

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
16" D.I.P. SEWER	1,054 L.F.	1039.0	D.I.P.	U.S. PIPE BELAIR
16" STEEL PIPE	519 L.F.	514.0	STEEL	D+S
15" SEWER	272 L.F.	250	P.V.C.	J.M. MANUF. "
8" D.I.P. SEWER	430 L.F.	430 L.F. CL 52	D.I.P.	U.S. PIPE / "
8" SEWER	2,170 L.F.	207	P.V.C.	J.M. MANUF. "
MANHOLES	18 EACH	18	PRECAST	ATLANTIC
MANHOLES; 5' 6"	2 EACH	2	PRECAST	ATLANTIC
NAME OF UTILITY CONTRACTOR: C.C.S.				
SURVEY & DRAFTING DIVISION AS-BUILT DATE:				

DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 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 R. ...
 SIGNATURE OF DEVELOPER
 6-18-98
 DATE

ENGINEER'S CERTIFICATE
 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. Rachel
 SIGNATURE OF ENGINEER
 06/18/98
 DATE

INTERCEPTOR CAPACITIES

MANHOLE TO MANHOLE	CAPACITY *
EX. MH #690 - MH #695	6.30 MGD
MH #695 - MH #698	3.30 MGD
MH #698 - MH #700	2.30 MGD
MH #700 - MH #3000	2.20 MGD
MH #3000 - MH #710	2.24 MGD
MH #710 - MH #720	1.95 MGD
MH #720 - MH #730	2.30 MGD
MH #730 - MH #740	2.30 MGD

* BASED ON ROUGHNESS COEFFICIENT "n" OF 0.13

GP-98-201
 MDE NONTIDAL WETLANDS AUTHORIZATION NO. 97-NT-010
 MDE APPLICATION TRACKING NO. 199761743
 — NO 'F' NUMBER —

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Clayton Simmons 9/15/98
 MDE NATURAL RESOURCES CONSERVATION SERVICE DATE
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED
John P. Johnston 9/16/98
 HOWARD SOIL CONSERVATION DISTRICT DATE

EROSION 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.

Paul R. ...
 SIGNATURE OF DEVELOPER
 6-18-98
 DATE

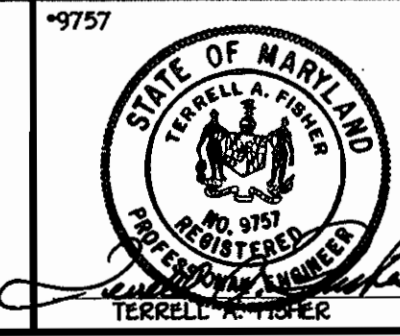
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Robert ...
 CHIEF, BUREAU OF UTILITIES
 9-14-98
 DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

John ...
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 9/21/98
 DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 18275 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2995



DESIGNED BY: P.W.L.
 DRAWN BY: N.J.M. L.H.
 CHECKED BY: P.W.L.
 DATE: MARCH 1998

BY NO. REVISION

DATE: 3/99

FILE NAME: GTW'S LITTLE PATUXENT INTERCEPTOR

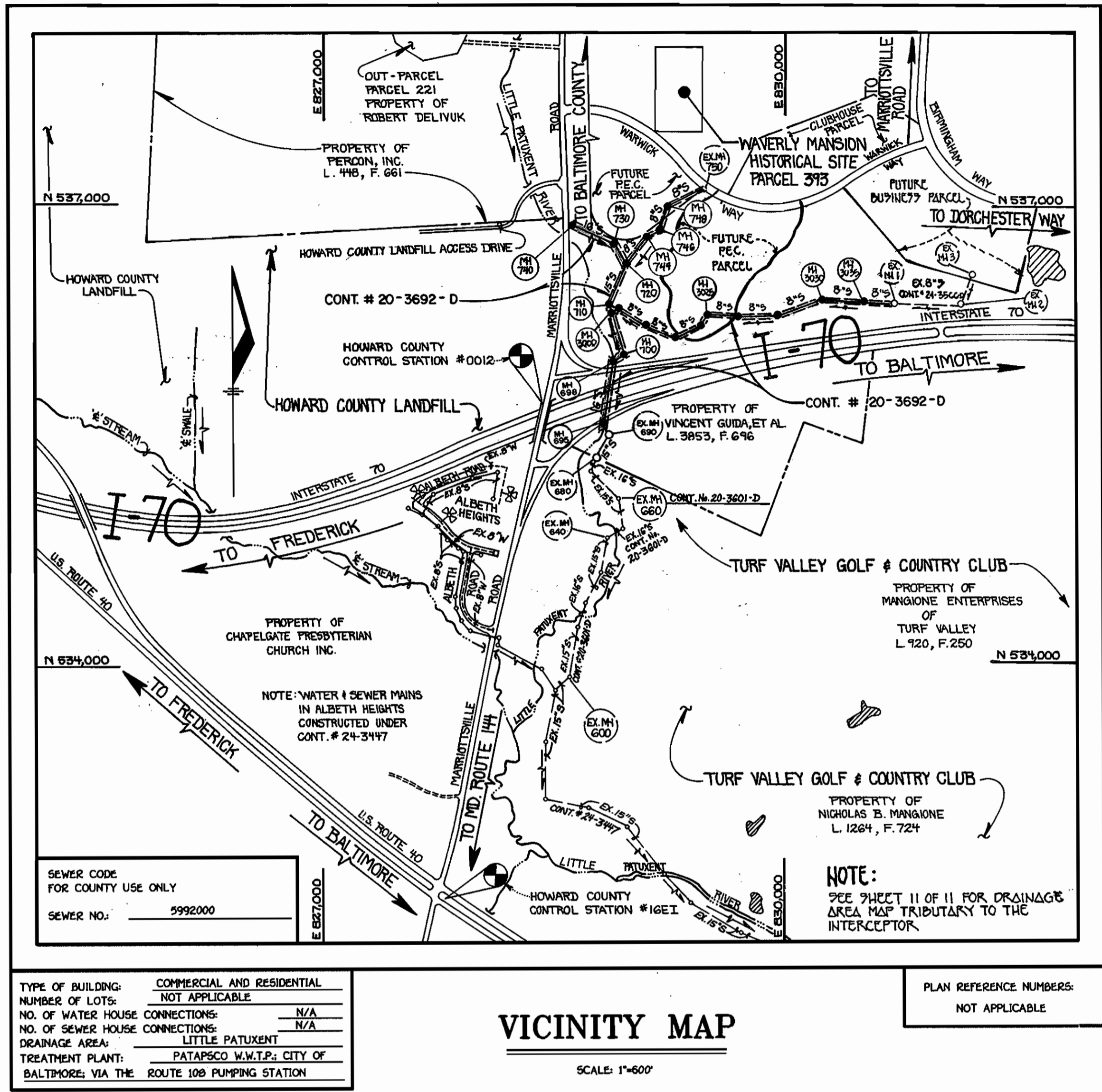
TITLE SHEET

600' SCALE MAP NO. 36 BLOCK NO. 10
 F.C.C. WORK ORDER NO. 527
 FILE NAME: GTW'S LITTLE PATUXENT INTERCEPTOR

GTW'S LITTLE PATUXENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS

CONTRACT NO. 20 - 3692 - D
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 of 11



GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS 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 (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 \square 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 - 850-6820
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9066
 - 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.552.
- WHERE WATER TIGHT 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.N.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 G.551.
- 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 TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (W.111 AND W.213). 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 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 18.114(d) OF THE HOWARD COUNTY CODE.
- THE USE OF MATS SHALL BE REQUIRED FOR ALL CONSTRUCTION EQUIPMENT OPERATED WITHIN THE WETLANDS AND WETLAND BUFFERS FROM MH # 690 TO MH # 740.
- ALL TEMPORARY EQUIPMENT CROSSING SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE INTERCEPTOR SEWER MAIN CONSTRUCTION.
- ALL SOIL FROM THE TRENCHING OPERATION SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- SEE SHEET 10 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS.
- ALL CONSTRUCTION WORK PERFORMED WITHIN THE LIMITS OF THE STATE HIGHWAY ADMINISTRATION (SHA) RIGHT-OF-WAY SHALL BE PERFORMED IN THE PRESENCE OF AN SHA INSPECTOR.

INDEX OF DRAWINGS

SHEET 1 : TITLE SHEET / VICINITY MAP
SHEET 2 : PLAN - INTERCEPTOR SEWER MAIN
SHEET 3 : PLAN - INTERCEPTOR SEWER MAIN
SHEET 4 : PROFILE - INTERCEPTOR SEWER MAIN
SHEET 5 : PROFILE - INTERCEPTOR SEWER MAIN
SHEET 6 : DETAILS - INTERCEPTOR AT BOX CULVERT
SHEET 7 : PROFILE - OUTFALL SEWER MAIN
SHEET 8 : PLAN & PROFILE - OUTFALL SEWER MAIN
SHEET 9 : PLAN & PROFILE - OUTFALL SEWER MAIN
SHEET 10 : SEDIMENT CONTROL : NOTES & DETAILS
SHEET 11 : DRAINAGE AREA MAP

NOTE: EX. 12" W. ALONG MARBOTTSVILLE ROAD
CONSTRUCTED UNDER CONTRACT # 44-380;
CAPITAL PROJECT # 1-8203.

MATCH LINE A-A; SEE SHEET 3 OF 7

MATCH LINE A-A; SEE SHEET 3 OF 7

SEE SHEET 5 FOR PROFILE OF INTERCEPTOR SEWER MAIN UPSTREAM OF MH #700

FOLLOWING INSTALLATION OF THE INTERCEPTOR SEWER MAIN, THE EXISTING CHAIN LINK FENCE SHALL BE REINSTALLED TO ITS ORIGINAL LINE, GRADE AND DIMENSIONS IN ACCORDANCE WITH SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS

NOTES:

1. THE USE OF MATS SHALL BE REQUIRED FOR CONSTRUCTION EQUIPMENT OPERATED WITHIN THE WETLANDS & WETLAND BUFFERS FROM MH No. 690 TO MH No. 740.
2. ALL TEMPORARY EQUIPMENT CROSSINGS SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE INTERCEPTOR SEWER MAIN CONSTRUCTION.
3. ALL SPOIL FROM THE TRENCHING OPERATIONS SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. SEE SHEET 10 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS.
5. PRIOR TO BEGINNING ANY WORK WITHIN THE EXISTING CONCRETE BOX CULVERT, THE CONTRACTOR SHALL CONSTRUCT A SOLID SANDBAG DIVERSION DAM AT THE UPSTREAM ENTRANCE TO THE EAST CELL OF THE CULVERT TO DIVERT ALL INCOMING FLOW TO THE WEST CELL OF THE BOX CULVERT. ALL WORK WITHIN THE EXISTING BOX CULVERT SHALL BE DONE "IN THE DRY". SEE DETAIL FOR SOLID SANDBAG DIVERSION DAM ON SHEET 10.

LEGEND

- EXISTING CONTOURS
- EDGE OF WOODS
- WETLANDS
- LIMIT OF 100-YEAR FLOODPLAIN
- SPOT ELEVATION
- LIMIT OF WETLANDS
- L.O.D. LIMITS OF TEMPORARY DISTURBANCE
- SILT FENCE; SEE DETAILS SHEET 10

NOTE: SET PINDS OF MHS #676, #678 & #700 1'-0" ABOVE EXISTING GRADE; STANDARD DETAIL 9.5.4.

NOTE: W.T. LOCATED WATER TIGHT MANHOLE FRAME & COVER; STANDARD DETAIL 9.5.5.2. MHS #676, #678 & #700 SHALL BE WATER TIGHT.

DEVELOPER'S CERTIFICATE
I HEREBY CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT PLAN FOR ORIGINAL & EXISTING CONTOUR & THAT ALL PERSONS OR PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF STATEWIDE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF BEST MANAGEMENT PRACTICES BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS THE DEPARTMENT DEEMED APPROPRIATE.
Signature of Developer: [Signature] DATE: 07/16/98

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR EXISTING & DEVELOPMENT CONTOUR REPRESENTS A PRACTICAL WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS & THAT I HAVE PREPARED IT IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COIL CONSERVATION DISTRICT.
Signature of Engineer: [Signature] DATE: 07/16/98

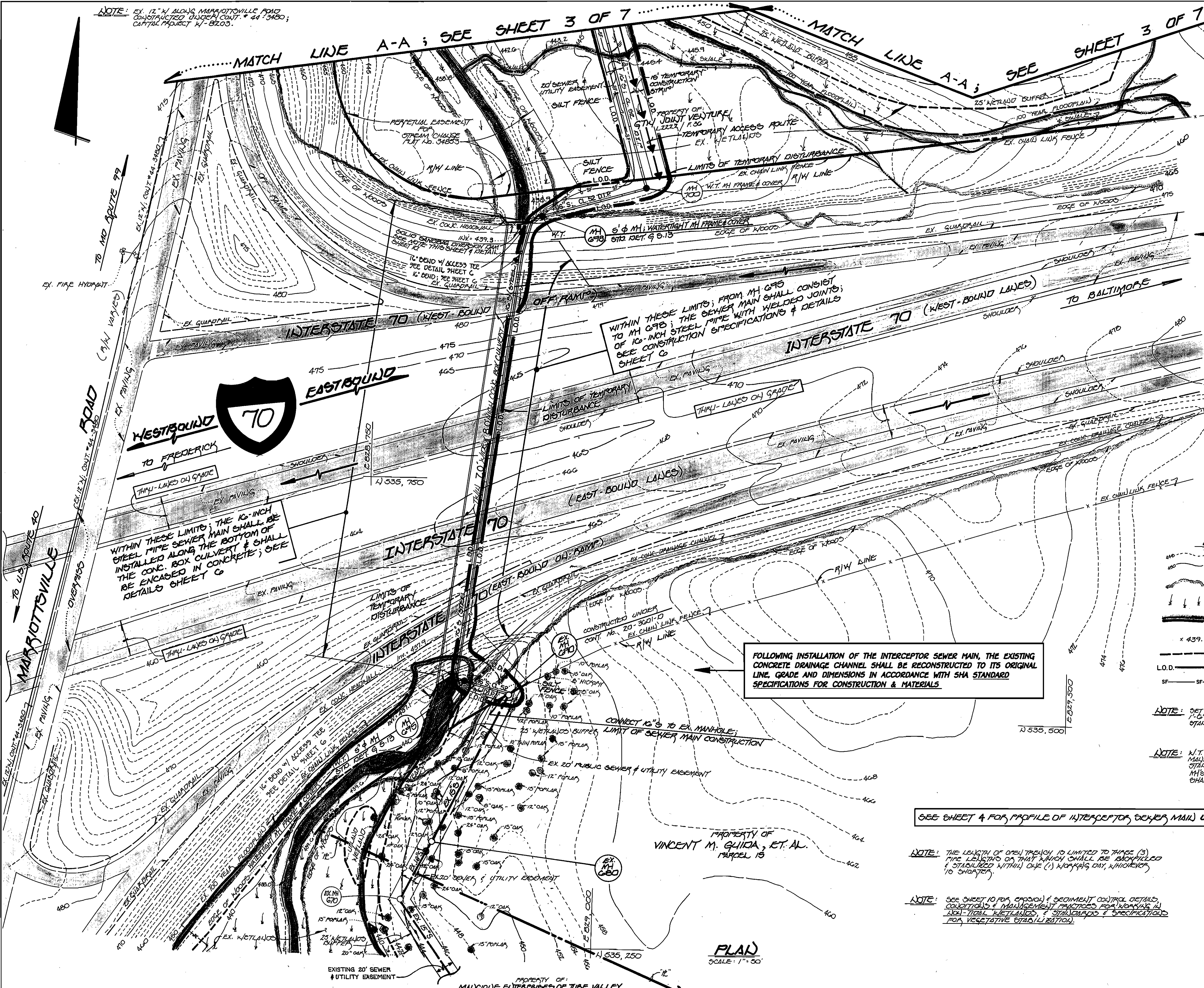
FOLLOWING INSTALLATION OF THE INTERCEPTOR SEWER MAIN, THE EXISTING CONCRETE DRAINAGE CHANNEL SHALL BE RECONSTRUCTED TO ITS ORIGINAL LINE, GRADE AND DIMENSIONS IN ACCORDANCE WITH SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS

SEE SHEET 4 FOR PROFILE OF INTERCEPTOR SEWER MAIN UP TO MH #700

NOTE: THE LENGTH OF OPEN TRENCH IS LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.

NOTE: SEE SHEET 10 FOR PROFILES & SEGMENT CONTROL DETAILS, CONDITIONS & MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, & STANDARD & SPECIFICATIONS FOR VEGETATIVE STABILIZATION.

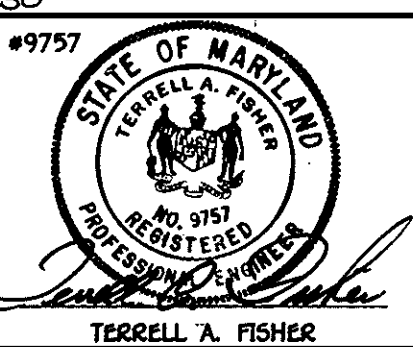
PLAN
SCALE: 1" = 50'



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
[Signature] 7/14/98
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
[Signature] 7/21/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Elliott City, Maryland 21042
(410) 461-2856

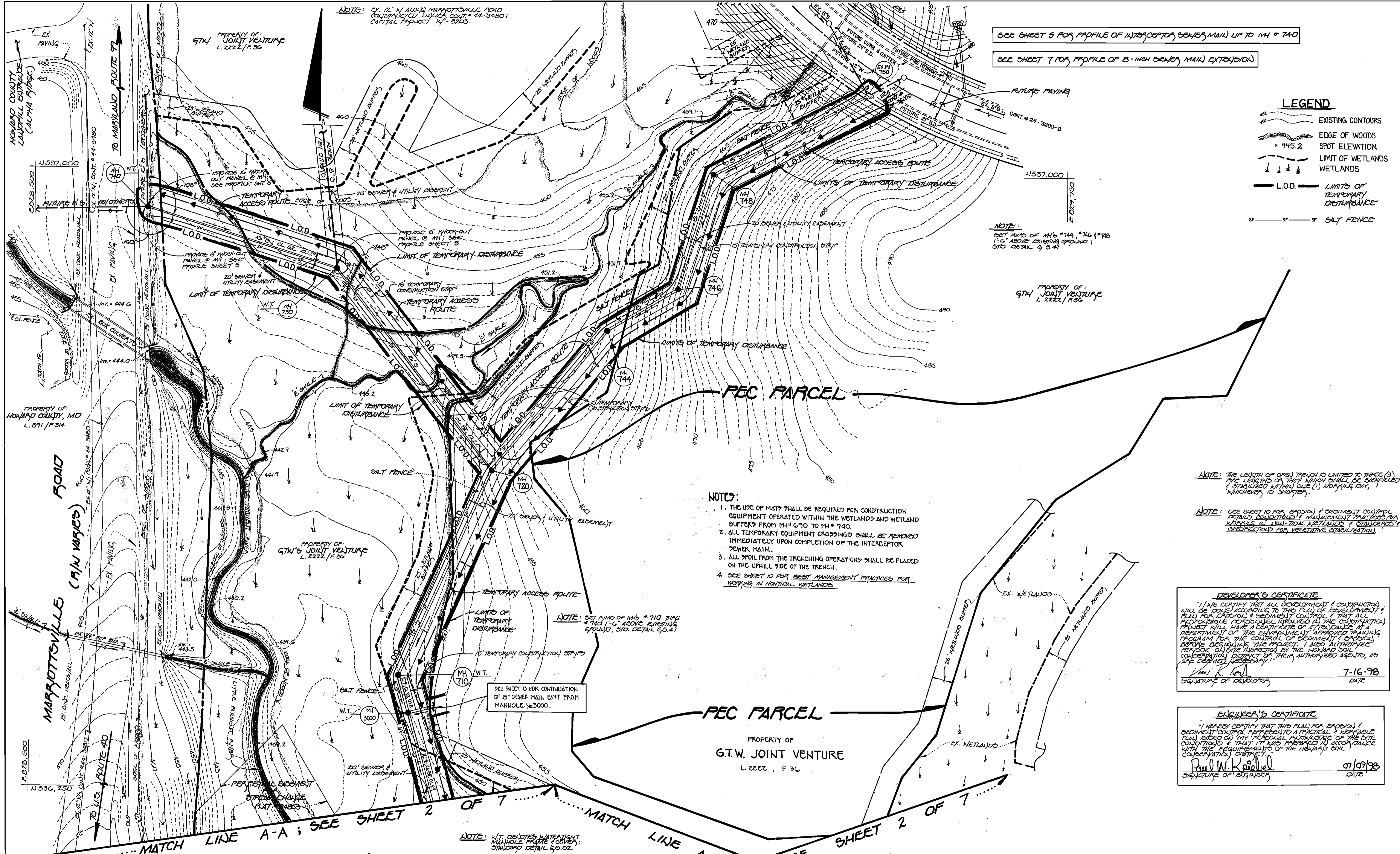


DES: P.W.K.					
DRWN: J.M.M.					
CHK: P.W.K.					
DATE:	BY:	NO.	REVISION	DATE	

INTERCEPTOR SEWER MAIN
PLAN
600' SCALE MAP NO. 16 BLOCK NO. 10

G.T.W.'S LITTLE PATENT INTERCEPTOR AT I-70
AND SEWER MAIN EXTENSIONS
CONTRACT NO. 20 - 3692 - D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 2 OF 11

CONTRACT NO. 20 - 3692 - D
G.T.W.'S LITTLE PATENT INTERCEPTOR AT I-70
AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



NOTE: EX. 12" W. ALONG MARBOTTSVILLE ROAD
CONSTRUCTED 1/1/82, CONT. # 44-3480;
CAPITAL PROJECT # 7-8203.

SEE SHEET 5 FOR PROFILE OF INTERCEPTOR SEWER MAIN UP TO MH # 740
SEE SHEET 7 FOR PROFILE OF 8-INCH SEWER MAIN EXTENSION

LEGEND

- EXISTING CONTOURS
- EDGE OF WOODS
- SPOT ELEVATION
- LIMIT OF WETLANDS
- WETLANDS
- L.O.D. LIMITS OF TEMPORARY DISTURBANCE
- SILT FENCE

NOTE: SET RIMS OF MHs #744, #746 & #748
1'-0" ABOVE EXISTING GROUND;
STD. DETAIL 9.5.4

- NOTES:**
1. THE USE OF MATS SHALL BE REQUIRED FOR CONSTRUCTION EQUIPMENT OPERATED WITHIN THE WETLANDS AND WETLAND BUFFERS FROM MH #790 TO MH #740.
 2. ALL TEMPORARY EQUIPMENT CROSSINGS SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE INTERCEPTOR SEWER MAIN.
 3. ALL SPOIL FROM THE TRENCHING OPERATIONS SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
 4. SEE SHEET 10 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS.

NOTE: THE LENGTH OF OPEN TRENCH IS LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) MONTH ONLY, WHICHEVER IS SHORTER.

NOTE: SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS, SCHEDULED MAINTENANCE PRACTICES FOR WORKING IN NON-TIDAL WETLANDS & STABILIZED & SPECIFIED FOR VEGETATIVE STABILIZATION.

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 PERSONNEL ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Wm. R. Kay 7-16-98
SIGNATURE OF DEVELOPER DATE

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 PREPARED TO ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Paul W. Kuebel 07/09/98
SIGNATURE OF ENGINEER DATE

NOTE: SET RIMS OF MHs #710 THRU #740 1'-0" ABOVE EXISTING GROUND; STD. DETAIL 9.5.4

SEE SHEET 6 FOR CONTINUATION OF 8" POWER MAIN EAST FROM MANHOLE #63000.

NOTE: W.T. DENOTES WATER TABLE MANHOLE FRAME COVER; STANDARD DETAIL 9.5.02

PLAN
SCALE: 1" = 50'

MATCH LINE A-A; SEE SHEET 2 OF 7

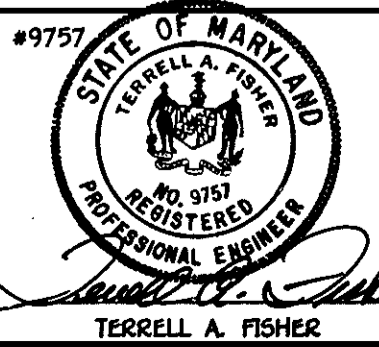
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Bennett 7-14-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Ann M. Deanna 9/21/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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



DES: P.W.K.				
DRWN: J.M.H.				
CHK: P.W.K.				
DATE:				
BY NO.		REVISION		DATE

**8-INCH SEWER MAIN EXTENSION
INTERCEPTOR SEWER MAIN
PLAN**

600' SCALE MAP NO. 16 BLOCK NO. 10

**G.T.W.'S LITTLE PATIENT INTERCEPTOR AT I-70
AND SEWER MAIN EXTENSIONS**
CONTRACT NO. 20 - 3692 - D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 11

CONTRACT NO. 20 - 3692 - D
G.T.W.'S LITTLE PATIENT INTERCEPTOR AT I-70
AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

SEE SHEET 2 FOR PLAN OF INTERCEPTOR, SEWER, MAIN

PROPERTY OF: MANSOURI ENTERPRISES OF TURK VALLEY L. 920 / F. 250

PROPERTY OF: VINCENT M. GUIDA, ET AL. PARCEL 15

PROPERTY OF STATE ROAD COMMISSION

PROPERTY OF GTM JOINT VENTURE L. 2222 / F. 30

EX. 20' SEWER & UTILITY EASEMENT

RIGHT-OF-WAY FOR INTERSTATE 70 STATE ROAD COMMISSION

20' SEWER & UTILITY EASEMENT

INTERSTATE 70

NOTES:

1. THE USE OF MATS SHALL BE REQUIRED FOR CONSTRUCTION EQUIPMENT OPERATED WITHIN THE WETLANDS AND WETLAND BUFFERS FROM MH # 670 TO MH # 740.
2. ALL TEMPORARY EQUIPMENT CROSSINGS SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE INTERCEPTOR SEWER MAIN CONSTRUCTION.
3. ALL PAVIL FROM THE TRENCHING OPERATIONS SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. SEE SHEET 10 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS.

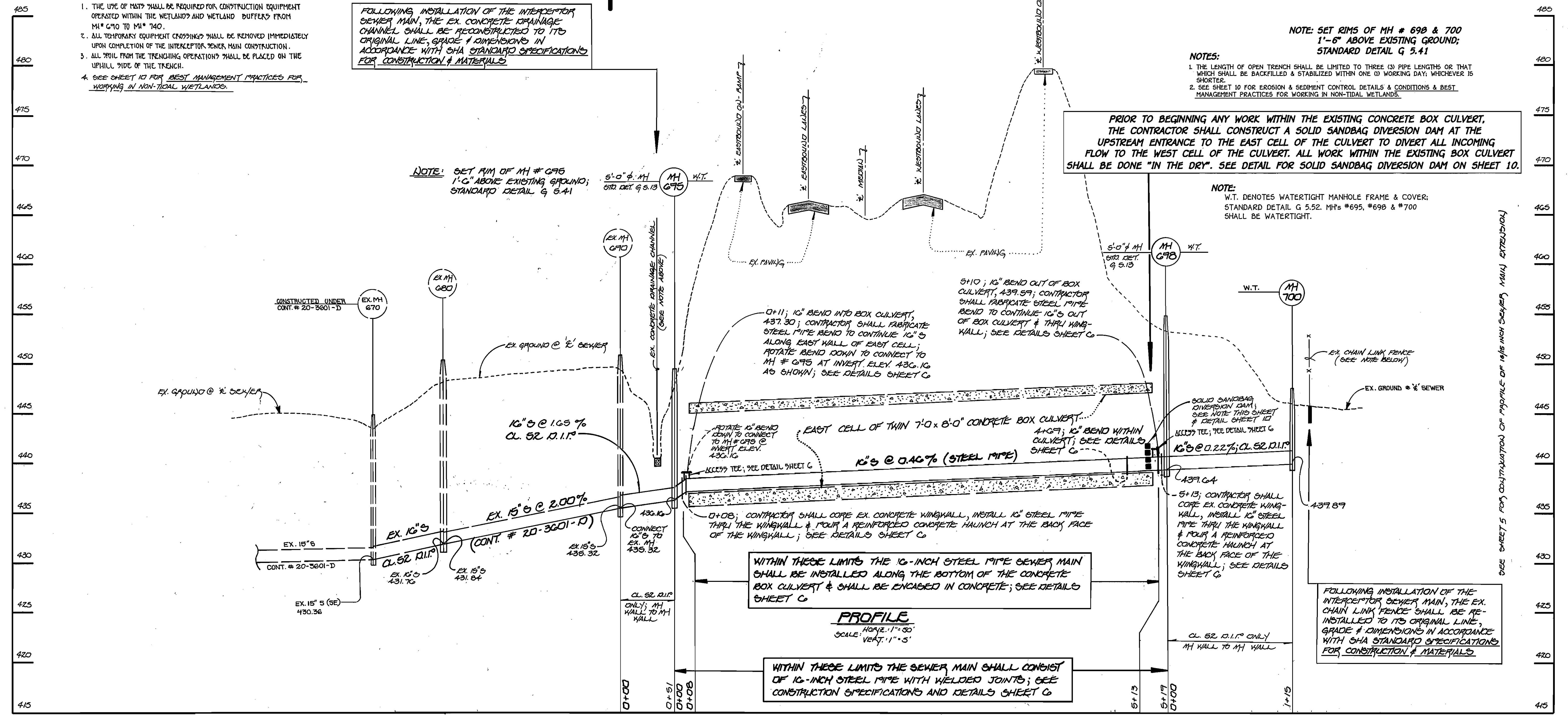
FOLLOWING INSTALLATION OF THE INTERCEPTOR SEWER MAIN, THE EX. CONCRETE DRAINAGE CHANNEL SHALL BE RECONSTRUCTED TO ITS ORIGINAL LINE, GRADE & DIMENSIONS IN ACCORDANCE WITH SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS.

NOTE: SET RIMS OF MH # 698 & 700 1'-6" ABOVE EXISTING GROUND; STANDARD DETAIL G 5.41

- NOTES:
1. THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY; WHICHEVER IS SHORTER.
 2. SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS & CONDITIONS & BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS.

PRIOR TO BEGINNING ANY WORK WITHIN THE EXISTING CONCRETE BOX CULVERT, THE CONTRACTOR SHALL CONSTRUCT A SOLID SANDBAG DIVERSION DAM AT THE UPSTREAM ENTRANCE TO THE EAST CELL OF THE CULVERT TO DIVERT ALL INCOMING FLOW TO THE WEST CELL OF THE CULVERT. ALL WORK WITHIN THE EXISTING BOX CULVERT SHALL BE DONE "IN THE DRY". SEE DETAIL FOR SOLID SANDBAG DIVERSION DAM ON SHEET 10.

NOTE: W.T. DENOTES WATERTIGHT MANHOLE FRAME & COVER; STANDARD DETAIL G 5.52. MHS #695, #698 & #700 SHALL BE WATERTIGHT.



WITHIN THESE LIMITS THE 10-INCH STEEL PIPE SEWER MAIN SHALL BE INSTALLED ALONG THE BOTTOM OF THE CONCRETE BOX CULVERT & SHALL BE ENCASED IN CONCRETE; SEE DETAILS SHEET G

PROFILE
HORIZ. 1" = 50'
SCALE: VERT. 1" = 5'

WITHIN THESE LIMITS THE SEWER MAIN SHALL CONSIST OF 10-INCH STEEL PIPE WITH WELDED JOINTS; SEE CONSTRUCTION SPECIFICATIONS AND DETAILS SHEET G

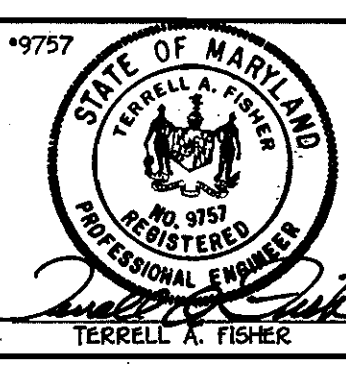
15-INCH/16-INCH INTERCEPTOR SEWER MAIN

SEE SHEET 5 FOR CONTINUATION OF PROFILE OF 16 INCH SEWER MAIN EXTENSIONS

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 Pike
Ellicott City, Maryland 21042
(410) 481-2855



DESIGNED BY:	P.W.K.
DRAWN BY:	J.M.M.
CHECKED BY:	P.W.K.
DATE:	
BY NO.	REVISION
DATE	

INTERCEPTOR SEWER MAIN PROFILE

600' SCALE MAP NO. 15 BLOCK NO. 10
F.C.C. WORK ORDER NO. 927
FILE NAME: G2/DRAWINGS/3271

G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS
CONTRACT NO. 20-3072-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 11

Robert B. Bennett
CHIEF, BUREAU OF UTILITIES

9-2-18
DATE

Howie M. Zimmerman
CHIEF, DEVELOPMENT ENGINEERING DIVISION

9/2/18
DATE

CONTRACT NO. 20-3072-D
G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

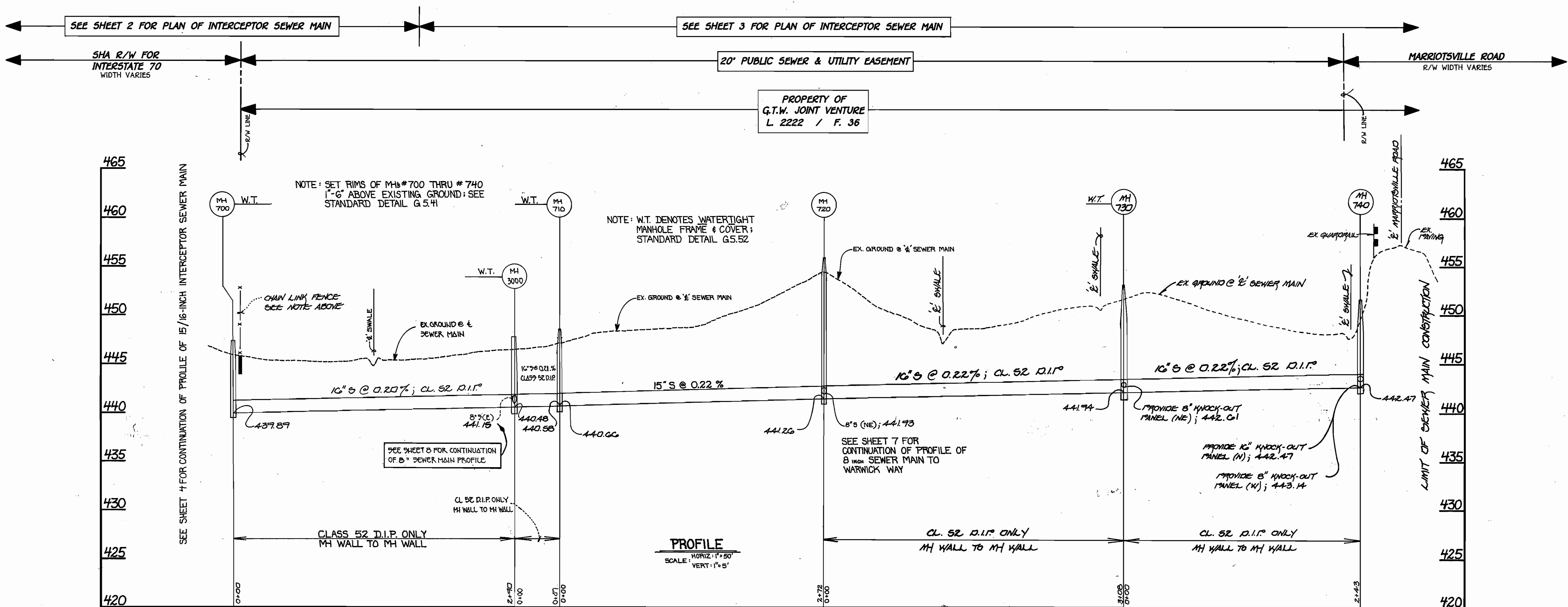
NOTES:

1. THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY; WHICHEVER IS SHORTER.
2. SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS & CONDITIONS & MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS.

NOTES:

1. THE USE OF MATS SHALL BE REQUIRED FOR CONSTRUCTION EQUIPMENT OPERATED WITHIN THE WETLANDS & WETLAND BUFFERS FROM 1/4" C/S TO 1/4" C/S.
2. ALL TEMPORARY EQUIPMENT CROPPINGS SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE INTERCEPTOR SEWER MAIN CONSTRUCTION.
3. ALL SOIL FROM THE TRENCHING OPERATION SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. SEE SHEET 10 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS.

FOLLOWING INSTALLATION OF THE INTERCEPTOR SEWER MAIN, THE EXISTING CHAIN LINK FENCE SHALL BE RE-INSTALLED TO ITS ORIGINAL LINE, GRADE AND DIMENSIONS IN ACCORDANCE WITH SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS



15-INCH / 16-INCH INTERCEPTOR SEWER MAIN

CONTRACT NO. 20-3692-D
G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert W. Bevinger
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Chief, DEVELOPMENT ENGINEERING DIVISION

9/21/98

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

TERRELL A. FISHER

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER

NO. 9757

DESIGNED BY:	P.W.L.
DRAWN BY:	M.J.M./L.M.
CHECKED BY:	P.W.L.
DATE:	APRIL, 1998
BY NO.	
REVISION	
DATE	

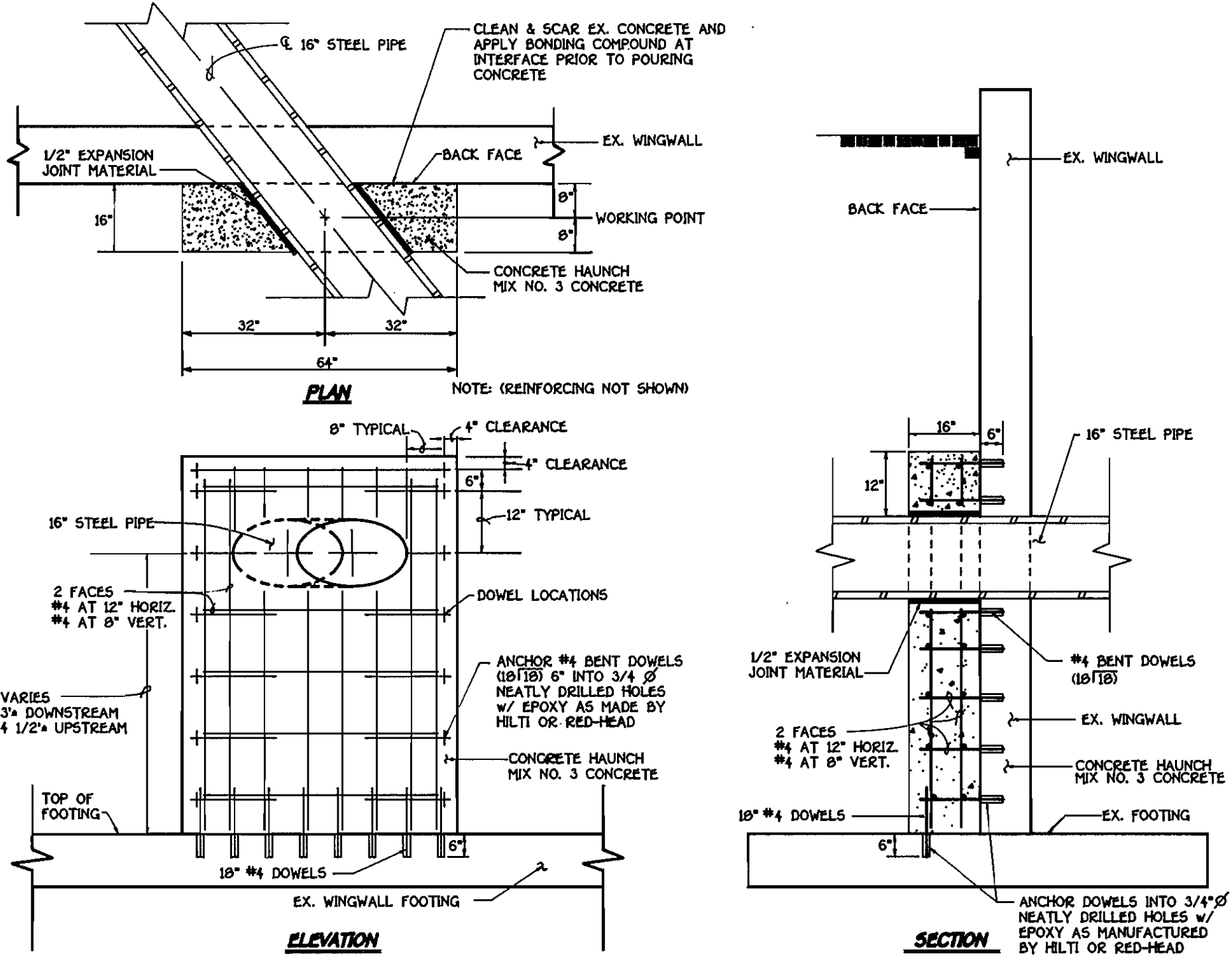
INTERCEPTOR SEWER MAIN PROFILE

60' SCALE MAP NO. 16 BLOCK NO. 10
F.C.C. WORK ORDER NO. 527
FILE NAME: G:/DRAWINGS/527/INT2.DWG

G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS

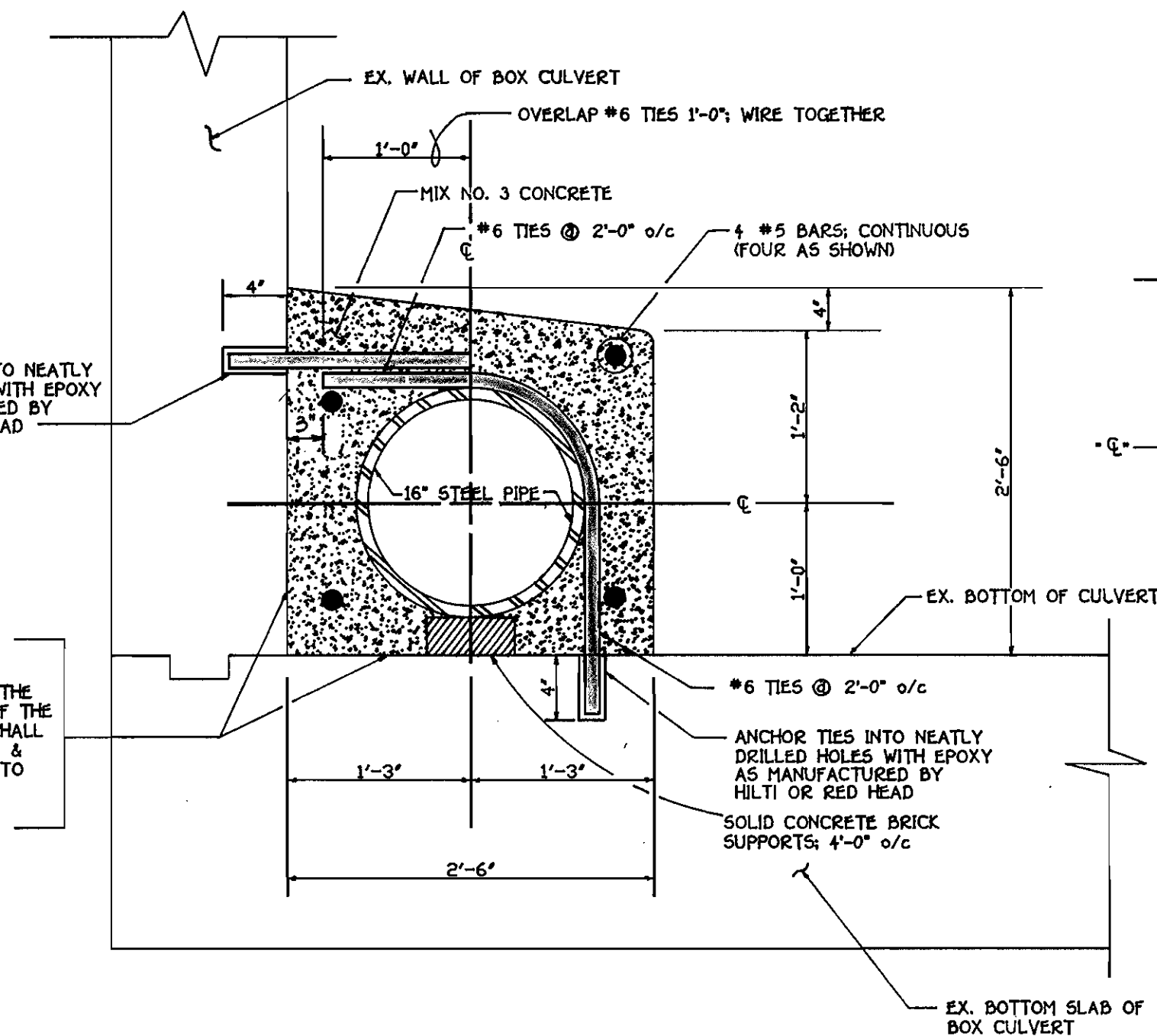
CONTRACT NO. 20 - 3692 - D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 5 OF 11

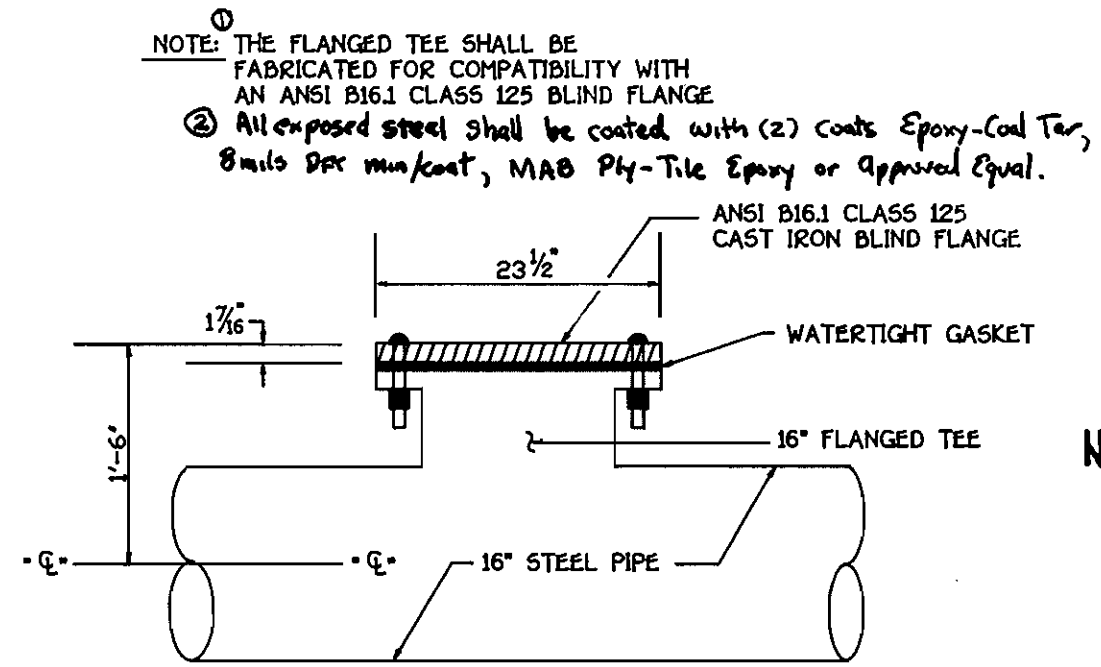


DETAILS: CONCRETE HAUNCH @ WINGWALLS
NOT TO SCALE

WHERE NEW CONCRETE CONTRACTS THE SURFACES OF THE WALL & FLOOR OF THE EX. BOX CULVERT, THE SURFACES SHALL BE THOROUGHLY CLEANED, SCARRED & BONDING COMPOUND APPLIED PRIOR TO POURING CONCRETE



CONCRETE ENCASEMENT DETAIL
SCALE: 1" = 1'-0"



DETAIL: 16\"/>

PRIOR TO BEGINNING ANY WORK WITHIN THE EXISTING CONCRETE BOX CULVERT, THE CONTRACTOR SHALL CONSTRUCT A SOLID SANDBAG DIVERSION DAM AT THE UPSTREAM ENTRANCE TO THE EAST CELL OF THE CULVERT. ALL WORK WITHIN THE EXISTING BOX CULVERT SHALL BE DONE "IN THE DRY". SEE DETAIL FOR SOLID SANDBAG DIVERSION DAM ON SHEET 10.

- NOTES:**
1. THE USE OF MATS SHALL BE REQUIRED FOR CONSTRUCTION EQUIPMENT OPERATED WITHIN THE WETLANDS AND WETLAND BUFFERS FROM MH # 690 TO MH # 700.
 2. ALL TEMPORARY EQUIPMENT CROSSINGS SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE INTERCEPTOR POWER MAIN CONSTRUCTION.
 3. ALL SPOIL FROM THE TRENCHING OPERATIONS SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
 4. SEE SHEET 10 FOR BEST MANAGEMENT PRACTICES FOR WORKING IN AGRICULTURAL WETLANDS.

- NOTES:**
1. THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY, WHICH IS SHORTER.
 2. SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS & CONDITIONS & MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS.

CONSTRUCTION NOTES:

1. ALL CONSTRUCTION WORK PERFORMED WITHIN THE LIMITS OF THE STATE HIGHWAY ADMINISTRATION (SHA) RIGHT-OF-WAY SHALL BE PERFORMED IN THE PRESENCE OF AN SHA INSPECTOR.
2. REFERENCE SECTION 5.10 OF THE SPECIAL PROVISIONS FOR SPECIFICATIONS REGARDING THE 16-INCH STEEL PIPE.
3. CONCRETE SHALL MEET THE REQUIREMENTS OF MIX NO. 3 OF SECTION 916 OF THE SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS.
4. THE CONTRACTOR SHALL UTILIZE A PACHOMETER TO LOCATE THE EXISTING REESTEL WITHIN THE WALLS & BOTTOM SLAB OF THE BOX CULVERT. IT IS THE INTENT THAT EVERY EFFORT BE MADE TO ASSURE THAT ALL HOLES DRILLED INTO THE BOX CULVERT MISS THE EXISTING REINFORCING PATTERN.
5. THE DOWELS & TIES OF THE CONCRETE ENCASEMENT SHALL BE PLACED IN NEATLY DRILLED HOLES WITHOUT ANY RAGGED OR SPALLED EDGES.

NOTE:
IT IS UNDERSTOOD BY THE STATE HIGHWAY ADMINISTRATION THAT HOWARD COUNTY SHALL ACCEPT ALL RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THE INTERCEPTOR SEWER MAIN INSTALLED WITHIN THE STATE HIGHWAY ADMINISTRATION'S RIGHT-OF-WAY.

WITHIN THESE LIMITS, FROM MH #695 TO MH #698; THE INTERCEPTOR SEWER MAIN SHALL CONSIST OF 16-INCH STEEL PIPE WITH WELDED JOINTS; SEE CONSTRUCTION SPECIFICATIONS

WITHIN THESE LIMITS, THE 16-INCH STEEL PIPE INTERCEPTOR SEWER MAIN SHALL BE INSTALLED ALONG THE BOTTOM OF THE CONCRETE BOX CULVERT & SHALL BE ENCASED IN CONCRETE, SEE DETAILS THIS SHEET

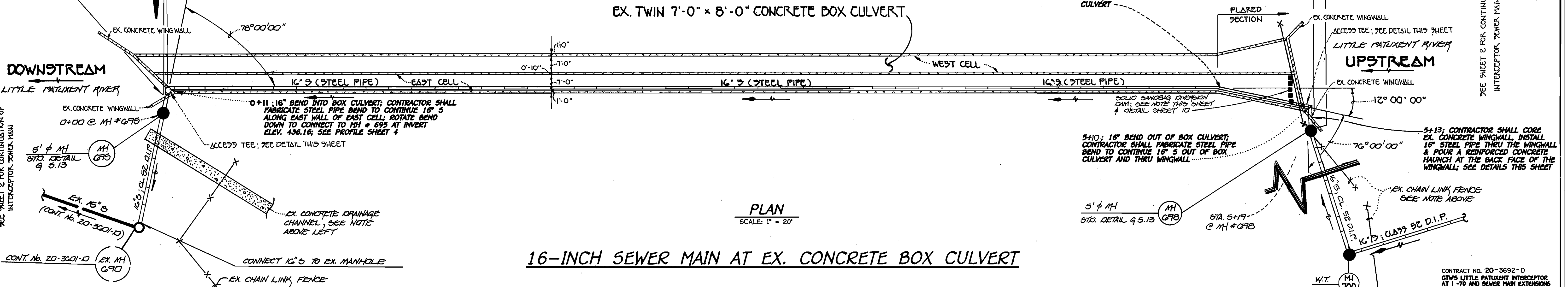
FOLLOWING INSTALLATION OF THE INTERCEPTOR SEWER MAIN, THE EXISTING CHAIN LINK FENCE SHALL BE RE-INSTALLED TO ITS ORIGINAL LINE, GRADE AND DIMENSIONS IN ACCORDANCE WITH SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS.

FOLLOWING INSTALLATION OF THE INTERCEPTOR SEWER MAIN, THE EXISTING CONCRETE DRAINAGE CHANNEL SHALL BE RECONSTRUCTED TO ITS ORIGINAL LINE, GRADE AND DIMENSIONS IN ACCORDANCE WITH SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS.

0+08; CONTRACTOR SHALL CORE EX. CONCRETE WINGWALL, INSTALL 16\"/>

4+69; 16\"/>

5+13; CONTRACTOR SHALL CORE EX. CONCRETE WINGWALL, INSTALL 16\"/>



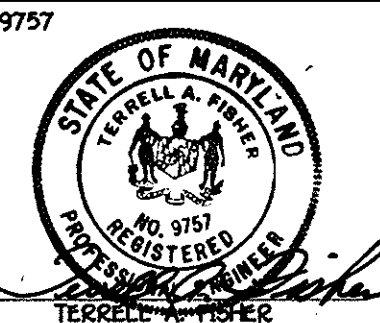
16-INCH SEWER MAIN AT EX. CONCRETE BOX CULVERT

PLAN
SCALE: 1" = 20"

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. Bauman
CHIEF, BUREAU OF UTILITIES
9-18-98
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
9/18/98
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
CLLETT CITY, MARYLAND 21042
4100 403 - 2095

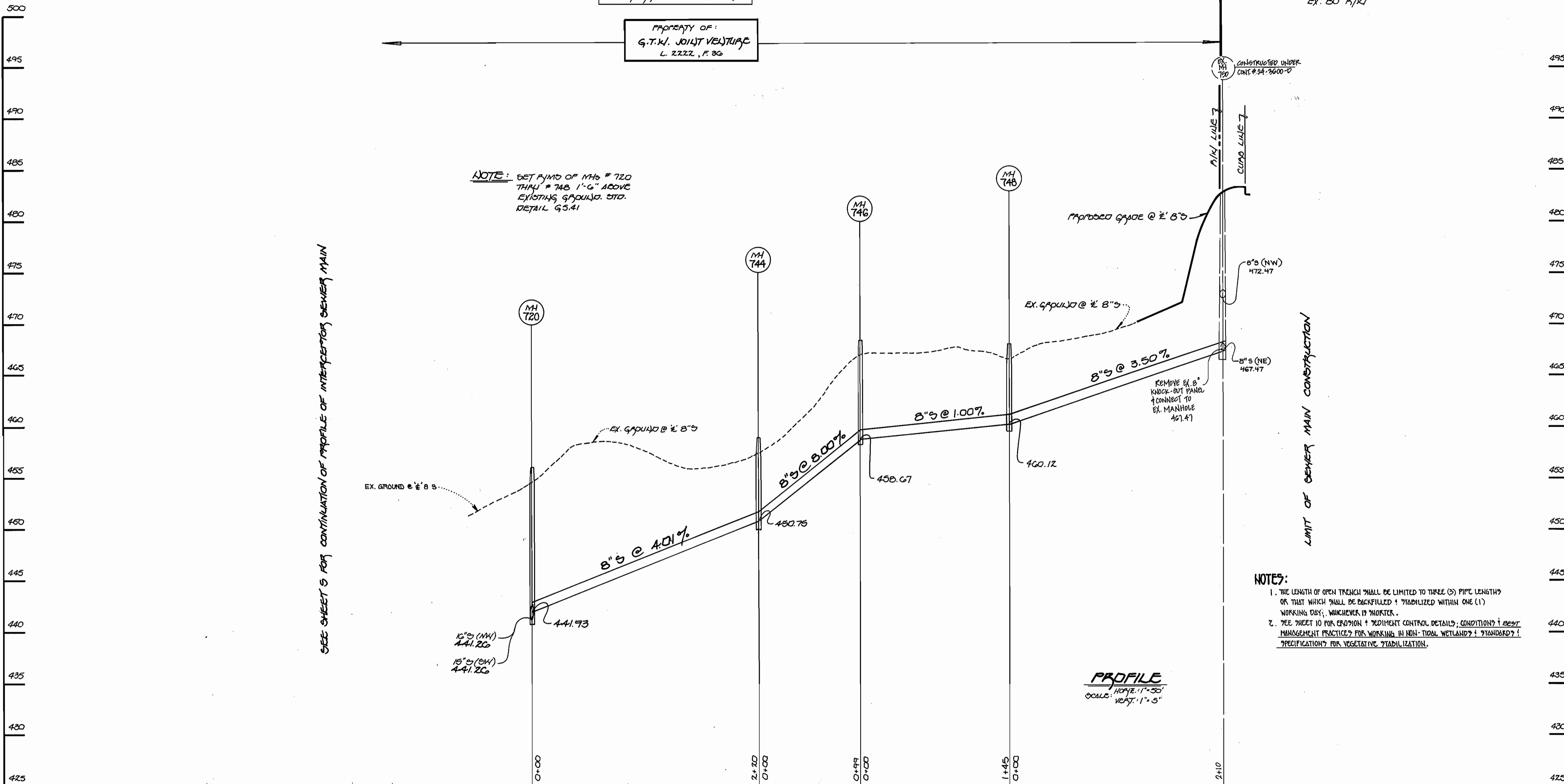


DESIGNED BY:	P.W.K.
DRAWN BY:	M.J.M.
CHECKED BY:	P.W.K.
DATE:	APRIL, 1998
BY NO.	REVISION
DATE	DATE

DETAILS
INTERCEPTOR @ CONC. BOX CULVERT
600' SCALE MAP NO. 18 BLOCK NO. 10
F.C.C. WORK ORDER NO. 327
FILE NAME: G/DRAWINGS/527/INT2.DWG

G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS
CONTRACT NO. 20 - 3692 - D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 6 OF 11



NOTE: SET P.I.M.S. OF MHS # 720
THRU # 748 1'-6" ABOVE
EXISTING GRAVITY. STD.
DETAIL G5.41

NOTES:
1. THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS
OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1)
WORKING DAY, WHICHEVER IS SHORTER.
2. SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS; CONDITIONS & BEST
MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS & STANDARD?
SPECIFICATION? FOR VEGETATIVE STABILIZATION.

PROFILE
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

8-INCH SEWER MAIN EXTENSION TO KIRBYCROFT WAY

CONTRACT NO. 20-3692-D
G.T.W.'S LITTLE PATENT INTERCEPTOR AT
AND SEWER MAIN EXTENSIONS I-70
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 9-18-98 DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND 9/21/98 DATE	Fisher, Collins & Carter, Inc. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK 10272 Baltimore National Pike ELIOTT CITY, Maryland 21043 (410) 481-2855		DESIGNED BY: P.W.K. DRAWN BY: J.H.M. CHECKED BY: P.W.K. DATE: DEC., 1997 BY NO. _____ REVISION _____ DATE _____	8-INCH SEWER MAIN EXTENSION PROFILE 600' SCALE MAP NO. 16 BLOCK NO. 10 F.C.C. WORK ORDER NO. 527 FILE NAME: G/DRAWINGS/527/	G.T.W.'S LITTLE PATENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS CONTRACT NO. 20 - 3692 -D THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 7 of 11
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PROPERTY OF
G.T.W. JOINT VENTURE
L. 2222 / F. 36

PROPERTY OF
G.T.W. JOINT VENTURE
L. 2222 / F. 36

SEE SHEET 1 FOR MANHOLE TABULATION
CHART FOR 8" SEWER MAIN OUTFALL (EAST)

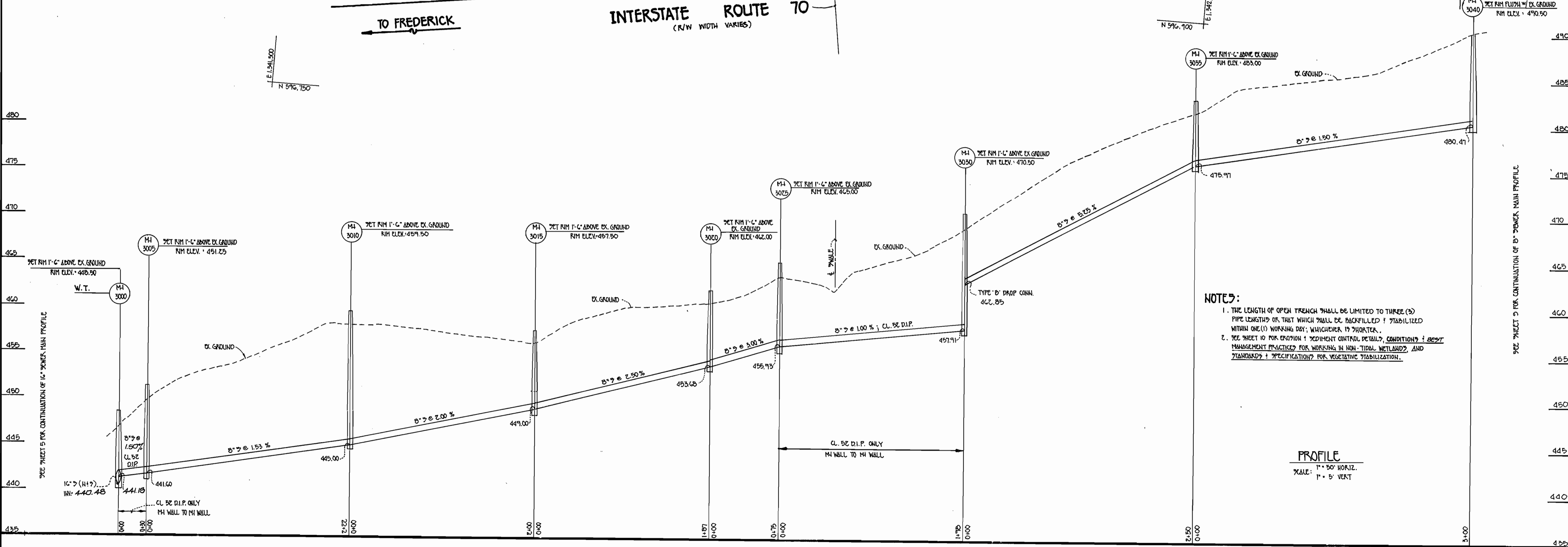
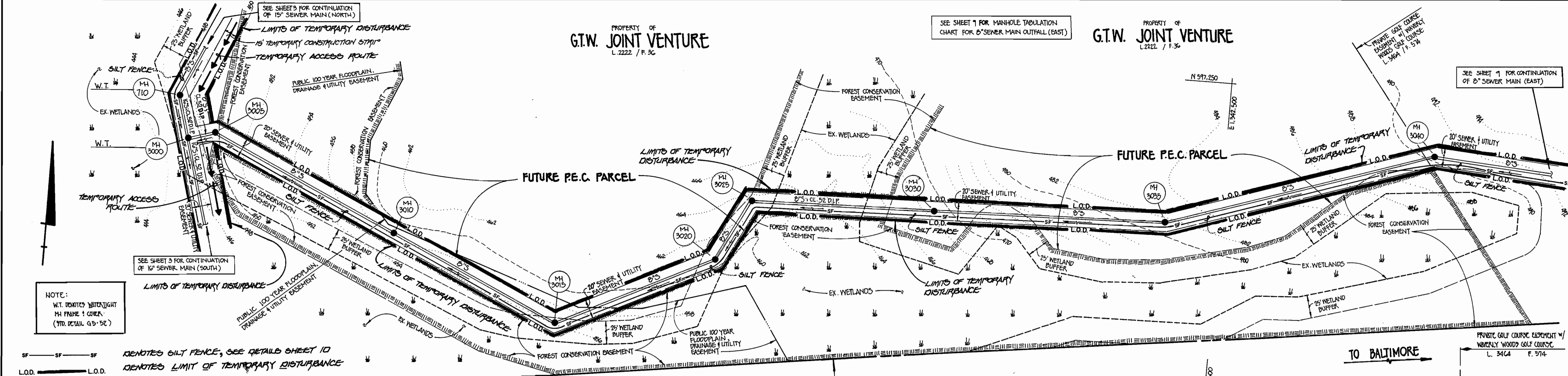
SEE SHEET 3 FOR CONTINUATION
OF 15" SEWER MAIN (NORTH)

SEE SHEET 1 FOR CONTINUATION
OF 8" SEWER MAIN (EAST)

SEE SHEET 3 FOR CONTINUATION
OF 10" SEWER MAIN (SOUTH)

NOTE:
W.T. DENOTES WATER TIGHT
M.H. FRAME & COVER
(STD. DETAIL G-5-B-C)

SF — SF DENOTES SILT FENCE, SEE DETAILS SHEET 10
L.O.D. — L.O.D. DENOTES LIMIT OF TEMPORARY DISTURBANCE

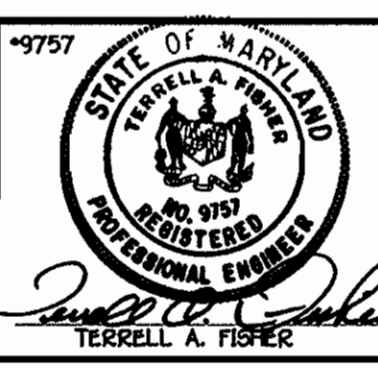


NOTES:
1. THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY; WHICHEVER IS SHORTER.
2. SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS, CONDITIONS & BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS AND STANDARDS & SPECIFICATIONS FOR VEGETATIVE STABILIZATION.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 9/2/98

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
DATE: 9/2/98

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
1100 401 - 2855

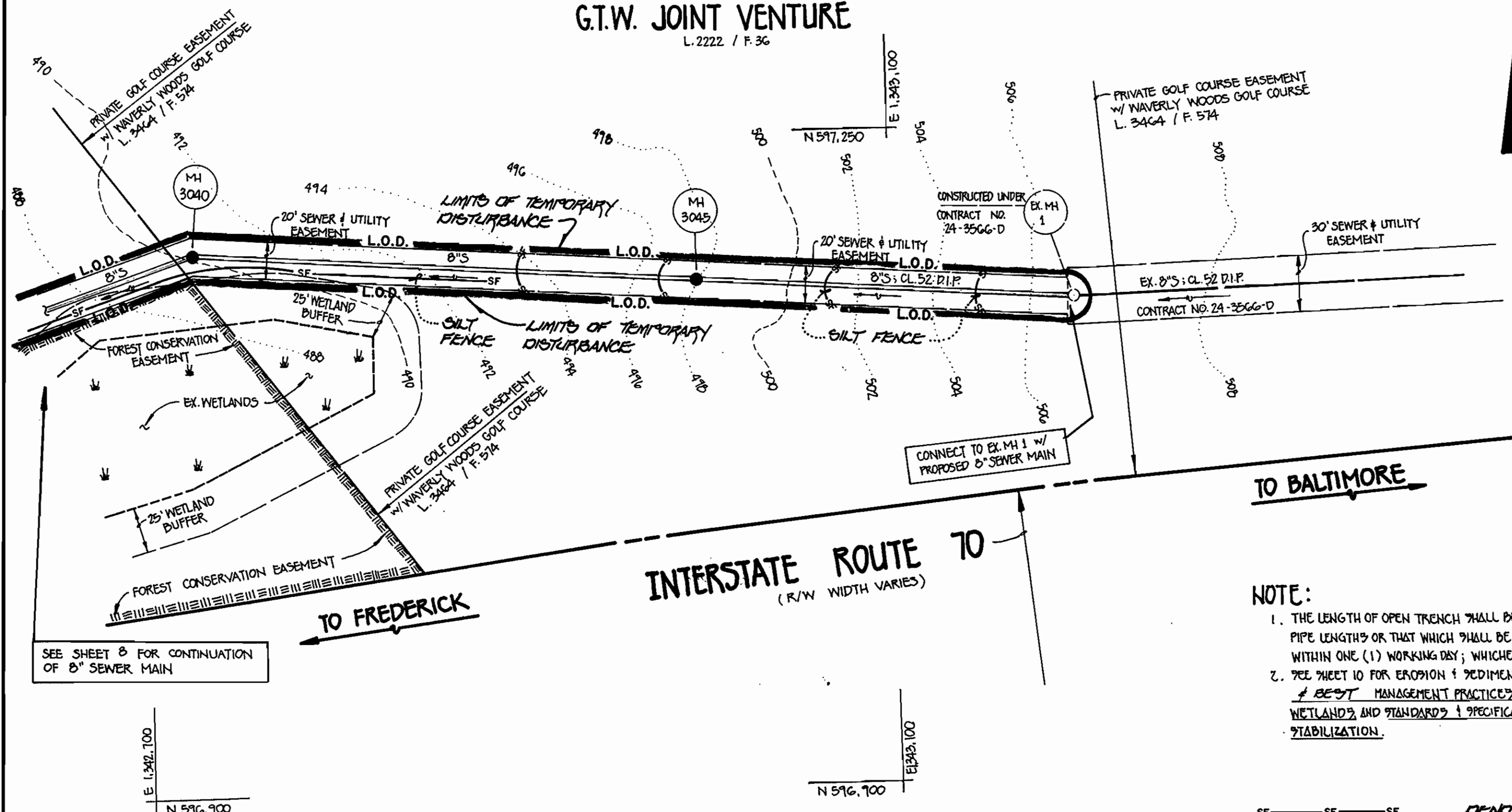


DESIGNED BY: H.J.M.
DRAWN BY: H.J.M.
CHECKED BY: P.W.L.
DATE: APRIL, 1998

**8" SEWER MAIN OUTFALL (EAST)
PLAN VIEW & PROFILE**
600' SCALE MAP NO. 18 BLOCK NO. 10
F.C.C. WORK ORDER NO. 327
FILE NAME: G/DRAWINGS/527/INT2PROFILE.DWG

G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS
CONTRACT NO. 20 - 3692 -D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 8 OF 11

PROPERTY OF
G.T.W. JOINT VENTURE
L. 2222 / P. 36

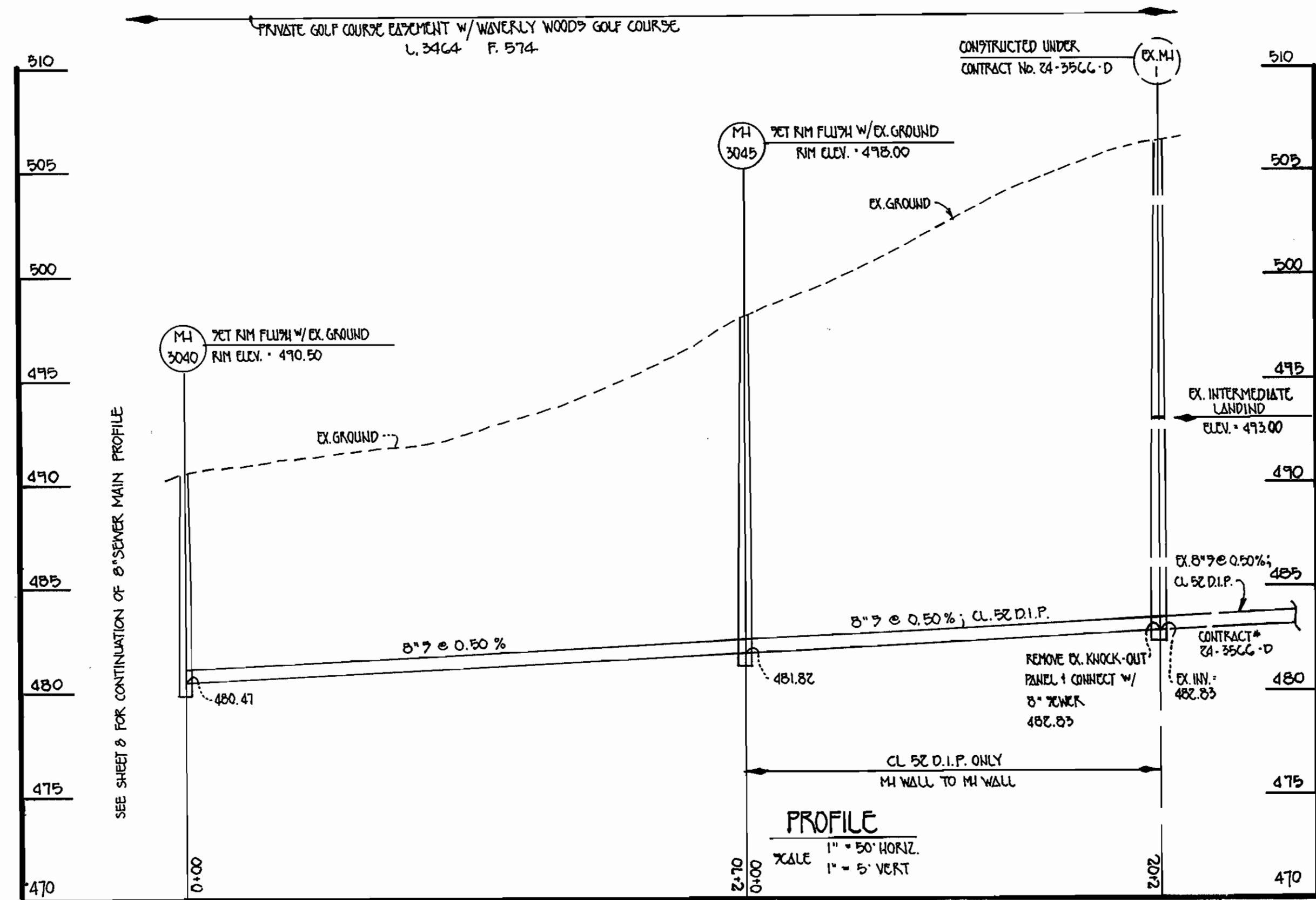


MANHOLE NO.	F.C.C. POINT NO.	NORTHING	EASTING
3000			
3005			
3010			
3015			
3020			
3025			
3030			
3035			
3040			
3045			

NOTE:

1. THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY, WHICHEVER IS SHORTER.
2. SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS, BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS AND STANDARDS & SPECIFICATIONS FOR VEGETATIVE STABILIZATION.

SF ——— SF ——— SF DENOTES SILT FENCE, SEE DETAILS SHEET 10
 L.O.D. ——— L.O.D. DENOTES LIMIT OF TEMPORARY DISTURBANCE

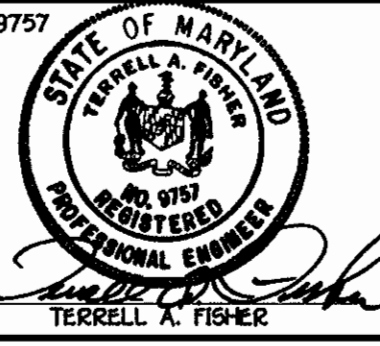


CONTRACT NO. 20-3692-D
 G.T.W.'S LITTLE PATUXENT INTERCEPTOR
 AT I-70 AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Robert M. Beisinger
 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
 1100 4th St., Baltimore, MD 21202



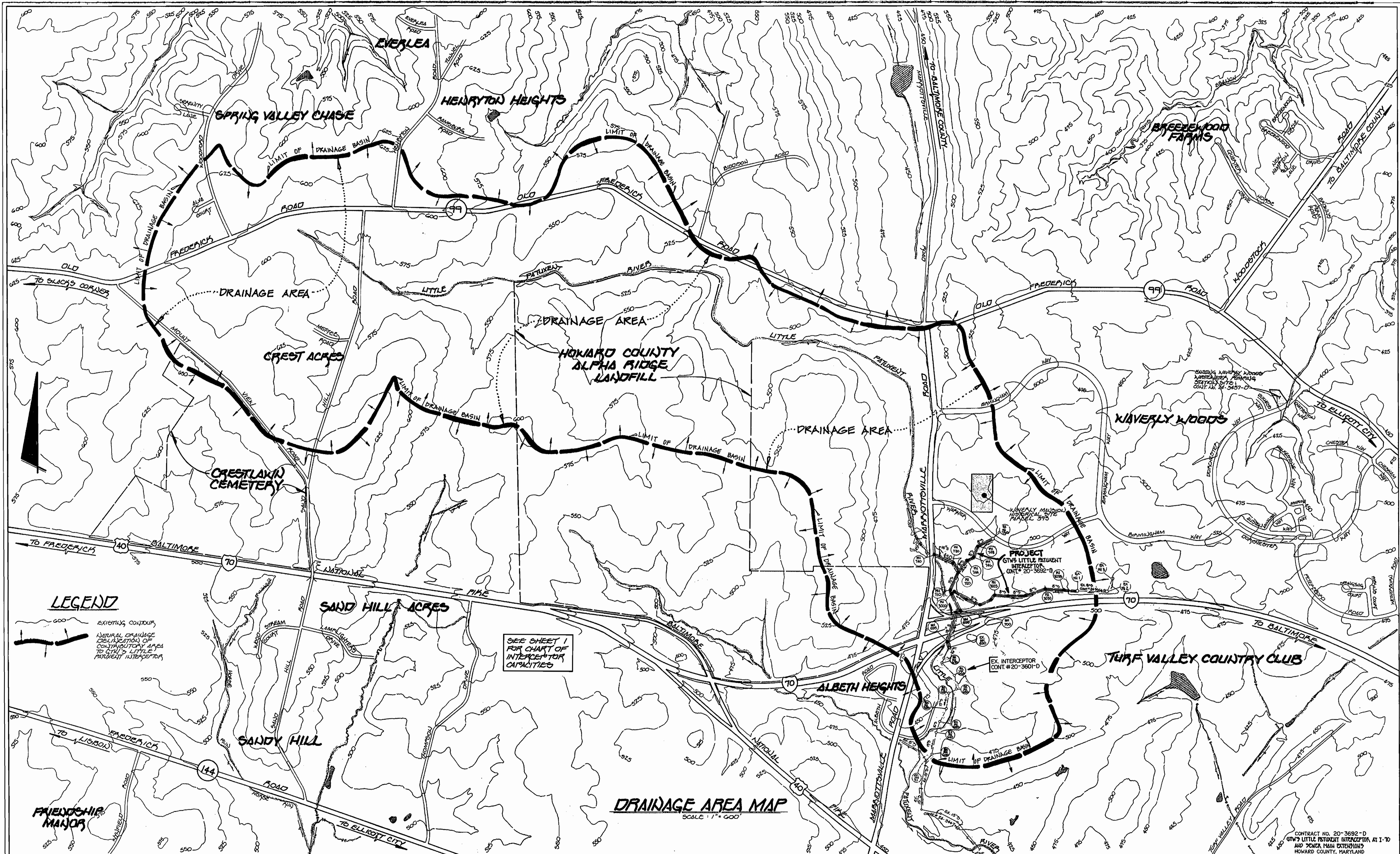
DESIGNED BY: M.J.M.
 DRAWN BY: M.J.M.
 CHECKED BY: P.W.K.
 DATE: APRIL, 1998

**8" SEWER MAIN OUTFALL (EAST)
 PLAN VIEW & PROFILE**

600' SCALE MAP NO. 16 BLOCK NO. 10
 F.C.C. WORK ORDER NO. 327
 FILE NAME: G/DRAWINGS/327/INT/PROFILE.DWG

G.T.W.'S LITTLE PATUXENT INTERCEPTOR
 AND SEWER MAIN EXTENSIONS
 CONTRACT NO. 20 - 3692 -D
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 9 OF 11



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Bainger
CHIEF, BUREAU OF UTILITIES

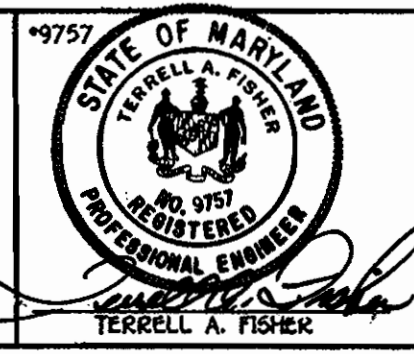
9-2-98
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Mr. [Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION

9/2/98
DATE

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS &
LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Ellicott City, Maryland 21042
(410) 461-2856



DESIGNED BY:	P.W.K.	
DRAWN BY:	J.M.M.	
CHECKED BY:	P.W.K.	
DATE:		
BY NO.	REVISION	DATE

DRAINAGE AREA MAP
SCALE: 1" = 600'

600' SCALE MAP NO. 15 BLOCK NO. 10
F.C.C. WORK ORDER NO. 527
FILE NAME: G/DRAWINGS/527/

G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70 AND SEWER MAIN EXTENSIONS

CONTRACT NO. 20-3692-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 11 OF 11

PROPERTY OF
G.T.W. JOINT VENTURE
L.2222 / F.3C

PROPERTY OF
G.T.W. JOINT VENTURE
L.2222 / F.3C

SEE SHEET 7 FOR MANHOLE TABULATION
CHART FOR 8" SEWER MAIN OUTFALL (EAST)

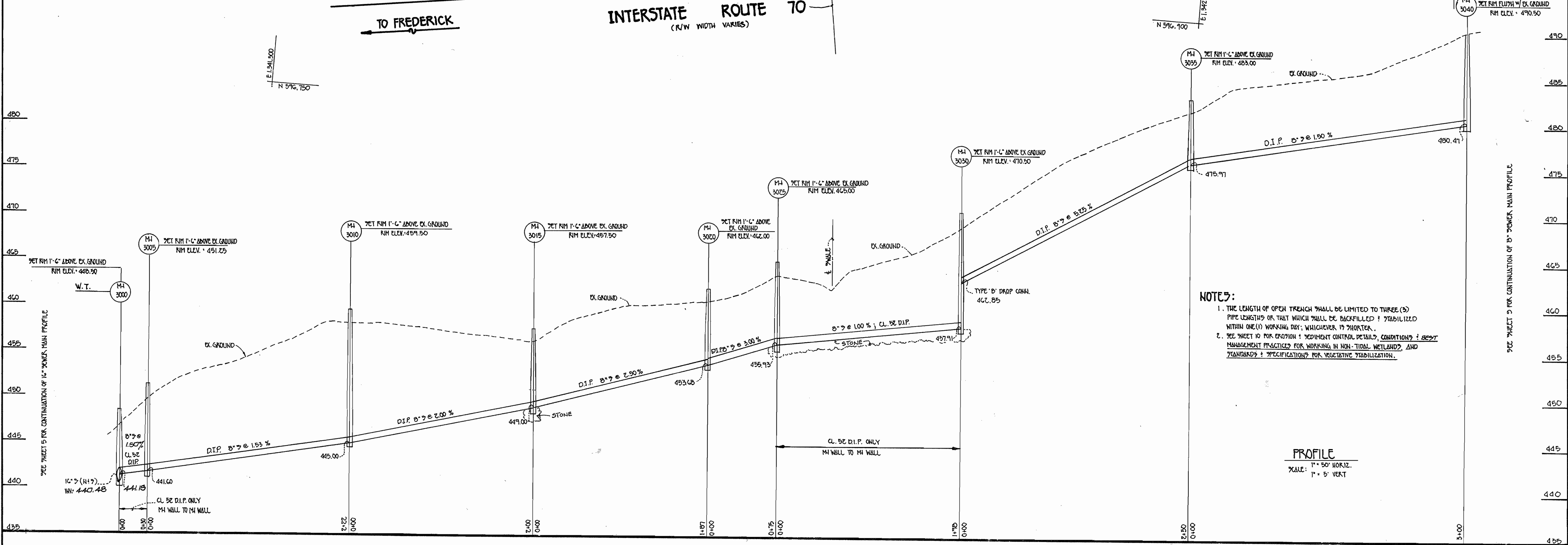
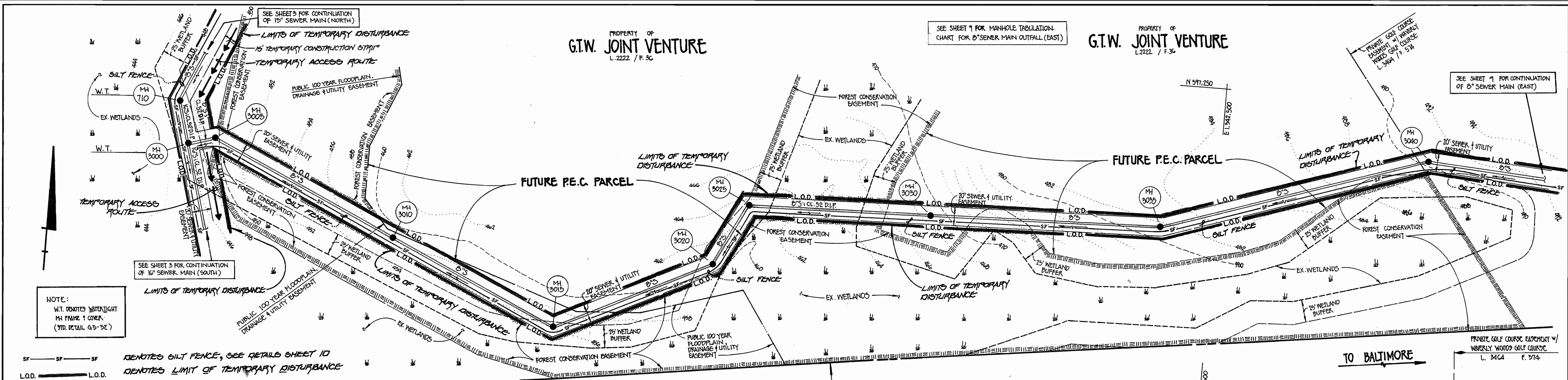
SEE SHEET 3 FOR CONTINUATION
OF 15" SEWER MAIN (NORTH)

SEE SHEET 7 FOR CONTINUATION
OF 8" SEWER MAIN (EAST)

SEE SHEET 3 FOR CONTINUATION
OF 16" SEWER MAIN (SOUTH)

NOTE:
W.T. DENOTES WATER TIGHT
M.H. FRAME & COVER
(STD. DETAIL G-5-52)

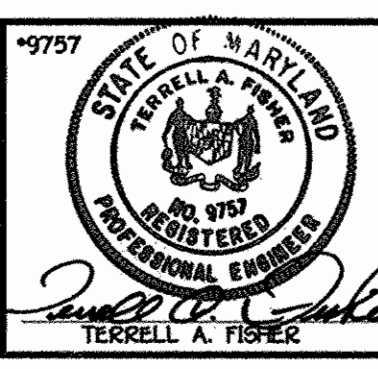
S.F. — S.F. — S.F. DENOTES SILT FENCE, SEE DETAILS SHEET 10
L.O.D. — L.O.D. — L.O.D. DENOTES LIMIT OF TEMPORARY DISTURBANCE



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert S. Sauer
CHIEF, BUREAU OF UTILITIES
9-18-98
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
9/21/98
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21142
410.461.2555



DESIGNED BY:	M.J.M.
DRAWN BY:	M.J.M.
CHECKED BY:	P.W.K.
DATE:	APRIL, 1998
BY NO.	KRI 1
REVISION	ASBUILT CONDITIONS ADDED TO PLAN
DATE	9/29

**8" SEWER MAIN OUTFALL (EAST)
PLAN VIEW & PROFILE**

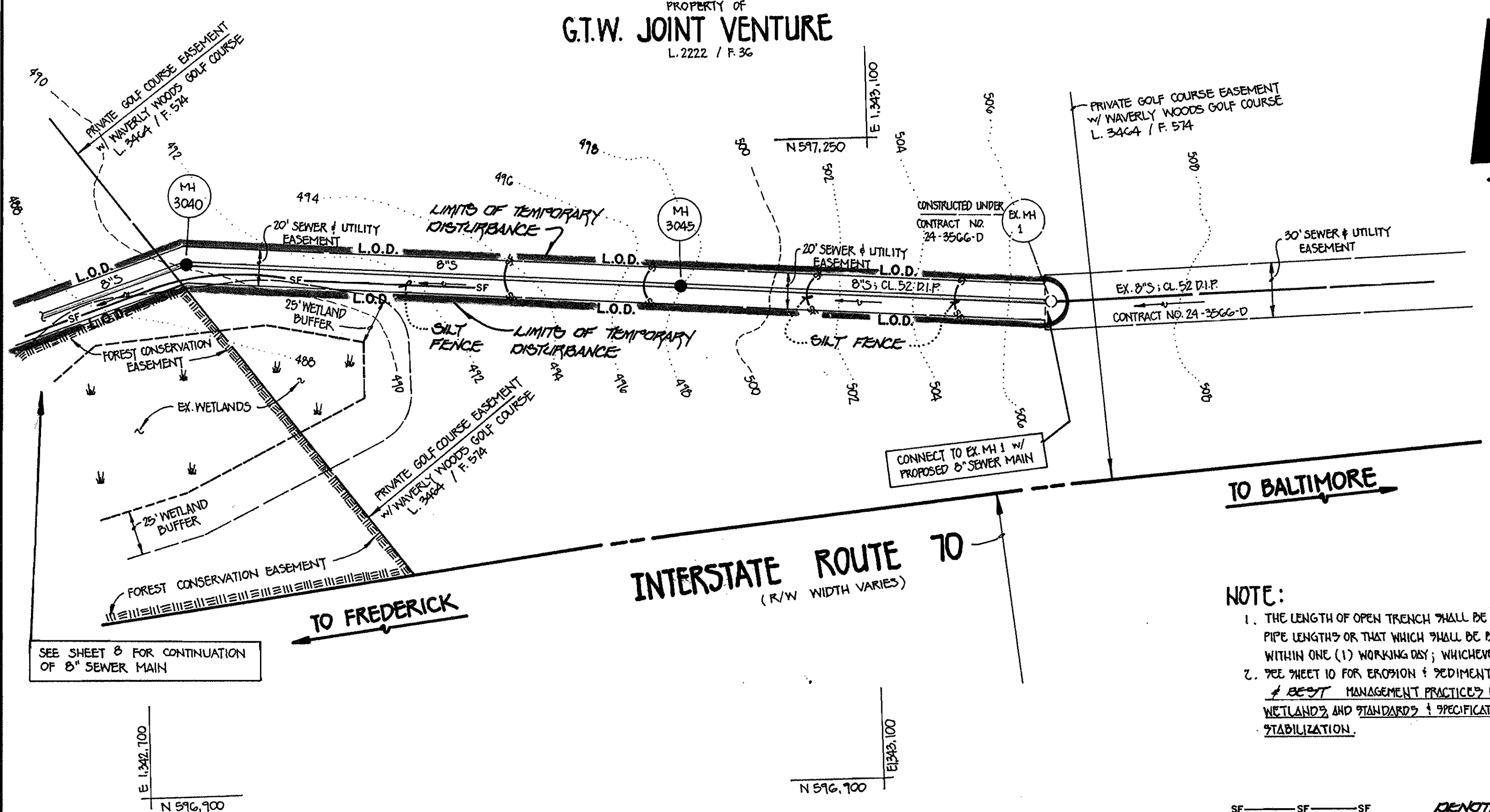
600' SCALE MAP NO. 36 BLOCK NO. 10
F.C.C. WORK ORDER NO. 527
FILE NAME: G:/DRAWINGS/927/INT2PROFILE.DWG

G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70
AND SEWER MAIN EXTENSIONS
CONTRACT NO. 20 - 3692 -D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 8 of 11

CONTRACT NO. 20-3692-D
G.T.W.'S LITTLE PATUXENT INTERCEPTOR
AT I-70 AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

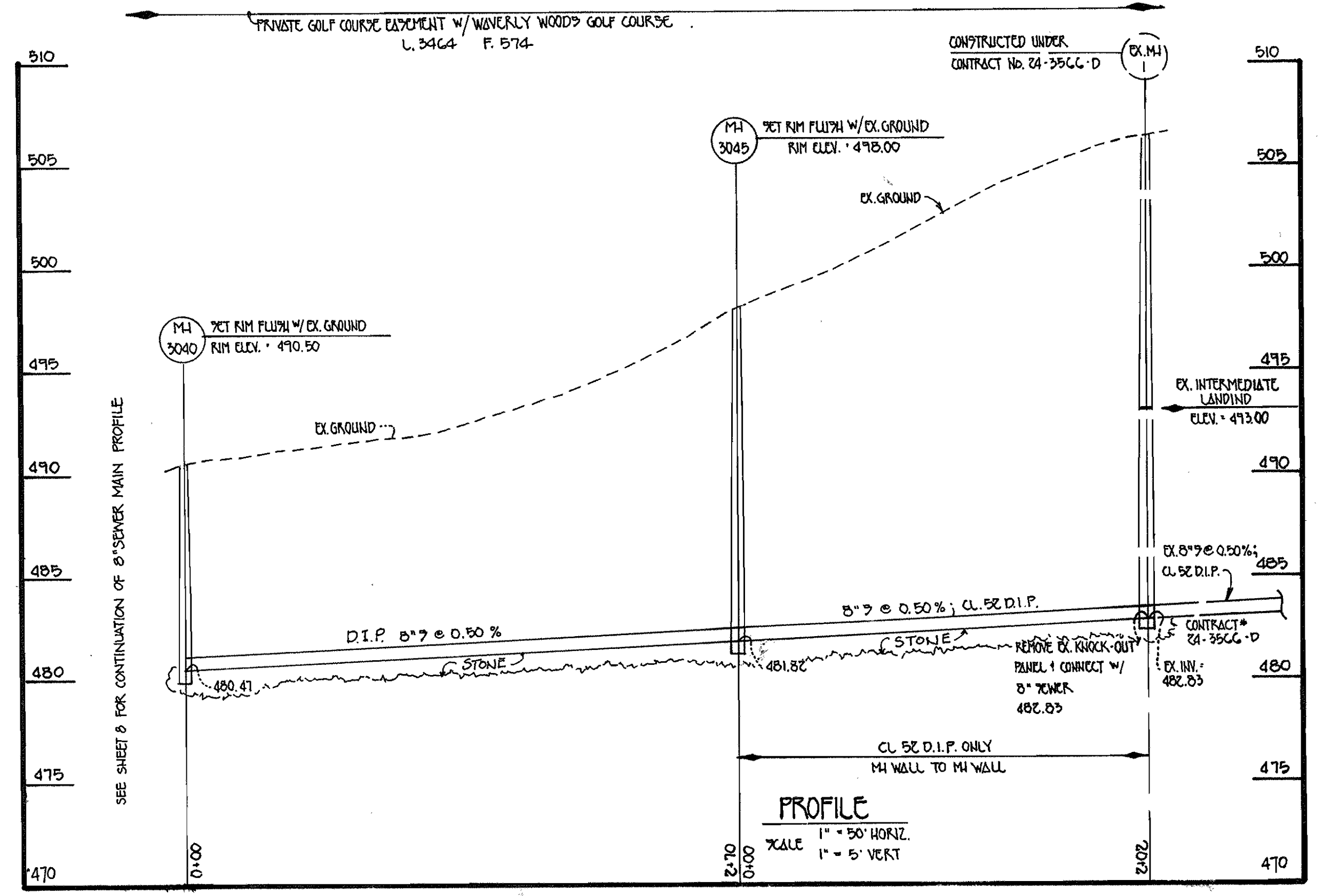
PROPERTY OF
G.T.W. JOINT VENTURE
L. 2222 / F. 36



MANHOLE NO.	F.C.C. POINT NO.	NORTHING	EASTING
3000			
3005			
3010			
3015			
3020			
3025			
3030			
3035			
3040			
3045			

NOTE:
1. THE LENGTH OF OPEN TRENCH SHALL BE LIMITED TO THREE (3) PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED & STABILIZED WITHIN ONE (1) WORKING DAY; WHICHEVER IS SHORTER.
2. SEE SHEET 10 FOR EROSION & SEDIMENT CONTROL DETAILS, & BEST MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS AND STANDARDS & SPECIFICATIONS FOR VEGETATIVE STABILIZATION.

SF ——— SF ——— SF DENOTES SILT FENCE, SEE DETAILS SHEET 10
L.O.D. ——— L.O.D. DENOTES LIMIT OF TEMPORARY DISTURBANCE

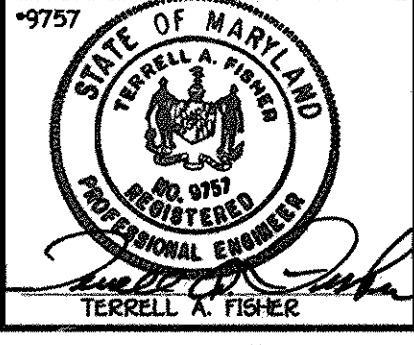


CONTRACT NO. 20-3692-D
G.T.W.'S LITTLE PATUXENT INTERCEPTOR
AT I-70 AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert M. Beamer
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
TERRELL K. FISHER



DESIGNED BY: M.J.M.
DRAWN BY: M.J.M.
CHECKED BY: P.W.K.
DATE: APRIL 1998
BY NO. KCI 1
ASBUILT CONDITIONS ADDED TO PLAN
REVISION
DATE: 3/99

8" SEWER MAIN OUTFALL (EAST)
PLAN VIEW & PROFILE
60' SCALE MAP NO. 18 BLOCK NO. 10
F.C.C. WORK ORDER NO. 327
FILE NAME: G:/DRAWINGS/227/INT2/PROFILE.DWG

G.T.W.'S LITTLE PATUXENT INTERCEPTOR AT I-70
AND SEWER MAIN EXTENSIONS
CONTRACT NO. 20 - 3692 -D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 9 OF 11