

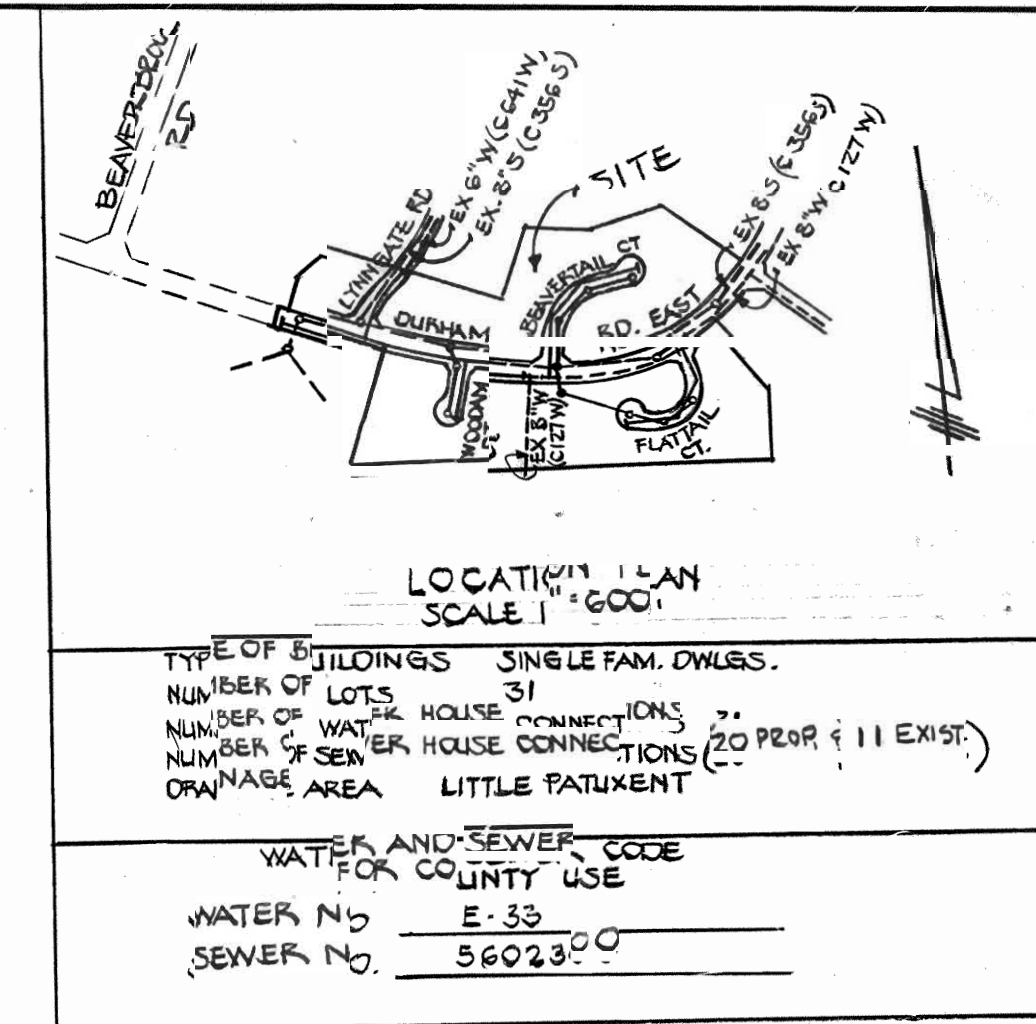
**GENERAL NOTES**

1. ALL WATER MAINS TO BE C.I.P. OR D.I.P. UNLESS OTHERWISE SHOWN.
2. TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5 FT. COVER UNLESS OTHERWISE NOTED.
3. ALL VALVES SHALL BE STRAPPED TO TREES IN ACCORDANCE WITH STANDARD DETAILS.
4. BLOCK ALL FITTINGS WITH CONCRETE, SEE STANDARD FOUND IN SPECIFICATIONS.
5. BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANTS TO BE COMPACTED IN ACCORDANCE WITH SECTION 1003.1008 OF THE STANDARD SPEC.
6. ALL SANITARY SEWERS SHALL BE C.S.P.K., V.C.P.K., P.V.C. OR A.C.P. CLASS 2400 UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
8. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER.
9. APPROXIMATE LOCATIONS 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 INSPECTOR AT THE CONTRACTOR'S EXPENSE.
10. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
11. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
12. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
13. CLEAR ALL UTILITIES BY A MINIMUM OF 6" CLEAR, ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. COSTS INCURRED SHALL BE INCLUDED IN UNIT PRICE BIDS FOR EXCAV. & BACKFILL FOR ALL STANDARD DETAILS SEE STANDARD FOUND IN SPECIFICATIONS.
14. CONTRACTOR SHALL LOCATE EXISTING UTILITIES 2 WKS. IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
15. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK: HOWARD CO. BUREAU OF UTILITIES 932-2892  
STATE HIGHWAY ADMINISTRATION 531-5633  
BALTIMORE G & E CO. - UNDERGROUND ELECTRIC DISTRIBUTION-CUSTOMER SERVICE 685-0123  
ENGINEERING - DAMAGE CONTROL 234-3621  
BALTIMORE G & E CO. UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE 685-0123  
M&S UTILITY 1-563-0100  
C & P TELEPHONE CO. 725-3376  
A.T. & T. CABLE LOCATION DIVISION 301-303-3553  
COLONIAL PIPELINE CO. 781-4641

17. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXCAVATION AND BACKFILL OF WATER & SEWER MAINS.
18. PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH M.S.H.A. MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
19. ALL WATER HOUSE CONNECTIONS SHALL BE ROKAN INSIDE METER SETTING. SEE SPEC. PNW.
20. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON EXISTING SYSTEM.
21. FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLANGED TYPE FITTINGS ONLY.
22. WATER MAIN AND WATER HOUSE CONNECTIONS MUST HAVE A MINIMUM OF 1 FOOT SEPARATION FROM THE SANITARY SEWER AND SEWER HOUSE CONNECTIONS AS THEY CROSS. EXCEPT AT CROSSINGS, WATER AND SEWER LINES HAVE A MINIMUM HORIZONTAL SEPARATION OF 10'.

QUANTITIES			
ITEM	BID	AS-BUILT	SUPPLIER
8" SEWER	1079 LF	1089 LF	ETI
6" SHC	680 LF	684.5	ETI
SAN. MH	0	9	TERRE HILL
8" WATER	964 LF	1005.5	GRIFFON
6" WATER	1704 LF	1192	GRIFFON
8" VALVE	83	2	U.S. PIPE
FIRE HYDRANT	4	4	U.S. PIPE
3/4" WHC	1100 LF	881.5 J.P.S.	HOWELL METAL CO.
8"x8" T.S. VALVE	2 EACH	2	U.S. PIPE
6" VALVE	2 EACH EX. I.C.H.V.	2	U.S. PIPE

INVERT OF S.H.C. AT R			INVERT OF S.H.C. AT R		
LOT	IN. @ R	OTHERS	LOT	IN. @ R	OTHERS
1	340.04		28	366.77	
2	348.05		27	365.90	
3	352.90		24	355.70	
4	353.27		25	354.93	
31	353.80		11	365.04	
5	353.79	6" NORTH SIDE OF EX. SHC.	7	358.92	
6	354.18		8	361.04	
23	365.30		9	363.84	
24	360.62		10	362.24	
12	360.93		22	365.35	
16	364.61		21	366.94	
13	364.06		20	367.18	
14	366.40		19	367.37	
15	367.98		18	369.05	
30	366.42		17	369.76	
29	366.37				

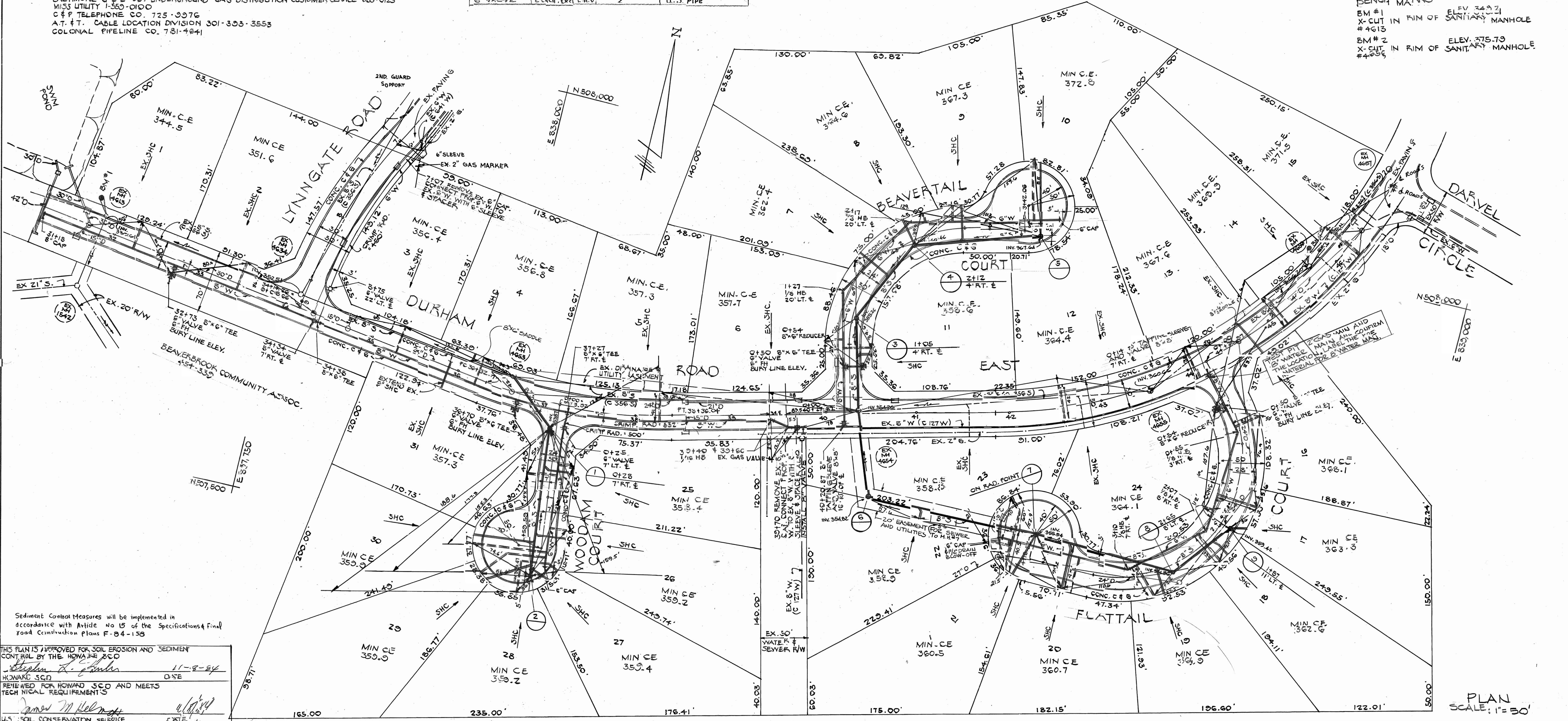


LOCATION MAP  
SCALE 1"=600'

TYPE OF BUILDINGS: SINGLE FAM. DWLS.  
NUMBER OF LOTS: 31  
NUMBER OF HOUSE CONNECTIONS: 20  
NUMBER OF WATER HOUSE CONNECTIONS: 20 (20 PER 11 EXIST.)  
NUMBER OF SEWER HOUSE CONNECTIONS: 20  
DRAINAGE AREA: LITTLE PATENT

WATER AND SEWER CODE FOR COUNTY USE  
WATER NO. E-33  
SEWER NO. 56023.00

BENCH MARKS  
BM #1 ELEV. 349.21  
X-CUT IN RIM OF SANITARY MANHOLE #4G13  
BM #2 ELEV. 375.79  
X-CUT IN RIM OF SANITARY MANHOLE #4G14

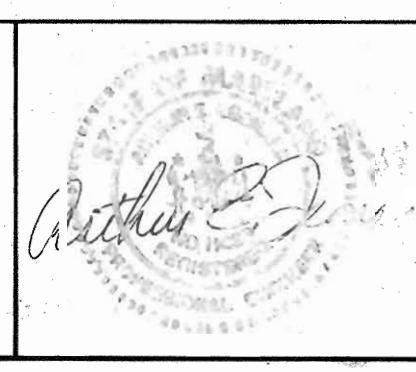


Sediment Control Measures will be implemented in accordance with Article No 15 of the Specifications and Final Road Construction Plans F-84-136

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SCD  
*Stephen J. G... 11-8-84*  
HOWARD SCD OSE  
REMB WED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS  
*James M. Helms*  
U.S. SOIL CONSERVATION SERVICE CXT/E

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
11-16-84  
DIRECTOR OF PUBLIC WORKS  
CHIEF, BUREAU OF ENGINEERING  
11-15-84  
CHIEF, BUREAU OF UTILITIES  
CHIEF, LAND DEVELOPMENT DIVISION

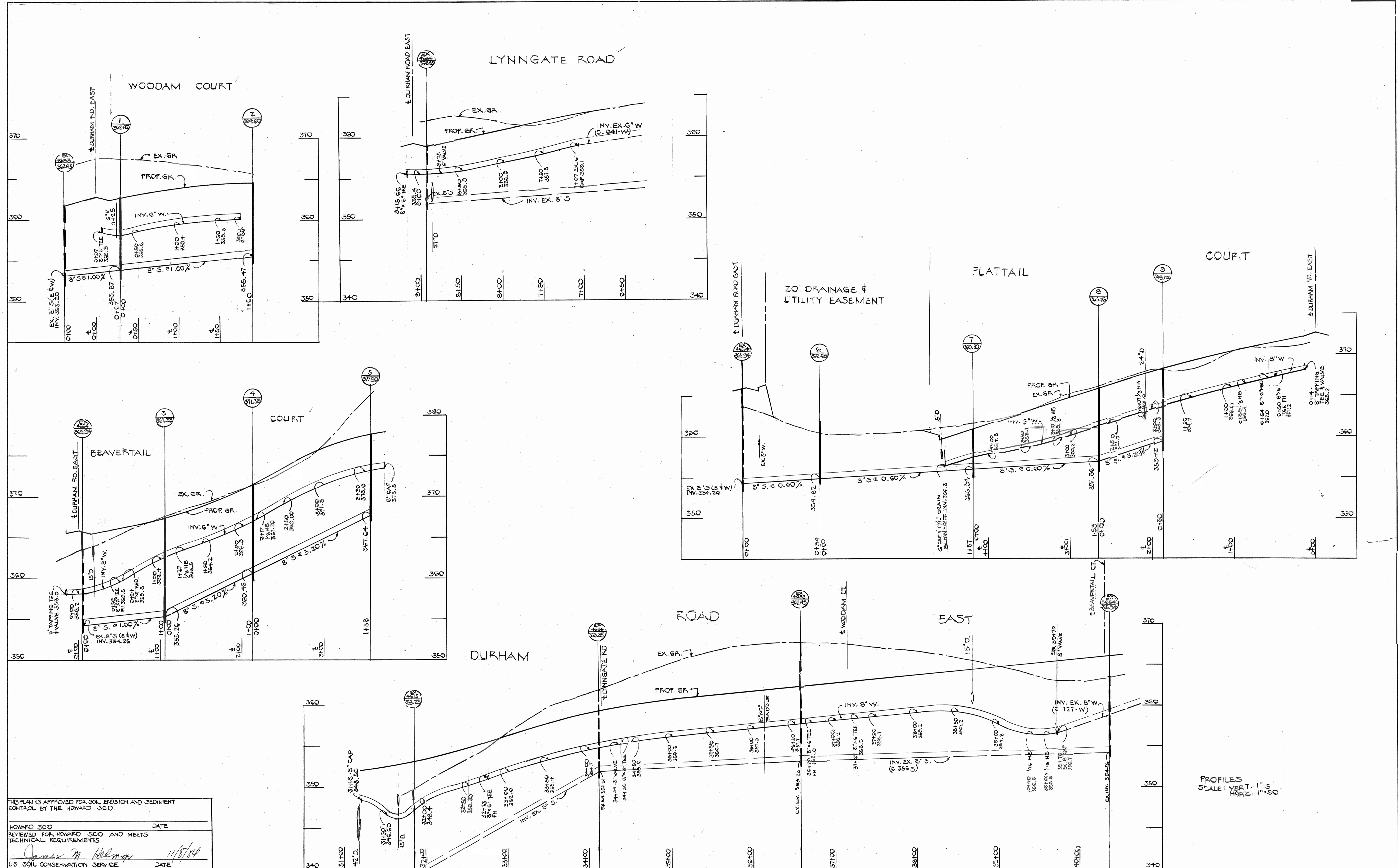
HOOKEY ASSOCIATES, INC.  
101 SHELL BUILDING  
200 EAST JOFFA ROAD  
TOWSON, MARYLAND 21284  
828-9070



DES:	DWB
DRN:	DWB
CHK:	AL
DATE:	
BY:	
NO.:	
REVISION:	
DATE:	

WATER AND SEWER PLAN AND PROFILE  
CONTRACT NO 24-1210-D  
600 SCALE MAP NO. 30 BLOCK NO.

DURHAM ROAD EAST, FLATTAIL COURT, BEAVERTAIL COURT, WOODAM COURT, AND LYNNGATE ROAD BEAVERBROOK SECTION 11 AREA 1 HOWARD COUNTY, MD  
SCALE AS SHOWN  
SHEET 1 OF 2  
AS-BUILT 8-4-86



THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SCD

HOWARD SCD DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

*James M. Williams* 11/18/80

U.S. SOIL CONSERVATION SERVICE DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*John F. Williams* 11-18-80  
DIRECTOR OF PUBLIC WORKS DATE

*Arthur J. Derwood*  
CHIEF, BUREAU OF ENGINEERING DATE

*Robert J. Williams* 11-15-84  
CHIEF, BUREAU OF UTILITIES DATE

*Arthur J. Derwood*  
CHIEF, LAND DEVELOPMENT DIVISION DATE

HOOKE ASSOCIATES, INC.  
101 SHELL BUILDING  
200 EAST JOPPA ROAD  
TOWSON, MARYLAND 21204  
878-3060

*Arthur J. Derwood*

DES: DWB	
DRN: DWB	
CHK: AL	
DATE: 11-18-80	222-85
BY: NO.	REVISION
1	REV'D STA. & ADD VALVE

WATER AND SEWER,  
PLAN AND PROFILE  
CONTRACT NO. 24-1219-D

600' SCALE MAP NO. 30 BLOCK NO.

DURHAM ROAD EAST, FLATTAIL COURT,  
BEAVER TAIL COURT, WOODAM COURT,  
AND LYNNGATE ROAD  
SECTION II AREA 1  
ELECT. DIST. 5 HOWARD COUNTY, MD

SCALE AS SHOWN

SHEET 2 OF 2