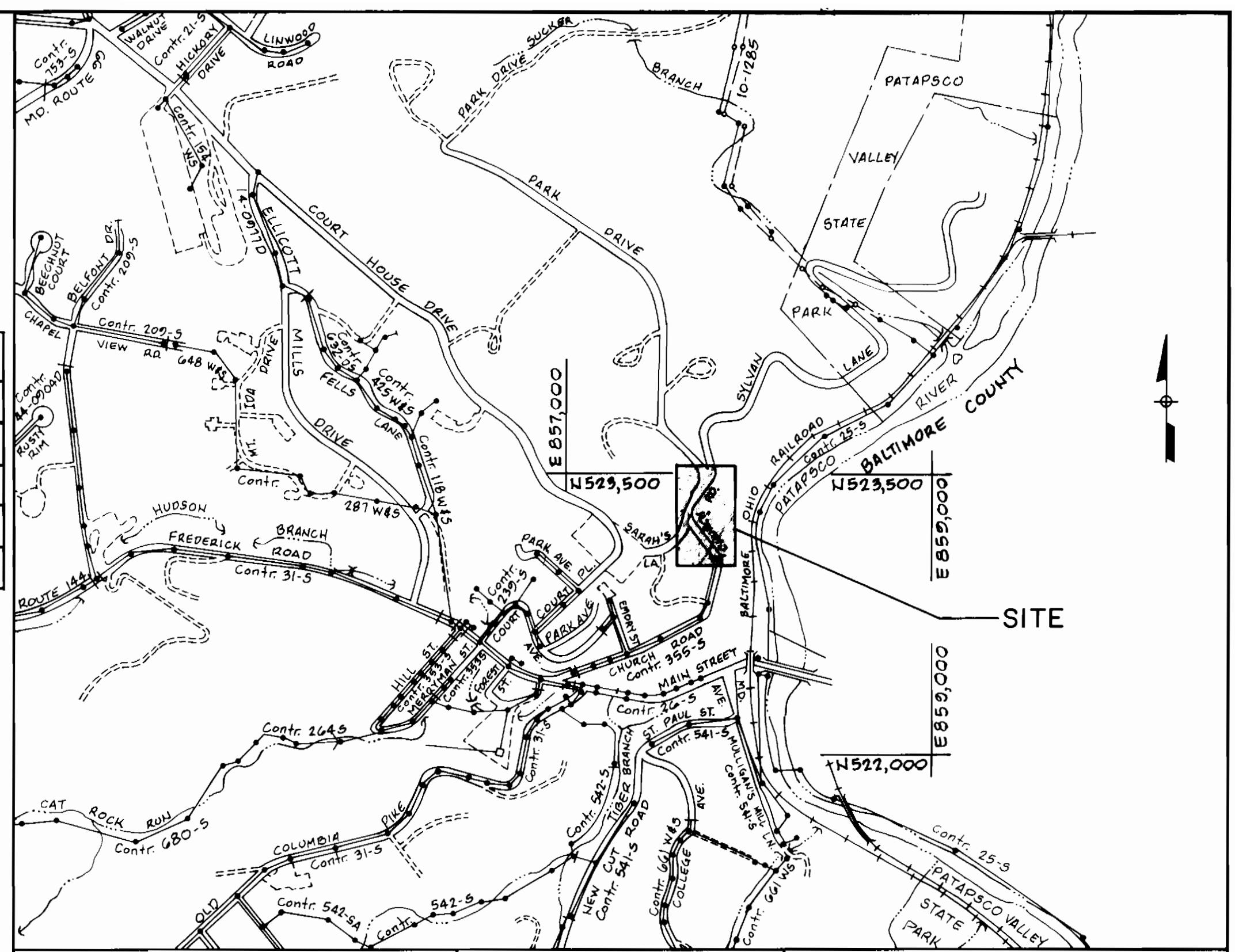


MANHOLE STAKEOUT TABLE

MH#	OFFSET	STATION/DIST.	TRAVERSE LINE
1	4' L	1+44	1+00 to 4+40.40
2	27' L	3+32	1+00 to 4+40.40
3	24' R	4+45	4+40.40 to 102
4	21' R	6+25	4+40.40 to 102



TYPE OF BUILDING: RESIDENTIAL
 NUMBER OF PARCELS: 1
 SEWER HOUSE CONNECTIONS: 1
 DRAINAGE AREA: PATAPSCO

VICINITY MAP
 SCALE: 1" = 600'

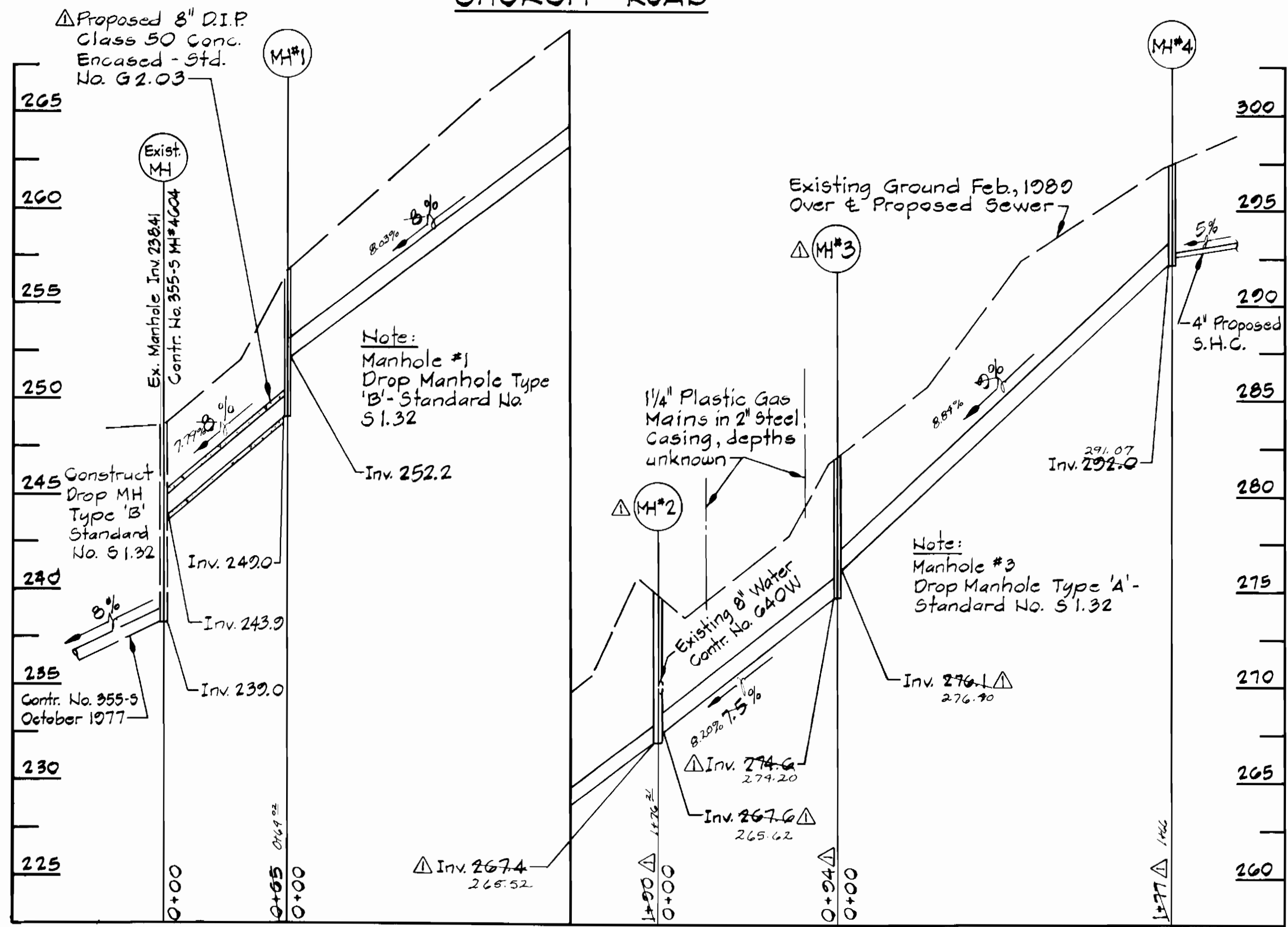
SEWER CODE FOR COUNTY USE ONLY
 SEWER NO. 1400700

- GENERAL NOTES:**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS, 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 BASED ON MARYLAND AND STATE COORDINATES.
 - ALL VERTICAL CONTROLS BASED ON U.S.G.S. DATA.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 6".
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. 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 [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 TESTS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 BALTIMORE GAS & ELECTRIC CO.- CONTRACTOR SERVICE 850-4620
 BALTIMORE GAS & ELECTRIC CO.- UNDERGROUND DAMAGE CONTROL 859-9004
 BALTIMORE GAS & ELECTRIC CO.- TROUBLE SHOOTING 298-9001
 MISS UTILITY 1-559-0100
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 992-2366
 - 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.
 - ALL SEWER MAINS SHALL BE V.C.P.X. 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.
 - THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON SHEET 2.
 - INVERTS OF THE SEWER HOUSE CONNECTIONS AT THE PROPERTY LINE ARE INDICATED BY THE SYMBOL: [Symbol]
 - "T.B." DENOTES TEST (SOIL) BORING.

ITEM	QUANTITIES		TYPE MATERIAL	SUPPLIER
	ESTIM.	AS BUILT		
8" P.V.C. Pipe	461 LF	440.91 LF	P.V.C.	CERTAINTEED CORP. A/P SUPPLIERS
Standard Manhole	2 EA.	2 EA.	PRECAST CONCRETE INVERTS	ATLANTIC CONCRETE
Drop Manhole Type 'A'	1 EA.	1 EA.	P.V.C. STANDARD	ATLANTIC CONCRETE
Drop Manhole Type 'B'	1 EA.	2 EA.	P.V.C. STANDARD	ATLANTIC CONCRETE
4" San. House Conn. Pipe	17 L.F.	24 LF	P.V.C.	CERTAINTEED CORP. A/P SUPPLIERS
8" D.I.P. Class 50	65 LF.	60.02 LF	CLASS 50 DEP.	GRIFFIN PIPE PRODUCTS

RESTORATION SCHEDULE

LOCATION	LENGTH	MATERIAL
Existing MH #4604 to MH #1	65'	Macadam
MH #1 to Sta. 0+45	45'	Macadam
Sta. 0+45 to MH #2	145'	Macadam-Right CR-G Shoulder-Lt.
MH #2 to MH #3	94'	Macadam
MH #3 to MH #4	171'	Macadam



PROFILE
 Scale: 1" = 50' Horiz. & 1" = 5' Vert.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

9-20-89
 DATE

9-12-89
 DATE

9-19-89
 DATE

WALLACE, MONTGOMERY & ASSOCIATES
 1544 YORK ROAD
 LUTHERVILLE, MARYLAND 21093
 (301) 494-9093

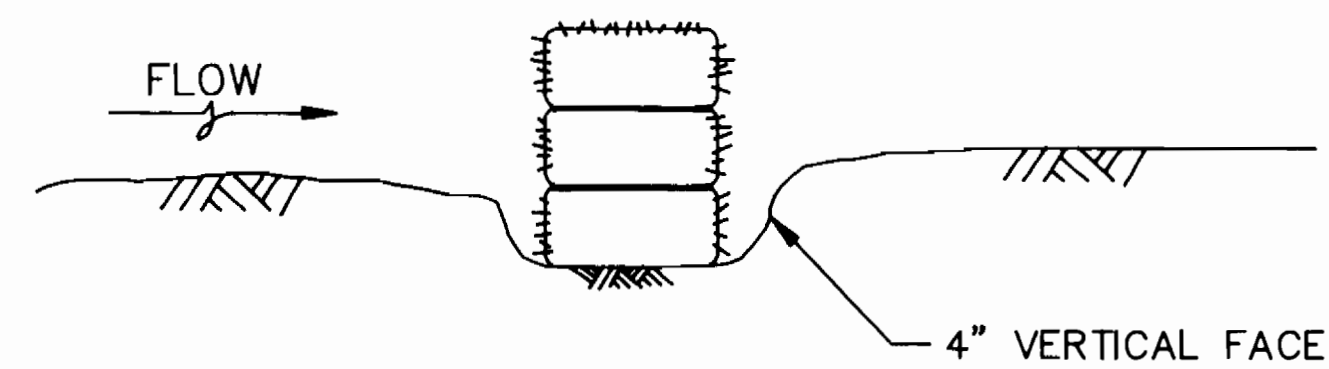
DES: J.C.W.	S.W.S.	Added 8" D.I.P. Class 50	11/9/89
DRN: S.W.S.	S.W.S.	Changed Location M.H.#2 & M.H.#3	11/27/89
CHK: J.C.W.	S.W.S.	Changed House Conn. Elev. @ M.H.#4	11/27/89
DATE: 4/28/89	BY NO.	REVISION	DATE

PLAN AND PROFILE OF SEWER EXTENSION

600' SCALE MAP NO. 25 BLOCK NO.

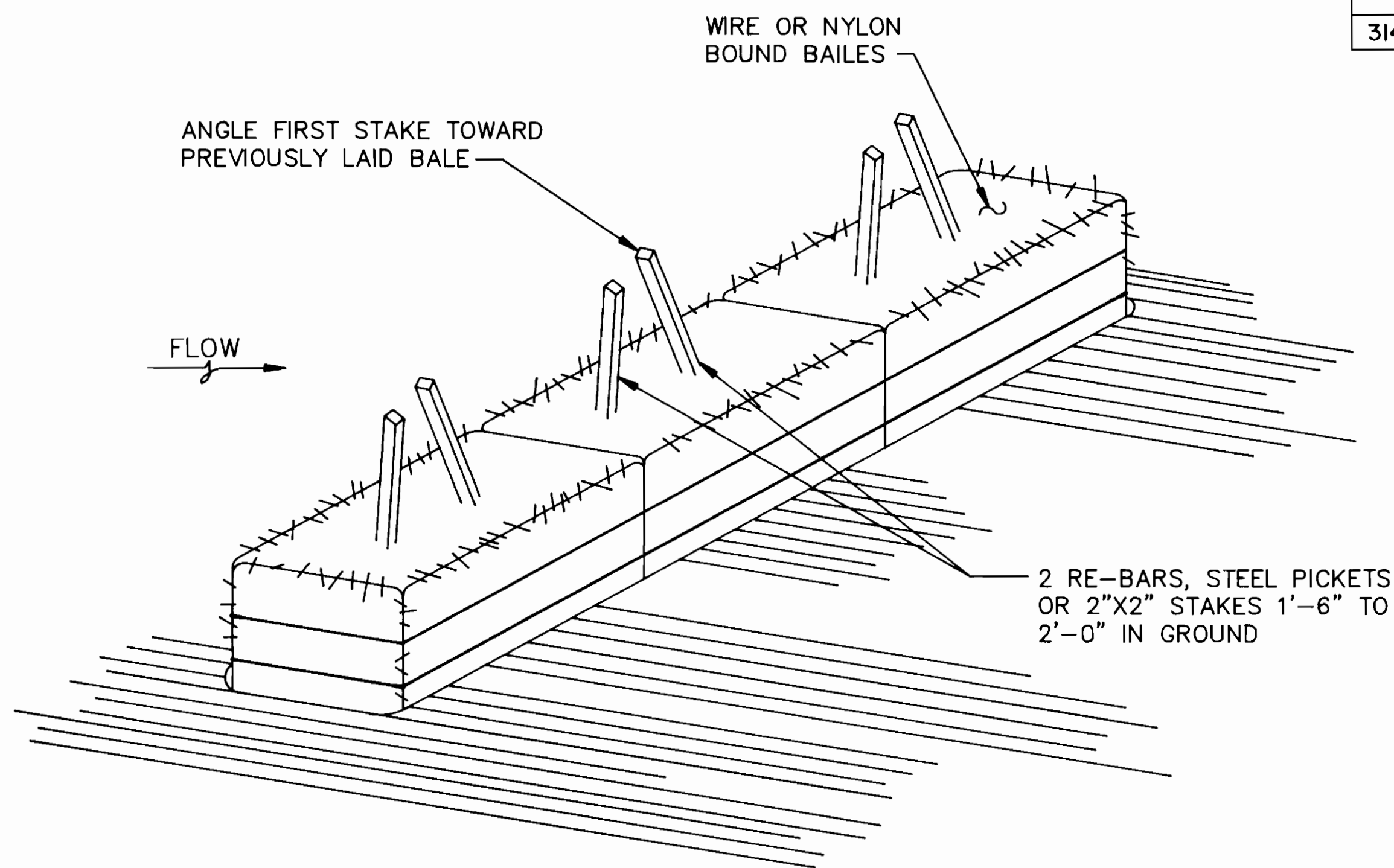
CHURCH ROAD ROUTINE SEWER EXTENSION
 CAPITAL PROJECT S 6689
 CONTRACT NO. 10-1930
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 2



EMBEDDING DETAIL

TRAVERSE DESCRIPTION				
POINT NO.	NORTH	EAST	BEARING	DISTANCE
3143011	523172.5040	856962.0070		
			N19°-32'-12"E	391.36'
3143013	523541.3360	857092.8830		
			S07°-48'-22"W	305.55'
104	523238.6148	857051.3821		
			S69°-17'-17"E	494.57'
103	523063.7003	857513.9882		
			N31°-58'-55"E	486.54'
102+6+68	523476.3908	857771.6851		
			S29°-38'-15"W	483.55'
101	523056.1029	857532.5644		
			N78°-28'-09"W	582.31'
3143011				



ANCHORING DETAIL

CONSTRUCTION SPECIFICATIONS

- BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THRU THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STANDARD SYMBOL - _____ S.B.D. _____

STRAW BALE DIKE DETAIL

NOT TO SCALE

SOIL EROSION AND SEDIMENT CONTROL NOTES:

- THE CONTRACTOR WILL COMPLY WITH ALL REQUIREMENTS OF SEDIMENT AND EROSION CONTROL SET FORTH IN THE CONTRACT DRAWINGS, 1983 "MARYLAND STANDARDS SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND VOLUME IV-SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV.
- THE CONTRACTOR SHALL NOT PUMP FROM EXCAVATED AREAS DIRECTLY INTO THE HOWARD COUNTY STORM DRAINAGE SYSTEM OR ANY NATURAL WATER COURSE. WHERE GROUND WATER IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE PORTABLE OR EXCAVATED SEDIMENT TRAPS TO PREVENT SILTED TRENCH WATER FROM ENTERING STORM DRAINAGE SYSTEMS OR NATURAL WATERWAYS.
- ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH WHENEVER POSSIBLE, AND CONFINED TO AN AREA WHERE IT WILL NOT OBSTRUCT THE NORMAL FLOW OR DRAINAGE COURSES.
- ALL SWALES SHALL BE EQUIPPED WITH A SEDIMENT RETENTION DEVICE TO TRAP SEDIMENT AND FILTER WATER LEAVING THE RIGHT-OF-WAY PRIOR TO ENTERING ANY RUNNING STREAM.
- THE CONTRACTOR SHALL PROVIDE STRAW BALE DIKES NORMAL TO SURFACE WATER FLOW AROUND ALL VEHICLE AND EQUIPMENT STAGING AREAS AS SHOWN IN "DETAIL OF A STRAW BALE DIKE" ENCLOSED IN SPECIFICATIONS.
- ROAD SIDE DITCHES AND DRAINAGE PIPES SHALL BE RESTORED TO A CONDITION FOLLOWING COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL DISPOSE OF SPOILS IN ACCORDANCE WITH GOOD SOIL CONSERVATION PRACTICE AND IN SUCH A MANNER THAT NONE CAN BE CARRIED INTO ANY DRAINAGE FACILITY OR WATER COURSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOIL OR EXCESS EXCAVATED MATERIAL ON A SITE APPROVED BY THE SOIL CONSERVATION DISTRICT. DOCUMENTATION OF APPROVAL AND SITE SHALL BE PROVIDED TO THE ENGINEER PRIOR TO BEGINNING WORK.
- THE HOWARD COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED IN WRITING BY THE CONTRACTOR AS TO WHERE EXCESS MATERIAL WILL BE DISPOSED FROM THE PROJECT, COPIES SHALL BE PROVIDED TO THE ENGINEER.
- CONTINUOUS INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROL DEVICES WILL BE REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL AS REQUIRED BY THE SEDIMENT CONTROL INSPECTOR, AS THE WORK PROGRESSES OR REQUIRES.
- THE CONTRACTOR SHALL NOTIFY IN WRITING, A HOWARD COUNTY SEDIMENT CONTROL DIVISION REPRESENTATIVE AT LEAST THREE (3) DAYS PRIOR TO STARTING WORK. PLEASE CONTACT: HOWARD COUNTY 992-2436. COPIES SHALL BE PROVIDED TO THE ENGINEER.
- THE CONTRACTOR SHALL PLACE A STABILIZED CONSTRUCTION ENTRANCE AS SHOWN IN THE HOWARD COUNTY STANDARD DETAILS, G6.11 WHERE SHOWN ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- SEDIMENT REMOVAL - ALL TRAPPED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AT THE AUTHORIZED LANDFILLS PRIOR TO REMOVAL OF SEDIMENT CONTROL STRUCTURES.
- FOLLOWING INITIAL SOIL DISTURBANCE, OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - SEVEN (7) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - FOURTEEN (14) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

<p>ENGINEER'S CERTIFICATION</p> <p>I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.</p> <p><i>Wallace</i> DATE 8/18/89</p> <p>WALLACE, MONTGOMERY & ASSOCIATES 1544 YORK ROAD LUTHERVILLE, MARYLAND 21093 (301) 494-9093</p>	<p>REVIEWED FOR HOWARD COUNTY S.C.D. MEETS TECHNICAL REQUIREMENTS.</p> <p>U.S. SOIL CONSERVATION SERVICE DATE 8/23/89</p> <p>THIS DEVELOPMENT PLAN IS APPROVED FOR THE SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.</p> <p>APPROVED DATE _____ HOWARD COUNTY S.C.D.</p>
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<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>James A. Lewis</i> 9-20-89 DIRECTOR OF PUBLIC WORKS DATE</p> <p><i>Robert M. Bevinger</i> 9-19-89 CHIEF, BUREAU OF UTILITIES DATE</p>	<p>WALLACE, MONTGOMERY & ASSOCIATES 1544 YORK ROAD LUTHERVILLE, MARYLAND 21093 (301) 494-9093</p> <p><i>Wallace</i></p>	<table border="1"> <tr><td>DES: J.C.W.</td><td></td><td></td><td></td><td></td></tr> <tr><td>DRN: S.W.S.</td><td></td><td></td><td></td><td></td></tr> <tr><td>CHK: J.C.W.</td><td></td><td></td><td></td><td></td></tr> <tr><td>DATE: 4/23/89</td><td>BY</td><td>NO.</td><td>REVISION</td><td>DATE</td></tr> </table>	DES: J.C.W.					DRN: S.W.S.					CHK: J.C.W.					DATE: 4/23/89	BY	NO.	REVISION	DATE	<p>DETAILS OF SEWER EXTENSION</p> <p>600' SCALE MAP NO. _____ BLOCK NO. _____</p>	<p>CHURCH ROAD ROUTINE SEWER EXTENSION CAPITAL PROJECT S 6689 CONTRACT NO. 10-1930 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN</p> <p>SHEET 2 OF 2</p>
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