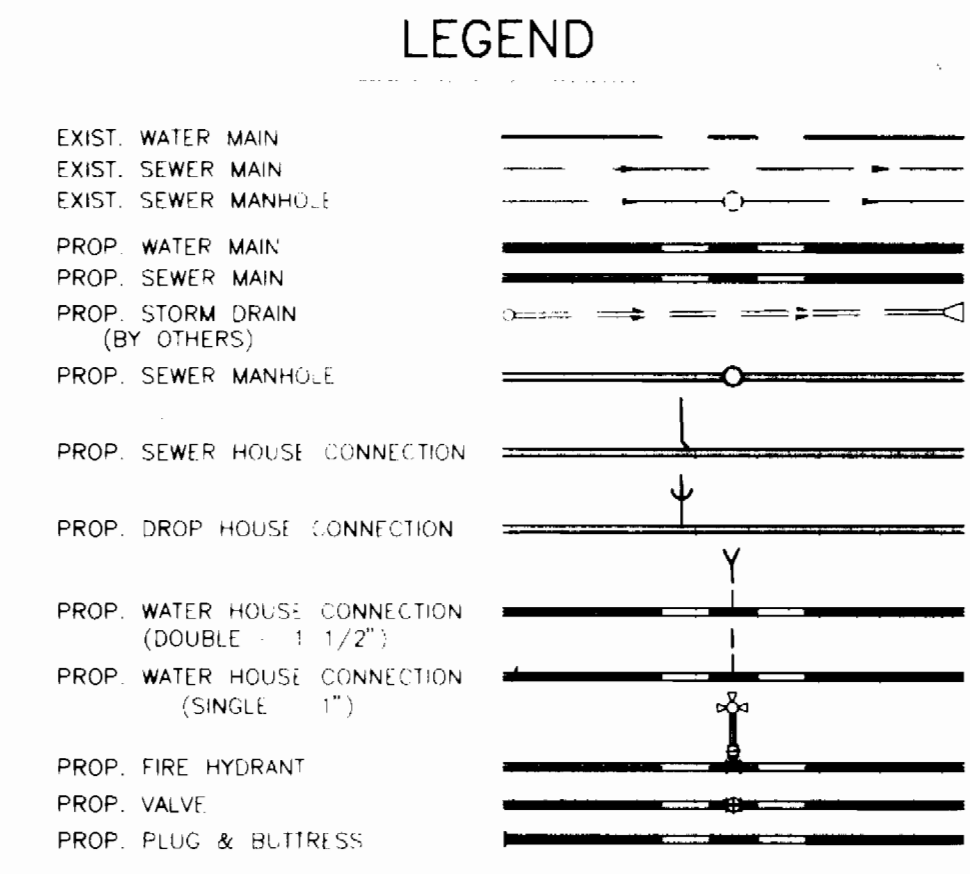


3455 ws/1 PAPILLON sect. 1, lots 1-118

PUBLIC WATER AND SEWER EXTENSIONS PAPILLON SECTION 1 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT No.14-3455-D

BENCH MARKS (NAD 83)
 HO. CO. #24FA ELEV. 263.814
 STAMPED CONC. MONUMENT NEAR THE S.E. COR.
 OF THE INTERSECTION OF FREDERICK RD. AND
 ROGERS AVE.
 N 583751.408 E 1366091.855
 HO. CO. #25AA ELEV. 308.559
 STAMPED CONC. MONUMENT NEAR THE N.W.
 COR. OF THE INTERSECTION OF ROGERS AVE.
 AND PATAPSCO RIVER RD.
 N 585307.172 E 1366070.971



WHC LOCATION DATA

ROCHELLE DRIVE

LOT NO.	CL. STATION	OFFSET
17/2	0+87.34	36.23 LF
17/4	1+18.05	36.23 LF
5/6	1+62.61	36.88 RT
7/8	1+93.29	37.72 LF
9/5	2+16.89	41.45 LF
12/13	2+12.42	37.00 RT
14	2+52.42	37.00 LF
10/11	NS84171.37	E 1364116.43

LASALLE COURT

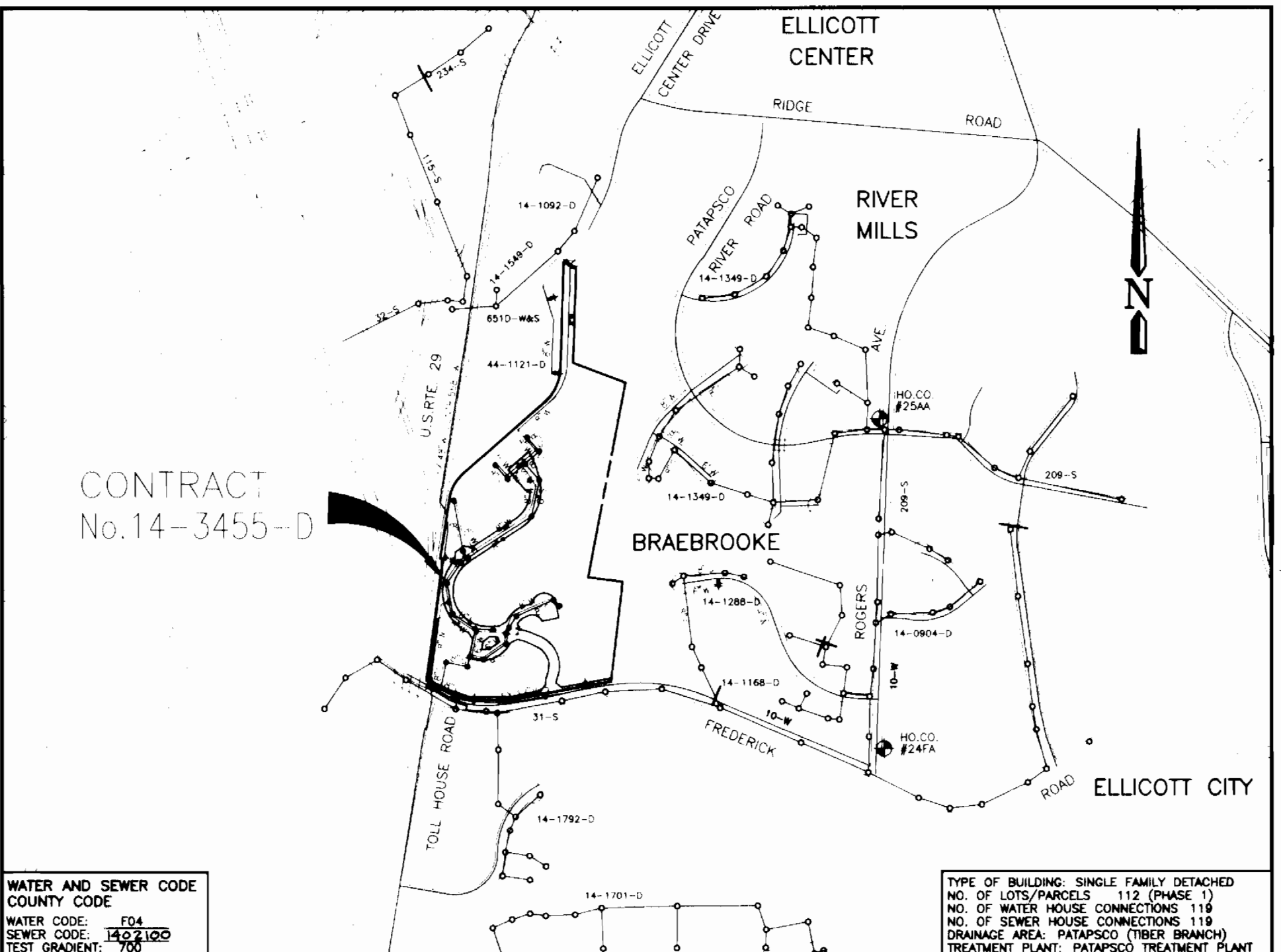
LOT NO.	CL. STATION	OFFSET
15	3+22.59	47.00 RT
16/17	3+22.25	47.10 RT
18	3+33.71	54.10 RT
19/20	3+44.63	39.00 RT
21	3+60.08	39.13 RT
22	3+67.79	37.83 RT
23/24	3+62.85	40.14 RT
25	3+90.55	48.28 RT
26/27	1+45.30	44.54 LF
28/29	1+15.59	37.31 LF
30/31	0+84.99	39.75 LF
32	0+58.20	50.69 LF

PAPILLON DRIVE

LOT NO.	CL. STATION	OFFSET
33	5+09.31	25.62 RT
34/35	5+46.72	29.98 RT
36/37	5+93.72	29.98 RT
38/39	7+36.91	25.00 RT
40/41	7+33.09	25.00 RT
42/43	9+26.60	37.44 RT
44/45	9+77.19	34.99 RT
46	10+15.17	28.07 RT
47/48	10+87.66	37.00 RT
49/50	11+27.66	37.00 RT
51/52	11+67.66	37.00 RT
53	1+89.66	37.00 RT
54/55	12+42.66	37.00 RT
56/57	12+52.66	37.00 RT
58/59	13+22.66	37.00 RT
60/61	13+56.43	39.94 RT
62/63	13+93.85	44.80 RT
64/65	14+26.25	37.88 RT
66/67	14+59.64	37.88 RT
68/69	14+92.04	44.80 RT
70/71	15+19.19	41.49 RT
72/73	15+63.82	37.46 RT
74/75	16+00.40	37.46 RT
76	16+34.89	40.83 RT
77/78	SEE PLAN	
79/80	16+75.83	39.85 RT
81/82	17+08.89	37.00 RT
83/84	SEE PLAN	
85	SEE PLAN	
86/87	SEE PLAN	
88/89	SEE PLAN	
90/91	17+53.01	65.28 RT
92/93	14+47.16	47.92 LF
94/95	13+94.48	62.27 LF
96	13+24.89	37.00 LF
97/98	12+52.66	37.00 LF
99/100	12+12.89	37.00 LF
101/102	12+12.89	37.00 LF

BELLEAU COURT

LOT NO.	CL. STATION	OFFSET
103/104	0+78.78	63.06 RT
105/106	1+42.07	44.42 RT
107/108	2+09.56	37.61 RT
109/110	2+46.11	18.52 RT
111/112	NS84921.20	E 1364088.02



- GENERAL NOTES**
- PART 1 - GENERAL**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
 - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 6" CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 STATE HIGHWAY ADMINISTRATION 531-5533
 BALTIMORE GAS & ELECTRIC CO 850-4620
 CONTRACTOR SERVICES 787-9068
 BALTIMORE GAS & ELECTRIC CO 787-9068
 UNDERGROUND DAMAGE CONTROL 1-800-257-7777
 MISS UTILITY 795-1390
 COLONIAL PIPELINE CO 315-4900
 HOWARD CO. DEPT. OF PUBLIC WORKS 315-4900
 BUREAU OF UTILITIES 315-4900
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
 - PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.
- PART 2 - WATER**
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
 - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- PART 3 - SEWER**
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2' - 0" OF EXTERIOR MANHOLE WALL.
 - ALL MANHOLES SHALL BE 4' - 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 05-52, WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1' - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

NOTE: 1) FOR SEWER HOUSE CONNECTION LOCATIONS, SEE PROFILES, SHEET NOS. 3 AND 4
 2) • DENOTES FUTURE LOTS UNDER PAPILLON PHASE II

HOWARD SOIL CONSERVATION DISTRICT
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Cheryl Simmons Kas. 12/16/06
 NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Robert Solis 12/16/06
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-96-BH

NAME OF UTILITY CONTRACTOR: C. J. MILLER INC.
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE: 12-07

QUANTITIES					
ITEMS	QUANTITIES ESTIMATED	AS-BUILT			
		QUANTITIES	TYPE	MANUF./SUPPLIER	ITEM
8" WATER	2,873 LF	2,878.0 LF	DIP CL-52	ATLANTIC STATES	4" D.I.P. NONE
6" WATER	1,182 LF	1,066.0 LF	DIP CL-52	"	B.H.C.
6" VALVES	17 EA	12 EA	NECO DATE	MUELLER CO.	
6" VALVES	6 EA	6 EA	WEDGECAST	"	
FIRE HYDRANTS	5 EA	5 EA	CENTURION F.H.	"	
17/2" WHC	1,558 LF	1,590.0 LF	TYPE K COPPER READING TUBE CO.		
1" WHC	912 LF	1,178.0 LF	TYPE K COPPER		
8" (PVC) MANHOLES	2,551 LF	2,440.0 LF	SDR 35 SEWER J.M. MANUFACTURE CO.		
8" S.H.C.	3,704 LF	3,648.0 LF	SAUNTERY ATLANTIC CONCRETE		
8" T.S. & V.	2 EA	2.00 EA	WEDGECAST	MUELLER CO.	
AIR RELEASE MH	1 EA	1.00 EA	1" AIR VALVE	CLA-VAL CO.	
1" AIR RELEASE MH	58 EA	58.00 EA	1" AIR VALVE	CLA-VAL CO.	
8" S (DIP)	364 LF	361.0 LF	DIP CL-52	ATLANTIC STATES	

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
Robert Simmons 11-21-06
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
Donald Moore 12/16/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

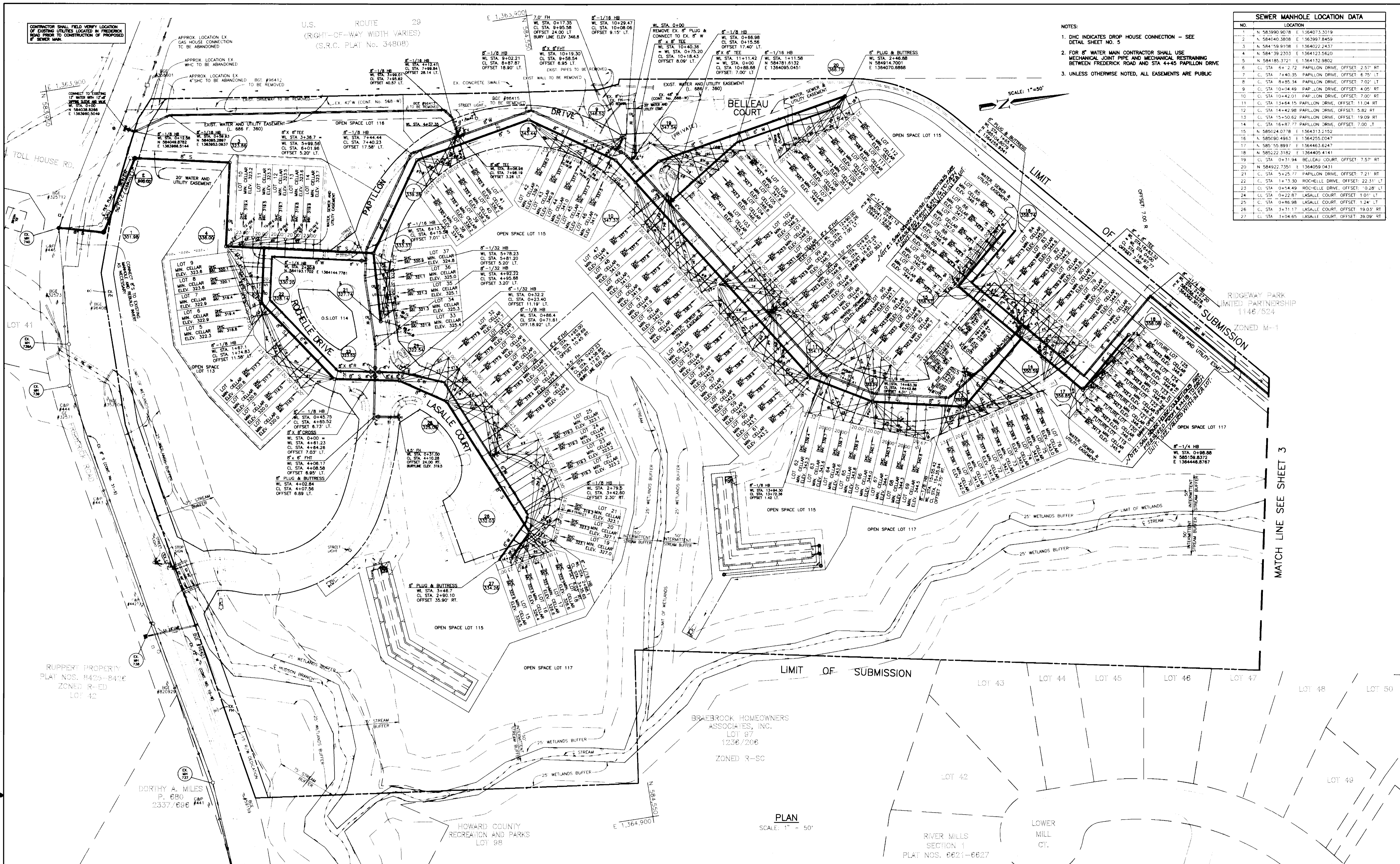
TSA GROUP, INC.
 planning • engineering • surveying
 8480 Baltimore National Pike • Suite 418
 Ellicott City, Maryland 21043
Donald Moore

DES: JH					
DRN: JH					
CHK: JME					
DATE: JAN. 1996	K.C.I.	1	AS-BUILT CONDITIONS ADDED TO PLAN	12/07	
NOV. 1996	BY NO.		REVISIONS	DATE	

TITLE SHEET
 600 SCALE MAP NO. 24
 BLOCK 12

PAPILLON
 SECTION 1
 LOTS 1-118
 ELECTION DISTRICT NO. 2
 CONTRACT NO.14-3455-D
 SCALE AS SHOWN
 SHEET 1 OF 5

3455 WY/2 PAPILLON



- NOTES:
- DHC INDICATES DROP HOUSE CONNECTION - SEE DETAIL SHEET NO. 5
 - FOR 8" WATER MAIN CONTRACTOR SHALL USE MECHANICAL JOINT PIPE AND MECHANICAL RESTRAINING BETWEEN FREDERICK ROAD AND STA 4+45 PAPILLON DRIVE
 - UNLESS OTHERWISE NOTED, ALL EASEMENTS ARE PUBLIC

SEWER MANHOLE LOCATION DATA		
NO.	LOCATION	
1	N 583990.9078	E 1364073.3019
2	N 584040.3808	E 1363997.8459
3	N 584159.9108	E 1364022.2437
4	N 584159.2503	E 1364123.5620
5	N 584185.3721	E 1364132.9802
6	CL STA 6+72.72	PAPILLON DRIVE, OFFSET 2.57' RT
7	CL STA 7+40.35	PAPILLON DRIVE, OFFSET 6.75' LT
8	CL STA 8+45.34	PAPILLON DRIVE, OFFSET 7.02' LT
9	CL STA 10+04.49	PAPILLON DRIVE, OFFSET 4.05' RT
10	CL STA 10+42.01	PAPILLON DRIVE, OFFSET 7.00' RT
11	CL STA 13+64.51	PAPILLON DRIVE, OFFSET 11.04 RT
12	CL STA 14+42.98	PAPILLON DRIVE, OFFSET 5.82 RT
13	CL STA 15+50.62	PAPILLON DRIVE, OFFSET 19.09 RT
14	CL STA 16+87.77	PAPILLON DRIVE, OFFSET 7.00 RT
15	N 585024.0778	E 1364213.2152
16	N 585050.4963	E 1364255.0047
17	N 585159.8997	E 1364483.6247
18	N 585223.3182	E 1364405.4141
19	CL STA 0+31.94	BELLEVUE COURT, OFFSET 7.57' RT
20	N 584922.7351	E 1364059.0431
21	CL STA 5+25.77	PAPILLON DRIVE, OFFSET 7.21' RT
22	CL STA 14+73.30	ROCHELLE DRIVE, OFFSET 22.51' LT
23	CL STA 0+54.49	ROCHELLE DRIVE, OFFSET 0.28' LT
24	CL STA 0+22.87	LASALLE COURT, OFFSET 1.01' LT
25	CL STA 0+46.98	LASALLE COURT, OFFSET 1.24' LT
26	CL STA 3+31.17	LASALLE COURT, OFFSET 19.03' RT
27	CL STA 3+04.85	LASALLE COURT, OFFSET 39.09' RT

RIDGEWAY PARK LIMITED PARTNERSHIP
1146/524
ZONED M-1

BRAEBROOK HOMEOWNERS ASSOCIATES, INC.
LOT 97
1236/206
ZONED R-5C

PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

TSA GROUP, INC.
planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Filiacott City, Maryland 21043

Donald Mason

DES: JH			
DRN: JH			
CHK: JME			
DATE: JAN 1996	K21	1	"AS-BUILT" CONDITIONS (SEWER ONLY) ADDED TO PLAN
NOV. 1996	9Y	NO.	REVISIONS
			DATE

PLAN OF WATER & SEWER MAINS

PAPILLON SECTION 1
LOTS 1-118
ELECTION DISTRICT NO. 2

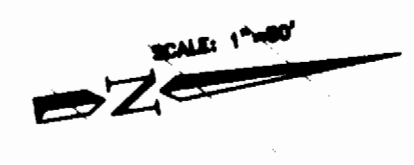
CONTRACT NO. 14-3455-D

SCALE
1" = 50'
SHEET
2 OF 5

Robert Bringer 11-21-96
CHIEF, BUREAU OF UTILITIES

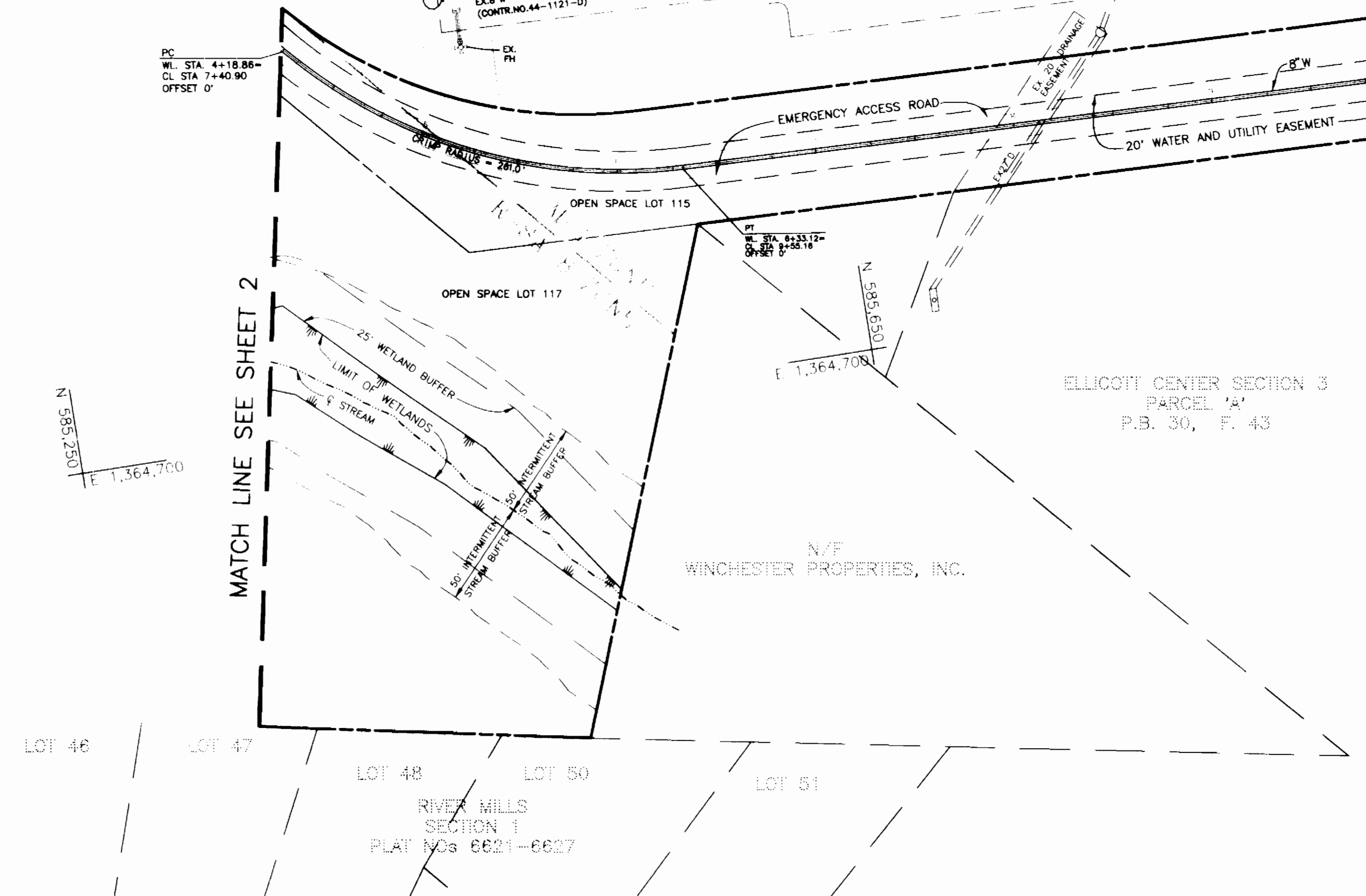
Donald Mason 12/5/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION

600 SCALE MAP NO. 24 BLOCK 12

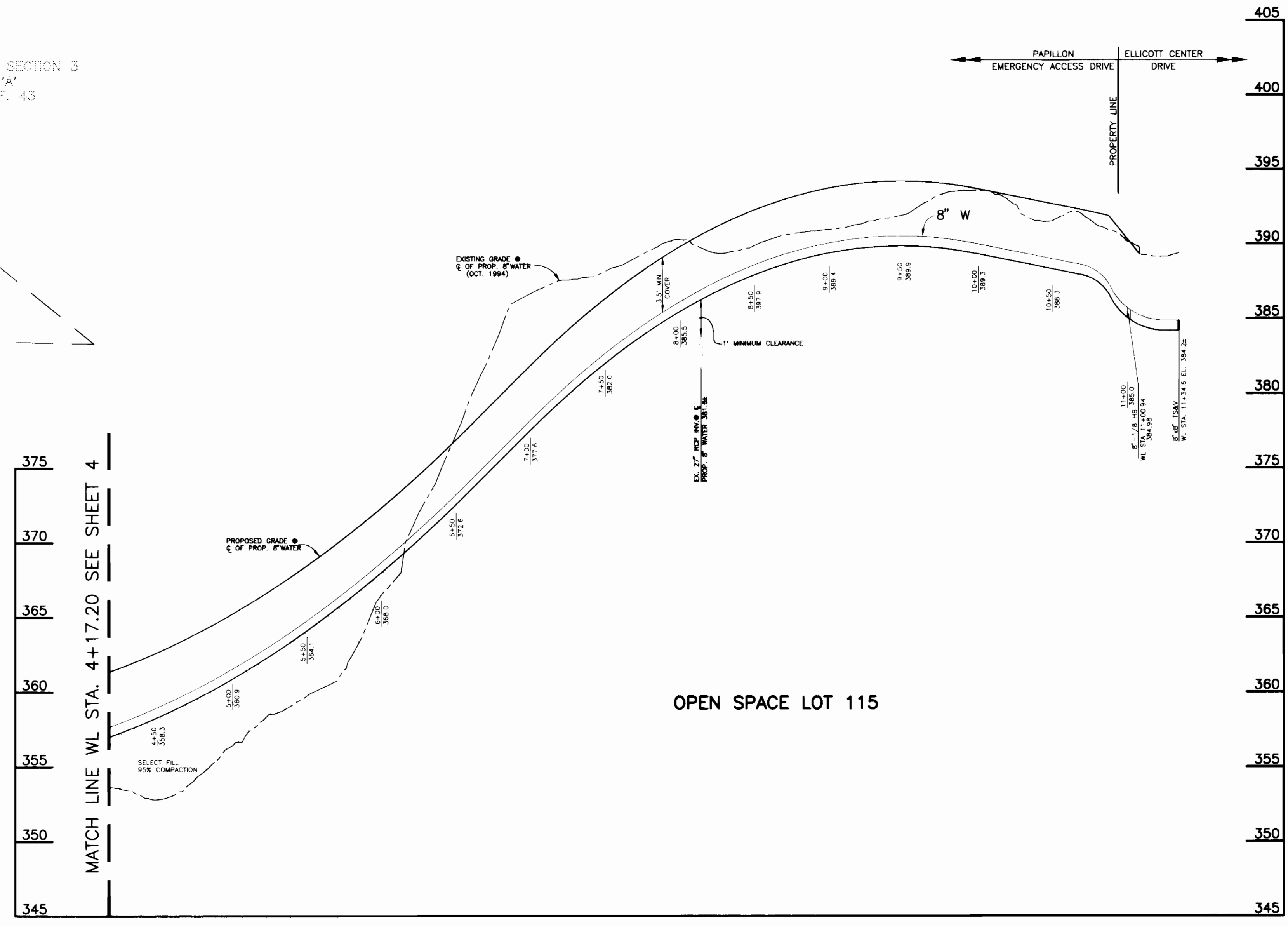


RIDGEWAY PARK
LIMITED PARTNERSHIP
11467524
ZONED M-1

E 1,364.400
N 595.550



PLAN
SCALE: 1" = 50'



PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

3455 ws/3 PAPILLON

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert Bauman
CHIEF, BUREAU OF UTILITIES
DATE: 11-21-96

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Donald Moore
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 12/5/96

TSA GROUP, INC.
planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043

Donald Moore

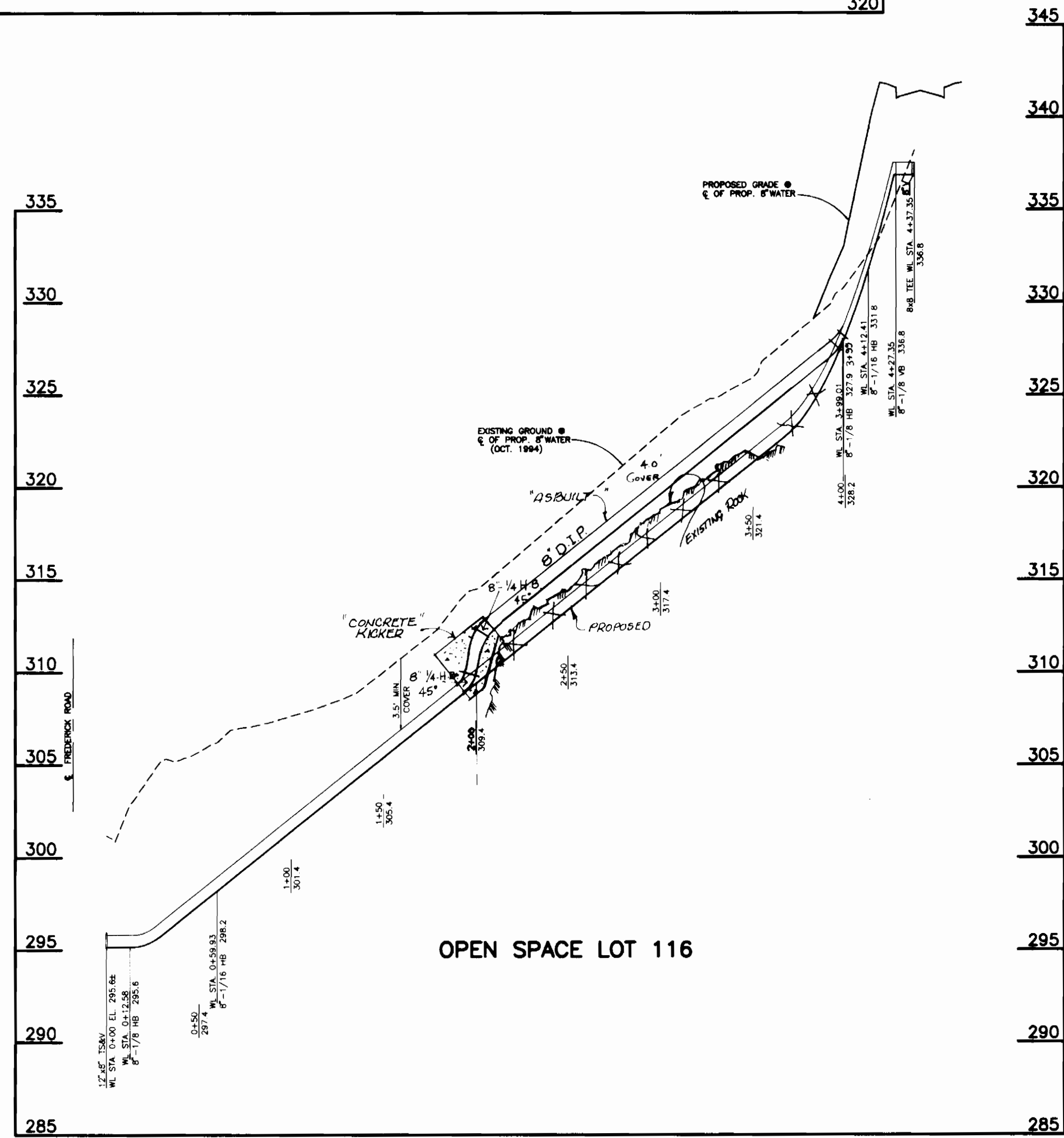
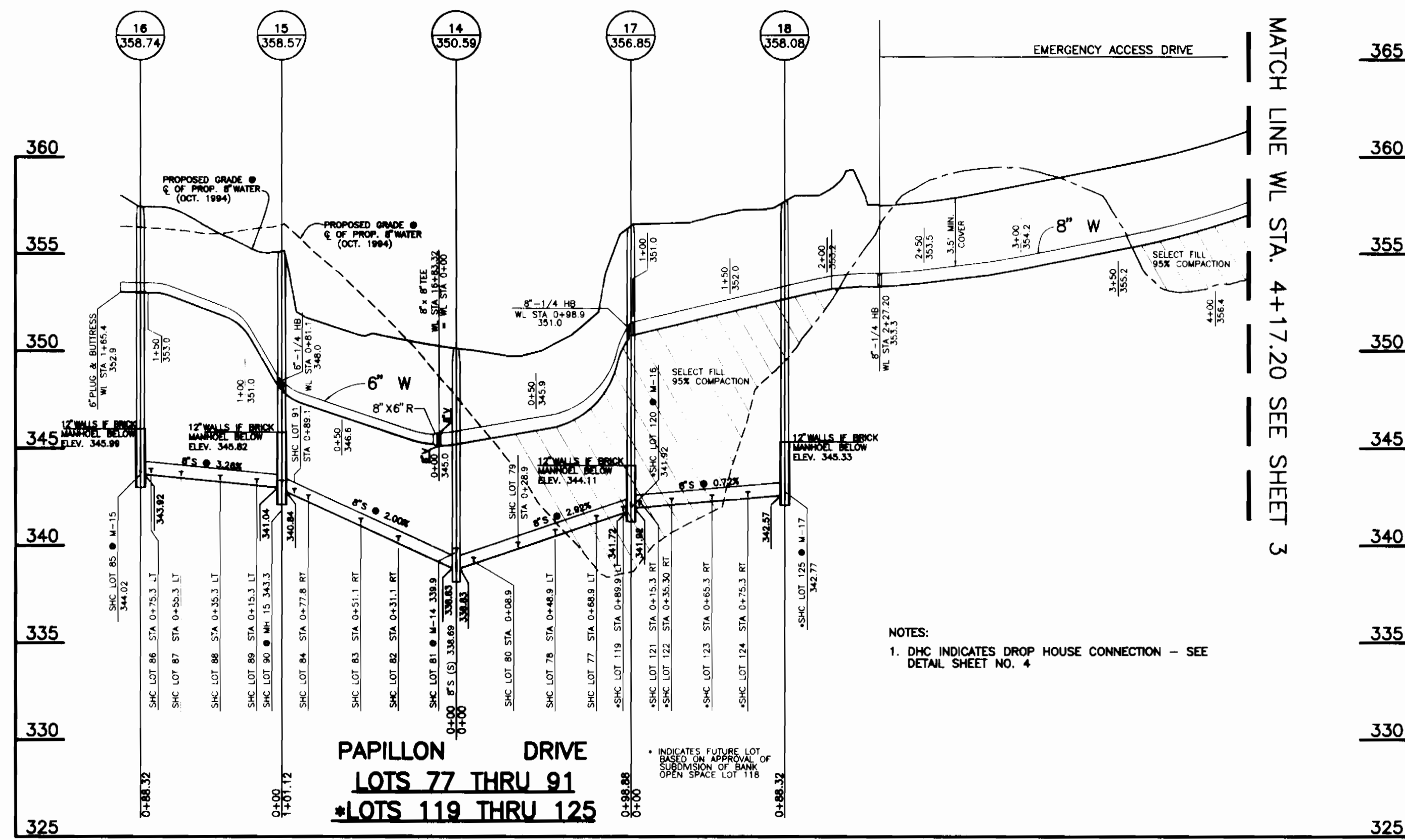
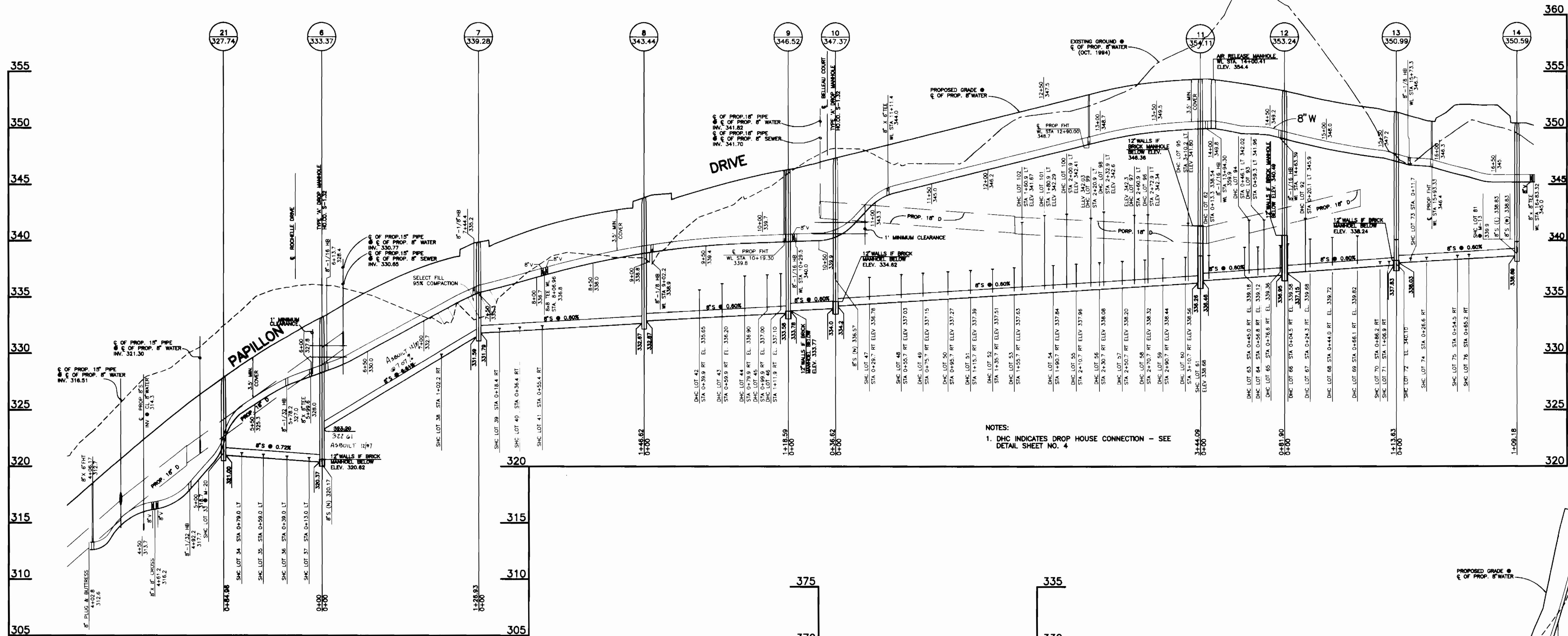
DES: JH					
DRN: JH					
CHK: JME					
DATE: JAN. 1996	KCI	8" VALVE ASSEMBLY LOCATION ADDED TO PLAN	12/97		
NOV. 1996	BY NO.	REVISIONS	DATE		

PLAN OF
WATER & SEWER MAINS
600 SCALE MAP NO. 24
BLOCK 12

PAPILLON
SECTION 1
LOTS 1-118
ELECTION DISTRICT NO. 2
CONTRACT NO. 14-3455-D
SHEET 3 OF 5

SCALE
AS SHOWN

3455 WS/4 PAPILLON



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

TSA GROUP, INC.
planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043

Donald Mac

DES:	JH
DRN:	MBB
CHK:	DAM
DATE:	JAN. 1996
BY:	KOI
NOV. 1996	1
REVISIONS:	AS-BUILT CONDITIONS ADDED TO PLAN, WATER
DATE:	12.97

PROFILES OF
WATER & SEWER MAINS

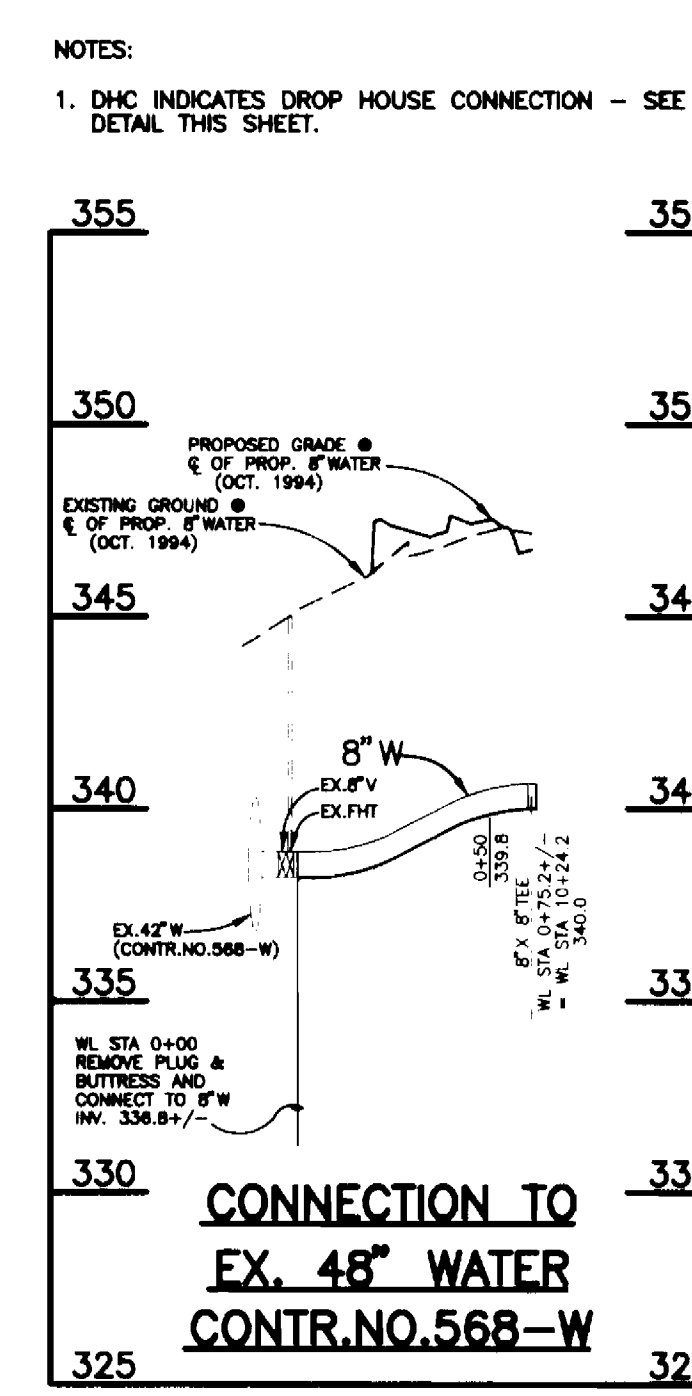
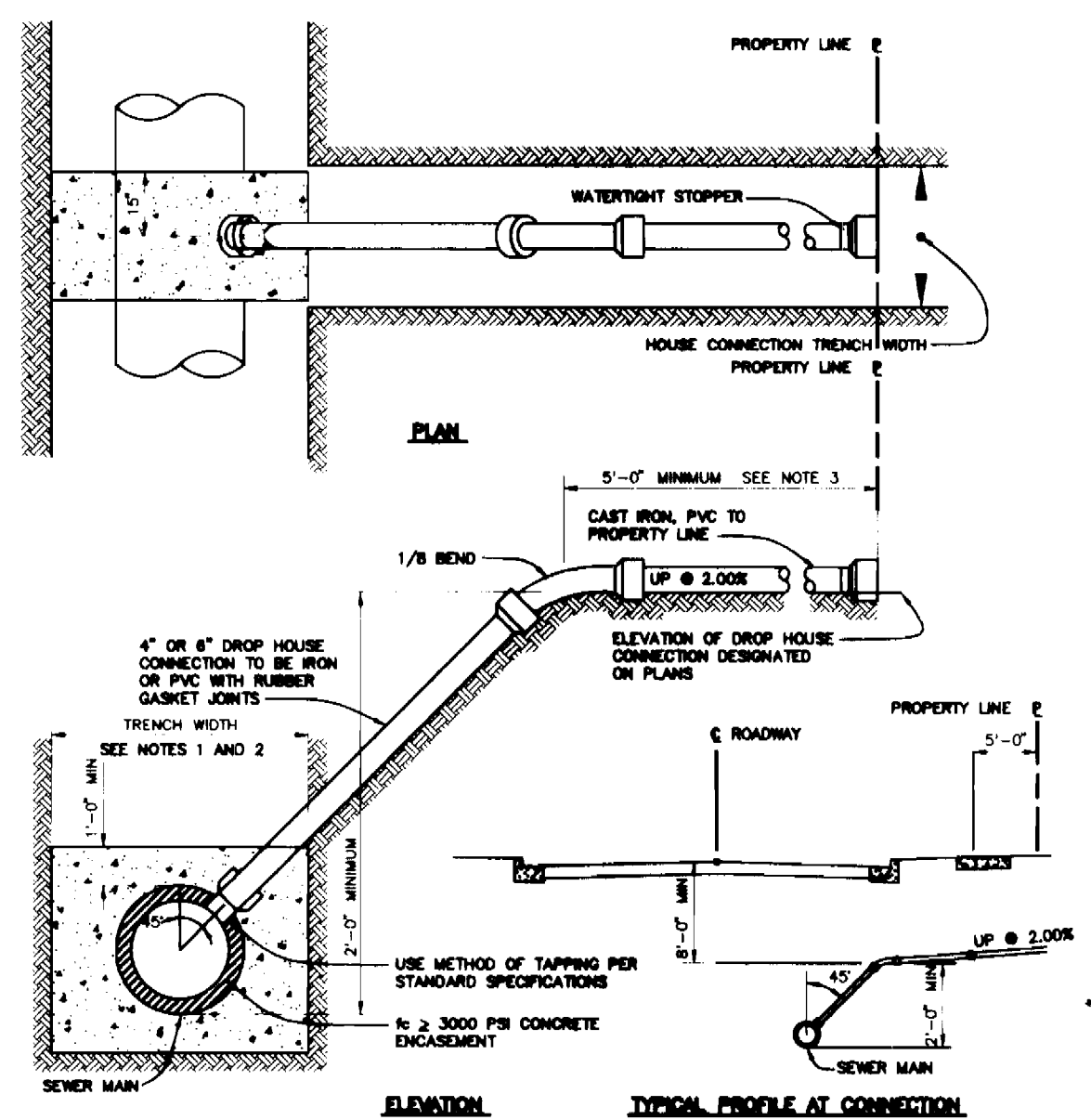
PAPILLON
SECTION 1
LOTS 1-118
ELECTION DISTRICT NO. 2

SCALE
VERT: 1" = 5'
HORIZ: 1" = 50'

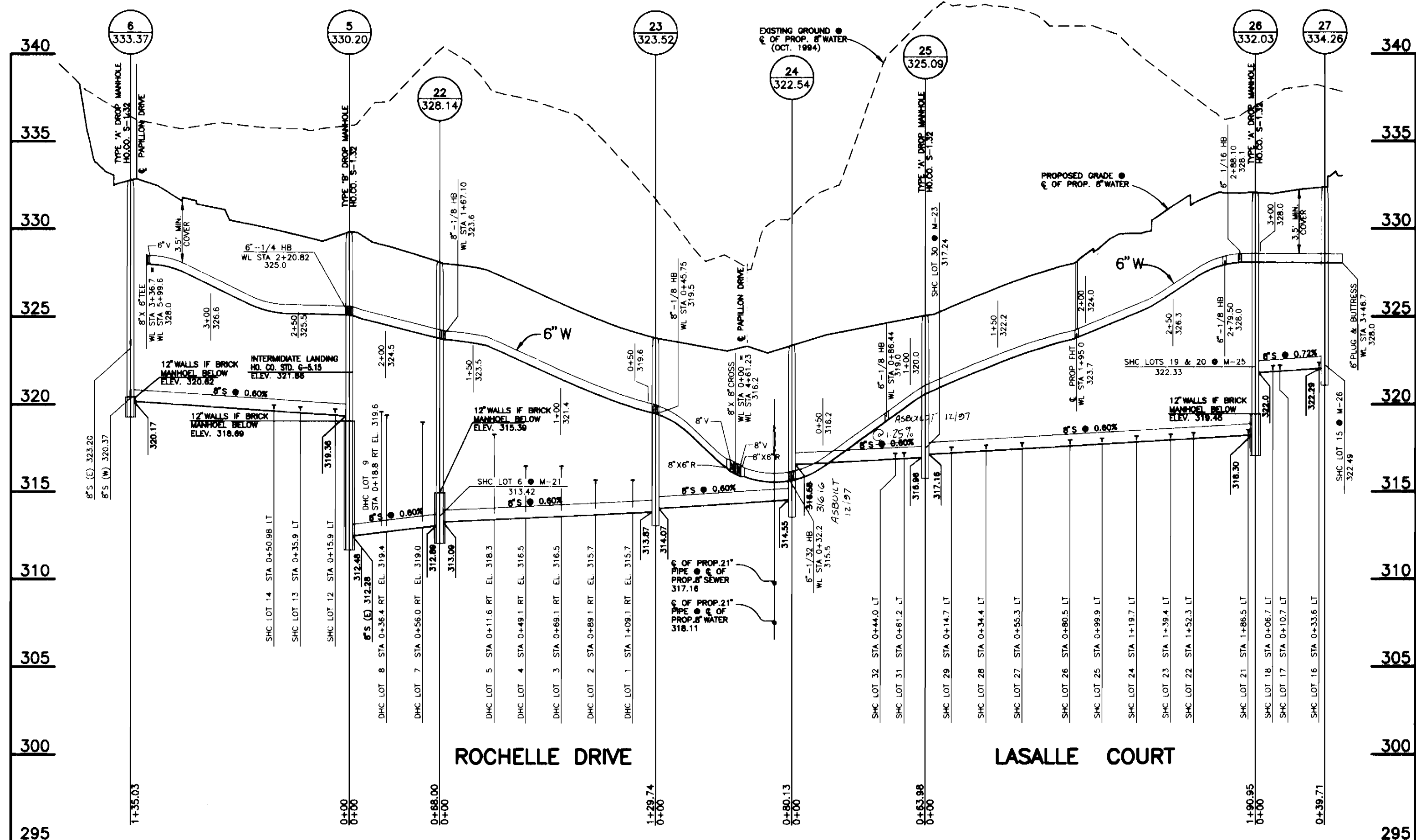
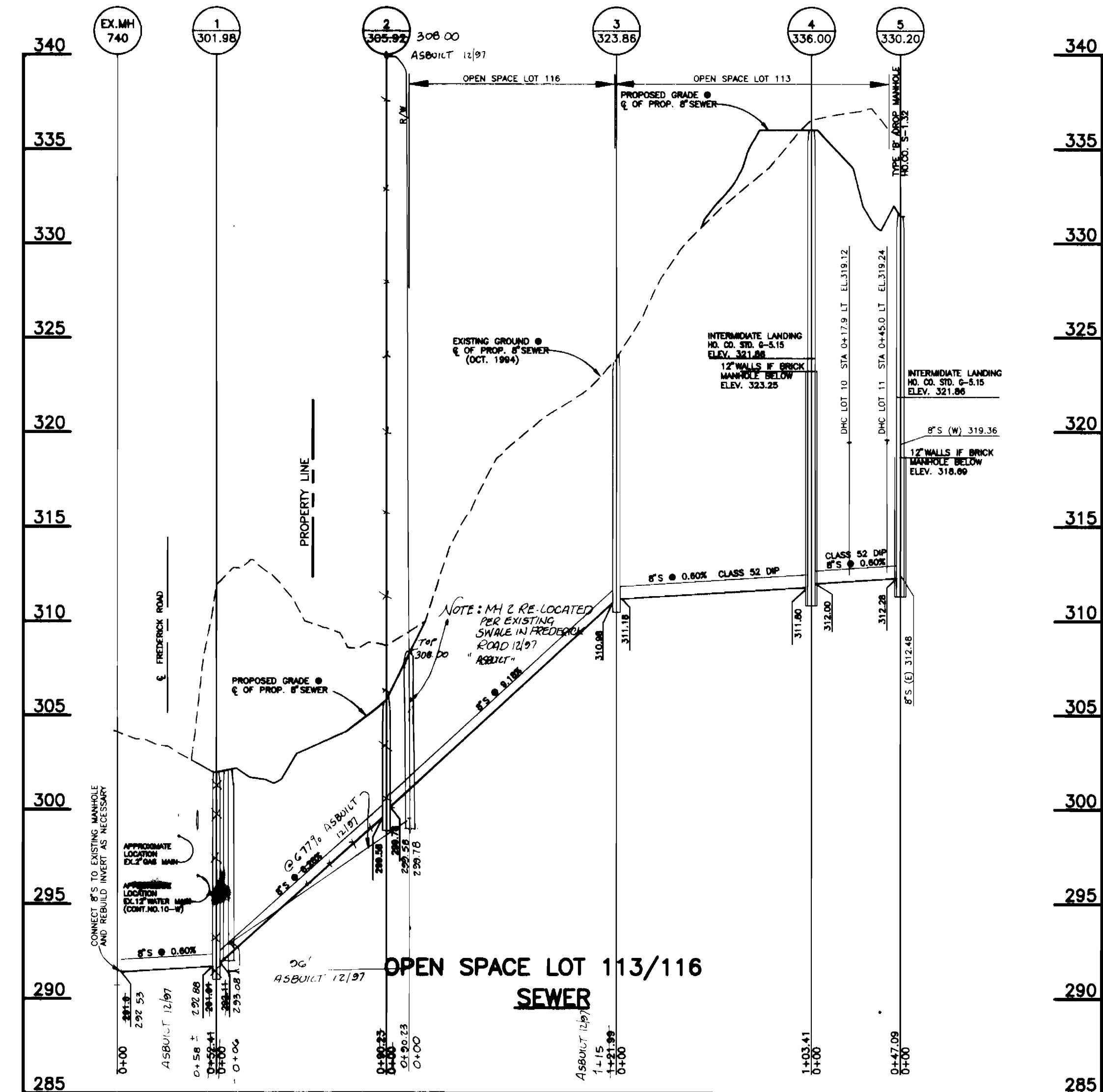
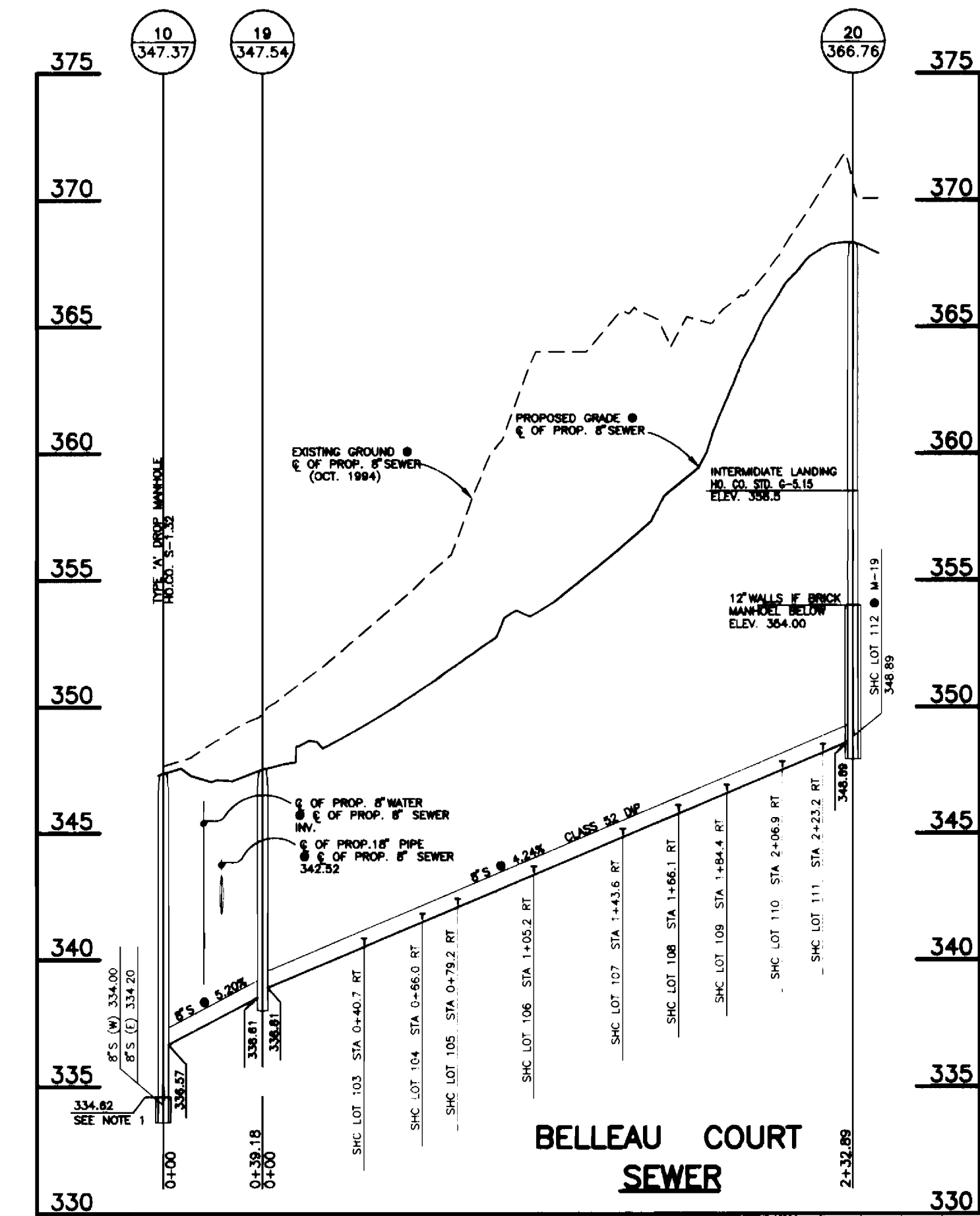
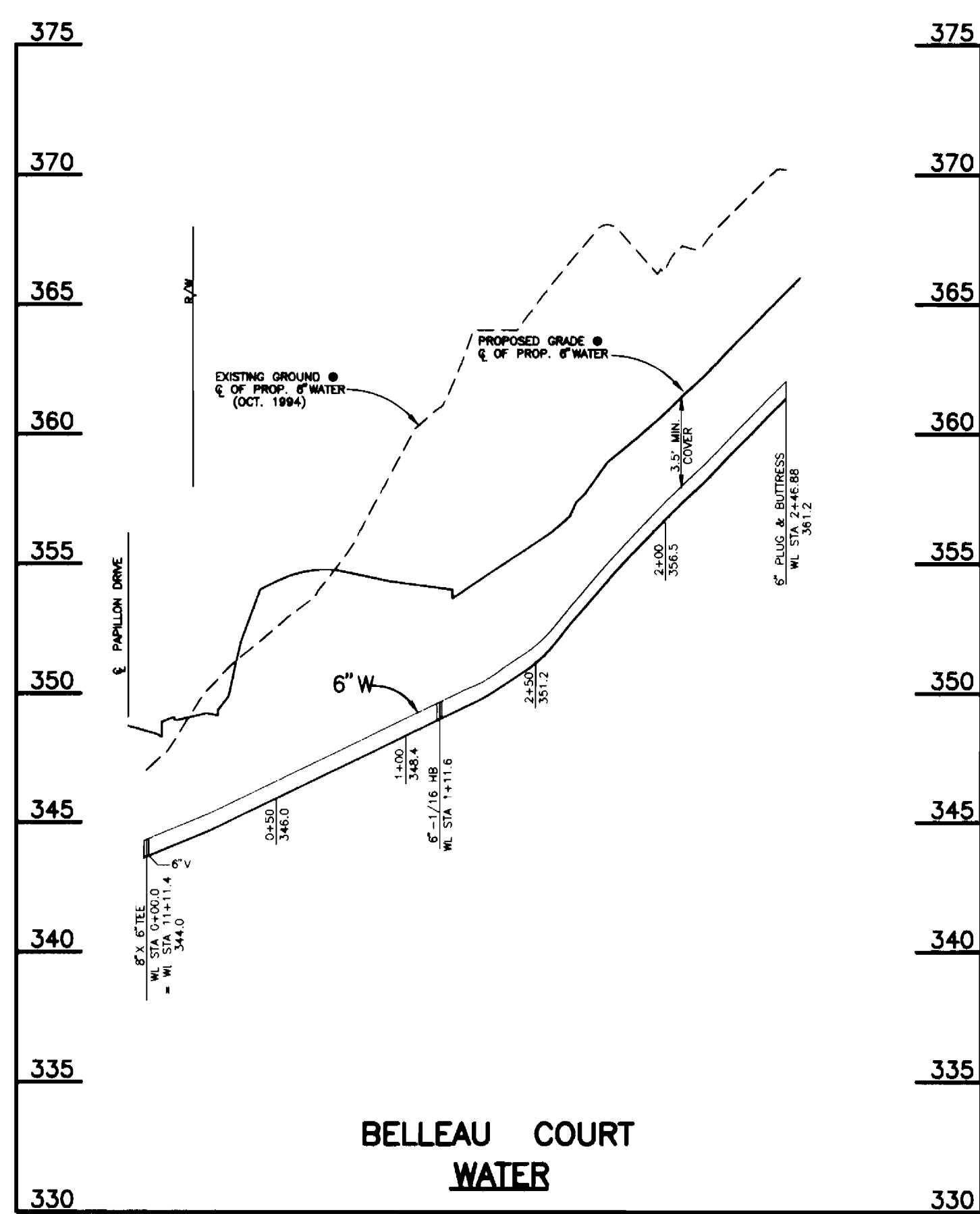
CONTRACT NO. 14-3455-D

SHEET
4 OF 5

3455 WS/S PAPILLON



4" & 6" DROP HOUSE CONNECTION TO SEWER MAIN
NOT TO SCALE
HOWARD COUNTY DESIGN MANUAL - VOL. II
WATER AND SEWER - APPENDIX 13



CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING UTILITIES LOCATED IN FREDERICK ROAD PRIOR TO CONSTRUCTION OF PROPOSED SEWER MAIN.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 11-21-96 DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND 12/5/96 DATE	TSA GROUP, INC. planning • engineering • surveying 8480 Baltimore National Pike • Suite 418 Ellicott City, Maryland 21043 Donald Mason	DES: JH DRN: JH CHK: DAM DATE: JAN. 1996 MAR. 1996	ASBUILT CONDITIONS ADDED TO PLAN (SEWER ONLY) REVISIONS DATE	PROFILE OF WATER & SEWER MAINS AND DETAILS 600 SCALE MAP NO. 24 BLOCK 12	PAPILLON SECTION 1 LOTS 1-118 ELECTION DISTRICT NO. 2 CONTRACT NO. 14-3455-D SHEET 5 OF 5
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