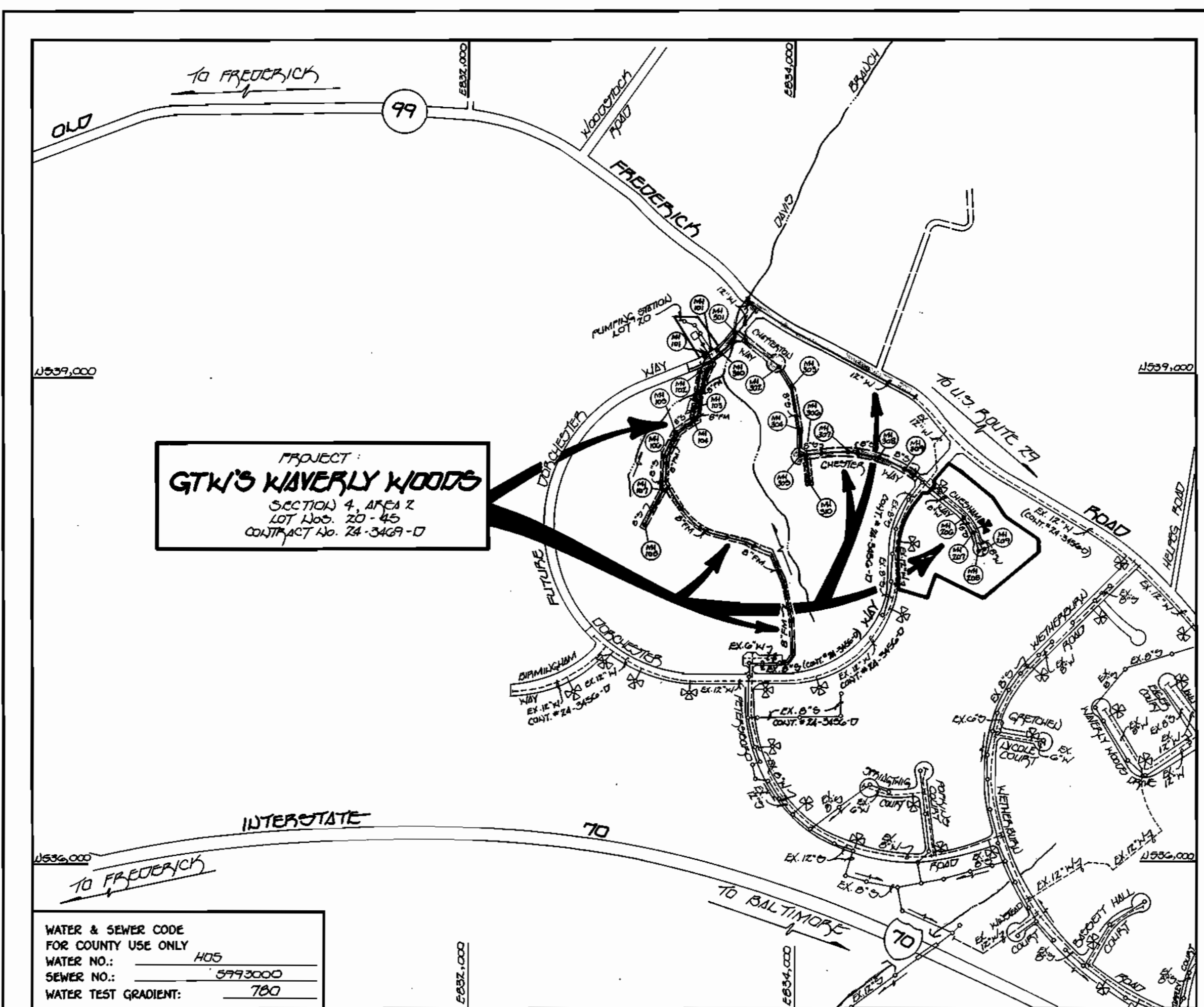


QUANTITIES				
ITEM	ESTIMATED	FINAL		SUPPLIER/MANUF.
		QUANTITIES	TYPE	
8" SEWERS	2,759 L.F.	2,732 L.F.	PVC	B.R. SUPPLY
8" SEWERS (W/P)	1,052 L.F.	1,092 L.F.	CL-52	GRIFFIN PIPE
4" SEWERS	1,718 L.F.	2,037 L.F.	PVC	B.R. SUPPLY
MANHOLES	23 EACH	23 EA	PRE-CAST	ATLANTIC CONC.
8" FORCE MAIN	2,357 L.F.	2,445 L.F.	CL-54	GRIFFIN PIPE
AIR RELEASE MH	2 EACH	2 EA	PRE-CAST	ATLANTIC CONC.
PLUN-OFF MANHOLE	2 EACH	2 EA	PRE-CAST	" "
8" 1/2 HO	6 EACH	6 EA	CL-52	GRIFFIN PIPE
8" 1/4 HO	5 EACH	4 EA	CL-52	" "
8" 1/8 HO	2 EACH	1 EA	CL-52	" "
12" WATER	1,800 L.F.	1,807 L.F.	CL-52	GRIFFIN PIPE
8" WATER	573 L.F.	522 L.F.	CL-52	" "
6" WATER	60 L.F.	47.5 L.F.	CL-52	" "
2" WATER	38 L.F.	39 L.F.	SOFT 'K'	B.R. SUPPLY
1 1/2" WMC	100 L.F.	159.5 L.F.	SOFT 'K'	" "
1" WMC	261 L.F.	246 L.F.	SOFT 'K'	" "
3/4" WMC	20 L.F.	42 L.F.	SOFT 'K'	" "
12" x 12" TEE	1 EACH	1 EA	CL-52	GRIFFIN PIPE
12" x 8" TEE	1 EACH	1 EA	CL-52	" "
12" x 6" TEE	3 EACH	3 EA	CL-52	" "
8" x 6" TEE	1 EACH	1 EA	CL-52	" "
12" VALVE	4 EACH	4 EA	GATE	B.R. SUPPLY
8" VALVE	1 EACH	1 EA	GATE	" "
6" VALVE	4 EACH	4 EA	GATE	" "
8" 1/2 HO	1 EACH	1 EA	CL-52	GRIFFIN PIPE
12" PLUG & OUTROAD	2 EACH	2 EA	CL-52	" "
8" PLUG & OUTROAD	2 EACH	2 EA	CL-52	" "
PIPE HYDRANTS	4 EACH	4 EA	ORANGE	B.R. SUPPLY



TYPE OF BUILDING: RESIDENTIAL SINGLE FAMILY DETACHED	PLAN REFERENCE NUMBERS: P-90-07
NUMBER OF LOTS: 26 (25 BUILDABLE)	F-90-174
NO. OF WATER HOUSE CONNECTIONS: 30	PERMIT REFERENCE NUMBERS: CDE # 91-0921-5
NO. OF SEWER HOUSE CONNECTIONS: 19	WGC # 91-0408
DRAINAGE AREA: LITTLE PATUXENT	
TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT VIA THE ROUTE 100 PUMPING STATION	
NO. OF WHO'S FOR FUTURE LOTS: 0	
NO. OF SHC'S FOR FUTURE LOTS: 37	

**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.
- CLEAR ALL UTILITIES BY A MINIMUM OF 8' CLEAR ALL POLES BY 2'-0" MINIMUM.
- 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 (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 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 VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO 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:
  - STATE HIGHWAY ADMINISTRATION - 531-5533
  - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
  - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9089
  - MISS UTILITY - 1-800-257-7777
  - COLONIAL PIPELINE CO. - 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900
- 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 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 WATER TIGHT FRAME AND COVERS, STANDARD DETAIL G 5.52.
- WHERE WATER TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- HOUSE(S) WITH THE SYMBOL "C.M.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 SEWER 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'-1/2" 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 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 (W1.11 AND W2.13). 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 SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH ANMA SPECIFICATIONS C-153; 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 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 18.114(a) OF THE HOWARD COUNTY CODE.

**CONDITIONS AND MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS**

- STOCKPILE AND MAINTAIN SEPARATELY THE TOP 8"-12" OF TOPSOIL MATERIAL TO BE REPLACED AS THE LAYER OF BACKFILLED MATERIAL.
- REMOVE EXCESS FILL OR CONSTRUCTION MATERIAL OR DEBRIS TO AN UPLAND DISPOSAL AREA.
- PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF THE NONTIDAL WETLANDS.
- MAINTAIN THE HYDROLOGIC REGIME OF THE NONTIDAL WETLANDS UPSTREAM, DOWNSTREAM, OR ADJACENT TO THE SEWERLINE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY DESIGN THE EQUIPMENT TO PREVENT DAMAGE TO THE NONTIDAL WETLANDS.
- USE PREVIOUSLY EXCAVATED MATERIAL AS BACKFILL UNLESS IT CONTAINS WASTE METAL PRODUCTS, LIGHTLY DESIGN TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE. USE CLEAN ROCKY MATERIAL WHEN EXCAVATED MATERIAL IS NOT SUITABLE FOR USE AS BACKFILL.
- ALL STABILIZATION IN THE WETLAND AND BUFFER SHALL BE OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS, GOLDEN HALETOP, MILLET (SETARIA ITALICA), BARLEY WHEATGRASS, DAISY BUNNEL, OR WINDSOR EYE (SECALE CEREALE). THESE SPECIES ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY VEGETATION OF THE NATURAL WETLANDS SPECIES. OTHER NONPERENNIAL VEGETATION MAY ALSO BE ACCEPTABLE BUT MUST BE APPROVED BY THE DIVISION. KENTUCKY BLUEGRASS SHALL NOT BE UTILIZED IN THE WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- UPON COMPLETION OF THE PROJECT NONTIDAL WETLANDS AND THE 25-FOOT NONTIDAL WETLAND BUFFER WILL NOT BE MOWED OR OTHERWISE MANAGED TO PREVENT THE RE-ESTABLISHMENT OF FORESTED COVER.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS OF NONTIDAL WETLANDS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*J.G. Greenfield* / *jas* 7/21/96  
 SOIL NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *[Signature]* 3/25/96  
 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 AS SHOWN ON THESE PLANS # P10-174.  
*Michael J. McCann* FOR W.P.D., INC. 3/25/96  
 SIGNATURE OF DEVELOPER DATE

CONTRACT No. 24-3469-D  
**GTW'S WAVERLY WOODS**  
 SECTION 4, AREA 2  
 LOT NOS. 20-45  
**WATER AND SEWER MAIN EXTENSIONS**  
 HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR CONSTRUCTION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN (BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS) & THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
*Paul W. Koebel* 03/26/96  
 SIGNATURE OF ENGINEER DATE

**DEVELOPER'S CERTIFICATE**  
 I (WE) CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR SEDIMENT CONTROL & THAT ALL NECESSARY PERMITS AND APPROVALS FOR THE CONSTRUCTION PROJECT WILL BE OBTAINED AND ATTACHED AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.  
*Michael J. McCann* FOR W.P.D., INC. 3/25/96  
 SIGNATURE OF DEVELOPER DATE

INDEX OF DRAWINGS	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN: WATER & SEWER MAINS (CHESSMAN WAY)
3	PLAN: SEWER & FORCE MAIN TO P.S. LOT 20
4	PLAN: SEWER & FORCE MAIN TO AUSTIN WAY
5	PROFILES: WATER & SEWER MAINS, NOTES & DETAILS
6	PROFILES: SEWER MAINS
7	PROFILES: SEWER & FORCE MAIN
8	PROFILES: WATER & FORCE MAIN

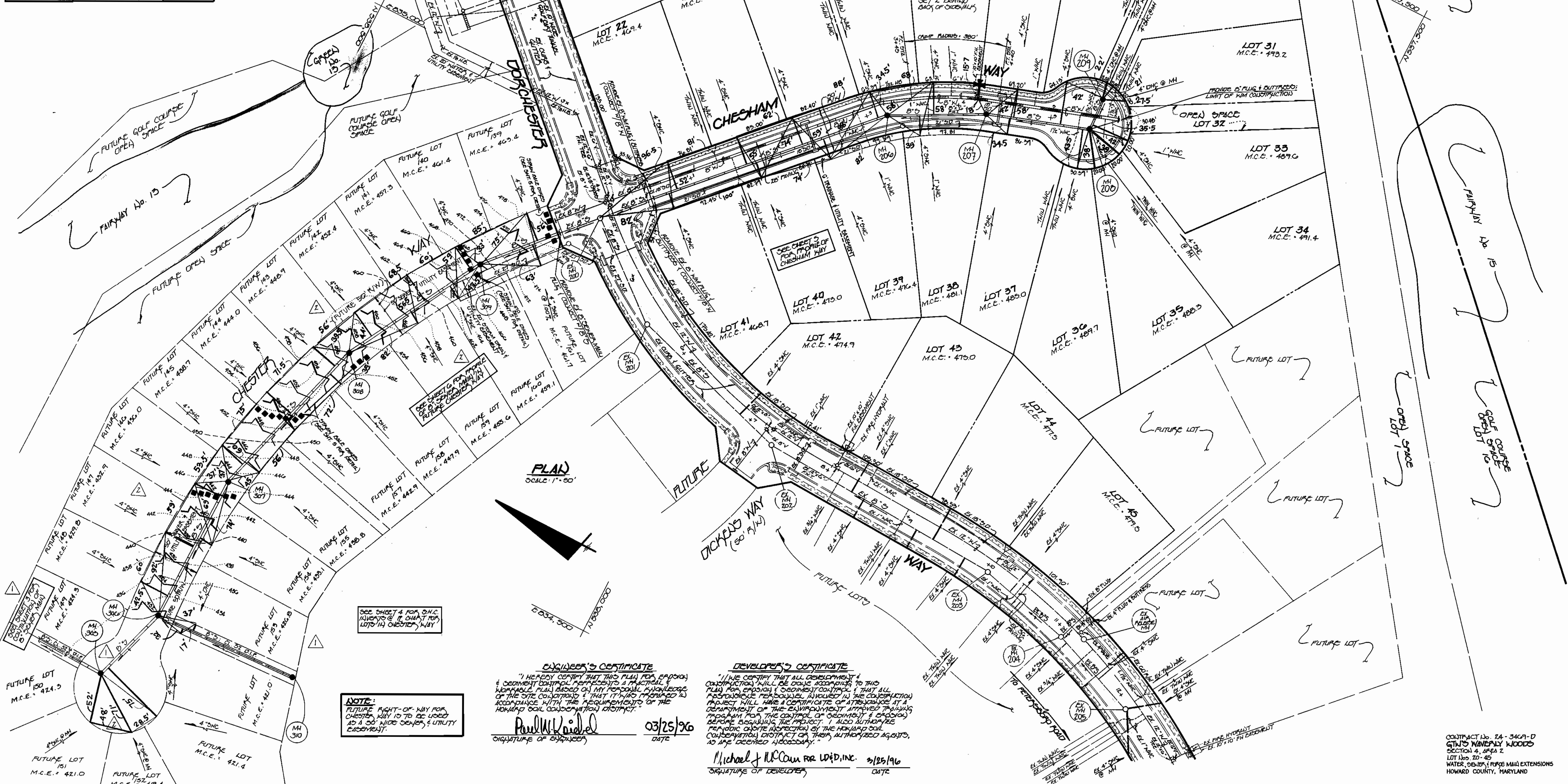
**AS-BUILT**

CONTRACT No. 24-3469-D  
 GTW'S WAVERLY WOODS  
 SECTION 4, AREA 2  
 LOT NOS. 20-45  
 WATER, SEWER & FORCE MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert B. Benjamin</i> 3-28-96 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>[Signature]</i> 3/21/96 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	Fisher, Collins & Carter, Inc. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE BLDG. 10272 CANTONMENT NATIONAL PIKE ELLCOTT CITY, MARYLAND 21042 (410) 461-2855 <i>[Signature]</i> TERRELL A. FISHER	DES: M.J.M. DRAW: J.H.M. CHK: P.W.K. DATE: 3/25/96	BY: F.C.C.  REVISION QUANTITIES NO. REVISION DATE	TITLE SHEET	GTW'S WAVERLY WOODS SECTION 4, AREA 2 LOT NOS. 20-45 CONTRACT NO. 24-3469-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 8
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**SHC INVERTS @ PROPERTY LINE CHART**

STATION	LOT	ELEVATION	STATION	LOT	ELEVATION
0+80 FT.	EX. MH 200 TO MH 206	463.13	0+05 FT.	MH 208 TO MH 209	483.86
0+90 FT.	41	463.86	@ MH 209 FT.	31 (DHC @ MH)	487.46
1+70 FT.	22	467.46	@ MH 209 CTR.	30 (DHC @ MH)	484.94
1+80 FT.	23	467.63	@ MH 209 LT.	29 (DHC @ MH)	487.36
2+32 FT.	40	470.25			
2+55 FT.	24	471.01			
3+20 FT.	37	474.17			
	25	474.17			
	MH 206 TO MH 207				
0+35 FT.	38	476.74			
0+50 FT.	26	476.74			
	MH 207 TO MH 208				
0+25 FT.	37	479.66			
0+30 FT.	27	480.14			
0+80 FT.	28	482.46			
1+05 FT.	36	483.38			
@ MH 208 FT.	35 (DHC @ MH)	483.84			
@ MH 208 FT.	34 (DHC @ MH)	483.84			



**PLAN**  
SCALE: 1" = 50'

**NOTE:**  
FUTURE RIGHT-OF-WAY FOR CHESTER WAY IS TO BE USED AS A 50' WIDE CORNER & UTILITY CASEMENT.

**ENGINEER'S CERTIFICATE**  
"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION & SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
*Paul W. Koidel*  
SIGNATURE OF ENGINEER  
03/25/96  
DATE

**DEVELOPER'S CERTIFICATE**  
"I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR EROSION & SEDIMENT CONTROL & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION (E-200) BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, NO FEE REQUIRED NECESSARILY."  
*Michael J. McCann FOR LD&D, INC.*  
SIGNATURE OF DEVELOPER  
3/25/96  
DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert Berman*  
CHIEF, BUREAU OF UTILITIES  
3-28-96  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*John W. ...*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE

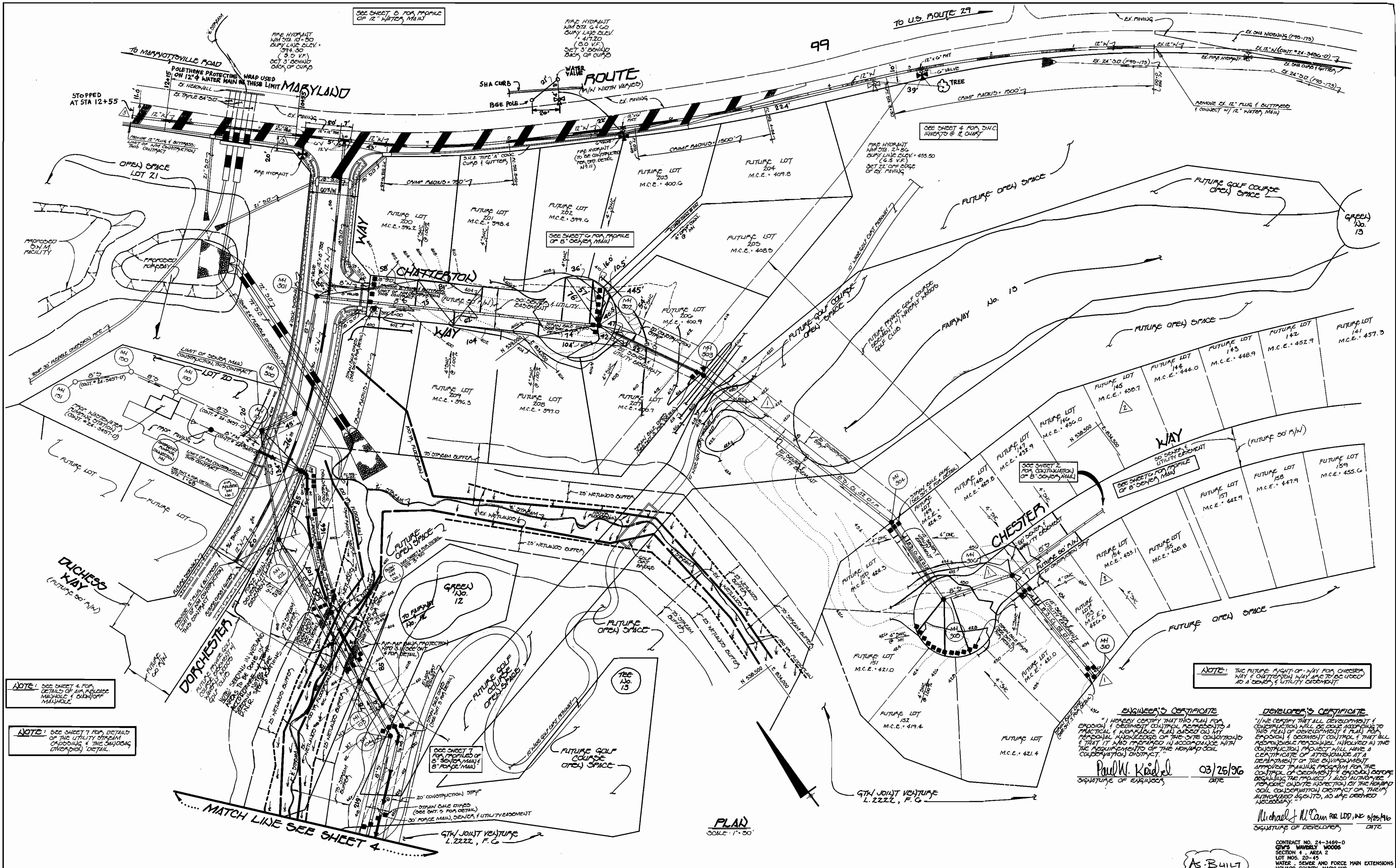
**Fisher, Collins & Carter, Inc.**  
#9757  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CONSTITUTION SQUARE OFFICE PARK  
1027E BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21042  
(410) 461-2858  
*TERRILL A. FISHER*

DES: M.J.M.  
DRWN: J.M.H.  
CHK: P.M.K.  
DATE: 3/25/96

BY	NO.	REVISION	DATE
F.C.C.	1	REVISE LOT LAYOUT IN CHESTER WAY & REVISE SWS ACCORDING	11/96
F.C.C.	2	REVISE SEWER MAIN FROM MH 304 TO MH 300 & MH 310	11/96

**WATER AND SEWER MAINS  
PLAN VIEW**  
600' SCALE MAP NO. 16 BLOCK NO. 6 & 12

**GTW's WAVERLY WOODS**  
SECTION 4, AREA 2  
LOT No. 20-45  
CONTRACT NO. 24-3469-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE AS SHOWN  
SHEET 2 OF 2  
AS-BUILT  
WAV42.DWG



NOTE: SEE SHEET 4 FOR DETAILS OF AIR RELEASE MANHOLE & BURIED MANHOLE

NOTE: SEE SHEET 7 FOR DETAILS OF THE UTILITY STREAM CROSSING & THE SURROUNDING DRAINAGE DETAIL

SEE SHEET 7 FOR PROFILE OF 8" FORCE MAIN

MATCH LINE SEE SHEET 4

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION & SEDIMENT CONTROL REPRESENTS A PRACTICAL & WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 Paul W. Keidel  
 SIGNATURE OF ENGINEER  
 03/25/96  
 DATE

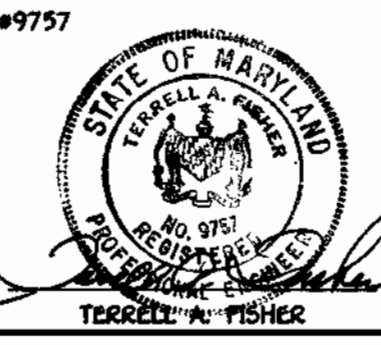
**DEVELOPER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR EROSION & SEDIMENT CONTROL & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION & SEDIMENT BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERSONS ON SITE INSPECTED BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.  
 Michael J. McCann FOR LDD, INC 3/25/96  
 SIGNATURE OF DEVELOPER DATE

PLAN SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Robert A. Beaman  
 CHIEF, BUREAU OF UTILITIES  
 3-28-96  
 DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 [Signature]  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE

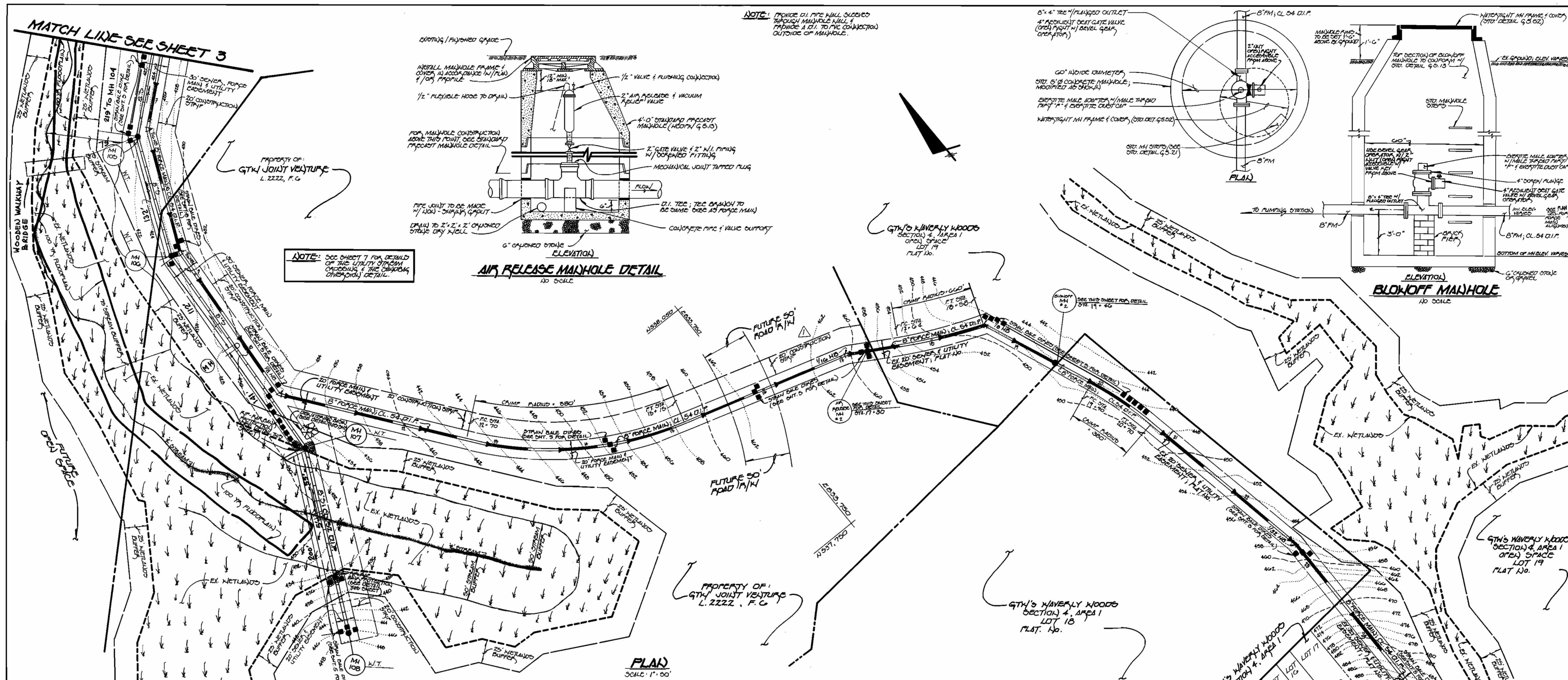
Fisher, Collins & Carter, Inc.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARES OFFICE PARK  
 10272 Baltimore National Pike  
 Ellicott City, Maryland 21042  
 (410) 461-2866



DES: M.J.M.			
DRAWN: J.M.M.			
CHK: P.W.K.	F.C.C.	EXTEND 12" WM IN MD ROUTE 99	1/96
	F.C.C.	REVISE LOT LAYOUT IN CHESTER WAY	1/96
DATE: 3/25/96	F.C.C.	REVISE CENTER ALIGNMENT FROM MH 303 TO MH 306 & MH 310	1/96
BY: NO.		REVISION	DATE

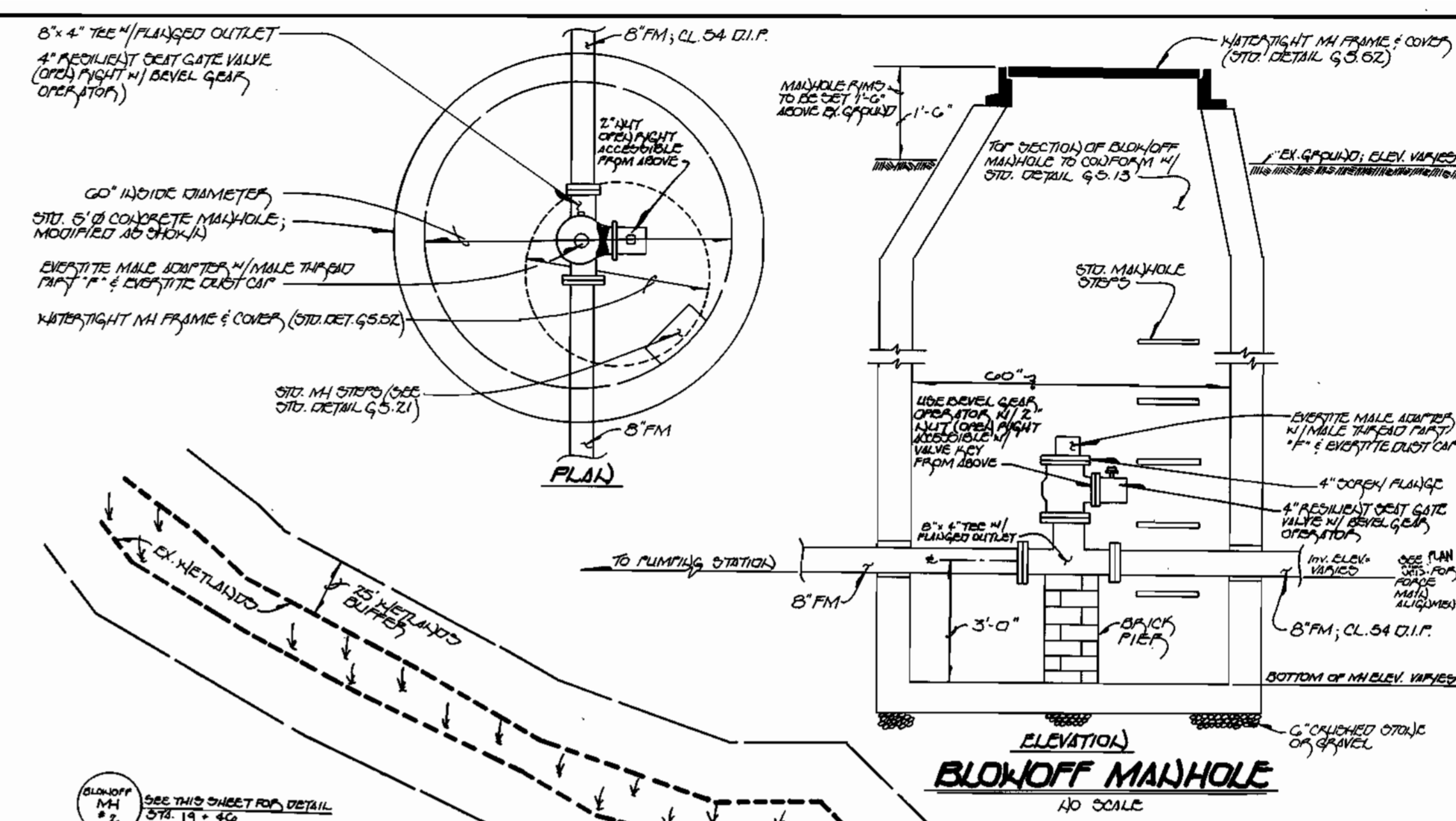
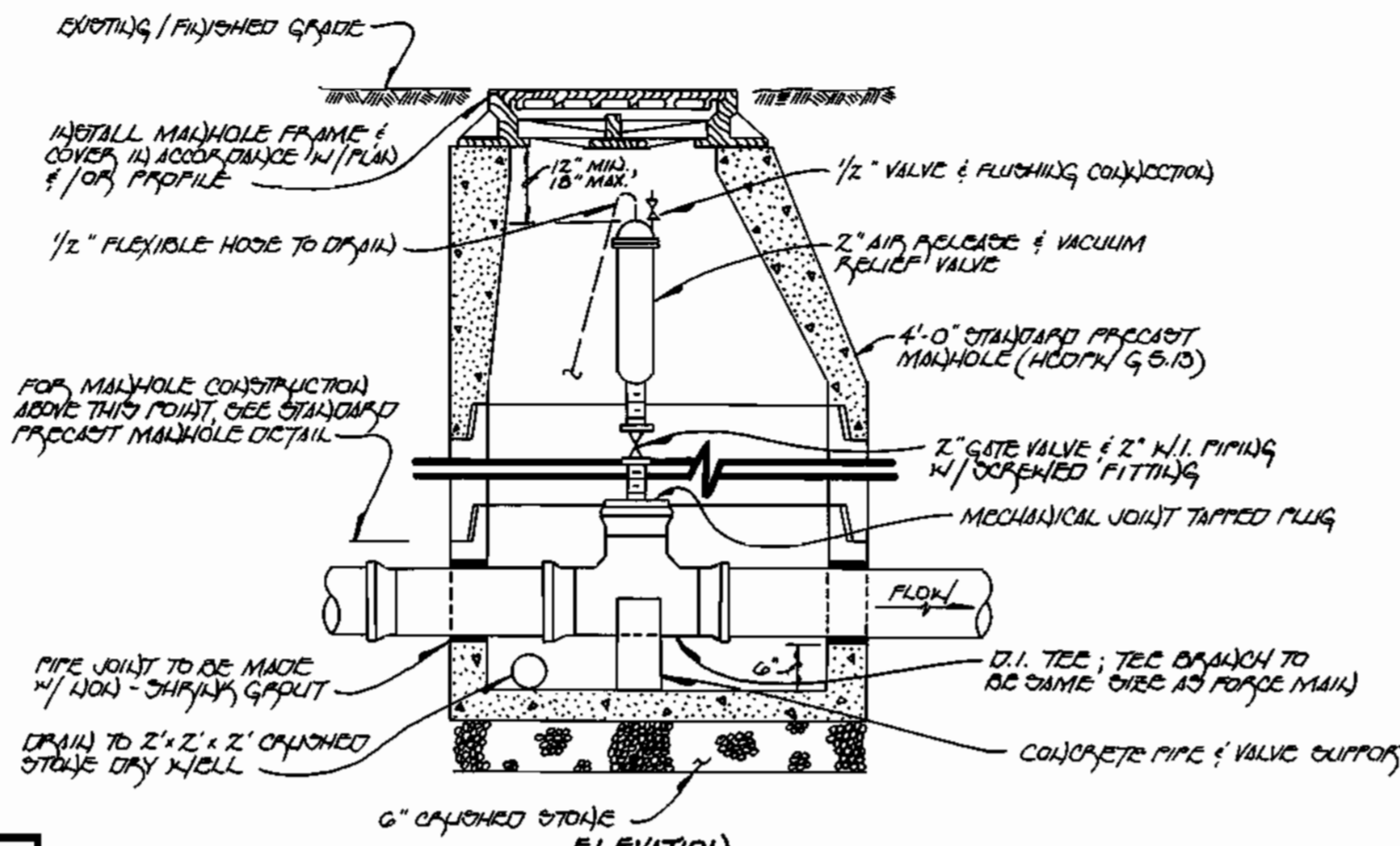
WATER, SEWER & FORCE MAINS  
 PLAN VIEW  
 600' SCALE MAP NO. 16 BLOCK NO. 6 & 12

G.T.W.'S WAVERLY WOODS  
 SECTION 4, AREA 2  
 LOT NOS. 20-45  
 CONTRACT NO. 24-3469-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN  
 SHEET 3 OF 8



NOTE: SEE SHEET 7 FOR DETAIL OF THE UTILITY SYSTEM INCLUDING THE SANDS OVERLAP DETAIL.

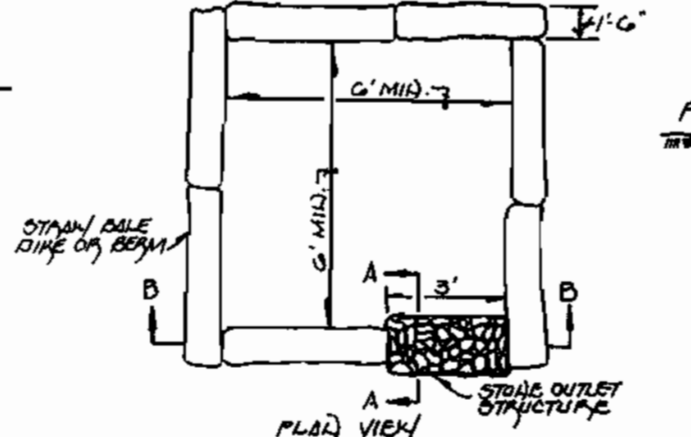
**AIR RELEASE MANHOLE DETAIL**  
NO SCALE



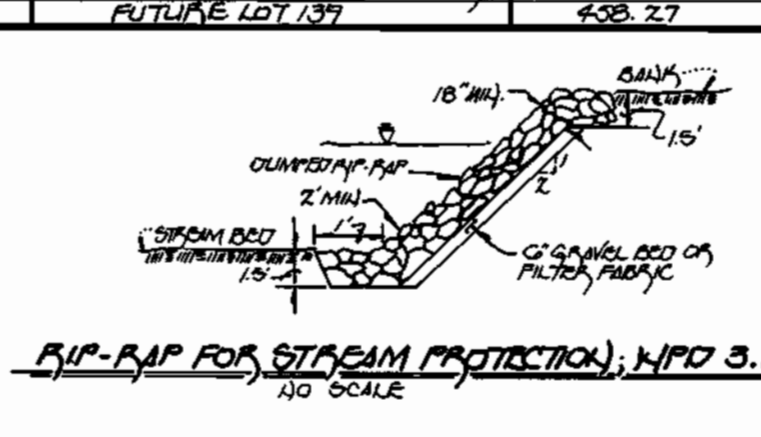
**BLOWOFF MANHOLE**  
NO SCALE

**SHC INVERTS @ R.L. CHART**

STATION	LOT	ELEVATION	STATION	LOT	ELEVATION
1+20 LT.	MH 301 TO MH 302	392.17	0+25 LT.	MH 300 TO MH 307	424.65
1+70 AT.	FUTURE LOT 200 (@ 100%)	392.25	0+85 LT.	FUTURE LOT 148	427.77
2+00 LT.	FUTURE LOT 201	392.89	0+95 AT.	FUTURE LOT 134	427.95
3+25 AT.	FUTURE LOT 208 (@ 100%)	392.93	1+45 LT.	FUTURE LOT 146	430.20
3+00 LT.	FUTURE LOT 209	393.87			
3+55 LT.	FUTURE LOT 205	394.03			
@ MH 302 LT.	FUTURE LOT 204 (CONV. @ MH)	400.90			
@ MH 302 LT.	FUTURE LOT 203 (CONV. @ MH)	400.80			
	MH 301 TO MH 302				
0+40 AT.	FUTURE LOT 207	395.24	0+25 LT.	MH 307 TO MH 308	433.30
0+45 LT.	FUTURE LOT 206	395.30	0+30 AT.	FUTURE LOT 155	433.05
	MH 304 TO MH 305		0+90 AT.	FUTURE LOT 157	437.79
0+20 LT.	FUTURE LOT 149 (CONV.)	419.16	1+00 LT.	FUTURE LOT 144	430.65
@ MH 305 AT.	FUTURE LOT 151	415.87	1+20 AT.	FUTURE LOT 138	442.71
@ MH 305 AT.	FUTURE LOT 152 (@ 100%)	415.53	1+70 LT.	FUTURE LOT 125	443.75
	MH 306 TO MH 310				
0+30 AT.	FUTURE LOT 1	415.87	0+10 LT.	FUTURE LOT 142	447.25
0+40 LT.	FUTURE LOT 153 (CONV.)	415.64	0+80 AT.	FUTURE LOT 159	450.41
0+16 AT.	MH 303 TO MH 304	416.44	1+00 LT.	FUTURE LOT 141	455.15
			1+30 AT.	FUTURE LOT 160	453.93
			1+60 LT.	FUTURE LOT 140	456.27
			MH 309 TO EX. MH 200		
			0+60 AT.	FUTURE LOT 161 (@ 100%)	457.64
			0+65 LT.	FUTURE LOT 139	458.27



**DE-WATERING BASIN: W.P.O. 1.1**  
NO SCALE



**RIP-RAP FOR STREAM PROTECTION: W.P.O. 3.1**  
NO SCALE

**ENGINEER'S CERTIFICATE**  
"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION & SEDIMENT CONTROL REPRESENTS A FUNCTIONAL & FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
Paul W. Koedel  
SIGNATURE OF ENGINEER  
03/26/96  
DATE

**DEVELOPER'S CERTIFICATE**  
"I HEREBY CERTIFY THAT ALL DEVELOPMENT (CONSTRUCTION) SHALL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR EROSION & SEDIMENT CONTROL & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERSONNEL TO OBTAIN INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."  
Michael J. McCann FOR LD&D, INC.  
SIGNATURE OF DEVELOPER  
3/25/96  
DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
Robert S. ...  
CHIEF, BUREAU OF UTILITIES  
3-28-96  
DATE

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
Michael J. McCann  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
3/28/96  
DATE

Fisher, Collins & Carter, Inc.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK  
10872 Baltimore National Pike  
Bellicott City, Maryland 21042  
(410) 461-2885

STATE OF MARYLAND  
TERRELL A. FISHER  
REGISTERED PROFESSIONAL ENGINEER  
#9797

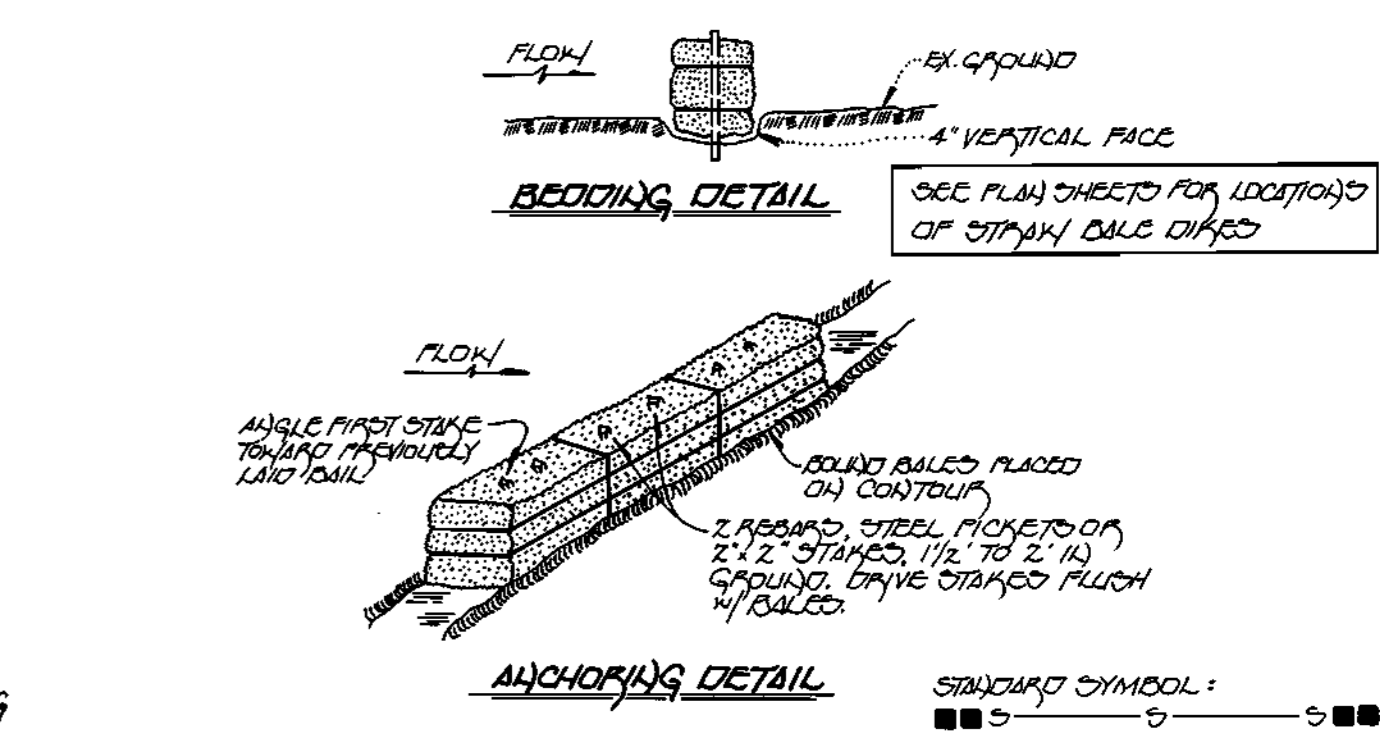
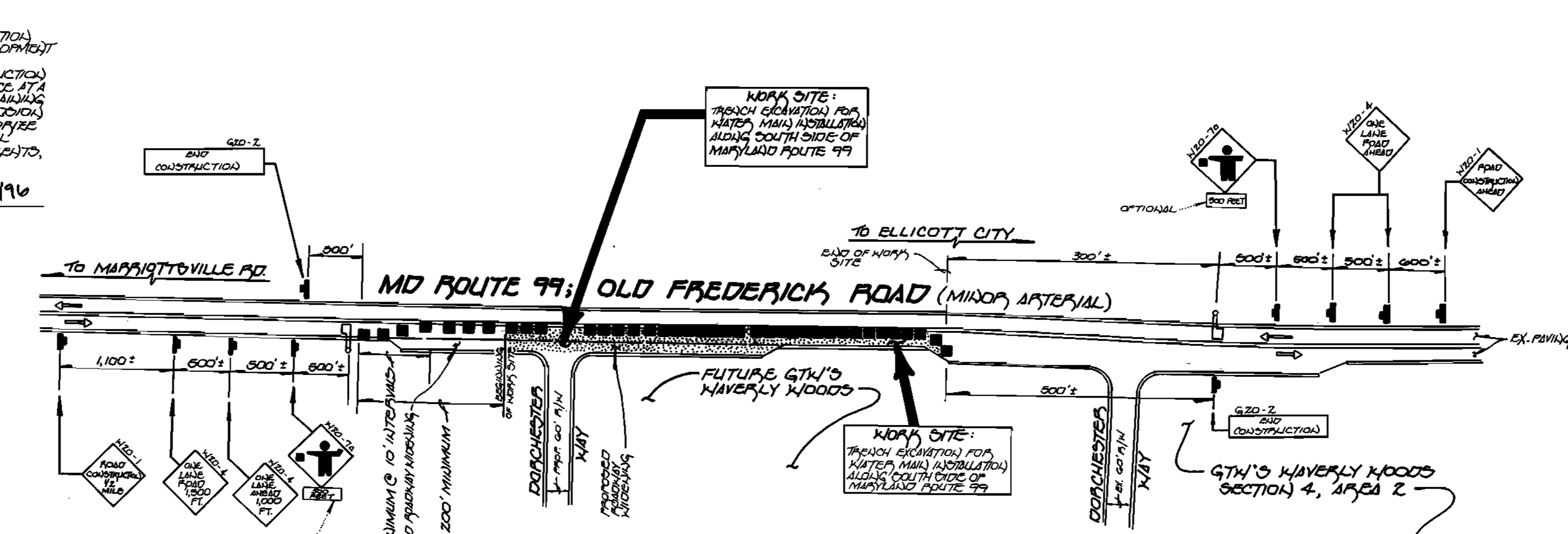
DES: M.J.M.  
DRWN: J.M.M.  
CHK: P.W.K.  
DATE: 3/25/96  
REVISION

SEKIER & FORCE MAIN  
PLAN VIEW  
F.C.C. Δ REMOVE S.H.C. INVERT @ R.L. CHART 11/96  
F.C.C. Δ REMOVE LOCATION OF AIR RELEASE MH NO. 2 11/96  
DATE: 600' SCALE MAP NO. 16 BLOCK NO. 6 & 12

G.T.W.'S WAYERLY WOODS  
SECTION 4, AREA 2  
LOT NOS. 20-45  
CONTRACT NO. 24-3469-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE AS SHOWN  
SHEET 4 OF 8

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION & SEDIMENT CONTROL ACCORDS TO A PRACTICAL & WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT I AM PREPARED TO ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT.  
 Paul W. Kimmel  
 SIGNATURE OF ENGINEER  
 03/25/96  
 DATE

**DEVELOPER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR EROSION & SEDIMENT CONTROL & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONSTRUCTION OF SEDIMENT & EROSION CONTROL MEASURES. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY CONSERVATION DISTRICT OF THEIR AUTHORIZED AGENTS, SO ARE DEEMED NECESSARY.  
 Michael J. McClain for LPO, INC.  
 SIGNATURE OF DEVELOPER  
 03/25/96  
 DATE



**EROSION AND SEDIMENT CONTROL NOTES**  
 1. ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.  
 2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.  
 3. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE SEWER MAIN TRENCH.  
 4. IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER MAIN TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED AND SEEDING NOTES SHOWN ON THIS SHEET.  
 5. THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.  
 6. ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. SEE SEWER MAIN CONSTRUCTION SEQUENCE THIS SHEET.

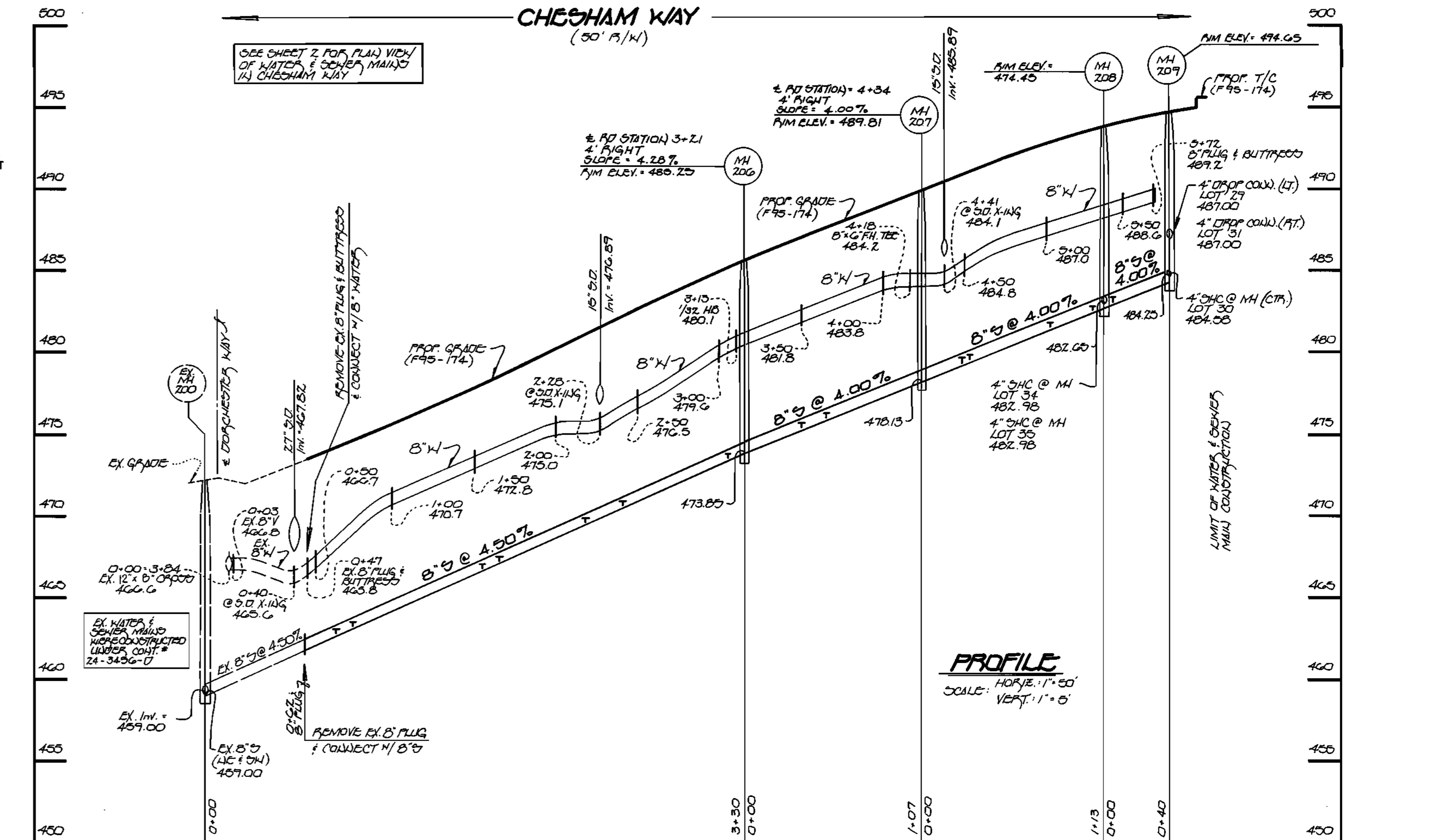
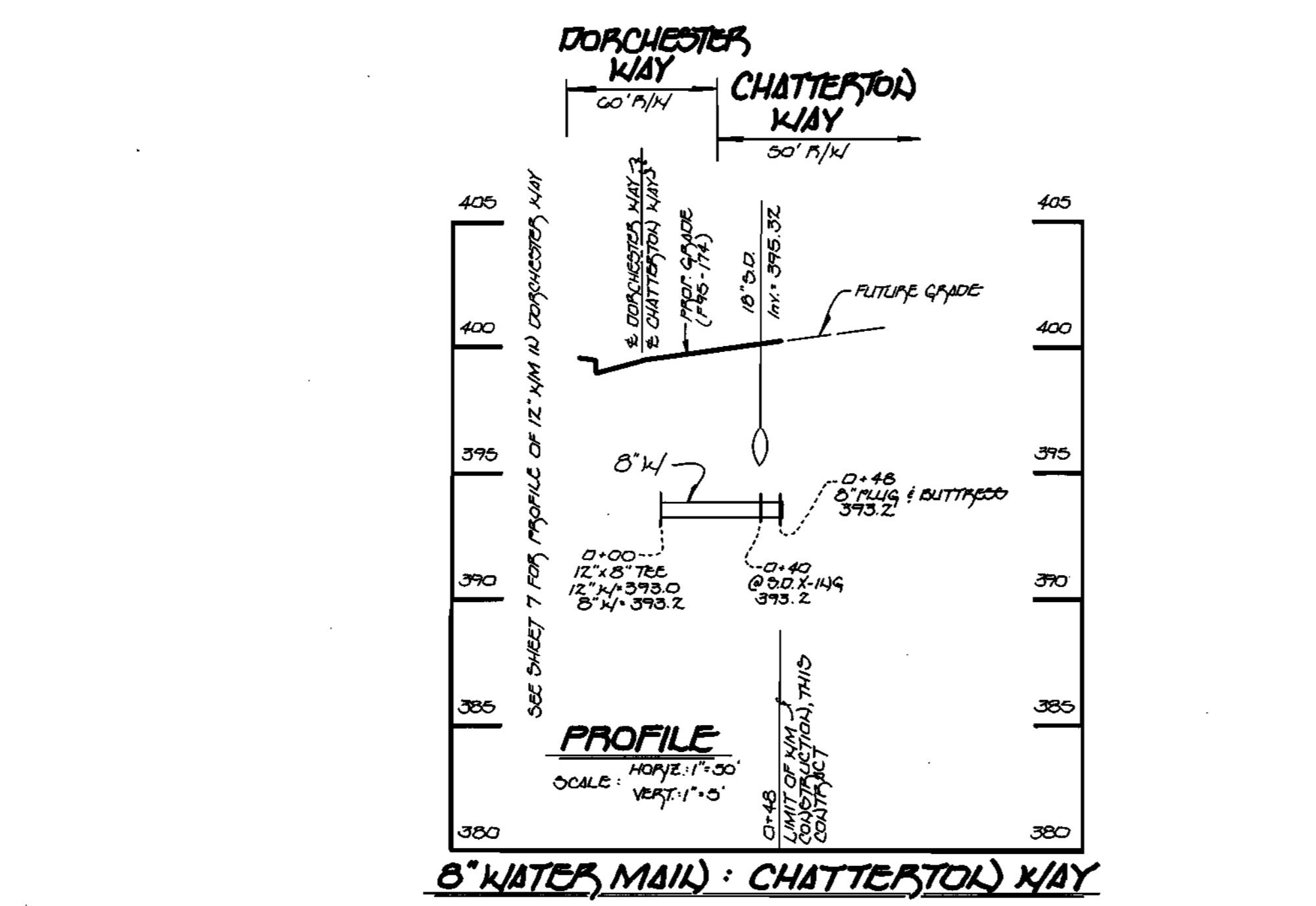
**PERMANENT SEEDING NOTES**  
 1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (313-1955).  
 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.  
 3. 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, PERIMETER SLOPES AND ALL GREATER THAN 3:1 BY FOURTEEN (14) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.  
 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.  
 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 50 SOD SEC. 54).  
 6. TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52) TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.  
 7. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.  
 8. SITE ANALYSIS:  
 TOTAL AREA OF SITE: 15.14 ACRES  
 AREA DISTURBED: 12.60 ACRES  
 AREA TO BE ROOFED OR PAVED: 1.00 ACRES  
 AREA TO BE VEGETATIVELY STABILIZED: 11.60 ACRES  
 TOTAL CUT: 23,000 CU.YDS.  
 TOTAL FILL: 25,000 CU.YDS.  
 OFF-SITE WASTE/BORROW: 0 CU.YDS.  
 AREA LOCATION (NOT APPLICABLE)  
 ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.  
 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.  
 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF TWO (2) ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.  
 11. TRAVELERS FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE (3) TIME LENGTHS ON THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.

**TEMPORARY SEEDING NOTES**  
 APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.  
 SEEDBED PREPARATION:  
 LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.  
 SOIL AMENDMENTS:  
 APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 38-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./1,000 SQ.FT.) OF 10-20-20 FERTILIZER.  
 SEEDING:  
 FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15TH, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROJECT SITE BY: OPTION (1) TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OPTION (2) USE SOD, OPTION (3) SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE ON SLOPES WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEDED.  
 MULCHING:  
 APPLY 1 1/2 TO 2 TONS PER ACRE (80 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 8 FEET OR HIGHER USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR ANCHORING.  
 MAINTENANCE:  
 INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**TRAFFIC CONTROL PLAN ALONG MD ROUTE 99**  
 NO SCALE

**KEY:**  
 CHANNELIZING DEVICES  
 SIGN SUPPORT  
 FACE OF DIKE  
 DIRECTION OF TRAFFIC  
 WORK SITE  
 FLAG

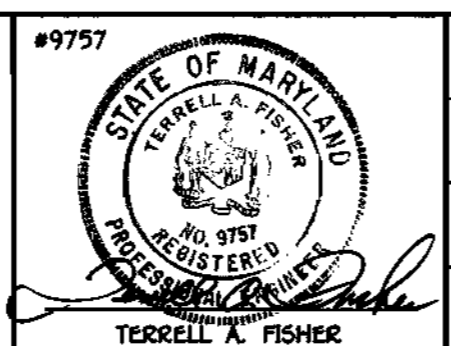
**SEQUENCE OF CONSTRUCTION**  
 1. OBTAIN THE REQUIRED GRADING PERMIT.  
 2. NOTIFY MISS UTILITY 48 HOURS BEFORE BEGINNING ANY WORK (1-800-257-7777). NOTIFY HOWARD COUNTY CONSTRUCTION/INSPECTION DIVISION 24 HOURS BEFORE STARTING ANY WORK (410)333-1870.  
 3. INSTALL THE REQUIRED SEDIMENT AND EROSION CONTROL DEVICES AS INDICATED ON THE PLAN SHEETS UNDER P-10-174. # THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL DEVICES AFTER EACH RAINFALL AND ON A DAILY BASIS.  
 4. CLEAR AND GRUB AS NECESSARY; ONLY AS REQUIRED FOR EXCAVATION AND INSTALLATION OF THE WATER MAIN SEWER MAIN AND FORCE MAIN AND ONLY WITHIN THE DESIGNATED EASEMENTS.  
 5. INSTALL WATER MAIN, SEWER MAIN AND FORCE MAIN AND ALL APPURTENANCES COMPLETE AND IN PLACE. ##  
 6. STABILIZE SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES SHOWN ON THIS SHEET.  
 7. FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS, AND AFTER PERMISSION HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES.  
 \* THE START OF CONSTRUCTION WITHIN THE EASEMENTS & STRAIN CAPACITIES SHALL BE LIMITED TO A 5-DAY CLEAR WEATHER PERIOD FROM THE 1st OF CONSTRUCTION WITHIN THREE LIMITED TO 30 DAYS.  
 \*\* TRAVELERS FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE (3) TIME LENGTHS ON THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.



DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 3-28-96  
 DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division  
 3/29/96  
 DATE

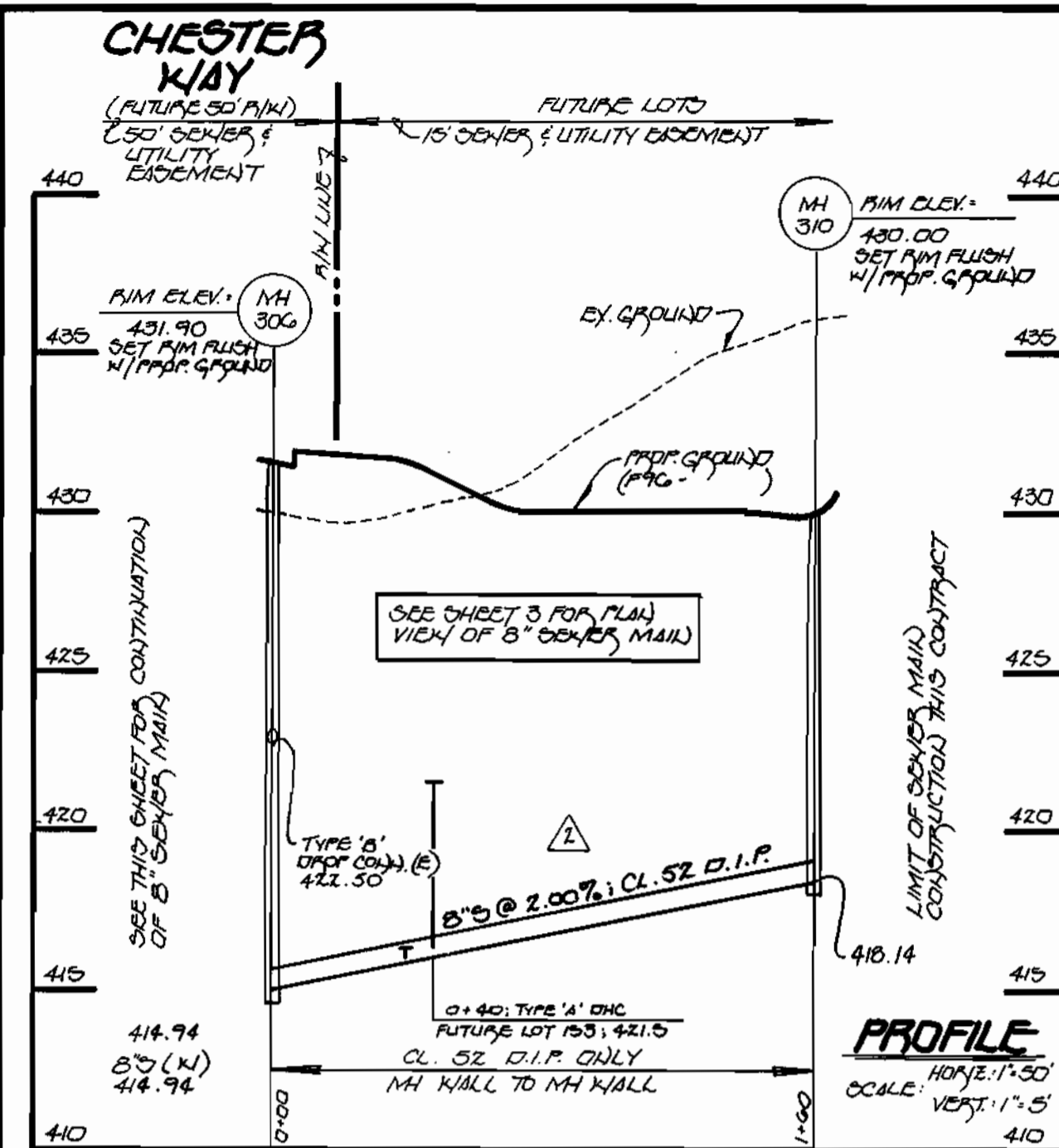
Fisher, Collins & Carter, Inc.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK  
 10272 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21042  
 (410) 461-2855



DES: M.J.M.	BY: NO.	REVISION	DATE
DRWN: J.H.M.			
CHK: P.W.K.			
DATE: 3/25/96			

WATER & SEWER MAIN  
 PROFILES;  
 NOTES & DETAILS  
 600' SCALE MAP NO. 15 BLOCK NO. 6 & 12

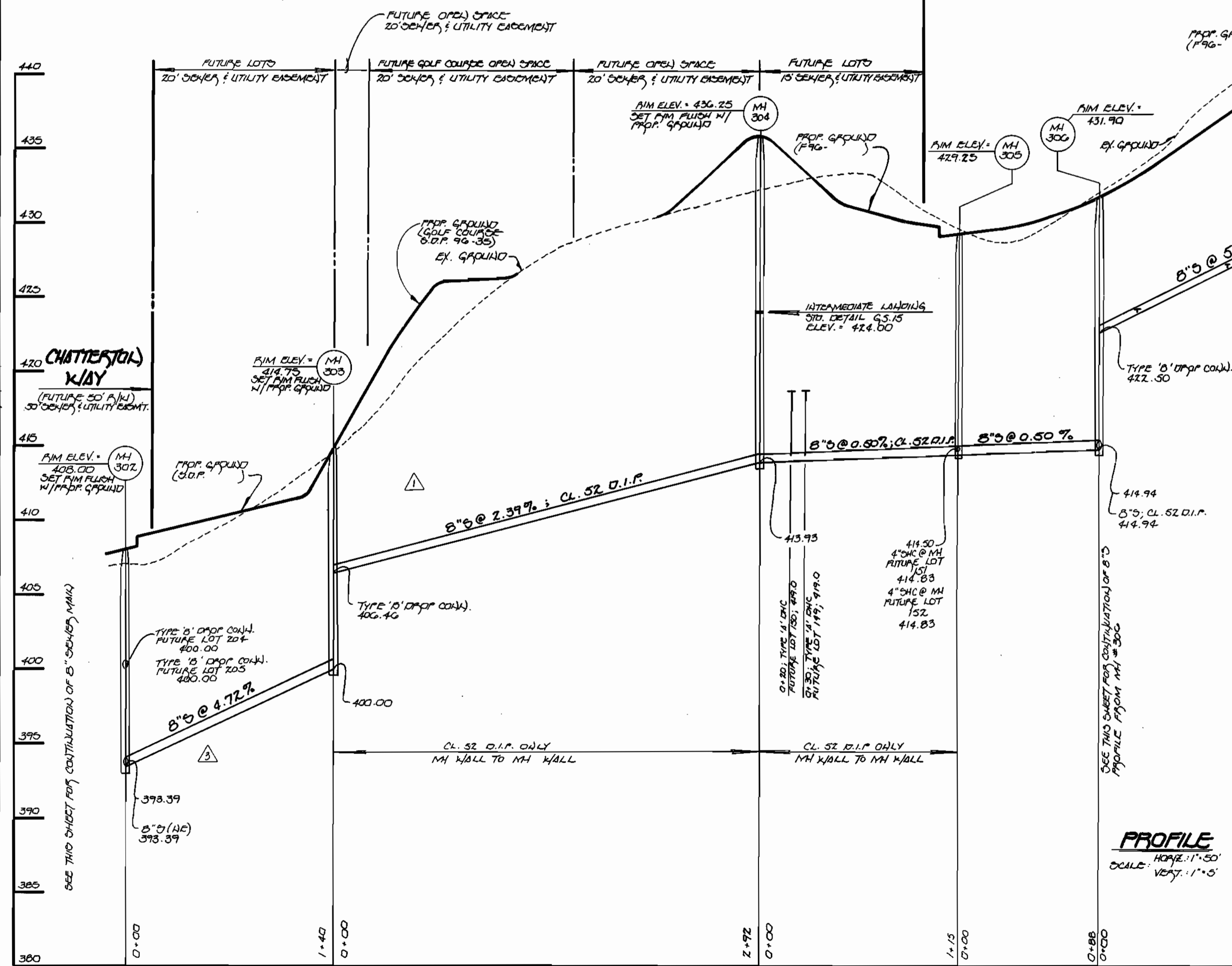
GTW'S WAVERLY WOODS  
 SECTION 4, AREA 2  
 LOT Nos. 20 - 45  
 CONTRACT NO. 24-3469-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN  
 SHEET 5 OF 8



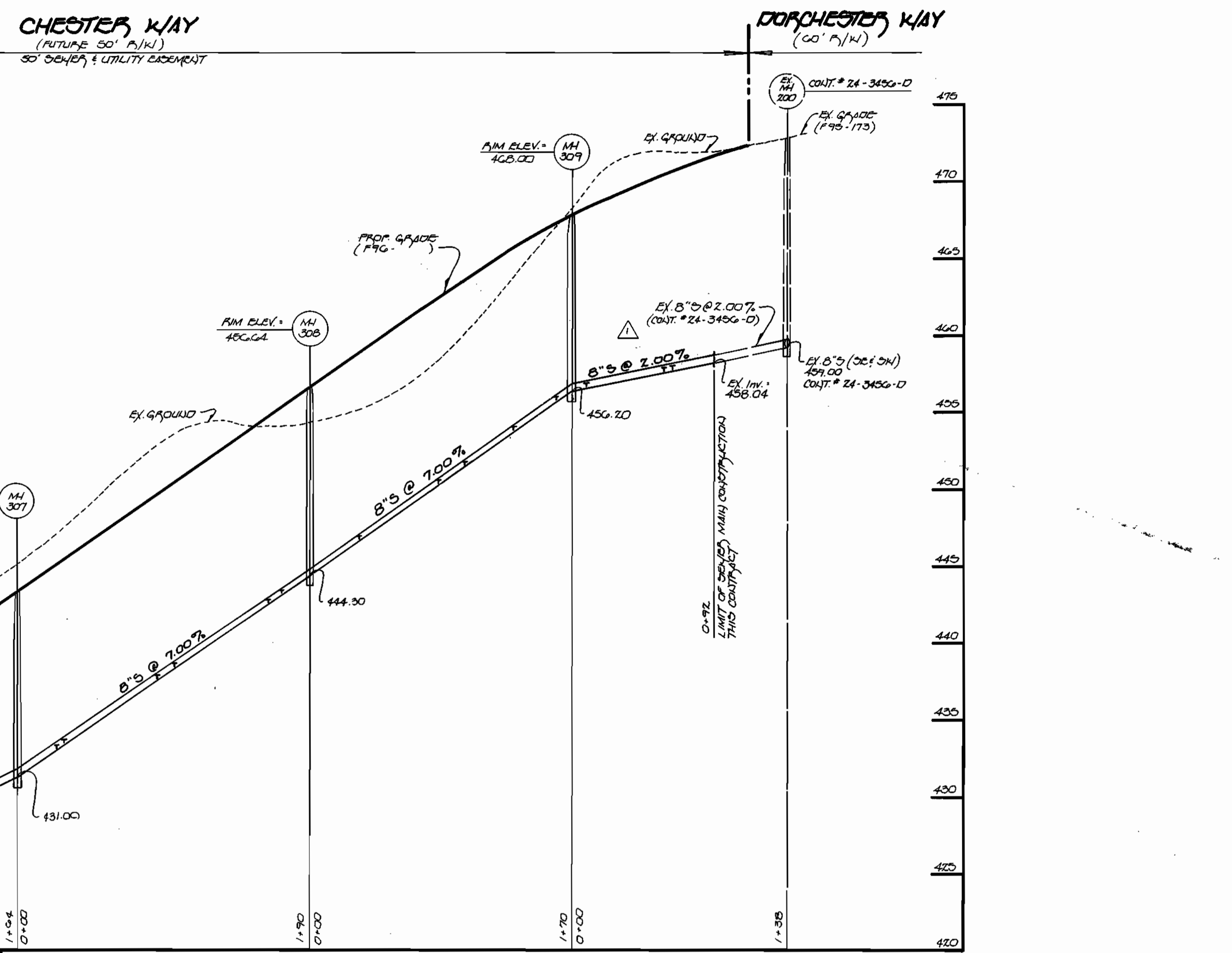
**8" SEWER MAIN THRU FUTURE LOTS**

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR SEWER & SEDIMENT CONTROL REPRESENTS A PRACTICAL & FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT HAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 Paul W. Keidel 03/25/96  
 SIGNATURE OF ENGINEER DATE

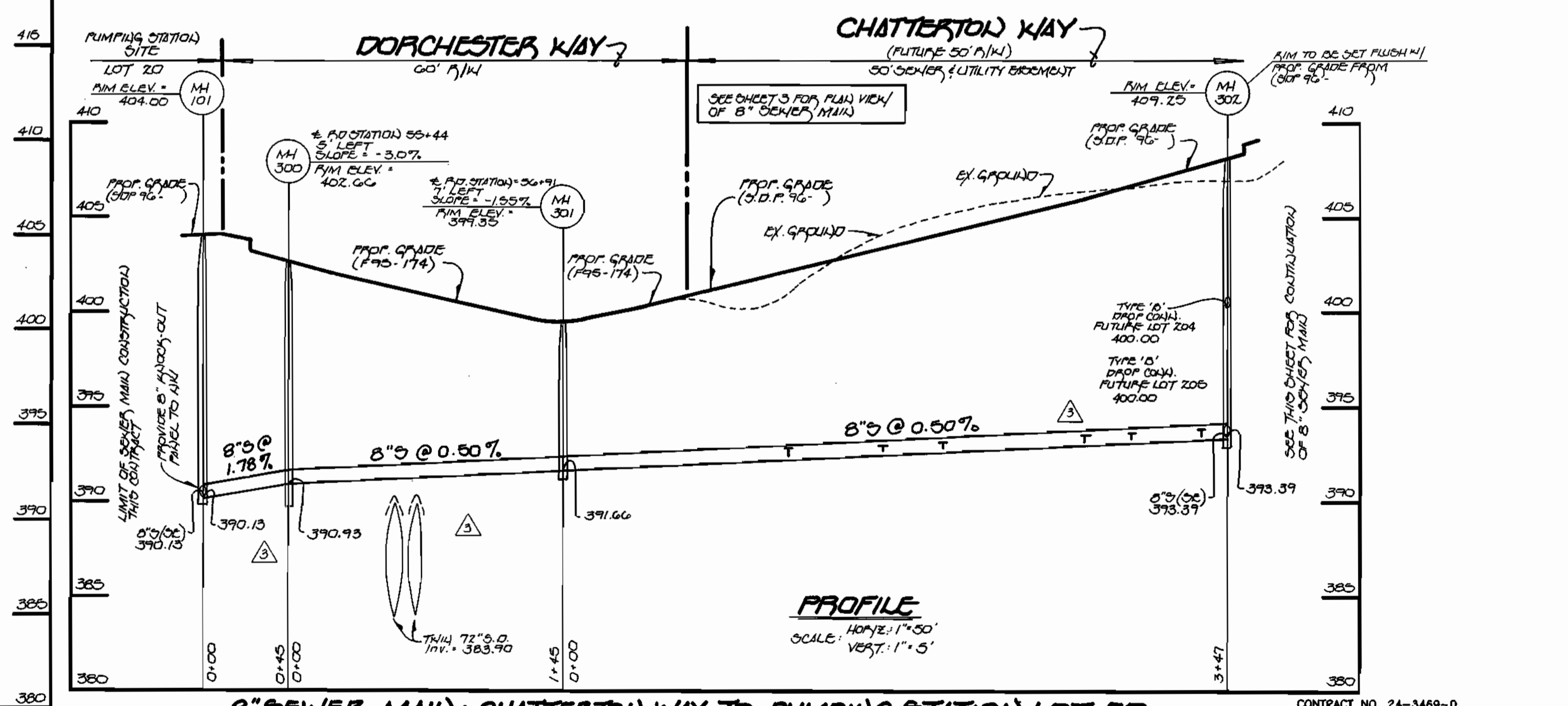
**DEVELOPER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR SEWER & SEDIMENT CONTROL & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION & SEDIMENTATION BEGINSING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.  
 Michael McCann for LWD, INC. 3/25/96  
 SIGNATURE OF DEVELOPER DATE



**8" SEWER MAIN: CHESTER WAY TO CHATTERTON WAY**



**8" SEWER MAIN: CHESTER WAY TO DORCHESTER WAY**

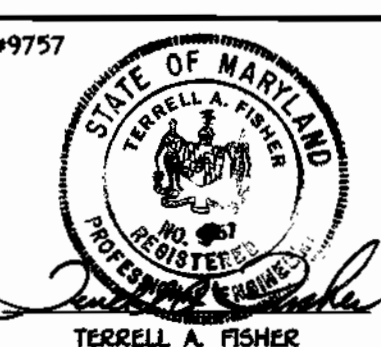


**8" SEWER MAIN: CHATTERTON WAY TO PUMPING STATION LOT 20**

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 3-29-96

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division

Fisher, Collins & Carter, Inc.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK  
 10272 Baltimore National Pike  
 Ellicott City, Maryland 21042  
 (410) 481-2855



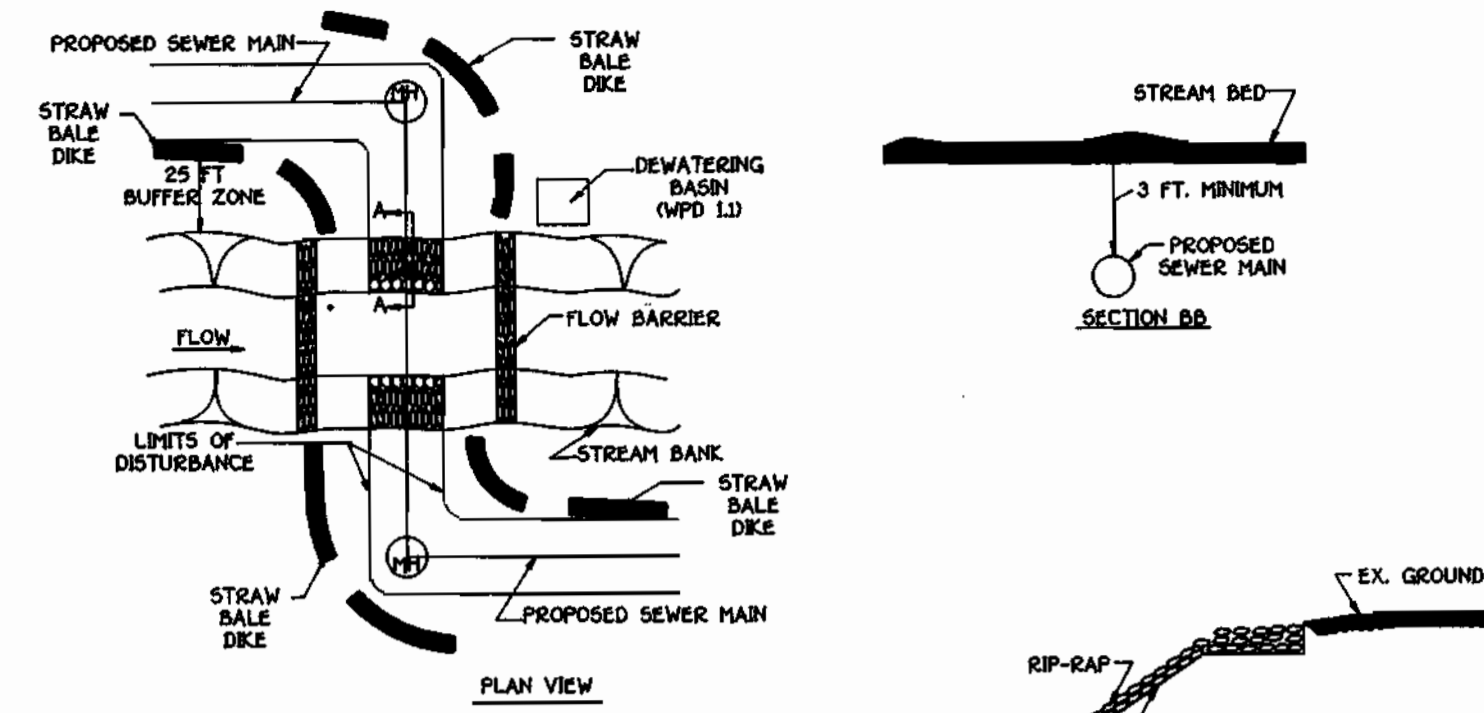
DES:	M.J.H.				
DRAWN:	J.H.H.				
CHK:	P.W.K.	F.C.C.	REVISE SEWER MAIN PROFILE FROM MH 101 TO MH 303 AND CORRECTION OF 72'-0.0'	12/96	
		F.C.C.	REVISE SEWER MAIN PROFILE FROM MH 300 TO MH 310	02/96	
		F.C.C.	REVISE SEWER MAIN PROFILE FROM MH 303 TO EX. MH 200 (CHATTERTON WAY)	01/96	
DATE:	3/25/96	BY:	NO.	REVISION	DATE

**SEWER MAIN PROFILES**  
 600' SCALE MAP NO. 16 BLOCK NO. 5 & 12

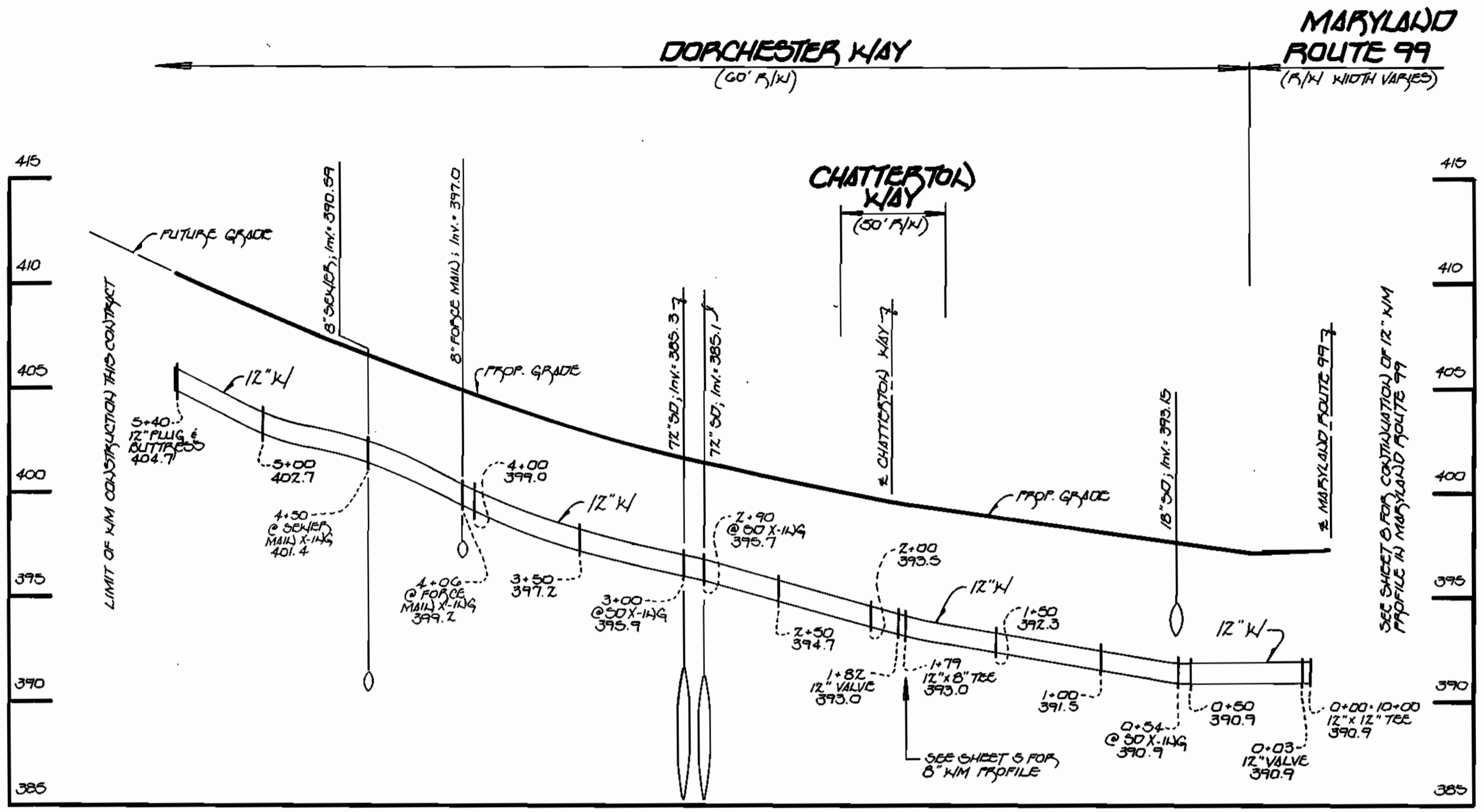
G.T.W.'S WAVERLY WOODS  
 SECTION 4, AREA 2  
 LOT NOS. 20-45  
 CONTRACT NO. 24-3469-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN  
 SHEET 6 OF 8

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR SEWER & FORCE MAIN & PUMPING STATION CONSTRUCTION IS A PRACTICAL & FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT IT HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY CONSTRUCTION DISTRICT.  
**Paul W. Koebel** 03/25/96  
 SIGNATURE OF ENGINEER DATE

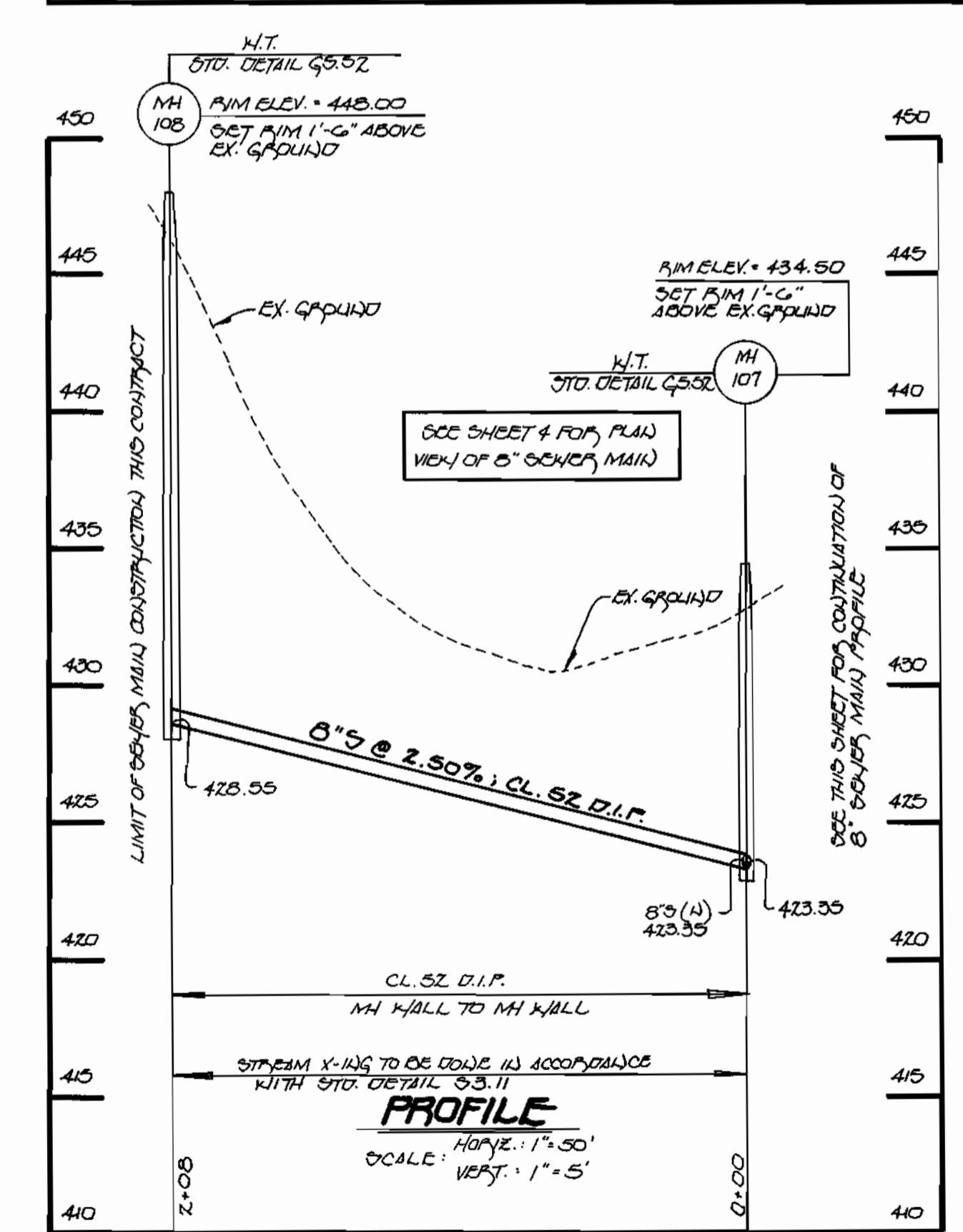
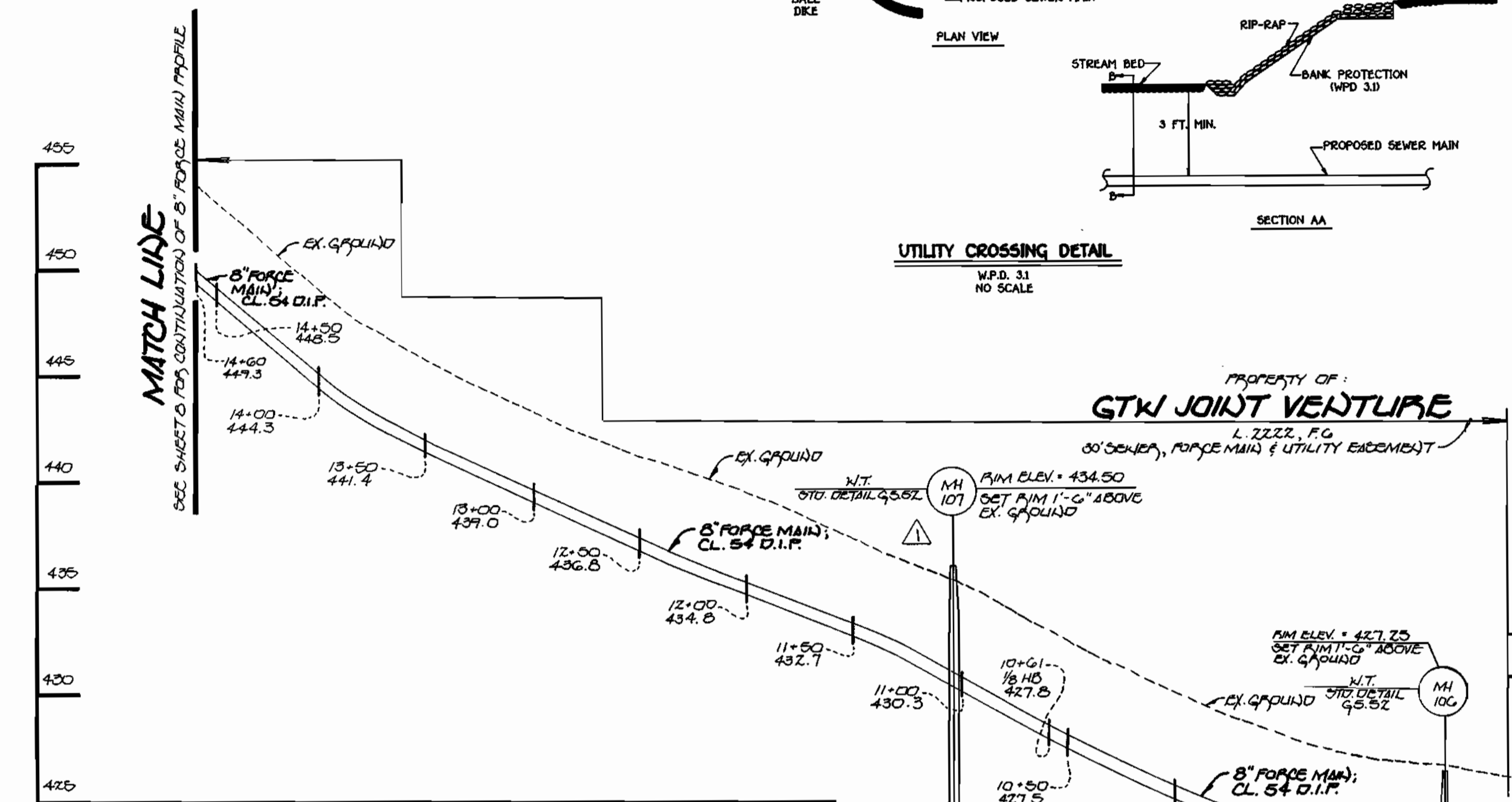
**DEVELOPER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT & PLAN FOR SEWER & FORCE MAIN & PUMPING STATION CONSTRUCTION & THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION & SEDIMENTATION BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONLY INSPECTION BY THE HOWARD COUNTY CONSTRUCTION DISTRICT OF THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.  
**Michael J. McCann** 3/25/96  
 SIGNATURE OF DEVELOPER DATE



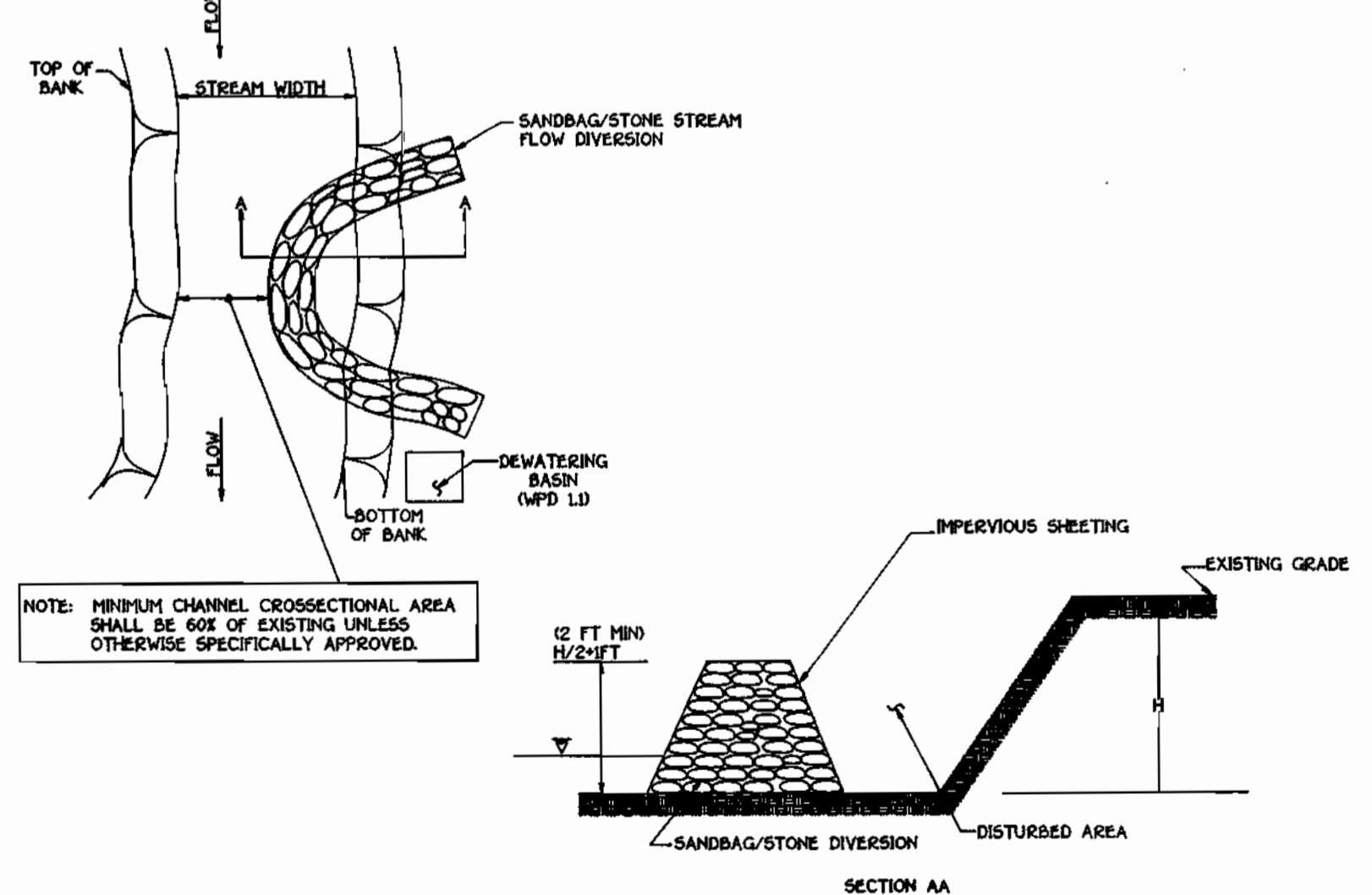
**UTILITY CROSSING DETAIL**  
 WPD 3.I  
 NO SCALE



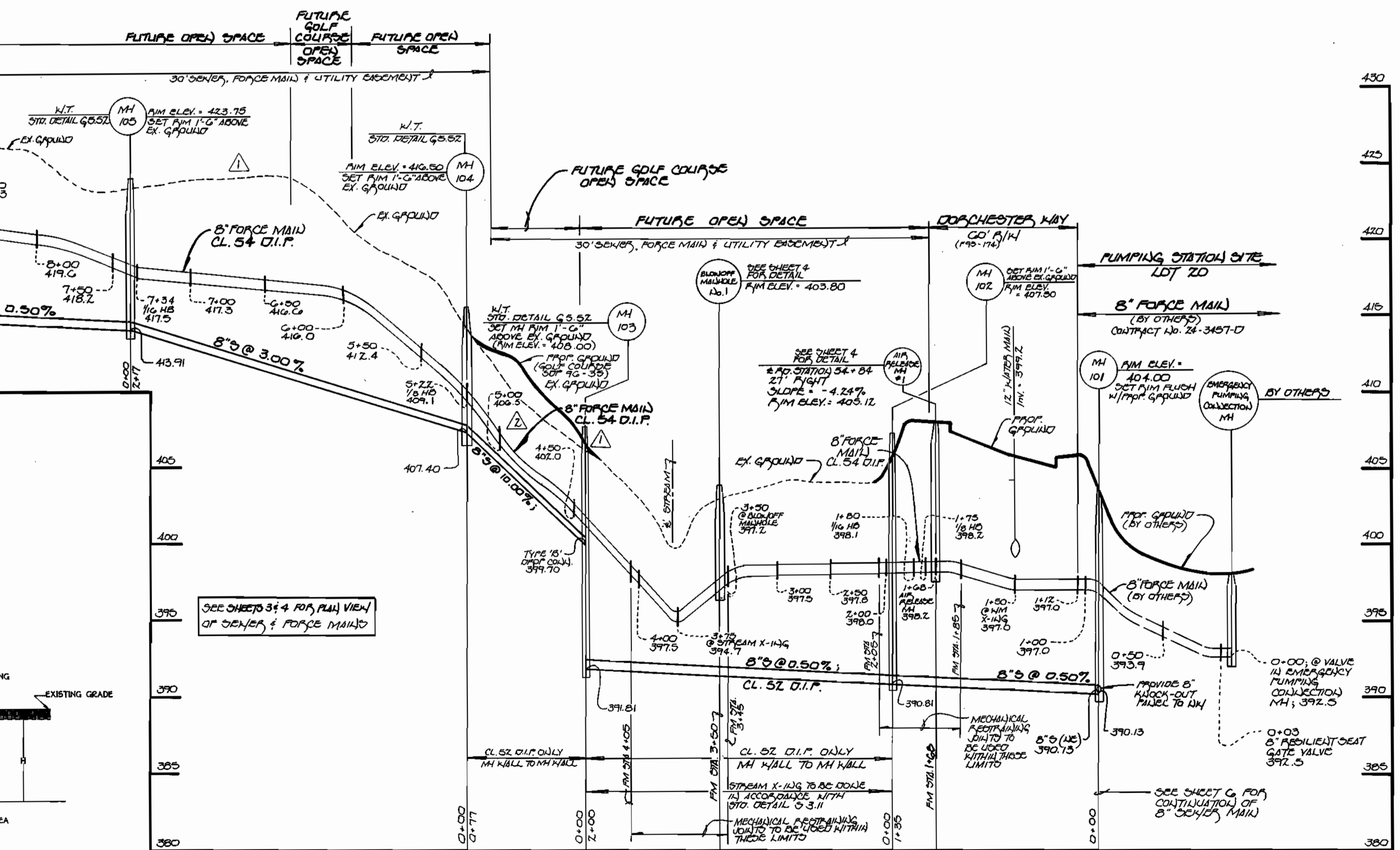
**12" WATER MAIN : DORCHESTER WAY**



**8" SEWER MAIN : FOR FUTURE TOWNHOUSE DEVELOPMENT**



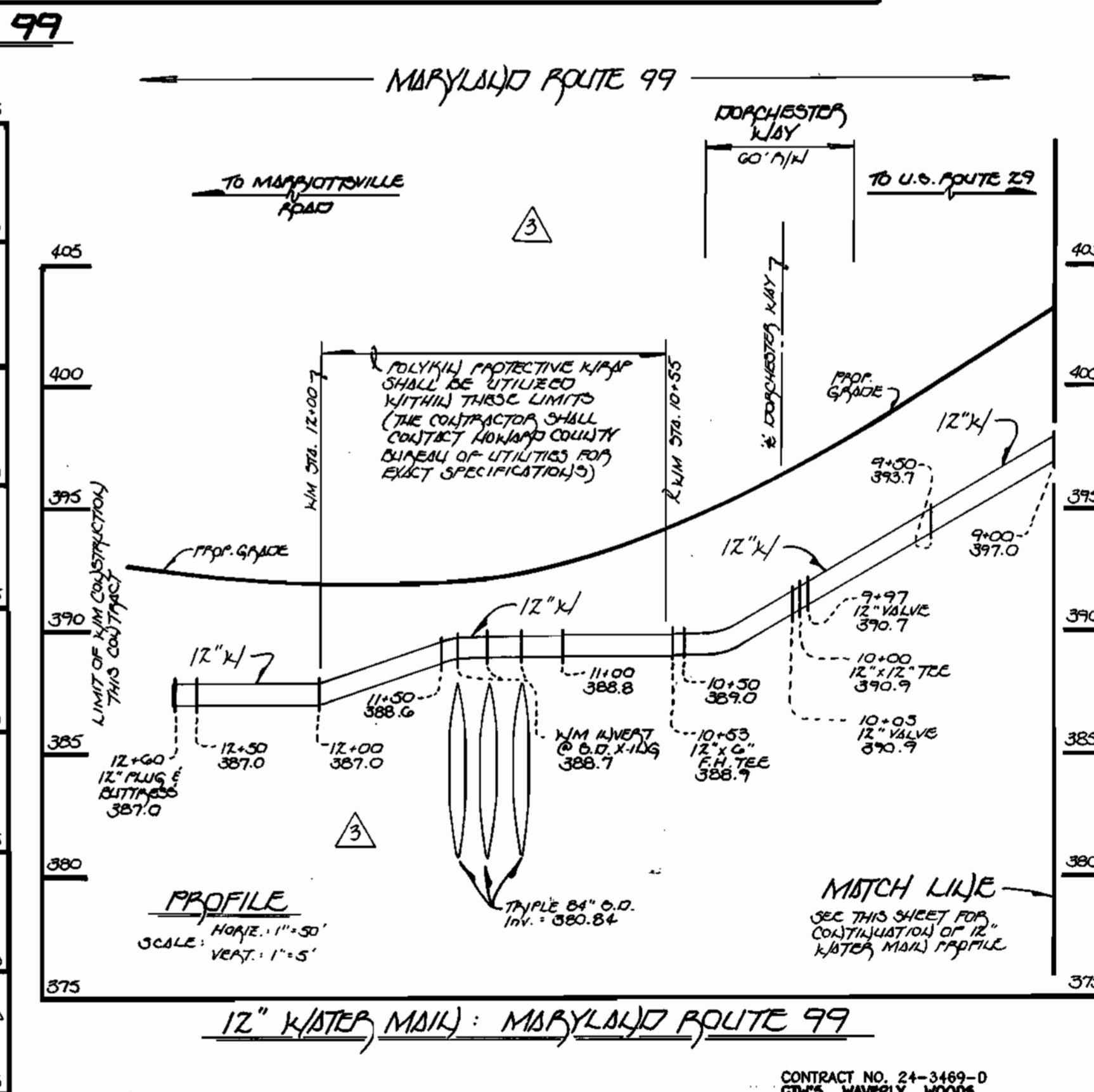
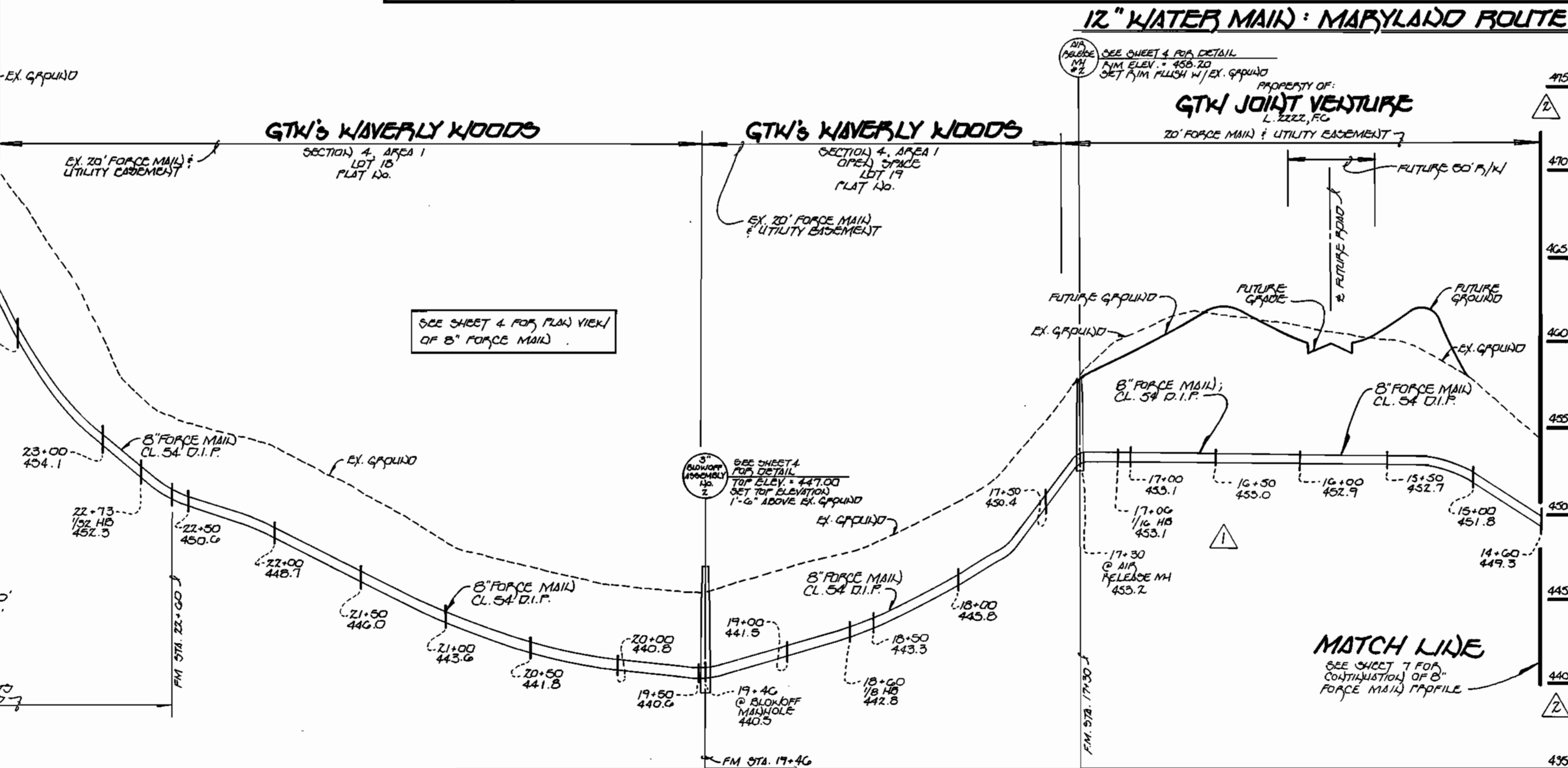
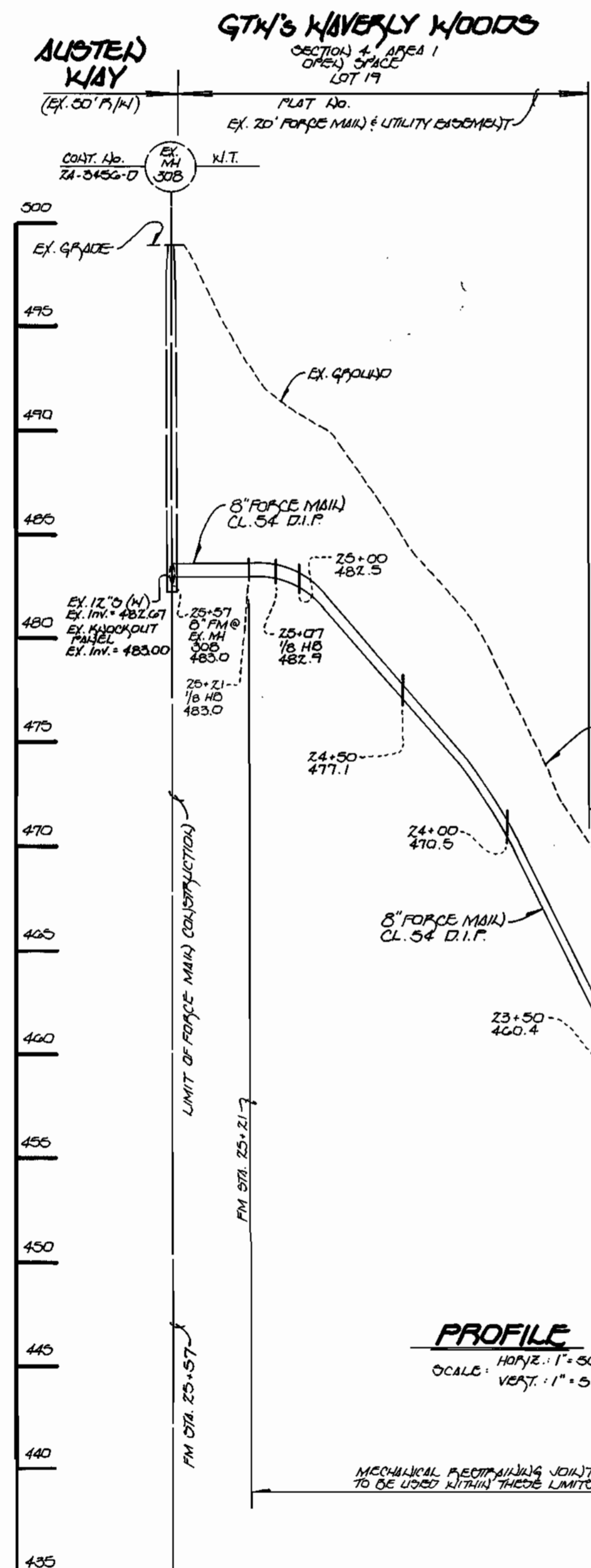
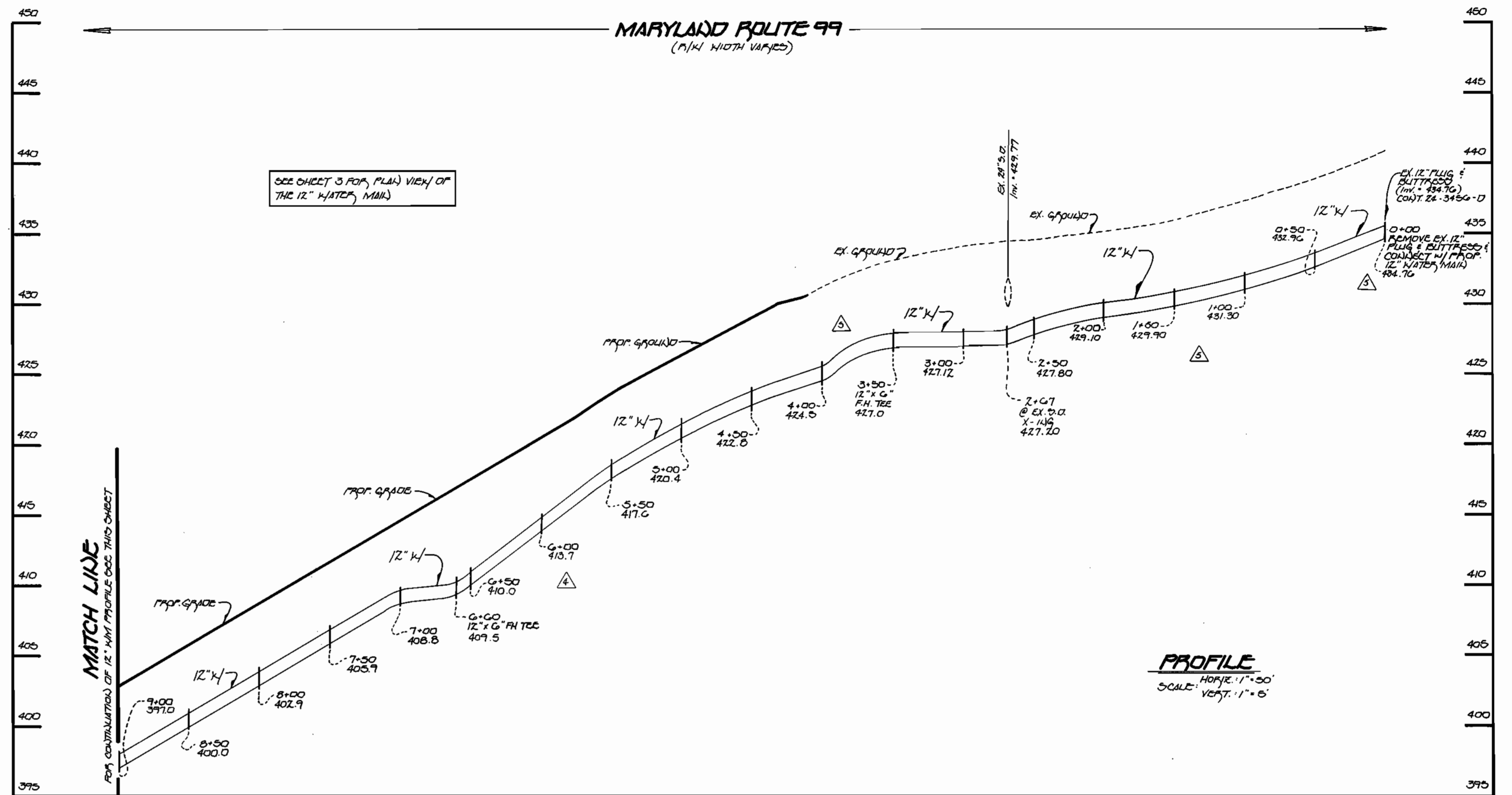
**SANDBAG/STONE STREAM FLOW DIVERSION DETAIL**  
 NO SCALE



**8" SEWER & 8" FORCE MAIN : TO PUMPING STATION**

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR PROPOSED SEWAGE TREATMENT PLANT AND SEWERAGE SYSTEM IS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
 Paul W. Koebel 03/25/96  
 SIGNATURE OF ENGINEER DATE

**DEVELOPER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR PROPOSED SEWAGE TREATMENT PLANT AND SEWERAGE SYSTEM. I HAVE A CERTIFICATE OF ATTENDING AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEWAGE AND SEWERAGE REPORTS. I HAVE ALSO AUTHORIZED MY AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY, TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
 Michael J. McCann FOR LOP & INC. 3/29/96  
 SIGNATURE OF DEVELOPER DATE

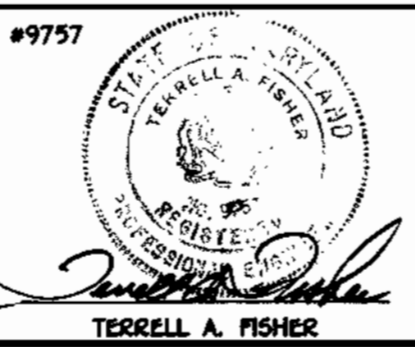


**8" FORCE MAIN : TO 12" SEWER MAIN IN AUSTEN KWAY**

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Robert Sauer 3-28-96  
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Michael J. McCann 3/29/96  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Fisher, Collins & Carter, Inc.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK  
 10272 Baltimore National Pike  
 Ellicott City, Maryland 21042  
 (410) 481-2855



DES.	DATE	BY	NO.	REVISION	DATE
F.C.C.	12/95			REVISE W/M FROM STA. 0+00 TO STA. 4+00 PER 40' DUAL CONDITIONS	12/95
F.C.C.	12/95			REVISE INVERT OF 12" G. TEE TO MATCH WITH DUAL LINE INFORMATION	12/95
F.C.C.	12/95			ADD PROFILE WHICH SHOWS RUN UP TO STA. 12+00 (MD ROUTE 99)	12/95
F.C.C.	12/95			MOVE CENTER OF THE PROFILE TO MAKE ROOM FOR W/M EXTENSION	12/95
F.C.C.	12/95			REVISE FORCE MAIN FROM STA. 15+00 TO STA. 18+00	12/95
F.C.C.	12/95			RELAY/LOC. AND RELEASE MH # 2	12/95

**WATER & FORCE MAIN PROFILES**  
 600' SCALE MAP NO. 16 BLOCK NO. 6 & 12

G.T.W.'S WAVERLY WOODS  
 SECTION 4, AREA 2  
 LOT NOS. 20-45  
 CONTRACT NO. 24-3469-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN  
 SHEET 8 OF 8