STORM WATER SEWER NO. 132

GENERAL NOTES

1. FIELD ENGINEER SHALL TAKE TIES TO ALL IRONS AND THIMBLES WHICH MAY BE DESTROYED. FIELD ENGINEER SHALL REPLACE ALL IRONS AND THIMBLES WHICH ARE DESTROYED.

2. ALL CONCRETE UNLESS OTHERWISE NOTED SHALL BE "6-SACK CONCRETE".

3. ~~ALL METAL PIPES SHALL BE FULL ASPHALT COATED HELICALLY CORRUGATED METAL PIPES FOR SIZES 24" IN DIAMETER (OR EQUIVALENT ARCH PIPE) OR SMALLER, AND FULL ASPHALT COATED FULLY PAVED CORRUGATED METAL PIPE FOR SIZES 24 INCHES IN DIAMETER (OR EQUIVALENT ARCH PIPE) OR LARGER.~~

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

5. ALL CURB INLETS TO BE TYPE I-A.

6. CONTRACTOR TO COORDINATE WORK WITH PAVING AND SANITARY CONTRACTORS.

7. CONTRACTOR TO COORDINATE THEIR WORK EFFORTS WITH UTILITY COMPANIES, AND OTHER AGENCIES RELATED WITH THE PROJECT SITE DEVELOPMENT.

8. SEE PAVING PLAN FOR STREET LAYOUT.

9. LOCATION OF CURB INLETS TO BE DETERMINED FROM BACK-OF-CURB LOCATION SHOWN ON STREET PAVING PLAN.

10. ALL METAL PIPES SHALL BE HELICALLY CORRUGATED 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 PIPE FOR SIZES 24" OR LARGER. ALL CONNECTIONS SHALL BE FAIRLY WATER TIGHT CONSTRUCTED USING HUGGER TYPE COUPLER OR EQUAL.

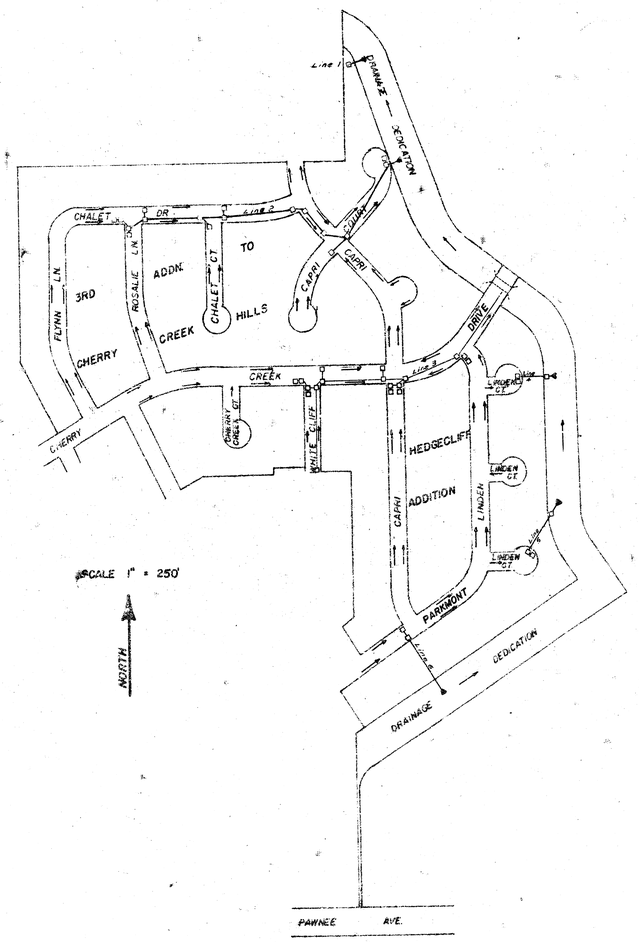


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LINE 3	P_p 6-8
LINES 4 & 5	P. 9
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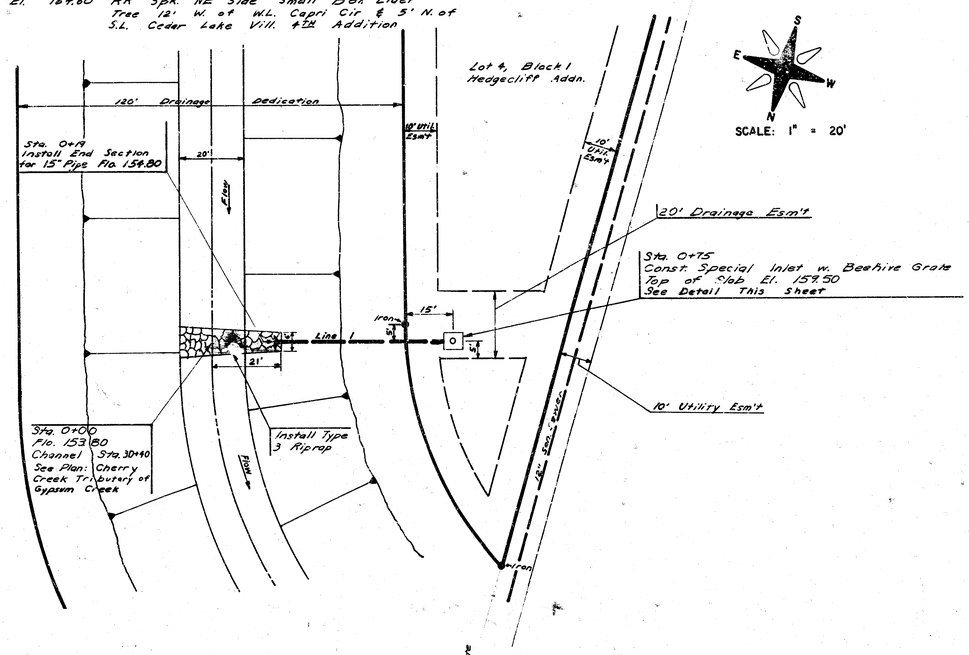
CITY OF WICHITA, KANSAS

R. W. LINN, CITY ENGINEER

PROJECT NO. 468-76-245-80646-000-000-001

DATE: _____

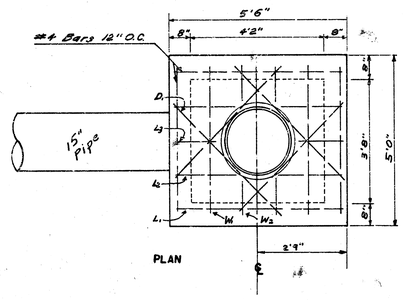
B.M. El. 178.46 Top W CD. Rosalie 58' S of S.L. Cherry Creek Drive
B.M. El. 164.60 RR Spk. NE Side Small Box Elder Tree 12' W of W.L. Capri Cir & 5' N. of S.L. Cedar Lake Vill. 4th Addition

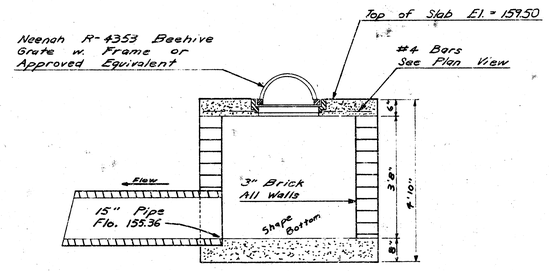


SCALE: 1" = 20'

SPECIAL INLET DETAIL

SCALE 1/2" = 1'





Bar	Quan.	Size	Length	Weight
W_1	4	#4	4'4"	11.6 lbs.
W_2	4	#4	1'2"	3.1 lbs.
L_1	2	#4	5'2"	6.9 lbs.
L_2	4	#4	2'0"	5.4 lbs.
L_3	2	#4	1'6"	2.0 lbs.
D_1	4	#4	4'6"	12.0 lbs.
Total Rebar				41.0 lbs.
C.Y. Concrete				1.2 C.Y.
Sq. Ft. 8" Brick Wall				67.2 S.F.

TABLE OF QUANTITIES

PLAN
Date Revised 7/77
Scale 1" = 20'
Sheet No. 1 of 2

PROFILE

LINE 1

Vertical Scale 1"=5'
Horizontal Scale 1"=20'

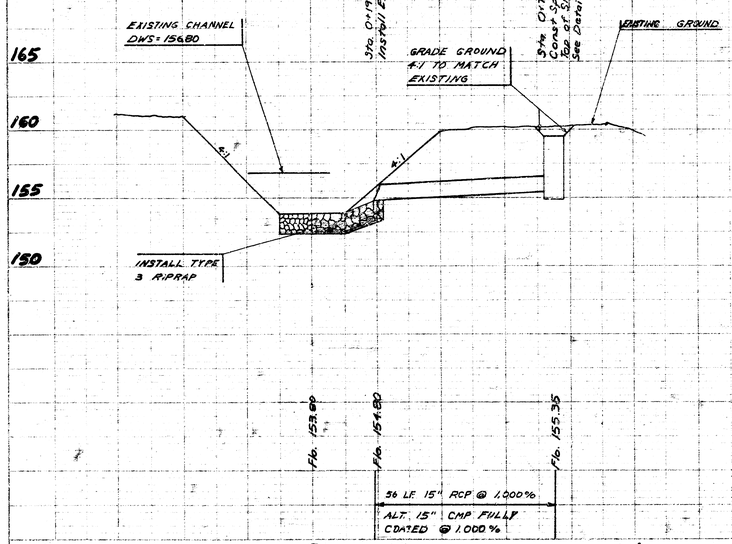


PLATE 1, PLAN PROFILE
KENTEL & EGGER CO.

SWS 132
Proj. No. 158-76-245-80696-000-000-001

2/11

B.M. El. 164.60 RR Spk. NE side small Box Elder Tree 12' W of W.L. Capri Cir. & 5' N. of SL. Cedar Lake Village 4th

SCALE 1" = 20'

Sta. 5+90
Const. Type 1A Curb Inlet W=5'10"
Top 162.80 Street Sta. 1+23.22

Sta. 6+19
Const. Type 1A Curb Inlet W=5'0"
Top 163.00 Street Sta. 8+35.20

Sta. 8+88
Const. Type 1A Curb Inlet W=5'0"
Top 165.70 Street Sta. 5+72.22

Const. Type 1A Curb Inlet W=4'2"
Top 166.60 Street Sta. 3+59.28

29 L.F. 15" RCP or 15" CMP (Fully Coated) USFL = 163.27
DSFL = 163.15

Sta. 9+70
Const. Type 1A Curb Inlet W=5'0"
Top 168.40 Street Sta. 4+90.22

Const. Type 1A Cb Inlet W=4'2" Top 165.46 Street Sta. 5+72.22

39 L.F. 15" RCP or CMP (Fully Coated) USFL = 161.71
DSFL = 161.55

Proposed 12" Waterline
Proposed 8" Waterline
Proposed 6" Waterline
24" Pipe
CHALET DRIVE
CAPRI
64' R/W
35' B-B

LINE 2

PROFILE SCALE: 1" = 5' Vertical
1" = 20' Horizontal

Sta. 5+30
Sta. 5+90 Const. Type 1A Curb Inlet Top 162.80
Sta. 6+19 Const. Type 1A Curb Inlet Top 163.00
Sta. 8+88 Const. Type 1A Curb Inlet Top 165.70
Sta. 9+70 Const. Type 1A Curb Inlet Top 166.90

Existing Ground
Proposed Top of South Curb Chalet Drive
Proposed 6" Waterline

170
165
160
155

8" San. Sewer
El. 154.50

159.02 Flow	158.20 Flow out 158.50 Flow in	158.97 Flow out 158.87 Flow in	159.62 Flow	160.52 Flow	161.71 Flow out 161.41 Flow in West 161.55 Flow in North	161.82 Flow out 161.62 Flow in West 163.15 Flow in SE		
60 L.F. 30" RCP @ .308% ALT. 30" CMP FULLY PAVED & FULLY COATED @ .308%	29 L.F. 30" RCP @ .310% ALT. 30" CMP FULLY PAVED & FULLY CTD. @ .310%	269 L.F. 24" RCP @ .900% ALT. 24" CMP FULLY PAVED & FULLY COATED @ .900%			82 L.F. 24" RCP @ .500% ALT. 24" CMP FULLY PAVED & FULLY CTD. @ .500%			
6	7	8	9	10				

Project SWS 132
Project No. 468-76-245-80646-000-000-001

BM. 164.60 RR. Spk. NE Side Small Box Elder Tree 12' W. of W.L. Capri Ctr. ℄ 5'N of SL. Cedarlake Village 4th Addition

Sta. 0+90
Rlo. 154.25
Channel Sta. 3+16

Proposed 6" A.C. Water

CAPRI COURT

LINE 2

Install Type 3 Riprap

Proposed 8" S.S.

80'

18'

3:1

36" Pipe

30" Pipe

5' Min.

35' R.

50' R.

40' Wall Easement

Sta. 0+21
Begin Headwall Const.
See Detail Sheet 14

Sta. 0+72
Const. Type 1A Curb Inlet W= 4'2"
Top 160.69 Street Sta. 4+18.88

4 LF 15" RCP or 15" CMP
Fully Coated.
USFL = 157.22 DSFL = 157.12

Const. Type 1A Curb Inlet W = 4'2"
Top 160.64 Street Sta. 4+26.88

Sta. 3+85
Const. Type 1A Curb Inlet W=5'0"
Top 162.50 Street Sta. 1+08.88

35' B-B
64' R/W

78 LF 15" RCP or 15" CMP
Fully Coated
USFL = 158.95 DSFL = 158.63

Const. Type 1A Curb Inlet W= 4'2"
Top 162.74 Street Sta. 3+21.88

Sta. 4+73
Const. Type 1A Cb. Inlet W=5'0"
Top 162.38 Street Sta. 0+08.88

CAPRI

Proposed 12" RC Storm Drain

PLAN SCALE: 1" = 20'

PLAN
Quiroz Herrington

LINE 2

PROFILE SCALE: 1" = 5' Vertical
1" = 20' Horizontal

Sta. 0+21
Begin Headwall Const.

Sta. 0+29
Begin 36" Pipe

Proposed 8" Manhole

Sta. 0+72
Const. Type 1A Cb. Inlet
Top 160.68

Sta. 3+85
Const. Type 1A Curb Inlet
Top 162.50

Sta. 4+73
Const. Type 1A Curb Inlet
Top 162.38

PROPOSED TOP OF S/W CURB CAPRI

Sta 5+30

EXISTING GROUND

PROPOSED CAPRI CT STREET GRADES

EXISTING FLOOD CONTROL CHANNEL
DWS EL.=158.20

154.25

INSTALL TYPE 3 RIPRAP

Sta. 0+90
Proposed 8" S.S. by "Others"
Proposed FL.= 148.00

165
160
155
150

Flow 155.25

Flow out SW Flow in N. 155.87 157.12

Flow 156.00

Flow 156.45

Flow 156.90

Flow out Northeast Flow in West Flow in Southwest 157.28 157.38 158.69

Flow out Flow in 157.74 157.84

Flow 157.92

Flow 158.02

43 LF 36" RCP @ .279%
ALT. 36" CMP. FULLY PAVED & FULLY COATED @ .279%

313 LF 30" RCP @ 450%
ALT. 30" CMP. FULLY PAVED & FULLY COATED @ 450%

88 LF 30" RCP @ .409%
ALT. 30" CMP. FULLY PAVED & FULLY COATED @ .409%

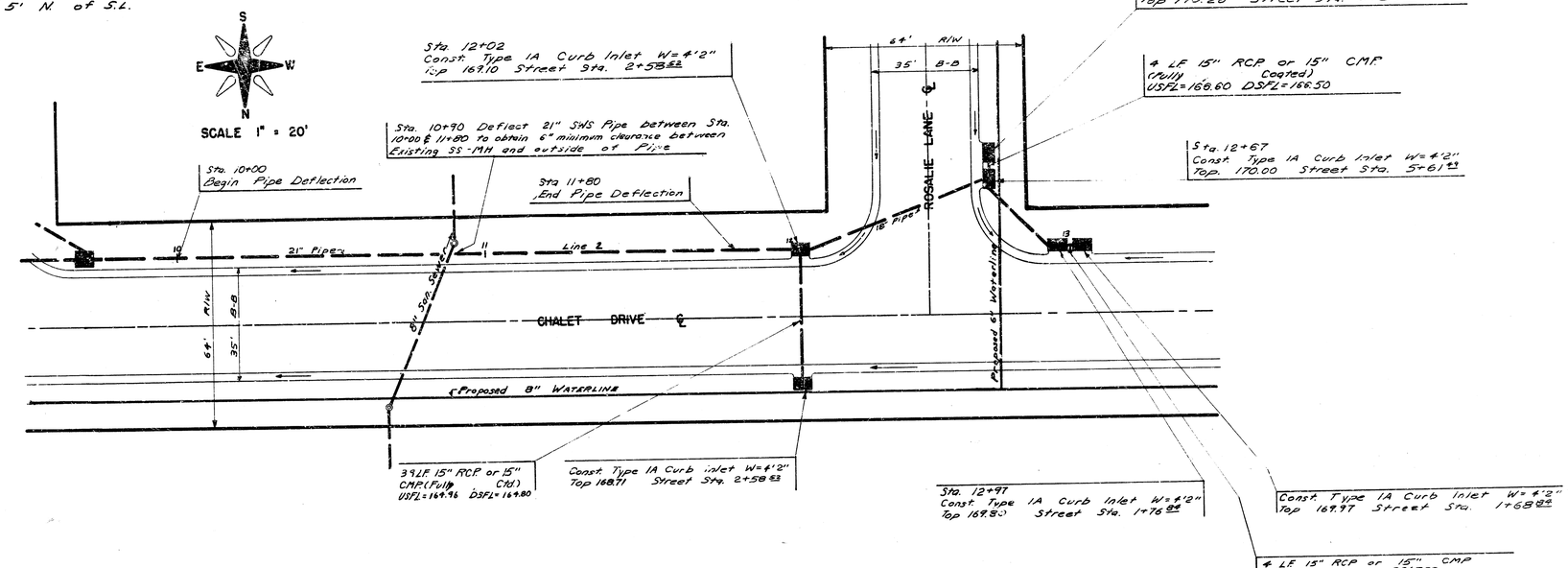
57 LF 30" RCP @ .308%
ALT. 30" CMP. FULLY PAVED & FULLY COAT'D @ 308%

0 1 2 3 4 5

SWS. No. 132
Project No. 46846-245-80846-000-000-001

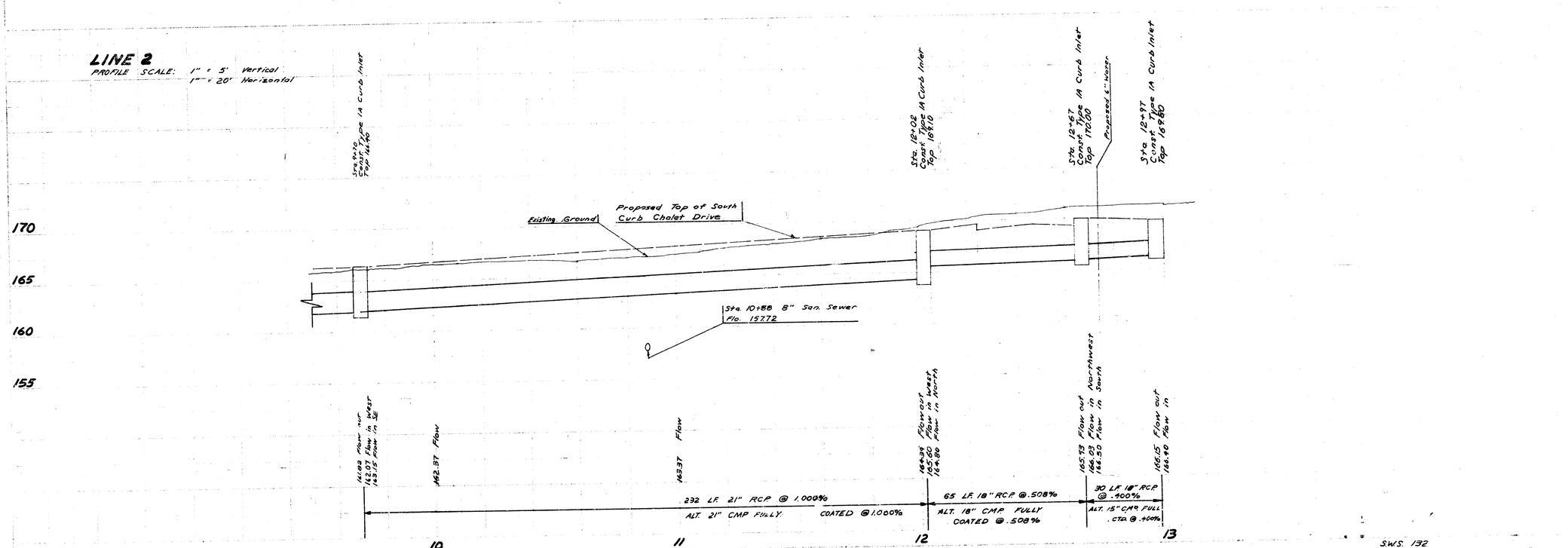
3/

B.M. El. 184.60 RR. Spk. NE-side Small Box Elder Tree 12' W. of W.L. Capri Circle & 5' N. of S.L. Cedar Lake Village 4TH



LINE 2

PROFILE SCALE: 1" = 5' Vertical
1" = 20' Horizontal



SWS: 132
Project No. 468-78-245-00646-000-000-001

BM. 178.46 Top W. Cb Rosalie 5'5" S. of S.L. Cherry Creek Drive

Sta. 0+30 Begin 36" Pipe Street Sta. 6+80.12

Install 4 L.F. 15" RCP or CMP (Fully Coated) USFL= 168.00 DSFL= 167.90

Install 27 L.F. 15" RCP or CMP (Fully Coated) USFL= 168.95 DSFL= 167.95

Const. Type 1A Curb Inlet W= 4'2" Top 172.28 Linden St. Sta. 12+99.73

Const. Type 1A Curb Inlet W= 4'2" Top 172.20 Linden St. Sta. 13+08.52

SCALE 1" = 20'

Sta. 3+10 Const. Type 1A Curb Inlet W= 6'0" Top 172.00 Cherry Creek Drive Street Sta. 4+05.73

CHERRY CREEK DRIVE

LINDEN

Proposed 8" A.C. Water

Proposed Double 10' x 6' RCBC, 2 Type 1A Curb Inlets, & 20 L.F. 36" Pipe to be Installed by "Others"

10' Utility Esm't

Existing Channel

120' Drainage Dedication

If RCBC not constructed before Storm Sewer, install temporary Type 3 Riprap at direction of Field Engineer

Tree to be removed, if necessary, at direction of Field Engineer

20' Utility Esm't

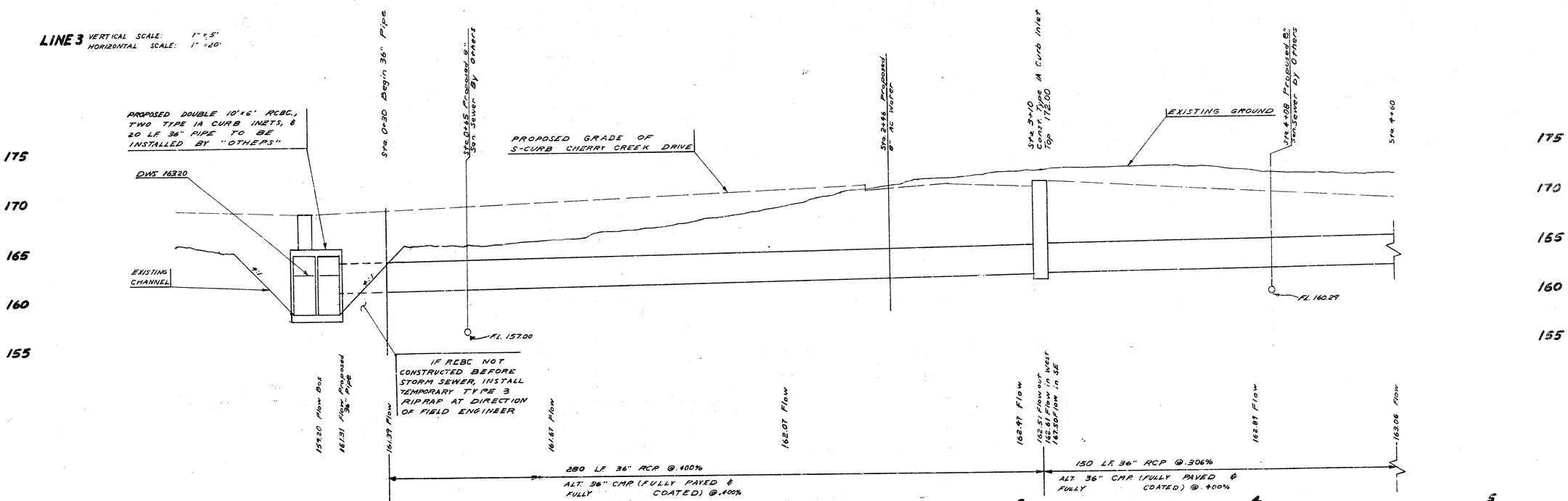
36" Pipe Line 3

Proposed

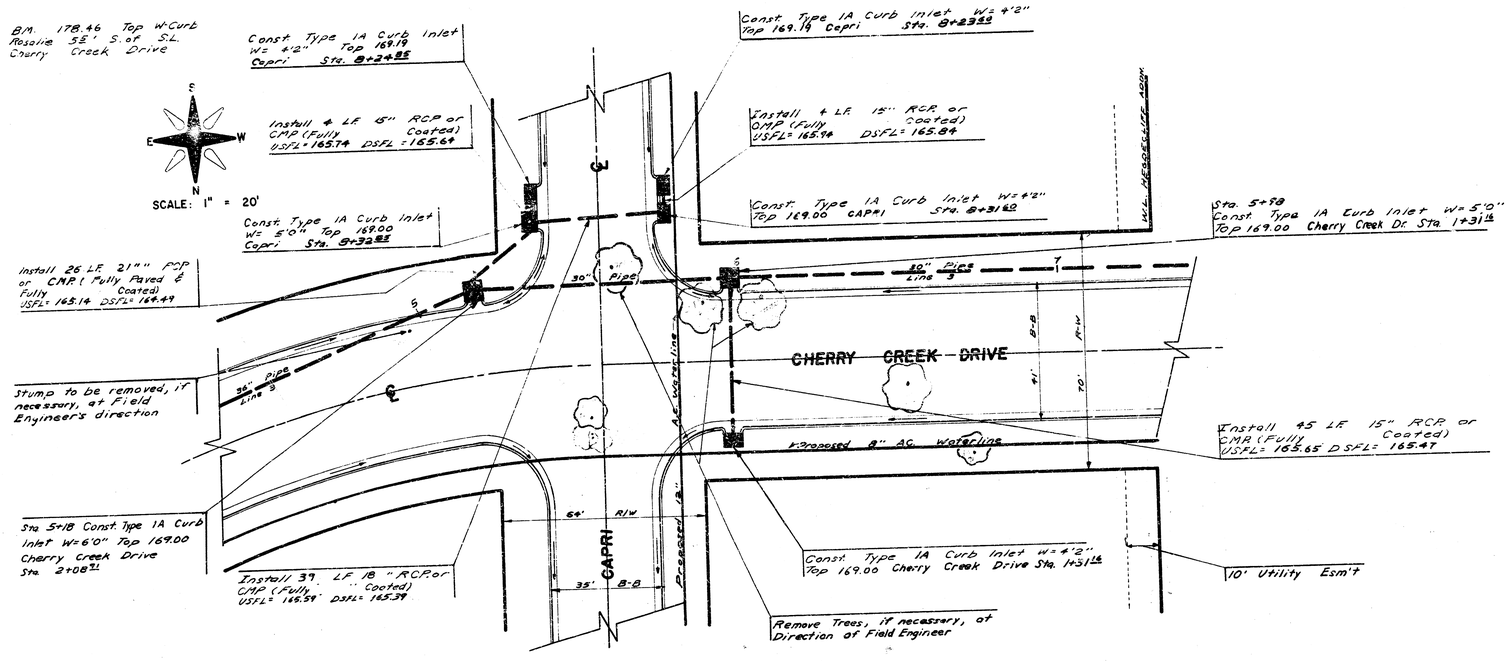
EVELEA HARRINGTON 1179

DCG-180

LINE 3 VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 20'

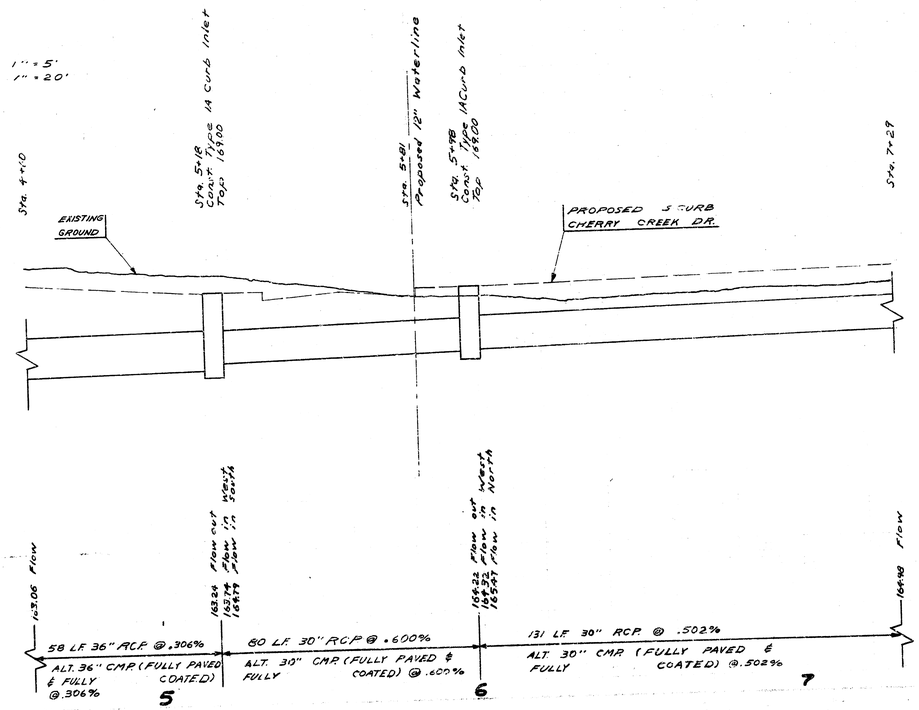


SWS 132
Project No. 468-76-245-80646-000-000-001



LINE 3

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



8

Project No. SWS 132 468-76-245-80646-000-000-001

BM. 178.46 Top W-Cb Rosalie 55' S. of SL. Cherry Creek Dr.

10' Utility Esm't

Proposed

Install 45 LF 15" RCP or CMP (Fully Coated) USFL= 166.96 DSFL= 166.76

Const. Type 1A Curb Inlet W=4'2" Top 170.50 Cherry Creek Drive Sta. 7+06.92

Install 27 LF 18" RCP or CMP (Fully Coated) USFL= 167.41 DSFL= 167.29

Const. Type 1A Curb Inlet W=4'2" Top 171.00 Cherry Creek Drive Street Sta. 6+25.92

Install 4 LF 15" RCP or CMP (Fully Coated) USFL= 168.60 DSFL= 167.66

Const. Type 1A Curb Inlet W=4'2" Top 171.13 Cherry Creek Drive Street Sta. 6+17.92

Remove 20 LF Hedge, if necessary, at Direction of Field Engineers

Sta. 8+35 Const. Type 1A Curb Inlet W=5'10" Top 170.50 Cherry Creek Drive Sta. 7+06.92

Sta. 8+64 Const. Type 1A Curb Inlet W=5'10" Top 171.20 White Cliff Lane Sta. 3+03.62

Install 39 LF 21" RCP or CMP (Fully Coated) USFL= 167.10 DSFL= 166.53

Const. Type 1A Curb Inlet W=4'2" Top 171.24 White Cliff Lane Sta. 2+92.80

Remove Trees, if necessary, at Direction of Field Engineer

Sta. 11+60 Const. Type 1A Ch. Inlet W= 5'0" TOP 172.10 White Cliff Lane Sta. 0+03.82±

24" Stub Out Install 2" Wood Bulkhead at no extra cost

Const. Type 1A Curb Inlet W=4'2" Top 171.20 White Cliff Lane Sta. 3+00.62

Install 4 LF 15" RCP or CMP (Fully Coated) USFL= 167.54 DSFL= 167.38

SCALE 1" = 20'

CHERRY CREEK DRIVE

WHITE CLIFF LANE

Proposed 8" AC Water

Line 3 10 24" Pipe 11

SL Cherry Creek Hills Third Add.

RIH F-F 64' 34'

LINE 3

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

Sta. 7+63 Sta. 7+35 Prop. 8" SS by "Others"

PROPOSED W-CURB CHERRY CREEK DRIVE

Sta. 8+35 Const. Type 1A Curb Inlet Top 170.50

Sta. 8+64 Const. Type 1A Curb Inlet Top 171.00

PROPOSED E-CURB WHITE CLIFF LANE

Sta. 11+60 Const. Type 1A Curb Inlet Top 172.10

EXISTING GROUND

PAVING CONTRACTOR TO FILL TO APPROXIMATE FINAL GRADE IN THIS AREA PRIOR TO SWS CONSTRUCTION

24" STUB OUT - CONST. 2" WOOD BULKHEAD AT NO ADDITIONAL COST

FL 159.21

175 170 165 160

166.98 Flow

106 LF 30" RCP @ .502 %

ALT. 30" CMP (FULLY PAVED & FULLY COATED) @ .502 %

8

165.51 Flow Out
165.84 Flow in SW
166.78 Flow in North

29 LF 30" RCP @ .517 %

ALT. 30" CMP (FULLY PAVED & FULLY COATED) @ .517 %

9

166.17 Flow out
167.10 Flow in South
166.53 Flow in West

167.11 Flow

296 LF 24" RCP @ .300%

ALT. 24" CMP (FULLY PAVED & FULLY COATED) @ .300%

10

167.41 Flow

167.71 Flow

11

167.89 Flow out
167.71 Flow in

Dallas Harrington 7/79

SWS 132
Project No. 468-76-245-80640-000-000-001

8/11

B.M. 178.46 Top W. Curb Rosslie St. S. of S.L. Cherry Creek Drive

Sta 0+58
Const Special Inlet w. Beehive Grate
Top of Slab El. 169.25
See Sheet 11 for Detail

Sta 0+20
Install Ensection for 30" Pipe
Flow 163.20

SCALE 1" = 20'

Const Type 1A Curb Inlet
W= 4'2" Top 171.54

Prop. 15" San. Sewer

20' Drainage Esm't

LINDEN CT.
LOTS 1-6 BLOCK 6
HEDGECLIFF ADDITION

4 LF 15" RCP or 15" CMP
Fully Coated
USFL = 166.60 DSFL = 166.50

Line 4

Install Type 3 Riprap

4:1

120' Drainage Dedication

20'

26'

15'

163.35 Flow

Sta 0+00 Flow 162.20
Channel Sta 44+87
See Plan: Cherry Creek
Tributary of Sypsum Creek

10' Utility Esm't

Sta 1+75
Const Type 1A Curb Inlet
W= 4'2" Top 171.30

Sta 0+00 Flo 154.18 Channel
Sta 48+93 See Plan: Cherry Creek Tributary of Gypsum Creek

Sta. 0+28
Install End Section for 24" Pipe Flow 165.15

120' Drainage Dedication

Sta 0+96
Const Special Inlet w Beehive Grate
Top of Slab El. 172.10
See Sheet 11 for Detail

Sta. 2+47
Const Type 1A Curb Inlet
W= 4'2" Top 176.00

SCALE 1" = 20'

4 LF 15" RCP or 15" CMP
Fully Coated
USFL = 171.85 DSFL = 171.75

Flow

49'

51'

180°

Line 5

20' Drainage Esm't

Sta 2+62
Const Type 1A Curb Inlet
W= 4'2" Top 176.08

LINDEN CT.
LOTS 13-18 HEDGECLIFF BLOCK 6 ADDITION

20' Utility Esm't

10' Utility Easement

Proposed 15" San. Sewer

LINE 4
PROFILE SCALE: 1" = 5' Vertical
1" = 20' Horizontal

LINE 5
PROFILE SCALE: 1" = 5' Vertical
1" = 20' Horizontal

EXISTING FLOOD CONTROL CHANNEL
DWS EL. 164.80

Sta 0+20 Install End Section For 30" Pipe

Sta 0+58 Const. Special Inlet w Beehive Grate Top of Slab EL. 168.25 See Sheet for Detail

Sta 0+65 Proposed 8" San. Sewer by Others

Sta 1+75 Const Type 1A Curb Inlet Top 171.30

GRADE GROUND 4:1 TO MATCH EXISTING

EXISTING GROUND

4:1

INSTALL TYPE 3 RIPRAP

FL. 159.80

EXISTING FLOOD CONTROL CHANNEL
DWS EL. 169.00

Sta 0+27 Install End Section 24" Pipe

Sta 0+96 Const. Special Inlet w Beehive Grate Top of Slab 172.10 See Sheet 11 for Detail Sta 1+08 From 8" San. Sewer by Others

Sta 2+47 Const Type 1A Curb Inlet Top 176.00

GRADE GROUND 4:1 TO MATCH EXISTING

EXISTING GROUND

INSTALL TYPE 3 RIPRAP

FL. 164.00

180
175
170
165
160

162.20 Channel Flow
163.20 Flow
163.35 Flow out
164.50 Flow in
165.13 Flow
165.80 Flow out
166.50 Flow in
164.15 Channel Flow
165.15 Flow
164.43 Flow out
165.24 Flow in
171.50 Flow out
171.75 Flow in

38 LF 30" RCP @ .395%
ALT. 30" CMP. FULLY PAVED & FULLY COATED @ .395%

117 LF 21" RCP @ 1.496%
ALT. 21" CMP. FULLY COATED @ 1.496%

89 LF 24" RCP @ 4.01%
ALT. 24" CMP FULLY PAVED & FULLY C.T.D. @ 4.01%

151 LF 18" RCP @ 1.500 %
ALT. 18" CMP FULLY C.T.D. @ 1.500%

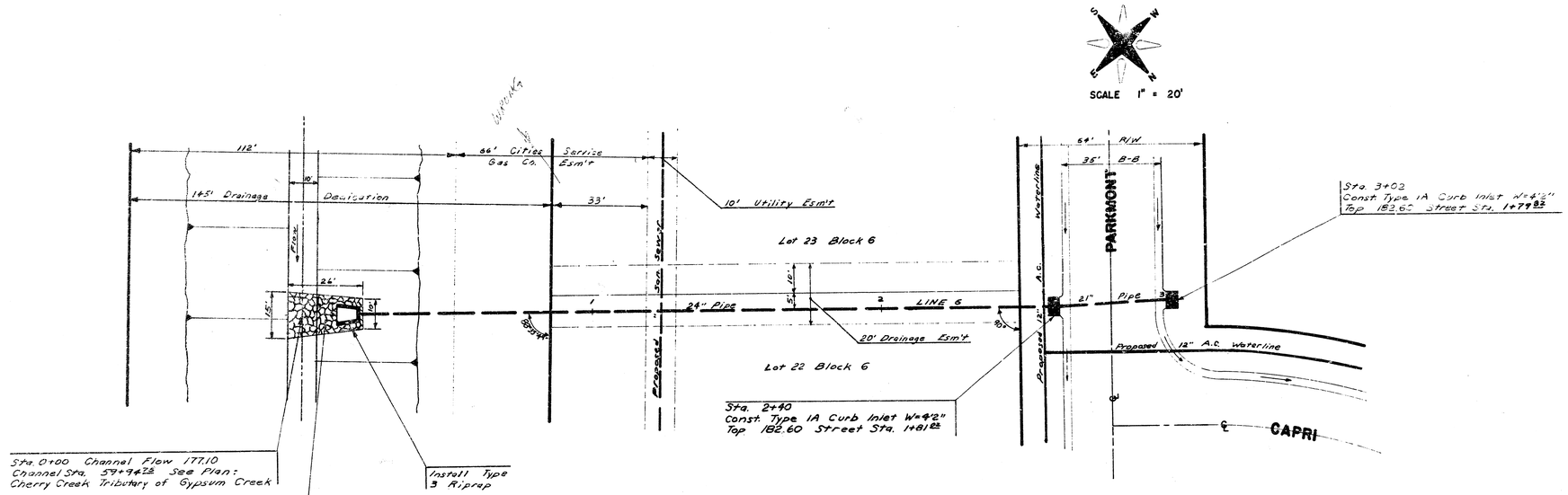
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PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

SWS 132
Project No 4-68-TC-245-80646-000 000-001

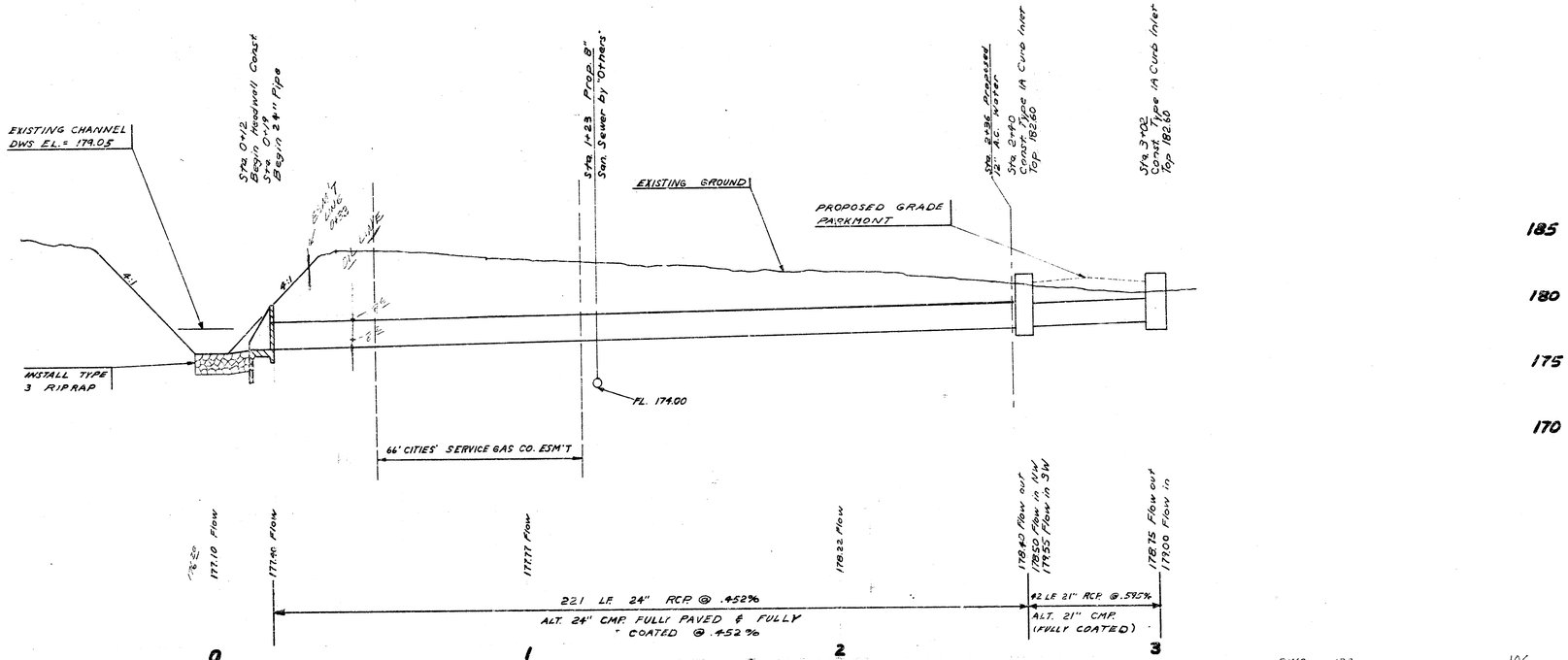
9/11

B.M. 178.46 Top W. Cb. Rosalie 5E' S of S.L.
Cherry Creek Drive



LINE 6

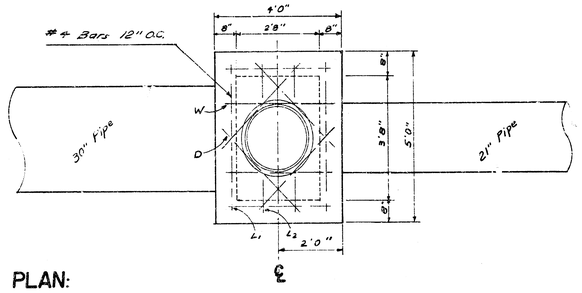
VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 20'



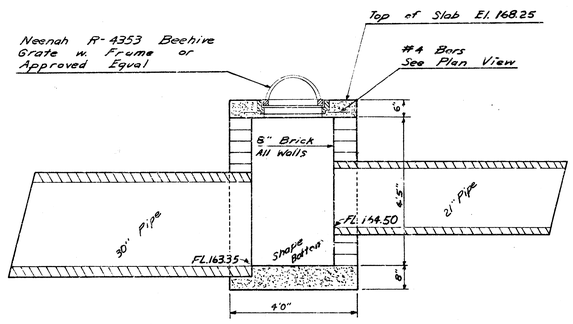
SWS 132
Project No. 472-76-245-30646-000-000-001 10/11

SPECIAL INLET: LINE 4

SCALE: 1/2" = 1'



PLAN:

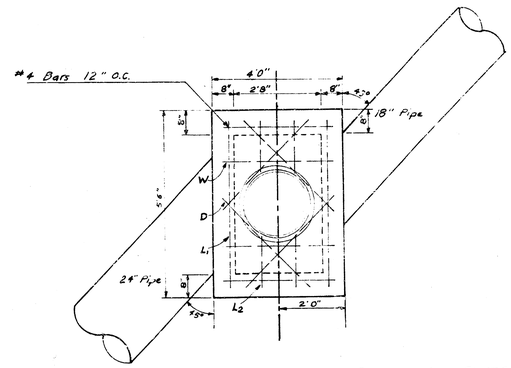


SECTION:

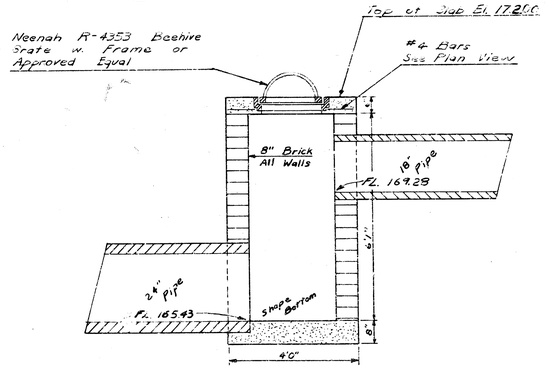
Bar	Quan.	Size	Length	Weight
W	4	#4	3'6"	9.4
L_1	2	#4	4'6"	6.0
L_2	4	#4	1'2"	3.1
D	4	#4	3'10"	10.3
Total Lbs. Rebar				28.8
C.Y. Concrete				.9
Sq. Ft. 8" Brick Wall				67.7

SPECIAL INLET: LINE 5

SCALE: 1/2" = 1'



PLAN:



SECTION:

Bar	Quan.	Size	Length	Weight
W	4	#4	3'6"	9.4
L_1	2	#4	5'0"	6.7
L_2	4	#4	1'5"	3.8
D	4	#4	4'0"	10.7
Total Lbs. Rebar				30.6
C.Y. Concrete				1.0
Sq. Ft. 8" Brick Wall				99.4