STREET IMPROVEMENTS

CYPRESS

W'LY LINE HEDGECLIFF FOURTH ADDITION
TO N. LINE MT. VERNON

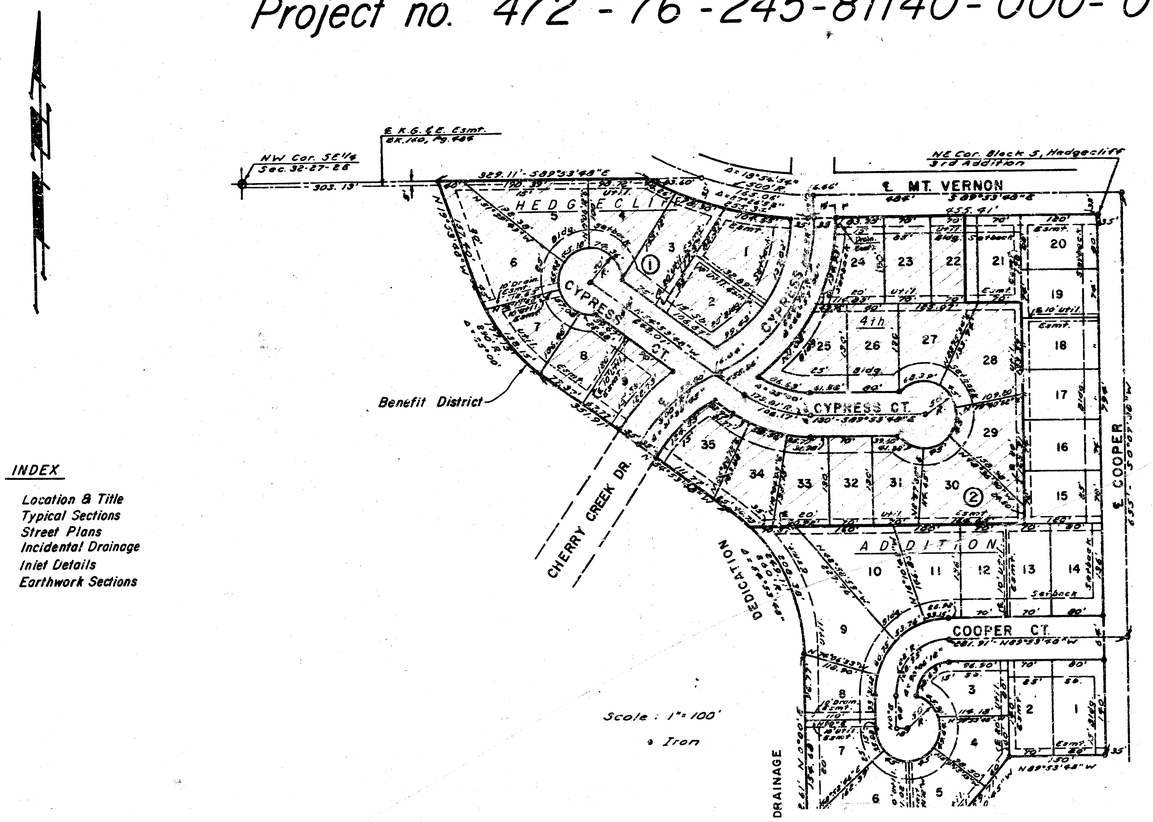
CYPRESS COURT

W. LINE CYPRESS TO AND INCLUDING CUL-DE-SAC

CYPRESS COURT

E. LINE CYPRESS TO AND INCLUDING CUL-DE-SAC

Project no. 472 - 76 - 245 - 81140 - 000 - 000 - 001



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8	Inlet Details
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BENCH MARK - Elev. 170.76, City Std Disc. at the South end of the South end of the West headwall of the RCBC on Cypress, South of Cypress Court.

CITY OF WICHITA, KS.

MICHAEL E. LINDEBAK - CITY ENGINEER

N. BRENT WOOTEN LICENSED 8470 KANSAS

1/12 JUNE 1984

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 330 LAURA • WICHITA, KANSAS 67211

1/12

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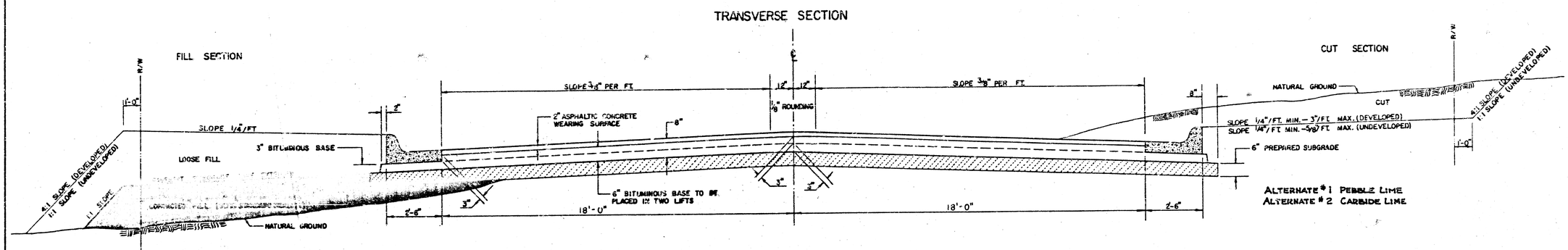
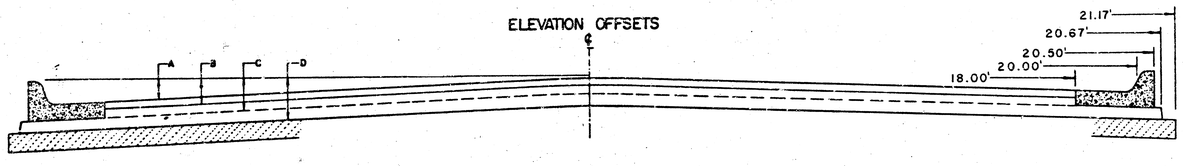
TYPICAL 41' PAVEMENT DETAILS

TRANSVERSE SECTION

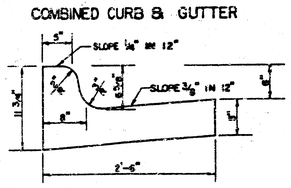


ELEVATION OFFSETS

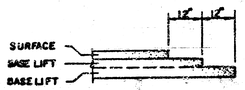


	DISTANCE FROM CENTERLINE (LT. & RT.)													
	0	2	4	6	8	10	12	14	16	18	20	20.5	20.67	21.17
A: TOP OF CURBS TO TOP OF SURFACE LIFT	-.05	-.01	.05	.11	.18	.24	.30	.36	.43	.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	.11	.16	.22	.28	.34	.40	.47	.53	.59	.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	.36	.41	.47	.53	.59	.65	.72	.78	.84	.90	.97	.98	.99	—
D: TOP OF CURBS TO TOP OF SUBGRADE	.61	.66	.72	.78	.84	.90	.97	1.03	1.09	1.15	1.22	1.23	1.24	1.25

COMBINED CURB & GUTTER



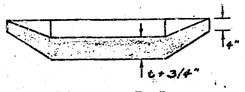
TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 8" ASPHALTIC CONCRETE (6" BITUMINOUS BASE).

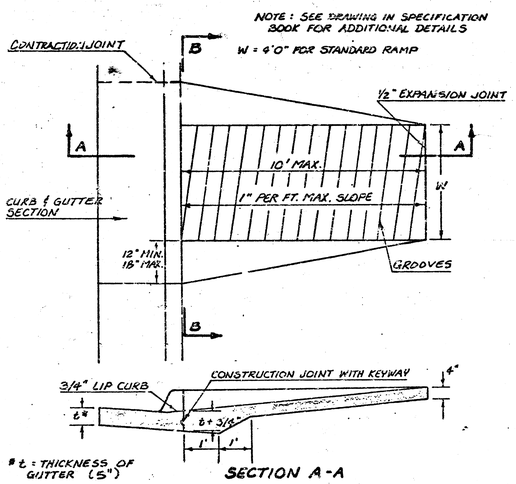
GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 8" ASPHALTIC CONCRETE (6" BITUMINOUS BASE).
2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 3" BITUMINOUS BASE.
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.



SECTION B-B

STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR STREETS WITH COMBINED CURB & GUTTER



SECTION A-A

2/12

8 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 6 INCH BITUMINOUS BASE

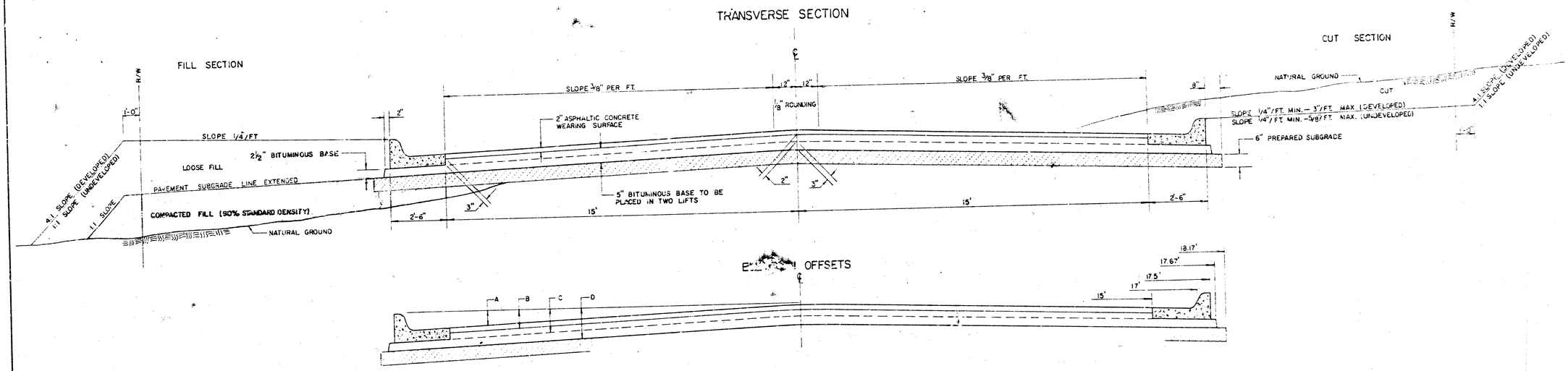
CITY OF WICHITA, KANSAS

PROJECT NUMBER

472-76-245-81140-000-000-001

TYPICAL 35' PAVEMENT DETAILS

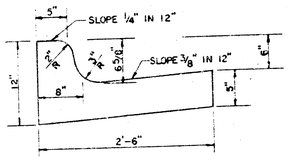
TRANSVERSE SECTION



OFFSETS

	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0'	2'	4'	6'	8.5'	10'	12'	14'	15'	17'	17.5'	17.67'	18.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.04	0.08	0.14	0.21	0.29	0.33	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.21	0.25	0.31	0.37	0.45	0.50	0.56	0.62	0.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.37	0.43	0.50	0.57	0.67	0.72	0.79	0.87	0.90	0.98	1.00	1.00	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.62	0.67	0.74	0.81	0.90	0.95	1.02	1.08	1.12	1.19	1.21	1.21	1.23

COMBINED CURB & GUTTER



GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.

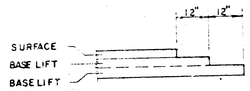
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

TRANSVERSE CONSTRUCTION JOINTS



WHERE JOINTS IN THE ASPHALTIC CONCRETE PAVEMENT ARE REQUIRED IN FLEXIBLE BASE PAVEMENT OR WHERE PAVEMENT IS CONSTRUCTED ADJACENT TO EXISTING PAVEMENT, A TRANSVERSE CONSTRUCTION JOINT SHALL BE PROVIDED AT THE END OF EACH DAY'S CONSTRUCTION OR AT THE END OF THE PAVING. THESE JOINTS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

3/12

7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE

CITY OF WICHITA, KANSAS

PROJECT NUMBER

472-76-245-81140-000-000-001

3/12

BENCH MARK - Elev. 170.76, City Std Disc. at the South end of the South end of the West headwall of the RCBC on Cypress, South of Cypress Court.

INTERSECTION QUANTITIES

- ___ S.Y. ___" Concrete Pavement
- 832 S.Y. 6 " Asphaltic Conc. Pavement (6 " Bituminous Base)
- 73 S.Y. 3 " Bituminous Base
- 210 L.F. Combined Curb & Gutter
- ___ L.F. Integral Curb
- 4 Gd 4" Wheelchair Ramp
- ___ S.F. 4" Walk
- ___ C.Y. Excavation
- ___ C.Y. Compacted Fill
- 2800 Lbs. Reinforcing Steel
- ___ S.Y. Manipulation
- ___ Tons Lime or Cement
- ___ S.Y. V.G. ___" Concrete & ___" Asphaltic Concrete Base

BEGIN CONSTRUCTION STA. 0-20

SAW JOINT & REMOVE EXISTING 9" ASPHALTIC CONCRETE PAVEMT. REPLACE W/ 8" A.C. TO MATCH EXISTG PAVEMT AT STA 0-20

GRADE @ 0.32% TO DRAIN TO EXISTING PAVEMENT

END CONSTRUCTION

END CONSTRUCTION MATCH EXISTING PAVEMENT

END CONSTRUCTION

CONSTRUCT 4' CONCRETE SIDEWALK

CONSTRUCT CONCRETE WHEELCHAIR RAMPS. SEE DETAIL SHEET 2

CONSTRUCT 4'-(4") CONCRETE SIDEWALK

CONSTRUCT CONCRETE WHEEL CHAIR RAMPS

CONSTRUCT 8" A.C. PAVEMENT - 6" BIT. BASE

ADJUST EXISTING INLET TOPS

DEDICATION

CHERRY CREEK DR.

CYPRESS CT.

CYPRESS

VERNON MT.

DRAINAGE

+0.379%

-1.491%

+0.446%

-1.269%

P.C. 0+00

P.I. 4+15.95

1+65.44 P.R.C.

1+59.40

1+76.58

1+87.69

2+22.57

2+50

2+75

3+00

3+25

3+50

3+75

4+00

4+36.15

4+68.68

5+17.15

1+09.90

1+30.02

1+40.98

2+09.84

4+38.82

4+51.41

PROPOSED 8" SAN. SEWER

PROPOSED 10" SAN. SEWER

S.L. HENSCLIFF 4TH ADD.

W Proposed

Saw Jt.

Base Line

CURVE NO. 1

Δ = 31°35'45" R = 300' T = 84.88' L = 165.44' L.C. = 163.35'

Curve Data based on ℄ Rad. Δ/2 = 15°47'52"

STA.	ARC	Chord Length 8' off Lt. Co.	8' off Rt. Co.	DEFL.	TOTAL DEFL.
0+00 P.C.	–	–	–	–	0°00'00"
0+25	25'	27.32'	22.66'	02°25'14"	2°25'14"
0+50	25'	27.32'	22.66'	2°25'14"	4°46'28"
0+75	25'	27.32'	22.66'	2°25'14"	7°09'42"
0+97.35	22.35'	24.43'	20.26'	2°08'04"	9°17'46"
1+30.02	32.68'	↓	29.12'	3°07'14"	12°25'00"
1+65.44	35.41'	74.28'	32.09'	3°22'52"	15°47'52"

DEFL./FT. = 0.095493°

CURVE NO. 2

Δ = 67°00'08" R = 244.76' T = 162.01' L = 286.22' L.C. = 270.19'

Curve Data based on ℄ Rad. Δ/2 = 33°30'015"

STA.	ARC	Chord Length 8' off Lt. Co.	8' off Rt. Co.	DEFL.	TOTAL DEFL.
1+65.44 P.R.C.	–	–	–	–	0°00'00"
1+87.69	22.25'	19.88'	–	2°57'40"	2°57'40"
2+22.57	34.68'	30.69'	38.61'	4°03'35"	6°41'15"
2+50	27.43'	24.25'	30.55'	3°12'35"	9°53'51"
2+75	25'	22.13'	27.85'	2°55'34"	12°49'25"
3+00	25'	22.13'	27.85'	2°55'34"	15°44'59"
3+25	25'	22.13'	27.85'	2°55'34"	18°40'33"
3+50	25'	22.13'	27.85'	2°55'34"	21°36'07"
3+75	25'	22.13'	27.85'	2°55'34"	24°31'41"
4+00	25'	22.13'	27.85'	2°55'34"	27°27'15"
4+36.15	36.15'	31.98'	↓	4°19'52"	31°41'07"
4+38.82	2.75'	↓	43.30'	0°19'19"	32°00'26"
4+51.41 P.I.	12.76'	13.75'	14.22'	1°29'36"	33°30'02"

DEFL./FT. = 0.117045°

EARTHWORK QUANTITES

EXCAVATION	= 3853.4 C.Y.	COMPACTED FILL	= 207.7 C.Y.
+ 10 %	= 385.3 C.Y.	+ 10%	= 20.8 C.Y.
TOTAL	= 4238.7 C.Y.	TOTAL	= 228.5 C.Y.

MANIPULATION = 5582 S.Y.

INTERSECTION QUANTITIES

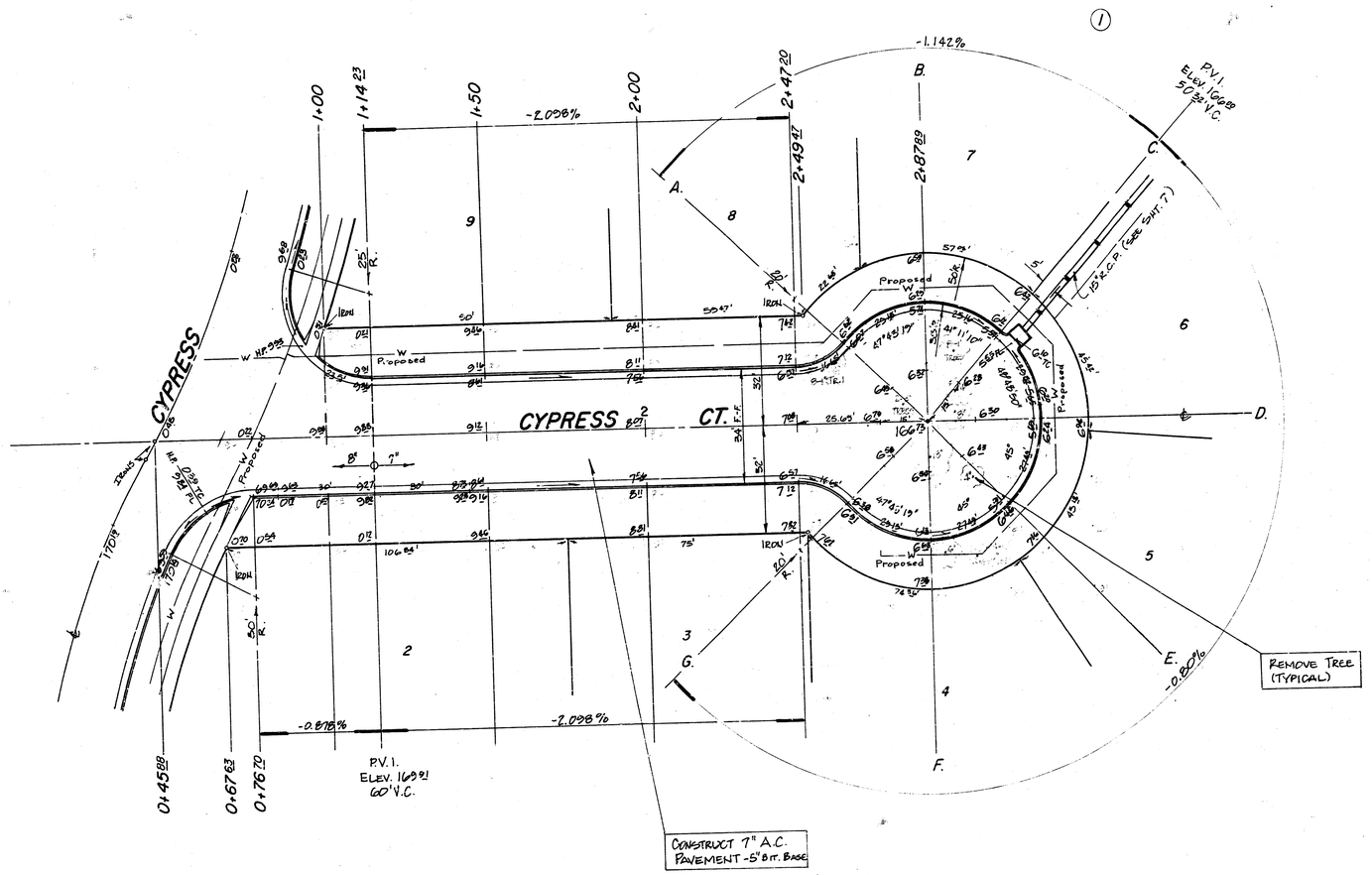
- ___ S.Y. ___" Concrete Pavement
- 5582 S.Y. 6 " Asphaltic Conc. Pavement (6 " Bituminous Base)
- 278 S.Y. 3 " Bituminous Base
- 320 L.F. Combined Curb & Gutter
- ___ L.F. Integral Curb
- 4 Gd 4" Wheelchair Ramp
- ___ S.F. 4" Walk
- ___ C.Y. Excavation
- ___ C.Y. Compacted Fill
- ___ Lbs. Reinforcing Steel
- 556 S.Y. Manipulation
- ___ Tons Lime or Cement
- ___ S.Y. V.G. ___" Concrete & ___" Asphaltic Concrete Base

NOTE: NO DRIVES TO BE CONSTRUCTED ON THIS PROJECT.

CYPRESS

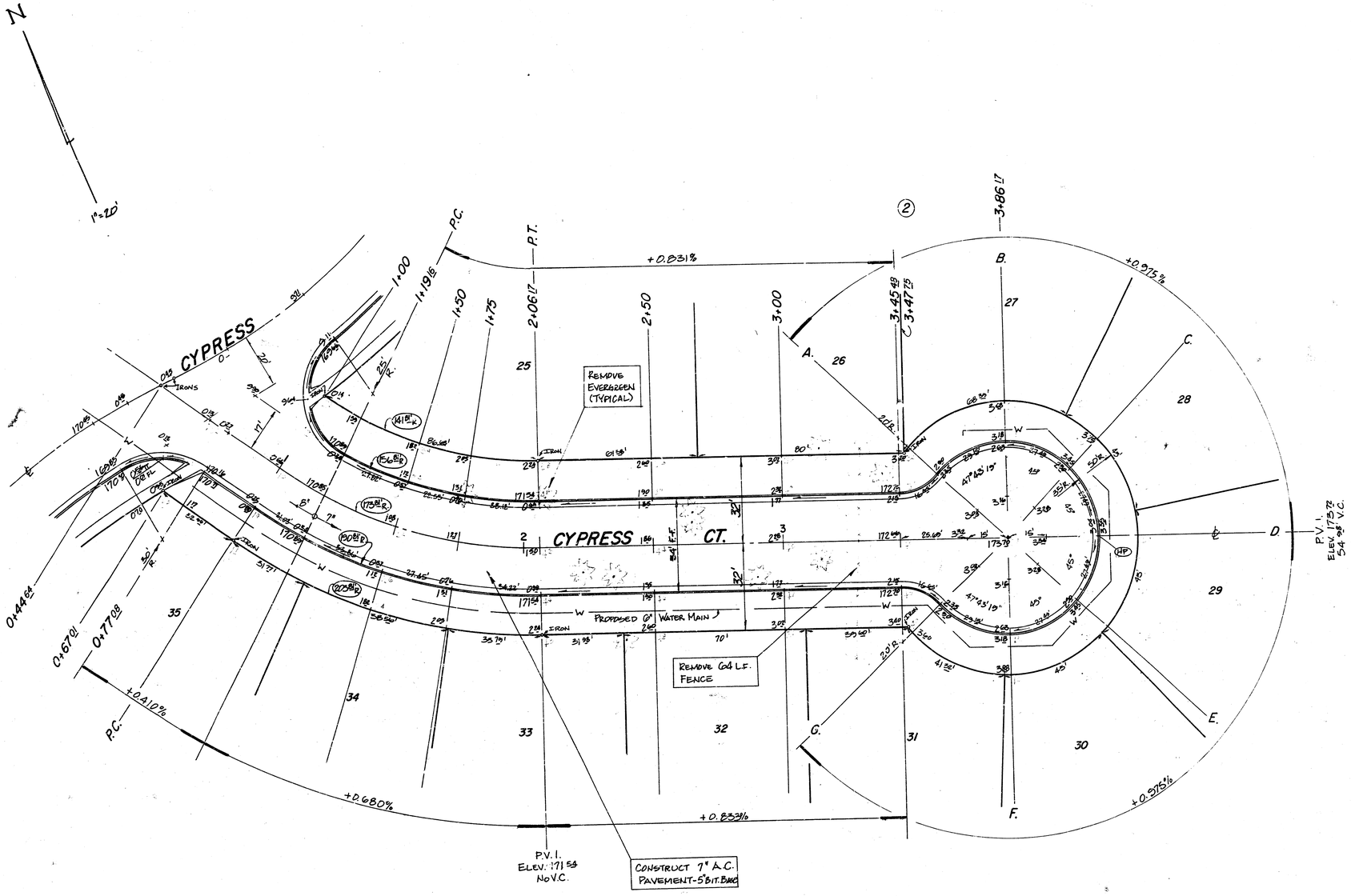
Proj. no. 472-76-245-81140-000-000-001

4/12



CYPRESS COURT
BLOCK 1.
Proj. no. 472-76-245-81140-000-000-001

5/12



Curve Data based on ℄ Rad.		Chord Length			
Sta.	Arc	8" Dist Lt. Ch.	8" Dist Rt. Ch.	Defl.	Total Defl.
HOP P.C.	–	–	–	–	0°00'00"
1+18.15	18.16'	16.40'	21.30'	5°09'25"	5°09'25"
1+50	30.84'	26.37'	35.23'	5°04'59"	10°14'28"
1+75	25'	21.39'	28.51'	4°07'14"	12°21'42"
2+06.17 P.T.	31.17'	26.65'	35.61'	5°08'18"	17°30'00"

Defl./Ft. = 0.164825°

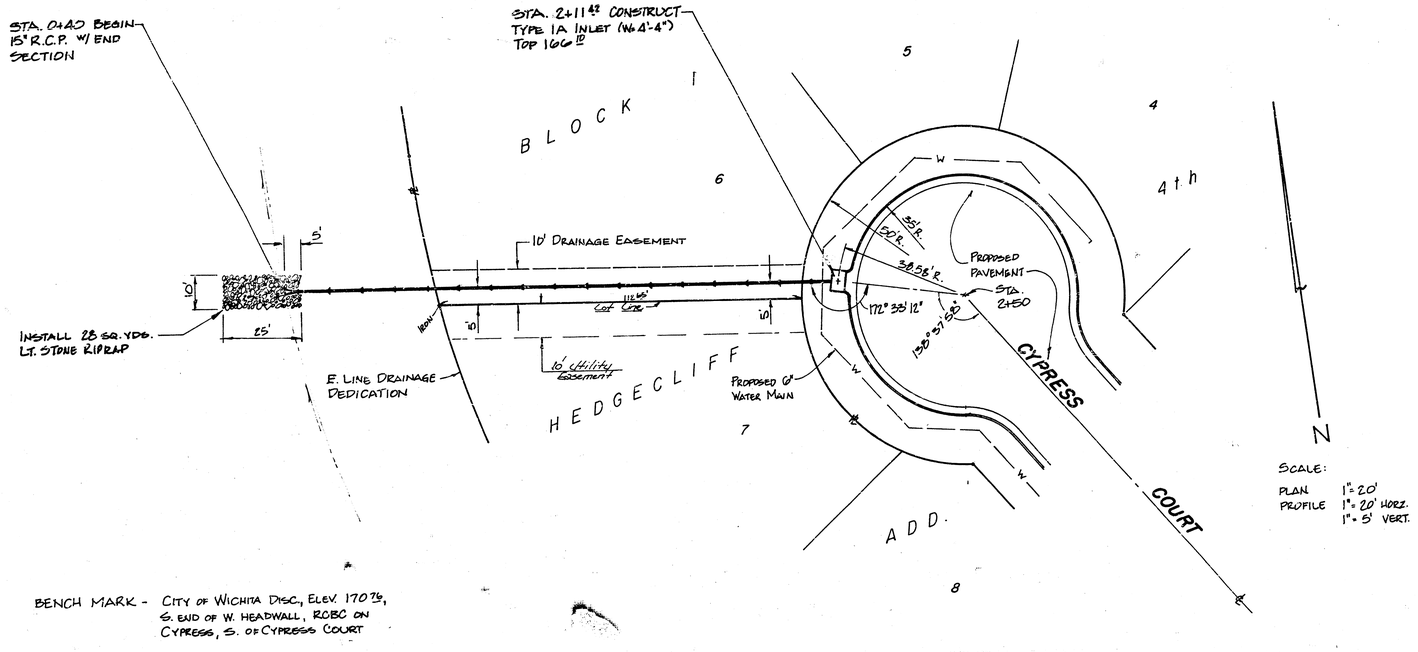
6/12

CYPRESS COURT

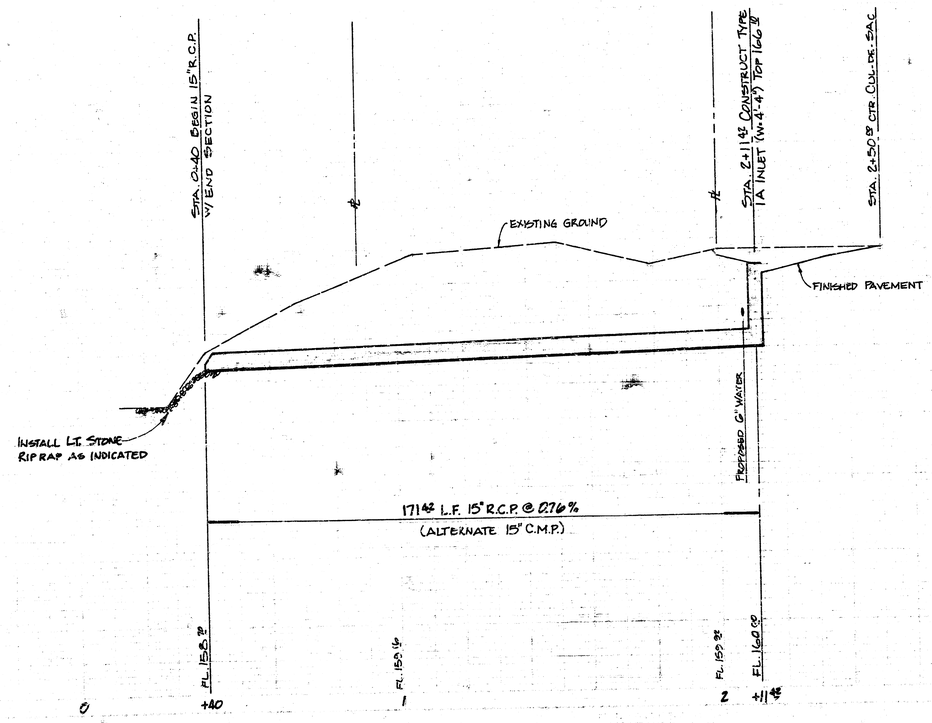
BLOCK 2

Proj. no. 472-76-245-81140-000-000-001

6/12



BENCH MARK - CITY OF WICHITA DISC., ELEV. 1707.9, S. END OF W. HEADWALL, RCBC ON CYPRESS, S. OF CYPRESS COURT

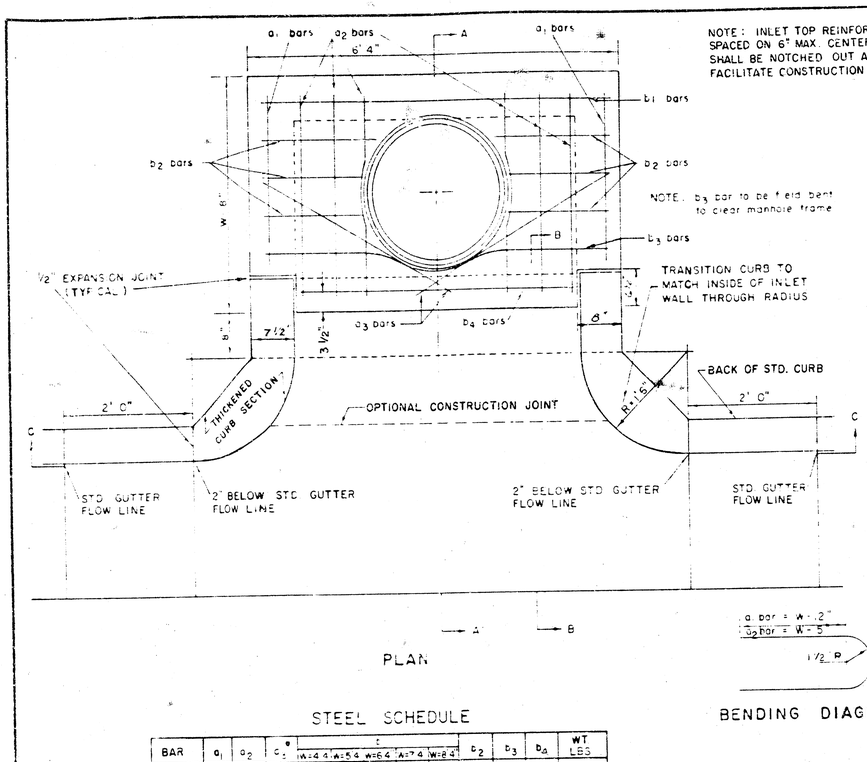


170
165
160

INCIDENTAL DRAINAGE
IN CONNECTION WITH
CYPRESS AND CYPRESS COURTS

7/12 (7/12)

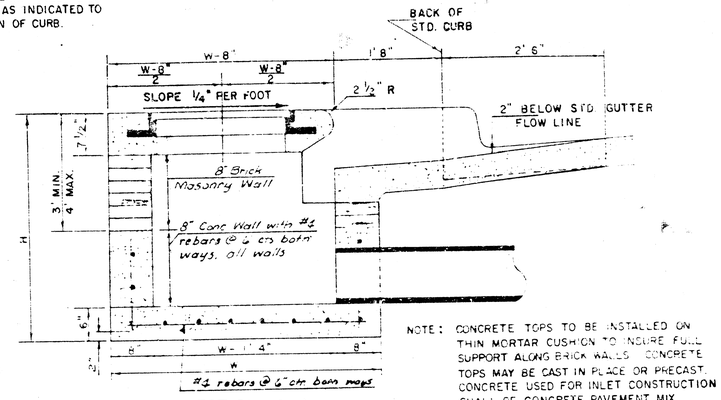
PROJECT NO. 472-76-245-81140-000-000-001



PLAN

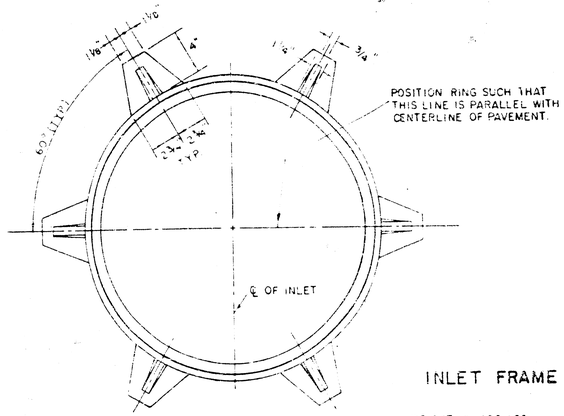
NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

NOTE: b_3 bar to be field bent to clear manhole frame



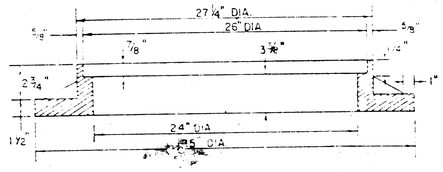
SECTION A-A

NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.



INLET FRAME

WEIGHT = 180 LBS.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

BENDING DIAGRAM

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING BY BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 4'4" AND H = 8'0" OR LESS.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

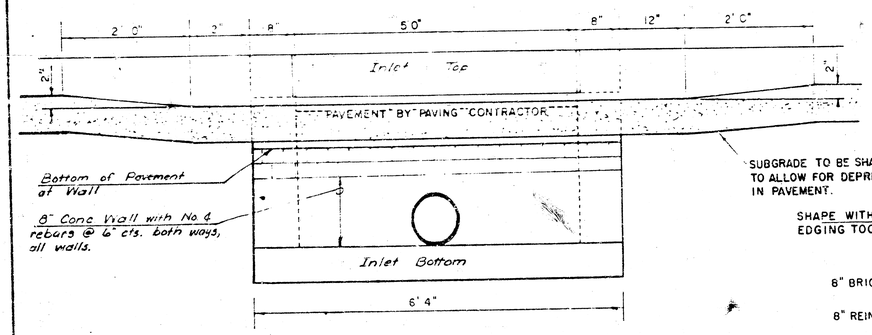
INLET INVERT SHALL BE SHAPED WITH 6 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

STEEL SCHEDULE

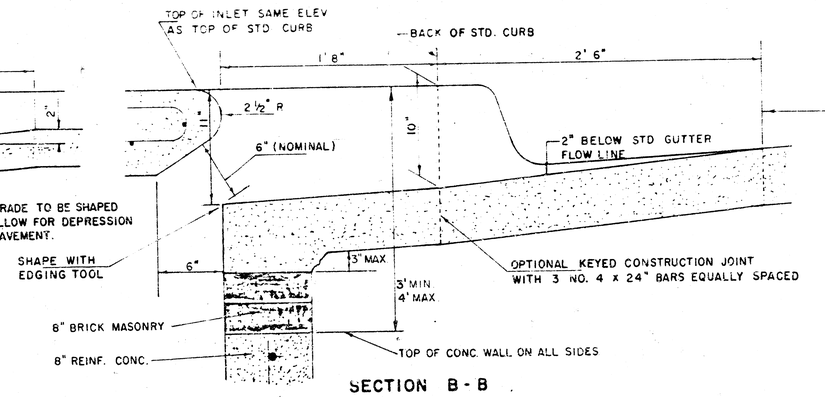
BAR	a_1	a_2	c_1*	LENGTH W=4'4"	W=5'4"	W=6'4"	W=7'4"	W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER	4	4	2		2	5	7	9	5	-	1	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
W=4'4"	7'1"	8'3"	4'0"	6'1"	–	–	–	–	1'9"	6'2"	4'8"	69±
W=5'4"	9'1"	10'3"	5'0"	–	6'1"	–	–	–	1'9"	6'2"	4'8"	83±
W=6'4"	11'1"	12'3"	6'0"	–	–	6'1"	–	–	1'9"	6'2"	4'8"	110±
W=7'4"	13'1"	14'3"	7'0"	–	–	–	6'1"	–	1'9"	6'2"	4'8"	130±
W=8'4"	15'1"	16'3"	8'0"	–	–	–	–	6'1"	1'9"	6'2"	4'8"	150±

* NOTE: c_3 BARS TO BE PLACED APPROX 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU YD CONC
4' 4"	3'8" x 6'4" x 7 1/2"	21" Ø SMALLER	0.38 ±
5' 4"	4'8" x 6'4" x 7 1/2"	24" Ø 30"	0.51 ±
6' 4"	5'8" x 6'4" x 7 1/2"	36" Ø 42"	0.64 ±
7' 4"	6'8" x 6'4" x 7 1/2"	48" Ø 54"	0.77 ±
8' 4"	7'8" x 6'4" x 7 1/2"	60" Ø 66"	0.90 ±



SECTION C-C



SECTION B-B

Project no. 472-76-245-81140-000-000-001

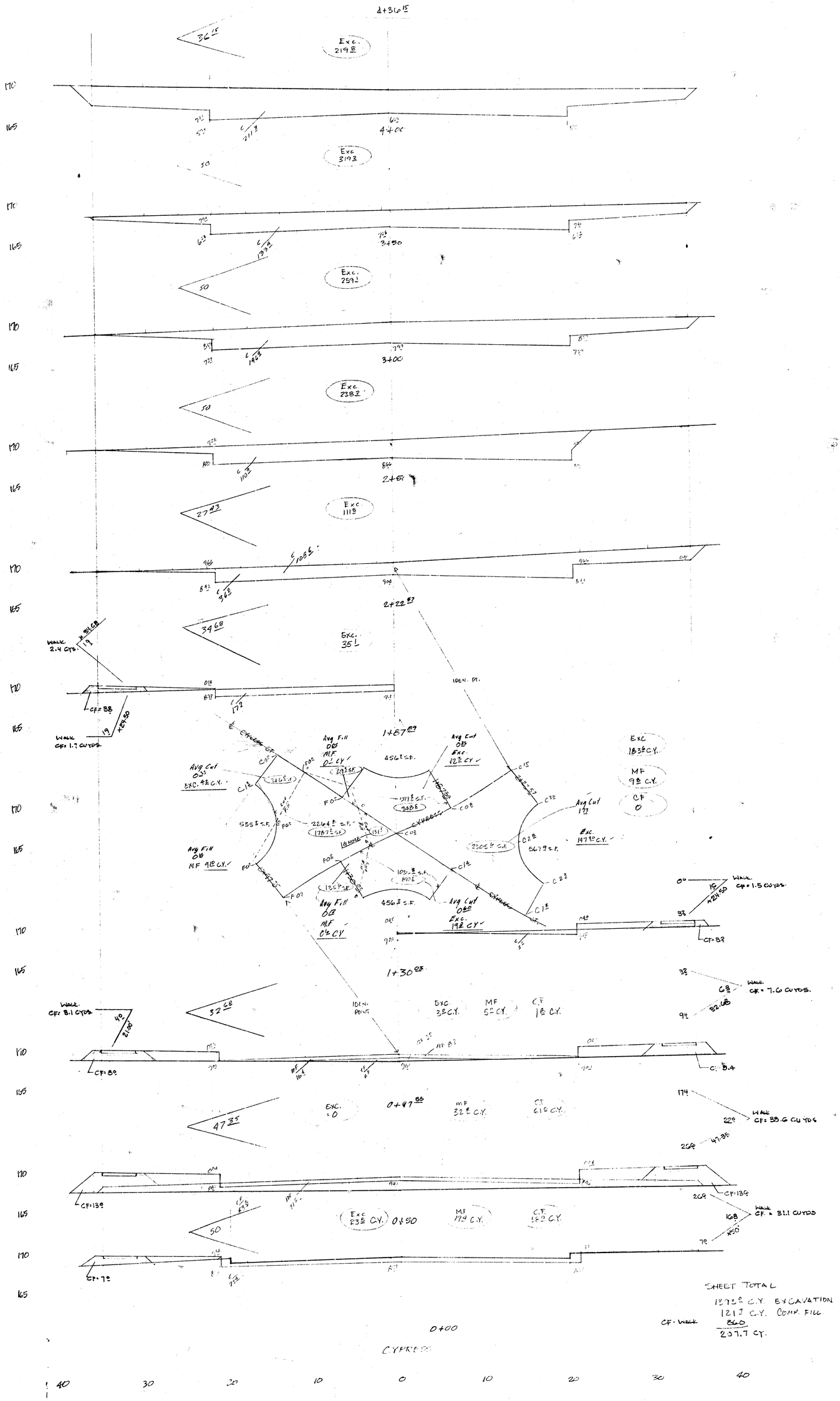
DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

MARCH 1984

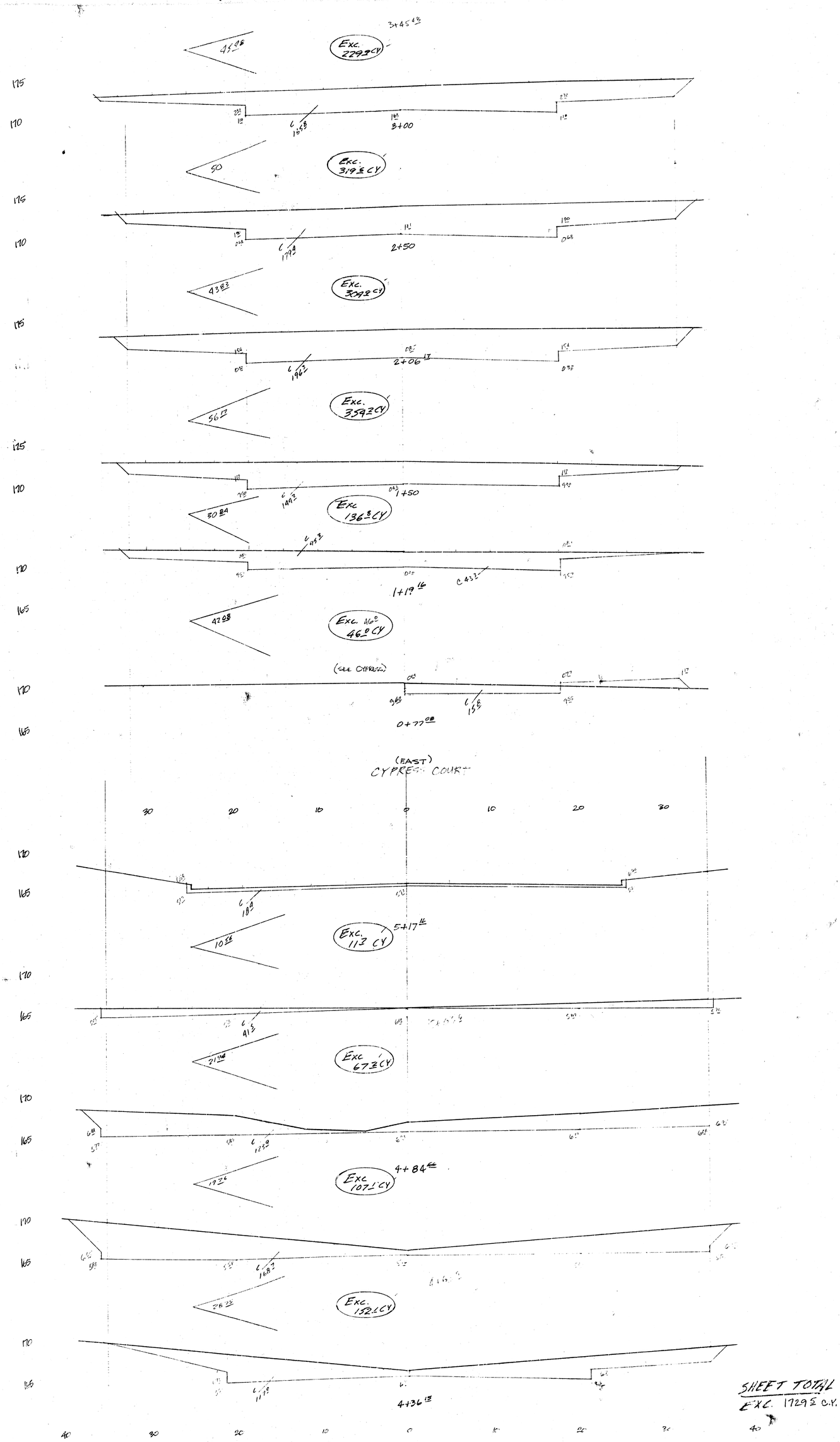
8/12 (B/12)



CYPRESS

PROJ. NO. 472-76-245-81140-000-000-001

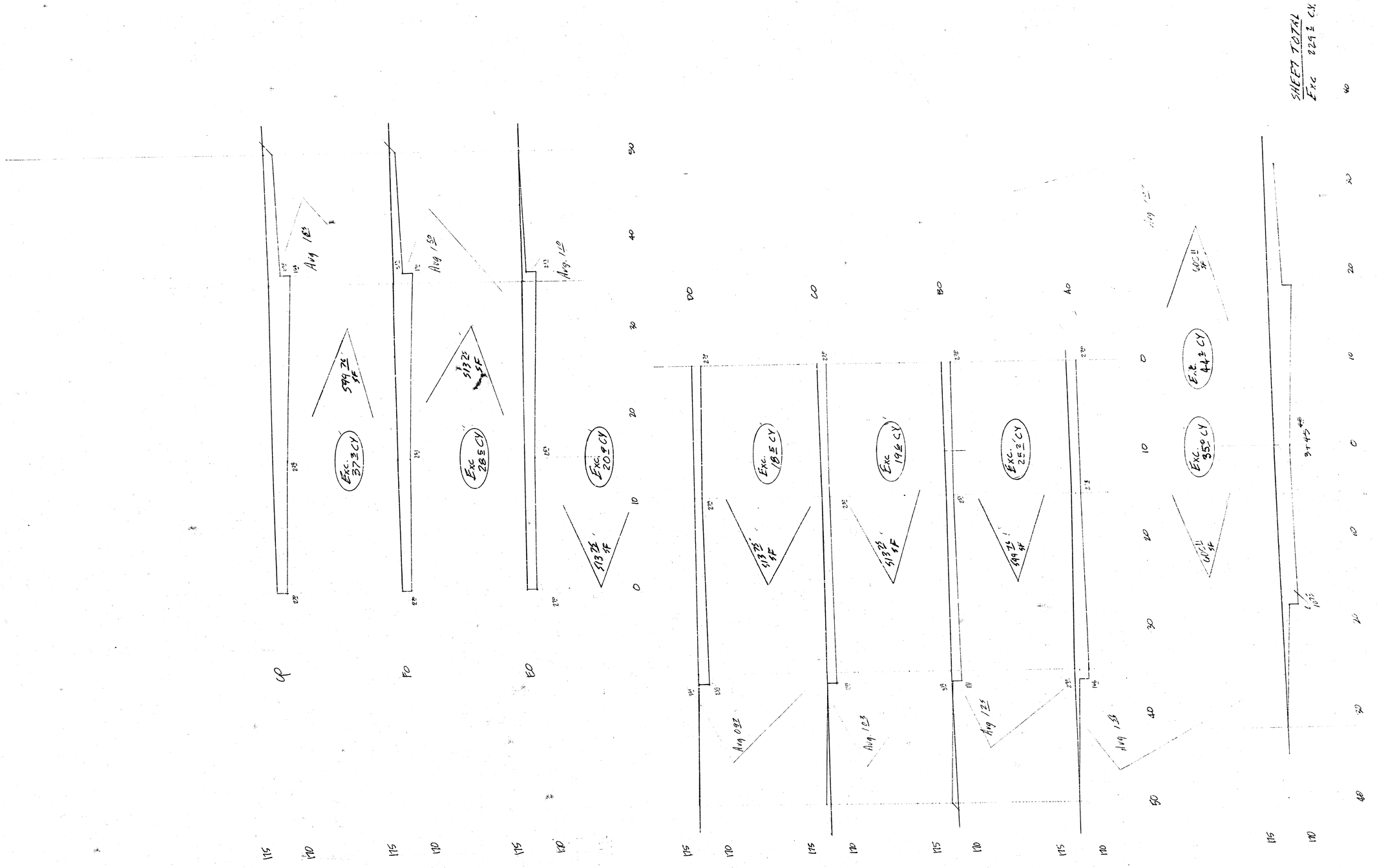
1/12 3/12



SHEET TOTAL
EXC. 1729.5 C.Y.

CYPRESS COURT
LOTS 25-35, BLK. 2,
HEDGECLIFF 4TH ADD.
PROJ. NO. 472-76-245-81140-000-000-001

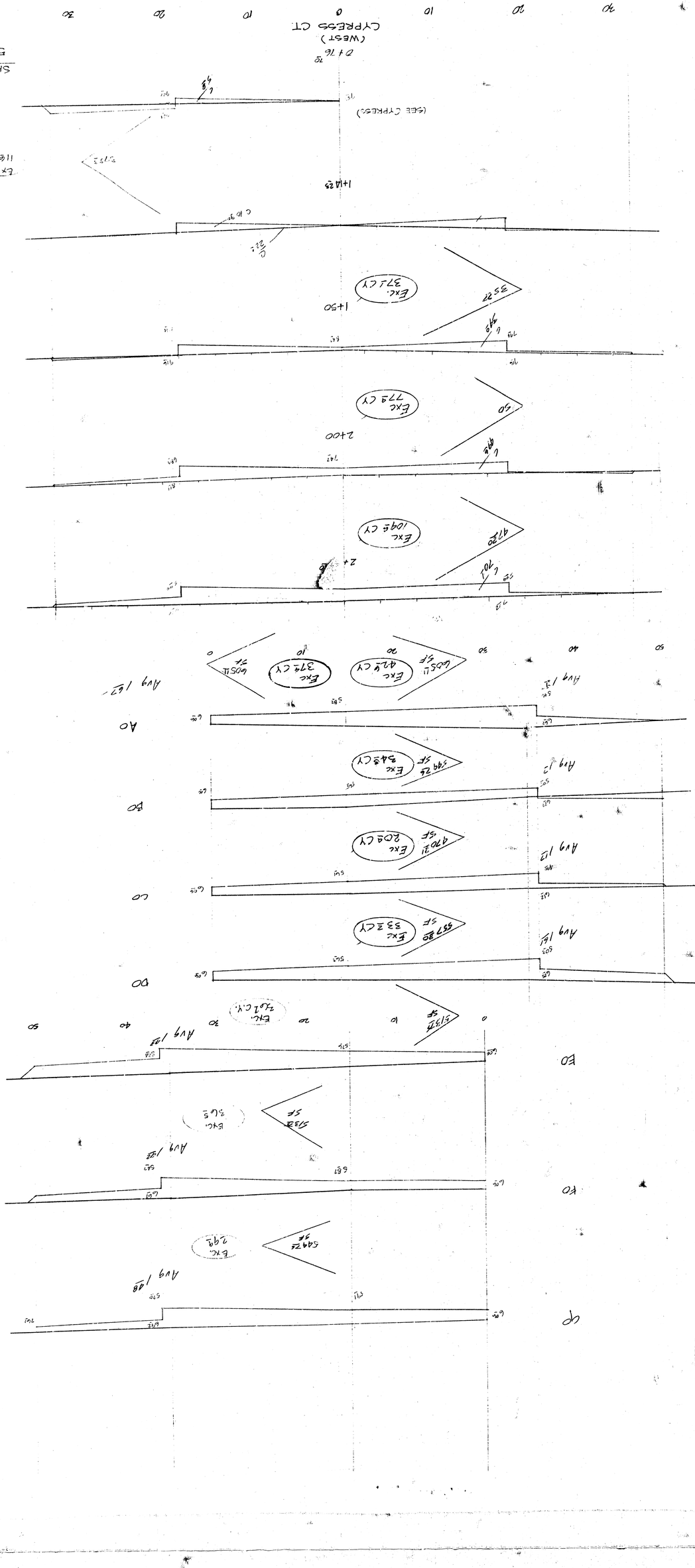
10/12



CYPRESS COURT
LOTS 25-35, BLK. 2,
HEDGECLIFF 4TH ADD.

PROJ. NO. 472-76-245-81140-000-000-001

11/12


CYPRESS CT
(WEST)
0+76
(SEE CYPRESS)
1+25
1+50
2+00
2+
Exc. 379 CY
Exc. 779 CY
Exc. 1095 CY
Exc. 2994 CY
Exc. 3848 CY
Exc. 2084 CY
Exc. 3332 CY
Exc. 3732 CY
Exc. 4292 CY
Exc. 3732 CY
Exc. 2992 CY
Exc. 3848 CY
Exc. 2084 CY
Exc. 3332 CY
Exc. 3732 CY
Exc. 4292 CY
Exc. 2992
Exc. 3848
Exc. 2084
Exc. 3332
Exc. 3732
Exc. 4292