

**PLANS SYMBOLS**

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| STATE LINE                        | SPRINGS                              |
| COUNTY LINE                       | MARSH                                |
| TOWNSHIP OR RANGE LINE            | TIMBER                               |
| SECTION LINE                      | ORCHARD                              |
| QUARTER LINE                      | BRUSH                                |
| SIXTEENTH LINE                    | NURSERY                              |
| RIGHT-OF-WAY LINE                 | CATCH BASIN                          |
| PRESENT RIGHT-OF-WAY LINE         | FIRE HYDRANT                         |
| CONTROL OF ACCESS LINE            | CATTLE GUARD                         |
| PROPERTY LINE (Except Land Lines) | OVERPASS (Highway Over)              |
| VACATED PLATTED PROPERTY          | UNDERPASS (Highway Under)            |
| CORPORATE OR CITY LIMITS          | BRIDGE                               |
| TRUNK HIGHWAY CENTER LINE         | BUILDING (One Story Frame)           |
| RETAINING WALL                    | F-FRAME C-CONCRETE                   |
| RAILROAD                          | S-STONE T-TILE                       |
| RAILROAD RIGHT-OF-WAY LINE        | B-BRICK ST-STUCCO                    |
| RIVER OR CREEK                    | IRON PIPE OR ROD                     |
| DRY RUN                           | MONUMENT (STONE, CONCRETE, OR METAL) |
| DRAINAGE DITCH                    | WOODEN HUB                           |
| DRAIN TILE                        | GRAVEL PIT                           |
| CULVERT                           | SAND PIT                             |
| DROP INLET                        | BORROW PIT                           |
| GUARD RAIL                        | ROCK QUARRY                          |
| BARBED WIRE FENCE                 |                                      |
| WOVEN WIRE FENCE                  |                                      |
| CHAIN LINK FENCE                  |                                      |
| RAILROAD SNOW FENCE               |                                      |
| STONE WALL OR FENCE               |                                      |
| HEDGE                             |                                      |
| RAILROAD CROSSING SIGN            |                                      |
| RAILROAD CROSSING BELL            |                                      |
| ELECTRIC WARNING SIGN             |                                      |
| CROSSING GATE                     |                                      |
| MEANDER CORNER                    |                                      |

**UTILITIES SYMBOLS**

|  |                            |
|--|----------------------------|
| POWER POLE LINE                          | CONDUIT                    |
| TELEPHONE OR TELEGRAPH POLE LINE         | TELEPHONE CABLE IN CONDUIT |
| JOINT TELEPHONE AND POWER ON POWER POLES | ELECTRIC CABLE IN CONDUIT  |
| ON TELEPHONE POLES                       | TELEPHONE MANHOLE          |
| ANCHOR                                   | ELECTRIC MANHOLE           |
| STEEL TOWER                              | BURIED TELEPHONE CABLE     |
| STREET LIGHT                             | BURIED ELECTRIC CABLE      |
| PEDESTAL (TELEPHONE CABLE TERMINAL)      | AERIAL TELEPHONE CABLE     |
| GAS MAIN                                 | SEWER, (SANITARY OR STORM) |
| WATER MAIN                               | SEWER MANHOLE              |

**PIT DATA**

|                  |  |
|------------------|--|
| COUNTY PIT NO. 1 | Located in S.W. 1/4 OF S.W. 1/4 OF SEC. 13, T.29N., R.23W. |
|                  | Dead Haul  |
| PIT NO. 1        | Located in Dead Haul                                       |
| PIT NO. 2        | Located in Dead Haul                                       |
| PIT NO. 3        | Located in Dead Haul                                       |

**SPECIFICATIONS**

THE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1964 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED FEBRUARY 1, 1966 SHALL GOVERN.

**OFFICE OF COUNTY ENGINEER**

**RAMSEY COUNTY**

**CONSTRUCTION PLAN FOR GRADING**

**COUNTY ROAD "C"**

BETWEEN: HAMLINE AVE. AND VICTORIA ST.

FROM: A POINT 77.5 FEET EAST AND 31.2 FEET SOUTH OF THE NORTH 1/4 CORNER OF SECTION 10, T.29N., R.23W. TO: A POINT 447.6 FEET WEST AND 272.6 FEET SOUTH OF THE NORTH 1/4 CORNER OF SECTION 11, T.29N., R.23W.

S.A.P. 62-623-05

|                   |                        |
|-------------------|------------------------|
| GROSS LENGTH      | 4820 FEET 0.9129 MILES |
| BRIDGES-LENGTH    | 0 FEET 0 MILES         |
| EXCEPTIONS-LENGTH | 37 FEET 0.0070 MILES   |
| NET LENGTH        | 4783 FEET 0.9059 MILES |

|        |  |
|--------|--|
| SCALES | PLAN, 1 inch = 100 Feet  |
|        | PROFILE, Horiz. 1 inch = 50 Feet Vert. 1 inch = 5 Feet   |
|        | WORKING PLANS<br>Horiz. 1 inch = 50 Feet<br>Vert. 1 inch = 5 Feet<br>Cross-Sections 1 inch = 10 Feet |
|        | LAYOUT, 1 inch = 2640 Feet   |

|                             |                  |
|-----------------------------|------------------|
| DESIGN                      | DESIGNATION      |
| A.D.T. 1966                 | =                |
| A.D.T. 1985                 | =                |
| DHV                         | =                |
| D(DIRECTIONAL DISTRIBUTION) | =                |
| T(HEAVY COMMERCIAL) 1985    | = 300-600        |
| DESIGN SPEED                | = 35 M.P.H.      |
| DESIGN LOAD                 | = 9 TON (FUTURE) |
| SOILS FACTOR                | = 100%           |

**INDEX**

|           |   |
|-----------|---|
| SHEET NO. | DESCRIPTION                             |
| 1         | TITLE SHEET                             |
| 2         | TYPICAL SECTIONS & ESTIMATED QUANTITIES |
| 3&4       | PLAN PROFILES & CONSTRUCTION PLAN       |
| 5-15      | CROSS SECTIONS                          |

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Walter Acker* REG. NO. 2042 DATE 2-12-67  
ENGINEER

RECOMMENDED FOR APPROVAL *Dean K. Acker* DATE 2-12-67  
COUNTY ENGINEER

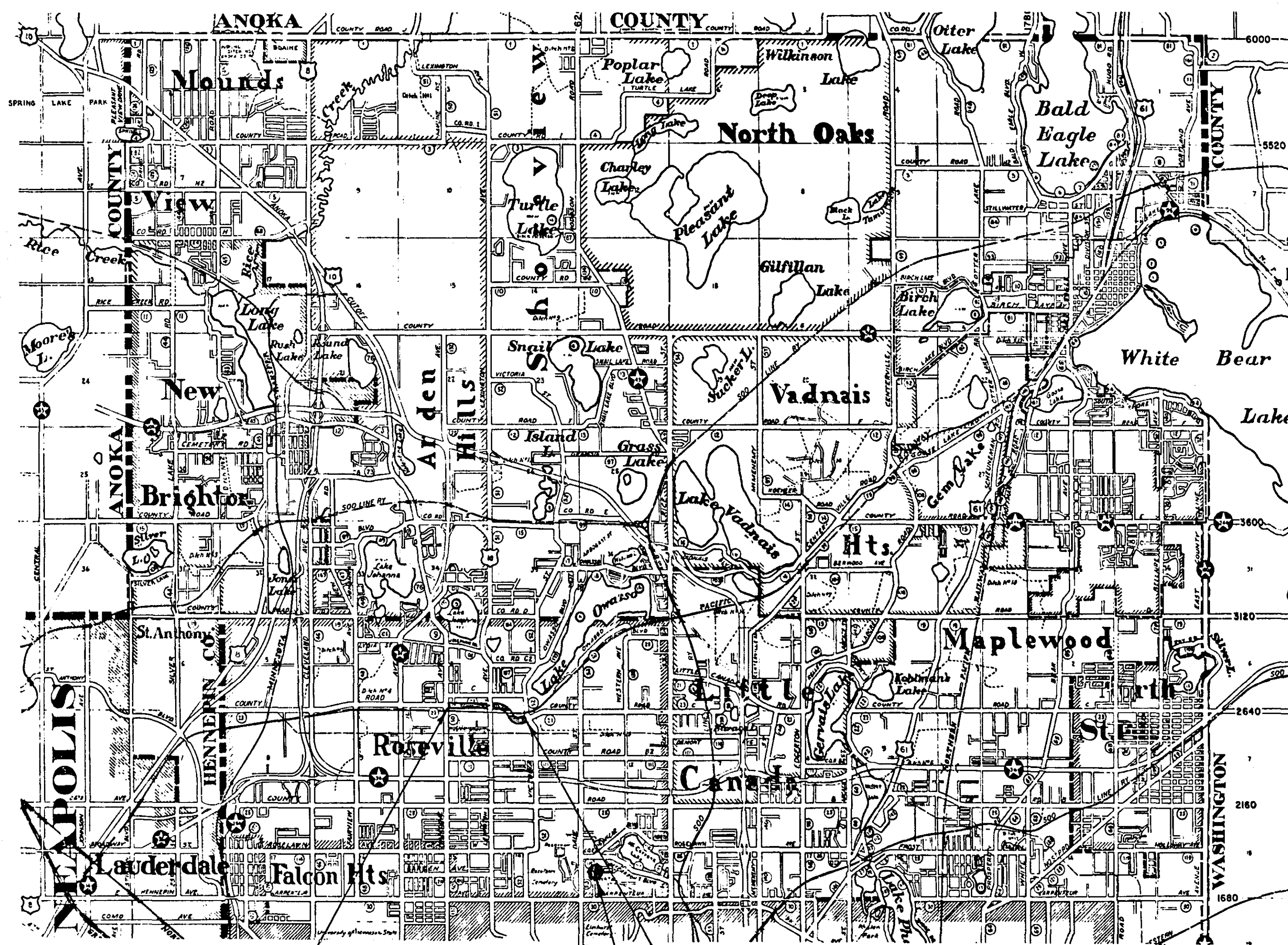
APPROVED *Thomas J. Butue* DATE 2-27-67  
CHAIRMAN OF THE RAMSEY COUNTY BOARD

**MINNESOTA STATE HIGHWAY DEPARTMENT**

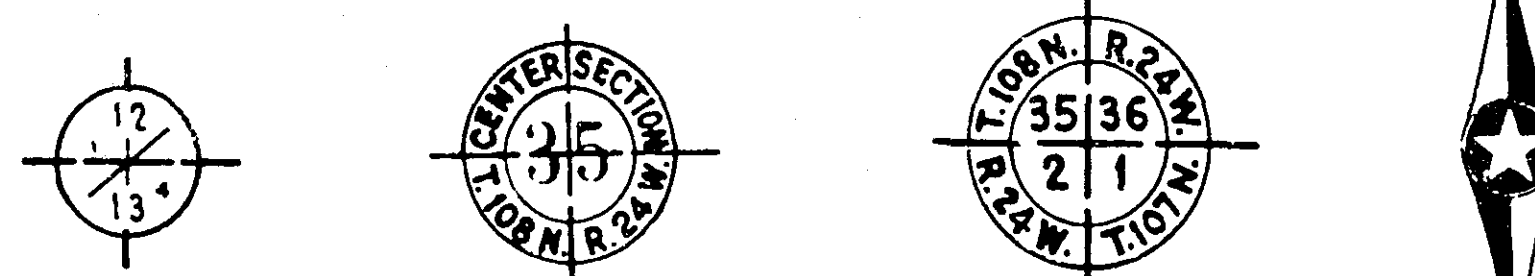
RECOMMENDED FOR APPROVAL *C.E. Weichselbaum* DATE 4-12-67

RECOMMENDED FOR APPROVAL *J.T. Berglund* DATE 3/31/67  
DISTRICT STATE ENGINEER

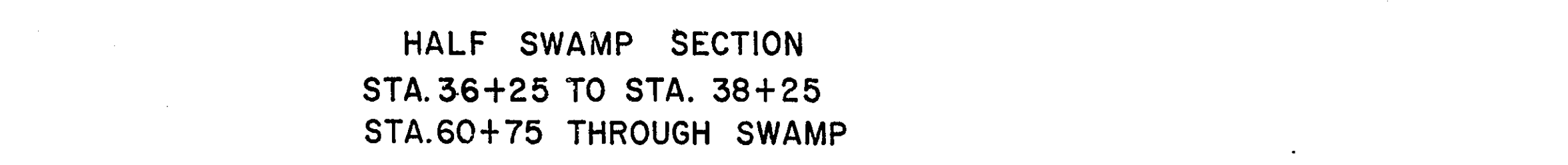
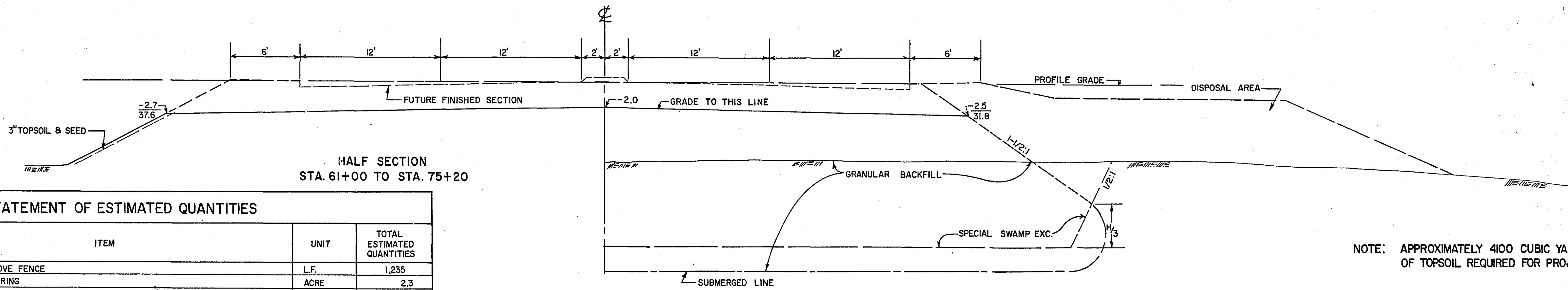
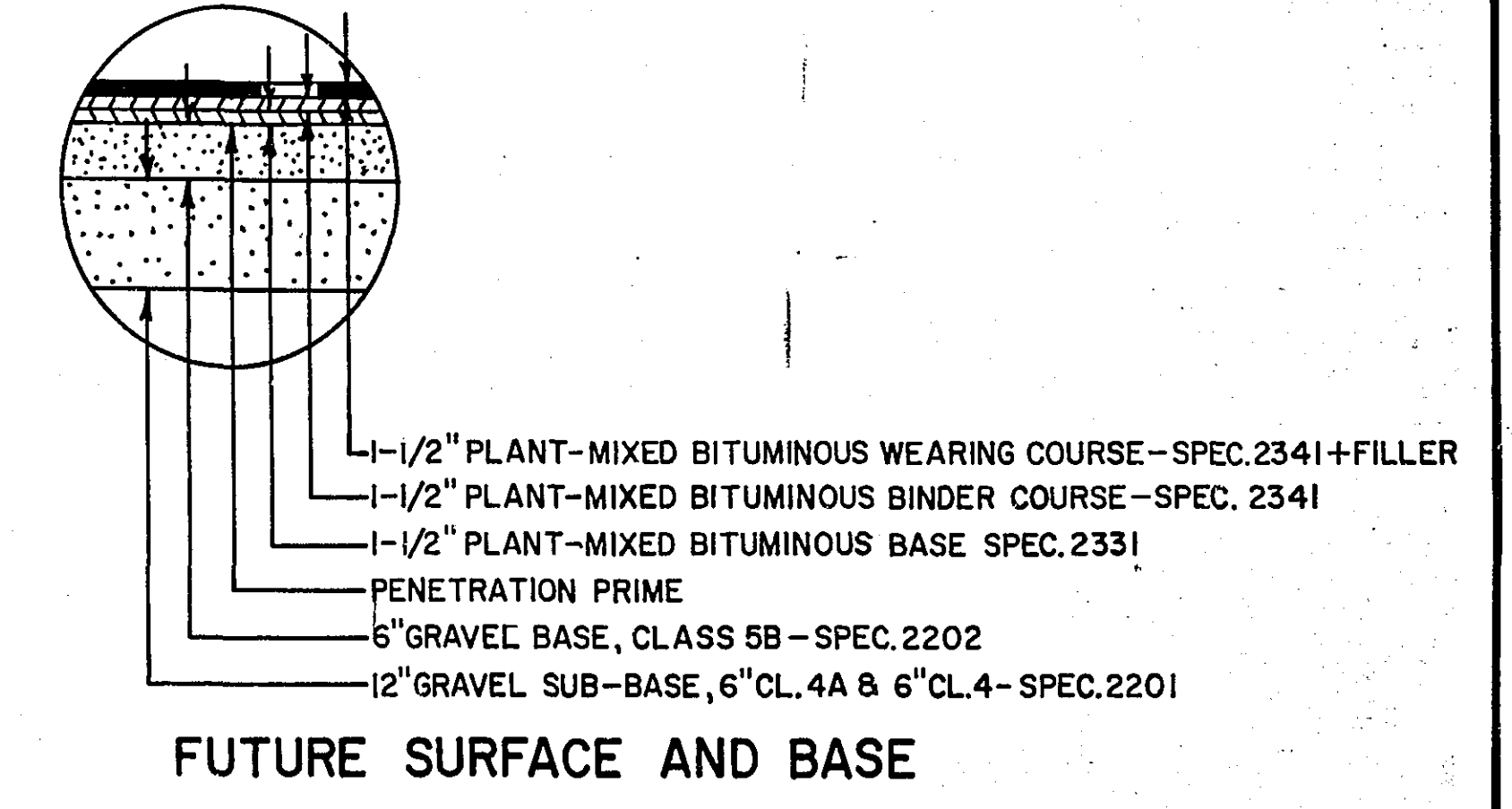
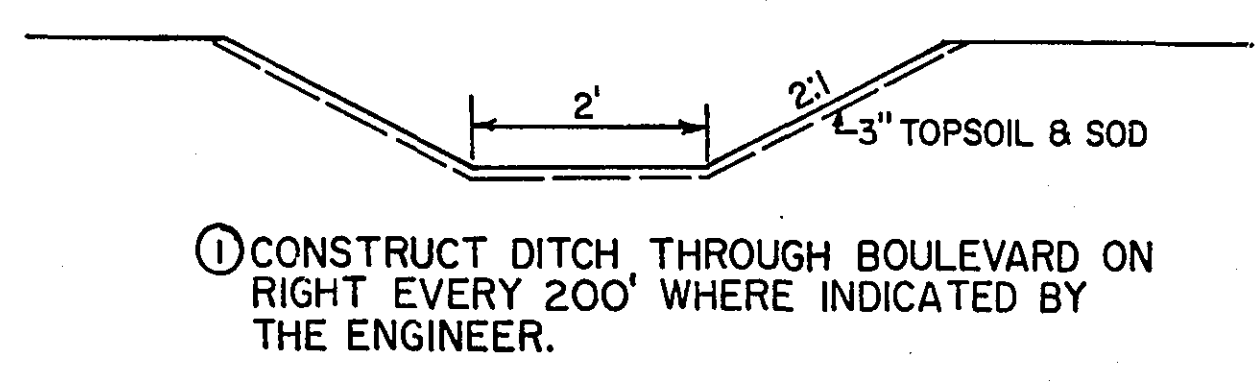
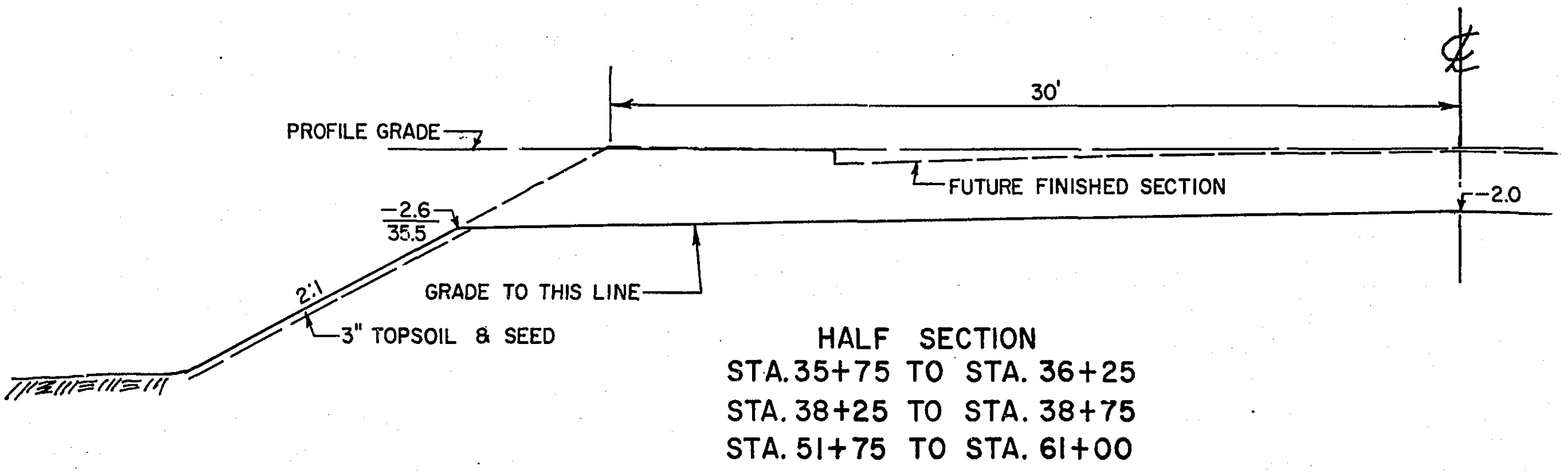
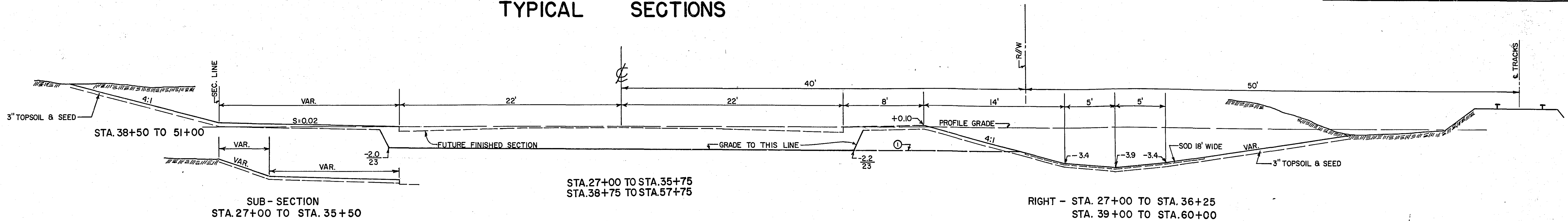
APPROVAL *K.J. Moran* DATE 4-12-67  
STATE AID ENGINEER



BEGIN PROJ. STA. 27+00  
END PROJ. STA. 75+20  
COUNTY PIT



# TYPICAL SECTIONS



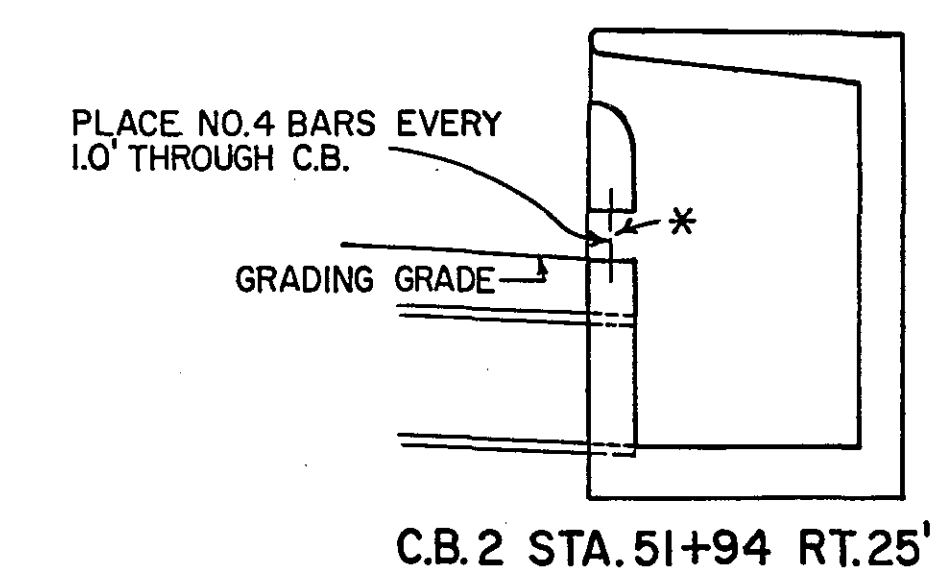
NOTE: APPROXIMATELY 400 CUBIC YARDS OF TOPSOIL REQUIRED FOR PROJECT

## STATEMENT OF ESTIMATED QUANTITIES

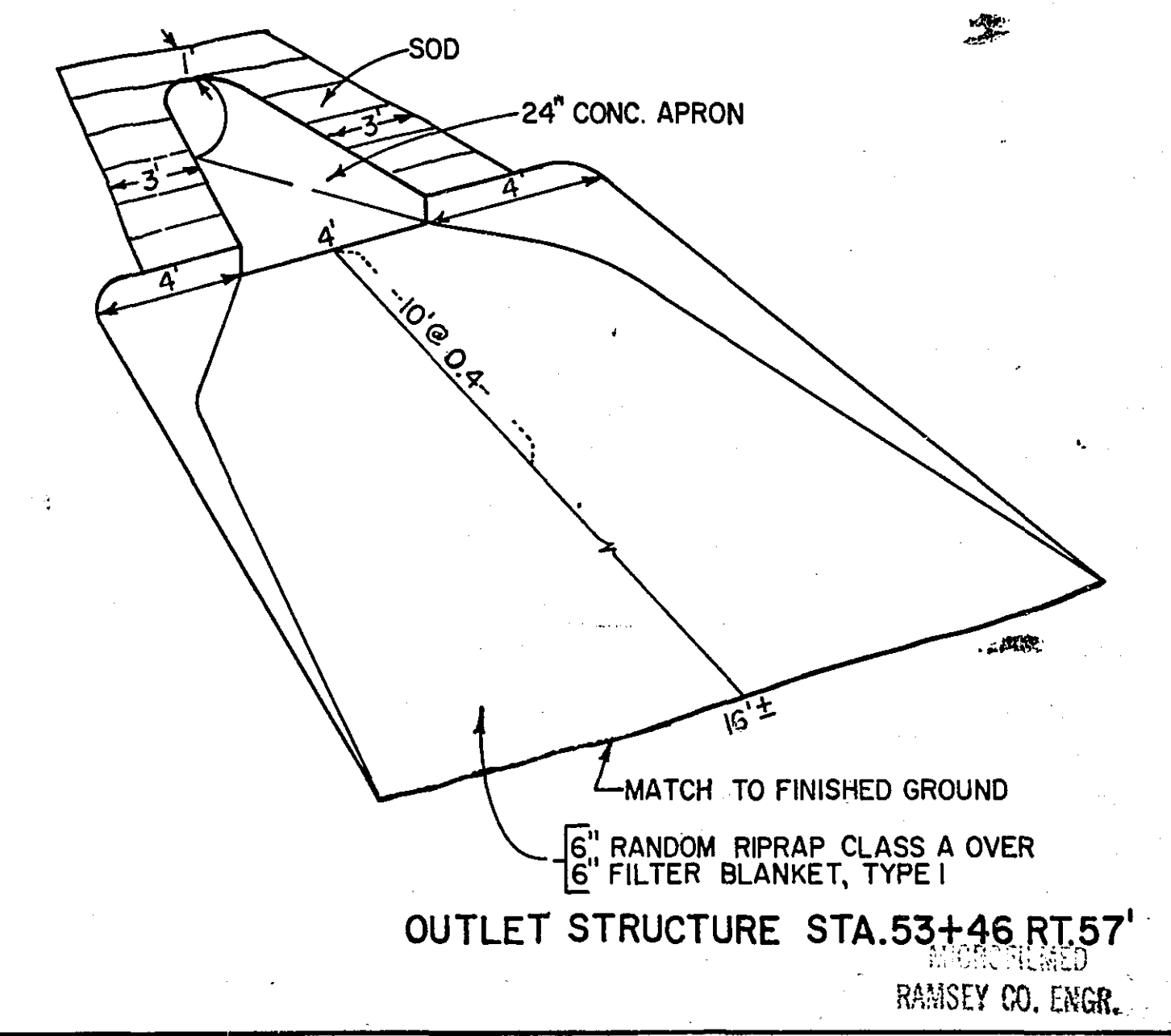
| ITEM NO. | ITEM                                  | UNIT  | TOTAL ESTIMATED QUANTITIES |
|----------|---------------------------------------|-------|----------------------------|
| 2104.510 | REMOVE FENCE                          | L.F.  | 1,235                      |
| 2101.501 | CLEARING                              | ACRE  | 2.3                        |
| 2101.506 | GRUBBING                              | ACRE  | 2.3                        |
| 2105.501 | CLASS A EXCAVATION, TO BAL. NO. 5     | C.Y.  | 55,444                     |
| 2105.501 | CLASS A EXCAVATION                    | C.Y.  | 90,909                     |
| 2106.501 | SPECIAL SWAMP EXCAVATION              | C.Y.  | 31,093                     |
| 2110.517 | GRANULAR MATERIAL, ALTERNATE NO. 1    | C.Y.  | 38,260                     |
| 2110.517 | GRANULAR MATERIAL, ALTERNATE NO. 2    | C.Y.  | 38,260                     |
| 2501.521 | F.B.I. 18" R.C.P. CULV., CLASS II     | L.F.  | 102                        |
| 2503.512 | F.B.I. 18" R.C.P. SEWER, CLASS II     | L.F.  | 36                         |
| 2503.512 | F.B.I. 18" R.C.P. SEWER, CLASS II     | L.F.  | 74                         |
| 2503.512 | F.B.I. 24" R.C.P. SEWER, CLASS II     | L.F.  | 86                         |
| 2506.506 | CONSTRUCT MANHOLES, DESIGN A          | L.F.  | 13.3                       |
| 2506.507 | CONSTRUCT CATCH BASIN, DESIGN L.P.4-H | L.F.  | 13.2                       |
| 2515.541 | F.B.I. CONC. APRON FOR 15" S.C.P.     | APRON | 1                          |
| 2515.541 | F.B.I. CONC. APRON FOR 18" S.C.P.     | APRON | 2                          |
| 2515.541 | F.B.I. CONC. APRON FOR 24" S.C.P.     | APRON | 1                          |
| 2511.501 | RANDOM RIPRAP CLASS A                 | C.Y.  | 5                          |
| 2511.506 | FILTER BLANKET, TYPE I                | C.Y.  | 5                          |
| 2574.501 | ROADSIDE SEEDING, CLASS 15            | ACRE  | 14                         |
| 2575.501 | SURFACE MULCHING, TYPE I (7)          | TON   | 2                          |
| 2575.506 | SURFACE MULCHING, TYPE 6 (7)          | GAL.  | 885                        |
| 2576.501 | SODDING                               | S.Y.  | 4,775                      |
| 2501.521 | F.B.I. 36" R.C.P. CULV., CLASS III    | L.F.  | 114                        |
| 2515.541 | F.B.I. CONC. APRON FOR 36" S.C.P.     | APRON | 2                          |

| SODDING CHART            |              |
|--------------------------|--------------|
| STATION                  | LOCATION     |
| STA. 27+00 TO STA. 37+60 | RT. DITCH    |
| STA. 39+00 TO STA. 52+10 | RT. DITCH    |
|                          | CULVERT ENDS |

SEED ALL AREAS NOT TO BE SODDED MULCH SLOPES STA. 69+00 TO STA. 74+00



\*PLACE 6" HIGH OPENING THROUGH FACE OF C.B.



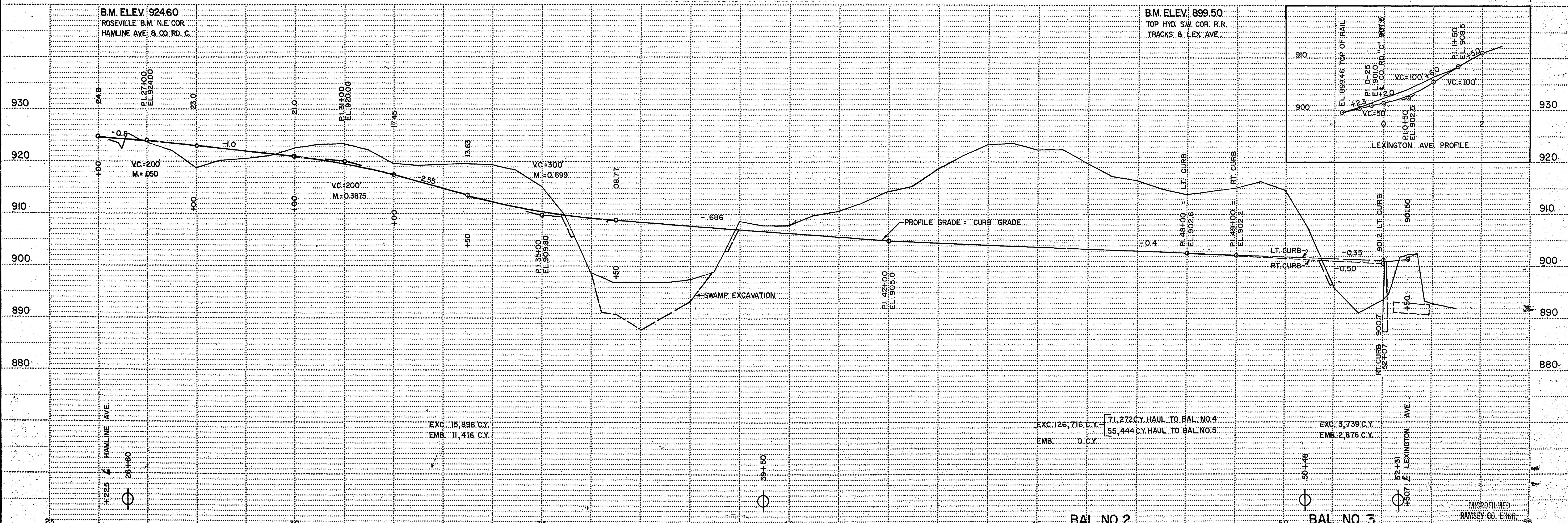
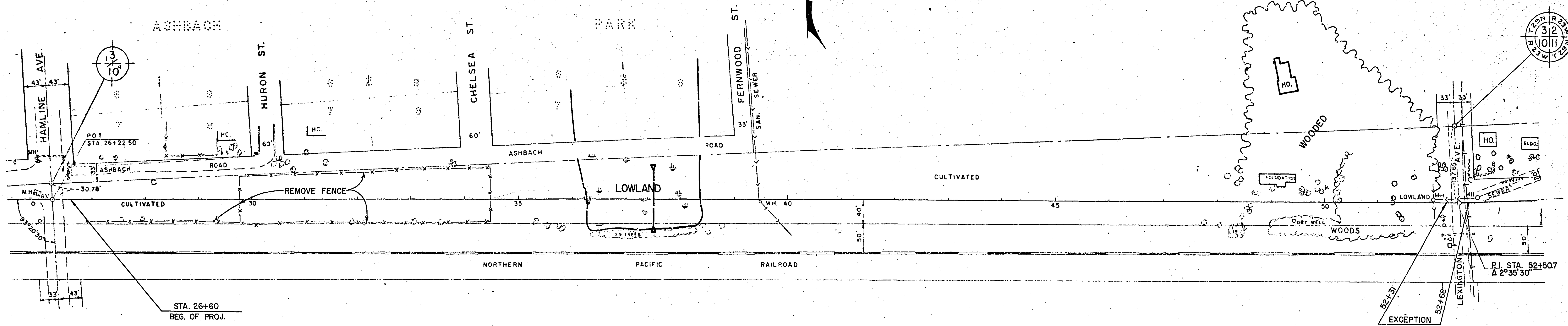
## STANDARD DETAIL PLATES

|       |   |
|-------|---|
| 3000E | REINFORCED CONCRETE PIPE                    |
| 4000F | MANHOLE OR CATCH BASIN                      |
| 4016A | CURB OPENING CATCH BASIN                    |
| 4101B | RING CASTING FOR MANHOLE OR CATCH BASIN     |
| 9102B | SODDING AT PIPE CULVERT ENDS                |
| 3100E | CONCRETE APRON FOR REINFORCED CONCRETE PIPE |



STA. 37+50 #F&I 18" X 102' S.C.P.  
 CULV. F&I 2 CONC. APRONS  
 54 RT.=898.0  
 60 LT.=896.7

STA. 52+07 MANHOLE 6'L.T.  
 RECONSTRUCT MANHOLE 10.3 L.F.  
 INSTALL CASTING ASSEMBLY



MICROFILMED  
 RAMSEY CO. ENGR.

6267



