

64H76

9-21-12

#24

Various

#24

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR STATE STANDARDS, SEE SHEET NO. 2

(VARIOUS ROUTES)

FAI ROUTE 39 AND FAP ROUTE 301 (US 20) (VARIOUS LOCATIONS)

SECTION D2 SAFETY 2012-1

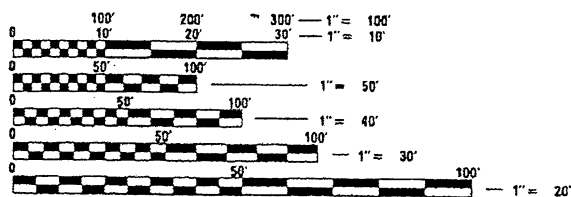
PROJECT HSIP: ACHSIP-0005(906)

TYPE of IMPROVEMENT

(LEE, OGLE, STEPHENSON AND
WINNEBAGO COUNTIES) VARIOUS COUNTIES

C-92-125-12

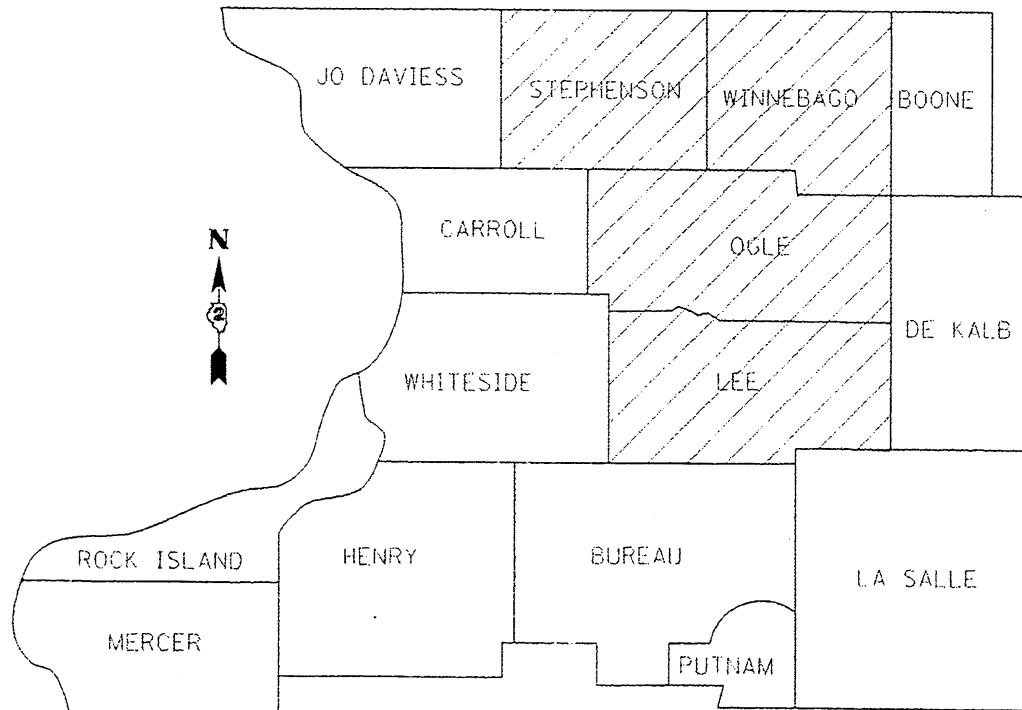
100%
11-27-2013



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: MASOOD AHMAD
SENIOR SQUAD LEADER: SAM ABDULLAH (815) 284-5935
SQUAD LEADER: DAVID DOSS (815) 284-5916
CONTRACT NO. 64H76 071-0058



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	D2 SAFETY 2012-1	••	175	1
ILLINOIS CONTRACT NO. 64H76				

• FAI 39, FAP 301 (US 20)
•• LEE, OGLE, WINNEBAGO AND STEPHENSON COUNTIES

D-92-051-12



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 14 2012
E. S. Schubert
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
August 17 2012
John D. Baranzelli, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT
August 17 2012
William R. Frey
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

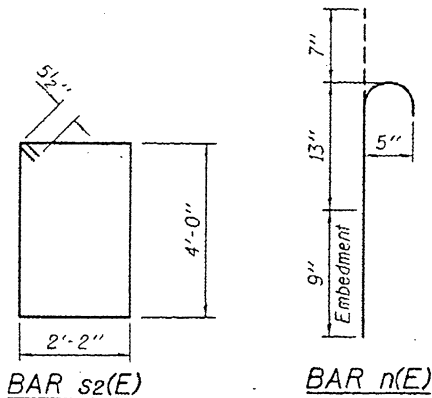
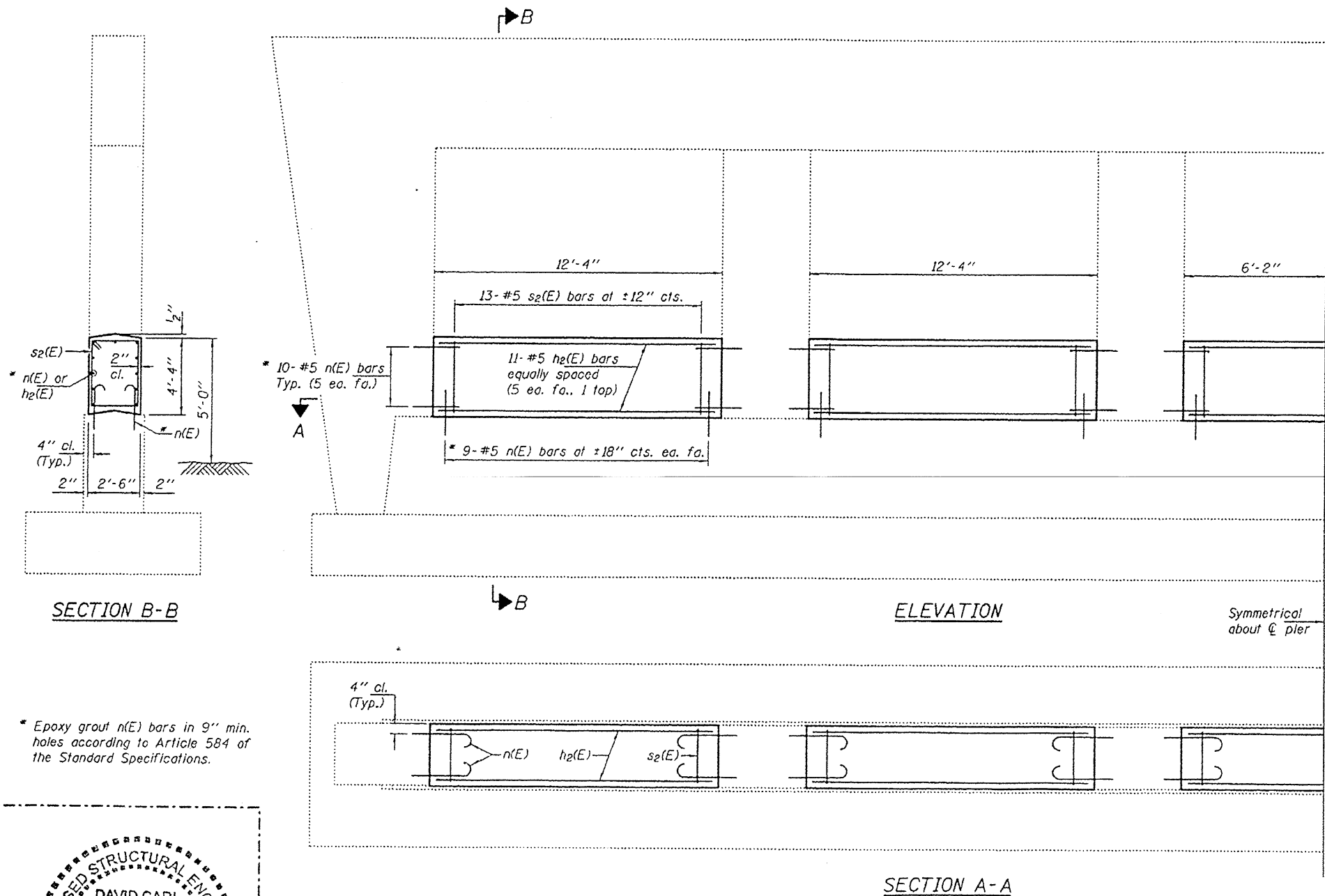
PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

NOTES

The cost of epoxy grouting threaded rods shall be included with Reinforcement Bars, Epoxy Coated.

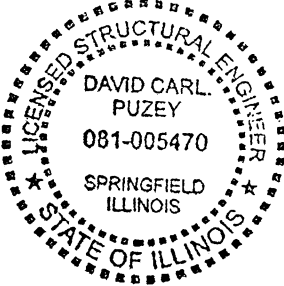
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement bars designated (E) shall be epoxy coated.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h2(E)	55	#5	12'-0"	—
n(E)	190	#5	2'-5"	—
s2(E)	65	#5	13'-3"	□
Concrete Structures			Cu. Yd.	24.7
Reinforcement Bars, Epoxy Coated			Pound	2070



DESIGNED DAB	EXAMINED <i>Timothy A. Allert</i>	DATE - JUNE 5, 2012	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER CRASHWALL EXTENSION 071-0058	F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED ARS	PASSED <i>David Carl Puze</i>	REVISED 09/11/2012			412	02 SAFETY 2012-1	OGLE	175	62
DRAWN baliva	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISOR						CONTRACT NO. 64H76	
CHECKED DAB ARS								ILLINOIS FED. AID PROJECT	

64228

#47

8-1-97

FAI 39

Ogle Co.

Sec. (141-1HB-3)M & (141-1VB)M-3

2 of 1 Copy

#47

47

98%
6-13-1998

INDEX OF SHEETS

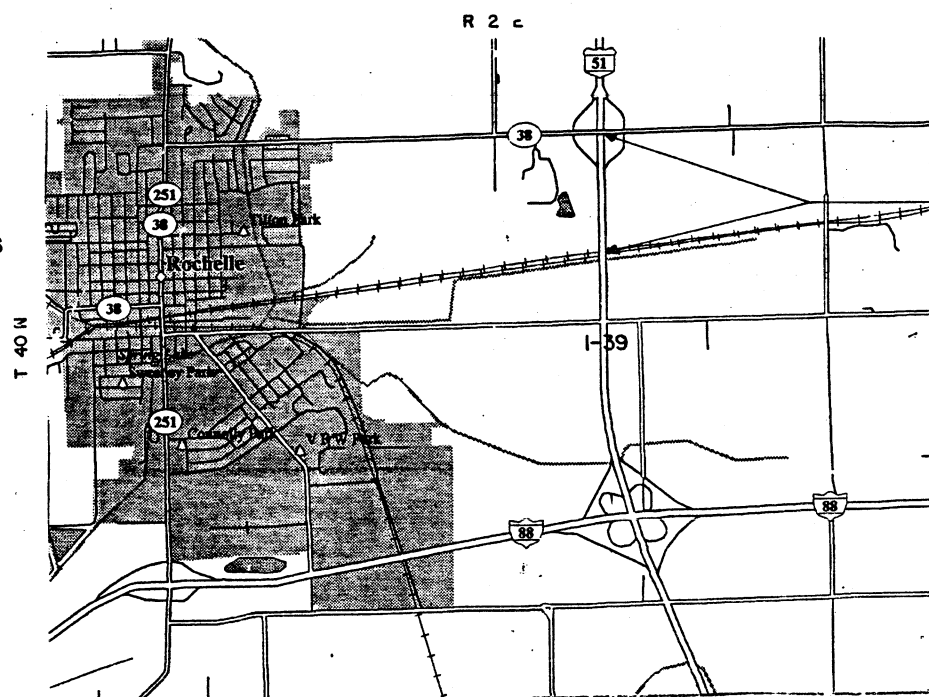
- 1.) Location Map, Index of Sheets & Standards
- 2.) Typical Sections, Summary of Quantities & General Notes
- 3.) Traffic Control Plan Illinois Route 38
- 4-5.) Plan Sheets SN: 017-0058
- 6.) Deck Repair Plan SN: 017-0058
- 7.) Bridge Approach Pavement IL 38
- 8.) Traffic Control Plan I-39
- 9.) Plan Sheet SN: 017-0060
- 10.) Anode Cathodic Protection (FOR INFORMATION ONLY)

STANDARDS

482006	BITUMINOUS SHOULDER ADJACENT OF RIGID PAVEMENT
701101	OFF-ROAD OPERATIONS, MULTILANE LESS THAN 15' AWAY
	SPEEDS AT > 45 MPH
701401	LANE CLOSURE, MULTILANE, FOR SPEDS > 45 MPH
701406	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY
	FOR SPEEDS > 45 MPH
701426	LANE CLOSURE, MULTILAND, INTERMITTENT OR MOVING OPERATIONS
	FOR SPEEDS > 45 MPH
702001	TRAFFIC CONTROL DEVICES
705001	TEMPORARY CONCRETE BARRIER

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY FAI 39 (I-39) SECTION (141-1HB-3)M & (141-1VB)M-3 OGLE COUNTY

C-92-092-97

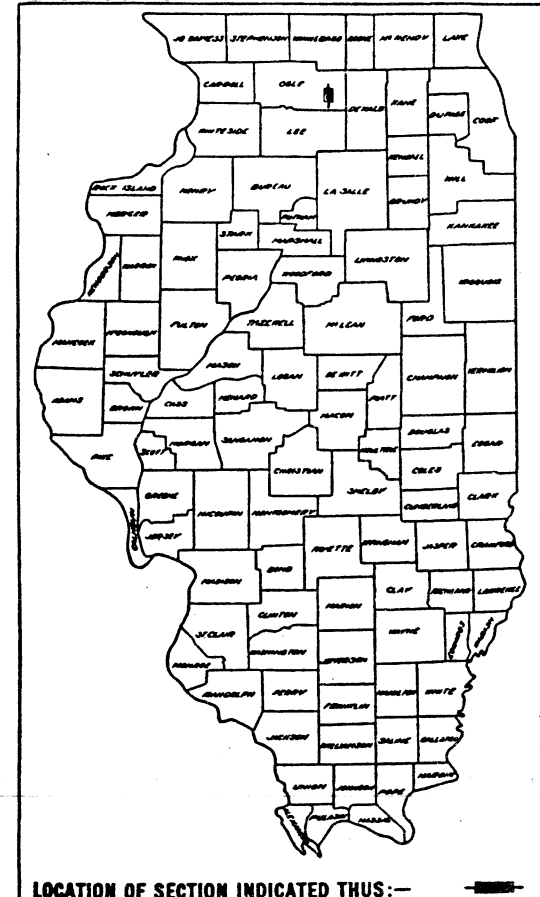


LOCATIONS OF IMPROVEMENTS

ITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 39	*	OGLE	10	1

* (141-1HB-3)M & (141-1VB)M-3

D-92-055-97



LOCATION OF SECTION INDICATED THUS:—

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

SUBMITTED May 19, 1997
EXAMINED June 27, 1997
PASSED June 27, 1997
APPROVED June 27, 1997

"CALL J.U.L.I.E.
BEFORE YOU DIG"
800-892-0123

DEMENT TOWNSHIP SEC. 20

CONTRACT # 64228

071-0058

SN 071-0058
SN 071-0060

2-215

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 39	*	OGLE	10	2
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

The diagram shows a cross-section of a bridge deck with a central vertical axis labeled "FAI 39 (1-39)". The deck is divided into several segments with the following dimensions from left to right:

- Top width segments: 30'-0", 24'-0", 8'-0", 24'-0", 36'-0"
- Bottom width segments: 20'-0", 10'-0", 12'-0", 12'-0", 8'-0", 18'-0", 18'-0", 8'-0", 12'-0", 12'-0", 10'-0", 18'-0", 8'-0"
- Vertical dimensions (from left to right): 7.33', 1/2"/FT., 3/16"/FT., 3/16"/FT., 1/2"/FT., 6:1, 2'-0", 6:1, 1/2"/FT., 3/16"/FT., 3/16"/FT., 1/2"/FT., 7.33', 6:1

The diagram also shows a profile line at the bottom of the deck structure.

Diagram illustrating the cross-section of a bridge deck with various dimensions and slopes:

- Top dimensions (from left to right):
 - 20'-0"
 - 10'-0"
 - 24'-0" & VAR.
- Internal dimensions (from left to right):
 - 12'-0" & VAR.
 - 12'-0" & VAR.
 - 2'-7"
- Slopes (from left to right):
 - 1/2"/FT.
 - 3/16"/FT.
 - 1/4"/FT.
- Reference: FA 567 (IL 38)

00% ST
SFTY-2A

SALE

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 39	*	OGLE	10	3
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* (I41-1HB-3)M & (I41-1VB)M-3

TRAFFIC CONTROL PLAN ILLINOIS ROUTE 38

PAVEMENT MARKING TAPE, TYPE III, 4"

	YELLOW	WHITE
STAGE 1		
East Bound Traffic		2130 FT.
West Bound Traffic		1575 FT.
STAGE 2		
East Bound Traffic	1530 FT.	1080 FT.
West Bound Traffic	1680 FT.	1080 FT.
SUBTOTAL	3210 FT.	5865 FT.
TOTAL		9075 FT.

TEMPORARY CONC. BARRIER

LOCATION	FOOT
STAGE 1 WB	480
STAGE 1 EB	480
TOTAL	960

FOLLOW STANDARD 701401 FOR PLACEMENT OF ARROW BOARDS AND ADVANCE SIGNS.

TEMP. CONC. BARRIER TERM SEC.

	EACH
STAGE 1 WB	1
STAGE 1 EB	1
TOTAL	2

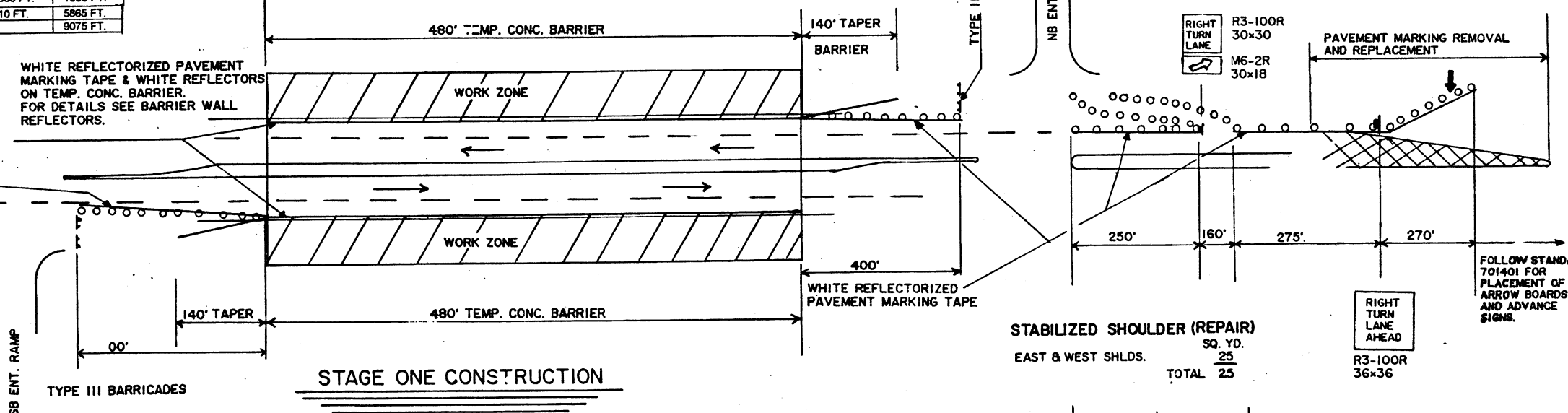
- TYPE III BARRICADES WITH FLASHERS
- DRUMS WITH STEADY BURNS
- REVERSE CURVE PLACED ON RIGHT SHOULDER
- PLACE ROAD CONST. AHEAD (RCA) SIGNS ON OFF RAMP AT 500' BEFORE INTERSECTION
- SAND MODULE IMPACT ATTENUATOR, SAND BAGS SHALL NOT BE USED

RELOCATE TEMP. CONC. BARRIER

LOCATION	FOOT
STAGE 1 WB	487
STAGE 1 EB	487
TOTAL	974

LBS. PER ATTENUATOR

200 LB.
400 LB.
700 LB.
1400 LB.



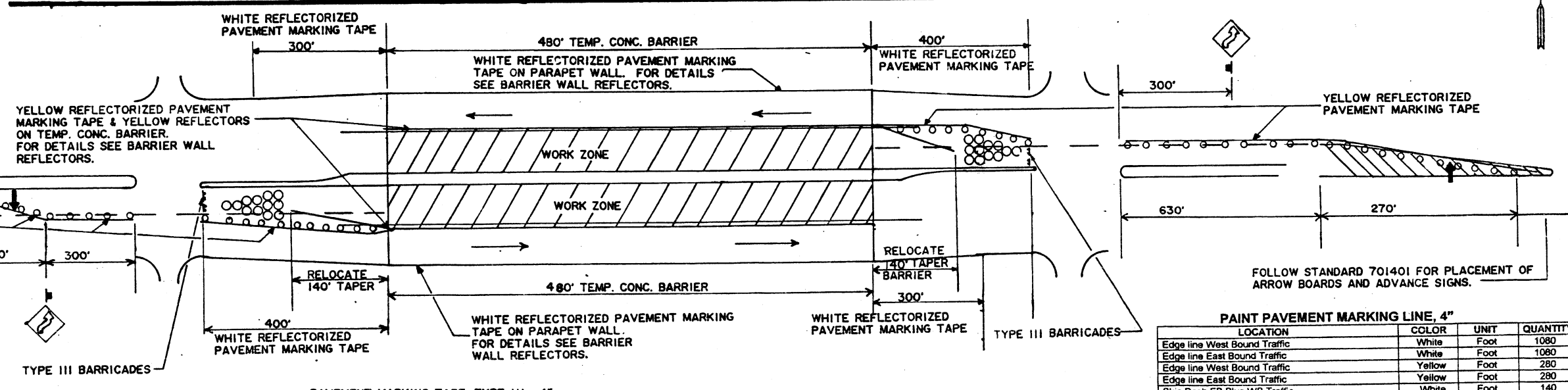
PAVEMENT MARKING REMOVAL Stage One

Item	Unit	Quantity
PAINT PVT MK REMOV	SQ. FT.	450

PAVEMENT MARKING REPLACEMENT Stage One

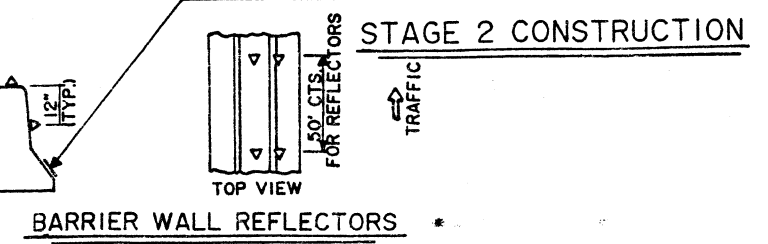
Item	Color	Unit	Quantity
PAINT PVT MK LINE, 4"	Yellow	FOOT	1880
PAINT PVT MK LINE, 12"	Yellow	FOOT	274

* Each pay item will be applied in two applications with half of the quantity being used for each application.



PAINT PAVEMENT MARKING LINE, 4"

LOCATION	COLOR	UNIT	QUANTITY
Edge line West Bound Traffic	White	Foot	1080
Edge line East Bound Traffic	White	Foot	1080
Edge line West Bound Traffic	Yellow	Foot	280
Edge line East Bound Traffic	Yellow	Foot	280
Skip Dash EB Plus WB Traffic	White	Foot	140
TOTAL			2860
Grandtotal			4740

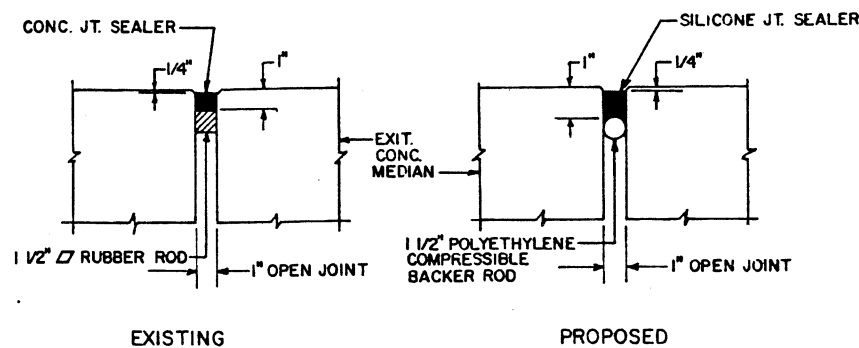


SN 071-0058
DISTRICT NO. 2 DIXON
DESIGNED
DRAWN GARY MOSHER
CHECKED
DATE
SCALE

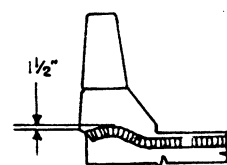
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 39	X	OGLE	10	5
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

*(I41-IHB-3)M & (I41-IVB)M-3

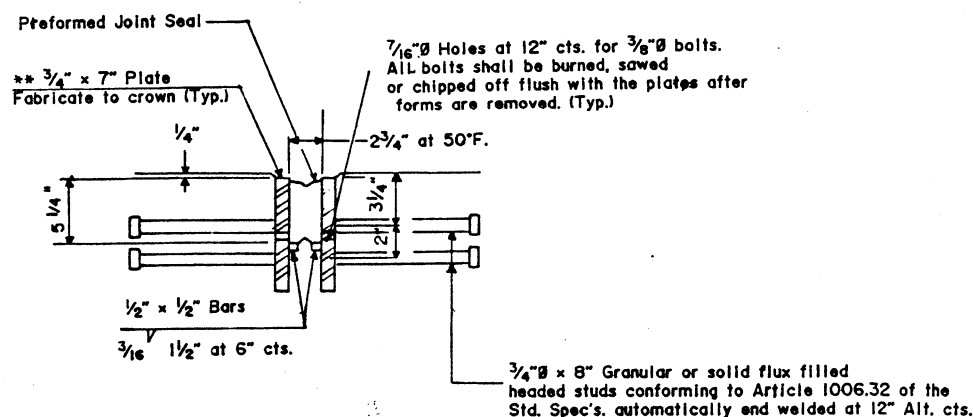
SHEET 2 OF 3



DETAIL A

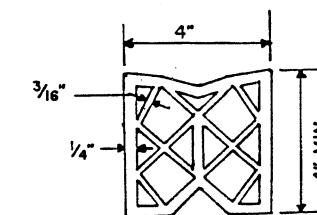


TYPICAL END OF SEAL TREATMENT

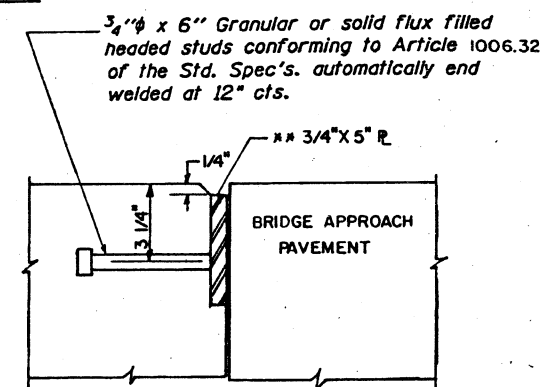


DETAIL B

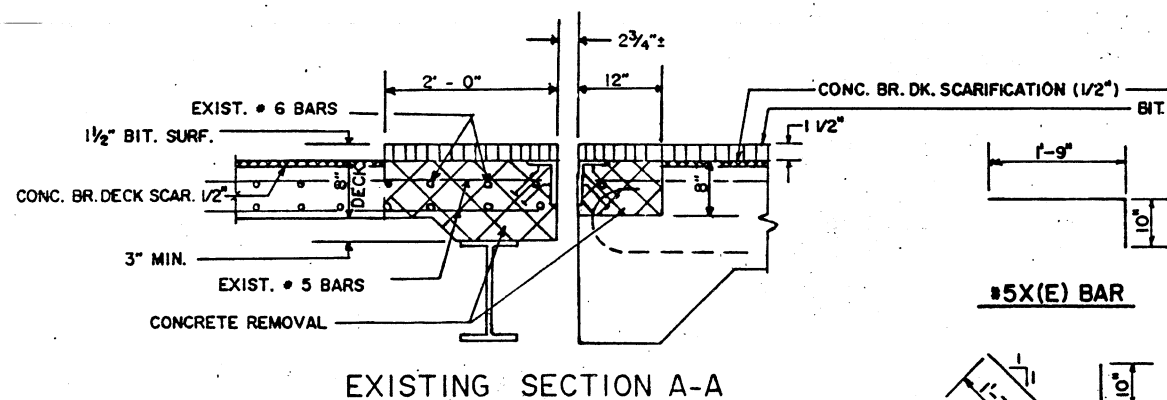
** Furnish in segments of 20 ft. maximum length.
Maximum space between installed segments shall be 3/16\"/>



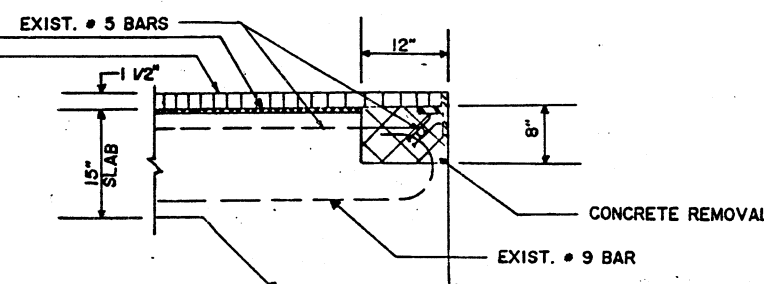
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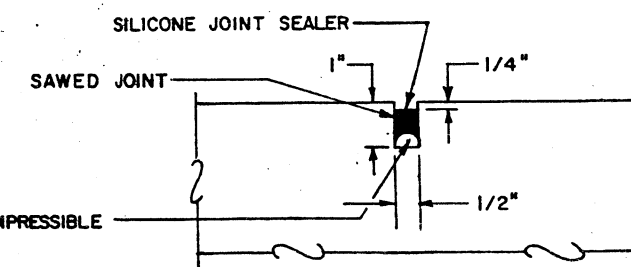
DETAIL C



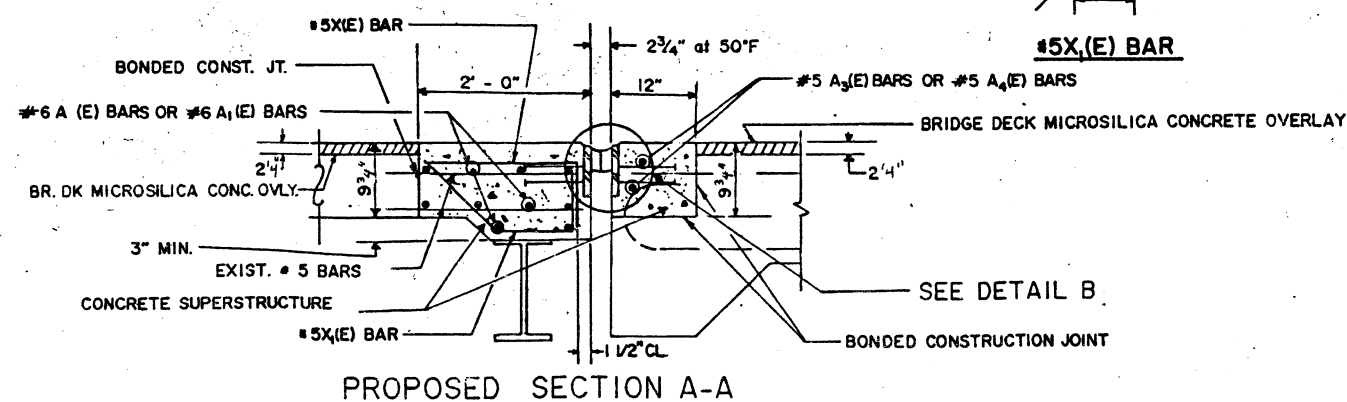
EXISTING SECTION A-A



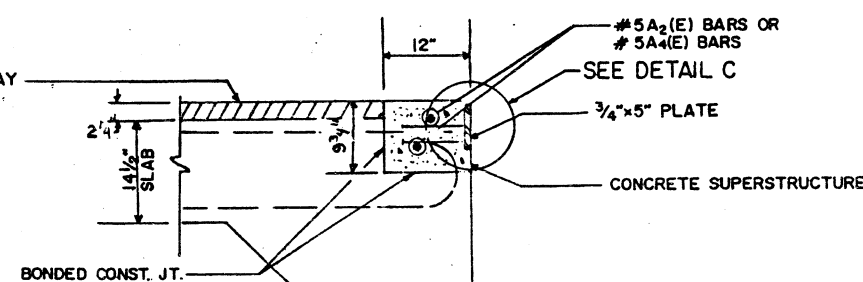
EXISTING SECTION B-B



DETAIL D



PROPOSED SECTION A-A



PROPOSED SECTION B-B

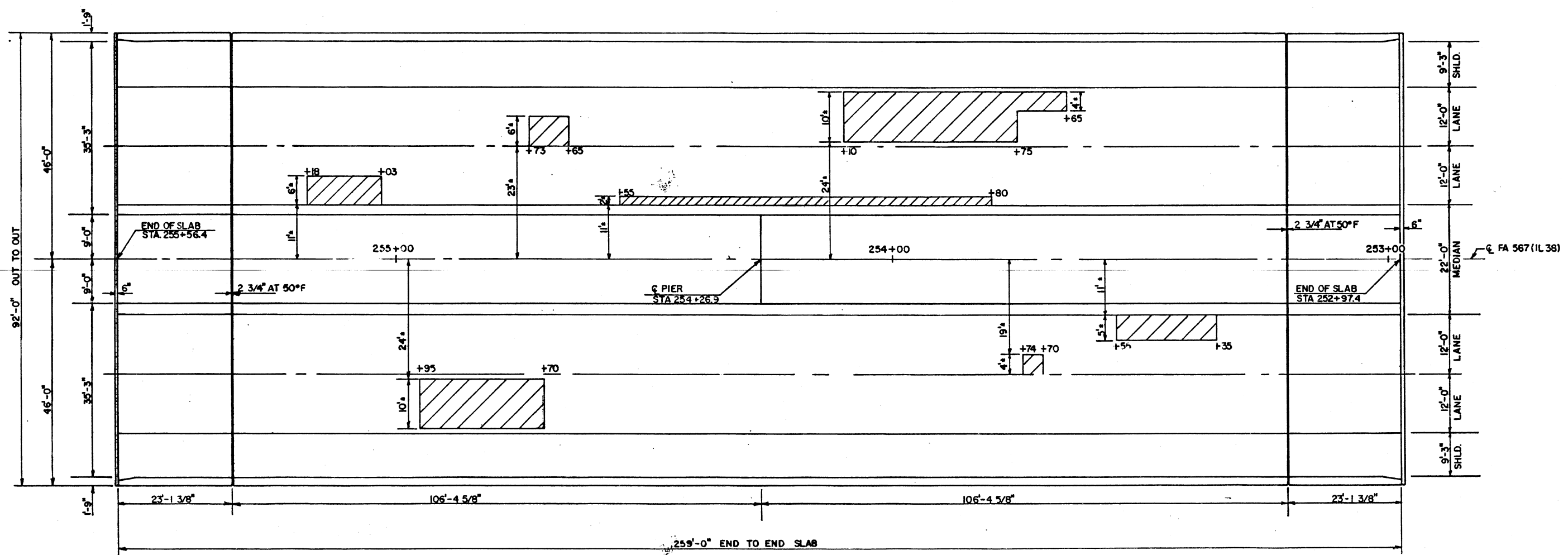
SN 071-0058
DISTRICT NO. 2 DIXON
DESIGNED D. PAUSER
DRAWN A. CONDERMAN
CHECKED
DATE 4/97
SCALE

REVISED 5-16-97

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 39	*	OGLE	10	6
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

*(141-1HB-3)M & (141-1VB)M-3

SHEET 3 OF 3



NOTE: A deck survey conducted on May 14, 1997, indicates probable scaled or delaminated areas as shown on the plan. Quantities for Deck Slab Repair, Partial, Full Depth Type 1 and Full Depth Type II are estimated. Actual location of each type of Deck Slab Repair to be shown by the Resident Engineer for as-built plans.

BILL OF MATERIALS

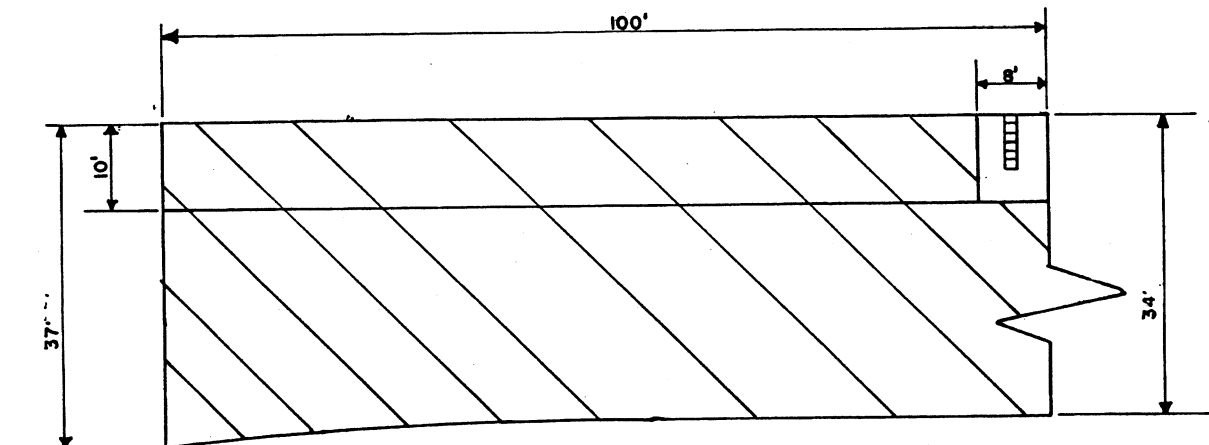
ITEM	UNIT	QUANTITY
* DECK SLAB REPAIR (PARTIAL)	SQ. YD.	125
* DECK SLAB REPAIR (FD-T1)	SQ. YD.	5
* DECK SLAB REPAIR (FD-T2)	SQ. YD.	5
* ESTIMATED QUANTITIES		

SN 071-0058
DISTRICT NO. 2 DIXON
DESIGNED D. FAUSER
DRAWN
CHECKED
DATE 5/97
SCALE 1"=10'

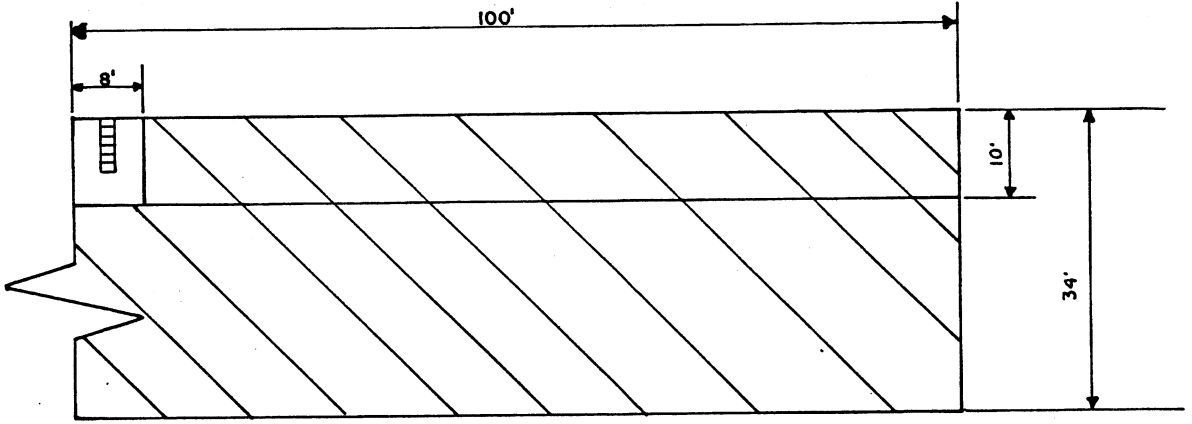
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 39	*	OGLE	10	7
PED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

* (141-1HB-3)M & (141-1VB)M-3

BRIDGE APPROACH PAVEMENT

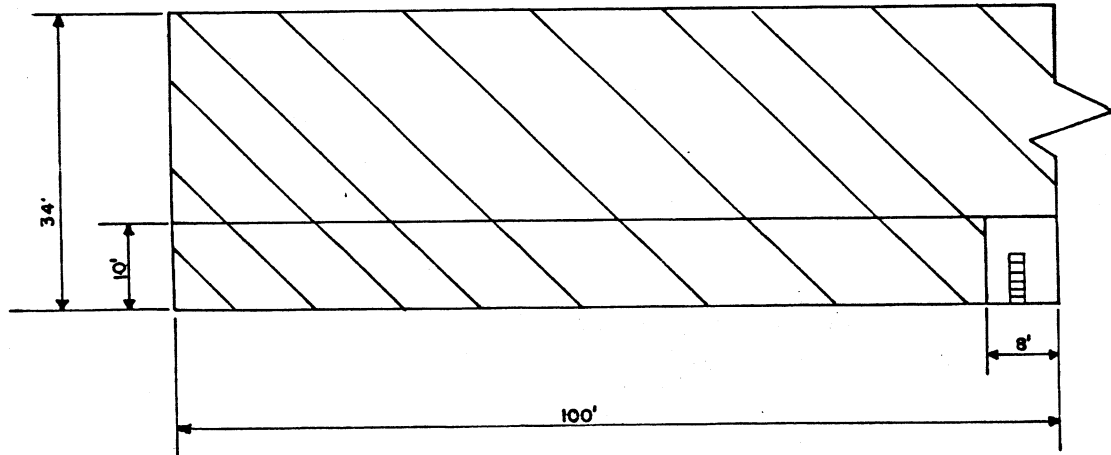


WEST BOUND TRAFFIC

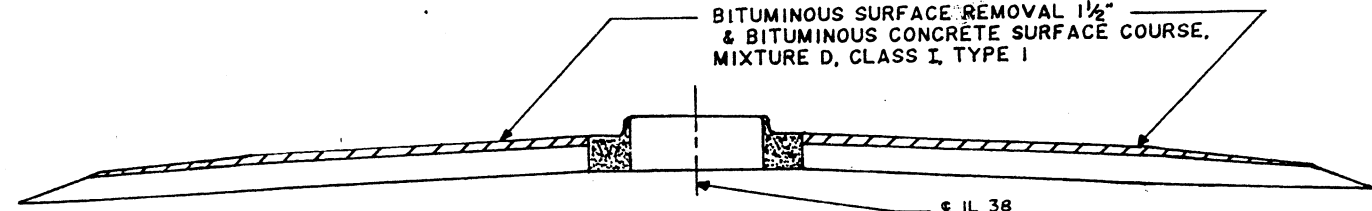
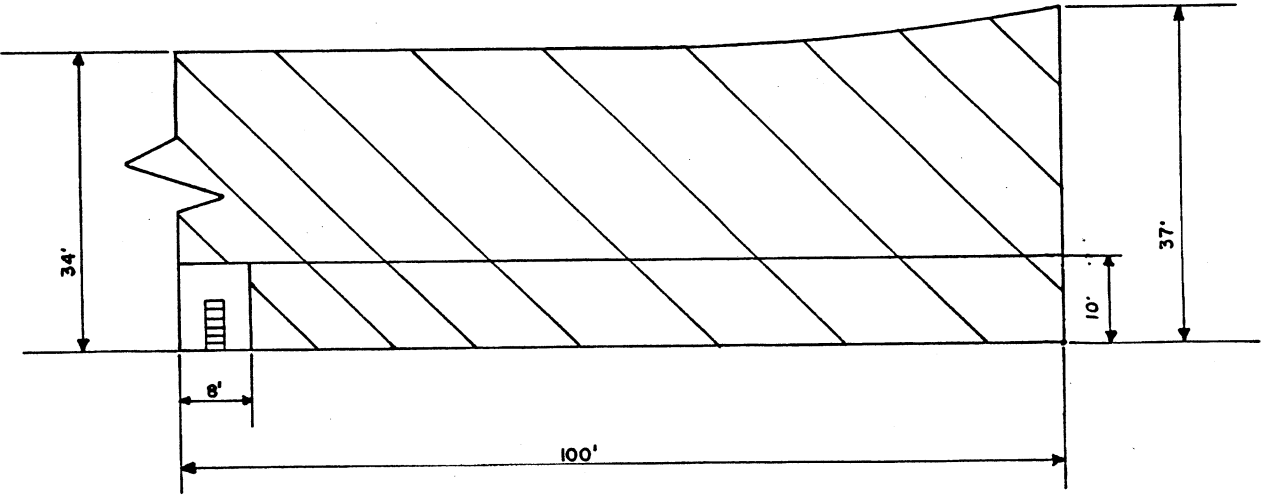


BILL OF MATERIALS

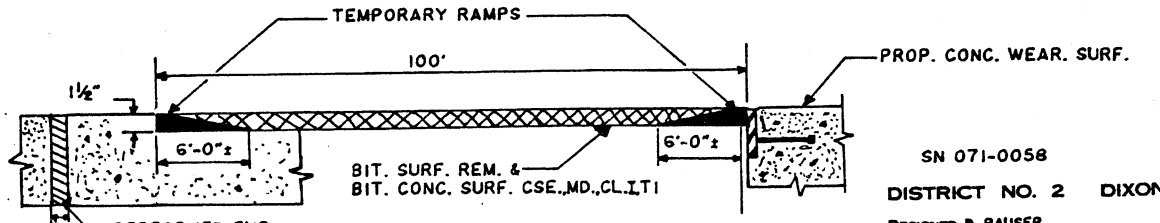
ITEM	UNIT	QUANTITY
BIT. CON. SC "D" CL.I T1	TON	125
BIT. SURF. REM. 1 1/2"	SQ. YD.	1492
TEMPORARY RAMP	SQ. YD.	94



EAST BOUND TRAFFIC



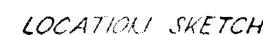
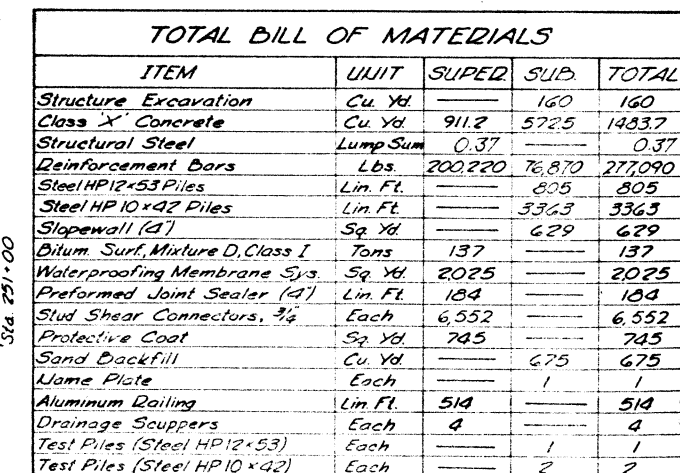
TYPICAL SECTION



BITUMINOUS SURFACE REMOVAL

SN 071-0058
DISTRICT NO. 2 DIXON
DESIGNED P. PAUSER
DRAWN G. MOSHER
CHECKED
DATE 04-29-
SCALE

SHEET NO. 1
12 SHEETS



PLANS PREPARED BY AMERICAN ENG. CO.

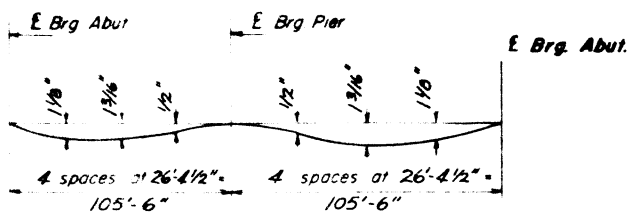
REV. 12-15-18

DESIGNED	<i>MM</i>
CHECKED	<i>MM</i>
DRAWN	<i>CWB</i>
CHECKED	<i>MM</i>

N. 28626

071-0058

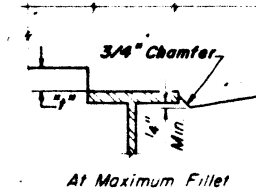
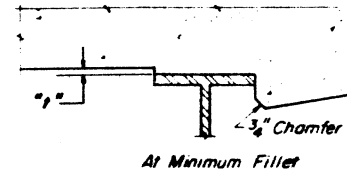
2-120 & 2-121



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.

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



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

FA 412	141-1A	OGLE	628	259	SHEET NO. 2
					12 SHEETS

GIRDER 18 I 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	43.000	825.481	825.481
A	255+46.40		825.538	825.538
BK. W. Abut.	255+33.40		825.604	825.604
Br. W. Abut.	255+32.40		825.608	825.608
B	255+22.40		825.652	825.710
C	255+12.40		825.690	825.797
D	255+02.40		825.723	825.863
E	254+92.40		825.750	825.905
F	254+82.40		825.772	825.922
G	254+72.40		825.788	825.917
H	254+62.40		825.799	825.894
I	254+52.40		825.804	825.861
J	254+42.40		825.804	825.827
K	254+32.40		825.799	825.802
Br. Pier	254+26.90		825.793	825.793
L	254+16.90		825.779	825.790
M	254+06.90		825.760	825.797
N	253+96.90		825.735	825.809
O	253+86.90		825.704	825.815
P	253+76.90		825.669	825.809
Q	253+66.90		825.627	825.782
R	253+56.90		825.580	825.731
S	253+46.90		825.528	825.655
T	253+36.90		825.470	825.556
U	253+26.90		825.407	825.439
Br. E. Abut.	253+21.40		825.370	825.370
BK. E. Abut.	253+20.40		825.363	825.363
V	253+10.40		825.291	825.291
BK. E. Appr. Slab	252+97.40	43.000	825.189	825.189

LONGITUDINAL CONST. JT. 18 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	39.000	825.544	825.544
A	255+46.40		825.600	825.600
BK. W. Abut.	255+33.40		825.666	825.666
Br. W. Abut.	255+32.40		825.671	825.671
B	255+22.40		825.714	825.772
C	255+12.40		825.753	825.860
D	255+02.40		825.785	825.925
E	254+92.40		825.813	825.968
F	254+82.40		825.834	825.984
G	254+72.40		825.851	825.980
H	254+62.40		825.861	825.956
I	254+52.40		825.867	825.924
J	254+42.40		825.867	825.890
K	254+32.40		825.861	825.864
Br. Pier	254+26.90		825.856	825.856
L	254+16.90		825.842	825.853
M	254+06.90		825.822	825.859
N	253+96.90		825.797	825.871
O	253+86.90		825.767	825.878
P	253+76.90		825.731	825.871
Q	253+66.90		825.690	825.845
R	253+56.90		825.643	825.794
S	253+46.90		825.591	825.718
T	253+36.90		825.533	825.619
U	253+26.90		825.470	825.502
Br. E. Abut.	253+21.40		825.432	825.432
BK. E. Abut.	253+20.40		825.426	825.426
V	253+10.40		825.353	825.353
BK. E. Appr. Slab	252+97.40	39.000	825.251	825.251

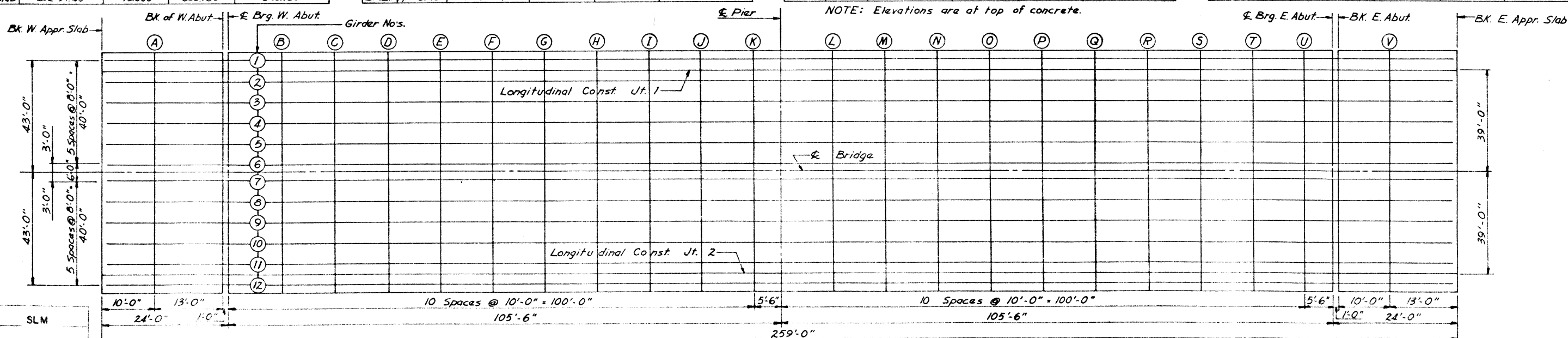
GIRDER 28 I 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	35.000	825.606	825.606
A	255+46.40		825.663	825.663
BK. W. Abut.	255+33.40		825.729	825.729
Br. W. Abut.	255+32.40		825.733	825.733
B	255+22.40		825.777	825.835
C	255+12.40		825.815	825.922
D	255+02.40		825.848	825.988
E	254+92.40		825.875	826.030
F	254+82.40		825.897	826.047
G	254+72.40		825.913	826.042
H	254+62.40		825.924	826.019
I	254+52.40		825.929	825.986
J	254+42.40		825.929	825.953
K	254+32.40		825.924	825.927
Br. Pier	254+26.90		825.918	825.918
L	254+16.90		825.904	825.915
M	254+06.90		825.885	825.922
N	253+96.90		825.860	825.934
O	253+86.90		825.829	825.940
P	253+76.90		825.794	825.934
Q	253+66.90		825.752	825.907
R	253+56.90		825.705	825.856
S	253+46.90		825.653	825.780
T	253+36.90		825.595	825.684
U	253+26.90		825.532	825.564
Br. E. Abut.	253+21.40		825.495	825.495
BK. E. Abut.	253+20.40		825.488	825.488
V	253+10.40		825.416	825.416
BK. E. Appr. Slab	252+97.40	35.000	825.314	825.314

GIRDER 38 I 0

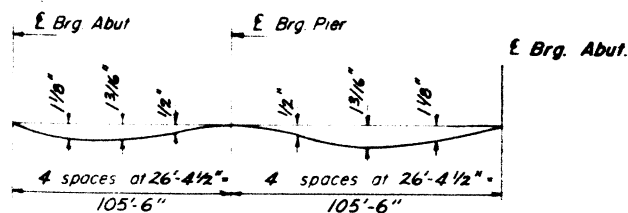
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	27.000	825.731	825.731
A	255+46.40		825.788	825.788
BK. W. Abut.	255+33.40		825.854	825.854
Br. W. Abut.	255+32.40		825.858	825.858
B	255+22.40		825.902	825.960
C	255+12.40		825.940	826.047
D	255+02.40		825.973	826.113
E	254+92.40		826.000	826.155
F	254+82.40		826.022	826.172
G	254+72.40		826.038	826.167
H	254+62.40		826.049	826.144
I	254+52.40		826.054	826.111
J	254+42.40		826.054	826.077
K	254+32.40		826.049	826.052
Br. Pier	254+26.90		826.043	826.043
L	254+16.90		826.029	826.040
M	254+06.90		826.010	826.047
N	253+96.90		825.985	826.059
O	253+86.90		825.954	826.065
P	253+76.90		825.919	826.059
Q	253+66.90		825.877	826.032
R	253+56.90		825.830	825.981
S	253+46.90		825.778	825.905
T	253+36.90		825.720	825.806
U	253+26.90		825.657	825.689
Br. E. Abut.	253+21.40		825.620	825.620
BK. E. Abut.	253+20.40		825.613	825.613
V	253+10.40		825.541	825.541
BK. E. Appr. Slab	252+97.40	27.000	825.439	825.439

NOTE: Elevations are at top of concrete.



DESIGNED	SLM
CHECKED	HMW
DRAWN	BSB
CHECKED	HMW
E-5	8-1-65

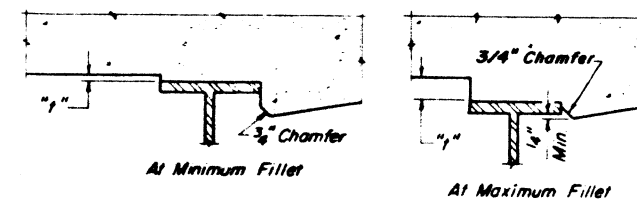
TOP OF SLAB ELEVATIONS
 F.A. RTE. 412 SEC. 141-IHB-3
 OGLE COUNTY
 STA. 1517+30.75 (F.A. RTE 412)



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

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



To determine "i". 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 "i" above top flange of beams.

FILLET HEIGHTS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	141-1A	OGLE	628	260

SHEET NO. 3
 12 SHEETS

GIRDER 489

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	19.000	825.856	825.856
A	255+46.40		825.913	825.913
BK. W. Abut.	255+33.40		825.979	825.979
E. Brg. W. Abut.	255+32.40		825.983	825.983
B	255+22.40		826.027	826.085
C	255+12.40		826.065	826.172
D	255+02.40		826.098	826.238
E	254+92.40		826.125	826.280
F	254+82.40		826.147	826.297
G	254+72.40		826.163	826.292
H	254+62.40		826.174	826.269
I	254+52.40		826.179	826.236
J	254+42.40		826.179	826.202
K	254+32.40		826.174	826.177
E. Pier	254+26.90		826.168	826.168
L	254+16.90		826.154	826.165
M	254+06.90		826.135	826.172
N	253+96.90		826.110	826.184
O	253+86.90		826.079	826.190
P	253+76.90		826.044	826.184
Q	253+66.90		826.002	826.157
R	253+56.90		825.955	826.106
S	253+46.90		825.903	826.030
T	253+36.90		825.845	825.931
U	253+26.90		825.782	825.814
E. Brg. E. Abut.	253+21.40		825.745	825.745
BK. E. Abut.	253+20.40		825.738	825.738
V	253+10.40		825.666	825.666
BK. E. Appr. Slab	252+97.40	19.000	825.564	825.564

GIRDER 588

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	11.000	825.981	825.981
A	255+46.40		826.038	826.038
BK. W. Abut.	255+33.40		826.104	826.104
E. Brg. W. Abut.	255+32.40		826.108	826.108
B	255+22.40		826.152	826.210
C	255+12.40		826.190	826.297
D	255+02.40		826.223	826.363
E	254+92.40		826.250	826.405
F	254+82.40		826.272	826.422
G	254+72.40		826.288	826.417
H	254+62.40		826.299	826.394
I	254+52.40		826.304	826.361
J	254+42.40		826.304	826.327
K	254+32.40		826.299	826.302
E. Pier	254+26.90		826.293	826.293
L	254+16.90		826.279	826.290
M	254+06.90		826.260	826.297
N	253+96.90		826.235	826.309
O	253+86.90		826.204	826.315
P	253+76.90		826.169	826.309
Q	253+66.90		826.127	826.282
R	253+56.90		826.080	826.231
S	253+46.90		826.028	826.155
T	253+36.90		825.970	826.056
U	253+26.90		825.907	825.939
E. Brg. E. Abut.	253+21.40		825.870	825.870
BK. E. Abut.	253+20.40		825.863	825.863
V	253+10.40		825.791	825.791
BK. E. Appr. Slab	252+97.40	11.000	825.689	825.689

GIRDER 687

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	3.000	826.106	826.106
A	255+46.40		826.163	826.163
BK. W. Abut.	255+33.40		826.229	826.229
E. Brg. W. Abut.	255+32.40		826.233	826.233
B	255+22.40		826.277	826.335
C	255+12.40		826.315	826.422
D	255+02.40		826.348	826.458
E	254+92.40		826.375	826.530
F	254+82.40		826.397	826.547
G	254+72.40		826.413	826.542
H	254+62.40		826.424	826.519
I	254+52.40		826.429	826.486
J	254+42.40		826.429	826.452
K	254+32.40		826.424	826.427
E. Pier	254+26.90		826.418	826.418
L	254+16.90		826.404	826.415
M	254+06.90		826.385	826.422
N	253+96.90		826.360	826.434
O	253+86.90		826.329	826.440
P	253+76.90		826.294	826.434
Q	253+66.90		826.252	826.407
R	253+56.90		826.205	826.356
S	253+46.90		826.153	826.280
T	253+36.90		826.095	826.181
U	253+26.90		826.032	826.064
E. Brg. E. Abut.	253+21.40		825.995	825.995
BK. E. Abut.	253+20.40		825.988	825.988
V	253+10.40		825.916	825.916
BK. E. Appr. Slab	252+97.40	3.000	825.814	825.814

E BRIDGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. Appr. Slab	255+56.40	0.000	826.153	826.153
A	255+46.40		826.210	826.210
BK. W. Abut.	255+33.40		826.275	826.275
E. Brg. W. Abut.	255+32.40		826.280	826.280
B	255+22.40		826.324	826.382
C	255+12.40		826.362	826.469
D	255+02.40		826.395	826.534
E	254+92.40		826.422	826.577
F	254+82.40		826.444	826.594
G	254+72.40		826.460	826.589
H	254+62.40		826.471	826.566
I	254+52.40		826.476	826.533
J	254+42.40		826.476	826.499
K	254+32.40		826.471	826.474
E. Pier	254+26.90		826.465	826.465
L	254+16.90		826.451	826.462
M	254+06.90		826.432	826.469
N	253+96.90		826.407	826.481
O	253+86.90		826.376	826.487
P	253+76.90		826.340	826.480
Q	253+66.90		826.299	826.454
R	253+56.90		826.252	826.403
S	253+46.90		826.200	826.327
T	253+36.90		826.142	826.228
U	253+26.90		826.079	826.111
E. Brg. E. Abut.	253+21.40		826.042	826.042
BK. E. Abut.	253+20.40		826.035	826.035
V	253+10.40		825.963	825.963
BK. E. Appr. Slab	252+97.40	0.000	825.861	825.861

NOTE: Elevations are at top of concrete.

DESIGNED	SLM
CHECKED	HMW
DRAWN	BSB
CHECKED	HMW

E-5 8-1-65

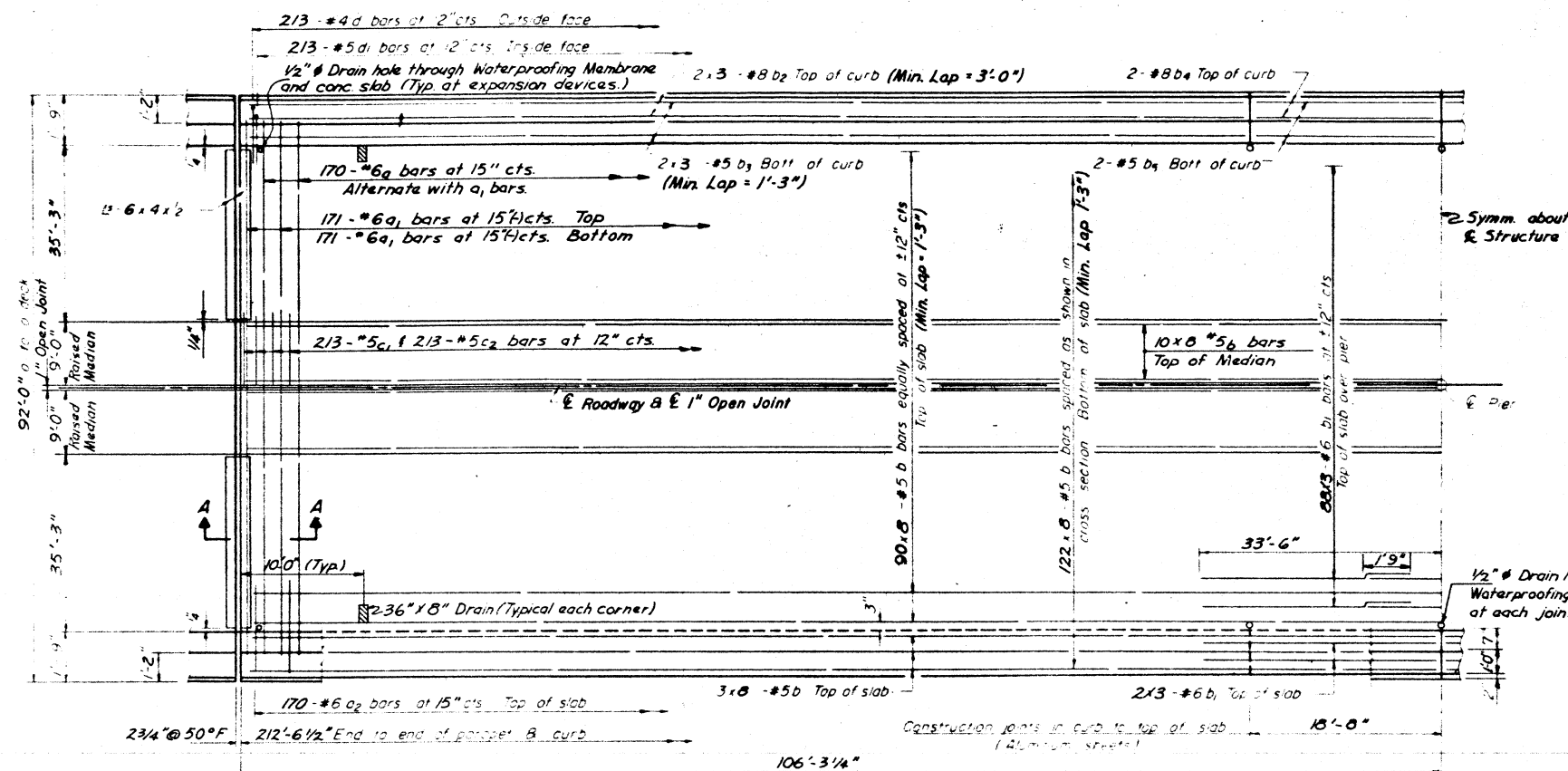
TOP OF SLAB ELEVATIONS
 F.A. RTE. 412 SEC. 141-1HB-3
 OGLE COUNTY
 STA. 1517 + 30.75 (F.A. RTE 412)

NOTE

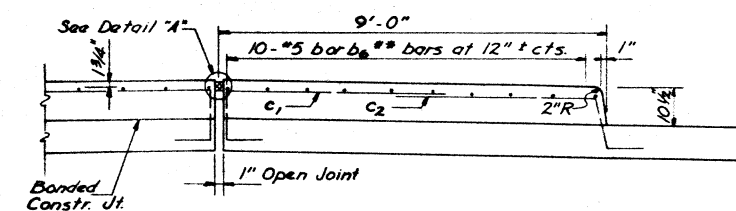
Bars indicated thus 20 x 3 #5 etc indicates 20 lines of bars with 3 lengths per line

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	PROJECT	TOTAL SHEETS	SHEET NO.
FA 412	141-1A	OGLE	628	261
				12 SHEETS

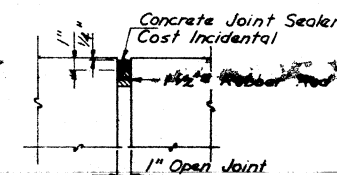


HALF PLAN



MEDIAN SECTION

** b₆ bars for Approach Slab Median Section. Approach Slab Median Reinforcement billed on sheet #5.



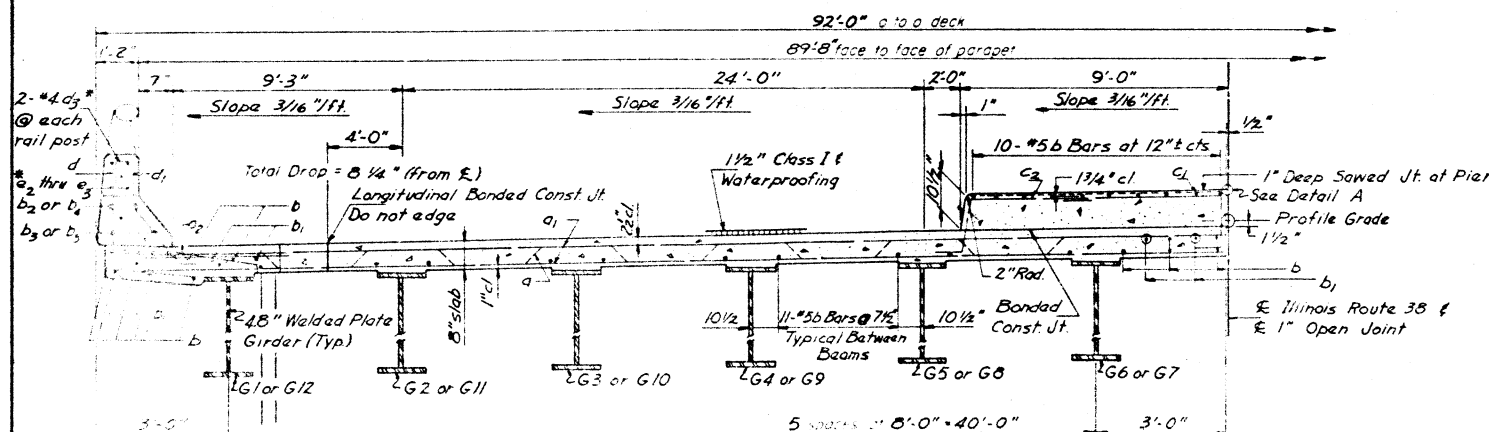
DETAIL "A"

Note: See Sheet 4A for revised Curb Section.

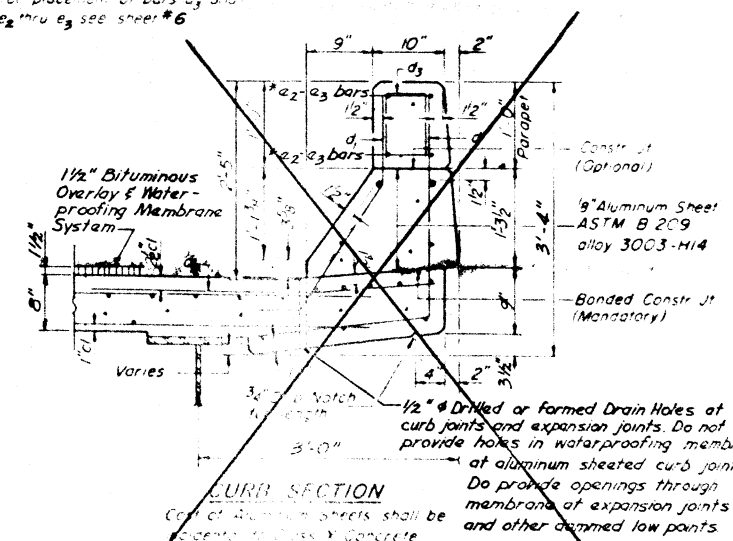
NOTE: For placement of bars d₁ and e₂ thru e₃ see sheet #6

BILL OF MATERIAL

ITEM	QTY	UNIT	PRICE	TOTAL
1	340	#6	46'-6"	
2	684	#6	45'-0"	
3	340	#6	4'-0"	
4	1904	#5	27'-8"	
5	276	#6	23'-6"	
6	24	#8	30'-6"	
7	24	#5	30'-0"	
8	8	#8	18'-6"	
9	8	#5	18'-6"	
10	426	#5	7'-0"	
11	426	#5	6'-10"	
12	426	#4	4'-7"	
13	426	#5	3'-7"	
Reinforcement Bars	149,000			
Class 2 Concrete	6575			



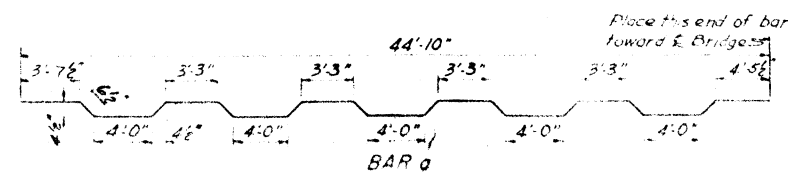
CROSS SECTION



CURB SECTION

1/2" Bituminous Overlay & Waterproofing Membrane System

CL	SLM
CH	HMW
CH	BSB
CH	HMW



Bar c₂

Bar c₁

BAR c₂

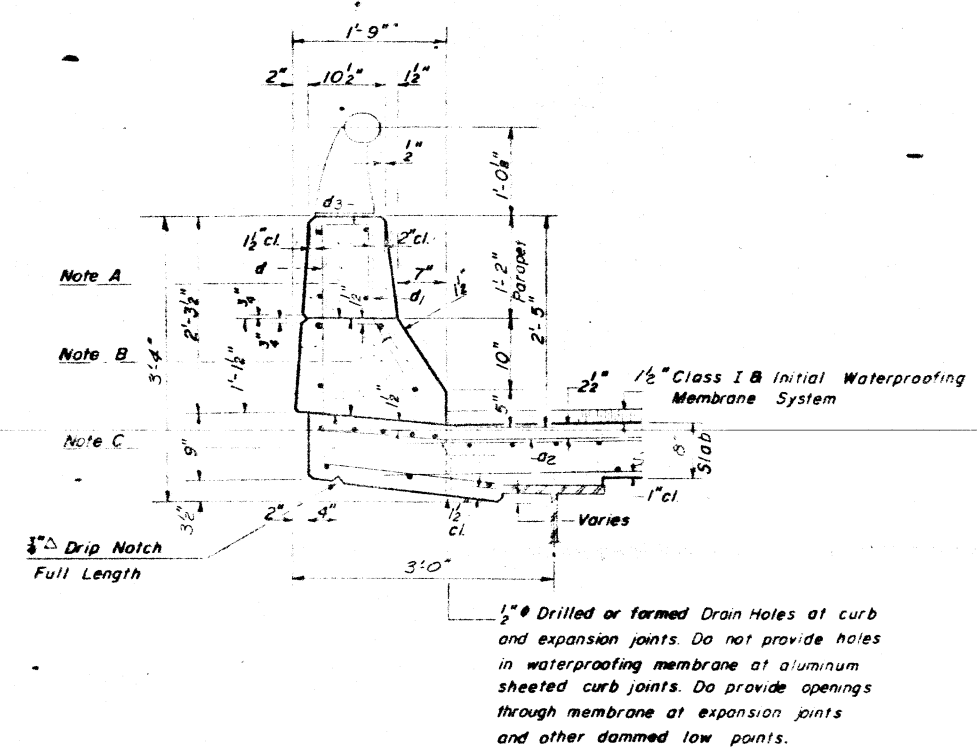
BAR c₁

BAR d₁

SUPERSTRUCTURE
F.A. RTE. 412 SEC. 141-IHB-3
OGLE COUNTY
STA. 1517+30.75 (F.A. RTE. 412)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
A.B.C. P.L. #12	1A1- 1AB-3	OGLE	628	261A
FEE ROAD SHOT NO. 7		CLARKSBURG	FEE. A/S PROJECT.	

SHEET NO. 4A
12 SHEETS

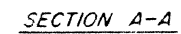


Note C- Bonded Construction Joint
(Mandatory)

CURB SECTION
Cost of Aluminum Sheets shall be
incidental to Class X Concrete.

FA ROUTE 412
SECTION 14-1116-3
OGLE COUNTY
STA. 1517+30.15 (CA. 412)

DESIGNED	EXAMINED
DRAWN	PASSED
CHECKED	APPROVED

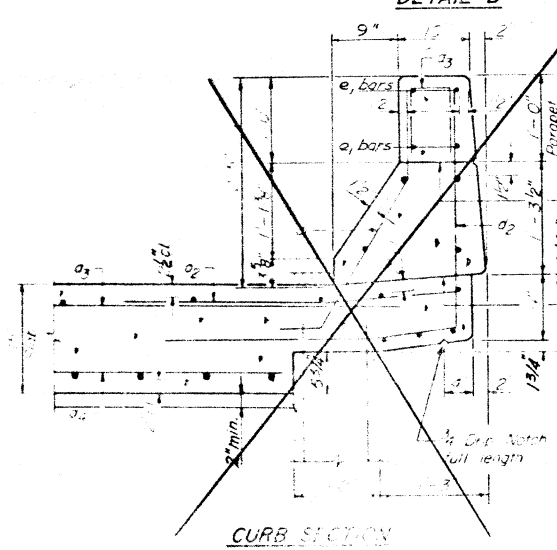


TWO APPR. SLABS
BILL OF MATERIAL

NO.	INCHES	FEET	INCHES	FOOT
22	92	#6	4'-0"	
23	64	#5	4'-6"	
24	100	#6	43'-6"	
25				
26	188	#5	22'-9"	
27	380	#3	25'-3"	
28	8	#8	22'-9"	
29				
31	92	#5	7'-0"	
32	92	#5	6'-10"	
33				
34	80	#5	3'-7"	
35	92	#4	6'-0"	
36	12	#5	4'-8"	
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NOTE:
Two Joint Assemblies required
at each Abut. Two Armor
Angle Assemblies at Appr. Bent

Note: See Sheet 5A for revised Curb Section.



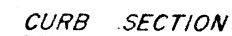
CURB SECTION

BAR d4

APPROACH SLABS
F.A. RTE. 412 SEC. 141-IHB-3
OGLE COUNTY
STA. 1517+30.75 (F.A. RTE 412)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEET'S	SHEET NO.
P. & L. P. & L. 412	141- 1NB-3	OGLE	628	267A
FED. ROAD DIST. NO. 7		ILL. ROAD	FED. AID PROJECT:	

SHEET NO 5A
12 SHEETS



Cost of Aluminum Sheets shall be incidental to Class X Concrete.

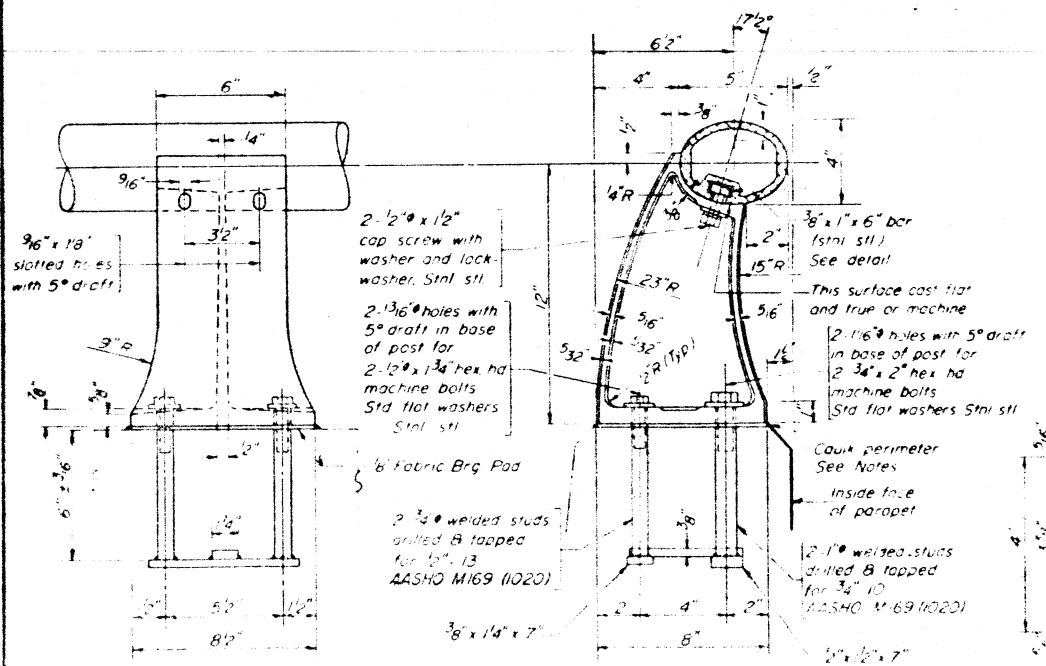
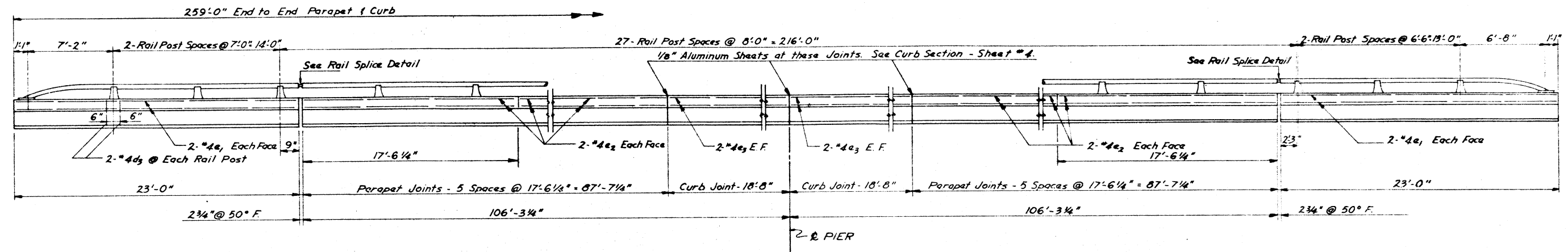
~~Note B-2 Aluminum Sheets ASTM B209~~
~~6061 3003 H14~~

Note C- Bonded Construction Joint
(Mandatory)

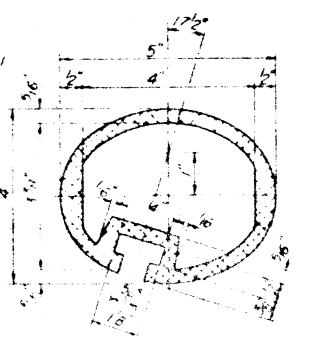
FA ROUTE 412
SECTION 141-1HB-3
OGLE COUNTY
STA. 1517 + 30.75 (FA. 412)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

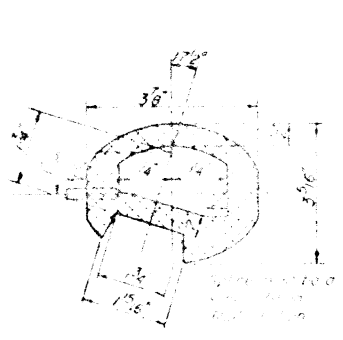
PROJECT NO.	SHEET NO.	DATE	BY	CHECKED	APPROVED
FA 412	141-1A	OGLE	628	263	
SHEET NO. 6					
12 SHEETS					



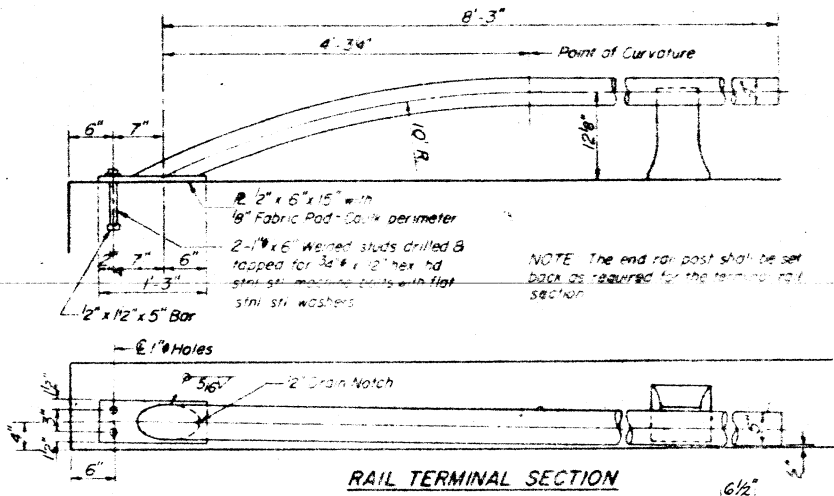
RAIL POST DETAILS



SEC. THRU ELLIPTICAL RAIL SECTION



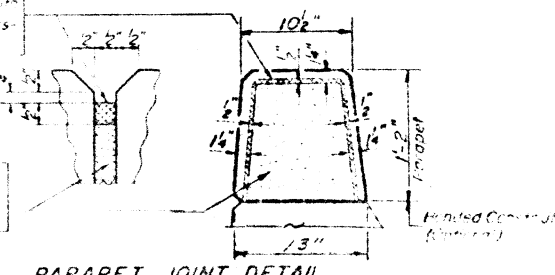
SEC. THRU SPLICE



RAIL TERMINAL SECTION

Two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer.

1/2" Preformed Cork Joint Filler (in accordance with Articles 715.07 or 715.08) Cost incidental.



PARAPET JOINT DETAIL

NOTES:
All Aluminum 2 1/2" x 4" 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 20' to 100' radius or less, the modular lengths may be required, but shall be attached to a minimum of 2 posts.
All joints in rail shall be spliced per detail.
Provide 1/2" x 4" x 2" Aluminum Shims for 25% of the Posts. All joints shall be attached 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 Sealing Pad shall have same dimensions as base of post.
Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6061-T3 with min. yield 35 ksi, min. tensile 35 ksi, and elongation of 15% in 2 inches.

PARAPETS & RAILS
BILL OF MATERIAL

Qty	Unit	Description	Grade
136	#4	2" x 4" Rail	□
16	#4	2" x 4" Post	□
80	#4	2" x 4" Beam	□
16	#4	2" x 4" Sheet	□
1550	sq. ft.	Reinforcement Bars	
167	cu. yd.	Class X Concrete	
514	sq. ft.	Aluminum Parapet	

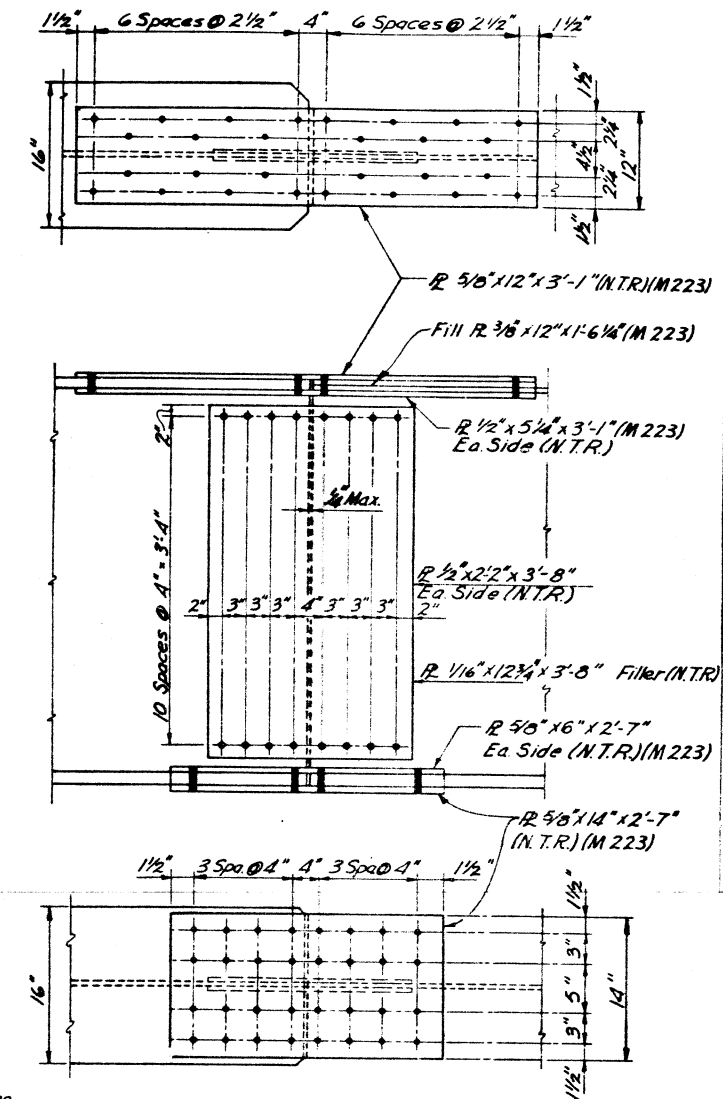
ALUMINUM PARAPET

FA RTE. 412 SEC 141-1HB-3
OGLE COUNTY
STA. 1517+30.75 (FA RTE 412)

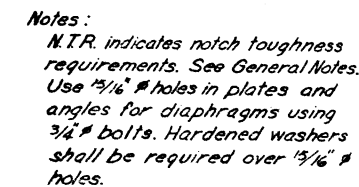
DESIGNED	SLM
CHECKED	HMW
DRAWN	BSB
CHECKED	HMW

R-17
1/2" x 4" x 2"

DATE NO	SECTION	COUNTY	TOWNSHIP	SHEET NO 7
FA412	1411A	OGLE	628 264	12 SHEETS
FED ROAD DIST NO 7	FED 1.5.100.107			



SPLICE DETAILS
(Splice bolts are 7/8" ϕ A325 Bolts)



SECTION B-B

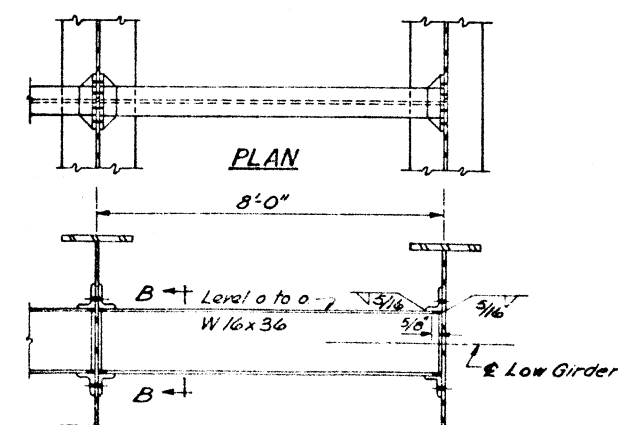
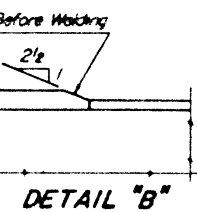
er

STRUCTURAL STEEL

F.A. RTE. 412 SEC. 141-IHB-3

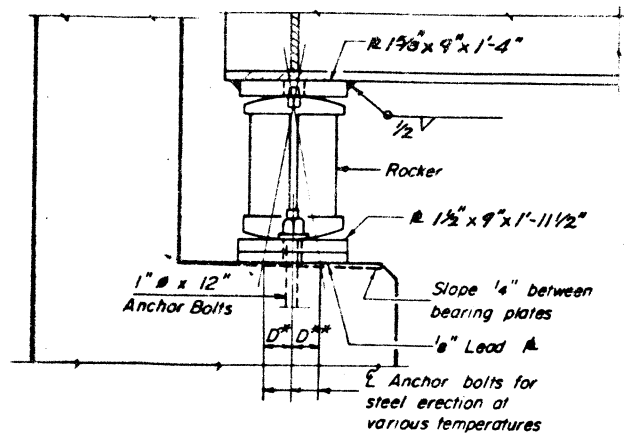
OGLE COUNTY

STA. 1517+30.75 (F.A. RTE. 412)

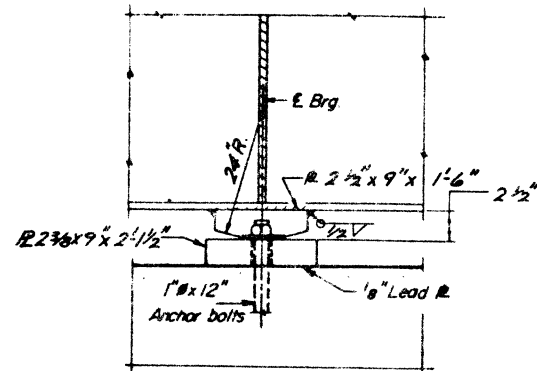


DIAPHRAGM DI

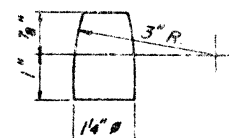
DESIGNED	SLM
CHECKED	H.M.W.
DRAWN	SLM
CHECKED	H.M.W.



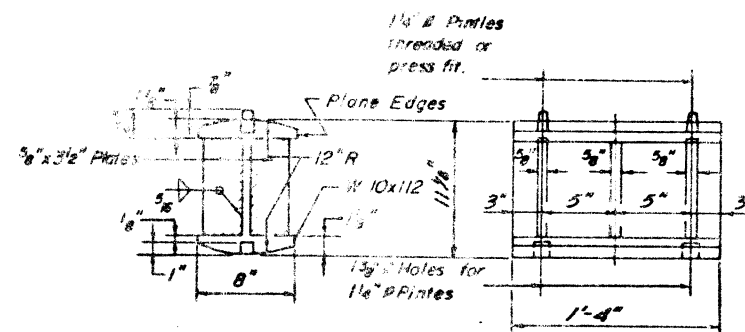
ELEVATION



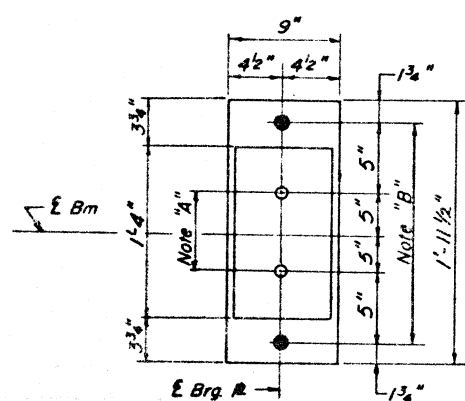
ELEVATION



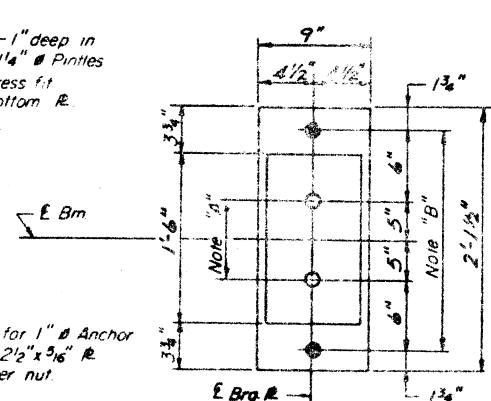
PINTLE



ROCKER



PLAN
AT ABUTMENT



PLAN
AT PIER

Note "A"
1 $\frac{3}{8}$ " $\varnothing$ Holes - 1" deep in
top R for 1 $\frac{1}{4}$ " $\varnothing$ Pintles
Thread or press fit
pintles in bottom R.

Note "B"
1 1/2" Ø Holes for 1" Ø Anchor
Bolts - 2 1/2" x 2 1/2" x 5/16" &
Washers under nut.

I_s and S_s are the moment of inertia and section modulus of the steel section. I_c and S_c are the moment of inertia and the section modulus of the composite section used in computing f_s .
VR is the maximum LL+impact shear range in a span.

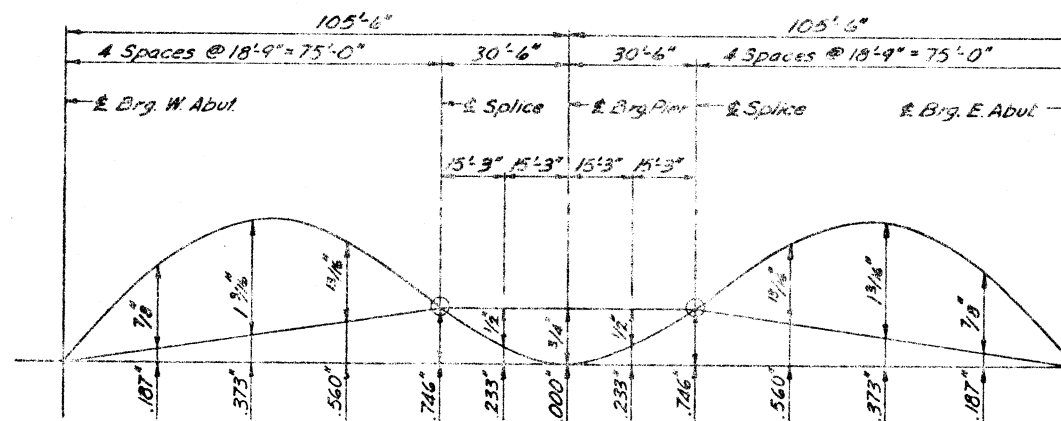
	0.4 Span 1	Pier	0.6 Span 2
I_g (in ⁴)	188842	42514.3	188842
S_g (in ³)	870.7	16431	870.7
D_L (k/ft)	1.006	1.152	1.006
M_{DL} (ft-k)	681.8	1744.0	681.8
I_g (ksi)	9.40	12.74	9.40
I_c (in ⁴)	372288	—	372288
S_c (in ³)	11271	—	11271
S_{CDL} (k/ft)	0.521	0.521	0.521
M_{CDL} (ft-k)	426.46	780.31	426.46
I_c (ksi)	454	570	454
I_c (in ⁴)	516419	—	516419
S_c (in ³)	12344	—	12344
M_{LL} (ft-k)	973.10	838.43	973.10
M_{IMP} (ft-k)	211.09	182.89	211.09
M_{TOTAL} (ft-k)	1184.19	1021.54	1184.19
I_{gLL} (ksi)	1151	746	1151
I_{gTOTAL} (ksi)	2545	25.90	2545
VR	62.4	—	62.4

	Abutment	Pier
$R_{OL} (k)$	57.9	214.2
$R_{LL} (k)$	51.4	83.5
$Imp. (k)$	11.2	18.1
$R_{TOTAL} (k)$	120.5	315.8

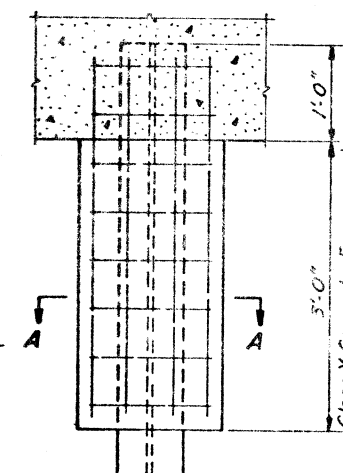
BEARING ASSEMBLY DETAILS

NOTES FOR SETTING OF ANCHOR BOLTS
AT EXPANSION BEARINGS

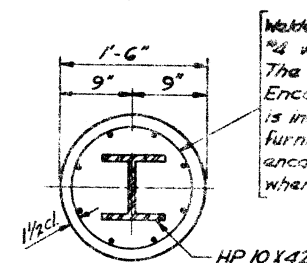
- EXPANSION BEAMS
- a) D* (Side of brg away from fixed brg)
D* = $\frac{1}{8}$ " per each 100' of expansion for
every 15° fall below the normal temp.
of 50°F
D** (Side of brg toward fixed brg)
D** = $\frac{1}{8}$ " per each 100' of expansion for
every 15° rise above the normal temp.
of 50°F
- b) After beams have been erected and dimensions
D* & D** determined, holes shall be drilled and
anchor bolts shall be grouted in place. All fixed
anchor bolts may be built into the masonry.



CAMBER DIAGRAM



STEEL PILE ENCASEMENT



SECTION A-A

Welded wire fabric 6" X 6" mesh
#4 wire - weighing 58 7/100 sq ft.
The cost of Class X Concrete
Encasement and Reinforcement
is incidental to the cost of
furnishing piles. Forms for
encasement may be omitted
when soil conditions will permit.

DESIGNED <i>SLM</i>
CHECKED <i>HMW</i>
DRAWN <i>SLM</i>
CHECKED <i>HMW</i>

I-2-G 3-29-71

TOP OF WEB ELEVATIONS *												
	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12
± Brg W. Abut.	824.816	824.941	825.066	825.191	825.316	825.441	825.441	825.316	825.191	825.066	824.941	824.816
± Splice #1	824.941	825.066	825.191	825.316	825.441	825.566	825.566	825.441	825.316	825.191	825.066	824.941
± Pier	824.914	825.039	825.164	825.289	825.414	825.539	825.539	825.414	825.289	825.164	825.039	824.914
± Splice #2	825.010	825.135	825.260	825.385	825.510	825.635	825.635	825.510	825.385	825.260	825.135	825.010
± Brg E. Abut.	824.570	824.703	824.828	824.953	825.078	825.203	825.203	825.078	824.953	824.828	824.703	824.570

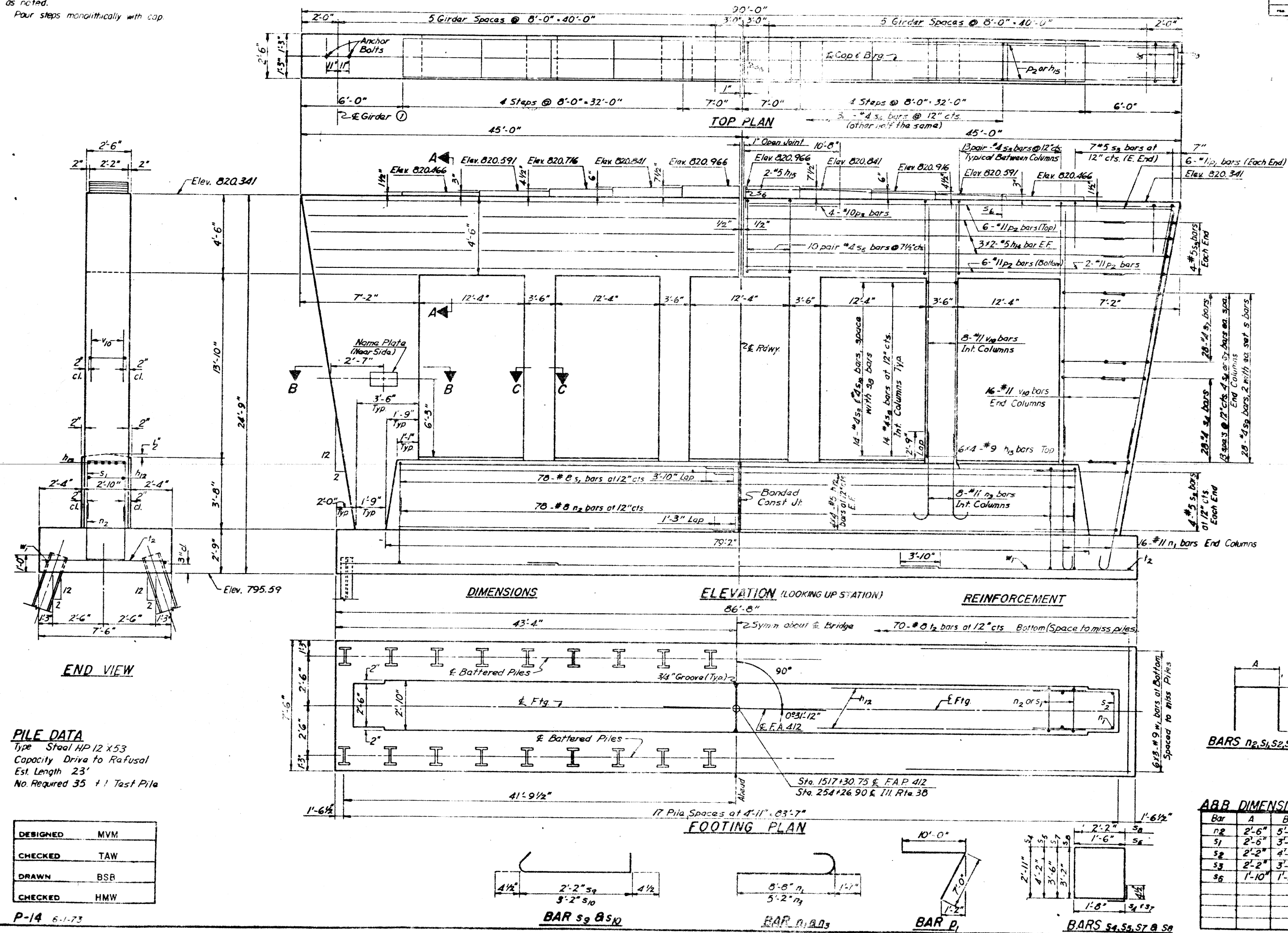
* For Fabrication Only

BEARING DETAILS
F.A. RTE. 412 SEC. 141-1HB-3
OGLE COUNTY
STA. 1517+30.75 (F.A. RTE. 412)

Pour steps monolithically with cap

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	141-1A	OGLE	628	267
FEE, ROAD DIST. NO. 1		ALL SHEETS	FEE, THE PROJECT	

SHEET NO. 10
12 SHEETS



BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
#12	32	#5	20'-4"	—
#15	24	#9	22'-2"	—
#14	24	#5	22'-0"	—
#15	4	#5	30'-6"	—
#1	32	#11	10'-3"	U
#2	78	#8	12'-6"	U
#3	32	#11	6'-9"	U
P1	12	#11	17'-0"	7
P2	28	#11	41'-6"	—
P3	8	#10	10'-6"	—
S1	78	#8	9'-6"	□
S2	8	#5	11'-6"	□
S3	22	#5	3'-6"	□
S4	56	#4	9'-11"	□
S5	144	#4	12'-1"	□
S6	62	#4	5'-0"	□
S7	56	#4	11'-1"	□
S8	56	#4	11'-5"	□
S9	112	#4	2'-11"	U
S10	56	#4	3'-11"	U
I2	70	#8	7'-3"	—
V10	64	#11	17'-3"	—
W1	18	#9	31'-3"	—
Class X Concrete			Cu Yds	166.0
Reinforcement Bars			Lbs	29,500
Steel HP12 X 53 Piles			Lin. Ft	805
Test Piles (Steel)			Each	1

[illegible]

PIER DETAILS
F.A. RTE. 412 SEC. 141-1HB-3
OGLE COUNTY
STA. 1517+30.75 (F.A. RTE. 412)

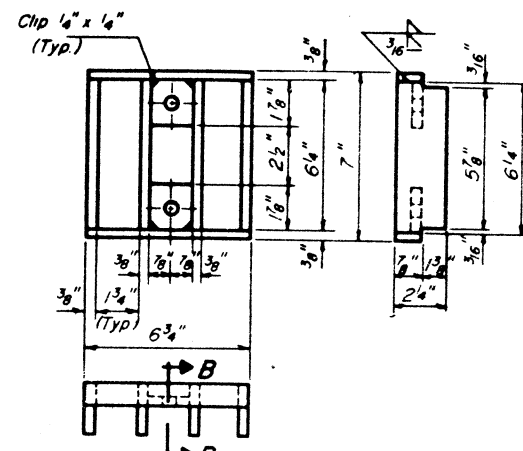
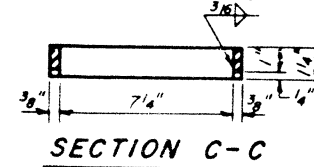
PILE DATA
Type *Steel HP 12 X 53*
Capacity *Drive to Refusal*
Est. Length *23'*
No. Required *35 + 1 Test Pile*

DESIGNED	MVM
CHECKED	TAW
DRAWN	BSB
CHECKED	HMW

P-14 6-1-73

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FA412	141-1A	OGLE	628	268
FED ROAD DIST NO 7		N.LINEN FED A/E PER JAW		

SHEET NO. 11
12 SHEETS



CLEANOUT GRATE

Top View Dimensions:

- Overall Width: 8"
- Overall Length: 11 1/8"
- Distance from Left Edge to First Vertical Line: 5 5/8"
- Distance Between Vertical Lines: 3/8"
- Distance from Last Vertical Line to Right Edge: 1 1/8"
- Distance from Left Edge to First Horizontal Line: 1 1/8"
- Distance Between Horizontal Lines: 7 1/4"
- Distance from Last Horizontal Line to Right Edge: 5 7/8"
- Distance from Left Edge to First Vertical Line (Typ): 3"
- Distance Between Vertical Lines (Typ): 3"
- Distance from Last Vertical Line to Right Edge (Typ): 2 1/2"

Side View Dimensions:

- Overall Height: 3 1/8"
- Distance from Top to First Horizontal Line: 5/8"
- Distance Between Horizontal Lines: 1 1/4"
- Distance from Last Horizontal Line to Bottom: 1 1/8"
- Distance from Left Edge to First Vertical Line: 1 1/8"
- Distance Between Vertical Lines: 3/8"
- Distance from Last Vertical Line to Right Edge: 5 5/8"
- Distance from Left Edge to First Vertical Line (Typ): 3"
- Distance Between Vertical Lines (Typ): 3"
- Distance from Last Vertical Line to Right Edge (Typ): 2 1/2"

Front View Dimensions:

- Overall Width: 8"
- Overall Length: 11 1/8"
- Distance from Left Edge to First Vertical Line: 5 5/8"
- Distance Between Vertical Lines: 3/8"
- Distance from Last Vertical Line to Right Edge: 1 1/8"
- Distance from Left Edge to First Horizontal Line: 1 1/8"
- Distance Between Horizontal Lines: 7 1/4"
- Distance from Last Horizontal Line to Right Edge: 5 7/8"
- Distance from Left Edge to First Vertical Line (Typ): 3"
- Distance Between Vertical Lines (Typ): 3"
- Distance from Last Vertical Line to Right Edge (Typ): 2 1/2"

Notes:

- Clip 1/4" x 1/4" (Typ)
- 3/16"
- 1 1/8"
- 5 5/8"
- 3/8"
- 1 1/4"
- 7 1/4"
- 8"
- 11 1/8"
- 5 7/8"
- 7 1/4"
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- 3"
- 3"

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B, or A-501 Structural Steel Tubing.
All other shapes, plates and bars shall conform to the requirements of AASHTO M 183.
Bolts, studs, washers and nuts shall conform to the requirements of ASTM A-307.
The Main Grate, Cleanout Grate, Frame and Downspout shall be galvanized after shop fabrication in accordance with AASHTO M111 & ASTM A-385.
All bolts, washers and nuts shall be galvanized in accordance with AASHTO M232.
The Waterproofing Membrane System shall be installed such that the membrane covers the frame, flanges and extends down into the frame with the grates placed on top of the membrane.
Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS".

[illegible]

Technical drawing of a bracket assembly. The drawing shows a side view of a bracket with a vertical support and a horizontal arm. Key dimensions and components are labeled:

- Top Flange:** A horizontal flange at the top with a width of $1\frac{3}{4}"$. It has a central hole with a diameter of $\frac{5}{8}"$ and a distance of $\frac{3}{8}"$ from the center to the edge.
- Vertical Support:** A vertical support with a total height of $8"$. It has a top flange thickness of $1\frac{1}{4}"$, a middle section of $3\frac{3}{4}"$, and a bottom flange of $2\frac{1}{2}"$.
- Horizontal Arm:** A horizontal arm extending from the vertical support. It has a thickness of $\frac{3}{16}"$ and is spot welded to the vertical support.
- Components:** A $\frac{1}{2}"$ Hex Nut is shown on the horizontal arm, and a Spot Welded (Typ) joint is indicated between the arm and the vertical support.

Diagram showing the elevation view of a beam-to-column connection. The beam is a C8x11.5 channel. Dimensions include: total width 3'-2 1/4", distance between column faces 2'-5", column face width 6", and various offsets and clearances such as 1 1/2", 6 3/8", 1 3/8", 1'-8 1/8", 5", 1 3/8", 1 1/2", 2 1/4", 1 1/2", 9", and 10 1/2". A force F is applied to the beam flange.

Diagram of a frame structure with dimensions and member labels:

- Vertical dimensions on the left: 8" and 3" 22".
- Horizontal dimensions at the bottom: 2'-4" and 3'-2 3/4".
- Member labels:
 - $L\ 2\frac{1}{2}" \times 1\frac{1}{2}" \times 3\frac{1}{16}"$ (top left horizontal member)
 - $L\ 2\frac{1}{2}" \times 2\frac{1}{2}" \times 3\frac{1}{16}"$ (top right horizontal member)
 - $\phi\ 3\frac{1}{16}" \times 6"$ (diagonal member)
- Supports:
 - Point D: Fixed support at the top left corner.
 - Point E: Roller support at the bottom right corner.
- Applied loads:
 - Point G: Downward point load at the top right corner.
 - Point C: Uniformly distributed load (UDL) of 115 lb/ft acting vertically downwards on the top right horizontal member.
- Other dimensions: 10 3/4" is shown as a horizontal offset from the right end of the frame to the vertical line of action of point load G.

[illegible][illegible]

Technical drawing of a rectangular plate with dimensions and a central cutout. The overall dimensions are 10 1/2" in height and 10 3/4" in width. The central cutout is 6" wide and 2 1/2" high. The plate is made of C8 x 15 channel steel. The drawing includes dimensions for the plate thickness (3/4"), the cutout dimensions (6" x 2 1/2"), and the overall dimensions (10 1/2" x 10 3/4"). The plate is labeled "C8 x 15". The drawing also shows the dimensions for the plate's thickness (3/4") and the overall dimensions (10 1/2" x 10 3/4"). The plate is labeled "C8 x 15". The drawing also shows the dimensions for the plate's thickness (3/4") and the overall dimensions (10 1/2" x 10 3/4"). The plate is labeled "C8 x 15".

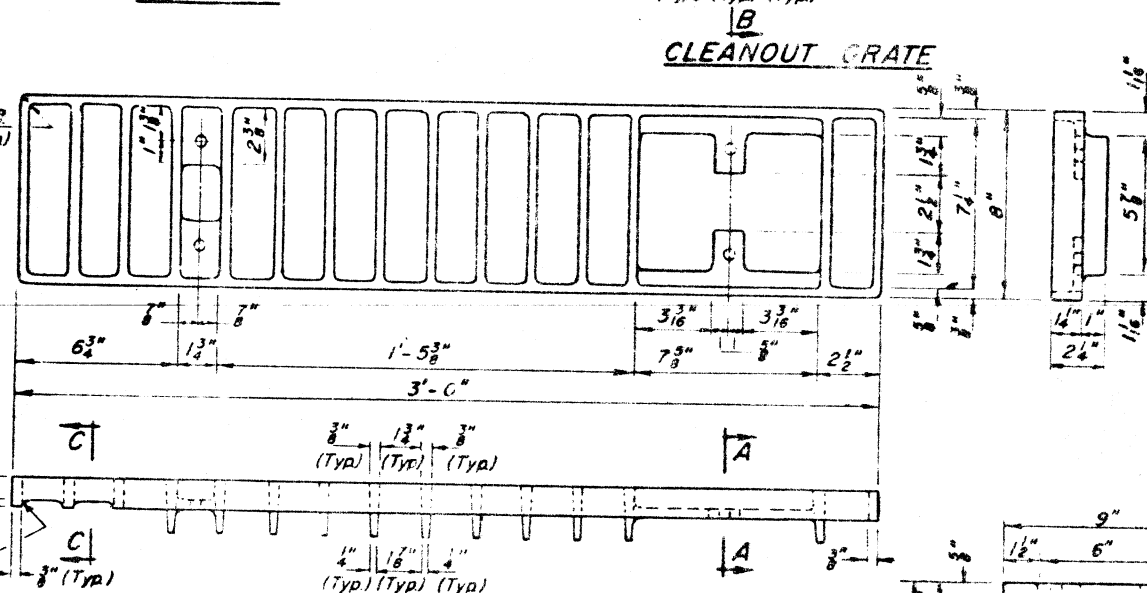
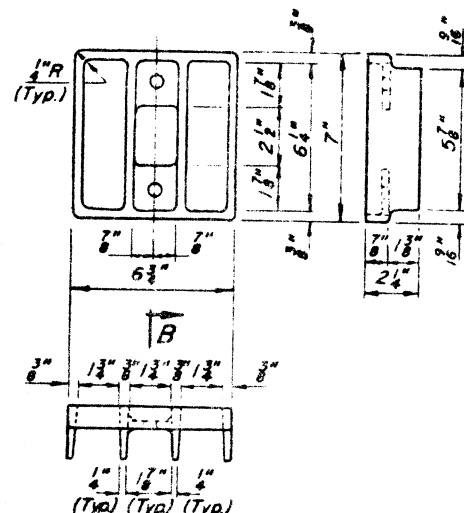
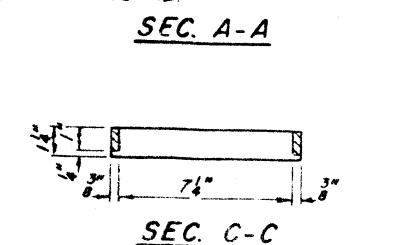
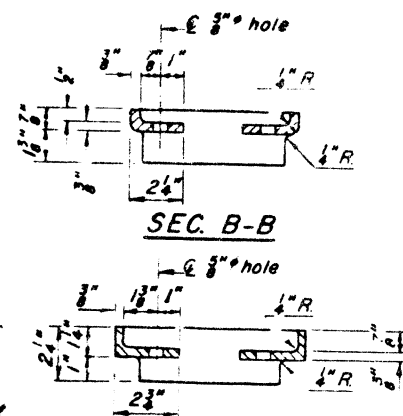
ITEM	UNIT	QUANTITY
Drainage Scooper	Each	4

F.A. RTE. 412 SEC. 141-1HB-3
OGLE COUNTY
STA. 1517+30.75 (F.A. RTE. 412)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
FA 412	141-1A	OGLE	628	639
1517+30.75				

SHEET NO 12
12 SHEETS



NOTES:
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 30.
Bolts, washers and nuts shall conform to the requirements of ASTM A-307.

All bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232.

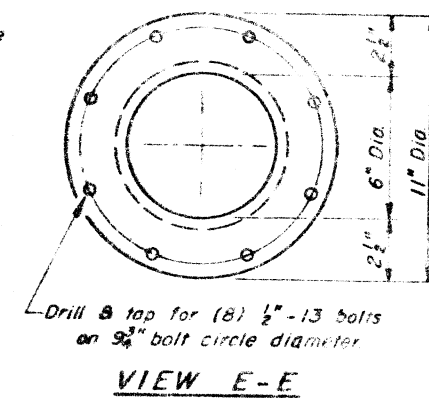
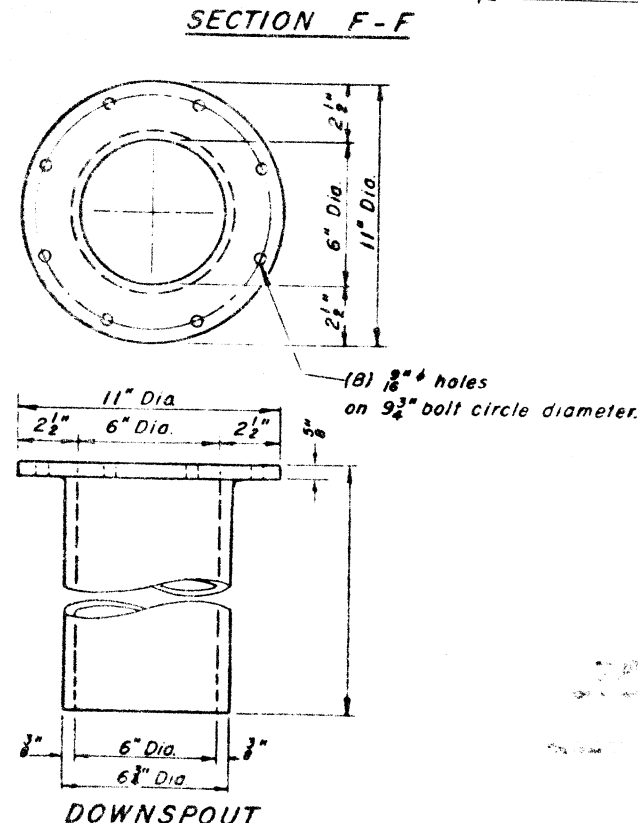
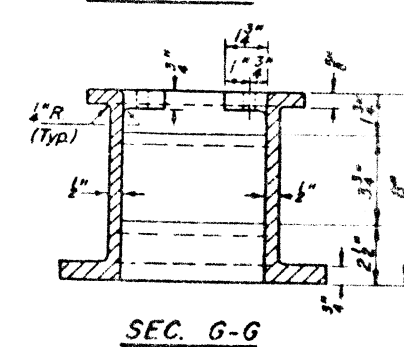
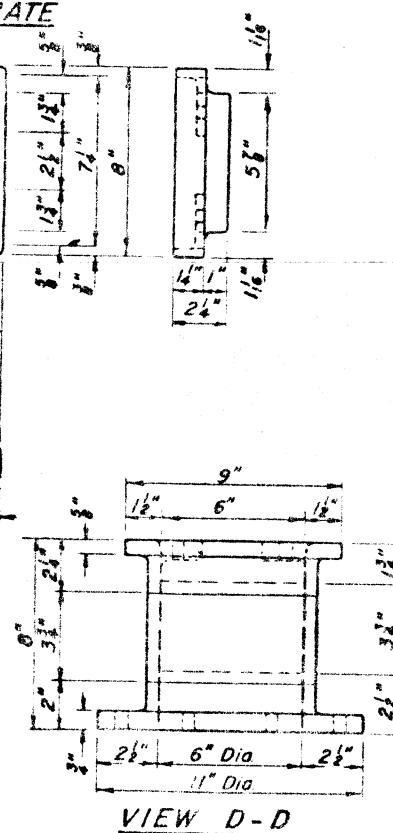
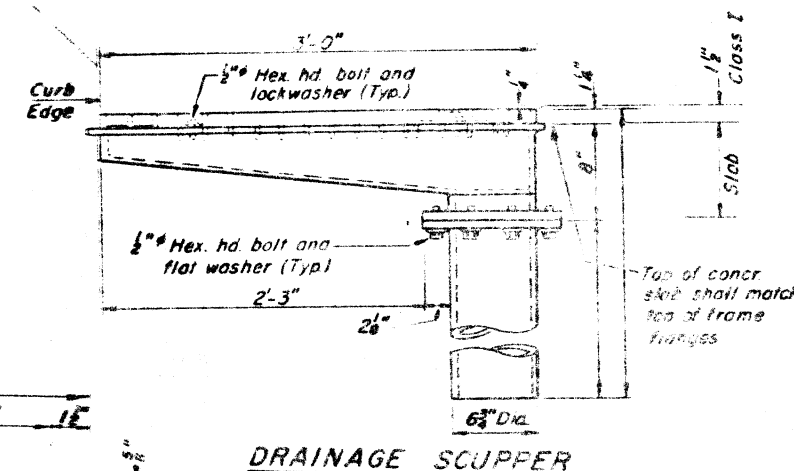
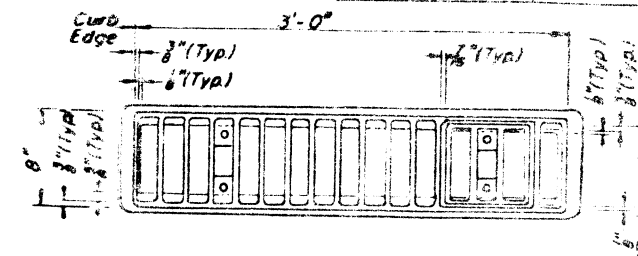
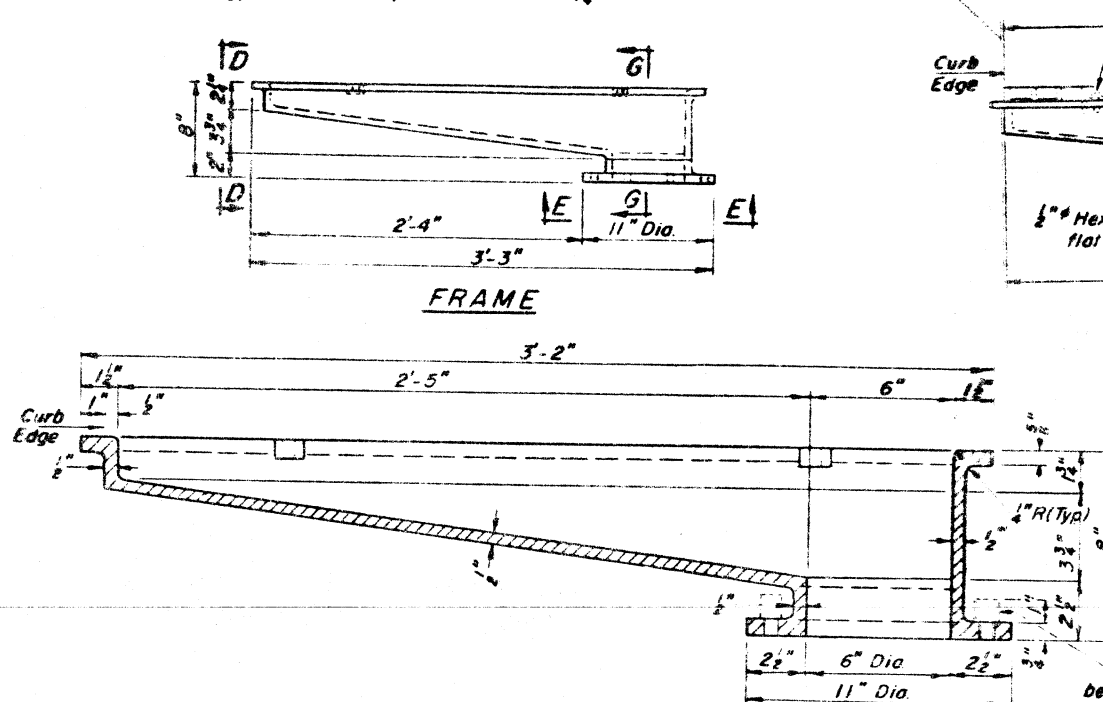
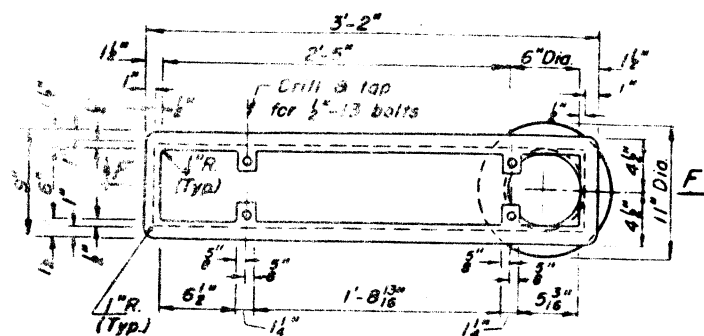
The waterproofing membrane system shall be installed such that the membrane covers the frame flanges and extends down into the frame with the grates placed on top of the membrane.

Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS".

The Contractor may use at his option steel frames and steel grates or cast frames and cast grates, but will not be allowed to use steel grates with cast frames nor cast grates with steel frames.

DESIGNED	MVM
CHECKED	HMW
DRAWN	BSB
CHECKED	HMW

DS-2 7-23-75 (W.T. to inside of exterior stringer flange shall not be > 3'-11")



(Sheet 2 of 2)
**ALTERNATE - CAST IRON
DRAINAGE SCUPPER**

F.A. RTE. 412 SEC. 141-1HB-3
OGLE COUNTY
STA. 1517+30.75 (F.A. RTE. 412)