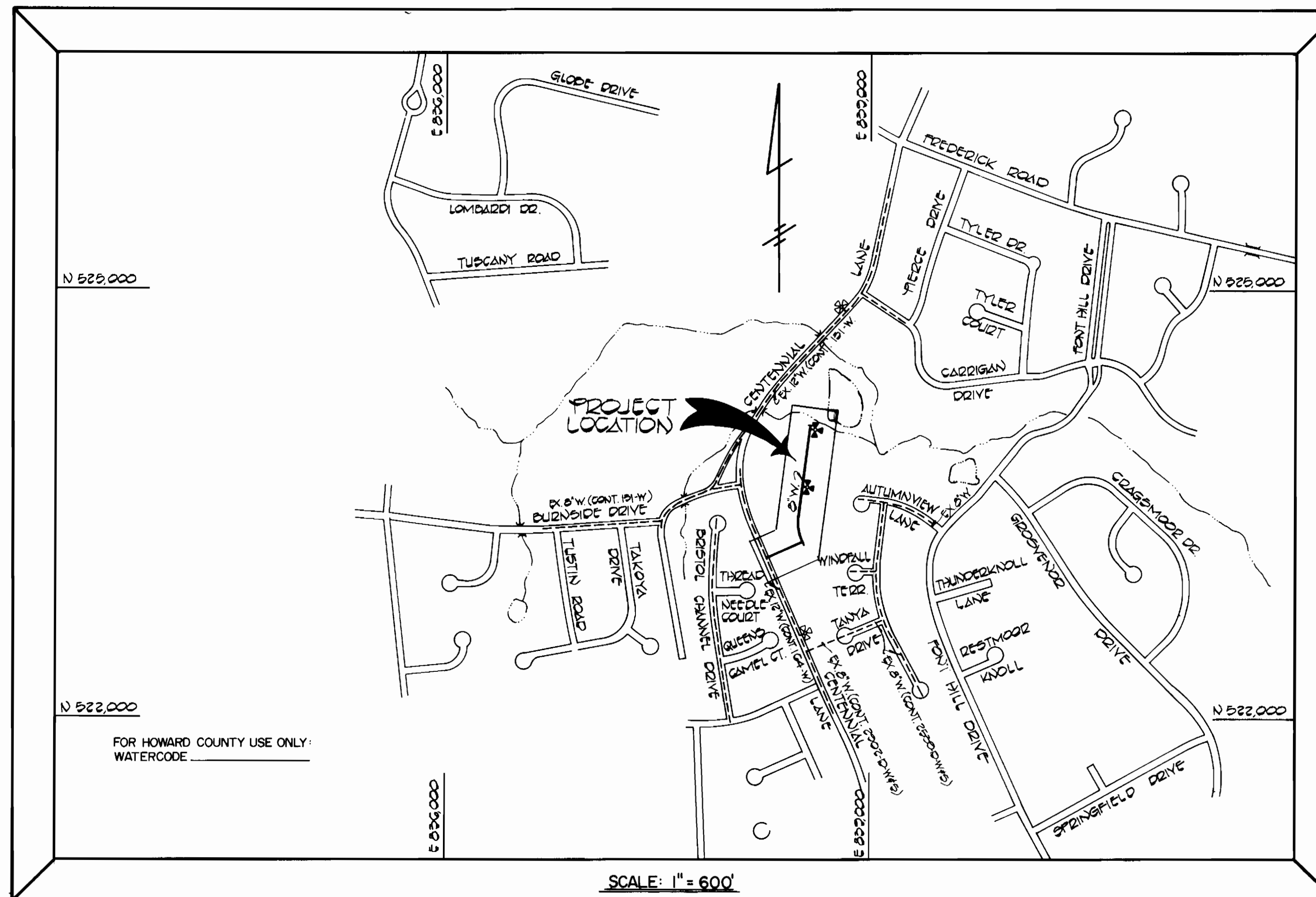


| QUANTITIES | | | |
|-------------------|--------|----------|---------------|
| ITEM | EST'D | AS-BUILT | SUPPLIED |
| 8" WATER | 207 LF | 995 LF | ATLANTIC PIPE |
| 6" WATER | 18 LF | 215 LF | ATLANTIC PIPE |
| FIRE HYD | 2 EA | 2 EA | A&P SUPPLIES |
| 3/4" WHC | 125 LF | 102 LF | A&P SUPPLIES |
| AIR RELEASE VALVE | 1 EA | 1 EA | A&P SUPPLIES |
| 6" FH VALVES | 2 EA | 2 EA | A&P SUPPLIES |
| 12" S T S F | 1 EA | 1 EA | A&P SUPPLIES |
| 3" VALVES | 3 EA | 3 EA | A&P SUPPLIES |



TYPE OF BUILDINGS: RESIDENTIAL
 NUMBER OF PARCELS: 8
 NUMBER OF WATER HOUSE CONN.: 8
 DRAINAGE AREA: LITTLE PATUXENT

- 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'. CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
 - FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
 - CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
 - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 BALTIMORE GAS AND ELECTRIC CO. - UNDERGROUND ELECTRIC DISTRIBUTION, CUSTOMER SERVICE - (685-0123)
 BALTIMORE GAS AND ELECTRIC CO. - UNDERGROUND GAS DISTRIBUTION, CUSTOMER SERVICE - (685-0123)
 ENGINEERING "DAMAGE CONTROL" - (234-5621)
 "MISS UTILITY" - (1-559-0000)
 CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - (725-9976)
 BUREAU OF UTILITIES, HOWARD COUNTY - (992-2366)
 - TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES 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 AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
 - PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
 - ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - BLOCK ALL FITTINGS WITH CONCRETE BUTTRESSES.
 - BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE 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 TO BE COMPACTED IN ACCORDANCE WITH SECTION 3701 AND 3705 OF THE STANDARD SPECIFICATIONS.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
 - WATER MAIN 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.
 - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.

CONTRACT NO. 44-1068
CAPITAL PROJECT W-8130
CENTENNIAL LANE
WATER MAIN EXTENSION
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS



TERRELL A. FISHER 9757 DATE 4/1/83

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

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

APPROVED: *[Signature]* DATE 3/28-83
 HOWARD SOIL CONSERVATION DISTRICT

[Signature] DATE 3/28-83
 U.S. SOIL CONSERVATION SERVICE

CONTRACT NO. 44-1068
 CAPITAL PROJECT W-8130
 CENTENNIAL LANE
 WATER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY MARYLAND
 DIRECTOR OF PUBLIC WORKS DATE 3-29-83
 CHIEF, BUREAU OF UTILITIES
 CHIEF, BUREAU OF ENGINEERING DATE 3/28/83
 CHIEF, UTILITY DIVISION

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

CONTRACT NO. 44-1068
 CAPITAL PROJECT W-8130

VICINITY MAP

CENTENNIAL LANE
 WATER MAIN EXTENSION
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT 2

DRAWING NO. 1 OF 3

SCALE AS SHOWN

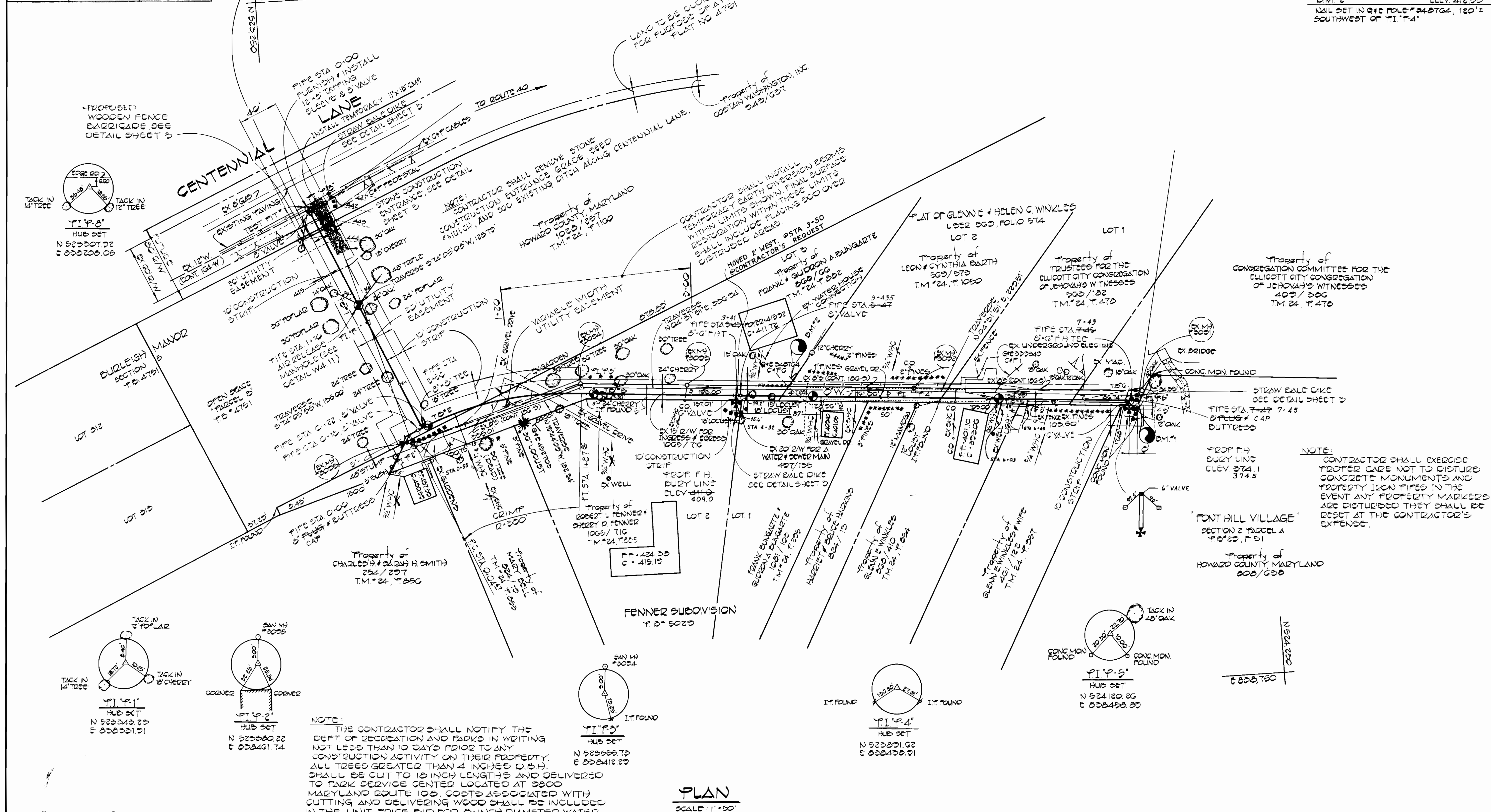
DES. D.B.S.
 DRN. D.B.B.
 CHK. T.A.F.

| STAKEOUT DATA | | |
|-------------------|------------|------------|
| ITEM | NORTH | EAST |
| 12x8 T.S. F.V. | 523,292.95 | 838,213.19 |
| AIR RELEASE MH | 523,307.10 | 838,313.24 |
| 8"x 8" TEE | 523,303.30 | 838,442.17 |
| PC STA 0+04.47 | 523,370.89 | 838,447.96 |
| P.T. STA. 1+87.86 | 523,550.15 | 838,418.78 |
| 8"x 6" F.H. TEE | 523,711.52 | 838,431.07 |
| 8"x 6" F.H. TEE | 524,111.26 | 838,463.10 |

NOTE:
THE CONTRACTOR SHALL FURNISH ALL MATERIALS FOR AND INSTALL 42 LINEAR FEET OF WOODEN FENCE BARRIAGE COMPLETE IN ACCORDANCE WITH DETAIL SHOWN ON SHEET 2 OF 2. THERE WILL BE NO SEPARATE MEASUREMENT OR PAYMENT FOR THIS ITEM OF WORK. ALL COST ASSOCIATED WITH THIS ITEM OF WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR 8-INCH DIAMETER WATER MAIN.

BENCH MARKS

| | |
|---|--------------|
| B.M.#1 | ELEV. 374.24 |
| CONCRETE MONUMENT FOUND, 10' EAST OF T.I. 'P-5' | |
| B.M.#2 | ELEV. 412.53 |
| NAIL SET IN G.I.E. POLE # 24-0704, 120' SOUTHWEST OF T.I. 'P-4' | |



NOTE:
THE CONTRACTOR SHALL NOTIFY THE DEPT. OF RECREATION AND PARKS IN WRITING NOT LESS THAN 10 DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY ON THEIR PROPERTY. ALL TREES GREATER THAN 4 INCHES D.B.H. SHALL BE CUT TO 12 INCH LENGTHS AND DELIVERED TO PARK SERVICE CENTER LOCATED AT 3800 MARYLAND ROUTE 108. COSTS ASSOCIATED WITH CUTTING AND DELIVERING WOOD SHALL BE INCLUDED IN THE UNIT PRICE BID FOR 8-INCH DIAMETER WATER MAIN.

NOTE:
CONTRACTOR SHALL EXERCISE PROPER CARE NOT TO DISTURB CONCRETE MONUMENTS AND PROPERTY IRON TIES IN THE EVENT ANY PROPERTY MARKERS ARE DISTURBED THEY SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.

Terrell A. Fisher
TERRELL A. FISHER 9757 DATE 3/5/82

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
F. Nemy 3/31/85
DIRECTOR OF PUBLIC WORKS DATE
R. M. B... 3-29-83
CHIEF, BUREAU OF UTILITIES DATE

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

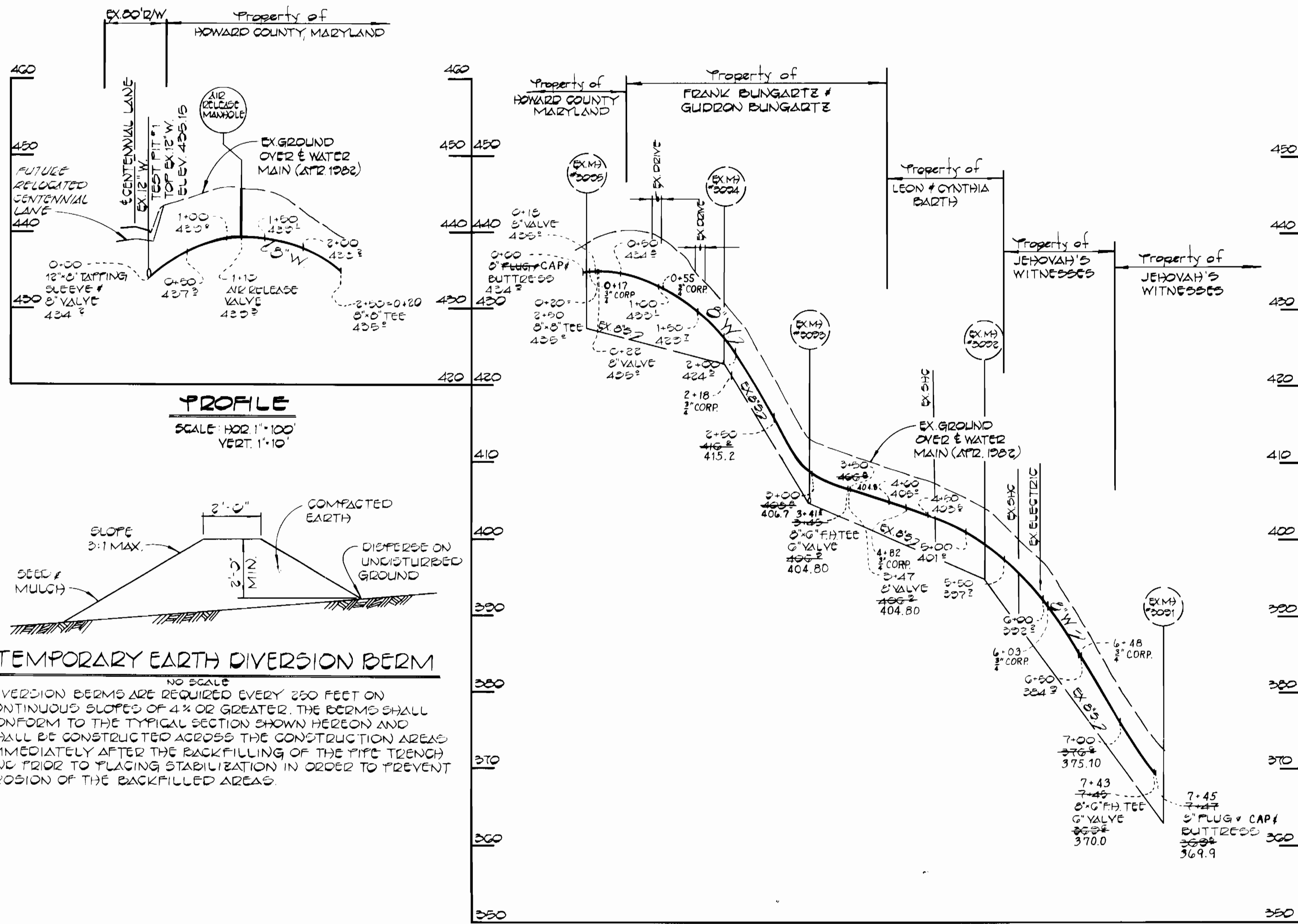
CONTRACT NO. 44-1068
CAPITAL PROJECT W-8130

PLAN
WATER MAIN

CENTENNIAL LANE
WATER MAIN EXTENSION
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT 2

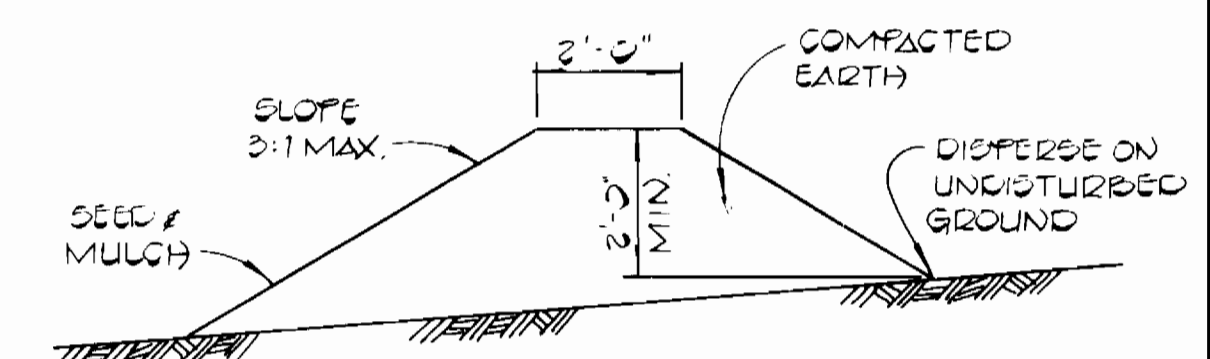
| | | |
|--------------------|----------------|---|
| DRAWING NO. 2 OF 3 | SCALE AS SHOWN | DES. D.B.S. DRN. D.B.S. CHK. T.A.F. |
|--------------------|----------------|---|

CENTENNIAL LANE



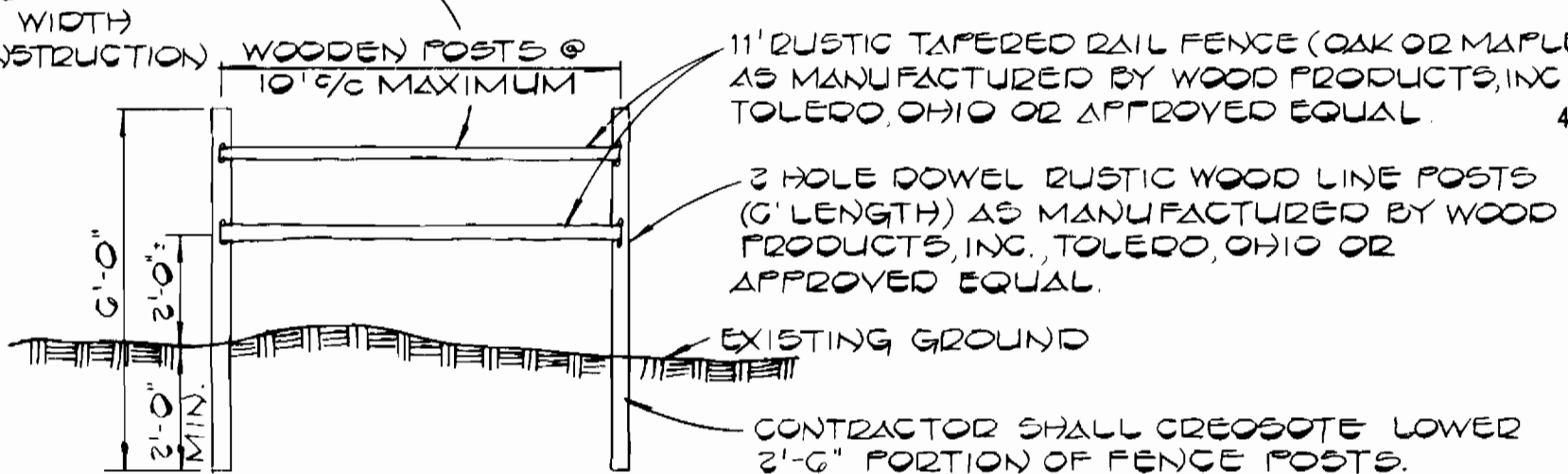
PROFILE
SCALE: HOR 1"=100'
VERT 1"=10'

PROFILE
SCALE: HOR 1"=100'
VERT 1"=10'

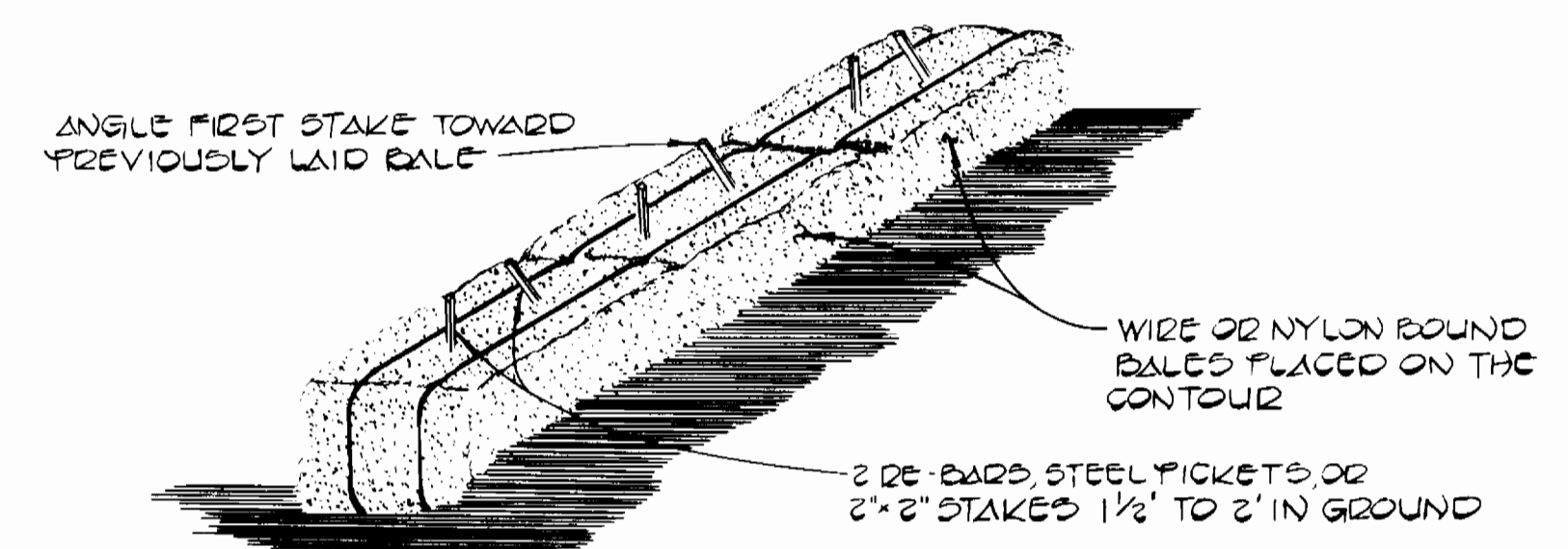
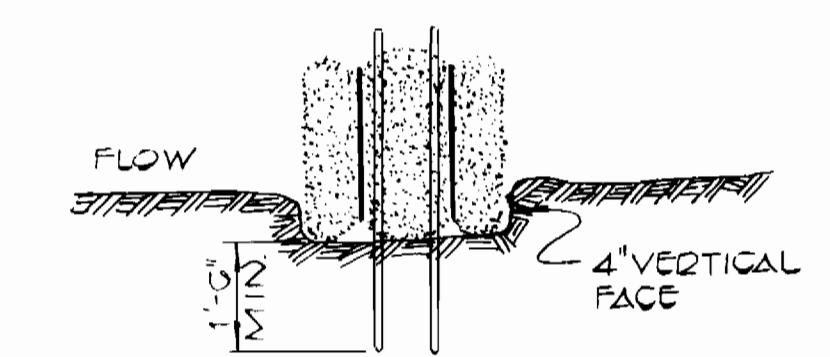


TEMPORARY EARTH DIVERSION BERM
NO SCALE
DIVERSION BERMS ARE REQUIRED EVERY 250 FEET ON CONTINUOUS SLOPES OF 4% OR GREATER. THE BERMS SHALL CONFORM TO THE TYPICAL SECTION SHOWN HEREON AND SHALL BE CONSTRUCTED ACROSS THE CONSTRUCTION AREAS IMMEDIATELY AFTER THE BACKFILLING OF THE PIPE TRENCH AND PRIOR TO PLACING STABILIZATION IN ORDER TO PREVENT EROSION OF THE BACKFILLED AREAS.

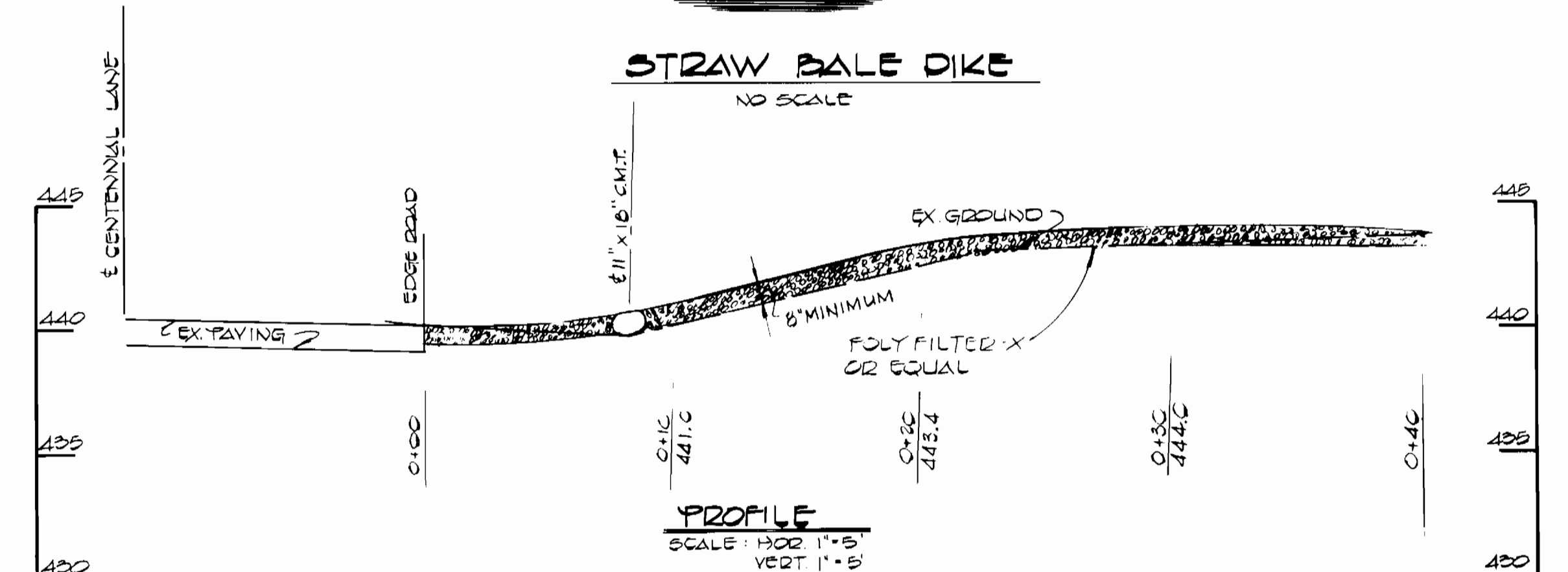
RUSTIC WOODEN RAIL FENCE TO BE PLACED TO ALLOW REMOVAL IF REQUIRED PERMITTING VEHICULAR INGRESS AND EGRESS FOR MAINTENANCE OF WATER MAIN
NOTE: WOODEN FENCE BARRICADE IS TO EXTEND THE FULL WIDTH OF RIGHT OF WAY AND CONSTRUCTION STRIPS



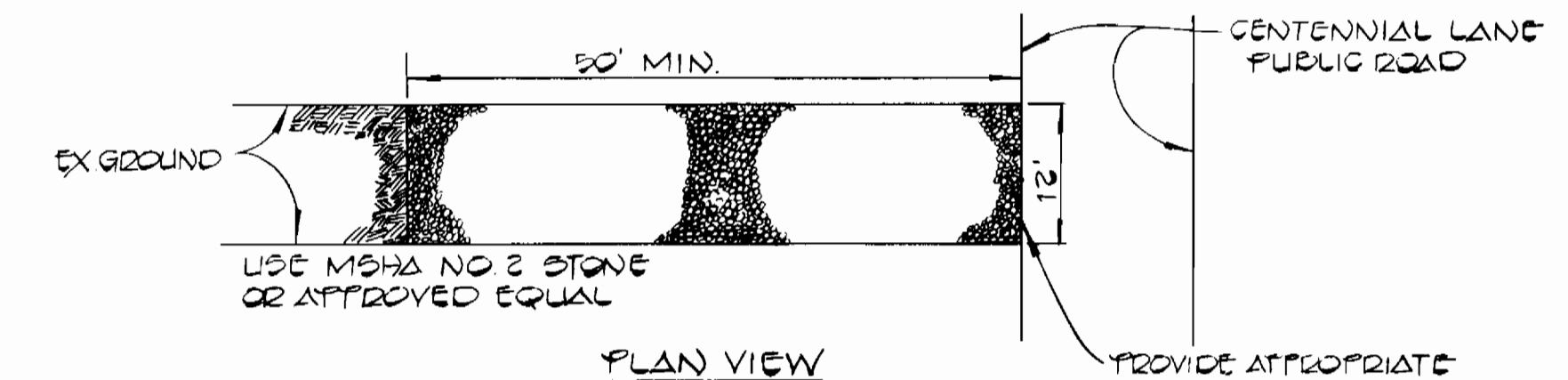
WOODEN FENCE BARRICADE DETAIL
NO SCALE



STRAW BALE DIKE
NO SCALE

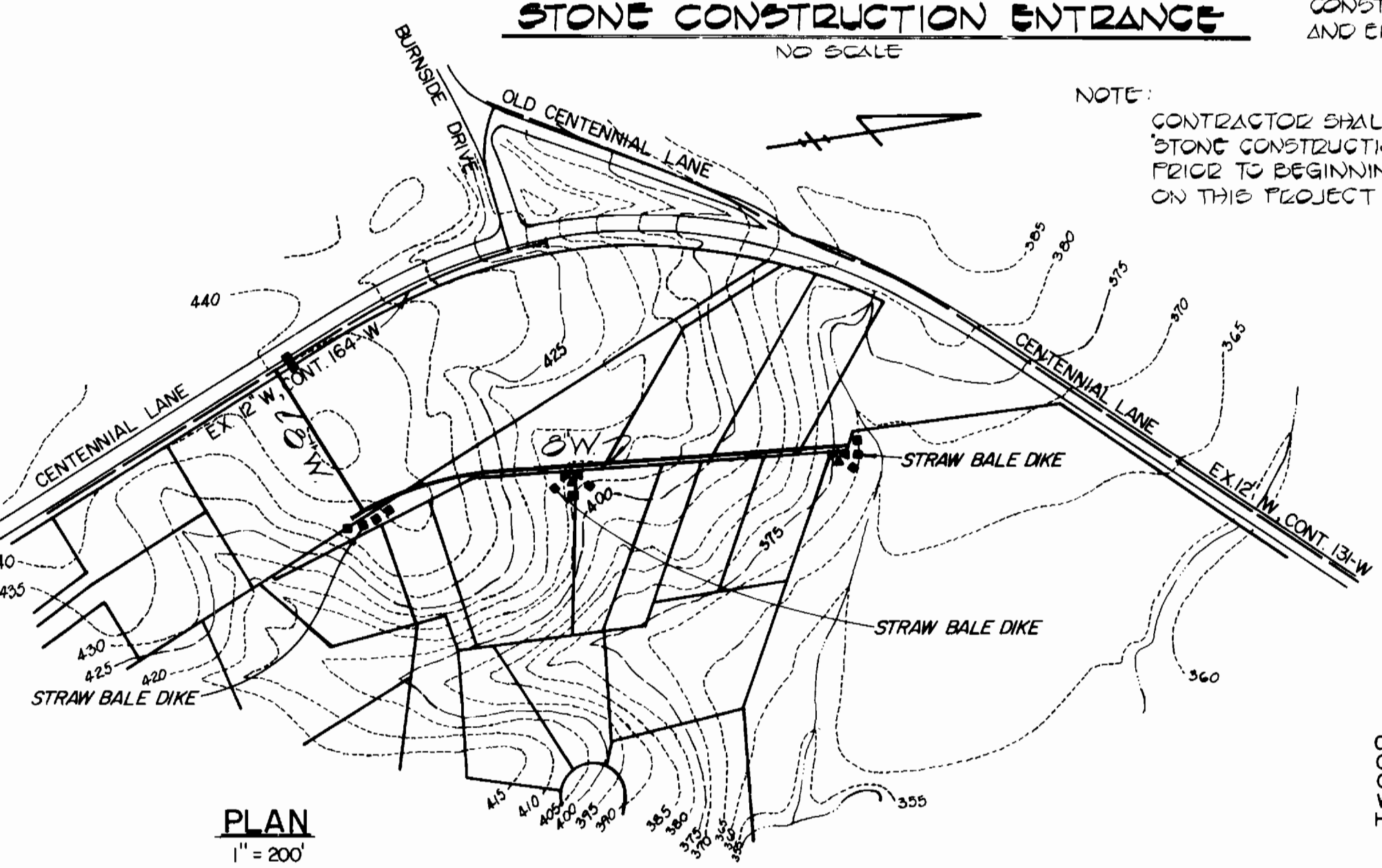


PROFILE
SCALE: HOR 1"=5'
VERT 1"=5'



STONE CONSTRUCTION ENTRANCE
NO SCALE

NOTE: CONTRACTOR SHALL CONSTRUCT "STONE CONSTRUCTION ENTRANCE" PRIOR TO BEGINNING ANY WORK ON THIS PROJECT



PLAN
1"=200'

TERRELL A. FISHER 9757 DATE 5/5/88

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works: *John F. Numa* 3-29-83
Chief, Bureau of Engineering: *Allen S. Brown* 3/28/83
Chief, Bureau of Utilities: *Allen S. Brown* 3/28/83

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

CONTRACT NO. 44-1068
CAPITAL PROJECT W-8130

PROFILE
WATER MAIN

CENTENNIAL LANE
WATER MAIN EXTENSION
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT 2

DRAWING NO. 3 OF 3
SCALE AS SHOWN
DES: D.B.S.
DRN: D.B.S.
CHK: T.A.F.