

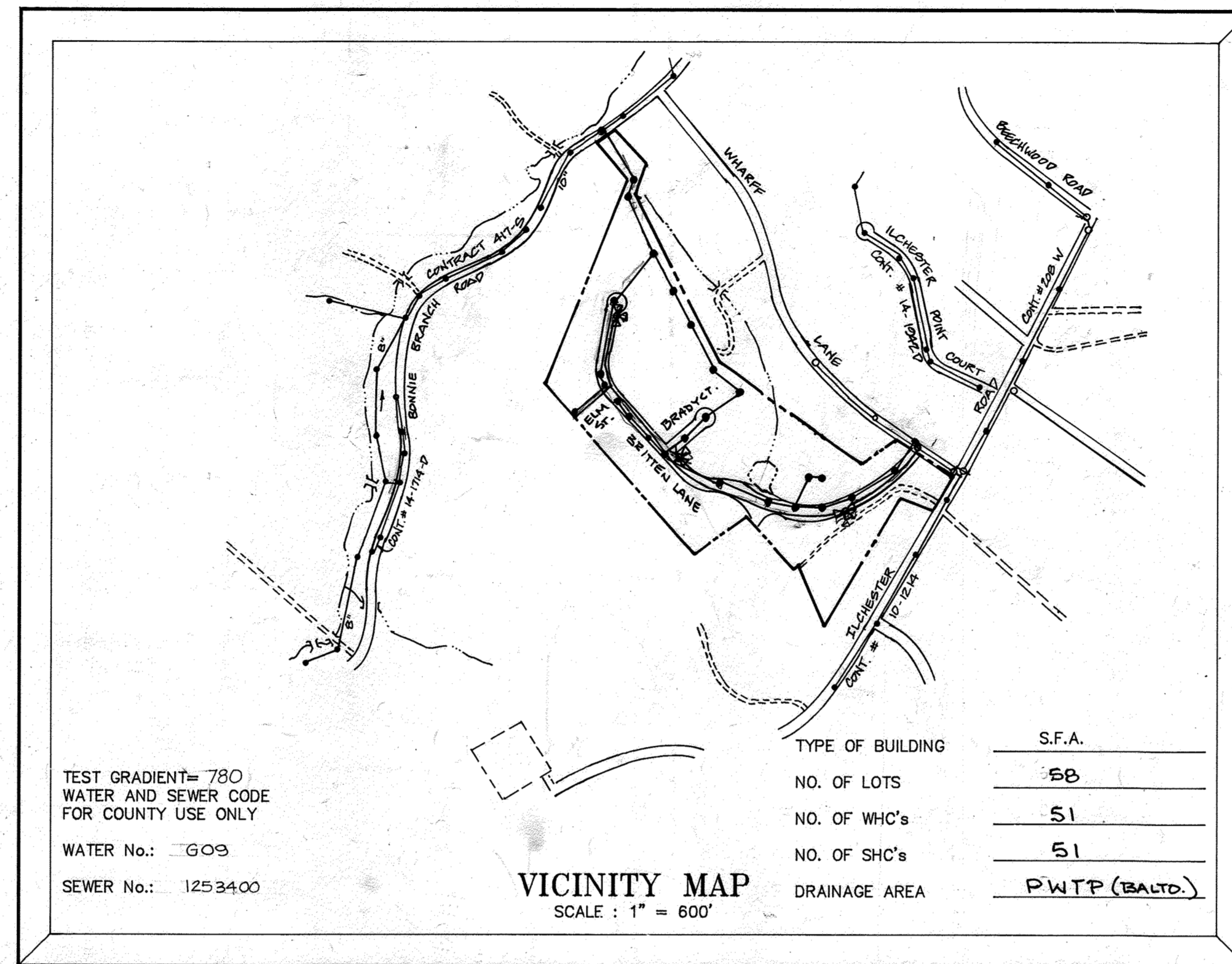
**QUANTITIES**

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" x 8" TEE	4	4	M.J.	GRIFFIN
8" x 6" TEE	7	7	M.J.	GRIFFIN
8" VALVE	6	6	R.S.	KENNEDY
8" VALVE	8	8	R.S.	KENNEDY
FIRE HYDRANT	5	5		KENNEDY
11.25" BEND	0	0		
22.50" BEND	19	0		
45" BEND	0	0		
8" WATER	2600 L.F.	2731 L.F.	D.I.P.	GRIFFIN
8" WATER	468 L.F.	464 L.F.	D.I.P.	GRIFFIN
3/4" W.H.C.	1085 L.F.	1157 L.F.	COPPER	READING
5/8 W.H.C.	-	-		
4" VALVE	4	2	R.S.	KENNEDY
8" S D.I.P.	1223 L.F.	1110 L.F.		GRIFFIN
MAN HOLE	31	31	PRECAST	ATLANTIC
4" S.H.C.	1657 L.F.	1381 L.F.	J.P.V.C.	IPEX
4" W	249 L.F.	302	D.I.P.	GRIFFIN
12" S D.I.P.	2734 L.F.	2672 L.F.	D.I.P.	
	332 L.F.	528 L.F.	D.I.P.	

NAME OF UTILITY CONTRACTOR: W.F. WILSON & SONS INC. R.L.W.  
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE OCT 29, 1997

**SEDIMENT CONTROL NOTES**

- FOR SEDIMENT CONTROL FOR THIS CONTRACT, SEE THE APPROVED ROAD CONSTRUCTION PLANS, REF. NO. F-94-17.
- MATERIALS FROM TRENCH EXCAVATION TO BE PLACED ON UPHILL SIDE TRENCH.
- CONTRACTOR TO BACKFILL, COMPACT AND STABILIZE IMMEDIATELY AFTER INSTALLATION OF PIPE. NO TRENCHES WILL BE LEFT OPEN AT THE END OF EACH DAY, EXCEPT THAT PORTION WHERE WORK HAS STOPPED.
- ANY SEDIMENT CONTROL FACILITIES ENCOUNTERED DURING PIPE CONSTRUCTION TO BE RETURNED TO ORIGINAL CONDITION IMMEDIATELY UPON COMPLETION OF THAT PORTION OF WORK.
- SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATION AND AS PER ROAD CONSTRUCTION PLANS. (F-94-17)



**GENERAL NOTES**

- 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. DATUM.
- 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 CONTRACTED 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 BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME FOUR, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME FOUR 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 UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THIS PLANS:
  - STATE HIGHWAY ADMINISTRATION : 531-5533
  - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES : 850-4620
  - UNDERGROUND DAMAGE CONTROL : 787-9068
  - TROUBLE SHOOTING : 298-9001
  - MISS UTILITY : 1-800-257-7777
  - COLONIAL PIPELINE COMPANY : 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS : 313-4900
  - CHESAPEAKE AND POTOMAC TELEPHONE COMPANY: 410-954-6230
- 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 DAMAGE 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.
- 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 PER STANDARD DETAIL W 1.11 AND W 2.13.
- 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 THE PLANS OR IN THE SPECIFICATIONS.
- WATER MAINS OR WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE D.I.P., R.C.P., V.C.P., C.S.P.K., R.C.P., AND 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.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G 5.51
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153 : DUCTILE IRON COMPACT FITTINGS, 3" THROUGH 12" FOR WATER & OTHER LIQUIDS.
- ALL EXISTING STRUCTURES TO BE REMOVED.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CANNOT BE SERVED.
- 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 CONNECTION THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.

**BRITTEN/BRADY PROPERTY**

LOTS 1-58

CONTRACT NO. 14-3503 - D

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

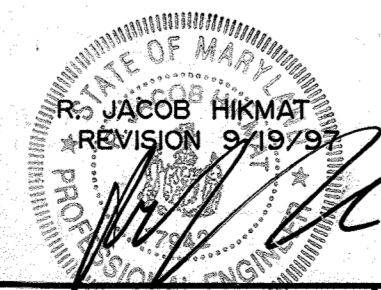
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*J. B. Wanfield*  
 U.S. SOIL CONSERVATION SERVICE  
 DATE: 10/29/97

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION DISTRICT.

APPROVED:  
*John R. Robertson*  
 HOWARD SOIL CONSERVATION DISTRICT  
 DATE: 10/29/97

OWNER/DEVELOPER: DASHER GREEN ASSOCIATES LTD.  
 839 ELKCRIDGE LANDING ROAD  
 LINTHICUM, MD 21090



DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

PREPARED BY:  
 AMERICAN LAND DEVELOPMENT AND ENGINEERING INC.  
 CIVIL ENGINEERING CONSULTANTS  
 AND LAND PLANNER



DES : D.C.W.  
 DRN : D.C.W.  
 CHK : B.S.  
 DATE : 7/14/94

WRA AS BUILT 4935 Whorff Ln. ADO 7-26-94  
 RLW AS BUILT WATER & SEWER CONDITIONS ADDED TO PLAN 10-29-97  
 RCJ REVISE QUANTITIES & VICINITY MAP 6-23-97  
 RCJ REVISE QUANTITIES & VICINITY MAP 5-19-97  
 BY NO. REVISION DATE

"AS BUILT"  
 COVER SHEET

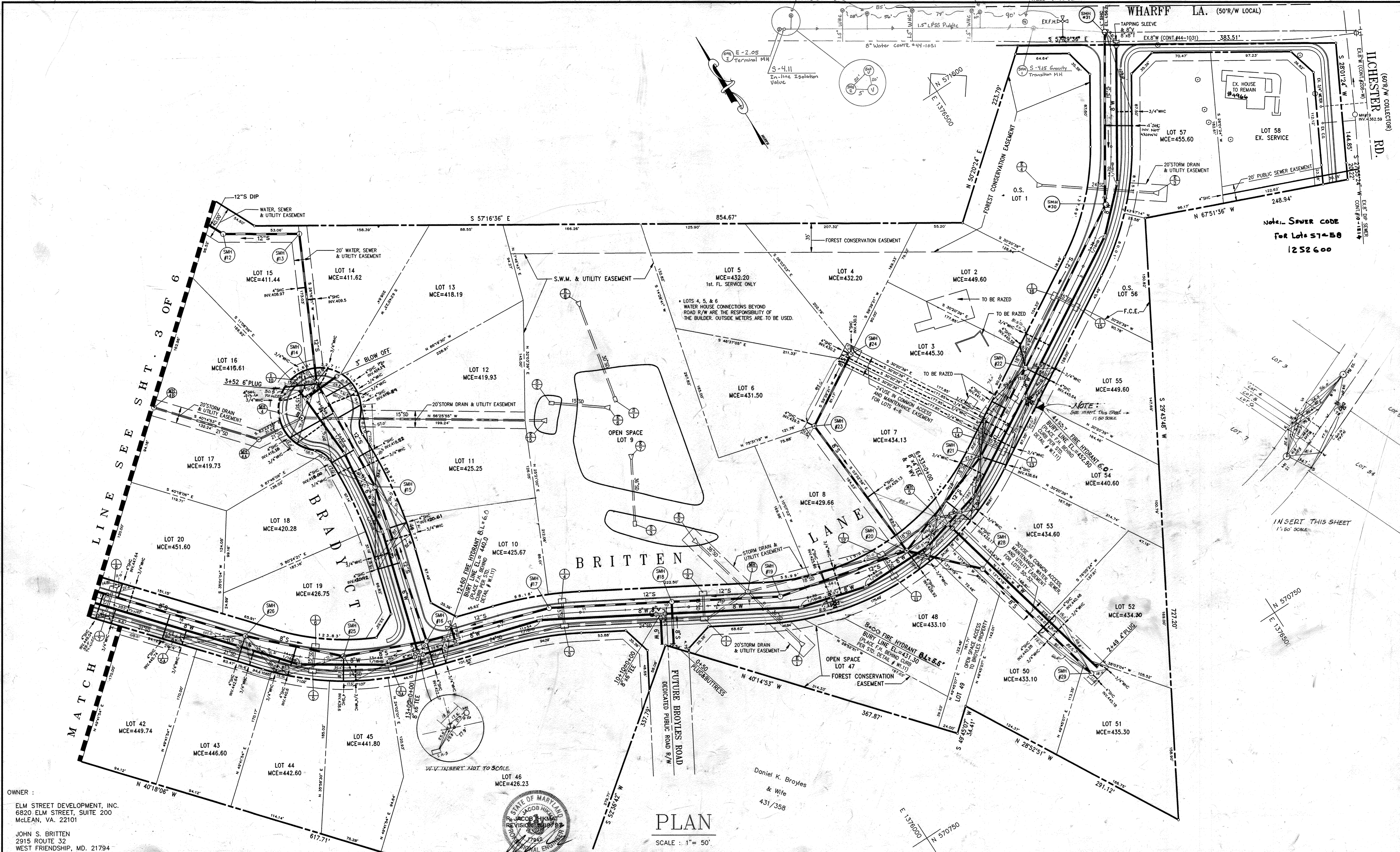
**BRITTEN/BRADY**  
 LOTS 1-58  
 CONTRACT NO. 14-3503 - D  
 6th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 1 OF 6

600' SCALE MAP NO. 81 BLOCK NO. 10

PROPERTY





OWNER :  
 ELM STREET DEVELOPMENT, INC.  
 6820 ELM STREET, SUITE 200  
 McLEAN, VA. 22101  
 JOHN S. BRITTEN  
 2915 ROUTE 32  
 WEST FRIENDSHIP, MD. 21794



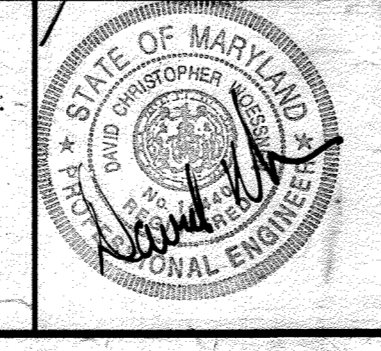
PLAN  
 SCALE : 1" = 50'

Daniel K. Broyles  
 & Wife  
 431/358

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND.  
 Chief, Bureau of Utilities  
 9-27-96  
 DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND.  
 Chief, Development Engineering Division  
 10/3/96  
 DATE

PREPARED BY :  
 AMERICAN LAND DEVELOPMENT AND ENGINEERING INC.  
 CIVIL ENGINEERING CONSULTANTS  
 AND LAND PLANNER  
 871-A MAIN STREET, BALTO. (410) 880-3039  
 LAUREL, MD. 20707 WASH. (301) 953-1221



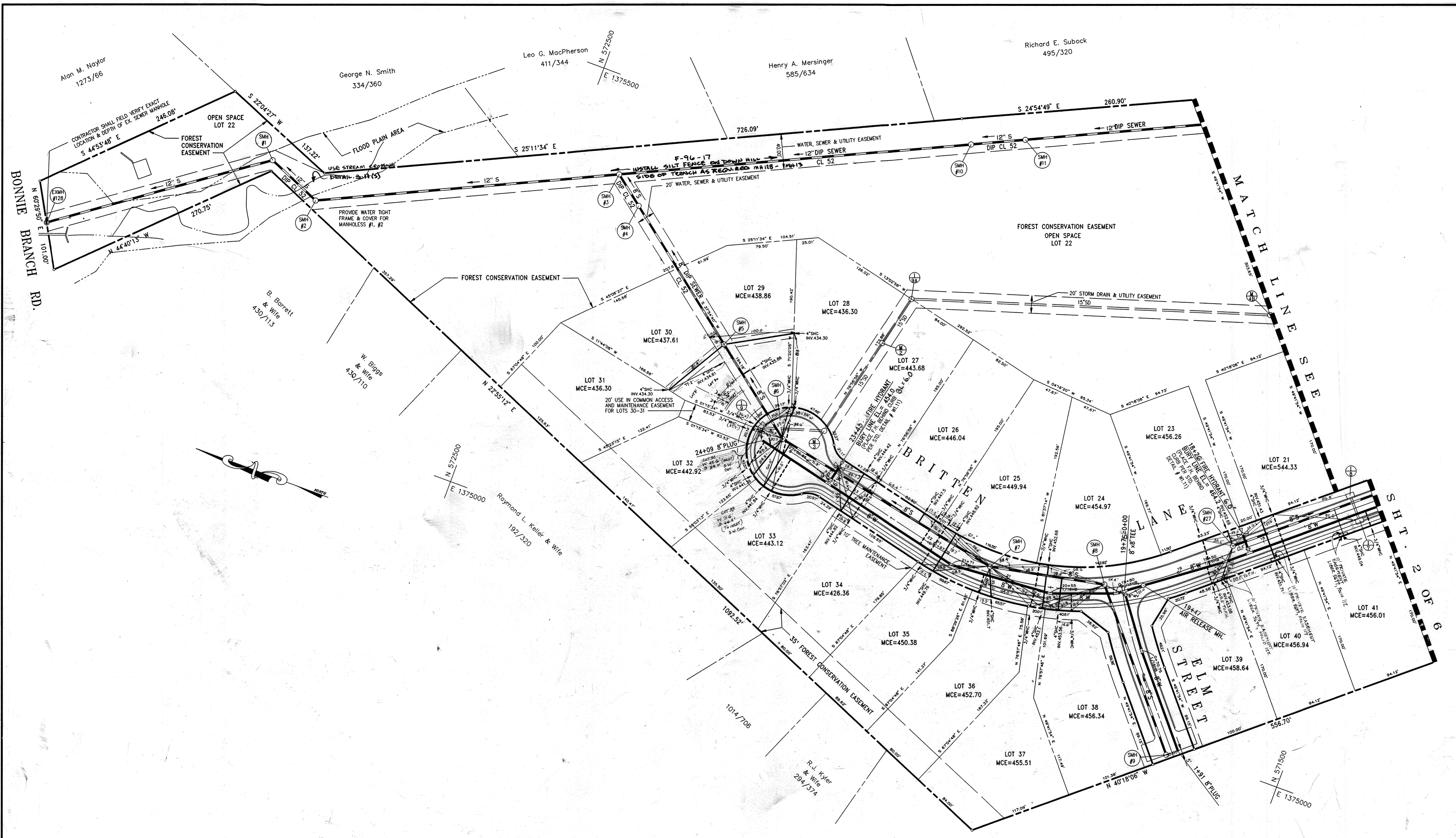
DES : D.C.W.	WRA	AS-BUILT 4935 Wharff Ln. ADO	7-26-24
DRN : W.D.F.	RLW	WATER & SEWER ASBUILT CONDITIONS ADDED TO PLAN	10-27-97
CHK : R.A.	RLW	4" SDC ADDED TO LOT 57	10-25-97
DATE : 6-20-96	RCJ	REMOVE 5" MAIN BETWEEN MH 31 & 32, REMOVE MH 32	6-23-97
	BY	REVISE SEWER MAIN BETWEEN MH 12-22 & ADD MH 30-32	5-19-97
	NO.	REVISION	DATE

ASBUILT  
 WATER AND SEWER  
 MAIN PLAN  
 600'SCALE MAP NO. 36 BLOCK NO. 22

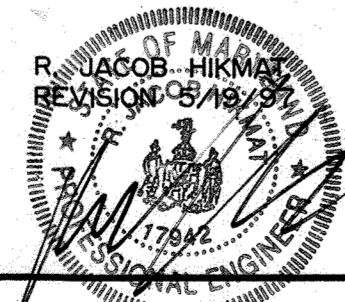
BRITTEN / BRADY PROPERTY  
 LOTS 1-58  
 CONTRACT NO. 14-3503-D  
 FIRST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE  
 AS  
 SHOWN  
 SHEET  
 2 OF 6





OWNER :  
 ELM STREET DEVELOPMENT, INC.  
 6820 ELM STREET, SUITE 200  
 McLEAN, VA. 22101  
 JOHN S. BRITTEN  
 2915 ROUTE 32  
 WEST FRIENDSHIP, MD. 21794

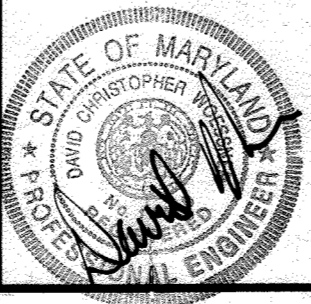


**PLAN**  
 SCALE : 1" = 50'

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND.  
 Chief, Bureau of Utilities

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND.  
 Chief, Development Engineering Division

PREPARED BY :  
 AMERICAN LAND DEVELOPMENT AND ENGINEERING INC.  
 CIVIL ENGINEERING CONSULTANTS  
 AND LAND PLANNER  
 671-A MAIN STREET  
 LAUREL, MD. 20707



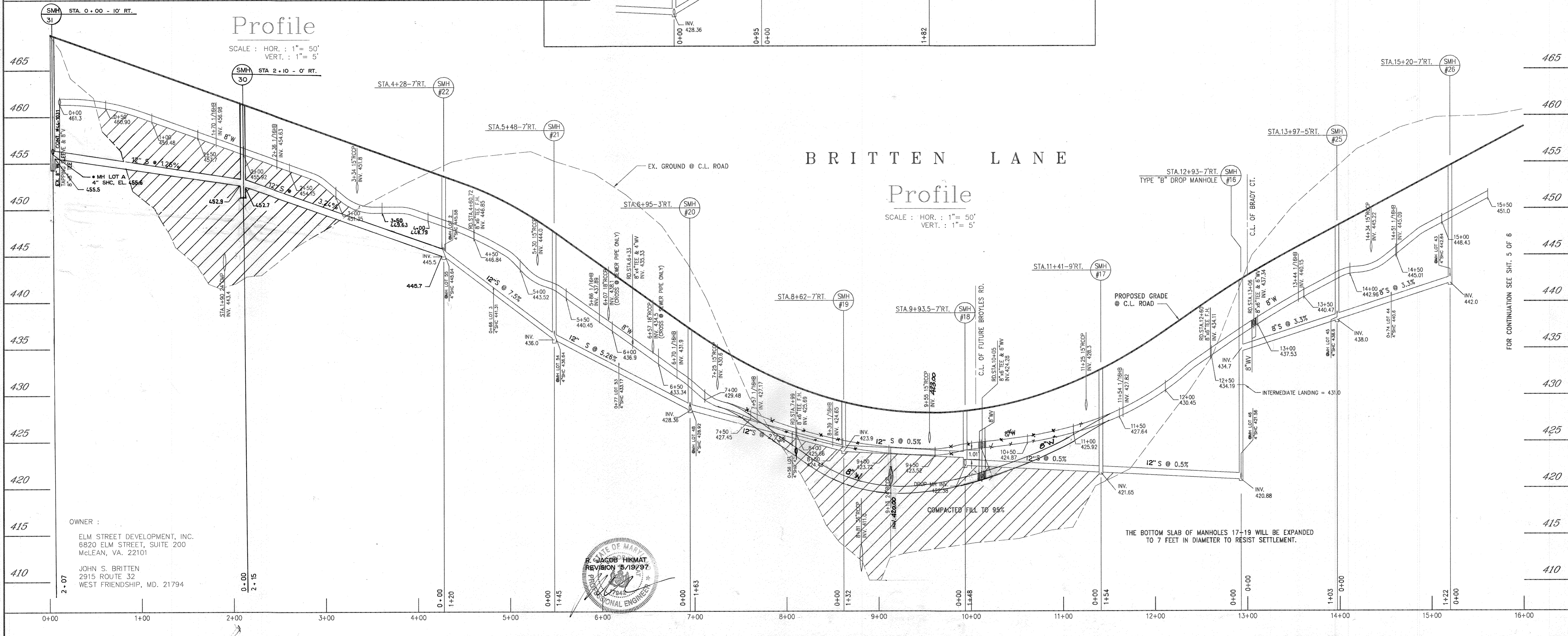
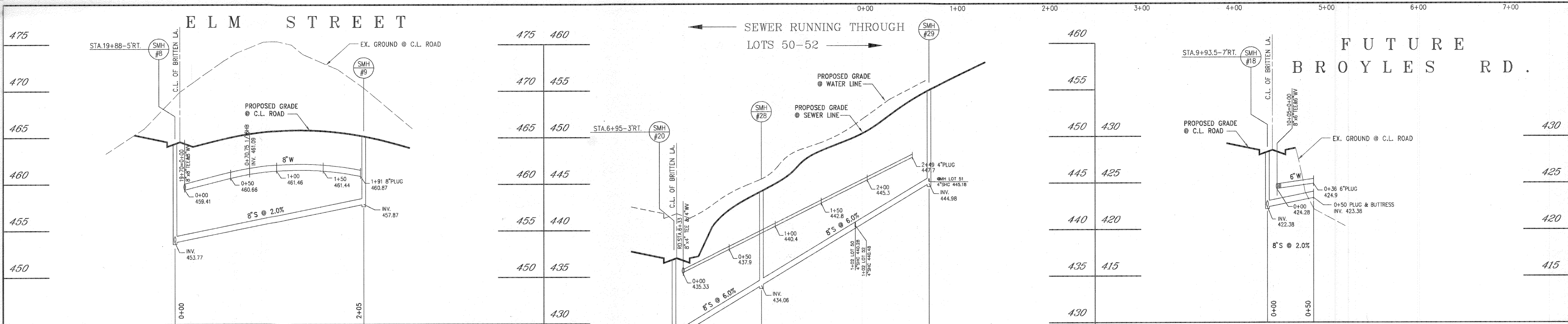
DES : D.C.W.			
DRN : W.D.F.	S-JP	4	REVISE LOCATION OF SILE FOR LOTS 39 & 41 AND ADD PRIVATE EASEMENTS FOR LOTS 39, 40, & 41
CHK : R.A.	RLW	5	ADDITIONAL SEWER ASBUILT CONDITIONS ADDED
DATE : 6-20-96	RCJ	2	WATER & SEWER ASBUILT CONDITIONS TO BE ADDED
	BY	NO.	REVISE SEWER MAIN BETWEEN MH 128 - 3, & MH 3-11

"ASBUILT"  
**WATER AND SEWER  
 MAIN PLAN**  
 600' SCALE MAP NO. 36 BLOCK NO. 22

**BRITTEN / BRADY PROPERTY**  
 LOTS 1-58  
 CONTRACT NO. 14-3503-D  
 FIRST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 3 OF 6





DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND.

*Robert B. Binger* 9-27-96  
CHIEF, BUREAU OF UTILITIES DATE

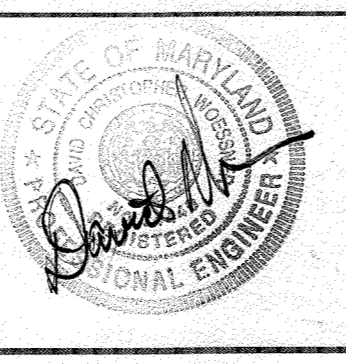
DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND.

*John S. Britten* 10/3/96  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

PREPARED BY:  
AMERICAN LAND DEVELOPMENT AND ENGINEERING INC.  
CIVIL ENGINEERING CONSULTANTS  
AND LAND PLANNER

671-A MAIN STREET  
LAUREL, MD. 20707

BALT. (410) 880-3039  
WASH. (301) 953-1221



DES : D.C.W.	DRN : W.D.F.	CHK : R.A.	DATE : 6-20-96
RLW : 3	RCJ : 2	RCJ : 1	BY NO.
ASBUILT CONDITIONS ADDED TO PLAN (WATER & SEWER) 10-29-97		REVISION	
REVISE SEWER MAIN & MANHOLES BETWEEN 22 AND 31		6/23/97	
ADD MANHOLES 31 & 30, REVISE SEWER MAIN BET. 30 & 16		5/19/97	

ASBUILT  
WATER AND SEWER  
MAIN PROFILE

600'SCALE MAP NO. 36 BLOCK NO. 22

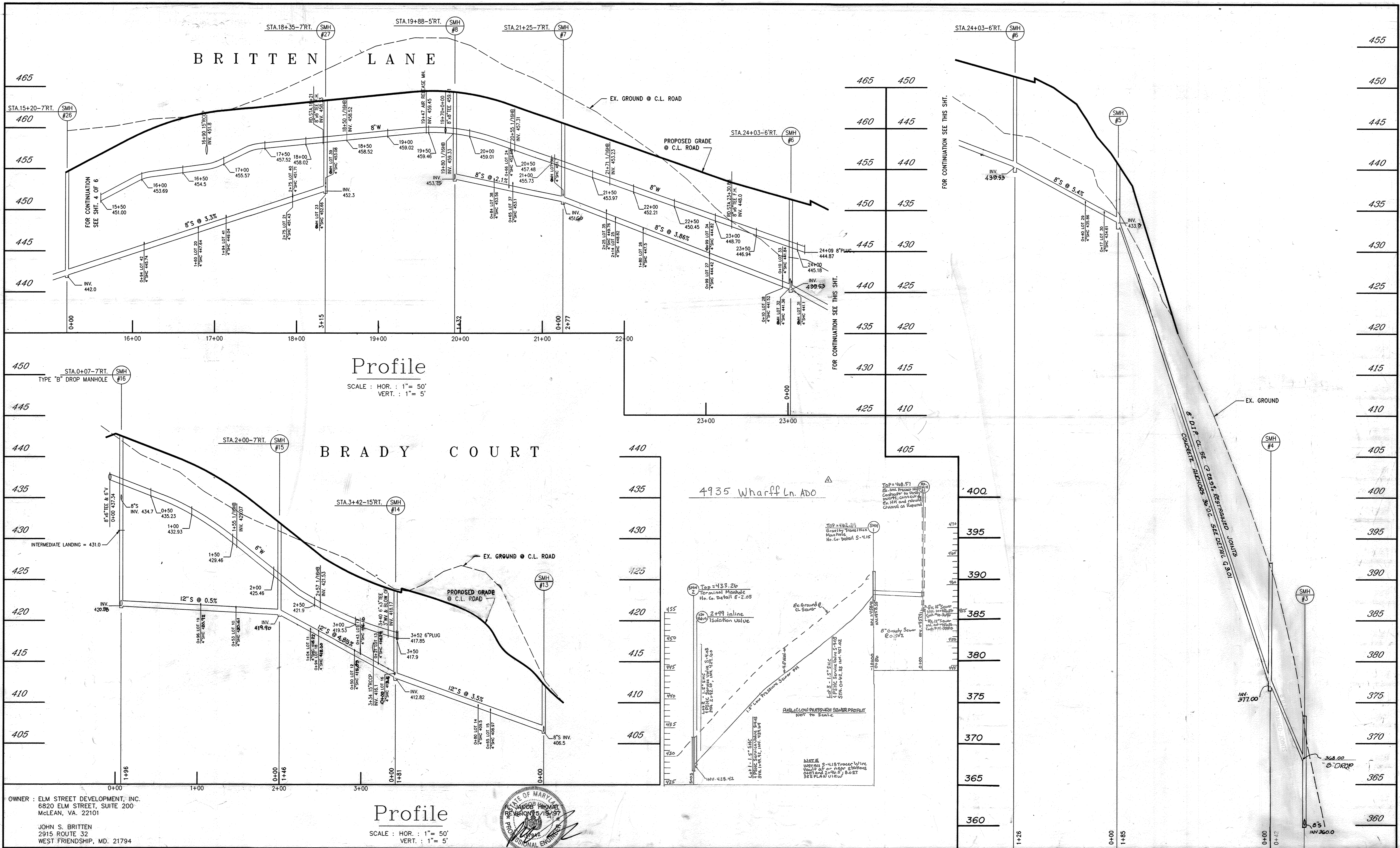
BRITTEN / BRADY PROPERTY  
LOTS 1-58  
CONTRACT NO. 14-3503-D  
FIRST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 4 OF 6

PROPERTY

FOR CONTINUATION SEE SHIT. 5 OF 6





**Profile**

SCALE: HOR. : 1" = 50'  
VERT. : 1" = 5'

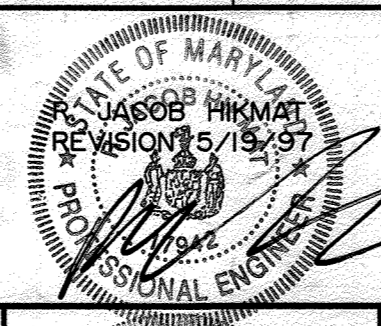
**BRADY COURT**

**Profile**

SCALE: HOR. : 1" = 50'  
VERT. : 1" = 5'

OWNER : ELM STREET DEVELOPMENT, INC.  
6820 ELM STREET, SUITE 200  
McLEAN, VA. 22101

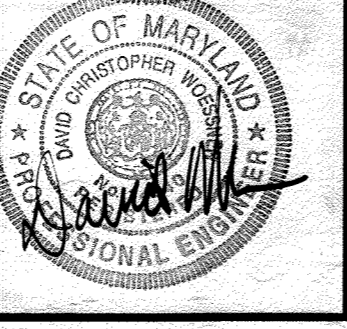
JOHN S. BRITTEN  
2915 ROUTE 32  
WEST FRIENDSHIP, MD. 21794



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND.  
*Robert S. ...* 9-27-96  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND.  
*John S. Britten* 10/1/96  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

PREPARED BY:  
AMERICAN LAND DEVELOPMENT AND ENGINEERING INC.  
CIVIL ENGINEERING CONSULTANTS  
AND LAND PLANNER  
671-A MAIN STREET LAUREL, MD. 20707  
BALT. (410) 880-3039  
WASH. (301) 953-1221



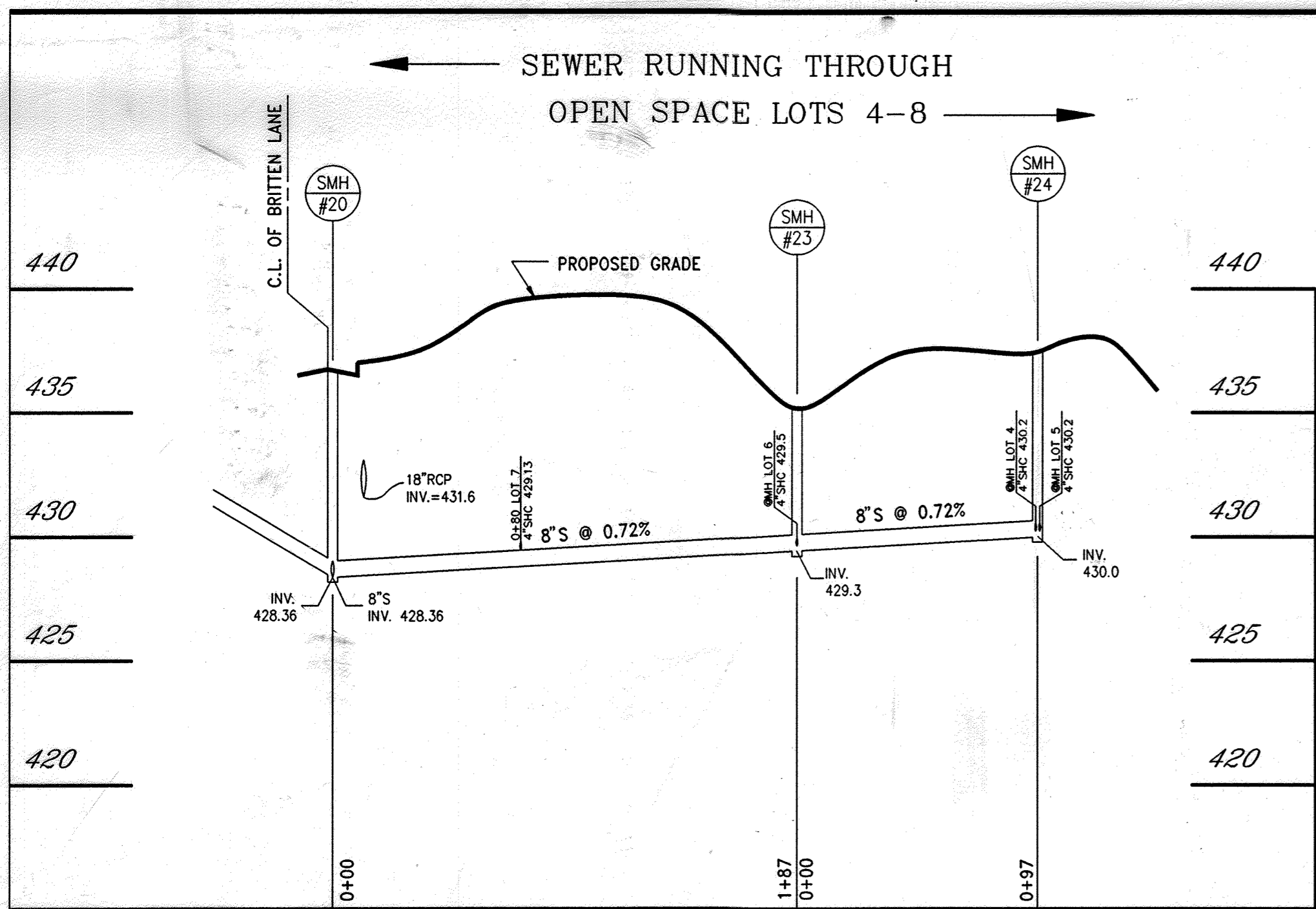
DES : D.C.W.			
DRN : W.D.F.	WRA	ASBUILT ADO	7-22-24
CHK : R.A.	RLW	ASBUILT CONDITIONS ADDED TO PLAN	10-29-97
DATE : 6-20-96	RCJ	REMOVE WHARFF LANE PROFILE	6/23/97
	RCJ	ADD WHARFF LA. PROFILE, REVISE S. MAIN BET. MH 13 & 16	5/19/97
	BY NO.	REVISION	DATE

WATER AND SEWER  
MAIN PROFILE  
600'SCALE MAP NO. 36 BLOCK NO. 22

BRITTEN / BRADY PROPERTY  
LOTS 1-58  
CONTRACT NO. 14-3503-D  
FIRST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

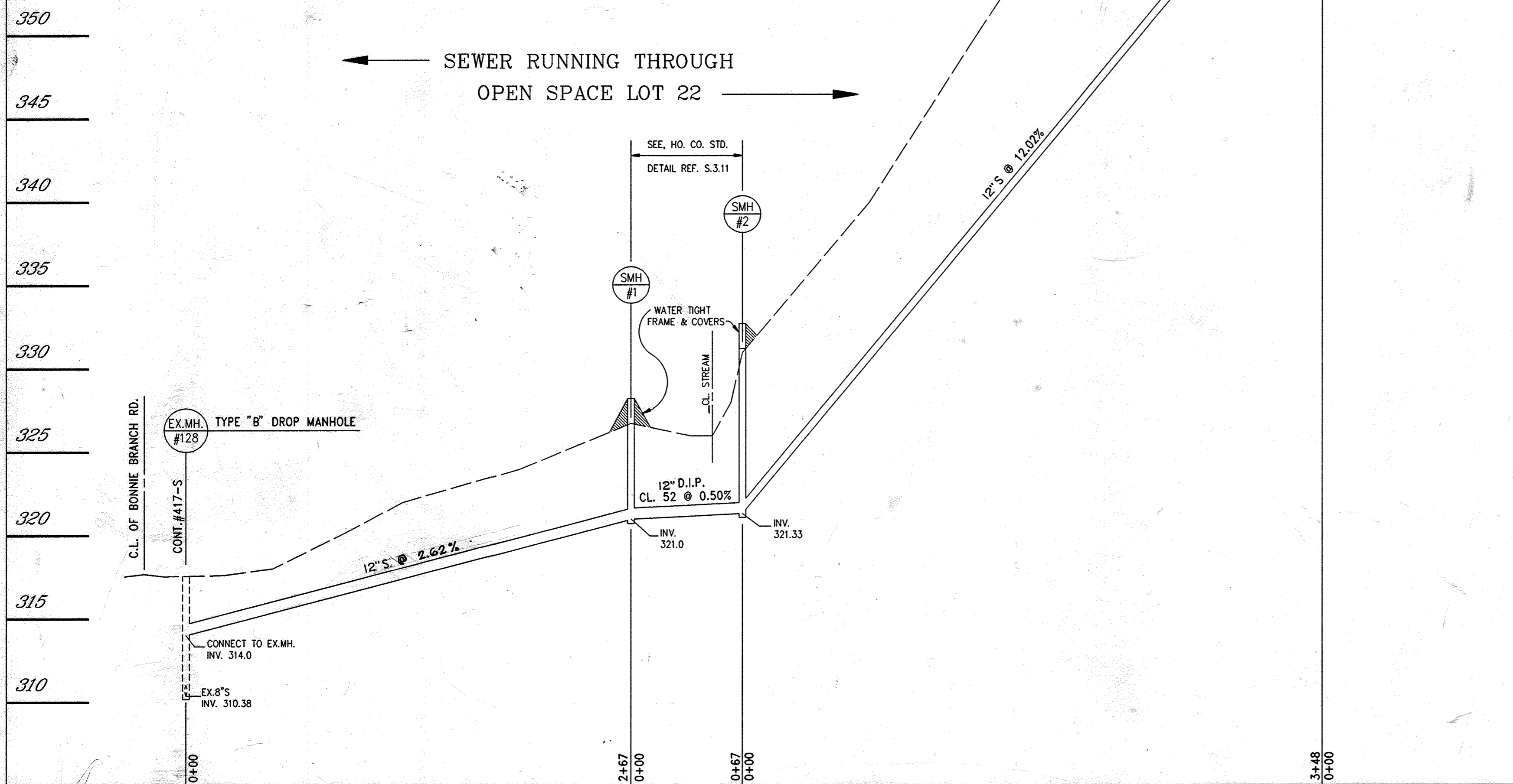
SCALE AS SHOWN  
SHEET 5 OF 6





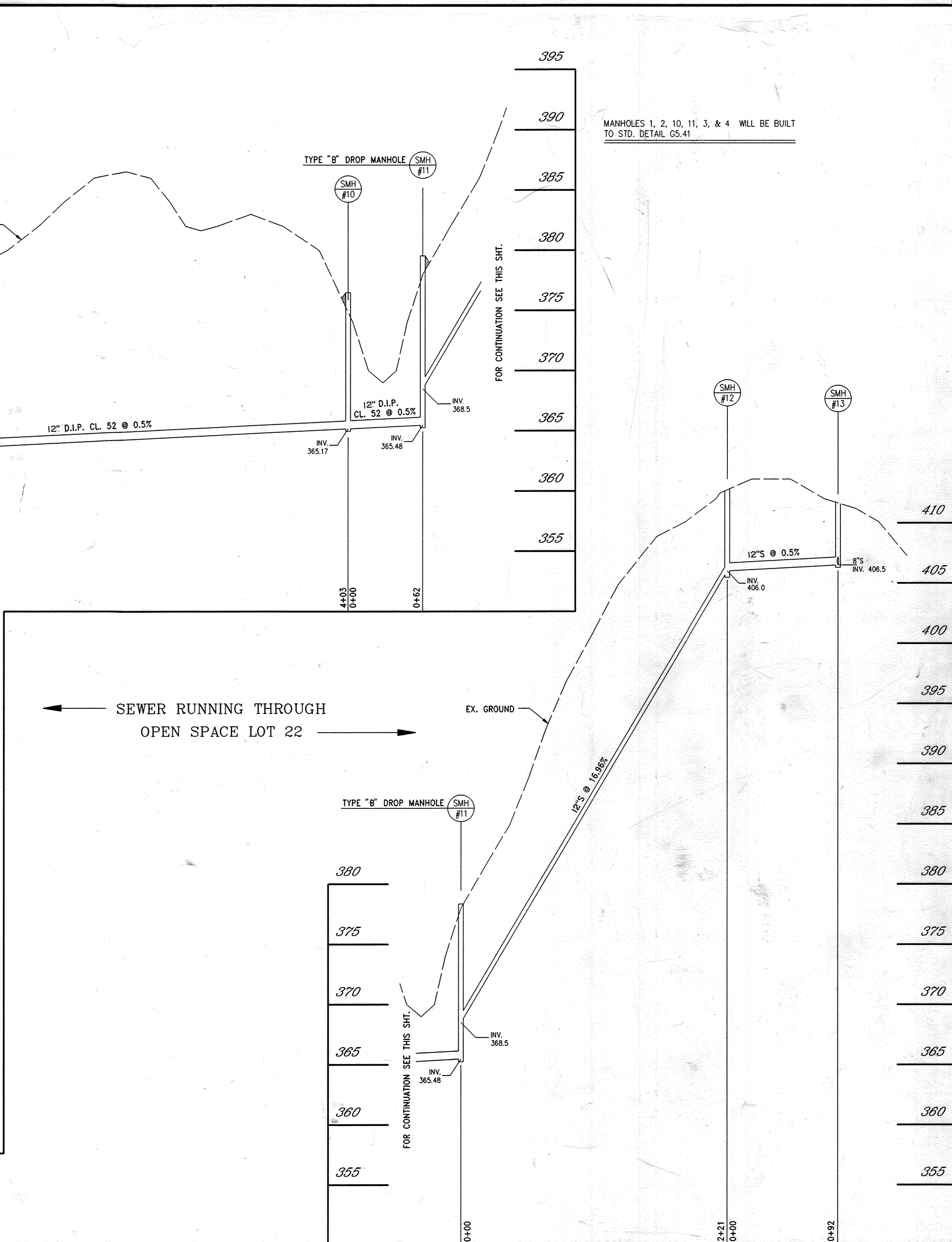
**Profile**

SCALE : HOR. : 1" = 50'  
VERT. : 1" = 5'



**Profile**

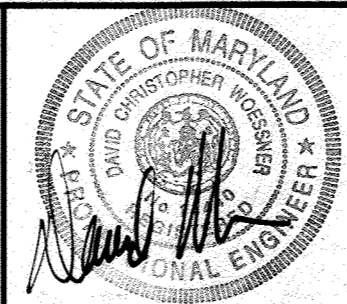
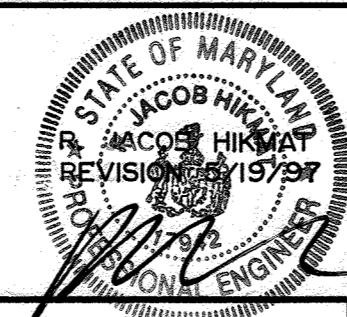
SCALE : HOR. : 1" = 50'  
VERT. : 1" = 5'



MANHOLES 1, 2, 10, 11, 3, & 4 WILL BE BUILT TO STD. DETAIL G5.41

OWNER : ELM STREET DEVELOPMENT, INC.  
6820 ELM STREET, SUITE 200  
MCLEAN, VA. 22101

JOHN S. BRITTEN  
2915 ROUTE 32  
WEST FRIENDSHIP, MD. 21794



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND.  
*Robert W. Bennett* 9-27-96  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND.  
*John S. Britten* 10/31/96  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

PREPARED BY :  
AMERICAN LAND DEVELOPMENT AND ENGINEERING INC.  
CIVIL ENGINEERING CONSULTANTS  
AND LAND PLANNER  
671-A MAIN STREET LAUREL, MD. 20707  
BALT. (410) 880-3039  
WASH. (301) 953-1221

DES :	D.C.W.			
DRN :	W.D.F.			
CHK :	R.A.	R.L.W.	2	AS BUILT WATER & SEWER CONDITIONS ADDED TO PLAN 10-29-97
DATE :	6-20-96	REV.	1	REVISE SEWER MAIN BETWEEN MH 128 & ILM MH 11 & 13 5/19/97
		BY :	NO.	REVISION

600' SCALE MAP NO. 36 BLOCK NO. 22  
**WATER AND SEWER MAIN PROFILE**

**BRITTEN / BRADY PROPERTY**  
LOTS 1-58  
CONTRACT NO. 14-3503-D  
FIRST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 6 OF 6