

**BENCH MARKS**

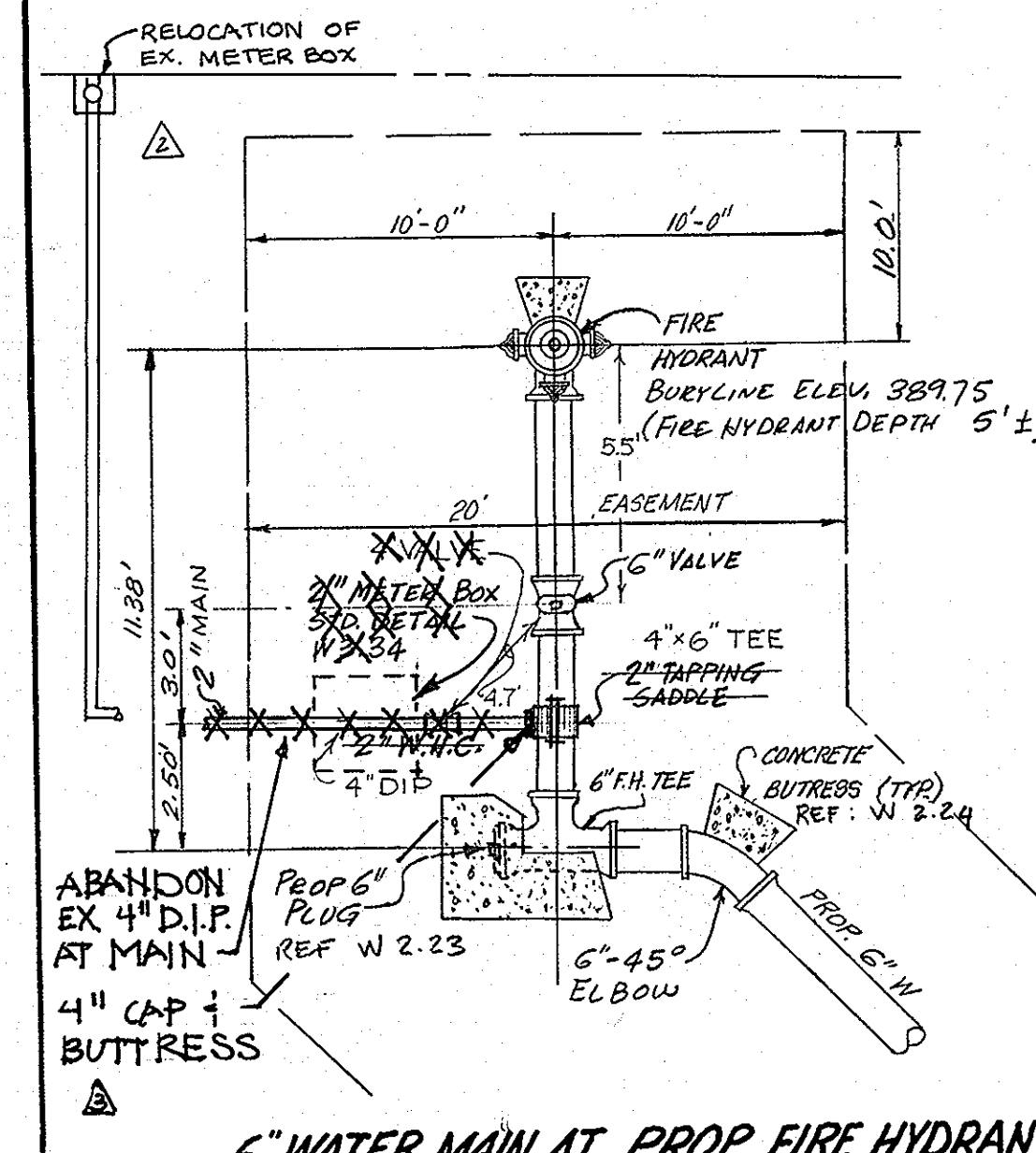
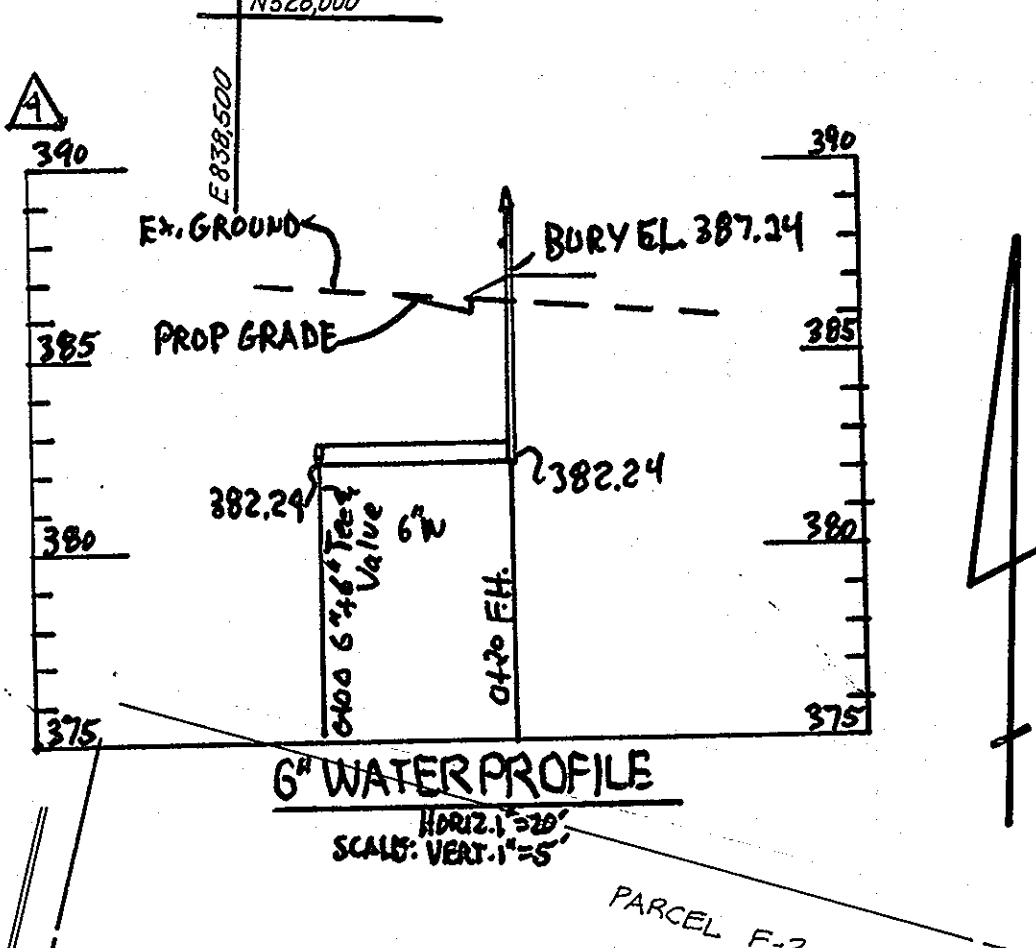
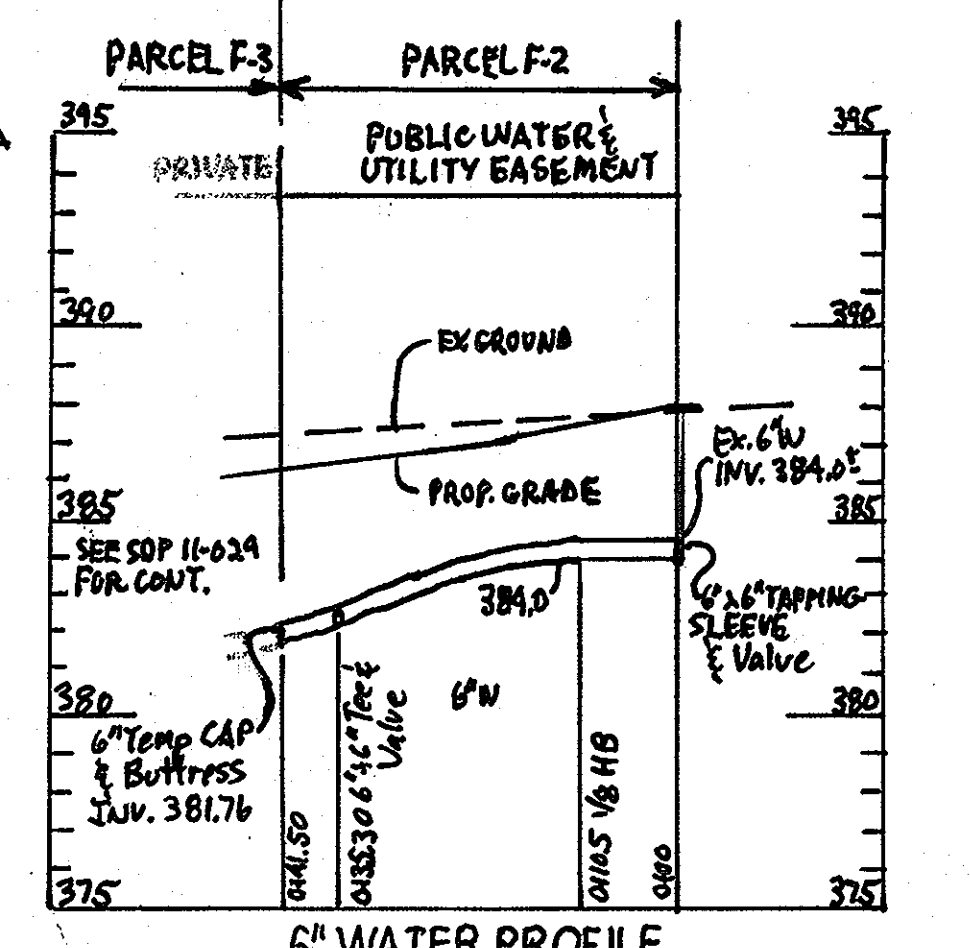
B.M. #1 "10-4" ELEV. = 401.59'  
RAILROAD SPIKE SET IN EX. PAVING 44' ±  
SOUTH FROM INTERSECTION OF PINE ORCHARD  
LAKE & NICHOLAS COURT

B.M. #2 ELEV. = 361.81'  
RIM OF EXISTING SEWER MANHOLE #3 AS  
PER CONTRACT 24-1135-D

**QUANTITIES**

ITEM	EST'D	AS BUILT	SUPPLIER
6" W. MAIN	137'	137'	DIP WATER & SEWER
FIRE HYDRANT	1 EA.	1 EA.	"
6" W.H.C.	10'	10'	DIP "
6" PRESS. VALVE	1 EA.	1 EA.	MUELLER CO.
6" VALVE	1 EA.	1 EA.	A+P WATER & SEWER
8" MAIN	85'	85'	PVC CHARLOTTE PIPE & FOUNDRY CO.
SEWER MANHOLE	1 EA.	1 EA.	PRE-CAST WATER & SEWER
8" S.H.C.	5'	5'	PVC A+P
6" W.H.C.	10'	10'	"

NOTE: ALL 2" WATER MAIN SHOULD BE TYPE 'K' COPPER WITH FLARED FITTINGS ONLY AS PER HOWARD COUNTY DESIGN MANUAL VOL. W STANDARDS IF NOT, IT SHALL BE REPLACED TO MEET THOSE STANDARDS PRIOR TO ACCEPTANCE.



**6" WATER MAIN AT PROP. FIRE HYDRANT**  
NOT TO SCALE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

*J. Helm* 9-20-85  
US SOIL CONSERVATION SERVICE DATE

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

*Stephen L. Fisher* 9/20/85  
HOWARD SOIL CONSERVATION DISTRICT DATE

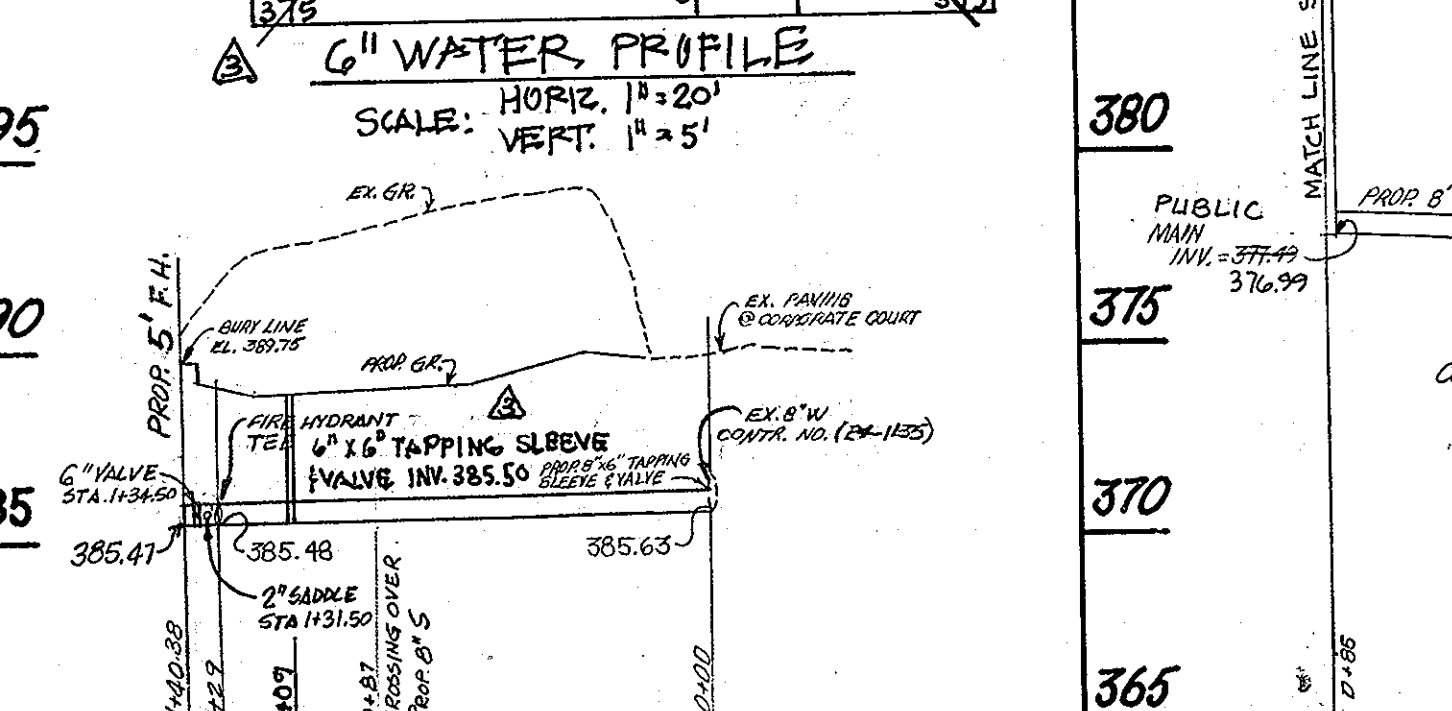
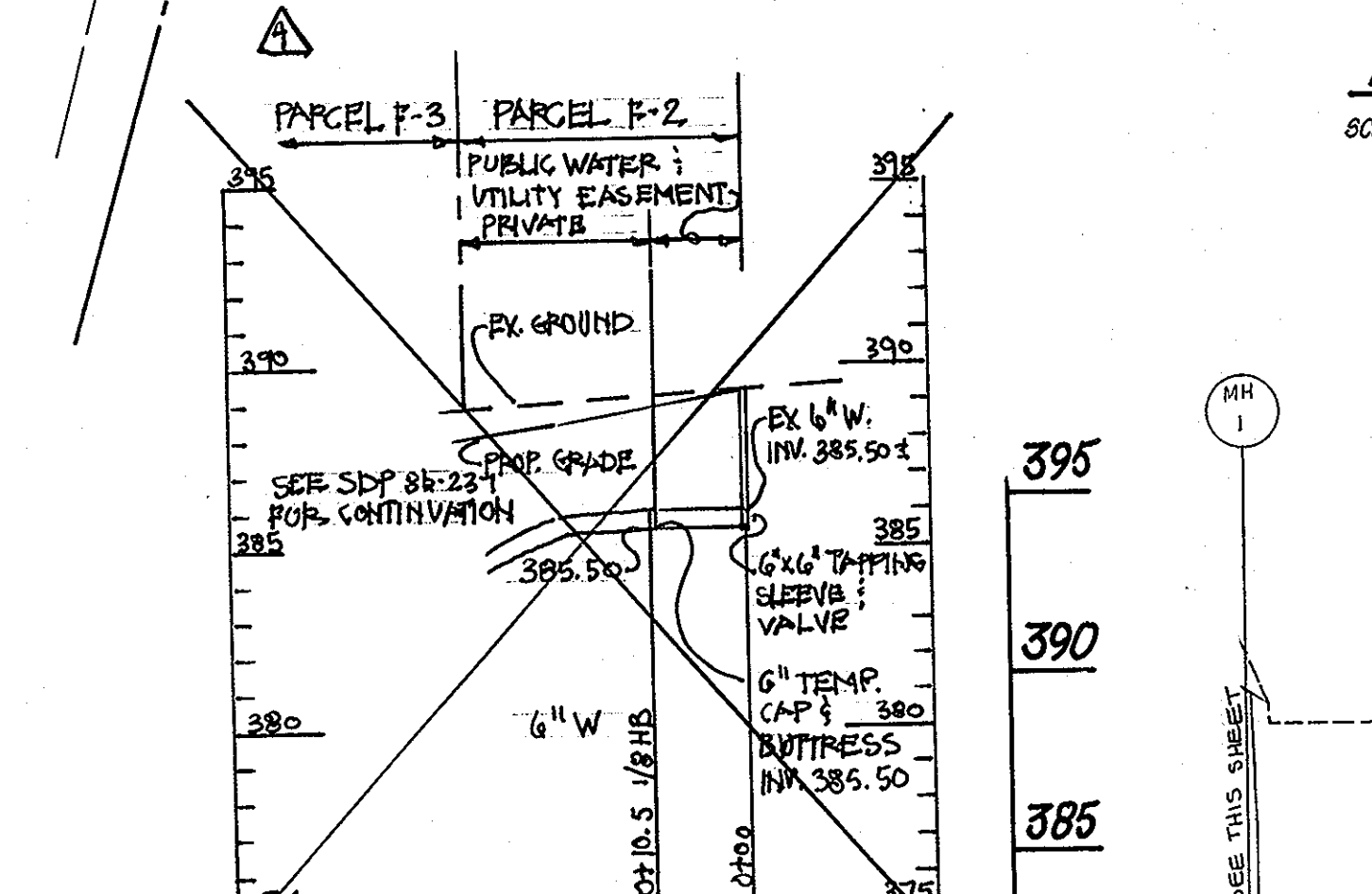
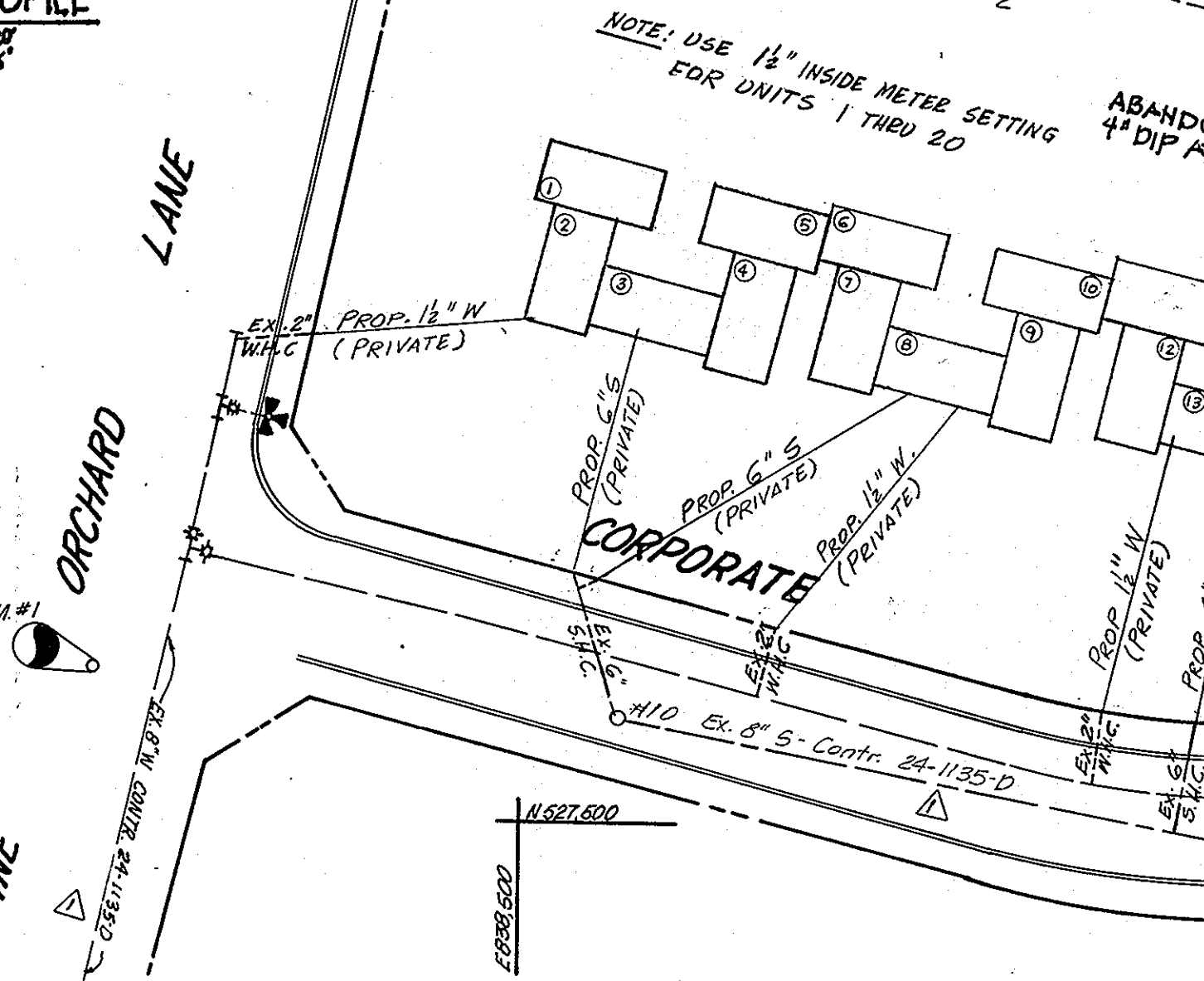
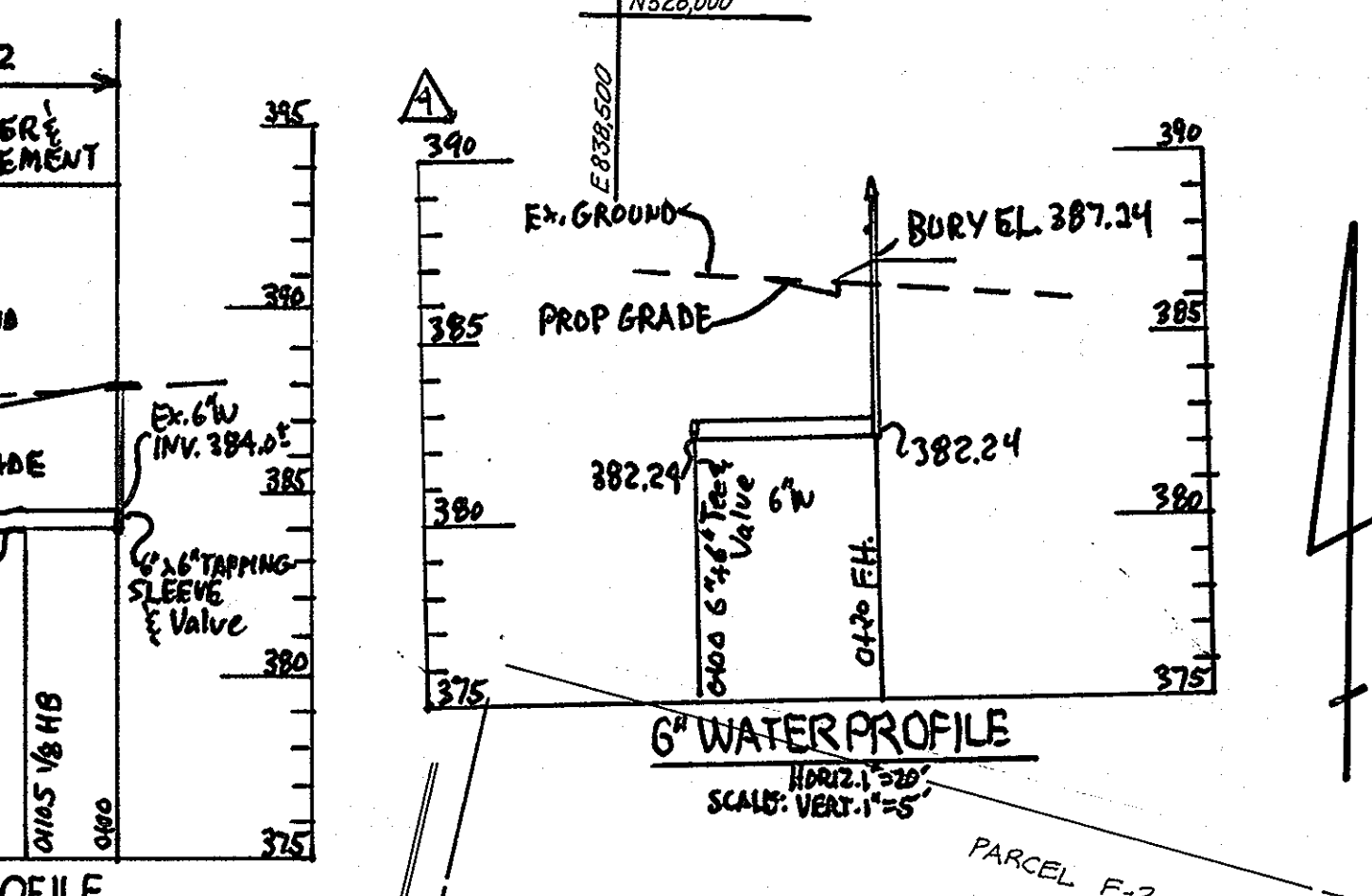
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Walter Nalley* 9-27-85  
DIRECTOR OF PUBLIC WORKS DATE

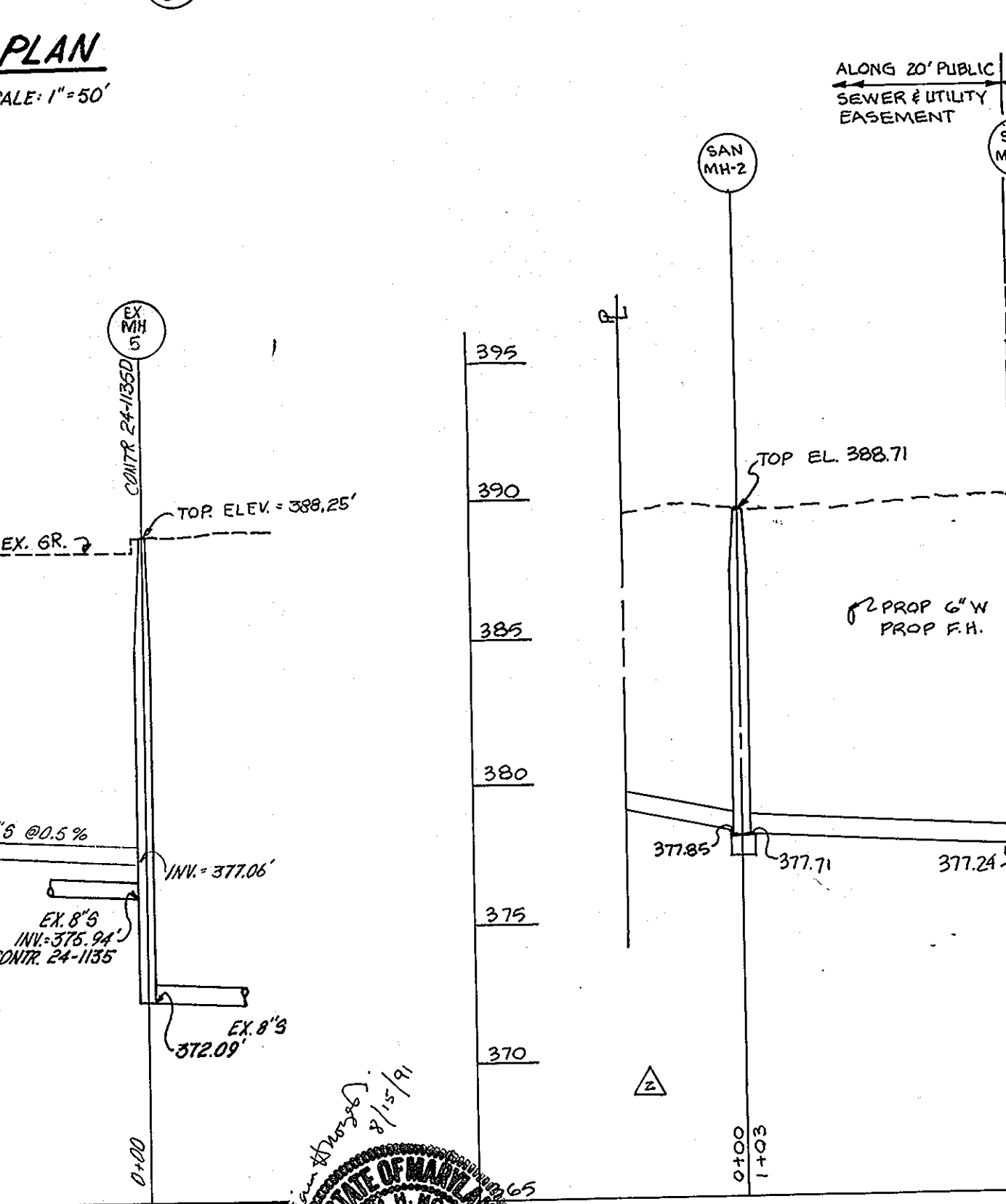
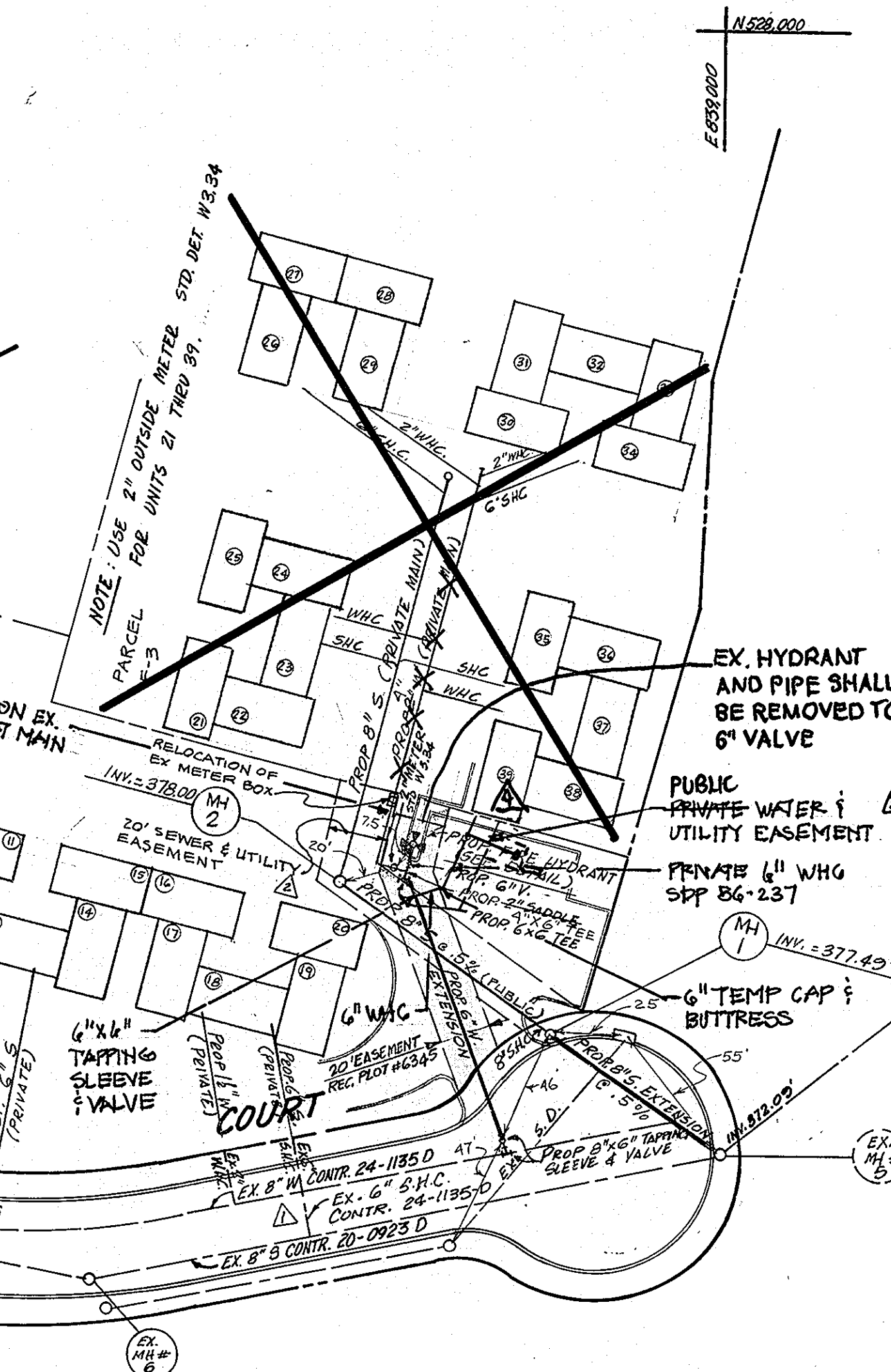
*James E. Ray* 9/21/85  
CHIEF BUREAU OF ENGINEERING DATE

*R.L. Hagan* 9-26-85  
CHIEF BUREAU OF UTILITIES DATE

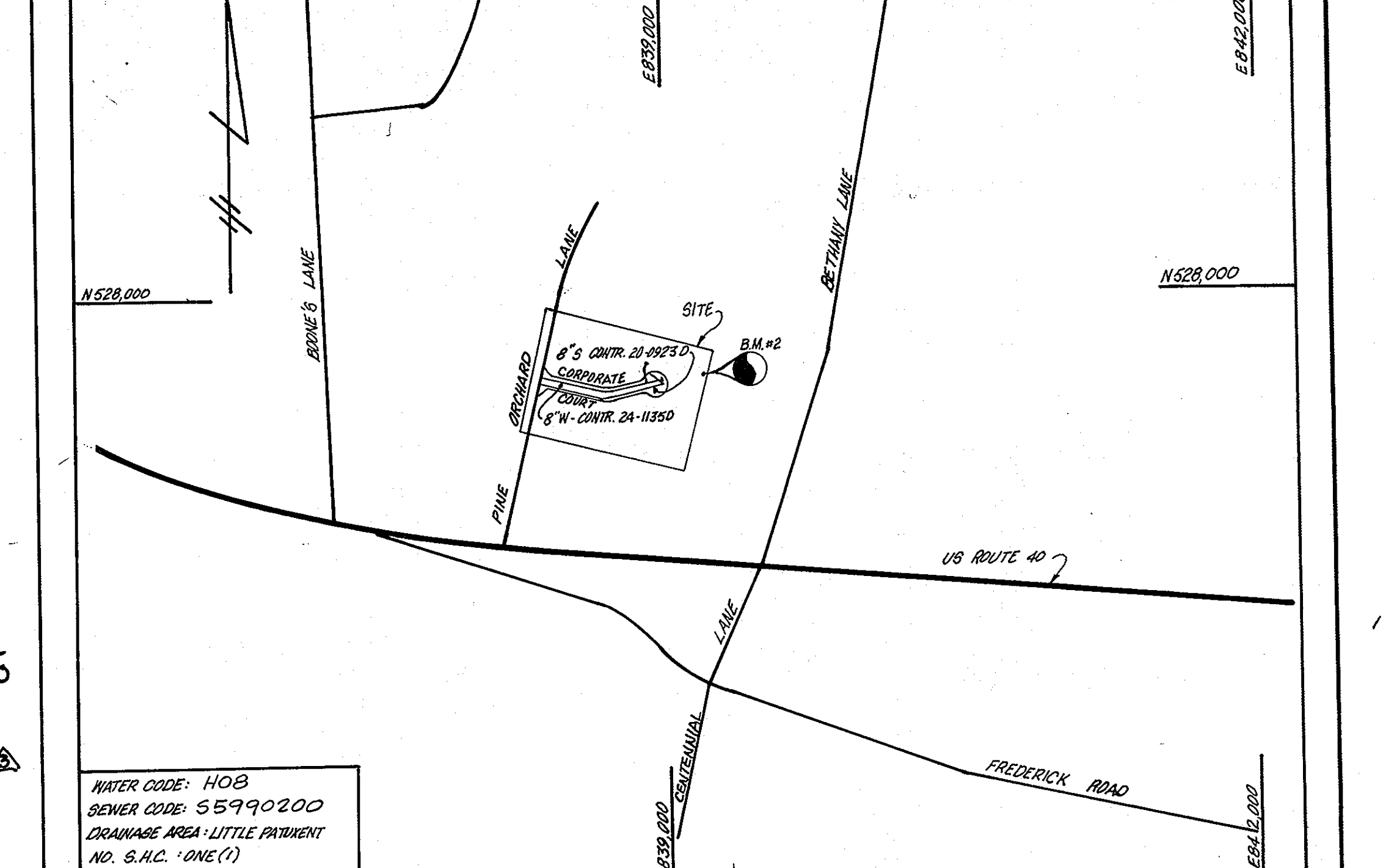
*Joseph Greenland* 9/25/85  
CHIEF, LAND DEVELOPMENT DIVISION DATE



**PROFILE - 6" W. EXTENSION FOR F.H.**  
SCALE: HORZ. 1" = 20' VERT. 1" = 5'



**SEWER PROFILE - PUBLIC**  
SCALE: HOR. 1" = 50' VERT. 1" = 5'



**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 AND 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.C.F.S.
- 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 THE UNIT PRICE 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 SPECIFICATION.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM 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" - (1-559-0100).
  - CHESAPEAKE AND POTOMAC (C.P.) TELEPHONE COMPANY - (725-9976).
  - BUREAU OF UTILITIES, HOWARD COUNTY - (992-2366).
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREE 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 PRICE BID FOR THE 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 OPERATION.
- ALL WATER MAINS TO BE C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS HAVE A 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- BURY LINE FITTINGS WITH CONCRETE.
- 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 HYDRANTS TO BE COMPACTED IN ACCORDANCE WITH SECTION 37.01 AND 37.05 OF THE STANDARD SPECIFICATIONS.
- WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING FOR UNITS 1 TO 20 AND FOR OUTSIDE METER SETTING FOR UNITS 21 TO 34.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P., I.C.P., 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 BRICK MANHOLES ONLY.
- WATER MAIN AND WATER HOUSE CONNECTION LINE 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.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLAIR TYPE FITTINGS ONLY.
- WATER HOUSE CONNECTION FOR PARCEL F-3 SHALL USE 3" METER.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14230, EXP. DATE 12/01/10.

AS-BUILT G. WALLACE 2-2-87

STATE OF MARYLAND PROFESSIONAL ENGINEER

STATE OF MARYLAND PROFESSIONAL ENGINEER

For Revision A by Tesseract Sites, Inc.

For Revision B by Tesseract Sites, Inc.

Tesseract Sites Inc.  
401 Washington Ave Suite 303  
Towson, MD 21204  
c/o JEFFREY SCHWAB  
PH. 410-321-7600 FAX 410-321-7101

R.D.M. ENGINEERING INC.  
11416 OLD FREDERICK RD.  
MARRIOTTVILLE, MARYLAND 2104  
TEL. (301) 442-1250

*Rosario Di Marco* 9/17/85  
PROFESSIONAL ENGINEER DATE

DES. RDM	CHK. JTN	DATE: AUG. 85	BY NO.	REVISION	DATE
TSJ	TSJ			Relocated Fire Hydrant	
TSJ	TSJ			REVISED WATER & SEWER TO ADD 6" WHC FOR PARCEL F-3	9/28/85
TSJ	TSJ			WATER HOUSE CONNECTIONS	
DEH	DEH			ADD SEWER & UTILITY EASEMENT, INDICATE RELOCATION OF WATER METER BOX, ADD SEWER PROFILE	8/19/91
WH	WH			R.V.D. CONTR. N.B. AS PER MR. HASON	3/27/86

**WATER & SEWER PLAN AND PROFILES**

**PINE ORCHARD - SECTION 2**  
PARCEL F-1  
CONTRACT 24-1404 - D

SCALE: AS SHOWN  
SHEET 1 OF 1