101-0131

INDEX OF SHEETS ON SHEET NO. 2

FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
412	201-3HB-3	WINNEBAGO	38	1
F. HWY. A. PROJ. NO. 4	ILLINOIS	PROJECT EBU-412-5(4)		

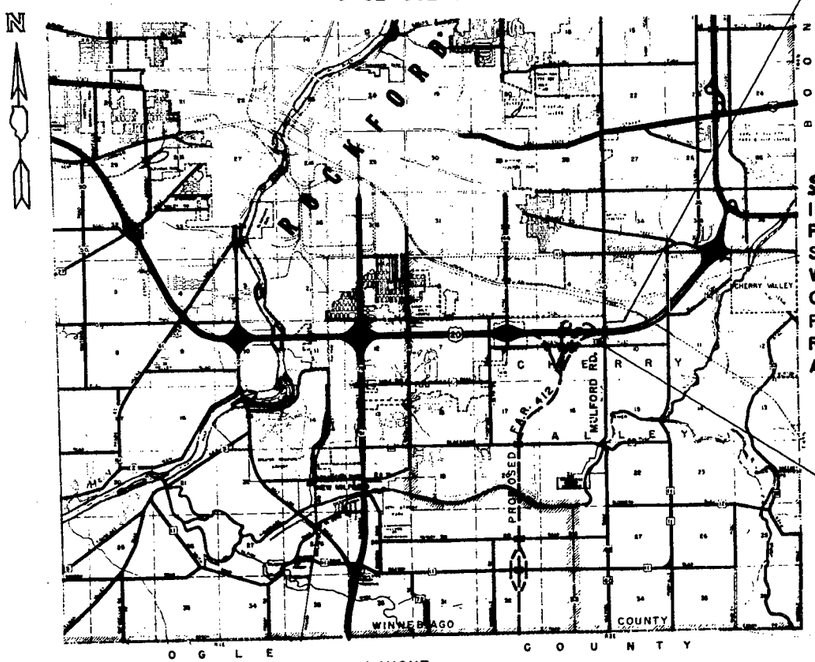
P92-026-74

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F. A. ROUTE 412
SECTION 201-3HB-3
F. A. PROJECT EBU -412-5(4)
WINNEBAGO COUNTY

C-92-002-76



LAYOUT
SCALE 1" = 1 MILE

PROJECT ENDS MULFORD ROAD STATION 60+00.00

PROJECT BEGINS MULFORD ROAD STATION 39+18.00

LOCATION OF SECTION INDICATED THUS

SECTION 201-3HB-3

INCLUDES THE REMOVAL AND COMPLETE RECONSTRUCTION OF A TWO SPAN (1 AT 94'-0" & AT 131'-0") WELDED PLATE GIRDER STRUCTURE CARRYING C.H. ROUTE 60 (MULFORD ROAD) OVER F.A. ROUTE 194 (U.S. ROUTE 20) AT STATION 753+57.61 ALONG CENTERLINE F.A. ROUTE 194.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Feb. 5 1976
D. E. Sunmark
DISTRICT ENGINEER

EXAMINED March 17 1976
ENGINEER OF PLANS AND CONTRACTS

PASSED March 17 1976
ENGINEER OF DESIGN

APPROVED March 17 1976
DIRECTOR OF HIGHWAYS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

DESIGN DESIGNATION

265 (95) COLLECTOR 0.65(BIT CONC-20)

NET LENGTH OF PROJECT EBU-412-5(4) = 0.00 FT= 0.000 MILES

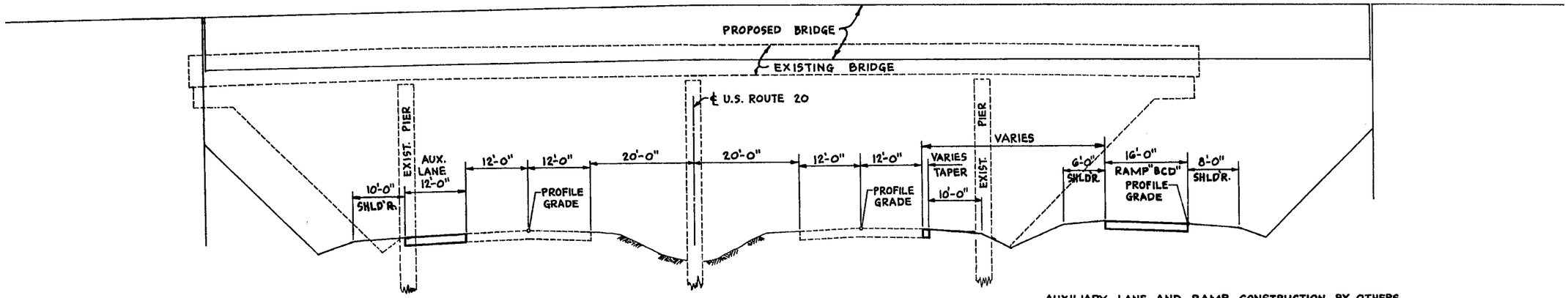
GROSS LENGTH OF IMPROVEMENT = 2082.00 FEET = 0.394 MILES = 0.634 KILOMETERS.
NET LENGTH OF IMPROVEMENT = 2082.00 FEET = 0.394 MILES = 0.634 KILOMETERS

Harold R. Vandenberg

CONTRACT NO. 82127

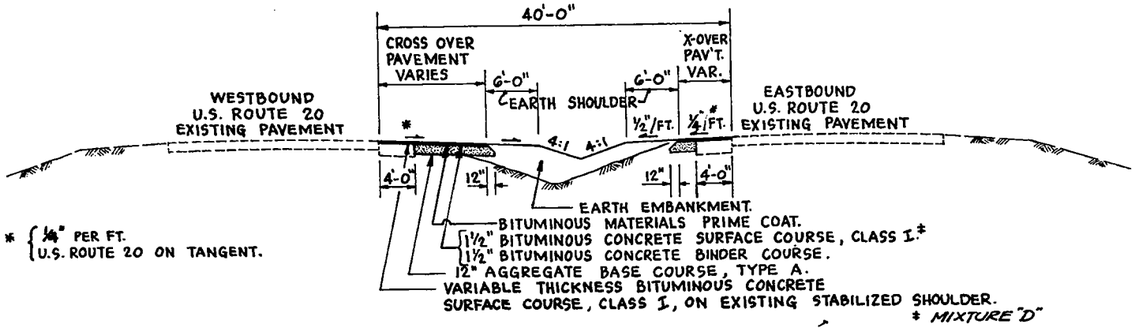
ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	201-3HB-3	WINNEBAGO	38	3
STA.		TO STA		
F.H.W.A. REG. NO. 4	ILLINOIS		PROJECT	

N



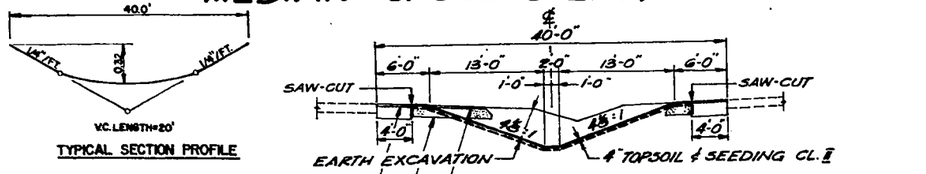
AUXILIARY LANE AND RAMP CONSTRUCTION BY OTHERS.
SEE CROSS SECTIONS FOR GRADING UNDER SECTION 201-3HB-3

U.S. ROUTE 20
VICINITY MULFORD ROAD
(LOOKING WEST)

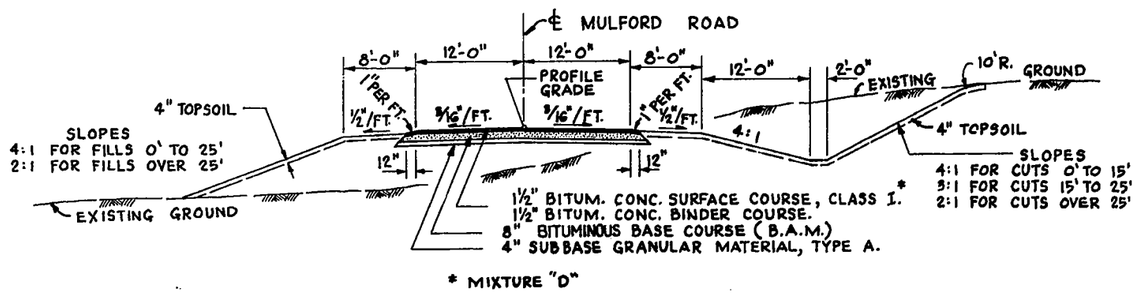


* { ⅛" PER FT. U.S. ROUTE 20 ON TANGENT.

MEDIAN CROSS-OVERS, CONSTRUCTION



MEDIAN CROSS-OVERS, REMOVAL

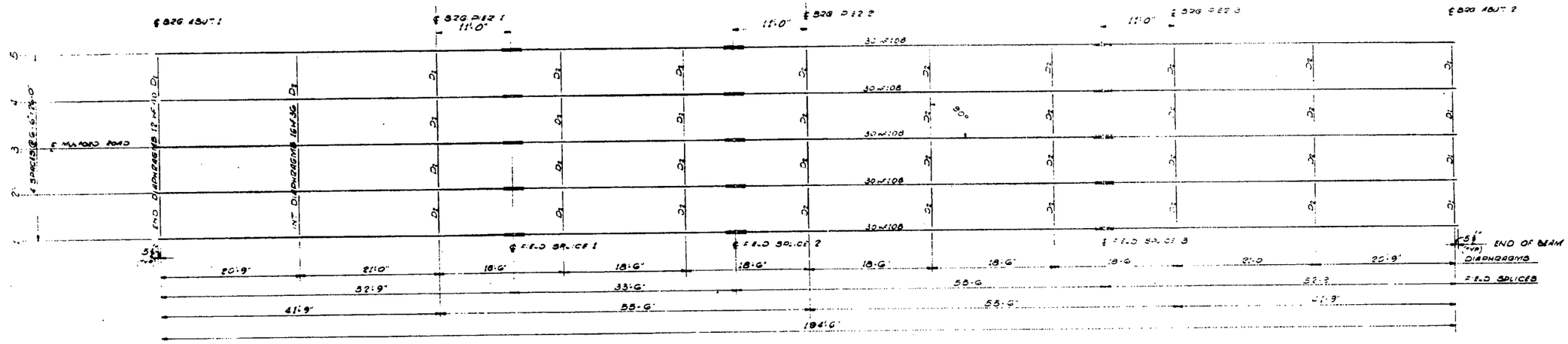


* MIXTURE "D"

MULFORD ROAD (COLLECTOR)

TYPICAL SECTIONS
F.A. ROUTE 412
SECTION 201-3HB-3
WINNEBAGO COUNTY
DISTRICT NO. 2

ROUTE NO	SEC	COUNTY	TOTAL SHEETS
FA-412	20-3HB-3	WINNEBAGO	38	8 B
STA.		TO STA.	
FED. ROAD DIST. NO 7	ILLINOIS	PROJ.	



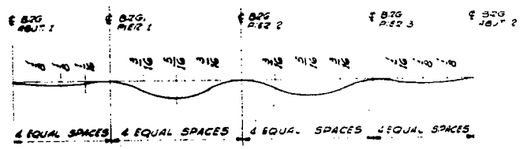
FRAMING PLAN

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

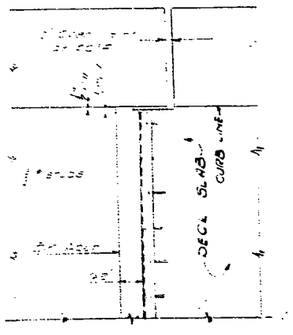
ELEVATIONS @ SPLICES ARE AT TOP OF BEAMS, NOT @ TOP OF SPLICE PLATES.

BENT NO	LOCATION	℄ BRG ABUT 1	℄ BRG PIER 1	℄ FIELD SPLICE 1	℄ FIELD SPLICE 2	℄ BRG PIER 2	℄ FIELD SPLICE 3	℄ BRG PIER 3	℄ BRG ABUT 2
1	TOP OF SLAB	822.40	822.59	822.62	822.67	822.66	822.56	822.52	822.87
	TOP OF BEAM	821.83	821.95	821.98	822.03	822.01	821.91	821.87	821.69
2	TOP OF SLAB	822.50	822.69	822.72	822.77	822.76	822.66	822.62	822.87
	TOP OF BEAM	821.92	822.05	822.08	822.13	822.11	822.02	821.97	821.79
3	TOP OF SLAB	822.53	822.72	822.75	822.80	822.79	822.69	822.65	822.90
	TOP OF BEAM	821.93	822.08	822.11	822.16	822.14	822.05	822.00	821.82
4	TOP OF SLAB	822.50	822.69	822.72	822.77	822.76	822.66	822.62	822.87
	TOP OF BEAM	821.92	822.05	822.08	822.13	822.11	822.02	821.97	821.79
5	TOP OF SLAB	822.40	822.59	822.62	822.67	822.66	822.56	822.52	822.77
	TOP OF BEAM	821.83	821.95	821.98	822.03	822.01	821.91	821.87	821.69

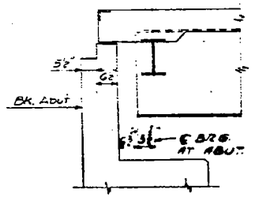
FOR CAMBER DIMENSIONS DO NOT INCLUDE ANY ALLOWANCE FOR DEFLECTION AND ARE TO BE USED FOR FABRICATION OF STRUCTURAL STEEL.



DEAD LOAD DEFLECTION DIAGRAM
FOR SLAB ONLY

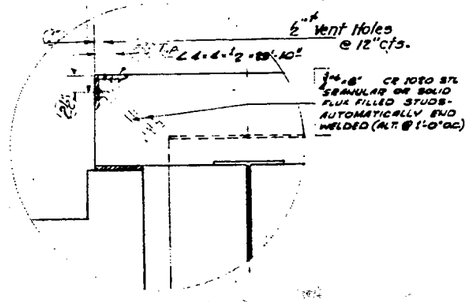


PLAN



SECTION

THE HOLES 5/12 O.C. FOR ⅜" Ø 30"-5" & 30"-5" SHALL BE BURNED, SHARED OR CLOSED OFF & USED AS BACK OF ANGLES AS-22 COPYS ARE REMOVED.



DETAIL A

EXPANSION JOINT DETAILS

THIS SHEET TO BE USED FOR CONTRACTORS REFERENCE ONLY.

FOR STEEL DETAILS SEE SHT. NO 10.

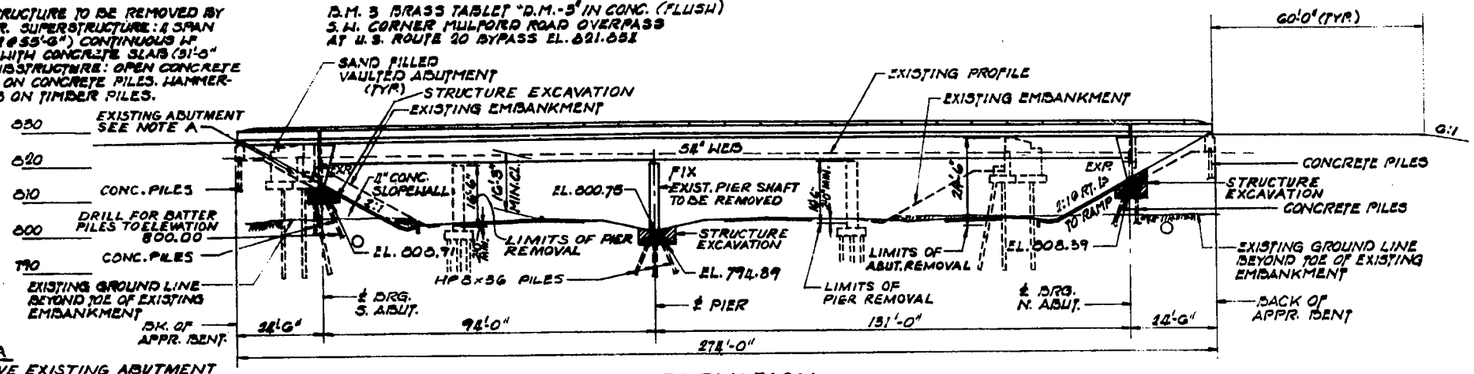
ILLINOIS DIVISION OF HIGHWAYS
ROCKFORD BYPASS
F. A. ROUTE 194
PROJECT _____ SECTION 4HB2
WINNEBAGO COUNTY
STEEL FRAMING PLAN

CONTRACT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	201-3HB-3	WINNEBAGO	98	9
STA.	TO STA.			
F.H.W.A. REG. NO. 4	ILLINOIS	PROJECT		

SHEET 1 OF 17

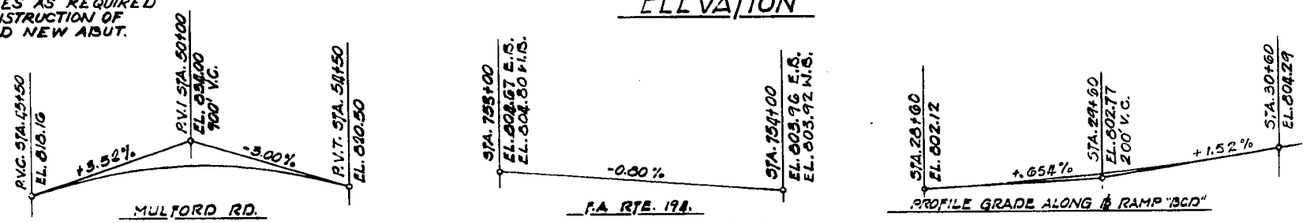
EXISTING STRUCTURE TO BE REMOVED BY CONTRACTOR. SUPERSTRUCTURE: 4 SPAN (2 @ 45'-7" & 2 @ 53'-4") CONTINUOUS I.P. STRINGERS WITH CONCRETE SLAB (31'-0" c. TO c.). SUBSTRUCTURE: OPEN CONCRETE ABUTMENTS ON CONCRETE PILES. HAMMER-HEAD PIERS ON TIMBER PILES.

B.M. 3 BRASS TABLET "B.M.-3" IN CONC. (FLUSH) S.W. CORNER MULFORD ROAD OVERPASS AT U.S. ROUTE 20 BYPASS EL. 821.881

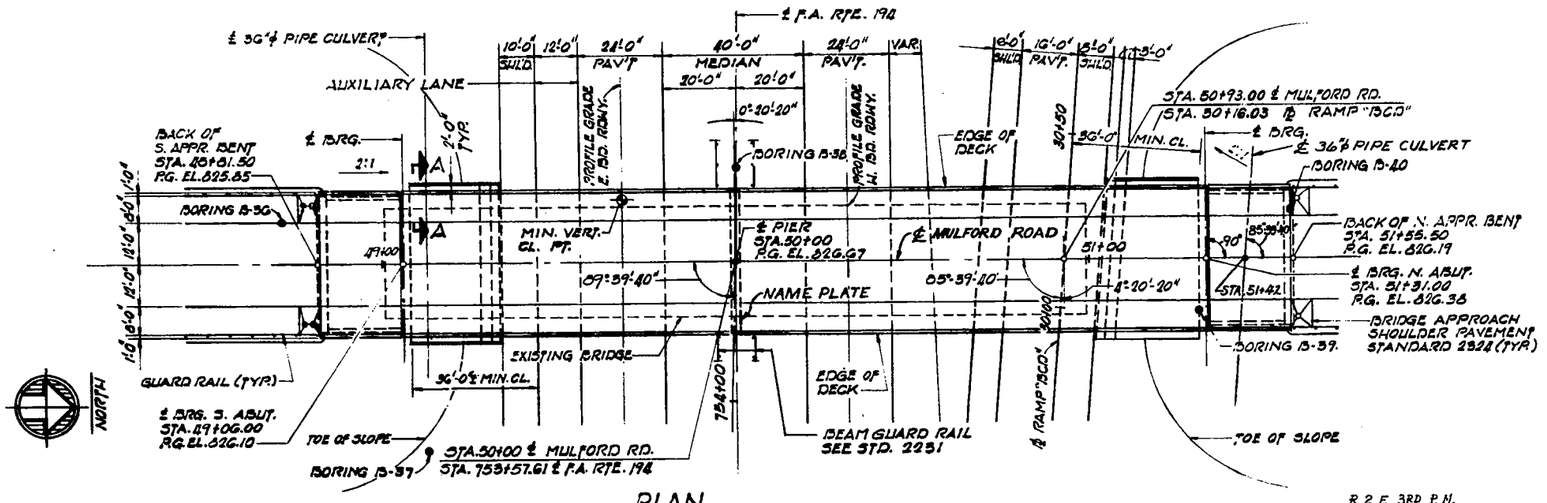


ELEVATION

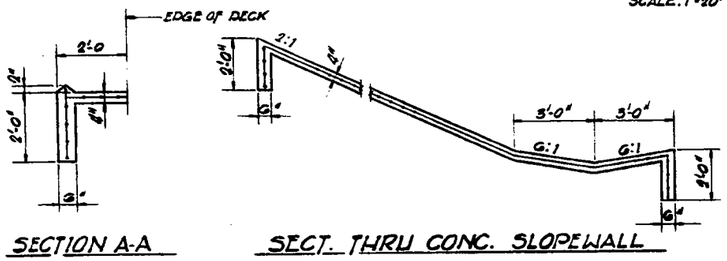
NOTE: A
REMOVE EXISTING ABUTMENT AND PILES AS REQUIRED FOR CONSTRUCTION OF PROPOSED NEW ABUT.



PROFILE GRADES



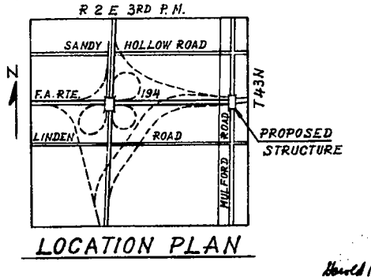
PLAN
SCALE: 1"=20'



SECTION A-A

SECT. THRU CONC. SLOPEWALL

DESIGN LOAD
L.L. = HS20-44
FUTURE D.L. = 25 P.S.F.
DESIGN STRESSES
f'c = 3,000 P.S.I.
fc = 1,200 P.S.I. (DECK SLAB SPAN 2 & 3)
fc = 1,400 P.S.I. (SUBSTRUCTURE, CURB, PARAPET & DECK SLAB - SPANS 1 & 4)
fc = 1,000 P.S.I. (WITH EARTH PRESSURE)
v = 56.2 P.S.I. (FOOTINGS)
n = 10
REINFORCING STEEL
fs = 20,000 P.S.I.
STRUCTURAL STEEL
fs = 20,000 P.S.I. (M 183)
MAX. L.L. DEFLECTION
L/1200 (COMPOSITE)
DESIGN SPECIFICATIONS
AASHTO. 1973 AND INTERIMS AS APPLICABLE



LOCATION PLAN

INDEX OF SHEETS

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Carl E. Thurmann Jr.
Engineer of Bridges & Traffic Structures

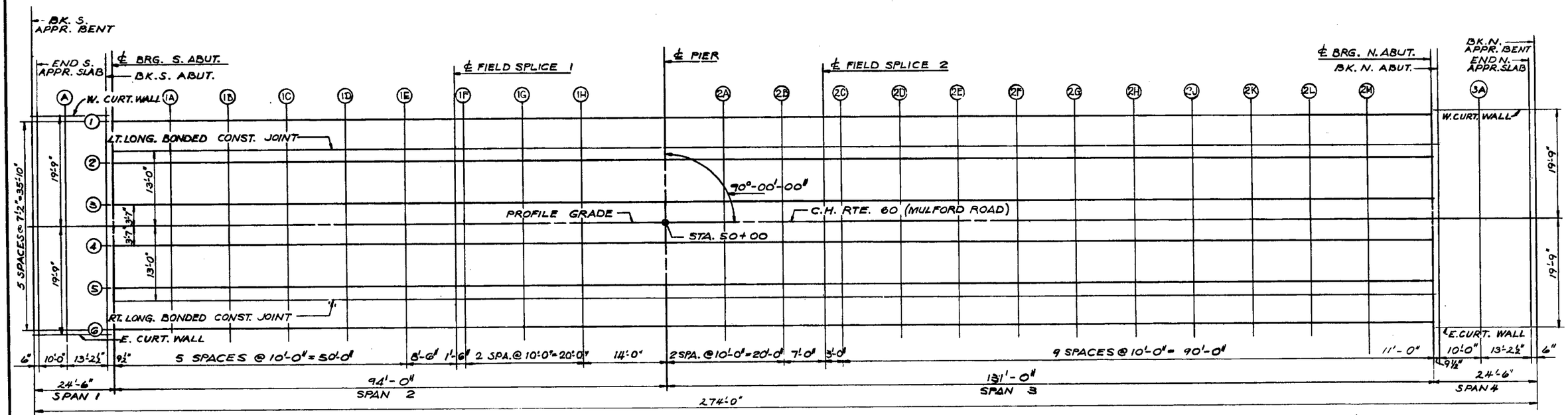
Harold R. Sundberg
#1994

ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
JOB NO. 16-05-1.
233 N. MICHIGAN AVE. CHICAGO, ILLINOIS

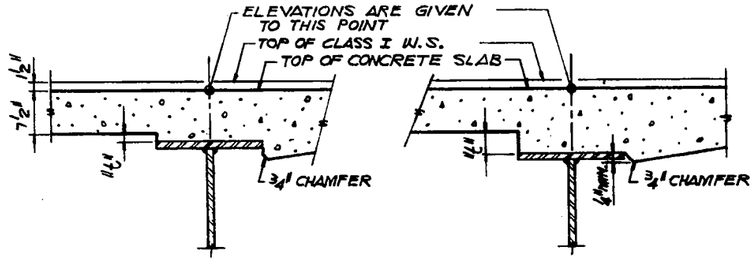
GENERAL PLAN AND ELEVATION
C.H. ROUTE 60 (MULFORD ROAD) OVER F.A. ROUTE 194
PROJECT
SECTION 201-3HB-3
WINNEBAGO COUNTY
STATION 753+57.61

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.R. 12	201-3HB-3	WINNEBAGO	38	18
STA.	TO STA.			
F. NO. & REG. NO. 4	ILLINOIS	PROJECT		

SHEET 8 OF 17



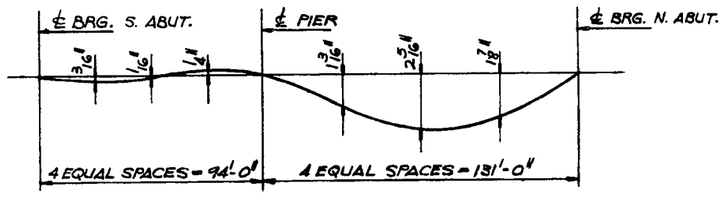
PLAN



AT MINIMUM FILLET AT MAXIMUM FILLET

FILLET HEIGHTS

FILLET "f" THICKNESS
TO DETERMINE "f" AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OF THE GIRDERS SHALL BE TAKEN AT INTERVALS SHOWN. THESE ELEVATIONS SUBTRACTED FROM THE "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION" SHOWN ON SHEET 9, MINUS SLAB THICKNESS, EQUALS THE FILLET HEIGHT "f" ABOVE TOP FLANGE OF THE GIRDERS.



DEAD LOAD DEFLECTION DIAGRAM

INCLUDES WEIGHT OF CONCRETE & INITIAL SUPERIMPOSED D.L. ONLY

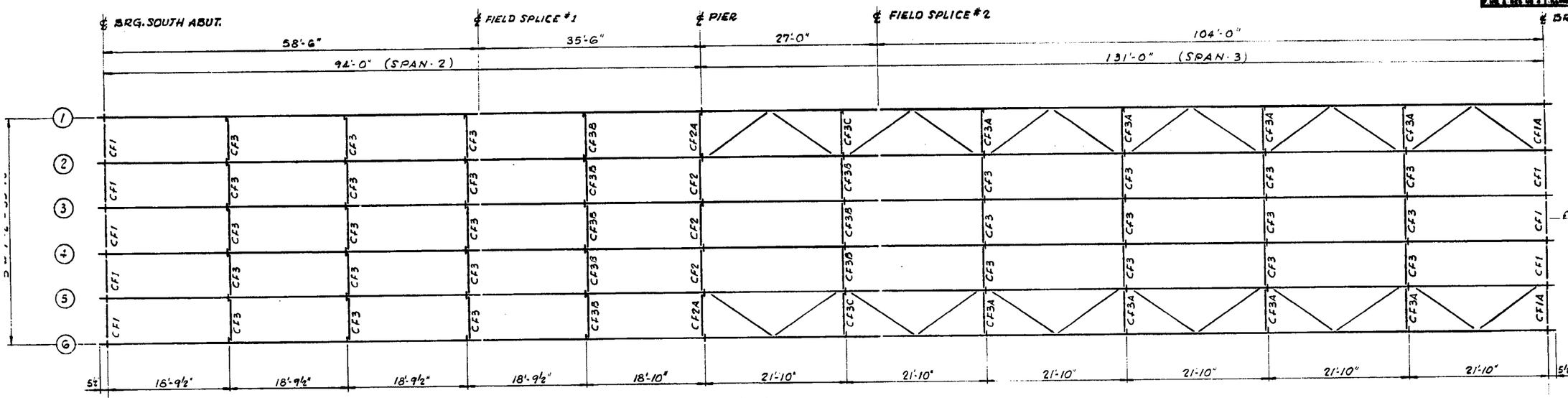
NOTE:
THE ABOVE DEFLECTIONS ARE NOT TO BE USED IN THE FIELD IF THE ENGINEER IS WORKING FROM THE "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION".

NORTH

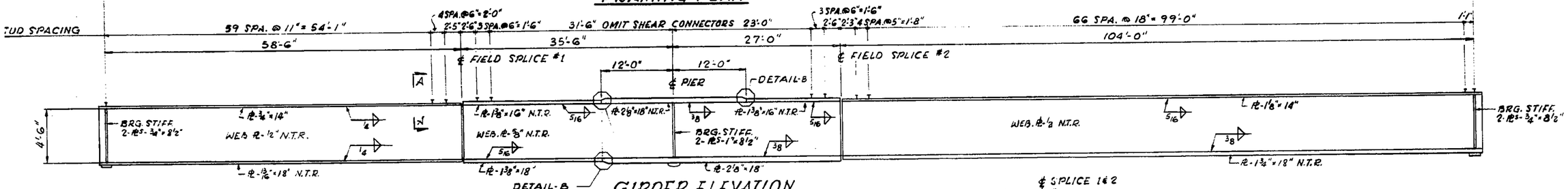
ALFRED BENESCH & COMPANY
CONSULTING ENGINEERS
JOB NO. 1605-L
230 N. MICHIGAN AVE. CHICAGO, ILLINOIS

TOP OF SLAB ELEVATIONS
C.H. ROUTE 60 (MULFORD ROAD)
OVER F.A. ROUTE 124
PROJECT
SECTION 201-3HB-3
WINNEBAGO COUNTY
STATION 753+57.61

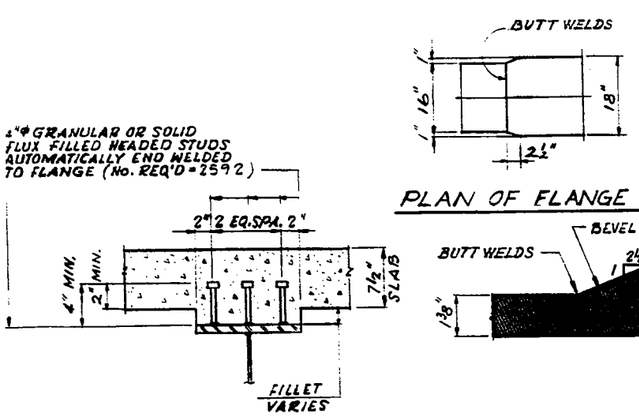
F.A.RTE				
STA.	TO STA.			



FRAMING PLAN



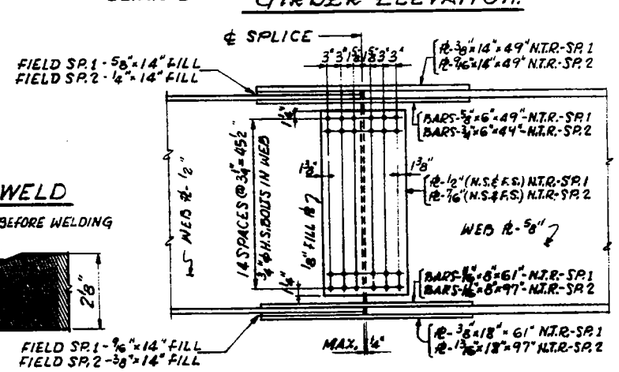
GIRDER ELEVATION.



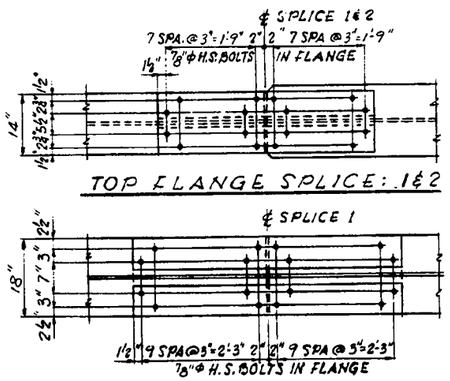
SECTION A-A

PLAN OF FLANGE WELD

DETAIL B



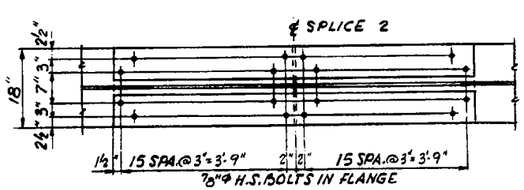
WEB SPLICE



TOP FLANGE SPLICE: 1&2

BOTTOM FLANGE SPLICE #1

BOLTED FIELD SPLICES



BOTTOM FLANGE SPLICE #2

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

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

FRAMING PLAN-SPANS 2 AND 3
C.H. ROUTE 60 (MULFORD ROAD)
OVER F.A. ROUTE 194
PROJECT
SECTION 801-3WB-2
WINNEBAGO COUNTY
STATION 753+57.61