GENERAL NOTES

1. All work on this project shall conform to the Standard Specifications for Storm Sewer Construction of the City of Wichita.
2. The Contractor shall be responsible for any costs and arrangements necessary for any adjustment of the Southwestern Bell cable and relocation of enclosure.
3. All unpaved areas within public right-of-way which may be disturbed by Contractor's operations shall be restored in accordance with City of Wichita Administrative Regulation AR-78.
4. The Contractor shall notify Kansas One-Call (587-2470) a minimum of 24 hours prior to any excavation.

BENCH MARKS

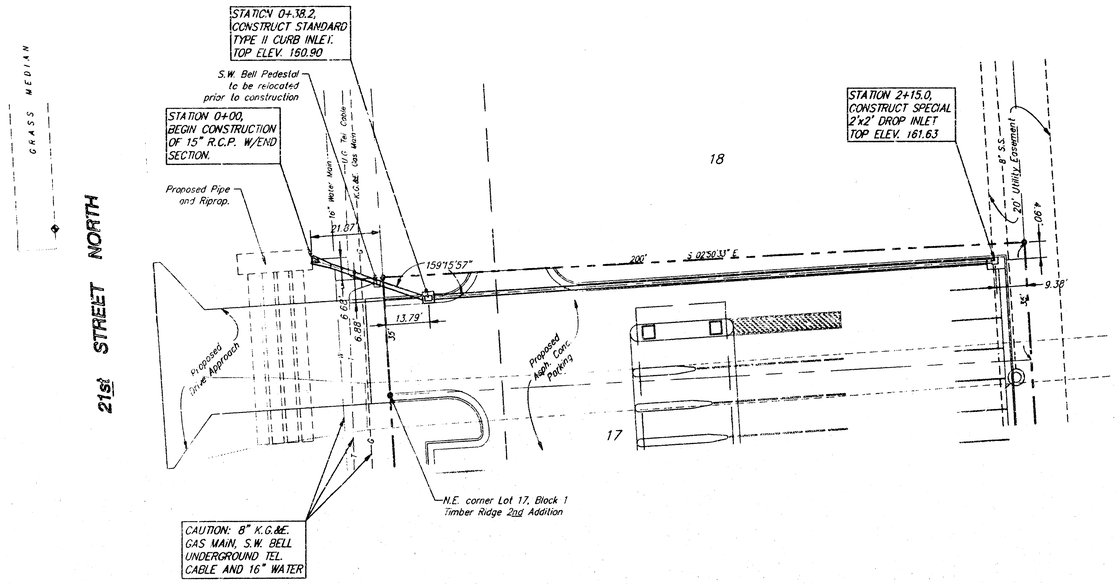
1. R.R. Spike in south face of H.L.P. 13' east of N.E. cor. Lot 17 @ Prop. line. Elevation = 161.33 City datum
2. "□" Cut on top of curb @ S.W. corner of median in 21st Street east of Lot 17, Elev. 160.70.

DRAINAGE CALCULATIONS

Runoff calculated by the Rational Formula: Q=CIA
Time of concentration assumed to be 15 minutes
Surface 96% impervious. C_5=0.87 C_{100}=0.89
I_5=4.56 in./hr. I_{100}=7.37 in./hr. Q_5=4.0 cfs/ac. Q_{100}=6.6 cfs/ac.
(C and I values from City of Wichita Drainage Criteria, App. A and D)
Total area of site = 0.85 acre.

Area A = 0.29 acre, drains to northwest through 8" pipe/driveway
Q_5=1.2 cfs Q_{100}=1.9 cfs

Area B = 0.56 acre. Drains to storm sewer, this sheet
Q_5=2.2 cfs Q_{100}=3.7 cfs
2'x2' Drop Inlet at Station 2+15.0
max. pond depth, h=0.5' Grate opening=1.28 sq. ft.
using orifice formula for capacity: $Q=0.6A\sqrt{2gh}$
$Q_{Capacity}$ =4.36 cfs (> Q_{100} for drainage area)
15" R.C.P. @ 0.36% slope (use ACPA Design Data 4)
$Q_{Capacity}$ =3.9 cfs (> Q_{100} for drainage area)



SRB

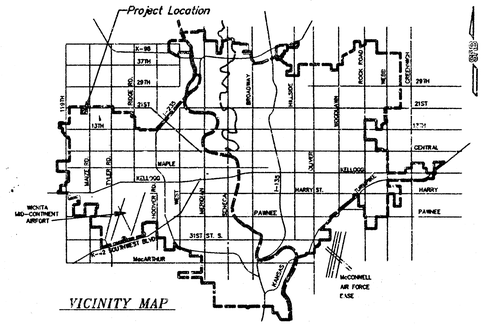
SCALE:
1"=20'-0" PLAN
1"=5'-0" PROFILE (V.)
IRON = ●

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

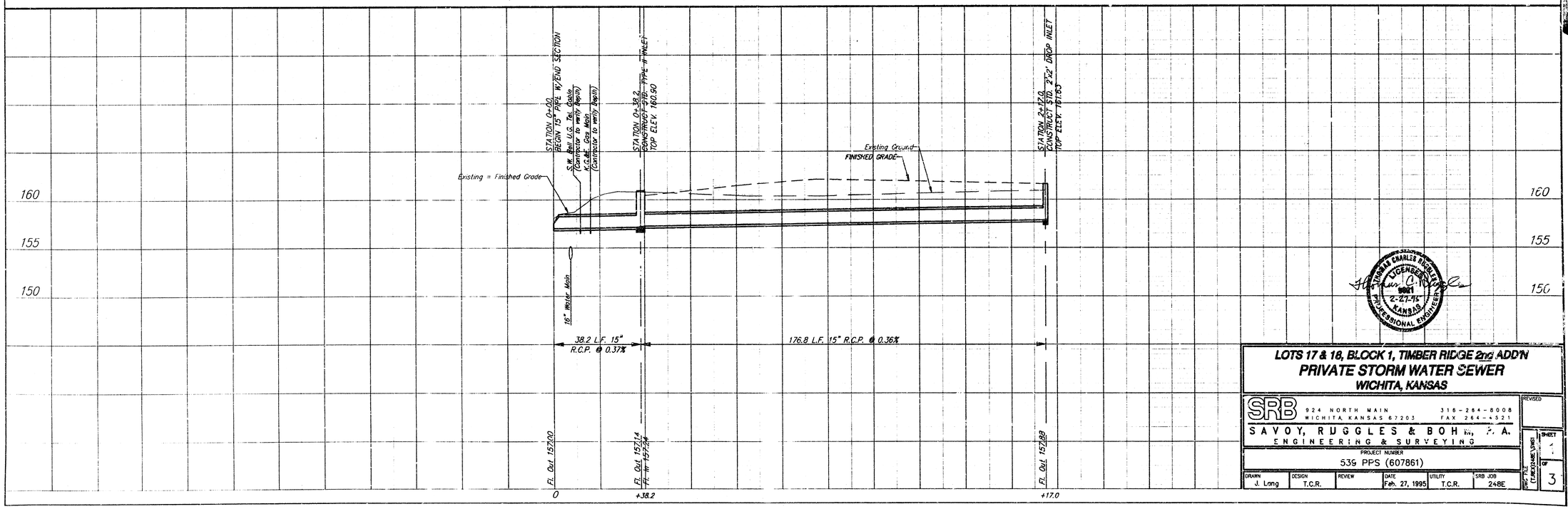
Sanitary Sewers _____
Storm Sewers VRH 2/27/95
Driveway Approaches _____
Water Mains _____
Paving _____

NOTE TO CONTRACTORS

Inspection and testing for this project are to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer.



VICINITY MAP



HOWARD CHARLES RUGGLES LICENSED PROFESSIONAL ENGINEER 9961 2-27-95 KANSAS

LOTS 17 & 18, BLOCK 1, TIMBER RIDGE 2nd ADD'N
PRIVATE STORM WATER SEWER
WICHITA, KANSAS

SRB 924 NORTH MAIN WICHITA, KANSAS 67203 316-264-8008 FAX 264-4521
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

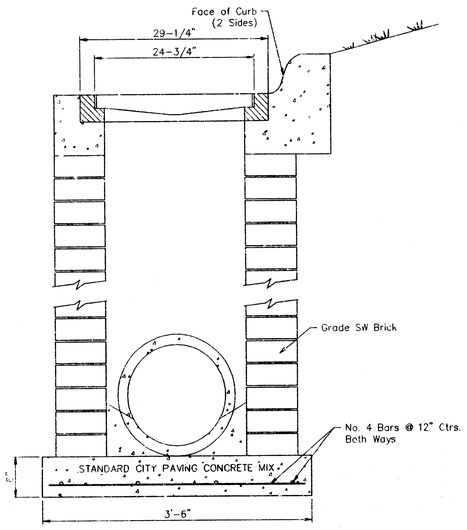
REVISED

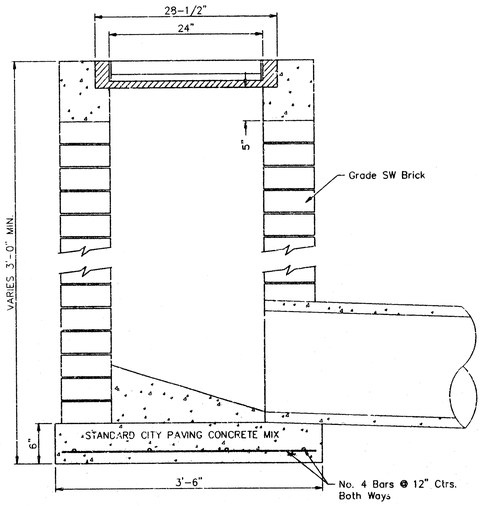
PROJECT NUMBER 539 PPS (607861)

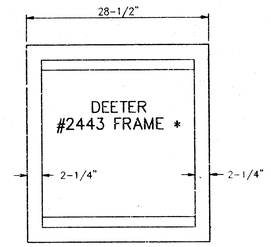
DRAWN	DESIGN	REVIEW	DATE	UTILITY	SRB JOB
J. Lang	T.C.R.		Feb. 27, 1995	T.C.R.	248E

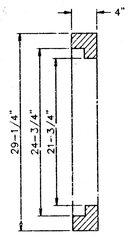
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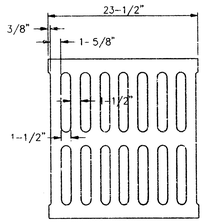
SHEET 3 OF 3



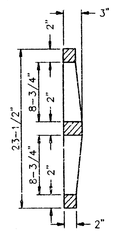








DEETER #2433 GRATE *



* Or Equal Approved by Engineer.

24" x 24" FRAME AND GRATE DETAIL

LOTS 17 & 18, BLOCK 1, TIMBER RIDGE 2nd ADD'N
2'x2' SPECIAL DROP INLET
WICHITA, KANSAS

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

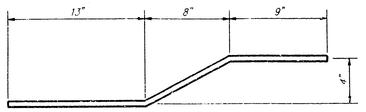
REVISED

PROJECT NUMBER
539 PPS (607861)

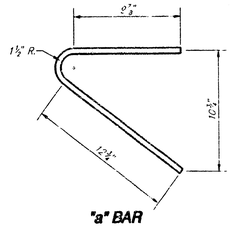
DRAWN	DESIGN	REVIEW	DATE	UTILITY	SRB JOB
J. Lang	T.C.R.		Nov. 27, 1995	T.C.R.	248E

WORK FILE: T:\DCD\248E\DROPINLT

SHEET 2 OF 3

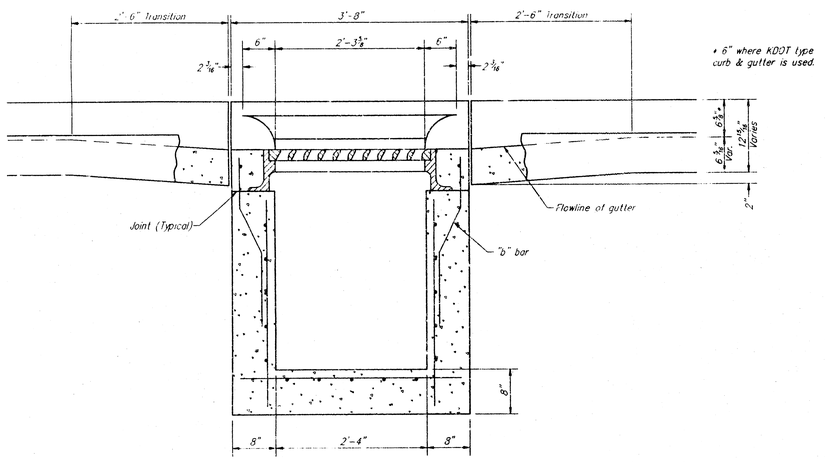


"b" BAR

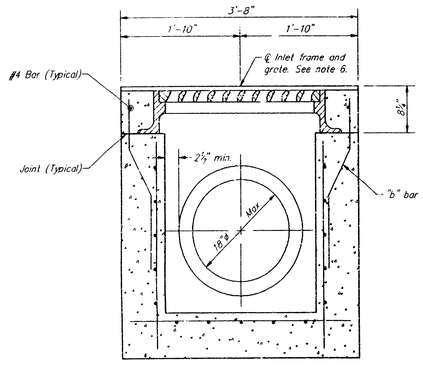


"a" BAR

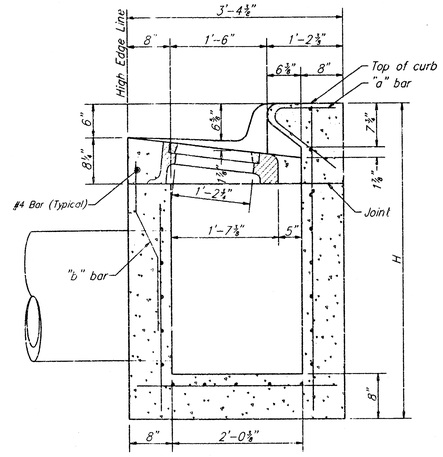
BENDING DIAGRAM



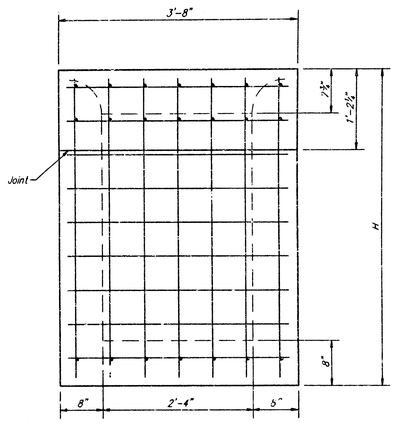
SECTION C-C



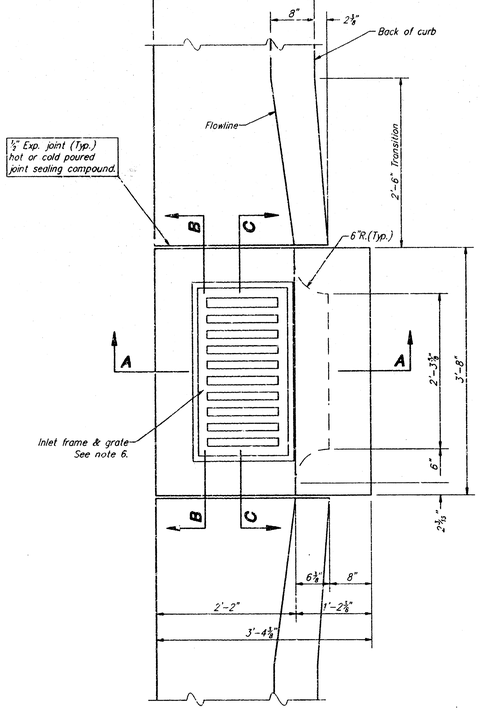
SECTION B-B



SECTION A-A



REAR WALL



PLAN

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 1 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.
9. Deeter Foundry, Inc. casting No. 2441 with style H grate is an approved equal to Neenah castings specified. Inlet drawing is based on Neenah castings and concrete walls and supports will require some field modifications to accommodate.

CITY OF WICHITA STANDARD
TYPE II CURB INLET DETAILS
INLET OPENING = 6" x 2'-3 5/8"

SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

REVISED

PROJECT NUMBER
539 PPS (607861)

DRAWN	DESIGN	REVIEW	DATE	UTILITY	SRB JOB
J. Lang	C.O.W.		Dec. 2, 1994		248E

SHEET 3 of 3

DWG. FILE: C:\DRAWING\TYPEII-S