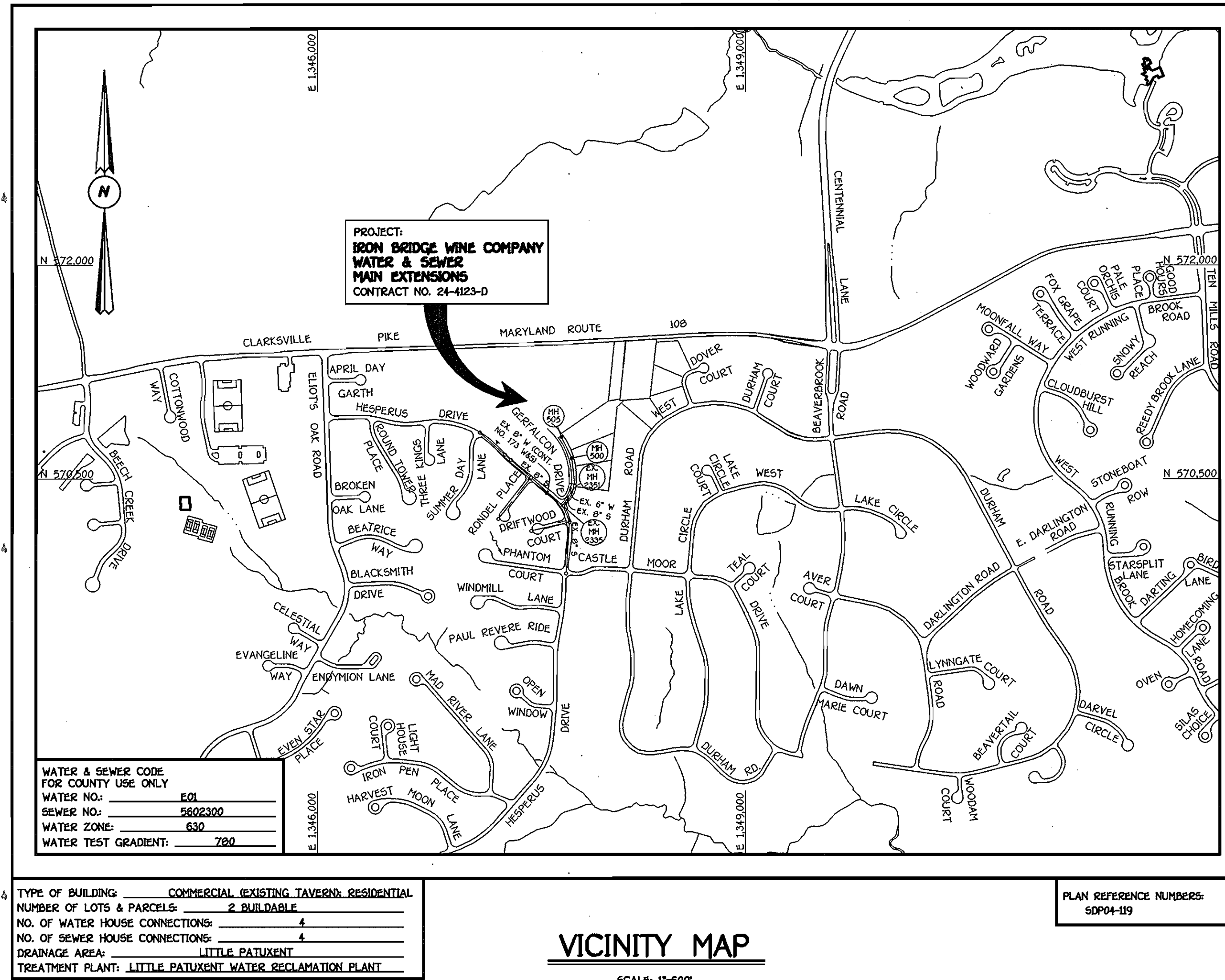


QUANTITIES					
ITEM	ESTIMATED	AS-BUILT		SUPPLIER	
		QUANTITIES	TYPE		
8" WATER	344 L.F.	347 L.F.	DIP CLASS 52	GRIFFIN	
6" WATER	85 L.F.	83 L.F.	DIP CLASS 52	GRIFFIN	
4" WATER	25 L.F.	25 L.F.	DIP CLASS 52	GRIFFIN	
1 1/2" WATER	35 L.F.	35 L.F.	COPPER	READING	
1" WATER	35 L.F.	34 L.F.	COPPER	READING	
8" X 6" TEE	2 EACH	2 EACH	DIP CLASS 52	U.S. PIPE	
4" X 4" TEE	2 EACH	2 EACH	DIP CLASS 52	U.S. PIPE	
6" VALVE	3 EACH	2 EACH	GATE	MUELLER CO.	
4" VALVE	3 EACH	3 EACH	GATE	MUELLER CO.	
8" X 6" REDUCER	1 EACH	1 EACH	DIP CLASS 52	U.S. PIPE	
6" X 4" REDUCER	2 EACH	2 EACH	DIP CLASS 52	U.S. PIPE	
4"-90° ELBOW	2 EACH	2 EACH	DIP CLASS 52	U.S. PIPE	
6" PLUG & BUTTRESS	1 EACH	1 EACH	DIP CLASS 52	U.S. PIPE	
6" PLUG & BUTTRESS	1 EACH	1 EACH	DIP CLASS 52	U.S. PIPE	
FIRE HYDRANT	1 EACH	1 EACH	—	MUELLER CO.	
OUTSIDE METER VAULT & BYPASS ASSEMBLY	1 EACH	—	—	—	
8" SEWER	363 L.F.	363 L.F.	PVC SDR 35	JM MFG.	
6" SEWER	20 L.F.	20 L.F.	PVC SDR 35	JM MFG.	
4" SEWER	35 L.F.	35 L.F.	PVC SDR 35	JM MFG.	
MANHOLES	2 EACH	2 EACH	PRECAST CONC.	ATLANTIC	

NAME OF UTILITY CONTRACTOR: CONSOLIDATED CONSTRUCTION SRV'S.
SURVEY & DRAFTING DIVISION AS-BUILT DATE: AUGUST 31, 2005



GENERAL NOTES

PART I

- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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 83/91.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 80.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 9'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED 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 (LATEST EDITION). 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 (C) AT THE LOCATIONS OF THE TEST PITS. 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.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - AT&T 1-800-252-1333
 - BGE (CONTRACTOR SERVICES) 410-250-1620
 - BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9068
 - BUREAU OF UTILITIES 410-313-4900
 - COLONIAL PIPELINE CO. 410-795-1390
 - MISS UTILITY 1-800-297-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
 - VERIZON 1-800-743-0033/410-224-9210

PART II: WATER

- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TREES SHALL BE STRAPPED TO TREES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE SURVEY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.

PART III: SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 1'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 15" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

DEVELOPER'S CERTIFICATION

I/WE 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 ARE DEEMED NECESSARY.

Paul W. Koebel FOR: **Rauwar Enterprises, LLC** 07-12-05
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. Koebel 07-12-05
SIGNATURE OF ENGINEER DATE

GP05-17

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

Jim Meyer 7/27/05
D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *John K. Rhoton* 7/27/05
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 SDP04-119 AND ON THESE PLANS.

Paul W. Koebel FOR: **Rauwar Enterprises, LLC** 07-12-05
SIGNATURE OF DEVELOPER DATE

CONTRACT No. 24-4123-D

IRON BRIDGE WINE COMPANY

WATER & SEWER MAIN EXTENSIONS

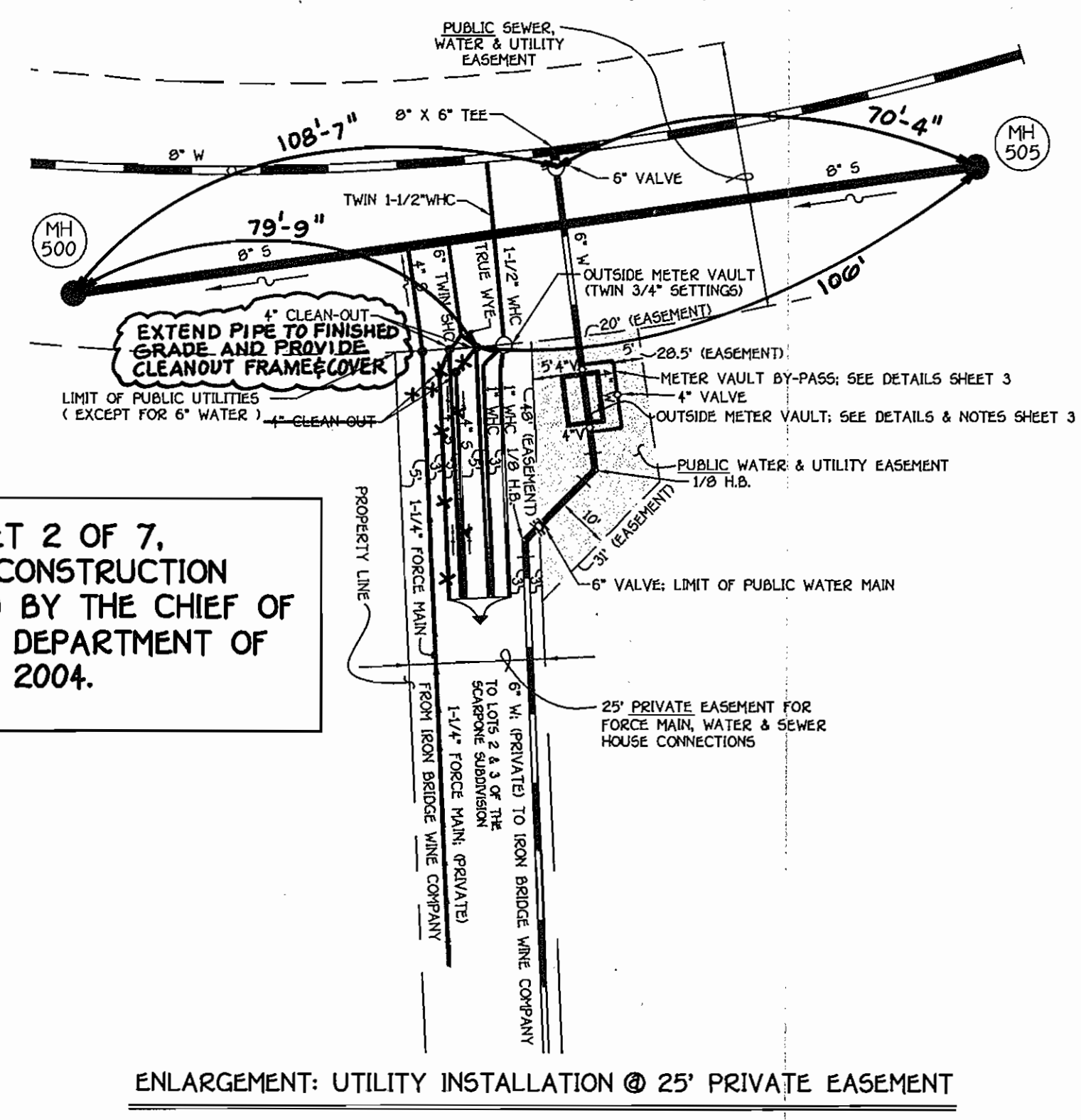
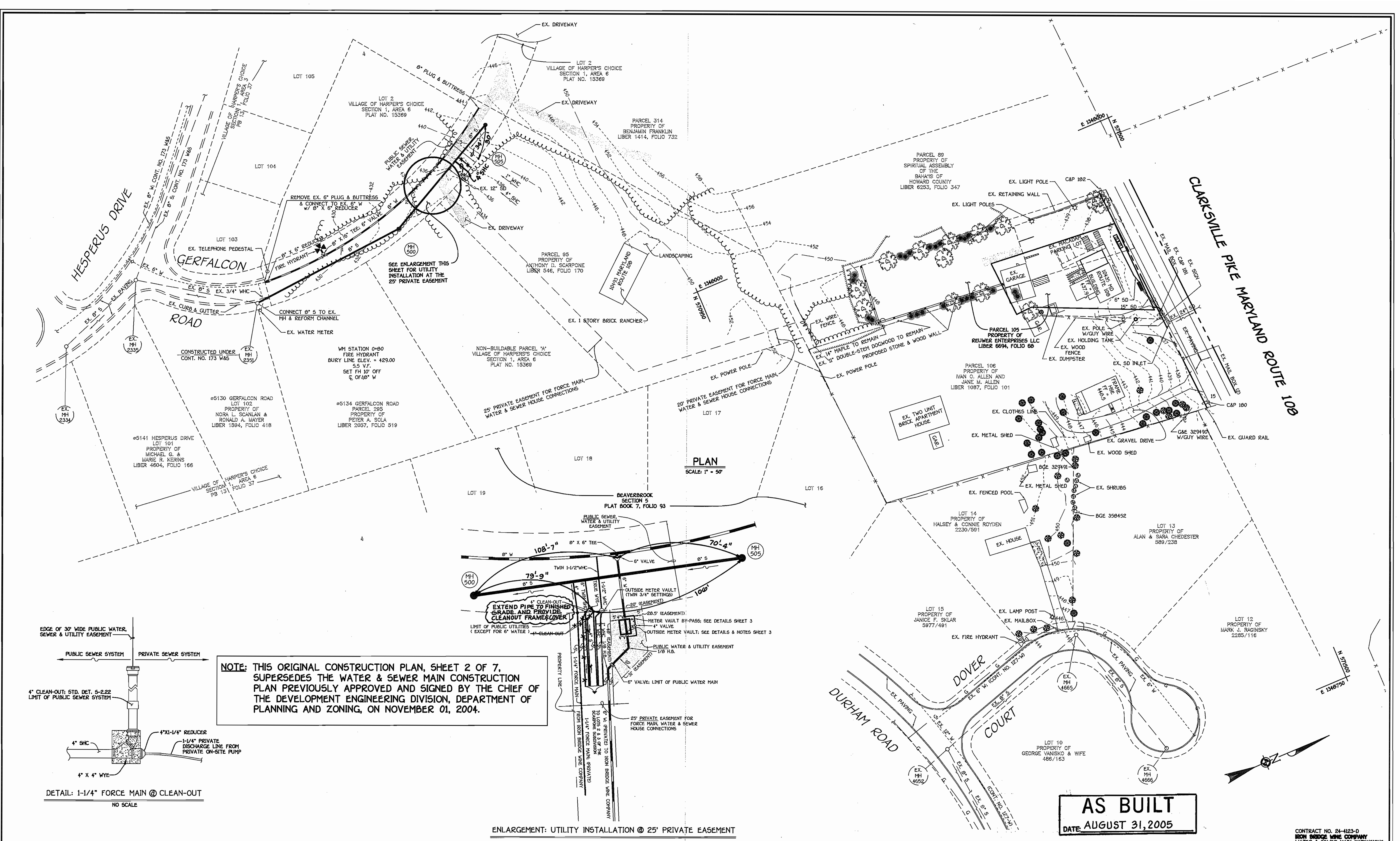
HOWARD COUNTY, MARYLAND

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 1 OF 7, SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON NOVEMBER 01, 2004.

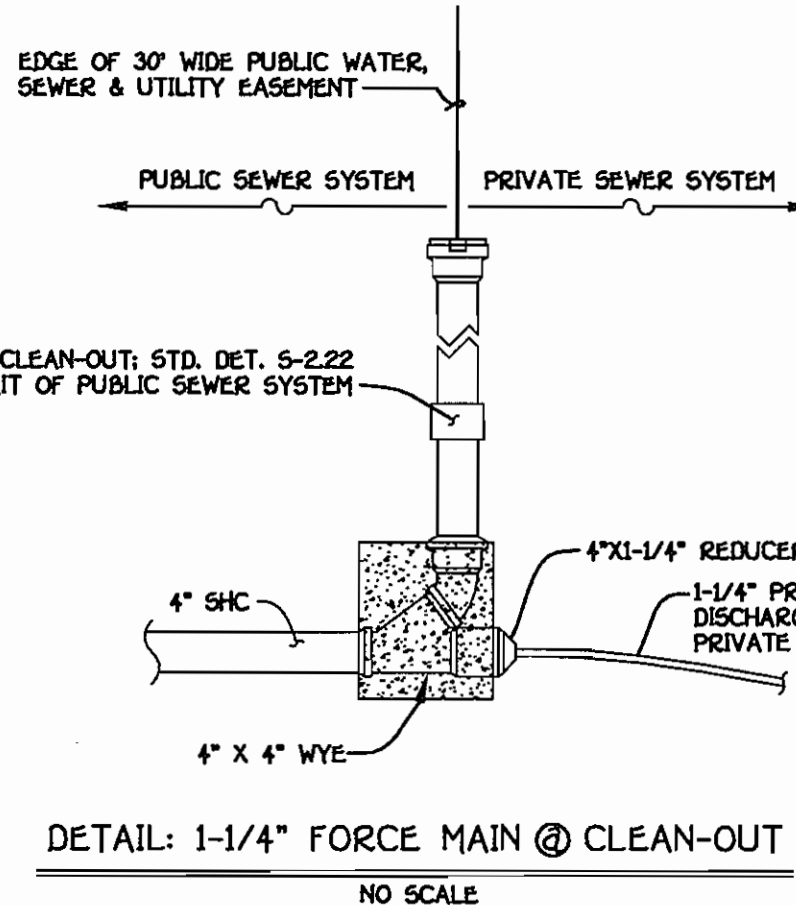
AS BUILT
DATE: AUGUST 31, 2005

CONTRACT NO. 24-4123-D
IRON BRIDGE WINE COMPANY
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE ELICOTT CITY, MARYLAND 21042 (410) 461 - 2955	DESIGNED BY: P.W.K. DRAWN BY: D.Y.B. CHECKED BY: P.W.K. DATE: JULY, 2005	BY NO. _____	REVISION _____	DATE _____	FILE NAME: FINAL WATER AND SEWER PLAN SH1	WATER & SEWER MAINS TITLE SHEET	IRON BRIDGE WINE COMPANY WATER AND SEWER MAIN EXTENSIONS CONTRACT NO. 24-4123-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 7
---	--	---	---	--------------	----------------	------------	---	------------------------------------	---	--------------------------------



NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 7, SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON NOVEMBER 01, 2004.

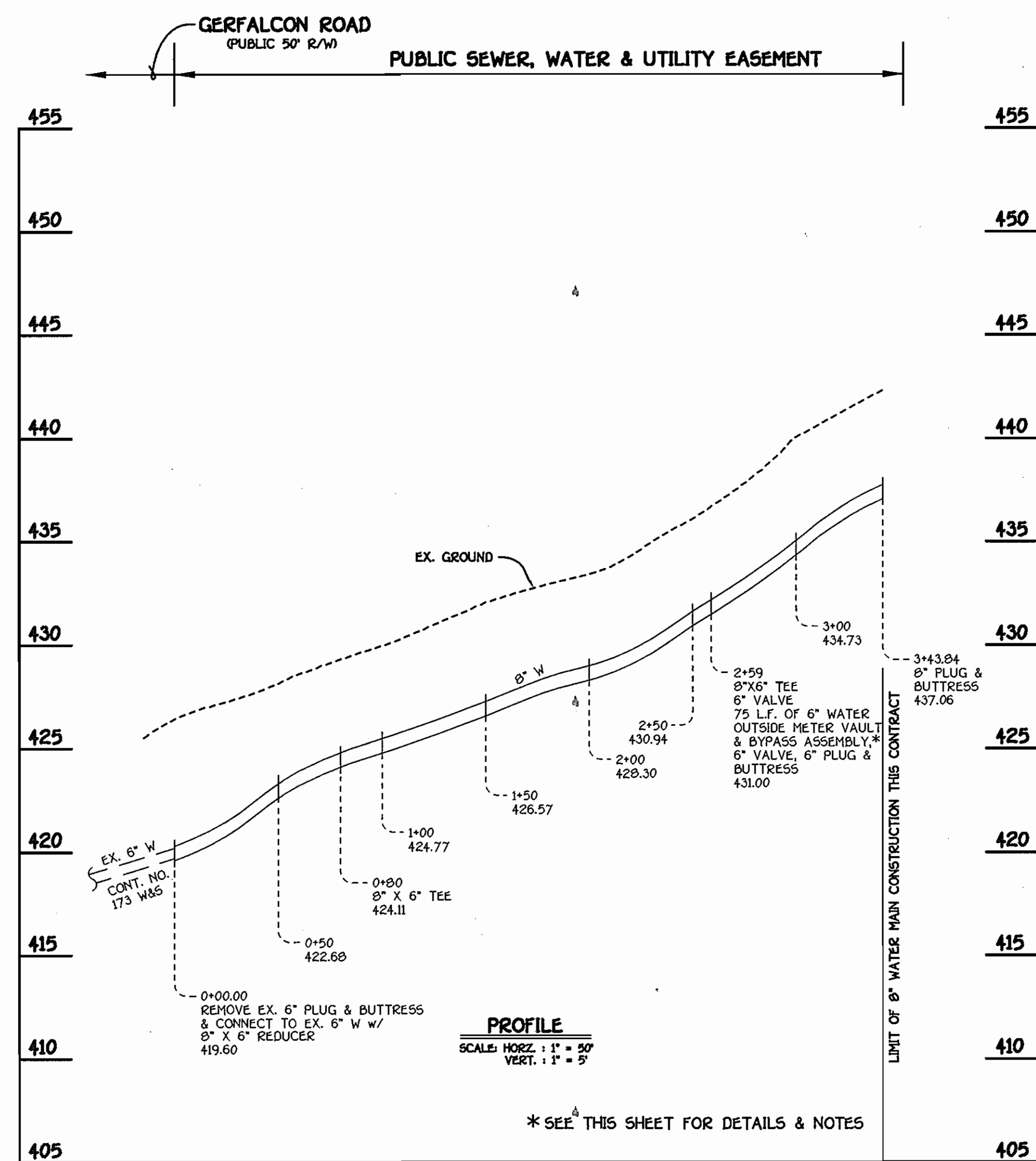


AS BUILT
DATE: AUGUST 31, 2005

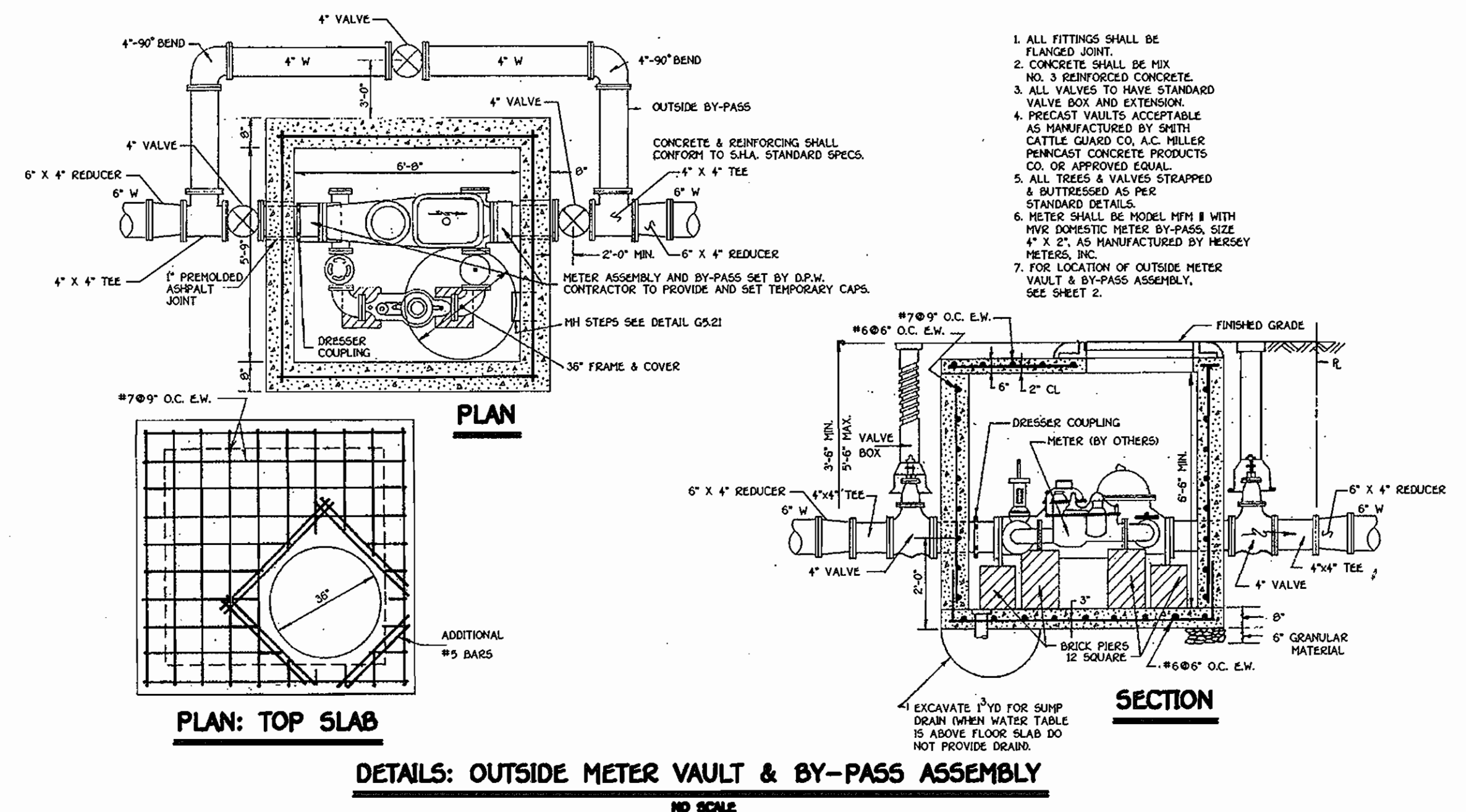
<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>R. J. ...</i> CHIEF, BUREAU OF UTILITIES</p>	<p>DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND</p> <p><i>M. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION</p>	<p>FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS</p> <p>3757 STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER</p> <p>TERRELL A. FISHER</p>	<p>DESIGNED BY : P.W.K. DRAWN BY : D.Y.B. CHECKED BY : P.W.K. DATE : JULY, 2005</p>	<p>WATER & SEWER MAINS PLAN</p> <p>600' SCALE MAP NO. 29 BLOCK NO. 12 F.C.C. WORK ORDER NO. 40375 FILE NAME : FINAL WATER AND SEWER PLAN SH1</p>	<p>IRON BRIDGE WINE COMPANY WATER AND SEWER MAIN EXTENSIONS CONTRACT NO. 24-4123-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN SHEET 2 OF 7</p>
--	---	---	---	---	---	--

K:\SSDK\PROJ\40375\Crowling\WAT\SEW\40375 Final Water and Sewer Plan 7-1-05.dwg, 7/12/2005 5:22:18 PM

WATER MAIN TABULATION CHART			
WM. STATION	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN			
0+00.00	CONNECT TO EX. 6" WATER W/ 8" X 6" REDUCER	570464.46	1347780.56
0+00.00	P.C. (CRIMP RADIUS = 50')	570464.46	1347780.56
0+80.00	8" X 6" TEE	570544.36	1347779.16
2+59.00	8" X 6" TEE	570701.91	1347737.36
3+43.84	P.T. (CRIMP RADIUS = 50')	570788.60	1347687.60
3+43.84	8" PLUG & BUTTRESS	570788.60	1347687.60



8" WATER MAIN: GERFALCON ROAD



DETAILS: OUTSIDE METER VAULT & BY-PASS ASSEMBLY
NO SCALE

WATER & SEWER AS-BUILTS

- 31'-0" MH 505 TO LOT 1 WHC
- 30'-0" MH 505 TO LOT 1 WV
- 2'-0" LOT 1 WHC TO LOT 1 WV
- 21'-0" LOT 1 WHC TO LOT 1 SHC
- 20'-0" LOT 1 WV TO LOT 1 SHC
- 40'-0" LOT 1 SHC TO MH 505
- 72'-0" MH 500 TO SCO LOT 2 & 3
- 77'-0" MH 500 TO WM LOT 3
- 79'-0" MH 500 TO WM LOT 2
- 80'-0" MH 500 TO 3RD WM
- 89'-0" MH 500 TO 4TH WM
- 91'-0" MH 500 TO FIRE HYDRANT
- 89'-0" MH 500 TO FHV
- 9'-0" FIRE HYDRANT TO FHV

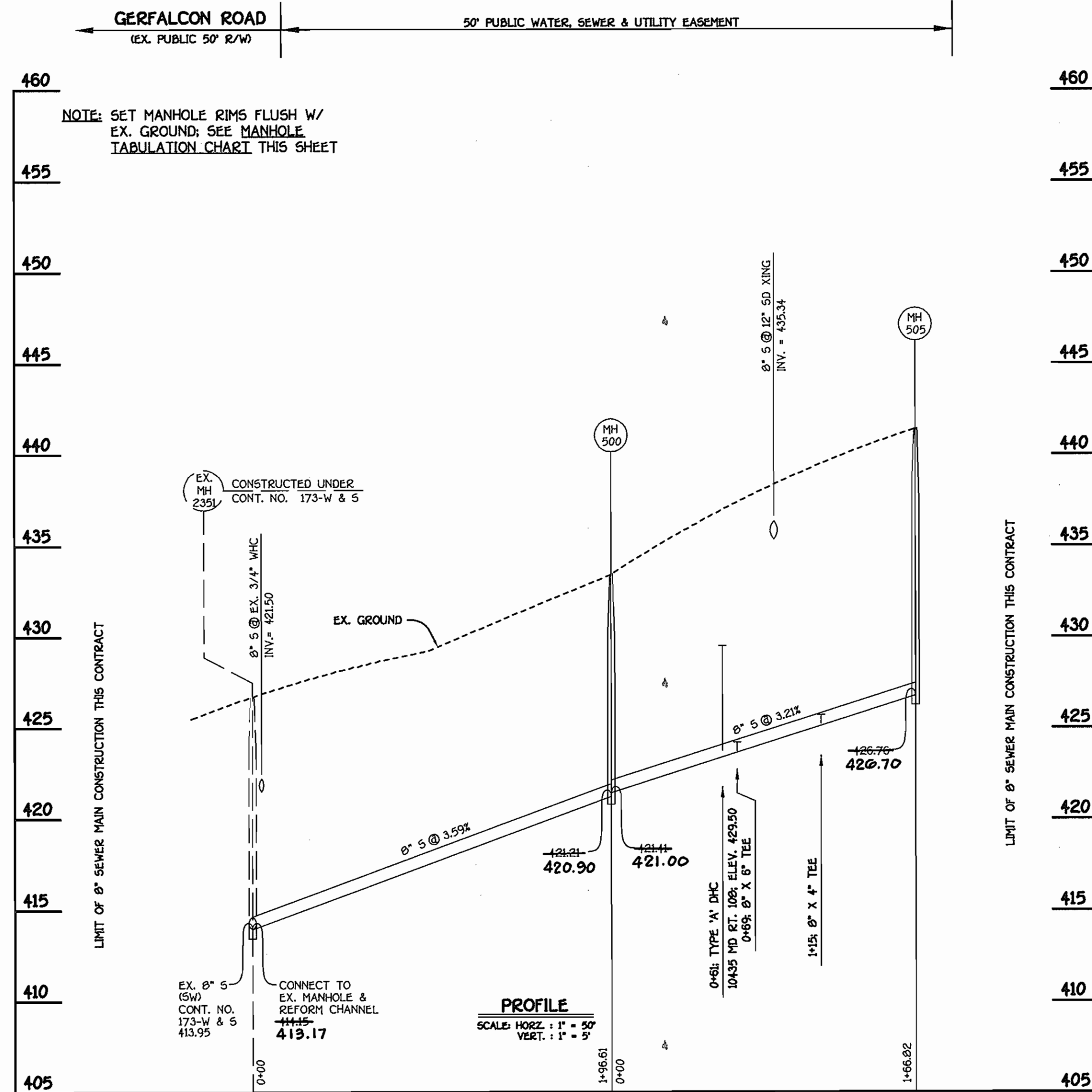
NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 7, SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON NOVEMBER 01, 2004.

AS BUILT
DATE: AUGUST 31, 2005

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND R. J. B. [Signature] CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND [Signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS 10000 WOODBURN ROAD, SUITE 100 ELICOTT CITY, MARYLAND 21042 (410) 461-2555	STATE OF MARYLAND PROFESSIONAL ENGINEER TERRELL A. FISHER	DESIGNED BY: P.W.K. DRAWN BY: D.Y.B. CHECKED BY: P.W.K. DATE: JULY, 2005	WATER MAIN PROFILE 600' SCALE MAP NO. 29 BLOCK NO. 12 F.C.C. WORK ORDER NO. 40375 FILE NAME: FINAL WATER AND SEWER PLAN SH1	IRON BRIDGE WINE COMPANY WATER AND SEWER MAIN EXTENSIONS CONTRACT NO. 24-4123-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 3 OF 7
---	--	--	---	---	--	---	--------------------------------

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
500	570641.71	1347704.20	433.41
505	570790.15	1347708.09	441.39

NOTE: SET ALL MH RIMS FLUSH W/ EXISTING GROUND



8" SEWER MAIN: GERFALCON ROAD

AS BUILT
DATE: AUGUST 31, 2005

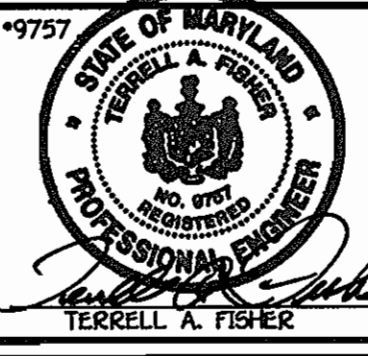
NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 4 OF 7, SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON NOVEMBER 01, 2004.

CONTRACT NO. 24-4123-D
IRON BRIDGE WINE COMPANY
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. J. B. 8-01-05
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
[Signature] 8/1/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONFIDENTIAL SEWER OFFICE P.L.C. - 10272 BALTIMORE NATIONAL PRZ
ELLSWORTH CITY, MARYLAND 21042
410 481 - 2225



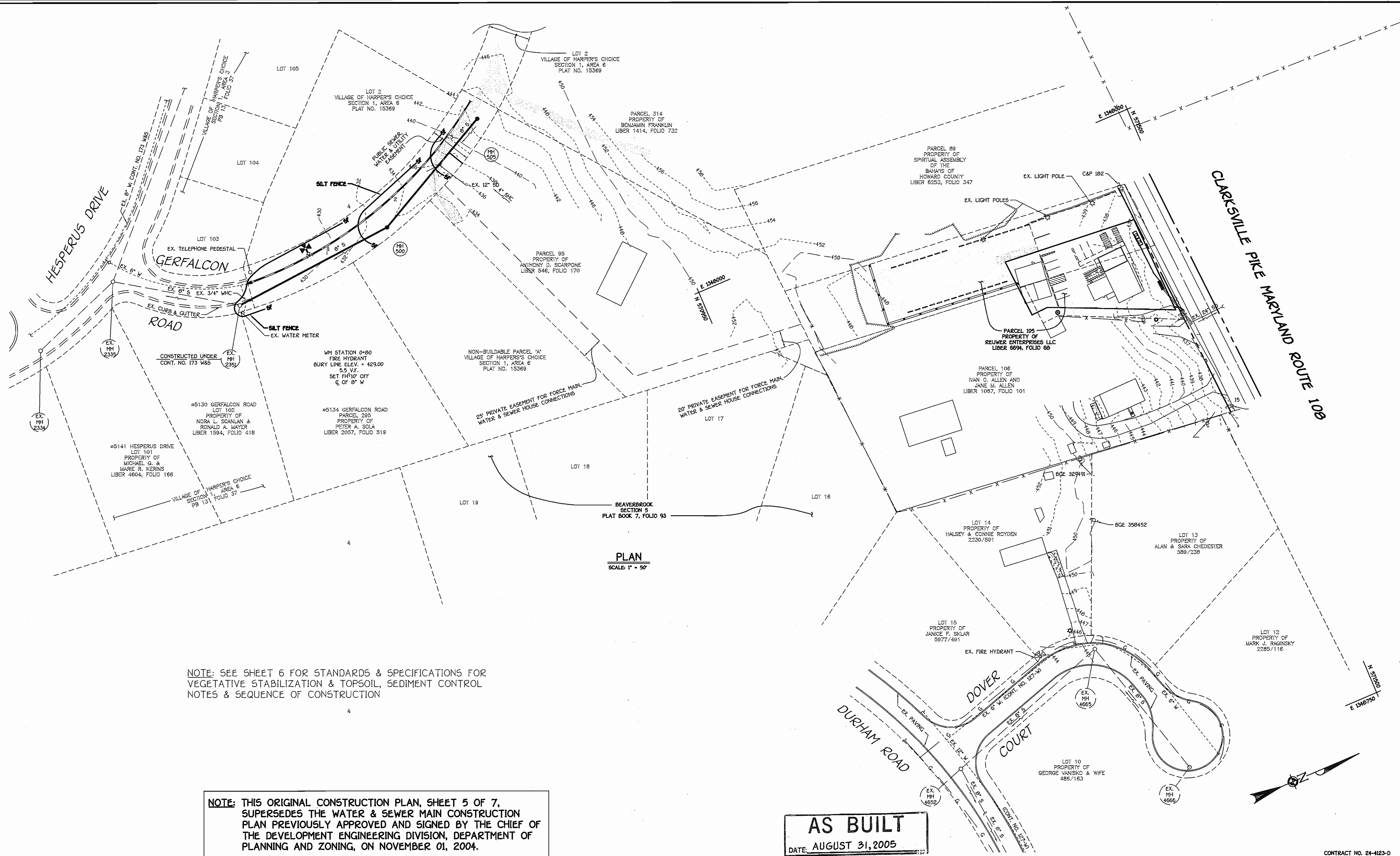
DESIGNED BY:	P.W.K.				
DRAWN BY:	D.Y.B.				
CHECKED BY:	P.W.K.				
DATE:	JULY, 2005	BY NO.		REVISION	

SEWER MAIN PROFILE
600' SCALE MAP NO. 29 BLOCK NO. 12
F.C.C. WORK ORDER NO. 40375
FILE NAME: FINAL WATER AND SEWER PLAN SH4

IRON BRIDGE WINE COMPANY
WATER AND SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4123-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 7

K:\ISSR\PROJ\0375 Crowding\WATER\SEWER\0375 Final Water and Sewer Plan 7-1-05.dwg, 7/12/2005 4:45:53 PM



PLAN
SCALE: 1" = 50'

NOTE: SEE SHEET 6 FOR STANDARDS & SPECIFICATIONS FOR VEGETATIVE STABILIZATION & TOPSOIL, SEDIMENT CONTROL NOTES & SEQUENCE OF CONSTRUCTION

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 5 OF 7, SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION, DEPARTMENT OF PLANNING AND ZONING, ON NOVEMBER 01, 2004.

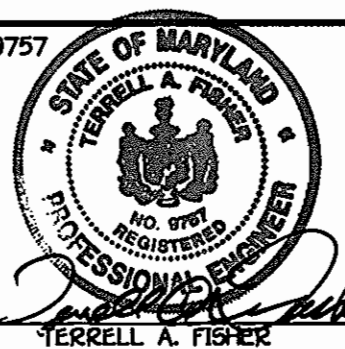
AS BUILT
DATE: AUGUST 31, 2005

CONTRACT NO. 24-4123-D
IRON BRIDGE WINE COMPANY
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKWY
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2555



DESIGNED BY:	P.W.K.
DRAWN BY:	D.Y.B.
CHECKED BY:	P.W.K.
DATE:	JULY, 2005
BY NO.	
REVISION	
DATE	

EROSION & SEDIMENT CONTROL PLAN	
600' SCALE MAP NO. 29	BLOCK NO. 12
F.C.C. WORK ORDER NO. 40375	
FILE NAME: FINAL WATER AND SEWER PLAN SH5	

IRON BRIDGE WINE COMPANY
WATER AND SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4123-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 5 OF 7

K:\ISD\PROJ\040375\Crowding\WATSEW\0375 Final Water and Sewer Plan 7-1-06.dwg, 7/12/2005 5:22:37 PM