

BENCH MARKS

PI.#6 ELEV. 407.482
3/8" Iron Pin 35"± West
of G&E Tower #239

PI.#7 ELEV. 402.905
PK. Nail in paving on South
Side of Cul-de-Sac Forest
Hill Drive

Property of
STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
708/001
Parcel 24B.

Property of
STATE OF MARYLAND
261/208
Parcel 02
Zoning = R

GOLDBERG PROPERTY
PLAT NO. 5108
PARCELS 65 & 66

Property of
BERNARD F. GOLDBERG & WIFE
300/411
231/175
LOT 1

Property of
BERNARD F. GOLDBERG & WIFE
1276/224
LOT 2

Property of
MICHAEL W. HUNTT
1176/235
LOT 3

Property of
RAYMOND J. GOLDBERG
1176/241
LOT 4

8' Temporary
Construction Strip
20' Private Drainage
and Utility
Easement

8' Temporary
Construction Strip
20' Private Drainage
and Utility
Easement

8' Temporary
Construction Strip
20' Private Drainage
and Utility
Easement

20' Temporary
Construction Strip

N80°32'33"W, 240.49'

N81°45'10"W, 224.12'

N78°34'13"W, 144.27'

N78°34'13"W, 168.17'

50°2'51.50"W, 200.42'

TRAVERSE COORDINATES

PI. NO.	NORTH	EAST
6	530 804.21	859 517.84
71	530 543.50	859 505.02
71A	530 580.79	859 322.59
101	530 600.36	859 179.29
101A	530 636.39	858 991.25
102	530 668.26	858 769.58

Property of
ROBERT J. SPARROW
1106/522
Parcel 67
Plat No. 5822

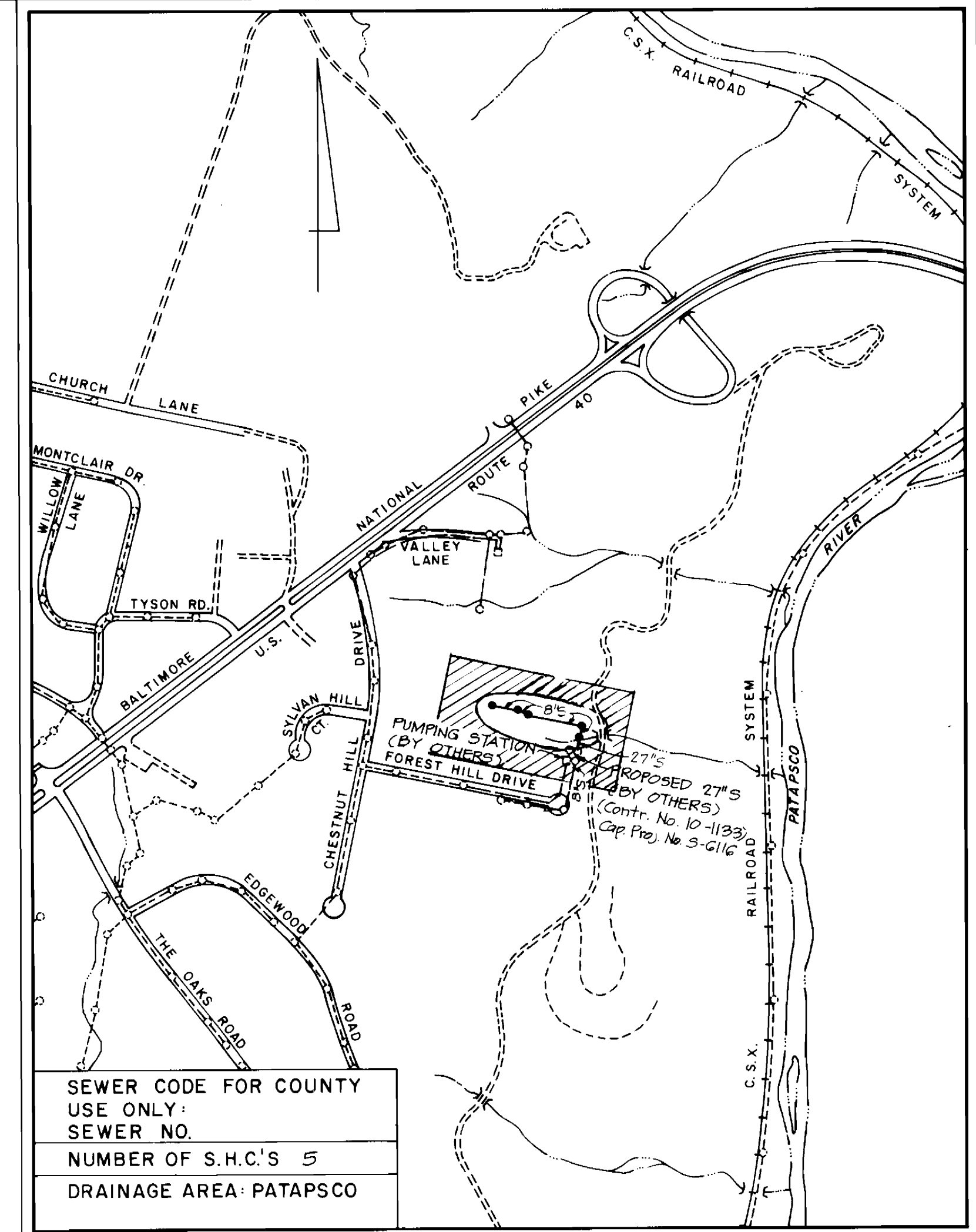
Property of
MICHAEL W. HUNT
1176/235
LOT 3

Property of
RAYMOND J. GOLDBERG
1176/241
LOT 4

Property of
KARL M. YUREK
1170/385
Parcel 167
Zoning = R-20

TRAVERSE TIES TO 4 MANHOLES

TRAVERSE NO.	BEARING	DISTANCE	MH NO.
PI.# 71	S 40° 14' 35" E	102.08'	G0
PI.# 71	S 76° 37' 04" E	88.05'	G1
PI.# 71A	N 83° 20' 02" W	24.08'	G2
PI.# 71A	N 68° 44' 12" W	76.12'	G3
PI.# 101	N 72° 16' 30" W	114.50'	G4

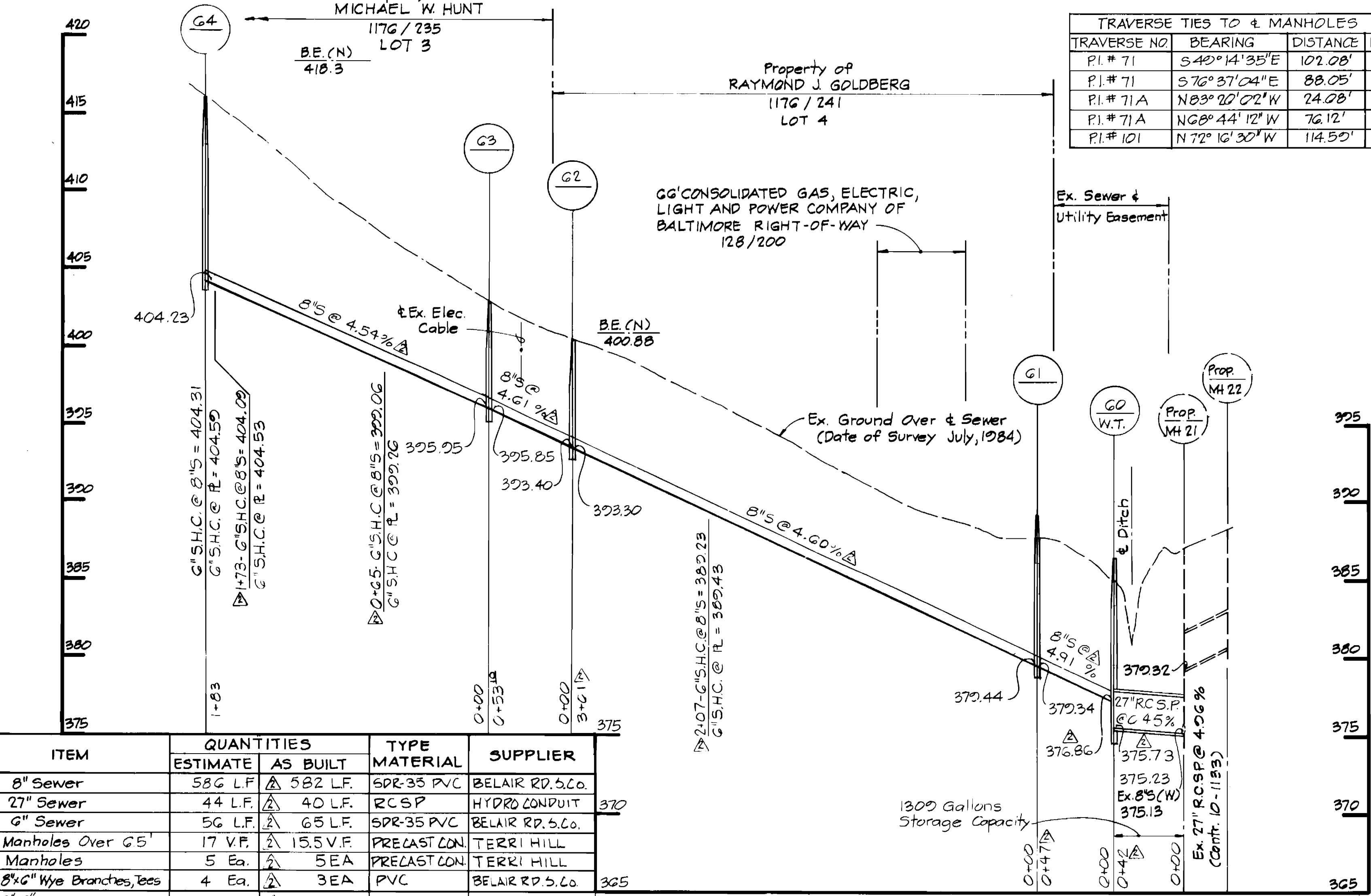
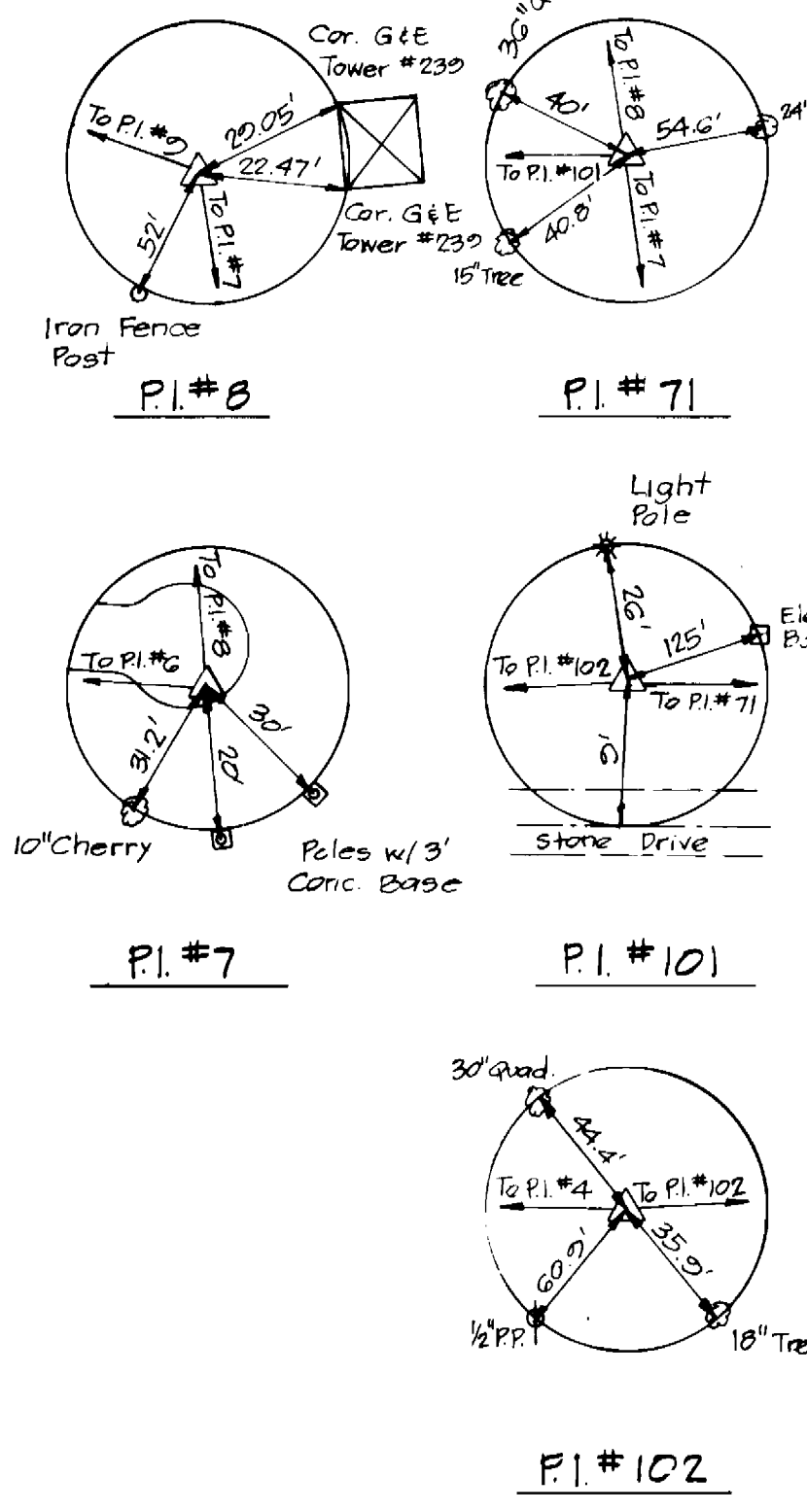


SEWER CODE FOR COUNTY
USE ONLY:
SEWER NO.
NUMBER OF S.H.C.'S 5
DRAINAGE AREA: PATAPSCO

VICINITY MAP
SCALE: 1" = 600'

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 CONTACTED THE UTILITIES 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 THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWNED 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 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 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 (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
STATE HIGHWAY ADMINISTRATION - 531-5533
BALTIMORE GAS & ELECTRIC COMPANY - CONTRACTOR SERVICES - 561-2585
BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND DAMAGE CONTROL - 234-5621
BALTIMORE GAS & ELECTRIC COMPANY - TROUBLE SHOOTING- 298-9013
"MISS UTILITY" - 1-559-0100
COLONIAL PIPELINE COMPANY - 795-1390
BUREAU OF UTILITIES HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 992-2366.
- TREES AND SHRUBS TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS 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 AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
- ALL SEWER MAINS SHALL BE D.I.P., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR PVC 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 BRICK MANHOLES ONLY.
- 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.
- HOUSE(S) WITH THE SYMBOL INDICATES THAT CELLAR CANNOT BE SERVED.



QUANTITIES

ITEM	ESTIMATE	AS BUILT	TYPE MATERIAL	SUPPLIER
8" Sewer	58 G L.F.	582 L.F.	SPR-35 PVC	BELAIR RD. S.CO.
27" Sewer	44 L.F.	40 L.F.	R.C.S.P.	HYDR. CONDUIT
6" Sewer	56 L.F.	65 L.F.	SPR-35 PVC	BELAIR RD. S.CO.
Manholes Over G5'	17 V.F.	15.5 V.F.	PRECAST CON.	TERRI HILL
Manholes	5 Ea.	5 EA	PRECAST CON.	TERRI HILL
8" x 6" Wye Branches, Tees	4 Ea.	3 EA	PVC	BELAIR RD. S.CO.
6" x 6" Wye	2	1 EA	PVC	BELAIR RD. S.CO.

PROFILE
Scale: Horz. 1"=50'
Vert. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John F. Nimmer 1-15-84
DIRECTOR OF PUBLIC WORKS

Michael J. Ryan 11-15-84
CHIEF, BUREAU OF ENGINEERING

Paul H. ... 11-15-84
CHIEF, BUREAU OF UTILITIES

Michael J. Ryan 11-15-84
CHIEF, UTILITY DIVISION

KIDDE CONSULTANTS, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

DES: T.E.S.
DRN: J.M.G.
CHK: W.B.H.
DATE: 10/15/84

K.C.I. As-Built
Watertight M. Reference Revised.
BY NO. REVISION DATE

PLAN AND PROFILE OF SEWER MAIN EXTENSIONS

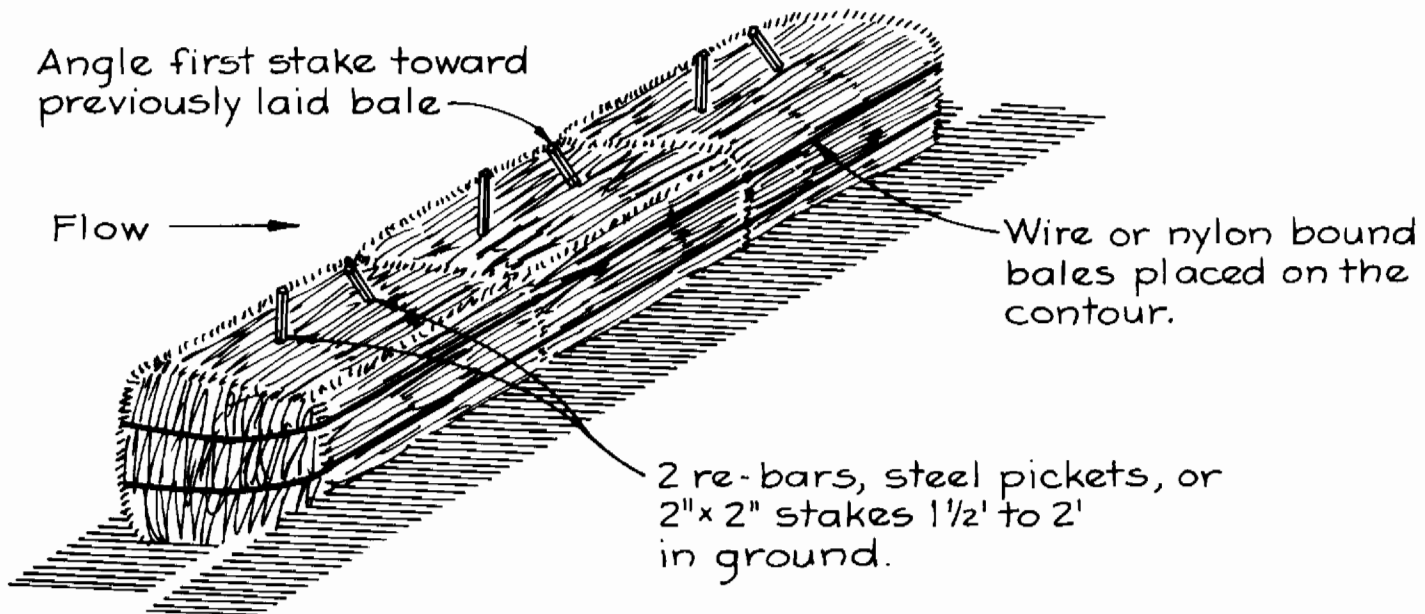
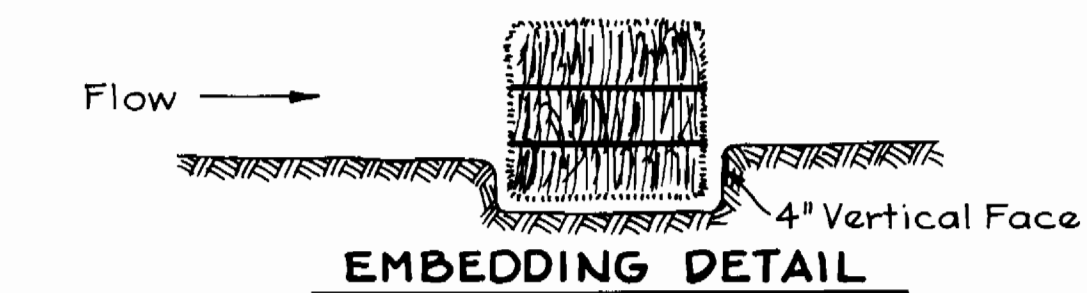
600' SCALE MAP NO. 18 BLOCK NO. 20

CHESTNUT HILL COLLECTOR SEWER-EXTENSION
CAPITAL PROJECT NO. S-6116
CONTRACT NO. 10-1134
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2

SOIL EROSION AND SEDIMENT CONTROL NOTES

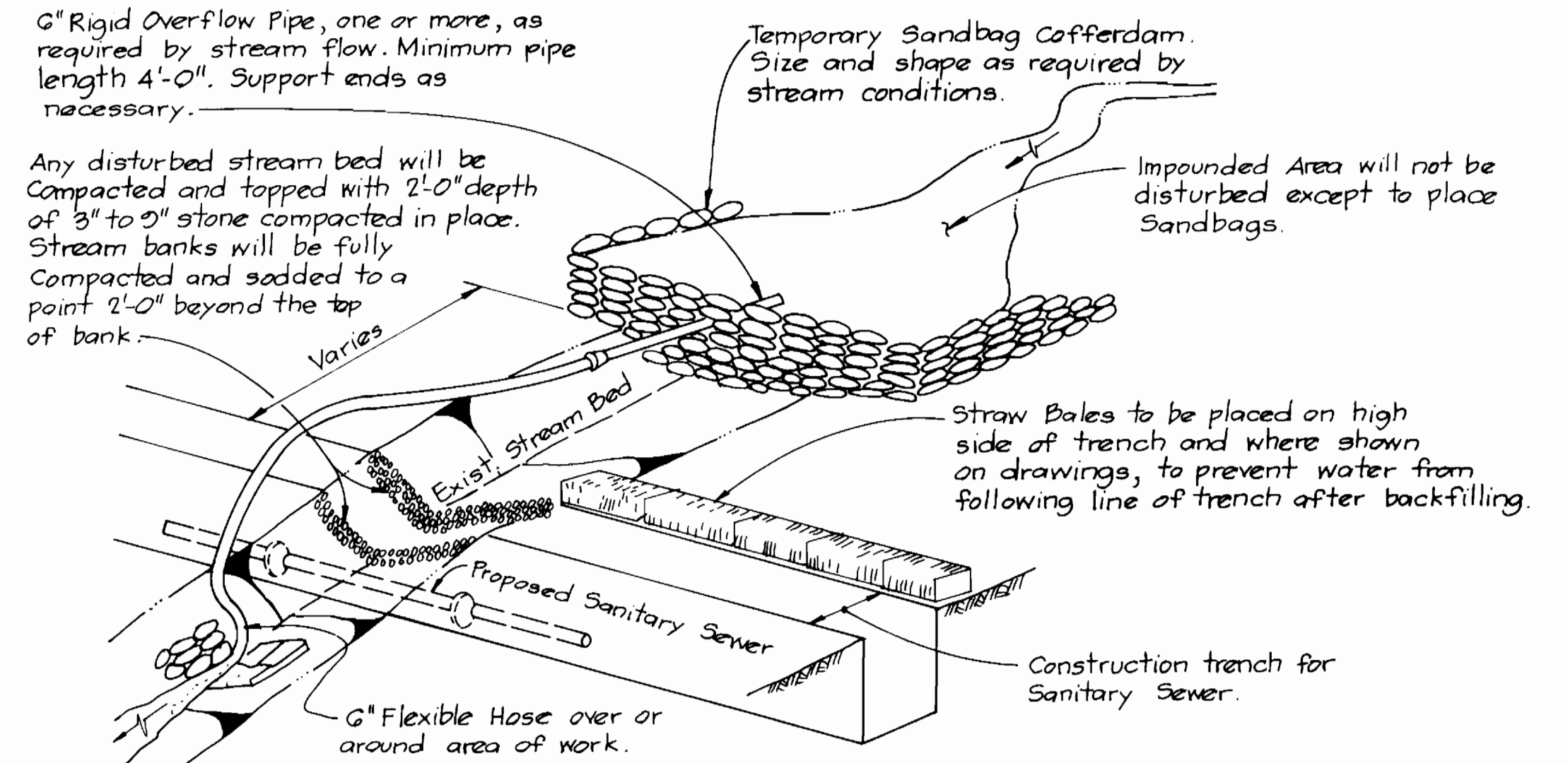
1. THE CONTRACTOR WILL COMPLY WITH ALL REQUIREMENTS OF SEDIMENT AND EROSION CONTROL SET FORTH IN THE CONTRACT DRAWINGS, THE USDA SOIL CONSERVATION SERVICE MANUAL, "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS", AND VOLUME IV - ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV.
2. THE CONTRACTOR SHALL NOT PUMP FROM EXCAVATED AREAS DIRECTLY INTO THE HOWARD COUNTY STORM DRAINAGE SYSTEM OR ANY NATURAL WATER COURSE. WHERE GROUNDWATER 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.
3. 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.
4. 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 STREAMS.
5. 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.
6. ROADSIDE DITCHES AND DRAINAGE PIPES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE ORIGINAL CONDITION FOLLOWING COMPLETION OF CONSTRUCTION.
7. 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.
8. THE HOWARD COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED IN WRITING BY THE CONTRACTOR AS TO WHERE EXCESS MATERIAL WILL BE DISPOSED OR BORROW MATERIAL WILL BE OBTAINED. PRIOR TO BEGINNING ANY WORK ON THIS PROJECT, COPIES SHALL BE PROVIDED TO THE ENGINEER.
9. CONTINUOUS INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROL DEVICES WILL BE REQUIRED.
10. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL AS REQUIRED BY THE SEDIMENT CONTROL INSPECTOR, AS THE WORK PROGRESSES OR REQUIRES.
11. 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.
12. THE CONTRACTOR SHALL PLACE A STABILIZED CONSTRUCTION ENTRANCE AS SHOWN IN THE HOWARD COUNTY STANDARD DETAILS, GG.11, WHERE SHOWN ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
13. SEDIMENT REMOVAL - ALL TRAPPED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AT THE AUTHORIZED LANDFILLS PRIOR TO REMOVAL OF SEDIMENT CONTROL STRUCTURES.
14. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A.) SEVEN (7) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - B.) FOURTEEN (14) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.



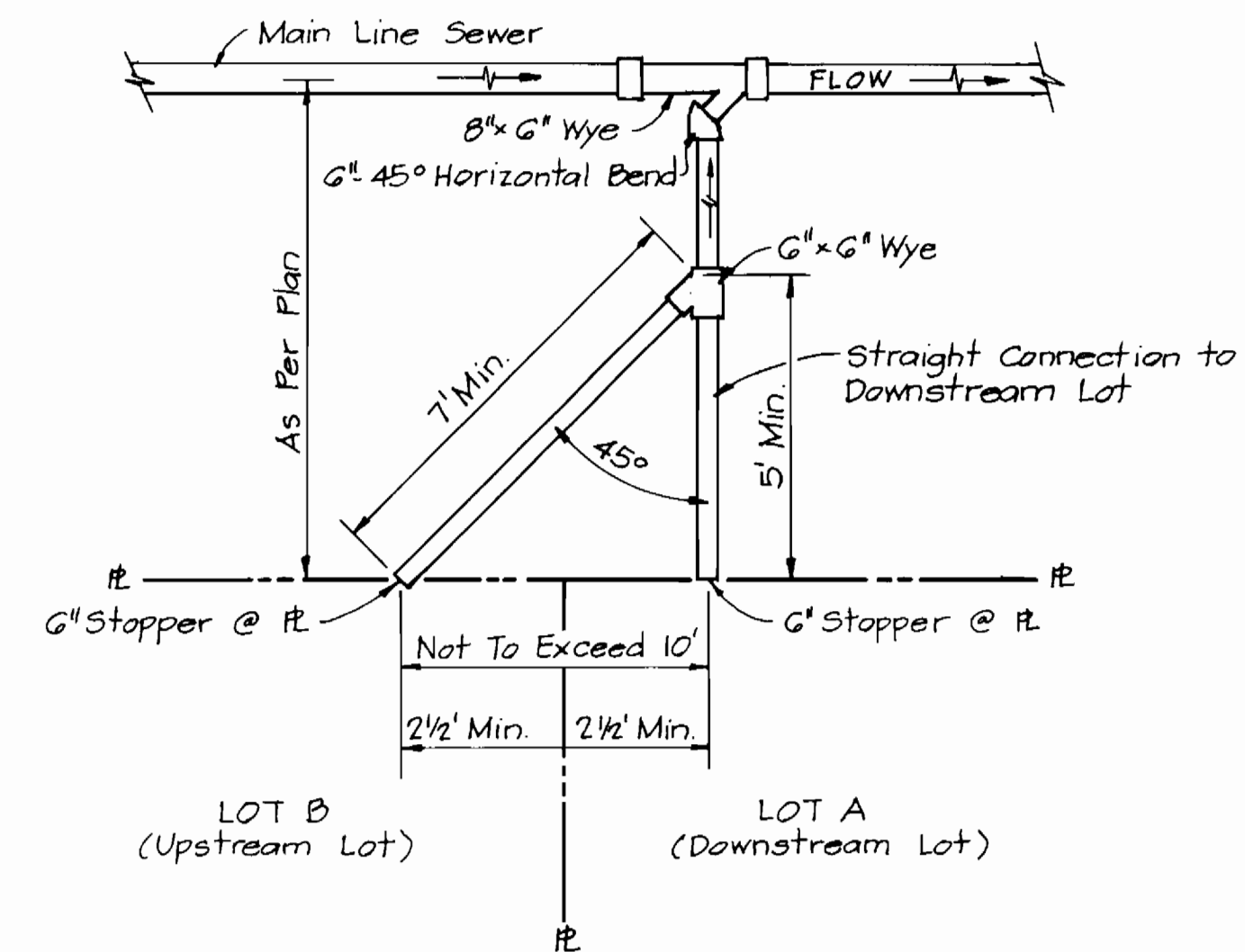
CONSTRUCTION SPECIFICATIONS

1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

DETAIL STRAW BALE DIKE
No Scale



STREAM CROSSING DETAIL
Not To Scale



NOTE:
For Details of Standard Fittings See Detail S1.41
See also Detail S2.11 for Standard Sewer House Connection

DETAIL TWIN SEWER HOUSE CONNECTION
Not To Scale

<p>Reviewed for Howard County S. C. D. and meets technical requirements.</p> <p><i>[Signature]</i> Date: 7-14-84 U.S. SOIL CONSERVATION SERVICE</p> <p>This development plan is approved for soil erosion and sediment control by the Howard County Soil Conservation District.</p> <p>Approved: <i>[Signature]</i> Date: 9/14/84 HOWARD COUNTY S.C.D.</p>	<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 requirements of the Howard County Soil Conservation District.</p> <p>Date: _____</p> <p>KIDDE CONSULTANTS, INC. 1020 CROMWELL BRIDGE ROAD TOWSON, MD. 21204</p>	<p>DEVELOPER'S CERTIFICATION</p> <p>"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."</p> <p><i>[Signature]</i> 11/18/84 BUREAU OF ENGINEERING DEPARTMENT OF PUBLIC WORKS</p>
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AS-BUILTS B-22-85

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 1-15-84 DIRECTOR OF PUBLIC WORKS</p> <p><i>[Signature]</i> 11-19-84 CHIEF, BUREAU OF UTILITIES</p>	<p>KIDDE CONSULTANTS, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND</p>		<p>DES: T.E.S. DRN: J.M.G. CHK: W.B.H. DATE: 10/15/84</p>	<p>SEDIMENT CONTROL DETAILS</p>	<p>CHESTNUT HILL COLLECTOR SEWER-EXTENSION CAPITAL PROJECT NO. S-6116 CONTRACT NO. 10-1134 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN SHEET 2 OF 2</p>
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