

Delta=30°14'05"
 Radius=150.00'
 Length=79.14'
 CB=N29°26'57"E
 Chord=78.24'

WAYPOINT
 160' R.O.W.
 DRIVE

N89°56'40"E 394.37'

ONE-STORY BUILDING
 85.96' x 130.96'
 11,257 S.F.
 FIN FLR EL = 662.86

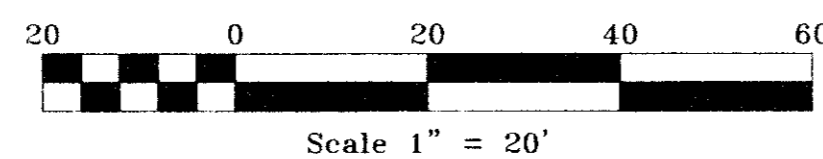
WESTGROVE DRIVE
 (60' R.O.W.)

CITY OF CARROLLTON
 TOWN OF ADDISON

LEGEND
 [Pattern] PROPOSED SIDEWALK
 [Pattern] PROPOSED FIRELANE
 (C) NUMBER OF PARKING SPACES

SITE SUMMARY	
ZONING	LI
PROPOSED USE	ANIMAL TRAINING FACILITY
LOT AREA	1.73 AC. (75,369 SF)
BUILDING AREA TOTAL	11,050 SF
BUILDING HEIGHT (1-STORY)	17'-0"
PARKING	
REQUIRED	1/500 S.F. = 22 SP.
PROVIDED	26 {24 (REG); 2 (H/C)}
LANDSCAPING	
PROVIDED-10%	7,529 SF
REQUIRED-10% OF SITE	7,529 SF
INTERIOR PARKING LOT LANDSCAPING	
REQUIRED	543 SF
PROVIDED	550 SF
IMPERVIOUS COVER	40.2% (30,306 SF)
FLOOR AREA RATIO (FAR)	0.15:1

- NOTES:
- ALL PAVING DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF CARROLLTON'S SPECIFICATIONS.
 - LANDSCAPING MUST BE LOCATED IN ACCORDANCE WITH THE COMPREHENSIVE ZONING ORDINANCE.
 - SELLING OF A PORTION OF THIS ADDITION BY METES AND BOUNDS DESCRIPTION, WITHOUT A REPLAT BEING APPROVED BY THE CITY OF CARROLLTON, IS A VIOLATION OF CITY ORDINANCE AND STATE LAW AND IS SUBJECT TO FINES AND WITHHOLDING OF UTILITIES AND BUILDING PERMIT.



E:\900173\900173SP.dwg Thu Jul 08 14:10:37 1999 BLAKE

HCE Hickman Consulting Engineers, Inc.
 1315 E. 19th Street, Suite 2A
 Carrollton, TX 75007
 (972) 509-1844 • Fax (972) 578-9644
 (800) 579-4367
 E-MAIL: HCE@AIRMAIL.NET
 Planners
 Engineers
 Surveyors

SITE PLAN
 MAN'S BEST FRIEND
 CARROLLTON, TEXAS
 D/B CONSTRUCTORS, INC.
 2400 GREAT SOUTHWEST PKWY.
 FORT WORTH, TEXAS 76106

SCALE: AS SHOWN
 DATE: JUNE 1999
 DRAWN BY: A.B.C.
 CHK'D BY: M.H.H.
 JOB NO: 9001-73
 FILE: 800173SP.DWG
 DATE: 06/03/99

7/8/99

REVISION	DATE	DESCRIPTION

SHEET
C-1

DRAINAGE CHART						
AREA	C _f runoff coefficient	C runoff coefficient	I ₁₀₀ rainfall intensity	A acres	Q ₁₀₀ cfs	DESCRIPTION
1	1.25	0.85	8.82	0.21	1.85	TO WESTGROVE DR.
2	1.25	0.85	8.82	0.43	3.79	OFFSITE TO NORTH
3	1.25	0.85	8.82	0.09	0.79	TO WAYPOINT DR.
4	1.25	0.85	8.82	2.11	18.61	TO DETENTION BASIN
5	1.25	0.85	8.82	0.23	2.03	OFFSITE TO WEST
6	1.25	0.85	8.82	0.14	1.23	OFFSITE TO SOUTH

DETECTION CALCULATIONS

DEVELOPMENT DATA:
 DRAINAGE AREA = 3.20 ac.
 RESIDENTIAL C = 0.55
 RESIDENTIAL T_{CR} = 15 min.
 DEVELOPED C_p = 0.85
 DEVELOPED T_{CP} = 10 min.
 C_f = 1.25

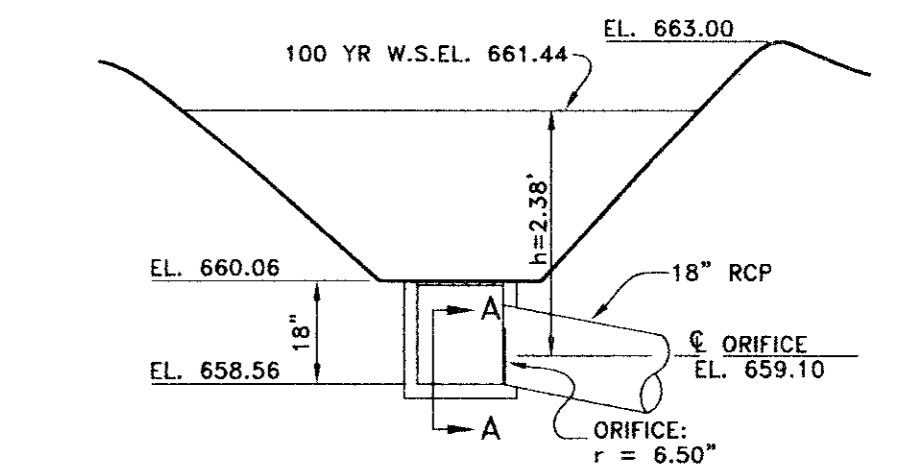
NOTE: C_f * C CANNOT EXCEED 1.
 FOR THE 100-YEAR STORM:
 I_{RES} = 7.52 in./hr.
 I_P = 8.82 in./hr.
 Q_E = Q_D = (1.25)(0.55)(7.52)(3.20) = 28.22 cfs
 Q_P = (1.25)(0.85)(8.82)(3.20)

ORIFICE CALCULATIONS

Q_{ALLOW} = 16.54 - AREA 1 - AREA 2
 = AREA 3 - AREA 5 - AREA 6
 = 6.85 cfs
 $Q = CA(2gh)^{1/2}$
 g = 32.2
 h = 2.38 ASSUME r = 6.5" (ORIFICE)
 $6.85 = 0.6A(64.4)(2.38)^{1/2}$
 6.85 = 0.6A(12.38)
 0.6A = 0.54
 A = 0.92 sq. ft.
 $0.92 = \pi r^2$
 $0.54 = r^2$
 r = 0.54 ft. = 6.50 in.
 6.50 = 1.00; WITHIN 2%
 6.50

$I_D = \frac{Q_D}{(C_p A) C_f} = \frac{16.54}{(0.80)(3.20)(1.25)} = 5.17$ in./hr.
 T_D = 37 min.
 V = 60 $\left(\frac{16.54}{2}\right) (37-10)$
 = 13,397 cu. ft.
 ELEVATION @ 13,397 cu. ft. = 661.44
 VOLUME PROVIDED = 14,696 cu. ft. AT ELEV. 661.50
 FREEBOARD = 1.50'

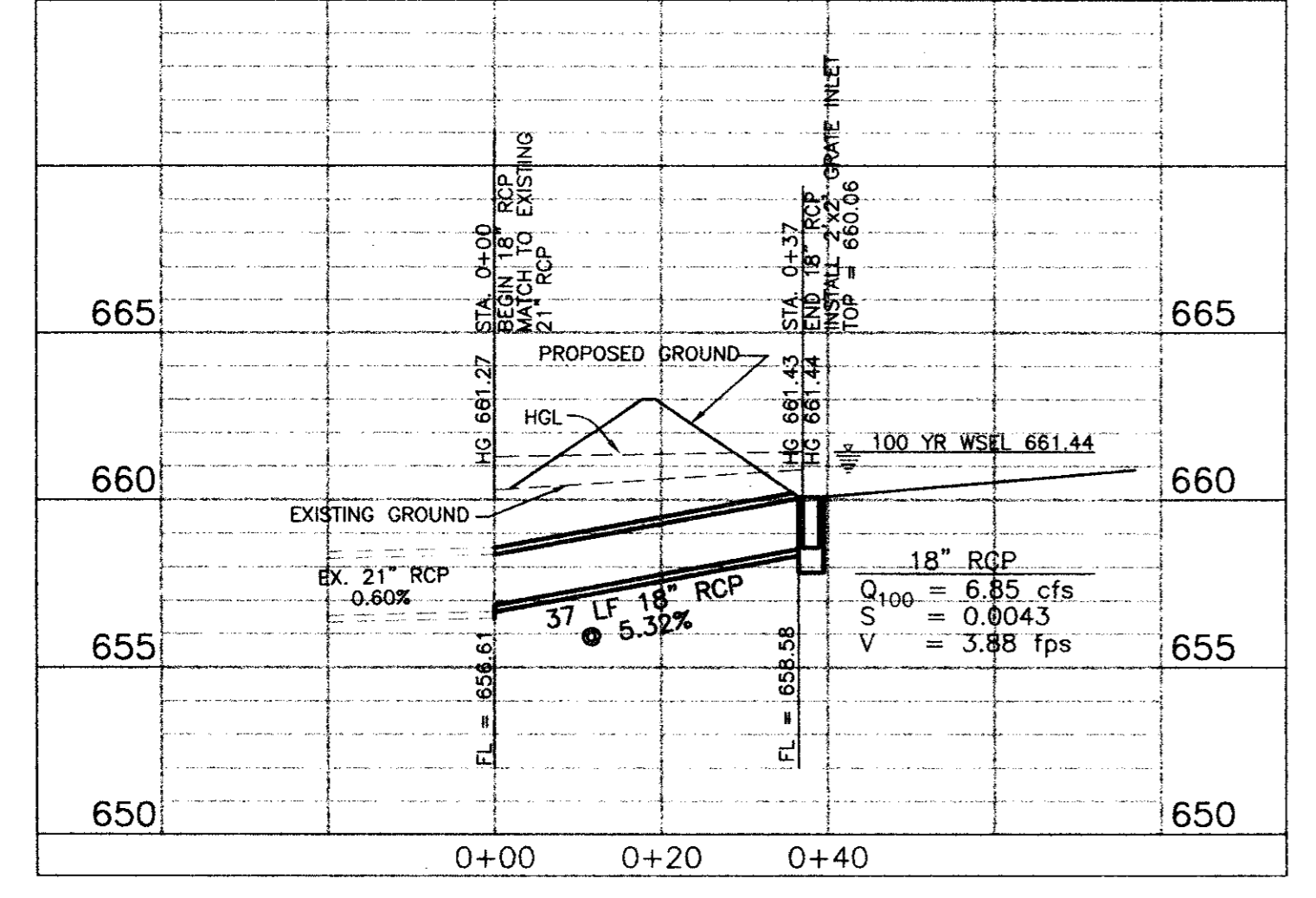
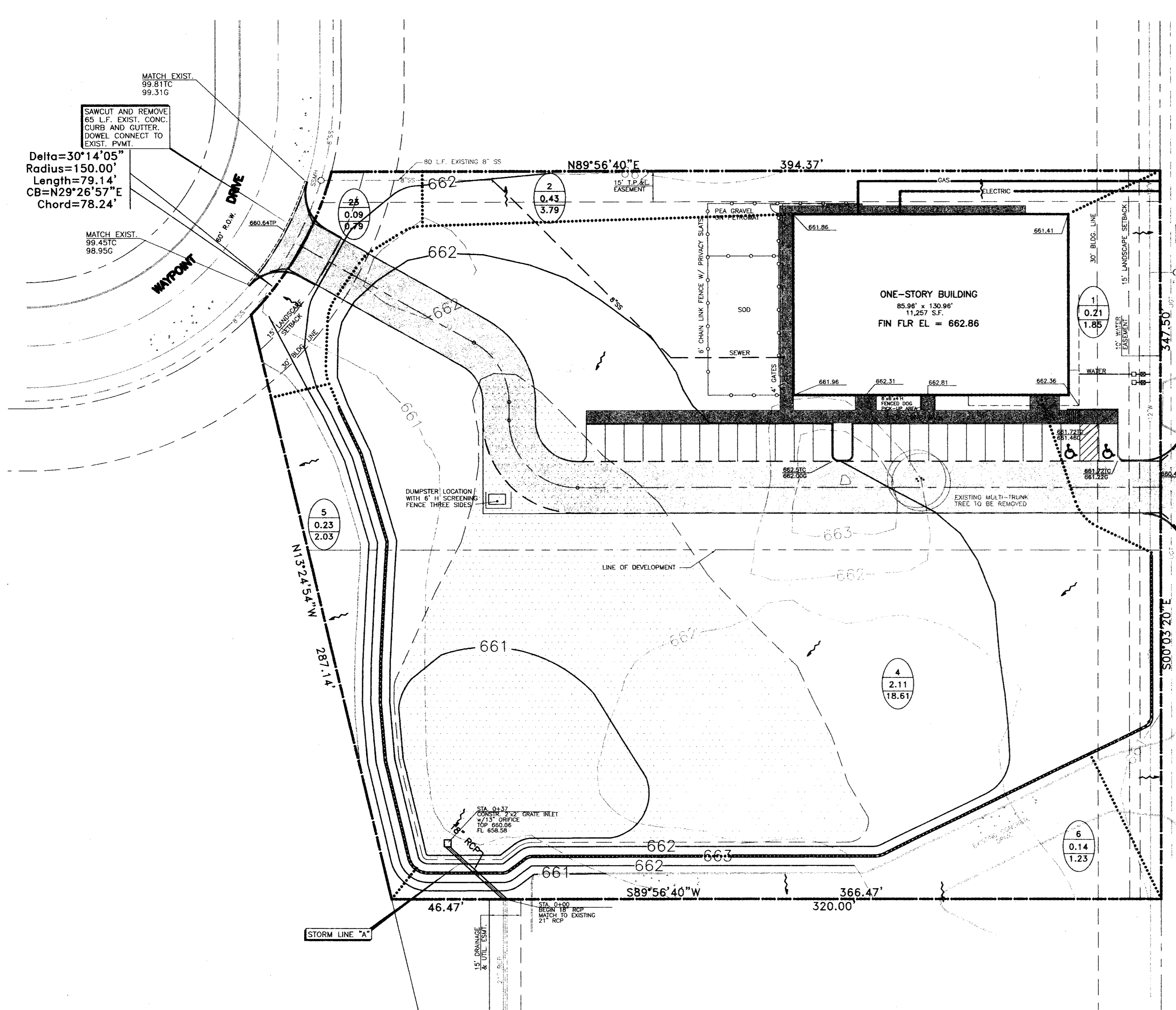
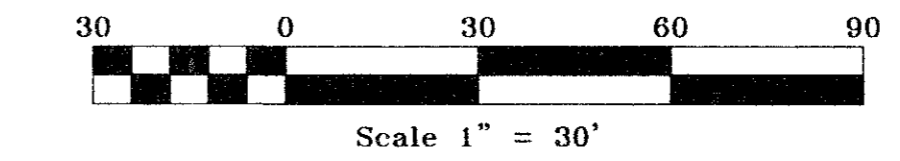
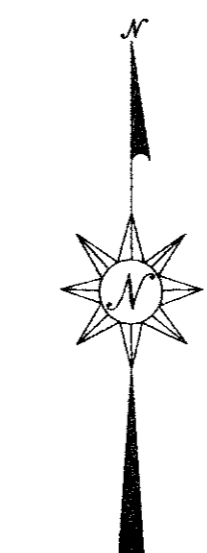
ELEVATION	AREA (sq. ft.)	VOLUME (cu. ft.)	CUMULATIVE VOLUME (cu. ft.)
660.06	0	4541	0
661.00	9,093	10,155	49
661.50	31,528	14,696	



LEGEND

PROPOSED DETENTION AREA

4
2.11
18.61
DRAINAGE AREA
AREA SIZE (AC.)
Q (cfs)



- GENERAL NOTES**
- ALL WORK WITHIN RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF CARROLLTON STANDARDS AND DETAILS.
 - EXISTING UTILITIES SHOWN ARE FROM AVAILABLE RECORDS. LOCATIONS SHOWN ARE GENERALLY SCHEMATIC IN NATURE AND MAY NOT ACCURATELY REFLECT THE SIZE AND LOCATION OF EACH PARTICULAR UTILITY. SOME UTILITY LINES MAY NOT BE SHOWN. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ACTUAL FIELD LOCATION AND PROTECTION OF EXISTING UTILITIES WHETHER SHOWN OR NOT. CONTRACTOR SHALL ALSO ASSUME RESPONSIBILITY FOR REPAIRS TO EXISTING UTILITIES, WHETHER SHOWN OR NOT, DAMAGED BY CONTRACTOR'S ACTIVITIES. DIFFERENCES IN HORIZONTAL OR VERTICAL LOCATIONS EXISTING UTILITIES SHALL NOT BE A BASIS FOR ADDITIONAL EXPENSES.
 - TRAFFIC FLOW AND ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF THE CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC SAFETY MEASURES FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
 - THE CONTRACTOR SHALL PROVIDE MATERIAL AND QUALITY CONTROL TESTING AS REQUIRED BY OWNER. TESTS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
 - DENSITY TESTS FOR GENERAL SITE FILL. (MINIMUM ONE TEST PER LIFT PER 10,000 S.F. FILL)
 - DENSITY TESTS FOR UTILITY TRENCH BACKFILL (MINIMUM ONE TEST PER 100 L.F. ON EVERY OTHER LIFT)
 - CONCRETE CYLINDER TESTS. (MINIMUM 4 CYLINDERS PER 100 C.Y. OF MATERIAL)
 - CONTRACTOR SHALL MAINTAIN DRAINAGE AT ALL TIMES DURING CONSTRUCTION. PONDING OF WATER IN STREETS, DRIVES, TRUCK COURTS, TRENCHES, ETC. WILL NOT BE ALLOWED.
 - PAVEMENT REMOVAL AND REPAIR SHALL CONFORM TO THE CITY OF CARROLLTON GENERAL CONSTRUCTION GUIDELINES. ALL SAWCUTS SHALL BE FULL DEPTH CUTS. CONTRACTOR SHALL MAKE EFFORTS TO PROTECT CONCRETE EDGES. ANY LARGE SPALLED OR BROKEN EDGES SHALL BE REMOVED BY SAWCUTTING PAVEMENT PRIOR TO REPLACEMENT. REFERENCE CONSTRUCTION JOINT DETAIL, SHEET C-7, FOR CONNECTION TO EXISTING PAVEMENT.
 - EARTHWORK OPERATIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF QUALIFIED PERSONNEL WORKING IN CONJUNCTION WITH THE PROJECT GEOTECHNICAL ENGINEER.
 - CONCRETE CURB TO BE CONSTRUCTED PER CITY OF CARROLLTON STANDARDS AND SHALL CONTAIN 100% GASOLINE & ETHANOL RESISTANT EXPANSION MATERIAL.
 - THE ELEVATIONS AS DESIGNED DO NOT REPRESENT A CONSISTENT SLAB REVEAL. THE SLAB REVEAL VARIES. SEE SPECIFIC SPOT ELEVATIONS TO DETERMINE EXACT AMOUNT OF SLAB REVEAL IN SOME CIRCUMSTANCES THE SLAB REVEAL IS 0.
 - IN AREAS WHERE REAR PORCHES ARE ADJACENT TO SIDEWALKS, RETAINING WALLS OR EXPOSED PORCH GRADE BEAMS MAY BE REQUIRED WHERE SLOPES ARE EXCESSIVE. CONTRACTOR TO VERIFY LOCATIONS AND NOTIFY ENGINEER OF POSSIBLE CONFLICTS.
 - CONTRACTOR SHOULD ATTEMPT TO MAINTAIN A MINIMUM 8" SLAB REVEAL IN ALL AREAS WHERE GRADING IS ALLOWED.

GRADING & DRAINAGE PLAN
 MAN'S BEST FRIEND
 CARROLLTON, TEXAS
 D/B CONSTRUCTORS, INC.
 2400 GREAT SOUTHWEST PKWY.
 FORT WORTH, TEXAS 76106

SCALE: AS SHOWN
 DATE: JUNE 1999
 DRAWN BY: A.B.C.
 CHK'D BY: M.H.H.
 JOB NO: 8001-73
 FILE: 800173SP.DWG
 DATE SUBMITTED: 06/23/99(3)

REVISION	DATE	DESCRIPTION

Delta=30°14'05"
 Radius=150.00'
 Length=79.14'
 CB=N29°26'57"E
 Chord=78.24'

WAYPOINT
 60' R.O.W.
 DRIVE

15' LANDSCAPE SETBACK
 30' BLDG. LINE

N13°24'54"W
 287.14'

CONNECT TO EXIST. 8" SS
 FL 653.39

N89°56'40"E
 394.37'

SS LN. "A"
 175' F. 8" PVC
 @ 2.00%

INSTALL:
 6" CLEANOUT
 FL 656.86

ONE-STORY BUILDING
 85.96' x 130.96'
 11,257 S.F.
 FIN FLR EL = 662.86

CONNECT TO EX. 12" WATER
 INSTALL:
 1-2" METER & BOX (DOM.)
 1-1" METER & BOX (IRR.)
 2-BACKFLOW PREVENTORS

DUMPSTER LOCATION
 WITH 6' H' SCREENING
 FENCE THREE SIDES

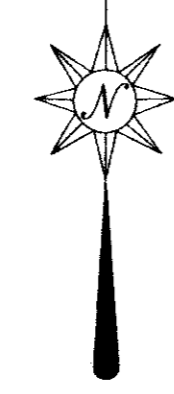
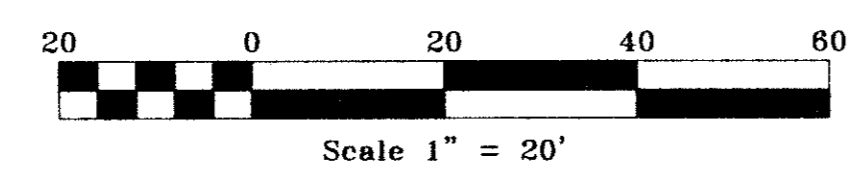
EXISTING MULTI-TRUNK
 TREE TO BE REMOVED

WATER & WASTEWATER NOTES:

- ALL WATER AND SANITARY SEWER MAIN CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY OR EASEMENT SHALL CONFORM TO THE REQUIREMENTS OF THE TEXAS NATURAL RESOURCES CONSERVATION COMMISSION (TRNC) GUIDELINES FOR CONSTRUCTION OF PUBLIC WATER AND SEWER SYSTEMS. WATER AND SANITARY SERVICES SHALL BE TESTED IN ACCORDANCE WITH THE CITY OF CARROLLTON STANDARDS AND SPECIFICATIONS.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE CITY OF CARROLLTON.
- CONTRACTOR SHALL MAINTAIN EXISTING SANITARY SEWER AND WATER SERVICE AT ALL TIMES DURING CONSTRUCTION.
- ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF CARROLLTON STANDARDS AND DETAILS. CONTRACTOR SHALL MAINTAIN A COPY OF THE REFERENCE DOCUMENTS AT THE JOBSITE.
- THE CONTRACTOR SHALL PROVIDE "AS-BUILT" PLANS TO THE OWNER SO THAT THE REPRODUCIBLES OF THE PLANS MAY BE CORRECTED TO REFLECT "AS-BUILT" CONDITIONS.
- ALL WATER MAINS AND SERVICE CONNECTIONS CONSTRUCTED WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE CITY OF CARROLLTON REQUIREMENTS. THE CONTRACTOR SHALL FLUSH AND STERILIZE ALL WATER MAINS. THE CITY WILL TAKE WATER SAMPLES AND HAVE LABORATORY TESTS PERFORMED TO PROVE THE WATER MAINS TO BE FREE OF BACTERIA/MICRO-ORGANISMS. CONTRACTOR IS RESPONSIBLE FOR ANY FEES OR COST RELATED TO TESTING OF WATER OR SEWER MAINS.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ALL NECESSARY WARNING AND SAFETY DEVICES (FLASHING LIGHTS, BARRICADES, SIGNS, ETC.) TO PROTECT THE PUBLIC SAFETY AND HEALTH UNTIL ALL WORK HAS BEEN COMPLETED AND ACCEPTED BY THE CITY.
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND VERIFY IN THE FIELD ANY UTILITIES THAT MAY CONFLICT WITH HIS CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY RELOCATION OR ADJUSTMENT COST ASSOCIATED WITH HIS WORK. AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION IN THE VICINITY OF EXISTING UNDERGROUND UTILITIES, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES TO LOCATE ALL UNDERGROUND UTILITIES.
- ALL SANITARY SEWER PIPES SHALL CONFORM TO ASTM D3034 SDR 35 AND SHALL BE AIR TESTED IN ACCORDANCE WITH THE CITY REQUIREMENTS.
- ALL DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE AND RIGHT-OF-WAY OR PROPERTY LINE, UNLESS NOTED OTHERWISE.
- WATER SERVICES SHALL BE TYPE "K" COPPER, SIZED & LOCATED AS INDICATED ON THE PLANS, AND COMPLY WITH DETAIL W-7 OF THE GENERAL DESIGN STANDARDS. METER BOXES AND GATE VALVES SHALL MEET CITY OF CARROLLTON SPECIFICATIONS.
- MINIMUM BURY DEPTH OF CITY WATER MAINS IS 42" BELOW DEVELOPED GRADE.
- AT TIME OF PLACEMENT ALL WATER MAINS SHALL BE SWABBED WITH KNAPP POLLY PIG BARE SWAB OR APPROVED EQUAL.
- ALL WATER MAINS SHALL BE PLUGGED WITH A CAST IRON PLUG (OR APPROVED EQUAL) AT THE END OF EACH WORK DAY.
- UNLESS SHOWN OTHERWISE, ALL SANITARY SEWER PIPE SHALL BE PVC D-3040 SDR 35.
- SANITARY SEWER LATERALS SHALL BE AS INDICATED ON THE PLAN.
- EMBEDMENTS SHALL BE AS FOLLOWS:
 D.I. WATER - CLASS "C"
 PVC WATER - CLASS "B-1"
 PVC SEWER - CLASS "4"
- THE CONTRACTOR SHALL PROVIDE A TRENCH SAFETY PLAN AND BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO HIS WORK.
- ALL WATER METERS ARE TO BE LOCATED IN NON-TRAFFIC AREAS.
- CONSTRUCTION SHALL NOT PROCEED ABOVE THE FOUNDATION PRIOR TO COMPLETION OF ALL FIRE LANES AND FIRE HYDRANTS.
- ALL SANITARY SEWER LATERALS OUTSIDE OF EASEMENT SHALL BE INSPECTED BY CITY OF CARROLLTON BUILDING INSPECTOR PRIOR TO BACKFILL.
- ALL SANITARY SEWER LINES, WATER LINES & GAS LINES TO BE ENCASED IN CONCRETE OR APPROVED EQUAL WHEN LINES ARE UNDER PAVEMENT.
- TRAFFIC FLOW SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

LEGEND

- PROPOSED WATER METER
- PROPOSED FIRE HYDRANT

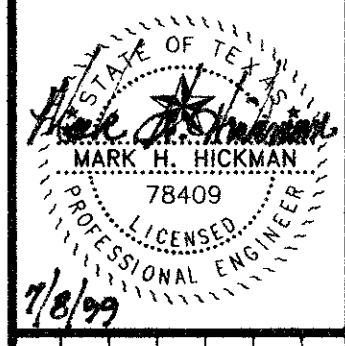


WESTGROVE DRIVE
 (60' R.O.W.)

CITY OF CARROLLTON
 TOWN OF ADDISON

UTILITY PLAN
 MAN'S BEST FRIEND
 CARROLLTON, TEXAS
 D/B CONSTRUCTORS, INC.
 2400 GREAT SOUTHWEST PKWY.
 FORT WORTH, TEXAS 76106

SCALE: AS SHOWN
 DATE: JUNE 1999
 DRAWN BY: A.B.C.
 CHK'D BY: M.H.H.
 JOB NO: 9001-73
 FILE: 800173UP.DWG
 SUBMITTAL: 06/23/99(3)



REVISION	DATE	DESCRIPTION

SHEET
C-3

HCE Hickman Consulting Engineers, Inc.
 1315 E 19th Street, Suite 2A
 Plano, Texas 75074
 (972) 509-1544 • Fax (972) 579-9644
 (800) 579-4367
 E-MAIL: HCE@AIRMAIL.NET
 Planners
 Engineers
 Surveyors

Delta=30°14'05"
 Radius=150.00'
 Length=79.14'
 CB=N29°26'57"E
 Chord=78.24'

WAYPOINT
 DRIVE
 60' P.O.D.

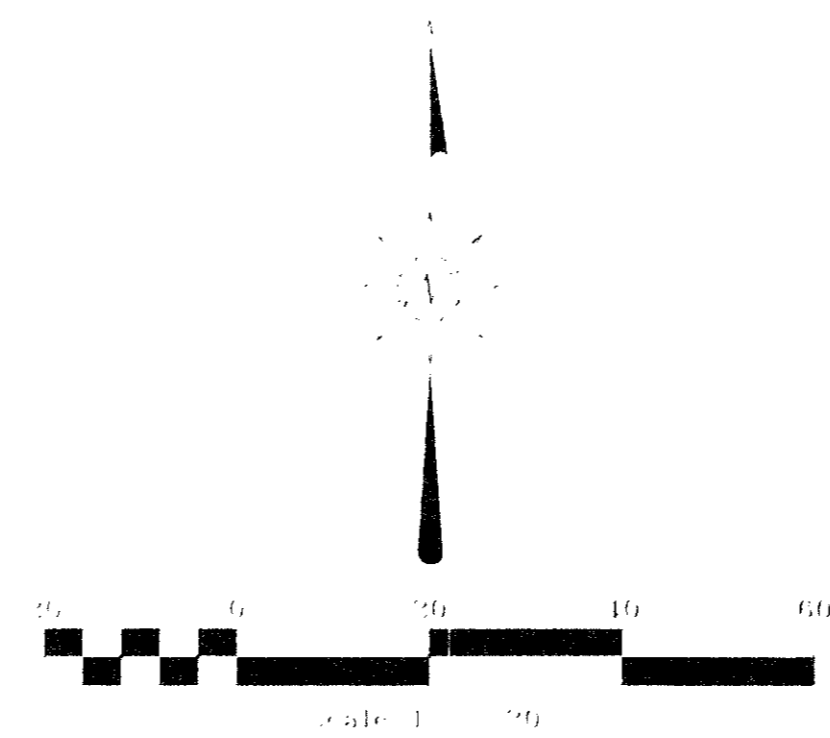
N15°24'54"W
 287.14'

N89°56'40"E
 394.37'

ONE-STORY BUILDING
 85.96' x 130.96'
 FIN FLR EL = 662.86

WESTGROVE DRIVE
 (60' R.O.W.)

S00°03'20"E
 347.50'



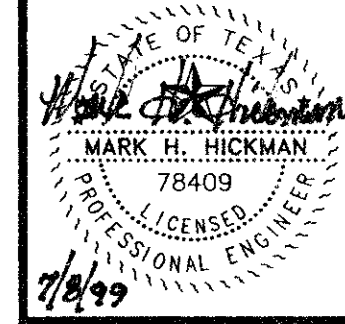
LEGEND

1. REFER TO SHEET 106 FOR PAVEMENT DETAILS AND NOTES.
2. NOTIFY OWNER 14 DAYS PRIOR TO BEGINNING OF ANY PAVING.
3. TRAFFIC FLOW SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

48.47' N89°56'40"E 366.47' 320.00'

CITY OF CARROLLTON
 TOWN OF ADDISON

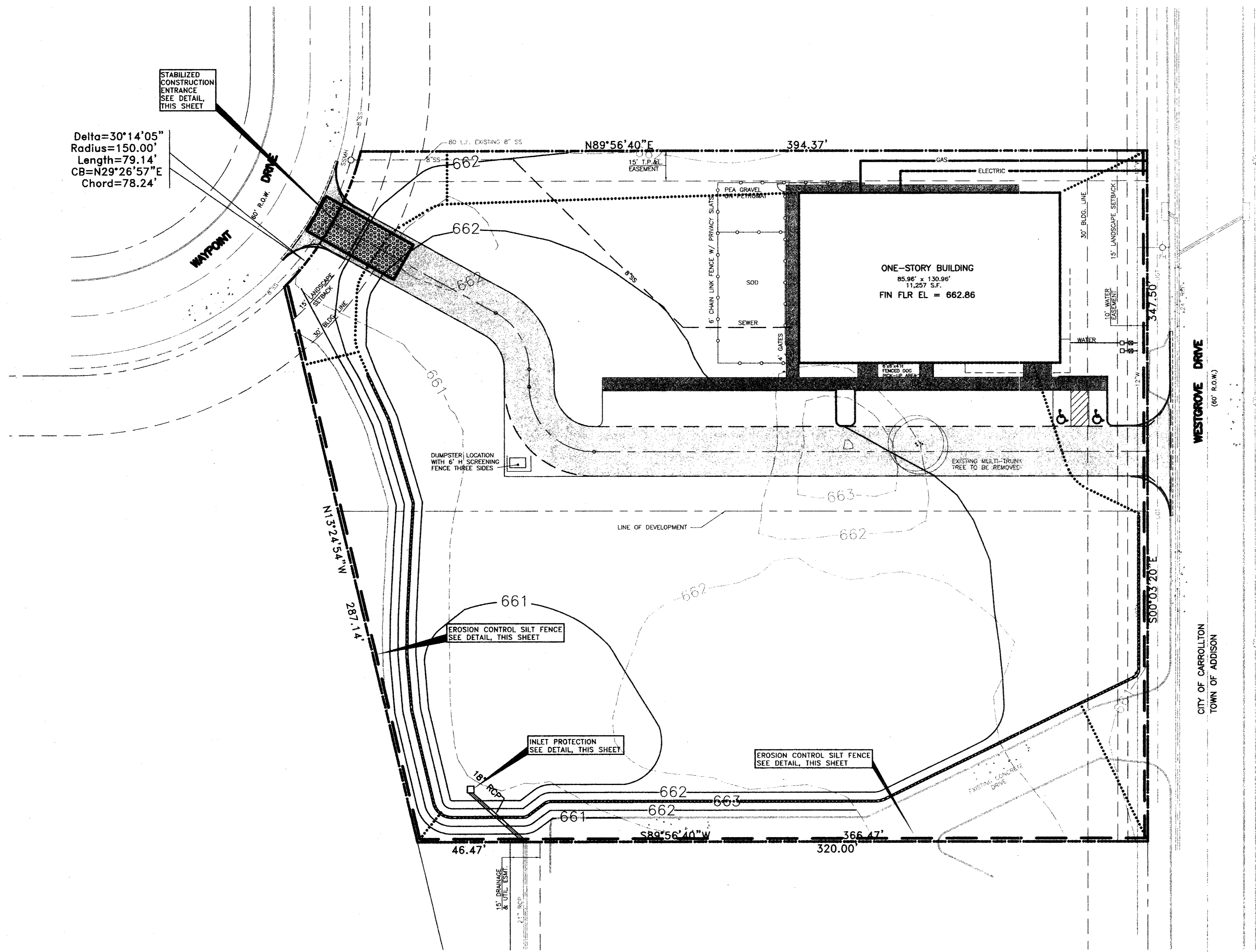
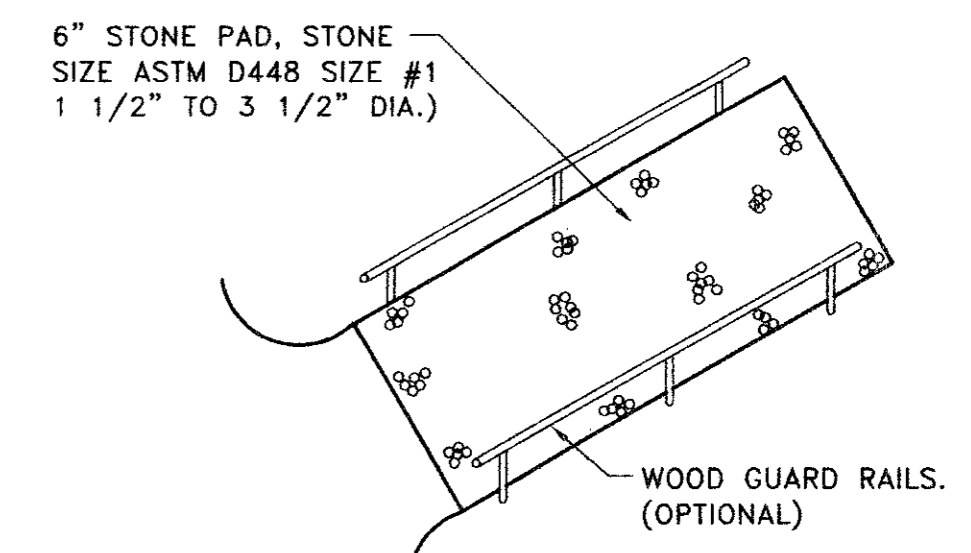
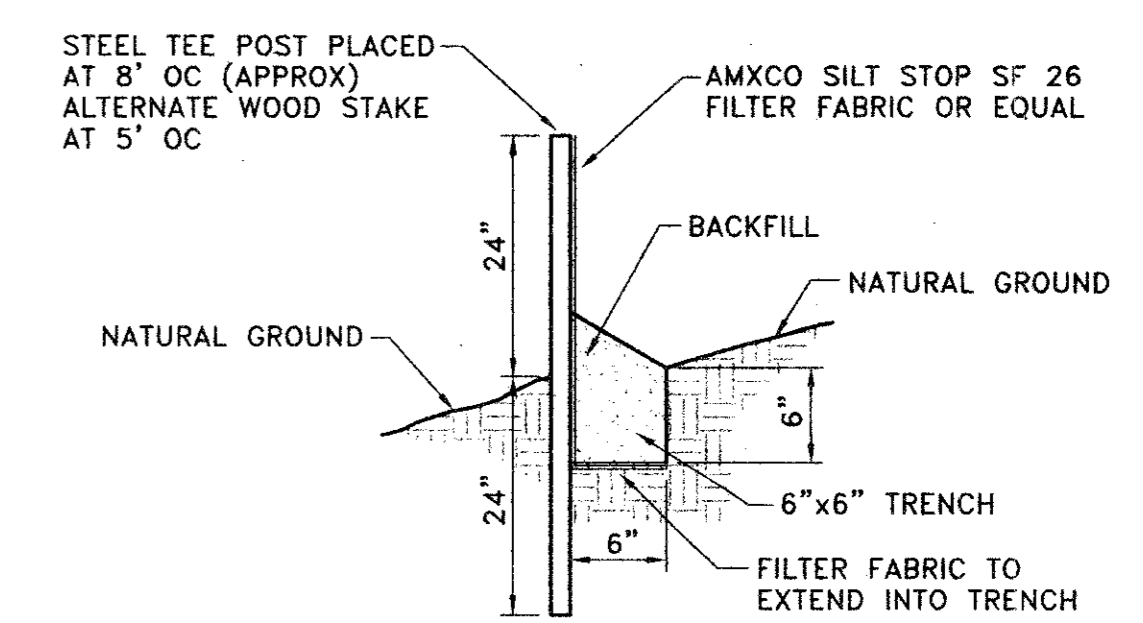
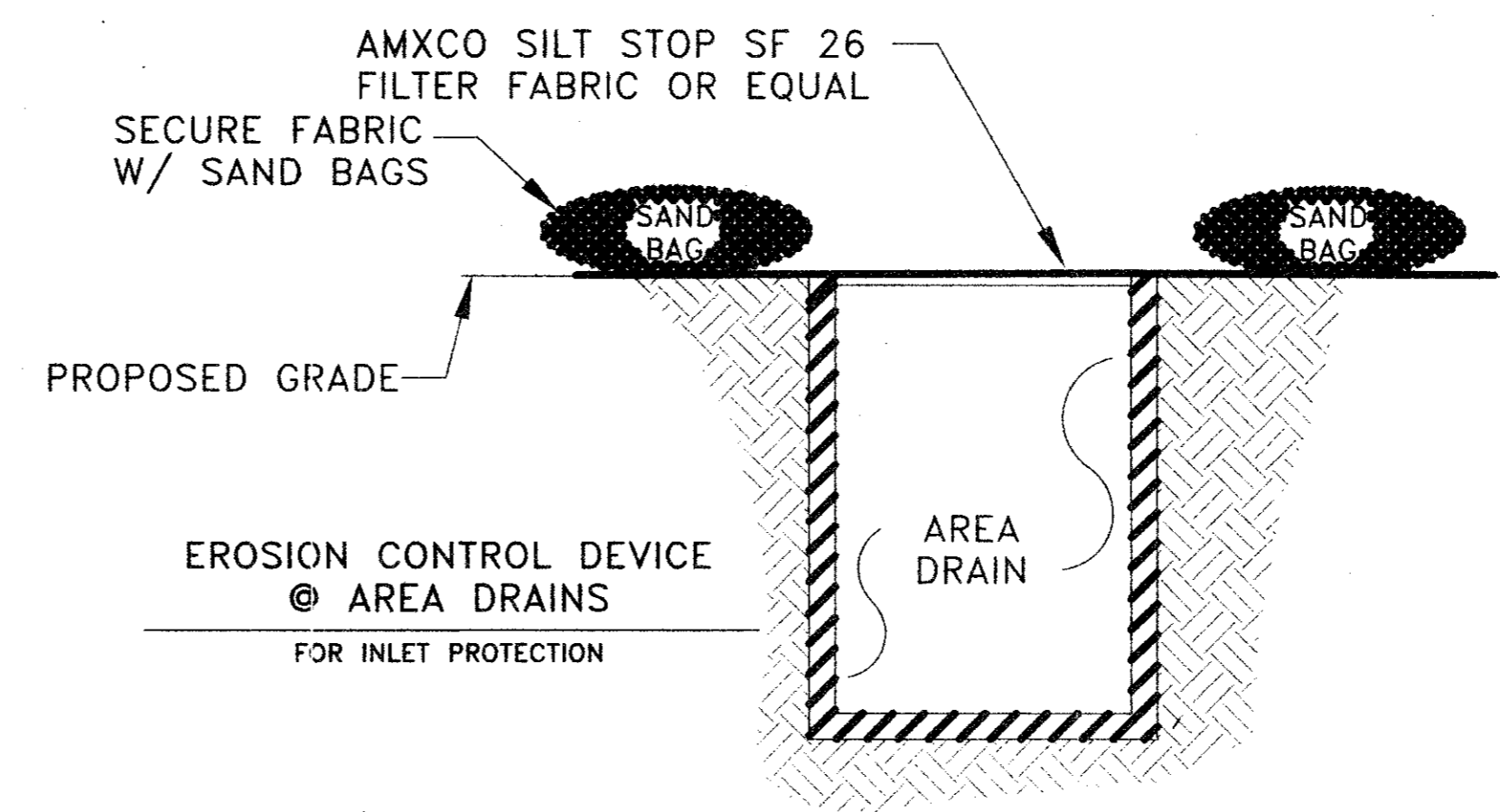
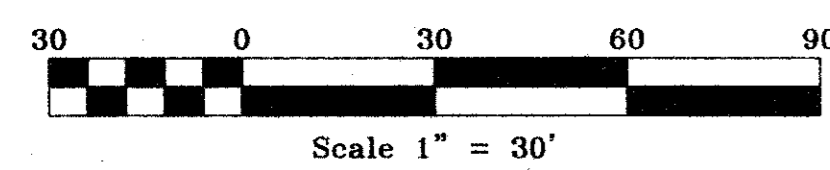
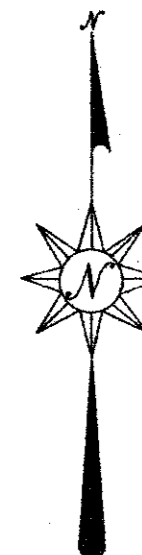
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 CHK'D BY: M.H.H.
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 FILE: 900173PP.DWG
 DATE SUBMITTED: 06/23/99



REVISION	DESCRIPTION	DATE	BY

PAVING PLAN
 MAN'S BEST FRIEND
 CARROLLTON, TEXAS
 D/B CONSTRUCTORS, INC.
 2400 GREAT SOUTHWEST PKWY.
 FORT WORTH, TEXAS 76106

HCE Hickman Consulting Engineers, Inc.
 1315 E. 10th Street, Suite 2A
 Plano, Texas 75074
 (972) 509-1544 • Fax (972) 578-9644
 (800) 579-4367
 E-MAIL: HCE@AIRMAL.NET
 Engineers Planners Surveyors



EROSION CONTROL NOTES

1. SOIL EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE CURRENT CITY SEDIMENT AND EROSION CONTROL ORDINANCE.
2. SEDIMENT TRAPS, SILT FENCE, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT ON-SITE MUST BE CONSTRUCTED AND FUNCTIONAL BEFORE ANY GRADING OR LAND DISTURBANCE TAKES PLACE.
3. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED DAILY BY THE SITE FOREMAN. ANY STRUCTURES THAT ARE DAMAGED OR INOPERATIVE WILL BE IMMEDIATELY REPAIRED OR REPLACED.
4. CONTRACTOR TO SUPPLY SPILL PROTECTION FOR ANY TEMPORARY FUEL STORAGE TANK ON SITE DURING CONSTRUCTION.

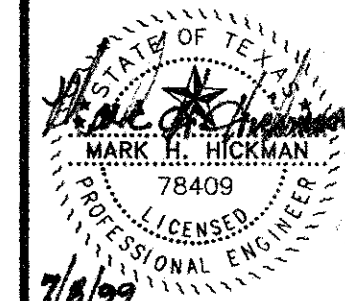
EROSION CONTROL CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE AT INDICATED LOCATION.
2. INSTALL HAY BALE DIKES & SILT FENCE AT SITES INDICATED.
3. BEGIN GRADING OPERATIONS, BRING SITE TO SUB GRADE.
4. INSTALL ALL UTILITIES.
5. INSTALL ALL CONCRETE AND ASPHALT AREAS.
6. REMOVE ALL SILT FROM EROSION CONTROL STRUCTURES. BACKFILL CONSTRUCTION ENTRANCE TO PROPOSED GRADE.
7. REMOVE ALL REMAINING EROSION CONTROL DEVICES.

EROSION CONTROL PLAN

MAN'S BEST FRIEND
CARROLLTON, TEXAS
D/B CONSTRUCTORS, INC.
2400 GREAT SOUTHWEST PKWY.
FORT WORTH, TEXAS 76106

SCALE: AS SHOWN
DATE: JUNE 1999
DRAWN BY: A.B.C.
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JOB NO: 9001-73
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DATE SUBMITTED: 08/23/99



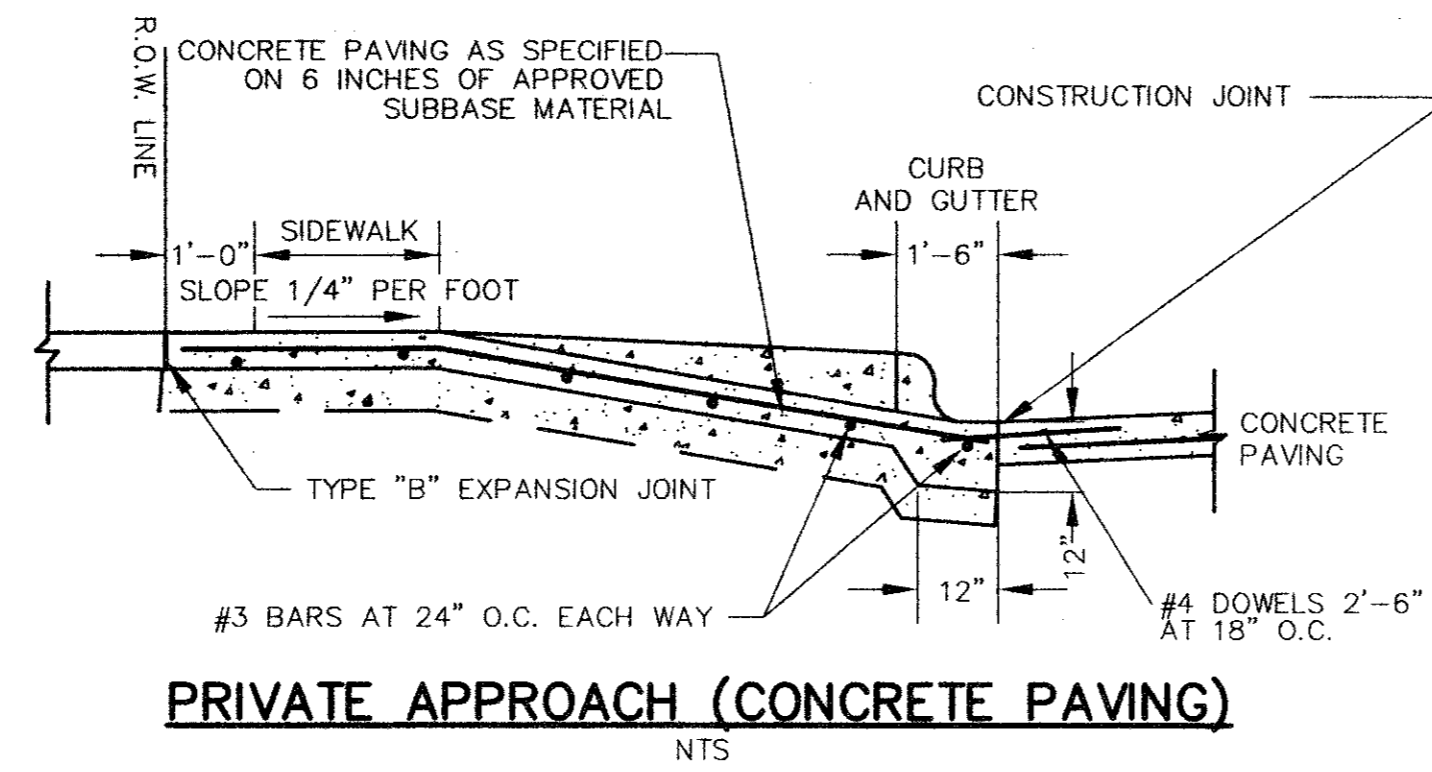
REVISION	DATE	BY	DESCRIPTION

FIRE LANE GENERAL NOTES

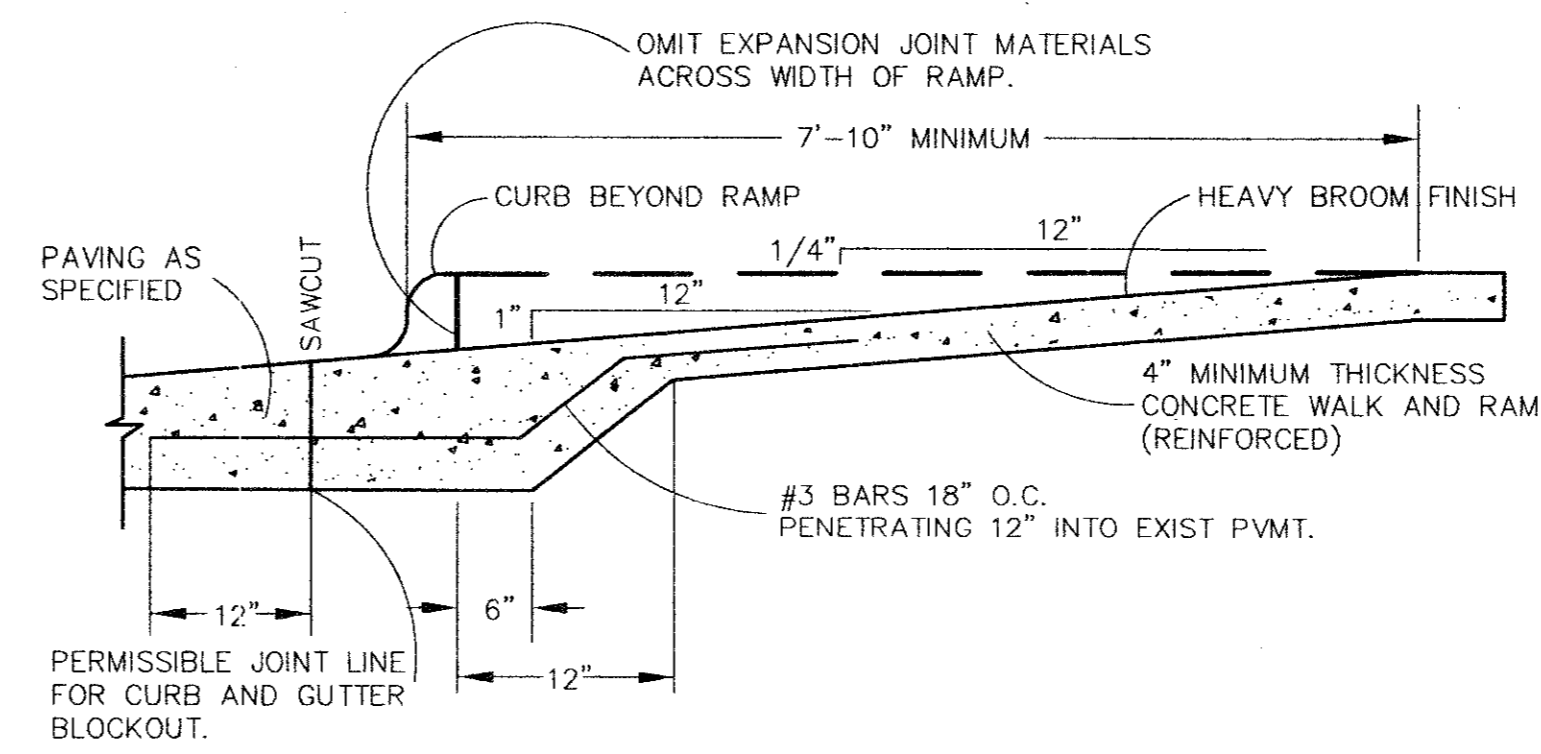
Designated Fire Lanes:

To meet the requirements of the Carrollton Fire Department for adequate horizontal emergency access, all parts of ALL buildings must be within one hundred fifty (150) feet of a public street or a designated fire lane.

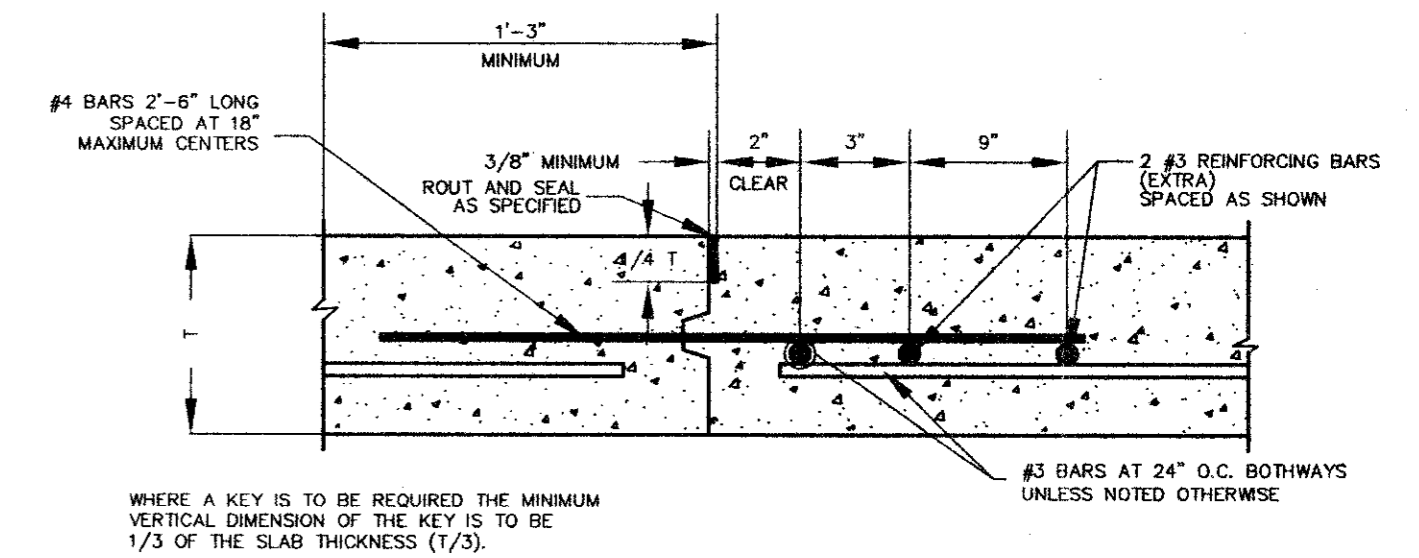
- FIRE LANE WIDTH:**
Minimum fire lane width shall be at least twenty-four (24) feet clear (face to face of curbs) without horizontal obstructions.
- FIRE LANE VERTICAL CLEARANCE:**
Minimum fire lane vertical clearance shall be at least thirteen feet and six inches (13'-6").
- INTERSECTION:**
The fire lane must intersect with a dedicated street r.o.w. In addition if this fire lane exceeds one hundred fifty (150) feet in length, it must intersect with a dedicated street r.o.w. at each end of the fire lane or terminate in a configuration as detailed in the following standard details.
- PAVING SURFACE:**
The fire lane shall be paved in accordance with the City of Carrollton standards as herein detailed.
- MARKING:**
The designated fire lane shall be marked as detailed in the following standard details.



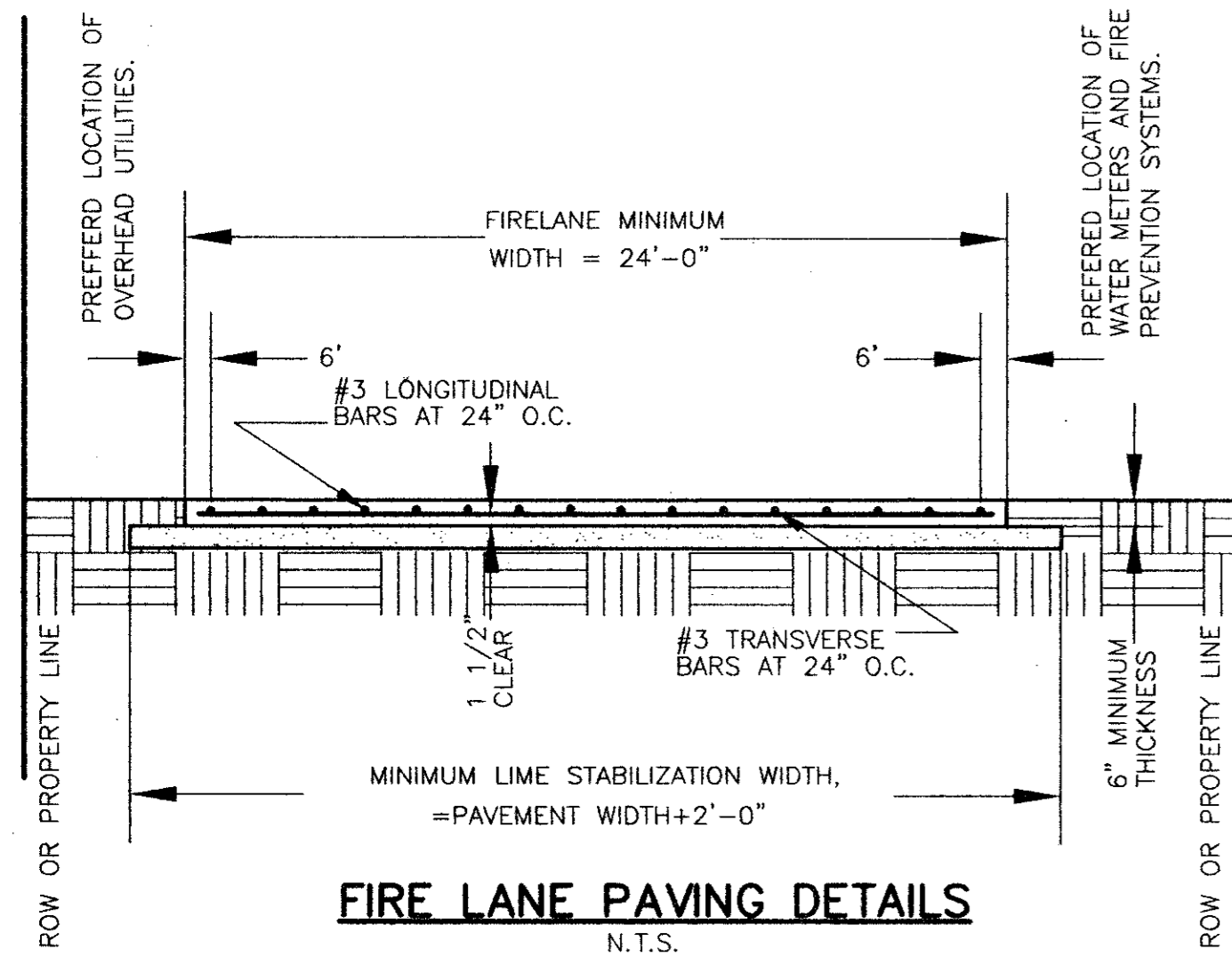
PRIVATE APPROACH (CONCRETE PAVING)
NTS



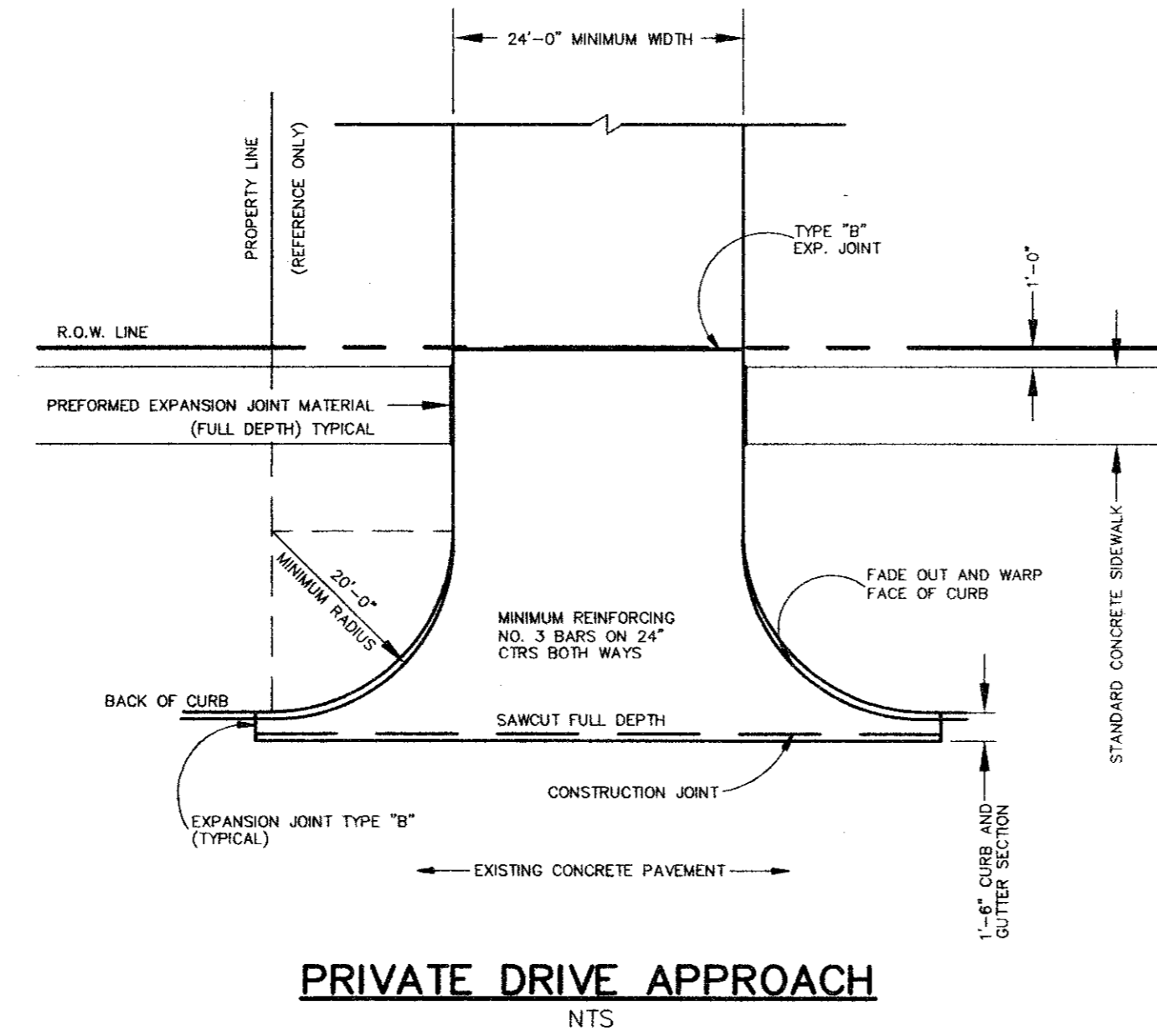
TYPICAL SECTION THRU RESIDENTIAL RAMP
NTS



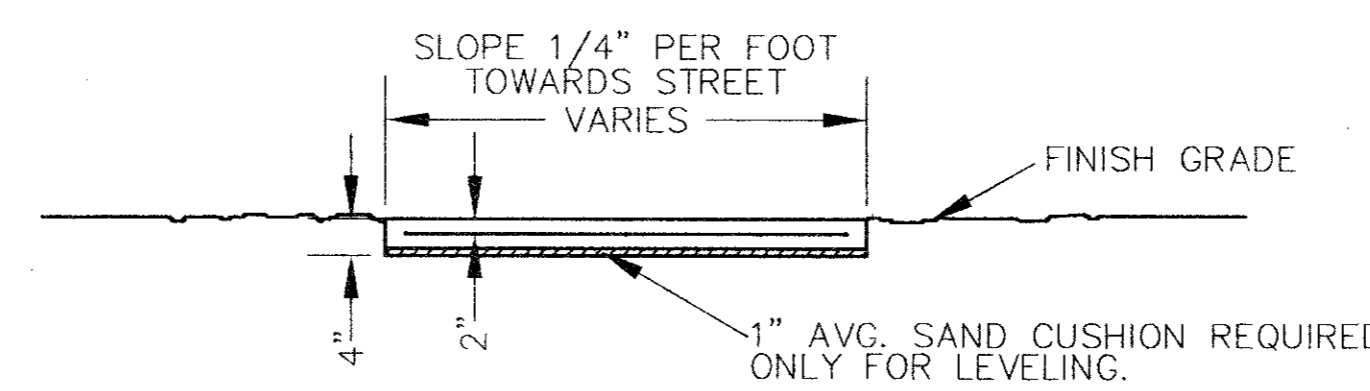
CONSTRUCTION JOINT
NTS



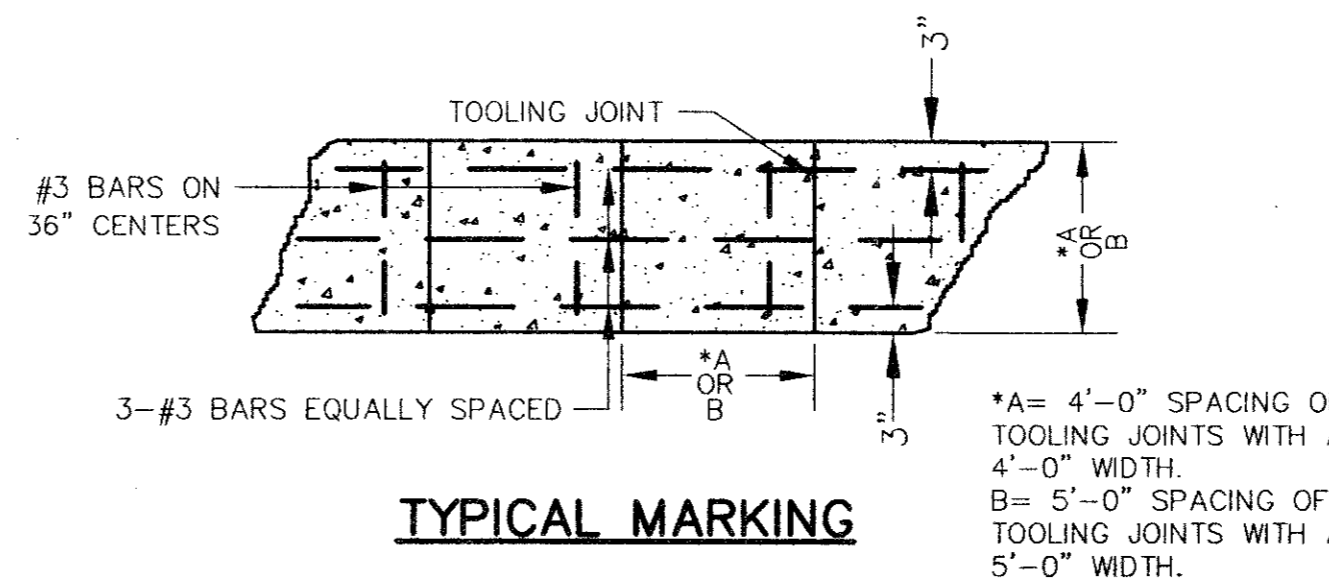
FIRE LANE PAVING DETAILS
N.T.S.



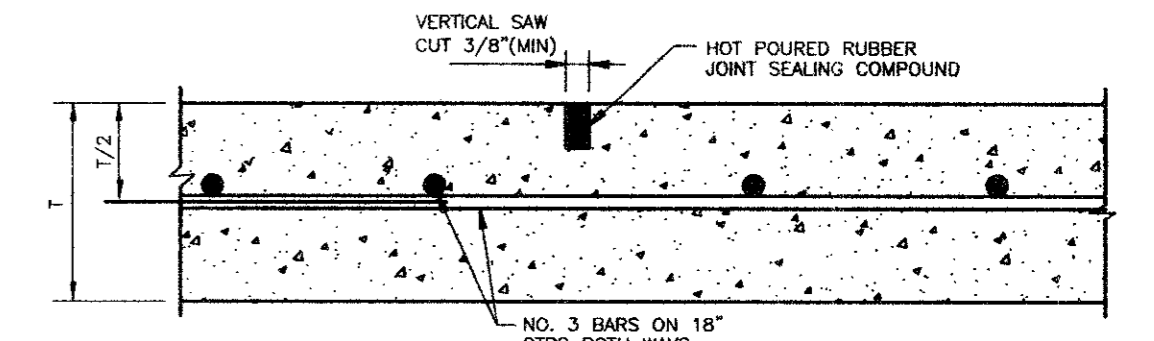
PRIVATE DRIVE APPROACH
NTS



TYPICAL SECTION



TYPICAL MARKING



CONTRACTION JOINT
NTS

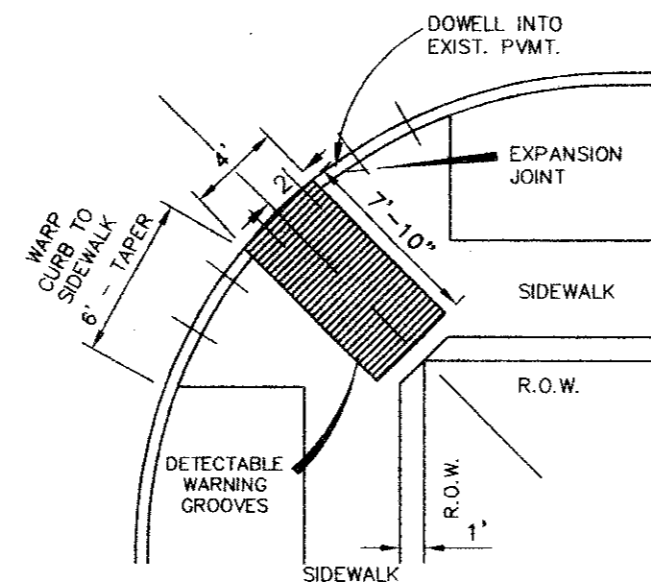
GENERAL NOTES:

- ALL #4 X 2'-6" BARS ARE TO BE SET IN DRILLED HOLES USING EPOXY GROUT IN THE MANUFACTURER'S RECOMMEND QUANTITIES.
- ALL REINFORCING BARS SHALL HAVE WIRE TIES AT EVERY INTERSECTION (100% TIE).
- WHERE NEW CONCRETE IS TO BE POURED AGAINST OLD CONCRETE, THE OLD CONCRETE SHALL HAVE A COAT OF EPOXY BONDING AGENT APPLIED AT THE MANUFACTURER'S SPECIFIED RATES.

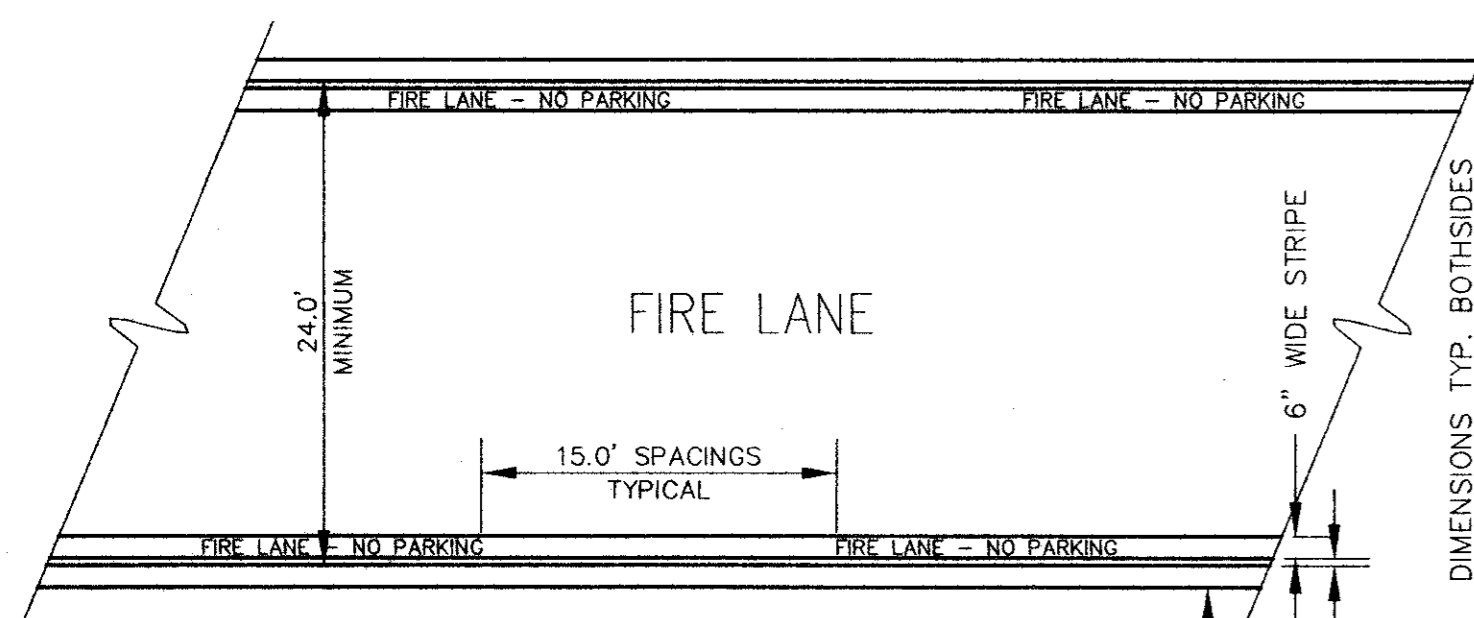
GENERAL NOTES:

- SEE PAVING IMPROVEMENT DETAIL GENERAL NOTES FOR HYDRATED LIME REQUIREMENTS FOR SOIL STABILIZATION AND DENSITY REQUIREMENTS.
- CONCRETE PAVING SHALL BE A MINIMUM FIVE AND ONE-HALF (5 1/2) SACK PER CUBIC YARD MIX WITH A MINIMUM FLEXURAL STRENGTH OF 650 P.S.I. AT 28 DAYS AND A MAXIMUM SLUMP OF 3 INCHES.
- REINFORCING SHALL BE NEW BILLET STEEL ASTM A615 GRADE 60 REINFORCING BARS WHICH SHALL BE FREE OF RUST, LOOSE SCALE, PAINT, OIL OR OTHER FOREIGN SUBSTANCES WHICH SHALL PREVENT BONDING OF THE CONCRETE AND REINFORCING BARS.
- EXPANSION JOINTS SHALL BE PROVIDED AT THE R.O.W. LINE OF THE FIRE LANE APPROACH AND AT A MAXIMUM OF 400 FOOT SPACINGS. TRANSVERSE SAW JOINTS SHALL BE PROVIDED AT 20' MAXIMUM SPACINGS.
- WHERE A CURB IS USED, THE REQUIRED CLEARANCE SHALL BE MEASURED FROM THE CURB FACE TO ANY PERMANENT TRAFFIC OBSTACLE.

- FOR REAR ENTRANCE DRIVE APPROACHES THE SIDEWALKS AND CURB RETURNS ARE TO BE OMITTED.
- FOR CONSTRUCTION JOINT DETAILS SEE DRAWING P-10.
- FOR EXPANSION JOINT DETAILS SEE DRAWING P-11.



STREET INTERSECTION PLAN VIEW



FIRE LANE STRIPING DETAIL

STRIPING DETAILS AND SPECIFICATIONS

- PAINT:**
 - STRIPES SHALL BE SIX(6) INCHES WIDE PAINTED WITH AN EXTERIOR ACRYLIC LATEX PAINT. COLOR SHALL BE "TRAFFIC RED" GILDDEN NO. 63251 OR EQUAL.
 - LETTERS SHALL BE FOUR(4) INCHES HIGH PAINTED WITH AN EXTERIOR ACRYLIC PAINT. COLOR SHALL BE "TRAFFIC WHITE" GILDDEN NO. 563245 OR EQUAL.
- APPLICATION:**
 - STRIPES MAY BE BRUSHED OR SPRAYED. ONE COAT TO FINISH.
 - LETTERS SHALL BE STENCIL FORMED, BRUSH APPLIED AND SPACED AS DETAILED ON THIS SHEET.

GENERAL NOTES:

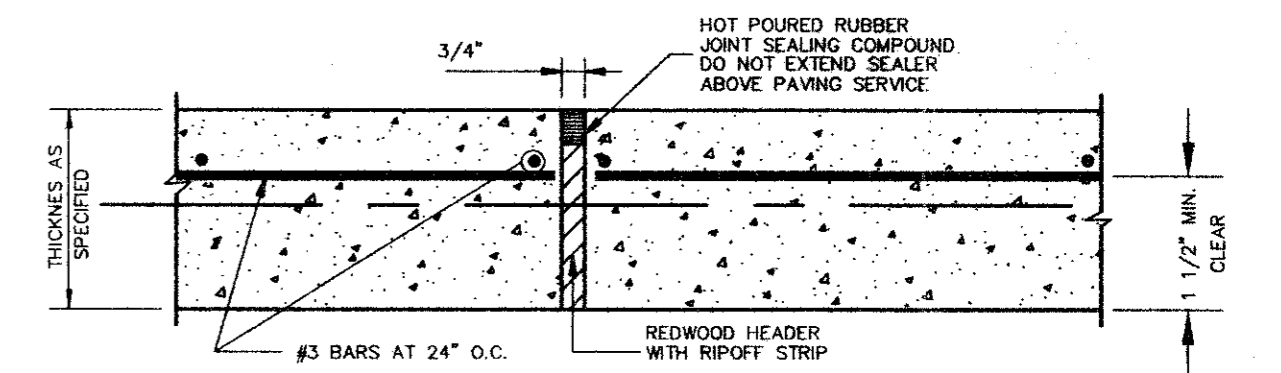
- BARRIER FREE RAMPS SHALL BE CONSTRUCTED AS EXTENSIONS OF STANDARD CONCRETE SIDEWALKS EXCEPT AS NOTED IN THESE DETAILS.
- MAXIMUM SLOPE ON BARRIER FREE RAMPS SHALL NOT EXCEED 1" PER FOOT ANY LOCATION.
- DESIGNS SHOWN ARE FOR 6" CURBS. FOR CURBS WITH HEIGHT GREATER THAN 6", DIMENSIONS SHALL BE INCREASED PROPORTIONATELY.
- STREETS ON STEEP GRADE WILL REQUIRE LONGER TRANSITIONS ON UPGRADE SIDE.
- LOCATION OF BARRIER FREE RAMP MAY BE SHIFTED TO CLEAR OBSTRUCTIONS WITH THE APPROVAL OF THE CITY ENGINEER.
- DETECTABLE WARNING GROOVES SHALL BE 1/4" TO 3/4" WIDE, 1/8" DEEP, SPACED 3" TO 4 1/2" APART.

BARRIER FREE RAMP

GENERAL NOTES:

- CONCRETE STRENGTH SHALL BE A MINIMUM OF 3000 P.S.I. AT 28 DAYS.
- EXPANSION JOINTS SHALL BE 1/2" THICK REDWOOD FOR FULL DEPTH OF SIDEWALK AND SHALL INCLUDE GREASED 24" SMOOTH 1/2" DIA. DOWEL STEEL BARS WITH CAPS.

SIDEWALK DETAILS STEEL DETAILING
NTS



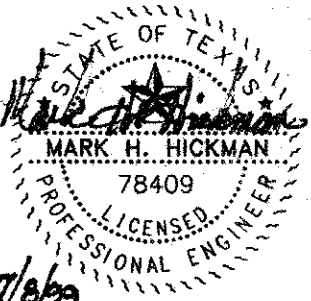
EXPANSION JOINT TYPE "B"
NTS

E:\900173\90017301\7301.dwg Thu Jul 08 14:08:23 1999 BLAKE

HCE Hickman Consulting Engineers, Inc.
1315 E. 19th Street, Suite 2A
Carrollton, Texas 76074
(972) 509-1544 • Fax (972) 578-0644
(800) 579-4367
E-MAIL: HCE@AOLMAIL.NET
Planners Surveyors Engineers

DETAILS
MAN'S BEST FRIEND
CARROLLTON, TEXAS
D/B CONSTRUCTORS, INC.
2400 GREAT SOUTHWEST PKWY.
FORT WORTH, TEXAS 76106

SCALE: AS SHOWN
DATE: JUNE 1999
DRAWN BY: A.B.C.
CHK'D BY: M.H.H.
JOB NO: 9001-73
FILE: 90017301.DWG
DATE SUBMITTED: 06/23/99(3)



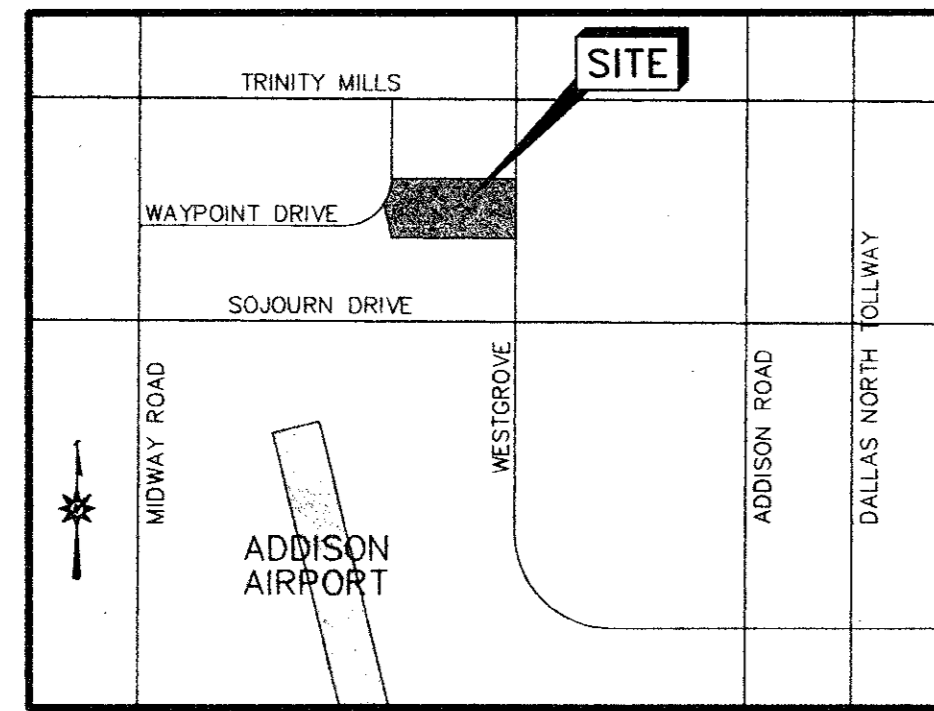
REVISION	DATE	BY	DESCRIPTION

CIVIL CONSTRUCTION PLANS

FOR

MAN'S BEST FRIEND

CARROLLTON, TEXAS



VICINITY MAP
N.T.S.

D/B CONSTRUCTORS, INC.
2400 GREAT SOUTHWEST PKWY.
FORT WORTH, TEXAS

JUNE 1999

SHEET INDEX	
SHT. NO.	SHEET TITLE
	COVER SHEET
	PLAT
C-1	SITE PLAN
C-2	GRADING AND DRAINAGE PLAN
C-3	UTILITY PLAN
C-4	PAVING PLAN
C-5	EROSION CONTROL PLAN
C-6	DETAILS

PLAN SUBMITTALS		
No	DATE	COMMENTS
1	04/24/99	FIRST SUBMITTAL - CITY OF CARROLLTON
2	06/18/99	SECOND SUBMITTAL - CITY OF CARROLLTON
3	06/23/99	THIRD SUBMITTAL - CITY OF CARROLLTON

REVISIONS/CORRECTIONS			
DATE	No	SHTS	DESCRIPTION

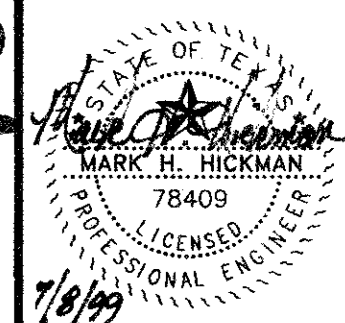
MAN'S
BEST
FRIEND
July 99
FILE COPY

B12-5

HCE Hickman Consulting Engineers, Inc.
 1315 E. 19th Street, Suite 2A
 Plano, Texas 75074
 (972) 509-1544 • Fax (972) 578-9644
 (800) 579-4367
 E-MAIL: HCE@AIRMAIL.NET
 Engineers Planners Surveyors

COVER SHEET
 MAN'S BEST FRIEND
 CARROLLTON, TEXAS
 D/B CONSTRUCTORS, INC.
 2400 GREAT SOUTHWEST PKWY.
 FORT WORTH, TEXAS 76106

SCALE: AS SHOWN
 DATE: JUNE 1999
 DRAWN BY: A.B.C.
 CHK'D BY: M.H.H.
 JOB NO. 8001-73
 FILE: 800173CS.DWG
 DATE SUBMITTAL: 06/23/99(3)

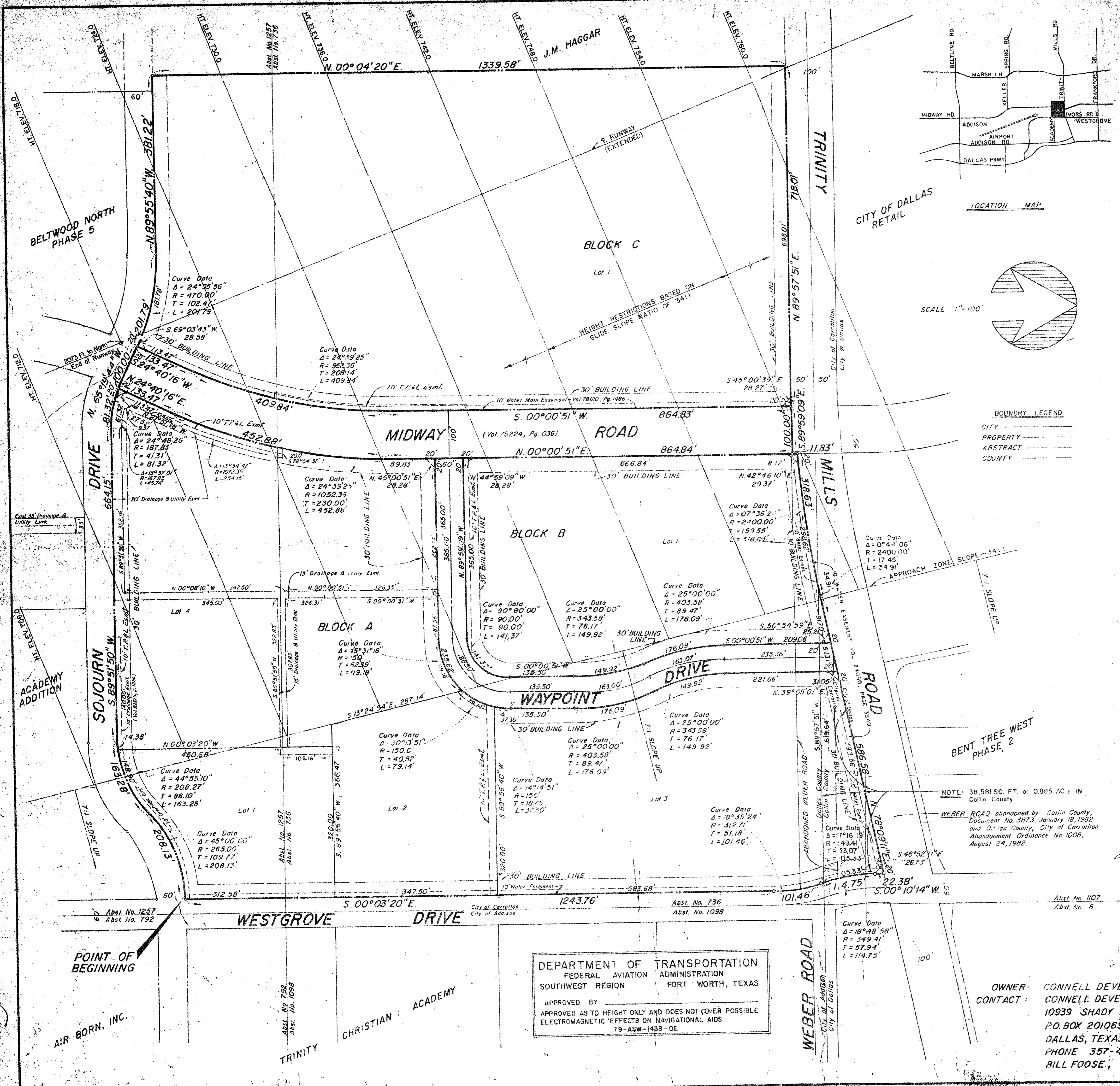


REVISION	DATE	DESCRIPTION

SHEET

MAN'S BEST FRIEND WESTGROVE

B12-5



OWNER'S CERTIFICATE

STATE OF TEXAS
COUNTY OF DALLAS & COUNTY OF COLLIN

WHEREAS, Connell Development Co. is the Owner of a tract of land situated in the Wm. B. Rowe Survey, Abstract No. 1 and in the Wm. Kingwell Survey, Abstract No. 736, City of Carrollton, Dallas and Collin Counties, Texas and being more particularly described as follows:

BEGINNING at an iron rod for corner at the intersection of the west right-of-way line of Westgrove Drive (a 60' right-of-way) and the north right-of-way line of Sojourn Drive (a 60' right-of-way);

THENCE, along the north line of Sojourn Drive in a curve to the left, having a tangent bearing of S. 89°56'40" W. and a tangent length of 109.77-feet, a central angle of 45°00'00", a radius of 265.00-feet and a length of 208.13 to the beginning of a curve to the right in the north line of Sojourn Drive;

THENCE, continuing along the north line of Sojourn Drive in a curve to the right, having a tangent bearing of S. 44°55'10" W. and a tangent length of 85.10-feet, a central angle of 44°55'10", a radius of 208.27-feet and a length of 163.28-feet;

THENCE, S. 89°55'50" W., 664.15-feet continuing along the north line of Sojourn Drive to an iron rod for corner;

THENCE, continuing along the north line of Sojourn Drive in a curve to the right having a tangent bearing of S. 89°55'50" W. and a tangent length of 41.31-feet, a central angle of 24°48'26", a radius of 187.87-feet and a length of 31.32-feet to an iron rod for corner at the intersection of the north line of Sojourn Drive with the east line of Midway Road (a 100-foot right-of-way);

THENCE, N. 65°19'14" W., 100.00-feet to an iron rod for corner at the intersection of the north line of Sojourn Drive with the west line of Midway Road;

THENCE, continuing along the north line of Sojourn Drive in a curve to the left having a tangent bearing of N. 65°19'14" W. and a tangent length of 102.47-feet, a central angle of 24°35'56", a radius of 470.00-feet and a length of 201.75-feet;

THENCE, N. 89°55'40" W., 331.22-feet continuing along the north line of Sojourn Drive to an iron rod for corner;

THENCE, N. 00°00'20" E., 1,339.58-feet to an iron rod for corner on the south right-of-way line of Trinity Mills Road (a 100-foot right-of-way);

THENCE, N. 89°55'51" E., 718.01-feet along the south line of Midway Road to an iron rod for corner at the intersection of the south line of Midway Road with the west line of Midway Road;

THENCE, S. 89°55'09" E., 100.00-feet to a point on the east line of Midway Road;

THENCE, W. 00°00'51" E., 11.83-feet along the east line of Midway Road to an iron rod for corner at the intersection of the east line of Midway Road with the south line of Trinity Mills Road;

THENCE, along the south line of Trinity Mills Road in a curve to the left having a tangent bearing of N. 89°55'09" E. and a tangent length of 159.55-feet, a central angle of 7°36'24", a radius of 2,400.00-feet and a length of 318.63-feet;

THENCE, N. 73°00'11" E., 586.58-feet continuing along the south line of Trinity Mills to an iron rod for corner at the intersection of the south line of Trinity Mills Road with the west line of Westgrove Drive;

THENCE, S. 00°00'14" W., 22.38-feet along the west line of Westgrove Drive in a curve to the left having a tangent bearing of S. 00°00'14" W. and a tangent length of 57.94-feet, a central angle of 18°48'58", a radius of 349.41-feet and a length of 114.75-feet to the beginning of a curve to the right in the west line of Westgrove Drive;

THENCE, continuing along the west line of Westgrove Drive in a curve to the right having a tangent bearing of S. 18°35'44" E. and a tangent length of 51.18-feet, a central angle of 18°35'44", a radius of 312.71-feet and a length of 101.46-feet;

THENCE, S. 00°00'20" E., 1,243.76-feet continuing along the west line of Westgrove Drive to the Point of Beginning and containing a gross area of 2,507,428 square feet, save and except 193,366 square feet in Midway Road (a 100-foot right-of-way) from Sojourn Drive to Trinity Mills Road as described in dedication plat No. 1 for record in Volume 75224 Page 036 of the Dallas County Deed Records, and containing a net area of 2,364,018 square feet or 54.272-acres of land more or less.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT, Connell Development Co. does hereby adopt this plat designating the herein above described property as BELTWOOD NORTH-TRINITY ADDITION an addition to the City of Carrollton, Texas and does hereby dedicate to the City of Carrollton, Texas and to the use and accommodation of all public utilities, forever the street right-of-way shown thereon for the mutual use and accommodation of all public utilities, to use or using same. Any utility shall have the right to remove and keep removed all or part of any building, fences, trees, shrubs, or other improvements which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective systems on or over any part of the right-of-way, and any utility shall at all times have the right of ingress and egress to and from and upon the said right-of-way for the purpose of constructing, inspecting, and maintaining, and adding to or removing all or any part of its respective system and the necessity at any time of procuring the permission of anyone.

WITNESS MY HAND & SEAL OF OFFICE, this 14th DAY OF May, 1984.

STATE OF TEXAS
COUNTY OF DALLAS

Before me, the undersigned, a Notary Public in and for said County and State, on this day personally appeared C. W. Foote, President of Connell Development Co., known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act and deed of Connell Development Co. for the purposes and consideration therein expressed, and in my capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 15th day of May, 1984.

Thomas Stegemoller
Notary Public in and for Dallas County, Texas

ENGINEER'S CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS:

That, I, Donald C. Moreau, do hereby certify that I prepared this plat from an actual and accurate Survey of the land and that the corner monuments shown therein were properly placed under my personal supervision in accordance with the platting rules and regulations of the City of Carrollton, Texas.

Donald C. Moreau
Donald C. Moreau, R.P.S.

STATE OF TEXAS
COUNTY OF DALLAS

Before me, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Donald C. Moreau, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 22nd day of May, 1984.

Thomas Stegemoller
Notary Public in and for Dallas County, Texas

CERTIFICATE OF APPROVAL

APPROVED by the City of Carrollton, Texas, this 23rd day of May, 1984.

ATTEST: Date

Clara C. ...
City of Carrollton, Texas.

UTILITY CERTIFICATE

THIS PLAT CORRECTLY PRESENTS THE REQUIRED UTILITY EASEMENTS FOR THE DEVELOPMENT

DATE	SIGNATURE
5-22-84	<i>Tom Stegemoller</i>
5-24-84	<i>Clara C. ...</i>
5-30-84	<i>Wayne ...</i>

FLAT

BELTWOOD NORTH-TRINITY ADDITION

WM. B. ROWE SUR-ABST. NO. 1257
WM. KINGWELL SUR-ABST. NO. 736

CITY OF CARROLLTON, COLLIN & DALLAS COUNTY, TEXAS

DATE: OCTOBER 1983 SCALE: 1"=100'

DONALD C. MOREAU - CONSULTING ENGINEER
2355 STEMMONS FRYKY, SUITE 906 • DALLAS, TEXAS • 638-8430

OWNER: CONNELL DEVELOPMENT CO.
CONTACT: CONNELL DEVELOPMENT COMPANY
10939 SHADY TRAIL
P.O. BOX 201069
DALLAS, TEXAS 75220
PHONE 357-4694
BILL FOOSE, MARK CONNELL