

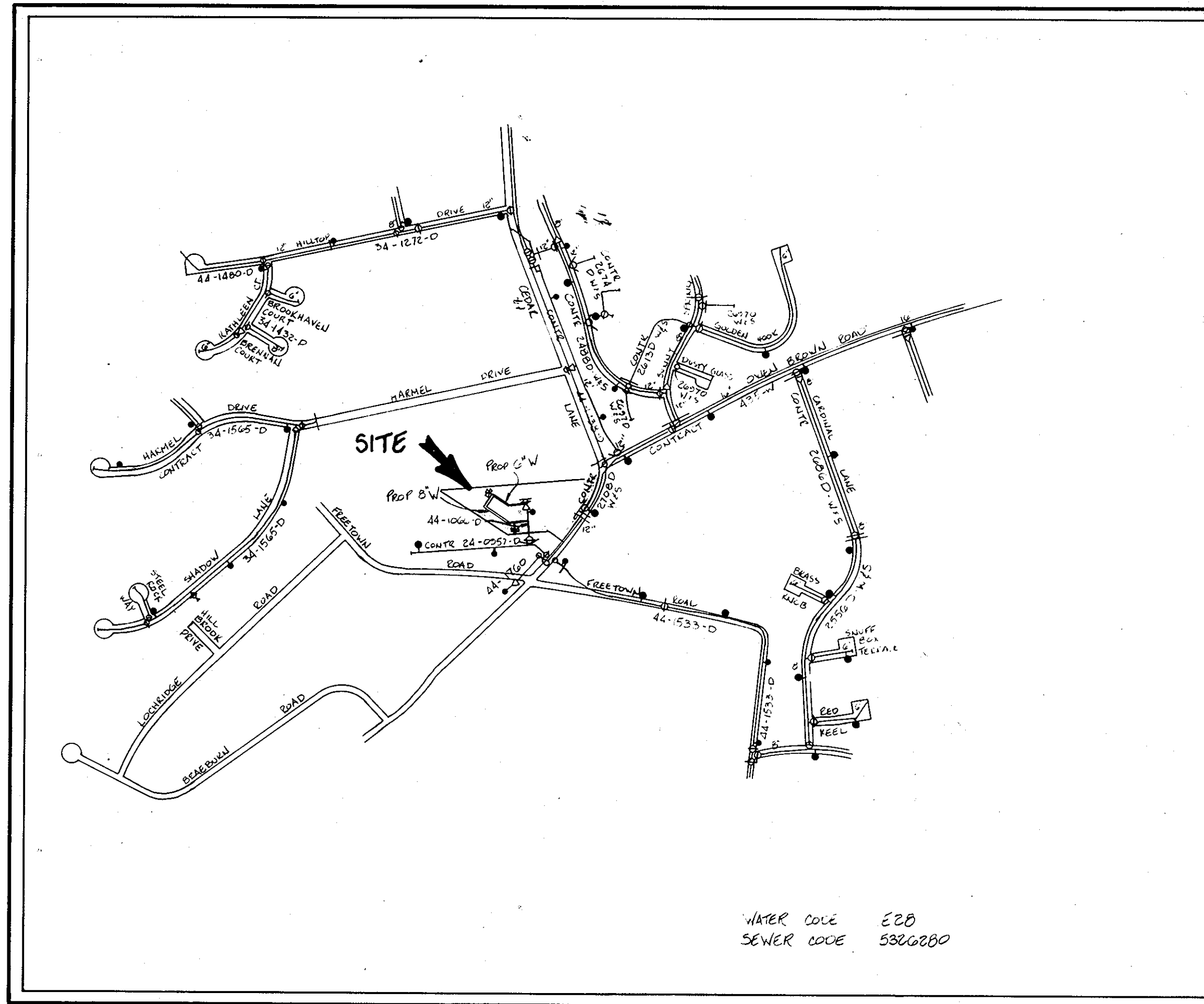
LORIEN NURSING HOME

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

GENERAL NOTES

1. ALL WATER MAIN TO BE D.I.P. CLASS 52. ALL FITTINGS FOR THE 8" MAIN TO BE D.I.P. COMPACT FITTINGS (SEE NOTE #24).
2. TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5 FT. COVER UNLESS OTHERWISE NOTED.
3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
4. BLOCK ALL FITTING WITH CONCRETE. SEE STANDARDS BOUND IN SPECIFICATIONS.
5. BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND OUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARDS DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTION 1005 OF THE STANDARD SPECIFICATIONS.
6. APPROXIMATE LOCATIONS 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.
7. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
8. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
9. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
10. CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2' - 8" 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 MAIN.
11. FOR DETAILS NOT SHOWN ON DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
12. CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATION IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
13. 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.
14. CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
15. 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.
16. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 STATE HIGHWAY ADMINISTRATION - 531-5533
 BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION (CUSTOMER SERVICE 685-8123)
 ENGINEERING, "DAMAGE CONTROL" - 234-5621
 BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION (CUSTOMER SERVICE 685-8123)
 "MISS UTILITY" - 1-553-8188
 CHESAPEAKE & POTOMAC (C&P) TELEPHONE CO. - 725-9976
 AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3555
 COLONIAL PIPELINE COMPANY - 795-1398
 BUREAU OF UTILITIES HOWARD COUNTY - 992-2366
17. FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
18. ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
19. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
20. ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AMWA SPECIFICATIONS C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.



LOCATION MAP

Scale: 1" = 600'

ITEM	UNIT	QUANTITIES		MATERIAL/SUPPLIER
		ESTIMATED	AS-BUILT	
8"x6" TEE	EA	1		
8"x4" TEE	EA	1		
4" VALVE	EA	1		
6" VALVE	EA	1		
6" FIRE HYDRANT	EA	1		
6" WATER	LF	8		
4" WATER	LF	40		

AS-BUILT QUANTITIES	SUPPLIER
8" DIP Water 452 LF.	Municipal & Contractor Sales
6" DIP Water 92 LF.	" " "
Fire Hydrant 2 EA.	" M&H "
6" VALVE 4 EA.	" M&J "
8" 90° Horiz. Bend. 1 EA.	" " "
8"x6" Tee 4 EA.	" " "
8" 1/8 Bend 1 EA.	" " "
8" VALVE 1 EA.	M&J

ITEM	UNIT	QUANTITIES		MATERIAL/SUPPLIER
		ESTIMATED	AS BUILT	
6" WATER	LF	25		
6" 1/8 BEND	EA			
8" WATER	LF	500 (481)		
8"x6" REDUCER	EA	1		
8" 1/8 BEND	EA	1		
8" 1/8 BEND	EA	1		
8"x6" TEE	EA	2		
8"x8" TS & V	EA	2		
FIRE HYDRANT	EA	2		

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IN ACCORDANCE WITH SECT-210 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS

TYPE OF BUILDING	NURSING HOME
NUMBER OF LOTS	1
NUMBER OF WATER HOUSE CONNECTIONS	1
NUMBER OF SEWER HOUSE CONNECTIONS	0
DRAINAGE AREA	LITTLE PATUXENT RIVER

REFERENCE FILE No. SDP-76-93
 SDP-81-36
 SDP-82-82
 SDP-90-109
 F-84-26



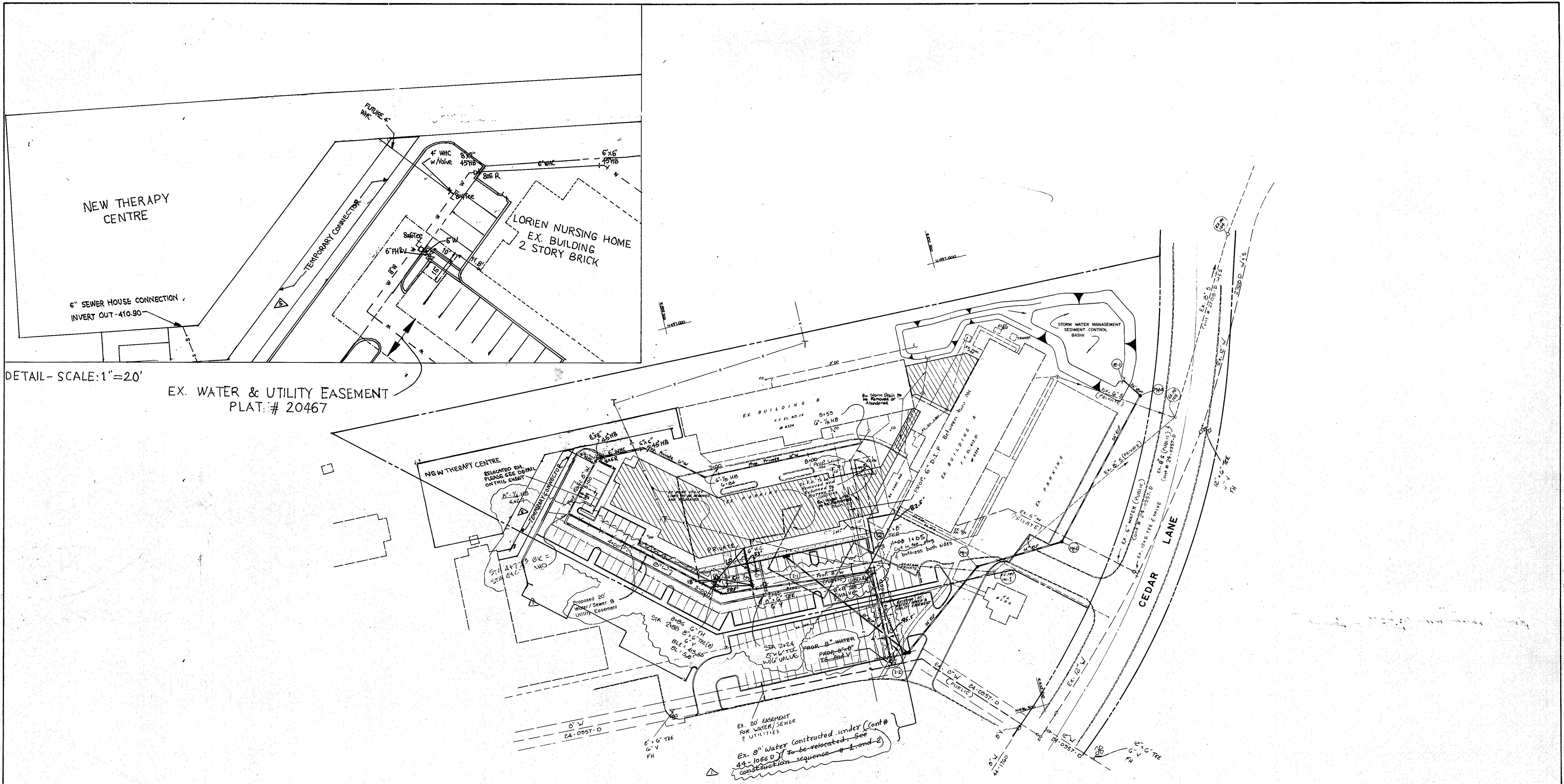
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Helms 6/28/90
 U.S. SOIL CONSERVATION SERVICE

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

John R. Roberts 6/28/90
 HOWARD SOIL CONSERVATION DISTRICT

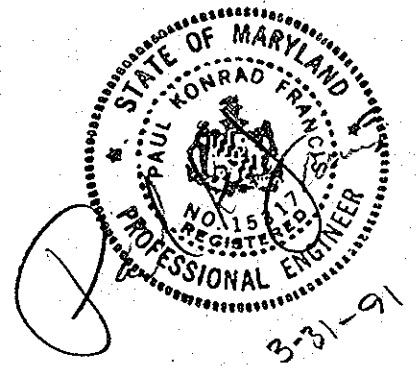
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James M. Helms</i> 7/2/90 Chief, Bureau of Utilities: <i>John R. Roberts</i> 6-21-90	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS 3458 ELLICOTT CENTER DRIVE, SUITE 101 ELLEWOOD CITY, MD 21443 (301) 461-9920	TITLE SHEET WATER MAINS CONTRACT 44-3048-D LORIEN NURSING HOME EXPANSION 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 3 AS-BUILT 4-5-91
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DETAIL - SCALE: 1" = 20'

EX. WATER & UTILITY EASEMENT
PLAT. # 20467

PLAN
Scale: 1" = 50'



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

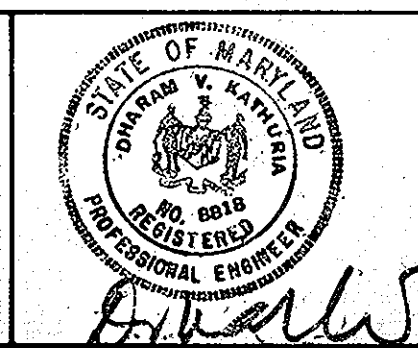
James J. ... 7/2/90
DIRECTOR OF PUBLIC WORKS DATE

Richard ... 6-21-90
CHIEF, BUREAU OF UTILITIES DATE

John M. ... 6/29/90
CHIEF, LAND DEVELOPMENT DIVISION DATE

ENGINEERING TECHNOLOGIES
ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS
3438 ELLCOTT CENTER DRIVE SUITE 101
ELLCOTT CITY, MD 21043
1201-461-9920



DES: MAL	DKF	REVISE WATER LINE AND EASEMENT & MANHOLE	3-24-91
DRN: SQP	KCE	REVISED FIRE HYDRANT LOCATION AND WATER LINE	5/4/90
CHK:			
DATE:	BY:	NO.	REVISION

PLAN
WATER MAINS

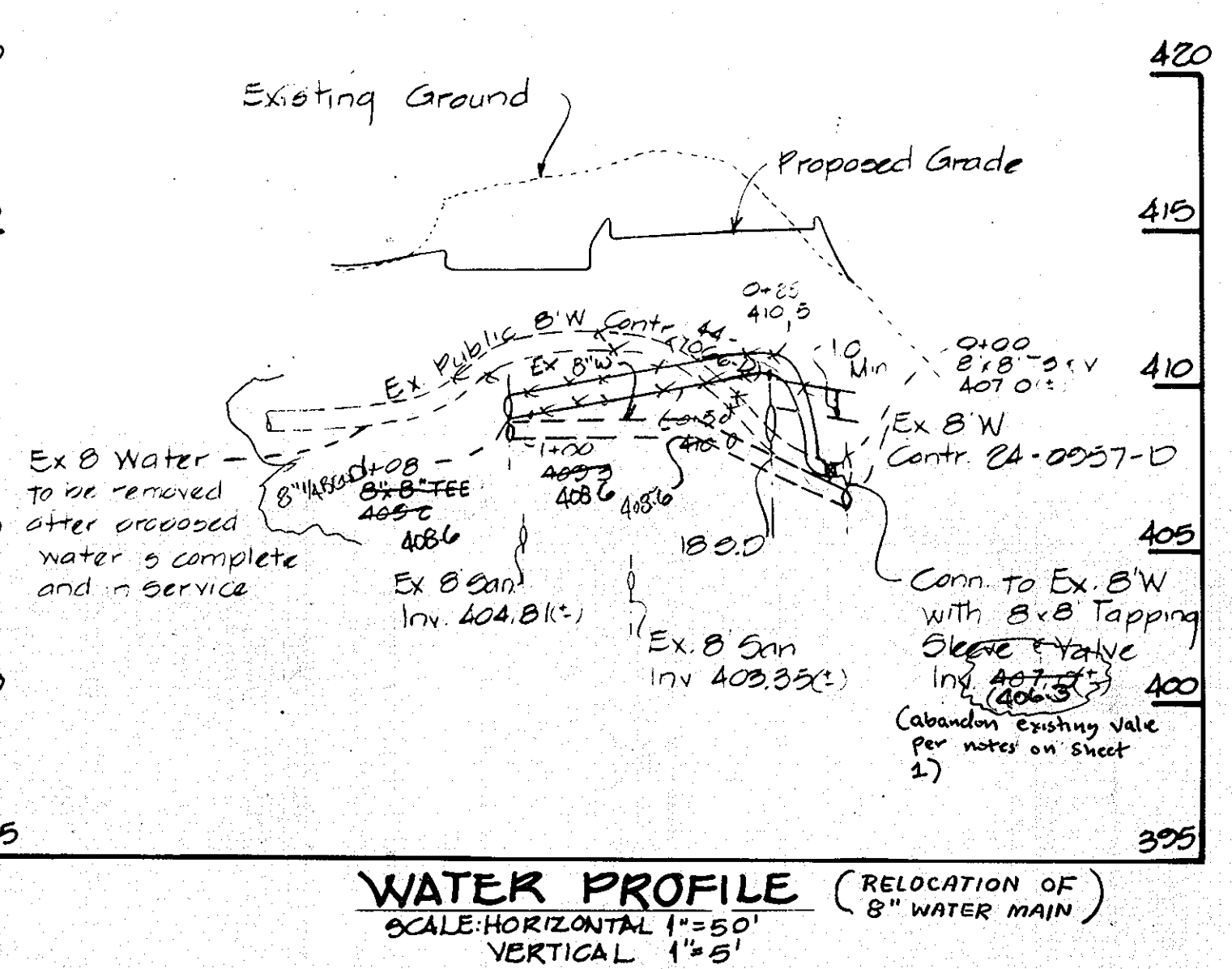
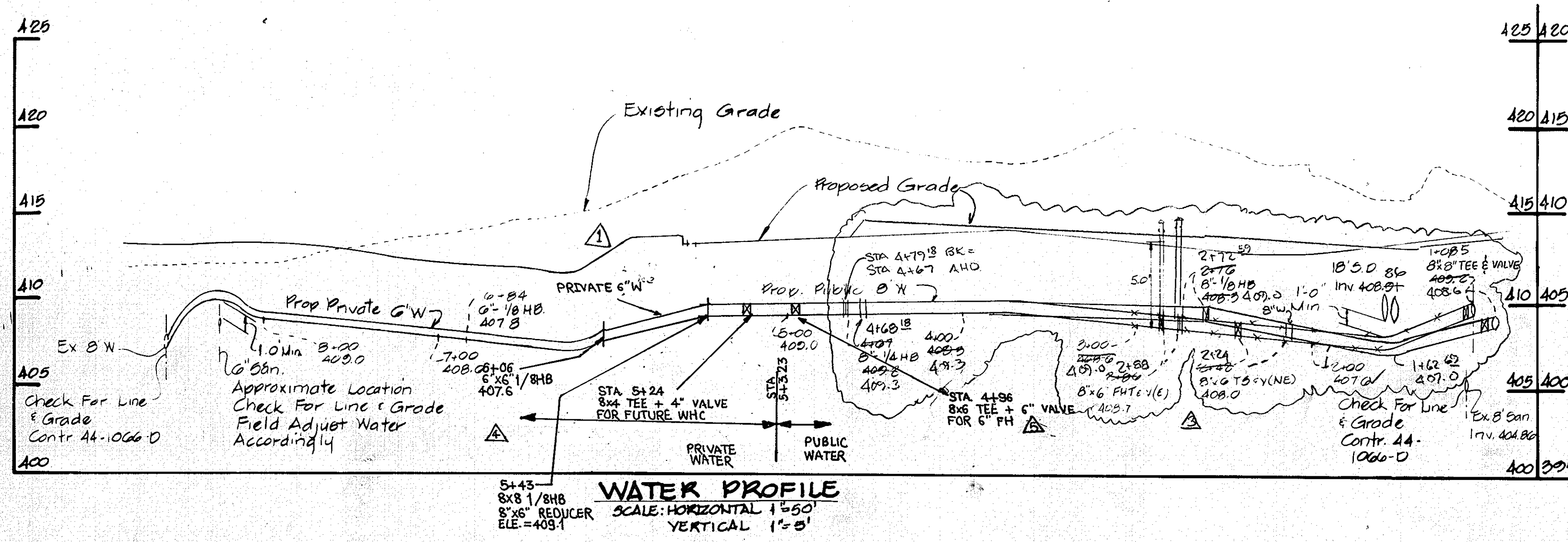
600' SCALE MAP NO. 35 BLOCK NO. 17

CONTRACT 44-3048-D
LORIE NURSING HOME EXPANSION

5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 3

AS-BUILT 4-5-91



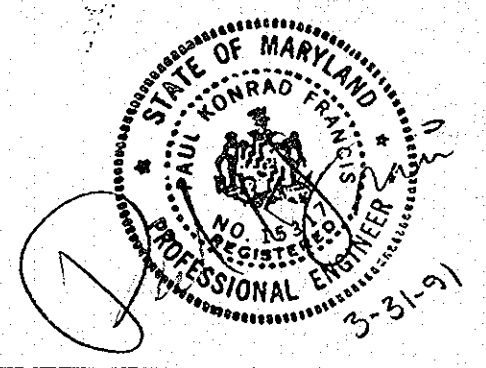
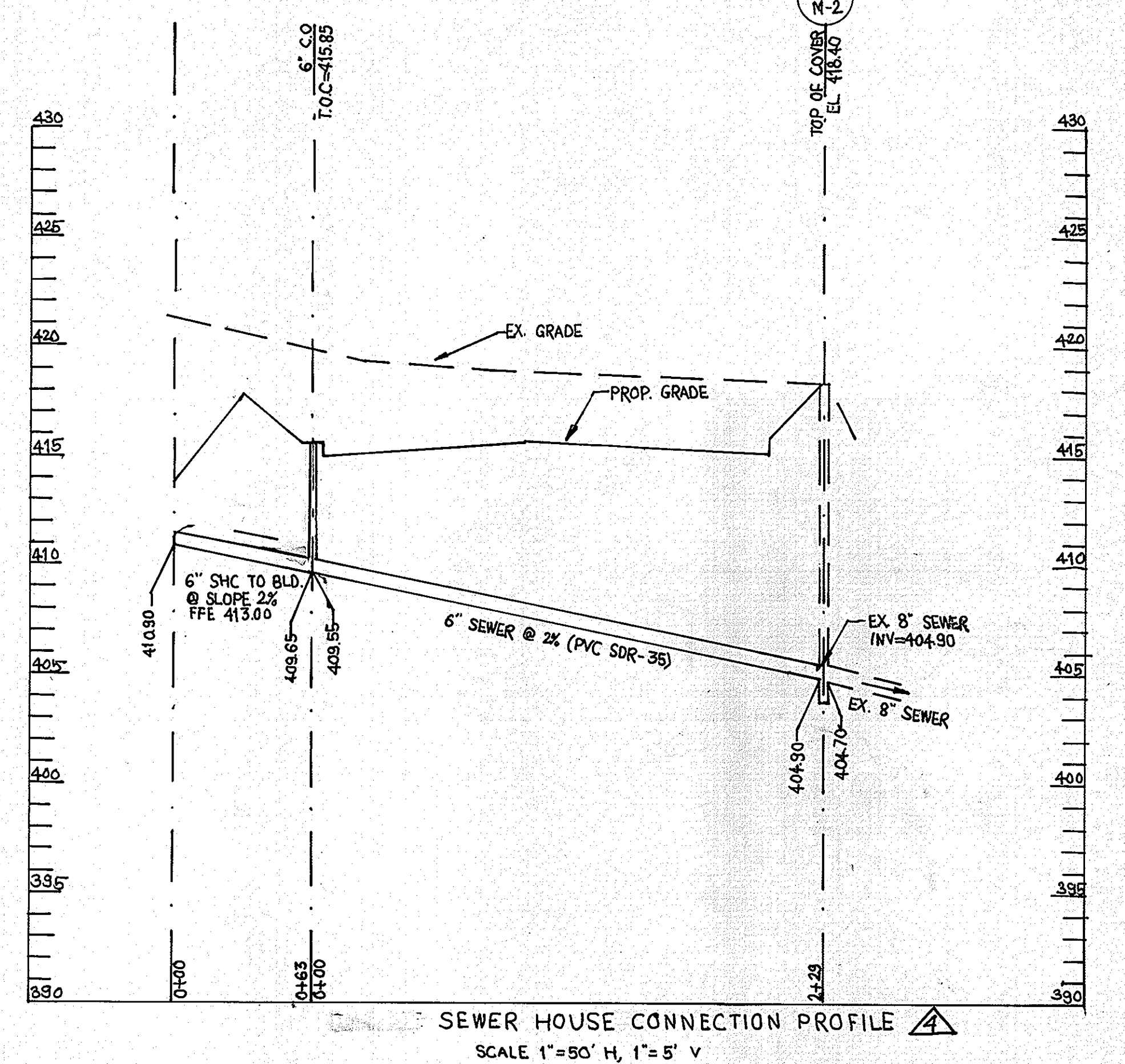
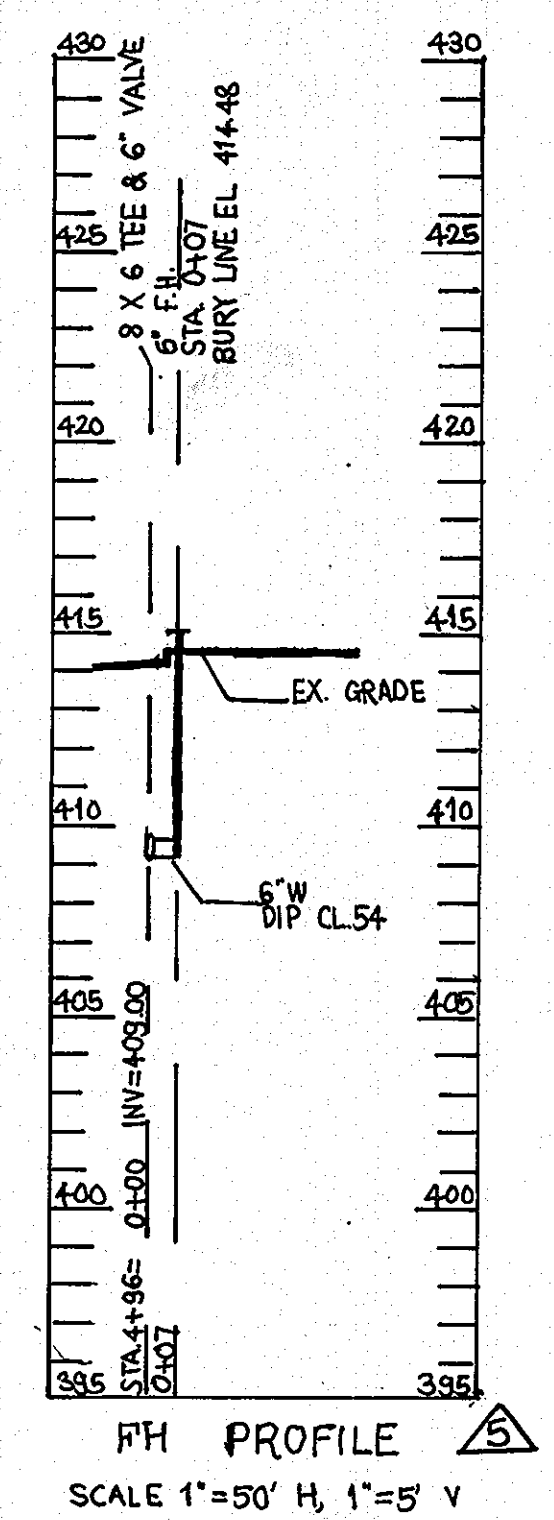
WATER LINE INSTALLATION SEQUENCE (REVISED)

- 1) RELOCATE 108 L.F. OF 8" WATER MAIN CONSTRUCTED UNDER CONTRACT 44-1066-D. THIS WORK WOULD INCLUDE THE 8"x8" TAPPING SLEEVE AND VALVE AND ADDITIONAL BENDS AND FITTINGS REQUIRED TO RECONNECT THE EXISTING 8" PRIVATE WATER MAIN.
- 2) THE ABOVE WORK SHALL BE PERFORMED PRIOR TO THE START OF GRADING. THIS WORK IS CONSIDERED AS A RELOCATION OF CONTRACT 44-1066-D AND NOT REQUIRED FOR ANY FORMAL PLACED IN-SERVICE NOTIFICATION NOR REQUIRE ANY LIEN RELEASES.
- 3) ABANDON THE OLD PUBLIC 8" WATER MAIN, CONTRACT 44-1066-D.
- 4) CONSTRUCT NEW 8" WATER MAIN AND 6" WATER HOUSE CONNECTION AND PLACE A NEW FIRE HYDRANT. THIS CONSTRUCTION SHOULD BEGIN AFTER GRADING HAS BEEN COMPLETED AND WOULD REQUIRE ALL NORMAL PROCEDURES FOR INSPECTION AND TESTING.
- 5) NO BUILDING CONSTRUCTION OVER THE EXISTING CONNECTION WOULD BE ALLOWED UNTIL THE NEW WATER MAIN HAS BEEN CONSTRUCTED AND PLACED IN-SERVICE AND RECONNECTED VIA THE 6" PRIVATE MAIN INTO THE EXISTING BUILDING B.
- 6) DISCONNECT AND ABANDON EXISTING 8" PRIVATE WATER MAIN FEED TO BUILDING B, STEP 1 ABOVE.

NOTE: To Minimize disruption to patients, proposed public 8" water main from profile station 0+00 through 1+08 will be installed parallel to existing public 8" water and within existing 20' utility easement. The existing line will be removed or abandoned after water is redirected through proposed line.

- ~~(1) WATER LINE INSTALLATION SEQUENCE~~
1. Construct proposed 8" public water line and fire hydrant. Water line from station 0+00 through 1+08 to be constructed parallel to existing public water line and within existing 20' utility easement, as shown on plan and profile. (Relocation of Water Main between sta. 0+00 to sta. 1+08)
 2. After previously mentioned water line has been tested and approved by the County, install remaining 6" private water line, as shown on plan and profile.
 3. After proposed water line is completely installed, connect proposed water line to existing water line and redirect flow of water through newly constructed system.
 4. Remove abandoned existing water line from proposed water line station 0+00 to proposed bend at station 8+00. Remove indicated abandoned fire hydrant and return to Bureau of Utilities.

- (2) SEQUENCE OF CONSTRUCTION
- (1) TAP THE EXISTING WATER MAIN 4' AWAY FROM EXISTING TEE.
 - (2) BUILT A PARALLEL LINE AND PROVIDE WATER TO BUILDING "B"
 - (3) CUT THE EXISTING PIPE BEHIND THE EXISTING TEE. REMOVE A SECTION OF OLD PIPE AND PORE BUTTRISS BEHIND THE VALVE. ABANDON THE EXISTING WATER MAIN.
 - (4) REMOVE ROAD WAY BOX OF THE VALVE AND RETURN TO THE BUREAU OF UTILITIES.



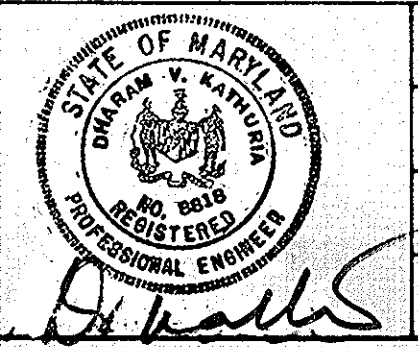
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... 7/2/00
DIRECTOR OF PUBLIC WORKS DATE

... 6-27-90
CHIEF, BUREAU OF UTILITIES DATE

... 6/27/00
CHIEF, LAND DEVELOPMENT DIVISION DATE

ENGINEERING TECHNOLOGIES ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS
2438 ELICOTT CENTER DRIVE SUITE 100
ELICOTT CITY, MD 21037
(301) 461-9970



DES: MAL	KAP	Changed 8"x8" Tee To 8"x6" Tee at Sta. 5+69	
	MCR	REVISED WATER LINE INSTALLATION SEQR	11-21-90
DRN: RMC	PT	REVISED WATER PROFILES & SEQR	3-21-91
	KCE	REVISED FIRE HYDRANT LOCATION AND WATERLINE	5/4/90
CHK: KCE	4	REVISED FH, Add SHC profile	7/16/90
DATE:	BY NO.	REVISION	DATE

PROFILES WATER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 17

CONTRACT 44-3048-D
LORIEN NURSING HOME EXPANSION

5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 3