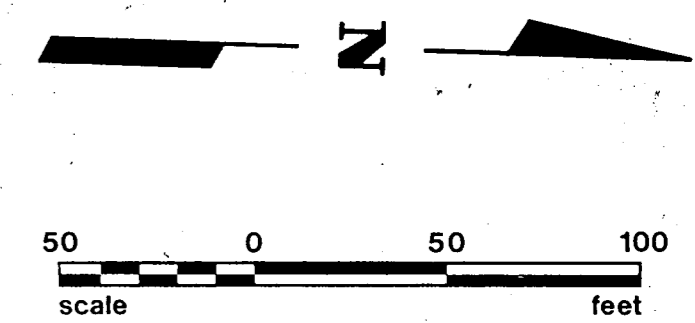


SANITARY SEWER CURVE DATA

CURVE NO.	DELTA	RADIUS	LENGTH	CHORD	TANGENT
1	30°56'23"	200.00'	108.00'	106.69'	55.35'
2	23°39'32"	200.00'	82.59'	82.00'	41.89'
3	23°18'33"	720.00'	292.91'	290.90'	148.51'
4	68°53'03"	305.00'	366.69'	345.00'	209.17'
5	51°53'20"	200.00'	181.13'	175.00'	97.31'
6	42°30'27"	200.00'	148.38'	145.00'	77.79'
7	17°15'19"	320.00'	96.37'	96.01'	48.55'
8	48°05'45"	200.00'	167.89'	163.00'	89.25'
9	30°44'02"	200.00'	107.28'	106.00'	54.97'
10	10°54'10"	200.00'	38.06'	38.00'	19.09'
11	63°20'11"	200.00'	221.09'	210.00'	123.37'

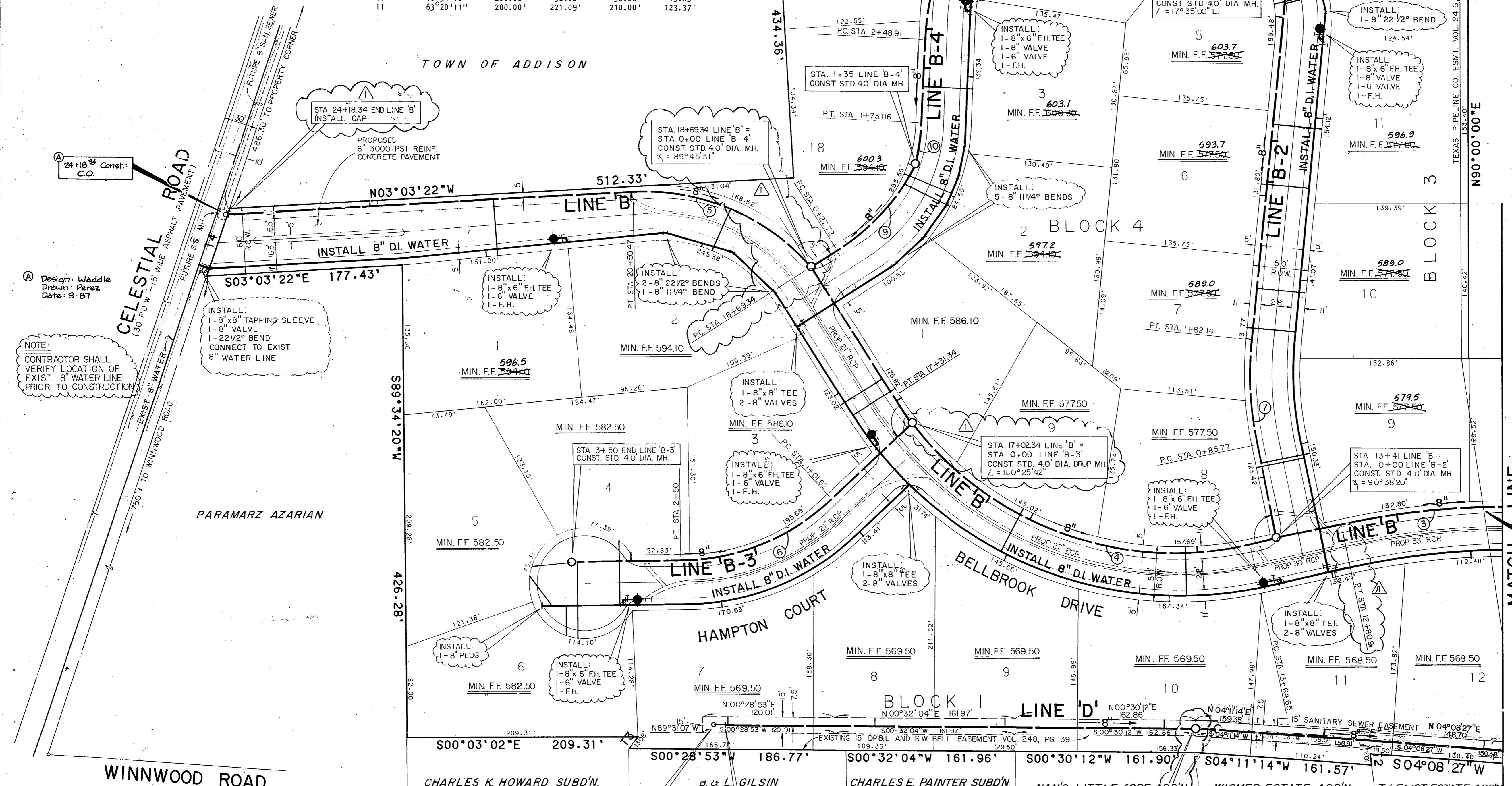


- GENERAL WATER AND SANITARY SEWER NOTES
- ALL WATER MAINS SHALL BE DUCTILE IRON CLASS 51 WATER PIPE WITH POLYETHYLENE WRAP ON PIPE, FITTINGS, AND FIRE HYDRANT BASES.
 - ALTERNATE - ALL 8" WATER MAINS SHALL BE PVC CLASS 200 WATER PIPE FOR PVC SERVICE TAPS, TAPPINGS SADDLE BE USED.
 - 8" WATER MAINS SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED STREET GRADE OR 60" DEPTH IN UNIMPROVED STREETS OR AS REQUIRED TO CLEAR OTHER UTILITIES.
 - ALL WATER DEADHEADS SHALL BE 1" COPPER, LOCATED AS SHOWN, AND REFERENCED AS FOLLOWS: TOTAL 45' 1" DEADHEADS.
 - ALL SANITARY SEWER LATERALS SHALL BE 6", LOCATED AS SHOWN, AND REFERENCED AS FOLLOWS: TOTAL 45' 6" LATERALS.
 - ALL WATER AND SANITARY SEWER LATERALS SHALL BE SEPARATED BY 10 FEET (MINIMUM).
 - EXTEND WATER DEADHEADS AND SANITARY SEWER LATERALS 2' BEYOND PROPOSED CURBS, UNLESS OTHERWISE SHOWN.
 - CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCTCOG STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
 - BULLHEAD SERVICES AND METER WILL BE INSTALLED BY THE CITY.
 - CONTRACTOR SHALL USE 5" BEVEL BEND PIPE FOR PVC SANITARY SEWER IF NEEDED; DO NOT PULL PVC PIPE.
 - REFER TO SHEET 16 FOR EMBEDMENT DETAILS.

JOHN L. SHIRLEY

CAUTION:
TEXAS PIPELINE CO. CROSSING. CONTRACTOR TO VERIFY DEPTH IN FIELD AND ADJUST IF NECESSARY. CONTACT MR. R. A. DUFF AT (409)279-2441 48 HOURS PRIOR TO CONSTRUCTION.

- BENCHMARK LIST
- BM #1 RAILROAD SPIKE IN THE NORTH SIDE OF A POWER POLE APPROXIMATELY 620 FEET SOUTH OF BELLINE ROAD AND 150 FEET WEST OF WINNWOOD ROAD. ELEV. 560.69
 - BM #2 RAILROAD SPIKE IN THE WEST SIDE OF A POWER POLE APPROXIMATELY 1300 FEET SOUTH OF BELLINE ROAD AND 230 FEET WEST OF WINNWOOD ROAD. ELEV. 569.89



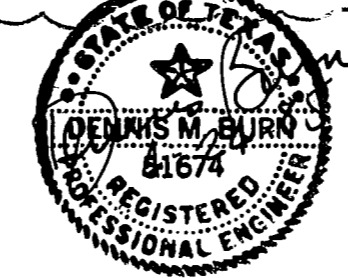
Design: Waddle
Drawn: Perez
Date: 9-87

NOTE:
CONTRACTOR SHALL VERIFY LOCATION OF EXIST. 8" WATER LINE PRIOR TO CONSTRUCTION.

- REVISIONS
- △ REVISED STATIONS ON LINE 'B' AND LINE 'B-2'
 - ⊥ REVISED STATION ON LINE 'D'

DESIGNED BY *Denis Dunn, P.E.* DATE 5-31-85
 R.O.W. APPROVED _____ DATE _____
 ENGINEER OF DESIGN *Wicki Reed* DATE 6-11-85
 CONTRACT NO. _____ DATE _____

WISMER ESTATE ADDN. T.J. ELIOT ESTATE ADDN.
 DESIGNED BY: *Denis Dunn, P.E.* DATE 4-24-85
 R.O.W. APPROVED _____ DATE _____
 ENGINEER OF DESIGN *Wicki Reed* DATE 5-6-85
 CONTRACT NO. 85-332-P ~ 4-22-85



WATER & SANITARY SEWER PLAN
BELLBROOK ESTATES
 SHARIF · MUNIR · DAVIDSON DEVELOPMENT CORP.
WATER UTILITIES DEPARTMENT
CITY OF DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
D.M.B.	O.R.D.	DEC. 1984	1" = 50'		411Q	1960