

F-M ENGR.	LOCATING ENGR.	BRIDGE ENGR.	P. R. A.	CONST. ENGR.
R.B.G.	G.H.S.	H.X.W.		995

1-3-47

PUB. ROAD DIV. NO.	STATE	F.A.S. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	S-219 (1)	47	1	30

Revised 3-3-47, 4-15-47.

OKLAHOMA STATE HIGHWAY COMMISSION GRADY COUNTY

—△— PLAN AND PROFILE FEDERAL AID SECONDARY PROJECT NO. S-219 (1)

92-26-37

ROADWAY LENGTH 28,959.08 FT. 5.484 MILES
BRIDGE LENGTH 26.27 FT. 0.004 MILES
PROJECT LENGTH 5488 MILES

EXCEPTIONS (2) RR. XINGS 28.95 FT.
EQUATIONS (1) ONE

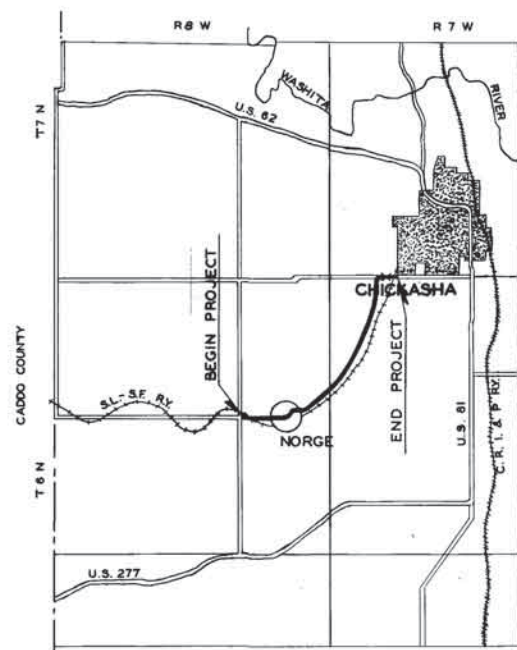
CONVENTIONAL SIGNS

STATE OR NATIONAL LINE	—+—+—+—+—+—
COUNTY LINE	—+—+—+—+—+—
TOWN LINE	—+—+—+—+—+—
UNFENCED PROPERTY	—+—+—+—+—+—
FENCE	—X—X—X—X—
RIGHT-OF-WAY LINE	—+—+—+—+—+—
TRAVELED WAY	—+—+—+—+—+—
RAILROAD	—+—+—+—+—+—
GUARD RAIL	—+—+—+—+—+—
SURVEY LINE	—+—+—+—+—+—
CULVERT	—+—+—+—+—+—
DROP INLET	—+—+—+—+—+—
TROLLEY POLE	—+—+—+—+—+—
TEL. POLE	—+—+—+—+—+—
POWER POLE	—+—+—+—+—+—
MARSH	—+—+—+—+—+—
TREES	—+—+—+—+—+—
STONE WALL	—+—+—+—+—+—
LEVEL DATUM	—+—+—+—+—+—

U.S.C. & G.S.

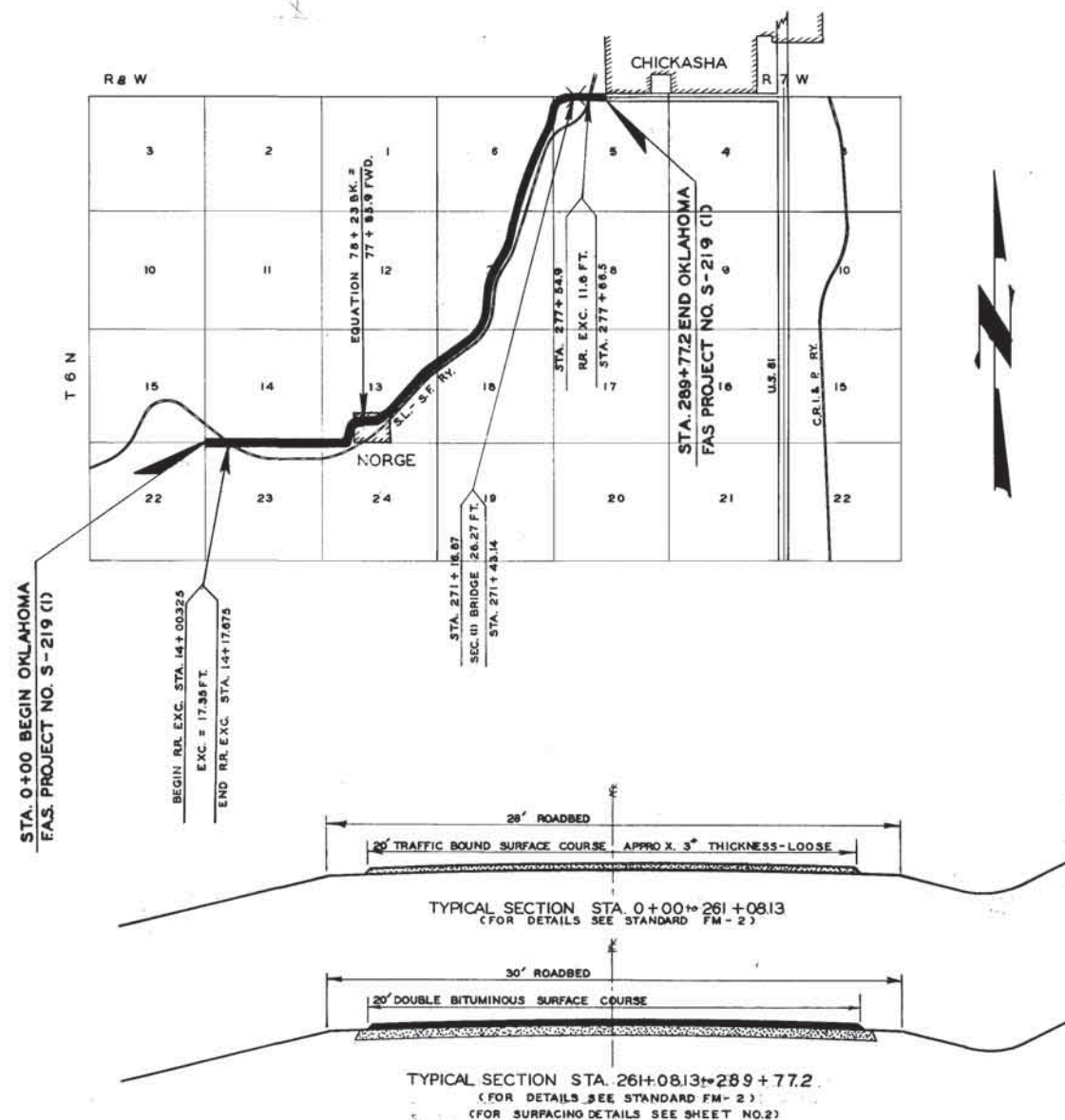
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GRADY COUNTY
OKLAHOMA

PROJECT LOCATION



28' ROADBED
20' TRAFFIC BOUND SURFACE COURSE APPROX. 3" THICKNESS-LOOSE

TYPICAL SECTION STA. 0+00 TO 261+08.13
(FOR DETAILS SEE STANDARD FM-2)

30' ROADBED
20' DOUBLE BITUMINOUS SURFACE COURSE

TYPICAL SECTION STA. 261+08.13 TO 289+77.2
(FOR DETAILS SEE STANDARD FM-2)
(FOR SURFACING DETAILS SEE SHEET NO. 2)

APPROVED	DATE
DIST. 1	
DIST. 2	
DIST. 3	
COUNTY COMMISSIONERS	
APPROVED	DATE
CHIEF ENGINEER	
OKLAHOMA HIGHWAY COMMISSION	
RECOMMENDED FOR APPROVAL DATE	
DISTRICT ENGINEER	
PUBLIC ROADS ADMINISTRATION	
FEDERAL WORKS AGENCY	
APPROVED	DATE
DIVISION ENGINEER	
PUBLIC ROADS ADMINISTRATION	
FEDERAL WORKS AGENCY	

F.A. SPECIAL PROVISIONS GOVERN AND
STATE STANDARD SPECIFICATIONS GOVERN. APPROVED NOV. 1, 1937

DRAINAGE SCHEDULE

STATION	DESCRIPTION	STD.	STRUCT. EXCAV. UNITS CU.YD.	CLASS "A" CONCRETE CU.YD.	REINF. STEEL LBS.	REINF. CONC. PIPE (LB) CGMP (LF)										PIPE RAILING (L.F.)	REMARKS
						15"	18"	24"	30"	36"	18"	24"	22"x13"	29"x18"	36"x22"		
3+00	Const. 18"x20" long CGMP SD. Rt.		8	No	Hdwills.												Nothing in Place
11+00	Const. 36"x30" long R.C.B.	BC-52	11	10.49	909												Nothing in Place
13+75	Const. 24"x30" long CGMP SD. Rt.		17	No	Hdwills.												Nothing in Place
14+82	Const. 3"x2"x28" Poly. R.C.B.	BC-52	14	10.05	862												Nothing in Place
38+95	Const. 4"x25"x6" Extension Lt. Total 36" Poly.	BC-52	6	4.80	366												4"x25"x30" Conc. Masonry Culv. in Place
44+71	Const. 22"x18"x20" long CGMP Arch SD. Lt.		7	No	Hdwills.												Nothing in Place
52+18	Const. 36"x22"x20" long CGMP Arch SD. Rt.		15	No	Hdwills.												Nothing in Place
57+65	Const. 24"x20" long CGMP Flume Lt. 45° Wings	CP-2	6	1.12	28												Hdwll on Up Stream End
66+01	Const. 24"x24"x4" Poly. R.C.P. 45° Wings	CP-2	9	2.24	96												Nothing in Place
78+07 (Reloc)	Const. 18"x28"x4" Poly. R.C.P. 45° Wings	CP-2	18	1.54	28												Nothing in Place
80+27	Const. 22"x18"x20" long CGMP Arch SD. Rt.		7	No	Hdwills.												Nothing in Place
82+20 (Tan)	Const. 22"x13"x40" long CGMP Arch SD. Rt.		16	No	Hdwills.												Nothing in Place
85+50	Const. 29"x18"x30" long CGMP Arch SD. Rt.		16	No	Hdwills.												Nothing in Place
86+29	Const. 29"x18"x30" long CGMP Arch SD. Rt.		16	No	Hdwills.												Remove 2'x1'-3/4" Wood Box
86+69	Const. 29"x18"x30" long CGMP Arch SD. Lt.		11	No	Hdwills.												Remove 2'x1'-3/4" Wood Box
94+57	Const. 36"x24" R.C.B. Extension Lt. Total 34" Poly.	BC-52	33	7.47	684												36"x30" Poly. Conc. Masonry Culv. in Place
118+50	Const. 36"x24" R.C.B.	BC-52	43	10.27	885												Nothing in Place
119+53	Const. 36"x24"x21" R.C.B. Extension Lt. Total 57" Poly.	BC-52	8	7.63	648												36"x24"x36" Poly. Conc. Masonry Culv. in Place
124+50	Const. 24"x24"x6" Poly. R.C.B. with 2'-18"x34" long CGMP Flumes, Hdwwills 45° Wings	BC-52	55	16.98	1517												Remove 24"x28" CGMP Sta 124+77
143+15	Const. 36"x15" R.C.B. Extension Lt. Total 57" Poly.	BC-52	6	4.67	407												36"x12" Poly. Conc. Masonry Culv. in Place
172+20	Const. 36"x24"x28" Poly. R.C.B.	BC-52	10	14.79	1352												Remove 24"x24" CGMP
204+872	Const. 61"x8" R.C.B. Extension Lt. Total 376" Poly.	BC-52	6	8.63	678												61"x80" Poly. Conc. Masonry Culv. in Place Sta. 172
213+32	Const. 30"x38"x4" Poly. R.C.P. 45° Wings	CP-2	36	3.04	62												Nothing in Place
221+00	Const. 30"x34"x4" Poly. R.C.P. 45° Wings	CP-2	22	3.04	62												Nothing in Place
231+00	Const. 30"x34"x4" Poly. R.C.P. 45° Wings	CP-2	22	3.04	62												Nothing in Place
238+35	Const. 24"x34"x4" Poly. R.C.P. 45° Wings	CP-2	30	2.24	96												Nothing in Place
240+28	Const. 30"x38"x4" Poly. R.C.P. 45° Wings	CP-2	12	3.04	62												Nothing in Place
255+54	Const. 36"x24"x4" Poly. R.C.B.	BC-52	15	16.91	1459												Remove 5'x2'x15'-3/4" Wood Box
259+20	Const. 18"x34"x4" Poly. R.C.B. SD. Lt. 45° Wings	CP-2	18	1.54	28												Nothing in Place
TOTALS Sta 0+00 to Sta. 261+08.13			493	133.53	10210												
263+40	Const. 22"x13"x20" long CGMP Arch SD. Rt.		7	No	Hdwills.												Nothing in Place
282+82 E	Const. 22"x13"x20" long CGMP Arch SD. Rt.		11	No	Hdwills.												Nothing in Place
283+97 L	Const. 61"x16" Extension Lt. 6' 61"x5' 1/2" Lt. 1/4" Drop Inlet	BC-52	50	15.19	1316												61"x27 1/2" R.C.B. in Place
285+45	Const. 22"x13"x20" long CGMP Arch SD. Lt.		7	No	Hdwills.												Nothing in Place
TOTALS Sta 261+08.13 to Sta. 289+77.2			75	15.19	1316												

ESTIMATED QUANTITIES

ITEM NO.	ITEM	QUANTITIES			UNIT
		Sta. 0+00 to Sta. 261+08.13	Sta. 261+08.13 to Sta. 289+77.2	Sta. 289+77.2 to Sta. 290+00.00	
202.06 (d)	Class "D" Uncl. Excavation	13903	6101		Cu.Yd.
202.06 (e)	Rolling	(1)	89		Hr.
202.06 (f)	Sprinkling	(2)	196		M. Gal.
204.06	Overhaul	5167	1020		Sec. Yds.
207.06 (a)	Shoulders		54		Mi.
303.06	6" Gravel Base Course		7112		Sq. Yd.
308.06 (a)	Rolling Base Course	(3)	73		Hr.
309.06 (b)	Sprinkling Base Course	(4)	35.6		M. Gal.
403.06 (a)	Prime Material	(5)	2489		Gal.
403.06 (b)	Asphaltic Binder	(6)	5181		Gal.
403.06 (c)	First Cover Material	(7)	162		Cu.Yd.
403.06 (d)	Second Cover Material	(8)	81		Cu.Yd.
501.06 (a)	Structural Excavation Unclassified		493		Cu.Yd.
509.06 (a)	Class "A" Concrete	13353	1536		Cu.Yd.
511.06	Reinforcing Steel	10210	1316		Lb.
512.06 (c)	18" Reinforced Concrete Pipe	96			L.F.
512.06 (d)	24" Reinforced Concrete Pipe	72			L.F.
512.06 (e)	30" Reinforced Concrete Pipe	152			L.F.
513.06 (c)	18" Corrugated Galvanized Metal Pipe	88			L.F.
513.06 (d)	24" Corrugated Galvanized Metal Pipe	30			L.F.
601.06	Plain Rip Rep	79	36		Cu.Yd.
622.06 (a)	Pipe Rolling		27		L.F.
625.06 (a)	Monuments	1	1		Each
614.06 (b)	6" Pipe Underdrain (Drain Tile)		130		L.F.
614.06 (a)	Pipe Underdrain Cover Material		184		Cu.Yd.
401.06 Spec	Traffic Bound Surface Course	(9) 5127	(10) 4	(11) 4	Cu.Yd.
Special	Machine Grading	218.9	(12) 10.6	(13) 10.6	Sta.
Special	22"x13" Cor. Galvanized Metal Pipe Arch	80			L.F.
Special	29"x18" Cor. Galvanized Metal Pipe Arch	80			L.F.
Special	36"x22" Cor. Galvanized Metal Pipe Arch	20			L.F.
Special	Bermuda Tuft Sodding	2000			Sq.Yd.
Special	Water for Sodding	20			M. Gal.
Special	Ref. Hwy. Rk. Crossing Sign Crosscut Type 1	2	2		Each
Special	Ref. Adv. Warning	2	2		Each

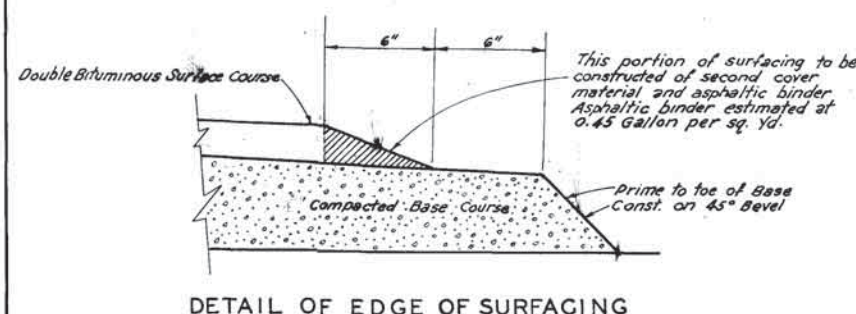
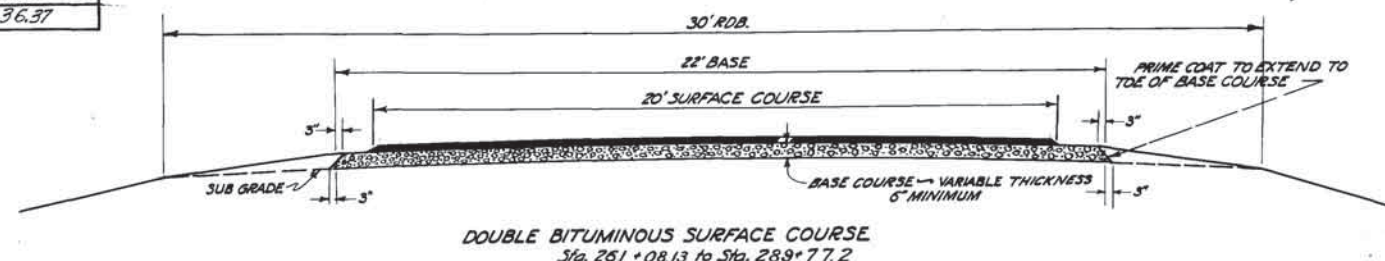
- Note: 1. Estimated at 2 hrs. per Sta. per Ft. of Fill on Machine Grading Sections
 Estimated at 1 hr. per 75 Cu.Yds. Class "D" Excavation
 2. Estimated at 4 M. Gal. per Sta. per Ft. of Fill on Machine Grading Sections
 Estimated at 30 Gal. per Cu.Yd. Class "D" Excavation
 3. Estimated at 135 hrs. per Mile
 4. Estimated at 5 Gal. per Sq.Yd. Base Course
 5. Estimated at 0.35 Gal. per Sq.Yd. Base Course
 6. Estimated at 0.80 Gal. per Sq.Yd. Surface Course
 7. Estimated at 1 Cu.Yd. per 40 Sq.Yds. Surface Course
 8. Estimated at 1 Cu.Yd. per 80 Sq.Yds. Surface Course
 9. Estimated at 980 Cu.Yds. per Mile
 10. Includes 246 Cu.Yds. for Gravel Dips, Returns, and Parking area & 40 Cu.Yds. for Curve Widening
 11. Includes 4 Cu.Yds. for Gravel dip
 12. Includes 5.5 Sta. at intersections
 13. Includes 1.0 Sta. at intersections

Note: See Special Provision included in the Proposal for the Maintenance of Traffic.

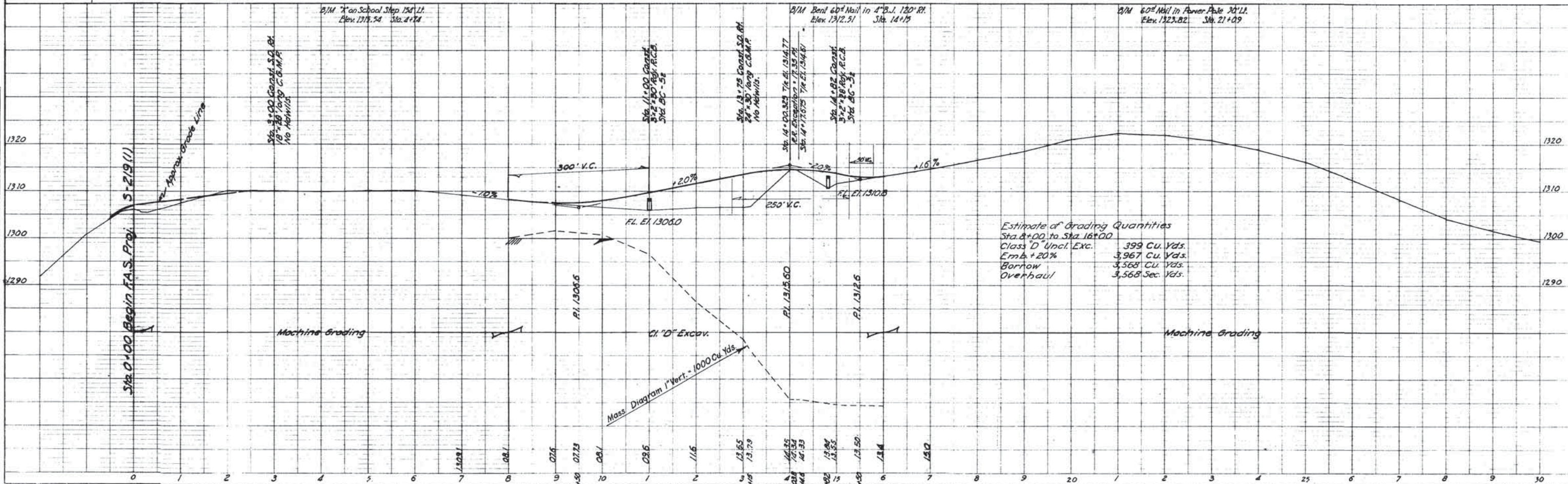
ESTIMATE OF BRIDGE QUANTITIES

Sta. 271+30 2'-10"x9'-24" Poly. R.C.B. Sk. 60" Lt. Fwd. Std. BC-12S ₄				
ITEM NO.	ITEM	QUANTITIES	UNIT	
501.06 (a)	Structural Excavation Unclassified	150	Cu. Yd.	
501.06 (d)	Removal of Existing Structures	1	Each	
505.06	Reinf. Concrete Hand Rail	55	L.F.	
509.06 (a)	Class "A" Concrete	141.2	Cu. Yd.	
511.06	Reinforcing Steel	11,310	Lb.	

SCHEDULE OF PLAIN RIP RAP DITCH CHECKS (Std. FM-1)					
Station to Station	Side	No.	Des.	Cu. Yd. (Each)	Cu. Yd. (Total)
54+00 57+00	Rt. & Lt.	8	F-1	5.25	42.00
189+50 198+50	Lt.	5	B-1	3.18	15.90
250+00 253+80	Rt.	5	D-1	4.21	21.05
TOTAL Sta. 0+00 to Sta. 261+08.13					78.95
262+20 263+15	Lt.	2	D-1	4.21	8.42
267+93	Lt.				10.00
271+09	Lt.	1	H-7	17.95	17.95
TOTAL Sta. 261+08.13 to Sta. 289+77.2					36.37

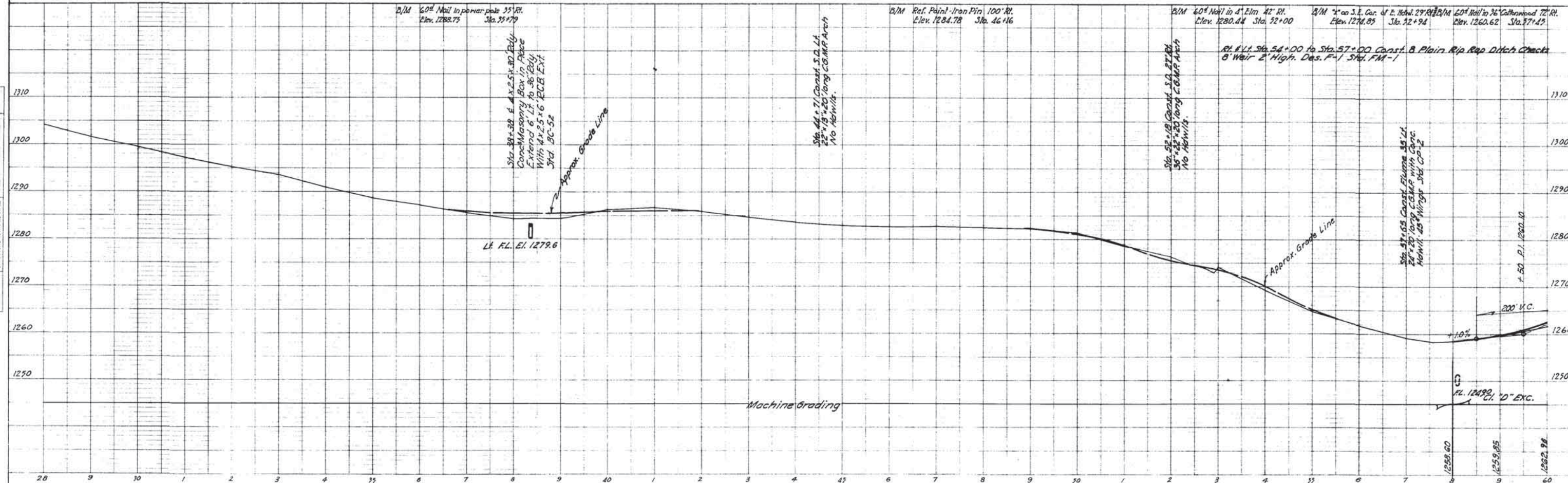


PLAN	SURVEYED _____		DATE
NOTE BOOK	PLOTTED _____		BY
40	ALIGNMENT CHECKED _____		
	RT. OF WAY CHECKED _____		

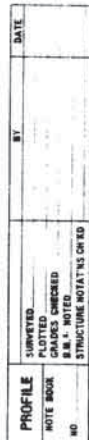


Estimate of Grading Quantities	
Sta. 8+00 to Sta. 16+00	
Class 'D' Uncl. Exc.	399 Cu. Yds.
Emb. + 20%	3,967 Cu. Yds.
Borrow	3,568 Cu. Yds.
Overhaul	3,568 Sec. Yds.

PLAN NOTE BOOK	SURVEYED _____ PLOTTED _____ ALIGNMENT CHECKED _____ RT. OF WAY CHECKED _____	BY _____	DATE _____

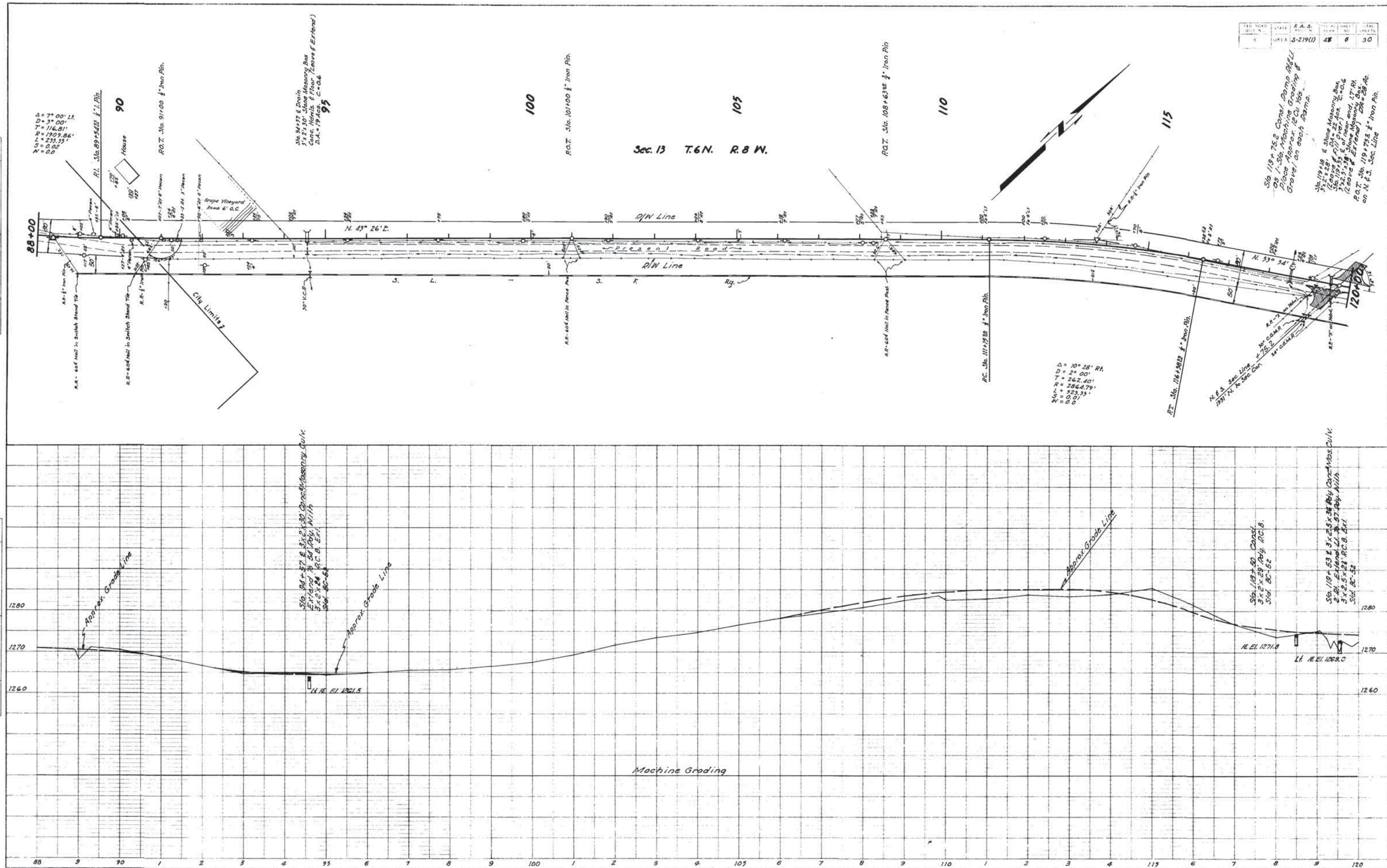


PLAN	BY	DATE
NOTE BOOK		
NO		
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
RT. OF WAY CHECKED		



PLAN	
SURVEYED	DATE
PLOTTED	BY
NOTE BOOK	NO.
ALIGNED CHECKED	
RT. OF WAY CHECKED	

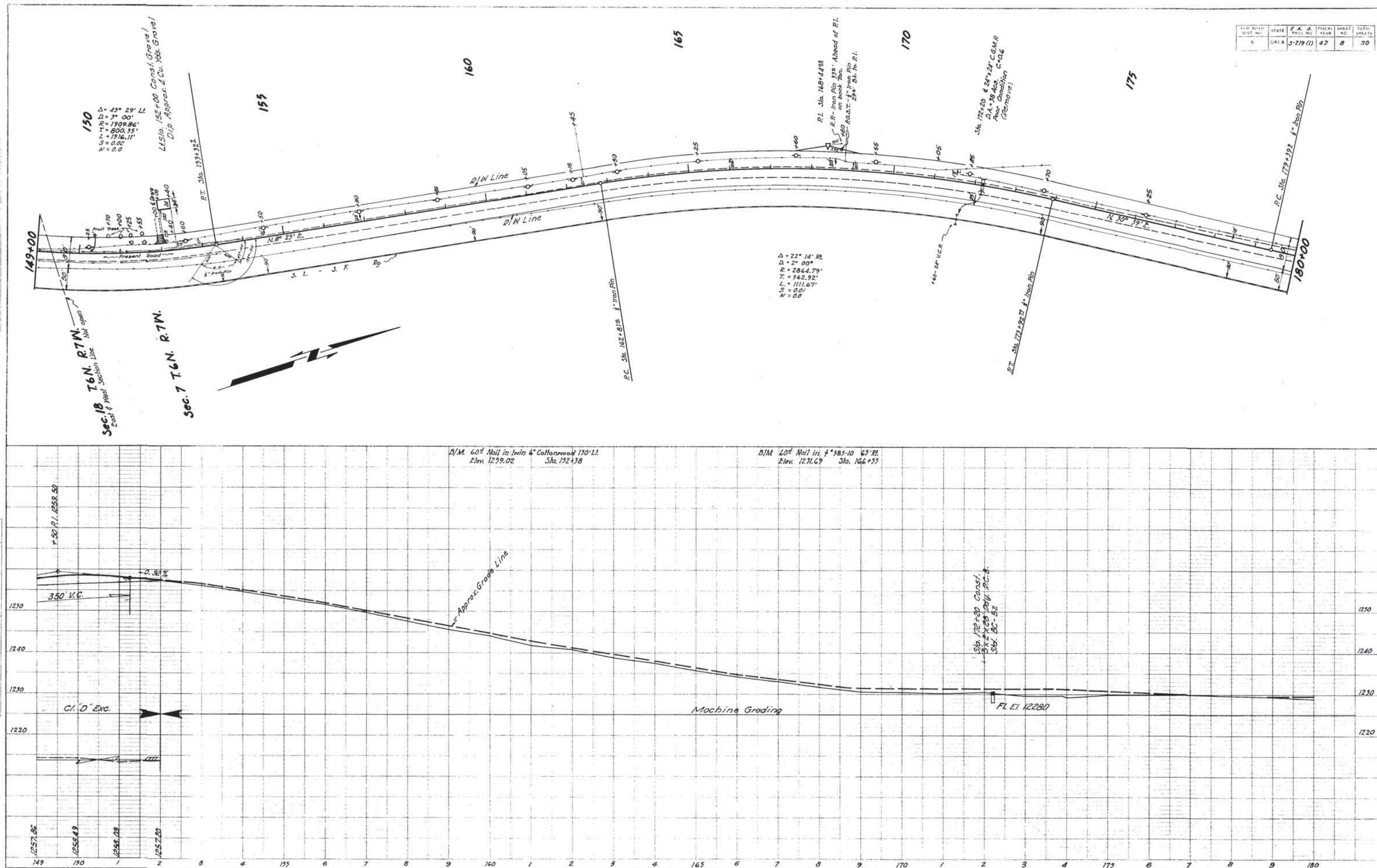
PROFILE	
SURVEYED	DATE
PLOTTED	BY
NOTE BOOK	NO.
GRADES CHECKED	
STRUCTURE NOTATIONS CH'KD	



FED. ROAD DIST. NO.	STATE	F.A.S. NO.	SHEET NO.	TOTAL SHEETS
3-219(1)	OKLA	3-219(1)	48	6
			30	

PLAN	SURVIVED
NOTE BOOK	FLOTTED
	ALIGNMENT CHECKED
	RT. OF WAY CHECKED

NO
STRUCTURE TOTALS
S.M. + NOTED
GRAT. CHICKED
FLUID
SURVEYED
NOTE BLACK
PROFILE



PLAN	APPROVED	DATE	BY
NOTE: GUIN	APPROVED	DATE	BY
1 OF 81 SHEETS			

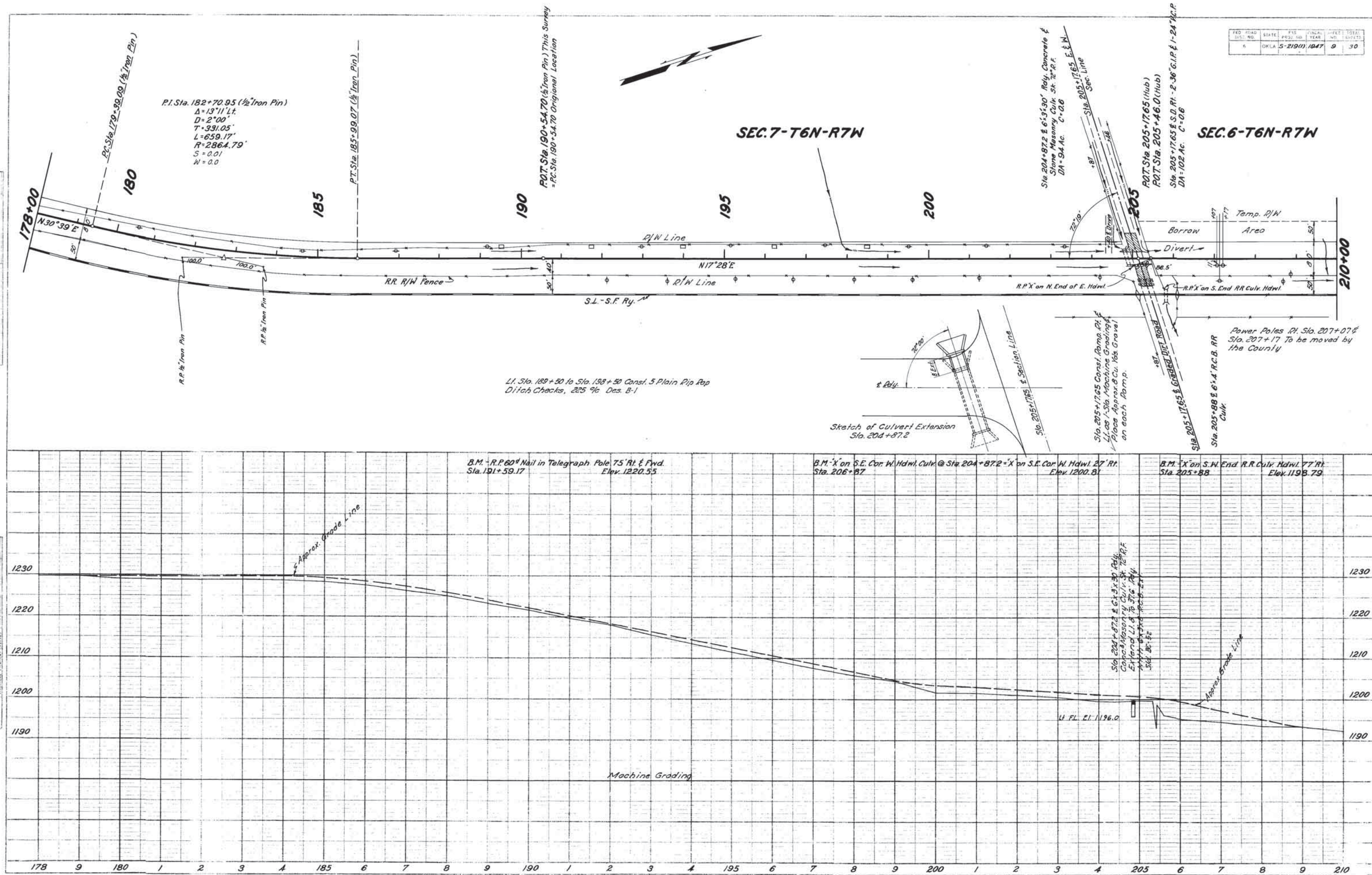
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NOTE BOOK

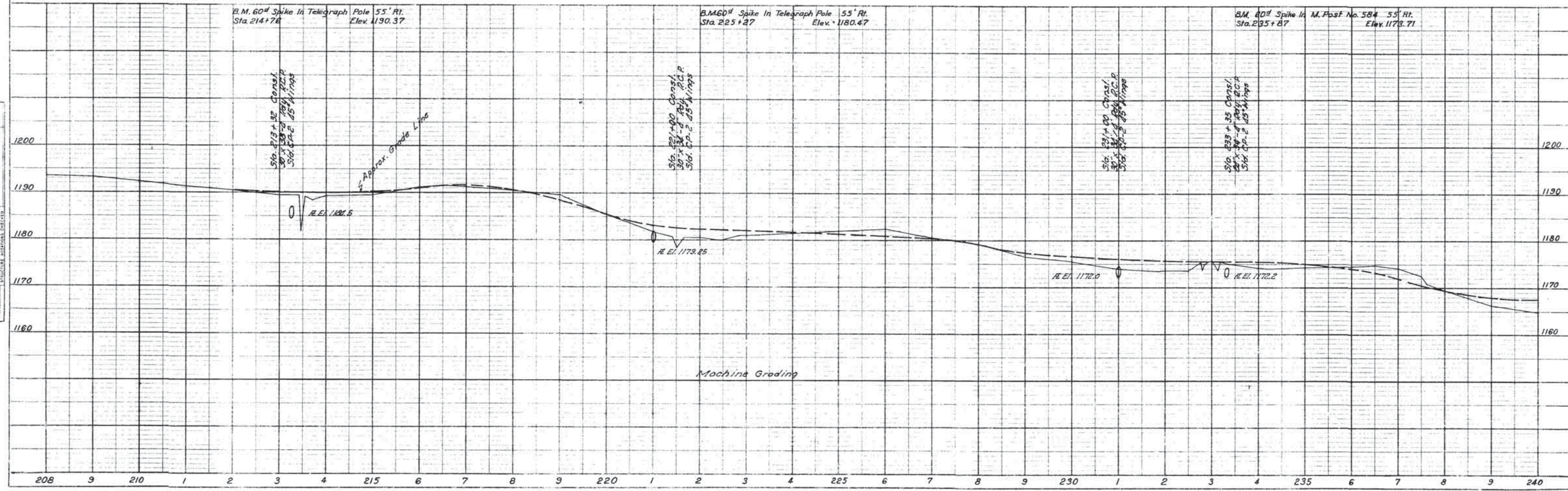
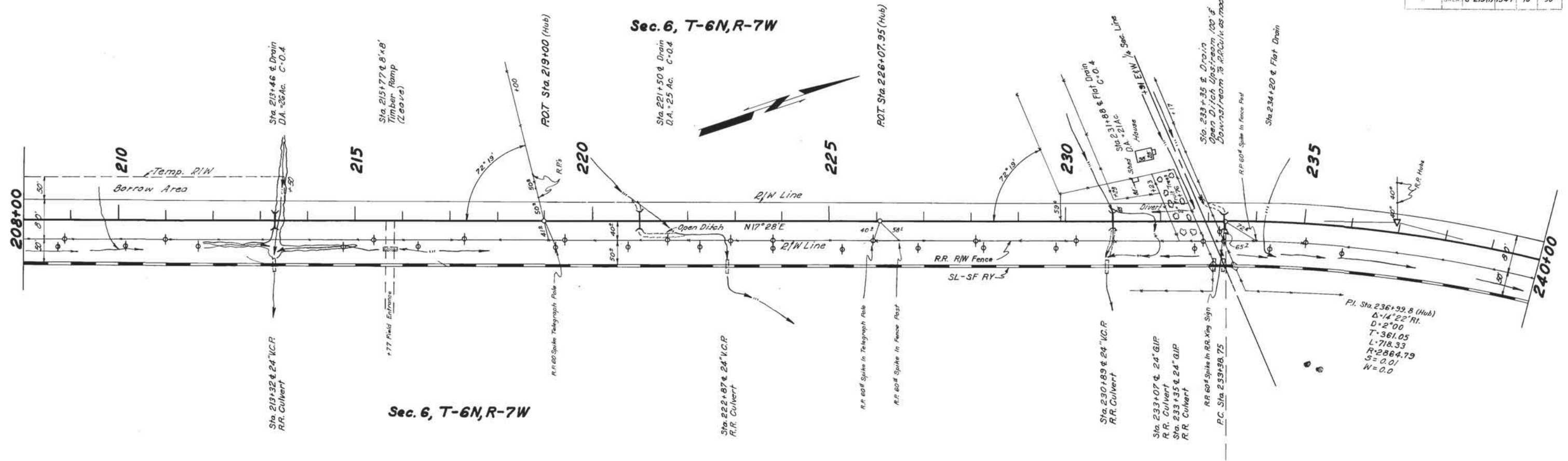
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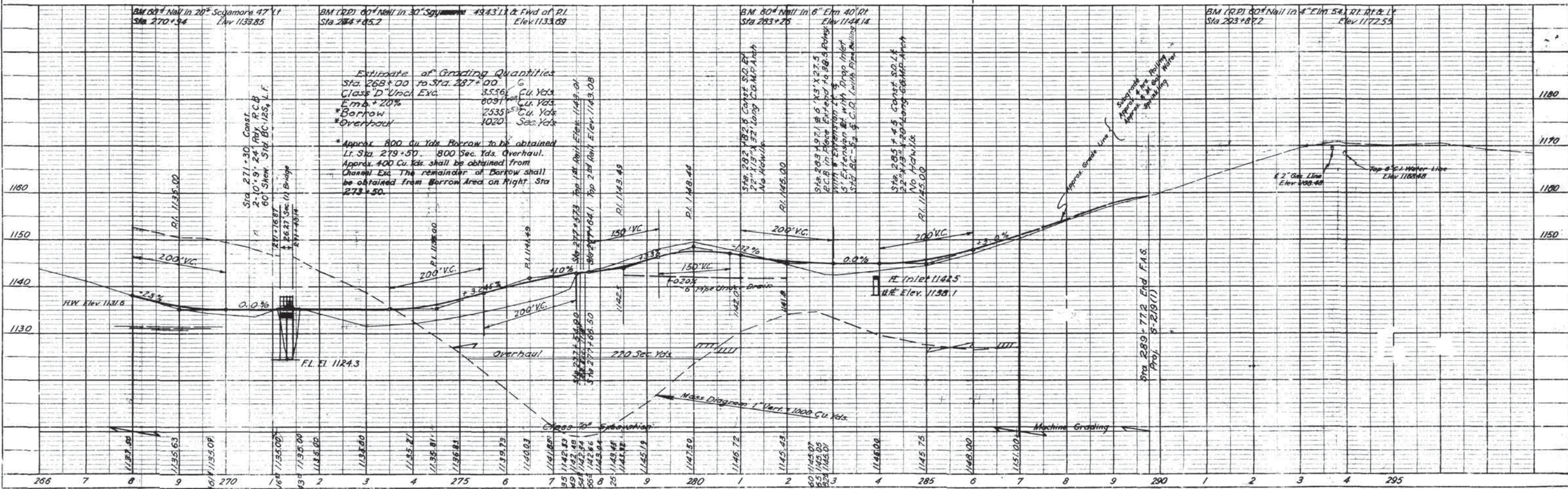
STANDARD INFORMATION SYSTEM



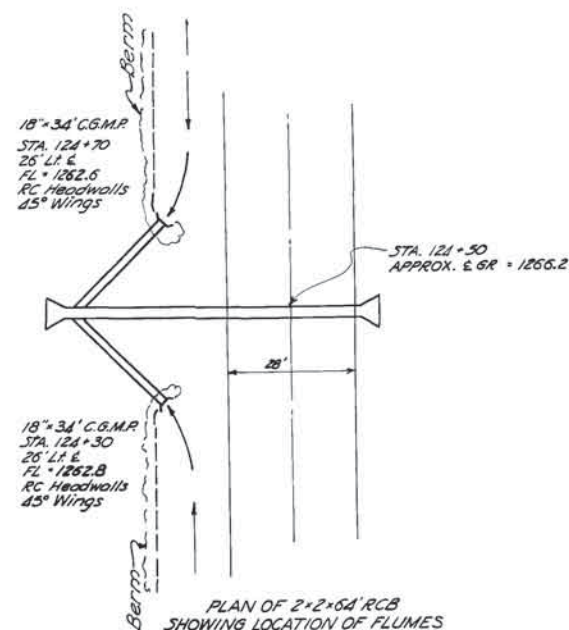
FED. ROAD DIST. NO.	STATE	FED. AID DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OKLA.	S-219(1)	1947	10	30	



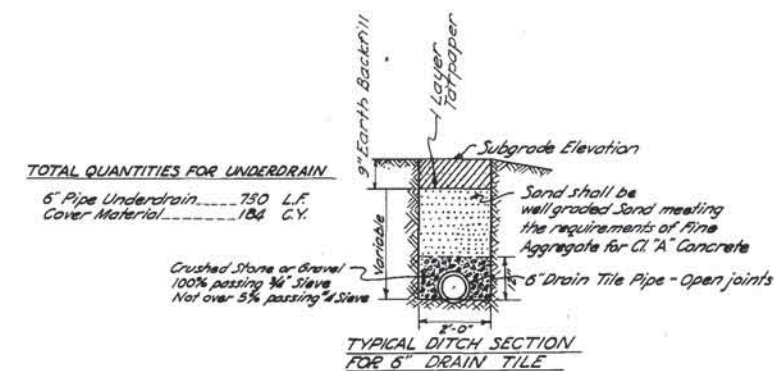
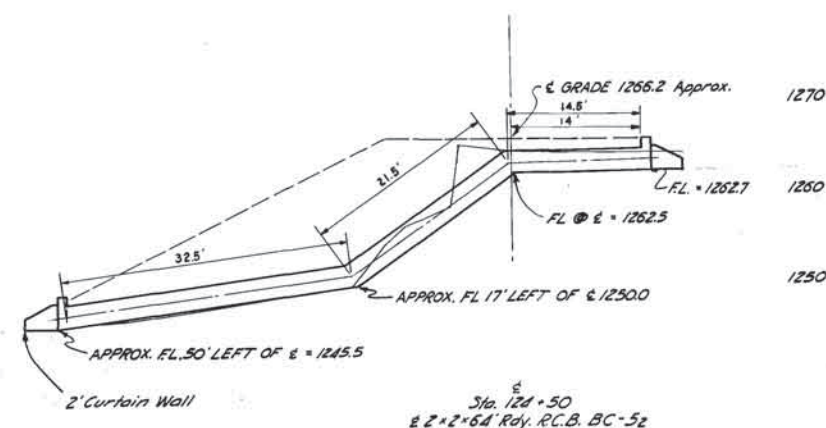




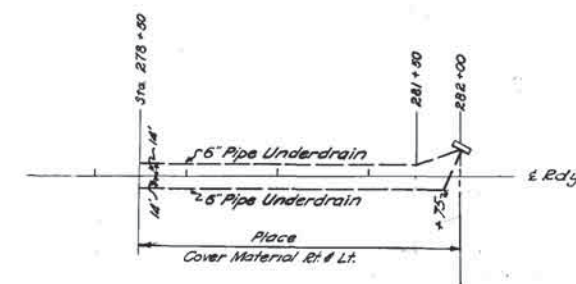
PUBLIC ROAD DIV. NO.	STATE	F.A.S. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	5-219(1)	1947	20	30



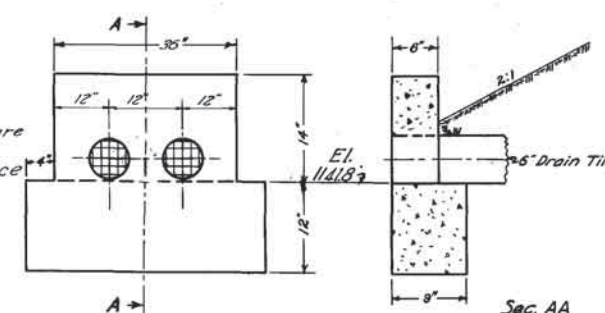
DETAILS OF CULVERT STA. 124+50



DETAILS FOR 6" PIPE UNDERDRAIN (DRAIN TILE)
Sta. 278+50 to Sta. 282+00



Place 1" mesh Hardware
Cloth over Outlets.
Cost incl. in unit Price
Bid per L in. Ft for
6" Pipe Underdrain



DETAILS OF HEADWALL FOR 6" DRAIN TILE
Class "A" Concrete .17 Cu. Yd.

