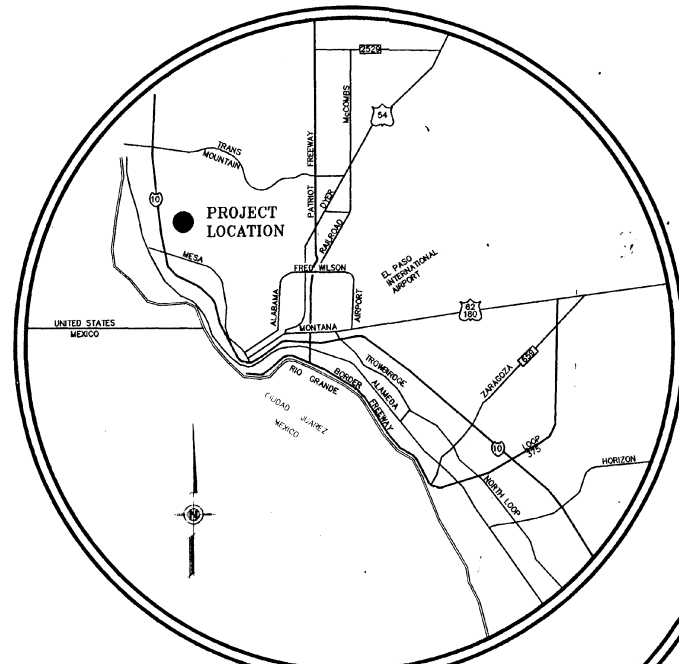


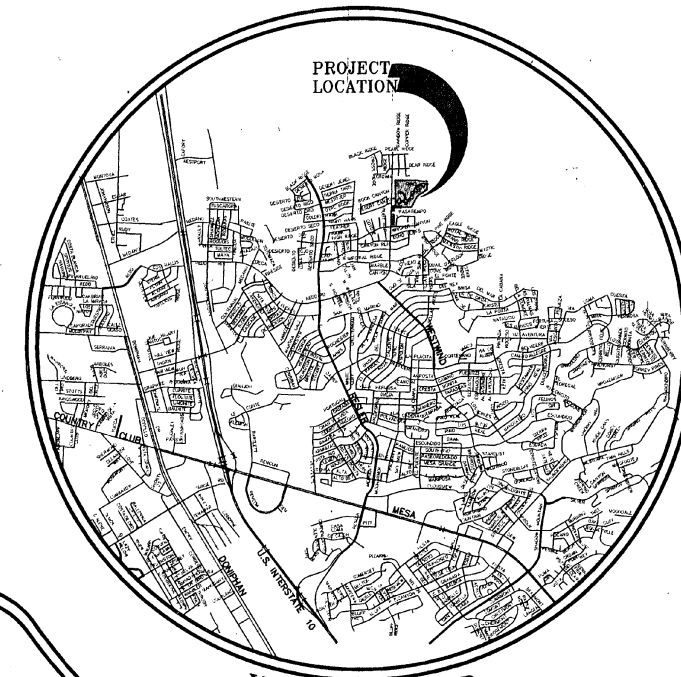
HIGHLANDS NORTH

UNIT THREE

STREET IMPROVEMENTS



VICINITY MAP

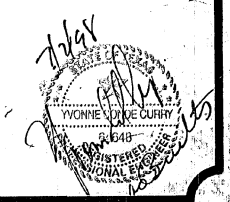
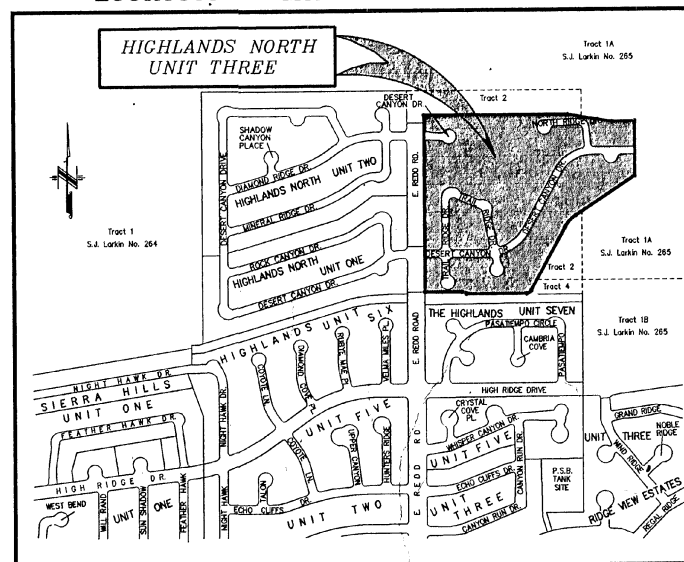


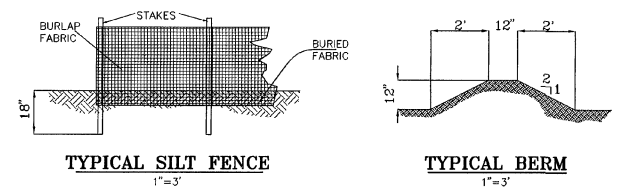
VICINITY MAP

I N D E X

TITLE	SHEET No.
COVER SHEET	1 OF 16
PLAT	2 OF 16
GRADING PLAN	3, 3A OF 16
DRAINAGE PLAN	4 OF 16
PLAN & PROFILE	5-11 OF 16
DRAINAGE DETAILS	12 OF 16
STANDARD DETAILS	13-15 OF 16
ILLUMINATION PLAN	16 OF 16
ILLUMINATION DETAILS	16 OF 16

LOCATION MAP 1" = 600'

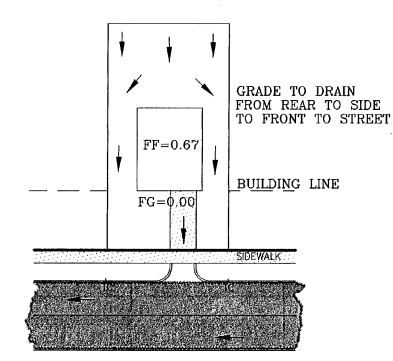




EROSION AND SEDIMENT CONTROLS
TEMPORARY STABILIZATION
 A TEMPORARY BERM OR SILT FENCE (SEE DETAIL) WILL BE PLACED ALONG THE PERIMETER OF THE PROPERTY DURING CONSTRUCTION ACTIVITIES.

OFFSITE VEHICLE TRACKING
 A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEEPED DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE.

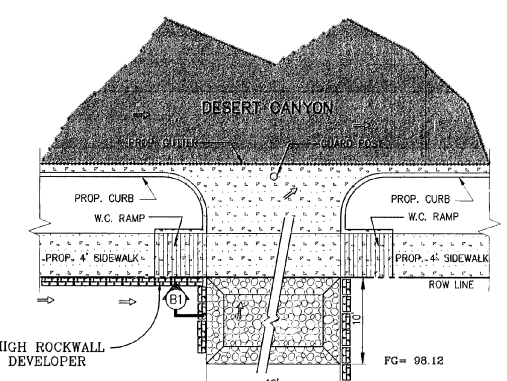
EROSION AND DUST CONTROL PLAN



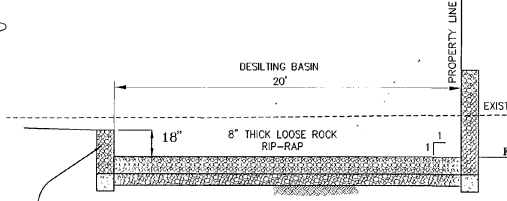
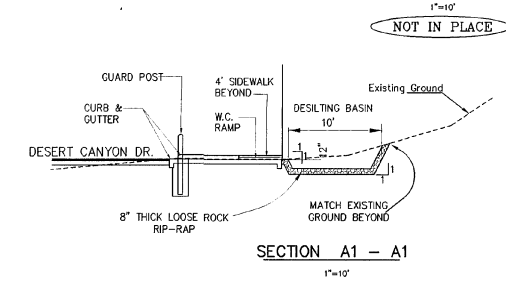
DRIVEWAY SLOPES MUST BE 10% MAXIMUM FROM GUTTER FOR FIRST 12 FEET, AND 14% MAXIMUM THEREAFTER (BLDG. CODE 18.08.060C). DRIVEWAY TO BE LOCATED ON HIGH SIDE.

*AS OF 4/7/99
SEE REVISED SHEET.*

FOR SECTIONS SEE SHEET 3A OF 16.



TYPICAL DESILTING BASIN
1"=10'



SECTION B1 - B1
1"=5'

- NOTES:**
1. A RETAINING WALL SHALL BE REQUIRED WHEN THE GRADE DIFFERENCE BETWEEN LOTS - LOT STREET IS OVER 2'-0".
 2. THIS SUBDIVISION IS IN FLOOD ZONE B & C PANEL 480214-0022E, DATED JANUARY 03, 1997. - BFE = 3670.80
 3. DRIVEWAYS FOR THE LOTS ON DESERT CANYON DR. SHOULD BE PLACED ON THE "HIGH SIDE" OR "TERRACED" IN ORDER TO COMPLY WITH THE MUNICIPAL ORDINANCE CODE FOR DRIVEWAY SLOPES.
 4. PRIVATE SLOPE AND DRAINAGE EASEMENTS TO BE MAINTAINED BY OWNERS.

○ DENOTES AS BUILT CONDITIONS ONLY

CONDE, INC.
1700 LEE HIGHWAY, SUITE 400
DALLAS, TEXAS 75244

HIGHLANDS NORTH UNIT THREE
GRADING PLAN

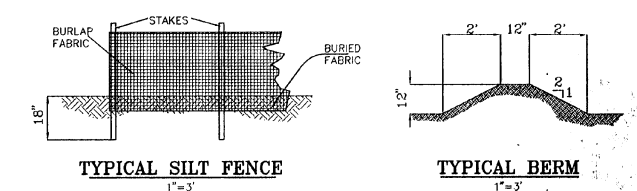
REVISIONS

5-15-97	10 ELEV.
6-13-97	LOTS
8-8-97	ROCKWALL
9-2-97	REVISED SLOPES
11-6-97	LOT GRADING
1-21-98	LOTS
7-13-98	AS BUILTS

DATE: 197-21 FEB 1997
SHT 3 OF 16

SCALE: 1"=100'

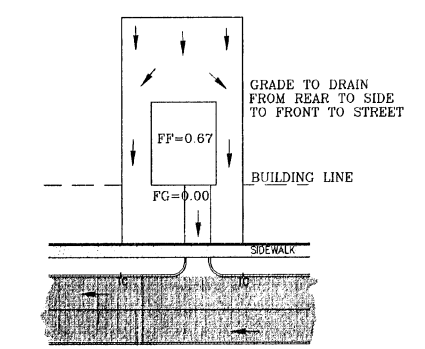
HN3-GR4



EROSION AND SEDIMENT CONTROLS
TEMPORARY STABILIZATION
A TEMPORARY BERM OR SILT FENCE (SEE DETAIL) WILL BE PLACED ALONG THE PERIMETER OF THE PROPERTY DURING CONSTRUCTION ACTIVITIES.

OFFSITE VEHICLE TRACKING
A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEEP DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE.

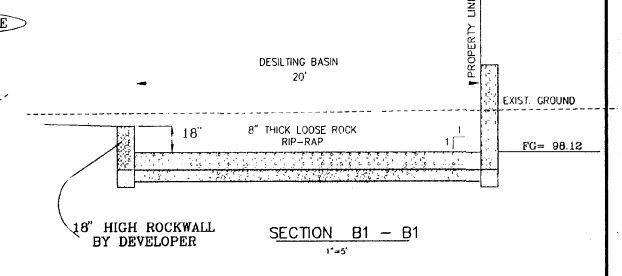
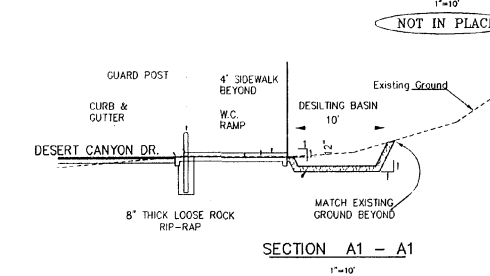
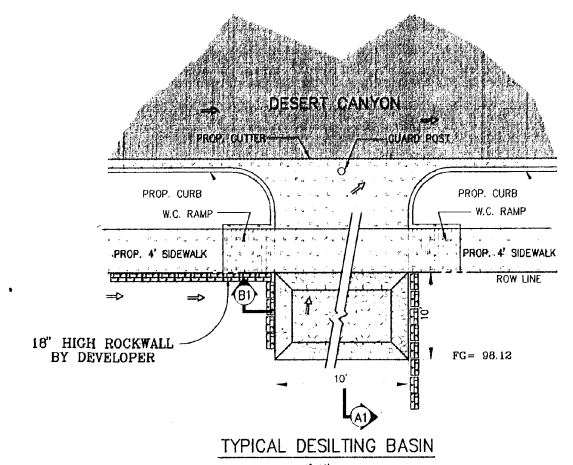
EROSION AND DUST CONTROL PLAN



DRIVEWAY SLOPES MUST BE 10% MAXIMUM FROM GUTTER FOR FIRST 12 FEET AND 14% MAXIMUM THEREAFTER (BLDG. CODE 18.08.080C). DRIVEWAY TO BE LOCATED ON HIGH SIDE.

TYPICAL LOT GRADING
1"=40'

FOR SECTIONS SEE SHEET 3A OF 16.



- NOTES:**
1. A RETAINING WALL SHALL BE REQUIRED WHEN THE GRADE DIFFERENCE BETWEEN LOTS - LOT STREET IS OVER 2'-0".
 2. THIS SUBDIVISION IS IN FLOOD ZONE B & C PANEL 480214-0022E. DATED JANUARY 03, 1997. - BFE = 3670.80
 3. DRIVEWAYS FOR THE LOTS ON DESERT CANYON DR SHOULD BE PLACED ON THE "HIGH SIDE" OR "TERRACED" IN ORDER TO COMPLY WITH THE MUNICIPAL ORDINANCE CODE FOR DRIVEWAY SLOPES.
 4. PRIVATE SLOPE AND DRAINAGE EASEMENTS TO BE MAINTAINED BY OWNERS.

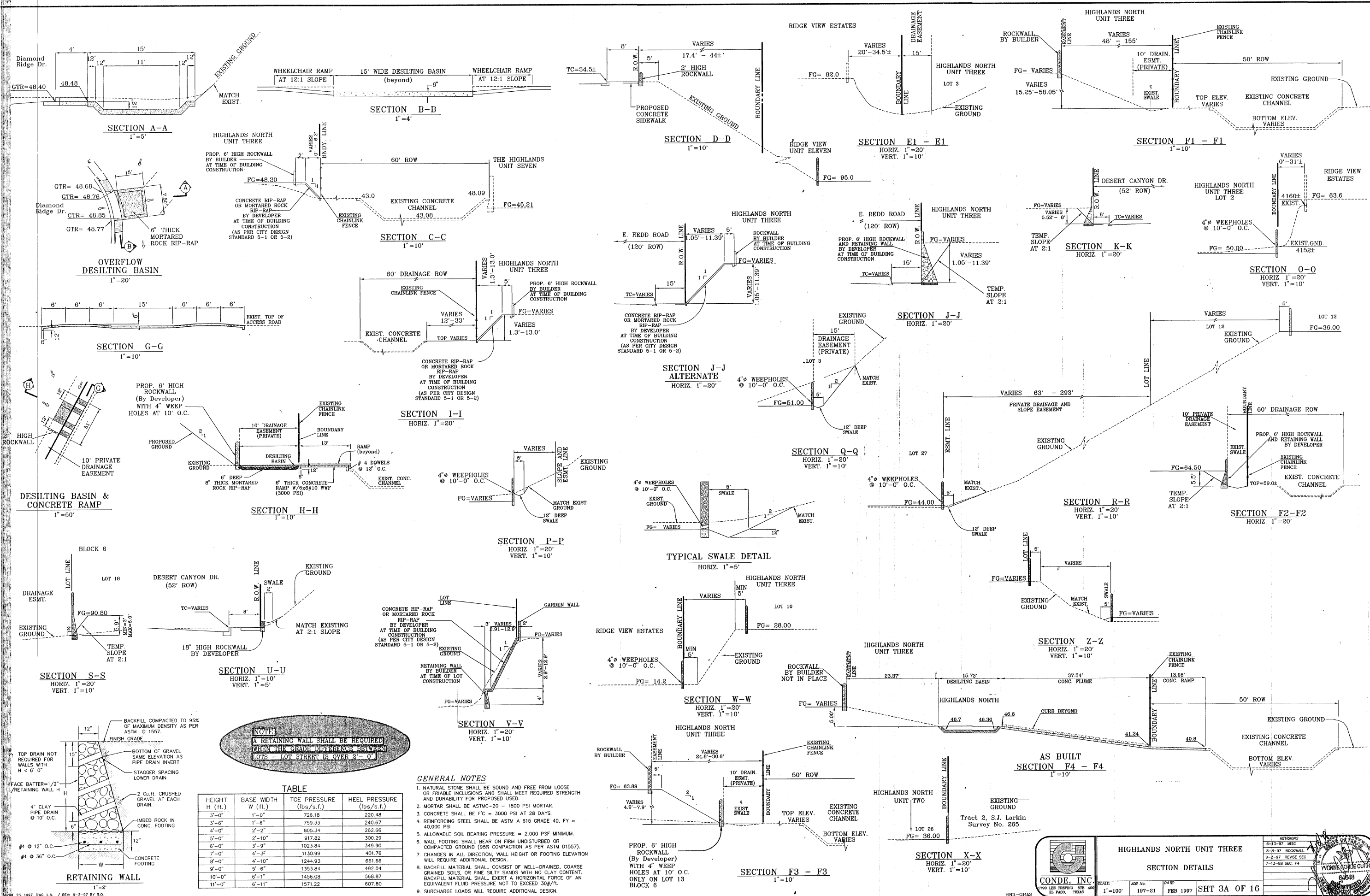
○ DENOTES AS BUILT CONDITIONS ONLY



HIGHLANDS NORTH UNIT THREE			
GRADING PLAN			
REVISIONS	DATE	BY	APP.
5-15-97	IC ELEV		
6-13-97	LOTS		
8-8-97	ROCKWALL		
9-2-97	REVISED SEC		
11-6-97	LOT GRADES		
1-21-98	LOT		
7-13-98	AS BUILT		
SCALE	JOB No.	DATE	SHT 3 OF 16
1"=100'	197-21	FEB 1997	

BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD ELEV. = 4128.26 (CITY DATUM)

600506



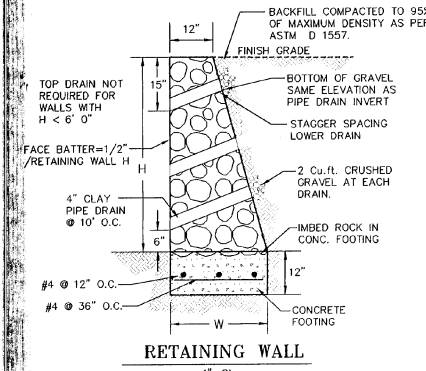
NOTES
 A RETAINING WALL SHALL BE REQUIRED WHEN THE GRADE DIFFERENCE BETWEEN LOTS - LOT STREET IS OVER 2'-0"

GENERAL NOTES

- NATURAL STONE SHALL BE SOUND AND FREE FROM LOOSE OR FRIBLE INCLUSIONS AND SHALL MEET REQUIRED STRENGTH AND DURABILITY FOR PROPOSED USE.
- MORTAR SHALL BE ASTM-C-20 - 1800 PSI MORTAR.
- CONCRETE SHALL BE F'C = 3000 PSI AT 28 DAYS.
- REINFORCING STEEL SHALL BE ASTM A 615 GRADE 40, F_y = 40,000 PSI
- ALLOWABLE SOIL BEARING PRESSURE = 2,000 PSF MINIMUM.
- WALL FOOTING SHALL BEAR ON FIRM UNDISTURBED OR COMPACTED GROUND (95% COMPACTION AS PER ASTM D1557).
- CHANGES IN ALL DIRECTION, WALL HEIGHT OR FOOTING ELEVATION WILL REQUIRE ADDITIONAL DESIGN.
- BACKFILL MATERIAL SHALL CONSIST OF WELL-DRAINED, COARSE GRAINED SOILS, OR FINE SILTY SANDS WITH NO CLAY CONTENT. BACKFILL MATERIAL SHALL EXERT A HORIZONTAL FORCE OF AN EQUIVALENT FLUID PRESSURE NOT TO EXCEED 30#/FT.
- SURCHARGE LOADS WILL REQUIRE ADDITIONAL DESIGN.

TABLE

HEIGHT H (ft.)	BASE WIDTH W (ft.)	TOE PRESSURE (lb/s.f.)	HEEL PRESSURE (lb/s.f.)
3'-0"	1'-0"	726.18	220.48
3'-6"	1'-6"	759.33	240.67
4'-0"	2'-2"	805.34	262.66
5'-0"	2'-10"	917.82	300.29
6'-0"	3'-9"	1023.84	349.90
7'-0"	4'-3"	1130.99	401.76
8'-0"	5'-9"	1244.93	461.66
9'-0"	5'-6"	1353.84	492.04
10'-0"	6'-1"	1456.08	568.87
11'-0"	6'-11"	1571.22	607.80



CONDE, INC.
 1700 LEB TREVINO STE. 400
 EL PASO, TEXAS

HIGHLANDS NORTH UNIT THREE

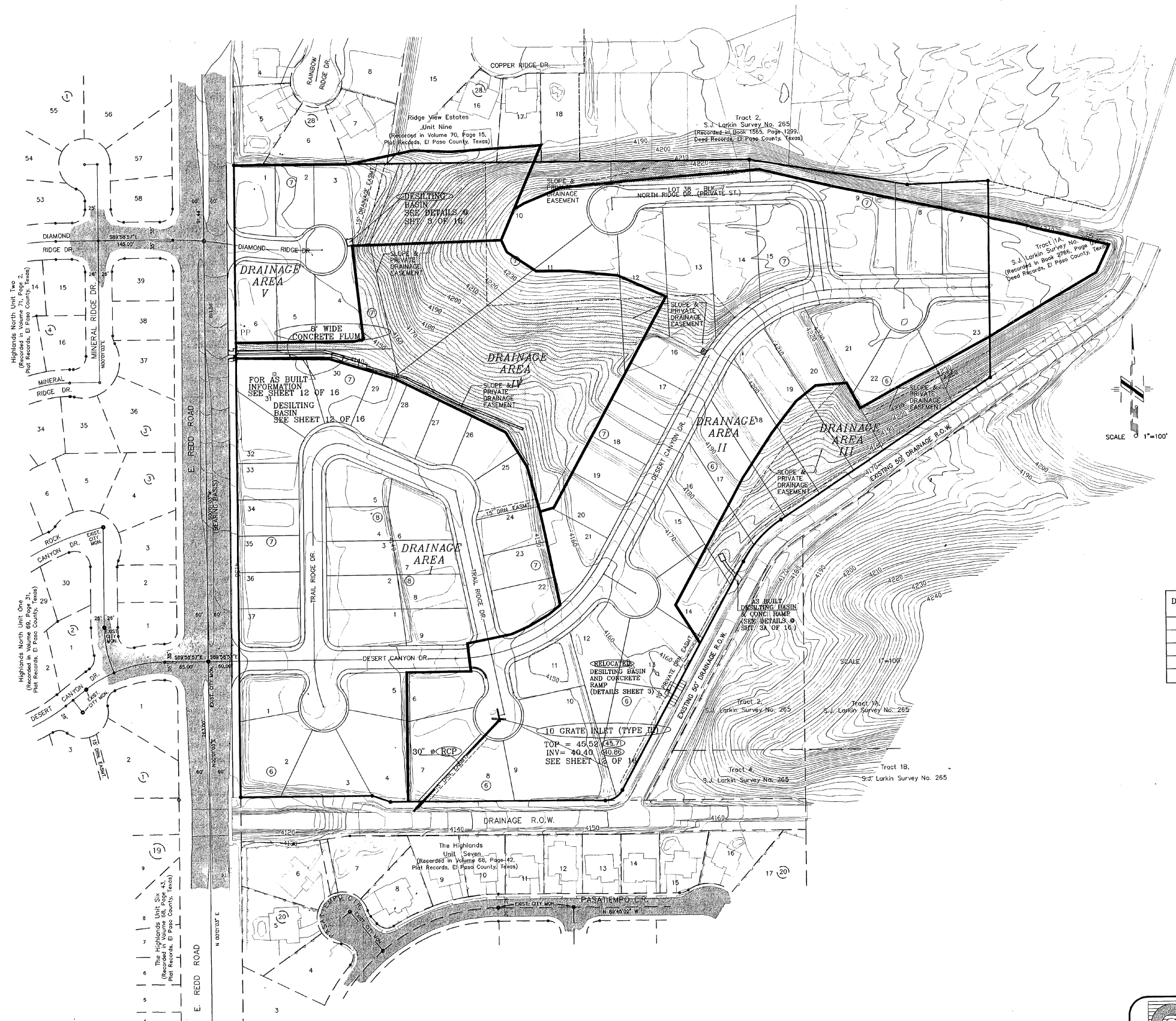
SECTION DETAILS

SCALE: 1"=100'
 JOB No. 197-21
 DATE: FEB 1997
 SHT 3A OF 16

REVISIONS:
 8-13-97 MSC
 8-8-97 ROCKWALL
 9-2-97 REVERSE SEC
 7-13-98 SEC. F4


Tract 2, S.J. Larkin Survey No. 265

AS BUILT SECTION F4 - F4
 HORIZ. 1"=20'
 VERT. 1"=10'



DRAINAGE AREA	AREA (acres)			t min	c	i in/hr	Q cfs
	TOTAL	STREET	ADJUST				
I	8.95			25.5	0.55	3.32	16.34
II	14.3			21.5	0.50	3.50	28.67
III	1.72			6.5	0.75	5.06	6.51
IV	4.24			13.0	0.75	3.48	11.07
V	3.48			15.0	0.50	4.10	7.99

○ DENOTES AS BUILT CONDITIONS ONLY



CONDE, INC.
1790 LEE TREVINO STE. 400
EL PASO, TEXAS

HIGHLANDS NORTH UNIT THREE
DRAINAGE PLAN

SCALE: 1"=100'
JOB No: 197-21
DATE: FEB 1997

SHT 4 OF 16

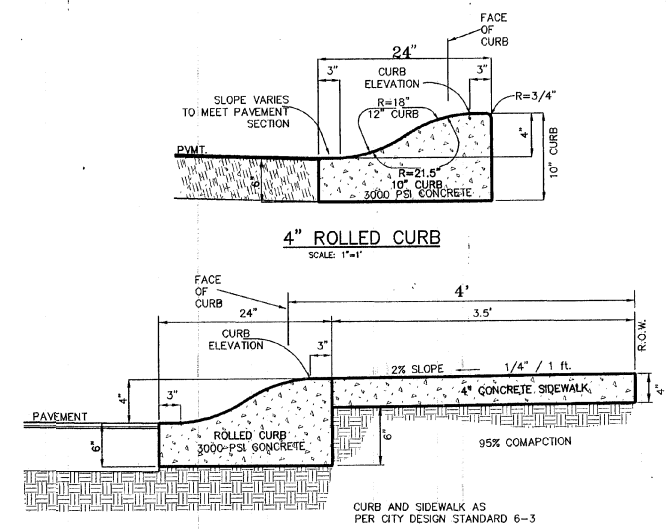
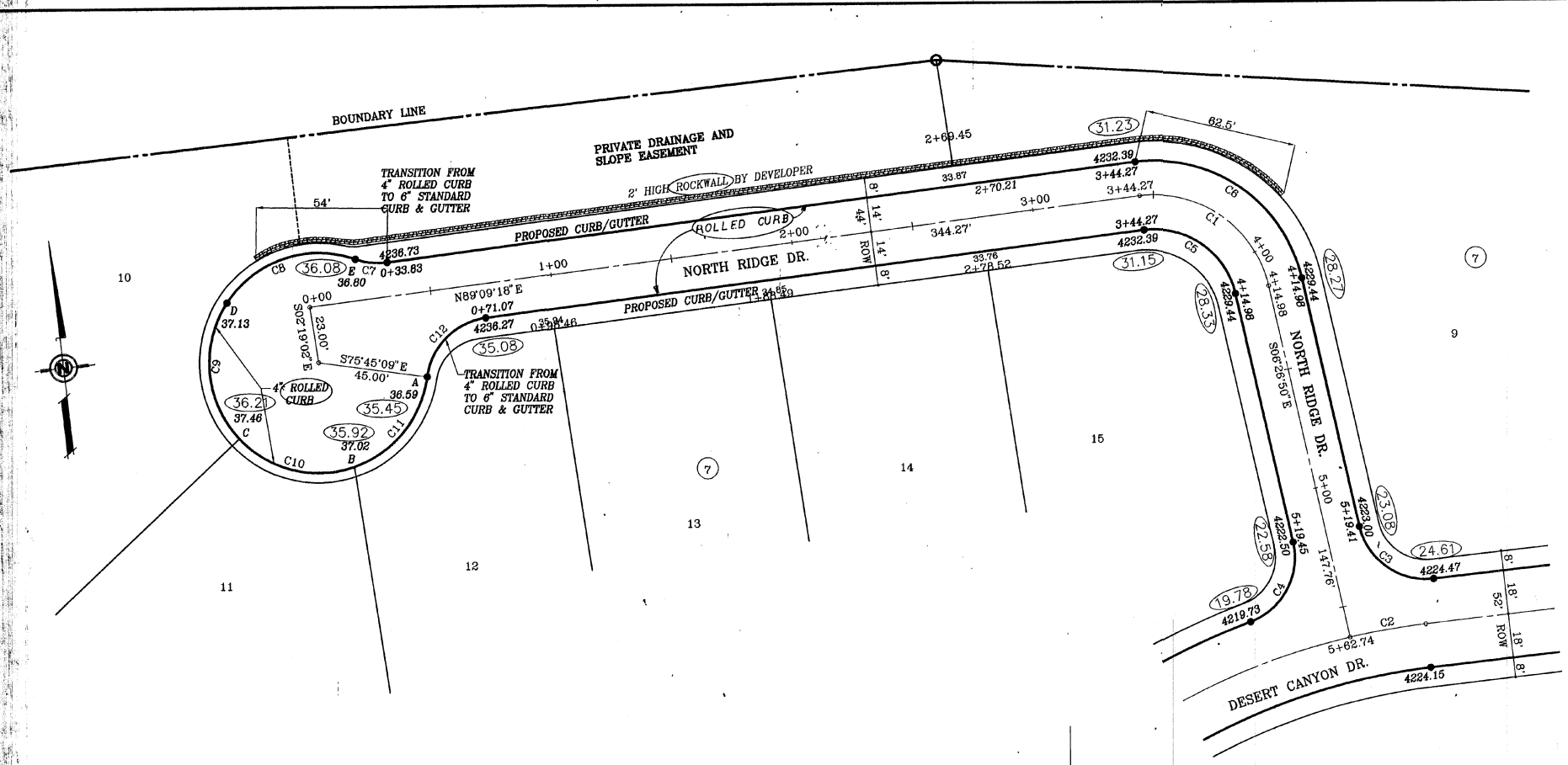
REVISIONS

6-13-97	LOTS
1-21-98	LOTS
7-13-98	AS BUILT

YVONNE VONDE CURRY
REGISTERED PROFESSIONAL ENGINEER
88648

600506

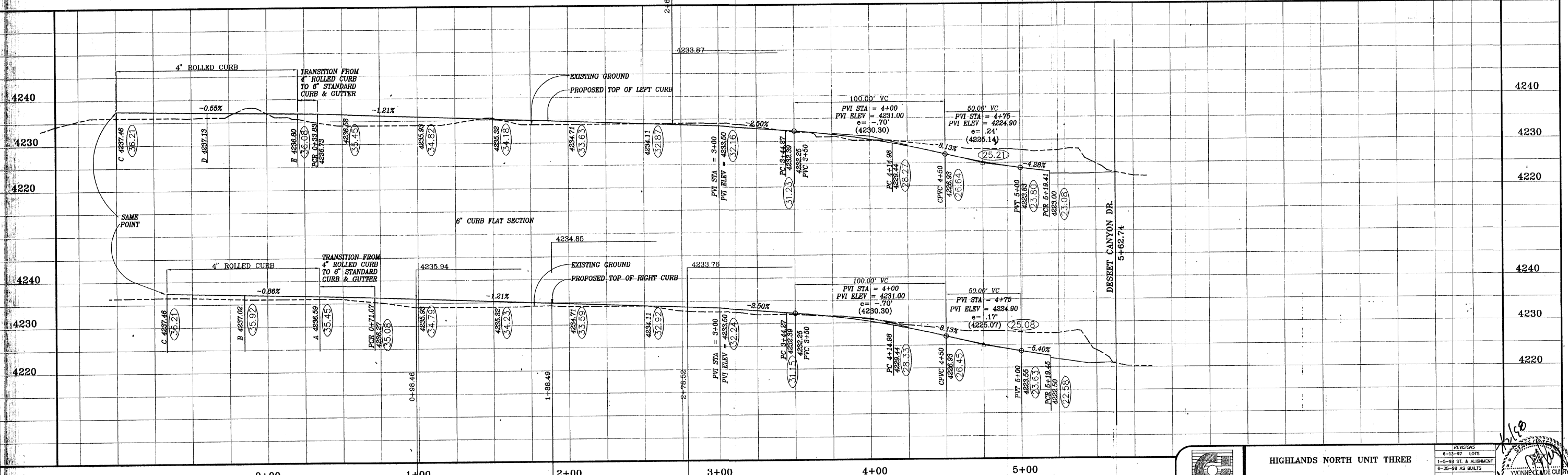
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	48.00'	70.70'	43.52'	64.48'	N48°38'46" W	84°23'52"
C2	280.00'	31.59'	15.81'	31.58'	S88°47'06" W	06°27'53"
C3	28.00'	40.82'	25.01'	37.30'	S48°12'54" E	83°32'07"
C4	28.00'	40.36'	24.60'	36.96'	N34°51'06" E	82°35'52"
C5	34.00'	50.08'	30.83'	45.68'	N48°38'46" W	84°23'52"
C6	62.00'	91.33'	56.22'	83.29'	N48°38'46" W	84°23'52"
C7	28.00'	13.24'	6.74'	13.11'	S77°18'03" E	27°05'17"
C8	45.00'	60.09'	35.48'	55.73'	S77°59'08" W	78°30'55"
C9	45.00'	60.09'	35.48'	55.73'	S01°28'13" W	78°30'55"
C10	45.00'	51.51'	28.99'	48.76'	S89°34'52" E	86°35'16"
C11	45.00'	49.78'	27.78'	47.28'	N45°56'11" E	63°22'39"
C12	28.00'	36.61'	21.45'	34.05'	S51°42'05" W	74°54'27"



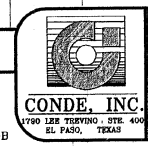
DRIVEWAY DETAIL
SCALE: 1"=1'

○ DENOTES AS BUILT CONDITIONS ONLY

SCALES: 1" = 30' HORIZONTAL
1" = 10' VERTICAL
BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD
ELEV. = 4128.28 (CITY DATUM)

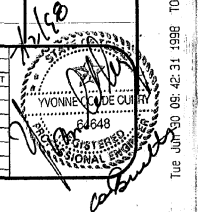


APRIL 16, 1997, DWG. L.V. / REV. BY R.O.



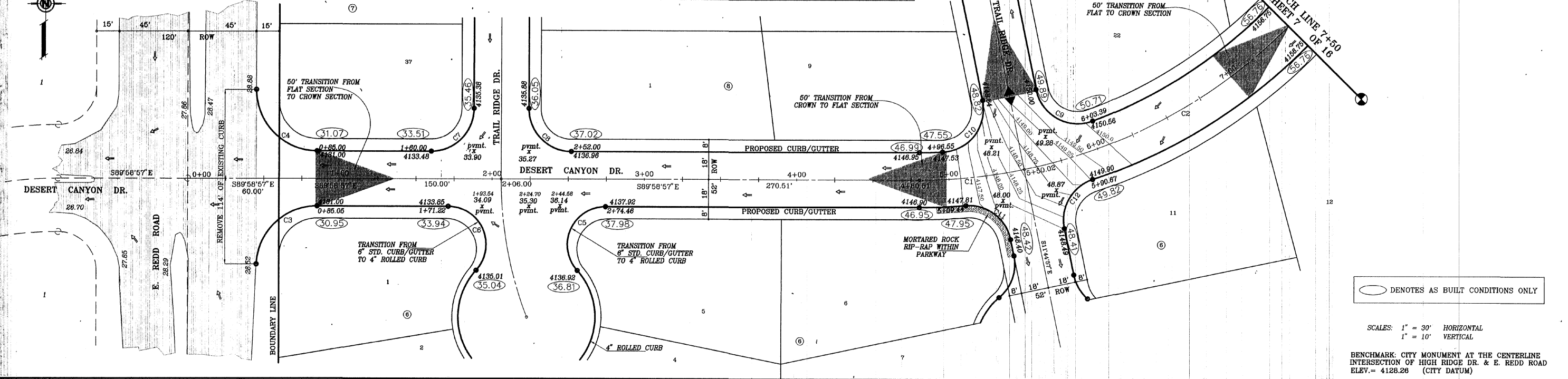
HIGHLANDS NORTH UNIT THREE
NORTH RIDGE DR.
JOB No: 197-21
DATE: FEB 1997
SHT 5 OF 18

REVISIONS
4-13-97 LOTS
1-5-98 ST. & ALIGNMENT
6-26-98 AS BUILTS



600506

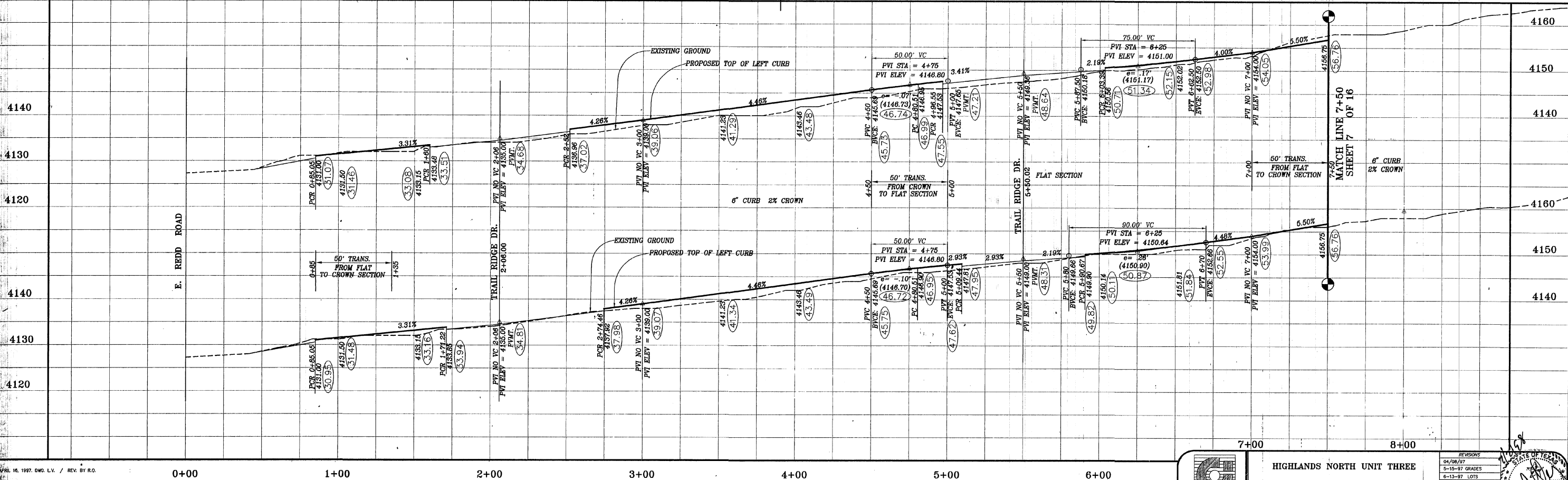
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	340.00'	69.51'	34.88'	69.39'	N64°09'36" E	11°42'50"
C2	340.00'	199.98'	102.97'	197.11'	N61°27'14" E	33°41'56"
C3	40.00'	60.88'	38.10'	55.17'	S46°24'47" W	87°12'32"
C4	40.00'	62.83'	40.00'	56.57'	S44°58'57" E	90°00'00"
C5	25.00'	57.77'	56.69'	45.75'	S23°48'59" W	132°24'07"
C6	25.00'	57.77'	56.69'	45.75'	N23°48'53" W	132°24'07"
C7	28.00'	43.98'	28.00'	39.60'	N45°01'03" E	90°00'00"
C8	28.00'	43.98'	28.00'	39.60'	S44°58'57" E	90°00'00"
C9	28.00'	48.35'	32.75'	42.56'	S81°13'08" E	98°56'24"
C10	28.00'	48.41'	32.82'	42.60'	N37°46'57" E	99°03'46"
C11	28.00'	40.61'	24.82'	37.15'	N53°18'13" W	83°06'32"
C12	28.00'	40.66'	24.86'	37.18'	S29°51'08" W	83°12'09"



○ DENOTES AS BUILT CONDITIONS ONLY

SCALE: 1" = 30' HORIZONTAL
1" = 10' VERTICAL

BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD
ELEV. = 4126.26 (CITY DATUM)



APRIL 16, 1997. DWG. LV. / REV. BY R.O.

0+00 1+00 2+00 3+00 4+00 5+00 6+00

CONDE, INC.
1700 LEE TREVINO STE. 400
EL PASO, TEXAS

HIGHLANDS NORTH UNIT THREE
DESERT CANYON DR.

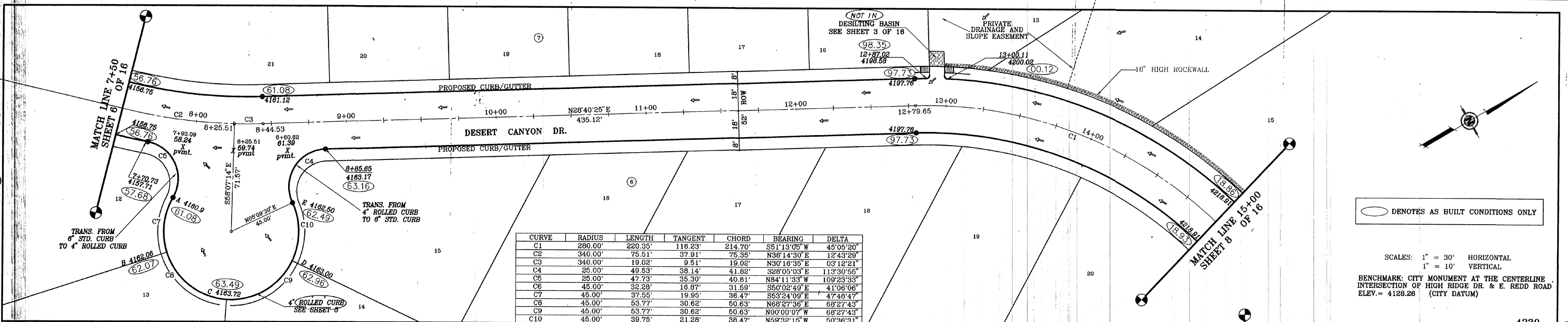
SCALE: 1" = 30'
JOB No. 197-21
DATE: FEB 1997
SHT 6 OF 16

REVISIONS

04/08/97
5-13-97 GRADES
6-13-97 LOTS
6-29-98 AS BUILT

600506

TUE JUN 30 7:07 AM 1998 TONY

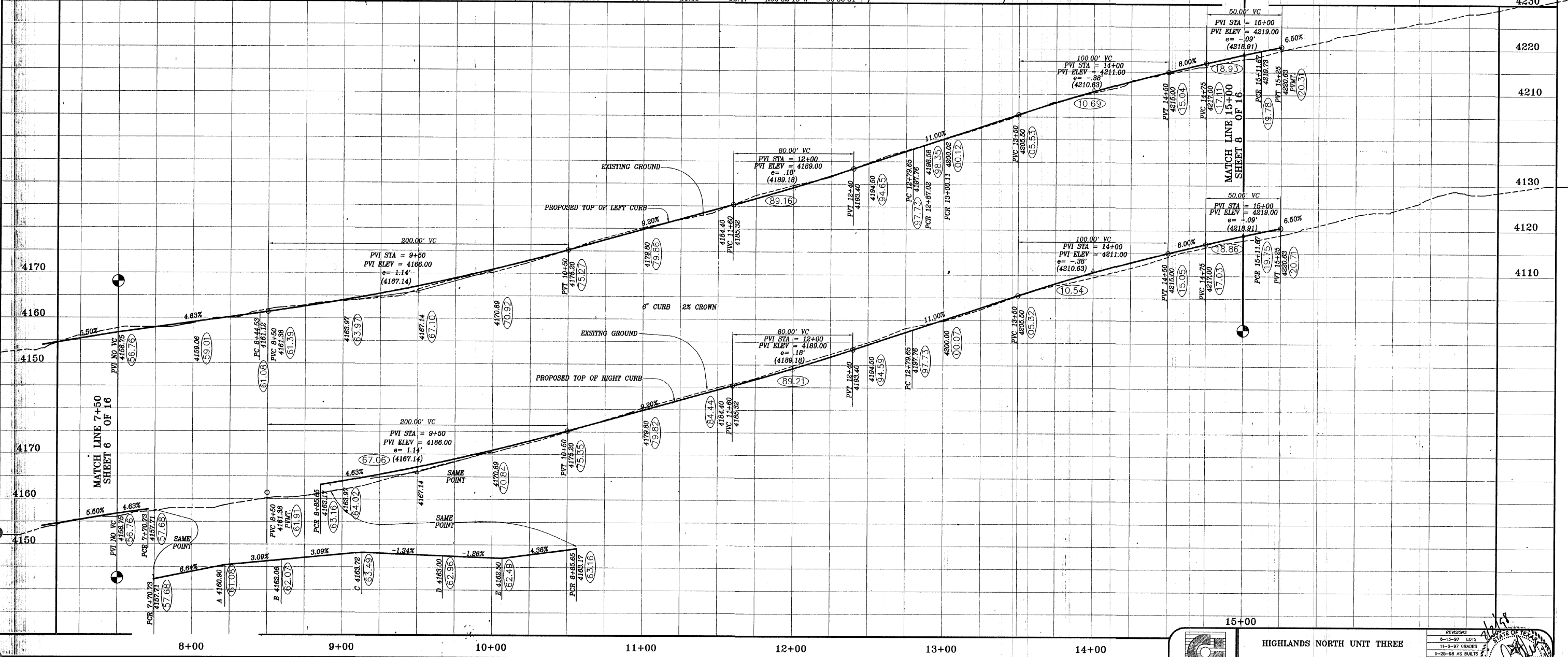


CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	280.00'	220.35'	116.23'	214.70'	S5°13'05" W	45°05'20"
C2	340.00'	75.61'	37.91'	76.36'	N36°14'30" E	12°43'29"
C3	340.00'	19.02'	9.51'	19.02'	N30°18'35" E	03°12'21"
C4	25.00'	49.63'	38.14'	41.82'	S28°05'03" E	113°30'55"
C5	25.00'	47.73'	35.30'	40.81'	N84°11'33" W	109°23'33"
C6	45.00'	32.28'	16.87'	31.59'	S50°02'49" E	41°06'06"
C7	45.00'	37.55'	19.95'	36.47'	S63°24'09" E	47°48'47"
C8	45.00'	53.77'	30.62'	50.63'	N68°27'36" E	68°27'43"
C9	45.00'	53.77'	30.62'	50.63'	N00°00'07" W	68°27'43"
C10	45.00'	39.75'	21.28'	38.47'	N59°32'15" W	50°36'31"

○ DENOTES AS BUILT CONDITIONS ONLY

SCALES: 1" = 30' HORIZONTAL
1" = 10' VERTICAL

BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD
ELEV. = 4128.26 (CITY DATUM)



15+00

HIGHLANDS NORTH UNIT THREE

DESERT CANYON

CONDE, INC.

1700 LEE TREVINO STE. 400 EL PASO, TEXAS

SCALE: 1" = 30'

JOB No. 197-21

DATE: FEB 1997

SHT 7 OF 16

REVISIONS:

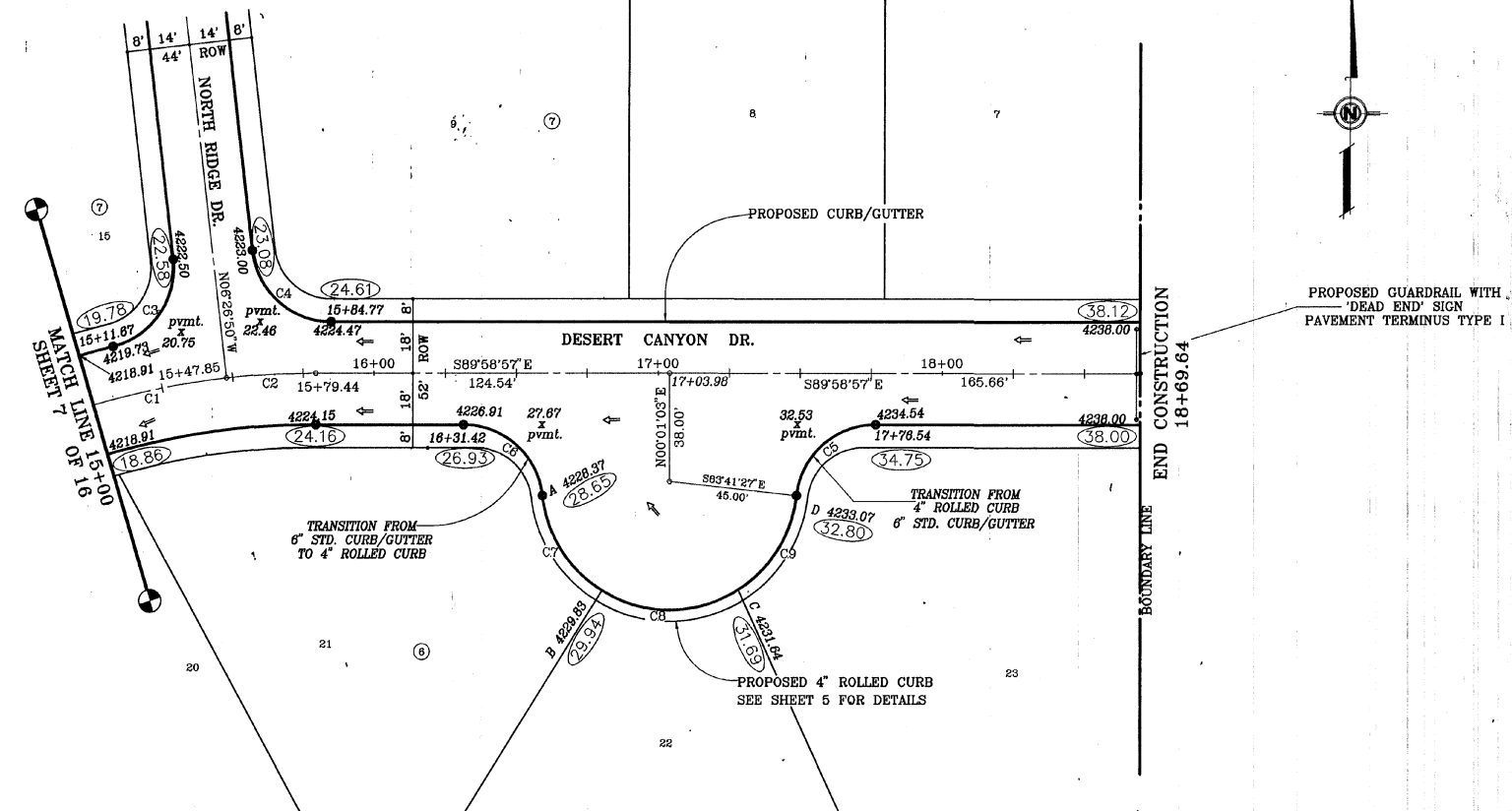
- 8-13-97 LOTS
- 11-4-97 GRADIES
- 6-25-98 AS SHILTS

REGISTERED PROFESSIONAL ENGINEER

Tue Jun 30 09:55:27 1998 TONY

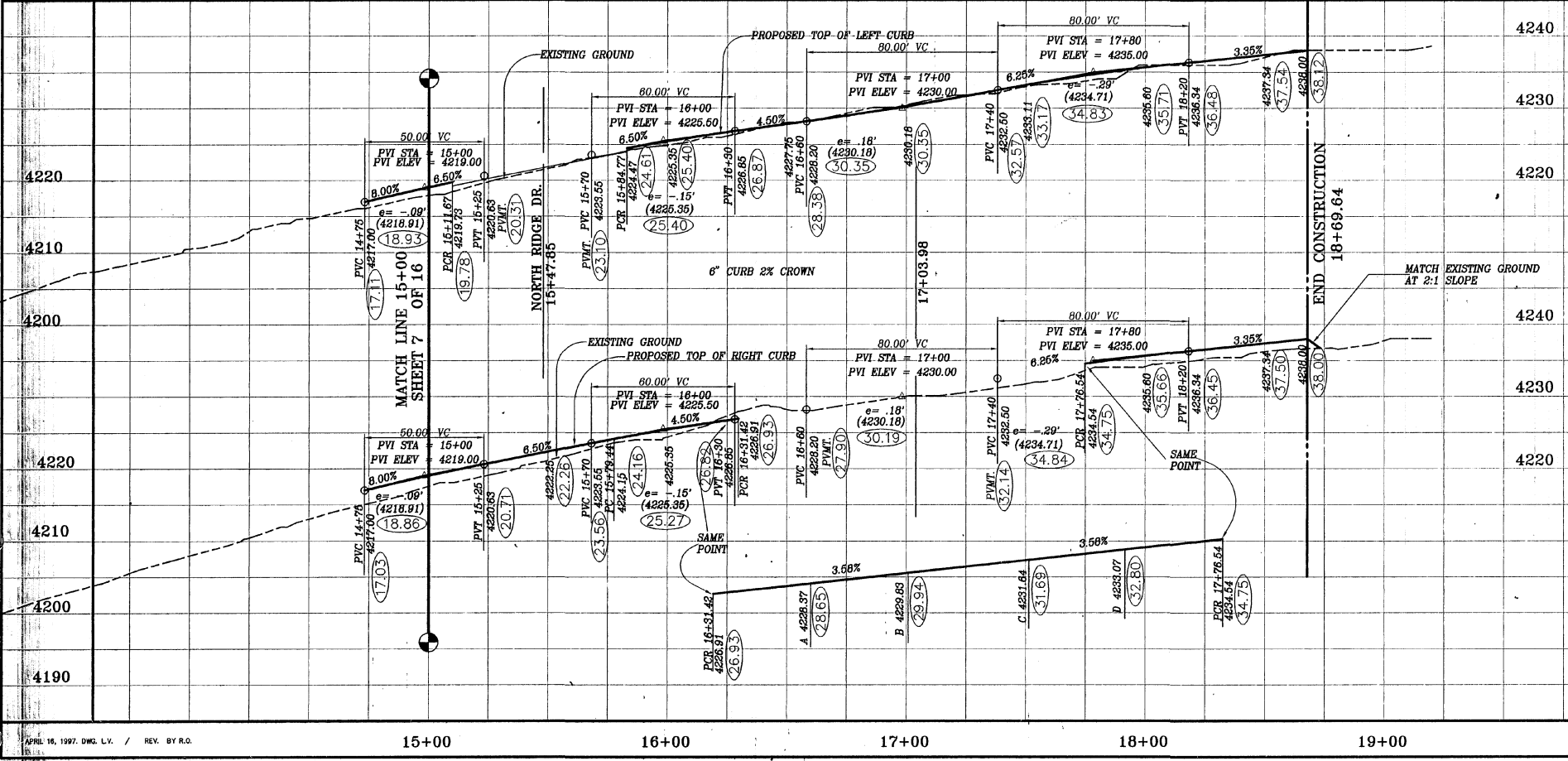
600506

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	260.00'	47.84'	23.98'	47.79'	S78°39'28" W	09°47'26"
C2	280.00'	31.55'	15.91'	31.58'	S89°47'07" W	08°27'53"
C3	28.00'	40.36'	24.90'	36.96'	N34°51'06" E	82°56'52"
C4	28.00'	40.82'	25.01'	37.30'	S48°12'53" E	83°32'07"
C5	28.00'	40.91'	25.08'	37.37'	S48°09'48" W	83°42'30"
C6	28.00'	40.91'	25.08'	37.37'	N48°07'42" W	83°42'30"
C7	45.00'	40.73'	21.88'	39.35'	S32°12'03" E	51°51'12"
C8	45.00'	50.55'	28.32'	47.93'	N89°41'33" E	64°21'36"
C9	45.00'	40.22'	21.56'	38.89'	N31°54'39" E	51°12'12"



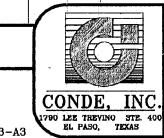
○ DENOTES AS BUILT CONDITIONS ONLY

SCALES: 1" = 30' HORIZONTAL
 1" = 10' VERTICAL
 BENCHMARK: CITY MONUMENT AT THE CENTERLINE
 INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD
 ELEV. = 4128.28 (CITY DATUM)



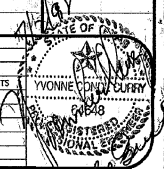
APRIL 16, 1997, DMD, L.V. / REV. BY R.G.

15+00 16+00 17+00 18+00 19+00



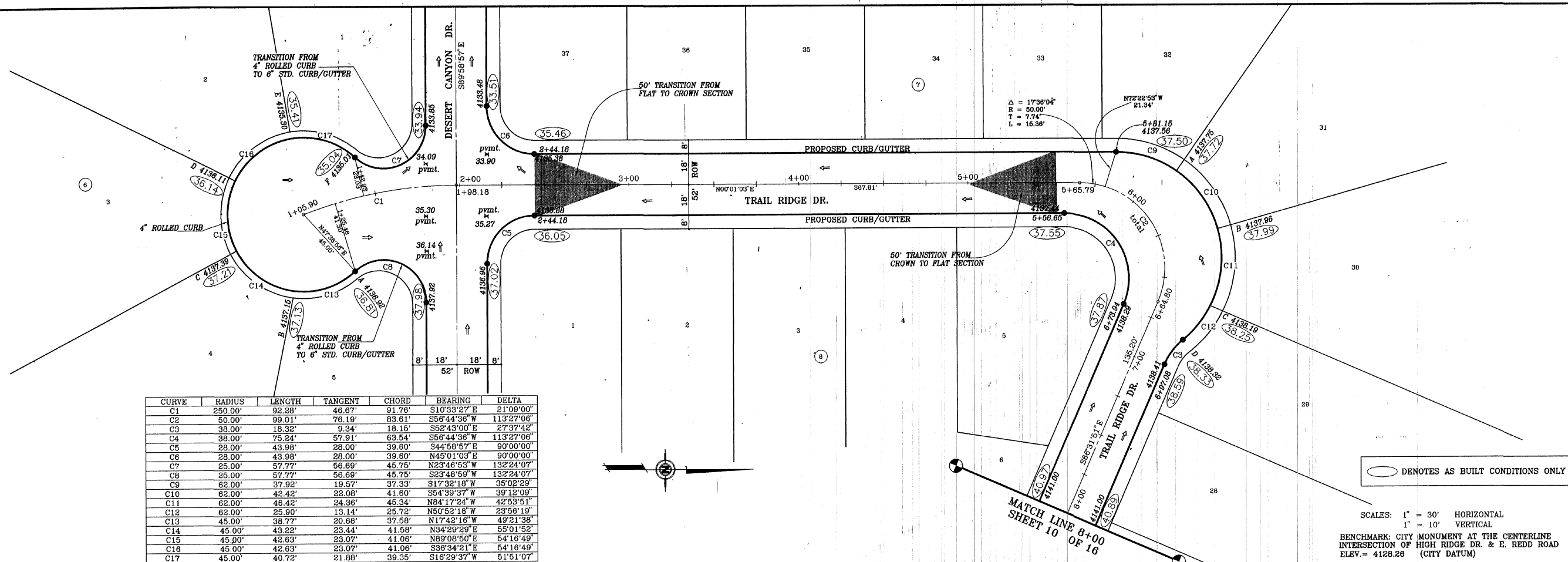
HIGHLANDS NORTH UNIT THREE
 DESERT CANYON DR.
 SCALE: 1" = 30'
 JOB No. 197-21
 DATE: FEB 1997
 SHT 8 OF 16

REVISIONS
04/08/97
6-13-97 LOTS
6-25-98 AS BUILT



6.00.50.60

Tue Jun 30 10:26:24 1998 TDY

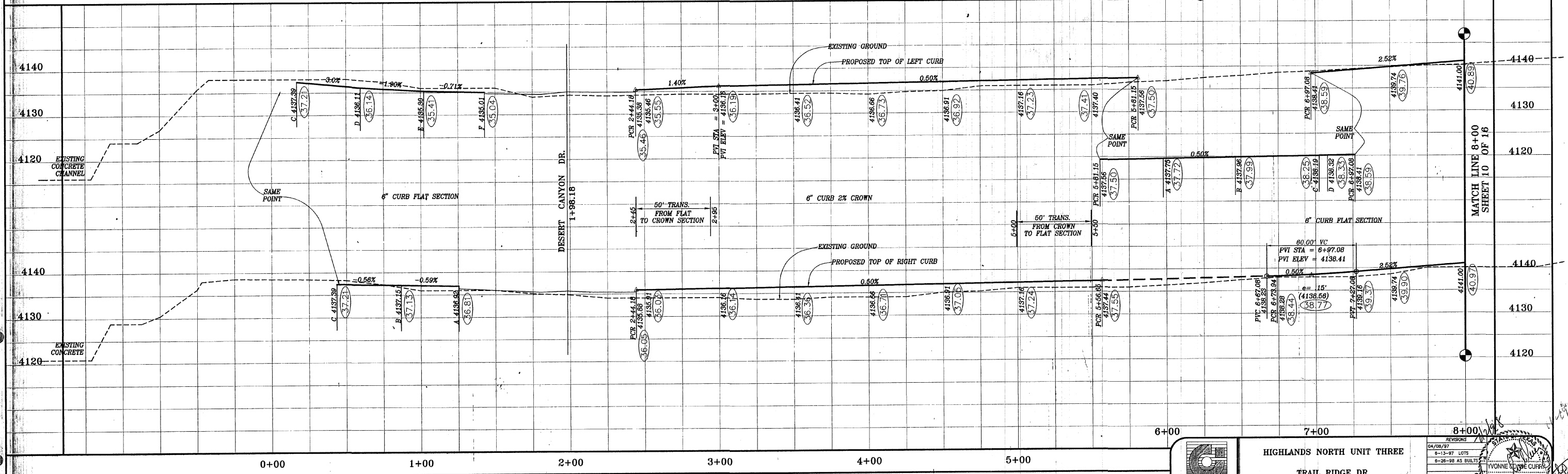


CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	250.00'	92.28'	46.67'	91.76'	S10°33'27" E	21°09'00"
C2	50.00'	99.01'	76.19'	83.61'	S56°44'36" W	113°27'06"
C3	38.00'	18.32'	9.34'	18.15'	S52°43'00" E	27°37'42"
C4	38.00'	75.24'	57.91'	63.54'	S56°44'36" W	113°27'06"
C5	28.00'	43.98'	28.00'	39.60'	S44°58'57" E	90°00'00"
C6	28.00'	43.98'	28.00'	39.60'	N45°01'03" E	90°00'00"
C7	25.00'	57.77'	56.69'	45.75'	N23°46'53" W	132°24'07"
C8	25.00'	57.77'	56.69'	45.75'	S23°48'59" W	132°24'07"
C9	62.00'	37.92'	19.57'	37.33'	S17°32'18" W	35°02'29"
C10	62.00'	42.42'	22.08'	41.60'	S54°39'37" W	39°12'09"
C11	62.00'	45.42'	24.36'	45.34'	N84°17'24" W	42°53'51"
C12	62.00'	25.90'	13.14'	25.72'	N50°52'18" W	23°56'19"
C13	45.00'	38.77'	20.68'	37.58'	N17°42'16" W	49°21'38"
C14	45.00'	43.22'	23.44'	41.58'	N34°29'29" E	55°01'52"
C15	45.00'	42.63'	23.07'	41.06'	N89°08'50" E	54°16'49"
C16	45.00'	42.63'	23.07'	41.06'	S36°34'21" E	54°16'49"
C17	45.00'	40.72'	21.88'	39.35'	S16°29'37" W	61°51'07"

○ DENOTES AS BUILT CONDITIONS ONLY

SCALES: 1" = 30' HORIZONTAL
1" = 10' VERTICAL

BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD
ELEV. = 4128.26 (CITY DATUM)



CONDE, INC.
1700 LEE TRIFORD SITE 400
EL PASO, TEXAS

HIGHLANDS NORTH UNIT THREE
TRAIL RIDGE DR.

SHT 9 OF 16

DATE: FEB 1997

SCALE: 1" = 30'

JOB No. 197-21

DATE: FEB 1997

REVISIONS:
04/08/97
6-13-97 LOTS
6-26-99 AS BUILT
WYONNE SCOTT CURVE

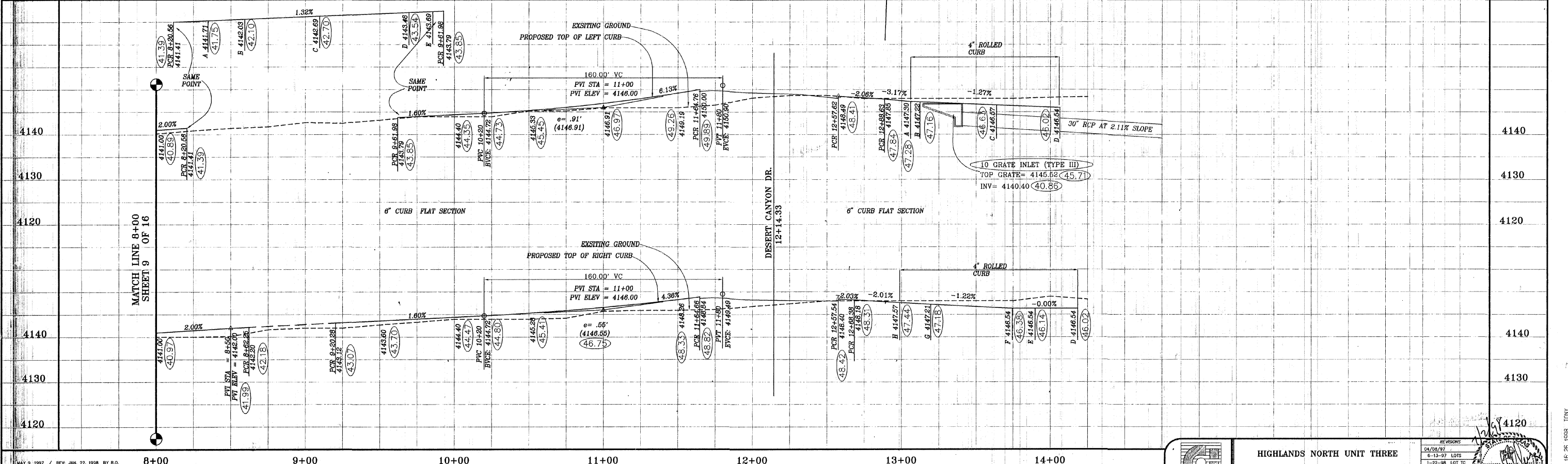
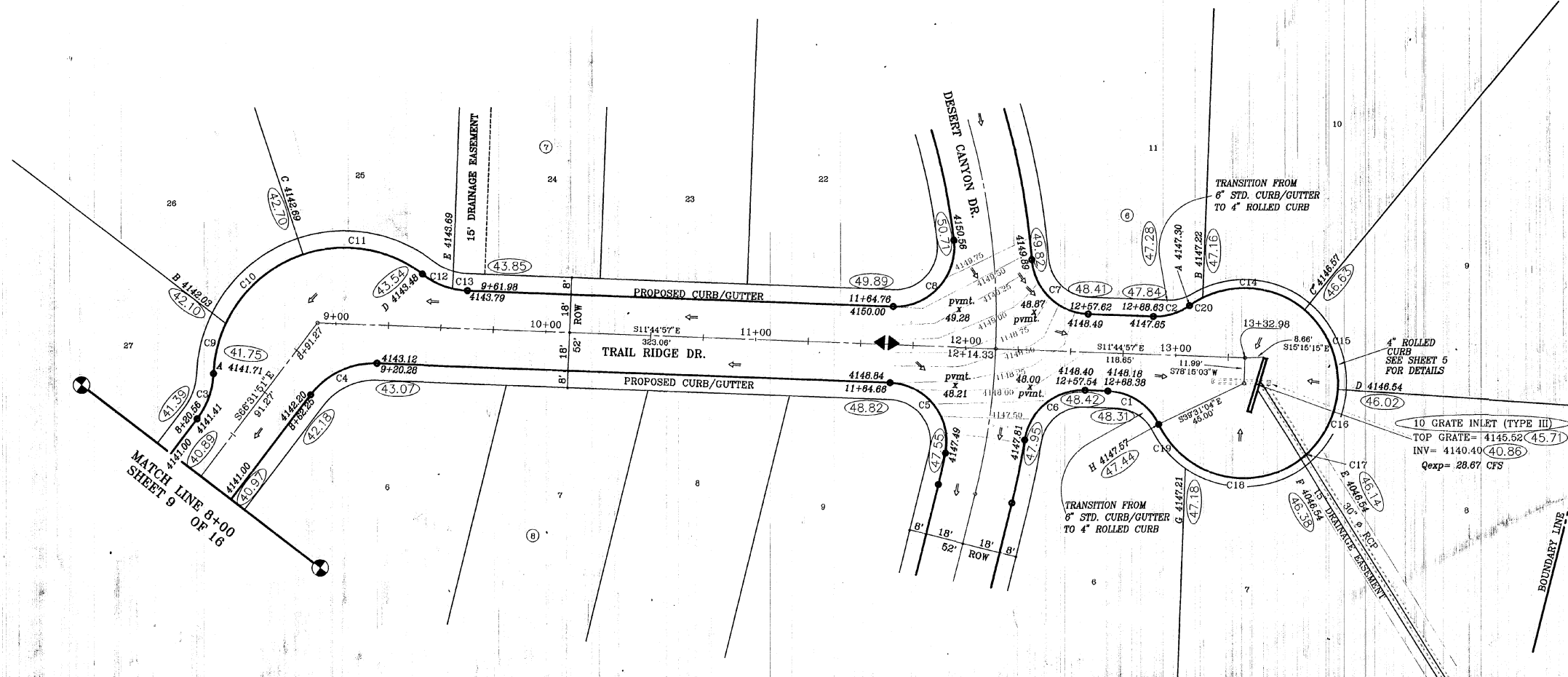
6005966

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	28.00'	30.41'	16.90'	28.94'	N19°21'59" E	62°13'53"
C2	28.00'	16.28'	9.48'	17.96'	S30°27'04" E	37°24'15"
C3	38.00'	23.18'	11.95'	22.80'	S83°59'19" E	34°54'55"
C4	38.00'	38.33'	19.68'	34.96'	N37°08'24" W	54°46'54"
C5	28.00'	48.41'	32.82'	42.60'	N37°46'57" E	99°03'48"
C6	28.00'	40.61'	24.82'	37.15'	N53°18'13" W	83°06'32"
C7	28.00'	40.66'	24.86'	37.18'	S29°51'08" W	83°12'09"
C8	28.00'	48.35'	32.75'	42.56'	S61°13'09" E	98°56'24"
C9	62.00'	24.60'	12.46'	24.43'	S89°55'07" W	22°43'47"
C10	62.00'	50.30'	26.63'	48.93'	N55°28'29" W	46°29'01"
C11	62.00'	59.95'	32.55'	57.64'	N04°32'00" W	55°23'56"
C12	38.00'	16.05'	8.15'	15.93'	S11°03'52" W	24°12'11"
C13	38.00'	7.10'	3.56'	7.09'	S06°23'35" E	10°42'44"
C14	45.00'	51.53'	29.00'	48.76'	N07°00'44" W	65°36'17"
C15	45.00'	42.54'	23.01'	40.97'	N52°52'18" E	54°09'48"
C16	45.00'	27.24'	14.05'	26.82'	S82°42'29" E	34°40'39"
C17	45.00'	15.29'	7.72'	15.22'	S55°38'01" E	19°28'16"
C18	45.00'	54.88'	31.44'	51.54'	S10°57'40" E	69°52'28"
C19	45.00'	20.82'	10.60'	20.63'	S37°13'44" W	26°30'22"
C20	45.00'	6.36'	3.19'	6.36'	N43°51'51" W	08°05'56"



○ DENOTES AS BUILT CONDITIONS ONLY

SCALES: 1" = 30' HORIZONTAL
 1" = 10' VERTICAL
 BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD
 ELEV. = 4128.26 (CITY DATUM)



MATCH LINE 8+00 SHEET 9 OF 16
 8+00 9+00 10+00 11+00 12+00 13+00 14+00

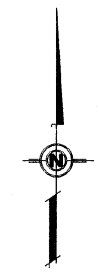
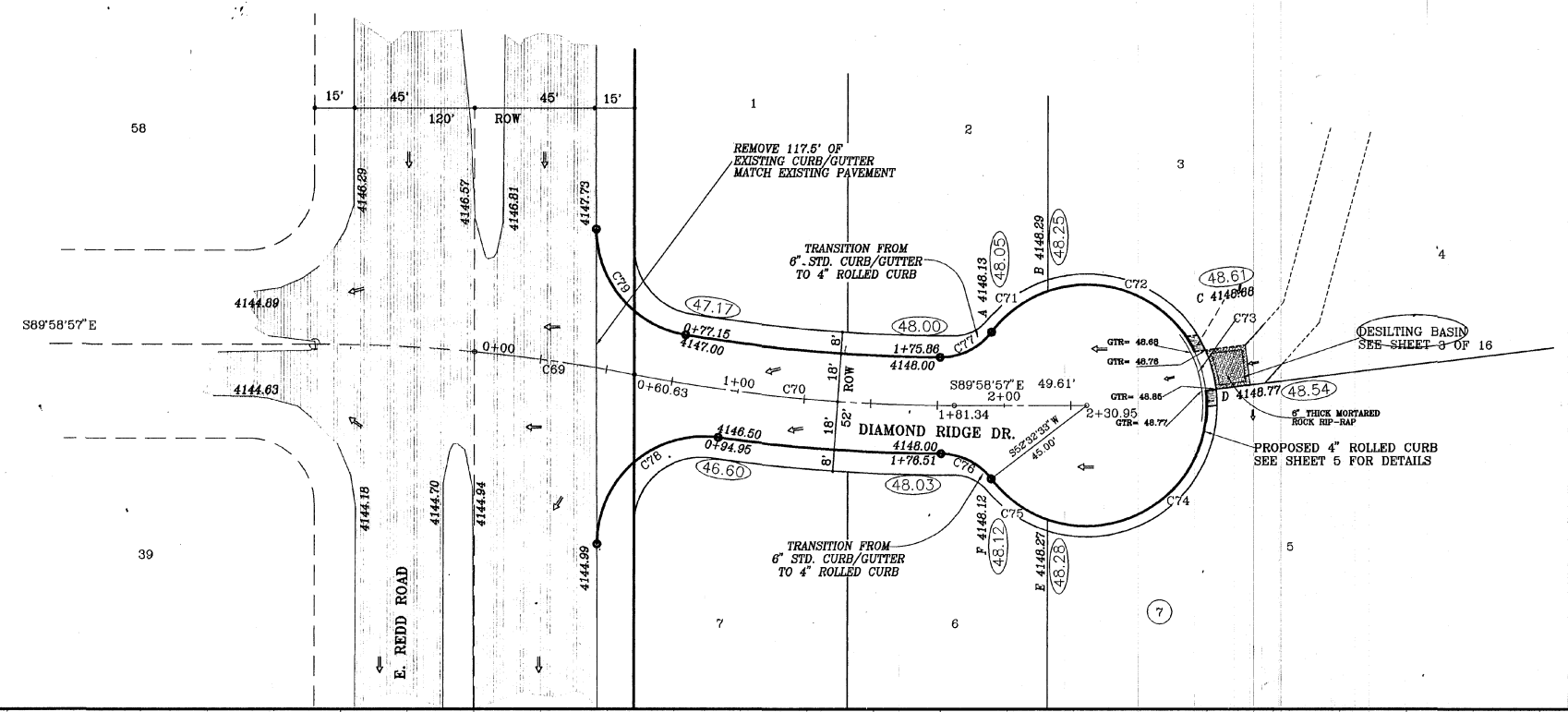
HIGHLANDS NORTH UNIT THREE
 TRAIL RIDGE DR.
 SHT 10 OF 16

CONDE, INC.
 197-21
 FEB 1997

REVISIONS
 04/06/97
 6-13-97 LOTS
 1-22-98 LOT 10
 9-28-98 AS BUILT

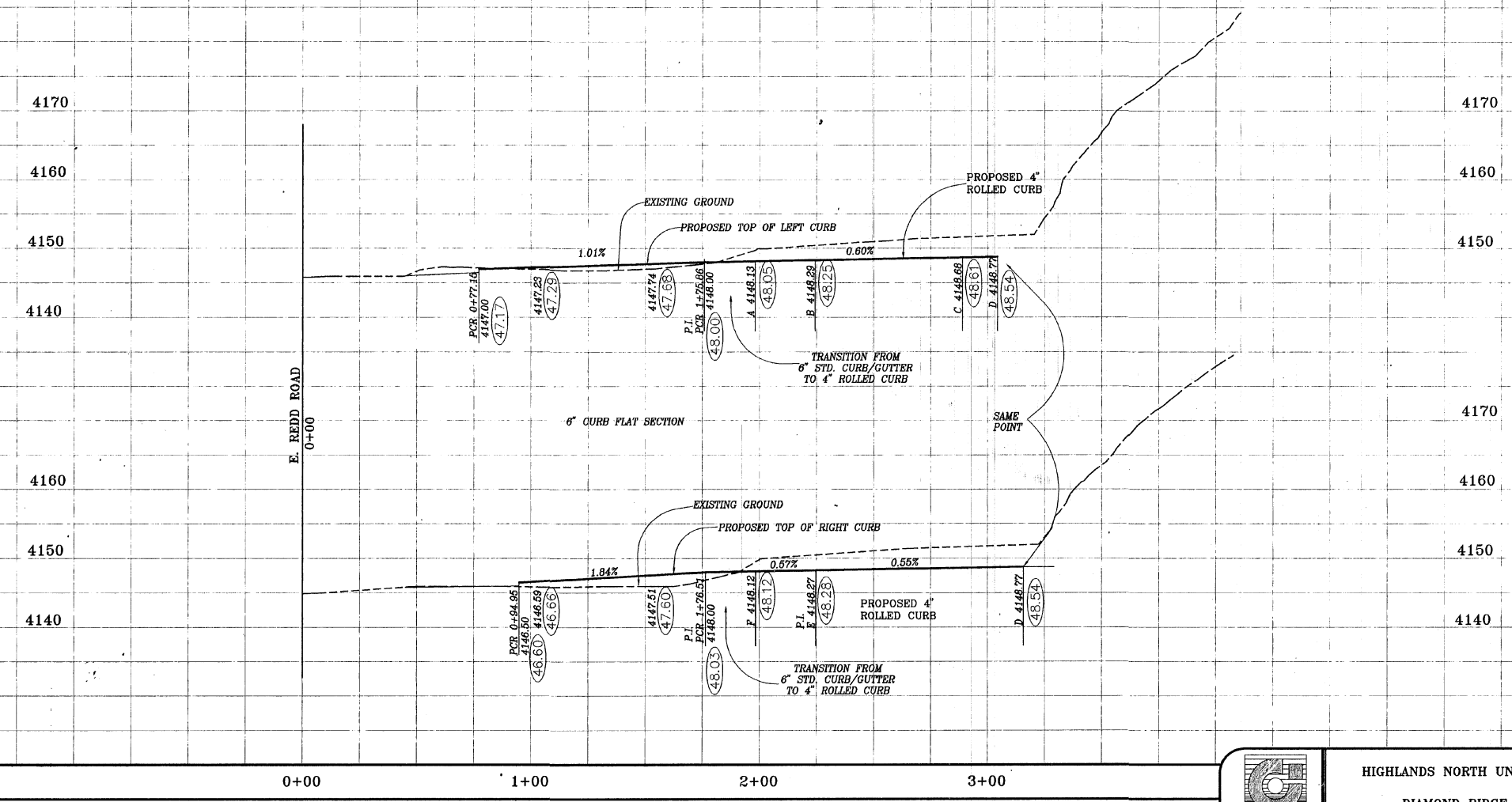
600506

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C69	840.00'	80.63'	30.34'	80.60'	N81°53'22" W	05°25'39"
C70	840.00'	120.71'	60.54'	120.54'	S84°34'45" E	10°48'25"
C71	45.00'	26.34'	13.56'	25.97'	S54°18'17" W	33°32'17"
C72	45.00'	64.72'	39.39'	59.28'	N87°43'36" W	82°23'56"
C73	45.00'	15.29'	7.72'	15.22'	N16°47'30" W	19°28'16"
C74	45.00'	91.12'	72.04'	76.33'	N50°57'09" E	116°01'02"
C75	45.00'	26.37'	13.58'	26.00'	S54°14'53" E	33°34'53"
C76	24.00'	21.82'	11.73'	21.08'	N63°30'13" W	52°05'32"
C77	24.00'	22.19'	11.96'	21.41'	N64°01'19" E	52°58'20"
C78	40.00'	68.41'	46.01'	60.37'	S48°45'14" W	97°59'42"
C79	40.00'	56.25'	33.91'	51.73'	S40°22'07" E	80°34'19"

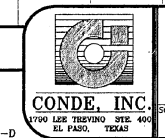


○ DENOTES AS BUILT CONDITIONS ONLY

SCALE: 1" = 30' HORIZONTAL
1" = 10' VERTICAL
BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF HIGH RIDGE DR. & E. REDD ROAD
ELEV. = 4128.28 (CITY DATUM)



APRIL 16, 1997. DWG. L.V.



HIGHLANDS NORTH UNIT THREE
DIAMOND RIDGE DR.
SHT 11 OF 18

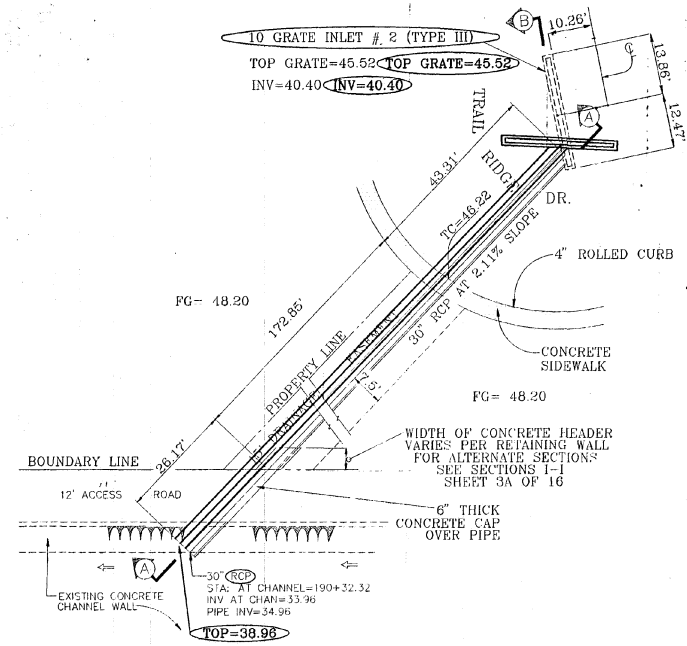
SCALE: 1" = 30'
JOB No. 197-21
DATE: FEB 1997

REVISIONS
04/11/97
6-25-98 AS BUILT

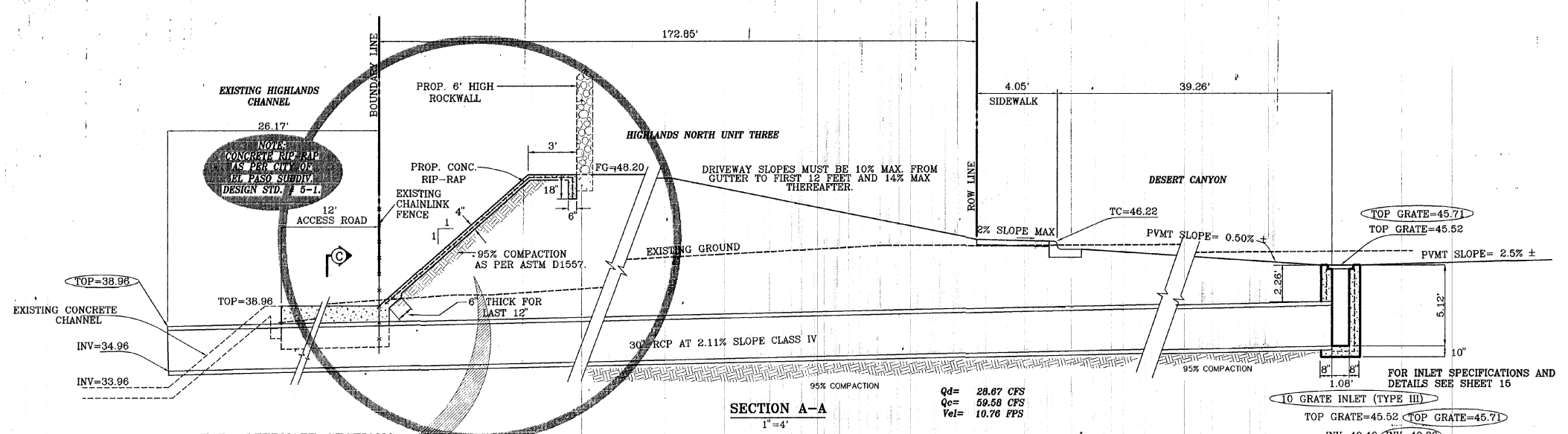
CONDE, INC.

600.506

FP1 JUN 26 11:27:13 1998 TONY

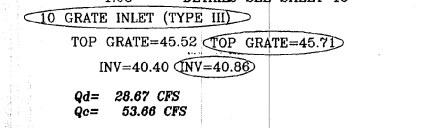


**PLAN VIEW
INLET # 2 (TYPE III)**
1"=20'

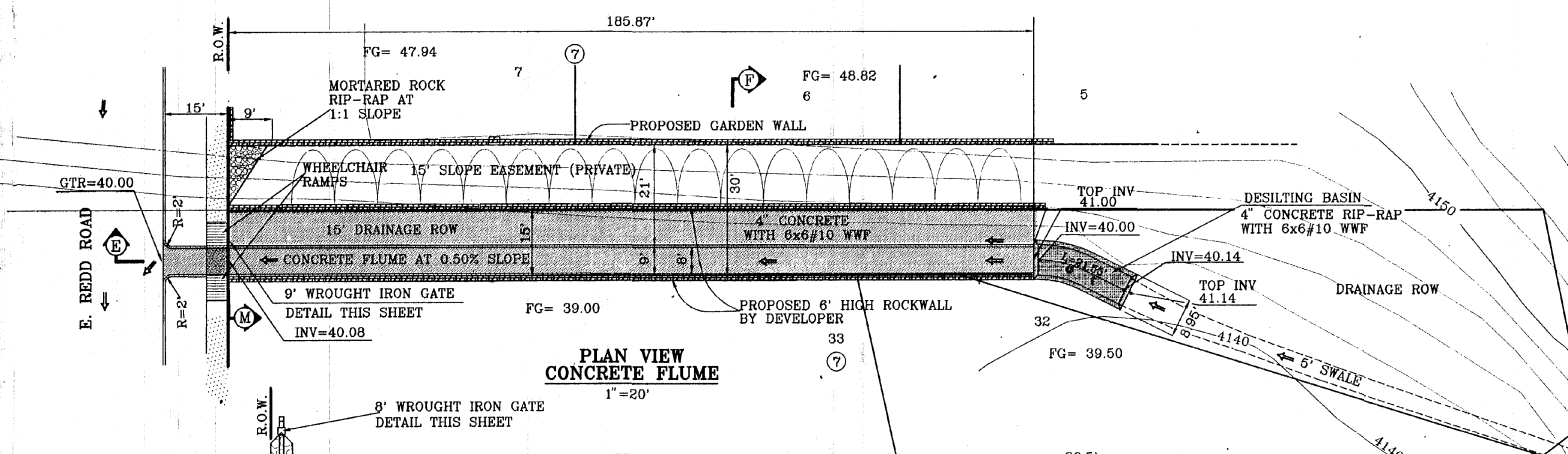


SECTION A-A
1"=4'

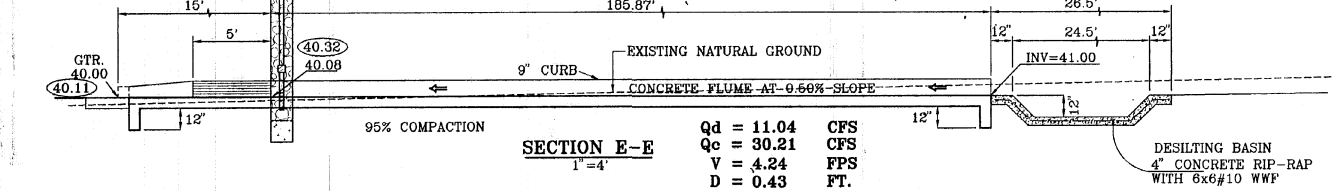
Qd = 28.67 CFS
Qc = 59.58 CFS
V = 10.76 FPS



TYPICAL FLUME SECTION
1"=2'

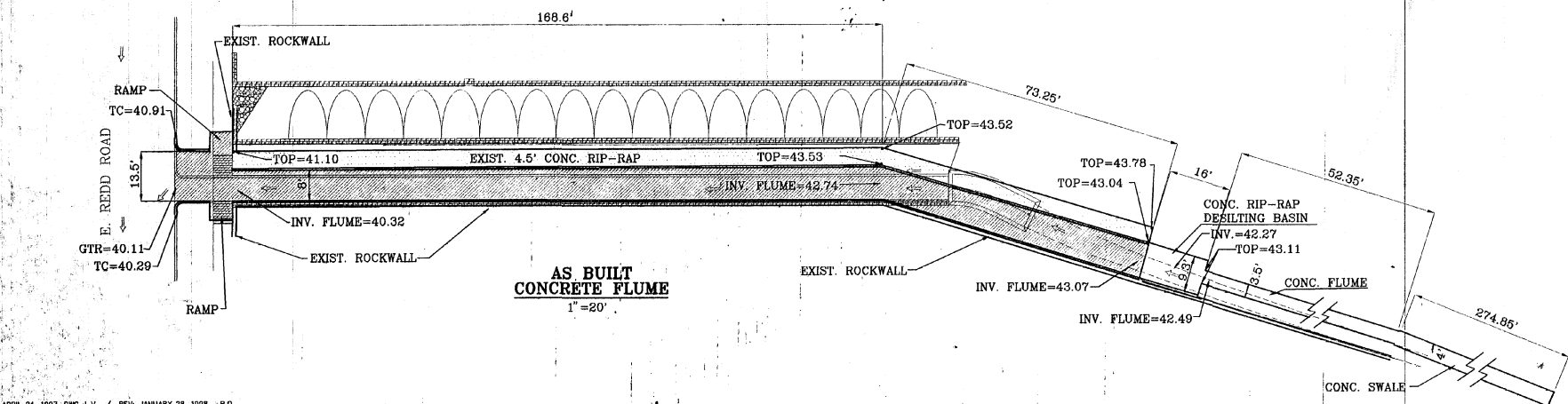


**PLAN VIEW
CONCRETE FLUME**
1"=20'

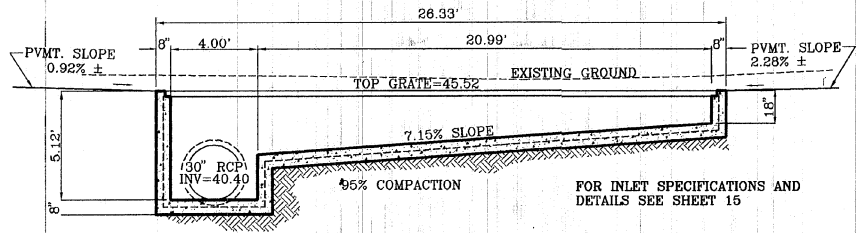


SECTION E-E
1"=4'

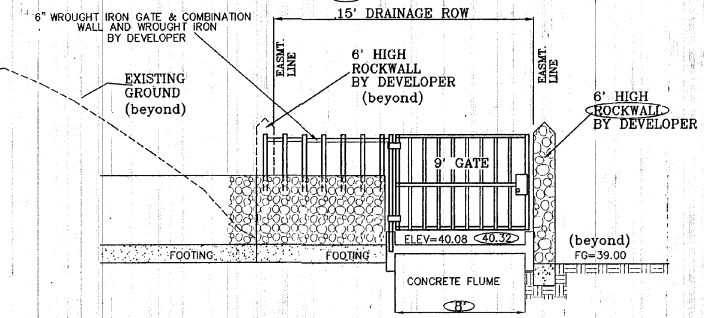
Qd = 11.04 CFS
Qc = 30.21 CFS
V = 4.24 FPS
D = 0.43 FT.



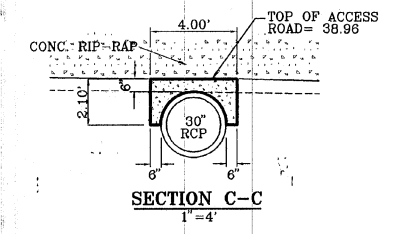
**AS BUILT
CONCRETE FLUME**
1"=20'



SECTION B-B
1"=4'



**SECTION M-M
IRON GATE**
1"=5'



SECTION C-C
1"=4'

○ DENOTES AS BUILT CONDITIONS ONLY

- NOTE:**
1. ALL CONCRETE FOR STRUCTURES SHALL BE 3000 PSI, UNLESS OTHERWISE NOTED.
 2. MINIMUM COVER FOR REINFORCING STEEL SHALL BE 2" UNLESS OTHERWISE NOTED.
 3. REINFORCING STEEL SHALL BE #4 BARS AT 6" O.C. GRADE 60 BOTH WAYS, UNLESS OTHERWISE NOTED.
 4. 95% COMPACTION REQUIRED FOR STRUCTURES. ASTM D-1557

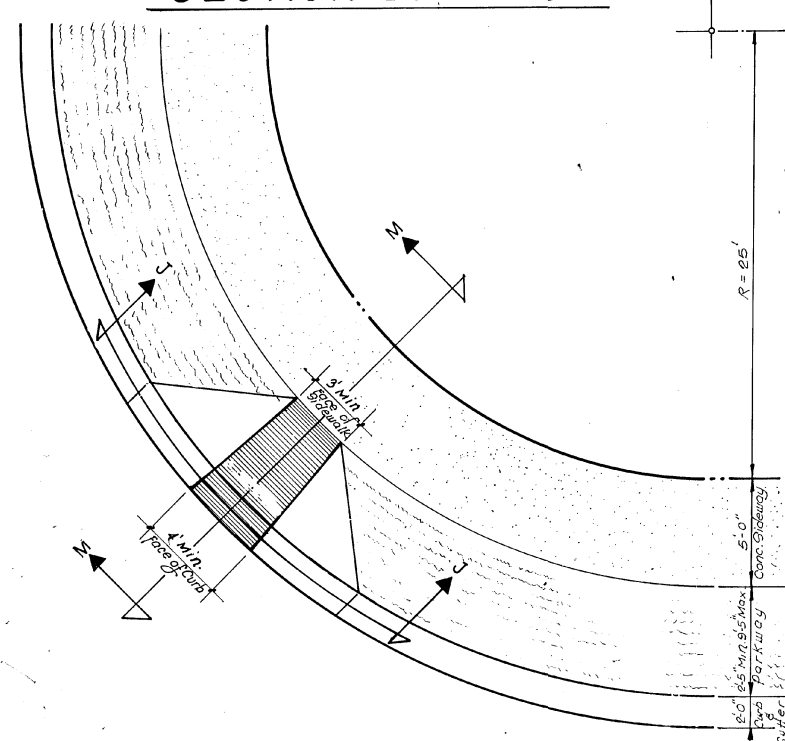


**HIGHLANDS NORTH UNIT THREE
INLET #1 (INLET AND PIPE DETAILS)**

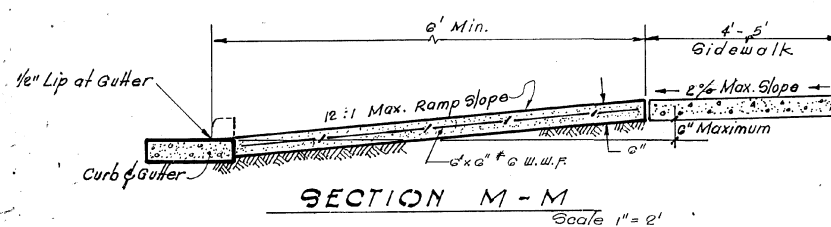
SCALE: AS SHOWN
JOB No. 197-21
DATE: FEB 1997
SHT 12 OF 16

REVISIONS	
04/11/97	6-13-97 MISC
5-22-97	4" SLAB
1-28-98	DRAIN ROW
7-1-98	AS BUILT

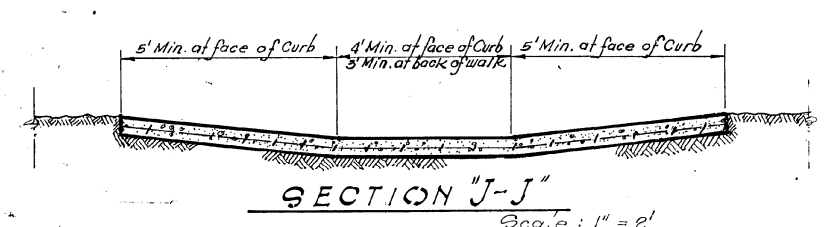
TYPICAL SIDEWALK & WHEELCHAIR SECTION DETAILS



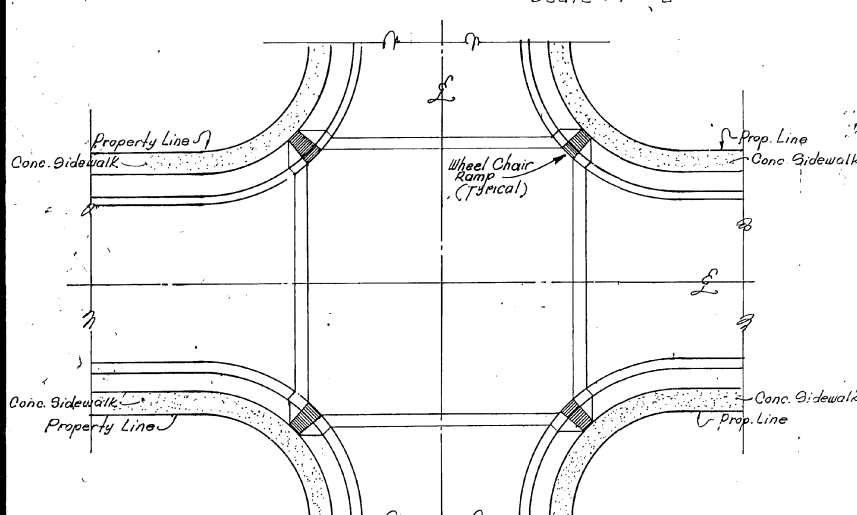
WHEEL CHAIR RAMP DETAILS
Scale: 1" = 2'



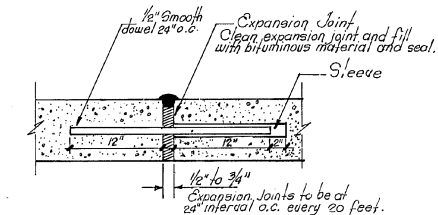
SECTION M-M
Scale: 1" = 2'



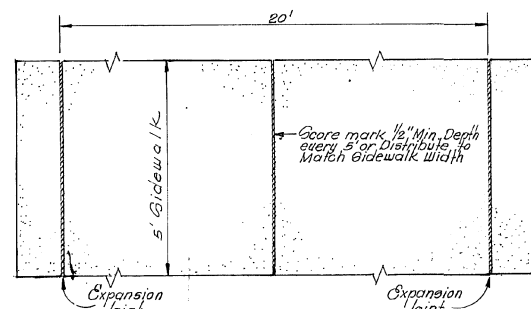
SECTION J-J
Scale: 1" = 2'



WHEEL CHAIR RAMP PLAN VIEW Scale: 1" = 20'



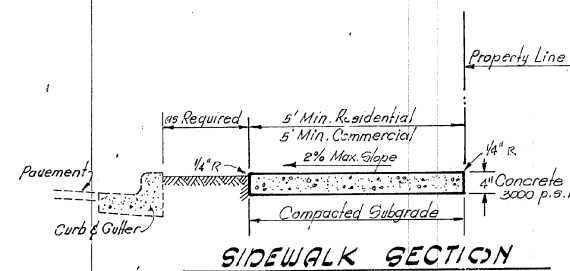
EXPANSION JOINT DETAIL N.T.S.



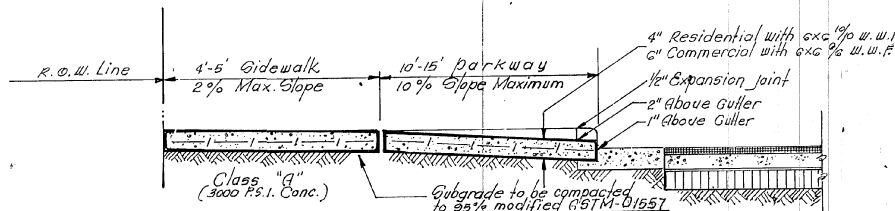
TYPICAL SIDEWALK DETAILS

NOTES:

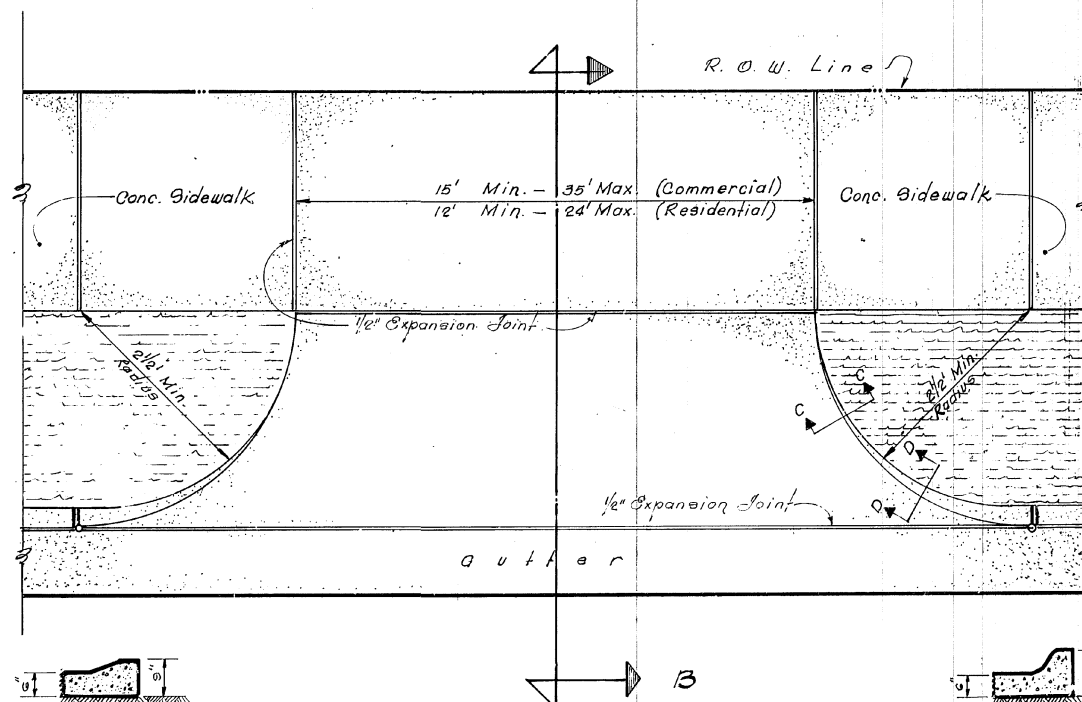
- Expansion joint filler shall be 1/2" bituminous type preformed joint filler (AQSHO M-33).
- Whenever sidewalk abuts rock or masonry structures such as curbs or buildings, expansion joint filler shall be placed in accordance with Standard Specifications.



SIDEWALK SECTION
Scale: 1" = 2"



SECTION B-B
Scale: 1" = 2'



SECTION C-C
Scale: 1" = 2'

TYPICAL CONCRETE DRIVEWAY
Scale: 1" = 20'

SECTION D-D
Scale: 1" = 2'

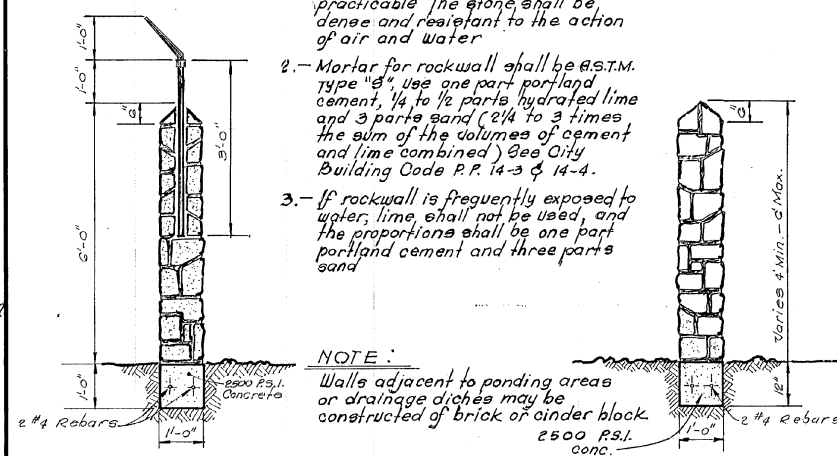
NOTE:

For driveway construction provide a saw cut on curb perpendicular to street centerline, and saw cut on gutter parallel to street centerline along face of curb.

TYPICAL ROCKWALL DETAILS

Masonry wall over six (6) feet in height and those used in whole or in part for earth retention, regardless of height, shall be designed as structural walls and provided with adequate footings of reinforcing concrete. Such design of wall and footings shall be presented to the building official for approval prior to erection.

- Stone for rockwalls shall be as nearly uniform in section as is practicable. The stone shall be dense and resistant to the action of air and water.
- Mortar for rockwall shall be as per ASTM Type "S", use one part portland cement, 1/4 to 1/2 parts hydrated lime and 3 parts sand (2 1/4 to 3 times the sum of the volumes of cement and lime combined) See City Building Code P.P. 14-3 & 14-4.
- If rockwall is frequently exposed to water, lime shall not be used, and the proportions shall be one part portland cement and three parts sand.



TYPE #1

TYPE #2

Scale: 1" = 2'

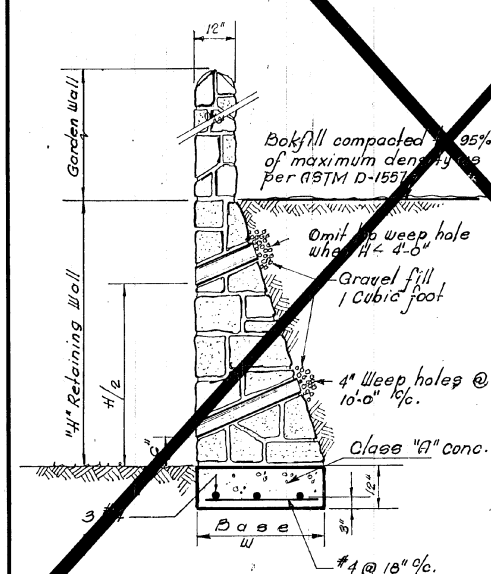
TYPICAL RETAINING WALL DETAILS

Rock Retaining Wall Chart.

H	3'-6"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
W	2'-0"	2'-3"	2'-9"	3'-3"	3'-9"	4'-9"	5'-3"

GENERAL NOTES

- Natural stone shall be sound & free from loose or friable portions & shall meet required strength & durability for proposed use.
- Mortar shall be ASTM C-270 type proportions by volume: 1 part portland cement, 1/4 part lime, 2 1/2 parts sand.
- Concrete f'c = 3,000 p.s.i. @ 28 days.
- Reinforcing steel ASTM A615 Grade 40, fy = 40,000 p.s.i.
- Allowable soil bearing pressure 3500 minimum.
- Wall footing shall bear on compacted or firm undisturbed ground.
- Changes in wall direction, wall height or footing elevation will require additional design.
- Backfill material shall consist of well drained, coarse grained soils, or fine silty sands with no clay content. Backfill material shall exert a horizontal force of an equivalent fluid pressure not to exceed 30% c.
- Surcharge will require additional design yes no.



TYPICAL RETAINING ROCKWALL

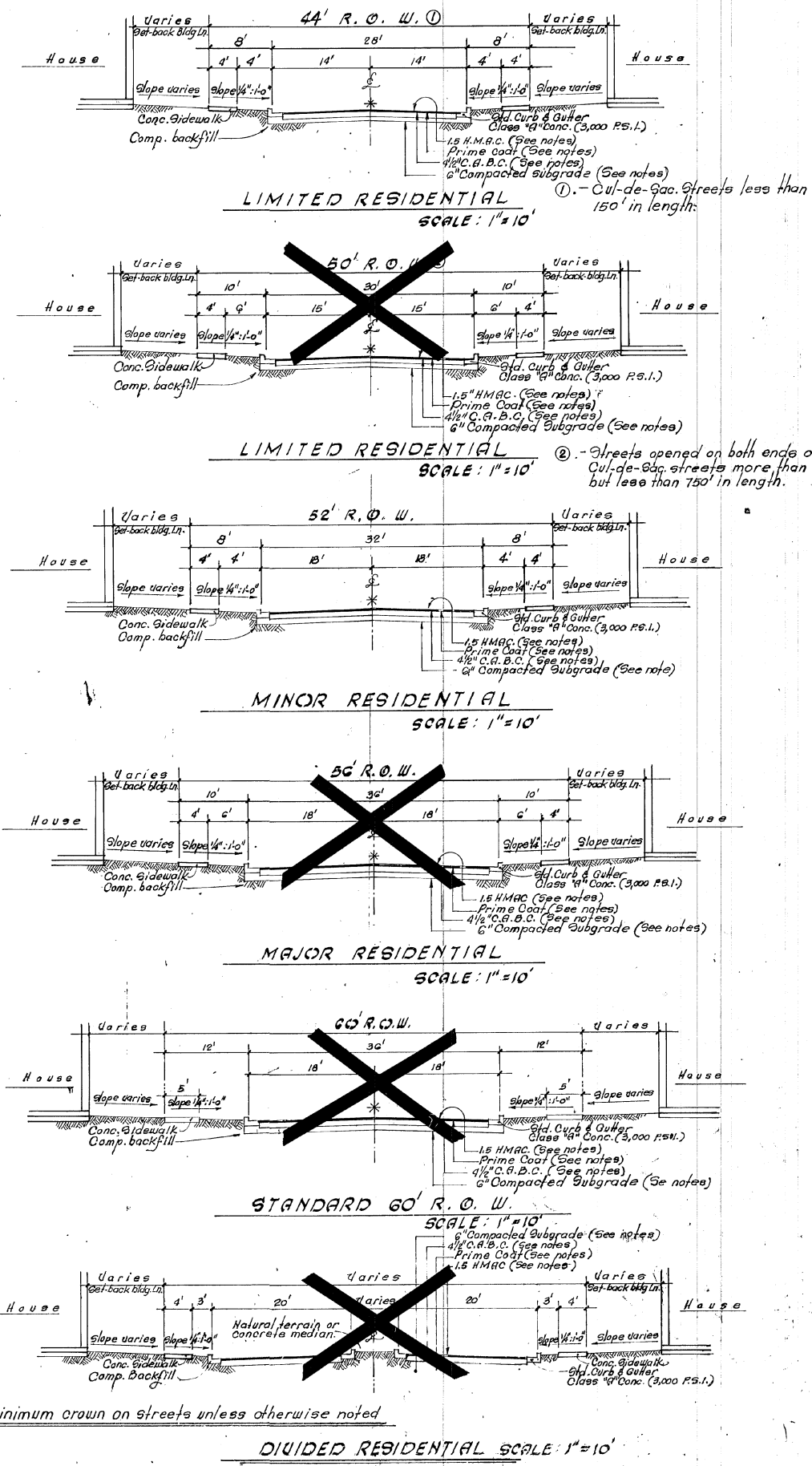


HIGHLANDS NORTH UNIT THREE			
TYPICAL SECTIONS			
SCALE: AS SHOWN	JOB No.: 107-21	DATE: FEB. 1997	SHT: 13 OF 16

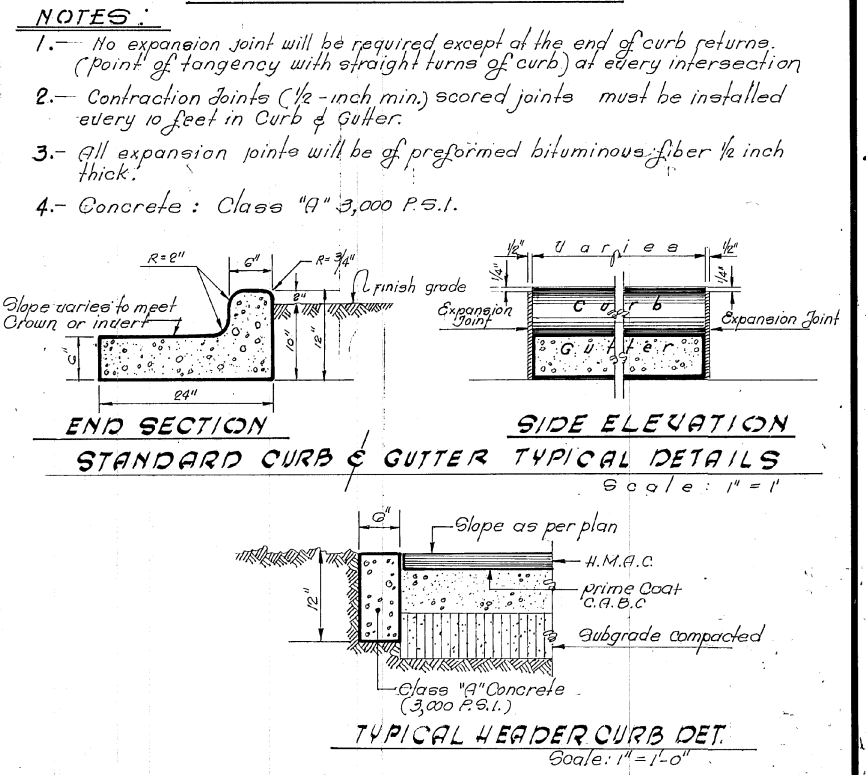
NOTES:

1. Subgrade to be compacted to 95% of maximum density as per ASTM D1557.
 2. Base to be compacted to not less than 100% density in accordance with ASTM D1557.
 3. Bituminous material shall conform to AC-10 or AC-20 in accordance with ASTM-D 3381.
 4. Prime coat to be 0.25 gal. per square yard (minimum coverage) MC-70.
 5. Compaction tests where required by the City Engineer must be paid for by the developer.
 6. C.B.R. tests will be required at 500 foot intervals after subgrade is in place, and for a minimum of two test if the street is less than 500 feet.
 7. Strict vertical control of all curb and gutter elevations will be maintained. Blue topping will be required throughout.
 8. All plans must be in accordance with the latest edition of the City of El Paso Subdivision Design and Improvement Standards.
 9. HMAC, Base, Subbase will be in accordance with latest City of El Paso Specifications.
 10. Minimum Pavement Design details are shown, Actual Pavement Design will be determined by C.B.R.
- TRENCHING**
 All trenching shall be done in strict accordance with OSHA-2226 Standards.

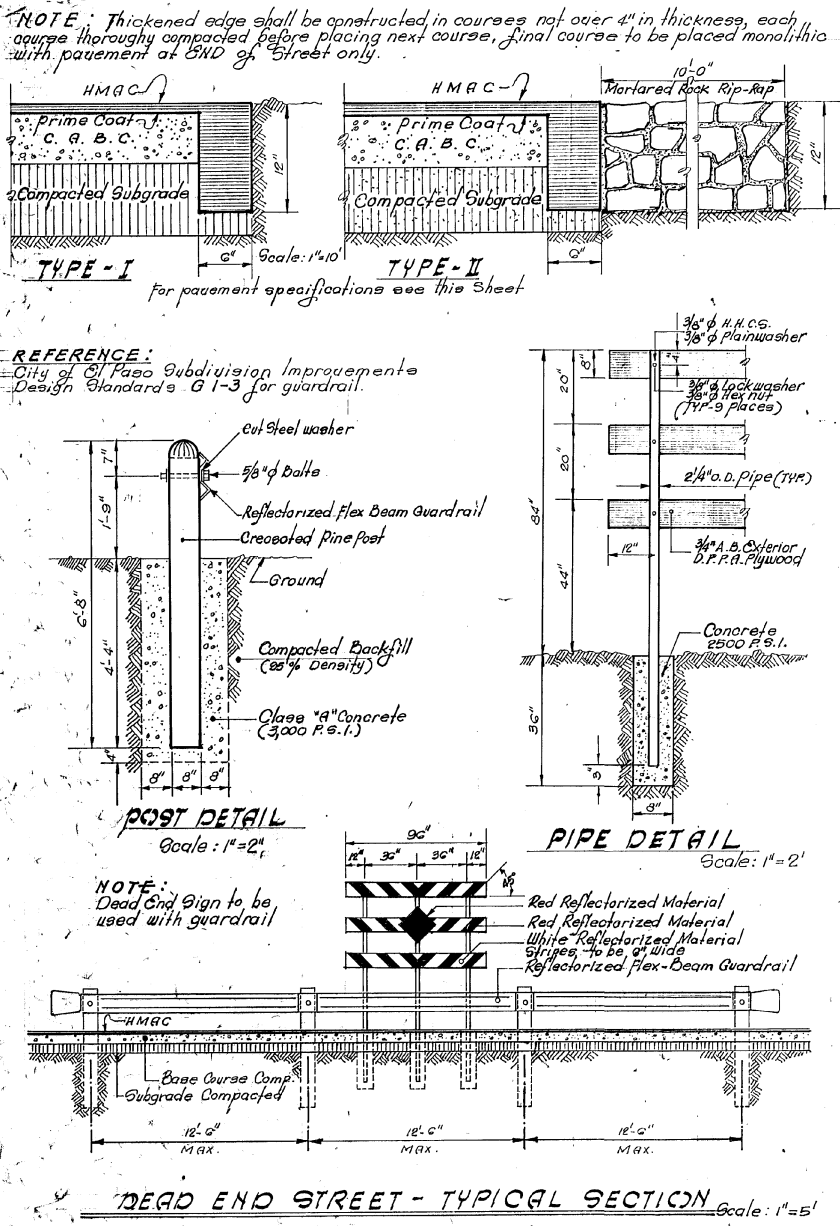
**HIERARCHY STREETS
 TYPICAL CROSS SECTION DETAILS**



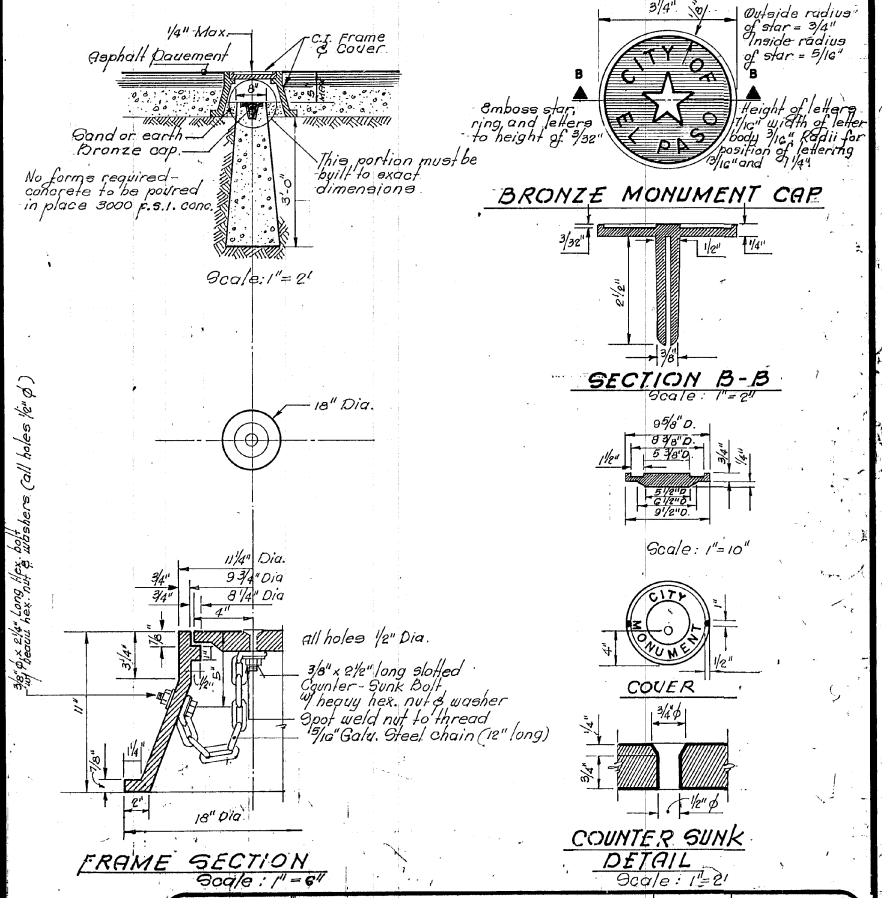
CURB DETAILS



DEAD END, TERMINUS & GUARD RAIL DETAILS



MONUMENT DETAILS



CONDE INC.
 1750 LEE TRENCH BLVD
 EL PASO, TEXAS 79905

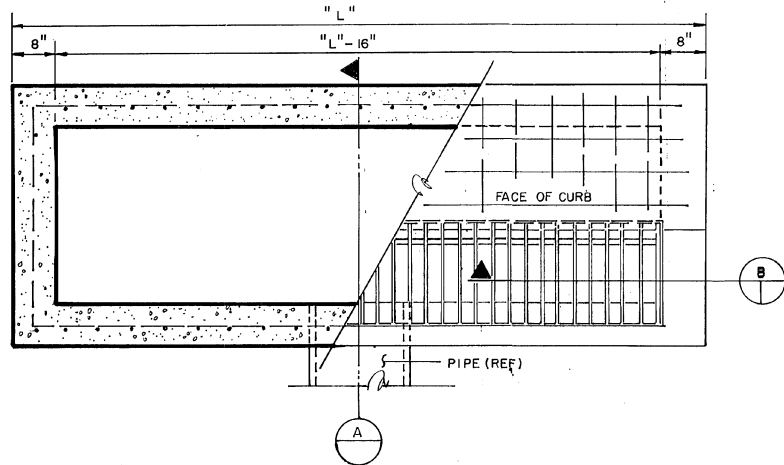
**HIGHLANDS NORTH
 UNIT THREE
 TYPICAL STREET SECTIONS
 & DETAILS (HIERARCHY)**

SCALE: AS SHOWN
 DATE: FEB. 1997
 SHEET: 14 OF 16

REVISIONS

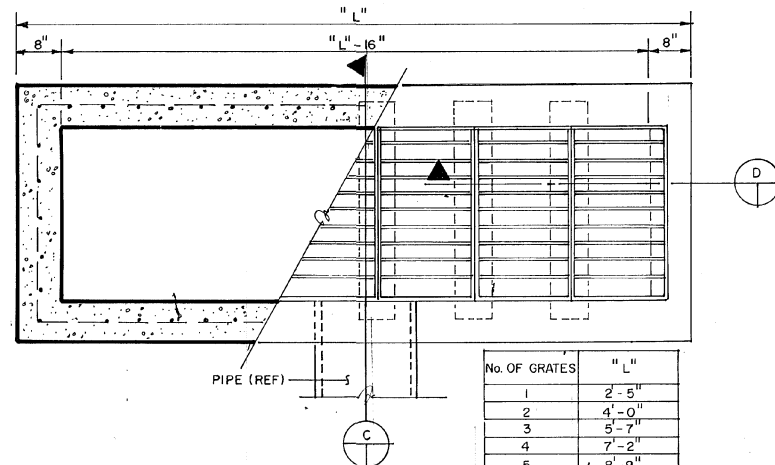
TYPE I

SC: 3/4"=1'-0"



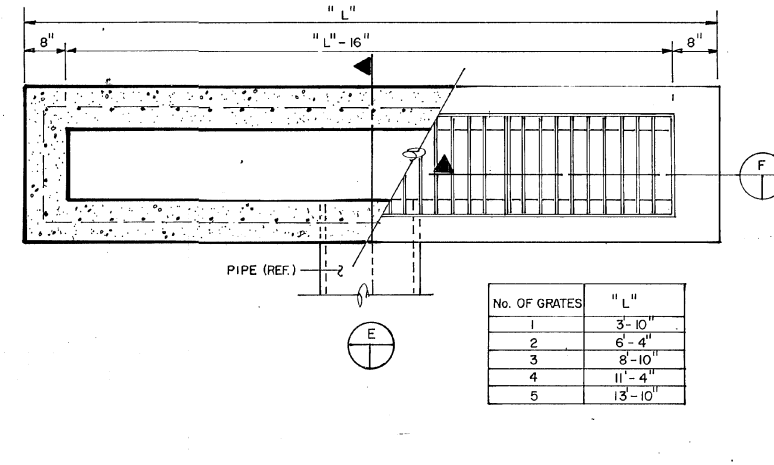
TYPE II

SC: 3/4"=1'-0"



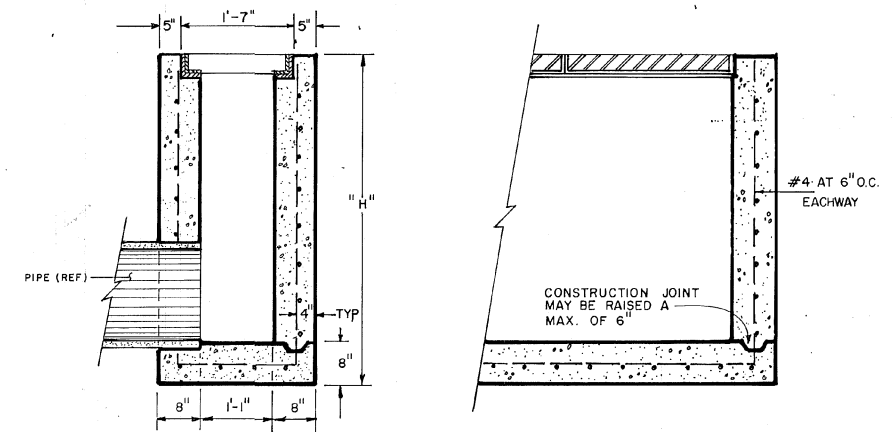
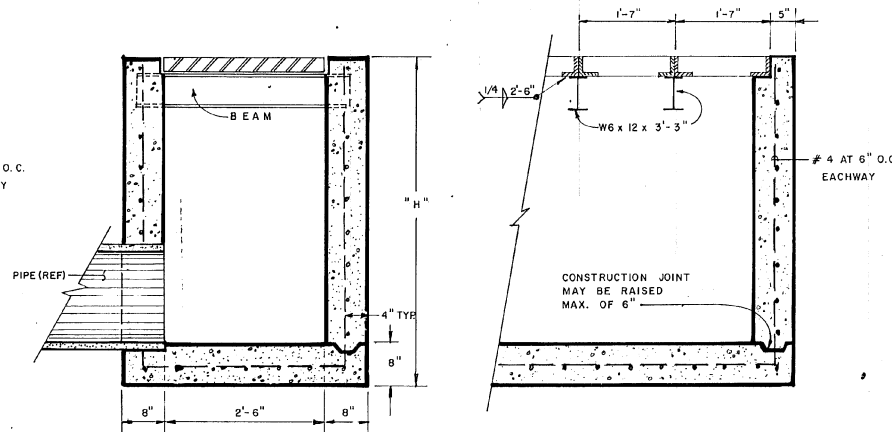
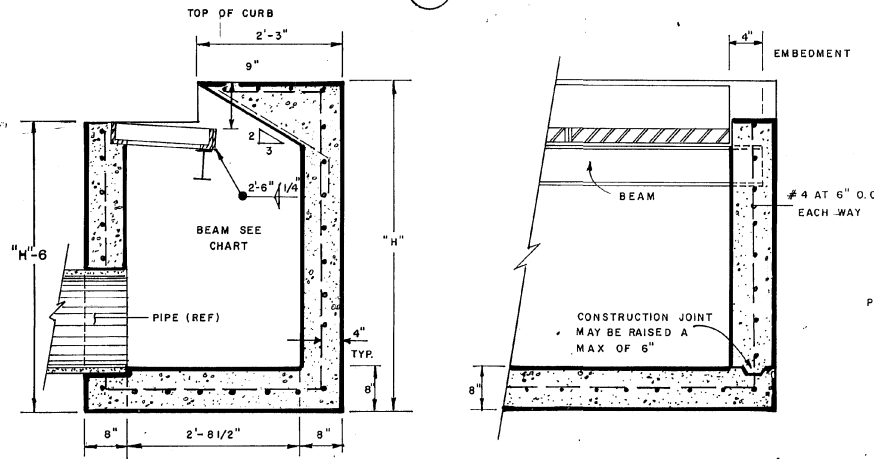
TYPE III

SC: 3/4"=1'-0"



No. OF GRATES	" L "
1	3'-10"
2	6'-4"
3	8'-10"
4	11'-4"
5	13'-10"

No. OF GRATES	" L "
1	2'-5"
2	4'-0"
3	5'-7"
4	7'-2"
5	8'-9"



A SECTION
3/4"=1'-0"

B SECTION
3/4"=1'-0"

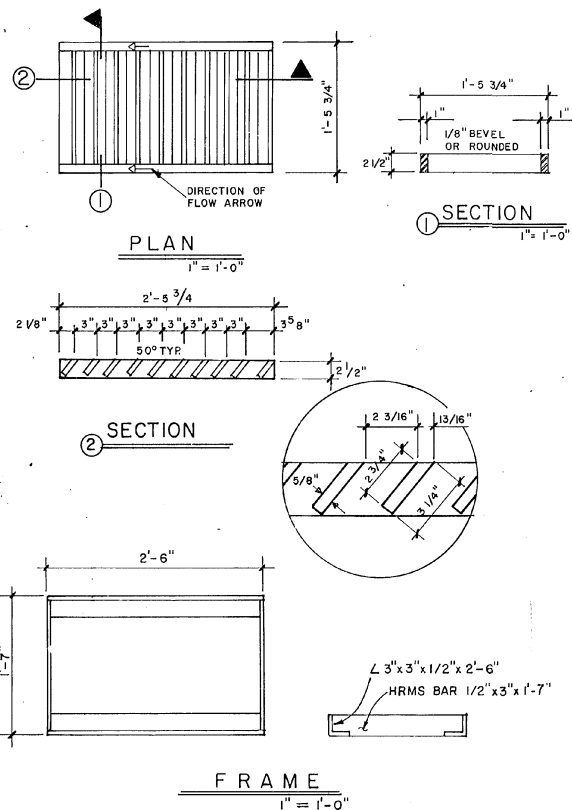
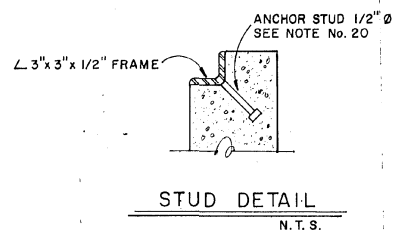
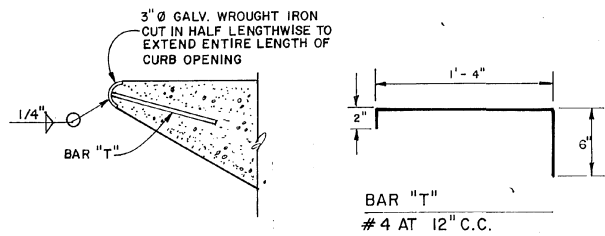
C SECTION
3/4"=1'-0"

D SECTION
3/4"=1'-0"

E SECTION
3/4"=1'-0"

F SECTION
3/4"=1'-0"

NO. OF GRATES	" L "	B E A M	
		LENGHT	MINIMUM SIZES
1	3'-10"	3'-4"	W6x12, M4x13, C6x8.2
2	6'-4"	5'-10"	W6x12, S6x12.5, MC6x15.1
3	8'-10"	8'-4"	W8x15, S7x15.3, MC7x17.6
4	11'-4"	10'-10"	W8x18, S8x18.4, MC8x20
5	13'-10"	13'-4"	W12x18, S8x21, MC10x21.9
6	16'-4"	15'-10"	W12x19, S8x23, MC10x25



GENERAL NOTES

- Welded Steel or Cast Grates as detailed are all acceptable grates. Mixing of alternate types of grates on the same project will be permitted with the approval of the City Engineer.
- All construction and materials shall be in accordance with the current Standard Specifications.
- Sharp edges resulting from fabrication shall be dulled by only acceptable method for safety in handling.
- Grates shall be installed in frame with flow arrow pointing downstream or toward the low point in a sump.
- Welded grates shall be Structural Steel conforming to the requirements of AASHTO M-183 or of corrosion resistant structural steel conforming to the requirements of AASHTO M-161 or M-222 or be made of other approved steels of equal quality. Mixing grades of steel on the same grate will not be permitted.
- Grates made of M-183 steel shall be galvanized in accordance with AASHTO M-111 Specifications or shall be painted with inorganic zinc paints, meeting the requirements of current standard specifications.
- All welds shall be a minimum of 1/4" filled and shall conform to the Specifications for Highway Construction and to the AWS Structural Welding Code. Electrodes shall be compatible to the different grades of steel that comprises the grate members.
- Cast grates shall be cast steel conforming to the requirements of AASHTO M-103, Grade 65-35 or of ductile iron conforming to the requirements of ASTM A-536, Special Grade 60-45, or of gray iron conforming to the requirements of AASHTO M-106, Class-35B or ASTM A-48 Class 35B. This specifications of general application for cast steel grates shall be AASHTO M-103 Scope 121, Grade N-1.
- Ferrous castings shall be of uniform quality free of blowholes, porosity, hard spots, shrinkage distortion or other defects. They shall be smooth and well cleaned by shot blasting or other approved cleaning method. After cleaning they shall be coated with asphalt base paint resulting in a smooth coating, tough and tenacious when cold, not tacky nor brittle.
- All castings shall be manufactured true to pattern. Component parts shall fit together in a satisfactory manner.
- All concrete to be 3000 P.S.I. Chamfer all exposed edges 3/4" All dimensions relating to reinforcing steel are to center of bars.
- Minimum concrete cover shall be 1 1/2" for steel reinforcing.
- Expansion material to be 1/2" bituminous fiber and be placed where proposed concrete comes in contact with any existing or proposed concrete or masonry structure.
- Structural steel shall be shop painted in accordance with T.H.D. Item 446 "Paint and Painting"
- Surface of all exposed concrete shall conform in slopes and grade to existing or proposed curb and walk adjacent to inlets.
- Grate will be depressed 1" below proposed or existing grade.
- All reinforcing bars to be #4 bars at 6" O.C. grade 60. Bend bars around pipe openings.
- Inlets to be designated in plans by number of grates required.
- Location of sewer pipes shown elsewhere in plans.
- 2-1/2" x 4" long conc. anchor studs required for each side of frame, where resting on concrete, use Nelson studs or equal.
- The grates of all inlets within the street pavement must be constructed with the grate bars perpendicular to the curb

**DRAINAGE STRUCTURE DETAILS
AS PER CITY OF EL PASO STANDARDS**

(THIS SHEET FOR REFERENCE ONLY)

HIGHLANDS NORTH
UNIT THREE

REFERENCES --- BENCH MARKS

ENGINEERING DEPARTMENT
2, CIVIC CENTER PLAZA
PH. (915) 541-4200

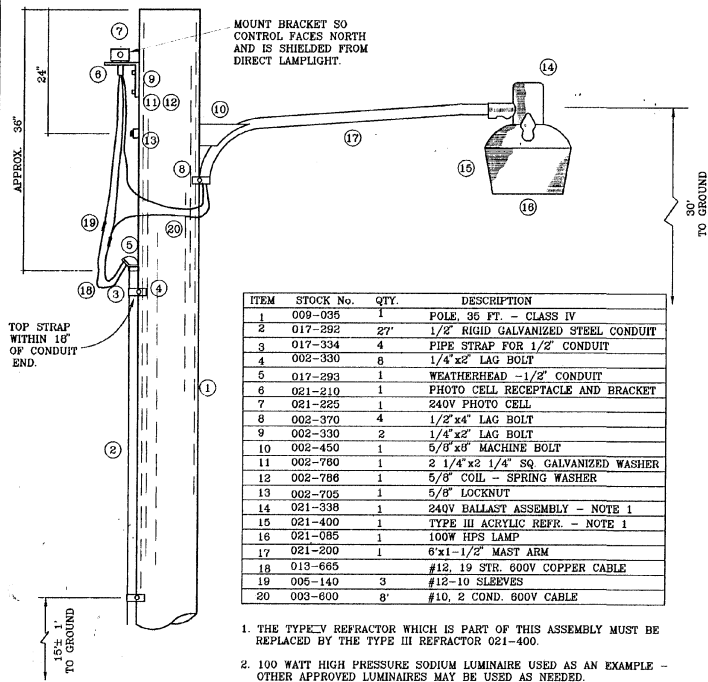
SCALE: Horiz. - AS SHOWN, Vert. - AS SHOWN

DESIGN BY: _____
DRAWN BY: _____
CHKD BY: _____
APPD. BY: _____

CITY OF EL PASO

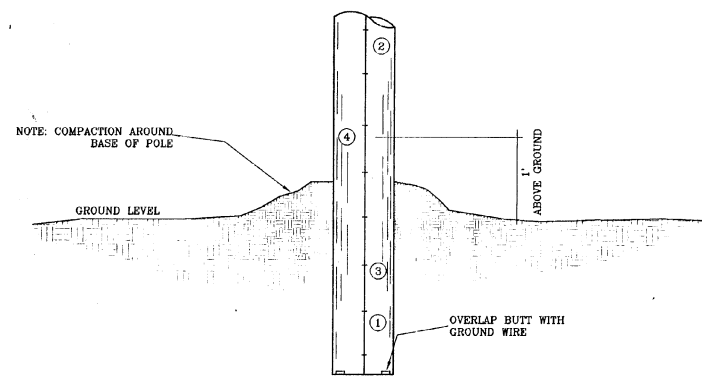
SHEET TITLE

Sheet 15 of 16



1. THE TYPE V REFRACTOR WHICH IS PART OF THIS ASSEMBLY MUST BE REPLACED BY THE TYPE III REFRACTOR 021-400.

2. 100 WATT HIGH PRESSURE SODIUM LUMINAIRE USED AS AN EXAMPLE - OTHER APPROVED LUMNAIRES MAY BE USED AS NEEDED.



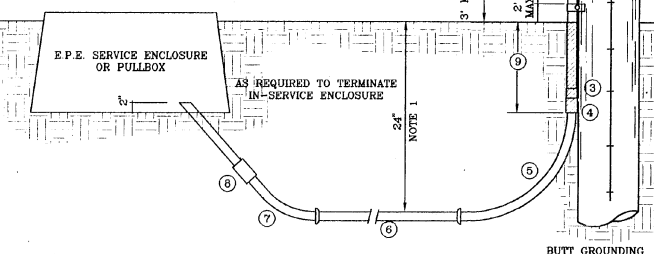
NOTE: COMPACTION AROUND BASE OF POLE

GROUND LEVEL

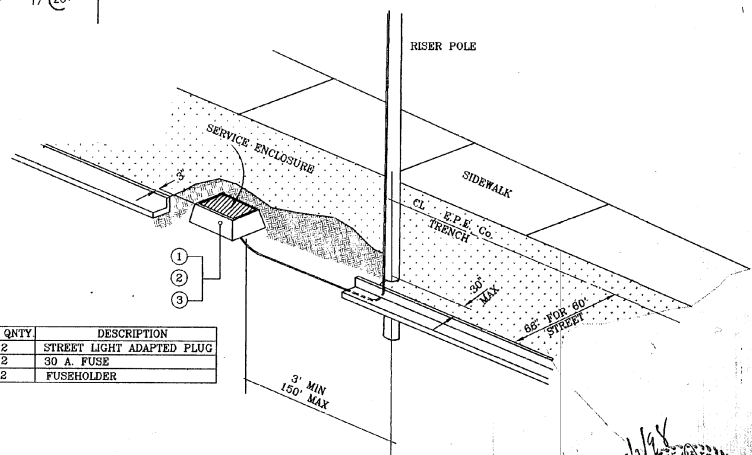
1" ABOVE GROUND

OVERLAP BUTT WITH GROUND WIRE

ITEM	STOCK #	QNTY	DESCRIPTION
1	017-292	27'	1/2" RIGID GALVANIZED CONDUIT
2	021-215	1	GROUND CLAMP
3	017-294	1	1" TO 1/2" REDUCER
4	017-295	1	1" FEMALE ADAPTER
5	017-297	1	1" 90 DEG. DEG. 40 PVC ELBOW
6	017-299	1	1" SCH 40 PVC CONDUIT
7	017-298	1	1" 45 DEG SCH. 40 PVC ELBOW
8	017-296	1	1" SCH 40 PVC COUPLING
9	028-830	1 ROLL	2" PLASTIC ELECTRICAL TAPE



ITEM	STOCK No.	QNTY	DESCRIPTION
1	017-004	2	STREET LIGHT ADAPTED PLUG
2	021-245	2	30 A FUSE
3	021-247	2	FUSEHOLDER



CONDE, INC.
1700 LEE TRADING VILLAGE
EL PASO, TEXAS

HIGHLANDS NORTH UNIT THREE
ILLUMINATION PLAN AND DETAILS
SHT 16 OF 18

REVISIONS
1-21-98 LOTS
7-2-98 AS BUILT

DATE: 197-21
SCALE: 1"=100'

REGISTERED PROFESSIONAL ENGINEER