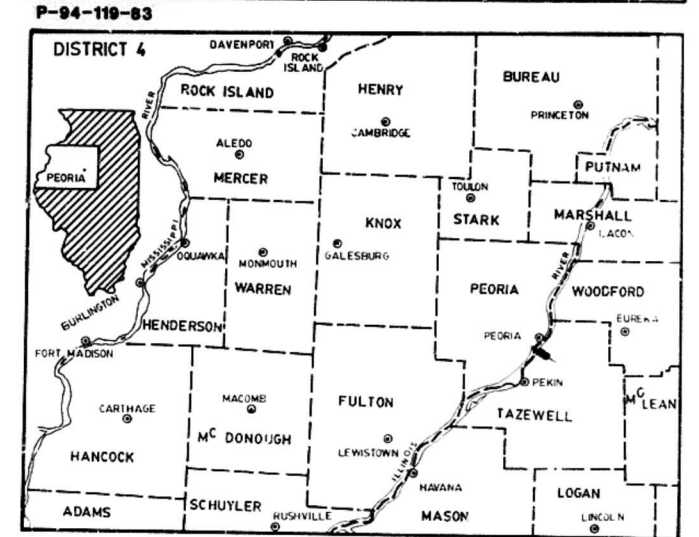


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

INDEX OF SHEETS

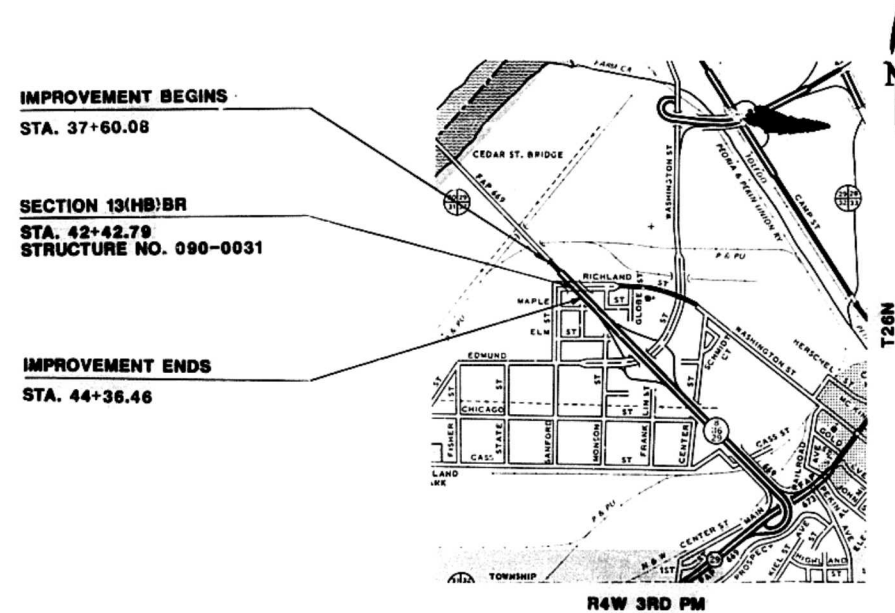
1. COVER SHEET
2. SUMMARY OF QUANTITIES
- 3-17 BRIDGE PLANS
 1. GENERAL PLAN
 2. STAGE CONSTRUCTION
 3. CONCRETE REMOVAL
 4. TOP OF SLAB ELEVATIONS
 5. TOP OF SLAB ELEVATIONS
 6. TOP OF SLAB ELEVATIONS
 7. SUPERSTRUCTURE
 8. SUPERSTRUCTURE
 9. SUPERSTRUCTURE DETAILS
 10. SUPERSTRUCTURE DETAILS
 11. NEOPRENE EXPANSION JOINT DETAILS
 12. STRUCTURAL STEEL
 13. STRUCTURAL STEEL
 14. NORTH ABUTMENT
 15. SOUTH ABUTMENT
- 16 & 17 DELETED
18. WEST APPROACH PLAN
19. EAST APPROACH PLAN
20. TYPE C AND TYPE D INLET BOX (SPECIAL) DETAIL
21. EXPANSION JOINT 4" DETAIL
- 22-24. CROSS SECTION
- 24A. TRAFFIC CONTROL & PROTECTION. 11-2

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 669	13(HB)BR	TAZEWELL	24A	1
F.H.W.A. REG. 4		ILLINOIS	PROJECT	



LOCATION OF SECTION INDICATED THUS: — —

**F.A. ROUTE 669 (ILL. 8,29,116)
SECTION 13(HB)BR
TAZEWELL COUNTY
C-94-303-88**



PROPOSED IMPROVEMENT INCLUDES THE REMOVAL AND REPLACEMENT OF THE EXISTING REINFORCED CONCRETE DECK CARRYING EAST ROUTE 669 OVER RICHLAND STREET, AND THE IMPROVEMENT OF THE APPROACHES TO THE STRUCTURE.

LIST OF STANDARDS

- 2113 -2
- 2122 -3
- 2168 -11
- 2230 -14
- 2298 -7
- 2299 -10
- 2300 -3
- 2341 -1

SURVEY BOOK NOS.

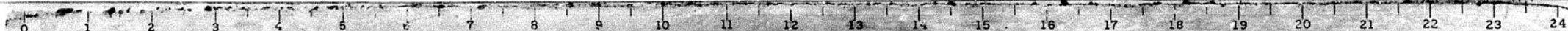
CONTRACT NO. 44030

**GROSS LENGTH OF IMPROVEMENT: 676.38 FEET= 0.128 MILE
NET LENGTH OF IMPROVEMENT: 676.38 FEET= 0.128 MILE**

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
SUBMITTED	1-30-87
EXAMINED	12/31/87
PASSED	12/31/87
APPROVED	12/31/87

DISTRICT ENGINEER
 ENGINEER OF PLANS AND CONTRACTS
 ENGINEER OF RECORD
 DIRECTOR, DIVISION OF HIGHWAYS

**FOR UTILITY INFORMATION
CALL J.U.I.E.
PHONE 800-892-0123**



SUMMARY OF QUANTITIES

ROUTE	SECTION	COUNTY	SHEET	
EA. 669	13(HB)BR	TAZEWELL	TOTAL	NO.
MCD.			24	2
PROJ.	STA.	TO STA.		

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITIES	STA. 37+00.00 TO 41+49.12	STA. 43+06.46 TO 44+36.48	13(HB)BR
	CONSTRUCTION TYPE CODE			SFTY-3Q		X271-2A
20200100	EARTH EXCAVATION	CU YD	205	205		
40600500	LEVELING BINDER (MACHINE METHOD)	TON	245	245		
40600700	BITUMINOUS CONCRETE BINDER COURSE	TON	103	103		
40601300	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I	TON	220	220		
40601980	STRIP REFLECTIVE CRACK CONTROL TREATMENT, SYSTEM B	LN FT	985	985		
50102400	CONCRETE REMOVAL	CU YD	21.9		21.9	
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1	
50300100	FLOOR DRAINS	EACH	8		8	
50300250	CLASS X CONCRETE SUPER STRUCTURE	CU YD	4213		4213	
50300300	PROTECTIVE COAT	SQ YD	168		168	
50400300	CLASS X CONCRETE	CU YD	21.6		21.6	
50700400	FURNISHING & ERECTING STRUCTURAL STEEL	LBS.	2340		2340	
50700500	STUD SHEAR CONNECTORS	EACH	2368		2368	
51200100	REINFORCEMENT BARS	LBS	2620		2620	
51200200	REINFORCEMENT BARS, EPOXY COATED	LBS	101,700		101,700	
51400100	NAME PLATES	EACH	1		1	
61247001	TYPE C INLET BOX STD 2324 (SPECIAL)	EACH	4	4		
61265200	INLET TO BE REMOVED	EACH	4	4		
61620353	CONCRETE MEDIAN TYPE SB-9	SQ FT	989	989		
61624600	CORRUGATED MEDIAN	SQ FT	347	347		
61700500	COMBINATION CURB AND GUTTER REMOVAL	LN FT	787	787		
61700600	SIDEWALK REMOVAL	SQ FT	2,580	2,580		
61701000	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ YD	420	420		
61703100	MEDIAN REMOVAL	SQ FT	1,354	1,354		
62800085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1		
62900300	CHAIN LINK FENCE, 6 FEET	LN FT	124	124		
62910300	CHAIN LINK FENCE REMOVAL	LN FT	124	124		
63300300	STEEL PLATE BEAM GUARDRAIL REMOVAL	LN FT	175	175		
63301210	REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	LN FT	100	100		
X0320168	HANDRAIL SPECIAL	LN FT	784	784		
X0942060	GEOTECHNICAL REINFORCEMENT	SQ YD	196	196		
Z0021600	EXPANSION JOINT 4"	LN FT	55	55		
Z0022200	EXPANSION TIE ANCHORS 3/4"	EACH	390	390		
Z0035000	NEOPRENE EXPANSION JOINT 2"	LN FT	207		207	
64801625	TRAFFIC CONTROL & PROTECTION, U-2	L SUM	1	1		
65000100	MOBILIZATION	L SUM	1		1	

SUBMITTED 11-24-87
 EXAMINED 11-30-87
 EXAMINED 11-24-87
 EXAMINED 11-24-87
 This work is hereby approved as to policy.
 DATE 11-30-87

Bench Mark: B.M. chisled "□" on North wing wall of No. Abutment. Elev. 462.50

Existing Structure: Built in 1966 as F.A. Route 10, Section 13-HB, S.N. 090-0031
 A three span continuous steel beam (W36) structure supporting a 7" R.C. slab. The minimum Out to Out width of structure is 69'-0" and the maximum is 78'-6". The length of Structure is 187'-4".
 The contractor shall remove and replace the existing R.C. deck. The existing steel beams & substruct. shall remain in place. Construction equipment traffic shall be maintained during the rehabilitation of structure.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	NO.	SHEET NO. 1
			24A	3	13 SHEETS

GENERAL NOTES

Fasteners shall be high strength bolts. Bolts 3/4"φ, open holes 15/16"φ, unless otherwise noted.

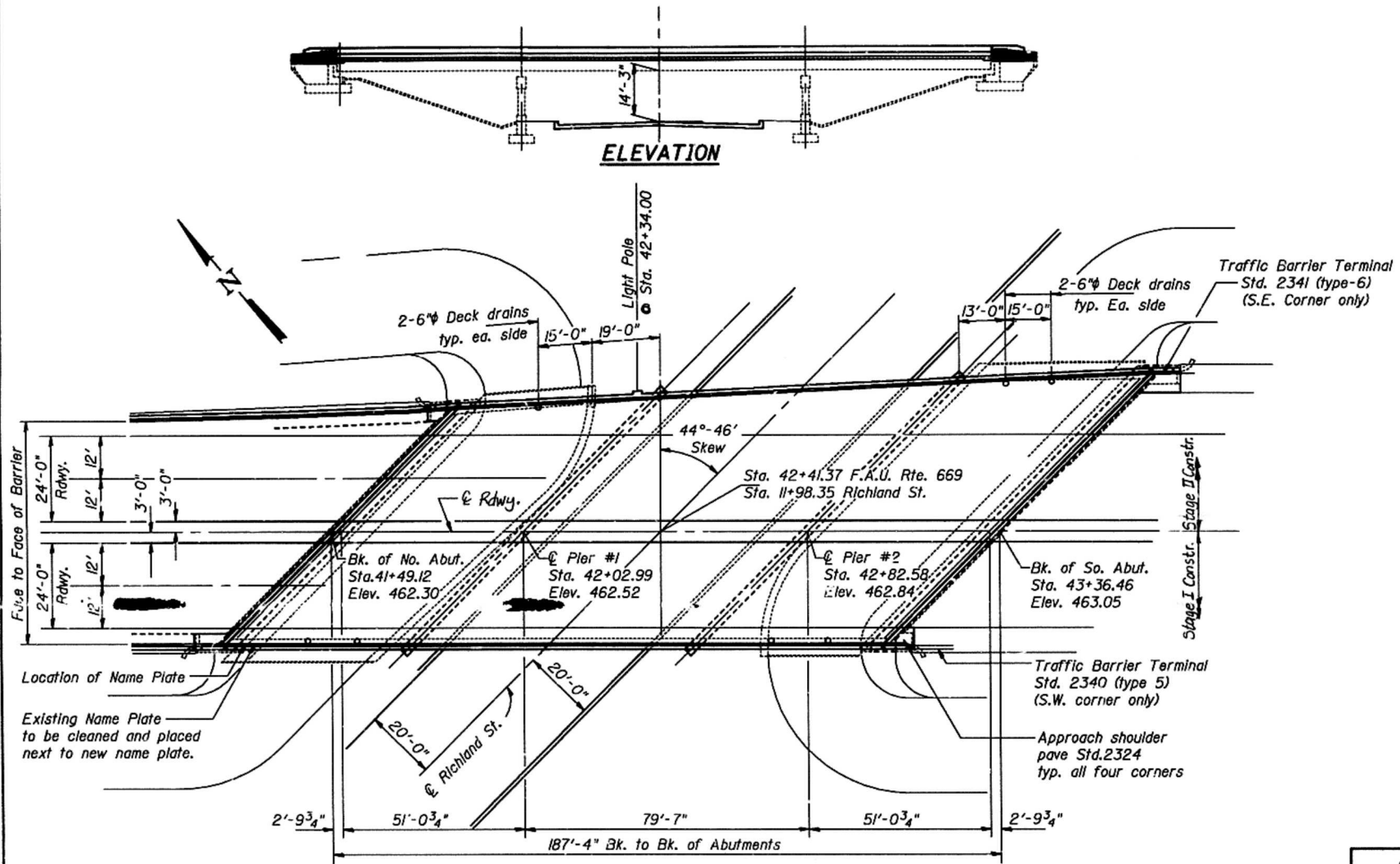
Tightening and inspection of all high strength bolt connections shall conform to the requirements of the latest issue of the Specification for Structural Joints using A325 (M16) or A490 (M253) bolts for slip-critical connections. Except tightening methods using either the load indicating washers or the calibrated wrench are not allowed.

All new structural steel shall receive one shop coat of the lead and chromate free alkyl paint system primer and two field coats of aluminum paint.

Field welding of construction accessories will not be permitted to the bottom flange of the existing beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.		21.9	21.9
Removal of Existing Concrete Deck	Each	1		1
Floor Drains	Each	8		8
Protective Coat	Sq. Yd.	168		168
Class X Concrete	Cu. Yd.		21.6	21.6
Class X Concrete Superstructure	Cu. Yd.	421.3		421.3
Structural Steel	Lbs.	2,340		2,340
Stud Shear Connectors	Each	2,368		2,368
Reinforcement Bars	Lbs.		2,620	2,620
Reinforcement Bars (Epoxy Coated)	Lbs.	101,700		101,700
Name Plates	Each	1		1
Neoprene Expansion Joint (2")	Lin. Ft.	207		207

STATION 42+42.79
 BUILT 198 BY
 STATE OF ILLINOIS
 F.A. RT. 669 SEC. 13(HB)BR

LOADING HS20
 STR. NO. 090-0031

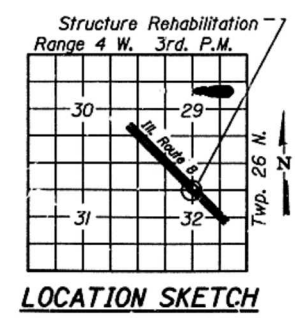
NAME PLATE
 See Std. 2113

DESIGN SPECIFICATIONS
 AASHTO (1983) and applicable Interims (1984, 1985 and 1986)

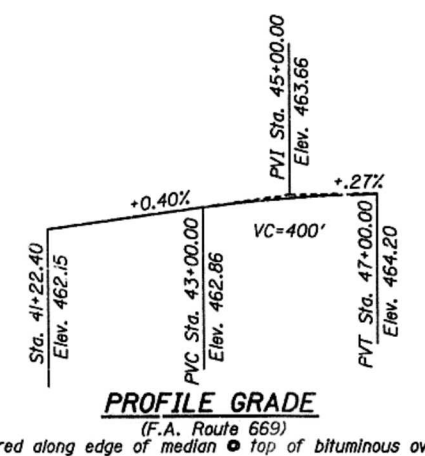
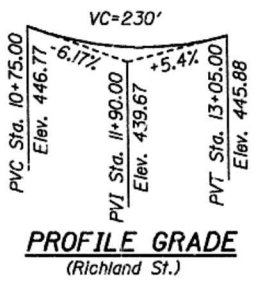
LOADING HS 20-44
 Allow 25#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS
 f'c = 3,500 psi
 fy = 60,000 psi (Reinf.)
 fy = 36,000 psi (Struct. Steel)



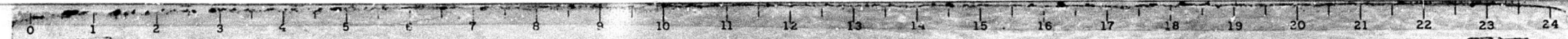
GENERAL PLAN
 ILL. ROUTE 8 OVER RICHLAND ST.
 F.A. ROUTE 669 SECTION 13 (HB) BR
 TAZEWELL COUNTY
 STATION 42+42.79
 STRUCTURE NUMBER 090-0031



DESIGNED Eric Gowdy
 CHECKED Peter M. Patrone
 P.W. Sweet
 DRAWN John F. Schneller Jr.
 CHECKED PMP EEG

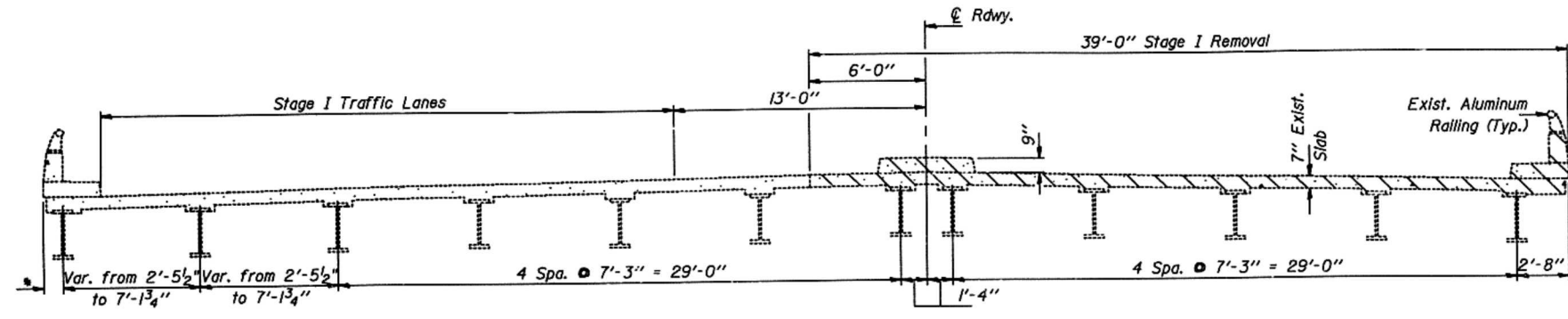
EXAMINED Craig O. Kasper
 PASSED James J. Kautzman
 APPROVED

Dec 28, 1987



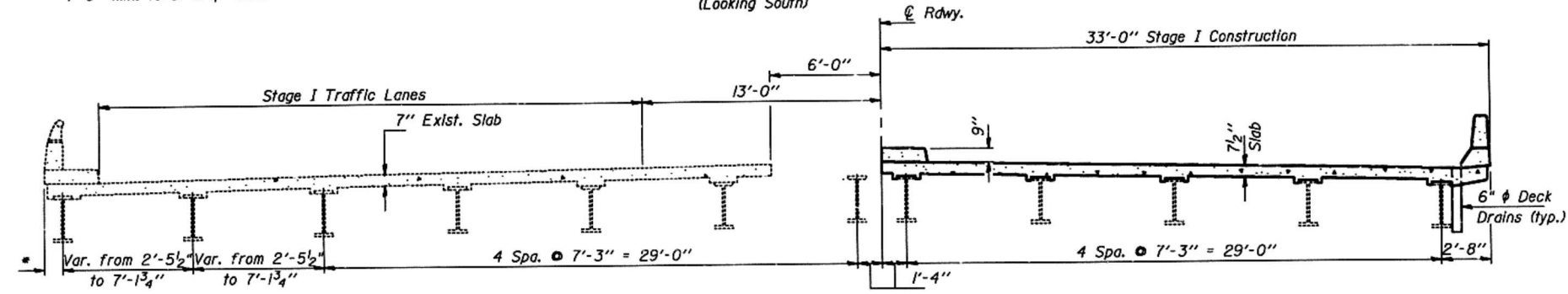
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	POST	SHEET NO. 2 13 SHEETS
F.A. No.			24A	4	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



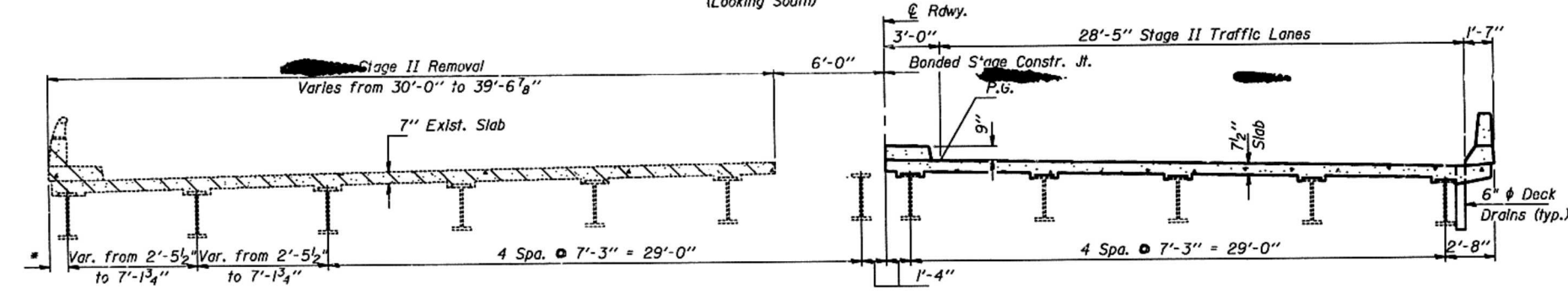
* Varies from 1'-0" min. to 3'-2 3/4" max.

STAGE I REMOVAL
(Looking South)



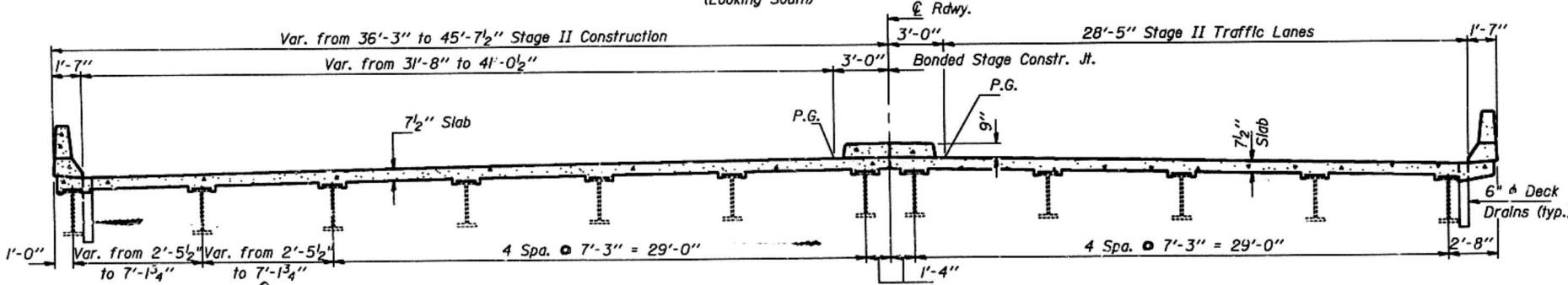
* Varies from 1'-0" min. to 3'-2 3/4" max.

STAGE I CONSTRUCTION
(Looking South)



* Varies from 1'-0" min. to 3'-2 3/4" max.

STAGE II REMOVAL
(Looking South)

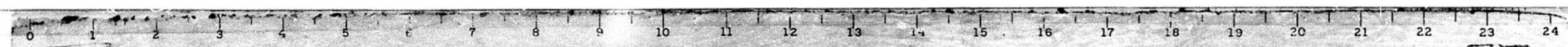


STAGE II CONSTRUCTION
(Looking South)

Notes: Hatched area indicates "Removal of Existing Concrete Deck".
Cost of removal of existing Aluminum Railing is incidental to "Removal of Existing Concrete Deck".

DESIGNED Eric Gowdy	EXAMINED <i>[Signature]</i> Dec. 28, 1987
CHECKED <i>[Signature]</i>	PASSED <i>[Signature]</i>
DRAWN John F. Schneller Jr.	APPROVED <i>[Signature]</i>
CHECKED PMP EEG	DIRECTOR OF HIGHWAYS

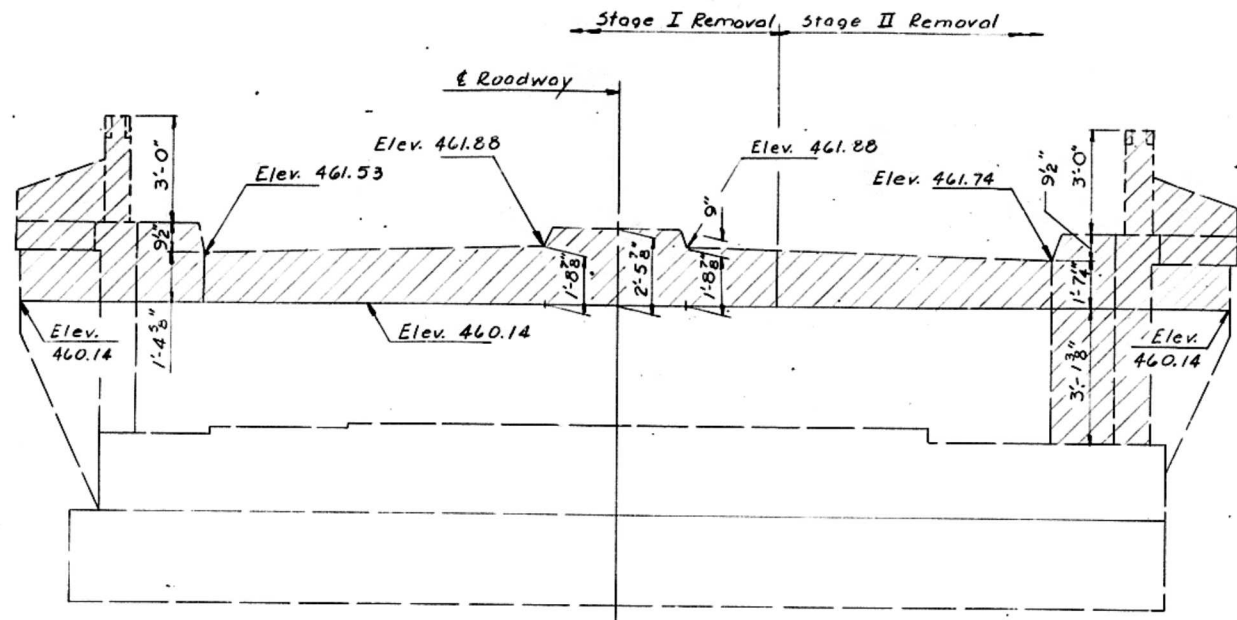
STAGE CONSTRUCTION DETAILS
F.A. RT. 669 SECTION 13(HB)BR
TAZEWELL COUNTY
STA. 42+42.79



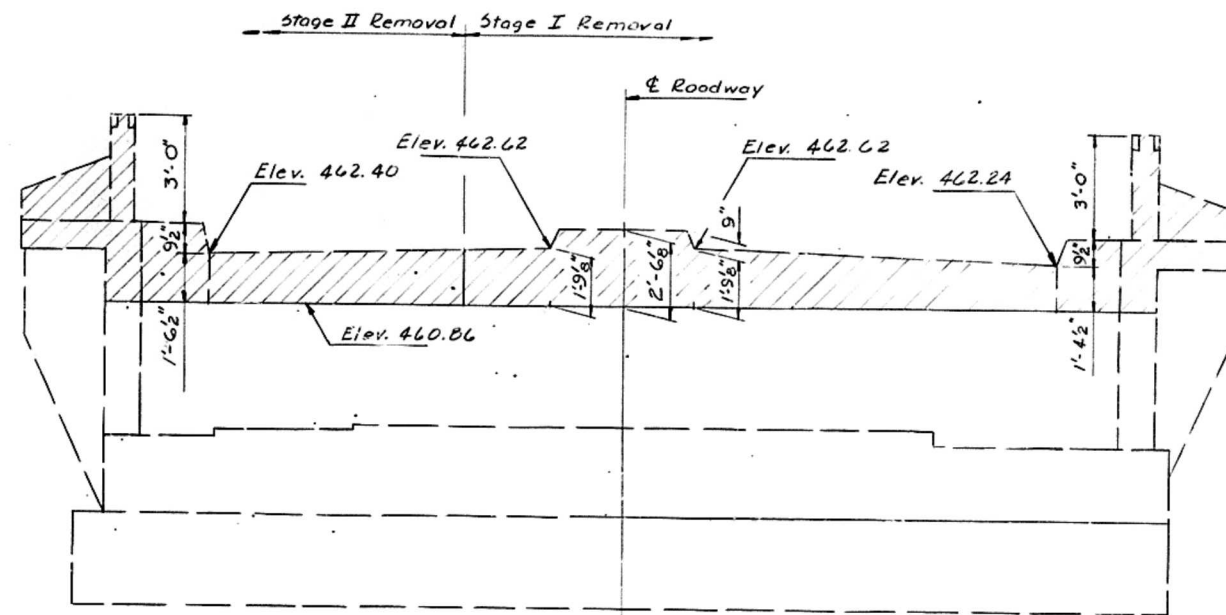
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	REVISION	TOTAL SHEETS	SHEET NO.
...	24A	5

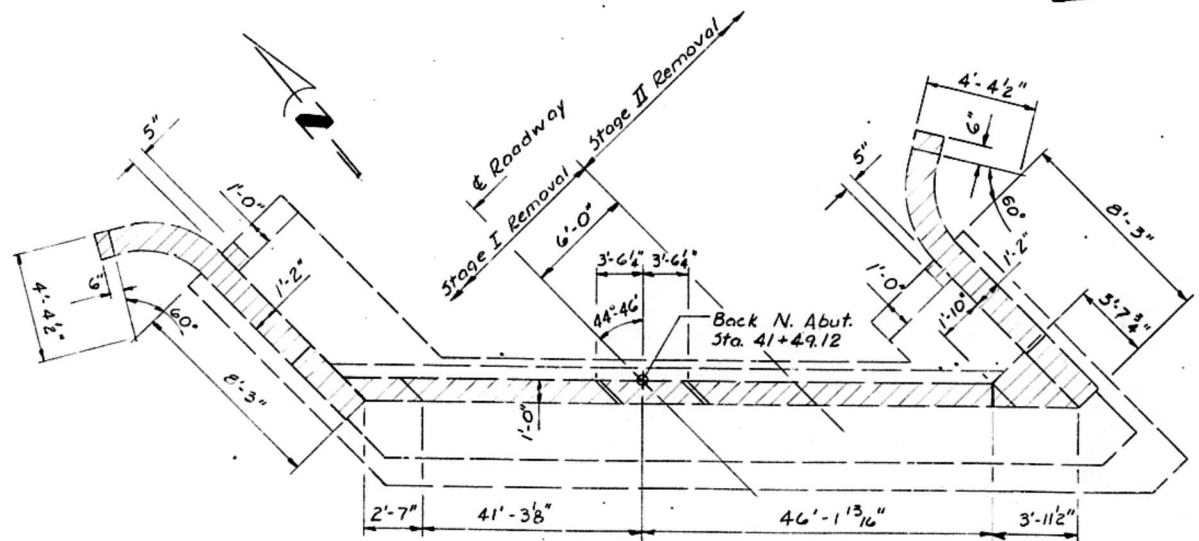
SHEET NO 3
13 SHEETS



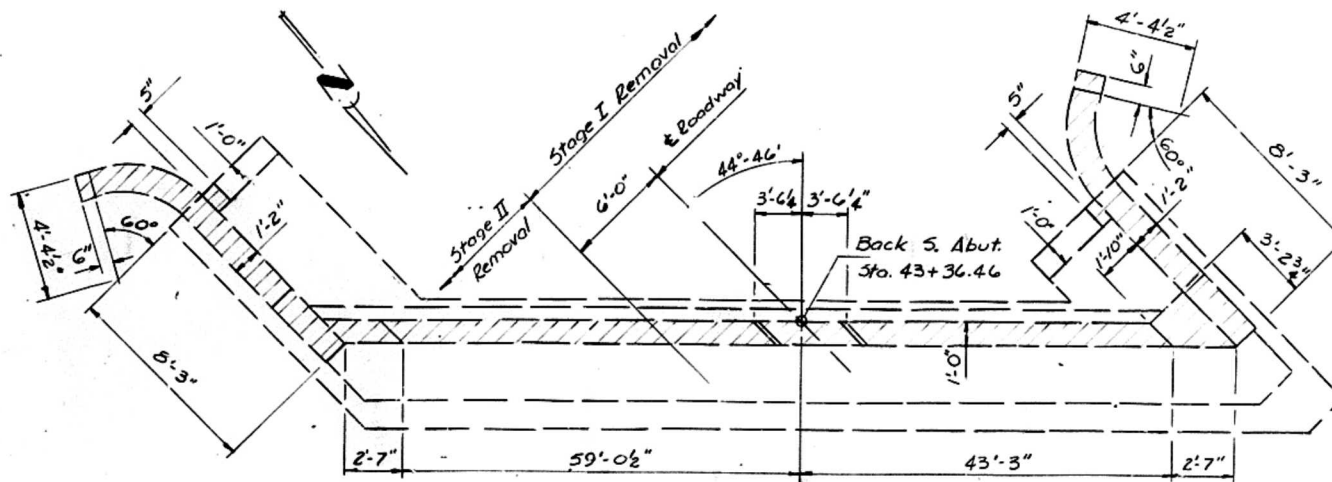
ELEVATION
(AT RIGHT ANGLES TO
& ROADWAY)



ELEVATION
(AT RIGHT ANGLES TO
& ROADWAY)



PLAN VIEW
NORTH ABUTMENT

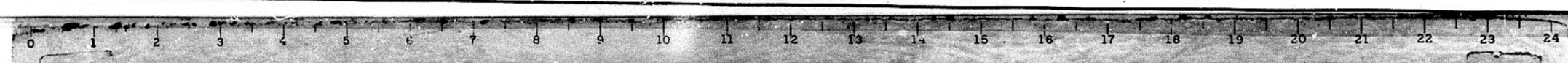


PLAN VIEW
SOUTH ABUTMENT

DESIGNED	Eric Gowdy	DATE	Dec. 28, 1987
CHECKED	Patrick M. ...	EXAMINED	...
DRAWN	...	PASSED	James J. ...
CHECKED	PMP EEG	APPROVED	...

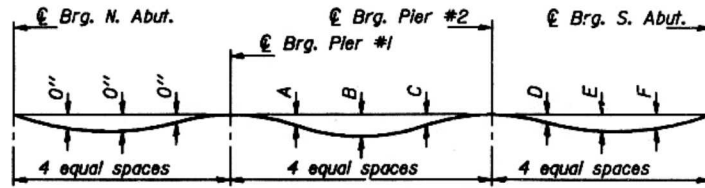
Notes: Hatched areas indicates concrete removal.
Existing reinforcement extending into concrete removal areas shall be cleaned, straightened, and incorporated into new construction. Cost incidental.

CONCRETE REMOVAL
FA. RT. 669 SECTION 13(HB) BR.
TAEWELL COUNTY
STA. 42+42.79



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	DRAWN	DATE	SHEET	SHEET NO. 4
			24A	6	13 SHEETS
F.A. NO.		ILLINOIS		FEL-AD PROJECT	

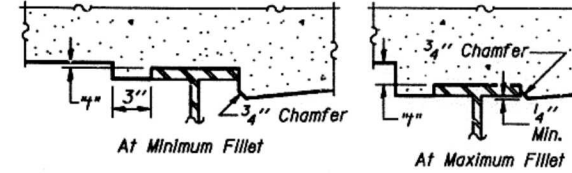


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

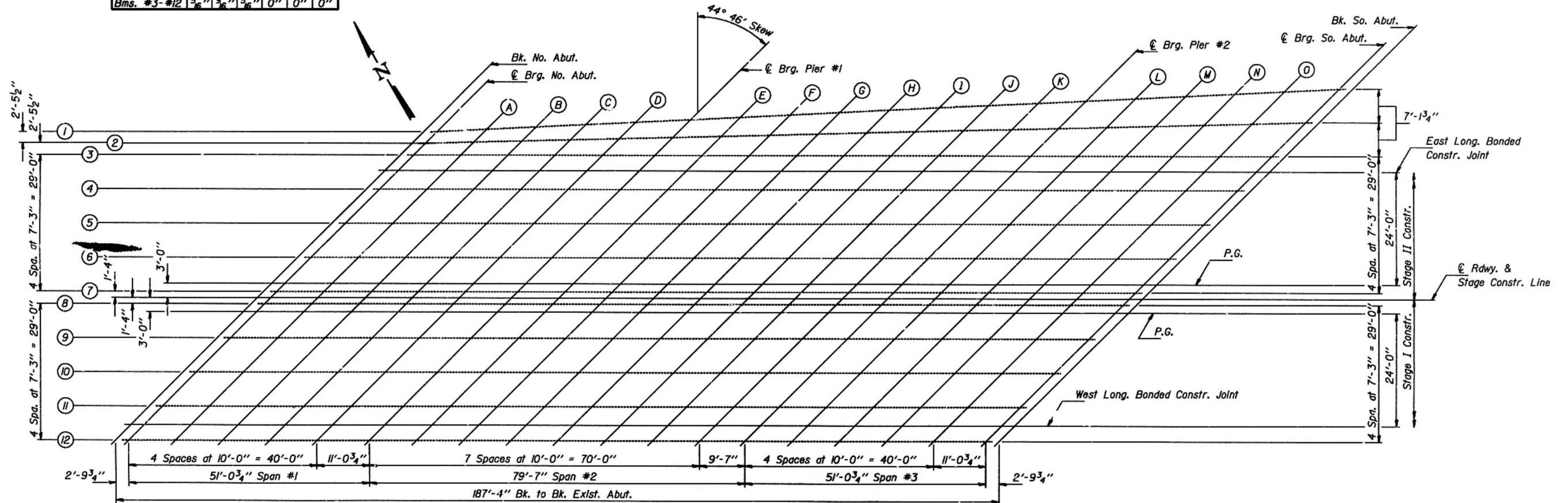
Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

Beam	LOC.	A	B	C	D	E	F
Beam #1		1/4"	1/4"	1/4"	0"	0"	0"
Beam #2		1/4"	3/8"	3/8"	0"	1/8"	1/8"
Bms. #3-#12		3/8"	3/8"	3/8"	0"	0"	0"



To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "f" above top flange of beams.

FILLET HEIGHTS



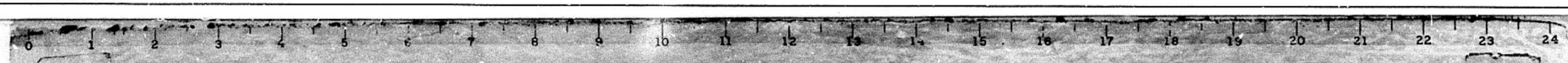
PLAN

DESIGNED Eric Gowdy
CHECKED Patrick M. Petrone
DRAWN John F. Schneller Jr.
CHECKED Pmp EEG

Dec. 28, 1987
EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]
DIRECTOR OF HIGHWAYS

E-S 1-6-82

TOP OF SLAB ELEVATIONS
F.A. RT. 669 SECTION 13(HB)BR
TAZEVELL COUNTY
STA. 42+42.79



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4183.940	-35.105	461.895	461.895
€ Brg. N. Abut.	4186.896	-35.250	461.904	461.904
A	4197.408	-35.766	461.938	461.938
B	4207.920	-36.282	461.972	461.972
C	4218.431	-36.798	462.006	462.006
D	4228.943	-37.314	462.040	462.040
€ Brg. Pier 1	4240.572	-37.885	462.078	462.078
E	4251.084	-38.401	462.112	462.112
F	4261.596	-38.916	462.146	462.146
G	4272.107	-39.423	462.180	462.180
H	4282.619	-39.948	462.214	462.214
I	4293.131	-40.464	462.248	462.248
J	4303.643	-40.980	462.282	462.282
K	4314.154	-41.946	462.316	462.321
€ Brg. Pier 2	4324.228	-41.991	462.348	462.348
L	4334.740	-42.506	462.381	462.381
M	4345.251	-43.022	462.413	462.413
N	4355.763	-43.538	462.446	462.446
O	4366.275	-44.054	462.478	462.478
€ Brg. S. Abut.	4377.904	-44.625	462.512	462.512
Bk. S. Abut.	4380.860	-44.770	462.521	462.521

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4181.574	-32.719	461.923	461.923
€ Brg. N. Abut.	4184.458	-32.791	461.933	461.933
A	4194.714	-33.050	461.970	461.970
B	4204.970	-33.308	462.007	462.007
C	4215.225	-33.566	462.044	462.044
D	4225.481	-33.824	462.081	462.081
€ Brg. Pier 1	4236.827	-34.109	462.122	462.122
E	4247.083	-34.367	462.159	462.159
F	4257.339	-34.625	462.196	462.217
G	4267.595	-34.883	462.233	462.267
H	4277.851	-35.141	462.270	462.317
I	4288.107	-35.399	462.307	462.341
J	4298.362	-35.657	462.344	462.365
K	4308.618	-35.915	462.381	462.391
€ Brg. Pier 2	4318.447	-36.162	462.416	462.416
L	4328.702	-36.420	462.452	462.452
M	4338.958	-36.678	462.488	462.488
N	4349.214	-36.936	462.524	462.524
O	4359.470	-37.194	462.559	462.559
€ Brg. S. Abut.	4370.816	-37.479	462.597	462.597
Bk. S. Abut.	4373.700	-37.552	462.607	462.607

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4179.207	-30.333	461.950	461.950
€ Brg. N. Abut.	4182.020	-30.333	461.962	461.962
A	4192.020	-30.333	462.002	462.002
B	4202.020	-30.333	462.042	462.042
C	4212.020	-30.333	462.082	462.082
D	4222.020	-30.333	462.122	462.122
€ Brg. Pier 1	4233.092	-30.333	462.166	462.166
E	4243.082	-30.333	462.206	462.219
F	4253.082	-30.333	462.246	462.272
G	4263.082	-30.333	462.286	462.323
H	4273.082	-30.333	462.326	462.373
I	4283.082	-30.333	462.366	462.402
J	4293.082	-30.333	462.406	462.432
K	4303.082	-30.333	462.446	462.458
€ Brg. Pier 2	4312.566	-30.333	462.484	462.484
L	4322.666	-30.333	462.523	462.523
M	4332.666	-30.333	462.563	462.563
N	4342.666	-30.333	462.601	462.601
O	4352.666	-30.333	462.640	462.640
€ Brg. S. Abut.	4363.728	-30.333	462.682	462.682
Bk. S. Abut.	4366.541	-30.333	462.693	462.693

EAST LONG. BONDED CONSTR. JT.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4175.901	-27.000	461.989	461.989
€ Brg. N. Abut.	4178.713	-27.000	462.000	462.000
A	4188.713	-27.000	462.040	462.040
B	4198.713	-27.000	462.080	462.080
C	4208.713	-27.000	462.120	462.120
D	4218.713	-27.000	462.160	462.160
€ Brg. Pier 1	4229.776	-27.000	462.205	462.205
E	4239.776	-27.000	462.245	462.258
F	4249.776	-27.000	462.285	462.311
G	4259.776	-27.000	462.325	462.361
H	4269.776	-27.000	462.365	462.411
I	4279.776	-27.000	462.405	462.441
J	4289.776	-27.000	462.445	462.470
K	4299.776	-27.000	462.485	462.497
€ Brg. Pier 2	4309.359	-27.000	462.523	462.523
L	4319.359	-27.000	462.562	462.562
M	4329.359	-27.000	462.602	462.602
N	4339.359	-27.000	462.641	462.641
O	4349.359	-27.000	462.679	462.679
€ Brg. S. Abut.	4360.422	-27.000	462.721	462.721
Bk. S. Abut.	4363.234	-27.000	462.732	462.732

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4172.016	-23.083	462.035	462.035
€ Brg. N. Abut.	4174.829	-23.083	462.046	462.046
A	4184.829	-23.083	462.086	462.086
B	4194.829	-23.083	462.126	462.126
C	4204.829	-23.083	462.166	462.166
D	4214.829	-23.083	462.206	462.206
€ Brg. Pier 1	4225.891	-23.083	462.250	462.250
E	4235.891	-23.083	462.290	462.303
F	4245.891	-23.083	462.330	462.356
G	4255.891	-23.083	462.370	462.407
H	4265.891	-23.083	462.410	462.457
I	4275.891	-23.083	462.450	462.486
J	4285.891	-23.083	462.490	462.516
K	4295.891	-23.083	462.530	462.543
€ Brg. Pier 2	4305.474	-23.083	462.569	462.569
L	4315.474	-23.083	462.608	462.608
M	4325.474	-23.083	462.648	462.648
N	4335.474	-23.083	462.687	462.687
O	4345.474	-23.083	462.725	462.725
€ Brg. S. Abut.	4356.537	-23.083	462.768	462.768
Bk. S. Abut.	4359.349	-23.083	462.778	462.778

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4164.825	-15.833	462.119	462.119
€ Brg. N. Abut.	4167.637	-15.833	462.130	462.130
A	4177.637	-15.833	462.170	462.170
B	4187.637	-15.833	462.210	462.210
C	4197.637	-15.833	462.250	462.250
D	4207.637	-15.833	462.290	462.290
€ Brg. Pier 1	4218.700	-15.833	462.335	462.335
E	4228.700	-15.833	462.375	462.388
F	4238.700	-15.833	462.415	462.441
G	4248.700	-15.833	462.455	462.491
H	4258.700	-15.833	462.495	462.541
I	4268.700	-15.833	462.535	462.571
J	4278.700	-15.833	462.575	462.600
K	4288.700	-15.833	462.615	462.627
€ Brg. Pier 2	4298.283	-15.833	462.653	462.653
L	4308.283	-15.833	462.693	462.732
M	4318.283	-15.833	462.732	462.772
N	4328.283	-15.833	462.772	462.811
O	4338.283	-15.833	462.811	462.811
€ Brg. S. Abut.	4349.346	-15.833	462.853	462.853
Bk. S. Abut.	4352.158	-15.833	462.864	462.864

BEAM #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4160.446	-8.583	462.203	462.203
€ Brg. N. Abut.	4160.446	-8.583	462.215	462.215
A	4170.446	-8.583	462.255	462.255
B	4180.446	-8.583	462.295	462.295
C	4190.446	-8.583	462.335	462.335
D	4200.446	-8.583	462.375	462.375
€ Brg. Pier 1	4211.509	-8.583	462.419	462.419
E	4221.509	-8.583	462.459	462.472
F	4231.509	-8.583	462.499	462.525
G	4241.509	-8.583	462.539	462.576
H	4251.509	-8.583	462.579	462.626
I	4261.509	-8.583	462.619	462.655
J	4271.509	-8.583	462.659	462.685
K	4281.509	-8.583	462.699	462.711
€ Brg. Pier 2	4291.092	-8.583	462.737	462.737
L	4301.092	-8.583	462.777	462.777
M	4311.092	-8.583	462.817	462.817
N	4321.092	-8.583	462.857	462.857
O	4331.092	-8.583	462.896	462.896
€ Brg. S. Abut.	4342.154	-8.583	462.939	462.939
Bk. S. Abut.	4344.967	-8.583	462.949	462.949

P.G. N.B. LANES

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4152.096	-3.000	462.268	462.268
€ Brg. N. Abut.	4154.908	-3.000	462.280	462.280
A	4164.908	-3.000	462.320	462.320
B	4174.908	-3.000	462.360	462.360
C	4184.908	-3.000	462.400	462.400
D	4194.908	-3.000	462.440	462.440
€ Brg. Pier 1	4205.971	-3.000	462.484	462.484
E	4215.971	-3.000	462.524	462.537
F	4225.971	-3.000	462.564	462.590
G	4235.971	-3.000	462.604	462.641
H	4245.971	-3.000	462.644	462.691
I	4255.971	-3.000	462.684	462.720
J	4265.971	-3.000	462.724	462.750
K	4275.971	-3.000	462.764	462.776
€ Brg. Pier 2	4285.554	-3.000	462.802	462.802
L	4295.554	-3.000	462.842	462.842
M	4305.554	-3.000	462.882	462.882

STATE OF ILLINOIS
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BEAM #7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4150.442	-1.333	462.288	462.288
€ Brg. N. Abut.	4153.255	-1.333	462.299	462.299
A	4163.255	-1.333	462.339	462.339
B	4173.255	-1.333	462.379	462.379
C	4183.255	-1.333	462.419	462.419
D	4193.255	-1.333	462.459	462.459
€ Brg. Pier 1	4204.317	-1.333	462.503	462.503
E	4214.317	-1.333	462.543	462.556
F	4224.317	-1.333	462.583	462.609
G	4234.317	-1.333	462.623	462.660
H	4244.317	-1.333	462.663	462.710
I	4254.317	-1.333	462.703	462.739
J	4264.317	-1.333	462.743	462.769
K	4274.317	-1.333	462.783	462.796
€ Brg. Pier 2	4283.901	-1.333	462.822	462.822
L	4293.901	-1.333	462.862	462.862
M	4303.901	-1.333	462.902	462.902
N	4313.901	-1.333	462.941	462.941
O	4323.901	-1.333	462.981	462.981
€ Brg. S. Abut.	4334.963	-1.333	463.024	463.024
Bk. S. Abut.	4337.776	-1.333	463.035	463.035

€ RDWY. & STAGE CONSTR. LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4149.120	0.000	462.303	462.303
€ Brg. N. Abut.	4151.933	0.000	462.315	462.315
A	4161.933	0.000	462.355	462.355
B	4171.933	0.000	462.395	462.395
C	4181.933	0.000	462.435	462.435
D	4191.933	0.000	462.475	462.475
€ Brg. Pier 1	4202.995	0.000	462.519	462.519
E	4212.995	0.000	462.559	462.572
F	4222.995	0.000	462.599	462.625
G	4232.995	0.000	462.639	462.675
H	4242.995	0.000	462.679	462.725
I	4252.995	0.000	462.719	462.755
J	4262.995	0.000	462.759	462.784
K	4272.995	0.000	462.799	462.811
€ Brg. Pier 2	4282.578	0.000	462.837	462.837
L	4292.578	0.000	462.877	462.877
M	4302.578	0.000	462.917	462.917
N	4312.578	0.000	462.957	462.957
O	4322.578	0.000	462.996	462.996
€ Brg. S. Abut.	4333.641	0.000	463.040	463.040
Bk. S. Abut.	4336.453	0.000	463.050	463.050

BEAM #8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4147.798	1.333	462.277	462.277
€ Brg. N. Abut.	4150.610	1.333	462.288	462.288
A	4160.610	1.333	462.328	462.328
B	4170.610	1.333	462.368	462.368
C	4180.610	1.333	462.408	462.408
D	4190.610	1.333	462.448	462.448
€ Brg. Pier 1	4201.673	1.333	462.493	462.493
E	4211.673	1.333	462.533	462.546
F	4221.673	1.333	462.573	462.599
G	4231.673	1.333	462.613	462.649
H	4241.673	1.333	462.653	462.699
I	4251.673	1.333	462.693	462.729
J	4261.673	1.333	462.733	462.758
K	4271.673	1.333	462.773	462.785
€ Brg. Pier 2	4281.256	1.333	462.811	462.811
L	4291.256	1.333	462.851	462.851
M	4301.256	1.333	462.891	462.891
N	4311.256	1.333	462.931	462.931
O	4321.256	1.333	462.970	462.970
€ Brg. S. Abut.	4332.318	1.333	463.014	463.014
Bk. S. Abut.	4335.131	1.333	463.025	463.025

P.G. S.B. LANES

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4146.144	3.000	462.245	462.245
€ Brg. N. Abut.	4148.957	3.000	462.256	462.256
A	4158.957	3.000	462.296	462.296
B	4168.957	3.000	462.336	462.336
C	4178.957	3.000	462.376	462.376
D	4188.957	3.000	462.416	462.416
€ Brg. Pier 1	4200.019	3.000	462.460	462.460
E	4210.019	3.000	462.500	462.513
F	4220.019	3.000	462.540	462.566
G	4230.019	3.000	462.580	462.617
H	4240.019	3.000	462.620	462.667
I	4250.019	3.000	462.660	462.696
J	4260.019	3.000	462.700	462.726
K	4270.019	3.000	462.740	462.753
€ Brg. Pier 2	4279.603	3.000	462.778	462.778
L	4289.603	3.000	462.818	462.818
M	4299.603	3.000	462.858	462.858
N	4309.603	3.000	462.898	462.898
O	4319.603	3.000	462.938	462.938
€ Brg. S. Abut.	4330.665	3.000	462.981	462.981
Bk. S. Abut.	4333.478	3.000	462.992	462.992

BEAM #9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4140.606	8.583	462.135	462.135
€ Brg. N. Abut.	4143.419	8.583	462.147	462.147
A	4153.419	8.583	462.187	462.187
B	4163.419	8.583	462.227	462.227
C	4173.419	8.583	462.267	462.267
D	4183.419	8.583	462.307	462.307
€ Brg. Pier 1	4194.481	8.583	462.351	462.351
E	4204.481	8.583	462.391	462.404
F	4214.481	8.583	462.431	462.457
G	4224.481	8.583	462.471	462.507
H	4234.481	8.583	462.511	462.558
I	4244.481	8.583	462.551	462.587
J	4254.481	8.583	462.591	462.616
K	4264.481	8.583	462.631	462.643
€ Brg. Pier 2	4274.065	8.583	462.669	462.669
L	4284.065	8.583	462.709	462.709
M	4294.065	8.583	462.749	462.749
N	4304.065	8.583	462.789	462.789
O	4314.065	8.583	462.829	462.829
€ Brg. S. Abut.	4325.127	8.583	462.872	462.872
Bk. S. Abut.	4327.940	8.583	462.883	462.883

BEAM #10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4133.415	15.833	461.993	461.993
€ Brg. N. Abut.	4136.228	15.833	462.005	462.005
A	4146.228	15.833	462.045	462.045
B	4156.228	15.833	462.085	462.085
C	4166.228	15.833	462.125	462.125
D	4176.228	15.833	462.165	462.165
€ Brg. Pier 1	4187.290	15.833	462.209	462.209
E	4197.290	15.833	462.249	462.262
F	4207.290	15.833	462.289	462.312
G	4217.290	15.833	462.329	462.366
H	4227.290	15.833	462.369	462.416
I	4237.290	15.833	462.409	462.445
J	4247.290	15.833	462.449	462.475
K	4257.290	15.833	462.489	462.502
€ Brg. Pier 2	4266.873	15.833	462.527	462.527
L	4276.873	15.833	462.567	462.567
M	4286.873	15.833	462.607	462.607
N	4296.873	15.833	462.647	462.647
O	4306.873	15.833	462.687	462.687
€ Brg. S. Abut.	4317.936	15.833	462.731	462.731
Bk. S. Abut.	4320.748	15.833	462.742	462.742

BEAM #11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4126.224	23.083	461.852	461.852
€ Brg. N. Abut.	4129.036	23.083	461.863	461.863
A	4139.036	23.083	461.903	461.903
B	4149.036	23.083	461.943	461.943
C	4159.036	23.083	461.983	461.983
D	4169.036	23.083	462.023	462.023
€ Brg. Pier 1	4180.099	23.083	462.067	462.067
E	4190.099	23.083	462.107	462.120
F	4200.099	23.083	462.147	462.173
G	4210.099	23.083	462.187	462.224
H	4220.099	23.083	462.227	462.274
I	4230.099	23.083	462.267	462.303
J	4240.099	23.083	462.307	462.333
K	4250.099	23.083	462.347	462.360
€ Brg. Pier 2	4259.682	23.083	462.385	462.385
L	4269.682	23.083	462.425	462.425
M	4279.682	23.083	462.465	462.465
N	4289.682	23.083	462.505	462.505
O	4299.682	23.083	462.545	462.545
€ Brg. S. Abut.	4310.745	23.083	462.589	462.589
Bk. S. Abut.	4313.557	23.083	462.601	462.601

WEST LONG. BONDED CONSTR. JT.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4122.339	27.000	461.775	461.775
€ Brg. N. Abut.	4125.152	27.000	461.786	461.786
A	4135.152	27.000	461.826	461.826
B	4145.152	27.000	461.866	461.866
C	4155.152	27.000	461.906	461.906
D	4165.152	27.000	461.946	461.946
€ Brg. Pier 1	4176.214	27.000	461.990	461.990
E	4186.214	27.000	462.030	462.044
F	4196.214	27.000	462.070	462.097
G	4206.214	27.000	462.110	462.147
H	4216.214	27.000	462.150	462.197
I	4226.214	27.000	462.190	462.227
J	4236.214	27.000	462.230	462.256
K	4246.214	27.000	462.270	462.283
€ Brg. Pier 2	4255.797	27.000	462.309	462.309
L	4265.797	27.000	462.349	462.349
M	4275.797	27.000	462.389	462.389
N	4285.797	27.000	462.429	462.429
O	4295.797	27.000	462.469	462.469
€ Brg. S. Abut.	4306.860	27.000	462.513	462.513
Bk. S. Abut.	4309.672	27.000	462.524	462.524

BEAM #12

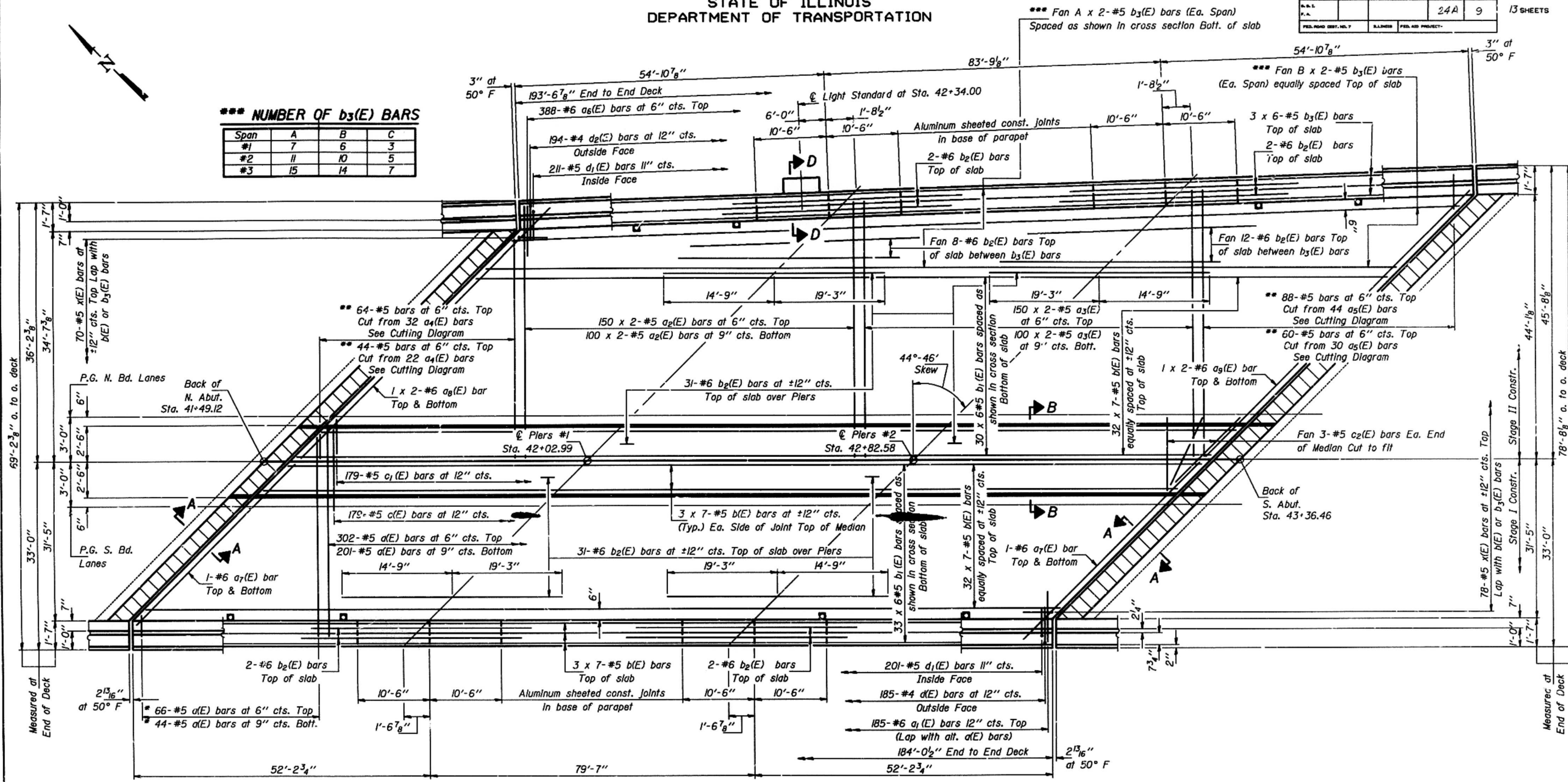
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	4119.033	30.333	461.692	461.692
€ Brg. N. Abut.	4121.845	30.333	461.704	461.704
A	4131.845	30.333	461.744	461.744
B	4141.845	30.333	461.784	461.784
C	4151.845	30.333	461.824	461.824
D	4161.845	30.333	461.864	461.864
€ Brg. Pier 1	4172.908	30.333	461.908	461.908
E	4182.908	30.333	461.948	461.961
F	4192.908	30.333	461.988	462.014
G	4202.908	30.333	462.028	462.065
H	4212.908	30.333	462.068	462.115
I	4222.908	30.333	462.108	462.144
J	4232.908	30.333	462.148	462.174
K	4			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	POST-MILE	DATE	SHEET NO.
		24A	9	13 SHEETS
F.A.		ILL. ROAD DIST. NO. 7		
F.A.		ILL. ROAD DIST. NO. 7		

*** NUMBER OF b₃(E) BARS

Span	A	B	C
#1	7	6	3
#2	11	10	5
#3	15	14	7



PLAN

* Order a(E) bars full length. Cut to fit skew and use remainder at opposite end.
** Order a₄(E) and a₅(E) full length. See field cutting diagram on sheet #8.

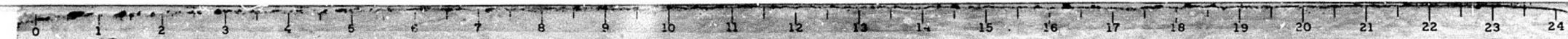
MIN. BAR LAP
#5 bars = 1'-8"
#6 bars = 2'-0"

Notes: See sheet #8 & #9 of 13 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Hatched area to be poured after superstructure forms have been removed.

DESIGNED Eric Rowdy	EXAMINED [Signature]
CHECKED [Signature]	PASSED [Signature]
DRAWN John F. Schneller Jr.	APPROVED [Signature]
CHECKED EEG PMP	DIRECTOR OF HIGHWAYS

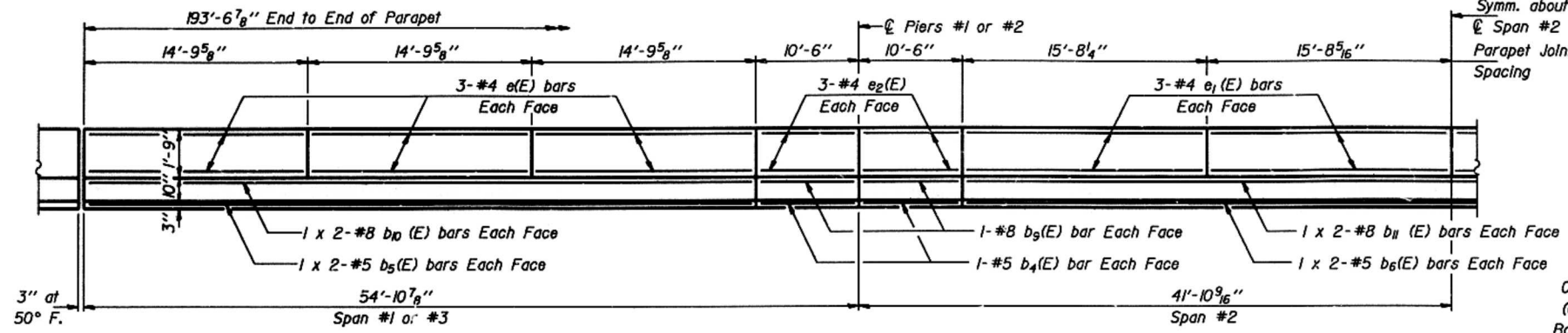
SUPERSTRUCTURE
F.A. RT. 669 SECTION 13(HB)BR
TAEWELL COUNTY
STA. 42+42.79

S-1-L(15°) 12-1-83

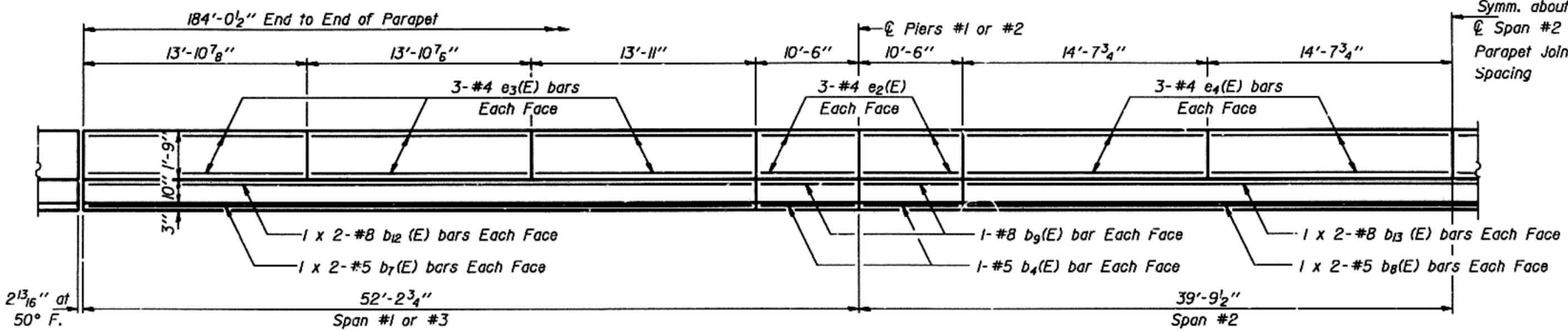


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

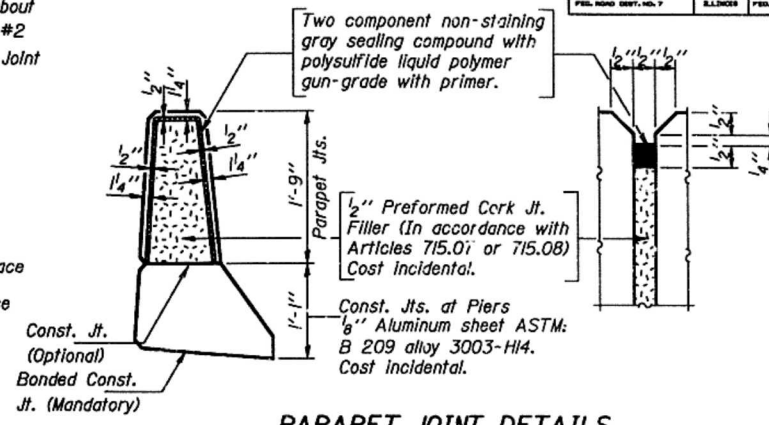
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			24 A	10
SHEET NO. 8				13 SHEETS



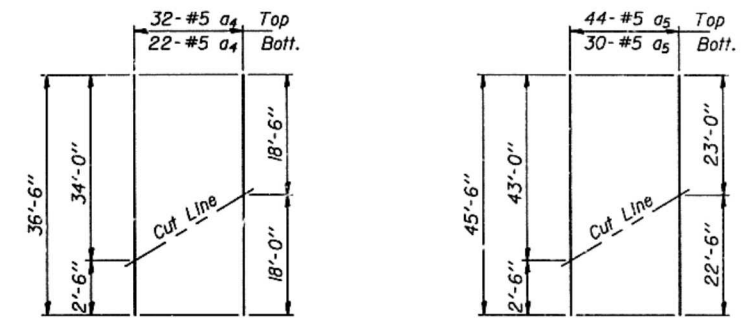
INSIDE ELEVATION - EAST PARAPET



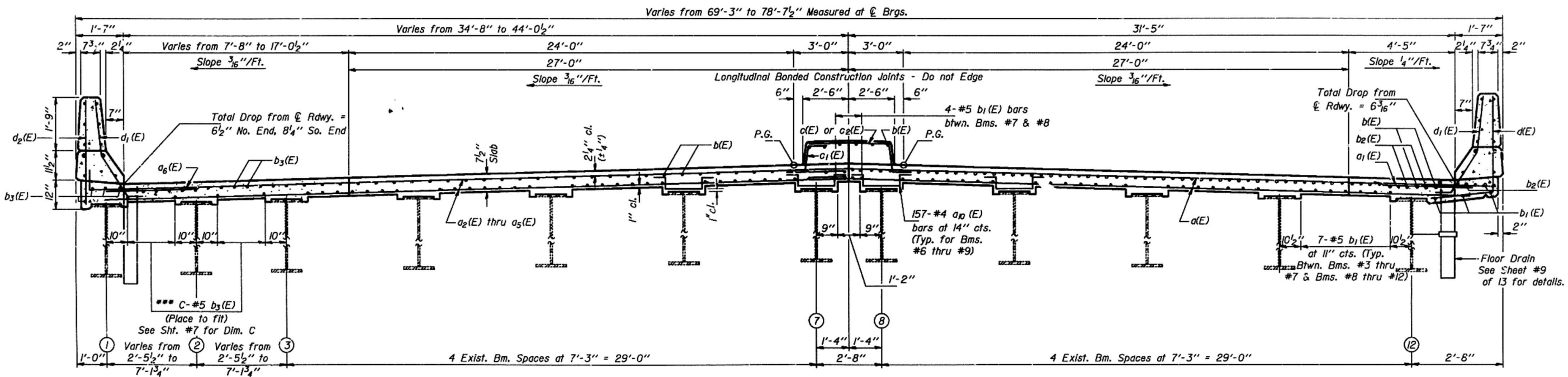
INSIDE ELEVATION - WEST PARAPET



PARAPET JOINT DETAILS



a4(E) FIELD CUTTING DIAGRAM a5(E) FIELD CUTTING DIAGRAM



CROSS SECTION
(Looking South)

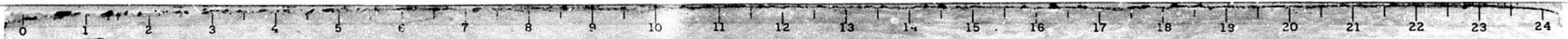
DESIGNED Eric Gowdy
CHECKED Patrick M. Patrone
DRAWN John F. Schaeffer Jr.
CHECKED EEG PMP

EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]

Dec. 28, 1987

Notes: See sheet #7 & #9 of 13 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

SUPERSTRUCTURE DETAILS
F.A. RT. 669 SECTION 13(HB)BR
TAZEWELL COUNTY
STA. 42+42.79



Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions.

The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.

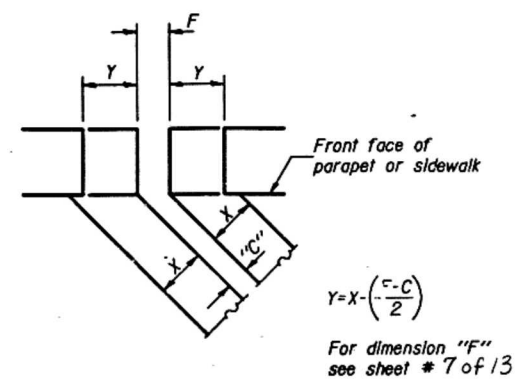
INSTALLATION NOTES

- Install sponge mandrels into positions shown to form flap convolution.
- Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
- Install continuous seal in roadway.
- Install anchor blocks as indicated.

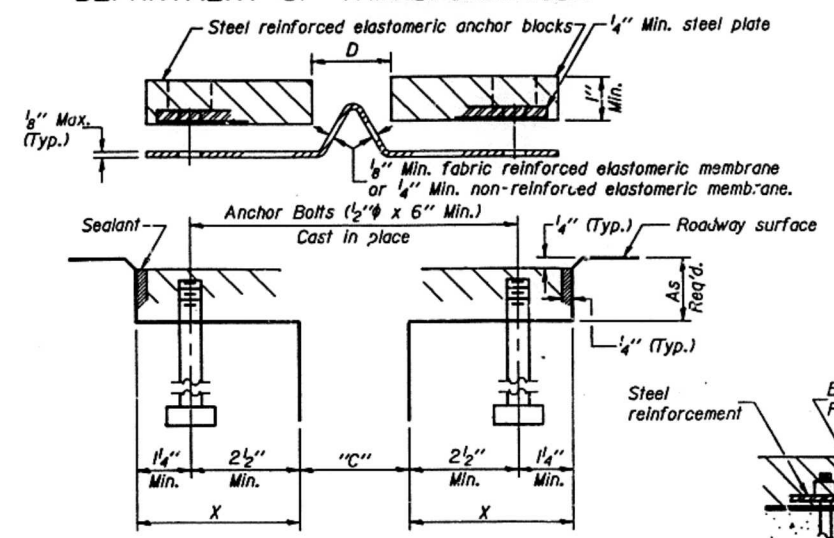
NOTE A: Maximum spacing of anchor bolts shall be 12" centers.

SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.

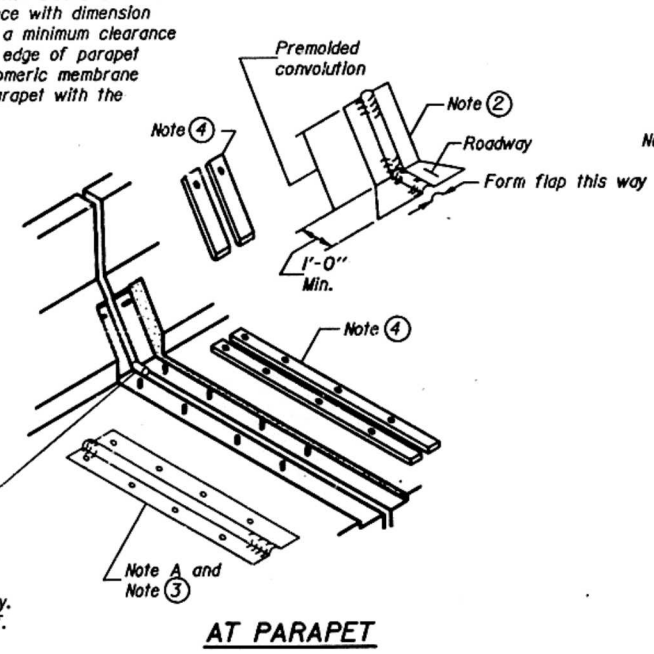


FORMING BLOCKOUT SKETCH

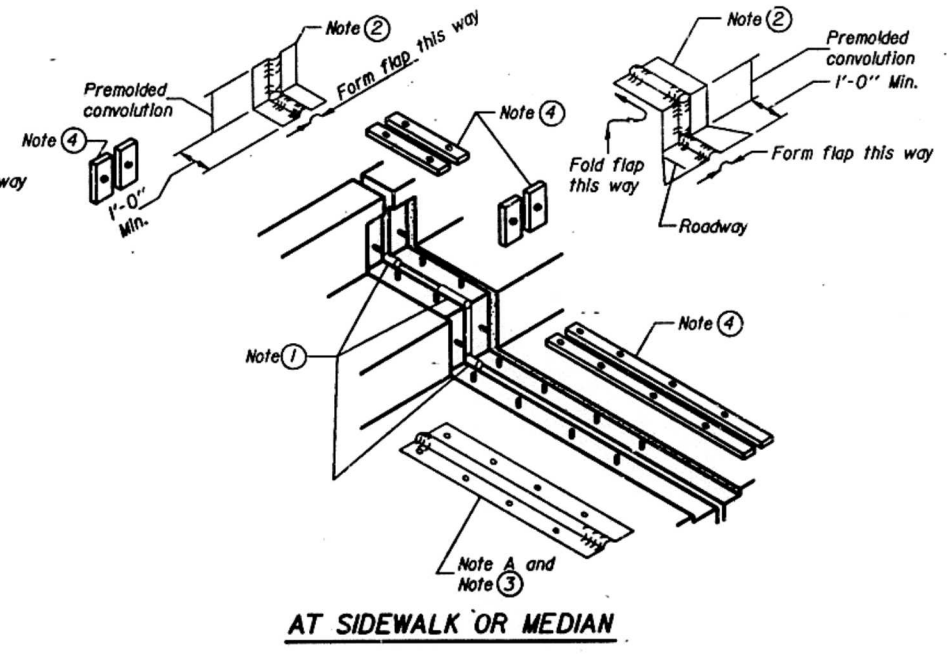


CROSS SECTION

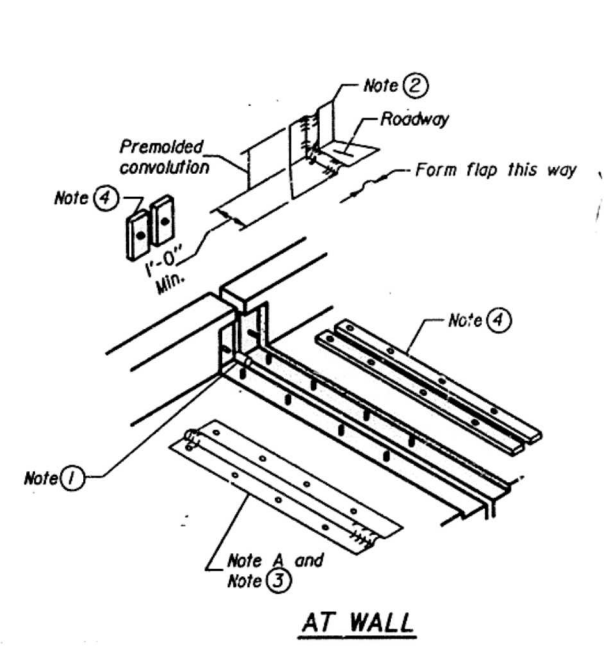
ANCHOR BLOCK REINFORCEMENT WITH ASPHALT SURFACE



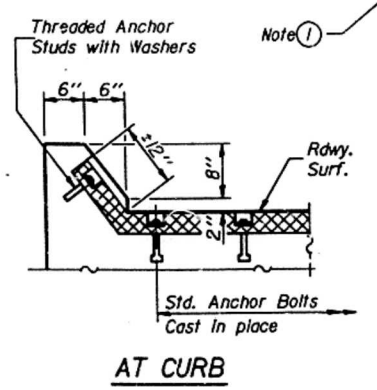
AT PARAPET



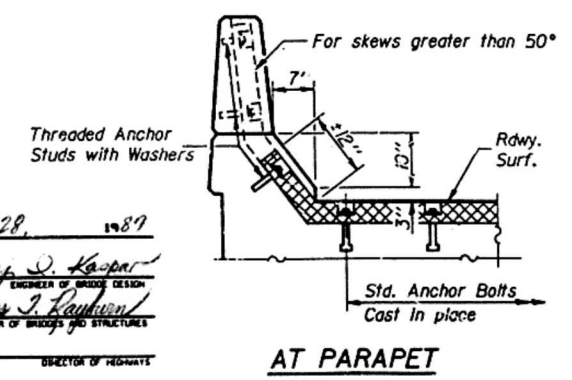
AT SIDEWALK OR MEDIAN



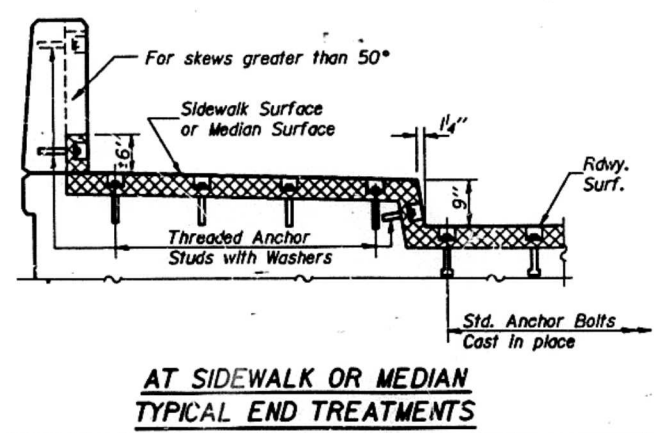
AT WALL



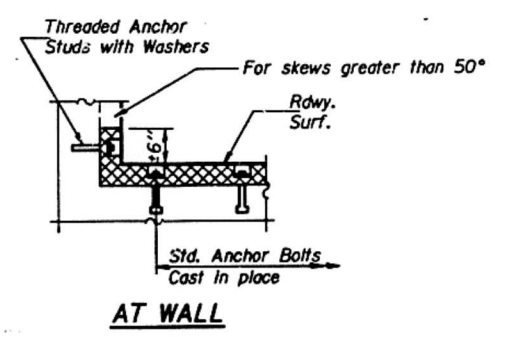
AT CURB



AT PARAPET



AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS



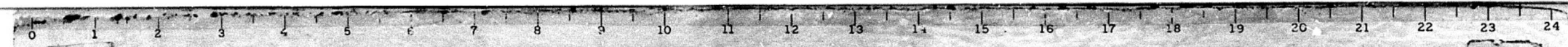
AT WALL

DESIGNED Eric Gowdy
CHECKED Patrick M. Phipps
DRAWN J. SCHNELLER
CHECKED PMP EEG
EJ-CS 12-1-83

Dec. 28, 1987
EXAMINED Gray J. Kasper
PASSED James J. Kasper
APPROVED

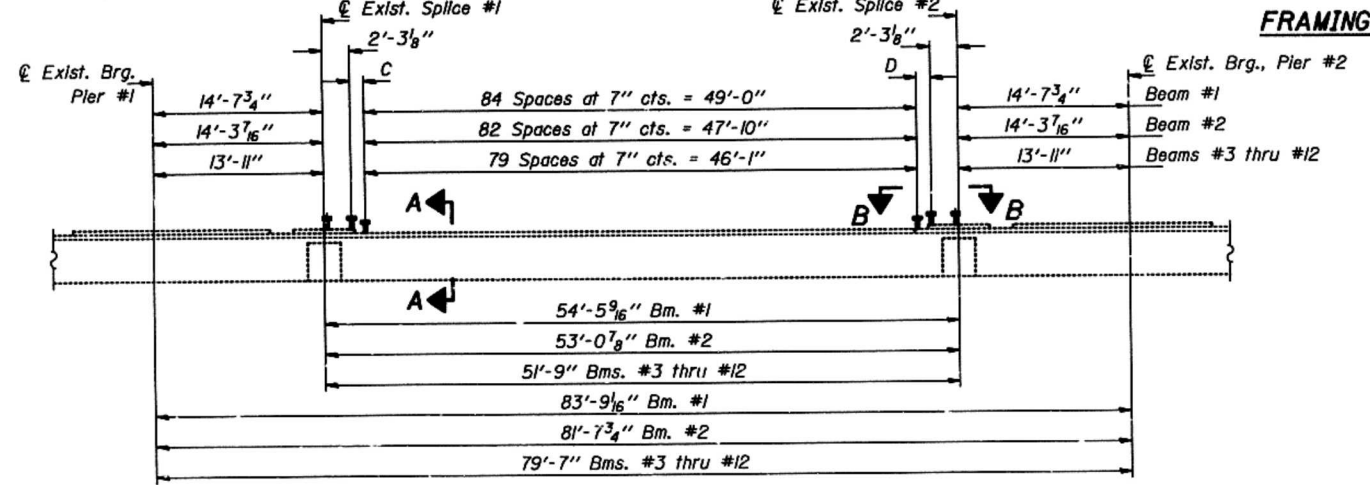
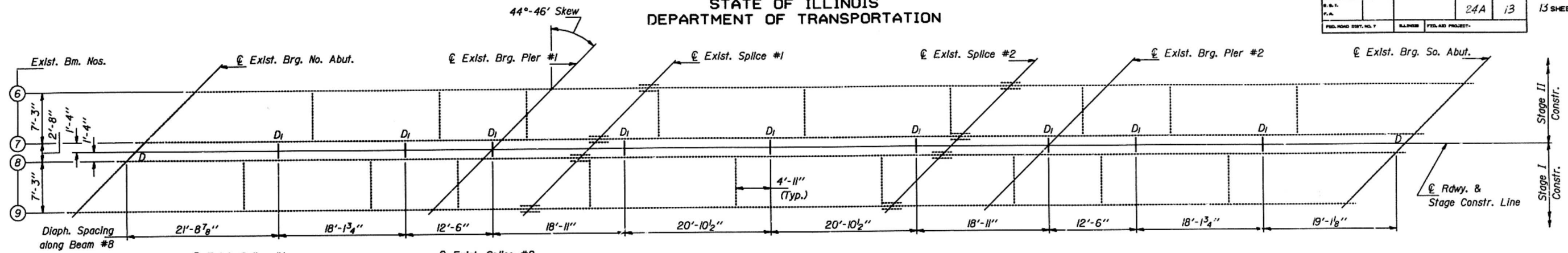
CONTINUOUS SEAL TYPE NEOPRENE EXPANSION JOINTS
For 2", 2 1/2" and 4" Movement

F.A. RT. 669 SEC. 13(HB)3R
TAZEWELL COUNTY
STA. 42+42.79



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	GRAVITY	JEOP.	"E"	SHEET NO. 11 13 SHEETS
F.S.A.			24A	13	
F.A.					
FED. ROAD DIST. NO. 7	ALABAMA	FED. AID PROJECT			



FRAMING PLAN

ELEVATION

	0.4 Sp. #1 or 0.6 Sp. #3	Pier #1 or Pier #2	.5 Sp. #2
Is (in ⁴)	9760.0	13896.1	9760.0
Ic (in ⁴)			23606.4
Ss (in ³)	542.0	748.7	542.0
Sc (in ³)			756.6
Z (in ³)	625		
φ (K/ft.)	1.18	1.18	0.874
M _R (K)	144.4	562.1	258.8
s _R (K/ft.)			0.306
M _{sR} (K)			113.3
M _t (K)	330.2	324.0	534.2
M (Imp) (K)	95.7	85.1	130.6
S ₃ (M _t +I) (K)	710.0	682.0	108.2
M _a (K)	110.7	167.3	192.4
M _u (K)	1875		3210
f _{sR} non-comp (k.s.i.)	3.2	9.0	5.7
f _{sR} (comp) (k.s.i.)			1.8
f _s S ₃ (M _t +I) (k.s.i.)	15.7	10.9	17.6
f _s (Overload) (k.s.i.)	18.9	19.9	25.1
f _s (Total) (k.s.i.)		25.9	
VR (K)	54.2		57.3

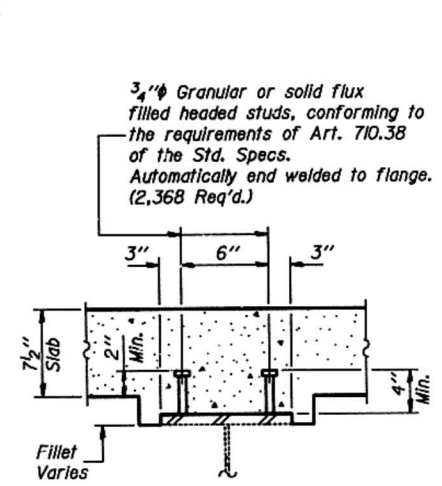
Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs (Total & Overload).
VR is the maximum Live Load + Impact shear range in span.
Ma (Applied Moment) = 1.3(M_R + M_{sR} + S₃(M_t + I)).
fs (Overload) is the sum of the stresses due to M_R + M_{sR} + S₃(M_t + I).
fs (Total) (Non-compact section) is the sum of the stresses due to 1.3(M_R + M_{sR} + S₃(M_t + I)).
M_R - Moment due to dead loads on non-composite section.
M_{sR} - Moment due to dead loads on composite section.
M_t - Moment due to live loads on non-composite or composite section.
I - Live load impact.
Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
The fully plastic moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.
* Service Load Values.
** Non-compact section.

	Abuts.	Pier 1 or 2
RR (K)	19.1	88.1
R _L (K)	28.4	39.3
Imp. (K)	8.3	10.3
R (Total) (K)	55.8	137.7

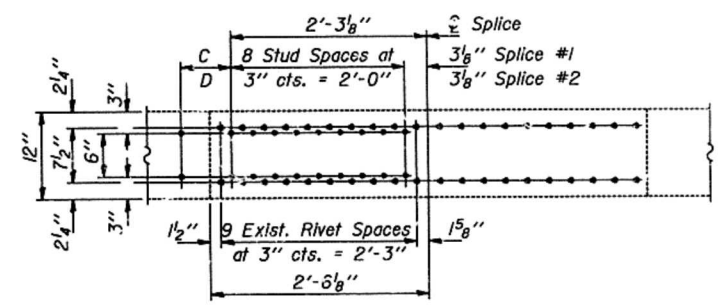
DESIGNED E. G. Gowdy
CHECKED [Signature]
DRAWN John F. Schneller Jr.
CHECKED PMP EEG

EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]

*** Removal of existing rivets shall be incidental to the cost of Structural Steel.



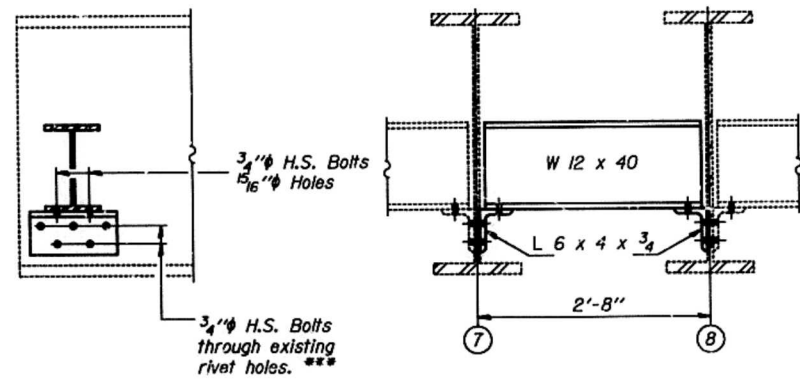
SECTION A-A



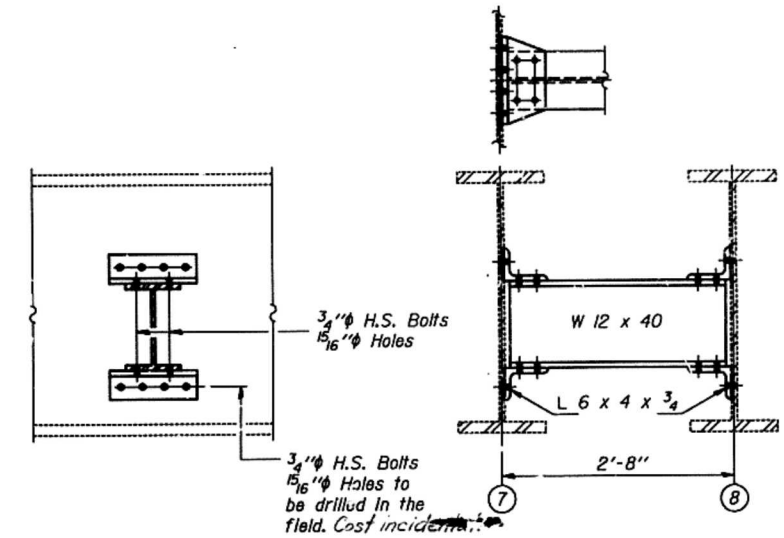
SECTION B-B

DIMENSIONS "C" & "D"

Bm. Dim	C	D
#1	5 5/8"	5 1/8"
#2	4 5/8"	4 5/8"
#3-#12	6 1/8"	6 1/8"



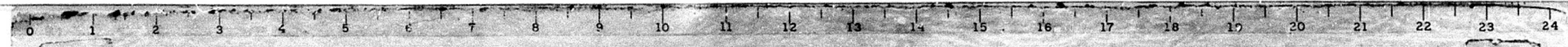
DIAPHRAGM D
(2 Required)



DIAPHRAGM D1
(9 Required)

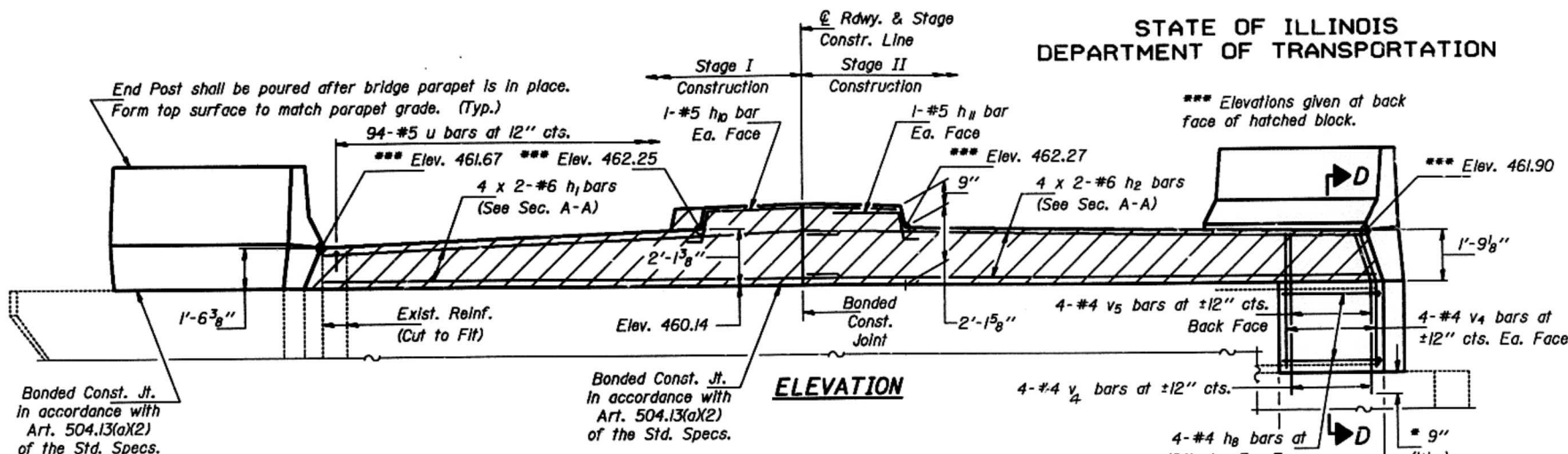
Note: Two hardened washers shall be required over all 1 5/16" holes and existing rivet holes.
All contact surfaces of joints shall be free of paint or lacquer.

STRUCTURAL STEEL
F.A. RT. 669 SECTION 13(HB)BR
TAZEWELL COUNTY
STA. 42+42.79

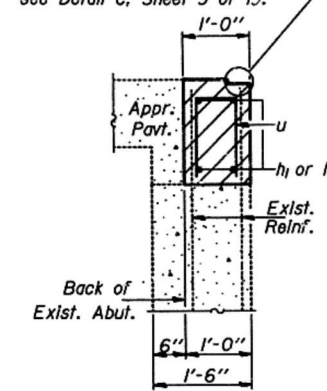


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

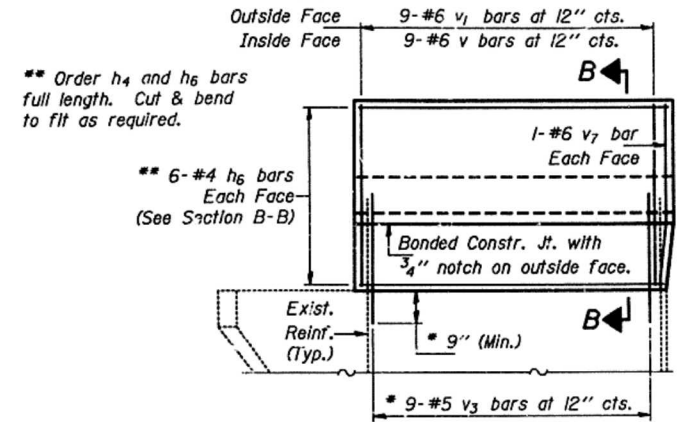
ROUTE NO.	SECTION	COUNTY	POST MILES	POST	SHEET NO. 12
			24A	14	13 SHEETS
FED. ROAD DIST. NO. 7		BLANKET	FED. AID PROJECT		



For details of Expansion Joint, see Detail C, Sheet 9 of 13.

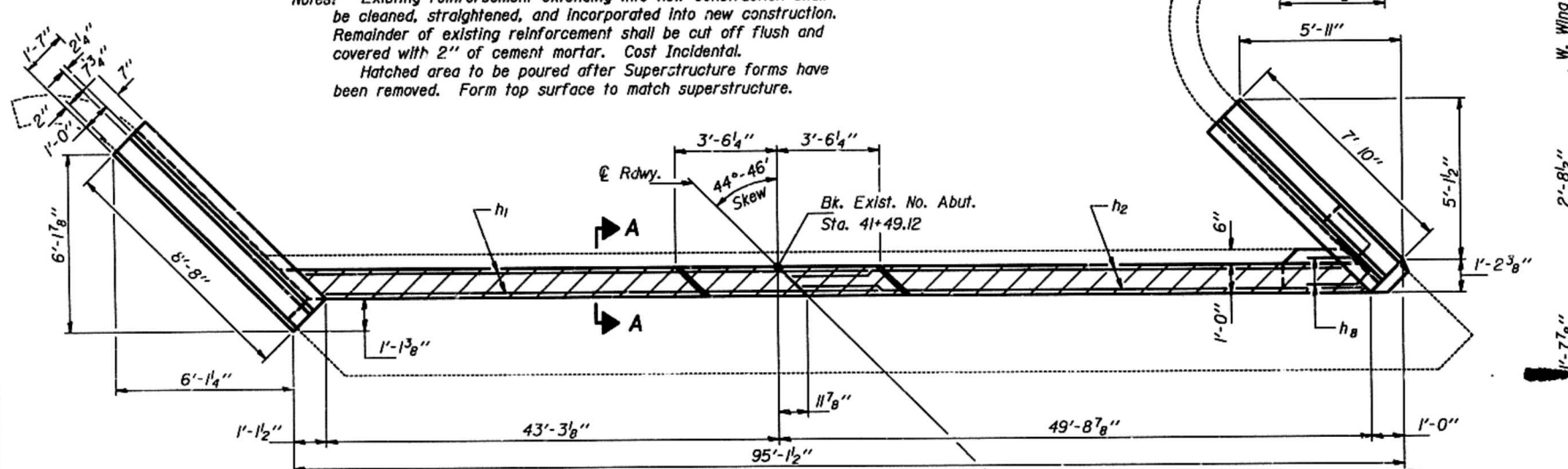


SECTION A-A



ELEVATION OF NORTHWEST WINGWALL

Notes: Existing reinforcement extending into new construction shall be cleaned, straightened, and incorporated into new construction. Remainder of existing reinforcement shall be cut off flush and covered with 2" of cement mortar. Cost Incidental. Hatched area to be poured after Superstructure forms have been removed. Form top surface to match superstructure.

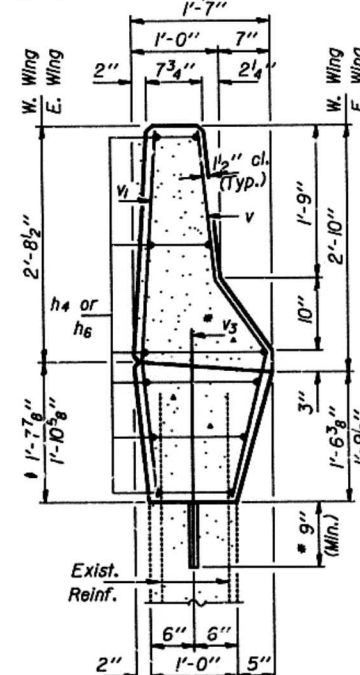


PLAN

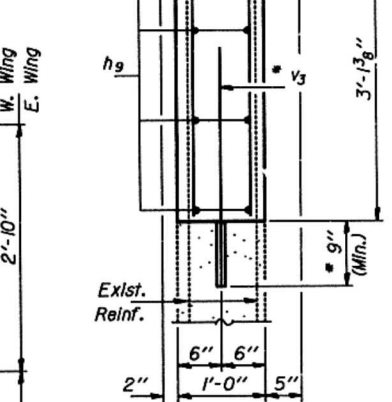
* Drill 7/8" holes and epoxy grout v3 bars, 9" min. depth. See Special Provisions.

MIN. BAR LAP
#5 bars = 1'-8"
#6 bars = 2'-0"

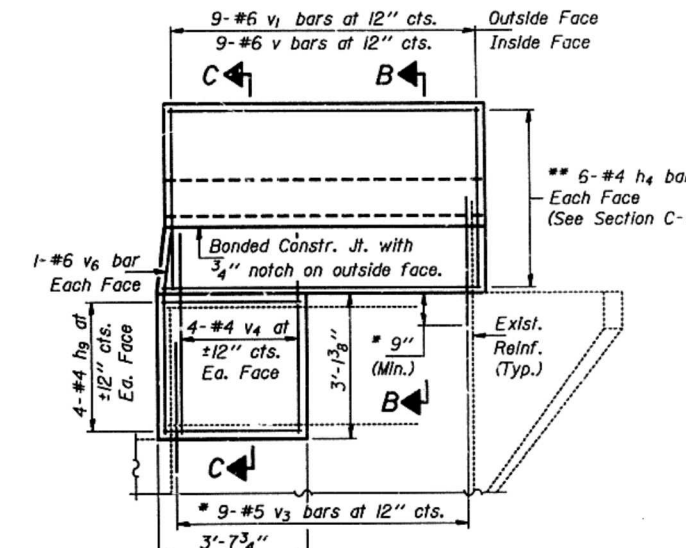
For details of Expansion Joint, see Detail C, Sheet 9 of 13.



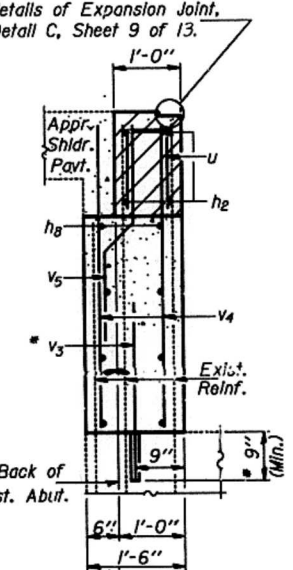
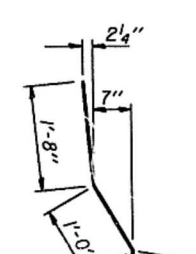
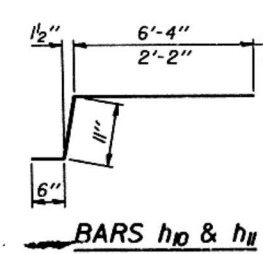
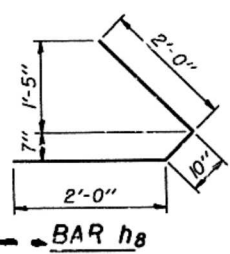
SECTION B-B



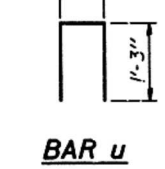
SECTION C-C



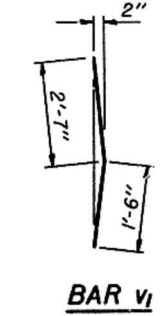
ELEVATION OF NORTHEAST WINGWALL



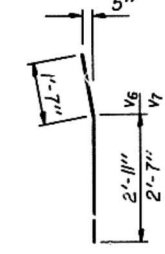
SECTION D-D



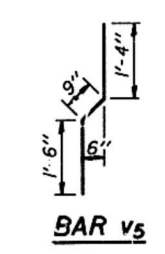
BAR u



BAR v1



BARS v6 & v7



BAR v5

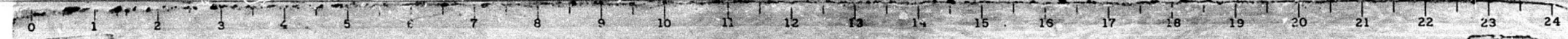
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1	8	#6	23'-3"	
h2	8	#6	25'-6"	
h4	12	#4	8'-0"	
h6	12	#4	8'-5"	
h8	8	#4	3'-10"	
h10	8	#4	3'-4"	
h11	2	#5	7'-9"	
h12	2	#5	3'-7"	
u	94	#5	3'-3"	
v	18	#6	4'-4"	
v1	18	#6	4'-1"	
v3	22	#5	2'-9"	
v4	16	#4	4'-8"	
v5	4	#4	3'-7"	
v6	2	#4	4'-6"	
v7	2	#6	4'-2"	
Reinforcement Bars			Lbs.	1150
Class X Concrete			Cu. Yd.	11.0
Concrete Removal			Cu. Yd.	11.0

NORTH ABUTMENT
F.A. RT. 669 SECTION 13(HB)BR
TAZEWELL COUNTY
STA. 42+42.79

DESIGNED Eric G wdy
CHECKED Patrick McPhee
D1
DRAWN John F. Schneller Jr.
CHECKED PMP EEG

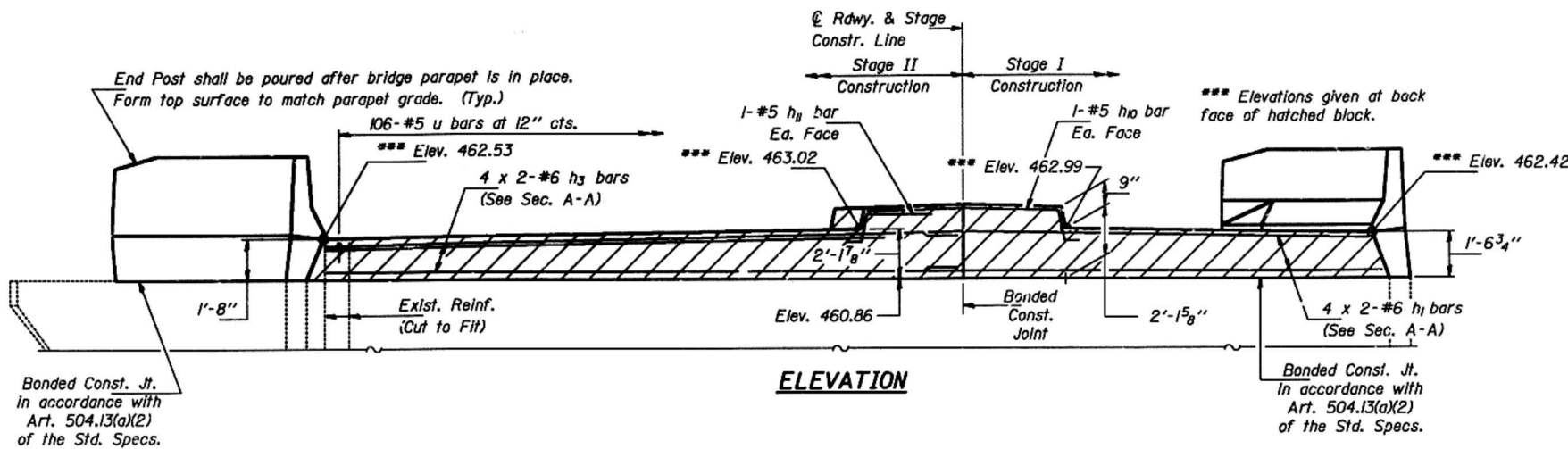
EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]
DIRECTOR OF HIGHWAYS



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

For details of Expansion Joint, see Detail C, Sheet 9 of 13.

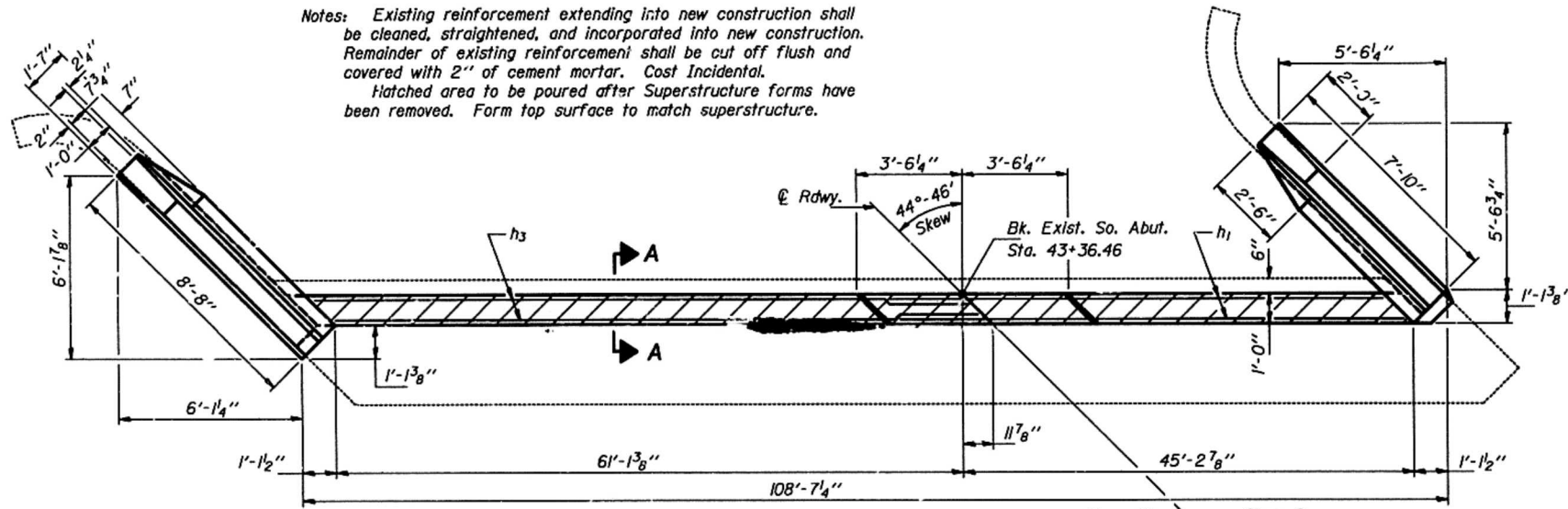
PLATE NO.	SECTION	COUNTY	DATE	SHEET NO. 13
			24A 15	13 SHEETS
F.A. RT. 669 SECTION 13(HB)BR TAZEWELL COUNTY STA. 42+42.79				



ELEVATION

Banded Const. Jt. in accordance with Art. 504.13(a)(2) of the Std. Specs.

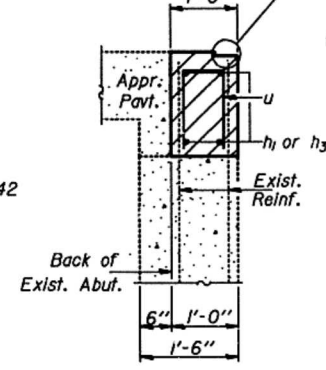
Notes: Existing reinforcement extending into new construction shall be cleaned, straightened, and incorporated into new construction. Remainder of existing reinforcement shall be cut off flush and covered with 2" of cement mortar. Cost incidental. Hatched area to be poured after Superstructure forms have been removed. Form top surface to match superstructure.



PLAN

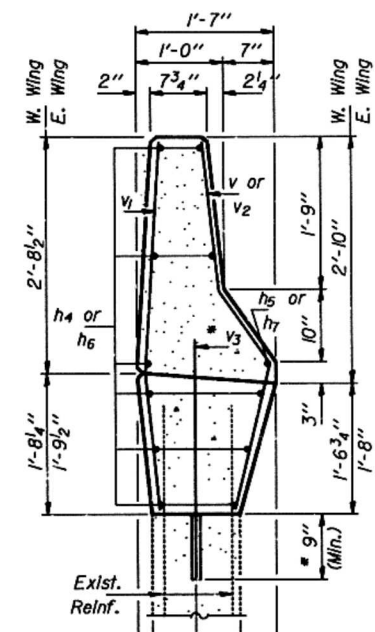
* Drill 7/8" holes and epoxy grout v2 bars, 9" min. depth. See Special Provisions.

MIN. BAR LAP
#5 bars = 1'-8"
#6 bars = 2'-0"

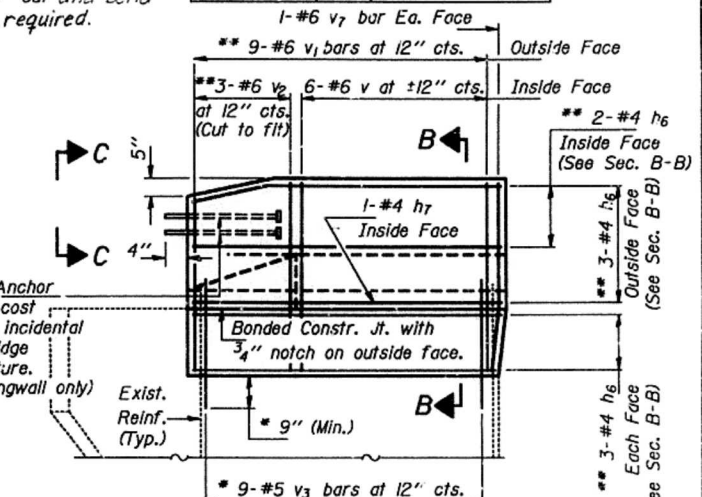


SECTION A-A

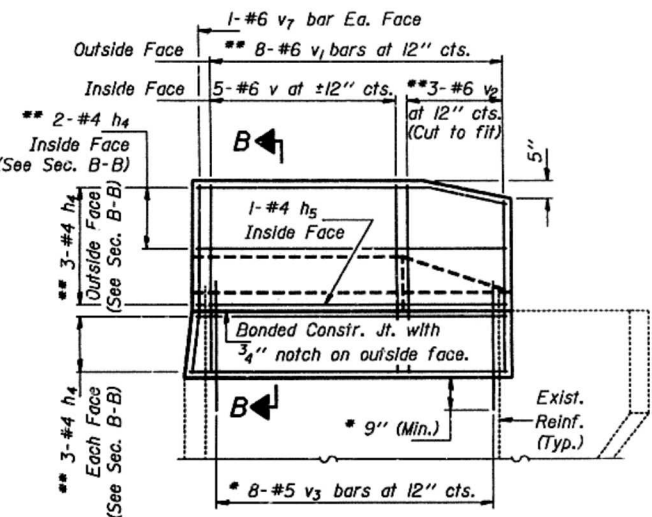
** Order h4 and h6 bars full length. Cut and bend to fit as required.



SECTION B-B



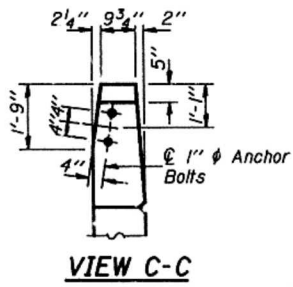
ELEVATION OF SOUTHEAST WINGWALL



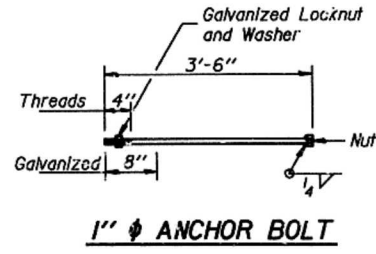
ELEVATION OF SOUTHWEST WINGWALL

BILL OF MATERIAL

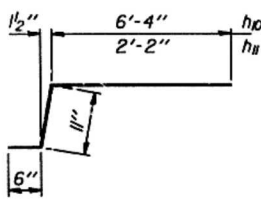
Bar	No.	Size	Length	Shape
h1	0	#6	23'-3"	—
h3	8	#6	32'-0"	—
h4	11	#4	8'-0"	—
h5	1	#4	7'-7"	—
h6	11	#4	8'-5"	—
h7	1	#4	8'-5"	—
h10	2	#5	7'-9"	—
h11	2	#5	3'-7"	—
u	106	#5	3'-3"	—
v	11	#6	4'-4"	—
v1	17	#6	4'-1"	—
v2	6	#6	4'-2"	—
v3	17	#5	2'-9"	—
v7	4	#6	4'-2"	—
Reinforcement Bars		Lbs.	1470	
Class X Concrete		Cu. Yd.	10.6	
Concrete Removal		Cu. Yd.	10.9	



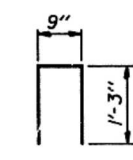
VIEW C-C



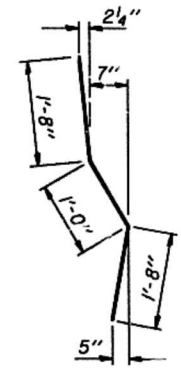
1" ANCHOR BOLT



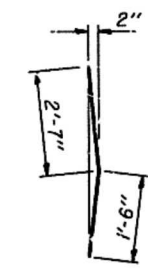
BARS h10 & h11



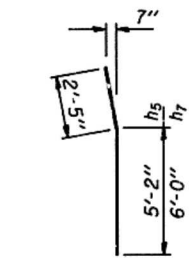
BAR u



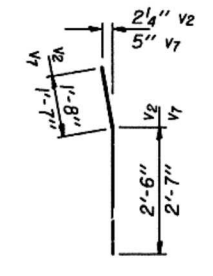
BAR v



BAR v1



BARS h5 & h7



BARS v2 & v7

DESIGNED Eric Gowdy
CHECKED Patrick M. Peterson
DRAWN John F. Schaeffer Jr.
CHECKED P.M.P. EEG

EXAMINED [Signature]
PASSED [Signature]
APPROVED [Signature]

SOUTH ABUTMENT
F.A. RT. 669 SECTION 13(HB)BR
TAZEWELL COUNTY
STA. 42+42.79

ROUTE	SECTION	COUNTY	SHEETS
FA 569	13(HB)BR	TAZEWELL	24 18

CHAIN LINK FENCE REMOVAL

LT. STA. 38+25.9-39+50± = 124 LIN. FT.

CHAIN LINK FENCE 6'

LT. STA. 38+25.9-39+50± = 124 LIN. FT.

MEDIAN REMOVAL

STA. 39+61±-40+60± = 347.0 SQ. FT.
 STA. 40+60±-41+49.12 = 425.0 SQ. FT.
 TOTAL = 772 SQ. FT.

SIDEWALK REMOVAL

*RT. STA. 37+60.08-39+34± = 864 SQ. FT.
 LT. STA. 37+60.08-41+89± = 1716 SQ. FT.
 TOTAL = 2580 SQ. FT.

COMBINATION CURB & GUTTER REMOVAL

*INCLUDES CURB REMOVAL
 LT. STA. 37+60.08-41+89± = 423 LIN. FT.
 RT. STA. 37+60.08-41+18± = 358 LIN. FT.
 TOTAL = 787 LIN. FT.

CONCRETE MEDIAN, TY SB-9

STA. 40+60±-41+49.12 = 407 SQ. FT.

CORRUGATED MEDIAN

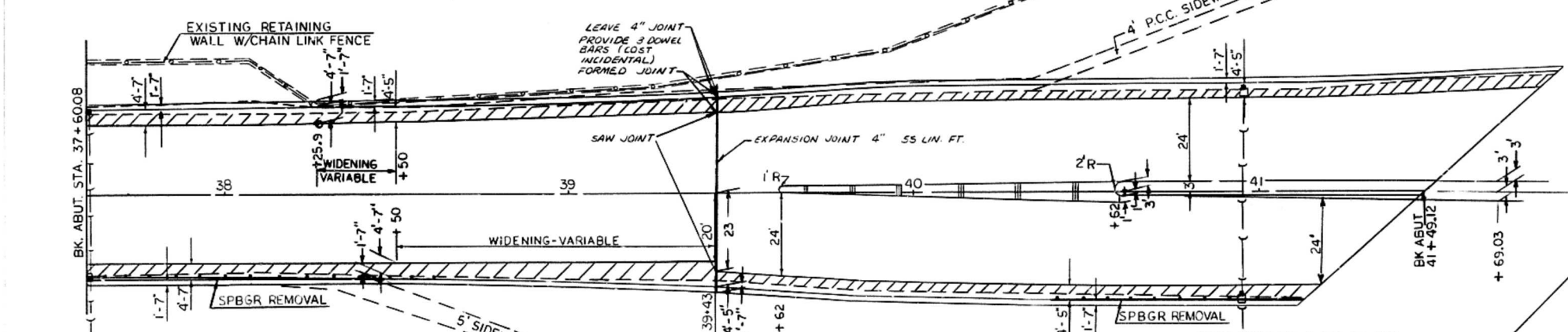
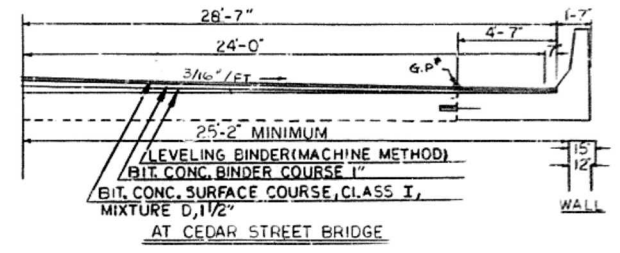
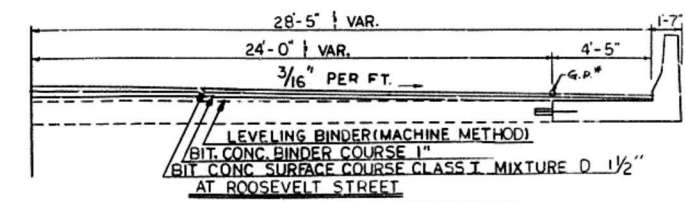
STA. 39+61±-40+60± = 347 SQ. FT.

GEOTECHNICAL REINFORCEMENT (SEE CROSS SECTIONS)

LT. & RT. STA. 37+60.1-38+25± = 196 SQ. YD.

HANDRAIL SPECIAL

LT. STA. 37+60.08-41+89± = 428.9 LIN. FT.
 RT. STA. 37+60.08-41+15± = 358.9 LIN. FT.
 TOTAL = 784 LIN. FT.



BITUMINOUS MATERIALS (PRIME COAT)

LT. & RT. STA. 37+60.08-41+89± = 0.8 TON
 RATES: 0.05 GAL./S.Y. ON EXIST PAV'T
 0.03 GAL./S.Y. ON BINDER CSES.

BITUMINOUS CONCRETE BINDER COURSE

LT. & RT. STA. 37+60.08-41+89 103 TONS

STEEL PLATE BEAM GUARDRAIL REMOVAL

SOUTHWEST APPROACH TO CEDAR STREET BRIDGE 100 LIN. FT.
 SOUTHWEST APPROACH TO RIKHLAND STREET BRIDGE 75 LIN. FT.
 TOTAL 175 LIN. FT.

LEVELING BINDER (MACHINE METHOD)

LT. & RT. STA. 37+60.08-41+89± = 165 TON

BIT. CONC. SURF. CSE., MIX. D, CLI

LT. & RT. STA. 37+60.08-41+89± = 154 TON

EXPANSION TIE ANCHORS 3/4"

LT. STA. 37+60.08-41+82± = 211 EACH
 RT. STA. 37+60.08-41+18± = 179 EACH
 TOTAL = 390 EACH

INLETS TO BE REMOVED

LT. & RT. STA. 37+61± = 2 EACH
 LT. & RT. STA. 40+95.7± = 2 EACH
 TOTAL = 4 EACH

TY.C INLET BOX, STD. 2324 (SPECIAL)

LT. & RT. STA. 37+61± = 2 EACH
 LT. & RT. STA. 40+95.7± = 2 EACH
 TOTAL = 4 EACH

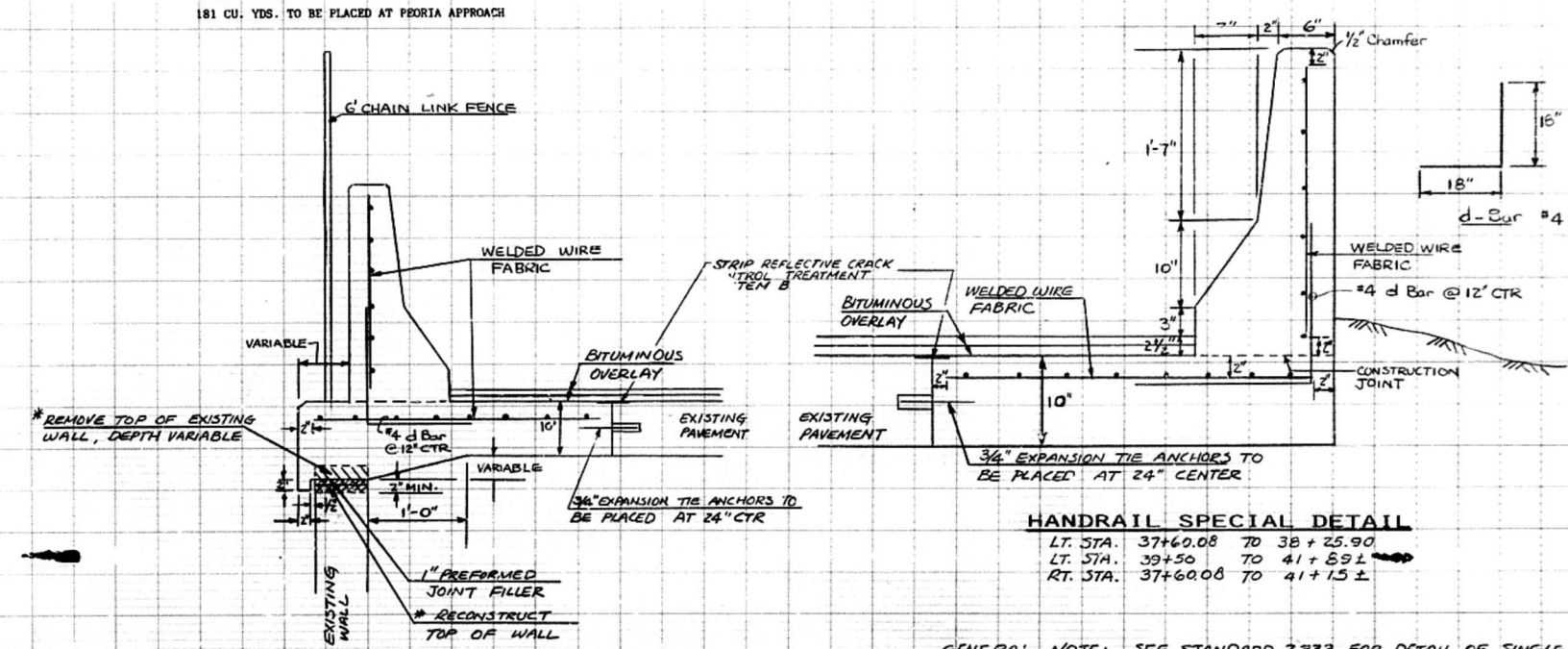
SUMMARY OF EARTHWORK

EARTH EXCAVATION 205 CU. YDS.
 EARTH EMBANKMENT 110 CU. YDS.
 181 CU. YDS. TO BE PLACED AT PEORIA APPROACH

REMOVAL OF CURB & GUTTER

STRIP REFLECTIVE CRACK CONTROL SYSTEM B
 WIDENING JOINTS 188 LIN. FT.
 TRANSVERSE JOINTS 203 LIN. FT.
 TOTAL 985 LIN. FT.

SCALE: 1"=20'



HANDRAIL SPECIAL DETAIL

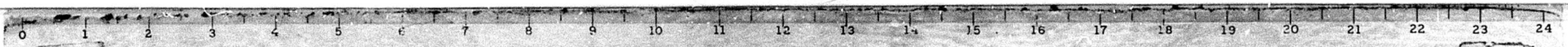
LT. STA. 38+25.90 TO 39+50

*THIS WORK SHALL BE PAID FOR IN ACCORDANCE TO ART. 169.04 OF THE STANDARD SPECIFICATIONS.

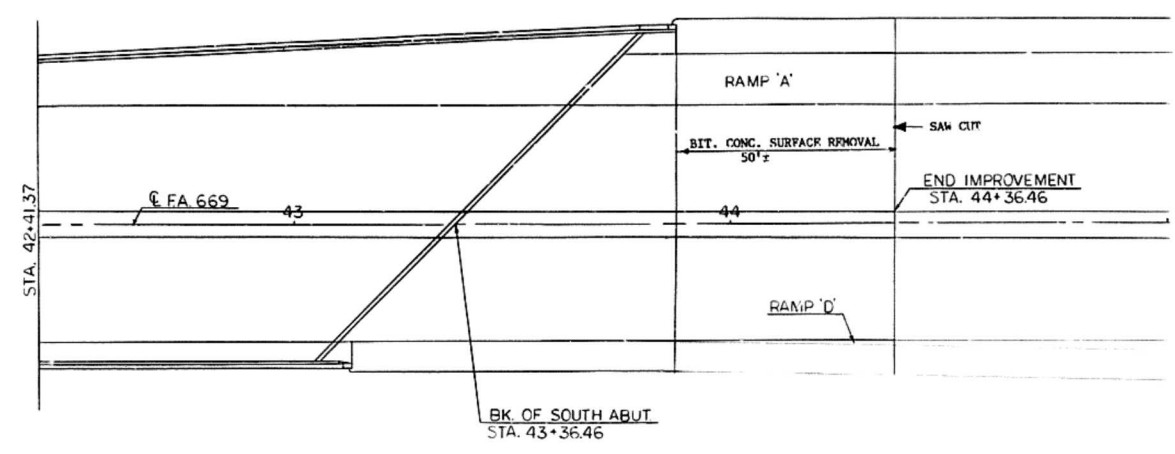
HANDRAIL SPECIAL DETAIL

LT. STA. 37+60.08 TO 38+25.90
 LT. STA. 39+50 TO 41+89±
 RT. STA. 37+60.08 TO 41+15±

GENERAL NOTE: SEE STANDARD 2333 FOR DETAIL OF SINGLE FACE BARRIER AND GENERAL NOTES.



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
699	3(HB)	BRAZEWELL	24	19
		ILLINOIS PROJECT		



MEDIAN REMOVAL

43+36.46 TO 44+36.46 582 SQ. FT.

CONCRETE MEDIAN, TY SB-9

43+36.46 TO 44+36.46 582 SQ. FT.

BITUMINOUS MATERIAL (PRIME COAT)

(COST INCIDENTAL TO BITUMINOUS CONCRETE)

43+36.46 TO 44+36.46 0.2 TONS

RATES: 0.05 GAL/S.Y. ON EXISTING PVT
0.03 GAL/S.Y. ON LEVELING BINDER

LEVELING BINDER (MACHINE METHOD)

80 TONS

BITUMINOUS CONCRETE SURFACE COURSE, CLASS I, MIXTURE D

66 TONS

TRAFFIC BARRIER TERMINAL, TYPE 6

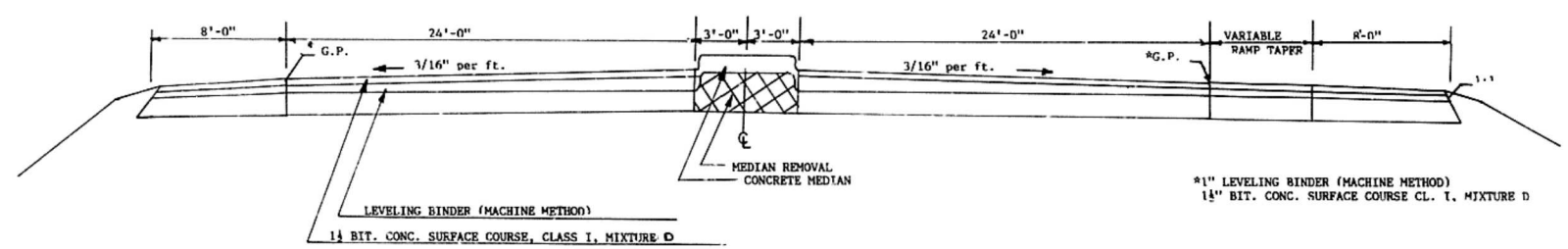
1 EACH

BITUMINOUS CONCRETE SURFACE REMOVAL

43+86.46 TO 44+36.46 420 SQ. YDS.

REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, TYPE A

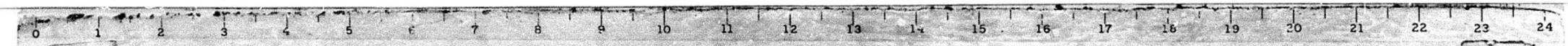
NORTHEAST APPROACH TO RICHLAND BRIDGE 100 LIN. FT.



TYPICAL SECTION

DISTRICT NO. 4 PEORIA
 DESIGNED
 DRAWN
 CHECKED
 DATE
 SCALE

EAST APPROACH



CAST GRATING AND FRAMES SHALL CONFORM TO ARTICLE 710.17 OF THE STANDARD SPECIFICATIONS. CASE GRATING AND FRAMES SHALL NOT BE GALVANIZED.

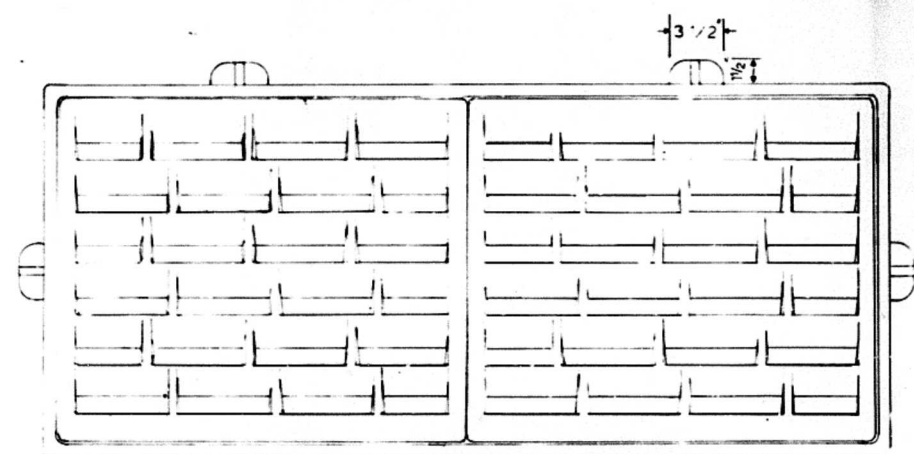
CLASS X CONCRETE OR PRECAST CONCRETE SHALL BE USED FOR THE INLET. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH SECTIONS 505.01 THRU 505.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONCRETE STRENGTH SHALL BE 4000 PSI AFTER 28 DAYS.

ALL EXPOSED EDGES OF THE INLET, EXCEPT THE UPPER PERIMETER SHALL BE BEVELED 3/4".

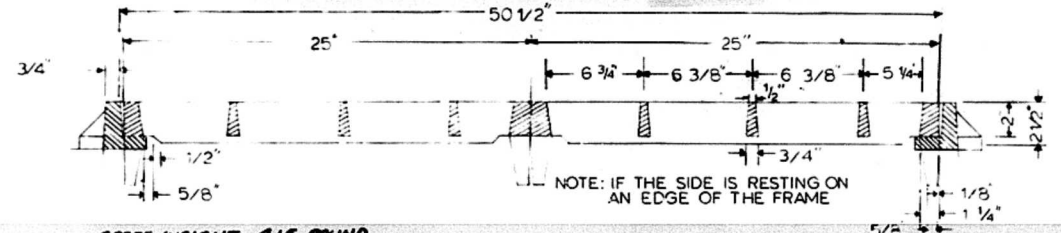
SHOP DRAWINGS WILL NOT BE REQUIRED FOR PRECAST INLET BOXES.

A 3" DEEP SAND BEDDING CONFORMING TO ARTICLE 703.01 (FA 1 OR FA 2) SHALL BE PROVIDED UNDER FULL LENGTH AND WIDTH OF PRECAST UNITS, AND ALL VOIDS AROUND THE PIPE DRAIN ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

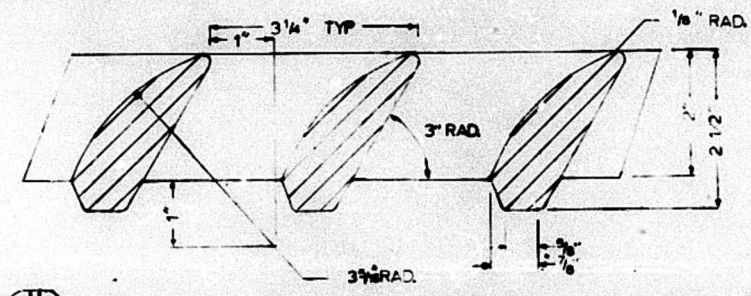
THE CONTRACT UNIT PRICE "EACH" FOR TYPE D INLET BOX (SPECIAL) STANDARD 2324 OR TYPE C INLET BOX (SPECIAL) STANDARD 2324, IN PLACE, SHALL INCLUDE THE FRAME AND GRATING, CLASS X OR PRECAST CONCRETE, REINFORCEMENT BARS, EXCAVATION, BEDDING WHEN REQUIRED, AND COMPACTED BACKFILLING.



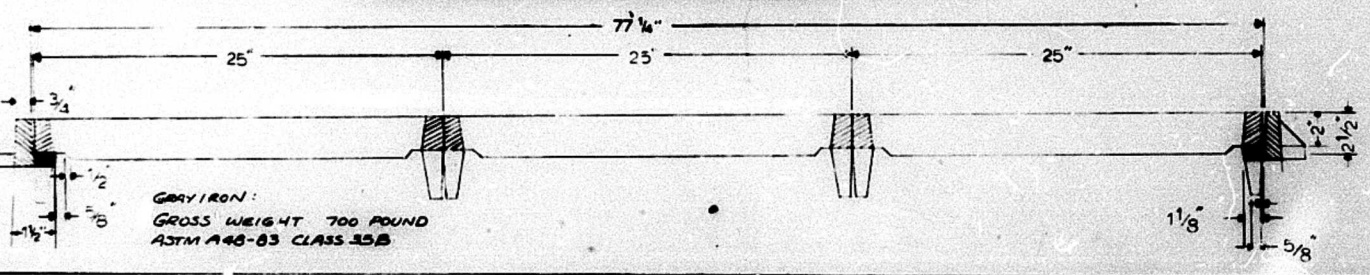
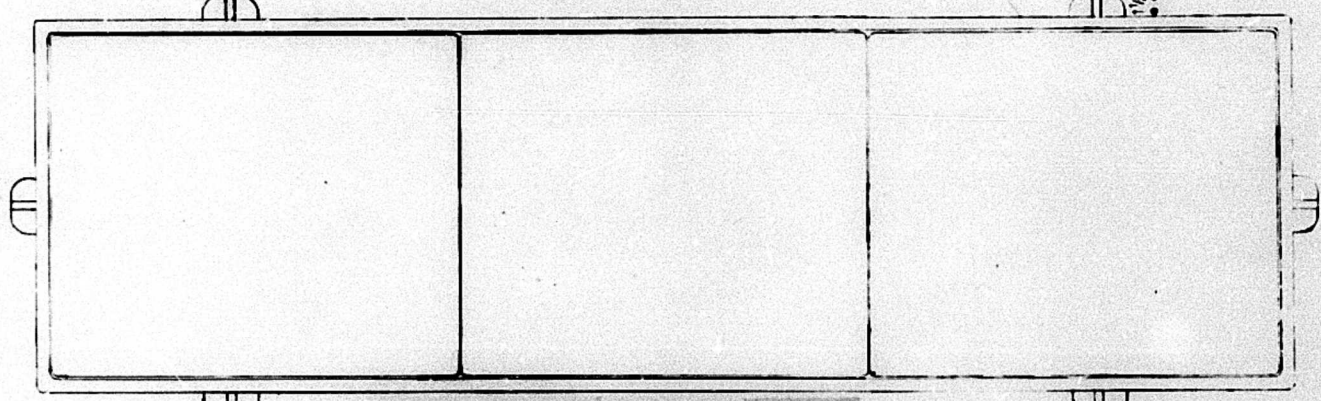
GRATING FOR TYPE C INLET BOX (SPECIAL)



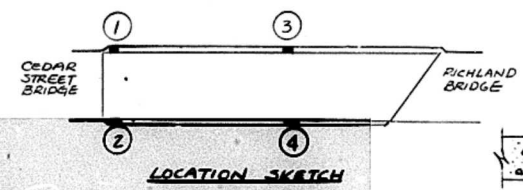
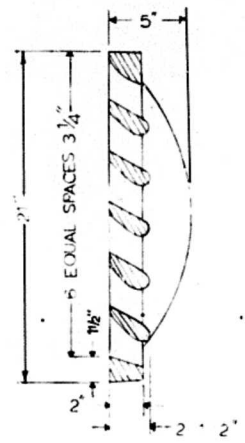
GROSS WEIGHT 415 POUND
GRAY IRON ASTM A48-83 CLASS 35 B



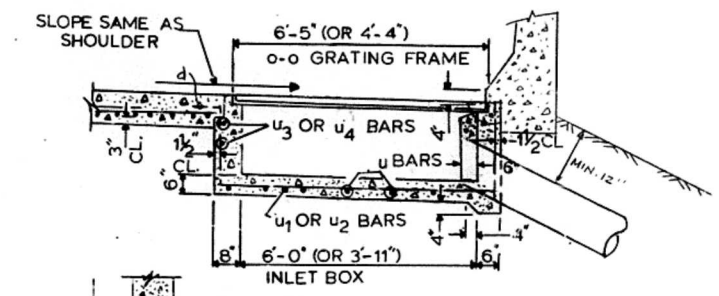
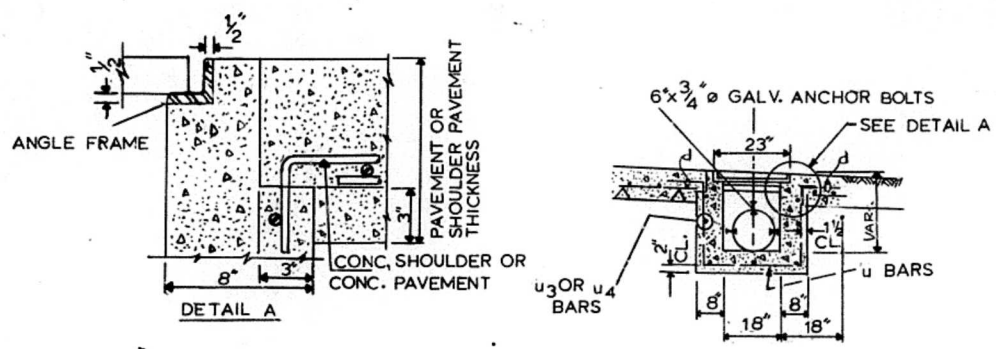
GRATING FOR TYPE D INLET BOX (SPECIAL)



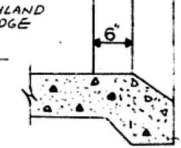
GRAY IRON:
GROSS WEIGHT 700 POUND
ASTM A48-83 CLASS 35 B



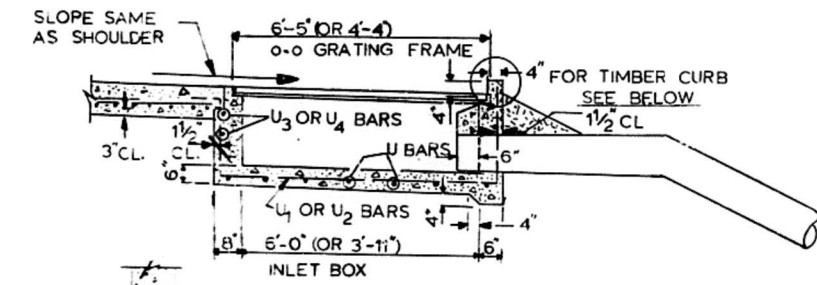
LOCATION SKETCH



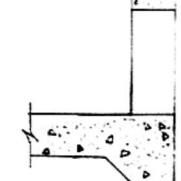
FOR BURIED OUTLET PIPE



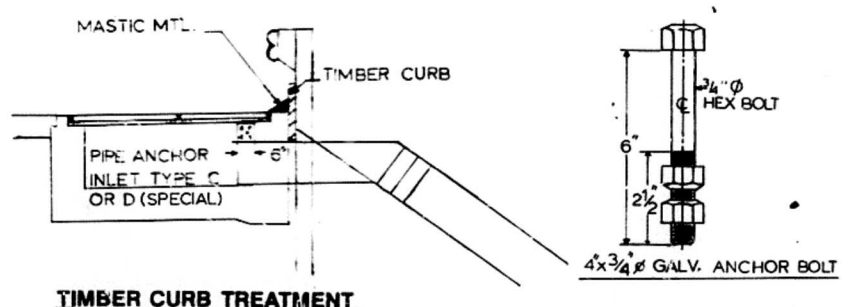
BOX OUTLET FOR BURIED PIPE WHEN PRECAST



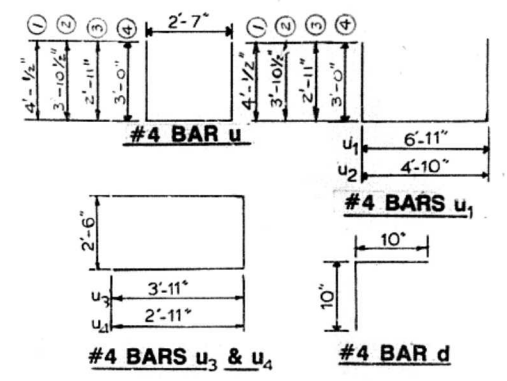
FOR EXPOSED OUTLET PIPE



BOX OUTLET WHEN PRECAST



TIMBER CURB TREATMENT



MATERIAL REQUIRED FOR ONE TYPE D INLET BOX

BAR	NO.	SIZE	LENGTH
u	8	#4	6'-9"
u1	3	#4	11'-4"
u3	4	#4	10'-4"
u4	19	#4	1'-8"
CONCRETE - CLASS X OR PRECAST			CU. YDS. 1.2
REINFORCEMENT BARS			LBS. 87 (108)*
GRATING			SQ. FT. 11.0

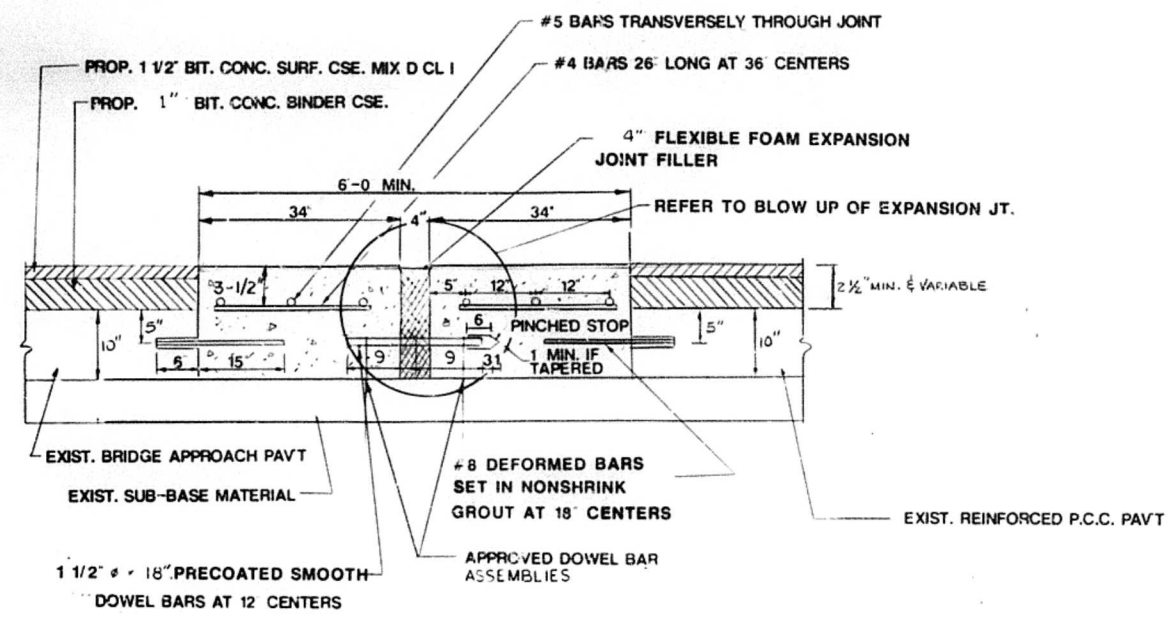
MATERIAL REQUIRED FOR ONE TYPE C INLET BOX

BAR	NO.	SIZE	LENGTH
u	6	#4	VAR.
u1	3	#4	VAR.
u3	6	#4	8'-4"
u4	15	#4	1'-8"
CONCRETE - CLASS X OR PRECAST			
REINFORCEMENT BARS			
GRATING			SQ. FT. 7.3

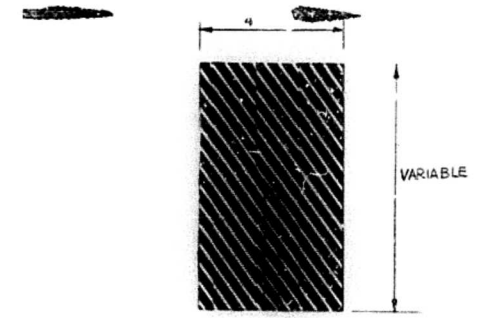
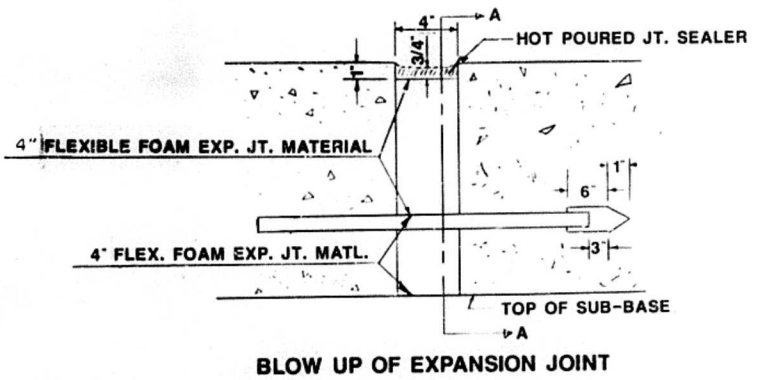
*ADJACENT TO CONCRETE SHOULDER OR CONCRETE PAVEMENT ONLY

TYPE C AND TYPE D INLET BOX (SPECIAL) STANDARD 2324

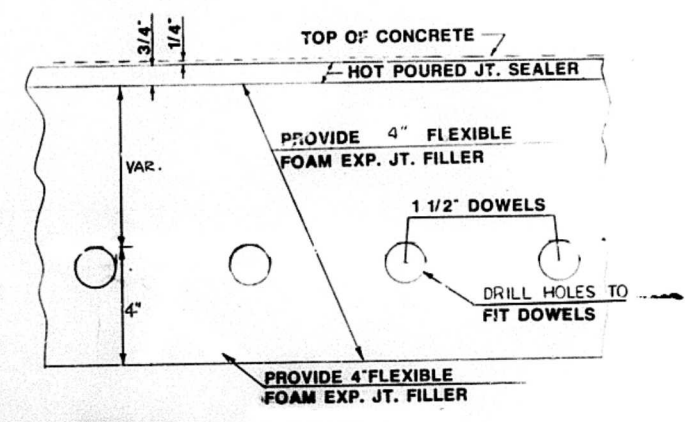
ROUTE	SEC	COUNTY	TOTAL SHEET
FA 669	13(HBIBR)	TAZEWELL	24A 21



DETAIL OF PROPOSED EXPANSION JOINT 4"
 JOINT TO BE PLACED AFTER R.S.
 (SEE SPECIAL PROVISIONS)



ELEVATION
 PREFORMED EXPANSION JT. FILLER FOR TOP PORTION OF 4" EXPANSION JT.



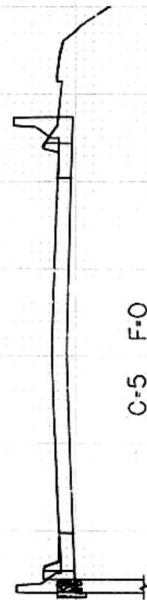
SEC.A-A

ROUTE	SECTION	COUNTY	SHEET TOTAL NO.
FA 669	13(H)BR	TAZEWELL	24 22
MKD	PROJ. STA 37+60.1 TO STA 38+50		

FINAL SURVEY	DATE
NO.	BY
NOTE BOOK	
AREA	
CHECKED	

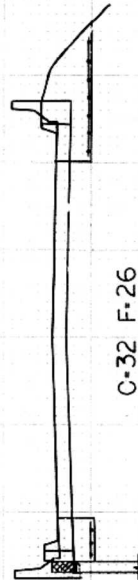
ORIGINAL SURVEY	DATE
NO.	BY
NOTE BOOK	
AREA	
CHECKED	

470
38
+
50
460



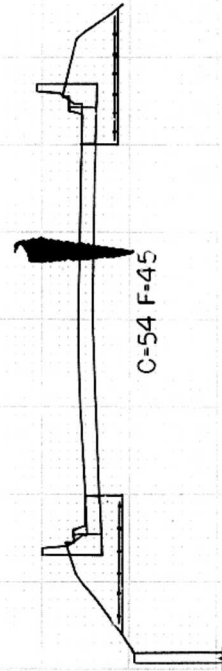
C-5 F-0

470
38
+
25
460



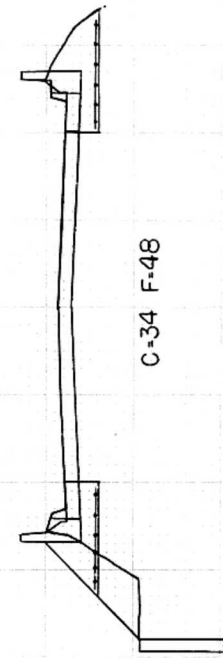
C-32 F-26

470
38
+
07
460



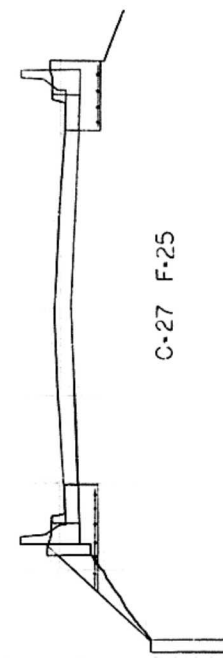
C-54 F-45

470
37
+
77
460



C-34 F-48

470
37
+
60.1
460

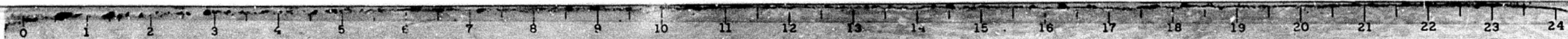


C-27 F-25

SCALE: 1"=5' VERT.
1"=10' HORIZ.

ROADWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL DOT
PRINTED IN U.S.A.

EAST APPROACH



50
0
50

ROUTE	SECTION	COUNTY	SHEET
FA 669	13(MB)BR	TAZEWELL	TOTAL NO. 24
MKD			23
PROJ.	STA. 38+75	TO STA. 40+10	

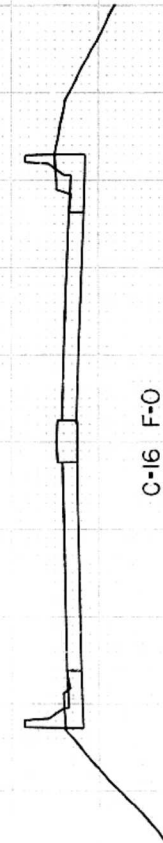
FINAL SURVEY	DATE
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	

ORIGINAL SURVEY	DATE
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	

40
+
10

470

460

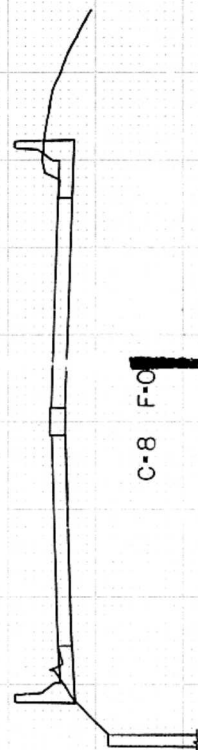


C-16 F+0

39
+
86

470

460

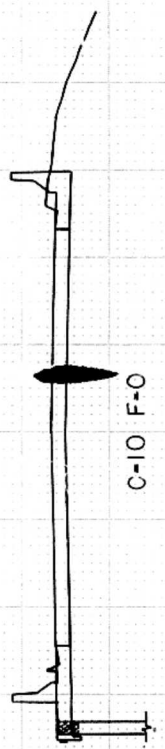


C-8 F+0

39
+
46

470

460

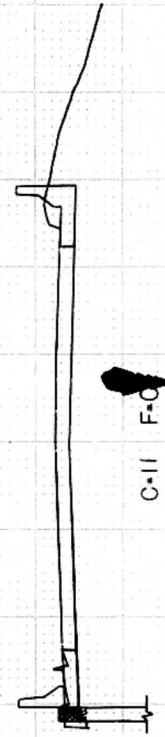


C-10 F+0

39
+
25

470

460

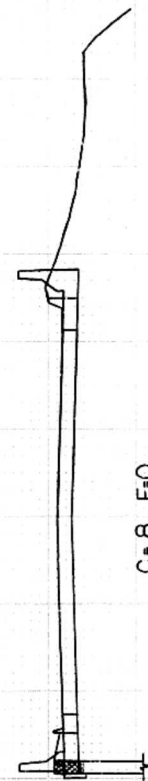


C-11 F+0

39
+
00

470

460

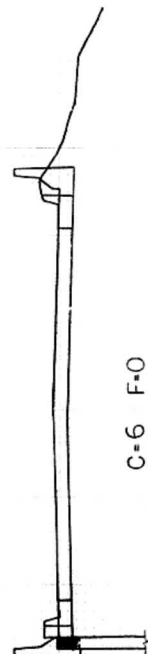


C-8 F+0

38
+
75

470

460

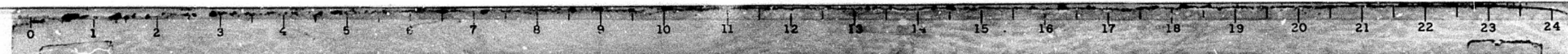


C-6 F+0

SCALE: 1"=5' VERT.
1"=10' HORIZ.

PLATE 3-FULL CROSS SECTION-FULL DOT
PRINTED IN U.S.A.

EAST APPROACH



50
0
50

ROUTE	SECTION	COUNTY	SHEET TOTAL NO.
FA 669	13(HB)BR	TAZEWELL	24 24
MKD.	PROJ. STA. 40+30 TO STA. 41+49.12		

FINAL SURVEY

SURVEYED BY _____ DATE _____

PLOTTED BY _____

NOTE BOOK NO. _____

AREA CHECKED _____

ORIGINAL SURVEY

SURVEYED BY _____ DATE _____

PLOTTED BY _____

NOTE BOOK NO. _____

AREA CHECKED _____

470 460

41
+
49.12

ALONG SKEW OF ABUT.

470 460

41
+
49.12

⊥ TO C

470 460

41
+
12

470 460

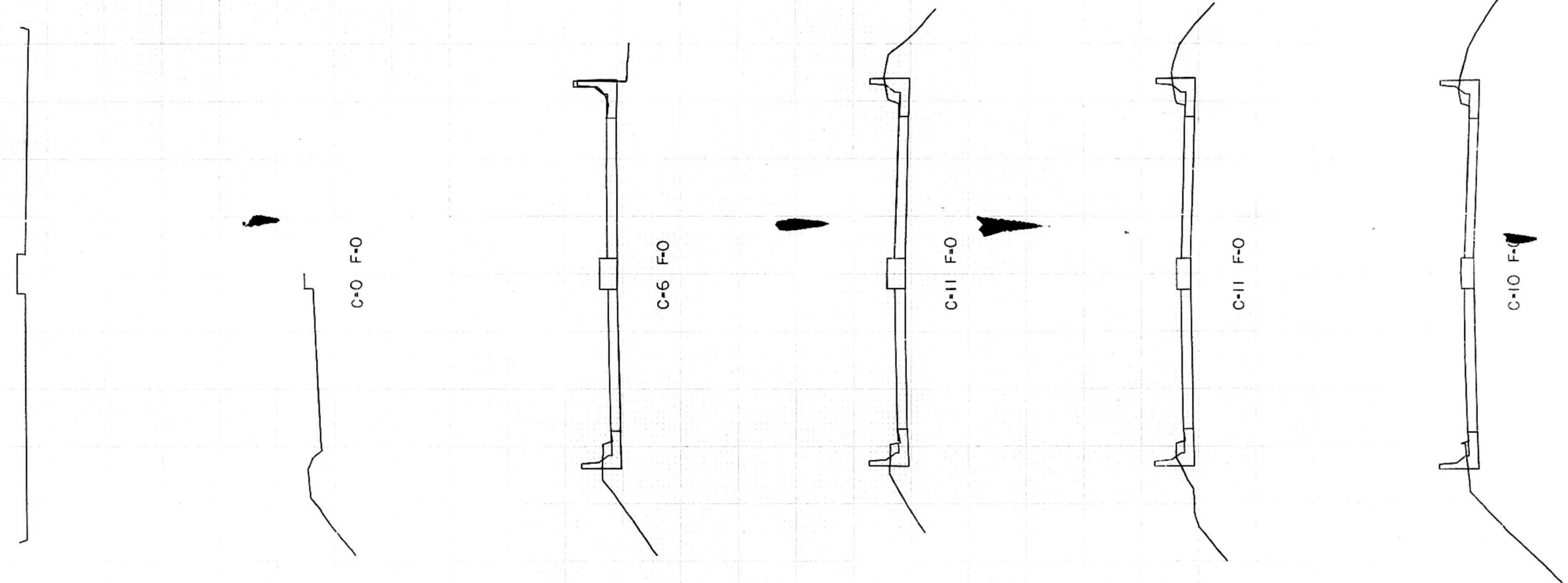
40
+
80

470 460

40
+
50

470 460

40
+
50

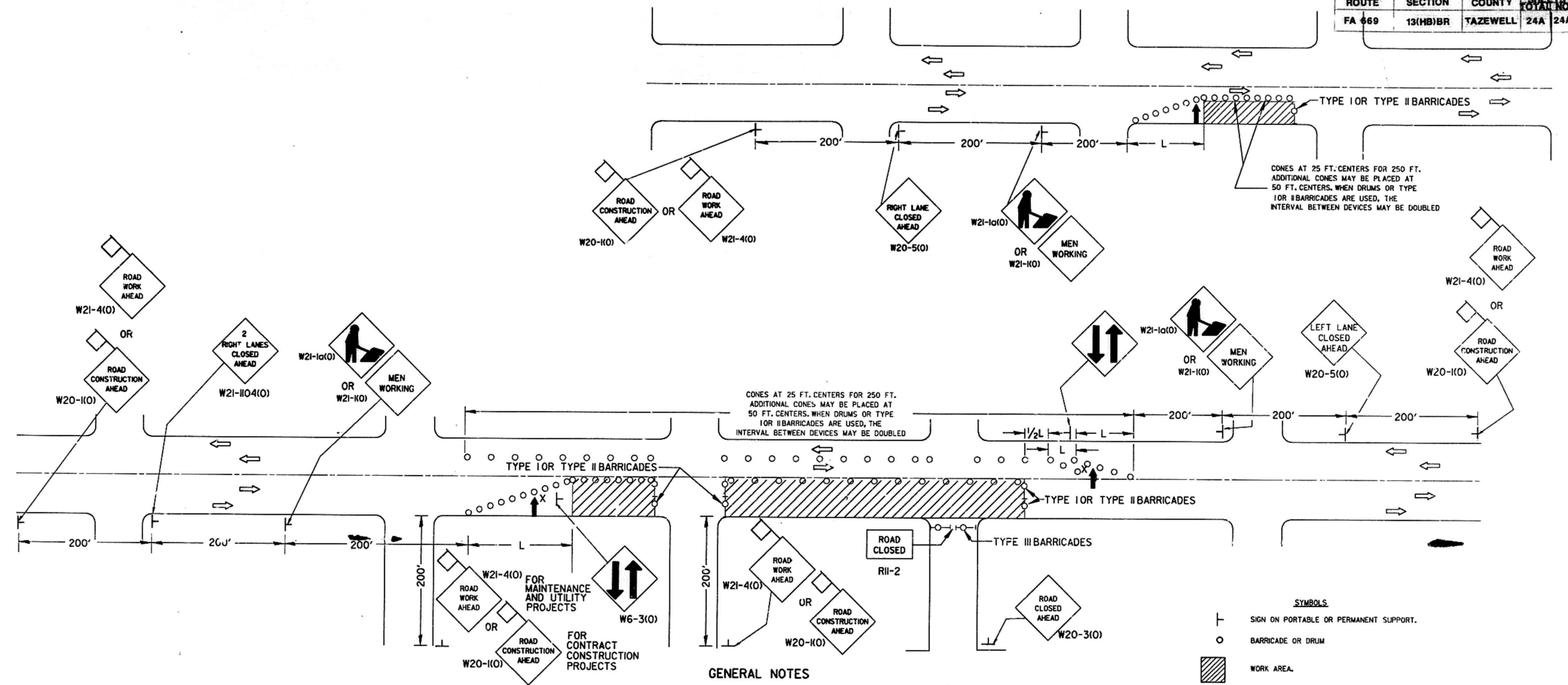


SCALE: 1" = 5' VERT.
1" = 10' HORIZ.



50
0
50

ROUTE	SECTION	COUNTY	SHEETS	TOTAL NO.
FA 669	13(HB)BR	TAZEWELL	24A	24A



GENERAL NOTES

1. WHEN THE POSTED SPEED LIMIT IS 35 M.P.H. OR MORE, ALL WARNING SIGNS SHALL HAVE MINIMUM DIMENSIONS OF 48 IN. BY 48 IN. OR, WITH THE APPROVAL OF THE ENGINEER, 36 IN. BY 36 IN. IF THE POSTED SPEED LIMIT IS 30 M.P.H. OR LESS, ALL WARNING SIGNS SHALL HAVE A MINIMUM DIMENSION OF 36 IN. BY 36 IN.
2. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS. WHERE PARKED VEHICLES BLOCK THE LINE OF SIGHT TO NORMAL SIGN LOCATIONS, OR SIGNS ENCRATCH ON A NORMAL PEDESTRIAN WALKWAY, THE SIGNS SHALL BE POST MOUNTED WITH THE BOTTOM NOT LESS THAN 7 FT. ABOVE THE EDGE OF THE ROADWAY.
3. THE DISTANCE SHALL BE DEFINED AS: $L = WS^2/60$
WHERE: W = WIDTH OF CLOSURE
S = NORMAL POSTED SPEED LIMIT
4. BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS SHALL BE USED IN LIEU OF CONES FOR NIGHT OPERATIONS.
5. REFLECTIVE PAVEMENT MARKINGS SHALL BE USED WHEN THE CLOSURE TIME EXCEEDS 4 DAYS. DOUBLE YELLOW CENTER LINE SHALL BE USED IN THE TWO-WAY TRAFFIC AREA IN ADDITION TO THE BARRICADE OR DRUMS. SINGLE YELLOW LEFT EDGE LINE SHALL BE USED TO OUTLINE THE BARRICADE ISLAND. WHITE RIGHT EDGE LINE SHALL BE USED ALONG THE BARRICADES PROTECTING THE WORK AREA.
6. IF THE WORK OPERATION IS PERFORMED BETWEEN 9:00 A.M. AND 3:00 P.M. AND DOES NOT EXCEED 15 MINUTES, TRAFFIC PROTECTION SHALL BE AS SHOWN FOR "STD. 2307." SIGNS, WHEN REQUIRED, SHALL BE INSTALLED AT 200 FT. SPACING.
7. THIS STANDARD DOES NOT APPLY WHEN WORK IS BEING PERFORMED IN THE MIDDLE LANE(S) OF A SIX OR MORE LANE HIGHWAY. SPECIAL PLANS APPROVED BY THE ENGINEER WILL BE REQUIRED.
8. IF THE WORK AREA IS IN THE PARKING LANE AND THE PARKING EXISTS DURING WORK HOURS, "ROAD CONSTRUCTION AHEAD" OR "ROAD WORK AHEAD" SIGNS SHALL BE INSTALLED 200 FT. IN ADVANCE OF THE WORK AREA AND THE AREA PROTECTED WITH CONES OR BARRICADES.
9. FLASHING LIGHTS SHALL BE USED ON EACH APPROACH IN ADVANCE OF THE AREA DURING HOURS OF DARKNESS AND INSTALLED ABOVE THE FIRST TWO SIGNS IN EACH SERIES.
10. WHEN THERE IS NO WORK BEING PERFORMED, THE WORKER SIGN(S) SHALL BE REMOVED OR COVERED.
11. WHEN ARROW BOARDS ARE SPECIFIED, THE HIGH LEVEL WARNING DEVICE MAY BE OMITTED.
12. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
13. FORM "BT 725" IS REQUIRED.

- SYMBOLS**
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT.
 - BARRICADE OR DRUM
 - ▨ WORK AREA.
 - ➔ ARROW BOARD. (WHEN SPECIFIED)
 - ◇ 18 IN. BY 18 IN. (MINIMUM ORANGE FLAG)
 - CONE, DRUM OR BARRICADE
 - X HIGH LEVEL WARNING DEVICE

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION OR CONTRACT MAINTENANCE

MULTILANE TWO WAY TRAFFIC, UNDIVIDED URBAN OR MULTILANE TWO WAY TRAFFIC, DIVIDED URBAN WITH MOUNTABLE MEDIAN, DAY OR NIGHT OPERATION

WHERE, AT ANY TIME, ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRATCH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE OR MORE TRAFFIC LANES IN AN AREA WHERE THE POSTED SPEED LIMIT IS 40 M.P.H. OR LESS.

CASE U-2

