
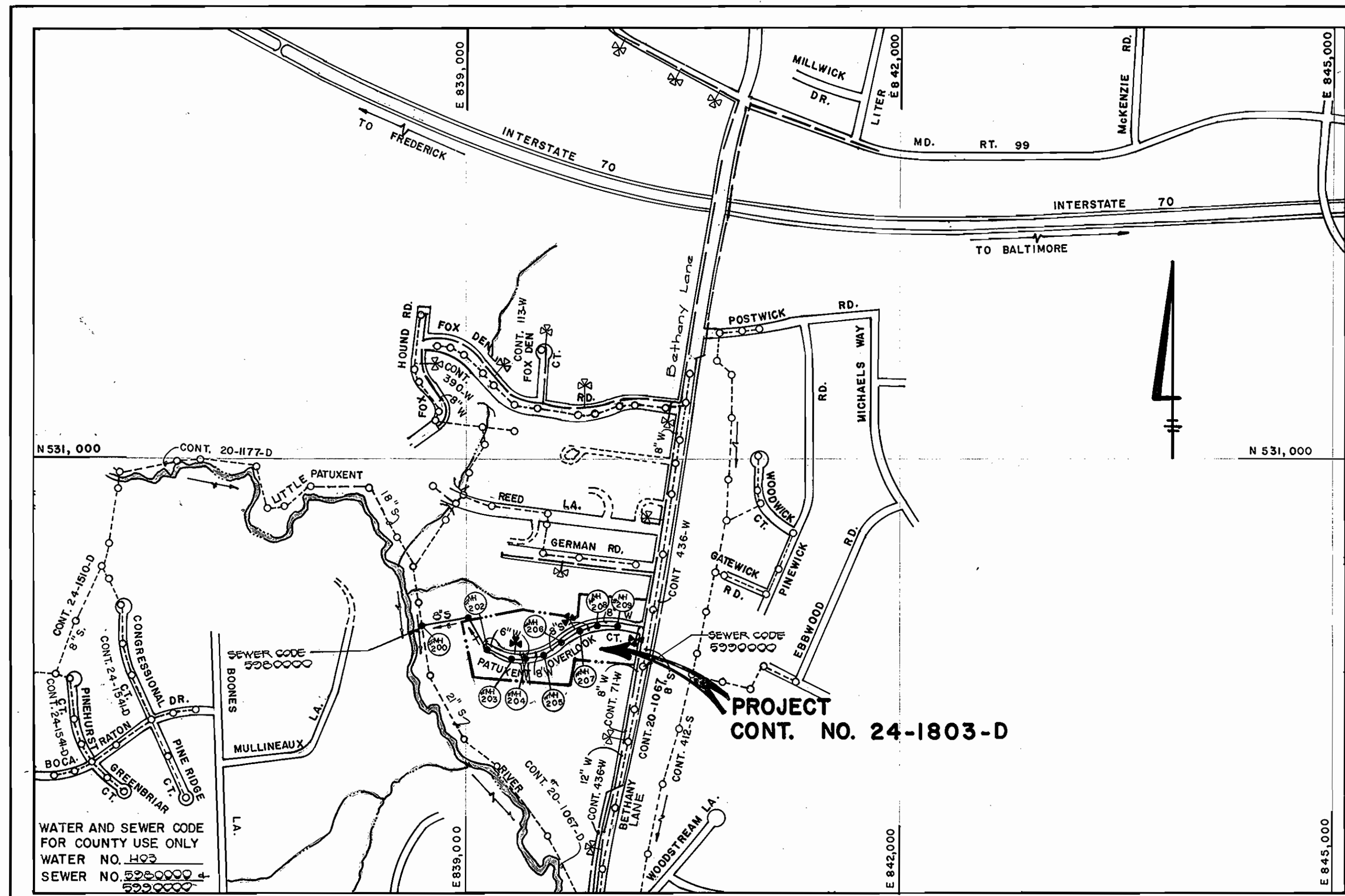


GENERAL NOTES

- 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 G5.52 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 G5.51.
- 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.

| QUANTITIES | | | |
|-------------------|-----------|----------|----------------|
| ITEM | ESTIMATED | AS-BUILT | SUPPLIER |
| 8" SEWER | 921 l.f. | 683 | HARRINGTON |
| 8" SEWER (D.I.P.) | 261 l.f. | 861 | GRIFFIN |
| 6" SEWER | 573 l.f. | 553 | HARRINGTON |
| MANHOLES | 10 EACH | 10 | ATLANTIC CONC. |
| 8" WATER | 1185 l.f. | 1081 | GRIFFIN |
| 6" WATER | 244 l.f. | 234 | GRIFFIN |
| 4" WATER | 20 l.f. | 28 | GRIFFIN |
| 1" WHC | 129 l.f. | 180 | HOWELL |
| 3/4" WHC | 402 l.f. | 420 | HOWELL |
| FIRE HYDRANTS | 3 EACH | 3 | MUELLER |
| BLOW-OFFS | 1 EACH | 1 | MUELLER |
| 8" VALVES | 1 EACH | 1 | MUELLER |
| 8"x8" T.S. & V. | 1 EACH | 1 | MUELLER |
| 4" VALVES | 1 EACH | 1 | MUELLER |
| 4"x3" REDUCERS | 1 EACH | 1 | GRIFFIN |
| 8"x6" REDUCERS | 1 EACH | 1 | GRIFFIN |

| AS-BUILT STAKE OUT SCHEDULE | | | |
|-----------------------------|--|--|--|
| LOT NO. | WATER HOUSE CONNECTION (WHC) | SEWER HOUSE CONNECTION (SHC) | |
| 1 | 88' TO 8" WV INTERSECT, 91' TO MH 209 | 68' TO MH 209, 69' TO 6" F.H.V | |
| 2 | 134' TO MH 208, 83' TO MH 209 | 71' TO MH 209, 146' TO MH 208 | |
| 3 | 131' TO MH 208, 87' TO MH 209 | 134' TO MH 209, 82' TO MH 208 | |
| 4 | 60' TO MH 208, 87' TO MH 207 | 118' TO MH 207, 35' TO MH 208 | |
| 5 | 64' TO MH 208, 84' TO MH 207 | 42' TO MH 207, TO MH 208 | |
| 7 | 87' TO MH 206, 79' TO MH 205 | 49' TO MH 206, 122' TO MH 205 | |
| 8 | 91' TO MH 206, 77' TO MH 205 | 141' TO MH 206, 28' TO MH 205 | |
| 9 | 175' TO 8" WV INTERSECT, 77' TO MH 203 | 62' TO MH 203, 32' TO 8" WV INTERSECT. | |
| 10 | 52' TO S.H.C. OF LOT 17, 74' TO MH 203 | 67' TO MH 202, 55' TO S.H.C. LOT 17 | |
| 11 | 53' TO MH 202, 60' TO 4" WV | 76' TO MH 202, 71' TO 4" WV | |
| 12 | 87' TO MH 202, 70' TO 4" WV | 203' TO MH 202, 54' TO MH 201 | |
| 13 | 77' TO BLOW-OFFS, 62.5' TO 4" WV | 42' TO MH 201, 213' TO MH 202 | |
| 14 | 75' TO BLOW-OFFS, 61' TO 4" WV | 43' TO 4" WV, 41' TO BLOW-OFFS | |
| 15 | 12' TO BLOW-OFFS, 30' TO 4" WV | 39' TO 4" WV, 35' TO BLOW-OFFS | |
| 16 | 45' TO MH 202, 55.5' TO S.H.C. LOT 10 | 40' TO 4" WV, 24' TO MH 202 | |
| 17 | 49' TO MH 202, 54' TO S.H.C. LOT 10 | 57' TO MH 203, 88' TO MH 202 | |
| 18 | 62' TO MH 204, 46' TO MH 203 | 30' TO MH 203, 80' TO MH 204 | |
| 19 | 81' TO MH 204, 49' TO MH 205 | 67' TO MH 205, 63' TO MH 204 | |
| 20 | 85' TO MH 204, 45' TO MH 205 | 28' TO MH 205, 136' TO MH 206 | |
| 21 | 50' TO MH 205, 112' TO MH 206 | 59' TO MH 205, 103' TO MH 206 | |
| 22 | NONE | 91' TO MH 209, 116' TO MH 208 | |



TYPE OF BUILDING: RESIDENTIAL
 NUMBER OF LOTS: 22 (21 BUILDABLE)
 NO. OF WATER HOUSE CONNECTIONS: 20
 NO. OF SEWER HOUSE CONNECTIONS: 20
 DRAINAGE AREA: LITTLE PATUXENT
 TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT VIA THE ROUTE 108 PUMPING STATION

VICINITY MAP
 SCALE: 1" = 600'

CONTRACT NO. 24-1803-D

PATUXENT VALLEY OVERLOOK

LOTS 1-22

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 88-269

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

Thomas M. Kelly 9-22-88
 U.S. SOIL CONSERVATION SERVICE DATE

PLAN REFERENCE NUMBERS:
 P88-53 F88-269

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

APPROVED:
Stephen L. Fahn 9/22/88
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. ... 10-25-88
 DIRECTOR OF PUBLIC WORKS DATE

William J. ... 10/25/88
 CHIEF, BUREAU OF ENGINEERING DATE

Robert ... 10-29-88
 CHIEF, BUREAU OF UTILITIES DATE

William ... 10/25/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS

8388 COURT AVENUE
 ELLKOTT CITY, MARYLAND 21043

TERRELL A. FISHER

DES: J.O.
 DRN: J.O.
 CHK: P.W.K.
 DATE: 6/3/88

MJM
 BY NO. REVISION

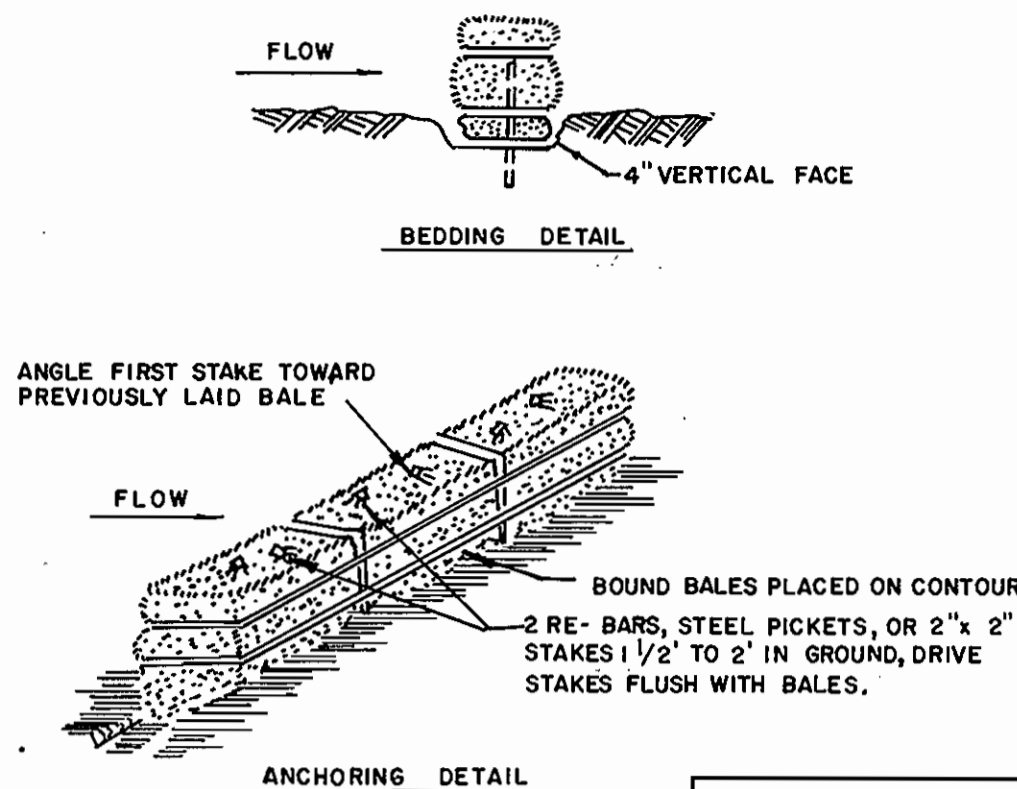
REVISION QUANTITIES: 8" & 6" S

TITLE SHEET

600' SCALE MAP NO. 17 BLOCK NO.

PATUXENT VALLEY OVERLOOK
 LOTS 1-22
 CONTRACT NO. 24-1803-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 3



STRAW BALE DIKE

- 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.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- 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.
- INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

**CONSTRUCTION REQUIREMENTS
PARK PROPERTY**

- NO PART OF THE PARK PROPERTY SHALL BE USED FOR STAGING AREAS BY THE CONTRACTOR.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL ERECT A FENCE ALONG THE ENTIRE LENGTH OF THE CONSTRUCTION STRIPS. FENCE POSTS SHALL BE 15' C/C MAXIMUM & THE FENCE SHALL HAVE A MIN. OF 2 STRANDS OF BARBED WIRE.
- SEE LANDSCAPING PLAN THIS SHEET FOR REPLANTING REQUIREMENTS.
- THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF RECREATION AND PARKS @ 222-2400 PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES ON THE PARK PROPERTY.

**SEWER HOUSE CONNECTIONS
INVERT ELEVATIONS AT PROPERTY LINE**

| STATION | LOT | ELEVATION |
|----------------------------|------------|-----------|
| MH*201 TO MH*202 | | |
| 0+41 RT. | 13(DHC) | 389.20 |
| 0+51 LT. | 12(DHC) | 396.70 |
| 1+93 LT. | 11 | 394.10 |
| 2+16 RT. | 14&15(DHC) | 400.00 |
| MH*202 RT. 16 (DHC) 401.44 | | |
| MH*202 TO MH*203 | | |
| 0+20 RT. | 18 | 400.40 |
| 0+57 LT. | 9(DHC00%) | 399.28 |
| MH*204 TO MH*205 | | |
| 0+60 RT. | 19(DHC) | 400.46 |
| MH*205 TO MH*206 | | |
| 0+17 LT. | 8(1%) | 395.97 |
| 0+23 RT. | 20 | 396.02 |
| 0+57 RT. | 21 | 396.23 |
| 1+17 LT. | 7(1%) | 396.77 |
| MH*207 TO MH*208 | | |
| 0+30 LT. | 5 | 399.38 |
| 1+14 LT. | 4 | 403.91 |
| MH*208 TO MH*209 | | |
| 0+77 LT. | 3 | 407.04 |
| @MH.209 LT. | 1 | 410.99 |
| 1+48 LT. | 2 | 408.72 |

PLANT LIST #

| QUANTITY | SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE |
|----------|--------|-----------------------|------------------|-----------------------|
| 4 | ⊖AMC | AMELANCIER CANADENSIS | SERVICEBERRY | 5'-6" HT. 2" CAL. |
| 2 | ⊖PA | PLATANUS ACERIFOLIA | SYCAMORE | 8'-10" HT. 2" CAL. |
| 2 | ⊖QR | QUERCUS RUBRA | RED OAK | 8'-10" HT. 2" CAL. |
| 2 | ⊖TSC | TSUGA CANADIAN | CANADIAN HEMLOCK | 5'-6" HT. 1 1/2" CAL. |
| 2 | ⊖PA | POPULUS ALBA | WHITE POPLAR | 8'-10" HT. 2" CAL. |

NOTES: 1. SEE NOTES ON THIS SHEET FOR CONSTRUCTION REQUIREMENTS ON PARK PROPERTY.
2. THERE WILL BE NO SEPARATE MEASUREMENT OR PAYMENT FOR THE LANDSCAPING REQUIREMENTS COST. SHALL BE INCLUDED IN THE PRICE BID FOR THE SEWER MAINS.
* SEE LANDSCAPING PLAN THIS SHEET

MANHOLE TABULATION

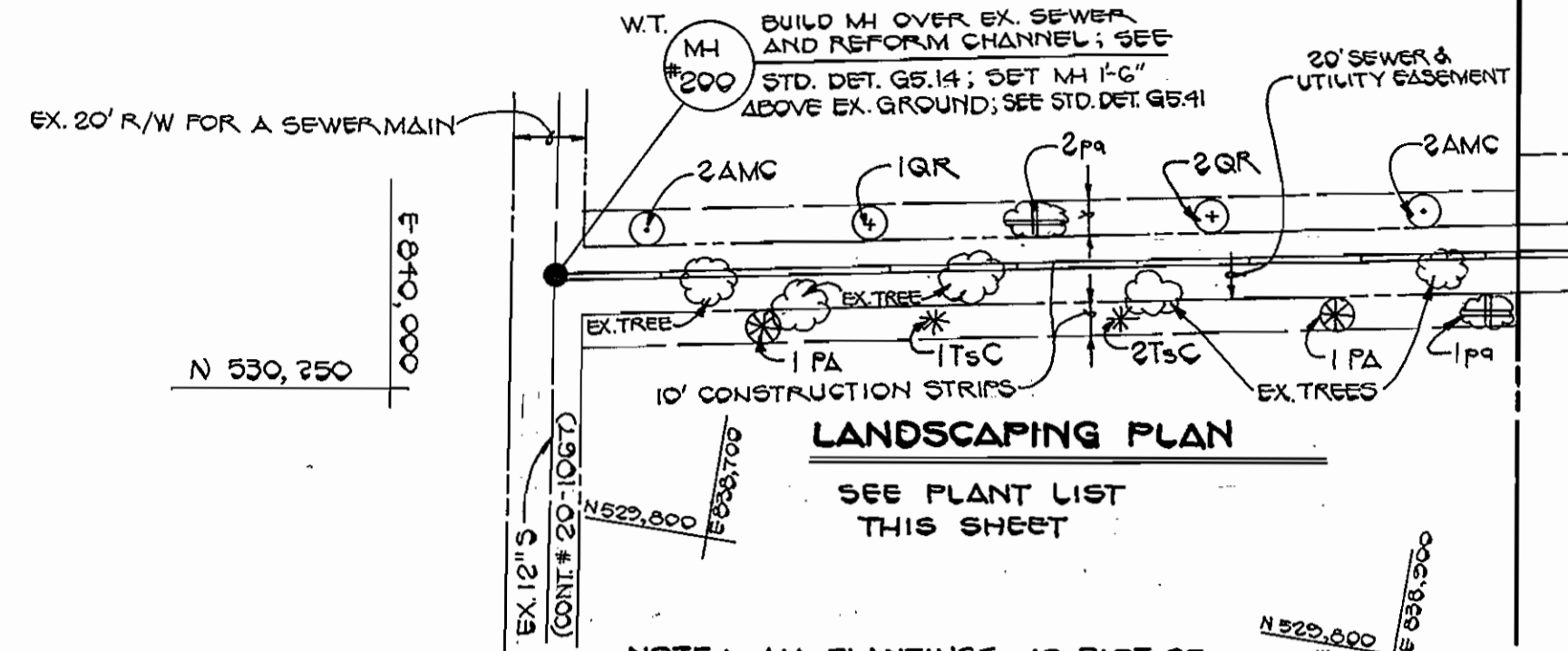
| NO. | RD. STA. | DISTANCE | RIM ELEV. | SLOPE |
|---|------------|----------|-----------|--------|
| 200 | | | | |
| 201 | | | | |
| } SET RIM 1'-6" ABOVE EX. GROUND; G.S. 41 | | | | |
| 202 | CUL-DE-SAC | | 411.22 | |
| 203 | 10+43 | 10' LEFT | 411.64 | +2.00% |
| 204 | 9+17 | 3' LEFT | 409.13 | +3.00% |
| 205 | 8+28 | 10' LEFT | 405.35 | +3.00% |
| 206 | 6+74 | 7' LEFT | 403.73 | +0.30% |
| 207 | 5+24 | 5' LEFT | 407.96 | -5.40% |
| 208 | 3+89 | 8' LEFT | 415.28 | -3.40% |
| 209 | 1+83 | 4' LEFT | 420.28 | -2.87% |

BENCH MARKS

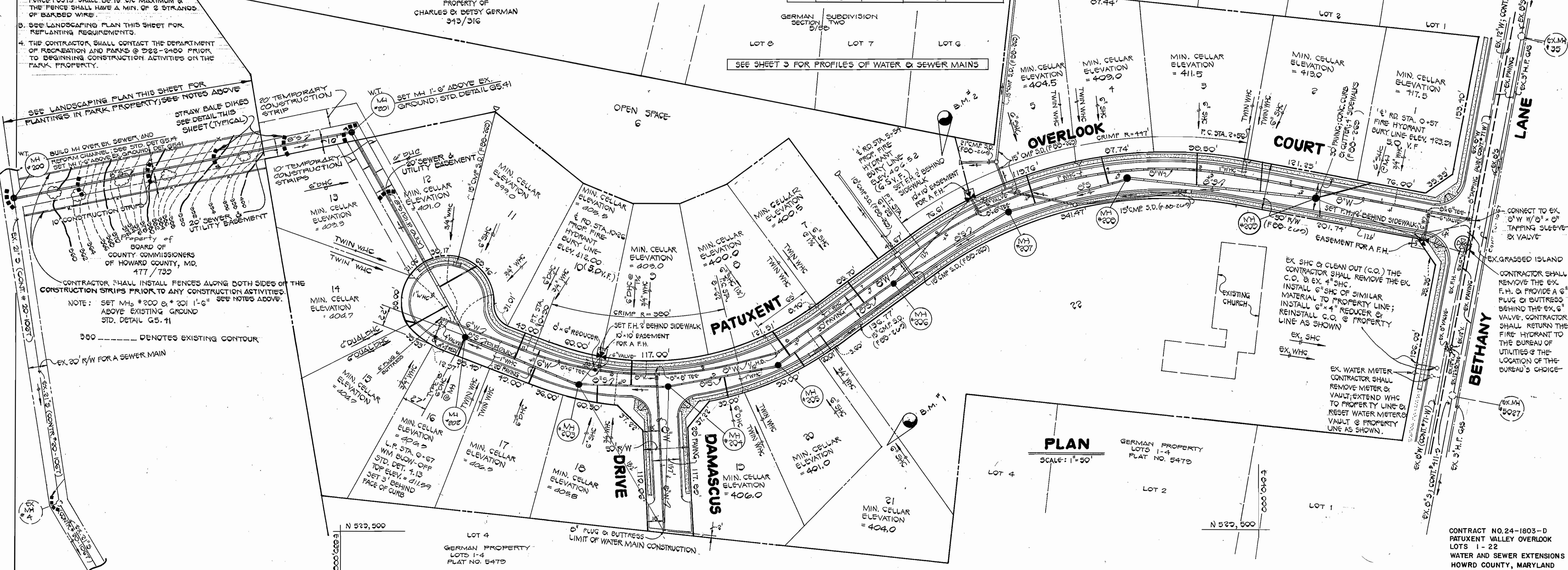
B.M. #1
TRAVERSE STA. "102" REBAR SET, LOCATED APPROXIMATELY 150' ± SOUTHEAST OF STA. 7+82, INTO LOT 21.
ELEV = 427.29

B.M. #2
TRAVERSE STA. "20" REBAR SET, LOCATED APPROXIMATELY 17' OFF OF THE REAR LOT LINE INTERSECTION OF LOT 5 AND OPEN SPACE LOT 6.
ELEV = 399.87

PROPERTY OF BOARD OF COUNTY COMMISSIONERS OF HOWARD COUNTY, MD. 477/730



NOTE: ALL PLANTINGS AS PART OF THIS LANDSCAPING PLAN SHALL BE INSTALLED IMMEDIATELY OUTSIDE OF THE 20' SEWER & UTILITY EASEMENT; WITHIN THE 10' CONSTRUCTION STRIPS AS INDICATED.



PLAN
SCALE: 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. [Signature] 10/25/88
DIRECTOR OF PUBLIC WORKS DATE

Rheta [Signature] 10/29/88
CHIEF, BUREAU OF UTILITIES DATE

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

TERRELL A. FISHER DATE

DES: J.O.
DRN: J.O.
CHK: P.W.K.
DATE: 6/3/88

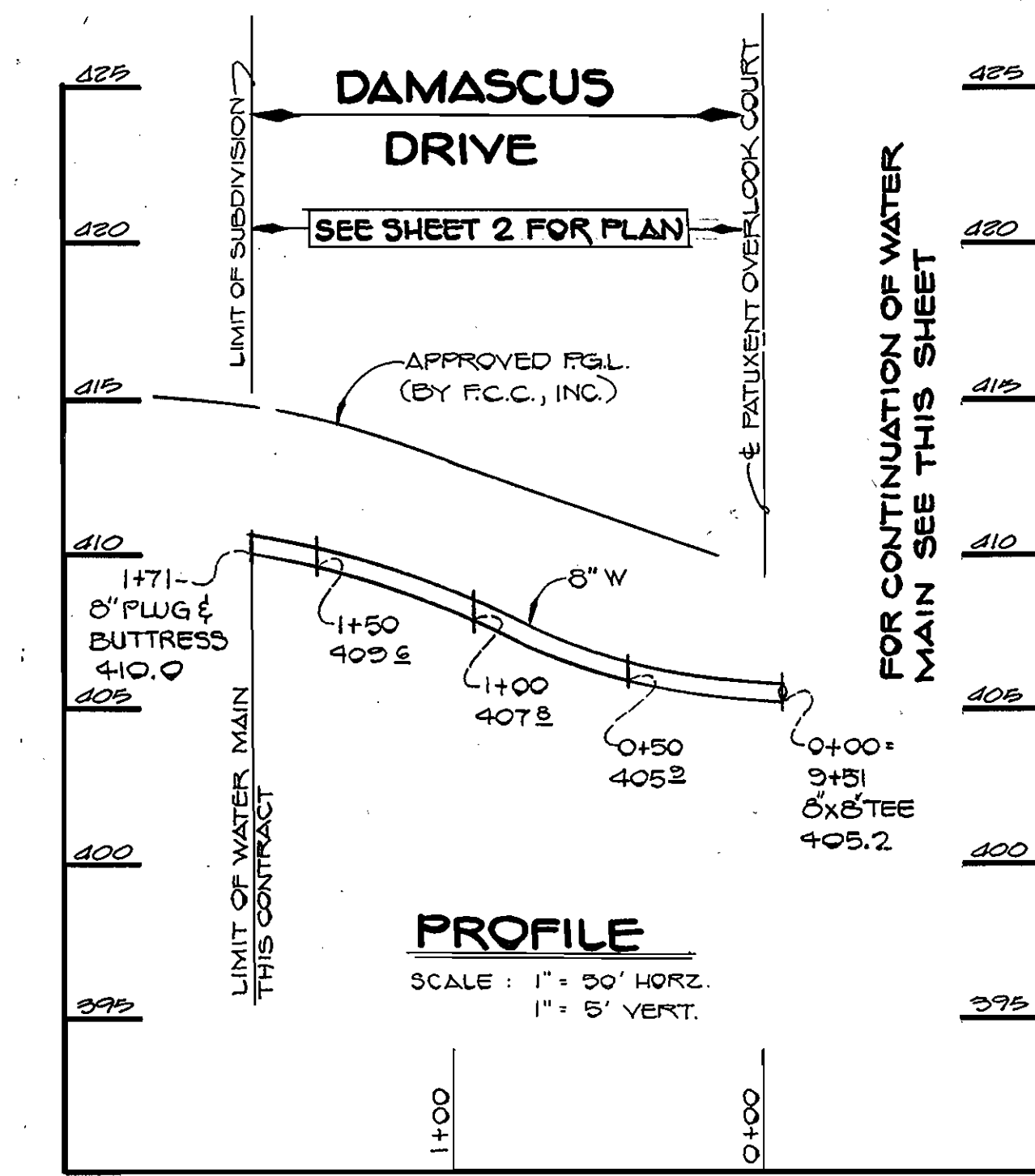
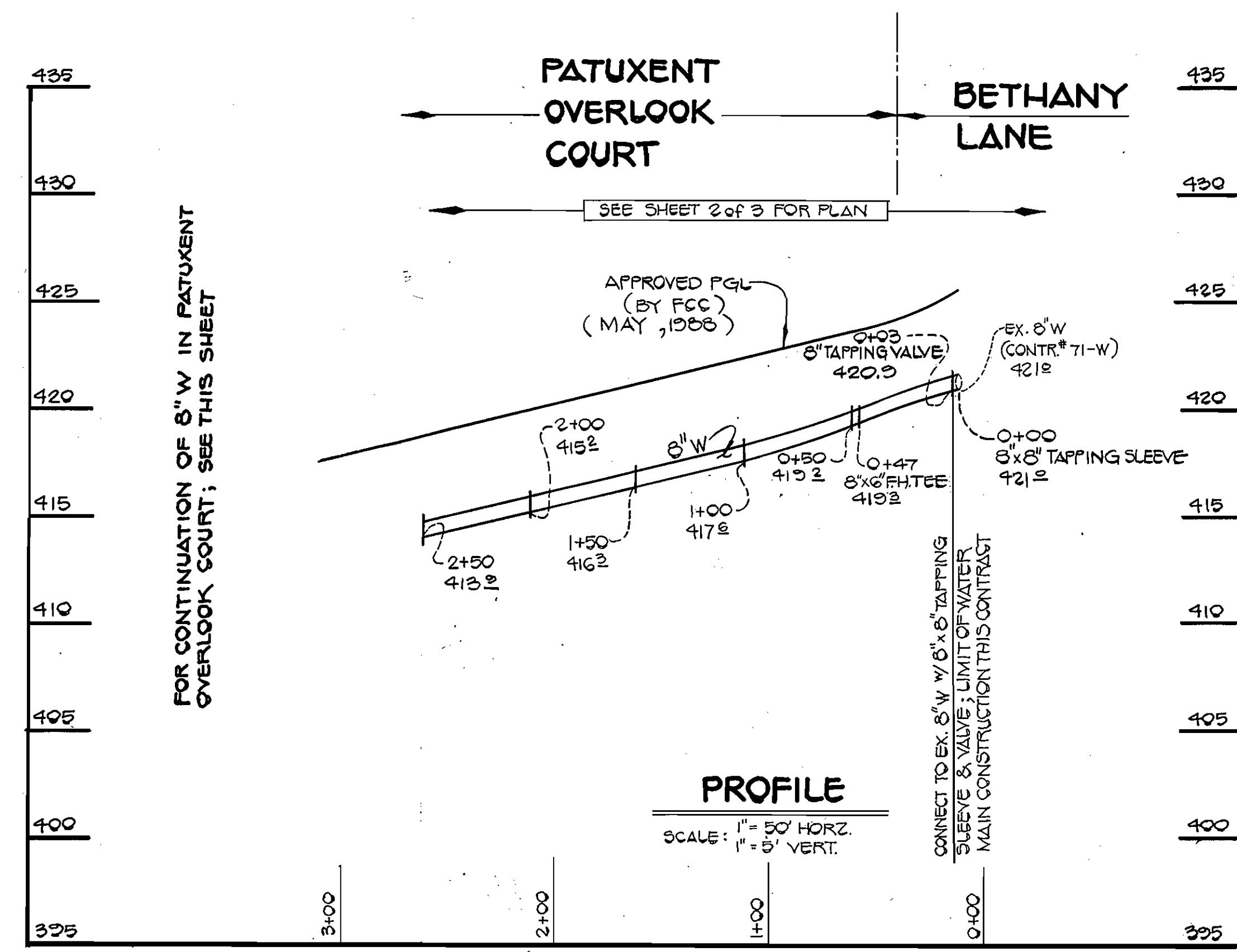
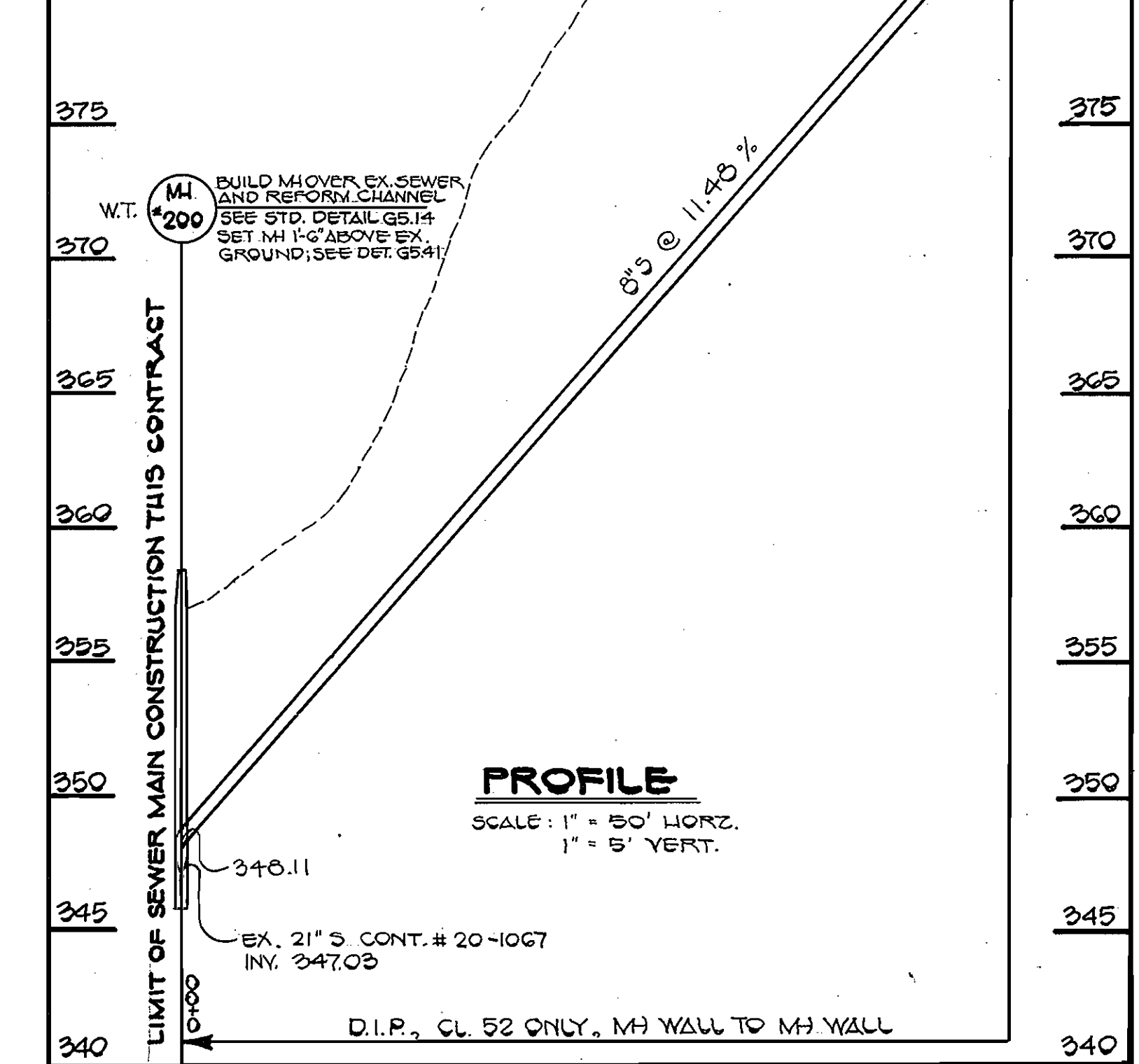
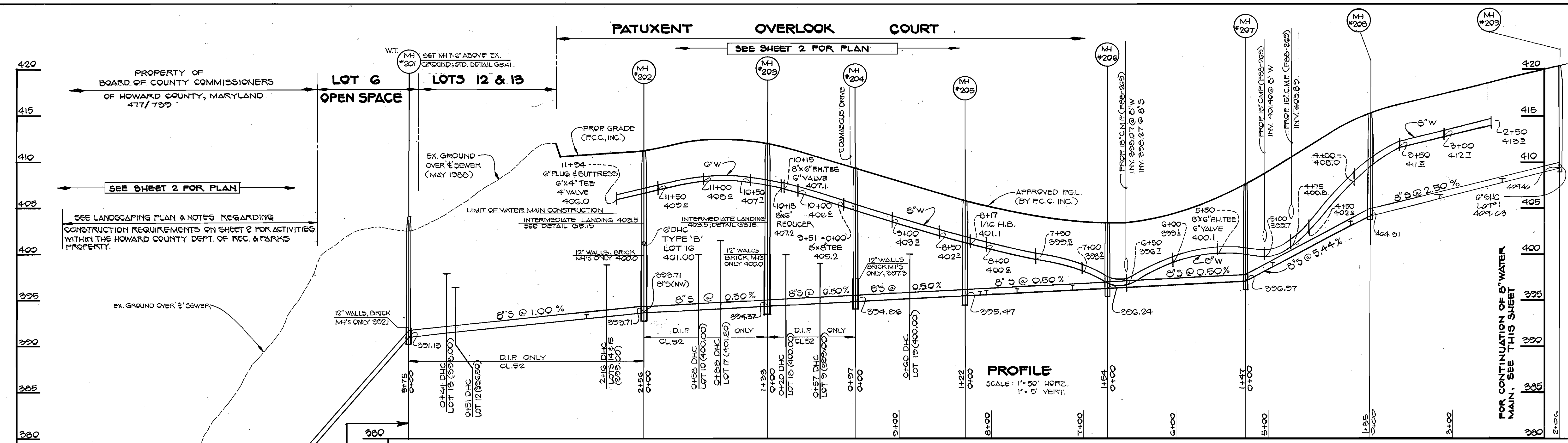
MJM Δ REVISE NO 208 TO 209
BY NO. REVISION

PROFILES
WATER AND SEWER MAINS

600' SCALE MAP NO. 17 BLOCK NO.

PATUXENT VALLEY OVERLOOK
LOTS 1-22
CONTRACT NO. 24-1803-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 3



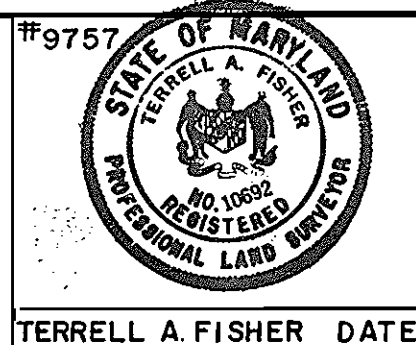
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. ...
DIRECTOR OF PUBLIC WORKS
DATE: 10/25/88

John ...
CHIEF, BUREAU OF ENGINEERING
DATE: 10-25-88

John ...
CHIEF, LAND DEVELOPMENT DIVISION
DATE: 10/25/88

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



| | | | |
|-----------|-----|----------|--------------------------|
| DES: | | | |
| DRN: | | | |
| CHK: | | | |
| DATE: | MJM | 10-25-88 | Reverse MD 200 to MD 201 |
| BY: | NO. | | |
| REVISION: | | | |

PROFILES
WATER AND SEWER MAINS

DATE: 600 SCALE MAP NO. BLOCK NO.

PATUXENT VALLEY OVERLOOK
LOTS 1-22
CONTRACT NO. 24-1803-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 3