

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
Plan and Profile of State Aid Road No. 11

From S.W. COR. SEC. 1, T-31, R-23, W To A POINT 375.0' SOUTH OF THE SO. 1/4 COR. SEC. 1, T-33, N R-23, W
Give proper reference to Sections, Township and Range

GROSS LENGTH 3,174.8 FEET 6.013 MILES
LENGTH OF EXCEPTIONS 0 FEET 0 MILES
NET LENGTH 3,174.8 FEET 6.013 MILES

PLAN. Inch = 100 Feet.
PROFILE, Horiz. Inch = 100 Feet. Vert. Inch = 10 Feet
WORKING PLANS { Horiz. Inch = Feet
Vert. Inch = Feet
Cross-Section, Inch = 10 Feet

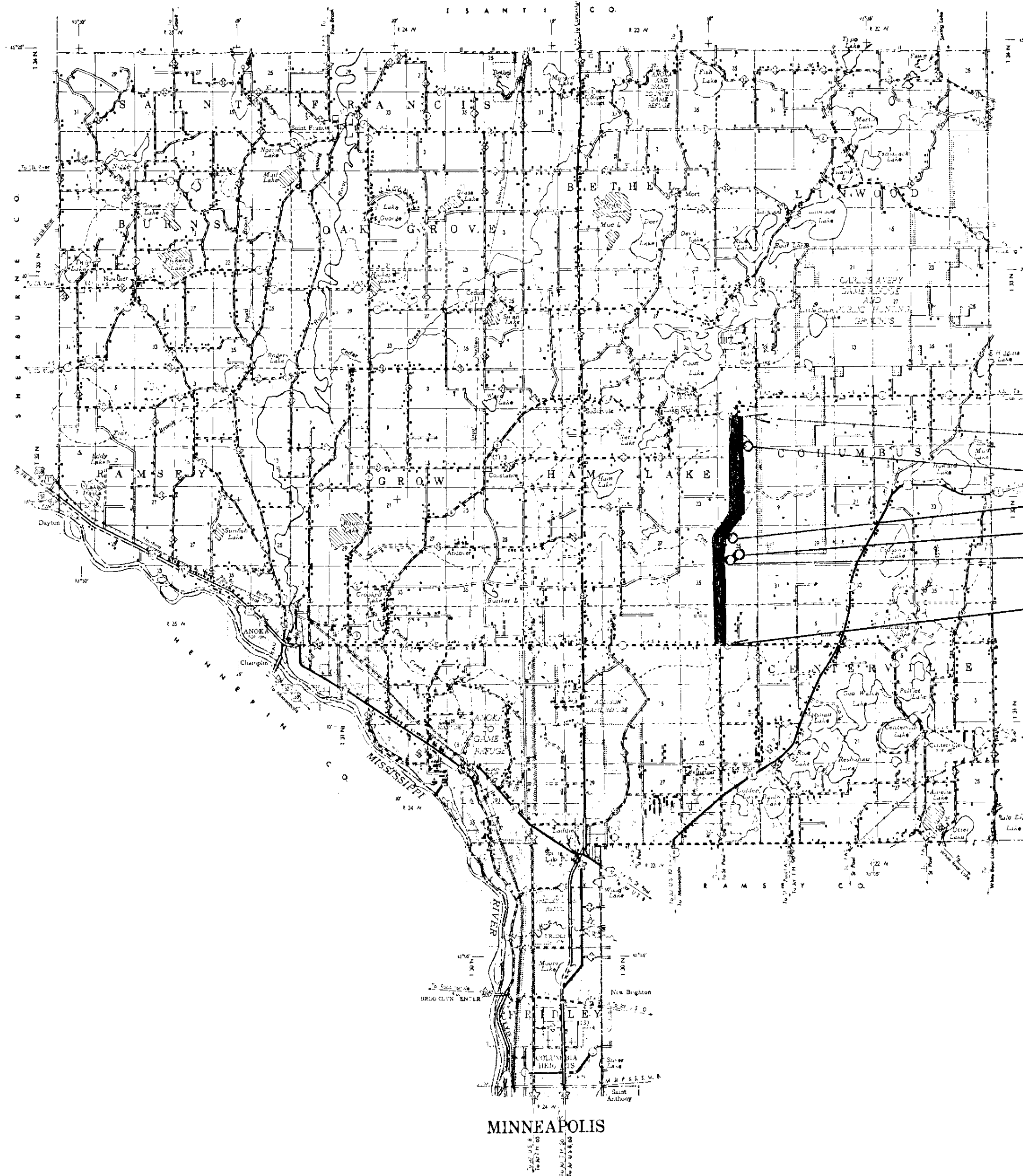
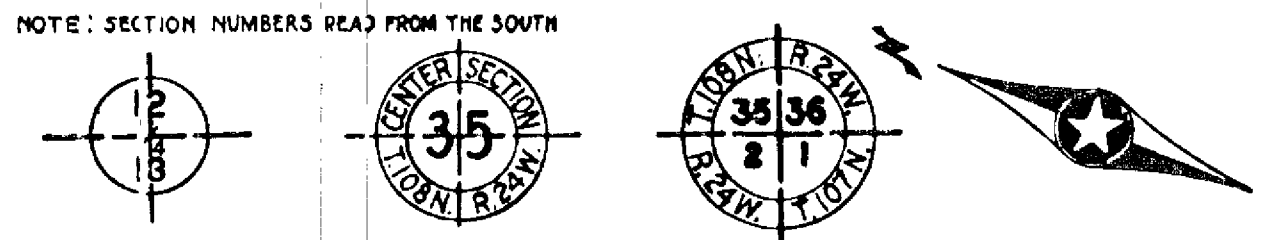
LAYOUT
Scale, Inch = 100 Feet

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SPECIFICATION REFERENCE:
The specifications for Highway Construction, dated July 1, 1947, and submitted for approval by the Division Engineer of the Bureau of Public Roads October 15, 1947, as modified by "supplement 1" thereto dated April 15, 1953, and submitted for approval by the Division Engineer of the Bureau of Public Roads on March 25, 1953, shall govern.

CONVENTIONAL SIGNS	ABBREVIATIONS
STATE LINE	EXCAVATION E.C.
COUNTY LINE	EARTH E.
TWP. OR RANGE LINE	LOOSE ROCK L.R.
SECTION LINE	SOLID ROCK S.R.
RIGHT OF WAY LINE	EMBANKMENT E.
CORPORATE OR CITY LIMITS	OVERHAUL H.
ROAD CENTER LINE	SURFACING S.
RETAINING WALL	HAND DITCHING H.D.
RAILROADS	SPECIAL EXCAVATION S.E.
CREEK	SPECIAL PLOWING S.P.
DRY RUN	GUARD RAIL G.R.
DRAINAGE DITCH	CORRUGATED METAL CULVERT C.M. CULV.
POWER POLE LINE	SECTIONAL CONCRETE CULVERT S.C. CULV.
TELEPHONE OR TELEGRAPH LINE	SECTIONAL CONCRETE CULVERT (Heavy Type) H.C. CULV.
CULVERTS - PLAIN	TON MILES T.M.
WITH ENDWALLS	TELEPHONE POLE TEL. P.
WITH WINGWALLS	POWER POLE P.P.
DROP INLET	PLACE P.
FENCE LINE	IN PLACE I.N.P.
GRAVEL PIT	REPLACE REP.
SAND PIT	RIGHT RT.
CLAY PIT	LEFT LT.
ROCK QUARRY	INTERSECTION ANGLE Δ
SPRINGS	RADIUS R.
MARSH	TANGENT T.
BRUSH OR TIMBER	LENGTH OF CURVE L.C.
HEDGE	POINT OF CURVE P.C.
ROCK LEDGE	POINT OF TANGENT P.T.
SAND	POINT OF INTERSECTION P.I.
EDGE OF CUT	VERTICAL CURVE V.C.
TOE OF EMBANKMENT	BENCH MARK B.M.
RAILROAD R/W LINE	ELEVATION EL.
BUILDING (One Story Frame)	ACRES A.



END S.P. 02-512-02 S-6722(2)
STA. 580+00

BORROW PIT "E"

BORROW PIT "C"

BORROW PIT "B"

BORROW PIT "A"

BEGIN S.P. 02-512-02 S-6722(2)
STA. 263+75.4

EQUATION STA 459+08.4 = 457+85.0

DESIGN SPEED 50 M.P.H.

PLANNED BY E. S. VEVEA 19__

COUNTY ENGINEER FOR ANOKA COUNTY

RECOMMENDED FOR APPROVAL B. J. Weib 6-1-19__ 19__
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL _____ 19__

APPROVED 6/14/56 1956 B. J. Weib
DISTRICT ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

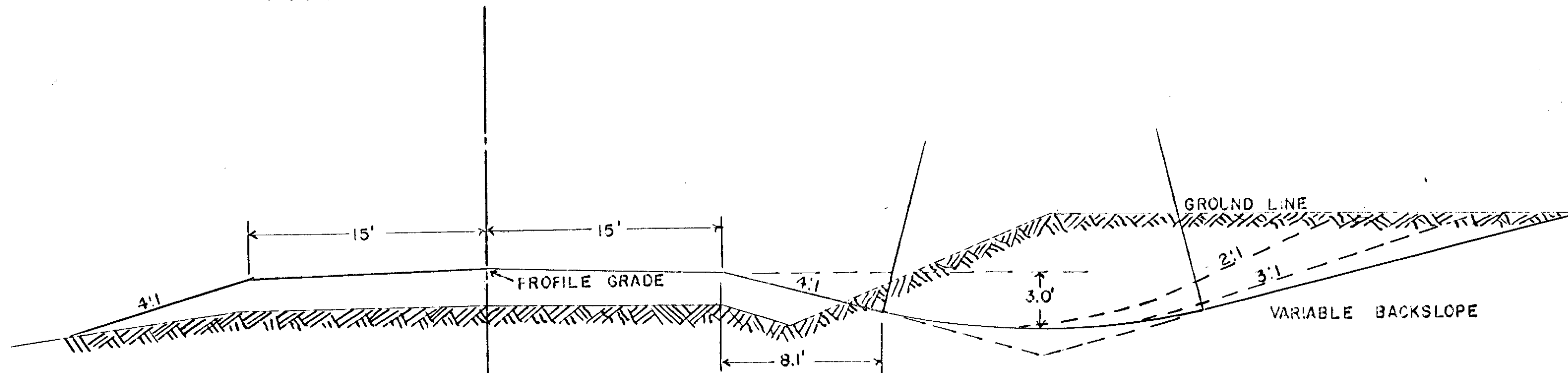
APPROVED _____
DISTRICT ENGINEER DATE _____

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.501	CLEARING	ACRE	0.25
2101.502	CLEARING	TREE	112
2101.506	GRUBBING	ACRE	7.25
2101.507	GRUBBING	TREE	98
2104.501	REMOVE PORT CULV.	LIN. FT.	278
2104.510	REMOVE FENCE	LIN. FT.	24,094
2105.503	CLASS "C" EXCAVATION	CU. YDS.	105,871
2105.503	BORROW EXCAVATION (CLASS "C")	CU. YDS.	35,159
2413.501	EXCAVATION FOR TIMBER BOX CULV.	CU. YDS.	62
2413.506	SAND GRAVEL SUBFOUNDATION	CU. YDS.	84
2413.511	TIMBER BOX CULVERT DOUBLE 6x5	LIN. FT.	42
2413.512	TIMBER CULVERT END SECTIONS	SECTION	2
2441.502	SINGLE LANE BY-PASS	BY-PASS	1
2501.501	PIPE CULVERT EXCAVATION	CU. YDS.	254
2501.511-15	FURNISH & INSTALL 15" C.M.P. CULVERT	LIN. FT.	700
2501.511-18	" " " 18" C.M.P. "	LIN. FT.	63
2501.511-24	" " " 24" C.M.P. "	LIN. FT.	140
2501.521-24	FURNISH & INSTALL 24" S.C.P. CULVERT	LIN. FT.	222
2501.521-30	" " " 30" S.C.P. "	LIN. FT.	186
2501.521-48	" " " 48" S.C.P. "	LIN. FT.	42
2501.551	SAND GRAVEL BACKFILL	CU. YDS.	313
* 2574.501	ROADSIDE SEEDING	ACRE	50
** 2575.511	MULCH ADMIXTURE	TON.	57

* 2574.501 SEED SHALL BE FURNISHED BY CONTRACTOR (CLASS 18) 60 LBS. PER ACRE. (1210 ACRES ROADSIDE SEEDING, 74 ACRES BORROW PIT SEEDING.)
 ** 2575.511 MULCH COMPUTED AT THE RATE OF 2 TONS PER ACRE (FOR SHOULDER SLOPES IN ACCORDANCE WITH SPEC. NO. 2275-3B MIX WITH SOIL PRIOR TO SEEDING. MULCH ONLY STA. 263+75.4 TO STA. 370+00 AND STA. 460+00 TO STA. 580+00)

TYPICAL GRADING SECTIONS



ROADBED TO BE BLADED TO 1/4" PER. FOOT PITCH DURING FINISHING OPERATIONS.

SUPERELEVATED CURVES
 ALL CURVES FOR WHICH NO SUPERELEVATION HAS BEEN PROVIDED IN THE PLAN SHALL BE SUPERELEVATED IN ACCORDANCE WITH DESIGN STANDARDS DURING CONSTRUCTION.

THE UPPER 1.0' OF NATURAL SOIL IS CONSIDERED UNSUITABLE FOR USE IN THE UPPER 1.0' OF ROADWAY. THE UPPER PORTION OF THIS LAYER SHALL BE USED TO COVER DITCH BOTTOMS AND SLOPES. THE REMAINDER TO BE PLACED BELOW THE UPPER 1.0' OF THE EMBANKMENT. EXCAVATION TO BE WASTED SHALL BE WASTED AS DIRECTED BY THE ENGINEER.

TYPICAL BASE & SURFACE SECTIONS

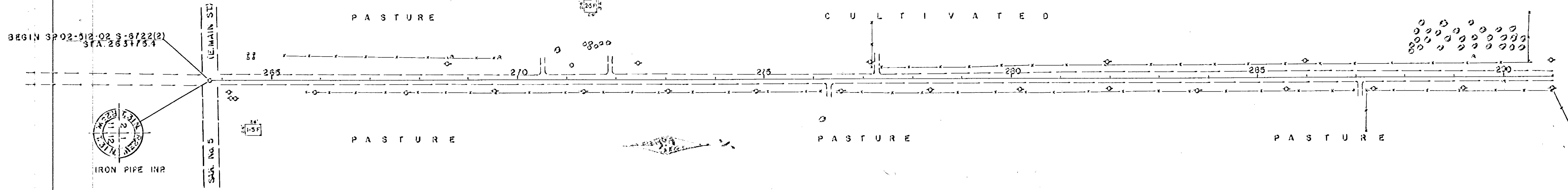
STANDARD DETAIL PLATES

Standard Detail Plates issued October 1, 1947 and approved by the Public Roads Administration April 1, 1948, with revisions Approved Feb. 24, 1949, shall govern.

PLATE NO.	STANDARD DETAIL PLATES
5000	APPROACHES & ENTRANCES
3000-3001	S.C. CULV. PIPE
3050-3051	TIMBER BOX CULVERT

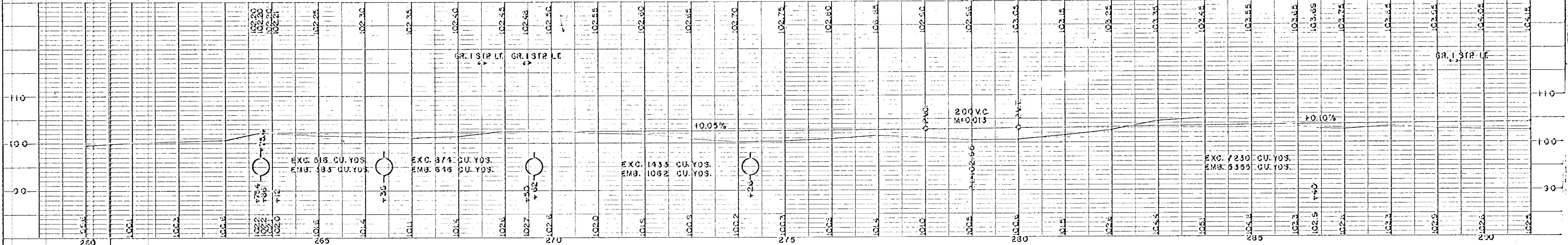
FE-STA.270+49LT. NO CULV. REQ. FE-STA.271+89LT. NO CULV. REQ.

FE-STA.277+28LT. NO CULV. REQ.



FE-STA.276+33RT. NO CULV. REQ.

FE-STA.287+08RT. NO CULV. REQ.

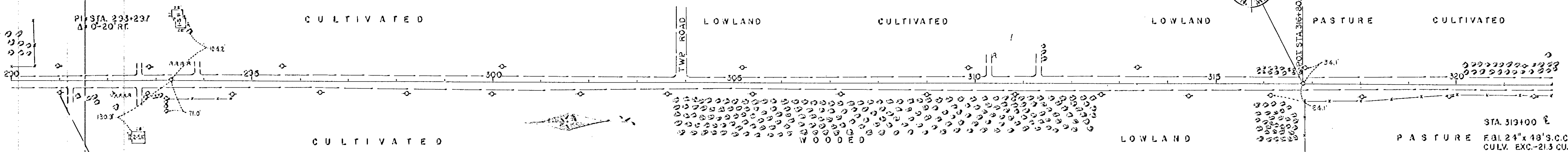


FE-STA.292+65LT. NO CULV. REQ. FE-STA.293+92LT. NO CULV. REQ.

TWP ROAD - STA.303+91LT. F&I 15"x42" C.M. CULV.

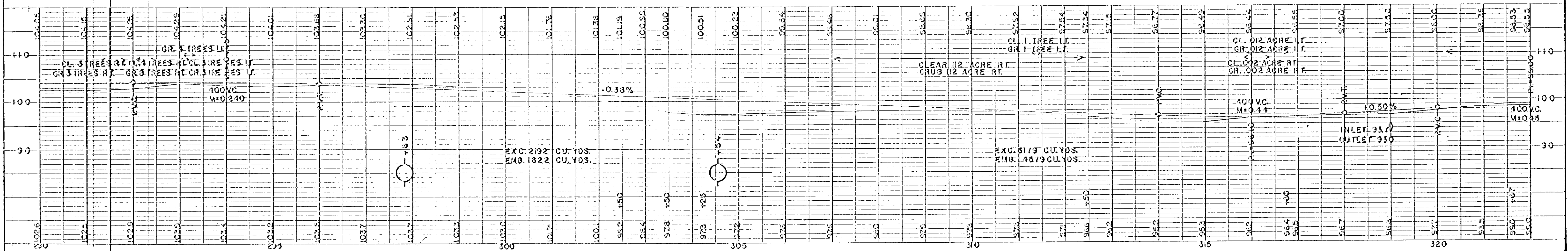
FE-STA.310+28 FE-STA.311+32 F&I 15"x38" C.M. CULV. OMIT IN CONST.

Assumed



FE-STA.293+21RT. NO CULV. REQ. FE-STA.292+65RT. NO CULV. REQ.

STA. 319+00 E
F&I 24"x48" S.C. CULV.
CULV. EXC. 213 CU. YDS
BACKFILL - 28.8 CU. YDS

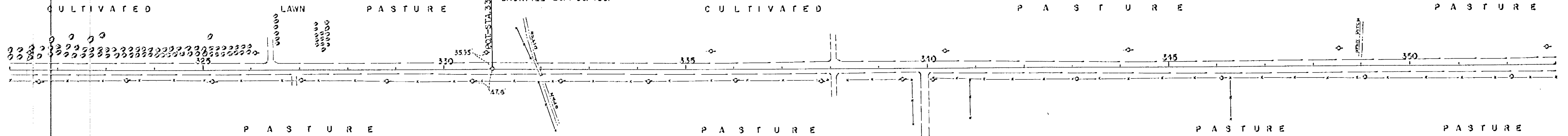


FE--STA. 326+39 LT.
F&I. 15"x38" C.M. CULV.

STA. 331+98 LT.
INPL. 12"x36" C.M. CULV.
REMOVE
F&I. 24"x44" S.C. CULV.
CULV. EXC. -19.6 CU. YDS.
BACKFILL -26.4 CU. YDS.

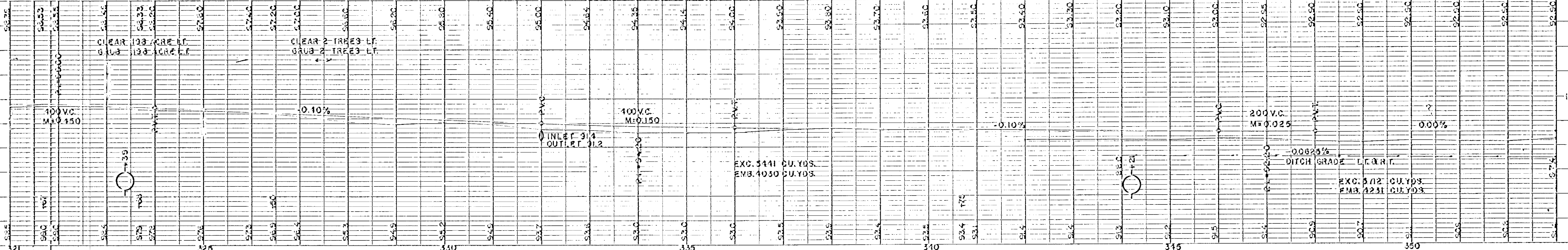
FE--STA. 338+06 LT. STA. 340+20
F&I. 15"x38" C.M. CULV. END BIT. SURFACE

STA. 350+03 LT.
INPL. 18"x31" C.M. CULV.
REMOVE



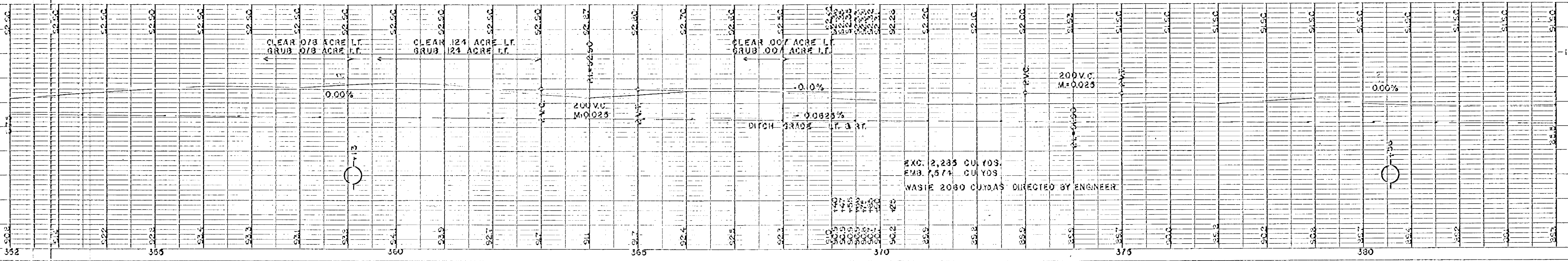
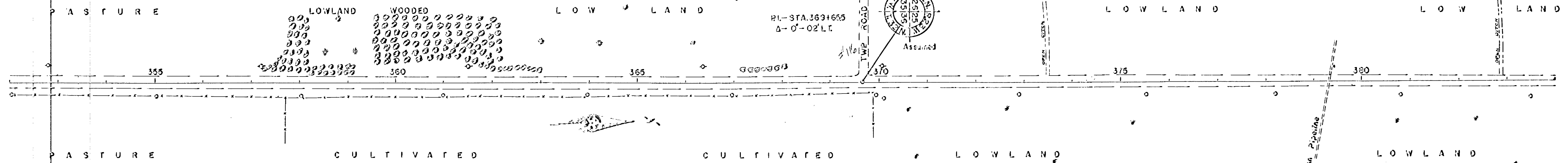
FE--STA. 326+90 RT.
F&I. 15"x38" C.M. CULV.

FE--STA. 338+06 RT. FE--STA. 339+91 RT.
F&I. 15"x38" C.M. CULV. F&I. 15"x44" C.M. CULV.



TWP ROAD - STA. 369+655 LT.
F&I. 18"x60" C.M. CULV.

PI - STA. 369+655
Δ - 0'-02" LT.



FE. STA. 334+63 LT.
 INP. 18"x20" C.M. CULV.
 REMOVE
 F&I. 2'x13' C.M. CULV.

LOWLAND

LOWLAND

FE. STA. 334+63 RT.
 INP. 36"x20" C.M. CULV.
 REMOVE
 F&I. 2'x13' C.M. CULV.

LOWLAND

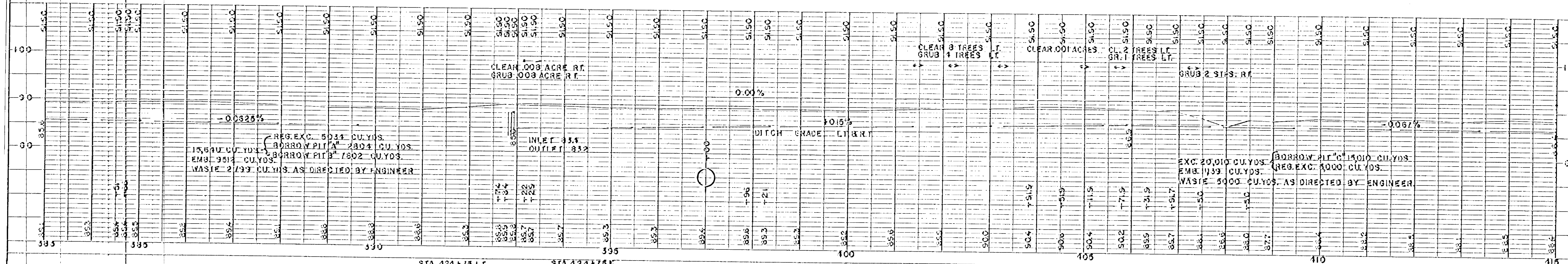
LOWLAND

FE. STA. 338+09 RT.
 F&I. 15"x33" C.M. CULV.

STA. 392+35 R.
 INP. 60" 33" C.M. CULV.
 REMOVE
 F&I. 1.00x6'-6"x5'x12' TIMBER BOX CULV.
 F&I. 2 END SECTIONS
 EXC. 62 CY
 SINGLE LANE BYPASS

PI. STA. 413+25.0
 $\Delta = 44^\circ 33' RT.$
 $\Delta c = 34^\circ 35'$
 $Dc = 350.0'$
 $Ts = 933.1'$
 $Ls = 300.0'$
 $O = 1^\circ 30'$
 $Lc = 1185.00'$

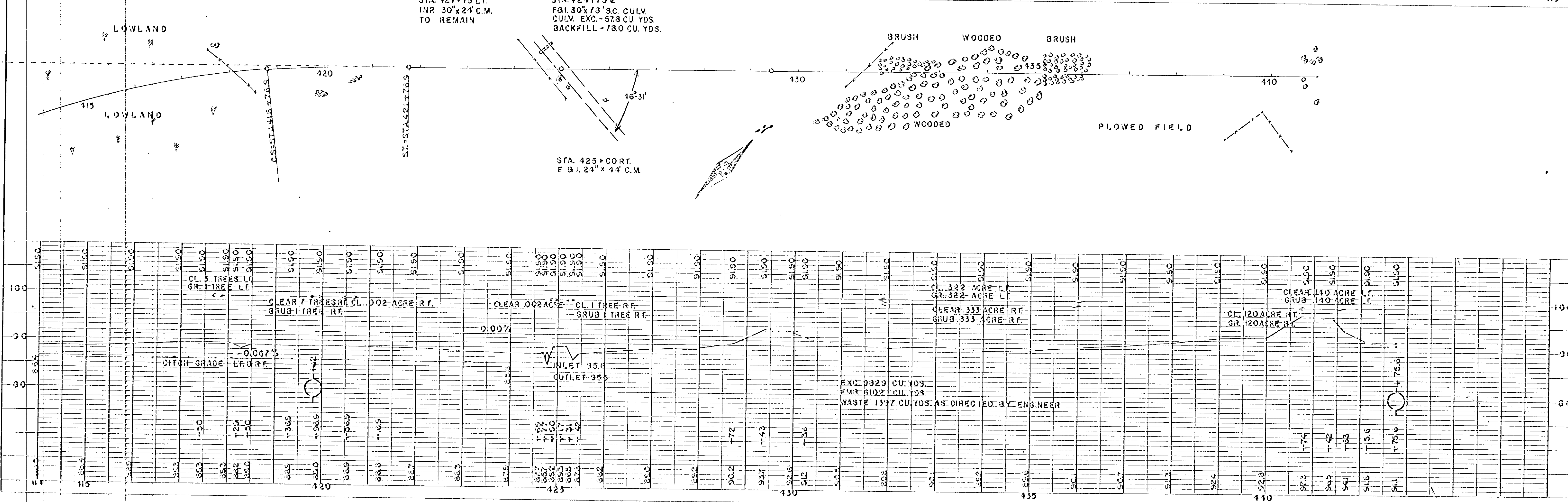
LOWLAND

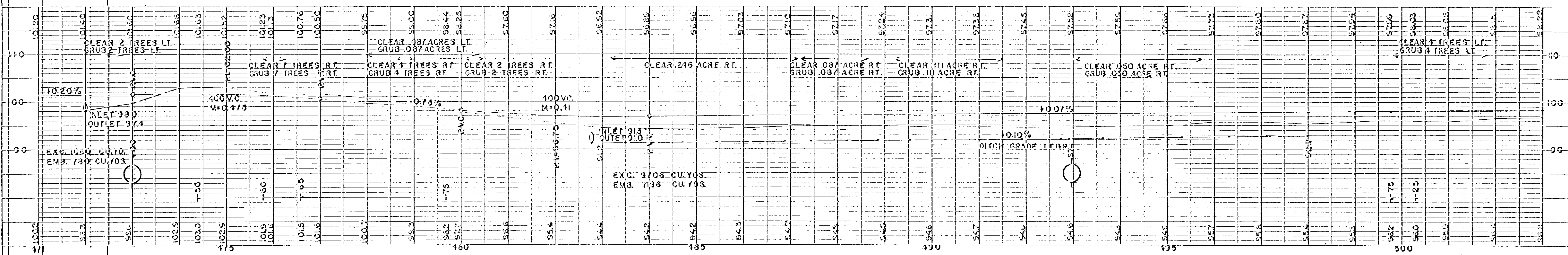
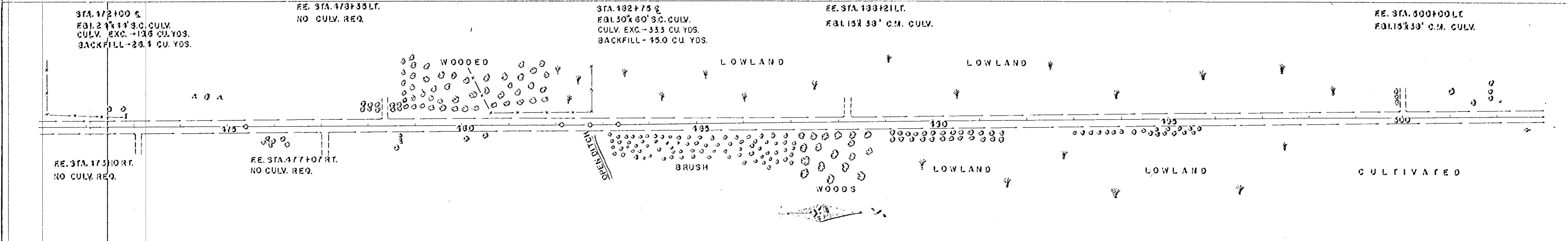
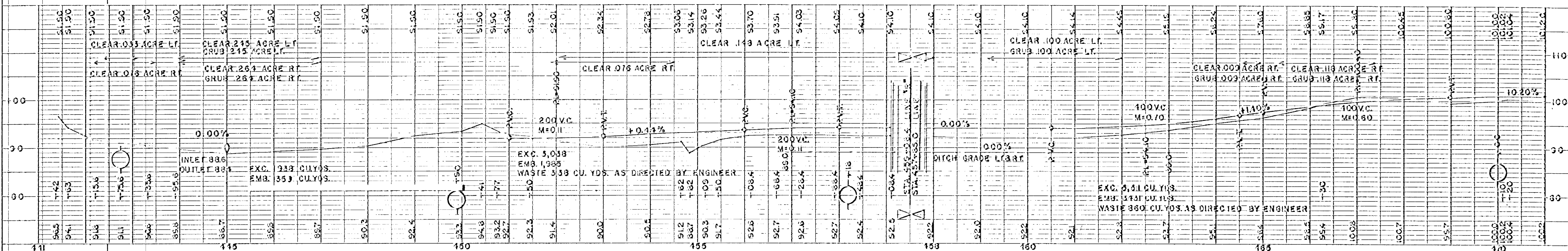
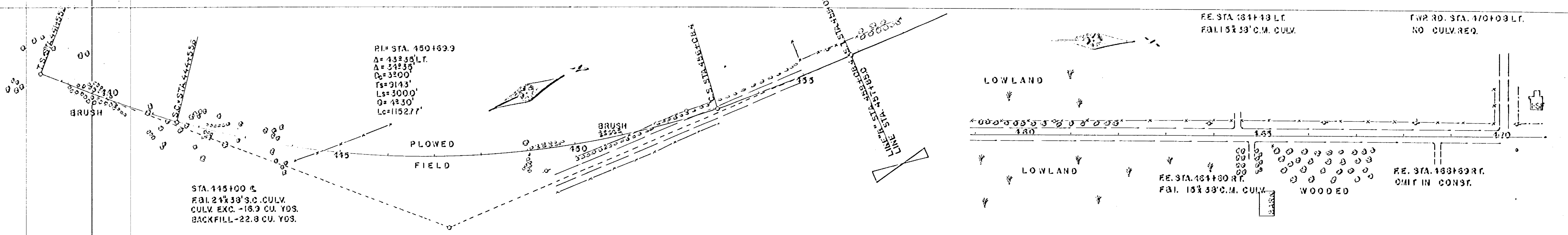


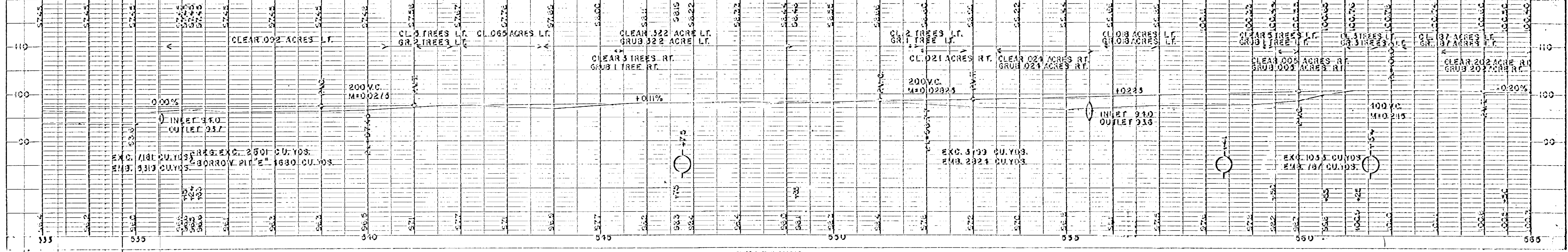
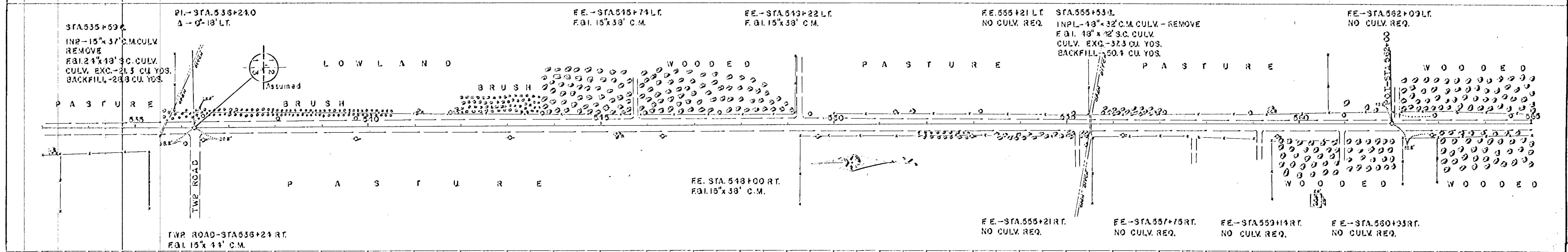
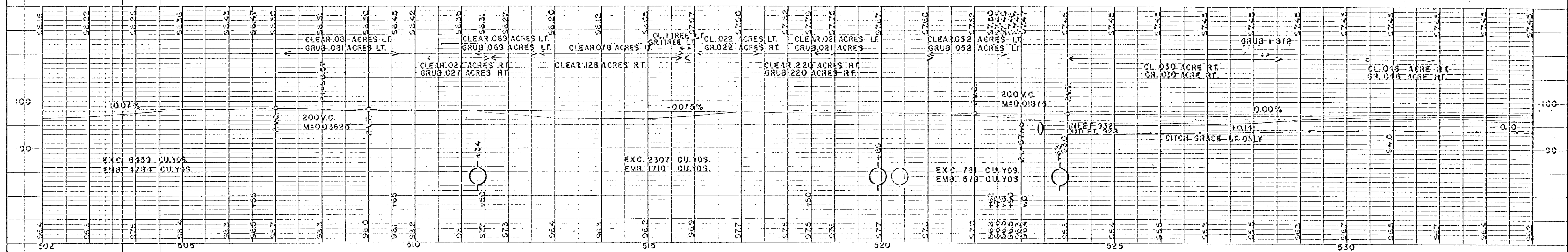
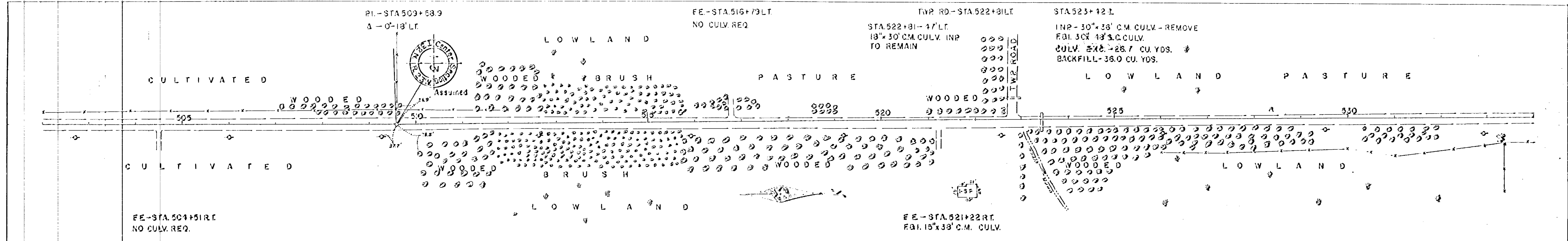
STA. 424+73 LT.
 INP. 30"x24" C.M.
 TO REMAIN

STA. 424+75 R.
 F&I. 30"x73" SC. CULV.
 CULV. EXC. -578 CU. YDS.
 BACKFILL - 78.0 CU. YDS.

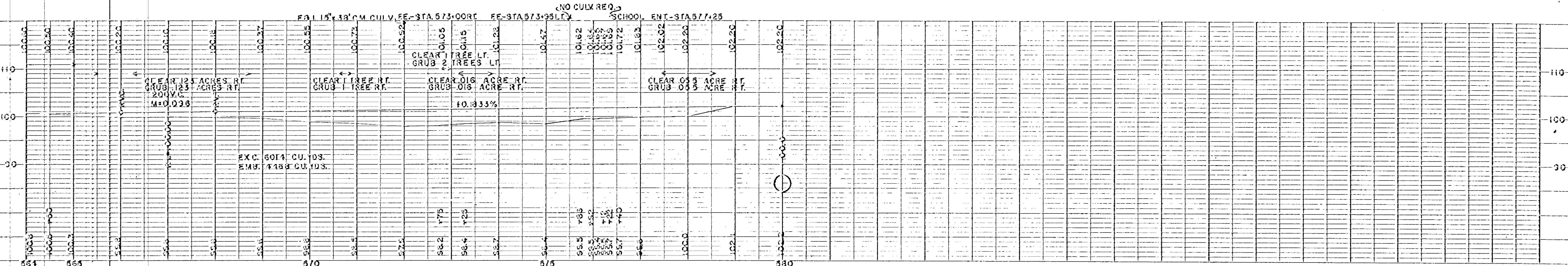
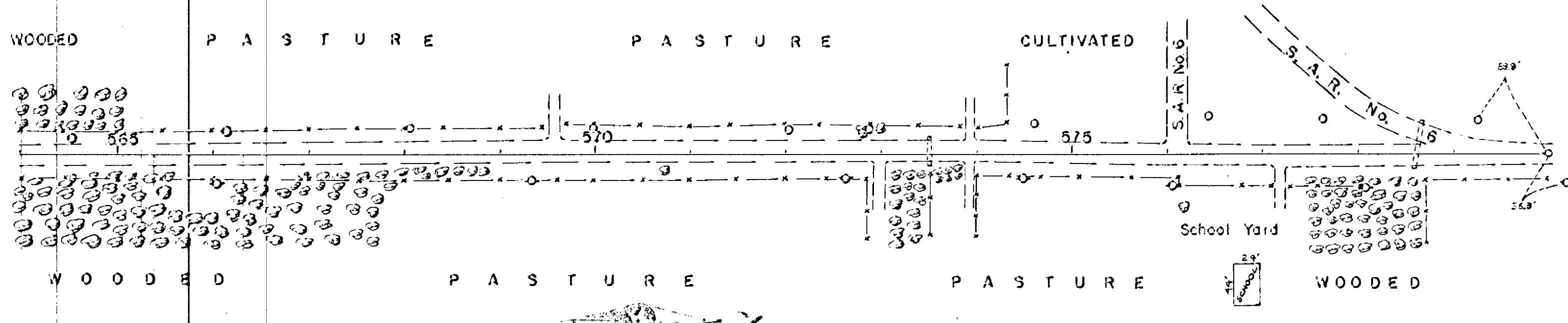
STA. 425+00 RT.
 F&I. 24"x44" C.M.







FE.-STA. 563+60 LT NO CULV. REQ. STA. 573+18 L STA. 573+35 LT FE.-STA. 573+35 LT S.A.R. # 6 573+00 STA. 573+60 L
 INPL.-12"x23" C.M. CULV. REMOVE NO CULV. REQ. NO CULV. REQ. NO CULV. REQ. INPL.-13"x52" C.M. CULV. EXTEND RT. ONLY
 F31.13'X6" C.M. CULV.



BORROW PIT LOCATIONS

FINAL SURVEY
NOTE BOOK NO. 100

ORIGINAL SURVEY
NOTE BOOK NO. 100

BORROW PIT "A"
In the NW 1/4 of the SW 1/4 Sec. 25 T-32-N R-23-W
3,598 Cu. Yds.
794 Cu. Yds. Topsoil
2,804 Cu. Yds. Class "C" Borrow
Dead Haul 620'
Area 1.20 Acre (Total Exc.) — Area—1.73 Acres(B.P.)
See Cross Section Sheets Number 46 & 47
CLEARING & GRUBBING— 4 TREES & 2 STUMPS

BORROW PIT "B"— Area 2.14 Acres (Exc.)
In the NW 1/4 of the SW 1/4 Sec. 25 T-32-N R-23-W
9,324 Cu. Yds.
1,522 Cu. Yds. Topsoil Area—3.88 Acres(B.P.)
7,802 Cu. Yds. Class C Borrow
Dead Haul 950'
See Cross Section Sheets Number 48 & 49
CLEARING & GRUBBING— 0.60 Acres & 15 Trees & 15 Stumps

BORROW PIT "C"
In the NW 1/4 of the NW 1/4 Sec. 25 T-32-N R-23-W
Area 2.89 Acres (Exc.) — Area—5.62 Acres(B.P.)
17,878 Cu. Yds.
2,868 Cu. Yds. Topsoil
15,010 Cu. Yds. Class "C" Borrow
Dead Haul 480'
See Cross Section Sheets Number 50, 51 & 52
CLEARING & GRUBBING— 2.62 ACRES

BORROW PIT "E"
TOWN RD. SO. SEC. LINE SEC. 12 T-32-N R-23-W
Area 1.56 Acres
5,359 Cu. Yds.
679 Cu. Yds. Topsoil
4,680 Cu. Yds. Class "C" Borrow
Dead Haul 586'
See Cross Section Sheets Number 53 & 54
CLEARING & GRUBBING— 0.002 ACRES & 15 TREES & 15 STUMPS

