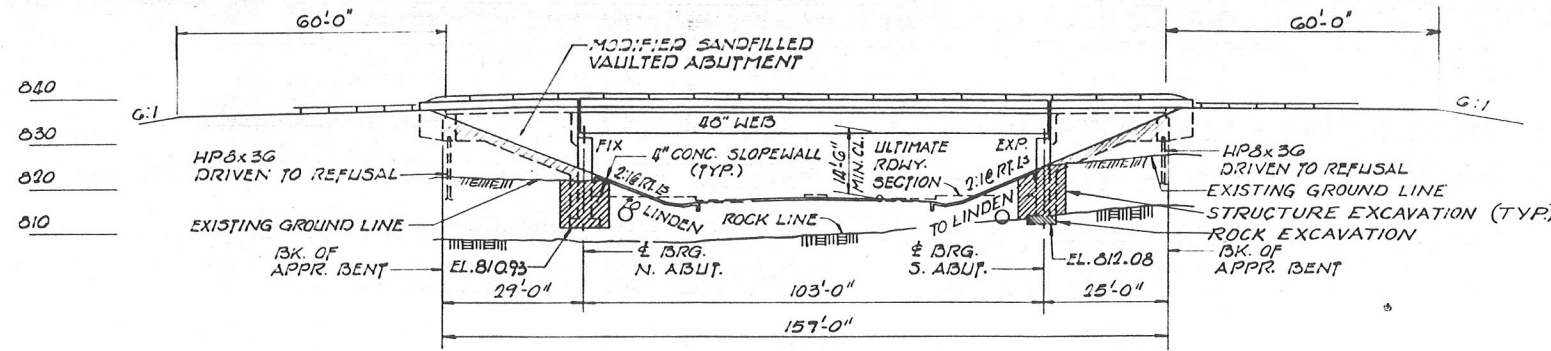


ORIGINAL 101-0139
PLANS

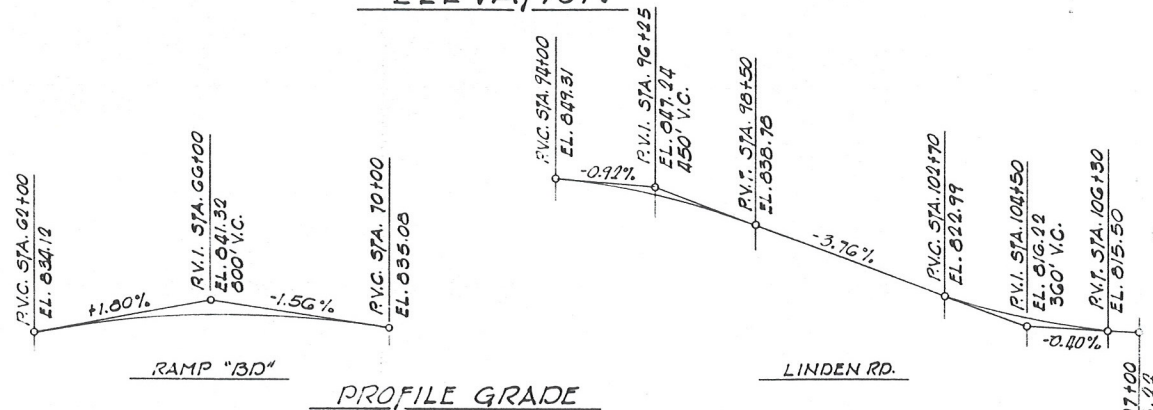
NO EXISTING STRUCTURE
BENCHMARK: TOP OF CONC. R.O.W. MARKER ON N. SIDE OF LINDEN RD.
APPROX. 170' E. OF $\frac{1}{2}$ F.A. RTE #12. ELEV. = 834.707

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	201-3HB-5	WINNEBAGO	347	146
STA. TO STA.				
F.N.R. & REG. NO. 4 ILLINOIS			PROJECT	

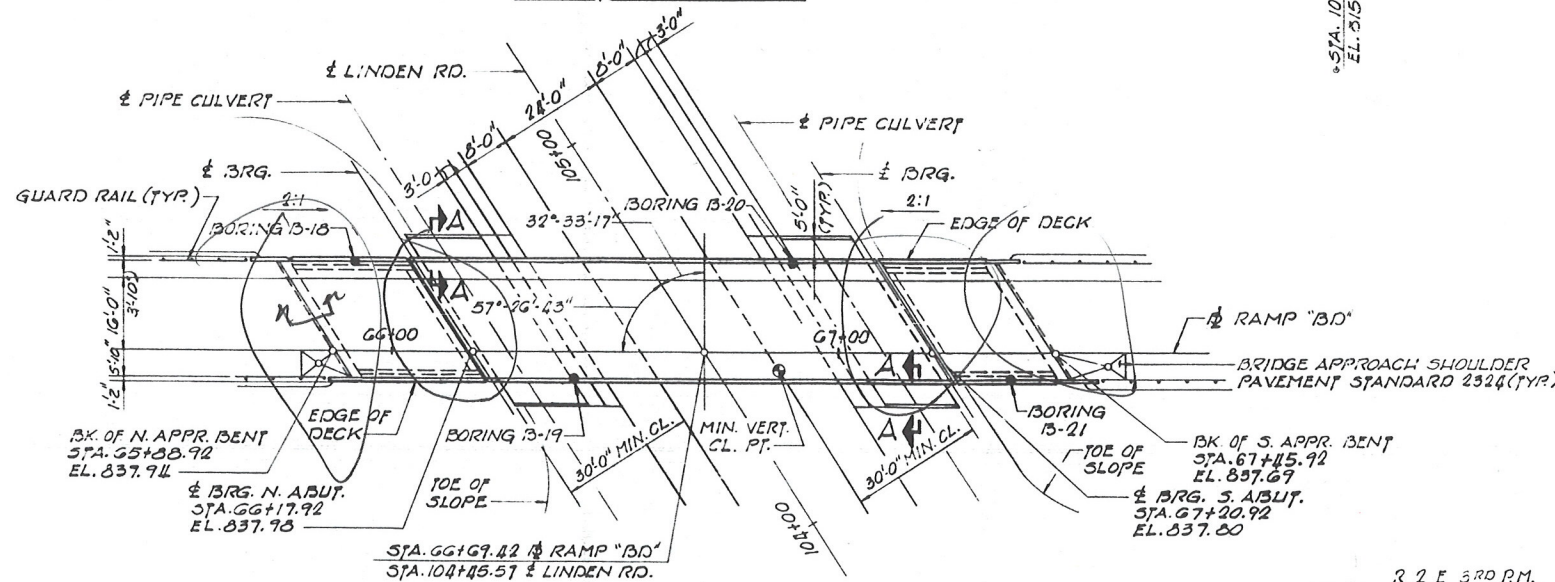
SHEET 1 OF 12



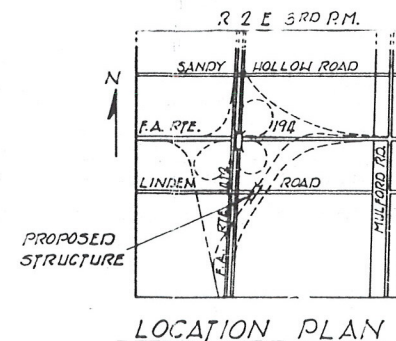
ELEVATION



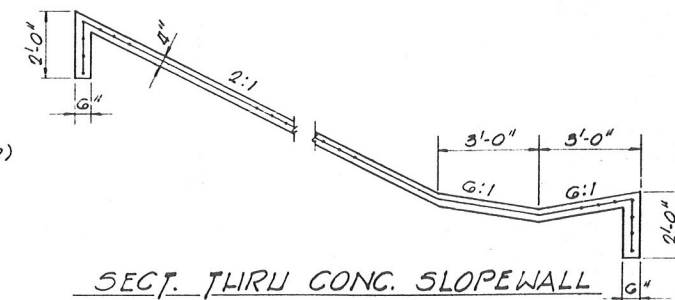
PROFILE GRADE



PLAN



LOCATION PLAN



SECT. THRU CONC. SLOPEWALL

DESIGN LOAD
L.L. = HS20-44
FUTURE D.L. = 25 P.S.F.
DESIGN STRESSES
CONCRETE (CAST IN PLACE)
F_c = 3,500 P.S.I.

DECK SLAB
F_y = 60,000 psi
F_c = 3,500 psi

F_c = 1,400 P.S.I. (SUBSTRUCTURE, APPRO. S:ABS)
F_c = 1,000 P.S.I. (WITH EARTH PRESSURE)
v = 0.95IFE (FOOTINGS)
n = 10

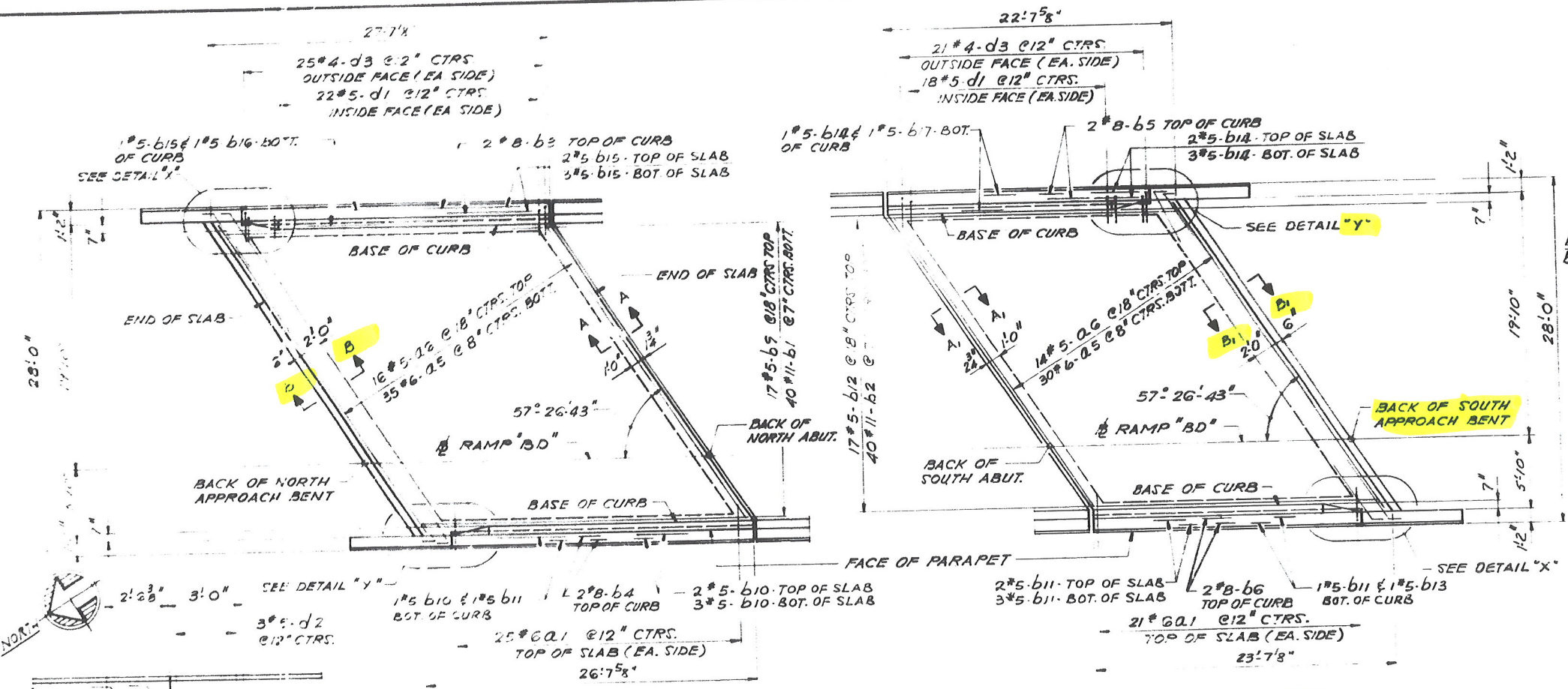
REINFORCING STEEL
F_s = 20,000 P.S.I. (Substructure & Appr. Slab)
STRUCTURAL STEEL
F_s = 20,000 P.S.I. (M183)
MAX. L.L. DEFLECTION
L/1200 (COMPOSITE)
DESIGN SPECIFICATIONS
AASHTO: 1973, AND INTERIMS
AS APPLICABLE

APPROVED
SEAL

David R. Bradley
#1994

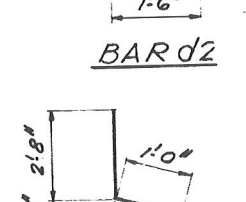
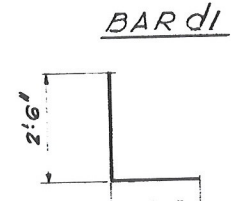
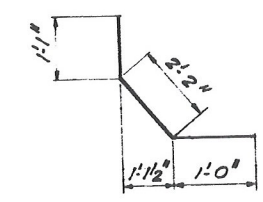
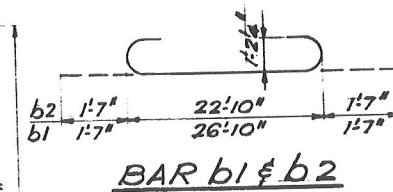
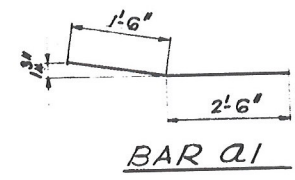
ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
JOB NO. 1605-H
233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

GENERAL PLAN AND ELEVATION
RAMP BD
OVER LINDEN ROAD
PROJECT
SECTION 201-3HB-5
WINNEBAGO COUNTY
STATION 66+69.42



SPAN 1 **SPAN 3**

DECK REINFORCEMENT PLAN SPANS 1 & 3

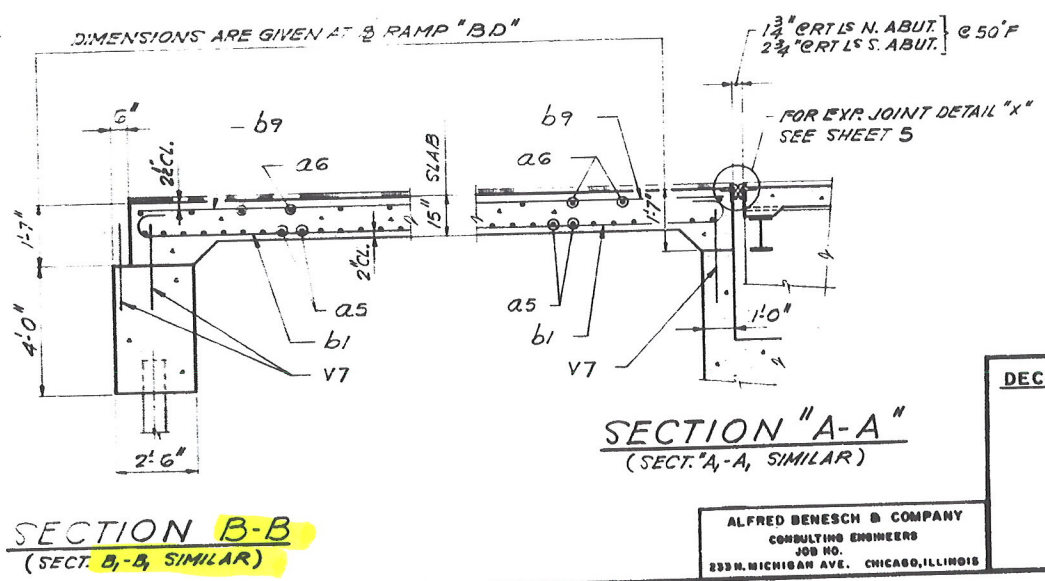
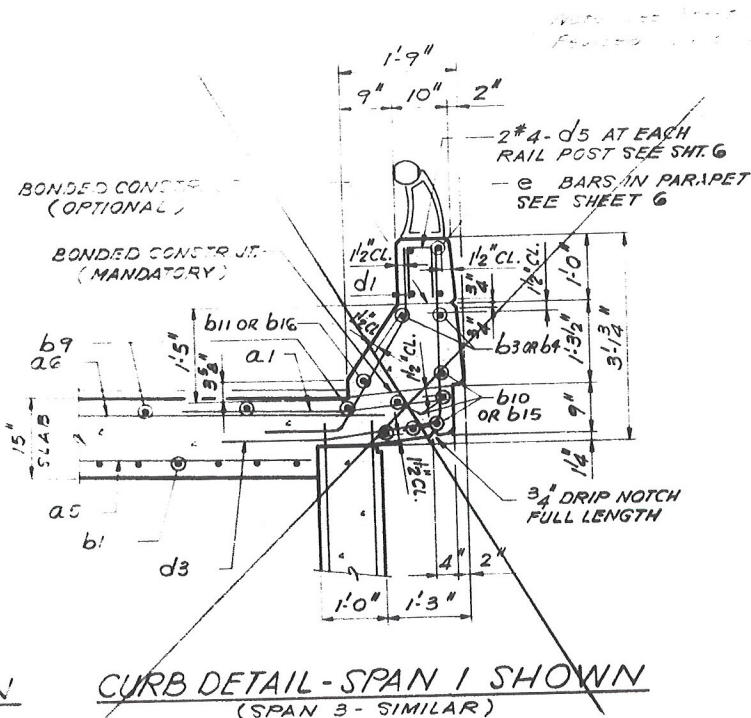
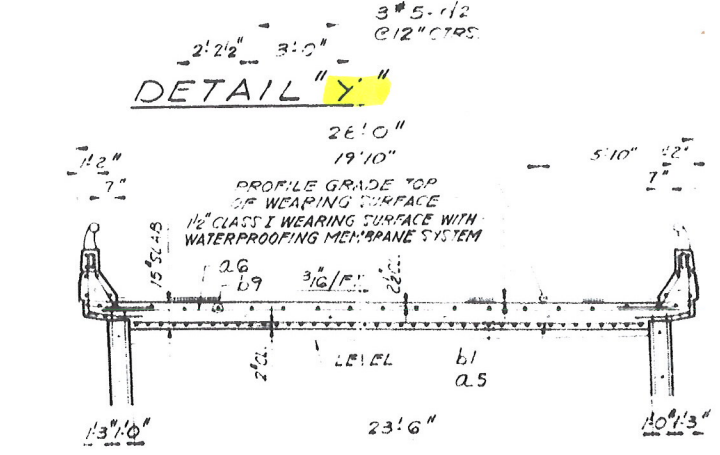
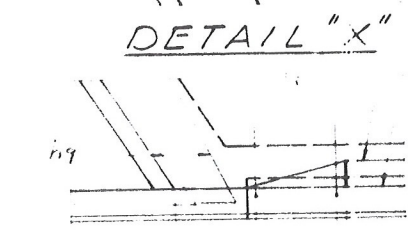


BILL OF MATERIAL

BAR	No. REQUIRED	SIZE	LENGTH	SHAPE
a1	50	#6	4'-0"	—
a5	35	#6	27'-0"	—
a6	16	#5	30'-0"	—
b1	40	#11	30'-0"	U
b2	—	#11	26'-0"	U
b3	2	#8	24'-9"	—
b4	2	#8	24'-0"	—
b5	—	#8	20'-0"	—
b6	—	#8	20'-9"	—
b7	17	#5	26'-9"	—
b10	6	#5	24'-0"	—
b11	1	#5	20'-9"	—
b12	—	#5	22'-9"	—
b13	—	#5	18'-0"	—
b14	—	#5	20'-0"	—
b15	6	#5	24'-9"	—
b16	1	#5	21'-9"	—
b17	—	#5	17'-0"	—
d1	44	#5	4'-3"	L
d2	6	#5	4'-0"	L
d3	50	#4	6'-0"	L
ITEM		UNIT	SPAN 1	SPAN 3
CLASS X CONCRETE		CU. YD.	37	310
REINFORCEMENT BARS		LBS.	10,096	8,697

NOTE:
ALL BAR DIMENSIONS ARE OUT TO OUT.

NOTE:
PARAPET REINFORCEMENT AND CLASS X CONCRETE ARE BILLED ON SHT. #6



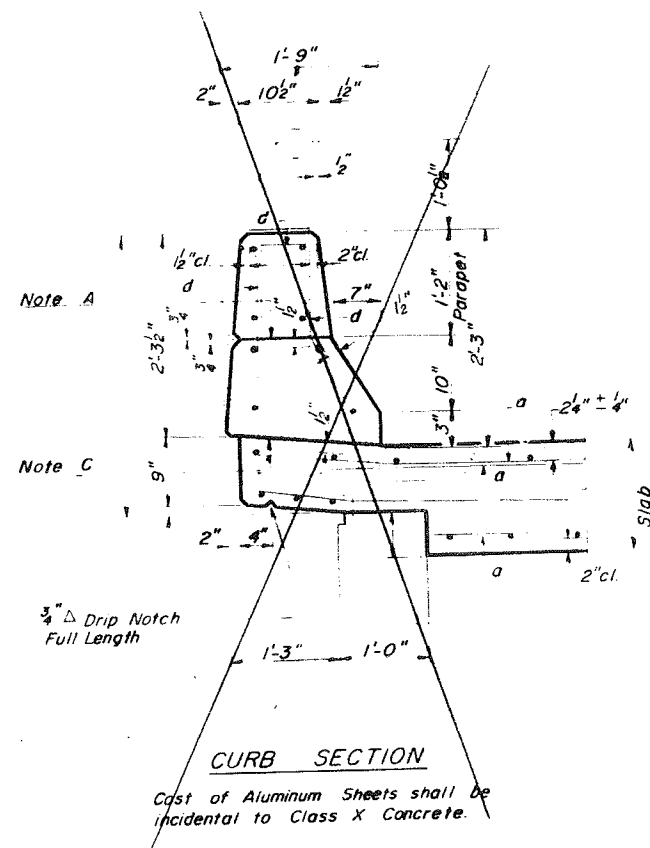
DECK CROSS SECTION - SPAN 1 SHOWN
(SPAN 3 - SIMILAR)

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
JOB NO.
233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

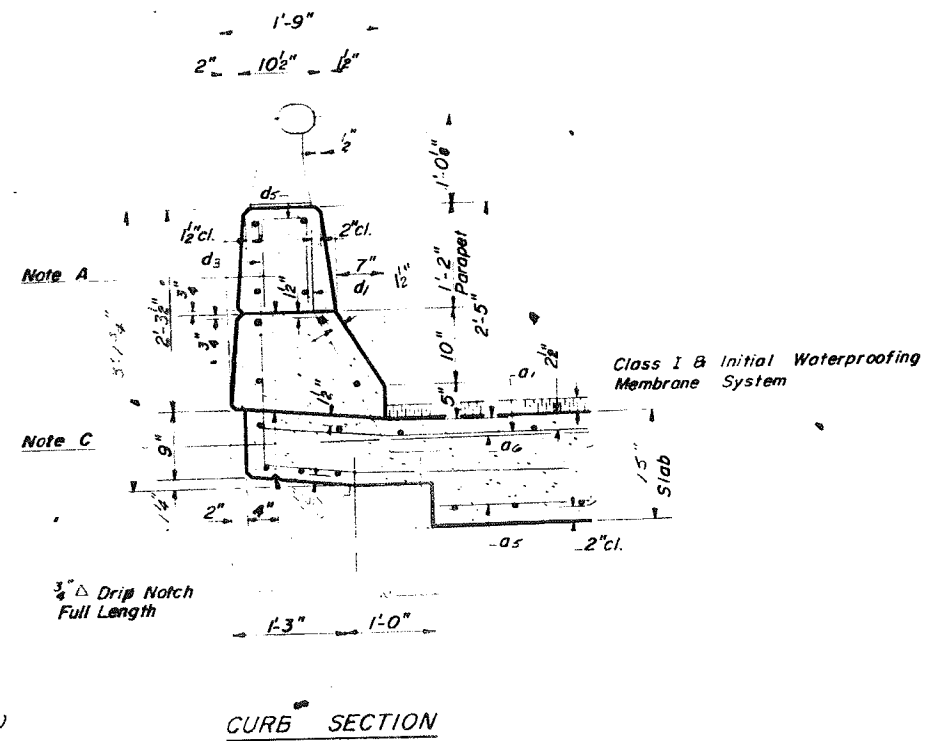
DECK REINFORCEMENT PLAN - SPANS 1 & 3
RAMP "BD"
OVER LINDEN ROAD
PROJECT
SECTION 201-3HB-5
WINNEBAGO COUNTY
STATION 66+69.42

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
201-3HB-5	3A7	WINNEBAGO	149	12 SHEETS



Note: All edges shall have $\frac{3}{4}$ " chamfer.



Note A - Bonded Construction Joint (Optional)

Note C - Bonded Construction Joint (Mandatory)

APPROACH SLABS
REVISED PARAPET CONFIGURATION

SPANS 1 & 3
RAMP 8D
SECTION 201-3HB-5
WINNEBAGO COUNTY
STA. 66 + 69.42

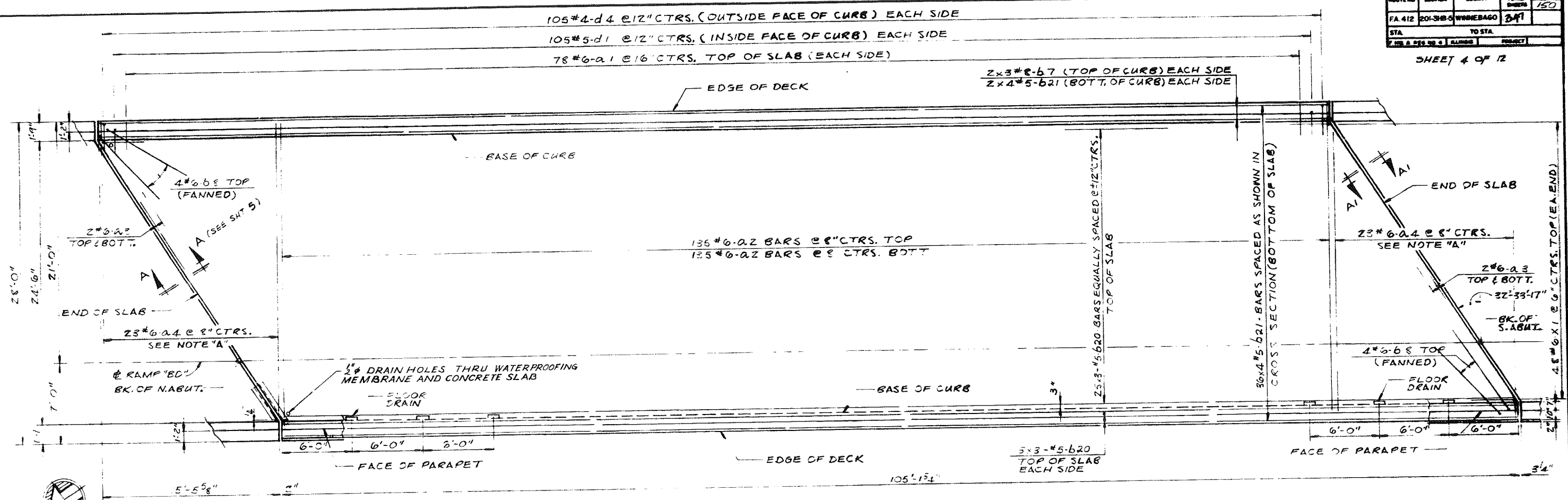
19

DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

D DERRINGER

DATE	BY	CHECKED	SCALE	SHEET NO.
FA 412	201-3HB-9	WINNEBAGO	3/4"	150
STA.	TO STA.		PROJECT	
66+69.42	66+69.42		RAMP	

SHEET 4 OF 12



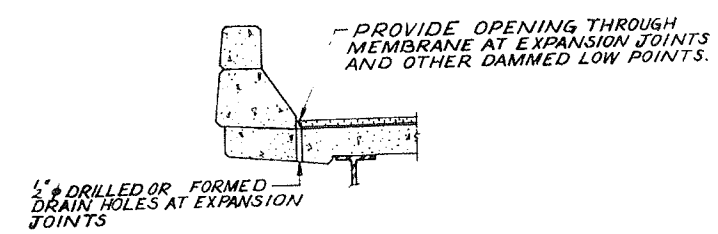
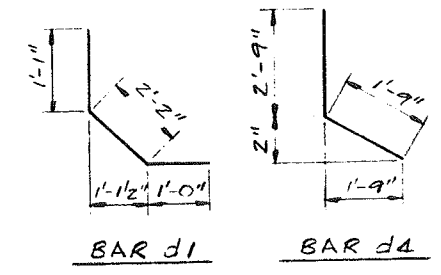
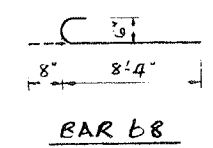
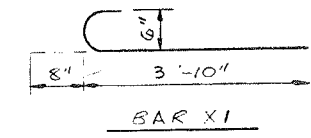
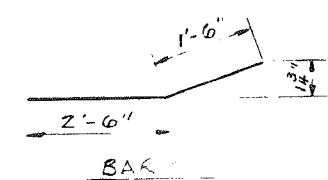
DECK REINFORCEMENT PLAN-SPAN 2

NOTE "A"
ORDER BARS FULL LENGTH, CUT IN FIELD TO FIT SKEW FOR TOP BARS. USE THE REMAINDER FOR BOTTOM BARS.

NOTE:
BAR INDICATED THUS 20-3-#5 ETC. INDICATES 20 LINES OF BARS WITH 3 LENGTHS PER LINE.

BILL OF MATERIAL

BAR	NO	SIZE	LENGTH	SHAPE
a1	156	#6	2'-0"	—
a2	270	#6	26'-0"	—
a3	8	#6	28'-9"	—
a4	46	#6	26'-6"	—
b7	12	#8	36'-6"	—
b8	8	#6	9'-0"	—
b20	93	#5	36'-0"	—
b21	160	#5	27'-3"	—
d1	210	#5	4'-3"	┘
d4	210	#4	4'-6"	┘
x1	96	#6	4'-2"	—
CLASS "X" CONCRETE		CU.YD.	96"	
REINFORCEMENT BARS		LBS.	25,180	



SECTION AT CURB

NOTE:
ALL BAR DIMENSIONS ARE OUT TO OUT.

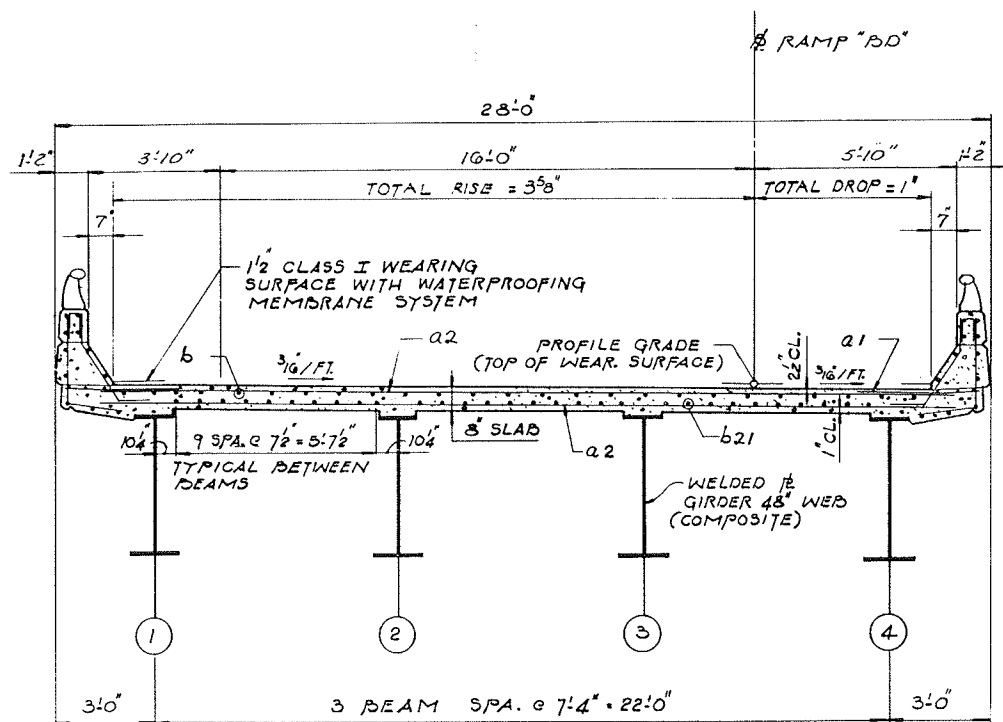
NOTE:
PARAPET REINFORCEMENT AND CLASS X CONCRETE ARE BILLED ON SHEET #6

**DECK REINFORCEMENT PLAN - SPAN 2
RAMP BD
OVER LINDEN ROAD
PROJECT
SECTION 201-3HB-9
WINNEBAGO COUNTY
STATION 66+69.42**

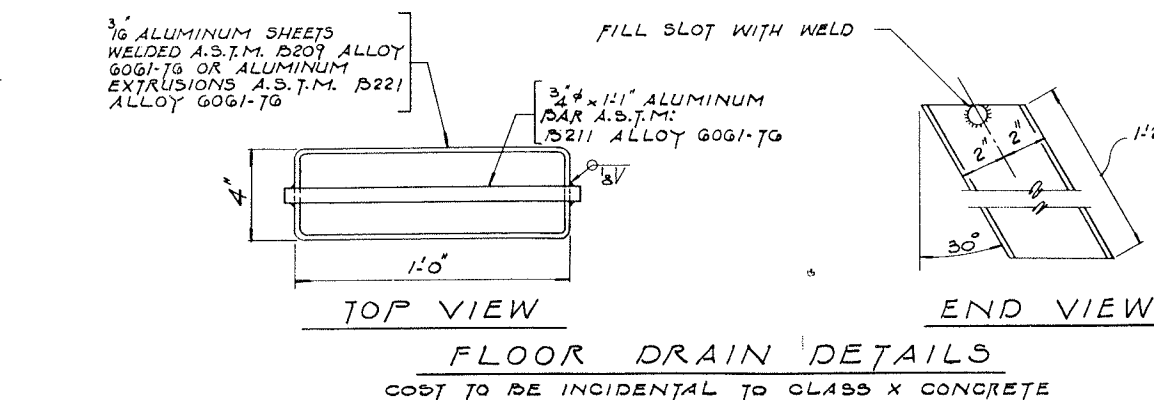
ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
JOB NO.
233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	201-3HD-5	WINNEBAGO	241	151
STA.		TO STA.		
PLAN & REF. NO. 6		ALUMINUM	PROJECT	

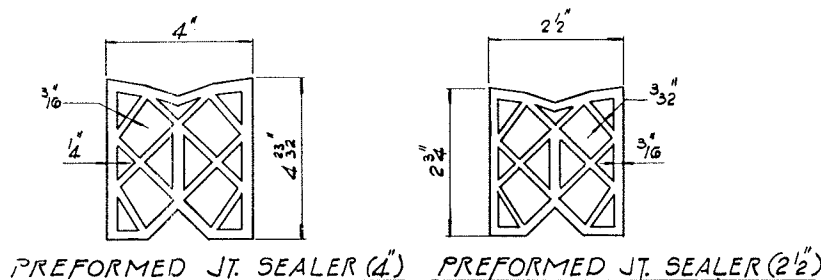
SHEET 5 OF 12



DECK CROSS SECTION
(SPAN 2)



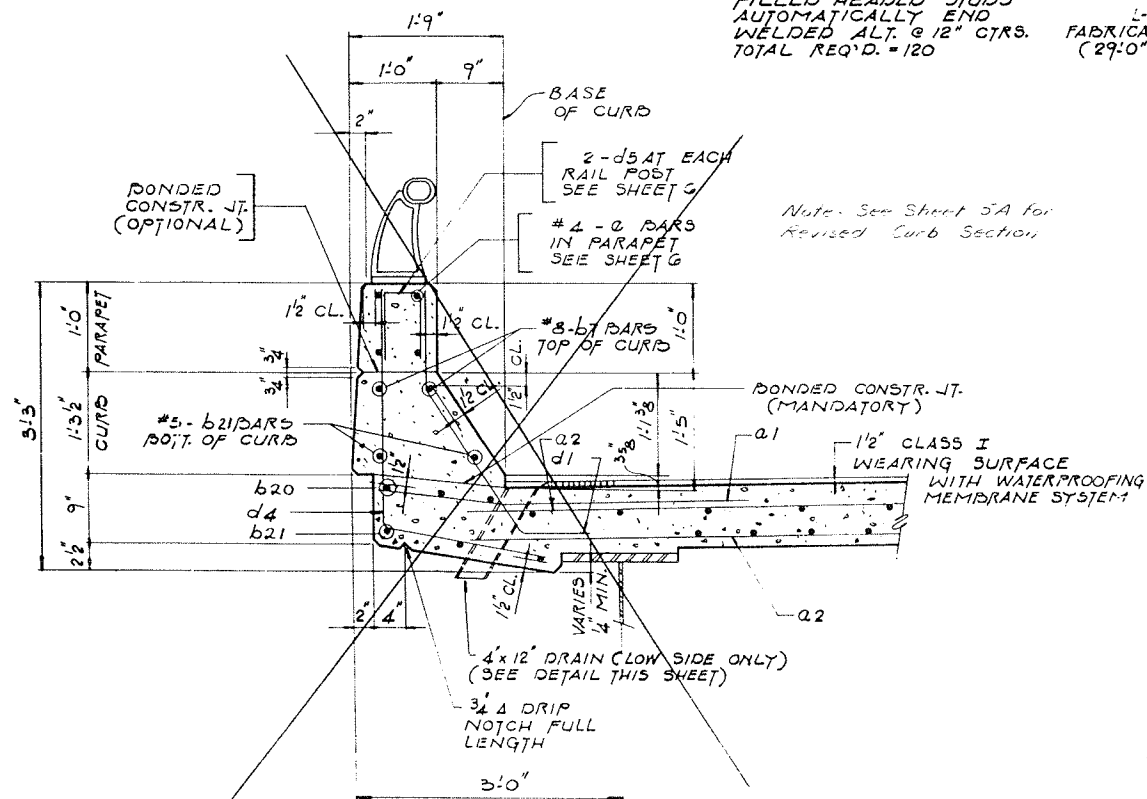
FLOOR DRAIN DETAILS
CODE TO BE INCIDENTAL TO CLASS X CONCRETE



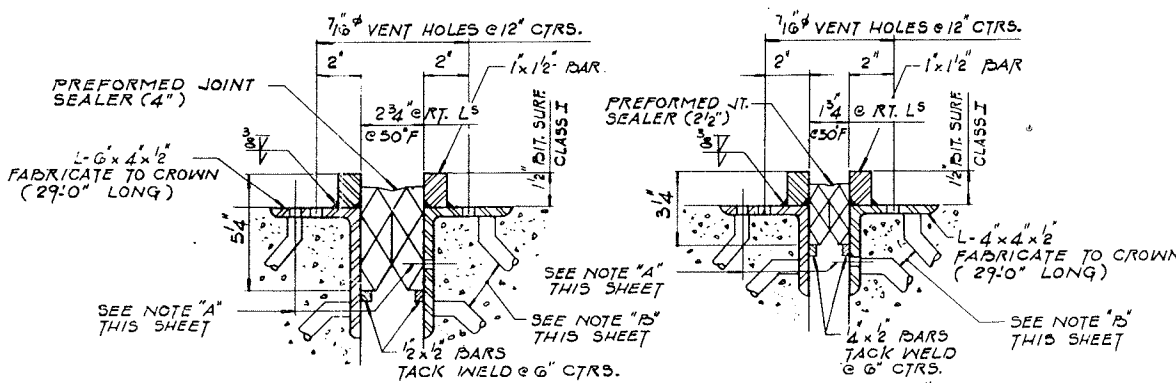
NOTE "B"

3/4" x 5" OR 1020 STL.
GRANULAR OR SOLID FLUX
FILLED HEADED STUDS
AUTOMATICALLY END
WELDED ALT. @ 12" CTRS.
TOTAL REQ'D. = 120

Note: See Sheet 5A for
Revised Curb Section



FASCIA CURB DETAIL

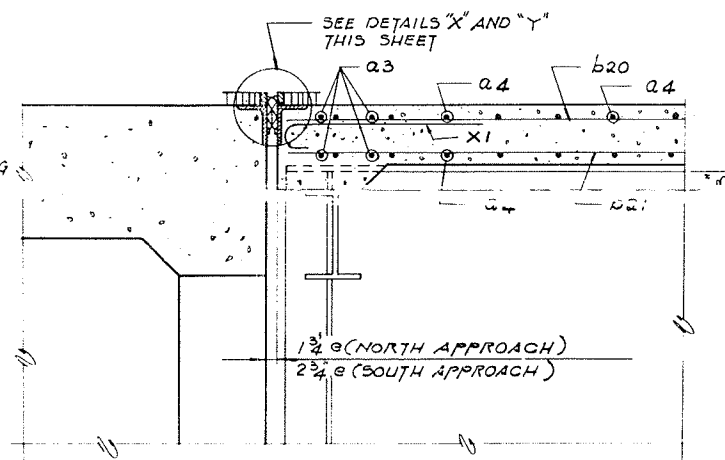


DETAIL "X"
(AT SOUTH APPROACH)

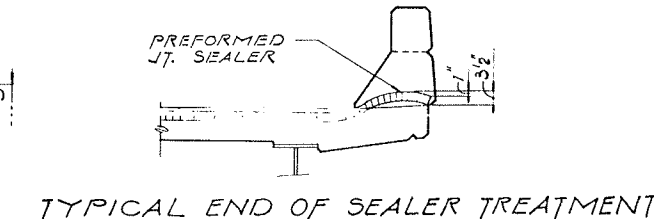
DETAIL "Y"
(AT NORTH APPROACH)

NOTE "A"

7/16" HOLES AT 12" CTRS. FOR
3/8" BOLTS SET ON 2" GAGE
LINE. ALL BOLTS SHALL BE
BURNED, SAILED OR CHIPPED
OFF FLUSH WITH THE BACK OF
ANGLES AFTER FORMS ARE REMOVED.



SECTION "D-D"



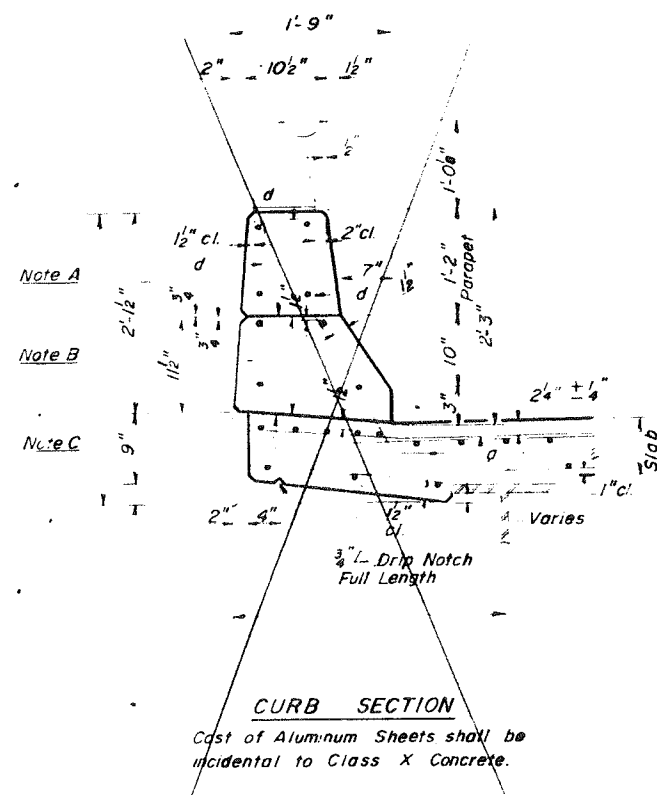
TYPICAL END OF SEALER TREATMENT

DECK DETAILS - SPAN 2
RAMP BD.
OVER LINDEN ROAD
PROJECT
SECTION 201-3HD-5
WINNEBAGO COUNTY
STATION 66+69.42

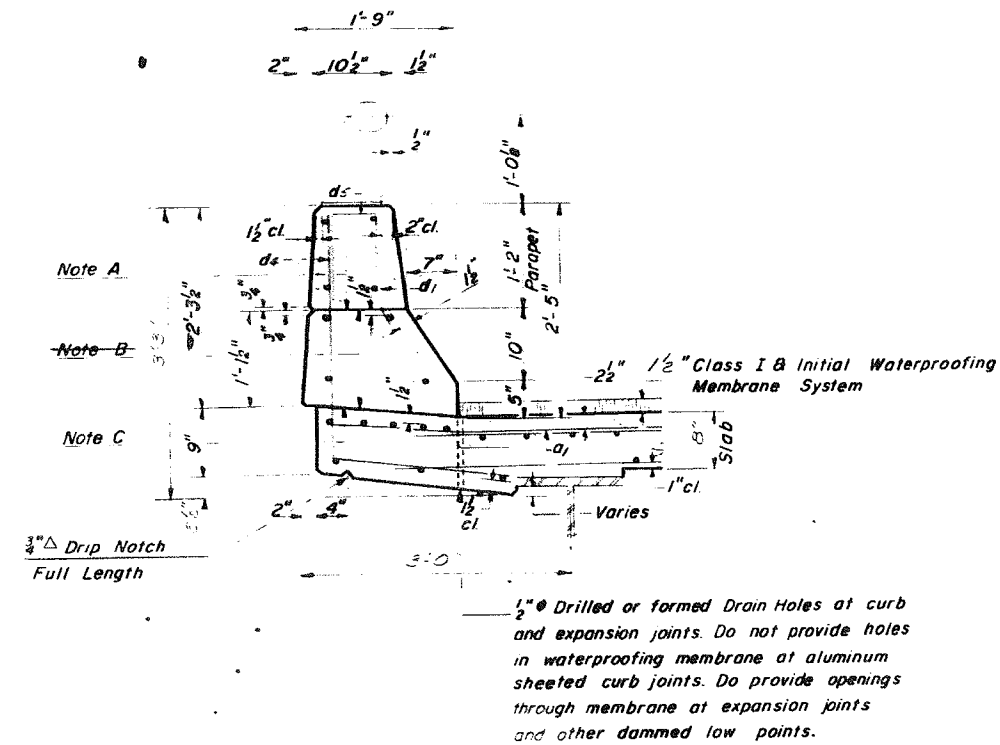
ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
JOB NO.
233N. MICHIGAN AVE. CHICAGO, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 54
412	201-3HB-5	Winnebago	341	152	12 SHEETS
FSD ROAD DIST NO. 7	ILLINOIS	FED. AID PROJECT			



Note: All edges shall have $\frac{3}{4}$ " chamfer.



Note A - Bonded Construction Joint (Optional)

Note B - ~~Aluminum Sheets ASTM B209 alloy 3003-H14~~

Note C - Bonded Construction Joint (Mandatory)

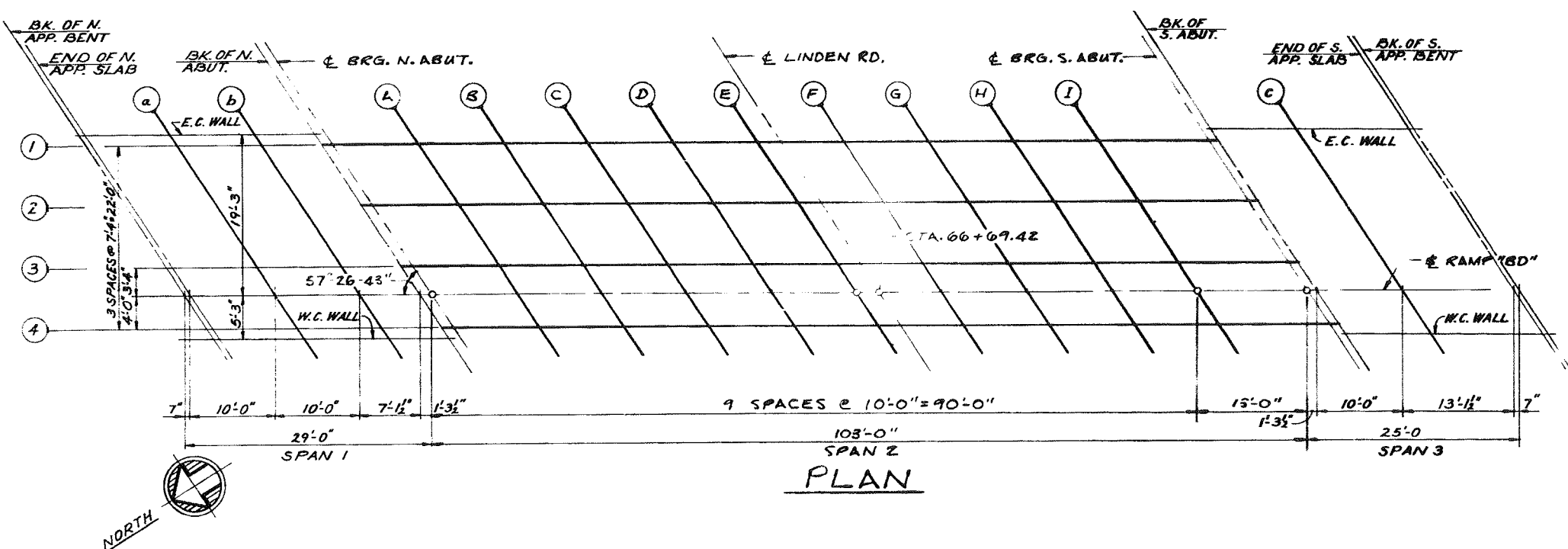
**SUPERSTRUCTURE
REVISED PARAPET CONFIGURATION**

SPAN 2
RAMP BD
SEC. 201-3HB-5
WINNEBAGO COUNTY
STA. 66+69.42

19

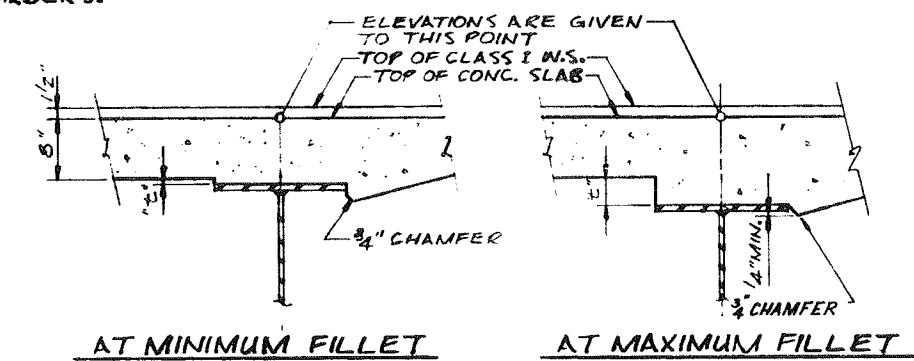
EXAMINED	ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED	
APPROVED	DIRECTOR OF HIGHWAYS

RRINGER

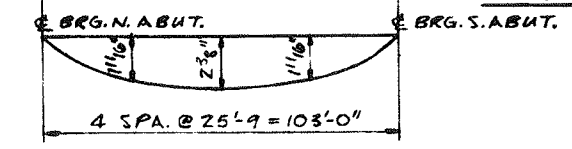


LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
N. ABUT.	GIR 1	6606.429	18.000	838.122	838.122
	GIR 2	6611.108	10.670	838.012	838.012
	GIR 3	6615.788	3.340	837.901	837.901
	GIR 4	6620.474	-4.000	837.788	837.788
1A	GIR 1	6616.429	18.000	838.130	838.189
	GIR 2	6621.108	10.670	838.017	838.077
	GIR 3	6625.788	3.340	837.904	837.964
	GIR 4	6630.474	-4.000	837.790	837.869
1B	GIR 1	6626.429	18.000	838.133	838.246
	GIR 2	6631.108	10.670	838.018	838.132
	GIR 3	6635.788	3.340	837.903	838.017
	GIR 4	6640.474	-4.000	837.787	837.900
1C	GIR 1	6636.429	18.000	838.131	838.287
	GIR 2	6641.108	10.670	838.015	838.171
	GIR 3	6645.788	3.340	837.898	838.034
	GIR 4	6650.474	-4.000	837.780	837.936
1D	GIR 1	6646.429	18.000	838.126	838.310
	GIR 2	6651.108	10.670	838.008	838.192
	GIR 3	6655.788	3.340	837.889	838.073
	GIR 4	6660.474	-4.000	837.768	837.952
1E	GIR 1	6656.429	18.000	838.116	838.312
	GIR 2	6661.108	10.670	837.996	838.191
	GIR 3	6665.788	3.340	837.875	838.070
	GIR 4	6670.474	-4.000	837.753	837.948
1F	GIR 1	6666.429	18.000	838.103	838.291
	GIR 2	6671.108	10.670	837.980	838.169
	GIR 3	6675.788	3.340	837.857	838.046
	GIR 4	6680.474	-4.000	837.733	837.922
1G	GIR 1	6676.429	18.000	838.085	838.250
	GIR 2	6681.108	10.670	837.960	838.126
	GIR 3	6685.788	3.340	837.835	838.001
	GIR 4	6690.474	-4.000	837.709	837.875
1H	GIR 1	6686.429	18.000	838.062	838.189
	GIR 2	6691.108	10.670	837.936	838.063
	GIR 3	6695.788	3.340	837.809	837.936
	GIR 4	6700.474	-4.000	837.681	837.808
1J	GIR 1	6696.429	18.000	838.036	838.112
	GIR 2	6701.108	10.670	837.908	837.984
	GIR 3	6705.788	3.340	837.779	837.855
	GIR 4	6710.474	-4.000	837.649	837.725
S. ABUT.	GIR 1	6709.429	18.000	837.995	837.995
	GIR 2	6714.108	10.670	837.865	837.865
	GIR 3	6718.788	3.340	837.733	837.733
	GIR 4	6723.474	-4.000	837.601	837.601
BK. N. APP. BENT	E.C. WALL	6576.631	19.250	838.088	838.088
	RAMP BD	6586.920	0.000	837.818	837.818
	W.C. WALL	6592.272	-5.250	837.743	837.743
BK. S. ABUT.	E.C. WALL	6709.921	19.250	838.014	838.014
	RAMP BD	6722.210	0.000	837.888	837.888
	W.C. WALL	6725.562	-5.250	837.573	837.573
END N. APP. SLAB	E.C. WALL	6577.224	19.250	838.097	838.097
	RAMP BD	6589.513	0.000	837.820	837.820
	W.C. WALL	6592.865	-5.250	837.744	837.744
a	E.C. WALL	6587.224	19.250	838.117	838.117
	RAMP BD	6599.513	0.000	837.835	837.835
	W.C. WALL	6602.865	-5.250	837.758	837.758
b	E.C. WALL	6597.224	19.250	838.132	838.132
	RAMP BD	6609.513	0.000	837.845	837.845
	W.C. WALL	6612.865	-5.250	837.768	837.768
BK. N. ABUT.	E.C. WALL	6604.348	19.250	838.140	838.140
	RAMP BD	6616.635	0.000	837.849	837.849
	W.C. WALL	6619.987	-5.250	837.769	837.769

NOTE:
 TO DETERMINE "c": AFTER ALL STRUCTURAL STEEL HAS BEEN ERRECTED, ELEVATIONS OF THE GIRDERS SHALL BE TAKEN AT INTERVALS SHOWN THESE ELEVATIONS SUBTRACTED FROM THE GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION SHOWN ON THIS SHEET MINUS SLAB THICKNESS, EQUALS THE FILLET HEIGHTS "c" ABOVE TOP FLANGE OF THE GIRDERS.



FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM
 (INCLUDES WT. OF CONCRETE AND INITIAL SDL ONLY)

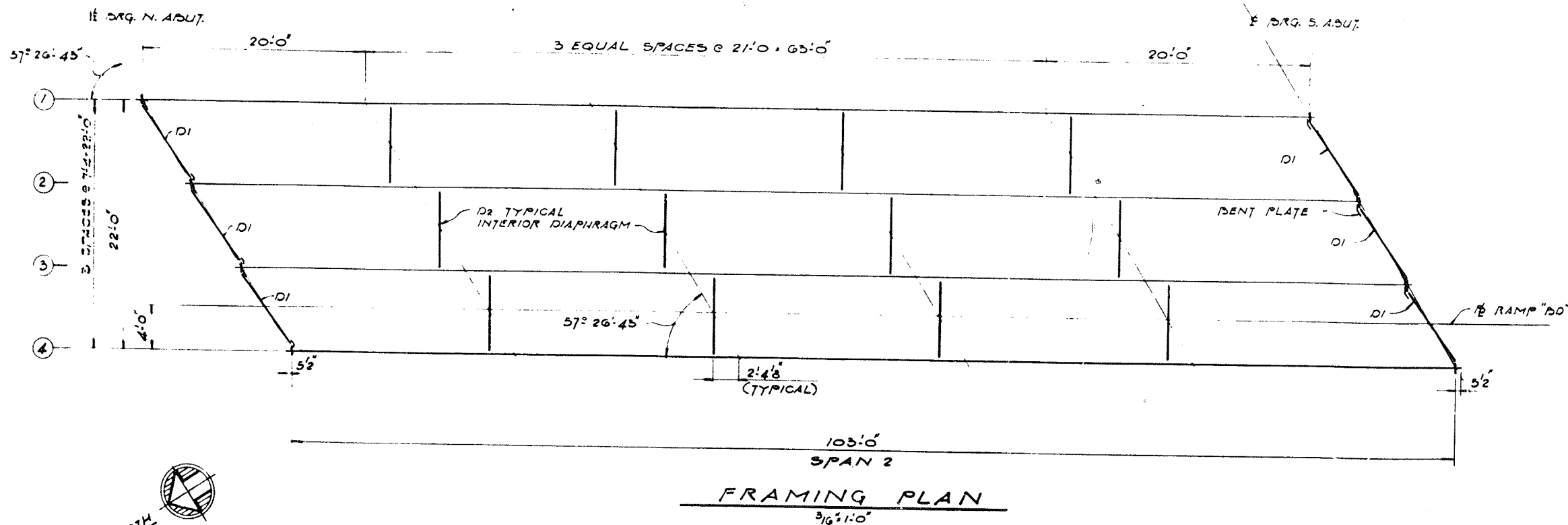
NOTE:
 THE ABOVE DEFLECTIONS ARE NOT TO BE USED IN THE FIELD IF THE ENGINEER IS WORKING FROM THE GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS.

ALFRED BENESCH & COMPANY
 CONSULTING ENGINEERS
 233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

TOP OF SLAB ELEVATIONS
 RAMP BD
 OVER LINDEN ROAD
 PROJECT
 SECTION 201-3MB-5
 WINNEBAGO COUNTY
 STATION 66+69.42

PROJECT	NO.	COUNTY	TOTAL SHEETS	DATE
FA. 412	201-3RD	WINNEBAGO	347	1/55A
STA.	TO STA.		PROJECT	
201+00	201+00		201+00	

SHEET 8 OF 12



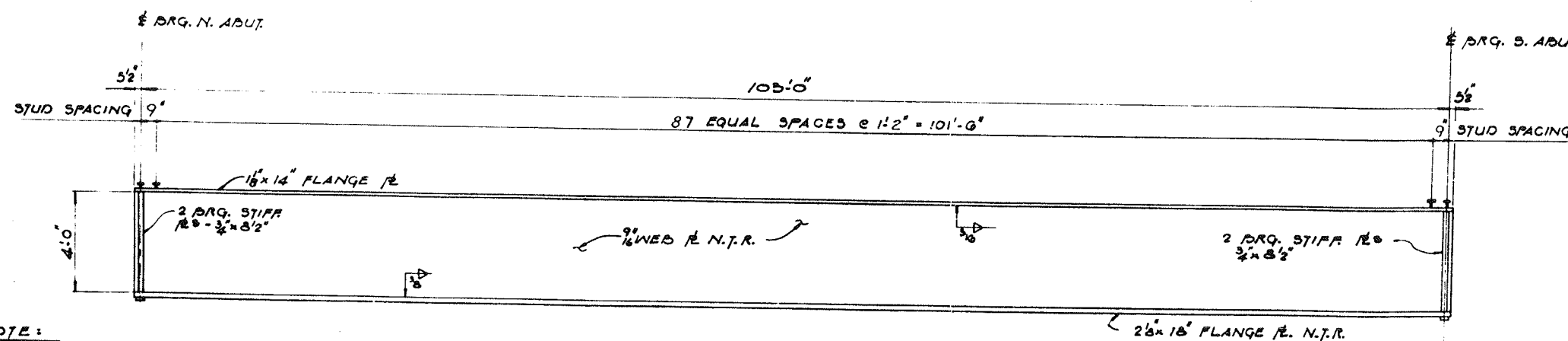
REACTION TABLE

INTERIOR GIRDER REACTION TABLE	
	ABUT.
RDL (K)	77.0
RLI (K)	53.6
Imp (K)	11.8
R TOTAL (K)	145.0

MOMENT TABLE

SYMMETRICAL COMPOSITE . SPAN

INTERIOR GIRDER MOMENT TABLE	
	0.83 MN
I_x (in ⁴)	86872
I_y (in ⁴)	86674
J_x (in ⁴)	1078
J_y (in ⁴)	8817
D.L. (K)	1.009
M _{max} (K)	1338
f_b (ksi)	14.9
S.D.L. (K)	0.536
M _{max} (K)	711
M.L.L. (K)	1069
M _{max} (K)	251
M _{max} (K)	1991
M _{max} (K)	4.11
M _{max} (K)	17.01
VR (K)	53.3



NOTE:

N.T.R. DESIGNATES MEMBERS SUBJECT TO THE SUPPLEMENTAL REQUIREMENTS FOR TOUGHNESS.

NOTES!

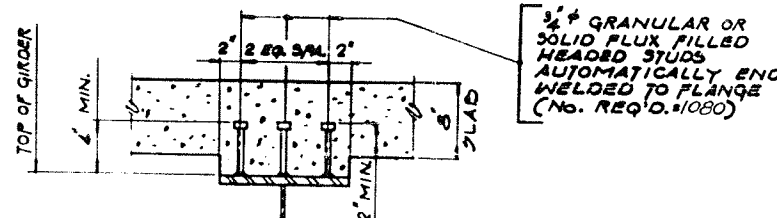
I_x AND I_y ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF STEEL SECTION.
 I_o AND J_o ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING f_b .
 VR IS THE MAXIMUM L.L. + IMPACT SHEAR RANGE IN SPAN.

TOP OF WEB ELEVATIONS (UNDEFLECTED GIRDERS - FOR FABRICATION ONLY)

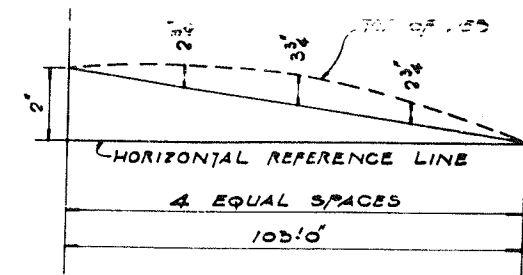
GIRDER LOCATION	1	2	3	4
DRG. N.A.	837.300	837.190	837.079	836.968
DRG. S.A.	837.173	837.043	836.911	836.779

AS REVISED

GIRDER ELEVATION



SHEAR CONNECTOR DETAIL



CAMBER DIAGRAM AND DIMENSIONS (ALL GIRDERS)

ALFRED BENECH & COMPANY
 CONSULTING ENGINEERS
 JOB NO.
 233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

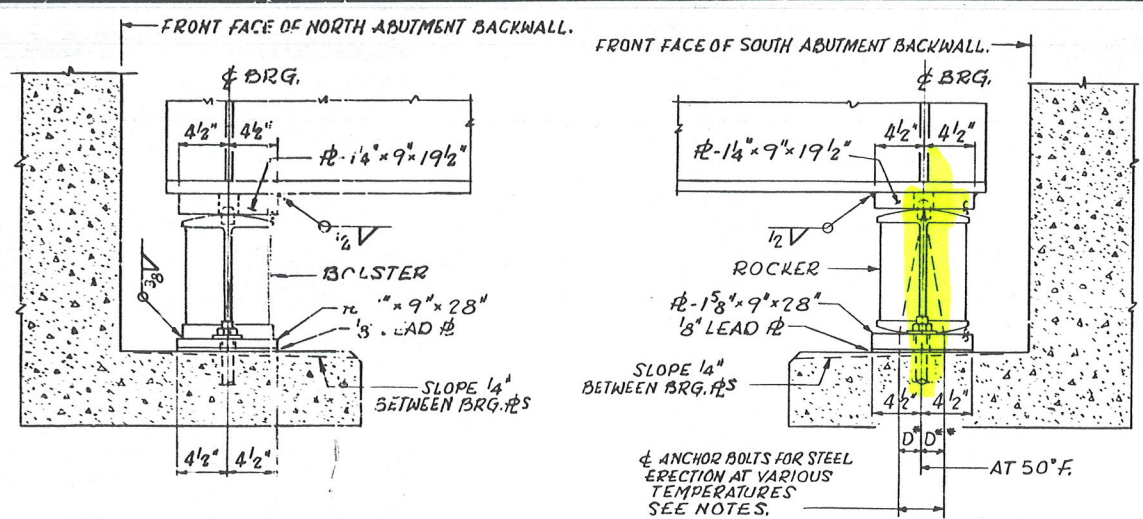
FRAMING PLAN
 RAMP DD
 OVER LINDEN ROAD
 PROJECT
 SECTION 201-3RD S.
 WINNEBAGO COUNTY
 STATION 86+88.51

As Revised 8-21-80 L.W.

9810-10-102

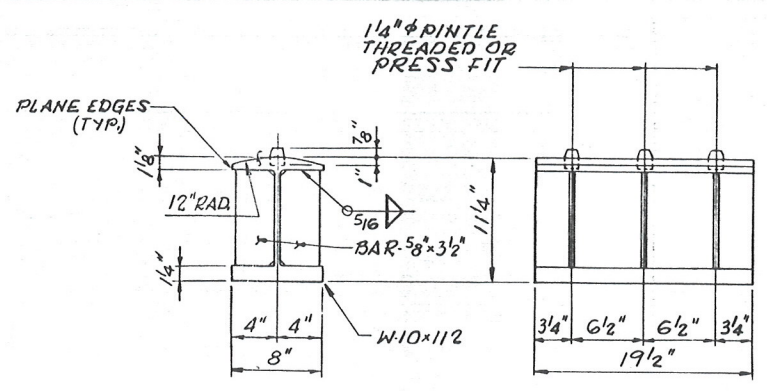
DATE	SHEET	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	201-3HD-5	WINNEBAGO	3A1	156
STA.	TO STA.			
LINE & REG. NO.	ILLINOIS	PROJECT		

SHEET 9 OF 12

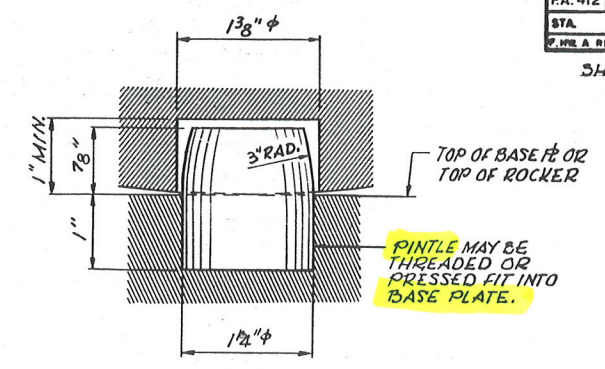


ELEVATION

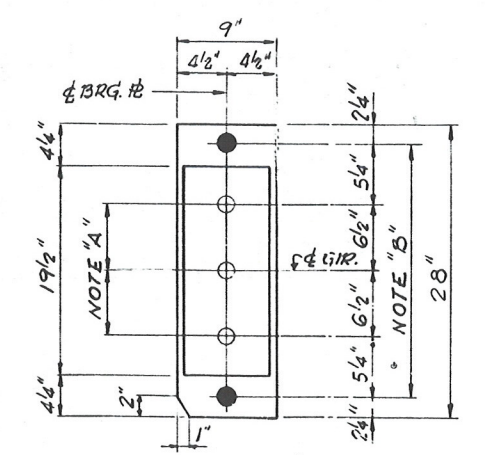
ELEVATION



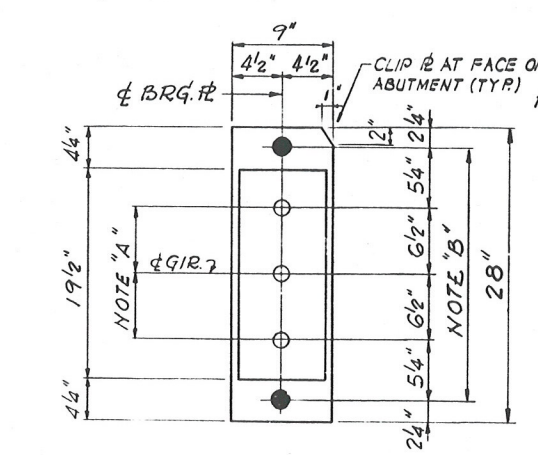
BOLSTER DETAIL



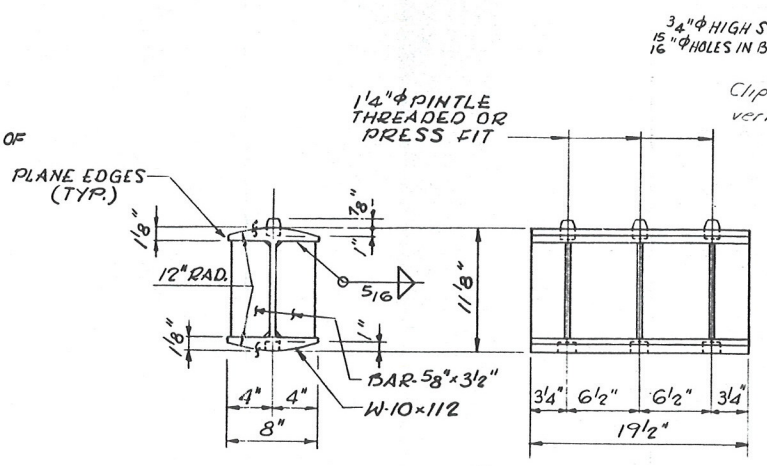
PINTLE



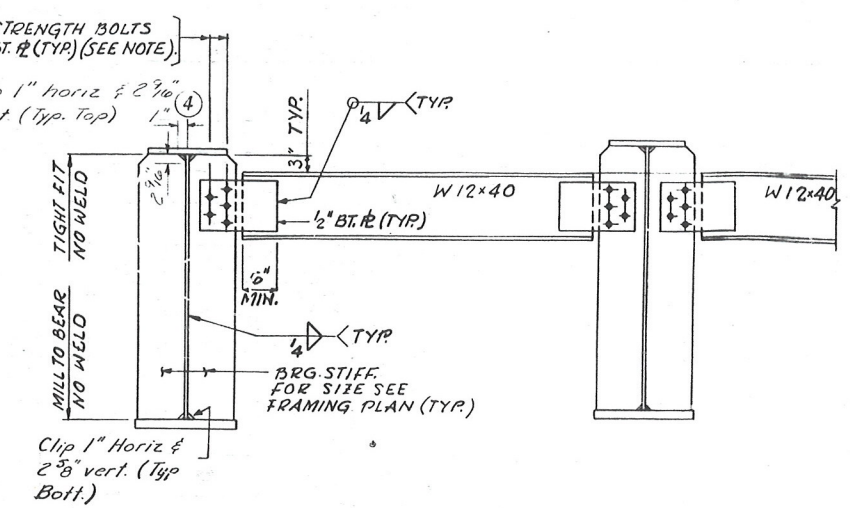
PLAN AT NORTH ABUTMENT



PLAN AT SOUTH ABUTMENT



ROCKER DETAIL



DIAPHRAGM D1

NOTES:

NOTE "A"
1-3/8" DIAMETER HOLES - 1" DEEP IN TOP PLATE FOR PINTLES. THREAD OR PRESS FIT PINTLES INTO BOTTOM PLATE.

NOTE "B"
2" DIAMETER HOLES FOR 1 1/2" DIAMETER X 19" ANCHOR BOLTS. 3/8" X 3" X 3" PLATE WASHERS UNDER NUT

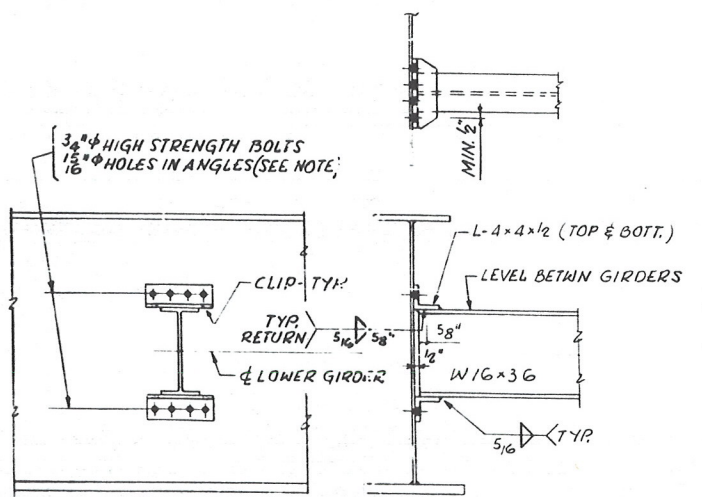
NOTE:
HARDENED WASHERS SHALL BE USED OVER 15/16" DIAMETER HOLES IN BENT PLATES AND ANGLES.

NOTES ON SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

D* (SIDE OF BEARING AWAY FROM FIXED BEARING)
D* = 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15° FALL BELOW THE NORMAL TEMP. OF 50° F.

D** (SIDE OF BEARING TOWARD FIXED BEARING)
D** = 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15° RISE ABOVE THE NORMAL TEMP. OF 50° F.

AFTER BEAMS HAVE BEEN ERECTED AND DIMENSIONS D* OR D** DETERMINED HOLES SHALL BE DRILLED AND ANCHOR BOLTS SHALL BE GROUDED IN PLACE. ALL FIXED ANCHOR BOLTS MAY BE BUILT INTO THE MASONRY.



DIAPHRAGM D2

STEEL DETAILS
RAMP BD.
OVER LINDEN ROAD
PROJECT
SECTION 201-3HD-5
WINNEBAGO COUNTY
STATION 661.69.42

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
JOB NO.
233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

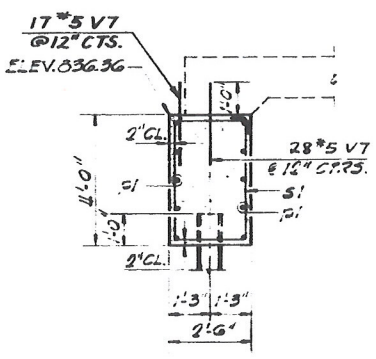
BILL OF MATERIAL

SAR	NO.	SIZE	LENGTH	SHAPE
h1	4	#6	20'-0"	—
h3	15	#5	30'-0"	—
h4	10	#5	27'-6"	—
h5	28	#5	7'-9"	—
h6	12	#5	31'-0"	—
h7	20	#5	28'-3"	—
h8	74	#5	2'-9"	—
h9	74	#5	1'-9"	—
h13	28	#5	7'-6"	—
h12	40	#4	8'-9"	—
n1	33	#4	11'-3"	C
n2	38	#4	7'-0"	C
n3	56	#4	5'-0"	C
n4	31	#5	4'-0"	C
s1	10	#7	32'-0"	—
s1	30	#8	12'-8"	□
s1	30	#8	12'-8"	—
s2	6	#8	15'-0"	C
v1	34	#9	10'-0"	—
v3	12	#6	6'-5"	—
v4	24	#6	7'-3"	—
v5	16	#6	4'-11"	—
v6	31	#5	10'-6"	—
v7	74	#5	2'-0"	—
v8	16	#5	28'-0"	—
v9	16	#5	21'-0"	—
v10	14	#5	16'-0"	—
v11	14	#5	16'-0"	—
v12	6	#5	5'-0"	—
v13	10	#5	5'-3"	—
v14	4	#5	5'-6"	—
v15	31	#5	8'-5"	—
v16	29	#5	12'-9"	—
n1	26	#5	37'-6"	—

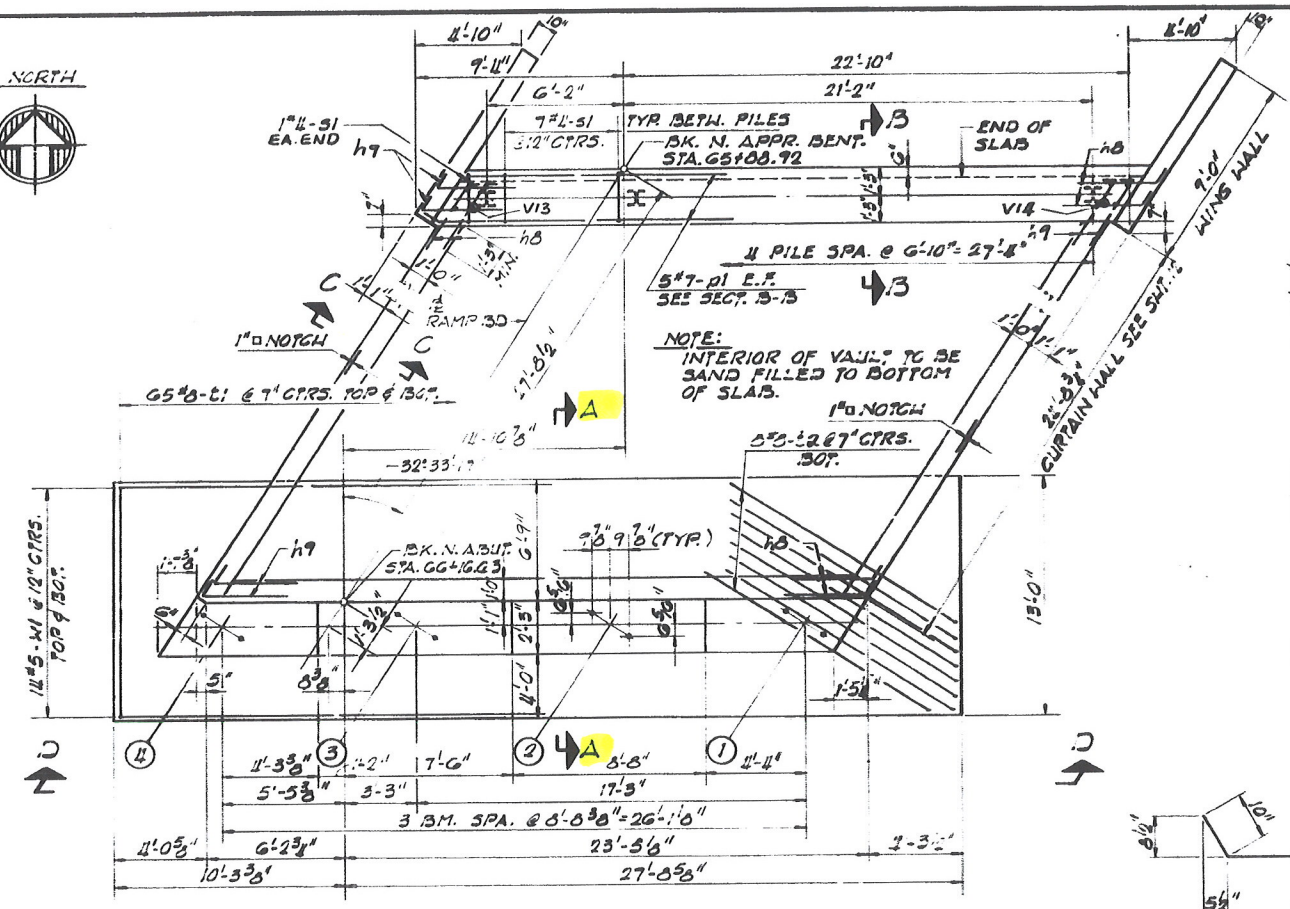
NOTE:
ALL BAR DIMENSIONS ARE OUT TO OUT

**NORTH ABUTMENT
RAMP RD.
OVER LINDEN ROAD
PROJECT
SECTION 201-388-5
WINNEBAGO COUNTY
STATION 66+69.42**

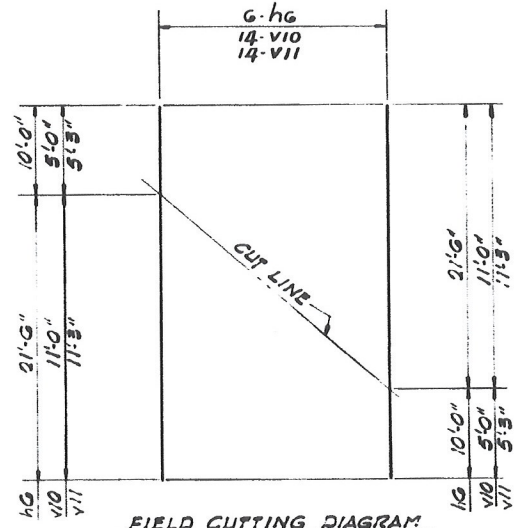
PILE DATA
TYPE: HP8x36
CAPACITY: DRIVEN TO REFUSAL
EST. LENGTH: 25'-0"
NO. REQUIRED: 5
* INCLUDES ONE TEST PILE



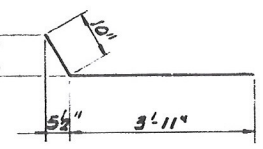
SECTION 3-3
FOR ENCASEMENT SEE SHT. 12



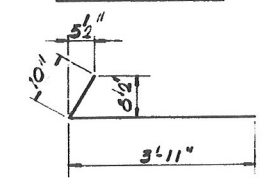
PLAN



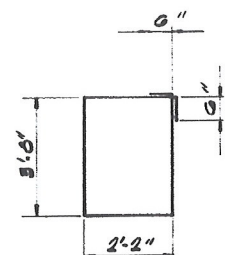
FIELD CUTTING DIAGRAM
* ORDER #6, #10 & #11 BARS FULL LENGTH. CUT TO FIT AS SHOWN AND USE REMAINDER OF BARS IN OTHER FACE



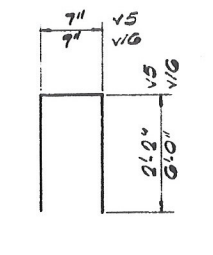
BAR h8



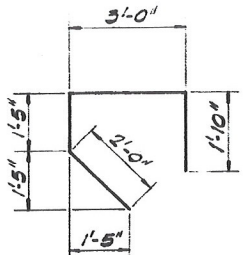
BAR h9



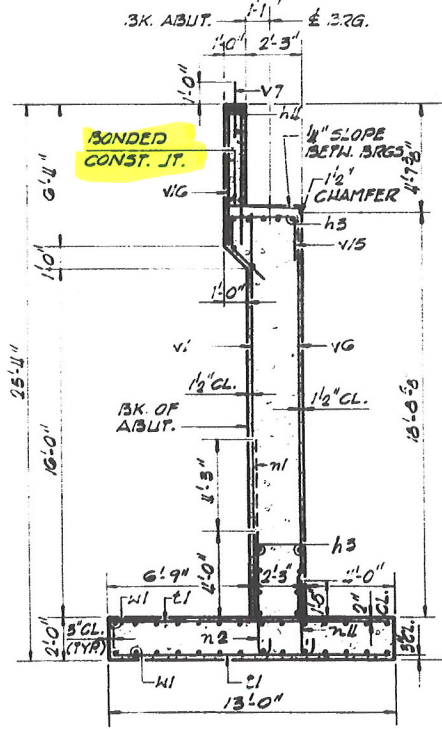
BAR s1



BARS v5 & v16

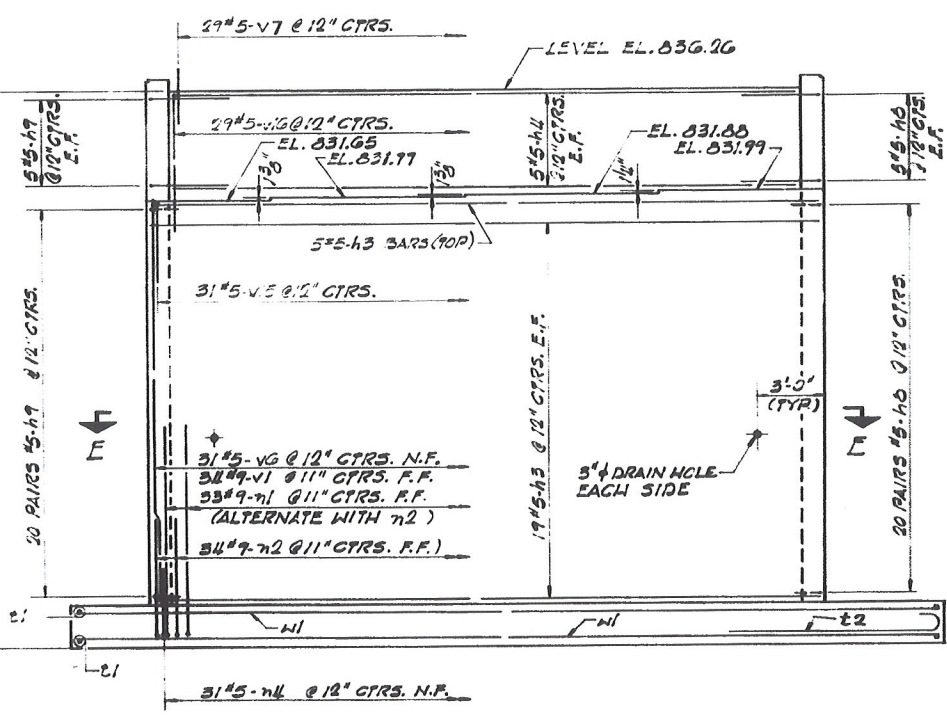


BAR v15



SECTION A-A

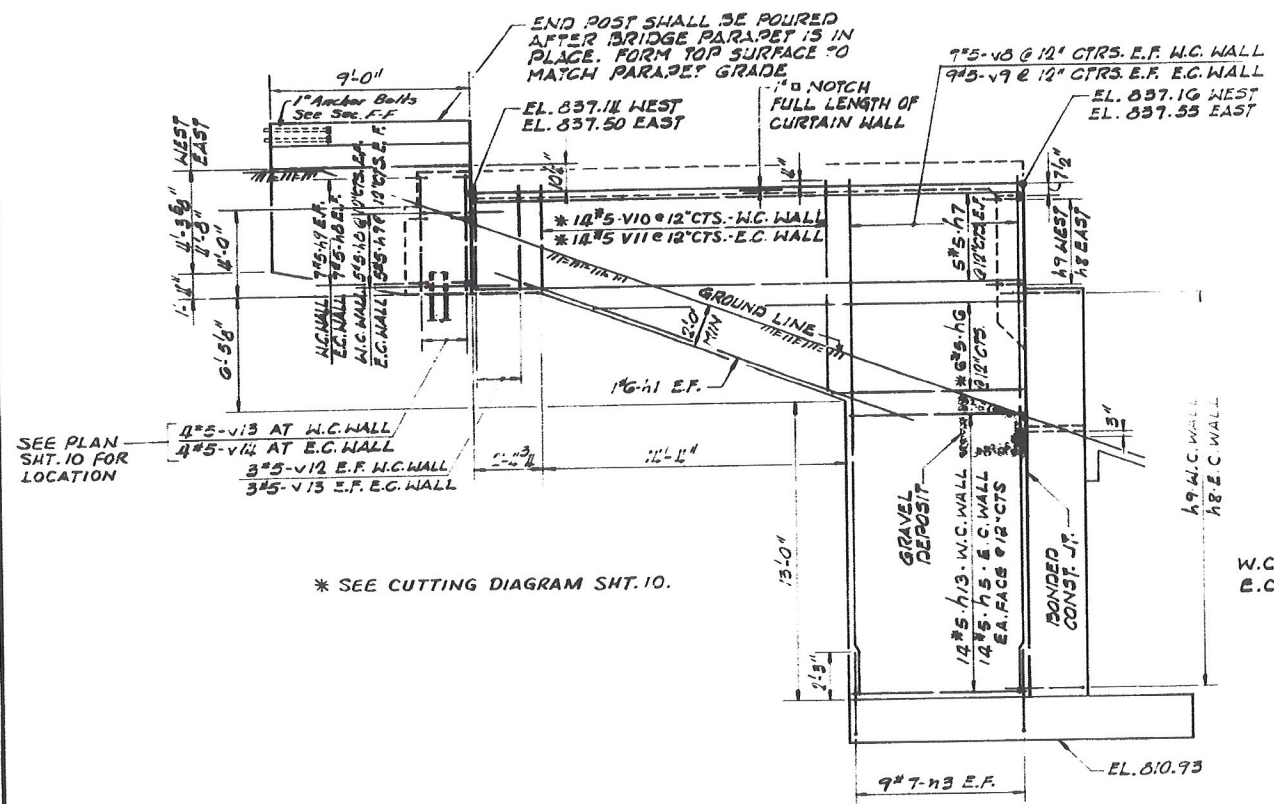
MAX. FOOTING PRESSURE 5 KSF



VIEW D-D

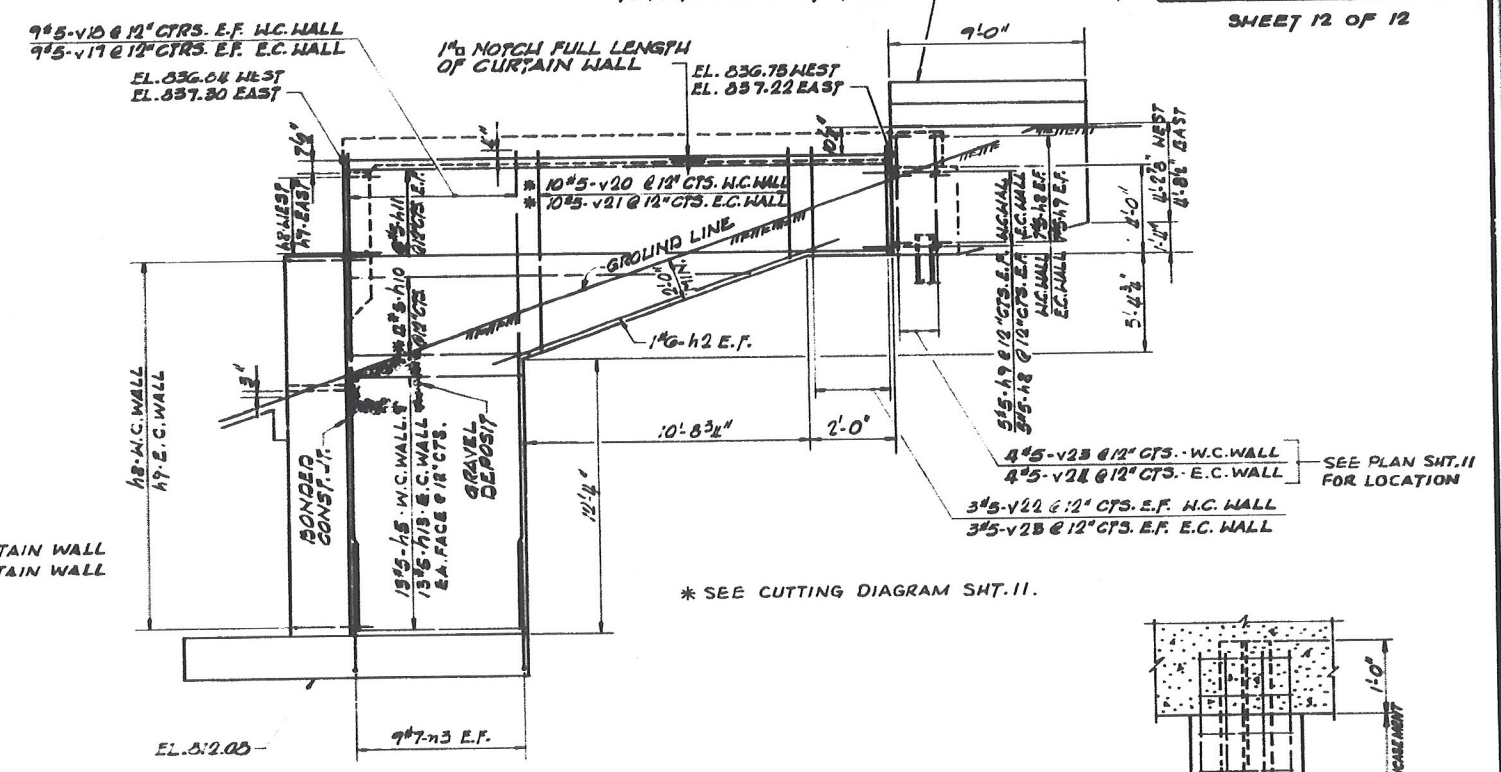
ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
350 N. MICHIGAN AVE. CHICAGO, ILLINOIS

END POST SHALL BE POURED AFTER BRIDGE PARAPET IS IN PLACE. FORM TOP SURFACE TO MATCH PARAPET GRADE.



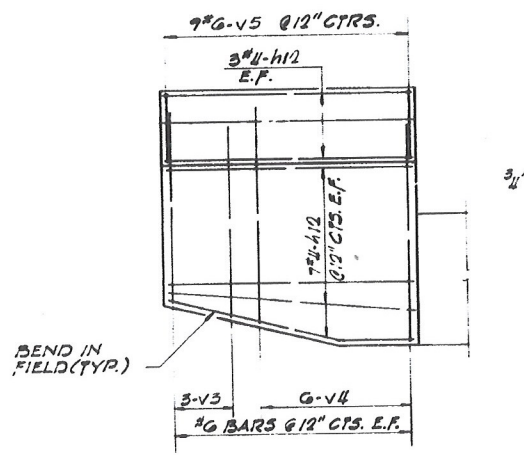
* SEE CUTTING DIAGRAM SHT. 10.

SIDE ELEVATION NORTH ABUTMENT

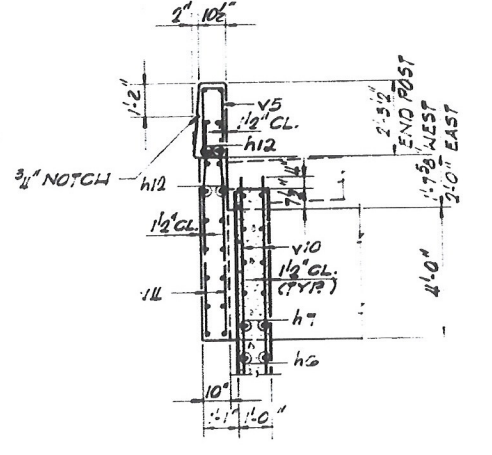


* SEE CUTTING DIAGRAM SHT. 11.

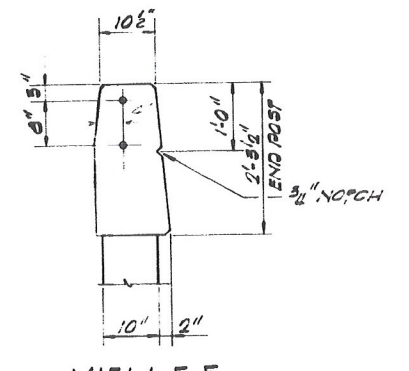
SIDE ELEVATION SOUTH ABUTMENT



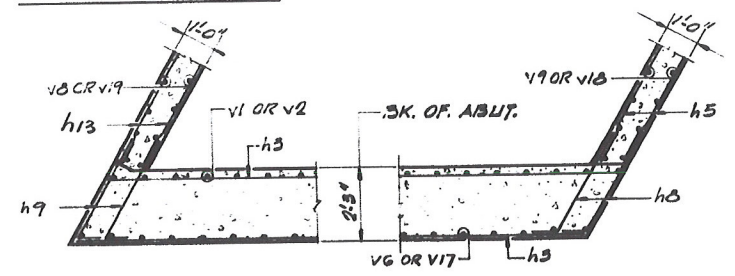
WING WALL REINFORCEMENT NORTH ABUTMENT



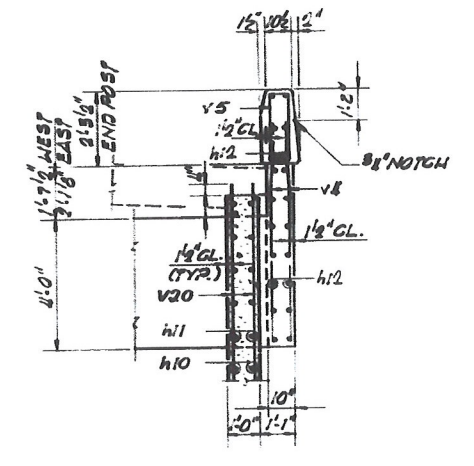
SECTION C-C



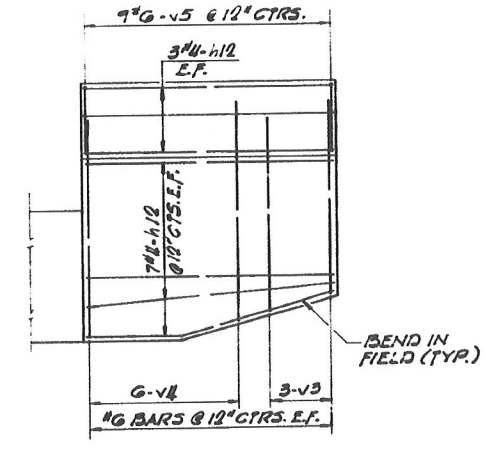
VIEW F-F



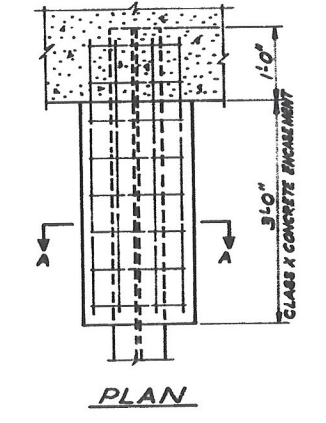
SECTION E-E



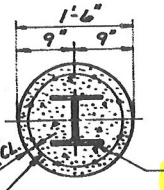
SECTION G-G



WING WALL REINFORCEMENT SOUTH ABUTMENT

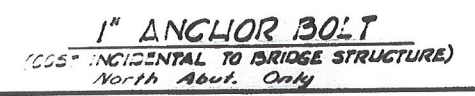


PLAN



SECTION A-A TYPICAL H.P. PILE ENCASEMENT

HP 8x36
WELDED WIRE FABRIC #6 MESH 2" WIRE-WEIGHTING 58' 0" 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.



1" ANCHOR BOLT (CGS" INCIDENTAL TO BRIDGE STRUCTURE) North Abut. Only

ALFRED BERESCH & COMPANY
CONSULTING ENGINEERS
JOB NO. 2338
2338 NICHIGAN AVE. CHICAGO, ILLINOIS

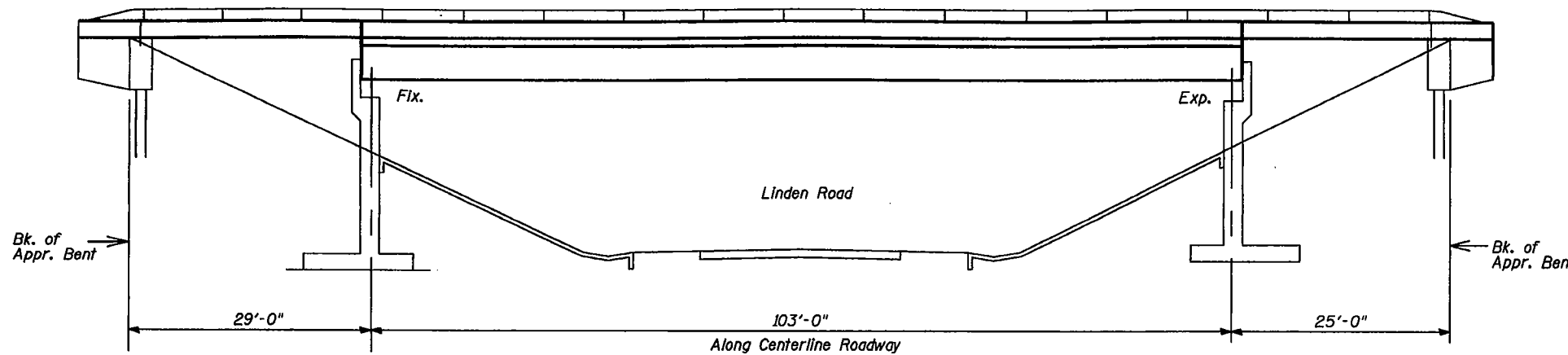
ABUTMENT DETAILS
RAMP RD
OVER LINDEN ROAD
PROJECT
SECTION 201-3MB-9
WINNEBAGO COUNTY
STATION 66+69.42

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

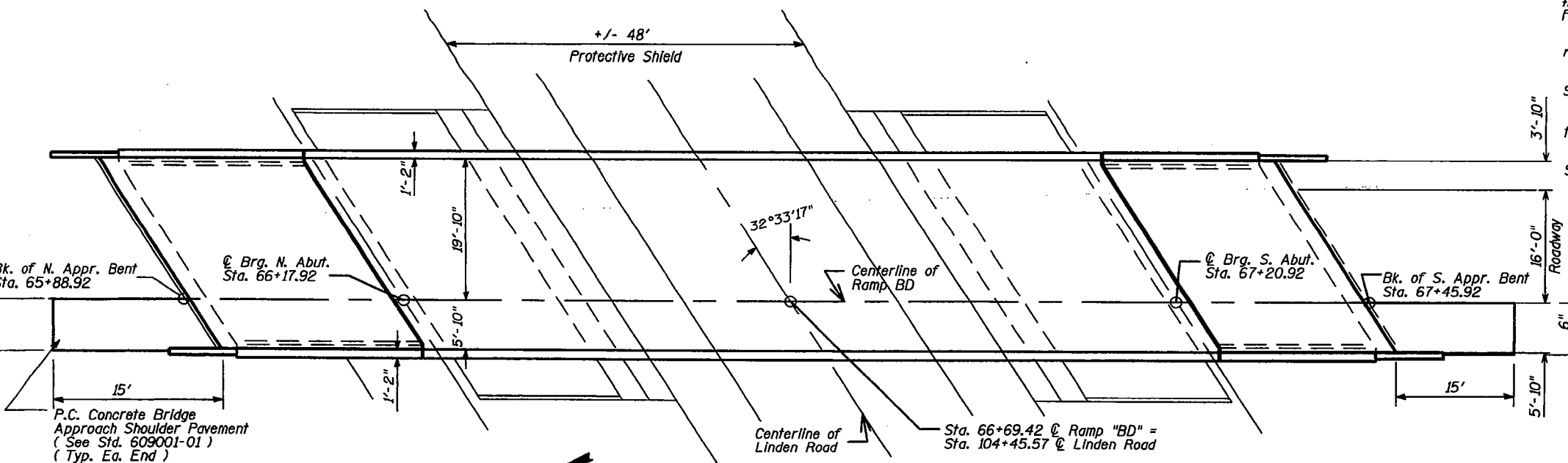
ROUTE NO.	SECTION	QUANTITY	DATE	BY	SHEET NO.
P.A.L. 39	201-3HB-1	Winnebago	114	60	12 SHEETS
P.L. 600 DIST. NO. 7	ILLINOIS	PRELIMINARY			

GENERAL NOTES

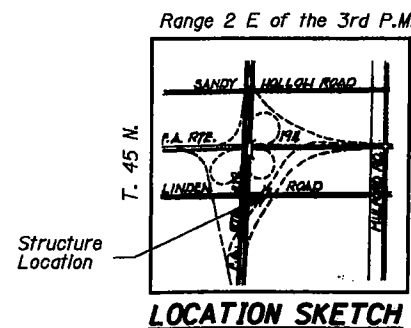
- This structure will retain the same number 101-0139.
- All new structural steel shall conform to AASHTO Classification M-270, Gr. 36 unless otherwise noted.
- Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
- Prior to pouring the new concrete deck, all loose rust, loose mill scale and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.
- 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 work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The existing structural steel coating contains lead. The contractor should take appropriate precautions to deal with the presence of lead on this project.
- Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included in the cost of "Concrete Removal".
- Existing longitudinal reinforcement extending into the removed area shall be cleaned, straightened and incorporated into the new construction. Existing transverse reinforcement may be cut as shown and removed.
- The inorganic zinc primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be Interstate Green, Munsell No. 7.56 4/8. See Special Provision "Cleaning and Painting New Metal Structures".
- Joint plates and attached bars shall be shop painted with the inorganic zinc rich primer. No field paint required.
- Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures".
- During construction operations, the Contractor shall provide temporary shielding from shoulder to shoulder of the roadway crossed. See Special Provisions.
- Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50 degrees F.



ELEVATION



PLAN



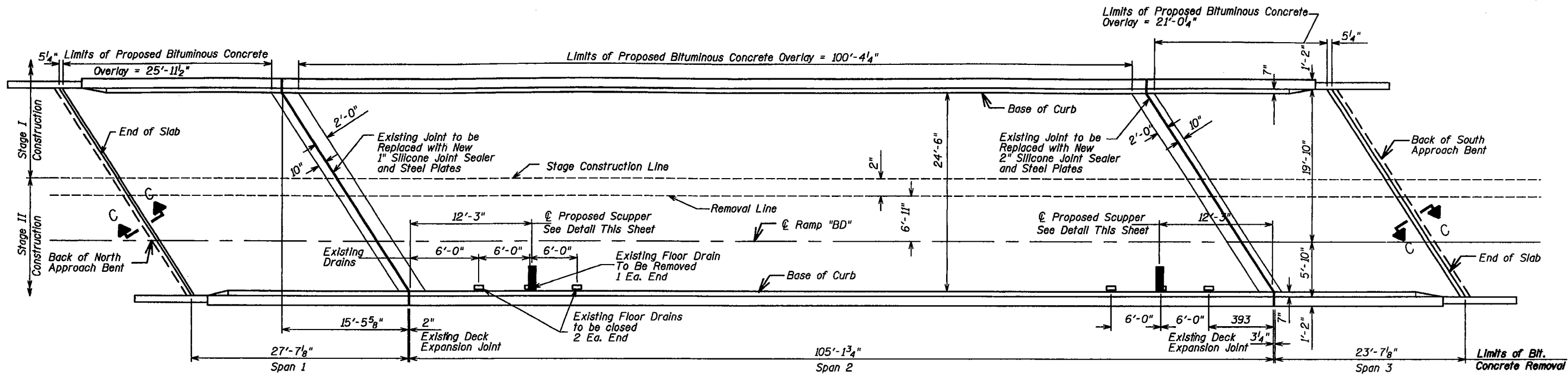
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	7.8		7.8
Bituminous Concrete Removal (Deck)	Sq Yd	426		426
Concrete Superstructure	Cu Yd	7.5		7.5
Reinforcement Bars (Epoxy Coated)	Pound	1090		1090
Bar Splicers	Each	20		20
Silicone Joint Sealer	Foot	130		130
Deck Slab Repair (Full Depth - Type 1)	Sq Yd	4		4
Deck Slab Repair (Full Depth - Type 2)	Sq Yd	8.5		8.5
Deck Slab Repair (Partial Depth)	Sq Yd	58		58
Drainage Scupper	Each	2		2
Plug Existing Deck Drains	Each	4		4
Polymerized Bituminous Concrete Surface Course, Superpave, Mix "D", N70	Ton	36		36
Protective Shield	Sq Yd	118		118
Furnishing and Erecting Structural Steel	Pound	3156		3156
Polymer Concrete	Cu Ft	6.5		6.5
Jack and Remove Existing Bearings	Each	2		2
Sheet Waterproofing Membrane System	Sq Yd	401		401

GENERAL PLAN AND ELEVATION
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

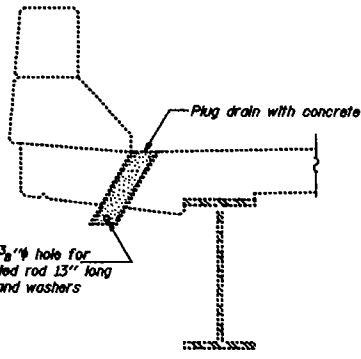
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	JOB NO.	FILE	SHEET NO. 2
F.A.I. 39	201-3HB-1	Winnebago	114	61	12 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

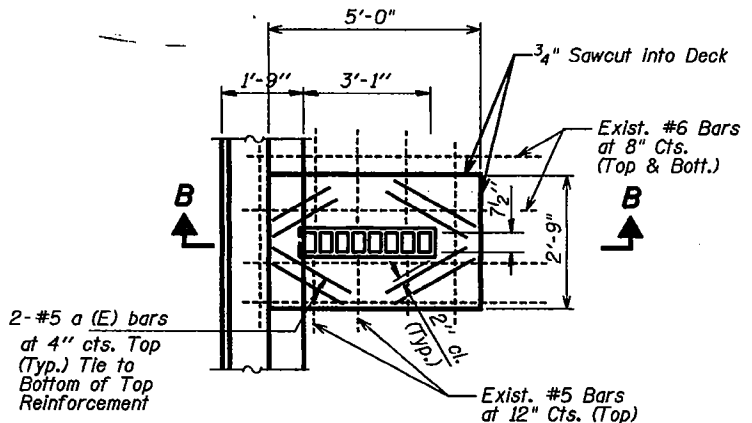


PLAN

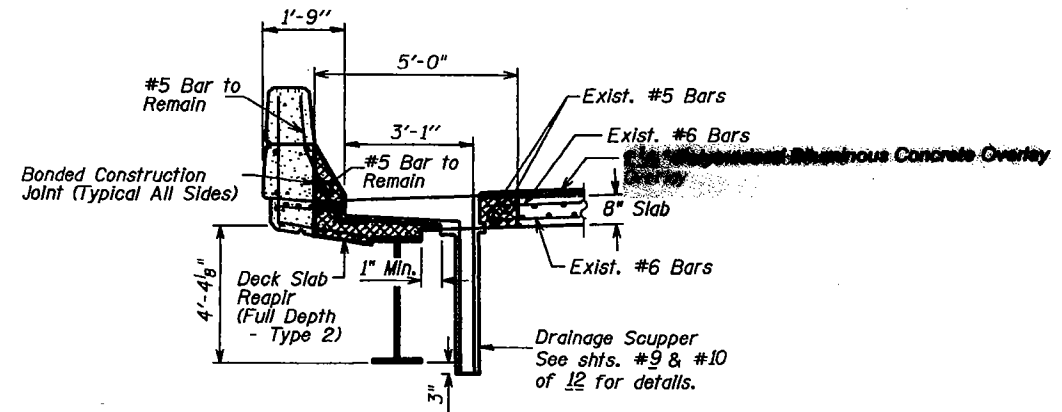
For Section C-C
See Sheet 5 of 12



SECTION AT DRAIN



SCUPPER PLAN



SECTION B-B

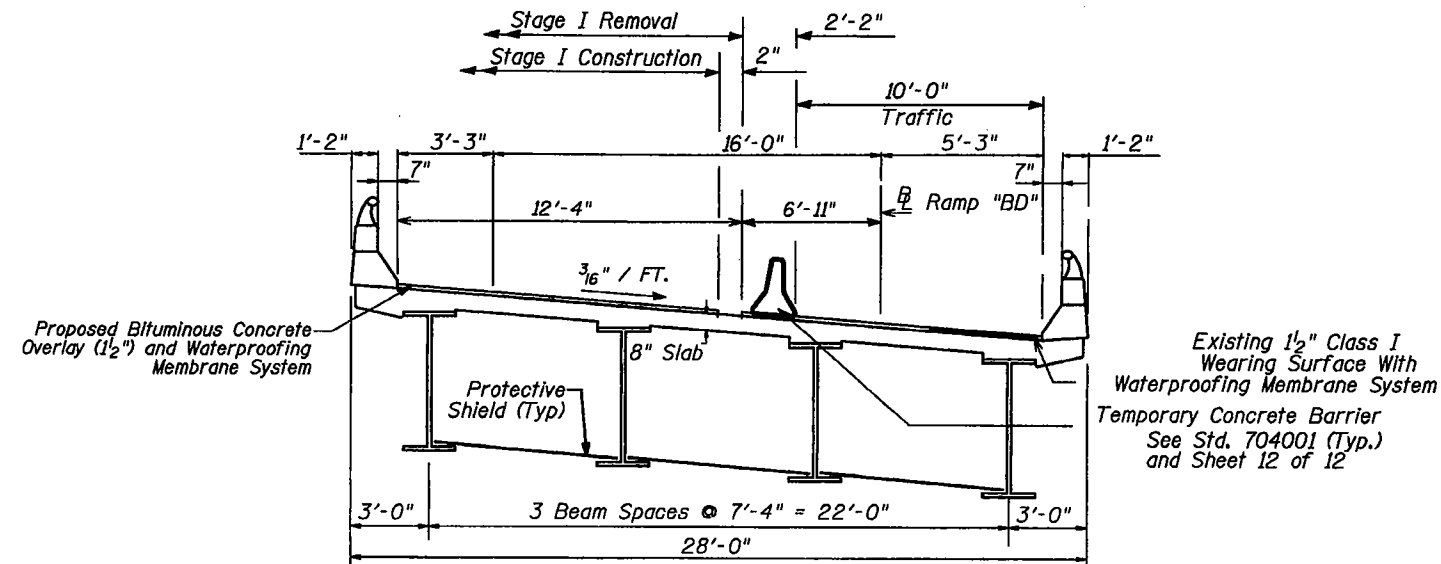
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Bituminous Concrete Removal (Deck)	Sq. Yd.	426
Polymerized Bituminous Concrete Surface Course, Superpave, Mix "D", N70	Ton	36
Deck Slab Repair (Full Depth, Type 2)	Sq. Yd.	1.5
Protective Shield	Sq. Yd.	118
Plug Existing Deck Drains	Each	4
Drainage Scupper	Each	2
Sheet Waterproofing Membrane System	Sq. Yd.	401

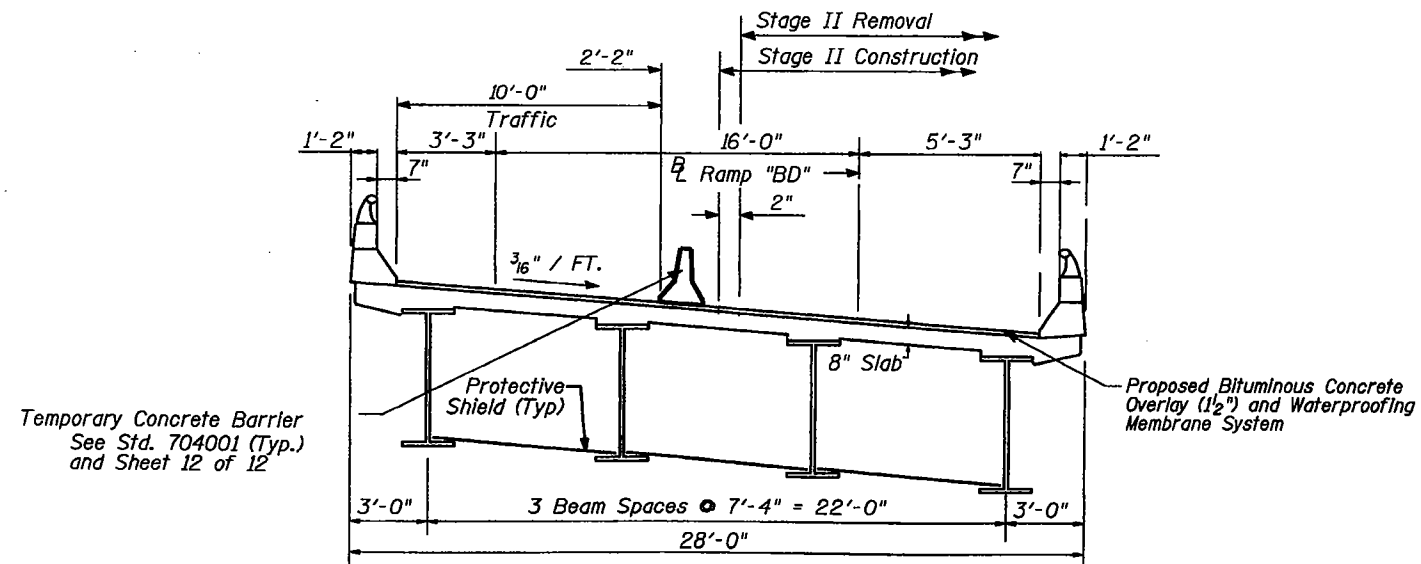
DECK PLAN
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	SECTION	SHEET NO.
F.A.I. 39	201-3HB-1	Winnebago	114	62
P.O. BOX 1007, MOUNTAIN VIEW, ILL.		P.O. BOX 1007, MOUNTAIN VIEW, ILL.		



DECK CROSS SECTION - STAGE I
(Looking South)



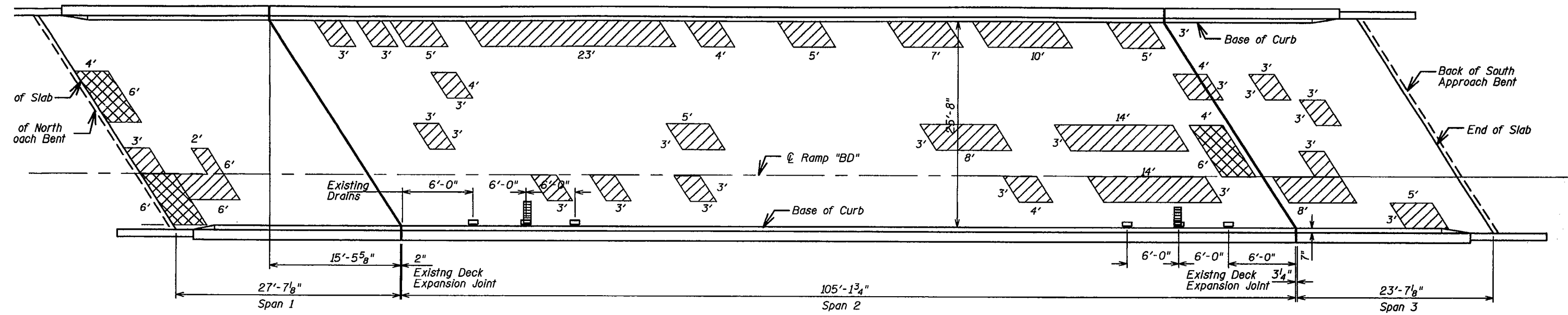
DECK CROSS SECTION - STAGE II
(Looking South)

DECK CROSS SECTIONS
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

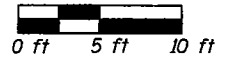
IGNED
CKED
IN
CKED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	QUANTITY	DATE	BY	SHEET NO.
I-39	201-3HB-1	Winnebago	114	63	12 SHEETS
PUB. ROAD DIST. NO. 7	SECTION	PUB. ROAD DIST. NO.			



PLAN



- Deck Slab Repair (Partial)
- Deck Slab Repair (Full Depth)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Deck Slab Repair (Partial)	Sq. Yd.	58
Deck Slab Repair (Full Depth, Type 1)	Sq. Yd.	4
Deck Slab Repair (Full Depth, Type 2)	Sq. Yd.	7

The plan quantities shown for Deck Slab Repair (Partial and Full Depth) are estimated quantities. The actual locations and quantity of Deck Slab Repair shall be determined by the resident engineer in the field after removal of the existing wearing surface. Actual repair locations shall be shown on the as-built plans.

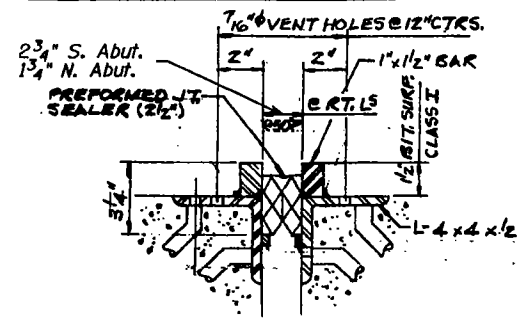
DESIGNED
CHECKED
BY
CHECKED

Deck Survey : 01/10/00

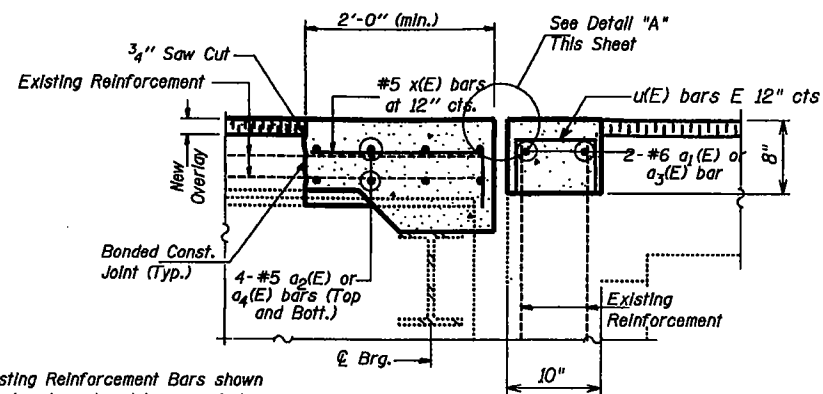
DECK REPAIR PLAN
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	JOB#	"E"	SHEET NO. 5
F.A.I. 39	201-3HB-1	Winnebago	114	64	12 SHEETS
DESIGN DIST. NO. 7	DESIGNER	PREPARED PROJECT			

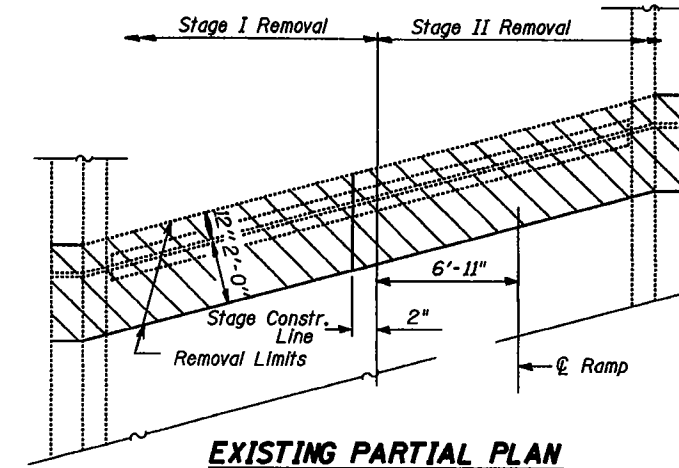


SECTION THRU
EXISTING JOINT

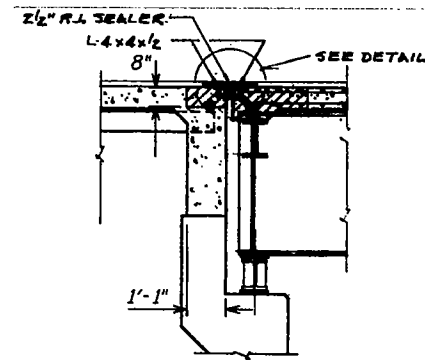


Note: Existing Reinforcement Bars shown are to be cleaned and incorporated into new construction.

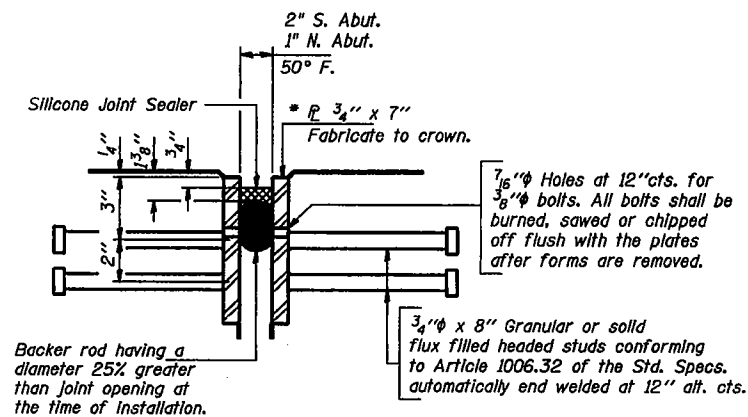
JOINT RECONSTRUCTION



EXISTING PARTIAL PLAN



SECTION THRU
EXISTING ABUT.



DETAIL "A"

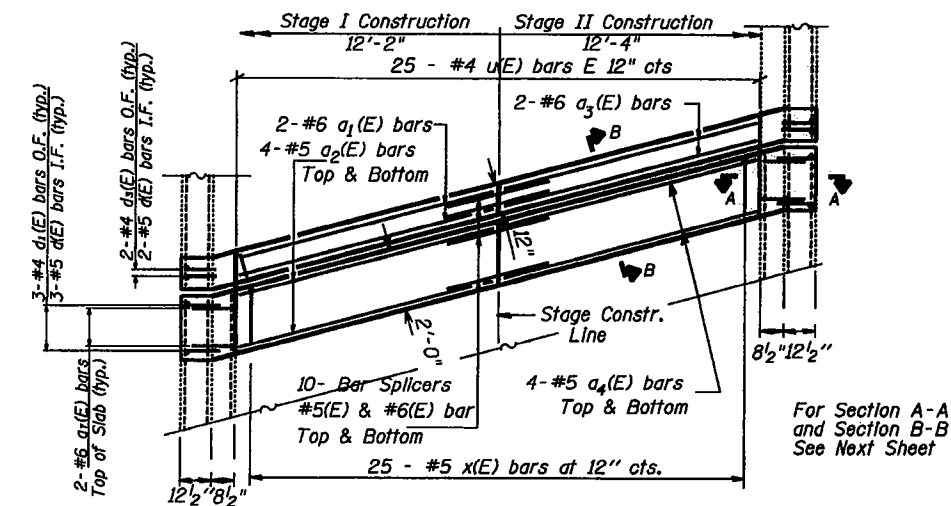
* Furnish in segments of 20 ft. maximum length. Maximum space between installed segments shall be 3/16 inch. Seal space with Silicone Sealant suitable for Structural Steel.

Note: After fabrication all surfaces of the steel plates shall be given one shop coat of paint specified for Structural Steel. No field painting required.

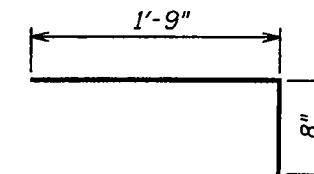
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	16	#5	2'-9"	
a1(E)	4	#6	14'-2"	
a2(E)	16	#5	14'-2"	
a3(E)	4	#6	14'-5"	
a4(E)	16	#5	14'-5"	
a7(E)	8	#6	4'-0"	
d(E)	20	#5	4'-3"	
d1(E)	12	#4	4'-6"	
d2(E)	8	#4	2'-1"	
d3(E)	8	#4	6'-0"	
x(E)	50	#5	2'-5"	
u(E)	50	#4	1'-7"	
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Pound	1090		
Concrete Superstructure	Cu. Yd.	7.5		
Concrete Removal	Cu. Yd.	7.8		
Furnishing and Erecting Structural Steel	Pound	2269		
Silicone Joint Sealer	Foot	130		
Bar Splicers	Each	20		
Polymer Concrete	Cu. Ft.	6.5		

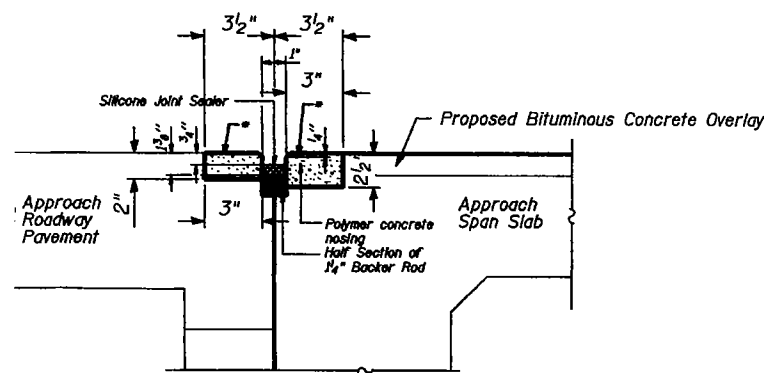
Reinforcement bars designated (E) shall be epoxy coated.



PROPOSED PARTIAL PLAN



BAR x(E)



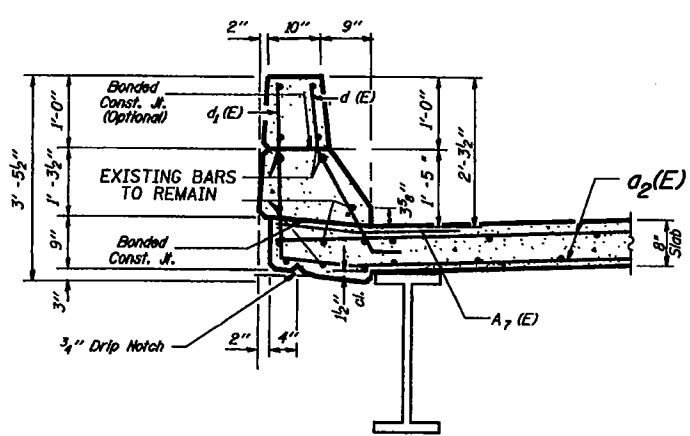
SECTION "C-C"

* Concrete Removal For Polymer nosing Included in Concrete Removal Quantities.

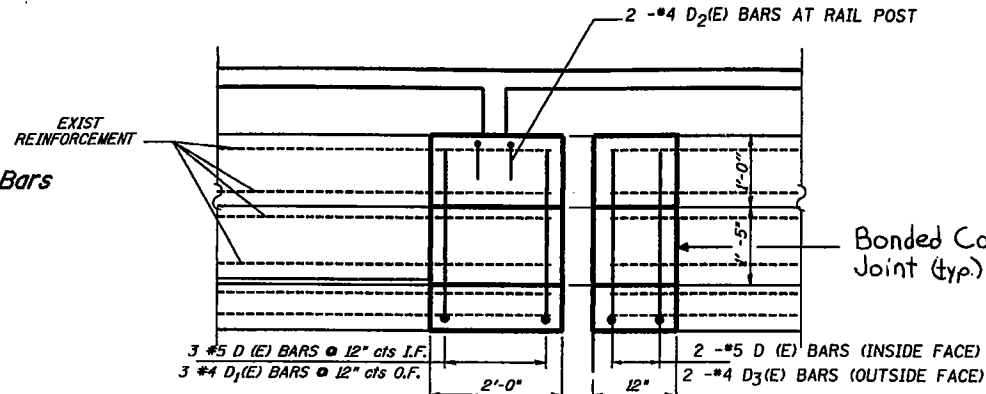
JOINT REPLACEMENT DETAILS
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	POST	JOB	DATE	SHEET NO.
F.A.I. 39	3HB-1	Winnebago	114	65	12 SHEETS
F.L.R.D. DIST. NO. 7		ILLINOIS	F.L.R.D. PROJECT		

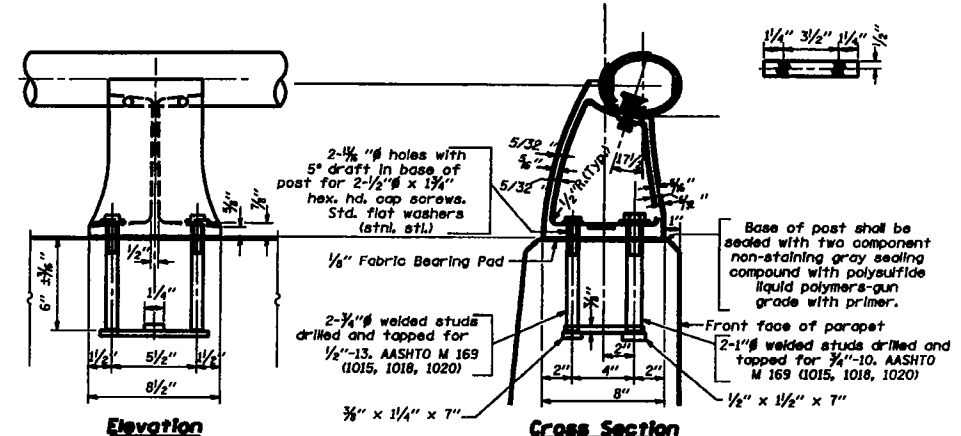


SECTION A-A
(deck span)

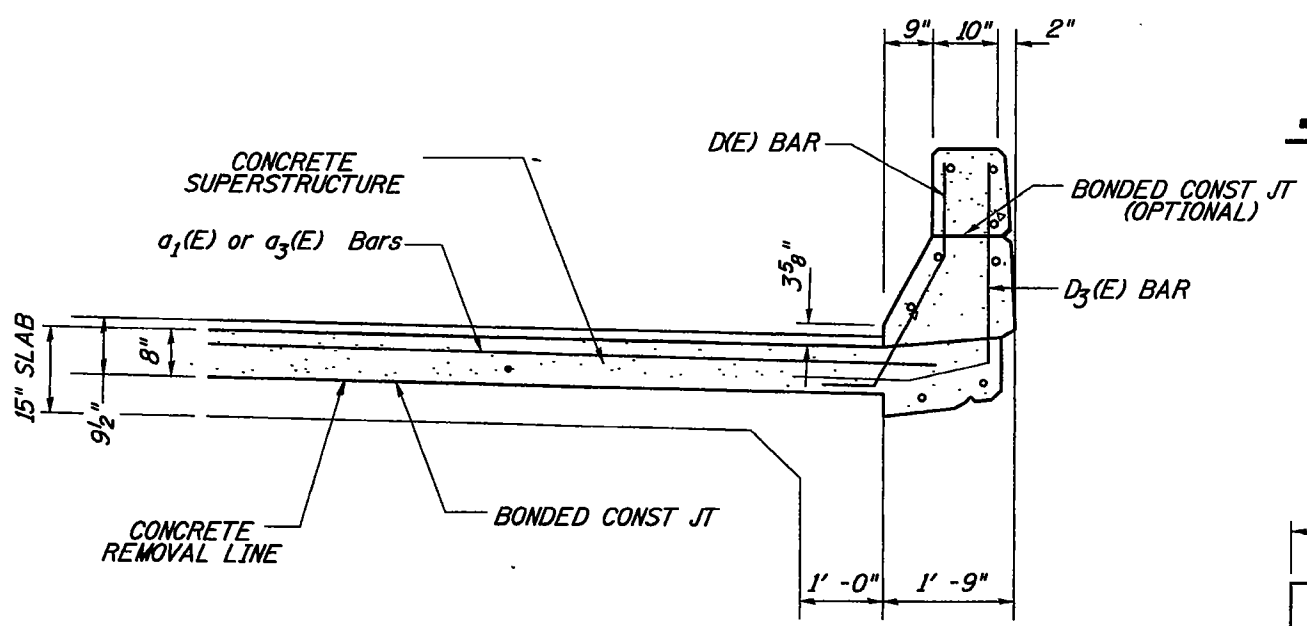


SECTION B-B

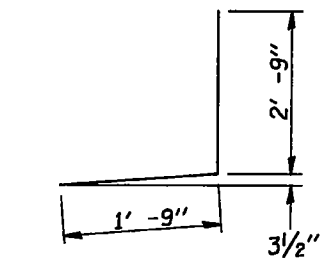
NOTE: ALL COST FOR REMOVAL OF EXISTING ALUMINUM RAILING AND RAIL ELEMENTS, IF REQUIRED, AND RE-INSTALLATION SHALL BE CONSIDERED INCLUDED IN CONCRETE REMOVAL



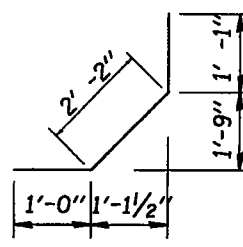
RAIL POST DETAILS
PROVIDE NEW ANCHORAGES WHEN REMOVING AND RE-ERECTING RAIL POSTS



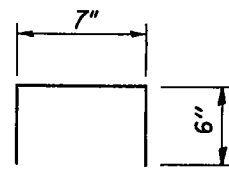
TYP SECTION THRU SLAB PARAPET
(at ends of approach span)



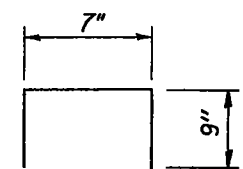
#4 D₁(E) BAR



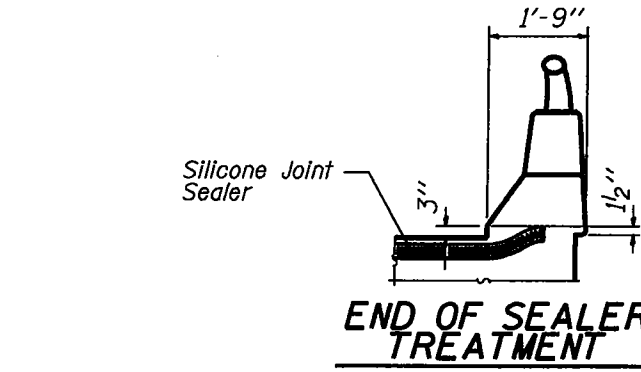
#5 D (E) BAR



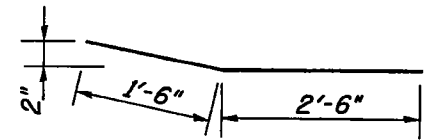
#4 UE(E) BAR



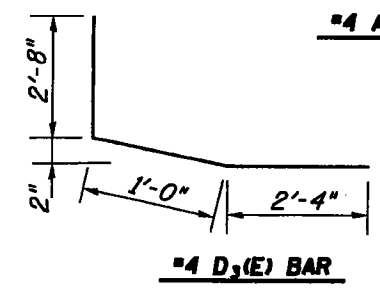
#4 D₂(E) BAR



END OF SEALER TREATMENT



#4 A₇(E) BAR



#4 D₃(E) BAR

PARAPET DETAILS
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

ED	
ED	
ED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

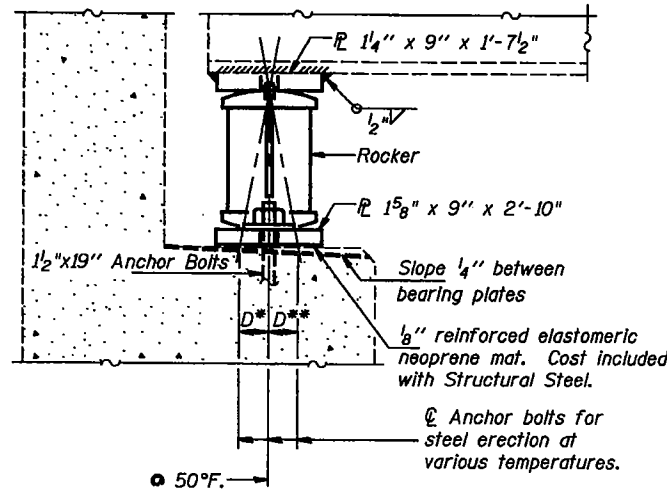
GIRDER REACTIONS

R _Q	(k)	79.6
R _L	(k)	53.6
IMP.	(k)	11.8
R (Total)	(k)	145.0

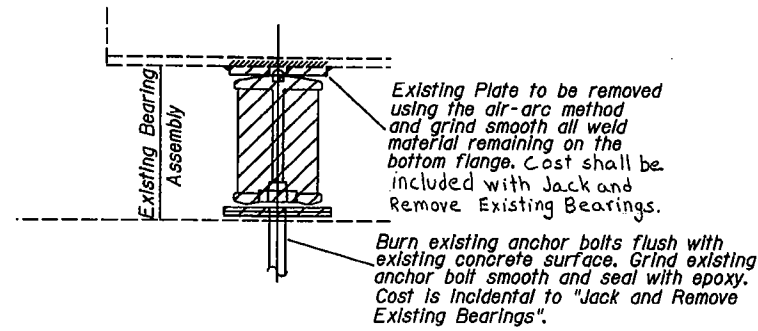
ROUTE NO.	SECTION	COUNTY	SHEETS	"OF"	SHEET NO.
I-39	201-3HB-1	Winnebago	114	66	12 SHEETS
P.O. ROAD DIST. NO. 7		ILLINOIS	P.O. ROAD PROJECT		

*D=1/8"/100 ft. of exp. for every 15° below the normal temp. of 50°F.

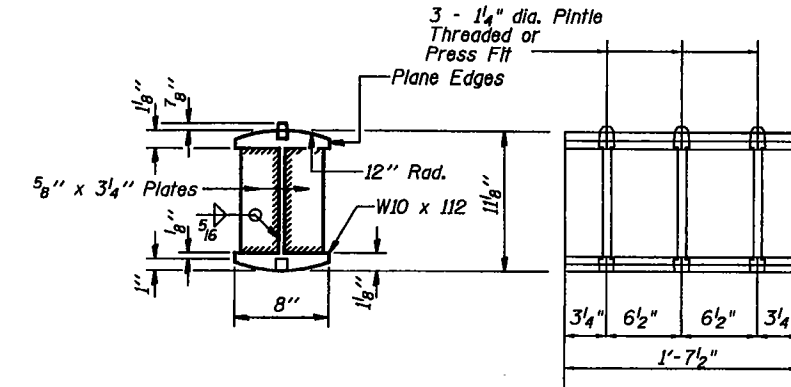
**D=1/8"/100 ft. of exp. for every 15° above the normal temp. of 50°F.



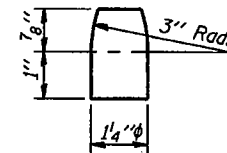
SECTION AT SOUTH ABUTMENT



BEARING REMOVAL



DETAIL OF ROCKER



DETAIL OF PINTLE

BEARING REPLACEMENT NOTES

Note:
-Diaphragm removal and replacement may be required to facilitate drilling holes. Cost shall be included with furnishing and erecting structural steel

-New bearings and anchor bolts are included with furnishing and erecting structural steel.

-Min. Jack Capacity = 110 Tons

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

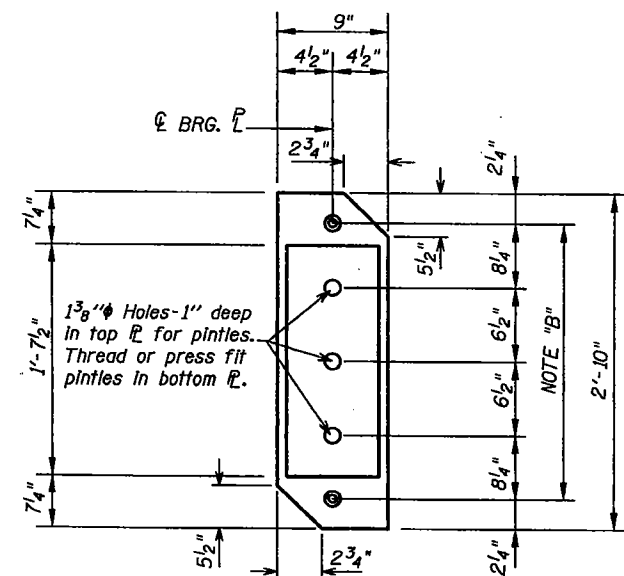
Bearing Removal and Replacement Schedule:

SN 101-0139: ~~XXXXXXXXXXXXXXXXXXXX~~

Note "B" : 2" Dia. Holes for 1 1/2" Dia. x 19" Anchor Rods (See Sheet 8 of 12 for Anchor Bolt Details). Anchor bolt assemblies shall be hot dipped galvanized and no field painting is required.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Jack and Remove Existing Bearings	Each	2
Furnishing and Erecting Structural Steel	Pound	887



BEARING - PLAN AT SOUTH ABUTMENT

ABUTMENT REPAIR PLAN
F.A.I. RTE. 39 (I-39 & US51)
RAMP "BD"
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

DESIGNED
CHECKED
BY
CHECKED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	DISTRICT	COUNTY	SHEET NO.	TOTAL SHEETS
201-39	3HB-1	Winnebago	114	67
ILLINOIS DEPT. OF TRANSPORTATION		SHEET NO. 8		

The Illinois Coil-Lock Anchor Bolt is a proprietary which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected by Federal copyright laws. The production and fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or fabricator for producing or fabricating this bolt.

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire.

The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed. The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

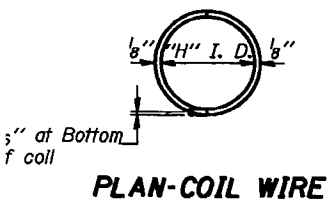
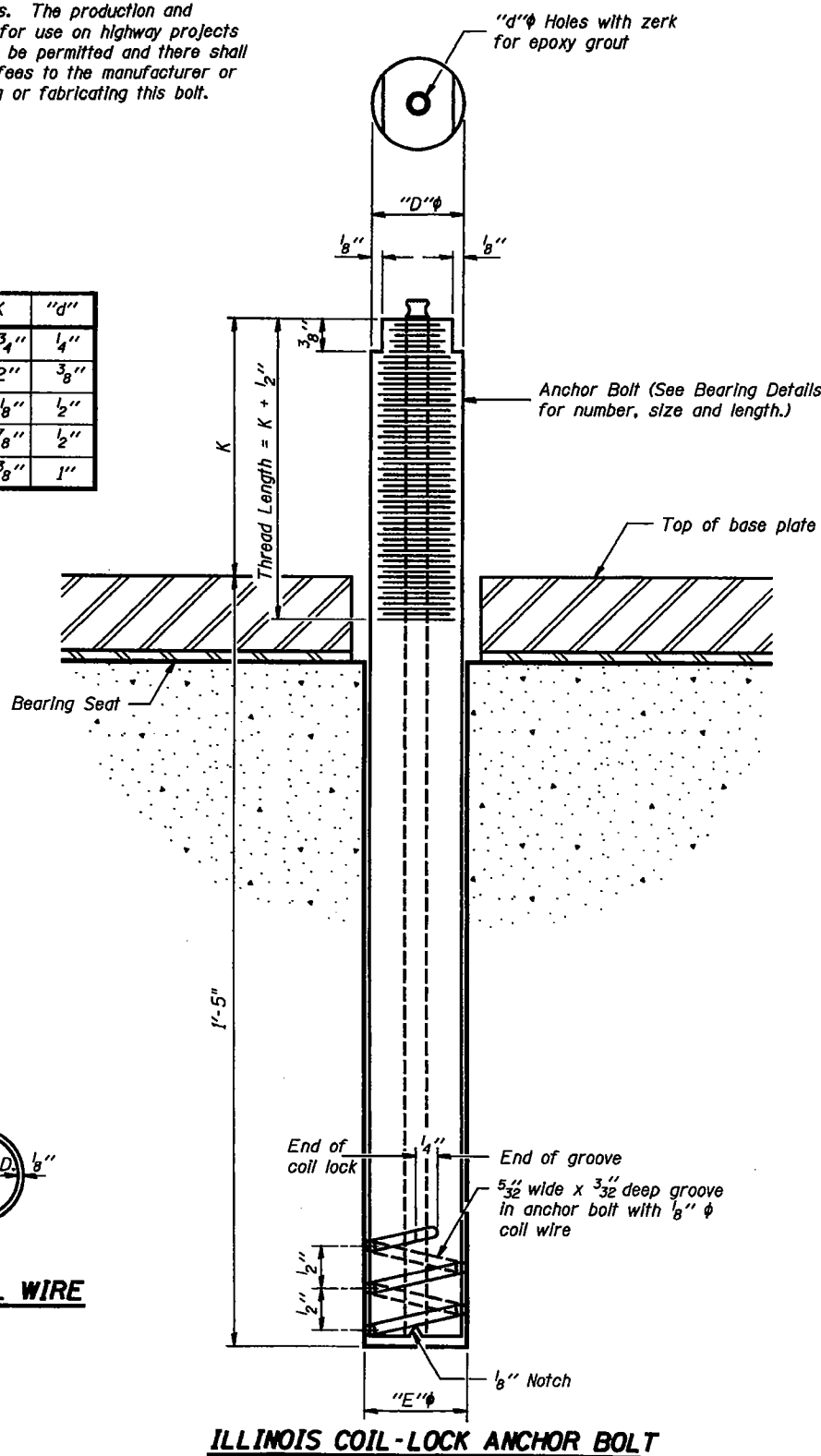
GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.

Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. A threaded rod stud with nut and washer of the type specified.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

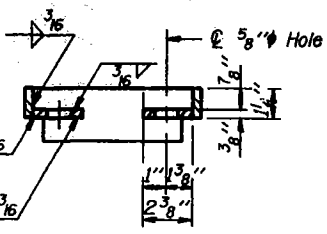
Location	Type
S. Abut.	A307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

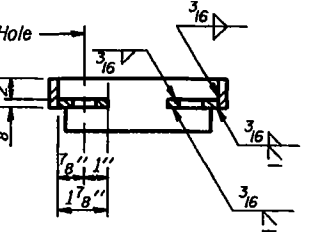
ANCHOR BOLT DETAILS FOR BEARINGS
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

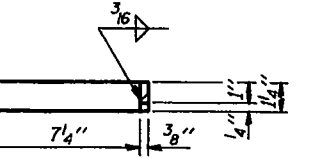
SHEET NO.	SECTION	COUNTY	DATE	REV.	SHEET NO.
39	201-3HB-1	Winnebago	114	68	12 SHEETS
F.A.I. RTE. 39 (I-39 & US51)					



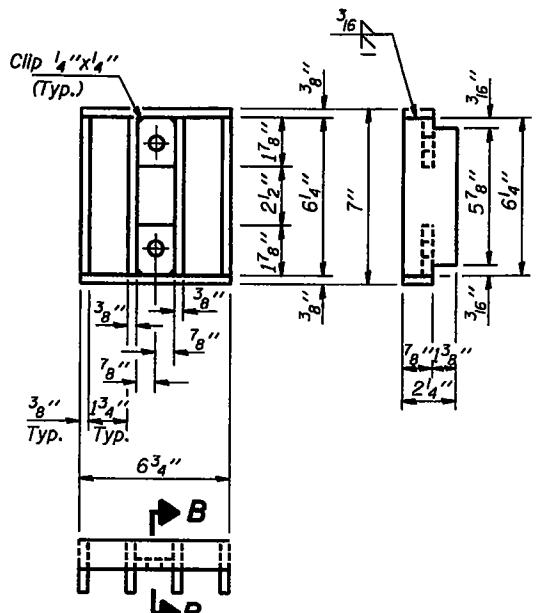
SECTION A-A



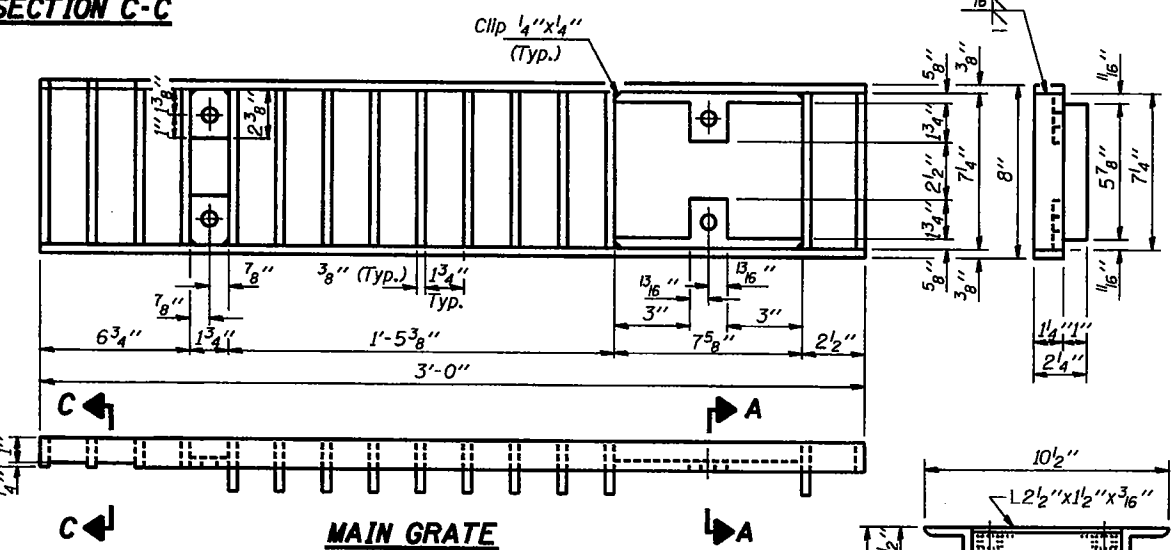
SECTION B-B



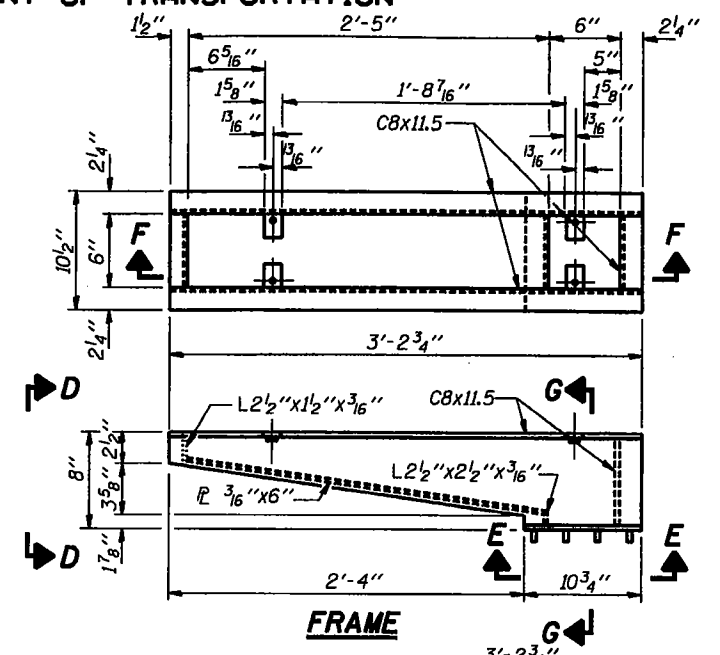
SECTION C-C



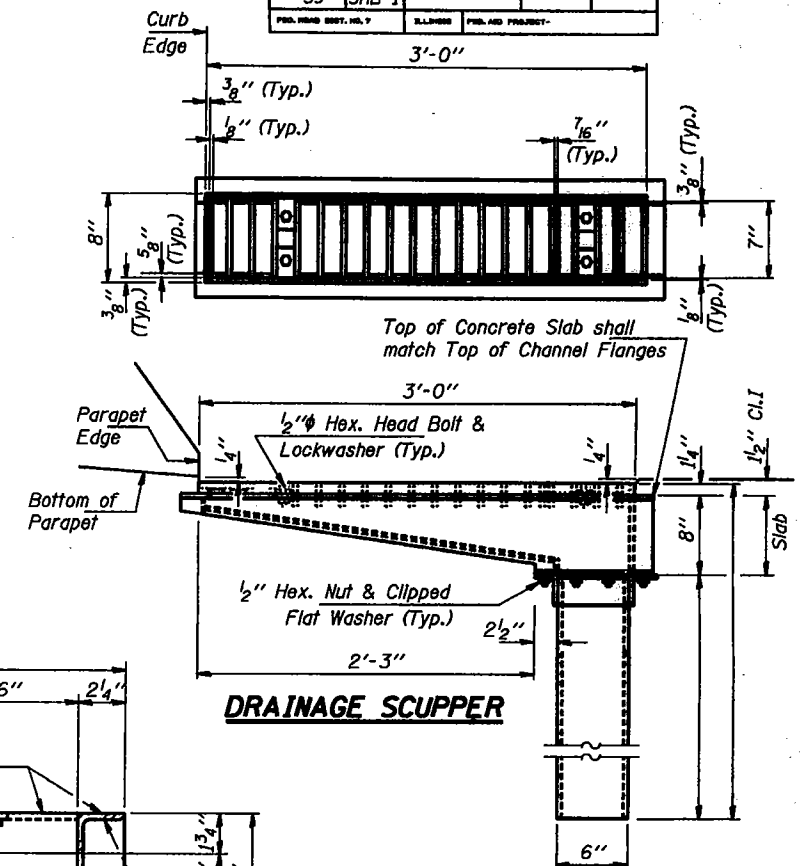
CLEANOUT GRATE



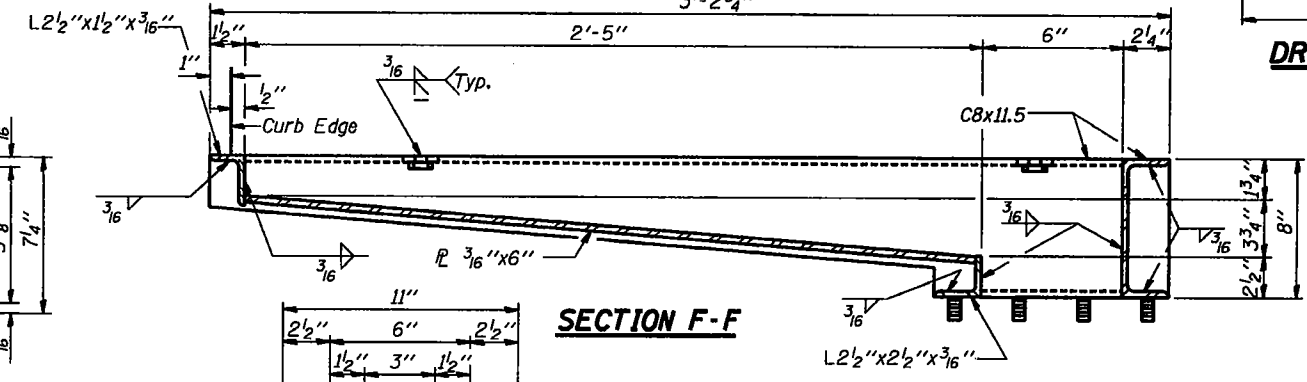
MAIN GRATE



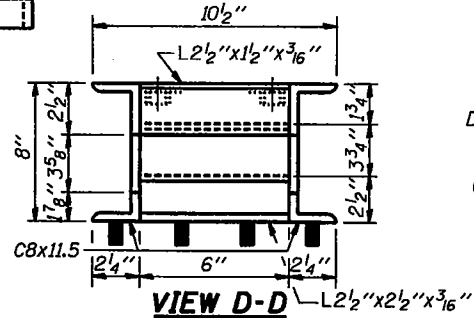
FRAME



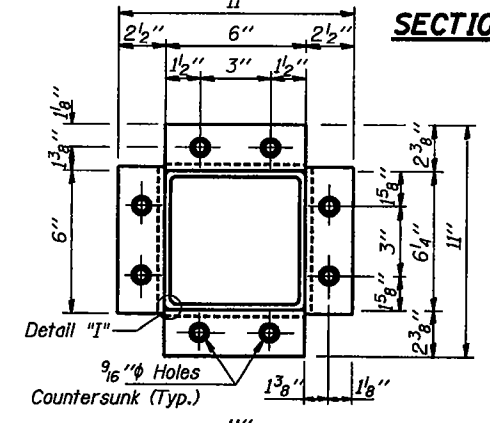
DRAINAGE SCUPPER



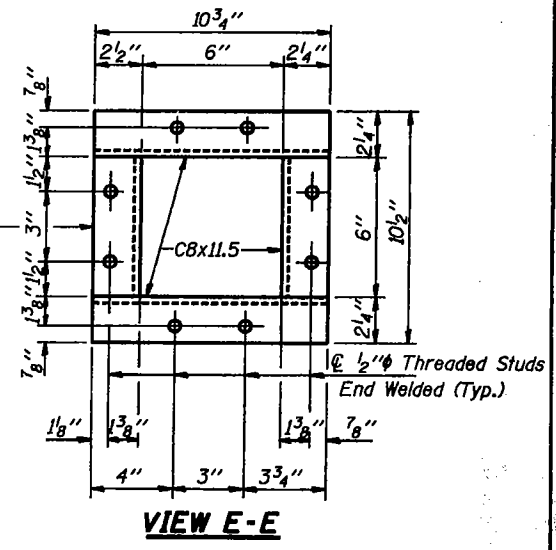
SECTION F-F



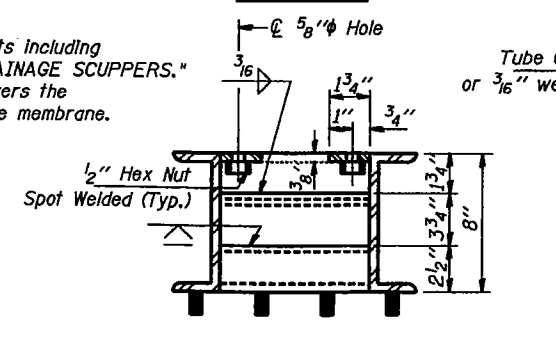
VIEW D-D



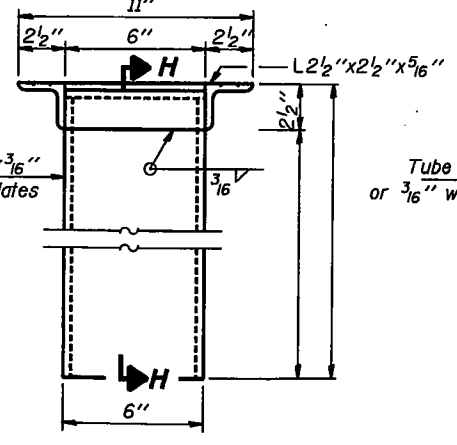
DETAIL 'I'



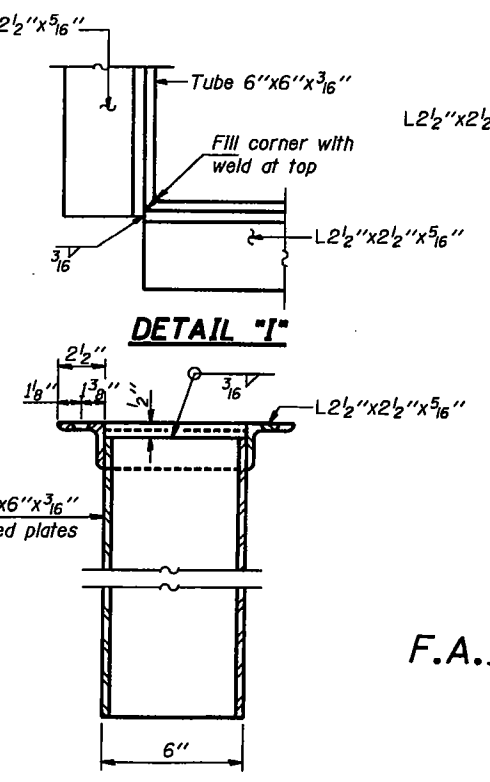
VIEW E-E



SECTION G-G



DOWNSPOUT



SECTION H-H

BILL OF MATERIAL

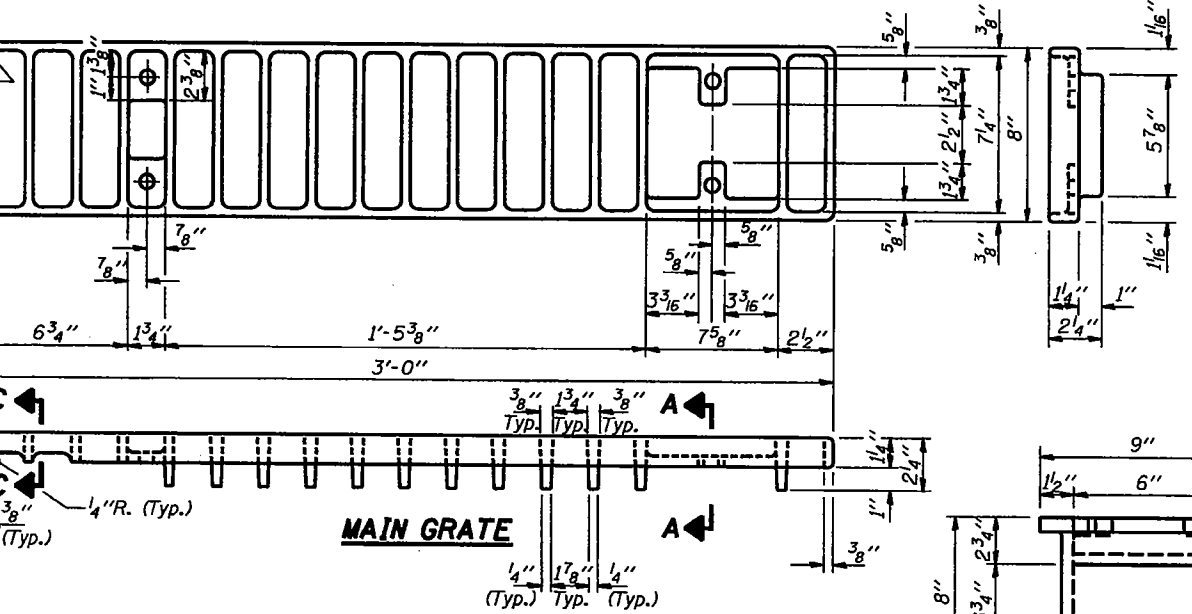
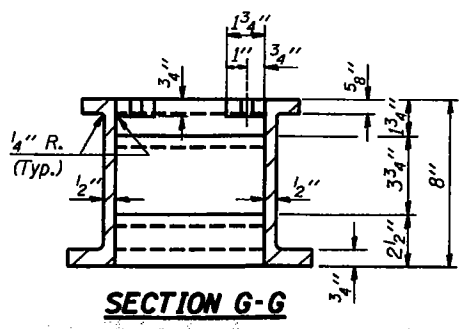
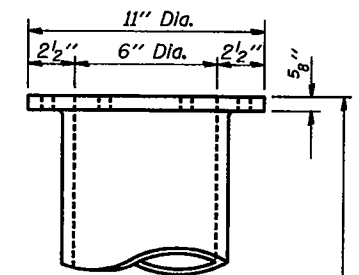
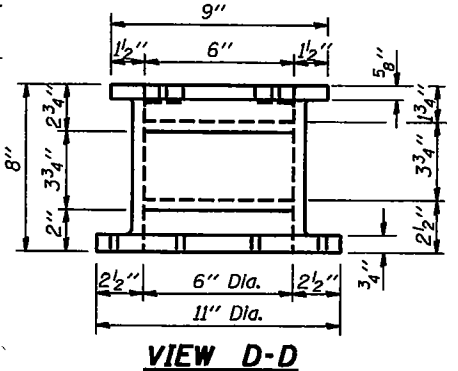
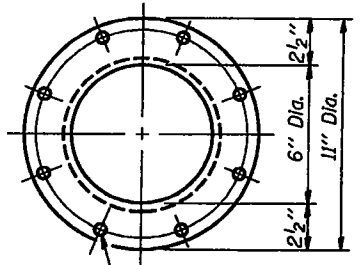
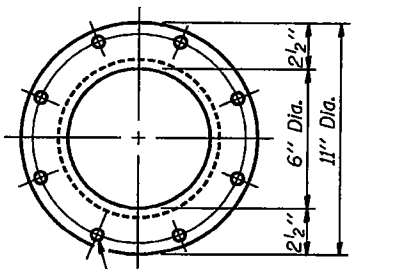
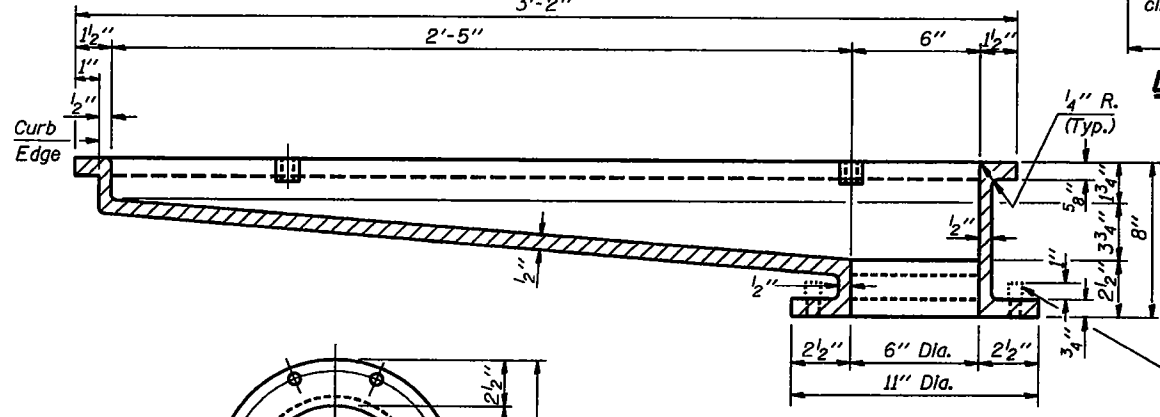
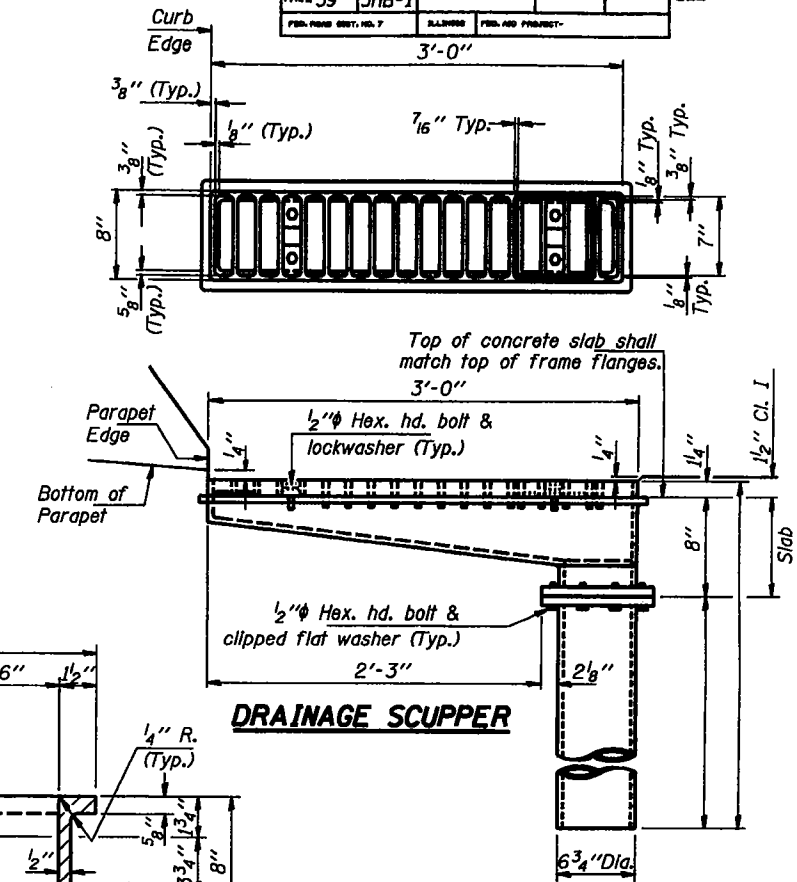
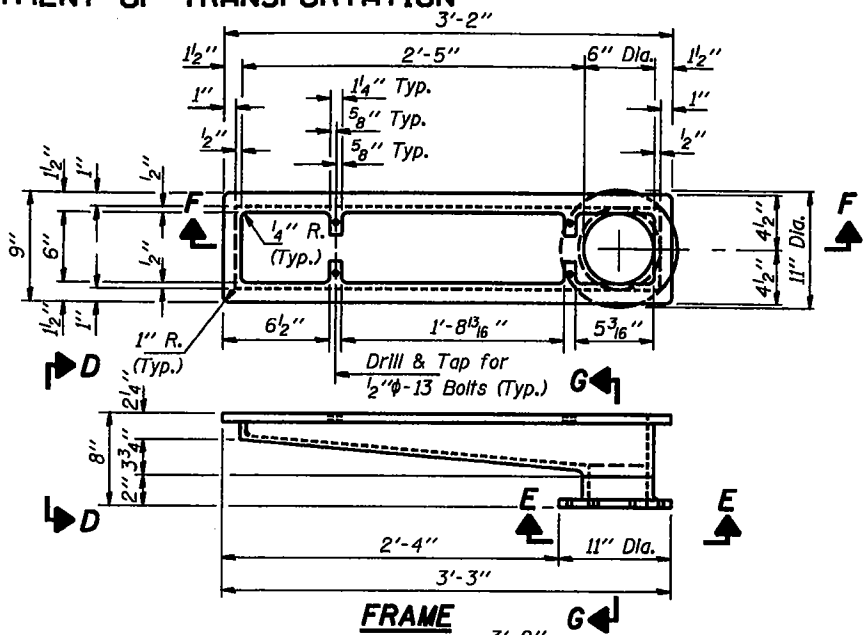
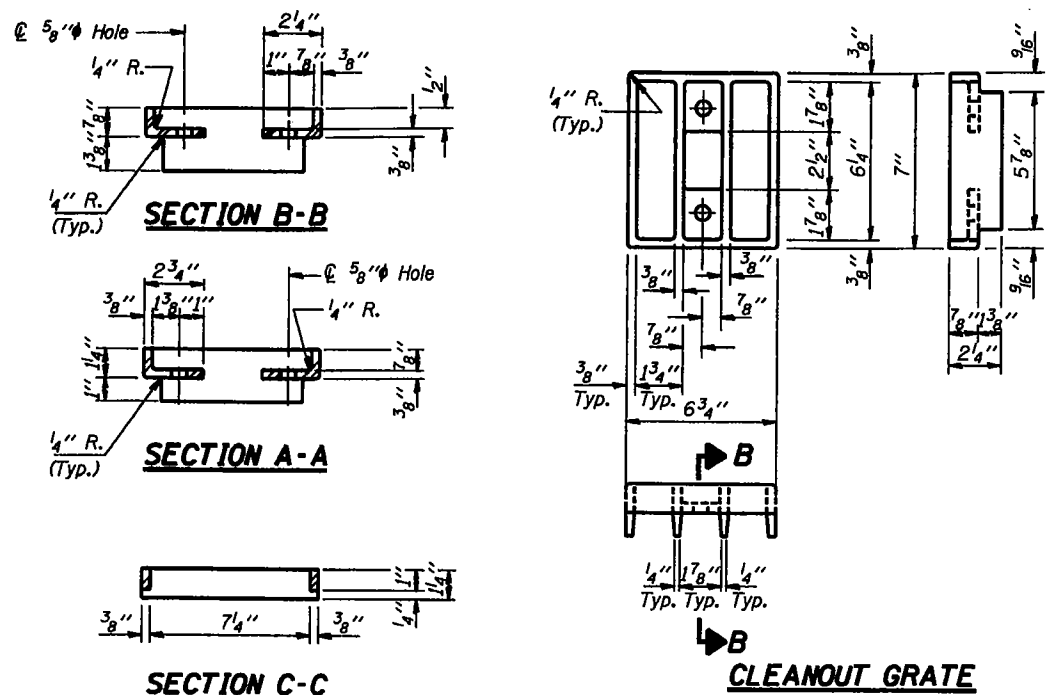
ITEM	UNIT	QUANTITY
Drainage Scupper	Each	2

DRAINAGE SCUPPER
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

Follow structural steel tubing shall conform to the requirements of ASTM Specification A 500 Grade B, or A 501 Structural Steel Tubing.
All other shapes, plates and bars shall conform to the requirements of AASHTO M 270 Grade 36.
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 according to AASHTO M 111 & ASTM A 385.
All bolts, washers and nuts shall be galvanized according to AASHTO M 232.
Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper will be paid for at the unit bid price each for "DRAINAGE SCUPPERS."
The Waterproofing Membrane System shall be installed such that the membrane covers the curb flanges and extends down into the frame with the grates placed on top of the membrane.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	SECTION	SHEET NO.
39	201-3HB-1	Winnebago	114	69
SHEET NO. 10				12 SHEETS



All cast iron parts shall be gray iron conforming to the requirements AASHTO M 105, Class 30.
Bolts, washers and nuts shall conform to the requirements of ASTM A 307.
All bolts, washers and nuts shall be galvanized according to AASHTO M 232.
The waterproofing membrane system shall be installed such that the membrane vers the frame flanges and extends down into the frame with the grates placed 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 each 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.

(Sheet 2 of 2)
ALTERNATE - CAST IRON DRAINAGE SCUPPER
F.A.I. RTE. 39 (I-39 & US51)
RAMP BD
SECTION 201-3HB-1
WINNEBAGO COUNTY
SN 101-0139

ED
D
D

GENERAL NOTES

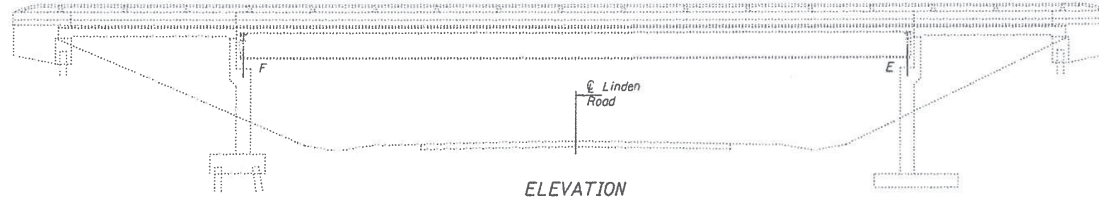
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall 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.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The new deck surface area shall have its final finish lined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F. Work to be completed under road closure.



ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	4.3
Concrete Superstructure	Cu. Yd.	4.3
Reinforcement Bars, Epoxy Coated	Pound	400
Prefabricated Joint Strip Seal	Foot	62
Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N90	Tons	36
Deck Slab Repair (Partial)	Sq. Yd.	64
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	21
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	21
HMA Surface Removal (Deck)	Sq. Yd.	711
Waterproofing Membrane System, Special	Sq. Yd.	711
Silicone Joint Sealer	Foot	61
Polymer Concrete	Cu. Ft.	5.7
Protective Shield	Sq. Yd.	120

* Quantities are estimated. Actual locations and sizes to be determined in the field, by the Engineer.



EXPIRES 11-30-2016

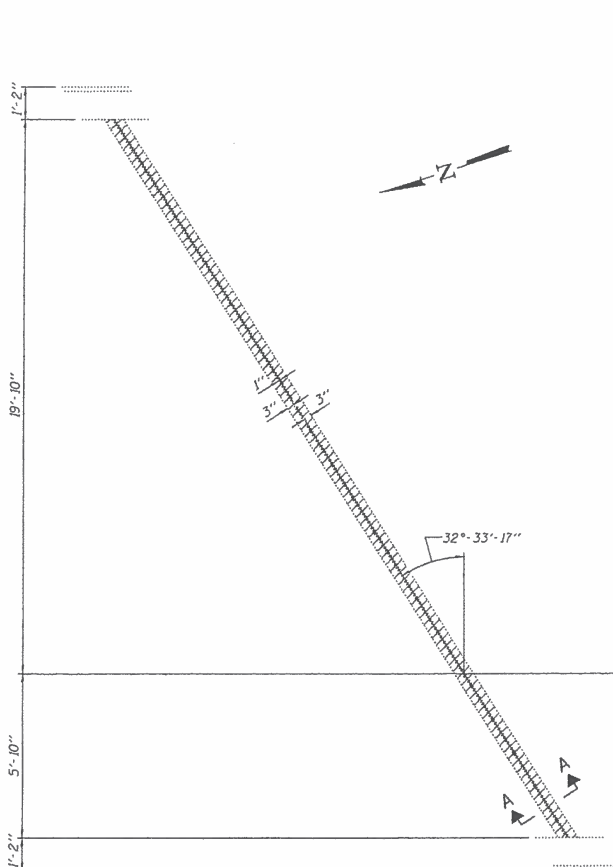
DESIGNED	<i>Victor H. Vega</i>	DATE	JANUARY 26, 2016
CHECKED	<i>Stephen M. Ryan</i>	REVISED	
DRAWN	<i>balva</i>	REVISED	
CHECKED	<i>SMR</i>	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

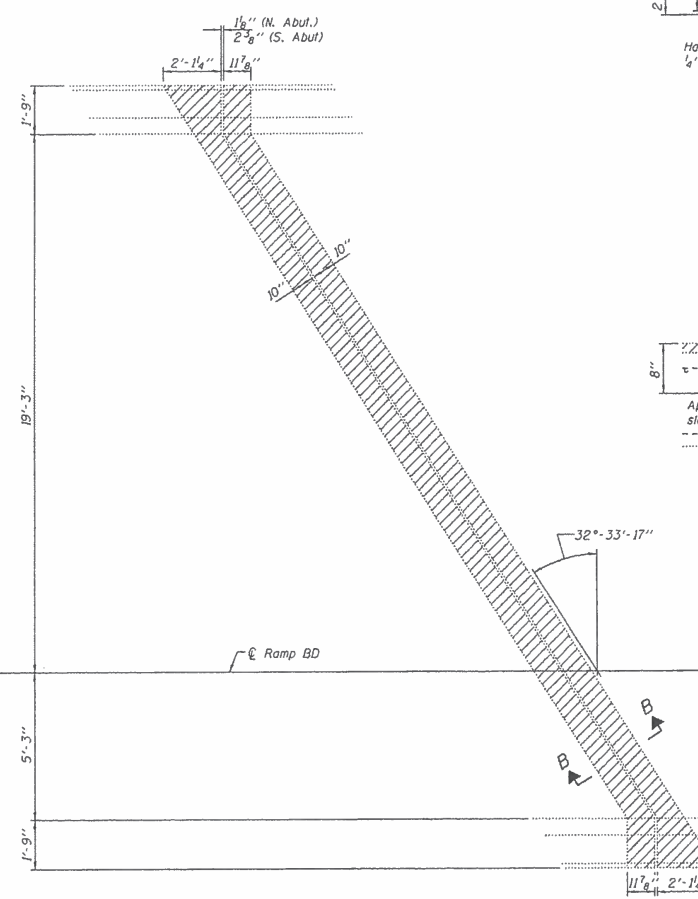
PLAN AND ELEVATION
FAI 39 (RAMP BD) OVER LINDEN ROAD
SN 101-0139

SHEET NO. 1 OF 4 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	02 DECK REPAIR 2016-2	WINNEBAGO	260	11
CONTRACT NO. 64166			ILLINOIS FED. AID PROJECT	

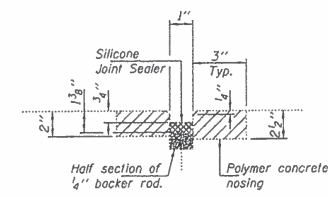


APPROACH JOINT REMOVAL DETAILS
 (N. Abut. shown
 S. Abut. similar)

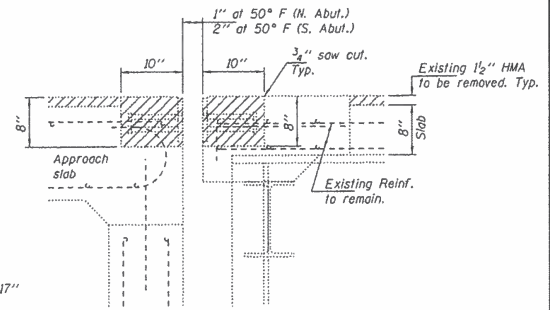


BRIDGE JOINT REMOVAL DETAILS
 (N. Abut. shown, S. Abut. similar
 except as noted.)

Notes:
 Hatched areas indicate removal.
 For Bill of Material, see sheet 3 of 4.

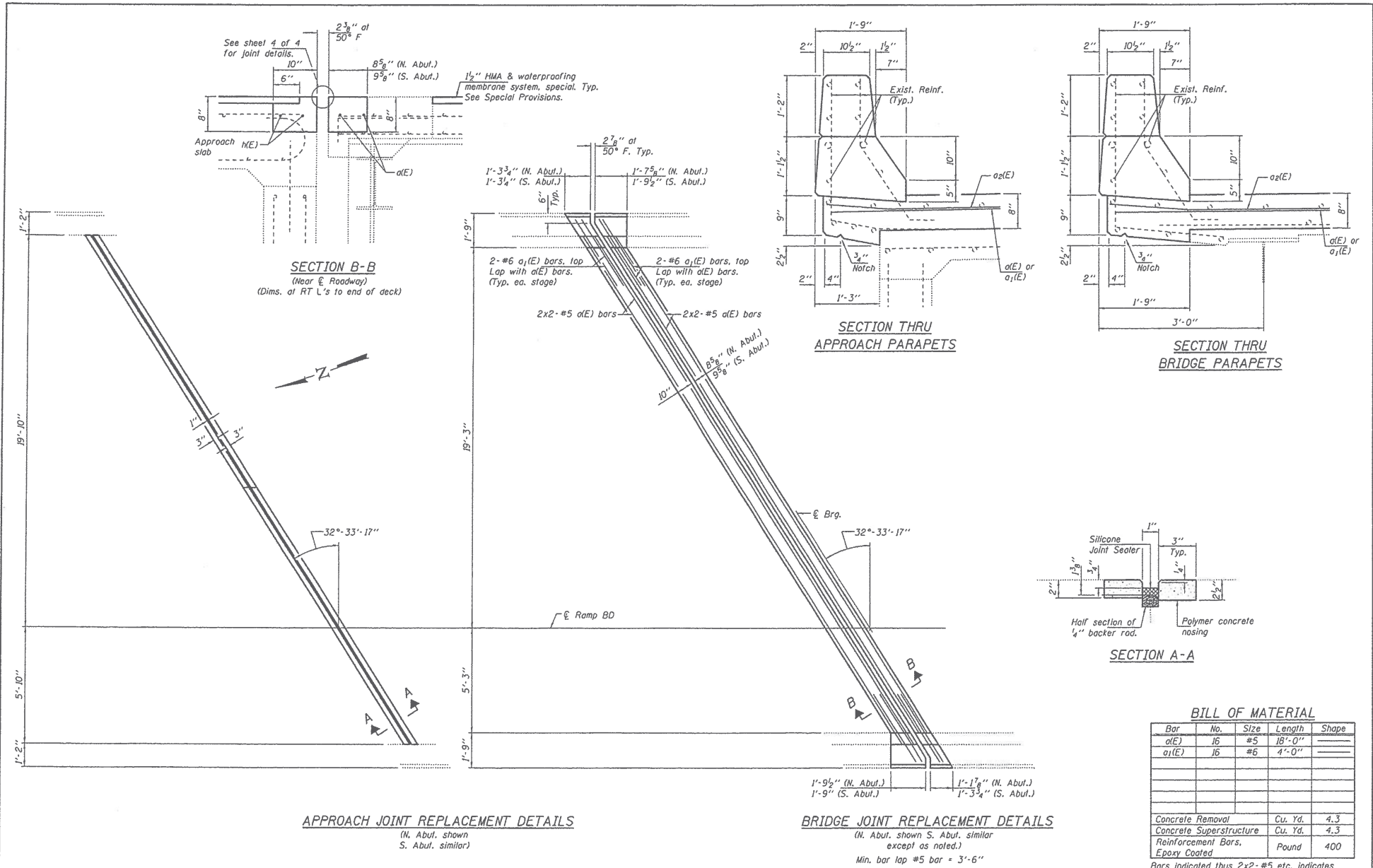


SECTION A-A
 Removal of Polymer Concrete is
 included with Concrete Removal.



SECTION B-B
 (Near \bar{C} Roadway)
 (Dims. at RT L's to end of deck)

DESIGNED <i>VHV</i>	DATE <u>JANUARY 26, 2016</u>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL DETAILS SN 101-0139	F.A.I. RTE. <u>39</u>	SECTION <u>02 DECK REPAIR 2016-2</u>	COUNTY <u>WINNEBAGO</u>	TOTAL SHEETS <u>26</u>	SHEET NO. <u>13</u>	
CHECKED <i>SMR</i>	REVISOR			CONTRACT NO. <u>64406</u>			ILLINOIS FED. AID PROJECT		
DRAWN <i>baliva</i>	REVISOR								
CHECKED <i>VHV</i>	REVISOR								
PASSED <i>[Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES		SHEET NO. 2 OF 4 SHEETS							



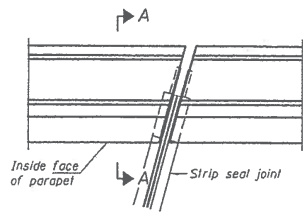
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
α(E)	16	#5	18'-0"	—
α1(E)	16	#6	4'-0"	—
Concrete Removal				
			Cu. Yd.	4.3
Concrete Superstructure			Cu. Yd.	4.3
Reinforcement Bars, Epoxy Coated			Pound	400

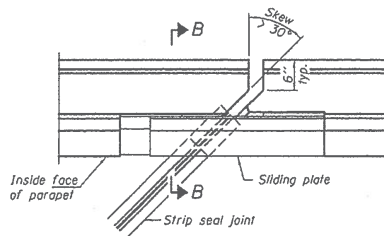
Bars indicated thus 2x2-#5 etc. indicates 2 lines of bars with 2 lengths per line.

DESIGNED <i>VHV</i>	DATE <u>JANUARY 26, 2016</u>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPLACEMENT DETAILS SN 101-0139	F.A.I. SHEETS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED <i>SMR</i>	REVISOR			39	D2 DECK REPAIR 2016-2	WINNEBAGO	13	13
DRAWN <i>balva</i>	REVISOR			CONTRACT NO. <i>64166</i>				
CHECKED <i>VHV</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES <i>A. Carl Perry</i>			[ILLINOIS] FED. AID PROJECT				

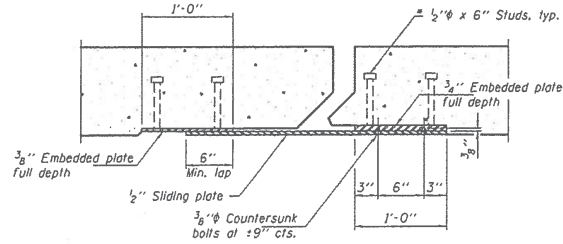
SHEET NO. 3 OF 4 SHEETS



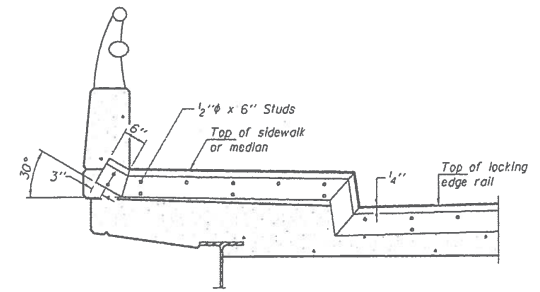
PLAN
(For stews $\leq 30^\circ$)



PLAN
(For stews $> 30^\circ$)
Showing point block

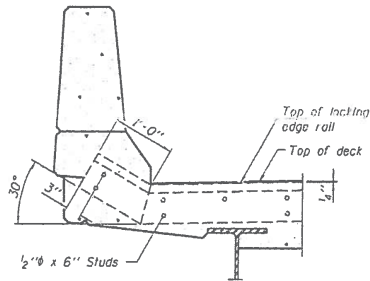


SECTION C-C

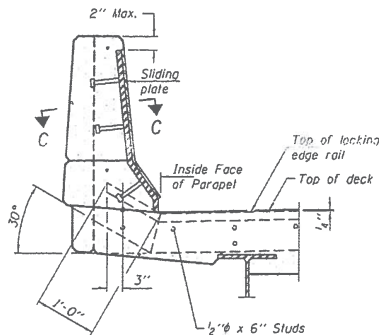


TYPICAL END TREATMENT
AT SIDEWALK OR MEDIAN

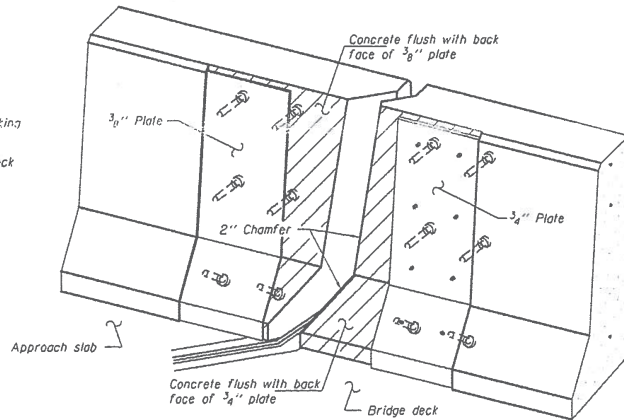
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A



SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rolls will not be allowed.

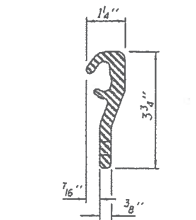
The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

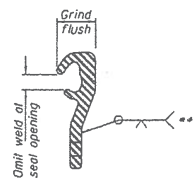
Maximum space between rail segments at stage lines shall be 1/8", sealed with a suitable sealant.

Parapet plates and anchor studs for stews $> 30^\circ$ included in the cost of Preformed Joint Strip Seal.

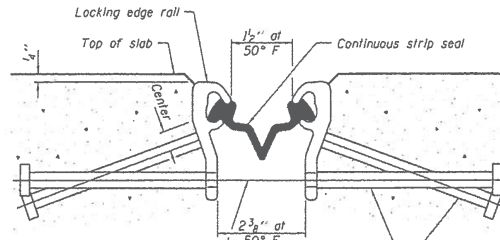
The manufacturer's recommended installation methods shall be followed.



LOCKING EDGE RAIL



LOCKING EDGE RAIL SPLICE



SECTION THRU STRIP SEAL JOINT

7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Place 1/2" ϕ x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.

** Back gauge not required if complete joint penetration is verified by mock-up.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	62

DESIGNED VHV	DATE JANUARY 26, 2016
CHECKED SMR	REVISIONS
DRAWN Daliva	REVISIONS
CHECKED VHV	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

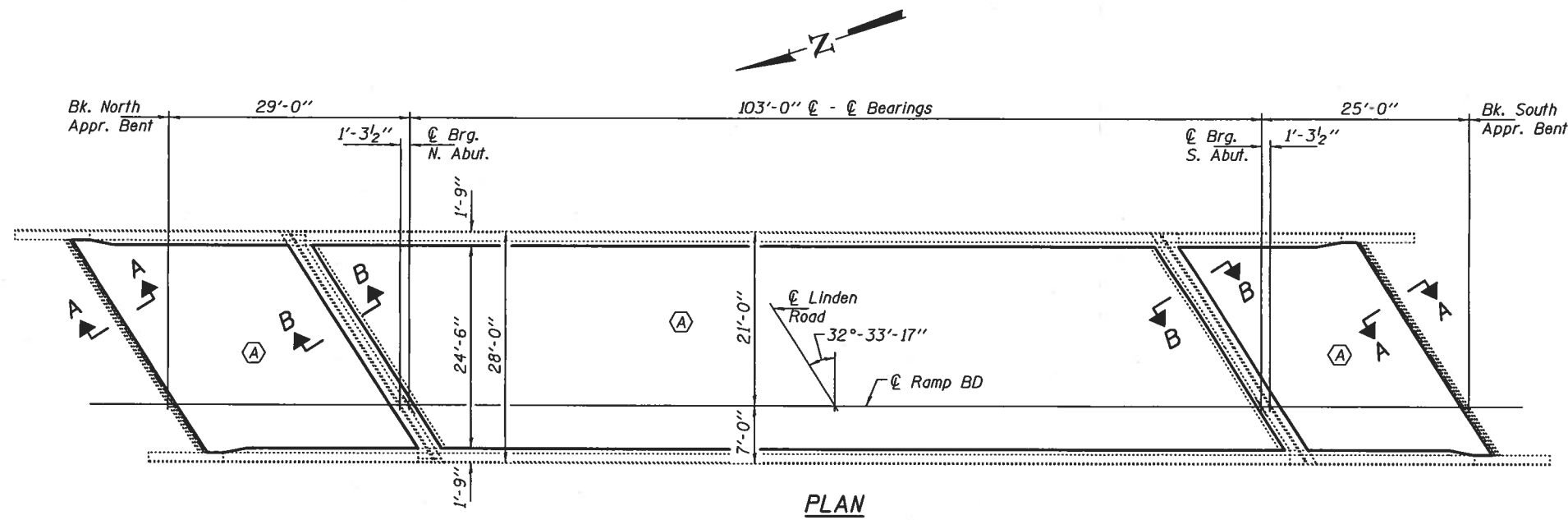
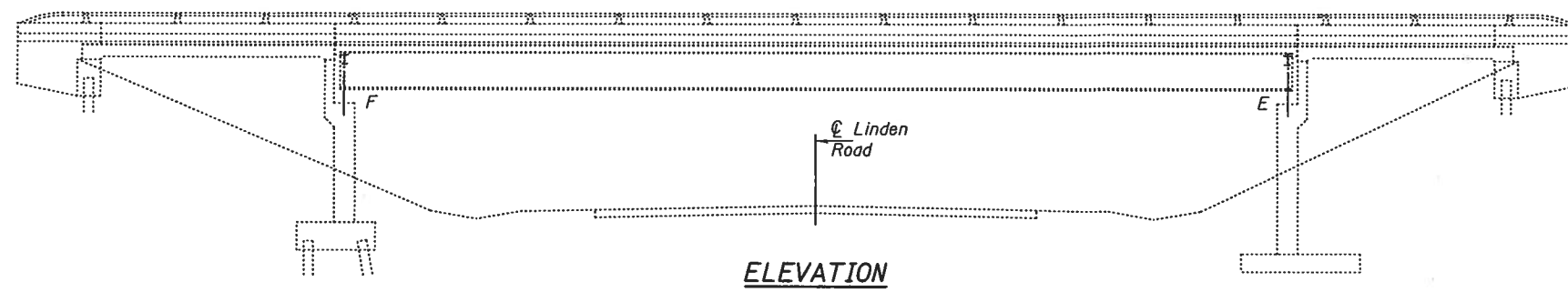
PREFORMED JOINT STRIP SEAL
SN 101-0139

F.A.I. RFE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	02 DECK REPAIR 2016-2	WILLMEROG	710	14
CONTRACT NO. 69706			ILLINOIS FED. AID PROJECT	

SHEET NO. 4 OF 4 SHEETS

GENERAL NOTES

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. Work to be completed under road closure.



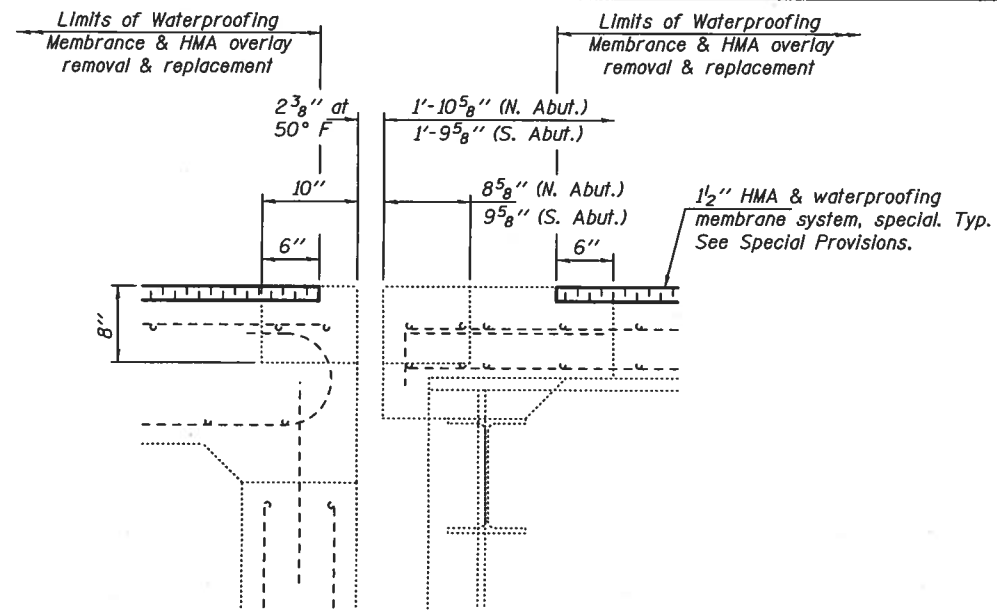
(A) - Waterproofing Membrane System & HMA surface removal and replacement.

TOTAL BILL OF MATERIAL

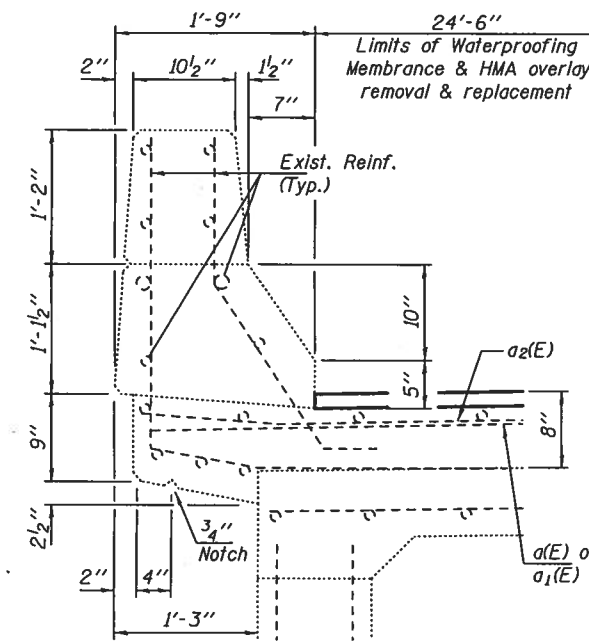
ITEM	UNIT	QUANTITY
Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N90	Tons	35
HMA Surface Removal	Sq. Yd.	410
Waterproofing Membrane System, Special	Sq. Yd.	410

PRE-FINAL
DATE: 9/3/2019
EXPIRES 11-30-2020

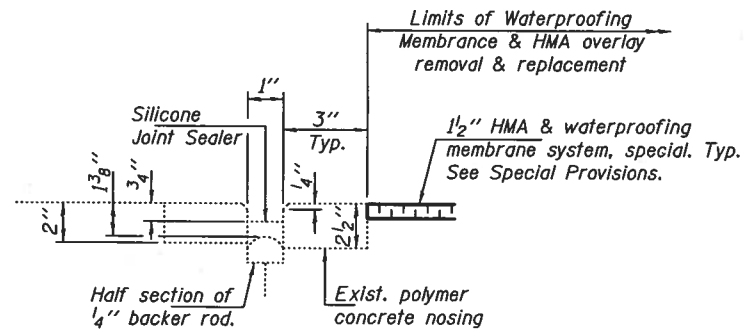
DESIGNED - CHECKED - DRAWN - <i>daburdell</i> CHECKED -	EXAMINED PASSED ENGINEER OF STRUCTURAL SERVICES ENGINEER OF BRIDGES AND STRUCTURES	DATE - SEPTEMBER 3, 2019 REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND ELEVATION FAI 39 (RAMP BD) OVER LINDEN ROAD SN 101-0139 SHEET NO. 1 OF 2 SHEETS	F.A.I. RTE. 39 SECTION COUNTY WINNEBAGO TOTAL SHEETS SHEET NO. CONTRACT NO. ILLINOIS FED. AID PROJECT
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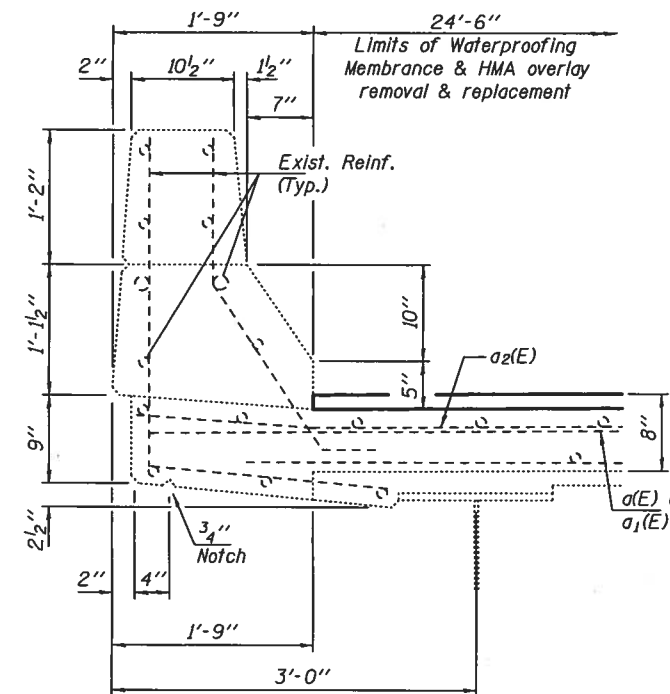
SECTION B-B
(Near Center Roadway)
(Dims. at RT L's to end of deck)



SECTION THRU APPROACH PARAPETS



SECTION A-A



SECTION THRU BRIDGE PARAPETS

PRE-FINAL

DATE: 9/3/2019

DESIGNED - XXX
CHECKED - XXX
DRAWN - daburdell
CHECKED - XXX

EXAMINED
PASSED

Timothy A. Daulton
ENGINEER OF STRUCTURAL SERVICES
Carl Perry
ENGINEER OF BRIDGES AND STRUCTURES

DATE - SEPTEMBER 3, 2019
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERLAY DETAILS
SN 101-0139

SHEET NO. 2 OF 2 SHEETS

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