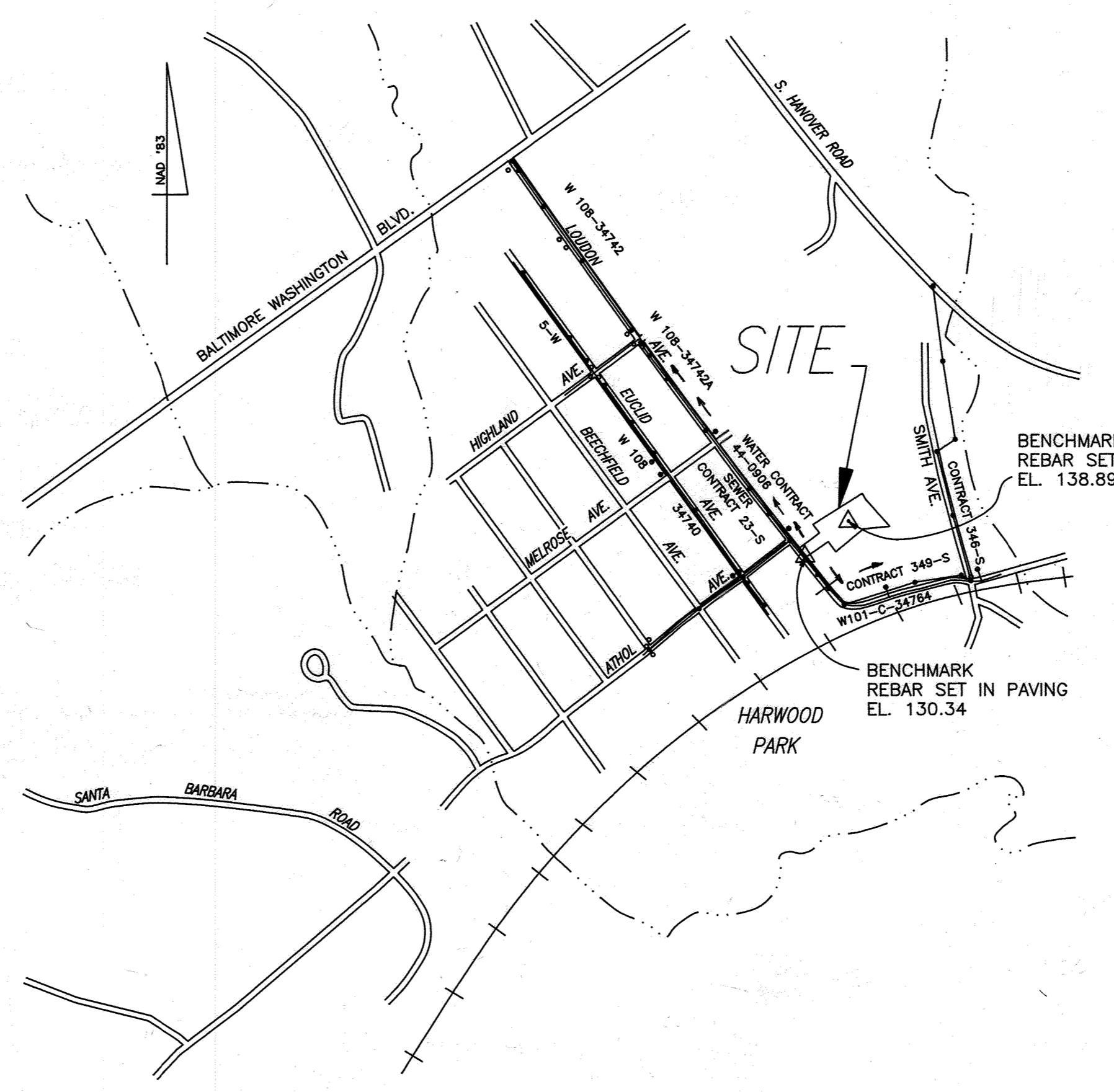


QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
8" SEWER PVC	283 L.F.	293	SDR-35	1 PEX / M+C SALES
SEWER MANHOLES	2, 15.7 L.F.	2		
4" SEWER PVC	30 L.F.	30	SDR-35	1 PEX / MUNICIPAL CONTRACTOR / SALES
6" SEWER P.V.C.	29 L.F.	20	SDR-35	1 PEX / M+C SALES
6" SEWER TEE (P.V.C.)	2	0	-	CHANGED TO BLOCKS
6" SEWER CAP / FLUG (P.V.C.)	3	2	SDR-35	HASCO / M+C SALES
6" x 1 1/2"	2	0	-	BY PLUMMER
6" X 4" REDUCER	1	1		
4" WATERMAIN D.I.P.	293 L.F.	203 L.F.	D.I.P.	GRIFFEN / M+C SALES
1" W.H.C.	70 L.F.	82 L.F.	K	CAMBRIDGE LEE / M+C SALES
1" PRESSURE REDUCING VALVE	4	4		
10" x 6" TAPPING SLEEVE & VALVE	1	1	C 270	FORD / M+C SALES
WATER MAIN DRAIN	1	1		
4" D.I.P. NIPPLE	2	2	C 153 D.I.P.	TYLER / M+C SALES
6" SEWER BLOCKS	0	2	PRECAST	
4" SEWER BLOCKS	0	2	PRECAST	

NAME OF UTILITY CONTRACTOR: FERGUSON TRENCHING

SURVEY AND DRAFTING DIVISION	CHECKBOX AS-BUILT DATE
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WATER & SEWER CODE:
COUNTY USE

WATER NO. A01
SEWER NO. 215 0510
TEST GRADIENT: 550

TYPE OF BUILDING	S.F.D.
NUMBER OF LOTS	4
NUMBER OF W.H.C.'S	4
NUMBER OF S.H.C.'S	4
DRAINAGE AREA	PATAPSCO
TREATMENT PLANT	PATAPSCO

VICINITY MAP
SCALE: 1" = 600'

GENERAL NOTES

- PART I**
- 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 [North American Datum of 1983 (NAD '83)].
 - All vertical controls are based on U.S.G.S. data.
 - 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. 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 bracing of additional poles or damages shall be deducted from money owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
 - For details not shown on the drawings, and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction (Latest Edition). The contractor shall have a copy of Volume IV on the job.
 - Where test pits have been made on existing utilities, they are noted by the symbol \square at the location of the test pit. A note or notes containing the results of the test pit or 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 utility companies or agencies at least (5) working days before starting the work shown on these plans:

AT&T	865-3803
BGE (Contractor Services)	850-4620
BGE Under Ground Damage Control	787-9068
Bureau of Utilities (DPW)	313-4900
Chesapeake & Potomac Telephone Co.	597-8585
Colonial Pipeline Co.	795-1390
Miss Utility	1-800-257-7777
State Highway Administration	531-5533
 - Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs located within the construction strip are not to be or damaged 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 of the main.
 - The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five (5) working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirements per Section 18.114(a) of the Howard County Code.

- PART II - WATER**
- All water mains to be D.I.P. Class 52 unless otherwise noted.
 - Tops of all water mains to have a minimum of 3-1/2' 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 for on the drawings.
 - Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with the Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
 - The contractor shall not operate any water main valves on the existing water system.
 - All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
 - For sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1' connection with a 3/4" meter.

- PART III - SEWER**
- All sewer mains shall be P.V.C. or D.I.P. class 52 unless otherwise noted.
 - All manholes shall be 4'-0" inside diameter unless otherwise noted.
 - Force mains shall be D.I.P. only.
 - Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight frame and cover is used, set top of frame 1"-6" above finished grade unless otherwise noted on drawings.
 - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
 - REFER TO STANDARD DETAIL G4.401 FOR METHOD OF CUTTING & REPAIRING OPENINGS IN EXISTING ROADWAY PAVING.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS (F-99-05)

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Cheryl Simmons 6/3/99
SIGNATURE DATE

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICES

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

John P. Roberts 6/3/99
HOWARD S.C.B. DATE

CONTRACT NO. 14-3747-D
PROFFEN PROPERTY
LOTS 1 - 4

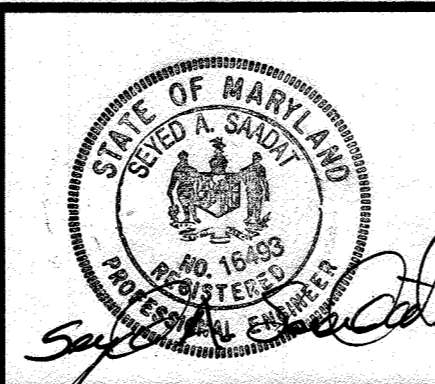
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

OWNER/DEVELOPER:
KIETH PROFFEN
6451 LOUDEN AVE.
ELKRIDGE, MD 21227

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MD
Robert Berman 5-4-99
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MD
John P. Roberts 6/4/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SHANABERGER & LANE
SURVEYING • LAND PLANNING • CONSTRUCTION STAKEOUT
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MD 21043
PHONE: (410)-461-9563
FAX: (410)-461-9693



DESIGN: <i>JS</i>				
DRAWN: <i>JAT</i>				
CHECK: <i>JS</i>	K.C.I.	3	AS-BUILT CONDITIONS ADDED TO PLAN	2/16/00
	J.A.I.	2	ADD WATER & SEWER CODES, REVISED QUANTITIES	4/24/99
DATE: 11-16-98	J.P.R.	1	REVISE QUANTITIES	9/29/99
	BY	NO.	REVISION	DATE

TITLE SHEET
CONTRACT NO. 14-3747-D
600' SCALE MAP NO. 38 BLOCK NO. 14

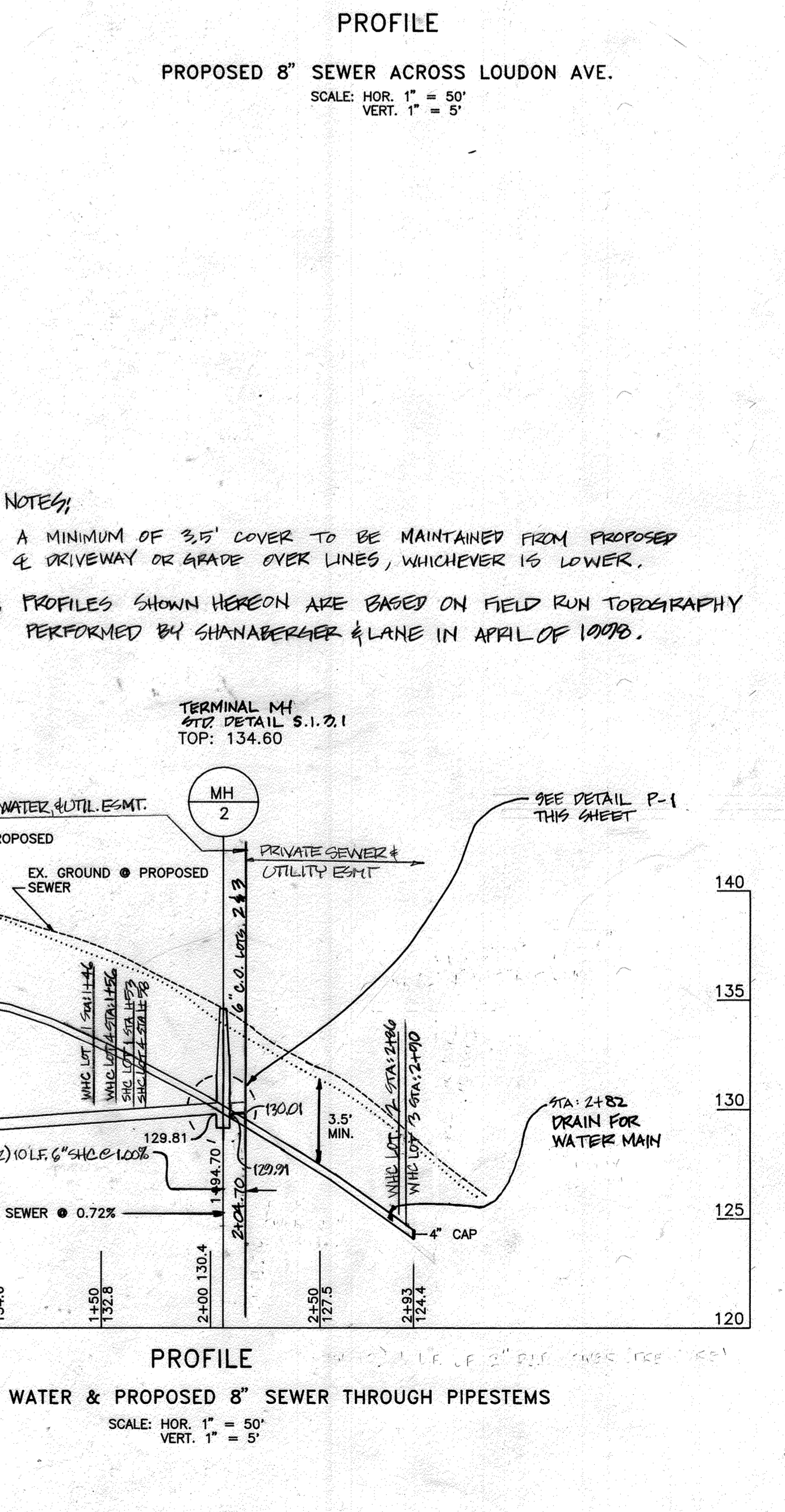
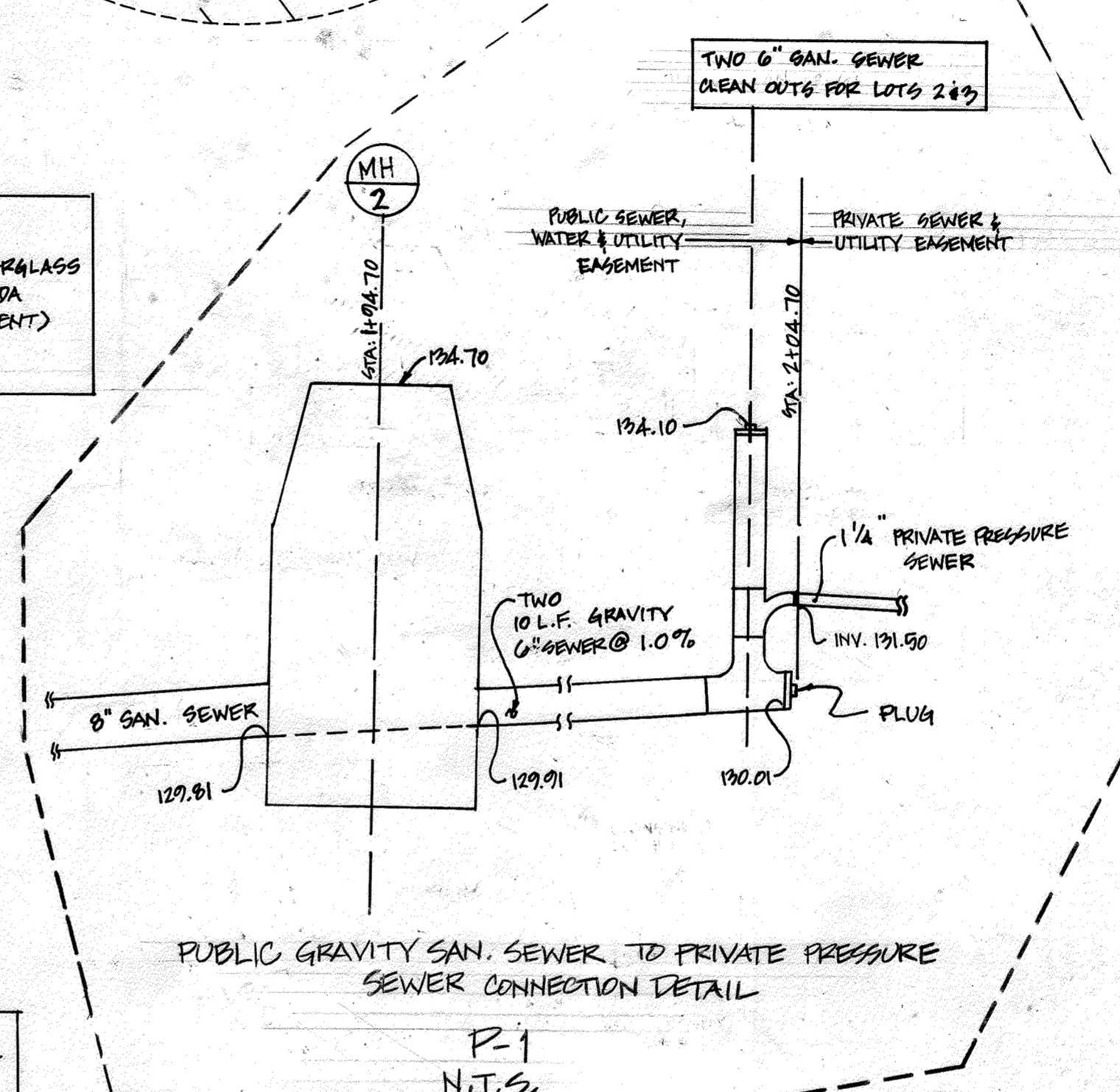
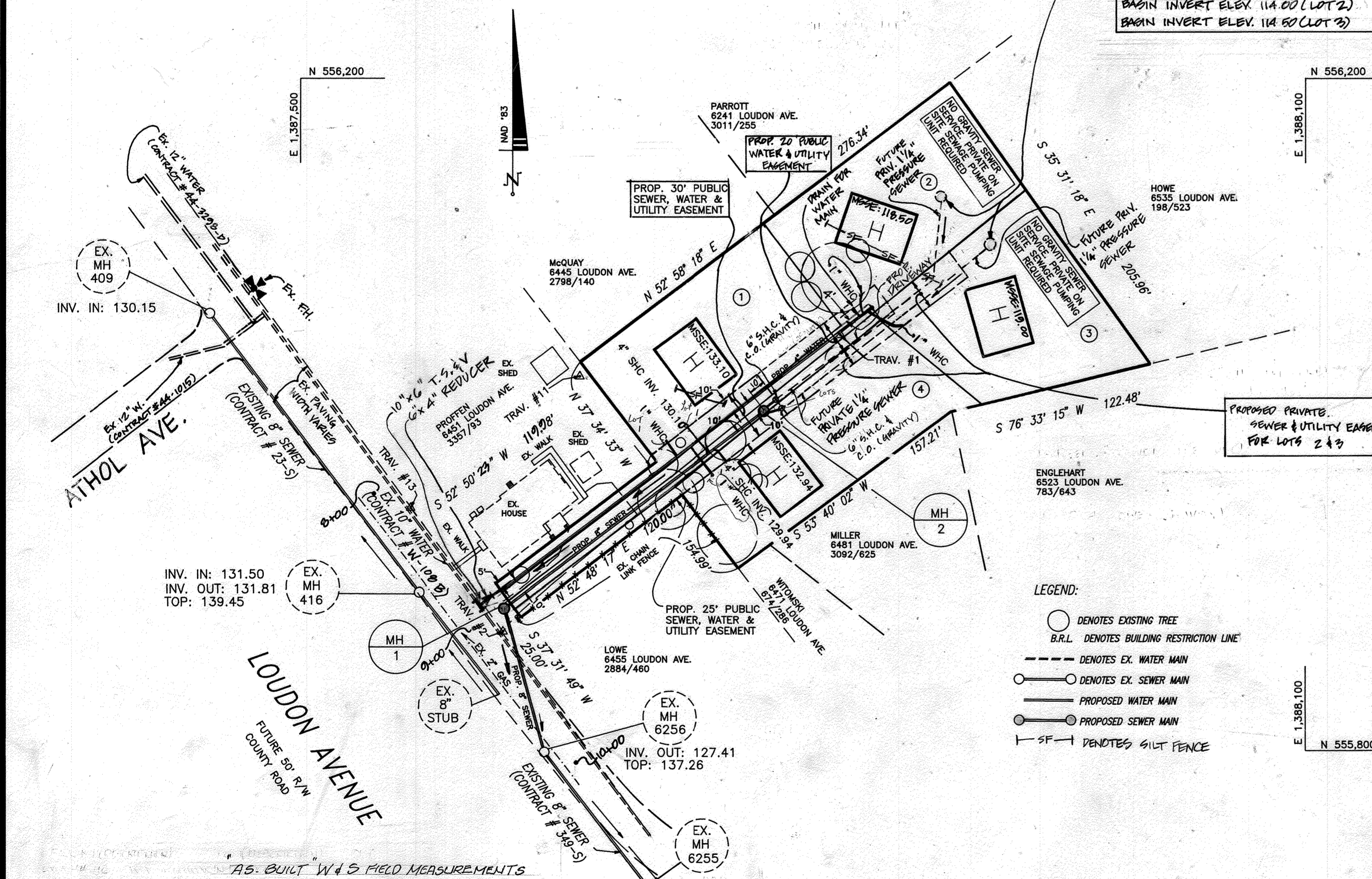
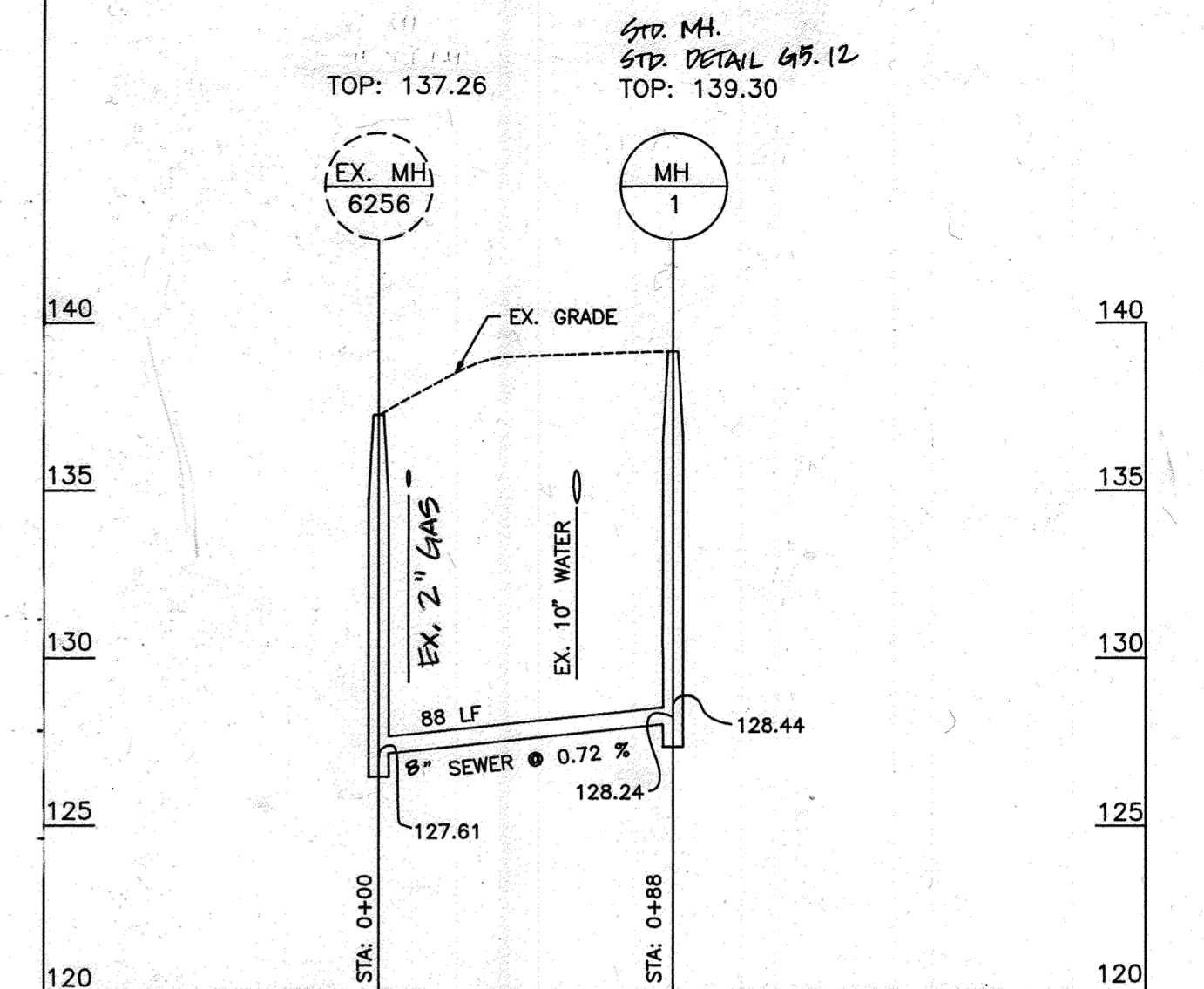
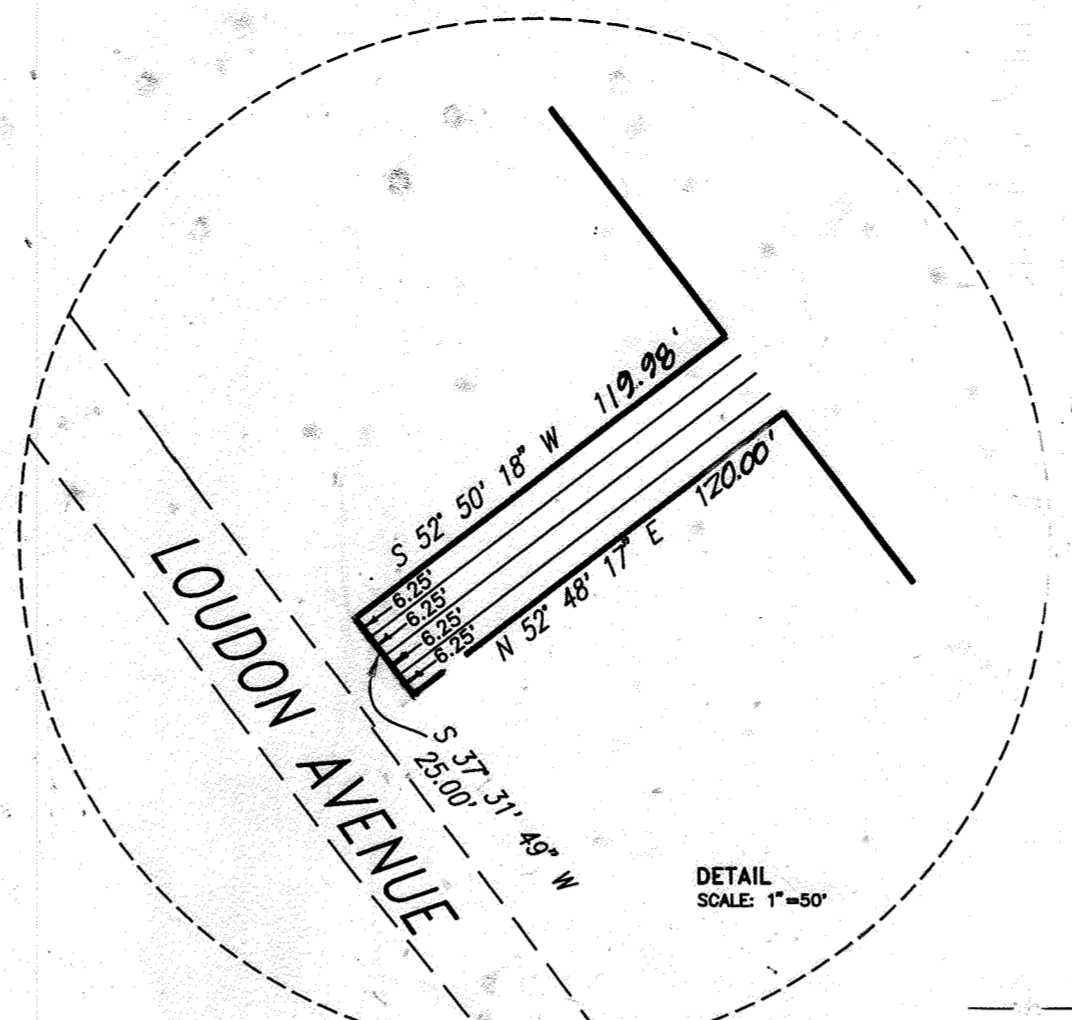
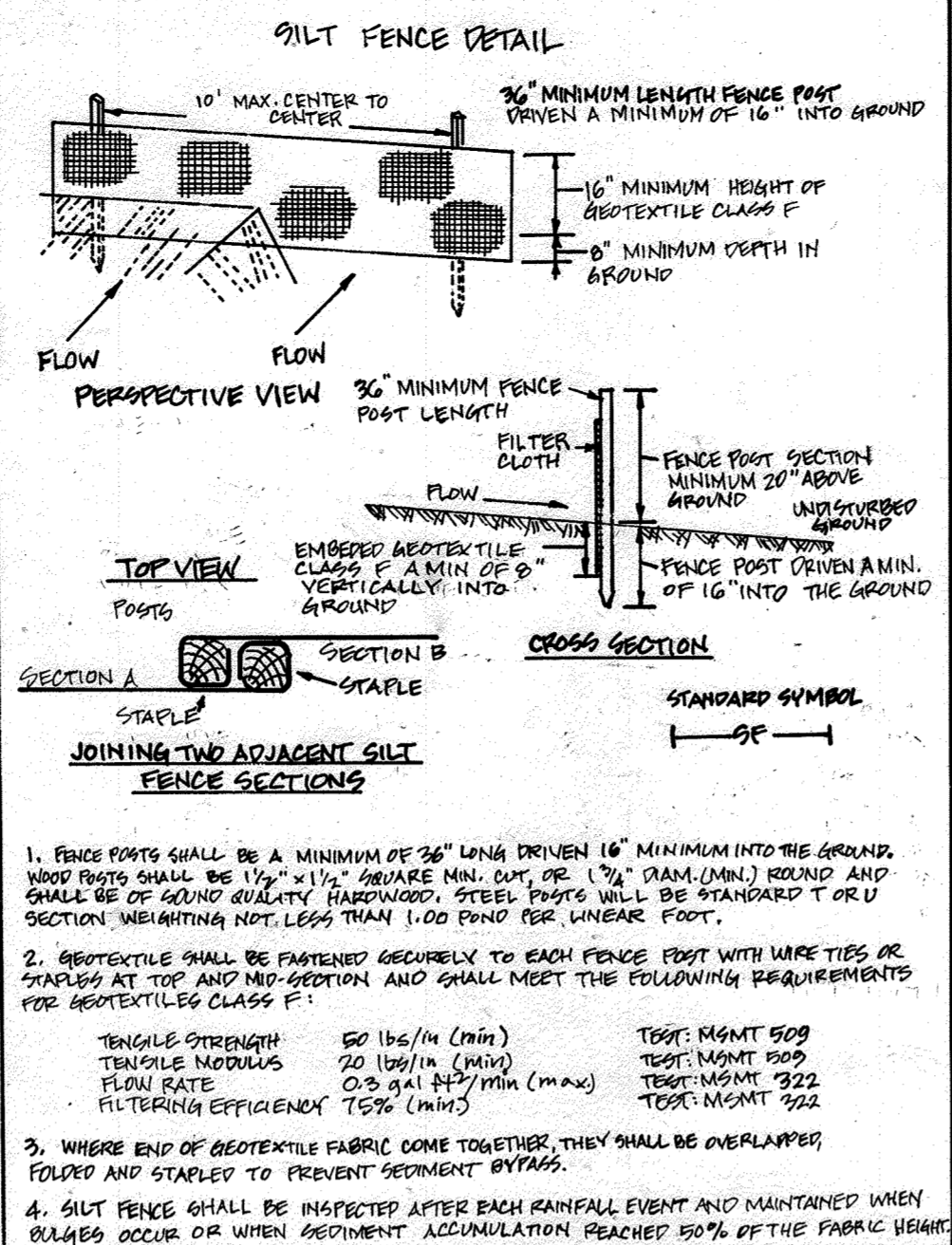
PROFFEN PROPERTY
LOTS 1 - 4
TAX MAP 38, GRID 14, PARCEL 213
1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
CONTRACT NO. 14-3747-D
SCALE: AS SHOWN
SHEET 1 OF 2

STAKEOUT INFORMATION

TRAVERSE POINT	N	E	ELEV.	DESCRIPTION
#1 (BENCHMARK)	556,047.3166	1,387,822.3254	130.34	REBAR SET
#2 (BENCHMARK)	555,870.9362	1,387,820.9884	138.89	REBAR SET IN PAVING
#11	556,022.8008	1,387,666.6454	N/A	REBAR SET
#13	555,944.2622	1,387,565.7299	N/A	P.K. NAIL SET

SEWER MANHOLE	N	E
#1 Ho. Co. STD. 45.12	555,884.713	1,387,821.850
#2 Ho. Co. STD. 5.1.2.1	556,002.325	1,387,777.013

WATER MAIN	N	E
0+00 10"x6" TS&V	555,885.9	1,387,606.9
2+94 4" CAP	556,063.5	1,387,841.2



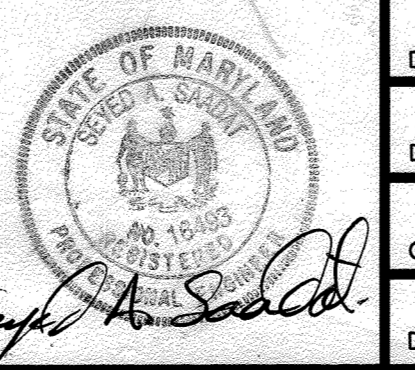
AS-BUILT W & S FIELD MEASUREMENTS

FROM (DESCRIPTION)	TO (DESCRIPTION)	DIST.	FROM (DESCRIPTION)	TO (DESCRIPTION)	DIST.
EXISTING MH 416	W.V. @ BEG. 20' RW	35'	MH # 2	LOT 1 4 S.H.C. @ CO.	37'
W.V. @ BEG. 20' RW	MH # 1 @ BEG. 20' RW	15'	MH # 2	LOT 2 W.H.C.	81'
MH # 1 @ BEG. 20' RW	W.H.C. LOT 1	150'	MH # 2	DRAIN 1/2" LOT 2	80'
"	W.H.C. LOT 4	150'	"	LOT 2 W.H.C.	142'
"	"	134.7'	MH # 2	LOT 3 W.H.C.	101'
LOT 1 W.H.C.	LOT 4 W.H.C.	32'	LOT 1 W.H.C.	LOT 3 W.H.C.	160.5'
"	S.H.C. LOT 4 @ CO. LOT 1	30'	LOT 1 W.H.C.	LOT 3 W.H.C.	229.5'
"	MH # 2	608.5'	LOT 4 W.H.C.	LOT 3 W.H.C.	97'
"	S.H.C. LOT 1 @ CO. 300	74'	MH # 2	LOT 2 S.H.C.	14'
"	S.H.C. LOT 2	73.5'	MH # 2	LOT 4 S.H.C. @ CO. 3	14'
"	S.H.C. LOT 1	18'	LOT 2 W.H.C.	DRAIN 1/2"	6'
MH # 2	S.H.C. LOT 1	45'			

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MD
Robert W. Deinger 5-4-99
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MD
Charles P. ... 6/4/99
DATE

SHANABERGER & LANE
SURVEYING • LAND PLANNING • CONSTRUCTION STAKEOUT
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLICOTT CITY, MD 21043
PHONE: (410)-461-9563
FAX: (410)-461-9893
Seip A. Seidel



DESIGN: *[Signature]*

DRAWN: JAI

CHECK: 93

DATE: 11-16-98

NO.	BY	REVISION	DATE
1	K.C.I.	4 AS-BUILT CONDITIONS ADDED TO PLAN	2/16/00
2	JAI	2 ADD SILT FENCE & DETAIL	4/3/99
3	JAI	2 ELIMINATE PRIVATE SAN. PRESSURE SEWER FROM PROFILE, ETC.	4/26/99
4	JAI	1 ADD PRESSURE SEWER DETAILS, ELEV. 4" @ (PRESSURE) ADD QUANTITIES	3/30/99

PLAN & PROFILE OF WATER & SEWER MAINS
CONTRACT NO. 14-3747-D
600' SCALE MAP NO. 38 BLOCK NO. 14

PROFFEN PROPERTY
LOTS 1 - 4
TAX MAP 38, GRID 14, PARCEL 213
1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SHEET 2 OF 2

SCALE: AS SHOWN