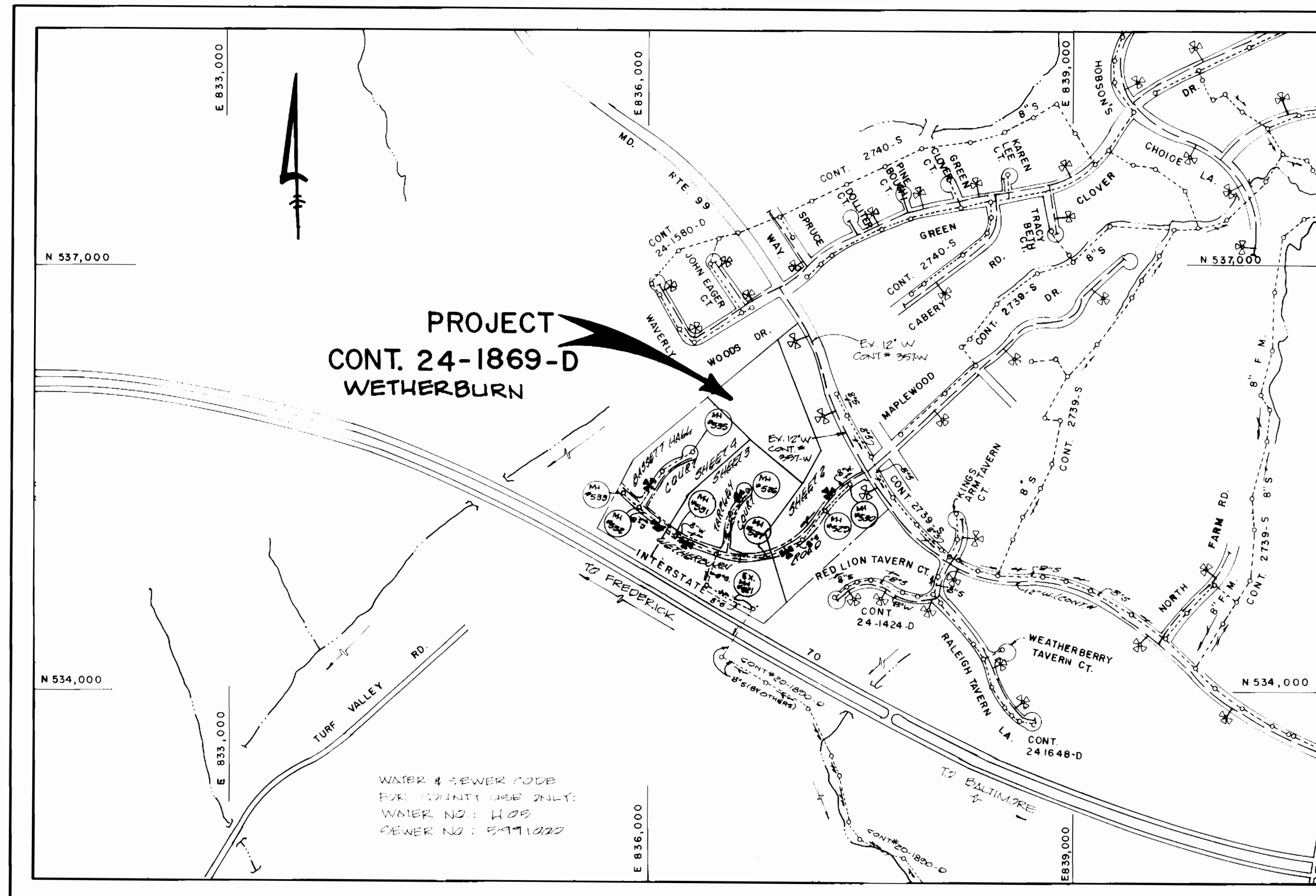


GENERAL NOTES

- 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 SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6".
- 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. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- 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. UNDERGROUND DAMAGE CONTROL: 859-9004
BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING: 298-9001
MISS UTILITY: 1-559-0100
COLONIAL PIPELINE COMPANY: 795-1390
BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 992-2366
C&P TELEPHONE COMPANY: 1-800-257-7777
- 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 LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO 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 ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL GS.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR P.V.C. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL GS.51.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153. DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER & OTHER LIQUIDS.



TYPE OF BUILDING: RESIDENTIAL

NUMBER OF LOTS TO BE OULDOABLE: 70

NO OF WATER HOUSE CONNECTIONS: 70

NO OF SEWER HOUSE CONNECTIONS: 70

DRAINAGE AREA: LITTLE PATUXENT

TREATMENT PLANT: PATUXENT TREATMENT PLANT VIA THE ROUTE 122 PUMPING STATION

VICINITY MAP
SCALE: 1" = 600'

QUANTITIES			
ITEM	EST'D	AS-BUILT	SUPPLIER
8" SEWER	2011.6	2114	OK MANUFACTURING
4" SEWER	2426.6	2372	"
MANHOLES	18.6	5	ATLANTIC STATES
8" WATER	2800.6	2672	ATLANTIC STATES
6" WATER	580.6	556	"
FIRE HYDRANTS	0.8	9	MUELLER
1" WHC	2060.6	2304	HOWELL METALS
3/4" WHC	206.6	365	"
8" VALVES	0.8	3	MUELLER
6" VALVES	0.8	0	"
8" x 6" REDUCERS	1.8	1	ATLANTIC STATES
8" x 6" REDUCERS	600.6	577	"
10" x 8" TAPPING	1.8	0	MUELLER

NOTE:
QUANTITY FOR LENGTH OF 8" SEWER IS MEASURED FROM END TO END

CONTRACT NO. 24-1869-D WETHERBURN

WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F 89-126.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
James M. Hahn 4/27/89
SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY
HOWARD SOIL CONSERVATION DISTRICT
Stephen L. Hahn 4/27/89
HOWARD SOIL CONSERVATION DISTRICT DATE

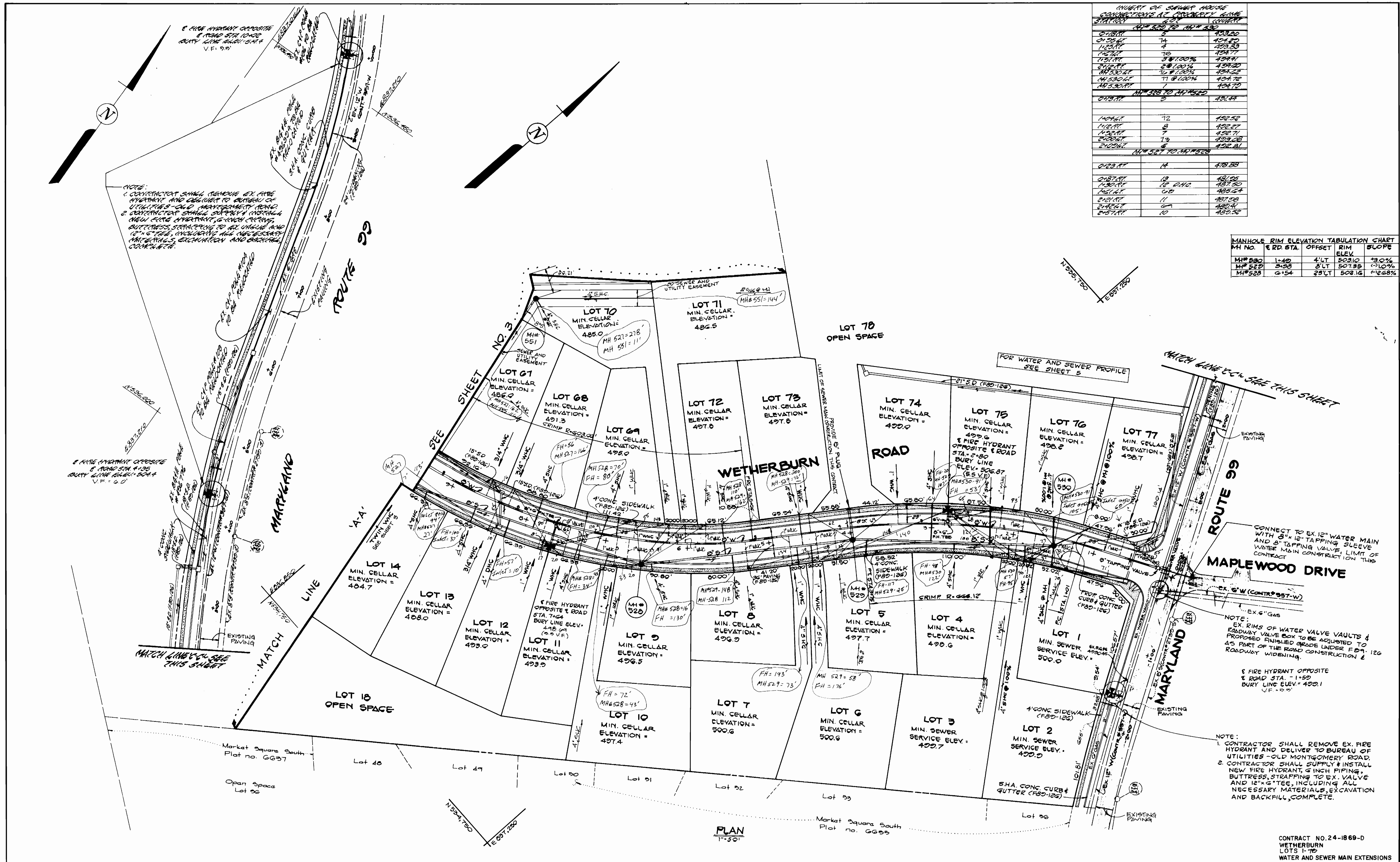
PLAN REFERENCE NUMBERS:
S 20-108
P 20-108
F 20-122

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>John J. O'Neil</i> 4/28/89 DIRECTOR OF PUBLIC WORKS DATE <i>Robert B. Brown</i> 4-25-89 CHIEF BUREAU OF UTILITIES DATE	FISHER, COLLINS AND CARTER, INC. *9757 CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 <i>James A. Fisher</i> TERRELL A. FISHER	DES: G W DRN: G W / SB CHK: T.A.F. DATE: 1/30/89 BY: NO REVISION: _____ DATE: _____	TITLE SHEET WETHERBURN LOTS 1-78 CONTRACT NO. 24-1869-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 1 OF 6
---	--	---	---

AS-BUILT

INVERT OF SEWER HOUSE CONNECTIONS AT PROPERTY LINE		
STATION	CONVERT	CONVERT
MH# 528 TO MH# 529		
0+00.00	2	404.80
0+25.00	74	404.80
1+00.00	4	403.85
1+25.00	76	404.77
1+50.00	3 @ 1.00%	404.77
2+00.00	8 @ 1.00%	404.80
2+50.00	7 @ 1.00%	404.80
3+00.00	1	404.75
3+50.00	1	404.70
MH# 528 TO MH# 528		
0+00.00	5	404.44
MH# 527 TO MH# 528		
0+00.00	14	404.85
0+25.00	13	404.85
1+00.00	12	404.80
1+25.00	11	404.71
2+00.00	13	404.80
2+25.00	6	404.81

MANHOLE RIM ELEVATION TABULATION CHART				
MH NO.	E RD. STA.	OFFSET	RIM ELEV.	SLOPE
MH# 520	1+40	4' L	503.10	+3.0%
MH# 522	3+25	3' L	507.95	+1.0%
MH# 523	6+54	23' L	508.16	+2.68%



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John O'Neil 4/28/89
DIRECTOR OF PUBLIC WORKS DATE

Robert Reinger 4-25-89
CHIEF, BUREAU OF UTILITIES DATE

William R. Kelly 4-27-89
CHIEF, BUREAU OF ENGINEERING DATE

Robert L. Gann 4/27/89
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS, AND CARTER, INC. 9757

CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

Terrell A. Fisher
TERRELL A. FISHER

DES: G.W.				
DRN: G.W.				
CHK: T.A.F.				
DATE: 11/30/88	BY: NO.	REVISION	DATE	

PLAN

WATER AND SEWER MAINS

600' SCALE MAP NO 17 BLOCK NO. 7

WETHERBURN
LOTS 1-78

CONTRACT NO. 24-1869-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

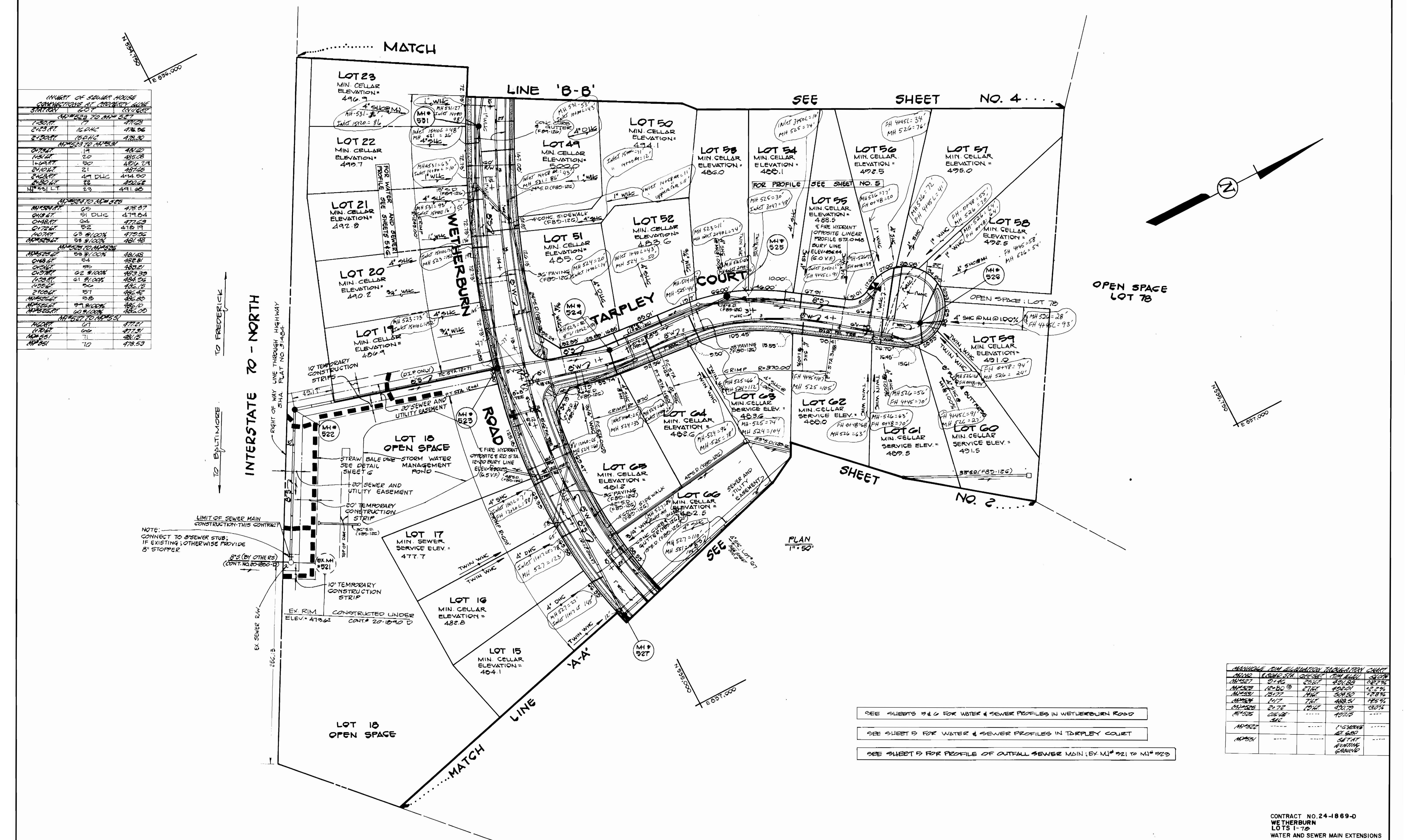
SCALE AS SHOWN

SHEET 20F6

AS-BUILT 12/28/89

MINIMUM OF SQUARE HOUSE
CONNECTIONS TO WETHERBURN
STATION

ADDRESS TO METER	DATE	ELEVATION
1701 RT	1/1	477.23
2101 RT	1/1	478.96
2201 RT	1/1	478.30
2301 RT	1/1	478.96
2401 RT	1/1	478.96
2501 RT	1/1	478.96
2601 RT	1/1	478.96
2701 RT	1/1	478.96
2801 RT	1/1	478.96
2901 RT	1/1	478.96
3001 RT	1/1	478.96
3101 RT	1/1	478.96
3201 RT	1/1	478.96
3301 RT	1/1	478.96
3401 RT	1/1	478.96
3501 RT	1/1	478.96
3601 RT	1/1	478.96
3701 RT	1/1	478.96
3801 RT	1/1	478.96
3901 RT	1/1	478.96
4001 RT	1/1	478.96
4101 RT	1/1	478.96
4201 RT	1/1	478.96
4301 RT	1/1	478.96
4401 RT	1/1	478.96
4501 RT	1/1	478.96
4601 RT	1/1	478.96
4701 RT	1/1	478.96
4801 RT	1/1	478.96
4901 RT	1/1	478.96
5001 RT	1/1	478.96
5101 RT	1/1	478.96
5201 RT	1/1	478.96
5301 RT	1/1	478.96
5401 RT	1/1	478.96
5501 RT	1/1	478.96
5601 RT	1/1	478.96
5701 RT	1/1	478.96
5801 RT	1/1	478.96
5901 RT	1/1	478.96
6001 RT	1/1	478.96
6101 RT	1/1	478.96
6201 RT	1/1	478.96
6301 RT	1/1	478.96
6401 RT	1/1	478.96
6501 RT	1/1	478.96
6601 RT	1/1	478.96
6701 RT	1/1	478.96
6801 RT	1/1	478.96
6901 RT	1/1	478.96
7001 RT	1/1	478.96



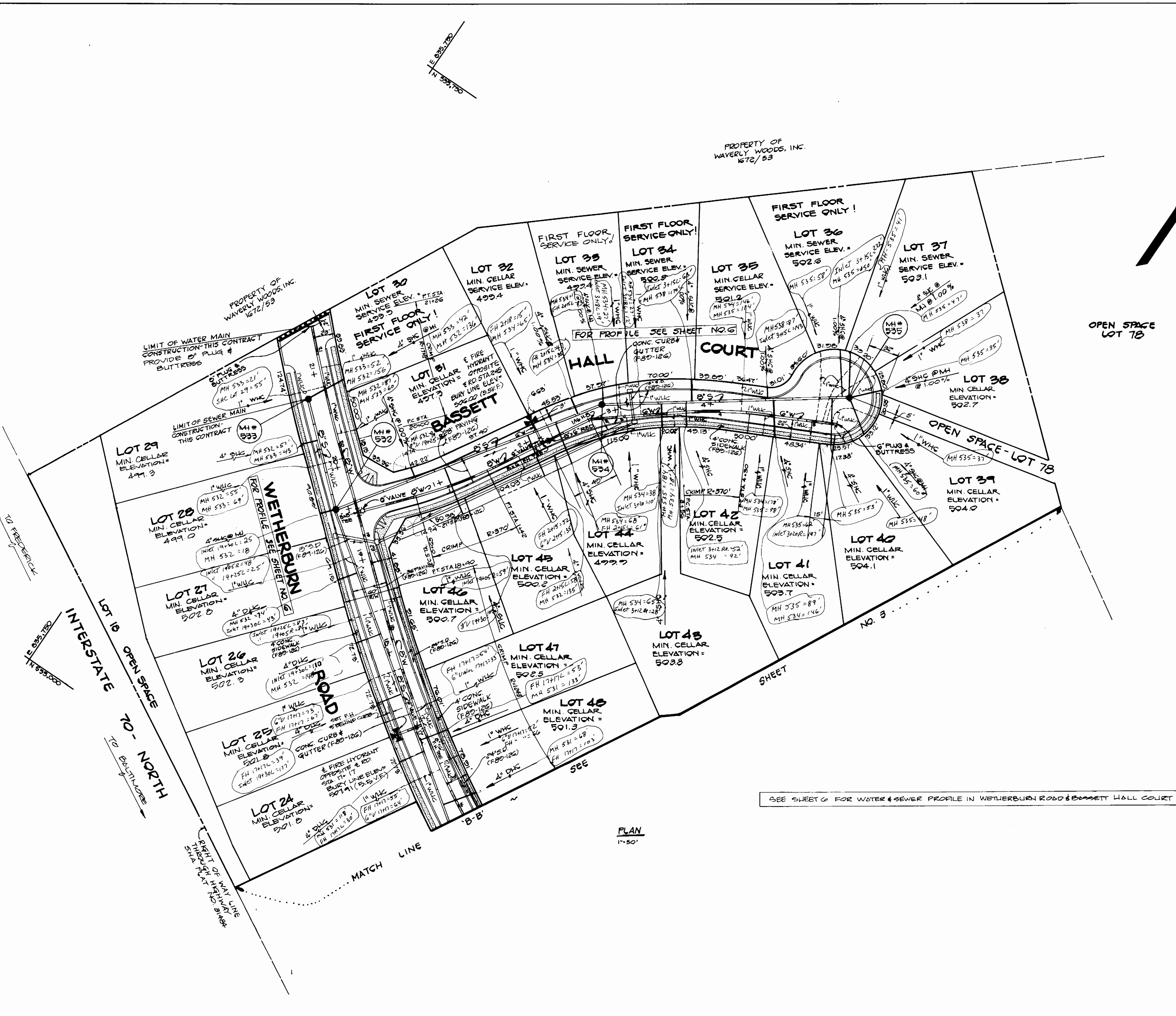
NOTE: CONNECT TO SEWER STUB; IF EXISTING; OTHERWISE PROVIDE 8" STOPPER.

- SEE SHEETS 9 & 6 FOR WATER & SEWER PROFILES IN WETHERBURN ROAD
- SEE SHEET 5 FOR WATER & SEWER PROFILES IN TARPLEY COURT
- SEE SHEET 5 FOR PROFILE OF OUTFALL SEWER MAIN; EX. M# 521 TO M# 523

ADDRESS	MIN. CELLAR ELEVATION	DATE	CONTRACT
M# 521	477.7	4/27/89	24-1869-D
M# 522	477.7	4/27/89	24-1869-D
M# 523	477.7	4/27/89	24-1869-D
M# 524	477.7	4/27/89	24-1869-D
M# 525	477.7	4/27/89	24-1869-D
M# 526	477.7	4/27/89	24-1869-D
M# 527	477.7	4/27/89	24-1869-D
M# 528	477.7	4/27/89	24-1869-D
M# 529	477.7	4/27/89	24-1869-D
M# 530	477.7	4/27/89	24-1869-D
M# 531	477.7	4/27/89	24-1869-D
M# 532	477.7	4/27/89	24-1869-D
M# 533	477.7	4/27/89	24-1869-D
M# 534	477.7	4/27/89	24-1869-D
M# 535	477.7	4/27/89	24-1869-D
M# 536	477.7	4/27/89	24-1869-D
M# 537	477.7	4/27/89	24-1869-D
M# 538	477.7	4/27/89	24-1869-D
M# 539	477.7	4/27/89	24-1869-D
M# 540	477.7	4/27/89	24-1869-D
M# 541	477.7	4/27/89	24-1869-D
M# 542	477.7	4/27/89	24-1869-D
M# 543	477.7	4/27/89	24-1869-D
M# 544	477.7	4/27/89	24-1869-D
M# 545	477.7	4/27/89	24-1869-D
M# 546	477.7	4/27/89	24-1869-D
M# 547	477.7	4/27/89	24-1869-D
M# 548	477.7	4/27/89	24-1869-D
M# 549	477.7	4/27/89	24-1869-D
M# 550	477.7	4/27/89	24-1869-D

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 4/27/89 DIRECTOR OF PUBLIC WORKS DATE</p> <p><i>[Signature]</i> 4-25-89 CHIEF, BUREAU OF UTILITIES DATE</p>	<p>FISHER, COLLINS, AND CARTER, INC. #9757 CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043</p> <p><i>[Signature]</i> TERRELL A. FISHER</p>	<p>DES: G.W.</p> <p>DRN: G.W.</p> <p>CHK: T.A.F.</p> <p>DATE: 1/30/89</p>	<p>PLAN</p> <p>WATER AND SEWER MAINS</p> <p>DATE 600' SCALE MAP NO. 17 BLOCK NO. 7</p>	<p>WETHERBURN LOTS 1-78 CONTRACT NO. 24-1869-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN</p> <p>SHEET 3 OF 6</p>
---	--	---	--	--	---

STATION	PI	TO	FROM	ELEVATION
0+00.00	1	0	100%	403.25
1+00.00	46	0	100%	404.75
2+00.00	44	0	100%	405.25
3+00.00	22	0	100%	404.23
4+00.00	22	0	100%	403.23
5+00.00	22	0	100%	402.23
6+00.00	22	0	100%	401.23
7+00.00	22	0	100%	400.23
8+00.00	22	0	100%	399.23
9+00.00	22	0	100%	398.23
10+00.00	22	0	100%	397.23
11+00.00	22	0	100%	396.23
12+00.00	22	0	100%	395.23
13+00.00	22	0	100%	394.23
14+00.00	22	0	100%	393.23
15+00.00	22	0	100%	392.23
16+00.00	22	0	100%	391.23
17+00.00	22	0	100%	390.23
18+00.00	22	0	100%	389.23
19+00.00	22	0	100%	388.23
20+00.00	22	0	100%	387.23



SEE SHEET 6 FOR WATER & SEWER PROFILE IN WETHERBURN ROAD & BASSETT HALL COURT

MANHOLE	MIN. CELLAR	MIN. CELLAR	MIN. CELLAR	MIN. CELLAR
MH 535	502.0	502.5	503.0	503.5
MH 536	503.0	503.5	504.0	504.5
MH 537	504.0	504.5	505.0	505.5
MH 538	505.0	505.5	506.0	506.5
MH 539	506.0	506.5	507.0	507.5

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John O'Hara
DIRECTOR OF PUBLIC WORKS
DATE: 4/20/89

Ruth Sawyer
CHIEF, BUREAU OF UTILITIES
DATE: 4/25/89

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043

Terrella A. Fisher
DATE: 1/30/89

DES: G.W.	BY NO.	REVISION	DATE
DRN: G.W.			
CHK: T.A.F.			
DATE: 1/30/89			

PLAN
WATER AND SEWER MAINS

600' SCALE MAP NO. 17 BLOCK NO. 7

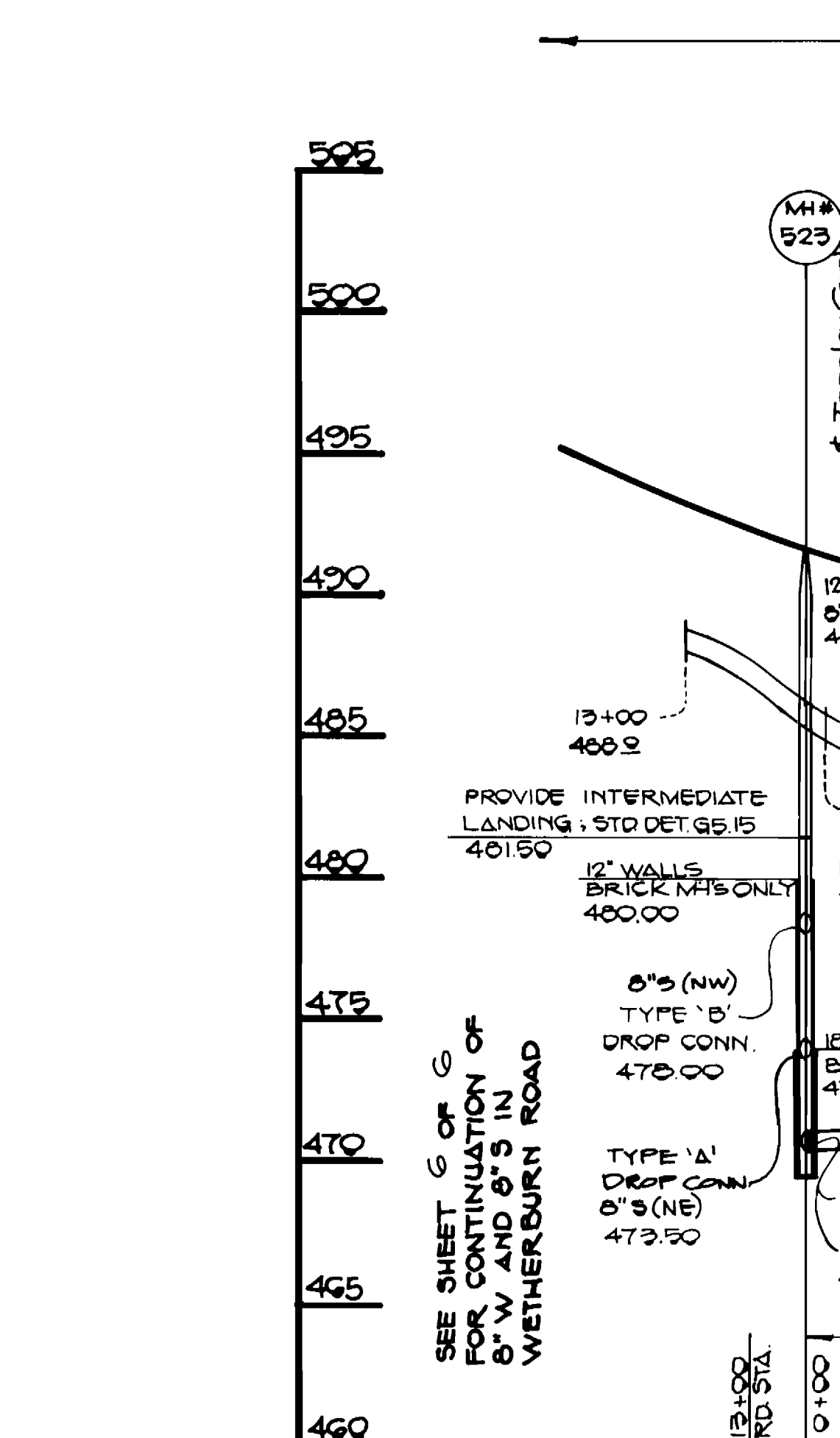
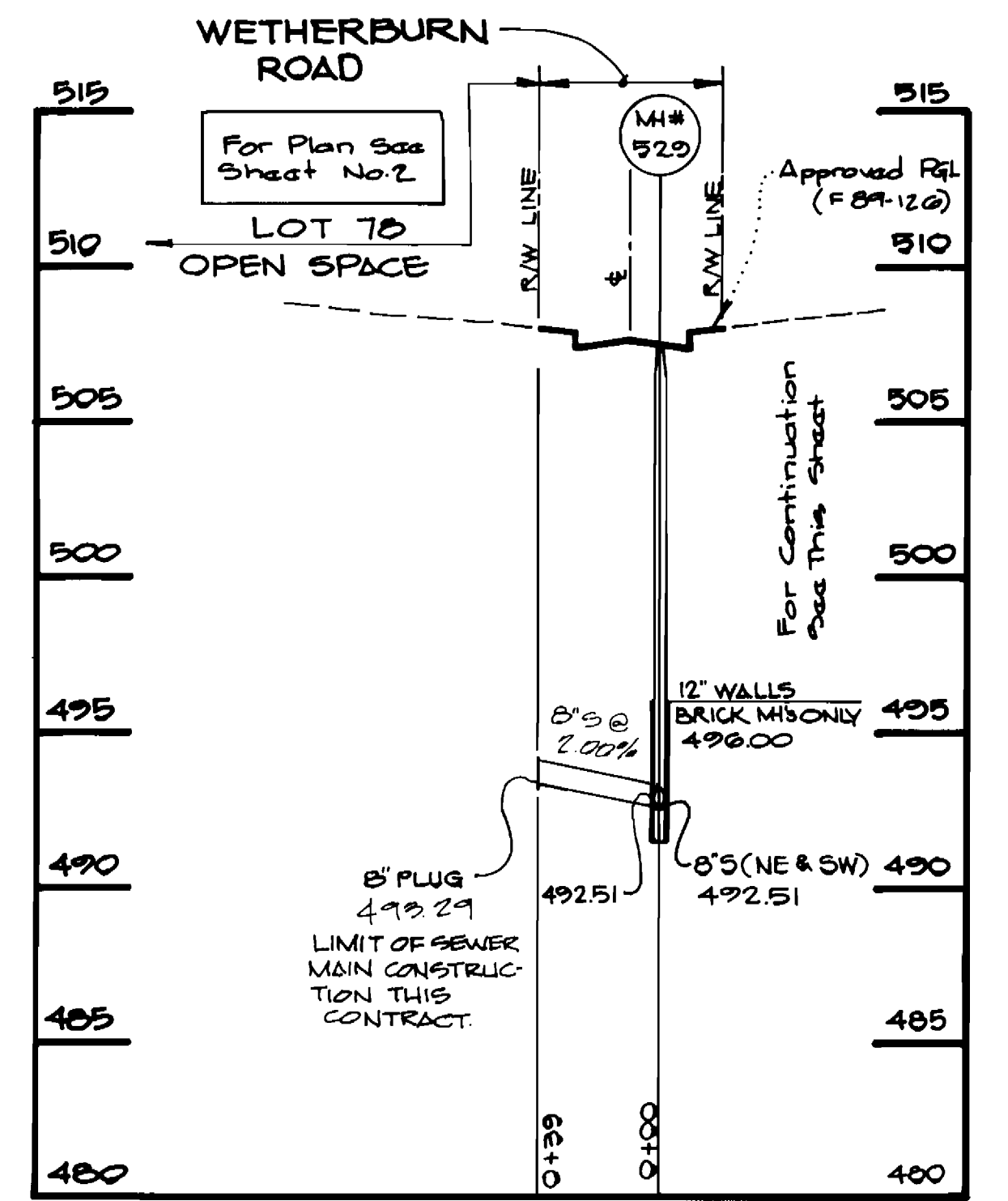
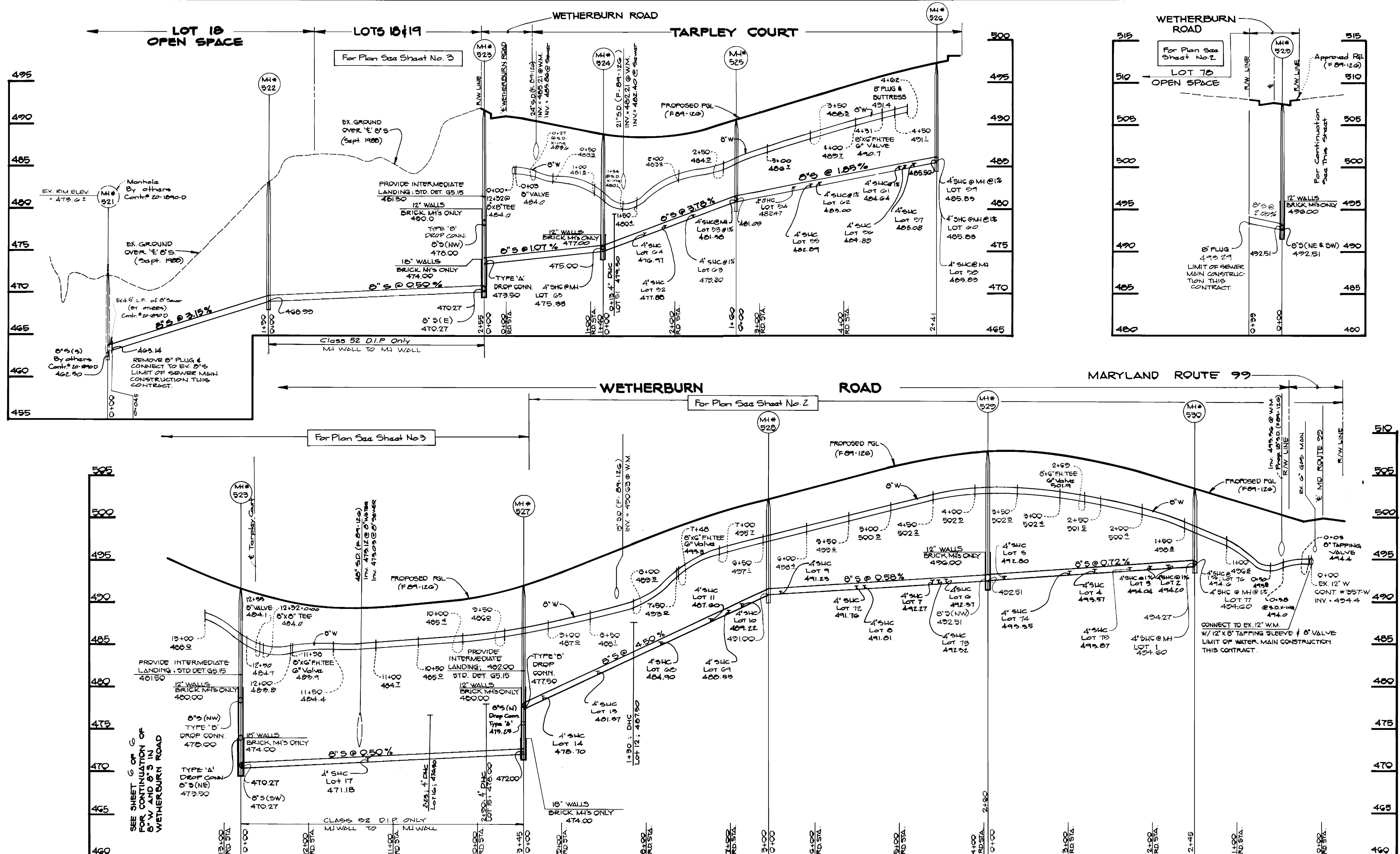
WETHERBURN
LOTS 1-78

CONTRACT NO. 24-1869-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 40F6

AS-BUILT 12/28/89



Profiles
 Hor.: 1" = 50'
 Ver.: 1" = 5'

CONTRACT NO. 24-1869-D
 WETHERBURN
 LOTS 1-7B
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *John O'Hara* 4/28/89
 Chief, Bureau of Engineering: *Richard E. Ryan* 4/27/89
 Chief, Bureau of Utilities: *Robert J. ...* 4-25-89
 Chief, Land Development Division: *...* 4/27/89

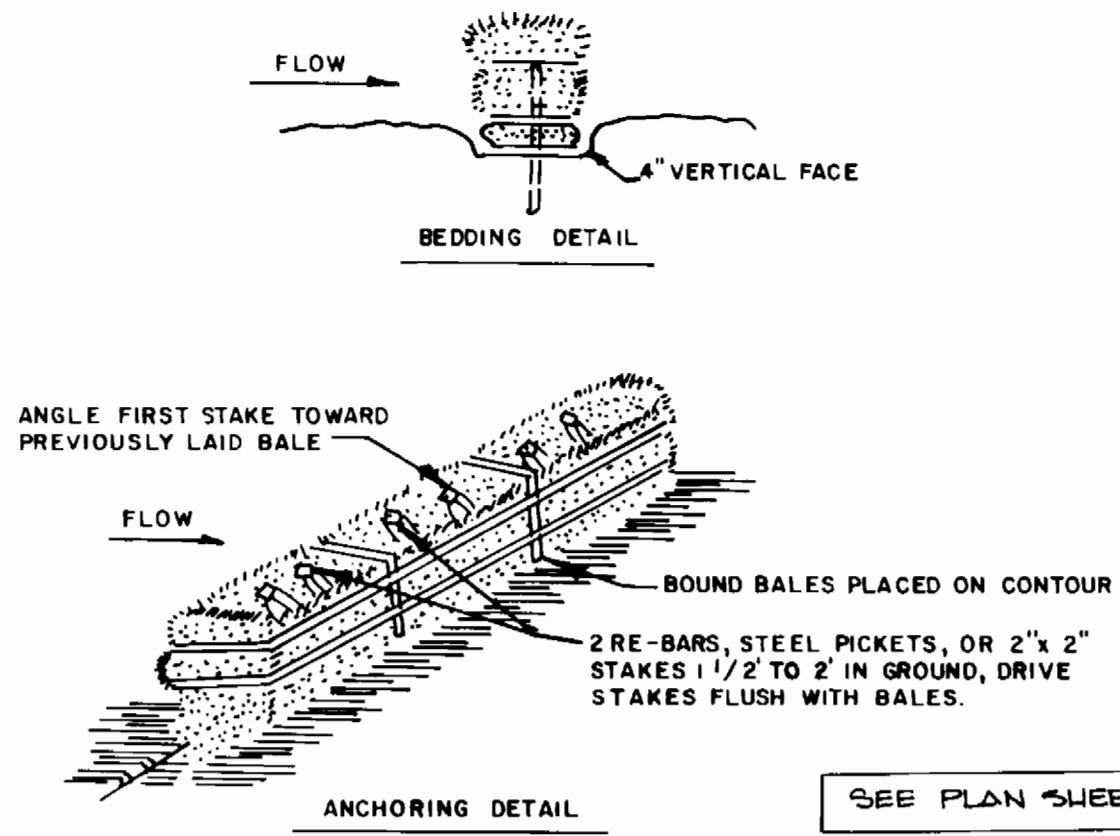
FISHER, COLLINS, AND CARTER, INC. #9757
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 Terrell A. Fisher

DES. G.W.	DRN. G.W.	CHK. T.D.P.	DATE: 3/28/89	BY NO.	REVISION	DATE

PROFILES	
WATER AND SEWER MAINS	
600' SCALE MAP NO. 17	BLOCK NO. 7

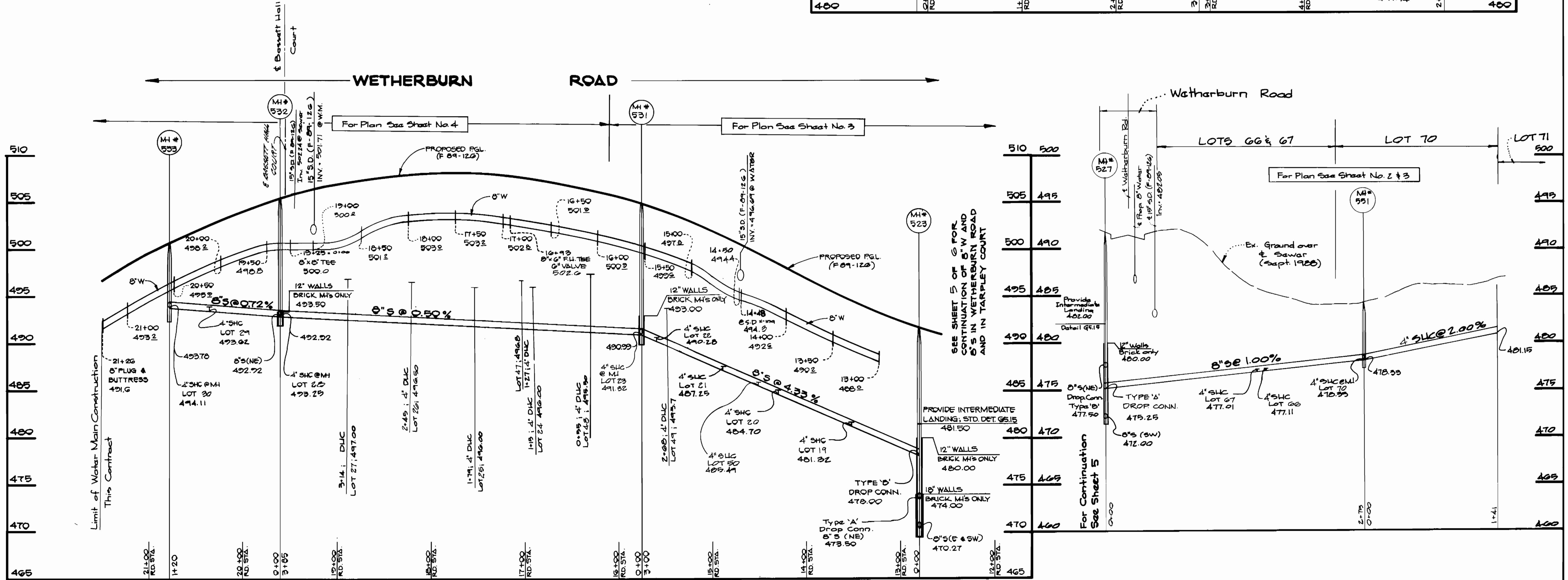
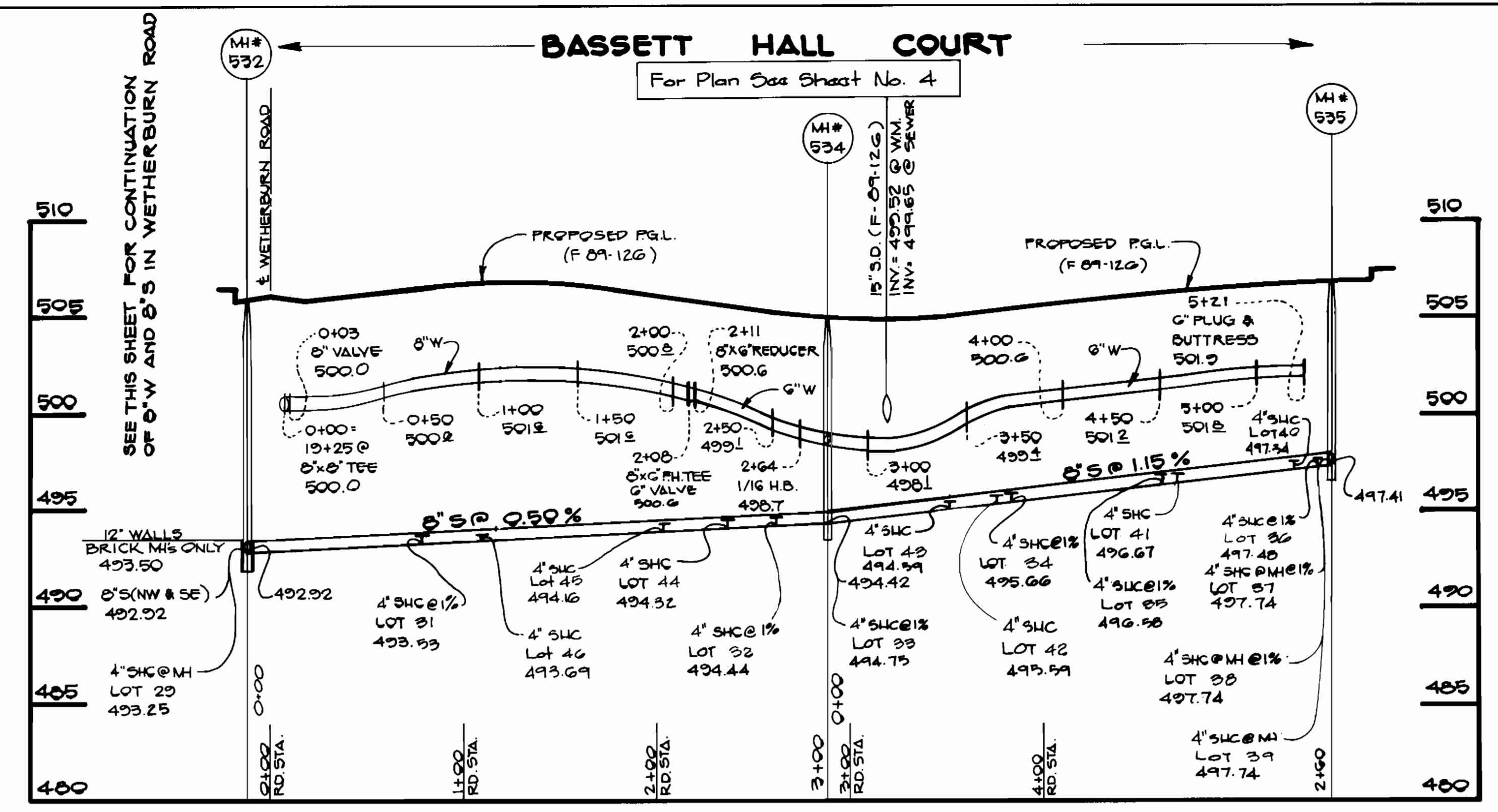
WETHERBURN
 LOTS 1-7B
 CONTRACT NO. 24-1869-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 5 OF 6



STRAW BALE DIKE

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



Profiles
 Hor.: 1"=50'
 Ver.: 1"=5'

CONTRACT NO. 24-1869-D
 WETHERBURN
 LOTS 1-78
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: John O'Hara
 Chief, Bureau of Engineering: [Signature]
 Chief, Bureau of Utilities: [Signature]

FISHER, COLLINS, AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 Chief, Land Development Division: [Signature]

DES: G.W.			
DRN: G.W.			
CHK: T.A.F.			
DATE: 1/30/09	BY: NO.	REVISION	DATE

PROFILES	
WATER AND SEWER MAINS	
600' SCALE MAP NO. 17	BLOCK NO. 7

WETHERBURN
 LOTS 1-78
 CONTRACT NO. 24-1869-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 6 OF 6