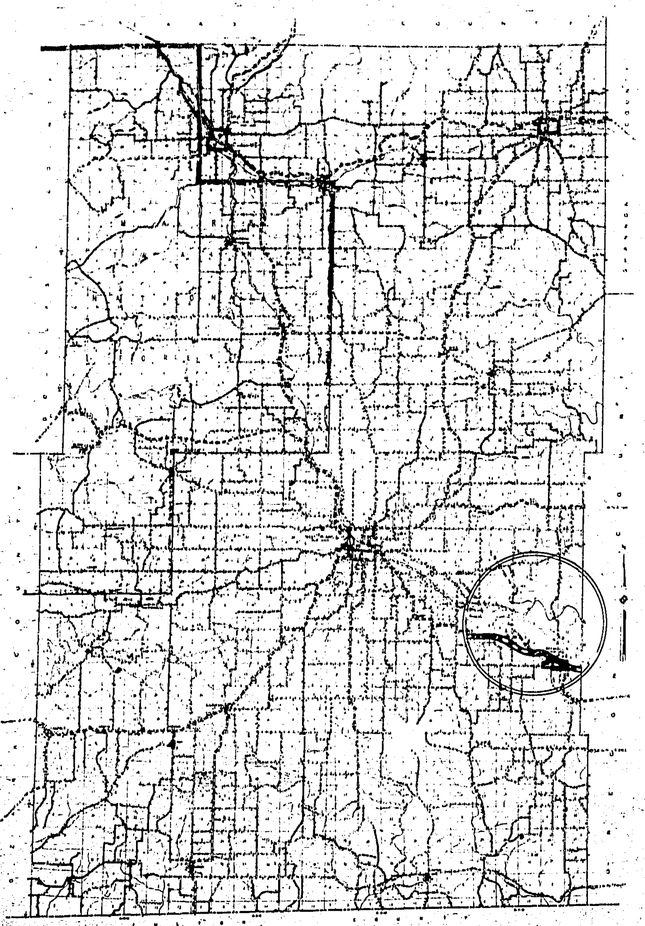
| COUNTY |
| --- |
| HOWELL |
| STATE ROUTE NO. |
| G3 |
| PROJECT NO. |
| F-51(12) A & B |
| [redacted] |

# MISSOURI
# STATE HIGHWAY COMMISSION
# PLAN AND PROFILE
# OF PROPOSED
# STATE ROAD

FEDERAL AID PROJECT

## HOWELL COUNTY

LOCATION MAP



CONVENTIONAL SIGNS

| | |
| --- | --- |
| STATE AND NATIONAL LINE | LEVEE |
| COUNTY LINE | CULVERTS |
| CITY, VILLAGE OR BOROUGH | DROP INLET |
| TOWNSHIP LINE | TROLLEY POLE |
| SECTION LINE | POWER POLE |
| GRANT LINE | TELEPHONE OR TELEGRAPH POLE |
| FENCE LINE | MARSH |
| GUARD RAIL | HEDGE |
| UNFENCED PROPERTY | |
| RIGHT OF WAY LINE | GROUND ELEVATION |
| TRAVELED WAY | |
| RAILROADS | GRADE ELEVATION |
| RETAINING WALL | SURFACE LINE |
| BASE OR SURVEY LINE | GRADE LINE |

SUBMITTED BY [redacted] DATE [redacted]

[redacted]

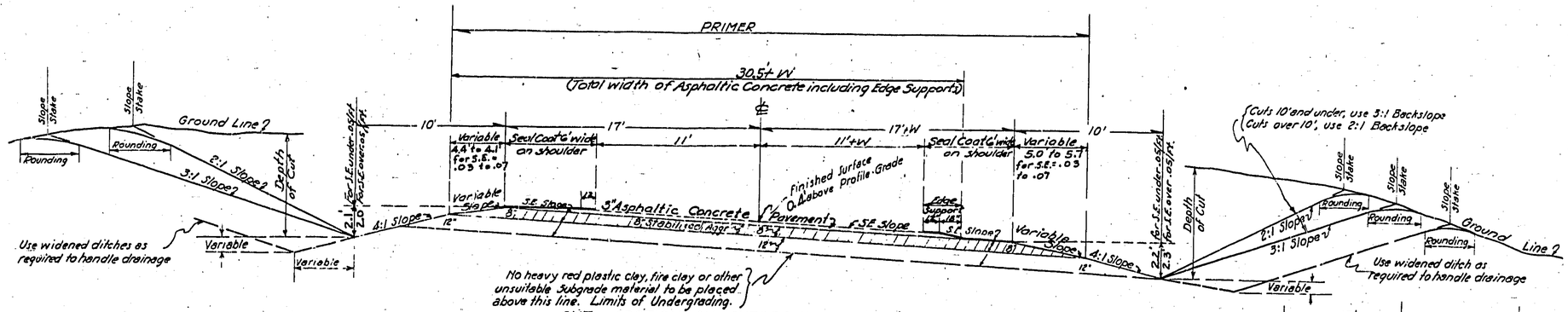
CHIEF ENGINEER
MISSOURI STATE HIGHWAY COMMISSION

[redacted]

DIVISION ENGINEER

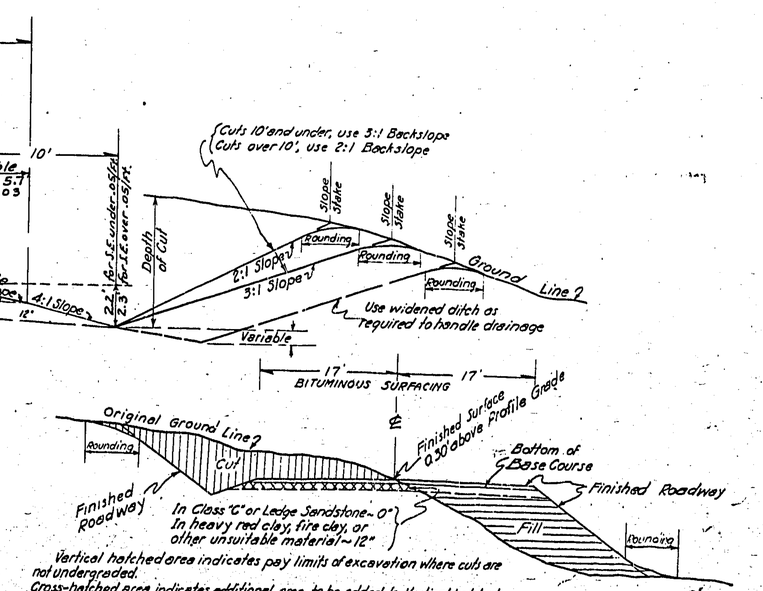
[redacted]

DIVISION ENGINEER DATE



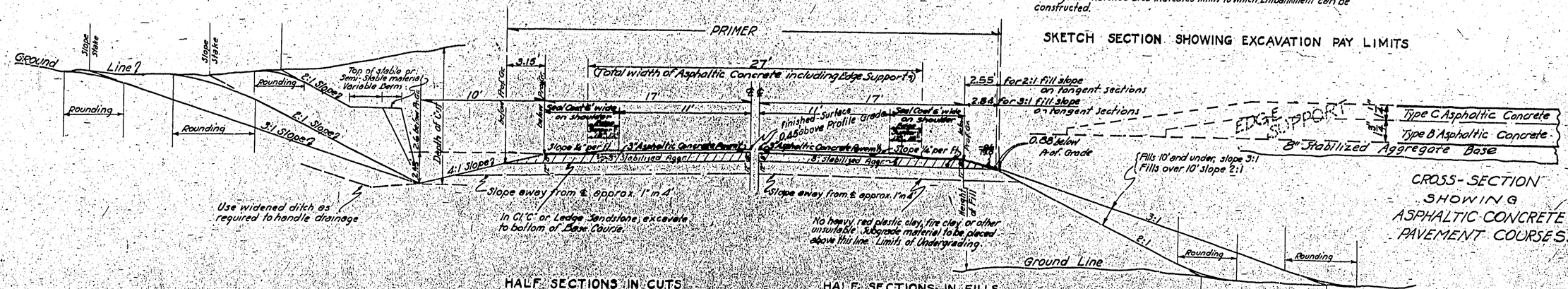

CUT SECTION ON SUPERELEVATED CURVE

Note: Fill sections on superelevated curve to be identical to this Section from shoulder to shoulder. Beyond shoulder use same as shown for "Section on Tangent"




Vertical hatched area indicates pay limits of excavation where cuts are not undergraded.
Cross-hatched area indicates additional area, to be added to Vertical hatched area included in pay limits of excavation where Cuts are undergraded.
For pay limits of overbreak and backfill, see Specifications.
Horizontal hatched area indicates limits to which Embankment can be constructed.

SKETCH SECTION SHOWING EXCAVATION PAY LIMITS

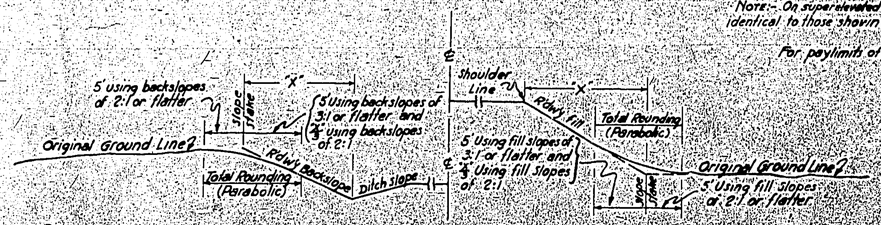



HALF SECTIONS IN CUTS ON TANGENTS

HALF SECTIONS IN FILLS ON TANGENTS

Note:- On superelevated curves, undergrading to parallel the superelevation, and other details from ditch line to ditch line shall be identical to those shown for "Cut Section On Superelevated Curves."

For pay limits of overbreak and backfill, see Specifications.




PARABOLIC ROUNDING REQUIRED AT TOP OF ROADWAY BACKSLOPES AND AT TOE OF ROADWAY FILL SLOPES

GENERAL NOTES

For details of superelevation and widening of horizontal curves, drainage items, etc, see other drawings.
In transitioning from one cut or fill slope to another, use a 25' transition beginning at a point 15' back along that which would normally be the flatter slope and ending the transition at the actual point where the steeper slope is required. If the actual width requiring a steeper slope is less than 15' in length, do not change to steeper slope.
All information shown on these TYPICAL SECTIONS is for the purpose of indicating general design and construction details. Actual construction of roadway widths, slopes, depths and type of ditches, undergrading Cut, and other features, shall conform to the details shown on Cross-Sections and Plan-Profile sheets or as directed by the Engineer.

CROSS-SECTION SHOWING ASPHALTIC CONCRETE PAVEMENT COURSES.

MISSOURI STATE HIGHWAY COMMISSION

# TYPICAL SECTIONS FOR 34 FT. GRADED EARTH AND 8" STABILIZED AGGREGATE BASE WITH 3" ASPHALTIC CONCRETE PAVEMENT 22' WIDE

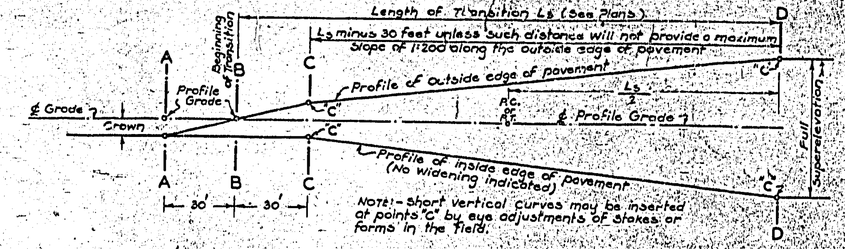
(DESIGN SPEED 55 M.P.H.)

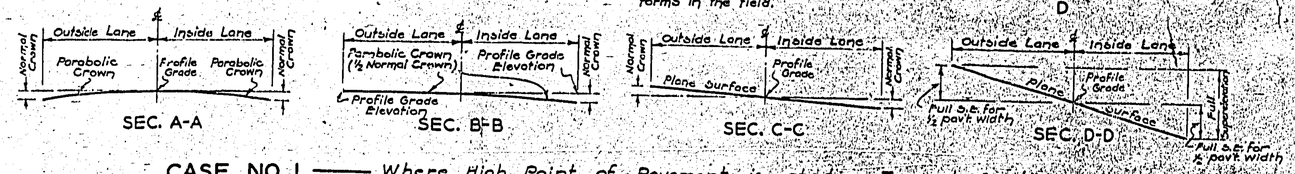
ROUTE 63 COUNTY-HOWELL-OREGON
PROJ. F-51(12), FG-51(2), HOWELL COUNTY.
F-414(1), OREGON COUNTY.

FINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, BY, DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, BY, DATE

# STRAIGHT LINE METHODS OF ATTAINING SUPERELEVATION




SEC. A-A — SEC. B-B — SEC. C-C — SEC. D-D

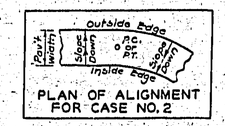
**CASE NO. 1** —— *Where High Point of Pavement is at ℄ on Tangent Section*
(Note:- Use for 2-lane traffic roads only. Pavement revolved about its ℄.)

## SUPERELEVATION AND WIDENING DATA

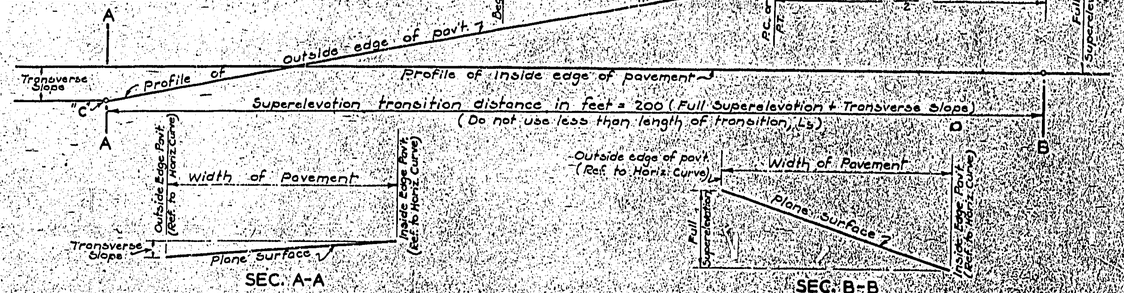
| Design Speed → | 30 M.P.H. or Less | | | | 40 M.P.H. | | | | | 50 M.P.H. | | | | | 55 M.P.H. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Normal Surface Width | | | 20' | 22' | | | 20' | 22' | 24' | 44' | | 20' | 22' | 24' | 44' | | | 22' |
| Degree of Curve ↓ | S | Ls | "W" | | S | Ls | "W" | | | | S | Ls | "W" | | | S | Ls | "W" |
| 0°01' to 0°30' | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0°31' to 1°00' | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 1°01' to 1°30' | 0 | 150 | 0 | 0 | .01 | 150 | 0 | 0 | 0 | 0 | .02 | 150 | 0 | 0 | 0 | .03 | 150 | 0 |
| 1°00' | .01 | 150 | 0 | 0 | .02 | 150 | 0 | 0 | 0 | 0 | .03 | 150 | 0 | 0 | 0 | | | |
| 2°30' | .01 | 150 | 0 | 0 | .03 | 150 | 0 | 0 | 0 | 0 | .04 | 150 | 0 | 0 | 0 | | | |
| 3°00' | .02 | 150 | 0 | 0 | .03 | 150 | 0 | 0 | 0 | 0 | .05 | 150 | 0 | 0 | 0 | .06 | 300 | 0 |
| 3°30' | .02 | 150 | 0 | 0 | .04 | 150 | 0 | 0 | 0 | 0 | .06 | 150 | 0 | 0 | 0 | | | |
| 4° | .02 | 150 | 0 | 0 | .04 | 150 | 0 | 0 | 0 | 0 | .06 | 150 | 0 | 0 | 0 | .07 | 280 | 2.0 |
| 5° | .03 | 150 | 0 | 0 | .05 | 150 | 0 | 0 | 0 | 0 | .08 | 150 | 2.0 | 0 | 0 | | | |
| 6° | .03 | 150 | 0 | 0 | .06 | 150 | 0 | 0 | 0 | 2.0 | .08 | 200 | 4.0 | 2.0 | 0 | 2.0 | | |
| 7° | .04 | 150 | 0 | 0 | .07 | 150 | 1.0 | 0 | 0 | 2.0 | .08 | 250 | 4.0 | 2.0 | 0 | 3.0 | | |
| 8° | .05 | 150 | 0 | 0 | .08 | 150 | 4.0 | 2.0 | 0 | 3.0 | .08 | 300 | 4.0 | 2.0 | 0 | 3.0 | | |
| 9° | .05 | 150 | 0 | 0 | .08 | 150 | 4.0 | 2.0 | 0 | 3.0 | .08 | 300 | 5.0 | 3.0 | 2.0 | 3.0 | | |
| 10° | .06 | 150 | 4.0 | 2.0 | .08 | 200 | 4.0 | 2.0 | 0 | 3.0 | | | | | | | | |
| 11° | .06 | 150 | 4.0 | 2.0 | .08 | 200 | 5.0 | 3.0 | 2.0 | 3.0 | | | | | | | | |
| 12° | .07 | 150 | 4.0 | 2.0 | .08 | 200 | 5.0 | 3.0 | 2.0 | 4.0 | | | | | | | | |
| 13° | .07 | 150 | 4.0 | 2.0 | .08 | 250 | 5.0 | 3.0 | 2.0 | 4.0 | | | | | | | | |
| 14° | .08 | 150 | 4.0 | 2.0 | .08 | 250 | 5.0 | 3.0 | 2.0 | 4.0 | | | | | | | | |
| 15°00' to 22°59' | .08 | 150 | 5.0 | 3.0 | Max. Curve 14°00' | | | | | | Max. Curve 9°00' | | | | | | | |
| 23°00' to 23°59' | .08 | 150 | 6.0 | 4.0 | | | | | | | | | | | | | | |
| 24°00' to 25°00' | .08 | 200 | 6.0 | 4.0 | | | | | | | | | | | | | | |
| Max Curve 25°00' | | | | | | | | | | | | | | | | | | |

NOTE:- Curves of 2°00' or less are not to be spiraled.
On dual lane projects, consider each roadbed separately.
"S" denotes the superelevation in Ft. per Ft.; "Ls" the *minimum* length in feet of the spiral and widening transition; "W" the widening in feet for surfacing and inside shoulder.

See Curve data on Plan Sheet for "Ls" to be used on each curve.



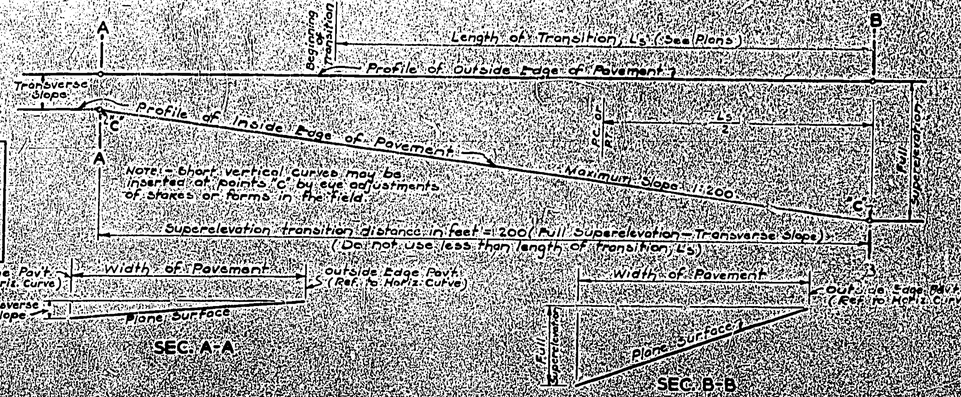

PLAN OF ALIGNMENT FOR CASE NO. 2




SEC. A-A — SEC. B-B

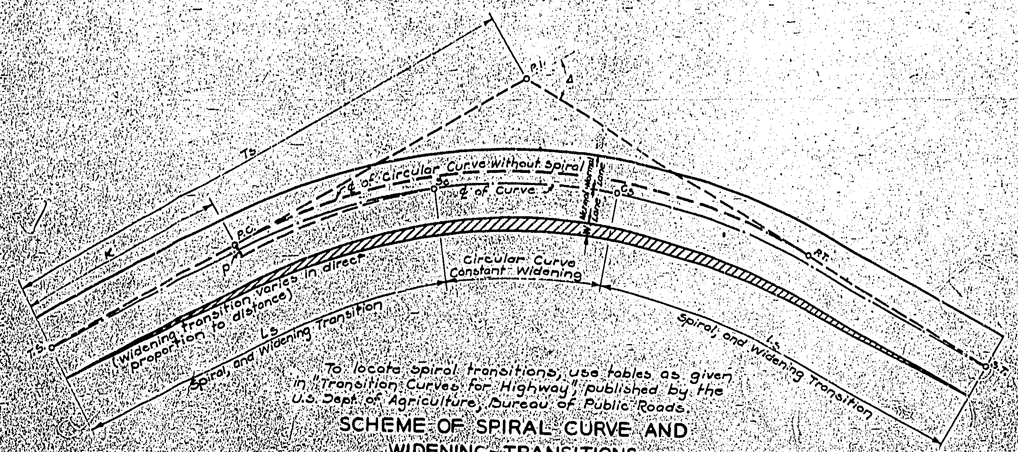
**CASE NO. 2** —— *Where Transverse Slope on Tangent Section is opposite to slope of Superelevation*
(NOTE:- Pavement revolved about its *inside* edge with reference to the horizontal curve which is being approached.)

PLAN OF ALIGNMENT FOR CASE NO. 3



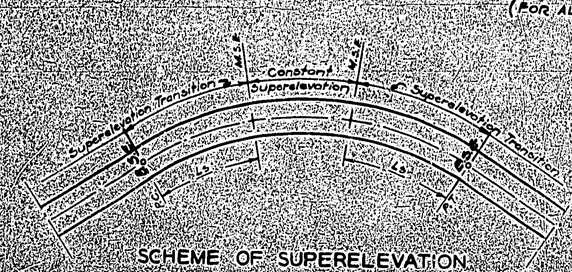

SEC. A-A — SEC. B-B

**CASE NO. 3** - *Where Transverse Slope on Tangent Section is in same direction as slope of Superelevation*
(NOTE:- Pavement revolved about its outside edge with reference to horizontal curve which is being approached.)




To locate spiral transitions, use tables as given in "Transition Curves for Highways" published by the U.S. Dept. of Agriculture, Bureau of Public Roads.

SCHEME OF SPIRAL CURVE AND WIDENING TRANSITIONS
(FOR ALL CURVES OVER 2°00')




SCHEME OF SUPERELEVATION TRANSITION WITHOUT SPIRALS
(FOR CURVES OF 2°00' OR LESS)

MISSOURI STATE HIGHWAY COMMISSION

SPECIAL SUPERELEVATION, SPIRAL CURVE, AND WIDENING TRANSITIONS

PROJECT F-5(12) HOWELL COUNTY
PROJECT F-4(4) OREGON COUNTY

APPROVED [signature] ENGR. SURVEYS AND PLANS — APPROVED [signature] CHIEF ENGINEER

LOCATION WEST PLAINS SOUTHEASTERLY TO OREGON CO. LINE

TYPE 24' R.C. CULVTS, BRIDGES & 22' ASPH. CONC. PAVT. ON STAB. AGG. BASE

# MISSOURI STATE HIGHWAY COMMISSION

## SUMMARY OF QUANTITIES

| FED. ROAD DIST. No. | STATE | PROJECT | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 5 | MO. | F-51 (12) | 1955 | 2-A | |
| DIV. No. | COUNTY | | | ROUTE | SEC. No. |
| 9 | HOWELL | | | 63 | |

### EARTHWORK

| Station | Cl & Gr. Cl. | Cl & Gr. Borr. | Cl & Gr. Haul | Compt. Cut | Sub Bas. | O. Haul |
|---|---|---|---|---|---|---|
| 1770+00 | | | | | | |
| 1777+50 | 1710 | | 31 | 211 | 755 | |
| 1788+74 | 5556 | | 1389 | 30 | 721 | |
| 1796+79 | 8310 | | | 18 | 1061 | |
| 1810+38 | 10186 | | | 165 | 2015 | |
| 1815+63 | 1147 | | | 212 | 333 | |
| 1839+10 | 10129 | | | 18 | 1698 | |
| 1848+14 | 4917 | | | 34 | 2267 | 1259 |
| 1865+37 | 5222 | | | 35 | 1023 | |
| 1866+00 | 13432 | | | 357 | 8584 | 420 |
| 1874+57 | 9616 | 561 | | 13 | 1100 | |
| 1876+49 | 1209 | | | 12 | 119 | |
| 1887+00 | 6754 | | | 102 | 1647 | |
| 1893+80 | 7294 | | | 107 | 1871 | |
| 1905+05 | 2088 | | | 50 | 599 | |
| 1909+50 | 2311 | | | 54 | 878 | |
| 1918+19 | 5815 | | | 101 | 1289 | |
| 1928+00 | 3144 | | | | 872 | |
| 1934+90 | Excavation & Proj. F-51(12) (FG-51(11)) | | | | | |
| 1951+00 | 24300 | | | 98 | 3473 | |
| 1958+68 | 3012 | | | 38 | 1333 | |
| 1966+29 | 5471 | | | 100 | 1264 | |
| 1976+37 | 7063 | | | 41 | 1344 | |
| 1983+20 | 4325 | | | 111 | 856 | |
| 1996+57 | 9581 | | | 82 | 1960 | |
| 2001+58 | 1600 | | | 118 | 786 | |
| 2008+55 | 3732 | | | 78 | 830 | |
| 2012+24 | 2185 | | | 34 | 311 | |
| 2020+38 | 21727 | 1266 | | 691 | 1600 | |
| 2037+00 | 13182 | | | 324 | 1555 | |
| 2051+18 | 15368 | | | 181 | 1841 | |
| Sub-Total | 210368 | 1827 | 1472 | 3619 | 36774 | 420 |
| Borrow | 1827 | | | | | |
| Rounding | 4141 | | | | | |
| Totals | 216354 | | 1472 | 3619 | 36774 | 420 |

### CLEARING & GRUBBING

| Sheet No. | Clear | Grub |
|---|---|---|
| 3 | 252 | 131 |
| 4 | 271 | 119 |
| 5 | 301 | 128 |
| 6 | 307 | 144 |
| 7 | 599 | 377 |
| 8 | 471 | 239 |
| 9 | 248 | 118 |
| 10 | 670 | 29 |
| 11 | 362 | 186 |
| 12 | 550 | 281 |
| Total | 4034 units | 1712 |
| Acres | 46.3 | 19.7 |

### FERTILIZING & MULCHING

| Sheet No. | Sq. Ft. |
|---|---|
| 3 | 96450 |
| 4 | 182550 |
| 5 | 150850 |
| 6 | 159250 |
| 7 | 133780 |
| 8 | 98650 |
| 9 | 157050 |
| 10 | 147650 |
| 11 | 200200 |
| 12 | 138150 |
| Total Sq. Ft. | 1422550 |
| Acres | 32.7 |

### REMOVAL OF EXISTING STRUCTS. (Culvts.)

Removal of (19) Existing Struct. (Culvts.) as per Original Plans 19

Total 19

Lump Sum

### CONCRETE BOX CULVERTS

| Station | Skew | Size | Length | Cl B Conc. | Reinf. | Remarks |
|---|---|---|---|---|---|---|
| 1775+00 | 529 | 9'x5' | 47 | 55.4 | 5470 | |
| 1782+88 | Special | 21'x12' | 78.5 | 209.9 | 20390 | 25° Skew 9" Hdwll. 1' Fill Dwg. #G-409R |
| 1820+00 | 529 | 6'x6' | 54 | 43.1 | 3900 | 4' Fill 15" Hdwll. |
| 1867+15 | 529 | 5'x4' | 65 | 35.6 | 3900 | 7' Fill 15" Hdwll. |
| 1924+50 | Special | 2(9'x6') | 65.5 | 146.4 | 14990 | incl. Rem. Dwg. # G-390R |
| Totals | | | | 490.4 | 48050 | |

### REINFORCED CONCRETE CULVERT PIPE (CROSS ROAD)

| Station | Skew | 15" | 18" | 24" | 30" | 36" | Cl B Conc. | Reinf. | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1807+19 | 2-RC | | | | | | | | |
| 1811+50 | 2-RC | 50 | | | | 51 | 4.53 | 378 | incl. Removal |
| 1833+18 | 1-RC | | | | | | 1.28 | 106 | |
| 1839+78 | 2-RC | | | 78 | | | 2.26 | 222 | incl. Removal |
| 1875+76 | 1-RC | 62 | | 83 | | | 1.98 | 196 | incl. Removal |
| 1888+00 | 1-RC | | | 32 | | | 1.14 | 95 | |
| 1889+00 | 1-RC | 72 | | | | | 3.00 | 328 | 30° RA Skew |
| 1894+00 | 2-RC | 66 | | | | | 1.16 | 95 | |
| 1904+13 | 2-RC | | | 52 | | | 1.28 | 106 | |
| 1907+30 | 2-RC | | | | 57 | | 2.52 | 248 | |
| 1909+00 | 2-RC | 60 | | | | | 3.53 | 376 | |
| 1918+00 | 2-RC | | | | 79 | | 1.28 | 104 | |
| 1942+50 | 2-RC | | 96 | | | | 2.70 | 244 | |
| 1955+50 | 2-RC | 68 | | | | | 1.30 | 106 | |
| 1970+82 | 2-RC | 54 | | | | | 1.72 | 158 | 30° LA Skew |
| 1998+57 | 2-RC | 52 | | | | | 1.72 | 158 | 30° RA Skew incl. Rem. |
| 2012+60 | 2-RC | | | | | | 1.28 | 104 | incl. Removal |
| 2017+10 | 2-RC | | | | 83 | | 3.22 | 322 | 20° RA Skew |
| 2032+00 | 1-RC | | | | 108 | | 2.70 | 244 | |
| 2045+15 | 1-RC | | | 97 | | | 2.65 | 286 | 20° RA Skew |
| 2048+83 | 2-RC | | 81 | | | | 3.11 | 275 | |
| | | | | | | | 1.66 | 126 | |
| Totals | | 480 | 177 | 402 | 411 | 51 | 46.05 | 4195 | |
| U.S.E. | | 480 | 177 | 402 | 411 | 51 | 46.1 | 4200 | |

### REMOVAL OF EXISTING STRUCTURES (BRIDGE)

Removal of (2) Existing Structures (Bridges) as per Original Plans

| | |
|---|---|
| Total | 2 |
| Lump Sum | 1 |

### WATER FOR STABILIZED AGGREGATE

| Book No. | 2.2 gal. per sq. yd. | 2.4 gal. per sq. yd. |
|---|---|---|
| 1 | 1535 | |
| 2 | | 1485 |
| 3 | | 1500 |
| 4 | | 1470 |
| 5 | | 1470 |
| Sub Total | 1535 | 5925 |
| | | 1535 |
| Grand Total | | 7460 |

### LENGTH OF PROJECT

| | | | |
|---|---|---|---|
| End of Project | Station | 2051+18 | |
| Beginning of Project | Station | 1770+00 | |
| Apparent Length | | 28118.4 | Feet |
| Equations and Exceptions: | | | |
| Station 1928+00 to 1934+90 = -1090.0' | | | |
| Total Corrections | | -1090.0 | Feet |
| Net Length of Project | | 27028.4 | Feet |
| | State Length = | 5.119 | Miles |
| | Federal Length = | 5.119 | Miles |

### SPREADING, SHAPING & COMPACTING

| Station | to | Station | Lin. Ft. |
|---|---|---|---|
| 1770+00 | | 2051+18 | 28118.4 |
| Minus Proj. FG-51(11) | | | 1090.0 |
| Total Lin. Ft. | | | 27028.4 |
| Mile | | | 5.12 |

### BARRICADES

| Station | Loc. | No. |
|---|---|---|
| 1768+00 | a | 1 |
| 2022+00 | a | 1 |
| Total | | 2 |

### GENERAL SUMMARY

| ITEM NO. | DESCRIPTION | UNIT | TOTAL UNITS | NO. UNITS FED. AID ONLY |
|---|---|---|---|---|
| 1-A | Clearing | Acre | 46.3 | |
| 1-B | Grubbing | Acre | 19.7 | |
| 1-D | Class A Excavation | C.Y. | 216354 | |
| 1-DD | Stock Pile Borrow | C.Y. | 36774 | |
| 1-E | Class C Excavation | C.Y. | 1472 | |
| 1-L | Compacting In Cuts (Rolling) | C.Y. | 3619 | |
| 1-M | Overhaul | Sta. Yd. | 420 | |
| 1A-D | Machine Grading (Class I) | Sta. | 7.0 | |
| 1B-D | Crushed Stone Surface | C.Y. | 425 | |
| 16-B | Class B Concrete (Box Culvert) | C.Y. | 490.4 | |
| 16-B | Class B Concrete (Other than Box Culv.) | C.Y. | 46.1 | |
| 18-B | 15" Corrugated Metal Culv. Pipe (FBSR) | L.F. | 91.4 | |
| 18-B | 18" Corrugated Metal Culv. Pipe (FBSR) | L.F. | 60 | |
| 18-B | 36" Corrugated Metal Culv. Pipe (FBSR) | L.F. | 60 | |
| 18-C | 15" Reinf. Conc. Culv. Pipe (X-Rd.) | L.F. | 680 | |
| 18-C | 18" Reinf. Conc. Culv. Pipe (X-Rd.) | L.F. | 177 | |
| 18-C | 24" Reinf. Conc. Culv. Pipe (X-Rd.) | L.F. | 402 | |
| 18-C | 30" Reinf. Conc. Culv. Pipe (X-Rd.) | L.F. | 411 | |
| 18-C | 36" Reinf. Conc. Culv. Pipe (X-Rd.) | L.F. | 51 | |
| 19-A | Reinforcing Steel | Lb. | 52250 | |
| 28-A | Barricades | Each | 2 | |
| 29-C | Right of Way Markers | Each | 127 | |
| 33-A | Removal of (19) Exist. Struc. (Culvts.) | L.S. | 1 | |
| 33-A | Removal of (2) Exist. Struc. (Bridges) | L.S. | 1 | |
| 37-A | Fertilizing & Mulching | Acre | 32.7 | |
| | STABILIZED AGGREGATE BASE | | | |
| 1B-A | Water | 1000 Gal. | 7460 | |
| 3B-A | Stabilized Aggregate | Ton | 5004 | |
| 3B-B | Spreading, Shaping & Compacting | Mile | 5.12 | |
| 3B-B | Spreading, Shaping & Compacting | S.Y. | 621 | |
| | ASPHALTIC CONCRETE PAVEMENT | | | |
| 4C-A | Primer (RC-0) | Gal. | 29840 | |
| 7-B | Type B Asphaltic Concrete | Ton | 7250 | |
| 7-C | Type C Asphaltic Concrete | Ton | 3682 | |
| | SEAL COAT | | | |
| 10A-A | Bituminous Material (RC-4) | Gal. | 3710 | |
| 10A-B | Cover Material | Ton | 469 | |
| | BRIDGE AT STA. 1816+78.81, Dwg. No. L-482 | | | |
| 1-E | Class C Excav. for Structures | C.Y. | 267.5 | |
| 16-B | Class B Concrete | C.Y. | 177.3 | |
| 19-A | Reinforcing Steel | Lb. | 17110 | |
| 33-A | Removal of Exist. Struct. | L.S. | 1 | |
| | BRIDGE AT STA. 1859+19.35, Dwg. No. L-483 | | | |
| 1-E | Class C Excav. for Struct. | C.Y. | 785.0 | |
| 16-B | Class B Concrete | C.Y. | 173.9 | |
| 19-A | Reinforcing Steel | Lb. | 19980 | |
| | CONTINGENT ITEMS | | | |
| | Laying State Furnished Pipe | L.F. | 38 | |
| 29-D | Drain Markers | Each | 16 | |
| | Density Samples | Each | 32 | |
| | Class "A" Underdrains | L.F. | 484 | |

Prepared By C.E. Clark Date 5-19 1956 Checked in Div. Office By C.E. Hale Date 6/8 1956 Checked in Central Office By A.S.H. Date 6/20 1956 Revised By Date 19

LOCATION WEST PLAINS, SOUTHEASTERLY TO OREGON CO. LINE

TYPE 35' A.E. CULVTS, BRDGES, & 2.2" ASPH. CONC. PAVMT. ON STAB. BASE

# MISSOURI STATE HIGHWAY COMMISSION

## SUMMARY OF QUANTITIES

| FED. ROAD DIST. No. | STATE | PROJECT | FISCAL YEAR | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 5 | MO. | F-51 (12) | 1955 | 2-A | |
| DIV. No. | COUNTY | | | ROUTE | SEC. No. |
| 9 | HOWELL | | | 63 | |

### STABILIZED AGGREGATE

| Book No. | Pounds |
|---|---|
| 1 to 20 | 9816400 |
| 21-40 | 10188600 |
| 41-60 | 10071000 |
| 61-80 | 10245900 |
| 81-100 | 10191700 |
| 101-120 | 10110600 |
| 121-140 | 9946200 |
| 141-160 | 10042900 |
| 161-180 | 9743400 |
| 181-200 | 9881300 |
| 201-207 | 3195800 |
| Total Wet Wt. | 103373500 |
| Minus Water Add'd @ plant | 1278635 |
| Sub-Total | 102094865 |
| Minus Excess in Stpile | 2013210 |
| Total Lbs. | 100081655 |
| TONS | 50041 Tons |

### COVER MATERIAL

| Book No. | Tons |
|---|---|
| 1 | 206.315 |
| 2 | 234.265 |
| 3 | 28.740 |
| Total | 469.32 |
| Use | 469 |

### PRIMER RC-0

| Cat. | No. | Gal. Incl. | Gal. Used | Remarks |
|---|---|---|---|---|
| Gatx | 36595 | 9550 | 4895 | 4695 on F-41(1) |
| Gatx | 37588 | 9597 | 9597 | |
| Gatx | 37584 | 9642 | 9642 | |
| Gatx | 17917 | 9642 | 5743 | 1320 used on F-51(12); 2879 left in car |
| Total | | | 29837 | |
| Use | | | 29840 | |

### BITUMINOUS MATERIAL RC-4

| Cat. | No. | Gal. Incl. | Gal. Used | Remarks |
|---|---|---|---|---|
| Gatx | 4917 | 6942 | 5049 | 1893 left in car |
| Gatx | 4527 | 6308 | 4665 | 643 left in car |
| Total | | | 9714 | |
| Use | | | 9710 | |

### CUTTING TEST SAMPLES

| Station | Date | Mix | No. Samp. |
|---|---|---|---|
| 2044+50 | 11-10-55 | B | 1 |
| 2015+10 | 11-11-55 | B | 1 |
| 2002+16 | 11-12-55 | C | 2 |
| 1980+00 | 11-14-55 | B | 2 |
| 1952+50 | 11-15-55 | B | 1 |
| 1911+10 | 11-18-55 | B | 2 |
| 1906+95 | 11-19-55 | B | 1 |
| 1877+02 | 11-22-55 | B | 1 |
| 1850+37 | 11-21-55 | B | 1 |
| 1931+38 | 11-22-55 | B | 2 |
| 1799+58 | 11-23-55 | B | 2 |
| 1774+55 | 11-24-55 | B | 1 |
| 1988+06 | 11-25-55 | C | 2 |
| 1967+95 | 11-26-55 | C | 1 |
| 1950+00 | 11-27-55 | C | 2 |
| 1911+18 | 12-6-55 | C | 1 |
| 1909+80 | 12-7-55 | C | 1 |
| 1891+14 | 12-12-55 | C | 2 |
| 1855+98 | 3-22-56 | C | 2 |
| 1855+65 | 3-23-56 | C | 1 |
| 1914+55 | 3-24-56 | C | 2 |
| 1909+82 | 3-26-56 | C | 1 |
| 1775+68 | 3-27-56 | C | 1 |
| Total | | | 32 |

### TYPE B ASPHALTIC CONC.

| Book No. | Tons |
|---|---|
| 1 | 257.975 |
| 2 | 261.325 |
| 3 | 263.675 |
| 4 | 259.500 |
| 5 | 266.825 |
| 6 | 262.725 |
| 7 | 260.900 |
| 8 | 265.425 |
| 9 | 276.125 |
| 10 | 272.850 |
| 11 | 266.600 |
| 12 | 277.200 |
| 13 | 274.950 |
| 14 | 279.200 |
| 15 | 274.300 |
| 16 | 278.575 |
| 17 | 274.225 |
| 18 | 270.850 |
| 19 | 271.975 |
| 20 | 264.125 |
| 21 | 275.800 |
| 22 | 272.925 |
| 23 | 274.250 |
| 24 | 271.325 |
| 25 | 270.850 |
| 26 | 274.600 |
| 27 | 227.350 |
| Total | 7249.525 |
| Use | 7250 |

### TYPE C ASPHALTIC CONC.

| Book No. | Tons |
|---|---|
| 1 | 273.800 |
| 2 | 271.775 |
| 3 | 270.325 |
| 4 | 270.950 |
| 5 | 278.875 |
| 6 | 272.450 |
| 7 | 273.850 |
| 8 | 274.125 |
| 9 | 273.925 |
| 10 | 274.075 |
| 11 | 273.800 |
| 12 | 269.750 |
| 13 | 269.050 |
| 14 | 261.610 |
| 15 | 257.100 |
| 16 | 261.225 |
| 17 | 256.975 |
| 18 | 253.375 |
| 19 | 253.600 |
| 20 | 264.350 |
| 21 | 127.150 |
| Total | 5481.533 |
| Use | 5482 |

### CORRUGATED METAL CULVERT PIPE & APPROACHES - B.&S.R.

| Station | Type & Loc. | 15" | 18" | 36" | Sizes Furnished | MA Ell | Start Cut | Spr. Stone | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1780+50 | FE. Rt. | | | | | | | | Crown |
| 1780+50 | FE. Lt. | | | | | | | | Crown |
| 1789+75 | PE. Lt. | 30' | | | | | | | |
| 1790+87 | PE. Rt. | 28' | | | | | | | |
| 1792+27 | SR. Rt. | 44' | 34' | | | | 10 | | |
| 1798+50 | PE. Lt. | 28' | | | | | 5 | | |
| 1814+90 | PE. Rt. | 28' | | | | 4.0 | 30 | | 18" Pipe 170' Rt. |
| 1836+68 | SR. Lt. | 44' | | | | | 40 | | |
| 1842+00 | PE. Rt. | 28' | | | | | 3 | | |
| 1843+00 | PE. Lt. | 28' | | | | | 10 | | |
| 1847+50 | PE. Rt. | 28' | | | | | 10 | | |
| 1849+00 | FE. Lt. | 28' | | | | | 10 | | |
| 1859+13 | SR. Lt. | | | 60' | | | 5 | | |
| 1859+28 | SR. Rt. | | | | | | 18 | | |
| 1859+28 | FE. Rt. | | 26' | | | | 61 | | DB. |
| 1872+00 | SR. Lt. | | | | | | | | Sta. 4+50 Lt. of Ice |
| 1877+50 | FE. Rt. | | | | | | 47 | | Divert Drainage |
| 1886+00 | FE. Rt. | | | | | | | | DB. |
| 1886+50 | FE. Lt. | | | | | | | | N.D. |
| 1893+00 | FE. Lt. | | | | | | | | N.D. |
| 1893+00 | FE. Rt. | | | | | | | | Crown |
| 1908+00 | FE. Rt. | | | | | | | | Crown |
| 1908+00 | FE. Lt. | | | | | | | | DB. |
| 1936+50 | SR. Lt. | 44' | | | | | 30 | | N.D. |
| 1945+00 | FE. Rt. | | | | | | | | |
| 1945+00 | FE. Lt. | | | | | | | | N.D. |
| 1950+00 | FE. Lt. | 28' | | | | | | | N.D. |
| 1955+60 | FE. Rt. | | | | | | | | |
| 1956+50 | FE. Lt. | | | | | | | | DB. |
| 1959+50 | PE. Rt. | 28' | | | | | 7 | | N.D. |
| 1970+45 | PE. Rt. | | | | | | 8 | | |
| 1970+45 | PE. Lt. | | | | | | 8 | | DB |
| 1988+92 | SR. Rt. | 52' | | | | | | | N.D. |
| 1988+92 | SR. Lt. | 50' | | | | | 7 | | |
| 1996+00 | PE. Lt. | 28' | | | | | 10 | | |
| 1997+00 | FE. Rt. | 30' | | | | | 5 | | |
| 1998+30 | FE. Rt. | | | | | | | | |
| 2004+68 | SR. Rt. | 52' | | | | | | | DB |
| 2004+68 | SR. Lt. | 52' | | | | | 17 | | |
| 2005+00 | PE. Lt. | 28' | | | | | 18 | | |
| 2006+72 | PE. Lt. | 28' | | | | | 13 | | |
| 2008+35 | SR. Rt. | | | | | 18 | 20 | | Sewer Sta. Ent. |
| 2008+35 | SR. Lt. | | | | | 20 | 15 | | Sewer Sta. Ent. |
| 2015+75 | PE. Rt. | | | | | | | 621 | Force |
| 2019+75 | SR. Lt. | 46' | | | | | 7 | | N.D. |
| 2019+75 | FE. Rt. | 26' | | | | | 16 | | Crown |
| 2028+50 | FE. Rt. | 26' | | | | | 33 | | |
| 2028+50 | FE. Lt. | 26' | | | | 3.0 | | | |
| 2037+00 | FE. Rt. | 26' | | | | | | | |
| 2037+00 | FE. Lt. | 30' | | | | | | | |
| 2045+75 | FE. Rt. | | | | | | | | DB. |
| Totals | | 914' | 60' | 60' | 38' | 7.0' | 445' | 621' | |

### CLASS A UNDERDRAINS

| Station | LF | No. Mtrs. | Side |
|---|---|---|---|
| 1777+50 | 56 | 2 | Rt. & Lt. |
| 1779+00 | 54 | 1 | Lt. |
| 1788+00 | 56 | 2 | Rt. & Lt. |
| 1830+50 | 56 | 2 | Rt. & Lt. |
| 1832+00 | 56 | 2 | Rt. & Lt. |
| 1946+50 | 44 | 1 | Rt. |
| 1949+90 | 56 | 2 | Rt. & Lt. |
| 2020+70 | 56 | 2 | Rt. & Lt. |
| 2022+94 | 50 | 2 | Rt. & Lt. |
| Totals | 484 | 16 | |

### LENGTH OF PROJECT

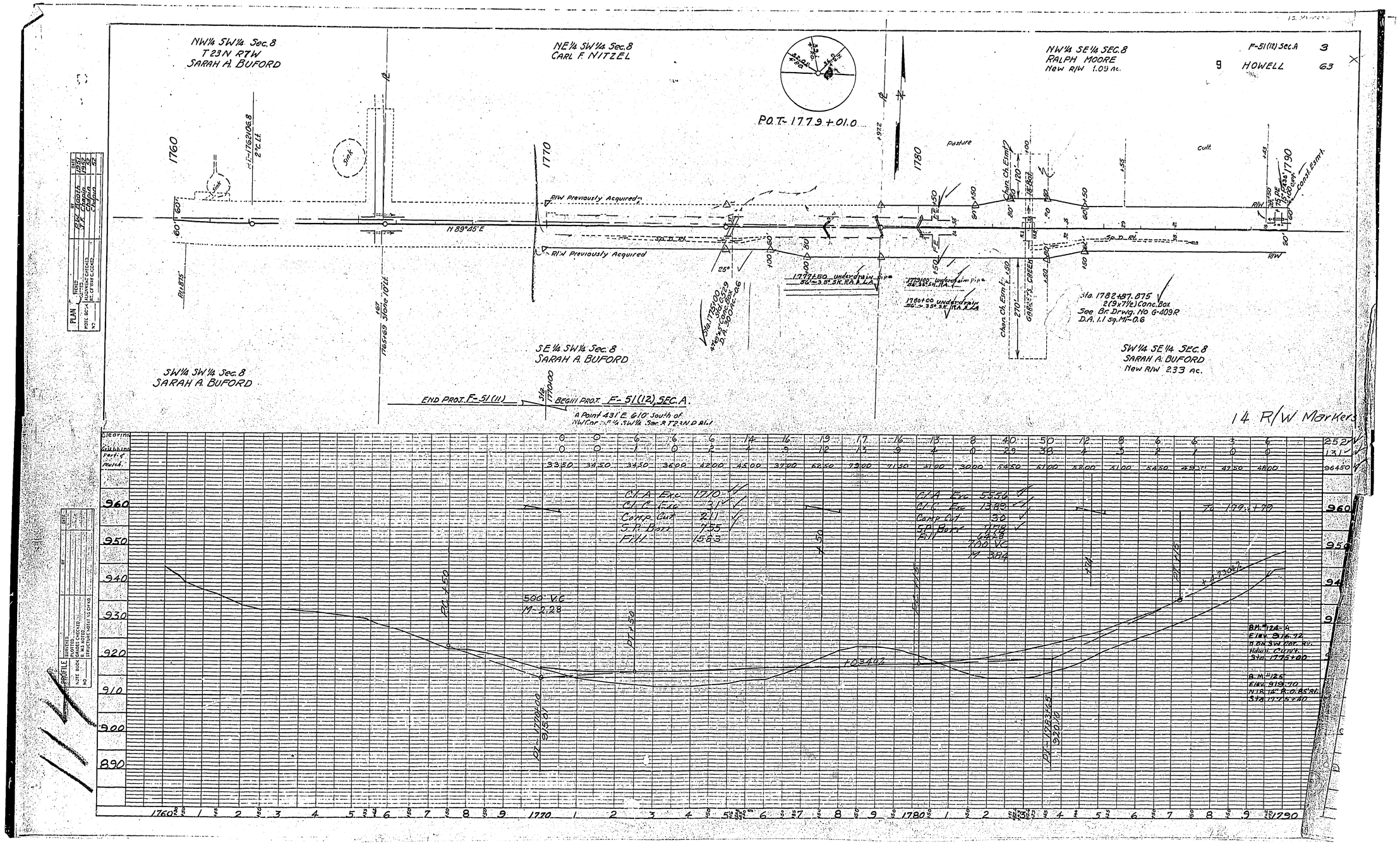
| | | |
|---|---|---|
| End of Project | Station | |
| Beginning of Project | Station | |
| Apparent Length | | Feet |
| Equations and Exceptions: | | |
| See Next Sheet | | |
| Total Corrections | | Feet |
| Net Length of Project | | Feet |
| State Length = | | Miles |
| Federal Length = | | Miles |

### GENERAL SUMMARY

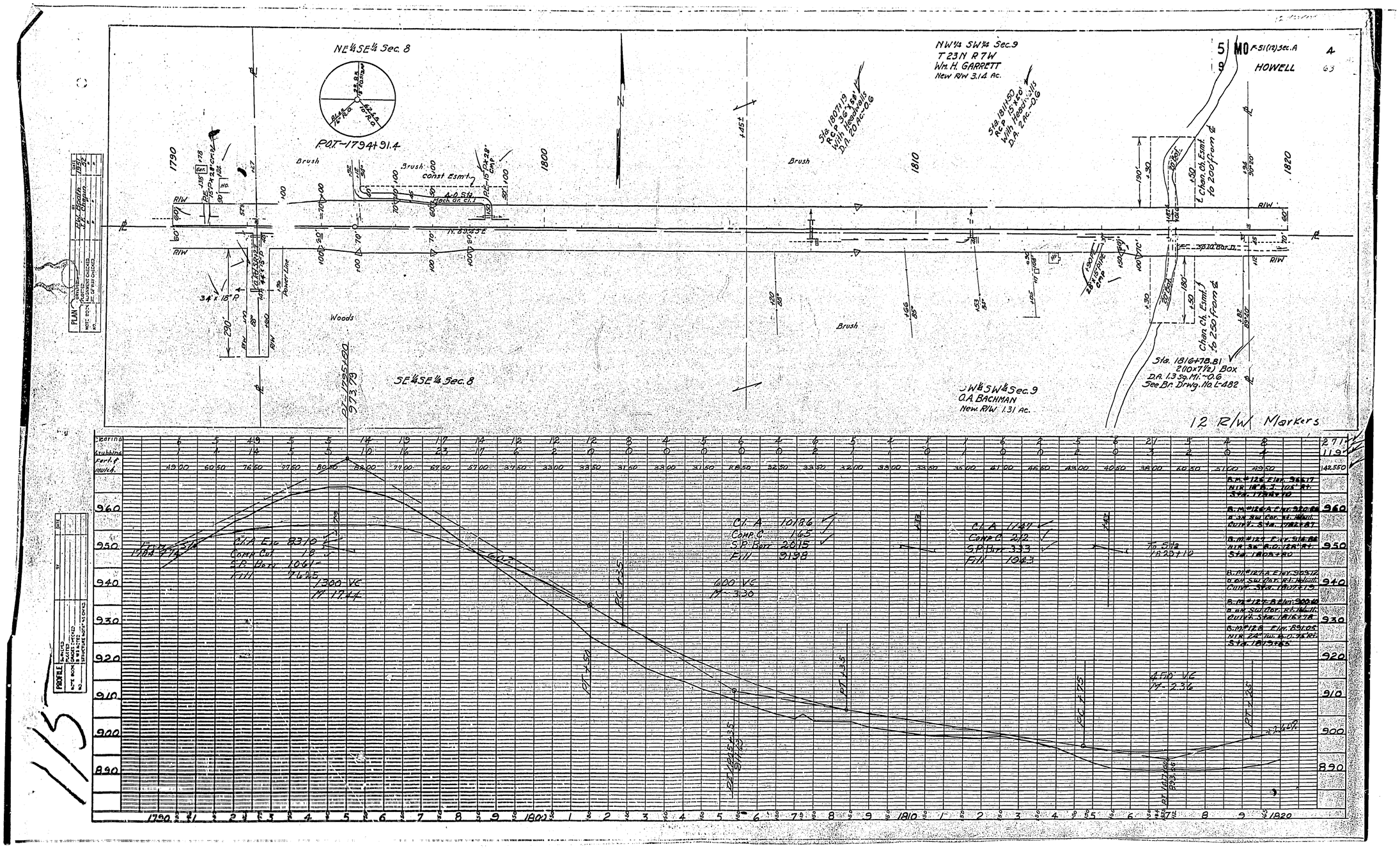
| ITEM NO. | DESCRIPTION | UNIT | TOTAL UNITS | NO. UNITS FED. AID ONLY |
|---|---|---|---|---|
| | RIGHT OF WAY MARKERS | | | |
| | Station Side No. Mtrs. | | | |
| | 1770+00 Rt. & Lt. 2 | | | |
| | 1770+75 Rt. & Lt. 2 | | | |
| | 1776+00 Rt. 1 | | | |
| | 1777+00 Rt. 1 | | | |
| | 1779+00 Rt. & Lt. 2 | | | |
| | 1781+50 Lt. 1 | | | |
| | 1782+50 Lt. 1 | | | |
| | 1783+50 Rt. & Lt. 2 | | | |
| | 1788+50 Rt. & Lt. 2 | | | |
| | 1793+00 Lt. 1 | | | |
| | 1794+00 Rt. & Lt. 2 | | | |
| | 1795+00 Rt. 1 | | | |
| | 1796+00 Lt. 1 | | | |
| | 1797+00 Rt. & Lt. 2 | | | |
| | 1798+00 Rt. 1 | | | |
| | 1808+50 Rt. & Lt. 2 | | | |
| | 1815+50 Rt. 1 | | | |
| | 1816+00 Rt. 1 | | | |
| | 1820+00 Rt. 1 | | | |
| | 1821+00 Rt. 1 | | | |
| | 1830+18 Rt. & Lt. 2 | | | |
| | 1832+00 Rt. 1 | | | |
| | 1833+00 Rt. 1 | | | |
| | 1846+00 Rt. & Lt. 2 | | | |
| | 1846+50 Rt. 1 | | | |
| | 1858+88 Lt. 2 | | | |
| | 1858+58 Rt. 2 | | | |
| | 1859+58 Rt. & Lt. 2 | | | |
| | 1862+82 Rt. & Lt. 2 | | | |
| | 1871+60 Lt. 2 | | | |
| | 1872+00 Rt. 1 | | | |
| | 1872+80 Lt. 2 | | | |
| | 1872+50 Rt. 1 | | | |
| | 1874+00 Rt. & Lt. 2 | | | |
| | 1895+00 Rt. & Lt. 2 | | | |
| | 1883+18 Rt. & Lt. 2 | | | |
| | 1886+02 Rt. & Lt. 2 | | | |
| | 1892+32 Rt. & Lt. 2 | | | |
| | 1897+87 Rt. & Lt. 2 | | | |
| | 1910+00 Rt. & Lt. 2 | | | |
| | 1910+50 Rt. & Lt. 2 | | | |
| | 1912+00 Lt. 1 | | | |
| | 1912+50 Lt. 1 | | | |
| | 1918+00 Rt. 1 | | | |
| | 1918+00 Rt. 1 | | | |
| | 1921+98 Rt. & Lt. 2 | | | |
| | 1936+00 Rt. 1 | | | |
| | 1936+10 Lt. 2 | | | |
| | 1936+00 Lt. 2 | | | |
| | 1937+00 Rt. 1 | | | |
| | 1943+00 Rt. 1 | | | |
| | 1964+00 Rt. 1 | | | |
| | 1968+00 Lt. 1 | | | |
| | 1968+00 Rt. & Lt. 2 | | | |
| | 1969+00 Lt. 1 | | | |
| | 1969+35 Rt. & Lt. 2 | | | |
| | 1974+00 Rt. 1 | | | |
| | 1975+00 Rt. 1 | | | |
| | 1975+81 Rt. & Lt. 2 | | | |
| | 1985+00 Rt. 1 | | | |
| | 1986+00 Rt. 1 | | | |
| | 1991+00 Lt. 1 | | | |
| | 1997+00 Lt. 1 | | | |
| | 1995+00 Lt. 1 | | | |
| | 1996+00 Lt. 1 | | | |
| | 1998+57 Rt. & Lt. 2 | | | |
| | 2004+72 Rt. & Lt. 2 | | | |
| | 2014+49 Rt. 2 | | | |
| | 2015+00 Lt. 1 | | | |
| | 2016+00 Rt. & Lt. 2 | | | |
| | 2017+00 Rt. 1 | | | |
| | 2018+35 Lt. 2 | | | |
| | 2020+15 Lt. 2 | | | |
| | 2021+00 Lt. 1 | | | |
| | 2022+00 Lt. 1 | | | |
| | 2023+00 Lt. 1 | | | |
| | 2023+50 Rt. 1 | | | |
| | 2024+00 Lt. 1 | | | |
| | 2026+00 Rt. 1 | | | |
| | 2032+29 Rt. & Lt. 2 | | | |
| | CONTINUED | | | |

| ITEM NO. | DESCRIPTION | UNIT | TOTAL UNITS | NO. UNITS FED. AID ONLY |
|---|---|---|---|---|
| | RW MKRS. CONT. | | | |
| | Station Side No. Mtrs. | | | |
| | 2040+00 Rt. 1 | | | |
| | 2041+00 Rt. 1 | | | |
| | 2041+38.9 Lt. 1 | | | |
| | 2046+00 Rt. 1 | | | |
| | 2047+02 Lt. 1 | | | |
| | 2047+50 Rt. 1 | | | |
| | 2048+50 Rt. 1 | | | |
| | 2051+18 Rt. 1 | | | |
| | Total | | 187 | |

Prepared By O.E. Chief Date 5-22 19 56 Checked in Div. Office By C.E. Hale Date 6/18 19 56 Checked in Central Office By Date 19 Revised By Date 19

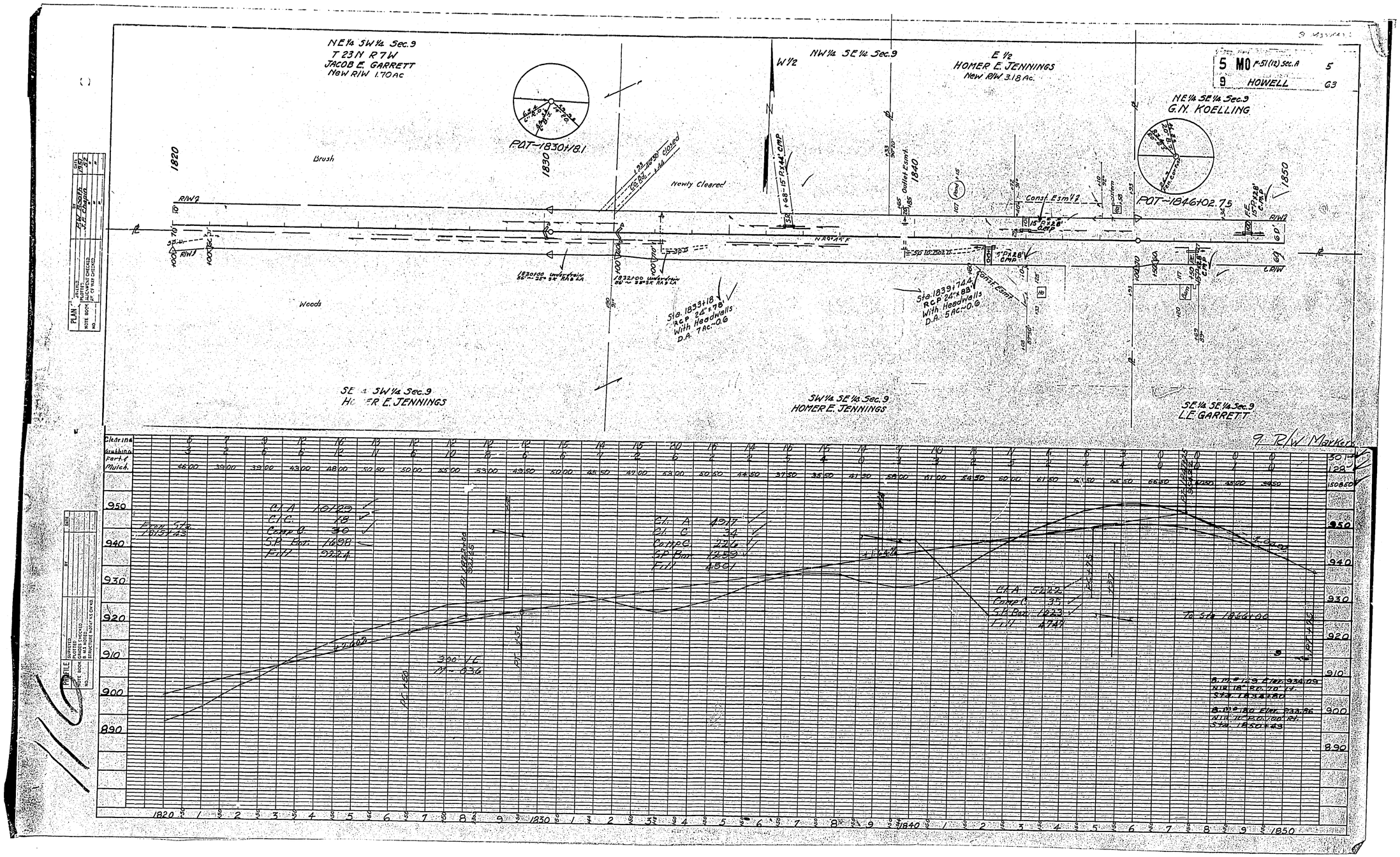

NW¼ SW¼ Sec. 8
T 23 N R 7 W
SARAH A. BUFORD
NE¼ SW¼ Sec. 8
CARL F. NITZEL
NW¼ SE¼ SEC. 8
RALPH MOORE
New R/W 1.09 ac.
F-51(12) Sec. A 3
9 HOWELL 63
P.O.T.- 177.9 + 01.0
Pasture
Cult.
R/W Previously Acquired
N 89°45' E
Sta. 1782+87.875
2(9'x7½') Conc. Box
See Br. Drwg. No. G-409R
D.A. 1.1 Sq. Mi.-0.6
SW¼ SE¼ SEC. 8
SARAH A. BUFORD
New R/W 2.33 ac.
SW¼ SW¼ Sec. 8
SARAH A. BUFORD
SE¼ SW¼ Sec. 8
SARAH A. BUFORD
END PROJ. F-51(11)
BEGIN PROJ. F-51(12), SEC. A.
A Point 431' E. 610' South of
NW Cor. of ¼ SW¼ Sec. 8 T23N R7W
14 R/W Markers
Clearing
Grubbing
Cl.-A Exc. 1710
Cl.-C Exc. 31
Comp. Cut 211
S.P. Borr. 755
Fill 1583
Cl.-A Exc. 5550
Cl.-C Exc. 1382
Comp. Cut 50
S.P. Borr. 1419
Fill 6618
500' V.C.
M-2.28
To 179+01.0
B.M. #12-A
Elev. 916.72
B.M. #12B
Elev. 919.70

504

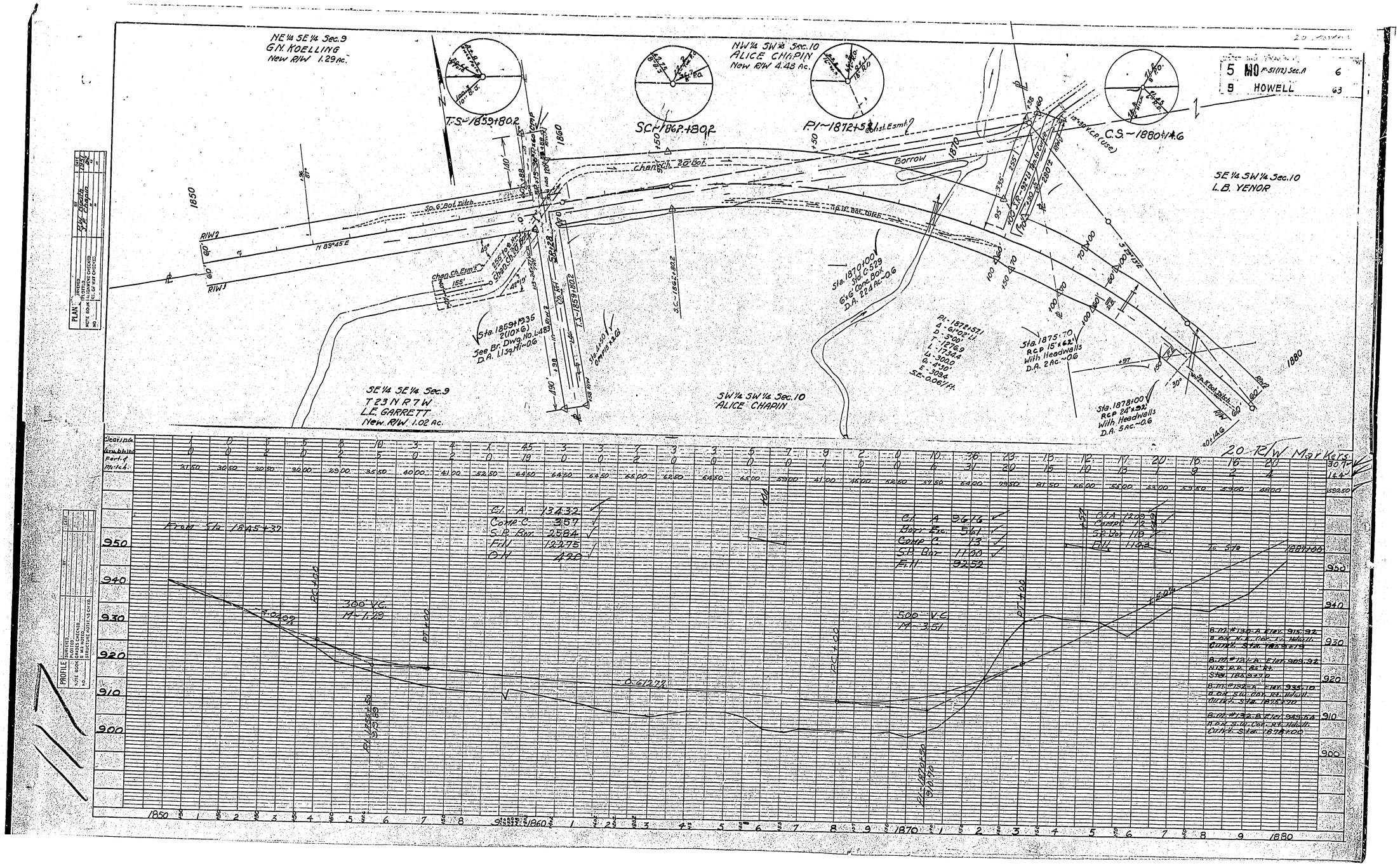

NE¼SE¼ Sec. 8
PAT-1794+91.4
NW¼ SW¼ Sec. 9
T 23 N R 7 W
Wm. H. GARRETT
New R/W 3.14 Ac.
MO F-51(12) Sec. A
HOWELL
Brush
Woods
Const Esmt.
Power Line
34" x 18" P.
SE¼SE¼ Sec. 8
PAT-1795+00
973.79
SW¼SW¼ Sec. 9
O.A. BACHMAN
New R/W 1.31 Ac.
Sta. 1807+19
R.C.P. 36" x 54"
With Headwalls
D.A. 2.0 Ac.-0.6
Sta. 1811+50
R.C.P. 15" x 26"
With Headwalls
D.A. 2 Ac.-0.6
Sta. 1816+78.81
2(10'x7½') Box
D.A. 1.3 Sq. Mi.-0.6
See Br. Drwg. No. L-482
℄ Chan. Ch. Esmt. to 200' from ℄
Chan. Ch. Esmt. to 250' from ℄
12 R/W Markers
Clearing
Grubbing
Fert. & Mulch.
Cl. A 10186
Comp. C 165
S.P. Bor. 2015
Fill 9198
1300 VC
Cl. A 1247
Comp. C 212
S.P. Bor. 333
Fill 1043
400 VC
Cl. A 8310
Comp. C 18
S.P. Bor. 1061
Fill 7685
600 VC
To 5+12
PROFILE
PLAN

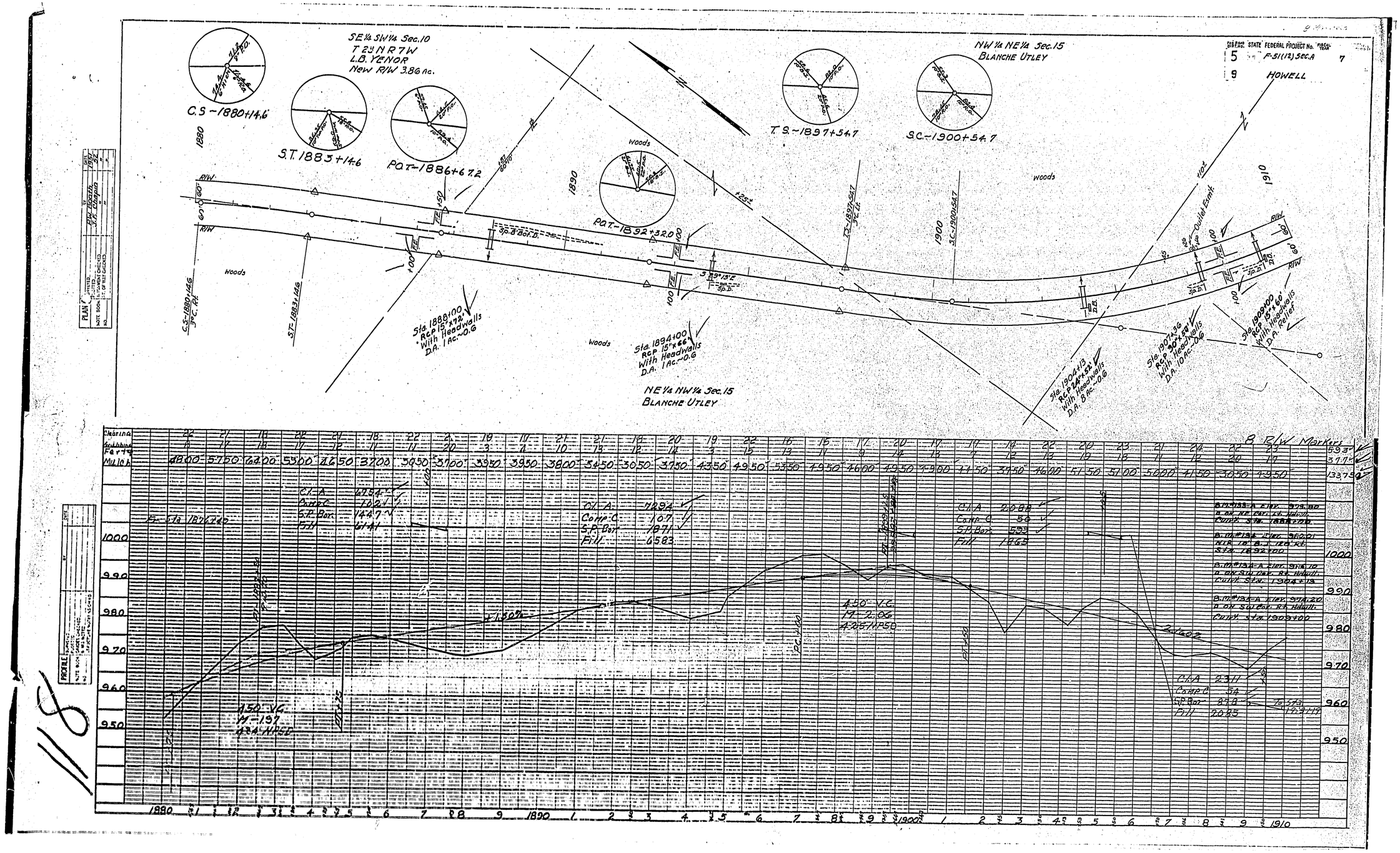
113

504


NE¼ SW¼ Sec. 9
T 23 N R 7 W
JACOB E. GARRETT
New R/W 1.70 Ac
NW¼ SE¼ Sec. 9
W½
E ½
HOMER E. JENNINGS
New R/W 3.18 Ac.
5 MO
9 HOWELL
NE¼ SE¼ Sec. 9
G.N. KOELLING
POT-1830+18.1
POT-1846+02.75
Brush
Newly Cleared
Woods
Const. Esm't
Sta. 1833+18
RCP 24" x 78'
With Headwalls
D.A. 7 Ac.-0.6
Sta. 1839+44
RCP 24" x 88'
With Headwalls
D.A. 5 Ac.-0.6
SE¼ SW¼ Sec. 9
HOMER E. JENNINGS
SW¼ SE¼ Sec. 9
HOMER E. JENNINGS
SE¼ SE¼ Sec. 9
L.E. GARRETT
9 R/W Markers
Clearing
Grubbing
Perf. Mulch
C.A. 1012.0
C.C. 18
Comp C. 30
SP Box 1698
Fill 922.4
C.A. 1017
C.C. 34
Comp C 226
SP Box 1259
Fill 4801
C.A. 5222
Comp C. 35
SP Box 1823
Fill 4747
To Sta 1846+00
300' VC
M-836
PLAN
PROFILE

504


5 MO F-51(12) Sec.A 6
9 HOWELL 63
NE¼ SE¼ Sec.9
G.N. KOELLING
New R/W 1.29 Ac.
NW¼ SW¼ Sec.10
ALICE CHAPIN
New R/W 4.48 Ac.
SE¼ SW¼ Sec.10
L.B. YENOR
SE¼ SE¼ Sec.9
T 23 N R 7 W
L.E. GARRETT
New R/W 1.02 Ac.
SW¼ SW¼ Sec.10
ALICE CHAPIN
T.S.~1859+80.2
SC~1861+80.2
PI~1872+5 & 1st Esmt
C.S.~1880+14.6
Chan. Ch. 30' Bot.
Borrow
Sp. 6' Bot. Ditch
16' W. Bot. Ditch
N 89°45' E
Chan. Ch. Esmt
Sta. 1869+12.35
2(10'x6')
See Br. Dwg. No. L-483
D.A. 1.139 Mi.~0.6
Sta. 1870+00
3-Cd. C.S.P.
6'x6' Conc. Box
D.A. 22.4 Ac.~0.6
PI-1872+57.1
Δ-61°02'Lt.
D-5°00'
T-1276.9
L-2344
Lc-3000
R-4500
E-3094
S.E.-0.061 ft.
Sta. 1875+70
R.C.P. 15"x62'
With Headwalls
D.A. 2 Ac.~0.6
Sta. 1878+00
R.C.P. 24"x92'
With Headwalls
D.A. 5 Ac.~0.6
Sp. 4' Bot. Ditch
20' R/W Markers
From Sta. 1845+37
Cl. A. 1343.2
Comp. C. 357
S.B. Bar. 2584
F.M. 1227.5
O.H. 420
Cl. A 961.6
Borr. Exc. 561
Comp. C. 13
S.B. Bar. 1100
F.M. 925.2
Cl. A 1200
Comp. C. 12
S.B. Bar. 110
F.M. 1102
To Sta. 1889+00
300' V.C.
K-1.29
500' V.C.
K-3.51
B.M. #130-A Elev. 915.92
B.M. #132-A Elev. 935.10
B.M. #132-B Elev. 945.54


SE¼ SW¼ Sec.10
T 23 N R 7 W
L.B. YENOR
New R/W 3.86 ac.
NW¼ NE¼ Sec.15
BLANCHE UTLEY
STATE FEDERAL PROJECT No.
F-51(12) Sec.A
HOWELL
C.S.-1880+14.6
S.T. 1883+14.6
P.O.T.-1886+67.2
P.O.T.-1892+32.0
T.S.-1897+54.7
S.C.-1900+54.7
Woods
R/W
Sta. 1888+00
RCP 15"x72"
With Headwalls
D.A. 1 Ac.-0.6
Sta. 1894+00
RCP 15"x66"
With Headwalls
D.A. 1 Ac.-0.6
NE¼ NW¼ Sec.15
BLANCHE UTLEY
Sta. 1904+13
RCP 24"x52"
With Headwalls
D.A. 8 Ac.-0.6
Sta. 1907+56
RCP 30"x52"
With Headwalls
D.A. 10 Ac.-0.6
Sta. 1909+00
RCP 15"x60"
With Headwalls
D.A. Relief
Clearing
Grubbing
Earth
Mulch
8 R/W Markers
C.L.A.
Comp. C
S.P. Box
Fill
450' V.C.
450' V.C.
PROFILE

118

16 Markers

| FED. ROAD DIST. NO. | STATE | FEDERAL PROJECT No. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 5 | MO | F-51(12) | | 8 | |
| DIV. NO. | COUNTY | | | ROUTE | SEC. |
| 9 | HOWELL | | | 63 | |

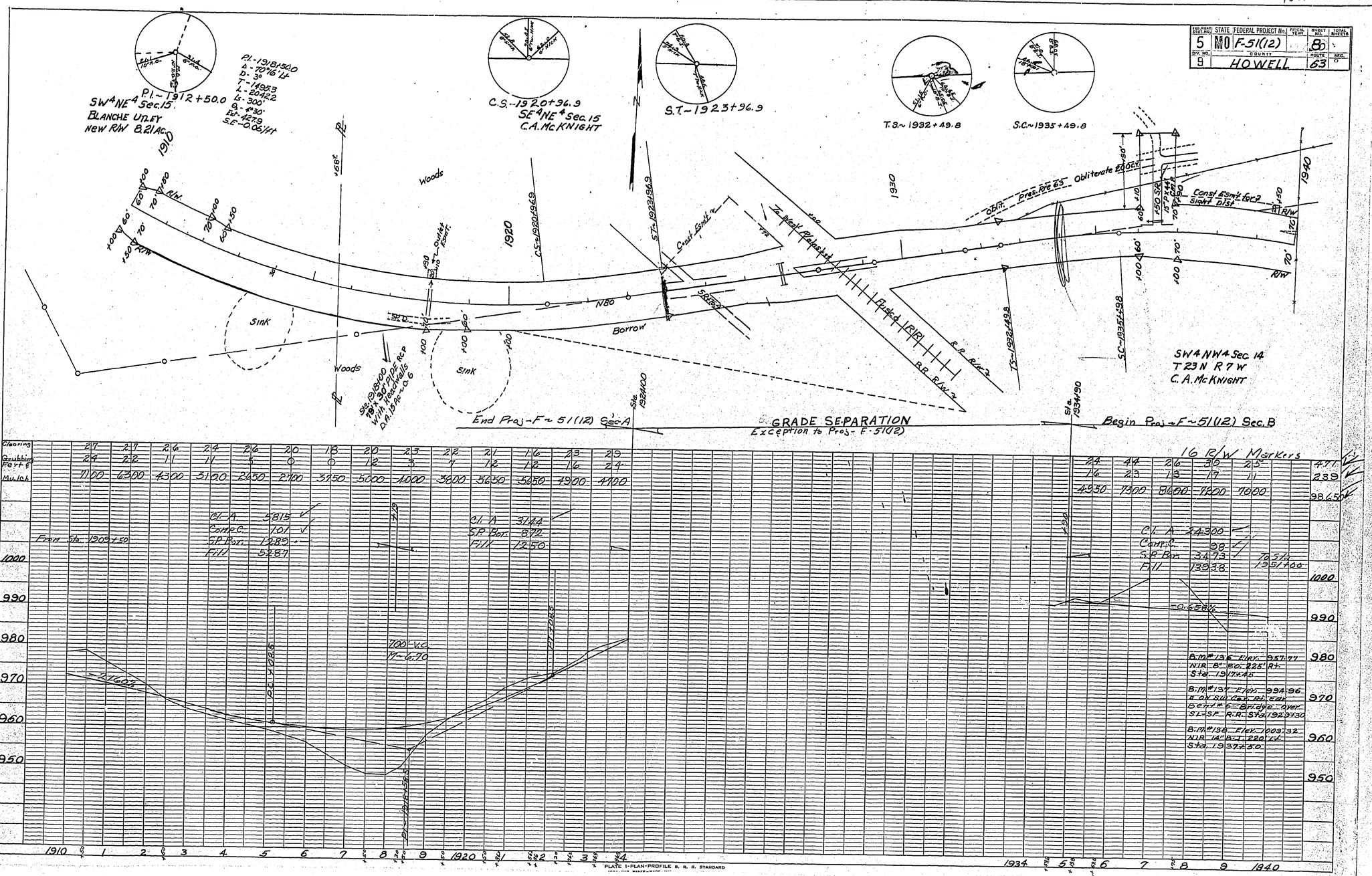
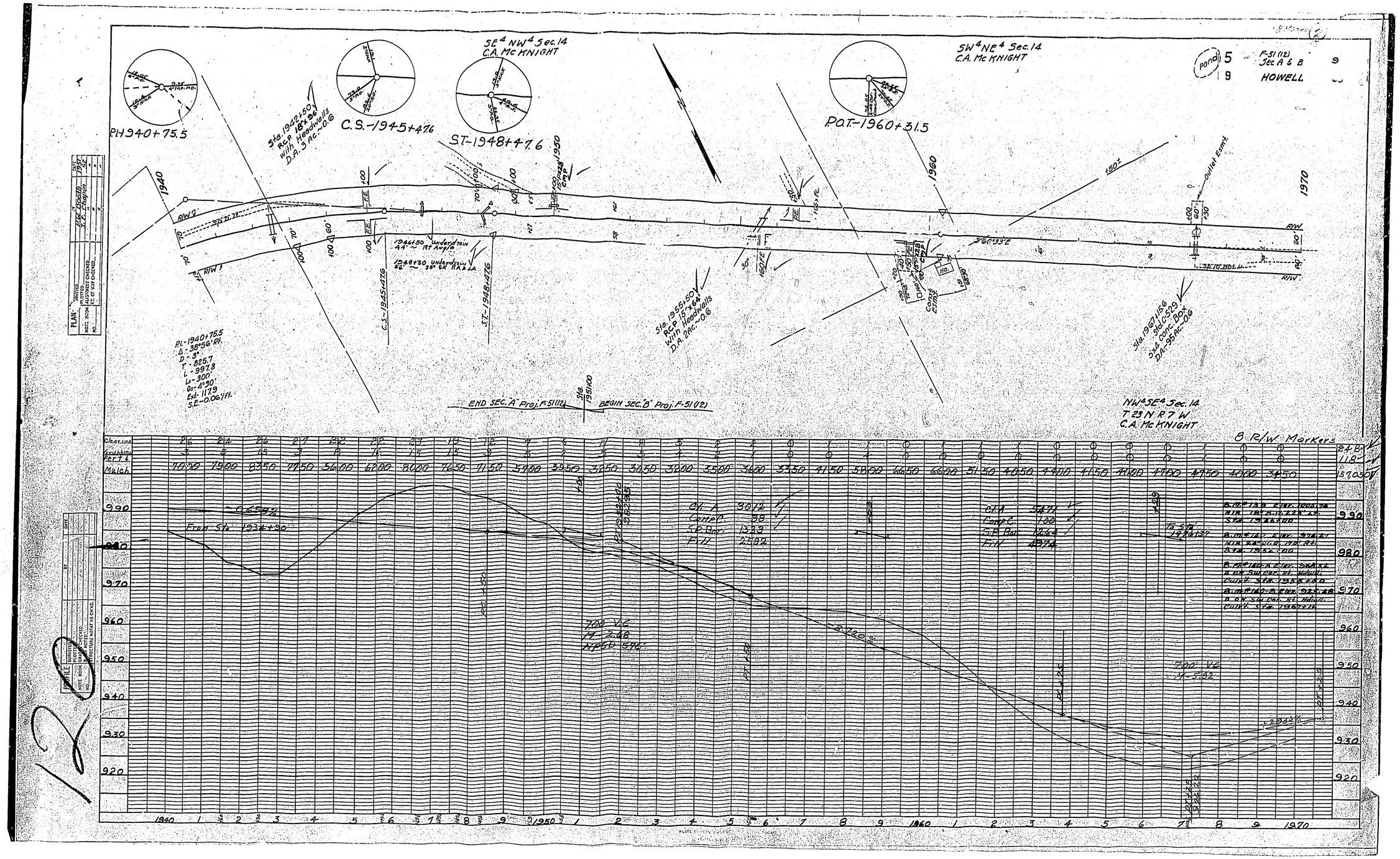



PLATE 1-PLAN-PROFILE B. R. R. STANDARD

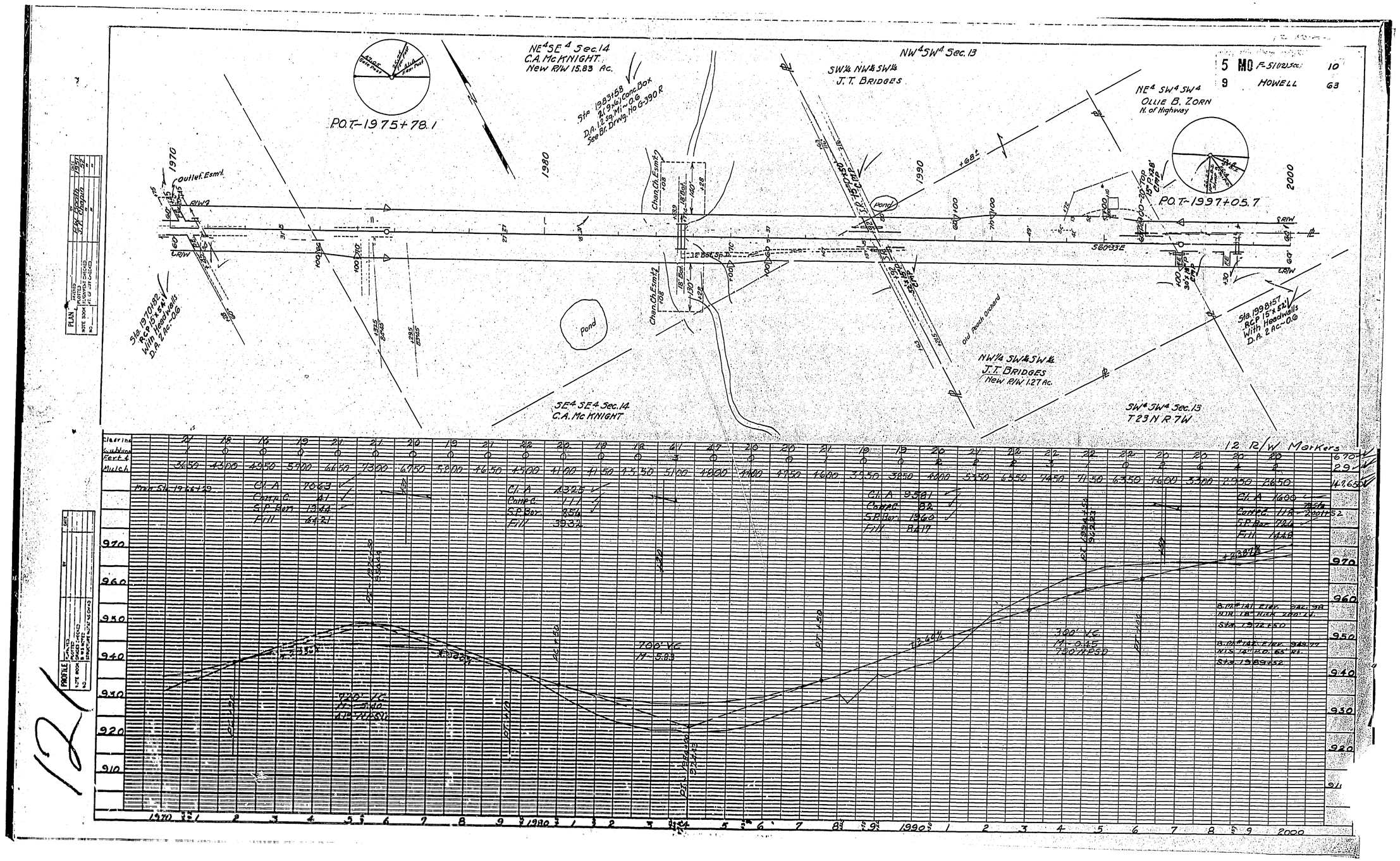
PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, ALIGNMENT CHECKED, EL. OF RAY CHECKED, NOTE BOOK NO., BY, DATE

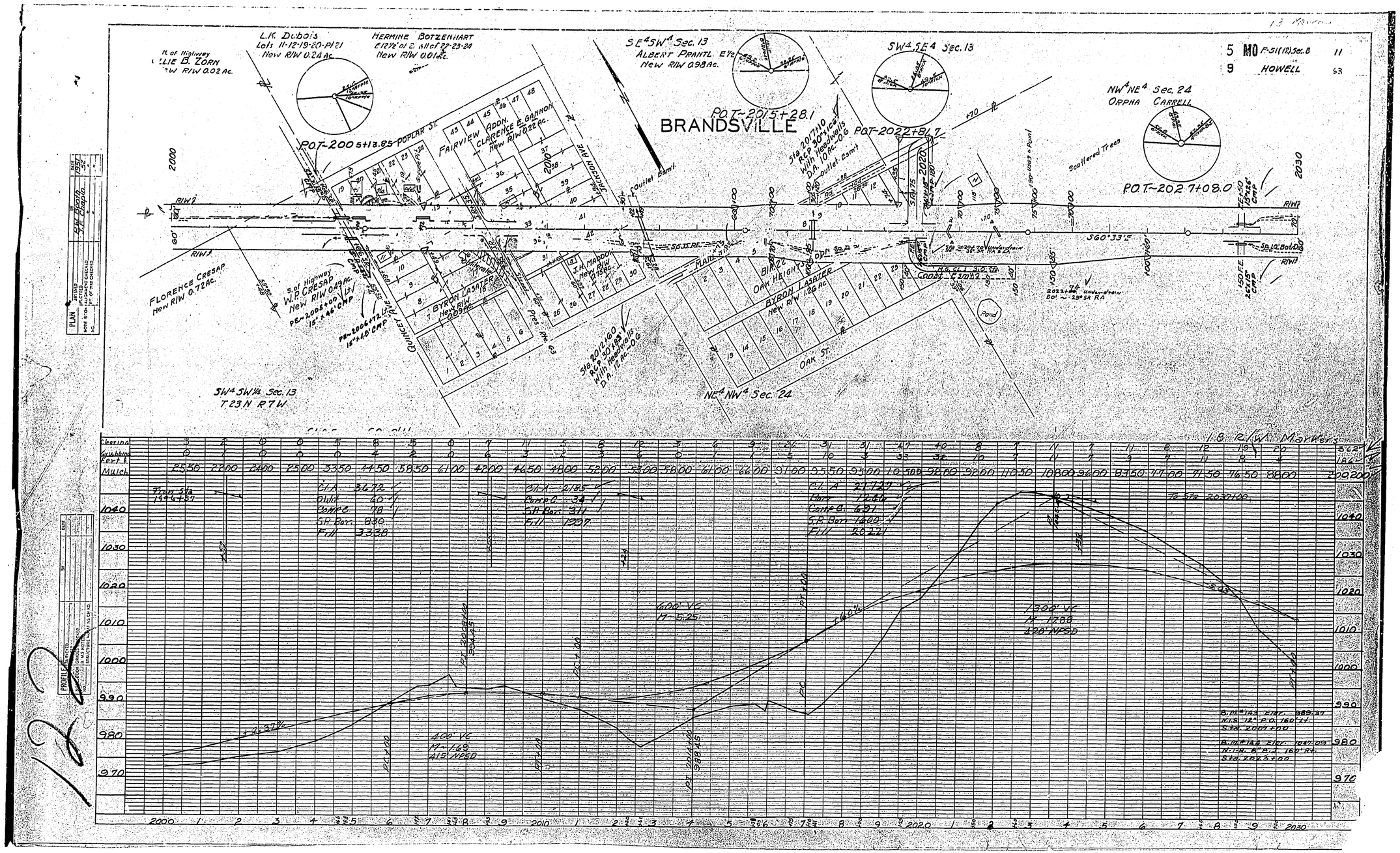
PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B. M. NOTED, STRUCTURES REVIEWED, NOTE BOOK NO., BY, DATE

504

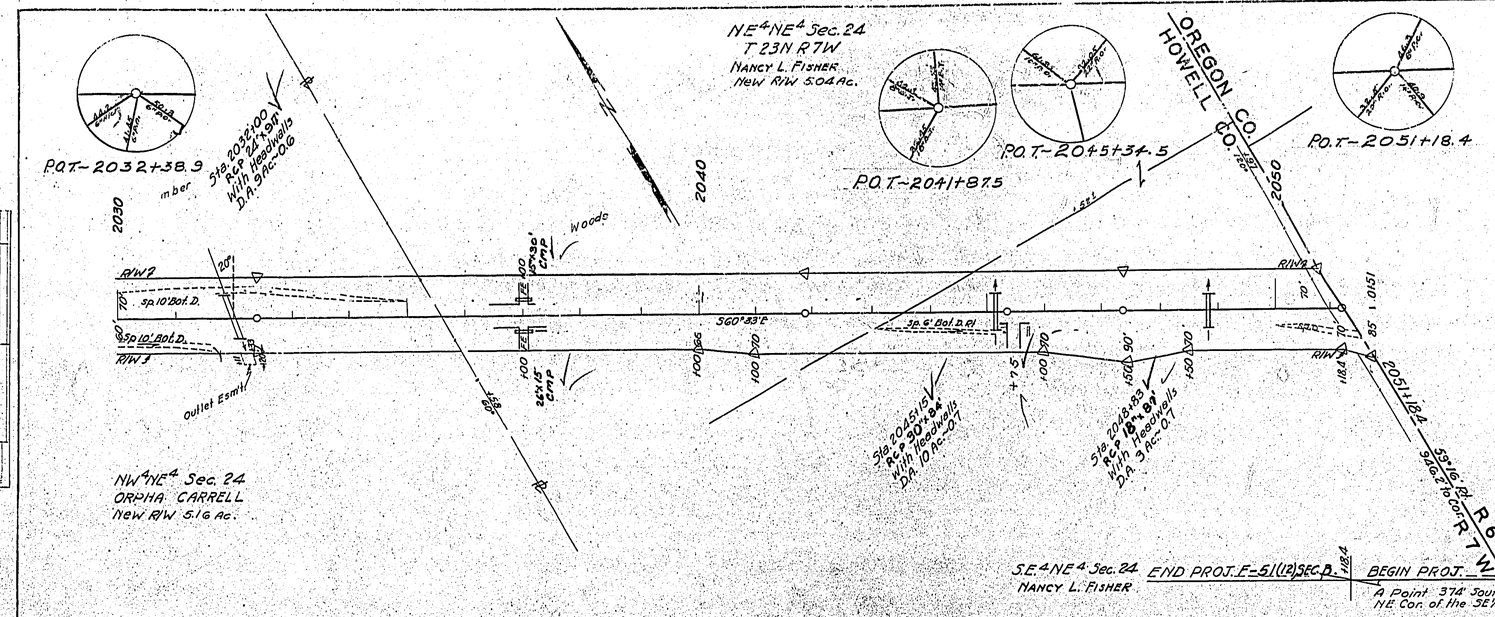

SE¼ NW¼ Sec. 14
C.A. McKNIGHT
SW¼ NE¼ Sec. 14
C.A. McKNIGHT
pond 5 9
F-51(12) Sec A & B
HOWELL
P.I. 1940+75.5
Sta. 1942+50 R.C.P. 18"x 28' with Headwalls D.A. 3 Ac.-0.6
C.S.-1945+47.6
S.T.-1948+47.6
P.O.T.-1960+31.5
Outlet Esmt.
S60°33'E
Sta. 1955+50 R.C.P. 15"x 24' with Headwalls D.A. 2Ac.-0.6
Sta. 1967+56 Std. C529 24" Conc. Box DA.-.95Ac.-0.6
P.I.-1940+75.5
Δ-38°56' Rt.
D-3°
T-825.7
L-997.8
L'-300'
Ds-4°30'
Ext.-1179
S.E.-0.06'/ft.
END SEC. "A" Proj. F-51(12)
BEGIN SEC. "B" Proj. F-51(12)
NW¼ SE¼ Sec. 14
T 23 N R 7 W
C.A. McKNIGHT
8 R/W Markers
Clearing
Grubbing
Mulch
-0.65%
From Sta. 1934+30
700' V.C.
M-2.68
NPSD 576'
700' V.C.
M-5.82
-2.20%
-2.93%

504


5 MO F-511(12)Sec. 10
9 HOWELL 63
NE¼ SE¼ Sec. 14
C.A. McKNIGHT
New R/W 15.83 Ac.
P.O.T.-1975+78.1
Sta. 1983158
2-9'x6' Conc. Box
D.A. 12 Sq. Mi.-0.6
See Br. Drwg. No G-390 R
NW¼ SW¼ Sec. 13
SW¼ NW¼ SW¼
J.T. BRIDGES
NE¼ SW¼ SW¼
OLLIE B. ZORN
N. of Highway
P.O.T.-1997+05.7
Outlet Esm't.
R/W
L/R/W
Chan. Ch. Esm't
Pond
S60°33'E
Sta. 1970182
RCP 15"x54'
With Headwalls
D.A. 2 Ac.-0.6
Sta. 1998157
RCP 15"x52'
With Headwalls
D.A. 2 Ac.-0.6
Old Peach orchard
NW¼ SW¼ SW¼
J.T. BRIDGES
New R/W 1.27 Ac.
SE¼ SE¼ Sec. 14
C.A. McKNIGHT
SW¼ SW¼ Sec. 13
T 23 N R 7 W
12 R/W Markers
Clearing
Grubbing
Fert. & Mulch
Cl. A
Comp. C.
S.P. Bor.
Fill
700' VC
700' VC
360' VC
PLAN
PROFILE


5 MO F-51(12)Sec.B 11
9 HOWELL 63
BRANDSVILLE
P.O.T.-2005+13.85 POPLAR ST.
P.O.T.-2015+28.1
P.O.T.-2022+81.7
P.O.T.-2027+08.0
L.K. Dubois
Lots 11-12-19-20-Pl21
New R/W 0.24 Ac.
Hermine Botzenhart
E12½'of 2 Ml of 22-23-24
New R/W 0.01 Ac.
N. of Highway
Lillie B. Zorn
New R/W 0.02 Ac.
SE¼SW¼ Sec. 13
Albert Prantl E½
New R/W 0.98 Ac.
SW¼SE¼ Sec. 13
NW¼NE¼ Sec. 24
Orpha Carrell
Florence Cresap
New R/W 0.72 Ac.
S. of Highway
W.P. Cresap
New R/W 0.49 Ac.
Fairview Addn.
Clarence B. Gannon
New R/W 0.22 Ac.
J.H. Maddox
New R/W
0.75 Ac.
Byron Lasater
New R/W
0.09 Ac.
Byron Lasater
New R/W 1.26 Ac.
Oak Heights Addn.
Main St.
Oak St.
Quincy Ave.
Jackson Ave.
Pres. Ave.
Coast Guard
Pond
Scattered Trees
Sta. 2017+10
R.C.P. 30" Ucs
With Headwalls
D.A. 10 Ac.-0.6
Outlet Esmt.
Sta. 2012+60
R.C.P. 30" Ucs
With Headwalls
D.A. 12 Ac.-0.6
Sta. 2020
Sta. 2028
S60°33'E
SW¼SW¼ Sec. 13
T23N R7W
NE¼NW¼ Sec. 24
1:8 R/W Markers
Clearing
Grubbing
Ft-Lb
Mulch
Prop. Sta.
1994+57
C.I.A. 3672
Oil A 40
Comp C. 78
S.P. Borr. 830
Fill 3338
C.I.A. 2185
Comp C. 34
S.P. Borr. 311
Fill 1237
C.I.A. 2722
Borr 7200
Comp C. 631
S.P. Borr 1400
Fill 2022
Ta Sta 2037+00
600' VC
17-5.25
400' VC
17-1.69
415' NPSD
1300' VC
14-17.00
420' NPSD
B.M.#183 Elev. 989.37
N.S. 12" P.O. 160' Rt.
Sta. 2007+00
B.M.#183 Elev. 1047.09
N.S. 8" P.O. 160' Rt.
Sta. 2032+00
PLAN
PROFILE
504

5 MO F-51(12) Sec. B 12
9 HOWELL




| Station | Clearing Grubbing Rock + Mulch | Fill | Cut | Haul | Cl. A. | Comp. C | Sp. Bor. | F.M. |
|---|---|---|---|---|---|---|---|---|
| 2032+38.9 | 21 | 8 | 8900 | | | | | |
| | 24 | 12 | 8850 | | | | | |
| | 28 | 11 | 8800 | | | | | |
| | 26 | 9 | 6550 | | 13182 | 324 | 1053 | 12126 |
| | 26 | 4 | 3800 | | | | | |
| | 26 | 6 | 3000 | | | | | |
| | 26 | 9 | 3650 | | | | | |
| | 26 | 14 | 3000 | | | | | |
| | 26 | 21 | 5550 | | | | | |
| | 26 | 20 | 5950 | | | | | |
| | 26 | 21 | 6550 | | | | | |
| | 28 | 19 | 7450 | | | | | |
| | 25 | 19 | 7700 | | | | | |
| | 26 | 8 | 7450 | | | | | |
| | 26 | 1 | 7500 | | | | | |
| | 26 | 14 | 7500 | | 15368 | 181 | 1841 | 9530 |
| | 29 | 10 | 7600 | | | | | |
| | 33 | 14 | 6800 | | | | | |
| | 29 | 15 | 6150 | | | | | |
| | 25 | 5 | 6200 | | | | | |
| | 27 | 4 | 4100 | | | | | |
| | 4 | 2 | | | | | | |

Point Sta. 2024+38

Elevations: 1020, 1010, 1000, 990, 980

PVI 2032+50 1000.25
PVI 2034+00 1002.65
PVI 2037+00 1010
PVI 2039+50 1006.25
PVI 2041+00 1008.65
PVI 2045+50 990.25
PVI 2048+50 990.25
+1.10%
-2.80%
450' VC
H 2.08
422' NP50
500' VC
H 3.06
-1.00%
Fill 0%

B.M. #126 Elev. 988.22
NIR 12" High 198' Rt.
Sta. 2035+00

B.M. #126 Elev. 1018.67
NIR 12" P.O. 65' Rt.
Sta. 2042+90

B.M. #127 Elev. 988.07
NIR 16" R.O. 120' Rt.
Sta. 2051+20

Stations: 2030, 1, 2, 3, 4, 5, 6, 7, 8, 9, 2040, 1, 2, 3, 4, 5, 6, 7, 8, 9, 2050, 1

PLAN: Drawn BW; Traced PORTER; Checked R.E. Cheatham; Field Book No. 4-6; Date 1-22-92

PROFILE: Drawn BW; Traced PORTER; Checked R.E. Cheatham; Field Book No. 4-6; Date 1-22-92

12B

504

# LIST OF STANDARD PLANS

| PROJ. | SHEET |
|---|---|
| F-51(12) A & B | 13 |
| CO. HOWELL | RTE. 63 |

| | | |
|---|---|---|
| 1BA-4 (6-9-54) | | |
| 28A-2 | | |
| C-230 R2 | | |
| C-245 | | |
| C-529 1of2 | | |
| C-529 2of2 | | |
| C-530 | | |
| C-27 | | |

124

504