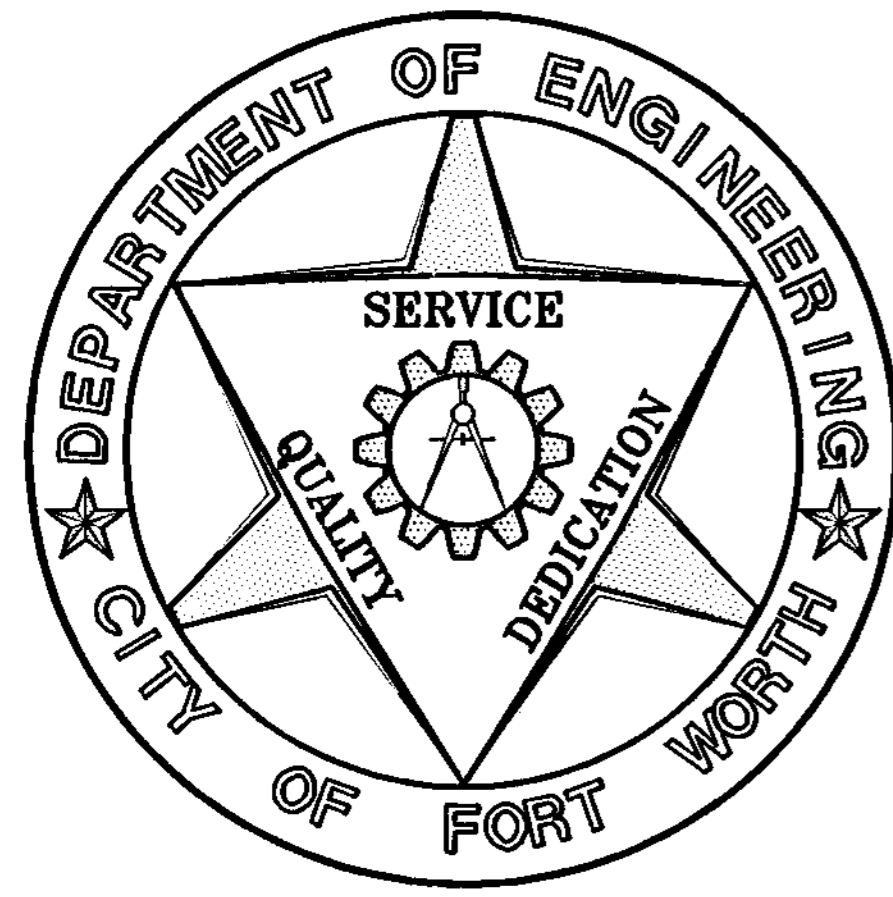


(S)

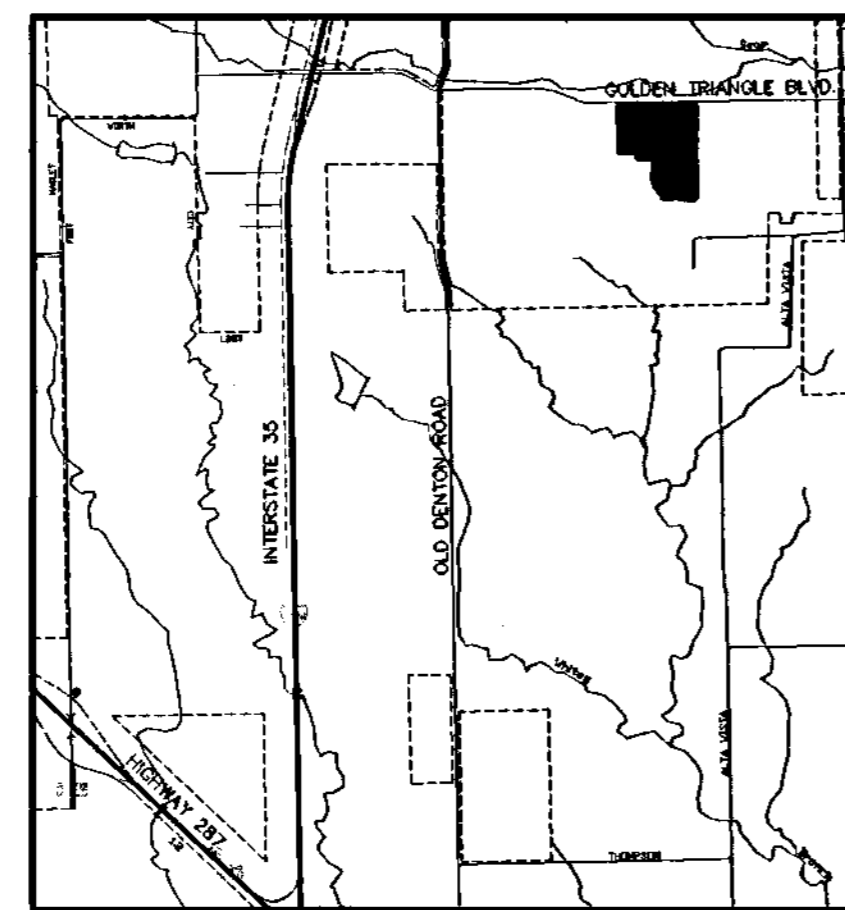


# THE CITY OF FORT WORTH, TEXAS TRANSPORTATION AND PUBLIC WORKS

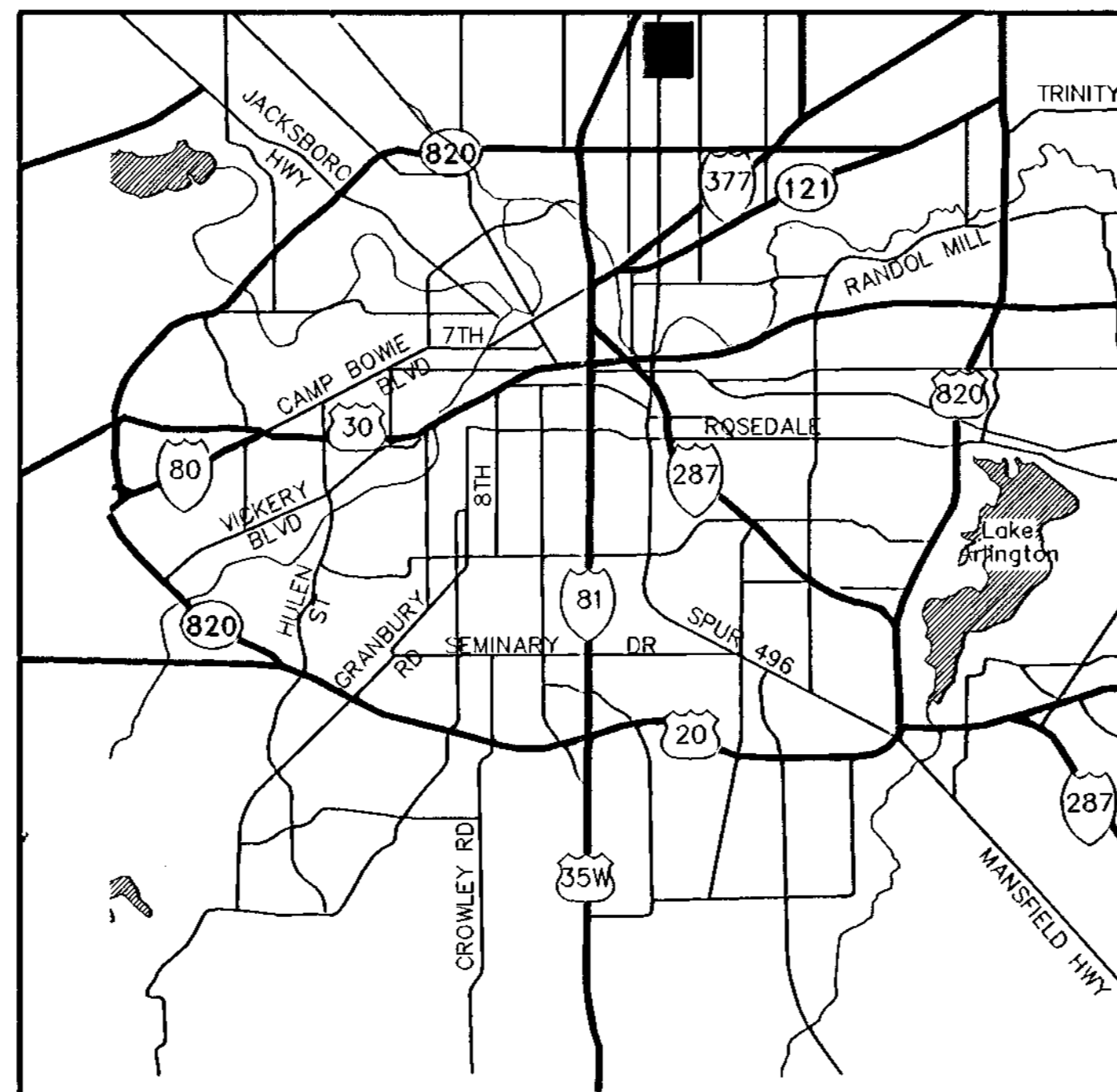
## PAVING AND STORM DRAINAGE IMPROVEMENTS TO SERVE...

# CRAWFORD FARMS BLOCKS 1 THRU 9

FILE No. W-964  
FORT WORTH, TEXAS  
D.O.E. 3076  
PAVING & DRAINAGE FOR CRAWFORD FARMS, BLOCK 1 THRU 9



VICINITY MAP



LOCATION MAP

SHEET #	DESCRIPTION
1	FINAL PLAT
2 - 3	DRAINAGE AREA MAP AND CALCULATIONS
4 - 18	PAVING PLAN/PROFILES
19 - 24	STORM DRAIN PLAN/PROFILES
25	POND GRADING PLAN
26 - 29	LOT/BLOCK GRADING PLANS
29A & 29B	STORM WATER POLLUTION PREVENTION PLAN
30	PAVING DETAILS

KENNETH BARR  
MAYOR

BOB TERRELL  
CITY MANAGER

HUGO A. MALANGA, P.E.  
DIRECTOR OF TRANSPORTATION AND PUBLIC WORKS

DALE FISSELER, P.E.  
WATER DEPARTMENT DIRECTOR

FILE NUMBER W-3076 964

D.O.E. NUMBER 3076



# 2000

A. Douglas Rademaker 8/7/00  
A. DOUGLAS RADEMAKER, P.E. DATE  
DIRECTOR, DEPARTMENT OF ENGINEERING

S. Frank Crumb 8/7/00  
S. FRANK CRUMB, P.E. DATE  
ASSISTANT DIRECTOR, WATER DEPARTMENT

George A. Behmanesh 8/4/00  
GEORGE A. BEHMANESH, P.E. DATE  
ASSIST. DIRECTOR, DEPT. OF TRANSPORTATION AND PUBLIC WORKS

Joseph S. Ternus 7/25/00  
JOSEPH S. TERNUS, P.E. DATE  
ASSIST. DIRECTOR, DEPT. OF TRANSPORTATION AND PUBLIC WORKS

6-21-00 RECOMMENDED: Paul Tump  
PROJECT MANAGER DIVISION MANAGER

RECORD DRAWINGS  
Mark J. Holiday  
DATE: 6-15-00



W-0964

W-964



**OWNERS**  
E. CRAWFORD FAMILY, L.P.  
125 VANDERBILT  
WAXAHACHIE, TEXAS 75165

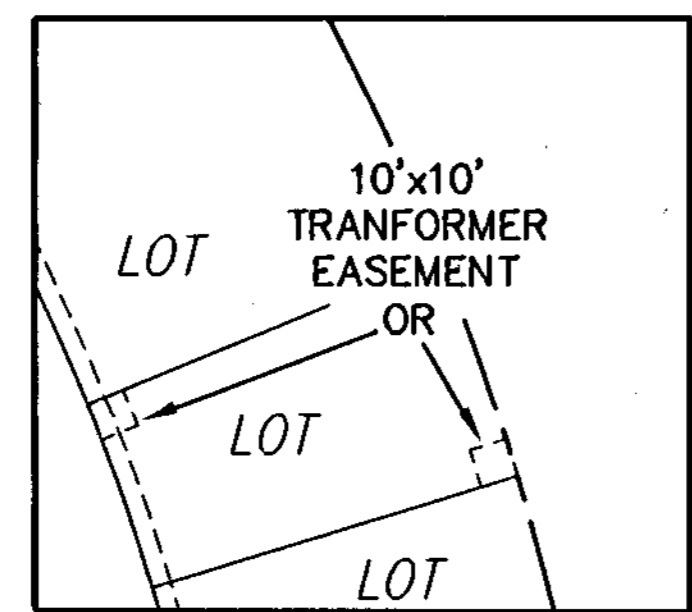
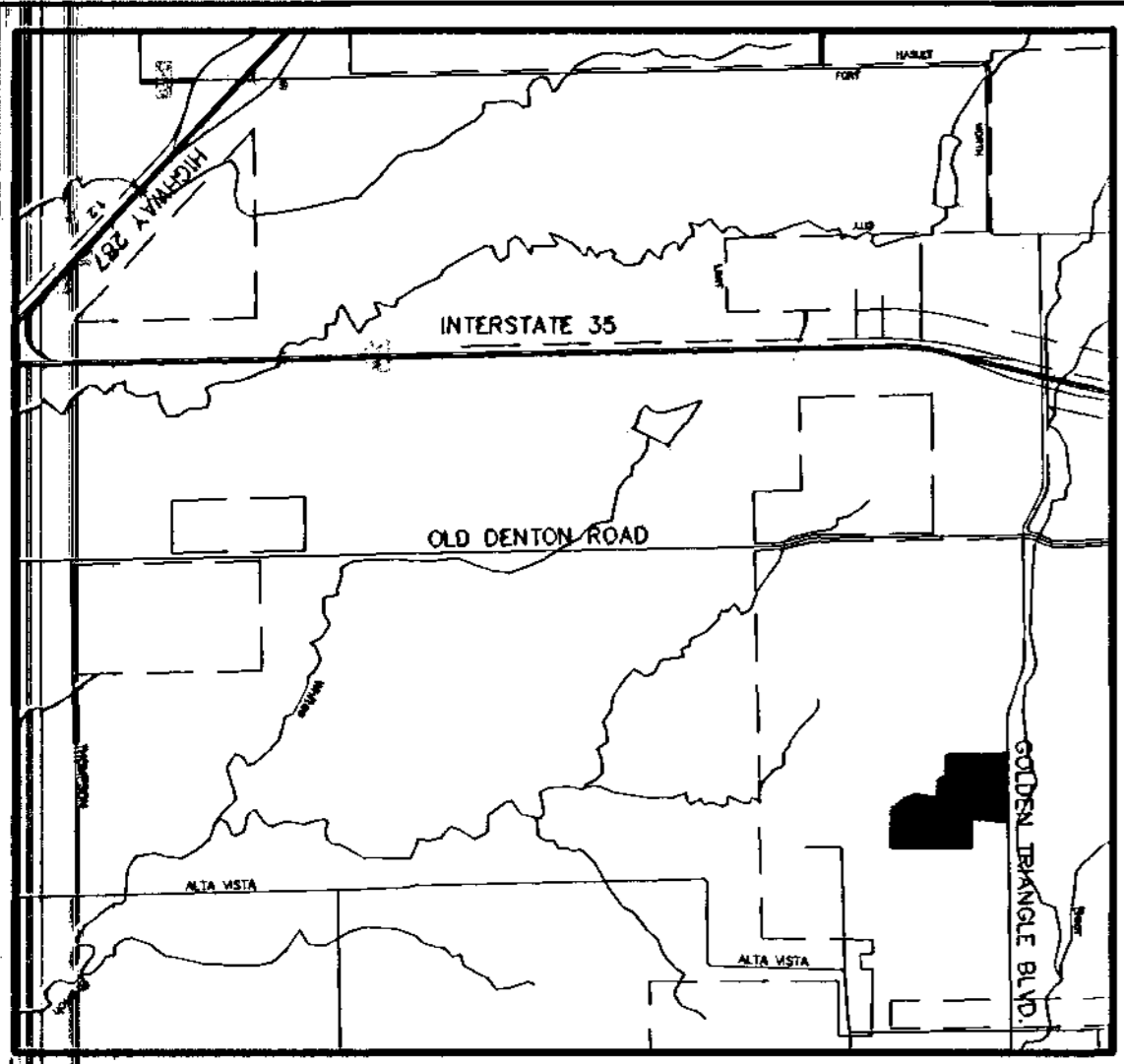
**OWNER/DEVELOPER AGENT**  
JAMES M. SCHELL  
301 FORT WORTH CLUB BUILDING  
FORT WORTH, TEXAS 76102

**DEVELOPER**  
HANOYER PROPERTY COMPANY  
8235 DOUGLAS, STE. 805  
DALLAS, TEXAS 75225  
(214) 373-1892  
CONTACT: DICK LEBLANC

**ENGINEER/SURVEYOR**  
TEAGUE NALL AND PERKINS, INC.  
915 FLORENCE STREET  
FORT WORTH, TEXAS 76102  
(817) 338-5773  
CONTACT: GARY J. TEAGUE, P.E.  
CHARLES R. MCLEOD, R.P.L.S.

E. CRAWFORD FAMILY LIMITED PARTNERSHIP  
VOL. 12935, PG. 414

TARRANT COUNTY  
VOL. 5026, PG. 108



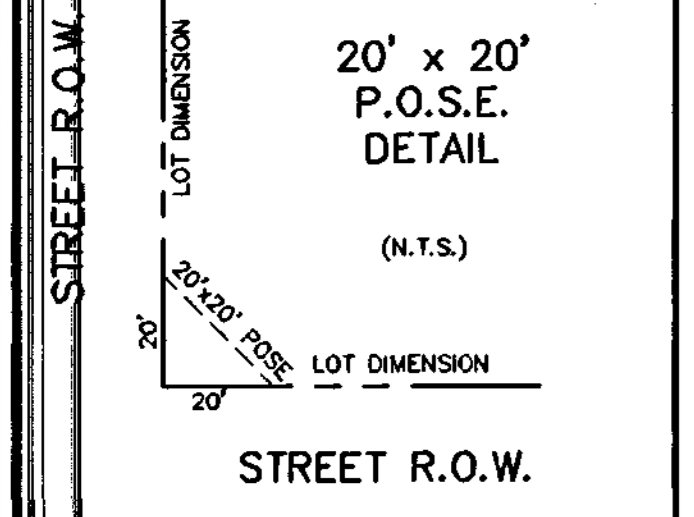
$R = 700.00'$   $L = 174.43'$   
 $\Delta = 1476.39'$   $CB = N13709'09"E$   
 $T = 87.67'$   $CL = 173.98'$

$R = 650.00'$   $L = 9.12'$   
 $\Delta = 00'48'14"$   $CB = S06'23'03"W$   
 $T = 4.56'$   $CL = 9.12'$

$R = 4975.00'$   $L = 176.02'$   
 $\Delta = 02'01'38"$   $CB = N88'03'35"W$   
 $T = 88.02'$   $CL = 176.02'$

$R = 4975.00'$   $L = 86.97'$   
 $\Delta = 01'00'06"$   $CB = N85'58'09"W$   
 $T = 43.49'$   $CL = 86.98'$

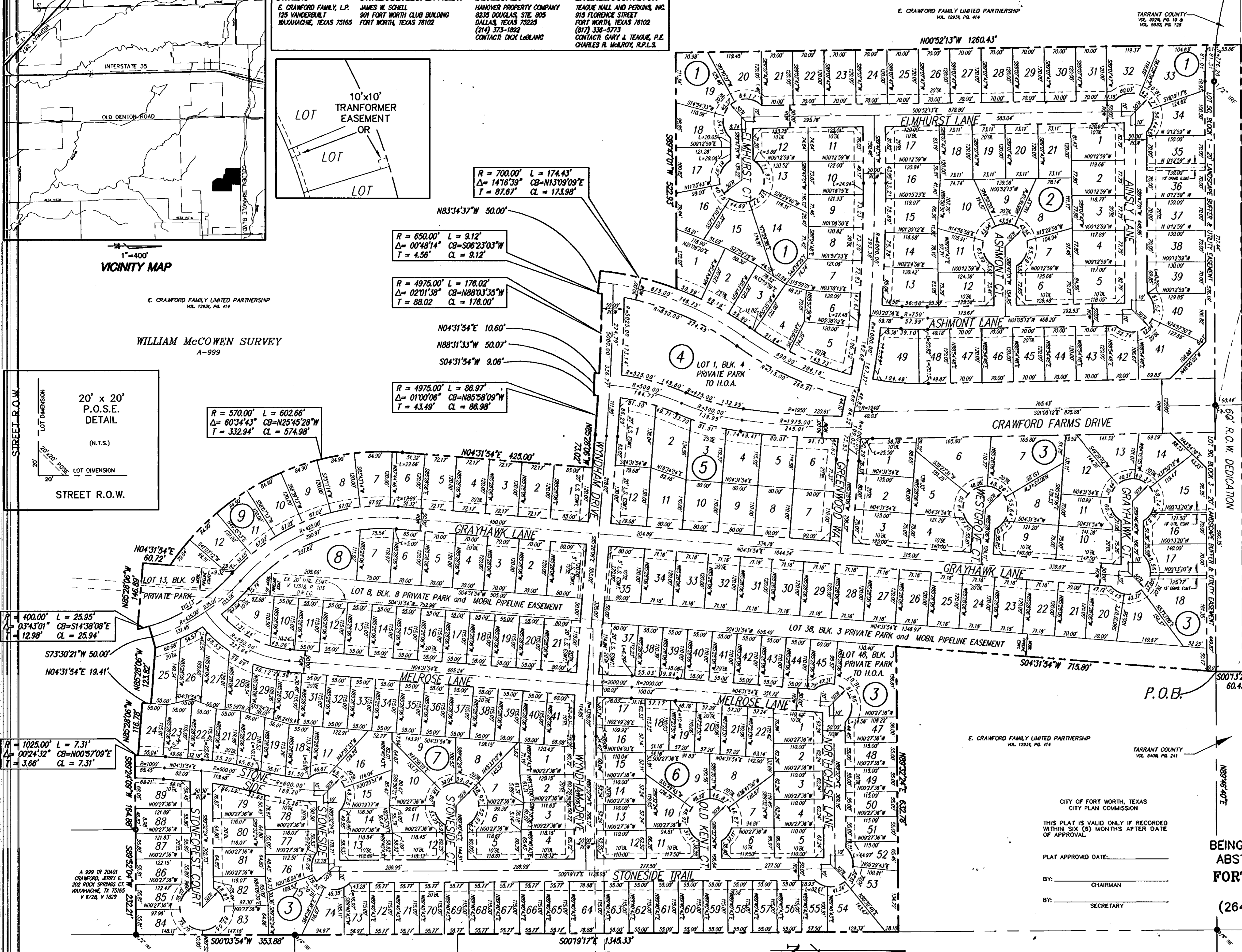
$R = 570.00'$   $L = 602.66'$   
 $\Delta = 60'34'43"$   $CB = N25'45'28"W$   
 $T = 332.94'$   $CL = 574.98'$



1"=400'  
VICINITY MAP

E. CRAWFORD FAMILY LIMITED PARTNERSHIP  
VOL. 12935, PG. 414

WILLIAM McCOWEN SURVEY  
A-999



**FLOODPLAIN/DRAINAGEWAY MAINTENANCE**

The existing creek, stream, river, or drainage channel traversing along or across portions of this addition, will remain unobstructed at all times and will be maintained by the individual owners whose lots are traversed by, or adjacent to, the drainageways. The City of Fort Worth will not be responsible for the maintenance, erosion control, and/or operation of said drainageways. Property owners shall keep the adjacent drainageways traversing their property clean and free of debris, silt or other substances which would result in unsanitary conditions, and the City shall have the right of entry for the purpose of inspecting the maintenance work by the property owners. The drainageways are occasionally subject to storm water overflow and/or bank erosion that cannot be defined. The City of Fort Worth shall not be liable for any damages resulting from the occurrence of these phenomena, nor the failure of any structure(s) within the drainageways. The drainageway crossing each lot is contained within the floodplain easement line as shown on the plat.

No construction shall be allowed within the floodplain easement, without written approval of the director of transportation and public works. In order to secure approval, detailed engineering plans and/or studies for the improvements, satisfactory to the director, shall be prepared and submitted by the party(ies) wishing to construct within the floodplain, where construction is permitted, all finished floor elevations shall be a minimum of two (2) feet above the 100-year flood elevation.

**NOTES:**

The City of Fort Worth has an ordinance implementing the assessment and collection of water and wastewater impact fees. The total amount to be assessed is established as of the date of the filing of this plat and is based upon the then existing Schedule 1 to the current impact fee ordinance. The amount to be collected is established on the date the building permit is issued and the date of connection to the water and/or wastewater collection system and is based upon the then existing schedule 1 to the current impact fee ordinance.

No building permits shall be issued for any lot in this plat until provision is made for the construction of the water, sewer, storm drain, street lights and paving improvements and approval is obtained from the City of Fort Worth.

All building set back lines shall comply with requirements of the City Zoning Ordinances.

All streets greater than 42' in width require sidewalks to be constructed with this development.

No direct access shall be permitted from any lots on this addition to Golden Triangle Boulevard.

**PUBLIC OPEN SPACE RESTRICTION**

NO STRUCTURE, OBJECT, OR PLANT OF ANY TYPE EXCEEDING 24' IN HEIGHT ABOVE TOP OF CURB, INCLUDING, BUT NOT LIMITED TO BUILDINGS, FENCES, WALLS, SIGNS, TREES, SHRUBS, CARS, TRUCKS, ETC., MAY HEREINAFTER BE PLACED OR RECONSTRUCTED IN THE PUBLIC OPEN SPACE EASEMENT AS SHOWN ON THIS PLAT. THESE OPEN SPACE EASEMENTS WILL REMAIN IN EFFECT UNTIL VACATED BY ORDINANCE ADOPTED BY THE CITY COUNCIL OF FORT WORTH AND THE PROPERTY REAPPLIED. EXISTING STRUCTURES EXEMPT FROM PUBLIC OPEN SPACE EASEMENT, UNTIL DESTRUCTION OR SUBSTANTIAL RECONSTRUCTION.

**UTILITY EASEMENTS**

Any public utility, including the City of Fort Worth, shall have the right to move and keep moved all or part of any building, fences, trees, shrubs, other growths or improvements which in any way endanger or interfere with the construction, maintenance or efficiency of its respective systems on any of the easements shown on the plat and any public utility, including the City of Fort Worth, shall have the right at all times of ingress and egress to and from and upon said easements for the purpose of construction, reconstruction, inspection, patrolling, maintaining and adding to or removing all or part of its respective system with-out the necessity at any time of procuring the permission of anyone.

RANCHO PLACE (60' PRIVATE ACCESS DRIVE)

GOLDEN TRIANGLE ESTATES LOT 11, BLK 11  
LENSVILLE 7 PARTNERS  
3720 BRANBAUGH ROAD  
FORT WORTH, TEXAS 76108  
V 13270, P 194

GOLD RUSH DRIVE (60' R.O.W.)

GOLDEN TRIANGLE ESTATES LOT 12, BLK 12  
LENSVILLE 7 PARTNERS  
3720 BRANBAUGH ROAD  
FORT WORTH, TEXAS 76108  
V 13270, P 194

A FINAL PLAT FOR...  
**CRAWFORD FARMS BLOCKS 1 THRU 9**  
A 75.49 ACRE TRACT,  
BEING PART OF THE WILLIAM McCOWEN SURVEY,  
ABSTRACT No. 999 SITUATED IN THE CITY OF  
FORT WORTH, TARRANT COUNTY, TEXAS  
(271 LOTS)  
(264 RESIDENTIAL and 7 OPEN SPACE LOTS)  
APRIL 12th, 2000

E. CRAWFORD FAMILY LIMITED PARTNERSHIP  
VOL. 12935, PG. 414

TARRANT COUNTY  
VOL. 5006, PG. 241

CITY OF FORT WORTH, TEXAS  
CITY PLAN COMMISSION

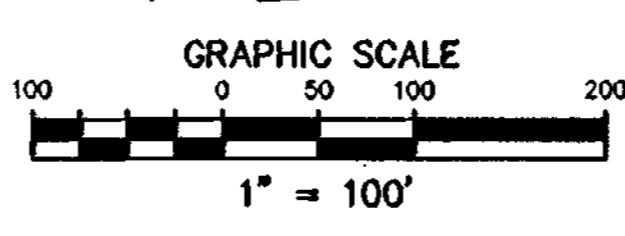
THIS PLAT IS VALID ONLY IF RECORDED WITHIN SIX (6) MONTHS AFTER DATE OF APPROVAL.

PLAT APPROVED DATE: \_\_\_\_\_

BY: \_\_\_\_\_  
CHAIRMAN

BY: \_\_\_\_\_  
SECRETARY

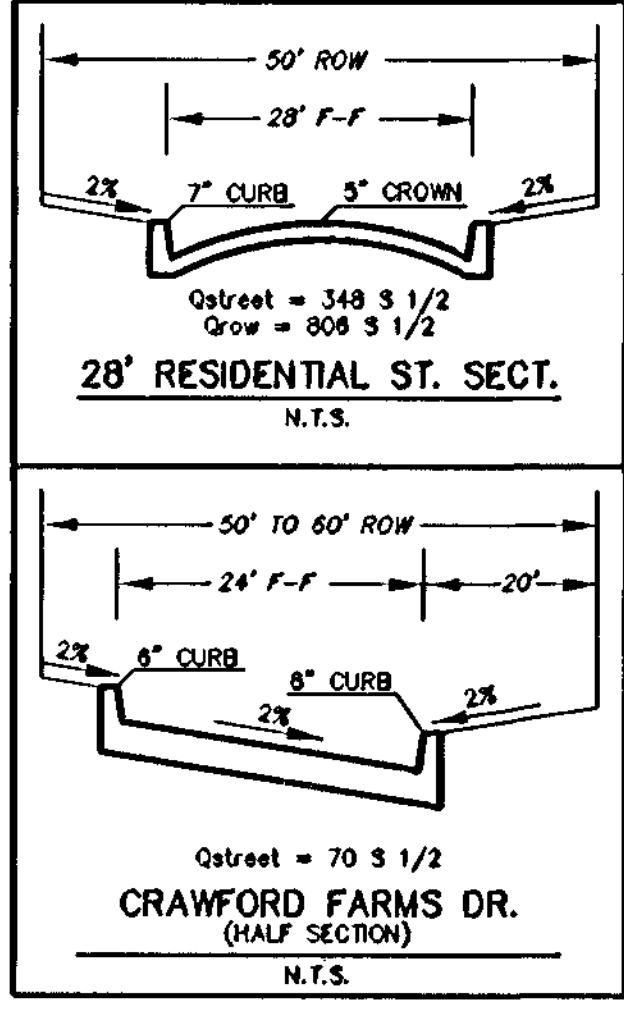
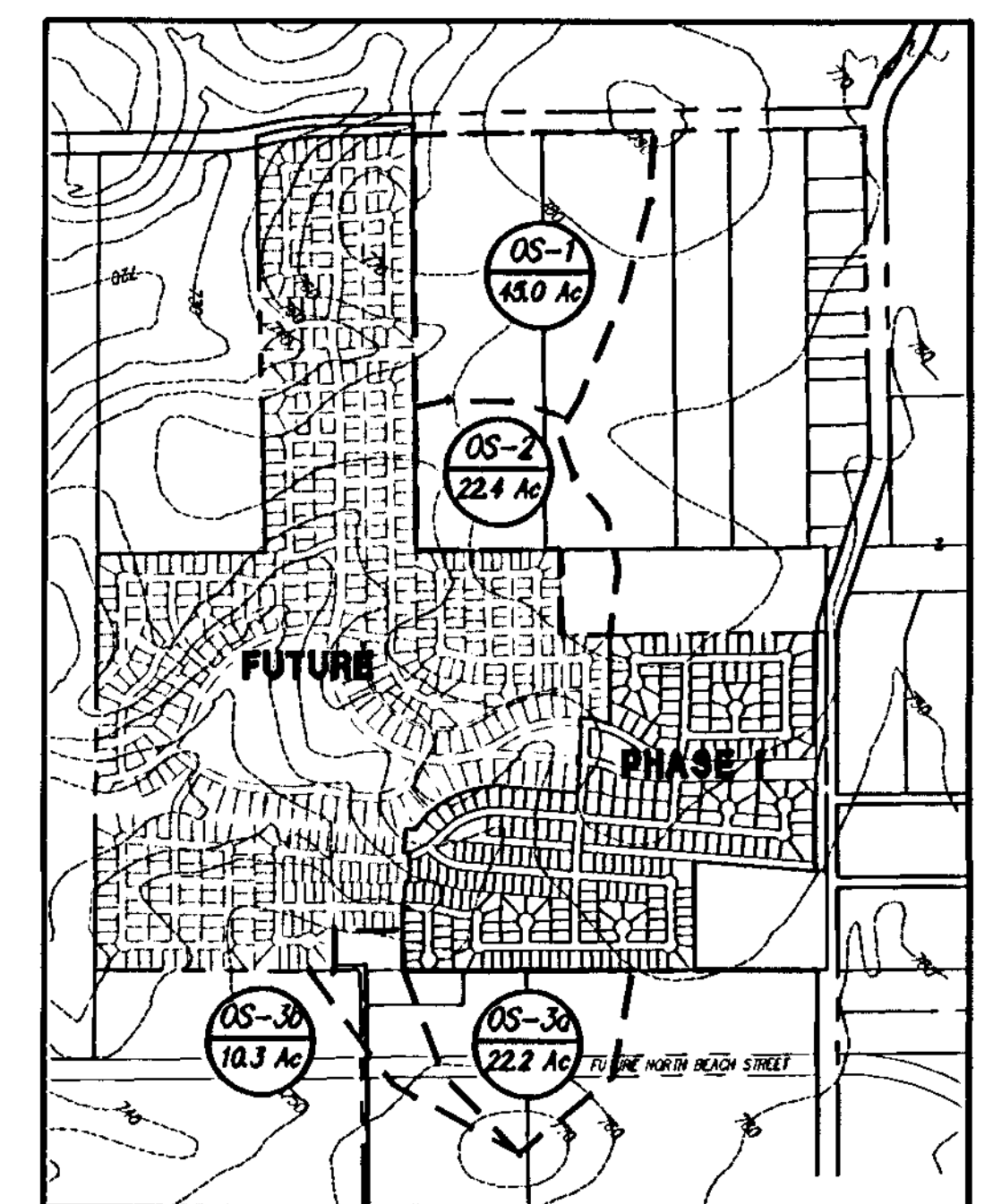
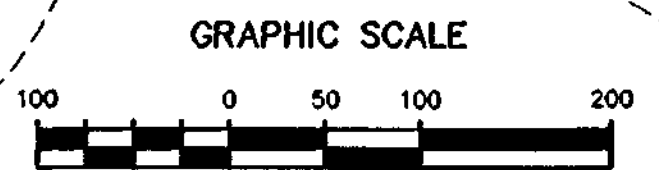
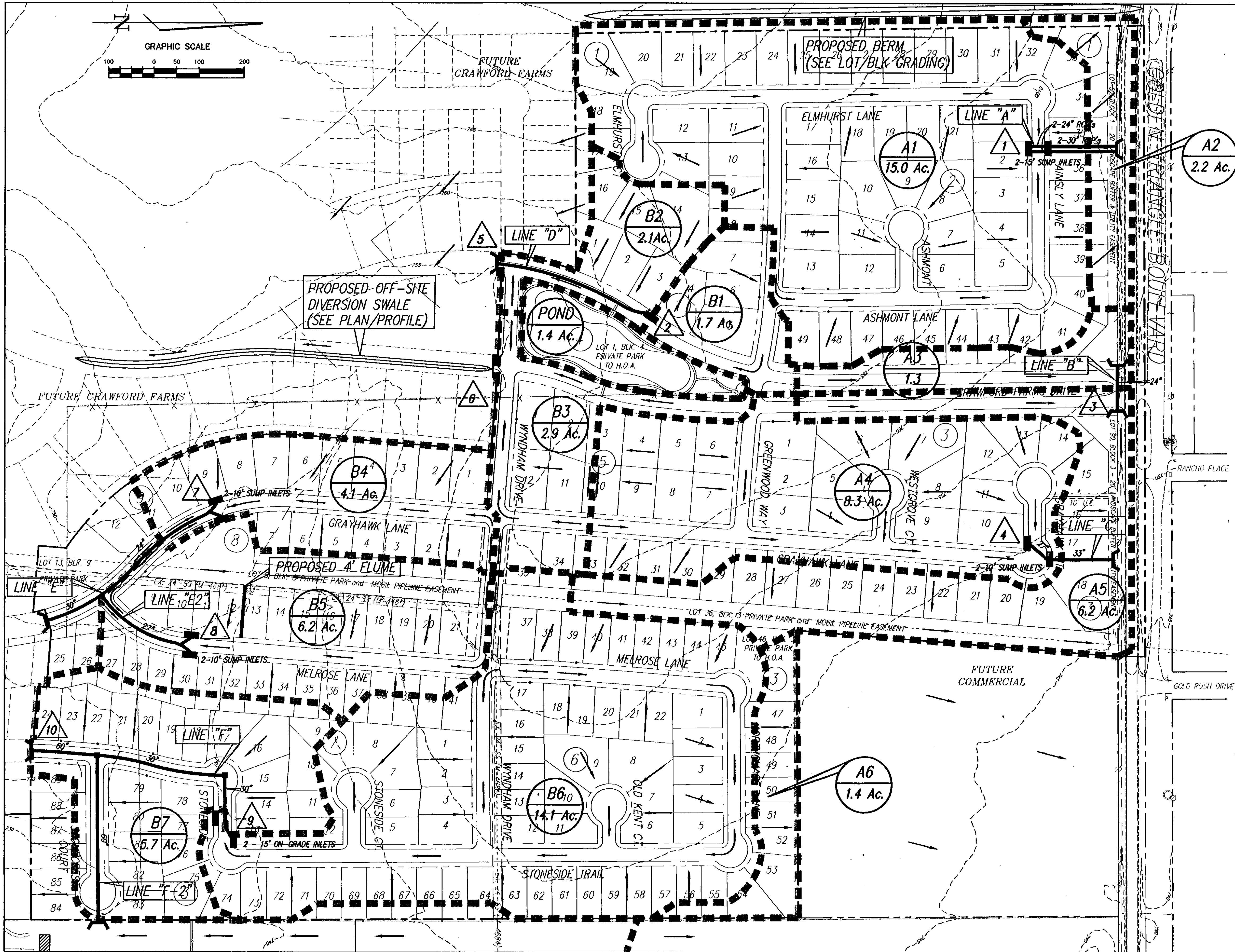
DATE: \_\_\_\_\_



STEPHEN H. ROBERSON  
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 4090





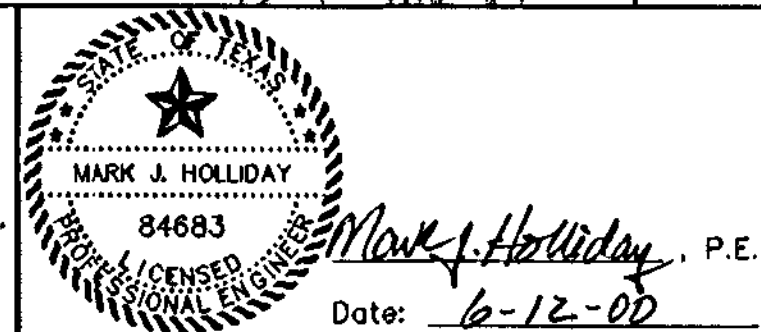


NO.	REVISION	BY	DATE

JPV  
DESIGNED  
LCC  
DRAWN  
MJH  
CHECKED

SCALE  
HORIZ  
1"=100'  
VERT  
N/A  
DATE  
JUNE 2000  
PROJECT NO.

**TEAGUE NALL AND PERKINS**  
INC. CONSULTING ENGINEERS  
915 Florence Street Fort Worth, Texas 76102 (817) 336-5773  
2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765



CITY OF FORT WORTH, TEXAS  
PHASE I  
CRAWFORD FARMS  
DRAINAGE AREA MAP  
SHEET 2 OF 30



5 YEAR & 100 YEAR STORM DRAIN CALCULATIONS

\*NOTE: Q SHOWN IS HALF OF TOTAL, 2 PIPES IN PARALLEL ARE PROPOSED.

SECTION REACH	FROM	TO	LENGTH (FT)	DRAINAGE AREA(S)	INCR. CA	TOTAL CA	TIME OF CONCENTRATION (MIN)			DESIGN FREQ. (YR)	RAINFALL INTENSITY (IN/HR)	DESIGN Q (CFS)	INLET BYPASS	TOTAL Q IN SYSTEM (CFS)	SIZE	TYPE	AREA (SF)	WETTED PERIMETER (FT)	FRICTION GRADIENT (FT/FT)	HYDRAULIC GRADIENT		VELOCITY		LOSS COEFF. K <sub>i</sub>	HEAD LOSS (FT)	HG AT UPSTREAM OF NODE		
							INLET TIME	TRAVEL TIME	TOTAL TIME											DOWNSTREAM (MSL)	UPSTREAM (MSL)	IN (FPS)	OUT (FPS)					
LINE A	1+61 (INLET 1B)	1+90 (INLET 1A)	29.00	A1/2	3.75	3.75	15	0.00	15.00	100	9.60	18	0	18*	24	RCP	3.1	6.3	0.008	757.53	757.72	0.00	5.73	0.00	0.51	1.25	0.64	758.36
	0+15 (HEADWALL)	1+61 (INLET 1B)	146.00	A1/2	3.75	7.50		0.08	15.08	100	9.57	36	0	36*	30	RCP	4.9	7.9	0.008	756.00	757.12	5.73	7.31	0.51	0.83	0.5	0.42	757.53
LINE B	5+40 (HEADWALL)	6+42 (HEADWALL)	102.00	A3	0.65	0.65	15	0.00	15.00	100	9.60	6	0	6	24	RCP	3.1	6.3	0.001	700.00	700.08	0.00	1.99	0.00	0.06	1.25	0.08	700.15
LINE C	1+53 (INLET 4B)	2+12 (INLET 4A)	59.00	A4/2	2.08	2.08	15	0.00	15.00	100	9.60	20	0	20	27	RCP	4.0	7.1	0.004	747.92	748.16	0.00	5.01	0.00	0.39	1.25	0.49	748.65
	0+15 (HEADWALL)	1+53 (INLET 4B)	138.00	A4/2	2.08	4.15		0.20	15.20	100	9.53	40	0	40	33	RCP	5.9	8.6	0.006	746.80	747.57	5.01	6.66	0.39	0.69	0.5	0.34	747.92
LINE D	2+87 (HEADWALL)	5+84 (INLET 2)	369.00	B1	0.85	0.85	15	0.00	15.00	5	5.60	5	0	5	24	RCP	3.1	6.3	0.000	753.17	758.00	0.00	1.52	0.00	0.04	1.25	0.04	758.04
LINE E	8+39 (0+00 LAT E2)	8+62 (INLET 7A)	23.00	B4/2	1.03	1.03	15	0.00	15.00	100	9.60	10	0	10	21	RCP	2.4	5.5	0.004	743.28	743.37	0.00	4.09	0.00	0.26	1.25	0.26	743.63
	5+36 (0+00 LINE E2)	8+39 (0+00 LAT E-1)	303.00	B4/2	1.03	2.05		0.09	15.09	100	9.57	20	0	20	24	RCP	3.1	6.3	0.008	735.57	742.83	4.09	6.25	0.26	0.61	0.6	0.45	743.28
	3+90 (HEADWALL)	5+36 (0+00 LINE E2)	146.00	B5	3.10	5.15		0.81	15.90	100	9.32	48	0	48	30	RCP	4.9	7.9	0.014	733.20	735.20	6.25	9.78	0.61	1.49	0.25	0.37	735.57
LAT E-1	0+00 (8+39 LINE E)	0+27 (INLET 7B)	27.00	B4/2	1.03	1.03	15	0.00	15.00	100	9.60	10	0	10	21	RCP	2.4	5.5	0.004	743.28	743.38	6.19	4.09	0.59	0.26	1.25	0.52	743.71
LINE E2	2+11 (0+00 LAT E2-1)	2+35 (INLET 8A)	24.00	B5/2	1.55	1.55	15	0.00	15.00	100	9.60	15	0	15	21	RCP	2.4	5.5	0.009	738.03	738.24	0.00	6.19	0.00	0.59	1.25	0.74	738.99
	0+00 (5+36 LINE E)	2+11 (0+00 LAT E2-1)	211.00	B5/2	1.55	3.10		0.06	15.06	100	9.58	30	0	30	27	RCP	4.0	7.1	0.009	735.57	737.51	6.19	7.47	0.59	0.87	0.6	0.52	738.03
LAT E2-1	0+00 (2+11 LINE E2)	0+27 (INLET 8B)	27.00	B5/2	1.55	1.55	15	0.00	15.00	100	9.60	15	0	15	21	RCP	2.4	5.5	0.009	738.03	738.27	0.00	6.19	0.00	0.59	1.25	0.74	739.01
LINE F	8+32 (0+00 LAT F-1)	9+00 (INLET 9A)	68.00	B6/2	3.53	3.53	15	0.00	15.00	5	5.60	20	0	20	24	RCP	3.1	6.3	0.008	735.16	735.68	0.00	6.28	0.00	0.61	1.25	0.77	736.44
	5-YR 7+59 (SDMH)	8+32 (0+00 LAT F-1)	73.00	B6/2	3.53	7.05		0.18	15.18	5	5.56	39	0	39	30	RCP	4.9	7.9	0.009	733.88	734.53	6.28	7.99	0.61	0.99	0.6	0.62	735.16
	4+72 (0+00 LAT F-2)	7+59 (SDMH)	287.00	B6/2	1.43	8.48		0.15	15.33	5	5.54	47	0	47	30	RCP	4.9	7.9	0.013	728.45	733.04	7.99	9.56	0.99	1.42	0.6	0.82	733.86
	3+10 (HEADWALL)	4+72 (0+00 LAT F-2)	162.00	OS-3A	17.76	26.24		0.15	15.33	5	5.54	145	0	145	60	RCP	19.6	15.7	0.003	727.50	728.10	7.99	7.40	0.99	0.85	0.5	0.35	728.45
LINE F 100-YR	3+10 (HEADWALL)	4+72 (0+00 LAT F-2)	162.00	OS-3A	17.76	26.24		0.00	30.00	100	6.80	178	0	178	60	RCP	19.6	15.7	0.005	727.50	728.26	7.40	9.09	0.85	1.28	0.5	0.86	729.12
LAT F-1	0+00 (8+32 LINE F)	0+17 (INLET 9B)	17.00	B6/2	3.53	3.53	15	0.00	15.00	5	5.60	20	0	20	24	RCP	3.1	6.3	0.008	735.16	735.29	0.00	6.28	0.00	0.61	1.25	0.77	736.05
LAT F-2	0+00 (4+72 LINE F)	3+66 (HEADWALL)	366.00	OS-3A	17.76	17.76	30	0.00	30.00	100	6.80	121	0	121	60	RCP	19.6	15.7	0.002	729.12	729.91	0.00	6.15	0.00	0.59	NA	NA	NA

DESIGN POINT AND INLET CALCULATIONS

DESIGN POINT	INLET No.	AREA(S)	SIZE (AC.)	DESIGN FREQ.	C	T <sub>c</sub> (MIN)	I 5 (IN/HR)	Q 5 (CFS)	I 100 (IN/HR)	Q 100 (CFS)	UPSTREAM BYPASS	TOTAL Q TO EACH INLET	STREET SLOPE (FT/FT)	TOTAL Q IN STREET	STREET CAPACITY (CFS)	R.O.W. CAPACITY (CFS)	FLOW DEPTH (FT)	INLET TYPE	INLET CAPACITY (CFS/FT)	INLET LENGTH (FT)	FLOW COLLECTED (CFS)	BYPASS (CFS)	COMMENT
1	1A	A1/2	7.50	100	0.5	15	5.6	21.0	9.6	36.0	0.0	36.0	0.005	72.0	26	61	0.86	SUMP	4.16	15	36.0	0.0	
	1B	A1/2	7.50	100	0.5	15	5.6	21.0	9.6	36.0	0.0	36.0	0.005	72.0	26	61	0.86	SUMP	4.16	15	36.0	0.0	
2	2	B1	1.70	100	0.5	15	5.6	4.8	9.6	8.2	0.0	8.2	0.016	8.2	47	109	0.50	GRADE	1.65	10	8.2	0.0	
3	NA	A3	1.30	5	0.5	15	5.6	3.6	9.6	6.2	0.0	NA	0.005	3.6	10	61	NA	NA	NA	NA	NA	NA	COMPUTED STREET CAPACITY IS FOR BOTH SIDES.
4	4A	A4/2	4.15	100	0.5	15	5.6	11.6	9.6	19.9	0.0	19.9	0.01	39.8	37	86	0.76	SUMP	3.45	10	19.9	0.0	
	4B	A4/2	4.15	100	0.5	15	5.6	11.6	9.6	19.9	0.0	19.9	0.01	39.8	37	86	0.76	SUMP	3.45	10	19.9	0.0	
5	NA	B2	2.10	5	0.5	15	5.6	5.9	9.6	10.1	0.0	NA	0.005	5.9	5	61	NA	NA	NA	NA	NA	NA	COMPUTED STREET CAPACITY IS FOR ONE SIDE.
6	NA	B3	2.90	5	0.5	15	5.6	8.1	9.6	13.9	0.0	NA	0.0054	8.1	5	63	NA	NA	NA	NA	NA	NA	COMPUTED STREET CAPACITY IS FOR ONE SIDE.
	7	7A	B4/2	2.05	100	0.5	15	5.6	5.7	9.6	9.8	0.0	9.8	0.005	19.7	26	61	0.48	SUMP	1.71	10	9.8	0.0
	7B	B4/2	2.05	100	0.5	15	5.6	5.7	9.6	9.8	0.0	9.8	0.005	19.7	26	61	0.48	SUMP	1.71	10	9.8	0.0	
8	8A	B5/2	3.10	100	0.5	15	5.6	8.7	9.6	14.9	0.0	14.9	0.005	29.8	26	61	0.63	SUMP	2.58	10	14.9	0.0	
	8B	B5/2	3.10	100	0.5	15	5.6	8.7	9.6	14.9	0.0	14.9	0.005	29.8	26	61	0.63	SUMP	2.58	10	14.9	0.0	
9	9A	B6/2	7.05	5	0.5	15	5.6	19.7	9.6	33.8	0	19.7	0.012	39.5	41	94	0.50	GRADE	1.65	15	19.7	0.0	
	9B	B6/2	7.05	5	0.5	15	5.6	19.7	9.6	33.8	0	19.7	0.012	39.5	41	94	0.50	GRADE	1.65	15	19.7	0.0	
10	NA	B7	5.70	5	0.5	15	5.6	16.0	9.6	27.4	0.0	NA	0.007	16.0	31	72	NA	NA	NA	NA	NA	NA	

DRAINAGE AREA DATA

Area ID	Area (acres)	C	CA	TC (min)	I 5	I 100	Q 5 (cfs)	Q 100 (cfs)	COMMENTS
A1	15.0	0.5	7.50	15	5.6	9.6	42	72	
A2	2.2	0.5	1.10	15	5.6	9.6	6	11	
A3	1.3	0.5	0.65	15	5.6	9.6	4	6	
A4	8.3	0.5	4.15	15	5.6	9.6	23	40	
A5	6.2	0.5	3.10	15	5.6	9.6	17	30	
A6	1.4	0.5	0.70	15	5.6	9.6	4	7	
B1	1.7	0.5	0.85	15	5.6	9.6	5	8	
B2	2.1	0.5	1.05	15	5.6	9.6	6	10	
B3	2.9	0.5	1.45	15	5.6	9.6	8	14	
B4	4.1	0.5	2.05	15	5.6	9.6	11	20	
B5	6.2	0.5	3.10	15	5.6	9.6	17	30	
B6	14.1	0.5	7.05	15	5.6	9.6	39	68	
B7	5.7	0.5	2.85	15	5.6	9.6	16	27	
POND	1.4	0.5	0.70	15	5.6	9.6	4	7	
OS-1	45.0	0.5	22.50	15	5.6	9.6	126	216	
OS-2	22.4	0.5	11.20	15	5.6	9.6	63	108	
OS-3A	22.2	0.8	17.76	15	5.6	9.6	99	170	
OS-3B	10.3	0.5	5.15	15	5.6	9.6	29	49	
OS-3A	22.2	0.3	6.66	15	5.6	9.6	37	64	UNDEVELOPED Q

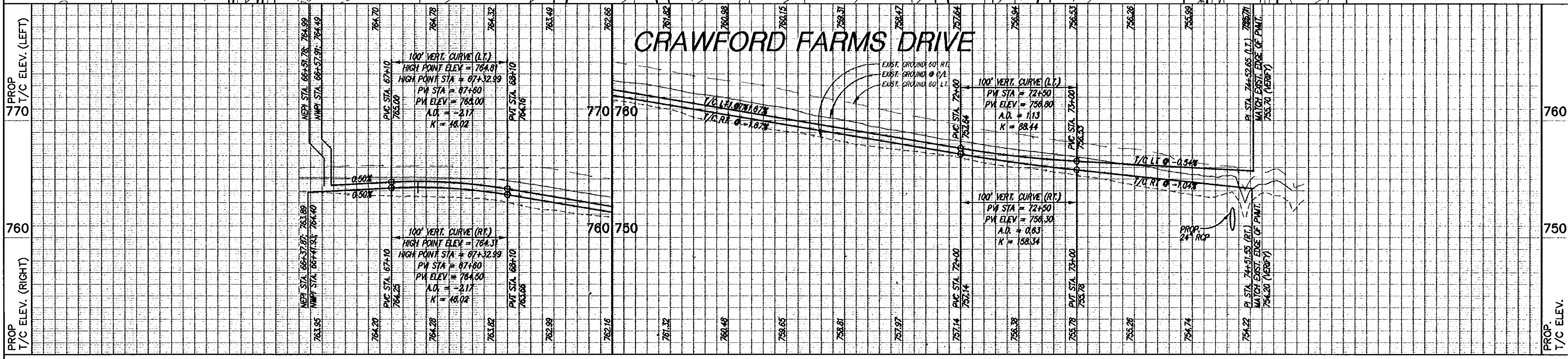
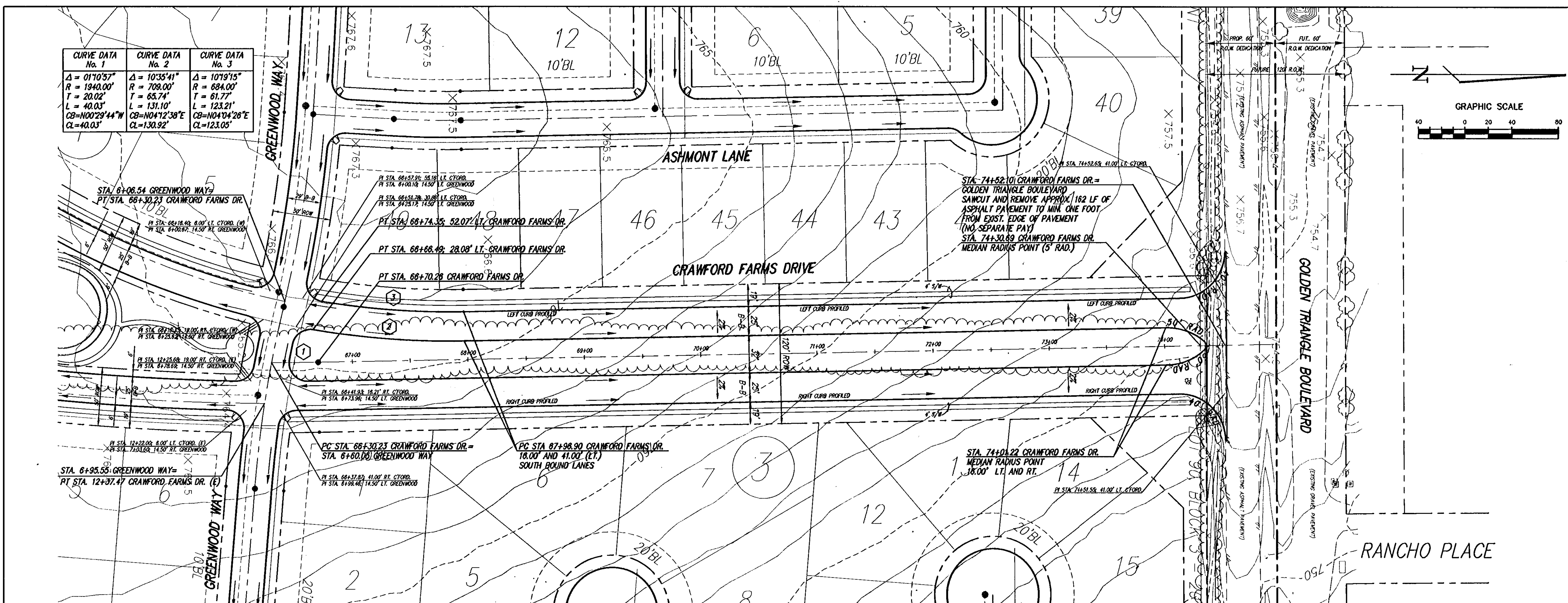
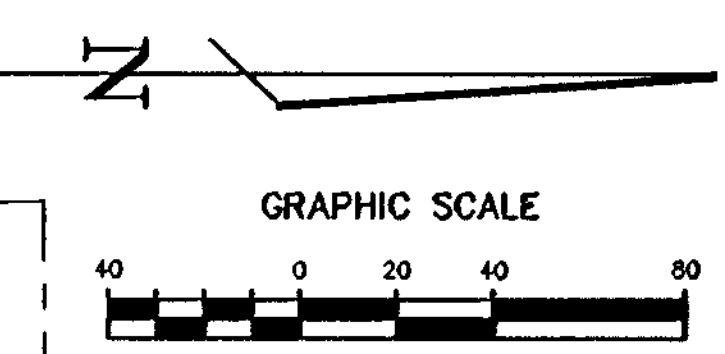
NO.	REVISION	BY	DATE	JPV DESIGNED LCC DRAWN MJH CHECKED	SCALE	DATE	TEAGUE NALL AND PERKINS CONSULTING ENGINEERS 915 Florence Street Fort Worth, Texas 76102 (817) 336-5773	2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765	Mark J. Holliday P.E. Date: 6-12-00	CITY OF FORT WORTH, TEXAS PHASE I CRAWFORD FARMS DRAINAGE CALCULATIONS	TNP PROJECT LEB99233 SHEET 3 OF 30
					HORIZ 1"=100'	APR 2000					







CURVE DATA No. 1	CURVE DATA No. 2	CURVE DATA No. 3
$\Delta = 0170'57"$	$\Delta = 10'35'41"$	$\Delta = 1079'15"$
$R = 1940.00'$	$R = 709.00'$	$R = 684.00'$
$T = 20.02'$	$T = 65.74'$	$T = 61.77'$
$L = 40.03'$	$L = 131.10'$	$L = 123.21'$
$CB = N0029'44"W$	$CB = N0412'30"E$	$CB = N04104'26"E$
$CL = 40.03'$	$CL = 130.92'$	$CL = 123.05'$

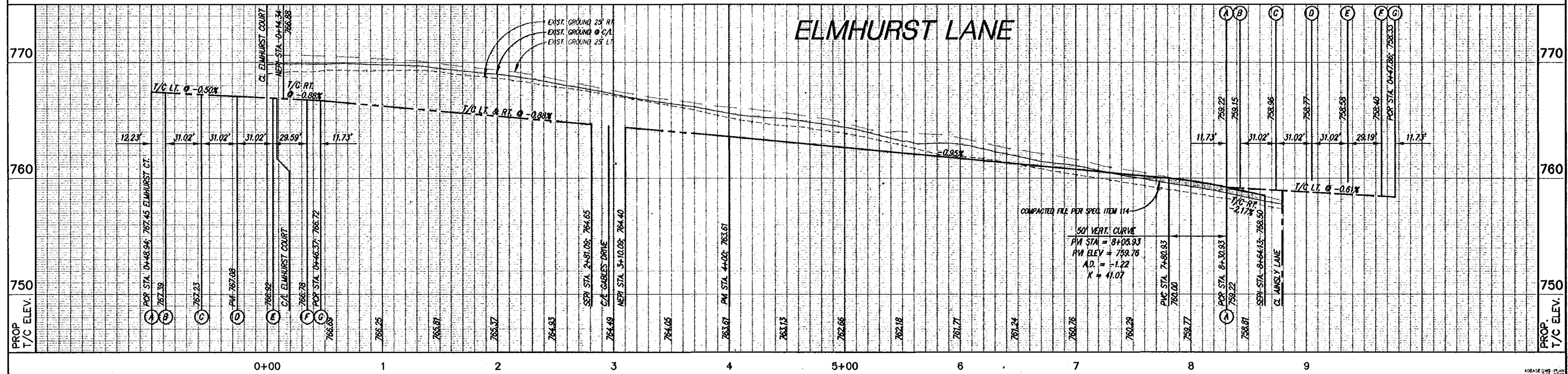
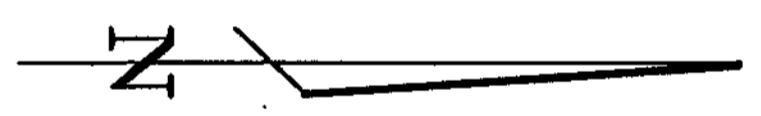
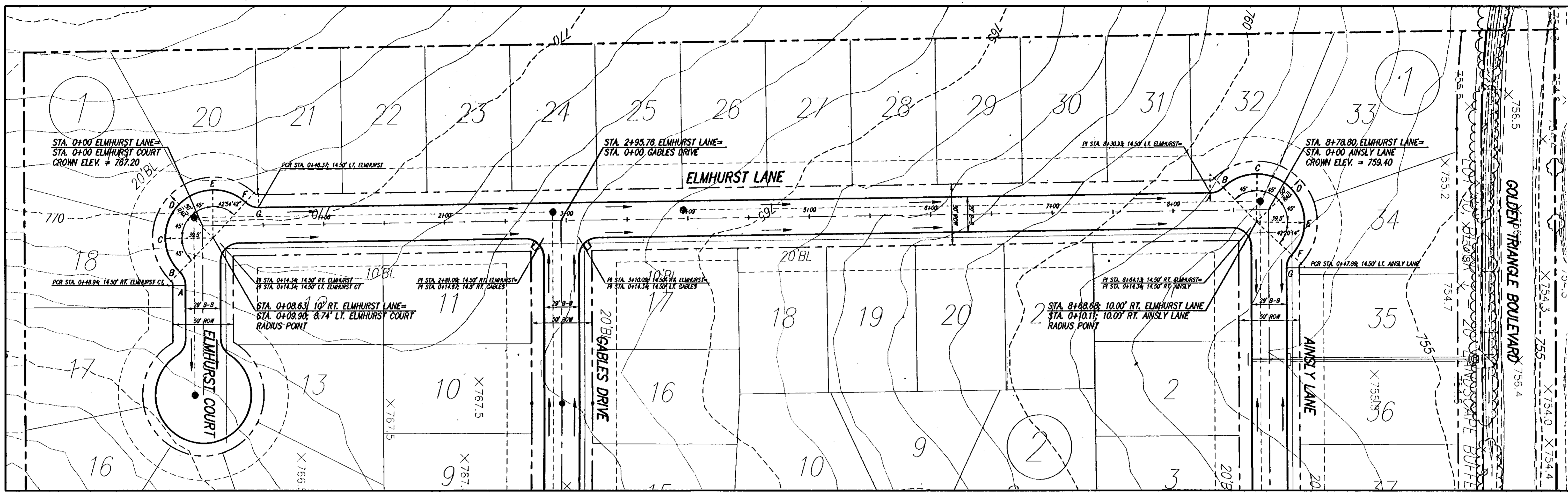
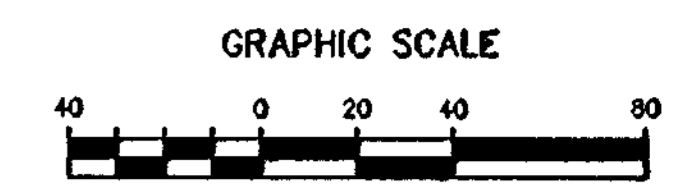


NO.      REVISION      BY      DATE	DESIGNED: JPV DRAWN: LCC/ASB CHECKED: MJH	SCALE: HORIZ 1"=40' VERT N/A DATE: JUNE 2000 PROJECT NO.	<b>TEAGUE NALL AND PERKINS</b> CONSULTING ENGINEERS 915 Florence Street      2001 West Irving Blvd. Fort Worth, Texas 76102      Irving, Texas 75061 (817) 336-5773      (972) 254-1765	 Date: 6-12-00	CITY OF FORT WORTH, TEXAS PHASE I <b>CRAWFORD FARMS</b> CRAWFORD FARMS DRIVE	TNP PROJECT LEB00134 SHEET <b>5</b> OF 30
-------------------------------------	-------------------------------------------------	-------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------	---------------------------------------------------------------------------------------	----------------------------------------------------------







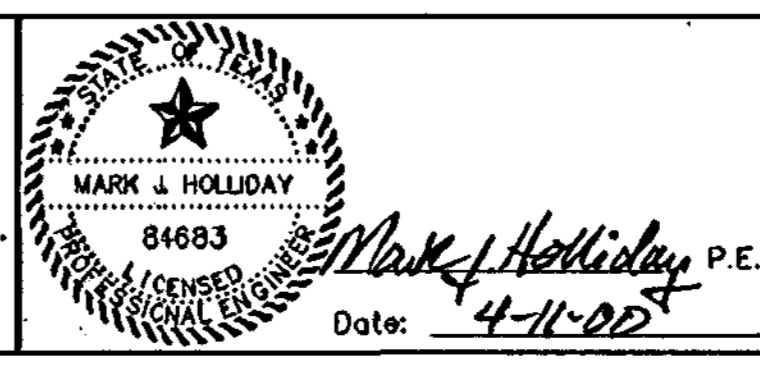


NO.	REVISION	BY	DATE

JPV  
 DESIGNED  
 LCC/ASB  
 DRAWN  
 MJH  
 CHECKED

SCALE	DATE
HORIZ 1"=40'	APR 2000
VERT N/A	
PROJECT NO.	

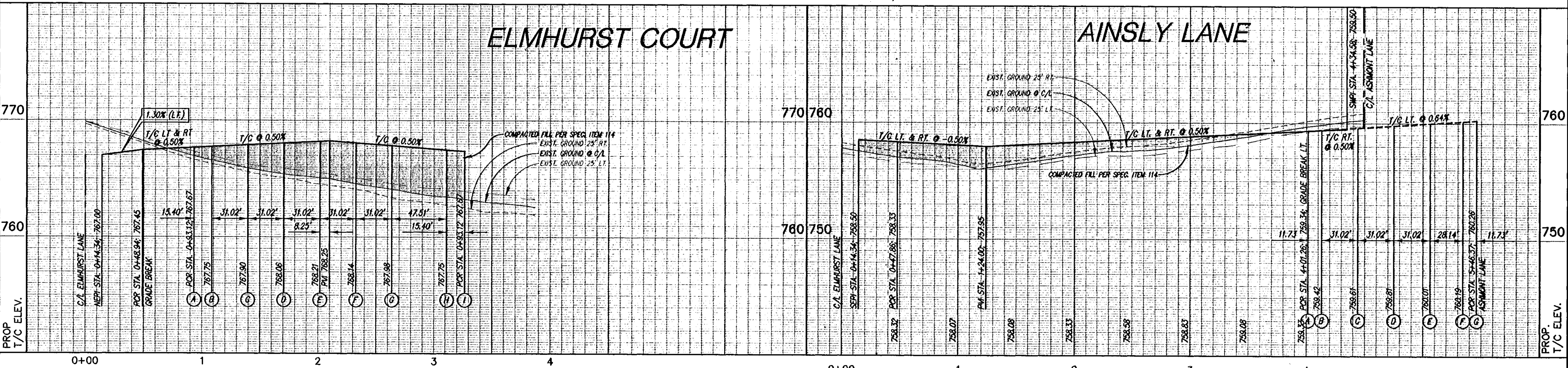
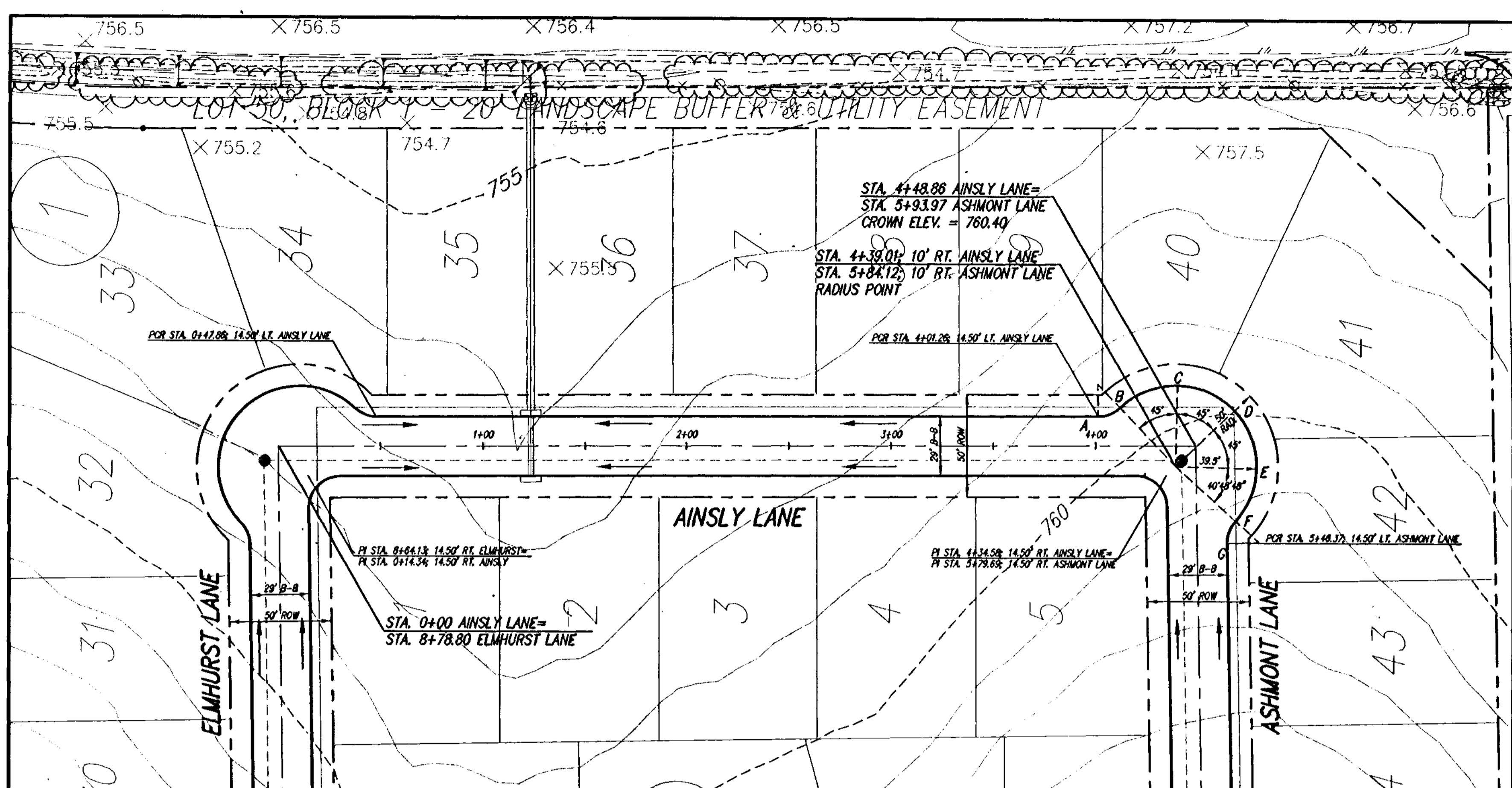
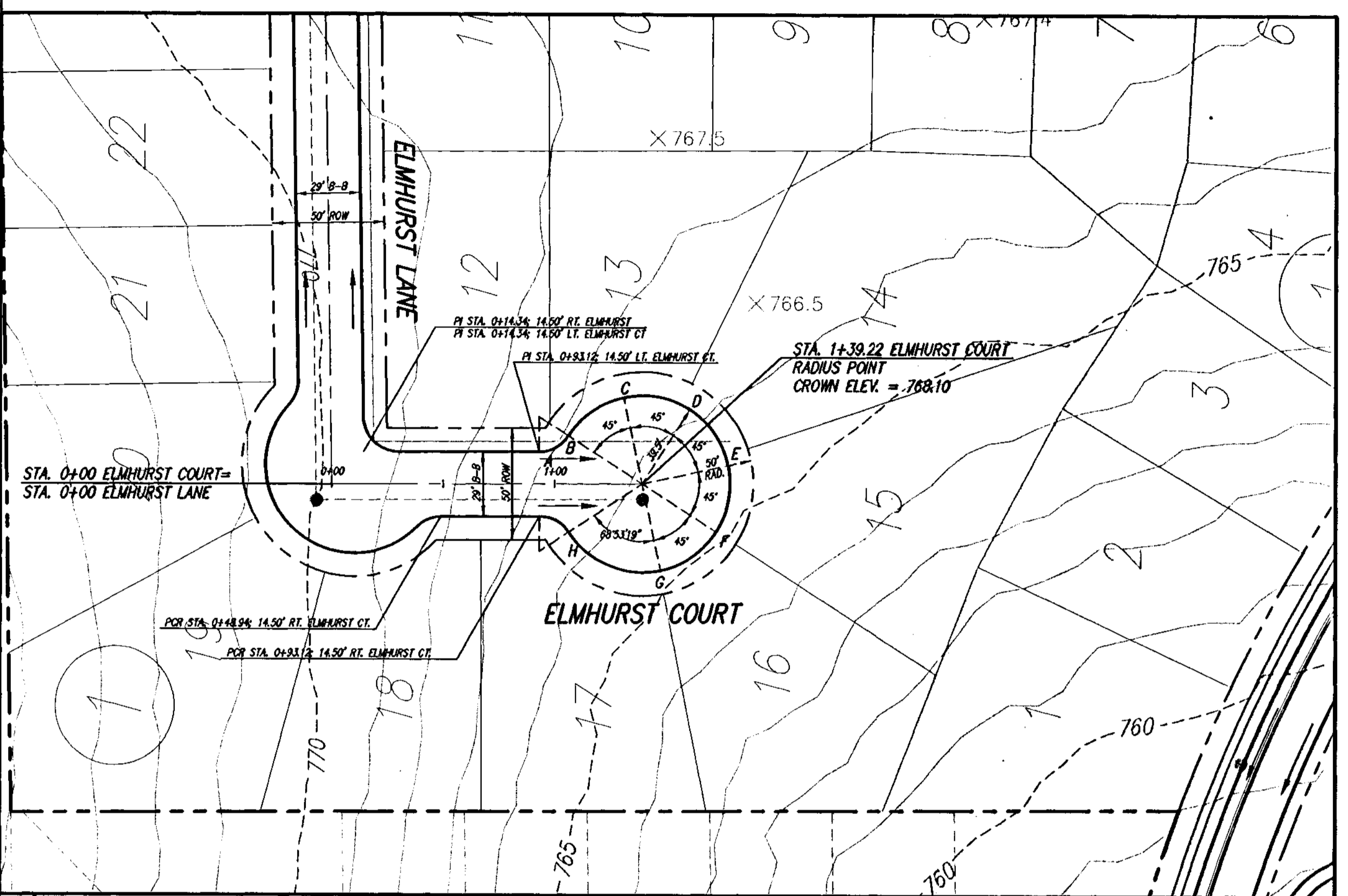
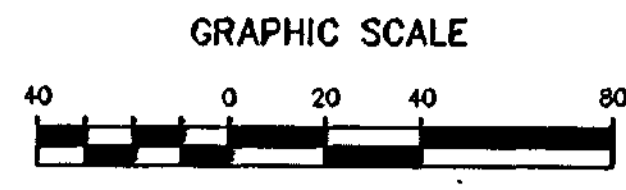
**TEAGUE NALL AND PERKINS**  
 INC. CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773  
 2001 West Irving Blvd Irving, Texas 75061 (972) 254-1765



CITY OF FORT WORTH, TEXAS		TWP PROJECT LEB00134
PHASE I CRAWFORD FARMS		SHEET 7
ELMHURST LANE		OF 30

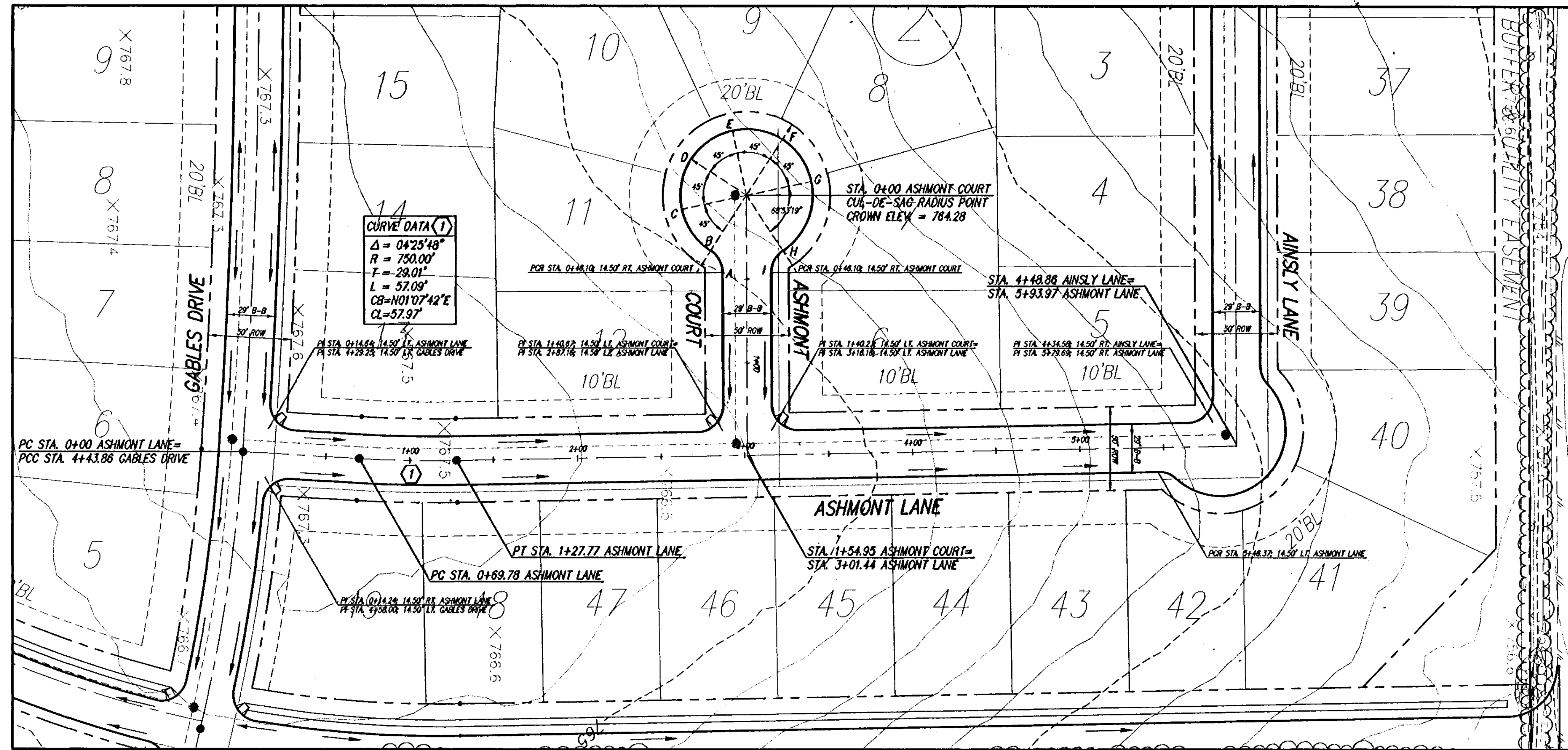
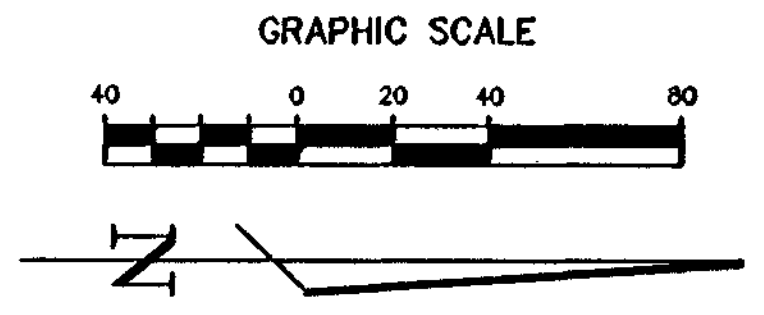


C:\PROJ\14\LEB00134\CD\DWG\ELMCT.dwg Wed Apr 12 09:55:41 2000

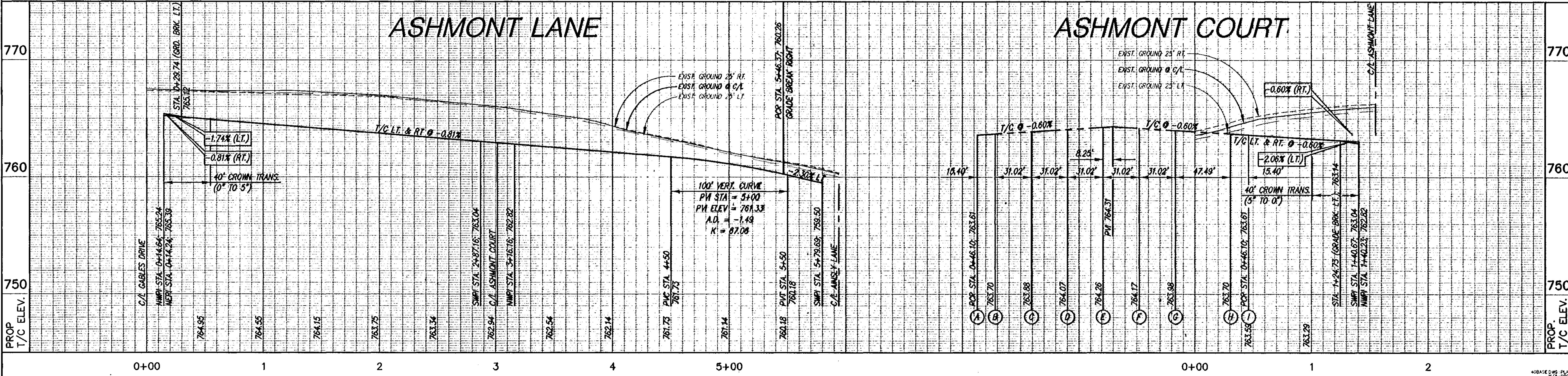


	<b>JPV</b> DESIGNED <b>LCC/ASB</b> DRAWN <b>MJH</b> CHECKED	SCALE HORIZ 1" = 40' VERT N/A PROJECT NO.	DATE APR 2000	 <b>TEAGUE NALL AND PERKINS</b> CONSULTING ENGINEERS 915 Florence Street Fort Worth, Texas 76102 (817) 336-5773 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1785		CITY OF FORT WORTH, TEXAS PHASE I <b>CRAWFORD FARMS</b> ELMHURST COURT & AINSLY LANE	SHEET <b>8</b> OF <b>30</b>
--	----------------------------------------------------------------------------	----------------------------------------------------------	------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	-----------------------------------------------------------------------------------------------	--------------------------------------





**CURVE DATA (1)**  
 $\Delta = 0425'48"$   
 $R = 750.00'$   
 $T = 29.01'$   
 $L = 57.03'$   
 $CB = N0107'42"E$   
 $CL = 57.97'$



NO.	REVISION	BY	DATE

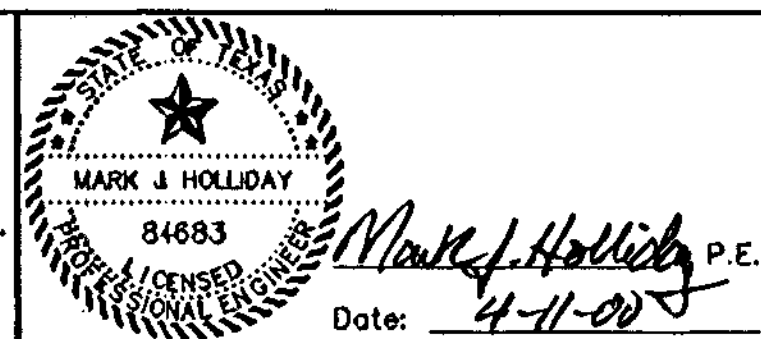
JPV  
DESIGNED  
LCC/ASB  
DRAWN  
MJH  
CHECKED

SCALE  
HORIZ  
1" = 40'  
VERT  
N/A

DATE  
APR 2000

PROJECT NO.

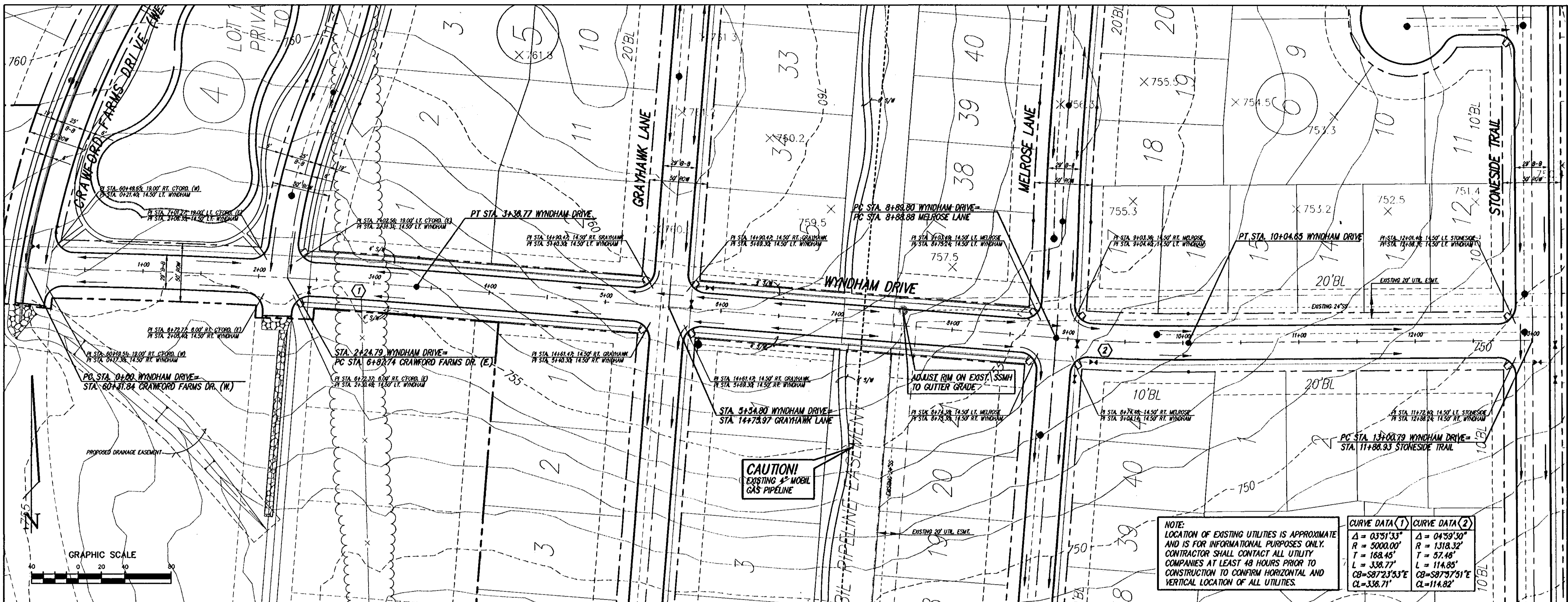
**TEAGUE NALL AND PERKINS**  
 CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773  
 2001 West Irving Blvd Irving, Texas 75081 (972) 254-1785



CITY OF FORT WORTH, TEXAS  
 PHASE I  
**CRAWFORD FARMS**  
 ASHMONT LANE AND COURT

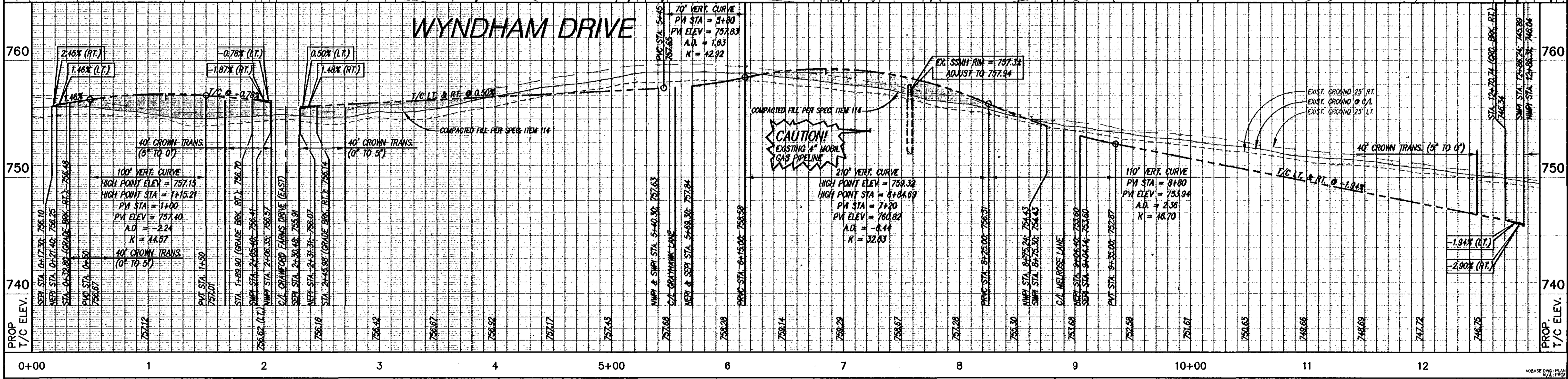
THE PROJECT  
 LEB00134  
 SHEET  
**9**  
 OF  
 30





NOTE: LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND IS FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO CONFIRM HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.

CURVE DATA (1)	CURVE DATA (2)
$\Delta = 03^{\circ}31'33''$	$\Delta = 04^{\circ}59'30''$
$R = 5000.00'$	$R = 1318.32'$
$T = 168.45'$	$T = 57.48'$
$L = 338.77'$	$L = 114.85'$
$CB = S87^{\circ}23'53''E$	$CB = S87^{\circ}51'E$
$CL = 338.71'$	$CL = 114.82'$



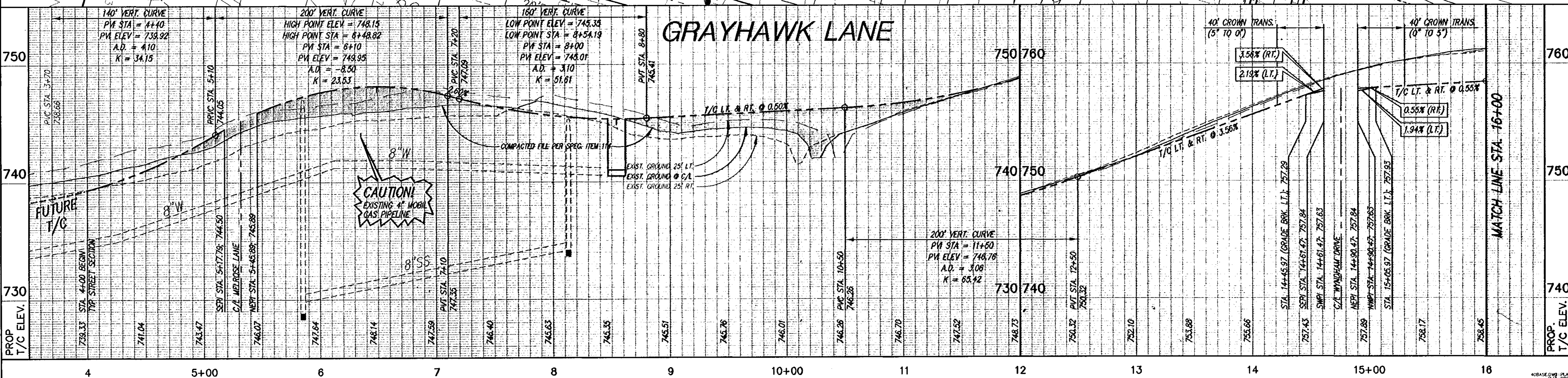
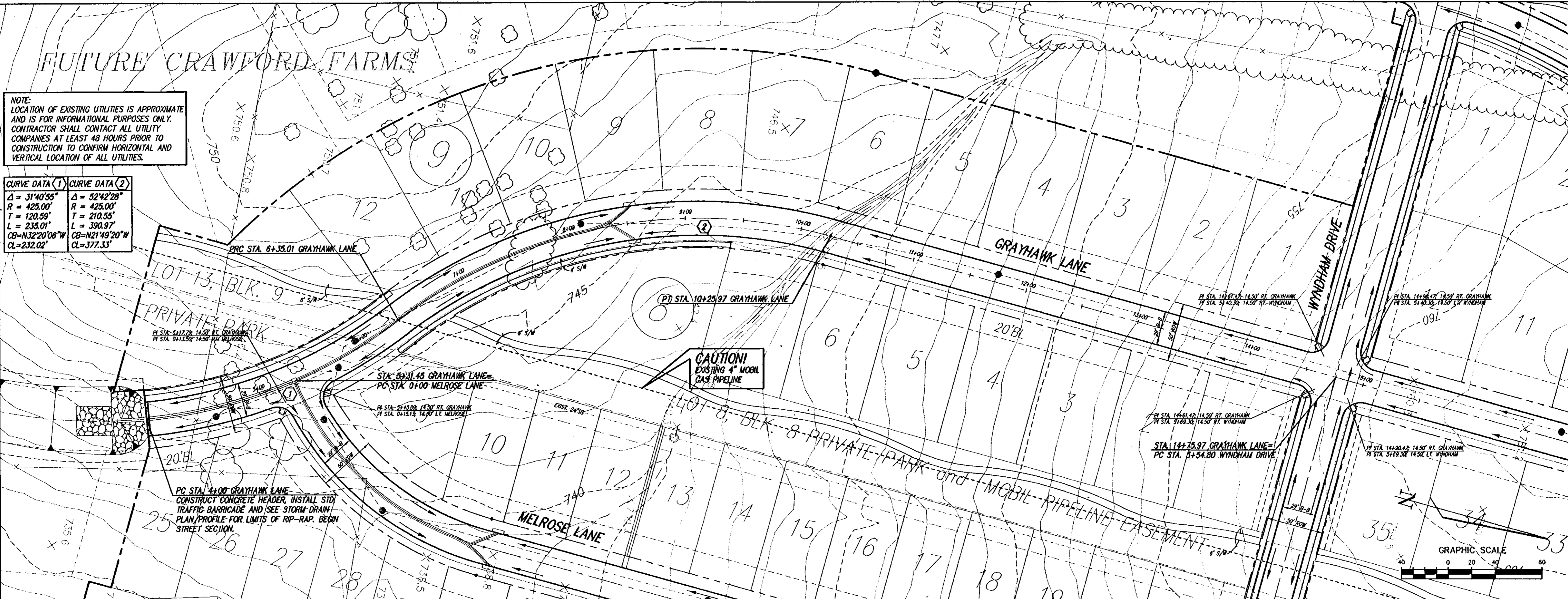
NO.      REVISION      BY      DATE		JPV DESIGNED LCC/ASB DRAWN MJH CHECKED	SCALE HORIZ 1" = 40' VERT N/A PROJECT NO.	DATE JUNE 2000	<b>TEAGUE NALL AND PERKINS</b> INC. CONSULTING ENGINEERS 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765	<b>Mark J. Holliday, P.E.</b> Date: 6-12-00	CITY OF FORT WORTH, TEXAS PHASE I <b>CRAWFORD FARMS</b> WYNDHAM DRIVE	SHEET <b>10</b> OF 30
-------------------------------------	--	-------------------------------------------------------	----------------------------------------------------------	-------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------	--------------------------------------------------------------------------------	--------------------------------



# FUTURE CRAWFORD FARMS

NOTE:  
LOCATION OF EXISTING UTILITIES IS APPROXIMATE  
AND IS FOR INFORMATIONAL PURPOSES ONLY.  
CONTRACTOR SHALL CONTACT ALL UTILITY  
COMPANIES AT LEAST 48 HOURS PRIOR TO  
CONSTRUCTION TO CONFIRM HORIZONTAL AND  
VERTICAL LOCATION OF ALL UTILITIES.

CURVE DATA (1)	CURVE DATA (2)
$\Delta = 31^{\circ}40'35''$	$\Delta = 52^{\circ}42'28''$
$R = 425.00'$	$R = 425.00'$
$T = 120.59'$	$T = 210.55'$
$L = 235.01'$	$L = 390.97'$
$CB = N32^{\circ}20'06''W$	$CB = N21^{\circ}49'20''W$
$CL = 232.02'$	$CL = 377.33'$



NO.	REVISION	BY	DATE

SCALE	DATE
HORIZ 1" = 40'	AUG 2000
VERT N/A	
PROJECT NO.	

**TEAGUE NALL AND PERKINS**  
CONSULTING ENGINEERS  
915 Florence Street  
Fort Worth, Texas 76102  
(817) 336-5773

**CITY OF FORT WORTH, TEXAS**  
PHASE I  
**CRAWFORD FARMS**  
GRAYHAWK LANE  
STA. 4+00 TO STA. 16+00

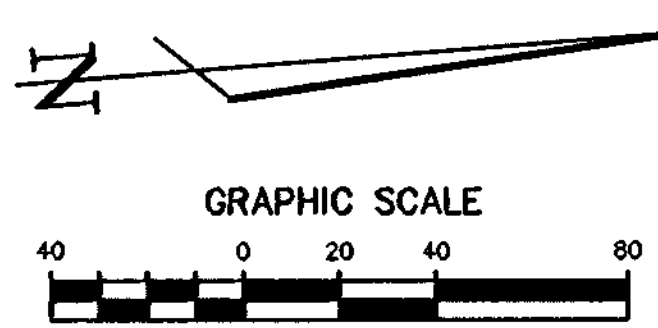
**MARK A. HOLLIDAY**  
LICENSED PROFESSIONAL ENGINEER  
84683  
Date: 8-11-00

CITY OF FORT WORTH, TEXAS	SHEET
CRAWFORD FARMS	<b>11</b>
GRAYHAWK LANE	OF
STA. 4+00 TO STA. 16+00	30

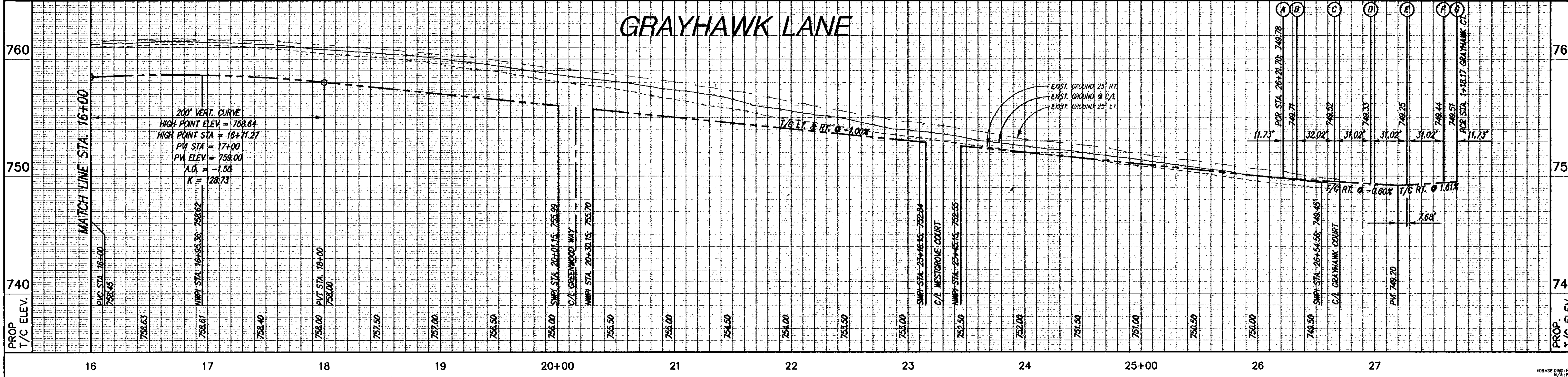
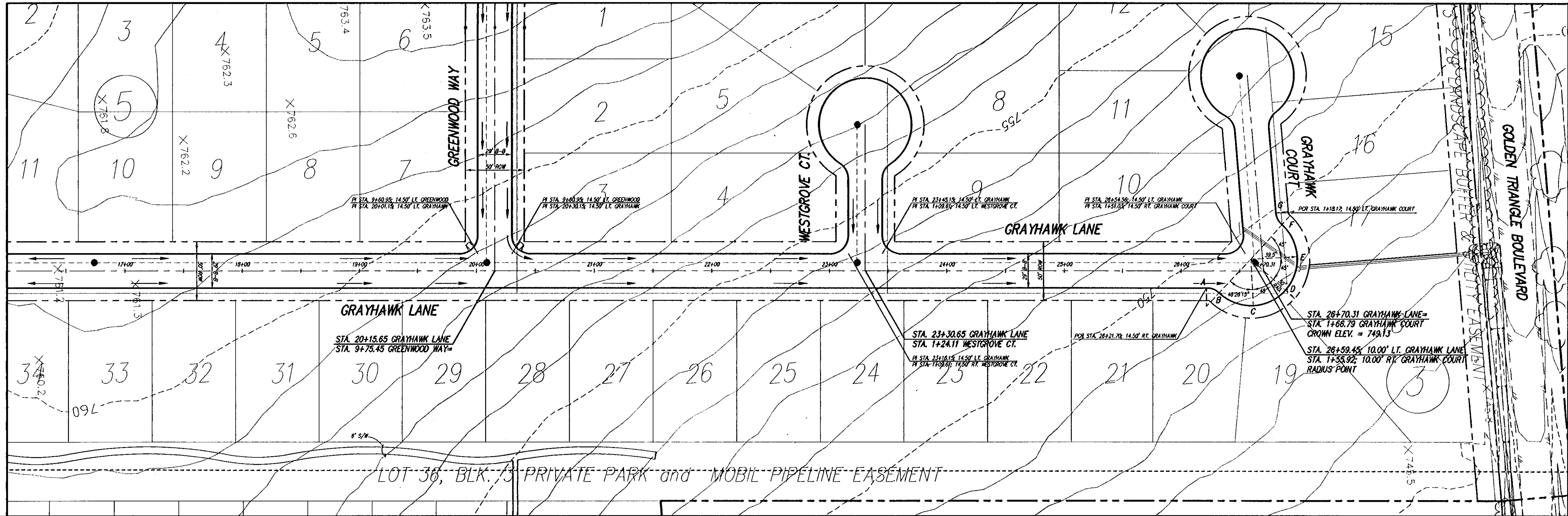
12

12





NOTE:  
 LOCATION OF EXISTING UTILITIES IS APPROXIMATE  
 AND IS FOR INFORMATIONAL PURPOSES ONLY.  
 CONTRACTOR SHALL CONTACT ALL UTILITY  
 COMPANIES AT LEAST 48 HOURS PRIOR TO  
 CONSTRUCTION TO CONFIRM HORIZONTAL AND  
 VERTICAL LOCATION OF ALL UTILITIES.



C:\PROJ\41\LEB00134\LEB00134.dwg Thu Aug 10 14:14:52 2000

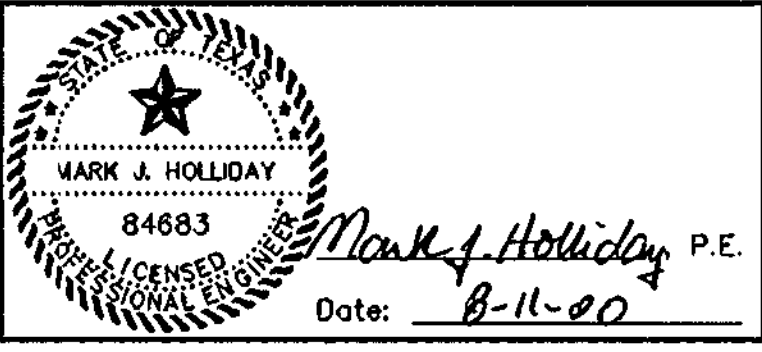
13

NO.	REVISION	BY	DATE

JPV  
 DESIGNED  
 LCC/ASB  
 DRAWN  
 MJH  
 CHECKED

SCALE  
 HORIZ  
 1" = 40'  
 VERT  
 N/A  
 DATE  
 APR 2000  
 PROJECT NO.

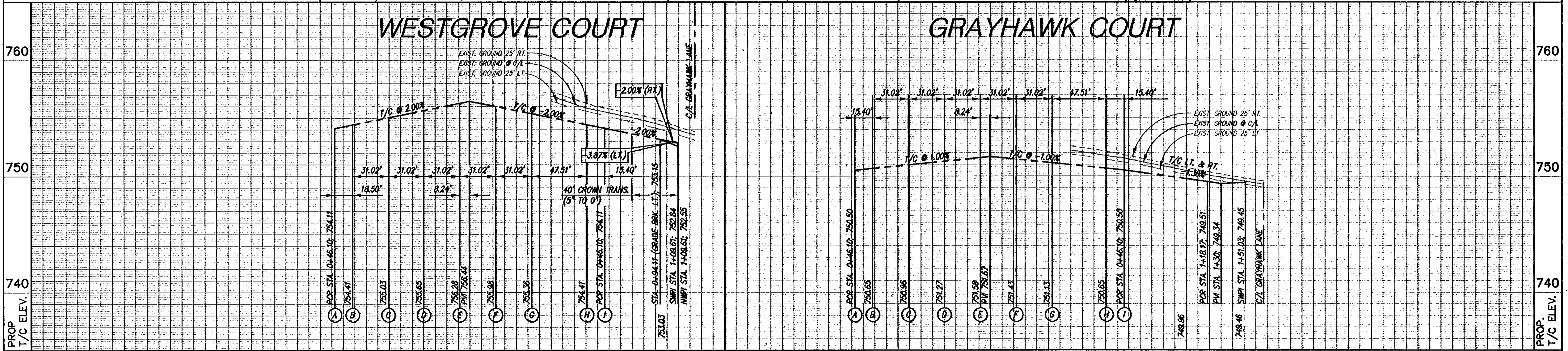
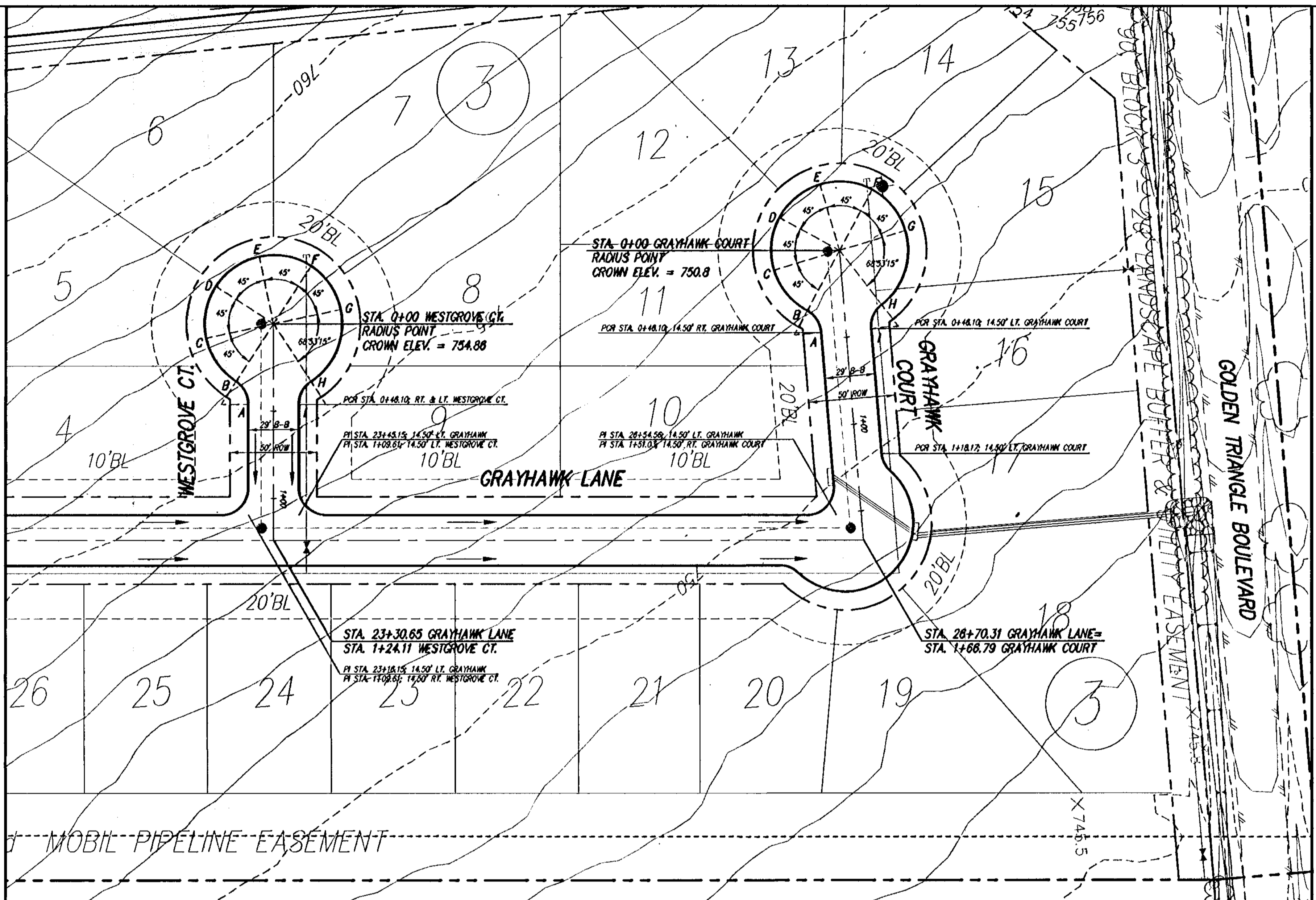
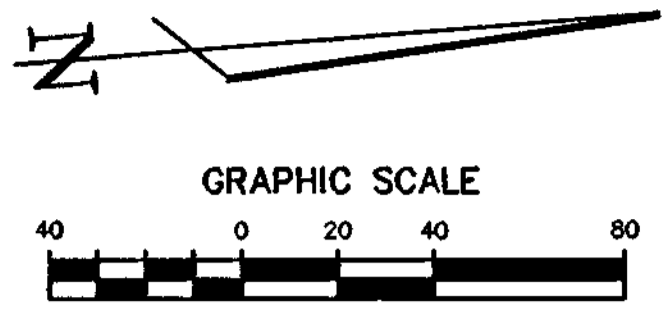
**TEAGUE NALL AND PERKINS**  
 CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 336-5773  
 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1785



CITY OF FORT WORTH, TEXAS  
 PHASE I  
**CRAWFORD FARMS**  
 GRAYHAWK LANE  
 STA. 16+00 TO STA 26+59.45

TWP PROJECT  
 LEB00134  
 SHEET  
**12**  
 OF  
 30





NO.	REVISION	BY	DATE	JPV DESIGNED LCC/ASB DRAWN MJH CHECKED	SCALE HORIZ 1" = 40' VERT N/A	DATE APR 2000	 915 Florence Street Fort Worth, Texas 76102 (817) 336-5773	 Mark J. Holliday, P.E. Date: 8-11-00	CITY OF FORT WORTH, TEXAS PHASE I CRAWFORD FARMS WESTGROVE & GRAYHAWK COURTS	SHEET <b>13</b> OF 30
					PROJECT NO.					

G:\PROJECTS\14\LEB00134\1401\PROJ\DWG3.dwg, Thu Aug 10 14:15:33 2000

7/1

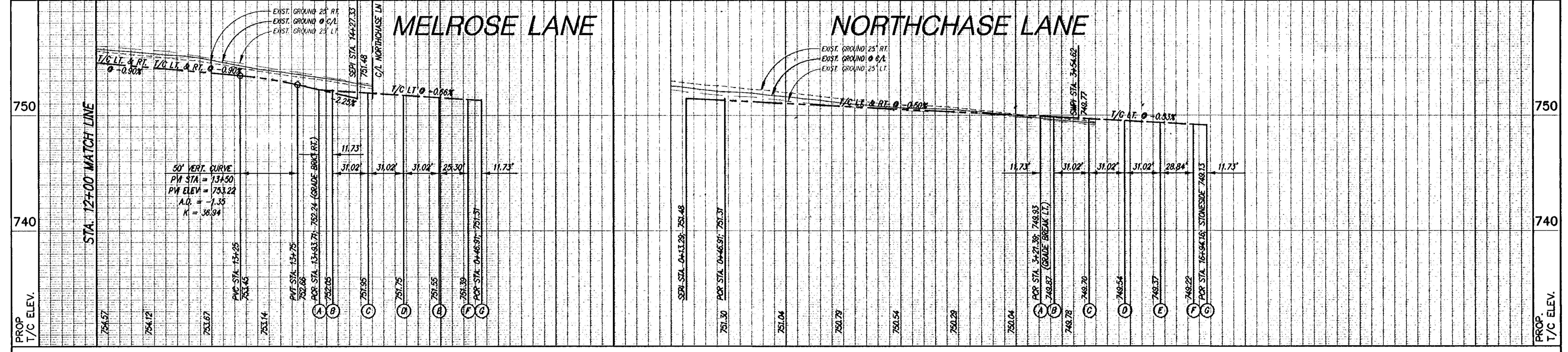
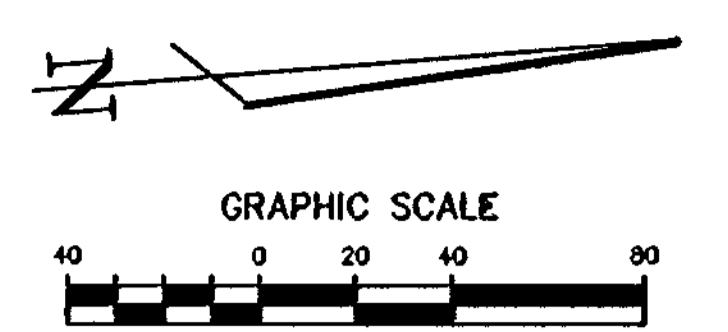
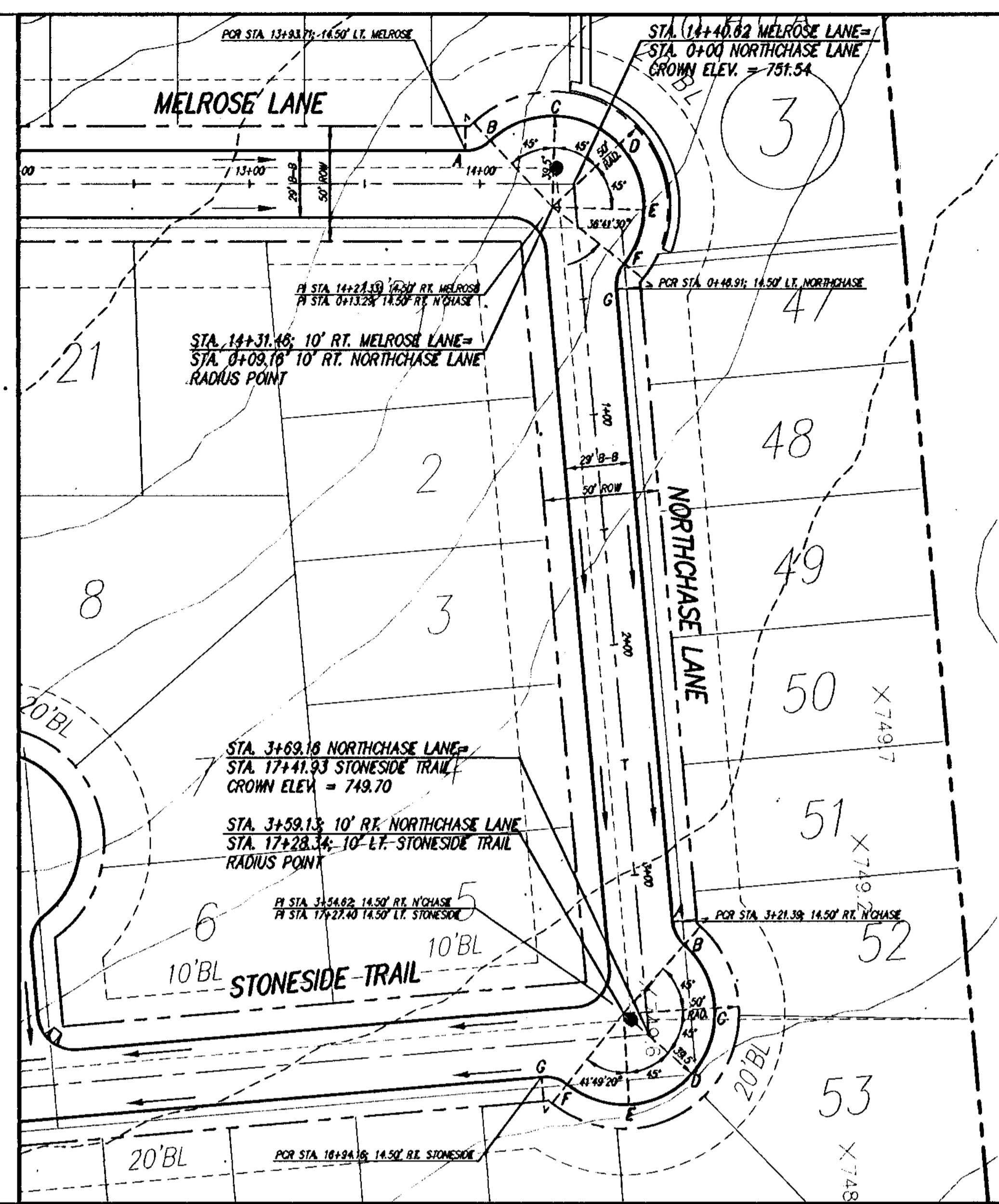
14







D:\PROJ\14\LEB00134\CADD\PLAN\222.dwg Thu Apr 11 15:53:49 2000

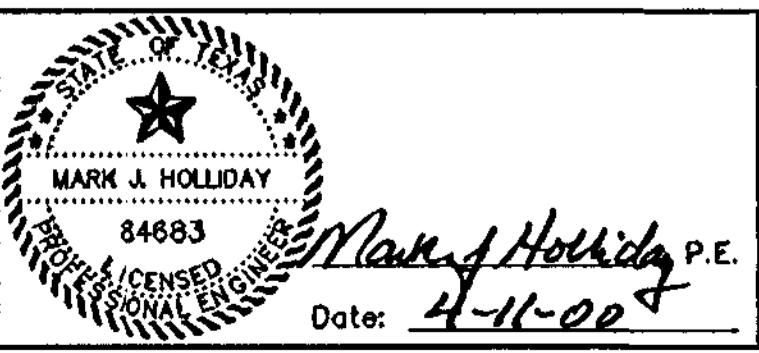


	12	13	14	0+00	1	2	3	

JPV  
DESIGNED  
LCC/ASB  
DRAWN  
MJH  
CHECKED

SCALE  
HORIZ  
1" = 40'  
VERT  
N/A  
DATE  
APR 2000  
PROJECT NO.

**TEAGUE NALL AND PERKINS**  
CONSULTING ENGINEERS  
915 Florence Street  
Fort Worth, Texas 76102  
(817) 338-5773  
2001 West Irving Blvd.  
Irving, Texas 75061  
(972) 254-1765



CITY OF FORT WORTH, TEXAS  
PHASE I  
CRAWFORD FARMS  
MELROSE LANE & NORTHCHASE LANE  
SHEET  
15  
OF  
30

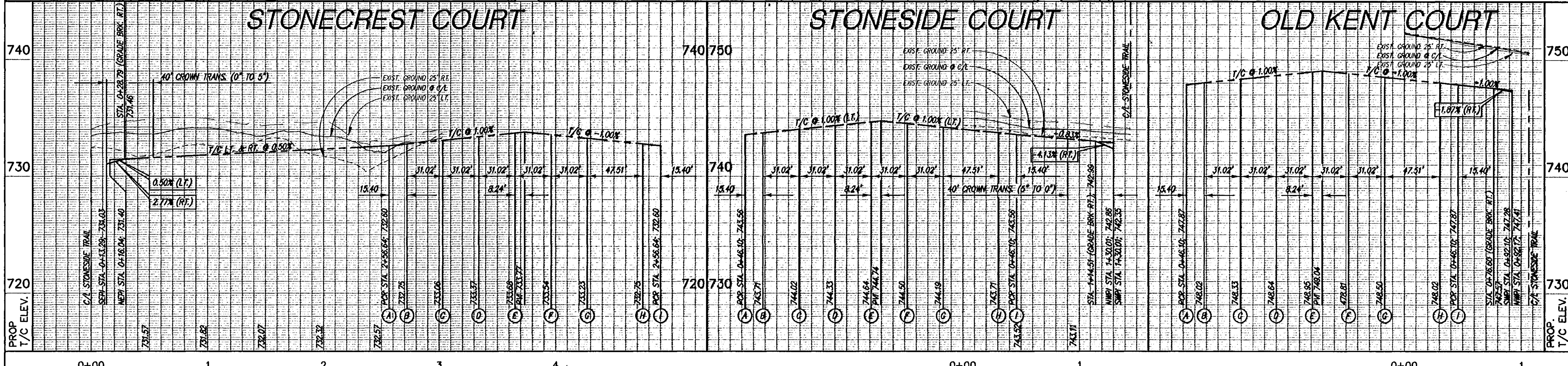
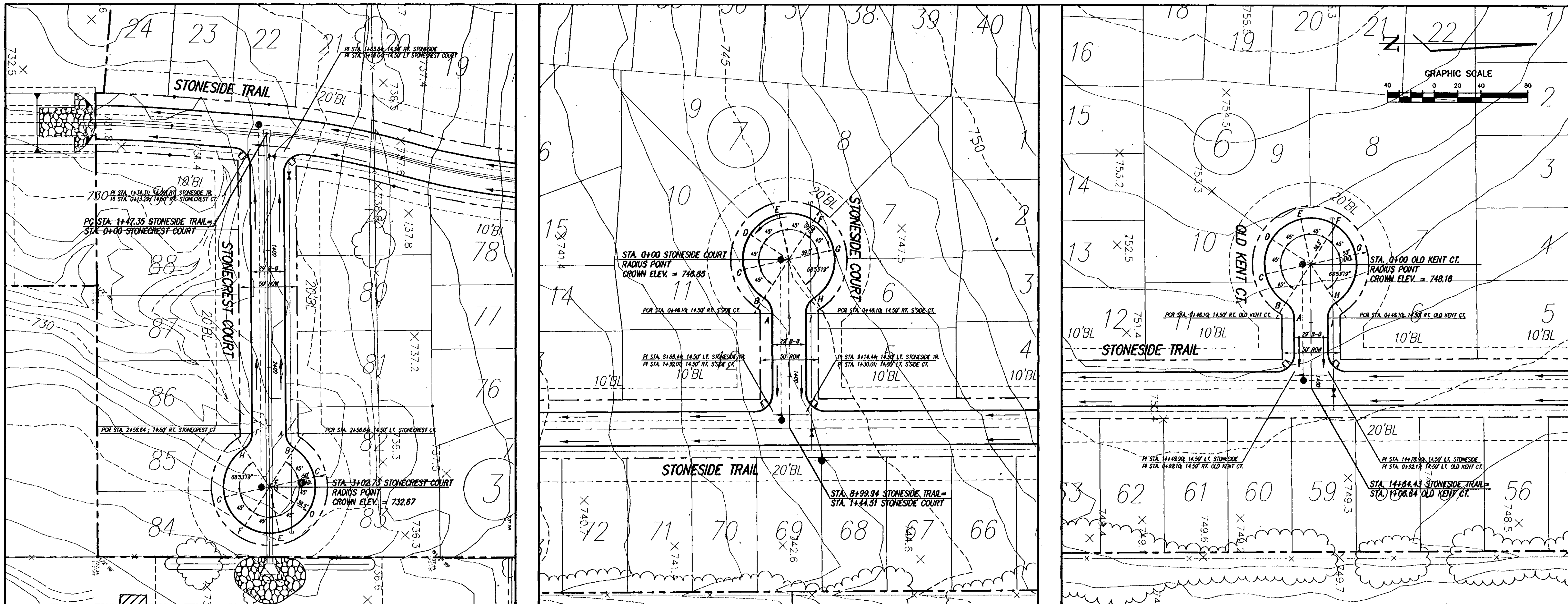




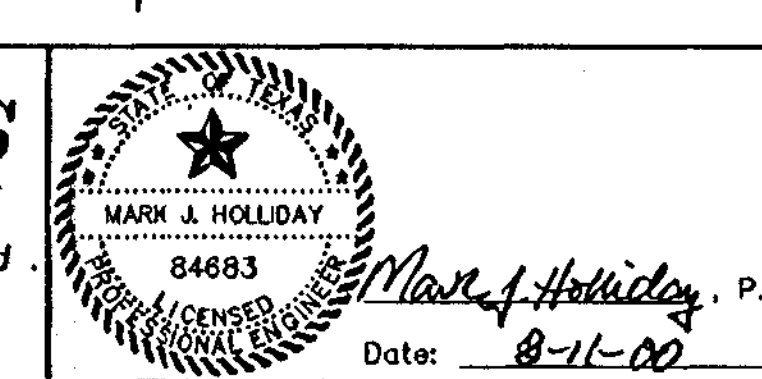








NO. REVISION BY DATE		JPV DESIGNED LCC/ASB DRAWN MJH CHECKED		SCALE HORIZ 1" = 40' VERT N/A		DATE AUG 2000		PROJECT NO.		<b>TEAGUE NALL AND PERKINS</b> INC. CONSULTING ENGINEERS 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765		CITY OF FORT WORTH, TEXAS PHASE I CRAWFORD FARMS STONECREST, STONESIDE AND OLD KENT COURTS		SHEET <b>18</b> OF 30	
----------------------	--	-------------------------------------------------------	--	-------------------------------------	--	------------------	--	-------------	--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	-----------------------------------------------------------------------------------------------------	--	--------------------------------	--

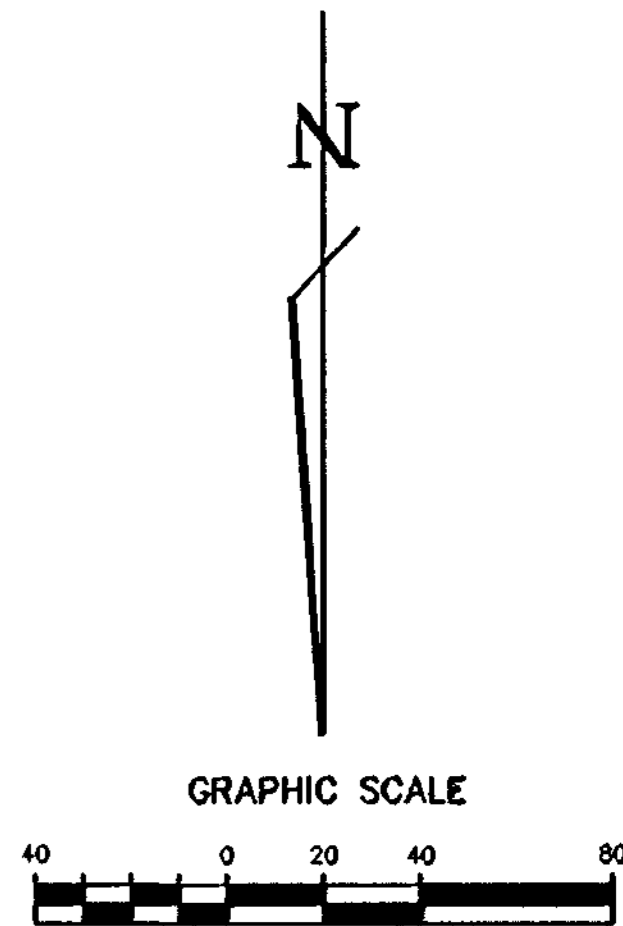
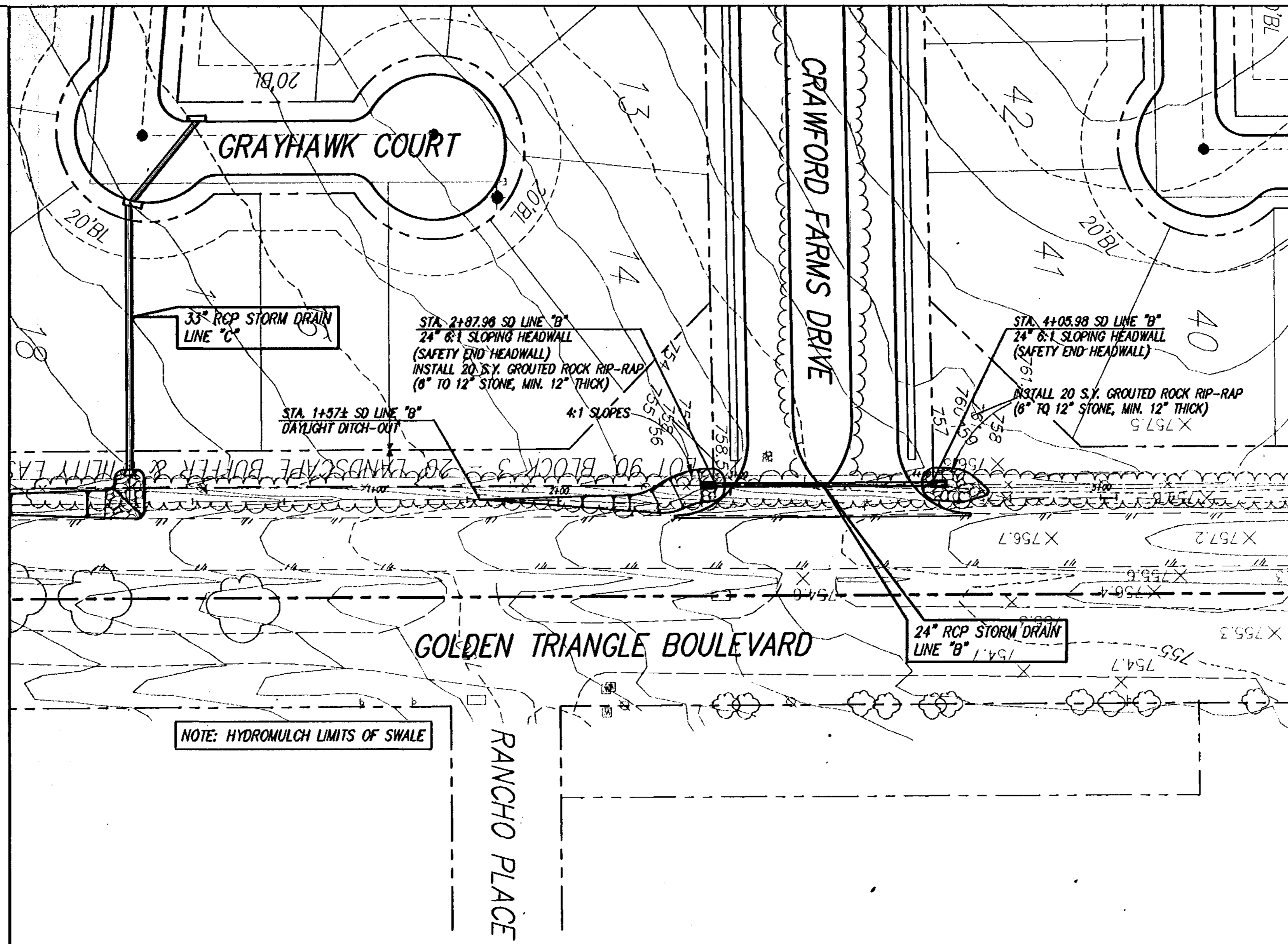


C:\PROJ\14\LEB00134\1401\VP\STONESIDE.dwg Thu Aug 10 14:28:40 2000

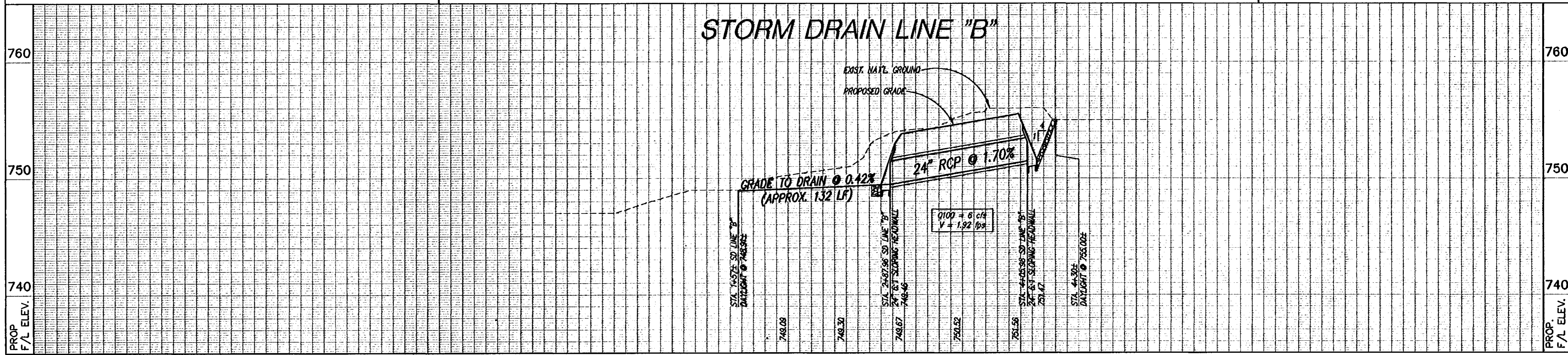








### STORM DRAIN LINE "B"

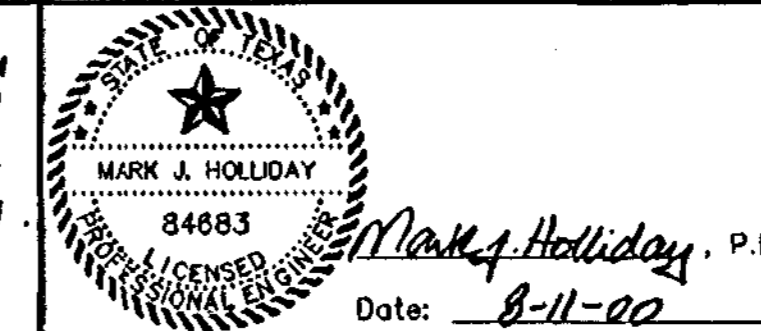


NO.	REVISION	BY	DATE

JPV  
 DESIGNED  
 LCC  
 DRAWN  
 MJH  
 CHECKED

SCALE	DATE
HORIZ 1" = 40'	AUG 2000
VERT N/A	
PROJECT NO.	

**TEAGUE NALL AND PERKINS**  
 CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 336-5773  
 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1785

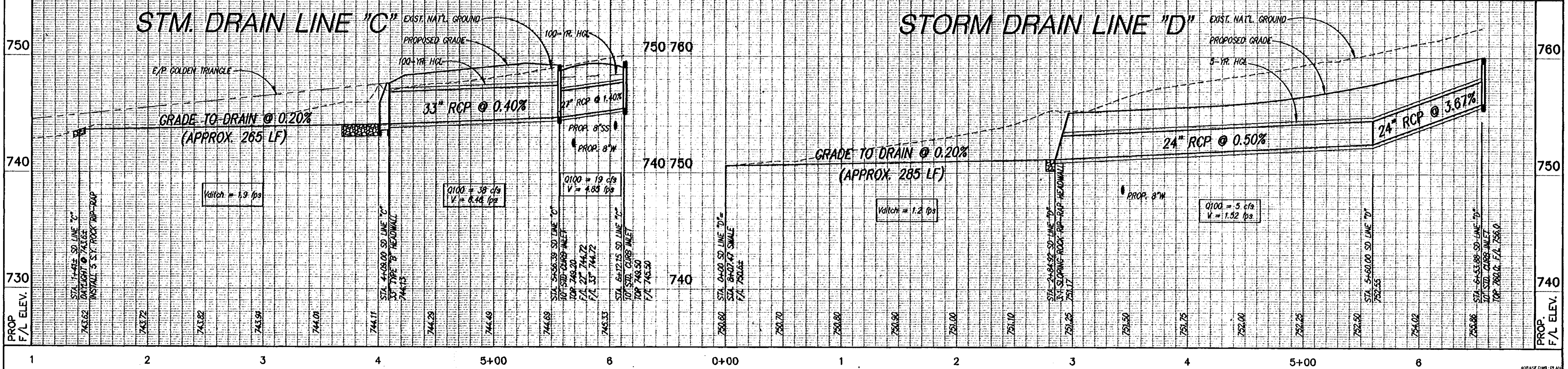
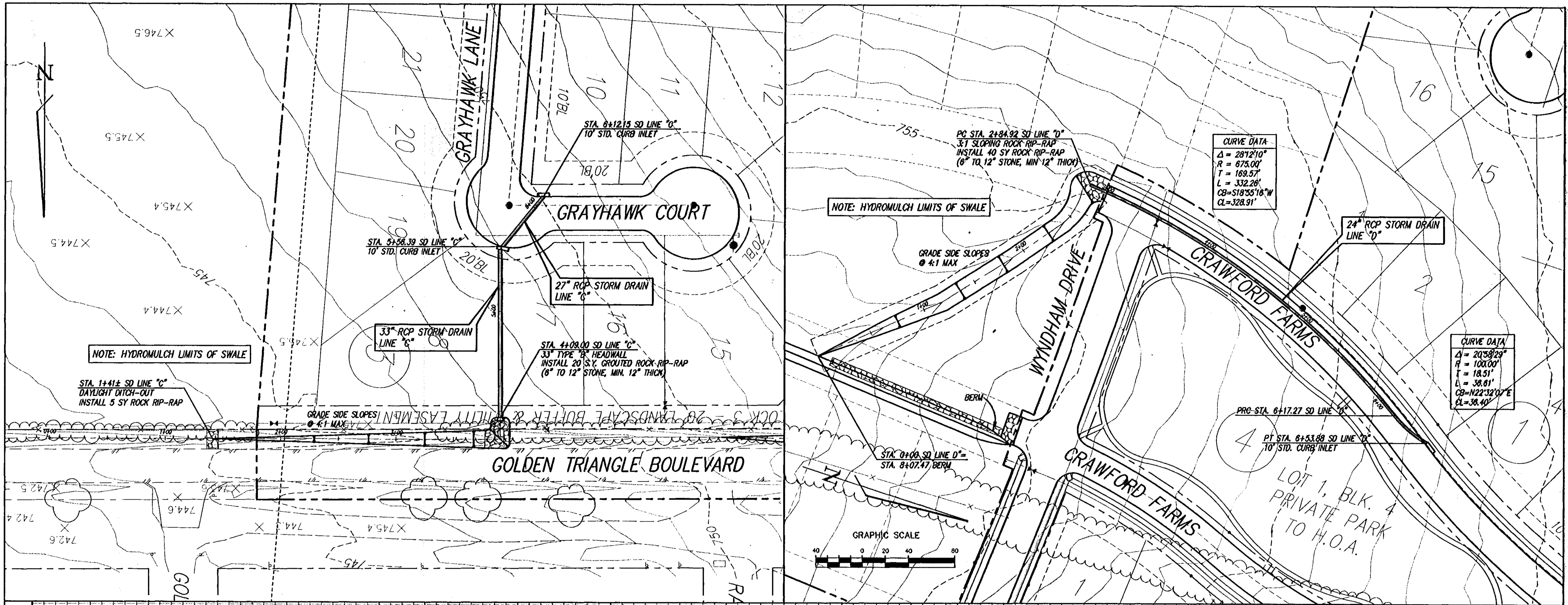


CITY OF FORT WORTH, TEXAS	TNP PROJECT LEB00134
PHASE I CRAWFORD FARMS	SHEET <b>20</b>
STORM DRAIN LINE "B"	OF 30

C:\PROJ\914\LEB00134\CON\SDLINE-B.dwg Thu Aug 10 14:31:55 2000

21





NO.	REVISION	BY	DATE

DESIGNED	JPV
DRAWN	LCC
CHECKED	MJH

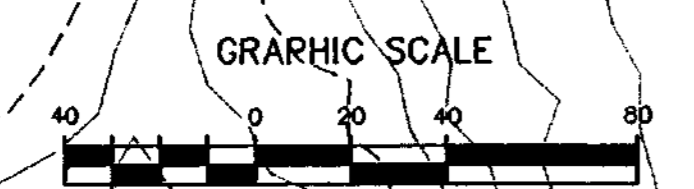
SCALE	DATE
HORIZ 1"=40'	AUG 2000
VERT N/A	
PROJECT NO.	

**TEAGUE NALL AND PERKINS**  
 CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773  
 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765

MARK J. HOLLIDAY  
 84683  
 LICENSED PROFESSIONAL ENGINEER  
 State of Texas  
 Date: 8-11-00

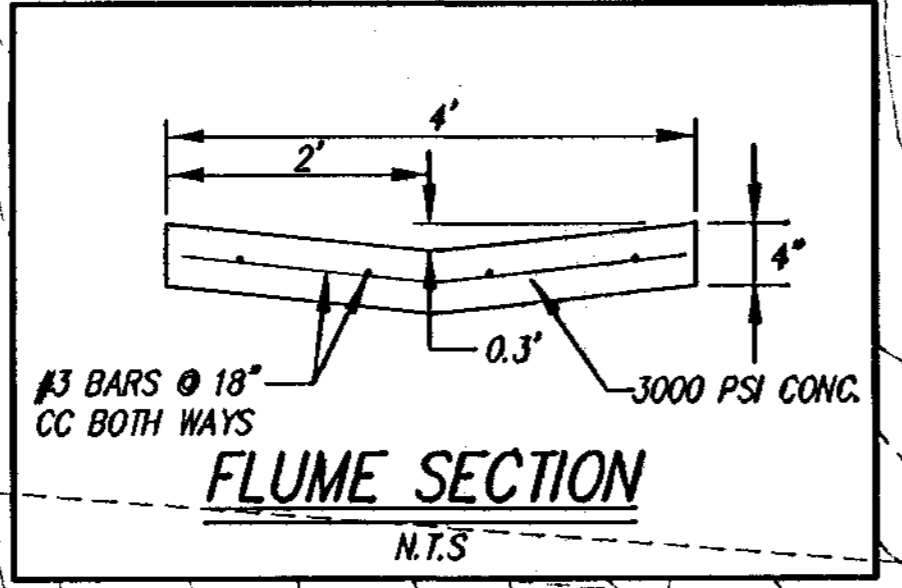
CITY OF FORT WORTH, TEXAS  
 PHASE I  
**CRAWFORD FARMS**  
 STORM DRAIN LINE "C" AND "D"  
 SHEET **21** OF 30



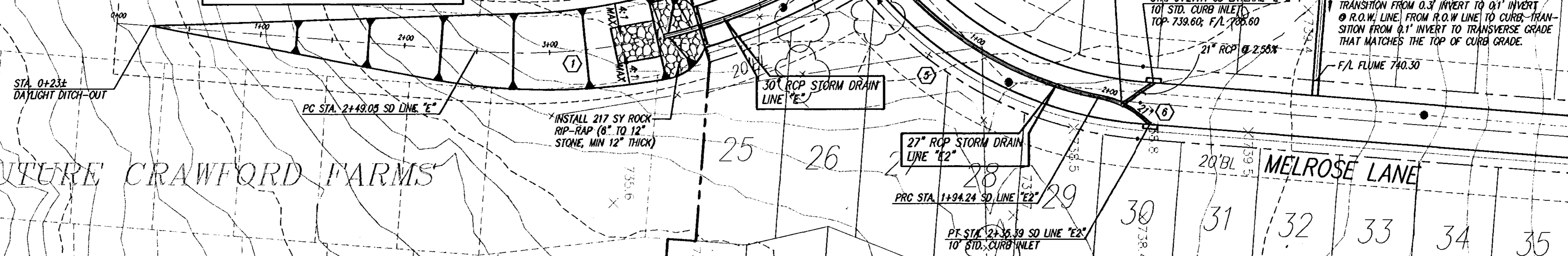


CURVE No. (1)	CURVE No. (2)	CURVE No. (3)	CURVE No. (4)	CURVE No. (5)	CURVE No. (6)
$\Delta = 20^{\circ}20'58''$	$\Delta = 32^{\circ}21'29''$	$\Delta = 24^{\circ}13'38''$	$\Delta = 35^{\circ}00'13''$	$\Delta = 44^{\circ}30'59''$	$\Delta = 33^{\circ}41'05''$
$R = 425.00'$	$R = 425.00'$	$R = 425.00'$	$R = 70.00'$	$R = 250.00'$	$R = 70.00'$
$T = 76.28'$	$T = 123.31'$	$T = 91.22'$	$T = 22.07'$	$T = 102.32'$	$T = 21.19'$
$L = 150.95'$	$L = 240.02'$	$L = 179.71'$	$L = 42.78'$	$L = 194.24'$	$L = 41.15'$
$CB = N05^{\circ}38'36''W$	$CB = N31^{\circ}59'49''W$	$CB = S36^{\circ}03'45''E$	$CB = N41^{\circ}27'02''W$	$CB = N33^{\circ}31'38''E$	$CB = S28^{\circ}08'40''W$
$CL = 150.15'$	$CL = 236.84'$	$CL = 178.37'$	$CL = 42.10'$	$CL = 189.39'$	$CL = 40.58'$

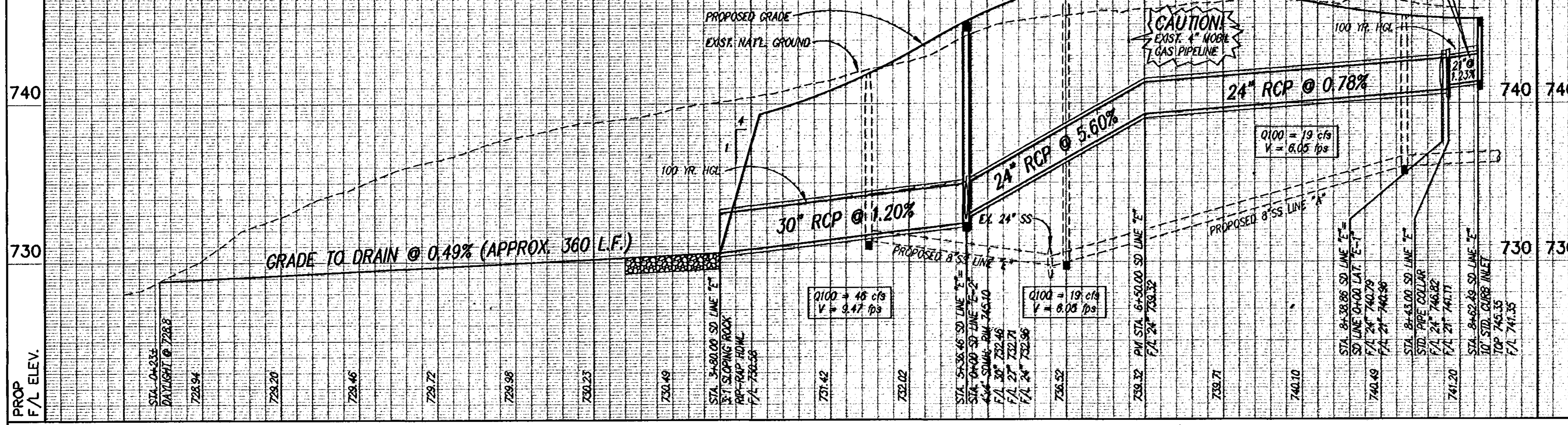
NOTE: LOCATION OF EXISTING UTILITIES IS APPROXIMATE AND IS FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO CONFIRM HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.



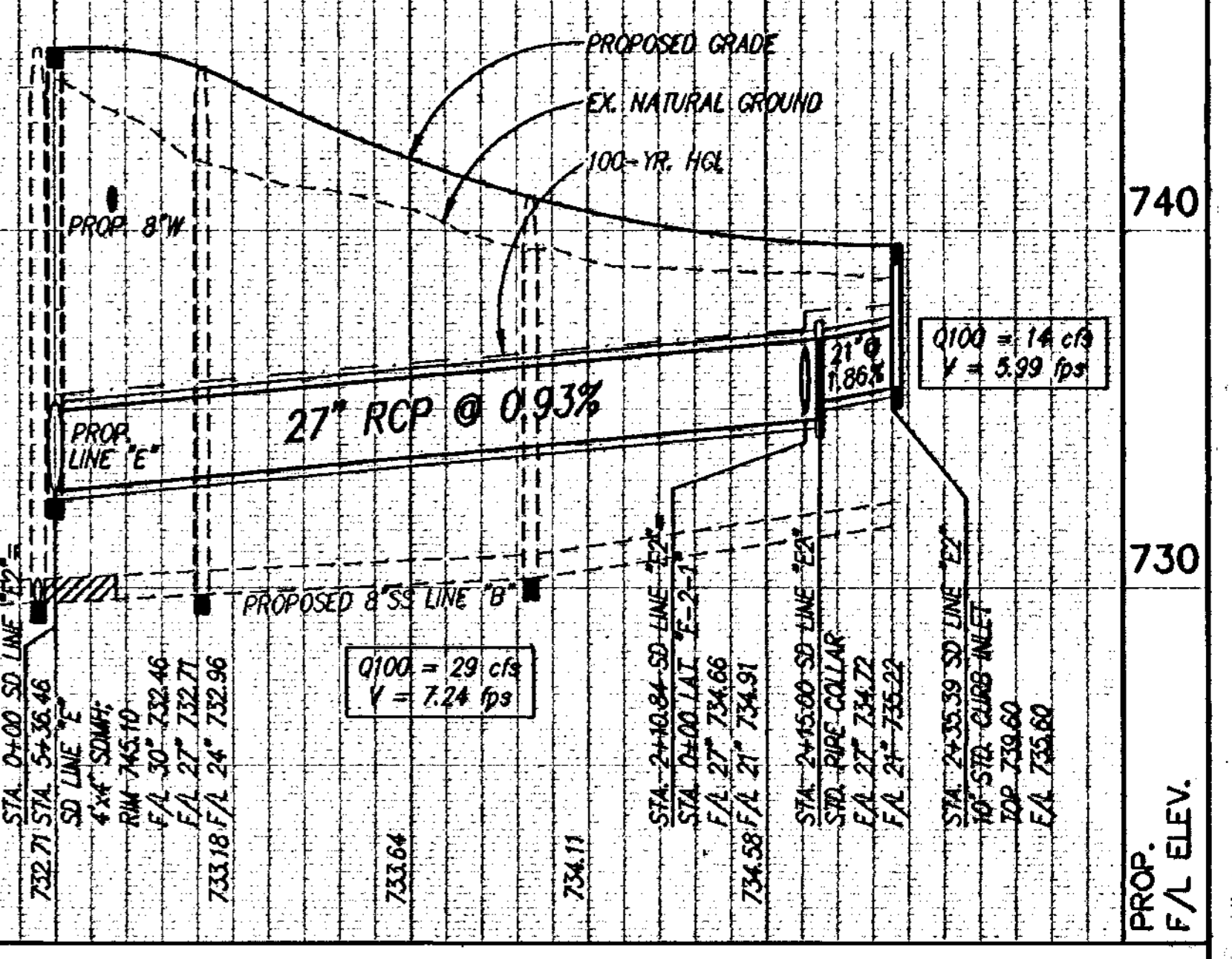
NOTE: HYDROMULCH LIMITS OF SWALE



### STORM DRAIN LINE "E"

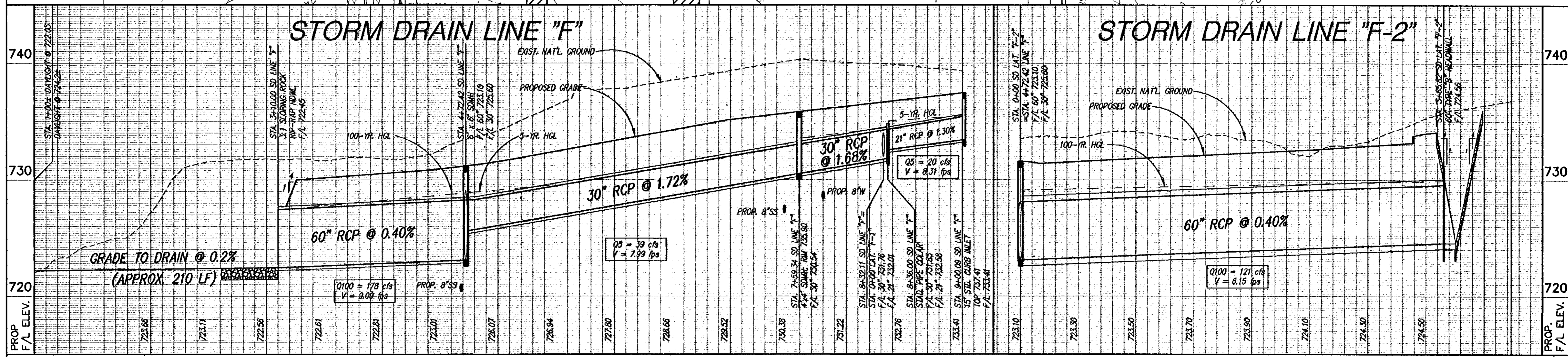
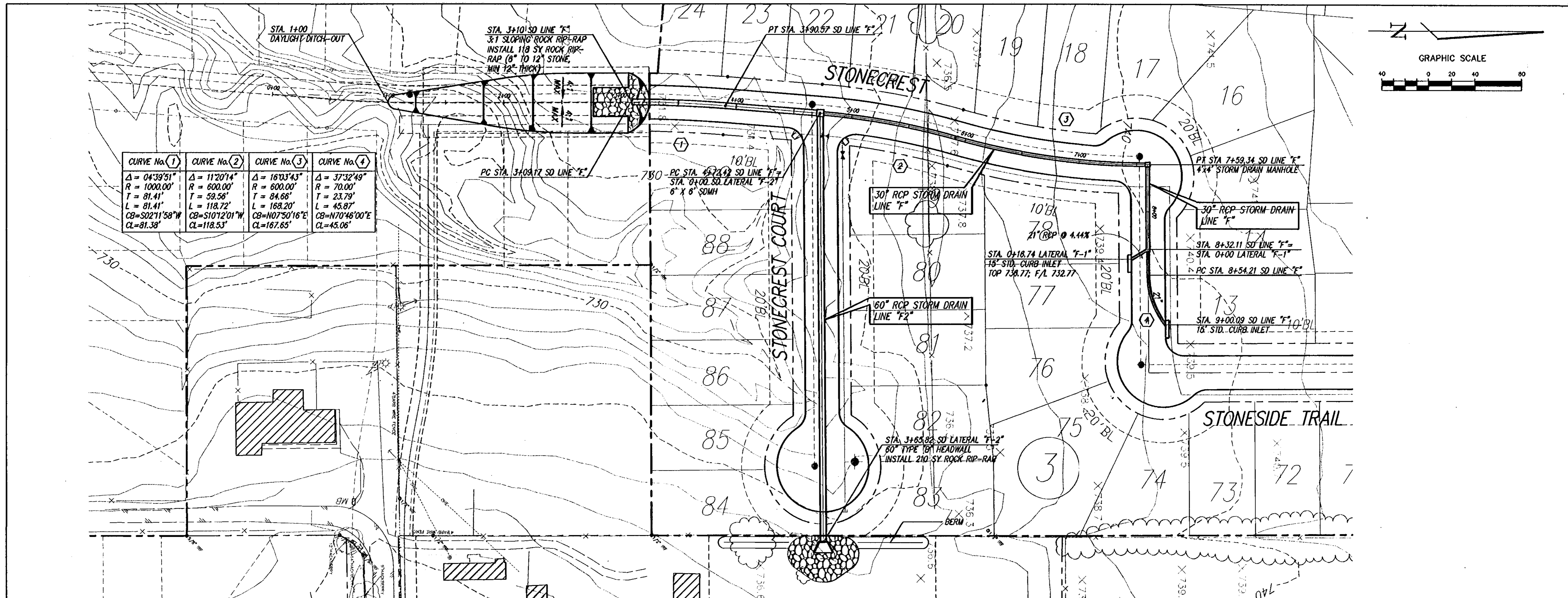


### STORM DRAIN LINE "E-2"



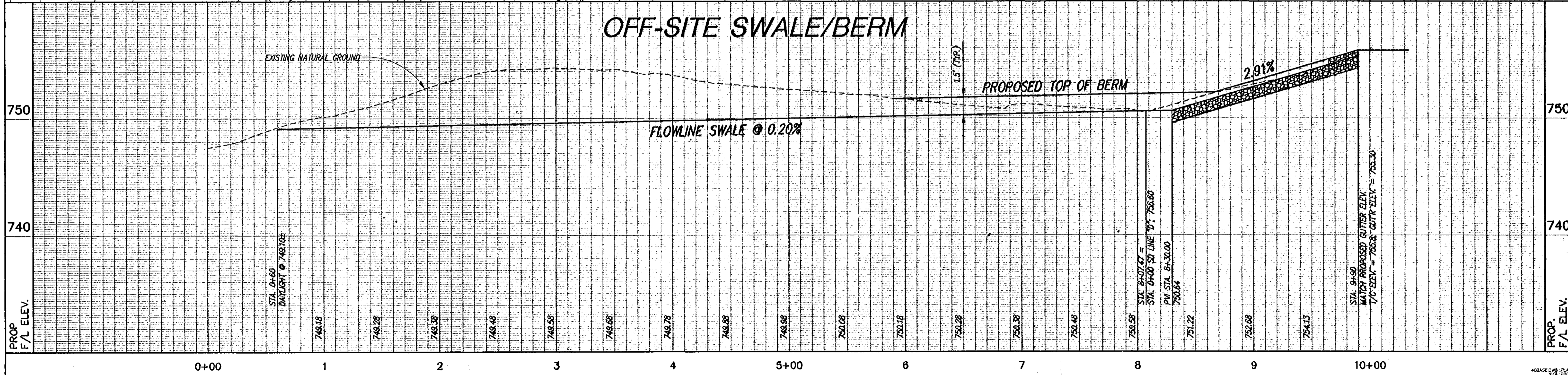
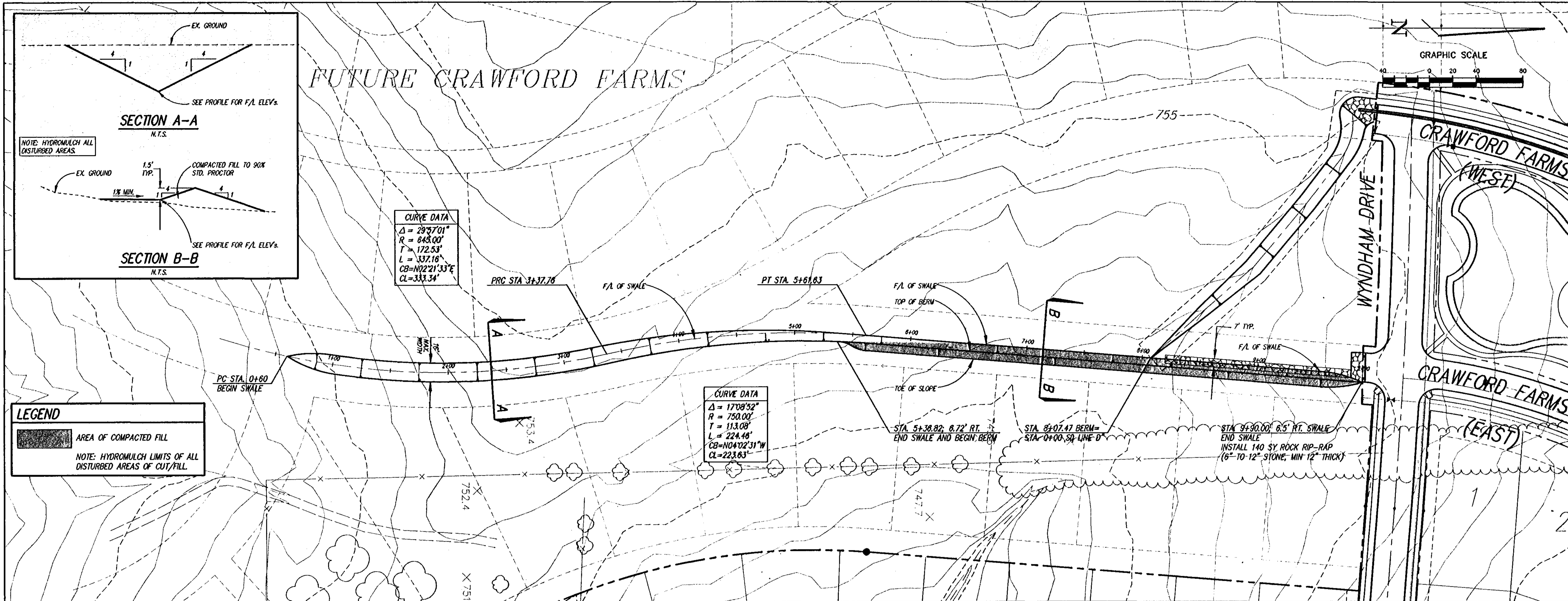
PROP. F/L ELEV. 740 730		0+00 1 2 3 4 5+00 6 7 8		0+00 1 2		PROP. F/L ELEV. 740 730	
STA. 0+00.00 DAYLIGHT @ 728.3 728.94 729.20 729.46 729.72 729.98 730.23 730.49 730.71 730.97 731.23 731.49 731.75 732.01 732.27 732.53 732.79 733.05 733.31 733.57 733.83 734.09 734.35 734.61 734.87 735.13 735.39 735.65 735.91 736.17 736.43 736.69 736.95 737.21 737.47 737.73 737.99 738.25 738.51 738.77 739.03 739.29 739.55 739.81 740.07 740.33 740.59 740.85 741.11 741.37 741.63 741.89 742.15 742.41 742.67 742.93 743.19 743.45 743.71 743.97 744.23 744.49 744.75 745.01 745.27 745.53 745.79 746.05 746.31 746.57 746.83 747.09 747.35 747.61 747.87 748.13 748.39 748.65 748.91 749.17 749.43 749.69 749.95 750.21 750.47 750.73 750.99 751.25 751.51 751.77 752.03 752.29 752.55 752.81 753.07 753.33 753.59 753.85 754.11 754.37 754.63 754.89 755.15 755.41 755.67 755.93 756.19 756.45 756.71 756.97 757.23 757.49 757.75 758.01 758.27 758.53 758.79 759.05 759.31 759.57 759.83 760.09 760.35 760.61 760.87 761.13 761.39 761.65 761.91 762.17 762.43 762.69 762.95 763.21 763.47 763.73 763.99 764.25 764.51 764.77 765.03 765.29 765.55 765.81 766.07 766.33 766.59 766.85 767.11 767.37 767.63 767.89 768.15 768.41 768.67 768.93 769.19 769.45 769.71 769.97 770.23 770.49 770.75 771.01 771.27 771.53 771.79 772.05 772.31 772.57 772.83 773.09 773.35 773.61 773.87 774.13 774.39 774.65 774.91 775.17 775.43 775.69 775.95 776.21 776.47 776.73 776.99 777.25 777.51 777.77 778.03 778.29 778.55 778.81 779.07 779.33 779.59 779.85 780.11 780.37 780.63 780.89 781.15 781.41 781.67 781.93 782.19 782.45 782.71 782.97 783.23 783.49 783.75 784.01 784.27 784.53 784.79 785.05 785.31 785.57 785.83 786.09 786.35 786.61 786.87 787.13 787.39 787.65 787.91 788.17 788.43 788.69 788.95 789.21 789.47 789.73 789.99 790.25 790.51 790.77 791.03 791.29 791.55 791.81 792.07 792.33 792.59 792.85 793.11 793.37 793.63 793.89 794.15 794.41 794.67 794.93 795.19 795.45 795.71 795.97 796.23 796.49 796.75 797.01 797.27 797.53 797.79 798.05 798.31 798.57 798.83 799.09 799.35 799.61 799.87 800.13 800.39 800.65 800.91 801.17 801.43 801.69 801.95 802.21 802.47 802.73 802.99 803.25 803.51 803.77 804.03 804.29 804.55 804.81 805.07 805.33 805.59 805.85 806.11 806.37 806.63 806.89 807.15 807.41 807.67 807.93 808.19 808.45 808.71 808.97 809.23 809.49 809.75 810.01 810.27 810.53 810.79 811.05 811.31 811.57 811.83 812.09 812.35 812.61 812.87 813.13 813.39 813.65 813.91 814.17 814.43 814.69 814.95 815.21 815.47 815.73 815.99 816.25 816.51 816.77 817.03 817.29 817.55 817.81 818.07 818.33 818.59 818.85 819.11 819.37 819.63 819.89 820.15 820.41 820.67 820.93 821.19 821.45 821.71 821.97 822.23 822.49 822.75 823.01 823.27 823.53 823.79 824.05 824.31 824.57 824.83 825.09 825.35 825.61 825.87 826.13 826.39 826.65 826.91 827.17 827.43 827.69 827.95 828.21 828.47 828.73 828.99 829.25 829.51 829.77 830.03 830.29 830.55 830.81 831.07 831.33 831.59 831.85 832.11 832.37 832.63 832.89 833.15 833.41 833.67 833.93 834.19 834.45 834.71 834.97 835.23 835.49 835.75 836.01 836.27 836.53 836.79 837.05 837.31 837.57 837.83 838.09 838.35 838.61 838.87 839.13 839.39 839.65 839.91 840.17 840.43 840.69 840.95 841.21 841.47 841.73 841.99 842.25 842.51 842.77 843.03 843.29 843.55 843.81 844.07 844.33 844.59 844.85 845.11 845.37 845.63 845.89 846.15 846.41 846.67 846.93 847.19 847.45 847.71 847.97 848.23 848.49 848.75 849.01 849.27 849.53 849.79 850.05 850.31 850.57 850.83 851.09 851.35 851.61 851.87 852.13 852.39 852.65 852.91 853.17 853.43 853.69 853.95 854.21 854.47 854.73 854.99 855.25 855.51 855.77 856.03 856.29 856.55 856.81 857.07 857.33 857.59 857.85 858.11 858.37 858.63 858.89 859.15 859.41 859.67 859.93 860.19 860.45 860.71 860.97 861.23 861.49 861.75 862.01 862.27 862.53 862.79 863.05 863.31 863.57 863.83 864.09 864.35 864.61 864.87 865.13 865.39 865.65 865.91 866.17 866.43 866.69 866.95 867.21 867.47 867.73 867.99 868.25 868.51 868.77 869.03 869.29 869.55 869.81 870.07 870.33 870.59 870.85 871.11 871.37 871.63 871.89 872.15 872.41 872.67 872.93 873.19 873.45 873.71 873.97 874.23 874.49 874.75 875.01 875.27 875.53 875.79 876.05 876.31 876.57 876.83 877.09 877.35 877.61 877.87 878.13 878.39 878.65 878.91 879.17 879.43 879.69 879.95 880.21 880.47 880.73 880.99 881.25 881.51 881.77 882.03 882.29 882.55 882.81 883.07 883.33 883.59 883.85 884.11 884.37 884.63 884.89 885.15 885.41 885.67 885.93 886.19 886.45 886.71 886.97 887.23 887.49 887.75 888.01 888.27 888.53 888.79 889.05 889.31 889.57 889.83 890.09 890.35 890.61 890.87 891.13 891.39 891.65 891.91 892.17 892.43 892.69 892.95 893.21 893.47 893.73 893.99 894.25 894.51 894.77 895.03 895.29 895.55 895.81 896.07 896.33 896.59 896.85 897.11 897.37 897.63 897.89 898.15 898.41 898.67 898.93 899.19 899.45 899.71 899.97 900.23 900.49 900.75 901.01 901.27 901.53 901.79 902.05 902.31 902.57 902.83 903.09 903.35 903.61 903.87 904.13 904.39 904.65 904.91 905.17 905.43 905.69 905.95 906.21 906.47 906.73 906.99 907.25 907.51 907.77 908.03 908.29 908.55 908.81 909.07 909.33 909.59 909.85 910.11 910.37 910.63 910.89 911.15 911.41 911.67 911.93 912.19 912.45 912.71 912.97 913.23 913.49 913.75 914.01 914.27 914.53 914.79 915.05 915.31 915.57 915.83 916.09 916.35 916.61 916.87 917.13 917.39 917.65 917.91 918.17 918.43 918.69 918.95 919.21 919.47 919.73 919.99 920.25 920.51 920.77 921.03 921.29 921.55 921.81 922.07 922.33 922.59 922.85 923.11 923.37 923.63 923.89 924.15 924.41 924.67 924.93 925.19 925.45 925.71 925.97 926.23 926.49 926.75 927.01 927.27 927.53 927.79 928.05 928.31 928.57 928.83 929.09 929.35 929.61 929.87 930.13 930.39 930.65 930.91 931.17 931.43 931.69 931.95 932.21 932.47 932.73 932.99 933.25 933.51 933.77 934.03 934.29 934.55 934.81 935.07 935.33 935.59 935.85 936.11 936.37 936.63 936.89 937.15 937.41 937.67 937.93 938.19 938.45 938.71 938.97 939.23 939.49 939.75 939.99 940.25 940.51 940.77 941.03 941.29 941.55 941.81 942.07 942.33 942.59 942.85 943.11 943.37 943.63 943.89 944.15 944.41 944.67 944.93 945.19 945.45 945.71 945.97 946.23 946.49 946.75 947.01 947.27 947.53 947.79 948.05 948.31 948.57 948.83 949.09 949.35 949.61 949.87 950.13 950.39 950.65 950.91 951.17 951.43 951.69 951.95 952.21 952.47 952.73 952.99 953.25 953.51 953.77 954.03 954.29 954.55 954.81 955.07 955.33 955.59 955.85 956.11 956.37 956.63 956.89 957.15 957.41 957.67 957.93 958.19 958.45 958.71 958.97 959.23 959.49 959.75 959.99 960.25 960.51 960.77 961.03 961.29 961.55 961.81 962.07 962.33 962.59 962.85 963.11 963.37 963.63 963.89 964.15 964.41 964.67 964.93 965.19 965.45 965.71 965.97 966.23 966.49 966.75 967.01 967.27 967.53 967.79 968.05 968.31 968.57 968.83 969.09 969.35 969.61 969.87 970.13 970.39 970.65 970.91 971.17 971.43 971.69 971.95 972.21 972.47 972.73 972.99 973.25 973.51 973.77 974.03 974.29 974.55 974.81 975.07 975.33 975.59 975.85 976.11 976.37 976.63 976.89 977.15 977.41 977.67 977.93 978.19 978.45 978.71 978.97 979.23 979.49 979.75 979.99 980.25 980.51 980.77 981.03 981.29 981.55 981.81 982.07 982.33 982.59 982.85 983.11 983.37 983.63 983.89 984.15 984.41 984.67 984.93 985.19 985.45 985.71 985.97 986.23 986.49 986.75 987.01 987.27 987.53 987.79 988.05 988.31 988.57 988.83 989.09 989.35 989.61 989.87 990.13 990.39 990.65 990.91 991.17 991.43 991.69 991.95 992.21 992.47 992.73 992.99 993.25 993.51 993.77 994.03 994.29 994.55 994.81 995.07 995.33 995.59 995.85 996.11 996.37 996.63 996.89 997.15 997.41 997.67 997.93 998.19 998.45 998.71 998.97 999.23 999.49 999.75 999.99 1000.25 1000.51 1000.77 1001.03 1001.29 1001.55 1001.81 1002.07 1002.33 1002.59 1002.85 1003.11 1003.37 1003.63 1003.89 1004.15 1004.41 1004.67 1004.93 1005.19 1005.45 1005.71 1005.97 1006.23 1006.49 1006.75 1007.01 1007.27 1007.53 1007.79 1008.05 1008.31 1008.57 1008.83 1009.09 1009.35 1009.61 1009.87 1010.13 1010.39 1010.65 1010.91 1011.17 1011.43 1011.69 1011.95 1012.21 1012.47 1012.73 1012.99 1013.25 1013.51 1013.77 1014.03 1014.29 1014.55 1014.81 1015.07 1015.33 1015.59 1015.85 1016.11 1016.37 1016.63 1016.89 1017.15 1017.41 1017.67 1017.93 1018.19 1018.45 1018.71 1018.97 1019.23 1019.49 1019.75 1019.99 1020.25 1020.51 1020.77 1021.03 1021.29 1021.55 1021.81 1022.07 1022.33 1022.59 1022.85 1023.11 1023.37 1023.63 1023.89 1024.15 1024.41 1024.67 1024.93 1025.19 1025.45 1025.71 1025.97 1026.23 1026.49 1026.75 1027.01 1027.27 1027.53 1027.79 1028.05 1028.31 1028.57 1028.83 1029.09 1029.35 1029.61 1029.87 1030.13 1030.39 1030.65 1030.91 1031.17 1031.43 1031.69 1031.95 1032.21 1032.47 1032.73 1032.99 1033.25 1033.51 1033.77 1034.03 1034.29 1034.55 1034.81 1035.07 1035.33 1035.59 1035.85 1036.11 1036.37 1036.63 1036.89 1037.15 1037.41 1037.67 1037.93 1038.19 1038.45 1038.71 1038.97 1039.23 1039.49 1039.75 1039.99 1040.25 1040.51 1040.77 1041.03 1041.29 1041.55 1041.81 1042.07 1042.33 1042.59 1042.85 1043.11 1043.37 1043.63 1043.89 1044.15 1044.41 1044.67 1044.93 1045.19 1045.45 1045.71 1045.97 1046.23 1046.49 1046.75 1047.01 1047.27 1047.53 1047.79 1048.05 1048.31 1048.57 1048.83 1049.09 1049.35 1049.61 1049.87 1050.13 1050.39 1050.65 1050.91 1051.17 1051.43 1051.69 1051.95 1052.21 1052.47 1052.73 1052.99 1053.25 1053.51 1053.77 1054.03 1054.29 1054.55 1054.81 1055.07 1055.33 1055.59 1055.85 1056.11 1056.37 1056.63 1056.89 1057.15 1057.41 1057.67 1057.93 1058.19 1058.45 1058.71 1058.97 1059.23 1059.49 1059.75 1059.99 1060.25 1060.51 1060.77 1061.03 1061.29 1061.55 1061.81 1062.07 1062.33 1062.59 1062.85 1063.11 1063.37 1063.63 1063.89 1064.15 1064.41 1064.67 1064.93 1065.19 1065.45 1065.71 1065.97 1066.23 1066.49 1066.75 1067.01 1067.27 1067.53 1067.79 1068.05 1068							





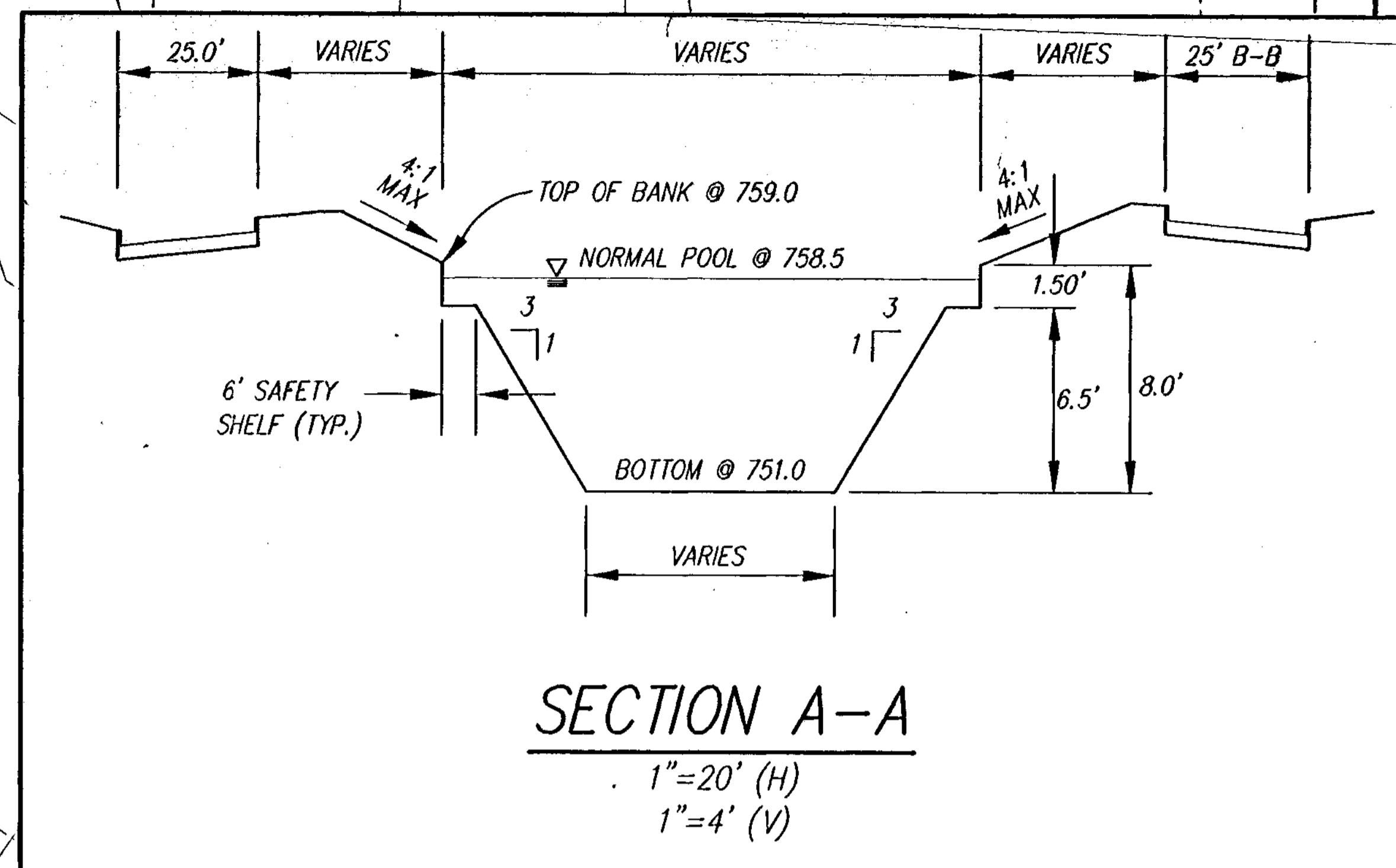
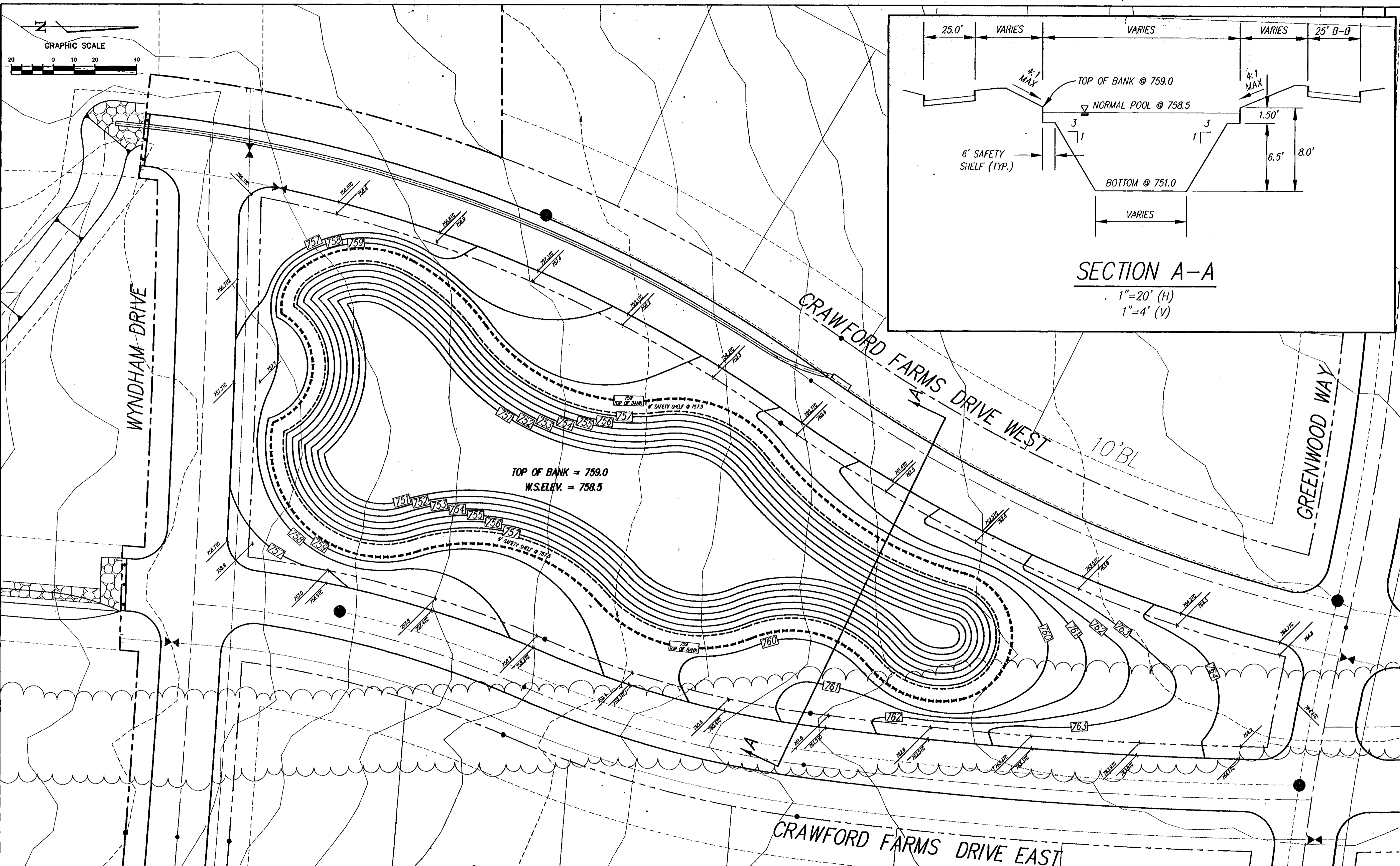
NO. REVISION BY DATE _____ _____ _____	JPV DESIGNED LCC/ASB DRAWN MJH CHECKED	SCALE 1"=40' VERT N/A	DATE AUG 2000	<b>TEAGUE NALL AND PERKINS</b> CONSULTING ENGINEERS 915 Florence Street Fort Worth, Texas 76102 (817) 336-5773	2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1785		CITY OF FORT WORTH, TEXAS PHASE I CRAWFORD FARMS STORM DRAIN LINE "F"	TWP PROJECT LEB00134 SHEET <b>23</b> OF 30
		PROJECT NO.	Date: 8-11-02					





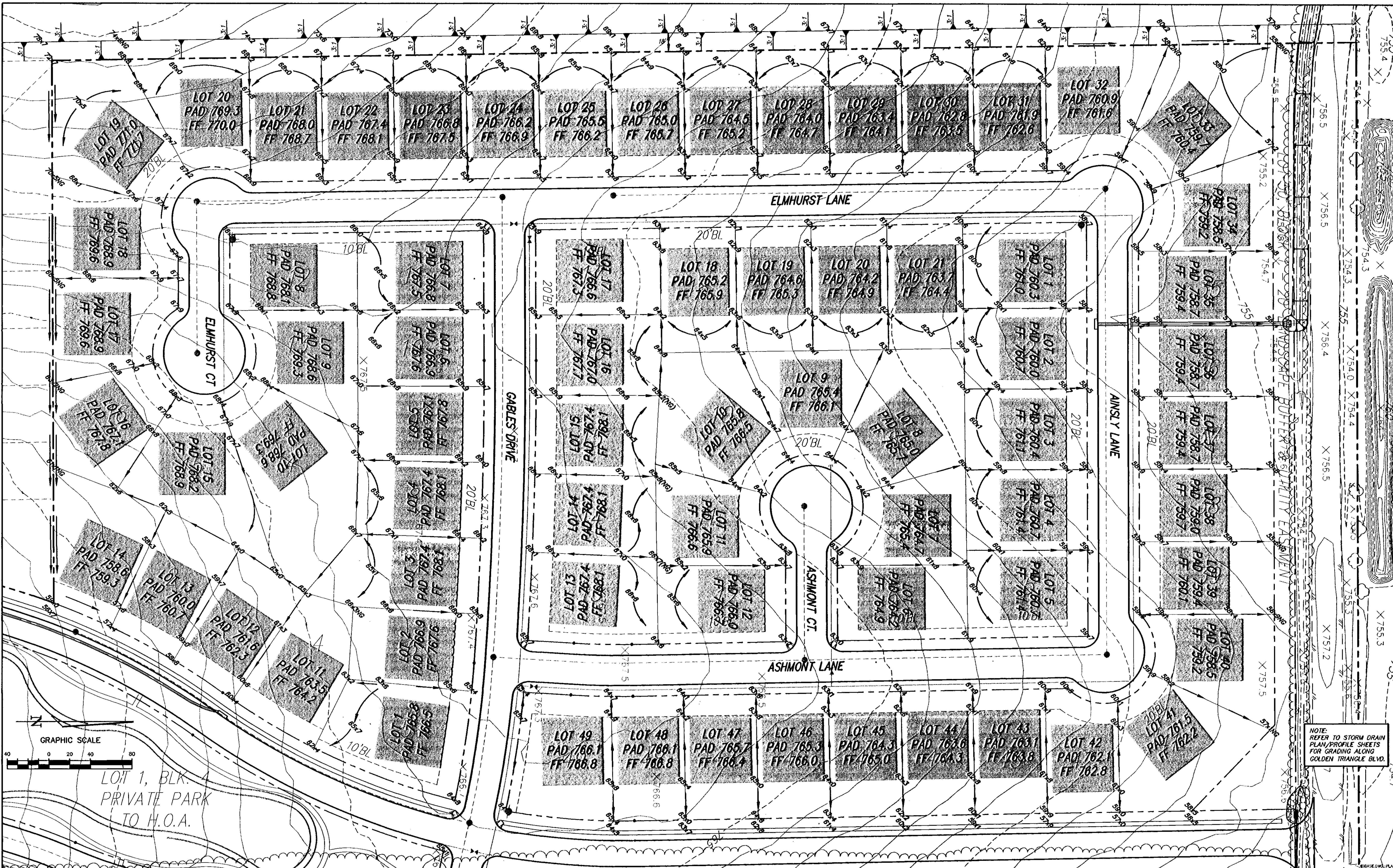
25





NO.	REVISION	BY	DATE	SCALE HORIZ 1"=20' VERT N/A PROJECT NO.	DATE JUNE 2000	TEAGUE NALL AND PERKINS INC. CONSULTING ENGINEERS 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773 2001 West Irving Blvd. Irving, Texas 75081 (972) 254-1765	MARK J. HOLLIDAY 84683 P.E. Date: 6-16-00	CITY OF FORT WORTH, TEXAS PHASE I CRAWFORD FARMS POND GRADING PLAN	TNP PROJECT LEB00134 SHEET <b>25</b> OF 30
	DESIGNED	LCC	DRAWN						



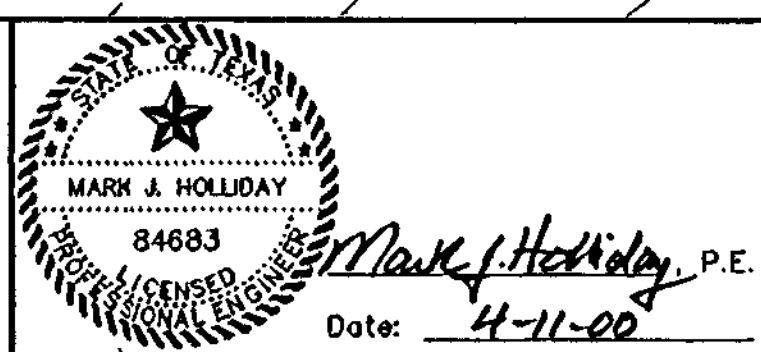


NO.	REVISION	BY	DATE

DESIGNED LCC/ASB	CHECKED MJH
---------------------	----------------

SCALE HORIZ 1" = 40'	DATE APR 2000
VERT N/A	PROJECT NO.

**TEAGUE NALL AND PERKINS**  
 CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773  
 2001 West Irving Blvd Irving, Texas 75061 (972) 254-1765

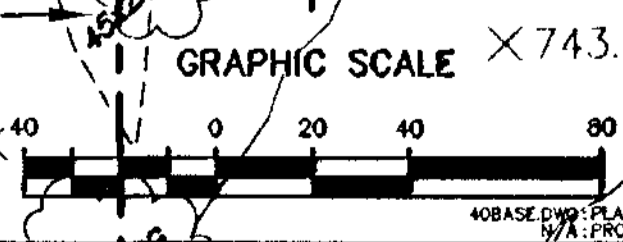
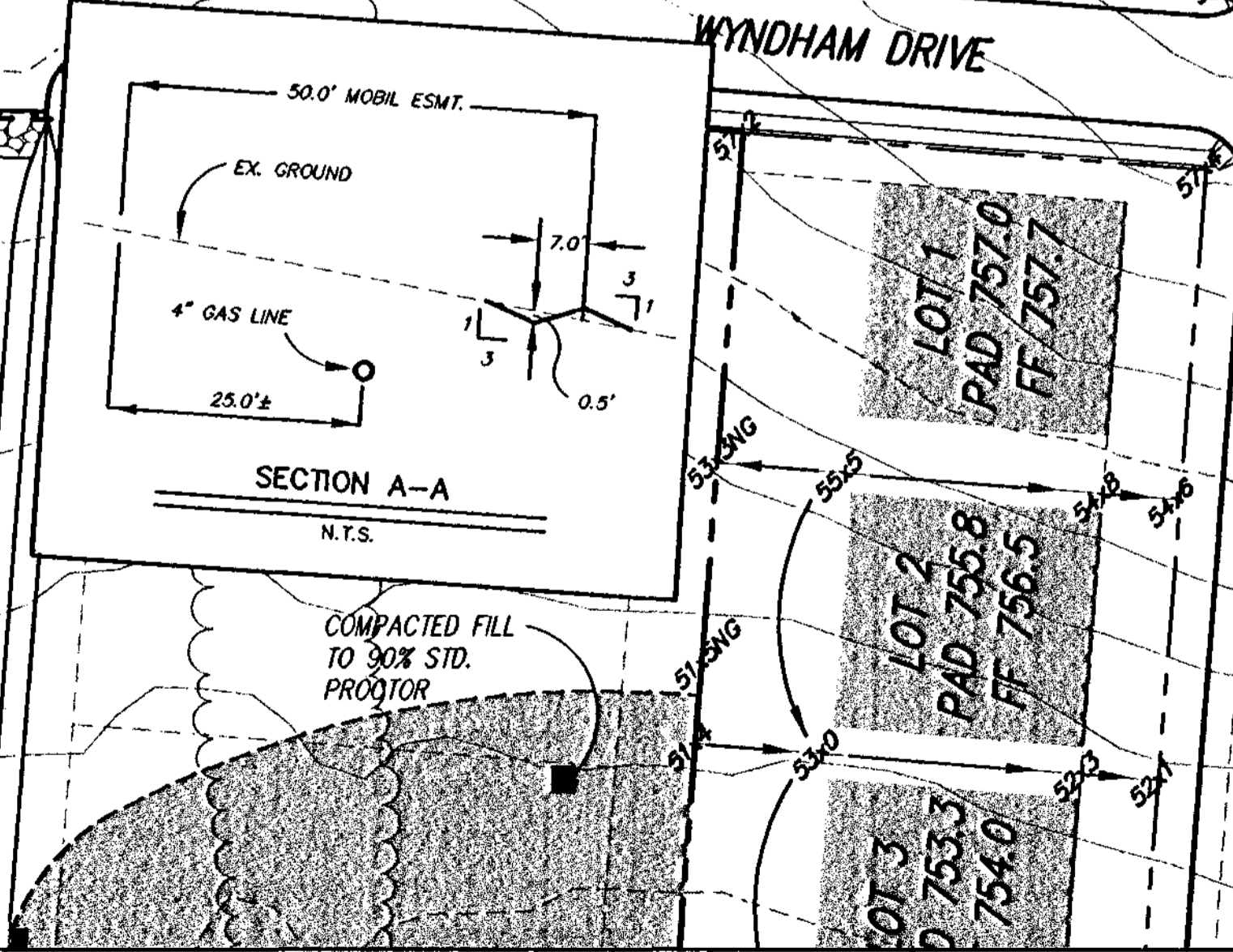
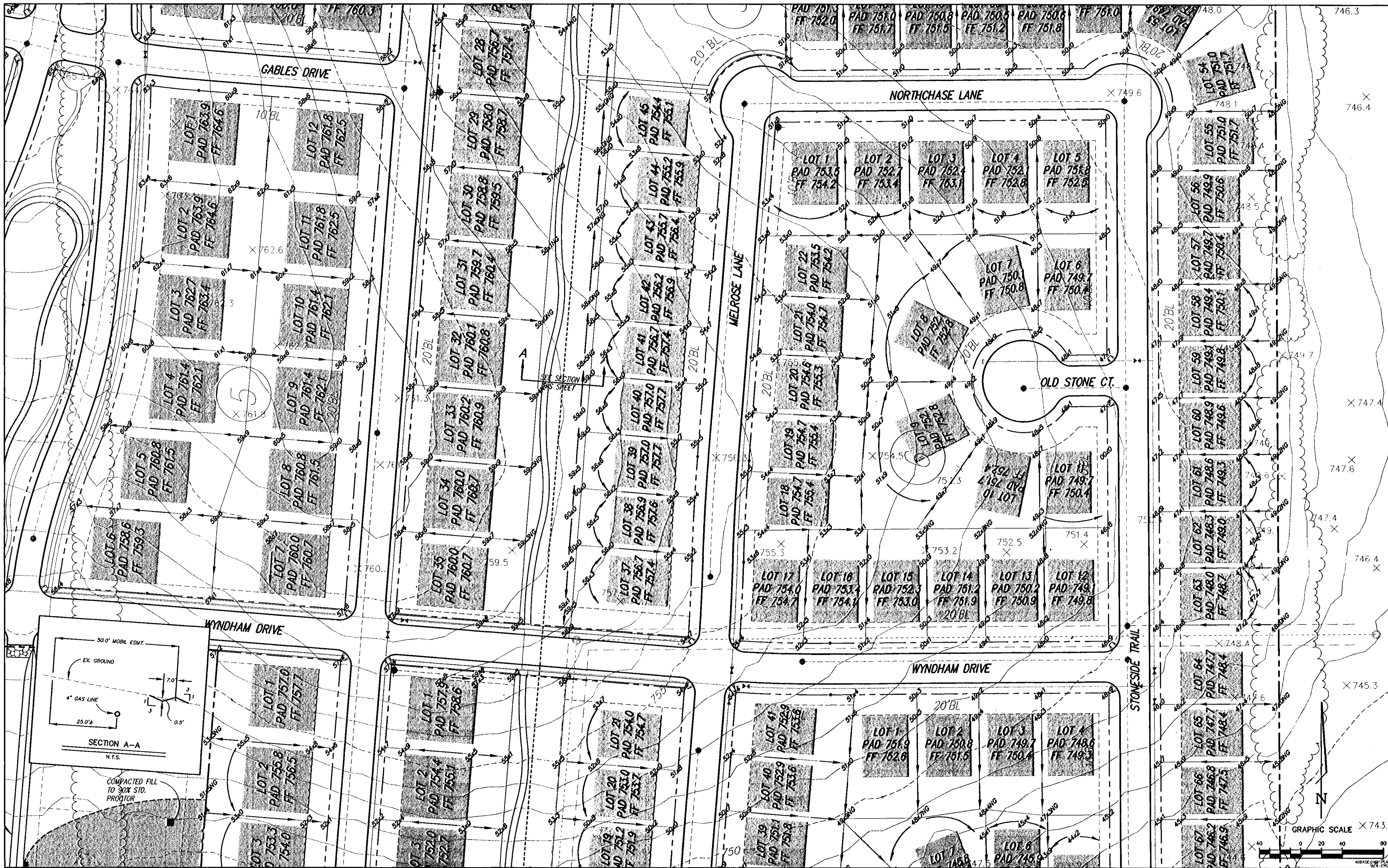


CITY OF FORT WORTH, TEXAS	PROJECT LEB00134
PHASE I CRAWFORD FARMS	SHEET 26
LOT/BLOCK GRADING PLAN (1 of 4)	OF 30







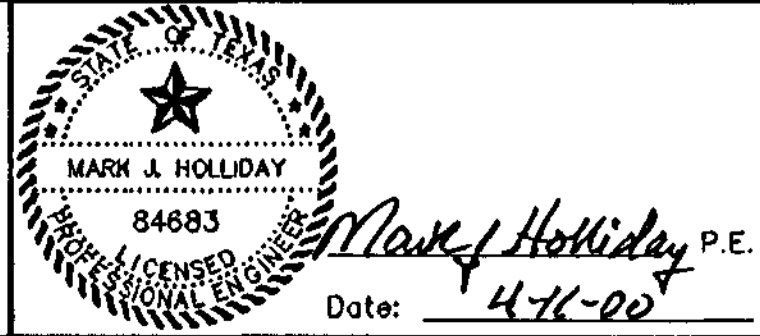


NO.	REVISION	BY	DATE

JPV  
 DESIGNED  
 LCC/ASB  
 DRAWN  
 MJH  
 CHECKED

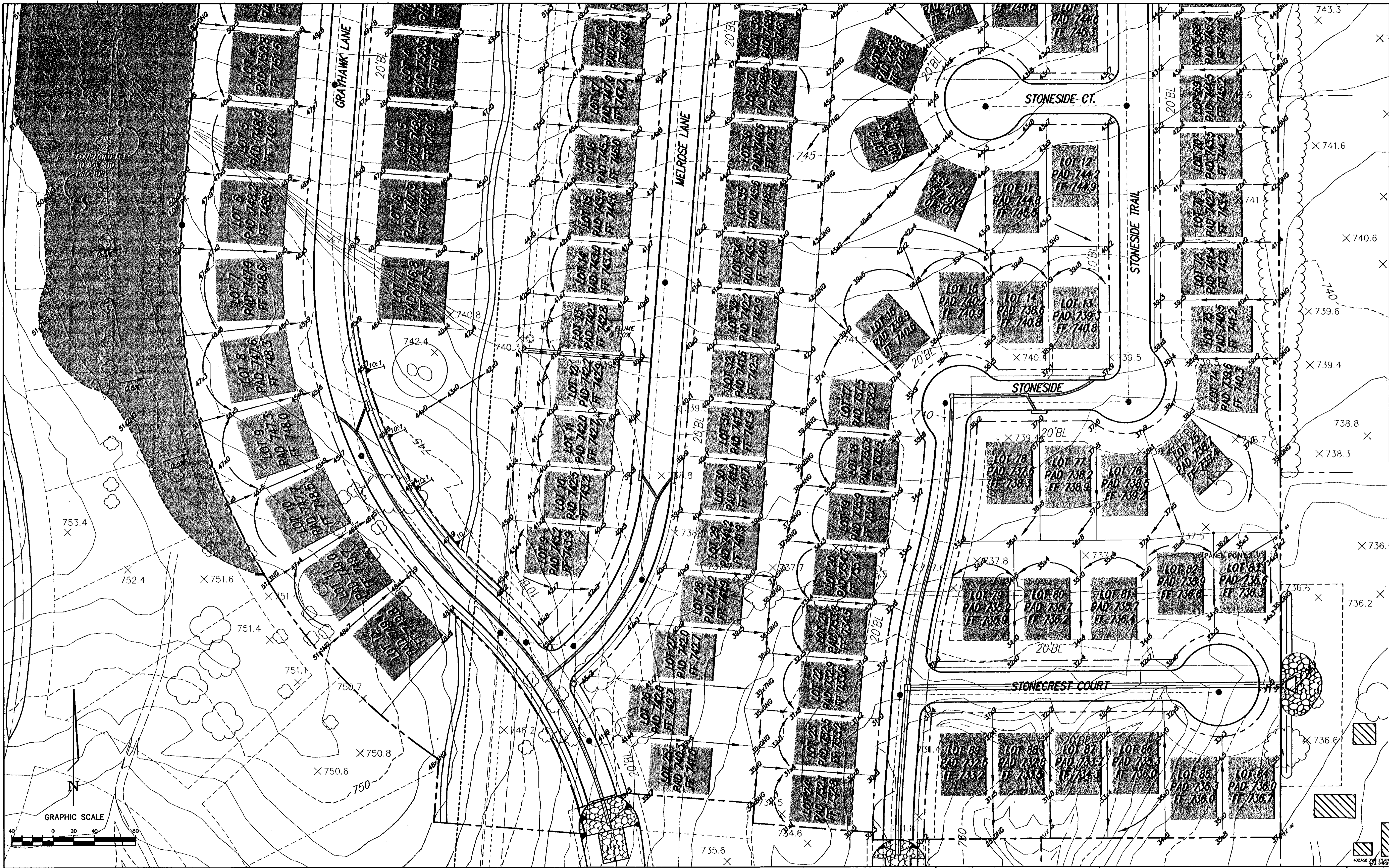
SCALE  
 HORIZ 1"=40'  
 VERT N/A  
 DATE APR 2000  
 PROJECT NO.

**TEAGUE NALL AND PERKINS**  
 CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 336-5773  
 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765



CITY OF FORT WORTH, TEXAS  
 PHASE I  
**CRAWFORD FARMS**  
 LOT/BLOCK GRADING PLAN (3 of 4)  
 SHEET **28** OF 30



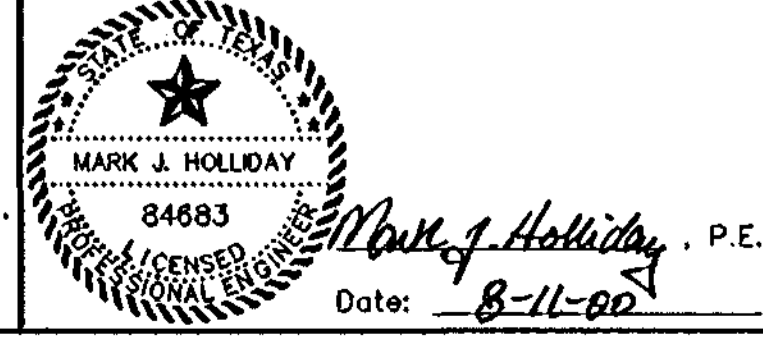


NO.	REVISION	BY	DATE

JPV  
 DESIGNED  
 LCC/ASB  
 DRAWN  
 MJH  
 CHECKED

SCALE  
 HORIZ 1" = 40'  
 VERT N/A  
 DATE  
 AUG 2000  
 PROJECT NO.

**TEAGUE NALL AND PERKINS**  
 CONSULTING ENGINEERS  
 915 Florence Street Fort Worth, Texas 76102 (817) 338-5773  
 2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765



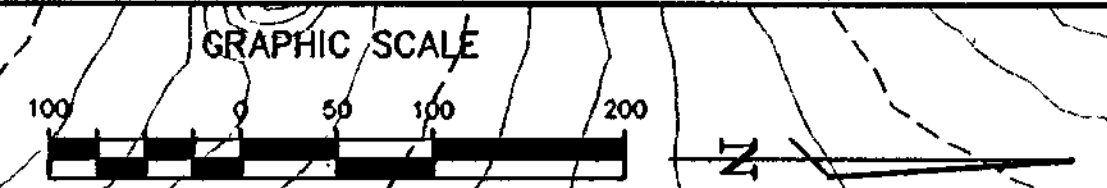
CITY OF FORT WORTH, TEXAS  
 PHASE I  
**CRAWFORD FARMS**  
 LOT/BLOCK GRADING PLAN (4 of 4)

TNP PROJECT  
 LEB00134  
 SHEET  
**29**  
 OF  
 30

30

30

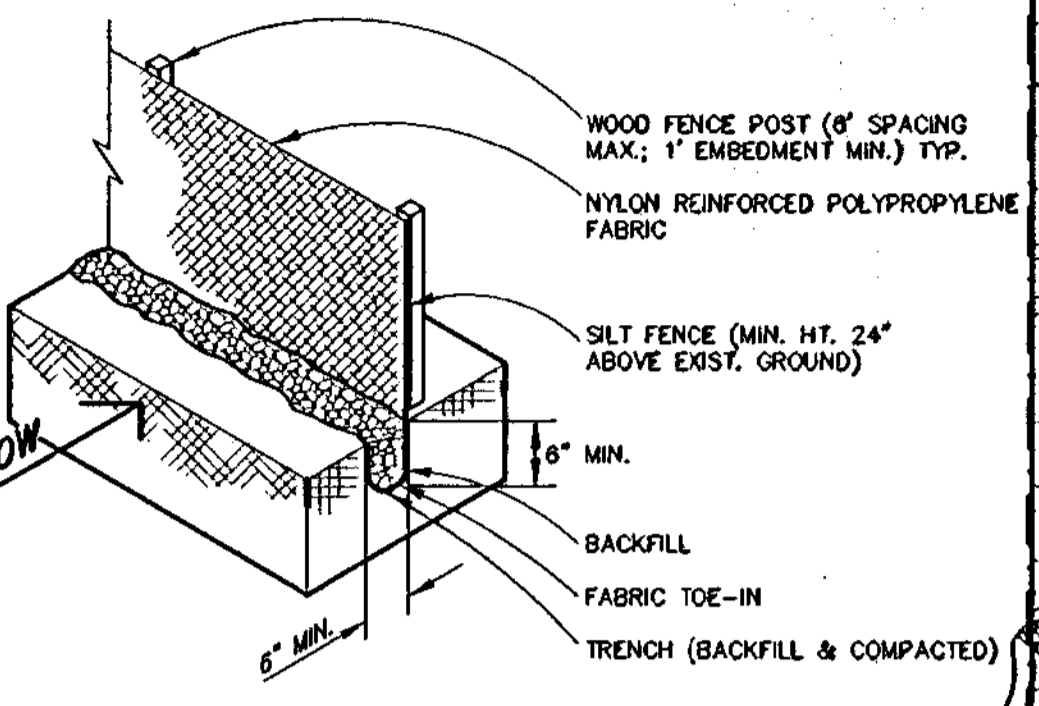




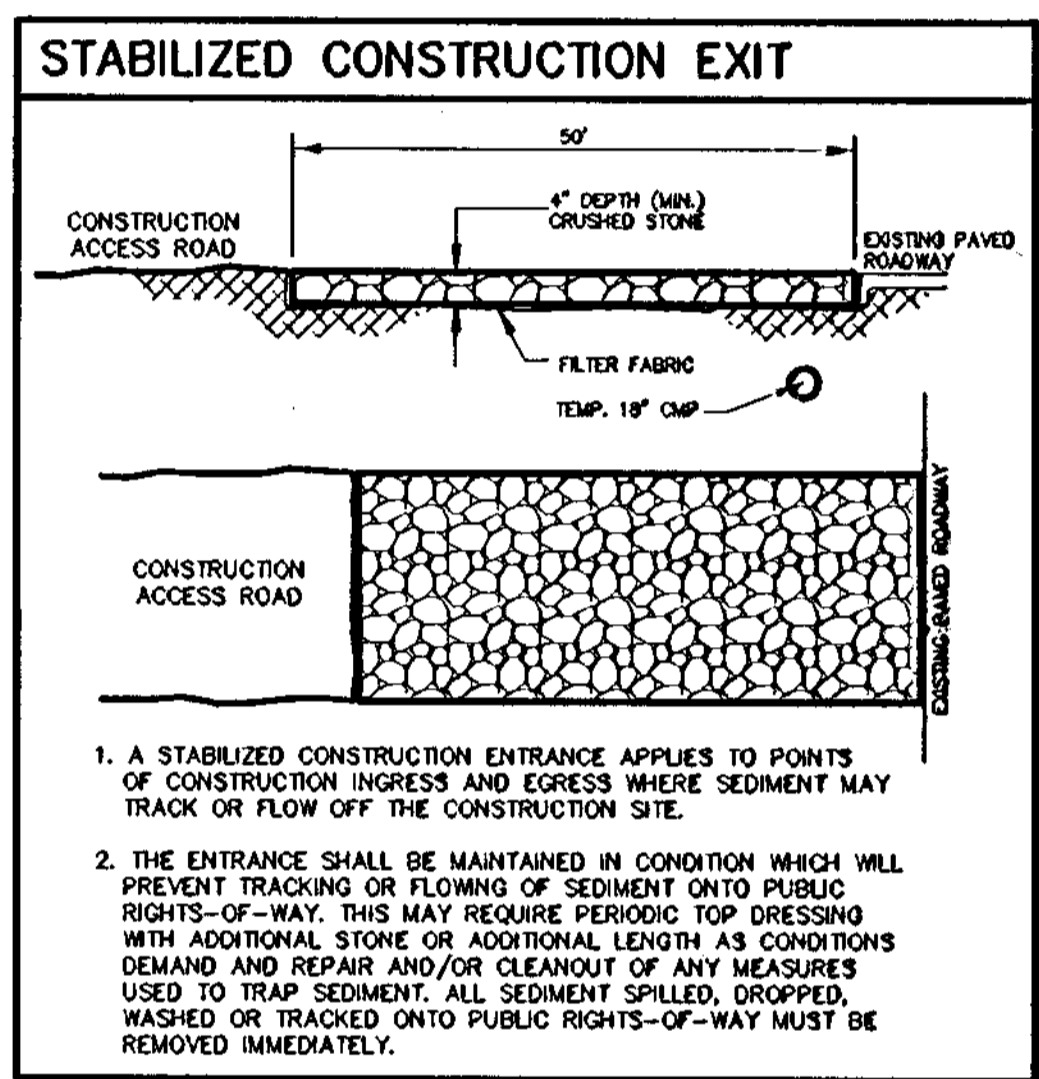
LEGEND	
	SILT FENCE INLET PROTECTION
	SILT FENCE OR HAY BALE DIKE
	PROPOSED OR EXISTING INLET
	STABILIZED CONSTRUCTION EXIT

**SILT FENCE**

- SILT FENCE NOTES**
- SILT FENCE MAY BE USED WHERE THE GROUND SLOPES ACROSS A DITCH OR SWALE.
  - WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. THE POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
  - THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF THE FENCE.
  - THE TRENCH MUST BE A MINIMUM OF 6" DEEP AND 6" WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
  - THE SILT FENCE SHOULD BE SECURELY FASTENED TO EACH WOOD SUPPORT POST. ALTERNATIVELY, SILT FENCE SHALL BE FASTENED TO WOVEN WIRE WHICH IS FASTENED TO THE WOOD POST. THE ENDS OF FABRIC SHALL OVERLAP THREE FEET.
  - INSPECTION SHALL BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
  - SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO THAT NATURAL DRAINAGE IS NOT BLOCKED OR IMPEDED.
  - ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT A SITE APPROVED BY THE OWNER AND IN SUCH A MANNER AS TO PREVENT ADDITIONAL SILTATION.
  - CONTRACTOR TO MAINTAIN SILT FENCING AND ALL OTHER EROSION CONTROL MEASURES AT ALL TIMES DURING THE DURATION OF THE PROJECT.



- GENERAL NOTES**
- HAY BALES OR SILT FENCES SHALL BE REPLACED AS NECESSARY TO MAINTAIN INTEGRITY. SILT FENCES WHICH CANNOT PASS WATER DUE TO SEDIMENTATION SHALL BE REPLACED. SILT FENCES DETERIORATED SO THAT THEY CANNOT HOLD ORIGINAL FORM DUE TO THE ELEMENTS SHALL BE REPLACED.
  - STABILIZED CONSTRUCTION EXITS SHALL BE USED BY ALL PROJECT VEHICLES LEAVING THE CONSTRUCTION AREA. WHEEL WASHING EQUIPMENT SHALL BE USED TO REMOVE EARTHEN MATERIALS FROM WHEELS AND VEHICLES.
  - CONTRACTOR SHALL REMOVE SEDIMENT DEPOSITS WHICH AFFECT THE FUNCTION OF SILT FENCES AND, WHICH MAY ENTER UNDERGROUND DRAINAGE SYSTEMS.
  - CONTRACTOR SHALL ENSURE THAT NO STORMWATER RUNOFF ENTERS DRAINAGE SYSTEMS OR EXITS THE CONSTRUCTION AREA WITHOUT PASSING THROUGH SILT FENCES.
  - CONTRACTOR SHALL PROVIDE STREET CLEANING ON ADJACENT STREETS AS NECESSARY TO REMOVE EARTHEN MATERIALS TRANSPORTED FROM THE CONSTRUCTION AREA.
  - NO OIL OR HAZARDOUS MATERIALS SHALL BE STORED IN THE CONSTRUCTION AREA.
  - THESE PLANS ARE FOR EROSION AND SEDIMENTATION CONTROL PURPOSES ONLY AND SHALL NOT BE USED FOR ANY OTHER DESIGN OR CONSTRUCTION RELATED PURPOSE.



**NOTE**

THE SWPPP INCLUDES THIS EROSION CONTROL PLAN AND THE SWPPP DOCUMENT WHICH IS A SEPARATELY BOUND VOLUME AND IS AVAILABLE FROM THE ENGINEER. ALL PROVISIONS OF THE SWPPP DOCUMENTS & PLAN SHEET SHALL BE ADHERED TO AND SHALL BE INCLUDED IN THE BID ITEM FOR EROSION CONTROL.

**CONSTRUCTION PHASING NOTES**

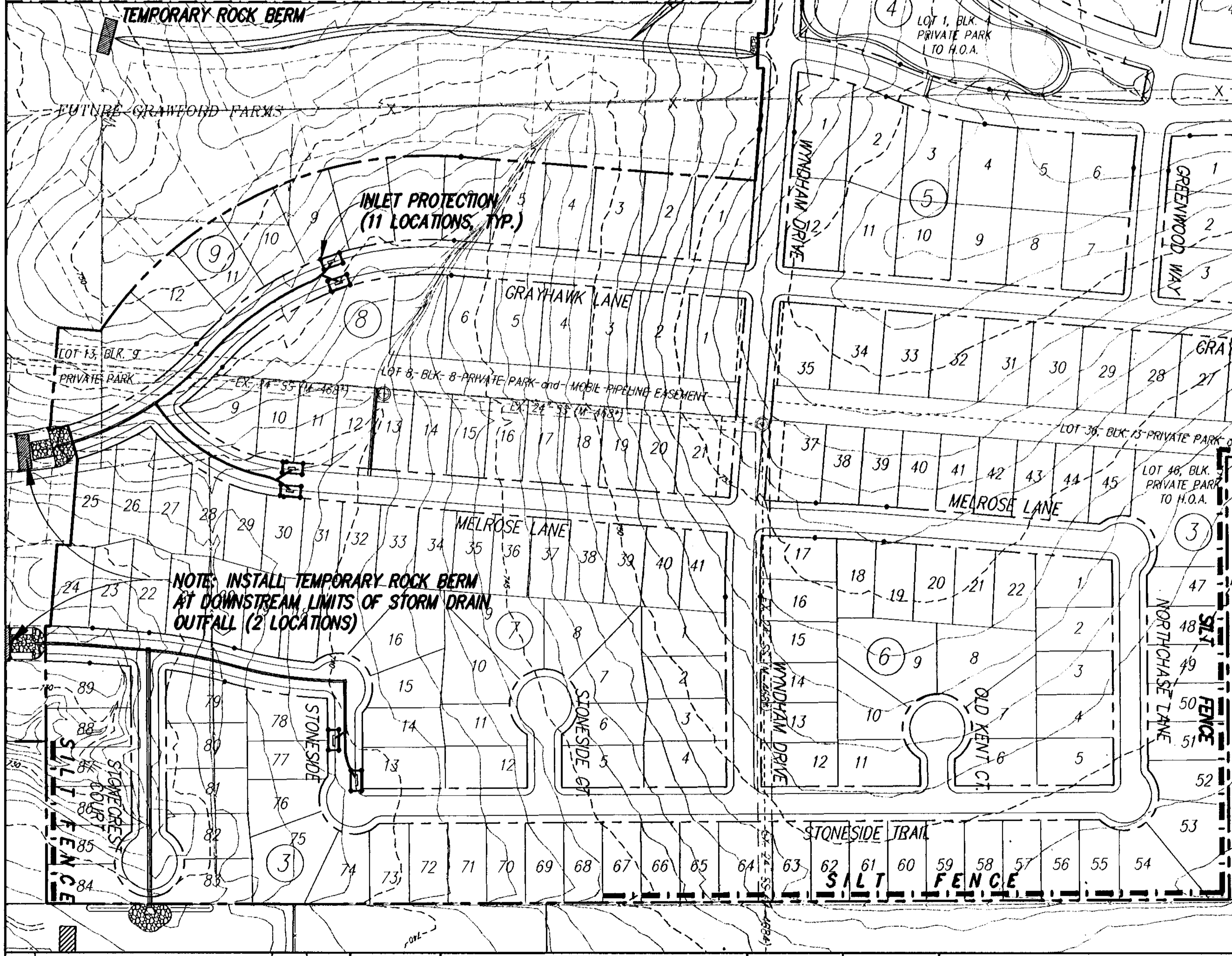
**PHASE I - EXCAVATION & GRADING:**  
INSTALL PERIMETER SILT FENCE, ROCK BERMS, AND STABILIZED CONSTRUCTION EXIT.

**PHASE II - WATER, SEWER AND STORM DRAIN IMPROVEMENTS:**  
MAINTAIN ALL EROSION CONTROL FACILITIES PREVIOUSLY INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS EROSION CONTROL PLAN AND SWPPP.

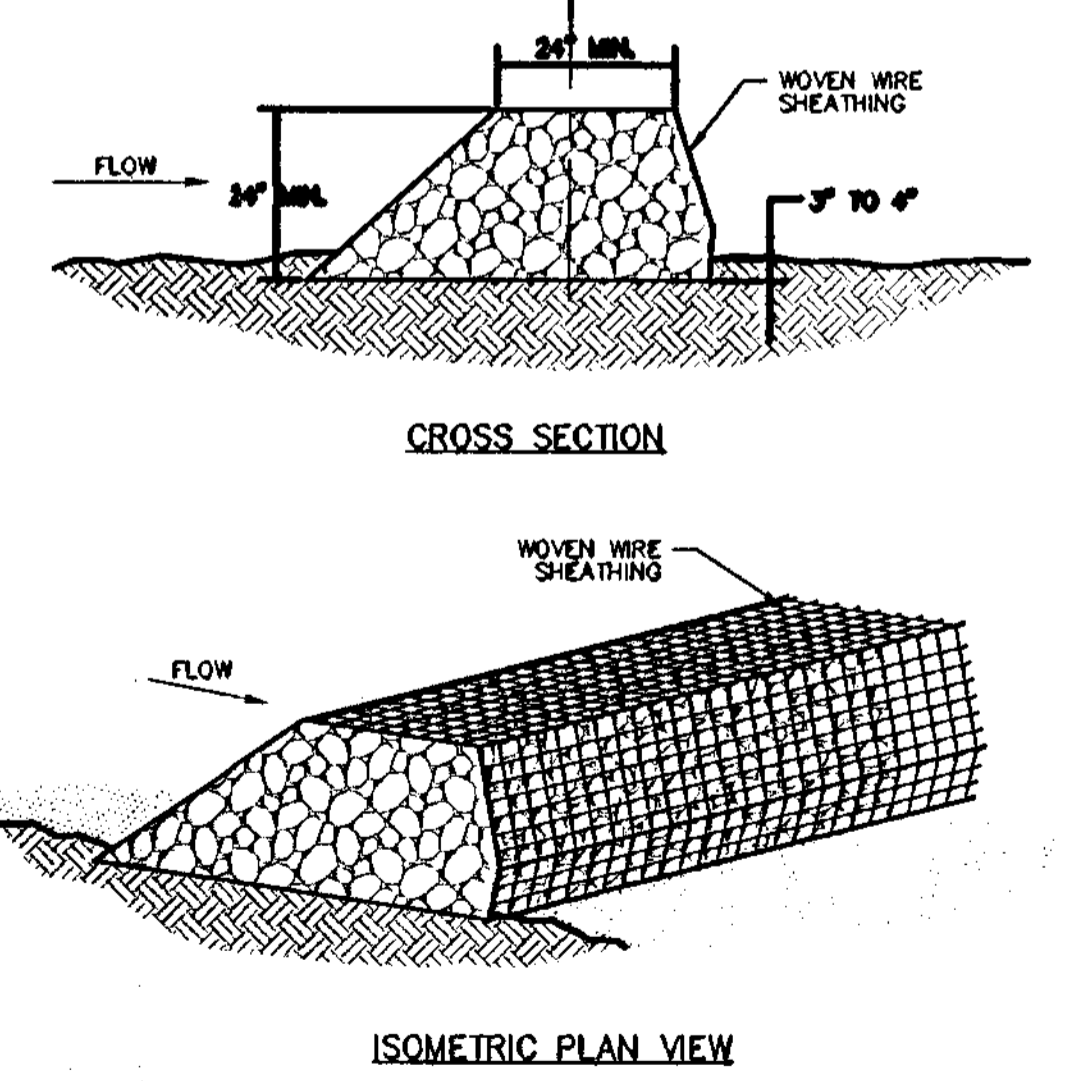
**PHASE III - INSTALL SILT FENCE ALONG RIGHT-OF-WAY AND/OR PARKWAY STABILIZATION.** MAINTAIN ALL EROSION CONTROL FACILITIES PREVIOUSLY INSTALLED IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND THE SWPPP.

**NOTE**

THE SWPPP INCLUDES THIS EROSION CONTROL PLAN AND THE SWPPP DOCUMENT WHICH IS A SEPARATELY BOUND VOLUME AND IS AVAILABLE FROM THE ENGINEER. ALL PROVISIONS OF THE SWPPP DOCUMENTS & PLAN SHEET SHALL BE ADHERED TO AND SHALL BE INCLUDED IN THE BID ITEM FOR EROSION CONTROL.



- ROCK BERM NOTES**
- USE ONLY OPEN GRADED ROCK 4-8 INCHES IN DIAMETER FOR STREAM FLOW CONDITION.
  - THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAX. OPENING OF 1" AND A MIN. WIRE SIZE OF 20 GAUGE AND SHALL BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP.
  - THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN EVENT AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, AMAGEDON, ETC.
  - WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE BERM OR ONE FOOT, WHICH EVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
  - WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN A APPROVED MANNER.
  - ROCK BERM SHOULD BE USED AS CHECK DAMS FOR CONCENTRATED FLOW AND ARE NOT INTENDED FOR USE IN PERIMETER PROTECTION.



**ROCK BERM**

NO.	REVISION	BY	DATE

JPV DESIGNED	LCC DRAWN	MJH CHECKED
-----------------	--------------	----------------

SCALE HORIZ 1"=100'	DATE APR 2000
VERT N/A	PROJECT NO.

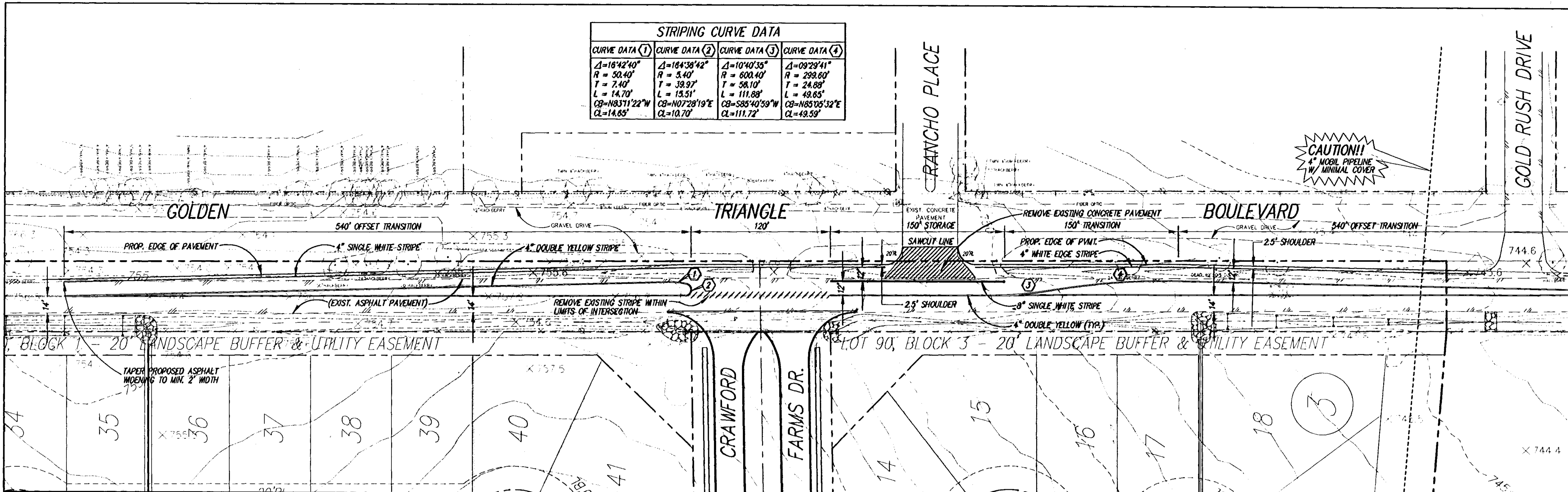
**TEAGUE NALL AND PERKINS**  
CONSULTING ENGINEERS  
915 Florence Street Fort Worth, Texas 76102 (817) 336-5773  
2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765

Professional Engineer Seal for Mark A. Holliday, P.E., No. 84683, State of Texas, dated 8-11-00.

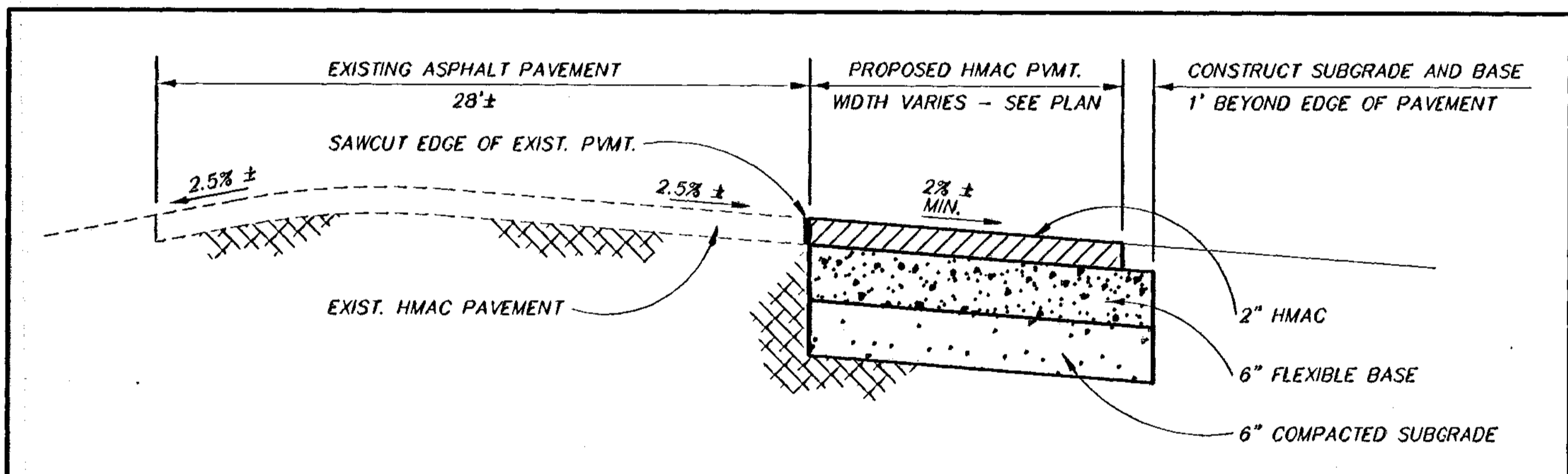
CITY OF FORT WORTH, TEXAS  
PHASE I  
**CRAWFORD FARMS**  
SWPPP  
SHEET **29A** OF 30  
TNP PROJECT LEB99233



STRIPING CURVE DATA			
CURVE DATA (1)	CURVE DATA (2)	CURVE DATA (3)	CURVE DATA (4)
$\Delta=16^{\circ}42'40''$	$\Delta=184^{\circ}38'42''$	$\Delta=10^{\circ}40'35''$	$\Delta=09^{\circ}29'41''$
$R=50.40'$	$R=5.40'$	$R=600.40'$	$R=299.60'$
$T=7.40'$	$T=39.97'$	$T=56.10'$	$T=24.88'$
$L=14.70'$	$L=15.51'$	$L=111.88'$	$L=49.65'$
$CB=N83^{\circ}11'22''W$	$CB=N07^{\circ}28'19''E$	$CB=S85^{\circ}40'59''W$	$CB=N85^{\circ}05'32''E$
$CL=14.65'$	$CL=10.70'$	$CL=111.72'$	$CL=49.59'$



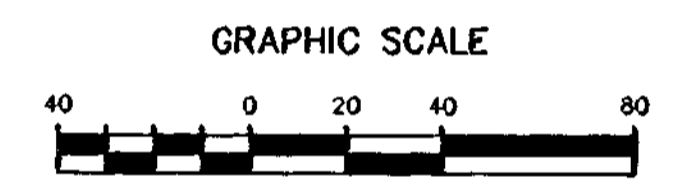
**CAUTION!!**  
4" MOBILE PIPELINE  
W/ MINIMAL COVER



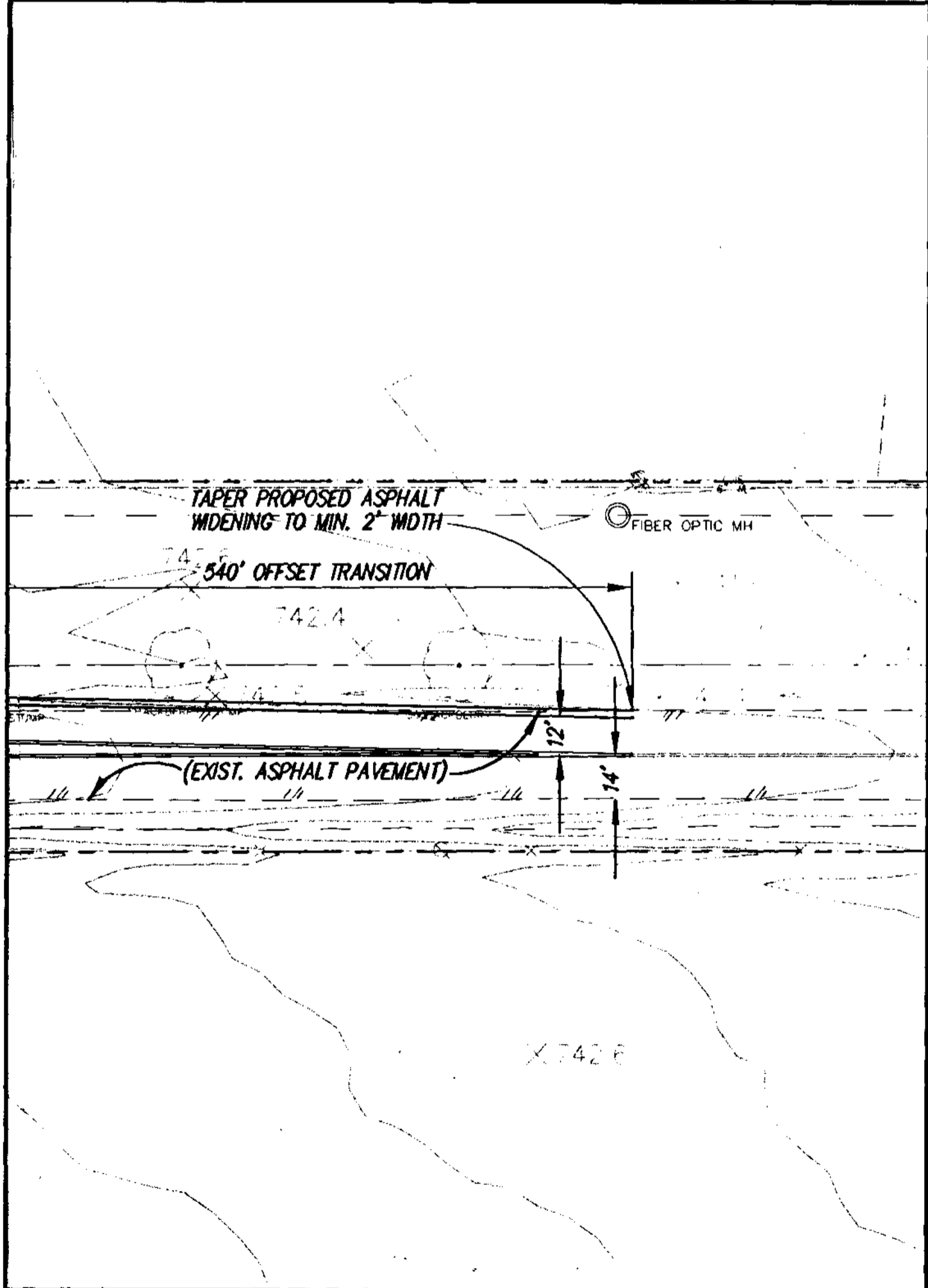
**TYPICAL PAVEMENT WIDENING SECTION**

NTS

1. ALL CONSTRUCTION SHALL CONFORM TO CITY OF FORT WORTH STANDARDS.
2. 2" HMAC SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 312 OF THE STANDARD SPECIFICATIONS FOR STREET AND STORM DRAIN CONSTRUCTION, CITY OF FORT WORTH, TRANSPORTATION AND PUBLIC WORKS DEPARTMENT.
3. 6" FLEXIBLE BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 208 OF THE STANDARD SPECIFICATIONS.
4. 6" COMPACTED SUBGRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 204 OF THE STANDARD SPECIFICATIONS.
5. ALL PAVEMENT MARKINGS SHALL BE HOT THERMOPLASTIC IN ACCORDANCE WITH CITY OF FORT WORTH STANDARDS.
6. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE CITY OF FORT WORTH STANDARDS AND THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



LEGEND	
	PROPOSED ASPHALT PAVEMENT (2" HMAC, 6" FLEX BASE, 6" COMPACTED SUBGRADE)
	4" DOUBLE YELLOW STRIPE
	4" SINGLE STRIPE
	8" SINGLE WHITE LANE STRIPE
	EXISTING STRIPING TO BE REMOVED
	EXISTING STRIPING TO REMAIN
	EXISTING ASPHALT PAVEMENT
	EXISTING CONCRETE PAVEMENT TO BE REMOVED



NO.	REVISION	BY	DATE

JPV  
DESIGNED  
LCC  
DRAWN  
MJH  
CHECKED

SCALE	DATE
HORIZ 1"=40'	OCT. 2000
VERT N/A	
PROJECT NO.	

**TEAGUE NALL AND PERKINS**  
CONSULTING ENGINEERS  
1100 Macon Street Fort Worth, Texas 76102 (817) 336-5773  
2001 West Irving Blvd Irving, Texas 75061 (972) 254-1765

Professional Engineer Seal for Mark J. Holiday, No. 84683, State of Texas. Date: 10-10-00

CITY OF FORT WORTH, TEXAS	TNP PROJECT LEB00134
CONSTRUCTION PLANS FOR CRAWFORD FARMS, PHASE I	SHEET <b>29B</b>
LEFT TURN LANE GOLDEN TRIANGLE BOULEVARD	OF 30

W-964

C:\PROJ\14\LEB00134\CRWD\PLAN-G1B.dwg Tue Oct 10 09:25:02 2000



