17TH & HILLSIDE DRAINAGE (W.S.U)

PROJ. No. 872-70-245-50707-350-013 -000

INDEX No. 610550

CITY OF WICHITA, KANSAS

M.E. LINDEBAK ◄•► CITY ENGINEER

SHEET No.	DESCRIPTION
1.	COVER SHEET
2.	PLAN — 17TH & HILLSIDE
3.	PROFILE LINE No. 1 - 17TH STREET NO.
4.	PROFILE LINE No. 1 - HILLSIDE AVE W/ CLEANOUT RISER
5.	COVERED CONC. OUTLET BOX DETAILS. PAVEMENT SECTION W/ JOINT DETAILS.
6.	DETAIL STD. TYPE II CURB INLET
7.	WHEELCHAIR RAMP DETAILS PAVING DETAILS

REVISED JUNE 23, 1989

SHEETS 2-3-4 & 7 REVISED TO SHOW W.S.U. TELE. CONDUIT & PVC WATER LINE LOCATIONS.

Booked
12/89
MCG

SURVEY REF: HALL BOOK D.2.M 46
" ARVIDSON.

STA 0+00
CONSTRUCT CONCRETE CURB OUTLET BOX. SEE SHEET 5
FL. 6" P.V.C. at 16985

45° BEND
0+06

REMOVE & REPLACE 6" CONCRETE DRIVE.

BUS STOP BENCHES

ASPHALT

PARKING LOT

SEE SHEET 7 FOR WHEEL-CHAIR RAMP CONSTRUCTION.

NOTE: 4" GAS LINE MAY NEED TO BE ADJUSTED DURING CONSTRUCTION.

2.9' DEEP - TOP PAVM'T SURFACE TOP 8" WATER.

205 L.F. 6" P.V.C. PIPE

W.S.U. TELECOMMUNICATIONS JUNCTION BOX
NOTE: TELEPHONE CABLES RUN SOUTH OUT OF TELEPHONE VAULT. DEPTHS AND LOCATIONS UNKNOWN. USE EXTREME CAUTION IN THIS AREA.

PLANTER & SIGN.

B.M. 177.68 CITY OF WICHITA DISC, 32'W - 44' S. ℄ BOTH. 17TH ST & HILLSIDE AVE

R/W = 30' ℄

FULL WALK

12" WATER

TRAFFIC M.H.

CONC. WALK

8" WATER

CONC. SIDEWALK

4" STEEL (KPL)

SAW & MATCH

ABANDONED 6" WATER

DRILL & GROUT #5 BARS 2'-0" LONG ON 5' CTRS.

EXIST'G CONC. PAVM'T

STA 4+27 LINE 1
22½° BEND

MATCH @ JOINT

REMOVE PAVM'T & CONST. 8" REINF. CONC. PAVM'T W MONOLITHIC EDGE CURB. (ADD' ALT. BID.)

HILLSIDE AVE.

STA 6+19 END LINE 1 (INSTALL CLEANOUT) SEE SHEET No. 4

LINE 1

24' - 6" ℄ - BK

24' - 6" BK - ℄

FULL WALK R/W = 30' ℄

ST. LIGHT

REMOVE W.C.R. AND CONST. STD. WHEELCHAIR RAMP TO MATCH NEW CONSTRUCTION.

STA 2+05 CONSTRUCT STD. TYPE II CURB INLET. T.C. 17700
L = 3'-8" W = 3'-43/8".
6" OUT 17150 - 6" IN 17180

ADD ALT. CONSTR STD TYPE II CURB INLET & INSTALL 32' L.F. 6" P.V.C. PIPE.

P.P. EXIST'G 6' CONC. SIDEWALK

4" P.V.C. WELL CASING

8" P.V.C. WATER LINE

W.V.

TRAFFIC M.H.

E.L.6000 FLOWER BED

1' WIDE ROW OF BRICKS

R/W = 50'

SPRINKLER M.H.

4" P.V.C. WELL CASING.

R = 42.19' F

REMOVE WALK AND CONST 6.00' CONC SIDE WALK (4").

72'

218'

45'

P.C.

P.T.

STA 4+61 LINE 1
22½° BEND.

R = 50'

R = 15'

49' BK - BK

50' R/W

17TH ST. NO.

SIDEWALK

4" SIDEWALK

6" HORST

SAW & MATCH

EXIST'G CONC. PAVM'T

** GENERAL NOTES **

1. NEW PAVEMENT ELEVATIONS SHALL BE DETERMINED BY FIELD ENGINEER CONSISTENT WITH VERTICAL ALIGNMENT AND CROSS SLOPE OF EXISTING PAVEMENT.
2. ALL EARTHWORK OTHER THAN SUBGRADE COMPACTION NECESSARY TO COMPLETE THIS PROJECT IS TO BE SUBSIDIARY TO OTHER BID ITEMS.
3. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO A CONDITION ACCEPTABLE TO THE ENGINEER.
4. GRASSED AREAS DISTURBED BY THE CONST. OF THE IMPROVEMENTS SHALL BE REPLANTED W REBEL II FESCUE SEED 10 lbs / 1000 SF. - FERTILIZER 16-20-0 @ 10 lbs / 1000 SF., AND IS TO BE SUBSIDIARY TO OTHER BID ITEM'S.
5. UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, AND ETCETERA ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT OF WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
6. A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF THE 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.
7. 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.
8. TRAFFIC IS TO BE CARRIED THROUGH CONSTRUCTION.

** JOINT LOCATIONS **

NEW PAVEMENT JOINT LOCATIONS ARE TO BE CONSISTENT WITH EXISTING PAVEMENT JOINTS.

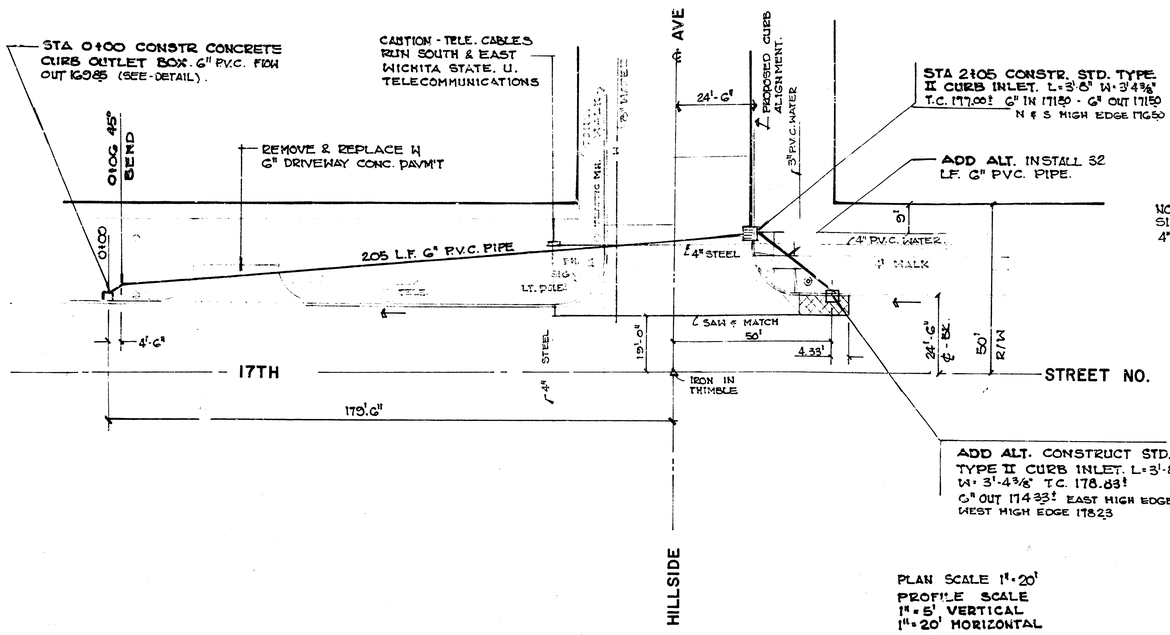
SCALE : 1" = 20'

= DENOTES. COMPLETE REMOVAL

= DENOTES. ADD ALTERNATE REMOVAL & REPLACEMENT.

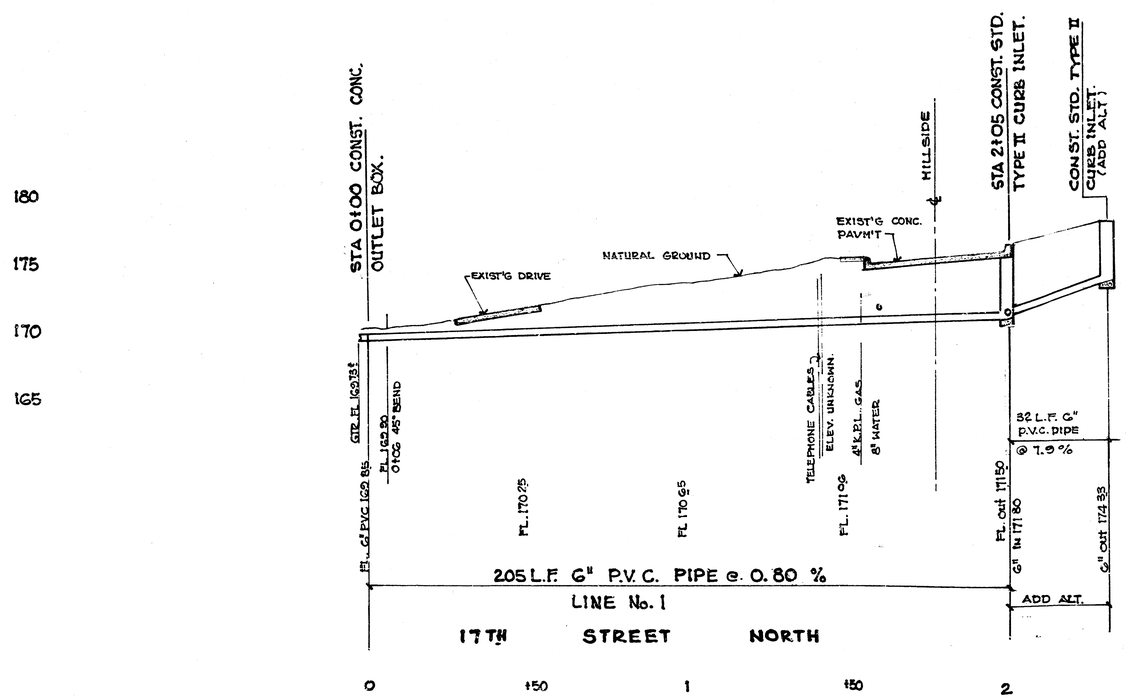
PROJECT DESCRIPTION
HILLSIDE AVE. & 17TH ST. NO.

PROJECT NUMBER
872-70-245-50707-350-013-000



PLAN SCALE 1"=20'
PROFILE SCALE
1"=5' VERTICAL
1"=20' HORIZONTAL

ADD ALTERNATE IS NOT TO BE CONSTRUCTED WITHOUT WRITTEN APPROVAL OF THE CITY ENGR.



17TH and HILLSIDE DRAINAGE (W.S.U.)
PROJ. No. 872-70-245-5070'1-350-013-000

N

ST. N.

17TH

ADD ALT. BID

HILLSIDE

℄ AVE

4" STEEL (R.T.L.)

2" WATER

STA 4+27
22 1/2° BEND

R=42.19'

24'-6" BK. CURB

23'-10" ℄ PIPE

37'-6" BK. CURB

36'-10" ℄ PIPE

SAW & MATCH

EXIST'G 6' CONC. SIDEWALK

3" P.V.C. WATER

WATER VALVE

3'-4"

5'

STA 6+19 END
INSTALL CLEANOUT
SEE DETAIL THIS SHEET

R=15'

STA 4+61
22 1/2° BEND

9'

213'

45'

72'

50'

P.C. PAV'T ℄27

P.T. ℄12

PROFILE SCALE
1" = 5' VERTICAL
1" = 20' HORIZONTAL

PLAN SCALE 1" = 20'

STA 2+05 CONST. STD. TYPE II CURB INLET

STA 4+27 INSTALL 22 1/2° BEND HORIZONTAL

STA 4+61 INSTALL 22 1/2° BEND HORIZONTAL

NATURAL GROUND

TOP EXISTING EAST CURB HILLSIDE AVE.

DRIVE

T.C. 171.62'

185
180
175
170

12.5' 12.5' 12.5' 12.5'

-1.90%

-2.97%

P.C.

P.V.I. EL. 175.50 50' V.C.

P.T.

END LINE No. 1 INSTALL CLEANOUT

9'

50'

17TH ST.

℄ N.L. 17TH ST.

FL. OUT 171.50
6" FL. IN 171.60

FL. 172.65
FL. 173.60
FL. 174.55
FL. 175.03
FL. 175.28
FL. 175.57
FL. 175.69
FL. 176.24
FL. 176.90
FL. 177.31
FL. 178.47
FL. 179.95
FL. 181.44
FL. 182.00

412 L.F. 6" DIA. PERFORATED PIPE WITH TAMPED FILTER MATERIAL BACKFILL

LINE No. 1

HILLSIDE AVENUE

2 +50 3 +50 +75 4 +25 +50 101 5 +50 6 +19

BID ITEM 1 UNIT
P.V.C. CLEANOUT

STA 6+19

EXIST'G GROUND LINE

1% SLOPE

4" CAST IRON RISER EXTENSION W WATER TIGHT SCREW PLUG.

VARIABLE LENGTH

1.5% MIN. DEPTH (CONC.)

45° BEND

22 1/2°

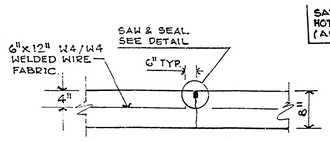
4" CONC. MIN

4" PVC PIPE (SDR 35)

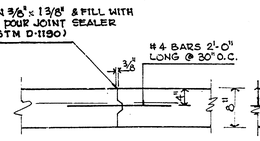
6" P.V.C. LINE

TYPICAL
4" P.V.C. CLEANOUT RISER

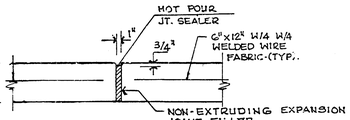
17TH and HILLSIDE DRAINAGE (W.S.U.)
PROJ. No. 872-70-245-50707-350-013-000



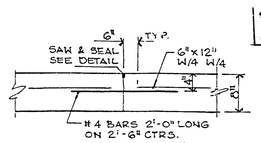
SAWED CONTRACTION JT.



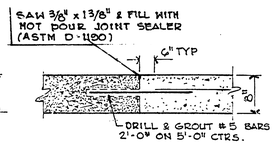
ALT. KE ED LONGITUDINAL JOINT.



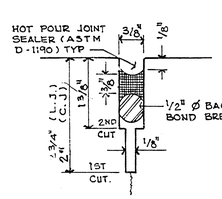
EXPANSION JOINT



SAWED LONGITUDINAL JT.



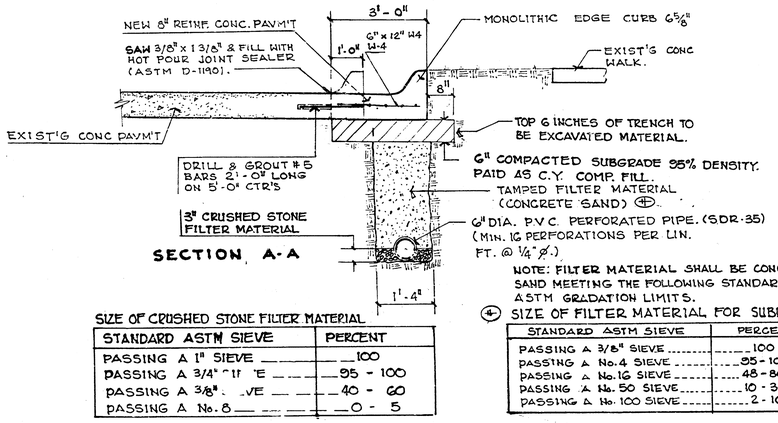
CONSTRUCTION JOINT ALONG EXISTING PAVEMENT



DETAIL: SAW JOINTS

NOTE: 6" x 12" W4 x W4 WIRE MESH REINFORCING SHALL BE PLACED SUCH THAT THE WIRES WITH THE 6" SPACING WILL RUN PARALLEL WITH THE LONGITUDINAL JOINT.

PAVEMENT JOINT DETAILS



SECTION A-A

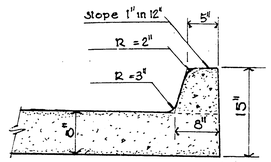
NOTE: FILTER MATERIAL SHALL BE CONCRETE SAND MEETING THE FOLLOWING STANDARD ASTM GRADATION LIMITS.

SIZE OF CRUSHED STONE FILTER MATERIAL

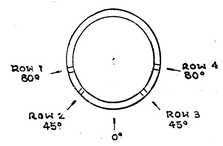
STANDARD ASTM SIEVE	PERCENT
PASSING A 1" SIEVE	100
PASSING A 3/4" SIEVE	95 - 100
PASSING A 3/8" SIEVE	40 - 60
PASSING A No. 8	0 - 5

⊕ SIZE OF FILTER MATERIAL FOR SUBDRAIN

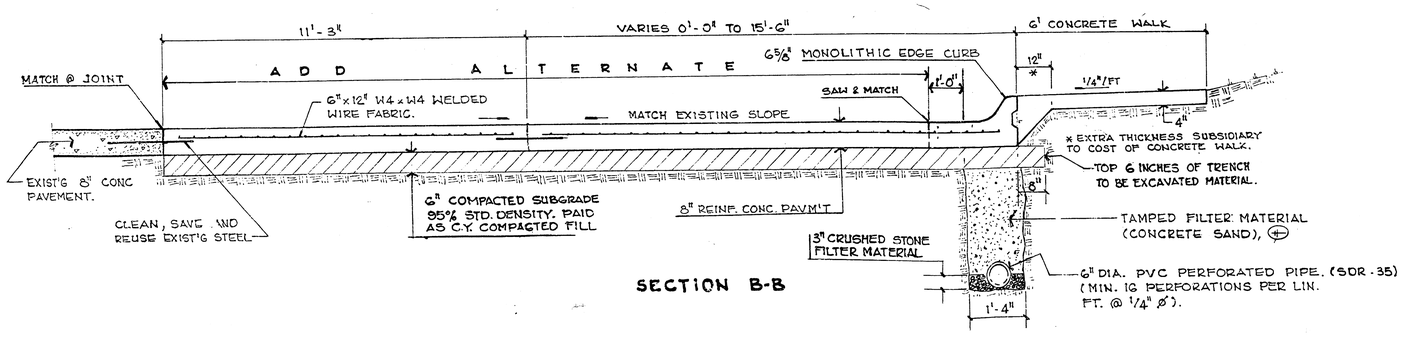
STANDARD ASTM SIEVE	PERCENT
PASSING A 3/8" SIEVE	100
PASSING A No. 4 SIEVE	85 - 100
PASSING A No. 16 SIEVE	48 - 80
PASSING A No. 50 SIEVE	10 - 30
PASSING A No. 100 SIEVE	2 - 10



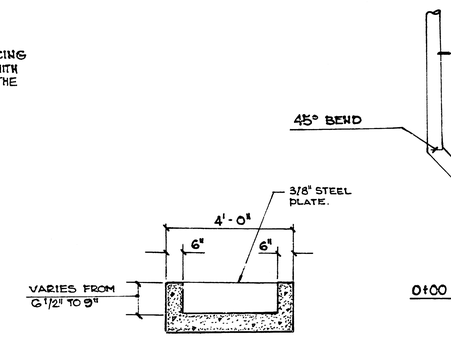
DETAIL: MONOLITHIC EDGE CURB (6 5/8").



SECTION: 6" PVC PERFORATED PIPE.



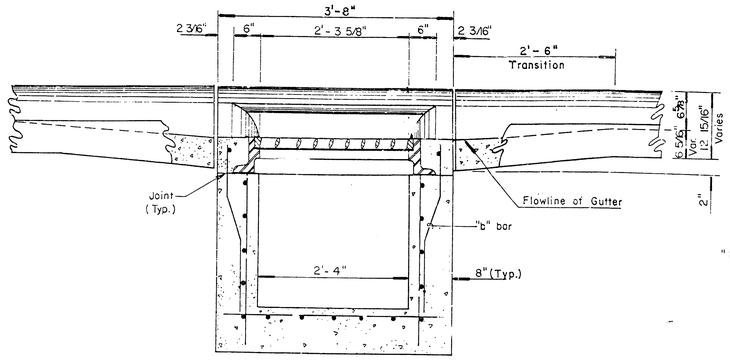
SECTION B-B



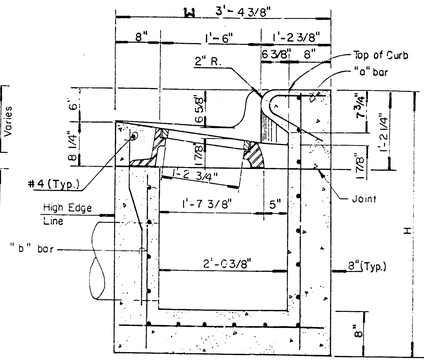
DETAIL: CONCRETE OUTLET BOX

NOTE: THE CHECKERED STEEL PLATE SHALL HAVE A RAISED LUG PATTERN & SHALL BE EITHER SHOP OR FIELD PAINTED WITH ONE COAT OF ZINC DUST PAINT FOLLOWED BY TWO FIELD COATS OF ALUMINUM PAINT. (TOP AND BOTTOM).
COST OF ALL WORK INCLUDED IN THE BID PRICE FOR CONCRETE OUTLET BOX SHALL INCLUDE COMPACTION OF SUBGRADE AND NECESSARY AREA GRADING, COST OF STEEL PLATE AND PAINTING.
STEEL PLATE TO BE ANCHORED WITH 1/4" x 2 1/4" FLAT HEAD SCREWS WITH EXPANSION ANCHOR. 5 SCREWS SPACED AS SHOWN.

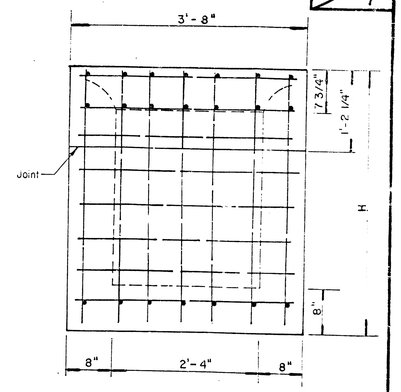
PROJECT DESCRIPTION
HILLSIDE & 17TH STREET N.
DRAINAGE (W. S. U)
PROJECT NUMBER
872-70-245-50707-350-013-000



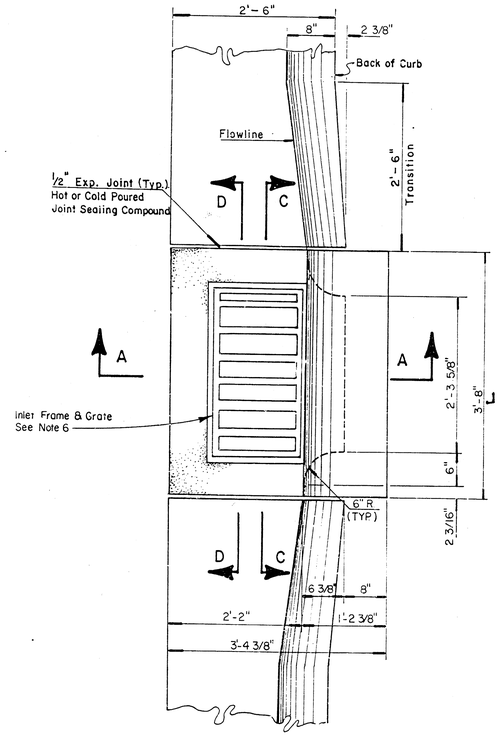
SECTION C-C

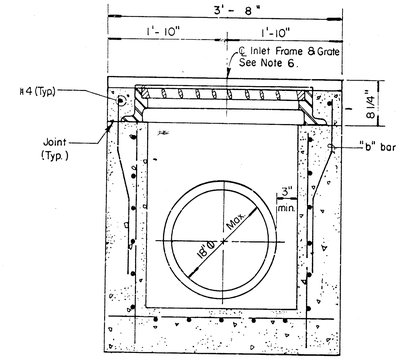


SECTION A-A

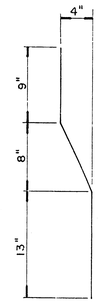


REAR WALL

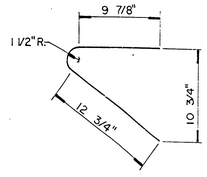




SECTION D-D



"b" bar



"a" bar

BENDING DIAGRAM

GENERAL NOTES:

1. Use the concrete mix specified for the City of Wichita concrete pavement throughout. All exposed edges shall be finished with an edging tool. Reinforcing bars shall be bent around pipe.
2. Inlet invert shall be shaped with 8 sack 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.
3. All bars are #4 with 6" spacing and shall have a minimum clearance of 1½ inches unless otherwise noted on the plans.
4. When directed by the Engineer, a small opening may be required in the back of the inlet in order to drain a low area. Reinforcing bars will extend through the openings. No deductions in concrete quantities will be made for these openings.
5. No deductions will be made in pay length of curb, gutter, or curb and gutter through the inlet area.
6. Use Neenah R-3289 HV Single Inlet Frame and Grate or approved equal. Inlet frame to be proof load tested to 40,000 lbs on unsupported side.
7. Reinforcing bars shall be cut or bent around pipes. No deduction in concrete quantities shall be made for pipe openings.
8. The vanes of the grate shall be oriented with respect to the flow arrows shown on the plans.

PROJ. NO. 872-70-245-50707-350-013-000

DETAIL STANDARD TYPE II CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6"x2'-3 5/8"

JANUARY, 1987

CONSTRUCT STD. WHEELCHAIR RAMP

CONSTRUCT STD. WHEELCHAIR RAMPS.

N

SCALE 1" = 10'

B.M. = 177.68 CITY OF WICHITA DISC, 32' W. & 44' SO. ℄ BOTH 17TH & HILLSIDE

WALK SIGNAL AND POLE TO BE RELOCATED BY CITY OF WICHITA TRAFFIC ENGINEERING MAINTENANCE SECTION.

FIRE HYDRANT RELOCATION TO BE COORDINATED WITH THE CITY OF WICHITA WATER DEPT. CONTACT DICK MCCLINTOCK 268-4558

CONSTR 4' WIDE CONC. WALK. (4").

STREET NO.

43' B-B

35'

SIGNAL

R/W = 50'

4' SIDEWALK (EXIST'G)

BENCH MARK DISC.

LIGHT POLE TRAFFIC SIGNAL

4' FIRE HYD.

TELEPHONE MANHOLE TRAFFIC M.H.

R/W = 30'

EXIST'G FULL SIDEWALK

5'-6"

6'

CONSTR. 4" SIDEWALK

RAMP

CONSTRUCT STD. WHEELCHAIR RAMP

CONSTR 4' CONC. SIDEWALK.

FULL SIDEWALK (EXIST'G)

19'-0"

SAW & MATCH

24'-0"

CONST. 8" REINF. CONC. PAVM'T W G5/8" MONO. EDGE CURB.

5' TYP.

EXIST'G PAVM'T

B-B

HILLSIDE

AVE

IRON IN THIMBLE

G.

49'

5'

6'

5'

5'

5'

5'

50'

MATCH @ JT.

PROPOSED 24'-6" B-B

45'

1'-0" SAW & MATCH

Base Line-Back Existg curb

6'

EXIST'G FULL SIDEWALK

5'-6"

R/W = 30'

CONSTR. 4.00' WIDE CONC. SIDEWALK. (4").

CONSTR. STD WHEELCHAIR RAMPS

R/W = 50'

6' SIDEWALK (EXIST'G)

5" P. V. C. WATER

CONST. 8" REINF. CONC. PAVM'T W G5/8" MONOLITHIC EDGE CURB.

R.15'

CONSTR 4.00' WIDE SIDEWALK (4").

RETAINING WALL

4' SIDEWALK (EXIST'G)

LIGHT POLE TRAFFIC SIGNAL

TRAFFIC M.H.

TRAFFIC SIGNAL

EXIST'G 4' SIDEWALK

4.33'

9'

R/W = 50'

CONSTR. STD. WHEELCHAIR RAMPS.

35'

43'

B-B

50'

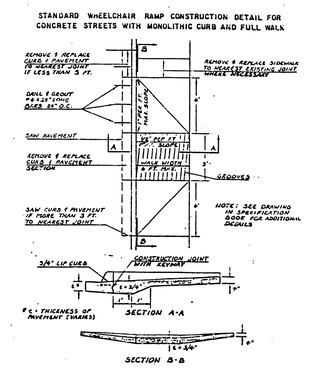
R/W = 50'

17TH

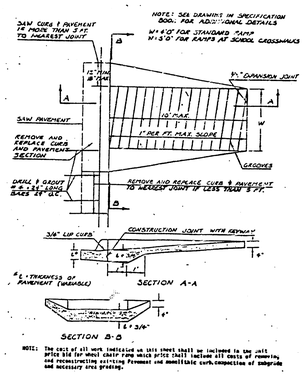
NEW PAVEMENT JOINT LOCATIONS ARE TO BE CONSISTENT WITH EXISTING PAVM'T JOINTS.

DENOTES NEW SIDEWALK AND WHEELCHAIR RAMP CONSTR.

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR CONCRETE STREETS WITH MONOLITHIC CURB AND FULL WALK



STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR CONCRETE STREETS WITH MONOLITHIC CURB



PROJECT DESCRIPTION

WHEELCHAIR RAMP & PAVING DETAILS

PROJECT NUMBER

872-70-245-50707-350-013-000