

# PLANS SYMBOLS

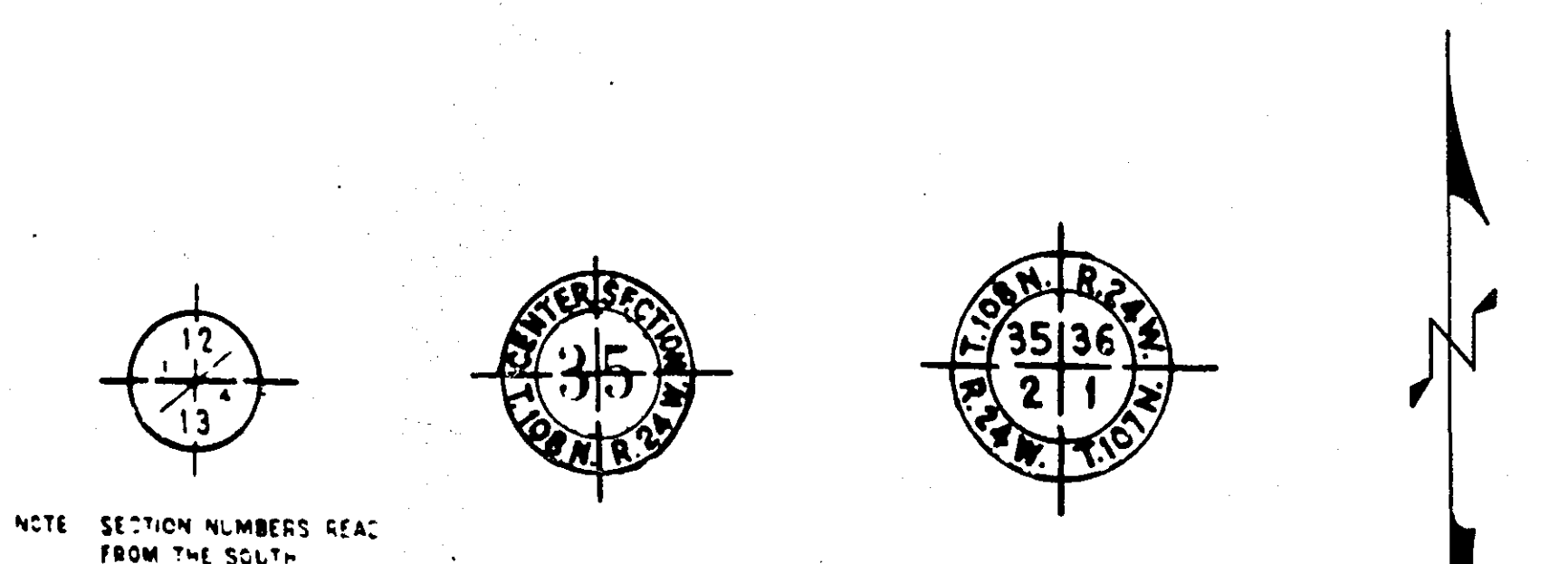
STATE LINE  
COUNTY LINE  
TOWNSHIP OR RANGE LINE  
SECTION LINE  
QUARTER LINE  
SIXTEENTH LINE  
RIGHT-OF-WAY LINE  
PRESENT RIGHT-OF-WAY LINE  
CONTROL OF ACCESS LINE  
PROPERTY LINE (Except Land Lines)  
VACATED PLATTED PROPERTY  
CORPORATE OR CITY LIMITS  
TRUNK HIGHWAY CENTER LINE  
RETAINING WALL  
RAILROAD  
RAILROAD RIGHT-OF-WAY LINE  
RIVER OR CREEK  
DRY RUN  
DRAINAGE DITCH  
DRAIN TILE  
CULVERT  
DROP INLET  
GUARD RAIL  
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

SPRINGS  
MARSH  
TIMBER  
ORCHARD  
BRUSH  
NURSERY  
CATCH BASIN  
FIRE HYDRANT  
CATTLE GUARD  
OVERPASS (Highway Over)  
UNDERPASS (Highway Under)  
BRIDGE  
BUILDING (One Story Frame)  
F-FRAME  
S-STONE  
B-BRICK  
C-CONCRETE  
T-TILE  
ST-STUCCO  
IRON PIPE OR ROD  
MONUMENT (STONE, CONCRETE, OR METAL)  
WOODEN HUB  
GRAVEL PIT  
SAND PIT  
BORROW PIT  
ROCK QUARRY

# UTILITIES SYMBOLS

POWER POLE LINE  
TELEPHONE OR TELEGRAPH  
POLE LINE  
JOINT TELEPHONE AND POWER  
ON POWER POLES  
ON TELEPHONE POLES  
ANCHOR  
STEEL TOWER  
STREET LIGHT  
PENETRAL TELEPHONE CABLE  
TERMINAL  
GAS MAIN  
WATER MAIN

CONDUIT  
TELEPHONE CABLE IN CONDUIT  
ELECTRIC CABLE IN CONDUIT  
TELEPHONE-MANHOLE  
ELECTRIC MANHOLE  
BURIED TELEPHONE CABLE  
BURIED ELECTRIC CABLE  
AERIAL TELEPHONE CABLE  
SEWER, (SANITARY)  
SEWER MANHOLE  
STORM SEWER



# PIT DATA

PIT NO. Located in  
Dead Haul  
PIT NO. Located in  
Dead Haul

# SPECIFICATIONS

THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1968 AS AMENDED BY "SUPPLEMENTAL SPECIFICATIONS" DATED JULY 1, 1969 SHALL GOVERN.

# OFFICE OF COUNTY ENGINEER

## RAMSEY COUNTY

CONSTRUCTION PLAN FOR GRADING AND BITUMINOUS SURFACING

## COUNTY ROAD "B"

BETWEEN: CLEVELAND AVE. AND: SNELLING AVE.

FROM: A POINT 40 FEET EAST OF THE NORTH-WEST CORNER OF SECTION 16, T.29N, R.23W. TO: A POINT 463.52 FEET WEST OF THE NORTH EAST CORNER OF SECTION 16, T.29N, R.23W.

GROSS LENGTH 4760 FEET 0.902 MILES  
BRIDGES-LENGTH 0 FEET 0 MILES  
EXCEPTIONS-LENGTH 0 FEET 0 MILES  
NET LENGTH 4760 FEET 0.902 MILES

PLAN, 1 inch = 50 Feet  
PROFILE, Horiz. 1 inch = 50 Feet Vert. 1 inch = 5 Feet  
CROSS-SECTIONS, 1 inch = 10 Feet  
LAYOUT, 1 inch = 5280 Feet

# DESIGN DESIGNATION

A.D.T. 1985 CLEVELAND TO FAIRVIEW = 10,000  
A.D.T. 1985 FAIRVIEW TO SNELLING = 12,000  
A.D.T. 196 =  
A.D.T. 196 =  
DHV =  
DIRECTIONAL DISTRIBUTION = 50-50  
T (HEAVY COMMERCIAL) 1985 = 5%

DESIGN SPEED = STA. 0+40 TO STA. 9+00 = 35 M.P.H.  
STA. 9+00 TO STA. 25+00 = 45 M.P.H.  
STA. 25+00 TO STA. 48+00 = 50 M.P.H.  
DESIGN LOAD = 9 TON  
SOIL FACTOR = 125% STA. 17+50 TO 48+00  
100% STA. 0+40 TO 17+50

# INDEX

SHEET NO. DESCRIPTION  
1 TITLE SHEET  
2 TYPICAL SECTION & ESTIMATED QUANTITIES  
3&4 DRAINAGE CHART & DETAILS  
5 CLEARING & GRUBBING CHART AND MISC CHART  
6-9 PLAN, PROFILES & CONSTRUCTION  
10-18 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.  
ENGINEER REG. NO. 2042 DATE 7-2-70

RECOMMENDED FOR APPROVAL DATE 7-6-70  
COUNTY ENGINEER

APPROVED DATE 7-6-70  
CHAIRMAN OF THE RAMSEY COUNTY BOARD

APPROVED DATE 7-6-70  
MAYOR, VILLAGE OF ROSEVILLE

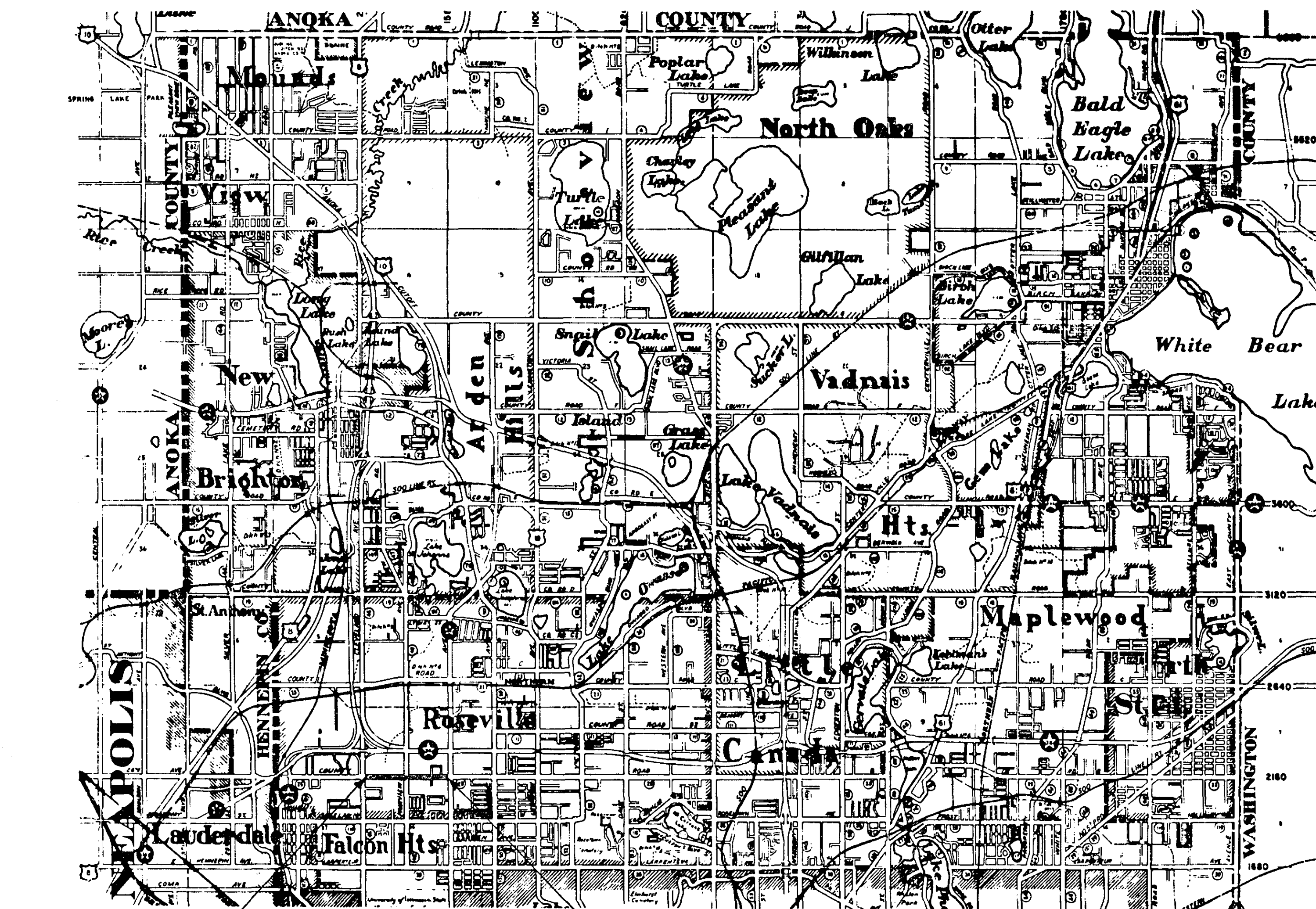
APPROVED DATE  
MAYOR

# MINNESOTA STATE HIGHWAY DEPARTMENT

RECOMMENDED FOR APPROVAL DATE 7-14-70

RECOMMENDED FOR APPROVAL DATE 7-13-70  
DISTRICT STATE AID ENGINEER

APPROVAL DATE 7/14/70  
STATE AID ENGINEER



BEGIN PROJECT STA 0+40  
CITY OF ST. PAUL  
END PROJECT STA 48+00

RECOMMENDED FOR APPROVAL DATE 8/3/70  
RECOMMENDED FOR APPROVAL DATE 8/15/70  
RECOMMENDED FOR APPROVAL DATE 9/1/70  
RECOMMENDED FOR APPROVAL DATE  
RECOMMENDED FOR APPROVAL DATE  
APPROVED DATE  
COUNTY ENGINEER

S.A.P. NO. 62-625-04

Sheet No. 1 of 18 Sheets

19-104

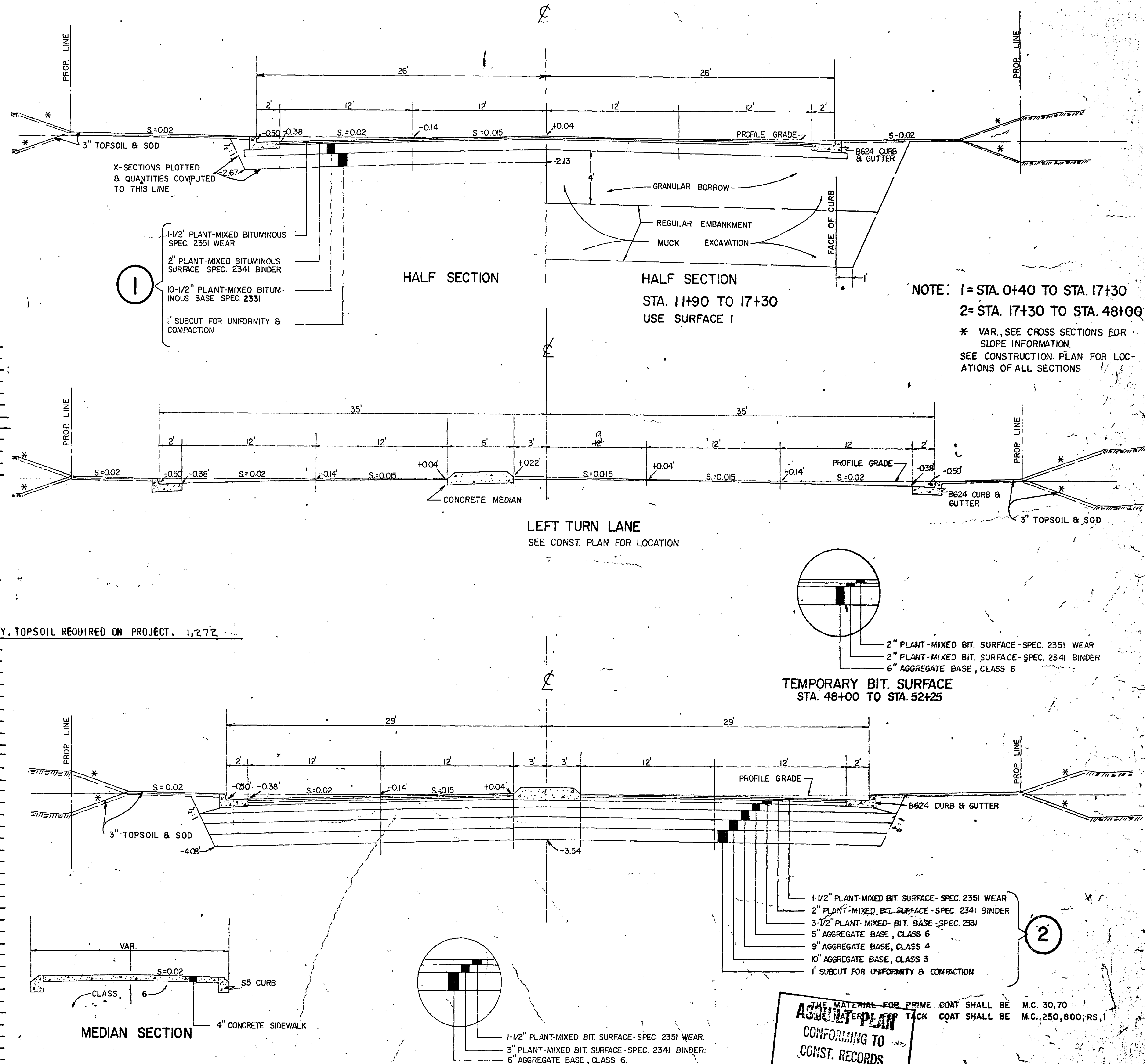


## STATEMENT OF ESTIMATED QUANTITIES

| ITEM NO. | ITEM                                     | UNIT       | TOTAL ESTIMATED QUANTITIES |
|----------|------------------------------------------|------------|----------------------------|
| 2101.502 | CLEARING                                 | TREE       | 97                         |
| 2101.507 | GRUBBING                                 | TREE       | 87                         |
| 2104.502 | REMOVE PAVEMENT                          | S.Y.       | 4334                       |
| 2104.504 | REMOVE CURB                              | L.F.       | 359                        |
| 2104.506 | REMOVE SIDEWALK                          | S.F.       | 228                        |
| 2104.510 | REMOVE FENCE                             | L.F.       | 878                        |
| 2104.511 | REMOVE MANHOLES & CATCH BASINS           | STRUCTURE  | 20                         |
| 2104.515 | REMOVE PIPE SEWERS                       | L.F.       | 1727                       |
| 2104.520 | REMOVE SANITARY SEWER FORCE MAIN         | STRUCTURE  | 1                          |
| 2105.501 | COMMON EXCAVATION                        | C.Y.       | 44,500                     |
| 2105.505 | MUCK EXCAVATION                          | C.Y.       | 5458                       |
| 2105.521 | GRANULAR BORROW                          | C.Y.       | 6240                       |
| 2130.501 | WATER                                    | (M) GAL.   | 500                        |
| 2104.521 | REMOVE 6" WATERMAIN                      | L.F.       | 40                         |
| 2211.501 | AGGREGATE BASE, CLASS 6                  | TON        | 7944                       |
| 2211.501 | AGGREGATE BASE, CLASS 4                  | TON        | 10976                      |
| 2211.501 | AGGREGATE BASE, CLASS 3                  | TON        | 12146                      |
| 2331.504 | BITUMINOUS MATERIAL FOR MIXTURE          | TON        | 329                        |
| 2331.514 | BASE COURSE MIXTURE                      | TON        | 9398                       |
| 2341.504 | BITUMINOUS MATERIAL FOR MIXTURE          | TON        | 176                        |
| 2341.510 | BINDER COURSE MIXTURE                    | TON        | 3512                       |
| 2351.504 | ASPHALT CEMENT                           | TON        | 168                        |
| 2351.509 | ASPHALT CONCRETE WEARING COURSE + FILLER | TON        | 2711                       |
| 2357.502 | BITUMINOUS MATERIAL FOR TACK COAT        | GALLON     | 3471                       |
| 2358.501 | BITUMINOUS MATERIAL FOR PRIME COAT       | GALLON     | 7532                       |
| 2451.503 | GRANULAR BACKFILL                        | C.Y.       | 894                        |
| 2501.536 | 15" CONCRETE APRONS                      | APRON      | 1                          |
| 2503.502 | 15" REINFORCED CONCRETE SEWER CLASS II   | L.F.       | 564                        |
| 2503.502 | 18" REINFORCED CONCRETE SEWER CLASS II   | L.F.       | 142                        |
| 2503.502 | 21" REINFORCED CONCRETE SEWER CLASS II   | L.F.       | 30                         |
| 2503.521 | INSTALL CONCRETE SEWER                   | L.F.       | 356                        |
| 2506.506 | CONSTRUCT MANHOLES, DESIGN A OR F        | L.F.       | 24.1                       |
| 2506.509 | CONSTRUCT CATCH BASINS, DESIGN R.C.-2    | STRUCTURE  | 6                          |
| 2506.509 | CONSTRUCT CATCH BASINS, DESIGN L.P.-4    | STRUCTURE  | 6                          |
| 2506.623 | INSTALL CATCH BASINS                     | L.F.       | 2                          |
| 2506.511 | RECONSTRUCT MANHOLES                     | L.F.       | 7.8                        |
| 2506.521 | INSTALL CASTINGS                         | ASSEMBLY   | 6                          |
| 2506.522 | ADJUST FRAME AND RING CASTING            | ASSEMBLY   | 24                         |
| 2503.503 | 8" CLAY SEWER, EXTRA STRENGTH            | L.F.       | 220                        |
| 2521.501 | 4" CONCRETE WALK                         | S.F.       | 11115                      |
| 2531.501 | CONCRETE CURB AND GUTTER, DESIGN B624    | L.F.       | 9201                       |
| 2531.502 | CONCRETE CURB, DESIGN B6                 | L.F.       | 176                        |
| 2531.502 | CONCRETE CURB, DESIGN S5                 | L.F.       | 2163                       |
| 2531.503 | CONCRETE MEDIAN                          | S.Y.       | 915                        |
| 2535.501 | BITUMINOUS CURB                          | L.F.       | 1463                       |
| 2575.505 | SODDING                                  | S.Y.       | 18284                      |
| 2575.531 | COMMERCIAL FERTILIZER, ANALYSIS 12-12-12 | TON        | 1.3                        |
| 2105.525 | TOPSOIL BORROW                           | C.Y.       | 700                        |
| 504.679  | ADJUST VALVE BOX                         | BOX        | 19                         |
| 104.604  | REMOVE HYDRANT                           | EACH       | 10                         |
| 504.666  | INSTALL HYDRANT                          | EACH       | 10                         |
| 557.604  | INSTALL FENCE (4' CHAIN LINK)            | L.F.       | 527                        |
| 503.698  | SEWER INSULATION                         | L.F.       | 50                         |
| 504.652  | WATER MAIN INSULATION                    | S.Y.       | 467                        |
| 504.612  | 1" COPPER WATER SERVICE CONNECTION       | L.F.       | 40                         |
| 504.612  | 4" C.I.P. WATER SERVICE CONNECTION       | L.F.       | 100                        |
| 565.635  | RIGID METALLIC CONDUIT, 3 INCH           | L.F.       | 334                        |
| 565.637  | CONCRETE HANDHOLES                       | HANDHOLE   | 12                         |
| 504.665  | INSTALL WATERMAIN                        | L.F.       | 40                         |
| 504.601  | FR 6" CAST IRON WATER MAIN               | L.F.       | 20                         |
| 504.629  | 12" WATERMAIN CONNECTION                 | CONNECTION | 2                          |
| 504.629  | 6" WATERMAIN CONNECTION                  | CONNECTION | 1                          |
| 2451.501 | STRUCTURE EXCAVATION CLASS U             | C.Y.       | 58                         |
| 123.603  | BACKHOE RENTAL                           | 400R       | 20                         |
| 504.601  | FR 12" CAST IRON WATERMAIN               | L.F.       | 85                         |
| 2501.523 | 36" CONCRETE CULVERT CL II               | L.F.       | 120                        |
| 2503.502 | 33" REINFORCED CONCRETE SEWER CL IV      | L.F.       | 120                        |

## TYPICAL

## SECTIONS





| DRAINAGE |           |     |      |            |                        |                      |           |                        |                   |                     | CHART                   |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
|----------|-----------|-----|------|------------|------------------------|----------------------|-----------|------------------------|-------------------|---------------------|-------------------------|-----------------------------------|--------------------------|-------------------------|-----|-----|---------------------------|-----|-----|----------------------------|-------|-------|---------------|----------|----------------------|---------------------|
| STATION  | LOCATION  | NO. | TYPE | DESIGN     | CONST. HEIGHT LIN. FT. | F&I CASTING ASSEMBLY | ELEVATION |                        |                   |                     | ADJUST CASTING ASSEMBLY | RECONSTRUCT C.B. OR M.H. LIN. FT. | INSTALL CASTING ASSEMBLY | F & I CONC. PIPE SEWERS |     |     | INSTALL CONC. PIPE SEWERS |     |     | REMOVE PIPE SEWER LIN. FT. | APRON | CLASS | DRAINS TO     |          | REMARK               |                     |
|          |           |     |      |            |                        |                      | PROFILE   | ORIGINAL GRATE OR RING | NEW GRATE OR RING | C.B. OR M.H. INVERT |                         |                                   |                          | 15"                     | 18" | 21" | 21"                       | 18" | 12" |                            |       |       | STRUCTURE NO. | INV. EL. |                      |                     |
| 0+80     | RT. 13'   | 1   | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | O.K. LEAVE           |                     |
| 0+61     | RT. 37'   | 2   | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | O.K. LEAVE           |                     |
| 0+22     | RT. 23'   | 3   | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | O.K. LEAVE           |                     |
| 0+22     | LT. 21'   | 4   | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | O.K. LEAVE           |                     |
| 1+11     | RT. 16'   | 5   | M.H. |            |                        |                      | 971.26    | 970.67                 | 971.19            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | ADJUST BY TELL.CO.   |                     |
| 2+02     | RT. 37'   | 6   | C.B. | L.P.-4     | 4.27                   | E                    | 970.80    |                        | 970.80            | 967.2               |                         |                                   |                          |                         | 74  |     |                           |     |     |                            | II    | 7     | 966.5         |          |                      |                     |
| 2+02     | LT. 37'   | 7   | C.B. | L.P.-4     | 4.97                   | E                    | 970.80    |                        | 970.80            | 966.5               |                         |                                   |                          |                         | 27  |     |                           |     |     |                            | I     | II    | H+93 LT.58'   | 961.0±   |                      |                     |
| 2+77     | RT. 22'   | 8   | M.H. |            |                        |                      | 971.23    | 971.75                 | 970.89            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 3+23     | LT. 19'   | 9   | M.H. |            |                        |                      | 971.37    | 971.22                 | 971.17            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 5+11     | RT. 18'   | 10  | M.H. |            |                        |                      | 977.89    | 978.88                 | 977.63            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 6+22     | LT. 19'   | 11  | M.H. |            |                        |                      | 981.64    | 982.47                 | 981.38            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | ADJUST BY TELL.CO.   |                     |
| 7+74     | RT. 18'   | 12  | M.H. |            |                        |                      | 982.93    | 983.73                 | 982.67            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 10+29    | RT. 17'   | 13  | M.H. |            |                        |                      | 976.13    | 976.00                 | 975.89            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 10+42    | LT. 8'    | 14  | M.H. |            |                        |                      | 975.74    | 975.67                 | 975.66            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 10+42    | RT. 21'   | 15  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | RELOCATE             |                     |
| 10+42    | LT. 21'   | 16  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | RELOCATE             |                     |
| 10+42    | RT. 25.5' | 17  | C.B. | USE EXIST. |                        |                      | 975.74    |                        | 975.04            | 971.5±              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       | 14            | 970.9±   | MOVE EXIST. C.B. 15  |                     |
| 10+42    | LT. 25.5' | 18  | C.B. | USE EXIST. |                        |                      | 975.74    |                        | 975.04            | 971.5±              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       | 14            | 970.9±   | MOVE EXIST. C.B. 16  |                     |
| 11+44    | LT. 8     | 19  | M.H. |            |                        |                      | 972.68    | 972.35                 | 972.40            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          | REMOVE PIPE STA. 12' |                     |
| 13+01    | RT. 21'   | 20  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               | 88       | 34                   | REMOVE              |
| 13+17    | LT. 19'   | 21  | M.H. |            |                        |                      | 967.49    | 965.85                 | 967.21            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | WATER M.H.          |
| 13+11    | RT. 17'   | 22  | M.H. |            |                        |                      | 967.67    | 965.91                 | 967.43            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 13+18    | LT. 8'    | 23  | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE *INCLUDES 3' |
| 13+18    | RT. 25.5' | 24  | C.B. | R.C.-2     | 5.25                   | B                    | 967.46    |                        | 966.89            | 961.5               |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               | 40       | 40                   | REMOVE EXIST. 18" X |
| 13+18    | LT. 25.5' | 25  | C.B. | R.C.-2     | 3.25                   | B                    | 967.46    |                        | 966.89            | 963.5               |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               | 26       | 26                   |                     |
| 13+18    | LT. 8     | 26  | M.H. | A OR F     | 6.63                   | ①                    | 967.46    |                        | 967.38            | 960.75              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               | 30       | 30                   | 959.2               |
| 14+54    | LT. 21'   | 27  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 14+54    | RT. 21'   | 28  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 14+54    | LT. 8     | 29  | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 14+82    | LT. 35'   | 30  | M.H. |            |                        |                      | 964.59    | 963.57                 | 964.77            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 14+94    | LT. 8     | 31  | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 14+96    | RT. 31'   | 32  | S.D. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 15+00    | RT. 44'   | 33  | S.D. | A OR F     | 4.1                    | ①                    |           |                        | 964.0             | 959.9±              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 15+42    | RT. 28'   | 34  | C.B. | L.P.-4     | 4.40                   | E                    | 964.33    |                        | 964.33            | 960.60              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | MAKE SUITABLE CONN  |
| 15+42    | LT. 28    | 35  | C.B. | L.P.-4     | 5.00                   | E                    | 964.33    |                        | 964.33            | 960.00              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 16+98    | RT. 42'   | 36  | M.H. |            |                        |                      | 965.55    | 966.83                 | 965.90            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 16+99    | RT. 24'   | 37  | M.H. |            |                        |                      | 965.56    | 965.43                 | 965.18            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 17+35    | LT. 21'   | 38  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 17+35    | LT. 8     | 39  | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 17+35    | RT. 21'   | 40  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 18+01    | RT. 21'   | 41  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 18+05    | RT. 25.5' | 42  | C.B. | R.C.-2     | 2.97                   | B                    | 967.38    |                        | 966.81            | 964.00              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 18+05    | LT. 25.5' | 43  | C.B. | R.C.-2     | 3.47                   | B                    | 967.38    |                        | 966.81            | 963.5               |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 23+22    | RT. 19'   | 44  | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 25+71    | LT. 34.5' | 45  | C.B. | R.C.-2     | 4.69                   | B                    | 974.00    |                        | 974.43            | 970.2               |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 25+71    | RT. 34.5' | 46  | C.B. | R.C.-2     | 4.23                   | B                    | 974.00    |                        | 974.43            | 969.5               |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 25+81    | LT. 22    | 47  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 25+90    | LT. 19    | 48  | M.H. |            |                        |                      | 973.84    | 973.41                 | 973.73            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 25+88    | RT. 21    | 49  | C.B. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 26+07    | RT. 26    | 50  | M.H. |            |                        |                      | 973.81    | 973.54                 | 973.63            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | WATER M.H.          |
| 26+15    | LT. 43    | 51  | M.H. |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | REMOVE              |
| 26+63    | RT. 28    | 52  | M.H. |            |                        |                      | 973.63    | 973.24                 | 973.39            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 26+74    | RT. 20'   | 53  | M.H. |            |                        |                      | 973.59    | 973.65                 | 973.44            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 26+87    | RT. 37'   | 54  | C.B. | L.P.-4     | 4.74                   | E                    | 973.57    |                        | 973.57            | 969.50              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | ADJUST BY TELL.CO.  |
| 26+87    | LT. 37'   | 55  | C.B. | L.P.-4     | 5.04                   | E                    | 974.57    |                        | 973.57            | 969.20              |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 27+00    | LT. 20'   | 56  | M.H. |            |                        |                      | 973.49    | 973.65                 | 973.41            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |
| 37+51    | RT. 31.4' | 57  | C.B. |            |                        |                      | 973.93    |                        | 973.36            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | O.K. LEAVE          |
| 37+51    | LT. 31.4' | 58  | C.B. |            |                        |                      | 973.93    |                        | 973.36            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | O.K. LEAVE          |
| 37+51    | RT. 12'   | 59  | M.H. |            |                        |                      | 973.93    |                        | 973.83            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | O.K. LEAVE          |
| 39+19    | RT. 28.5' | 60  | C.B. |            |                        |                      | 970.18    |                        | 969.61            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | O.K. LEAVE          |
| 39+19    | LT. 28.5' | 61  | C.B. |            |                        |                      | 970.18    |                        | 969.61            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | O.K. LEAVE          |
| 39+19    | RT. 12'   | 62  | M.H. |            |                        |                      | 970.18    |                        | 970.08            |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      | O.K. LEAVE          |
| 40+67    | RT. 28.5' |     |      |            |                        |                      |           |                        |                   |                     |                         |                                   |                          |                         |     |     |                           |     |     |                            |       |       |               |          |                      |                     |



## CHART

X74'V.C.P. TO SO.



S.A.P. NO. 62 - 625 - 04



| CLEARING & GRUBBING |          |                |       |      |
|---------------------|----------|----------------|-------|------|
| STATION             | LOCATION | TYPE           | CLEAR | GRUB |
| 1+58                | RT. 43'  | 8" TW COT. WD. | 2     | 1    |
| 2+05                | LT. 36'  | 4" C. ELM.     | 1     | 1    |
| 2+65                | RT. 35'  | 4" TW ELM.     | 2     | 1    |
| 2+79                | RT. 33'  | 4" TW ELM.     | 2     | 1    |
| 3+64                | RT. 40'  | 6" ELM.        | 1     | 1    |
| 3+75                | LT. 43'  | 10" APPLE      | 1     | 1    |
| 4+02                | RT. 24'  | 4" MAPLE       | 1     | 1    |
| 4+38                | RT. 43'  | 14" C. ELM.    | 1     | 1    |
| 4+34                | LT. 43'  | 10" APPLE      | 1     | 1    |
| 4+58                | RT. 38'  | 6" TRI ASH     | 3     | 1    |
| 5+00                | RT. 41'  | 8" PINE        | 1     | 1    |
| 5+24                | LT. 46'  | 26" OAK        | 1     | 1    |
| 5+54                | LT. 51'  | 18" OAK        | 1     | 1    |
| 5+68                | RT. 45'  | 6" MAPLE       | 1     | 1    |
| 6+44                | RT. 37'  | 8" PINE        | 1     | 1    |
| 6+41                | LT. 41'  | 8" CEDAR       | 1     | 1    |
| 6+59                | RT. 37'  | 8" PINE        | 1     | 1    |
| 6+98                | LT. 43'  | 6" CEDAR       | 1     | 1    |
| 6+98                | LT. 58'  | 14" C. ELM.    | 1     | 1    |
| 7+29                | LT. 48'  | 12" OAK        | 1     | 1    |
| 7+52                | LT. 49'  | 6" APPLE       | 1     | 1    |
| 7+85                | LT. 41'  | 30" OAK        | 1     | 1    |
| 8+74                | RT. 50'  | 6" MAPLE       | 1     | 1    |
| 8+14                | LT. 32'  | 24" OAK        | 1     | 1    |
| 8+85                | LT. 43'  | 14" COT. WD.   | 1     | 1    |
| 8+92                | LT. 32'  | 18" OAK        | 1     | 1    |
| 9+48                | RT. 37'  | 3" PINE        | 1     | 1    |
| 9+88                | LT. 41'  | 12" OAK        | 1     | 1    |
| 10+35               | LT. 35'  | 8" OAK         | 1     | 1    |
| 10+38               | LT. 36'  | 12" OAK        | 1     | 1    |
| 10+38               | LT. 46'  | 10" OAK        | 1     | 1    |
| 10+39               | LT. 40'  | 4" OAK         | 1     | 1    |
| 10+44               | LT. 42'  | 6" OAK         | 1     | 1    |
| 11+44               | RT. 41'  | 10" L. POP.    | 1     | 1    |
| 14+41               | LT. 33'  | 5" COT. WD.    | 1     | 1    |
| 21+75               | RT. 35'  | 28" ELM.       | 1     | 1    |
| 22+03               | RT. 35'  | 26" ELM.       | 1     | 1    |
| 22+30               | RT. 36'  | STUMP          | 1     | 1    |
| 24+73               | LT. 41'  | 4" OAK         | 1     | 1    |
| 24+75               | LT. 40'  | 24" OAK        | 1     | 1    |
| 25+06               | LT. 34'  | 6" ELM.        | 1     | 1    |
| 25+41               | LT. 40'  | 18" OAK        | 1     | 1    |
| 26+78               | LT. 39'  | 33" COT. WD.   | 1     | 1    |
| 35+14               | LT. 30'  | 6" COT. WD.    | 1     | 1    |
| 35+16               | LT. 31'  | 4" COT. WD.    | 1     | 1    |
| 35+20               | LT. 37'  | 4" COT. WD.    | 1     | 1    |
| 35+24               | LT. 37'  | 4" COT. WD.    | 1     | 1    |
| 35+31               | LT. 36'  | 5" COT. WD.    | 1     | 1    |
| 35+47               | LT. 40'  | 5" COT. WD.    | 1     | 1    |
| 35+60               | LT. 35'  | 6" COT. WD.    | 1     | 1    |
| 35+86               | LT. 49'  | 8" C. ELM.     | 1     | 1    |
| 36+04               | LT. 47'  | 5" C. ELM.     | 1     | 1    |
| 36+34               | LT. 38'  | 6" ASH         | 1     | 1    |
| 39+55               | LT. 29'  | 10" PLUM       | 1     | 1    |
| 39+73               | LT. 27'  | 10" PLUM       | 1     | 1    |
| 39+83               | RT. 36'  | 8" QUAD MAPLE  | 4     | 1    |
| 40+49               | LT. 41'  | 4" MT. ASH     | 1     | 1    |
| 40+63               | RT. 37'  | 4" COT. WD.    | 1     | 1    |

| CLEARING & GRUBBING |          |               |       |      |
|---------------------|----------|---------------|-------|------|
| STATION             | LOCATION | TYPE          | CLEAR | GRUB |
| 45+76               | LT. 47'  | 8" ASH        | 1     | 1    |
| 45+85               | LT. 44'  | 10" B. ELD.   | 1     | 1    |
| 45+88               | LT. 41'  | 12" CELM.     | 1     | 1    |
| 46+18               | RT. 42'  | 16" ASH       | 1     | 1    |
| 46+08               | RT. 35'  | 8" TW MAPLE   | 2     | 1    |
| 46+18               | RT. 38'  | 16" C. ELM.   | 1     | 1    |
| 46+61               | RT. 34'  | 8" PINE       | 1     | 1    |
| 46+67               | RT. 39'  | 10" PINE      | 1     | 1    |
| 46+73               | LT. 42'  | 28" ASH       | 1     | 1    |
| 46+92               | RT. 35'  | 4" PINE       | 1     | 1    |
| 47+00               | LT. 42'  | 24" ASH       | 1     | 1    |
| 47+94               | RT. 42'  | 16" PINE      | 1     | 1    |
| 47+25               | LT. 43'  | 28" ASH       | 1     | 1    |
| 47+78               | LT. 43'  | 22" L. POP.   | 1     | 1    |
| 47+81               | LT. 39'  | 22" L. POP.   | 1     | 1    |
| 47+89               | LT. 38'  | 2-4" ASH      | 2     | 2    |
| 48+05               | RT. 40'  | 8" PINE       | 1     | 1    |
| 48+12               | RT. 41'  | 8" PINE       | 1     | 1    |
| 48+15               | RT. 29'  | 10" TW ASH    | 2     | 1    |
| 48+46               | RT. 38'  | 20" ASH       | 1     | 1    |
| 48+65               | LT. 42'  | 6" PINE       | 1     | 1    |
| 48+65               | LT. 46'  | 6" PINE       | 1     | 1    |
| 48+70               | LT. 70'  | 6" PINE       | 1     | 1    |
| 49+54               | RT. 29'  | 20" C. ELM.   | 1     | 1    |
| 49+29               | RT. 49'  | 18" C. ELM.   | 1     | 1    |
| 9+72                | LT. 50'  | 4" TW C. ELM. | 2     | 1    |
| 9+75                | RT. 57'  | 4" C. ELM.    | 1     | 1    |
| 9+55                | LT. 43'  | 6" ELM.       | 1     | 1    |
| TOTALS              |          |               | 97    | 87   |

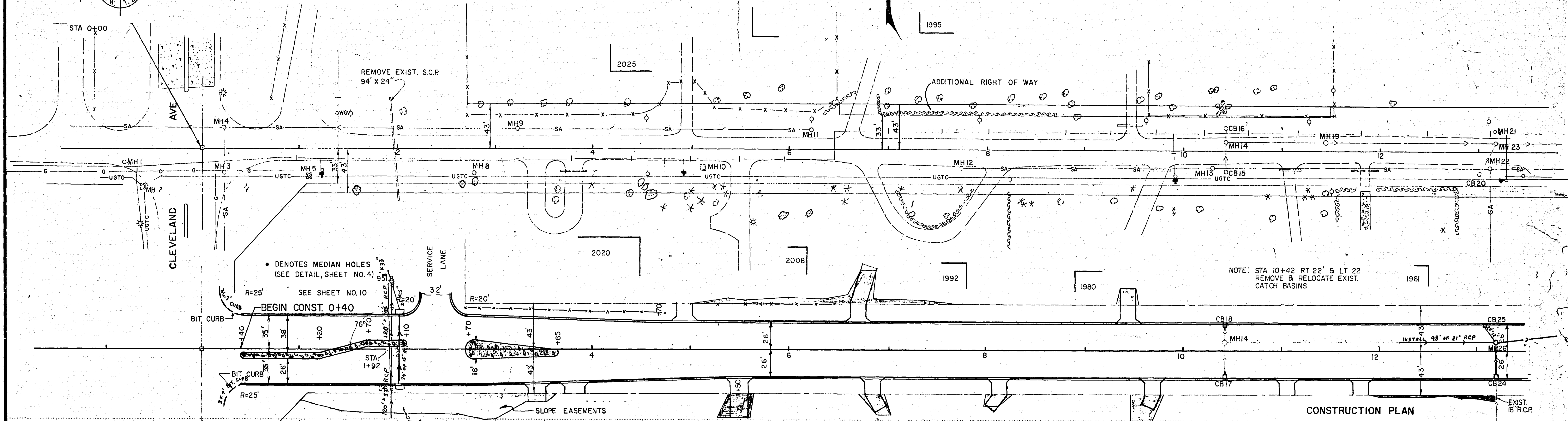
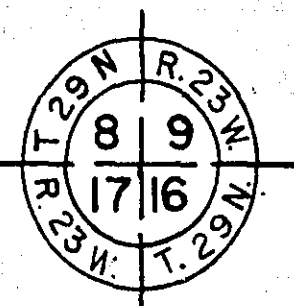
NOTE: CONTRACTOR SHALL VERIFY  
REMOVAL OF ALL TREES  
WITH PROJECT ENGINEER.

| FENCE CHART |          |         |          |             |                       |
|-------------|----------|---------|----------|-------------|-----------------------|
| FROM        |          | TO      |          | TYPE        | REMOVE<br>FENCE L.F.  |
| STATION     | LOCATION | STATION | LOCATION |             | INSTALL<br>FENCE L.F. |
| 2+69        | LT. 43'  | 4+75    | LT. 55'  | CHAIN LINK  | 221'                  |
| 5+16        | LT. 49'  | 6+48    | LT. 60'  | CHAIN LINK  | 155'                  |
| 9+65        | LT. 52'  | 11+52   | LT. 43'  | 4 - WIRE    | 214'                  |
| 39+50       | RT. 35'  | 39+50   | RT. 43'  | WOOD 3-RAIL | 6'                    |
| 46+07       | LT. 50'  | 47+88   | LT. 49'  | CHAIN LINK  | 191'                  |
| 49+55       | RT. 29'  | 50+61   | RT. 29'  | SNOW FENCE  | 91'                   |
|             |          |         |          |             | 878'                  |
|             |          |         |          |             | 527'                  |

| F. & I. HANDHOLES |         |          |                       |
|-------------------|---------|----------|-----------------------|
| NO.               | STATION | LOCATION | 3" R.M.C.<br>LIN. FT. |
| 1                 | 25+83   | LT. 38'  | 32'                   |
| 2                 | 25+83   | LT. 6'   | 44'                   |
| 3                 | 25+83   | RT. 38'  |                       |
| 4                 | 26+90   | LT. 38'  | 44'                   |
| 5                 | 26+90   | RT. 6'   | 32'                   |
| 6                 | 26+90   | RT. 38'  |                       |
| 7                 | 35+30   | LT. 38'  | 32'                   |
| 8                 | 35+30   | LT. 6'   | 44'                   |
| 9                 | 35+30   | RT. 38'  |                       |
| 10                | 36+14   | LT. 38'  | 44'                   |
| 11                | 36+14   | RT. 6'   | 32'                   |
| 12                | 36+14   | RT. 38'  |                       |

| HYDRANT CHART |          |         |          |
|---------------|----------|---------|----------|
| REMOVE        |          | INSTALL |          |
| STATION       | LOCATION | STATION | LOCATION |
| 1+23          | RT. 25'  | 1+23    | RT. 42'  |
| 4+93          | RT. 26'  | 4+93    | RT. 42'  |
| 9+92          | RT. 27'  | 9+92    | RT. 42'  |
| 13+23         | RT. 28'  | 13+23   | RT. 42'  |
| 16+88         | RT. 28'  | 16+88   | RT. 42'  |
| 19+79         | RT. 26'  | 19+79   | RT. 42'  |
| 23+48         | RT. 27'  | 23+48   | RT. 42'  |
| 29+96         | RT. 31'  | 29+96   | RT. 42'  |
| 33+90         | RT. 32'  | 33+90   | RT. 42'  |
| 36+99         | LT. 27'  | 36+99   | LT. 42'  |



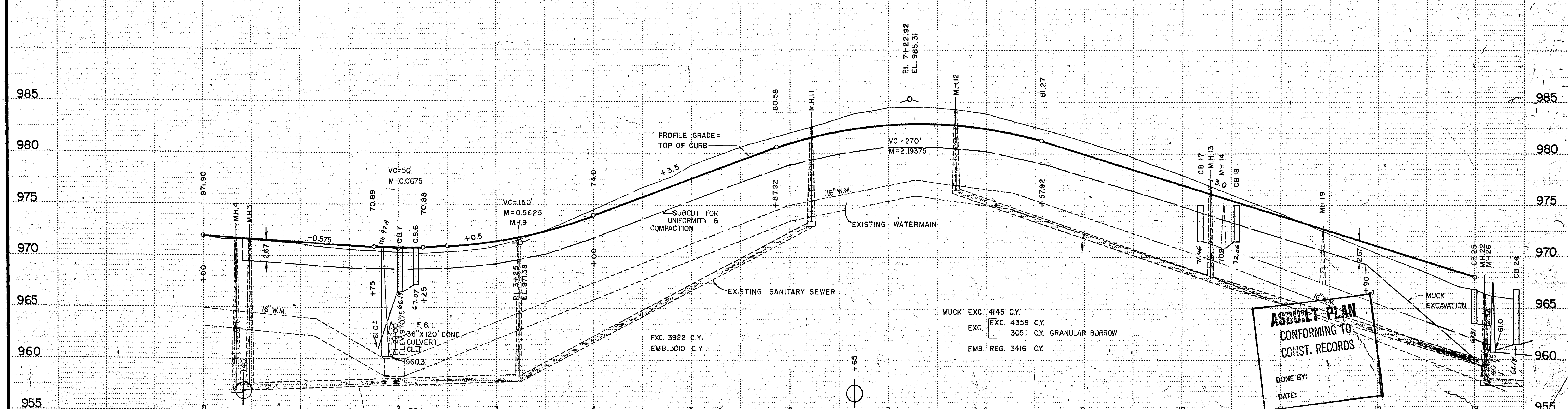


B.M. ELEV. 973.41  
TOP OF HYD. S.E. COR.  
CLEVELAND AV. & CO. RD. B

B.M. ELEV. 981.59  
TOP OF HYD. RT.  
AT STA. 9+90

B.M. ELEV. 968.54  
TOP OF HYD.  
STA. 13+20 RT. 27

STA. 1+92 F.B.I. 33' X 120' R.C.P., CL. IV  
STA. 1+92 F.B.I. 36' X 120' CONC. CULVERT, CL. II  
SEE SHEET NO. 10 FOR GRADES  
58 CY. CLASS U EXCAVATION



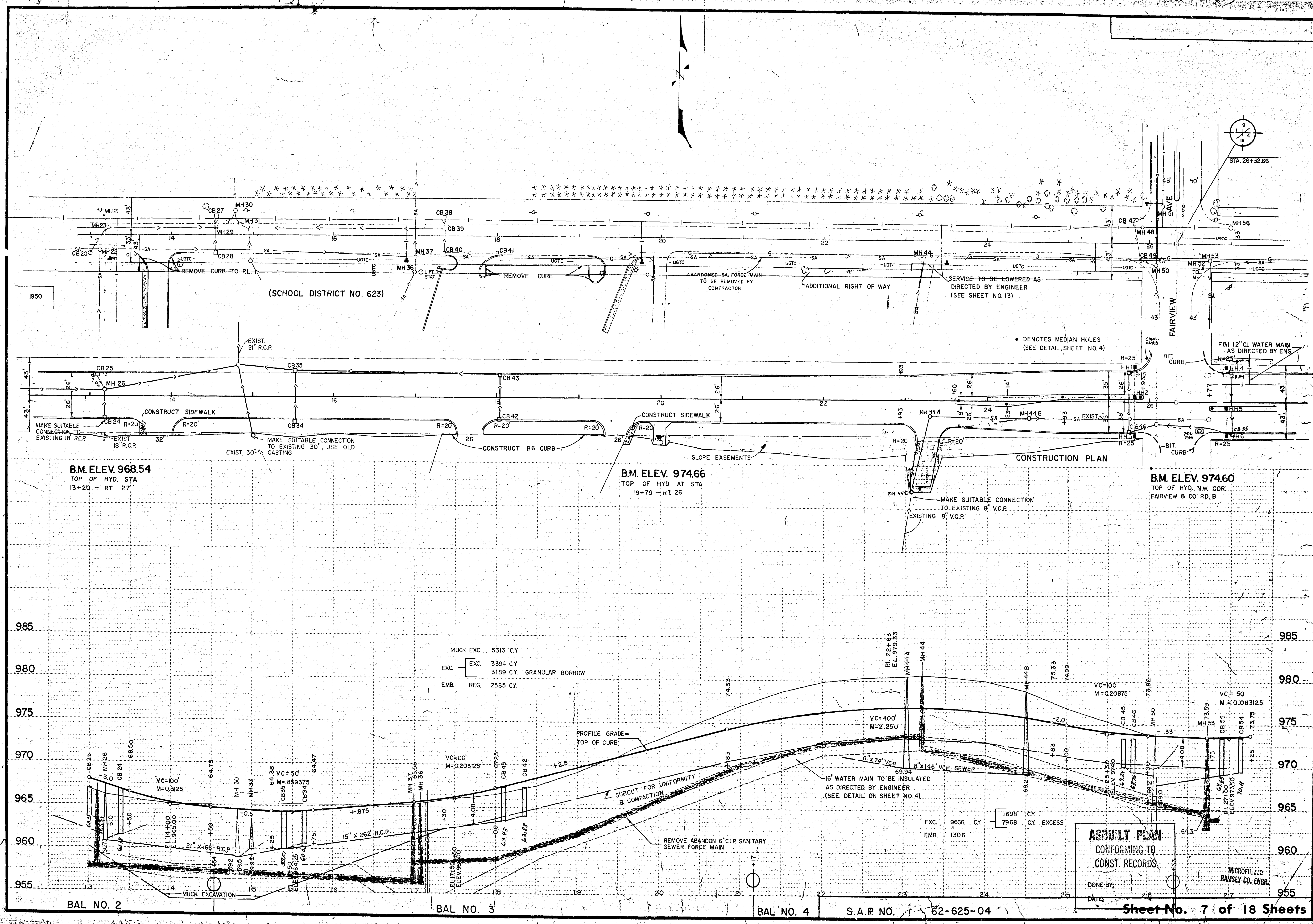
ASBUILT PLAN  
CONFORMING TO  
CONST. RECORDS  
DONE BY:  
DATE:

BAL. NO. 2 S.A.P. NO. 62-625-04

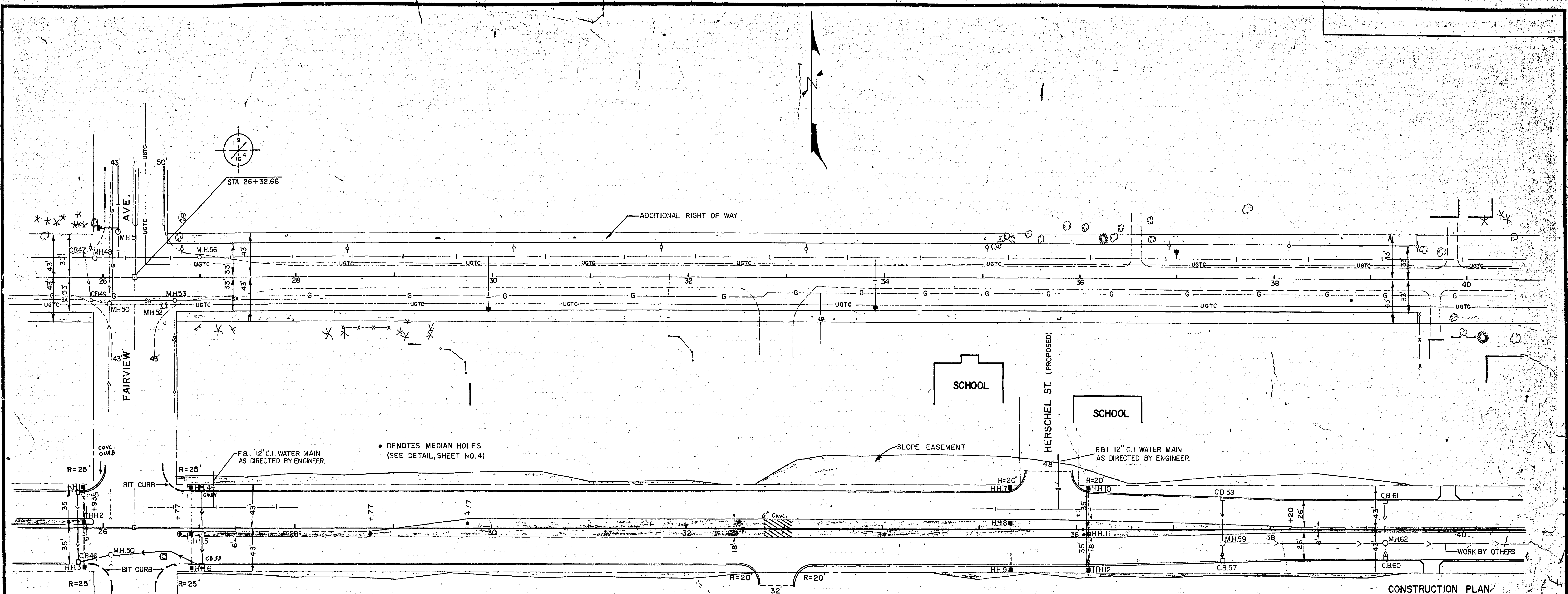
Microfilmed Sheet No. 6 of 18 Sheets

DESIGNED BY: ST. PAUL, MINNEAPOLIS, MINNESOTA









B.M. ELEV. 974.60  
TOP OF HYD. N.W. COR.  
FAIRVIEW & CO. RD. B

B.M. ELEV. 977.96  
TOP OF HYD. STA.  
36 + 99 - LT. 27



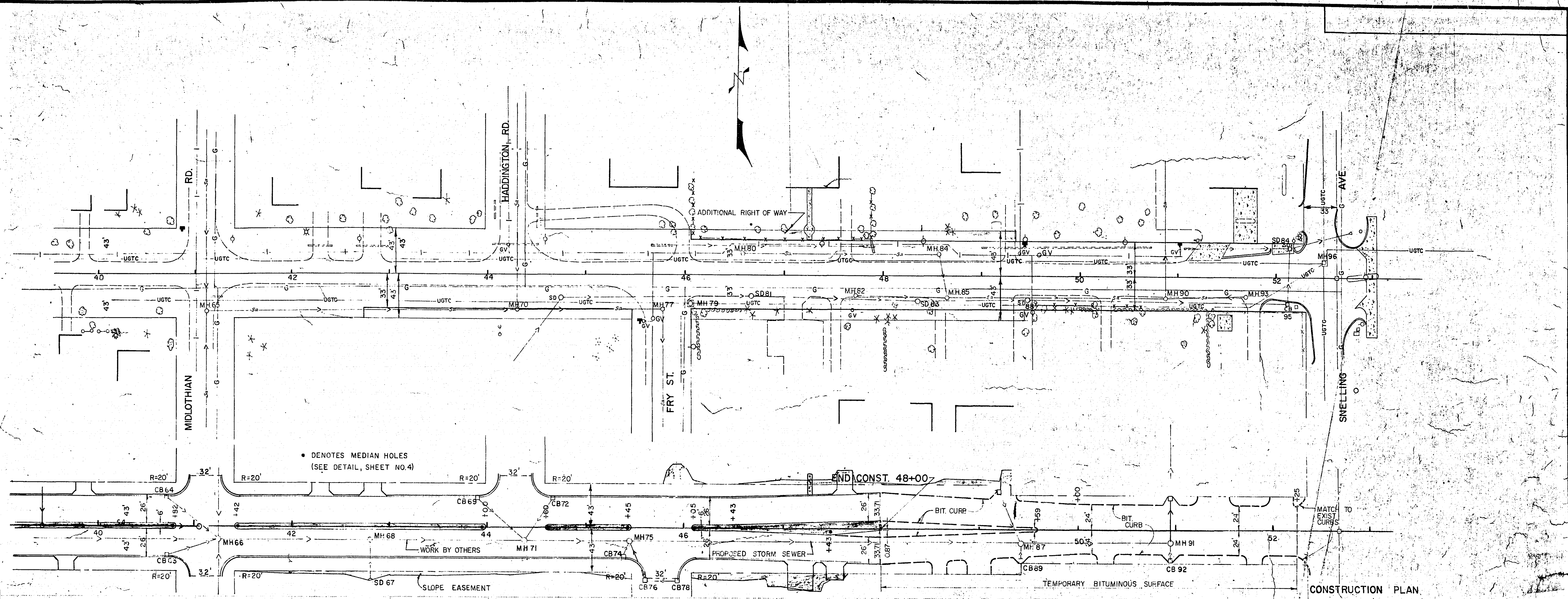
**ASBUILT PLAN**  
CONFORMING TO  
CONST. RECORDS

DONE BY:  
DATE:

REVISED 5-24-71

MICROFILMED  
RAMSEY CO. ENGR.

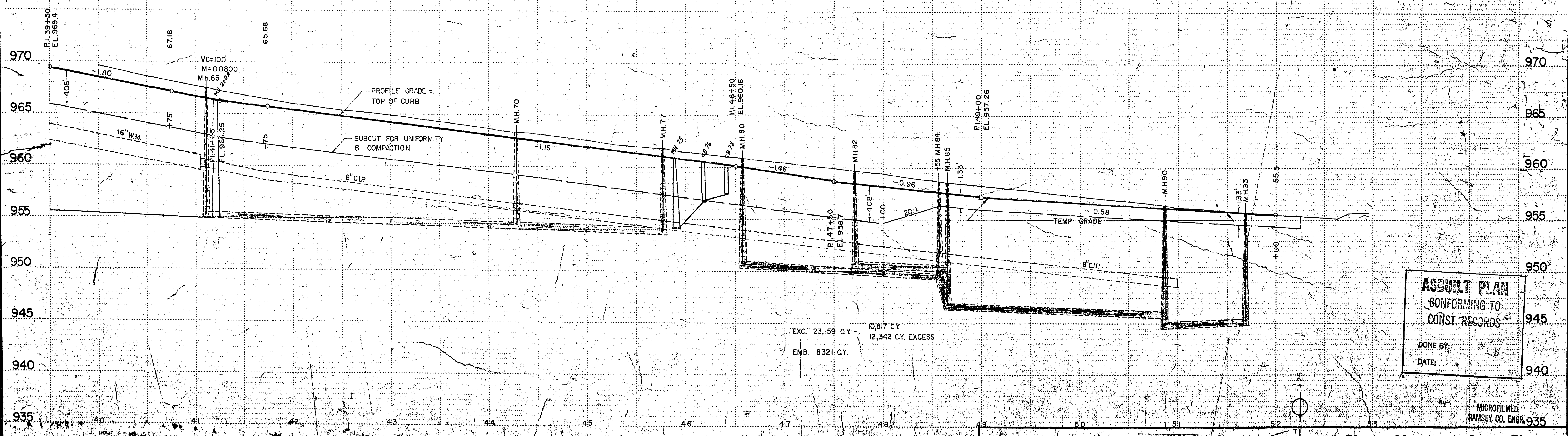




B.M. ELEV. 968.60  
TOP HYD. N.W. COR.  
MIDLOTHIAN & CO RD. B

B.M. ELEV. 964.61  
TOP HYD. S.W. COR.  
FRY & CO RD. B

B.M. ELEV. 960.81  
TOP OF HYD. STA.  
49+44 LT. 31'



**ASBUILT PLAN**  
CONFORMING TO  
CONST. RECORDS

DONE BY: \_\_\_\_\_

DATE: \_\_\_\_\_

MICROFILMED  
RAMSEY CO. ENGR 935