# MINNESOTA DEPARTMENT OF TRANSPORTATION

## THE COUNTY OF OLMSTED

## CONSTRUCTION PLAN FOR GRADING, PORTLAND CEMENT, BITUMINOUS PAVING, & STORM SEWER

**LOCATED ON** C.S.A.H. 22 **BETWEEN** C.S.A.H. 25 **AND** TH 14 AT WEST EDGE OF ROCHESTER **(GEOGRAPHIC DESCRIPTION)**

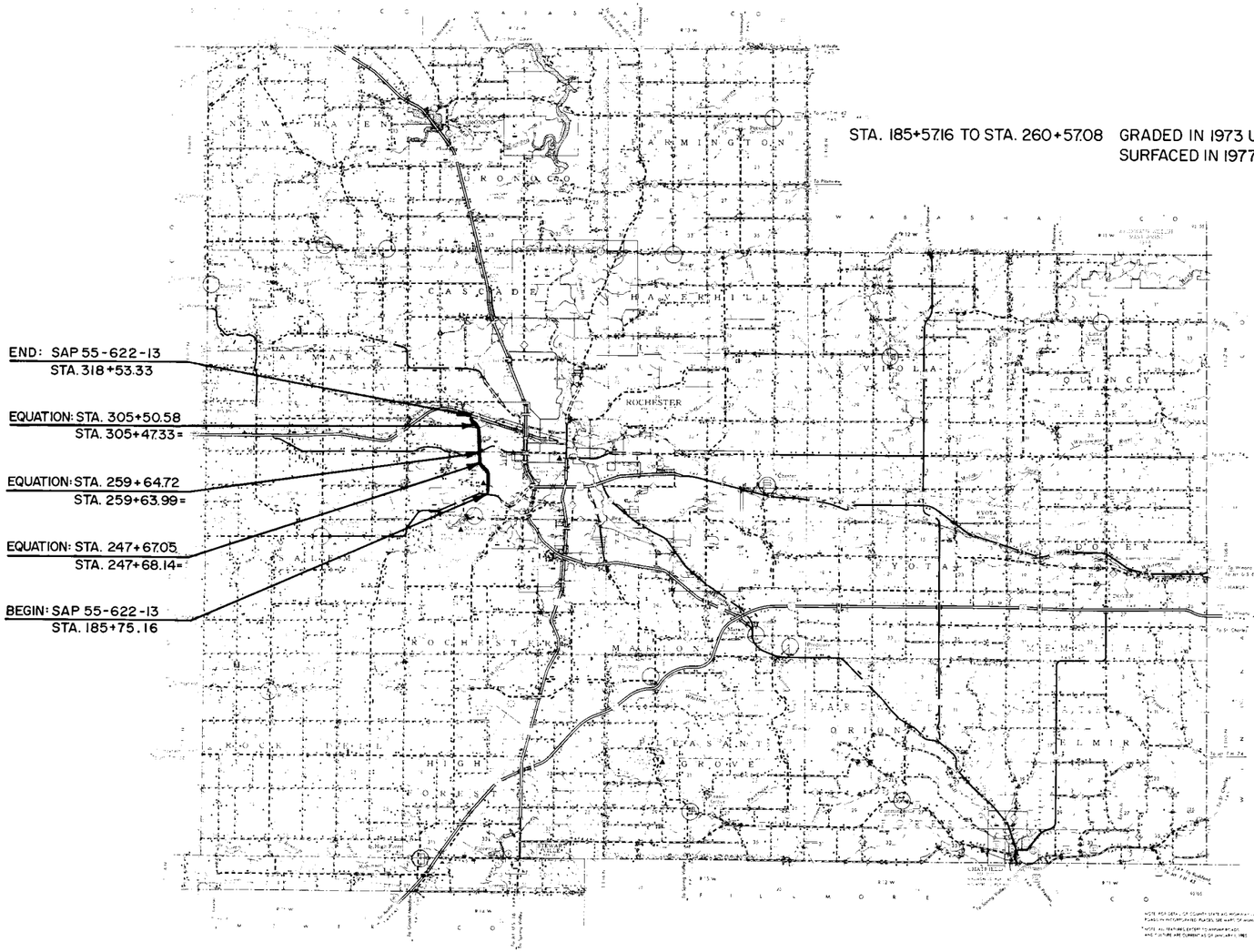
**FROM** 1424.85' SOUTH OF NORTH 1/4 COR. SEC. 9 T106N R14W **TO** 330.36'E. & 373.09' N. OF N.W. COR. SEC. 32 T107N-R14W **(LEGAL DESCRIPTION)**

**STATE PROJ. NO.** .....

| | | | |
|---|---|---|---|
| GROSS LENGTH | | FEET | MILES |
| BRIDGES-LENGTH | | FEET | MILES |
| EXCEPTIONS-LENGTH | | FEET | MILES |
| NET LENGTH | | FEET | MILES |

~~**STATE PROJ. NO.**~~ SAP 55-622-13

| | | | |
|---|---|---|---|
| GROSS LENGTH | 13275.28 | FEET | 2.514 MILES |
| BRIDGES-LENGTH | | FEET | MILES |
| EXCEPTIONS-LENGTH | | FEET | MILES |
| NET LENGTH | 13275.28 | FEET | 2.514 MILES |




STA. 185+57.16 TO STA. 260+57.08 GRADED IN 1973 UNDER C122-73-2
SURFACED IN 1977 UNDER C122-77-10

END: SAP 55-622-13
STA. 318+53.33

EQUATION: STA. 305+50.58
STA. 305+47.33 =

EQUATION: STA. 259+64.72
STA. 259+63.99 =

EQUATION: STA. 247+67.05
STA. 247+68.14 =

BEGIN: SAP 55-622-13
STA. 185+75.16

### 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
VACATED PLAT (E. PROPERTY)
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK (NAME)
DRY RUN (SIZE)
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 C CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE CONCRETE OR METAL)
WOODEN HUB
GRAVEL PIT (G)
SAND PIT (S)
BORROW PIT (B)
ROCK QUARRY (Q)
SLOPE EASEMENT (SE)

### 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
PEDESTAL-TELEPHONE CABLE TERMINAL
GAS MAIN (G)
WATER MAIN (W)
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRICAL CABLE IN CONDUIT
TELEPHONE MANHOLE (T)
ELECTRIC MANHOLE (P)
BURIED TELEPHONE CABLE (BTC)
BURIED ELECTRICAL CABLE (BEC)
AERIAL TELEPHONE CABLE (OT)
SEWER (SANITARY OR STORM)
SEWER MANHOLE

### SCALES

| | | |
|---|---|---|
| PLAN | 0' | 50' |
| PROFILE | 0' | 50' |
| INDEX MAP | 0' | 10560' |
| CROSS SECTIONS | 0' | 10' |

ALBINSON MPLS 55405

72485

**MINN. PROJ. NO.** .....

### GOVERNING SPECIFICATIONS

THE 1988 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION SHALL GOVERN.

### INDEX


| | | |
|---|---|---|
| SHEET NO. | 1 | TITLE SHEET. |
| SHEET NO. | 2,3 | ESTIMATE OF QUANTITIES. |
| SHEET NO. | 4,6 | TYPICAL SECTIONS. |
| SHEET NO. | 7 | STORM SEWER QUANTITY TABULATIONS. |
| SHEET NO. | 8-18 | SURFACING PLAN AND PROFILE. |
| SHEET NO. | 19-24 | GRADING AND STORM SEWER PLAN & PROFILE. |
| SHEET NO. | 25 | CSAH 34 GRADING, CULVERT EXTENSIONS AND SURFACING. |
| SHEET NO. | 26-46 | CROSS SECTIONS. |
| SHEET NO. | 46A & 46B | 3rd STREET NW. PLAN & PROFILE SHEETS PROJECT NO. 5720-90 |


APPROVED 4-12-1990, Roger E. Plumb
DIRECTOR OF PUBLIC SERVICES,
CITY OF ROCHESTER

• TRAFFIC PROJECTION YEAR 2000. ADT 9500 (FROM PROJECT DEVELOPMENT REPORT)

### DESIGN DESIGNATION

FUNCTIONAL CLASSIFICATION: LOW DENSITY ARTERIAL

| | | | |
|---|---|---|---|
| **ADT (Current Year)** | = | * | **Design Speed** 45 **MPH** |
| **ADT (Future Year)** | = | * | **Based on** STOPPING **Sight Distance** |
| **DHV (Design Hr. Vol.)** | = | | **Height of eye** 3.5 **Height of object** 0.5 |
| **D (Directional Distr.)** | = | % | **Design Speed not achieved at:** |
| **T (Heavy Commercial)** | = | EST 6% | STA. TO STA. MPH |
| **SOIL FACTOR** | | 130 | STA. TO STA. MPH |

9 TON DESIGN SHOULDER WIDTH 8'-12' STA. TO STA. MPH

NO OF TRAFFIC LANES (STA 185+57-STA 260+00 2-LANE) (STA 260+00-318+53 4-LANE)

NO OF PARKING LANES NONE

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.

DATE 4/10/90 REG. NO. 10397 ENGR. Michael J. Sheehan

COUNTY Olmsted

Recommended for Approval [signature] 4-25 1990
DISTRICT STATE AID ENGINEER

Recommended for Approval Julie Stallman 5/24 1990
STATE AID PLANS AND SPECS ENGINEER

Approved 5-24 1996 Edward O. Ottesen
STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

**STATE AID PROJ. NO.** 55-622-13
~~**STATE PROJ. NO.**~~ 55 BULI

**SHEET NO.** 1 **OF** 46 **SHEETS**

# ESTIMATED QUANTITIES

| | SPECIFICATION NO. | ITEM | UNIT | PARTICIPATING RURAL | NON PARTICIPATING RURAL | PARTICIPATING MUNICIPAL | NON PARTICIPATING MUNICIPAL | STORM SEWER RURAL | STORM SEWER MUNICIPAL | TOTAL STORM SEWER | TOTAL ESTIMATED QUANTITIES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2101.501 | CLEARING | ACRE | 4.3 | | 10.6 | | | | | 14.9 |
| | 2101.502 | CLEARING | TREE | 10 | | 19 | | | | | 29 |
| | 2101.506 | GRUBBING | ACRE | 4.3 | | 10.6 | | | | | 14.9 |
| | 2101.507 | GRUBBING | TREE | 10 | | 19 | | | | | 29 |
| | 2104.501 | REMOVE PIPE CULVERT | LIN.FT. | 103 | | 221 | | | | | 324 |
| | 2104.501 | REMOVE SEWER PIPE (STORM) | LIN.FT. | | | | | 133 | 22 | 155 | 155 |
| | 2104.501 | REMOVE CURB AND GUTTER | LIN.FT. | | | 210 | | | | | 210 |
| | 2104.509 | REMOVE MANHOLES | EACH | | | | | 1 | | 1 | 1 |
| | 2104.521 | SALVAGE PIPE CULVERT | LIN.FT. | | | 156 | | | | | 156 |
| (1) | 2104.521 | SALVAGE GUARDRAIL-PLATE BEAM | LIN.FT. | 437 | | | | | | | 437 |
| | 2104.523 | SALVAGE ANCHORAGE ASSEMBLY PLATE BEAM | EACH | 4 | | | | | | | 4 |
| | 2104.523 | SALVAGE METAL SAFETY APRON | EACH | | | 2 | | | | | 2 |
| (23) | 2104.523 | SALVAGE CONCRETE APRONS | EACH | 9 | | 4 | | | 2 | 2 | 15 |
| | 2105.511 | COMMON CHANNEL EXCAVATION (P) | CU.YD. | 1829 | | | | | | | 1829 |
| (2) | 2105.515 | UNCLASSIFIED EXCAVATION (P) | CU.YD. | 93024 | | 33099 | 94 | | | | 126217 |
| | 2105.535 | SALVAGED TOPSOIL (EV) (P) | CU.YD. | 1652 | | 2662 | | | | | 4314 |
| | 2104.513 | SAW BITUMINOUS PAVEMENT | LIN.FT. | 210 | | 124 | 600 | | | | 934 |
| (19) | 2130.501 | WATER | M.GALLON | 59 | | 72 | | | | | 131 |
| (3) | 2211.501 | AGGREGATE BASE, CLASS 5 | TON | 11992 | 233 | 14648 | 595 | | | | 27468 |
| | 2221.501 | AGGREGATE SHOULDER, CLASS 5 | TON | 1177 | | 616 | | | | | 1793 |
| | 2301.502 | CONCRETE PAVEMENT STANDARD WIDTH (P) | SQ.YD. | 12300 | | 26511 | | | | | 38811 |
| | 2301.503 | CONCRETE PAVEMENT IRREGULAR WIDTH (P) | SQ.YD. | 6008 | | 6880 | | | | | 12888 |
| | 2301.511 | STRUCTURAL CONCRETE (P) | CU.YD. | 4581 | | 8361 | | | | | 12942 |
| | 2301.536 | DOWEL BAR ASSEMBLIES | LIN.FT. | 10607 | | 19342 | | | | | 29949 |
| | 2301.541 | INTEGRANT CURB, DESIGN B6 | LIN.FT. | 5942 | | 14296 | | | | | 20238 |
| (4) | 2331.504 | BITUMINOUS MATERIAL FOR MIXTURE | TON | 89.6 | 9.4 | 61 | 24 | | | | 184 |
| (22) | 2331.508 | WEARING COURSE MIXTURE (MOD.) | TON | 361 | 162 | 244 | 416 | | | | 1183 |
| (5) | 2331.514 | BASE COURSE MIXTURE (MOD.) | TON | 1027 | | 803 | | | | | 1830 |
| (6) | 2331.516 | SHOULDER MIXTURE (MOD.) | TON | 234 | | 75 | | | | | 309 |
| (7) | 2341.504 | BITUMINOUS MATERIAL FOR MIXTURE | TON | 499 | | 31 | | | | | 530 |
| | 2341.508 | WEARING COURSE MIXTURE (MOD.) | TON | 3968 | | 525 | | | | | 4493 |
| | 2341.510 | BINDER COURSE MIXTURE (MOD.) | TON | 4887 | | | | | | | 4887 |
| | 2357.502 | BITUMINOUS MATERIAL FOR TACK COAT | GALLON | 3696 | | 257 | | | | | 3953 |
| | 2501.511 | 15" C.S. PIPE CULVERT | LIN.FT. | 50 | | | | | | | 50 |
| | 2501.511 | 18" C.S. PIPE CULVERT | LIN.FT. | 32 | | | | | | | 32 |
| | 2501.511 | 18" R.C. PIPE CULVERT CL.3 | LIN.FT. | | | 88 | | | | | 88 |
| | 2501.511 | 24" R.C. PIPE CULVERT CL.2 | LIN.FT. | 8 | | | | | | | 8 |
| | 2501.515 | 12" G.S. PIPE APRON | EACH | | | | | 1 | 3 | 4 | 4 |
| | 2501.515 | 15" G.S. PIPE APRON | EACH | | | | | | 2 | 2 | 2 |
| | 2501.515 | 18" G.S. PIPE APRON | EACH | 2 | | | | | | | 2 |
| | 2501.515 | 12" R.C. PIPE APRON (OUTLET) | EACH | | | | | 1 | 3 | 4 | 4 |
| | 2501.515 | 18" R.C. PIPE APRON (INLET) | EACH | | | | | | 1 | 1 | 1 |
| | 2501.515 | 21" R.C. PIPE APRON (OUTLET) | EACH | | | | | | 1 | 1 | 1 |
| | 2501.521 | 73" SPAN R.C. PIPE-ARCH CULVERT CL. 2A | LIN. FT. | | | 226 | | | | | 226 |
| | 2501.521 | 169" SPAN R.C. PIPE-ARCH CULVERT CL. 2A | LIN. FT. | 545 | | | | | | | 545 |
| | 2501.571 | INSTALL R.C. PIPE-ARCH CULVERT | LIN. FT. | | | 156 | | | | | 156 |
| | 2501.573 | INSTALL METAL SAFETY APRONS | EACH | 2 | | | | | | | 2 |
| | 2501.573 | INSTALL CONCRETE APRON | EACH | 9 | | 4 | | | 2 | 2 | 15 |
| (8) | 2503.511 | 12" C.S. PIPE SEWER | LIN.FT. | | | | | | 700 | 700 | 700 |
| | 2503.511 | 15" C.S. PIPE SEWER | LIN.FT. | | | | | | 379 | 379 | 379 |
| | 2503.511 | 12" R.C. PIPE SEWER CL. 4 | LIN.FT. | | | | 67 | 726 | 921 | 1714 | 1714 |
| | 2503.511 | 15" R.C. PIPE SEWER CL. 3 | LIN.FT. | | | | | 162 | 539 | 701 | 701 |
| | 2503.511 | 18" R.C. PIPE SEWER CL. 3 | LIN.FT. | | | | | 616 | 796 | 1412 | 1412 |
| | 2503.511 | 21" R.C. PIPE SEWER CL. 3 | LIN.FT. | | | | | | 545 | 545 | 545 |
| | 2503.511 | 24" R.C. PIPE SEWER CL. 3 | LIN.FT. | | | | | | 439 | 439 | 439 |
| | 2503.511 | 36" R.C. PIPE SEWER CL. 2 | LIN.FT. | | | | | | 238 | 238 | 238 |
| | 2503.511 | 42" R.C. PIPE SEWER CL. 3 | LIN.FT. | | | | 256 | | 500 | 756 | 756 |
| | 2503.511 | 60" R.C. PIPE SEWER CL. 3 | LIN.FT. | | | | | | 230 | 230 | 230 |
| | 2503.521 | 22" SPAN R.C. PIPE-ARCH SEWER CL. 2A | LIN.FT. | | | | | | 46 | 46 | 46 |
| | 2503.521 | 28" SPAN R.C. PIPE-ARCH SEWER CL. 2A | LIN.FT. | | | | | | 34 | 34 | 34 |
| | 2503.521 | 36" SPAN R.C. PIPE-ARCH SEWER CL. 2A | LIN.FT. | | | | | | 904 | 904 | 904 |
| | 0504.602 | ADJUST GATE VALVE | EACH | | 1 | | | | | | 1 |
| | 0504.605 | 4" POLYSTYRENE INSULATION | SQ.YD. | | 29 | | 53 | | | | 82 |
| | 2506.508 | CONST. MANHOLE DESIGN C OR G | EACH | | | | | 4 | 16 | 20 | 20 |
| | 2506.509 | CONST. CATCH BASIN DESIGN C ORG | EACH | | | | 2 | 17 | 59 | 78 | 78 |
| (9) | 0506.602 | CONNECT INTO EXISTING STORM SEWER | EACH | | | | | 2 | 6 | 8 | 8 |
| | 2511.507 | GROUTED RIP RAP | CU.YD. | 729 | | 133 | | | | | 862 |
| | 2531.501 | CONCRETE CURB AND GUTTER DESIGN B624 | LIN.FT. | 435 | | 770 | 600 | | | | 1805 |
| | 2531.503 | CONCRETE MEDIAN | SQ.YD. | 55 | | | | | | | 55 |
| | 2545.521 | 4" RIGID STEEL CONDUIT | LIN.FT. | 365 | | 545 | | | | | 910 |
| | 0545.602 | P.V.C. HANDHOLE WITH CONCRETE COVER | EACH | 3 | | 5 | | | | | 8 |
| (10) | 2554.511 | INSTALL TRAFFIC BARRIER DESIGN B8307 | LIN.FT. | 235 | | 36 | | | | | 271 |
| | 2506.508 | CONSTRUCT MH. DESIGN 90-4020 | EACH | | | | | | 1 | 1 | 1 |
| | 2506.508 | CONSTRUCT MH. DESIGN 60-4020 | EACH | | | | | | 1 | 1 | 1 |

(P) PLAN QUANTITY.

(1) INCLUDES TWISTED ENDS, TANGENT AND RADIUS PLATE BEAM.
(2) UNCLASSIFIED EXCAVATION INCLUDES SUBGRADE TREATMENT AS SHOWN IN TYPICAL SECTIONS AND CROSS SECTIONS
(3) INCLUDES 22188 TONS FOR MAINLINE 2365 TONS FOR 17 TURN LANES, 572 TONS FOR RAMP ON TO T.H.14, 1515 TONS FOR 6 STREET APPROACHES AND 828 FOR BITUMINOUS PATH.
(4) PERCENT OF BITUMINOUS BY WEIGHT- BITUMINOUS BASE 5.3%, WEARING COURSE 5.8%, AND SHOULDER MIXTURE 5.8%.
(5) INCLUDES 109 TONS REPAIR WORK AT INTERSECTION C.S.A.H. 25 & C.S.A.H. 22, 600 TONS FOR 4 TURN LANES, 354 TONS FOR RAMP ON TO T.H.14, 50 TONS FOR WIDENING MEDIAN OPENING AT T.H.14 AND 717 TON ON C.S.A.H. 34.
(6) FROM RT. STA. 248+00 TO STA. 255+40, FROM LT. STA. 248+00 TO STA. 259+40.
(7) PERCENT OF BITUMINOUS BY WEIGHT - WEARING COURSE 5.8% AND BINDER COURSE 5.5%.
(8) INCLUDES 1-90° BEND.
(9) LOCATED AT C.B. NO. 2, C.B. NO. 3, C.B. NO. 34, C.B. NO. 35, C.B. NO. 36 AND C.B. NO. 87, C.B. NO. 29, AND C.B. NO 33.
(10) QUANTITY INCLUDES 2 TWISTED ENDS AND THE INSTALLATION OF 2 ANCHORAGE ASSEMBLIES. CONTRACTOR TO FURNISH AND INSTALL 9 POST SEATS, AND THIS WORK IS TO BE INCIDENTAL TO INSTALL TRAFFIC BARRIER.
(19) WATER TO BE USED AS DUST PREVENTATIVE AS DIRECTED BY THE ENGINEER.
(22) INCLUDES 578 TONS FOR BITUMINOUS PATH, 80 TON FOR DRIVE RT. STA. 298+00 TO STA. 302+00 AND 525 TONS FOR TEMPORARY SURFACE ON 7th STREET AND 9th STREET N.W. FOR USE OVER WINTER MONTHS.
(23) INCLUDES 8-169" SPAN R.C.P.-ARCH APRONS 20' LONG, 1-24" R.C. PIPE APRON, 1-42" R.C. PIPE APRON, 1-60" R.C. PIPE APRON, AND 4-73" SPAN R.C.P.-ARCH APRONS.

## STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

| PLATE NO. | DESCRIPTION |
|---|---|
| 0005 A | SPECIFICATION REFERENCE TO STANDARD PLATES |
| 1015 I | CONCRETE PAVEMENTS |
| 1016 H | CONCRETE PAVEMENTS NON-REINFORCED (WITH C5D-1 JOINTS) |
| 1070 J | REINFORCED PANELS OVER CULVERTS (WITH C5D-1 JOINTS) |
| 1100 P | EXPANSION JOINTS (WITH SILICONE SEALER) |
| 1103 I | TYPICAL DOWEL BAR ASSEMBLY |
| 1120 S | CONTRACTION JOINTS (WITH SILICONE SEALER) |
| 1140 S | LONGITUDINAL JOINTS (WITH SILICONE SEALER) |
| 1141 C | PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION |
| 1150 N | CONSTRUCTION OF HEADER JOINTS |
| 3000 K | REINFORCED CONCRETE PIPE |
| 3007 B | SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES |
| 3014 J | REINFORCED CONCRETE PIPE ARCH DETAIL |
| 3040 F | CORRUGATED METAL PIPE CULVERT |
| 3100 G | CONCRETE APRON FOR REINFORCED CONCRETE PIPE |
| 3110 G | CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH |
| 2123 I | METAL APRON FOR C.S. PIPE |
| 2124 B | METAL APRON CONNECTION |
| 3145 E | CONCRETE PIPE TIES (EYE BOLT TIE) |
| 3221 C | CORRUGATED STEEL PIPE COUPLING BAND |
| 4000 I | MANHOLE OR CATCH BASIN |
| 4002 E | MANHOLE OR CATCH BASIN |
| 4006 K | MANHOLE OR CATCH BASIN |
| 4010 G | CONC. SHORT CONE & ADJUSTING RING |
| 4011 D | PRECAST CONCRETE BASE |
| 4020 E | MANHOLE OR CATCH BASIN |
| 4101 C | RING CASTING FOR MANHOLE OR CATCH BASIN |
| 4110 D | COVER CASTING FOR MANHOLES |
| 4129 F | CATCH BASIN FRAME CASTING |
| 4140 D | SPECIAL GRATE CASTING FOR CATCH BASINS |
| 4142 D | BEEHIVE GRATE CASTING FOR CATCH BASINS |
| 4154 B | CATCH BASIN GRATE CASTING |
| 4160 D | CURB BOX CASTING FOR CATCH BASIN |
| 4180 H | MANHOLE OR CATCH BASIN STEP |
| 7000 E | INTEGRANT CURBS |
| 7035 J | CONCRETE WALK & CURB RETURNS AT ENTRANES |
| 7036 C | PEDESTRIAN CURB RAMP |
| 7100 F | CONCRETE CURB AND GUTTERS |
| 7110 E | CURB AND GUTTER CONSTRUCTION AT CATCH BASIN |
| 7111 G | INSTALLATION & REINFORCEMENT OF CATCH BASIN CASTINGS |
| 7112 A | INSTALLATION & REINFORCEMENT OF CATCH BASINS & MANHOLES |
| 8000 I | STANDARD BARRICADES |
| 8003 B | BREAKAWAY SIGN SUPPORT |
| 8307 N | STEEL PLATE BEAM GUARDRAIL |
| 8316 C | POST SEAT FOR ANCHORAGE ON FOOTING FOR BOX CULVERTS |
| 8319 C | TWISTED END TREATMENT |
| 9000 B | APPROACHES AND ENTRANCES |
| 4102 C | MANHOLE OR CATCH BASIN RING CASTING |
| 4127 E | CATCH BASIN FRAME CASTING TELESCOPING TYPE |
| 4128 B | CATCH BASIN CASTING ASSEMBLY TELESCOPING TYPE |
| 4149 C | GRATE CASTING FOR CATCH BASIN |
| 4146 F | CURB BOX CASTING FOR CATCH BASIN |

AS BUILT PLANS

# ESTIMATED QUANTITIES

| | SPECIFICATION NO. | ITEM | UNIT | PARTICIPATING RURAL | NON PARTICIPATING RURAL | PARTICIPATING MUNICIPAL | NON PARTICIPATING MUNICIPAL | STORM SEWER RURAL | STORM SEWER MUNICIPAL | TOTAL STORM SEWER | TOTAL ESTIMATED QUANTITIES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (11) | 2575.501 | ROADSIDE SEEDING (P) | ACRE | 4.1 | | 7.1 | 4.8 | | | | 16.0 |
| (14) | 2575.502 | SEED MIXTURE 500 | POUND | 205 | | 290 | 240 | | | | 735 |
| (14) | 2575.502 | SEED MIXTURE 1100 | POUND | 328 | | 464 | 384 | | | | 1176 |
| (12) | 2575.502 | SEED CROWN VETCH | POUND | | | 33 | | | | | 33 |
| (13) | 2575.505 | SODDING TYPE EROSION | SQ.YD. | 14300 | | 30774 | | | | | 45074 |
| (15) | 2575.511 | MULCH MATERIAL TYPE 1 | TON | 8.2 | | 11.6 | 9.6 | | | | 29.4 |
| (16) | 2575.519 | DISC ANCHOR (P) | ACRE | 4.1 | | 5.8 | 4.8 | | | | 14.7 |
| (17) | 2575.532 | COMMERCIAL FERTILIZER ANALYSIS 12-12-12 | POUND | 820 | | 1420 | 960 | | | | 3200 |
| (18) | 2123.508 | 15 CU.YD. SCRAPER | HOUR | | | | 24 | | | | 24 |
| (18) | 2123.509 | DOZER | HOUR | | | | 18 | | | | 18 |
| (24) | 2105.525 | TOPSOIL BORROW (LV) | CU. YD. | 2756 | | | | | | | 2756 |
| (20) | 0504.601 | LOWER WATER MAIN | LUMP SUM | | | | 1 | | | | 1 |
| (21) | 2506.522 | ADJUST FRAME AND RING CASTING | EACH | | | | 1 | | | | 1 |
| | | | | | | | | | | | |
| | 2501.515 | 42" R.C. PIPE APRON (OUTLET) | EACH | | | | 1 | | | | 1 |
| | 2501.525 | 36" SPAN R.C. PIPE-ARCH APRON (OUTLET) | EACH | | | | | | 1 | 1 | 1 |
| | 2521.501 | 4" CONCRETE WALK | SQ. FT. | | 5154 | | 15971 | | | | 21125 |
| | | CITY OF ROCHESTER PROJECT NO. 5720-90 | | | | | | | | | |
| | 2104.501 | REMOVE CURB & GUTTER | LIN. FT. | | | | 93 | | | | 93 |
| | 2104.501 | REMOVE PIPE SEWERS | LIN. FT. | | | | 154 | | | | 154 |
| | 2104.505 | REMOVE CONCRETE PAVEMENT | SQ. YD. | | | | 11 | | | | 11 |
| | 2104.505 | REMOVE CONCRETE SIDEWALK | SQ. YD. | | | | 68 | | | | 68 |
| | 2104.509 | REMOVE MANHOLES | EACH | | | | 2 | | | | 2 |
| | 2105.515 | UNCLASSIFIED EXCAVATION | CU. YD. | | | | 390 | | | | 390 |
| | 2105.525 | TOPSOIL BORROW (EV) | CU. YD. | | | | 27 | | | | 27 |
| | 2211.501 | AGGREGATE BASE, CLASS 5 | TON | | | | 265 | | | | 265 |
| | 2301.541 | INTEGRANT CURB DESIGN B6 | LIN. FT. | | | | 40 | | | | 40 |
| | 2301.503 | CONCRETE PAVEMENT IRREGULAR WIDTH (8 INCH) | SQ. YD. | | | | 184 | | | | 184 |
| | 2301.511 | STRUCTURAL CONCRETE | CU. YD. | | | | 41 | | | | 41 |
| | 2331.504 | BITUMINOUS MAT'L FOR MIXTURE | TON | | | | 9 | | | | 9 |
| | 2331.508 | WEARING COURSE MIXTURE (MOD.) | TON | | | | 69 | | | | 69 |
| | 2331.510 | BINDER COURSE MIXTURE | TON | | | | 69 | | | | 69 |
| | 2503.511 | 12" R.C. PIPE SEWER CL. IV | LIN. FT. | | | | 4 | | | | 4 |
| | 2503.511 | 42" R.C. PIPE SEWER | LIN. FT. | | | | 361 | | | | 361 |
| | 0503.603 | 42" R.C. BEND 7.5° | EACH | | | | 1 | | | | 1 |
| | 0504.679 | ADJUST GATE VALVE BOX | EACH | | | | 1 | | | | 1 |
| | 2506.508 | CONSTRUCT MANHOLES DESIGN SPECIAL 1 | EACH | | | | 3 | | | | 3 |
| | 2506.509 | CONSTRUCT CATCH BASINS DESIGN SPECIAL 1 | EACH | | | | 1 | | | | 1 |
| | 2506.509 | CONSTRUCT CATCH BASINS DESIGN SPECIAL 2 | EACH | | | | 1 | | | | 1 |
| | 0506.602 | CONNECT INTO EXISTING STORM SEWER | EACH | | | | 1 | | | | 1 |
| | 2521.501 | 4" CONCRETE WALK | SQ.FT. | | | | 607 | | | | 607 |
| | 2531.501 | CONCRETE CURB AND GUTTER DESIGN B624 | LIN.FT. | | | | 291 | | | | 291 |
| | 2531.501 | CONCRETE CURB AND GUTTER DESIGN B624 (MOD.) | LIN.FT. | | | | 61 | | | | 61 |
| | 2575.505 | SODDING TYPE BLVD. | SQ. YD. | | | | 318 | | | | 318 |

(11) LEFT AND RIGHT FROM STA. 186+00 TO STA. 260+57, RIGHT FROM STA. 287+00 TO 297+00 AND LEFT & RIGHT FROM STA. 308+60 TO STA. 317+40. INCLUDING AREA WHERE EXCESS EXCAVATION IS STOCK PILED AND DRAINAGE DITCH FROM 3rd ST. N.W EAST 1400'.

(11) INCLUDES 14.7 ACRES FOR SEED MIXTURE 500 & 1100 AND 1.3 ACRES FOR CROWN VETCH.

(12) TO BE APPLIED TO CUT SLOPE RIGHT STA. 287+00 TO STA. 297+00 AT A RATE OF 25 LBS. PER ACRE.

(13) ALL DISTURBED AREA'S FROM STA. 260+57 TO STA. 308+60 EXCEPT THE CUT SLOPE RIGHT FROM STA. 287+00 TO STA. 297+00.

(14) SEED ALL DISTURBED AREA'S FROM STA. 248+00 TO STA. 260+57 AND FROM STA. 308+60 TO STA. 317+40.

(15) MULCH ALL AREA'S SEEDED WITH MIXTURE 500 & 1100 AT A RATE OF TWO TONS PER ACRE.

(16) DISC ANCHOR ALL MULCHED AREA'S.

(17) APPLY AT A RATE OF 200 LBS. PER ACRE TO ALL SEEDED AREA'S.

(18) EQUIPMENT HOUR TO BE USED FOR CLEANING CHANNEL, CLEARING BRUSH & TREES FROM STA. 5+20 3RD. ST. NW. TO 1145' EAST.

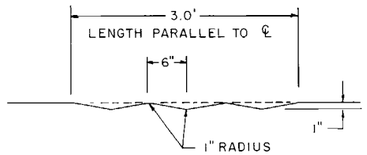
(20) SEE CROSS SECTION STA. 280+40 FOR DETAIL.

(21) SANITARY SEWER MANHOLE NO. 34 2' LEFT STA. 279+37.

(14) INCLUDE AREA WHERE EXCESS EXCAVATION MATERIAL IS STOCK PILED AND DRAINAGE DITCH FROM STA. 5 ON 3rd ST. N.W. TO 1400' EAST.

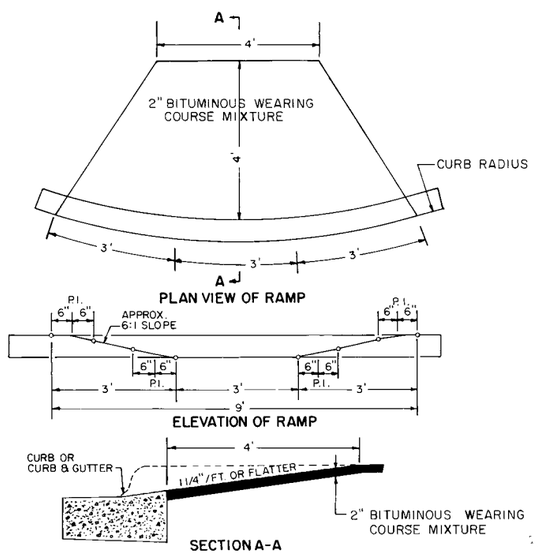
(24) TO BE PLACED ON INSLOPES AS SHOWN IN TYPICAL SECTIONS FROM STA. 186+00 TO STA. 248+00.

## RUMBLE STRIP DETAIL
S.A.P. 55-622-13

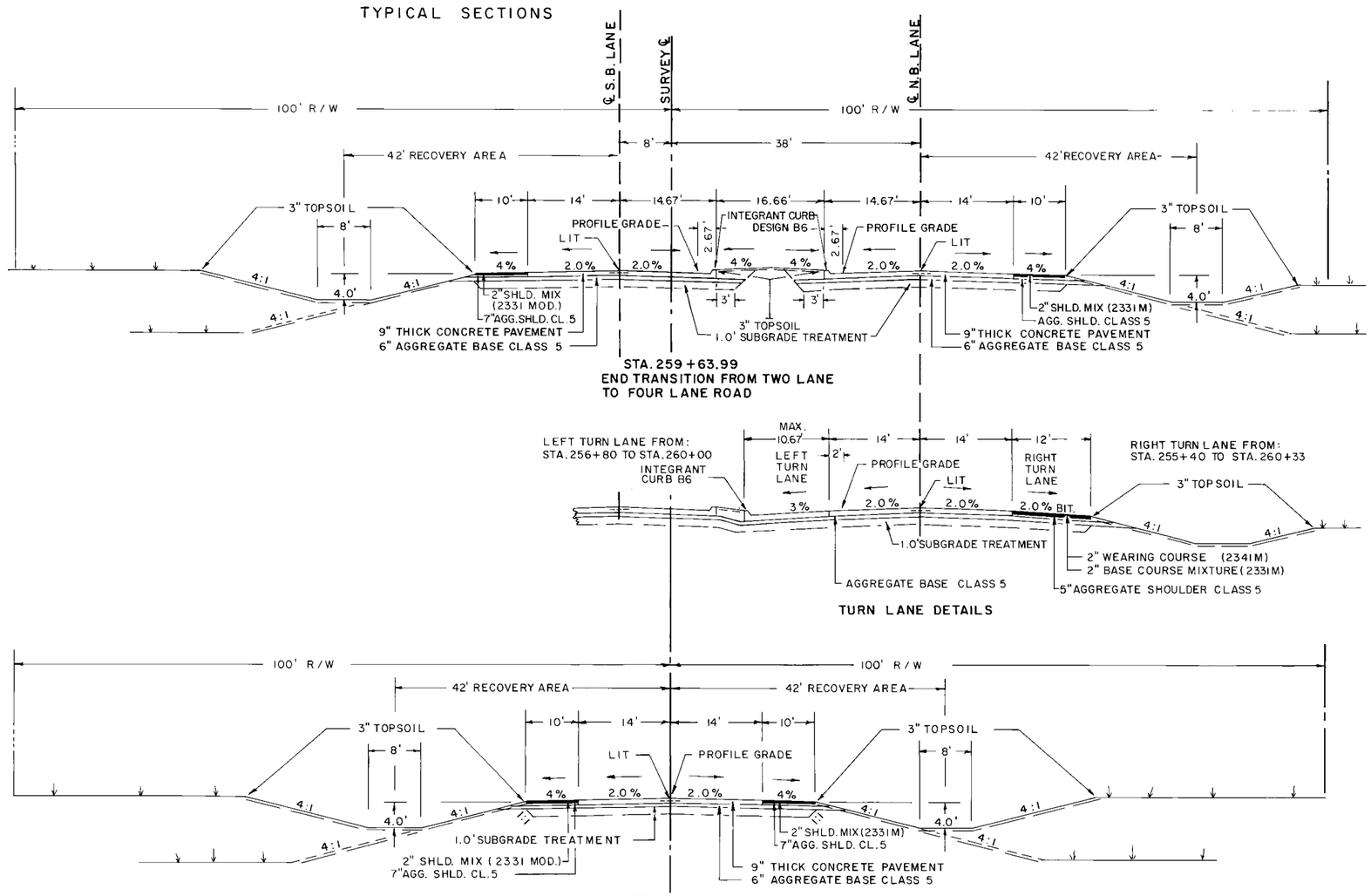



NOTE: 1. FOUR 5.0' EFFECTIVE PANELS RUMBLE STRIPS SHALL BE SPACED EVERY 60' AND SHALL BE LOCATED AT THE MIDPOINT OF THE 17' PANEL.
2. RUMBLE STRIPS WILL NOT BE PLACED IN AREA OF TURN LANES.
3. RUMBLE STRIPS SHALL BE FROM THE 12' LANE LINE OUT.
4. STRIPS TO BE 2.0' WIDE.
5. CONSTRUCT RUMBLE STRIPS FROM STA. 248+00 TO 260+00. ~~AND FROM STA. 309+00 TO STA. 317+00.~~

## PEDESTRIAN CURB RAMP DETAIL



# TYPICAL SECTIONS




**STA. 259+63.99**
**END TRANSITION FROM TWO LANE TO FOUR LANE ROAD**




**TURN LANE DETAILS**



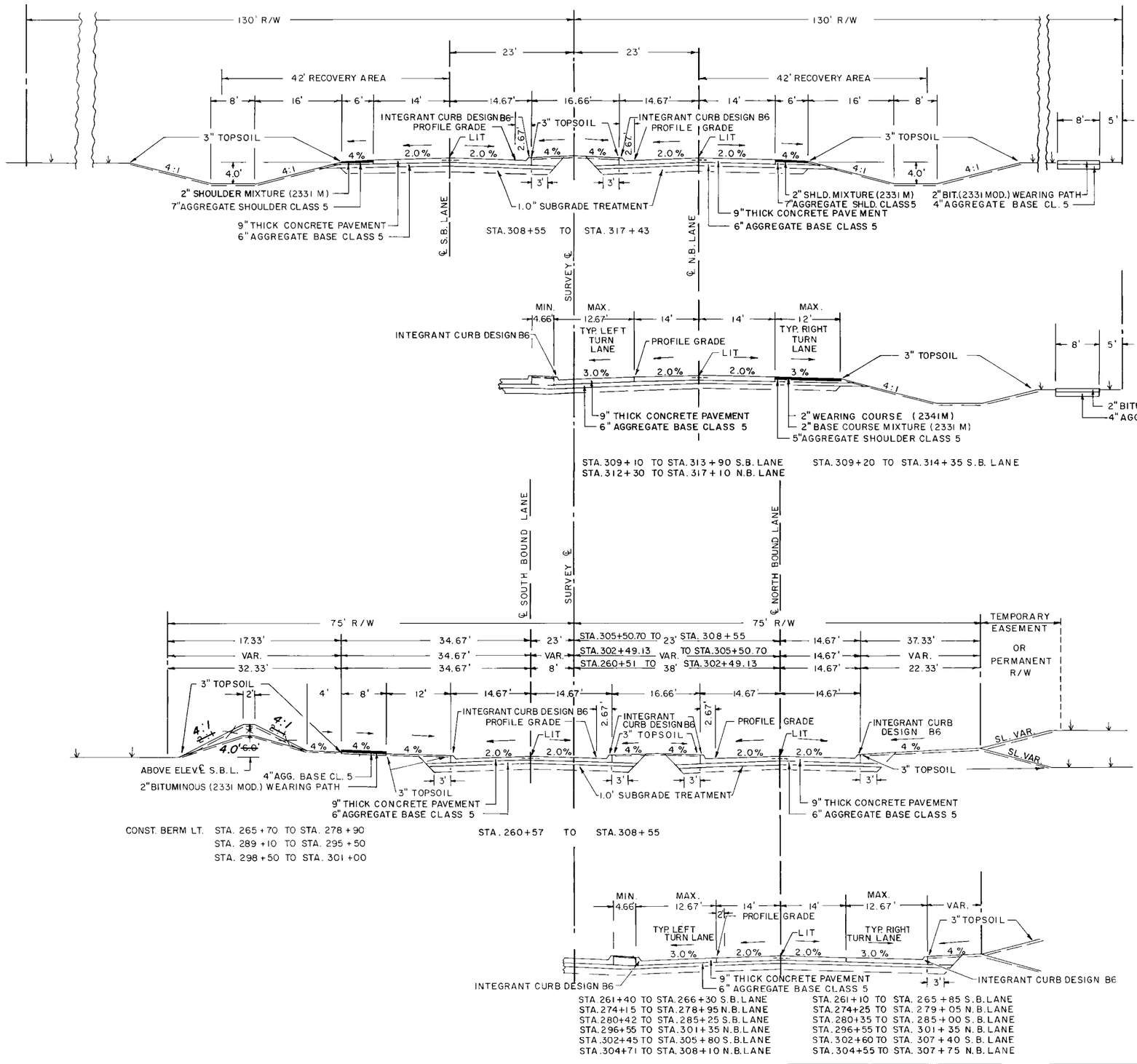

**STA. 248+00**
**BEGIN TRASITION FROM TWO LANE TO FOUR LANE ROAD**



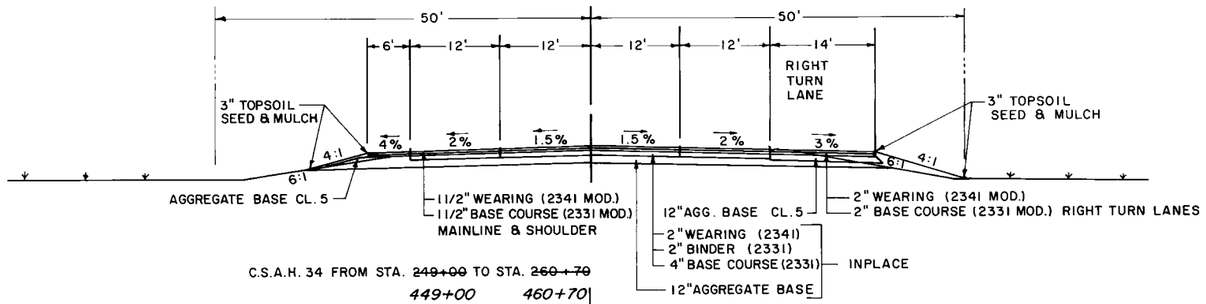

STA.185+75.16 TO STA. 248+00

SURVEY ℄

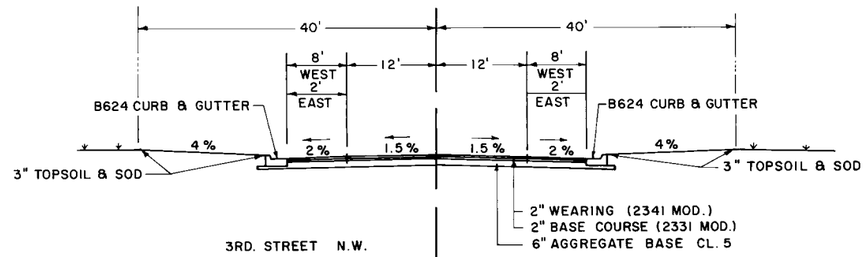
# TYPICAL SECTIONS



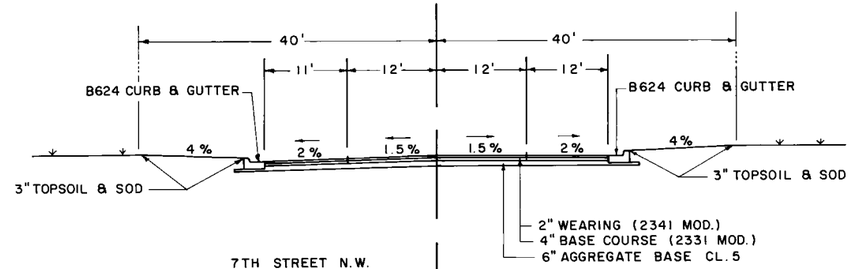
# TYPICAL SECTIONS



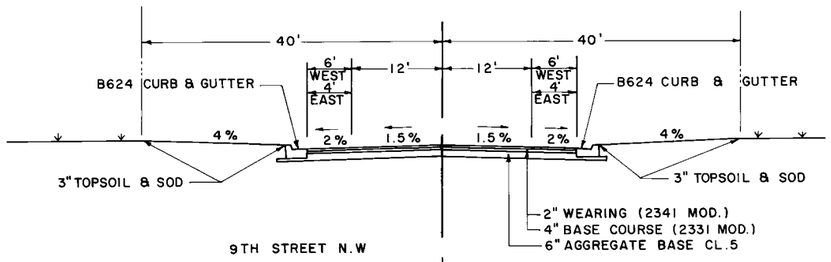

C.S.A.H. 34 FROM STA. ~~249+00~~ TO STA. ~~260+70~~
*449+00* *460+70*



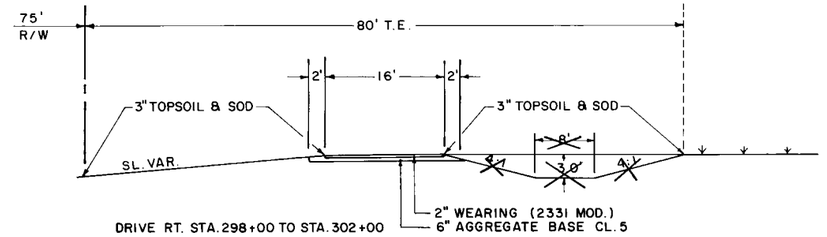

3RD. STREET N.W.



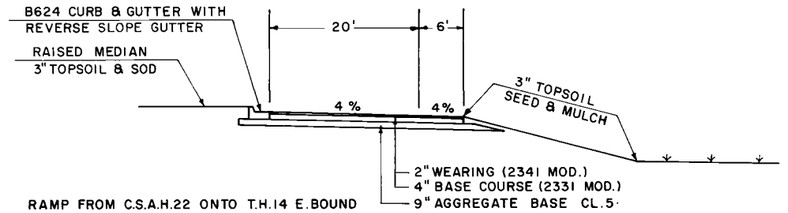

7TH STREET N.W.



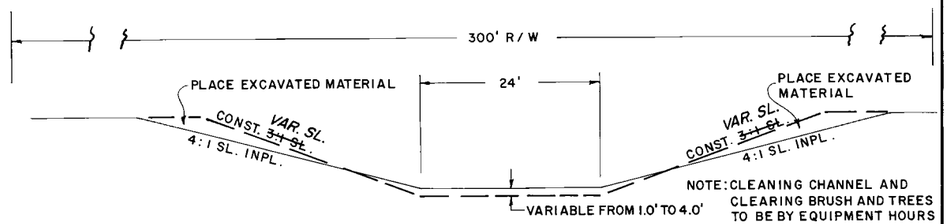

9TH STREET N.W




DRIVE RT. STA. 298+00 TO STA. 302+00



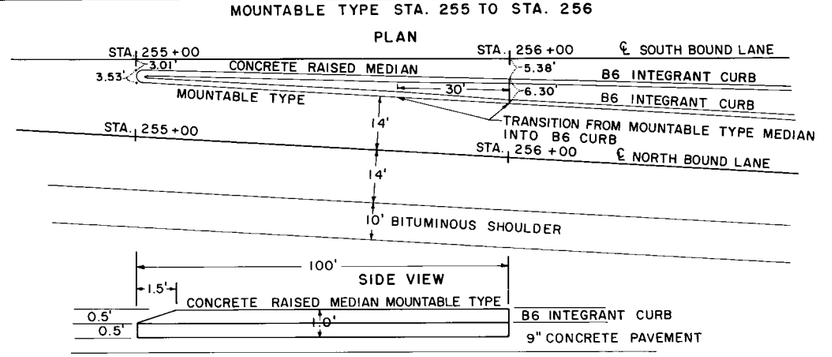

RAMP FROM C.S.A.H. 22 ONTO T.H. 14 E. BOUND




TYPICAL SECTION DRAINAGE DITCH.
STA. 5+20 (3rd STREET N.W.) TO 1145' EAST.

## CONCRETE MEDIAN DETAIL

MOUNTABLE TYPE STA. 255 TO STA. 256



# STORM SEWER

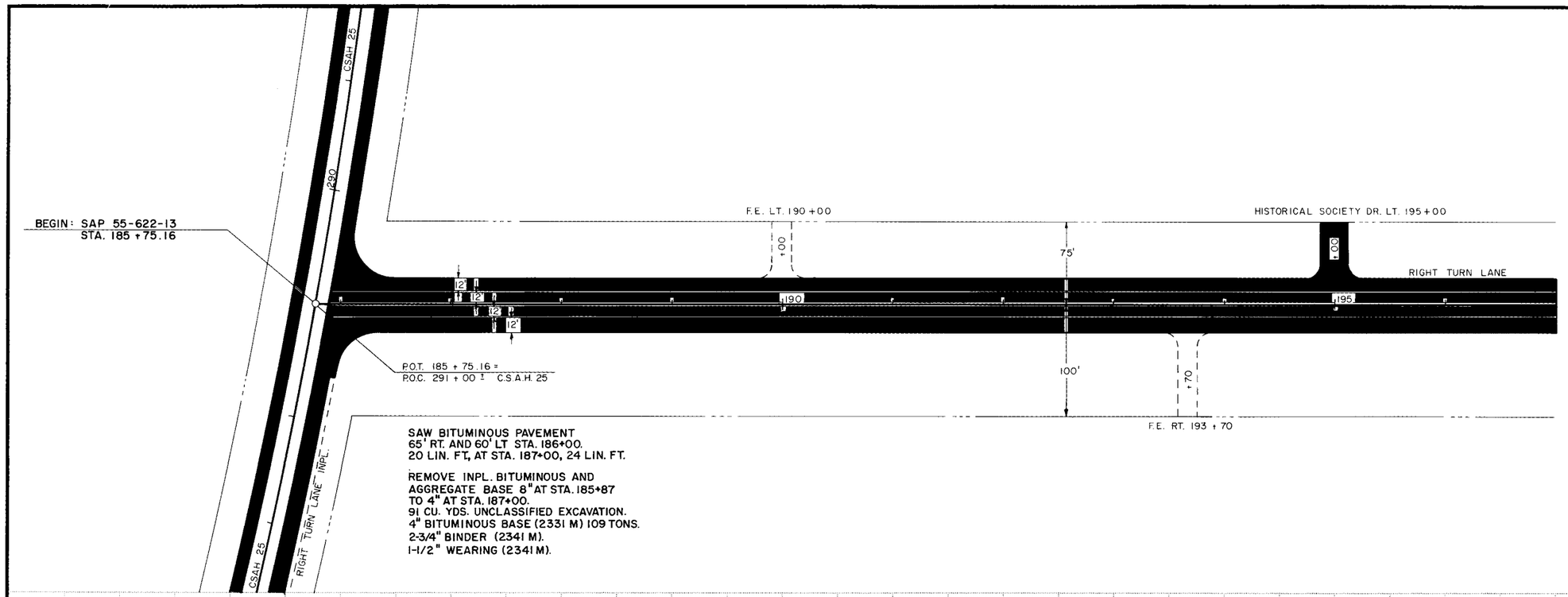
| STRUCTURE NO. | STATION | LOCATION | CONSTRUCTION DESIGN M.H. | CONSTRUCTION DESIGN C.B. | CONSTRUCTION QUANT. EST. | CONSTRUCTION QUANT. FINAL | TOP CASTING ELEV. | INLET ELEV. | INLET ELEV. | INLET ELEV. | OUTLET ELEV. | FRAME CASTING NO. | GRATE NO. | CURB BOX NO. | RING CASTING NO. | COVER CASTING NO. | 12" R.C.PIPE LIN.FT. | 15" R.C.PIPE LIN.FT. | 18" R.C.PIPE LIN.FT. | 21" R.C.PIPE LIN.FT. | 24" R.C.PIPE LIN.FT. | 36" R.C.PIPE LIN.FT. | 42" R.C.PIPE LIN.FT. | 60" R.C.PIPE LIN.FT. | LIN.FT. | LIN.FT. | LIN.FT. | LIN.FT. | LIN.FT. | 22"SPAN R.C.P.-A. LIN.FT. | 28"SPAN R.C.P.-A. LIN.FT. | 36"SPAN R.C.P.-A. LIN.FT. | 12" C.S.PIPE LIN.FT. | 15" C.S.PIPE LIN.FT. | LIN.FT. | LIN.FT. | APRON INLET | APRON OUTLET | FLOWS TO | % GRADE | CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CB 1 | 258+03 | 23'LT. NBL ℄ | | C-G | 1 | | 1023.07 | | | | 1018.97 E. | 872/771 | 810 | 821B | | | 72 | | | | | | | | | | | | | | | | | | | | | 1 | | 1.6 | IV |
| CB 2 | 260+01 | 24'LT.NBL ℄ | | C-G | 1 | | 1022.25 | | | | 1017.15N.W. | | 721 | | 770/771 | | 18 | | | | | | | | | | | | | | | | | | | | | | | | 2.0 | IV |
| CB 3 * | 260+70 | 75'LT.SBL ℄ | | ~~C-G~~ | 1 | | ~~1018.10~~ | | | | ~~1014.00S.E.~~ | | ~~730-6~~ | | ~~700-7~~ | | 40 | | | | | | | | | | | | | | | | | | | | | | | 7 | | ~~2.0~~ | IV |
| CB 4 | 263+00 | 64'LT.SBL ℄ | | | | | | 1015.80 E. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CB 5 | 265+00 | 61'LT.SBL ℄ | | | | | | 1016.50 E. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MH 2 | 265+00 | 42'LT.SBL ℄ | C-G | | 1 | | 1020.59 | 1014.20 W. | 1014.20 S. | | 1014.00 N. | | | | 700-7 | 712 | | | | | | | | | | | | | | | | | | | | | | | MH 2 | 0.4 | |
| CB 10 | 267+00 | 65'LT.SBL ℄ | | | | | | 1017.00 E. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MH 2 | 12.78 | |
| MH 3 | 267+00 | 37'LT.SBL ℄ | C-G | | 1 | | 1019.17 | 1013.20 W. | 1013.20 S. | | 1013.10N.E. | | | | 700-7 | 712 | | | | | | | | | | | | | | | | | | | | | | | MH 3 | 0.4 | |
| CB 11 | 267+94 | 13'LT.SBL ℄ | | C-G | 1 | | 1017.05 | 1012.60 S.W. | | | 1012.50 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | | MH 3 | 13.60 | |
| CB 12 | 267+98 | 13'RT. SBL ℄ | | C-G | 1 | | 1017.02 | 1012.38 W. | | | 1012.28 E. | 872/771 | 810 | 821B | | | | 20 | | | | | | | | | | | | | | | | | | | | | | CB 11 | 0.5 | |
| CB 13 | 267+98 | 13'LT. NBL ℄ | | C-G | 1 | | 1017.02 | 1012.14 W. | | | 1011.94 E. | 872/771 | 810 | 821B | | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 12 | 0.5 | III |
| CB 14 | 268+01 | 13'RT. NBL ℄ | | C-G | 1 | | 1016.99 | 1011.84 W. | | | 1011.74 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | CB 13 | 0.7 | III |
| MH 4 | 268+01 | 21'RT. NBL ℄ | C-G | | 1 | | 1017.74 | 1011.70 W. | 1012.10 S. | | 1011.50 N. | | | | 700-7 | 712 | | | | 351 | | | | | | | | | | | | | | | | | | | CB 14 | 0.4 | III |
| CB 6 | 264+48 | 22.1'LT.SBL ℄ | | C-G | 1 | | 1019.43 | | | | 1015.38 E. | 872/771 | 810 | 821B | | | 47 | | | | | | | | | | | | | | | | | | | | | | MH 4 | 0.5 | III |
| CB 7 | 264+56 | 24.6'RT.SBL ℄ | | C-G | 1 | | 1019.36 | 1015.24 W. | | | 1015.04 E. | 872/771 | 810 | 821B | | | | 9 | | | | | | | | | | | | | | | | | | | | | | MH 5 | 0.31 | III |
| CB 8 | 264+56 | 13'LT.NBL ℄ | | C-G | 1 | | 1019.72 | 1015.01 W. | | | 1014.91 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | | CB 7 | 0.3 | IV |
| CB 9 | 264+59 | 13'RT. NBL ℄ | | C-G | 1 | | 1019.69 | 1014.79 W. | | | 1014.69 E. | 872/771 | 810 | 821B | | | | 8 | | | | | | | | | | | | | | | | | | | | | | CB 8 | 0.3 | III |
| MH 1 | 264+59 | 21'RT.NBL ℄ | C-G | | 1 | | 1020.43 | 1014.64 W. | | | 1014.54 N. | | | | 700-7 | 712 | | 341 | | | | | | | | | | | | | | | | | | | | | | CB 9 | 0.5 | III |
| CB 15 | 211+50 | 62'LT.SBL ℄ | | | | | | 1015.60 E. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | MH 1 | 0.6 | III |
| CB 16 | 271+19 | 13'LT.SBL ℄ | | C-G | 1 | | 1014.79 | | | | 1011.30 N. | 872/771 | 810 | 821B | | | 27 | | | | | | | | | | | | | | | | | | | | | | MH 4 | 0.718 | III |
| CB 20 | 271+46 | 13'LT.SBL ℄ | | C-G | 1 | | 1014.81 | 1011.20 W. | 1011.18 S. | | 1011.18 E. | 872/771 | 810 | 821B | | | | | | | | | | | | | | | | | | | | | | | | | | CB 20 | 9.5 | |
| CB 21 | 271+50 | 13'RT.SBL ℄ | | C-G | 1 | | 1014.85 | 1011.06 W. | 1011.06 S. | | 1011.00 E. | 872/771 | 810 | 821B | | | | | | | | | | | | | | | | | | | 26 | | | | | | | CB 20 | 0.5 | IV |
| CB 17 | 271+19 | 13'RT.SBL ℄ | | C-G | 1 | | 1014.79 | | | | 1011.25 N. | 872/771 | 810 | 821B | | | 31 | | | | | | | | | | | | | | | | 20 | | | | | | | CB 21 | 0.5 | IIA |
| CB 22 | 271+48 | 13'LT.NBL ℄ | | C-G | 1 | | 1014.81 | 1010.89 W. | 1010.89 S. | | 1010.59 E. | 872/771 | 810 | 821B | | | | | | | | | | | | | | | | | | | | | | | | | | CB 22 | 0.6 | IIA |
| CB 18 | 271+19 | 13'LT.NBL ℄ | | C-G | 1 | | 1014.79 | | | | 1011.25 N. | 872/771 | 810 | 821B | | | 29 | | | | | | | | | | | | | | | | | 26 | | | | | | CB 22 | 1.33 | IV |
| CB 19 | 271+19 | 13'RT. NBL ℄ | | C-G | 1 | | 1014.79 | | | | 1010.90 N. | 872/771 | 810 | 821B | | | 32 | | | | | | | | | | | | | | | | | | | | | | CB 23 | 0.5 | IV |
| CB 23 | 271+51 | 13'RT.NBL ℄ | | C-G | 1 | | 1014.83 | 1010.49 W. | 1010.75 S. | | 1010.47 E. | 872/771 | 810 | 821B | | | | | | | | | | | | | | | | | | | | | | | | | | MH 5 | 0.6 | IIA |
| MH 5 | 271+51 | 21'RT. NBL ℄ | C-G | | 1 | | 1015.67 | 1010.42 W. | 1010.42 S. | | 1010.40 N. | | | | 700-7 | 712 | | | | | | | | | | | | | | | | | | | | | | | MH 6 | 0.3 | IIA |
| CB 25 | 274+70 | 13'LT.SBL ℄ | | C-G | 1 | | 1015.94 | | | | 1011.06 E. | 872/771 | 810 | 821B | | | 26 | | | | | | | | | | | | | | | | | | | | | | CB 26 | 0.5 | IV |
| CB 26 | 274+74 | 13'RT.SBL ℄ | | C-G | 1 | | 1015.96 | 1010.94 W. | | | 1010.84 E. | 872/771 | 810 | 821B | | | 16 | | | | | | | | | | | | | | | | | | | | | | CB 27 | 0.6 | IV |
| CB 27 | 274+74 | 16.9'LT.NBL ℄ | | C-G | 1 | | 1015.84 | 1010.76 W. | | | 1010.66 E. | 872/771 | 810 | 821B | | | 34 | | | | | | | | | | | | | | | | | | | | | | CB 28 | 0.9 | IV |
| CB 28 | 274+80 | 16.7'RT.NBL ℄ | | C-G | 1 | | 1015.87 | 1010.37 W. | | | 1010.17 E. | 872/771 | 810 | 821B | | | | 16 | | | | | | | | | | | | | | | | | | | | | | MH 6 | 0.7 | III |
| MH 6 | 274+80 | 33' RT. NBL ℄ | C-G | | 1 | | 1016.93 | 1010.07 W. | 1009.42 S. | | 1009.40 N. | | | | 700-7 | 712 | | | | | | | | | | | | | | | | | | | | | | | MH 7 | 0.4 | IIA |
| CB 30 * | 279+28 | 25'LT.SBL ℄ | | C-G | 1 | | 1016.10 | | | | 1009.56 N.E. | 872/771 | 810 | 821B | | | 46 | | | | | | | | | | | | | | | | | | | | | | MH 5C | 0.5 | ~~IV~~ |
| CB 31 | 278+90 | 13' RT. SBL ℄ | | C-G | 1 | | 1016.81 | 1009.33 W. | | | 1009.23 E. | 872/771 | 810 | 821B | | | 8 | | | | | | | | | | | | | | | | | | | | | | CB 32 | 0.5 | IV |
| CB 32 | 278+90 | 25'LT. NBL ℄ | | C-G | 1 | | 1016.46 | 1009.19 W. | | | 1009.09 E. | 872/771 | 810 | 821B | | | 51 | | | | | | | | | | | | | | | | | | | | | | CB 33 | 0.5 | IV |
| CB 33 | 279+00 | 25'RT. NBL ℄ | | C-G | 1 | | 1016.45 | 1008.84 W. | | | 1008.74 E. | 872/771 | 810 | 821B | | | 20 | | | | | | | | | | | | | | | | | | | | | | TEE | 0.5 | IV |
| MH 7 | 278+85 | 33'RT. NBL ℄ | C-G | | 1 | | 1017.20 | | 1007.79 S. | | 1007.77 E. | | | | 700-7 | 712 | | | | | | | | | | | | | | | | | | | | | | 1 | OUTL. | 0.5 | IIA |
| CB 24 | 276+00 | 62'LT.SBL ℄ | | C-G | 1 | | 1018.10 | | | | 1014.10 N. | | 730-6 | | 700-7 | | | | | | | | | | | | | | | | | | | | | | | CB 29 | 0.5 | |
| CB 29 | ~~279+15~~ | 62'LT.SBL ℄ | | C-G | 1 | | 1017.10 | ~~1012.50~~ S. | | | ~~1012.40 N.~~ | | 730-6 | | 700-7 | | ~~50~~ | | | | | | | | | | | | | | | | | | | | | | 42"R.C.P. | ~~1.7~~ | IV |
| | 278+65 | | | | | | | 1012.78 | | | 1012.68 | | | | | | 95 | | | | | | | | | | | | | | | | | | | | | | 42"R.C.P. | 1.38 | |
| CB 34 | 3+69 | 15' LT. | | C-G | 1 | | 1015.62 | | | | 1012.00 N. | 802A | 816 | 823A | | | | 7 | | | | | | | | | | | | | | | | | | | | | | 60"R.C.P. | 14.3 | III |
| CB 35 | 4+45 | 15' LT. | | C-G | 1 | | 1015.23 | | | | 1011.23 N. | 802A | 816 | 823A | | | | | 7 | | | | | | | | | | | | | | | | | | | | | 60"R.C.P. | 14.3 | III |
| CB 36 | 281+00 | 62'LT.SBL ℄ | | C-G | 1 | | 1016.10 | | | | 1012.10 S. | | 730-6 | | 700-7 | | | | | | | | | | | | | | | | | | | | | | | | 60"R.C.P. | 0.5 | |
| MH 8 | 279+98.7 | 21'RT. NBL ℄ | 90-4020 | | 1 | | 1016.37 | 1008.49 N. | 1007.73 W. | | 1007.71 E. | | | | 770/771 | 712 | | | | | | | | 230 | (SALVAGE AND INSTALL ONE 60" R.C. OUTLET APRON) | | | | | | | | | | | | | | OUTL. | 0.5 | III |
| CB 37 | 282+62 | 62'LT.SBL ℄ | | | | | | 1016.00 E. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | CB 42 | 13.1 | |
| CB 38 | 282+42 | 25'LT.SBL ℄ | | C-G | 1 | | 1015.42 | | | | 1011.53 N. | 872/771 | 810 | 821B | | | 20 | | | | | | | | | | | | | | | | | | | | | | CB 42 | 0.6 | IV |
| CB 39 | 282+48 | 25'RT. SBL ℄ | | C-G | 1 | | 1015.43 | | | | 1011.43 N. | 872/771 | 810 | 821B | | | 14 | | | | | | | | | | | | | | | | | | | | | | CB 43 | 0.6 | IV |
| CB 40 | 282+46 | 13'LT. NBL ℄ | | C-G | 1 | | 1015.77 | | | | 1011.70 N. | 872/771 | 810 | 821B | | | 14 | | | | | | | | | | | | | | | | | | | | | | CB 44 | 1.4 | IV |
| CB 41 | 282+50 | 13'RT. NBL ℄ | | C-G | 1 | | 1015.77 | | | | 1011.70 N. | 872/771 | 810 | 821B | | | 12 | | | | | | | | | | | | | | | | | | | | | | CB 45 | 1.7 | IV |
| CB 42 | 282+62 | 25'LT. SBL ℄ | | C-G | 1 | | 1015.41 | 1011.41 W. | 1011.42 S. | | 1011.21 E. | 872/771 | 810 | 821B | | | | | | 50 | | | | | | | | | | | | | | | | | | | | CB 43 | 0.6 | III |
| CB 43 | 282+62 | 25'RT. SBL ℄ | | C-G | 1 | | 1015.41 | 1010.92 W. | 1011.37 S. | | 1010.72 E. | 872/771 | 810 | 821B | | | | | | | 8 | | | | | | | | | | | | | | | | | | CB 44 | 0.4 | III |
| CB 44 | 282+62 | 13'LT. NBL ℄ | | C-G | 1 | | 1015.75 | 1010.70 W. | 1011.50 S. | | 1010.60 E. | 872/771 | 810 | 821B | | | | | | | 26 | | | | | | | | | | | | | | | | | | CB 45 | 0.5 | III |
| CB 45 | 282+62 | 13'RT. NBL ℄ | | C-G | 1 | | 1015.75 | 1010.48 W. | 1011.50 S. | | 1010.38 E. | 872/771 | 810 | 821B | | | | | | | 8 | | | | | | | | | | | | | | | | | | MH 9 | 0.8 | III |
| MH 9 | 282+62 | 21'RT. NBL ℄ | C-G | | 1 | | 1016.59 | 1010.33 W. | 1010.20 N. | | 1009.80 S. | | | | 700-7 | 712 | | | | | | | 264 | | | | | | | | | | | | | | | | MH 8 | 0.502 | II |
| CB 46 | 285+00 | 55'LT. SBL ℄ | | | | | | 1015.20 E. | | | | | | | | | | | | 28 | | | | | | | | | | | | | | | | | 1 | MH 10 | 5.3 | III |
| MH 10 | 285+00 | 21'LT. SBL ℄ | C-G | | 1 | | 1019.60 | 1013.50 W. | | | 1013.30 E. | | | | 700-7 | 712 | | | | | 88 | | | | | | | | | | | | | | | | | | MH 11 | 1.0 | III |
| MH 11 | 285+00 | 21'RT. NBL ℄ | C-G | | 1 | | 1019.60 | 1012.44 W. | 1012.64 N. | | 1011.64 S. | | | | 700-7 | 712 | | | | | | 238 | | | | | | | | | | | | | | | | MH 9 | 0.61 | II |
| CB 47 | 285+50 | 13'LT.SBL ℄ | | C-G | 1 | | 1020.32 | | | | 1016.32 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 48 | 0.5 | IV |
| CB 48 | 285+54 | 13' RT. SBL ℄ | | C-G | 1 | | 1020.45 | 1016.20 W. | | | 1016.10 E. | 872/771 | 810 | 821B | | | | 20 | | | | | | | | | | | | | | | | | | | | | CB 49 | 0.5 | IV |
| CB 49 | 285+54 | 13'LT. NBL ℄ | | C-G | 1 | | 1020.45 | 1016.00 W. | | | 1015.90 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 50 | 0.6 | IV |
| CB 50 | 285+58 | 13'RT. NBL ℄ | | C-G | 1 | | 1020.58 | 1015.76 W. | | | 1015.56 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | MH 12 | 0.8 | III |
| MH 12 | 285+58 | 21'RT. NBL ℄ | C-G | | | | 1021.42 | 1015.51 W. | 1015.31 N. | | 1014.81 S. | | | | 700-7 | 712 | | | | | | | | 58 | | | | | | | | | | | | | | | MH 11 | 3.875 | III |
| CB 51 | 288+50 | 13'LT. SBL ℄ | | C-G | 1 | | 1034.73 | | | | 1030.73 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 52 | 0.5 | IV |
| CB 52 | 288+54 | 13'RT. SBL ℄ | | C-G | 1 | | 1034.97 | 1030.61 W. | | | 1031.51 E. | 872/771 | 810 | 821B | | | | 20 | | | | | | | | | | | | | | | | | | | | | CB 53 | 0.5 | IV |
| CB 53 | 288+54 | 13'LT. NBL ℄ | | C-G | 1 | | 1034.97 | 1030.41 W. | | | 1030.31 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 54 | 0.5 | IV |
| CB 54 | 288+58 | 13'RT. NBL ℄ | | C-G | 1 | | 1035.21 | 1030.19 W. | | | 1029.99 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | MH 13 | 0.7 | III |
| MH 13 | 288+58 | 21'RT. NBL ℄ | C-G | | 1 | | 1036.05 | 1029.95 W. | 1029.75 N. | | 1029.73 S. | | | | 700-7 | 712 | | | 300 | | | | | | | | | | | | | | | | | | | | MH 12 | 4.838 | III |
| CB 55 | 291+50 | 13'LT.SBL ℄ | | C-G | 1 | | 1050.58 | | | | 1046.58 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 56 | 0.5 | ~~IV~~ |
| CB 56 | 291+54 | 13'RT. SBL ℄ | | C-G | 1 | | 1050.75 | 1046.46 W. | | | 1046.36 E. | 872/771 | 810 | 821B | | | | 20 | | | | | | | | | | | | | | | | | | | | | CB 57 | 0.5 | IV |
| CB 57 | 291+54 | 13'LT. NBL ℄ | | C-G | 1 | | 1050.75 | 1046.26 W. | | | 1046.16 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 58 | 0.8 | IV |
| CB 58 | 291+58 | 13'RT. NBL ℄ | | C-G | 1 | | 1050.93 | 1045.97 W. | | | 1045.57 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | MH 14 | 0.5 | III |
| MH 14 | 291+58 | 21'RT. NBL ℄ | C-G | | 1 | | 1051.77 | 1045.54 W. | 1045.54 N. | | 1045.44 S. | | | | 700-7 | 712 | | | 300 | | | | | | | | | | | | | | | | | | | | MH 13 | 5.262 | III |
| CB 59 | 294+50 | 13'LT. SBL ℄ | | C-G | 1 | | 1060.33 | | | | 1056.33 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 60 | 0.5 | IV |
| CB 60 | 294+54 | 13'RT. SBL ℄ | | C-G | 1 | | 1060.42 | 1056.21 W. | | | 1056.11 E. | 872/771 | 810 | 821B | | | | 20 | | | | | | | | | | | | | | | | | | | | | CB 61 | 0.5 | IV |
| CB 61 | 294+54 | 13'LT. NBL ℄ | | C-G | 1 | | 1060.45 | 1056.02 W. | | | 1055.92 E. | 872/771 | 810 | 821B | | | | 26 | | | | | | | | | | | | | | | | | | | | | CB 62 | 0.7 | IV |
| CB 62 | 294+58 | 13'RT. NBL ℄ | | C-G | 1 | | 1060.53 | 1055.75 W. | | | 1055.55 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | MH 15 | 0.6 | III |
| MH 15 | 294+58 | 21'RT. NBL ℄ | C-G | | 1 | | 1061.37 | 1055.51 W. | 1055.80 N. | | 1055.31 S. | | | | 700-7 | 712 | | | 300 | | | | | | | | | | | | | | | | | | | | MH 14 | 3.278 | III |
| 297+36 MH 16 | ~~296+90~~ | 25'RT. NBL ℄ | C-G | | 1 | 65 | 1064.~~48~~ | 1058.~~00~~ E. | 17 | | ~~1057.90~~ S. | 1058.07 | | | 700-7 | 712 | 232 | | | | | | | | | | | | | | | | | | | | | MH 15 | ~~0.913~~ | IV | 0.822 |
| CB 63 | 296+90 | 46'RT. NBL ℄ | | | | | | 1059.90 E. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | 1 | MH 16 | ~~0.78~~ | | 1.76 |
| CB 64 | 301+14 | 13'LT. SBL ℄ | | C-G | 1 | | 1059.37 | | | | 1055.37 E. | 872/771 | 810 | 821B | | | 30 | | | | | | | | | | | | | | | | | | | | | CB 65 | 0.5 | IV |
| CB 65 | 301+28 | 13'RT. SBL ℄ | | C-G | 1 | | 1059.50 | 1055.25 W. | | | 1055.15 E. | 872/771 | 810 | 821B | | | 8 | | | | | | | | | | | | | | | | | | | | | CB 66 | 0.5 | IV |
| CB 66 | 301+28 | 25'LT. NBL ℄ | | C-G | 1 | | 1059.39 | 1055.10 W. | | | 1054.90 E. | 872/771 | 810 | 821B | | | | | 51 | | | | | | | | | | | | | | | | | | | | | CB 67 | 0.5 | III |
| CB 67 | 301+21 | 25'RT. NBL ℄ | | C-G | 1 | | 1059.89 | 1054.66 W. | | | 1054.56 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | MH 17 | 0.6 | III |
| MH 17 | 301+21 | 33'RT.NBL ℄ | C-G | | 1 | | 1060.63 | 1054.52 W. | | | 1054.42 N. | | | | 700-7 | 712 | | | 103 | | | | | | | | | | | | | | | | | | | | | MH 18 | 0.6 | III |
| ~~CB 68 *~~ | ~~301+65~~ | ~~67'RT.NBL ℄~~ | | ~~C-G~~ | 1 | | ~~1058.00~~ | | | | ~~1053.00N.W.~~ | ~~802A~~ | ~~816~~ | ~~823A~~ | | | ~~66~~ | | | | | | | | | | | | | | | | | | | | | ~~MH 18~~ | ~~0.7~~ | ~~IV~~ |
| CB 69 * | 301+60 | 28'LT.SBL ℄ | | C-G | 1 | | 1058.20 | | | | 1054.20 N. | 802A | 816 | 823A | | | 70 | | | | | | | | | | | | | | | | | | | | | MH 17A | 0.5 | IV |
| MH 17A * | 302+33 | 28'LT.SBL ℄ | C-G | | 1 | | 1056.08 | 1053.13 W. | 1053.40 S. | | 1051.78 E. | | | | 700-10 | 712 | | | | 107 | | | | | | | | | | | | | | | | | | | | MH 18 | 0.45 | III |
| MH 18 | 302+24 | 33'RT.NBL ℄ | C-G | | 1 | | 1059.24 | 1051.28 W. | 1053.81 S. | 1053.80 S.E. | 1051.28 N. | | | | 700-7 | 712 | | | | 224 | | | | | | | | | | | | | | | | | | | | MH 19 | 4.00 | III |
| CB 70 | 304+23 | 25'LT. SBL ℄ | | C-G | 1 | | 1048.09 | | | | 1044.00 E. | 872/771 | 810 | 821B | | | | | | | | | | | | | | | | | | | | | | | | | | CB 71 | 0.9 | IV |
| CB 71 | 304+31 | 25'RT. SBL ℄ | | C-G | 1 | | 1049.56 | 1043.55 W. | | | 1043.35 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | CB 72 | 0.8 | III |
| CB 72 | 304+43 | 13'LT. NBL ℄ | | C-G | 1 | | 1049.40 | 1043.30 W. | | | 1043.10 E. | 872/771 | 810 | 821B | | | | | 46 | | | | | | | | | | | | | | | | | | | | | MH 19 | 1.14 | III |
| CB 74 * | 304+48 | 56'RT.NBL ℄ | | C-G | 1 | | 1048.70 | | | | 1043.40 W. | 802A | 816 | 823A | | | | 21 | | | | | | | | | | | | | | | | | | | | | MH 19 | 1.0 | IV |
| MH 19 | 304+48 | 33'RT. NBL ℄ | C-G | | 1 | | 1051.76 | 1042.60 W. | 1043.20 E. | 1042.40 S. | 1042.20 N. | | | | 700-7 | 712 | | | | | 337 | | | | | | | | | | | | | | | | | | | MH 20 | 3.36 | III |
| CB 75 | 307+88 | 13'LT.SBL ℄ | | C-G | 1 | | 1036.75 | | | | 1032.35 E. | 872/771 | 810 | 821B | | | 32 | | | | | | | | | | | | | | | | | | | | | CB 76 | 0.6 | IV |
| CB 76 | 308+06 | 13'RT. SBL ℄ | | C-G | 1 | | 1036.10 | 1032.21 W. | | | 1032.11 E. | 872/771 | 810 | 821B | | | 8 | | | | | | | | | | | | | | | | | | | | | CB 77 | 0.7 | ~~IV~~ |
| CB 77 | 308+06 | 25'LT. NBL ℄ | | C-G | 1 | | 1035.98 | 1032.07 W. | | | 1031.87 E. | 872/771 | 810 | 821B | | | | | 54 | | | | | | | | | | | | | | | | | | | | | CB 78 | 0.8 | III |
| CB 78 | 307+85 | 25'RT. NBL ℄ | | C-G | 1 | | 1036.63 | 1031.49 W. | | | 1031.39 E. | 872/771 | 810 | 821B | | | | | 8 | | | | | | | | | | | | | | | | | | | | | MH 20 | 1.0 | III |
| MH 20 | 307+85 | 33'RT. NBL ℄ | C-G | | 1 | | 1037.37 | 1031.33 W. | 1030.93 S. | | 1030.83 N. | | | | 700-7 | 712 | | | | | 108 | | | | | | | | | | | | | | | | | 1 | OUTL. | 3.765 | III |
| CB 79 * | 307+78 | 83'RT.NBL ℄ | | C-G | 1 | | 1031.60 | | | | 1027.60N.W. | 802A | 816 | 823A | | | 46 | | | | | | | | | | | | | | | | | | | | | CB 80 | 0.6 | IV |
| CB 80 * | 308+15 | 60'RT.NBL ℄ | | C-G | 1 | | 1032.40 | 1027.30 S.E. | | | 1027.20 N. | 802A | 816 | 823A | | | 70 | | | | | | | | | | | | | | | | | | | | | CB 83 | 1.0 | IV |
| CB 82 | 310+95 | 25'RT. SBL ℄ | | C-G | 1 | | 1026.91 | | | | 1022.90 E. | 872/771 | 810 | 821B | | | 8 | | | | | | | | | | | | | | | | | | | | | OUTL. | 4.3 | IV |
| CB 83 | 310+95 | 13'LT. NBL ℄ | | C-G | 1 | | 1026.97 | 1022.80 W | | | 1022.70 E. | 872/771 | 810 | 821B | | | 53 | | | | | | | | | | | | | | | | | | | | | CB 85 | 1.0 | IV |
| CB 84 | 314+21 | 13'RT. SBL ℄ | | C-G | 1 | | 1024.22 | | | | 1020.20 E. | 872/771 | 810 | 821B | | | 8 | | | | | | | | | | | | | | | | | | | | | OUTL. | 3.85 | IV |
| CB 85 | 314+21 | 25'LT. NBL ℄ | | C-G | 1 | | 1023.89 | 1020.10 W. | | | 1020.00 E. | 872/771 | 810 | 821B | | | 73 | | | | | | | | | | | | | | | | | | | | | CB 87 | 1.0 | IV |
| CB 86 | 317+00 | 13'RT. SBL ℄ | | C-G | 1 | | 1022.27 | | | | 1018.00 E. | 872/771 | 810 | 821B | | | 8 | | | | | | | | | | | | | | | | | | | | | OUTL. | 3.03 | IV |
| CB 87 | 317+00 | 25'LT. NBL ℄ | | C-G | 1 | | 1021.91 | 1017.90 W. | | | 1017.80 S. | 872/771 | 810 | 821B | | | 35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| MH 5C | 2+25 | ON ℄ | CITY | MH | | | 1016.41 | 1007.92 W. | 1009.30 S. | | 1007.90 E. | | | | | | | | | | | | 112 | | | | | | | | | | | | | | | | MH 7B | 0.5 | III |
| MH 7B | 3+37 | ON ℄ | 60-4020 | | 1 | | 1016.23 | 1007.35 W. | | | 1007.33 E. | | | | 700-10 | 712 | | | | | | | 144 | | | | | | | | | | | | | | 1 | OUTL. | 0.5 | III |
| | 279+88 | | | | | | | 1008.10 W. | | | 1006.90 | | | | | | | | | | | | 236 | (SALVAGE AND INSTALL ONE 42" R.C. OUTLET APRON) | | | | | | | | | | | | | OUTL. | 0.5 | III |

* LOCATION AND/OR ELEV. TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

STORM SEWER

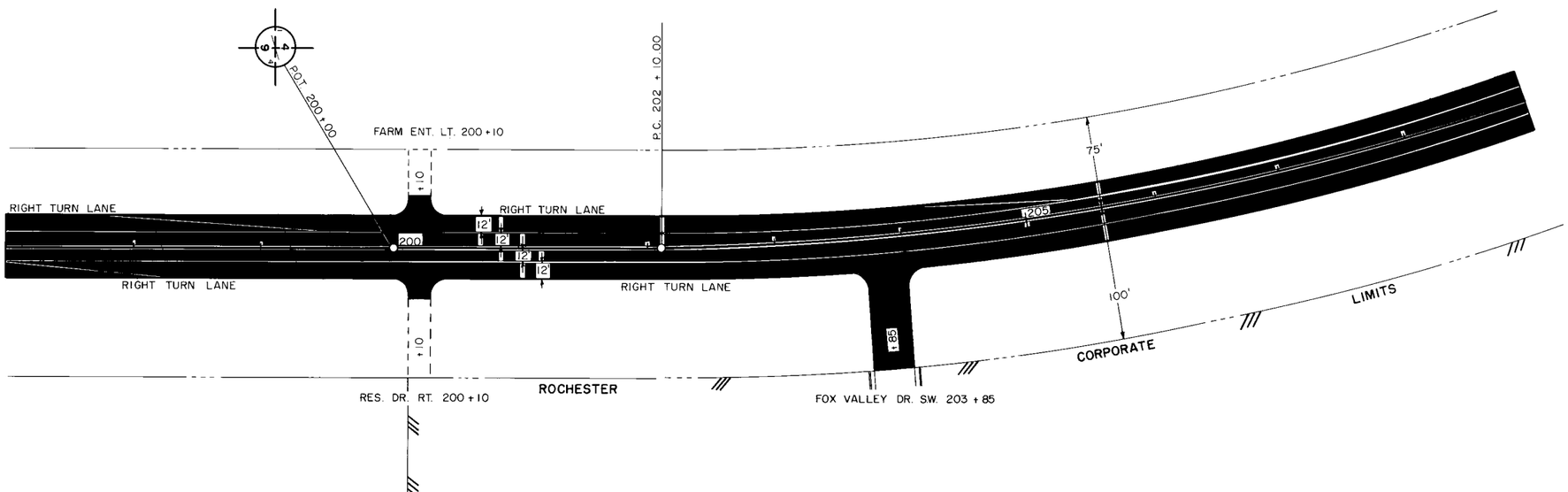
S.A.P. 55-622-13 C.S.A.H. 22 Sheet No. 7 of 46 Sheets

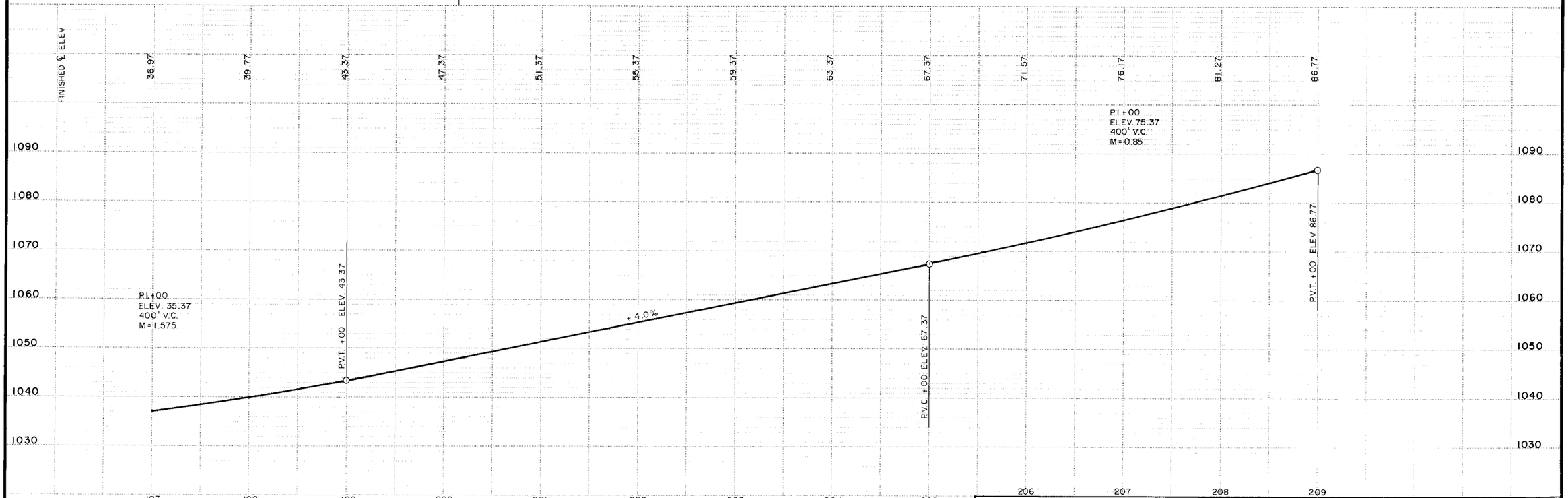
AS BUILT PLANS




~~State Proj. No.~~ SAP 55-622-13 CSAH 22 **Sheet No.** 8 **of** 46 **Sheets**

AS BUILT PLANS

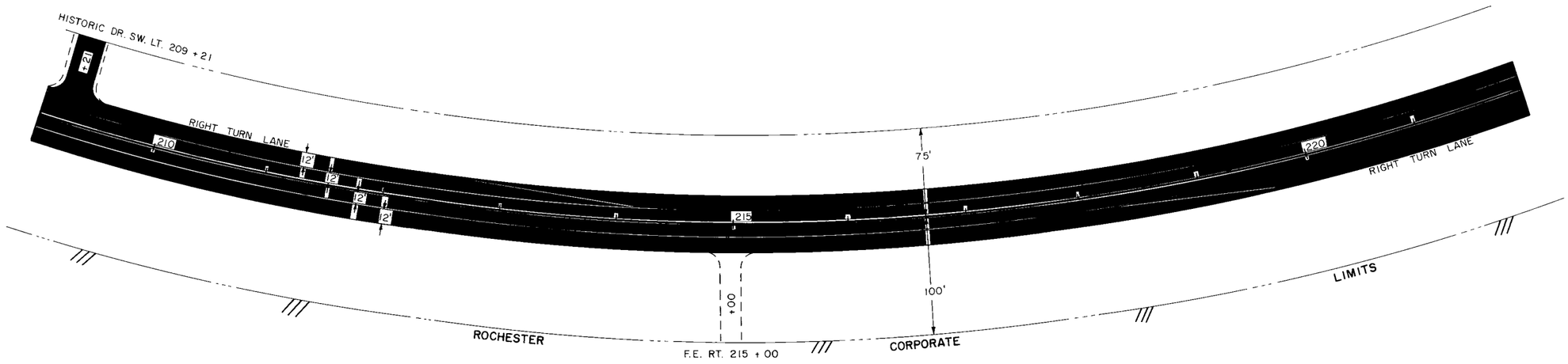


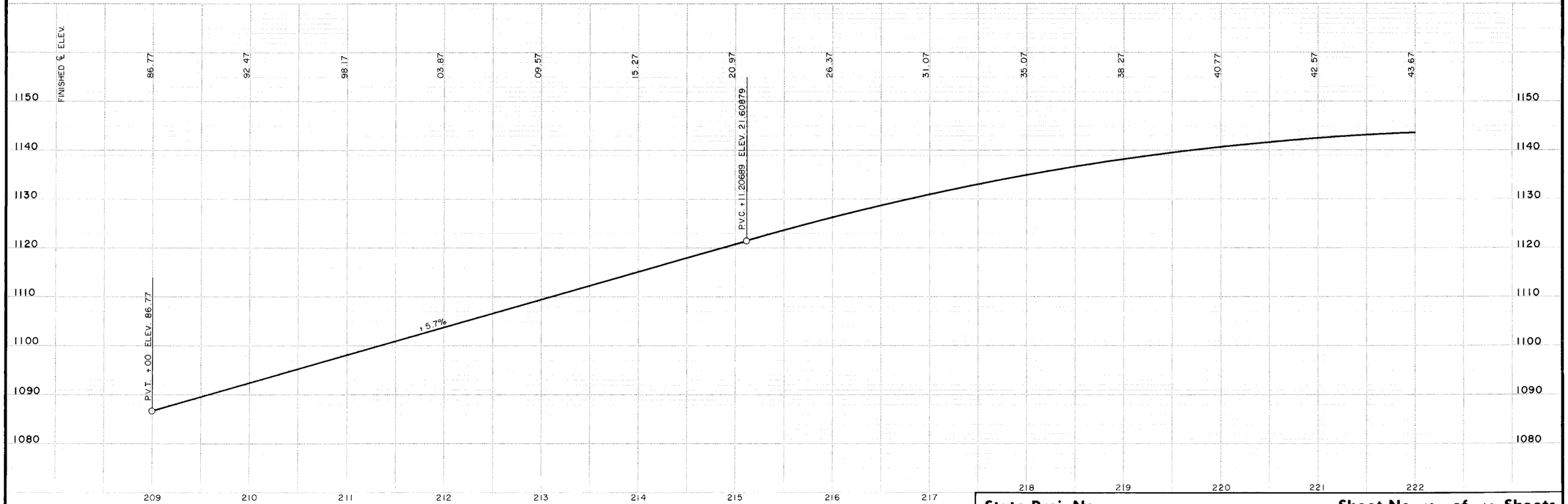




**~~State Proj. No.~~** SAP 55-622-13 CSAH 22 **Sheet No.** 9 **of** 46 **Sheets**

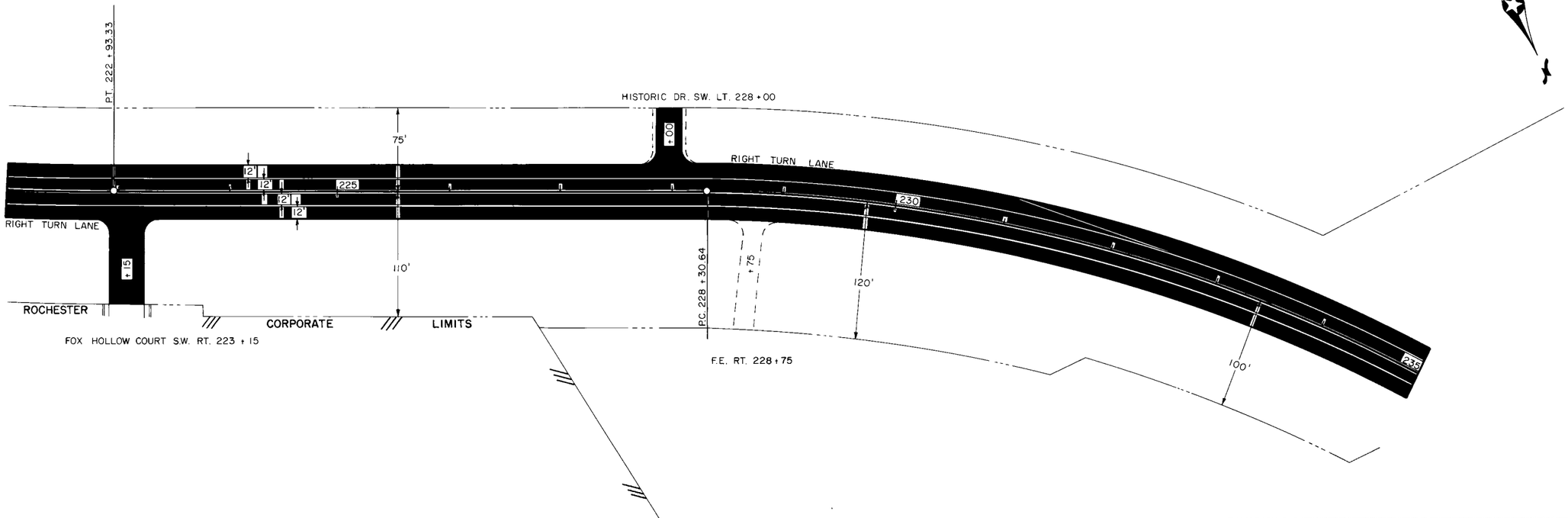
AS BUILT PLANS

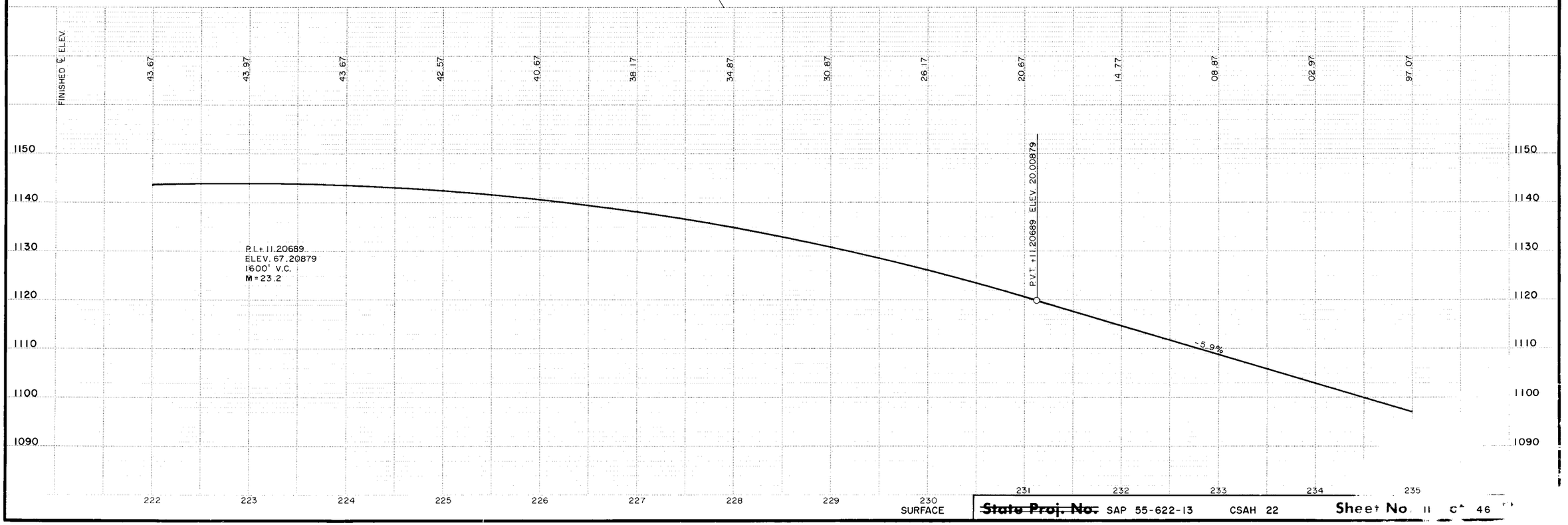
P.I. 213+68.93
Δ LT. 62° 30'
D 3° 00'
T 1158.93'
L 2083.33'
R 1909.86'



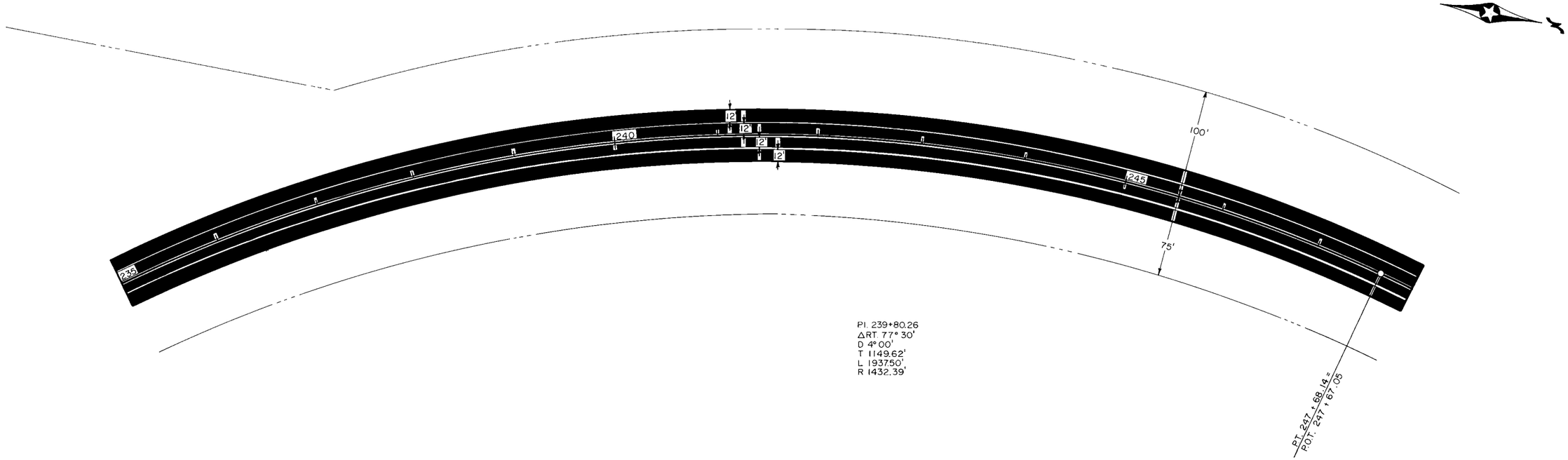



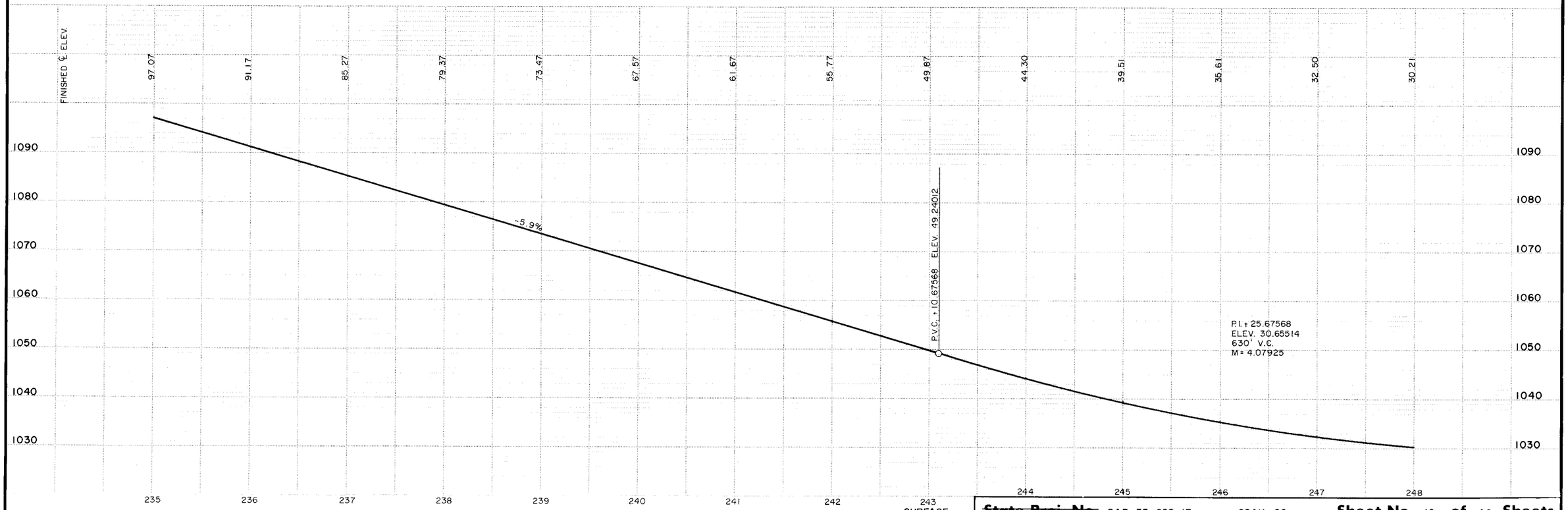

**~~State Proj. No.~~** SAP 55-622-13 CSAH 22 **Sheet No.** 10 **of** 46 **Sheets**




~~State Proj. No.~~ SAP 55-622-13 CSAH 22 Sheet No. 11 of 46 Sheets




~~State Proj. No.~~ SAP 55-622-13 CSAH 22 **Sheet No.** 12 **of** 46 **Sheets**

CONSTRUCT PERMANENT HEADER JOINTS
STA. ~~248+00~~ 247+00

BEGIN TAPER S.B.LANE STA.253+72.75
END TAPER S.B.LANE STA. 259+63.99

CONST. 17',13',13',14',13',16',14',17',13',16'&14' REINF. PANELS STA. 259+83 TO STA. 261+43 S.B. LANES.

S.B. LANE
P.I. 257+71.59
Δ 15° 37' 08"
D 4.03374°
T 194.81'
L 387.21'
P.C. 255+76.78
P.T. 259+63.99=
P.O.T. 259+64.72
SUPERELEVATION 0.046'/FT.
RUNOFF LENGTH 220'

SURVEY ℄
P.I. 258+01.30
Δ LT. 15°37'08"
D 3° 30'
T 224.52'
L 446.25'
R 1637.02'

4" CONCRETE WALK

Δ 105° 25'
T 81.41'
R 62'
D 92.4125°
EDGE BITUMINOUS

CONSTRUCT PEDESTRIAN CURB RAMPS LEFT STA. 260+90 AND RIGHT STA. 261+60

Δ 74° 45'
T 38.19'
R 50'
D 114.5916°
BACK CURB

Δ 74°45'
T 38.19'
R 50'
D 114.5916°
EDGE BITUMINOUS

Δ 105° 25
T 65.09'
R 50'
D 114.5916°
BACK CURB

247+97
~~248+00~~
STA. BEGIN CONCRETE PAVEMENT

P.I. 247+68.14 = ROT. 241+67.05

36th AVE. N.W.

C.S.A.H. 34

LIMITS ROCHESTER

8' WIDE BITUMINOUS PATH

SALVAGE AND INSTALL 235 LIN. FT. TRAFFIC BARRIER

SURVEY ℄

2' SHOULDER

INTEGRANT CURB 10'

CB NO.1

CB NO.2

CB NO.3

MH NO.1

SEE INSET "A"

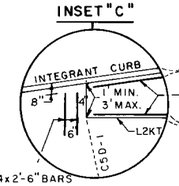
SEE INSET "B"

SEE INSET "C"

SEE INSET "D"

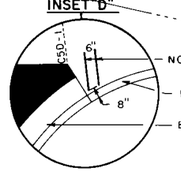
F.E. +80

INSET "C"




PLACE NO.4 BARS ALONG EACH EDGE PAVEMENT WHERE TAPER WIDTH IS LESS THAN 6 FEET.

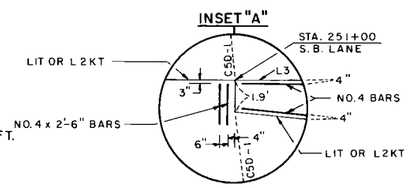
INSET "D"



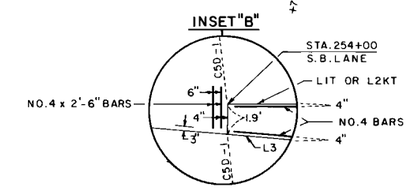

NOTE: C5D-1 CONTRACTION JOINT SHOWN ARE THE JOINTS LOCATE BETWEEN THE 17' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14', AND 17' UNLESS OTHERWISE SHOWN STATIONS SHOWN TO ℄ LANES.

N.B. LANE
P.I. 250+99.90
Δ 2° 56' 38"
D 1° 00'
T 147.23'
L 294.39'
P.C. 249+52.67
P.T. 252+47.06
SUPERELEVATION 0.023'/FT.
RUNOFF LENGTH 165'

INSET "A"




INSET "B"




N.B. LANE
P.I. 258+12.39
Δ 18° 33' 46"
D 5°
T 187.27'
L 371.26'
P.C. 256+26.12
P.T. 259+97.38=
P.O.T. 259+85.79
SUPERELEVATION 0.04'/FT.
RUNOFF LENGTH 190'

CONST. 14'&17' REINF. PANELS STA. 257+93 TO STA. 258+24 N.B. LANES & LEFT TURN LANE.

CONST. 13',16',14',17',13',16',14',17',13',16'& 14' REINF. PANELS STA. 260+45 TO STA. 262+08 N.B. LANES.

CONST. 13',16',13',16',14',17',13',16',14'&17' REINF. PANELS STA. 260+16 TO STA. 261+65 BETWEEN N.B. LANES & S.B. LANES.

FINISHED PROFILE GRADES

| | N.B. LANE | S.B. LANE |
|---|---|---|
| | 30.21 | 30.21 |
| | 28.75 | 28.75 |
| | 27.96 | 27.96 |
| | 27.24 | 27.24 |
| | 26.52 | 26.52 |
| | 25.80 | 25.80 |
| | 25.35 | 25.35 |
| | 24.92 | 24.90 |
| | 24.49 | 24.45 |
| | 24.06 | 23.99 |
| | 23.63 | 23.54 |
| | 23.20 | 23.08 |
| | 22.65 | 22.63 |
| | 23.00 +57.18 | 23.00 |
| | 22.67 | 22.67 |
| | 21.88 | 21.88 |
| | N.B. LANE | S.B. LANE |

S.B. LANE
P.I. 253+00
ELEV. 1025.80

N.B. LANE
P.I. 253+06.89655
ELEV. 1025.75034

S.B. LANE
P.I. 260+00 P.I. 260+57.18
ELEV. 1022.63 ELEV. 1023.00828

N.B. LANE
P.I. 260+00 P.I. 260+57.18
ELEV. 1022.63 ELEV. 1023.00828

-0.72% -0.454% +0.66156% -0.79%

PROFILE GRADE N.B. LANE

P.V.T. +40.67568
ELEV. 28.38703

-0.72% -0.43% +0.62658% -0.79%

1030
1020
1010

PROFILE C.S.A.H. 34

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23.95 | | 23.55 | | 23.25 | 22.72 | 23.00 | 22.72 | 23.00 | 22.72 | 22.55 | 22.25 |
| | -0.4% | | -0.3% | | -1.3% | | | | | -0.2% | -0.3% | |
| ℄ N.B. LANE | | | | | | | | | | | | |
| | 452 | | 453 | | 454 | | 455 | | | 456 | | 457 |

1030
1020

248 249 250 251 252 253 254 255 256 257 258 259 260 261 262

SURFACE

~~State Proj. No.~~ SAP 55-622-13 CSAH 22

Sheet No. 13 of 46 Sheets

AS BUILT PLANS

NOTE: C5D-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 17' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14', AND 17' UNLESS OTHER WISE SHOWN STATIONS SHOWN TO ℄ OF LANE.

CONST. 17' REINF. PANEL STA. 264+43 TO STA. 264+60 S.B. LANES, LEFT TURN AND RIGHT TURN LANES.

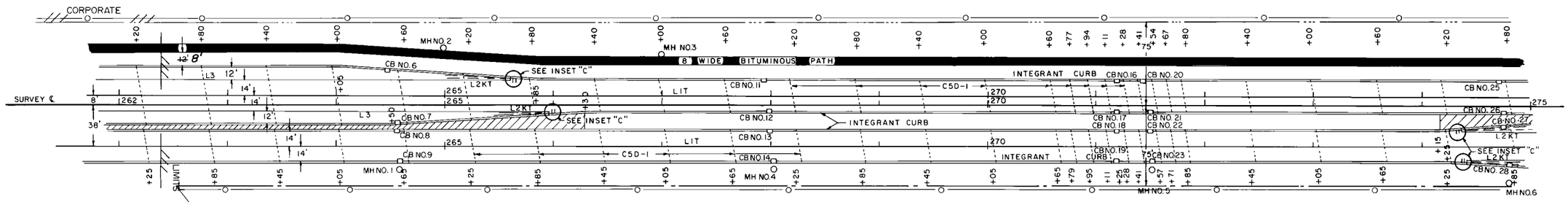
CONST. 14' REINF. PANEL STA. 267+89 TO STA. 268+03 S.B. LANES.

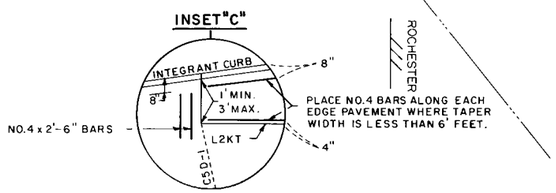
CONST. 17' REINF. PANEL STA. 271+11 TO STA. 271+28 S.B. LANES.

CONST. 13' REINF. PANEL STA. 271+41 TO STA. 271+54 S.B. LANES.

CONST. 17' REINF. PANEL STA. 274+63 TO STA. 274+80 S.B. LANES.

4" CONCRETE WALK



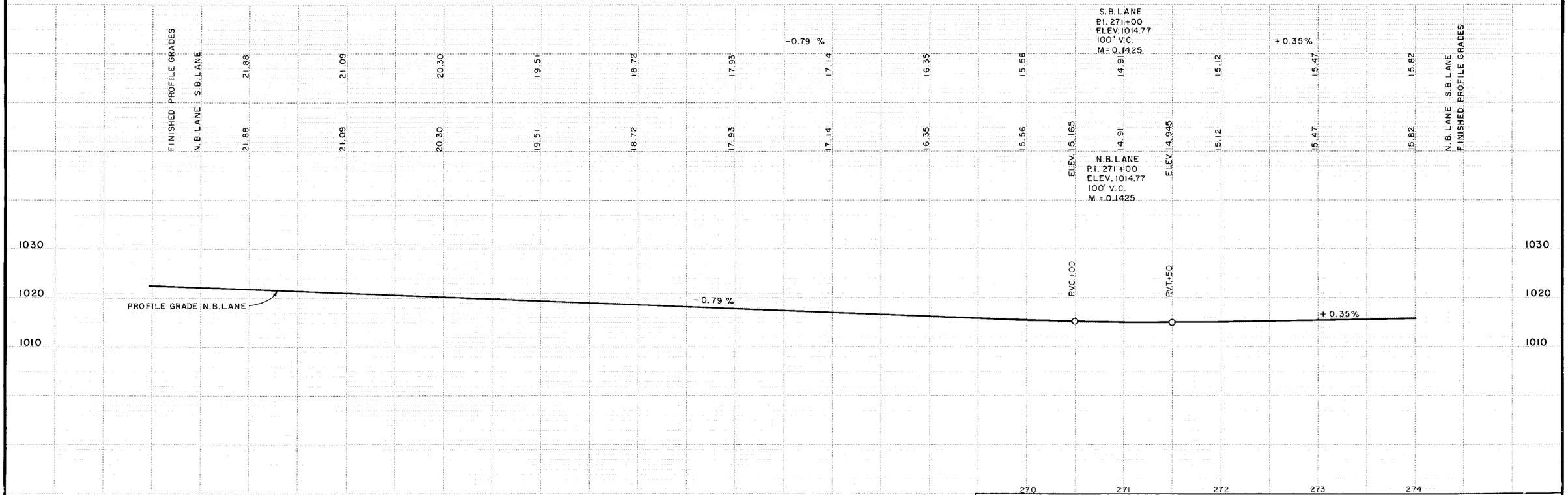

CONST. 17' REINF. PANEL STA. 264+48 TO STA. 264+65 N.B. LANES.

CONST. 14' REINF. PANEL STA. 267+94 TO STA. 268+08 N.B. LANES.

CONST. 17' REINF. PANEL STA. 271+11 TO STA. 271+28 N.B. LANES.

CONST. 16' REINF. PANEL STA. 271+41 TO STA. 271+57 N.B. LANES.

CONST. 17' REINF. PANEL STA. 274+68 TO STA. 274+85 N.B LANES, RIGHT TURN LANE AND LEFT TURN LANE.






AS BUILT

NOTE: C5D-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 17' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 17' UNLESS OTHERWISE SHOWN STATIONS SHOWN TO ℄ LANES.

CONST. PEDESTRIAN CURB RAMPS LT. STA. 27+20, RT. STA. 279+40, LT. STA. 280+10 AND RT. STA. 280+10.

CONST. 17' REINF. PANEL STA. 274+63 TO STA. 274+80 S.B. LANES.

CONST. 17' & 16' REINF. PANELS S.B. LANES STA. 278+83 TO STA. 279+16 AND 17' REINF. PANEL STA. 279+16 TO STA. 279+33 RIGHT TURN LANE.

CONST. 14' REINF. PANEL STA. 279+89 TO STA. 280+03 S.B. LANES, RIGHT TURN LANE AND LEFT TURN LANE.

CONST. 13' & 17' REINF. PANELS STA. 282+40 TO STA. 282+70 S.B. LANES, RIGHT TURN LANE AND LEFT TURN LANE.

CONST. 17' & 13' REINF. PANELS STA. 284+83 TO STA. 285+13 S.B. LANES.

CONST. 17' REINF. PANEL STA. 285+43 TO STA. 285+60 S.B. LANES.

CONST. 17' REINF. PANEL STA. 288+43 TO STA. 288+60 S.B. LANES.

CONST. 17' REINF. PANEL STA. 274+68 TO STA. 274 85 N.B. LANES, RIGHT TURN LANE AND LEFT TURN LANE.

CONST. 17' REINF. PANEL STA. 278 88 TO STA. 279+05 N.B. LANES, RIGHT TURN LANE AND LEFT TURN LANE.

CONST. 14' REINF. PANEL STA. 279+94 TO STA. 280+08 N.B. LANES, RIGHT TURN LANE AND LEFT TURN LANE.

CONST. 17' REINF. PANEL STA. 282+36 TO STA. 282+70 N.B. LANES.

CONST. 17' REINF. PANEL STA. 284+88 TO STA. 285+05 N.B. LANE.

CONST. 17' REINF. PANEL STA. 285+48 TO STA. 285+65 N.B. LANES.

CONST. 17' REINF. PANEL STA. 288+48 TO STA. 288+65.

INSET "D"

INSET "F"

4" CONCRETE WALK

INSET "C"

INSET "E"

PLACE NO.4 BARS ALONG EACH EDGE OF PAVEMENT WHERE TAPER WIDTH IS LESS THAN 6 FEET.

Δ 99° T 58.33' R 50' BACK CURB

Δ 81° T 42.55' R 50' BACK CURB

Δ 90° T 50' R 50' BACK CURB

Δ 90° T 50' R 50' BACK CURB

Δ 90° T 20' R 20' BACK CURB

ROCHESTER PI. 288+88.81 Δ LT. 00° 01' 18"

CORPORATE LIMITS

S.B. LANE P.I. 278+00 ELEV. 1017.22

S.B. LANE P.I. 285+20.15872 ELEV. 1015.05953 570' V.C. M = 4.48875

N.B. LANE P.I. 278+00 ELEV. 1017.22

N.B. LANE P.I. 285+20.15872 ELEV. 1015.05953 570' V.C. M = 4.48875

P.V.C. +35.15873 ELEV. 15.91453

P.V.T. +05.15875 ELEV. 32.15948

PROFILE GRADE N.B. LANE

PROFILE 3rd. ST. NW.

+80 END CONST. ℄ S.B.L. ℄ N.B.L. END SURFACING +65

SURFACE



AS BUILT PLANS

NOTE: C5D-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 17' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 17' UNLESS OTHERWISE SHOWN STATIONS SHOWN TO ℄ OF LANES.

CONST. 17' REINF. PANEL STA. 291+43 TO STA. 291+60 S.B. LANES.

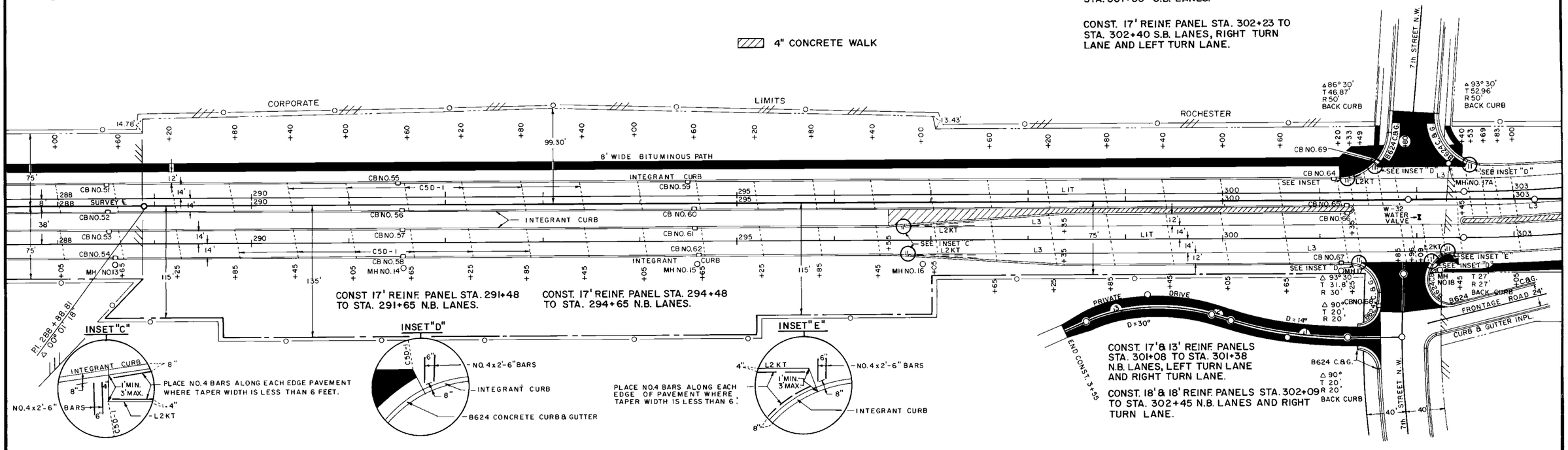
CONST. 17' REINF. PANEL STA. 294+43 TO STA. 294+60 S.B. LANES

CONSTRUCT PEDESTRIAN CURB RAMPS RT. STA. 301+55, LT. STA. 301+60, RT. STA. 302+10 AND LT. STA. 302+38.

CONST. 17' & 13' REINF. PANELS STA. 301+03 TO STA. 301+33 S.B. LANES.

CONST. 17' REINF. PANEL STA. 302+23 TO STA. 302+40 S.B. LANES, RIGHT TURN LANE AND LEFT TURN LANE.

4" CONCRETE WALK



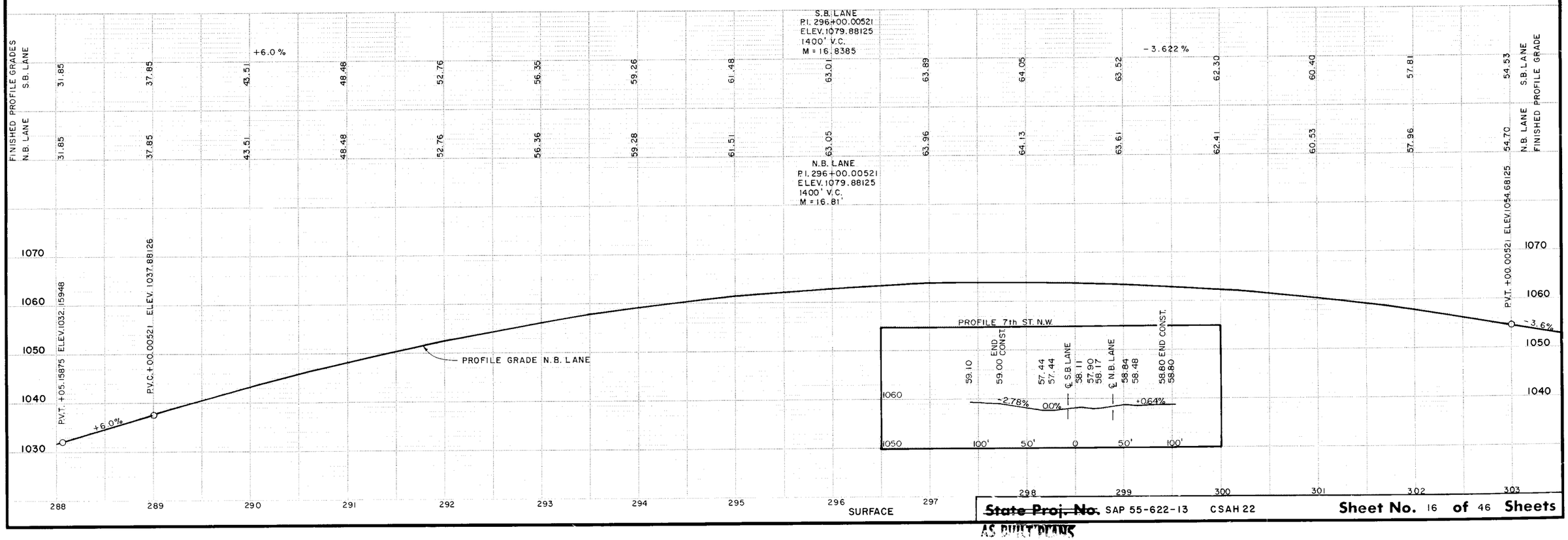















AS BUILT PLANS

NOTE C5D-1 CONTRACTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 17' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 17' UNLESS OTHERWISE SHOWN STATIONS SHOWN TO ℄ OF LANE.

℄ SOUTH BOUND LANE
P.I. 303 + 98.80
Δ LT. 11° 59' 35"
D 4.02247°
T 149.62'
L 298.15'
P.C. 302 + 49.18
P.T. 305 + 47.33 =
P.O.T. 305 + 50.58

SURVEY CENTER LINE
P.I. 304 + 71.83
Δ LT. 12° 00'
D 4°
T 150.55'
L 300.00'

~~CONSTRUCT~~ PEDESTRIAN CURB RAMPS ~~LT. STA~~ 307+64, IN ~~MEDIAN AT STA. 307+64~~, RT. STA. ~~307+64, RT. STA. 308+10 AND RT. STA. 308+46.~~

CONST. 13' REINF. PANEL STA. 304+20 TO STA. 304+33 S.B. LANES, RIGHT TURN LANE AND LEFT TURN LANE.

CONST. 13' & 16' REINF. PANELS STA. 307+84 TO STA. 308+03 S.B. LANES.

4" CONCRETE WALK

CONST. 16' REINF. PANEL STA. 304+30 TO STA. 304+46 N.B. LANES.

CONST. 11' & 12' REINF. PANEL STA. 307+78 TO STA. 308+10 N.B. LANES, 12' & 16' REINF. PANELS STA. 307+89 TO STA. 308+17 LEFT TURN LANE AND 11' REINF. PANEL STA. 307+78 TO STA. 307+89 RIGHT TURN LANE.

℄ NORTH BOUND LANE
P.I. 304+03.64
Δ LT. 11° 59' 35"
D 3.89663°
T 154.45'
L 307.78'
P.C. 302 + 49.19
P.T. 305 + 56.97=
P.O.T. 305 + 50.58

Δ 77°
T 39.63'
R 50'
BACK CURB

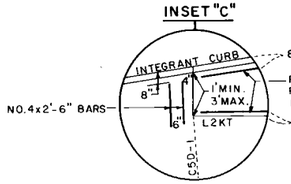
Δ 103°
T 40.24'
R 32'
EDGE BITUMINOUS

Δ 77°
T 39.63'
R 50'
EDGE BITUMINOUS

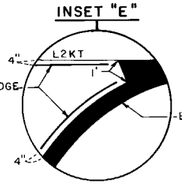
CONST. 13' REINF. PANEL STA. 310+88 TO STA. 311+01 N.B. LANES.

CONST. 14' REINF. PANEL STA. 314+17 TO STA. 314+31 N.B. LANES.

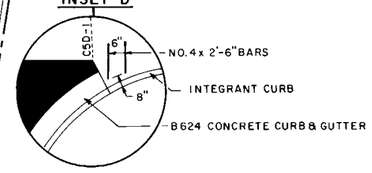
INSET "C"

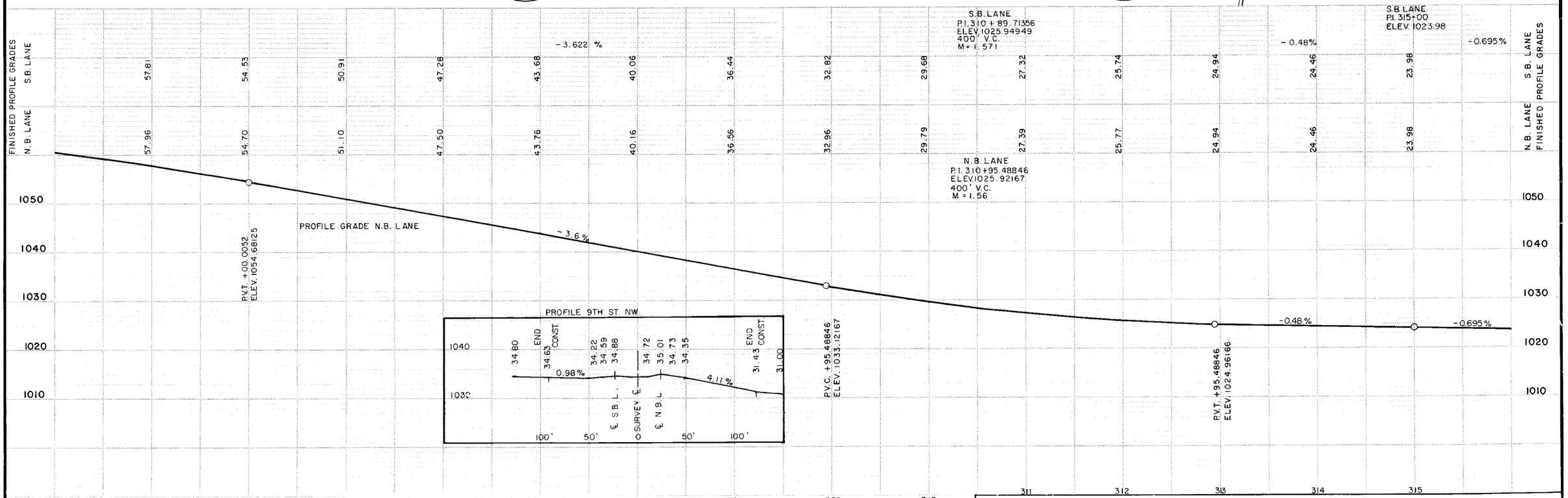



INSET "E"




INSET "D"




AS BUILT PLANS

~~State Proj. No.~~ SAP 55-622-13 CSAH 22

**Sheet No.** 17 **of** 46 **Sheets**

NOTE: C5D 1 CONSTRUCTION JOINTS SHOWN ARE THE JOINTS LOCATED BETWEEN THE 17' AND 13' PANELS. ROTATION OF JOINTS TO BE AT 13', 16', 14' AND 17' UNLESS OTHERWISE SHOWN. STATIONS SHOWN TO ℄ OF LANES.

CONST. 14', 17', 13' & 16' REINF. PANELS STA. 316+53 TO STA. 317+13 S.B. LANES.

Δ 60° 24'
T 49.48'
R 85'
EDGE BITUMINOUS

4" CONCRETE WALK

CONST. PERMANENT HEADER JOINT STA. 317+42.5 SURVEY CENTER LINE AND PARALLEL TO TH 14.

WIDEN MEDIAN OPENING AS SHOWN IN THE PLAN AND AS STAKED BY THE ENGINEER.

| | |
|---|---|
| 6" AGGREGATE BASE CLASS 5 | 142 TONS |
| 4" BASE COURSE MIXTURE (2331 MOD.) | 50 TONS |
| 2" WEARING COURSE (2341 MOD.) | 25 TONS |

CB NO. 84 INTEGRANT CURB CB NO. 85 INTEGRANT CURB CB NO. 86 CB NO. 87

B625 C.&G.

8' WIDE BITUMINOUS PATH

18"x 28' C.S. W/ 2 APRONS 84 R

Δ 111° 58' 25.6"
D 68.209°
T 124.47'
L 164.16'
R 84'

CONST. 17', 13', 16' & 14' REINF. PANELS STA. 316+11 TO STA. 316+71 N.B. LANES AND LEFT TURN LANE.

RIGHT TURN LANE INPLACE

LEFT TURN LANE INPLACE

T.H. 14 EAST BOUND LANE

T.H. 14 WEST BOUND LANE

P.O.T. 317+56.51 Rt. 145'

P.O.T. 318+53.33

END: SAP 55-622-13
STA. 318+53.33

CONST. RAISED MEDIAN RT. STA. 316+00 TO STA. 317+00 WITH B624 CONC. CURB & GUTTER. SEGMENT PARALLEL TO EXIT RAMP TO HAVE REVERSE SLOPE GUTTER SECTION.

LIMITS

ROCHESTER

CORPORATE

FINISHED PROFILE GRADES

S.B. LANE
P.I. 315+00
ELEV. 1023.98

-0.695%

+0.49%

| | | | | |
|---|---|---|---|---|
| S.B. LANE | 24.46 | 23.98 | 23.28 | 22.59 |
| N.B. LANE | 24.46 | 23.98 | 23.28 | 22.59 |

+55 22.86

+30 22.88

N.B. LANE
P.I. 315+00
ELEV. 1023.98

-0.48%

-.695%

+0.966%

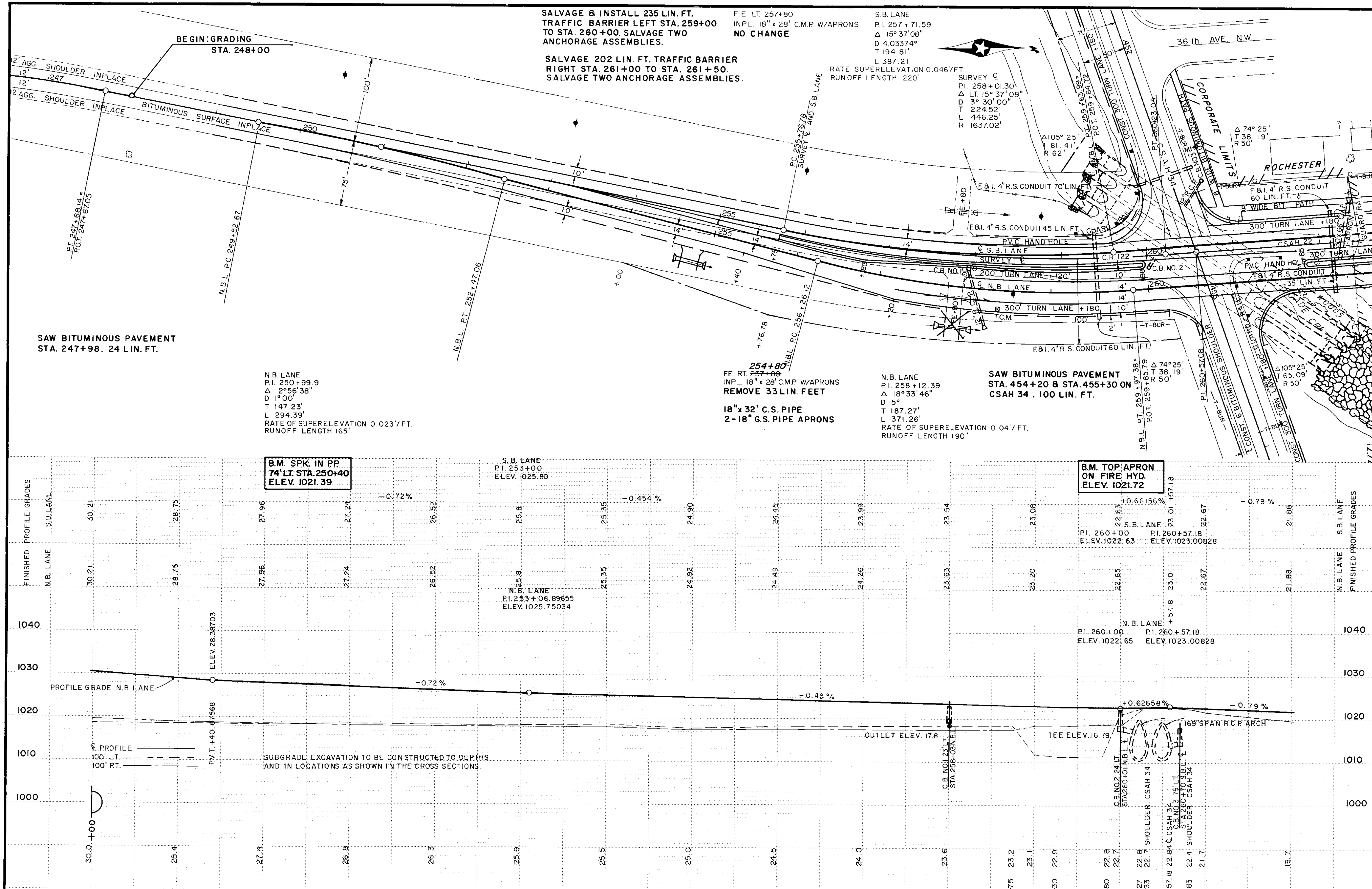
PROFILE GRADE N.B. LANE

1030
1020
1010

314 315 316 317 318

SURFACE

State Proj. No. SAP 55-622-13 C.S.A.H. 22 Sheet No. 18 of 46 Sheets




STORM SEWER AND GRADING

~~State Proj. No.~~ SAP 55-622-13 CSAH 22 **Sheet No.** 19 **of** 46 **Sheets**

PLANS

36th AVE. N.W.

C.B.3
CONST. 169" SPAN R.C. PIPE ARCH x 12" R.C. PIPE TEE FIELD CONNECTION.
*ELIMINATED TYPE C OR G C.B.*
*USED CONC. APRON FOR INLET*

C.B.4
FURNISH 90° BEND AT 20' FROM END OF BARREL.
*FURNISH 45° BEND 8' FROM END OF BARREL*
*FURNISH 45° BEND 18' FROM OTHER ELBOW*

*COUNTRY CLUB MANOR FIRST ADDITION*

Δ 105°25' T 81.41 R 62'
P.I. 259+63.99=
P.O.T. 259+64.72
CONST. 300' TURN LANE
P.T. 260+23.04
CORPORATE LIMITS
Δ 74°25' T 38.19' R 50'
F&I 4" R.S. CONDUIT 70 LIN. FT.
F&I 4" R.S. CONDUIT 45 LIN. FT.
GUARD RAIL
CR. 122
P.V.C. HAND HOLE
C.B. NO. 2
F&I 4" R.S. CONDUIT 60 LIN. FT.
F&I 4" R.S. CONDUIT 60 LIN. FT.
N.B.L. P.T. 259+97.38=
P.O.T. 259+85.79
P.I. 260+57.08
CONST. 6" BITUMINOUS SHOULDER
C.S.A.H. 34
CONST. 300' TURN LANE
Δ 74°25' T 38.19' R 50'
Δ 105°25' T 65.09' R 50'
WOODS
C.B. NO. 3
C.B. NO. 4
P.I. 262+38.63
Δ LT. 0°06'14"
F&I 4" R.S. CONDUIT 60 LIN. FT.
300' TURN LANE
C.B. NO. 5
C.B. NO. 6
C.B. NO. 7
F&I 4" R.S. CONDUIT 35 LIN. FT.
C.B. NO. 8
C.B. NO. 9
M.H. NO. 1
15" R.C. PIPE
T.E.
WOODS
RIVER CHESTNUT
CREEK
M.H. NO. 2
12" C.S. PIPE
15" C.S. PIPE
M.H. NO. 3
8' WIDE BIT. PATH
EARTH BERM
℄ S.B. LANE SURVEY ℄
℄ N.B. LANE
C.B. NO. 10
C.B. NO. 11
C.B. NO. 12
C.B. NO. 13
C.B. NO. 14
M.H. NO. 4
24" R.C. PIPE
P.O.T. 267+40.49
C.B. NO. 15
C.B. NO. 16
C.B. NO. 17
C.B. NO. 18
C.B. NO. 19
C.B. NO. 20
C.B. NO. 21
C.B. NO. 22
C.B. NO. 23
M.H. NO. 5
36" SPAN R.C. PIPE-ARCH
P.O.T. 271+28.53

C.B. 2
CONST. 169" SPAN R.C. PIPE-ARCH x 12" R.C. PIPE TEE FIELD CONNECTION.

℄ CULV. STA. 262+25
INPL. 30"x 66' C.M.P. W/INLET APRON
REMOVE 70 LIN. FT.

*STA. 262 + 75*
*INSTALLED 20" x 100'*
*WATERMAIN CASING*
*41' LT. & 59' RT. OF SURVEY ℄*
*FLOWLINE ELEV. 1012.0*

CL. 10 TREES GR. 10 TREES — CL. 4.3 ACRES GR. 4.3 ACRES

B.M. EL. 1021.72
TOP FIRE HYD.
ENT. COUNTRY CLUB

B.M. EL. 1019.37
SPK. IN P.P. 56' LT.
STA. 273 + 56

S.B. LANE
P.I. 271+00
ELEV. 1014.77
100' V.C.
M = 0.1425

N.B. LANE
P.I. 271+00
ELEV. 1014.77
100' V.C.
M = 0.1425'

FINISHED PROFILE GRADES

℄ PROFILE
100' LT.
100' RT.

PROFILE GRADE N.B. LANE

ELEV. 1012.0

SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTHS AND IN LOCATIONS AS SHOWN IN THE CROSS SECTIONS.

-0.79%
15" R.C. PIPE CL. III @ 0.718 %
ELEV. 1014.54
M.H. NO. 1 21' RT. STA. 264+69 N.B.L. ℄
ELEV. 1012.10
24" R.C. PIPE CL. III @ 0.31 %
M.H. NO. 4 21' RT. STA. 268+01
ELEV. 1011.50
+0.35%
36" SPAN R.C. PIPE-ARCH CL. II A @ 0.3%
ELEV. 1010.42
M.H. NO. 5 21' RT. STA. 271+51 N.B.L. ℄
ELEV. 1010.40

STORM SEWER AND GRADING

State Proj. No. SAP 55-622-13 CSAH 22 Sheet No. 20 of 46 Sheets

STA. 276 + 53
CITY OF ROCHESTER INSTALLED
3" PVC FOR FUTURE USE
2.5' BELOW NATURAL GROUND

C.B. 29
CONST. 48"R.C.PIPE x 12" R.C. PIPE
TEE FIELD CONNECTION.

C.B. 33
CONST. 36" SPAN R.C. PIPE x 12" R.C.P
TEE FIELD CONNECTION.

C.B. 36
CONST. 60"R.C.PIPE x 12"C.S. PIPE
TEE FIELD CONNECTION.

C.B. 34
CONST. 60"R.C. PIPE x 18" R.C. PIPE
TEE FIELD CONNECTION.

C.B. 35
CONST. 60"R.C. PIPE x 15" R.C. PIPE
TEE FIELD CONNECTION

COUNTRY CLUB MANOR FIRST ADDITION

COUNTRY CLUB MANOR FIRST ADDITION

COUNTRY CLUB MANOR SECOND ADDITION

9 8 7 6 5 4 3 2 1 19 18 17 16 11 10 9 8

POOL

GAR.

Δ 99° T 58.33' R 50'

Δ 81° T 42.55' R 50'

C.B. NO. 24 — EARTH BERM — 12" C.S. PIPE — C.B. NO. 29 — C.B. NO. 30 — 12" C.S. PIPE — C.B. NO. 36 — C.B. NO. 37 — C.B. NO. 46

8' WIDE BIT. PATH

F.B.I. 4" R.S. CONDUIT 35 LIN. FT.

C.B. NO. 25 — C.B. NO. 26 — C.B. NO. 27 — C.B. NO. 28

℄ S.B. LANE SURVEY ℄

℄ N.B. LANE

300' TURN LANE + 180'

P.V.C. HAND HOLE — C.B. NO. 31 — C.B. NO. 32 — C.B. NO. 33

F.B.I. 4" R.S. CONDUIT 60 LIN. FT.

36" SPAN R.C. PIPE-ARCH — M.H. NO. 6 — 36" SPAN R.C. PIPE-ARCH

T.E.

M.H. NO. 7

Δ 90° T 50' R 50'

M.H. NO. 34 APPROX. 2' LT. STA. 279 + 37
RING ELEV. 1015.95
ADJUST FRAME & RING CASTING TO
ELEV. 1016.93

M.H. NO. 33A 41' RT. STA. 4+00
RING ELEV. 1014.49
NO CHANGE

CULVERT LT. STA. 280 + 25
INPL. 36"x 36' C.M.P. W/OUTLET APRON
REMOVE 41 LIN. FT.

INSULATE 8'x8'

M.H. SAN.S. NO.33A

INSULATE 8' x 16'

STA. 4 + 06.22

116.84'

INTERSECTION 3rd. ST. N.W. & CSAH 22
STA. 279 + 76.65

INSTALL 36 LIN. FT. TRAFFIC BARRIER DESIGN B8307

P.I. C.B. NO. 35 — 183.16'

P.I. 0 + 70
Δ 19° 00'
D 21°
T 45.66'
L 90.48'
P.C. 0 + 24.34
P.T. 1 + 14.82
R 272.84'

54.7

CONST. GROUTED RIPRAP DEPTH 2' 133 CU. YDS.

C.B. 34 Δ 90° T 50' R 50'

M.H. NO. 8 — M.H. NO. 9 — M.H. NO. 10 — M.H. NO. 11 — M.H. NO. 12 — M.H. NO. 13

F.B.I. 4" R.S. CONDUIT 60 LIN. FT.

F.B.I. 4" R.S. CONDUIT 135 LIN. FT.

C.B. NO. 38 — C.B. NO. 39 — C.B. NO. 40 — C.B. NO. 41 — C.B. NO. 42 — C.B. NO. 43 — C.B. NO. 44 — C.B. NO. 45 — C.B. NO. 47 — C.B. NO. 48 — C.B. NO. 49 — C.B. NO. 50 — C.B. NO. 51 — C.B. NO. 52 — C.B. NO. 53 — C.B. NO. 54

42" R.C. PIPE — 36" R.C. PIPE — 21" R.C. PIPE — 18" R.C. PIPE — 18" R.C. PIPE

2" P.V.C. ELECTRICAL CROSSING INPL.

WATER V. MH. — EL. BOX — PROP COR.

P.I. 1 + 93.06
Δ 19° 00'
D 21°
T 45.66'
L 90.48'
P.C. 1 + 47.40
P.T. 2 + 37.88
R 272.84

END OF 8" PLUGGED WATERMAIN
INLET BARREL SE. 54.7
CENTER OF C.B. SW. 26.3

MANORWOOD — LAKES — CORPORATE LIMITS ROCHESTER

P.I. 288 + 88.81
Δ LT. 0°01'18"

CL. 6 TREES GR. 6 TREES

CL. 5.3 ACRES GR. 5.3 ACRES

SEE SHEET NO. 46C FOR INTERSECTION CHANGE ON 3RD. STREET EAST TO LAKE STREET NW.

B.M. EL. 1018.46
BOLT IN P.P. 75' LT.
STA. 284+44

B.M. EL. 1039.76
TOP OF P.I. PIPE ℄
STA. 288+88.81

S.B. LANE
P.I. 278+00
ELEV. 1017.22

S.B. LANE
P.I. 285+20.15872
ELEV. 1015.05953
570' V.C.
M = 4.48875

N.B. LANE
P.I. 278+00
ELEV. 1017.22

N.B. LANE
P.I. 285+20.15873
ELEV. 1015.05953
570' V.C.
M = 4.48875

P.V.C. + 35.15873 ELEV. 15.91453

FINISHED PROFILE GRADES N.B. LANE

FINISHED PROFILE GRADES S.B. LANE

PROFILE GRADE N.B. LANE

+ 0.35% — − 0.3% — + 0.35% — − 0.3% — + 6.0% — + 6.0%

℄ PROFILE
100' LT.
100' RT.

ELEV. 1009.42 — ELEV. 1009.40

36" SPAN R.C. PIPE-ARCH CL IIA @ 0.4%

ELEV. 1007.79 — ELEV. 1007.77

SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTHS AND IN LOCATIONS AS SHOWN IN THE CROSS SECTIONS.

ELEV. 1008.49 42"R.C.PIPE CL. II @ 0.502%

60"R.C.PIPE STORM SEWER

42"R.C.PIPE STORM SEWER

42"R.C.PIPE STORM SEWER

36" R.C. PIPE CL. II @ 0.61%

ELEV. 1009.80 — ELEV. 1010.20

21" R.C.PIPE CL. III @ 3.875%

18" R.C.PIPE CL. III @ 4.838%

ELEV. 1011.64 — ELEV. 1012.64

ELEV. 1015.31 — ELEV. 1014.81

ELEV. 1029.73 — ELEV. 1029.75

M.H. NO.6 33' RT. STA. 274+80 N.B.L. ℄

M.H. NO.7 33' RT. STA. 278+85 NBL ℄

APPROX LOCATION 4' LT. STA. 279+36 SAN. SEWER M.H. NO. 34 INPL.; 18" R.C. PIPE SAN. S

M.H. NO.8 21' RT. STA. 279+98.85 N.B.L. ℄

M.H. NO.9 21' RT. STA. 282+62 N.B.L. ℄

M.H. NO.11 21' RT. STA. 285+00 N.B.L. ℄

M.H. NO.12 21' RT. STA. 285+58

M.H. NO.13 21' RT. STA. 288+58 N.B.L. ℄

PVT. + 05.15875 ELEV 32.15948

STORM SEWER AND GRADING

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SAW BITUMINOUS PAVEMENT
105' RT. AND 90' LT. STA.
301+90 SURVEY ℄
92 LIN. FT.

INPL. WATER GATE VALVE
19' RT. STA. 302+03 ELEV. 1058.67
ADJUST GATE VALVE -0.9'

SCHOOL
CORPORATE LIMITS
COUNTRY CLUB MANOR SECOND ADDITION
COUNTRY CLUB MANOR THIRD ADDITION
ROCHESTER
WESTWAY MANOR THIRD ADDITION
WESTWAY MANOR FIRST ADDITION
EARTH BERM
8' WIDE BIT. PATH
NEW BIT.
5' CONC. WALK
BIT. CURB
T-BUR
CONC.
C.B. NO. 51
C.B. NO. 52
C.B. NO. 53
C.B. 54
C.B. NO. 55
C.B. NO. 56
C.B. NO. 57
C.B. NO. 58
C.B. 59
C.B. 60
C.B. 61
C.B. 62
C.B. NO. 63
C.B. 64
C.B. 65
C.B. NO. 66
C.B. NO. 67
C.B. 69
M.H. NO. 13
M.H. NO. 14
M.H. NO. 15
M.H. NO. 16
M.H. NO. 17
M.H. NO. 17A
M.H. 18
℄ S.B. LANE
℄ N.B. LANE
SURVEY ℄
P.I. 288+88.81
△ LT 0°01'18"
P.O.T. 291+27.37
P.O.T. 292+77.48
P.O.T. 297+19.13
P.O.T. 297+50.97
T.E.
300' TURN LANE +180'
BITUMINOUS DRIVE
FRONTAGE ROAD CONC. C & G
F&I. 4" R.S. CONDUIT 60 LIN. FT.
F&I. R.S. CONDUIT 35 LIN. FT.
F&I. 4" CONDUIT 60 LIN. FT.
F&I. 4" R.S. CONDUIT 60 LIN. FT.
INSULATE 8 x 8"
INSULATE 24x8
PVC HANDHOLE
WATER VALVE W-32
12" W.M. INPL.
8" R.C. PIPE
15" R.C.P.
18" R.C. PIPE
12" R.C. PIPE
20" R.C.P.
STORM SEWER
M.H. ZSTORM SEWER OUTLET
20" W.M.
BIT. CURB INPL.
P.I. 2+68.27
△ 40°00'
D 30°00'
T 69.51'
L 133.33'
R 190.99'
P.C. 1+98.76
P.T. 3+32.09
P.I. 1+18.0
△ 17°00'
D 14°00'
T 61.16'
L 121.43'
R 409.26'
P.C. 0+56.84
P.T. 1+78.27
△ 86°30' T 46.87 R 50'
△ 93°30' T 52.96 R 50'

CL. 10 TREES GR. 10 TREES — CL. 4.3 ACRES GR. 4.3 ACRES

B.M. EL. 1039.76
TOP OF P.I. PIPE ℄
STA. 288+88.81

B.M. EL. 1066.31
TOP OF RE-ROD ℄
STA. 291+27.37

B.M. EL. 1084.59
TOP OF RE-ROD ℄
STA. 292+77.48

B.M. EL. 1057.48
SPK. IN P.P. 95' LT.
STA. 295+50

B.M. EL. 1055.48
TOP OF PIPE ℄
STA. 297+19.13

B.M. EL. 1066.23
SPK. IN P.P. 75' LT.
STA. 301+47

FINISHED PROFILE GRADES S.B. LANE / N.B. LANE

℄ PROFILE
100' LT.
100' RT.

S.B. LANE
P.I. 296+00.00521
ELEV. 1079.88125
1400 V.C.
M = 16.8385

N.B. LANE
P.I. 296+00.00521
ELEV. 1079.88125
1400 V.C.
M = 16.80

P.V.T. +05.15875
ELEV. 32.15948
P.V.C. +00.00521
ELEV. 37.88126
MH NO. 13 21' RT. STA. 288+58 N.B.L. ℄
6.0%
18" R.C. PIPE CL. III @ 5.262%
ELEV. 1029.73
ELEV. 1029.75
ELEV. 1045.44
MH NO. 14 21' RT. STA. 291+58 N.B.L. ℄
18" R.C. PIPE CL. III @ 3.278%
ELEV. 1045.54
PROFILE GRADE N.B. LANE
ELEV. 1055.31
MH NO. 15 21' RT. STA. 294+58 N.B.L. ℄
ELEV. 1055.80
12" R.C. PIPE CL. IV @ 0.913%
ELEV. 1057.90
MH NO. 16 25' RT. STA. 296+90
15" R.C. PIPE CL. III @ 0.6%
ELEV. 1053.8
ELEV. 1054.52
ELEV. 1054.42
MH NO. 17 33' RT. STA. 301+21
12" W.M. INPL.
15" STORM SEWER INPL.
18" R.C.P.
ELEV. 1051.28
MH NO. 18 33' RT. STA. 302+24 N.B.L. ℄
P.V.T. +00.00521
ELEV. 54.68125
3.6%

SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTHS AND IN LOCATION AS SHOWN IN THE CROSS SECTIONS

NOTE: EXCESS UNCLASSIFIED EXCAVATION TO BE HAULED AND STOCKPILED TO LEFT AND RIGHT STA. 315+00 AND AS SHOWN ON PLAN SHEET NO. 23.

| | | |
|---|---|---|
| UNCLASSIFIED EXC. | 126,126 | CU. YDS. |
| SALVAGED TOPSOIL | 4,314 | CU. YDS. |
| COMMON CHANNEL EXC. | 1,829 | CU. YDS. |
| EMBANKMENT | 63,983 | CU. YDS. |

STORM SEWER AND GRADING

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Sheet No. 22 of 46 Sheets

℄ SOUTH BOUND LANE
P.I. 303 + 98.80
Δ 11°59'35"
D 4.02247°
T 149.62'
L 298.15'
P.C. 302 + 49.18
P.T. 305 + 47.33 =
P.O.T. 305 + 50.58
RATE OF SUPER ELEV. /0.052'/FT.
250' RUNOFF

SURVEY CENTERLINE
P.I. 304 + 71.83
Δ LT. 12°00'00"
D - 4°00'
T - 150.55'
L - 300.00'
R - 1432.40'

M.H. NO. 17A
REMOVE 107 LIN. FT. 15" R.C. PIPE STORM SEWER

M.H. NO. 18
REMOVE M.H. NO. S-9
REMOVE 42 LIN. FT. 15" R.C. PIPE STORM SEWER
AND 1-15" R.C. PIPE APRON.

9th ST. N.W. LT. STA. 308 + 50
INPL. 15" x 74' R.C.P. W/APRONS
REMOVE 86 LIN. FT.
CONST. CULV. 48' LT. S.B.L. ℄
~~18" x 88'~~ R.C. PIPE CL. III 18" x 84' BELL & 2 MALE APRONS
2-18" R.C. PIPE APRONS
F.&I. CONC. PIPE TIES.
INLET ELEV. 31.0
OUTLET ELEV. 27.0
WATER MAIN ELEV. 1028.0 ±
F.&I. 8'x8' POLYSTYRENE INSULATION

F.&I. 8'x8' POLYSTYRENE INSULATION
F.&I. 4" R.S. CONDUIT 60 LIN. FT.
8' WIDE BIKE PATH
F.&I. R.S. CONDUIT 35 LIN. FT.
C.B. NO. 64
C.B. NO. 65
PVC HANDHOLE
C.B. NO. 66
F.&I. 4" R.S. CONDUIT 60 LIN. FT.
C.B. NO. 67
M.H. NO. 16
15" R.C.P.
WATER VALVE W-32
C.B. 68 ELIMINATED
C.B. 69
M.H. NO. 17A
F.&I. 4" R.S. CONDUIT 60 LIN. FT.
300' TURN LANE +180'
℄ S.B. LANE
220' TURN LANE +120'
PVC HANDHOLE
℄ N.B. LANE
F.&I. 4" R.S. CONDUIT 35 LIN. FT.
18" R.C. PIPE
STORM SEWER OUTLET
M.H. NO. 19
21" R.C.P.
M.H. NO. 20
C.B. NO. 70
C.B. NO. 71
C.B. NO. 72
C.B. NO. 74
C.B. NO. 75
C.B. NO. 76
C.B. NO. 78
C.B. NO. 79
C.B. NO. 82
C.B. NO. 83
C.B. NO. 84
C.B. NO. 85
225' TURN LANE +120'
210' TURN LANE +120'
FRONTAGE ROAD
4" AGG. SHLD.
OUTLET 15" STORM SEWER
15" R.C.P.
2-15" CONC. APRONS
15" x 74' R.C. PIPE
15" x 58' R.C. PIPE
12" R.C.P.
CONC. C & G.
BITUMINOUS
9th ST. N.W.
36th AVE. N.W.
CONC. PAVEMENT
WATER MAIN
STOCKPILE AREA
EXCESS EXCAVATION
15:1 TAPER
8' WIDE BITUMINOUS PATH
INPL. 15" R.C. PIPE SAN. SEWER
EAST BOUND TH 14
ROCHESTER
CORPRATE LIMITS
BITUMINOUS CURB
CONC. WALK
F.&I. 24'x8' POLYSTYRENE INSULATION
INPL. CONC. C & G.
WESTWAY MANOR FIRST ADDITION

℄ NORTH BOUND LANE
P.I. 304 + 03.64
Δ 11°59'35"
D 3.89663°
T 154.45'
L 307.78'
P.C. 302 + 49.19
P.T. 305 + 56.97 =
P.O.T. 305 + 50.58
RATE OF SUPER ELEV. 0.052'/FT.
250' RUNOFF

SAW BITUMINOUS PAVEMENT
123' RT. STA. 308 + 50
30 LIN. FT.

9th ST. N.W. RT. STA. 308 + 50
INPL. 15" x 58' R.C.P. W/APRONS
REMOVE 70 LIN. FT.
NO CULV. REQ'D.

REMOVE 144 LIN. CONC. CURB & GUTTER
9th STREET N.W. EAST APPROACH

CL. 3 TREES GR. 3 TREES — CL. 1.0 ACRES GR. 1.0 ACRES

B.M. EL. 1066.23
SPK. IN P.P. 75' LT.
STA. 301 + 47

S.B. LANE
P.I. 310 + 89.71356
ELEV. 1025.94949
400' V.C.
M = 1.571

S.B. LANE
P.I. 315 + 00
ELEV. 1023.98

N.B. LANE
P.I. 310 + 95.48846
ELEV. 1025.92167
400' V.C.
M = 1.56

N.B. LANE
P.I. 315 + 00
ELEV. 1023.98

FINISHED PROFILE GRADES S.B. LANE
FINISHED PROFILE GRADES N.B. LANE

15" R.C.P. CL. III @ 0.6%
ELEV. 1054.42
15" STORM SEWER INPL.
12" WM. INPL.
ELEV. 1053.81
ELEV. 1051.28
18" R.C. PIPE CL. III @ 4.0%
PROFILE GRADE N.B. LANE
3.6 %
21" R.C.P. CL. III @ 3.364%
ELEV. 1042.40
ELEV. 1042.20
21" R.C.P. CL. III @ 3.765%
ELEV. 1030.93
ELEV. 1030.83
8" WATER MAIN INPL.
OUTLET ELEV. 1026.50
OUTLET ELEV. 1022.70
OUTLET ELEV. 1020.0
-3.622 %
-0.48 %
-0.695 %

M.H. NO. 17 33' RT. STA. 301 + 21 N.B.L. ℄
M.H. NO. 18 33' RT. STA. 302 + 24 N.B.L. ℄
P.V.T. + 00.00321 ELEV. 54.68125
M.H. NO. 19 33' RT. STA. 304 + 48 N.B.L. ℄
P.V.C. + 95.48846 ELEV. 33.12167
M.H. NO. 20 33' RT. STA. 307 + 85 N.B.L. ℄
P.V.T. + 95.48846 ELEV. 24.96166

℄ PROFILE
100' LT.
100' RT.

SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTHS AND IN LOCATIONS AS SHOWN IN THE CROSS SECTIONS.

STORM SEWER AND GRADING

~~State Proj. No.~~ SAP 55-622-13 CSAH 22

ENT. LT. STA. 316+30
INPL. 15" x 24' R.C.P.
REMOVE 24 LIN. FT.
NO ENT. REQ'D.

CB. NO. 87
CONST. 73" SPAN R.C. PIPE-ARCH x 12" R.C. PIPE TEE FIELD CONNECTION

40' DRAINAGE EASEMENT

STOCKPILE AREA EXCESS EXCAVATION

M.H. NO. 2 SAN. SEWER

Δ 60° 24'
T 49.48'
R 85'

SAW BITUMINOUS PAVEMENT 14 LIN. FT.

℄ CULV. STA. 316+53
INPL. 73" SPAN x 72' R.C. PIPE-ARCH WITH 2-73" SPAN CONC. APRONS

SALVAGE 73" SPAN x 72' R.C. PIPE-ARCH
SALVAGE 2-73" SPAN R.C. PIPE-ARCH APRONS
INSTALL 73" SPAN x 72' R.C. PIPE-ARCH
EXTENED INLET 73" SPAN x 12' R.C. PIPE-ARCH CL. 2A
EXTENED OUTLET 73" SPAN x 102' R.C. PIPE-ARCH CL. 2A
INSTALL 2-73" SPAN R.C. PIPE-ARCH APRONS
PLACE CULVERT ON "B" BEDDING
F&I. CONCRETE PIPE TIES
INLET ELEV. 1015.02
OUTLET ELEV. 1014.16

℄ CULV. STA. 316+66
INPL. 73" SPAN x 84' R.C. PIPE-ARCH WITH 2-73" SPAN CONC. APRONS

SALVAGE 73" SPAN x 84' R.C. PIPE-ARCH
SALVAGE 2-73" SPAN R.C. PIPE-ARCH APRONS
INSTALL 73" SPAN x 84' R.C. PIPE-ARCH
EXTENED INLET 73" SPAN x 6' R.C. PIPE-ARCH CL. 2A
EXTENED OUTLET 73" SPAN x 106' R.C. PIPE-ARCH CL. 2A
INSTALL 2-73" SPAN R.C. PIPE-ARCH APRONS
PLACE CULVERT ON "B" BEDDING
F&I. CONCRETE PIPE TIES
INLET ELEV. ~~1014.14~~ *1015.02*
OUTLET ELEV. ~~1013.50~~ *1014.16*

P.O.T. 325+13.66

15" x 24' R.C.P.

F&I. 4" R.S. CONDUIT 45 LIN. FT.

315 ℄ S.B. LANE

100'

315 P.V.C. HANDHOLE

C.B. NO. 86

300' TURN LANE ± 180'

315 ℄ N.B. LANE

F&I. 4" R.S. CONDUIT 55 LIN. FT.

15:1 TAPER

18' P.V.C. HANDHOLE

F&I. 4" R.S. CONDUIT 40 LIN. FT.

8' WIDE BIT. PATH

40' DRAINAGE EASEMENT

STOCKPILE AREA EXCESS EXCAVATION

M.H. NO. 3 SAN. SEWER

INPL. 15" C.S. PIPE SAN. SEWER

15:1 TAPER

U.S. 14

85' R.

P.O.T. 317+56.51

P.O.T. 318+53.33

℄ CULV. STA. 318+03
INPL. 15" x 52' WITH SAFETY APRONS & GRATES

SALVAGE 2-15" SAFETY APRONS & GRATES
EXTEND INLET 15" x 28' C.S. PIPE
EXTEND OULET 15" x 22' C.S. PIPE
INSTALL 2 SAFETY APRONS & GRATES.
INLET ELEV. 1019.6
OUTLET ELEV. 1019.2

END: SAP 55-622-13
STA. 318+53.33

CONCRETE CURB AND GUTTER
RAISED MEDIAN RT. STA. 317+10
REMOVE 66 LIN. FT. CONC. CURB & GUTTER

SAW BITUMINOUS PAVEMENT
455' RT. STA. 317+44 BITUMINOUS SHOULDER ON T.H. 14.
8 LIN. FT.

SURVEY ℄

320

325

330

M.H. NO. 16 SAN. SEWER

C B N W RY

LIMITS

ROCHESTER

CORPORATE

SAN. SEWER

25' PERMANENT EASEMENT

B.M. EL. 1022.80
TOP P.K. NAIL ℄
TH 14 STA. 318+53.33

B.M. EL. 1024.76
TOP CONC. NW COR.
ROMAC CULV. DISPY.

B.M. EL. 1020.12
SPK. IN NW COR.
R.R. WOOD BRIDGE

FINISHED PROFILE GRADES
S.B. LANE
N.B. LANE

−0.695%

+0.5%

PROFILE GRADE N.B. LANE

℄ 15" SAN. SEWER INPL.

℄ PROFILE
100' LT.
100' RT.

SUBGRADE EXCAVATION TO BE CONSTRUCTED TO DEPTHS AND IN LOCATIONS AS SHOWN IN THE CROSS SECTIONS.

| | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S.B. LANE | 23.98 | 23.28 | 22.59 | 22.81 +44 | | | | | | | | | | | | |
| N.B. LANE | 23.98 | 23.28 | 22.59 | 22.81 +44 | | | | | | | | | | | | |
| +65 | | 22.3 | | | | | | | | | | | | | | |
| +80 | | 22.2 | | | | | | | | | | | | | | |
| +57 | | | 23.04 | | | | | | | | | | | | | |
| +80 | | | 22.7 | | | | | | | | | | | | | |
| +20 | | | 22.0 | | | | | | | | | | | | | |
| +53 | | | | 22.80 | | | | | | | | | | | | |
| +75 | | | | 22.7 | | | | | | | | | | | | |
| +90 | | | | 20.7 | | | | | | | | | | | | |
| +10 | | | | 19.0 | | | | | | | | | | | | |
| +20 | | | | 18.0 | | | | | | | | | | | | |
| +30 | | | | 18.7 | | | | | | | | | | | | |
| +40 | | | | 20.2 | | | | | | | | | | | | |
| +60 | | | | 21.7 | | | | | | | | | | | | |
| | | | | 20.9 | | | | | | | | | | | | |
| | | | | | | 24.4 | | | | | | | | | | |
| | | | | | | | | 22.7 | | | | | | | | |
| | | | | | | | | | 22.9 | | | | | | | |
| | | | | | | | | | | 23.3 | | | | | | |
| +56 | | | | | | | | | | | 19.1 | | | | | |
| +70 | | | | | | | | | | | 19.3 | | | | | |
| +90 | | | | | | | | | | | 19.5 | | | | | |
| +11 | | | | | | | | | | | 21.0 | | | | | |
| +16 | | | | | | | | | | | 22.8 | | | | | |
| +14 | | | | | | | | | | | 22.86 | | | | | |
| +20 | | | | | | | | | | | 22.4 | | | | | |
| +30 | | | | | | | | | | | 19.9 | | | | | |
| | | | | | | | | | | | | 19.8 | | | | |
| | | | | | | | | | | | | | 20.1 | | | |
| | | | | | | | | | | | | | | 20.8 | | |
| +70 | | | | | | | | | | | | | | | 21.5 | |
| +80 | | | | | | | | | | | | | | | 21.1 | |
| +90 | | | | | | | | | | | | | | | 20.1 | |
| | | | | | | | | | | | | | | | 20.0 | |
| | | | | | | | | | | | | | | | | 20.6 |

STORM SEWER AND GRADING

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Sheet No. 24 of 46 Sheets

℄ CULV. 451+42
INPL. 24"x 92' R.C.PIPE / APRONS

SALVAGE OUTLET APRON
EXTEND OUTLET 24"x 8' R.C.PIPE CLASS 2
INSTALL OUTLET APRON
F.&I. CONCRETE PIPE TIES.
PLACE CULV. ON "B" BEDDING.

TEL. M.H. 15.5' LT. STA. 451+98
ADJUST FRAME AND RING CASTING +0.25'

BEGIN: CONSTRUCTION C.S.A.H. 34
STA. 449+00

CSAH 34 12' 12' 12' 12'

CONST. 300' TURN LANE + 180'

70'

T.C.M.

CASCADE CREEK

36th AVE. N.W.

LIMITS

CORPORATE

8' WIDE BIT. PATH

M.H. 50'

TEL. M.H.

Δ 74° 45'
T 38.19'
R 50'
BACKCURB

Δ 105° 25'
T 81.41'
R 62'
EDGE BITUMINOUS

Δ 74° 45'
T 38.19'
R 50'
EDGE BITUMINOUS

Δ 105° 25'
T 65.09'
R 50'
BACKCURB

8' WIDE BIT. PATH

300' TURN LANE + 180'

CSAH 22

300' TURN LANE + 180'

200' TURN LANE + 120'

300' TURN LANE + 180'

CR. 122

CHANNEL EXC.

RANDOM RIP RAP CL. III

ROCHESTER

WOODS

WOODS

P.C. 457+41.13

P.T. 460+57.08

CONST. 300' TURN LANE + 180'

CONST. 6' BITUMINOUS SHOULDER

PI. 460+98.40
Δ 16° 32'
D 2° 20'
T 357.27'
L 708.58'

END: CONSTRUCTION C.S.A.H. 34
STA. 460+70

6' BITUMINOUS SHOULDER INPL.

CSAH 34 12' 12' 12' 12'

FUTURE 6' BITUMINOUS SHOULDER

℄ CULV. STA. 454+12
INPL. 169" SPAN x 185' R.C. PIPE-ARCH
SKEWED 52° 42'

SALVAGE INLET AND OUTLET APRONS
EXTEND INLET 169" SPAN x 35' R.C. PIPE-ARCH CL. 2A
EXTEND OUTLET 169" SPAN x 125' R.C. PIPE-ARCH CL. 2A
INSTALL INLET AND OUTLET APRONS
F.&I. CONCRETE PIPE TIES

℄ CULV. STA. 454+44
INPL. 169" SPAN x 185' R.C. PIPE-ARCH
SKEWED 52° 42'

SALVAGE INLET AND OUTLET APRONS
EXTEND INLET 169" SPAN x 30' R.C. PIPE-ARCH CL. 2A
EXTEND OUTLET 169" SPAN x 120' R.C.P. -ARCH CL. 2A
INSTALL INLET AND OUTLET APRONS
F.&I. CONCRETE PIPE TIES

℄ CULV. STA. 454+75
INPL. 169" SPAN x 195' R.C. PIPE-ARCH
SKEWED 52° 42'

SALVAGE INLET AND OUTLET APRONS
EXTEND OUTLET 169" SPAN x 105' R.C.P-ARCH CL. 2A
EXTEND INLET 169" SPAN x 25 R.C.P-ARCH CL. 2A
INSTALL INLET AND OUTLET APRONS
F&I CONCRETE PIPE TIES

℄ CULV. STA. 455+07
INPL. 169" SPAN x 214' R.C. PIPE-ARCH
SKEWED 52° 42'

SALVAGE INLET AND OUTLET APRONS
EXTEND OUTLET 169" SPAN x 85' R.C.P. -ARCH CL. 2A
EXTEND INLET 169" SPAN x 20' R.C.P. - ARCH CL. 2A
INSTALL INLET AND OUTLET APRONS
F&I CONCRETE PIPE TIES

B.M. TOP ARROW ON
FHYD. 36th AVE.
N.W. BY BRICK GATE
ELEV. 1021.72

1030
1020
1010

℄ PROFILE CSAH 34

OUTLET ELEV. 15.3

℄ CULV. STA. 454+12 INLET EL. 11.9
℄ CULV. STA. 454+44 INLET EL. 11.4
℄ CULV. STA. 454+75 INLET EL. 11.4
℄ CULV. STA. 455+07 INLET EL. 11.3

℄ CULV. STA. 454+12 OUTLET EL. 10.0
℄ CULV. STA. 454+44 OUTLET EL. 10.0
℄ CULV. STA. 454+75 OUTLET EL. 10.0
℄ CULV. STA. 455+07 OUTLET EL. 10.0

24.3 24.0 23.8 23.7 23.7 23.3 23.2 23.0 23.0 22.7 22.4 22.3 22.0 21.8 21.5 21.2

449 450 451 +42 452 453 +35 454 +75 455 +50 456 457 458 459 460

SURFACING, CULVERT EXTENSIONS & RIGHT TURN LANES CSAH 34

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AS BUILT PLANS