## GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

2. UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA CONCRETE PAVEMENT AND ASPHALTIC CONCRETE PAVEMENT SPECIFICATIONS.

3. THE TOPS OF INLETS AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS WITH REFERENCE TO PROPOSED PAVING PLANS.

4. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE PROJECT LIMITS A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.

5. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

   KANSAS ONE-CALL — 1-800-344-7233 OR (WICHITA) 687-2470

   THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

   | | |
   |---|---|
   | BELL TELEPHONE | 1-316-571-2115 |
   | KPL GAS SERVICE COMPANY | 263-7511 |
   | KANSAS GAS & ELECTRIC | 264-1141 |
   | CITY OF WICHITA WATER DEPARTMENT | 268-4908 |

6. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.

7. THIS PROJECT INCLUDES A CERTAIN AMOUNT OF FULL TYPE CURB CONSTRUCTION. FULL CURBS SHALL BE DEPRESSED THROUGH ALL DRIVEWAY OPENINGS WHEN SUCH DRIVES ARE CONSTRUCTED AS A PART OF THE PROJECT. NO MORE THAN 13 DRIVES 20 FEET IN WIDTH OR EQUIVALENT COMBINATIONS THEREOF, ARE TO BE CONSTRUCTED WITH THIS PROJECT.

8. A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED. SAWED JOINT TO FACILITATE REMOVAL WITHIN THREE (3) FEET OF EXISTING JOINTS WILL NOT BE PERMITTED AND FOR SUCH INSTANCES THE LIMITS OF REMOVAL SHALL EXTEND TO THE EXISTING JOINT. SUCH SAW CUTS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE REMOVAL OF THE SURFACE OR PAVEMENT.

9. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

10. THE CONTRACTOR SHALL ADJUST WATER VALVE BOXES AND FIRE HYDRANTS AS DIRECTED BY THE ENGINEER. COST TO BE SUBSIDIARY TO OTHER WORK. THE WATER DEPARTMENT SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, WATER VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

11. INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA AND LOCAL BUSINESS TRAFFIC GENERATED WITHIN THE PROJECT AREA ARE TO BE CARRIED THROUGH CONSTRUCTION.

ALL ELEVATIONS SHOWN ARE CITY OF WICHITA DATUM. CITY DATUM = USGS MSL - 1187.4'.

## BENCH MARKS:

BM #1 RAILROAD SPIKE IN NORTH FACE OF POWER POLE, 1450' ± WEST OF HILLSIDE ON SOUTH SIDE OF 33RD ST. NO.
ELEV. = 162.65 (STA. 55+58.6, 23' RT.)

BM #2 RAILROAD SPIKE IN NORTH FACE OF POWER POLE, 870' ± WEST OF HILLSIDE ON SOUTH SIDE OF 33RD ST. NO.
ELEV. = 164.67 (STA. 61+27.6, 23' RT.)

BM #3 RAILROAD SPIKE IN NORTH FACE OF POWER POLE, 300' ± WEST OF HILLSIDE ON SOUTH SIDE OF 33RD ST. NO.
ELEV. = 159.82 (STA. 66+91.8, 24' RT.)

BM #4 STEP NAIL IN EAST FACE OF LIGHT POLE, 258' NORTH OF CL 33RD STREET NO. AND 40' WEST OF CL HILLSIDE.
ELEV. = 162.65

# PAVING IMPROVEMENTS & INCIDENTAL DRAINAGE FOR

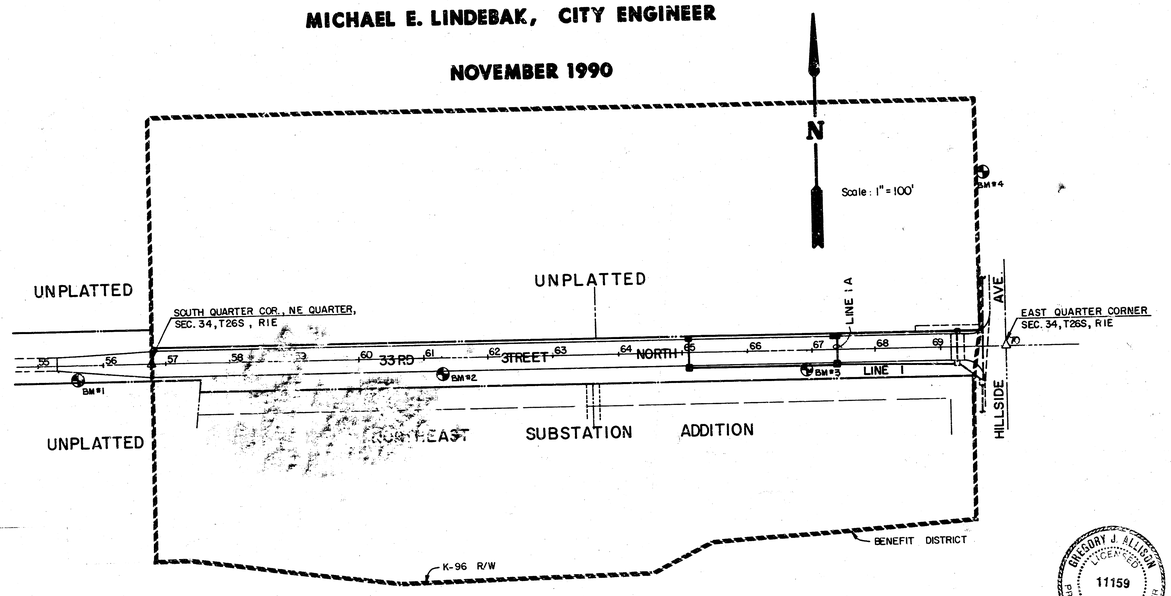
# 33RD STREET NORTH

FROM ONE QUARTER MILE WEST OF HILLSIDE AVENUE
TO THE WEST LINE OF HILLSIDE AVENUE

## PROJECT NO. 472-82038
## INDEX NO. 760512

**CITY OF WICHITA, KANSAS**
**MICHAEL E. LINDEBAK, CITY ENGINEER**

**NOVEMBER 1990**







**LOCATION MAP**

## INDEX TO DRAWINGS


| SHEET NO. | DESCRIPTION |
|---|---|
| 1 | Title Sheet |
| 2 | Paving Details |
| 3-5 | 33rd Street No. Paving Plans |
| 6 | Storm Water Sewer/Plan & Profile |
| 7-10 | Storm Water Sewer Details |
| 11-16 | Cross - Sections |


GREGORY J. ALLISON LICENSED 11159 KANSAS PROFESSIONAL ENGINEER

Stm. Swr. Booked 7-91 MCG

(1)

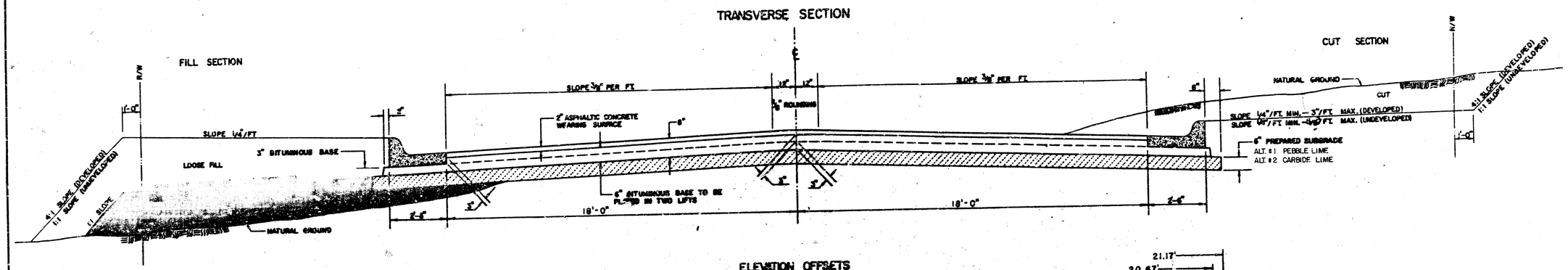
CITY OF WICHITA
33RD STREET NORTH
PROJ. NO. 472-82038

Design MJV
Drawn by DPR
Checked by GJA
Date NOV. 1990
Job no 90-81-113
Sheet 1 of 16

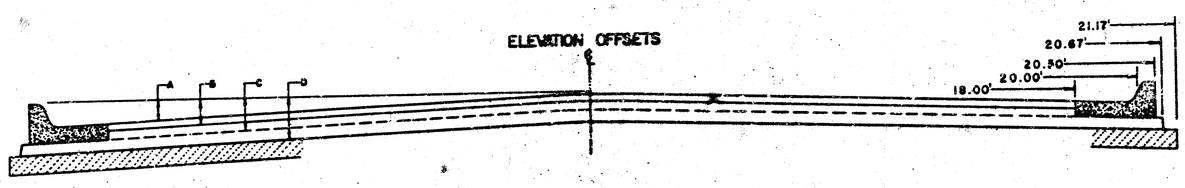

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
636-5566

# TYPICAL 41' PAVEMENT DETAILS

## TRANSVERSE SECTION

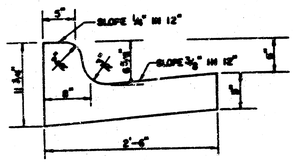



## ELEVATION OFFSETS

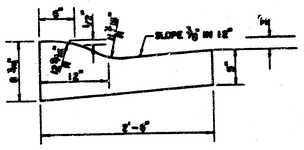



| | DISTANCE FROM CENTERLINE (LT. & RT.) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 20.5 | 20.67 | 21.17 |
| A: TOP OF CURBS TO TOP OF 3rd LIFT | -.05 | -.01 | .05 | .11 | .18 | .24 | .30 | .36 | .43 | .49 | — | — | — | — |
| B: TOP OF CURBS TO TOP OF UPPER BASE LIFT | .11 | .16 | .22 | .28 | .34 | .40 | .47 | .53 | .59 | .65 | — | — | — | — |
| C: TOP OF CURBS TO TOP OF LOWER BASE LIFT | .36 | .41 | .47 | .53 | .59 | .65 | .72 | .78 | .84 | .90 | .97 | .98 | .99 | — |
| D: TOP OF CURBS TO TOP OF SUBGRADE | .61 | .66 | .72 | .78 | .83 | .90 | .97 | 1.03 | 1.09 | 1.15 | 1.22 | 1.23 | 1.24 | 1.25 |

## COMBINED CURB & GUTTER




## ROLL TYPE COMBINED CURB & GUTTER




## GENERAL NOTES

1) THE ASPHALTIC CONCRETE TRANSITION BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2" ASPHALTIC CONCRETE (2" REFERENCE ONLY).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 3" BITUMINOUS BASE.

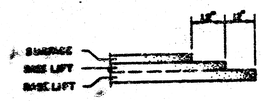
3) A TACK COAT OF EMULSIFIED ASPHALT (SS-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLON PER SQ.YD. USED BETWEEN EACH LIFT OF ASPHALTIC CONCRETE.

4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE USING AUTOMATIC CONTROLS FOR LINE AND GRADE.

5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTHOUGH BOTH ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

## TRANSVERSE CONSTRUCTION JOINTS

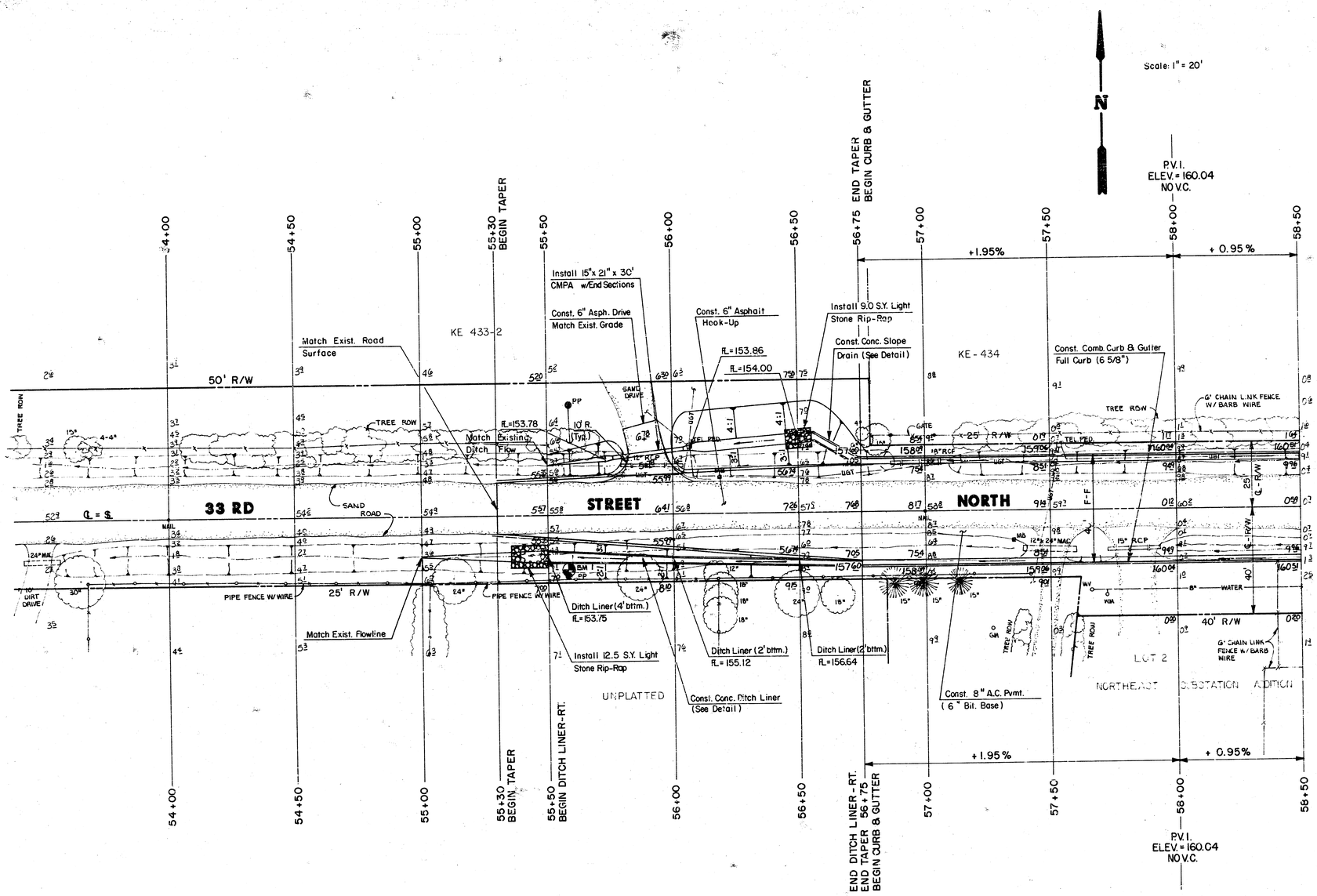



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 6" ASPHALTIC CONCRETE (6" BITUMINOUS BASE).

8 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 6 INCH BITUMINOUS BASE

CITY OF WICHITA, KANSAS

PROJECT NUMBER




CITY OF WICHITA

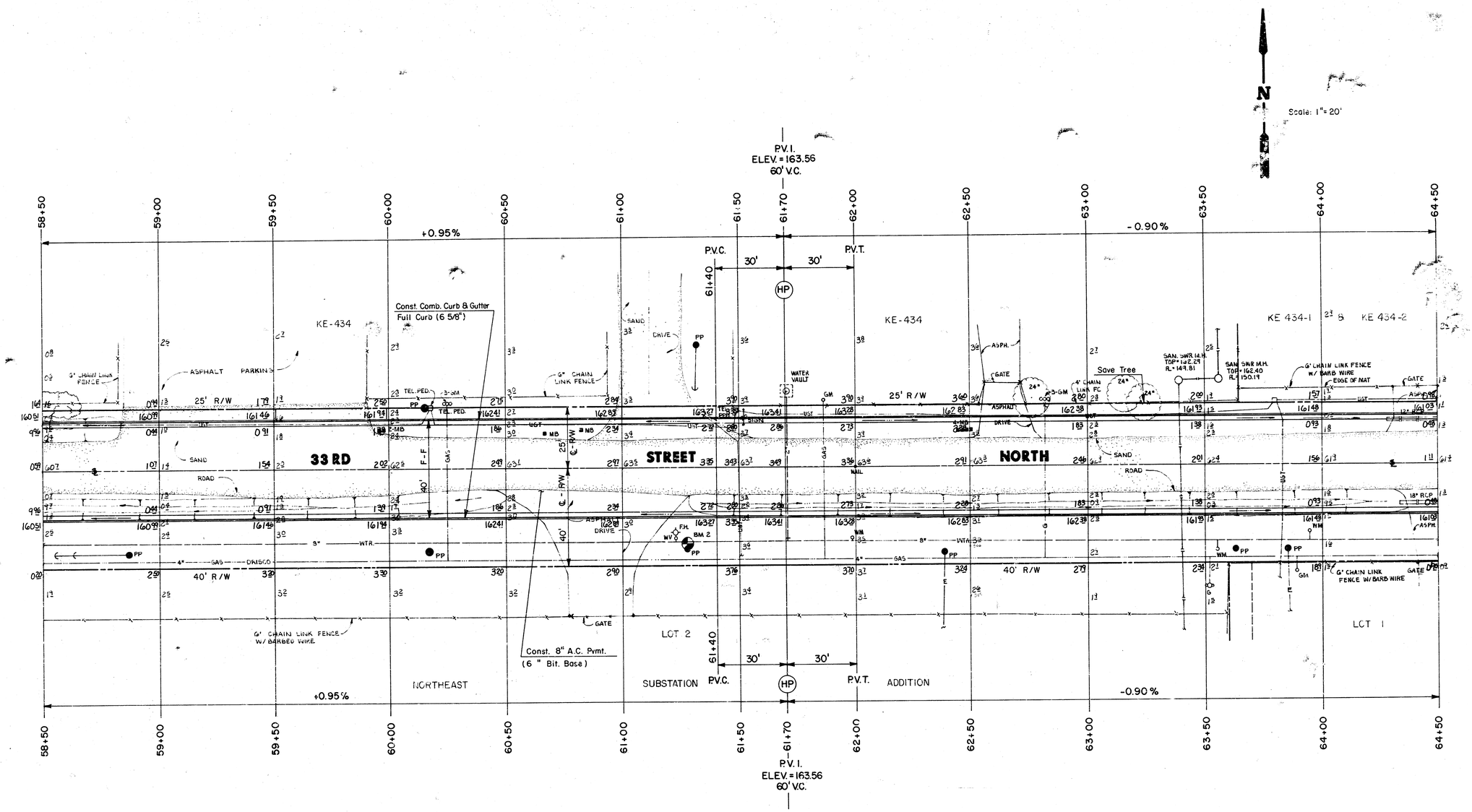
**33RD STREET NORTH**

PROJ. NO. 472 - 82038

| | |
|---|---|
| Design | MJV |
| Drawn by | DPR |
| Checked by | GJA |
| Date | NOV. 1990 |
| Job no. | 90-81-113 |

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BUILDING #800
WICHITA, KANSAS 67226
636-5566

Sheet 3 of 16




BM #2 RAILROAD SPIKE IN NORTH FACE OF POWER POLE, 870' ± WEST OF HILLSIDE ON SOUTH SIDE OF 33RD ST. NO. ELEV. = 164.67 (STA. 61+27.6, 23' RT.)

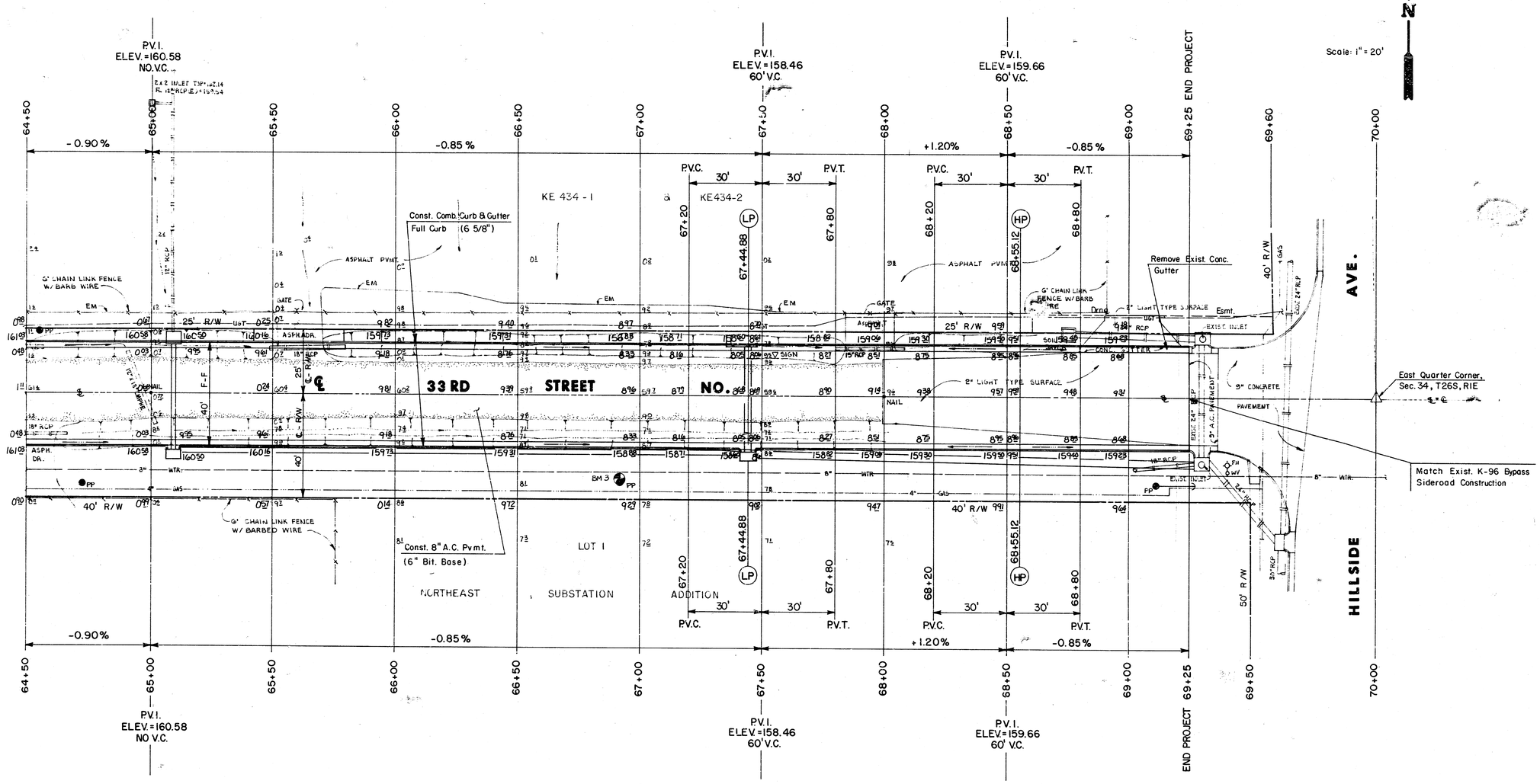
CITY OF WICHITA

**33RD STREET NORTH**

PROJ. NO. 472 - 82038

| | |
|---|---|
| Design | MJV |
| Drawn by | DPR |
| Checked by | GJA |
| Date | NOV. 1990 |
| Job no | 90 - 81 - 113 |
| Sheet | 4 |
| of | 16 |

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BUILDING #800
WICHITA, KANSAS 67226
316-5566




BM #3 RAILROAD SPIKE IN NORTH FACE OF POWER POLE, 300' ± WEST OF HILLSIDE ON SOUTH SIDE OF 33RD ST. NO.
ELEV. = 159.82 (STA. 66+91.8, 24' RT.)

BM #4 STEP NAIL IN EAST FACE OF LIGHT POLE, 258' NORTH OF CL 33RD STREET NO. AND 40' WEST OF CL HILLSIDE.
ELEV. = 162.65

CITY OF WICHITA

**33RD STREET NORTH**

PROJ. NO. 472 - 82038

Design by: MJV
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Sheet 5 of 16

33 RD STREET NORTH
PAVING & INCIDENTAL DRAINAGE
PROJECT NO. 472 - 82038

Sta. 0+00 Line 1
Exist. Type IA Curb Inlet
W=5'-4", L=6'-4"
Inlet Top=159.02
St. Sta. 69+30, Rt.

NORTHEAST SUBSTATION ADDITION

Remove Exist. 18" RCP

Sta. 1+85.1 Line 1 = Sta. 0+00 Line 1-A
Const. Type IA Curb Inlet
W=4'-4", L=6'-4"
Inlet Top=158.60
St. Sta. 67+44.88, 21.50' Rt.
(℄ to Front Ext. Wall)

Sta. 4+20.5 Line 1
Const. Type IA Curb Inlet
W=4'-4", L=6'-4"
Inlet Top=160.50
St. Sta. 65+09.40, 21.50' Rt.
(℄ to Front Ext. Wall)

6' CHAIN LINK FENCE W/ BARB WIRE

40' R/W

LINE 1 24" RCP

LINE 1 15" RCP

BM #3

East Quarter Corner, Sec. 34, T26S, R1E

AVE.

HILLSIDE

33 RD STREET NORTH

-0.85%

+1.20%

-0.85%

15" RCP +1.20%

-0.85%

LINE 1-A 24" RCP

21.50'

19.33'

F.F.

40' R/W

25' R/W

66

67

68

69

70

65

Dmg. Esmt.

UGT

DRIVE

GATE

EM

ASPH.

CONC. GUTTER

18" RCP

24" RCP

15" RCP

12" RCP

Plug 24" RCP Opening

Remove Exist. Ditch Inlet & 24" RCP

6' CHAIN LINK FENCE W/ BARB WIRE

UNPLATTED

Sta. 0+45.2 Line 1-A
Const. Type I Curb Inlet
W=4'-4", L=11'-4"
Inlet Top=158.60
St. Sta. 67+42.13, 19.33' Lt.
(℄ to Front Ext. Wall)

Adjust Inlet Top to allow connection of Exist. 12" RCP into Inlet (Cost Subsidiary to Inlet)

Sta. 4+65.7 Line 1
Const. Type I Curb Inlet
W=4'-4", L=6'-4"
Inlet Top=160.50
St. Sta. 65+09.40, 19.33' Lt.
(℄ to Front Ext. Wall)

N

SCALE: 1" = 20' HORIZ.
1" = 5' VERT.

## PLAN - LINE 1

## PROFILE - LINE 1

Sta. 0+00 Line 1-A
Sta. 1+85.1 Line 1
Const. Type IA Curb Inlet
W=4'-4", L=6'-4"
Inlet Top=158.60
Flow In Sta. 67+44.88, 19.33' Rt.
St. Sta. 67+42.13, 19.33' Lt.
(℄ to Front Ext. Wall)

Sta. 0+45.2 Line 1-A
Const. Type I Curb Inlet
W=4'-4", L=11'-4"
Inlet Top=158.60
St. Sta. 67+42.13, 19.33' Lt.
(℄ to Front Ext. Wall)

Sta. 0+00 Line 1
Exist. Type IA Curb Inlet
W=5'-4", L=6'-4"
Inlet Top=159.02
St. Sta. 69+30, Rt.
(33rd St. No.)

Sta. 1+85.1 Line 1
Const. Type IA Curb Inlet
W=4'-4", L=6'-4"
Inlet Top=158.60
St. Sta. 67+44.88, 19.33' Rt.
(℄ to Front Ext. Wall)

Sta. 4+20.5 Line 1
Const. Type IA Curb Inlet
W=4'-4", L=6'-4"
Inlet Top=160.50
St. Sta. 65+09.40, 19.33' Rt.
(℄ to Front Ext. Wall)

Sta. 4+65.7 Line 1
Const. Type I Curb Inlet
W=4'-4", L=6'-4"
Inlet Top=160.50
St. Sta. 65+09.40, 19.33' Lt.
(℄ to Front Ext. Wall)

℄ 33rd St. No.

Prop. Top of Curb (33rd St. No.)

45.2 L.F. 24" RCP @ 0.75 %

185.1 L.F. 24" RCP @ 0.80 %

235.4 L.F. 15" RCP @ 0.97 %

45.2 L.F. 15" RCP @ 0.93 %

160
155
150
145

Ft. Out = 152.26 (24" RCP, E.)
Ft. In = 152.46 (24" RCP, N.) (Line 1-A)
Ft. In = 152.46 (15" RCP, W.) (Line 1)

Ft. Out = 152.80 (24" RCP, S.)

Ft. Out = 150.68 (24" RCP, SE.) (Exist.)
Ft. In = 150.78 (24" RCP, N.) (Exist.)
Ft. In = 150.78 (24" RCP, W.) (Line 1)

Ft. = 151.58

Ft. Out = 152.26 (24" RCP, E.)
Ft. In = 152.46 (24" RCP, N.)
Ft. In = 152.46 (15" RCP, W.)

Ft. = 152.60

Ft. = 153.57

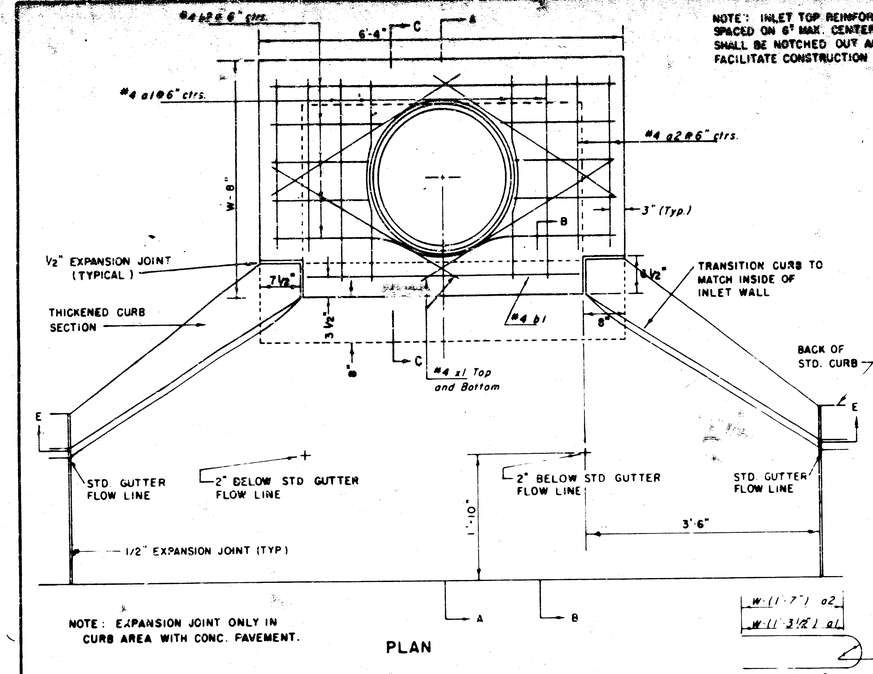
Ft. = 154.54

Ft. Out = 154.74
Ft. In = 154.84

Ft. Out = 155.26
Ft. In = 158.93 (Exist. 12" RCP)

0 0+43 0 1 2 3 4

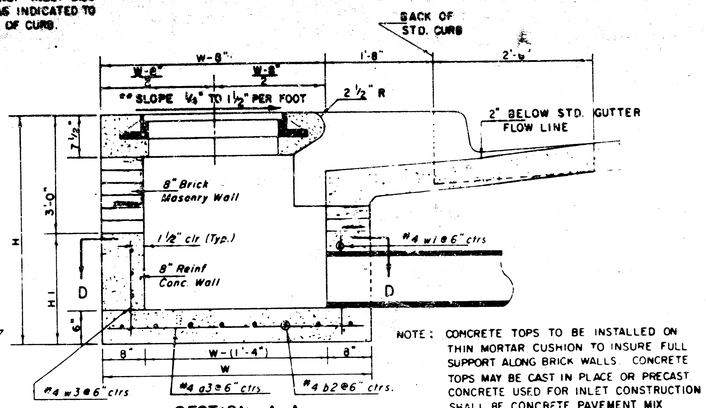
6/16
M.K.E.




PLAN

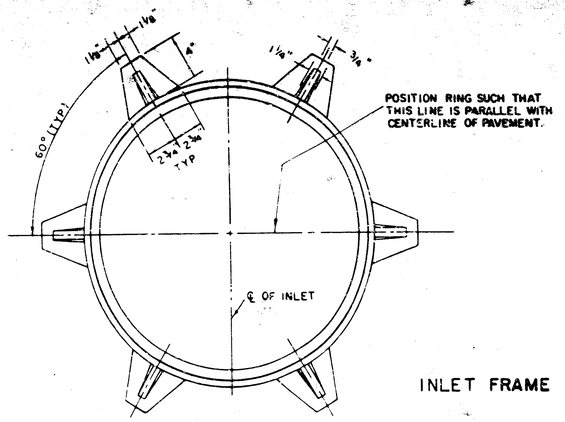
NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.



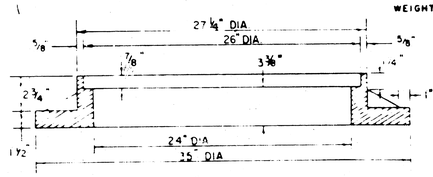

SECTION A-A

NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX WITH AIR ENTRAINMENT




INLET FRAME

WEIGHT = 180 LBS.



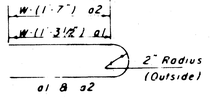

SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6'4" AND H = 7'0" OR LESS.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL




BENDING DIAGRAM

**PRECAST SLAB AND FLOOR REINFORCING**

| | | W=4'-4" | | W=5'-4" | | W=6'-4" | | W=7'-4" | | W=8'-4" | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mark | Size | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length |
| a1 | #4 | 6 | 6'-7" | 6 | 8'-7" | 6 | 10'-7" | 6 | 12'-7" | 6 | 14'-7" |
| a2 | #4 | 4 | 6'-0" | 4 | 8'-0" | 4 | 10'-0" | 4 | 12'-0" | 4 | 14'-0" |
| a3 | #4 | 13 | 4'-1" | 13 | 5'-1" | 13 | 6'-1" | 13 | 7'-1" | 13 | 8'-1" |
| b1 | #4 | 1 | 4'-9" | 1 | 4'-9" | 1 | 4'-9" | 1 | 4'-9" | 1 | 4'-9" |
| rb3 | #4 | 23 | 6'-1" | 29 | 6'-1" | 35 | 6'-1" | 41 | 6'-1" | 47 | 6'-1" |
| x1 | #4 | 8 | 3'-10" | 8 | 4'-2" | 8 | 4'-6" | 8 | 4'-10" | 8 | 5'-2" |

**WALL REINFORCING**

| | | W=4'-4" | | W=5'-4" | | W=6'-4" | | W=7'-4" | | W=8'-4" | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mark | Size | No. | Length | No. | Length | No. | Length | No | Length | No. | Length |
| w1 | #4 | ⑦ | 6'-1" | ⑦ | 6'-1" | ⑦ | 6'-1" | ⑦ | 6'-1" | ⑦ | 6'-1" |
| w2 | #4 | ⑦ | 4'-1" | ⑦ | 5'-1" | ⑦ | 6'-1" | ⑦ | 7'-1" | ⑦ | 8'-1" |
| w3 | #4 | 32 | ② | 36 | ② | 40 | ② | 44 | ② | 48 | ② |

* Field bend or cut Reinforcing as required for clearance.

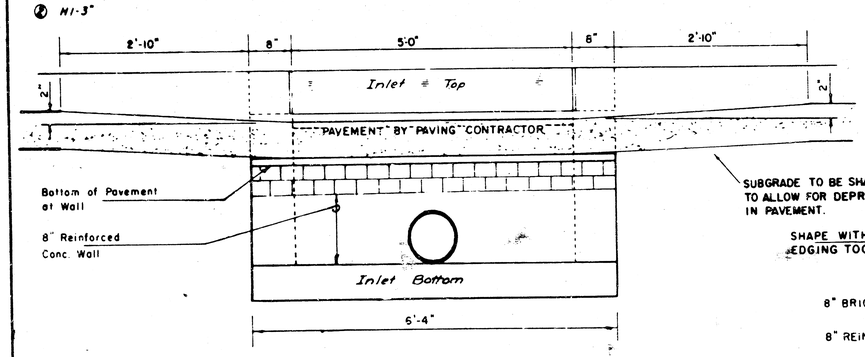
⑦ 4(H1-12"), (H1-12") Round down to nearest 0.5'

② H1-3"

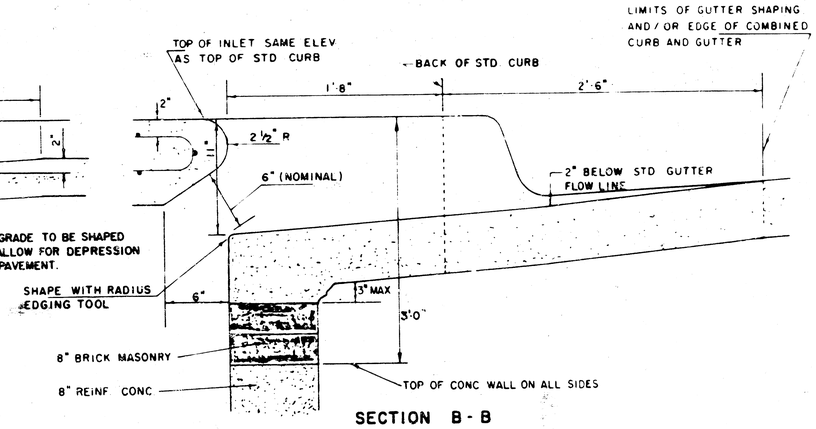
**STANDARD CURB INLET PRECAST TOPS**

| W | PRE-CAST TOP SIZE | PIPE SIZE | CU YD CONC |
|---|---|---|---|
| 4'-4" | 3'8" x 6'4" x 7 1/2" | 21" & SMALLER | 0.38 ± |
| 5'-4" | 4'8" x 6'4" x 7 1/2" | 24" & 30" | 0.51 ± |
| 6'-4" | 5'8" x 6'4" x 7 1/2" | 36" & 42" | 0.64 ± |
| 7'-4" | 6'8" x 6'4" x 7 1/2" | 48" & 54" | 0.77 ± |
| 8'-4" | 7'8" x 6'4" x 7 1/2" | 60" & 66" | 0.90 ± |

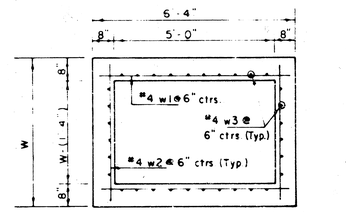
** NOTE: Slope of Inlet Tops to match Sidewalk or Parking Slopes within Limits indicated.



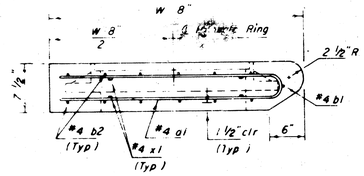

SECTION E - E




SECTION B - B




SECTION D-D




SECTION C-C

~~REVISED 11-30-1988~~

~~REVISED 12-21-1984~~ Revised 2-16-1989

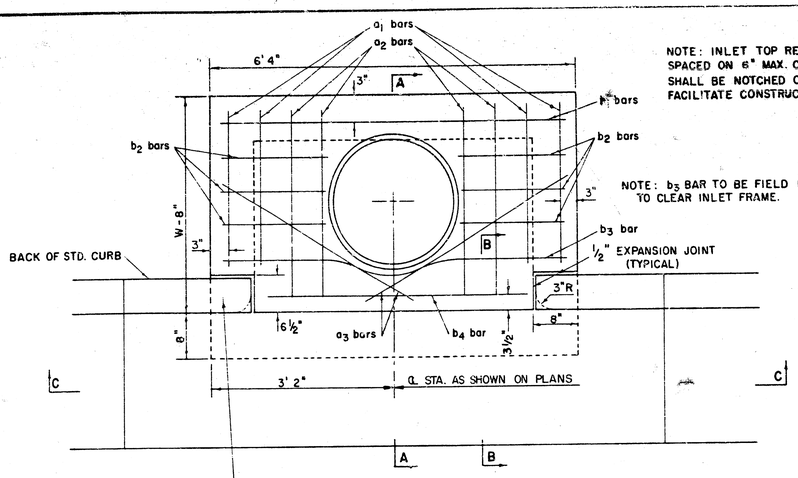
# DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5'0"

JUNE 1984

7/16




PLAN

WARP CURB TO MATCH INLET TOP WITH 1' MIN. TRANSITION LENGTH

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

NOTE: $b_3$ BAR TO BE FIELD BENT TO CLEAR INLET FRAME.

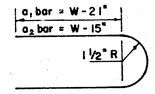
NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.

## STEEL SCHEDULE

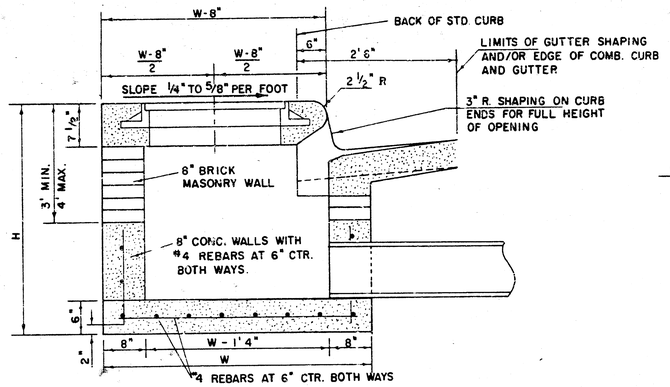
| BAR | | $a_1$ | $a_2$ | $a_3$ | $b_1$ W=4'4" | W=5'4" | W=6'4" | W=7'4" | W=8'4" | $b_2$ | $b_3$ | $b_4$ | WT. LBS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NUMBER | | 4 | 4 | 2 | 1 | 3 | 5 | 7 | 9 | 6 | 1 | 1 | |
| SIZE | | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #6 | |
| LENGTH | W=4'4" | 5'7" | 6'7" | 4'0" | 6'1" | - | - | - | - | 1'9" | 6'2" | 4'8" | 60± |
| | W=5'4" | 7'7" | 8'7" | 5'0" | - | 6'1" | - | - | - | 1'9" | 6'2" | 4'8" | 81± |
| | W=6'4" | 9'7" | 10'7" | 6'0" | - | - | 6'1" | - | - | 1'9" | 6'2" | 4'8" | 101± |
| | W=7'4" | 11'7" | 12'7" | 7'0" | - | - | - | 6'1" | - | 1'9" | 6'2" | 4'8" | 121± |
| | W=8'4" | 13'7" | 14'7" | 8'0" | - | - | - | - | 6'1" | 1'9" | 6'2" | 4'8" | 141± |

NOTE: $a_3$ BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER.

| STANDARD CURB INLET PRECAST TOPS | | | |
|---|---|---|---|
| W | PRE-CAST TOP SIZE | PIPE SIZE | CU. YD. CONC. |
| 4' 4" | 3'8" 6'4" 7 1/2" | 21" & SMALLER | 0.38± |
| 5' 4" | 4'8" 6'4" 7 1/2" | 24" & 30" | 0.51± |
| 6' 4" | 5'8" 6'4" 7 1/2" | 36" & 42" | 0.64± |
| 7' 4" | 6'8" 6'4" 7 1/2" | 48" & 54" | 0.77± |
| 8' 4" | 7'8" 6'4" 7 1/2" | 60" & 66" | 0.90± |




BENDING DIAGRAM

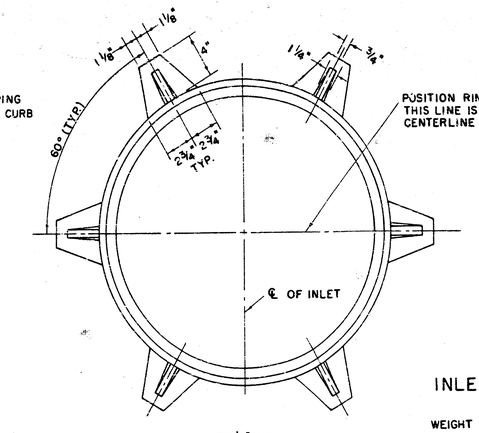



SECTION A-A

NOTE CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6'4" AND H = 7'0" OR LESS.

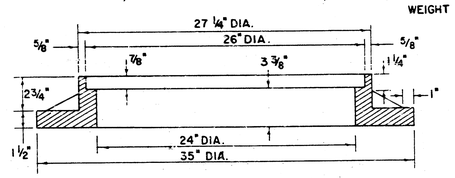
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

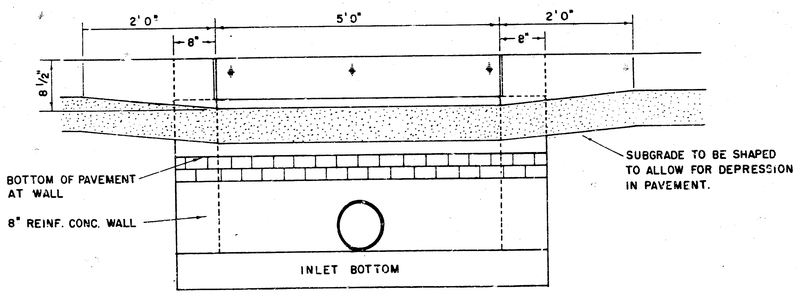



INLET FRAME

WEIGHT = 180 LBS.

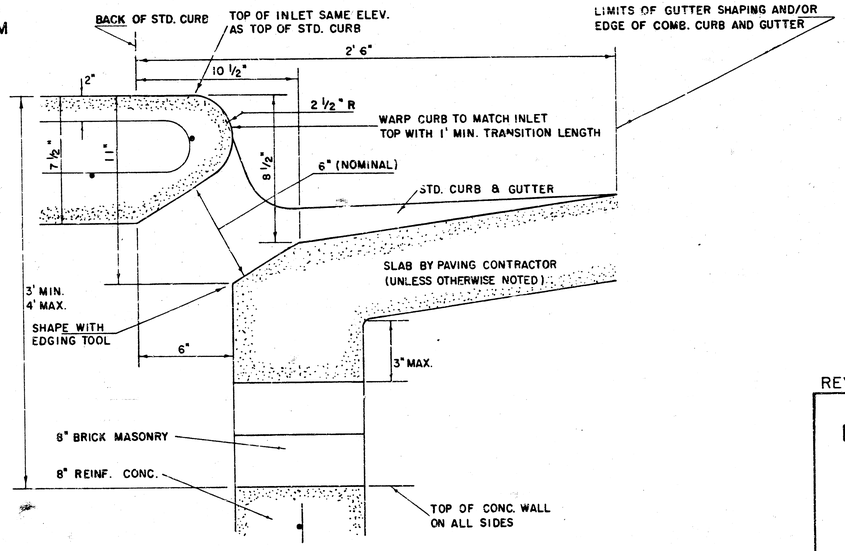



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.




SECTION C-C

SECTION B-B




REVISED 12-21-1984

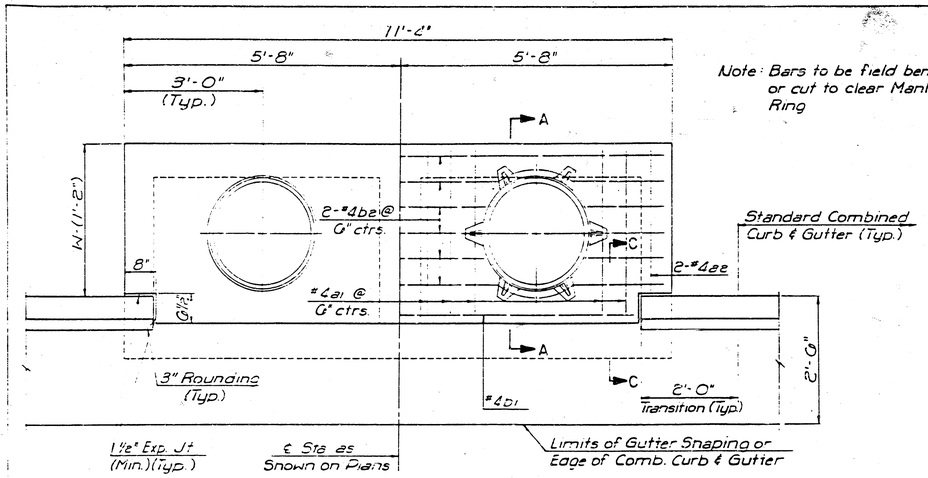
# DETAIL STANDARD TYPE I CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" × 5'0"

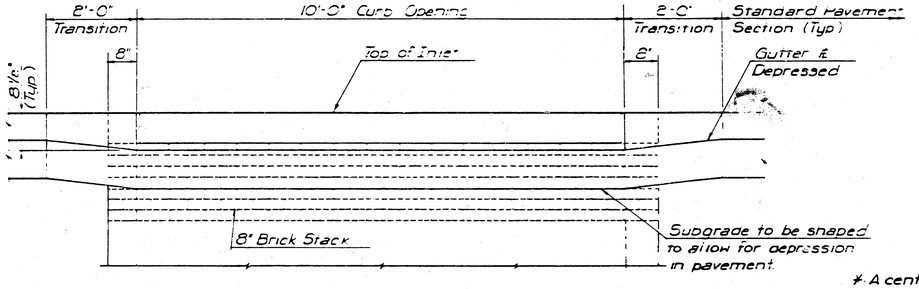
JUNE 1984

8/16

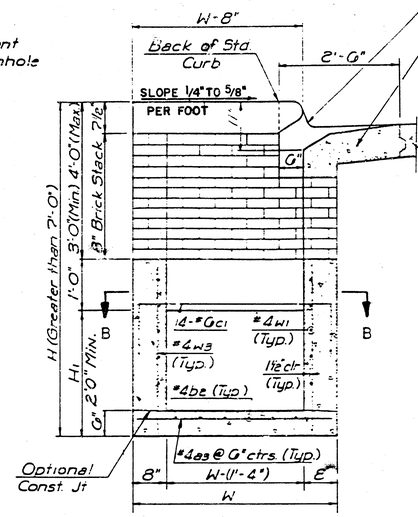



SLAB REINFORCING NOT SHOWN SHOWING SLAB REINFORCING

PLAN

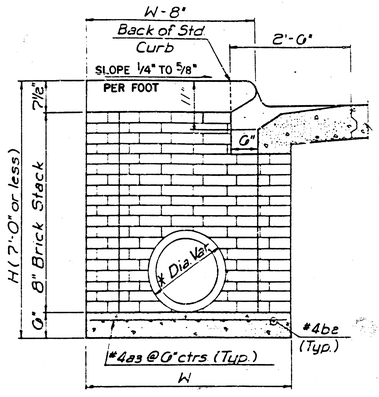



ELEVATION



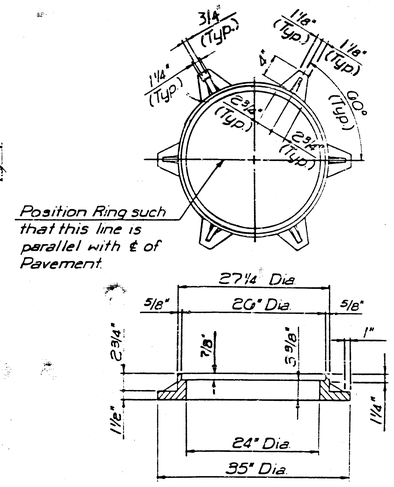

TYPICAL INLET SECTION AT CENTER WALL

(Reinforced Concrete Walls)




TYPICAL INLET SECTION AT CENTER WALL

(Masonry Walls)



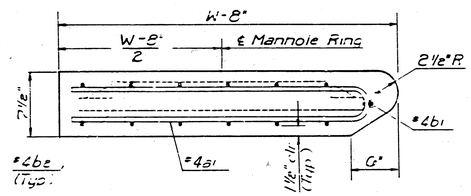

INLET FRAME (Weight = 180 LBS.)

SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

GENERAL NOTES

Concrete **shall** be C.O.W. Standard Paving Mix. **All** exposed edges shall be finished **with** an edging tool. Reinforcing **Bars** shall be field bent or cut to **clear** pipes. All bars are **#4** bars at 6" Spacing and shall **have** a minimum clearance of 1½" **unless** otherwise noted. Floors of inlet shall be shaped with 8 Sack Sand **Mix** Concrete to increase hydraulic **efficiency** such that the inlet will be self cleaning between all inlet and/or outfall pipe(s). The Contractor will be required to construct 8" Brick Masonry Walls between the concrete inlet base and top on this inlet when H=7'-0" or less and W=6'-4" or less.

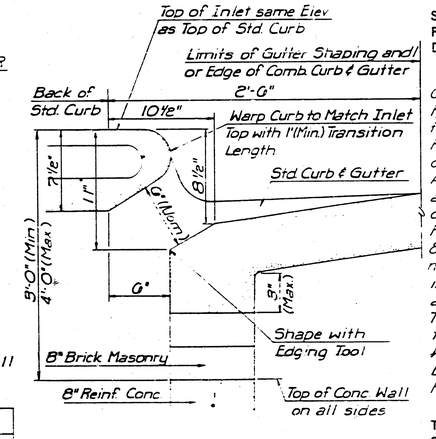
THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.




SECTION A-A

*A center wall opening shall be provided by means of a section of reinforced concrete pipe. The minimum diameter used shall be that of the outlet pipe.

Note: Concrete top to be installed on thin mortar cushion to insure full support along walls



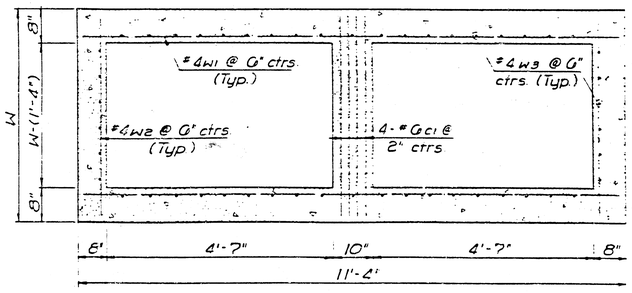

SECTION C-C

| SLAB AND FLOOR REINFORCING | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | W=4'-4" | | W=5'-4" | | W=6'-4" | | W=7'-4" | | W=8'-4" | |
| Mark | Size | No | Length | No | Length | No | Length | No | Length | No | Length |
| a1 | #4 | 13 | 6'-7½" | 13 | 8'-7½" | 13 | 10'-7½" | 13 | 12'-7½" | 13 | 14'-7½" |
| ae | #4 | 2 | 6'-0" | 2 | 8'-0" | 2 | 10'-0" | 2 | 12'-0" | 2 | 14'-0" |
| a3 | #4 | 20 | 4'-1" | 20 | 5'-1" | 20 | 6'-1" | 20 | 7'-1" | 20 | 8'-1" |
| b1 | #4 | 1 | 0'-8" | 1 | 0'-8" | 1 | 0'-8" | 1 | 0'-8" | 1 | 0'-8" |
| *be | #4 | 18 | 11'-1" | 24 | 11'-1" | 30 | 11'-1" | 36 | 11'-1" | 42 | 11'-1" |

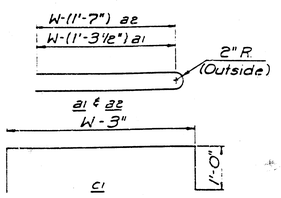
| WALL REINFORCING | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | W=4'-4" | | W=5'-4" | | W=6'-4" | | W=7'-4" | | W=8'-4" | |
| Mark | Size | No. | Length | No. | Length | No. | Length | No. | Length | No. | Length |
| c1 | #6 | 4 | 6'-1" | 4 | 7'-1" | 4 | 8'-1" | 4 | 9'-1" | 4 | 10'-1" |
| w1 | #4 | 1 | 11'-1" | 1 | 11'-1" | 1 | 11'-1" | 1 | 11'-1" | 1 | 11'-1" |
| w2 | #4 | 1 | 4'-1" | 1 | 5'-1" | 1 | 6'-1" | 1 | 7'-1" | 1 | 8'-1" |
| w3 | #4 | 2 | 13 | 2 | 13 | 2 | 13 | 2 | 13 | 2 | 13 |

*: Field bend or cut Reinforcing as required for clearance

①4(H1-6") ②40+4(W-1) ③H1-(10")




SECTION B-B




BENDING DIAGRAMS

| SHEET NO | TOTAL SHEETS |
|---|---|
| | |

REVISED 12-21-1984

# DETAIL STANDARD TYPE I CURB INLET

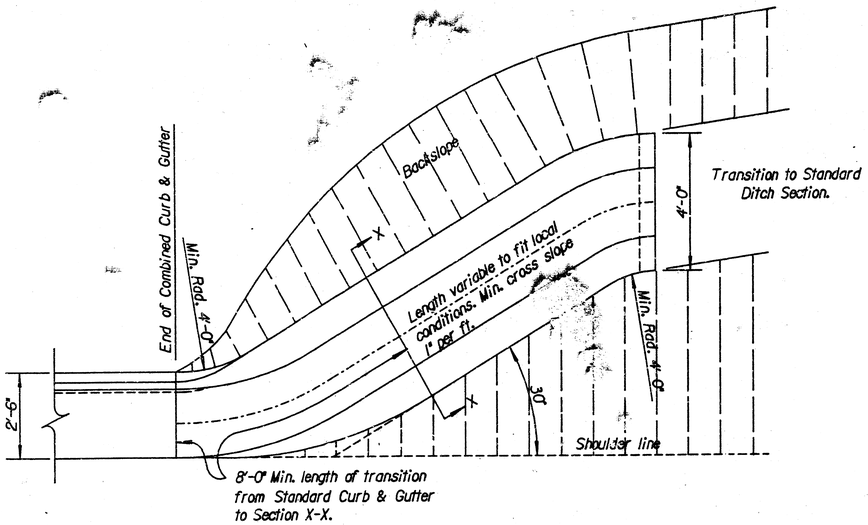
INLET OPENING = 6" x 10'-0"

CITY OF WICHITA

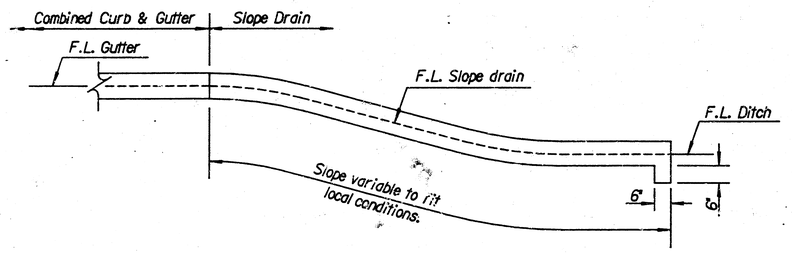
M.E. LINDEBAK, CITY ENGINEER

OCTOBER 1984

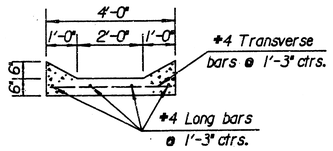
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TYPICAL PLAN

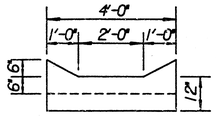



TYPICAL ELEVATION



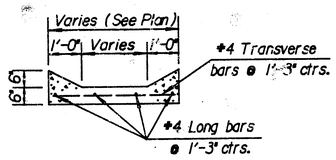

SECTION X-X

NOTE: Use City of Wichita Standard Conc. Pvmt. Mix. The entire area of the Slope Drain below the curbs, to be cast and struck off with a uniform thickness of 6". The curbs are to be applied in the same manner and using the same methods as for edge curb.
Reinforcing steel to be deformed #4 bars.



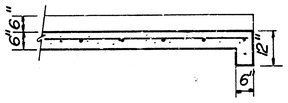

END ELEVATION
(Downstream End)

## SLOPE DRAIN DETAIL

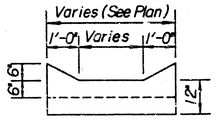



TYPICAL SECTION

NOTE:
Use City of Wichita Standard Conc. Pvmt. Mix. The entire area of the Conc. Ditch Liner below the curbs, to be cast and struck off with a uniform thickness of 6". The curbs are to be applied in the same manner and using the same methods as for edge curb.
Reinforcing steel to be deformed #4 bars.




LONGITUDINAL SECTION




END ELEVATION

## CONCRETE DITCH LINER DETAIL

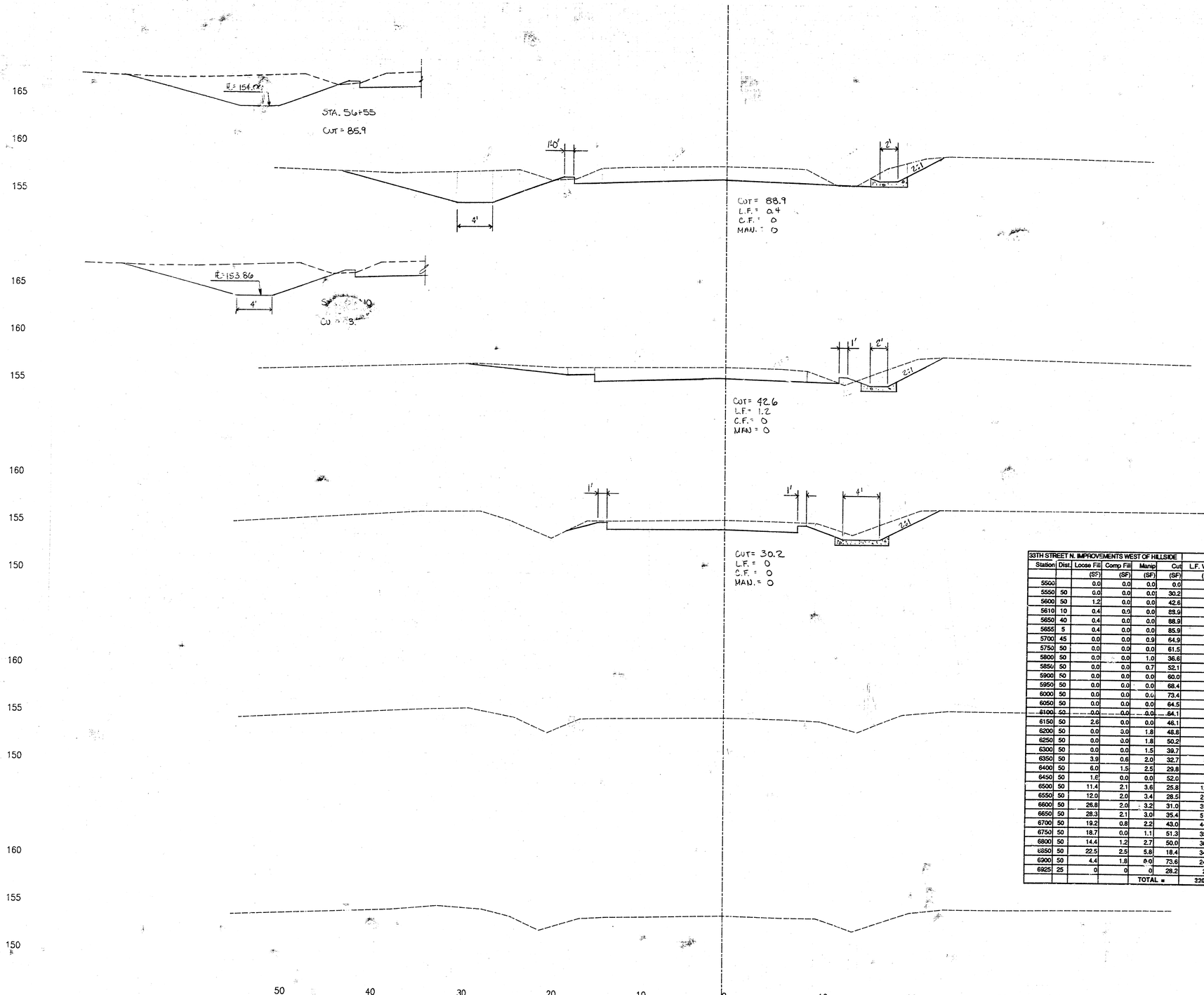
CITY OF WICHITA
**CONC. DITCH LINER & SLOPE DRAIN**
PROJECT NO. 472-82038

Design MJV
Drawn by DPR
Checked by
Date NOV. 1990
Job no. 90-81-113

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING 800
WICHITA, KANSAS 67226
636-5566

Sheet 10 of 16

# 33 RD STREET NO. IMPROVEMENTS
# CROSS SECTIONS - PAVING PLANS
# PROJ. NO. 472-82038




| 33TH STREET N. IMPROVEMENTS WEST OF HILLSIDE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Station | Dist. | Loose Fill (SF) | Comp Fill (SF) | Manip (SF) | Cut (SF) | L.F. Vol. (CY) | C. F. Vol. (CY) | Manip. Vol. (CY) | Cut Vol. (CY) |
| 5500 | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 5550 | 50 | 0.0 | 0.0 | 0.0 | 30.2 | 0.0 | 0.0 | 0.0 | 28.0 |
| 5600 | 50 | 1.2 | 0.0 | 0.0 | 42.6 | 1.1 | 0.0 | 0.0 | 67.4 |
| 5610 | 10 | 0.4 | 0.0 | 0.0 | 88.9 | 0.4 | 0.0 | 0.0 | 132.4 |
| 5650 | 40 | 0.4 | 0.0 | 0.0 | 88.9 | 1.5 | 0.0 | 0.0 | 321.8 |
| 5655 | 5 | 0.4 | 0.0 | 0.0 | 85.9 | 0.7 | 0.0 | 0.0 | 145.7 |
| 5700 | 45 | 0.0 | 0.0 | 0.9 | 64.9 | 0.4 | 0.0 | 0.8 | 142.4 |
| 5750 | 50 | 0.0 | 0.0 | 0.0 | 61.5 | 0.0 | 0.0 | 0.8 | 117.0 |
| 5800 | 50 | 0.0 | 0.0 | 1.0 | 36.6 | 0.0 | 0.0 | 0.9 | 90.8 |
| 5850 | 50 | 0.0 | 0.0 | 0.7 | 52.1 | 0.0 | 0.0 | 1.6 | 82.1 |
| 5900 | 50 | 0.0 | 0.0 | 0.0 | 60.0 | 0.0 | 0.0 | 0.6 | 103.8 |
| 5950 | 50 | 0.0 | 0.0 | 0.0 | 68.4 | 0.0 | 0.0 | 0.0 | 118.9 |
| 6000 | 50 | 0.0 | 0.0 | 0.0 | 73.4 | 0.0 | 0.0 | 0.0 | 131.3 |
| 6050 | 50 | 0.0 | 0.0 | 0.0 | 64.5 | 0.0 | 0.0 | 0.0 | 127.7 |
| 6100 | 50 | 0.0 | 0.0 | 0.0 | 64.1 | 0.0 | 0.0 | 0.0 | 119.1 |
| 6150 | 50 | 2.5 | 0.0 | 0.0 | 46.1 | 2.4 | 0.0 | 0.0 | 102.0 |
| 6200 | 50 | 0.0 | 0.0 | 1.8 | 48.8 | 2.4 | 0.0 | 1.7 | 87.9 |
| 6250 | 50 | 0.0 | 0.0 | 1.8 | 50.2 | 0.0 | 0.0 | 3.3 | 91.7 |
| 6300 | 50 | 0.0 | 0.0 | 1.5 | 39.7 | 0.0 | 0.0 | 3.1 | 83.2 |
| 6350 | 50 | 3.9 | 0.6 | 2.0 | 32.7 | 3.6 | 0.6 | 3.2 | 67.0 |
| 6400 | 50 | 6.0 | 1.5 | 2.5 | 29.8 | 9.2 | 1.9 | 4.2 | 57.9 |
| 6450 | 50 | 1.6 | 0.0 | 0.0 | 52.0 | 7.0 | 1.4 | 2.3 | 75.7 |
| 6500 | 50 | 11.4 | 2.1 | 3.6 | 25.8 | 12.0 | 1.9 | 3.3 | 72.0 |
| 6550 | 50 | 12.0 | 2.0 | 3.4 | 28.5 | 21.7 | 3.8 | 6.5 | 50.3 |
| 6600 | 50 | 26.8 | 2.0 | 3.2 | 31.0 | 35.9 | 3.7 | 6.1 | 55.1 |
| 6650 | 50 | 28.3 | 2.1 | 3.0 | 35.4 | 51.0 | 3.8 | 5.7 | 61.5 |
| 6700 | 50 | 19.2 | 0.8 | 2.2 | 43.0 | 44.0 | 2.7 | 4.8 | 72.6 |
| 6750 | 50 | 18.7 | 0.0 | 1.1 | 51.3 | 35.1 | 0.7 | 3.1 | 87.3 |
| 6800 | 50 | 14.4 | 1.2 | 2.7 | 50.0 | 30.6 | 1.1 | 3.5 | 93.8 |
| 6850 | 50 | 22.5 | 2.5 | 5.8 | 18.4 | 34.2 | 3.4 | 7.9 | 63.3 |
| 6900 | 50 | 4.4 | 1.8 | 0.0 | 73.6 | 24.9 | 4.0 | 5.4 | 85.2 |
| 6925 | 25 | 0 | 0 | 0 | 28.2 | 2.0 | 0.8 | 0.0 | 47.1 |
| | | | | TOTAL = | | 320.2 | 29.9 | 68.9 | 2782.1 |

Sta. 56+50.00

Sta. 56+00.00

Sta. 55+50.00

Sta. 55+00.00

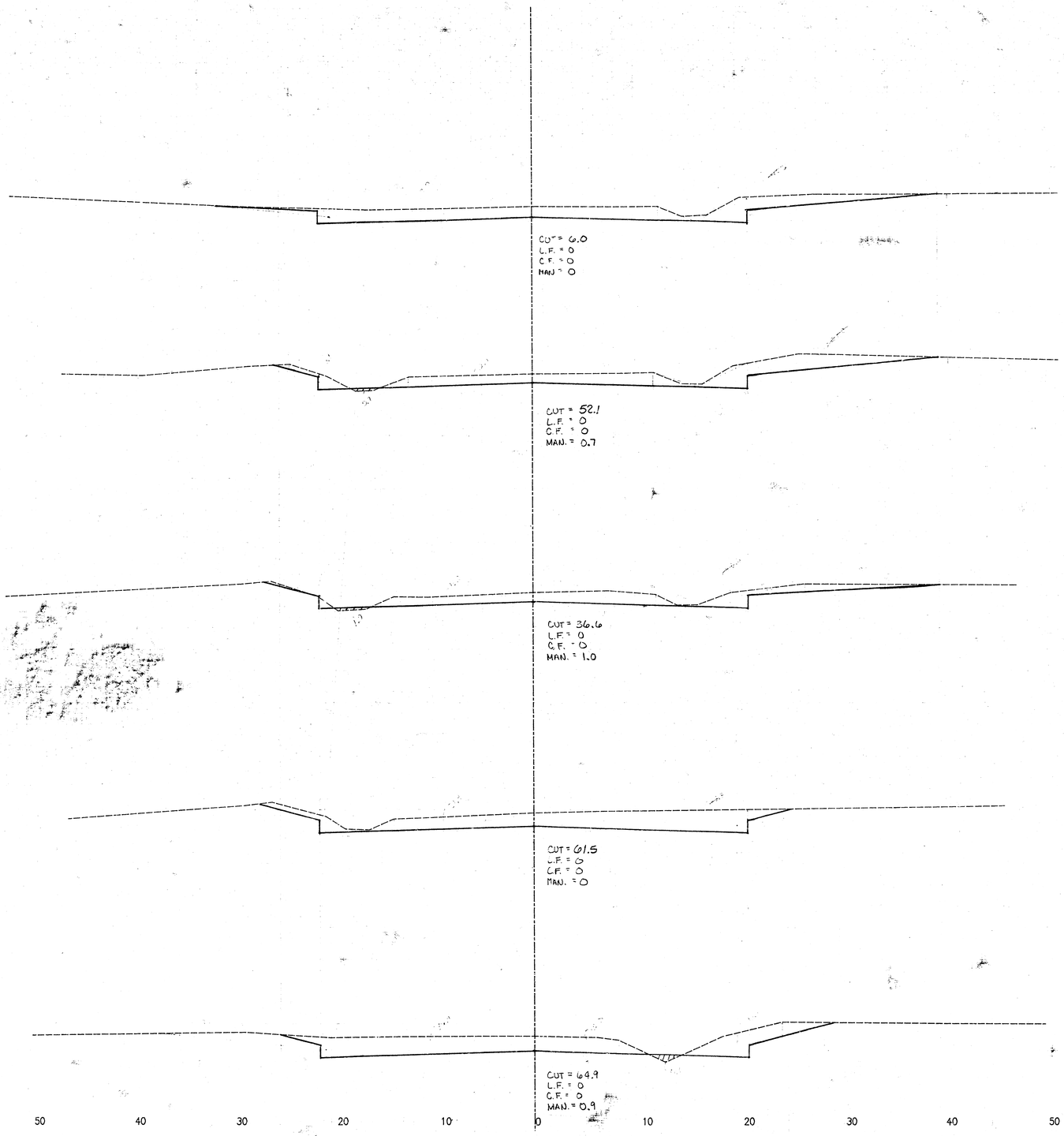
Sta. 54+50.00

Sta. 54+50.00 to Sta. 56+50.00

11/16

33rd St

33RD STREET NO. IMPROVEMENTS
CROSS SECTIONS - PAVING PLANS
PROJ. NO. 472-82038

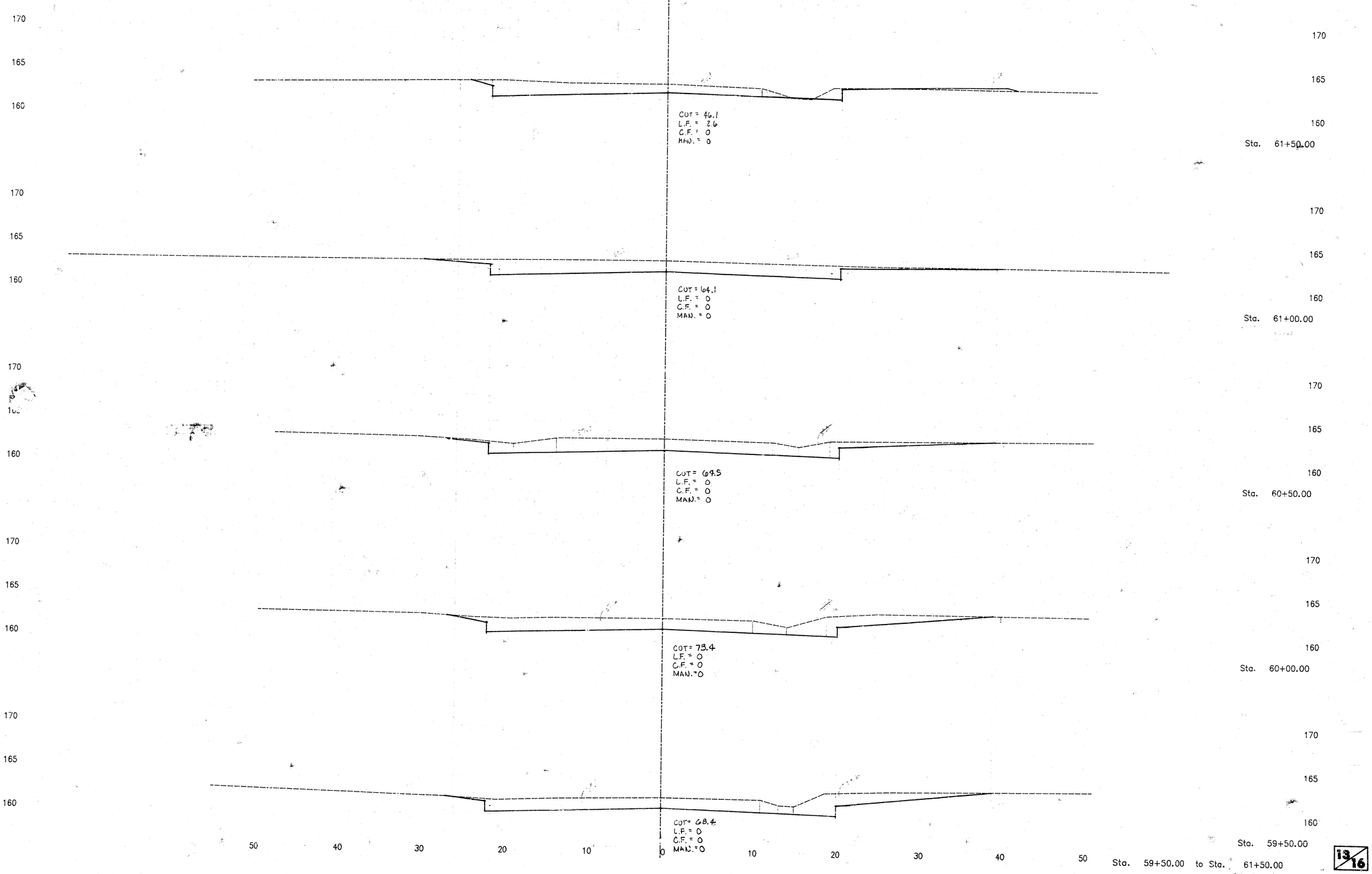



Sta. 57+00.00 to Sta. 59+00.00

33rd St.

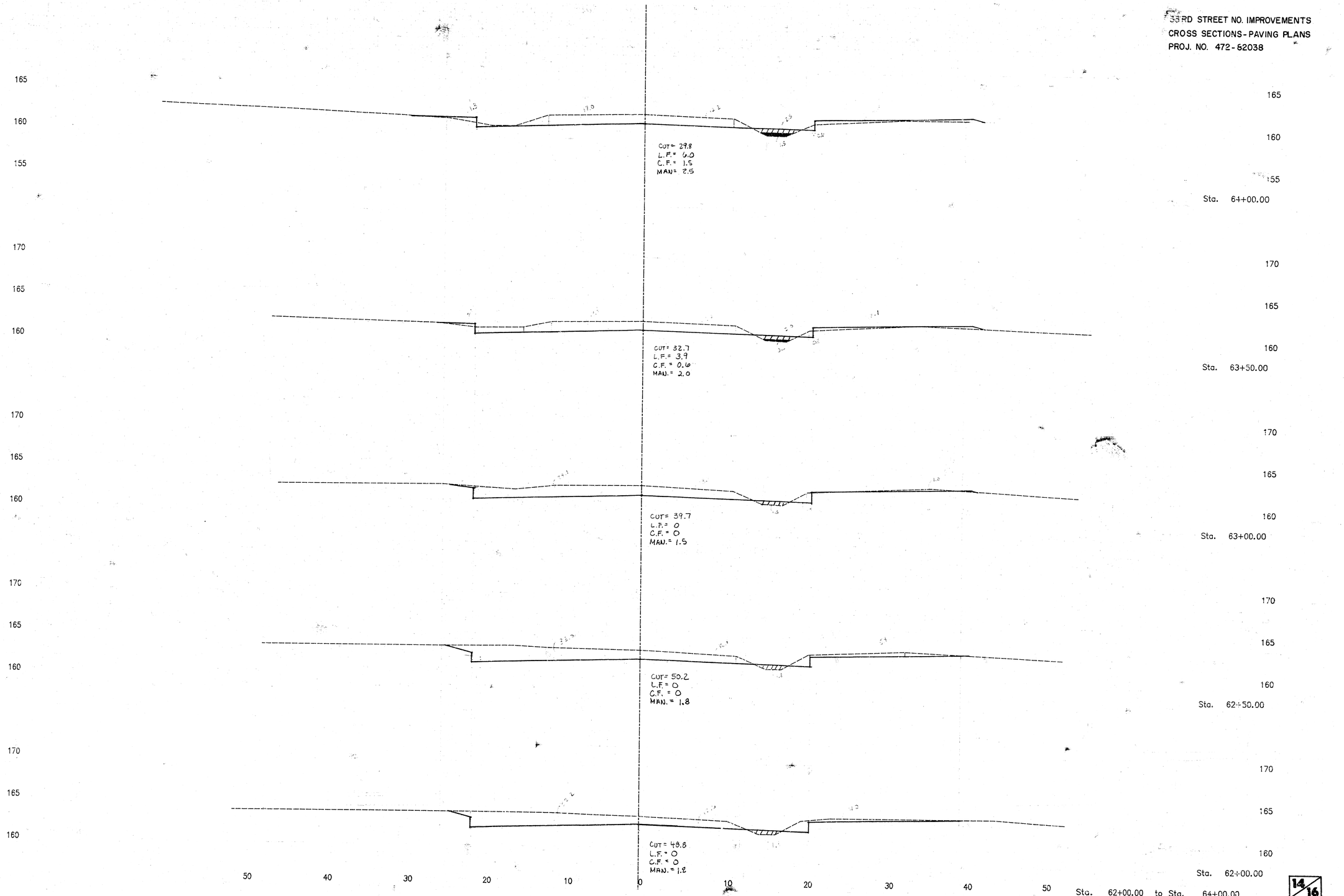
12/16

# 33 RD STREET NO. IMPROVEMENTS
# CROSS SECTIONS - PAVING PLANS
# PROJ. NO. 472-82038



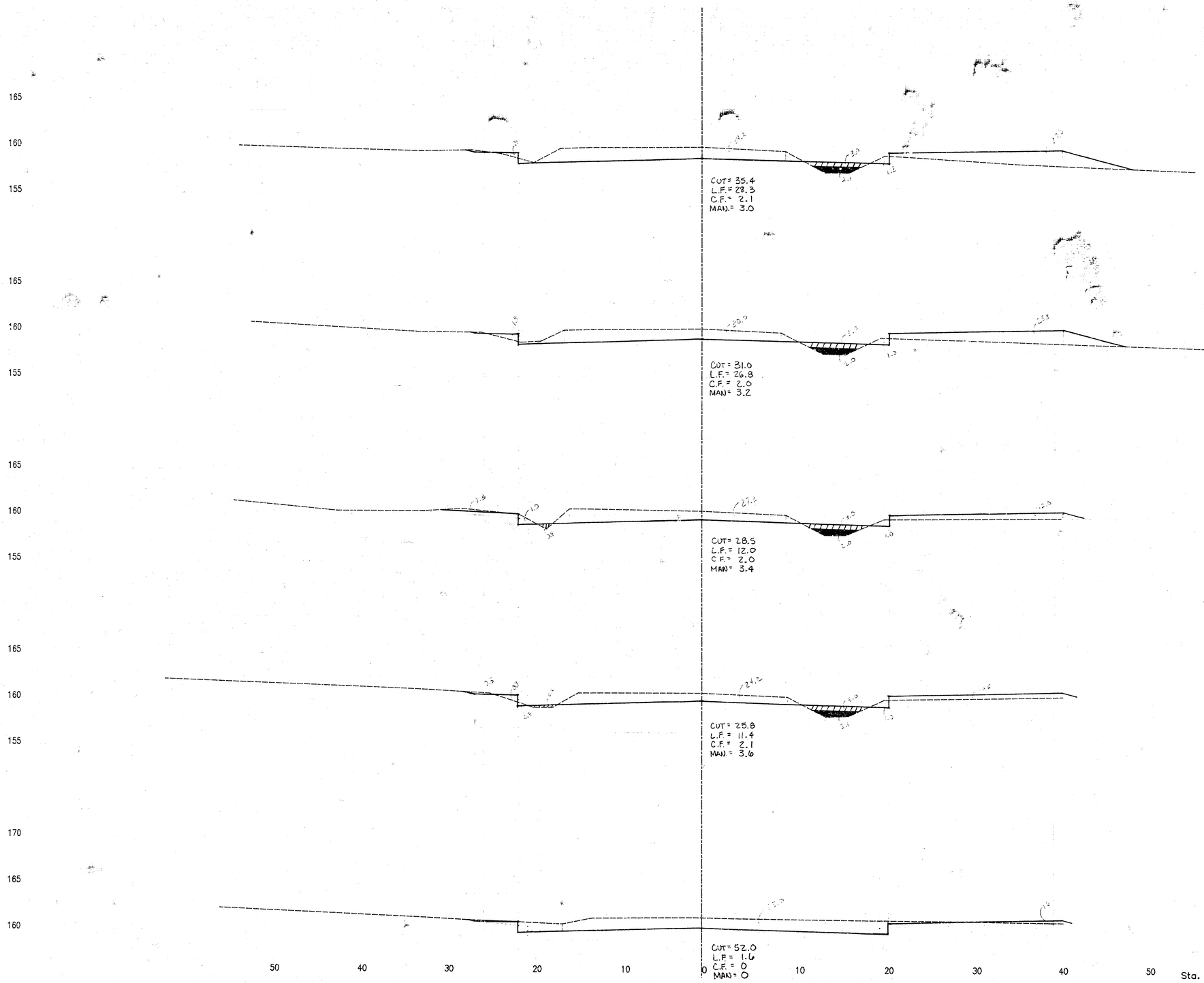

Sta. 59+50.00 to Sta. 61+50.00

33RD STREET NO. IMPROVEMENTS
CROSS SECTIONS - PAVING PLANS
PROJ. NO. 472-62038



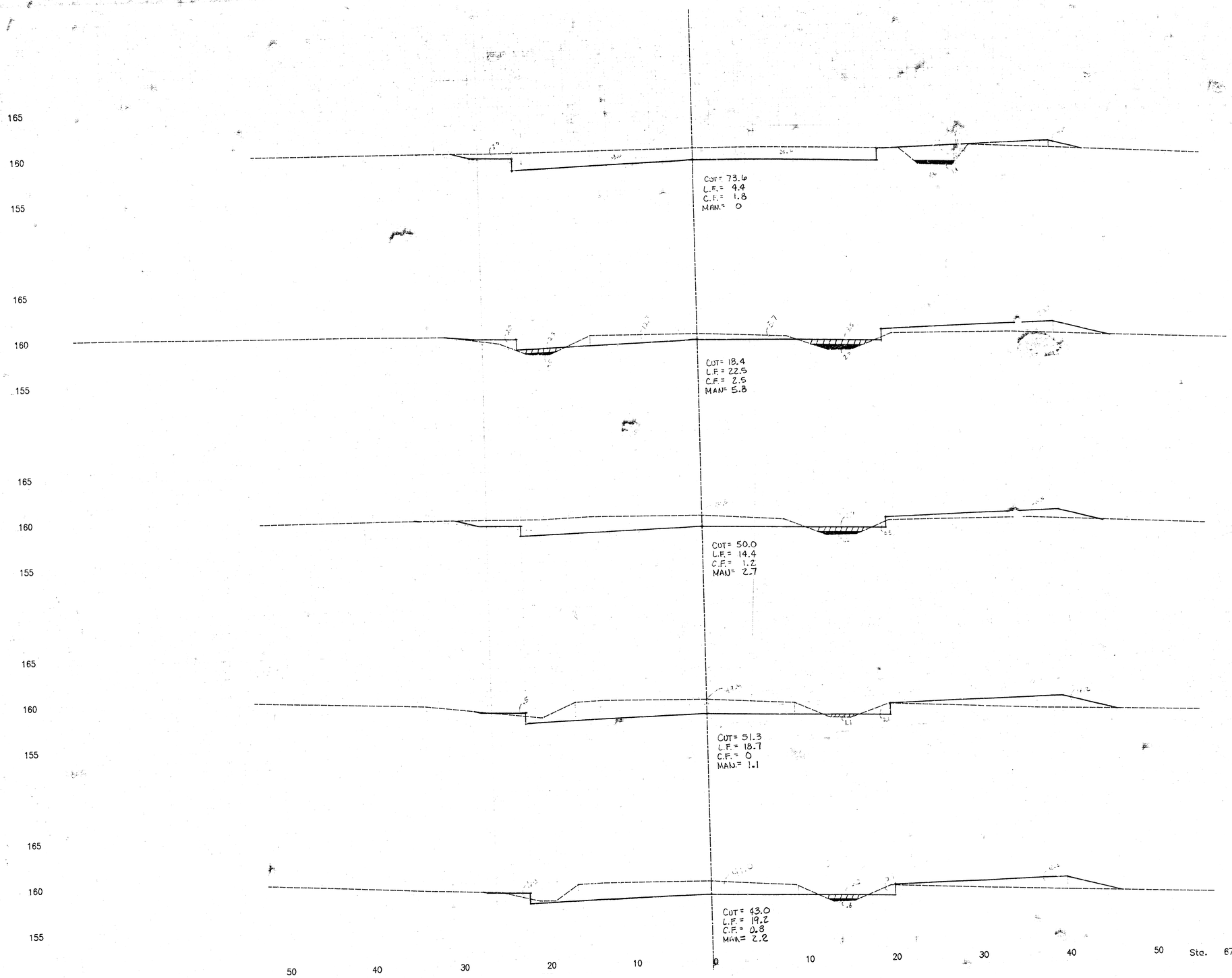

33rd St

33RD STREET NO. IMPROVEMENTS
CROSS SECTIONS - PAVING PLANS
PROJ. NO. 472-82038




33rd St.

33RD STREET NO. IMPROVEMENTS
CROSS SECTIONS - PAVING PLANS
PROJ. NO. 472-82038




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