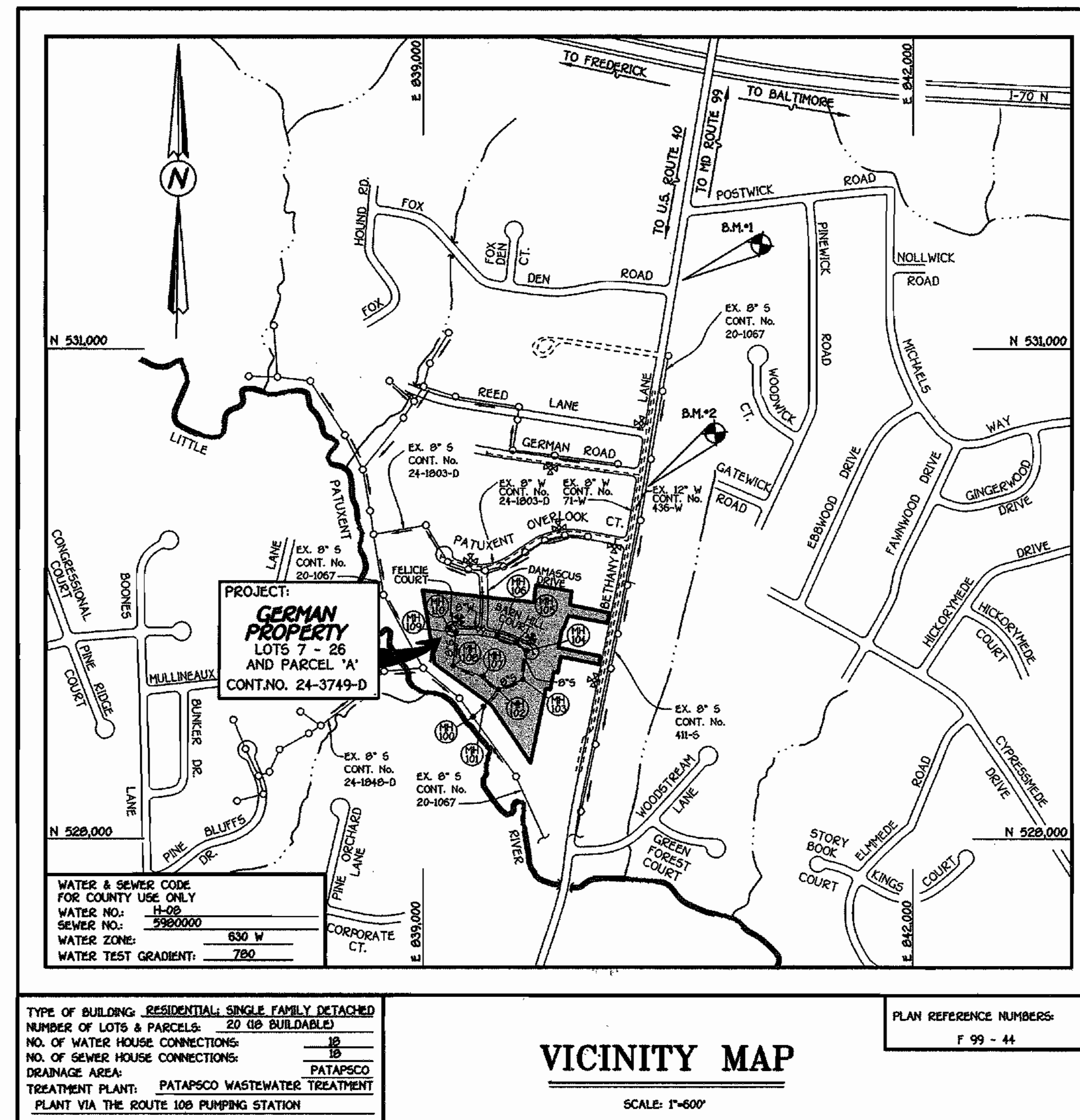


GENERAL NOTES

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- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". 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 0991 AMENDMENTS THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
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- 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 - 787-9066
 - HESS 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 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G.552.
- WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- HOUSES WITH THE SYMBOL "C.M.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
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- 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.
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- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA 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 10.11(A) OF THE HOWARD COUNTY CODE.

ITEM	ESTIMATED QUANTITIES	AS-BUILT		SUPPLIER
		QUANTITIES	TYPE	
8" SEWER	1,032 L.F.			
8" SEWER (D.I.P.)	236 L.F.			
4" SEWER	681 L.F.			
MANHOLES	11 EACH			
8" WATER	701 L.F.			
6" WATER	50 L.F.			
FIRE HYDRANTS	2 EACH			
1-1/2" WATER	192 L.F.			
1" WATER	392 L.F.			
8" x 8" TEE	1 EACH			
8" x 6" TEE	2 EACH			
8" VALVE	2 EACH			
6" VALVE	2 EACH			
8"-1/8" H.B.	2 EACH			
8" PLUG & BUTTRESS	2 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY & DRAFTING DIVISION AS-BUILT DATE:				



WATER & SEWER CODE FOR COUNTY USE ONLY
 WATER NO.: 14-00
 SEWER NO.: 2980000
 WATER ZONE: 630 W
 WATER TEST GRADIENT: 780

TYPE OF BUILDING: RESIDENTIAL: SINGLE FAMILY DETACHED
 NUMBER OF LOTS & PARCELS: 20 (20 BUILDABLE)
 NO. OF WATER HOUSE CONNECTIONS: 10
 NO. OF SEWER HOUSE CONNECTIONS: 10
 DRAINAGE AREA: PATAPSCO
 TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT VIA THE ROUTE 100 PUMPING STATION

PLAN REFERENCE NUMBERS: F 99 - 44

VICINITY MAP

SCALE: 1"=60'

BENCHMARK INFORMATION

B.M. 1 - HOWARD COUNTY MONUMENT NO. 3341002
 ELEV.: 440.42; DESCRIPTION: CONC. MONUMENT @ SURFACE APPROX. 9' EAST OF EDGE OF RD. IN GRASS ISLAND IN PARKING LOT OF BETHANY LANE METHODIST CHURCH
 B.M. 2 - HOWARD COUNTY MONUMENT NO. 3341001
 ELEV.: 421.74; DESCRIPTION: CONC. MONUMENT 1.3' BELOW SURFACE 0.3' EAST OF EDGE OF RD. APPROX. 120' SOUTH OF E. DRIVEWAY TO BETHANY LANE BAPTIST CHURCH

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 A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE 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."

Mt McCann for German Prop. Partnership 3-9-99
 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."

John P. Johnston 3/8/99
 SIGNATURE OF ENGINEER DATE

CONTRACT No. 24-3749-D

GERMAN PROPERTY
LOT NOS. 7 THRU 26 & PARCEL 'A'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

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

Cheryl Simmons 3/1/99
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED:
John P. Johnston 3/1/99
 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 AND UNDER F-99-44

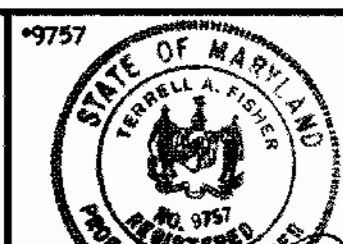
Mt McCann for German Prop. Partnership 3-3-99
 SIGNATURE OF DEVELOPER DATE

CONTRACT NO. 24-3749-D
GERMAN PROPERTY
 LOT NOS. 7-26 & PARCEL 'A'
 WATER AND 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
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 4100 14 - 2025



DESIGNED BY:	M.D.T.		
DRAWN BY:	J.C.L.		
CHECKED BY:	M.J.H.		
DATE:	JANUARY 29, 1999	F.C.C. --	ADDRESS COUNTY COMMENTS
BY:	NO.	REVISION	DATE

TITLE SHEET

60' SCALE MAP NO. 17 BLOCK NO. 20
 F.C.C. WORK ORDER NO. 30534
 FILE NAME: G/30534/WAS/TITLE SHEET.DWG

GERMAN PROPERTY
 LOT NOS. 7 THRU 26 & PARCEL 'A'
 CONTRACT NO. 24-3749-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 5

Robert M. Benjamin 3-12-99
 CHIEF, BUREAU OF UTILITIES DATE

John P. Johnston 3/1/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

NOTE:
THE EXISTING WATER AND SEWER MAINS SHOWN IN PATUXENT OVERLOOK COURT AND DAMASCUS DRIVE WERE CONSTRUCTED UNDER CONTRACT NUMBER 24-1803-D.

SHC INVERT • PROPERTY LINE CHART

STATION	LOT	ELEVATION
0+10 RT.	MH 103 TO MH 104	361.21
1+15 RT.	18 (DHC)	341.82
1+35 RT.	M (1.00%)	368.92
1+62 RT.	20	369.13
0+10 RT.	MH 104 TO MH 105	368.61
0+20 RT.	21 (SHC @ MFD)	390.06
0+50 RT.	22	392.50
0+63 RT.	23	396.76
0+63 RT.	MH 105 TO MH 106	396.76
0+63 RT.	24	396.76
0+63 RT.	25 (SHC @ MFD)	398.70
0+63 RT.	MH 102 TO MH 107	398.70
0+63 RT.	15 (SHC @ MFD)	366.54
0+63 RT.	MH 107 TO MH 108	366.54
0+65 RT.	14	366.25
0+45 RT.	MH 108 TO MH 109	361.70
0+45 RT.	12 (DHC)	361.70
0+45 RT.	15 (DHC)	362.70
0+47 RT.	MH 109 TO MH 110	364.41
0+47 RT.	7 (DHC)	395.64
0+42 RT.	11 (@ 1.00%)	364.27
0+10 RT.	8 (DROP CONN @ MFD)	368.98
0+10 RT.	9 (SHC @ MFD @ 1.00%)	364.41
0+10 RT.	10 (SHC @ MFD @ 1.00%)	364.41

MANHOLE TABULATION CHART

NO.	ROAD STATION	DISTANCE	SLOPE	RIM ELEVATION
100	---	---	---	356.30***
101	---	---	---	359.30***
102	---	---	---	370.60***
103	---	---	---	401.43*
104	IN CUL-DE-SAC	---	---	399.77**
105	2+05 BARN HILL COURT	4' RT.	-5.62%	404.06**
106	0+97 BARN HILL COURT	4' RT.	-3.95%	408.85**
107	---	---	---	373.30***
108	---	---	---	374.00**
109	IN CUL-DE-SAC	---	---	405.24**
110	IN CUL-DE-SAC	---	---	403.71**

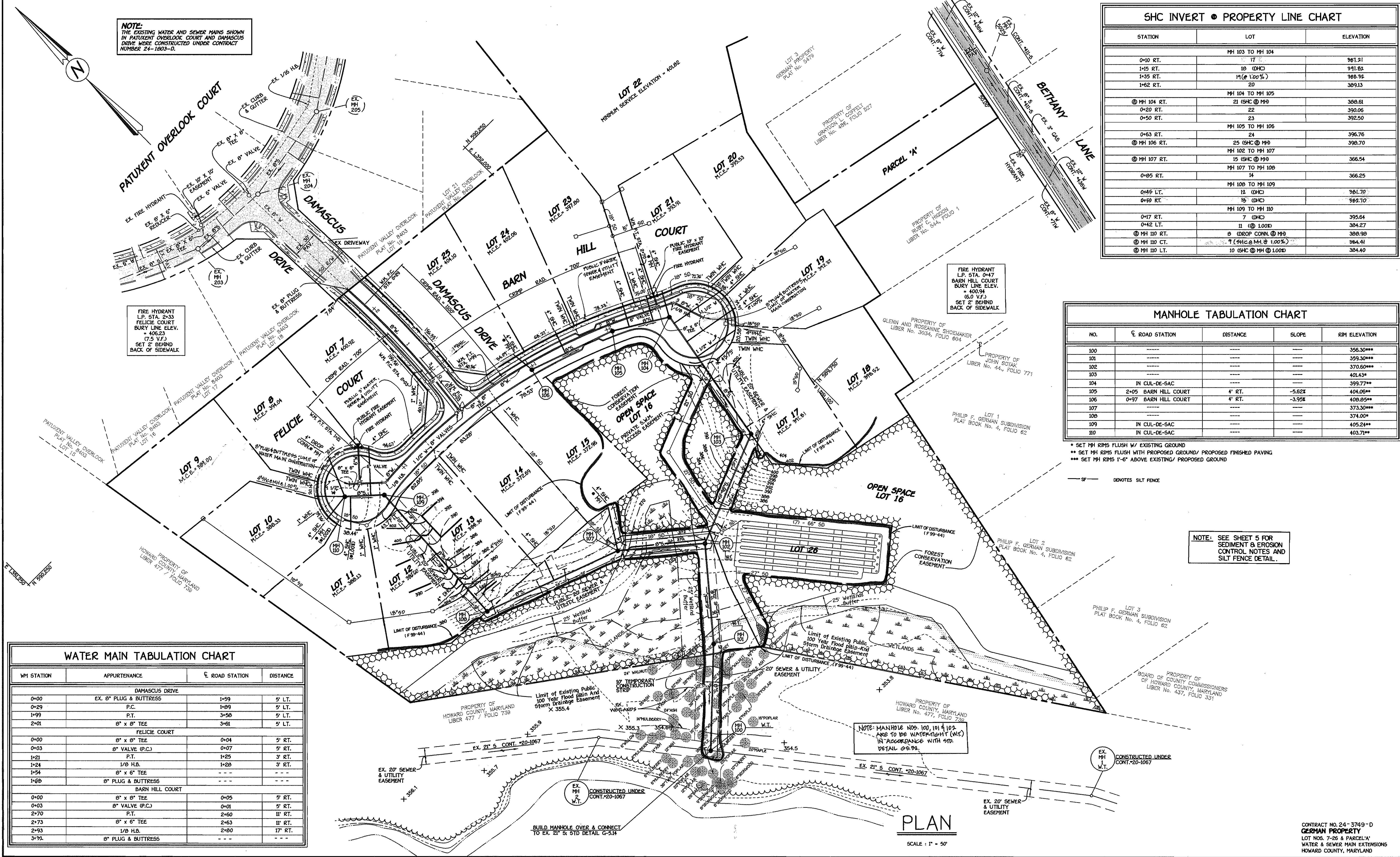
* SET MH RIMS FLUSH W/ EXISTING GROUND
 ** SET MH RIMS FLUSH WITH PROPOSED GROUND/ PROPOSED FINISHED PAVING
 *** SET MH RIMS 1'-6" ABOVE EXISTING/ PROPOSED GROUND

— SF — DENOTES SILT FENCE

NOTE: SEE SHEET 5 FOR SEDIMENT & EROSION CONTROL NOTES AND SILT FENCE DETAIL.

WATER MAIN TABULATION CHART

WM STATION	APPURTENANCE	ROAD STATION	DISTANCE
DAMASCUS DRIVE			
0+00	EX. 8" PLUG & BUTTRISS	1+59	5' LT.
0+29	P.C.	1+69	5' LT.
1+99	P.T.	3+58	5' LT.
2+01	8" x 8" TEE	3+61	5' LT.
FELICIE COURT			
0+00	8" x 8" TEE	0+04	5' RT.
0+03	8" VALVE (P.C.)	0+07	5' RT.
1+21	P.T.	1+25	3' RT.
1+24	1/8 H.B.	1+28	3' RT.
1+54	8" x 6" TEE	---	---
1+68	8" PLUG & BUTTRISS	---	---
BARN HILL COURT			
0+00	8" x 8" TEE	0+05	5' RT.
0+03	8" VALVE (P.C.)	0+01	5' RT.
2+70	P.T.	2+60	11' RT.
2+73	8" x 6" TEE	2+63	11' RT.
2+93	1/8 H.B.	2+80	17' RT.
3+94	8" PLUG & BUTTRISS	---	---



PLAN
SCALE: 1" = 50'

CONTRACT NO. 24-3749-D
 GERMAN PROPERTY
 LOT NOS. 7-26 & PARCEL 'A'
 WATER & SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Chief, Bureau of Utilities
 3-12-99

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 Chief, Development Engineering Division
 3/10/99

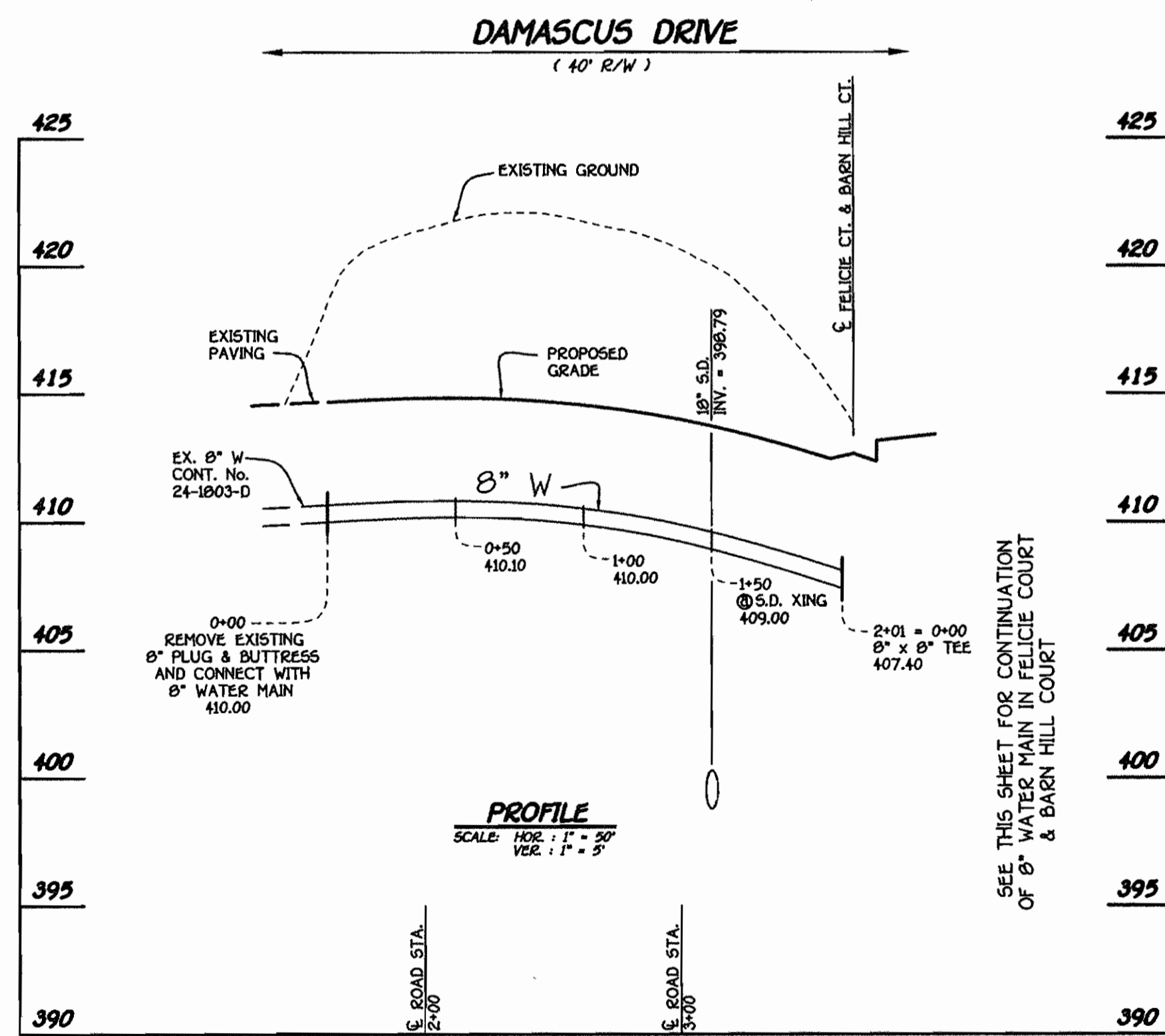
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLSWORTH CITY, MARYLAND 21042
 (410) 481-2055



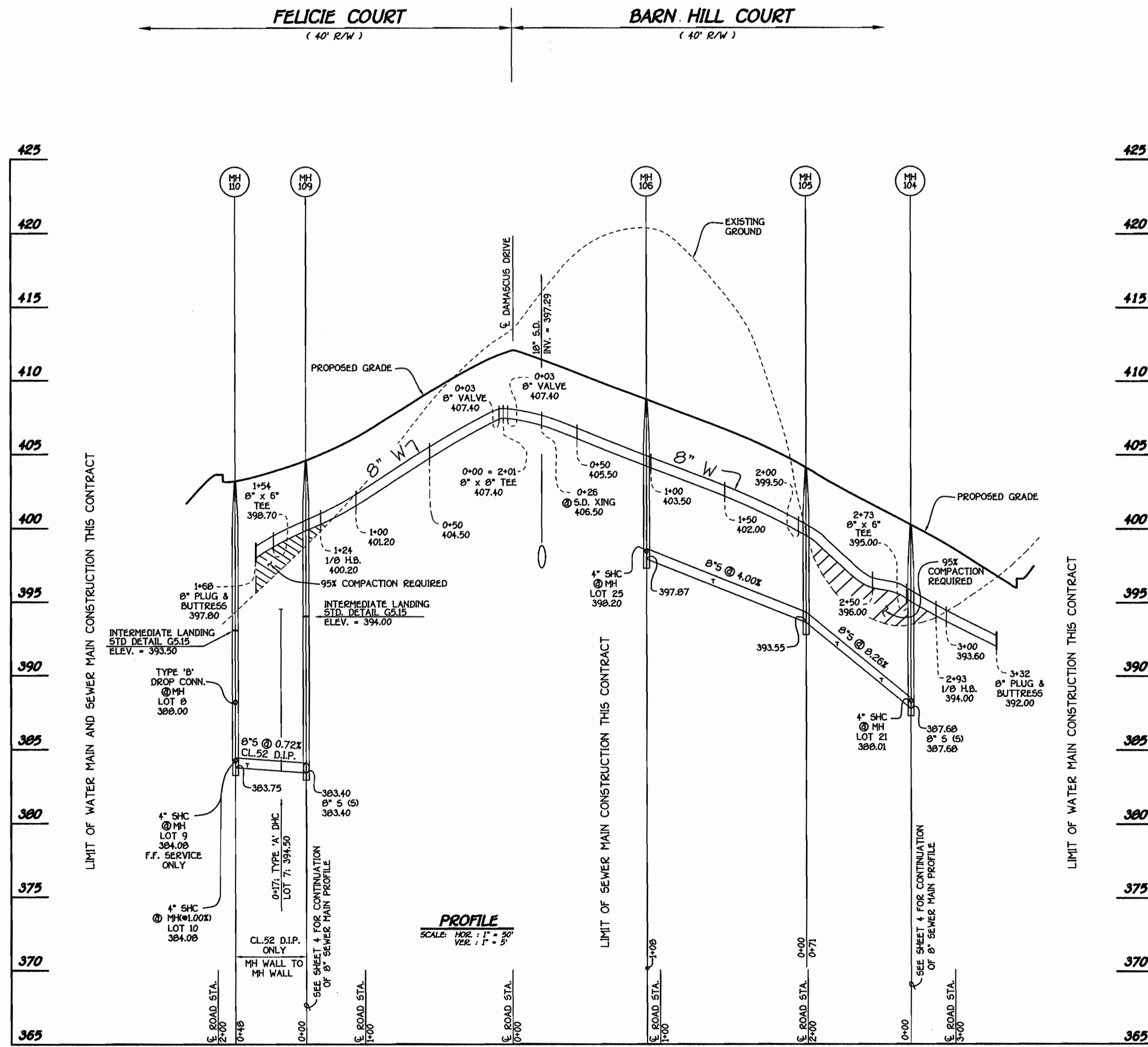
DESIGNED BY:	M.D.T.
DRAWN BY:	J.C.L.
CHECKED BY:	M.J.M.
DATE:	JANUARY 29, 1999
BY:	NO.
REVISION:	

PLAN VIEW
 WATER AND SEWER MAINS
 600' SCALE MAP NO. 17 BLOCK NO. 20
 F.C.C. WORK ORDER NO. 30534
 FILE NAME: G/30534/W&S/PLANDWG

GERMAN PROPERTY
 LOT NOS. 7 THRU 26 & PARCEL 'A'
 CONTRACT NO. 24-3749-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 2 of 5



SEE THIS SHEET FOR CONTINUATION OF 8" WATER MAIN IN FELICIE COURT & BARN HILL COURT

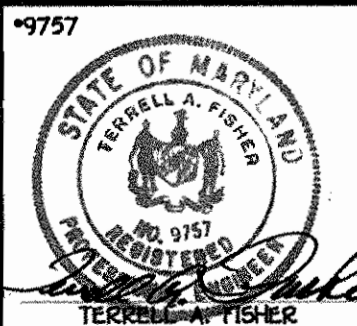


CONTRACT NO. 24-3749-D
GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 MALTHOUSE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
4100 481 - 2855



DESIGNED BY: M.D.T.
DRAWN BY: J.C.L.
CHECKED BY: M.J.M.
DATE: JANUARY 29, 1999
F.C.C. ADDRESS COUNTY COMMENTS: 2/26/99
BY NO. REVISION DATE

WATER AND SEWER MAINS PROFILES
600' SCALE MAP NO. 17 BLOCK NO. 20
F.C.C. WORK ORDER NO. 30534
FILE NAME: 30534WATSEWPROFILES.DWG

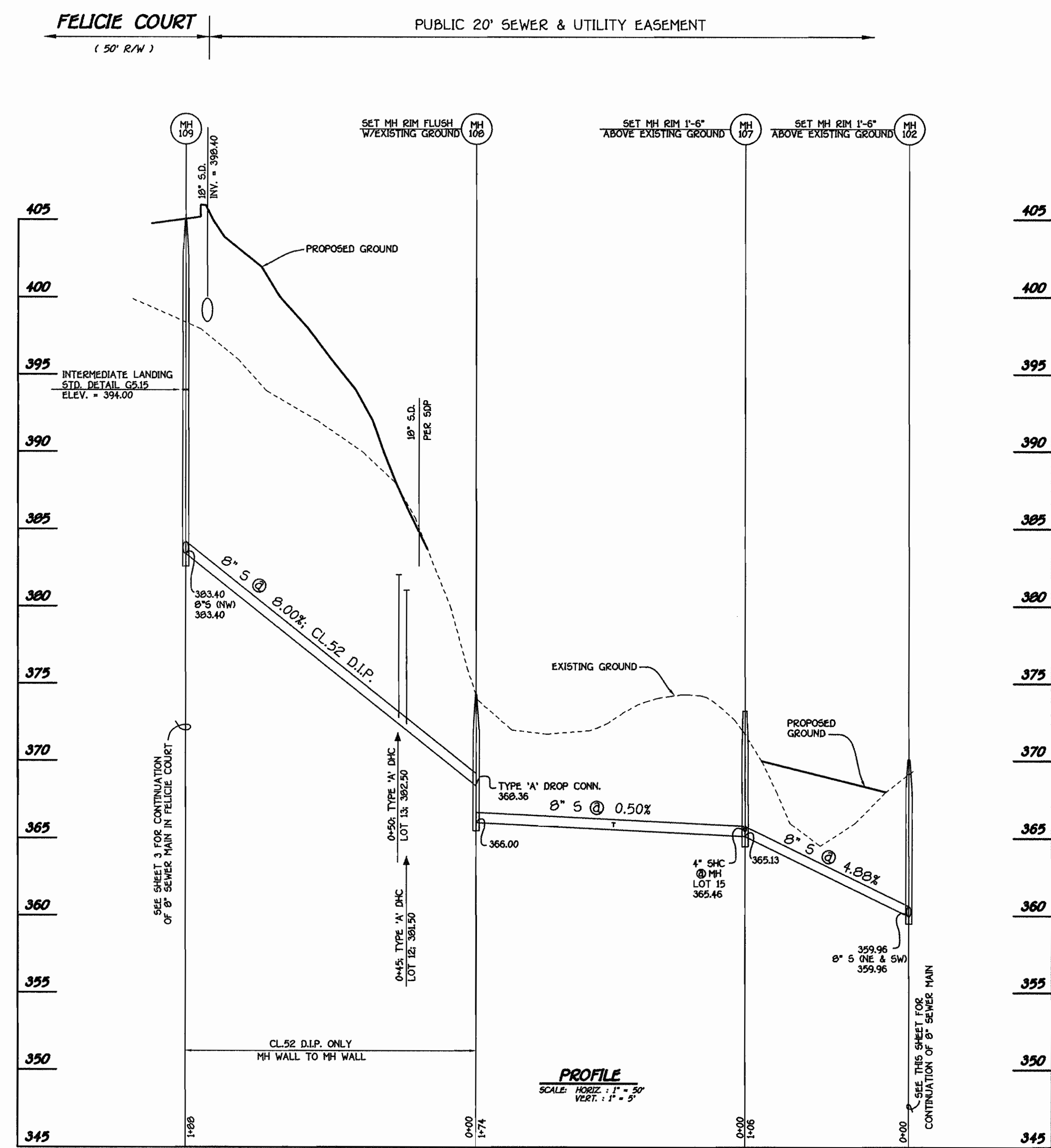
GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
CONTRACT NO. 24-3749-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 5

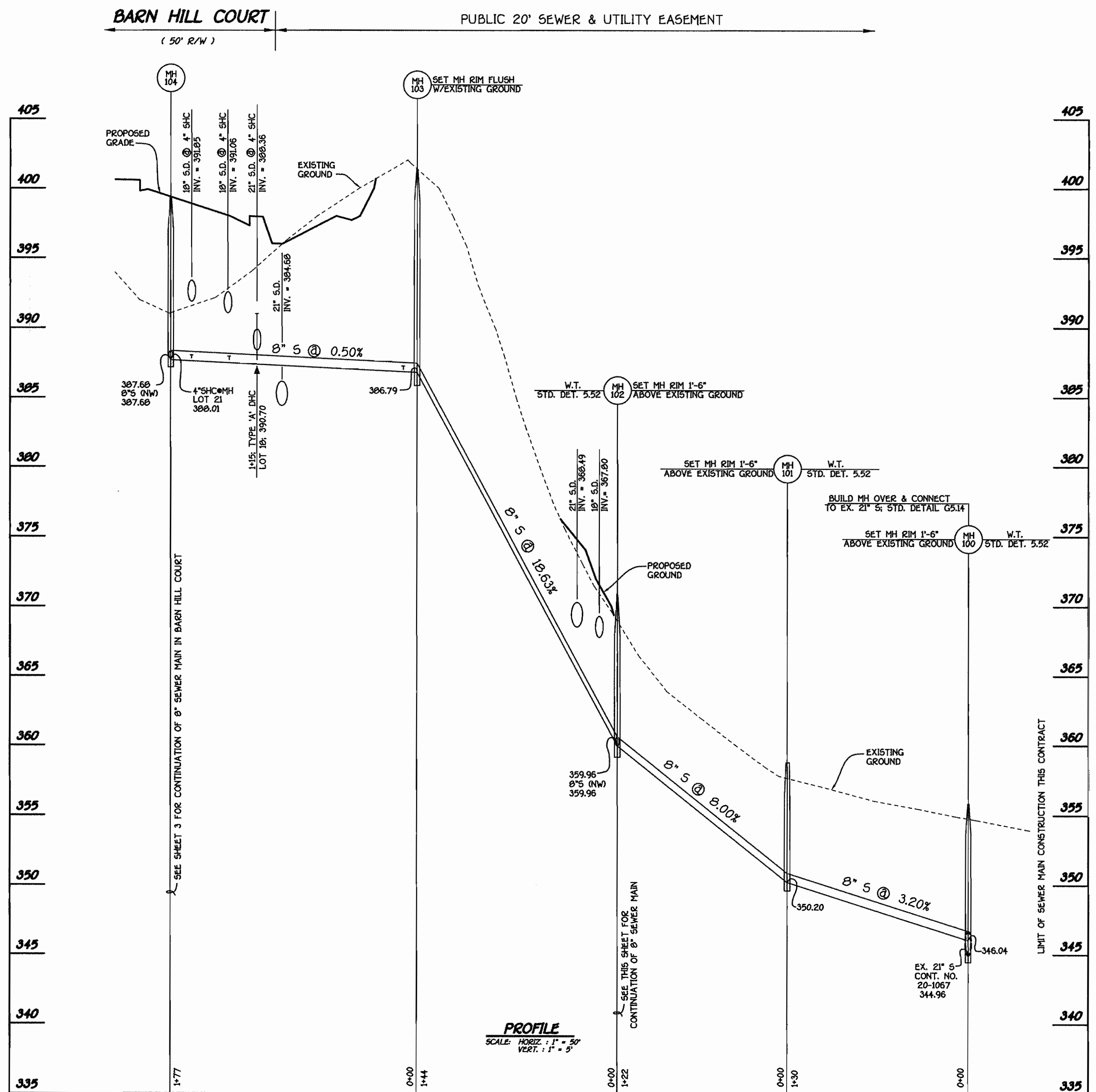
Robert W. Bainger
CHIEF, BUREAU OF UTILITIES
DATE: 3-12-99

Michael J. Damman
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 8/18/99

DATE: 8/18/99



**8" SEWER MAIN
OUTFALL FROM FELICIE COURT**



**8" SEWER MAIN
OUTFALL FROM BARN HILL COURT**

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Deisinger
CHIEF, BUREAU OF UTILITIES

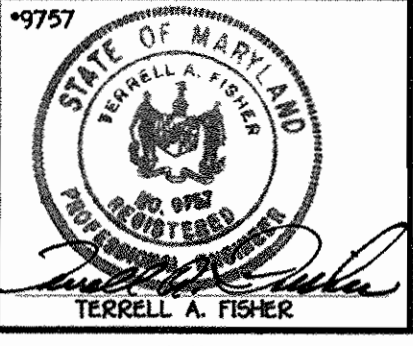
3-12-99
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Alan Deussen
CHIEF, DEVELOPMENT ENGINEERING DIVISION

3/10/99
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL FREE
ELLSWORTH CITY, MARYLAND 21046
4100 461 - 2255



DESIGNED BY:	M.D.T.
DRAWN BY:	J.C.L.
CHECKED BY:	M.J.H.
DATE:	JANUARY 29, 1999
BY NO.	
REVISION	

**SEWER MAIN
PROFILES**

600' SCALE MAP NO. 17 BLOCK NO. 20
F.C.C. WORK ORDER NO. 30534
FILE NAME: G/30534/WATSEW/PROFILES2.DWG

GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
CONTRACT NO. 24-3749-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
4 OF 5

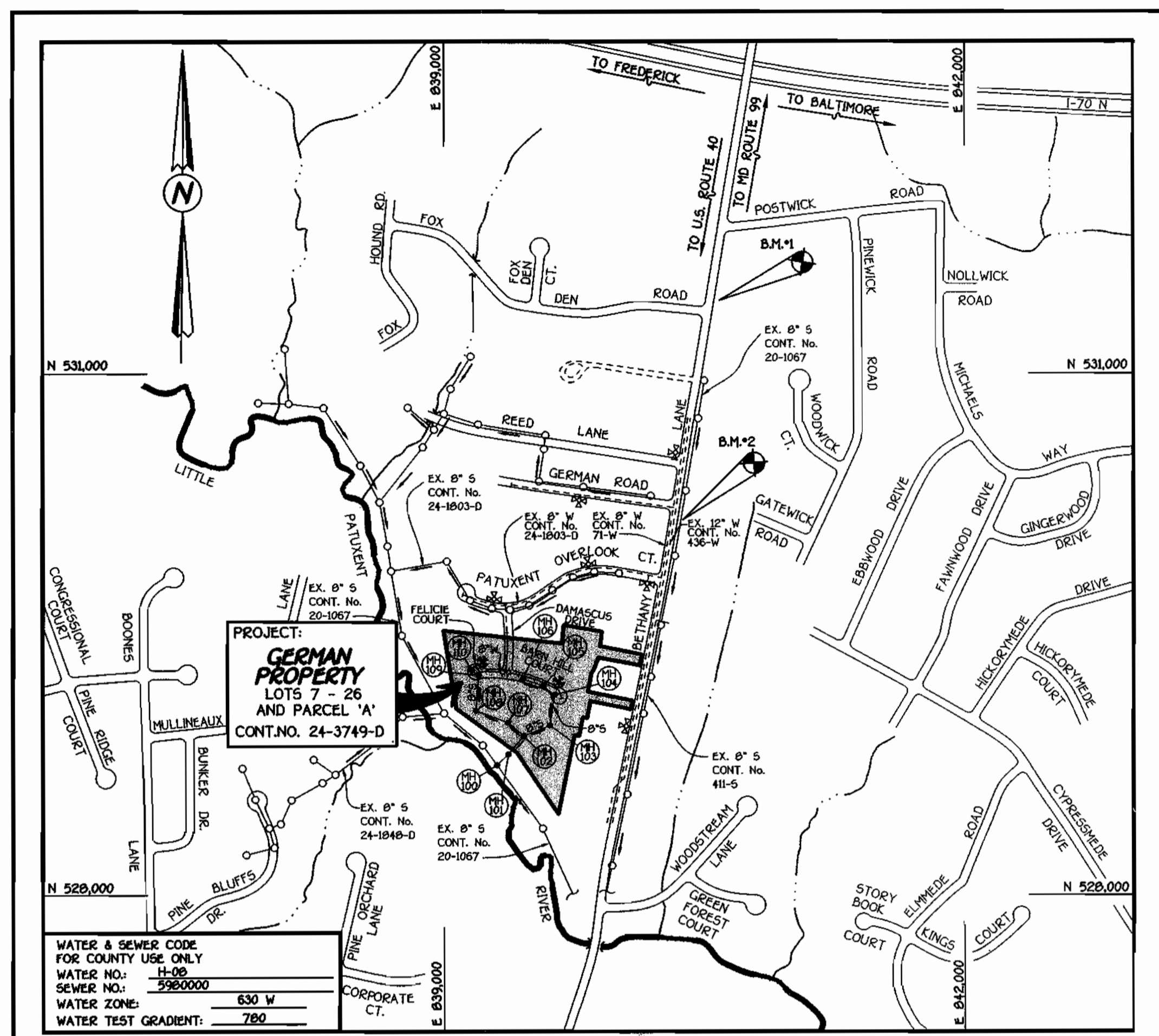
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GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

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 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9068
 - MISS UTILITY - 1-800-257-7777
 - COLONIAL PIPELINE CO. - 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900
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- T.B. DENOTES TEST BORING.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
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- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
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- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" COVER UNLESS OTHERWISE NOTED.
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- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
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- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA 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 16.114(d) OF THE HOWARD COUNTY CODE.

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
8" SEWER	1,032 L.F.	1,004 L.F.	SDR-35	J.M. MFG.
8" SEWER (D.I.P.)	236 L.F.	256 L.F.	D.I.P.	GRIFFIN
4" SEWER	661 L.F.	508 L.F.	SDR-35	J.M. MFG.
MANHOLES	11 EACH	11 EA.	CONCRETE	ATLANTIC, INC.
4" SEWER	131 L.F.	131 L.F.	D.I.P.	GRIFFIN
8" WATER	701 L.F.	474 L.F.	D.I.P.	GRIFFIN
8" WATER	58 L.F.	66 L.F.	D.I.P.	GRIFFIN
FIRE HYDRANTS	2 EACH	2 EA.		MUELLER CO.
1 1/2" WATER	152 L.F.			
1" WATER	352 L.F.	720 L.F.	W-COPPER	READING TUBE
8" x 8" TEE	1 EACH	1 EA.	D.I.P.	U.S. PIPE FOUNDRY
8" x 6" TEE	2 EACH	2 EA.	D.I.P.	U.S. PIPE FOUNDRY
8" VALVE	2 EACH	2 EA.	D.I.P.	U.S. PIPE FOUNDRY
6" VALVE	2 EACH	2 EA.	D.I.P.	U.S. PIPE FOUNDRY
8" 1/8" H.A.	2 EACH	2 EA.	D.I.P. (45°)	U.S. PIPE FOUNDRY
8" PLUG & BUTTRESS	2 EACH	2 EA.		

NAME OF UTILITY CONTRACTOR: C.C.S.
SURVEY & DRAFTING DIVISION AS-BUILT DATE:



TYPE OF BUILDING: RESIDENTIAL: SINGLE FAMILY DETACHED
 NUMBER OF LOTS & PARCELS: 20 (20 BUILDABLE)
 NO. OF WATER HOUSE CONNECTIONS: 10
 NO. OF SEWER HOUSE CONNECTIONS: 10
 DRAINAGE AREA: PATAPSCO
 TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT VIA THE ROUTE 108 PUMPING STATION

WATER & SEWER CODE FOR COUNTY USE ONLY
 WATER NO.: H-08
 SEWER NO.: 5280000
 WATER ZONE: 630 W CORPORATE CT.
 WATER TEST GRADIENT: 780

PLAN REFERENCE NUMBERS: F 99 - 44

SCALE: 1"=60'

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 A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE 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.

M. McCann for German Prop. Partnership 3-8-99
 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.

John P. ... 3/8/99
 SIGNATURE OF ENGINEER DATE

CONTRACT No. 24-3749-D

GERMAN PROPERTY
LOT NOS. 7 THRU 26 & PARCEL 'A'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

BENCHMARK INFORMATION
 B.M.#1 - HOWARD COUNTY MONUMENT NO. 3341002
 ELEV.= 440.42; DESCRIPTION: CONC. MONUMENT • SURFACE APPROX. 9' EAST OF EDGE OF RD. IN GRASS ISLAND IN PARKING LOT OF BETHANY LANE METHODIST CHURCH
 B.M.#2 - HOWARD COUNTY MONUMENT NO. 3341001
 ELEV.= 421.74; DESCRIPTION: CONC. MONUMENT 1.3' BELOW SURFACE 0.5' EAST OF EDGE OF RD. APPROX. 120' SOUTH OF E DRIVEWAY TO BETHANY LANE BAPTIST CHURCH

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

Cheryl Simmons 3/17/99
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *John P. ...* 3/17/99
 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 AND UNDER F-99-44

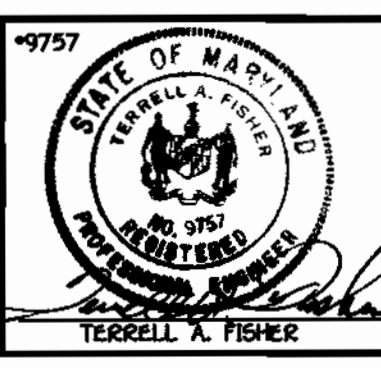
M. McCann for German Prop. Partnership 3-8-99
 SIGNATURE OF DEVELOPER DATE

CONTRACT NO. 24-3749-D
GERMAN PROPERTY
 LOT NOS. 7-26 & PARCEL 'A'
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
Robert W. ... 3-12-99
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
John P. ... 3/18/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21114
 (410) 461-2255



DESIGNED BY: M.D.T.
 DRAWN BY: J.C.L.
 CHECKED BY: M.J.M.
 DATE: JANUARY 29, 1999
 F.C.C. NO. AS-BUILT
 ADDRESS COUNTY COMMENTS
 REVISION

TITLE SHEET
 600' SCALE MAP NO. 17 BLOCK NO. 20
 F.C.C. WORK ORDER NO. 30234
 FILE NAME: G/30534/W&S/TITLE SHEET.DWG

GERMAN PROPERTY
 LOT NOS. 7 THRU 26 & PARCEL 'A'
 CONTRACT NO. 24-3749-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

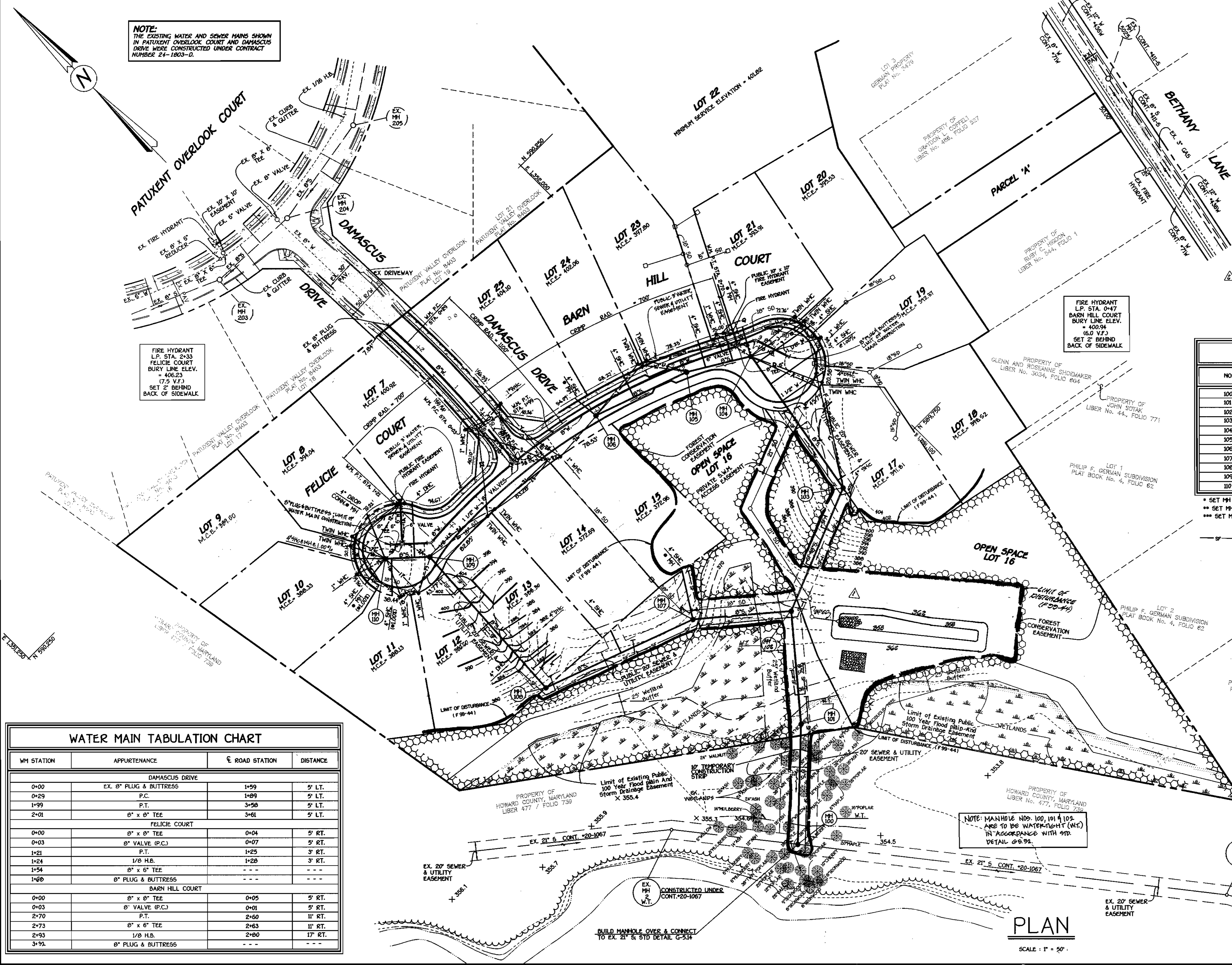
SCALE AS SHOWN
 SHEET 1 of 5

NOTE:
THE EXISTING WATER AND SEWER MAINS SHOWN IN PATUXENT OVERLOOK COURT AND DAMASCUS DRIVE WERE CONSTRUCTED UNDER CONTRACT NUMBER 24-1803-D.

SHC INVERT • PROPERTY LINE CHART		
STATION	LOT	ELEVATION
	MH 103 TO MH 104	
0+10 RT.	17	387.21
1+15 RT.	18 (DHC)	391.82
1+35 RT.	19 (1.00%)	388.32
1+62 RT.	20	389.13
	MH 104 TO MH 105	
0+10 RT.	21 (SHC @ MH)	388.61
0+20 RT.	22	390.06
0+50 RT.	23	392.50
	MH 105 TO MH 106	
0+63 RT.	24	396.76
0+106 RT.	25 (SHC @ MH)	398.70
	MH 102 TO MH 107	
0+107 RT.	15 (SHC @ MH)	366.54
	MH 107 TO MH 108	
0+85 RT.	14	366.25
	MH 108 TO MH 109	
0+49 RT.	12 (DHC)	381.70
0+69 RT.	13 (DHC)	382.10
	MH 109 TO MH 110	
0+17 RT.	7 (DHC)	395.64
0+42 RT.	11 (DHC)	382.80
0+110 RT.	8 (DROP CONN. @ MH)	382.48
0+110 CT.	9 (SHC @ MH @ 1.00%)	384.41
0+110 LT.	10 (SHC @ MH @ 1.00%)	381.44

MANHOLE TABULATION CHART				
NO.	ROAD STATION	DISTANCE	SLOPE	RIM ELEVATION
100				356.30***
101				359.30***
102				370.60***
103				401.43*
104				399.77**
105	2+05 BARN HILL COURT	4' RT.	-5.62%	404.06**
106	0+97 BARN HILL COURT	4' RT.	-3.95%	408.85**
107				373.30***
108				374.00**
109				405.24**
110				403.71**

* SET MH RIMS FLUSH W/ EXISTING GROUND
 ** SET MH RIMS FLUSH WITH PROPOSED GROUND/ PROPOSED FINISHED PAVING
 *** SET MH RIMS 1'-6" ABOVE EXISTING/ PROPOSED GROUND



WATER MAIN TABULATION CHART			
WM STATION	APPURTENANCE	ROAD STATION	DISTANCE
DAMASCUS DRIVE			
0+00	EX. 8" PLUG & BUTTRISS	1+99	5' LT.
0+29	P.C.	1+99	5' LT.
1+99	P.T.	3+58	5' LT.
2+01	8" x 8" TEE	3+61	5' LT.
FELICIE COURT			
0+00	8" x 8" TEE	0+04	5' RT.
0+03	8" VALVE (P.C.)	0+07	5' RT.
1+21	P.T.	1+25	3' RT.
1+24	1/8 H.B.	1+28	3' RT.
1+54	8" x 6" TEE		
1+68	8" PLUG & BUTTRISS		
BARN HILL COURT			
0+00	8" x 8" TEE	0+05	5' RT.
0+03	8" VALVE (P.C.)	0+01	5' RT.
2+70	P.T.	2+60	11' RT.
2+73	8" x 6" TEE	2+63	11' RT.
2+93	1/8 H.B.	2+90	17' RT.
3+92	8" PLUG & BUTTRISS		

5' DENOTES SILT FENCE

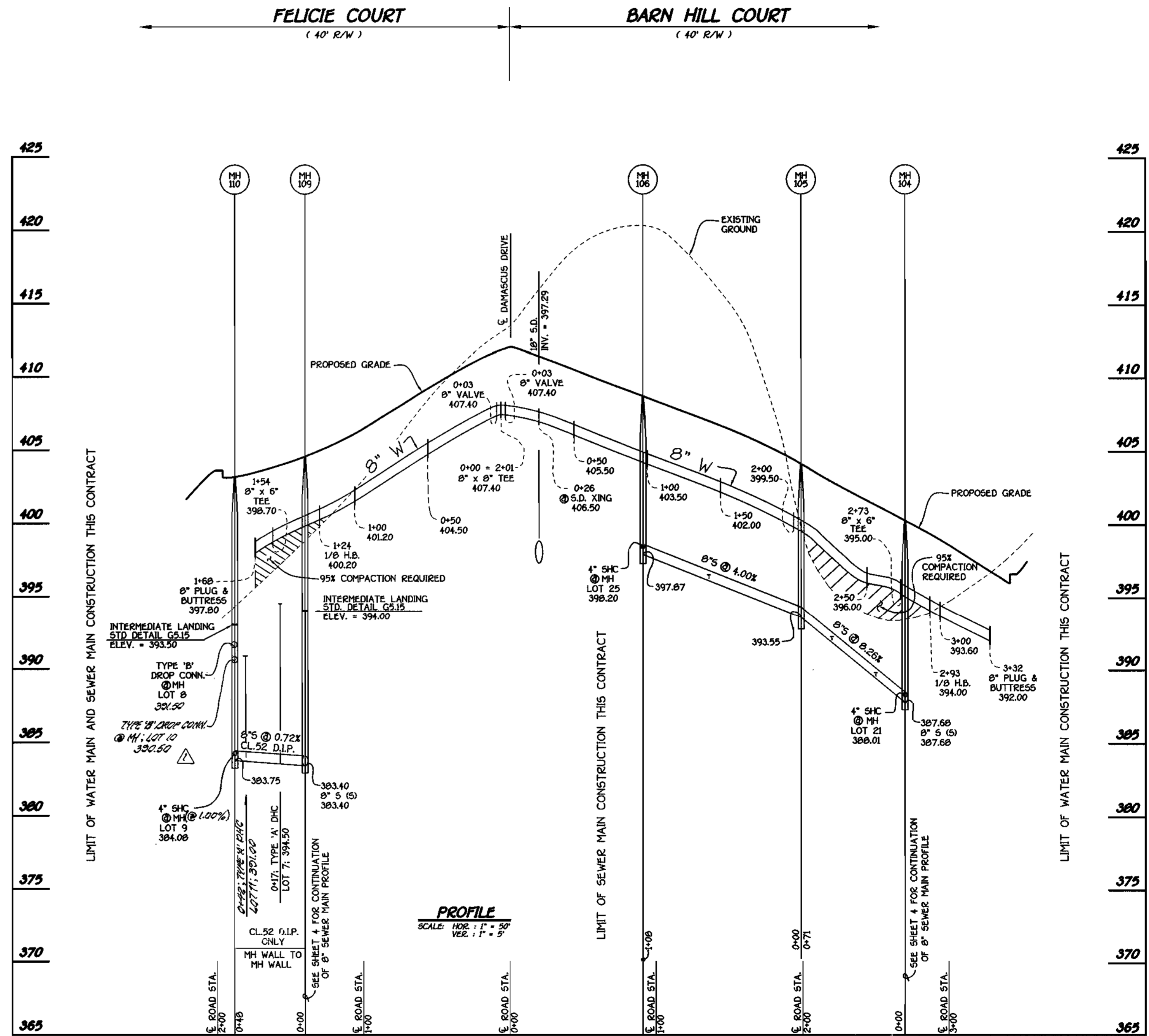
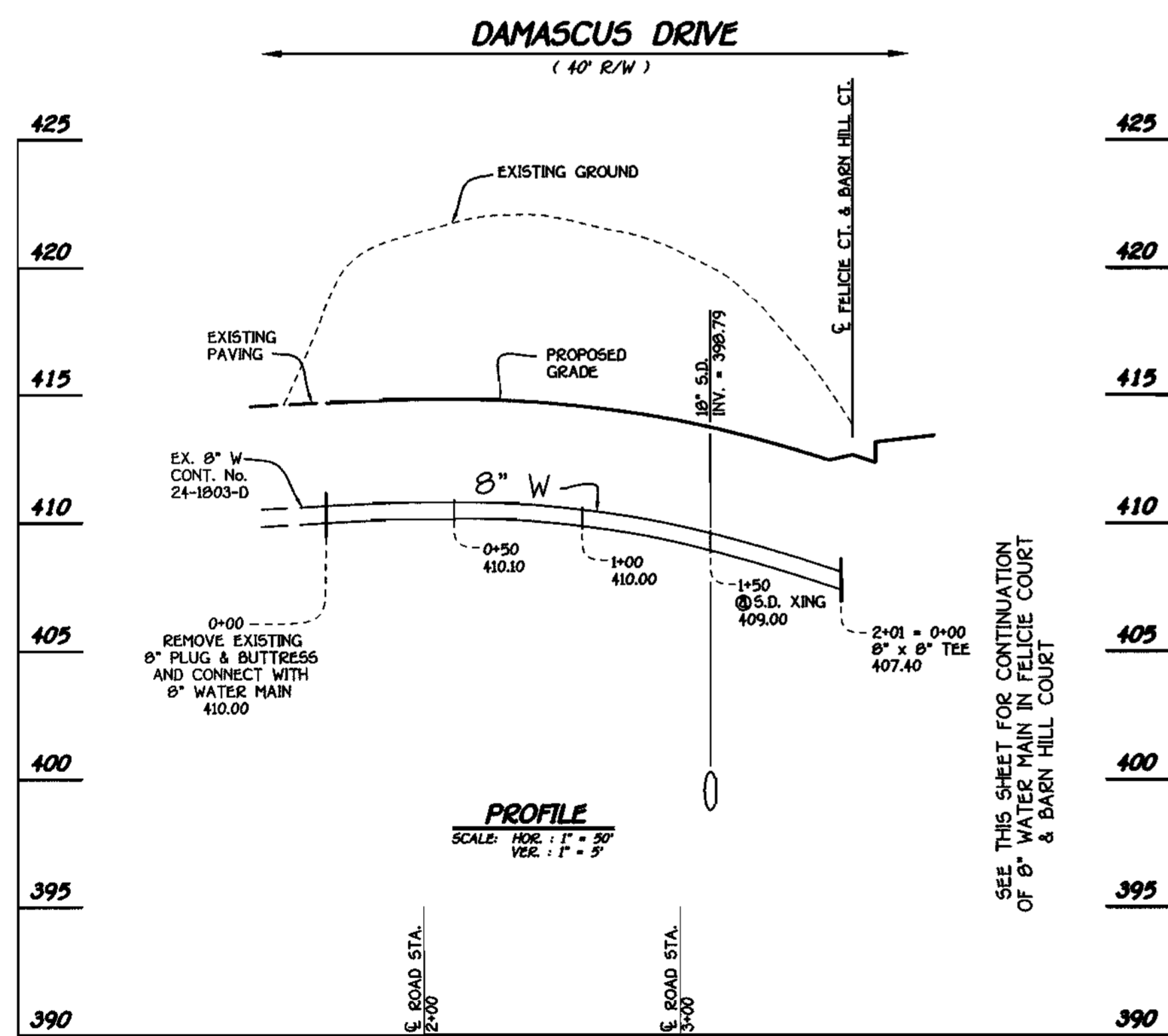
LOT 17 A = 8' TO MH104 B = 24' TO INLET C = 110' TO MH103	LOT 20 J = 66' TO MH104 K = 42' TO 5.0.M.H. L = 25' TO 5.0.M.H.	LOT 24 V = 72' TO MH106 W = 49' TO MH105 X = 79' TO INLET	LOT 11 14 = 9' TO 5.0.M.H. 15 = 23' TO INLET 16 = 45' TO MH109
LOT 18 D = 85' TO MH104 E = 18' TO INLET F = 120' TO MH103	LOT 21 M = 61' TO MH104 N = 33' TO 5.0.M.H. O = 25' TO 5.0.M.H.	LOT 25 Y = 71' TO 5.0.M.H. Z = 25' TO INLET 1 = 13' TO INLET	LOT 12 17 = 41' TO MH110 18 = 10' TO 5.0.M.H. 19 = 35' TO INLET
LOT 19 G = 24' TO INLET H = 15' TO 5.0.M.H. I = 77' TO MH104	LOT 22 P = 14' TO INLET Q = 14' TO F.H. R = 38' TO MH104	LOT 7 2 = 11' TO INLET 3 = 71' TO 5.0.M.H. 4 = 37' TO INLET	LOT 13 20 = 86' TO MH109 21 = 90' TO 5.0.M.H. 22 = 87' TO INLET
	LOT 23 S = 69' TO INLET T = 82' TO MH106 U = 52' TO MH105	LOT 6 5 = 69' TO F.H. 6 = 62' TO MH106 7 = 40' TO MH110	LOT 14 23 = 32' TO 5.0.M.H. 24 = 89' TO MH109 25 = 100' TO INLET
		LOT 5 8 = 45' TO INLET 9 = 70' TO F.H. 10 = 35' TO MH110	LOT 15 26 = 45' TO MH106 27 = 20' TO 5.0.M.H. 28 = 79' TO INLET
		LOT 10 11 = 21' TO INLET 12 = 91' TO F.H. 13 = 25' TO MH110	

8" VALVE @ INTERSECTION (W) @ WEST COL-DE-SAC
 1A = 42' TO F.H.
 2A = 36' TO MH103
 3A = 20' TO MH110

8" VALVE @ INTERSECTION (E) @ EAST COL-DE-SAC
 1C = 41' TO INLET
 2C = 51' TO INLET
 3C = 33' TO 5.0.M.H.

8" VALVE @ INTERSECTION (W) @ WEST COL-DE-SAC
 1B = 50' TO INLET
 2B = 80' TO INLET
 3B = 36' TO 5.0.M.H.

8" VALVE @ INTERSECTION (E) @ EAST COL-DE-SAC
 1D = 46' TO F.H.
 2D = 34' TO MH104
 3D = 21' TO INLET



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 16272 BALTIMORE NATIONAL FREE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2999



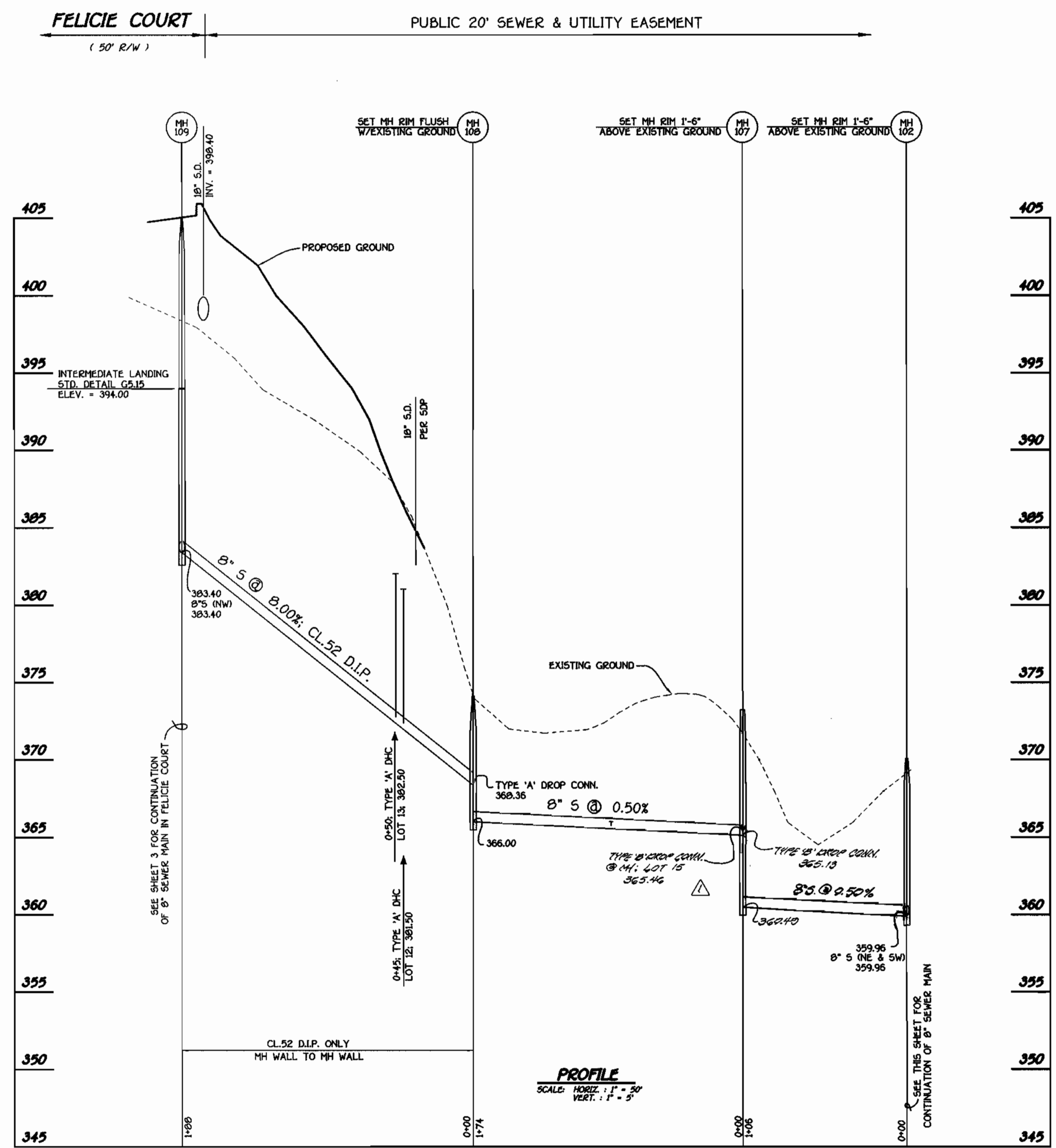
DESIGNED BY:	M.D.T.
DRAWN BY:	J.C.L.
CHECKED BY:	M.J.M.
DATE:	JANUARY 29, 1999
BY:	NO.
REVISION:	

WATER AND SEWER MAINS PROFILES	
600' SCALE MAP NO. 17	BLOCK NO. 20
F.C.C. WORK ORDER NO. 30534	
FILE NAME: 30534WATSEVPROFILES.DWG	

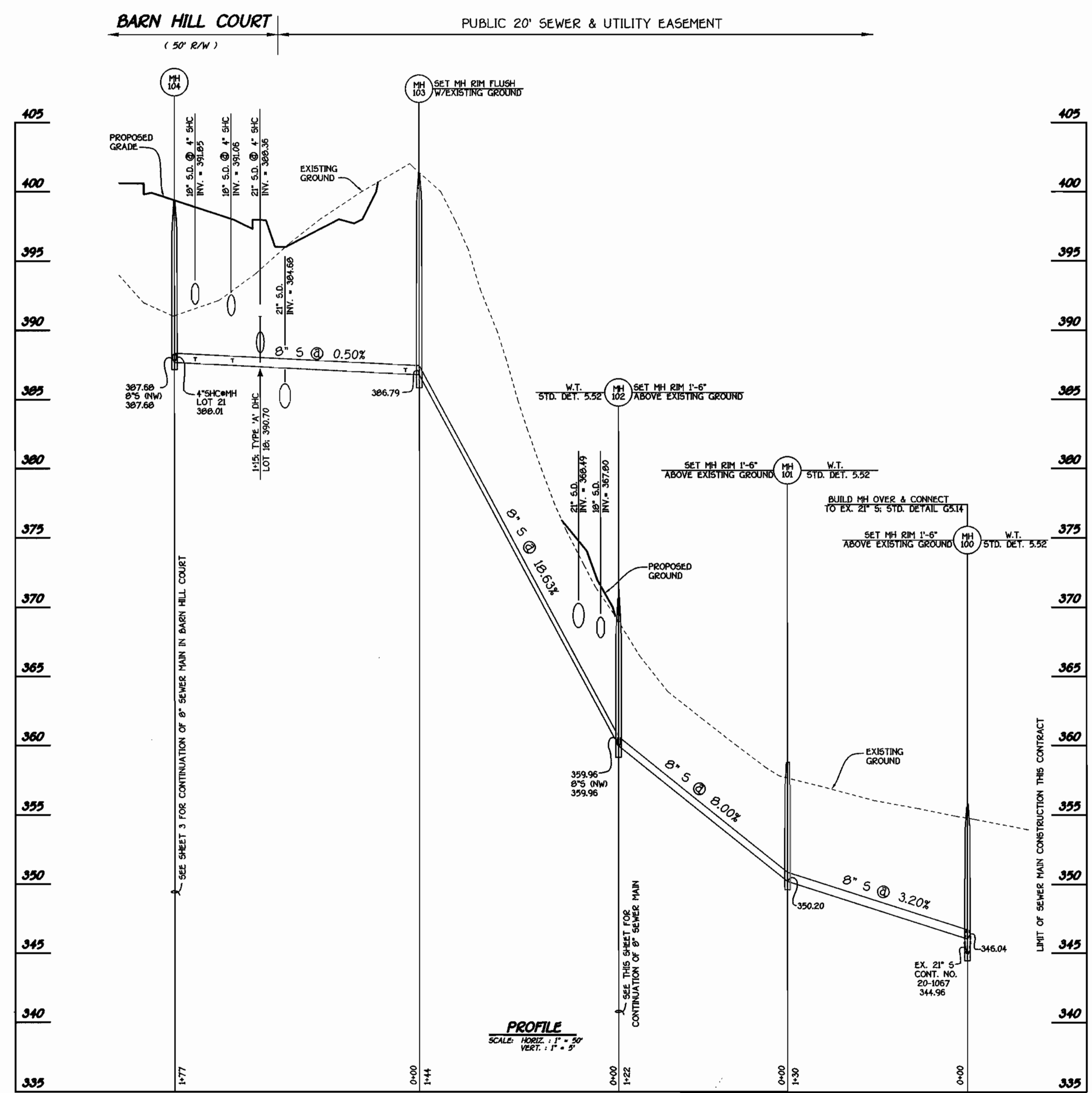
GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
CONTRACT NO. 24-3749-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 5

CONTRACT NO. 24-3749-D
GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



**8" SEWER MAIN
OUTFALL FROM FELICIE COURT**



**8" SEWER MAIN
OUTFALL FROM BARN HILL COURT**

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Deegan
CHIEF, BUREAU OF UTILITIES

3-12-99
DATE

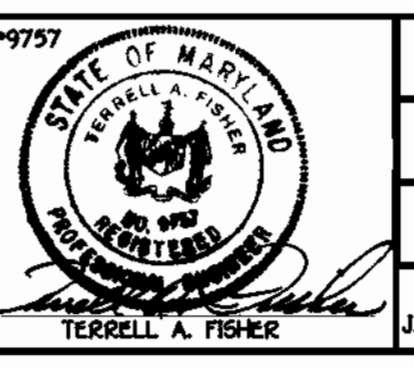
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

John P. Deegan
CHIEF, DEVELOPMENT ENGINEERING DIVISION

3/10/99
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2355



DESIGNED BY:	M.D.T.
DRAWN BY:	J.C.L.
CHECKED BY:	M.J.M.
DATE:	JANUARY 29, 1999
BY NO.	
REVISION	

600' SCALE MAP NO. 17	BLOCK NO. 20
F.C.C. WORK ORDER NO. 30534	
FILE NAME: G/30534/WATSEW/PROFILES2.DWG	

GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
CONTRACT NO. 24-3749-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
4 OF 5

CONTRACT NO. 24-3749-D
GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

SECTION 20 : STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

DEFINITION: Using vegetation as cover for barren soil to protect it from forces that cause erosion. Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall...

- A. Site Preparation
1. Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.

SEEDING NOTES: A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-3659). ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISED THERETO.

PERMANENT SEEDING NOTES: ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS: SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

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, IF NOT PREVIOUSLY LOOSENED.

SEDIMENT CONTROL NOTES: 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-3659). 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 MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISED THERETO.

SECTION 21 : STANDARDS AND SPECIFICATIONS FOR TOPSOIL

DEFINITION: PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. PURPOSE: TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SPECIFICATIONS: A. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM OR LOAMY SAND. B. TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING SUBSOILS.

SEQUENCE OF CONSTRUCTION: 1. OBTAIN THE REQUIRED GRADING PERMIT. 2. NOTIFY MISS UTILITY 48 HOURS BEFORE BEGINNING ANY WORK (410-267-7777). 3. INSTALL THE REQUIRED SEDIMENT AND EROSION CONTROL DEVICES AS INDICATED ON SHEET 2 OF THIS CONTRACT (2 DAYS).

Table with 3 columns: Description, Quantity, and Unit. Includes items like TOTAL AREA OF SITE (3430 ACRES), AREA DISTURBED (810 ACRES), and TOTAL FILL (10,000 CU.YDS).

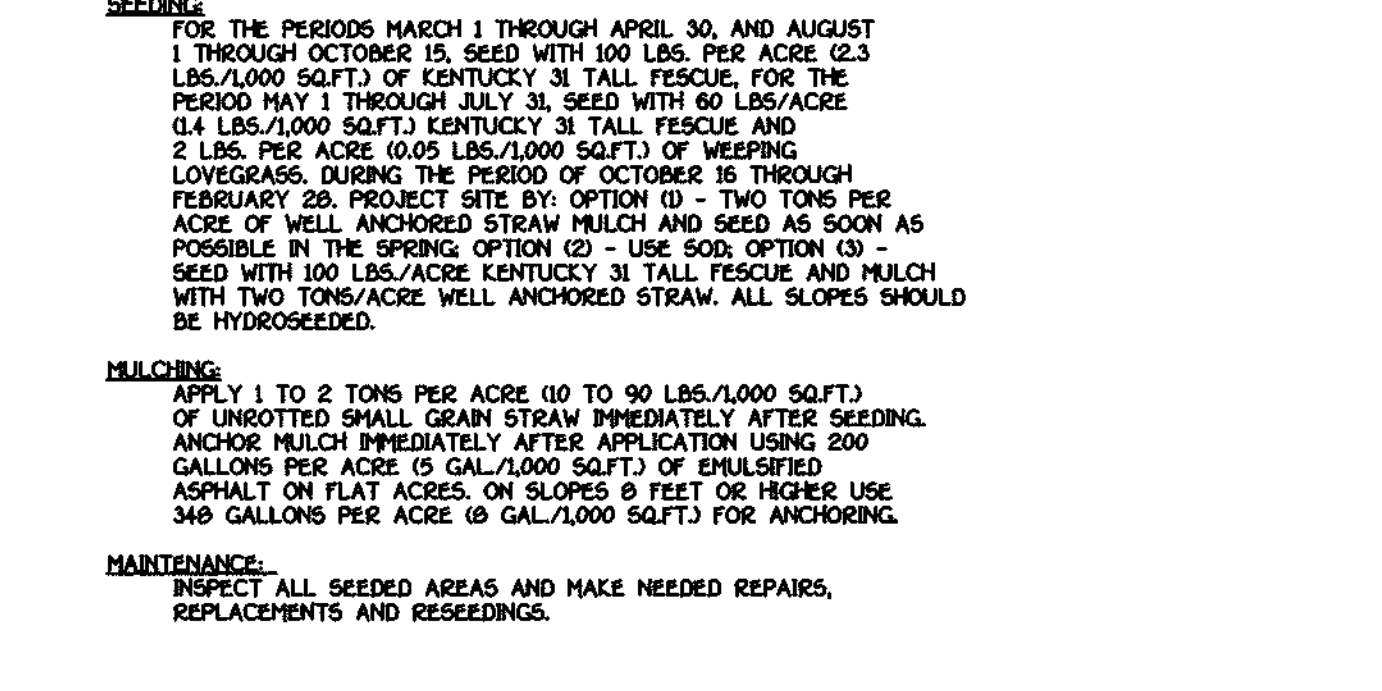


Table showing Silt Fence Design Criteria with columns for Slope Steepness, Maximum Slope Length, and Silt Fence Length. Includes rows for Flatter than 50:1, 50:1 to 10:1, 10:1 to 5:1, etc.

Table showing Construction Specifications for Silt Fences, including details on fence post requirements, geotextile installation, and inspection criteria.

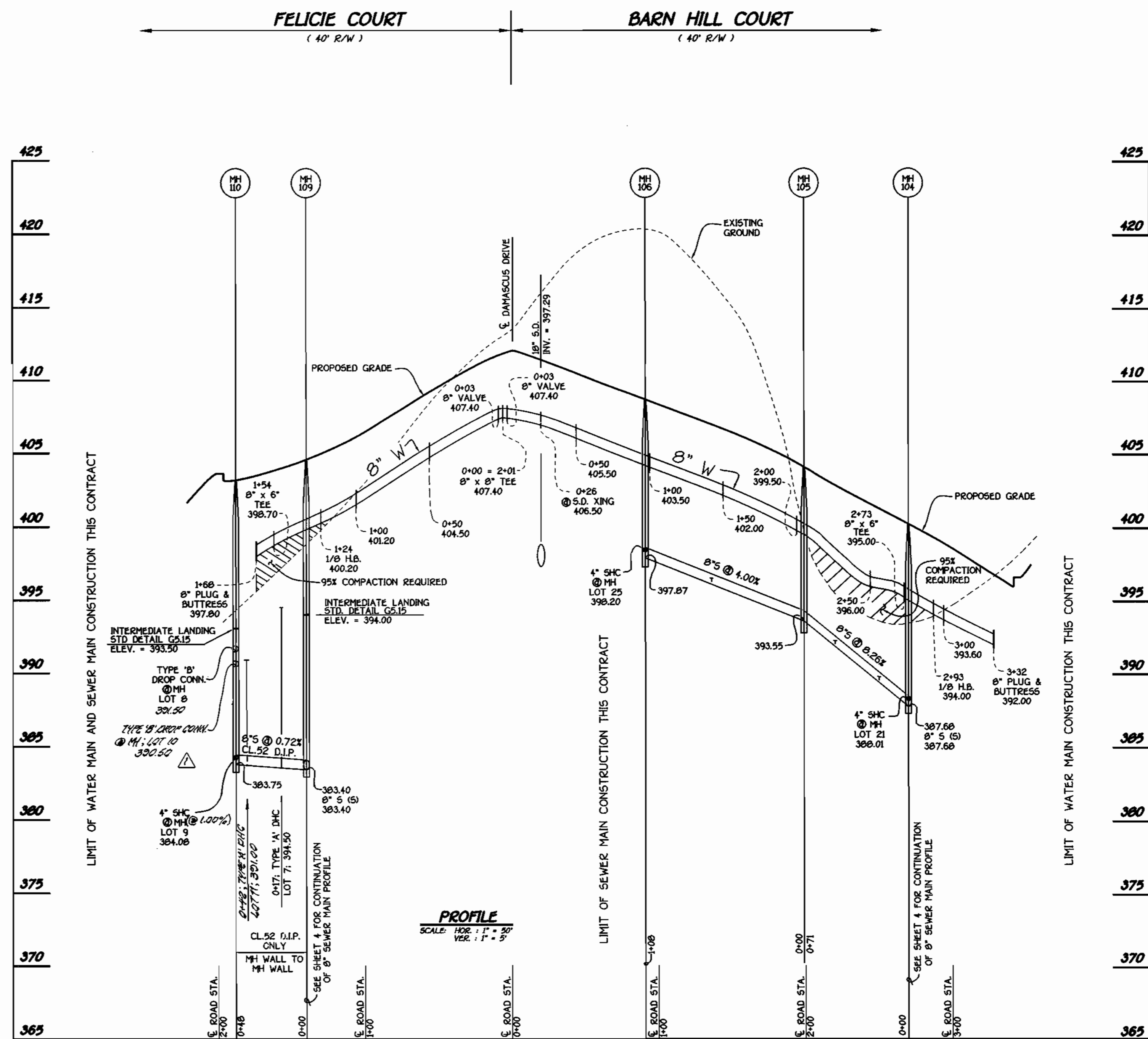
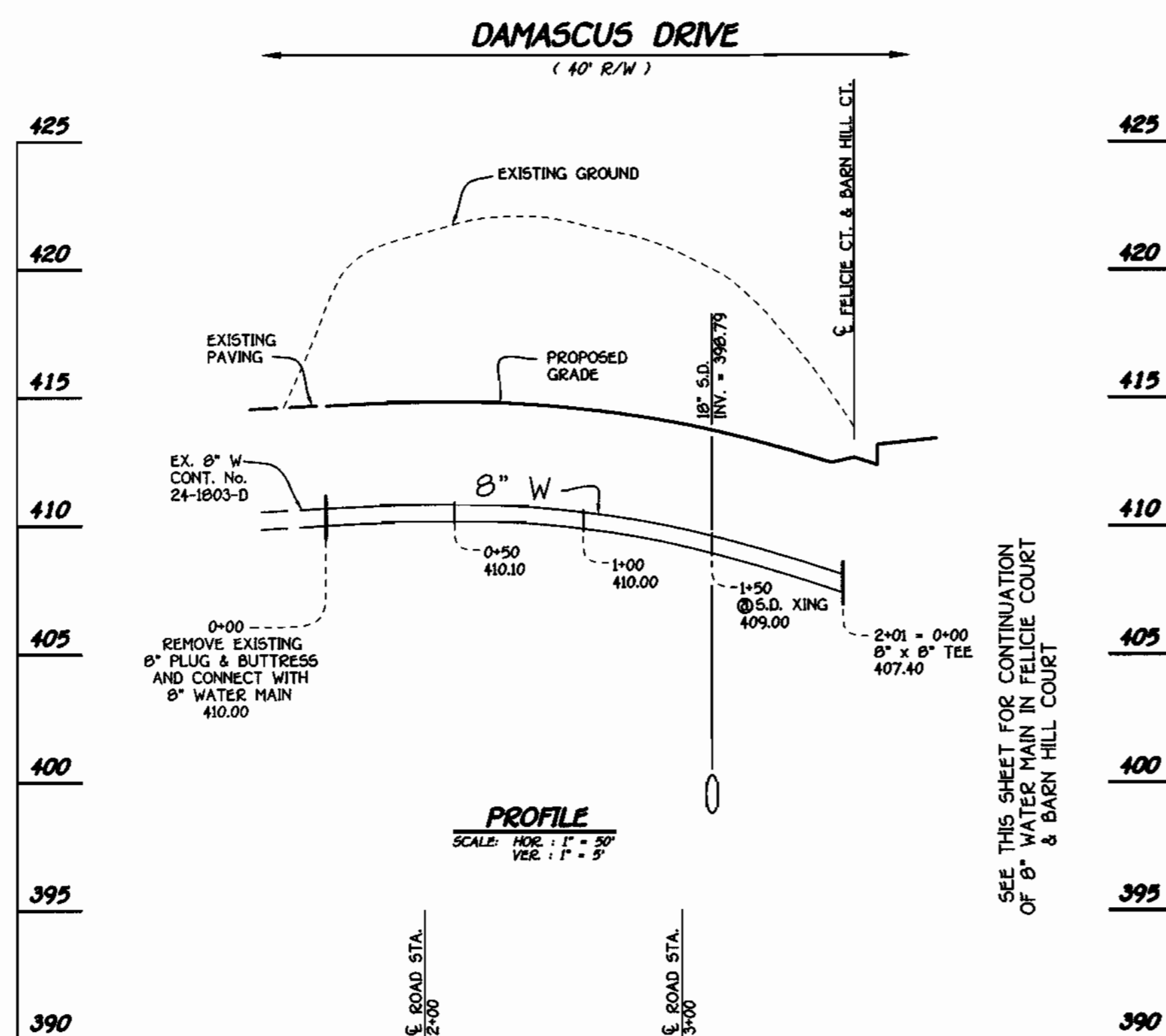
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND. DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND. Includes signatures and dates for both departments.

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS. STATE OF MARYLAND seal and project information.

DESIGNED BY: H.A.T., DRAWN BY: J.C.L., CHECKED BY: M.J.M., DATE: JANUARY 29, 1999. F.C.C. WORK ORDER NO. 30534.

NOTES AND DETAILS. 600' SCALE MAP NO. 17 BLOCK NO. 20. F.C.C. WORK ORDER NO. 30534. FILE NAME: G:\30534\WATSEW\TREESEDS\CANOTES&DETAILS.DWG

GERMAN PROPERTY LOTS 7 THRU 26 AND PARCELS 'A'. CONTRACT NO. 24-3749-D. SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND. SHEET 5 OF 5.



CONTRACT NO. 24-3749-D
GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
WATER AND 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
CENTIONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKWY.
ELLCOTT CITY, MARYLAND 21117
(410) 461-2899



DESIGNED BY:	M.D.T.
DRAWN BY:	J.C.L.
CHECKED BY:	M.J.S.
DATE:	JANUARY 29, 1999
BY:	NO.
REVISION:	DATE
REVISIONS: REVERSE SEWER MAIN AND SEWER CONNECTIONS PER GRADING CHANGES. 2/26/99	

WATER AND SEWER MAINS PROFILES

60' SCALE MAP NO.	17	BLOCK NO.	20
F.C.C. WORK ORDER NO.	30534		
FILE NAME	30534WATSEWPFILES.DWG		

GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
CONTRACT NO. 24-3749-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
3 OF 5

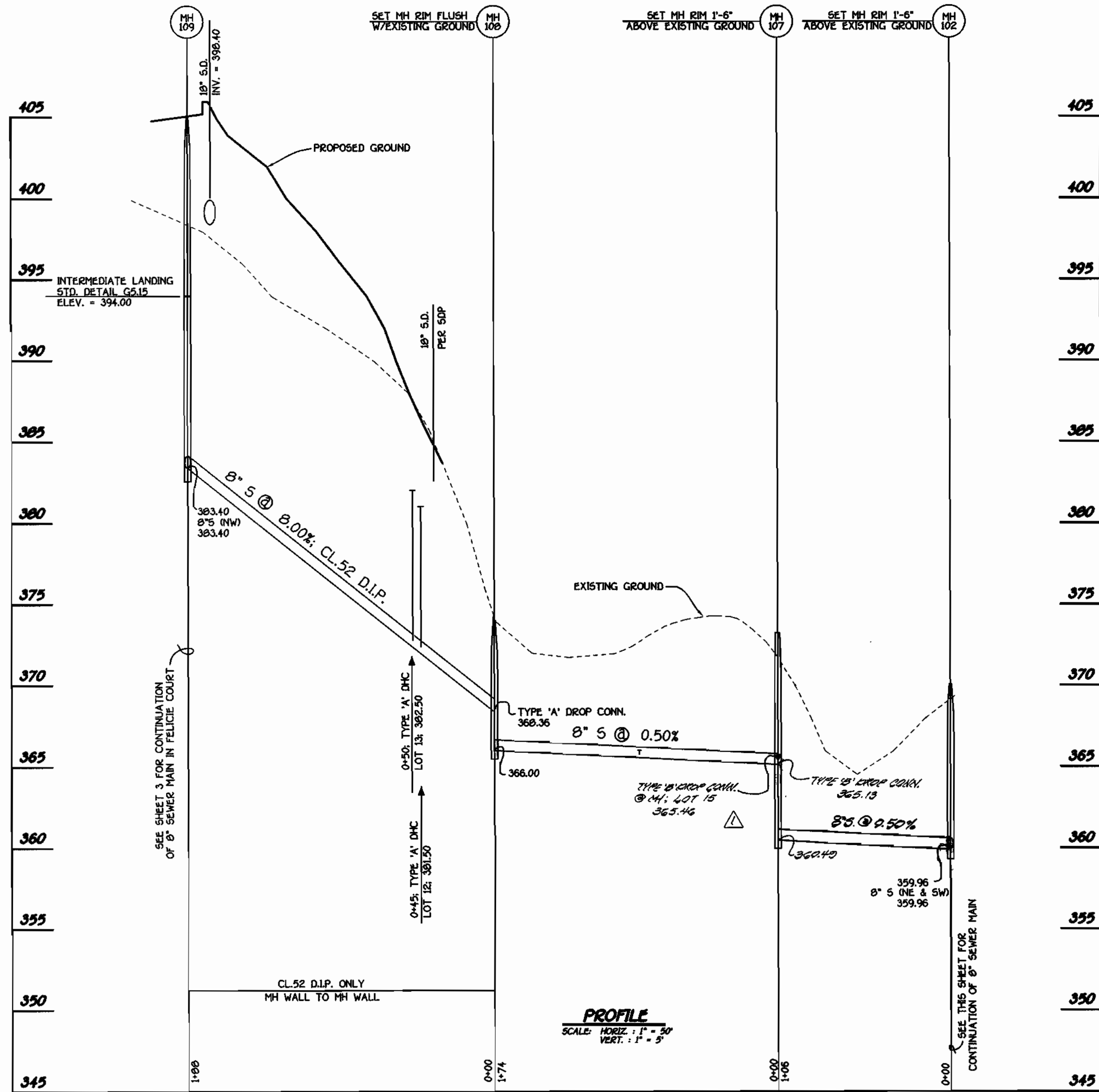
Robert M. Bainger
CHIEF, BUREAU OF UTILITIES

M. J. S.
CHIEF, DEVELOPMENT ENGINEERING DIVISION

3-12-99
DATE

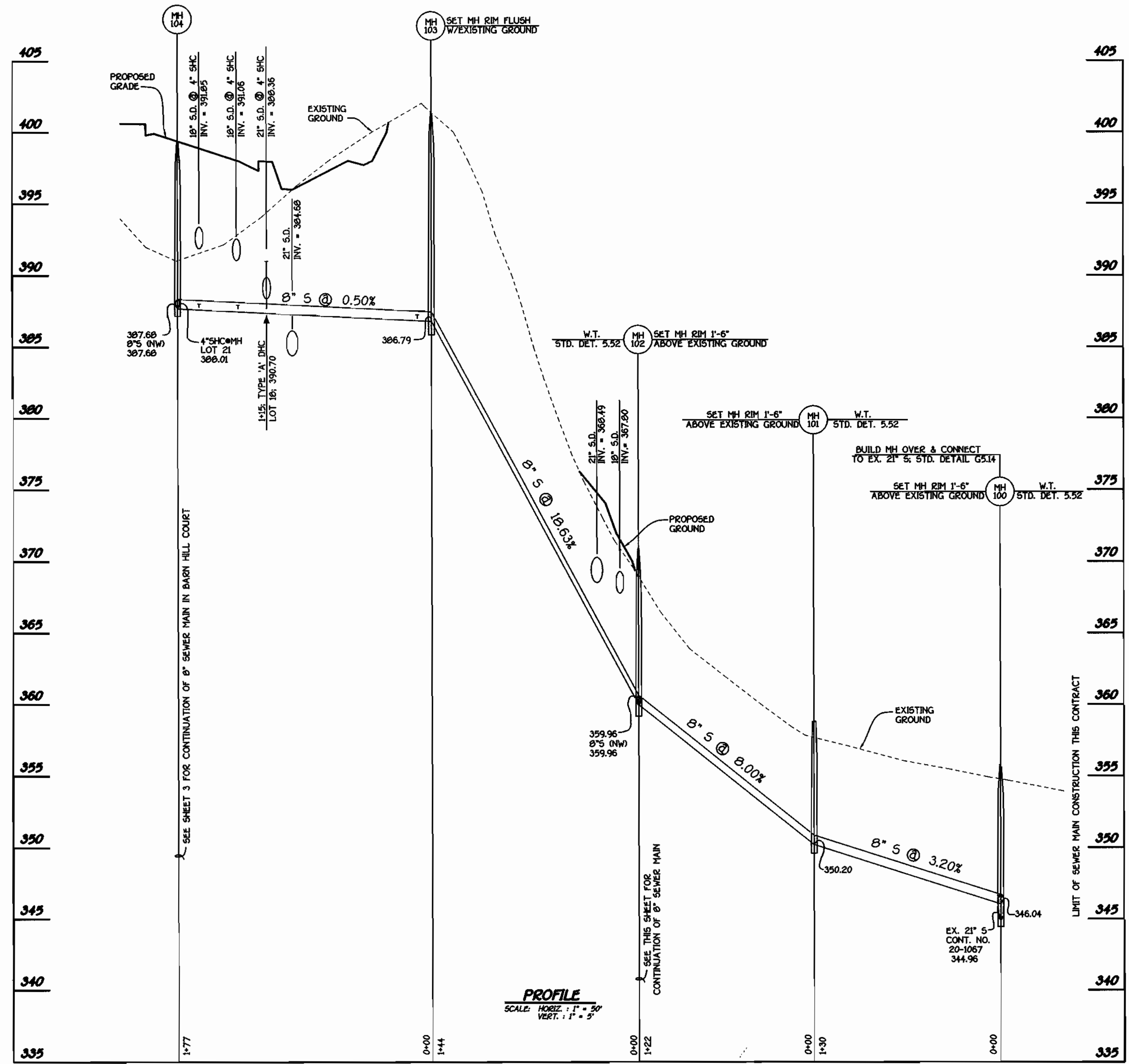
8/18/99
DATE

FELICIE COURT
(50' R/W)
PUBLIC 20' SEWER & UTILITY EASEMENT



**8" SEWER MAIN
OUTFALL FROM FELICIE COURT**

BARN HILL COURT
(50' R/W)
PUBLIC 20' SEWER & UTILITY EASEMENT



**8" SEWER MAIN
OUTFALL FROM BARN HILL COURT**

CONTRACT NO. 24-3749-D
GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
3-12-99
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
3/10/99
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
4100 461 - 2955
TERRELL A. FISHER

DESIGNED BY: M.D.T.
DRAWN BY: J.C.L.
CHECKED BY: M.J.M.
DATE: JANUARY 29, 1999
BY NO. REVISION

SEWER MAIN PROFILES
600' SCALE MAP NO. 17 BLOCK NO. 20
F.C.C. WORK ORDER NO. 30934
FILE NAME: G/30534/WATSEW/PROFILES2.DWG

GERMAN PROPERTY
LOTS 7 THRU 26 AND PARCEL 'A'
CONTRACT NO. 24-3749-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 4 OF 5

NOTE:
THE EXISTING WATER AND SEWER MAINS SHOWN IN PATUXENT OVERLOOK COURT AND DAMASCUS DRIVE WERE CONSTRUCTED UNDER CONTRACT NUMBER 24-1803-D.

SHC INVERT • PROPERTY LINE CHART

STATION	LOT	ELEVATION
	MH 103 TO MH 104	
0+10 RT.	17	367.21
1+15 RT.	18 (DHC)	341.82
1+35 RT.	19 @ 1.00%	368.94
1+62 RT.	20	369.13
	MH 104 TO MH 105	
0+10 RT.	21 (SHC @ MH)	368.61
0+20 RT.	22	390.06
0+50 RT.	23	392.50
	MH 105 TO MH 106	
0+63 RT.	24	396.76
0+106 RT.	25 (SHC @ MH)	398.70
	MH 102 TO MH 107	
0+107 RT.	15 (SHC @ MH)	366.54
	MH 107 TO MH 108	
0+85 RT.	14	366.25
	MH 108 TO MH 109	
0+49 LT.	12 (DHC)	361.70
0+59 RT.	13 (DHC)	362.70
	MH 109 TO MH 110	
0+17 RT.	7 (DHC)	395.64
0+42 LT.	11 (DHC)	392.80
0+110 RT.	8 (DROP CONN. @ MH)	392.48
0+110 CT.	9 (SHC @ MH @ 1.00%)	384.41
0+110 LT.	10 (DHC @ CONN. @ MH)	391.14

MANHOLE TABULATION CHART

NO.	ROAD STATION	DISTANCE	SLOPE	RIM ELEVATION
100	---	---	---	356.30***
101	---	---	---	393.30***
102	---	---	---	370.60***
103	---	---	---	401.43*
104	IN CUL-DE-SAC	---	---	399.77**
105	2+05 BARN HILL COURT	4' RT.	-5.62%	404.06**
106	0+97 BARN HILL COURT	4' RT.	-3.95%	408.85**
107	---	---	---	373.30***
108	---	---	---	374.00**
109	IN CUL-DE-SAC	---	---	405.24**
110	IN CUL-DE-SAC	---	---	403.71**

* SET MH RIMS FLUSH W/ EXISTING GROUND
 ** SET MH RIMS FLUSH WITH PROPOSED GROUND/ PROPOSED FINISHED PAVING
 *** SET MH RIMS 1'-6" ABOVE EXISTING/ PROPOSED GROUND

--- S --- DENOTES SILT FENCE

NOTE: SEE SHEET 5 FOR SEDIMENT & EROSION CONTROL NOTES AND SILT FENCE DETAIL.

WATER MAIN TABULATION CHART

WM STATION	APPURTENANCE	ROAD STATION	DISTANCE
DAMASCUS DRIVE			
0+00	EX. 8" PLUG & BUTTRISS	1+99	5' LT.
0+29	P.C.	1+89	5' LT.
1+99	P.T.	3+50	5' LT.
2+01	8" x 8" TEE	3+61	5' LT.
FELICIE COURT			
0+00	8" x 8" TEE	0+04	5' RT.
0+03	8" VALVE (P.C.)	0+07	5' RT.
1+21	P.T.	1+25	3' RT.
1+24	1/8 H.B.	1+28	3' RT.
1+54	8" x 6" TEE	---	---
1+68	8" PLUG & BUTTRISS	---	---
BARN HILL COURT			
0+00	8" x 8" TEE	0+05	5' RT.
0+03	8" VALVE (P.C.)	0+01	5' RT.
2+70	P.T.	2+60	11' RT.
2+73	8" x 6" TEE	2+63	11' RT.
2+93	1/8 H.B.	2+90	17' RT.
3+92	8" PLUG & BUTTRISS	---	---

PLAN

SCALE: 1" = 50'

CONTRACT NO. 24-3749-D
 GERMAN PROPERTY
 LOT NOS. 7-26 & PARCEL 'A'
 WATER & SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities 3-12-99 DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division 3/12/99 DATE	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SERVICE OFFICE: 1072 BALTIMORE NATIONAL PIKE ELLETTTS CITY, MARYLAND 21114 410-461-2995	DESIGNED BY: M.D.T. DRAWN BY: J.C.L. CHECKED BY: M.J.M. DATE: JANUARY 29, 1999 BY NO.	REVISION 1. REVISE SEWER CONNECTIONS PER GRADING CHANGES 2. ADDRESS COUNTY COMMENTS; REVISE STORMWATER MANAGEMENT 3. ADDRESS COUNTY COMMENTS	PLAN VIEW WATER AND SEWER MAINS 600' SCALE MAP NO. 17 BLOCK NO. 20 F.C.C. WORK ORDER NO. 30534 FILE NAME: G:\02634\WBS\PLAN.DWG	GERMAN PROPERTY LOT NOS. 7 THRU 26 & PARCEL 'A' CONTRACT NO. 24-3749-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 2 OF 5
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