BRIDGE CONTRACT NO. 6858

INDEX

PROJECT	STRUCTURE	TYPE	SPAN	OVER	STATION	CONTRACT NO.
S-60(2)	8-E-3214	PRESTRESSED R.C.I-BEAM	69'-10⅜" & 69'-11⅝" & 69'-10⅜" SK.45°R.	KANKAKEE RIVER	34+55	6858

SHEET NO.	SHEET DESIGNATION	SUBJECT	B.P.R. APPROVAL
1		INDEX & TITLE SHEET	
2	ONE SHEET	TYPICAL CROSS SECTIONS	
3-6	FOUR SHEETS	ROAD PLAN & PROFILE	
7	ONE SHEET	APPROACH DETAILS	
8	ONE SHEET	TEST BORING DATA	
9	C1 (STRUCTURE 8-E-3214)	LAYOUT	
10	C2	GENERAL PLAN	
11	C3	DETAILS BENT №1 or №4	
12	C4	DETAILS BENT №1 or №4	
13	C5	PIER № 2 or № 3	
14	C6	SUPERSTRUCTURE DETAILS	
15	C7	SUPERSTRUCTURE DETAILS	
16	C8	SUPERSTRUCTURE DETAILS	
17	C9	BILLS OF MATERIALS AND BENDING DIAGRAMS	
18	C10	BILLS OF MATERIALS AND BENDING DIAGRAMS	
19	ONE SHEET	WIDENED PAVEMENT DETAILS	
20	ONE SHEET	SUMMARY	
~~1-25~~	~~TWENTY-FIVE SHEETS~~	~~CROSS SECTIONS~~	
26-37	TWELVE SHEETS	CROSS SECTIONS	

STATE OF INDIANA

INDIANA STATE HIGHWAY COMMISSION

BRIDGE PLANS

FOR SPANS OVER 20 FEET ON STATE ROAD NO. 8 SECTION E

F.A.S. PROJECT NO. S-60(2)

S.R.43-U.S. 35 ROAD

BEGINNING AT A POINT IN LAPORTE COUNTY ON S.R.8 APPROX. 1613' EAST OF THE CORNER COMMON TO SECTIONS 9,10,16 & 15 AND EXTENDING EAST A DISTANCE OF APPROX. 2400' TO A POINT IN STARKE COUNTY ON S.R.8 APPROX. 1280' WEST OF THE CORNER COMMON TO SECTIONS 10,11,15 & 14, ALL ON THE LINE BETWEEN SECTIONS 10 & 15-T.33N.-R.3W.

ROADWAY LENGTH = 0.412 MI.
BRIDGE LENGTH = 0.042 MI.
TOTAL LENGTH = 0.454 MI.

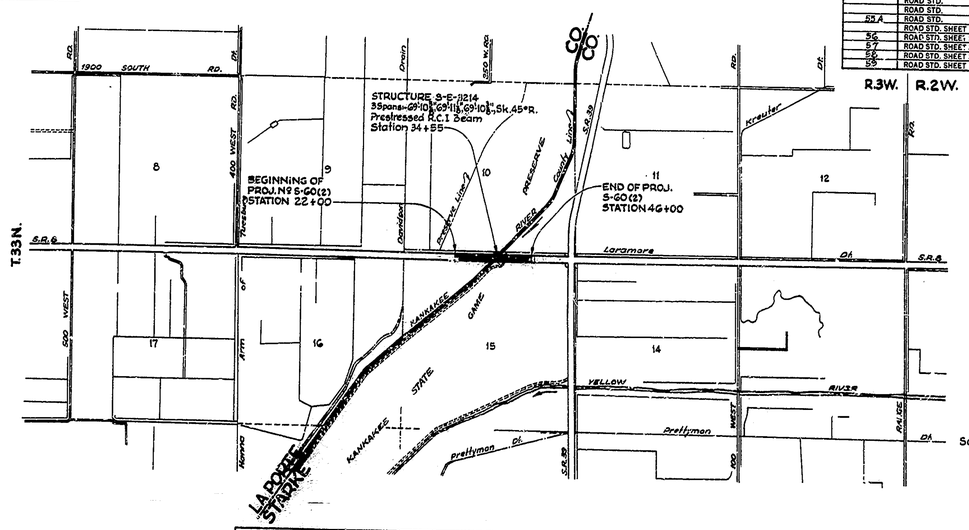
MAX. GRADE:- 1.00%

BRIDGES OVER 20' SPAN

PUBLIC ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	1	59

INDEX CONTINUED
STANDARD DRAWINGS

SHEET NO.	SHEET DESIGNATION	SUBJECT	B.P.R. APPROVAL	ADOPTED "A" REVISION "A"
41	BRIDGE STD. C1	STANDARD MISCELLANEOUS DETAILS	8-12-65	R-6-29-66
	BRIDGE STD. D2	STANDARD MISCELLANEOUS DETAILS		
	BRIDGE STD. D	CASTING DETAILS ROADWAY DRAINS		
42	BRIDGE STD. J	EXPANSION JOINTS	5-1-66	R-12-29-65
	BRIDGE STD. GRA	TYPICAL BEAM GUARD RAIL DETAILS		
	BRIDGE STD. H	TYP. DETAILS OF THICK. PAVEMENT & LOC. TOE OF SL. AROUND END BENTS		
	BRIDGE STD. N	TYP. DETAILS OF THICK. PAVEMENT & LOCATING TOE OF SLOPE		
	BRIDGE STD. HS	CONT. STEEL BEAM-TYP. APPROACH DETAILS-TWIN STRUCTURES		
	BRIDGE STD. HS	ST. BEAM & R.C. GIRDER-TYP. APPROACH DETAILS-TWIN STRUCTURES		
	BRIDGE STD. HS21	CONT. STEEL BEAM-TYP. APPROACH DETAILS-TWO-LANE STRUCTURES		
43	BRIDGE STD. M1	MISCELLANEOUS APPROACH DETAILS		
44	BRIDGE STD. M2	MISCELLANEOUS APPROACH DETAILS		R-8-4-66
	BRIDGE STD. M3	MISCELLANEOUS APPROACH DETAILS	4-17-64	R-8-27-65
	BRIDGE STD. M4	R.C. BRIDGE APPROACH TURNOUT DETAILS-12'-6" SHOULDERS		
	BRIDGE STD. M5	SLOPEWALL AND DRAINAGE DETAILS		
	BRIDGE STD. P2	STANDARD CONCRETE PILE DETAILS		
45	BRIDGE STD. PBS	PRESTRESSED CONCRETE TYPE BT I-BEAMS	4-16-62	A-JAN. 16, 1962
46	BRIDGE STD. PB	PRESTRESSED COMPOSITE BOX BEAMS WIDE		
47	BRIDGE STD. P10	TOLERANCES FOR FABRICATION OF PRESTRESSED BEAMS	6-14-63	A-NOV. 5, 1962
48	BRIDGE STD. R1-C	ALUMINUM RAILING-TYPE C	2-5-64	R-11-2-65
49	BRIDGE STD. R1-E	ALUMINUM RAILING DETAILS	8-12-65	R-4-27-65
	BRIDGE STD. R1-F	STEEL RAILING-TYPE C	2-5-66	R-11-2-65
50	BRIDGE STD. S1	TYPICAL DETAILS FOR PLACING GRADE "B" SPECIAL BORROW		
	BRIDGE STD. S2	TYPICAL DETAILS FOR PLACING GRADE "B" SPECIAL BORROW	3-26-63	R-2-18-63
	BRIDGE STD. T SHEET A	STANDARD TEMPORARY BRIDGE		
	BRIDGE STD. T SHEET B	STANDARD TEMPORARY BRIDGE		
	ROAD STD. SHEET A	STANDARD PAVEMENT JOINTS		
	ROAD STD. SHEET MA	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MB	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MC	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MC1	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MD	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MD1	MISCELLANEOUS STANDARDS		
51	ROAD STD. SHEET ME	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET ME1	MISCELLANEOUS STANDARDS	10-8-64	R-8-1-66
	ROAD STD. SHEET MF	MISCELLANEOUS STRUCTURE STANDARDS		
	ROAD STD. SHEET MG	MISCELLANEOUS STRUCTURE STANDARDS		
52	ROAD STD. SHEET MH	MISCELLANEOUS PRIVATE DRIVE STANDARDS		
	ROAD STD. SHEET MJ	MISCELLANEOUS STANDARDS	- - -	R-10-18-65
	ROAD STD. SHEET MJ	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MK	MISCELLANEOUS STANDARDS		
53	ROAD STD. SHEET MN	MISCELLANEOUS STANDARDS		
54	ROAD STD. SHEET MP	MISCELLANEOUS STANDARDS	3-17-66	R-1-28-66
	ROAD STD. SHEET MP1	MISCELLANEOUS STANDARDS	-	R-2-15-66
	ROAD STD. SHEET MQ	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MR	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MR1	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET S	MISCELLANEOUS STANDARDS CENTER DITCH INLETS		
	ROAD STD. SHEET S1	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MT	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD.	STANDARD STRUCTURE CONNECTIONS FOR EXTENSION		
	ROAD STD.	STANDARD REINF. CONC. BOX CULVERTS		
	ROAD STD.	STANDARD REINF. CONC. BOX CULVERTS-SK. END & WING DETAILS		
	ROAD STD.	STANDARD REINF. CONC. CULVERTS-SLAB TOP TYPE (W.F.)		
	ROAD STD.	STANDARD REINF. CONC. CULVERTS-SLAB TOP TYPE (U.F.)		
55	ROAD STD. SHEET GR	STANDARD GUARD RAIL		
	ROAD STD. SHEET GR1	BEAM GUARD RAIL		
	ROAD STD.	STANDARD REINF. CONCRETE ARCH-12' SPAN		A-July '65
	ROAD STD.	STANDARD HEADWALLS		
	ROAD STD.	STANDARD STRUCTURAL PLATE ARCH		
	ROAD STD.	CONCRETE WINGS FOR STD. STRUCTURAL PLATE ARCHES		
55A	ROAD STD.	STANDARDS FOR SUPER-ELEVATION		
	ROAD STD. SHEET 1 DETOURS	STANDARD DETOUR SIGNS	2-21-61	A-1-61
56	ROAD STD. SHEET 2 DETOURS	STANDARD DETOUR SIGNS		
57	ROAD STD. SHEET 3 DETOURS	STANDARD DETOUR SIGNS		R-3-8-63
58	ROAD STD. SHEET 3A DETOURS	STANDARD DETOUR SIGNS		R-2-6-63
59	ROAD STD. SHEET 7	CONSTRUCTION IDENTIFICATION SIGNS	3-9-64	R-3-8-63 A-FEB. 1964



INDIANA STATE HIGHWAY COMMISSION
STANDARD SPECIFICATIONS DATED 1963
TO BE USED WITH THESE PLANS.

TRAFFIC DATA		
A.D.T. (1963)		650 V.P.D.
A.D.T. (1983 PROJECTED)		1200 V.P.D.
A.D.T. (19 PROJECTED)		V.P.D.
TRUCKS		18 %
DESIGN SPEED		70 M.P.H.
ACCESS CONTROL		NONE

APPROVED 2-22-65

CHIEF HIGHWAY ENGINEER-INDIANA STATE HIGHWAY COMMISSION

REVISIONS	
DATE	SHEET NO.
5-28-65	4
7-21-65	1,2,9,20,41,42,48,8-49
8-6-65	3,6,9,20
4-6-66	1,2,3,4,5,6,7,9,10,20,26,27,29,29,30,32 Thru 37,42,43,47,49,52,53,54,55
	Sheets 21,22,23,24,25,33,39,40,51 Deleted. (Sheet 55A added)

RECOMMENDED FOR APPROVAL 2-9-65

ENGINEER OF PLANS AND SPECIFICATIONS
INDIANA STATE HIGHWAY COMMISSION

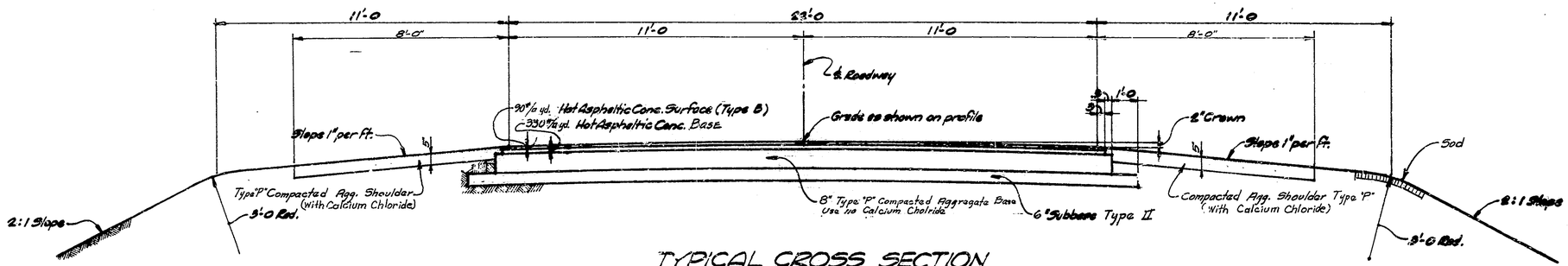
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER DATE

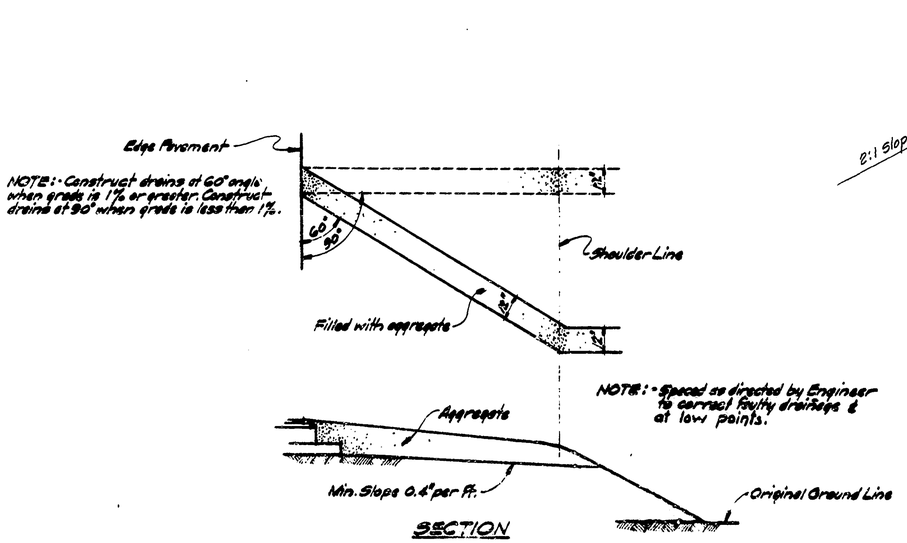
BRIDGE FILE: 8-E-3214

SCHEDULE OVER 20' SPANS					
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	NO. SHTS.
4	IND.	S-60(2)	1965	2	59



TYPICAL CROSS SECTION

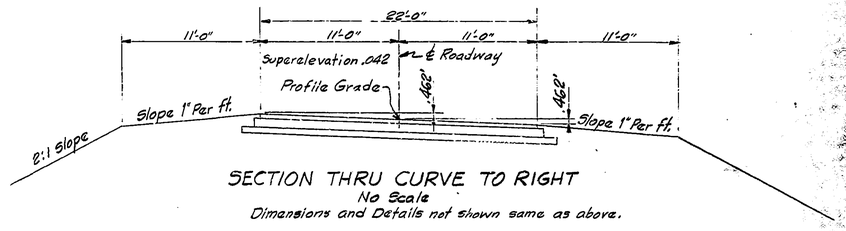
Scale:- $\frac{1}{2}$" = 1'-0



SECTION

SHOULDER DRAINS

Scale:- $\frac{1}{2}$" = 1'-0



SECTION THRU CURVE TO RIGHT

No Scale

Dimensions and Details not shown same as above.

DESIGNED CSD
DRAWN Ind. Std. 5/14/65 CHKD RB 7/14/65
TRACED CHKD

Rev. 4-6-66 ~ Curve Section
Rev. 7-2-'65 Calcium Chloride

TYPICAL CROSS SECTION

STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE:- AS NOTED JANUARY 14, 1965

RECOMMENDED FOR APPROVAL:- [signature]

DRAWING:- OF

PROJECT:- S-60(2)

BRIDGE CONTRACT NO. 6638

BRIDGE FILE:- B-L-3214

STATE HIGHWAY DEPARTMENT OF INDIANA

PUBLIC ROAD	STATE	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		S-60(2) 1966	3	59

UTILITY OWNERS
Pw. P.- Kankakee Valley R.E.M.C.
Tel. P.- General Tel. Co.

SEC. 9 T. 33 N. - R. 3 W.
CUSHMAN B. & MARION B. BISSELL (½ int.)
ELEANOR L. JOERR (½ int)

SEC. 10 T. 33 N. - R. 3 W.

JETTIE E. & MONA A. BURROUGHS (Cultivated)

STATE OF INDIANA (Heavy woods)

Built in 1934 as S-D-1932, Cont. 1659
1 @ 40'-0 RCA, Sp. 28'-0 Relay.
Plans on file in Bridge Design Office

DITCH (Dredged) — Flow

Approx. Levee

BORROW PIT

32' Offset

P.O.T. 4+12.0

P.O.T. 9+89.45

"Line 'B'" S.R.8 E.M.L. (±18' Black top over gravel)

Approx. Sec. Line

PROP. ℄ RDWY.

Brng. S. 89° 45' E.

Approx. ½

SEC. 16 T. 33 N. - R. 3 W.

JETTIE E. & MONA A. BURROUGHS

This tangent extends 1.0 mile to west and centers structure S-D-32.13, Cont. 2164, Built in 1941

Floor DAVIDSON

STATE OF INDIANA (Conservation Dept.) (Weeds)

STATE OF INDIANA (Kankakee Game Preserve) (Conservation Dept.) (Heavy woods)

R/W

Approx. ½

Line 'B'

S.R.8

(8" Elm) 42.60 Rt. 24.50 Rt. T3 P. 24" Cot.

P.O.T. 4+120 (I.P.F.)

21" Cot 40.06 Rt. T.P. (6" up)

P.O.T. 9+98.45 (I.P.F.)

U.S.G.S. B.M.: D-142 (1946) El. 672.19 Br. Disc. in conc. P. 18' R. of Sta. 51+55
A.M. #1" Br." El. 672.88 Br. Spk. in 15" Tw. Maple, 54' L. of Sta. 13+62

NOTE: Bench Marks are to Sea Level Datum (U.S.G.S.)

INCIDENTAL CONSTRUCTION

680
670
660

3 4 5 6 7 8 9 10 11 12 13 14 15

Rev. 8-6-65 Tel. Co.
Rev. 4-6-66 Proj. Limits

ROAD PLAN AND PROFILE

SCALES:- HORIZ: 1"=50', VERT. (1"=10'

JANUARY 15, 1965

RECOMMENDED FOR APPROVAL C.R. Rumined
ENGINEER OF BRIDGE DESIGN

PROJECT:- S-60(2)

BRIDGE CONTRACT NO. 6858

BRIDGE FILE:- S-E-3214

CHARLES R. RUMINER REGISTERED NO. 2275 STATE OF INDIANA PROFESSIONAL ENGINEER

STATE HIGHWAY
DEPARTMENT OF INDIANA

PUBLIC ROAD			FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	I-NO	S-66(3)	1965	4	59

SEC. 10 T. 33N.-R. 3W.

STATE OF INDIANA
(Heavy woods)

BEGINNING OF PROJECT
STA. 22+00

Salvage present road material

Structure No. 1A

Pvt. Dr. Class IV Req'd.

(Gravel) Drive

BORROW PIT

Flow

E.M. S.R. 8 32' Offset

50' Offset

P.O.T. 19+11.55

Brng. S. 89°45' E.

P.O.T. 22+99.5 (not set)

P.I. 22+49.21

O.P.O.T. 22+99.5 50'L (±19) Black top over gravel)

Paper Relocation

P.O.T. 28+00

PROP. R/W

Approx. Sec. Line

Line "B"

Approx. ℄

P.I. 30+01.19 (P.R.)
= 30+01.09 Line "B"

P.O.T. 33+69.40

Structure No. 1

Pvt. Dr. Class V Req'd.

SEC. 15 T. 33N.-R. 3W.

STATE OF INDIANA
(Kankakee Game Preserve)
(Conservation Dept.)
(Heavy woods)

R/W

P.C. 23+00.24

CURVE DATA (P.R.)
Δ = 4° 28'
D = 1° 30'
T = 148.97'
E = 2.90'
L = 297.78'

CURVE DATA (P.R.)
Δ = 4° 28'
D = 1° 30'
T = 148.97'
E = 2.90'
L = 297.78'

12" Elm
12" Ash 5' up
12" Ash
15" Trv. Map.

P.O.T. 19+11.25 (I.P.F.)

12" Elm
12" Ash
15" Map.

O.P.O.T. 22+99.5 (I.P.F.) 50'L

9" Map.
12" Ash
T.S.P.

P.O.T. 28+00 (I.P.F.)

Note: Construct Paper Relocation

All R/W on this sheet is Referenced to Line "B"

T.S.P.
30" Cot.
15" Ash

P.O.T. 33+69.4 (I.P.L.)

B.M. "2" Br." El. 673.24 Bf. Spk. in 15" Maple 73' L. of Sta. 28+37

NOTE: Bench Marks are to Sea Level Datum (U.S.G.S.)

Note: Incidental Construction consists of Matching Present Construction and Setting R/W Markers

INCIDENTAL CONSTRUCTION — PROJECT LIMIT

100 100

℄ Match Present Construction in this distance

+25
El. 674.55
V.C. = 200'

PROP. CRN. ROADWAY

0.00%

+1.00%

℄ Profile of Present Pavement

680
670
660

ROAD PLAN AND PROFILE

SCALES-HORIZ: 1"=50', VERT: 1"=10'-0"

JANUARY 15, 1965

RECOMMENDED FOR APPROVAL C. B. Rummer
BRIDGE DESIGN ENGINEER

PROJECT:- S-60(2)

BRIDGE CONTRACT NO. 6858

BRIDGE FILE:- B-E-3214

Rev. 4-6-66 ~ Proj. Limits

STATE HIGHWAY DEPARTMENT OF INDIANA

SEC.10 T.33N.-R.3W.
STATE OF INDIANA
Heavy Woods
Borrow pit
Log Cabin
(Gravel) Dr.
S.R.8 (± 19' Bl. top over gravel)
Line "B"
STATE OF INDIANA
(Heavy woods)
P.O.T. 33+69.40
P.O.T. 35+65.7
Pvt. Dr. See sheet No 7 for details
County Line LAPORTE CO. STARKE CO. KANKAKEE
SEC.15 T.33N.-R.3W.
RIVER
Flow
(Dredged)
Fl.St. Pl. Gal. Rl.
R.St. Pl. Gal. Rl.
PRESENT STRUCTURE
Brng. S.89°45'E.
Constr. Limits
R/W
+00 45'
+00 40'
STATE OF INDIANA (Kankakee Game Preserve)
(Heavy Woods)
LARAMORE (Dredged)
Note:- Leave Present Cable Gu. Rail in Place in this Area
Pvt. Dr. Class II Bag'd.
(±19' Black top over gravel)
Approx. Sec. Line
P.I. 40+06.14 (P.R.)
P.O.T. 40+06.14 ("B")
PROP. ℄ RDWY.
STATE OF INDIANA
(Heavy Woods)
P.C. 40+00.00
CURVE DATA (Paper Relocation)
Δ = 3°11' Lt.
D = 1°30'
T = 106.14'
E = 1.47'
L = 212.22'
+ No Name (Dredged)
LINE "B"
CURVE DATA
I = 1°18' L.
D = 0°07.8'
L = 1000.0'
T = 500.08'
E = 2.84'
P.T. 50+00.0
(Gravel) Rd.
STATE OF INDIANA
(Heavy Woods)
DITCH
Flow
P.I. 44+56.28
Paper Relocation
S.R.8
Line "B"
E.M.
Brng. N. 88°57' E.
Approx. ℄
P.I. 45+00.08 "B"
P.T. 45+56.36
+00 40'
R/W
END OF PROJECT STA. 46+00
Cleared & Flooded for wild fowl
Rebuild parking area. See sheet No 7 for details.
Gravel Parking
P.C. 43+56.14
CURVE DATA (Paper Relocation)
Δ = 3°11' Rt.
D = 1°30'
T = 106.14'
E = 1.47'
L = 212.22'
+00 Field Dir.
PUBLIC ROAD
S-60(2) 1965 S 59
35
Flow
Flow
Flow

Note:- Construct Paper Relocation
All R/W on this sheet is Referenced to Line "B"

Note:- Incidental Construction Consists of Matching Present Construction and Setting R/W Markers.

P.O.T. 33+69.4 (I.P.L.)
P.O.T. 35+65.7 (I.P.F.)
P.C. 40+00.0 (I.P.F.)
P.I. 45+00.08 (I.P.L.)
I.F.C.& W.R.C. STA. 5 B.M. El. 673.20 Br. Disc. in S.E. wing & abut. cor, 33'L. of Sta. 35+55
B.M. "3" Br. El. 670.01 Bl. Spk. in 10" Elm 50'L. of Sta. 47+44
NOTE: Bench Marks are to Sea Level Datum (USGS)

PROJECT LIMIT — INCIDENTAL CONSTRUCTION
Match Present Construction in this distance

+00 El. 673.40 V.C. + 200'
+35 El. 680.05 V.C. + 500'
+1.00% / -1.00%
PROP. CRN. ROADWAY +0.06%
Profile Present Pavement
Profile Line "B"
Max. H.W. El. 672.7 (1954)
Ave H.W. El. 669.7
L.W. El. 668.7
F.F.L. El. 656.6

680 / 670 / 660 / 650

673.42 673.21 673.27 673.03 673.37 673.34 673.43 673.62 673.86 674.29

33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49

ROAD PLAN AND PROFILE
SCALES:- HORIZ: 1"=50', VERT. 1"=10'-0"
JANUARY 15, 1965
RECOMMENDED FOR APPROVAL C.R. Rummer
DISTRICT ENGINEER
PROJECT:- S-60(2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-32/4
CHARLES E. ROMMEL REGISTERED No. 0275 STATE OF INDIANA PROFESSIONAL ENGINEER

Rev. 4-6-66 Proj. Limits

STATE HIGHWAY DEPARTMENT OF INDIANA

PUBLIC ROAD						
CITY	STATE	FEDERAL AID PROJECT NO.		SHEET NO.	TOTAL SHEETS
	IND.	S-60(2)	1965	6	59

UTILITY OWNERS.
Pw. P.- Kankakee Valley R.E.M.C.
Tel. P.- General Tel. Co.

CURVE DATA
Δ = 1°18' L.
D = 0°07' 8"
L = 1000.0'
T = 500.08'
E = 2.84'
P.I. 45+00.08
P.C. 40+00.

PT. 50+00

STATE OF INDIANA (Heavy Woods)

SEC. 10 T.33N.-R.3W.
Built in 1950 as 39-0-3627, Cont. R 3224
1 @ 20' R.C. Slab, 59-42'-0 Rdwy
Plans on file in Road Design Office

SEC. 11 T.33N.-R.3W.

Cultivated

Field Drainage Ditch Flow

GRACE MORRIS SWABY

Pump

LARAMORE DITCH Flow

LARAMORE DITCH (Dredged)

S.R.8 (±19' Black top over gravel)

Line "B"

This tangent approx. centers present road and extends to the east at least 1 mile

Approx. Sec. Line

Approx. P.L.

P.O.T. 54+10.4

P.O.T. 38+80.0

Brng. N. 88°57' E.V.

Cleared & Flooded for wild fowl

STATE OF INDIANA (Flooded) (Heavy Woods)

SEC. 15 T.33N.-R.3W.

SEC. 14 T.33N.-R.3W.

LOUIS & MARIE SALMOS (Cultivated)

Field Ditch

Pump No. 6"x8"

Dredged Ditch

S.W. cor. curb

S.E. cor. curb

P.T. 50+00 (J.P.F.)

P.O.T. 54+10.4 (J.P.F.)

P.O.T. 58+80 (J.P.F.)

S.H.C.I. B.M. L-129 El. 674.66 Br. Disc. in S.E. cor. of wing & abut. 7' L. of Sta. 58+58

NOTE Bench Marks are to Sea Level Datum (U.S.G.S.)

INCIDENTAL CONSTRUCTION

ROAD PLAN AND PROFILE

SCALES:- HORIZ. 1"=50', VERT. 1"=10.40' JANUARY 15, 1965

RECOMMENDED FOR APPROVAL C.S.B. Rummer ENGINEER OF BRIDGE DESIGN

PROJECT:- S-60(2)

BRIDGE CONTRACT NO. 6858

BRIDGE FILE:- 8-E-3214

CHARLES E. RUMMER REGISTERED 29 2279 STATE OF INDIANA PROFESSIONAL ENGINEER

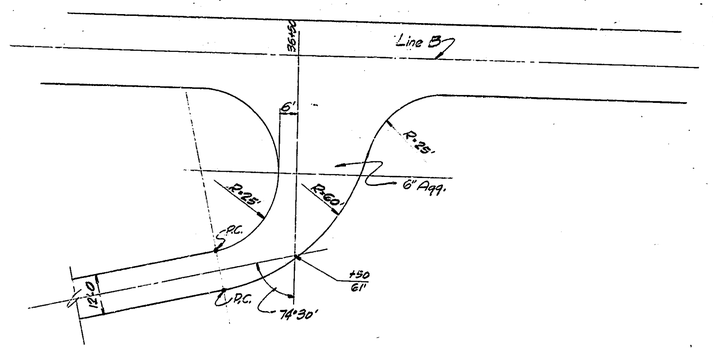
Rev. 8-6-65 Tel. Co.

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1966	7	59

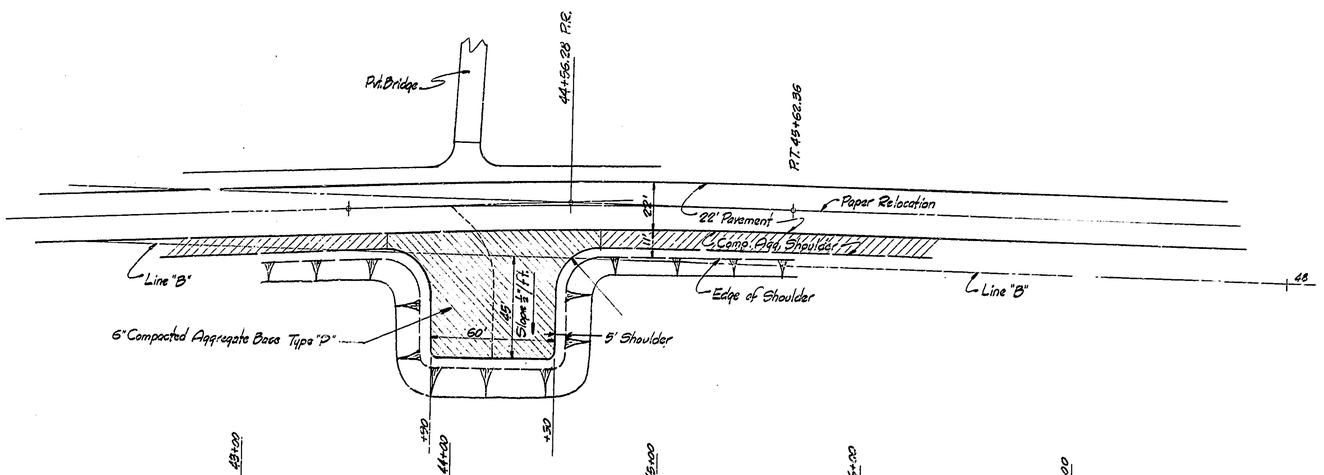
APPROACH TABLE

STATION	DESCRIPTION	EARTH WORK (CU. YDS.) CUT	EARTH WORK (CU. YDS.) FILL	WIDTH	RADII	GRADE Less Than 10% Not Shown	LENGTH	* DISTANCE Beyond R/W Line	HOT ASPHALTIC CONC. SURFACE 110#/Sq. Yd. TONS	HOT ASPHALTIC CONC. BASE 220#/Sq. Yd. TONS	3" COMP. AGG. BASE TYPE "2" TONS	6" COMP. AGG. BASE TYPE "2" TONS
Lt. Sta. 16+00	Pvt. Dr. Class V			12'			20'					
Rt. Sta. 36+50	Pvt. Dr. Class V		311	12'			90'	56				
Lt. Sta. 32+20	Pvt. Dr. Class IV		49	20'	20'		200'±	100'±	11	22	33	90
Rt. Sta. 36+50	Pvt. Dr.		233	See Det.	See Det.		290'	100'				
Lt. Sta. 44+00	Pvt. Dr. Class II			12'					4	8	16	100
Rt. Sta. 44+75	Parking Area	110	160	See Det.			39'					110
		110	753						15	30	49	380

* Right-of-Entry Required for Construction beyond R/W Line
# This Drive to be continued back to present parking area.



PRIVATE DRIVE ~ RT. STA. 36+50
Scale: 1" = 20'



PARKING AREA ~ RT. STA. 44+20
Scale: 1" = 30'

APPROACH DETAILS

INDIANA STATE HIGHWAY COMMISSION

SCALE:- As Noted JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C. R. Rummer
ENGINEER OF BRIDGE DESIGN

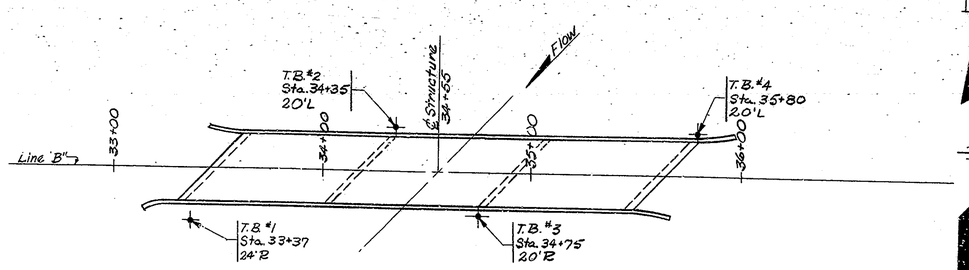
DRAWING:- OF
PROJECT:- S-60(2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-3214

CHARLES R. RUMMER REGISTERED 2273 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGNED _____ C'K'D _____
DRAWN DCS 9/16/64 C'K'D _____
TRACED _____ C'K'D _____

Rev. 4-6-66 ~ Parking Area

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	8	59



BORING PLAN

Scale: 1" = 30'-0"

NOTE:

N* indicates number of blows per foot in standard penetration test - Driving 2" O.D. Sampler 1' with 140# hammer falling 30"; Count made at 6" intervals.

SOIL BORING #1
33+37 24'R
Surf. El. 673.8

N*	Depth	
2/3		Surface El. 673.8
2/3	0.5	Black moist very loose fine sand with trace of organic matter (Topsoil) for 0.5'
2/3		Brown moist very loose to loose fine sand (Fill).
3/4	9.0	
	11.0	Dark brown moist loose fine sandy loam with trace of organic matter.
3/1	13.0	Brown moist loose fine sand.
6/8	16.5	Dark brown moist very soft to medium stiff silty loam.
6/8	19.0	Light gray saturated medium dense fine sand.
8/11		Light brown saturated medium dense fine sand.
7/12		
10/12		
	35.0	
15/17		Light gray dense to medium dense fine to coarse sand.
13/12		
	43.0	
4/4	45.5	Light gray saturated loose fine to coarse sand and gravel.
	48.0	Light gray saturated medium stiff silty clay loam.
2/1	50.5	Light gray saturated loose fine sand.
2/2		Light gray saturated very soft to medium stiff silty loam.
2/3		
4/4		
3/3		

SOIL BORING #1 (Con't.)

N*	Depth	
	73.0	Light gray saturated very soft to medium stiff silty loam.
7/5		Light brown saturated medium dense to loose silty loam.
4/5		
4/4		
	88.0	
15/115 for 6"	90.5	Gray moist medium dense silty loam with some gravel.
	93.0	Gray moist hard silty clay loam with some gravel.
51/51 for 4"	95.8	Gray moist very dense silty loam with trace of gravel.
		Bottom of test boring.

SOIL BORING #2
34+35 20'L
Surf. El. 659.8

N*	Depth	
3/8		Surface El. 659.8
	1.0	Gray moist soft silty clay.
6/11	4.0	Gray wet medium dense fine to coarse sand.
8/13		Brown wet medium dense to dense fine to medium sand.
10/12		
15/18		
34/34	20.0	
30/20		Gray wet very dense to dense fine to coarse sand.
25/24		
16/25	35.0	
10/12		Gray wet dense to medium dense medium to coarse silty sand.
9/12	46.5	
		Bottom of test boring.

SOIL BORING #3
34+75 20'R
Surf. El. 660.9

N*	Depth	
0/1		Surface El. 660.9
1/1		Gray moist very soft silty clay with organic matter.
7/10		
7/10		Gray wet medium dense sand.
7/8		
	15.1	
20/23		Gray moist to wet very dense to medium dense sand with trace of fine gravel.
10/12		
	23.6	
15/15		Gray moist to wet dense sand and fine to medium gravel.
	29.1	
15/[illegible]		Gray wet dense fine to coarse sand and gravel.
	34.1	
8/14		Gray saturated medium dense fine to medium sand with trace of gravel.
8/10		
8/12	47.6	
		Bottom of test boring

SOIL BORING #4
35+80 20'L
Surf. El. 674.2

N*	Depth	
6/4		Surface El. 674.2
	0.5	Black moist medium dense sandy loam with oil (Road fill) for 0.5'
2/1	2.5	
1/2	4.0	Red and brown moist loose sandy loam (Fill).
	7.0	Yellow and brown moist very soft silty loam.
1/1		Black moist very soft loam with 1-in. sand seams.
	11.0	Red and brown saturated very soft sandy loam with 3-in. loam layers.
3/3	12.5	Red and brown saturated soft loam.
	15.0	Red and brown saturated medium stiff sandy loam.
2/1	19.0	Black saturated very soft loam with trace of wood.
14/15	20.5	Gray saturated stiff silty loam with trace of clay.
12/13		Light gray saturated medium dense to very dense fine sand.
9/10		
7/12		
	40.0	
50/50 for 4"		
	39.0	
7/14		Light gray saturated medium dense to dense fine to coarse sand with trace of gravel.
17/19		
21/25	50.0	
	52.5	Light gray saturated dense fine to coarse sandy loam.
		Bottom of test boring.

SOIL BORING LOG

Vert. Scale: 1"=6'-0"

DESIGNED _____ C'K'D _____
DRAWN E.E.R. 2-7-64 C'K'D L.W.L.
TRACED _____ C'K'D _____

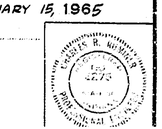
TEST BORING DATA

INDIANA STATE HIGHWAY COMMISSION

SCALE:- AS NOTED JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C.R. Rummer
ENGINEER OF BRIDGE DESIGN

DRAWING:- OF
PROJECT:- S-60 (2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- S-E-3214



BRIDGES OVER 20' SPAN					
PUB. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(12)	1965	9	59

UTILITY OWNERS
T&Lines: General Tel. Co
Pwr. & Lines: Kankakee Valley R.E.M.C.

SEC. 10-T33N-R3W

PVT. DR. CLASS IV REQ'D.

6" Comp. Agg. Base

STATE OF INDIANA
(Heavy Woods)

30' Straight Beam Gu. Rail Req'd.

15" P.S.D. Type "A" Req'd.

8 @ 16" Conc. Pipes

STRUCTURE No 1

(±18' Black Top over Gravel)

50° Offset

E.M.

PRES. STRUCTURE

Fill this area to El. 674.0

Slope

LINE "B"

7.03 Mi. to Lacrosse — East City Limits

PROP. RDWY. 21

Approx. Sec. Line

STRUCTURE No 2

STRUCTURE No 1

STRUCTURE No 12

STATE OF INDIANA
KANKAKEE GAME PRESERVE
(Heavy Woods)

PVT. DR. CLASS V REQ'D.

SEC. 15-T33N-R3W

NOTE
Fill this area to El. 674.0 and slope to drain

Toe Slope

Prop. Structure

15' P.S.D. Type "A"

55' Straight Beam (Dredged) Gu. Rail Req'd.

KANKAKEE COUNTY LINE

RIVER
LAPORTE CO.
STARKE CO.

Log Cabin

Stone Wall

Gravel Drive

FLOW

STATE OF INDIANA KANKAKEE GAME PRESERVE
(Heavy Woods)

LARAMORE DITCH

15' P.S.D. Type "A" Req'd.

Toe Slope

55' Straight Beam Gu. Rail Req'd.

(±19' Bituminous Top over Gravel)

Gd. Rail (2 Cables)

STRUCTURE No 2

6.54 Mi. to Jct. U.S. 35

NOTE:- SEE ROAD PLANS FOR REFERENCES

STATE OF INDIANA
(Heavy Woods)

PVT. DR. REQ'D. (See Sheet No. 7 For Details)

67.5 Straight Beam Gu. Rail Req'd.

25' P.S.D. Type "B" Req'd.

STRUCTURE No 3

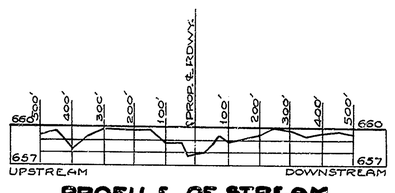
DRAINAGE AREA
Approx. 637.5 Sq. Mi. (408,000 Acres) of Flat Sandy Loam Land.

SITUATION PLAN
Scale:- 1"=30'-0", Contour Interval = 1 Ft.

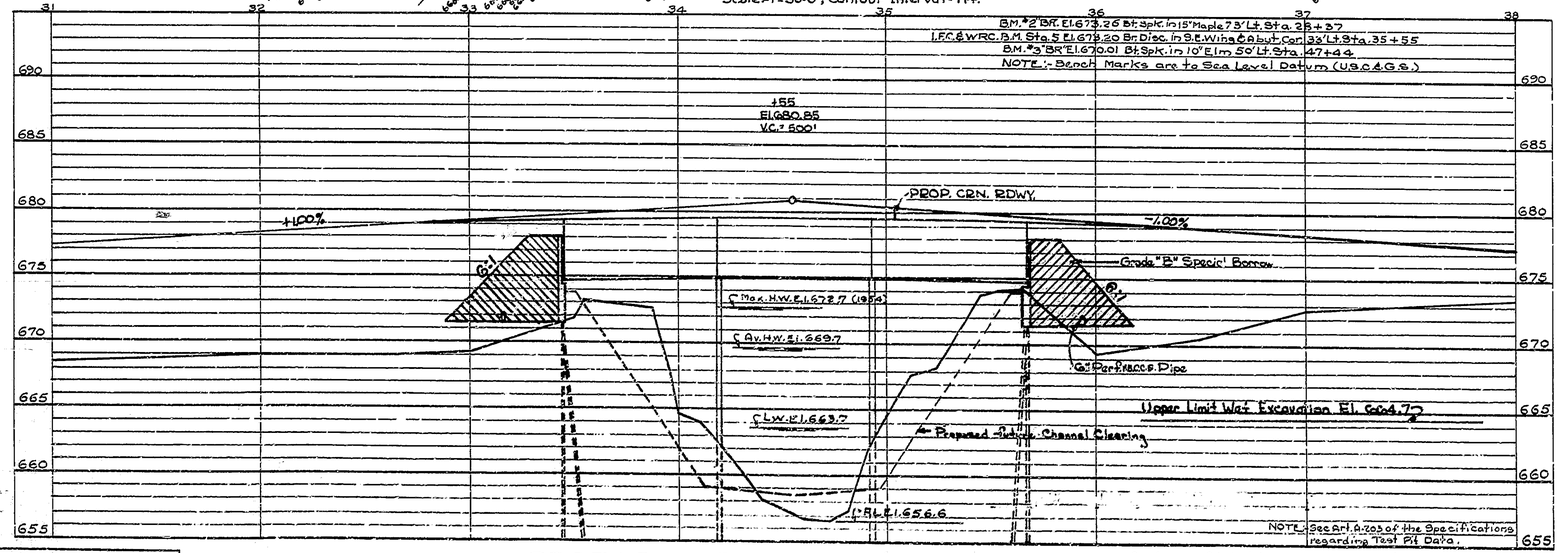
PRESENT STRUCTURE
Built by County-Clear Span 102'-0" Steel Truss Square
Clear Roadway 15'-6".

FLOOR BEAMS	STRINGERS
5-15" Is 42.9#x16'-0"	2-8" Is-11.5#x17'-6"
	8-8" Is-11.5#x17'-5"
	12-8" Is-18.4#x17'-6"
	24-8" Is-18.4#x17'-0"

Approx. Wt. Str. Steel = 30 Tons



PROFILE OF STREAM
Scales:- Horiz. 1"=200'-0" Vert. 1"=5'-0"



PROFILE ON PROPOSED ℄ ROADWAY
Scales:- Horiz. 1"=30'-0", Vert. 1"=5'-0"

Fill +20%	23,050 Cu. Yds.
Surplus Excavation	80 Cu. Yds.
*Common Excavation	3,110 Cu. Yds.
Special Borrow	19,000 Cu. Yds.

* This value contains [illegible] cu. yds. of Unsuitable Material, from ditches, which must be wasted.

LAYOUT
PRESTRESSED REINF. CONC. "I" BEAM BRIDGE
3 SPANS ~ 69-10⅜" ~ 69'-11⅛" ~ 69'-10⅜" SK. 45° FT. 31'-0 CL. RDWY.
OVER KANKAKEE RIVER ON S.R. 8

STATE HIGHWAY DEPARTMENT OF INDIANA
LAPORTE & STARKE COUNTIES

SCALE:- As Noted JANUARY 15, 1965

RECOMMENDED FOR APPROVAL: C. R. Rummel
ENGINEER OF BRIDGE DESIGN

DRAWING:- C1 OF 10
PROJECT:- S-60(12) STATION:- 34+55
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-F-3214

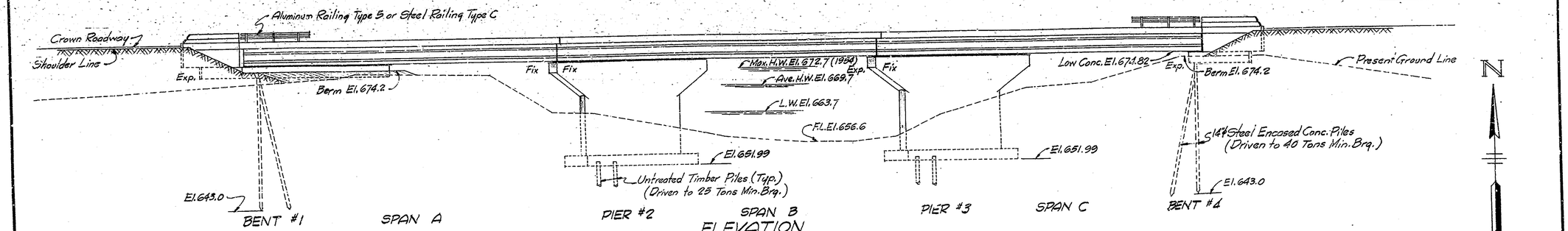
DESIGNED _____ CK'D _____
DRAWN GR 8-22-60 CK'D EF 9-14-60
TRACED WFB 11-2-61 CK'D _____

Rev. 4-6-66 Pvt. Dr. & Grading
Rev. 8-6-65 Grading & Tel. Co.
Rev. 7-21-[illegible] F.B. C.C.M. Pipe

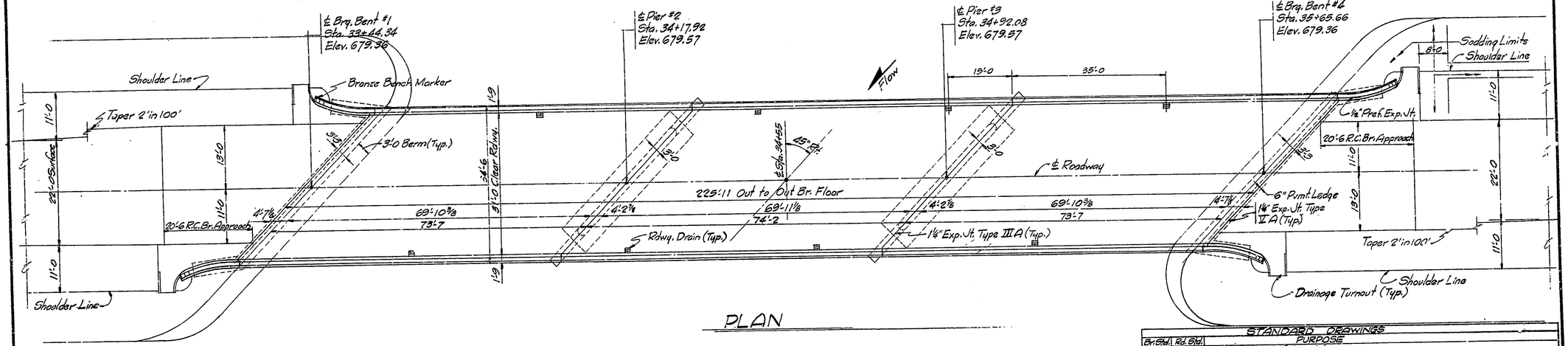
NOTE:- FIELD NOTES, BOOK BR. 1650 Pp 26-79

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	10	59

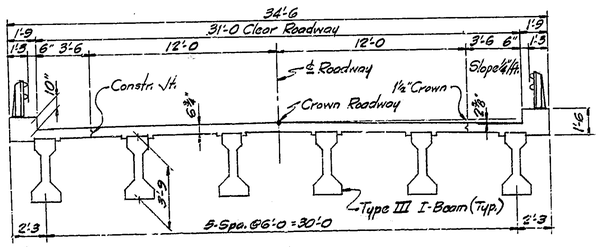
STRUCTURE TO BE BUILT TO A 500' VERTICAL CURVE



ELEVATION



PLAN



TYPICAL SECTION

Scale: 1½" = 1'-0

DESIGN DATA

Designed for HS 20-44 loading in accordance with 1961 AASHO Specifications.

TYPICAL CROSS SECTION

See Sheet No. 2

GENERAL NOTES

Depth of footings to be extended if found necessary. See Art. 1103.2(a) Specifications.
Piles shall have minimum bearing value shown on detail drawings. Determine pile lengths by Art. F103 and F203 of Specifications.
For details of steel encased concrete piles see Bridge Standard C1, Special Provisions and applicable articles in the Specifications.
Piles shall be driven to elevation shown on plans or below if necessary to obtain desired bearing.
Reinforcing steel covering shall be 1½ inches in top and 1 inch min. in bottom of floor slabs, 3 inches in footing except bottom steel which shall be 4 inches, and 2 inches in all other parts, unless noted.
Concrete in footings and pier stems up to construction joint to be class "E".
Concrete in superstructure, bent caps and top of pier stem down to construction joint to be class "F".
Concrete in paved side ditches and steel encased concrete piles to be class "D".
Continuous concrete pours shall be required between construction joints as shown on detail plans.
Waterproof wingwalls and back of mudwalls in accordance with the specifications.
Bevel forms ¼" under copings; and chamfer exposed edges 1 inch unless noted.
Tolerance in position of steel encased concrete pile head maximum 2 inches.
All railings to be constructed perpendicular to grade.
See special provisions for items included in this contract.
Expansion Joint Armor to be shaped in shop to conform to transverse section of structure.
4 Roadway Drains to be placed as shown on this drawing.

STANDARD DRAWINGS

Br. Std.	Rd. Std.	PURPOSE
C1		Pile Details, Reinf. Bar Notes.
J		Exp. Joints.
M1		P.C. Dra., Pvmt. Offsets, Paved Side Ditch, R/W Markers.
M3		R.C. Br. Approach
R1C		Aluminum Railing Details
R1-F		Steel Railing Details
S2		Placement Grade "B" Borrow
PB2		Prestressed Conc. I Beams
PB10		Prest. Beam Tolerances
	✓	Standards for Superelevation
MH		Pvt. Dr.
MN		Backfill for Structures
MP		Pipe
GR1		Beam Guard Rail
R-E		Aluminum Railing Details
	Sheet #1	Construction Identification Signs
	SI-2 Detour	Standard Detour Signs
	SI-5 Detour	Standard Detour Signs
	SI-9A "	Standard Detour Signs

GENERAL PLAN

PRESTRESSED REINF. CONC. I-BEAM BRIDGE
3-SPANS (SEE PLAN) SK. 45° RT. 31'-0 RDWY. 6" CURBS
OVER KANKAKEE RIVER ON S.R. 8

INDIANA STATE HIGHWAY COMMISSION

STARKE & LAPORTE COUNTY

SCALE:- 3/32" = 1'-0 Unless Noted

JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C. R. Rummer
ENGINEER OF BRIDGE DESIGN

DRAWING:- C2 OF 10

℄ STA. 34+55

PROJECT:- S-60(2)

BRIDGE CONTRACT NO. 6858

BRIDGE FILE:- 8-E-3212

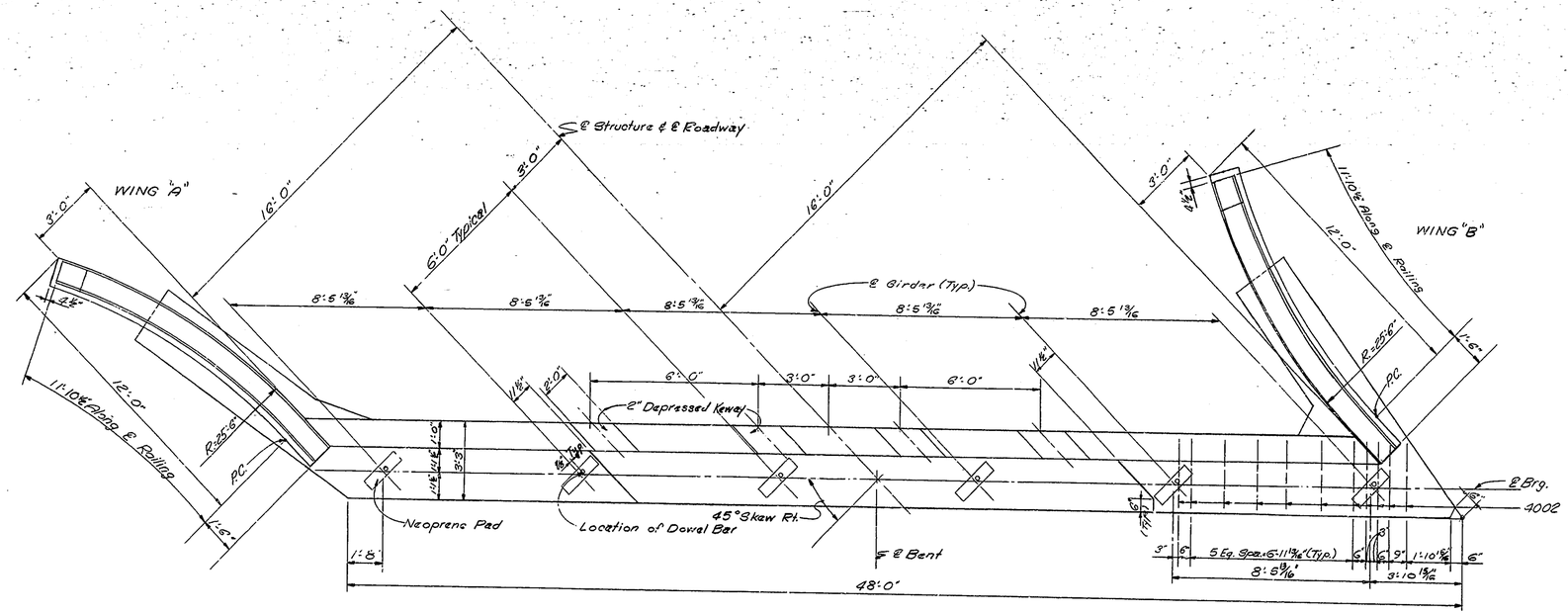
CHARLES R. RUMMER
REGISTERED
NO. 2273
PROFESSIONAL ENGINEER
STATE OF INDIANA

DESIGNED
DRAWN: DAS 11/8/63 C'K'D RER 3-25-64
TRACED C'K'D

Rev. 4-6-66 w Std. Dwgs.

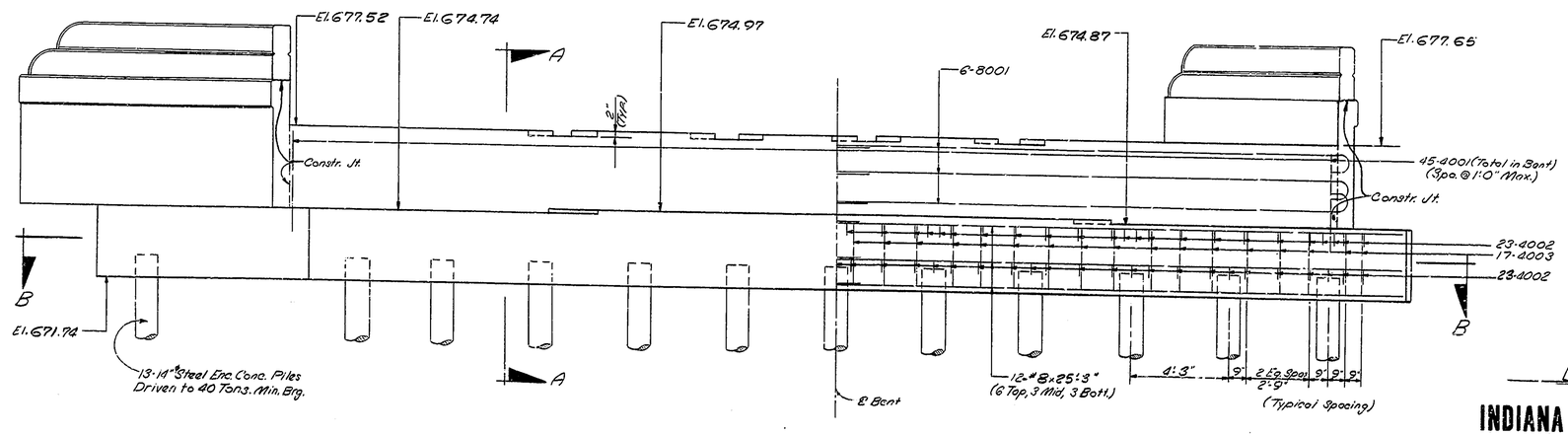
BRIDGES OVER 20' SPAN

PUB. ROAD REQ. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	11	59



NOTE: Dimensions shown for locating Dowel Bars are for checking field clearance between reinf. Steel and Dowel Bars. Reinf. steel shall be adjusted to maintain 1½" minimum clearance.

PLAN



ELEVATION

NOTE: See Br. Std. C1 and Drwg. C9 for Reinforcing Bar Notes.

DETAILS BENT No1 or No4

INDIANA STATE HIGHWAY COMMISSION

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

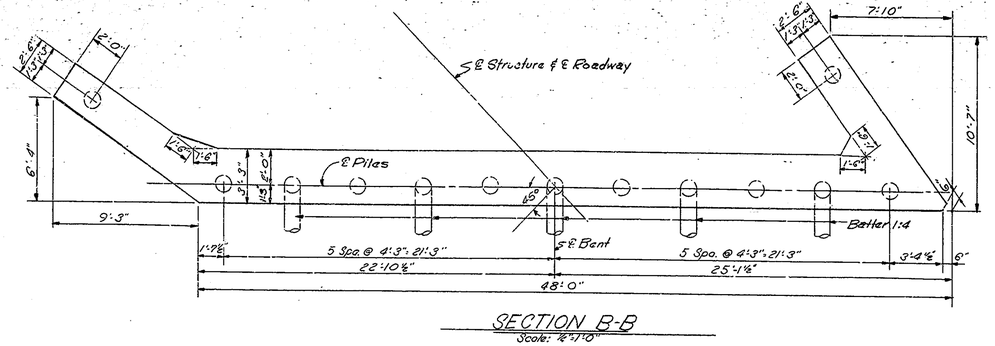
JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C.R.Rummel
ENGINEER OF BRIDGE DESIGN

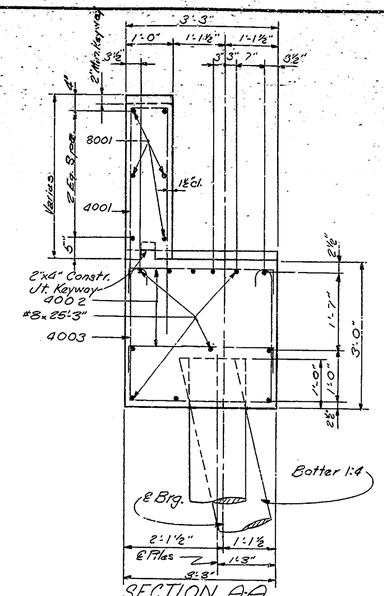
DRAWING: C3 OF 10
PROJECT:- S-60(2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- B-E-3214

DESIGNED M.P. C'K'D H. S.
DRAWN L.L.L. 12-18-64 C'K'D M.P. 9/24/64
TRACED ____ C'K'D ____

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISC. YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	12	59



SECTION B-B
Scale: ½"=1'0"



SECTION A-A
Scale: ¾"=1'0"

BILL OF MATERIALS

BENT No. 1 or No 4

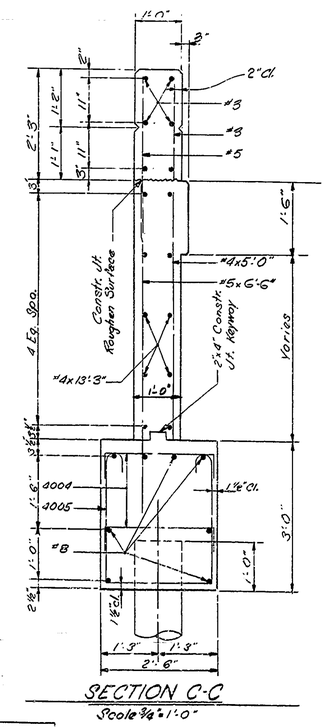
* REINFORCING STEEL 5443 Lbs.

CONCRETE
Class "F"

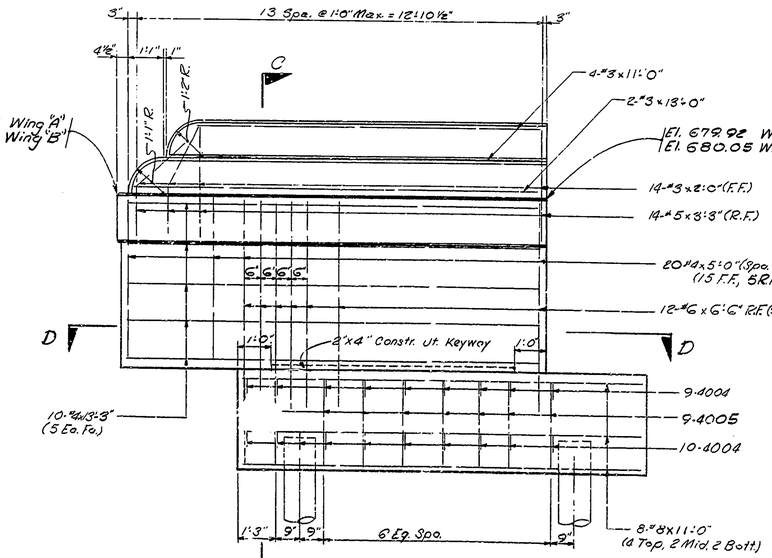
Cap	23.2 Cu.Yds.
Wingwall	5.2 Cu.Yds.
Mudwall	4.7 Cu.Yds.
Total:	33.1 Cu.Yds.
Railing Conc.	2.8 Cu.Yds.

MISCELLANEOUS
13-14 "x.79 ga. x (30'-0" Approx.) Steel Encased Conc. Piles = 390. Lin. Ft.

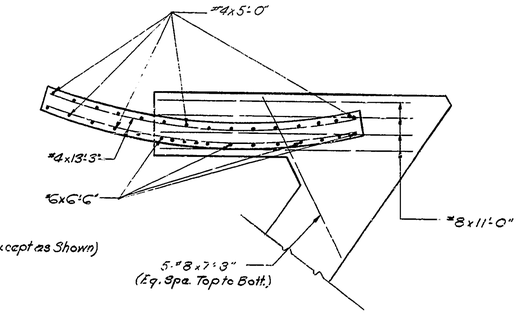
* See Drwg. No. C9 for Bending Diagrams and Bill of Reinforcing Steel.



SECTION C-C
Scale ¾"=1'-0"



C TYPICAL WING ELEVATION
Scale: ⅛"=1'-0"



SECTION D-D
Scale: ⅜"=1'-0"

NOTE: See Br. Std. C1 and Drwg. C9 for Reinforcing Bar Notes.

DESIGNED MP 11-15-64 C'K'D HJS 12-10-64
DRAWN LJL 1-2-65 C'K'D MP 1/22/65
TRACED ____ C'K'D ____

DETAILS BENT No 1 or No 4

INDIANA STATE HIGHWAY COMMISSION

SCALE:- As Noted JANUARY 15, 1965

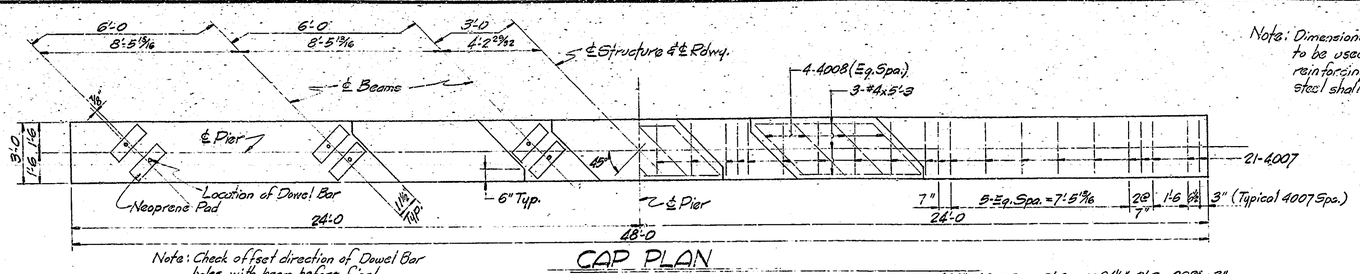
RECOMMENDED FOR APPROVAL:- C.R. Runner
ENGINEER OF BRIDGE DESIGN

DRAWING:- C4 OF 10
PROJECT:- S-60 (2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-3214

BRIDGES OVER 20' SPAN

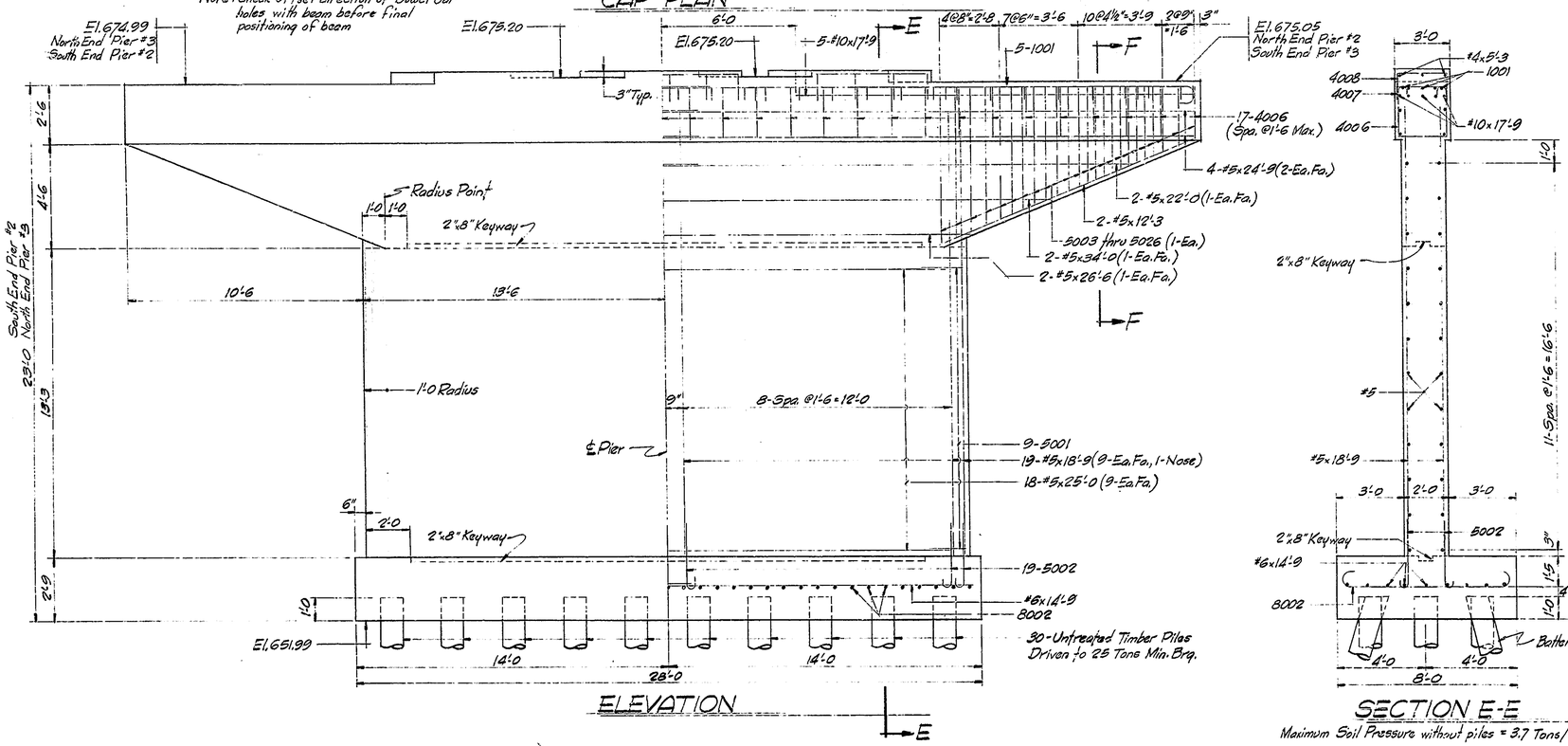
FUR. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	13	59

Note: Dimensions shown for locating dowel bars are to be used for checking field clearance between reinforcing steel and dowel bars. Reinforcing steel shall be adjusted to maintain 1½" clearance.



Note: Check offset direction of Dowel Bar holes with beam before final positioning of beam

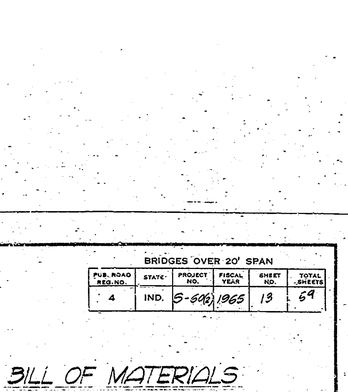
CAP PLAN



ELEVATION

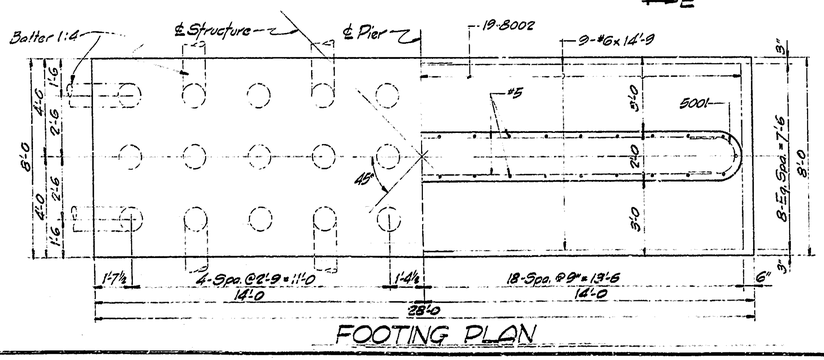
SECTION E-E

Maximum Soil Pressure without piles = 3.7 Tons/Sq. Ft.



SECTION F-F

Scale: ¾" = 1'-0



FOOTING PLAN

Note: See Br. Std. C1 and Drwg. C9 for Reinforcing Bar Notes.

BILL OF MATERIALS

PIER NO. 2 or NO. 3

* REINFORCING STEEL	6463 Lbs.
CONCRETE	
Class F Cap	25.7 Cys.
Class E Above Flg.	26.1 "
Class E Footing	22.8 "
MISCELLANEOUS	
30-Untreated Timber Piles (20'-0 Approx. Lengths) = 600 Lin. Ft.	

*See Drwg. No. C6 for Bending Diagrams and Bill of Reinforcing Steel.

DESIGNED MDP 12/16/63 C'K'D HG 12/17/63
DRAWN TRB 2-26-64 C'K'D REK 3-6-64
TRACED ——— C'K'D ———

PIER NO. 2 or NO. 3

INDIANA STATE HIGHWAY COMMISSION

SCALE:- ⅜" = 1'-0 Unless Noted JANUARY 15, 1965

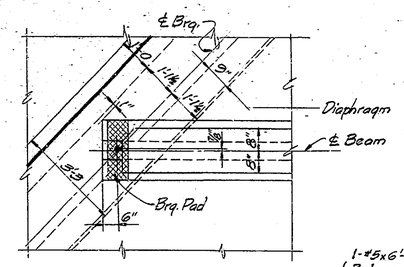
RECOMMENDED FOR APPROVAL: C R Cummins
ENGINEER OF BRIDGE DESIGN

DRAWING:- C5 OF 10
PROJECT:- S-60(2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-32.4

STATE OF INDIANA 2275 REGISTERED ENGINEER

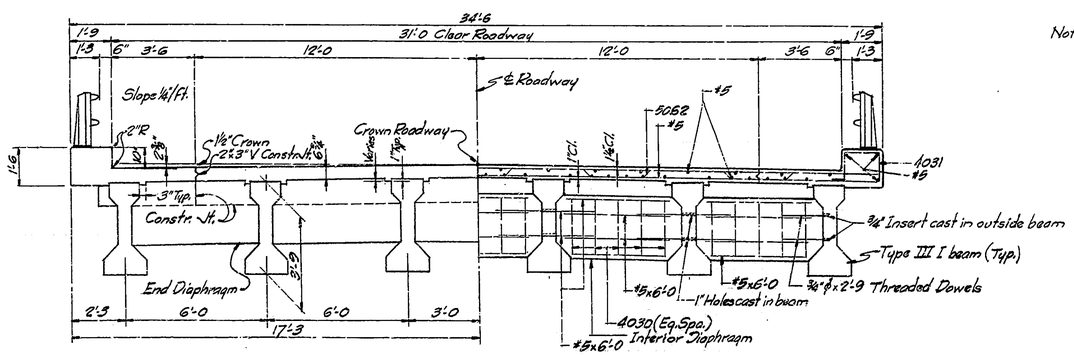
BRIDGES OVER 20' SPAN

PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	14	59



DETAIL "A"
Scale: ½"=1'-0

PLAN - SPAN A or C



TYPICAL SECTION
Scale: ⅜"=1'-0

Note: Screed Data will be furnished upon request of Project Engineer.

Note: See Br. Std. C1 and Drwg. C9 for Reinforcing Bar Notes.

DESIGN DATA

Prestressed Beams:
All beams shall be type III as shown on Br. Std. PB3
See PB3 for Design Data.

Reinforced Concrete:
Unit Stresses: fs = 20,000#/in², fc = 1200#/in²
Live Load: HS 20-44 with impact and distribution of loads in accordance with 1961 AASHO specifications.

Dead Load: Increased 35# per sq. ft. of roadway for future wearing surface. Slab designed with ½" wearing surface.

SUPERSTRUCTURE DETAILS

INDIANA STATE HIGHWAY COMMISSION

SCALE: 1½"=1'-0 Unless Noted JANUARY 15, 1965

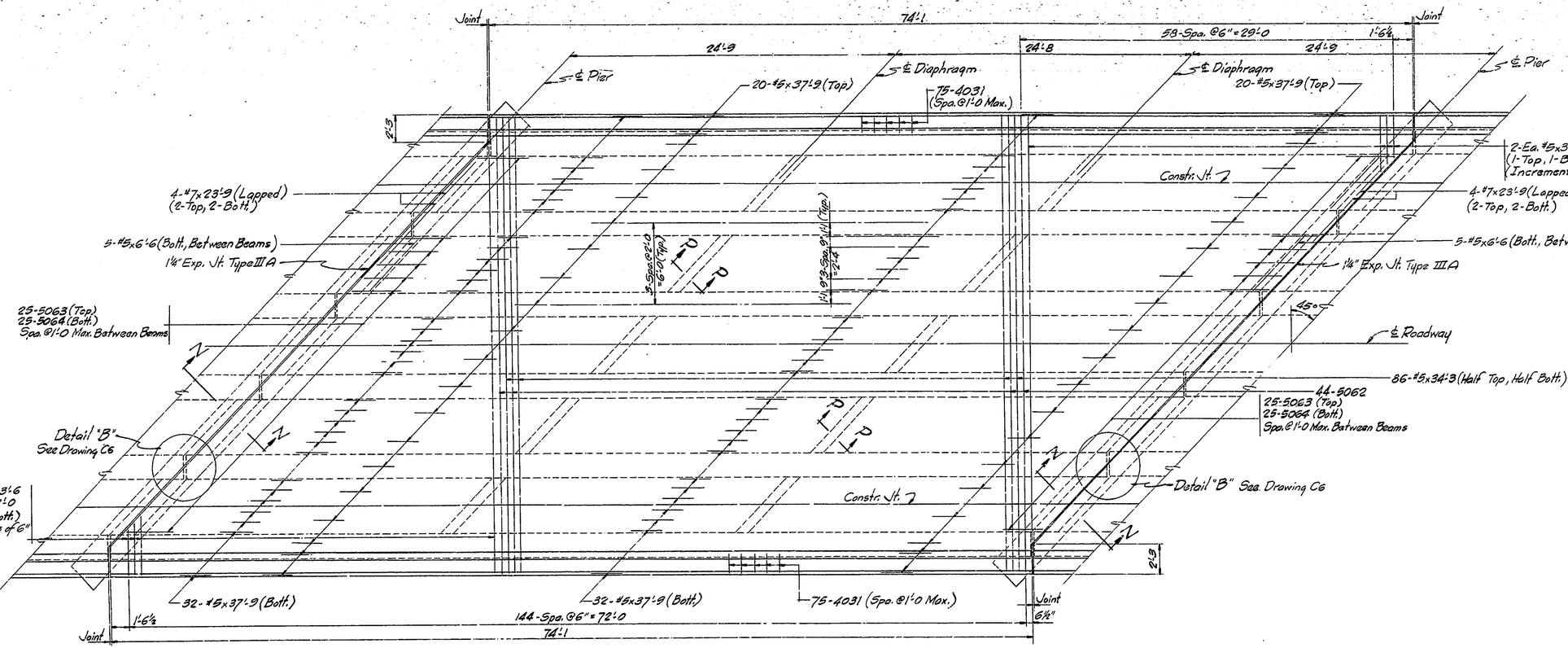
RECOMMENDED FOR APPROVAL: C. B. Rummel
ENGINEER OF BRIDGE DESIGN

DRAWING: C6 OF 10
PROJECT: S-60(2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE: 8-E-3214

DESIGNED ____ C'K'D ____
DRAWN DAS 11/17/64 C'K'D PER 3/25/64
TRACED ____ C'K'D ____

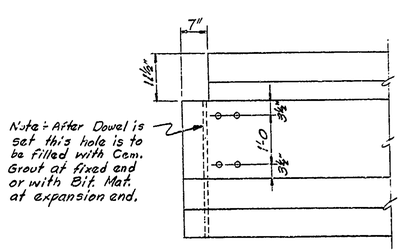
CHARLES R. WORTHINGTON No. 2275 REGISTERED PROFESSIONAL ENGINEER

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	15	59

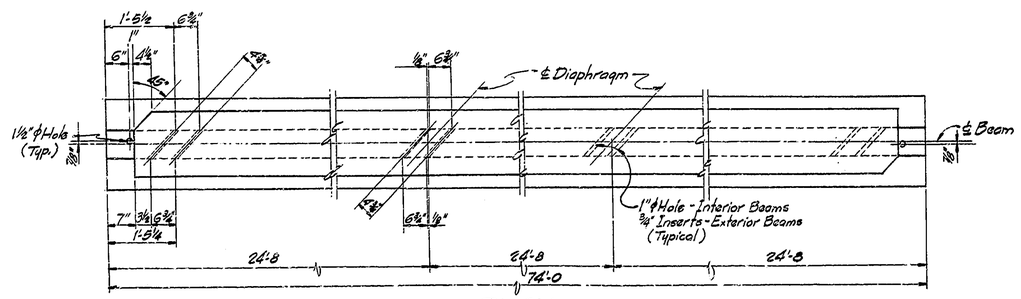


PLAN - SPAN B

Note: The outside face of outside beams to be given initial rub in the plant by the manufacturer. The inserts for Exterior Beams shall be placed in the Beam skewed to same angle as diaphragm.



ELEVATION



PLAN

TYPICAL BEAM DETAILS

Scale: ¾"=1'-0

Note: See Br. Std. C1 and Drwg. C9 for Reinforcing Bar Notes.

DESIGNED ____ C'K'D ____
DRAWN DBS 1/22/65 C'K'D EER 3-23-65
TRACED ____ C'K'D ____

SUPERSTRUCTURE DETAILS

INDIANA STATE HIGHWAY COMMISSION

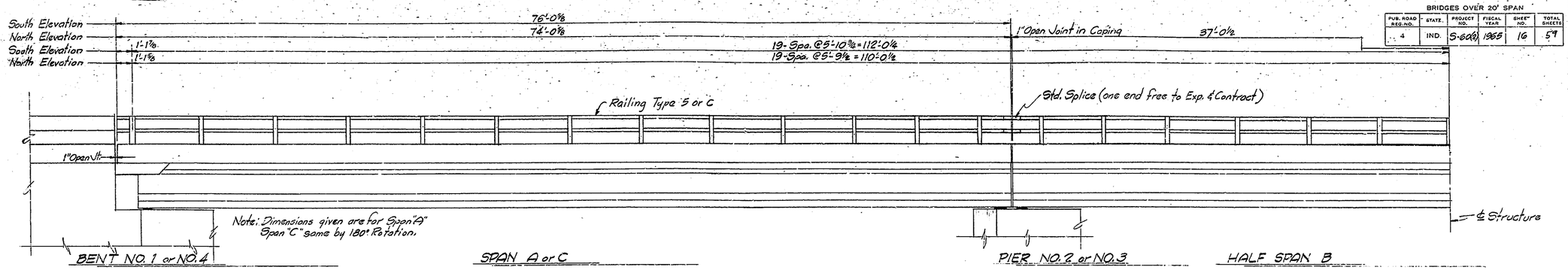
SCALE:- ½"=1'-0 Unless Noted JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C R Rummer
ENGINEER OF BRIDGE DESIGN

DRAWING:- C7 OF 10
PROJECT:- S-60(2)
BRIDGE CONTRACT NO. 6258
BRIDGE FILE:- 8-E-3214

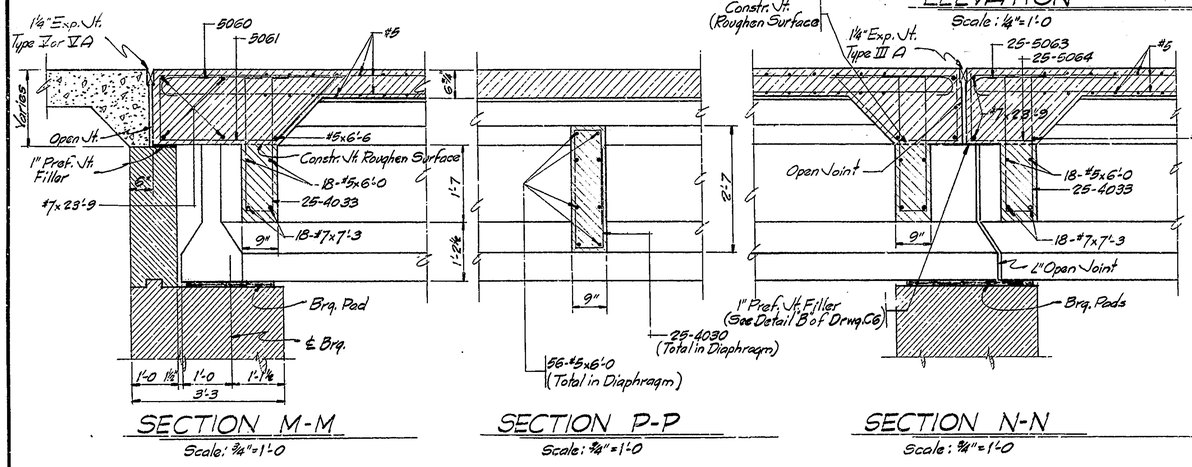
CHARLES R. KUMMER NO 2279 REGISTERED PROFESSIONAL ENGINEER STATE OF INDIANA

BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
. . 4	IND.	S-60(2)	1965	16	59



ELEVATION

Scale: ¼" = 1'-0

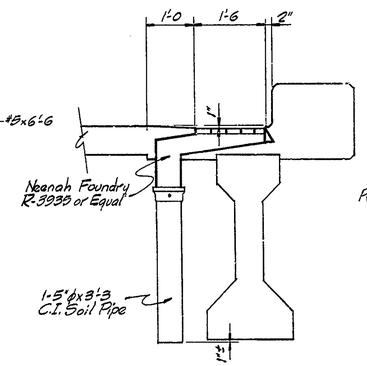


SECTION M-M
Scale: ¾" = 1'-0

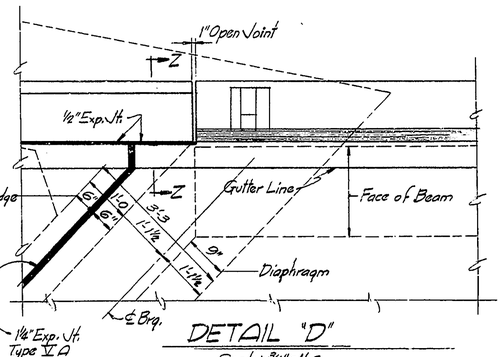
SECTION P-P
Scale: ¾" = 1'-0

SECTION N-N
Scale: ¾" = 1'-0

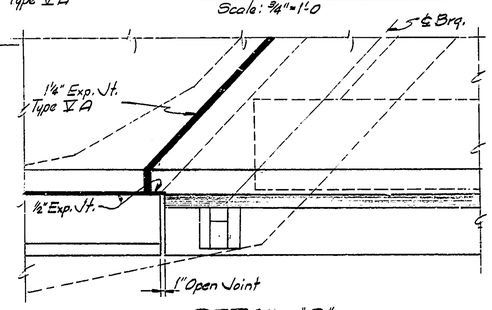
Note: Diaphragms to be poured before slab is formed.



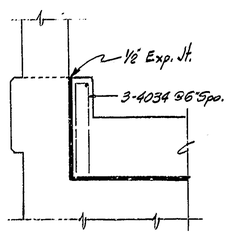
ROADWAY DRAIN DETAIL
Scale: ¾" = 1'-0
For Location See General Plan



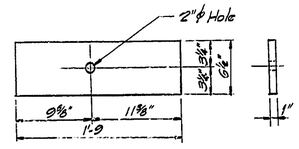
DETAIL "D"
Scale: ¾" = 1'-0



DETAIL "C"
Scale: ¾" = 1'-0



SECTION Z-Z
Scale: ¾" = 1'-0



NEOPRENE PAD DETAIL
Scale: 1½" = 1'-0
Note: Pad shall be made of 70 Durometer Hardness Neoprene.

BILL OF MATERIALS

SPAN "A" (SPAN "C" SAME)		SPAN "B"	
* REINFORCING STEEL	16,756 Lbs.	* REINFORCING STEEL	16,187 Lbs.
CONCRETE		CONCRETE	
Class F Outer Pour (2@13.8) =	27.6 Cys.	Class F Outer Pour (2@13.5) =	27.0 Cys.
Class F Inner Pour	44.8 "	Class F Inner Pour	42.4 "
Class F Diaphragms	8.7 "	Class F Diaphragms	8.7 "
Total Class F Conc.	81.1 "	Total Class F Conc.	78.1 "
MISCELLANEOUS		MISCELLANEOUS	
Prestr. I Beams, Type III -	444 Lin. Ft.	Prestr. I Beams, Type III	444 Lin. Ft.
Railing Type S or C	130.0 Lin. Ft.	Railing Type S or C	148.2 Lin. Ft.
1¼" Exp. Jt. Armor Type V A	43.5 Lin. Ft.	1¼" Exp. Jt. Armor Type III A	87 Lin. Ft.
1¼" Exp. Jt. Type V A	47.3 Lin. Ft.	1¼" Exp. Jt. Type III A	98 Lin. Ft.
2- Rdwy. Drains @ 250# =	500 #	4- Rdwy. Drains @ 250# =	1000 #
# 2-5'-9"x3'-3 C.I. Soil Pipe =	108 #	# 4-5'-9"x3'-3 C.I. Soil Pipe =	216 #
Total Cast Iron =	608 #	Total Cast Iron =	1216 #

Note: The cost of neoprene bearing pads, ¾"ϕx2'-9 threaded dowels, ¾"x1'-6 dowels, cement grout and joint filler to be included in Lump Sum bid of Prestressed Concrete I Beams.
* See Drwg. C10 for Bending Diagrams and Bill of Reinforcing Steel.
# 5" C.I. Soil Pipe @ 15#/foot + 5# per Hub

Note: See Br. Std. C1 and Drwg. C10 for Reinforcing Bar Notes.

DESIGNED ____ C'K'D ____
DRAWN DAS 1/20/64 C'K'D RTR 3/25/64
TRACED ____ C'K'D ____

SUPERSTRUCTURE DETAILS

INDIANA STATE HIGHWAY COMMISSION

SCALE:- As Noted JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C R Rummer
ENGINEER OF BRIDGE DESIGN

DRAWING:- C8 OF 10
PROJECT:- S-60(2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-3214

BILLS OF REINFORCING STEEL

BRIDGES OVER 20' SPAN

PUB. ROAD RCD. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(12)	1965	17	59

BENT NO 1 OR NO 4

SIZE	MARK	NO. OF BARS	TYPE	HOOK	A Ft.	A Inches	B Ft.	B Inches	C Ft.	C Inches	D Ft.	D Inches	E Ft.	E Inches	F Ft.	F Inches	G	Length Ft.	Length In.	Weight Lbs.
8	001	12	2		25	03.00														
8		24			25	03.00												26	04	
																		25	03	
8		16			11	00.00												11	00	
8		10			7	03.00												7	03	
																	TOTAL NO.	8		3125
G		24			G	06.00												G	06	
																	TOTAL NO.	6		939
5		28			3	06.00												3	06	
																	TOTAL NO.	5		102
4	001	45	6			9.00	3	09.00	3	09.00								8	03	
4	002	91	6		3	00.00		6.00		6.00								4	00	
4	003	34	12		3	00.00	2	09.00										9	06	
4	004	38	6		2	03.00		6.00		6.00								3	03	
4	005	18	12		2	03.00	2	09.00										6	09	
4		20			13	03.00												13	03	
4		40			5	00.00												5	00	
																	TOTAL NO.	4		1203
3		4			13	00.00												13	00	
3		8			11	00.00												11	00	
3		28			2	00.00												2	00	
																	TOTAL NO.	3		74
																	TOTAL STEEL			5443

PIER NO 2 OR NO 3

SIZE	MARK	NO. OF BARS	TYPE	HOOK	A Ft.	A Inches	B Ft.	B Inches	C Ft.	C Inches	D Ft.	D Inches	E Ft.	E Inches	F Ft.	F Inches	G	Length Ft.	Length In.	Weight Lbs.
10	01	10	2		25	06.00														
10		10			17	09.00												26	11	
																		17	09	
																	TOTAL NO.	10		1922
8	002	37	3		7	06.00												9	03	
																	TOTAL NO.	8		954
6		18			14	09.00												14	09	
																	TOTAL NO.	6		398
5	001	16	16		1	08.00		9.38			2	05.50						5	10	
5	002	30	2		3	01.00												3	08	
5	003	2	12		1	08.00	2	04.25										7	07	
5	004	2	12		1	08.00	2	07.75										8	02	
5	005	2	12		1	08.00	2	11.25										8	09	
5	006	2	12		1	08.00	3	01.00										9	00	
5	007	2	12		1	08.00	3	02.75										9	04	
5	008	2	12		1	08.00	3	04.50										9	07	
5	009	2	12		1	08.00	3	06.25										9	11	
5	010	2	12		1	08.00	3	08.00										10	02	
5	011	2	12		1	08.00	3	09.75										10	06	
5	012	2	12		1	08.00	3	11.50										10	09	
5	013	2	12		1	08.00	4	01.25										11	01	
5	014	2	12		1	08.00	4	03.00										11	04	
5	015	2	12		1	08.00	4	04.75										11	08	
5	016	2	12		1	08.00	4	07.25										12	01	
5	017	2	12		1	08.00	4	09.50										12	05	
5	018	2	12		1	08.00	4	11.75										12	10	
5	019	2	12		1	08.00	5	02.25										13	03	
5	020	2	12		1	08.00	5	04.50										13	07	
5	021	2	12		1	08.00	5	07.00										14	00	
5	022	2	12		1	08.00	5	09.25										14	05	
5	023	2	12		1	08.00	6	00.25										14	11	
5	024	2	12		1	08.00	6	03.25										15	05	
5	025	2	12		1	08.00	6	06.50										15	11	
5	026	2	12		1	08.00	6	09.00										16	04	
5	027	2	13		1	00.00	2	04.25										6	09	
5	028	2	13		1	00.00	2	07.75										7	04	
5	029	2	13		1	00.00	2	11.25										7	11	
5	030	2	13		1	00.00	3	01.00										8	02	
5	031	2	13		1	00.00	3	02.75										8	06	
5	032	2	13		1	00.00	3	04.50										8	09	
5	033	2	13		1	00.00	3	06.25										9	01	
5	034	2	13		1	00.00	3	08.00										9	04	
5	035	2	13		1	00.00	3	09.75										9	08	
5	036	2	13		1	00.00	3	11.50										9	11	
5	037	2	13		1	00.00	4	01.25										10	03	
5	038	2	13		1	00.00	4	03.00										10	06	
5	039	2	13		1	00.00	4	04.75										10	10	
5	040	2	13		1	00.00	4	07.25										11	03	
5	041	2	13		1	00.00	4	09.50										11	07	
5	042	2	13		1	00.00	4	11.75										12	00	
5	043	2	13		1	00.00	5	02.25										12	05	
5	044	2	13		1	00.00	5	04.50										12	08	
5	045	2	13		1	00.00	5	07.00										12	12	
5	046	2	13		1	00.00	5	09.25										13	07	
5	047	2	13		1	00.00	6	00.25										14	01	
5	048	2	13		1	00.00	6	03.25										14	07	
5	049	2	13		1	00.00	6	06.50										15	01	
5	050	2	13		1	00.00	6	09.00										15	06	
5		2			34	00.00												34	00	
5		2			26	06.00												26	06	
5		16			25	00.00												25	00	
5		8			24	09.00												24	09	
5		4			22	00.00												22	00	
5		38			18	09.00												18	09	
5		4			12	03.00												12	03	
																	TOTAL NO.	5		2833
4	006	33	12		2	09.00	2	03.00										8	03	
4	007	42	6		2	09.00		6.00		6.00								3	09	
4	008	12	6		2	09.00	1	00.00	1	00.00								4	09	
4		9			5	03.00												5	03	
																	TOTAL NO.	4		356
																	TOTAL STEEL			6463

Type 0

Type 6

Type 2

Type 3

Type 7

Type 12

Type 13

Type 14

Type 15

Type 16

Type 18

G = No. of H Spaces

Type 23

Type 12a

Type 20

Type 4

Type 22

Listed by D.A.S.
Checked by J.D.

Note: Where the Bar Type shows a hook and the Hook Col. is blank use a std. hook. SP in the Hook Col. indicates a special hook. See Br. Std. C1 for hook dimensions.

Bar Mark: No.10 & No.11 Bar sizes will have two numbers for Mark. Example 1023 or 1142
Bar Sizes No.3 to No.9 will have three numbers for Mark. Example 5003 or 7021

BILLS OF REINFORCING STEEL and BENDING DIAGRAMS

INDIANA STATE HIGHWAY COMMISSION

SCALE:-

JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C.R. Rummer
ENGINEER OF BRIDGE DESIGN

DRAWING:- C9 OF 10
PROJECT:- S-60(12)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-3214

CHARLES R. PRUITT NO 2275 STATE OF INDIANA REGISTERED PROFESSIONAL ENGINEER

BILLS OF REINFORCING STEEL

SIZE	MARK	No. OF BARS	TYPE	HOOK	A Ft.	A Inches	B Ft.	B Inches	C Ft.	C Inches	D Ft.	D Inches	E Ft.	E Inches	F Ft.	F Inches	G	Length Ft.	Length In.	Weight Lbs.
									SUPERSTRUCTURE SPAN A OR C											
7		12			23	09.30														
7		36			7	03.00												23	09	
																		7	03	
																	TOTAL	NO.	7	1116
5	060	25	2		4	00.00												4	07	
5	061	25	7		3	06.00	1	03.00	1	03.00	1	09.25	1	05.00				6	07	
5	062	44	23			9.00	1	05.75	2	04.00		4.25		9.00		6.00	5	33	00	
5	063	25	2		3	00.00												3	07	
5	064	25	7		1	08.50	1	03.00	1	03.00	1	09.25	1	03.00				4	09	
5		104			38	06.00												37	09	
5		86			34	03.00												34	03	
5		4			33	00.00												32	00	
5		2			32	06.00												31	06	
5		4			32	00.00												31	00	
5		4			31	06.00												30	06	
5		43			31	03.00												30	00	
5		4			31	00.00												29	06	
5		4			30	06.00												28	06	
5		4			30	00.00												27	06	
5		4			29	06.00												26	06	
5		4			29	00.00												25	06	
5		4			28	06.00												24	06	
5		4			28	00.00												23	06	
5		4			27	06.00												22	06	
5		4			27	00.00												21	06	
5		4			26	06.00												20	06	
5		4			26	00.00												19	06	
5		4			25	06.00												18	06	
5		4			25	00.00												17	06	
5		4			24	06.00												16	06	
5		4			24	00.00												15	06	
5		4			23	06.00												14	06	
5		4			23	00.00												13	06	
5		4			22	06.00												12	06	
5		4			22	00.00												11	06	
5		4			21	06.00												10	06	
5		4			21	00.00												9	06	
5		4			20	06.00												8	06	
5		4			20	00.00												7	06	
5		4			19	06.00												6	06	
5		4			19	00.00												5	06	
5		4			18	06.00												4	06	
5		4			18	00.00												3	06	
5		4			17	06.00														
5		4			17	00.00														
5		4			16	06.00														
5		4			16	00.00														
5		4			15	06.00														
5		4			15	00.00														
5		4			14	06.00														
5		4			14	00.00														
5		4			13	06.00														
5		4			13	00.00														
5		4			12	06.00														
5		4			12	00.00														
5		4			11	06.00														
5		4			11	00.00														
5		4			10	06.00														
5		4			10	00.00														
5		4			9	06.00														
5		4			9	00.00														
5		4			8	06.00														
5		4			8	00.00														
5		4			7	06.00														
5		4			7	00.00														
5		14			6	06.00														
5		152			6	00.00														
5		4			5	06.00														
5		4			5	00.00														
5		4			4	06.00														
5		4			4	00.00														
5		4			3	06.00														
																	TOTAL	NO.	5	14717
4	030	50	15		2	03.00		5.00	1	10.00										
4	031	152	6		1	06.00	1	03.00	1	03.00		06.00						6	09	
																		5	05	
4	033	50	14			6.00	2	09.00												
4	034	3	6			3.00	1	06.00	1	06.00								7	00	
																		3	03	
																	TOTAL	NO.	4	923
																	TOTAL	STEEL		16,756

SIZE	MARK	No. OF BARS	TYPE	HOOK	A Ft.	A Inches	B Ft.	B Inches	C Ft.	C Inches	D Ft.	D Inches	E Ft.	E Inches	F Ft.	F Inches	G	Length Ft.	Length In.	Weight Lbs.
									SUPERSTRUCTURE SPAN B											
7		8			23	09.00														
7		36			7	03.00												23	09	
																		7	03	
																	TOTAL	NO.	7	921
5	062	44	23			9.00	1	05.75	2	04.00		4.25		9.00		6.00	5	33	00	
5	063	50	2		3	00.00												3	07	
5	064	50	7		1	08.50	1	03.00	1	03.00	1	09.25	1	03.00				4	09	
5		104			37	09.00												37	09	
5		86			34	03.00												34	03	
5		4			32	00.00												32	00	
5		4			31	06.00												31	06	
5		43			31	03.00												31	03	
5		4			31	00.00												30	00	
5		4			30	06.00												29	06	
5		4			29	06.00												28	06	
5		4			29	00.00												28	00	
5		4			28	06.00												27	06	
5		4			28	00.00												27	00	
5		4			27	06.00												26	06	
5		4			27	00.00												26	00	
5		4			26	06.00												25	06	
5		4			26	00.00												24	06	
5		4			25	06.00												23	06	
5		4			25	00.00												22	06	
5		4			24	06.00												21	06	
5		4			24	00.00												20	06	
5		4			23	06.00												19	06	
5		4			23	00.00												18	06	
5		4			22	06.00												17	06	
5		4			22	00.00												16	06	
5		4			21	06.00												15	06	
5		4			21	00.00												14	06	
5		4			20	06.00												13	06	
5		4			20	00.00												12	06	
5		4			19	06.00												11	06	
5		4			19	00.00												10	06	
5		4			18	06.00												9	06	
5		4			18	00.00												8	06	
5		4			17	06.00												7	06	
5		4			17	00.00												6	06	
5		4			16	06.00												5	06	
5		4			16	00.00												4	06	
5		4			15	06.00												3	06	
5		4			15	00.00														
5		4			14	06.00														
5		4			14	00.00														
5		4			13	06.00														
5		4			13	00.00														
5		4			12	06.00														
5		4			12	00.00														
5		4			11	06.00														
5		4			11	00.00														
5		4			10	06.00														
5		4			10	00.00														
5		4			9	06.00														
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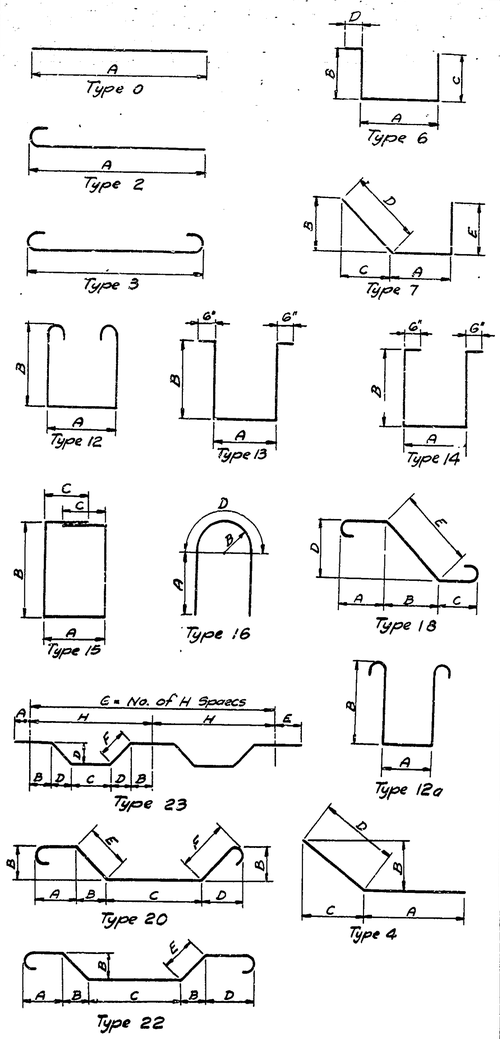
5		4			8	06.00														
5		4			8	00.00														
5		4			7	06.00														
5		4			7	00.00														
5		14			6	06.00														
5		152			6	00.00														
5		4			5	06.00														
5		4			5	00.00														
5		4			4	06.00														
5		4			4	00.00														
5		4			3	06.00														
																	TOTAL	NO.	5	14356
4	030	50	15		2	03.00		5.00	1	10.00										
4	031	150	6		1	06.00	1	03.00	1	03.00		06.00						6	09	
																		4	06	
4	033	50	14			6.00	2	09.00												
																		7	00	
																	TOTAL	NO.	4	910
																	TOTAL	STEEL		16,187

Listed by DBS
Checked by J.O.

Note: Where the Bar Type shows a hook and the Hook Col. is blank use a std. hook. SP in the Hook Col. indicates a special hook. See Br. Std. C1 for hook dimensions.

Bar Mark: No. 10 & No. 11 Bar sizes will have two numbers for Mark. Example 1023 or 1142
Bar Sizes No. 3 to No. 9 will have three numbers for Mark. Example 3023 or 7021

PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		BRIDGES OVER 20' SPAN			
4	IND.	S-60(12)	1965	18	59



BILLS OF REINFORCING STEEL and BENDING DIAGRAMS

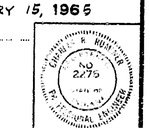
INDIANA STATE HIGHWAY COMMISSION

SCALE:-

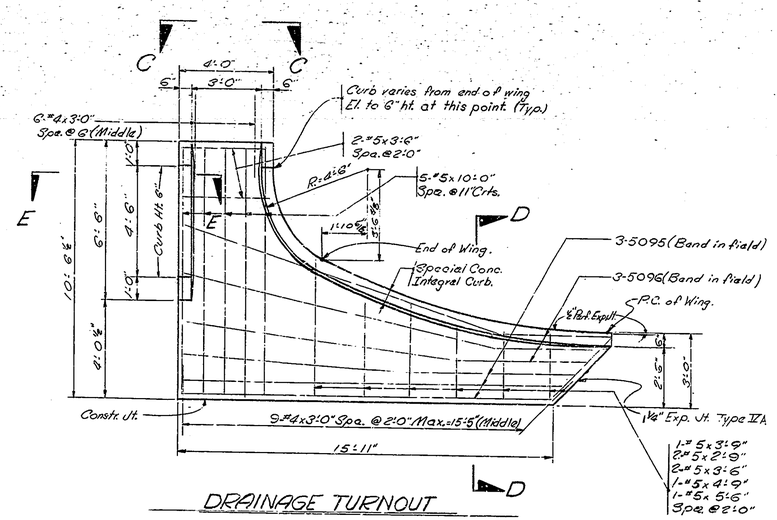
JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C. B. Rummer
ENGINEER OF BRIDGE DESIGN

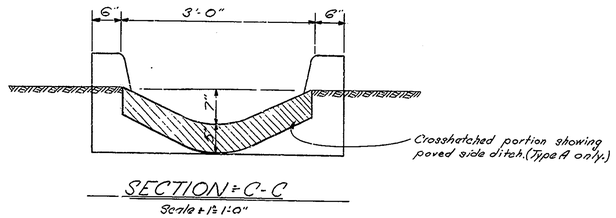
DRAWING:- C/O OF 10
PROJECT:- S-60(12)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-3214



BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1965	19	59

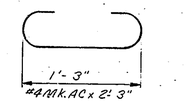


DRAINAGE TURNOUT



SECTION C-C

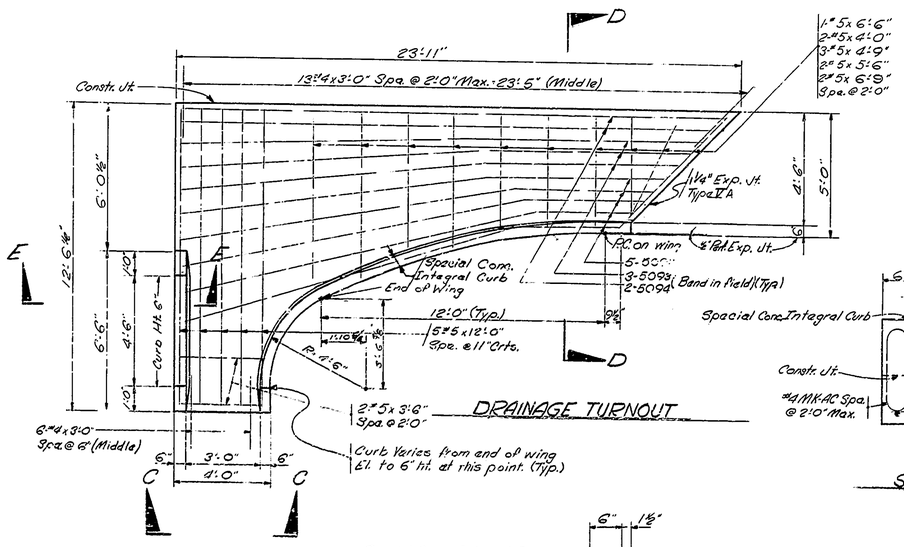
Scale 1/2 1:0"



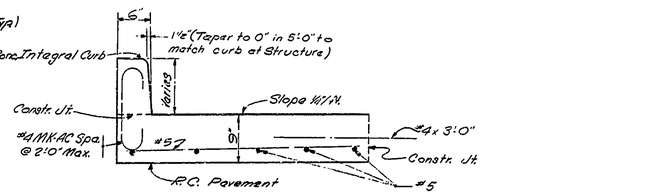
SIZE & MARK	O	LENGTH
5092	19'-5"	20'-0"
5093	21'-5"	22'-0"
5094	22'-11"	23'-6"
5095	15'-11"	16'-6"
5096	17'-8"	18'-3"

BILL OF MATERIALS
FOR FOUR TURNOUTS

REINFORCING STEEL			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT
5092	10	20'-0"	
5093	6	22'-0"	
5094	4	23'-6"	
5095	6	16'-6	
5096	6	18'-3"	
#5	4	2'-9"	
#5	12	3'-6"	
#5	6	5'-6"	
#5	2	6'-6"	
#5	4	4'-0"	
#5	8	4'-9"	
#5	4	6'-9"	
#5	10	10'-0"	
#5	10	12'-0"	
#5	2	3'-9"	
		Total #5	1003#
#4	68	3'-0"	
		Total #4	136#
	TOTAL STEEL		1139#
MISCELLANEOUS			
R.C. Pavement			506 Sq. Yds.
Special Integral Conc. Curb			100.4 Lin. Ft.

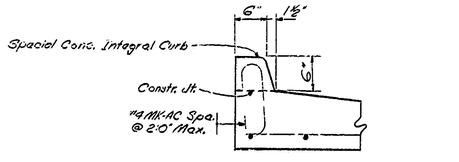


DRAINAGE TURNOUT



SECTION D-D

Scale 1/2 1:0"



PART SECTION E-E

Scale 1 1/2 1:0"

Note: See General Plan for location of Drainage Turnouts.
See Bridge Std. Ms for R.C. Bridge Approach Details.

Note: See Br. Std. C and Drwg. C of for Reinforcing Bar Notes.

WIDENED PAVEMENT DETAILS

INDIANA STATE HIGHWAY COMMISSION

SCALE:- 3/8" = 1:0" Unless Noted. JANUARY 15, 1965

RECOMMENDED FOR APPROVAL:- C. R. Rummer
ENGINEER OF BRIDGE DESIGN

DRAWING:- OF
PROJECT:- S-60(2)
BRIDGE CONTRACT NO. 6858
BRIDGE FILE:- 8-E-3214

CHARLES R. RUMMER
NO. 2275
STATE OF INDIANA
REGISTERED PROFESSIONAL ENGINEER

DESIGNED _____ C'K'D _____
DRAWN LL 3/10/65 C'K'D MP 9/29/64
TRACED _____ C'K'D _____

BRIDGE FILE

STRUCTURE QUANTITIES

ITEM	CONCRETE CLASS F	CONCRETE CLASS D	CONCRETE CLASS E ABOVE FTG	CONCRETE CLASS E IN FTG	RAILING CONCRETE CLASS F	REINFORCING STEEL (196# STD. WTS) #11	#10	#9	#8	#7	#6	#5	#4	#3	FOR SPIRALS **	TOTALS	STRUCTURAL STEEL ***	BRONZE BEARING PLATES	ANCHOR PLATES MK-AP	ANCHOR RODS MK-AR	CAST IRON	RAILING TYPE S or TYPE C	PILES: UNTREATED TIMBER	PILES: TREATED TIMBER	PILES: STEEL ENCASED CONCRETE	PILES: STEEL H BEARING
	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	LIN. FT.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.	LBS.	XX LBS.	LBS.	LBS.	LBS.	EACH	EACH	LBS.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
BENT No. 1	33.1				2.8				3125		939	108	1203	74		5449											
SPAN A	81.1									1116		14717	923			16756					608	150			13	390
PIER No. 2	25.7		26.1	22.8			1922		954		398	2833	356			6463							30	600		
SPAN B	78.1									921		12956	910			16187										
PIER No. 3	25.7		26.1	22.8			1922		954		398	2833	356			6463					1216	148.2	30	600		
SPAN C	81.1									1116		14717	923			16756										
BENT No. 4	33.1				2.8				3125		939	108	1203	74		5449					608	150			13	390
Widened Pavement Details SPLICE BARS							45		23	16	34	1003	136			1139										
Reinf. Steel for Approach Structures												95	12			165										
Reinf. Steel for R.C. Bridge Approaches												2821				2821										
Reinf. Steel for Lin Gutter, Pvmt, Terrace, etc																										
TOTALS	357.9		52.2	45.6	5.6		3889		8181	3169	2708	53519	6022	148		77636					2432	448.2	60	1,200	126	780

APPROACH STRUCTURES

STRUCT Nº	LOCATION	DESCRIPTION SIZE	DESCRIPTION KIND	LENGTH LIN. FT.	CL. D CONC IN STRUCTS CU. YDS	REINF. STEEL LBS	CAST IRON LBS.	REMARKS
1	Sta. 31 + 65	30"	Pipe Group "A" (16 Ga. F.B.C.C.S./P.I.)	130'				
14	Lt. Sta. 32+00	15"	Pipe Group "D" (16 Ga. C.S. or 16 Ga. C.A.A.)	50'				
8	Sta. 33+30	6"	Perf. F.B.C.C.S. Pipe	60'				
3	Rt. Sta. 35 + 40	15"	Pipe Group "D" (16 Ga. C.S. or 16 Ga. C.A.A.	36'				
4	Sta. 35+ 80	6"	Perf. F.B.C.C.S. Pipe	60'				
				TOTALS				Total of Reinforcing Steel carried to "Structure Quantities"

BILL OF SPLICE BARS

REINFORCING STEEL — BRIDGE FILE

SIZE	LENGTH	WEIGHT EACH	Nº PIECES	WEIGHT LBS	Nº PIECES	WEIGHT LBS	Nº PIECES	WEIGHT LBS	TOTAL WEIGHT LBS
	LIN. FT.								
# 11	11'-0"	58.4							
# 10	10'-6"	45.2	1	45					
# 9	7'-6"	32.3							
# 8	8'-9"	23.4	1	23					
# 7	8'-0"	16.4	1	16					
# 6	7'-6"	11.3	3	34					
# 5	6'-9"	7.0	5	35					
# 4	6'-0"	4.0	3	12					
# 3	5'-6"	2.1							
TOTAL SPLICE BARS			165						

NOTE: For Test Bar Samples see Bridge Std. C1

Designed EWW — Rev. RFM
Checked EWW — JFS

BILL OF MATERIALS FOR R.C. BRIDGE APPROACHES

REINFORCING STEEL — BRIDGE FILE

SIZE & MARK	NUMBER PIECES	LENGTH LIN. FT.	WEIGHT LBS	WEIGHT LBS	WEIGHT LBS	TOTAL WEIGHT LBS
5@	96	20'-6"				
4@	22	33'-6"				
	Total					2821#

BARRICADES, BARRIERS, TRAFFIC SIGNS AND LIGHTS

ITEM	UNIT	QUANTITY		ASSEMBLY	BRIDGE FILE			TOTALS
TYPICAL SIGN STANDARDS	Each	10		Signs XW-1	2			
				Signs XW-2	6			
				Signs XW-3				
				Signs W-4B, W-35A	2			
				Torches	10			
STANDARD BARRICADES (TYPE A)	Each	2		Barricades (Type A)	2			
				Signs XR-1	2			
				Signs M-20A	1			
				Signs XR-4	1			
				Lanterns	4			
STANDARD BARRICADES (TYPE B)	Each	1		Barricades (Type B)	1			
				Signs XR-1	1			
				Lanterns	2			
STANDARD SIGNS	Each			Signs W-1				
				Signs W-35A				
				Torches				
SUITABLE BRIDGE BARRIERS	Each	2	*	Suitable Barriers	2			
			*	Lanterns or Torches	4			
CONSTRUCTION IDENTIFICATION SIGNS	Each	2	*	Signs XM-6				
			*	Signs XM-7	2			
			*	Signs XM-8				

* Not a Pay Item. Place as directed by the Engineer "W-35A" safe speed to be determined by the Engineer. When sign standards are used in unpaved areas the contractor may use two posts set (3) three feet in the ground. Directional, advisory or warning signs shall be right hand or left and as the location of the sign requires.

** Weight of spirals includes weight of 1½ extra turns top and bottom. Spacers and ½ turns at laps included in cost of spiral.

*** The weight of structural steel is approximate only, and it shall be the contractors responsibility to determine the weight on which he bases his bid.

Rev. 4-6-66 Str. & Items
Rev. 8-6-65 Quantities
Rev. 7-21-65 F.B.C.C.M. Pipe

BRIDGES OVER 20' SPAN

FED. ROAD PROJ. NO.	STATE PROJ. NO.	FISCAL YEAR	SHEET NO.	SHEETS
4	IND 5-60(2)	1965	20	59

SUMMARY

ITEM	DESCRIPTION	UNIT	QUANTITIES BRIDGE FILE	TOTALS
1	Class F Concrete	Cu Yds.	357.9	
2	Class D Concrete	Cu Yds.		
3	Class E Concrete above Footings	Cu Yds.	52.2	
4	Class E Concrete in Footings	Cu Yds.	45.6	
5	Railing Concrete	Cu Yds.	5.6	
6	Reinforcing Steel	Lbs.	77,636	
7	Structural Steel	Lump Sum		
8	Anchor Plates (MK-AP)	Each		
9	Cast Iron	Lbs.	2432	
10	Railing Type S or Type C	Lin. Ft.	448	
11	Untreated Timber Piles Furnished	Lin. Ft.	1200	
12	Untreated Timber Piles Driven	Lin. Ft.	960	
13	Steel Pile Shells Furnished (14")	Lin. Ft.	780	
14	Steel Pile Shells Driven (14")	Lin. Ft.	780	
15	Furnishing Equipment for Driving Piles	Lump Sum	1	
16	Wet Excavation	Cu Yds.	253	
17	Waterway Excavation	Cu Yds.		
18	Common Excavation	Cu Yds.	3110	
19	Special Borrow	Cu Yds.	38,000	
20	Grade B Special Borrow	Cu Yds.	27,50	
21	Sodding	Sq. Yds.	16,40	
22	Mulched Seeding	Sq. Yds.	18,800	
23	Plain Cement Concrete Pavement (")	Sq. Yds.		
24	Reinforced Cement Concrete Pavement (9")	Sq. Yds.	234	
25	Type "P" Compacted Aggregate Base	Tons	2830	
26	Compacted Aggregate Shoulder Type "P"	Tons	995	
27	Subbase Type II	Cu Yds.	300	
28	Removal Presen Structure	Lump Sum	1	
29	Temporary Bridge and Approaches	Lump Sum		
30	Typical Sign Standards	Each	10	
31	Standard Barricades (Type A)	Each	2	
32	Standard Barricades (Type B)	Each	1	
33	Standard Signs	Each		
34	R/W Markers	Each	12	
35	Slopewall	Sq. Yds.		
36	½" Expansion Joint	Lin. Ft.	50	
37	Straight Beam Guard Rail	Lin. Ft.	207.5	
38	Class D Concrete in Structures	Cu Yds.		
39	Prestressed Conc. I Beams	Lump Sum	1	
40	Special Integral Conc. Curb	Lin. Ft.	101	
41	1½" Expansion Joint Armor Type IIIA	Lin. Ft.	87	
42	1½" Expansion Joint Type IIIA	Lin. Ft.	98	
43	1½" Expansion Joint Type IA	Lin. Ft.	95	
44	Paved Side Ditch Type A	Lin. Ft.	70	
45	30" Pipe Group "A" (14 Ga. (F.B.C.C.S./P.I.)	Lin. Ft.	130	
46	15" Pipe Group "D" (16 Ga. C.S. or 16 Ga. C.A.A.)	Lin. Ft.	86	
47	6" Perf. F.B.C.C.S. Pipe	Lin. Ft.	120	
48	Salvaged Road Material for Subbase	Cu. Yds.	700	
49	Aggregate for Shoulder Drains	Tons	85	
50	Hot Asphaltic Conc. Base	Tons	830	
51	Hot Asphaltic Conc. Surface Type B	Tons	280	
52	Bituminous Material Applied	Tons	9	
53	Calcium Chloride	Tons	3.5	
54	1¼" Expansion Joint Armor Type IA	Lin. Ft.	87	

SUMMARY
INDIANA STATE HIGHWAY COMMISSION

JANUARY 15, 1965

RECOMMENDED FOR APPROVAL C.G. Ruminer

PROJECT - S-60(2)
BRIDGE CONTRACT NO 6858
BRIDGE FILE - B-E-3214

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISICAL YEAR	SHEET NO	TOTAL SHEETS
4	IND.	S-6022	1964	1	6

STATE OF INDIANA

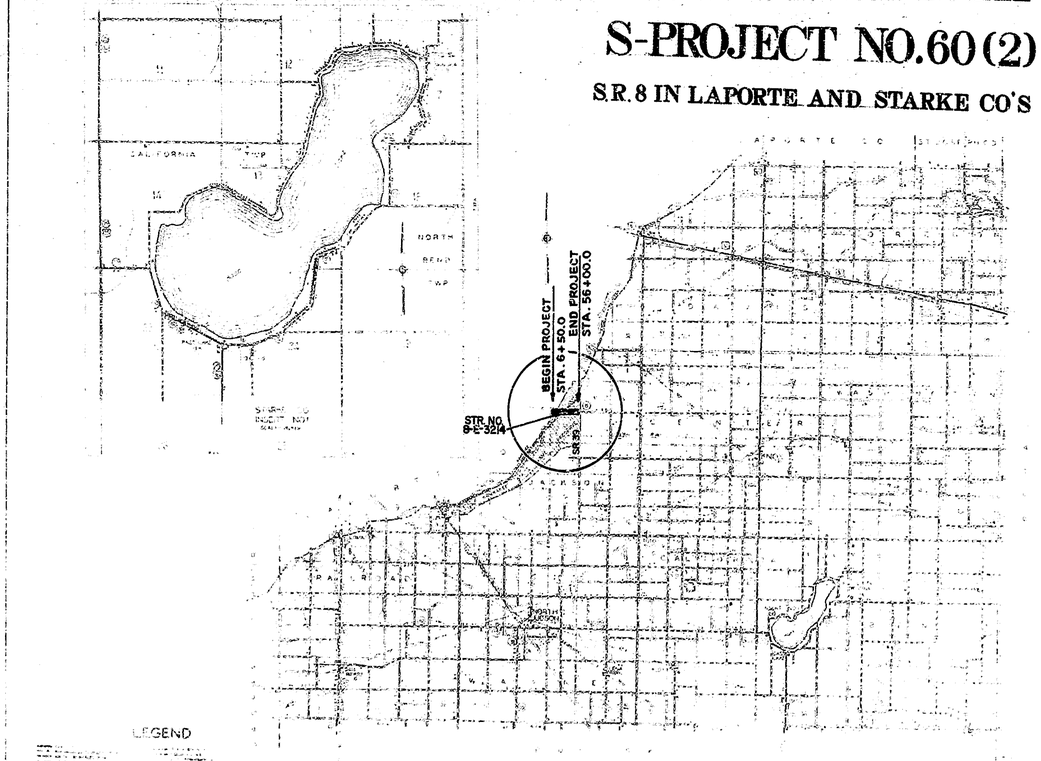
INDIANA STATE HIGHWAY COMMISSION

SOIL PROFILE OF PROPOSED

STATE HIGHWAY

S-PROJECT NO. 60 (2)

S.R. 8 IN LAPORTE AND STARKE CO'S



LEGEND

GENERAL HIGHWAY AND TRANSPORTATION MAP

STARKE COUNTY

INDIANA

STATE HIGHWAY COMMISSION

IN COOPERATION WITH THE U.S. DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS

STATE-WIDE HIGHWAY PLANNING SURVEY

DEC. 1

PLANS PREPARED

FOR:-
INDIANA STATE HIGHWAY COMMISSION

BY:-
AMERICAN TESTING & ENGINEERING CORP.
5129 E. 65TH. ST.
INDIANAPOLIS, IND

DATE: FEB. 1964

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	S-60(2)	1964	2	6

SOIL PROFILE

NOTES, LEGEND, SYMBOLS & ABBREVIATIONS

GENERAL NOTES

1. The field boring and sampling was started on 1-16-64 and completed on 1-23-64

2. Boring offsets were centerline unless otherwise noted.

3. The data shown herein is as found at the location of, and date of test borings and is for information only. The Indiana State Highway Commission assumes no responsibility for accuracy of data shown herein.

4. Ground elevations are plotted 10' to the inch. Boring depths are plotted 5' to the inch.

5. The structure boring logs are included in the report.

LEGEND

- A-1-a
- A-1-b
- A-3
- A-2-4
- A-2-5
- A-2-6
- A-2-7
- A-4(0-4)
- A-4(5-8)
- A-5
- A-6(0-10)
- A-6(11-16)
- A-7-5
- A-7-6(8-15)
- A-7-6(16-20)
- Limestone
- Sandstone
- Shale
- Topsoil
- Peat, marly peat or other highly organic material, unstable

QU=0.10 Unconfined compressive strength in Tons/Sq.Ft.

DD=104 Dry Density in PCF

L.L.=50 Indicates Liquid Limit

P.L.=30 Indicates Plastic Limit

SYMBOLS – PROFILE

Indicates limits of soil layer or horizon, hatched according to soil type.

② Indicates depth at which test sample was obtained for Classification Test. Number indicates laboratory number of sample.

Indicates depth at which bag sample was obtained.

18 Indicates depth at which moisture sample was obtained. (18% - Natural moisture content).

52% Indicates depth at which sample was obtained for loss on Ignition (52% - Loss on Ignition).

ST-2" Indicates depth at which Shelby Tube Sample was obtained and diameter of sample.

Standard Penetration Test with Split Spoon Sampler

Indicates number of blows for the middle two 6" increments of a 24" drive.
(5) is number of blows for second 6" increment.
(7) is number of blows for third 6" increment.
(P) used in place of (5) & (7) indicates pushed sample.
Center of circle is at bottom of second 6" increment.

Indicates water level at 0 hrs.

Indicates water level after 24 hrs. If water level is measured at a time other than 24 hrs., the hour is noted.

P.I.=20 Indicates Plasticity Index

SYMBOLS – PLAN

- ○ Indicates location of profile boring.
- ◎ Indicates location of boring made with Split Spoon Sampling.
- © Indicates location of core boring.
- X Indicates location of sounding, rock or peat.

ABBREVIATIONS

Cl. – Clay
L. – Loam
Si. – Silty, Silt
Sa. – Sandy, Sand
Gvl. – Gravel
Bl. – Black
Dk. – Dark
Gr. – Gray, Grayish
Lt. – Light
Red – Red, Reddish
Yel. – Yellow, Yellowish
Mot. – Mottled
Br. – Brown, Brownish
Peb – Pebbles

RELATIVE PROPORTIONS

Trace = 1-10%
Little = 10-20%
Some = 20-35%
And = 35-50%

CONSISTENCY

Very Soft – 3 blows/ft. or less
Soft – 3 to 5 blows/ft.
Medium Stiff – 5 to 10 blows/ft.
Stiff – 10 to 15 blows/ft.
Very Stiff – 15 to 30 blows/ft.
Hard – 30 blows/ft. or more

DENSITY

Very Loose – 5 blows/ft. or less
Loose – 5 to 10 blows/ft.
Medium Dense – 10 to 30 blows/ft.
Dense – 30 to 50 blows/ft.
Very Dense – 50 blows/ft. or more

NOTE: Density and consistency terms apply to borings with standard penetration tests. In other borings, density and consistency were estimated by inspection.

LABORATORY DATA SUMMARY

Lab. No.	Boring No.	Station	Offset	Sample No.	Sample Depth	Classification Textural	Classification A.A.S.H.O.	% Passing 10	% Passing 40	% Passing 200	% Passing 270	% Sand	% Silt	% Clay	% Coll.	L.L.	P.L.	P.I.	S.L.
1	2	10+05	℄	2	3½'-4.5	Brown Sand	A-2-4 (0)	99	87	16	13	87	3	10	4	NP	NP	NP	NP
2	2	10+05	℄	4	8.5-9.5	Light Brown Sand	A-2-4 (0)	99	63	11	10	90	–	–	–	–	–	–	–
3	2	10+05	℄	5	10.5-11.5	Gray Sand	A-3 (0)	100	71	5	4	96	–	–	–	–	–	–	–
4	4	17+00	19'Rt.	1	0.5-1.5	Dark Brown Sandy Clay Wtr. of Org. Mat.	A-7-6(8)	100	91	42	41	59	3	38	28	57	27	30	13
5	5E	21+49	19'Rt.	7	12'-14'	Gray Silty Clay Loam W/ Little Org. Mat.	A-7-6(13)	100	93	94	91	9	69	22	9	46	26	20	–
6	10	43+66	26'Rt.	1	2'-3'	Black Sandy Loam W/ Little Org. Mat.	A-7-5(13)	98	90	52	50	50	35	15	6	69	39	30	16
7	11	47+00	℄	1	8'-9'	Black Sand And Organic Mat.		66	36	3	3	97	1	2	0	NP	NP	NP	NP
8	12	49+00	50'Rt.	1	7'-8'	Brown Sandy Loam W/ Little Org. Mat.	A-2-4 (0)	100	98	26	22	78	20	2	0	NP	NP	NP	NP
9	11B	47+00	2'Lt.	5	9'-10'	Black Peat	L.O.I. = 73%												

STATE HIGHWAY DEPARTMENT OF INDIANA

ROAD NO. S.R.8
COUNTY:- LAPORTE

S-60(2) 1964 3 6

SEC. 9 T. 33 N. - R. 3 W.
CUSHMAN B. & MARION B. BISSELL (½ int.)
ELEANOR L. JOERR (½ int.)

SEC. 10 T. 33 N. - R. 3 W.
JETTIE E. & MONA A. BURROUGHS (Cultivated)

BEGIN S-PROJECT 60(2)
STA. 6 + 50.0

Staff rec. 1936 as S-U-1732, Cont. 1.59
16 63/2 Rods S. 39° 0 Relay
Town Centre in Bridge Centre Line

DITCH TO BE CLEANED

(Dredged)

FLOW

32' Offset

POT 4+12.0

℄ Line E.M.J. (Approx. Sec. Line)

S.R.8 (±19' Blacktop over gravel)

SEC. 16 T. 33 N. - R. 3 W.
JETTIE E. & MONA A. BURROUGHS

This tangent extends 10 mile to west and centers structure RD-3103, Cont. 2164, Bent 1 in Pit.

SEC. 15 T. 33 N. - R. 3 W.

PROP. ℄ R.D.W.'s

Brng. S 69° 45' E.

STATE OF INDIANA (Conservation Dept.) (Weeds)

S.R.8

Approx. Sec. Line

S-1 S-2 S-3 S-4 S-5 S-6

#15 #4

POT 4+120 (1 PF)

POT 9+98.43 (1 PF)

B.M. #1 Elev. 687.88 Brass Cap Set in Top of Conc. Post

NOTE: Bench Marks are to Sea Level Datum (U.S.G.S.)

STA. 16+40

5' Rt.

Sl. Saturated V. Soft Sl. W/Trace Org. Mat'l (Visual Classification)

Gr. Saturated Very Loose Sa. A-3 ③

#15

STA. 11+00

11' Rt.

Br. Moist Med. Dense Sand A-2-4 ①

Dk. Br. Moist Med. Stiff Sa. Cl. W/Trace Org. Mat'l A-7-6 ④

Lt. Br. Moist Med. Dense Sand A-2-4 ②

Br. Wet Loose Sand W/ Silt Seams A-2-4 ①

Br. Wet Loose Sand W/ Little Gravel (Visual Classification)

Gr. Wet Loose to Med. Dense Sand A-3 ③

Dry & Caved to 4.5' at Compl. Dry & Caved to 6.5' at 24 Hrs.

#4

100 Sl. G. 3.00 V.C. 150'

120 El. 672.00 V.C. 200'

PROP. C.R.N. ROADWAY

PROFILE ℄

24' Rt.

Br. Moist Med. Dense Sa. (Silt) (Visual Classification)

Br. Moist Med. Dense Sand A-2-4 (a) ①

Dk. Br. Moist Med. Stiff Sa. Cl. W/Trace Org. Mat'l A-7-6 ④

Lt. Br. Wet Loose to Med. Dense Sand A-2-4 ②

Br. Wet Loose to Med. Dense Sand A-3 (a) ③

W.O.H. of Compl.

Sl. Moist Med. Dense Sa. Cl. W/Trace Org. Mat'l A-7-6 ⑥

Lt. Br. Wet Loose to Med. Dense Sand F. A-2-4 ②

Dry at Compl. & 24 Hrs. Caved to 6' at 24 Hrs.

Wet Loose Sand

Drainage Silt

Sat'd Very Soft Org. Silt

Saturated Very Soft Org. Silt

Sat'd Very Loose Sa.

S-1 S-2 S-3 S-4 S-5 S-6

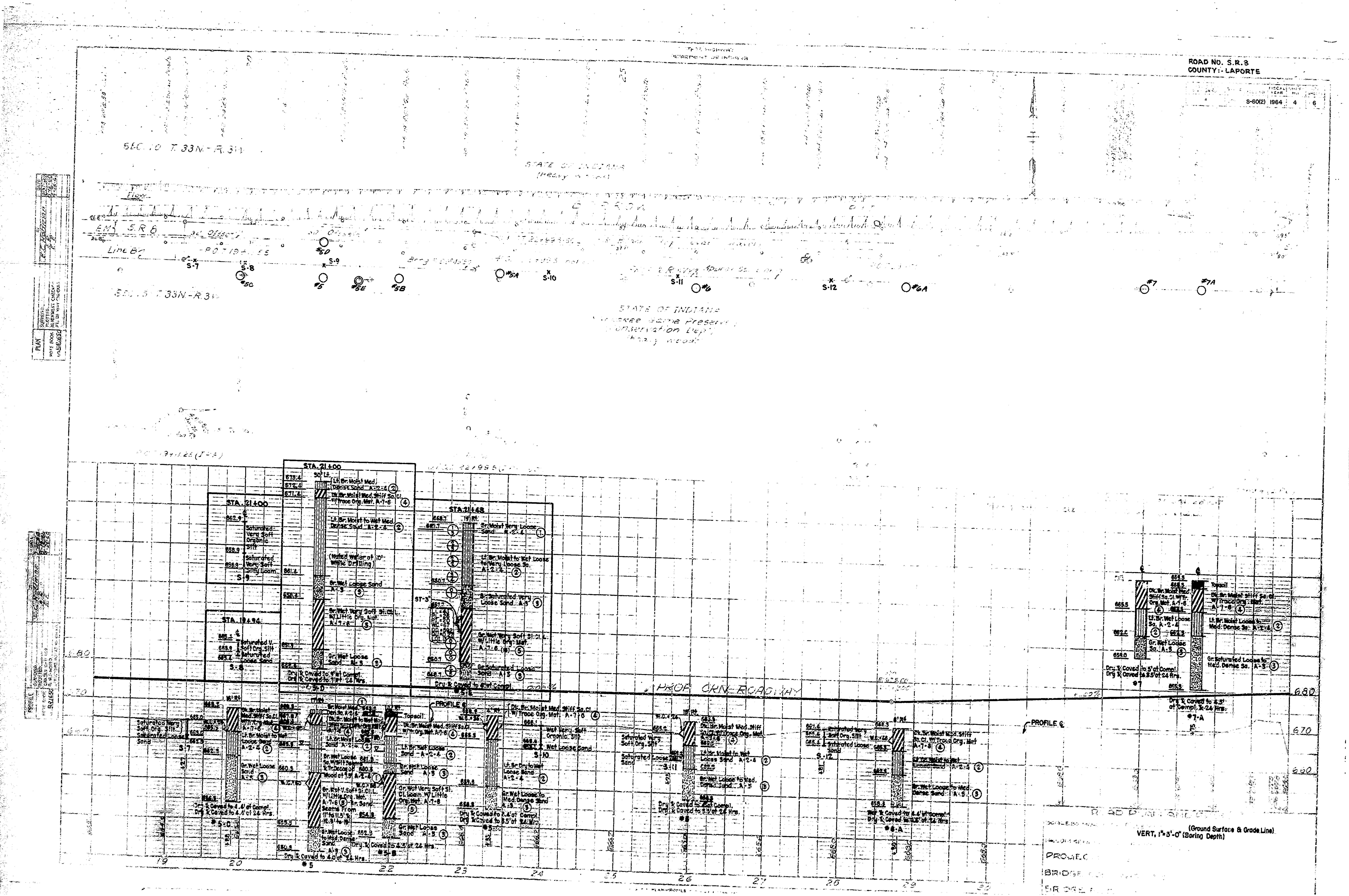
ROAD PLAN AND PROFILE

SCALES: HORIZ. 1"=50' VERT. 1"=10' (Ground Surface & Grade Line)
VERT. 1"=5'-0" (Boring Depth)

PROJECT:

BRIDGE CENTER LINE:

PLATE - PLAN & PROFILE


ROAD NO. S.R. 8
COUNTY:- LAPORTE
S-60(2) 1964 4 6
SEC. 10 T. 33N - R. 3W
STATE OF INDIANA
(Heavy Wood)
SEC. 3 T. 33N - R. 3W
STATE OF INDIANA
Game Preserve
Conservation Dept.
(Heavy Wood)
Flow
S-7
S-8
S-9
S-10
S-11
S-12
#5C
#5D
#5
#5E
#5B
#5A
#6
#6A
#7
#7A
PLAN
NOTE BOOK
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
PROFILE
STA. 21+00
50' Lt.
Lt. Br. Moist Med. Dense Sand A-2-4 (2)
Dk. Br. Moist Med. Stiff Sa. Cl. W/Trace Org. Mat. A-7-6 (4)
Lt. Br. Moist to Wet Med. Dense Sand A-2-4 (2)
(Noted Water at 10' While Drilling)
Gr. Wet Loose Sand A-3 (3)
Gr. Wet Very Soft Si. Cl. L. W/Little Org. Mat. A-7-6 (5)
Gr. Wet Loose Sand A-3 (3)
Dry & Caved to 9' at Compl.
Dry & Caved to 7' at 24 Hrs.
#5-D
STA. 21+00
Saturated Very Soft Organic Silt
Saturated Very Soft Silty Loam
S-9
STA. 19+94
Saturated V. Soft Org. Silt
Saturated Loose Sand
S-8
STA. 21+48
19' Rt.
Br. Moist Very Loose Sand A-2-4 (1)
Lt. Br. Moist to Wet Loose to Very Loose Sa. A-2-4 (2)
Br. Saturated Very Loose Sand A-3 (3)
ST-3"
Gr. Wet Very Soft Si. Cl. L. W/Little Org. Mat. A-7-6 (5)
Br. Saturated Loose Sand A-3 (3)
Dry & Caved to ... at Compl.
#5-E
PROF. GRN. ROADWAY
PROFILE ℄
Topsoil
Saturated Very Soft Org. Silt
Saturated Loose Sand
S-7
Dk. Br. Moist Med. Stiff Sa. Cl. W/Tr. Org. Mat. A-7-6 (4)
Lt. Br. Moist to Wet Loose Sand A-2-4 (2)
Gr. Wet Loose Sand A-3 (3)
Dry & Caved to 4.4' at Compl.
Dry & Caved to 4.4' at 24 Hrs.
#5-C
Br. Moist Med. Dense Sa. A-2-4 (1)
Dk. Br. Moist to Wet Med. Stiff Sa. Cl. W/Tr. Org. Mat. A-7-6 (4)
Lt. Br. Moist Loose Sand A-2-4 (2)
Br. Wet Loose Sa. W/Silt Seams & Tr. Decayed Wood at 7.5' A-2-4 (1)
Br. Wet V. Soft Si. Cl. L. W/Little Org. Mat. A-7-6 (5) - Br. Sand Seams From 11' to 11.5' & 12.5' to 13'
Br. Wet Loose to Med. Dense Sand A-3 (3)
Dry & Caved to 4.0' at 24 Hrs.
#5
Dk. Br. Moist Med. Stiff Sa. Cl. W/Tr. Org. Mat. A-7-6 (4)
Lt. Br. Wet Loose Sand A-2-4 (2)
Br. Wet Loose Sand A-3 (3)
Gr. Wet Very Soft Si. Cl. Loam W/Little Org. Mat. A-7-6 (5)
Gr. Wet Loose Sand A-3 (3)
Dry & Caved to 4.5' at 24 Hrs.
#5-B
Dk. Br. Moist Med. Stiff Sa. Cl. W/Trace Org. Mat. A-7-6 (4)
Lt. Br. Dry to Wet Loose Sand A-2-4 (2)
Gr. Wet Loose to Med. Dense Sand A-3 (3)
Dry & Caved to 2.4' at Compl.
Dry & Caved to 3.5' at 24 Hrs.
#5-A
Wet Very Soft Organic Silt
Wet Loose Sand
S-10
Saturated Very Soft Org. Silt
Saturated Loose Sand
S-11
Dk. Br. Moist Med. Stiff Sa. Cl. W/Trace Org. Mat. A-7-6 (4)
Lt. Br. Moist to Wet Loose Sand A-2-4 (2)
Br. Wet Loose to Med. Dense Sand A-3 (3)
Dry & Caved to ... at Compl.
Dry & Caved to 3.5' at 24 Hrs.
#6
Saturated Very Soft Org. Silt
Saturated Loose Sand
S-12
Dk. Br. Moist Med. Stiff Sa. Cl. W/Trace Org. Mat A-7-6 (4)
Lt. Br. Moist to Wet ... A-2-4 (2)
Br. Wet Loose to Med. Dense Sand A-3 (3)
Wet & Caved to 4.4' at Compl.
Dry & Caved to ... at 24 Hrs.
#6-A
Dk. Br. Moist Med. Stiff Sa. Cl. W/Tr. Org. Mat. A-7-6 (4)
Lt. Br. Wet Loose Sa. A-2-4 (2)
Gr. Wet Loose Sa. A-3 (3)
Dry & Caved to 5' at Compl.
Dry & Caved to 3.5' at 24 Hrs.
#7
Topsoil
Dk. Br. Moist Stiff Sa. Cl. W/Trace Org. Mat. A-7-6 (4)
Lt. Br. Moist Loose to Med. Dense Sa. A-2-4 (2)
Gr. Saturated Loose to Med. Dense Sa. A-3 (3)
Dry & Caved to 4.5' at Compl. & 24 Hrs.
#7-A
680
670
660
19
20
21
22
23
24
25
26
27
28
29
30
ROAD PLAN AND PROFILE
(Ground Surface & Grade Line)
VERT. 1"=3'-0" (Boring Depth)
PROJEC...
BRIDGE...

ROAD NO. S.R. 8
COUNTY:- LAPORTE & STARKE

	S-60(2)	1964	5	6

STATE HIGHWAY DEPARTMENT OF INDIANA

SEC 10 T 33N-R 5W
STATE OF INDIANA
Heavy Woods
Borrow pit
S R 8
30 offset
Line 8
STATE OF INDIANA
Heavy Woods
STA 33+66.4
P.O.T. 35+65.7
Str. No. 6-E-3214
COUNTY LINE LAPORTE STARKE KANKAKEE
SEC 15 T 33N-R 5W
STATE OF INDIANA (Kankakee Game Preserve)
Heavy Woods
LARAMORE
Flow
RIVER (DITCH)
P.I. 40+06.2
PROP. CONC. ROADWAY
#8
#8A
#9
#9A
#10
#10A
#10B
#11
#11B
#11C
#11A

P.O.T. 33+69.4 (J.P.I.)
P.O.T. 35+65.7 (J.P.I.)
P.I. 43+32.1
P.C. & W.R.C. STA 5 B + 03.20
B.M. #3 El. 670.01 (U.S.G.S.)
NOTE: Barn in Horns
U.S.G.S.

STA. 47+00 7.8 Rt.
Bl. Moist Med. Dense Sa. L. W/Little Org. Mat. A-7-5
Lt. Br. Moist to Wet Very Soft Sl. Cl. L. W/Little Org. Mat. A-7-6
Bl. Wet Loose Sa. & Org. Mat.
Lt. Br. Wet V. Loose Sa. A-2-4
PUSHED 10' to 14'
Gr. Wet Very Soft Sl. Cl. L. With Little Org. Mat. A-7-6
Gr. Wet Loose Sa. Caved to 8' at 24 Hrs. A-3
#11C

STA. 47+00
Br. Dry to Moist Med. Dense to V. Loose Elic. Sand (Fill) (Visual Classification)
Bl. Moist V. Loose Sa. L. W/Little Org. Mat. A-7-5
Bl. Moist V. Soft Peat
Lt. Br. Wet V. Loose Sa. L. W/Little Org. Mat. A-2-4
Gr. Saturated Loose Sand A-3
#11B

CLASSIFICATIONS FOR #10-B
Bl. Moist Med. Dense Sa. L. W/Little Org. Mat. A-7-5
Lt. Br. Moist to Wet Loose Sand A-2-4
Gr. Saturated Loose Sand A-3
Gr. Wet Very Soft Sl. Cl. L. W/Little Org. Mat. A-7-6
Gr. Wet Very Loose Sand A-3

STA. 48+00
Br. Dry to Moist Med. Dense Sand (Fill) (Visual Classification)
Bl. Moist Loose Sa. L. W/Little Org. Mat. A-7-5
Lt. Br. Moist Loose Sand A-2-4
Bl. Moist Loose Sa. L. W/Little Org. Mat. A-2-4
Little Wet Loose Sand A-2-4
Gr. Wet Very Soft Sl. Cl. L. W/Little Org. Mat. A-7-6
Gr. Wet Loose Sand A-3
Dry & Caved to 7' at 24 Hrs.
#11-A

CLASSIFICATIONS FOR #11
Brown Wet Loose Sa. w/ Trace Org. Mat. A-2-5 Alternating w/ 2" Layers of Gr. Sa. & Org. Sl. L.
Gr. Wet Very Soft Sl. Cl. L. W/Little Organic Matter A-7-6

CLASSIFICATIONS SHOWN ABOVE

PROFILE ℄
Topsoil
Lt. Br. Wet Loose Sand A-2-4
(Gr. Wet Stiff Sl. Cl. L. W/Little Org. Mat. A-7-6
Lt. Br. Wet Loose Sand A-2-4
Gr. Wet Loose Sand A-3
Gr. Wet Soft Sl. Cl. L. W/Little Org. Mat. A-7-6
Gr. Saturated Loose to Med. Dense Sand A-3
Noted Water at 4' While Drilling
Dry & Caved to 4' at Compl.
Caved to 8' at 24 Hrs.
#8
Bl. Moist Med. Dense Sand A-2-4
Lt. Br. Moist Loose Sand A-2-4
(4.5' to 7' Wet Loose)
Gr. Wet Loose Sand A-3
Gr. Wet Soft Sl. Cl. L. W/Little Org. Mat. A-7-6
Gr. Wet Loose Sand A-3
Noted Water at 4.5' While Drilling
Dry & Caved to 5' at Compl.
Caved to 8' at 24 Hrs.
#8-A
Bl. Moist Med. Dense Sand (Fill) (Visual Classification)
Lt. Br. Wet Loose Sand A-2-4
Gr. Wet Very Soft Sl. Cl. L. W/Little Org. Mat. A-7-6
Gr. Wet Loose Sand A-3
Noted Water at 8' While Drilling
Dry & Caved to 8' Filled at Compl.
#9
#9-A
Bl. Moist Med. Dense Sa. L. W/Little Org. Mat. A-7-5 (8)
Lt. Br. Wet Loose Sand A-2-4
(Noted Water at 4.5' While Drilling)
Gr. Wet Loose Sand A-3
Dry & Caved to 8' at Compl.
Dry & Caved to 8.5' at 24 Hrs.
#10
#10-A
Bl. Moist Loose Sa. L. W/Little Org. Mat. A-7-5
Lt. Br. Wet Loose Sand A-2-4
Dry & Caved to 7' at 24 Hrs.
#10-B
Filled at Compl.
#11
#11-B
#11-C
#11-A

ROAD PLAN AND PROFILE
SCALES-HORIZ. 1"=50' VERT. 1"=5' (Ground Surface & Grade Line) 195
VERT. 1"=5'-0" (Boring Depth)
RECOMMENDED FOR APPROVAL
PROJECT:- S 60(2)
BRIDGE CONTRACT NO.
BRIDGE FILE:- B-E 3214

ROAD NO. S.R. 8
COUNTY:- STARKE

		FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	S-60(2)	1964	6	6

END S-PROJECT 60(2)
STA. 56+00.0

STATE OF INDIANA

SEC 10 T33N-R3W

SEC 11 T33N-R3W

FROM CRM ROADWAY

STA. 49+00

STATE OF INDIANA

0.00%

PROFILE ℄

FROM CRM ROADWAY

STATE OF INDIANA

ROAD PLAN AND PROFILE

(Ground Surface & Ground Line)
VERT, 1"=5'-0" (Boring Depth)

PROJECT

BRIDGE CONTRACT NO

BRIDGE FILE NO

END TR