DWG NO. S-205

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB	ROCK ISLAND	389	245
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

GIRDER G-1

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN J-31	0.00	20.479	633.721	0.000	633.721
	10.00	20.479	634.034	0.024	634.058
	20.00	20.479	634.351	0.044	634.395
	30.00	20.479	634.671	0.057	634.728
	40.00	20.479	634.995	0.061	635.056
	50.00	20.479	635.323	0.056	635.379
	60.00	20.479	635.654	0.044	635.699
	70.00	20.479	635.989	0.030	636.019
	80.00	20.479	636.328	0.017	636.345
	87.99	20.479	636.601	0.012	636.613
SPAN 31-32 PIER 31 TO LINK	0.00	20.479	636.601	0.012	636.613
	10.00	20.479	636.946	0.014	636.961
	20.00	20.479	637.295	0.023	637.319
	30.00	20.479	637.648	0.034	637.682
	40.00	20.479	638.004	0.042	638.046
	50.00	20.479	638.363	0.045	638.409
	60.00	20.479	638.723	0.042	638.766
	70.00	20.479	639.083	0.034	639.118
	77.15	20.479	639.341	0.027	639.368

GIRDER G-2

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN J-31	0.00	13.187	633.873	0.000	633.873
	10.00	13.187	634.186	0.024	634.211
	20.00	13.187	634.503	0.044	634.548
	30.00	13.187	634.823	0.057	634.880
	40.00	13.187	635.147	0.060	635.207
	50.00	13.187	635.475	0.053	635.529
	60.00	13.187	635.806	0.040	635.847
	70.00	13.187	636.141	0.024	636.165
	80.00	13.187	636.480	0.010	636.490
	87.99	13.187	636.753	0.005	636.758
SPAN 31-32 PIER 31 TO LINK	0.00	13.187	636.753	0.005	636.758
	10.00	13.187	637.098	0.008	637.107
	20.00	13.187	637.447	0.019	637.466
	30.00	13.187	637.800	0.030	637.830
	40.00	13.187	638.156	0.039	638.195
	50.00	13.187	638.515	0.041	638.557
	60.00	13.187	638.875	0.037	638.913
	70.00	13.187	639.235	0.027	639.262
	77.15	13.187	639.493	0.018	639.511

GIRDER G-3

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN J-31	0.00	5.895	633.993	0.000	633.993
	10.00	5.895	634.306	0.024	634.330
	20.00	5.895	634.623	0.044	634.667
	30.00	5.895	634.943	0.055	634.998
	40.00	5.895	635.267	0.058	635.325
	50.00	5.895	635.595	0.051	635.646
	60.00	5.895	635.926	0.037	635.964
	70.00	5.895	636.261	0.021	636.282
	80.00	5.895	636.600	0.006	636.606
	87.99	5.895	636.873	0.001	636.874
SPAN 31-32 PIER 31 TO LINK	0.00	5.895	636.873	0.001	636.874
	10.00	5.895	637.218	0.005	637.223
	20.00	5.895	637.567	0.015	637.582
	30.00	5.895	637.920	0.026	637.947
	40.00	5.895	638.278	0.035	638.311
	50.00	5.895	638.635	0.037	638.673
	60.00	5.895	638.995	0.033	639.029
	70.00	5.895	639.355	0.023	639.379
	77.15	5.895	639.613	0.014	639.627

GIRDER G-4

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN J-31	0.00	-1.395	634.063	0.000	634.063
	10.00	-1.395	634.376	0.024	634.401
	20.00	-1.395	634.693	0.044	634.737
	30.00	-1.395	635.013	0.055	635.069
	40.00	-1.395	635.337	0.059	635.396
	50.00	-1.395	635.665	0.051	635.717
	60.00	-1.395	635.997	0.037	636.034
	70.00	-1.395	636.331	0.021	636.353
	80.00	-1.395	636.670	0.006	636.677
	87.99	-1.395	636.944	0.001	636.945
SPAN 31-32 PIER 31 TO LINK	0.00	-1.395	636.944	0.001	636.945
	10.00	-1.395	637.289	0.004	637.293
	20.00	-1.395	637.638	0.015	637.653
	30.00	-1.395	637.990	0.026	638.017
	40.00	-1.395	638.346	0.035	638.381
	50.00	-1.395	638.706	0.037	638.743
	60.00	-1.395	639.066	0.033	639.099
	70.00	-1.395	639.426	0.023	639.449
	77.15	-1.395	639.683	0.014	639.697

GIRDER G-5

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN J-31	0.00	-8.687	633.949	0.000	633.949
	10.00	-8.687	634.262	0.024	634.287
	20.00	-8.687	634.579	0.044	634.624
	30.00	-8.687	634.899	0.057	634.957
	40.00	-8.687	635.224	0.060	635.284
	50.00	-8.687	635.551	0.053	635.605
	60.00	-8.687	635.883	0.040	635.923
	70.00	-8.687	636.218	0.024	636.242
	80.00	-8.687	636.556	0.010	636.566
	87.99	-8.687	636.830	0.005	636.835
SPAN 31-32 PIER 31 TO LINK	0.00	-8.687	636.830	0.005	636.835
	10.00	-8.687	637.175	0.008	637.183
	20.00	-8.687	637.524	0.019	637.543
	30.00	-8.687	637.876	0.030	637.907
	40.00	-8.687	638.232	0.039	638.271
	50.00	-8.687	638.592	0.041	638.633
	60.00	-8.687	638.952	0.037	638.989
	70.00	-8.687	639.312	0.027	639.339
	77.15	-8.687	639.569	0.018	639.587

GIRDER G-6

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN J-31	0.00	-15.979	633.814	0.000	633.814
	10.00	-15.979	634.128	0.024	634.152
	20.00	-15.979	634.444	0.044	634.489
	30.00	-15.979	634.765	0.057	634.822
	40.00	-15.979	635.089	0.061	635.150
	50.00	-15.979	635.417	0.056	635.473
	60.00	-15.979	635.748	0.044	635.793
	70.00	-15.979	636.083	0.030	636.113
	80.00	-15.979	636.422	0.017	636.439
	87.99	-15.979	636.695	0.012	636.707
SPAN 31-32 PIER 31 TO LINK	0.00	-15.979	636.695	0.012	636.707
	10.00	-15.979	637.040	0.014	637.054
	20.00	-15.979	637.389	0.023	637.412
	30.00	-15.979	637.741	0.034	637.776
	40.00	-15.979	638.098	0.042	638.140
	50.00	-15.979	638.457	0.045	638.503
	60.00	-15.979	638.817	0.042	638.860
	70.00	-15.979	639.177	0.034	639.212
	77.15	-15.979	639.436	0.027	639.462

GIRDER G-7

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 31-32 LINK TO PIER 32	0.00	20.479	639.341	0.027	639.368
	10.00	20.479	639.701	0.019	639.720
	20.00	20.479	640.061	0.012	640.073
	20.24	20.479	640.070	0.012	640.082
SPAN 32-33	0.00	20.479	640.070	0.012	640.082
	10.00	20.479	640.430	0.013	640.443
	20.00	20.479	640.790	0.020	640.810
	30.00	20.479	641.150	0.027	641.177
	40.00	20.479	641.510	0.031	641.541
	50.00	20.479	641.870	0.031	641.901
	60.00	20.479	642.230	0.026	642.257
	70.00	20.479	642.590	0.019	642.610
	80.00	20.479	642.950	0.013	642.963
	86.94	20.479	643.200	0.012	643.212
SPAN 33-34	0.00	32.479	643.200	0.012	643.212
	10.00	32.479	643.560	0.016	643.577
	20.00	32.479	643.920	0.025	643.946
	30.00	32.479	644.280	0.033	644.314
	40.00	32.479	644.640	0.037	644.678
	50.00	32.479	644.997	0.036	645.034
	60.00	32.479	645.271	0.030	645.301
	70.00	32.479	645.585	0.021	645.606
	80.00	32.479	645.899	0.013	645.912
	83.66	32.479	646.014	0.012	646.026
SPAN 34-35 PIER 34 TO LINK	0.00	32.479	646.014	0.012	646.026
	10.00	32.479	646.328	0.012	646.340
	17.24	32.479	646.555	0.013	646.568

GIRDER G-8

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 31-32 LINK TO PIER 32	0.00	13.187	639.493	0.018	639.511
	10.00	13.187	639.853	0.011	639.864
	20.00	13.187	640.213	0.005	640.218
	20.24	13.187	640.222	0.005	640.227
SPAN 32-33	0.00	13.187	640.222	0.005	640.227
	10.00	13.187	640.582	0.007	640.590
	20.00	13.187	640.942	0.016	640.958
	30.00	13.187	641.302	0.024	641.326
	40.00	13.187	641.662	0.029	641.691
	50.00	13.187	642.022	0.029	642.051
	60.00	13.187	642.382	0.024	642.406
	70.00	13.187	642.742	0.015	642.757
	80.00	13.187	643.102	0.007	643.109
	86.94	13.187	643.352	0.005	643.357
SPAN 33-34	0.00	25.187	643.352	0.005	643.357
	10.00	25.187	643.712	0.008	643.721
	20.00	25.187	644.072	0.017	644.089
	30.00	25.187	644.432	0.024	644.457
	40.00	25.187	644.792	0.028	644.821
	50.00	25.187	645.114	0.027	645.142
	60.00	25.187	645.434	0.021	645.456
	70.00	25.187	645.744	0.013	645.757
	80.00	25.187	646.074	0.006	646.080
	83.66	25.187	646.191	0.005	646.196
SPAN 34-35 PIER 34 TO LINK	0.00	25.187	646.191	0.005	646.196
	10.00	25.187	646.511	0.007	646.519
	17.24	25.187	646.743	0.010	646.753

GIRDER G-9

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 31-32 LINK TO PIER 32	0.00	5.895	639.413	0.014	639.427
	10.00	5.895	639.973	0.007	639.980
	20.00	5.895	640.333	0.001	640.334
	20.24	5.895	640.342	0.001	640.343
SPAN 32-33	0.00	5.895	640.342	0.001	640.343
	10.00	5.895	640.702	0.003	640.706
	20.00	5.895	641.062	0.012	641.074
	30.00	5.895	641.422	0.020	641.442
	40.00	5.895	641.782	0.025	641.807
	50.00	5.895	642.142	0.025	642.167
	60.00	5.895	642.502	0.020	642.522
	70.00	5.895	642.862	0.011	642.873
	80.00	5.895	643.222	0.003	643.225
	86.94	5.895	643.472	0.001	643.473
SPAN 33-34	0.00	17.895	643.472	0.001	643.473
	10.00	17.895	643.832	0.004	643.836
	20.00	17.895	644.192	0.013	644.205
	30.00	17.895	644.552	0.020	644.573
	40.00	17.895	644.912	0.024	644.937
	50.00	17.895	645.241	0.023	645.265
	60.00	17.895	645.569	0.017	645.587
	70.00	17.895	645.897	0.009	645.906
	80.00	17.895	646.225	0.002	646.227
	83.66	17.895	646.345	0.001	646.346
SPAN 34-35 PIER 34 TO LINK	0.00	17.895	646.345	0.001	646.346
	10.00	17.895	646.672	0.003	646.676
	17.24	17.895	646.910	0.005	646.915

GIRDER G-10

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 31-32 LINK TO PIER 32	0.00	-1.395	639.683	0.014	639.697
	10.00	-1.395	640.043	0.007	640.051
	20.00	-1.395	640.403	0.001	640.404
	20.24	-1.395	640.412	0.001	640.413
SPAN 32-33	0.00	-1.395	640.412	0.001	640.413
	10.00	-1.395	640.772	0.003	640.776
	20.00	-1.395	641.132	0.012	641.144
	30.00	-1.395	641.492	0.020	641.513
	40.00	-1.395	641.852	0.025	641.878
	50.00	-1.395	642.212	0.025	642.237
	60.00	-1.395	642.572	0.020	642.592
	70.00	-1.395	642.932	0.011	642.944
	80.00	-1.395	643.292	0.003	643.296
	86.94	-1.395	643.542	0.001	643.543
SPAN 33-34	0.00	10.604	643.542	0.001	643.543
	10.00	10.604	643.902	0.004	643.907
	20.00	10.604	644.262	0.013	644.275
	30.00	10.604	644.622	0.020	644.643
	40.00	10.604	644.982	0.024	645.007
	50.00	10.604	645.321	0.023	645.344
	60.00	10.604	645.658	0.017	645.676
	70.00	10.604	645.995	0.009	646.004
	80.00	10.604	646.332	0.002	646.335
	83.66	10.604	646.456	0.001	646.457
SPAN 34-35 PIER 34 TO LINK	0.00	10.604	646.456	0.001	646.457
	10.00	10.604	646.794	0.003	646.797
	17.24	10.604	647.038	0.005	647.043

GIRDER G-11

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 31-32 LINK TO PIER 32	0.00	-8.687	639.569	0.018	639.587
	10.00	-8.687	639.929	0.011	639.941
	20.00	-8.687	640.287	0.005	640.294
	20.24	-8.687	640.298	0.005	640.303
SPAN 32-33	0.00	-8.687	640.298	0.005	640.303
	10.00	-8.687	640.658	0.007	640.666
	20.00	-8.687	641.018	0.016	641.034
	30.00	-8.687	641.378	0.024	641.403
	40.00	-8.687	641.738	0.029	641.766
	50.00	-8.687	642.098	0.029	642.126
	60.00	-8.687	642.458	0.024	642.482
	70.00	-8.687	642.818	0.015	642.834
	80.00	-8.687	643.178	0.007	643.185
	86.94	-8.687	643.428	0.005	643.433
SPAN 33-34	0.00	3.312	643.428	0.005	643.433
	10.00	3.312	643.788	0.009	643.797
	20.00	3.312	644.148	0.017	644.165
	30.00	3.312	644.508	0.024	644.533
	40.00	3.312	644.868	0.028	644.897
	50.00	3.312	645.221	0.027	645.249
	60.00	3.312	645.574	0.021	645.596
	70.00	3.312	645.927	0.013	645.940
	80.00	3.312	646.280	0.006	646.286
	83.66	3.312	646.410	0.005	646.415
SPAN 34-35 PIER 34 TO LINK	0.00	3.312	646.410	0.005	646.415
	10.00	3.312	646.763	0.007	646.771
	17.24	3.312	647.018	0.010	647.028

GIRDER G-12

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 31-32 LINK TO PIER 32	0.00	-15.979	639.435	0.027	639.462
	10.00	-15.979	639.795	0.019	639.814
	20.00	-15.979	640.155	0.012	640.167
	20.24	-15.979	640.164	0.012	640.176
SPAN 32-33	0.00	-15.979	640.164	0.012	640.176
	10.00	-15.979	640.524	0.013	640.537
	20.00	-15.979	640.884	0.020	640.904
	30.00	-15.979	641.244	0.027	641.271
	40.00	-15.979	641.604	0.031	641.635
	50.00	-15.979	641.964	0.031	641.995
	60.00	-15.979	642.324	0.026	642.350
	70.00	-15.979	642.684	0.019	642.703
	80.00	-15.979	643.044	0.013	643.057
	86.94	-15.979	643.293	0.012	643.305
SPAN 33-34	0.00	-3.979	643.293	0.012	643.305
	10.00	-3.979	643.654	0.016	643.670
	20.00	-3.979	644.014	0.025	644.039
	30.00	-3.979	644.374	0.033	644.407
	40.00	-3.979	644.734	0.037	644.771
	50.00	-3.979	645.094	0.036	645.130
	60.00	-3.979	645.454	0.030	645.484
	70.00	-3.979	645.814	0.021	645.835
	80.00	-3.979	646.174	0.013	646.187
	83.66	-3.979	646.306	0.012	646.318
SPAN 34-35 PIER 34 TO LINK	0.00	-3.979	646.306	0.012	646.318
	10.00	-3.979	646.666	0.012	646.678
	17.24	-3.979	646.927	0.013	646.940

NOTES:

TABULATED DISTANCES ARE MEASURED FROM CENTER LINE BEARINGS AT NORTH END IN EACH SPAN, ALONG CENTER LINE OF GIRDERS.

TABULATED ELEVATIONS ARE FOR TOP OF CONCRETE SLAB ALONG CENTER LINE OF GIRDERS.

POSITIVE DEFLECTIONS INDICATE DOWNWARD DEFLECTIONS. NEGATIVE DEFLECTIONS INDICATE UPWARD DEFLECTIONS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.A. BARRAZA
DRAWN BY F. GHORBANIAN
CHECKED
IN CHARGE B.S. MARTINS
APPROVED W.G. HORN

DECK ELEVATIONS

F.A.I. 74 - SECTION 81-1HB

F.A.I. 74 & RAMPS OVER RELOC. 19TH ST.

ROCK ISLAND COUNTY

STATION 289 + 23.09

SCALE: DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - DECK ELEVATIONS
I-74 AT 19TH ST. - SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 33 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	901
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

DWG. NO. S-206

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB	ROCK ISLAND	389	246
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

GIRDER G-13

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 34-35 LINK TO PIER 35	0.00	32.479	646.555	0.013	646.568
	10.00	32.479	646.869	0.017	646.887
	20.00	32.479	647.183	0.020	647.203
	30.00	32.479	647.497	0.019	647.516
	40.00	32.479	647.811	0.015	647.826
	50.00	32.479	648.125	0.012	648.137
	57.74	32.479	648.368	0.012	648.380
SPAN 35-36	0.00	32.479	648.368	0.012	648.380
	10.00	32.479	648.682	0.015	648.697
	20.00	32.479	648.996	0.021	649.017
	30.00	32.479	649.309	0.026	649.336
	40.00	32.479	649.623	0.027	649.651
	50.00	32.479	649.937	0.025	649.963
	60.00	32.479	650.250	0.019	650.270
	70.00	32.479	650.562	0.013	650.576
	76.97	32.462	650.784	0.012	650.796
SPAN 36-M	0.00	32.462	650.784	0.012	650.796
	10.00	32.401	651.102	0.012	651.114
	20.00	32.295	651.422	0.015	651.438
	30.00	32.145	651.744	0.016	651.761
	40.00	31.949	652.069	0.014	652.084
	50.00	31.708	652.396	0.008	652.404
	59.99	31.423	652.725	0.000	652.725

GIRDER G-14

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 34-35 LINK TO PIER 35	0.00	25.187	646.743	0.010	646.753
	10.00	25.187	647.063	0.021	647.084
	20.00	25.187	647.382	0.027	647.411
	30.00	25.187	647.703	0.026	647.729
	40.00	25.187	648.022	0.018	648.041
	50.00	25.187	648.342	0.009	648.351
	57.74	25.187	648.590	0.005	648.595
SPAN 35-36	0.00	25.187	648.590	0.005	648.595
	10.00	25.187	648.910	0.013	648.924
	20.00	25.187	649.230	0.026	649.257
	30.00	25.187	649.550	0.037	649.587
	40.00	25.187	649.870	0.040	649.910
	50.00	25.187	650.190	0.034	650.224
	60.00	25.187	650.509	0.022	650.532
	70.00	25.187	650.830	0.010	650.840
	76.97	25.171	651.056	0.005	651.061
SPAN 36-M	0.00	25.171	651.056	0.005	651.061
	10.00	25.110	651.391	0.010	651.392
	20.00	25.004	651.709	0.019	651.728
	30.00	24.854	652.038	0.025	652.064
	40.00	24.659	652.370	0.024	652.394
	50.00	24.419	652.704	0.015	652.719
	59.99	24.135	653.040	0.000	653.040

GIRDER G-15

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 34-35 LINK TO PIER 35	0.00	17.895	646.910	0.005	646.915
	10.00	17.895	647.238	0.016	647.254
	20.00	17.895	647.565	0.023	647.589
	30.00	17.895	647.893	0.021	647.915
	40.00	17.895	648.221	0.014	648.235
	50.00	17.895	648.548	0.004	648.553
	57.74	17.895	648.802	0.001	648.803
SPAN 35-36	0.00	17.895	648.802	0.001	648.803
	10.00	17.895	649.130	0.009	649.140
	20.00	17.895	649.458	0.022	649.481
	30.00	17.895	649.785	0.033	649.819
	40.00	17.895	650.113	0.036	650.149
	50.00	17.896	650.441	0.030	650.471
	60.00	17.896	650.769	0.018	650.787
	70.00	17.895	651.097	0.006	651.103
	76.97	17.879	651.328	0.001	651.329
SPAN 36-M	0.00	17.879	651.328	0.001	651.329
	10.00	17.819	651.661	0.006	651.668
	20.00	17.713	651.995	0.016	652.012
	30.00	17.563	652.332	0.023	652.356
	40.00	17.369	652.671	0.023	652.694
	50.00	17.130	653.012	0.014	653.026
	59.99	16.846	653.356	0.000	653.356

GIRDER G-16

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 34-35 LINK TO PIER 35	0.00	10.604	647.038	0.005	647.043
	10.00	10.604	647.375	0.016	647.392
	20.00	10.604	647.713	0.023	647.736
	30.00	10.604	648.050	0.021	648.072
	40.00	10.604	648.387	0.014	648.402
	50.00	10.604	648.724	0.004	648.729
	57.74	10.604	648.996	0.001	648.997
SPAN 35-36	0.00	10.604	648.986	0.001	648.987
	10.00	10.604	649.323	0.009	649.333
	20.00	10.604	649.660	0.022	649.683
	30.00	10.604	649.998	0.033	650.031
	40.00	10.604	650.335	0.036	650.371
	50.00	10.604	650.672	0.030	650.703
	60.00	10.604	651.010	0.018	651.028
	70.00	10.603	651.347	0.006	651.353
	76.97	10.588	651.584	0.001	651.585
SPAN 36-M	0.00	10.588	651.584	0.001	651.585
	10.00	10.527	651.925	0.006	651.932
	20.00	10.422	652.267	0.016	652.284
	30.00	10.273	652.611	0.023	652.635
	40.00	10.079	652.956	0.023	652.981
	50.00	9.841	653.306	0.014	653.321
	59.99	9.558	653.658	0.000	653.658

GIRDER G-17

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 34-35 LINK TO PIER 35	0.00	3.312	647.018	0.010	647.028
	10.00	3.312	647.371	0.021	647.393
	20.00	3.312	647.724	0.027	647.752
	30.00	3.312	648.077	0.026	648.104
	40.00	3.312	648.430	0.018	648.449
	50.00	3.312	648.783	0.009	648.792
	57.74	3.312	649.056	0.005	649.061
SPAN 35-36	0.00	3.312	649.056	0.005	649.061
	10.00	3.312	649.409	0.013	649.423
	20.00	3.312	649.762	0.026	649.789
	30.00	3.312	650.115	0.037	650.152
	40.00	3.312	650.468	0.040	650.508
	50.00	3.312	650.821	0.034	650.856
	60.00	3.312	651.174	0.022	651.197
	70.00	3.312	651.527	0.010	651.537
	76.97	3.296	651.774	0.005	651.779
SPAN 36-M	0.00	3.296	651.774	0.005	651.779
	10.00	3.236	652.129	0.010	652.139
	20.00	3.131	652.486	0.019	652.505
	30.00	2.982	652.845	0.025	652.870
	40.00	2.789	653.205	0.024	653.230
	50.00	2.551	653.568	0.015	653.583
	59.99	2.270	653.934	0.000	653.934

GIRDER G-18

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 34-35 LINK TO PIER 35	0.00	-3.979	646.927	0.013	646.940
	10.00	-3.979	647.287	0.017	647.305
	20.00	-3.979	647.647	0.020	647.667
	30.00	-3.979	648.007	0.019	648.026
	40.00	-3.979	648.367	0.015	648.383
	50.00	-3.979	648.727	0.012	648.739
	57.74	-3.979	649.006	0.012	649.018
SPAN 35-36	0.00	-3.979	649.006	0.012	649.018
	10.00	-3.979	649.366	0.013	649.381
	20.00	-3.979	649.726	0.021	649.747
	30.00	-3.978	650.086	0.026	650.112
	40.00	-3.978	650.446	0.027	650.474
	50.00	-3.978	650.806	0.025	650.831
	60.00	-3.978	651.166	0.019	651.186
	70.00	-3.979	651.526	0.013	651.540
	76.97	-3.994	651.776	0.012	651.788
SPAN 36-M	0.00	-3.994	651.776	0.012	651.788
	10.00	-4.054	652.134	0.013	652.147
	20.00	-4.159	652.491	0.015	652.507
	30.00	-4.307	652.848	0.016	652.865
	40.00	-4.500	653.203	0.016	653.218
	50.00	-4.737	653.557	0.008	653.565
	59.99	-5.018	653.910	0.000	653.910

GIRDER G-19

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN K-37	0.00	15.979	630.750	0.000	630.750
	10.00	15.979	631.064	0.014	631.079
	20.00	15.979	631.383	0.025	631.409
	30.00	15.979	631.707	0.031	631.738
	40.00	15.979	632.034	0.030	632.065
	50.00	15.979	632.367	0.025	632.392
	60.00	15.979	632.703	0.019	632.722
	70.00	15.979	633.044	0.015	633.059
	74.99	15.979	633.217	0.016	633.233
SPAN 37-38 PIER 37 TO LINK	0.00	15.979	633.217	0.016	633.233
	10.00	15.979	633.564	0.025	633.590
	20.00	15.979	633.916	0.040	633.957
	30.00	15.979	634.273	0.055	634.328
	40.00	15.979	634.634	0.066	634.700
	50.00	15.979	635.000	0.069	635.069
	60.00	15.979	635.370	0.063	635.434
	70.00	15.979	635.744	0.050	635.795
	80.00	15.979	636.123	0.032	636.155
	83.49	15.979	636.256	0.025	636.281

GIRDER G-20

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN K-37	0.00	8.687	630.885	0.000	630.885
	10.00	8.687	631.199	0.014	631.213
	20.00	8.687	631.518	0.024	631.542
	30.00	8.687	631.841	0.029	631.870
	40.00	8.687	632.169	0.026	632.196
	50.00	8.687	632.501	0.020	632.521
	60.00	8.687	632.838	0.011	632.850
	70.00	8.687	633.179	0.007	633.186
	74.99	8.687	633.351	0.008	633.359
SPAN 37-38 PIER 37 TO LINK	0.00	8.687	633.351	0.008	633.359
	10.00	8.687	633.699	0.016	633.716
	20.00	8.687	634.051	0.031	634.083
	30.00	8.687	634.408	0.047	634.455
	40.00	8.687	634.769	0.058	634.827
	50.00	8.687	635.134	0.062	635.197
	60.00	8.687	635.504	0.056	635.561
	70.00	8.687	635.879	0.042	635.921
	80.00	8.687	636.257	0.022	636.280
	83.49	8.687	636.391	0.015	636.406

GIRDER G-21

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN K-37	0.00	1.395	630.999	0.003	630.999
	10.00	1.395	631.313	0.013	631.326
	20.00	1.395	631.632	0.022	631.656
	30.00	1.395	631.955	0.026	631.982
	40.00	1.395	632.283	0.023	632.307
	50.00	1.395	632.615	0.016	632.631
	60.00	1.395	632.952	0.007	632.959
	70.00	1.395	633.293	0.001	633.295
	74.99	1.395	633.465	0.002	633.467
SPAN 37-38 PIER 37 TO LINK	0.00	1.395	633.465	0.002	633.467
	10.00	1.395	633.813	0.010	633.824
	20.00	1.395	634.165	0.026	634.191
	30.00	1.395	634.522	0.041	634.564
	40.00	1.395	634.883	0.053	634.936
	50.00	1.395	635.248	0.056	635.305
	60.00	1.395	635.618	0.051	635.669
	70.00	1.395	635.993	0.037	636.030
	80.00	1.395	636.371	0.017	636.389
	83.49	1.395	636.505	0.010	636.515

GIRDER G-22

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN K-37	0.00	-5.895	630.928	0.050	630.978
	10.00	-5.895	631.243	0.013	631.256
	20.00	-5.895	631.562	0.022	631.585
	30.00	-5.895	631.885	0.026	631.912
	40.00	-5.895	632.213	0.023	632.236
	50.00	-5.895	632.545	0.016	632.561
	60.00	-5.895	632.881	0.007	632.889
	70.00	-5.895	633.223	0.001	633.224
	74.99	-5.895	633.395	0.002	633.397
SPAN 37-38 PIER 37 TO LINK	0.00	-5.895	633.395	0.002	633.397
	10.00	-5.895	633.743	0.010	633.753
	20.00	-5.895	634.095	0.026	634.121
	30.00	-5.895	634.451	0.041	634.493
	40.00	-5.895	634.812	0.053	634.866
	50.00	-5.895	635.178	0.056	635.235
	60.00	-5.895	635.548	0.051	635.599
	70.00	-5.895	635.922	0.037	635.960
	80.00	-5.895	636.301	0.017	636.319
	83.49	-5.895	636.435	0.010	636.445

GIRDER G-23

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN K-37	0.00	-13.187	630.808	0.000	630.808
	10.00	-13.187	631.123	0.014	631.137
	20.00	-13.187	631.441	0.024	631.465
	30.00	-13.187	631.765	0.029	631.794
	40.00	-13.187	632.093	0.026	632.119
	50.00	-13.187	632.425	0.020	632.445
	60.00	-13.187	632.761	0.011	632.773
	70.00	-13.187	633.102	0.007	633.110
	74.99	-13.187	633.275	0.008	633.283
SPAN 37-38 PIER 37 TO LINK	0.00	-13.187	633.275	0.008	633.283
	10.00	-13.187	633.629	0.016	633.639
	20.00	-13.187	633.975	0.031	634.007
	30.00	-13.187	634.331	0.047	634.379
	40.00	-13.187	634.692	0.058	634.751
	50.00	-13.187	635.059	0.062	635.120
	60.00	-13.187	635.428	0.056	635.484
	70.00	-13.187	635.802	0.042	635.845
	80.00	-13.187	636.181	0.022	636.204
	83.49	-13.187	636.315	0.015	636.330

GIRDER G-24

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN K-37	0.00	-20.479	630.656	0.000	630.656
	10.00	-20.479	630.971	0.014	630.985
	20.00	-20.479	631.290	0.025	631.315
	30.00	-20.479	631.613	0.031	631.644
	40.00	-20.479	631.941	0.030	631.971
	50.00	-20.479	632.273	0.025	632.298
	60.00	-20.479	632.605	0.018	632.623
	70.00	-20.479	632.941	0.015	632.956
	74.99	-20.479	633.123	0.016	633.139
SPAN 37-38 PIER 37 TO LINK	0.00	-20.479	633.123	0.016	633.139
	10.00	-20.479	633.471	0.025	633.496
	20.00	-20.479	633.823	0.040	633.863
	30.00	-20.479	634.179	0.055	634.235
	40.00	-20.479	634.540	0.066	634.606
	50.00	-20.479	634.906	0.069	634.975
	60.00	-20.479	635.276	0.063	635.340
	70.00	-20.479	635.650	0.050	635.701
	80.00	-20.479	636.029	0.032	636.061
	83.49	-20.479	636.163	0.025	636.188

NOTES:

TABULATED DISTANCES ARE MEASURED FROM CENTER LINE BEARINGS AT NORTH END IN EACH SPAN, ALONG CENTER LINE OF GIRDERS.

TABULATED ELEVATIONS ARE FOR TOP OF CONCRETE SLAB ALONG CENTER LINE OF GIRDERS.

NEGATIVE OFFSETS PERTAIN TO POINTS WEST OF THE PROFILE GRADE LINE. POSITIVE OFFSETS PERTAIN TO POINTS EAST OF THE PROFILE GRADE LINE.

POSITIVE DEFLECTIONS INDICATE DOWNWARD DEFLECTIONS. NEGATIVE DEFLECTIONS INDICATE UPWARD DEFLECTIONS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.A. BARRAZA
DRAWN BY M. GHORBANIAN
CHECKED
IN CHARGE E.F. MARTINS
APPROVED W.G. HORN

DECK ELEVATIONS

F.A.I. 74 - SECTION 81-1HB

F.A.I. 74 & RAMPS OVER RELOC. 19TH ST.

ROCK ISLAND COUNTY

STATION 289 + 23.09

SCALE: DATE:

K&E CO. 10-8-65

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – DECK ELEVATIONS
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 34 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	902
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

DWG. NO. S-207

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-IHB	ROCK ISLAND	389	287
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT I-74	

GIRDER G-25

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 37-38 LINK TO PIER 38	0.00	15.979	636.256	0.025	636.281
	10.00	15.979	636.641	0.020	636.662
	20.00	15.979	637.031	0.016	637.047
	20.24	15.979	637.040	0.016	637.056
SPAN 38-39	0.00	15.979	637.040	0.016	637.056
	10.00	15.979	637.434	0.021	637.456
	20.00	15.979	637.832	0.033	637.866
	30.00	15.979	638.232	0.045	638.278
	40.00	15.979	638.632	0.055	638.688
	50.00	15.979	639.032	0.058	639.091
	60.00	15.979	639.432	0.054	639.487
	70.00	15.979	639.832	0.045	639.878
	80.00	15.979	640.232	0.031	640.264
	90.00	15.979	640.632	0.018	640.651
	98.26	15.979	640.963	0.012	640.975
SPAN 39-40	0.00	15.979	640.963	0.012	640.975
	10.00	15.979	641.363	0.012	641.375
	20.00	15.979	641.763	0.018	641.781
	30.00	15.979	642.163	0.024	642.187
	40.00	15.979	642.563	0.028	642.591
	50.00	15.979	642.963	0.028	642.991
	60.00	15.979	643.363	0.023	643.387
	70.00	15.979	643.763	0.017	643.780
	80.00	15.979	644.163	0.012	644.175
	87.62	15.979	644.468	0.012	644.480
SPAN 40-41 PIER 40 TO LINK	0.00	15.979	644.468	0.012	644.480
	10.00	15.979	644.868	0.018	644.886
	20.00	15.979	645.268	0.024	645.293
	20.24	15.979	645.278	0.025	645.303

GIRDER G-26

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 37-38 LINK TO PIER 38	0.00	8.687	636.391	0.015	636.406
	10.00	8.687	636.776	0.011	636.788
	20.00	8.687	637.165	0.008	637.173
	20.24	8.687	637.175	0.008	637.183
SPAN 38-39	0.00	8.687	637.175	0.008	637.183
	10.00	8.687	637.569	0.013	637.582
	20.00	8.687	637.967	0.025	637.993
	30.00	8.687	638.367	0.038	638.406
	40.00	8.687	638.767	0.048	638.816
	50.00	8.687	639.167	0.051	639.219
	60.00	8.687	639.567	0.048	639.615
	70.00	8.687	639.967	0.038	640.005
	80.00	8.687	640.367	0.025	640.392
	90.00	8.687	640.767	0.011	640.779
	98.26	8.687	641.097	0.006	641.103
SPAN 39-40	0.00	8.687	641.097	0.006	641.103
	10.00	8.687	641.497	0.008	641.506
	20.00	8.687	641.897	0.016	641.914
	30.00	8.687	642.297	0.024	642.322
	40.00	8.687	642.697	0.028	642.726
	50.00	8.687	643.097	0.028	643.126
	60.00	8.687	643.497	0.022	643.520
	70.00	8.687	643.897	0.014	643.912
	80.00	8.687	644.297	0.007	644.305
	87.62	8.687	644.602	0.006	644.608
SPAN 40-41 PIER 40 TO LINK	0.00	8.687	644.603	0.006	644.609
	10.00	8.687	645.003	0.011	645.014
	20.00	8.687	645.403	0.016	645.420
	20.24	8.687	645.413	0.017	645.430

GIRDER G-27

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 37-38 LINK TO PIER 38	0.00	1.395	636.505	0.010	636.515
	10.00	1.395	636.890	0.006	636.896
	20.00	1.395	637.279	0.002	637.281
	20.24	1.395	637.289	0.002	637.291
SPAN 38-39	0.00	1.395	637.289	0.002	637.291
	10.00	1.395	637.683	0.007	637.690
	20.00	1.395	638.081	0.019	638.101
	30.00	1.395	638.481	0.033	638.514
	40.00	1.395	638.881	0.043	638.924
	50.00	1.395	639.281	0.046	639.328
	60.00	1.395	639.681	0.043	639.724
	70.00	1.395	640.081	0.033	640.115
	80.00	1.395	640.481	0.020	640.501
	90.00	1.395	640.881	0.007	640.889
	98.26	1.395	641.211	0.002	641.213
SPAN 39-40	0.00	1.395	641.211	0.002	641.213
	10.00	1.395	641.611	0.004	641.616
	20.00	1.395	642.011	0.012	642.024
	30.00	1.395	642.411	0.020	642.432
	40.00	1.395	642.811	0.024	642.836
	50.00	1.395	643.211	0.024	643.236
	60.00	1.395	643.611	0.018	643.630
	70.00	1.395	644.011	0.010	644.022
	80.00	1.395	644.411	0.003	644.415
	87.62	1.395	644.716	0.002	644.718
SPAN 40-41 PIER 40 TO LINK	0.00	1.395	644.717	0.002	644.719
	10.00	1.395	645.117	0.007	645.124
	20.00	1.395	645.517	0.012	645.529
	20.24	1.395	645.527	0.013	645.540

GIRDER G-28

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 37-38 LINK TO PIER 38	0.00	-5.895	635.435	0.010	636.465
	10.00	-5.895	636.820	0.006	636.826
	20.00	-5.895	637.209	0.002	637.211
	20.24	-5.895	637.219	0.002	637.221
SPAN 38-39	0.00	-5.895	637.219	0.002	637.221
	10.00	-5.895	637.612	0.007	637.620
	20.00	-5.895	638.011	0.019	638.031
	30.00	-5.895	638.411	0.033	638.444
	40.00	-5.895	638.811	0.043	638.854
	50.00	-5.895	639.211	0.046	639.258
	60.00	-5.895	639.611	0.043	639.654
	70.00	-5.895	640.011	0.033	640.044
	80.00	-5.895	640.411	0.020	640.431
	90.00	-5.895	640.811	0.007	640.818
	98.26	-5.895	641.141	0.002	641.143
SPAN 39-40	0.00	-5.895	641.141	0.002	641.143
	10.00	-5.895	641.541	0.004	641.546
	20.00	-5.895	641.941	0.012	641.953
	30.00	-5.895	642.341	0.020	642.361
	40.00	-5.895	642.741	0.024	642.766
	50.00	-5.895	643.141	0.024	643.165
	60.00	-5.895	643.541	0.018	643.560
	70.00	-5.895	643.941	0.010	643.952
	80.00	-5.895	644.341	0.003	644.345
	87.62	-5.895	644.646	0.002	644.648
SPAN 40-41 PIER 40 TO LINK	0.00	-5.895	644.646	0.002	644.648
	10.00	-5.895	645.046	0.007	645.054
	20.00	-5.895	645.445	0.012	645.459
	20.24	-5.895	645.456	0.013	645.469

GIRDER G-29

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 37-38 LINK TO PIER 38	0.00	-13.187	636.315	0.015	636.330
	10.00	-13.187	636.699	0.011	636.711
	20.00	-13.187	637.089	0.008	637.097
	20.24	-13.187	637.099	0.008	637.107
SPAN 38-39	0.00	-13.187	637.099	0.008	637.107
	10.00	-13.187	637.492	0.013	637.506
	20.00	-13.187	637.891	0.025	637.916
	30.00	-13.187	638.291	0.038	638.329
	40.00	-13.187	638.691	0.048	638.739
	50.00	-13.187	639.091	0.051	639.143
	60.00	-13.187	639.491	0.048	639.539
	70.00	-13.187	639.891	0.038	639.929
	80.00	-13.187	640.291	0.024	640.315
	90.00	-13.187	640.691	0.011	640.702
	98.26	-13.187	641.021	0.006	641.027
SPAN 39-40	0.00	-13.187	641.021	0.006	641.027
	10.00	-13.187	641.421	0.008	641.430
	20.00	-13.187	641.821	0.016	641.837
	30.00	-13.187	642.221	0.024	642.245
	40.00	-13.187	642.621	0.028	642.650
	50.00	-13.187	643.021	0.028	643.049
	60.00	-13.187	643.421	0.022	643.444
	70.00	-13.187	643.821	0.014	643.836
	80.00	-13.187	644.221	0.007	644.229
	87.62	-13.187	644.526	0.006	644.532
SPAN 40-41 PIER 40 TO LINK	0.00	-13.187	644.526	0.006	644.532
	10.00	-13.187	644.926	0.011	644.938
	20.00	-13.187	645.326	0.015	645.343
	20.24	-13.187	645.336	0.017	645.353

GIRDER G-30

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 37-38 LINK TO PIER 38	0.00	-20.479	636.163	0.025	636.188
	10.00	-20.479	636.548	0.020	636.568
	20.00	-20.479	636.937	0.016	636.953
	20.24	-20.479	636.947	0.016	636.963
SPAN 38-39	0.00	-20.479	636.947	0.016	636.963
	10.00	-20.479	637.340	0.021	637.362
	20.00	-20.479	637.739	0.033	637.772
	30.00	-20.479	638.139	0.045	638.185
	40.00	-20.479	638.539	0.055	638.594
	50.00	-20.479	638.939	0.058	638.997
	60.00	-20.479	639.339	0.054	639.393
	70.00	-20.479	639.739	0.045	639.784
	80.00	-20.479	640.139	0.031	640.170
	90.00	-20.479	640.539	0.018	640.557
	98.26	-20.479	640.869	0.012	640.881
SPAN 39-40	0.00	-20.479	640.869	0.012	640.881
	10.00	-20.479	641.269	0.012	641.282
	20.00	-20.479	641.669	0.018	641.687
	30.00	-20.479	642.069	0.024	642.094
	40.00	-20.479	642.469	0.028	642.497
	50.00	-20.479	642.869	0.028	642.897
	60.00	-20.479	643.269	0.023	643.293
	70.00	-20.479	643.669	0.017	643.686
	80.00	-20.479	644.069	0.012	644.081
	87.62	-20.479	644.374	0.012	644.386
SPAN 40-41 PIER 40 TO LINK	0.00	-20.479	644.374	0.012	644.386
	10.00	-20.479	644.774	0.018	644.793
	20.00	-20.479	645.174	0.024	645.198
	20.24	-20.479	645.184	0.025	645.209

GIRDER G-31

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 40-41 LINK TO PIER 41	0.00	3.979	645.278	0.025	645.303
	10.00	3.976	645.675	0.033	645.709
	20.00	3.979	646.072	0.038	646.110
	30.00	3.979	646.468	0.038	646.507
	40.00	3.979	646.864	0.033	646.898
	50.00	3.979	647.260	0.025	647.285
	60.00	3.979	647.656	0.016	647.672
	70.00	3.979	648.052	0.011	648.064
	71.69	3.979	648.119	0.012	648.131
SPAN 41-N	0.00	3.979	648.119	0.012	648.131
	10.00	3.979	648.516	0.016	648.532
	20.00	3.979	648.912	0.025	648.937
	30.00	3.979	649.308	0.034	649.342
	40.00	3.979	649.704	0.038	649.743
	50.00	3.978	650.100	0.037	650.137
	60.00	3.978	650.496	0.028	650.525
	70.30	3.959	650.894	0.013	650.907
	77.71	3.914	651.201	0.000	651.201

GIRDER G-32

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 40-41 LINK TO PIER 41	0.00	-3.312	645.413	0.017	645.430
	10.00	-3.312	645.815	0.034	645.850
	20.00	-3.312	646.219	0.044	646.266
	30.00	-3.312	646.623	0.049	646.672
	40.00	-3.312	647.027	0.042	647.069
	50.00	-3.312	647.430	0.028	647.459
	60.00	-3.312	647.834	0.013	647.848
	70.00	-3.312	648.238	0.006	648.244
	71.69	-3.312	648.307	0.006	648.313
SPAN 41-N	0.00	-3.312	648.307	0.006	648.313
	10.00	-3.312	648.710	0.014	648.725
	20.00	-3.312	649.114	0.031	649.146
	30.00	-3.312	649.518	0.048	649.566
	40.00	-3.312	649.922	0.057	649.980
	50.00	-3.312	650.326	0.057	650.383
	60.00	-3.312	650.729	0.046	650.774
	70.00	-3.332	651.133	0.022	651.156
	78.23	-3.380	651.467	0.000	651.467

GIRDER G-33

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 40-41 LINK TO PIER 41	0.00	-10.604	645.526	0.013	645.539
	10.00	-10.604	645.935	0.030	645.966
	20.00	-10.604	646.347	0.042	646.390
	30.00	-10.604	646.759	0.045	646.804
	40.00	-10.604	647.171	0.039	647.210
	50.00	-10.604	647.583	0.024	647.608
	60.00	-10.604	647.995	0.009	648.005
	70.00	-10.604	648.408	0.002	648.410
	71.69	-10.604	648.478	0.002	648.480
SPAN 41-N	0.00	-10.604	648.478	0.002	648.480
	10.00	-10.604	648.890	0.012	648.902
	20.00	-10.604	649.302	0.030	649.332
	30.00	-10.604	649.714	0.047	649.762
	40.00	-10.604	650.126	0.058	650.185
	50.00	-10.604	650.538	0.058	650.597
	60.00	-10.604	650.951	0.046	650.997
	70.00	-10.624	651.362	0.024	651.386
	78.75	-10.676	651.723	0.000	651.723

GIRDER G-34

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 40-41 LINK TO PIER 41	0.00	-17.895	645.456	0.013	645.469
	10.00	-17.895	645.874	0.035	645.905
	20.00	-17.895	646.301	0.042	646.344
	30.00	-17.895	646.728	0.045	646.773
	40.00	-17.895	647.154	0.038	647.193
	50.00	-17.895	647.581	0.024	647.606
	60.00	-17.895	648.008	0.009	648.018
	70.00	-17.895	648.434	0.002	648.437
	71.69	-17.895	648.507	0.002	648.509
SPAN 41-N	0.00	-17.895	648.507	0.002	648.509
	10.00	-17.895	648.933	0.012	648.945
	20.00	-17.896	649.360	0.031	649.392
	30.00	-17.896	649.787	0.049	649.837
	40.00	-17.896	650.213	0.060	650.274
	50.00	-17.896	650.640	0.060	650.701
	60.00	-17.896	651.067	0.048	651.116
	70.00	-17.916	651.491	0.026	651.517
	79.28	-17.977	651.885	0.000	651.885

GIRDER G-35

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 40-41 LINK TO PIER 41	0.00	-25.187	645.336	0.017	645.353
	10.00	-25.187	645.766	0.034	645.801
	20.00	-25.187	646.208	0.046	646.255
	30.00	-25.187	646.651	0.049	646.701
	40.00	-25.187	647.094	0.042	647.137
	50.00	-25.187	647.537	0.028	647.566
	60.00	-25.187	647.980	0.013	647.994
	70.00	-25.187	648.423	0.006	648.429
	71.69	-25.187	648.498	0.006	648.504
SPAN 41-N	0.00	-25.187	648.498	0.006	648.504
	10.00	-25.187	648.940	0.017	648.958
	20.00	-25.187	649.383	0.036	649.419
	30.00	-25.187	649.826	0.054	649.880
	40.00	-25.188	650.269	0.065	650.334
	50.00	25.188	650.437	0.064	650.501
	60.00	25.188	650.965	0.052	651.018
	70.00	25.207	651.489	0.029	651.518
	79.80	25.268	652.002	0.000	652.002

GIRDER G-36

SPAN	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 40-41 LINK TO PIER 41	0.00	-32.479	645.185	0.025	645.210
	10.00	-32.479	645.626	0.034	645.660
	20.00	-32.479	646.086	0.040	646.127
	30.00	-32.479	646.546	0.041	646.587
	40.00	-32.479	647.006	0.036	647.042
	50.00	-32.479	647.466	0.027	647.493
	60.00	-32.479	647.926	0.017	647.944
	70.00	-32.479	648.386	0.012	648.398
	71.69	-32.479	648.464	0.012	648.476
SPAN 41-N	0.00	-32.479	648.464	0.012	648.476
	10.00	-32.479	648.928	0.018	648.947
	20.00	-32.479	649.389	0.029	649.419
	30.00	-32.479	649.850	0.040	649.890
	40.00	-32.479	650.310	0.046	650.357
	50.00	32.479	650.490	0.086	650.577
	60.00	32.480	651.025	0.064	651.089
	70.00	32.499	651.553	0.034	651.588
	80.32	32.564	652.098	0.000	652.098

NOTES:

TABULATED DISTANCES ARE MEASURED FROM CENTER LINE BEARINGS AT NORTH END IN EACH SPAN, ALONG CENTER LINE OF GIRDERS.

TABULATED ELEVATIONS ARE FOR TOP OF CONCRETE SLAB ALONG CENTER LINE OF GIRDERS.

POSITIVE DEFLECTIONS INDICATE DOWNWARD DEFLECTIONS. NEGATIVE DEFLECTIONS INDICATE UPWARD DEFLECTIONS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.A. BARRAZA
DRAWN BY R. GHORBANIAN
CHECKED
IN CHARGE E.G. MARTINS
APPROVED W.G. HORN

DECK ELEVATIONS

F.A.I. 74 - SECTION 81-IHB

F.A.I. 74 & RAMPS OVER RELOC. 19TH ST.

ROCK ISLAND COUNTY

STATION 289+23.09

SCALE: DATE:

K&E CO. 10-0165

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – DECK ELEVATIONS
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 35 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-IHBR	ROCK ISLAND	2042	903
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

DWG. NO. S-208

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB	ROCK ISLAND	389	248
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

GIRDER G-37

SPAN L-42 / ABUT. L TO LINK

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	14.375	614.363	0.000	614.365
10.00	14.375	614.941	0.037	614.979
20.00	14.375	615.517	0.070	615.587
30.00	14.375	616.093	0.094	616.186
40.00	14.375	616.669	0.110	616.779
50.00	14.375	617.245	0.114	617.359
60.00	14.375	617.821	0.108	617.929
70.00	14.375	618.397	0.091	618.489
80.00	14.375	618.973	0.066	619.040
90.00	14.375	619.549	0.034	619.584
94.58	14.375	619.813	0.019	619.832

GIRDER G-38

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	8.625	614.467	0.000	614.467
10.00	8.625	615.043	0.040	615.083
20.00	8.625	615.619	0.075	615.694
30.00	8.625	616.195	0.101	616.296
40.00	8.625	616.771	0.118	616.889
50.00	8.625	617.347	0.123	617.471
60.00	8.625	617.923	0.117	618.041
70.00	8.625	618.499	0.101	618.600
80.00	8.625	619.075	0.075	619.151
90.00	8.625	619.651	0.043	619.694
94.58	8.625	619.915	0.027	619.942

GIRDER G-39

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	2.875	614.557	0.000	614.557
10.00	2.875	615.133	0.039	615.173
20.00	2.875	615.709	0.074	615.784
30.00	2.875	616.285	0.100	616.386
40.00	2.875	616.861	0.117	616.978
50.00	2.875	617.437	0.122	617.559
60.00	2.875	618.013	0.116	618.129
70.00	2.875	618.589	0.099	618.689
80.00	2.875	619.165	0.074	619.239
90.00	2.875	619.741	0.041	619.782
94.58	2.875	620.005	0.025	620.030

GIRDER G-40

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	-2.875	614.557	0.000	614.557
10.00	-2.875	615.133	0.039	615.173
20.00	-2.875	615.709	0.074	615.784
30.00	-2.875	616.285	0.100	616.386
40.00	-2.875	616.861	0.117	616.978
50.00	-2.875	617.437	0.122	617.559
60.00	-2.875	618.013	0.116	618.129
70.00	-2.875	618.589	0.099	618.689
80.00	-2.875	619.165	0.074	619.239
90.00	-2.875	619.741	0.041	619.782
94.58	-2.875	620.005	0.025	620.030

GIRDER G-41

SPAN L-42 / ABUT. L TO LINK

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	-8.625	614.467	0.000	614.467
10.00	-8.625	615.043	0.040	615.083
20.00	-8.625	615.619	0.075	615.694
30.00	-8.625	616.195	0.101	616.296
40.00	-8.625	616.771	0.118	616.889
50.00	-8.625	617.347	0.123	617.471
60.00	-8.625	617.923	0.117	618.041
70.00	-8.625	618.499	0.101	618.600
80.00	-8.625	619.075	0.075	619.151
90.00	-8.625	619.651	0.043	619.694
94.58	-8.625	619.915	0.027	619.942

GIRDER G-42

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	-14.375	614.365	0.000	614.365
10.00	-14.375	614.941	0.037	614.979
20.00	-14.375	615.517	0.070	615.587
30.00	-14.375	616.093	0.094	616.188
40.00	-14.375	616.669	0.110	616.779
50.00	-14.375	617.245	0.114	617.359
60.00	-14.375	617.821	0.108	617.929
70.00	-14.375	618.397	0.091	618.489
80.00	-14.375	618.973	0.066	619.040
90.00	-14.375	619.549	0.034	619.584
94.58	-14.375	619.813	0.019	619.832

GIRDER G-43

SPAN L-42 / LINK TO PIER 42

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	14.375	619.813	0.019	619.832
10.00	14.375	620.389	0.011	620.400
20.00	14.375	620.965	0.009	620.973
26.24	14.375	621.325	0.008	621.333

SPAN 42-43

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	14.375	621.325	0.008	621.333
10.00	14.375	621.901	0.019	621.917
20.00	14.375	622.477	0.030	622.507
30.00	14.375	623.053	0.049	623.102
40.00	14.375	623.629	0.068	623.697
50.00	14.375	624.205	0.083	624.288
60.00	14.375	624.781	0.092	624.873
70.00	14.375	625.357	0.093	625.450
80.00	14.375	625.933	0.086	626.019
90.00	14.375	626.509	0.071	626.580
100.00	14.375	627.085	0.052	627.137
110.00	14.375	627.661	0.032	627.693
120.00	14.375	628.237	0.016	628.253
130.00	14.375	628.813	0.008	628.821
131.37	14.375	628.892	0.008	628.900

SPAN 43-44

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	14.375	628.892	0.008	628.900
10.00	14.375	629.468	0.015	629.484
20.00	14.375	630.044	0.030	630.074
30.00	14.375	630.620	0.049	630.669
40.00	14.375	631.196	0.068	631.264
50.00	14.375	631.772	0.083	631.855
60.00	14.375	632.348	0.090	632.438
70.00	14.375	632.924	0.089	633.014
80.00	14.375	633.500	0.080	633.581
90.00	14.375	634.076	0.065	634.142
100.00	14.375	634.652	0.046	634.699
110.00	14.375	635.228	0.027	635.256
120.00	14.375	635.804	0.012	635.816
126.59	14.375	636.184	0.007	636.191

SPAN 44-45 / PIER 44 TO LINK

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	14.375	636.184	0.007	636.191
10.00	14.375	636.760	0.005	636.765
20.00	14.375	637.336	0.007	637.343
26.24	14.375	637.698	0.010	637.708

GIRDER G-44

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	8.625	619.915	0.027	619.942
10.00	8.625	620.491	0.014	620.506
20.00	8.625	621.067	0.007	621.074
26.24	8.625	621.427	0.004	621.431

SPAN 42-43

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	8.625	621.427	0.004	621.431
10.00	8.625	622.003	0.008	622.011
20.00	8.625	622.579	0.019	622.599
30.00	8.625	623.155	0.037	623.192
40.00	8.625	623.731	0.055	623.786
50.00	8.625	624.307	0.069	624.377
60.00	8.625	624.883	0.078	624.962
70.00	8.625	625.459	0.079	625.538
80.00	8.625	626.035	0.072	626.108
90.00	8.625	626.611	0.059	626.670
100.00	8.625	627.187	0.041	627.228
110.00	8.625	627.763	0.022	627.785
120.00	8.625	628.339	0.009	628.348
130.00	8.625	628.915	0.003	628.918
131.37	8.625	628.994	0.004	628.998

SPAN 43-44

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	8.625	628.994	0.004	628.998
10.00	8.625	629.570	0.007	629.578
20.00	8.625	630.146	0.019	630.165
30.00	8.625	630.722	0.036	630.759
40.00	8.625	631.298	0.054	631.352
50.00	8.625	631.874	0.068	631.943
60.00	8.625	632.450	0.075	632.526
70.00	8.625	633.026	0.076	633.103
80.00	8.625	633.602	0.068	633.671
90.00	8.625	634.178	0.054	634.233
100.00	8.625	634.754	0.036	634.791
110.00	8.625	635.330	0.019	635.350
120.00	8.625	635.906	0.007	635.914
126.59	8.625	636.286	0.004	636.290

SPAN 44-45 / PIER 44 TO LINK

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	8.625	636.286	0.004	636.290
10.00	8.625	636.862	0.005	636.867
20.00	8.625	637.438	0.011	637.449
26.24	8.625	637.798	0.016	637.814

GIRDER G-45

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	2.875	620.005	0.025	620.030
10.00	2.875	620.581	0.012	620.594
20.00	2.875	621.157	0.004	621.162
26.24	2.875	621.517	0.001	621.518

SPAN 42-43

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	2.875	621.517	0.001	621.518
10.00	2.875	622.093	0.005	622.098
20.00	2.875	622.669	0.017	622.686
30.00	2.875	623.245	0.034	623.279
40.00	2.875	623.821	0.052	623.873
50.00	2.875	624.397	0.067	624.464
60.00	2.875	624.973	0.076	625.049
70.00	2.875	625.549	0.077	625.626
80.00	2.875	626.125	0.070	626.195
90.00	2.875	626.701	0.056	626.757
100.00	2.875	627.277	0.038	627.316
110.00	2.875	627.853	0.020	627.873
120.00	2.875	628.429	0.006	628.435
130.00	2.875	629.005	0.001	629.006
131.37	2.875	629.084	0.002	629.086

SPAN 43-44

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	2.875	629.084	0.002	629.086
10.00	2.875	629.660	0.005	629.666
20.00	2.875	630.236	0.016	630.253
30.00	2.875	630.812	0.034	630.846
40.00	2.875	631.388	0.051	631.440
50.00	2.875	631.964	0.066	632.030
60.00	2.875	632.540	0.073	632.614
70.00	2.875	633.116	0.073	633.190
80.00	2.875	633.692	0.065	633.758
90.00	2.875	634.268	0.051	634.320
100.00	2.875	634.844	0.033	634.878
110.00	2.875	635.420	0.016	635.437
120.00	2.875	635.996	0.004	636.000
126.59	2.875	636.376	0.001	636.377

SPAN 44-45 / PIER 44 TO LINK

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	2.875	636.376	0.001	636.377
10.00	2.875	636.952	0.003	636.955
20.00	2.875	637.528	0.009	637.537
26.24	2.875	637.888	0.014	637.902

GIRDER G-46

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	-2.875	620.005	0.025	620.030
10.00	-2.875	620.581	0.012	620.594
20.00	-2.875	621.157	0.004	621.162
26.24	-2.875	621.517	0.001	621.518

SPAN 42-43

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	-2.875	621.517	0.001	621.518
10.00	-2.875	622.093	0.005	622.098
20.00	-2.875	622.669	0.017	622.686
30.00	-2.875	623.245	0.034	623.279
40.00	-2.875	623.821	0.052	623.873
50.00	-2.875	624.397	0.067	624.464
60.00	-2.875	624.973	0.076	625.049
70.00	-2.875	625.549	0.077	625.626
80.00	-2.875	626.125	0.070	626.195
90.00	-2.875	626.701	0.056	626.757
100.00	-2.875	627.277	0.038	627.316
110.00	-2.875	627.853	0.020	627.873
120.00	-2.875	628.429	0.006	628.435
130.00	-2.875	629.005	0.001	629.006
131.37	-2.875	629.084	0.002	629.086

SPAN 43-44

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	-2.875	629.084	0.002	629.086
10.00	-2.875	629.660	0.005	629.666
20.00	-2.875	630.236	0.016	630.253
30.00	-2.875	630.812	0.034	630.846
40.00	-2.875	631.388	0.051	631.440
50.00	-2.875	631.964	0.066	632.030
60.00	-2.875	632.540	0.073	632.614
70.00	-2.875	633.116	0.073	633.190
80.00	-2.875	633.692	0.065	633.758
90.00	-2.875	634.268	0.051	634.320
100.00	-2.875	634.844	0.033	634.878
110.00	-2.875	635.420	0.016	635.437
120.00	-2.875	635.996	0.004	636.000
126.59	-2.875	636.376	0.001	636.377

SPAN 44-45 / PIER 44 TO LINK

DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
0.00	-2.875	636.376	0.001	636.377
10.00	-2.875	636.952	0.003	636.955
20.00	-2.875	637.528	0.009	637.537
26.24	-2.875	637.888	0.014	637.902

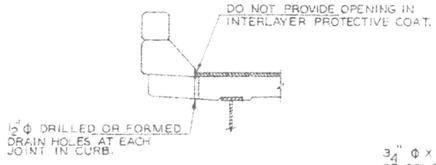
NOTES:

TABULATED DISTANCES ARE MEASURED FROM CENTER LINE BEARINGS AT NORTH END IN EACH SPAN, ALONG CENTER LINE OF GIRDERS.

TABULATED ELEVATIONS ARE FOR TOP OF CONCRETE SLAB ALONG CENTER LINE OF GIRDERS.

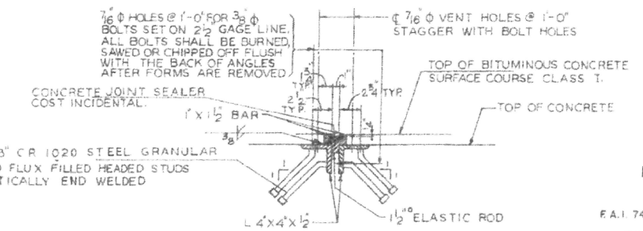
NEGATIVE OFFSETS PERTAIN TO POINTS WEST OF THE CENTER LINE OF BRIDGE. POSITIVE OFFSETS PERTAIN TO POINTS EAST OF THE CENTER LINE OF BRIDGE.

POSITIVE DEFLECTIONS INDICATE DOWNWARD DEFLECTIONS. NEGATIVE DEFLECTIONS INDICATE UPWARD DEFLECTIONS.



DRAIN HOLES AT CURB JOINTS
(TYPICAL)

DRAIN HOLES SHALL BE PROVIDED IN THE DECK AT THE BASE OF ALL ALUMINUM SHEETED JOINTS IN THE CURB OR PARAPET ON THE LOW SIDE OF THE DECK.



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

DECK ELEVATIONS AND DETAILS
F.A.I. 74 - SECTION 81-1HB
F.A.I. 74 & RAMPS OVER RELOC. 19TH ST.
ROCK ISLAND COUNTY
STATION 289+23.09

SCALE: DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.R. BARRAZA
DRAWN BY R. GHOBBANIAN
CHECKED
IN CHARGE E.B. MARTINS
APPROVED W.G. HORN

K&E CO. 10X10 FT.

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – DECK ELEVATIONS AND DETAILS
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 36 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	904
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

DWG. NO. S-209

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB	ROCK ISLAND	389	249
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

GIRDER G-47

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN L-42 LINK TO PIER 42	0.00	-8.625	619.915	0.027	619.942
	10.00	-8.625	620.491	0.014	620.506
	20.00	-8.625	621.067	0.007	621.074
	26.24	-8.625	621.427	0.004	621.431
SPAN 42-43	0.00	-8.625	621.427	0.004	621.431
	10.00	-8.625	622.003	0.008	622.011
	20.00	-8.625	622.579	0.019	622.598
	30.00	-8.625	623.155	0.037	623.192
	40.00	-8.625	623.731	0.055	623.786
	50.00	-8.625	624.307	0.069	624.377
	60.00	-8.625	624.883	0.078	624.962
	70.00	-8.625	625.459	0.079	625.538
	80.00	-8.625	626.035	0.072	626.108
	90.00	-8.625	626.611	0.059	626.670
	100.00	-8.625	627.187	0.041	627.228
	110.00	-8.625	627.763	0.022	627.785
	120.00	-8.625	628.339	0.009	628.348
	130.00	-8.625	628.915	0.003	628.918
	131.37	-8.625	628.994	0.004	628.998
SPAN 43-44	0.00	-8.625	628.994	0.004	628.998
	10.00	-8.625	629.570	0.007	629.578
	20.00	-8.625	630.146	0.019	630.165
	30.00	-8.625	630.722	0.036	630.759
	40.00	-8.625	631.298	0.054	631.352
	50.00	-8.625	631.874	0.068	631.943
	60.00	-8.625	632.450	0.075	632.526
	70.00	-8.625	633.026	0.076	633.103
	80.00	-8.625	633.602	0.068	633.671
	90.00	-8.625	634.178	0.054	634.233
	100.00	-8.625	634.754	0.036	634.791
	110.00	-8.625	635.330	0.019	635.350
	120.00	-8.625	635.906	0.007	635.914
	126.59	-8.625	636.286	0.004	636.290
SPAN 44-45 PIER 44 TO LINK	0.00	-8.625	636.286	0.004	636.290
	10.00	-8.625	636.882	0.005	636.887
	20.00	-8.625	637.438	0.011	637.449
	26.24	-8.625	637.798	0.016	637.814

GIRDER G-48

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN L-42 LINK TO PIER 42	0.00	-14.375	619.813	0.019	619.832
	10.00	-14.375	620.389	0.011	620.400
	20.00	-14.375	620.965	0.008	620.973
	26.24	-14.375	621.325	0.008	621.333
SPAN 42-43	0.00	-14.375	621.325	0.008	621.333
	10.00	-14.375	621.901	0.015	621.917
	20.00	-14.375	622.477	0.030	622.507
	30.00	-14.375	623.053	0.049	623.102
	40.00	-14.375	623.629	0.068	623.697
	50.00	-14.375	624.205	0.083	624.288
	60.00	-14.375	624.781	0.092	624.873
	70.00	-14.375	625.357	0.093	625.450
	80.00	-14.375	625.933	0.086	626.019
	90.00	-14.375	626.509	0.071	626.580
	100.00	-14.375	627.085	0.052	627.137
	110.00	-14.375	627.661	0.032	627.693
	120.00	-14.375	628.237	0.016	628.253
	130.00	-14.375	628.813	0.008	628.821
	131.37	-14.375	628.892	0.008	628.900
SPAN 43-44	0.00	-14.375	628.892	0.008	628.900
	10.00	-14.375	629.468	0.015	629.484
	20.00	-14.375	630.044	0.030	630.074
	30.00	-14.375	630.620	0.049	630.669
	40.00	-14.375	631.196	0.068	631.264
	50.00	-14.375	631.772	0.082	631.855
	60.00	-14.375	632.348	0.090	632.438
	70.00	-14.375	632.924	0.089	633.014
	80.00	-14.375	633.500	0.080	633.581
	90.00	-14.375	634.076	0.065	634.142
	100.00	-14.375	634.652	0.046	634.699
	110.00	-14.375	635.228	0.027	635.256
	120.00	-14.375	635.804	0.012	635.816
	126.59	-14.375	636.184	0.007	636.191
SPAN 44-45 PIER 44 TO LINK	0.00	-14.375	636.184	0.007	636.191
	10.00	-14.375	636.760	0.005	636.765
	20.00	-14.375	637.336	0.007	637.343
	26.24	-14.375	637.696	0.010	637.706

GIRDER G-49

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 44-45 LINK TO PIER 45	0.00	14.375	637.696	0.010	637.706
	10.00	14.375	638.272	0.023	638.295
	20.00	14.375	638.848	0.033	638.881
	30.00	14.375	639.424	0.038	639.462
	40.00	14.375	640.000	0.037	640.037
	50.00	14.375	640.576	0.031	640.607
	60.00	14.375	641.152	0.021	641.173
	70.00	14.375	641.728	0.012	641.740
	80.00	14.375	642.304	0.007	642.312
	80.74	14.375	642.347	0.008	642.355
SPAN 45-46	0.00	14.375	642.347	0.008	642.355
	10.00	14.375	642.923	0.010	642.934
	20.00	14.375	643.499	0.018	643.517
	30.00	14.375	644.075	0.027	644.102
	40.00	14.375	644.651	0.032	644.684
	50.00	14.375	645.227	0.034	645.261
	60.00	14.375	645.803	0.030	645.834
	70.00	14.375	646.379	0.023	646.403
	80.00	14.375	646.955	0.015	646.970
	90.00	14.375	647.531	0.008	647.540
	95.44	14.375	647.859	0.008	647.867
SPAN 46-N	0.00	14.375	647.859	0.008	647.867
	10.00	14.374	648.459	0.011	648.471
	20.00	14.374	649.051	0.019	649.070
	30.00	14.374	649.626	0.027	649.654
	40.00	14.374	650.191	0.032	650.224
	50.00	14.374	650.727	0.032	650.759
	60.00	14.366	651.226	0.028	651.254
	70.00	14.341	651.720	0.014	651.735
	79.93	14.295	652.178	0.000	652.178

GIRDER G-50

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 44-45 LINK TO PIER 45	0.00	8.625	637.798	0.016	637.814
	10.00	8.625	638.374	0.039	638.413
	20.00	8.625	638.950	0.057	639.007
	30.00	8.625	639.526	0.064	639.591
	40.00	8.625	640.102	0.061	640.164
	50.00	8.625	640.678	0.049	640.727
	60.00	8.625	641.254	0.030	641.285
	70.00	8.625	641.830	0.013	641.843
	80.00	8.625	642.406	0.004	642.410
	80.74	8.625	642.449	0.004	642.453
SPAN 45-46	0.00	8.625	642.449	0.004	642.453
	10.00	8.625	643.025	0.008	643.033
	20.00	8.625	643.601	0.020	643.621
	30.00	8.625	644.177	0.033	644.210
	40.00	8.625	644.753	0.042	644.795
	50.00	8.625	645.329	0.044	645.373
	60.00	8.625	645.905	0.038	645.944
	70.00	8.625	646.481	0.027	646.508
	80.00	8.625	647.057	0.014	647.072
	90.00	8.625	647.633	0.005	647.638
	95.44	8.625	647.955	0.004	647.959
SPAN 46-N	0.00	8.625	647.955	0.004	647.959
	10.00	8.624	648.541	0.008	648.550
	20.00	8.624	649.119	0.021	649.140
	30.00	8.624	649.682	0.035	649.717
	40.00	8.624	650.235	0.045	650.280
	50.00	8.624	650.767	0.046	650.814
	60.00	8.616	651.276	0.038	651.315
	70.00	8.591	651.776	0.021	651.798
	79.93	8.548	652.251	0.000	652.251

GIRDER G-51

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 44-45 LINK TO PIER 45	0.00	2.875	637.888	0.014	637.902
	10.00	2.875	638.464	0.037	638.501
	20.00	2.875	639.040	0.055	639.095
	30.00	2.875	639.616	0.062	639.679
	40.00	2.875	640.192	0.059	640.252
	50.00	2.875	640.768	0.047	640.815
	60.00	2.875	641.344	0.028	641.373
	70.00	2.875	641.920	0.011	641.931
	80.00	2.875	642.496	0.002	642.498
	80.74	2.875	642.539	0.002	642.541
SPAN 45-46	0.00	2.875	642.539	0.002	642.541
	10.00	2.875	643.115	0.006	643.121
	20.00	2.875	643.691	0.018	643.709
	30.00	2.875	644.267	0.031	644.298
	40.00	2.875	644.843	0.040	644.883
	50.00	2.875	645.419	0.042	645.461
	60.00	2.875	645.995	0.036	646.032
	70.00	2.875	646.571	0.025	646.597
	80.00	2.875	647.147	0.012	647.159
	90.00	2.875	647.723	0.003	647.726
	95.44	2.875	648.039	0.002	648.041
SPAN 46-N	0.00	2.875	648.039	0.002	648.041
	10.00	2.874	648.613	0.006	648.620
	20.00	2.874	649.177	0.010	649.187
	30.00	2.874	649.731	0.034	649.765
	40.00	2.874	650.275	0.044	650.319
	50.00	2.874	650.806	0.045	650.851
	60.00	2.866	651.323	0.037	651.361
	70.00	2.841	651.832	0.021	651.853
	79.93	2.798	652.324	0.000	652.324

GIRDER G-52

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 44-45 LINK TO PIER 45	0.00	-2.875	637.888	0.014	637.902
	10.00	-2.875	638.464	0.037	638.501
	20.00	-2.875	639.040	0.055	639.095
	30.00	-2.875	639.616	0.062	639.679
	40.00	-2.875	640.192	0.059	640.252
	50.00	-2.875	640.768	0.047	640.815
	60.00	-2.875	641.344	0.028	641.373
	70.00	-2.875	641.920	0.011	641.931
	80.00	-2.875	642.496	0.002	642.498
	80.74	-2.875	642.539	0.002	642.541
SPAN 45-46	0.00	-2.875	642.539	0.002	642.541
	10.00	-2.875	643.115	0.006	643.121
	20.00	-2.875	643.691	0.018	643.709
	30.00	-2.875	644.267	0.031	644.298
	40.00	-2.875	644.843	0.040	644.883
	50.00	-2.875	645.419	0.042	645.461
	60.00	-2.875	645.995	0.036	646.032
	70.00	-2.875	646.571	0.025	646.597
	80.00	-2.875	647.147	0.012	647.159
	90.00	-2.875	647.723	0.003	647.726
	95.44	-2.875	648.036	0.002	648.038
SPAN 46-N	0.00	-2.875	648.036	0.002	648.038
	10.00	-2.875	648.603	0.006	648.610
	20.00	-2.875	649.161	0.019	649.181
	30.00	-2.875	649.710	0.034	649.744
	40.00	-2.875	650.250	0.044	650.294
	50.00	-2.875	650.780	0.045	650.825
	60.00	-2.893	651.301	0.037	651.339
	70.00	-2.909	651.813	0.021	651.835
	79.93	-2.951	652.313	0.000	652.313

GIRDER G-53

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 44-45 LINK TO PIER 45	0.00	-8.625	637.798	0.016	637.814
	10.00	-8.625	638.374	0.039	638.413
	20.00	-8.625	638.950	0.057	639.007
	30.00	-8.625	639.526	0.064	639.591
	40.00	-8.625	640.102	0.061	640.164
	50.00	-8.625	640.678	0.049	640.727
	60.00	-8.625	641.254	0.030	641.285
	70.00	-8.625	641.830	0.013	641.843
	80.00	-8.625	642.406	0.004	642.410
	80.74	-8.625	642.449	0.004	642.453
SPAN 45-46	0.00	-8.625	642.449	0.004	642.453
	10.00	-8.625	643.025	0.008	643.033
	20.00	-8.625	643.601	0.020	643.621
	30.00	-8.625	644.177	0.033	644.210
	40.00	-8.625	644.753	0.042	644.795
	50.00	-8.625	645.329	0.044	645.373
	60.00	-8.625	645.905	0.038	645.944
	70.00	-8.625	646.481	0.027	646.508
	80.00	-8.625	647.057	0.014	647.072
	90.00	-8.625	647.633	0.005	647.638
	95.44	-8.625	647.945	0.004	647.950
SPAN 46-N	0.00	-8.625	647.945	0.004	647.950
	10.00	-8.625	648.513	0.008	648.522
	20.00	-8.625	649.072	0.021	649.093
	30.00	-8.625	649.620	0.035	649.656
	40.00	-8.625	650.160	0.045	650.205
	50.00	-8.625	650.690	0.046	650.736
	60.00	-8.638	651.211	0.038	651.249
	70.00	-8.658	651.723	0.021	651.744
	79.93	-8.701	652.222	0.000	652.222

GIRDER G-54

	DISTANCE FROM SUPPORT (FT)	NORMAL OFFSET (FEET)	THEORETICAL GRADE ELEVATION	DEAD LOAD DEFLECTION (FEET)	THEO. ELEV. ADJ FOR DEFLECTION
SPAN 44-45 LINK TO PIER 45	0.00	-14.375	637.696	0.010	637.706
	10.00	-14.375	638.272	0.023	638.295
	20.00	-14.375	638.848	0.033	638.881
	30.00	-14.375	639.424	0.038	639.462
	40.00	-14.375	640.000	0.037	640.037
	50.00	-14.375	640.576	0.031	640.607
	60.00	-14.375	641.152	0.021	641.173
	70.00	-14.375	641.728	0.012	641.740
	80.00	-14.375	642.304	0.007	642.312
	80.74	-14.375	642.347	0.008	642.355
SPAN 45-46	0.00	-14.375	642.347	0.008	642.355
	10.00	-14.375	642.923	0.010	642.934
	20.00	-14.375	643.499	0.018	643.518
	30.00	-14.375	644.075	0.027	644.102
	40.00	-14.375	644.651	0.032	644.684
	50.00	-14.375	645.227	0.034	645.261
	60.00	-14.375	645.803	0.030	645.834
	70.00	-14.375	646.379	0.023	646.403
	80.00	-14.375	646.955	0.015	646.970
	90.00	-14.375	647.531	0.008	647.540
	95.44	-14.375	647.844	0.008	647.852
SPAN 46-N	0.00	-14.375	647.844	0.008	647.852
	10.00	-14.375	648.411	0.011	648.423
	20.00	-14.375	648.969	0.019	648.988
	30.00	-14.375	649.518	0.027	649.546
	40.00	-14.375	650.058	0.032	650.091
	50.00	-14.375	650.588	0.032	650.620
	60.00	-14.383	651.108	0.026	651.135
	70.00	-14.408	651.619	0.014	651.634
	79.93	-14.451	652.117	0.000	652.117

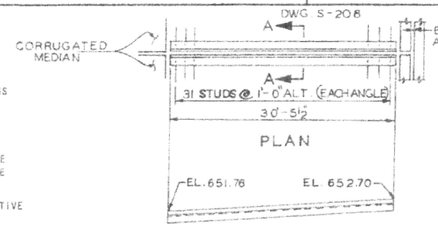
NOTES:

TABULATED DISTANCES ARE MEASURED FROM CENTER LINE BEARINGS AT NORTH END IN EACH SPAN, ALONG CENTER LINE OF GIRDERS.

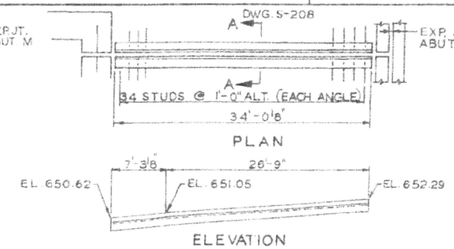
TABULATED ELEVATIONS ARE FOR TOP OF CONCRETE SLAB ALONG CENTER LINE OF GIRDERS.

NEGATIVE OFFSETS PERTAIN TO POINTS WEST OF THE CENTER LINE OF BRIDGE. POSITIVE OFFSETS PERTAIN TO POINTS EAST OF THE CENTER LINE OF BRIDGE.

POSITIVE DEFLECTIONS INDICATE DOWNWARD DEFLECTIONS. NEGATIVE DEFLECTIONS INDICATE UPWARD DEFLECTIONS.



ELEVATION
LONGITUDINAL JOINT BETWEEN
RAMP S-7 & N.B. F.A.I. 74



ELEVATION
LONGITUDINAL JOINT BETWEEN
RAMP 7-S & S.B. F.A.I. 74

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.A. BARRAZA
DRAWN BY R. GHORBANIAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

DECK ELEVATIONS AND LONGITUDINAL JOINT DETAILS
F.A.I. 74 - SECTION 81-1HB
F.A.I. 74 & RAMPS OVER RELOC. 19TH ST.
ROCK ISLAND COUNTY
STATION 289 + 23.09
SCALE: DATE:

K&E CO. 10-8188

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - DECK ELEVATIONS AND LONGITUDINAL JT DETAILS
I-74 AT 19TH ST. - SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 37 OF 45 SHEETS

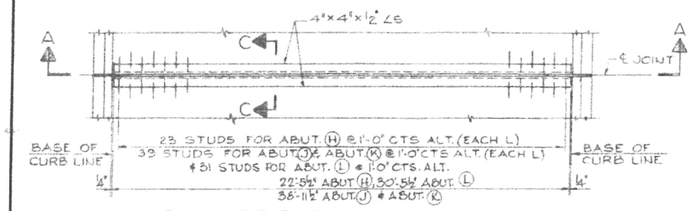
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	905

CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

DWG. NO. S-210

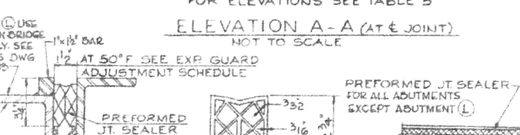
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB	ROCK ISLAND	389	250
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		



PLAN OF EXPANSION GUARDS AT ABUT. (H), ABUT. (J) AND ABUT. (K) & (L)

NOT TO SCALE

ABUT. (H)	3'-2 3/4"	8'-0"	8'-0"	3'-2 3/4"
ABUT. (J)	5'-2 3/4"	12'-0"	12'-0"	5'-2 3/4"
ABUT. (K)	5'-2 3/4"	12'-0"	12'-0"	5'-2 3/4"
ABUT. (L)	3'-2 3/4"	12'-0"	12'-0"	3'-2 3/4"



NOTE: FOR ELEVATIONS SEE TABLE 5

ELEVATION A-A (AT ℄ JOINT)

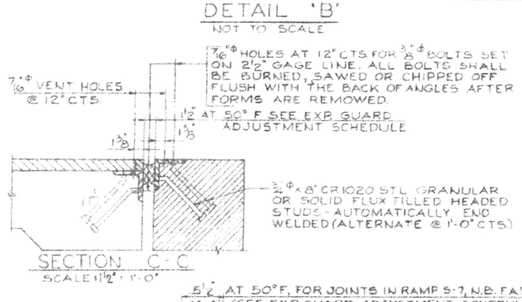
NOT TO SCALE

TABLE 5

ELEV. \ ABUT.	ABUT. (H)	ABUT. (J)	ABUT. (K)	ABUT. (L)
EL. A	634.540	633.891	630.793	614.383
EL. B	634.490	634.000	630.935	614.451
EL. C	634.365	634.188	631.123	614.658
EL. D	634.240	634.000	630.985	614.451
EL. E	634.190	63. .798	630.826	614.383

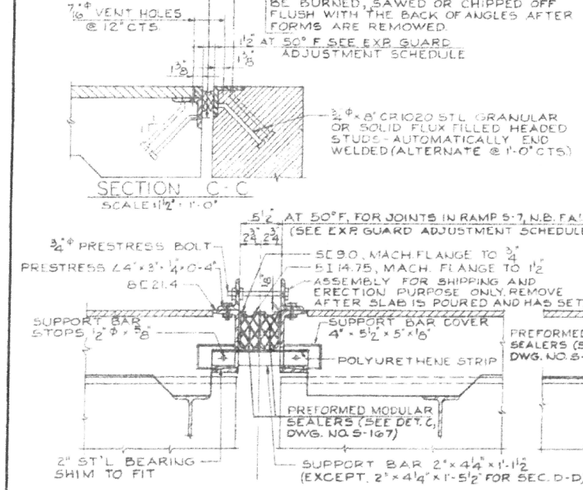
DETAIL 'B'

NOT TO SCALE



SECTION C-C

SCALE: 1 1/2" = 1'-0"



SECTION F-F (FOR DETAILS OF CONN. TO GIRDERS SEE SECT. D-D)

SCALE: 1 1/2" = 1'-0"

SECTION D-D (FOR SUPPORT BAR AND OTHER DETAILS NOT SHOWN SEE SEC. F-F)

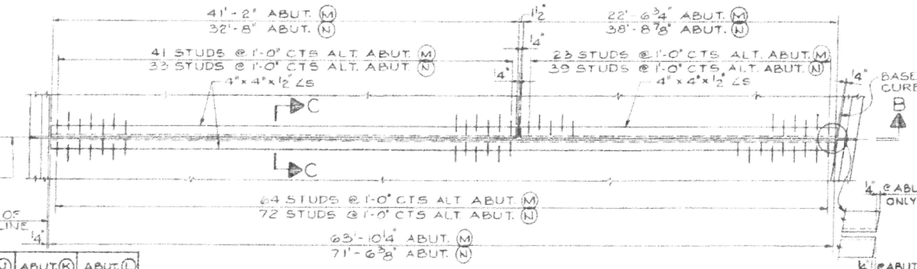
SCALE: 1 1/2" = 1'-0"

SECTION G-G

SCALE: 1 1/2" = 1'-0"

SECTION H-H

SCALE: 1 1/2" = 1'-0"



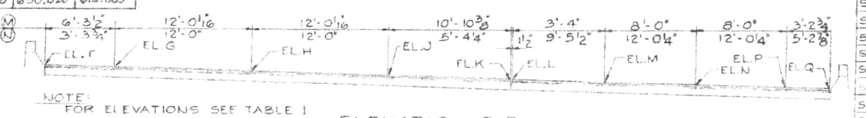
PLAN OF EXPANSION GUARDS AT ABUT. (M) AND ABUT. (N)

NOT TO SCALE

NOTE: FOR LOCATION OF VENT AND BOLT HOLES SEE SECT. C-C.

TABLE 1

ELEV. \ ABUT.	ABUT. (M)	ABUT. (N)
EL. F	654.055	652.267
EL. G	654.174	652.386
EL. H	653.713	652.424
EL. J	653.197	652.368
EL. K	652.706	652.254
EL. L	652.701	652.292
EL. M	652.550	652.191
EL. N	652.190	651.928
EL. P	651.825	651.565
EL. Q	651.684	651.308



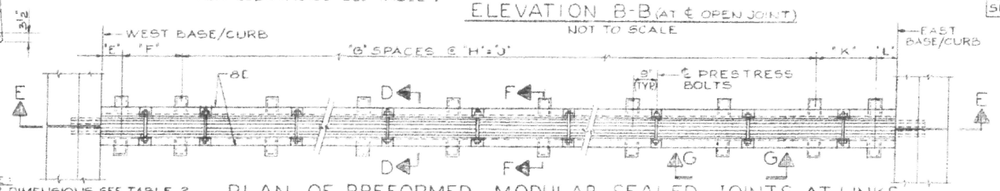
NOTE: FOR ELEVATIONS SEE TABLE 1

ELEVATION B-B (AT ℄ OPEN JOINT)

NOT TO SCALE

TABLE 2

DIMENS. \ JOINT	E	F	G	H	J	K	L
SPAN 26-27	6"	1'-5"	5	3'-4"	16'-8"	1'-5"	6"
SPAN 29-30	6"	1'-5"	5	3'-4"	16'-8"	1'-5"	6"
SPAN 31-32	6"	3'-3"	9	3'-6"	31'-6"	3'-3"	6"
SPAN 34-35	6"	3'-3"	9	3'-6"	31'-6"	3'-3"	6"
SPAN 37-38	6"	3'-3"	9	3'-6"	31'-6"	3'-3"	6"
SPAN 40-41	6"	3'-3"	9	3'-6"	31'-6"	3'-3"	6"
SPAN L-42	2'-0"	2'-9"	7	3'-0"	21'-0"	2'-9"	2'-0"
SPAN 44-45	2'-0"	2'-9"	7	3'-0"	21'-0"	2'-9"	2'-0"



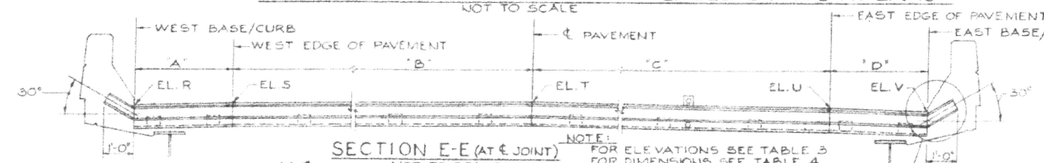
NOTE: FOR DIMENSIONS SEE TABLE 2

PLAN OF PREFORMED MODULAR SEALED JOINTS AT LINKS

NOT TO SCALE

TABLE 3

ELEV. \ JOINT	R	S	T	U	V
SPAN 26-27	640.688	640.637	640.512	640.367	640.336
SPAN 29-30	647.984	647.915	647.721	647.527	647.448
SPAN 31-32	639.507	639.416	63. .503	639.616	639.413
SPAN 34-35	647.058	647.162	64 .192	646.923	646.671
SPAN 37-38	636.238	636.436	636.613	636.436	636.327
SPAN 40-41	645.318	645.516	645.783	645.516	645.407
SPAN L-42	619.876	619.944	620.181	619.984	619.876
SPAN 44-45	637.840	637.914	638.101	637.914	637.846



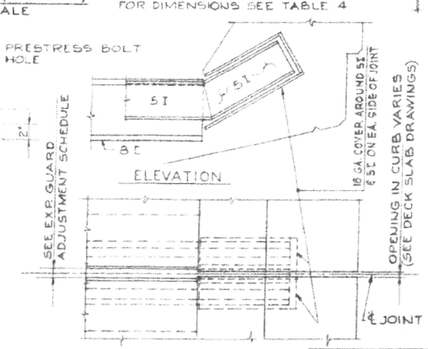
SECTION E-E (AT ℄ JOINT)

NOT TO SCALE

NOTE: FOR ELEVATIONS SEE TABLE 3 FOR DIMENSIONS SEE TABLE 4

TABLE 4

DIMENS. \ JOINT	A	B	C	D
SPAN 26-27	3'-3"	8'-0"	8'-0"	3'-3"
SPAN 29-30	3'-3"	8'-0"	8'-0"	3'-3"
SPAN 31-32	5'-3"	12'-0"	12'-0"	3'-9"
SPAN 34-35	5'-3"	12'-0"	12'-0"	3'-9"
SPAN 37-38	3'-9"	12'-0"	12'-0"	5'-3"
SPAN 40-41	3'-9"	12'-0"	12'-0"	5'-3"
SPAN L-42	3'-3"	12'-0"	12'-0"	3'-3"
SPAN 44-45	3'-3"	12'-0"	12'-0"	3'-3"



PLAN

DETAIL "A"

SCALE: 1 1/2" = 1'-0"

*THIS NUMBER REFERS TO TOTAL ALLOWABLE MOVEMENT

EXPANSION GUARD ADJUSTMENT SCHEDULE

JOINT \ TEMP.	12°	25°	37°	50°	63°	75°	87°	100°
SPAN 26-27 & SPAN 29-30	5 15/16"	5 13/16"	5 11/16"	5 1/2"	5 5/16"	5 3/16"	5 1/16"	4 7/8"
SPAN 31-32 & SPAN 40-41	6"	5 7/8"	5 11/16"	5 1/2"	5 5/16"	5 1/8"	5"	4 15/16"
SPAN 34-35 & SPAN 37-38	6 1/16"	5 7/8"	5 11/16"	5 1/2"	5 5/16"	5 1/8"	4 15/16"	4 3/4"
SPAN L-42	9"	8 3/4"	8 1/2"	8 1/4"	8"	7 3/4"	7 1/2"	7 1/4"
SPAN 44-45	9 1/16"	8 15/16"	8 9/16"	8 1/4"	7 15/16"	7 11/16"	7 7/16"	7 1/8"
AT ABUT. H & ABUT. M (RAMP 5-7)	1 11/16"	1 5/8"	1 3/16"	1 1/2"	1 7/16"	1 3/8"	1 5/16"	1 1/4"
AT ABUT. M (N.B)	1 13/16"	1 11/16"	1 5/8"	1 1/2"	1 3/8"	1 5/16"	1 3/16"	1 1/8"
AT ABUTS. J K N. (S.B)	1 3/4"	1 11/16"	1 9/16"	1 1/2"	1 7/16"	1 5/16"	1 1/4"	1 3/16"
AT ABUT. N (RAMP 7-8)	1 1/8"	1 3/4"	1 5/8"	1 1/2"	1 3/8"	1 1/4"	1 1/8"	1"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
PREFORMED JOINT SEALER	LIN. FT.	251
PREFORMED MODULAR EXP JOINT 4"*	LIN. FT.	65
PREFORMED MODULAR EXP JOINT 3"*	LIN. FT.	217

EXPANSION GUARD DETAILS

F.A.I. 74 - SECTION 81-1HB

F.A.I. 74 @ RAMPS OVER RELOC. 19TH ST.

ROCK ISLAND COUNTY

STATION 289 + 23.09

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY: A. BARRAZA
DRAWN BY: D. MARTINSONS
CHECKED: [illegible]
IN CHARGE: E.S. MARTINS
APPROVED: W.G. HORN

R & E CO. 10-91PS

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – EXPANSION GUARD DETAILS
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 38 OF 45 SHEETS

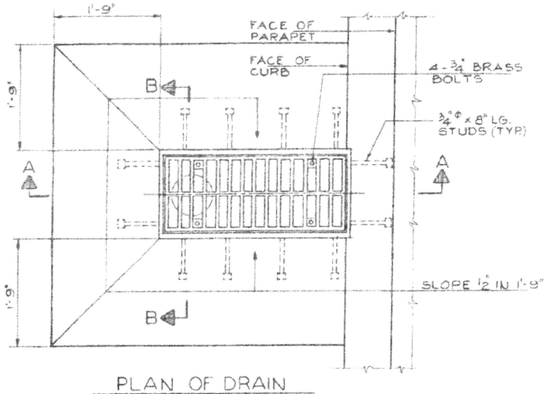
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	906

CONTRACT NO. 64E26

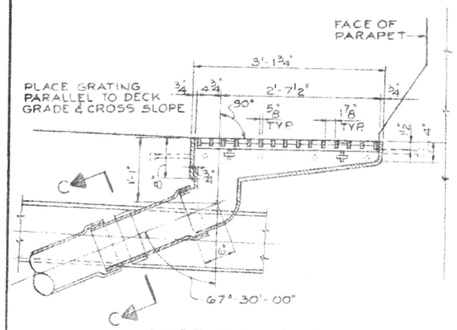
FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

DWG. NO. D-2

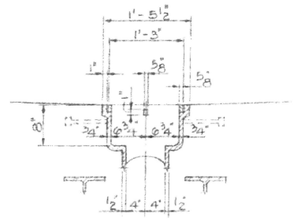
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB	ROCK ISLAND	389	251
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		



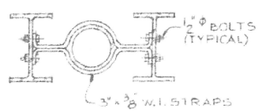
PLAN OF DRAIN
SCALE: 1"=1'-0"



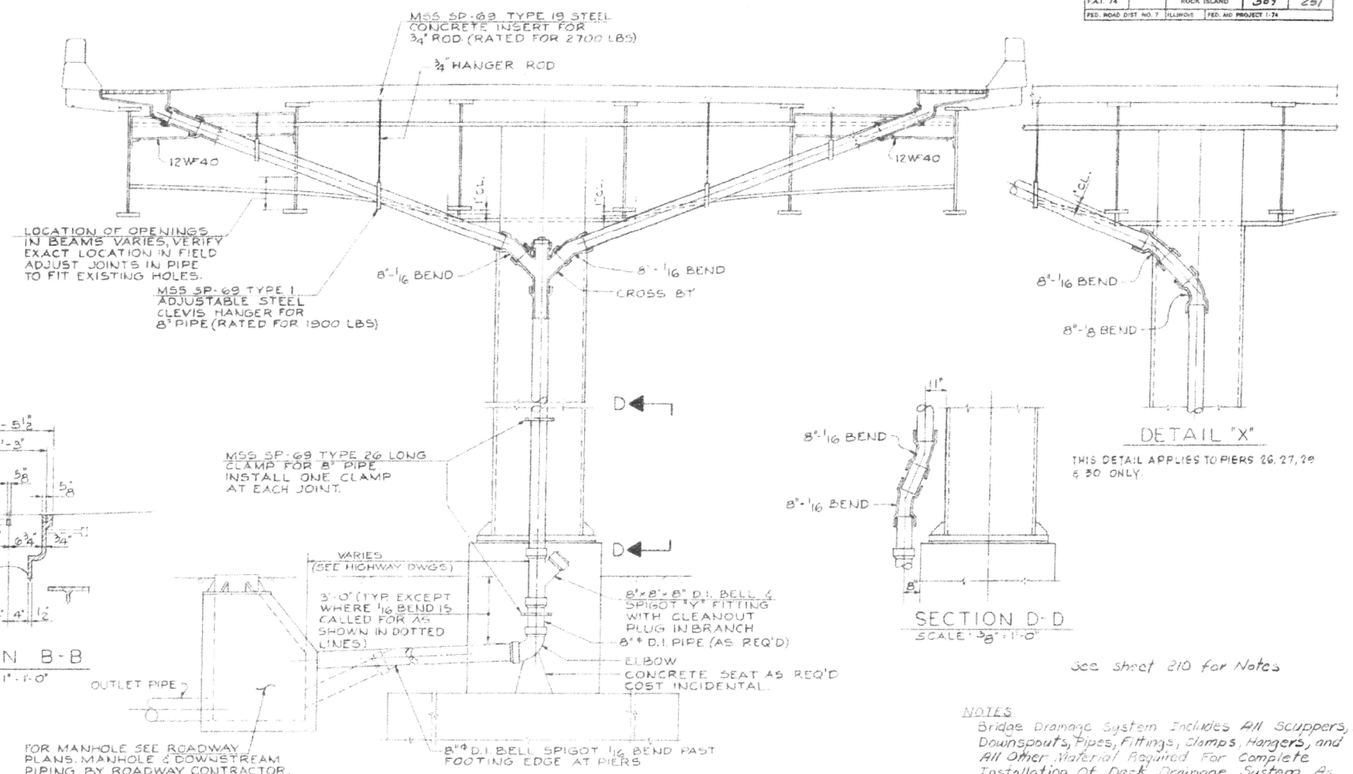
SECTION A-A
SCALE 1"=1'-0"



SECTION B-B
SCALE: 1"=1'-0"



SECTION C-C
SCALE: 1"=1'-0"



TYPICAL DRAIN DETAIL
NOT TO SCALE

SECTION D-D
SCALE: 3/8"=1'-0"

DETAIL "X"

THIS DETAIL APPLIES TO PIERS 26, 27, 28 & 30 ONLY.

See sheet 210 for Notes

NOTES

Bridge Drainage System Includes All Scuppers, Downspouts, Pipes, Fittings, Clamps, Hangers, and All Other Material Required For Complete Installation Of Deck Drainage System As Shown.

All Scuppers, Pipes, And Fittings Shall Be Ductile Iron.

Use Maximum Possible Slope On All 8"Φ D.I. Pipe, Always Exceeding 1/2" Per Ft.

PAINTING BRIDGE DRAINAGE SYSTEM

Exposed Portions Of The Drainage System Below The Deck Shall Be Cleaned And Painted As Follows:

1. Cleaning by wire brushing.
2. The prime coat shall be the Basic Lead Silico-Chromate shop primer.
3. Portions of System against structural steel shall be given the Basic Lead Silico-Chromate field coats as specified for structural steel
4. Portions of System against concrete shall be given two coats of aluminum paint.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
BRIDGE DRAINAGE SYSTEM - 19TH. STREET	L.S.	1

DECK DRAINAGE DETAILS

F.A.I. 74 SECTION 81-1HB

F.A.I. 74 & RAMPS OVER RELOC. 19TH ST.

ROCK ISLAND COUNTY

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY J.A. BARRAZA
DRAWN BY D. MARTINSONS
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

K&E CO. 10-9185

FOR INFORMATION ONLY

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Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

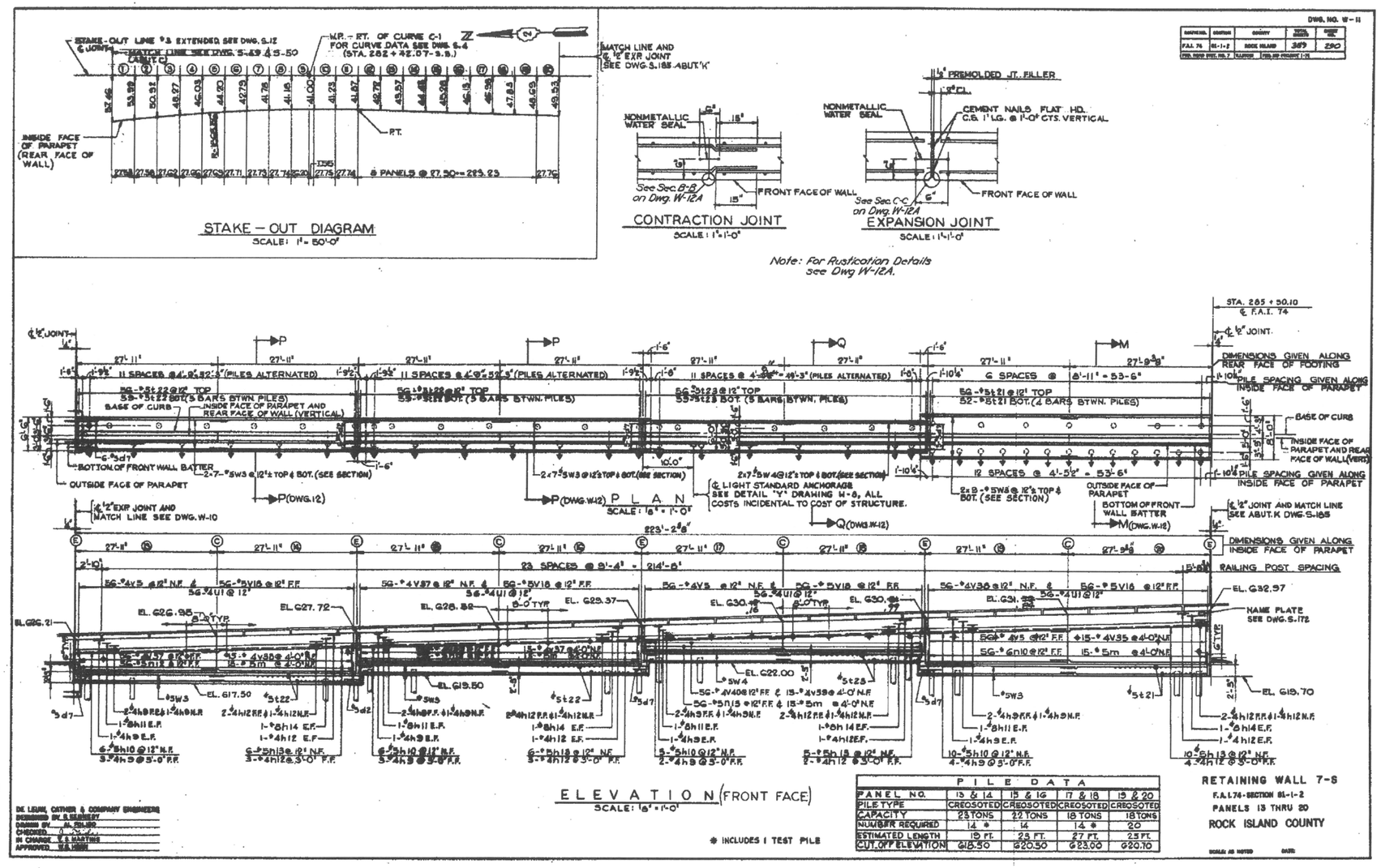
EXISTING PLANS – DECK DRAINAGE DETAILS
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 39 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	907

CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT



FOR INFORMATION ONLY

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	CHECKED -	REVISED	
PLOT SCALE =	DRAWN -	REVISED	
PLOT DATE = 03/23/2017	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – RETAINING WALL 7-S
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 40 OF 45 SHEETS

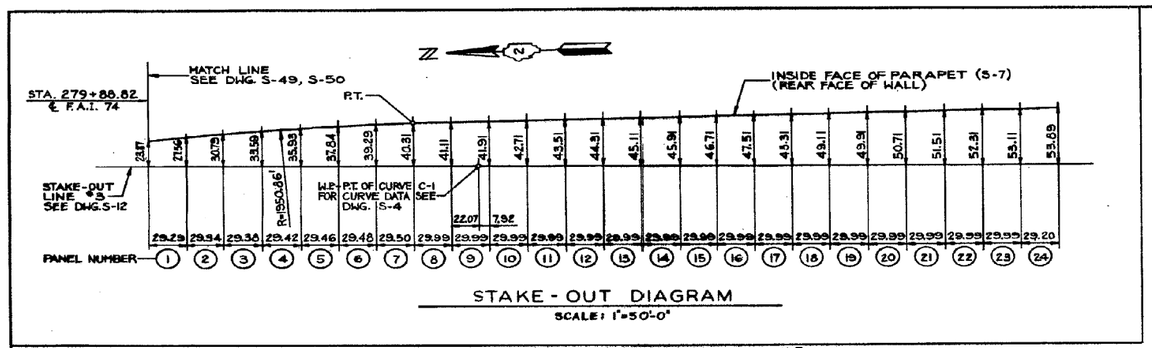
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	908

CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

DWG. NO. W-4

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1-2	ROCK ISLAND	389	283
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		



STAKE - OUT DIAGRAM

SCALE: 1"=5'-0"

Note: For Rustication Details see Dwg. W-12A

LEGEND

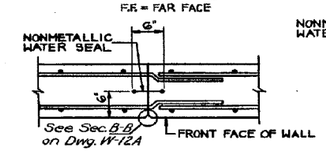
(C) = CONTRACTION JOINT

(E) = EXPANSION JOINT

E.F. = EACH FACE

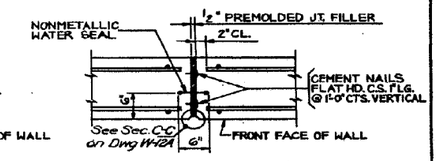
N.F. = NEAR FACE

F.F. = FAR FACE



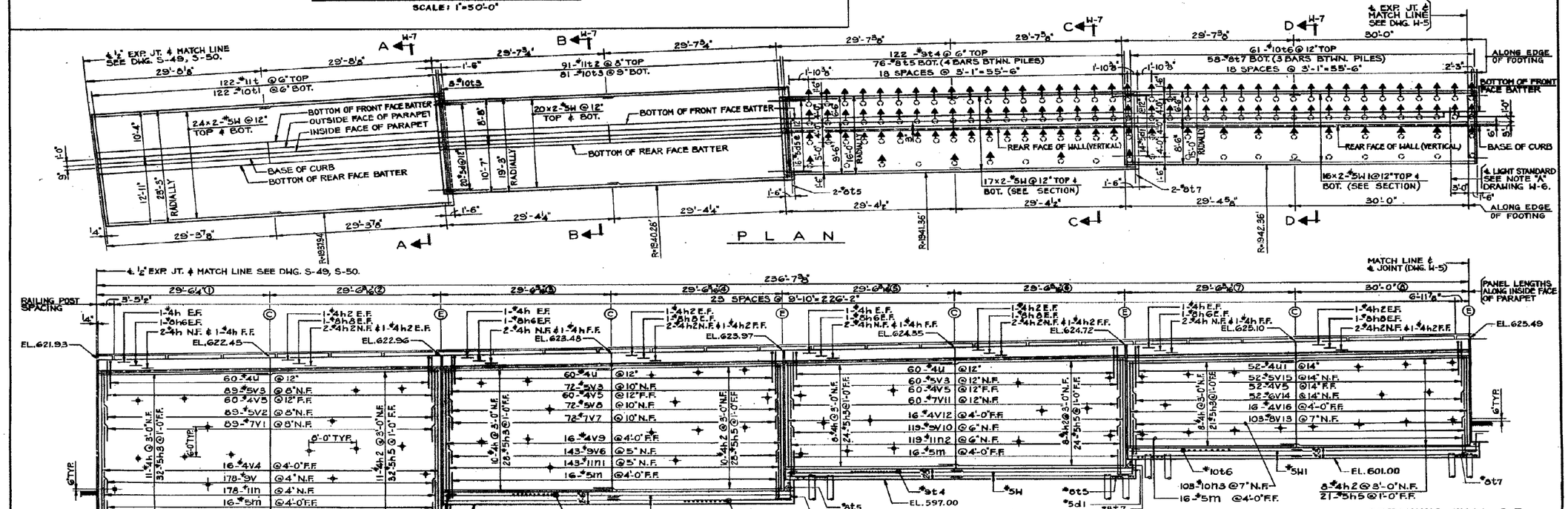
CONTRACTION JOINT

SCALE: 1"=1'-0"



EXPANSION JOINT

SCALE: 1"=1'-0"



DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.KENNEDY
DRAWN BY R.GHORBANIAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

MAXIMUM TOE PRESSURES:

PANELS	1 & 2	8000 PSF
PANELS	3 & 4	6500 PSF

PILE DATA

PANEL LOCATION	5 & 6	7 & 8
PILE TYPE	CREOSOTED	CREOSOTED
CAPACITY	22 TONS	19 TONS
NUMBER REQUIRED	67*	58
ESTIMATED LENGTH - FT	17	18
CUT OFF ELEVATION	598.00	602.00

* INCLUDES 1 TEST PILE

RETAINING WALL S-7

F.A.I. 74 - SECTION 81-1-2

PANELS 1 THRU 8

ROCK ISLAND COUNTY

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED	
	CHECKED -	REVISED	
PLOT SCALE =	DRAWN -	REVISED	
PLOT DATE = 03/23/2017	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – RETAINING WALL S-7 (PANELS 1 THRU 8)
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 41 OF 45 SHEETS

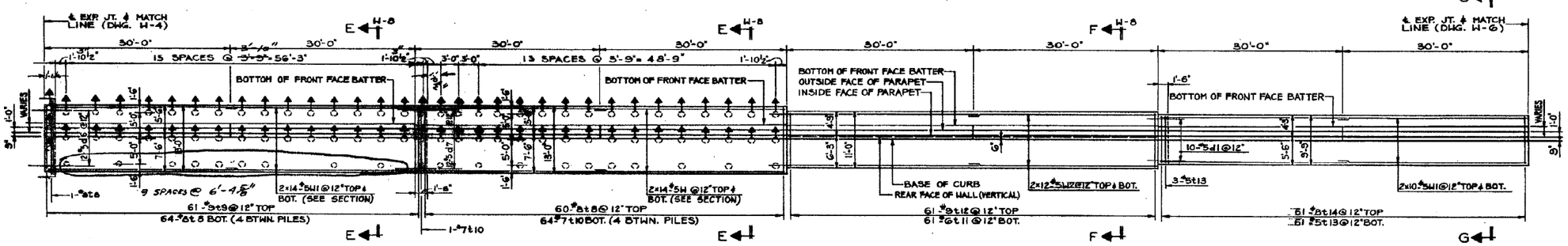
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	909

CONTRACT NO. 64E26

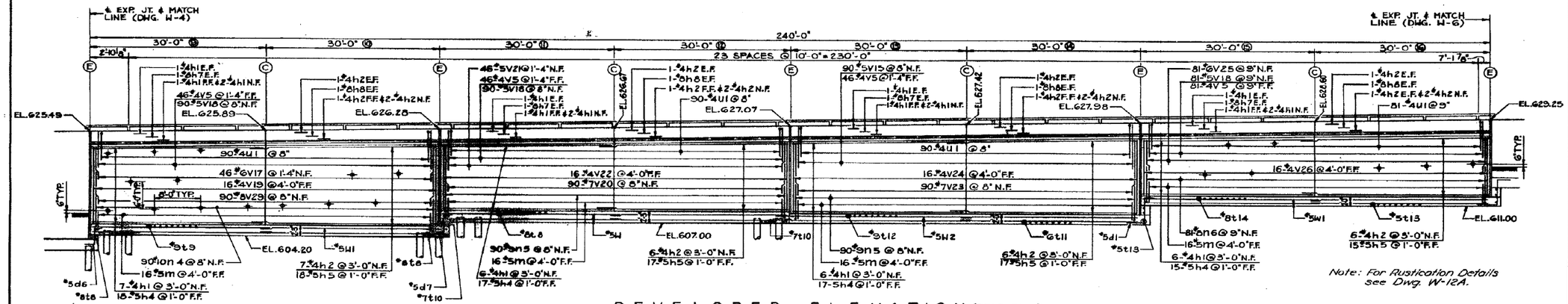
FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

DWG. NO. W-5

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1-2	ROCK ISLAND	289	284
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		



PLAN
SCALE: 1/8" = 1'-0"



DEVELOPED ELEVATION (REAR FACE)
SCALE: 1/8" = 1'-0"

NOTE: WEEP HOLES TYPICAL FOR ALL PANELS.

MAXIMUM BEARING PRESSURES

PANELS	13 & 14	4200 PSF.
PANELS	15 & 16	3500 PSF.

* INCLUDES 1 TEST PILE

PILE DATA		
PANEL LOCATION	9 & 10	11 & 12
PILE TYPE	CREOSOTED	CREOSOTED
CAPACITY	23 TONS	20 TONS
NUMBER REQUIRED	42*	42
ESTIMATED LENGTH - FT	15	17
CUT OFF ELEVATION	605.20	608.00

RETAINING WALL S-7
F.A.I. 74 - SECTION 81-1-2
PANELS 9 THRU 16
ROCK ISLAND COUNTY

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. KENNEDY
DRAWN BY R. GHORBANIAN
CHECKED
IN CHARGE E. B. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED	
	CHECKED -	REVISED	
PLOT SCALE =	DRAWN -	REVISED	
PLOT DATE = 03/23/2017	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – RETAINING WALL S-7 (PANELS 9 THRU 16)
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 42 OF 45 SHEETS

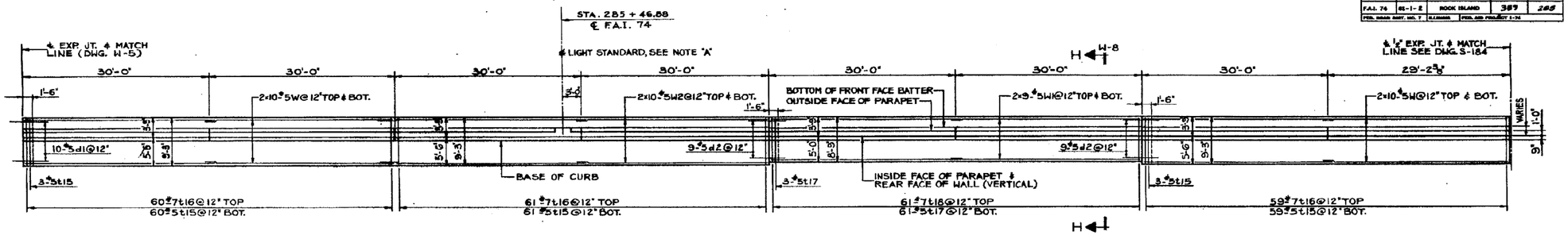
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	910

CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

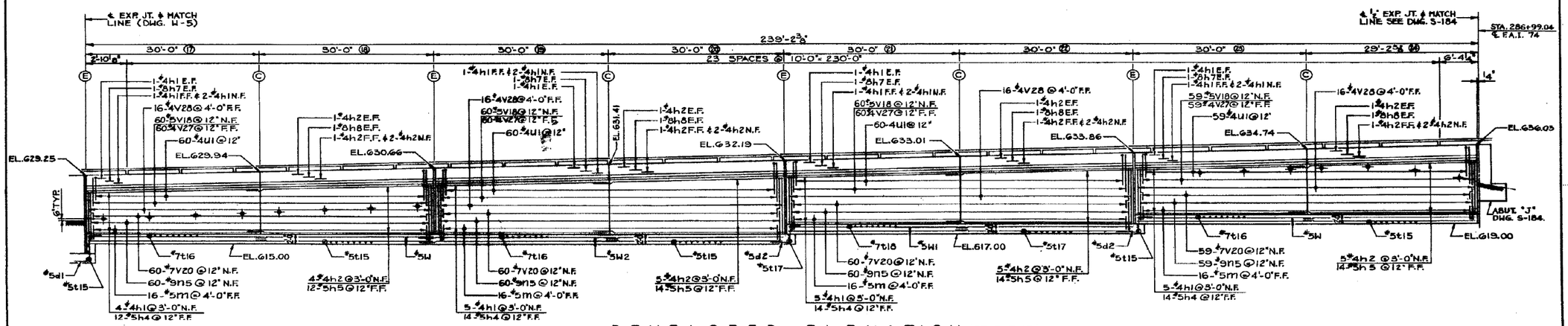
DWG. NO. W-6

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1-2	ROCK ISLAND	389	285
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		



PLAN

SCALE : 1/8" = 1'-0"



DEVELOPED ELEVATION (REAR FACE)

SCALE : 1/8" = 1'-0"

NOTE: WEEP HOLES TYPICAL FOR ALL PANELS.
NOTE 'A': FOR DETAILS SEE SECTION X-X DWG. W-8.
ALL COSTS INCIDENTAL TO COST OF STRUCTURE.

MAXIMUM BEARING PRESSURES

PANELS 17 THRU 20	3400	PSF.
PANELS 21 & 22	3500	PSF.
PANELS 23 & 24	3600	PSF.

Note: For Rustication Details see Dwg. W-12A.

RETAINING WALL S-7
F.A.I. 74 - SECTION 81-1-2
PANELS 17 THRU 24
ROCK ISLAND COUNTY

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. KENNEDY
DRAWN BY R. GHORBANIAN
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED	
	CHECKED -	REVISED	
PLOT SCALE =	DRAWN -	REVISED	
PLOT DATE = 03/23/2017	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

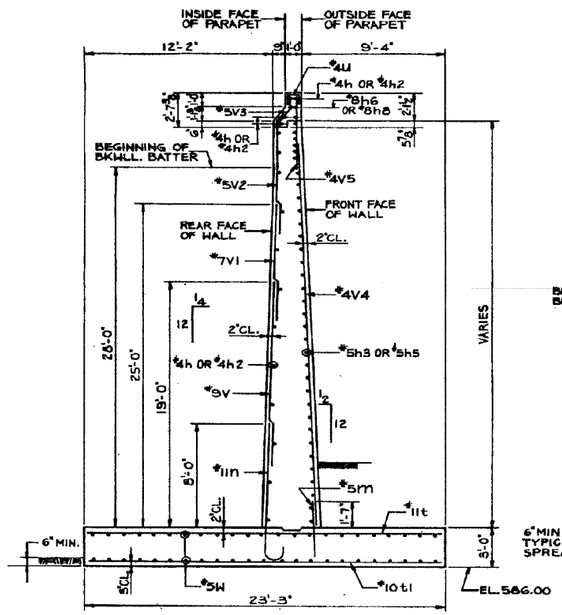
EXISTING PLANS – RETAINING WALL S-7 (PANELS 17 THRU 24)
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 43 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	911
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

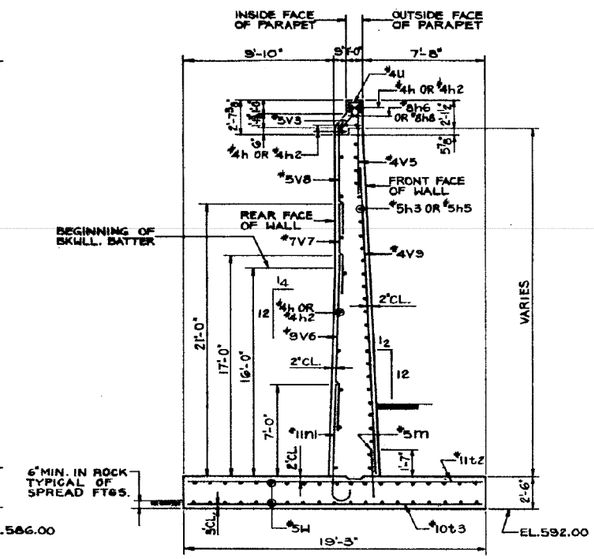
DWG. NO. W-7

SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1-2	ROCK ISLAND	389	286
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		



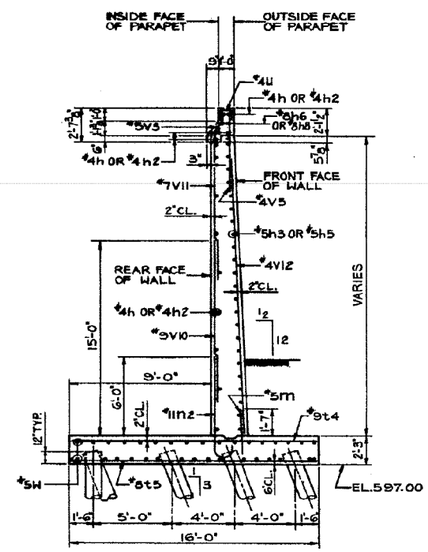
PANELS ① & ②
SCALE: 1/4"=1'-0"

SECTION A-A (DWG. W-4)



PANELS ③ & ④
SCALE: 1/4"=1'-0"

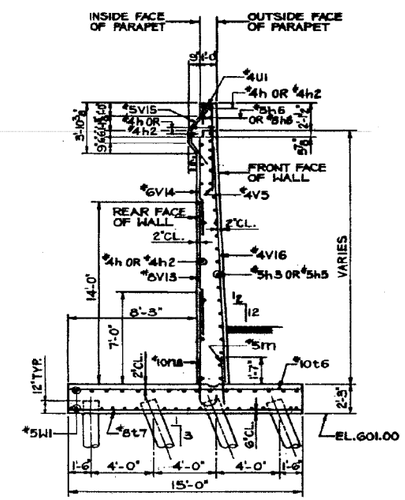
SECTION B-B (DWG. W-4)



PANELS ⑤ & ⑥
SCALE: 1/4"=1'-0"

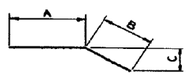
SECTION C-C (DWG. W-4)

Note: For Rustication Details see Dwg. W-12A.



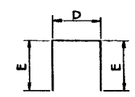
PANELS ⑦ & ⑧
SCALE: 1/4"=1'-0"

SECTION D-D (DWG. W-4)



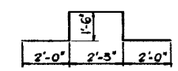
BAR V2, V8, V11 & d4

BAR	A	B	C
V2	8'-6"	1'-6"	9½"
V8	8'-0"	1'-6"	9½"
V11	10'-3"	1'-6"	9½"
d4	4'-3"	1'-6"	9"



BAR U & U1

BAR	D	E
U	8"	9"
U1	8"	2'-0"



BAR d3

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
h	57	4	29'-3"	—	T1	122	10	23'-0"	—	U1	642	4	4'-8"	—	V18	500	5	4'-11"	—	d4	6	6	5'-9"	—
h1	89	4	29'-9"	—	T2	91	11	19'-0"	—	V	178	9	14'-0"	—	V19	16	4	16'-3"	—	d5	16	5	10'-3"	—
h2	136	4	31'-0"	—	T3	84	10	19'-0"	—	V1	89	7	8'-6"	—	V20	329	7	8'-3"	—	d6	12	5	8'-8"	—
h3	105	5	29'-3"	—	T4	122	9	15'-9"	—	V2	89	5	11'-0"	—	V21	46	5	5'-3"	—	d7	12	5	8'-0"	—
h4	121	5	29'-9"	—	T5	78	8	15'-9"	—	V3	221	5	2'-8"	—	V22	16	4	14'-9"	—					
h5	226	5	31'-3"	—	T6	61	10	14'-9"	—	V4	16	4	30'-9"	—	V23	90	7	12'-6"	—					
h6	8	8	29'-3"	—	T7	60	8	14'-9"	—	V5	451	4	4'-0"	—	V24	16	4	15'-9"	—					
h7	16	8	29'-9"	—	T8	125	8	12'-9"	—	V6	143	9	12'-10"	—	V25	81	6	9'-6"	—					
h8	24	8	32'-0"	—	T9	61	9	12'-9"	—	V7	72	7	6'-6"	—	V26	16	4	12'-9"	—					
					T10	65	7	12'-9"	—	V8	72	5	9'-6"	—	V27	239	4	6'-0"	—					
m	192	5	3'-3"	—	T11	61	6	10'-9"	—	V9	16	4	26'-0"	—	V28	64	4	10'-0"	—					
n	178	11	11'-8"	⊃	T12	61	9	10'-9"	—	V10	119	9	12'-0"	—	V29	90	8	8'-6"	—					
n1	143	11	10'-2"	⊃	T13	64	5	9'-6"	—	V11	60	7	12'-3"	—	W	360	5	31'-0"	—					
n2	119	11	9'-0"	⊃	T14	61	8	9'-6"	—	V12	16	4	22'-5"	—	W1	196	5	31'-6"	—					
n3	103	10	9'-10"	⊃	T15	186	5	9'-0"	—	V13	103	8	9'-9"	—	W2	88	5	32'-0"	—					
n4	90	10	9'-9"	⊃	T16	180	7	9'-0"	—	V14	52	6	7'-9"	—	d	20	5	11'-6"	⊔					
n5	419	9	8'-8"	⊃	T17	64	5	8'-6"	—	V15	142	5	4'-5"	⌒	d1	34	5	9'-0"	⊔					
n6	81	8	8'-6"	⊃	T18	61	7	8'-6"	—	V16	16	4	19'-0"	—	d2	18	5	7'-0"	⊔					
T	122	11	23'-0"	—	U	180	4	2'-2"	⊏	V17	46	6	6'-0"	—	d3	14	6	9'-3"	⊔					

BILL OF MATERIAL *

ITEM	UNIT	QUANTITY
STRUCTURE EXCAVATION	CU. YD.	6967
CLASS "X" CONCRETE	CU. YD.	1722.2
REINFORCEMENT BARS	POUND	224,805
ALUMINUM RAILING	LIN. FT.	716
PROTECTIVE COAT	SQ. YD.	280
FURNISHING CREOSOTED PILES UP TO 20 FT.	LIN. FT.	3495
DRIVING TIMBER PILES	LIN. FT.	3495
TEST PILES (TIMBER)	EACH	2

* INCLUDES ALL WORK SHOWN ON DWG. W-4 THRU W-7.

NOTE:
FOR RAILING DETAILS SEE DWG. NO. S-172.

RETAINING WALL S-7
CROSS SECTIONS
F.A.I. 74 - SECTION 81-1-2
PANELS 1 THRU 8
ROCK ISLAND COUNTY

SCALE: AS NOTED DATE

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. KENNEDY
DRAWN BY R. SHORBANIAN
CHECKED
IN CHARGE T.S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – RETAINING WALL S-7 (CROSS SECTIONS)
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A

SHEET NO. 44 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	912

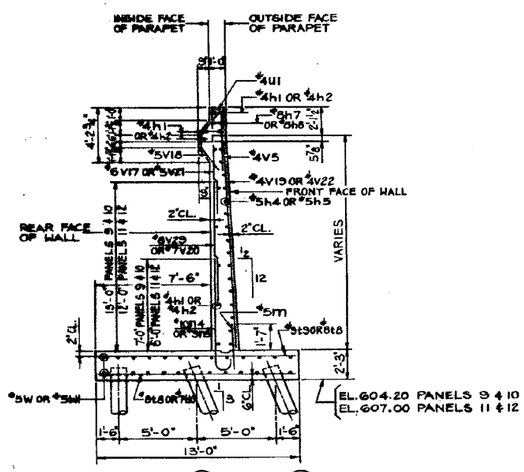
CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

DWG. NO. W-8

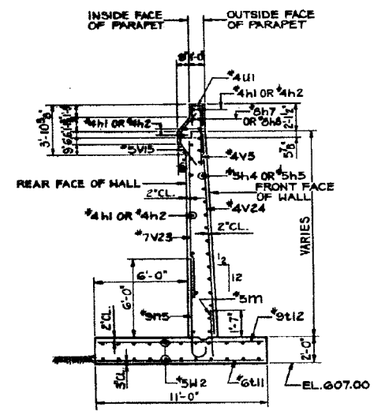
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1-2	ROCK ISLAND	383	287
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-74		

Note: For Rustication Details see Dwg. W-12A.



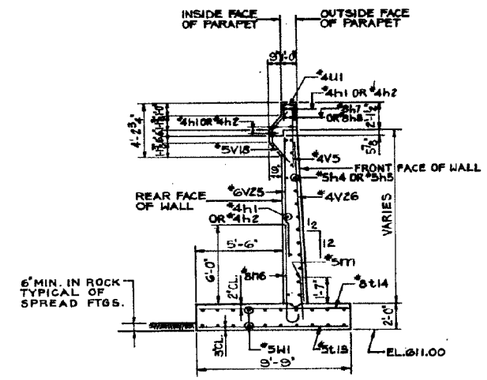
PANELS (9) THRU (12)
SCALE: 1/4"=1'-0"

SECTION E-E (DWG. W-5)



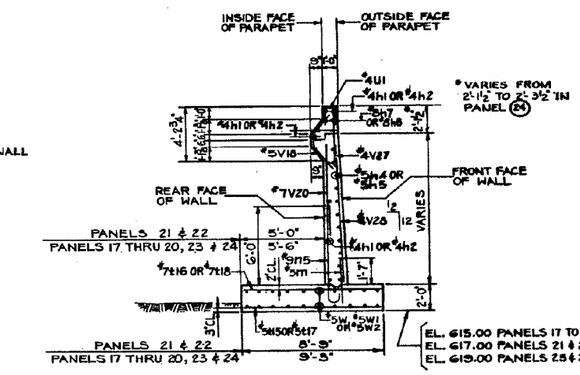
PANELS (13) & (14)
SCALE: 1/4"=1'-0"

SECTION F-F (DWG. W-5)



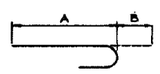
PANELS (15) & (16)
SCALE: 1/4"=1'-0"

SECTION G-G (DWG. W-5)



PANELS (17) THRU (24)
SCALE: 1/4"=1'-0"

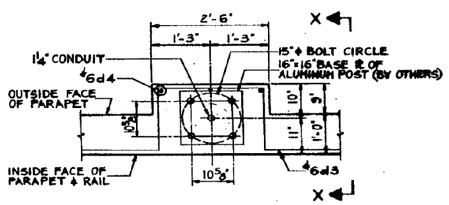
SECTION H-H (DWG. W-6)



BARS n TO n6

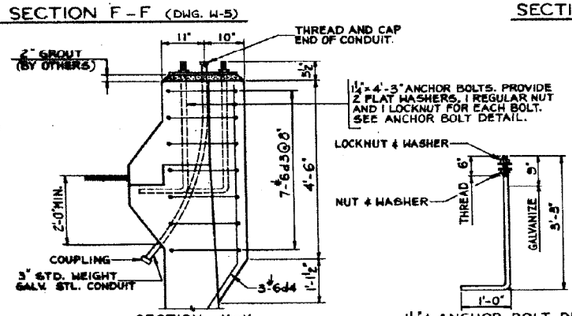
BAR	A	B
n	1'-2"	10'-6"
n1	1'-2"	9'-0"
n2	1'-2"	7'-10"
n3	1'-1"	6'-9"
n4	1'-1"	6'-8"
n5	1'-0"	7'-8"
n6	10"	7'-8"

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. KENNEDY
DRAWN BY R. SHORBANAN
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W.G. HOHN



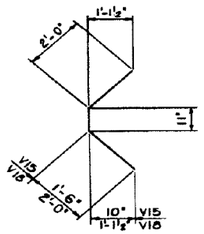
DETAIL "Y"
SCALE: 3/4"=1'-0"

COST OF ANCHOR BOLTS AND CONDUITS IS INCIDENTAL.

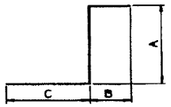


SECTION X-X
SCALE: 3/4"=1'-0"

1¼" ANCHOR BOLT DETAIL
SCALE: 3/4"=1'-0"

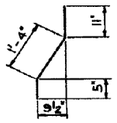


BAR V15 & V18



BAR d, d1, d2, d5, d6 & d7

BAR	A	B	C
d	7'-9"	1'-3"	2'-6"
d1	5'-3"	1'-3"	2'-6"
d2	3'-3"	1'-3"	2'-6"
d5	6'-6"	1'-3"	2'-6"
d6	4'-9"	1'-3"	2'-6"
d7	4'-3"	1'-3"	2'-6"



BAR V3

RETAINING WALL S-7
CROSS SECTIONS
F.A.I. 74 - SECTION 81-1-2
PANELS 9 THRU 24
ROCK ISLAND COUNTY

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – RETAINING WALL S-7 (CROSS SECTIONS)
I-74 AT 19TH ST. – SN 081-0179 WB, 081-0180 EB, 081-0181 RAMP 7TH-A
SHEET NO. 45 OF 45 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	913
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

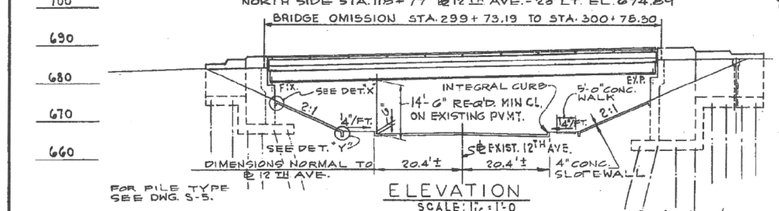
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	296
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1(,) 1.4		

DWG. NO. S-3

BENCH MARKS

12-1 - R.R. SPIKE IN 24" STUMP AT S.E. CORNER OF 12TH AVE. AND 18TH ST. "A" ℄ STA. 122+90 - 45' RT. - EL. 648.71.

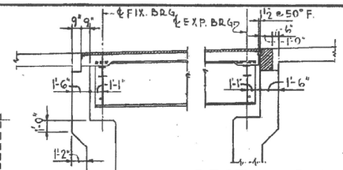
12-2 - □ - CUT ON S.E. CORNER OF 8" CONCRETE RETAINING WALL ON NORTH SIDE STA. 118+77 ℄ 12TH AVE. - 23' LT. EL. 674.89



FOR PILE TYPE SEE DWG. S-5.

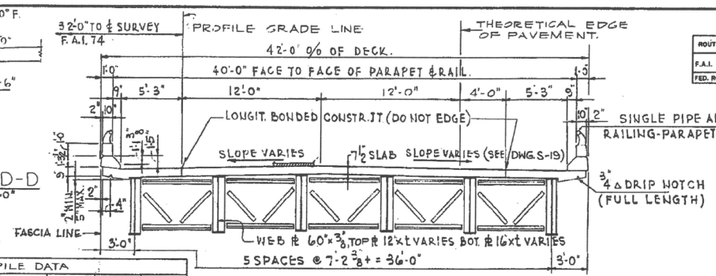
ELEVATION
SCALE: 1/16" = 1'-0"

TABLE I		
SLOPE WALL TOE ELEVATION		
	STATION	ELEVATION
NORTH ABUT.	120+21.90	667.05
	121+79.92	654.33
SOUTH ABUT.	120+44.16	665.26
	122+02.54	652.57

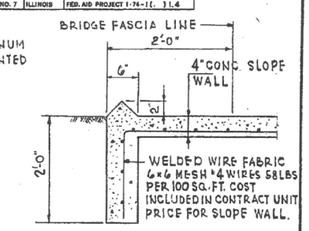


SECTION C-C
SCALE: 3/16" = 1'-0"

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

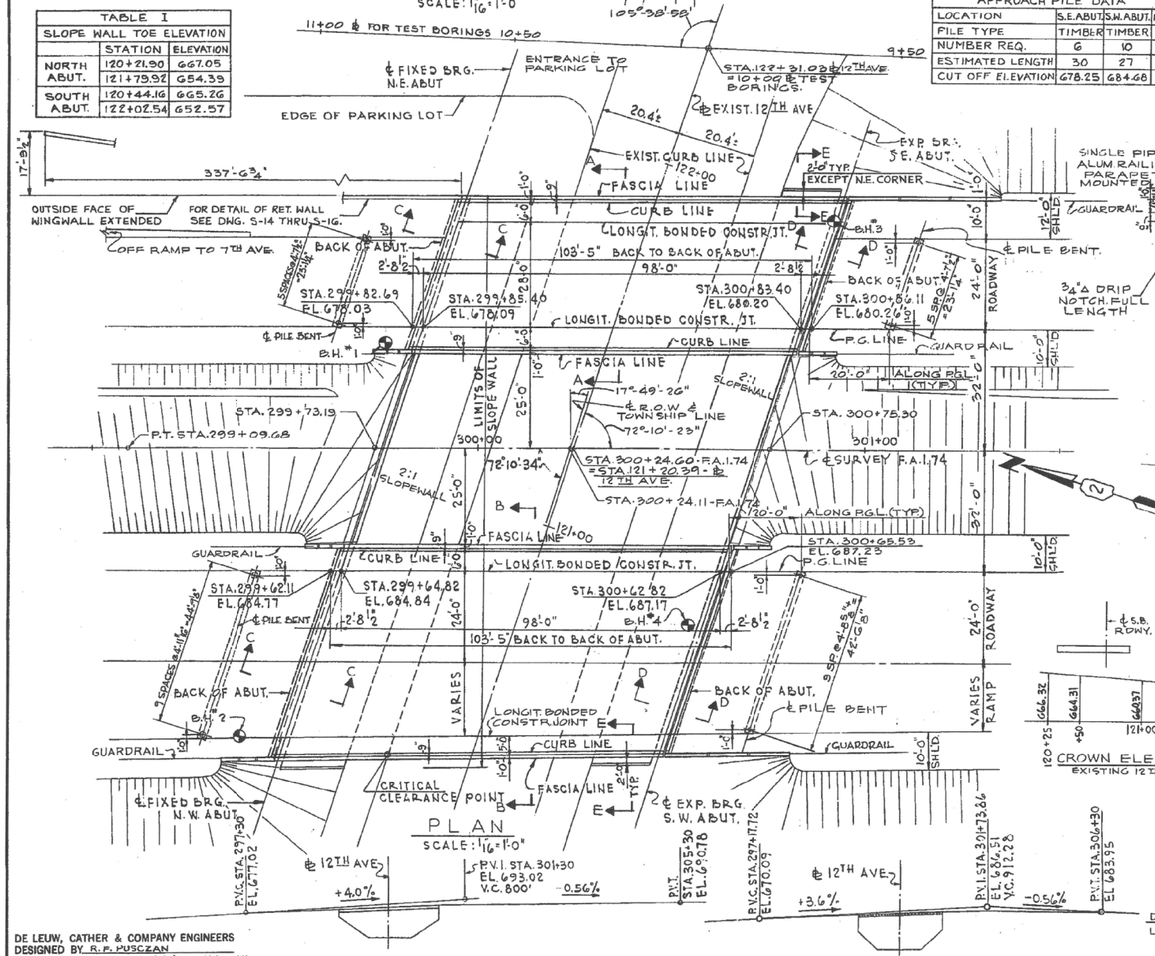


SECTION A-A
SCALE: 3/16" = 1'-0"

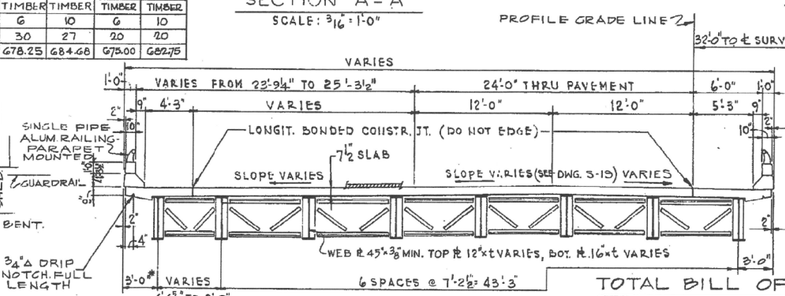


SECTION E-E
SCALE: 1" = 1'-0"

APPROACH PILE DATA				
LOCATION	S.E. ABUT.	S.W. ABUT.	N.E. ABUT.	N.W. ABUT.
PILE TYPE	TIMBER	TIMBER	TIMBER	TIMBER
NUMBER REQ.	6	10	6	10
ESTIMATED LENGTH	30	27	20	20
CUT OFF EL. ELEVATION	678.25	684.68	675.00	682.75



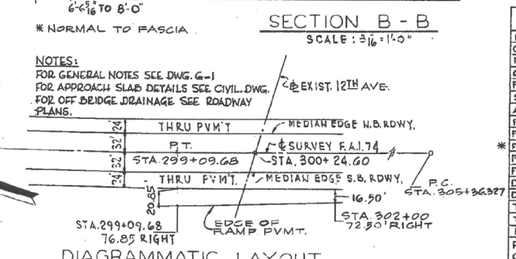
PLAN
SCALE: 1/16" = 1'-0"



* NORMAL TO FASCIA

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

NOTES:
FOR GENERAL NOTES SEE DWG. G-1
FOR APPROACH SLAB DETAILS SEE CIVIL DWG.
FOR OFF BRIDGE DRAINAGE SEE ROADWAY PLANS.



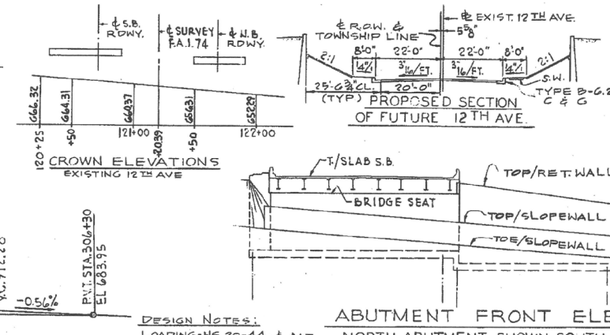
DIAGRAMMATIC LAYOUT

TOTAL BILL OF MATERIAL (BRIDGE ONLY)

ITEM	UNIT	SUPER STRUCTURE	SUB-STRUCTURE	TOTAL
POROUS GRANULAR BACKFILL	CU. YD.	—	875	875
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	—	425.7	425.7
PROTECTIVE COAT	SQ. YD.	325	—	325
CLASS X CONCRETE	CU. YD.	295.9	1,082.0	1,377.9
FURNISHING AND ERECTING STR. STEEL	L.S.	1	1	1
STUD SHEAR CONNECTORS	EACH	4,984	—	4,984
ALUMINUM RAILING	LIN. FT.	421	308	729
REINFORCEMENT BARS	POUND	81,900	154,623	236,523
* FURNISHING CREOSOTED PILES UP TO 20'	LIN. FT.	—	1,295	1,295
* FURNISHING CREOSOTED PILES 20' TO 38'	LIN. FT.	—	7,117	7,117
FURNISHING CREOSOTED PILES OVER 38'	LIN. FT.	—	440	440
FURNISHING CONCRETE PILES	LIN. FT.	—	3,756	3,756
DRIVING TIMBER PILES	LIN. FT.	—	8,852	8,852
DRIVING CONCRETE PILES	LIN. FT.	—	3,756	3,756
TEST PILE TIMBER	EACH	—	3	3
TEST PILE CONCRETE	EACH	—	3	3
NAME PLATES	EACH	—	2	2
PIPE UNDERDRAINS, PERFORATED CORRUGATED STEEL PIPE 6"	LIN. FT.	—	766	766
SLOPE WALL 4"	SQ. YD.	—	618	618
PREFORMED JOINT SEALER	LIN. FT.	102	—	102
BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TON	87	—	87
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	1,028	—	1,028

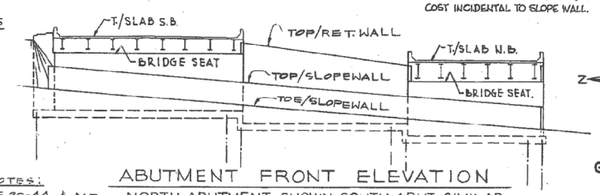
* INCLUDES 770 LIN. FT. OF TIMBER PILES FOR APPROACH PILE BENTS.

WIRE FABRIC NOTE:
SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" x 6" MESH, WEIGHING 58 LBS. PER 100 SQ. FT. COST INCIDENTAL TO SLOPE WALL.



CROWN ELEVATIONS
EXISTING 12TH AVE.

(TYP) PROPOSED SECTION OF FUTURE 12TH AVE.



ABUTMENT FRONT ELEVATION
NORTH ABUTMENT SHOWN, SOUTH ABUT. SIMILAR
NOT TO SCALE

LOCATION PLAN

DESIGN NOTES:
LOADING - HS 20-44 & ALT.
f_c = 1200 P.S.I. SUPERSTRUCTURE.
f_c = 1000 P.S.I. SUBSTRUCTURE.
f_s = 20,000 P.S.I. REINFORCEMENT BARS & STRUCTURAL STEEL. (A-36).
v = 75 P.S.I. MAX. SHEAR IN FOOTINGS.
n = 10
ALLOWABLE L.L. DEFLECTION - $\frac{L}{1200}$ (COMPOSITE)

S.B. PROFILE GRADE F.A.I. 74

N.B. PROFILE GRADE F.A.I. 74

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.P. PUSCZAN
DRAWN BY A.L. BURDKAS & G.P. ALLEMAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

GENERAL PLAN & ELEVATION
F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300 + 20.11
SCALE: AS NOTED DATE:

HE 16 9180

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

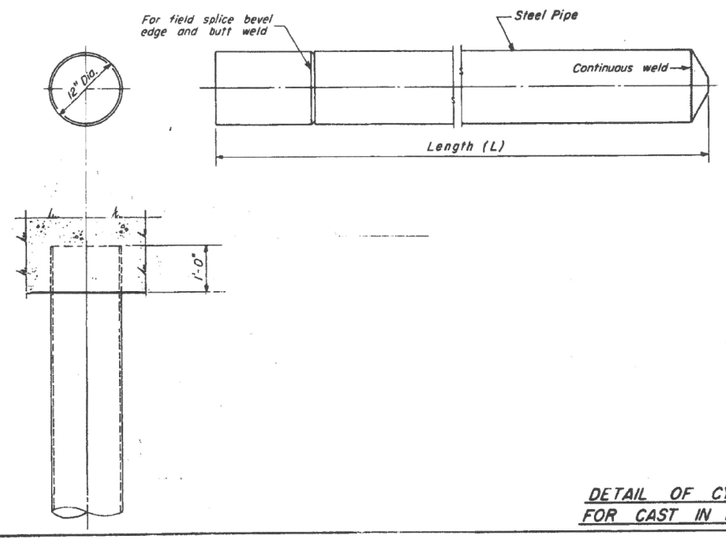
EXISTING PLANS – GENERAL PLAN & ELEVATION
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

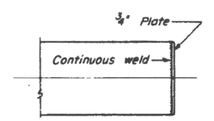
SHEET NO. 1 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	914
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	257
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

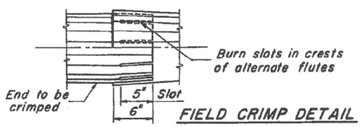
DRAWING NO. S-4





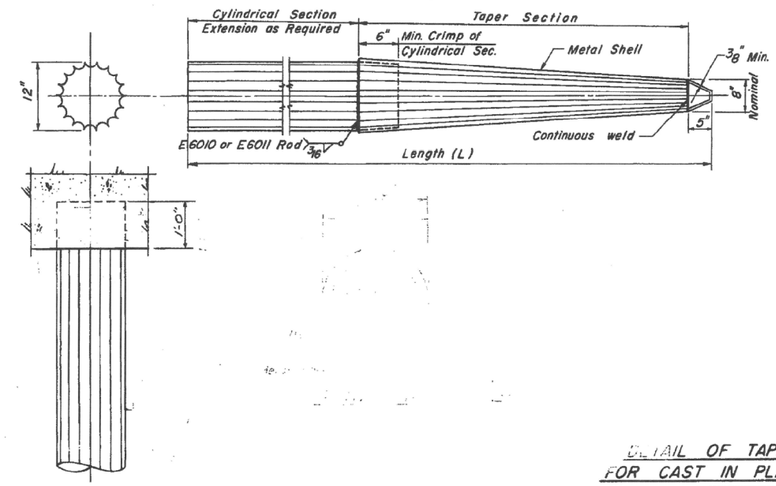
OPTIONAL FLAT END

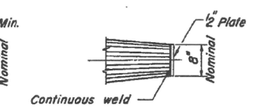
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



FIELD CRIMP DETAIL

Note: 6" Crimp shall be supplied on the cylindrical section or made in the field as detailed.



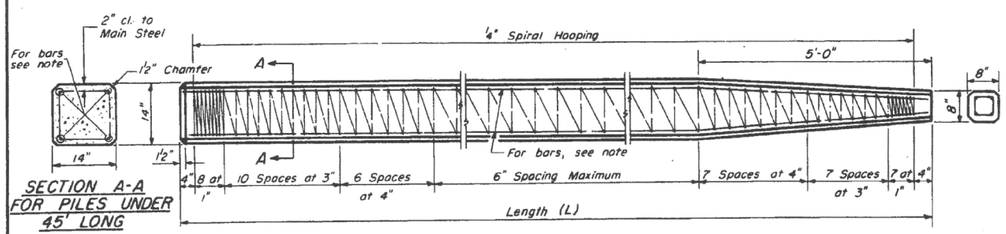


OPTIONAL FLAT END

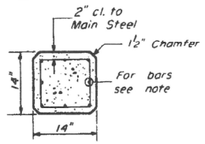
ALLOWABLE TAPER SECTIONS

10' Length - Taper 1" in 2'-6"
17' Length - Taper 1" in 4'-0"
25' Length - Taper 1" in 7'-0"
30' Length - Taper 1" in 7'-0"

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



SECTION A-A FOR PILES UNDER 45' LONG



SECTION A-A FOR PILES 45' OR MORE

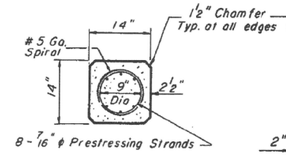
Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 14" Piles under 45' long use 4-#9 bars the full length.

Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L* from each end. For Piles longer than 45', use three slings placed at a distance of 0.12 L* from each end and at mid-point of pile.

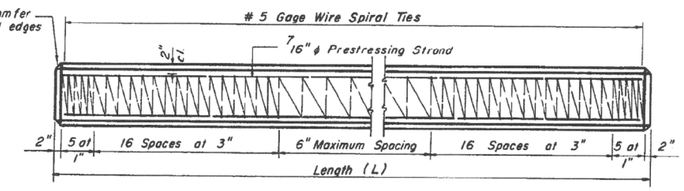
*L = Over all length of pile to be handled.

DE LEUW, CATHER & CO., ENGINEERS
DESIGNED BY STD.
DRAWN BY STD.
CHECKED BY
IN CHARGE
APPROVED W. G. HORN

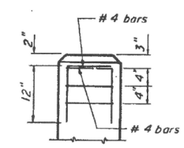
DETAIL OF PRECAST CONCRETE PILES



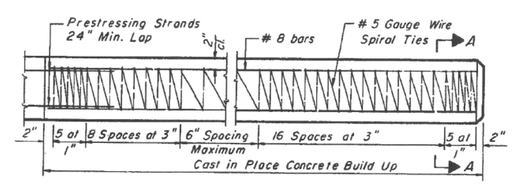
SECTION THRU PILE

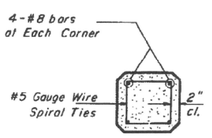


PILE PLAN

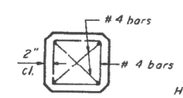


ELEVATION
(End Reinforcement)





SECTION A - A



PLAN
(End Reinforcement)

PILE BUILD UP

Note: Prestressing steel shall be non-galvanized extra high strength stress-relieved 7 wire strand. The nominal diameter shall be 7/16" and the minimum nominal cross-sectional area shall be 0.1155 square inch.

Handling: For pile lengths up to 65', use two slings placed at distance of 0.21L from each end. For piles longer than 65', use three slings placed at a distance of 0.12L from each end at midpoint of pile.

DESIGN STRESSES

fc' = 5,000 psi.
fc'i = 4,000 psi.
fs' = 268,000 psi. (31,000 lbs.)
fs'i = 188,000 psi. (21,700 lbs.)

CONCRETE PILE DETAILS

F.A.I. 74 SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300 + 20.11

DATE:

DETAIL OF PRECAST PRESTRESSED CONCRETE PILES

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED	
	CHECKED -	REVISED	
PLOT SCALE =	DRAWN -	REVISED	
PLOT DATE = 03/23/2017	CHECKED -	REVISED	

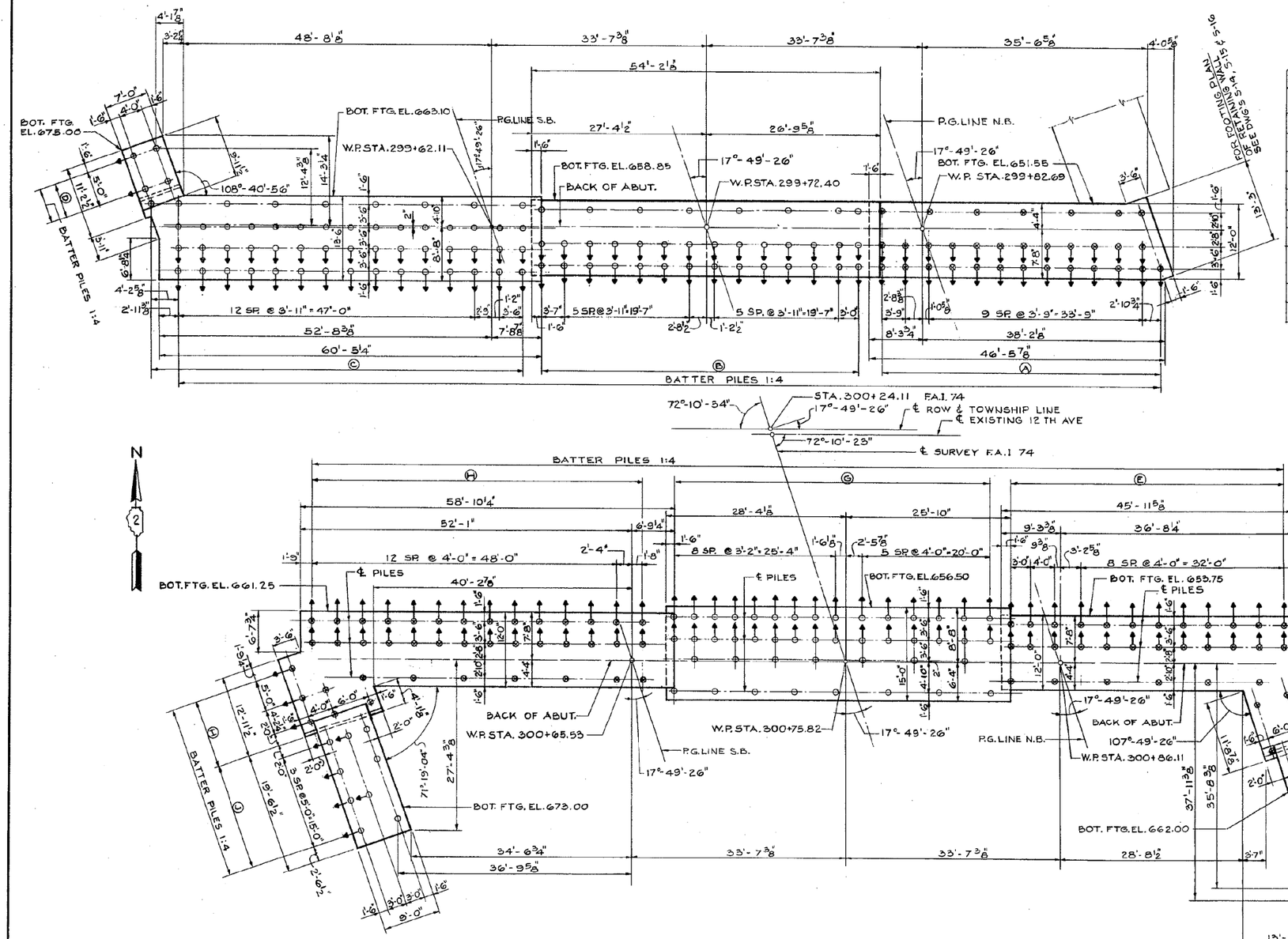
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - CONCRETE PILE DETAILS
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 2 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	915
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	258
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1( ) 1.4		

DWG. NO. S-5



PILE DATA						
PLAN LOCATION	STRUCTURE	PILE TYPE	MINIMUM CAPACITY TONS	NUMBER REQUIRED	ESTIMATED LENGTH FT.	CUT OFF ELEVATION
Ⓐ	N.E. ABUT.	CONCRETE	45	32	24	652.55
Ⓑ	N. MIDWALL	TIMBER	24	36	20	659.85
Ⓒ	N.W. ABUT.	TIMBER	24	54	26	664.10
Ⓓ	N.W. ABUT. WINGWALL	TIMBER	24	4	38'	676.00
Ⓔ	S.E. ABUT. E. END	CONCRETE	45	39	44	654.75
	S.E. ABUT. W. END				34	
Ⓕ	S.E. ABUT. WINGWALL	TIMBER	24	10	44	663.00
Ⓖ	S. MIDWALL E. END	TIMBER	24	45	28	657.50
	S. MIDWALL W. END				14	
Ⓗ	S.W. ABUT.	CONCRETE	45	41	27	662.25
Ⓙ	S.W. ABUT. WINGWALL	TIMBER	24	9	30	674.00

DENOTES BATTER PILES

DENOTES TIMBER PILES

DENOTES CONCRETE PILES

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
FURNISHING CREOSOTED PILES UP TO 20'	LIN. FT.	975
FURNISHING CREOSOTED PILES FROM 20.1' TO 38'	LIN. FT.	2496
FURNISHING CREOSOTED PILES OVER 38'	LIN. FT.	440
DRIVING TIMBER PILES	LIN. FT.	3911
TEST PILES (TIMBER)	EACH	2
FURNISHING CONCRETE PILES	LIN. FT.	3306
DRIVING CONCRETE PILES	LIN. FT.	3306
TEST PILES (CONCRETE)	EACH	3

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. S. KOESTER
DRAWN BY O. MARTINSONS
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W.G. HORN

PILE PLAN

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300 + 20.11

SCALE: 1/8" = 1'-0" DATE:

FOR INFORMATION ONLY

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Experience great bridges.

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	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

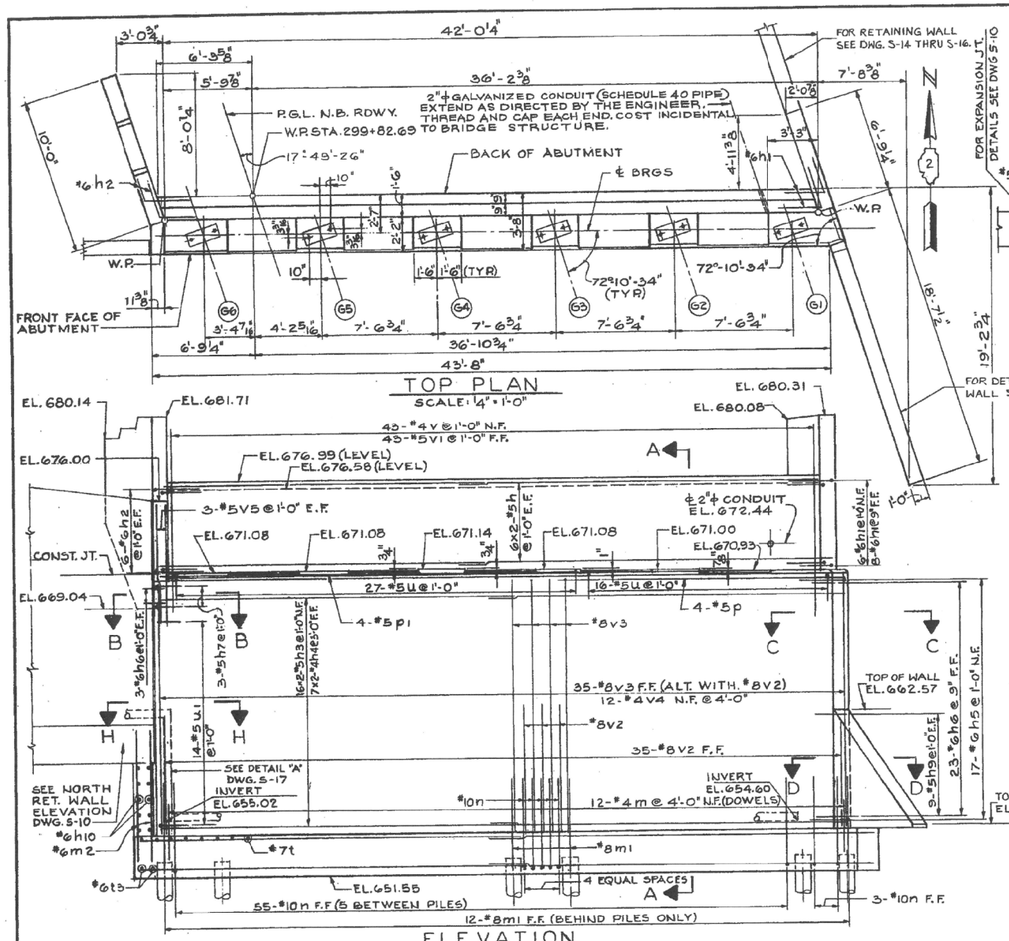
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – PILE PLAN
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 3 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	916
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

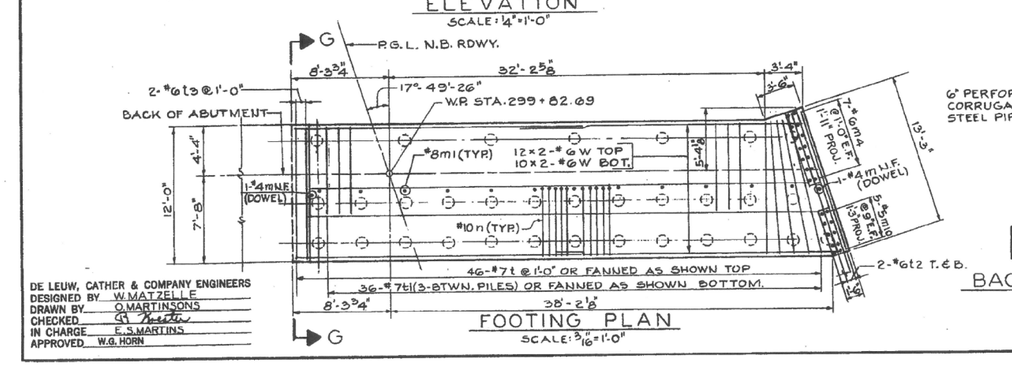
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	259
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1( ) L4		

DWG. NO. S-6

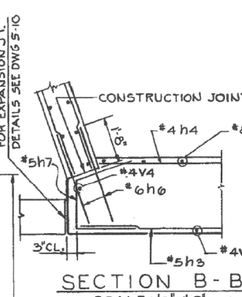


TOP PLAN
SCALE: 1/4" = 1'-0"

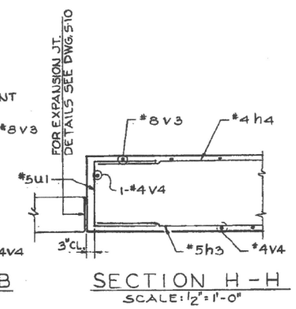
ELEVATION
SCALE: 1/4" = 1'-0"



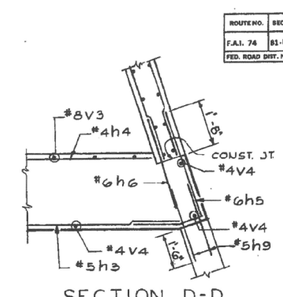
FOOTING PLAN
SCALE: 3/16" = 1'-0"



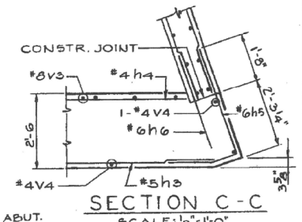
SECTION B-B
SCALE: 1/2" = 1'-0"



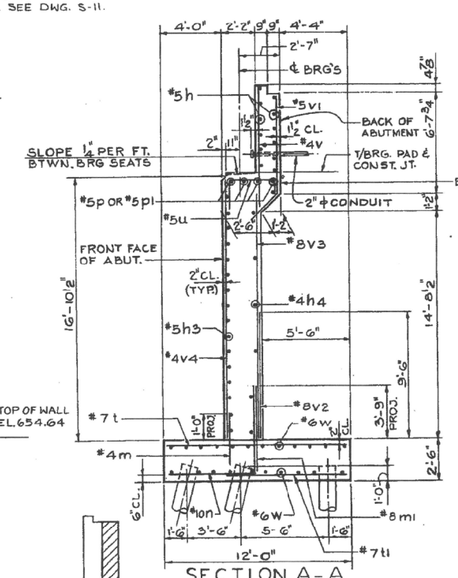
SECTION H-H
SCALE: 1/2" = 1'-0"



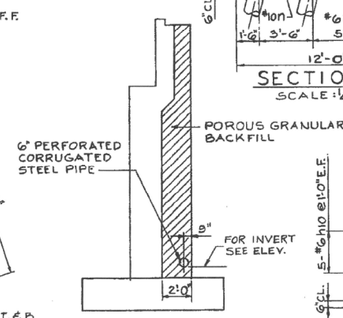
SECTION D-D
SCALE: 1/2" = 1'-0"



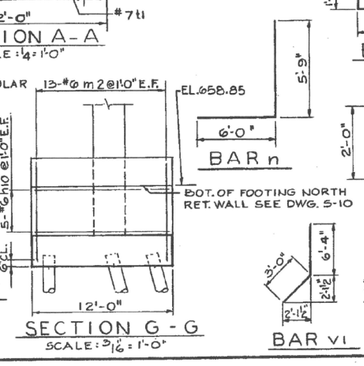
SECTION C-C
SCALE: 1/2" = 1'-0"



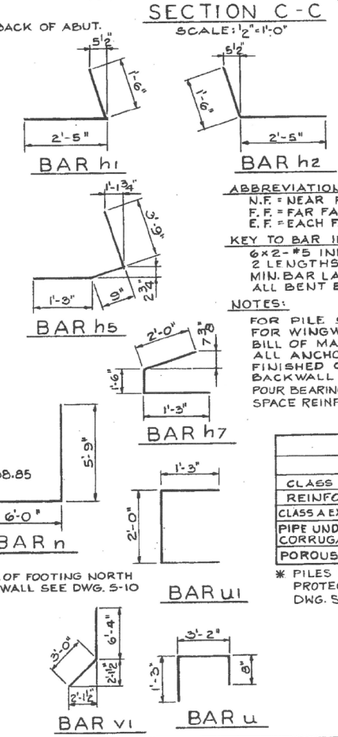
SECTION A-A
SCALE: 1/4" = 1'-0"



BACKFILL AND DRAINAGE DETAIL
NOT TO SCALE



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



BAR LIST				
BAR	NO.	SIZE	LENGTH	SHAPE
h	24	#5	21'-9"	
h1	14	#6	3'-11"	
h2	12	#6	3'-11"	
h3	32	#5	22'-6"	
h4	14	#4	22'-6"	
h5	17	#6	5'-9"	
h6	29	#6	3'-2"	
h7	3	#5	4'-9"	
h9	18	#5	2'-6"	
h10	10	#6	11'-8"	
m	14	#4	2'-0"	
m1	12	#8	5'-9"	
m2	26	#6	9'-0"	
m4	14	#6	4'-0"	
m10	10	#5	2'-6"	
n	58	#10	11'-9"	
p	4	#5	18'-0"	
p1	4	#5	27'-3"	
t	46	#7	11'-6"	
t1	36	#7	7'-3"	
t2	4	#6	12'-9"	
t3	2	#6	11'-6"	
u	43	#5	5'-1"	
u1	14	#5	4'-6"	
v	43	#4	7'-6"	
v1	43	#5	9'-4"	
v2	35	#8	9'-6"	
v3	35	#8	16'-9"	
v4	14	#4	16'-9"	
v5	6	#5	6'-3"	
w	44	#6	24'-6"	

ABBREVIATIONS:
N.F. = NEAR FACE.
F.F. = FAR FACE.
E.F. = EACH FACE.

KEY TO BAR INDICATIONS:
6x2-#5 INDICATES 6 LINES OF #5 BARS WITH 2 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.

NOTES:
FOR PILE SPACING SEE DWG. S-5.
FOR WINGWALL DETAILS SEE DWG. S-11.
BILL OF MATERIAL INCLUDES WINGWALL QUANTITIES.
ALL ANCHOR BOLTS TO PROJECT 3½" ABOVE FINISHED CONCRETE.
BACKWALL ELEVATIONS GIVEN AT NEAR FACE.
POUR BEARING SEAT STEP MONOLITHICALLY WITH WALL.
SPACE REINFORCMENT TO MISS ANCHOR BOLTS.

BILL OF MATERIAL *		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	153.1
REINFORCEMENT BARS	POUND	15,100
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	492
PIPE UNDERDRAINS PERFORATED CORRUGATED STEEL PIPE 6"	LIN. FT.	61
POROUS GRANULAR BACKFILL	CU. YD.	76

* PILES INCLUDED IN BILL OF MATERIAL DWG S-5
PROTECTIVE COAT INCLUDED IN BILL OF MATERIAL DWG. S-18.

NORTHEAST ABUTMENT

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. MATZELLE
DRAWN BY O. MARTINSONS
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

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	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – NORTHEAST ABUTMENT
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 4 OF 21 SHEETS

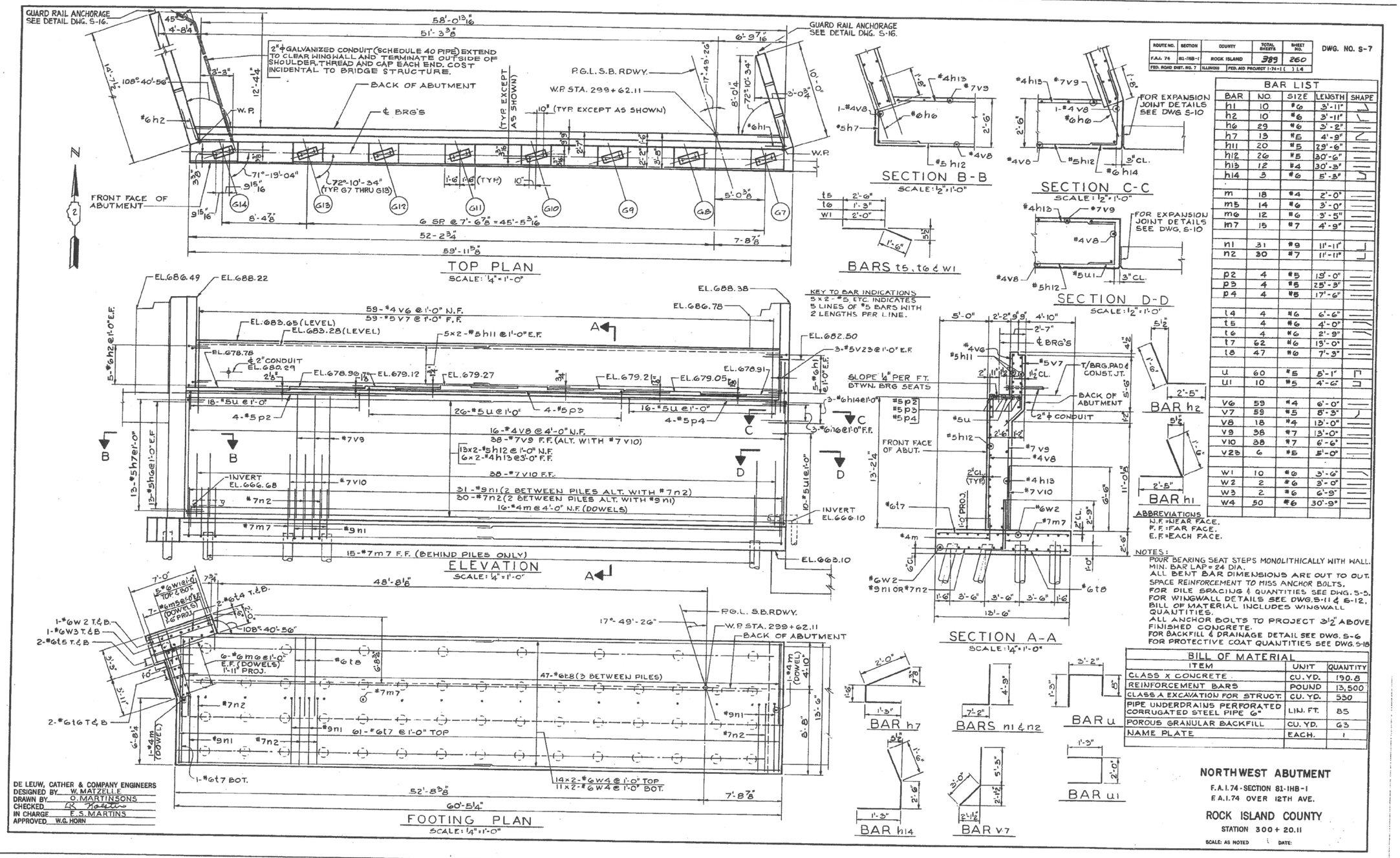
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	917

CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	260
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-74-1 ( ) L4		

DWG. NO. S-7



BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h1	10	#6	3'-11"	
h2	10	#6	3'-11"	
h6	29	#6	3'-2"	
h7	13	#5	4'-9"	
h11	20	#5	29'-6"	
h12	26	#5	30'-6"	
h13	12	#4	30'-3"	
h14	3	#6	5'-3"	
m	18	#4	2'-0"	
m5	14	#6	3'-0"	
m6	12	#6	3'-5"	
m7	15	#7	4'-9"	
n1	31	#9	11'-11"	
n2	30	#7	11'-11"	
p2	4	#5	15'-0"	
p3	4	#5	25'-3"	
p4	4	#5	17'-6"	
t4	4	#6	6'-6"	
t5	4	#6	4'-0"	
t6	4	#6	2'-9"	
t7	62	#6	15'-0"	
t8	47	#6	7'-3"	
u	60	#5	5'-1"	
u1	10	#5	4'-6"	
v6	59	#4	6'-0"	
v7	59	#5	5'-3"	
v8	18	#4	12'-0"	
v9	38	#7	13'-0"	
v10	38	#7	6'-6"	
v23	6	#5	5'-0"	
w1	10	#6	3'-6"	
w2	2	#6	3'-0"	
w3	2	#6	6'-9"	
w4	50	#6	30'-9"	

ABBREVIATIONS
N.F. = NEAR FACE.
F.F. = FAR FACE.
E.F. = EACH FACE.

NOTES:
POUR BEARING SEAT STEPS MONOLITHICALLY WITH WALL.
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
SPACE REINFORCEMENT TO MISS ANCHOR BOLTS.
FOR PILE SPACING & QUANTITIES SEE DWG. S-5.
FOR WINGWALL DETAILS SEE DWG. S-11 & S-12.
BILL OF MATERIAL INCLUDES WINGWALL QUANTITIES.
ALL ANCHOR BOLTS TO PROJECT 3 1/2" ABOVE FINISHED CONCRETE.
FOR BACKFILL & DRAINAGE DETAIL SEE DWG. S-6
FOR PROTECTIVE COAT QUANTITIES SEE DWG. S-18

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	190.8
REINFORCEMENT BARS	POUND	13,500
CLASS A EXCAVATION FOR STRUCT.	CU. YD.	530
PIPE UNDERDRAINS PERFORATED CORRUGATED STEEL PIPE 6"	LIN. FT.	85
POROUS GRANULAR BACKFILL	CU. YD.	63
NAME PLATE	EACH.	1

NORTHWEST ABUTMENT

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

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	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – NORTHWEST ABUTMENT
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 5 OF 21 SHEETS

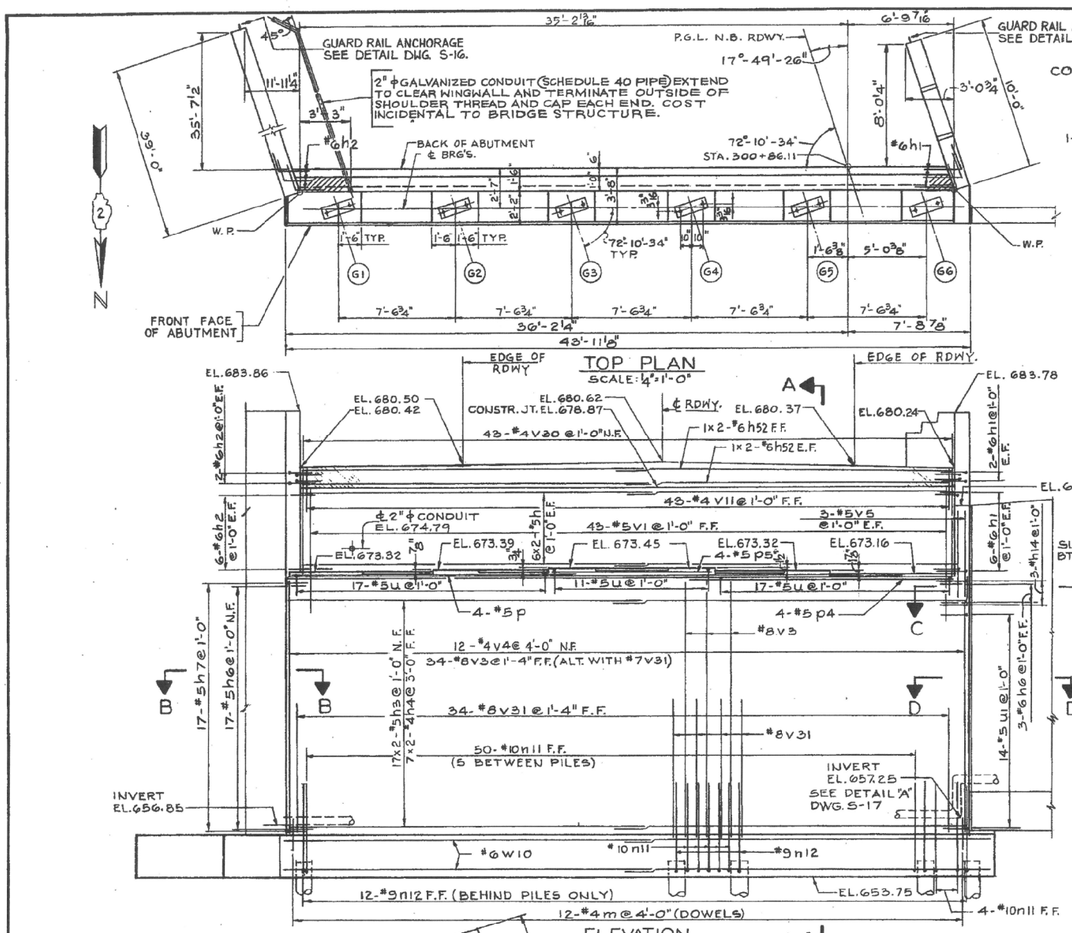
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	918

CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

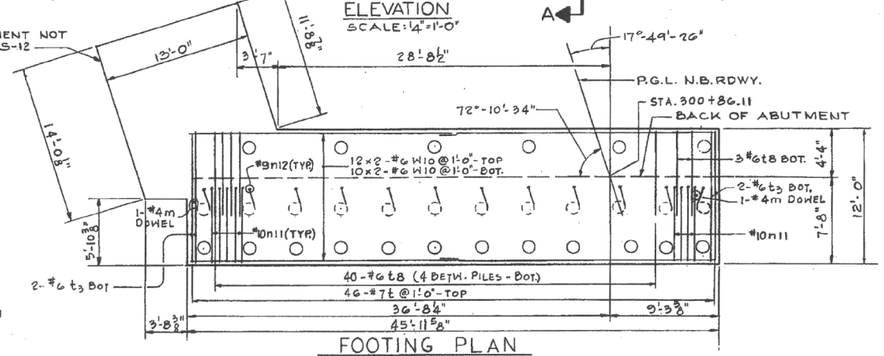
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	261
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 ( ) 1.4		

DWG. NO. S-8

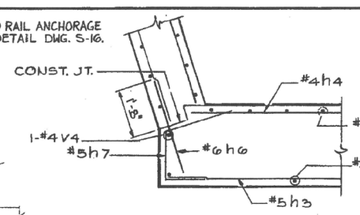


TOP PLAN
SCALE: ¼"=1'-0"

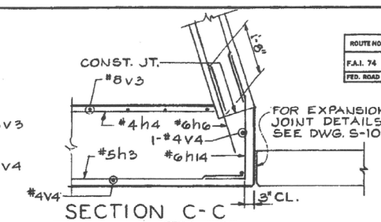
ELEVATION
SCALE: ¼"=1'-0"



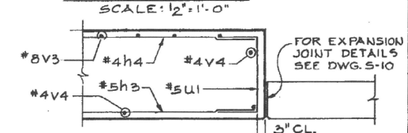
FOOTING PLAN
SCALE: 3/16"=1'-0"



SECTION B-B
SCALE: ½"=1'-0"

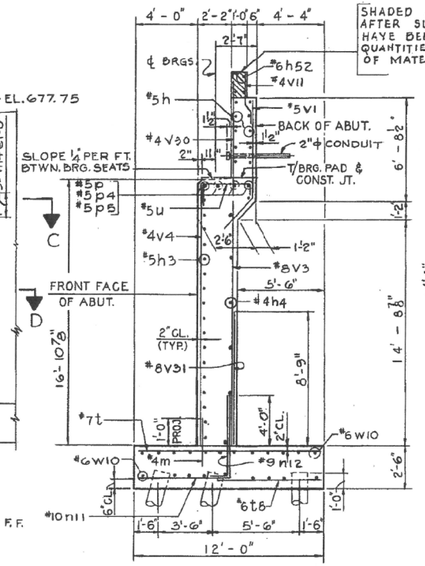


SECTION C-C
SCALE: ½"=1'-0"

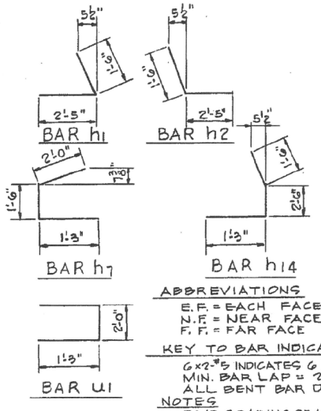


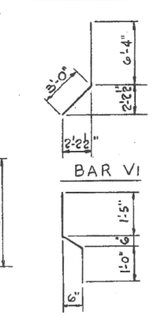
SECTION D-D
SCALE: ½"=1'-0"

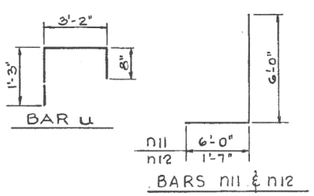
SHADED AREA TO BE POURED AFTER SUPERSTRUCTURE FORMS HAVE BEEN REMOVED. CONCRETE QUANTITIES INCLUDED IN BILL OF MATERIAL ON DWG. S-18.



SECTION A-A
SCALE: ¼"=1'-0"







BAR LIST

BAR	NO	SIZE	LENGTH	SHAPE
h	24	5	21'-9"	—
h1	16	6	3'-11"	⌟
h2	16	6	3'-11"	⌞
h3	34	5	22'-6"	—
h4	14	4	22'-6"	—
h6	20	6	3'-2"	—
h7	17	5	4'-9"	⊏
h14	3	6	5'-3"	⌟
h52	6	6	21'-9"	—
m	14	4	2'-0"	—
n11	54	10	12'-0"	⌟
n12	12	9	7'-7"	⌟
p	4	5	18'-0"	—
p4	4	5	17'-6"	—
p5	4	5	10'-3"	—
t	46	7	11'-6"	—
t3	4	6	11'-6"	—
t8	43	6	7'-3"	—
u	45	5	5'-1"	⊓
u1	14	5	4'-6"	⊏
v1	43	5	9'-4"	⌟
v3	34	8	16'-9"	—
v4	14	4	16'-9"	—
v5	6	5	6'-3"	—
v11	43	4	3'-2"	⊓
v30	43	4	8'-0"	—
v31	34	8	8'-9"	—
w10	44	6	23'-6"	—

ABBREVIATIONS
E.F. = EACH FACE
N.F. = NEAR FACE
F.F. = FAR FACE

KEY TO BAR INDICATIONS:
6 x 2-#5 INDICATES 6 LINES OF #5 BARS WITH 2 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.

NOTES
POUR BEARING SEAT STEP MONOLITHICALLY WITH WALL.
SPACE REINFORCEMENT TO MISS ANCHOR BOLTS.
FOR PILE SPACING AND QUANTITIES, SEE DWG. S-5.
FOR WINGWALL DETAILS SEE DWGS. S-11 AND S-12.
BILL OF MATERIAL INCLUDES WINGWALL QUANTITIES.
ALL ANCHOR BOLTS TO PROJECT 3½" ABOVE FINISHED CONCRETE.
BACKWALL ELEVATIONS GIVEN AT NEAR FACE.
FOR BACKFILL AND DRAINAGAGE DETAIL SEE DWG. S-6
FOR PROTECTIVE COAT QUANTITIES SEE DWG. S-18.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	227.3
REINFORCEMENT BARS	POUND	22,570
CLASS A EXCAVATION FOR STRUCT.	CU. YD.	191
PIPE UNDERDRAINS PERFORATED CORRUGATED STEEL PIPE 6"	LIN. FT.	90
POROUS GRANULAR BACKFILL	CU. YD.	121
NAME PLATE	EACH	1

SOUTHEAST ABUTMENT

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300+20.11

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. MATZELLE
DRAWN BY O. MARTINSONS, N. BERMAN
CHECKED A. Roach
IN CHARGE E. S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

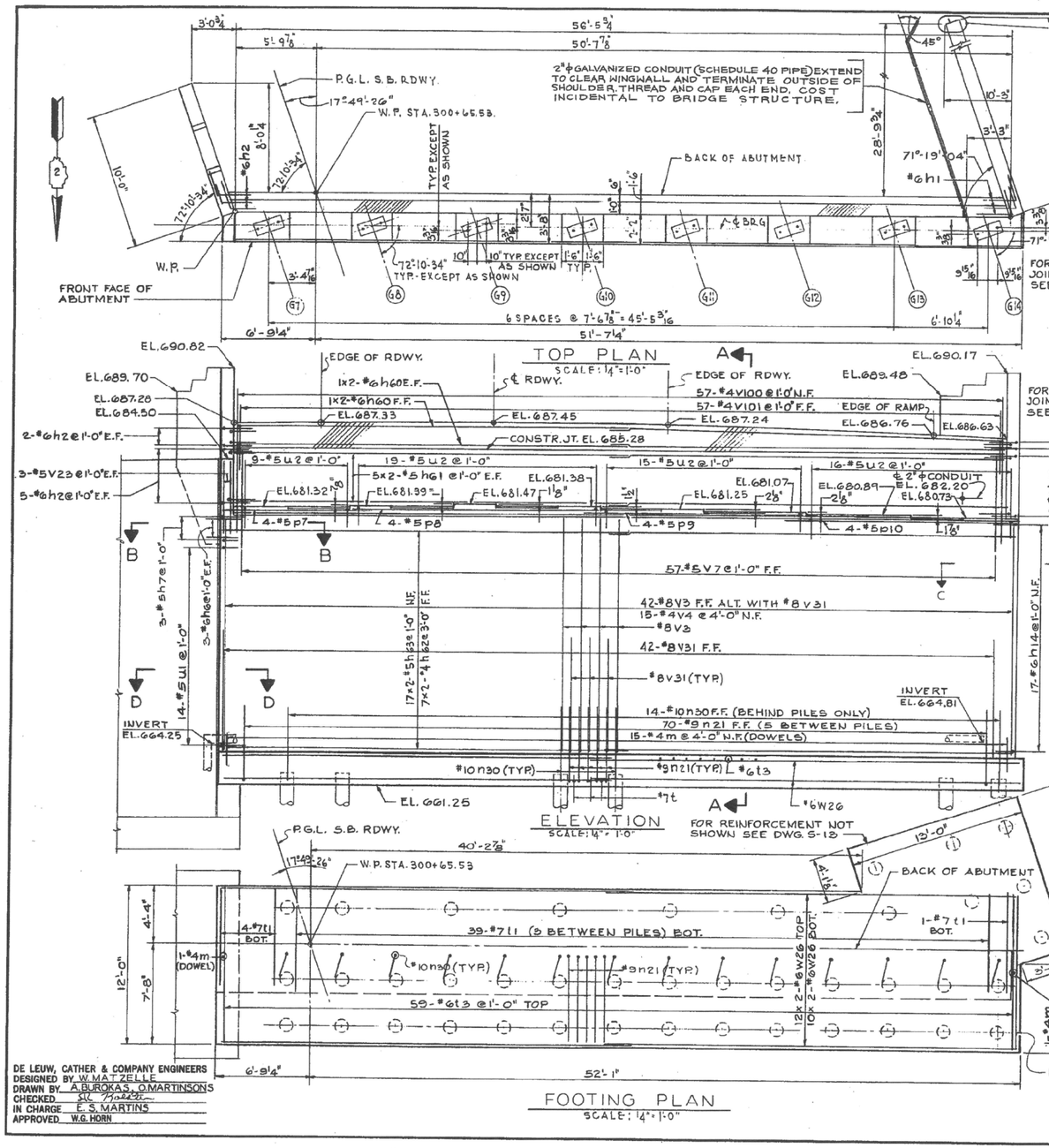
EXISTING PLANS – SOUTHEAST ABUTMENT
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

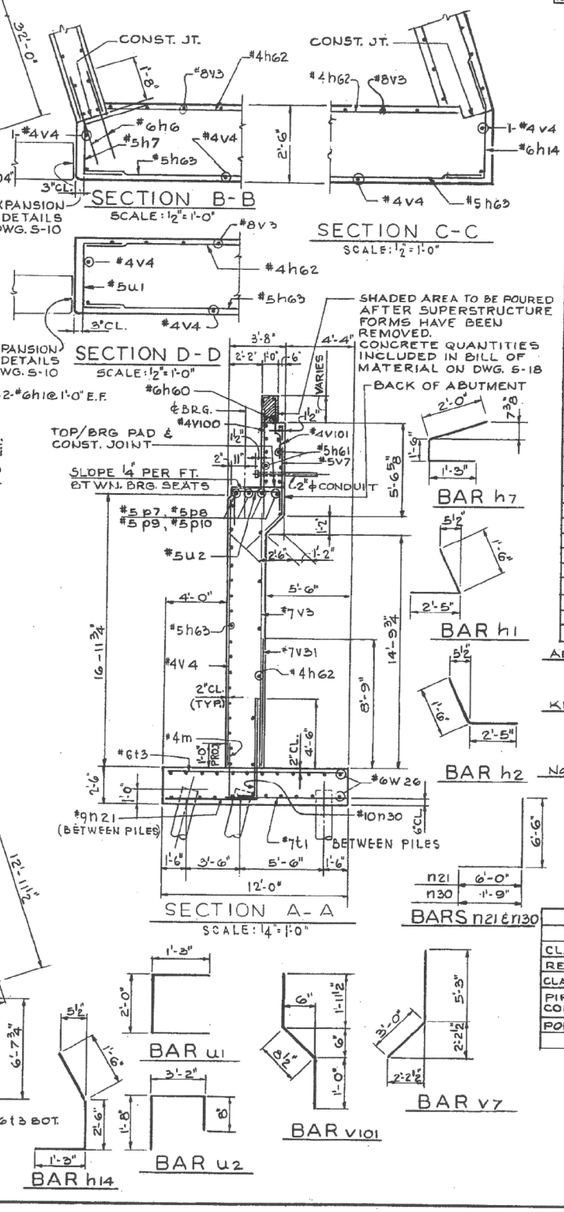
SHEET NO. 6 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	919
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	262
FED. ROAD DIST. NO. 7	ILLINOIS	FED. A/D PROJECT I-74-1 ( ) L.6		

DWG. NO. S-9





BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h1	14	#6	3'-11"	
h2	14	#6	3'-11"	
h6	6	#6	3'-2"	
h7	3	#5	4'-9"	
h14	17	#6	5'-3"	
h60	6	#6	28'-9"	
h61	20	#5	28'-9"	
h62	14	#4	29'-9"	
h63	34	#5	29'-9"	
m	17	#4	2'-0"	
n21	70	#9	12'-6"	
n30	14	#10	8'-3"	
p7	4	#5	10'-9"	
p8	4	#5	17'-9"	
p9	4	#5	16'-3"	
p10	4	#5	16'-6"	
t1	44	#7	7'-3"	
t3	59	#6	11'-6"	
u2	59	#5	5'-6"	
u1	14	#5	4'-6"	
v3	42	#8	16'-9"	
v4	15	#4	16'-9"	
v7	57	#5	8'-3"	
v23	6	#5	5'-0	
v31	42	#8	8'-9"	
v100	57	#4	7'-0"	
v101	57	#4	3'-8"	
w26	44	#6	30'-0"	

ABBREVIATIONS:
E.F. = EACH FACE.
N.F. = NEAR FACE.
F.F. = FAR FACE.

KEY TO BAR INDICATION
5x2-#5 INDICATES 5 LINES OF #5 BARS WITH 2 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENS. ARE OUT TO OUT.

NOTES:
POUR BEARING SEAT STEP MONOLITHICALLY WITH WALL.
SPACE REINFORCEMENT TO MISS ANCHOR BOLTS.
FOR PILE SPACING & QUANTITIES, SEE DWG. S-5.
FOR WINGWALL DETAILS SEE DWG. S-11 AND S-12.
BILL OF MATERIAL INCLUDES WINGWALL QUANTITIES.
FOR PROTECTIVE COAT QUANTITIES SEE DWG. S-18
ALL ANCHOR BOLTS TO PROJECT 3 1/2" ABOVE FINISHED CONCRETE.
BACKWALL ELEVATIONS GIVEN AT NEAR FACE.
FOR BACKFILL & DRAINAGE DETAIL SEE DWG. S-6

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	244.9
REINFORCEMENT BARS	POUND	20,570
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	224
PIPE UNDERDRAINS PERFORATED CORRUGATED STEEL PIPE 6"	LIN. FT.	83
POROUS GRANULAR BACKFILL	CU. YD.	116

SOUTHWEST ABUTMENT

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – SOUTHWEST ABUTMENT
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 7 OF 21 SHEETS

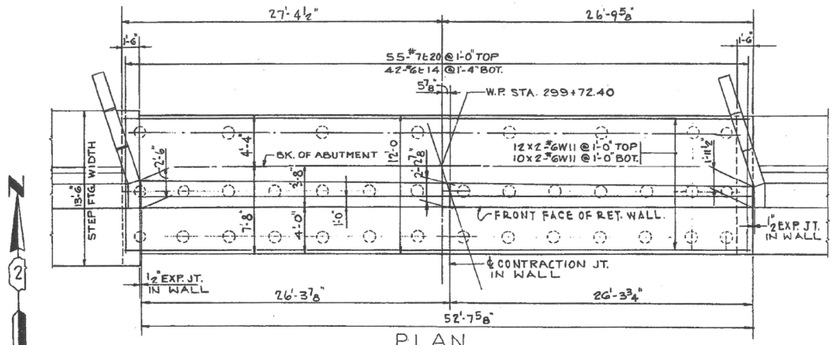
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	920

CONTRACT NO. 64E26

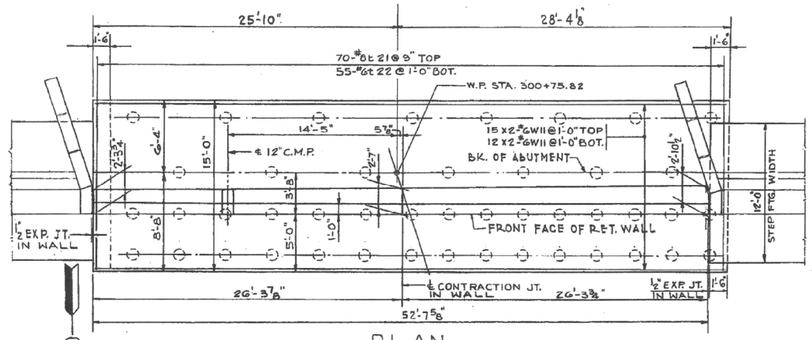
FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	263
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1( ) I.4		

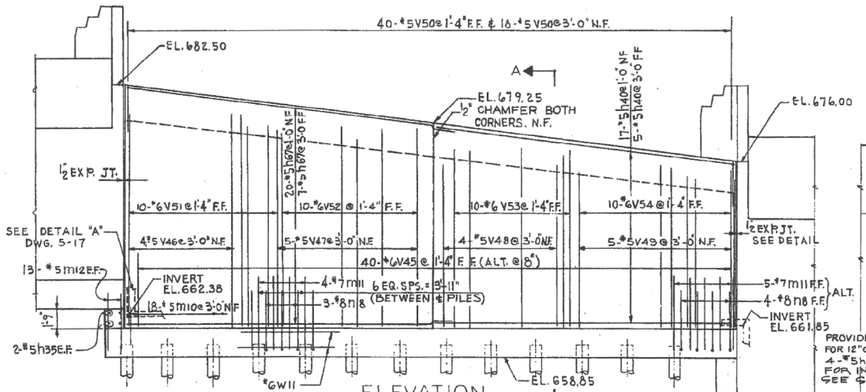
DWG. NO. S-10



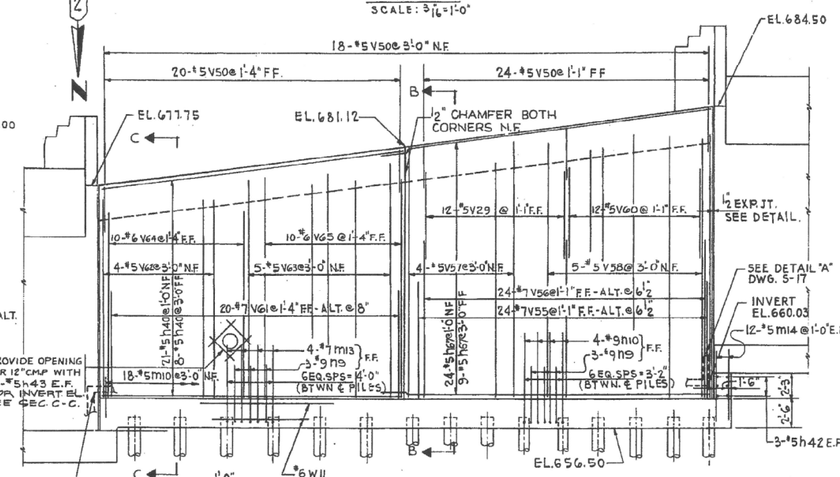
PLAN
SCALE: 3/16"=1'-0"



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

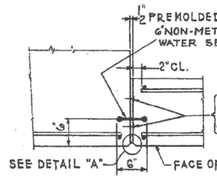


ELEVATION
SCALE: 3/16"=1'-0"
NORTH RETAINING WALL

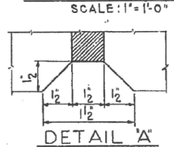


ELEVATION
SCALE: 3/16"=1'-0"
SOUTH RETAINING WALL

BAR LIST						
BAR	NUMBER N.RET.W.	S.RET.W.	TOTAL	SIZE	LENGTH	SHAPE
h35	4		4	#5	13'-0"	—
h40	22	29	51	#5	26'-0"	—
h67	27	33	60	#5	28'-1"	—
h42		6	6	#5	11'-6"	—
h43		8	8	#5	2'-3"	—
m10	18	18	36	#5	2'-6"	—
m11	40		40	#7	6'-6"	—
m12	26		26	#5	4'-3"	—
m13		20	20	#7	6'-7"	—
m14		24	24	#5	4'-9"	—
n8	40		40	#8	11'-6"	⌋
n9		43	43	#9	12'-5"	⌋
n10		22	22	#9	8'-3"	⌋
t14	42		42	#6	7'-6"	—
t20	55		55	#7	11'-8"	—
t21		70	70	#8	14'-8"	—
t22		55	55	#6	9'-0"	—
V29		12	12	#5	8'-0"	—
V45	40		40	#6	8'-7"	—
V46	4		4	#5	16'-0"	—
V47	5		5	#5	16'-6"	—
V48	4		4	#5	14'-9"	—
V49	5		5	#5	13'-4"	—
V50	40	62	102	#5	4'-3"	—
V51	10		10	#6	16'-6"	—
V52	10		10	#6	17'-0"	—
V53		10	10	#6	15'-3"	—
V54		10	10	#6	13'-10"	—
V55		24	24	#7	10'-4"	—
V56		24	24	#7	13'-10"	—
V57		4	4	#5	22'-4"	—
V58		5	5	#5	20'-7"	—
V60		12	12	#5	9'-9"	—
V61		20	20	#7	9'-6"	—
V62		4	4	#5	17'-1"	—
V63		5	5	#5	18'-11"	—
V64		10	10	#6	17'-11"	—
V65		10	10	#6	19'-7"	—
W11	49	54	103	#6	28'-2"	—

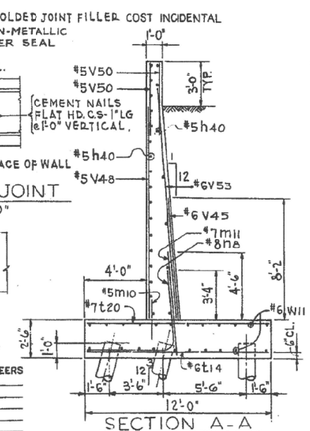


EXPANSION JOINT
SCALE: 1"=1'-0"

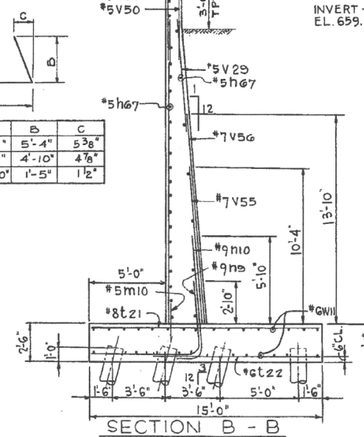


DETAIL "A"
FULL SCALE

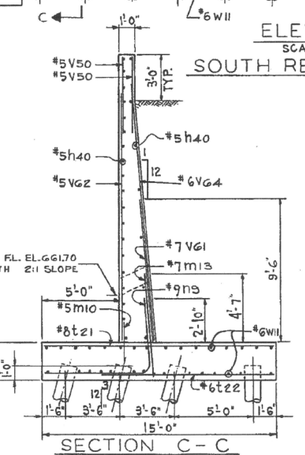
BAR	A	B	C
n8	6'-2"	5'-4"	5⅜"
n9	7'-7"	4'-10"	4⅞"
n10	7'-10"	1'-5"	1½"



SECTION A-A
SCALE: 1/4"=1'-0"



SECTION B-B
SCALE: 1/4"=1'-0"



SECTION C-C
SCALE: 1/4"=1'-0"

NOTES:
MIN. BAR LAP = 24 DIA.
FOR DETAIL OF DRAINAGE & BACKFILL SEE DWG. S-17.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
FOR CONTRACTION JOINT SEE DWG. S-16.
FOR PILE SPACING SEE DWG. S-5.

ABBREVIATIONS:
N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE

KEY TO BAR INDICATION:
10×2-#6 ETG. INDICATES 10 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.

BILL OF MATERIAL*		
ITEM	UNIT	QUANTITY
REINFORCEMENT BARS	POUND	22,670
CLASS X CONCRETE	CU. YD.	265.0
CLASS A EXCAVATION FOR STRUCT.	CU. YD.	619
PIPE UNDER DRAINS, PERFORATED CORRUGATED STEEL PIPE 6"	LIN. FT.	114
POROUS GRANULAR BACKFILL	CU. YD.	144

* PILES INCLUDED IN BILL OF MATERIAL DWG. S-5.

RETAINING WALLS BETWEEN ABUTMENTS

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300+20.11

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY A. BUROKAS
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

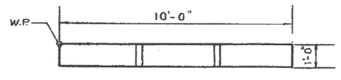
EXISTING PLANS – RETAINING WALLS BETWEEN ABUTMENTS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 8 OF 21 SHEETS

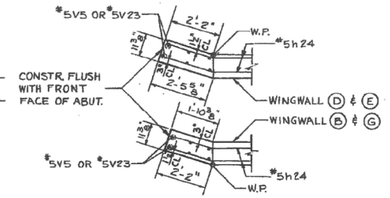
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	921
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	266
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 ( ) L.4		

DWG. NO. S-11

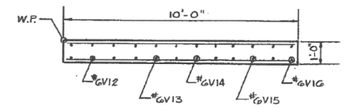


PLAN

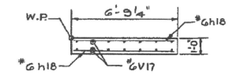


DETAIL Y

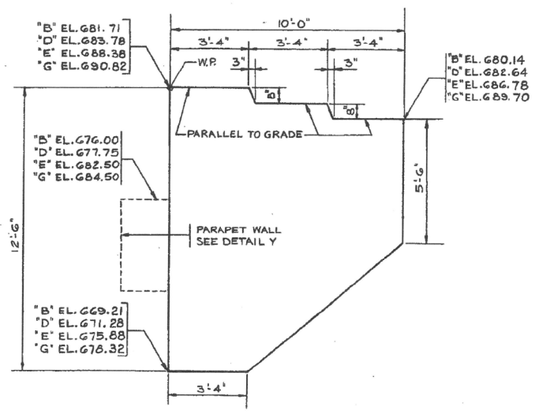
SCALE: 3/8" = 1'-0"



PLAN

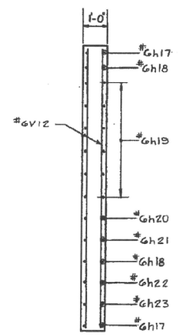


PLAN



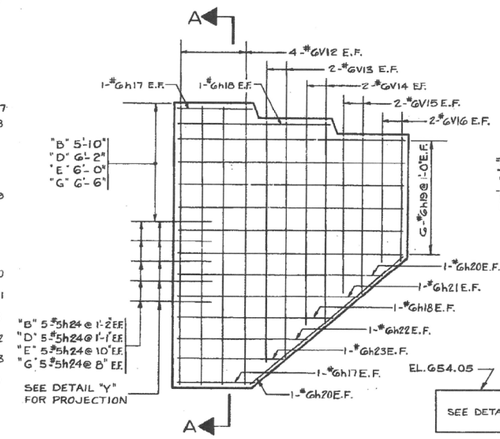
ELEVATION "B", "D", "E" & "G"

SCALE: 3/8" = 1'-0"



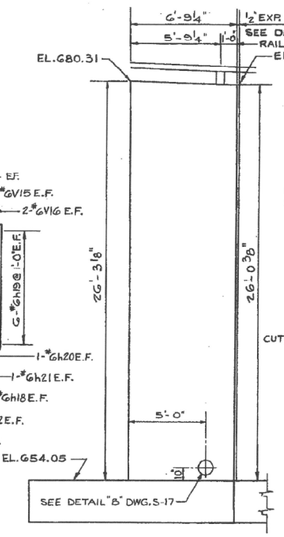
SECTION A-A

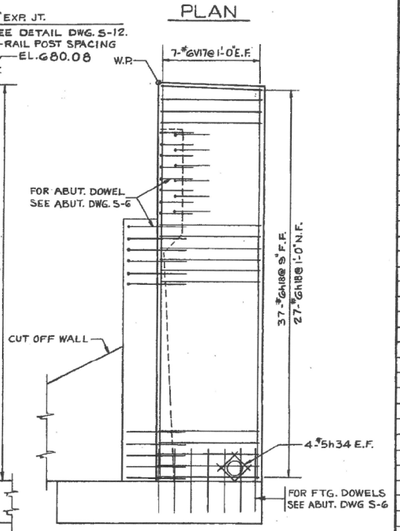
SCALE: 3/8" = 1'-0"



ELEVATION "B", "D", "E" & "G"

SCALE: 3/8" = 1'-0"



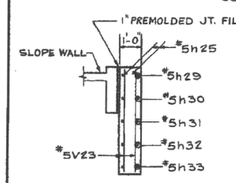


WINGWALL "A"

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

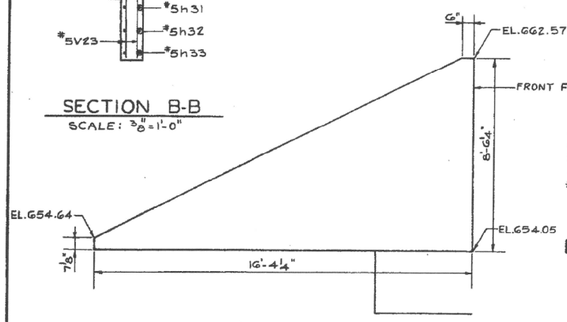
BAR LIST				
BAR	NO.	SIZE	LENGTH	SHAPE
h 17	16	6	3'-1"	
h 18	80*	6	6'-5"	
h 19	48	6	9'-8"	
h 20	16	6	8'-8"	
h 21	8	6	7'-8"	
h 22	8	6	5'-6"	
h 23	8	6	4'-5"	
h 24	40	5	3'-6"	
h 25	2	5	18'-0"	
h 26	2	5	2'-9"	
h 27	2	5	4'-9"	
h 28	2	5	6'-9"	
h 29	2	5	8'-9"	
h 30	2	5	10'-9"	
h 31	2	5	12'-9"	
h 32	2	5	14'-9"	
h 33	2	5	16'-0"	
h 34	8	5	1'-9"	
V 12	32	6	12'-2"	
V 13	16	6	10'-3"	
V 14	16	6	8'-9"	
V 15	16	6	6'-9"	
V 16	16	6	5'-3"	
V 17	14	6	25'-9"	
V 18	2	5	1'-3"	
V 19	2	5	2'-0"	
V 20	2	5	2'-9"	
V 21	2	5	3'-8"	
V 22	2	5	4'-3"	
V 23	2	5	5'-0"	
V 24	2	5	5'-11"	
V 25	2	5	6'-6"	
V 26	2	5	7'-0"	
V 27	2	5	7'-3"	
V 28	2	5	7'-9"	
V 29	2	5	8'-0"	

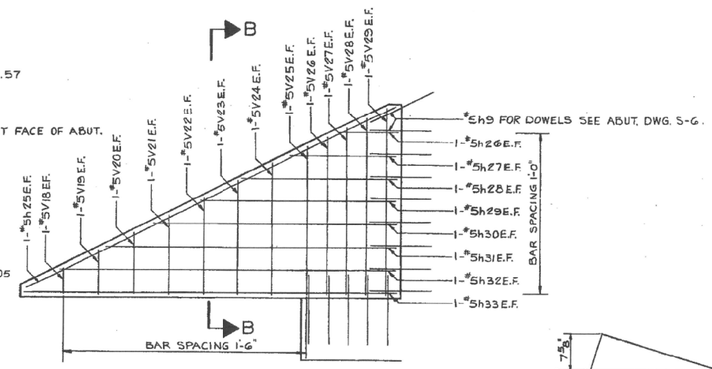
* 16-h18 FOR WINGWALLS "B", "D", "E" & "G" & 64-h18 FOR WINGWALL "A".



SECTION B-B

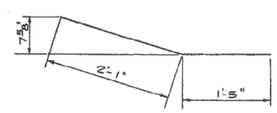
SCALE: 3/8" = 1'-0"





CUT-OFF WALL AT WINGWALL "A"

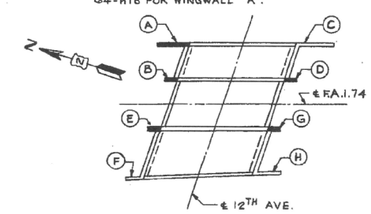
SCALE: 3/8" = 1'-0"



BAR h24

NOTES:

E.F. = EACH FACE.
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
ALL QUANTITIES EXCEPT ALUMINUM RAILING INCLUDED IN ABUTMENT BILL OF MATERIAL.
FOR DETAILS OF ALUMINUM RAILING SEE DWG. S-25.
FOR ALUMINUM RAILING QUANTITIES SEE DWG. S-14.
FOR BACKFILL & DRAINAGE DETAIL SEE DWG. S-17.



WINGWALL LOCATION PLAN

SHADED WINGWALLS ARE DETAILED ON THIS SHEET.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. F. MATZELLE
DRAWN BY R. S. GHORBANIAN
CHECKED
IN CHARGE E. J. MARTINS
APPROVED W.G. HORN

WINGWALLS A, B, D, E & G

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

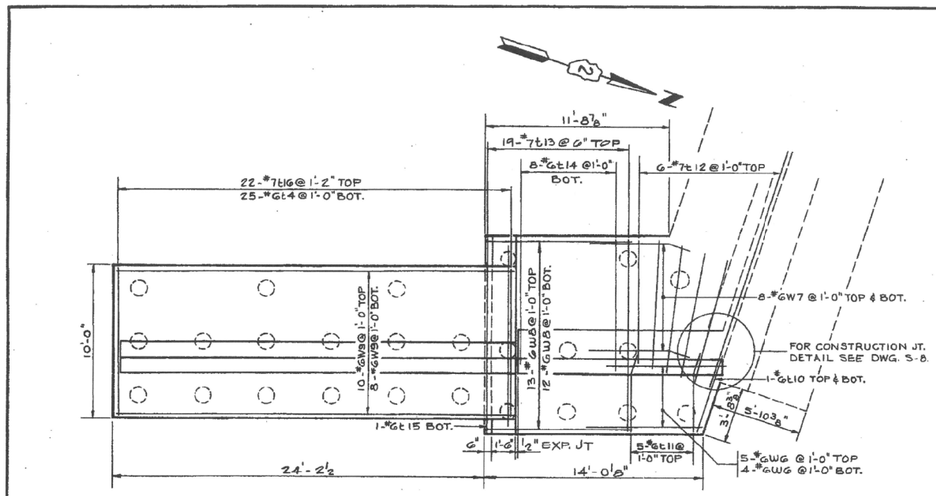
EXISTING PLANS – WINGWALLS A, B, D, E & G
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 9 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	922
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

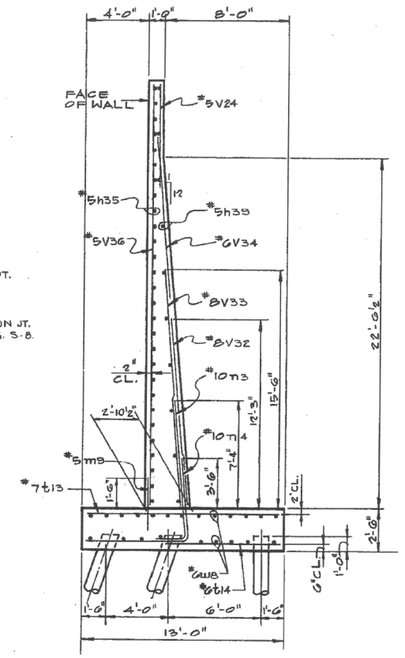
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	265
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 ( ) 1.4		

DWG. NO. S-12



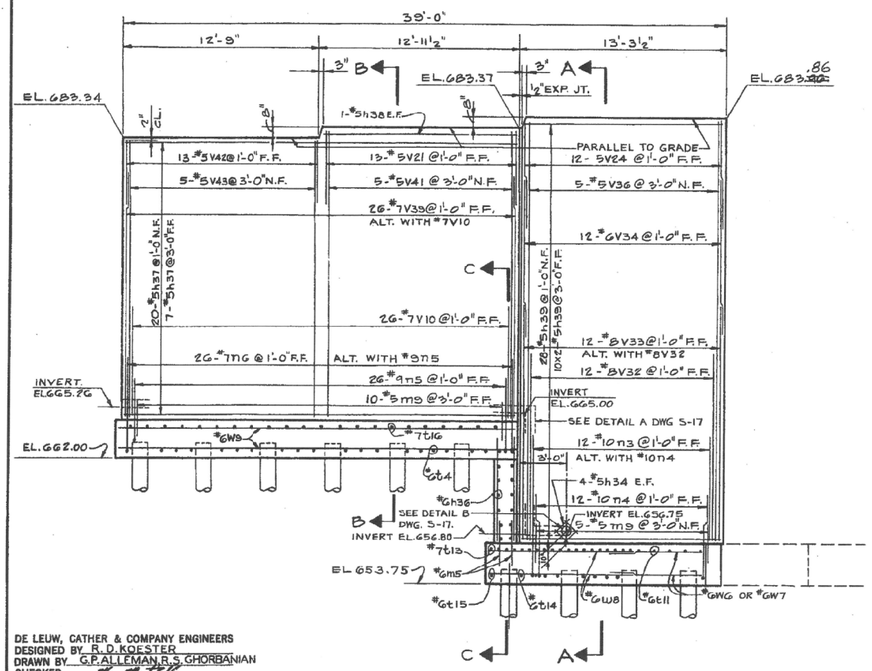
TOP PLAN

SCALE: ¼" = 1'-0"



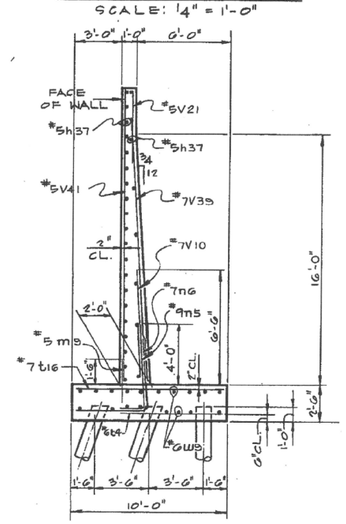
SECTION A-A

SCALE: ¼" = 1'-0"



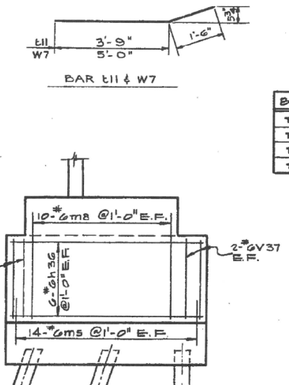
ELEVATION

SCALE: ¼" = 1'-0"



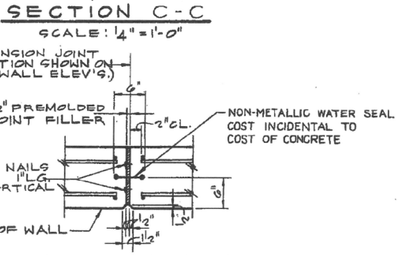
SECTION B-B

SCALE: ¼" = 1'-0"



SECTION C-C

SCALE: ¼" = 1'-0"

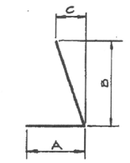


EXPANSION JOINT

SCALE: 1" = 1'-0"

BAR t11 & W7

BAR	A	B	C
m3	6'-8"	9'-4"	8⅜"
m4	1'-9"	5'-8"	5¾"
m5	1'-7"	6'-0"	3⅜"
m6	4'-10"	4'-6"	3⅜"



BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h35	28	#5	13'-0"	—
h36	12	#6	12'-8"	—
h37	27	#5	25'-5"	—
h38	2	#5	12'-6"	—
h39	20	#5	7'-1"	—
m5	14	#6	8'-0"	—
m8	10	#6	7'-3"	—
m9	15	#5	2'-9"	—
n3	12	#10	16'-0"	⌋
n4	12	#10	7'-6"	⌋
n5	26	#9	7'-7"	⌋
n6	26	#7	9'-4"	⌋
t4	25	#6	6'-6"	—
t10	2	#6	5'-3"	—
t11	5	#6	5'-3"	—
t12	6	#7	8'-0"	—
t13	19	#7	12'-8"	—
t14	8	#6	7'-6"	—
t15	1	#6	12'-8"	—
t16	22	#7	9'-8"	—
V10	26	#7	6'-6"	—
V21	13	#5	3'-8"	—
V24	12	#5	5'-11"	—
V32	12	#8	12'-3"	—
V33	12	#8	15'-6"	—
V34	12	#6	9'-3"	—
V36	5	#5	27'-7"	—
V37	8	#6	5'-6"	—
V39	26	#7	16'-6"	—
V41	5	#5	18'-11"	—
V42	13	#5	3'-5"	—
V43	5	#5	18'-5"	—
W6	9	#6	7'-3"	—
W7	16	#6	6'-6"	—
W8	25	#6	9'-6"	—
W9	18	#6	25'-10"	—

NOTES:

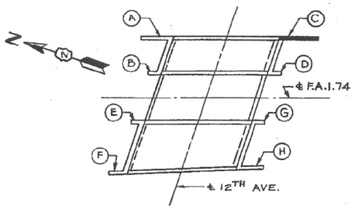
MIN. BAR LAP = 24 DIA.
FOR DETAIL OF DRAINAGE & BACKFILL SEE DWG. S-17.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
QUANTITIES INCLUDED IN ABUTMENT BILL OF MATERIAL SEE DWG. S-8.
FOR PILE SPACING SEE DWG. S-5.

ABBREVIATIONS:

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE

KEY TO BAR INDICATION:

12 X 2 - #6 ETC. INDICATES 12 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.



WINGWALL LOCATION PLAN

SHADED WINGWALL DETAILED ON THIS SHEET

WINGWALL C

F.A.I. 74 - SECTION 81-1HB-1

F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. D. KOESTER
DRAWN BY G.F. ALLEMAN, R.S. GHORBANIAN
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

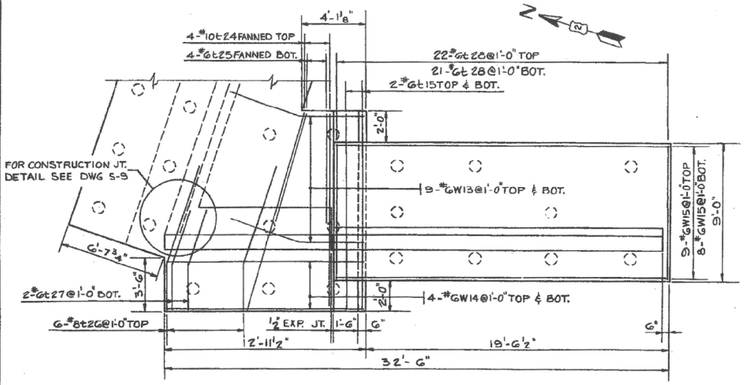
EXISTING PLANS – WINGWALL C
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 10 OF 21 SHEETS

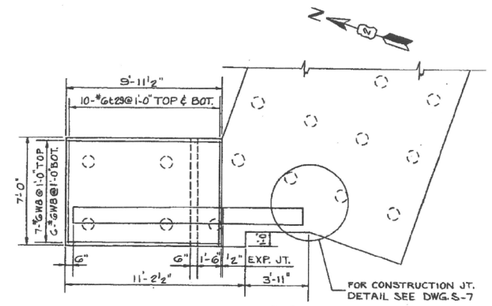
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	923
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	266
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 ( ) E.4		

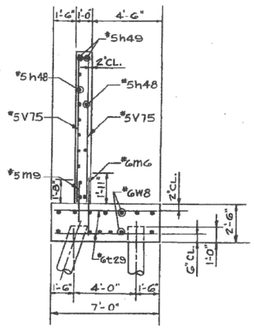
DWG. NO. S-13



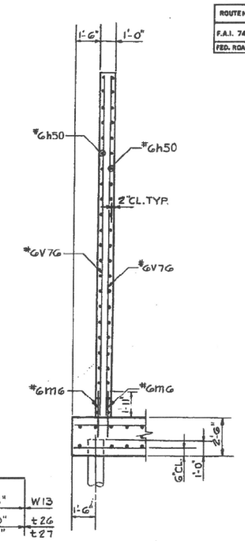
PLAN WINGWALL "H"
SCALE: 1/4" = 1'-0"



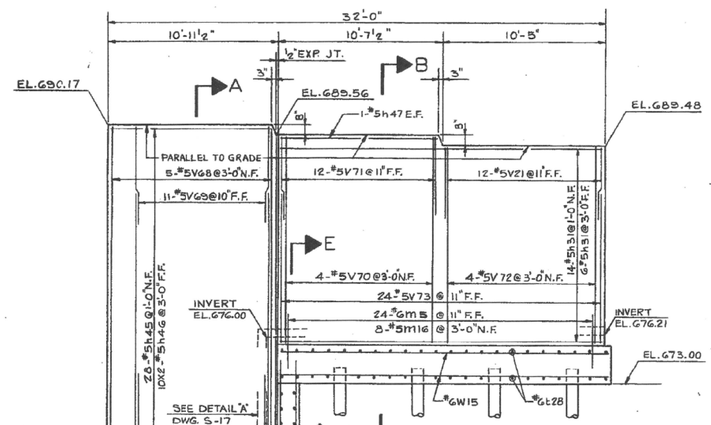
PLAN WINGWALL "F"
SCALE: 1/4" = 1'-0"



SECTION C-C
SCALE: 1/4" = 1'-0"

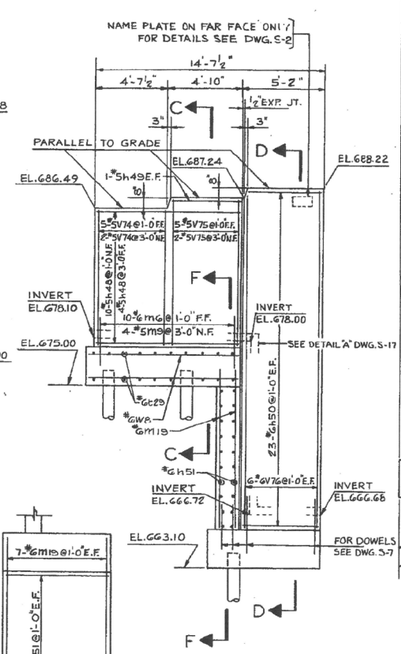


SECTION D-D
SCALE: 1/4" = 1'-0"



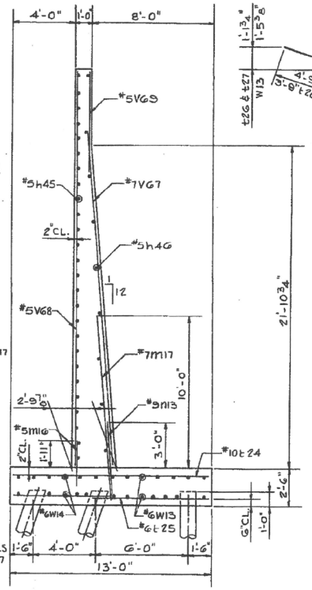
ELEVATION
SCALE: 1/4" = 1'-0"

WINGWALL "H"

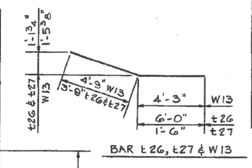


ELEVATION
SCALE: 1/4" = 1'-0"

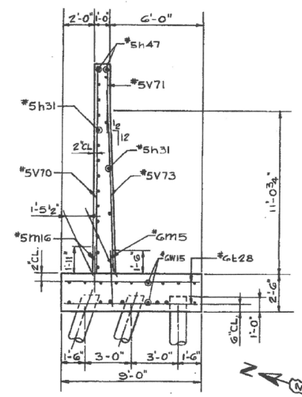
WINGWALL "F"



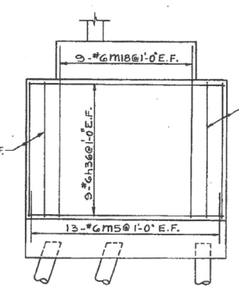
SECTION A-A
SCALE: 1/4" = 1'-0"



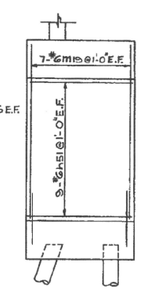
BAR t26, t27 & W13



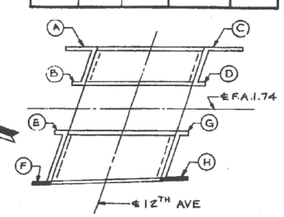
SECTION B-B
SCALE: 1/4" = 1'-0"



SECTION E-E
SCALE: 1/4" = 1'-0"



SECTION F-F
SCALE: 1/4" = 1'-0"



WINGWALL LOCATION PLAN
SHADED WINGWALL DETAILED ON THIS SHEET

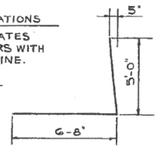
BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
h31	20	#5	12'-9"	—
h36	18	#6	12'-8"	—
h45	28	#5	10'-7"	—
h46	20	#5	6'-0"	—
h47	2	#5	10'-0"	—
h48	14	#5	9'-2"	—
h49	2	#5	4'-3"	—
h50	46	#6	4'-9"	—
h51	18	#6	6'-8"	—
m5	37	#6	3'-0"	—
m6	10	#6	3'-5"	—
m9	4	#5	2'-11"	—
m16	13	#5	3'-2"	—
m17	12	#7	12'-0"	—
m18	18	#6	10'-5"	—
m19	14	#6	11'-9"	—
n13	11	#9	11'-8"	⊥
t15	4	#6	12'-8"	—
t24	4	#10	12'-8"	—
t25	4	#6	6'-0"	—
t26	6	#8	9'-9"	—
t27	2	#6	5'-3"	—
t28	43	#6	8'-8"	—
t29	20	#6	6'-8"	—
V21	12	#5	3'-8"	—
V66	4	#6	9'-0"	—
V67	11	#7	22'-6"	—
V68	5	#5	26'-0"	—
V69	11	#5	5'-5"	—
V70	4	#5	13'-9"	—
V71	12	#5	4'-2"	—
V72	4	#5	13'-3"	—
V73	24	#5	11'-8"	—
V74	7	#5	8'-8"	—
V75	7	#5	9'-6"	—
V76	12	#6	22'-0"	—
W8	13	#6	9'-6"	—
W13	18	#6	9'-0"	—
W14	8	#6	12'-6"	—
W15	17	#6	21'-3"	—

NOTES
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
QUANTITIES INCLUDED IN ABUTMENT BILL OF MATERIAL SEE DWG. S-7 & S-8.
FOR PILE SPACING SEE S-5.
FOR EXPANSION JT. DETAIL SEE DWG. S-12.
FOR BACKFILL & DRAINAGE DETAIL SEE DWG. S-17.

KEY TO BAR INDICATIONS
12 x 2-#6 ETC. INDICATES 12 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.

ABBREVIATIONS
N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE



BAR n13

WINGWALLS F & H
F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300 + 20.11

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. D. KOESTER
DRAWN BY R. S. GHORBANIAN
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – WINGWALLS F & H
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

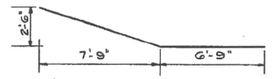
SHEET NO. 11 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	924
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

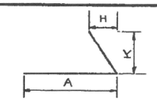
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	267
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1( ) L6		

DWG. NO. S-14

NOTES
FOR WALL CROSS SECTIONS SEE DWG. S-17.
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
FOR DETAILS OF ALUMINUM RAILING SEE DWG. S-23.
FOR DETAILS OF DRAINAGE & BACKFILL SEE DWG. S-17.
Ⓔ = EXPANSION JOINT } FOR DETAILS SEE DWG. S-16.
Ⓒ = CONTRACTION JOINT }
FOR PROTECTIVE COAT QUANTITES SEE DWG. S-18.

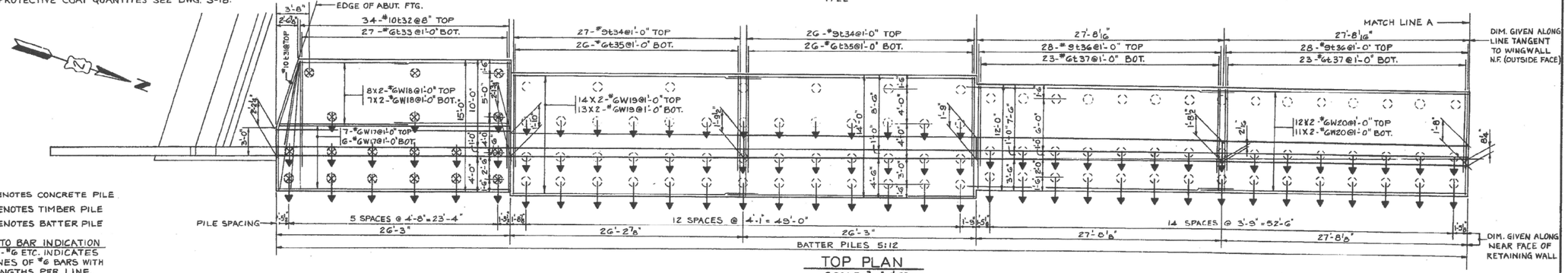


BAR t31



BAR n14, n15 & n16
n22

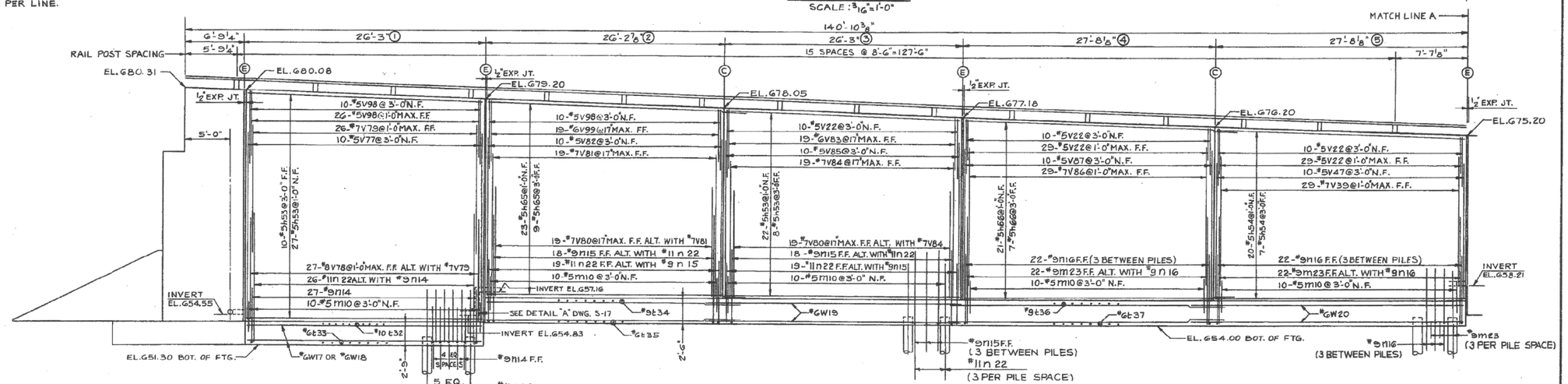
BAR	A	H	K
n14	8'-9"	3½"	5'-9"
n15	9'-0"	3"	5'-10"
n16	4'-8"	2½"	4'-8"
n22	4'-8"	½"	0'-9"



⊗ DENOTES CONCRETE PILE
○ DENOTES TIMBER PILE
DENOTES BATTER PILE

KEY TO BAR INDICATION
12X2-#6 ETC. INDICATES 12 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.

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



ABBREVIATIONS
N.F. = NEAR FACE
F.F. = FAR FACE

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

Note: For Rustication Details See Dwg. S-17A.

PILE DATA			
PANEL LOCATION	①	② - ③	④ - ⑤
PILE TYPE	CONCRETE	TIMBER	TIMBER
MINIMUM CAPACITY TONS	45	24	24
NUMBER REQUIRED	18	46	45
ESTIMATED LENGTH FT.	25	21	23
CUT OFF ELEVATION	652.30	655.00	655.00

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R.S. GHORBANIAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

BAR LIST PANELS ① THRU ⑤

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
h66	28	#5	29'-1"	—	n16	44	#9	11'-0"	⌋	V39	29	#7	16'-6"	—	V86	29	#7	17'-6"	—
h53	67	#5	25'-11"	—	n22	64	#11	5'-8"	⌋	V47	10	#5	16'-6"	—	V87	10	#5	17'-6"	—
h54	27	#5	27'-4"	—	t31	1	#10	14'-10"	\	V77	10	#5	22'-8"	—	V98	46	#5	4'-6"	—
h65	32	#5	27'-8"	—	t32	39	#10	14'-8"	—	V78	27	#8	12'-0"	—	V99	19	#6	4'-9"	—
m10	50	#5	2'-6"	—	t33	27	#6	9'-6"	—	V79	26	#7	22'-8"	—	W17	13	#6	25'-11"	—
					t34	53	#9	13'-8"	—	V80	38	#7	9'-3"	—	W18	30	#6	13'-9"	—
					t35	52	#6	8'-4"	—	V81	19	#7	19'-6"	—	W18	46	#6	26'-5"	—
m23	44	#9	9'-0"	—	t36	56	#9	11'-8"	—	V82	10	#5	19'-6"	—	W20	46	#6	29'-3"	—
					t37	46	#6	7'-8"	—	V83	19	#6	4'-6"	—					
n14	27	#9	14'-6"	⌋						V84	19	#7	18'-6"	—					
n15	62	#9	14'-10"	⌋	V22	78	#5	4'-3"	—	V85	10	#5	18'-6"	—					

* INCLUDES ALUMINUM RAILING FOR WINGWALL 'A' (SEE DWG. S-11.)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	1037
CLASS X CONCRETE	CU. YD.	311.7
REINFORCEMENT BARS	POUND	35,760
FURNISHING CREOSOTED PILES 20' TO 38 FT.	LIN. FT.	2001
DRIVING TIMBER PILES	LIN. FT.	2001
FURNISHING CONCRETE PILES	LIN. FT.	450
DRIVING CONCRETE PILES	LIN. FT.	450
*ALUMINUM RAILING	LIN. FT.	141
PIPE UNDERDRAINS PERFORATED CORR. STEEL PIPE 6"	LIN. FT.	136
POROUS GRANULAR BACKFILL	CU. YD.	193

NORTHEAST RETAINING WALL
PANELS 1 THRU 5
F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300 + 20.11
SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – NORTHEAST RETAINING WALL (PANELS 1–5)
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 12 OF 21 SHEETS

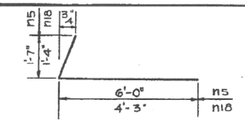
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	925
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HBR-1	ROCK ISLAND	389	268
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-74-1( ) 1.4		

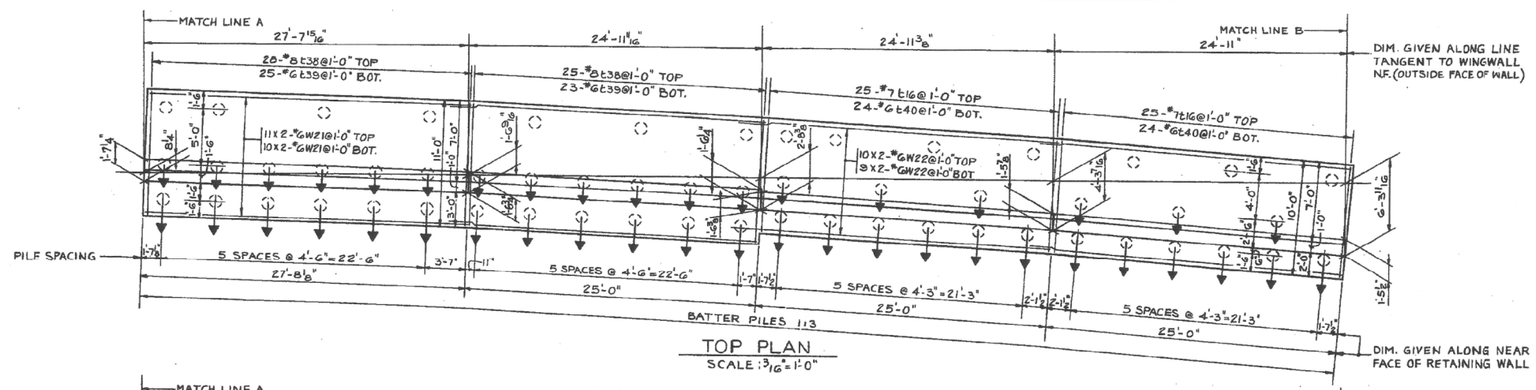
DWG. NO. S-15

NOTES

FOR WALL CROSS SECTIONS SEE DWG. S-17.
MIN. BAR LAP = 24 DIA.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
FOR DETAILS OF ALUMINUM RAILING SEE DWG. S-23.
FOR DETAILS OF DRAINAGE & BACKFILL SEE DWG. S-17.
Ⓔ = EXPANSION JOINT } FOR DETAILS SEE DWG. S-16.
Ⓒ = CONTRACTION JOINT }
FOR PROTECTIVE COAT QUANTITIES SEE DWG. S-18.



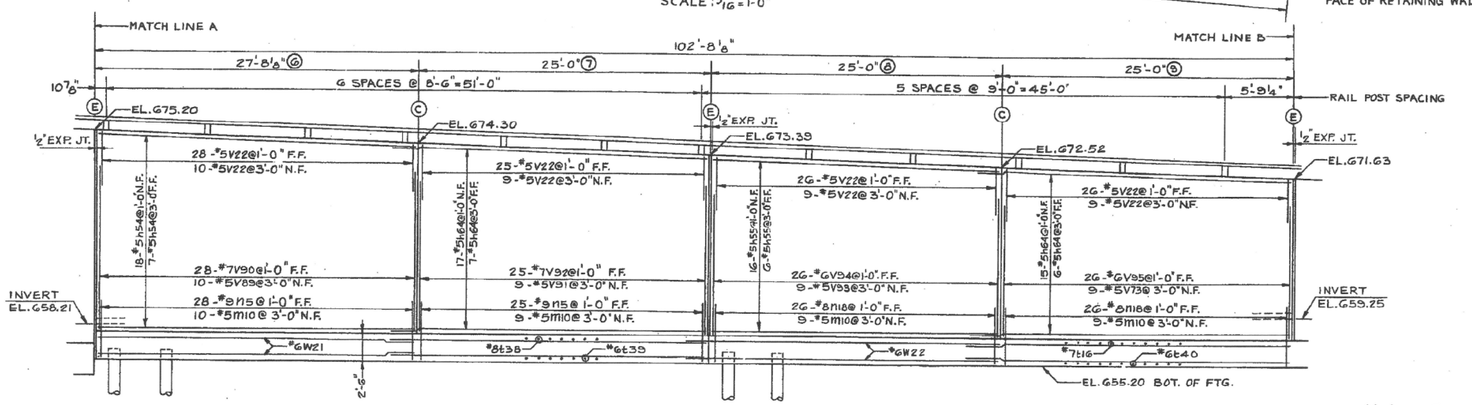
BAR n15 & n18



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

○ DENOTES TIMBER PILE
⊕ DENOTES BATTER PILE

KEY TO BAR INDICATION
12 x 2-#6 ETC. INDICATES 12 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.



Note: For Rustication Details See Dwg. S-17A.

ABBREVIATIONS
N.F. = NEAR FACE
F.F. = FAR FACE

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

PILE DATA

PANEL LOCATION	⑥ - ⑨
PILE TYPE	TIMBER
MINIMUM CAPACITY TONS	24
NUMBER REQUIRED	56
ESTIMATED LENGTH FEET	24
CUT OFF ELEVATION	656.20

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R.S. GHORBANIAN
CHECKED W. Mikelle
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

BAR LIST PANELS ⑥ THRU ⑨

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
					t39	48	#6	10'-8"	—	V95	26	#6	11'-9"	—					
h54	25	#5	27'-4"	—	t40	48	#6	9'-8"	—										
h55	22	#5	24'-8"	—															
h64	45	#5	26'-5"	—	V22	142	#5	4'-3"	—	W21	42	#6	26'-11"	—					
m10	37	#5	2'-6"	—	V73	9	#5	11'-9"	—	W22	38	#6	26'-6"	—					
					V89	10	#5	14'-4"	—										
n15	53	#8	7'-7"	L	V90	28	#7	14'-4"	—										
n18	52	#8	5'-7"	L	V91	9	#5	13'-5"	—										
					V92	25	#7	13'-5"	—										
t16	50	#7	9'-8"	—	V93	9	#5	12'-6"	—										
t38	53	#8	10'-8"	—	V94	26	#6	12'-6"	—										

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	709
CLASS X CONCRETE	CU. YD.	172.4
POROUS GRANULAR BACKFILL	CU. YD.	104
REINFORCEMENT BARS	POUND	15520
FURNISHING CREOSOTED PILES 20.1 TO 38 FT.	LIN. FT.	1320
DRIVING TIMBER PILES	LIN. FT.	1320
PIPE UNDERDRAINS PERFORATED CORR. STEEL PIPE 6"	LIN. FT.	103
ALUMINUM RAILING	LIN. FT.	103
TEST PILE (TIMBER)	EACH	1

NORTHEAST RETAINING WALL
PANELS 6 THRU 9
F.A.I. 74 - SECTION 81-1HBR-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300 + 20.11
SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

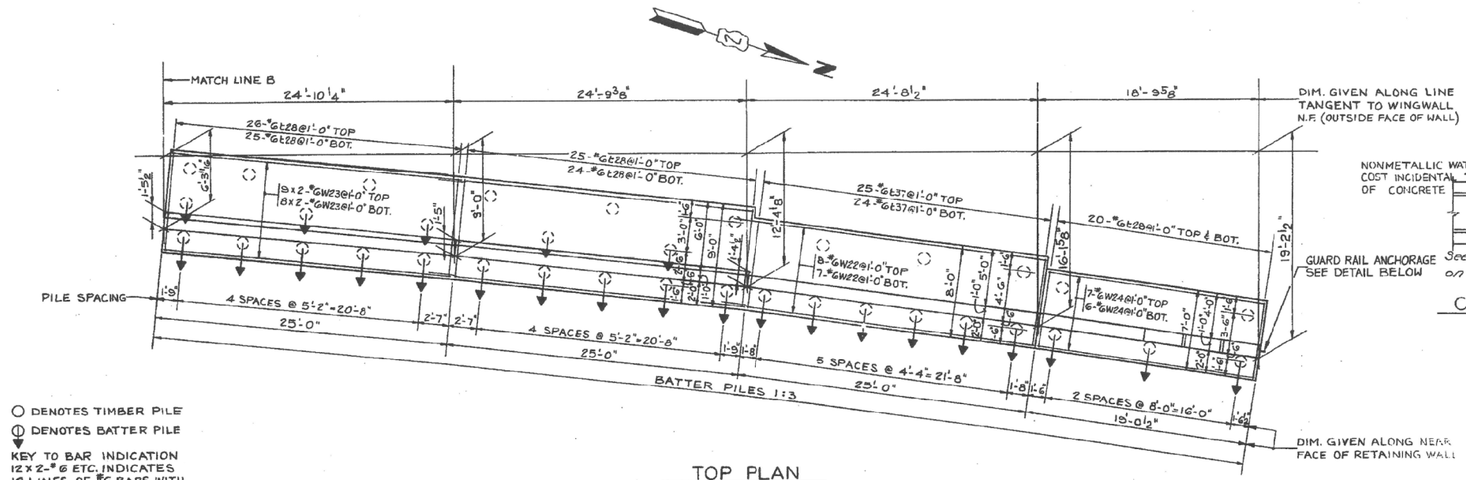
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – NORTHEAST RETAINING WALL (PANELS 6–9)
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 13 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	926
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	269
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1( ) 1.4		

DWG. NO. S-16

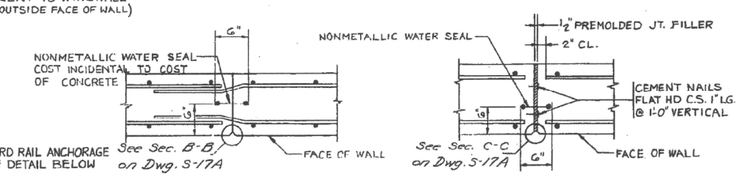


○ DENOTES TIMBER PILE

⦶ DENOTES BATTER PILE

KEY TO BAR INDICATION
12 x 2-#6 ETC. INDICATES 12 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.

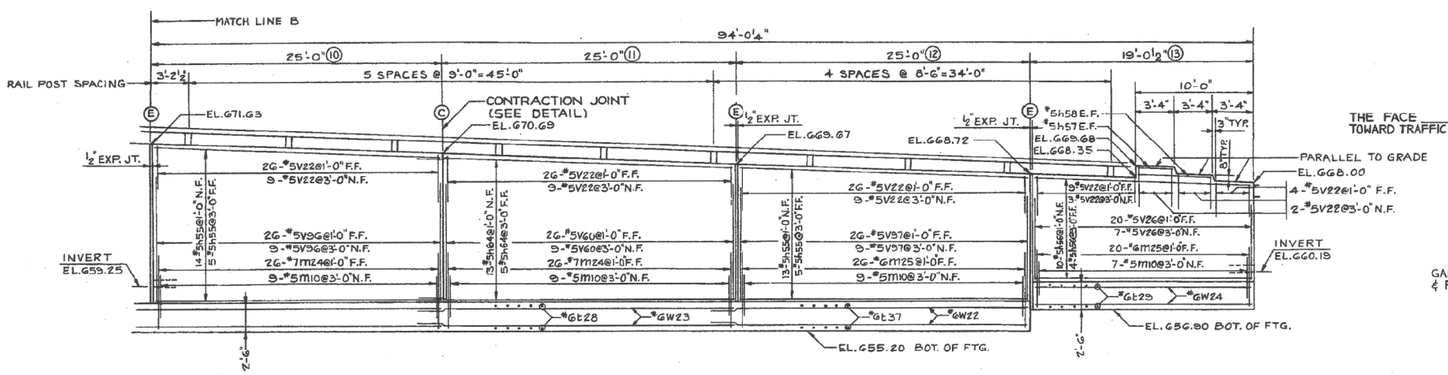
TOP PLAN
SCALE: 3/16"=1'-0"



CONTRACTION JOINT
SCALE: 1"=1'-0"

EXPANSION JOINT
SCALE: 1"=1'-0"

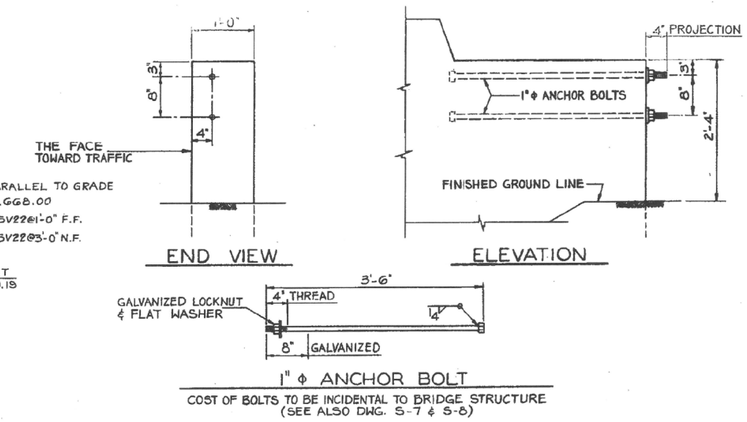
Note: For Rustication Details See Dwg. S-17A



ABBREVIATIONS
N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE

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

NOTES:
MIN. BAR LAP = 24 DIA.
FOR WALL CROSS SECTIONS SEE DWG. S-17.
ALL BENT BAR DIMENSIONS ARE OUT TO OUT.
FOR DETAILS OF ALUMINUM RAILING SEE DWG. S-23.
FOR DETAILS OF DRAINAGE & BACKFILL SEE DWG. S-17.
FOR PROTECTIVE COAT QUANTITIES SEE DWG. S-18.



1" Φ ANCHOR BOLT
COST OF BOLTS TO BE INCIDENTAL TO BRIDGE STRUCTURE (SEE ALSO DWG. S-7 & S-8)

GUARD RAIL ANCHORAGE DETAIL
SCALE: 1"=1'-0"

PILE DATA

PANEL LOCATION	(10) - (12)	(13)
PILE TYPE	TIMBER	TIMBER
MINIMUM CAPACITY TONS	24	24
NUMBER REQUIRED	30	5
ESTIMATED LENGTH FT.	24	26
CUT OFF ELEVATION	656.20	657.90

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R.S. GHORBANIAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

BAR LIST PANELS (10) THRU (13)

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
					t28	100	#6	8'-8"	—	W22	15	#6	26'-6"	—					
h55	37	#5	24'-8"	—	t29	40	#6	6'-8"	—	W23	34	#6	25'-7"	—					
h56	14	#5	18'-8"	—	t37	49	#6	7'-8"	—	W24	13	#6	18'-8"	—					
h57	2	#5	3'-1"	—															
h58	2	#5	6'-5"	—	V22	135	#5	4'-3"	—										
h64	18	#5	26'-5"		V26	27	#5	7'-0"	—										
m10	34	#5	2'-6"	—	V60	35	#5	3'-8"	—										
m24	52	#7	4'-0"	—	V86	35	#5	10'-9"	—										
m25	46	#6	4'-0"	—	V97	35	#5	8'-10"	—										

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	455
CLASS X CONCRETE	CU. YD.	116.8
POROUS GRANULAR BACKFILL	CU. YD.	58
REINFORCEMENT BARS	POUND	8933
FURNISHING CREOSOTED PILES 20.1 TO 38 FT.	LIN. FT.	850
DRIVING TIMBER PILES	LIN. FT.	850
PIPE UNDERDRAINS PERFORATED CORR. STEEL PIPE 6"	LIN. FT.	94
ALUMINUM RAILING	LIN. FT.	84

NORTHEAST RETAINING WALL PANELS 10 THRU 13

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300+20.11

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

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Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

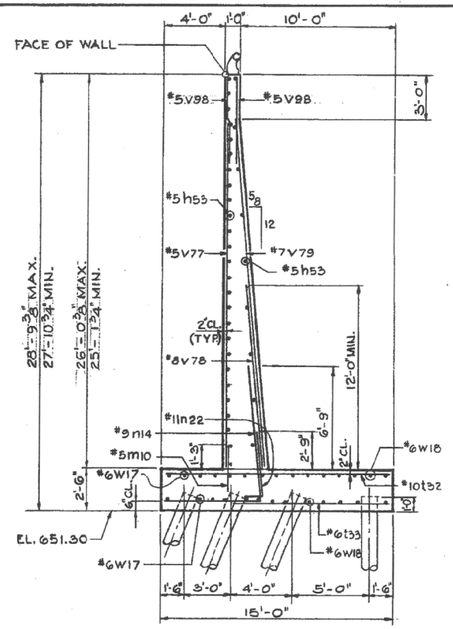
EXISTING PLANS – NORTHEAST RETAINING WALL (PANELS 10–13)
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 14 OF 21 SHEETS

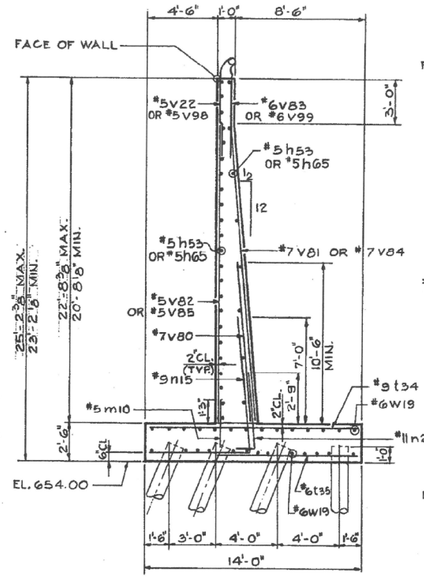
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	927
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	270
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1( ) 1.4		

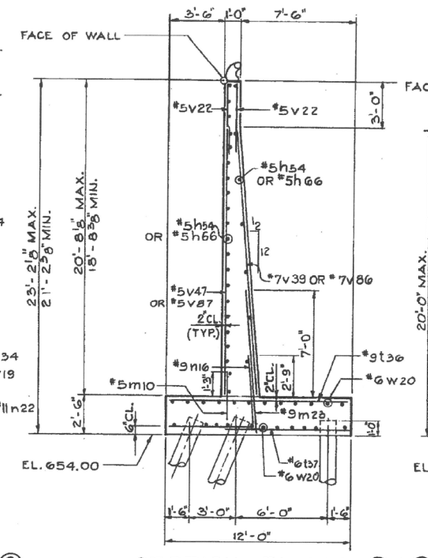
DWG. NO. S-17



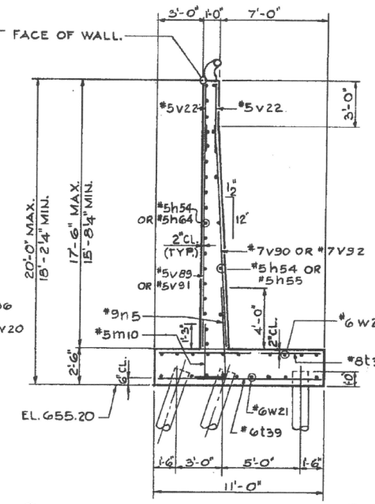
SECTION PANEL ①
SCALE: 1/4" = 1'-0"



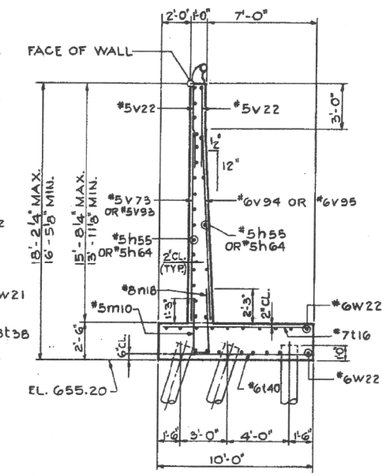
SECTION PANELS ②&③
SCALE: 1/4" = 1'-0"



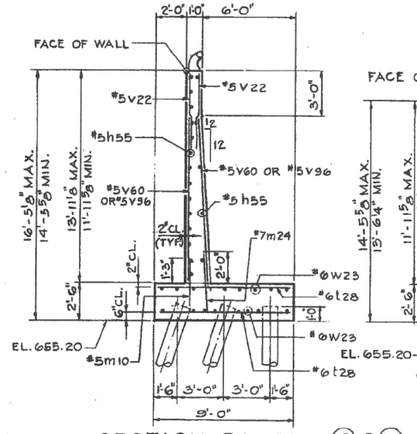
SECTION PANELS ④&⑤
SCALE: 1/4" = 1'-0"



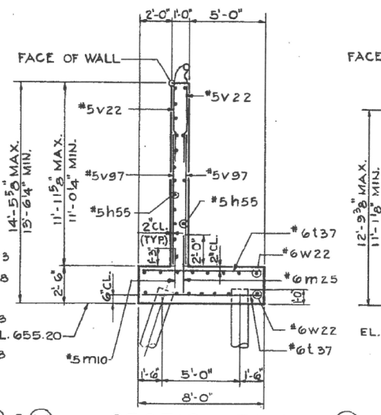
SECTION PANELS ⑥&⑦
SCALE: 1/4" = 1'-0"



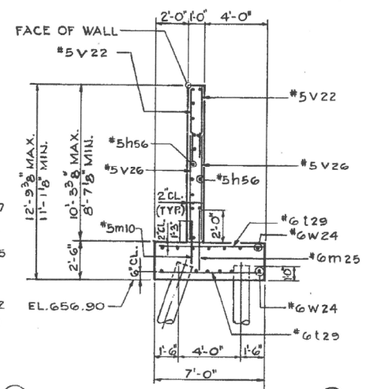
SECTION PANELS ⑧&⑨
SCALE: 1/4" = 1'-0"



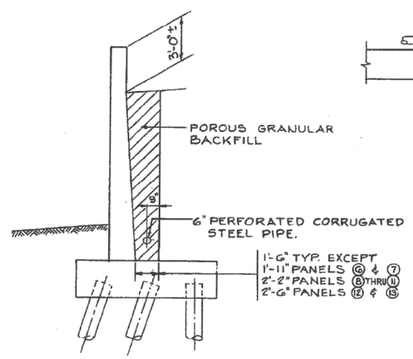
SECTION PANELS ⑩&⑪
SCALE: 1/4" = 1'-0"



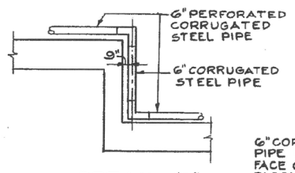
SECTION PANEL ⑫
SCALE: 1/4" = 1'-0"



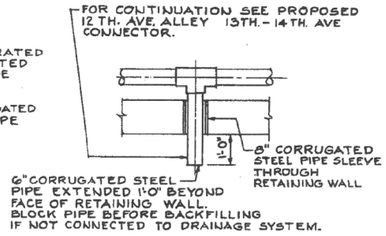
SECTION PANEL ⑬
SCALE: 1/4" = 1'-0"



BACKFILL AND DRAINAGE DETAIL
NOT TO SCALE



DETAIL "A"
NO SCALE



DETAIL B
SCALE: 1/2" = 1'-0"

Note: For Rustication Details See Dwg. S-17A.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOLSTER
DRAWN BY O. MARTINSONS
CHECKED *W. Mahelle*
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

NORTHEAST RETAINING WALL SECTIONS & DRAINAGE DETAILS

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300+20.11

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

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Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – NE RETAINING WALL SECTIONS & DRAINAGE DETAILS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

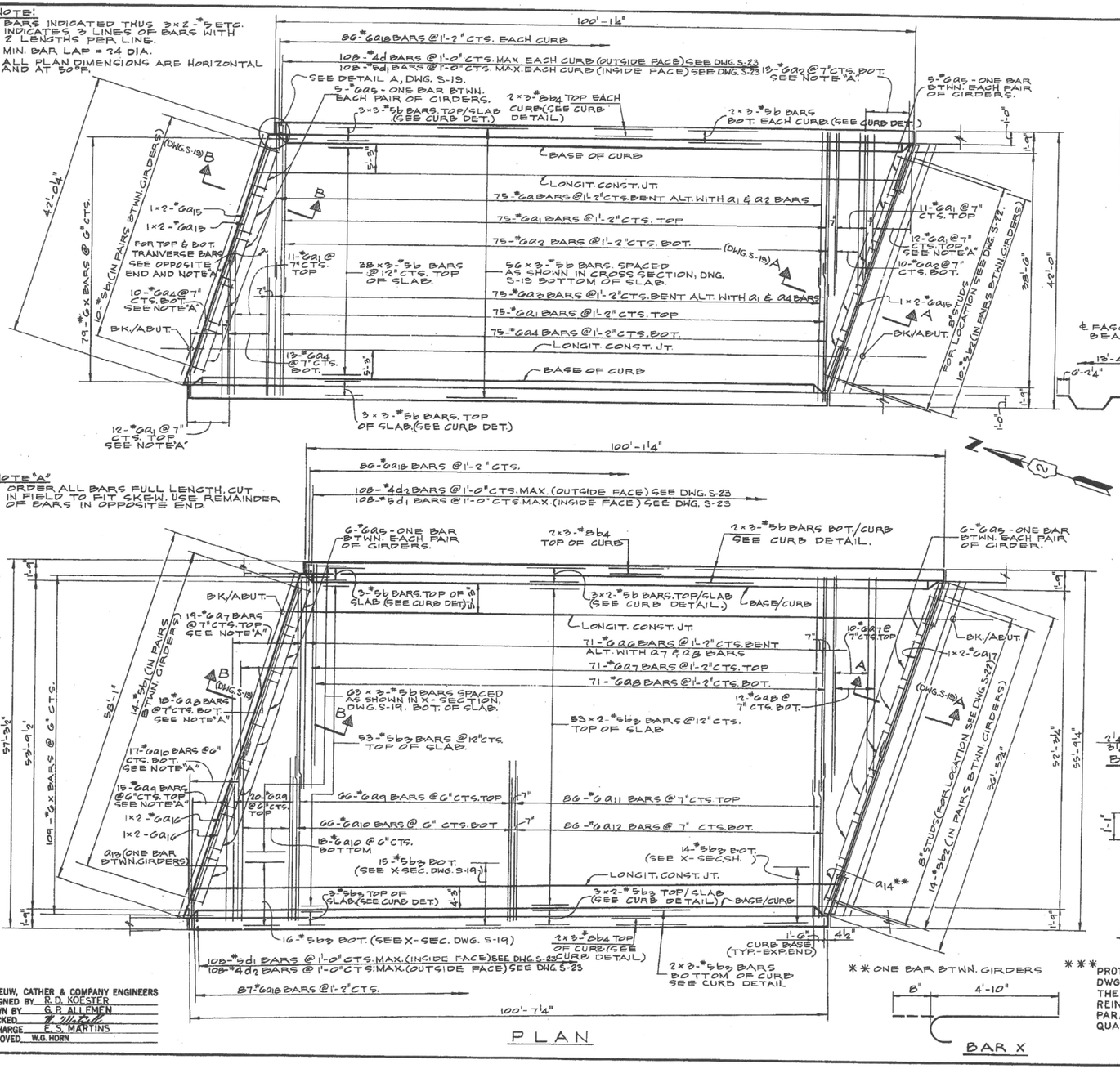
SHEET NO. 15 OF 21 SHEETS

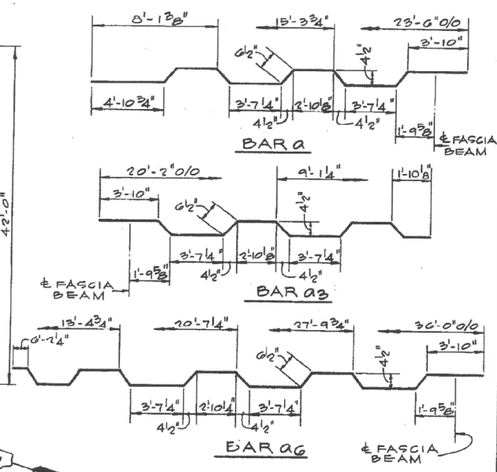
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	928
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	271
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-74-1( )L4		

DWG. NO. S-18

NOTE:
BARS INDICATED THUS 3×2-#5 ETC. INDICATES 3 LINES OF BARS WITH 2 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.
ALL PLAN DIMENSIONS ARE HORIZONTAL AND AT 50°F.

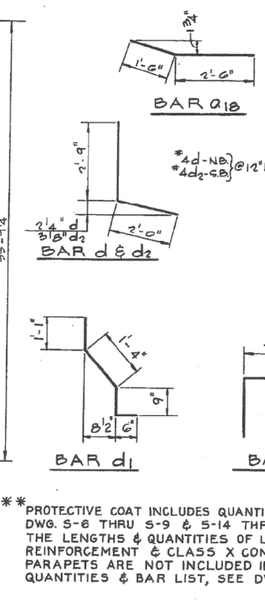


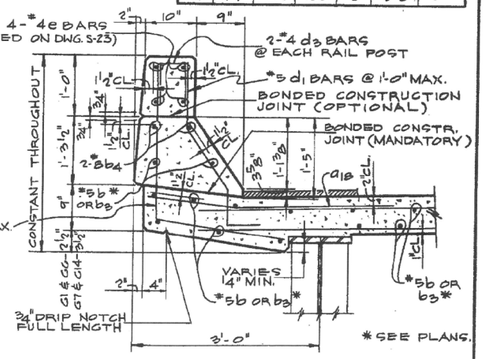


BAR LIST						
BAR	QUANTITY N. B.	QUANTITY S. B.	TOTAL	SIZE	LENGTH	SHAPE
a	75	—	75	6	24'-4"	
a1	196	—	196		21'-3"	—
a2	98	—	98		24'-0"	—
a3	75	—	75		21'-0"	
a4	98	—	98		10'-9"	—
a5	10	12	22		7'-3"	—
a6	—	71	71		37'-4"	
a7	—	100	100		35'-9"	—
a8	—	101	101		37'-0"	—
a9	—	101	101		22'-9"	—
a10	—	101	101		24'-9"	—
a11	—	86	86		22'-0"	—
a12	—	86	86		24'-0"	—
a13	—	1	1		8'-0"	—
a14	—	1	1		6'-0"	—
a15	6	—	6		19'-6"	—
a16	—	4	4		27'-6"	—
a17	—	2	2	6	20'-9"	—
a18	172	173	345	6	4'-0"	
b	312	204	516	5	34'-4"	—
b1	10	14	24	5	2'-1"	—
b2	10	14	24	5	1'-3"	—
b3	—	219	219	5	34'-6"	—
b4	12	12	24	8	34'-9"	—
d	216	—	216	4	4'-9"	
d1	216	216	432	5	3'-8"	
d2		216	216	4	4'-9"	
d3	48	48	96	4	2'-1"	
x	79	109	188	6	5'-6"	

NOTE "A"
ORDER ALL BARS FULL LENGTH, CUT IN FIELD TO FIT SKEW. USE REMAINDER OF BARS IN OPPOSITE END.

PLAN





CURB DETAIL
SCALE: 1" = 1'-0"

BILL OF MATERIAL ***		
ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	283.0
REINFORCEMENT BARS	POUND	80,850
PROTECTIVE COAT	SQ. YD.	323
BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TON	87
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	1028

** ONE BAR BTWN. GIRDERS

BAR X

*** PROTECTIVE COAT INCLUDES QUANTITIES FROM DWG. S-6 THRU S-9 & S-14 THRU S-16. THE LENGTHS & QUANTITIES OF LONGITUDINAL REINFORCEMENT & CLASS X CONCRETE IN PARAPETS ARE NOT INCLUDED IN ABOVE QUANTITIES & BAR LIST, SEE DWG. S-23.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. D. KOESTER
DRAWN BY G. B. ALLEMEN
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W.G. HORN

DECK SLAB - PLAN
F.A.I. 74 · SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.
ROCK ISLAND COUNTY
STATION 300 + 20.11
SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - DECK SLAB - PLAN
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 16 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	929
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	272
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1( ) L.6		

DWG. NO. S-19

NORTHBOUND ROADWAY

DISTANCE FROM CENTERLINE BEARING N.E. ABUT. (FEET)	GIRDER NO.	NORMAL OFFSET FROM P. G. LINE (FEET)	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEADLOAD DEFLECTIONS
0	1	+32.0	677.927	677.927
10		+32.0	678.221	678.267
20		+32.0	678.502	678.598
30		+32.0	678.777	678.892
40		+32.0	679.021	679.154
50		+32.0	679.260	679.399
60		+32.0	679.490	679.621
70		+32.0	679.713	679.823
80		+32.0	679.929	680.008
90		+32.0	680.124	680.161
98		+32.0	680.278	680.276
0	2	+24.8	678.003	678.003
10		+24.8	678.291	678.330
20		+24.8	678.566	678.640
30		+24.8	678.837	678.936
40		+24.8	679.083	679.196
50		+24.8	679.321	679.440
60		+24.8	679.552	679.664
70		+24.8	679.775	679.869
80		+24.8	679.983	680.060
90		+24.8	680.192	680.224
98		+24.8	680.345	680.345
0	3	+17.6	678.084	678.084
10		+17.6	678.384	678.403
20		+17.6	678.633	678.707
30		+17.6	678.896	678.997
40		+17.6	679.146	679.261
50		+17.6	679.362	679.502
60		+17.6	679.613	679.726
70		+17.6	679.837	679.931
80		+17.6	680.055	680.123
90		+17.6	680.259	680.291
98		+17.6	680.413	680.413
0	4	+10.4	678.142	678.142
10		+10.4	678.408	678.448
20		+10.4	678.669	678.742
30		+10.4	678.924	679.023
40		+10.4	679.170	679.285
50		+10.4	679.402	679.522
60		+10.4	679.630	679.743
70		+10.4	679.852	679.947
80		+10.4	680.069	680.137
90		+10.4	680.276	680.308
98		+10.4	680.431	680.431
0	5	+ 3.2	678.105	678.105
10		+ 3.2	678.350	678.390
20		+ 3.2	678.590	678.664
30		+ 3.2	678.826	678.925
40		+ 3.2	679.056	679.171
50		+ 3.2	679.276	679.398
60		+ 3.2	679.486	679.606
70		+ 3.2	679.708	679.803
80		+ 3.2	679.916	679.983
90		+ 3.2	680.119	680.151
98		+ 3.2	680.274	680.274
0	6	- 4.0	678.076	678.076
10		- 4.0	678.302	678.348
20		- 4.0	678.521	678.607
30		- 4.0	678.737	678.852
40		- 4.0	678.948	679.081
50		- 4.0	679.159	679.298
60		- 4.0	679.366	679.497
70		- 4.0	679.569	679.679
80		- 4.0	679.767	679.846
90		- 4.0	679.961	679.999
98		- 4.0	680.117	680.117

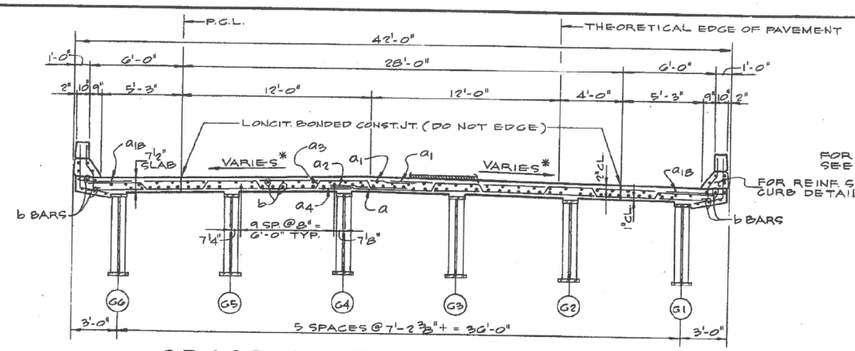
(+) SIGN INDICATES OFFSET EAST OF P. G. LINE.
(-) SIGN INDICATES OFFSET WEST OF P. G. LINE.

SOUTHBOUND ROADWAY

DISTANCE FROM CENTERLINE BEARING N.W. ABUT. (FEET)	GIRDER NO.	NORMAL OFFSET FROM P. G. LINE (FEET)	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEADLOAD DEFLECTIONS
0	7	+ 4.000	684.760	684.760
10		+ 4.000	685.030	685.088
20		+ 4.000	685.294	685.402
30		+ 4.000	685.553	685.698
40		+ 4.000	685.804	685.972
50		+ 4.000	686.048	686.222
60		+ 4.000	686.287	686.451
70		+ 4.000	686.520	686.658
80		+ 4.000	686.747	686.845
90		+ 4.000	686.966	687.013
98		+ 4.000	687.137	687.137
0	8	- 3.208	684.908	684.908
10		- 3.208	685.166	685.215
20		- 3.208	685.418	685.509
30		- 3.208	685.664	685.787
40		- 3.208	685.905	686.048
50		- 3.208	686.144	686.291
60		- 3.208	686.376	686.514
70		- 3.208	686.602	686.718
80		- 3.208	686.822	686.905
90		- 3.208	687.036	687.076
98		- 3.208	687.208	687.208
0	9	-10.417	685.063	685.063
10		-10.417	685.308	685.357
20		-10.417	685.548	685.638
30		-10.417	685.782	685.904
40		-10.417	686.011	686.153
50		-10.417	686.242	686.389
60		-10.417	686.467	686.606
70		-10.417	686.687	686.804
80		-10.417	686.901	686.984
90		-10.417	687.110	687.150
98		-10.417	687.280	687.280
0	10	-17.625	685.122	685.122
10		-17.625	685.349	685.398
20		-17.625	685.570	685.660
30		-17.625	685.785	685.907
40		-17.625	685.995	686.136
50		-17.625	686.213	686.360
60		-17.625	686.426	686.595
70		-17.625	686.634	686.751
80		-17.625	686.837	686.920
90		-17.625	687.033	687.073
98		-17.625	687.196	687.196
0	11	-24.833	685.136	685.136
10		-24.833	685.347	685.396
20		-24.833	685.550	685.640
30		-24.833	685.747	685.869
40		-24.833	685.939	686.080
50		-24.833	686.139	686.287
60		-24.833	686.341	686.480
70		-24.833	686.537	686.654
80		-24.833	686.726	686.811
90		-24.833	686.913	686.952
98		-24.833	687.066	687.066
0	12	-32.042	684.975	684.975
10		-32.042	685.183	685.232
20		-32.042	685.386	685.476
30		-32.042	685.582	685.704
40		-32.042	685.773	685.915
50		-32.042	685.956	686.115
60		-32.042	686.136	686.307
70		-32.042	686.363	686.480
80		-32.042	686.552	686.635
90		-32.042	686.735	686.775
98		-32.042	686.882	686.882
0	13	-39.250	684.813	684.813
10		-39.250	685.021	685.070
20		-39.250	685.222	685.314
30		-39.250	685.418	685.541
40		-39.250	685.609	685.751
50		-39.250	685.796	685.945
60		-39.250	685.996	686.135
70		-39.250	686.189	686.306
80		-39.250	686.377	686.460
90		-39.250	686.558	686.586
98		-39.250	686.700	686.700
0	14	-47.252	684.635	684.635
10		-47.101	684.844	684.904
20		-46.951	685.049	685.156
30		-46.800	685.247	685.396
40		-46.650	685.440	685.611
50		-46.499	685.628	685.806
60		-46.348	685.828	685.996
70		-46.198	686.023	686.165
80		-46.047	686.212	686.315
90		-45.897	686.396	686.447
98.485		-45.776	686.539	686.539

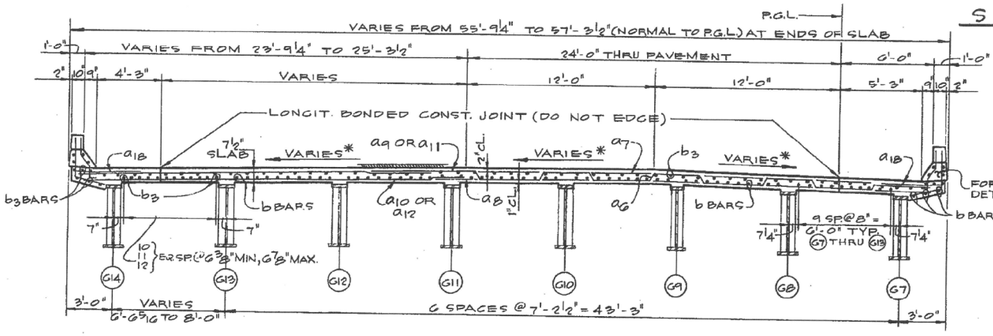
TABLE "A"

SHOWING NORMAL OFFSETS, THEORETICAL GRADE ELEVATIONS AND GRADE ELEVATIONS ADJUSTED FOR CONCRETE DEADLOAD DEFLECTIONS AT ALL SUPPORTS AND AT TEN-FOOT INTERVALS MEASURED ALONG THE CENTERLINE OF THE GIRDER.



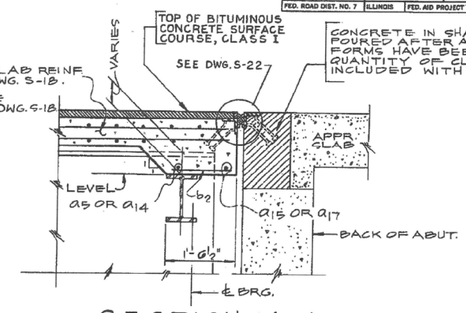
CROSS SECTION - N.B. BRIDGE
LOOKING NORTH

* SEE TABLE "B" BELOW

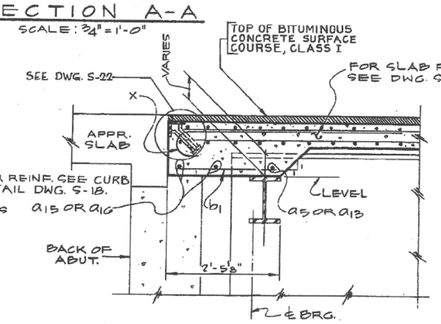


CROSS SECTION - S.B. BRIDGE
LOOKING NORTH

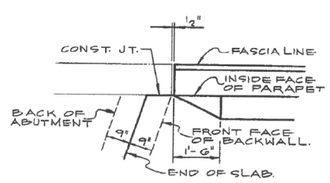
* SEE TABLE "B" BELOW



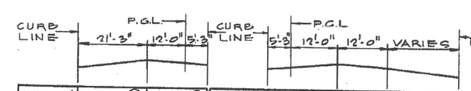
SECTION A-A
SCALE: 3/4" = 1'-0"



SECTION B-B
SCALE: 3/4" = 1'-0"



DETAIL A
SCALE: 1/2" = 1'-0"



STATION	SLOPE ①	SLOPE ②
299+75	0.0238	0.007
300+00	0.0192	-0.0007
300+25	0.0127	-0.008
300+50	0.0158	-0.012
300+75	0.0196	-0.0156

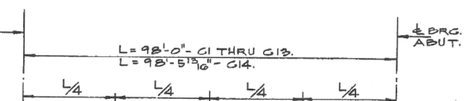
N.B. BRIDGE

STATION	SLOPE ①	SLOPE ②	SLOPE ③
299+50	0.032	0.015	-0.0156
300+00	0.0225	0.00	-0.017
300+50	0.017	-0.010	-0.019
300+75	0.0163	-0.013	-0.0196

S.B. BRIDGE

TABLE "B" - CROSS SLOPE CONFIGURATION

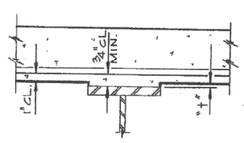
USE STRAIGHT LINE INTERPOLATION FOR SECTIONS BTWN. STATIONS SHOWN.
+ SIGN INDICATES RISING ELEVATION FROM LEFT TO RIGHT, LOOKING UP STATION.



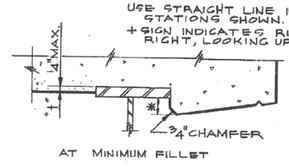
GIRDER NO.			
G1 THRU G6	1 1/16"	1 7/16"	1 1/16"
G7 THRU G14	1 1/4"	1 3/4"	1 1/4"

DEAD LOAD DEFLECTION DIAGRAM (G1) THRU (G14)
(INCLUDES WEIGHT OF CONCRETE ONLY)

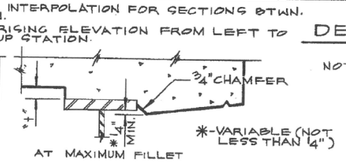
NOTE: THE ABOVE DEFLECTIONS ARE NOT TO USED IN THE FIELD IF THE ENGINEER IS WORKING FROM THE GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS AS SHOWN IN TABLE "A".



INTERIOR GIRDERS



AT MINIMUM FILLET



AT MAXIMUM FILLET

EXTERIOR GIRDERS

AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED ELEVATIONS OF THE TOP FLANGES OF THE GIRDERS SHALL BE TAKEN AT THE POINTS SHOWN IN TABLE "A". THESE ELEVATIONS SUBTRACTED FROM THE TABULATED "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS" MINUS 7 1/2" EQUALS THE FILLET HEIGHTS ABOVE THE TOP FLANGE OF GIRDERS.

METHOD OF DETERMINING FILLET HEIGHTS "t"

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY G.P. ALLEMAN, H. DEPERCZEL
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

DECK SLAB SECTIONS & DETAILS

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JBN	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

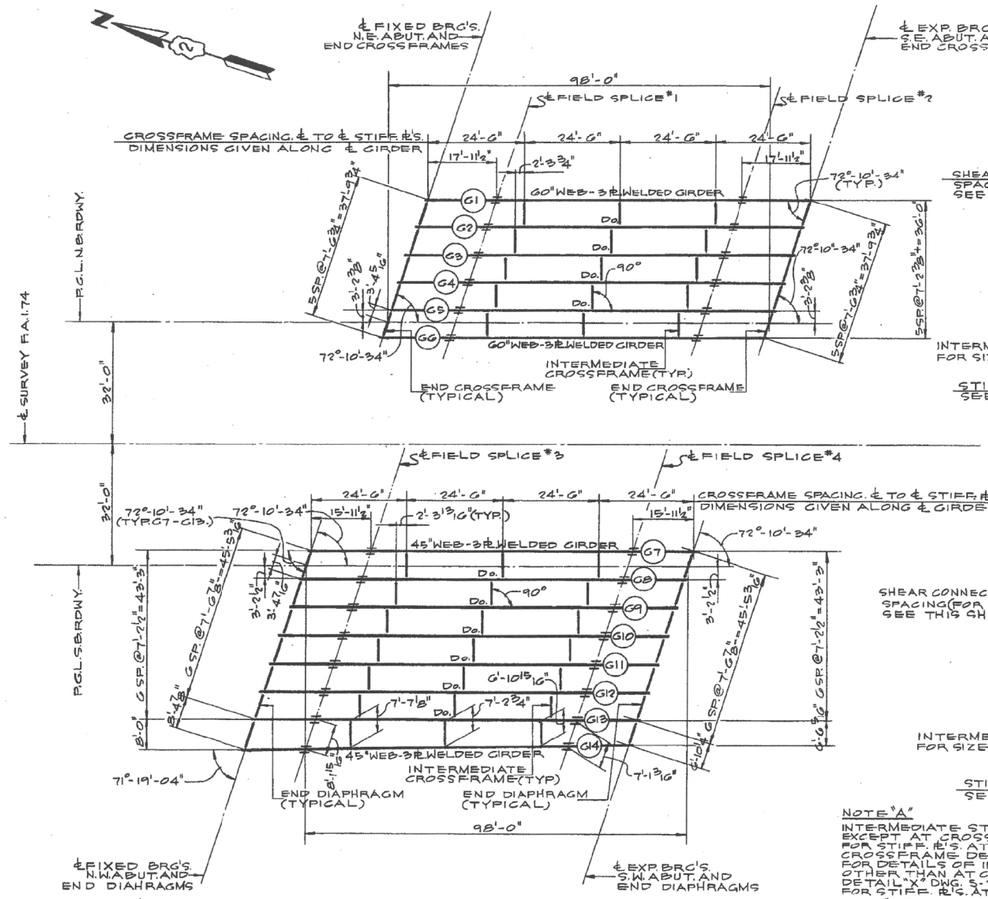
EXISTING PLANS – DECK SLAB SECTIONS & DETAILS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 17 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	930
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

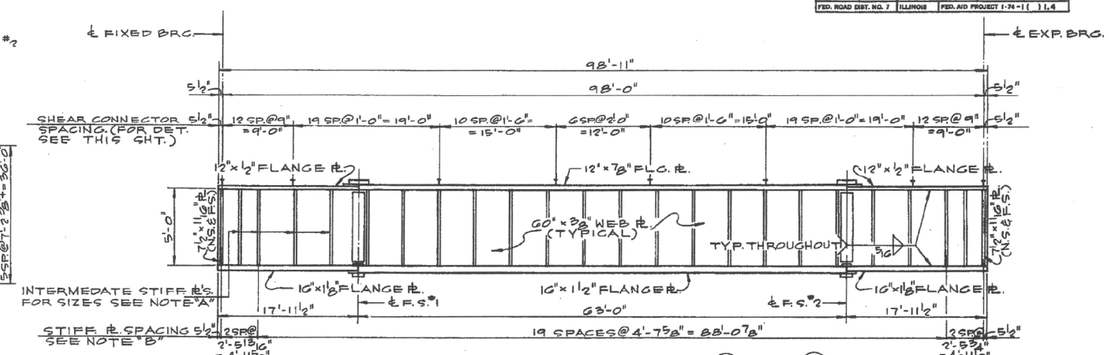
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	273
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-74-1 ( ) 1,4		

DWG. NO. S-20



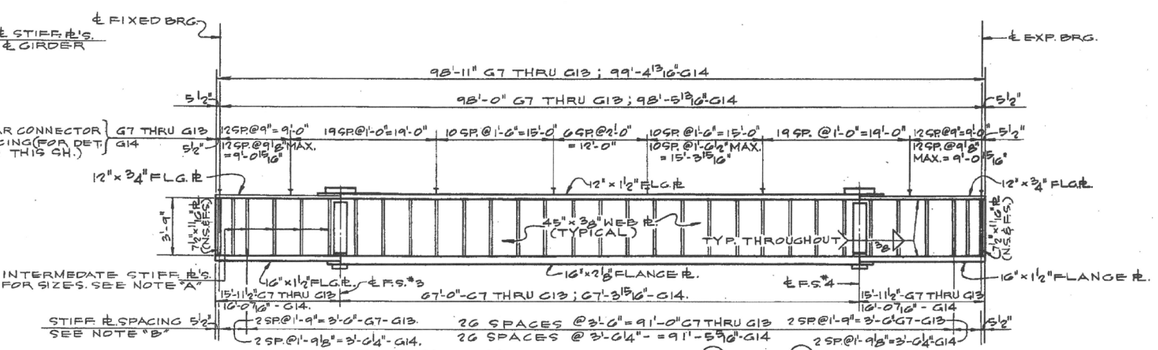
FRAMING PLAN

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



ELEVATION OF GIRDERS G1 THRU GG

SCALE: 1/8" = 1'-0" HORIZ. & 1/4" = 1'-0" VERT.



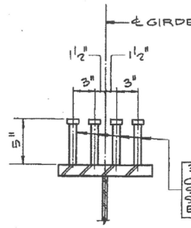
ELEVATION OF GIRDERS G7 THRU G14

SCALE: 1/8" = 1'-0" HORIZ. & 1/4" = 1'-0" VERT

NOTE "A"
INTERMEDIATE STIFF'S. - 4" × 3/8" ℔. (N.S. & F.S.)
EXCEPT AT CROSSFRAMES.
FOR STIFF. ℔'S. AT CROSSFRAMES, SEE CROSSFRAME DETAILS, DWG. S-21.
FOR DETAILS OF INTERMEDIATE STIFF. ℔'S. OTHER THAN AT CROSSFRAMES, SEE DETAIL "X" DWG. S-21.
FOR STIFF. ℔'S. AT BEARINGS, SEE DETAIL, DWG. S-21.

NOTE "B"
STIFFENER PLATES TO BE WELDED AT RIGHT ANGLE TO WEBS OF ALL GIRDERS EXCEPT G14 AT CROSSFRAMES.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
3/4" ϕ × 5" STUD SHEAR CONNECTORS	EACH	4984



SHEAR CONNECTOR DETAIL

SCALE: 1½" = 1'-0"

LEGEND:
FOR SYMBOLS USED IN TABLES OF MOMENTS, SHEARS AND PROPERTIES.
D.L. — DEAD LOAD.
S.D.L. — SUPERIMPOSED DEAD LOAD ACTING ON COMPOSITE SECTION.
L.L. — LIVE LOAD.
IMP. — IMPACT.
Is — MOMENT OF INERTIA STEEL SECTION.
Sts — SECTION MODULUS - TOP STEEL SECTION.
Sbs — SECTION MODULUS - BOT. STEEL SECTION.
Ic — MOMENT OF INERTIA COMPOSITE SECTION.
Stc — SECTION MODULUS - TOP COMPOSITE SECTION.
Sbc — SECTION MODULUS - BOT. COMPOSITE SECTION.

TABLE OF MOMENTS & SHEARS - INTERIOR GIRDERS - N.B. BRIDGE

	STEEL SECTION		
	MAX. MOMENTS		
D.L.	1137.6 FT.-KIPS		
	COMPOSITE SECTION		
	MAX. MOMENTS		
S.D.L.	385.6 FT.-KIPS		
L.L.	973.9 FT.-KIPS		
IMP.	218.3 FT.-KIPS		
TOTAL	1577.8 FT.-KIPS		
	SHEAR (IN KIPS)		
	SUPP'T.	¼ POINT	½ POINT
S.D.L.	15.8	7.85	0.
L.L.	42.6	30.85	19.07
IMP.	9.6	7.77	5.48
TOTAL	68.0	46.47	24.55

PROPERTIES OF INTERIOR GIRDERS - N. B. BRIDGE

STEEL SECTION		
LOCATION	SUPP'T.	CENTER
Is	26133	36105
Sts	680.1	944.8
Sbs	1126.5	1494.4
COMPOSITE SECTION		
LOCATION	SUPP'T.	CENTER
Ic	72327	85812
Stc	3301.1	3540.5
Sbc	1565.0	1922.4

TABLE OF MOMENTS & SHEARS - INTERIOR GIRDERS - S.B. BRIDGE

	STEEL SECTION		
	MAX. MOMENTS		
D.L.	1174.4 FT.-KIPS		
	COMPOSITE SECTION		
	MAX. MOMENTS		
S.D.L.	350.9 FT.-KIPS		
L.L.	975.3 FT.-KIPS		
IMP.	218.6 FT.-KIPS		
TOTAL	1544.8 FT.-KIPS		
	SHEAR (IN KIPS)		
	SUPP'T.	¼ POINT	½ POINT
S.D.L.	14.4	7.2	0
L.L.	42.7	30.9	19.1
IMP.	9.6	7.8	5.5
TOTAL	66.7	45.9	24.6

PROPERTIES OF INTERIOR GIRDERS - S.B. BRIDGE

STEEL SECTION		
	SUPPORT	CENTER
Is	18049	29344
Sts	595.5	1018.7
Sbs	1065.3	1538.3
COMPOSITE SECTION		
Ic	49154	62326
Stc	2598.5	2871.1
Sbc	1411.1	1865.1

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY G.P. ALLEMAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

FRAMING PLAN

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

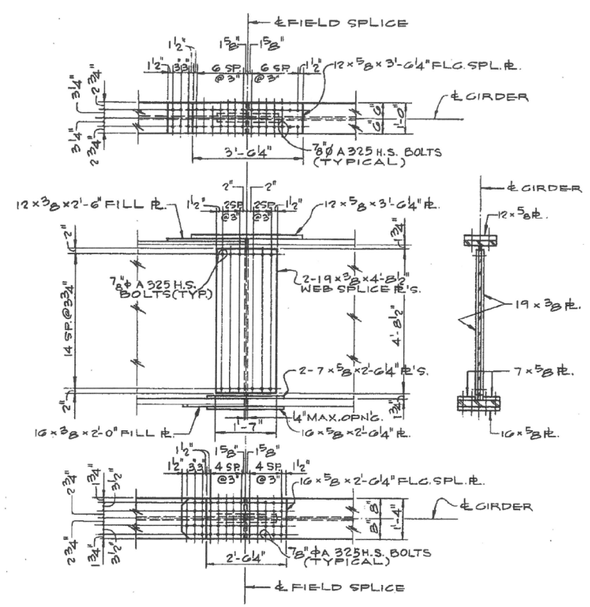
EXISTING PLANS – FRAMING PLAN
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 18 OF 21 SHEETS

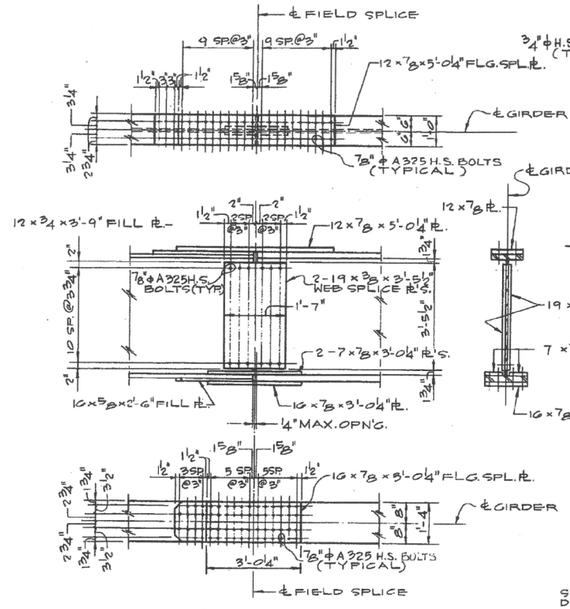
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	931
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	278
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 ( ) 1.4		

DWG. NO. S-21



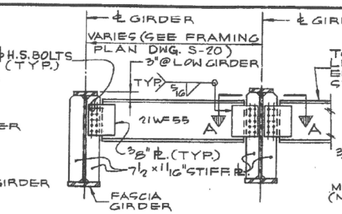
FIELD SPLICE - N.B. BRIDGE



FIELD SPLICE - S.B. BRIDGE

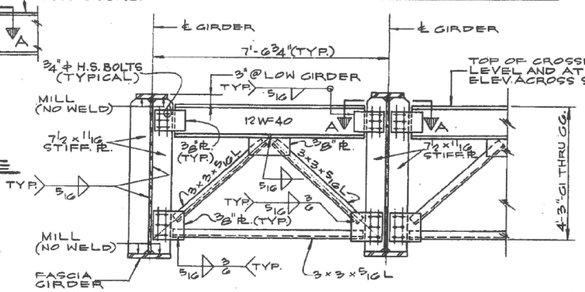
FIELD SPLICE DETAILS

SCALE: ½" = 1'-0"



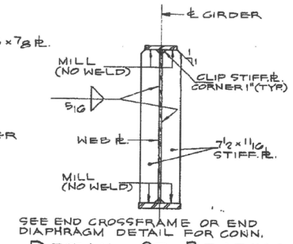
END DIAPHRAGM DETAIL - S.B. BRIDGE

NOT TO SCALE



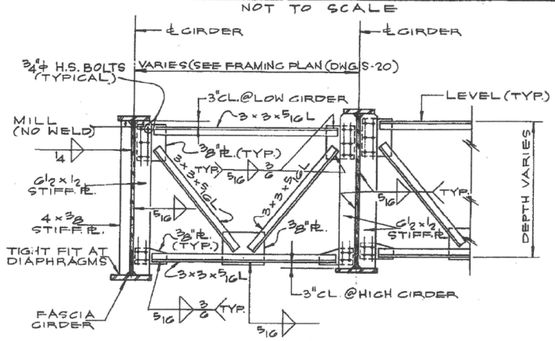
END CROSSFRAME DETAIL - N.B. BRIDGE

NOT TO SCALE



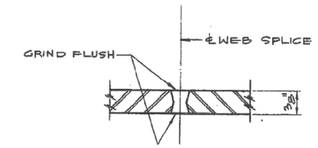
DETAIL OF BEARING STIFFENER PL'S.

SCALE: ½" = 1'-0"



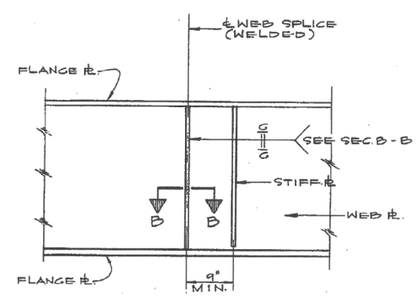
INTERMEDIATE CROSSFRAME DETAIL NOT TO SCALE

N.B. AND S.B. BRIDGES



SECTION B-B

(WELD SIMILAR TO A.W.S. B-L1-G)

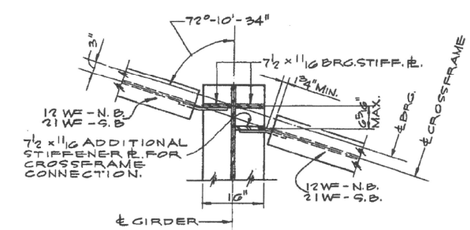


SPLICE ELEVATION

TYPICAL GIRDER SHOP SPLICE DETAIL

(OPTIONAL)

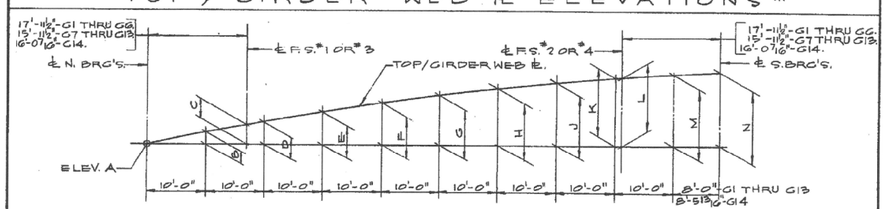
NOT TO SCALE



SECTION A-A

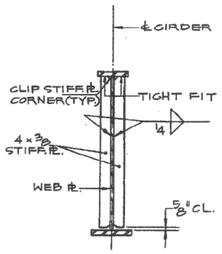
SCALE: ¾" = 1'-0"

TOP / GIRDER WEB PL ELEVATIONS *



GIRDER	ELEV. A	DIMENSION B	C	D	E	F	G	H	J	K	L	M	N
G1	677.197	3 15/16"	6 13/16"	7 11/16"	11 5/16"	1'-2 3/8"	1'-5 9/16"	1'-8"	1'-10 1/2"	2'-0 3/4"	2'-0 7/8"	2'-2 11/16"	2'-4 3/16"
G2	677.273	3 15/16"	6 3/4"	7 5/8"	11 3/16"	1'-2 3/8"	1'-5 1/4"	1'-7 15/16"	1'-10 3/8"	2'-0 11/16"	2'-0 13/16"	2'-2 5/8"	2'-4 1/8"
G3	677.355	3 13/16"	6 9/16"	7 7/16"	10 15/16"	1'-2 1/8"	1'-5"	1'-7 11/16"	1'-10 3/16"	2'-0 7/16"	2'-0 9/16"	2'-2 1/2"	2'-3 15/16"
G4	677.413	3 11/16"	6 5/16"	7 3/16"	10 9/16"	1'-1 11/16"	1'-4 9/16"	1'-7 3/16"	1'-9 5/8"	1'-11 15/16"	2'-0 1/16"	2'-2"	2'-3 7/16"
G5	677.376	3 7/16"	5 7/8"	6 11/16"	9 15/16"	1'-0 13/16"	1'-3 1/2"	1'-6 1/4"	1'-8 3/8"	1'-10 9/16"	1'-10 5/8"	2'-0 9/16"	2'-2"
G6	677.349	3 1/8"	5 3/8"	6 1/8"	9"	11 11/16"	1'-2 1/4"	1'-4 11/16"	1'-6 15/16"	1'-9"	1'-9 1/8"	1'-10 15/16"	2'-0 1/2"
G7	683.958	3 13/16"	5 13/16"	7 7/16"	10 7/8"	1'-2 1/8"	1'-5 1/8"	1'-7 7/8"	1'-10 7/16"	2'-0 3/4"	2'-1 9/16"	2'-2 15/16"	2'-4 1/2"
G8	684.106	3 11/16"	5 5/8"	7 3/16"	10 9/16"	1'-1 11/16"	1'-4 9/16"	1'-7 1/4"	1'-9 3/4"	1'-11 15/16"	2'-0 1/2"	2'-2 1/16"	2'-3 5/8"
G9	684.260	3 9/16"	5 7/16"	6 15/16"	10 1/8"	1'-1 1/16"	1'-3 15/16"	1'-6 1/2"	1'-8 7/8"	1'-11 1/16"	1'-11 9/16"	2'-1 1/16"	2'-2 5/8"
G10	684.320	3 5/16"	5 1/16"	6 7/16"	9 7/16"	1'-0 3/16"	1'-2 7/8"	1'-5 5/16"	1'-7 9/16"	1'-9 9/16"	1'-10 1/16"	1'-11 7/16"	2'-0 7/8"
G11	684.336	3 1/8"	4 3/4"	6"	8 3/4"	11 5/16"	1'-1 9/16"	1'-4 1/8"	1'-6 3/16"	1'-8 1/16"	1'-8 1/2"	1'-9 3/4"	1'-11 1/8"
G12	684.173	3 1/16"	4 3/4"	6"	8 3/4"	11 1/4"	1'-1 11/16"	1'-4"	1'-6 1/16"	1'-7 15/16"	1'-8 3/8"	1'-9 5/8"	1'-10 7/8"
G13	684.011	3 1/16"	4 1/16"	6"	8 3/4"	11 1/4"	1'-1 9/16"	1'-3 7/8"	1'-5 15/16"	1'-7 3/4"	1'-8 3/16"	1'-9 7/16"	1'-10 5/8"
G14	683.833	3 1/16"	4 1/16"	6"	8 3/4"	11 5/16"	1'-1 5/8"	1'-3 15/16"	1'-6"	1'-7 7/8"	1'-8 5/16"	1'-9 5/8"	1'-10 7/8"

* FOR FABRICATION OF STRUCTURAL STEEL - INCLUDES ALLOWANCE FOR DEFLECTION DUE TO DEAD LOAD OF CONCRETE.



DETAIL "X"

SCALE: ½" = 1'-0"

TYP. INTERMEDIATE STIFFENERS OTHER THAN AT CROSSFRAMES.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO & R.D. KOESTER
DRAWN BY G.R. ALLEMAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

STEEL DETAILS

F.A.I. 74 - SECTION 81-1HB-1
F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

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USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - STEEL DETAILS
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB

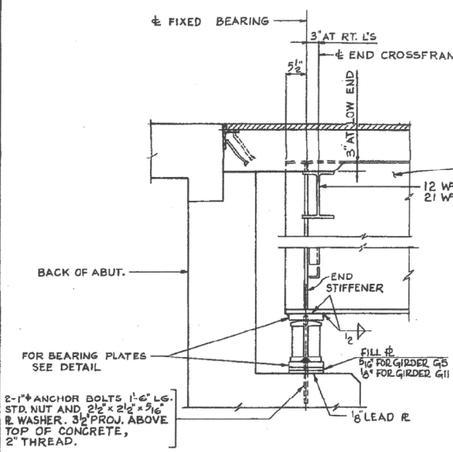
SHEET NO. 19 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	932
		CONTRACT NO. 64E26		

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	275
FED. ROAD DIST. NO 7	ILLINOIS	FED. AID PROJECT I-74-1 ( ) L.4		

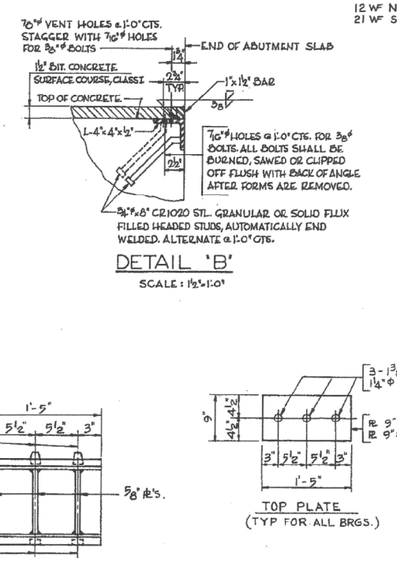
DWG. NO. S-22



SECTION AT N. ABUTMENTS

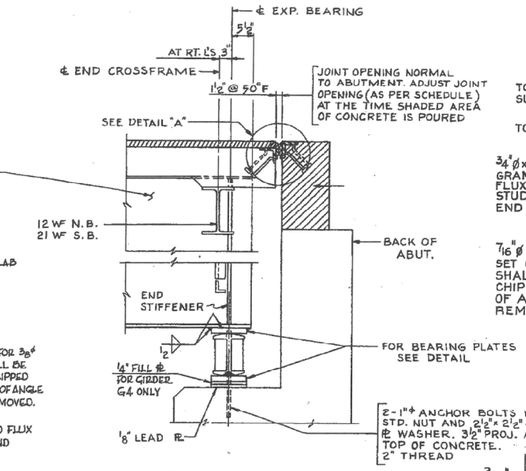
SCALE: ¾" = 1'-0"

BEARING TYPE F-1, 14 REQ'D. WT./BRG = 389 LBS. +FILL ℞'S



DETAIL "B"

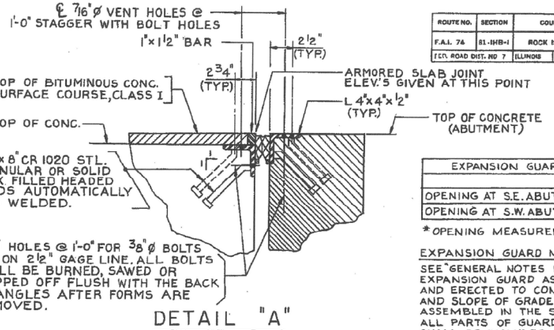
SCALE: 1½" = 1'-0"



SECTION AT S. ABUTMENT

SCALE: ¾" = 1'-0"

BEARING TYPE E-1, 14 REQ'D. WT./BRG. = 374 LBS. +FILL ℞'S



DETAIL "A"

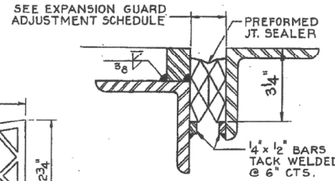
SCALE: 1½" = 1'-0"

EXPANSION GUARD ADJUSTMENT SCHEDULE						
	110°F	90°F	70°F	50°F	30°F	10°F
OPENING AT S.E. ABUT.*	1 3/32"	1 7/32"	1 3/8"	1 1/2"	1 5/8"	1 29/32"
OPENING AT S.W. ABUT.*	1 3/32"	1 7/32"	1 3/8"	1 1/2"	1 5/8"	1 29/32"

* OPENING MEASURED NORMAL TO ABUTMENT

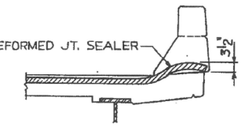
EXPANSION GUARD NOTES:

SEE "GENERAL NOTES FOR STRUCTURAL STEEL" DRG. S-2. EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPE OF GRADE AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION. ALL PARTS OF GUARD ASSEMBLY INCLUDING STUDS SHALL BE INCLUDED IN THE LUMP SUM COST FOR STRUCTURAL STEEL, EXCEPT "PREFORMED JOINT SEALER" WHICH IS BILLED SEPARATELY.



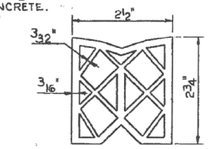
SEALED DECK JOINT

N.T.S.



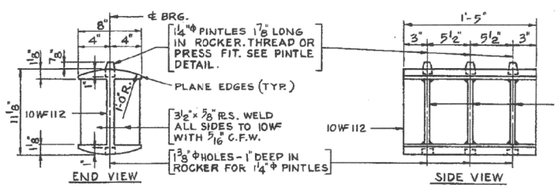
TYPICAL END OF SEALER TREATMENT.

N.T.S.



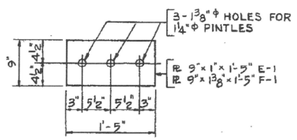
PREFORMED JOINT SEALER

N.T.S.



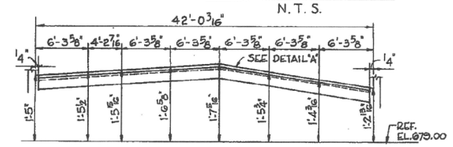
ROCKER DETAIL OF EXPANSION BRG. TYPE E-1

SCALE: 1½" = 1'-0"

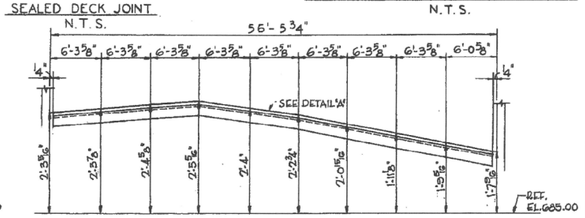


TOP PLATE

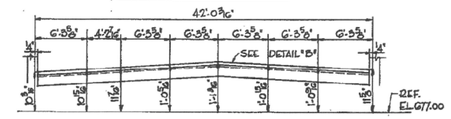
(TYP FOR ALL BRGS.)



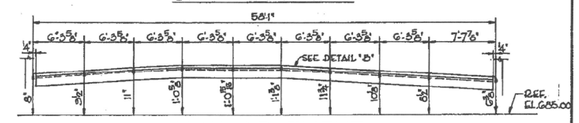
S.E. ABUTMENT



S.W. ABUTMENT



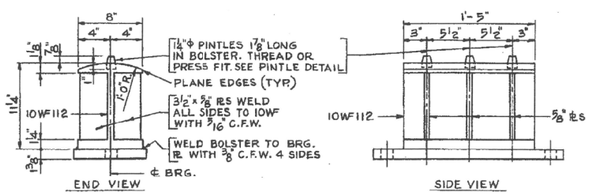
N.E. ABUTMENT



N.W. ABUTMENT

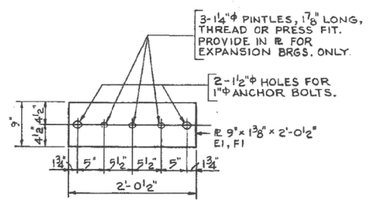
ELEVATION OF EXPANSION GUARDS

NOT TO SCALE



BOLSTER DETAIL OF FIXED BRG. TYPE F-1

SCALE: 1½" = 1'-0"

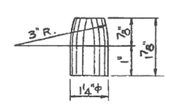


BOTTOM PLATE

(TYP. FOR ALL BRGS. EXCEPT AS NOTED)

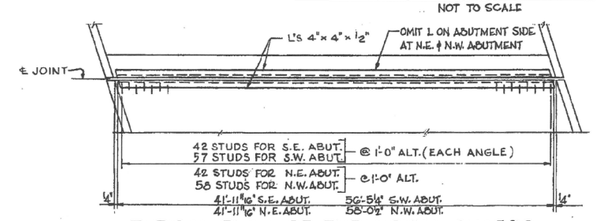
BEARING PLATE DETAIL

SCALE: 1" = 1'-0"



PINTLE DETAIL

SCALE: ½" = 1"



TYPICAL PLAN OF EXPANSION GUARDS

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
PREFORMED JOINT SEALER	LIN. FT.	102

BEARINGS AND EXPANSION GUARD DETAILS

F.A.I. 74 - SECTION 81-1HB-1

F.A.I. 74 OVER 12TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y.H. JO & R.D. KOESTER
DRAWN BY R.K. MILLER
CHECKED R.D. Koester
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

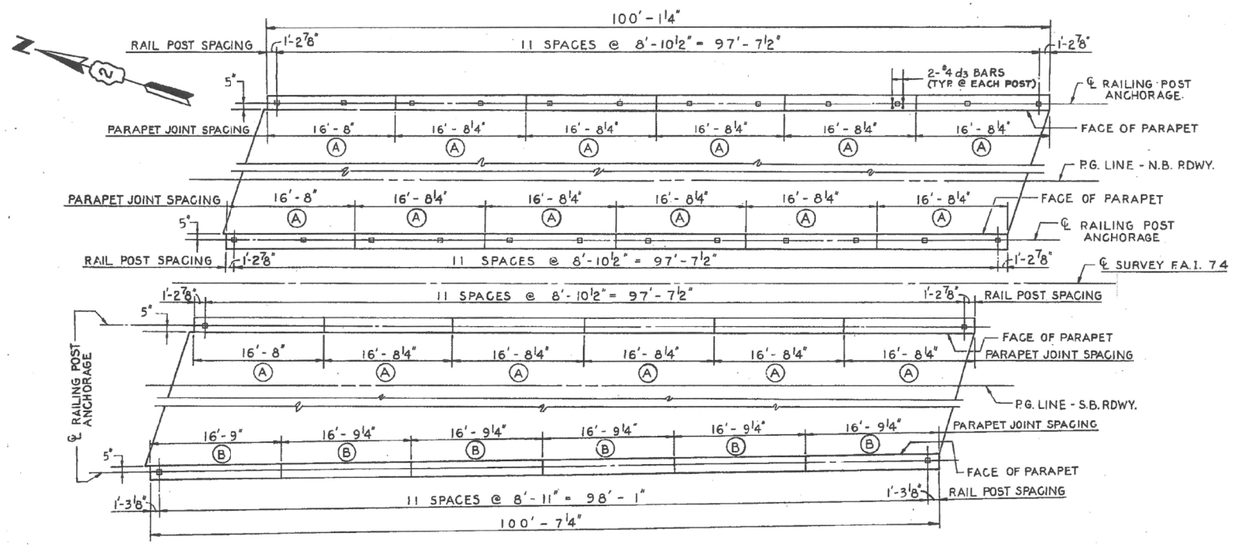
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – BEARINGS AND EXPANSION GUARD DETAILS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 20 OF 21 SHEETS

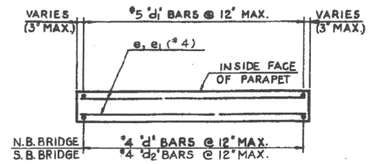
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	933
		CONTRACT NO. 64E26		

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT



PLAN

SCALE: 1/8" = 1'-0"



PLAN - TYP. PARAPET PANEL REINFORCEMENT

(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS EACH PANEL VERTICAL *		HORIZONTAL
N. BOUND	A	12	18-#4 d	18-#5 d1	2-#4 e E.F.
S. BOUND	A	6	18-#4 d2	18-#5 d1	2-#4 e E.F.
	B	6	18-#4 d2	18-#5 d1	2-#4 e1 E.F.

* BARS d, d1 AND d2 ARE DETAILED AND BILLED ON SH. S-18.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-1	ROCK ISLAND	389	276
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 ( ) 1.6		

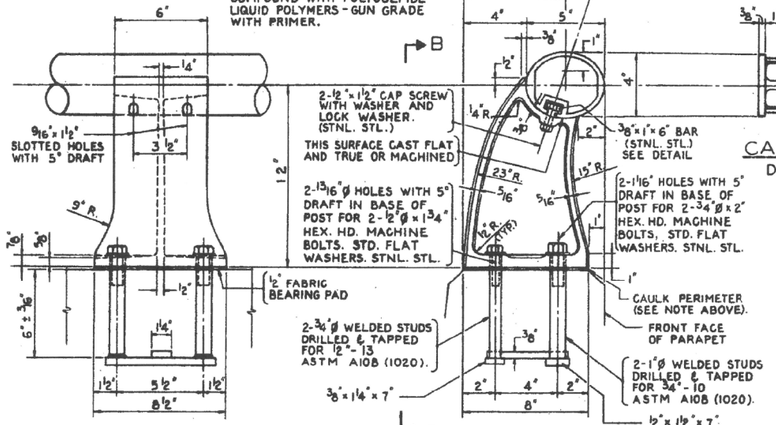
DWG. NO. S-23

BAR LIST

BAR	NO	SIZE	LENGTH	SHAPE
B	72	#4	16'-4"	—
e1	24	#4	16'-5"	—

NOTE:

SEAL PERIMETER OF POST TO PARAPET WITH TWO COMPONENT NON-STAINING GRAY SEALING COMPOUND WITH POLYSULFIDE LIQUID POLYMERS - GUN GRADE WITH PRIMER.

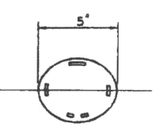


VIEW B-B

SECTION A-A

RAIL POST DETAILS

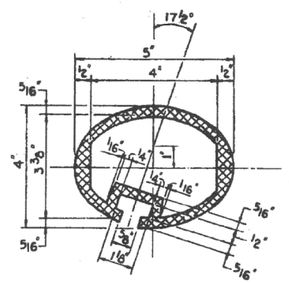
SCALE: 3" = 1'-0"



CAST END CAP

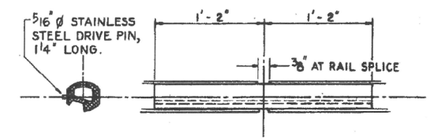
DRIVE FIT TYPE

- 8 REQUIRED -



SEC. THRU ELLIPTICAL RAIL SECTION

SCALE: ½" = 1"



RAIL SPLICE

SCALE: 1½" = 1'-0"

NOTES:

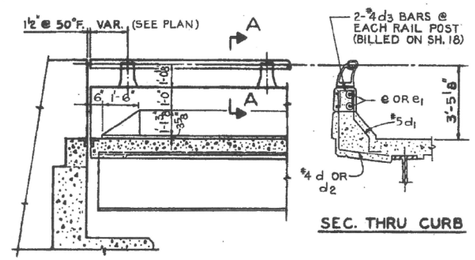
ALL POSTS SHALL BE NORMAL TO PARAPET. RAIL ELEMENT SHALL BE PARALLEL TO GRADE. PROVIDE ONE 1/8" AND TWO 1/16" SHIMS FOR 25 PERCENT OF THE POSTS. HIGH SPOTS SHALL BE GROUND, AND LOW SPOTS SHIMMED.

RAIL SHALL BE SUPPLIED IN MODULAR LENGTHS OF 30 FEET, EXCEPT AT ONE END OF THE BRIDGE, WHERE THE SHORTER RAIL LENGTH SHALL BE ATTACHED TO A MINIMUM OF TWO POSTS.

ALL JOINTS IN RAIL SHALL BE SPLICED PER DETAIL. COST OF RAIL SPLICE, END CAPS AND HARDWARE SHALL BE INCIDENTAL TO THE ITEM "ALUMINUM RAILING".

FOR MATERIAL SPECIFICATIONS, SEE SECTIONS 710.36, 710.37 AND 718.09(a) OF THE STANDARD SPECIFICATIONS.

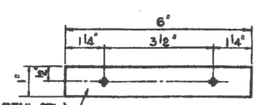
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38ksi. and elongation of 10 % in 2 inches.



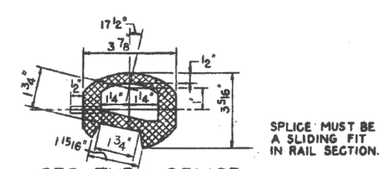
INSIDE VIEW AT SOUTH ABUTMENTS

SCALE: ⅜" = 1'-0"

SEC. THRU CURB

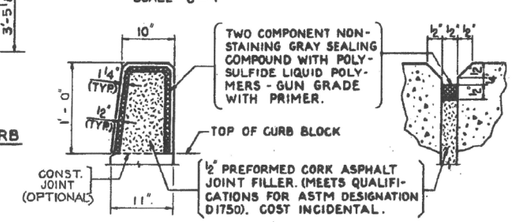


CLAMP BAR



SEC. THRU SPLICE

SCALE: ⅜" = 1"



PARAPET JOINT DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YDS.	12.9
REINFORCEMENT BARS	POUND	1,050
ALUMINUM RAILING	LIN. FT.	401

PARAPET AND RAILING DETAILS

F.A.I. 74 SECTION 81-1HB-1
F.A.I. 74 OVER 12 TH AVE.

ROCK ISLAND COUNTY

STATION 300 + 20.11

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY M. VADKERTY
DRAWN BY M. VADKERTY
CHECKED
IN CHARGE C.S. MARTINS
APPROVED W.G. HORN

FOR INFORMATION ONLY

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED -	REVISED
	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 03/23/2017	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

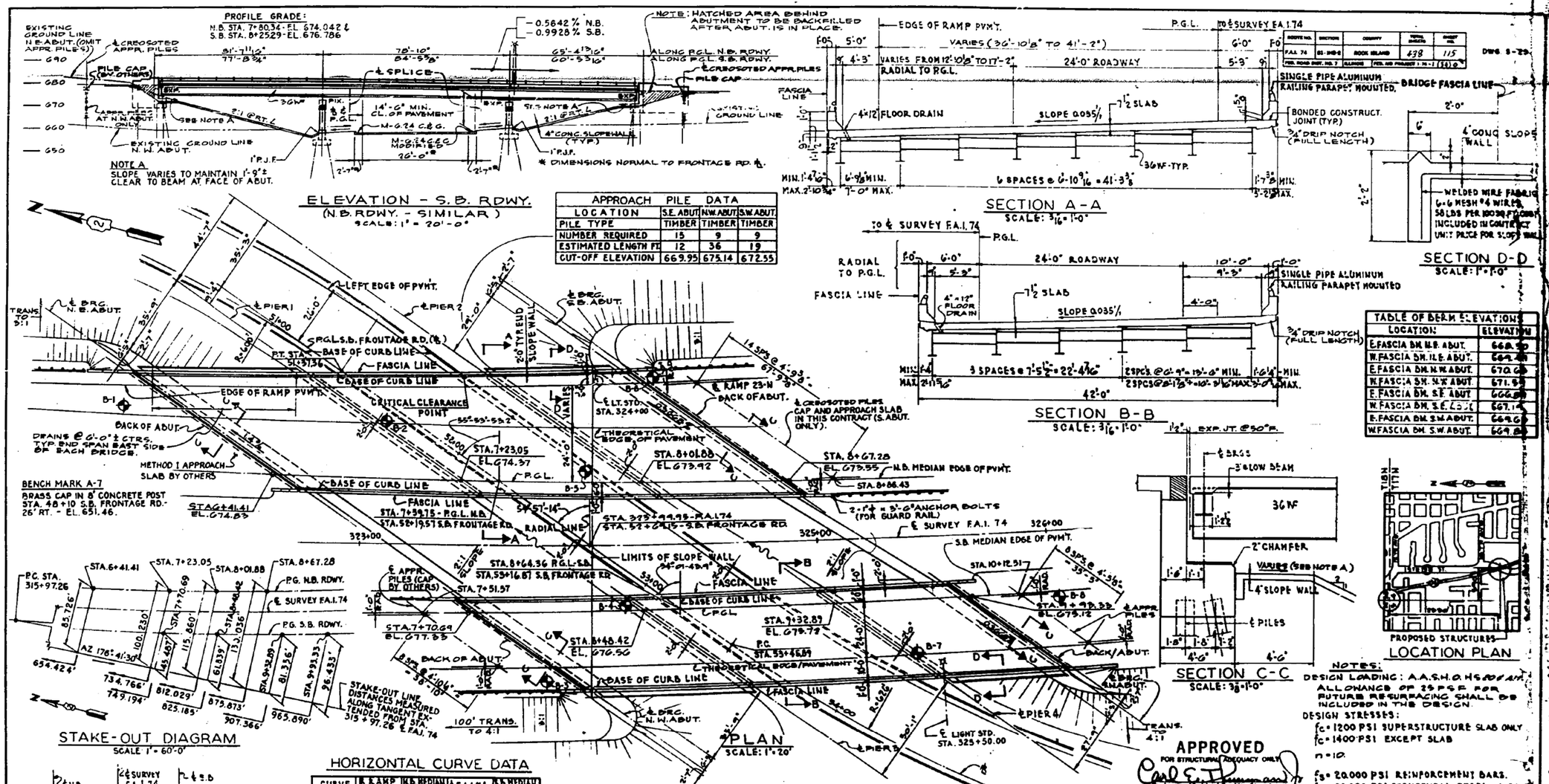
EXISTING PLANS – PARAPET AND RAILING DETAILS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 21 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	934

CONTRACT NO. 64E26

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT



APPROACH PILE DATA			
LOCATION	S.E. ABUT	N.W. ABUT	S.W. ABUT
PILE TYPE	TIMBER	TIMBER	TIMBER
NUMBER REQUIRED	15	9	9
ESTIMATED LENGTH FT.	12	36	19
CUT-OFF ELEVATION	669.95	673.14	672.55

TABLE OF BERM ELEVATIONS	
LOCATION	ELEVATION
E. FASCIA BM. N.B. ABUT.	668.50
W. FASCIA BM. N.B. ABUT.	669.40
E. FASCIA BM. N.W. ABUT.	670.65
W. FASCIA BM. N.W. ABUT.	671.95
E. FASCIA BM. S.B. ABUT.	666.80
W. FASCIA BM. S.B. ABUT.	667.14
E. FASCIA BM. S.W. ABUT.	669.65
W. FASCIA BM. S.W. ABUT.	669.85

HORIZONTAL CURVE DATA				
CURVE	℄ F.A.I. 74 & N.B. RAMP 23-N	N.B. MEDIAN EDGE/PVMT	℄ F.A.I. 74	S.B. MEDIAN EDGE/PVMT
Δ	14°-07'-10"	23°-30'-22"	23°-18'-01"	23°-05'-57"
D	1°-30'-00"	1°-50'-00"	1°-30'-00"	1°-30'-00"
R	3819.72	3819.72	3819.719	3819.72
P.C. STA.	0+00	0+00	315+97.26	0+00
P.C.C.STA.	9+46.30	15+67.07	351+50.60	15+39.57

NOTE:
EXCAVATION FOR PORTIONS OF STRUCTURE IN THE EMBANKMENTS SHALL NOT BE CLASSIFIED.
CLASS A EXCAVATION INCLUDES EXCAVATION FOR SLOPE WALL. (4 CU. YD.)

EDGE OF PAVEMENT ELEVATIONS (S.B. FRONTAGE RD)												
STATION	51+00	51+50	51+75	52+00	52+25	52+50	52+75	53+00	53+25	53+50	53+75	54+00
℄ ELEVATION.	652.81	653.26	653.51	653.75	653.98	654.27	654.67	655.18	655.71	656.65	657.35	658.23
LT. EDGE PVMT ELEV.	654.00	654.19	654.24	654.30	654.39	654.68	654.90	655.08	655.35	655.72	656.22	656.93

TOTAL BILL OF MATERIAL (BRIDGE ONLY)									
ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL	ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL
CLASS "A" EXCAVATION FOR STRUCTURES	CU. YD.	-	660	660	FURNISHING CONCRETE PILES	LIN. FT.	-	3,250	3,250
PROTECTIVE COAT	SQ. YD.	2,531	-	2,531	DRIVING TIMBER PILES	LIN. FT.	-	4,500	4,500
CLASS "X" CONCRETE	CU. YD.	608.5	769.8	1,378.3	DRIVING CONCRETE PILES	LIN. FT.	-	3,250	3,250
FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	0.3	-	0.3	TEST PILE TIMBER	EACH	-	2	2
ALUMINUM RAILING	LIN. FT.	870	-	870	TEST PILE CONCRETE	EACH	-	2	2
REINFORCEMENT BARS	POUND	192,060	78,845	270,905	NAME PLATES	EACH	2	-	2
FURNISHING CREOSOTED PILES UP TO 20 FT.	LIN. FT.	-	351	351	SLOPEWALL, 4-INCH	SQ. YD.	-	2,140	2,140
FURNISHING CREOSOTED PILES 20.1 TO 38'	LIN. FT.	-	4,248	4,248	BRIDGE SEAT SEALANT	L. SUM	-	0.4	0.4
					PERMANENT BENCH MARKS, TYPE I	EACH	1	-	1
					STUD SHEAR CONNECTORS	EACH	8,112	-	8,112

*CALCULATED QUANT. - 57,905 ML

NOTES:
DESIGN LOADING: A.A.S.H.O. HS20-44
ALLOWANCE OF 25 PSF FOR FUTURE RESURFACING SHALL BE INCLUDED IN THE DESIGN.
DESIGN STRESSES:
f'c = 1200 PSI SUPERSTRUCTURE SLAB ONLY
f'c = 1400 PSI EXCEPT SLAB
n = 10
fs = 20,000 PSI REINFORCEMENT BARS.
fs = 20,000 PSI STRUCTURAL STEEL A-36
v = 75 PSI SHEAR IN FOOTINGS.
ALLOWABLE LIVE LOAD DEFLECTION:
SPAN/1000 FOR NON-COMPOSITE CONSTRUCTION
SPAN/1200 FOR COMPOSITE CONSTRUCTION

GENERAL PLAN AND ELEVATION
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323+99.96
SCALE: AS NOTED DATE

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY Y. N. HUO
DRAWN BY AL BUCKAS & R. BLEKMAN
CHECKED
IN CHARGE F. E. MARTINS
APPROVED W. G. HORN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-092-Existing_Plan_-_General_Plan_and_Elevation.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – GENERAL PLAN AND ELEVATION
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. SX1 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	935
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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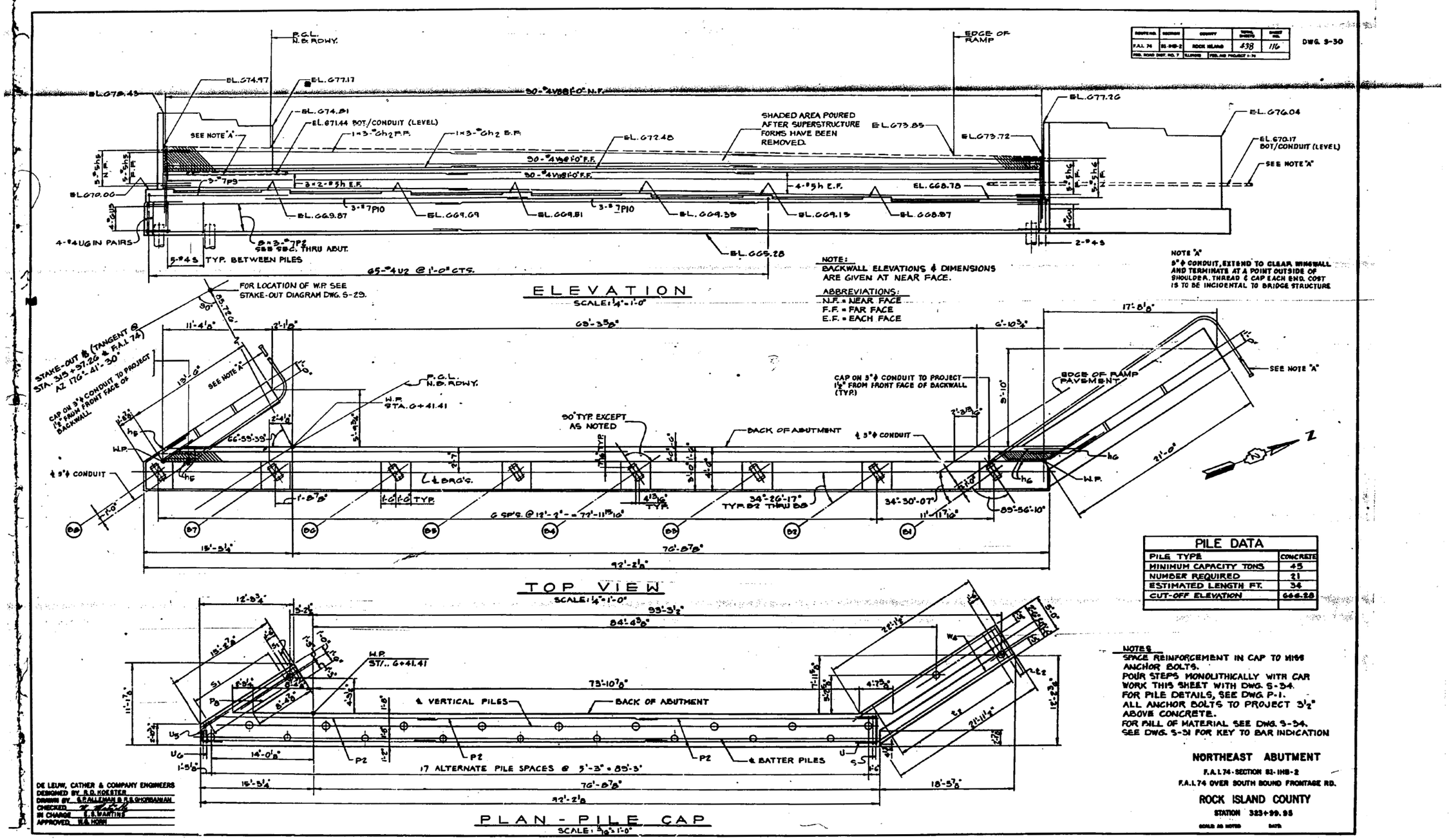
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	438	116
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-30



PILE DATA	
PILE TYPE	CONCRETE
MINIMUM CAPACITY TONS	45
NUMBER REQUIRED	21
ESTIMATED LENGTH FT.	34
CUT-OFF ELEVATION	646.28

NORTHEAST ABUTMENT

F.A.I. 74 - SECTION 81-1HB-2

F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.

ROCK ISLAND COUNTY

STATION 323+99.95

SCALE AS NOTED DATE

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-093-Existing_Plan_-_Northeast_Abutment.dgn

MODEL: Default

USER NAME = ksnider	DESIGNED - DTS	REVISED -
	CHECKED - AJK	REVISED -
PLOT SCALE =	DRAWN - DTS	REVISED -
PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – NORTHEAST ABUTMENT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)

SHEET NO. SX2 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	936
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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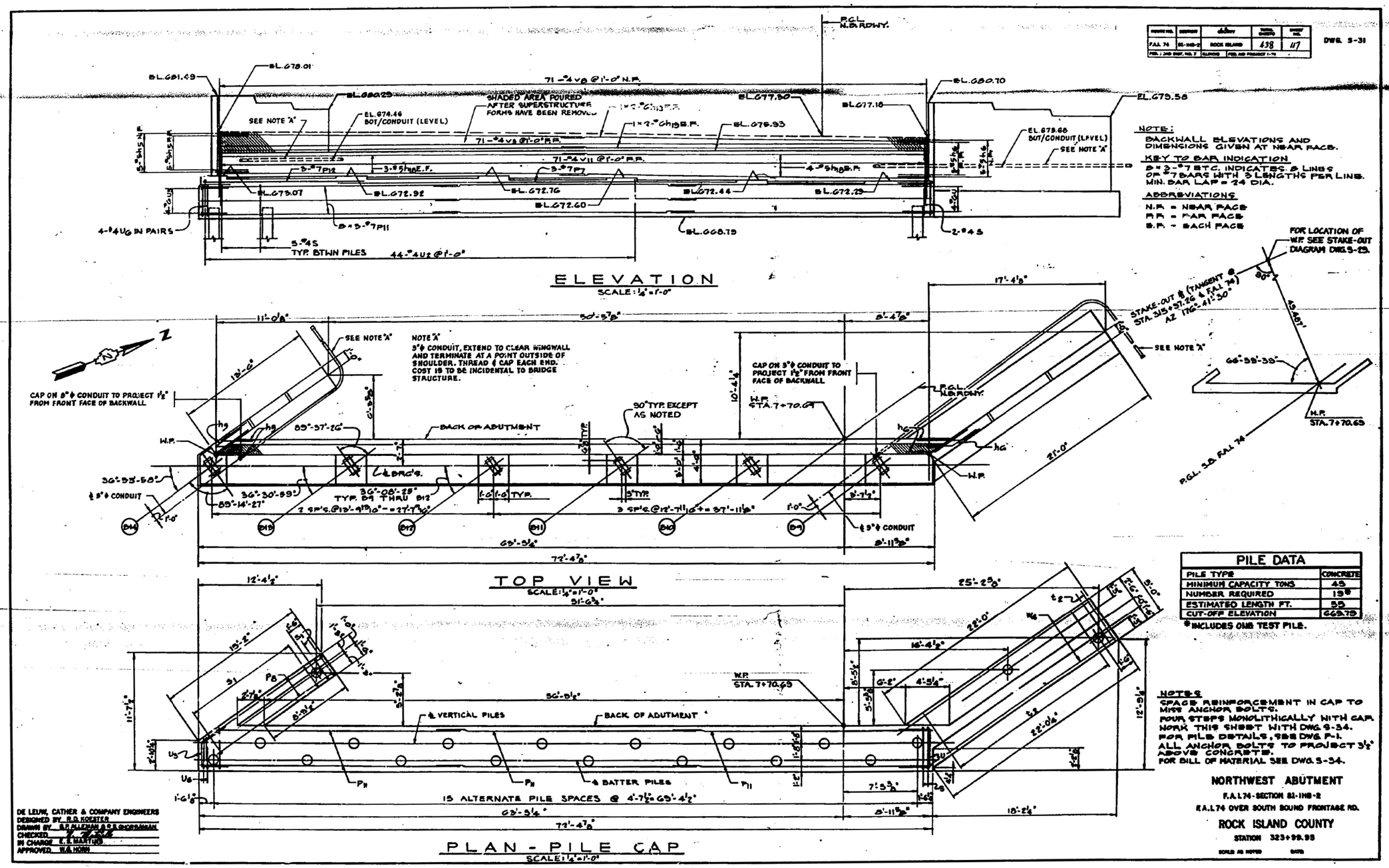
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	438	117
FED. AID PROJ. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-31



NOTE:
BACKWALL ELEVATIONS AND DIMENSIONS GIVEN AT NEAR FACE.

KEY TO BAR INDICATION
P = 3-#7 BTC. INDICATES 3 LINES OF #7 BARS WITH 3 LENGTHS PER LINE.
MIN. BAR LAP = 24 DIA.

ABBREVIATIONS
N.F. = NEAR FACE
F.F. = FAR FACE
B.F. = BACK FACE

PILE DATA	
PILE TYPE	CONCRETE
MINIMUM CAPACITY TONS	45
NUMBER REQUIRED	19*
ESTIMATED LENGTH FT.	55
CUT-OFF ELEVATION	669.79

*INCLUDES ONE TEST PILE.

NOTES
SPACE REINFORCEMENT IN CAP TO MISS ANCHOR BOLTS.
POUR STEPS MONOLITHICALLY WITH CAP.
WORK THIS SHEET WITH DWG. S-34.
FOR PILE DETAILS, SEE DWG. P-1.
ALL ANCHOR BOLTS TO PROJECT 3½" ABOVE CONCRETE.
FOR BILL OF MATERIAL SEE DWG. S-34.

NORTHWEST ABUTMENT
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323+98.98

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R.P. ALLEMAN & R.S. GHORPAMMAR
CHECKED
IN CHARGE E.E. MARTUS
APPROVED W.A. HORN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-094-Existing_Plan_-_Northwest_Abutment.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLAN – NORTHWEST ABUTMENT S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - AJK	REVISED -			74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	937
MODEL: Default	PLOT SCALE =	DRAWN - DTS	REVISED -					CONTRACT NO. 64E26		
	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -		SHEET NO. SX3 OF SX15 SHEETS		ILLINOIS FED. AID PROJECT			

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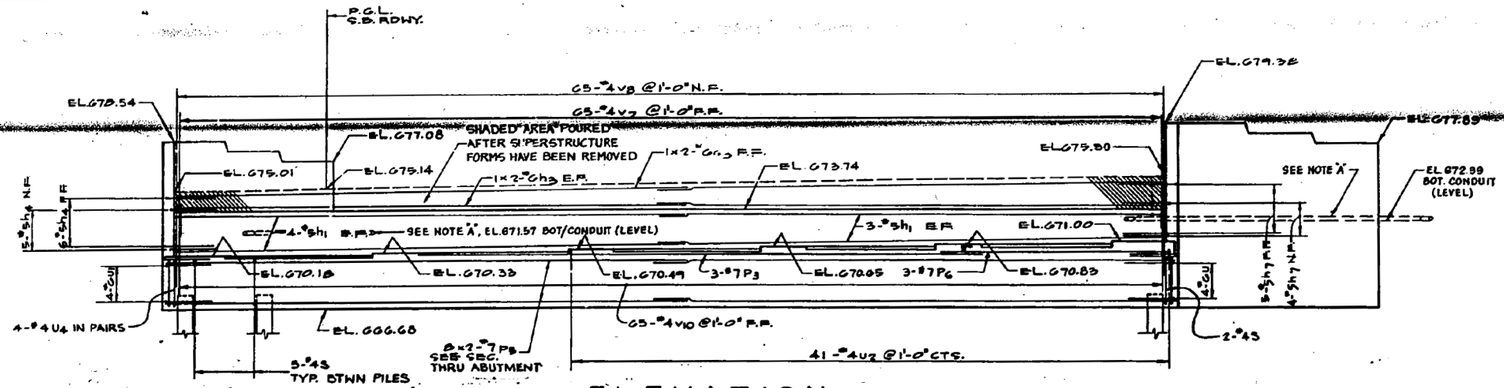
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	938	118
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-32



ELEVATION

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

NOTES:

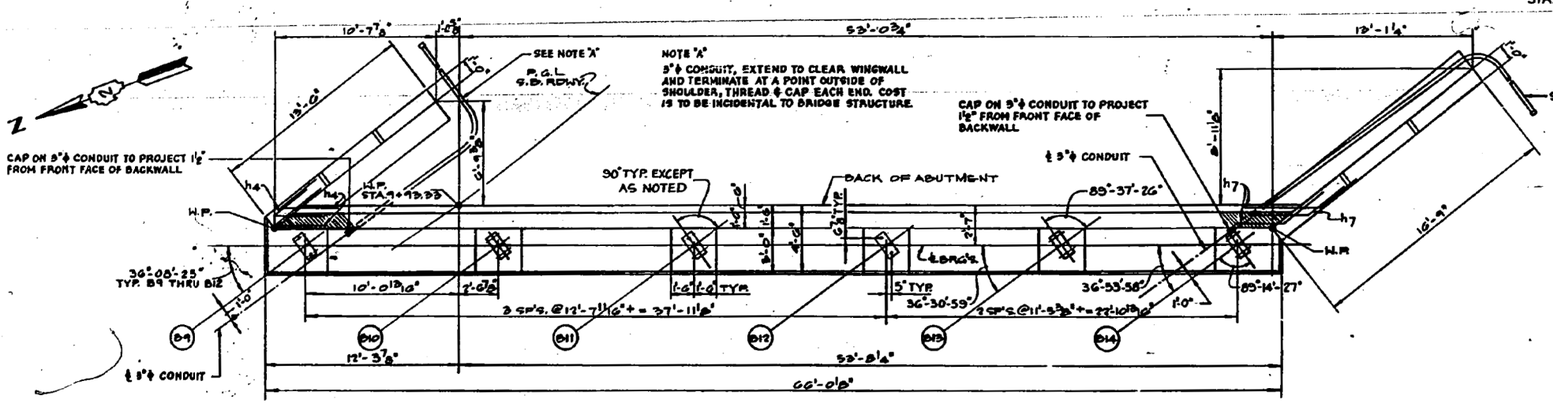
BACKWALL ELEVATIONS AND DIMENSIONS GIVEN AT NEAR FACE.

KEY TO BAR INDICATION

8x2-#7 STC. INDICATES 8 LINES OF #7 BARS WITH 2 LENGTHS PER LINE. MIN. BAR LAP = 24 DIA.

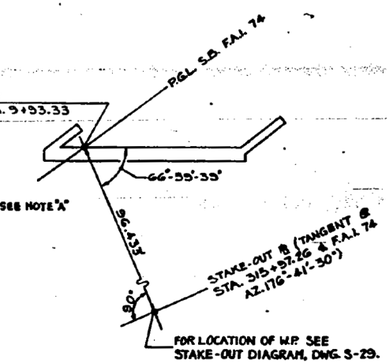
ABBREVIATIONS

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE

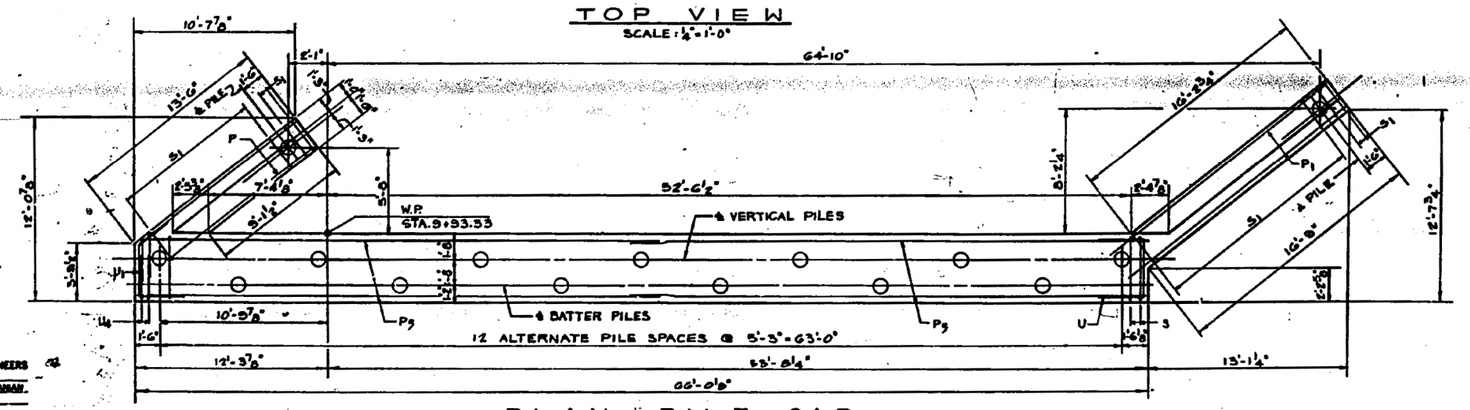


TOP VIEW

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



PILE DATA	
PILE TYPE	CONCRETE
MINIMUM CAPACITY TONS	45
NUMBER REQUIRED	15
ESTIMATED LENGTH FT.	53.0
CUT-OFF ELEVATION	662.60



PLAN - PILE CAP

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

NOTES

FOR BILL OF MATERIAL SEE DWG. S-34.
SPACE REINFORCEMENT IN CAP TO MISS ANCHOR BOLTS.
POUR STEPS MONOLITHICALLY WITH CAP.
WORK THIS SHEET WITH DWG. S-33.
FOR PILE DETAILS, SEE DWG. P-1.
ALL ANCHOR BOLTS TO PROJECT 3 1/2" ABOVE CONCRETE.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R.D. ALLEMAN & R.S. SHORRAMAN
CHECKED
IN CHARGE R.E. MARTINS
APPROVED W.G. HORN

SOUTHWEST ABUTMENT

F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.

ROCK ISLAND COUNTY

STATION 323+98.95

SCALE: AS NOTED DATE:

benesch

Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-095-Existing_Plan_-_Southwest_Abutment.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – SOUTHWEST ABUTMENT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. SX4 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	938
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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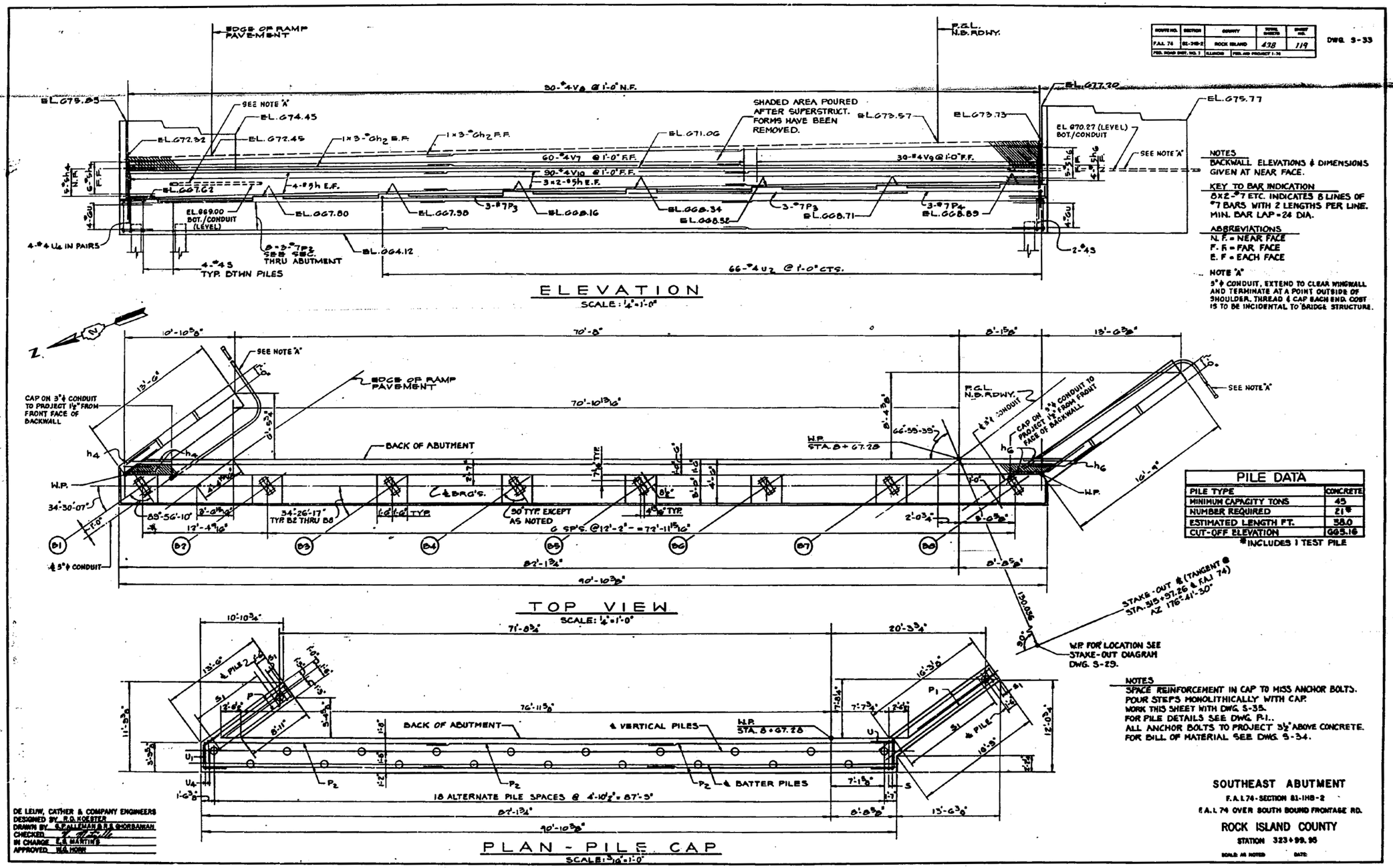
3/23/2017

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	438	119
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-33



PILE DATA	
PILE TYPE	CONCRETE
MINIMUM CAPACITY TONS	45
NUMBER REQUIRED	21*
ESTIMATED LENGTH FT.	38.0
CUT-OFF ELEVATION	665.16

*INCLUDES 1 TEST PILE

benesch

Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-096-Existing_Plan_-_Southeast_Abutment.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - DTS	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – SOUTHEAST ABUTMENT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. SX5 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	939
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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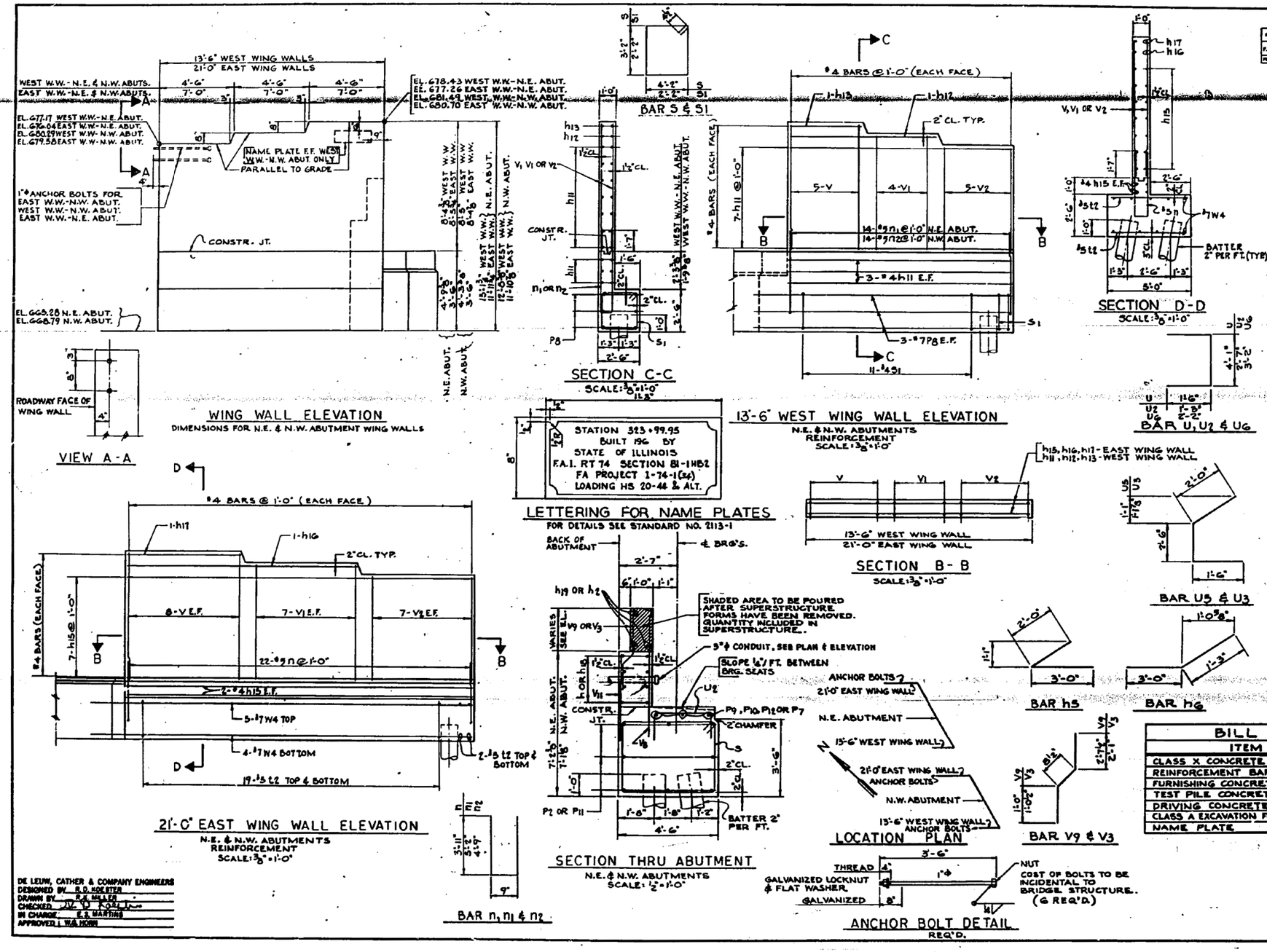
3/23/2017

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	438	120
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-34



BAR LIST

BAR	QUANTITY N.E.	QUANTITY N.W.	TOTAL	SIZE	LENGTH	SHAPE
h	20	—	20	5	31'-0"	—
h2	9	—	9	6	31'-0"	—
h5	10	10	20	5	5'-0"	∠
h6	10	10	20	5	4'-3"	/
h11	20	20	40	4	13'-3"	—
h12	2	2	4	4	8'-9"	—
h13	2	2	4	4	4'-3"	—
h15	18	18	36	4	20'-9"	—
h16	2	2	4	4	13'-9"	—
h17	2	2	4	4	6'-9"	—
n18	—	14	14	5	35'-3"	—
h19	—	6	6	6	35'-3"	—
n	22	22	44	5	8'-7"	⊏
n1	14	—	14	5	8'-1"	⊏
n2	—	14	14	5	10'-3"	⊏
P2	24	—	24	7	31'-9"	—
P7	—	3	3	7	28'-5"	—
P8	6	6	12	7	15'-0"	—
P9	3	—	3	7	14'-9"	—
P10	6	—	6	7	26'-3"	—
P11	—	24	24	7	25'-3"	—
P12	—	3	3	7	16'-6"	—
S	87	67	154	4	15'-5"	⊓
S1	13	13	26	4	9'-5"	⊓
U	4	4	8	6	7'-1"	⊏
U2	65	44	109	4	5'-1"	⊏
U3		4	4	6	6'-0"	⊏
U5	4		4	6	6'-0"	⊏
U6	4	4	8	4	7'-6"	⊏
V	26	26	52	4	8'-2"	—
V1	22	22	44	4	7'-5"	—
V2	26	26	48	4	6'-9"	—
V3		71	71	4	5'-10"	—
V8	90	71	161	4	5'-6"	—
V9	90		90	4	4'-4"	—
V11	90	71	161	4	4'-3"	—
t2	42	42	84	5	4'-9"	—
W4	9	9	18	7	22'-5"	—

BILL OF MATERIAL

ITEM	UNIT	QUANTITY N.E.	QUANTITY N.W.
CLASS X CONCRETE	CU. YD.	190.2	81.1
REINFORCEMENT BARS	POUND	7280	6090
FURNISHING CONCRETE PILES	LIN. FT.	714.0	990.0
TEST PILE CONCRETE	EACH	—	1
DRIVING CONCRETE PILES	LIN. FT.	714.0	990.0
CLASS A EXCAVATION FOR STRUCTURE	CU. YD.	176	—
NAME PLATE	EACH	—	1

NORTH ABUTMENTS
WINGWALLS & DETAILS
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323+99.95
SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R.K. MILLER
CHECKED J.V. D. Koester
IN CHARGE E.R. MARTINS
APPROVED J. W.A. HORN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

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		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – NORTH ABUTMENTS WINGWALLS & DETAILS
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. SX6 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	940
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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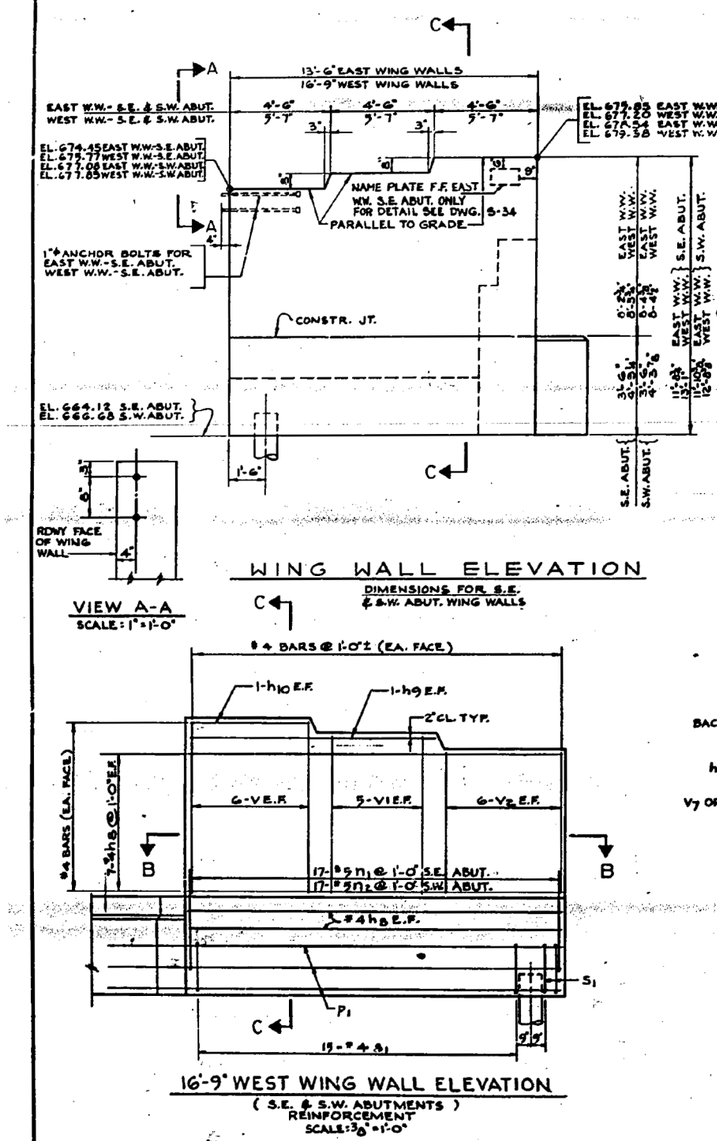
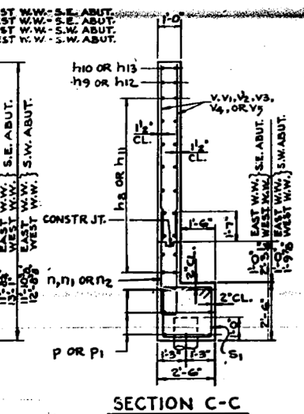
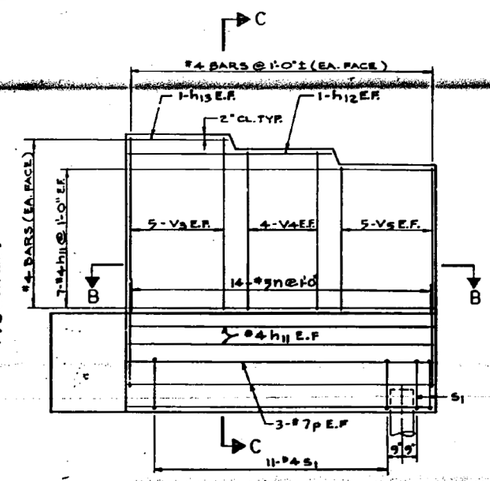
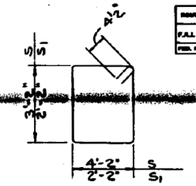
CONTRACT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(81-1HB-2)	ROCK ISLAND	438	121
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

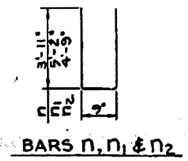
DWG. S-35



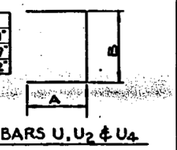




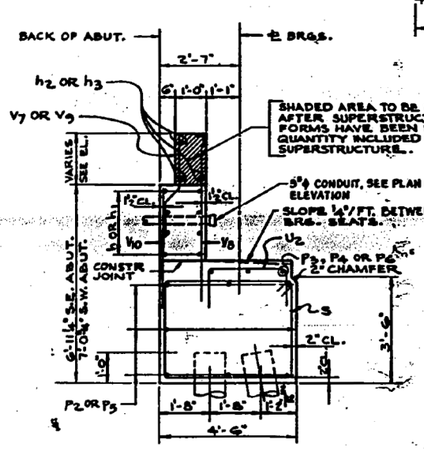


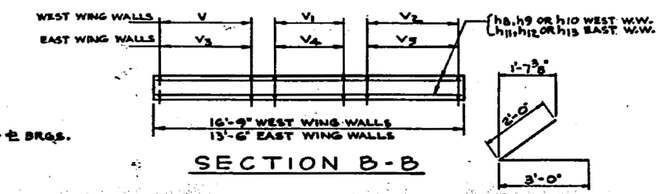


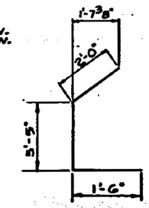
BAR	A	B
U	1'-6"	4'-1"
U2	1'-3"	2'-7"
U4	2'-9"	3'-2"

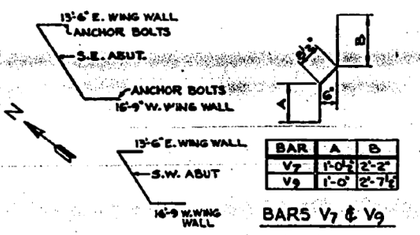


BAR	QUANTITY S.E.	QUANTITY S.W.	TOTAL	SIZE	LENGTH	SHAPE
h	20	—	20	5	31'-0"	—
h1	—	14	14	5	33'-0"	—
h2	9	—	9	6	31'-0"	—
h3	—	6	6	6	33'-0"	—
h4	11	11	22	5	5'-0"	L
h5	9	—	9	5	4'-3"	⌐
h6	—	9	9	5	4'-3"	⌐
h7	18	18	36	4	16'-6"	—
h8	2	2	4	4	10'-11"	—
h10	2	2	4	4	5'-4"	—
h11	18	18	36	4	13'-3"	—
h12	2	2	4	4	8'-9"	—
h13	2	2	4	4	4'-3"	—
n	14	14	28	5	8'-7"	⊏
n1	17	—	17	5	11'-1"	⊏
n2	—	17	17	5	10'-3"	⊏
P	6	6	12	7	19'-3"	—
P1	6	6	12	7	18'-0"	—
P2	24	—	24	7	31'-7"	—
P3	6	3	9	7	26'-4"	—
P4	3	—	3	7	16'-6"	—
P5	—	10	10	7	34'-0"	—
P6	—	3	3	7	15'-7"	—
S	74	62	136	4	15'-5"	⊐
S1	30	30	60	4	9'-5"	⊐
U	4	4	8	6	7'-1"	⊃
U1	4	4	8	6	6'-11"	⊂
U2	66	41	107	4	5'-1"	⊃
U4	4	4	8	4	8'-8"	⊃
V	12	12	24	4	8'-8"	—
V1	10	10	20	4	7'-9"	—
V2	12	12	24	4	6'-9"	—
V3	10	10	20	4	8'-0"	—
V4	8	8	16	4	7'-3"	—
V5	10	10	20	4	6'-7"	—
V7	60	65	125	4	3'-11"	⌐
V8	90	65	155	4	7'-0"	—
V9	30	—	30	4	4'-4"	⌐
V10	90	65	155	4	4'-6"	—



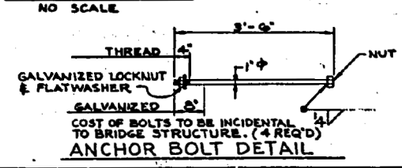






BAR	A	B
V7	1'-0½"	2'-2"
V9	1'-0"	2'-7⅝"

BILL OF MATERIAL			
ITEM	UNIT	S.E. QUANTITY	S.W. QUANTITY
CLASS X CONCRETE	CU. YD.	69.0	91.5
REINFORCEMENT BARS	POUND	9300	6680
FURNISHING CONCRETE PILES	LIN. FT.	795	760
TEST PILE CONCRETE	EACH	—	1
DRIVING CONCRETE PILES	LIN. FT.	795	760
NAME PLATE	EACH	—	1



DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. HOEFTER
DRAWN BY R.K. MILLER
CHECKED W.H. KAMJOU
IN CHARGE J. S. MARTINS
APPROVED W.A. HOFER

SOUTH ABUTMENTS
WINGWALLS & DETAILS
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323+99.98

SCALE: AS NOTED DATE:

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benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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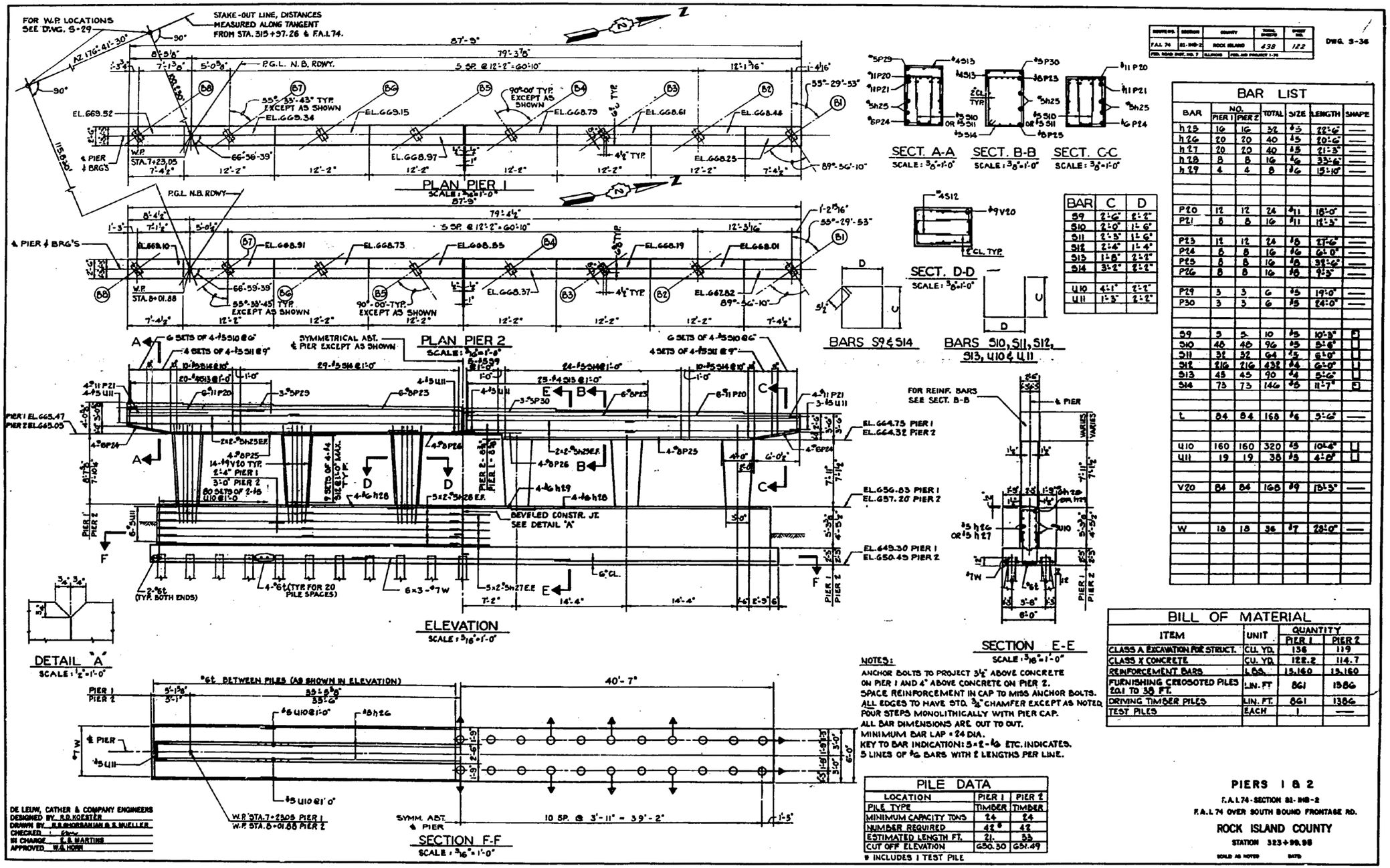
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – SOUTH ABUTMENTS WINGWALLS & DETAILS
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)

SHEET NO. SX7 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	941
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		



BAR	C	D
S9	2'-6"	2'-2"
S10	2'-0"	1'-6"
S11	2'-3"	1'-6"
S12	2'-4"	1'-4"
S13	1'-8"	2'-2"
S14	3'-2"	2'-2"
U10	4'-1"	2'-2"
U11	1'-3"	2'-2"

BAR LIST

BAR	NO. PIER 1	NO. PIER 2	TOTAL	SIZE	LENGTH	SHAPE
h25	16	16	32	#5	22'-6"	—
h26	20	20	40	#5	20'-6"	—
h27	20	20	40	#5	21'-3"	—
h28	8	8	16	#6	33'-6"	—
h29	4	4	8	#6	15'-10"	—
P20	12	12	24	#11	18'-0"	—
P21	8	8	16	#11	18'-3"	—
P23	12	12	24	#5	27'-6"	—
P24	8	8	16	#6	64'-0"	—
P25	8	8	16	#8	39'-6"	—
P26	8	8	16	#8	9'-3"	—
P29	3	3	6	#5	19'-0"	—
P30	3	3	6	#5	24'-0"	—
S9	5	5	10	#5	10'-3"	⊡
S10	48	48	96	#5	5'-8"	□
S11	32	32	64	#5	6'-0"	□
S12	216	216	432	#4	6'-0"	□
S13	45	45	90	#4	5'-6"	□
S14	73	73	146	#5	11'-7"	⊡
t	84	84	168	#6	5'-6"	—
U10	160	160	320	#5	10'-4"	□
U11	19	19	38	#5	4'-0"	□
V20	84	84	168	#9	18'-3"	—
W	18	18	36	#7	28'-0"	—

BILL OF MATERIAL

ITEM	UNIT	QUANTITY PIER 1	QUANTITY PIER 2
CLASS A EXCAVATION FOR STRUCT.	CU. YD.	138	119
CLASS X CONCRETE	CU. YD.	122.2	114.7
REINFORCEMENT BARS	L.BS.	13,160	13,160
FURNISHING CREOSOTED PILES 20.1 TO 35 FT.	LIN. FT	861	1386
DRIVING TIMBER PILES	LIN. FT.	861	1386
TEST PILES	EACH	1	—

NOTES:

ANCHOR BOLTS TO PROJECT 3 1/2" ABOVE CONCRETE ON PIER 1 AND 4" ABOVE CONCRETE ON PIER 2.
SPACE REINFORCEMENT IN CAP TO MISS ANCHOR BOLTS.
ALL EDGES TO HAVE STD. 3/4" CHAMFER EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH PIER CAP.
ALL BAR DIMENSIONS ARE OUT TO OUT.
MINIMUM BAR LAP = 24 DIA.
KEY TO BAR INDICATION: 5×2-#6 ETC. INDICATES 5 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.

PILE DATA

LOCATION	PIER 1	PIER 2
PILE TYPE	TIMBER	TIMBER
MINIMUM CAPACITY TONS	24	24
NUMBER REQUIRED	42*	42
ESTIMATED LENGTH FT.	21.	33
CUT OFF ELEVATION	650.30	657.49

* INCLUDES 1 TEST PILE

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R.S. HORBANIAN & S. MUELLER
CHECKED BY
IN CHARGE E.B. MARTINS
APPROVED W.A. HUNN

PIERS 1 & 2
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323+99.98
SCALE AS NOTED DATE

F.A.I. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	438	122

FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT I-74

DWG. S-36

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – PIERS 1 & 2
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. SX8 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	942
		CONTRACT NO. 64E26		

ILLINOIS FED. AID PROJECT

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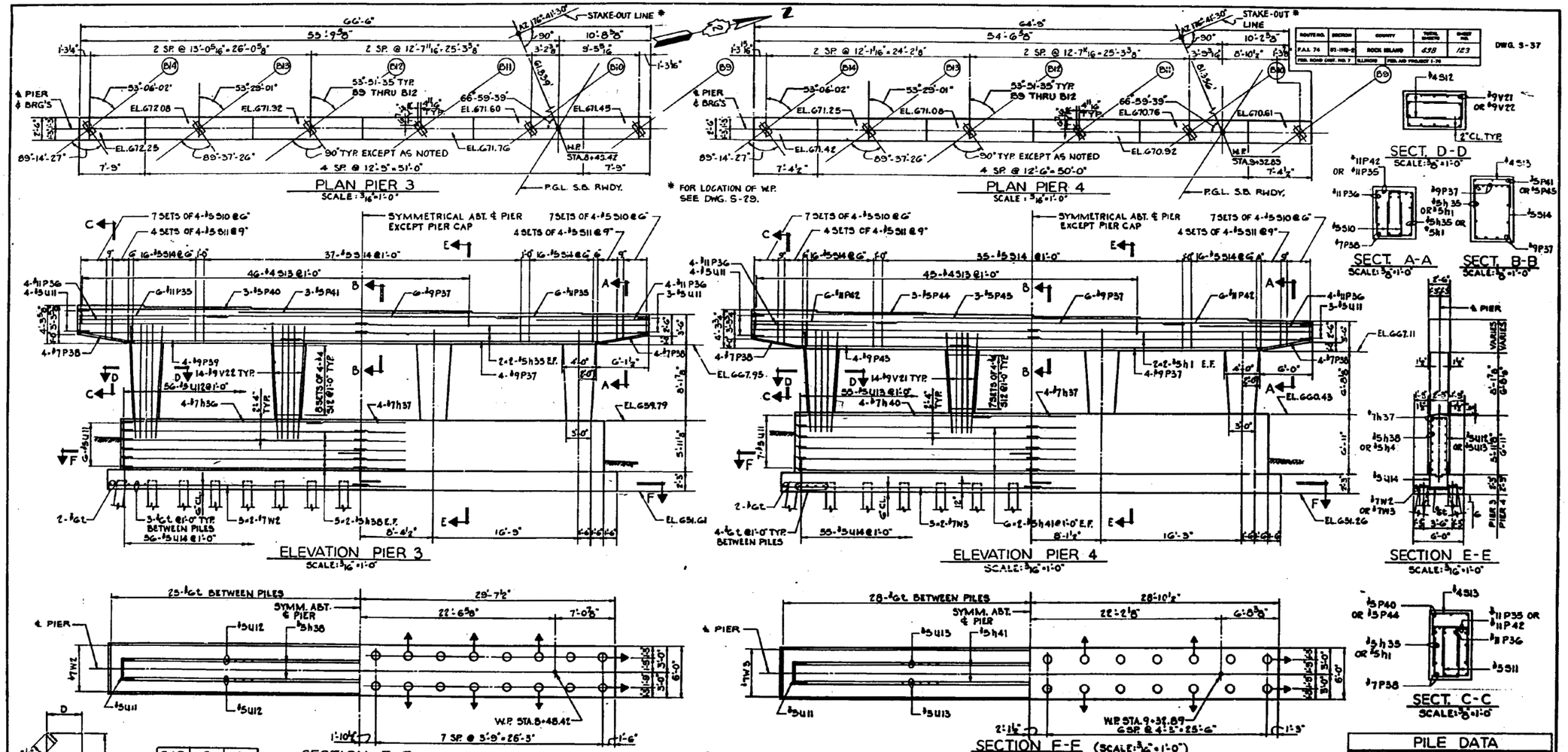

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	438	123
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

BAR	C	D
S10	2'-0"	1'-6"
S11	2'-3"	1'-6"
S12	2'-4"	1'-4"
S13	1'-8"	2'-2"
S14	3'-2"	2'-2"
U11	1'-3"	2'-2"
U12	3'-9"	2'-2"
U13	6'-9"	2'-2"
U14	3'-7"	2'-2"

BAR LIST

BAR	NO. PIER 3	NO. PIER 4	TOTAL	SIZE	LENGTH	SHAPE
h1	—	8	8	#5	33'-0"	—
h35	8	—	8	#5	33'-9"	—
h36	4	—	4	#7	23'-6"	—
h37	4	4	8	#7	34'-0"	—
h38	20	—	20	#5	28'-8"	—
h40	—	4	4	#7	22'-3	—
h41	—	24	24	#5	27'-9"	—
P35	12	—	12	#11	17'-6"	—
P36	8	8	16	#11	13'-0"	—
P37	10	10	20	#9	36'-0"	—
P38	8	8	16	#7	6'-6"	—
P39	4	—	4	#9	20'-6"	—

BAR	NO. PIER 3	NO. PIER 4	TOTAL	SIZE	LENGTH	SHAPE
P40	3	—	3	#5	20'-3"	—
P41	3	—	3	#5	22'-9"	—
P42	—	12	12	#11	16'-9"	—
P43	—	4	4	#9	19'-0"	—
P44	—	3	3	#5	19'-6"	—
P45	—	3	3	#5	26'-3"	—
S10	56	56	112	#5	5'-6"	U
S11	32	32	64	#5	6'-0"	U
S12	128	112	240	#4	6'-0"	U
S13	46	45	91	#4	5'-6"	U
S14	69	67	136	#5	11'-7"	U

BAR	NO. PIER 3	NO. PIER 4	TOTAL	SIZE	LENGTH	SHAPE
t	49	56	105	#6	5'-6"	—
U11	19	21	40	#5	4'-8"	U
U12	56	—	56	#5	15'-8"	U
U13	—	55	55	#5	15'-6"	U
U14	56	55	111	#6	9'-4"	U
V21	—	56	56	#9	11'-3"	—
V22	56	—	56	#9	12'-9"	—
W2	10	—	10	#7	30'-3"	—
W3	—	10	10	#7	29'-6"	—

NOTES:
ANCHOR BOLTS TO PROJECT 3½" ABOVE CONCRETE ON PIER 3 AND 4" ABOVE CONCRETE ON PIER 4. SPACE REINFORCEMENT IN CAP TO MISS ANCHOR BOLTS.
ALL EDGES TO HAVE STD. ¾" CHAMFER EXCEPT AS NOTED.
POUR STEPS MONOLITHICALLY WITH PIER CAP. ALL BAR DIMENSIONS ARE OUT TO OUT. MINIMUM BAR LAP = 24 DIA.
KEY TO BAR INDICATIONS 5-2-#6 ETC. INDICATES.
5 LINES OF #6 BARS WITH 2 LENGTHS PER LINE.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY PIER 3	QUANTITY PIER 4
CLASS A EXCAVATION FOR STRUCT.	CU. YD.	108	117
CLASS X CONCRETE	CU. YD.	97.6	93.7
REINFORCEMENT BARS	LBS.	11,703	11,470
FURNISHING CREOSOTED PILES 20.1 TO 38 FT.	LIN. FT.	1056	621
DRIVING TIMBER PILES	LIN. FT.	1056	621
TEST PILE (TIMBER)	EACH	—	1

PILE DATA

LOCATION	PIER 3	PIER 4
PILE TYPE	TIMBER	TIMBER
MINIMUM CAPACITY TONS	24	24
NUMBER REQUIRED	32	28*
ESTIMATED LENGTH FT.	33	23
CUT-OFF ELEVATION	652.61	652.26

* INCLUDES 1 TEST PILE

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. D. KOESTER
DRAWN BY R.S. HORBANAN & E. MUELLER
CHECKED BLW
IN CHARGE E. S. MARTINS
APPROVED W.A. HOHM

PIERS 3 & 4
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323+98.98
SCALE: AS NOTED DATE

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-100-Existing_Plan_-_Piers_3_&_4.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLAN – PIERS 3 & 4 S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - AJK	REVISED -			74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	943
MODEL: Default	PLOT SCALE =	DRAWN - DTS	REVISED -					CONTRACT NO. 64E26		
	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -		SHEET NO. SX9 OF SX15 SHEETS		ILLINOIS FED. AID PROJECT			

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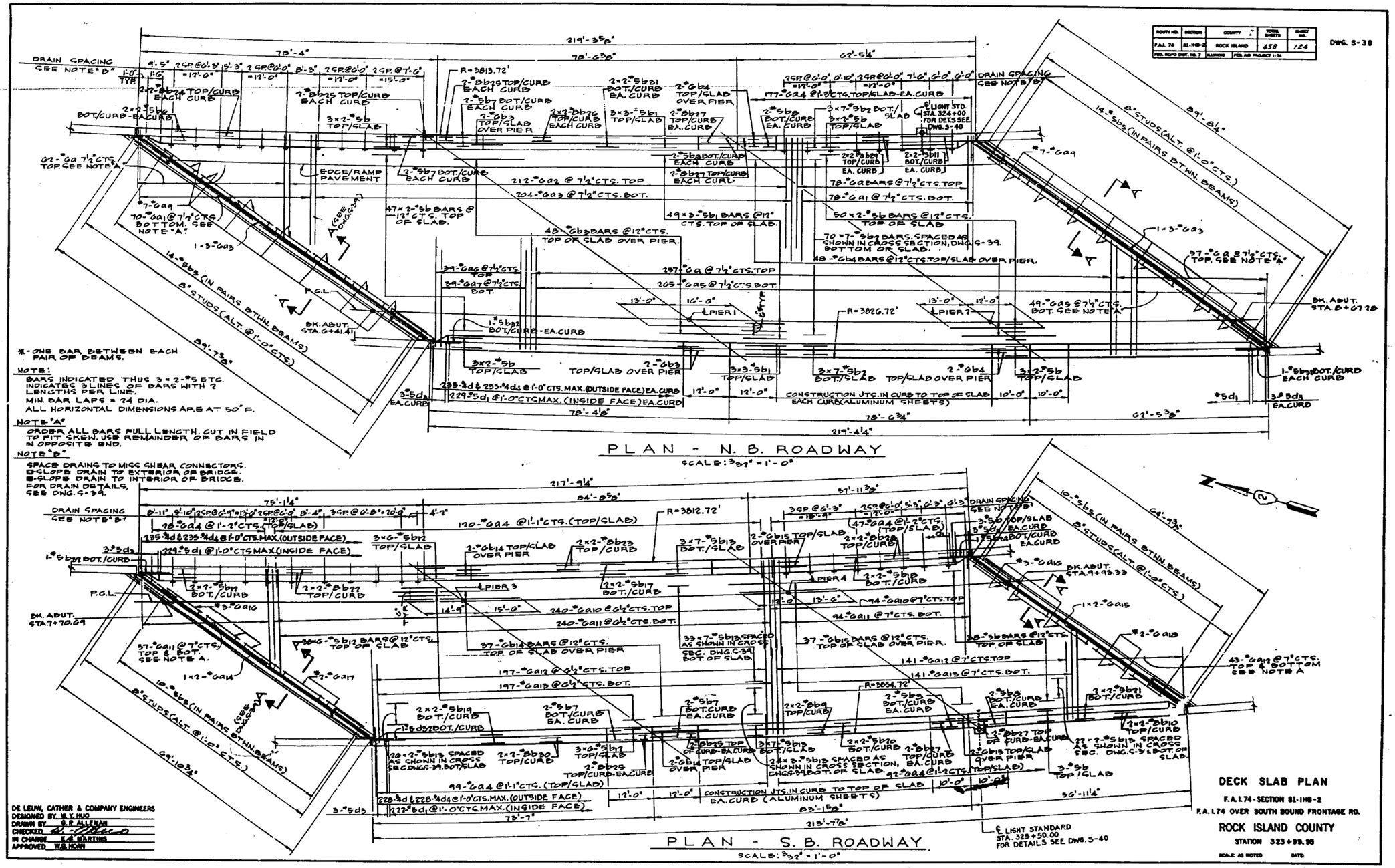

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		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – DECK SLAB PLAN
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)

SHEET NO. SX10 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	944
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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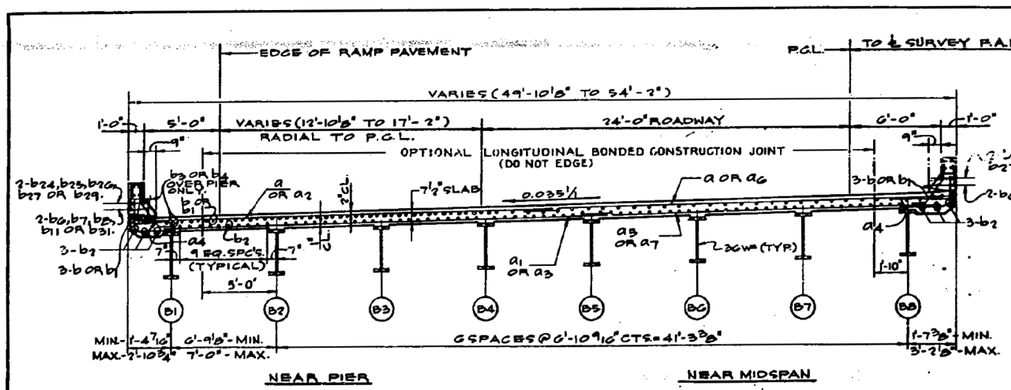
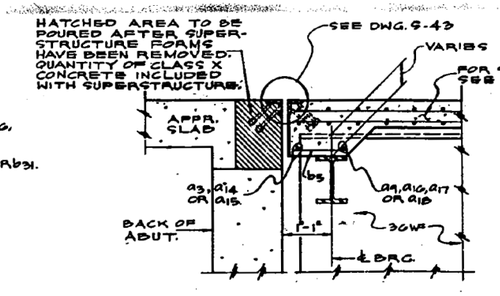


CROSS SECTION N.B. ROADWAY
LOOKING SOUTH
SCALE: ¼" = 1'-0"



SECTION A-A
SCALE: ¾" = 1'-0"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	638	125

FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT I-74

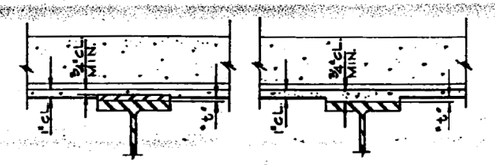
DWG. S-39

BAR LIST

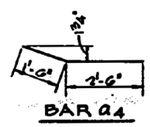
BAR	QUANTITY N.B.	QUANTITY S.B.	TOTAL	SIZE	LENGTH	SHAPE
a	454	—	454	6	27'-0"	—
a1	148	—	148	6	30'-9"	—
a2	217	—	217	6	20'-0"	—
a3	10	—	10	6	27'-0"	—
a4	384	356	740	6	41'-0"	—
a5	314	—	314	6	28'-9"	—
a6	34	—	34	6	28'-9"	—
a7	34	—	34	6	27'-9"	—
a9	14	—	14	6	11'-9"	—
a10	—	334	334	6	21'-0"	—
a11	—	448	448	6	28'-9"	—
a12	—	424	424	6	27'-0"	—
a13	—	336	336	6	18'-0"	—
a14	—	7	7	6	32'-0"	—
a15	—	7	7	6	31'-0"	—
a16	—	6	6	6	21'-0"	—
a17	—	7	7	6	15'-0"	—
a18	—	7	7	6	11'-0"	—
b	718	44	762	5	30'-0"	—
b1	108	—	108	5	28'-0"	—
b2	532	—	532	5	27'-0"	—
b3	27	—	27	5	27'-0"	—
b4	27	—	27	5	26'-0"	—
b5	28	20	48	5	1'-0"	—
b6	5	—	5	5	33'-9"	—
b7	5	5	10	5	11'-9"	—
b8	5	5	10	5	4'-9"	—
b9	—	4	4	5	30'-9"	—
b10	—	4	4	5	12'-0"	—
b11	5	—	5	5	28'-9"	—
b12	—	208	208	5	31'-0"	—
b13	—	441	441	5	31'-0"	—
b14	—	41	41	5	30'-9"	—
b15	—	41	41	5	29'-0"	—
b17	—	4	4	5	31'-9"	—
b18	—	4	4	5	28'-9"	—
b19	—	4	4	5	31'-9"	—
b20	—	4	4	5	31'-0"	—
b21	—	4	4	5	14'-0"	—
b22	—	4	4	5	31'-0"	—
b23	—	4	4	5	29'-0"	—
b24	5	—	5	5	31'-9"	—
b25	5	5	10	5	11'-9"	—
b26	5	—	5	5	30'-9"	—
b27	5	5	10	5	9'-9"	—
b28	—	4	4	5	28'-9"	—
b29	5	—	5	5	27'-9"	—
b30	—	4	4	5	31'-9"	—
b31	5	—	5	5	28'-9"	—
b32	4	4	8	5	3'-0"	—
d6	5	5	8	4	3'-0"	—
d	470	469	939	4	4'-0"	—
d1	451	451	902	4	3'-9"	—
d2	108	102	210	4	2'-9"	—
d3	18	18	36	4	2'-0"	—
d4	470	469	939	4	1'-10"	—
d7	4	4	8	4	2'-9"	—

FOR LOCATION OF d1, d3 & d4 BARS & OTHER PARAPET REINFORCEMENT SEE DWG. S-44.
FOR DETAILS OF d6 & d7 SEE DWG. S-9.

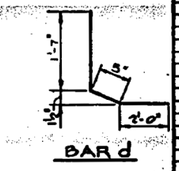
* PARAPET QUANTITIES NOT INCLUDED.
** PROTECTIVE COAT INCLUDES WINGWALL & PARAPET QUANTITIES.



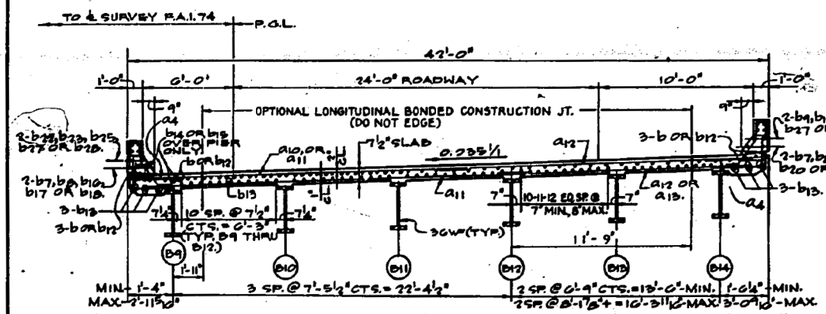
INTERIOR BEAMS



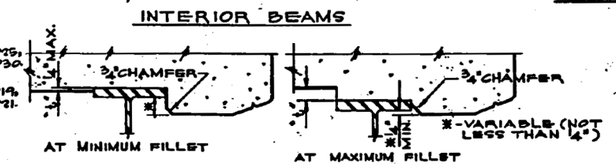
BAR a4



BAR d



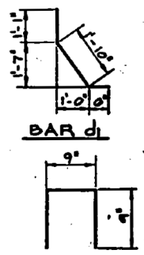
CROSS SECTION S.B. ROADWAY
LOOKING SOUTH
SCALE: ¼" = 1'-0"



EXTERIOR BEAMS

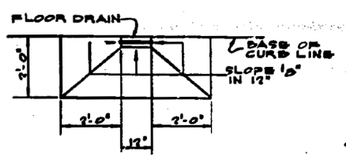
AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OF THE WF BEAMS SHALL BE TAKEN AT THE POINTS SHOWN IN TABLE A DWG. S-40. THESE ELEVATIONS SUBTRACTED FROM THE TABULATED "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION" IN SAME TABLE A., MINUS 7½" EQUALS THE FILLET HEIGHTS ABOVE THE TOP FLANGE OF WF BEAMS.

METHOD OF DETERMINING FILLET HEIGHT "t"

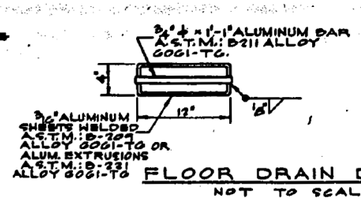


BAR d1

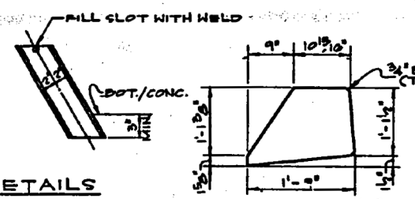
BAR d2



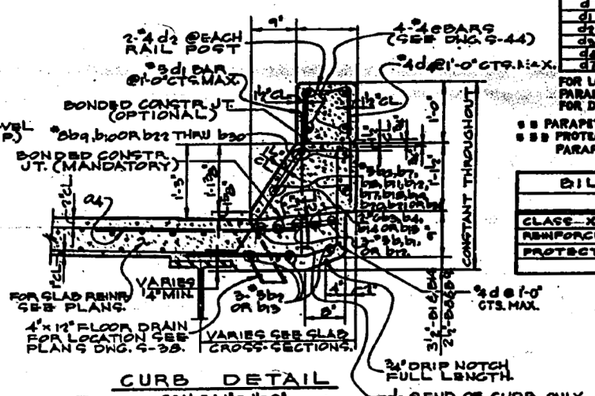
DETAIL "B"
SCALE: ½" = 1'-0"



FLOOR DRAIN DETAILS
NOT TO SCALE



DETAIL OF ⅛" ALUMINUM SHEET
SCALE: 1" = 1'-0"



CURB DETAIL
SCALE: 1" = 1'-0"
COST OF ALUMINUM DRAINS & SHEETS SHALL BE INCIDENTAL TO CLASS X CONC.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE **	CU. YD.	378.3
REINFORCEMENT BARS **	POUND	189,790
PROTECTIVE COAT ***	SQ. YD.	2,811

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY G. P. ALLEMAN
CHECKED
IN CHARGE E. H. MARTINS
APPROVED W. B. HOHN

DECK SLAB
SECTIONS & DETAILS
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323 + 99.99
SCALE AS NOTED DATE

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3/23/2017

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	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

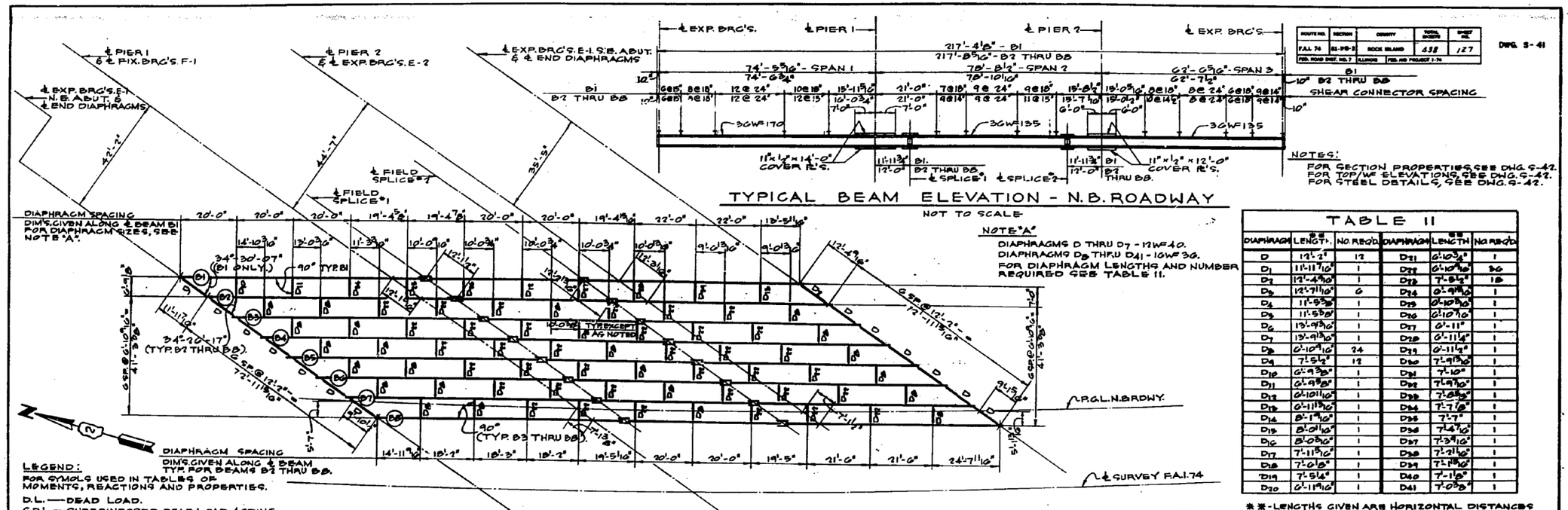
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – DECK SLAB SECTIONS & DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. SX11 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	945
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	438	127
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-41



NOTES:
FOR SECTION PROPERTIES, SEE DWG. S-42.
FOR TOP/WF ELEVATIONS, SEE DWG. S-42.
FOR STEEL DETAILS, SEE DWG. S-42.

TYPICAL BEAM ELEVATION - N.B. ROADWAY

NOT TO SCALE

NOTE "A"
DIAPHRAGMS D THRU D7 - 12WF40.
DIAPHRAGMS D8 THRU D41 - 16WF36.
FOR DIAPHRAGM LENGTHS AND NUMBER REQUIRED SEE TABLE II.

LEGEND:
FOR SYMBOLS USED IN TABLES OF MOMENTS, REACTIONS AND PROPERTIES.

D.L. — DEAD LOAD.
S.D.L. — SUPERIMPOSED DEAD LOAD ACTING ON COMPOSITE SECTION.
L.L. — LIVE LOAD.
IMP. — IMPACT.
I_s — MOMENT OF INERTIA STEEL SECTION.
S_{TS} — SECTION MODULUS - TOP STEEL SECTION.
S_{BS} — SECTION MODULUS - BOT. STEEL SECTION.
I_c — MOMENT OF INERTIA COMPOSITE SECTION.
S_{TC} — SECTION MODULUS - TOP COMPOSITE SECTION.
S_{BC} — SECTION MODULUS - BOT. COMPOSITE SECTION.

TABLE II

DIAPHRAGM	LENGTH**	NO. REQ'D	DIAPHRAGM	LENGTH**	NO. REQ'D
D	12'-2"	12	D21	6'-10¾"	1
D1	11'-11 7/16"	1	D22	6'-10 9/16"	36
D2	12'-4 9/16"	1	D23	7'-8½"	18
D3	12'-7 11/16"	6	D24	6'-9 15/16"	1
D4	11'-5⅝"	1	D25	6'-10 9/16"	1
D5	11'-5⅝"	1	D26	6'-10 9/16"	1
D6	13'-9 15/16"	1	D27	6'-11"	1
D7	13'-9 15/16"	1	D28	6'-11¼"	1
D8	6'-10 9/16"	24	D29	6'-11¼"	1
D9	7'-5½"	12	D30	7'-9 15/16"	1
D10	6'-9⅜"	1	D31	7'-10"	1
D11	6'-9⅜"	1	D32	7'-9 9/16"	1
D12	6'-10 11/16"	1	D33	7'-8⅝"	1
D13	6'-11 15/16"	1	D34	7'-7⅞"	1
D14	8'-1 9/16"	1	D35	7'-7"	1
D15	8'-0 11/16"	1	D36	7'-4 9/16"	1
D16	8'-0 5/16"	1	D37	7'-3 9/16"	1
D17	7'-11 15/16"	1	D38	7'-2 11/16"	1
D18	7'-6⅛"	1	D39	7'-1 15/16"	1
D19	7'-5¼"	1	D40	7'-1⅛"	1
D20	6'-11 9/16"	1	D41	7'-0⅜"	1

** - LENGTHS GIVEN ARE HORIZONTAL DISTANCES BETWEEN CENTERLINES OF STAINGERS.

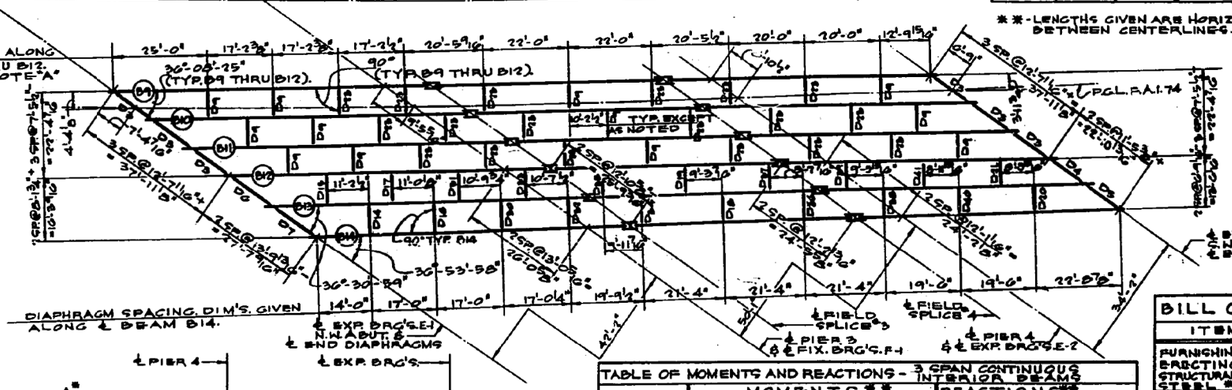
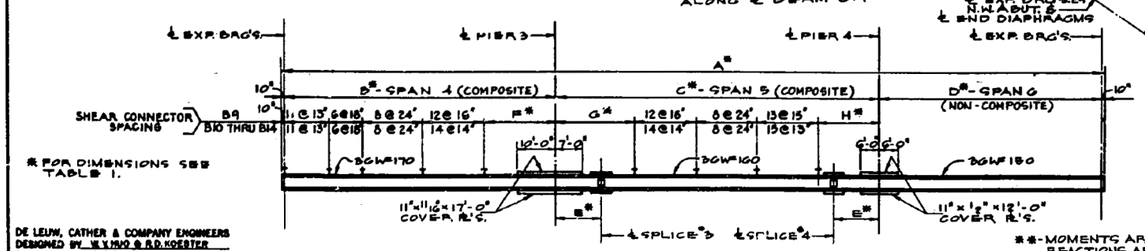


TABLE I

BEAM MARK	DIMENSIONS (GIVEN ALONG ℄ BEAMS) A	B	C	D	E	F	G	H
B9 THRU B12	216'-0¼"	71'-0"	84'-11 1/16"	57'-11 3/16"	13'-0"	18'-7"	70'-8 1/16"	16'-0"
B13	214'-1 3/16"	70'-10 3/16"	84'-2"	57'-5"	12'-10 5/16"	17'-11 3/16"	70'-0"	15'-11"
B14	212'-7 3/16"	70'-2¾"	83'-5"	56'-10 7/16"	12'-9¼"	17'-3¾"	69'-5"	15'-9"



* FOR DIMENSIONS SEE TABLE I.

TYPICAL BEAM ELEVATION - S.B. ROADWAY

NOT TO SCALE

** - MOMENTS ARE IN FT-KIPS REACTIONS ARE IN KIPS. FOR MEANING OF SYMBOLS USED IN TABLE OF MOMENTS & REACTIONS, SEE LEGEND.

TABLE OF MOMENTS AND REACTIONS - 3 SPAN CONTINUOUS INTERIOR BEAMS

		MOMENTS** .4 SPAN 1 & 4	PIER 1 & 3	.5 SPAN 2 & 5	PIER 2 & 4	.6 SPAN 3 & 6	REACTIONS** NE & SW ABUT.	PIER 1 & 3	PIER 2 & 4	SE & SW ABUT.
BEAMS B2 THRU B8	D.L.	355	-990	100	-406	770	24.8	74.1	62.9	19.3
	S.D.L.	110	-135	77	-103	78	7.9	20.9	18.5	6.0
	L.L.	590	-378	474	-311	451	43.9	55.8	57.5	41.7
	IMP.	142	-94	116	-79	120	10.8	13.9	13.4	11.2
	TOTAL COMPOSITE	818	—	667	—	640	—	—	—	—
	TOTAL	1173	-1163	832	-899	872	86.1	164.7	147.3	78.2
BEAMS B9 THRU B14	D.L.	370	-654	265	-461	108	24.7	83.9	64.7	17.3
	S.D.L.	109	-165	107	-159	61	7.8	24.8	22.2	5.9
	L.L.	576	-430	580	-374	405	46.7	61.4	57.6	45.6
	IMP.	140	-106	139	-94	111	11.7	15.1	14.7	11.9
	TOTAL COMPOSITE	831	—	852	—	—	—	—	—	—
	TOTAL	1151	-1355	1097	-1004	745	90.4	189.2	164.2	78.7

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
FURNISHING & ERECTING STRUCTURAL STEEL ***	POUND	549090
STUD SHEAR CONNECTORS	EACH	5112

*** - INCLUDES ALL STRUCTURAL STEEL EXCEPT BRG'S. & EXPANSION GUARDS.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. MAO & R.D. KOESTER
DRAWN BY G.P. ALLEMAN
CHECKED
IN CHARGE E.B. MARTINS
APPROVED W.A. HOHN

FRAMING PLAN

F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.

ROCK ISLAND COUNTY

STATION 323+99.95

SCALE AS NOTED DATE

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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FILE NAME = 081-0184&0185-C00CD-103-Existing_Plan_-_Framing_Plan.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – FRAMING PLAN
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. SX12 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	946
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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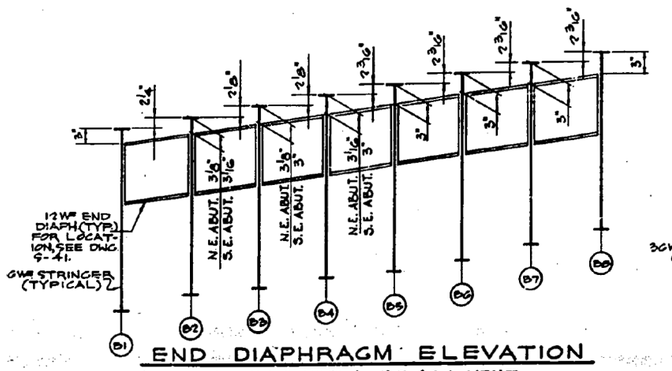
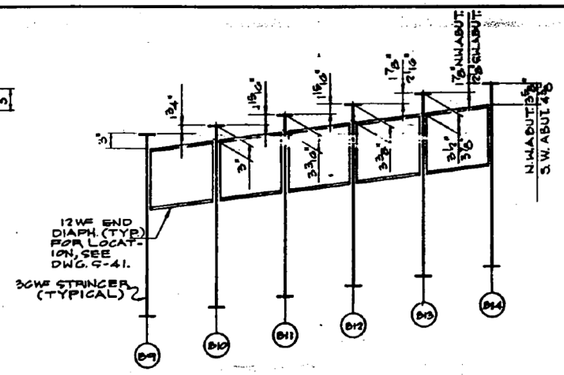


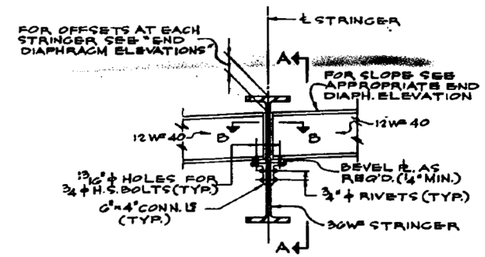
END DIAPHRAGM ELEVATION

LOOKING SOUTH - N.E. ABUTMENT
LOOKING SOUTH - S.E. ABUTMENT



END DIAPHRAGM ELEVATION

LOOKING SOUTH - N.W. ABUTMENT
LOOKING SOUTH - S.W. ABUTMENT

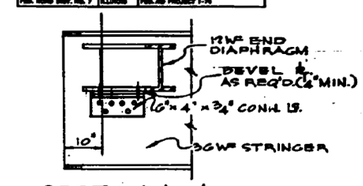


END DIAPHRAGM CONNECTION DETAIL

SCALE: 3/4" = 1'-0"

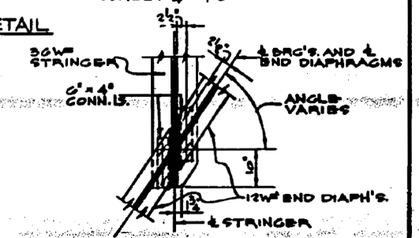
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	439	128
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-42



SECTION A-A

SCALE: 3/4" = 1'-0"

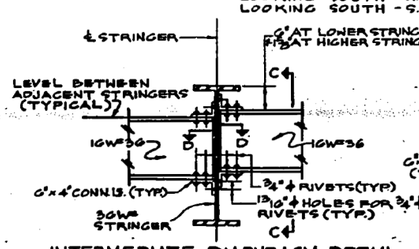


SECTION B-B

SCALE: 3/4" = 1'-0"

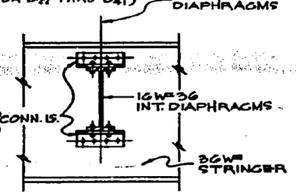
TOP OF WF ELEVATIONS

BEAM \ PT.		℄ BRG'S. N.E. ABUT. OR N.W. ABUT.	℄ PIER 1 OR 3	℄ SPLICE 1 OR 3	℄ SPLICE 2 OR 4	℄ PIER 2 OR 4	℄ BRG'S. S.E. ABUT. OR S.W. ABUT.
N. BOUND BRIDGE	B1	672.927	672.907	672.439	672.130	672.063	671.710
	B2	673.116	672.696	672.628	672.319	672.251	671.898
	B3	673.295	672.874	672.806	672.497	672.429	672.076
	B4	673.474	673.053	672.986	672.676	672.608	672.255
	B5	673.654	673.234	673.166	672.857	672.789	672.436
	B6	673.836	673.415	673.348	673.038	672.971	672.617
	B7	674.019	673.598	673.530	673.221	673.153	672.800
	B8	674.202	673.782	673.714	673.405	673.337	672.984
S. BOUND BRIDGE	B9	676.487	675.728	675.599	675.014	674.884	674.309
	B10	676.883	675.873	675.744	675.159	675.030	674.455
	B11	676.748	676.035	675.906	675.321	675.192	674.616
	B12	676.907	676.198	676.068	675.484	675.354	674.779
	B13	677.067	676.359	676.231	675.651	675.523	674.953
	B14	677.218	676.521	676.394	675.870	675.743	675.128



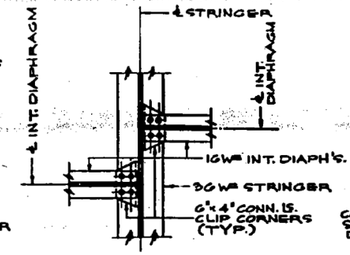
INTERMEDIATE DIAPHRAGM DETAIL

SCALE: 3/4" = 1'-0"



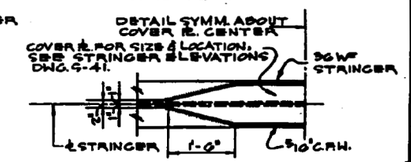
SECTION C-C

SCALE: 3/4" = 1'-0"



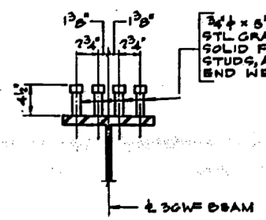
SECTION D-D

SCALE: 3/4" = 1'-0"



PLAN DETAIL OF COVER ℄'S.

TYPICAL - NOT TO SCALE

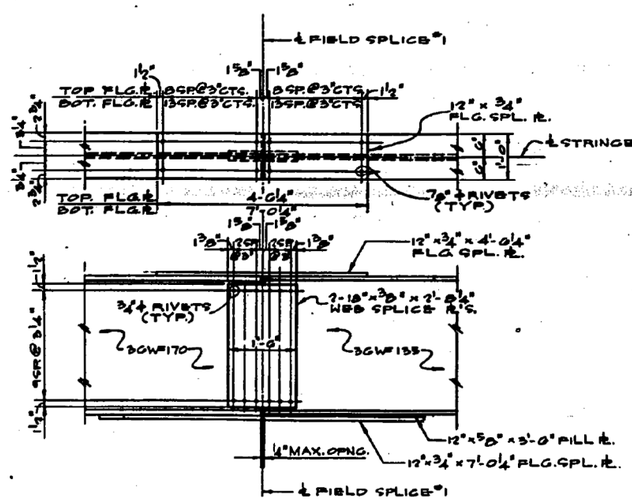


SHEAR CONNECTOR DETAIL

SCALE: 1 1/2" = 1'-0"

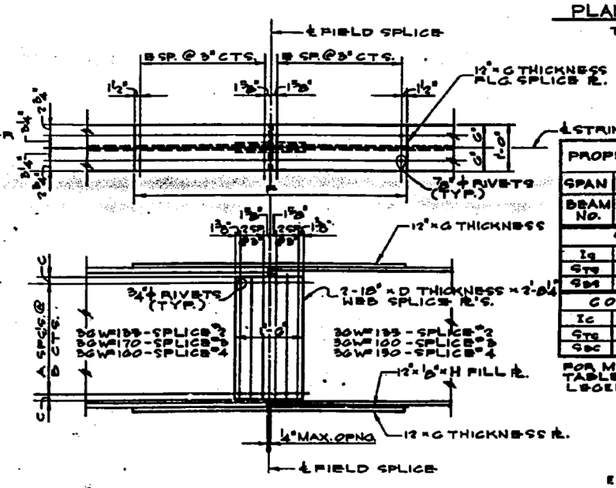
TABLE IV

LOCATION	A	B	C	D	E	F	G	H
SPLICE #2	9	3 1/4"	1 1/2"	3 5/8"	8	4'-0 1/4"	3/4"	—
SPLICE #3	10	2 7/8"	1 3/4"	7/10"	10	5'-0 1/4"	15/16"	2'-9"
SPLICE #4	10	2 7/8"	1 3/4"	7/10"	9	5'-0 1/4"	7/8"	2'-0"



FIELD SPLICE #1

SCALE: 3/4" = 1'-0"



FIELD SPLICE #2, #3, OR #4

FOR DIMENSIONS NOT SHOWN SEE TABLE IV

SCALE: 3/4" = 1'-0"

PROPERTIES	3 SPAN CONTINUOUS INTERIOR BEAMS.				
SPAN	1	1 & 3	4	5	6
BEAM NO.	B2 THRU B7	B2 THRU B7	B10 THRU B13	B10 THRU B13	B10 THRU B13
STEEL SECTION					
I_g	10470	7790	10470	9758	9012
S_{TG}	979	498	979	841	803
S_{BG}	979	498	979	841	803
COMPOSITE SECTION					
I_C	23187	18684	23291	22066	
S_{TC}	1717	1336	1736	1609	
S_{BC}	782	615	783	757	

FOR MEANING OF SYMBOLS USED IN TABLE OF PROPERTIES, SEE LEGEND, DWG. S-41.

E. LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W. Y. HUO
DRAWN BY G. P. ALLEMAN
CHECKED
CHARGE E. S. MARTINS
APPROVED W. A. HORN

STEEL DETAILS

F.A.I. 74 - SECTION 81-1HB-2
E.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.

ROCK ISLAND COUNTY

STATION 323+99.95

SCALE AS NOTED — DATE

benesch

Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-104-Existing_Plan_-_Steel_Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – STEEL DETAILS
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)

SHEET NO. SX13 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	947
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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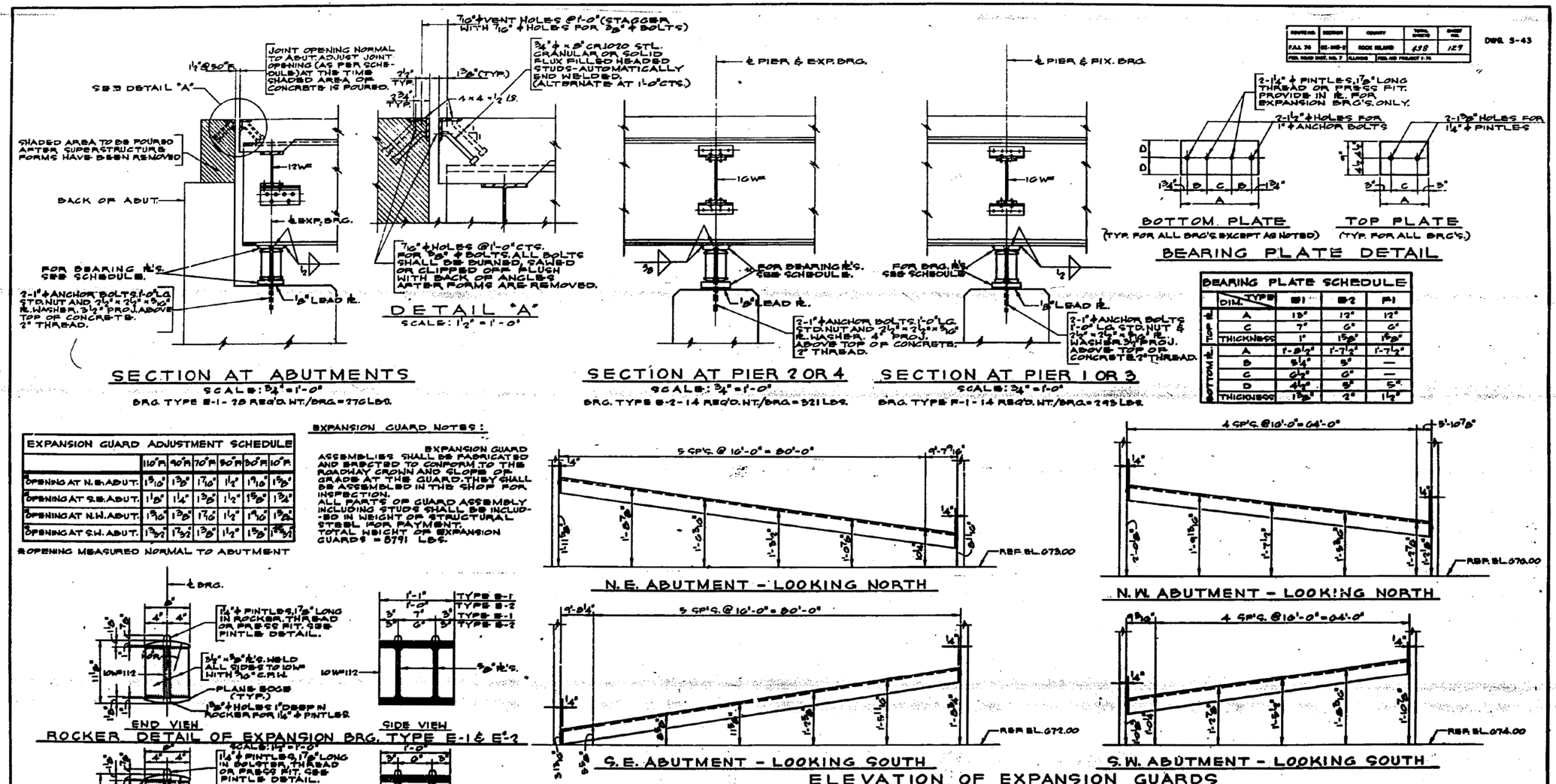
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-2	ROCK ISLAND	498	127
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-43



BEARING PLATE SCHEDULE				
	DIM. / TYPE	B1	B2	F1
TOP PL.	A	13"	12"	12"
	C	7"	6"	6"
	THICKNESS	1"	1⅝"	1⅝"
BOTTOM PL.	A	1'-8½"	1'-7½"	1'-7½"
	B	8¼"	8"	—
	C	6½"	6"	—
	D	4½"	3"	5"
	THICKNESS	1⅝"	2"	1½"

EXPANSION GUARD ADJUSTMENT SCHEDULE						
	110°F	90°F	70°F	50°F	30°F	10°F
*OPENING AT N.E. ABUT.	1 9/16"	1 3/8"	1 7/16"	1½"	1 9/16"	1 5/8"
*OPENING AT S.E. ABUT.	1 1/8"	1¼"	1 3/8"	1½"	1 5/8"	1¾"
*OPENING AT N.W. ABUT.	1 9/16"	1 3/8"	1 7/16"	1½"	1 9/16"	1 5/8"
*OPENING AT S.W. ABUT.	1 3/32"	1 13/32"	1 3/8"	1½"	1 5/8"	1 25/32"

*OPENING MEASURED NORMAL TO ABUTMENT

EXPANSION GUARD NOTES:

EXPANSION GUARD ASSEMBLIES SHALL BE FABRICATED AND ERECTED TO CONFORM TO THE ROADWAY CROWN AND SLOPES OR GRADES AT THE GUARD. THEY SHALL BE ASSEMBLED IN THE SHOP FOR INSPECTION.
ALL PARTS OF GUARD ASSEMBLY INCLUDING STUDS SHALL BE INCLUDED IN WEIGHT OF STRUCTURAL STEEL FOR PAYMENT.
TOTAL WEIGHT OF EXPANSION GUARDS = 8791 LBS.

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	25115

BEARINGS & EXPANSION GUARDS
F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 3234+88.95

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.D. KOESTER
DRAWN BY R. DALLENBACH
CHECKED
IN CHARGE C.E. MARTINEZ
APPROVED W.A. HORN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-105-Existing_Plan_-_Bearings_and_Expansion_Guards.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – BEARINGS AND EXPANSION GUARDS
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)

SHEET NO. SX14 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	948
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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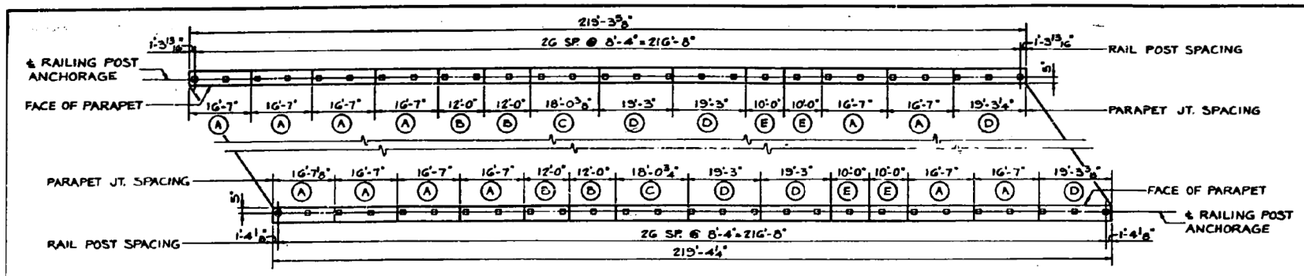
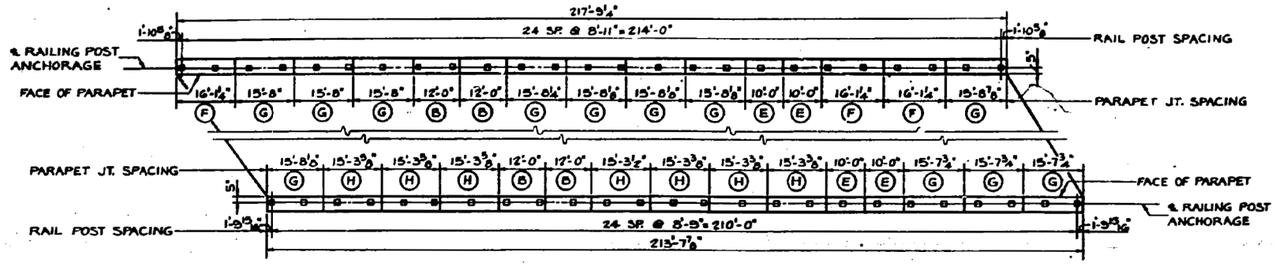
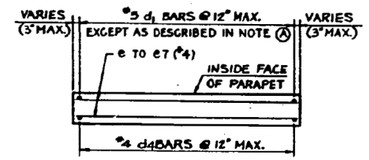




PLAN
SCALE: 1/16" = 1'-0"



PLAN - TYP. PARAPET PANEL REINFORCEMENT
(SEE TABLE BELOW)

LOCATION	PANEL	NO. OF PANELS	NO. OF BARS PER PANEL VERTICAL *		HORIZONTAL
N. BOUND	Ⓐ	12	18 #4 d4	18-#5 d1 OR d3	2-#4 e EF.
	Ⓑ	4	13 #4 d4	13-#5 d1	2-#4 e8 EF.
	Ⓒ	2	19 #4 d4	19-#5 d1	2-#4 e6 EF.
	Ⓓ	6	20 #4 d4	20-#5 d1 OR d3	2-#4 e5 EF.
	Ⓔ	4	11 #4 d4	11-#5 d1	2-#4 e4 EF.
S. BOUND	Ⓑ	4	13 #4 d4	13-#5 d1	2-#4 e1 EF.
	Ⓔ	4	11 #4 d4	11-#5 d1	2-#4 e4 EF.
	Ⓕ	3	17 #4 d4	17-#5 d1 OR d3	2-#4 e3 EF.
	Ⓖ	12	17 #4 d4	17-#5 d1 OR d3	2-#4 e2 EF.
	Ⓗ	7	16 #4 d4	16-#5 d1	2-#4 e7 EF.

* BARS d1, d3 & d4 ARE DETAILED & BILLED ON DWG. S-39

REGION NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(81-1HB-2)	ROCK ISLAND	458	130
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT F-74		

DWG. NO. S-44

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE
e	48	#4	16'-3"	—
e1	32	#4	11'-8"	—
e2	8	#4	17'-8"	—
e3	24	#4	18'-11"	—
e4	32	#4	9'-8"	—
e5	12	#4	15'-8"	—
e6	48	#4	15'-4"	—
e7	28	#4	15'-0"	—

NOTE Ⓐ
ON ABUTMENT SIDE OF END PANELS, SUBSTITUTE 3-#5 d3 STRAIGHT BARS FOR THE FIRST 3-#5 d1 BARS SHOWN ON TYP. PANEL REINFORCEMENT. THIS IS REQUIRED BY CURB TERMINATION DETAIL.

NOTES:

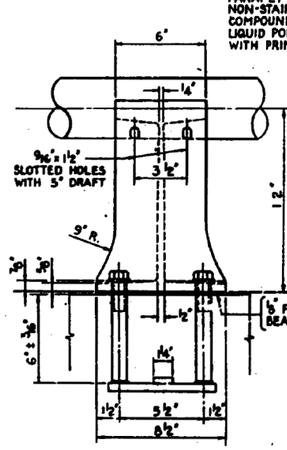
ALL ALUMINUM ALLOY EXTRUDED RAIL SHALL BE SUPPLIED IN MODULAR LENGTHS OF 30 FEET, EXCEPT AT THE END OF BRIDGE OR OVER OPEN JOINTS IN BRIDGE DECK WHERE THE RAIL SHALL BE ATTACHED TO A MINIMUM OF 2 POSTS. IF THE RAIL IS ON A HORIZONTAL CURVE OF 2,300 FOOT RADIUS OR LESS, THE MODULAR LENGTHS MAY BE REDUCED BUT SHALL BE ATTACHED TO A MINIMUM OF 2 POSTS.

ALL JOINTS IN RAIL SHALL BE SPLICED PER DETAIL.

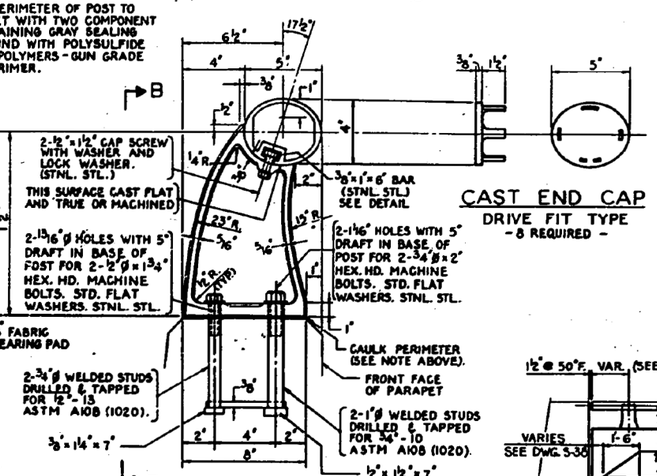
PROVIDE 1 - 1/8" AND 2 - 1/16" ALUMINUM SHIMS FOR 25 PERCENT OF THE POSTS. RAIL ELEMENT SHALL BE PARALLEL TO GRADE; HIGH SPOTS SHALL BE GROUND AND LOW SPOTS SHIMMED.

SEAL PERIMETER OF BASE OF POST TO PARAPET WITH TWO COMPONENT NON-STAINING GRAY SEALING COMPOUND WITH POLYSULFIDE LIQUID POLYMERS, GUN GRADE WITH PRIMER. FABRIC BEARING PAD SHALL HAVE SAME DIMENSIONS AS BASE OF POST.

NOTE:
SEAL PERIMETER OF POST TO PARAPET WITH TWO COMPONENT NON-STAINING GRAY SEALING COMPOUND WITH POLYSULFIDE LIQUID POLYMERS - GUN GRADE WITH PRIMER.



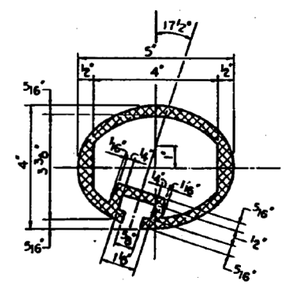
VIEW B-B



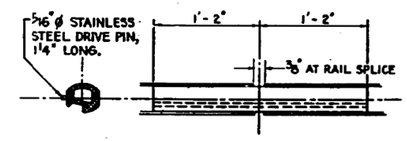
SECTION A-A

RAIL POST DETAILS
SCALE: 3" = 1'-0"

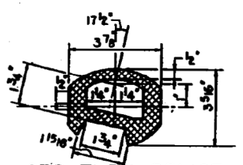
CAST END CAP
DRIVE FIT TYPE
- 8 REQUIRED -



SEC. THRU ELLIPTICAL RAIL SECTION
SCALE: 1/2" = 1'

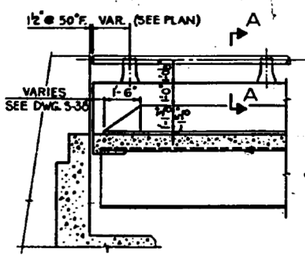


RAIL SPLICE
SCALE: 1 1/2" = 1'-0"

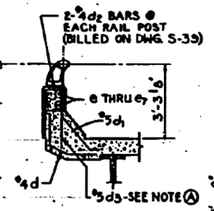


SPLICE MUST BE A SLIDING FIT IN RAIL SECTION.

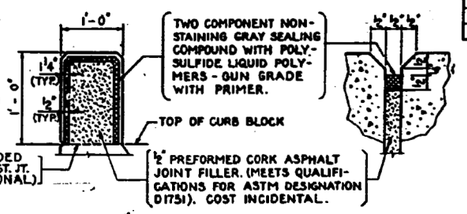
SEC. THRU SPLICE
SCALE: 3/8" = 1'



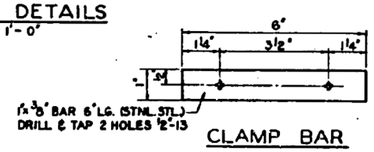
INSIDE VIEW AT ABUTMENT
SCALE: 3/8" = 1'-0"



SEC. THRU CURB



PARAPET JOINT DETAIL



CLAMP BAR

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YDS.	32.2
REINFORCEMENT BARS	POUND	2270
ALUMINUM RAILING	LIN. FT.	870

PARAPET & RAILING DETAILS

F.A.I. 74 - SECTION 81-1HB-2
F.A.I. 74 OVER SOUTH BOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 323+99.96
SCALE AS NOTED DATE

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R.S. SHORBAGIAN
DRAWN BY M. WADSWORTH & R.S.S.
CHECKED A. KAJAC
IN CHARGE R.S. MARTINS
APPROVED W.A. HOHN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FOR INFORMATION ONLY

FILE NAME = 081-0184&0185-C00CD-106-Existing_Plan_-_Parapet_and_Railing_Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN – PARAPET AND RAILING DETAILS
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. SX15 OF SX15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	949
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

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Benchmark No. 586:
Cut "X" on Northerly Bolt of Existing Ramp 7th-A Pier Foundation
Elevation NAVD 88 = 614.214

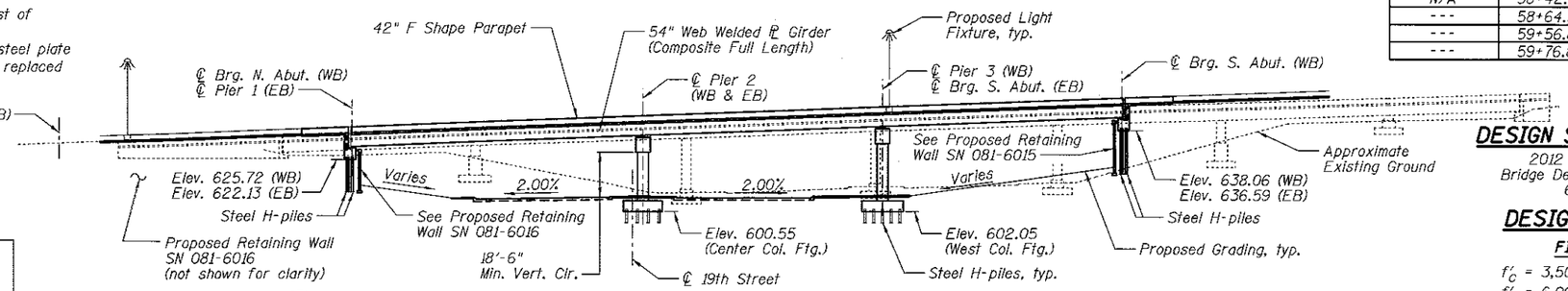
Existing Structures:
The existing structures were built in 1973 as F.A.I. Route 74, S.N. 081-0099 (SB I-74), S.N. 081-0100 (NB I-74) and S.N. 081-0115 (Ramp 7-S). The existing structures consist of 6 spans (S.N. 081-0099 and S.N. 081-0115) and 7 spans (S.N. 081-0100) of reinforced concrete deck on multiple steel plate girders. The existing structures are to be removed and replaced during the Stage 2 and Stage 3 Construction.
No salvage.

BEARING ARRANGEMENT

Structure	N. Abut.	Pier 1	Pier 2	Pier 3	S. Abut.
Westbound	Exp.	---	Exp.	Fixed	Exp.
Eastbound	Exp.	Fixed	Exp.	---	Exp.

DRAINAGE SCUPPER STATIONS

S.N. 081-0179 (WB)		S.N. 081-0180 (EB)	
INSIDE	OUTSIDE	INSIDE	OUTSIDE
N/A	58+42.34	58+32.84	57+08.84
---	58+64.34	58+57.84	57+18.84
---	59+56.84	59+51.84	---
---	59+76.84	59+81.84	---



ELEVATION

(Looking East along ℄ I-74)
(WB shown, EB similar)

EXISTING UTILITY LEGEND

- Underground Sanitary Sewer
- Underground Storm Sewer
- Underground Telephone
- Underground Fiber Optic
- Underground Water

Note: Utilities in conflict are to be relocated or removed by others. (See Utility Plans)

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

DESIGN SPECIFICATIONS

2012 AASHTO LRFD
Bridge Design Specifications,
6th Edition

DESIGN STRESSES

FIELD UNITS

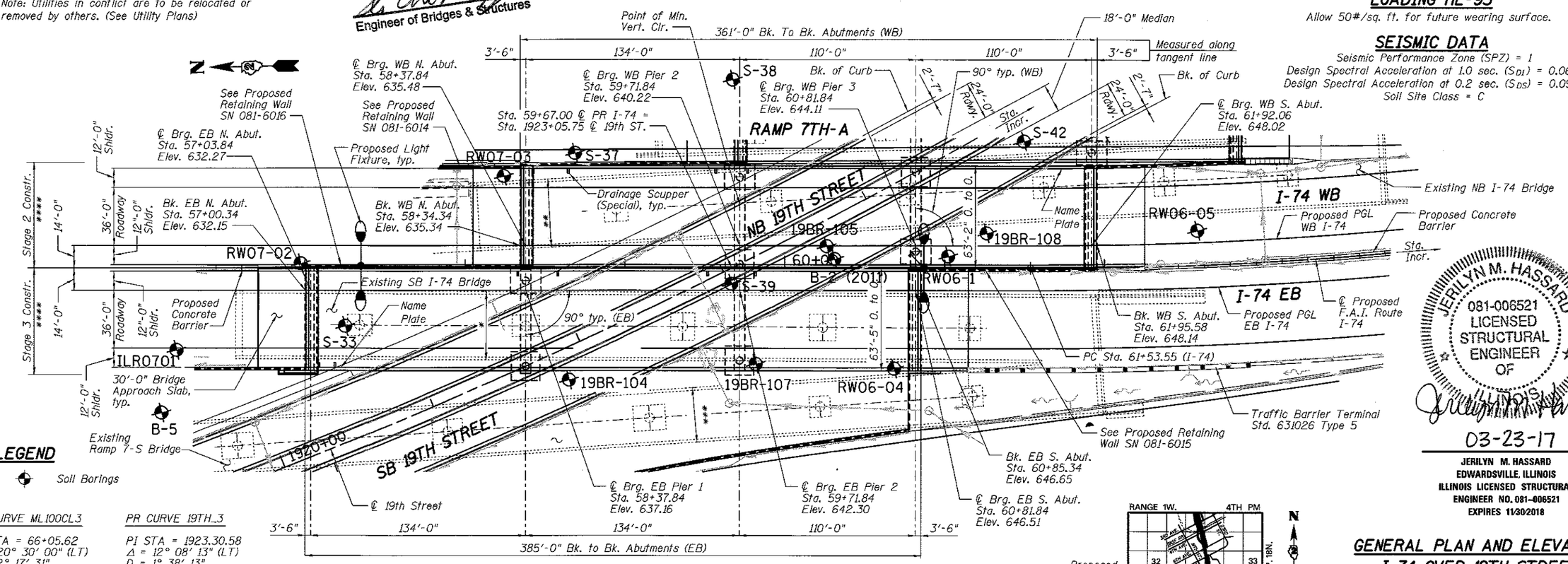
f'_c = 3,500 psi (Superstructure and Abutments)
f'_c = 6,000 psi (Piers)
f_y = 60,000 psi (Reinforcement)
f_y = 50,000 psi (M270 Grade 50)
f_y = 36,000 psi (M270 Grade 36)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.061g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.095g
Soil Site Class = C



LEGEND

Soil Borings

PR CURVE ML100CL3

PI STA = 66+05.62
Δ = 20° 30' 00" (LT)
D = 2° 17' 31"
R = 2,500.00'
T = 452.07'
L = 894.48'
E = 40.55'
e = 4.9%
T.R. = N/A
S.E. RUN = 422.89' (I)
410.49' (O)
PC STA = 61+53.55
PT STA = 70+48.03

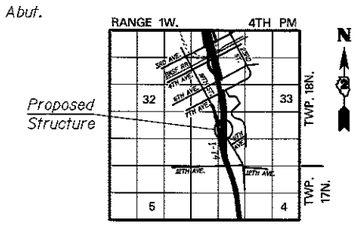
PR CURVE 19TH_3

PI STA = 1923.30.58
Δ = 12° 08' 13" (LT)
D = 1° 38' 13"
R = 3,500.00'
T = 372.09'
L = 741.40'
E = 19.72'
e = N.C. (2.0%)
T.R. = N/A
S.E. RUN = N/A
PC STA = 1919+58.49
PT STA = 1926+99.89

Notes:
Stations and elevations are given at the Proposed WB and EB PGLs, except as noted.
See Electrical Plans for lighting and conduit details.
For superelevation transitions, see sheet 2 of 86.
See Roadway Plans for grading.
Temporary Wire Faced MSE Walls (TWFMSE) required for stage construction shall remain in place. See SN 081-6015 and SN 081-6016 for TMFMSE wall locations and details.

PLAN

* Limits of Existing Bridge 081-0099 to be removed.
** Limits of Existing Bridge 081-0100 to be removed.
*** Limits of Existing Bridge 081-0115 to be removed.
**** See staging details for limits of Pier construction



LOCATION SKETCH

JERILYN M. HASSARD
081-006521
LICENSED STRUCTURAL ENGINEER OF ILLINOIS

03-23-17

JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-006521
EXPIRES 11/30/2018

GENERAL PLAN AND ELEVATION
I-74 OVER 19TH STREET
F.A.I. ROUTE 74 SEC. 81-1HBR
ROCK ISLAND COUNTY
STA. 59+67.00
STRUCTURE NO. 081-0179 (WB)
STRUCTURE NO. 081-0180 (EB)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JMH	REVISED	
	CHECKED - YSS	REVISED	
PLOT SCALE =	DRAWN - PRC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 1 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	950
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		