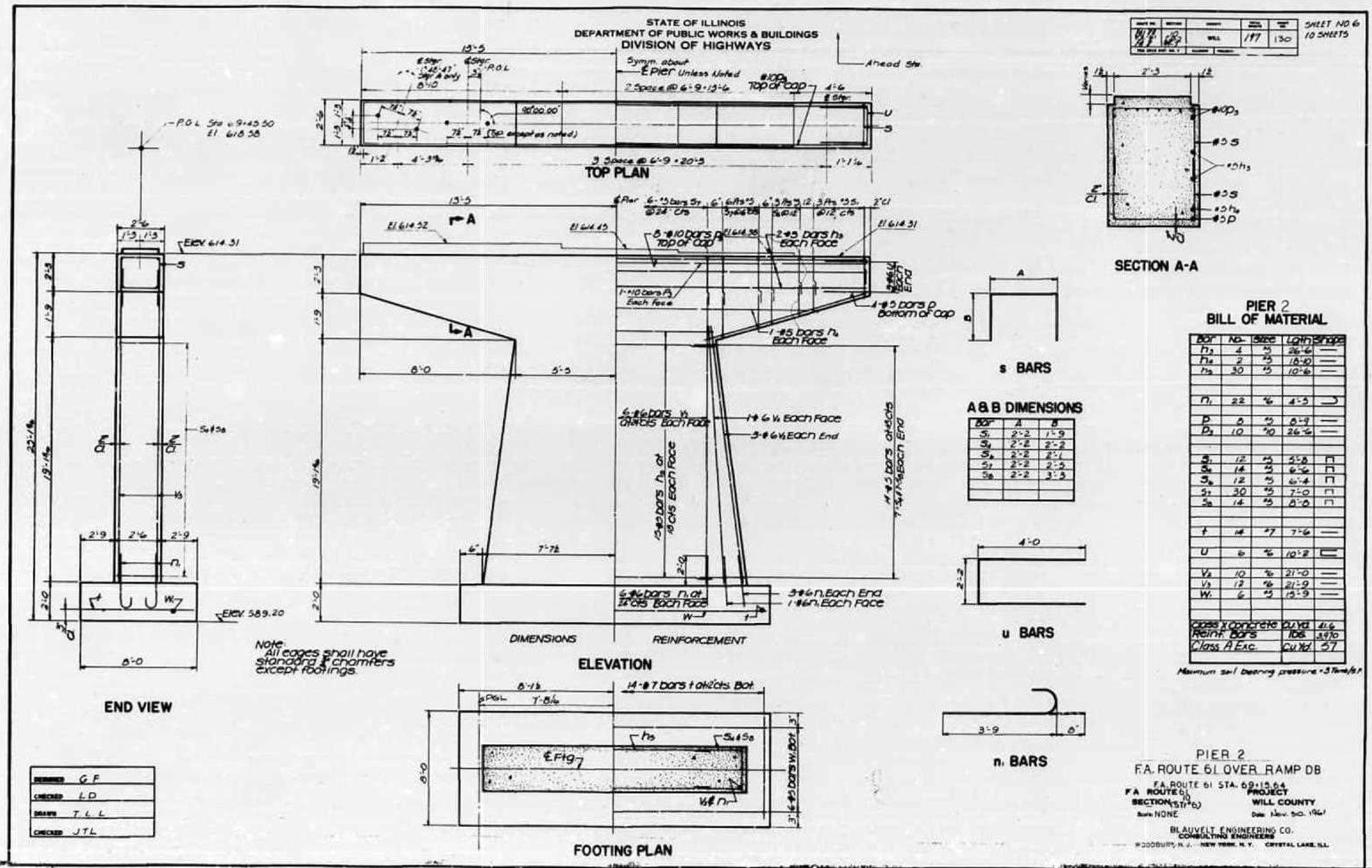
USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 54 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	874
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		



A & B DIMENSIONS

Bar	A	B
S_1	2'-2	1'-9
S_4	2'-2	2'-2
S_6	2'-2	2'-1
S_7	2'-2	2'-3
S_8	2'-2	3'-3

PIER 2 BILL OF MATERIAL

Bar	No.	Size	Lgth	Shape
h_1	4	#5	26'-6	—
h_4	2	#5	18'-10	—
h_3	30	#5	10'-6	—
n_1	22	#6	4'-3	⊃
p	8	#5	8'-9	—
p_3	10	#10	26'-6	—
S_1	12	#5	5'-8	⊓
S_4	14	#5	6'-6	⊓
S_6	12	#5	6'-4	⊓
S_7	30	#5	7'-0	⊓
S_8	14	#5	8'-0	⊓
t	14	#7	7'-6	—
U	6	#6	10'-2	⊏
V_2	10	#6	21'-0	—
V_3	12	#6	21'-9	—
W_1	6	#5	15'-9	—
Class X Concrete			Cu. Yd.	41.6
Reinf. Bars			lbs.	3,970
Class A Exc.			Cu. Yd.	57

Maximum soil bearing pressure = 3 Tons/s.f.

FOR INFORMATION ONLY

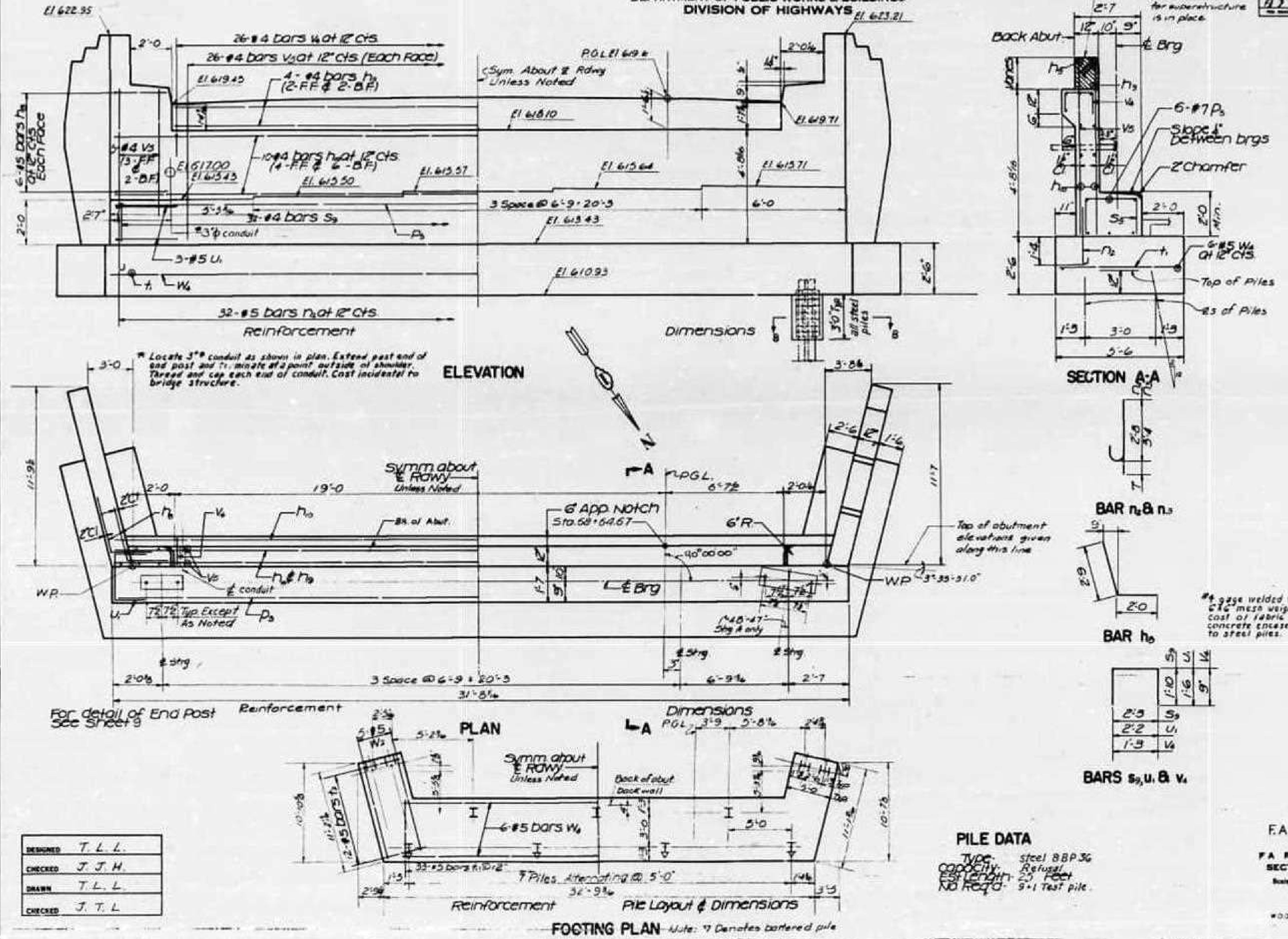
WSP USA Inc. 30 N. LASALLE STREET SUITE 4200 CHICAGO, IL 60602 TEL: (312) 782-8150 FAX: (312) 782-1684	USER NAME = USCP702533	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS
		DRAWN -	REVISED -		
	PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -		
	PLOT DATE = 4/22/2025	DATE -	REVISED -		SHEET 55 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	875
CONTRACT NO. 62R22				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

		WILL	197	131

SHEET NO 7
10 SHEETS



SOUTH ABUTMENT BAR LIST

Bar	No	Size	Lgth	Shape
h_9	4	#4	25'-4	—
h_{10}	10	#4	31'-4	—
h_8	24	#5	4'-9	∟
n_2	32	#5	3'-9	⊃
n_3	28	#5	3'-11	⊃
p_3	6	#7	31'-4	—
S_9	32	#4	5'-11	⊓
t_1	33	#5	5'-0	—
t_2	24	#5	4'-6	—
U_1	6	#5	5'-2	⊓
V_4	26	#4	2'-9	⊓
V_5	62	#4	5'-9	—
W_3	10	#5	10'-6	—
W_4	6	#5	32'-3	—

SOUTH ABUTMENT BILL OF MATERIAL

Item	Unit	Quan
Class X Concrete	Cu Yds	43.1
Reinforcement Bars	lbs	2610
Steel Piles (10BP42)	Lin Ft	250
Test Pile 57 (10BP42)	Each	1

Note: Bill of Material includes Reinforcement and Class X concrete for End Posts.

PILE DATA
Type - Steel 8BP36
Capacity - Refusal
Est. Length - 25 Feet
No. Req'd - 9+1 Test pile

SOUTH ABUTMENT
F.A. ROUTE 61 OVER RAMP DB
F.A. ROUTE 61 STA. 69+15.64
F.A. ROUTE 61 PROJECT
SECTION 10 (51-b) WILL COUNTY
Scale: NONE Date: Nov 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

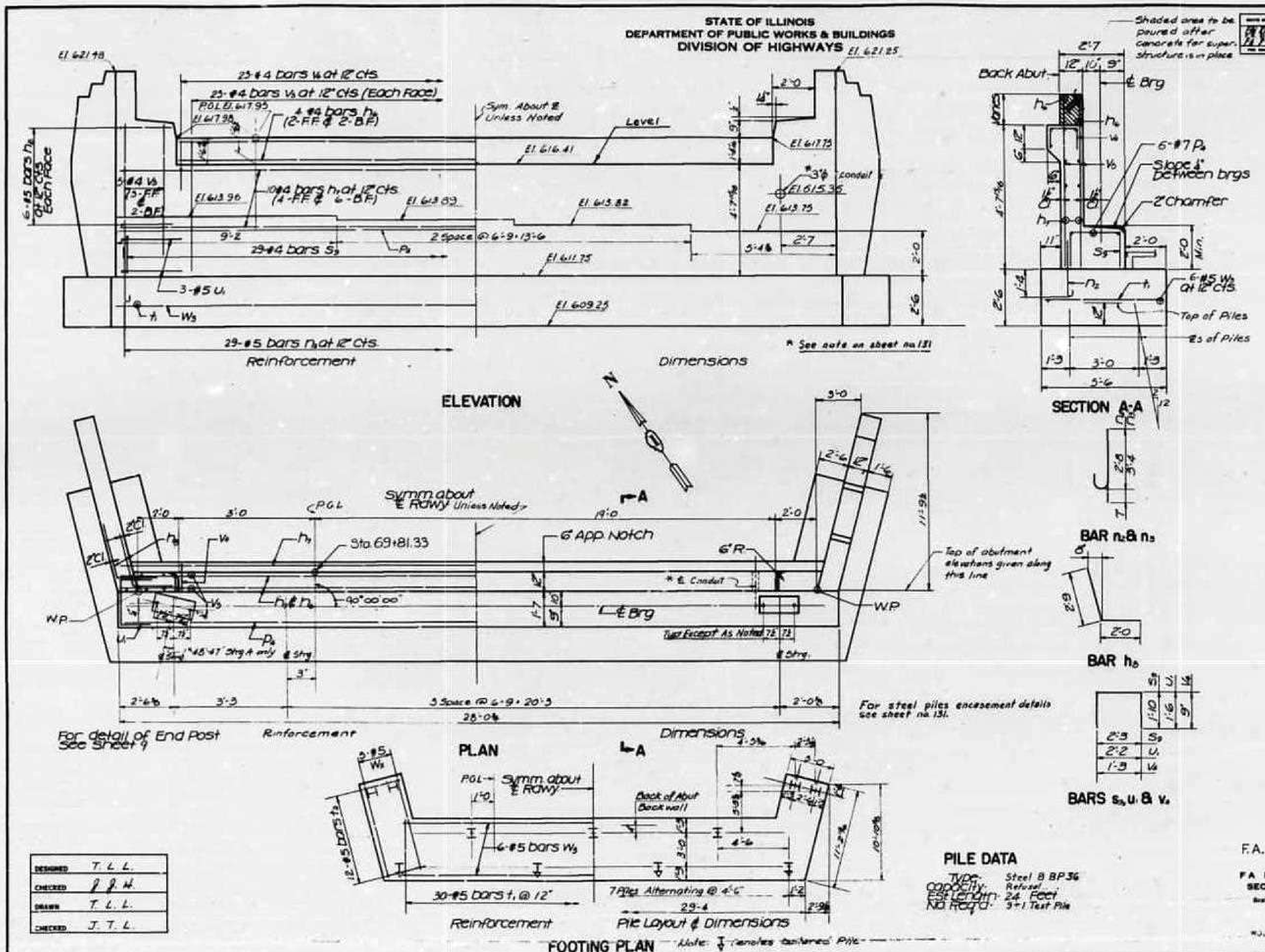
DESIGNED	T. L. L.
CHECKED	J. J. H.
DRAWN	T. L. L.
CHECKED	J. T. L.

Rev. 2-25-64 J.T.J. Class X conc. from 42.9 to 43.1 cu yds. & 7 piles alt. @ 10'-6 to 5'-0".

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 8
10 SHEETS



NORTH ABUTMENT BAR LIST

Bar	No	Size	Lgth	Shape
h_6	4	#4	21'-6	—
h_7	10	#4	27'-8	—
h_8	24	#5	4'-9	L
n_2	29	#5	3'-9	⊐
n_3	28	#5	3'-11	⊐
p_6	6	#7	27'-8	—
s_3	29	#4	5'-11	⊓
t_1	30	#5	5'-0	—
t_2	24	#5	4'-6	—
u_1	6	#5	5'-2	⊓
v_4	23	#4	2'-9	⊓
v_5	56	#4	5'-9	—
w_2	10	#5	10'-8	—
w_3	6	#5	28'-10	—

NORTH ABUTMENT BILL OF MATERIAL

Item	Unit	Quan.
Class X Concrete	Cu Yds	39.4
Reinforcement Bars	lbs	2,440
Steel Piles (8 BP36)	Lin Ft	240
Test Pile Sp.1 8BP36	Each	1

Note: Bill of Material includes Reinforcement and Class X concrete for End Posts.

PILE DATA
Type: Steel 8 BP36
Capacity: Refusal
Est. Length: 24 Feet
No. Req'd: 9+1 Test Pile

DESIGNED	T. L. L.
CHECKED	J. J. H.
DRAWN	T. L. L.
CHECKED	J. T. L.

NORTH ABUTMENT
F.A. ROUTE 61 OVER RAMP DB
F.A. ROUTE 61 STA. 69+15.64
F A ROUTE 61 PROJECT
SECTION 10 (S-17-6) WILL COUNTY
Scale NONE Date Nov. 30, 1961
BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N.J. NEW YORK, N.Y. CRYSTAL LAKE, ILL.

11-25-64 J.T.L. Rev. class x conc. from 39.2 to 39.4 ¢ T piles alt. @ 3'-0" to alt. @ 4'-6"

FOR INFORMATION ONLY

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

WSP USA Inc. 30 N. LASALLE STREET SUITE 4200 CHICAGO, IL 60602 TEL: (312) 782-8150 FAX: (312) 782-1684

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
SHEET 57 OF 62 SHEETS

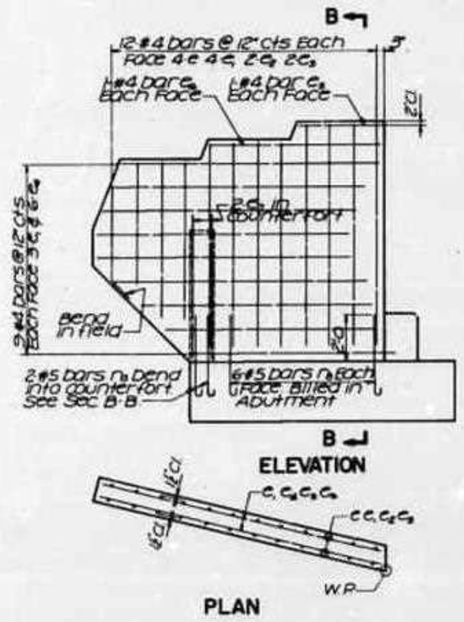
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	877

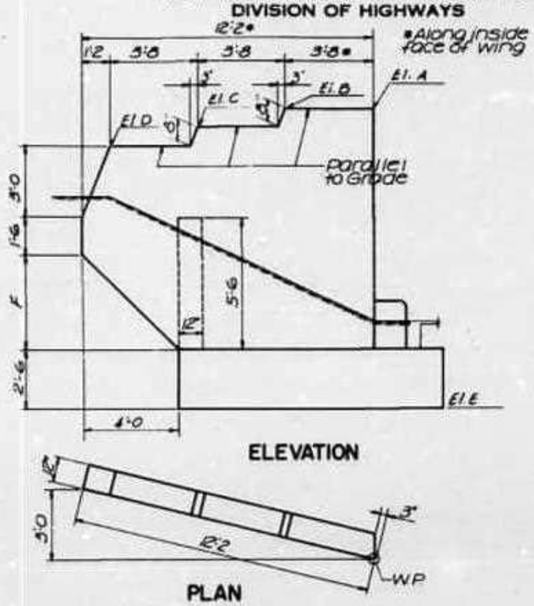
CONTRACT NO. 62R22
ILLINOIS FED. AID PROJECT

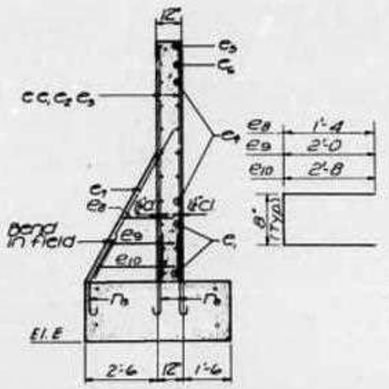
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

			WILL	197	138

SHEET NO. 9
10 SHEETS







ONE END POST BILL OF MATERIAL

Bar	No	Size	Lgth	Shape
c	0	#4	9'-1	—
c_1	14	#4	8'-4	—
c_4	4	#4	8'-4	—
c_5	4	#4	4'-10	—
c_6	12	#4	10'-6	—
c_8	2	#4	3'-6	—
c_7	2	#4	7'-0	—
c_9	2	#5	7'-0	—
e_8	1	#4	3'-2	—
e_9	1	#4	4'-6	—
e_{10}	1	#4	5'-10	—
Reinforcement Bars			185	280
Class X Concrete				
N. Abut. (2 End Posts) Cu. Yds.				7.8
S. Abut. (2 End Posts) Cu. Yds.				8.0

* Included in Quantity on Sheets 7 & 8

Bar	A	B	C	D	E	F
W Wall	623.81	623.14	622.60	621.36	610.93	4'-0"
S Wall	622.95	622.29	622.36	621.73	610.93	3'-9"
W Wall	621.98	621.41	620.68	618.35	609.25	3'-8"
S Wall	621.25	621.18	620.45	618.72	609.25	3'-5"

TABLE OF WINGWALL ELEVATIONS & DIMENSIONS

DESIGNED	T. L. L.
CHECKED	J. T. L.
DRAWN	T. L. L.
CHECKED	J. T. L.

ABUTMENT DETAILS
F.A. ROUTE 61 OVER RAMP DB

F.A. ROUTE 61 STA. 69+15.64
F.A. ROUTE 61 PROJECT
SECTION 10 (STP-6) WILL COUNTY
Scale NONE Date Nov 30, 1961

BLAUVELT ENGINEERING CO.
CONSULTING ENGINEERS
WOODBURY, N. J. NEW YORK, N. Y. CRYSTAL LAKE, ILL.

[1-25-64 J.M.] Rev. class x conc. S. abut from 7.8 to 8.0 cu. yds., N. abut from 7.6 to 7.8 cu. yds. [Rev. at end post elev.

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 58 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	878
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: pw:\\transystems-pw.bentley.com:transyscorp-pw1-hosted\Documents\Projects_2018\CH401140118002203-WSP\CAD\62R22-INT-4 (Center)\Sheets\Structural\Existing Bridge Plans\0990186-62R22-Existing58.dgn

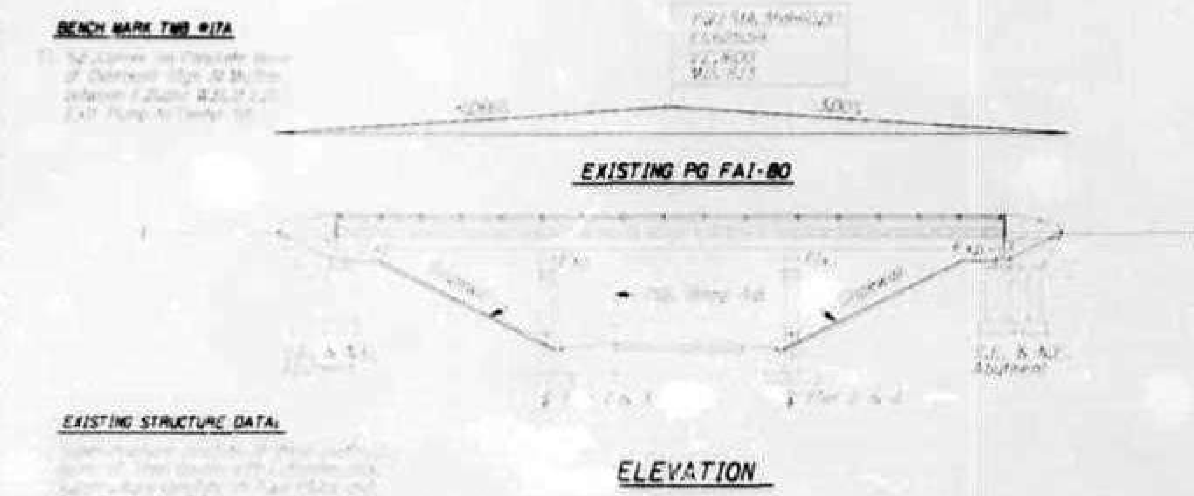
* SEC 99 (2&3) RS; 99-2 (B, VB, HB-4) & 99-3HB (1&2) BR
D-91-362-89

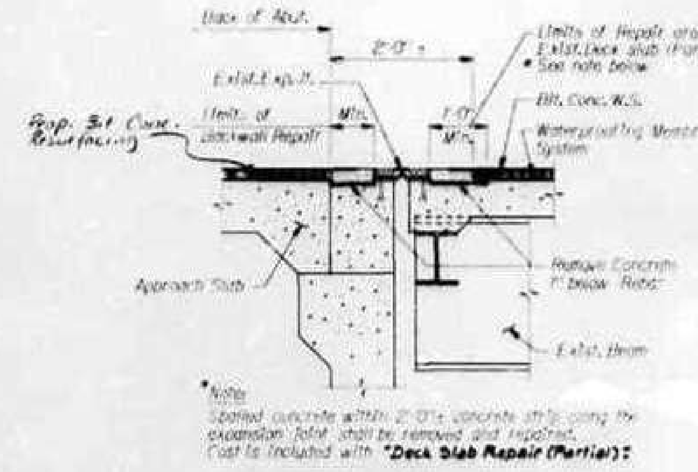
TOTAL BILL OF MATERIALS

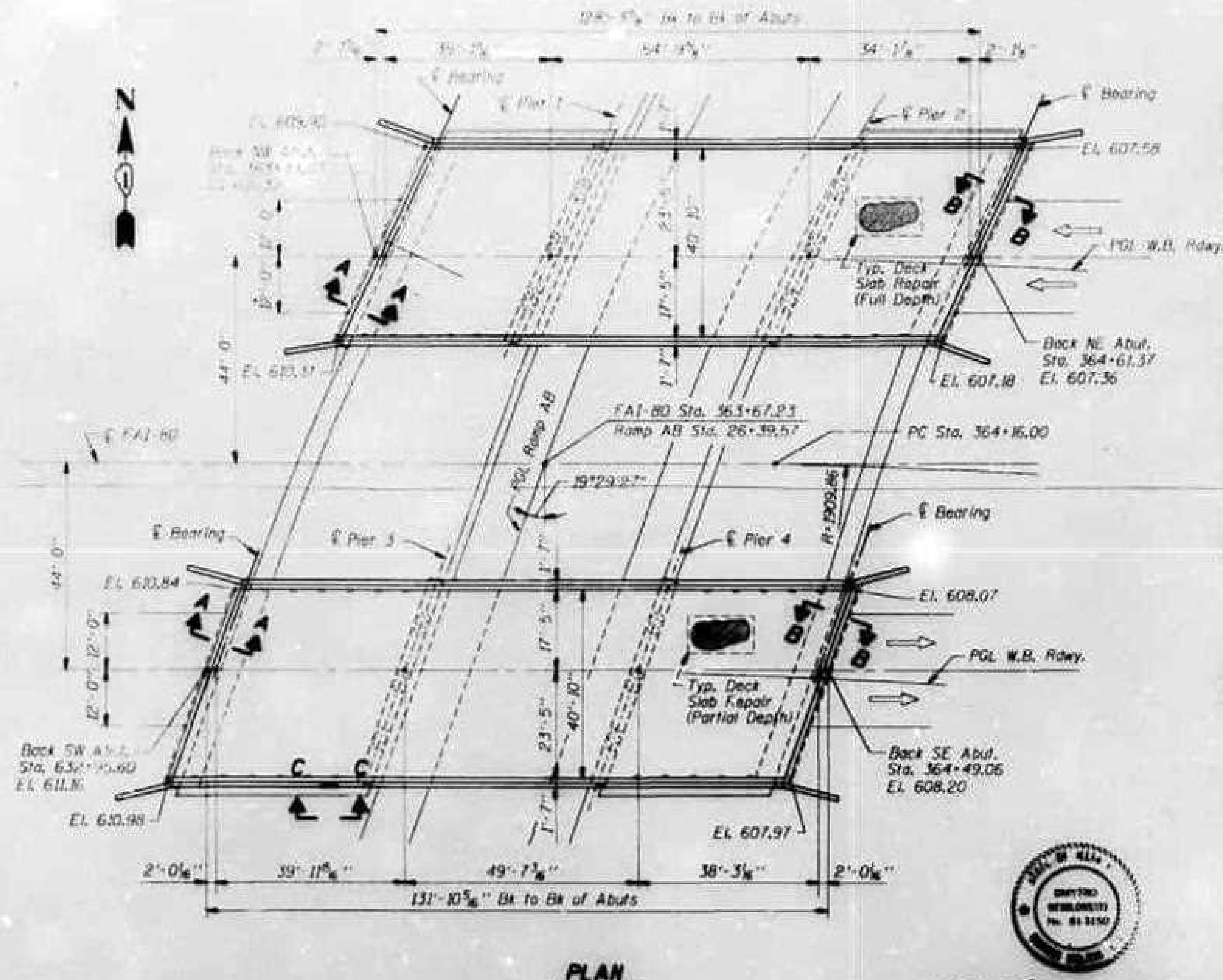
	ITEM		UNIT	SUPER.		
*	Bituminous Concrete Removal (Deck)		Sq.Yd.	[illegible]		
*	Deck Slab Repair (Partial)	**	Sq.Yd.	[illegible]		
*	Deck Slab Repair (Full Depth, Type I)	**	Sq.Yd.	[illegible]		
*	Deck Slab Repair (Full Depth, Type II)	**	Sq.Yd.	[illegible]		
*	Waterproofing Membrane System		Sq.Yd.	[illegible]		
	Bituminous Concrete Surface Course Mix F, Class I, Type 1		Ton	[illegible]		
*	Repair Concrete Structures	**	Sq.Ft.	[illegible]	[illegible]	
*	Protective Shield	**	Sq.Yd.	[illegible]		
	Deck Drain Extension		Each	[illegible]		

* See Special Provisions

** Quantities are estimated. Location and limits of repair areas are to be determined in the field and approved by the Engineer.







GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of AASHTO M-31, M 42 or M 53 Grade 60.
2. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

DESIGN SPECIFICATIONS

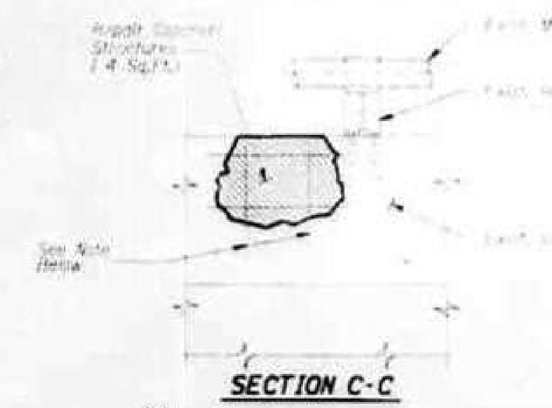
AASHTO 1989 Standard Specifications For Highway Bridges,1990 and 1991 Interims.
Standard Specifications for Road and Bridge Construction, State of Illinois adopted July 01,1988 and Supplemental Specifications and Recurring Special Provisions adopted December 2 , 1991

DESIGN STRESSES

Reinforced Concrete	f'_c =	3,500 psi
Reinforcement	f_y =	60,000 psi

CONSTRUCTION NOTES:

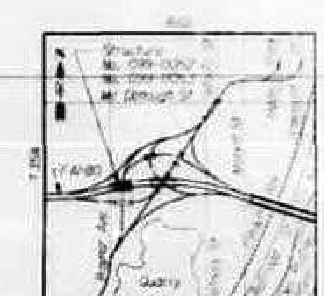
1. Remove Bituminous Concrete surface and Waterproofing Membrane System from the bridge deck.
2. Repair spalled and unsound areas of concrete in the bridge deck and elsewhere as shown on the plans.
3. Install a Waterproofing Membrane System on the bridge deck and provide Bituminous Concrete surface for the bridge deck.
4. Extend existing drain pipes to discharge below the bottom flange of beam (if Required).
5. All construction on the bridges shall be completed in two construction stages. See sheet 2 of 2 for details.



INDEX OF SHEETS

℄ FAI-80 CURVE DATA
(ARC DEF)

P.I. STA	371+20.58
Δ	40° 30' 00"
D	3° 00' 00"
R	1909.86'
T	704.88'
L	1350.00'
E	125.82'
P.C. STA	364+16.00
P.T. STA	377+66.00



LOCATION MAP

NO.	DATE	DESCRIPTION
		REVISIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
FAI-80 OVER CENTER ST. RAMP AB
F.A. ROUTE I-80 SECTION
STA. 363+67.23
STRUCTURE NO. 099-0052 & 099-0053
WILL COUNTY

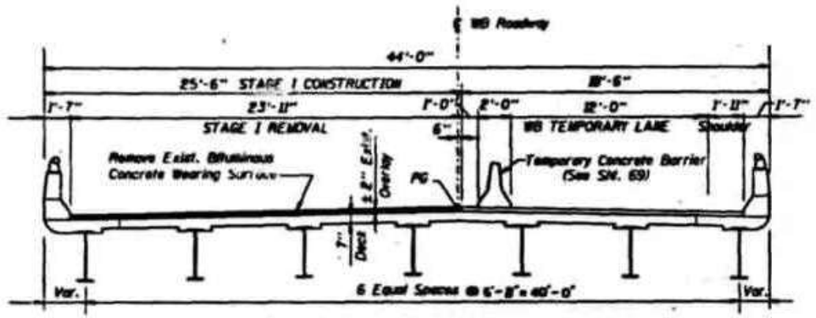
Designed by
FLUOR DANIEL

Scale: NONE

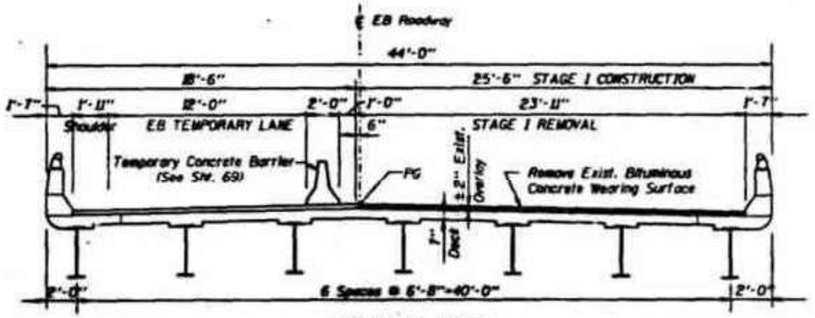
FOR INFORMATION ONLY

* SEC 99 (2&3) RS; 99-2 (B, VB, HB-4)
& 99-348 (B,2) BR
D-91-362-89

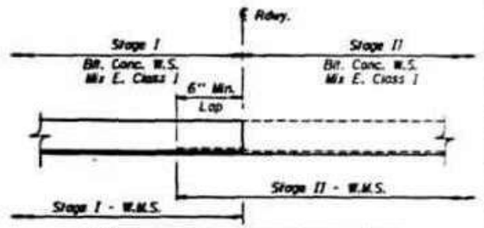
Sheet No. 2 of 2



STAGE I (W.B.)

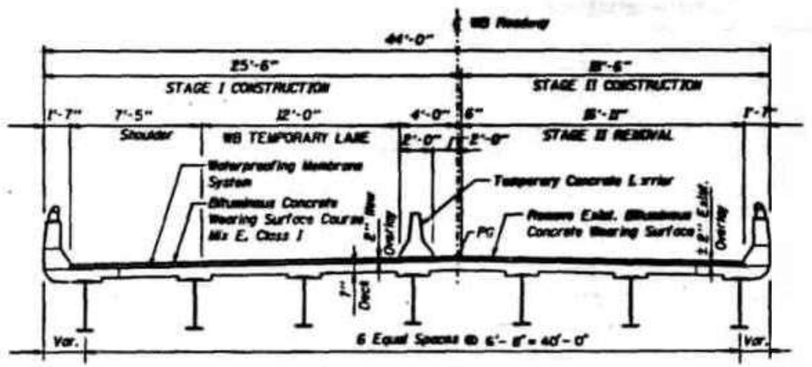


STAGE I (E.B.)

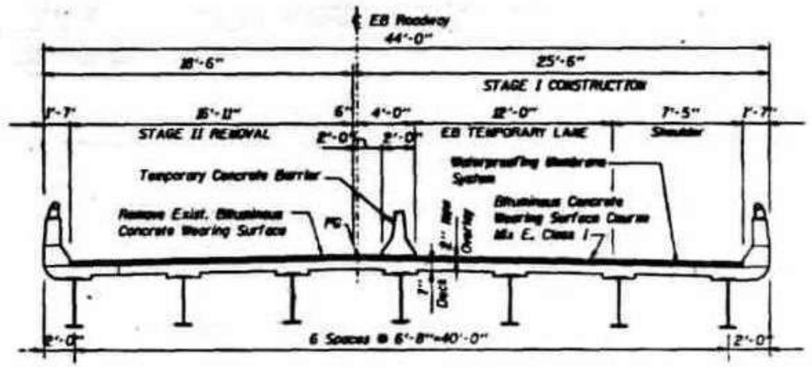


WATERPROOFING MEMBRANE SYSTEM (6" LAP)

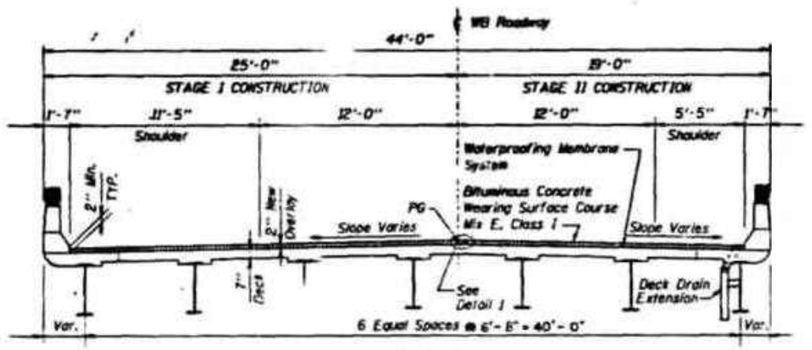
DETAIL 1
DETAIL 2 (SIMILAR)



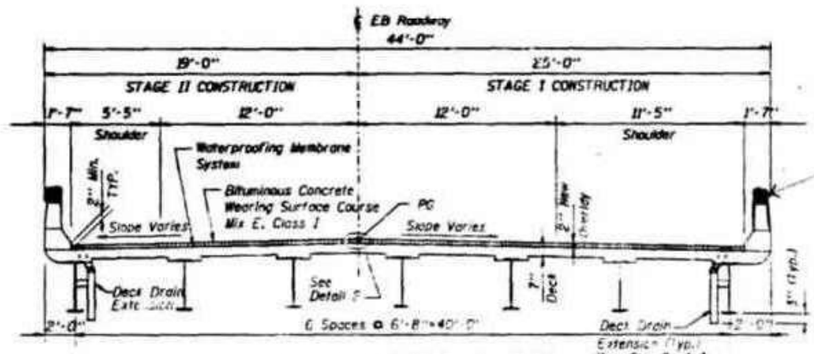
STAGE II (W.B.)



STAGE II (E.B.)



FINAL CROSS SECTION (W.B.)



FINAL CROSS SECTION (E.B.)

LEGEND:

Removal of Exist. Bit. Concrete Wearing Surface

New Bituminous Concrete Wearing Surface

WEST BOUND ROAD - STAGE CONSTRUCTION

EAST BOUND ROAD - STAGE CONSTRUCTION

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
FAI-80 OVER CENTER ST. RT.
F.A. ROUTE I-80 SECTION
STRUCTURE NO. 099-0058 & 099-0059

FLUOR DANIEL

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 ':" / in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

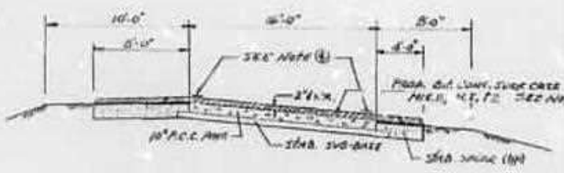
SHEET 60 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	880
		CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

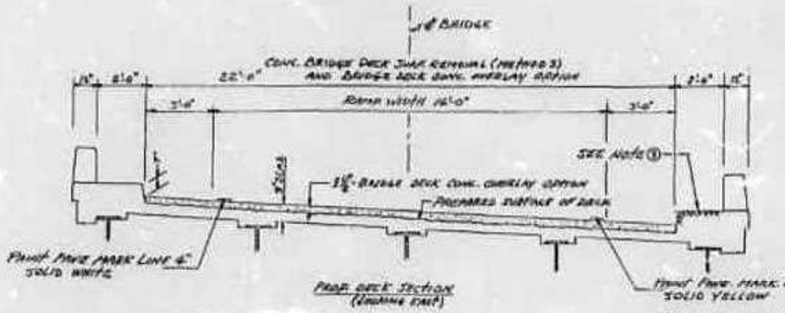
MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystemscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/03-WSP/CAD/62R22-INT-4 (Center)/Sheets/Structural/Existing Bridge Plans/0990186-62R22-Existing60.dgn

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
W.P.	WILL	16	4
RTE.	FED. ROUTE		
PROJECT NO.	SUPERSEDES	TYPE OF PROJECT	

N. PAT 80
W.P. 99-318-31

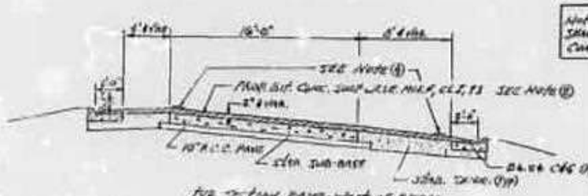


TYP. SECTION ROUTE 80 EAST OF BRIDGE
(LOOKING EAST)



PROP. DECK SECTION
(LOOKING EAST)

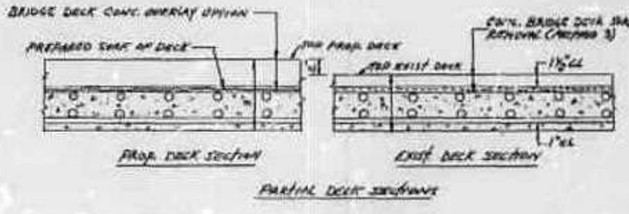
Note ③: Repair deteriorated Conc. & Safety Walk - Formed Conc. Repair (Depth equal to or less than 6") various locations on N. & S. Safety Walk.



TYP. SECTION RAMP - WEST OF BRIDGE
(LOOKING EAST)

Note ①: Bit. Mat. (Prime Coat) & Agg. (Tack Coat) shall be considered Incidental to the Bit. Conc. Surf. Crse. Mix E, CL I, T1.

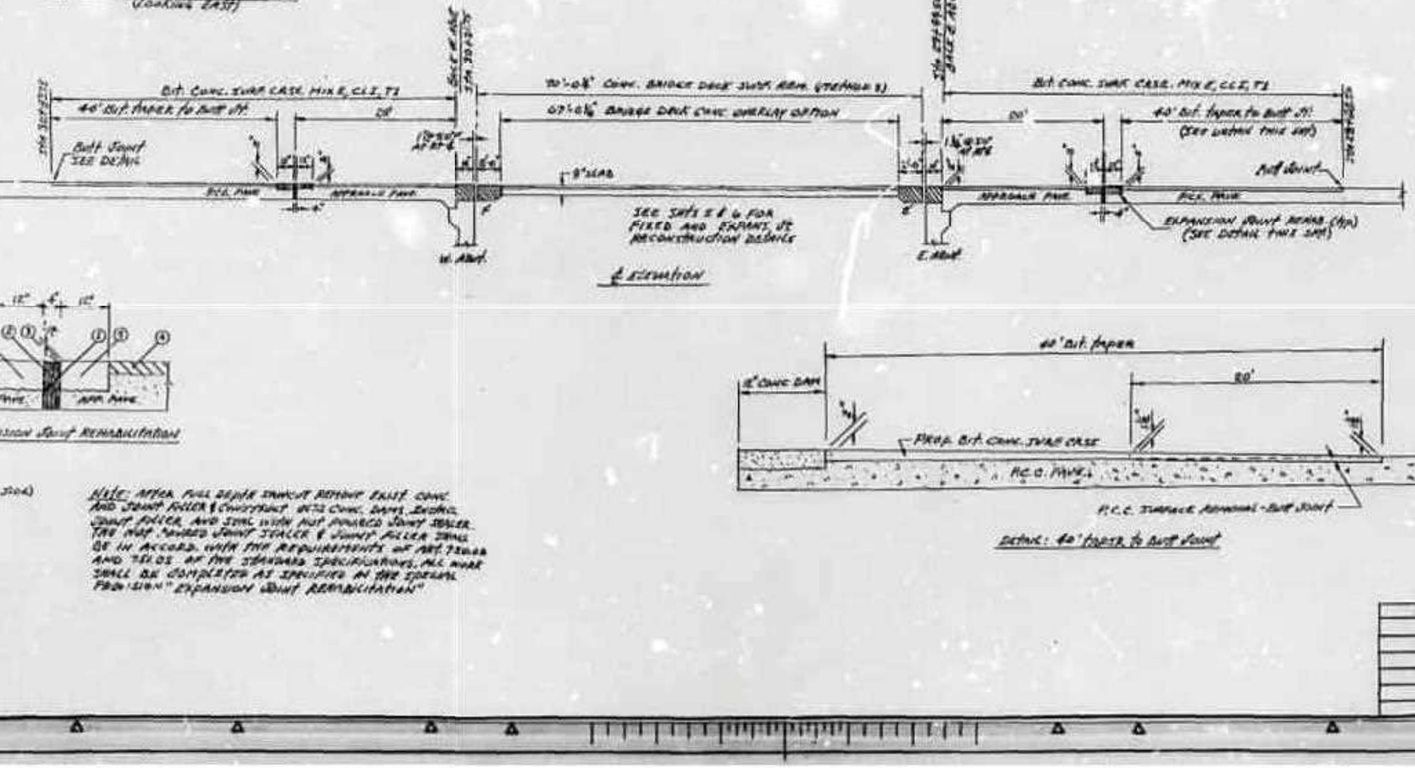
Note ②: Paint Pave. Marking Line Stripes on Bridge is typical for full length of Improvement.

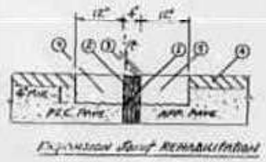


PROP. DECK SECTION

EXIST. DECK SECTION

PARTIAL DECK SECTIONS



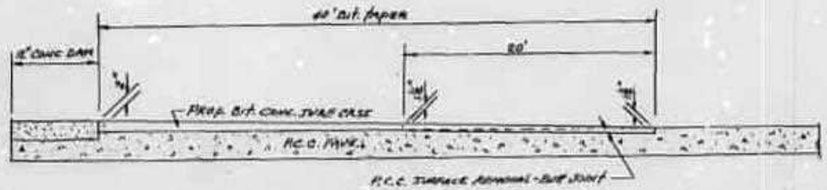


EXPANSION JOINT REHABILITATION

LEGEND

① FULL DEPTH SAWCUT (ON P.C.C. PAVE SIDE)
② PREFORM JOINT FILLER
③ HOT POURED JOINT SEALER
④ BIT. CONCRETE SURFACE
⑤ CONCRETE BASE (CL. SI CONC.)

NOTE: AFTER FULL DEPTH SAWCUT REMOVE EXIST. CONC. AND JOINT FILLER & CONSTRUCT BIT. CONC. BASE. INSTALL JOINT FILLER AND SEAL WITH HOT POURED JOINT SEALER. THE HOT POURED JOINT SEALER & JOINT FILLER SHALL BE IN ACCORD. WITH THE REQUIREMENTS OF ART. 720.03 AND 720.02 OF THE STANDARD SPECIFICATIONS. ALL WORK SHALL BE COMPLETED AS SPECIFIED IN THE SPECIAL PROVISION "EXPANSION JOINT REHABILITATION"



DETAIL: 40' TAPER TO BUTT JOINT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND ℄ ELEVATION

FAI RTE 80, SEC. 99-318-31, WILL CO.

SCALE: VERT. HORIZ.
DRAWN BY
DATE
CHECKED BY

FOR INFORMATION ONLY

WSP USA Inc.
30 N. LASALLE STREET
SUITE 4200
CHICAGO, IL 60602
TEL: (312) 782-8150
FAX: (312) 782-1684

USER NAME = USCP702533	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 7:11.99616 '/ in.	CHECKED -	REVISED -	
PLOT DATE = 4/22/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET 61 OF 62 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	881
		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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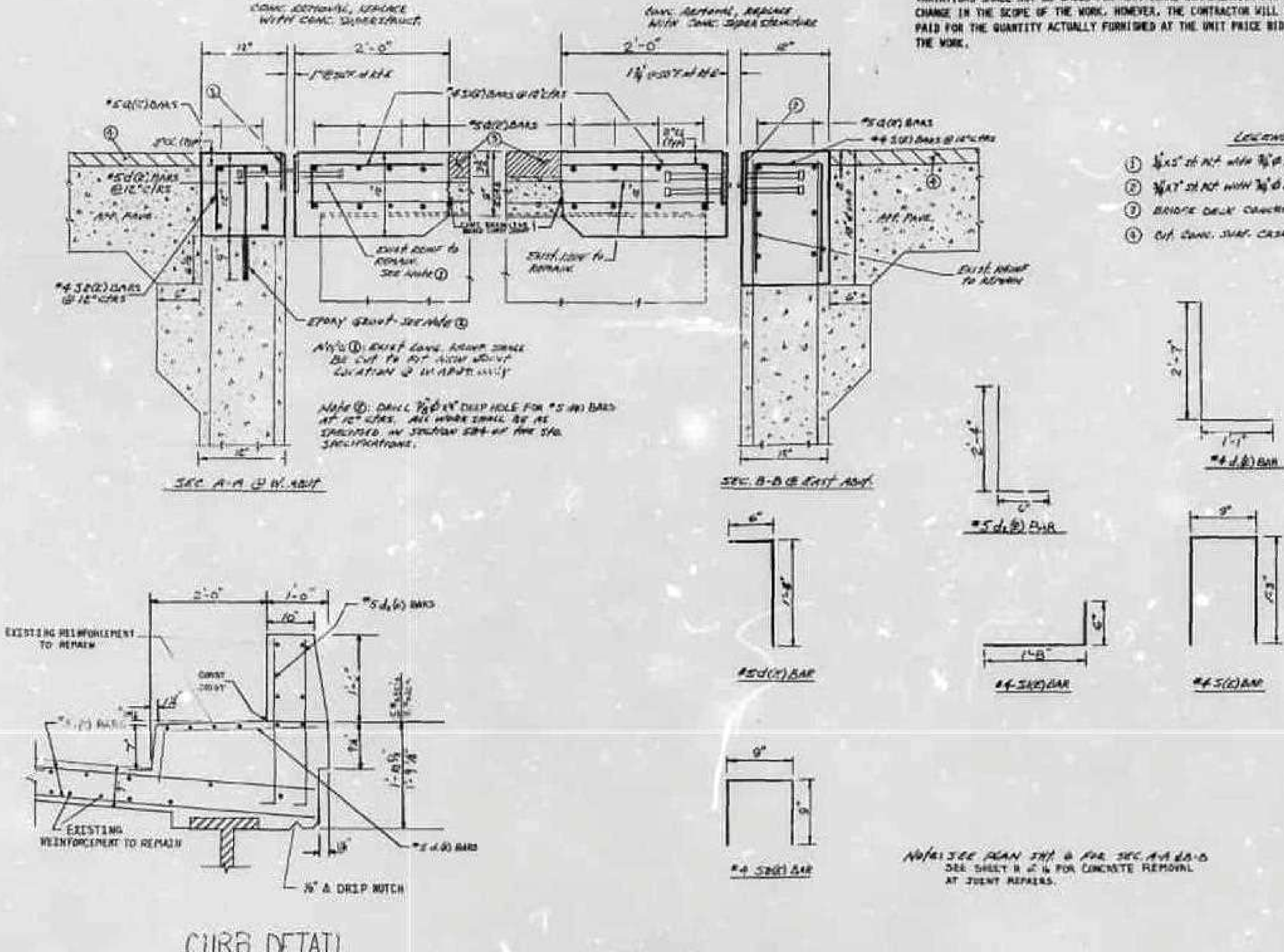
PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

FAI 80
SEC 99-3HB-3I



LEGEND

1. ¾"x5" st. pl. with ⅞"⌀ x 6" studs - preform. joint seal 1¾" (see sht 8)
2. ¾"x7" st. pl. with ⅞"⌀ x 8" studs - preform. joint seal 2½" (see sht 8)
3. Bridge deck concrete overlay option (see sup. spec. check sht. item 17)
4. Cut conc. surf. case mix II, cl. I, ty. I

Bill of Material

BAR	SIZE	NO. REQ	LENGTH	SHAPE
h(E)	#5	26	28'-0"	—
d(E)	#5	24	2'-0"	┐
S(E)	#4	30	3'-3"	⊓
S1(E)	#4	48	2'-2"	┘
S2(E)	#4	24	2'-3"	[illegible]
d1(E)	#4	8	3'-6"	┘
d2(E)	#5	24	2'-10"	┘

Reinf. Bars (E) - 1058 LBS
Concrete Removal - 7.4 C.Y.
Conc. Superstructure - 7.8 C.Y.
Furnish & Erect Struct. Steel - 1790 LBS
Preform. Joint Seal 1¾" - 30 FT
Preform. Joint Seal 2½" - 30 FT

(E) Indicates Epoxy Coated

NOTE: SEE PLAN SHT. 6 FOR SEC. A-A & B-B. SEE SHEET 8 & 16 FOR CONCRETE REMOVAL AT JOINT REPAIRS.

Note: Exist. conc. reinf. shall remain in place & front. reinf. in the conc. removal areas shall be removed. The removal of exist. st. angles and studs at the expansion joint, E. abut., shall be incidental to conc. removal.

All reinf. bars in the conc. removal areas specified to remain in place shall be thoroughly cleaned of old conc. & rust prior to placing new concrete.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS: FIXED AND EXPANSION JOINT RECONSTRUCTION
FAI 80, SEC. 99-3HB-3I, WILL Co

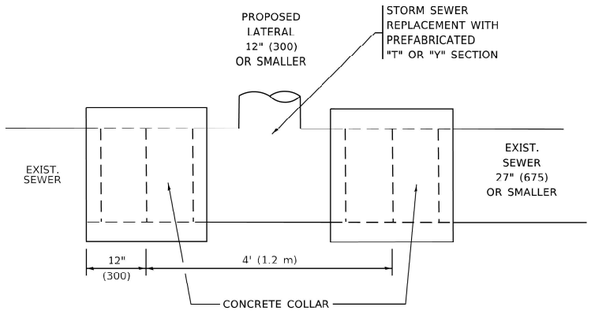
FOR INFORMATION ONLY

USER NAME = USCP702533	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS
PLOT SCALE = 7:11.99616 ':" / in.	DRAWN -	REVISED -		SHEET 62 OF 62 SHEETS
PLOT DATE = 4/22/2025	CHECKED -	REVISED -		
	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	882

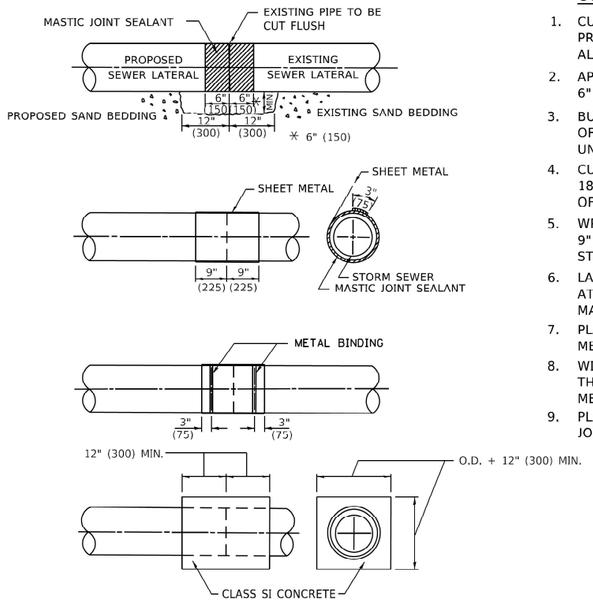
CONTRACT NO. 62R22

WSP USA Inc. 30 N. LASALLE STREET SUITE 4200 CHICAGO, IL 60602 TEL: (312) 782-8150 FAX: (312) 782-1684



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER
OF 27" (675) OR SMALLER

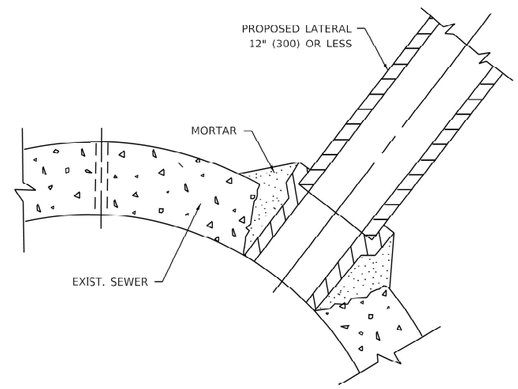


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

NOTES:

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
- A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
- B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

1. CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.
2. CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

1. TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.
2. REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.
3. TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.
4. CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

* ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

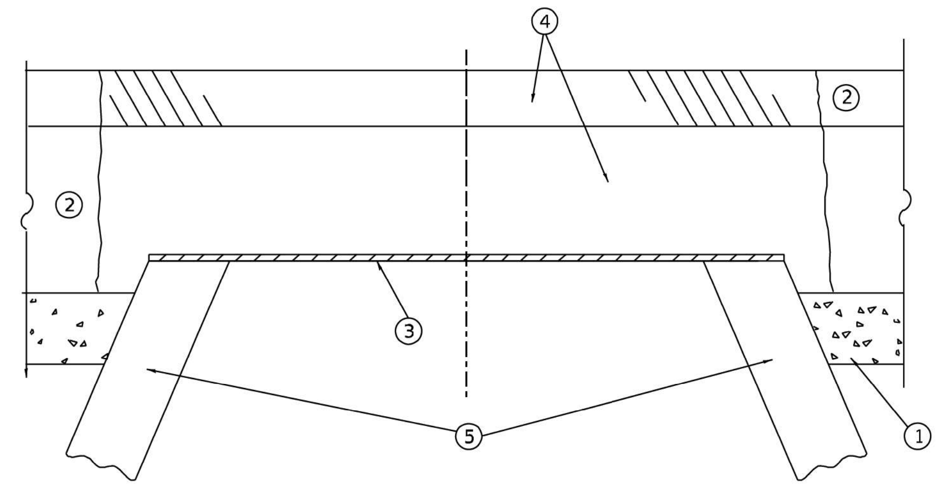
USER NAME = Lawrence.DeManche	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94	
	DRAWN -	REVISED - R. SHAH 10-25-94	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. SHAH 06-12-96	
PLOT DATE = 11/18/2022	DATE - 07-25-90	REVISED - K. SMITH 11-18-22	

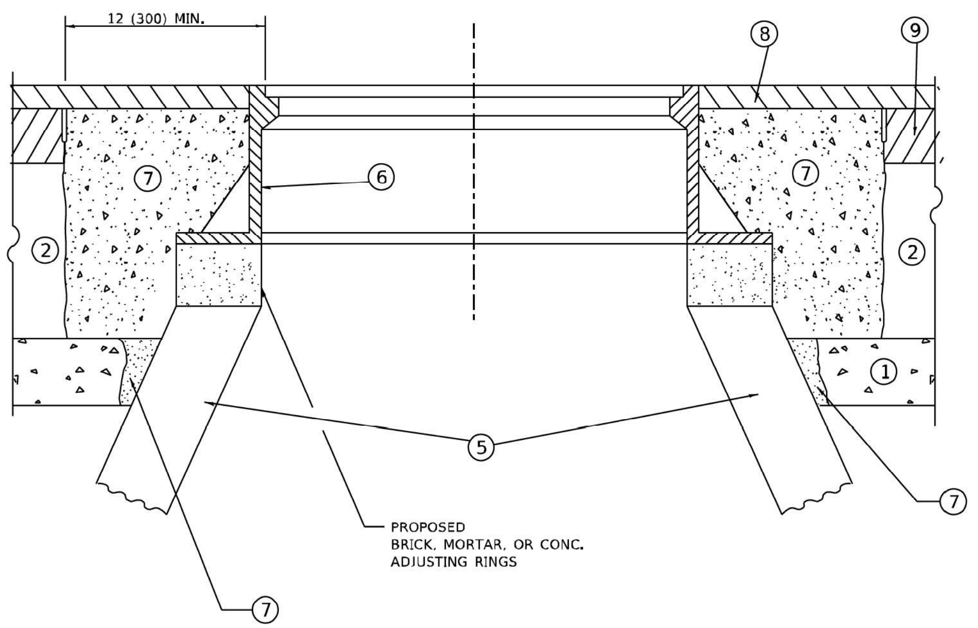
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	883
	BD500-01 (BD-07)	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			





DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

NOTES

1. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
2. IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.

B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.

C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.

D) BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.

B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.

C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 (900) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS PP-2* CONCRETE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA BINDER COURSE

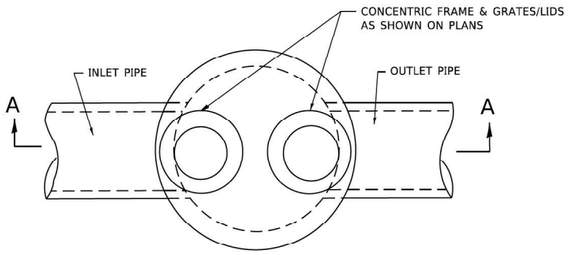
LOCATION OF STRUCTURES

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

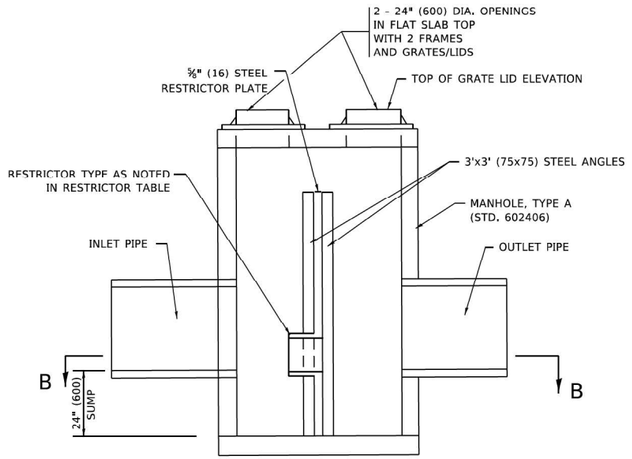
BASIS OF PAYMENT

1. REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
4. WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

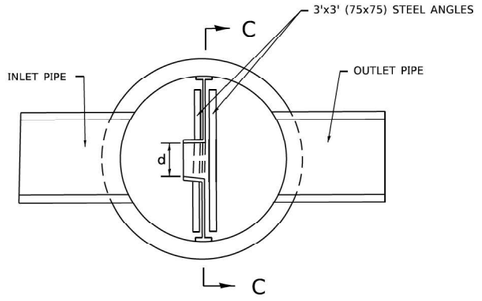
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN



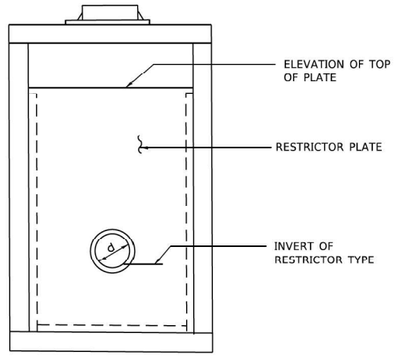
PLAN



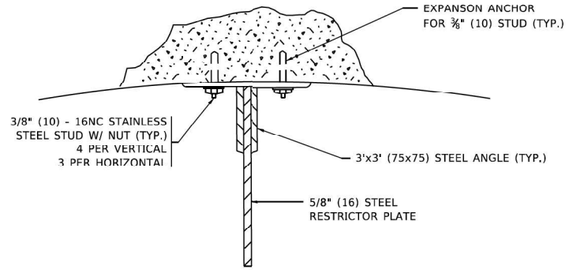
SECTION A–A



SECTION B–B



SECTION C–C



ANGLE FASTENER DETAIL

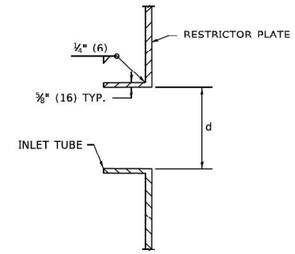
NOTES:

1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.

BASIS OF PAYMENT:

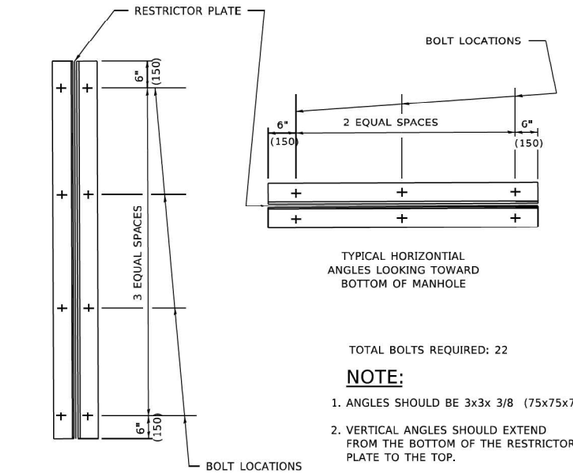
1. TO BE PAID FOR AS "MANHOLES ,TYPE A, 6 FT. (1.8 m)-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH

2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.



INLET TUBE DETAIL

STATION AND OFFSET	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in. (mm) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW



TYPICAL VERTICAL ANGLES
LOOKING TOWARD MANHOLE WALL

TYPICAL HORIZONTAL
ANGLES LOOKING TOWARD
BOTTOM OF MANHOLE

TOTAL BOLTS REQUIRED: 22

NOTE:

1. ANGLES SHOULD BE 3x3x 3/8 (75x75x75)
2. VERTICAL ANGLES SHOULD EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
3. HORIZONTAL ANGLES SHOULD EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

STEEL ANGLE BOLTING DETAILS

RESTRICTOR TYPE					
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED
LENGTH: ½ TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-½ DIA.	LENGTH: 2-½ DIA.	
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR
AND SQUARE ORIFICES

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

MODEL: Default
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USER NAME = demanchelt	DESIGNED - R. SHAH	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MANHOLE WITH RESTRICTOR PLATE	
	DRAWN -	REVISED - E. GOMEZ 08-28-00			
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-08-01			
PLOT DATE = 2/2/2022	DATE - 09-09-94	REVISED - K. SMITH 02-01-22		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	

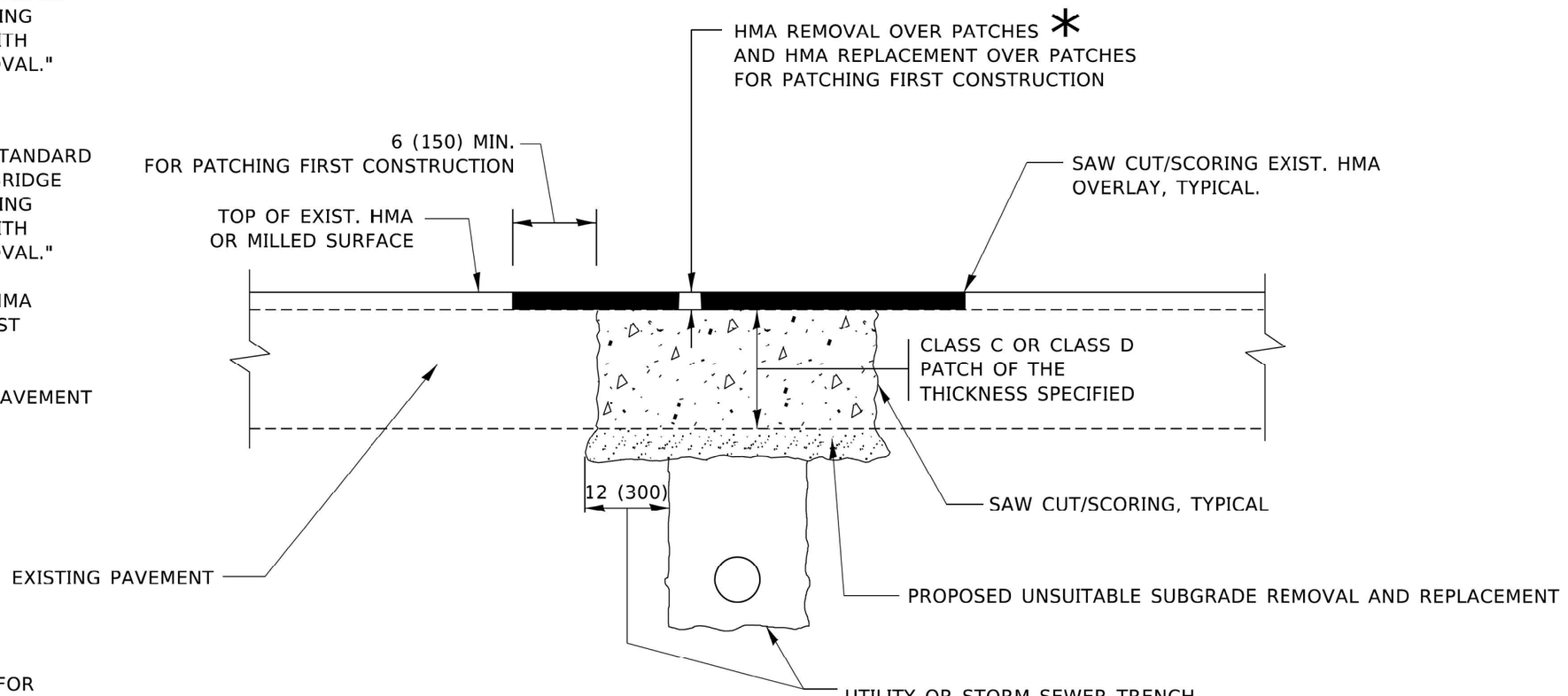
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	884
	BD600–04 (BD–12)	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

METHOD OF MEASUREMENT

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

BASIS OF PAYMENT

1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

MODEL: Default
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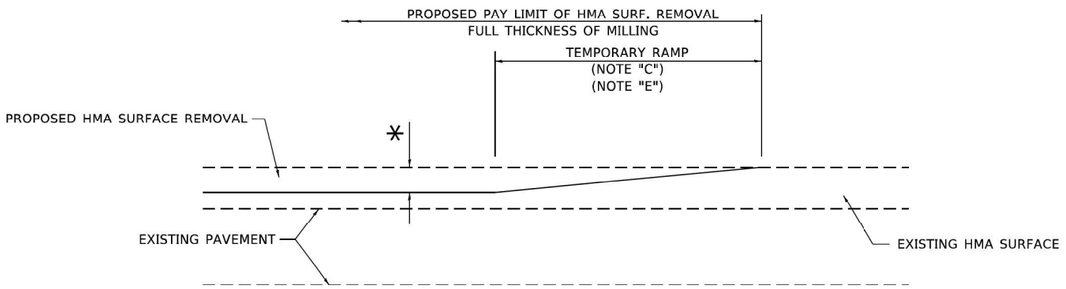
USER NAME = Lawrence.DeManche	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07	
	DRAWN -	REVISED - R. BORO 09-04-07	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - K. ENG 10-27-08	
PLOT DATE = 11/18/2022	DATE - 10-25-94	REVISED - K. SMITH 11-18-22	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

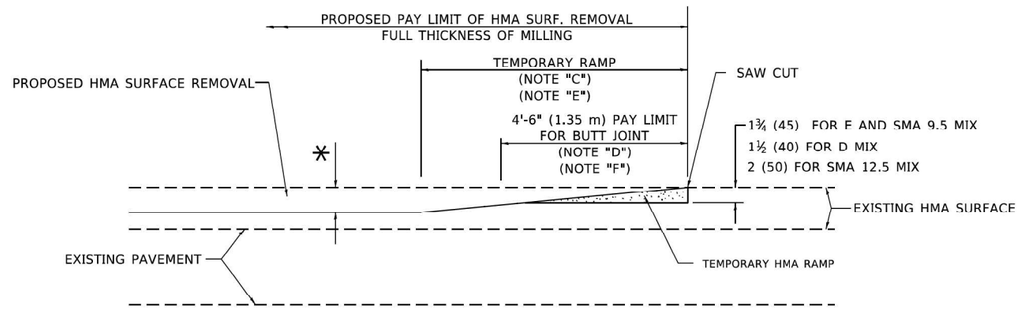
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	885
	BD400-04 (BD-22)	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

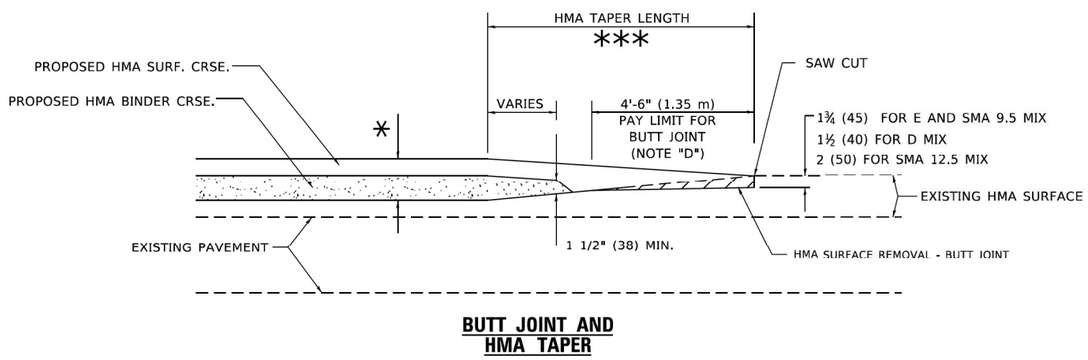


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

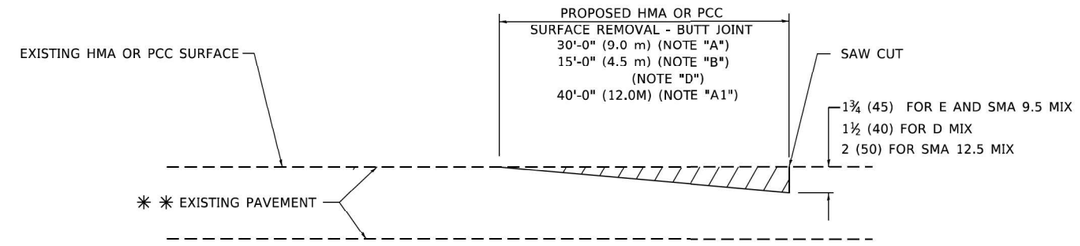
OPTION 2

TYPICAL TEMPORARY RAMP

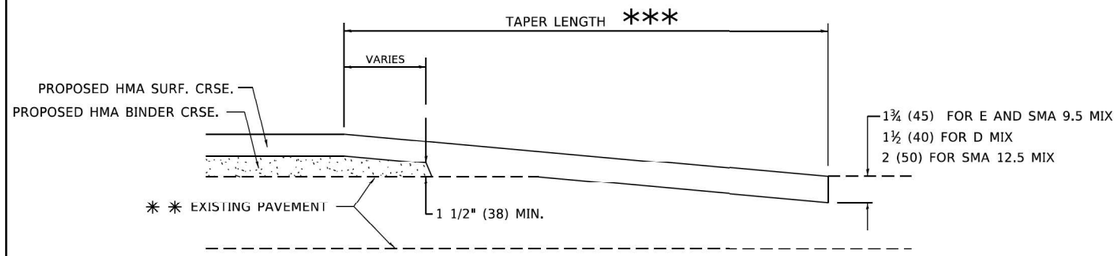


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

GENERAL NOTES

A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.

A1. INTERSTATES

B. MINOR SIDE ROADS.

C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E. TAPER THE TEMP. RAMP AT A RATE OF 3' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.
* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT

1. THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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USER NAME = Lawrence.DeManche	DESIGNED - M. DE YONG	REVISED - A. ABBAS 03-21-97	
	DRAWN -	REVISED - M. GOMEZ 04-06-01	
PLOT SCALE = 100.0000 ' / In.	CHECKED -	REVISED - R. BORO 01-01-07	
PLOT DATE = 11/18/2022	DATE - 06-13-90	REVISED - K. SMITH 11-18-22	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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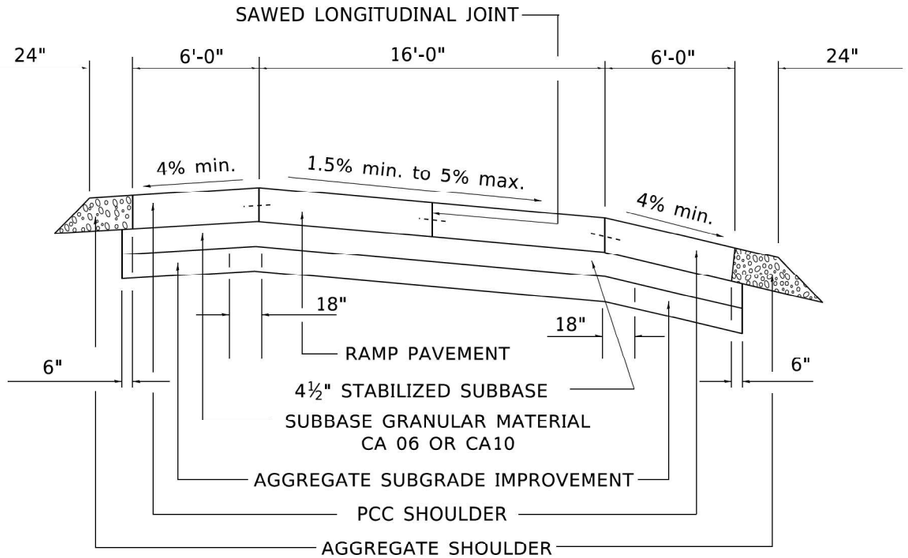
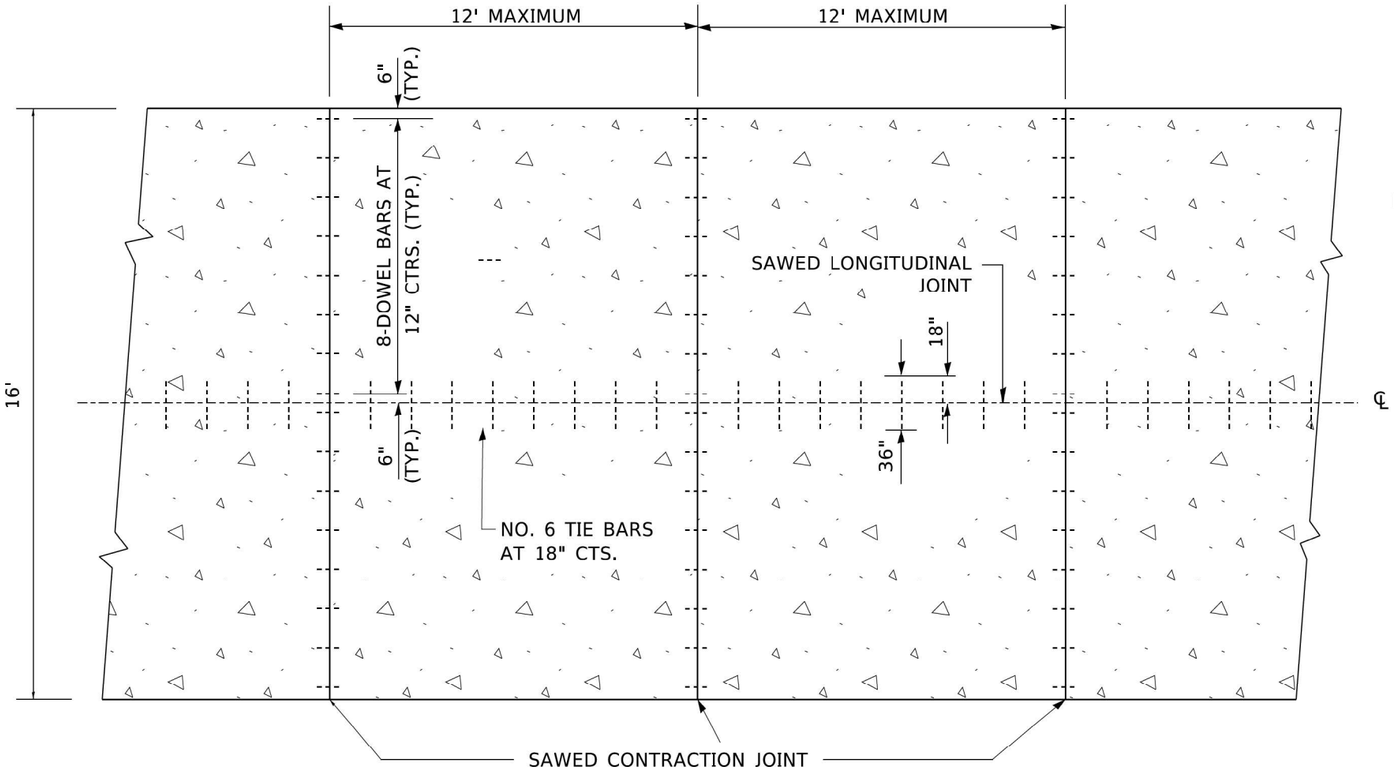
	BD400-05 BD-32	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			



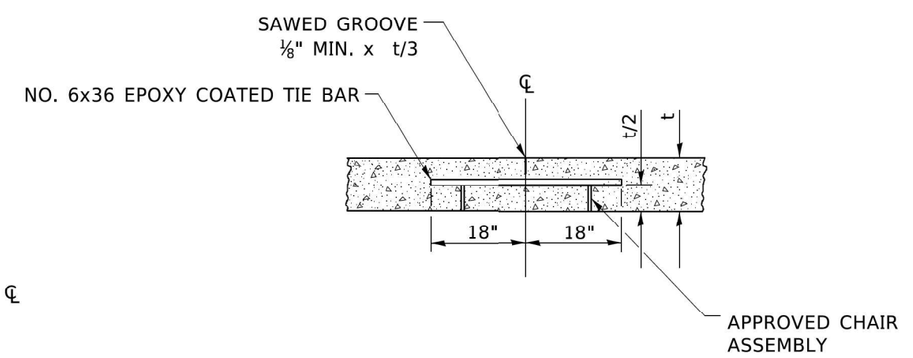
SECTION



PLAN

NOTES:

1. CENTERLINE JOINT REMAINS IN THE CENTER WHEN RAMP TRANSITIONS TO TWO (2) RAMPS AT 12'.
2. ALL BARS TO BE EPOXY COATED.



SAWED LONGITUDINAL JOINT

ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE NOTED

MODEL: Default
FILE NAME: pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dis-Std22x34\CADData\CADSheets\stc49.dgn

USER NAME = footemj	DESIGNED -	REVISED -TOM MATOUSEK 08/19/10
	DRAWN - TOM MATOUSEK	REVISED --
PLOT SCALE = 50.0000 ' / in.	CHECKED - A. ABBAS	REVISED --
PLOT DATE = 3/27/2019	DATE - 10-18-02	REVISED --

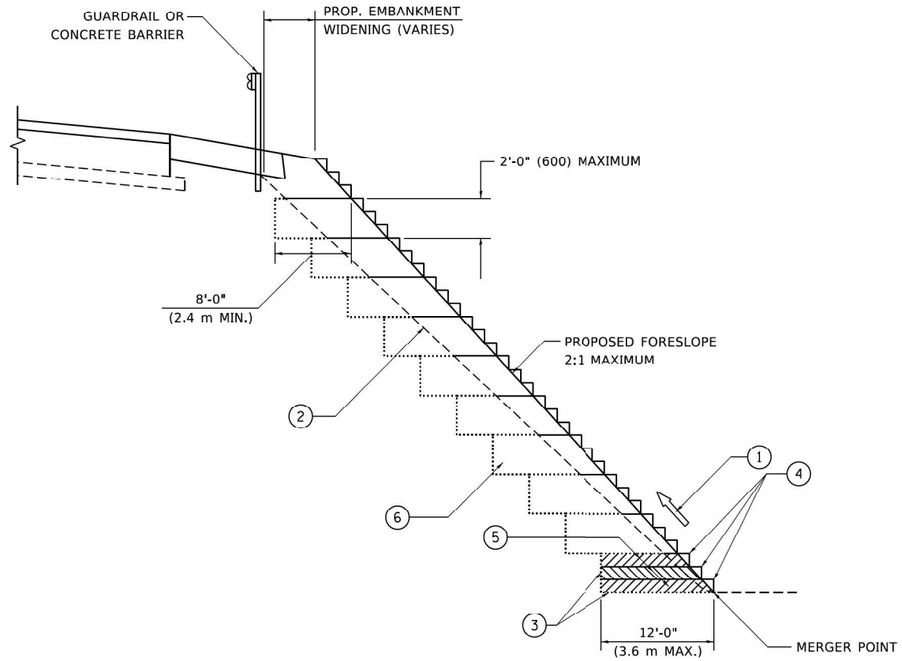
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL FOR CENTERLINE SAW CUT 16' AND VARIABLE JOINTED PCC PAVEMENT FOR RAMPS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	886
	BD49	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

stc49.dgn 3/27/2019 8:14:16 AM User=footemj



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN - CADD	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED - S.E.B.	REVISED -
PLOT DATE = 3/27/2019	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT WIDENING

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	887
	BD-51	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

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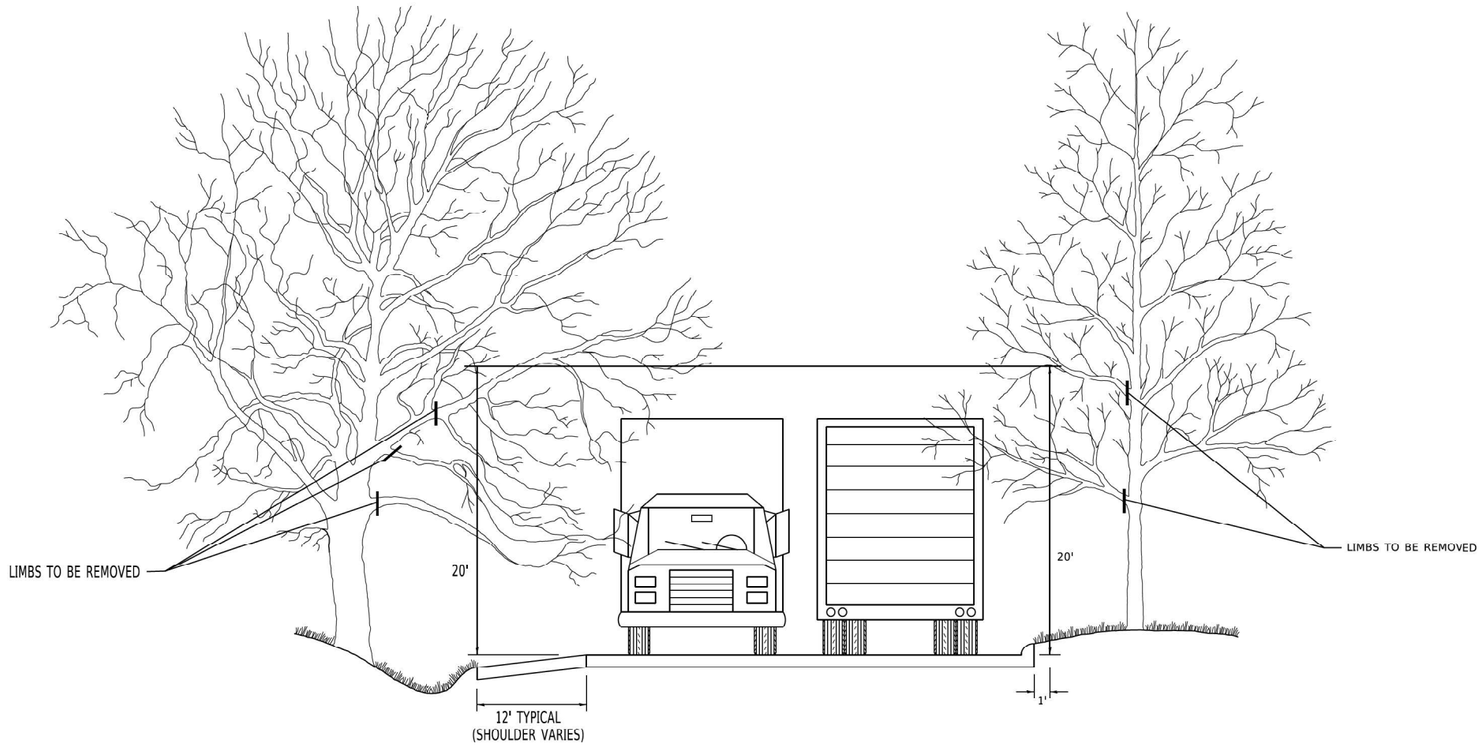

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USER NAME = footem]	DESIGNED -	REVISED - R. BORO 10-31-06	**STATE OF ILLINOIS**	**PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE**	
	DRAWN -	REVISED -	**DEPARTMENT OF TRANSPORTATION**		
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PLOT DATE = 3/11/2019	DATE -	REVISED -			

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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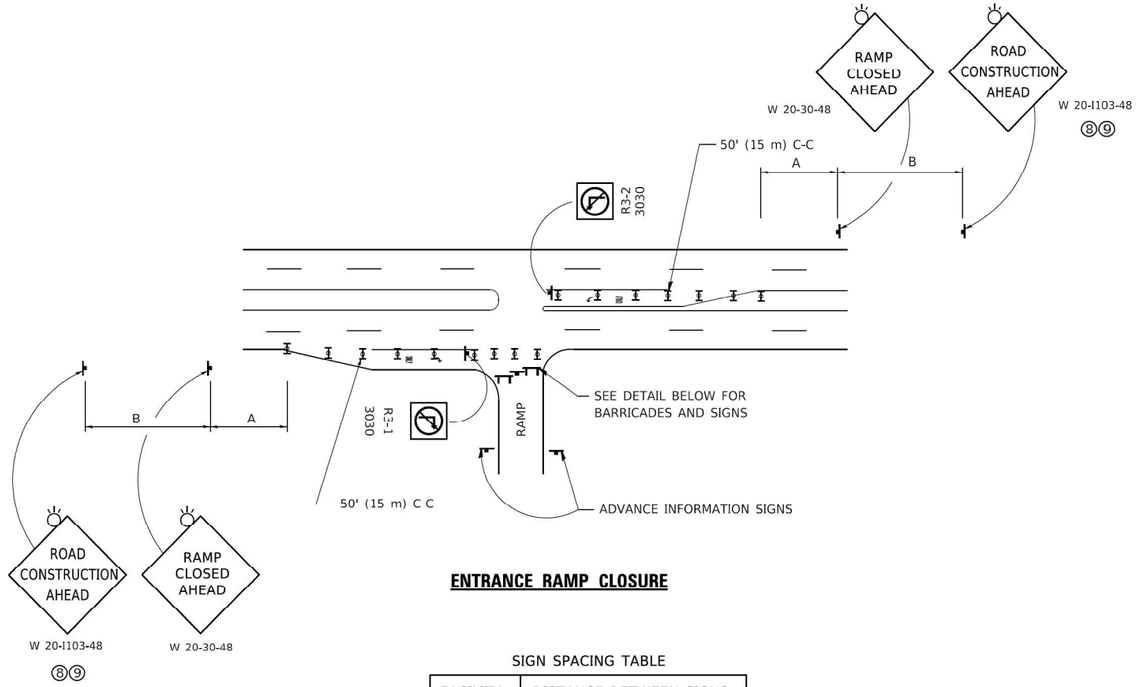
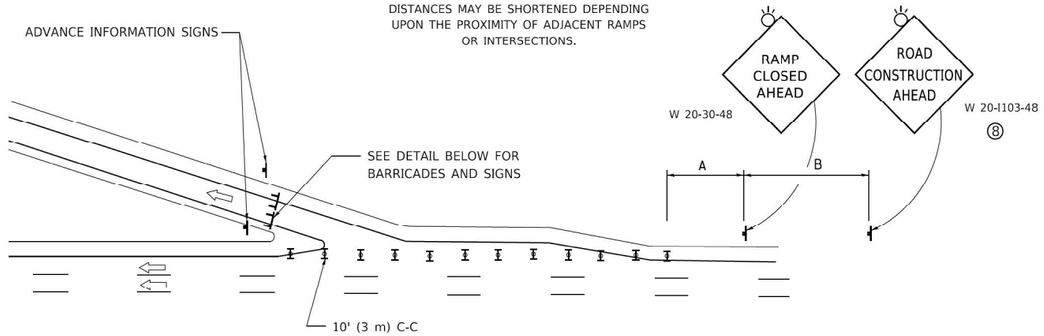


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.

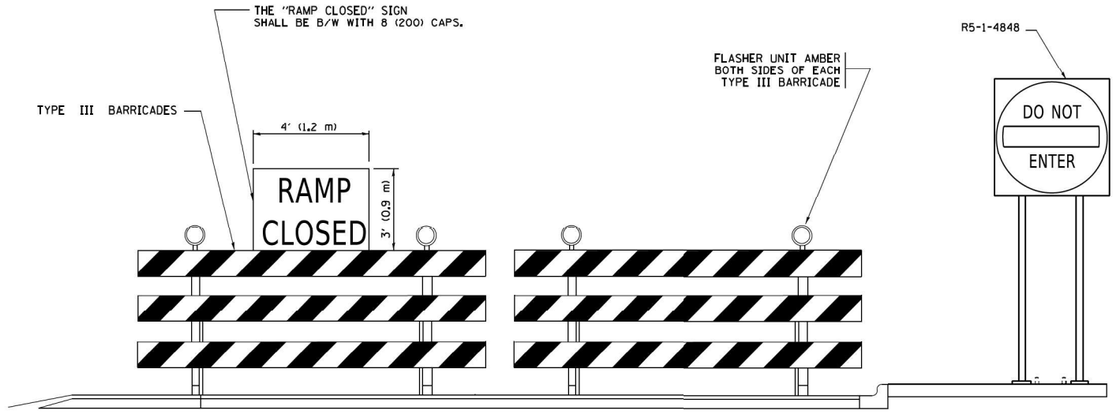


EXIT RAMP CLOSURE

SYMBOLS

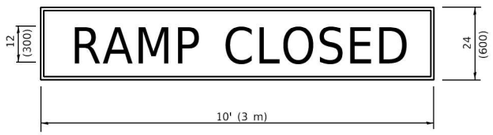
TYPE II BARRICADE OR DRUM

TYPE III BARRICADE WITH 2 FLASHING LIGHTS



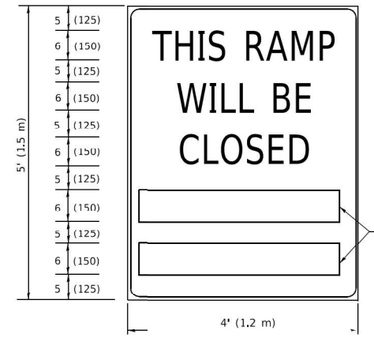
DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY
E MOD FONT
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE BACKGROUND

½ (12) BORDER

E MOD FONT

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
2. VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
8. ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
9. ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = footemj	DESIGNED - D.W.S.	REVISED - S.P.B._01-07	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ENTRANCE_AND_EXIT_RAMP CLOSURE_DETAILS	
	DRAWN -	REVISED - S.P.B._12-09			
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - M.D._06-13			
PLOT DATE = 3/4/2019	DATE - 02-83	REVISED - M.D._01-18		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	889
	TC-08	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

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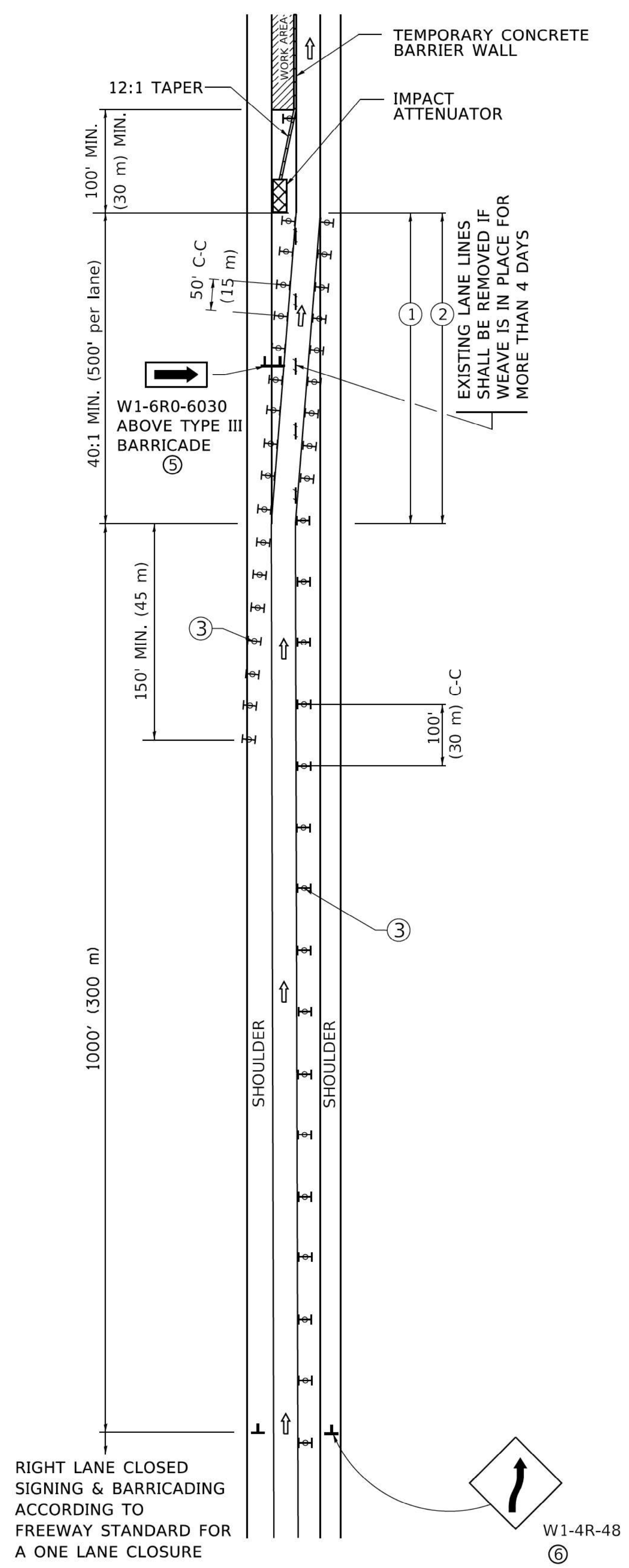
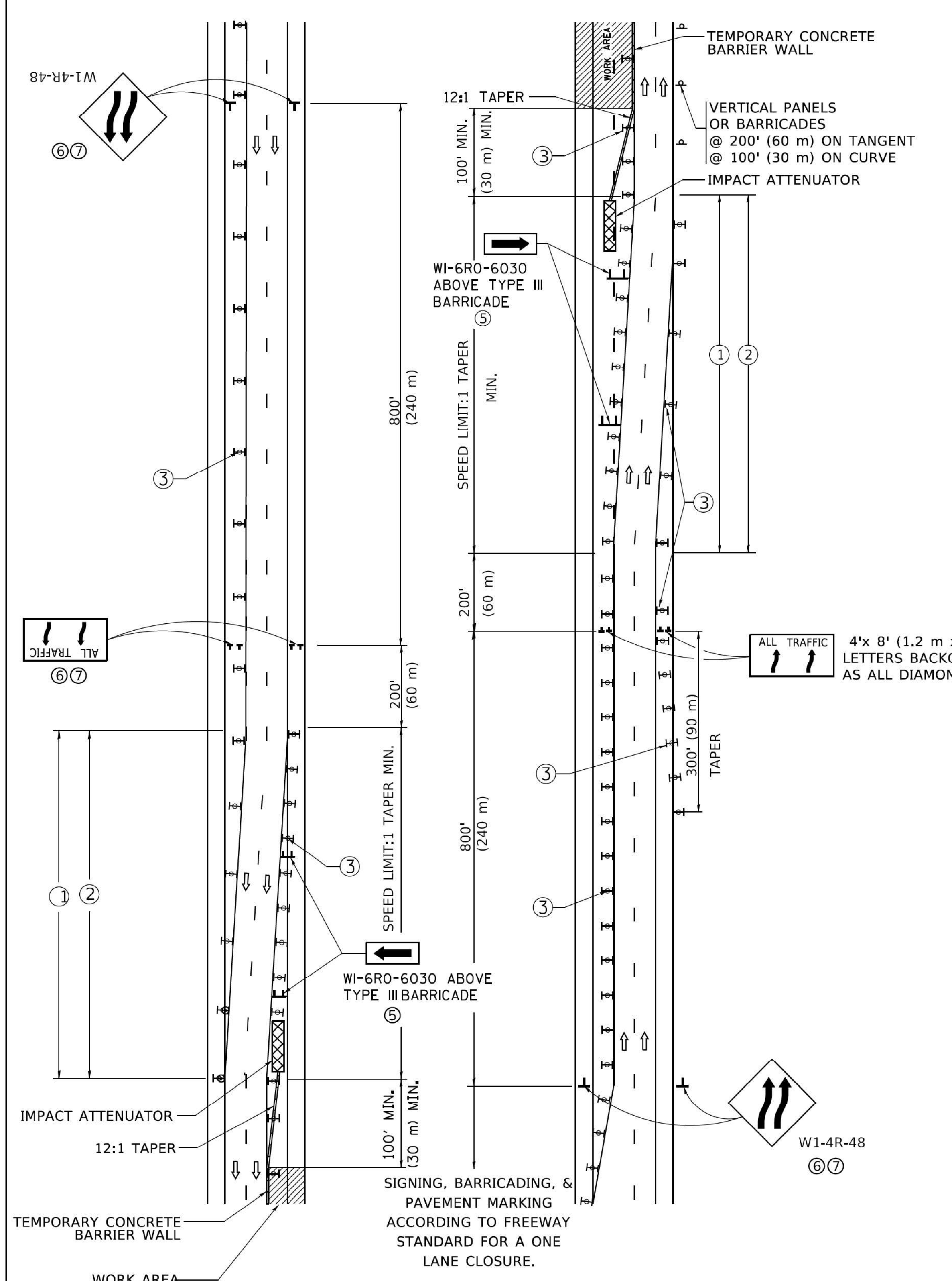
tc08.dgn 3/4/2019 10:22:32 AM User=footemj

SINGLE LANE WEAVE



MULTI–LANE WEAVE



GENERAL NOTES:

① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.

② CONTINOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.

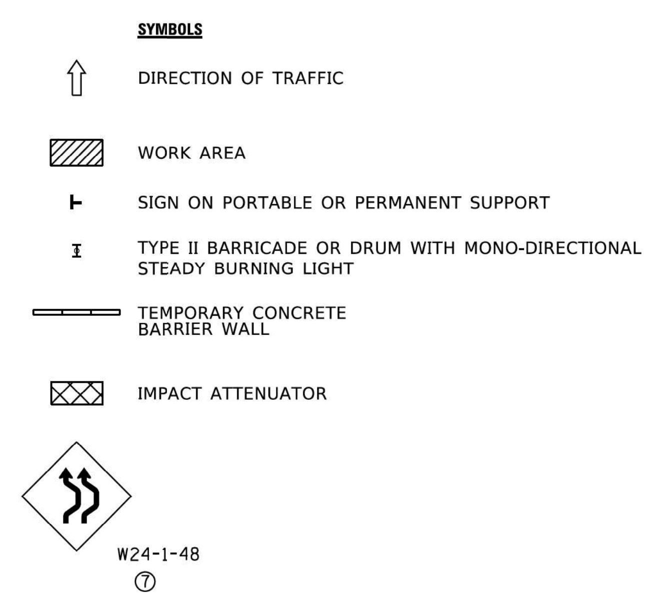
③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.

④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.

⑤ TYPE III BARRICADES MAY BE OMMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.

⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.



ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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USER NAME = footemj	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI–LANE WEAVE	F.A. RTE. 80 / SECTION FAI 80 21 INTERCHANGE / COUNTY WILL / TOTAL SHEETS 1209 / SHEET NO. 890
	DRAWN -	REVISED - S.P.B. 01-07			TC-09
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - S.P.B. 12-09			CONTRACT NO. 62R22
PLOT DATE = 3/4/2019	DATE - 02-87	REVISED - M.D. 06-13		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT

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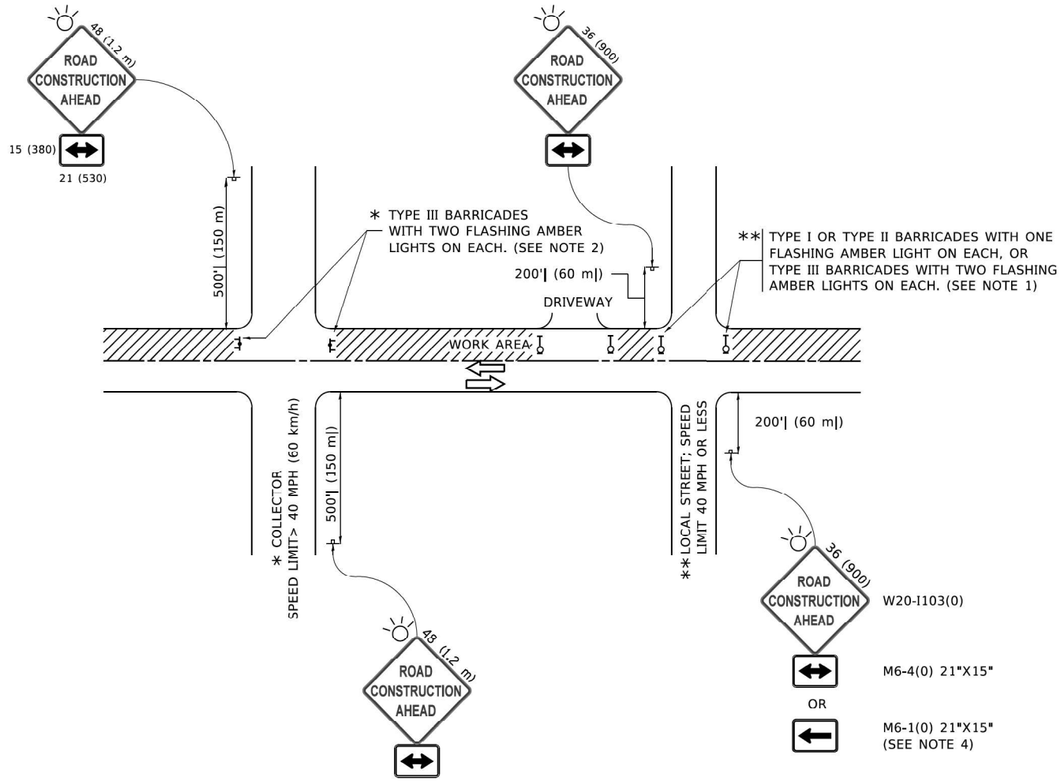

NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96	
	DRAWN -	REVISED - T. RAMMACHER 01-06-00	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13	
PLOT DATE = 3/4/2019	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	891
	TC-10	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

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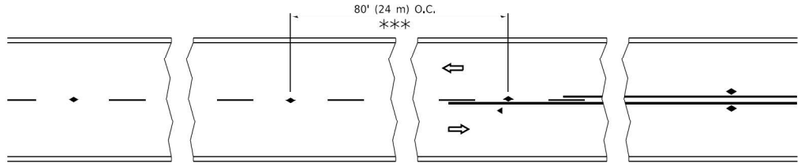
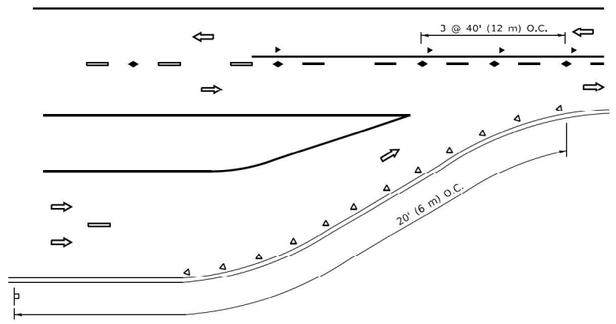


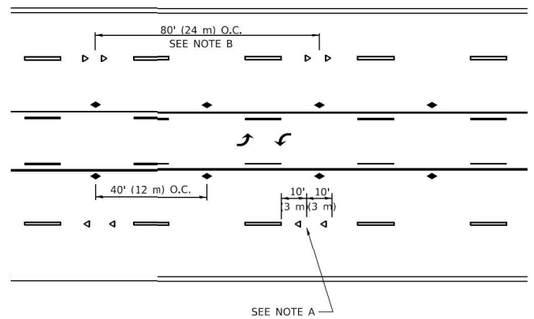
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO–LANE/TWO–WAY

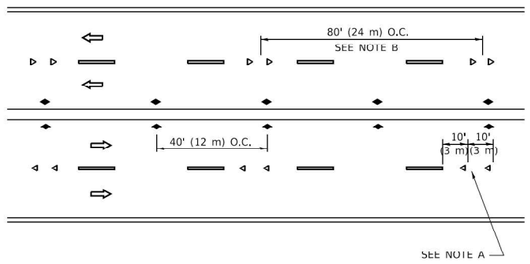
SEE FIGURE 3B-14 MUTCD



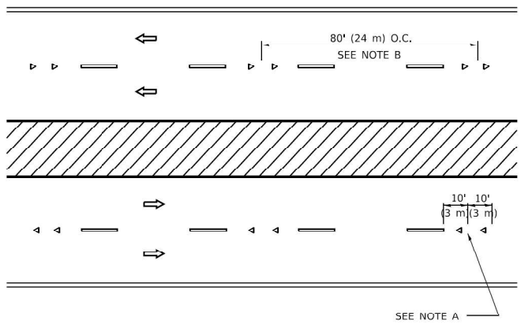
LANE REDUCTION TRANSITION



TWO–WAY LEFT TURN



MULTI–LANE/UNDIVIDED



MULTI–LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

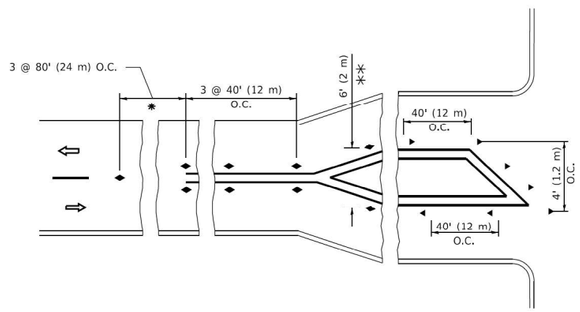
LANE MARKER NOTES

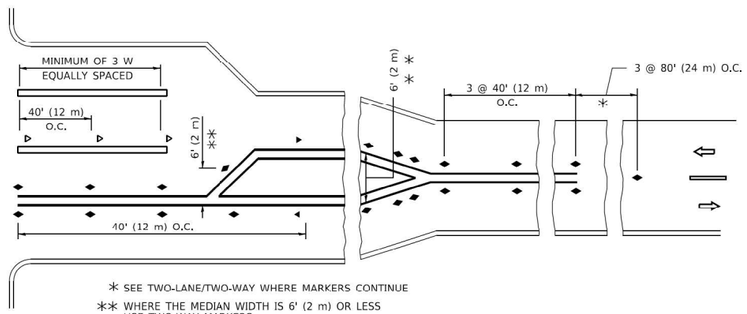
A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.





* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

TURN LANES

All dimensions are in inches (millimeters) unless otherwise shown.

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PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 07-01-13	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW–PLOW RESISTANT)

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	892
	TC-11	CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

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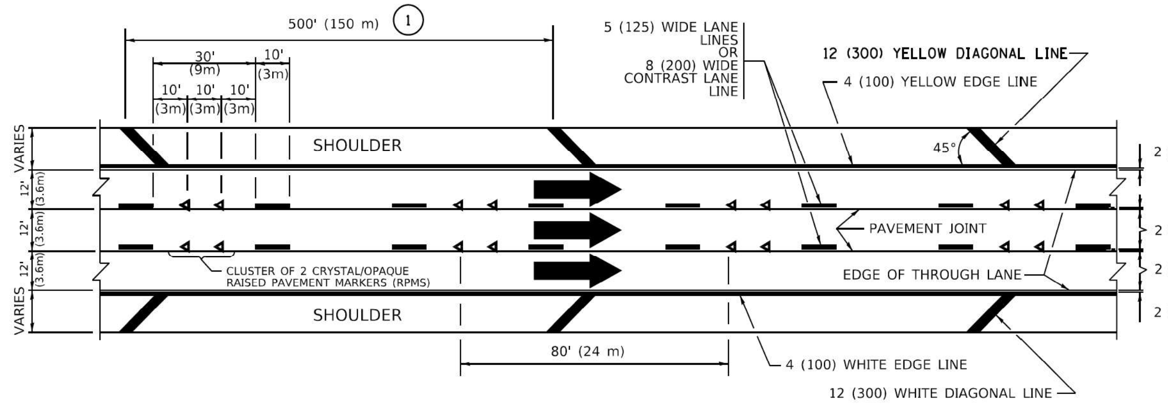
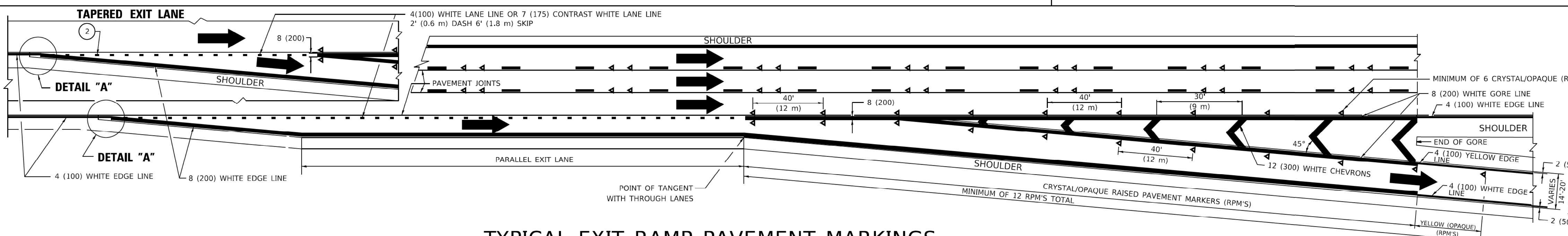


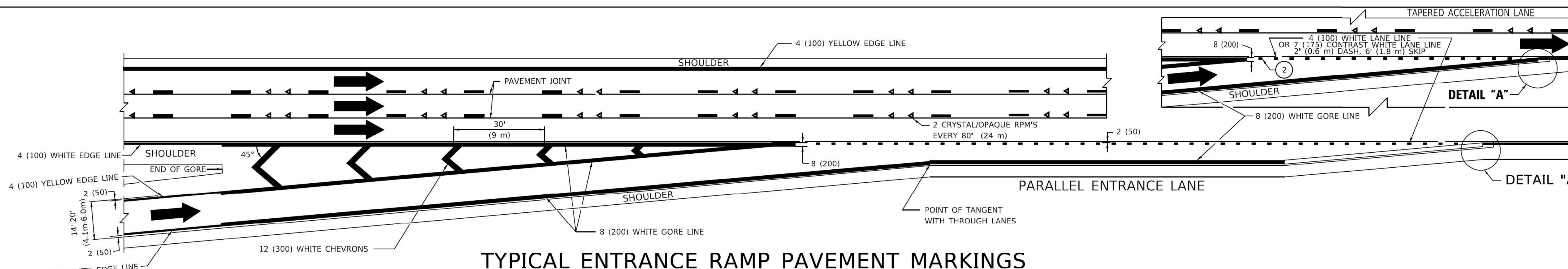
TYPICAL EDGE LINES & LANE LINES

PAVEMENT MARKING MATERIALS

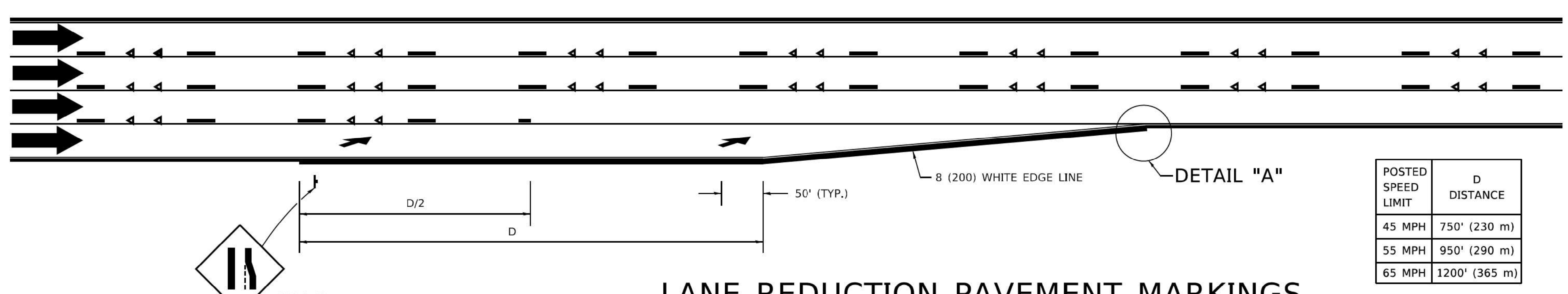
1. THERMOPLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON HMA PAVEMENTS.
2. POLYUREA OR MODIFIED URETHANE PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON PCC PAVEMENTS.
3. PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE D, INLAID OR GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENTS.
4. CONTRAST PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON PCC PAVEMENT.



TYPICAL EXIT RAMP PAVEMENT MARKINGS

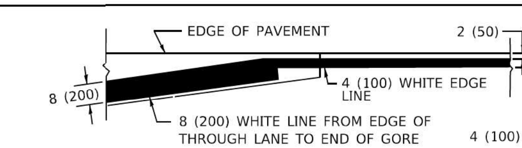


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS



POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)

LANE REDUCTION PAVEMENT MARKINGS



DETAIL "A"

NOTES:

1. THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
2. 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

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	DRAWN -	REVISED - M.D. 05-13
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M.D. 09-17
PLOT DATE = 11/18/2022	DATE - 01-90	REVISED - K. SMITH 11-18-22

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS

SCALE: NONE | SHEET 1 OF 2 SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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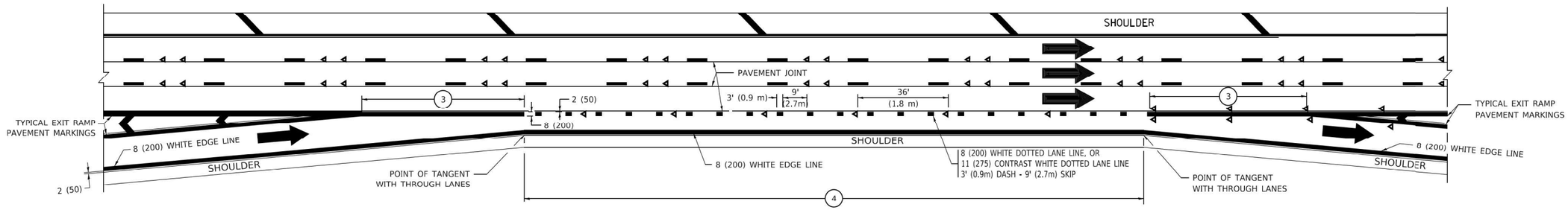
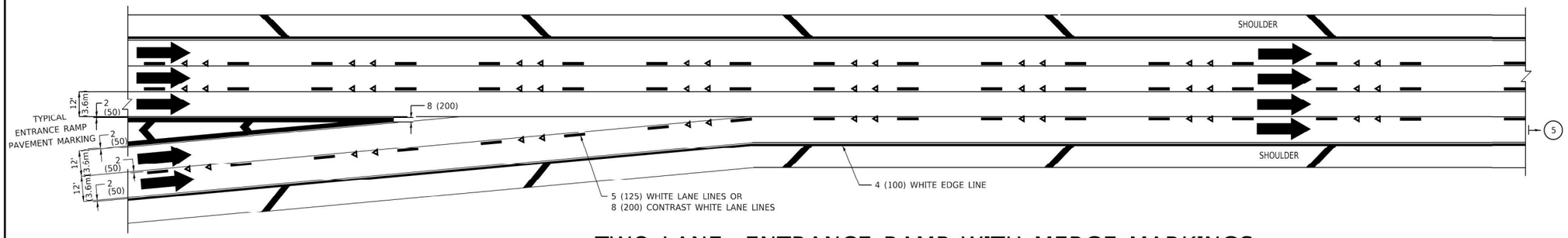
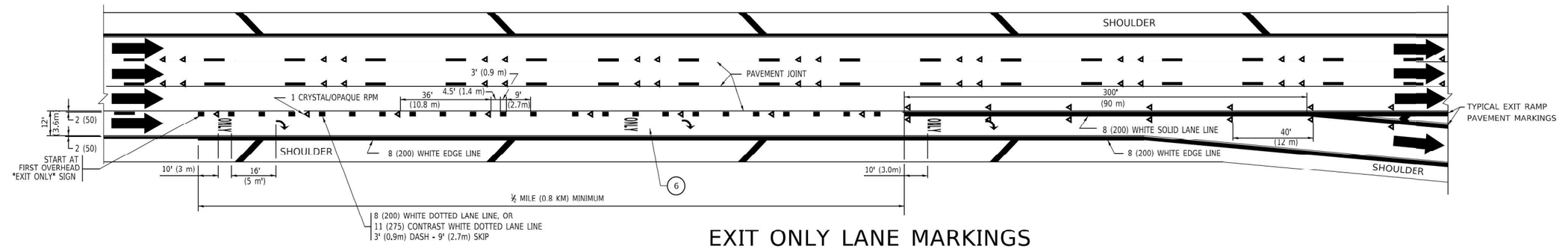
	TC-12	CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		



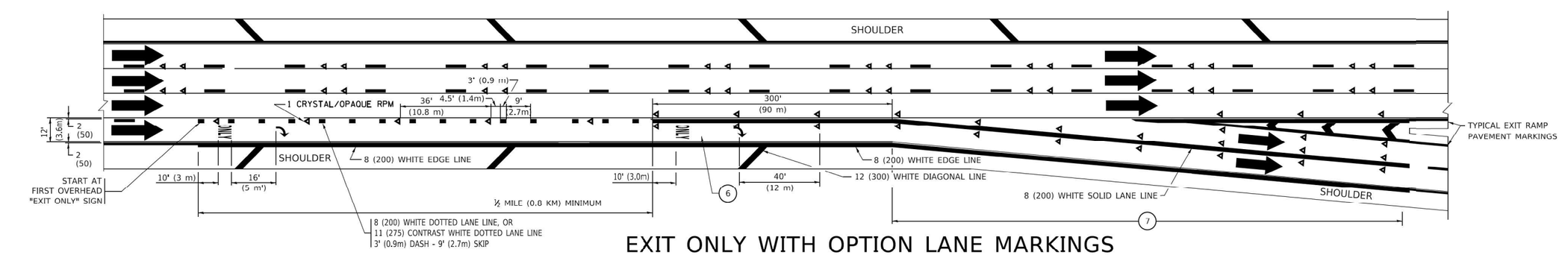
AUXILIARY LANE MARKINGS



TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS



EXIT ONLY LANE MARKINGS



EXIT ONLY WITH OPTION LANE MARKINGS

NOTES:

3. OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
4. 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
5. FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
6. ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED..
7. CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

USER NAME = footem]	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06	
	DRAWN -	REVISED - S.P.B. 01-07	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - S.P.B. 01-10	
PLOT DATE = 3/4/2019	DATE - 01-90	REVISED - M.D. 09-17	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS

SCALE: NONE | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	TC-12	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

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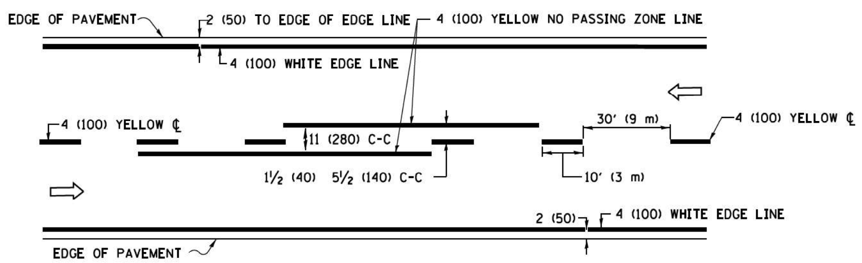
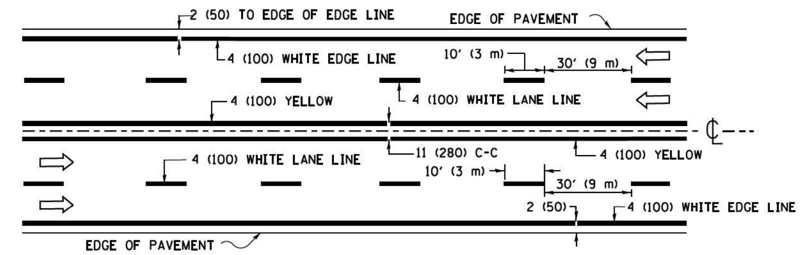
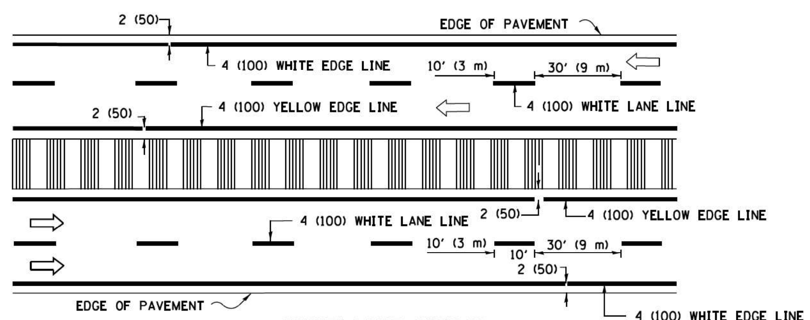


2-LANE ROADWAY



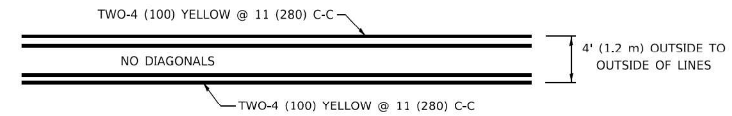
MULTI-LANE UNDIVIDED



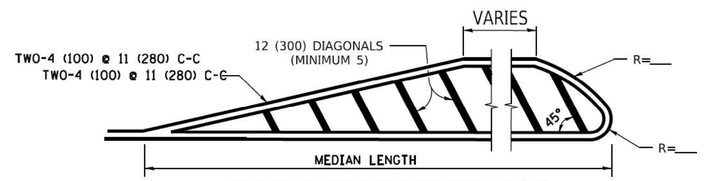
MULTI-LANE DIVIDED

WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING



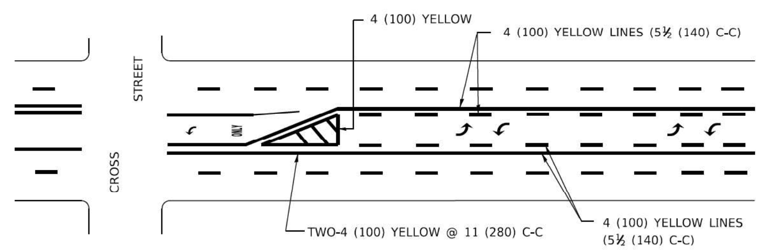
4' (1.2 m) WIDE MEDIANS ONLY



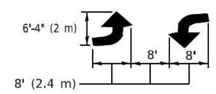
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

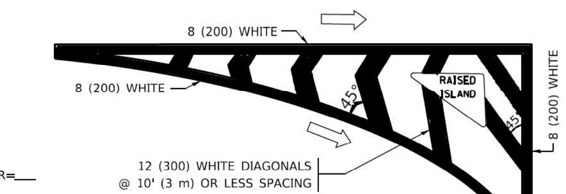


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

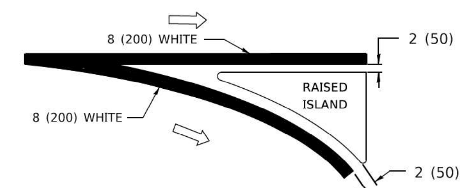


MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

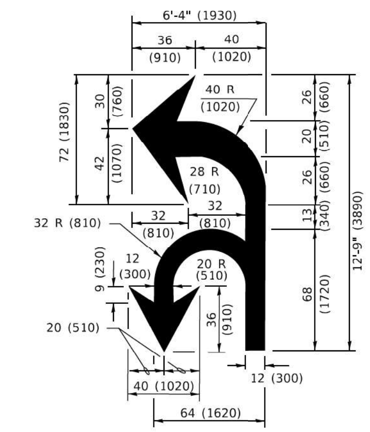


ISLAND OFFSET FROM PAVEMENT EDGE

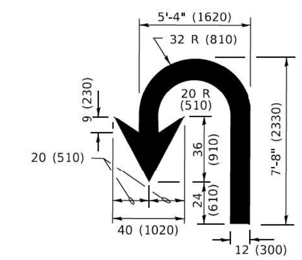


ISLAND AT PAVEMENT EDGE

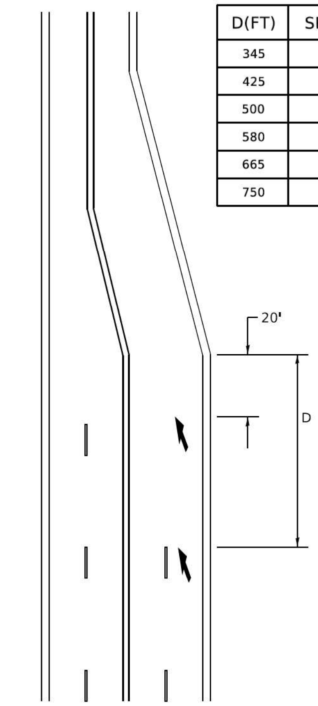
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN



D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

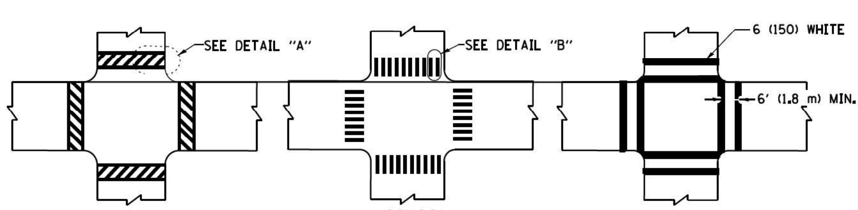
LANE REDUCTION TRANSITION

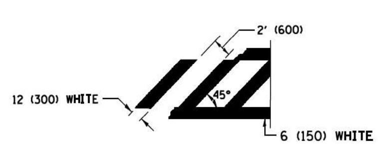
* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.





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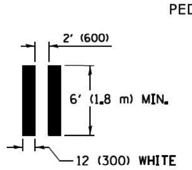
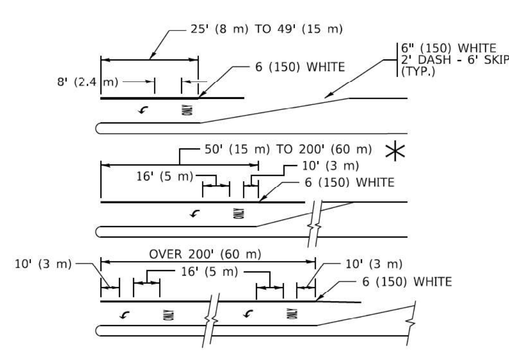


DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED - C. JUCIUS 07-01-13	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15	
PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16	

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	895
TC-13		CONTRACT NO. 62R22		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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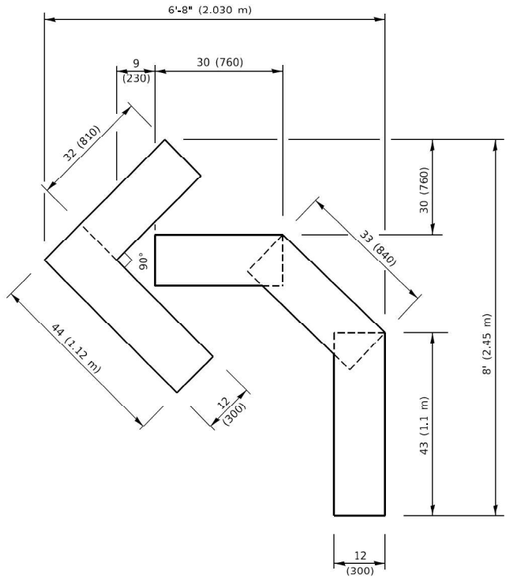
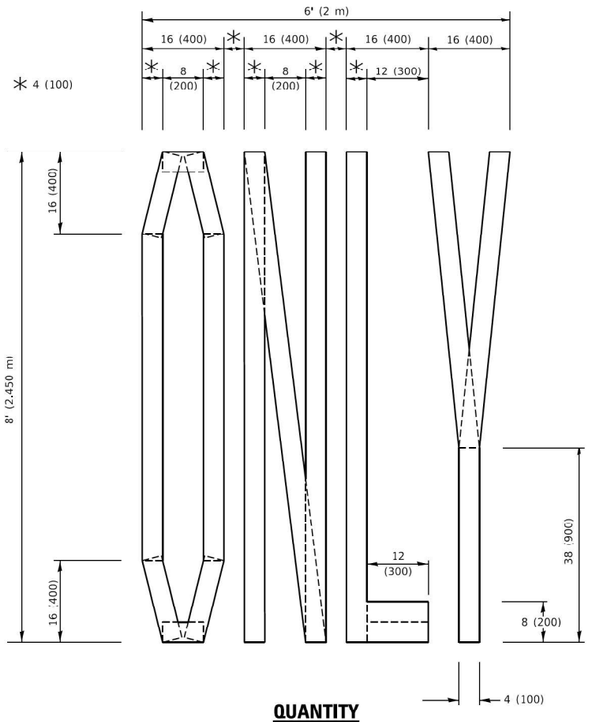
tc13.dgn 3/4/2019 10:34:37 AM User=footemj



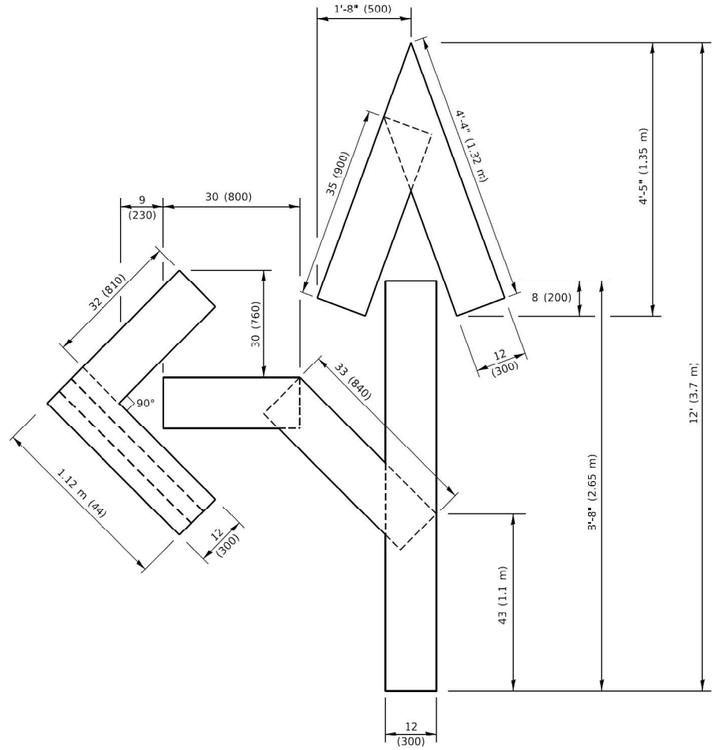
QUANTITY

4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.41 sq. m)



QUANTITY

4 (100) LINE = 64.1 ft. (19.5 m)
21.4 sq. ft. (1.99 sq. m)

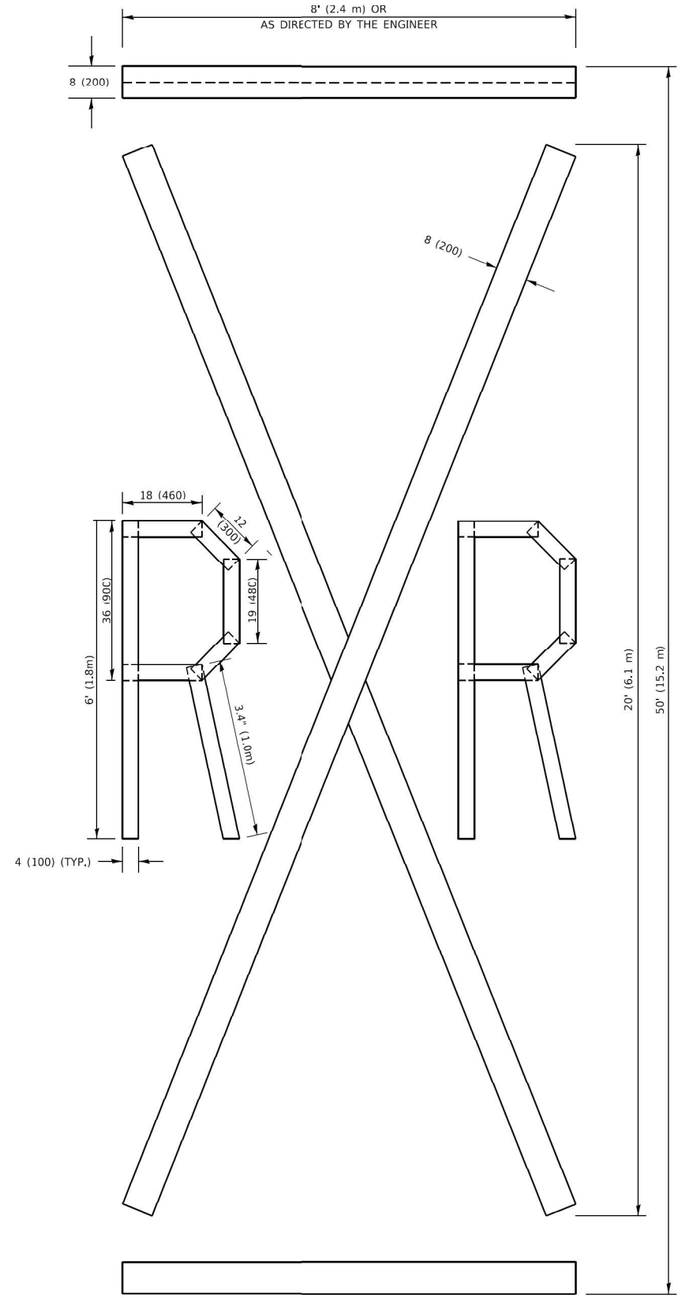


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m)
27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY

4 (100) LINE = 225.9 ft. (68.9 m)
75.3 sq. ft. (6.99 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

MODEL: Default
FILE NAME: pw:\\IL-0946EBIDINTEG.Illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist%202x3a\CADData\CADsheets\tc16.dgn

USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98	
	DRAWN -	REVISED - E. GOMEZ 08-28-00	
PLOT SCALE = 50.0068 ' / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00	
PLOT DATE = 3/4/2019	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

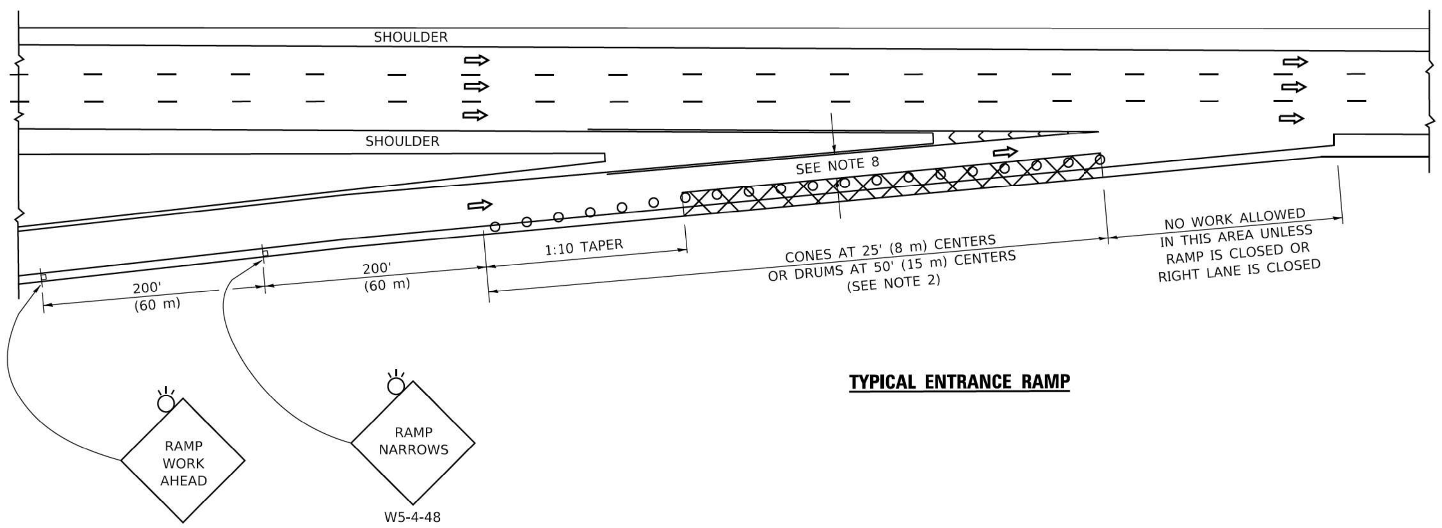
SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

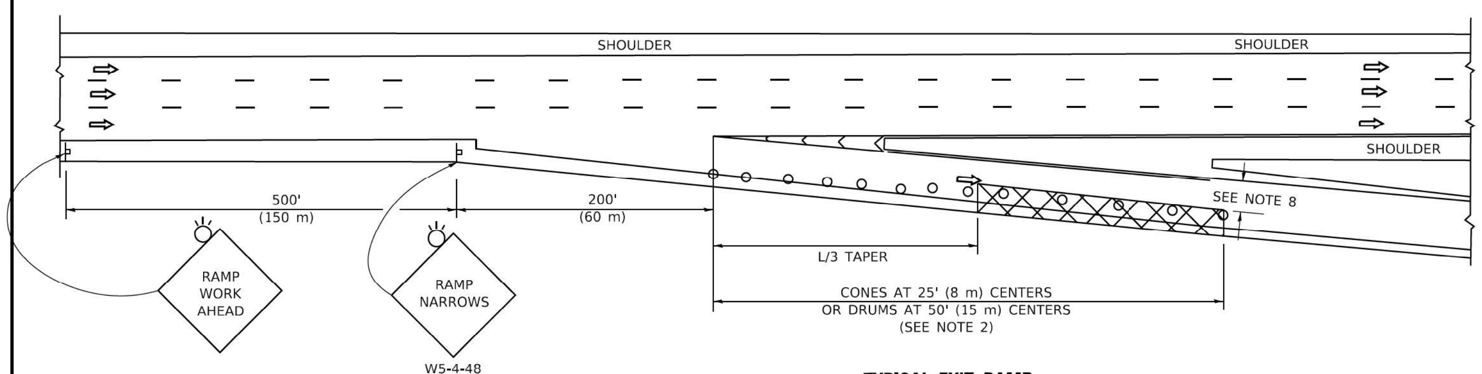
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	896
	TC-16	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

tc16.dgn 3/4/2019 10:37:35 AM User=footemj

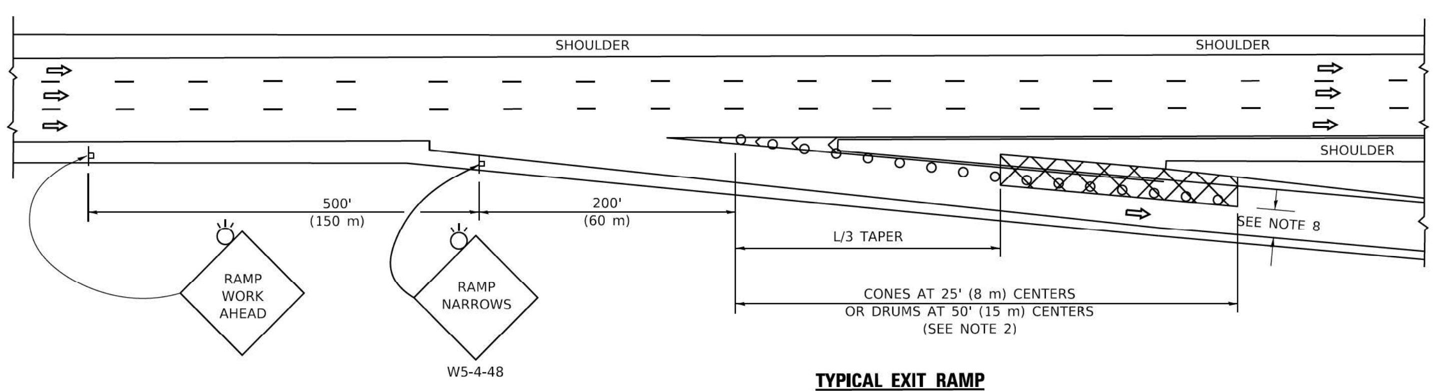
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP

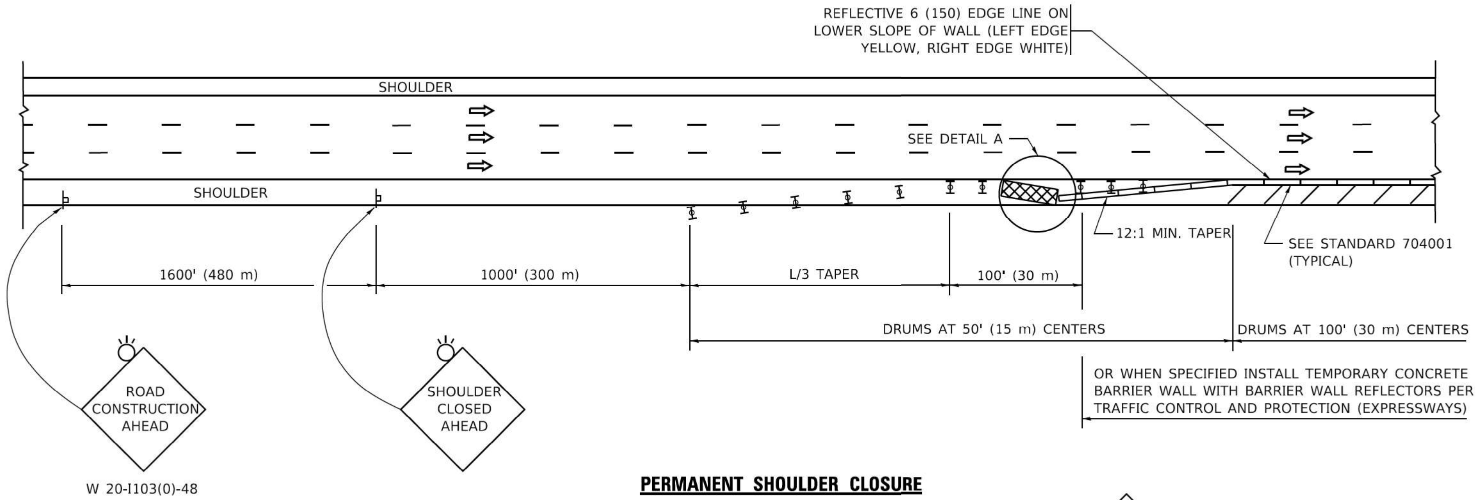


TYPICAL EXIT RAMP

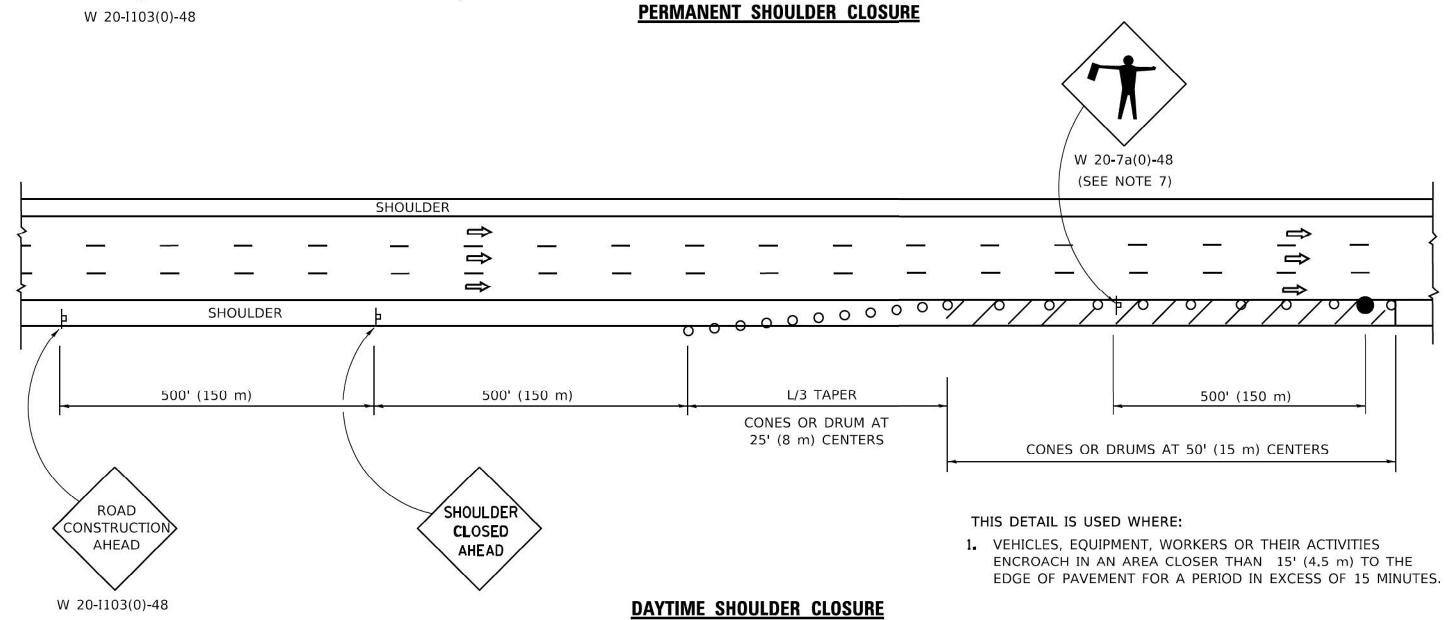


TYPICAL EXIT RAMP

SHOULDER CLOSURE DETAILS



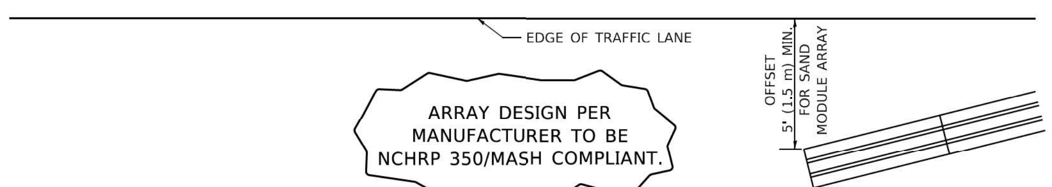
PERMANENT SHOULDER CLOSURE



THIS DETAIL IS USED WHERE:

1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4,5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

DAYTIME SHOULDER CLOSURE



DETAIL "A"
IMPACT ATTENTUATOR, TEMPORARY
(SEE NOTE 5)

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES:

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS METRIC	ENGLISH
45 mph (80 km/h) OR GREATER:	L=0.65(W)(S)	L=(W)(S)

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)

2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTICLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENTUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
   a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
   b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

   THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION
   16' MIN. WIDTH CURVE SECTION.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = footemj	DESIGNED -		REVISED -	S.P.B. 01-07
	DRAWN -	D.W.S.	REVISED -	S.P.B. 12-09
PLOT SCALE = 50.0000 ' / in.	CHECKED -		REVISED -	M.D. 06-13
PLOT DATE = 3/4/2019	DATE -	11-96	REVISED -	M.D. 01-18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

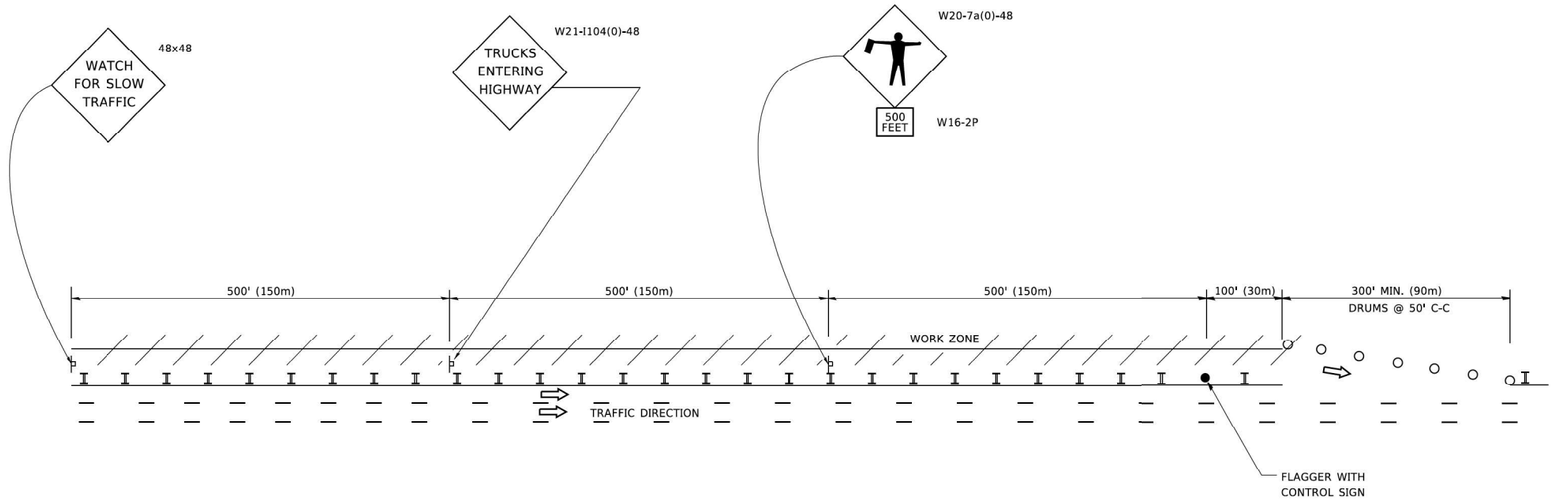
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	897
	TC-17	CONTRACT NO. 62R22		
		ILLINOIS FED. AID PROJECT		

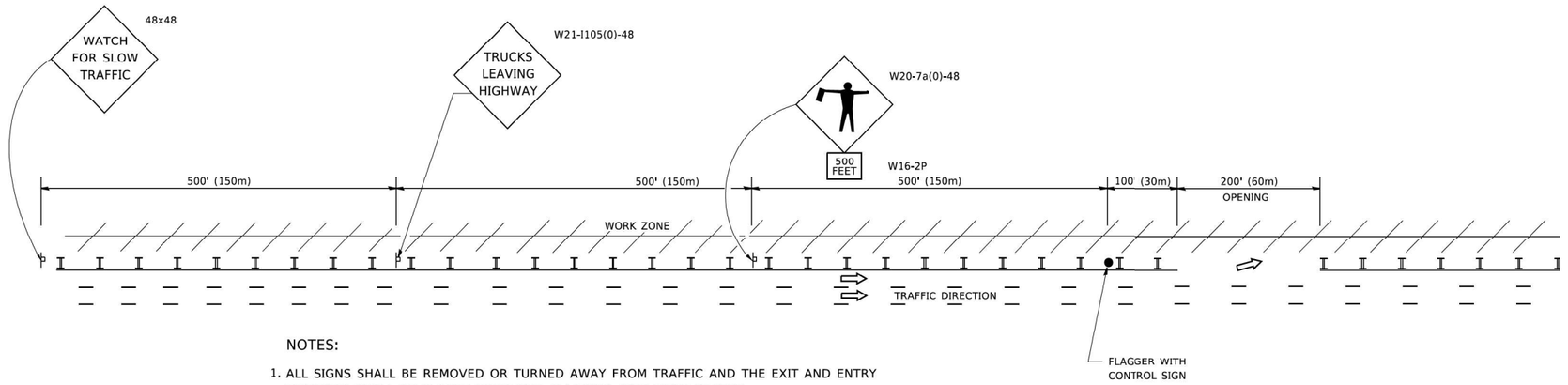
MODEL: Default
FILE NAME: pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist5\d22x34\CADData\CADsheets\tc17.dgn

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

USER NAME = footem]	DESIGNED -	REVISED -	J.A.F. 02-06
	DRAWN -	REVISED -	S.P.B. 01-07
PLOT SCALE = 50.0000 ' / in,	CHECKED -	REVISED -	S.P.B. 12-09
PLOT DATE = 3/4/2019	DATE -	REVISED -	M.D.06-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FREEWAY /EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS /EXPRESSWAYS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	898
	TC-18	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

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ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-2424

MAIN STREET — R.R. UNMARKED ROUTES SPECIAL 24" x 18" VARIABLE 4" BLACK LETTERS ON WHITE REFLECTIVE BACKGROUND

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

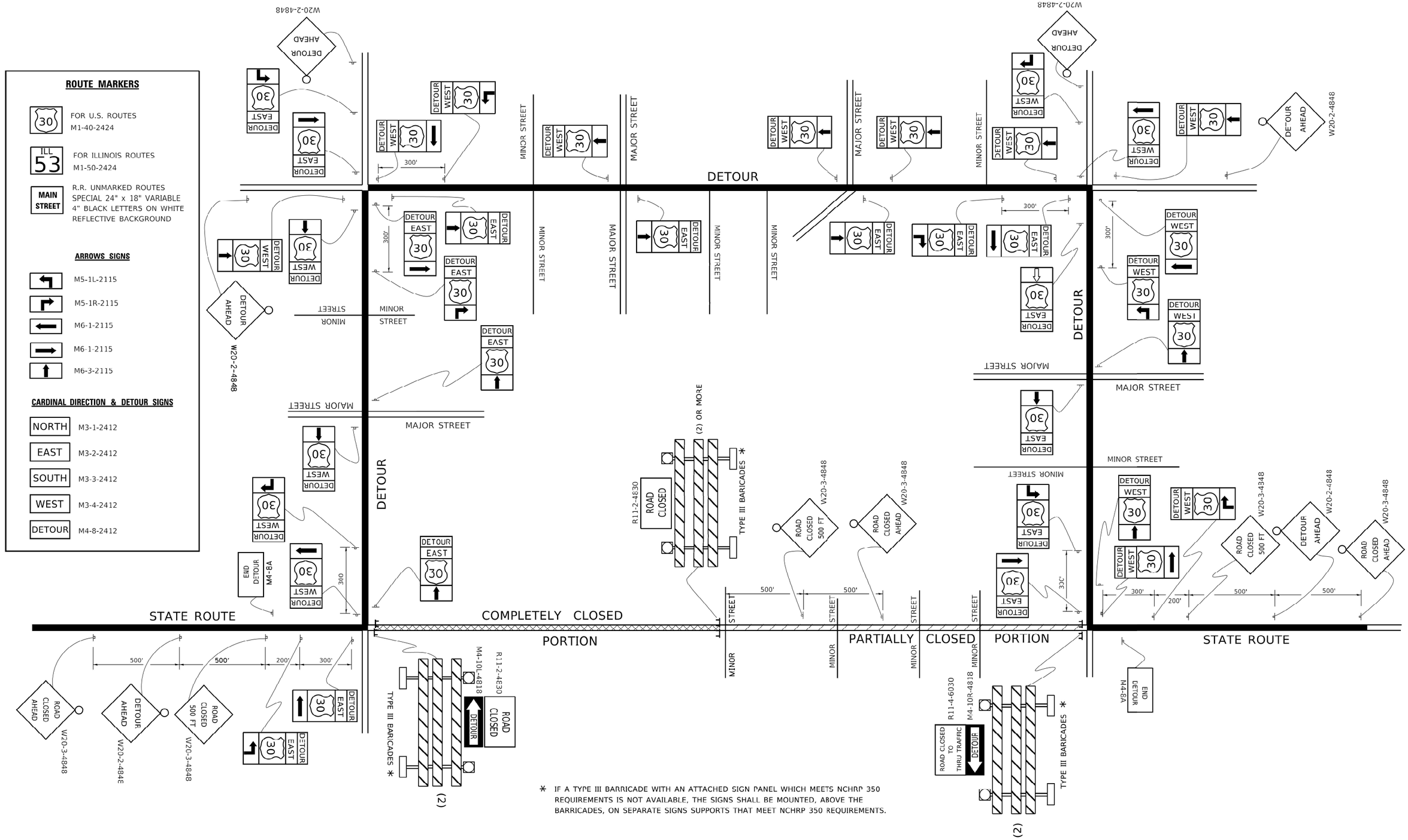
M6-1-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

NORTH	M3-1-2412
EAST	M3-2-2412
SOUTH	M3-3-2412
WEST	M3-4-2412
DETOUR	M4-8-2412



USER NAME = footemj	DESIGNED -	REVISED - 10-18-02	
	DRAWN -	REVISED - R. BORO 09-14-09	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/4/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	899
	TC-21	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
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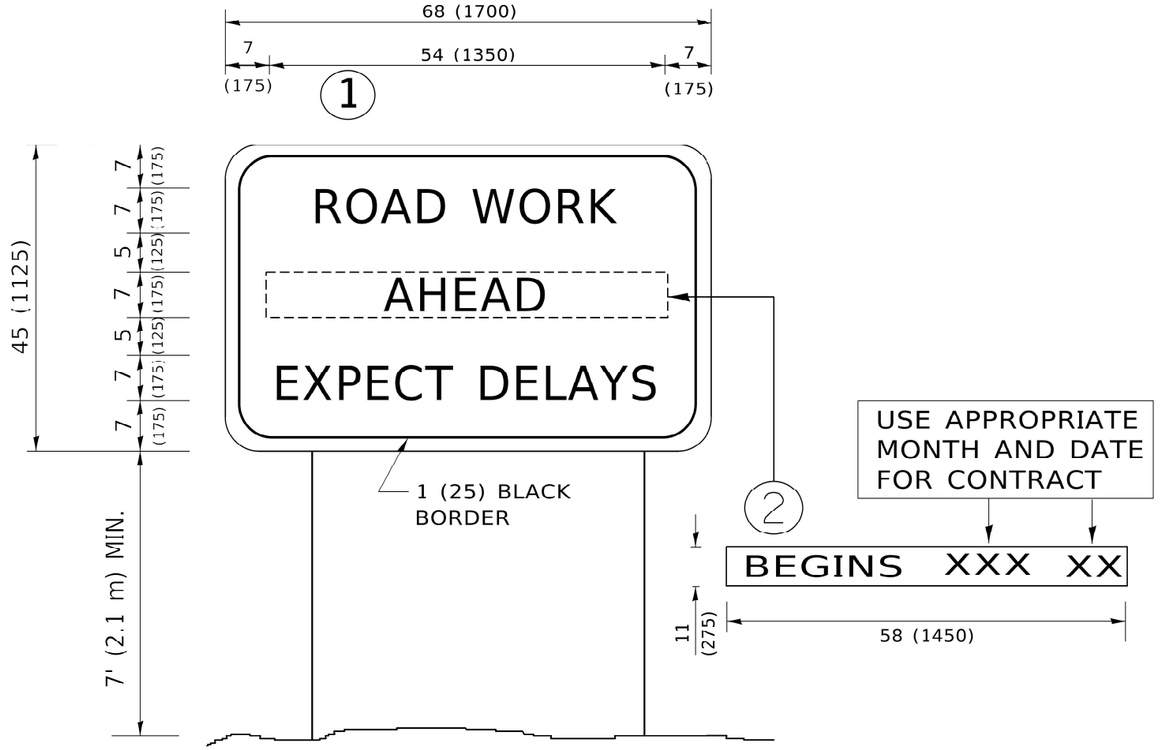
tc21.dan 3/4/2019 10:46:33 AM User=footemj



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97	
	DRAWN -	REVISED - R. MIRS 12-11-97	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 01-31-07	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 INTERCHANGE	WILL	1209	900
	TC-22	CONTRACT NO. 62R22		
	ILLINOIS FED. AID PROJECT			