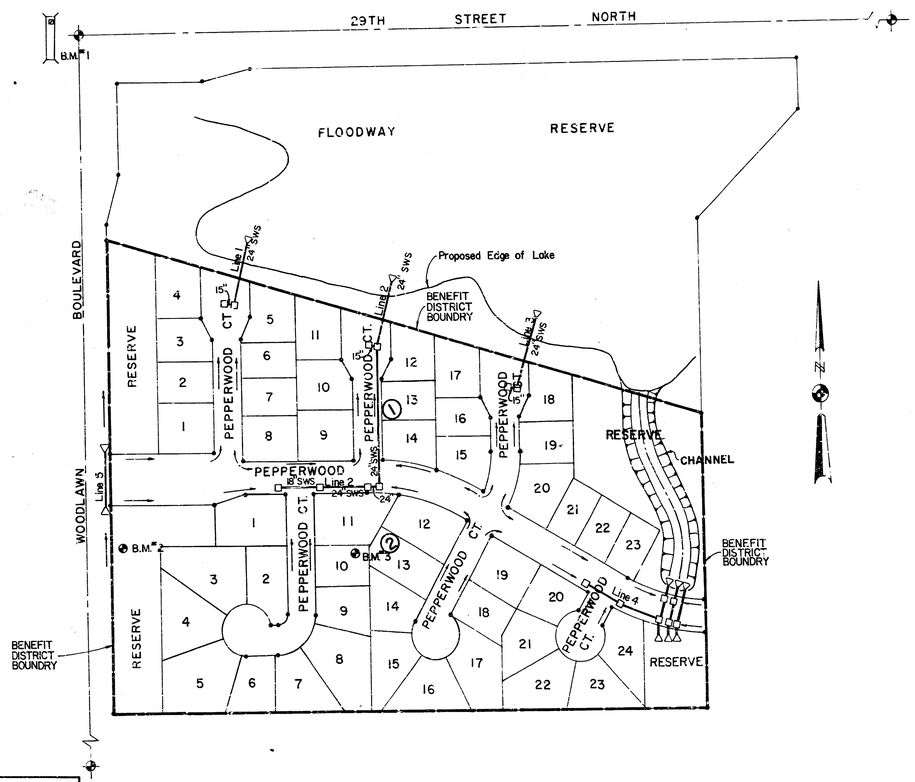
STORM SEWERS IN PEPPERWOOD ADDITION

PROJECT NO.
468-76-245-80836-000-000-001

S. W. S. NO. 170

CITY OF WICHITA, KANSAS
R. W. BRUGGEMAN, CITY ENGINEER



GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE WORK WITH PAVING AND SANITARY CONTRACTORS AND CONTACT RELEVANT UTILITY COMPANIES AND OTHER AGENCIES INVOLVED WITH THIS PROJECT SITE DEVELOPMENT.
2. FIELD ENGINEER SHALL TAKE TIES TO ALL IRONS AND THIMBLES IN THE PROJECT AREA BEFORE CONSTRUCTION BEGINS. FIELD ENGINEER SHALL REPLACE ALL SUCH IRONS AND THIMBLES DISTURBED DURING CONSTRUCTION.
3. THE TOPS OF INLETS AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATION OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
4. ALL METAL PIPES SHALL BE HELICALLY CORRUGATED PIPE FULLY COATED BOTH INSIDE AND OUTSIDE. THE COATING MAY BE BITUMINOUS OR POLYMERIC AS SPECIFIED IN AASHTO DESIGNATION: M246 - 78, TYPE B. ALL SUCH COATED CORRUGATED PIPE SHALL BE SMOOTH FLOW PIPES FOR SIZES 24" DIAMETER AND LARGER. ALL CONNECTIONS FOR THESE FULLY COATED OR FULLY PAVED AND FULLY COATED PIPES SHALL BE OF FAIRLY WATERTIGHT CONSTRUCTION USING HUGGER TYPE COUPLER OR EQUAL.
5. ALL CONCRETE SHALL BE "6 - SACK CONCRETE" UNLESS OTHERWISE NOTED.
6. THE RIPRAP FOR THIS PROJECT SHALL BE TYPE 3. THE TYPE 3 RIPRAP SHALL BE 12" RIPRAP. THE ROCK FOR RIPRAP AND GRAVEL PROTECTION SHALL BE HARD, DENSE, DURABLE AND SHALL BE REASONABLY WELL GRADED. THE SIZE RANGE OF ROCK USED SHALL BE A MAXIMUM OF ONE CUBIC FOOT AND A MINIMUM OF 1 1/2".
7. CONTRACTOR SHALL AVOID UNCOVERING EXISTING WATER LINES UNLESS ABSOLUTELY NECESSARY. UNCOVERING SHALL BE DONE ONLY IN THE PRESENCE OF A WATER DEPARTMENT ENGINEER.
8. CONTRACTOR SHALL HAVE THE OPTION OF INSTALLING PRECAST CONCRETE TYPE 1A CURB INLETS IN LIEU OF THE BRICK TYPE STRUCTURE. SEE STANDARD DETAIL PRECAST TYPE 1A CURB INLET DATED AUGUST, 1979. ALL INLETS SHALL BE OF THE SAME TYPE UNLESS OTHERWISE SPECIFIED ON PLANS.
9. CONTRACTOR SHALL MEET WITH ENGINEER AND OWNER PRIOR TO CONSTRUCTION TO ESTABLISH LIMITS OF CONSTRUCTION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR SEEDING AND MULCHING ALL AREAS DISTURBED IN THE CONTRACT OUTSIDE OF THE STREET RIGHT-OF-WAY.

INDEX TO DRAWINGS

BENCHMARKS

B.M. 1: "□" in E. end N. headwall first Culvert W. of Woodlawn on 29th St. N. Elev. = 1765.85

B.M. 2: Stp. Spk. N.E. fc. Temporary p.p. Elev. = 1786.53

B.M. 3: Stp. Spk. N. fc. Temporary p.p. Elev. = 1783.12

REVISED 25 AUG. 1981 - SHEETS 4 & 5

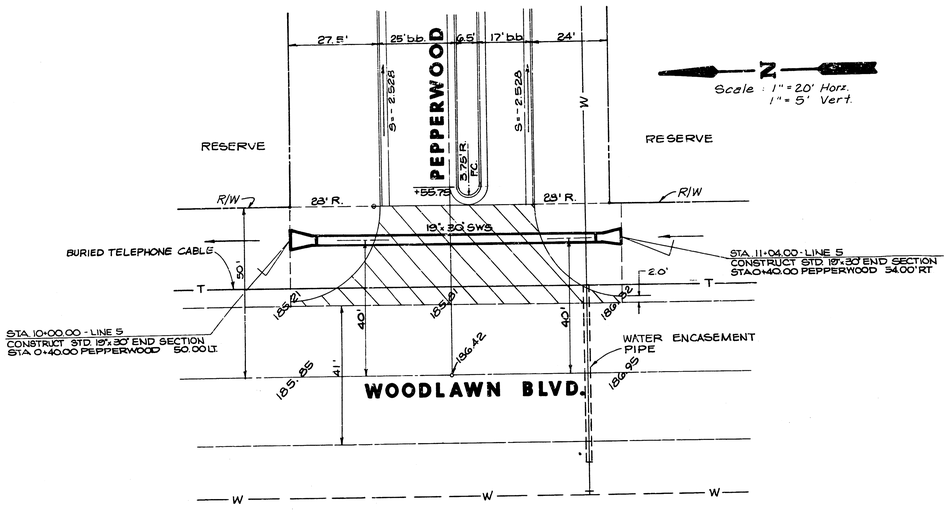
Van Doren - Hazard - Stallings
Architects • Engineers • Planners
Topeka Wichita Minneapolis

Sheet 1 of 7

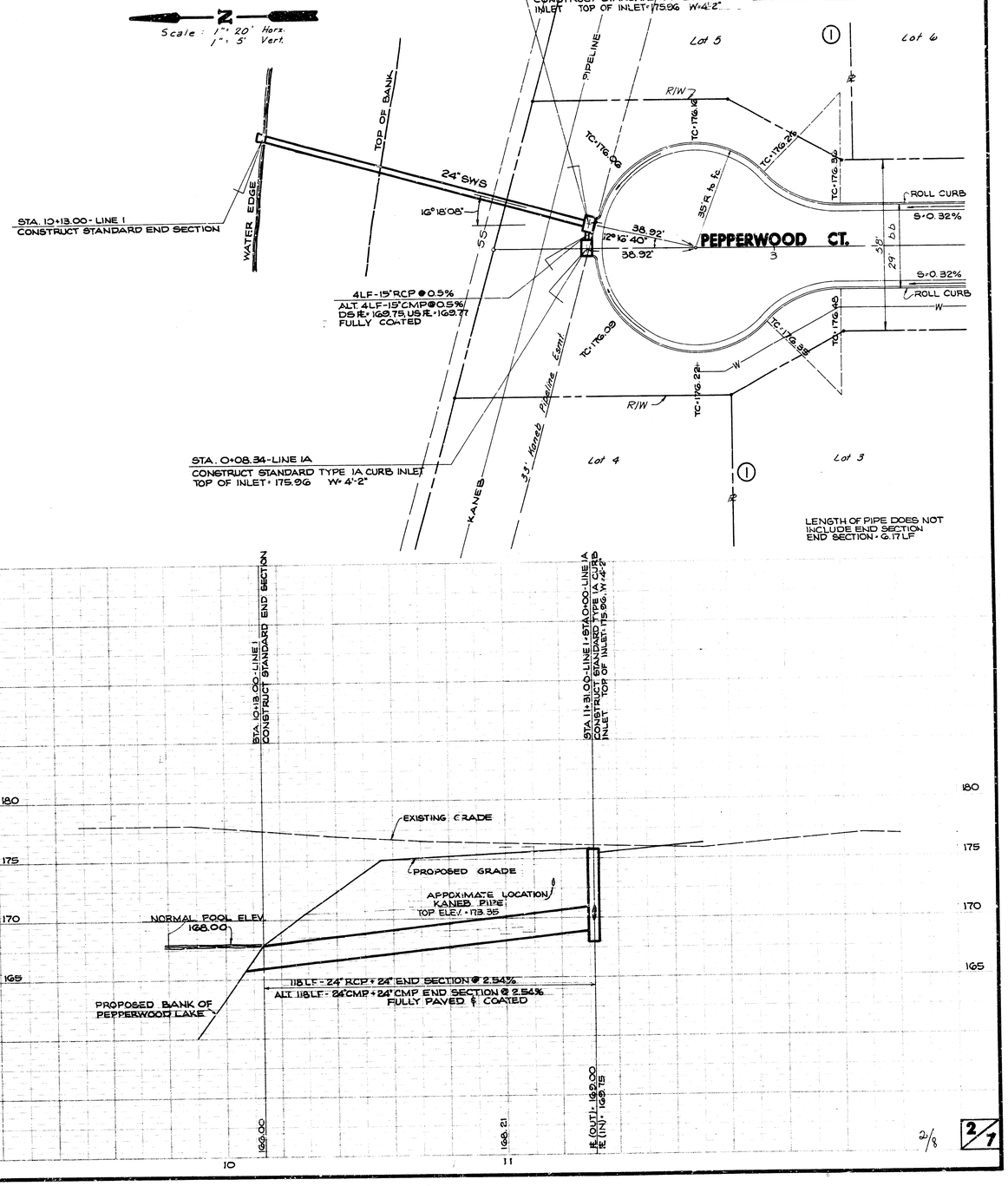
22 x 34

PEPPERWOOD ADDITION

468-76-245-80836-000-000-001



Scale : 1" = 20' Horz.
1" = 5' Vert.



PEPPERWOOD ADDITION

468-76-245-80836-000-000-001

Scale : 1" = 20' Horz.
1" = 5' Vert.

STA. 10+00.00 - LINE 2
CONSTRUCT STANDARD END SECTION

TOP OF BANK

WATER EDGE

24" SWS

4 LF - 15" RCP @ 0.5%
ALT 4 LF - 15" CMP @ 0.5%
DS IE = 169.25, US IE = 169.27
FULLY COATED

LENGTH OF PIPE DOES NOT INCLUDE END SECTION.
END SECTION = 6.11 LF

Lot 12

STA. 11+34.50 - LINE 2 + STA. 0+00 - LINE 2A
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 175.37 W = 4'-2"

PIPELINE

TC=175.57

TC=175.47

TC=175.67

TC=175.77

R/W

Lot 13

Lot 14

STA 14+39.35 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 178.50 W = 5'-0"
STA. 15+84.34 PEPPERWOOD 21.24' RT.

TC=178.54

TC=178.44

TC=178.34

ROLL CURB

FULL CURB

S=0.32%

S=0.52%

24" SWS

S=2.0%

PEPPERWOOD CT.

16°18'08"

12°16'40"

39.92'

35.02'

35' R. TO f.c.

S=0.52%

S=2.0%

ROLL CURB

TC=175.99

TC=176.09

TC=175.50

TC=175.63

TC=178.34

TC=178.44

TC=176.55

R/W

Pipeline Easmt

KANEB

35' Kaneb Pipeline Easmt

SEE SHEET 4 FOR INLET INFORMATION

PEPPERWOOD

24" SWS

STA. 0+08.34 - LINE 2A
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 175.37 W = 4'-2"

Lot 11

Lot 10

Lot 9

FULL CURB

S=0.32%

STA. 10+00.00 - LINE 2
CONSTRUCT STANDARD END SECTION

STA. 11+34.50 - LINE 2 + STA. 0+00 - LINE 2A
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 175.37 W = 4'-2"

STA. 14+39.35 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 178.50 W = 5'-0"
STA. 15+84.34 PEPPERWOOD
21.24' RT.

180
175
170
165

PROPOSED GRADE

EXISTING GRADE

APPROXIMATE LOCATION
KANEB PIPE
TOP ELEV. = 172.66

NORMAL POOL ELEV
168.00

PROPOSED BANK
PEPPERWOOD LAKE

EXISTING GRADE

PPOPOSED GRADE

134.50 LF - 24" RCP + 24" RCP END SECTION @ 0.74%
ALT. 134.50 LF - 24" CMP + 24" CMP END SECTION @ 0.74%
FULLY PAVED & COATED

304.85 LF - 24" RCP @ 1.0%
ALT 304.85 LF - 24" CMP @ 1.0%
FULLY PAVED & COATED

136.00 | 166.74 | 169.16 | 170.16 | 171.16 | 171.54

IE (OUT) = 167.00
IE (IN) = 168.50
IE (IN) = 168.25

IE (OUT) = 171.54
IE (IN) = 171.04

10 | 11 | 12 | 13 | 14

3/8

3/7

PEPPERWOOD ADDITION

468-76-245-80836-000-000-001

SEE SHEET 3 FOR INLET INFORMATION

Scale: 1" = 20' Horz.
1" = 5' Vert.

N

Lot 11

② STA. 14+47.69 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET TOP OF INLET = 178.48 W=5'-0"
STA. 5+76.00 PEPPERWOOD 21.24' RT.

R/W

W

24" SWS

18" SWS

FULL CURB

S=0.32%

PEPPERWOOD CT.

58'

29'

bb

ROLL CURB

PEPPERWOOD

35'

Lot 9

STA. 15+55.85 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 178.81 W=5'-0"
STA. 4+67.84 PEPPERWOOD 21.24' RT

① STA. 16+27.53 - LINE 2
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 179.04 W=4'-2"
STA. 3+96.16 PEPPERWOOD 20.92' RT

S=2.0%

STA 0+00.00 - LINE 4A
CONSTRUCT STD 42" END SECTION
STA. 12+53.10 PEPPERWOOD 47.96' RT.

STA 0+00.00 - LINE 4B
CONSTRUCT STD 42" END SECTION
STA. 12+55.82 PEPPERWOOD 47.11' RT.

STA 0+00.00 - LINE 4C
CONSTRUCT STD 42" END SECTION
STA. 12+66.57 PEPPERWOOD 46.40' RT.

FLOOD WAY

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

STA 0+29.35 - LINE 4C
CONSTRUCT STD TYPE 1A CURB INLET
TOP OF INLET = 177.12 W=4'-2"
STA. 12+94.50 PEPPERWOOD 20.92' RT.

18.08 LF - 42" RCP & END SECTION @ 0.3%
ALT 18.08 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.29

STA 10+97.77 - LINE 4
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.51 W=4'-2"
STA. 11+57.45 PEPPERWOOD 20.92' RT.

Lot 24

19.06 LF - 42" RCP & END SECTION @ 0.3%
ALT 19.06 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.29

18.58 LF - 42" RCP END SECTION @ 0.3%
ALT 18.58 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.29

18.08 LF - 42" RCP & END SECTION @ 0.3%
ALT 18.08 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.21 US I.E. = 171.28

STA 10+00.00 - LINE 4 + STA 0+27.25 LINE 4A
CONSTRUCT STD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+50.00 PEPPERWOOD 20.92' RT.

STA 0+26.75 - LINE 4B
CONSTRUCT STD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+57.25 PEPPERWOOD 20.92' RT.

STA 0+69.09 - LINE 4A
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+50.00 PEPPERWOOD 20.92' LT.

STA. 11+69.77 - LINE 4
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.85 W=4'-2"
STA 10+82.48 PEPPERWOOD 20.92' RT.

STA 0+69.52 - LINE 4B
CONSTRUCT STANDARD TYPE 1A CURB INLET
TOP OF INLET = 177.10 W=4'-2"
STA. 12+56.17 PEPPERWOOD 20.92' LT.

19.06 LF - 42" RCP & END SECTION @ 0.3%
ALT 19.06 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.00 US I.E. = 171.08

18.58 LF - 42" RCP & END SECTION @ 0.3%
ALT 18.58 LF - 42" CMP & END SECTION @ 0.3%
FULLY PAVED & COATED
DS I.E. = 171.00 US I.E. = 171.08

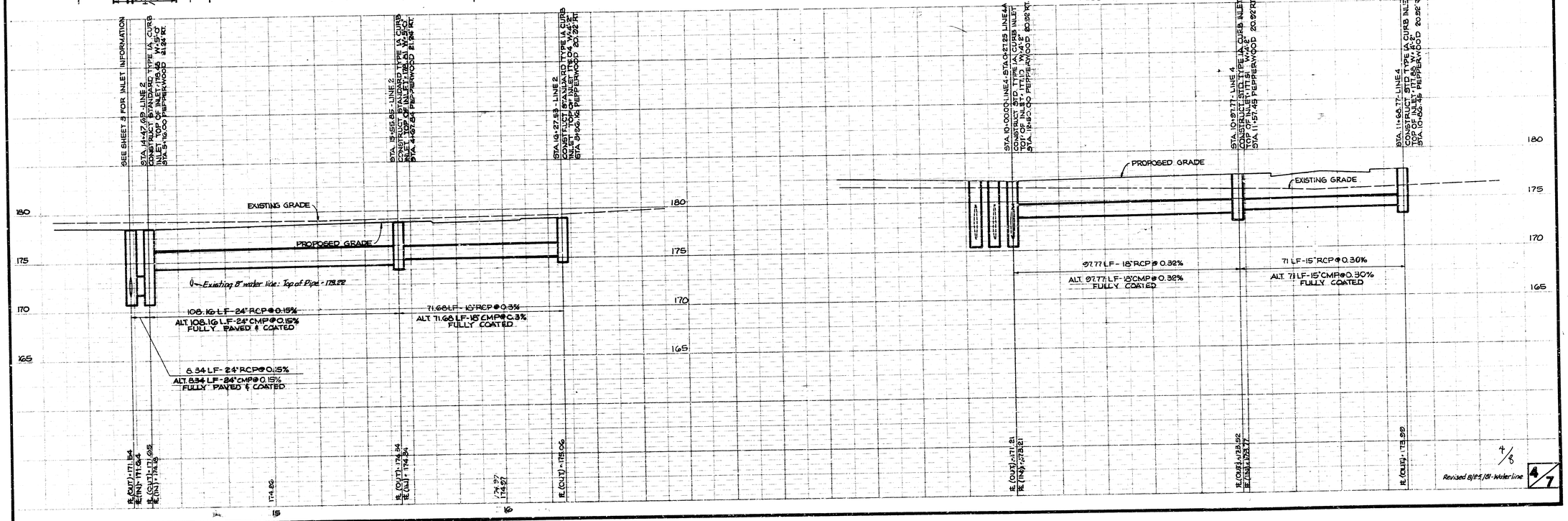
STA 0+24.66 - LINE 4C
CONSTRUCT STANDARD 42" END SECTION
STA. 12+67.78 PEPPERWOOD 47.78' LT.

STA 0+96.34 - LINE 4A
CONSTRUCT STANDARD 42" END SECTION
STA. 12+50.00 PEPPERWOOD 48.17' LT.

STA 0+95.34 - LINE 4B
CONSTRUCT STANDARD 42" END SECTION
STA. 12+56.90 PEPPERWOOD 48.07' LT.

① Lot 23

NOTE: LENGTH OF PIPE DOES NOT INCLUDED END SECTION.
42" END SECTION = 5.17 LF



4/8

Revised 8/23/01 - Waterline

4/7

PEPPERWOOD ADDITION

468-76-245-80836-000-000-001

NOTE
CAUTION - HIGH PRESSURE PIPELINE TO BE RELOCATED VERTICALLY BY KANEB UNDER SEPERATE CONTRACT

33' KANEB PIPELINE ESMT.

PROPERTY LINE

RESERVE 'A' FLOODWAY

TOP OF PROPOSED BANK

EROSION CONTROL HEADER

STA 4+67.90 P.T.

Δ = 42°47' 19"
C.L. = 171.56
R = 229.72'

21' BOTTOM / 5:1 SIDE SLOPE

STA 2+68.39 P.T.

7.99%

STA 2+96.34 P.C.

STA 1+07.86

WATERS EDGE

100'

STA 1+17.86 P.C.

R = 215.76'
C.L. = 170.53'
Δ = 45°17' 06"

TOP OF EXISTING BANK

TOP OF PROPOSED BANK

FORM MIN. OF TOP 1-0 EACH SIDE

#4 @ 16" CENTERS

4 - #4 CONT. @ 12" CENTERS

4 x 3 - 8 @ 16" CENTERS

4'-0"

12" MIN.

12" 3-#4 CONT.

TRENCH FOR CONCRETE WALL. POUR TO NEAT LINE OF EXCAVATION.

10.5'

5'

5:1

4'-0"

℄ SPILLWAY

EROSION CONTROL HEADER (NO SCALE)

R/W

PEPPERWOOD

R/W

STA. 5+00

TYPE 3 RIP RAP

TOP OF PROPOSED BANK

TYPE 3 RIP RAP

10'

NOTE: SEE PAGE 4 FOR INFORMATION RELATING TO INLETS WHICH WILL SUPPLY CHANNEL.

W

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

STA. 0+75.86

STA. 1+07.86 PROPERTY LINE

EXISTING GRADE

NOTE
CAUTION - HIGH PRESSURE PIPELINE TO BE RELOCATED VERTICALLY BY KANEB UNDER SEPERATE CONTRACT.

TOP OF PIPE ELEV. = 171.73

21' BOTTOM 5:1 SIDE SLOPES @ 0.71 %

EROSION CONTROL HEADER

20'

TYPE 3 RIP RAP

STA. 4+72.00 EROSION CONTROL HEADER

STA. 5+00.00 END OF PIPE

STA. 5+18.58 CONSTRUCT STANDARD TYPE 1A INLETS

STA. 5+60.48 CONSTRUCT STANDARD TYPE 1A INLETS

STA. 5+79.00 END OF PIPE

STA. 6+04.00 BEGIN TYPE 3 RIP RAP

STA. 6+14.00 BEGIN SIDE SLOPE

STA. 6+36.00 TOP OF BANK

RIP RAP

0.71 % SLOPE

10'

Approx. location of exist. 8" water line. Contractor shall varify before contruction begins.

175
170
165

FL = 168.00
FL = 168.17
FL = 168.23
FL = 168.35
FL = 168.58
FL = 168.70
FL = 168.88
FL = 169.08
FL = 169.24
FL = 169.41
FL = 169.5
FL = 169.77
FL = 169.93
FL = 170.15
FL = 170.30
FL = 170.48
FL = 170.66
FL = 170.84
FL = 171.00
FL = 171.08
FL = 171.21
FL = 171.29
FL = 171.54
ELEV. 178.00

1 2 3 4 5 6

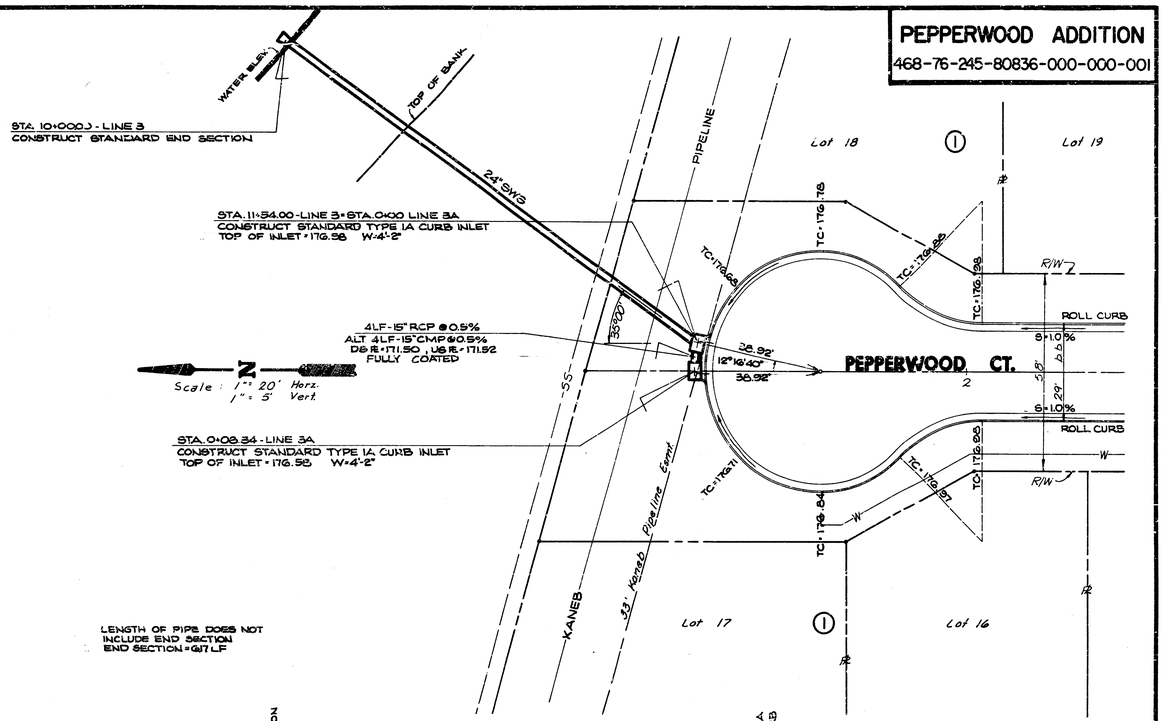
5/8

Revised 8/28/81 Water line

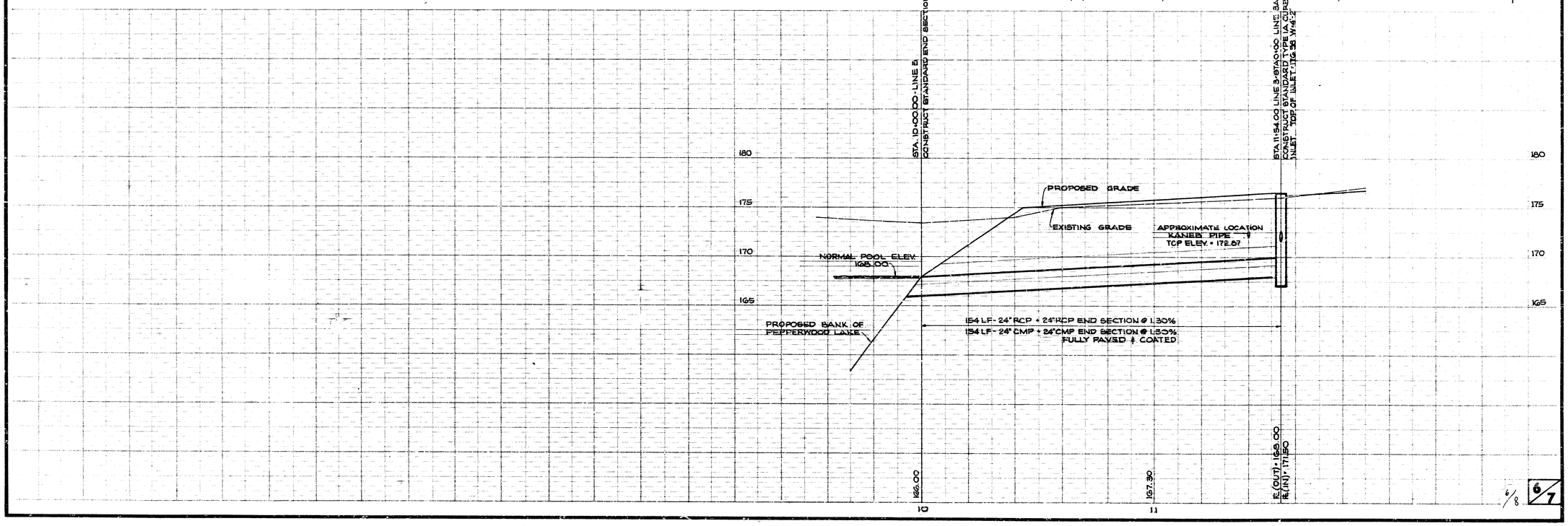
5/7

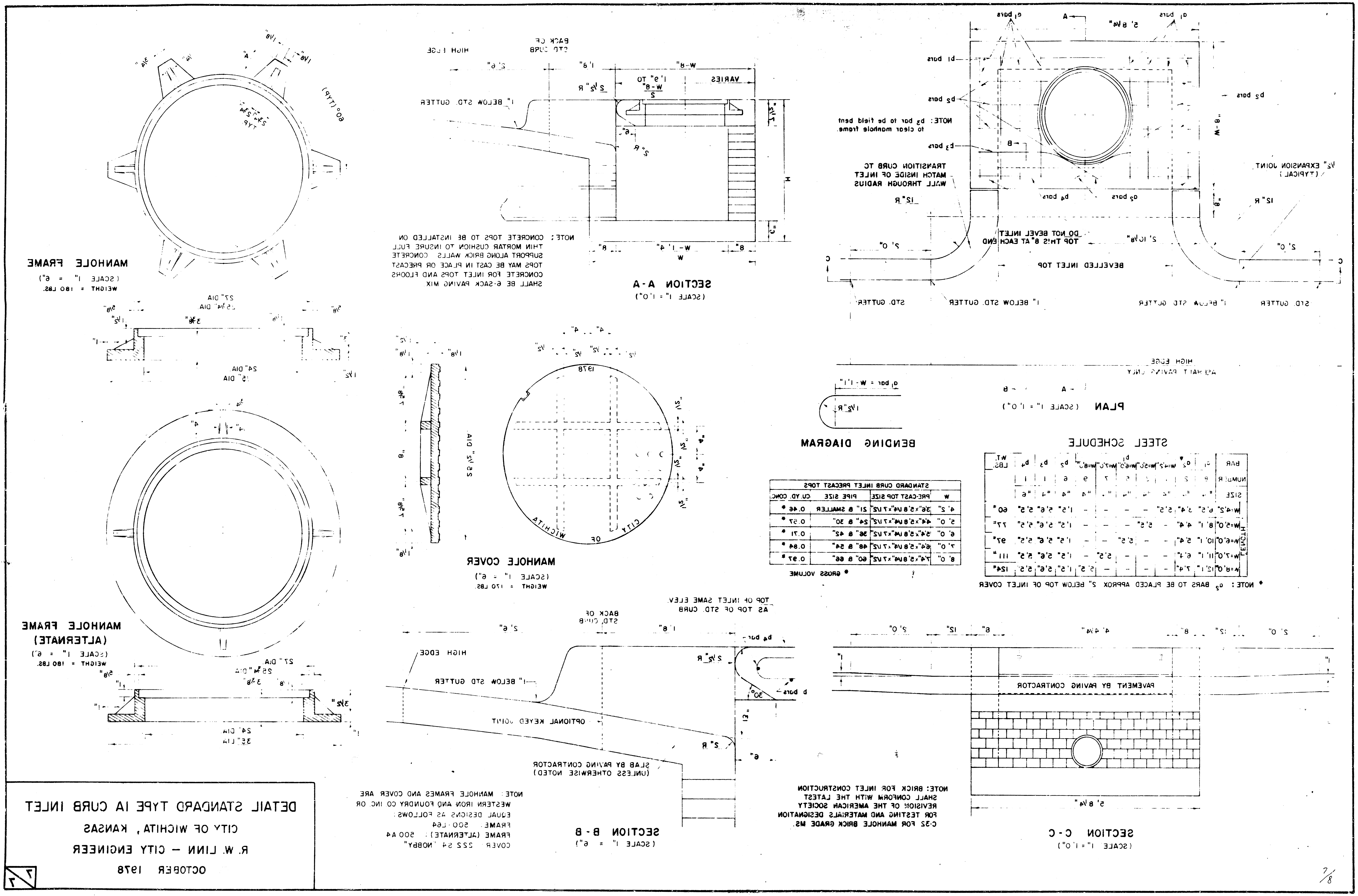
PEPPERWOOD ADDITION

468-76-245-80836-000-000-001



LENGTH OF PIPE DOES NOT INCLUDE END SECTION
END SECTION = 6.17 LF





STANDARD CURB INLET PRECAST TOPS

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'2"	3'6"x5'8 1/4"x7 1/2"	21" & SMALLER	0.46 *
5'0"	4'4"x5'8 1/4"x7 1/2"	24" & 30"	0.57 *
6'0"	5'4"x5'8 1/4"x7 1/2"	36" & 42"	0.71 *
7'0"	6'4"x5'8 1/4"x7 1/2"	48" & 54"	0.84 *
8'0"	7'4"x5'8 1/4"x7 1/2"	60" & 66"	0.97 *

* GROSS VOLUME

STEEL SCHEDULE

BAR	a_1	a_2 *	b_1 W=4'2"	b_1 W=5'0"	b_1 W=6'0"	b_1 W=7'0"	b_1 W=8'0"	b_2	b_3	b_4	WT. LBS.
NUMBER	8	2	[illegible]	[illegible]	5	7	9	6	1	1	
SIZE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	#4	#4	#4	#6	
LENGTH W=4'2"	6'5"	5'4"	5'5"	–	–	–	–	1'5"	5'6"	5'5"	60#
LENGTH W=5'0"	8'1"	4'4"	–	5'5"	–	–	–	1'5"	5'6"	5'5"	77#
LENGTH W=6'0"	10'1"	5'4"	–	–	5'5"	–	–	1'5"	5'6"	5'5"	97#
LENGTH W=7'0"	11'1"	6'4"	–	–	–	5'5"	–	1'5"	5'6"	5'5"	111#
LENGTH W=8'0"	12'1"	7'4"	–	–	–	–	5'5"	1'5"	5'6"	5'5"	124#

* NOTE: a_2 BARS TO BE PLACED APPROX 2" BELOW TOP OF INLET COVER

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

R. W. LINN – CITY ENGINEER

OCTOBER 1978

7/7

PEPPERWOOD ADDITION
S.W.S. NO. 170
CROSS SECTIONS