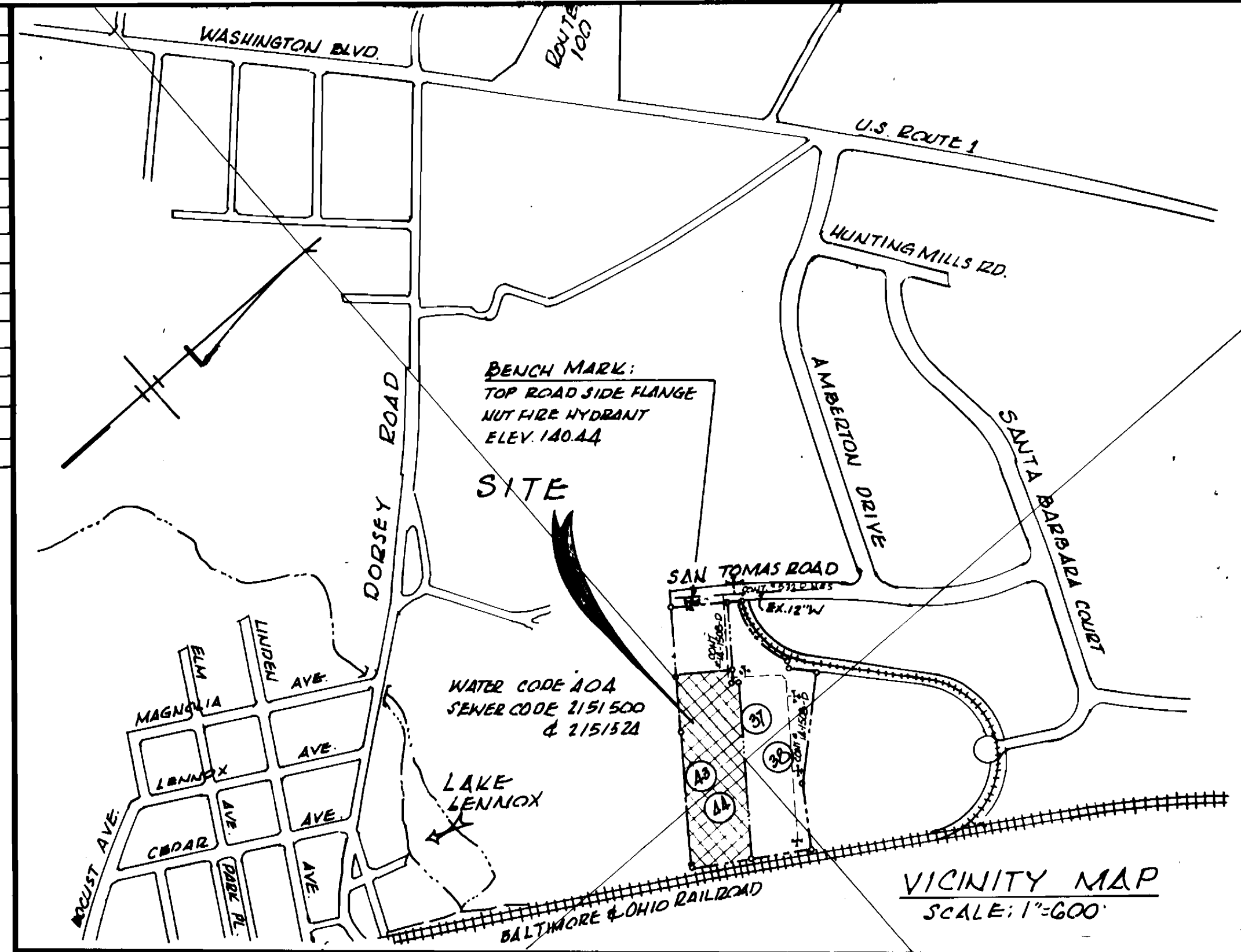


GENERAL NOTES

- 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 PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM 1' CLEAR. ALL POLES BY 4'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN THE UNIT PRICES PAID FOR CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL VOLUME III, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME III ON THE JOB.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO 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 WORKING DAYS BEFORE STARTING WORK ON THEM: STATE HIGHWAY ADMINISTRATION: 531-5533; BALTIMORE GAS & ELECTRIC COMPANY, UNDERGROUND DAMAGE CONTROL: 234-5621; BALTIMORE GAS & ELECTRIC COMPANY, TROUBLE SHOOTING: MISS UTILITY: 1-551-0100; COLOQUIAL PIPELINE CO.: 795-1390; BUREAU OF UTILITIES: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS: 991-1366.
- 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 FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO BE 6" D.I.P. UNLESS NOTED. CLASS 52.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3' COVER.
- VALVE ADJACENT 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 DRAWING.
- FIRE HYDRANTS SHALL BE SET TO THE CURB LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS TO BE SET 3' (THREE) FEET BEHIND PROPOSED FACE OF CURB UNLESS NOTED OTHERWISE. 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 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS, INSIDE METER SETTINGS, UNLESS OTHERWISE SHOWN.
- ALL WATER HOUSE CONNECTIONS SHALL COMPLY WITH HOWARD COUNTY STANDARD 3.2 AS SHOWN ON ARTICLE 40 SPECIAL PROVISIONS.
- MINIMUM CRIMP RADIUS WILL BE AS SPECIFIED BY PIPE MANUFACTURER.
- PLACE REGULATION MEN WORKING AND WARNING SIGNS AS REQUIRED TO COMPLY WITH THE MARYLAND STATE HIGHWAY ADMINISTRATION'S MANUAL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- 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 A SEWER MAIN WITHIN 150' OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 48" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" R.I.G. WALLS ARE BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN THE PLAN AND PROFILE SHALL HAVE WATER TIGHT FRAME AND COVERS, STANDARD DETAIL G-55L WHERE WATER TIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL 'C.A.S.' INDICATES THAT THE CELLAR CANNOT BE SERVED.
- SERVICE CLAMPS ARE TO HAVE STAINLESS STEEL ST RAPS.

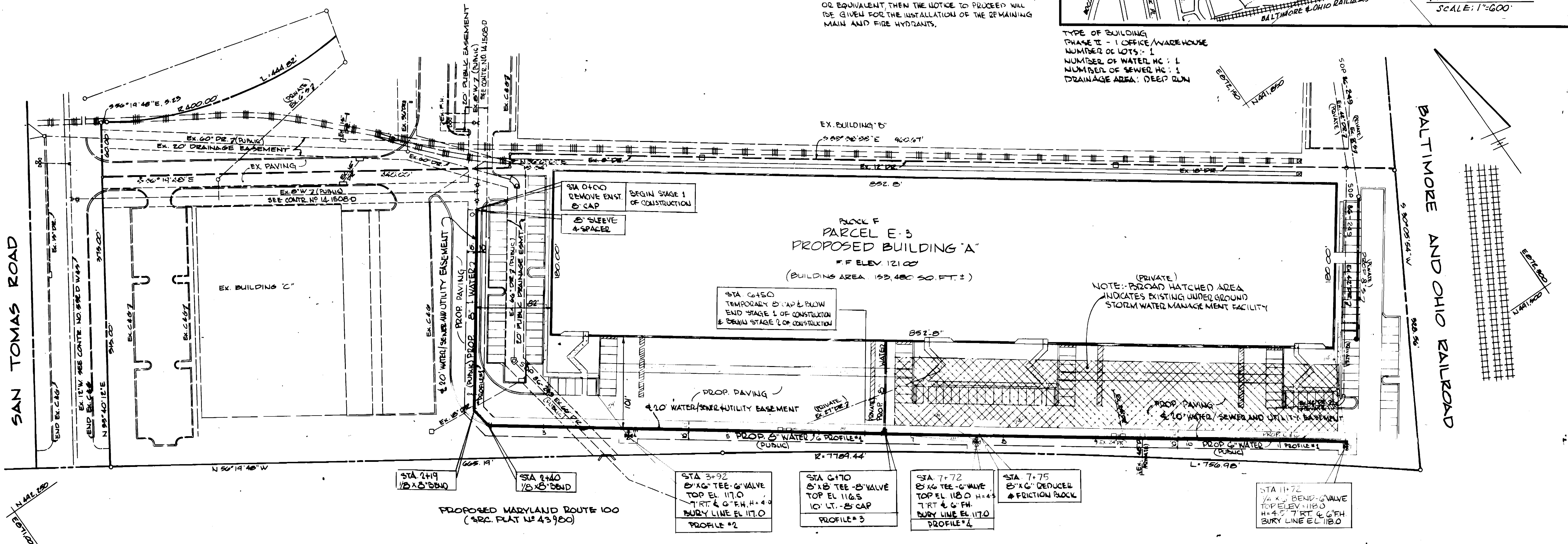
QUANTITIES			
ITEM	ESTIMATED QTY.	AS-BUILT	MATERIALS/SUPPLIES
8" D.I.P.	790	N/A	Griffin
6" D.I.P.	420	N/A	"
8" X 8 TEE	1	1	"
8" X 6 TEE	2	2	"
8" CAP	1	1	"
8" X 1/2 BEND	2	2	"
8" X 6 REDUCER & FRICION BLOCK	1	1	"
8" VALVE	1	1	"
6" VALVE	3	3	"
6" FIRE HYDRANT	3	3	"
6" X 1/4 BEND	1	1	"
8" SLEEVE & SPACER	1	1	"
8" CAP & BLOW	1	1	(TEMPORARY)



CONSTRUCTION SEQUENCE

- STAGE 1**
- CONSTRUCT WATER MAIN AND FIRE HYDRANT FROM 0+00 TO 6+50 AND PLACE A TEMPORARY CAP AND BLOW AT THE END.
 - TEST MAIN AT THIS POINT PRIOR TO BACK FILLING.
 - BACK FILL TRENCH IN ACCORDANCE WITH SECTION 1003 OF THE STANDARD SPECIFICATIONS.
 - CLOSE EXISTING VALVE AT STATION 0+00.
- STAGE 2**
- WHEN THE UNDER GROUND STORM WATER MANAGEMENT FACILITY IS IN PLACE AND THE COVER OVER IT AS WELL AS THE EMBANKMENT ALONG ITS FACE IS PLACED TO GRADE AND COMPACTED TO 95% OF AASHTO SPEC-T-99 OR EQUIVALENT, THEN THE NOTICE TO PROCEED WILL BE GIVEN FOR THE INSTALLATION OF THE REMAINING MAIN AND FIRE HYDRANTS.

TYPE OF BUILDING
 PHASE II - 1 OFFICE/WAREHOUSE
 NUMBER OF LOTS: 1
 NUMBER OF WATER HC: 1
 NUMBER OF SEWER HC: 1
 DRAINAGE AREA: DEEP RUN



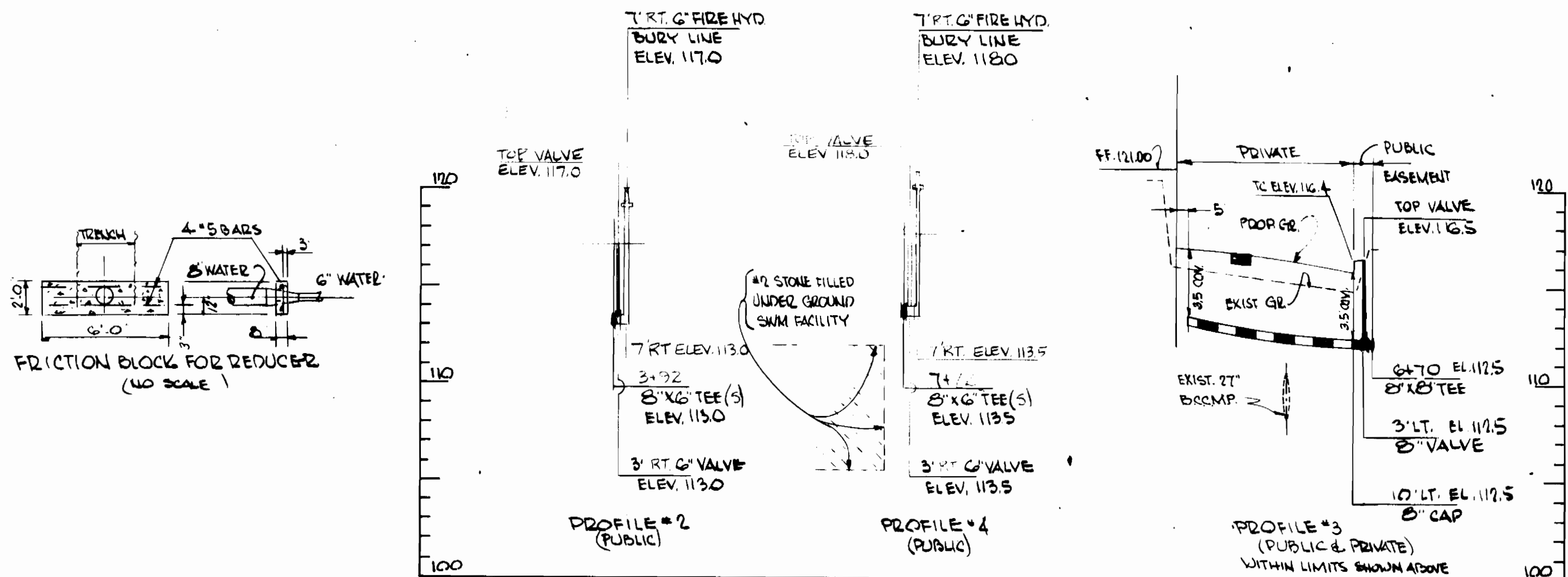
THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. DATE: 11/26/87

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. DATE: 5-7-87

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECT. 219 OF THE STANDARD SPECIFICATIONS & ADDITION TO S.D.P. 86-249.

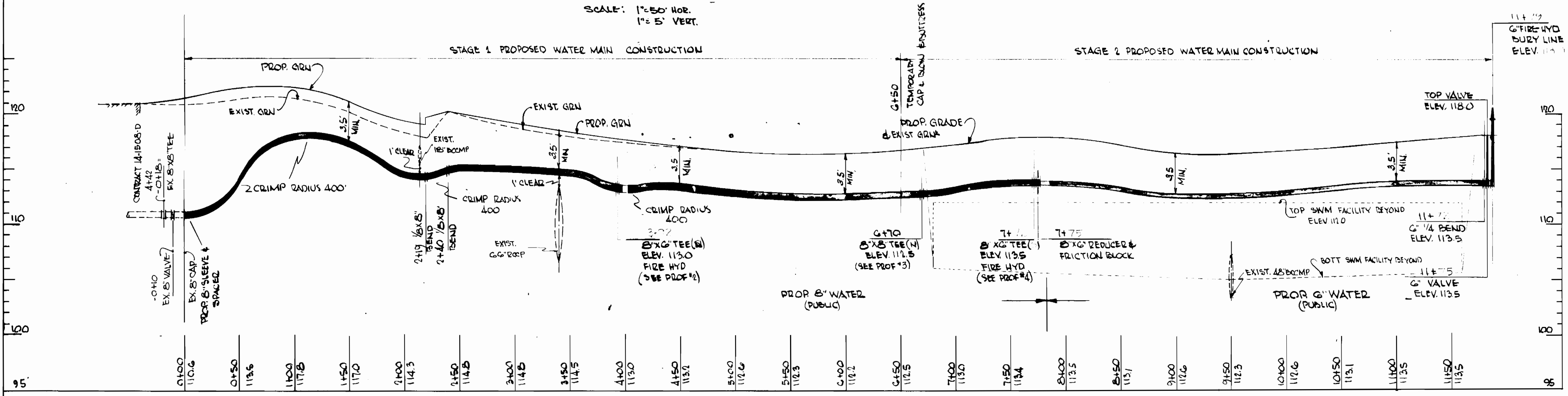
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MD. DATE: 5-13-87 CHIEF, BUREAU OF UTILITIES DATE: 5-13-87 CHIEF, LAND DEVELOPMENT DIV.	ENGINEER GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC. 503 ALLEGHENY AVENUE TOWSON, MARYLAND 21284 815-8120	DESIGNED: J.W. DRAWN: D.M.D. CHECKED: C.K.S. P.N. 05990	REVISION BY: J.W. NO: 1 DATE: 6-12-87 RELOCATE 3 FIRE HYDRANTS/REASON-CURB LINE SHIFT	PLAN FOR PROPOSED WATER MAIN CONTRACT NO: 44-1609-0 600' SCALE MAP NO. 27-28-42-44 BLOCK No. 13	PROPOSED OFFICE & WAREHOUSE BLOCK "F" - PARCEL E-3 - PHASE II PLAT: 1010 ROUTE 100 BUSINESS PARK 1ST ELECTION DISTRICT HOWARD COUNTY, MD. TAX MAP: 37-38 PARCEL: 601/281 SCALE: 1"=50' DATE: NOV. 23, 1986 (ADDITION TO S.D.P. 86-249) SDP-87-105	SCALE AS SHOWN SHEET NO. 1 OF 2
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NOTE: ALL EARTH PLACED IN ORIGINAL FILL AREAS AND COVER OVER STORM WATER MANAGEMENT FACILITY IS TO BE COMPACTED TO 75% OF AASHTO SPEC T-99 OR EQUIVALENT



WATER PROFILES

SCALE: 1" = 50' HOR.
1" = 5' VERT.



WATER PROFILE #1

SCALE: 1" = 50' HOR.
1" = 5' VERT.

THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DIST. APP. *Stephen K. Smith* 5/18/87 HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED: FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT *John M. Velt* 5-7-87 DIST. SOIL CONSERVATION SERVICE DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS & ADDITION TO S.D.P. 86-249

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MD.

Robert B. Smith 5-12-87
DIR. OF PUBLIC WORKS DATE

Robert B. Smith 5-12-87
CHIEF, BUR. OF UTILITIES DATE

Robert B. Smith 5-12-87
CHIEF, BUR. OF ENGINEERING DATE

Robert B. Smith 5-12-87
CHIEF, LAND DVLR. DIV. DATE

ENGINEER
**GEORGE WILLIAM STEPHENS, JR.
AND ASSOCIATES, INC.**

303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
825-8120

DESIGNED: J.W.
DRAWN: J.W.
CHECKED: C.K.S.

P.N. 05590

BY	NO.	REVISION	DATE
JW	1	RELOCATE 4 FIRE HYDRANTS/RELOC. CURB LINE SHIFT	5-12-87

PROFILES FOR PROPOSED WATER MAIN

CONTRACT NO: 44-1609-D

600 SCALE MAP NO. 2732-43-44 BLOCK NO. 12

PROPOSED OFFICE & WAREHOUSE

Block "F" - PARCEL E-3 - PHASE II

ROUTE 100 BUSINESS PARK
1ST ELECTION DISTRICT - HOWARD COUNTY, MD.
TAX MAP 37/38 PARCEL 601/281
SCALE: AS SHOWN DATE: NOV. 23, 1986
(ADDITION TO S.D.P. 86-249) SDP-87-105

SCALE AS SHOWN
SHEET NO. 2 OF 2