

ROSS COUNTY
ROS-138 - (16.58)(17.42)
 In Clarksburg

Existing S.R. 138

PROP. CURVE
 P.I. = 921+78.00
 $\Delta = 14^\circ 45' 11''$
 $D = 9^\circ 00'$
 $L_s = 150'$
 $T_s = 157.55'$
 $E_s = 6.82'$
 $X_c = 149.79'$
 $Y_c = 5.88'$
 $\Theta_s = 6.75^\circ$

PROP. CURVE
 P.I. = 929+77.25
 $\Delta = 44^\circ 17' 30''$
 $D = 9^\circ 00'$
 $L_s = 200'$
 $T_s = 360.09'$
 $E_s = 53.53'$
 $X_c = 199.51'$
 $Y_c = 10.45'$
 $\Theta_s = 9.00^\circ$

Design Flow (Q_{10}) = 2200 cfs.
 1987 Design ADT = 1120 vpd.

EXISTING BRIDGE DATA

Bridge No. ROS-138-1750
 Type Pony Truss
 Span 56' Clear
 Rdwy. 14'-7 1/4"
 Condition Critical

Skew 0°-00'
 Loading 5-9.9
 Abuts. Conc. & Stone
 Wearing Surf. 1 1/2" Bit.
 Suff. Rating 52

DRAINAGE AREA = 22.66 Sq. Mi.

PROPOSED STRUCTURE

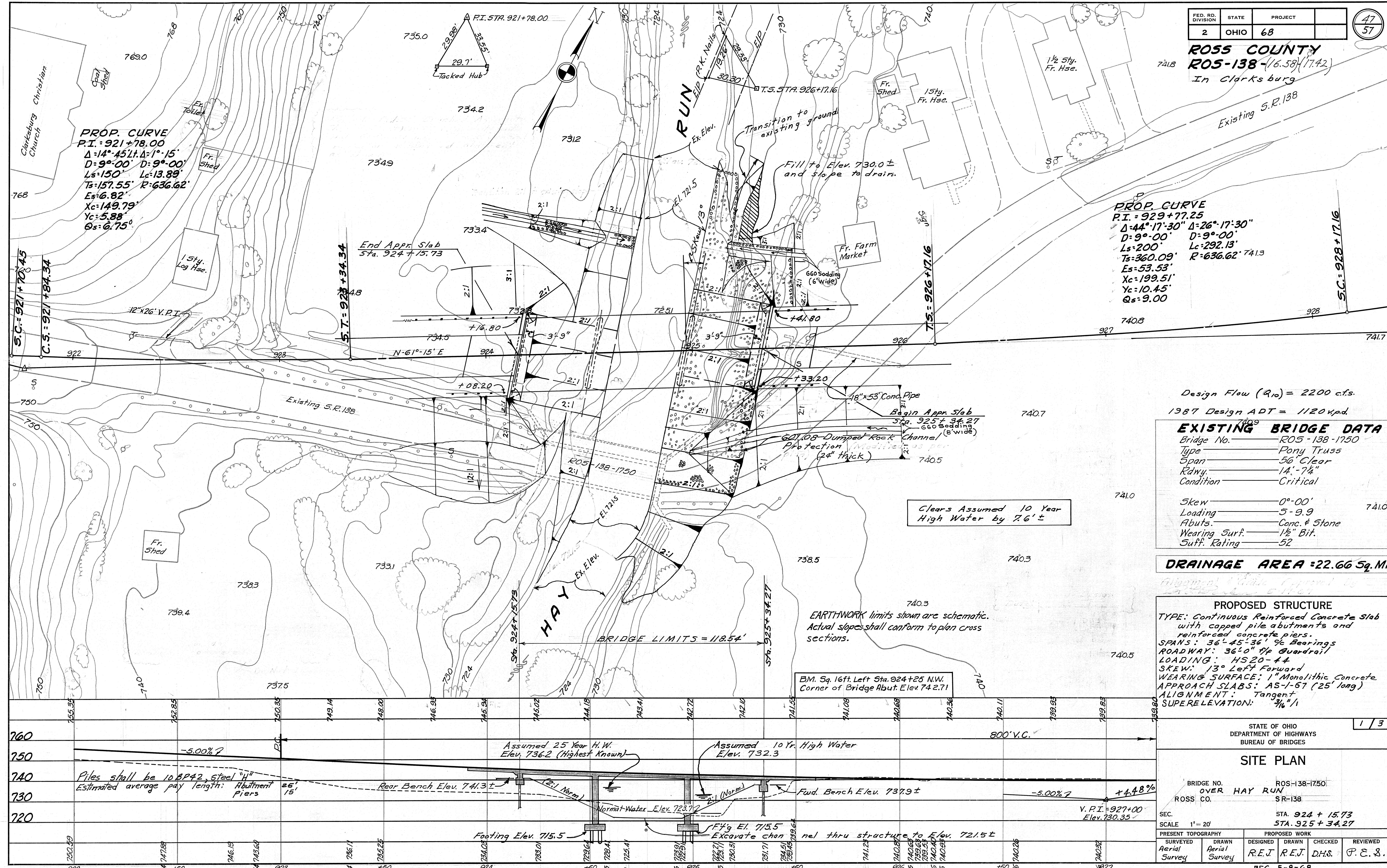
TYPE: Continuous Reinforced Concrete Slab with capped pile abutments and reinforced concrete piers.
 SPANS: 36'-45'-36' 1/2 Bearings
 ROADWAY: 36'-0" 1/2 Guardrail
 LOADING: HS20-44
 SKEW: 13° Left Forward
 WEARING SURFACE: 1" Monolithic Concrete
 APPROACH SLABS: AS-1-67 (25' long)
 ALIGNMENT: Tangent
 SUPERELEVATION: 3/8" / 1'

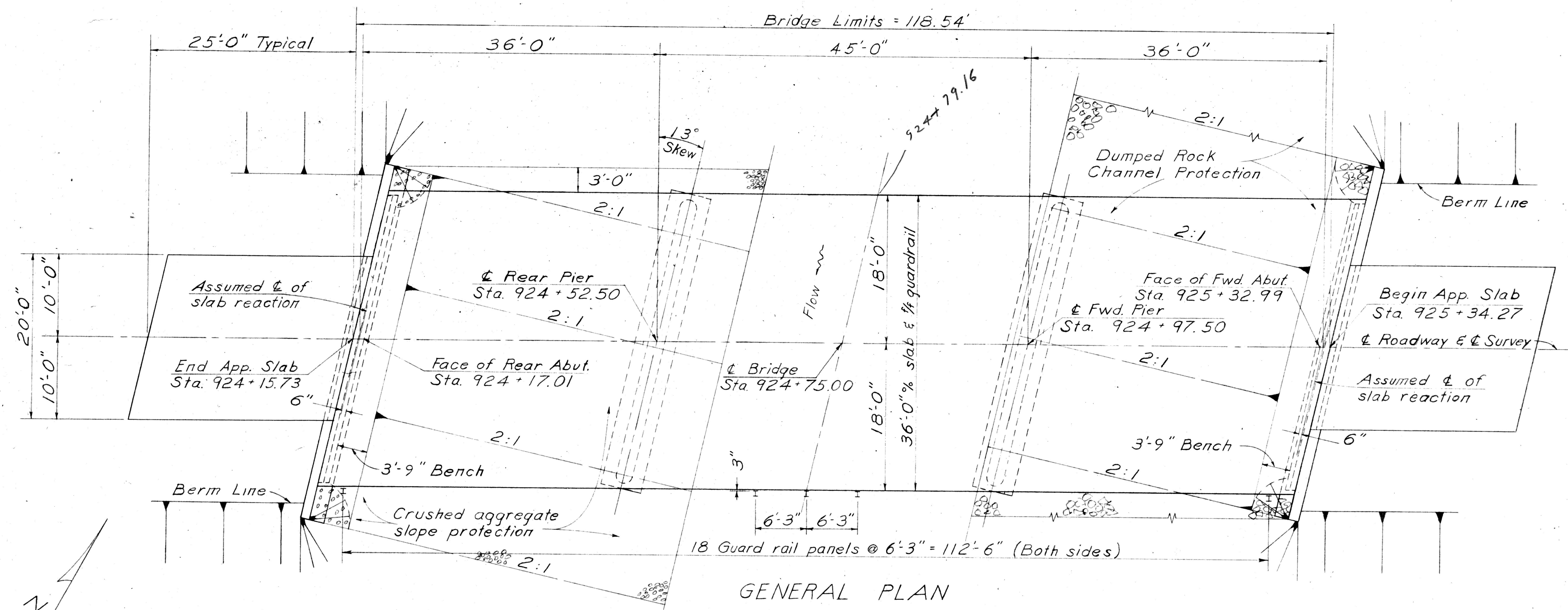
STATE OF OHIO
 DEPARTMENT OF HIGHWAYS
 BUREAU OF BRIDGES

SITE PLAN

BRIDGE NO. ROS-138-1750
 OVER HAY RUN
 ROSS CO. SR-138

SEC. STA. 924+15.73
 SCALE 1" = 20'
 PRESENT TOPOGRAPHY Aerial Survey
 PROPOSED WORK DRAWN R.E.J. CHECKED D.H.S. REVIEWED P.E.S.





GENERAL NOTES

REFERENCE SHALL BE MADE to Standard Drawings CS-1-65, sheets 1 and 2 dated 6-1-65; A-1-54 revised 11-8-65; and to Supplemental Specifications 808 dated 1-13-67 & 825 dated 12-19-67.

DESIGN SPECIFICATIONS: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway Officials, 1965, including the Ohio Supplement to these specifications.

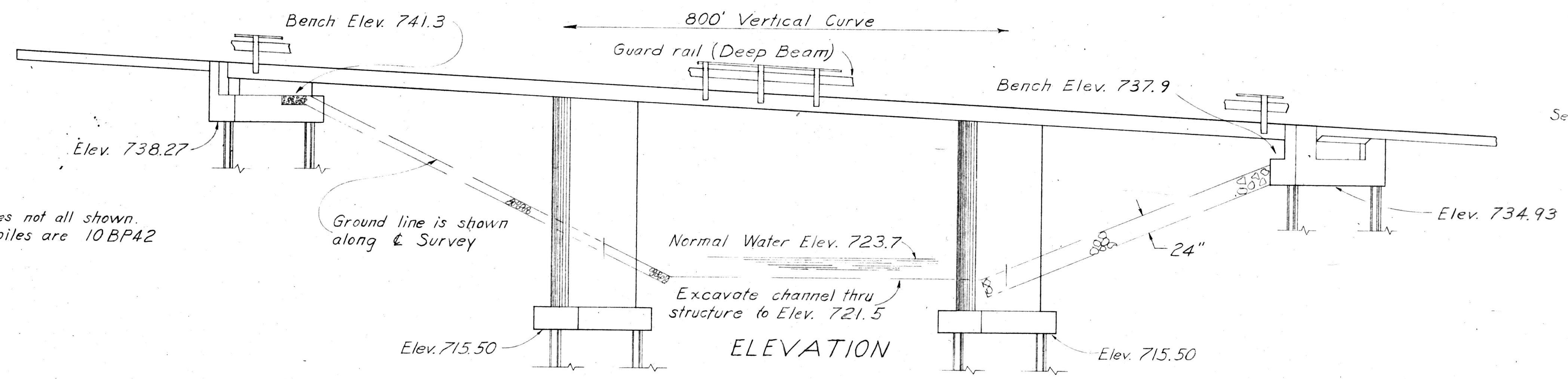
DESIGN DATA:
 Design Loading - HS20-44
 Concrete Class C - unit stress 1200 psi. for superstructure - unit stress 1333 psi. for substructure.
 Reinforcing Steel - ASTM A15, A16, A160, Deformed, Intermediate or Hard Grade. Unit Stress 20,000 p.s.i.

REMOVAL OF EXISTING STRUCTURE: when no longer needed to maintain traffic, the existing structure shall be removed.

ABUTMENT EXCAVATION QUANTITY, in addition to 503.10 includes the removal of embankment above the bench.

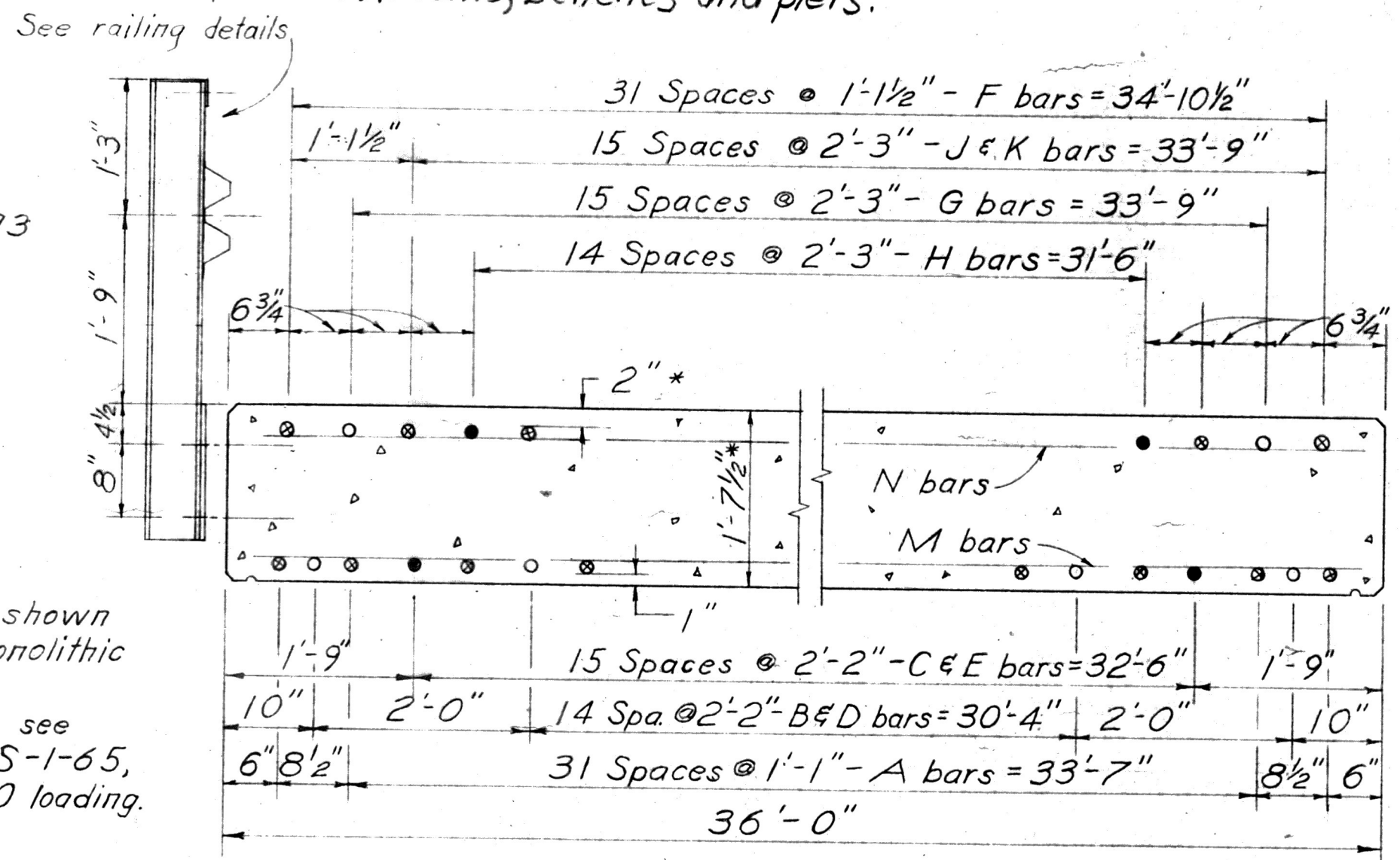
PILES shall be driven to a minimum bearing capacity of 30 tons per pile for the abutments and 35 tons per pile for the piers.

MACHINE FINISH: The concrete bridge deck shall be finished by the use of a finishing machine.

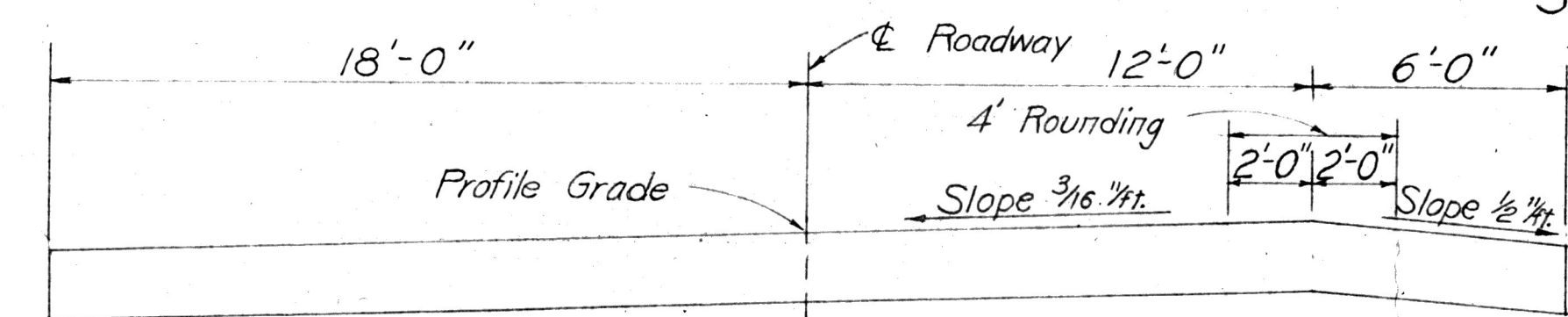


NOTE: Piles not all shown. All piles are 10BP42.

PROCEDURE: The embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet, or to the longitudinal extent of the fill if less than 200 feet, back of the abutments. Excavation shall then be made for the abutments, benches and piers.



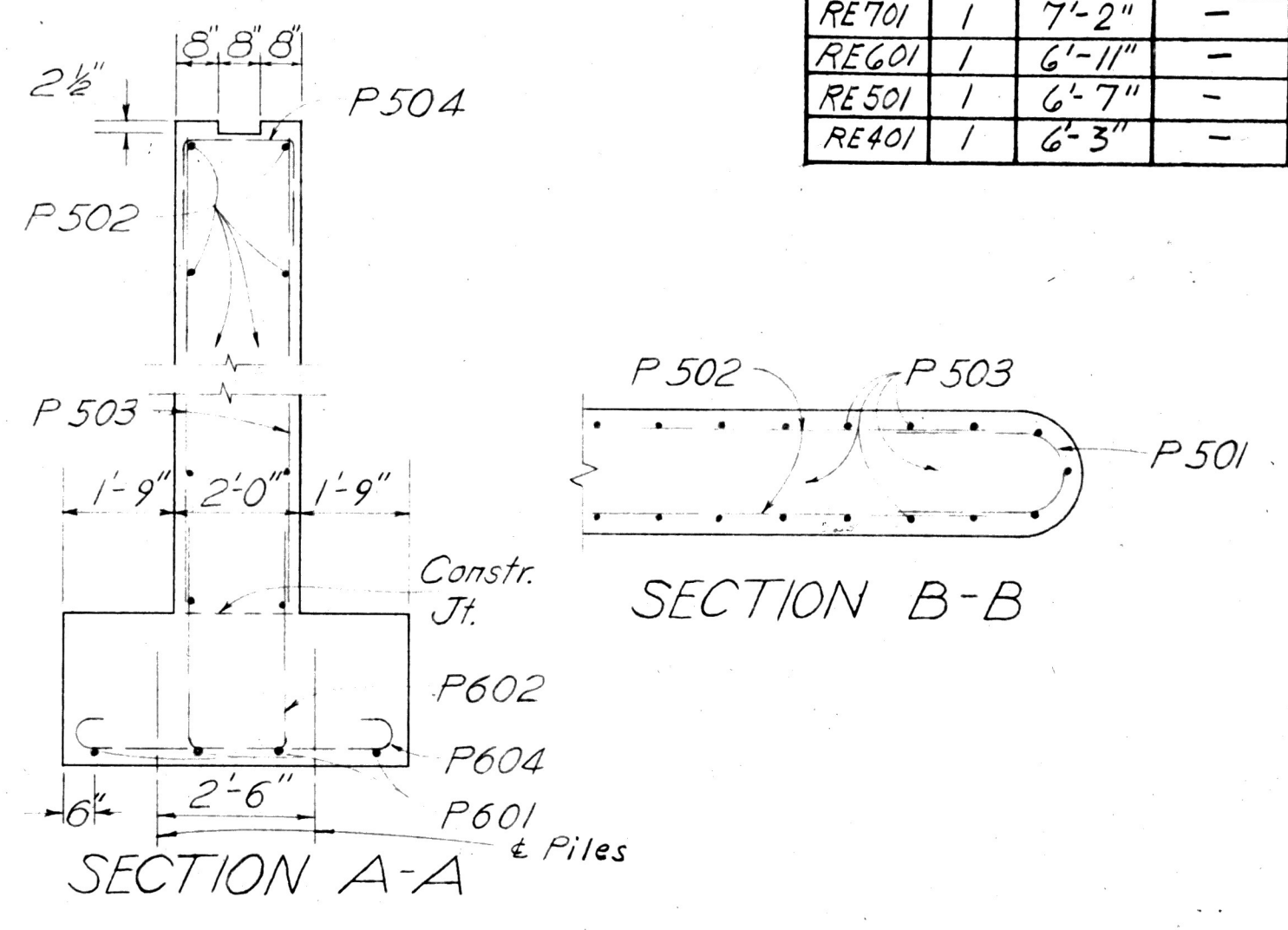
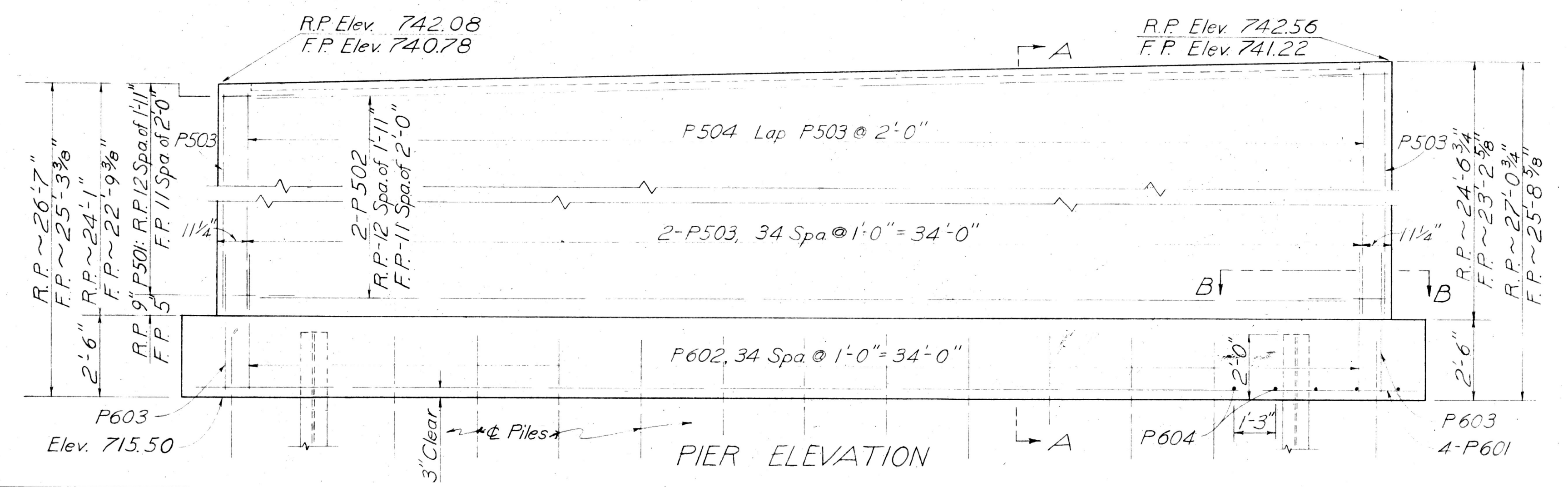
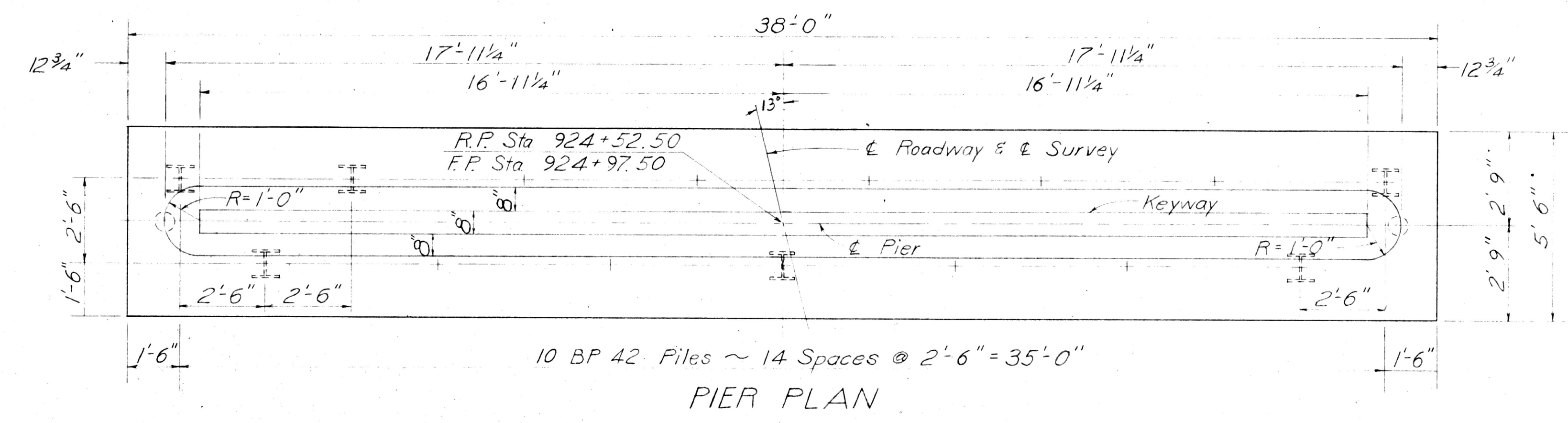
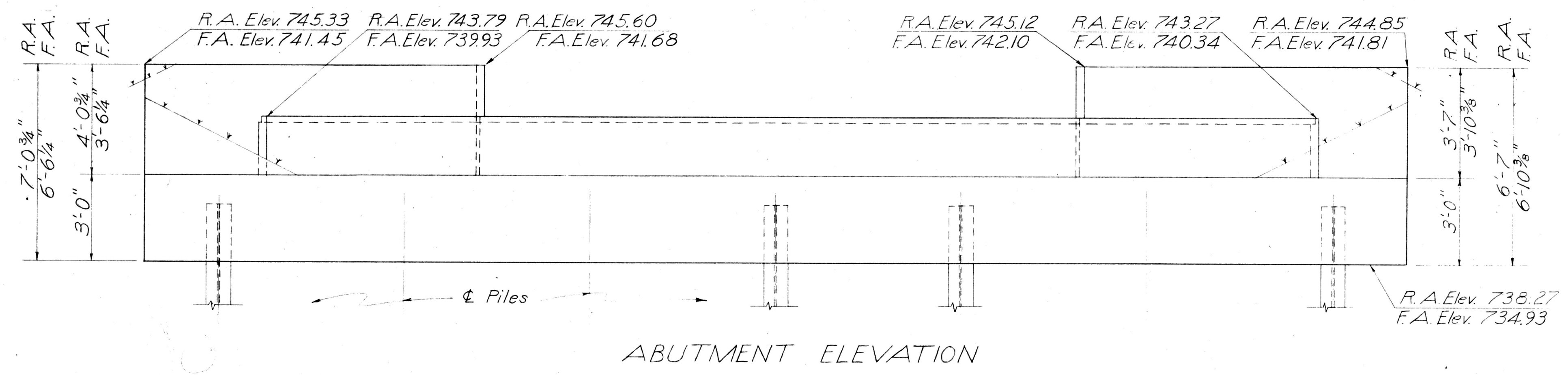
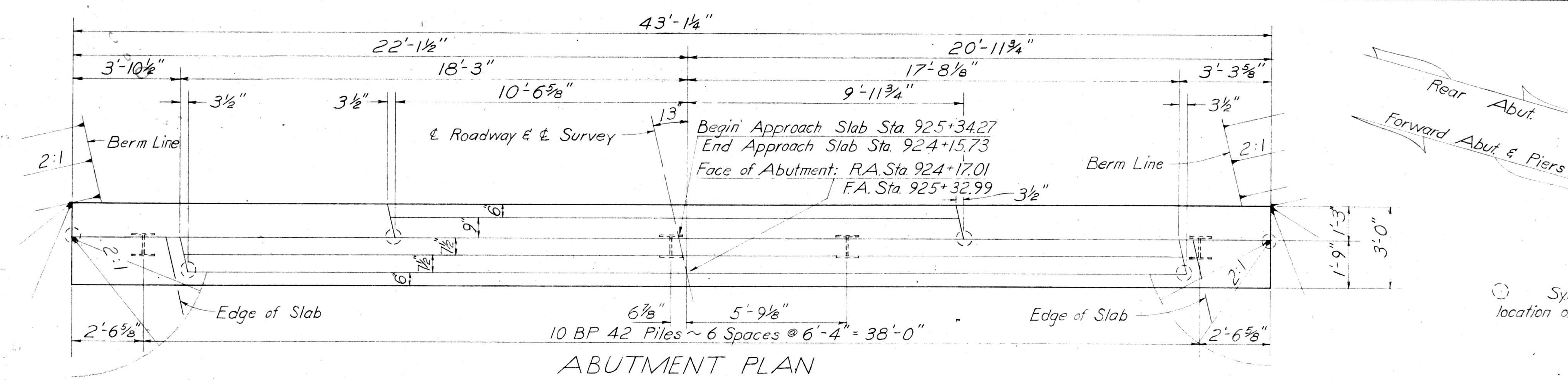
* Slab dimension shown includes 1" for monolithic wearing surface. For additional details, see Standard Drawing CS-1-65, Sheets 1 & 2, CF 2000 loading.



ESTIMATED QUANTITIES							
Item	Total	Unit	Description	Super	Abuts.	Piers	Gen'l.
202	Lump	Sum	Existing Structure removed				Lump
503	Lump	Sum	Cofferdams, cribs, and sheeting				Lump
503	291	Cu. Yds.	Unclassified excavation		96	195	Lump
505	Lump	Sum	First test Pile				Lump
507	800	Lin. Ft.	Steel H Piles, 10BP42		350	450	Lump
509	72,142	Lbs.	Reinforcing Steel	59,407	4,902	7,833	
511	257	Cu. Yds.	Class C Concrete, Superstructure	257			
511	47	Cu. Yds.	" " " Abutments		47		
511	121	Cu. Yds.	" " " pier walls			121	
511	39	Cu. Yds.	" " " pier footings			39	
517	237.08	Lin. Ft.	Railing (Deep Beam rail with hand rail, steel posts & bolts)	237.08			
518	17	Cu. Yds.	Porous backfill		17		
601	265	Sp. Yds.	Crushed Aggregate Slope protection				265
601	440	Cu. Yds.	Dumped rock channel protection				440
808	257	Units	Water-reducing, set-retarding admixture	257			
825	522	Sp. Yds.	Concrete surface treatment	522			

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES						2/3
GENERAL PLAN, ELEVATION, ESTIMATED QUANTITIES, NOTES & DECK SECTIONS						
BRIDGE NO. ROS-138-1750 OVER HAY RUN						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
LBK	LBK	RMM	FPR	BFG	5-8-68	

ROS-138-(16.58)(17.42)



Symbol indicates location of elevations

LEGEND
R.A. = Rear Abutment
F.A. = Forward Abut.
R.P. = Rear Pier
F.P. = Forward Pier

REINFORCING STEEL LIST					Bending Diagrams	
Mark	No.	Length	Weight	Shp.		
Superstructure						
F1170	64	32'-2"	10938	S		
G1170	32	16'-7"	2819	S		
H1170	30	12'-0"	1913	S		
A1070	102	4'-6"	18215	S		
B1070	34	29'-11"	4377	B		
C1070	32	26'-3"	3615	B		
D1070	17	26'-0"	1902	S		
E1070	16	19'-10"	1366	S		
M701	116	36'-5"	8635	S		
N601	73	36'-5"	3993	S		
L601	34	23'-5"	1196	S		
K601	17	17'-2"	438	S		
Abutments						
R501	16	22'-2"	370	S		
R502	136	6'-7"	934	B		
R503	8	18'-7"	155	S		
R504	24	6'-2"	154	S		
R505	28	9'-4"	273	B		
R506	8	10'-8"	90	S		
R507	16	5'-1"	85	S		
R508	20	6'-8"	139	B		
R509	22	8'-5"	194	B		
R401	56	5'-5"	203	B		
R801	16	22'-8"	968	S		
R1001	16	19'-5"	1337	S		
Piers						
P601	8	37'-6"	451	S		
P602	70	9'-8"	1016	B		
P603	4	4'-10"	29	B		
P604	60	6'-6"	586	B		
P501	50	5'-6"	287	B		
P502	50	33'-8"	1756	S		
P503AP	72	23'-10"	1790	S		
P503FP	72	22'-6"	1630	S		
P504	36	6'-1"	228	B		
Replacement Bars						
RE1101	1	8'-6"	-	S		
RE1001	2	8'-2"	-	S		
RE801	1	7'-6"	-	S		
RE701	1	7'-2"	-	S		
RE601	1	6'-11"	-	S		
RE501	1	6'-7"	-	S		
RE401	1	6'-3"	-	S		

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

PIER & ABUTMENT
DETAILS & STEEL LIST

BRIDGE NO. ROS-138-1750
over HAY RUN

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
L.B.K.	L.B.K.	R.M.M.	F.P.K.	B.F.G.	5-8-68	

Recorded in the Ross County Record
of Plats; Book _____ Page _____
Date _____

LOCATION PLAN

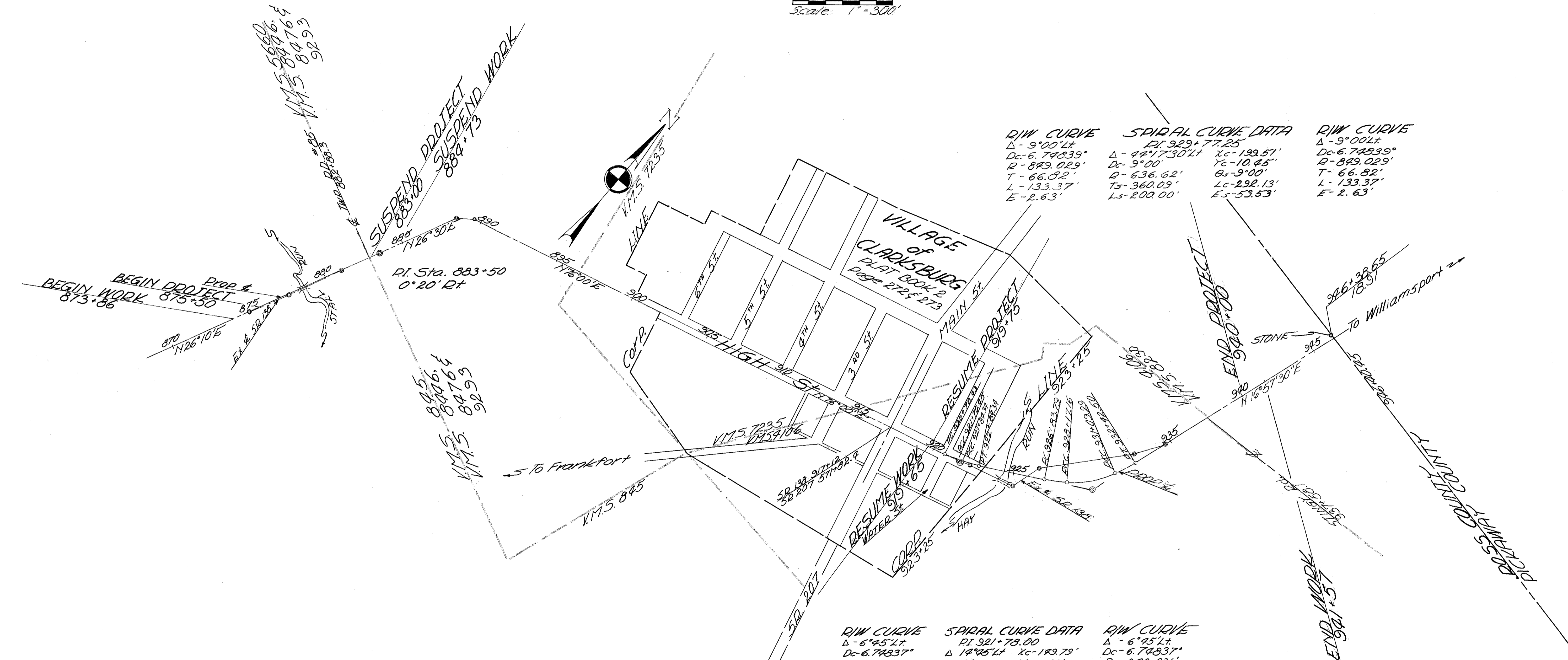
STATE OF OHIO DEPARTMENT OF HIGHWAYS
ROS 138 - (16.58) (17.42)
VILLAGE OF CLARKSBURG
V.M.S. LANDS
DEERFIELD TWP
ROSS COUNTY

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	



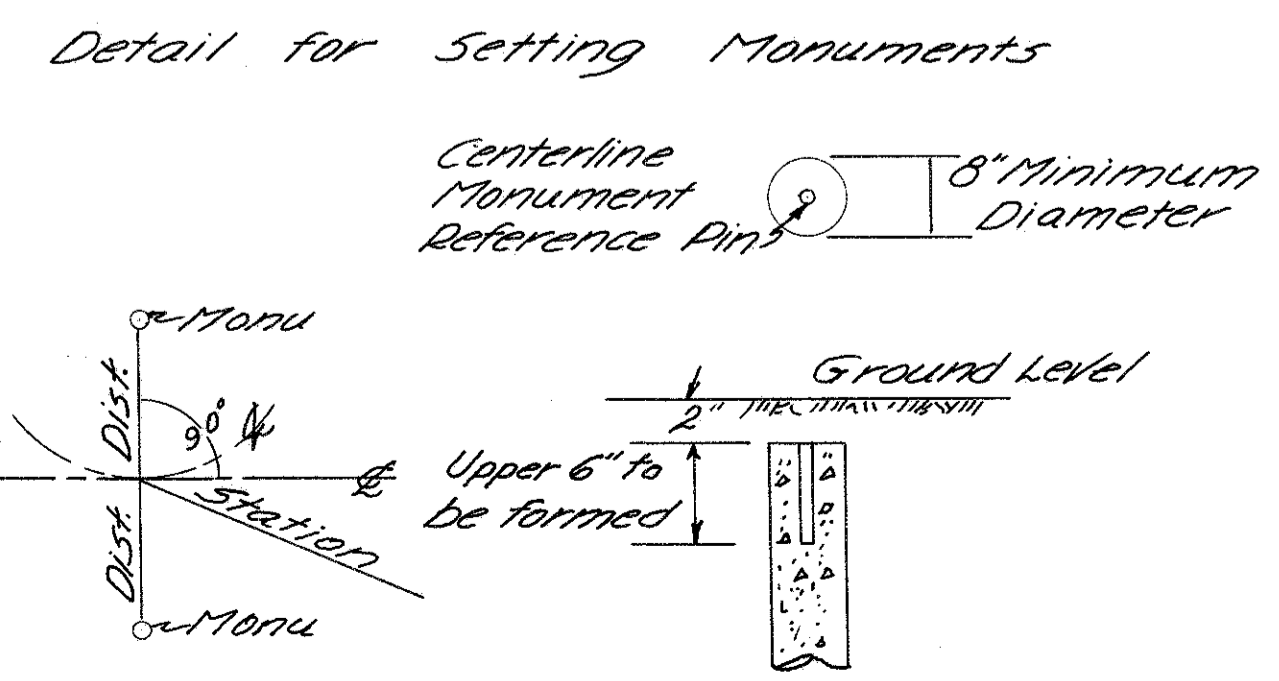
1/6

Scale 1" = 300'



REFERENCE MONUMENTS TO BE SET AFTER CONSTRUCTION

STATION	Dist. Ft. ±		STATION	Dist. Ft. ±	
	Lt.	Rt.		Lt.	Rt.
875+50	17	17	931+09.29	20	17
879+25	18	18	932+42.5	17	"
883+50	17	17	936+00	"	"
919+75	40	40	940+00	"	"
921+00	18	17			
921+70.45	20	"			
921+84.34	"	"			
922+84.34	"	19			
926+83.79	18	17			
928+77.16	20	"			



I Hereby Certify That This Plat is a True Delineation of a Survey Made By The Ohio Department of Highways

DATE Jan 3, 1968
Thomas H. Murphy P.S. 2220



R/W PLAN
 ROS. 138-(16.58)(17.42)
 ROSS COUNTY

SUMMARY OF ADDITIONAL R/W REQUIRED

PARCEL NO.	OWNER	FUND	DEED RECORD		DEED AREA	TO BE ACQUIRED				RESIDUE		SHEET NO.	REMARKS
			BOOK	PAGE		NET TAKE	PRO. IN TAKE	GROSS TAKE	TOTAL PRO	BUDG.	Lt.		
1	ELLEN Z. DAWSON		397	369,366	100 AC.	0.59 AC.	0.67 AC.	1.26 AC.			93.79 AC.	3	
1x						0.20 AC.		0.20 AC.				3	
1T						0.10 AC.		0.10 AC.				3	
1T1						0.05 AC.		0.05 AC.				3	TO BUILD TEMPORARY RUNAROUND
2	GUY L. ZURMEHLY JR.		397	491,493	100 AC.	0.57 AC.	0.76 AC.	1.33 AC.			102.67 AC.	3	
2x						0.15 AC.		0.15 AC.				3	
2Y						0.05 AC.		0.05 AC.				3	
3	BESSIE & ELMON TERRY		203	391	12752 AC.	0.11 AC.	0.18 AC.	0.29 AC.			127.23 AC.	3	
4	CLARA D. STOUT											4	NOT NEEDED
5T	TRUSTEES OF THE CHRISTIAN CHURCH		45	339	26,136 Sq. Ft.	2,651 Sq. Ft.		2,651 Sq. Ft.				4	TO SLOPE AND DRESS BANK
6	RUTH GRAHAM DOGGETT		336	163	8,778 Sq. Ft.	833.3 Sq. Ft.		833.3 Sq. Ft.			7997 sq. ft.	4	
7	RUTH TAYLOR		213	527	1.30 AC.	0.32 AC.	0.03 AC.	0.35 AC.	Yes	0.95 AC.		4	
7x						0.03 AC.		0.03 AC.				4	
8	VILLAGE OF CLARKSBURG		331	198	1.18 AC.	0.13 AC.	0.04 AC.	0.17 AC.			1.01 AC.	4	
8T						0.01 AC.		0.01 AC.				4	CONSTRUCT DRIVE RT. Sta 922+89.34
9	GUY & BETTY JOANE ZURMEHLY	STATE	394	317	14.92 AC.	2.27 AC.	1.01 AC.	3.28 AC.			11.19 AC.	4,5	
9x							0.11 AC.		0.11 AC.				
10	EVERETT & GRACE STEVENSON		317	354	5.51 AC.	0.13 AC.	0.23 AC.	0.36 AC.	Yes	5.15 AC.		5	
10x						0.08 AC.		0.08 AC.				5	
11	W. L. HUGHES		217	238	1.27 AC.							5	
12	HAROLD R. & ZILPHA E. DAWSON		288	587	0.20 AC.							5	
13	FLOYD & ALBERTA COLBURN		337	64	0.15 AC.							5	
14	JAMES ROBERT & ELEANOR MILLER		327	18	1.56 AC.	0.01 AC.	0.10 AC.	0.11 AC.			1.95 AC.	5	
15	TRUSTEES METHODIST CHURCH		311	150	10.58 AC.	0.45 AC.	0.35 AC.	0.80 AC.			9.78 AC.	5	
15T						0.03 AC.		0.03 AC.				5	CONSTRUCT DRIVE RT. Sta 935+37.00
16	FRANKS G. MCCOLLISTER		SEE REMARKS		309 AC.	0.44 AC.	0.72 AC.	1.16 AC.				5,6	VOL. 222 PAGE 421 & PAGE 423 VOL. 248 PAGE 417

Chillicothe Telephone Co.
 South Central Rural Electric Co-op
 Water: Clarksburg Water Co.

DEERFIELD TWP

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

R/W PLAN
 ROS 138-(16.58)(17.92)
 ROSS COUNTY

ELLEN Z. DAWSON

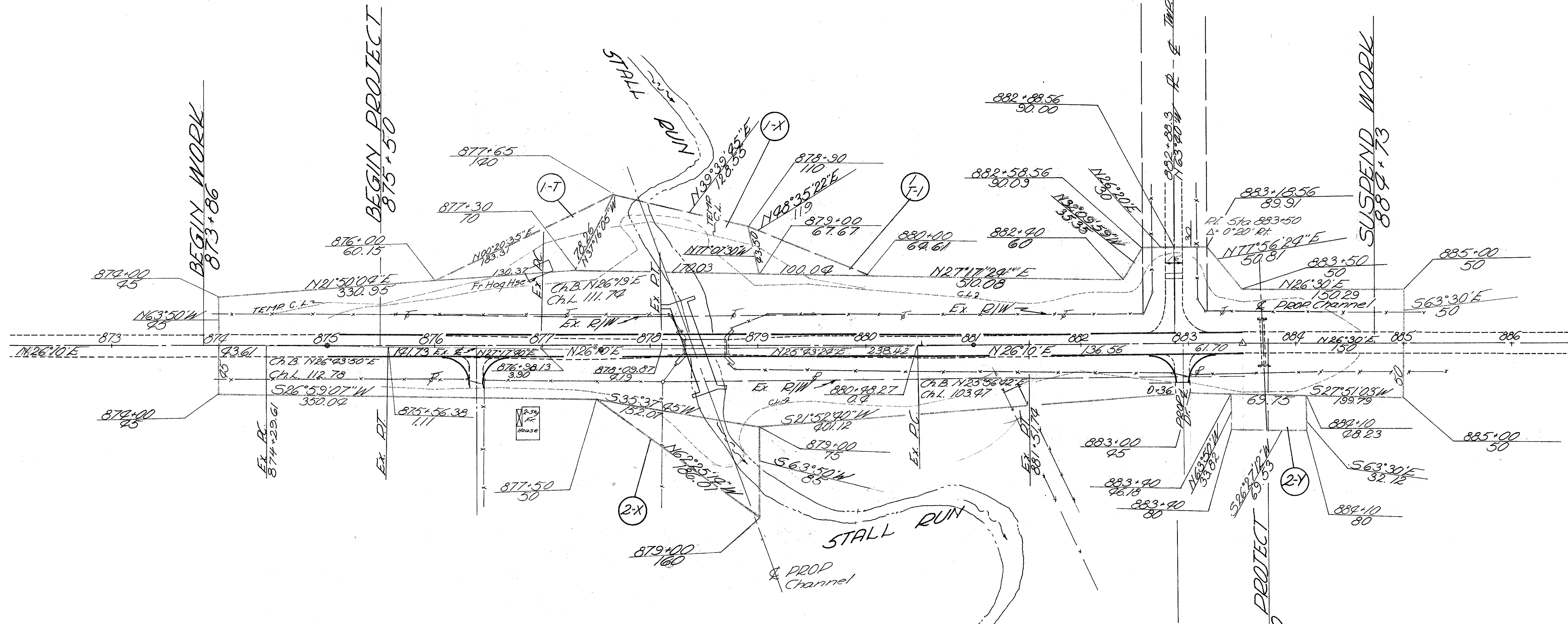
BESSIE & ELMON TERRY

Ex Curve Data
 Δ 1°57'20" Lt
 D_c 1°45'
 R 3274.046'
 T 55.878'
 L 111.745'
 E 0.50'

Ex CURVE DATA
 Δ 00°49'40" Rt
 D_c 00°48'
 R 761.975'
 T 51.737'
 L 103.75'
 E 0.75'

Ex CURVE DATA
 Δ 1°07'40" Rt
 D_c 1°00'
 R 5729.58'
 T 56.39'
 L 112.778'
 E 0.27'

GUY L. ZURMEHL Y JR.



Completion Date: 1/21/68
Revised Revision Description BY

D/W CURVE DATA		SPADAL CURVE DATA		D/W CURVE DATA	
DI 921+20.50	Δ 6°45' Lt.	DI 921+78.00	Δ 12°45' Lt.	DI 922+34.34	Δ 6°45' Lt.
Dc 6.7483716'	R 849.031'	Dc 9°00'	R 636.620'	Dc 6.7483716'	R 849.031'
T 50.07'	L 100.02'	Ts 157.55'	Ls 150.00'	T 50.07'	L 100.02'
E 1.48'		Es 6.82'		E 1.48'	

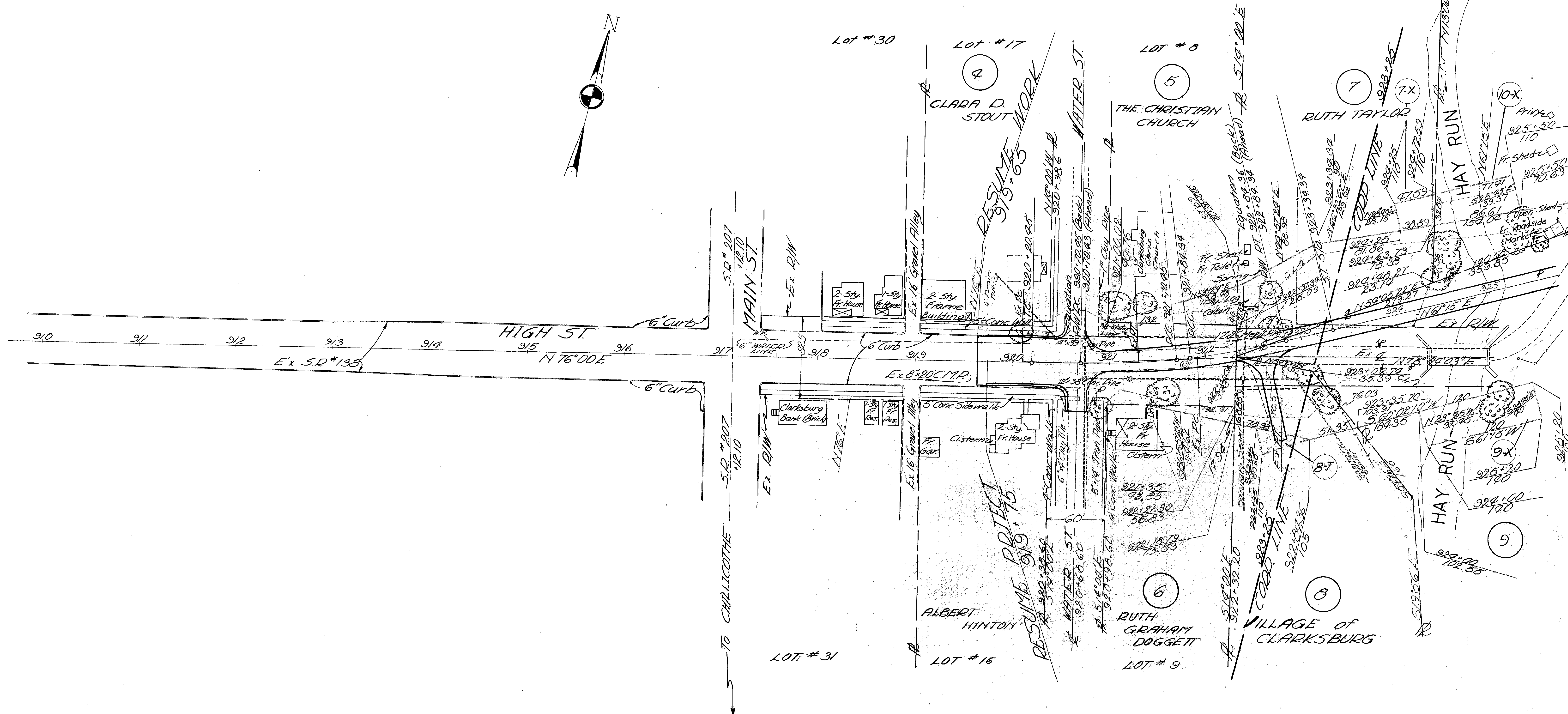
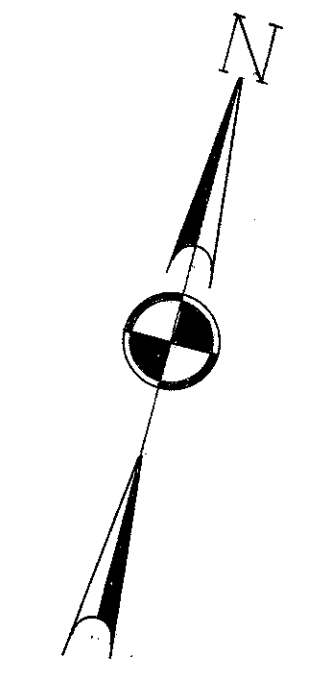
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

R/W PLAN
ROS 138-(16.58)(17.92)
ROSS COUNTY

KMS #1066
 DEERFIELD TWP
VILLAGE OF CLARKSBURG
 Platbook 2 Pages 272 & 273

Ex. CURVE DATA
 Δ-3°35'17" Lt.
 Dc-3.18507'
 R-1798.885'
 T-59.589'
 L-112.652'
 E-1.00'

4
6



Ex. Curve Data
 Δ 2°39'20" Rt.
 Dc 3.05157'
 R 1877.581'
 T 43.519'
 L 87.023'
 E 0.50'

Completion Date	Revised	Revision Description	BY
1/21/68			

DEERFIELD TWP

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

R/W PLAN
 ROS 138-(16.58)(17.42)
 ROSS COUNTY

5/6

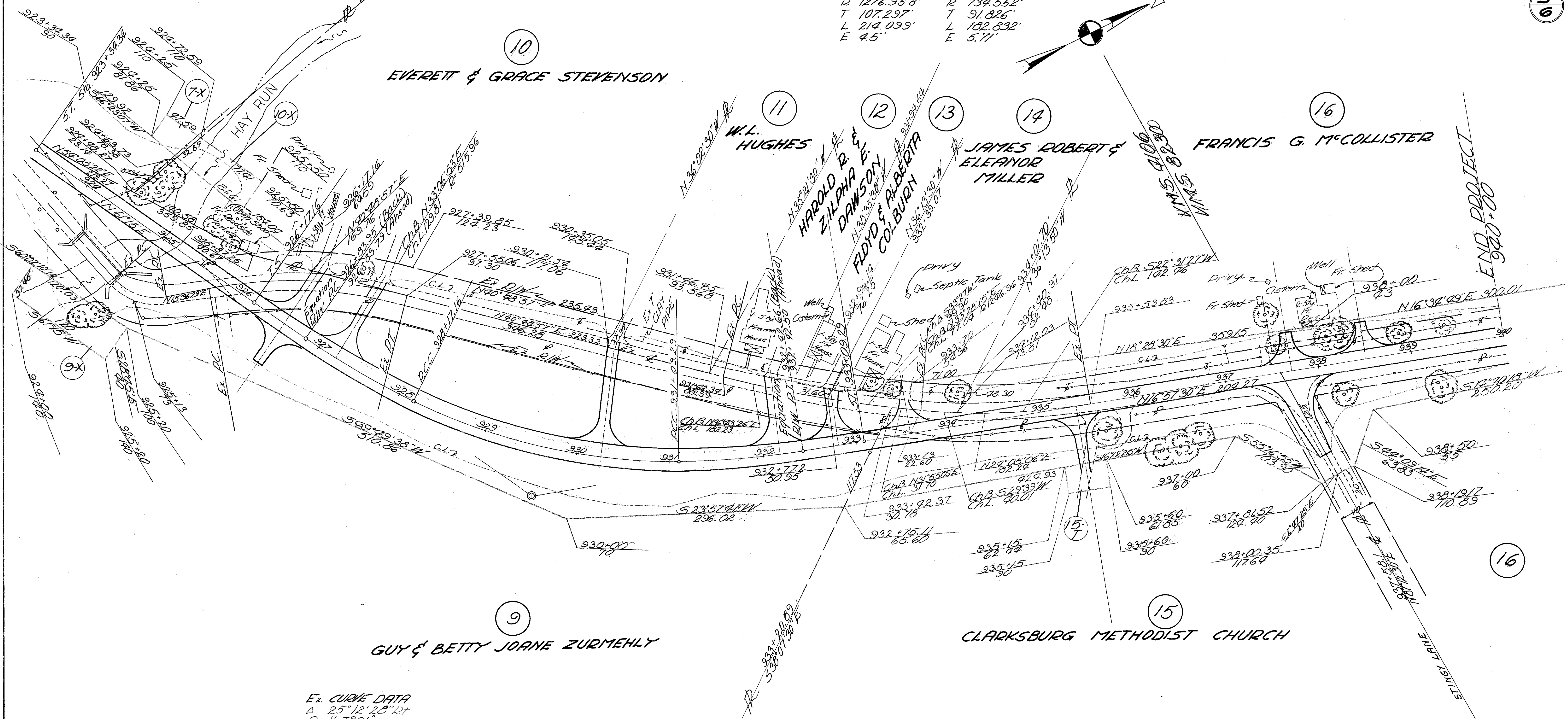
Ex. CURVE DATA
 Δ 59°27'30" Lt.
 Dc 99.1534'
 R 57.785'
 T 33.00'
 L 59.967'
 E 8.758'

R/W CURVE DATA
 PI 927+50.61
 Δ 9°00' Lt.
 Dc 6.7483914'
 R 899.029'
 T 66.82'
 L 133.37'
 E 2.63'

SPIRAL CURVE DATA
 PI 929+77.25
 Δ 44°17'30" Lt.
 Dc 9°00'
 R 636.620'
 Tc 360.09'
 Ls 200'
 Xc 199.51'
 Yc 10.45'
 Oc 9°00'
 Lc 292.13'
 Es 53.53'

R/W CURVE DATA
 PI 931+76.21
 Δ 9°00'
 Dc 6.7483914'
 R 899.029'
 T 66.82'
 L 133.37'
 E 2.63'

Ex CURVE DATA
 Δ 9°36'23" Lt. Δ 19°15'04" Lt.
 Dc 4.48689' Dc 7.8001'
 R 1276.958' R 739.552'
 T 107.299' T 91.826'
 L 214.099' L 182.832'
 E 4.5' E 5.71'



Ex. CURVE DATA
 Δ 25°12'28" Rt.
 Dc 11.7901'
 R 485.966'
 T 108.661'
 L 213.805'
 E 12.00'

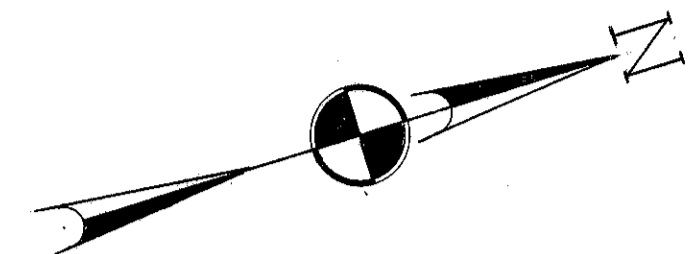
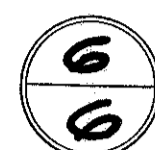
Completion Date:	1/21/08
Revised	Revision Description
	BY

DEERFIELD TWR

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		



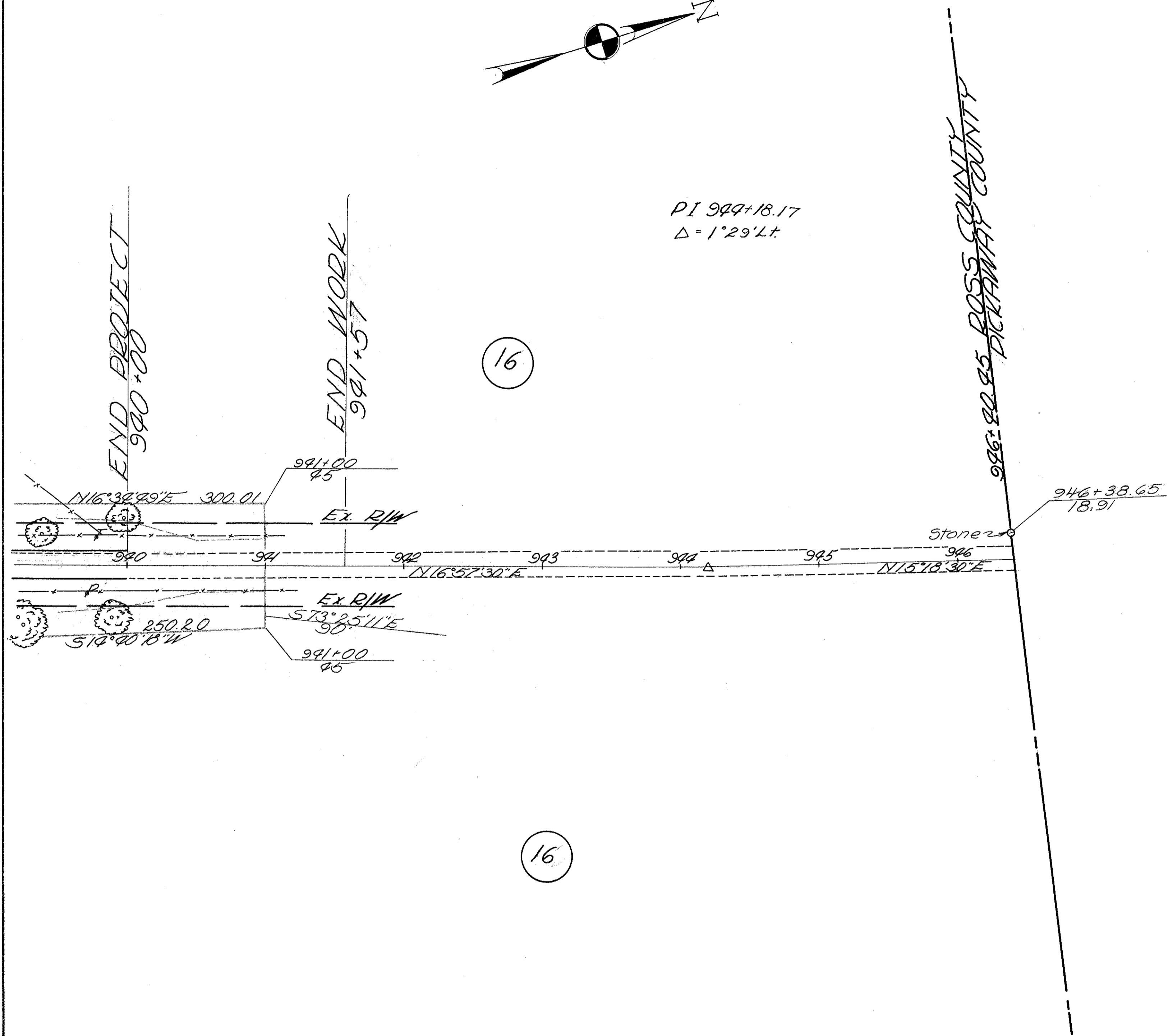
R/W PLAN
ROS 138-(16.58)(17.42)
ROSS COUNTY



PI 999+18.17
 $\Delta = 1^{\circ}29'44''$

16

16



Completion Date: 1/21/08	
Revised	Description