

QUANTITIES			
ITEM	ESTIMATED	AS-BUILT	MATERIAL/SUPPLIER
8" x 8" TEE	5	7	TRINITY VALLEY
8" x 6" TEE	5	5	TRINITY VALLEY
8" VALVE	5	5	MUELLER
8" V6 HORIZ. BEND	5	5	TRINITY VALLEY
8" CAP	2	2	TRINITY VALLEY
6" F.H. VALVE	5	5	MUELLER
8" V6 HORIZ. BEND	1	1	TRINITY VALLEY
8" D.I.P.	1523 L.F.	2200'-11"	ATLANTIC
6" D.I.P.	118 L.F.	109 L.F.	ATLANTIC
F.H.	5	5	KENNEDY

INCLUDING PRIVATE

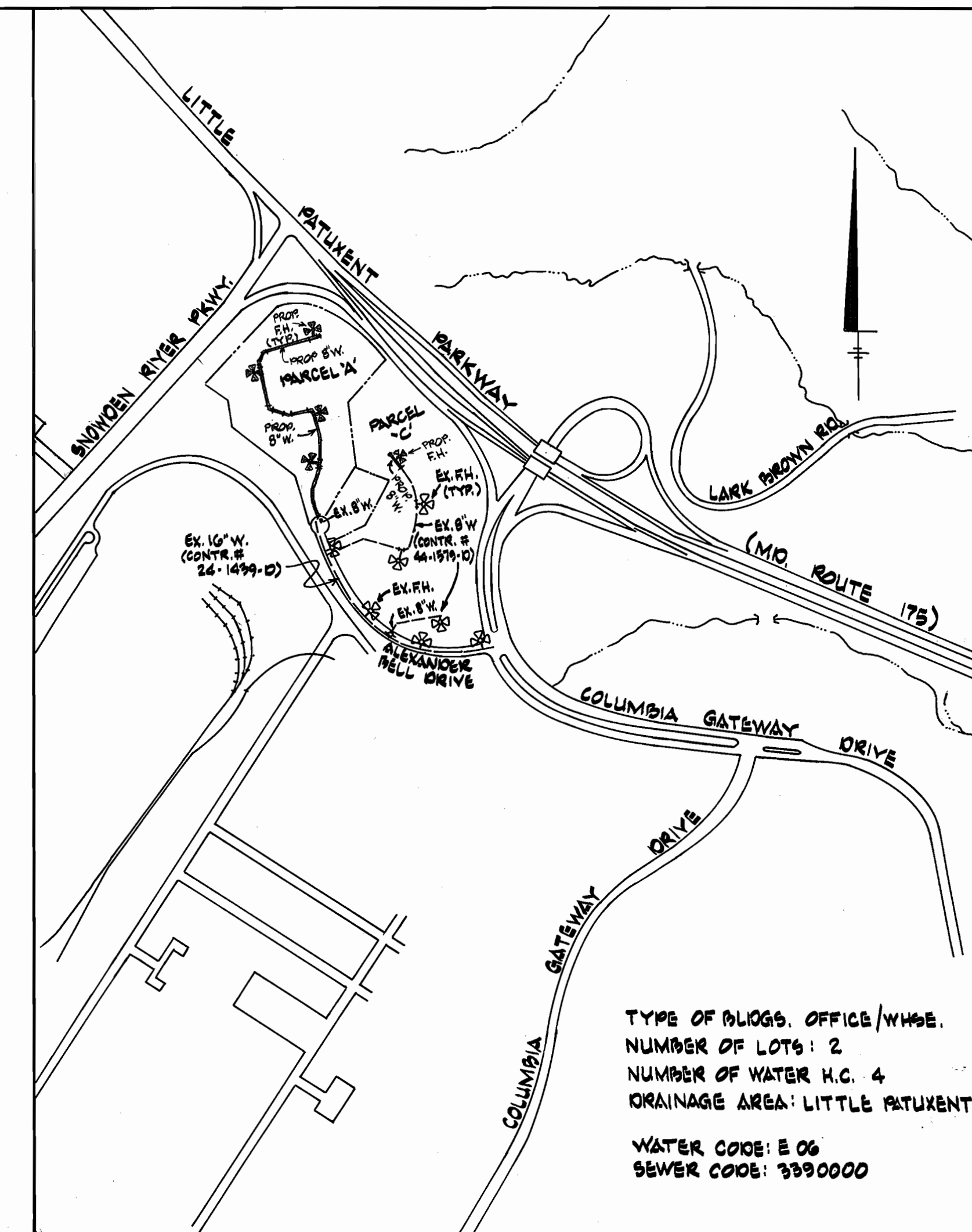
GENERAL NOTES:

PART 1

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICE 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. DATA.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES, OR DAMAGE SHALL BE DEDUCTED FROM THE MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOL. IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOL. 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 RESULTS OF THE TEST 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN 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, BALTO. GAS & ELECTRIC COMPANY - CONTRACTOR SERVICES 850-4620, BALTO. GAS & ELECTRIC COMPANY - UNDERGROUND DAMAGE CONTROL 859-9004, BALTO. GAS & ELECTRIC COMPANY - TROUBLE SHOOTING 296-9001, MISS. UTILITY 1-(301) 559-0100, COLONIAL PIPELINE 795-1390 BUREAU OF UTILITIES, HOWARD COUNTY DEPT. OF PUBLIC WORKS 992-2366, C & P TELEPHONE 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 DAMAGED OR REMOVED 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 OR THE MAIN.
- PLACE REGULATION "MEN WORKING" WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATIONS MANUAL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.

PART 2

- ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5 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 ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE 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 INSIDE METER SETTINGS UNLESS OTHERWISE NOTED.
- ALL FIRE HYDRANTS TO BE SET THREE FEET BEHIND FACE OF CURB UNLESS NOTED OTHERWISE.
- ALL WATER HOUSE CONNECTIONS SHALL COMPLY WITH HOWARD CO. STD. 3.21 AS SHOWN ON ART. 40, SPECIAL PROVISIONS.
- MINIMUM CRIMP RADIUS WILL BE SPECIFIED BY PIPE MANUFACTURER.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- SERVICE CLAMPS ARE TO HAVE STAINLESS STRAPS.
- 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 AND OTHER LIQUIDS.



LOCATION MAP

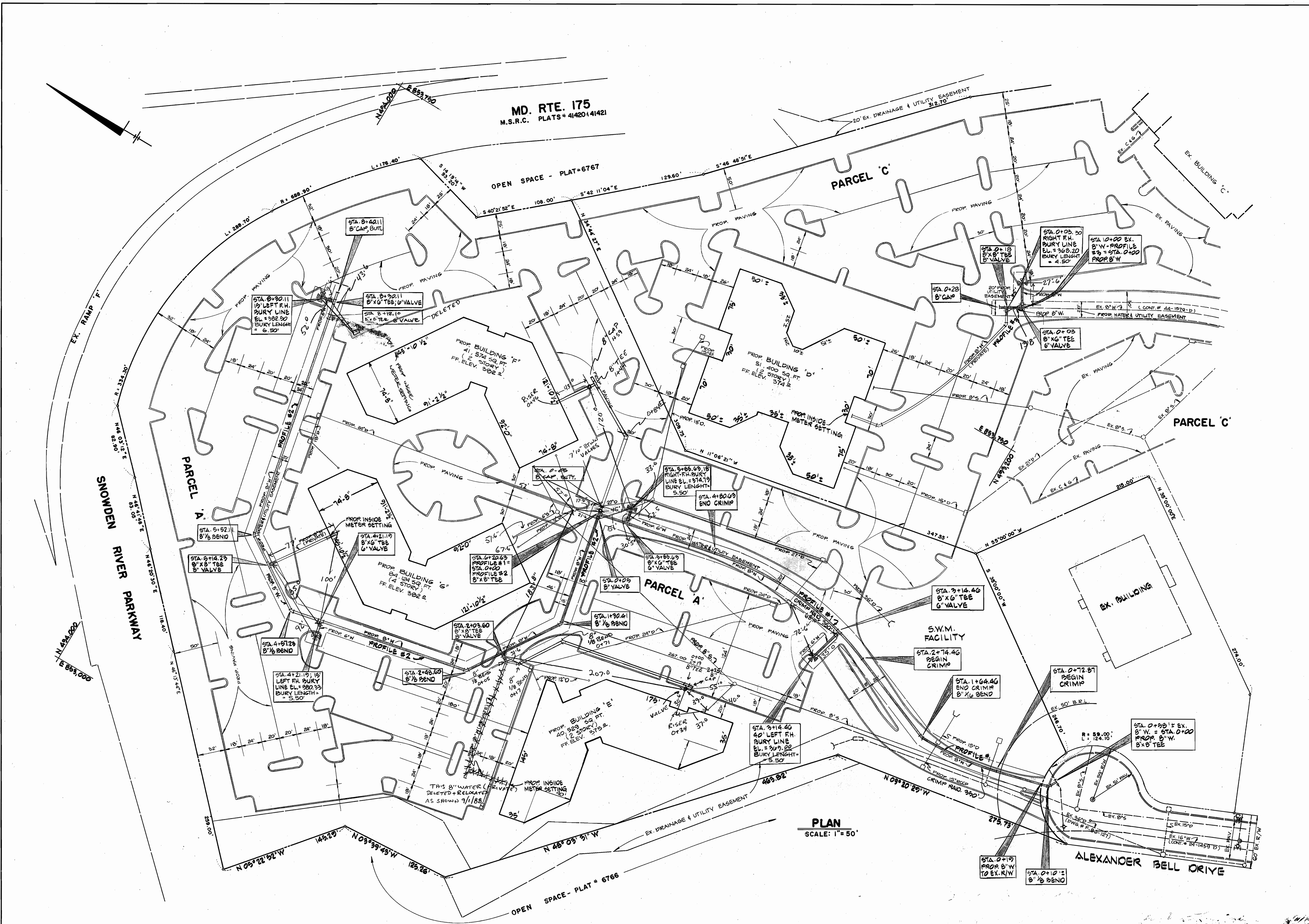
SCALE: 1" = 600'

BENCHMARKS:

- W.R. & A.P.M. #2: ELEVATION: 965.28
 R.R. SPIKE IN BASE OF 14" POPLAR, 90' ± RIGHT OF & OF ALEXANDER BELL DRIVE
- W.R. & A.P.M. #3: ELEVATION: 929.26
 TOP BOLT @ TOP OF OLD LIGHT POST FOOTER, 143' OF & COLUMBIA GATEWAY DRIVE.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. <i>James M. Hahn</i> 3-11-88 U.S. SOIL CONSERVATION SERVICES DATE	THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. <i>Stephen L. Hahn</i> 3/1/88 HOWARD SOIL CONSERVATION DISTRICT DATE	SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP-88-129
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DEPARTMENT OF PUBLIC WORKS <i>William F. F.</i> 3-21-88 CHIEF, LAND DEVELOPMENT DIVISION DATE	CHIEF, BUREAU OF UTILITIES <i>James M. Hahn</i> 3-21-88 CHIEF, BUREAU OF UTILITIES DATE	CHIEF, BUREAU OF ENGINEERING <i>James M. Hahn</i> 3-21-88 CHIEF, BUREAU OF ENGINEERING DATE	GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC. 303 ALLEGHENY AVENUE TOWSON, MARYLAND 21204 (301) 825-8120		DESIGNED: K.L.P. DRAWN: K.L.P. CHECKED: T.C.	<table border="1"> <thead> <tr> <th>BY</th> <th>NO.</th> <th>DATE</th> <th>REVISIONS</th> </tr> </thead> <tbody> <tr> <td>ANS</td> <td>1</td> <td>11/18/88</td> <td>CHANGED BUILDING CONNECTION</td> </tr> </tbody> </table>	BY	NO.	DATE	REVISIONS	ANS	1	11/18/88	CHANGED BUILDING CONNECTION	GENERAL NOTES - FOR - PROPOSED WATER MAIN CONTRACT NO. 44-1778-D 600' SCALE MAP #S 42 & 43 BLOCK #24	COLUMBIA GATEWAY PARCEL X AND PORTION OF PARCEL 'C' HOWARD COUNTY, MARYLAND JANUARY 28, 1988	SCALE AS SHOWN SHEET 1 OF 3
BY	NO.	DATE	REVISIONS														
ANS	1	11/18/88	CHANGED BUILDING CONNECTION														



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICES DATE

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

Stephen L. Huber 2/1/88
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP-88-129.

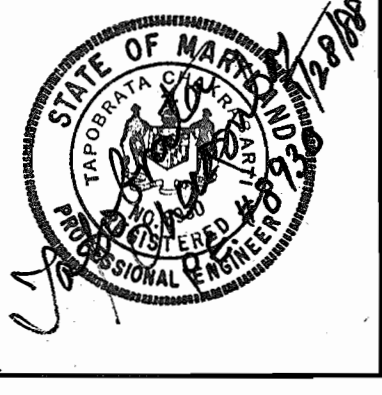
DEPARTMENT OF PUBLIC WORKS

William L. ... 3-21-88
CHIEF LAND DEVELOPMENT DIVISION DATE CHIEF BUREAU OF UTILITIES DATE

James M. ... 3/23/88
CHIEF BUREAU OF ENGINEERING DATE DIRECTOR OF PUBLIC WORKS DATE

GEORGE WILLIAM STEPHENS, JR. & ASSOCIATES, INC.

303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120



DESIGNED: K.L.D.
DRAWN: J.W.K.B.
CHECKED: T.C.

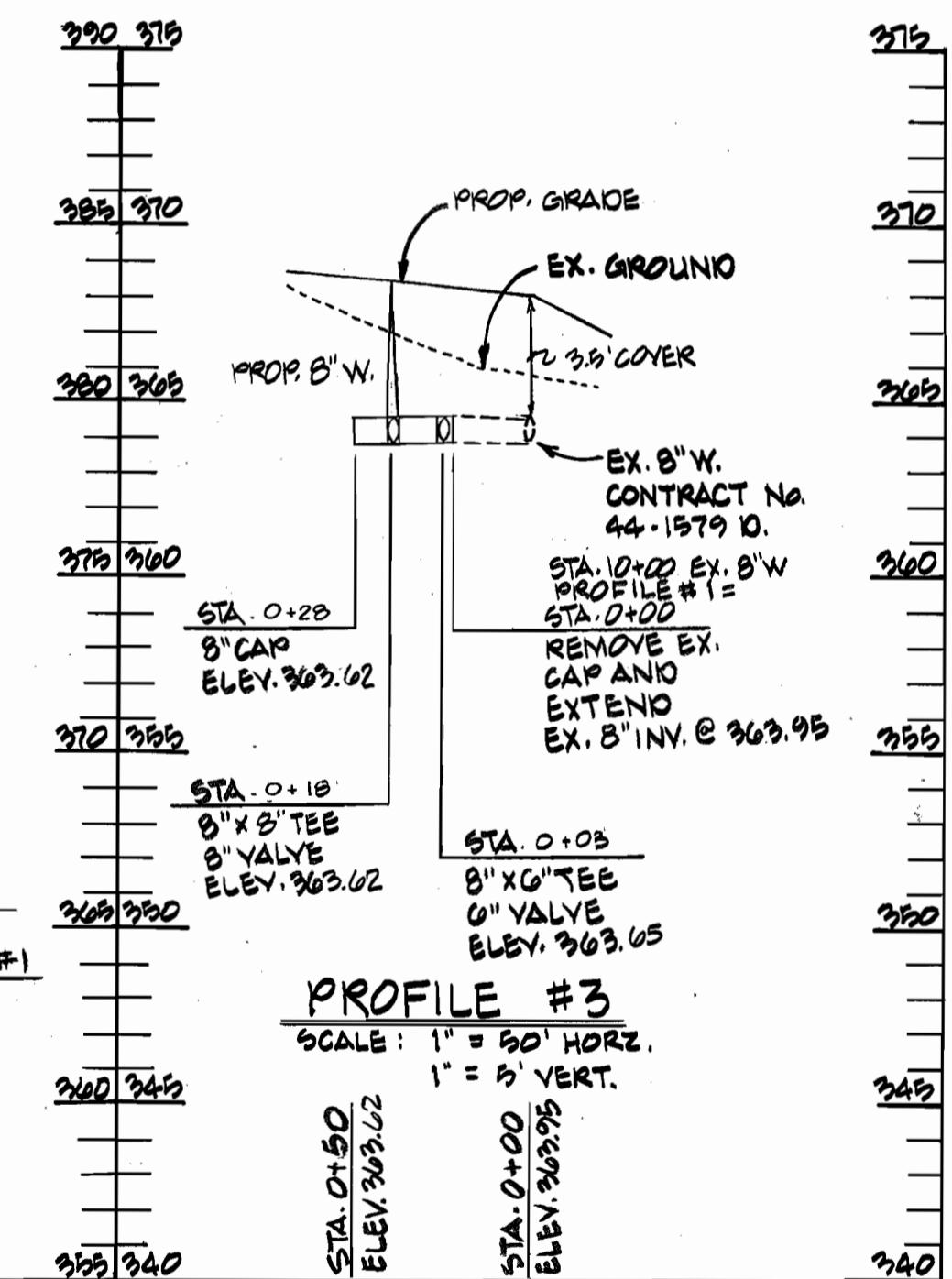
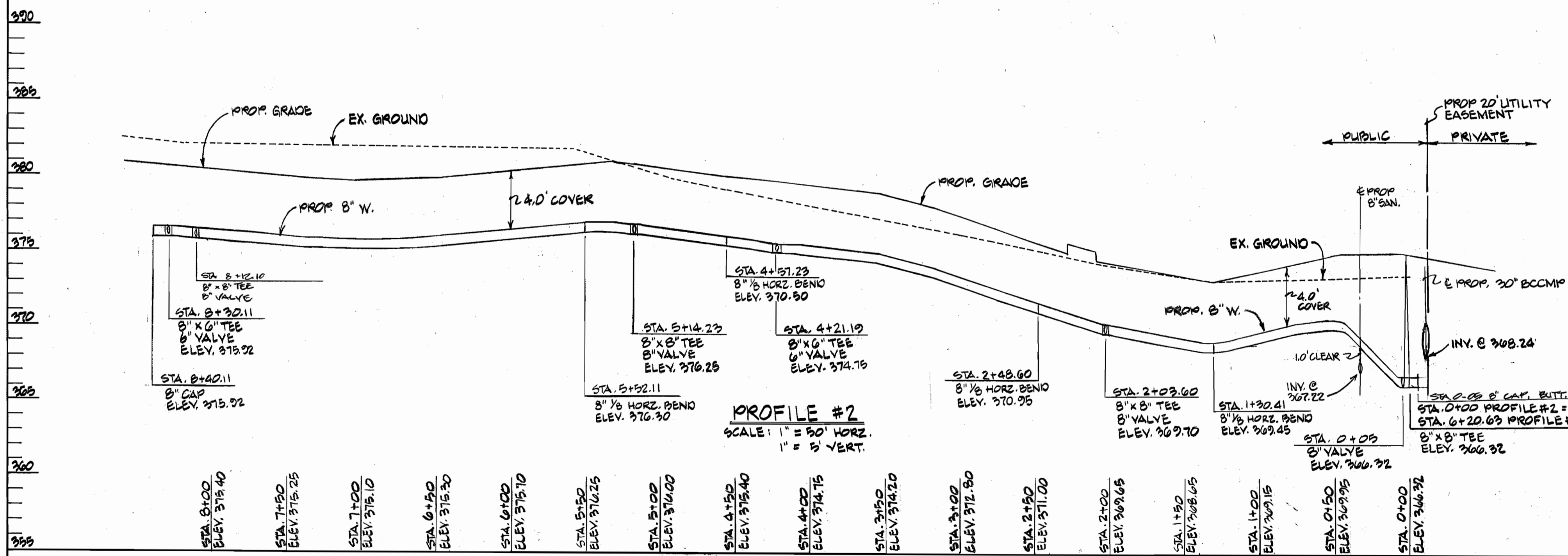
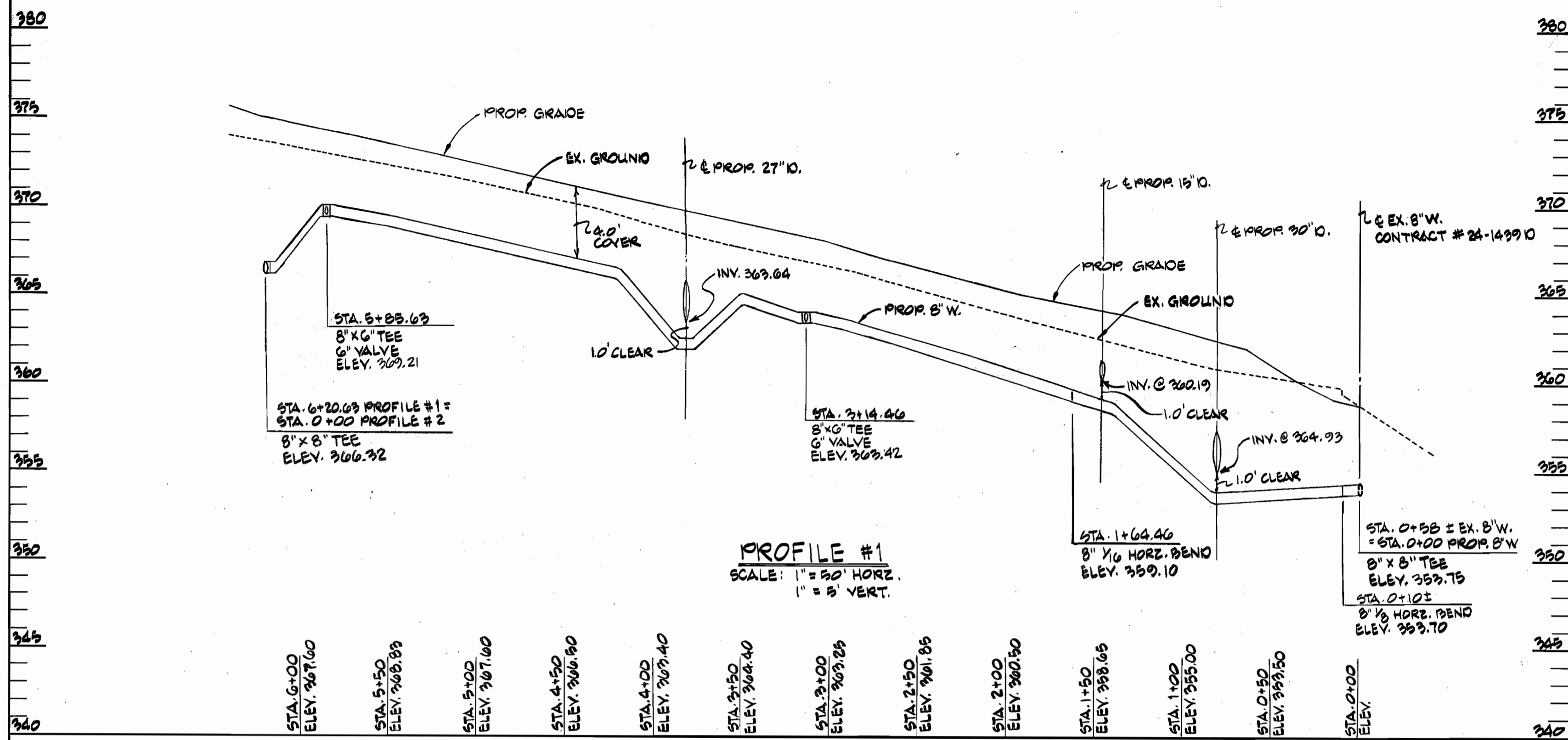
BY	NO.	REVISIONS	DATE
aws	1	changed building connection	11/10/88

PLAN
-FOR-
PROPOSED WATER MAIN
CONTRACT NO. 1778

600' SCALE MAP #13 42 & 43 BLOCK # 24

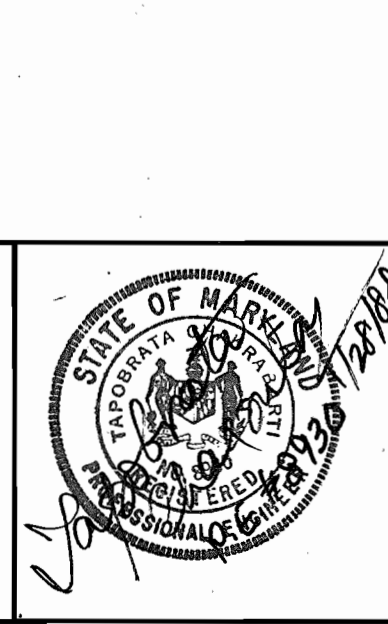
COLUMBIA GATEWAY
PARCEL 'A' AND PORTION OF PARCEL 'C'
HOWARD COUNTY, MARYLAND
JANUARY 28, 1988

SCALE AS SHOWN
SHEET 2 OF 3



DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division DATE 3-21-88
 Chief, Bureau of Utilities DATE
 Chief, Bureau of Engineering DATE 3-22-88
 Director of Public Works DATE 3/22/88

GEORGE WILLIAM STEPHENS, JR. & ASSOCIATES, INC.
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND 21204
 (301) 825-8120



DESIGNED: K.L.B.
 DRAWN: K.L.B.
 CHECKED: T.C.

BY	NO.	REVISIONS	DATE
ONE	1	Changed Building connection	11/18/88

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 U.S. SOIL CONSERVATION SERVICES DATE 3-11-88

PROFILES
 -FOR-
 PROPOSED WATER MAIN
 CONTRACT NO. 44-1778-D
 600' SCALE MAP #S 42 & 43 BLOCK # 24

THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 HOWARD SOIL CONSERVATION DISTRICT DATE 3/11/88

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP-88-129.

COLUMBIA GATEWAY
 PARCEL 'A' AND PORTION OF PARCEL 'C'
 HOWARD COUNTY, MARYLAND
 JANUARY 28, 1988

SCALE AS SHOWN
 SHEET 3 OF 3