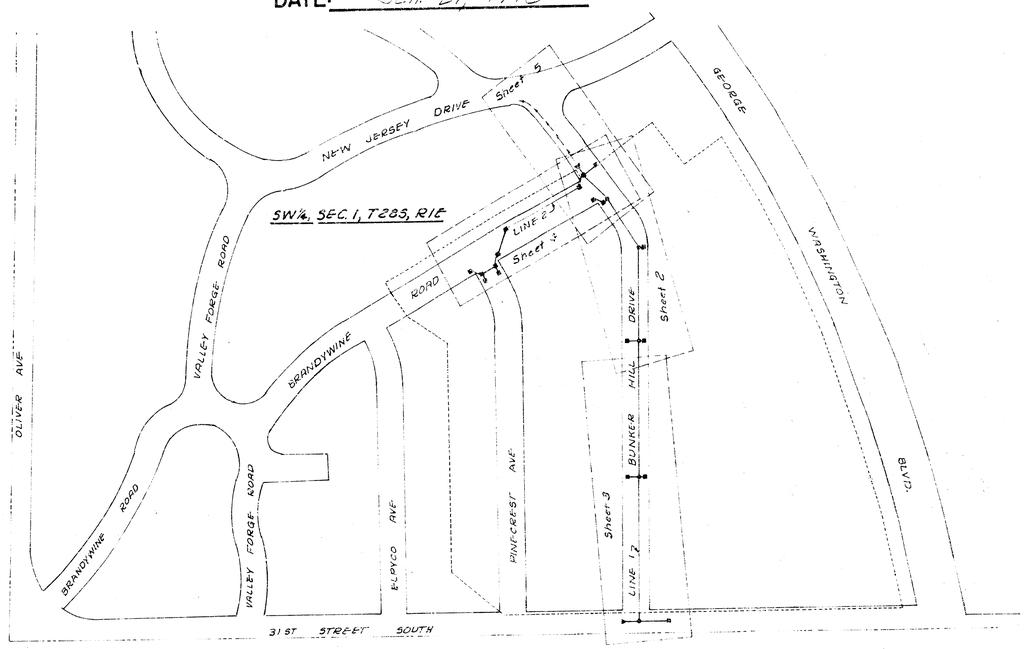
STORM WATER SEWER NO. 130

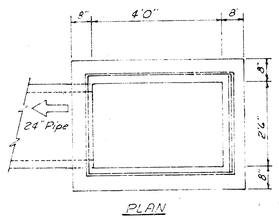
CITY OF WICHITA, KANSAS

R. W. LINN, CITY ENGINEER

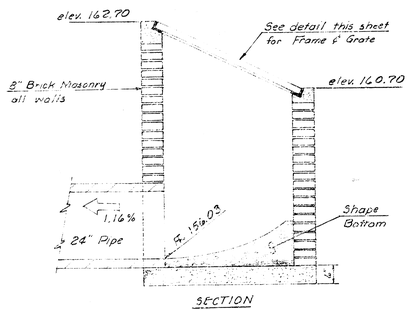
PROJECT NO. DBKA 577095

DATE: Jan. 27, 1978





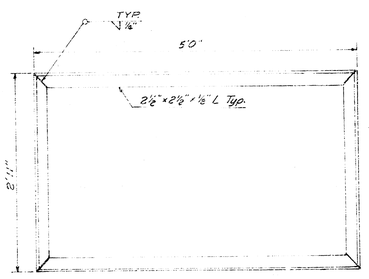
PLAN



SECTION

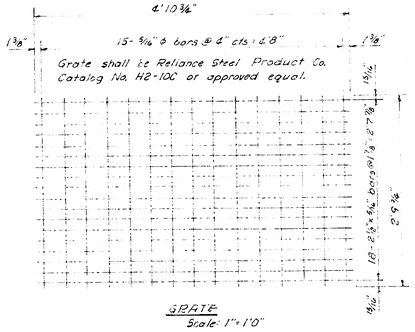
SPECIAL INLET STA. 12+36

Scale: ½"=1'0"



FRAME

Scale: 1"=1'0"



GRATE

Scale: 1"=1'0"

Project No. DBKA 577095 SWS #130 Sheet 1 of 7

BM 146.50 R.R. Spk. So. Face RR 70' West of W.L. Bunker Hill Dr. & 34 No. of & 31st St. So.

Constr. Type 1A Curb Inlet, Top 149.32
W=3'10", Floor Elev. 145.43
Install 44' of 15" Pipe @ 1.09%
USFL 145.62, DSFL 145.50
Constr. Type B Manhole Sta. 3+48 6' Lt. Street &
Street Paving Sta. 9+00

SCALE: 1" = 20'

Install 11' of 15" Pipe @ 3.44%
USFL 148.3 DSFL 147.9
Constr. Type 1A Curb Inlet, Top 152.04
W=3'10", Floor Elev. 148.30
Constr. Type B Manhole Sta. 5+93 6' Lt. Street &
Street Paving Sta. 7+20

BUNKER HILL DRIVE

8" Water Line

Remove 18" Tree

Constr. Type 1A Curb Inlet, Top 146.71
W=3'10" Floor Elev. 142.91
Install 35' of 15" Pipe @
USFL 143.0; DSFL 142.5

Sta. 1+22, Constr. Type 1A
Curb Inlet, W=4'10", Fl. Elev. 140.87

Constr. Headwall
See Sheet 5

Constr. Outfall Ditch
See Sheet 5

Start Headwall Sta. 1+00

Constr. Manhole Sta. 2+00 6' Rt. Street &
Street Paving Sta. 10+43.27
Install 44' of 18" Pipe @ 1.36%
USFL 143.50; DSFL 143.35

Constr. Type 1A Curb Inlet, Top 147.20
W=3'10", Floor Elev. 143.29
Install 25' of 15" Pipe @ 1.15%
USFL 143.90; DSFL 143.60

Constr. Type 1A Curb Inlet, Top 147.20
W=3'10", Floor Elev. 143.71

Constr. Type 1A Curb Inlet, Top 151.92
W=3'10", Floor Elev. 148.2
Install 24' of 15" Pipe @ 1.25%
USFL 148.2 DSFL 147.9

See Line 2

DLK 23K
WSK

LINE 1

Sta. 1+00 Start Headwall
Sta. 1+07.5 Start Pipe
Sta. 1+22 Type 1A w=4'10" Curb Inlet, Top=146.55
Sta. 2+30 Type B 5'ø Manhole, Top 147.09
6" Water
Sta. 3+46 Type B 5'ø Manhole, Top 148.85
Sta. 5+46 Type B 5'ø Manhole, Top 151.92
Sta. 6+00 Match Line
Lt Curb
Existing Ground

155
150
145
140

141.04 | 141.13 | 141.13 | 141.30 | 141.66 | 142.09 | 142.54 | 144.23 | 144.85 | 146.54 | 146.89

78' of 36" RCP @ +0.81%
Alt. 78' of 34" CMP Fully Paved @ 0.81%
and full asphalt coated.

148' of 30" RCP @ +1.15%
Alt. 142' of 30" CMP Fully Paved @ 1.15%
and full asphalt Coated

200' of 30" RCP @ +1.07%
Alt. 200' of 30" CMP Fully Paved @ 1.07%
and full asphalt Coated

58' of 24" RCP @ +1.52%
Alt. 58' of 22" CMP Fully Paved
@ 1.52% and full asphalt Coated

0 1 2 3 4 5 6

BM 166.50 R.R. Spk. So. Face P.P. 70' West of W.L. Bunker Hill Dr. & 36' No. of & 31st St. So.

SCALE: 1"=20'

Fill Area, Constr. Ditch Plug, Top 163.4 ± with 3:1 ± sides. Cost to be included in other bid items. (Fill = 251 CY)

Cut Area, Constr. Ditch from existing 2'x8' RCBC Tr. No. 23 to Spec. Inlet Top 160.70. Ditch bottom 2'± with 3:1 ± sides. Cost to be included in other bid items. (Cut = 45 + CY)

Constr. Spec. Inlet Sta. 10+35 See detail, Sheet 1

Install 24" Pipe

Future 49th Street

12'x12' RCBC

Install 71' of 15" Pipe @ 1.82% USFL 154.7; DSFL 154.5

Remove Tree

Constr. Type 1A Curb Inlet Top 158.90 w = 3.10' Floor Elev. 154.51

Constr. Type B Manhole Sta. 8+42 Street Paving Sta. 7+00

Remove Tree

BUNKER HILL DRIVE

Constr. Manhole Sta. 12+46 Street Paving Sta. 11+79

Install 38' of 15" Pipe with 9:13 sections @ USFL 149.3, DSFL 154.0

Constr. Type 1A Curb Inlet Top 158.65 w = 3.10' Floor Elev. 154.71

Install 28' of 15" Pipe @ 1.67% USFL 154.9, DSFL 154.5

Sta. 4+00 North Line

Sta. 8+42 Type B S ø Manhole Top 158.27

Ground Line

Lt Curb

LINE 1

Sta. 11+79 ± Type B S ø Manhole Top 164.3

Spec. Inlet Sta. 10+35 ±

Lt Curb

Ground Line

Shape Ditch

Ditch Grade @ +1.0% ±

242' of 24" RCP @ +1.52%
Alt. 242' of 24" CMP Fully Paved @ 1.52% and full asphalt Coated

324' of 24" RCP @ +1.16%
Alt. 324' of 24" CMP Fully Paved @ 1.16% and full asphalt Coated

70' of 24" RCP @ +1.14%
Alt. 70' of 24" CMP Fully Paved @ 1.14% and full asphalt Coated

165													
160													
155													
150													
145													
	147.27	149.29	150.81	152.16	153.28	154.44	155.63						
	6	7	8	9	10	11	12						

Project No. DBKA 577045 SWSM 130 LINE 1 Sheet 3 of 7

B.M. 149.13 "a" on Top of E. Cb. of Pinecrest 26.2' S. of S.L. of Brandywine

B.M. 148.93 "a" on Top of W. Cb. of Elpyco 26.8' S. of S.L. of Brandywine

Constr. Type IA Curb Inlet, Top 148.80
W=3'10", Floor Elev. 144.41

Install ± of 15" Pipe
USFL 144.80; DSFL 144.70

Constr. Type IA Curb Inlet, Sta. 3+82
W=3'10", Floor Elev. 144.02

Constr. Type IA Curb Inlet, Sta. 2+84
Street Paving Sta. 4+30
W=3'10", Floor Elev. 143.61

Saw Joint & Remove Part normal

Constr. Type IA Curb Inlet, Top 148.84
W=3'10", Floor Elev. 145.83

Install ± of 15" Pipe
USFL 145.17, DSFL 145.07

Constr. Type IA Curb Inlet, Sta. 3+59
W=3'10", Floor Elev. 144.81

Constr. Type IA Curb Inlet, Sta. 3+87
Street Paving Sta. 5+50
W=3'10", Floor Elev. 145.11

PINECREST AVE.

See Line 1

See Line 1

8" Water Line

8" San. Sewer

8" D.I. water Line

BUNKER HILL DRIVE

8" Sewer Line

Line 1

BRANDYWINE ROAD

60'

Line 2

Constr. Type IA Curb Inlet, Sta. 0+24
Street Paving Sta. 0+78
W=3'10", Floor Elev. 141.33

Constr. Type IA Curb Inlet, Sta. 0+90
W=4'10" (See Line 1) Floor Elev. 140.97

Sta. 0+00

See Line 1

Constr. Type IA Curb Inlet, Sta. 2+45
Street Paving Sta. 4+62
W=3'10", Floor Elev. 142.90
Field Engineer to adjust inlet to located approx. 5' north or south of garage driveway.

LINE 2

Curb Inlet See Line 1
Sta. 0+00
Top 146.95

Sta. 0+24 Type IA Curb Inlet
Top 147.01

Sta. 2+45 Type IA Curb Inlet
Top 147.85

Sta. 2+84 Type IA Curb Inlet
Top 148.30

Sta. 3+42 Type IA Curb Inlet
Top 148.72

Sta. 3+55 Type IA Curb Inlet
Top 148.74

Sta. 3+87 Type IA Curb Inlet
Top 148.94

Existing Ground

Top of Proposed Rt. Rolled Curb

8" San Sewer

36" Out 141.30
141.35

24" of 24" RCP @ +0.30%
Fill 29' of 24" CMP Fully Paved
@ 0.80% and Full asphalt Coated

141.58
141.63

216' of 24" RCP @ +3.70%
Fill 209' of 24" CMP Fully Paved
@ 0.70% and Full asphalt Coated

143.15
143.40

49' of 21" RCP @ +0.90%
Fill 48' of 21" CMP @ 0.90%
and Full asphalt Coated

143.06
144.02

28' of 21" RCP @ +0.80%
Fill 23' of 21" CMP @ 0.80%
and Full asphalt Coated

144.85
144.60

36' of 15" RCP @ +0.90%
Fill 37' of 15" CMP @ 0.90%
and Full asphalt Coated

145.00
145.09

29' of 15" RCP @ +0.80%
Fill 28' of 15" CMP @ 0.80%
and Full asphalt Coated

145.30
148.94

150
145
140

0 141.35
1 142.13
2 142.83
3

Project No. DBKA 577095 SWS 7130 Line 2 Sheet 4 of 7

BM 122.50 R.R. Spk. 3a Face PP 70' West of WL Bunker Hill Dr. & 34th Av. of & 31st St. So.

EARTHWORK ON THIS SHEET TO BE PAID FOR AS LUMP SUM BID FOR "OUTLET DITCH". USING DITCH SECTIONS AS SHOWN, THE DOUBLE END AREA EARTHWORK IS 528 C.Y.

Scale: 1"=20'

Constr. 3' Bottom Ditch

Earthwork Limits

Remove 16' of 18" CMP

18" CMP

Gravel Edge

30" RCP

Earthwork Limits

NEW JERSEY

Approx. R/W Line

RUNKER HILL DRIVE

Line 1

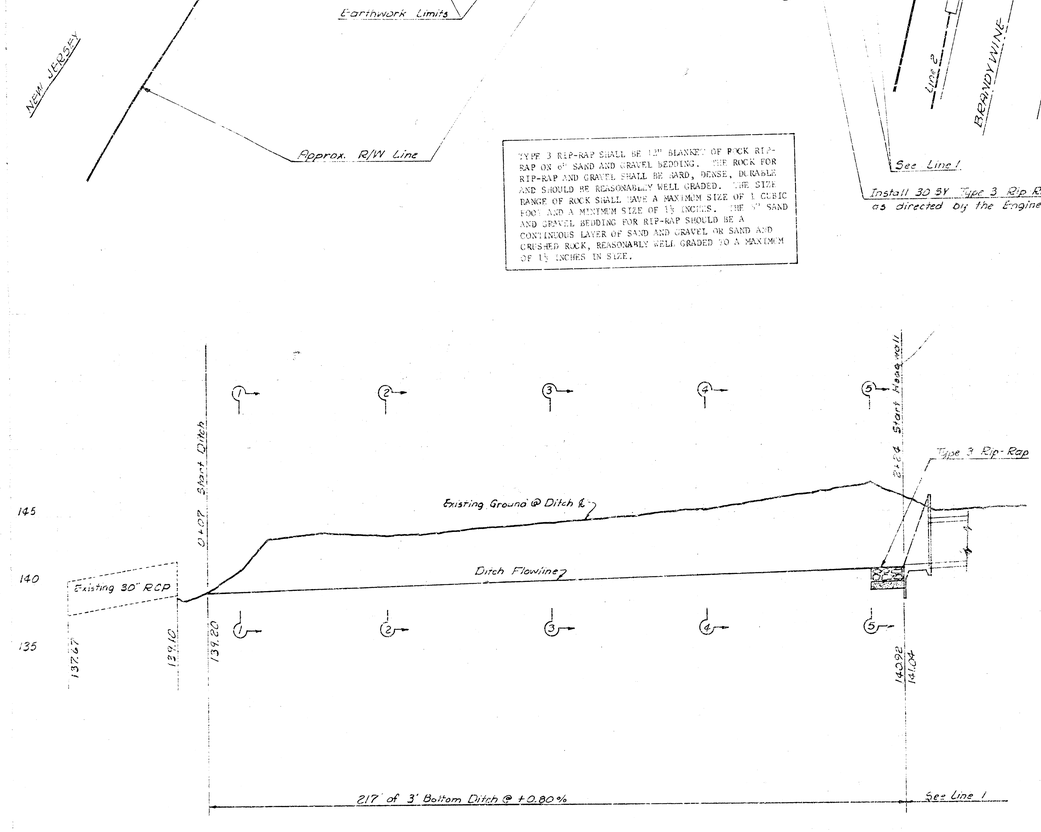
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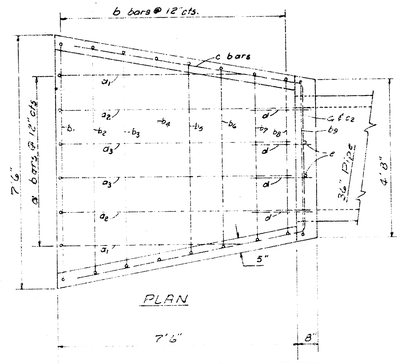
BRANDYWINE

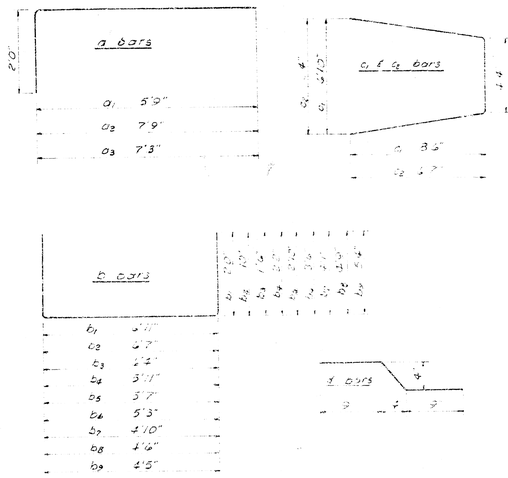
See Line 1

Install 30 SY Type 3 Rip Rap as directed by the Engineer

TYPE 3 RIP-RAP SHALL BE 12" BLANKET OF ROCK RIP-RAP ON 6" SAND AND GRAVEL BEDDING. THE ROCK FOR RIP-RAP AND GRAVEL SHALL BE HARD, DENSE, DURABLE AND SHOULD BE REASONABLY WELL GRADED. THE SIZE RANGE OF ROCK SHALL HAVE A MAXIMUM SIZE OF 1 CUBIC FOOT AND A MINIMUM SIZE OF 1½ INCHES. THE 6" SAND AND GRAVEL BEDDING FOR RIP-RAP SHOULD BE A CONTINUOUS LAYER OF SAND AND GRAVEL OR SAND AND CRUSHED ROCK, REASONABLY WELL GRADED TO A MAXIMUM OF 1½ INCHES IN SIZE.







BILL OF MATERIAL

ITEM	QUANTITY	UNIT
Concrete	2.5	C.Y.
Reinforcing Steel	157.21	Lbs.

BAR SCHEDULE

BAR	SIZE	LENGTH	NO.	SHAPE	WEIGHT
a_1	#6	7'9"	2		15.35
a_2	#6	9'9"	2		19.33
a_3	#6	9'3"	2		18.34
b_1	#3	10'11"	1		3.79
b_2	#6	3'3"	1		3.51
b_3	#4	9'2"	1		6.23
b_4	#6	10'3"	1		6.55
b_5	#3	11'3"	1		7.83
b_6	#6	10'3"	1		8.17
b_7	#6	13'0"	1		9.60
b_8	#6	12'0"	1		8.55
b_9	#3	15'0"	1		17.08
c_1	#6	21'6"	1		14.34
c_2	#3	17'3"	1		11.60
c_3	#6	4'0"	2		5.01
c_4	#4	3'6"	2		3.34
d	#6	21'5"	2		5.34
e	#6	1'6"	2		1.38
f	#6	7'0"	5		7.55

HEADWALL
Scale: 1/2"=1'0"

