

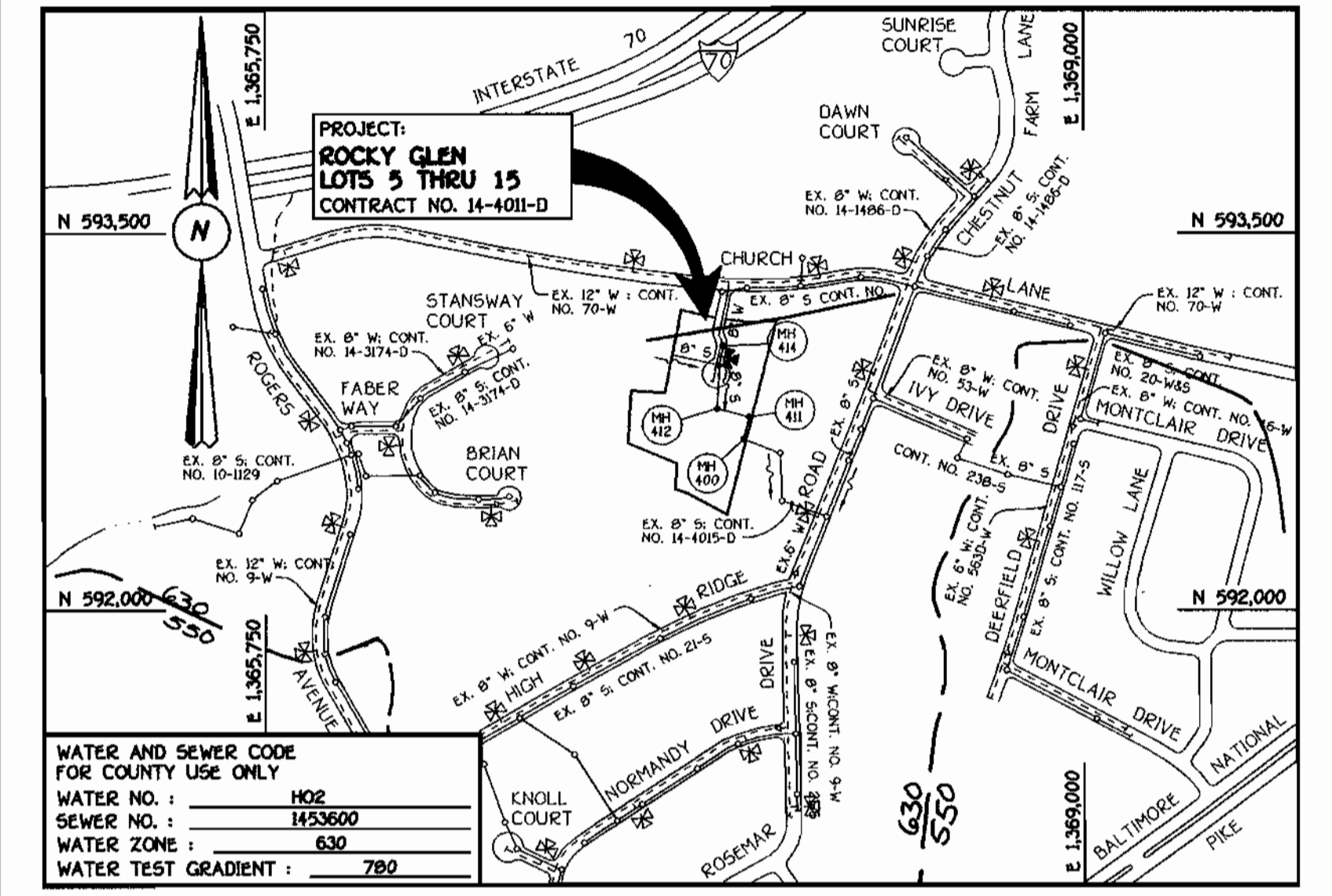
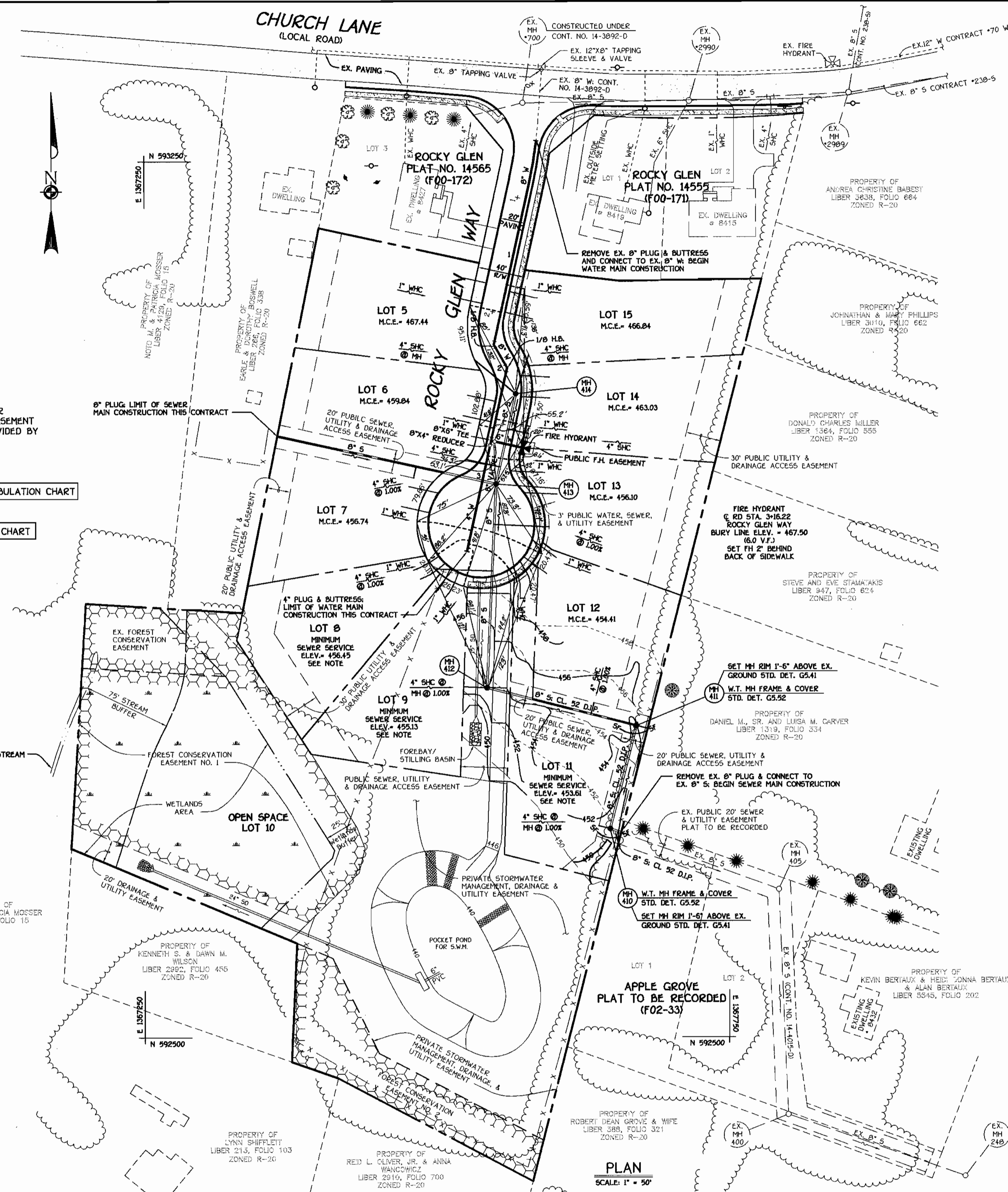
QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" WATER	268.39 L.F.	269 LF	DIP	BRIFIN B.R.S.
6" WATER	28 L.F.	29 LF	"	"
4" WATER	93.61 L.F.	93 LF	"	"
1" WATER	361 L.F.	363 LF	K. COPPER	CAMBRIDGE ICE
FIRE HYDRANTS	1 EACH	1EA	G.O.	MUELLER
8" X 6" TEE	1 EACH	1EA	DIP	U.S. PIPE
6" VALVE	1 EACH	1EA	R.S.O.R	MUELLER
1/8 H.B.	2 EACH	2EA	DIP	U.S. PIPE
8" X 4" REDUCER	1 EACH	1EA	"	"
4" PLUG & BUTTRESS	1 EACH	1EA	"	"
8" SEWER (D.I.P.)	445.08 L.F.	420 LF	PVC	J.M.
6" SEWER (D.I.P.)	233.08 L.F.	228 LF	DIP	BRIFIN
4" SEWER	274 L.F.	274 LF	PVC	J.M.
MANHOLES	5 EACH	5EA	PRECAST	ATLANTIC
8" PLUG	1 EACH	1EA	PVC	J.M.

NAME OF UTILITY CONTRACTOR: CCS
 SURVEY & DRAFTING DIVISION AS-BUILT DATE:

NOTE: LOTS 8, 9, & 11: GRAVITY SEWER SERVICE FIRST FLOOR ONLY; BASEMENT SEWER SERVICE SHALL BE PROVIDED BY PRIVATE ON SITE PUMP.

SEE SHEET 2 OF 2 FOR WATER MAIN TABULATION CHART

SEE SHEET 2 OF 2 FOR MANHOLE TABULATION CHART



TYPE OF BUILDING: RESIDENTIAL - SINGLE FAMILY DETACHED	PLAN REFERENCE NUMBERS: 599-19, P01-23, F02-115
NUMBER OF LOTS & PARCELS: 11 (10 BUILDABLE LOTS)	
NO. OF WATER HOUSE CONNECTIONS: 10	
NO. OF SEWER HOUSE CONNECTIONS: 10	
DRAINAGE AREA: PATAPSCO	
TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT	
CITY OF BALTIMORE	

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, NAD 83.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 29.
- ALL PIPE ELEVATIONS ARE INVERTS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 3'-0" MINIMUM.
- FOR DETAILS NOT SHOWN IN THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (1991 AMENDMENTS) THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL 'B' AT THE LOCATION OF THE TEST PIT. A NOTE TO 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 VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO THE EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - AT&T 1-800-526-2000
 - BGE (CONTRACTOR SERVICES) 410-950-4620
 - BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9095
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 410-313-4900
 - BELL ATLANTIC MARYLAND, INC. 1-800-621-9900
 - COLONIAL PIPELINE CO. 410-795-1390
 - MISS UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-9533
- 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 THE LINE OF EXCAVATION. 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. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- T.B. DENOTES TEST BORING.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR 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 PLANS OR SPECIFICATIONS.
- HOUSES WITH THE SYMBOL "C.A.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G5.51.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED AS TO HAVE ONE (1) FOOT SEPARATION FROM THE MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL WATER MAINS SHALL BE D.I.P., CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-0" 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 ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (W11 AND W2J3). 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 MAIN SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH THE AWWA SPECIFICATIONS C-353, DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, (410) 313-2450 AT LEAST FIVE (5) 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 1814(A) OF THE HOWARD COUNTY CODE.

DEVELOPER'S CERTIFICATION

"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS AWAID DEEMED NECESSARY."

Paul W. Kandel FOR: **ROCKY GLEN LLC** 07-19-07
 SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATION

"I HEREBY 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 SOIL CONSERVATION DISTRICT."

Paul W. Kandel 07-19-07
 SIGNATURE OF ENGINEER DATE

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

Jim Meyer 8/2/02
 U.S.D.A. NATURAL RESOURCE CONSERVATION SERVICE DATE

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

John K. Roberts 8/2/02
 APPROVE: HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND AS SHOWN ON F02-115 AND ON THESE PLANS.

Paul W. Kandel FOR: **ROCKY GLEN LLC** 07-19-02
 SIGNATURE OF DEVELOPER DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND



DESIGNED BY: P.W.K.	
DRAWN BY: M.D.T.	
CHECKED BY: P.W.K.	
DATE: JULY, 2002	
BY NO. K01	1
REVISION	1/20/04

WATER & SEWER MAINS PLAN VIEW	
600' SCALE MAP NO. 10	BLOCK NO. 13
F.C.C. WORK ORDER NO. 30676	
FILE NAME: 30676.FINAL.WATER AND SEWER PLAN.SHT	

ROCKY GLEN
 LOTS 5 THRU 15
 CONTRACT NO. 14-4011-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 2

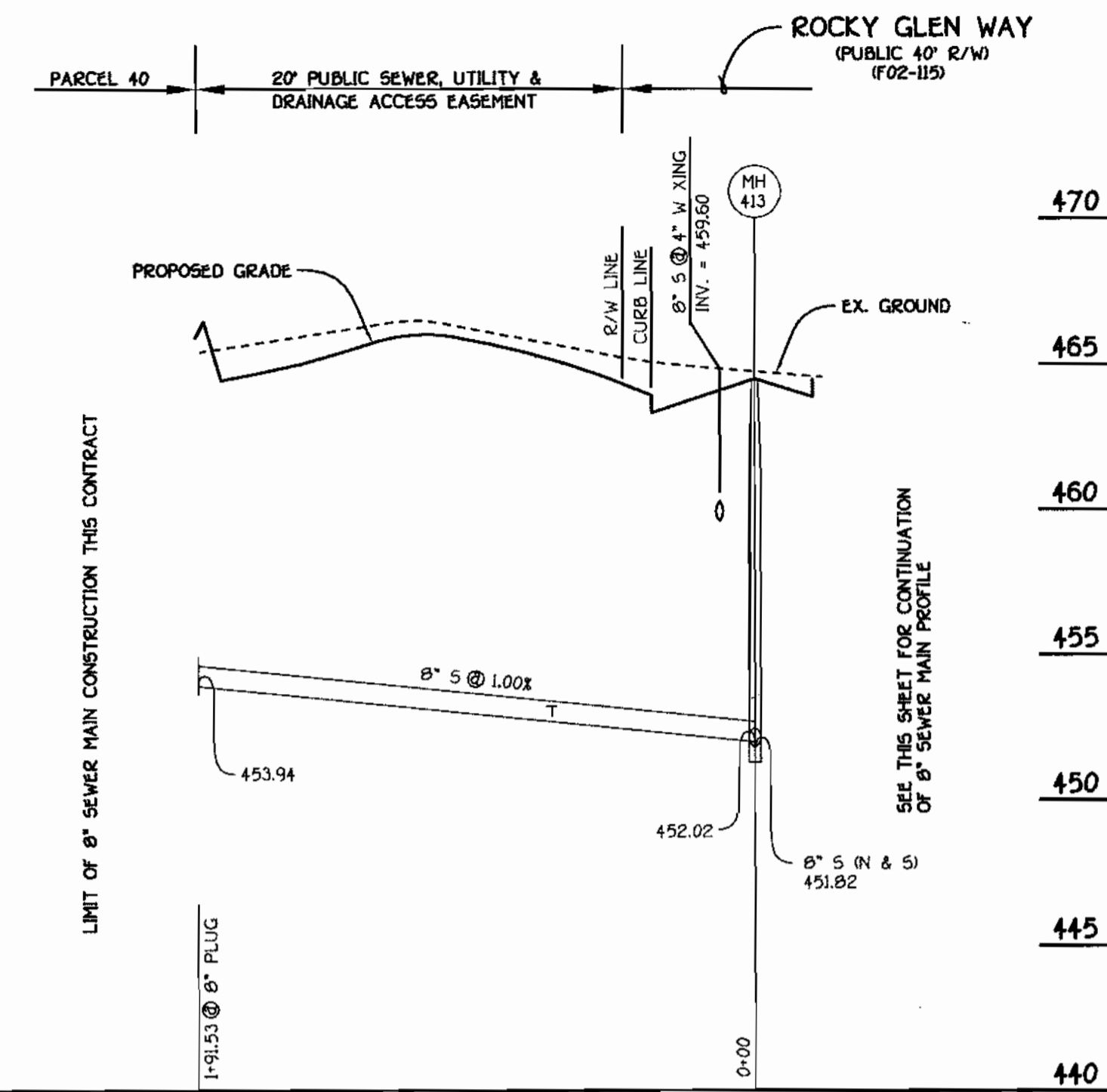
K:\Drawings\330676 Rocky Glen\Water and Sewer\Final\Water and Sewer Plan.sht.dwg, 07/18/02 09:34:32 PM

WM. STATION	APPURTENANCE	ROAD STATION	DISTANCE
8" & 4" WATER MAINS: ROCKY GLEN WAY			
0+00.00	CONNECT TO EX. 8" W	0+48.20	7.0' LT.
0+37.63	P.T. (CIRCP RADIUS 380')	0+86.50	7.00' LT.
1+78.45	1/8" H.B.	2+28.59	② ROAD
2+01.29	1/8" H.B.	2+51.31	143' LT.
2+65.39	8" X 6" TEE	3+16.22	7.00' RT.
2+68.39	8" X 4" REDUCER	3+19.22	7.00' RT.
3+62.00	4" PLUG & BUTTRESS	L.P. STA. 1+60.84	19.04' RT.

STATION	LOT	ELEVATION
SHC INVERT @ PROPERTY LINE CHART		
EX. 8" PLUG TO MH 410		
② MH 410 CT.	11 (SHC @ 1.000)	449.86
	MH 411 TO MH 412	
0+40 RT.	12 (SHC @ 1.000)	450.56
② MH 412 CT.	9 (SHC @ 1.000)	451.48
	MH 412 TO MH 413	
1+00 LT.	8 (SHC @ 1.000)	452.11
1+40 RT.	13 (SHC @ 1.000)	452.29
	MH 413 TO MH 414	
0+15 LT.	6	454.44
0+48 RT.	14	457.83
② MH 414 CT.	15	461.74
② MH 414 LT.	5	461.94
	MH 413 TO 8" PLUG	
0+70 LT.	7 (SHC @ 1.000)	452.99

NO.	NORTHING	EASTING	RIM ELEVATION
MANHOLE TABULATION CHART			
410	592678.34	1367648.15	453.70**
411	592766.73	1367670.67	455.45**
412	592799.27	1367542.94	454.00*
413	592973.64	1367550.95	464.46*
414	593050.81	1367567.85	469.43*
8" PLUG	593014.63	1367363.86	-----

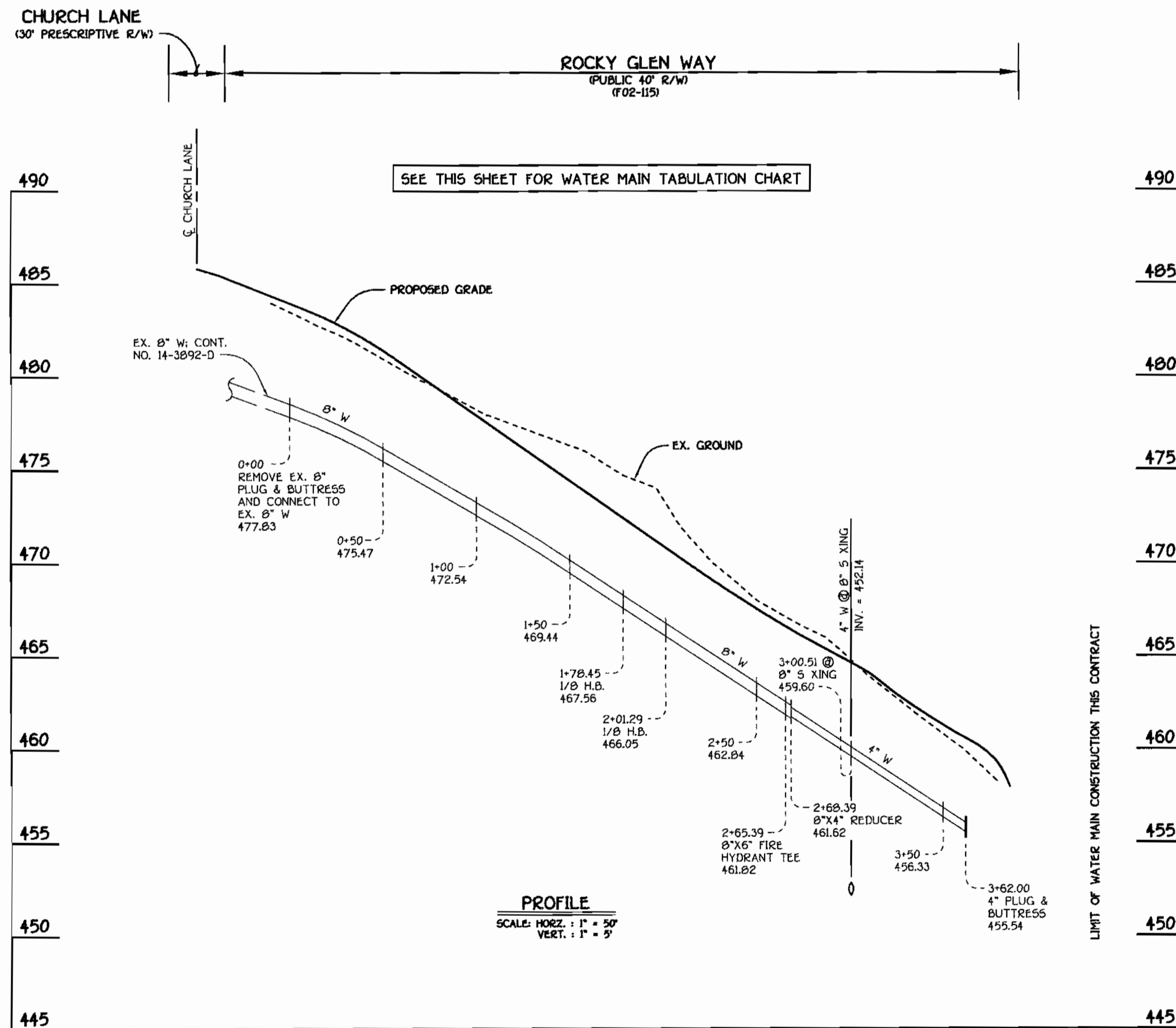
* SET MH RIMS FLUSH W/ PROPOSED FINISHED GRADE.
 ** SET MH RIMS 1'-6" ABOVE PROPOSED GRADE; STANDARD DETAIL G5.41.



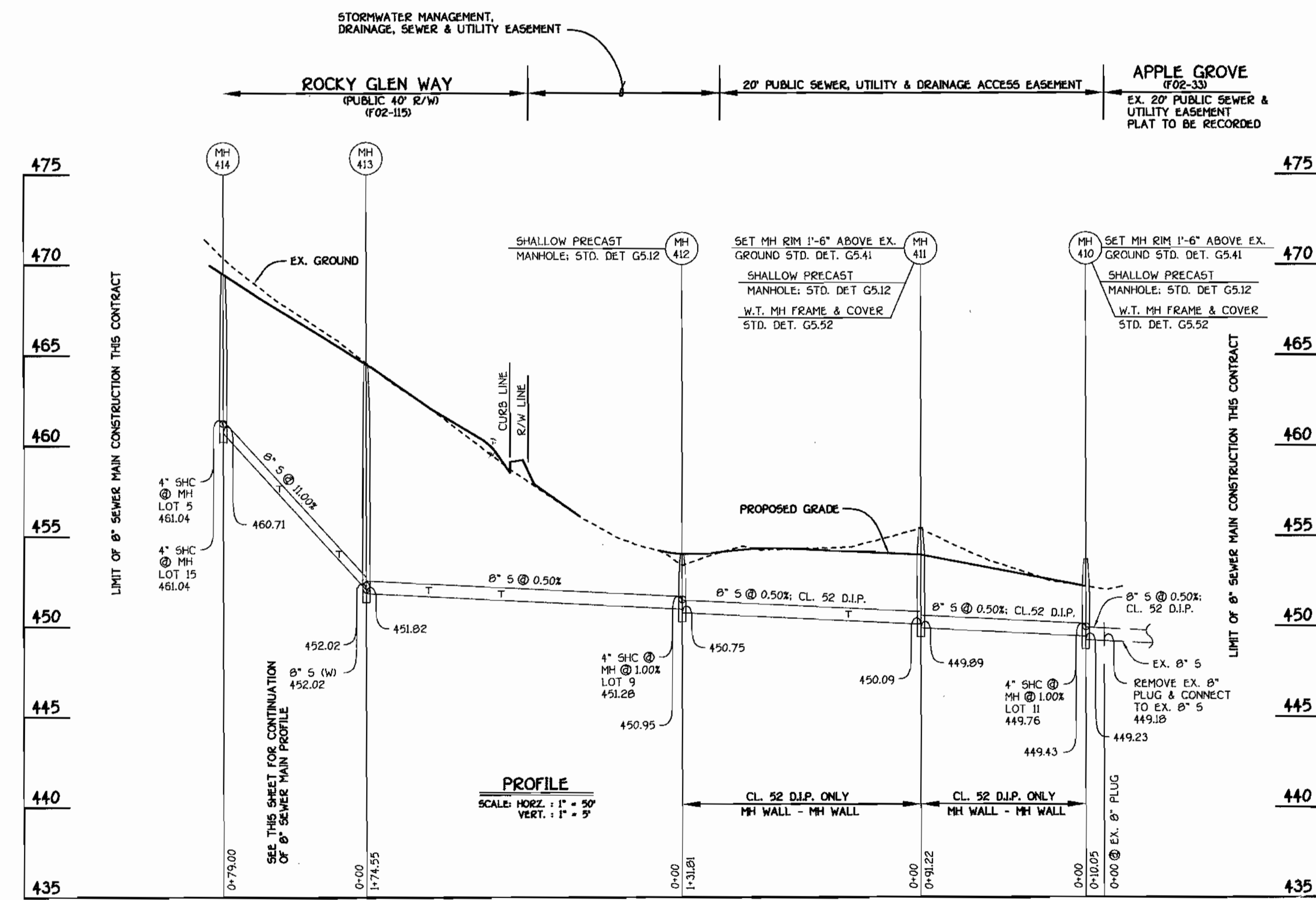
8" SEWER MAIN TO PARCEL 40

FROM	TO	DIST. FT.
MH 414	LOT 5	46.7
"	"	79
"	"	114
MH 413	"	148
"	"	183
"	"	218
SYSTEM DRAIN	"	253
"	"	288
MH 412	"	323
"	"	358
MH 411	"	393
"	"	428
MH 410	"	463
SYSTEM DRAIN	"	498
MH 415	"	533
"	"	568
MH 414	"	603
MH 413	"	638
MH 412	"	673

NOTE: ALL MEASUREMENTS ARE TO SHC.
 ALL MEASUREMENTS ARE IN FEET.



8" & 4" WATER MAIN: ROCKY GLEN WAY



8" SEWER MAIN: ROCKY GLEN WAY TO APPLE GROVE

CONTRACT NO. 14-4011-D
 ROCKY GLEN
 LOTS 5 THRU 15
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] R. P. [Signature] 7/29/02 BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND [Signature] 8/1/02 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 3077 BALTIMORE NATIONAL PIKE ELLOTT CITY, MARYLAND 21828 (410) 485-2995 TERRELL A. FISHER	DESIGNED BY: P.W.K. DRAWN BY: M.D.T. CHECKED BY: P.W.K. DATE: JULY, 2002 BY NO. 1 REVISION	WATER & SEWER MAINS PROFILES 600' SCALE MAP NO. 10 BLOCK NO. 15 F.C.C. WORK ORDER NO. 30675 FILE NAME: 30675.FINAL.WATER AND SEWER PROFILES.SHT 2	ROCKY GLEN LOTS 5 THRU 15 CONTRACT NO. 14-4011-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE A5 SHOWN SHEET 2 OF 2
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