

SHEET INDEX	
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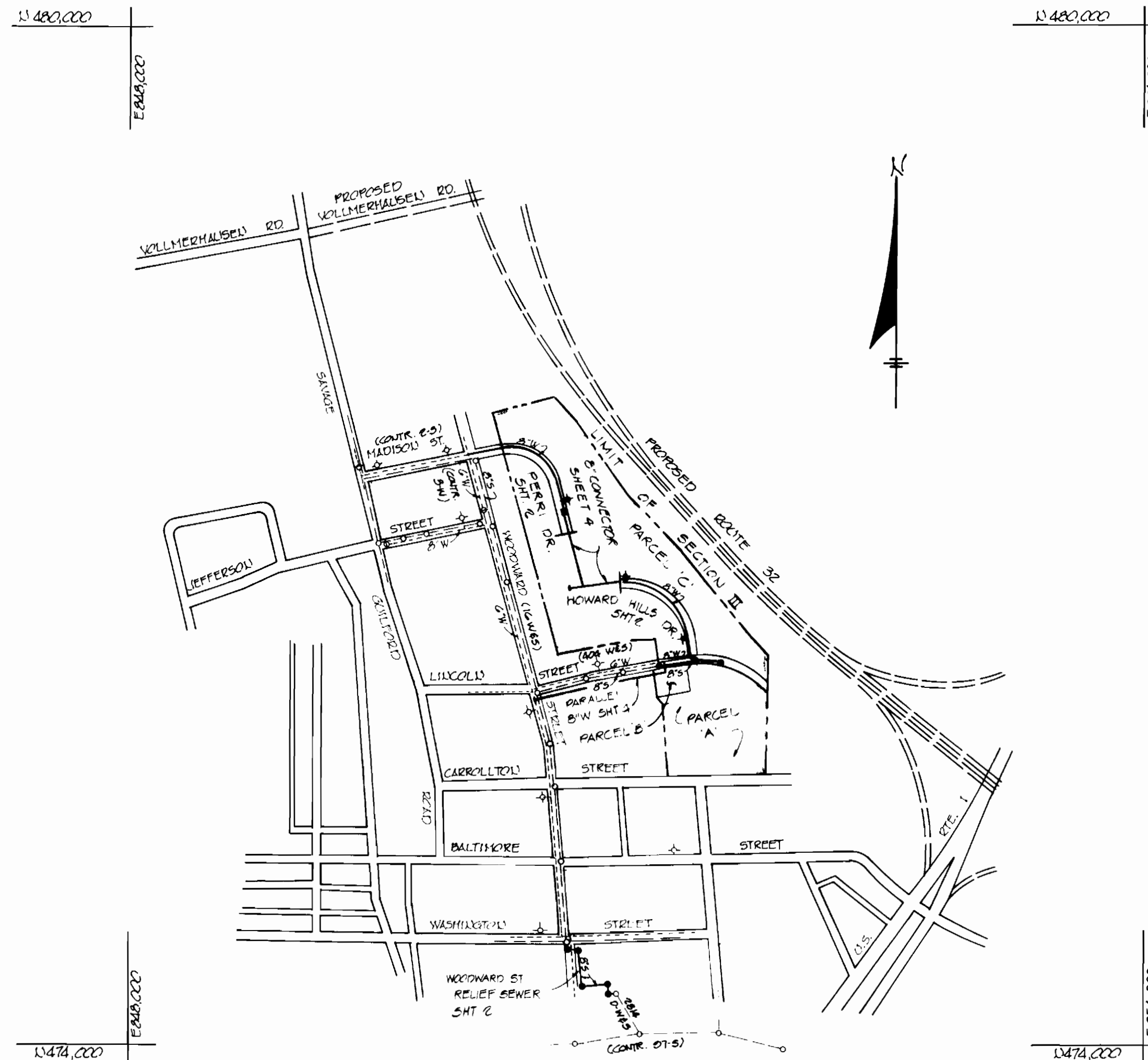
# CONTRACT NO. 24-1060-D

## HOWARD HILLS

### SECTION III PARCELS A,B&C

6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

ITEM	QUANTITY		MATERIAL (SUPPLIER)
	BID	AS BUILT	
8" SEWER	1068 LF	1077 LF	P.V.C. (Belair Rd. Supply)
MANHOLE (4' DIA)	(8) 675 VF	8 Ea.	Terra-Hill Conc. Prod. Co.
8" WATER MAIN	2008 LF	2,001 LF	D.I.P. (Griffin Pipe Prod. Co.)
8" VALVE & V. BOX	4 ea.	3 ea.	(Belair Rd. Supply Co.)
6" VALVE & V. BOX	1 ea.	1 ea.	" " " "
TYPE A 12" H.C.	5 ea.	5 ea.	" " " "
12" M. VAULT	10 ea.	10 ea.	Mayer Bros. Inc.
8" M. VAULT	12 ea.	12 ea.	" " " "
1/2" N.C.	285 LF	185,33 LF	K. Copper (Belair Rd. Sup.)
2" N.C.	245 LF	243,67 LF	" " " "
6" H.C.	75 LF	269 LF	P.V.C. (Belair Rd. Supply)
STD. FIRE HYDRANT/W/G	3 ea.	3 ea.	(Belair Rd. Supply Co.)
6" TAPPING & SERVICE VALVE	2 ea.	2 ea.	" " " "
6" D.P. For F.H. Conn.		14 LF	D.I.P. (Griffin Pipe)



- 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.
  - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
  - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
  - CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES 2'-0" MINIMUM OR TOWER AS REQUIRED.
  - FOR ALL STANDARD DETAILS SEE HOWARD CO. DESIGN MANUAL, VOLUME II.
  - CONTRACTOR SHALL LOCATE EXISTING UTILITIES IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES.
  - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST (5) DAYS BEFORE STARTING WORK ON THESE PLANS:  
BALTIMORE GAS & ELECTRIC CO. - UNDERGROUND ELEC. DISTRIBUTION ENG. - "DAMAGE CONTROL" - 234-3001, B.G.E. UNDERGROUND GAS DISTRIBUTION ENG. - 550-0000, C&P TELE. CO. - 725-2076, AMER. TELE. & TELEG. - CABLE LOCATION DIV. (301) 303-3553, COLONIAL PIPELINE CO. 781-4641, HOWARD CO. BUREAU OF UTILITIES 502-2866.
  - TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT.
  - 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 EXCAVATION AND BACKFILL FOR WATER AND SEWER MAINS.
  - ALL WATER MAINS TO BE C.I.P., D.I.P.
  - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3 1/2' COVER.
  - ALL VALVES SHALL BE STRAPPED TO TEES IN ACCORDANCE WITH STD. DETAILS.
  - BLOCK ALL FITTINGS WITH CONCRETE, SEE STD. DETAILS.
  - ALL SEWER MAINS SHALL BE C.S.P.K., V.C.P.K., P.V.C. OR A.C.F. CLASS 2400.
  - 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.
  - PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MD STATE HIGHWAY ADMIN. MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.

WASTE WATER DISPOSAL: SAVAGE  
 TYPE OF DWELLINGS: TOWNHOUSE APTS. (TOTAL = 184 DWG UNITS)  
 ALL BLDGS = 4 UNITS FR. EXCEPT BLDGS 1&2 = 3 UNITS ea.  
 \* NUMBER OF SEWER HOUSE CONNECTIONS 6  
 \* NUMBER OF WATER HOUSE CONNECTIONS 22

WATER AND SEWER CODE (COUNTY USE)  
 WATER : C 0 1  
 SEWER : 5060000

\* INCLUDES PRIVATE POOL FOR RESIDENTS

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

<i>Robert M. Benjamin</i> DIRECTOR OF PUBLIC WORKS	<i>W. S. ...</i> CHIEF BUREAU OF UTILITIES	<i>W. S. ...</i> CHIEF LAND DEVELOPMENT DIVISION
1-15-82	11-16-82	11-16-82

TYDINGS-OHEIM & ASSOCIATES  
 SURVEYORS - ENGINEERS  
 8370 COURT AVENUE  
 ELLICOTT CITY, MARYLAND

CONTRACT NO. 24-1060-D

LOCATION MAP OF WATER & SEWER MAINS

HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND METS TECHNICAL REQUIREMENTS  
 APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Signature* DATE: 10/20/82  
 APPROVED: *Signature* DATE: 10/20/82  
 HOWARD SOIL CONSERVATION DIST. DATE:

HOWARD HILLS  
 SECTION III - PARCELS A,B&C  
 SIXTH ELECTION DISTRICT

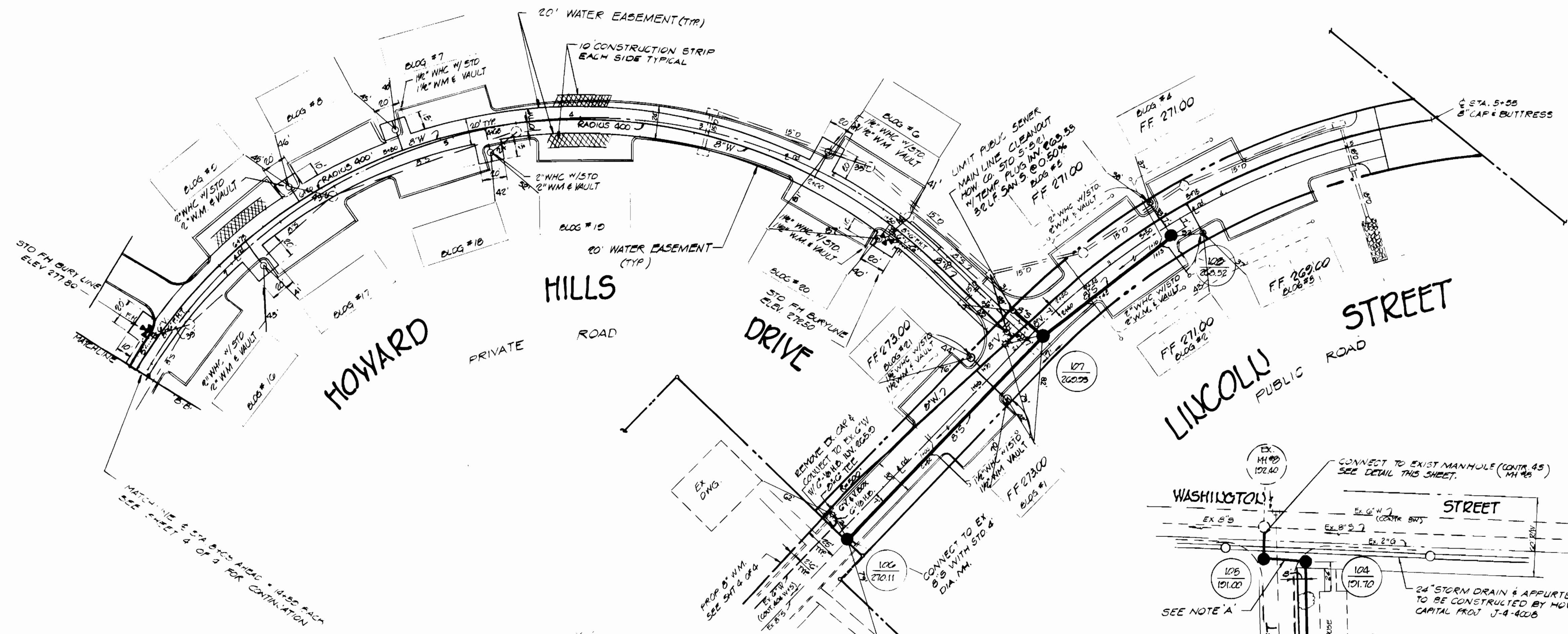
DRAWING NO. 1 OF 4 SCALE: 1"=60'

(AS BUILT JULY, 1984)

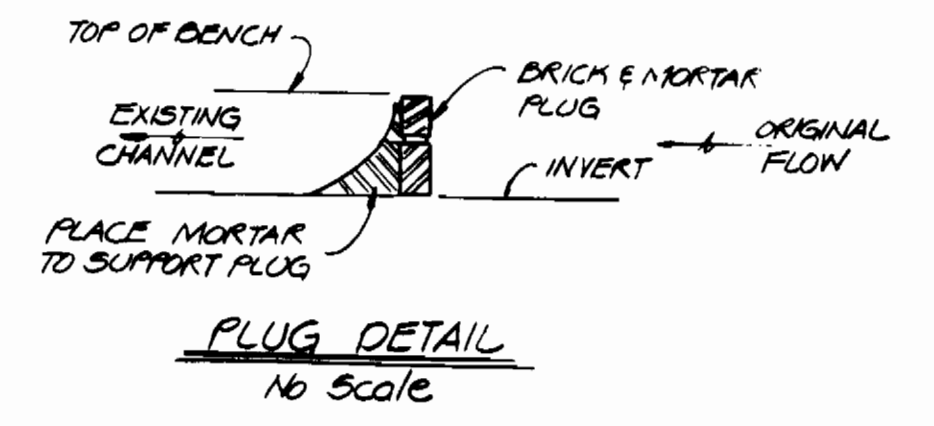


*Charles R. Cochran*  
 PROFESSIONAL ENGINEER No. 16703

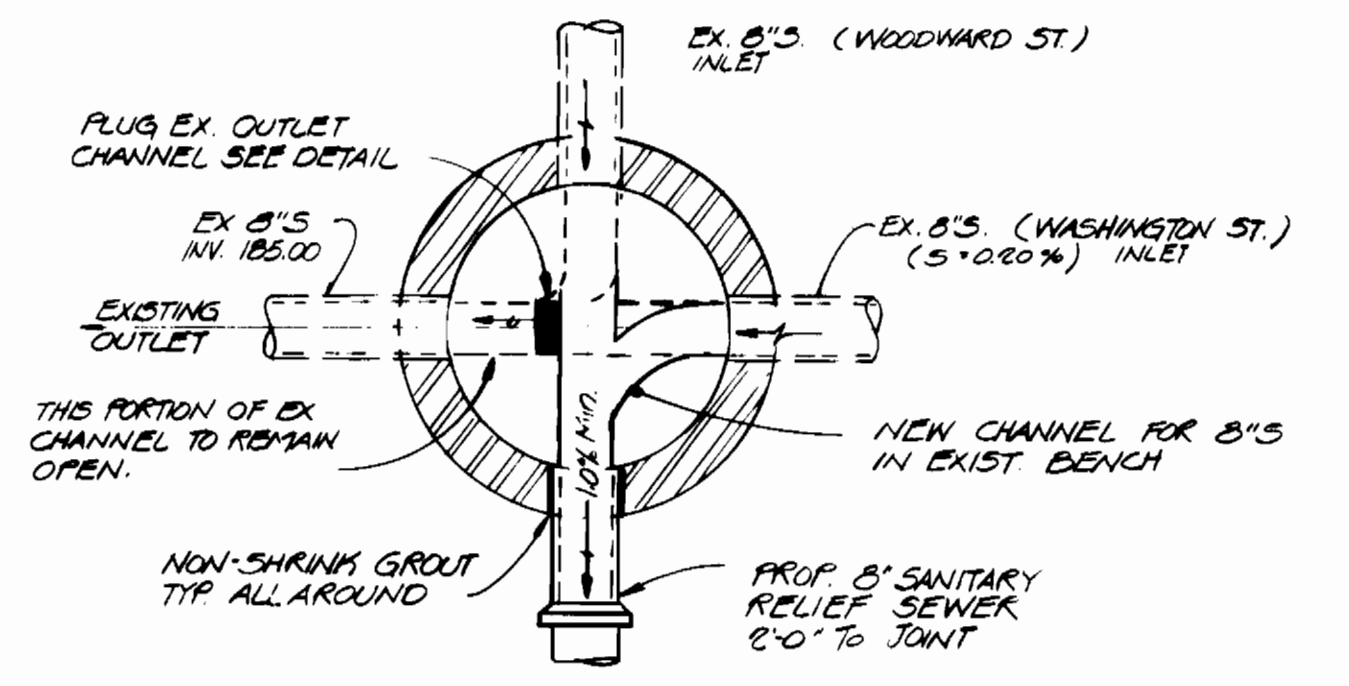
NOTE:  
 EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ARTICLE 15 OF THE HOWARD CO. DESIGN MANUAL VOLUME II AND THE FINAL ROAD CONSTRUCTION PLAN F-02-118



NOTE:  
ALL WATER METERS SHALL BE  
FURNISHED & INSTALLED BY  
HOWARD CO.



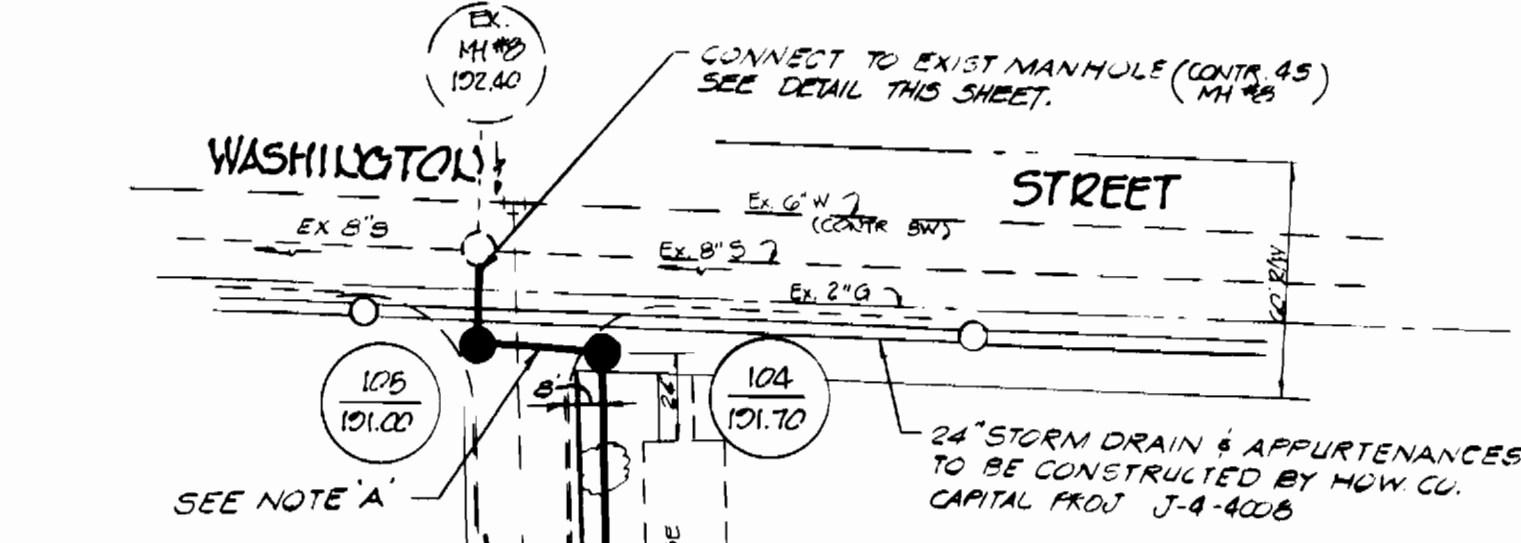
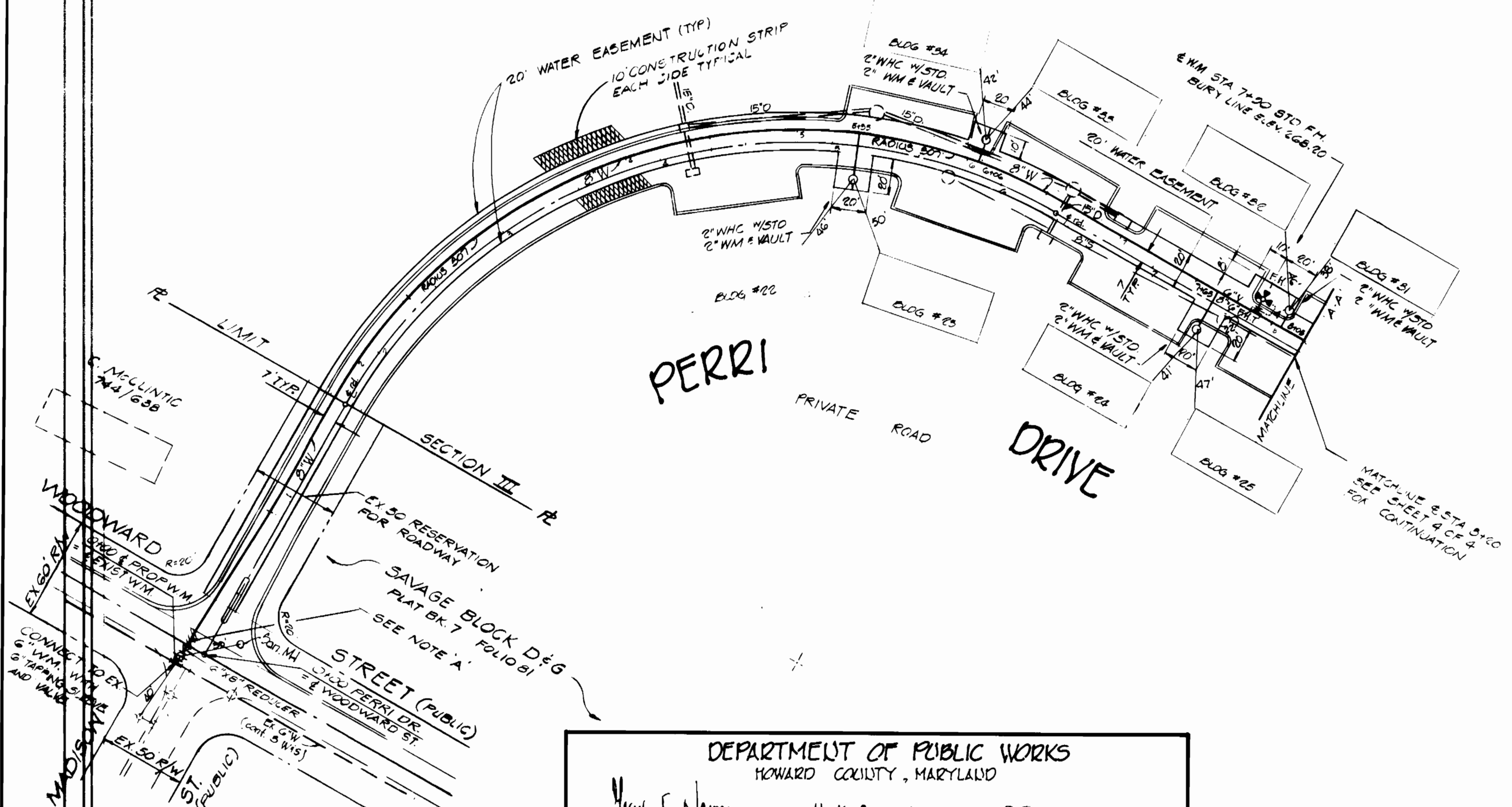
NOTE REMOVE EXIST. CHANNEL & BENCH AS SHOWN  
EXIST. B'S OUTLET CHANNEL TO REMAIN. CONSTRUCT  
BRICK & MORTAR PLUG IN EX. CHANNEL SAME  
HEIGHT AS BENCH.



MANHOLE CONNECTION DETAIL (CONTR. 45)  
No Scale

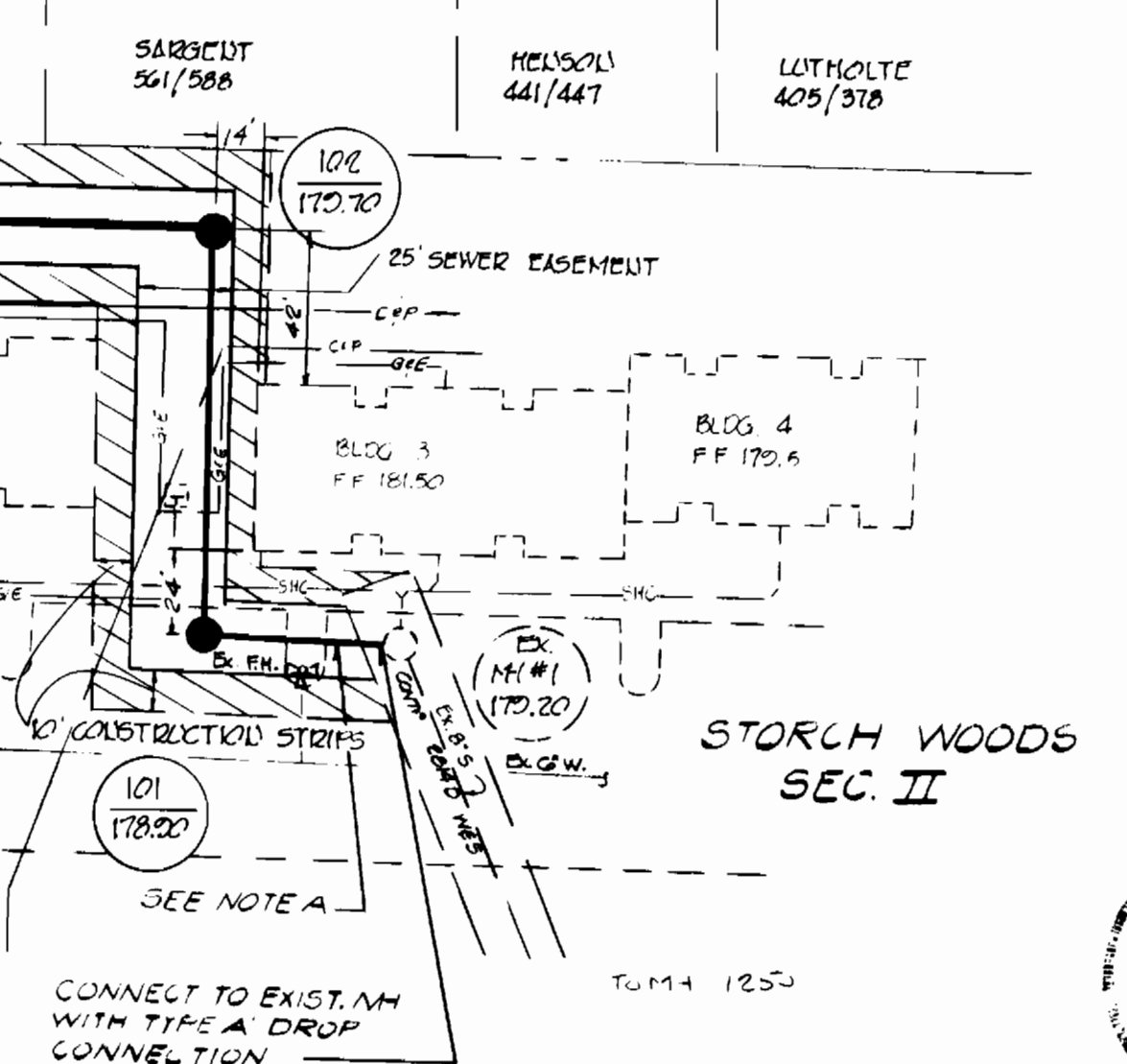
CONSTRUCTION NOTES

- A. CONTRACTOR SHALL REMOVE & REPLACE EXIST. PAVING & CURBS IN KIND SEE HOW CO. STD. DETAIL G. 4.01. COST TO BE INCLUDED IN PRICE BID PER LINEAR FOOT OF SEWER & WATER MAINS.
- B. CONTRACTOR SHALL REMOVE & REPLACE ALL SHRUBS AND REMOVE ALL DISTURBED AREAS TO ORIGINAL CONDITION.



SEE NOTE 'A'

EXISTING 16" ENT SEE NOTE 'A'



SEE NOTE 'A'



Charles R. Hester  
PROFESSIONAL ENGR. No. 7203

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND			
Director of Public Works	11-16-82	Chief Bureau of Engineering	11-16-82
Chief Bureau of Utilities	11-15-82	Chief Land Development Division	11-16-82

TYDINGS-OHEIM & ASSOCIATES  
SURVEYORS - ENGINEERS  
8370 COURT AVENUE  
ELICOTT CITY, MARYLAND

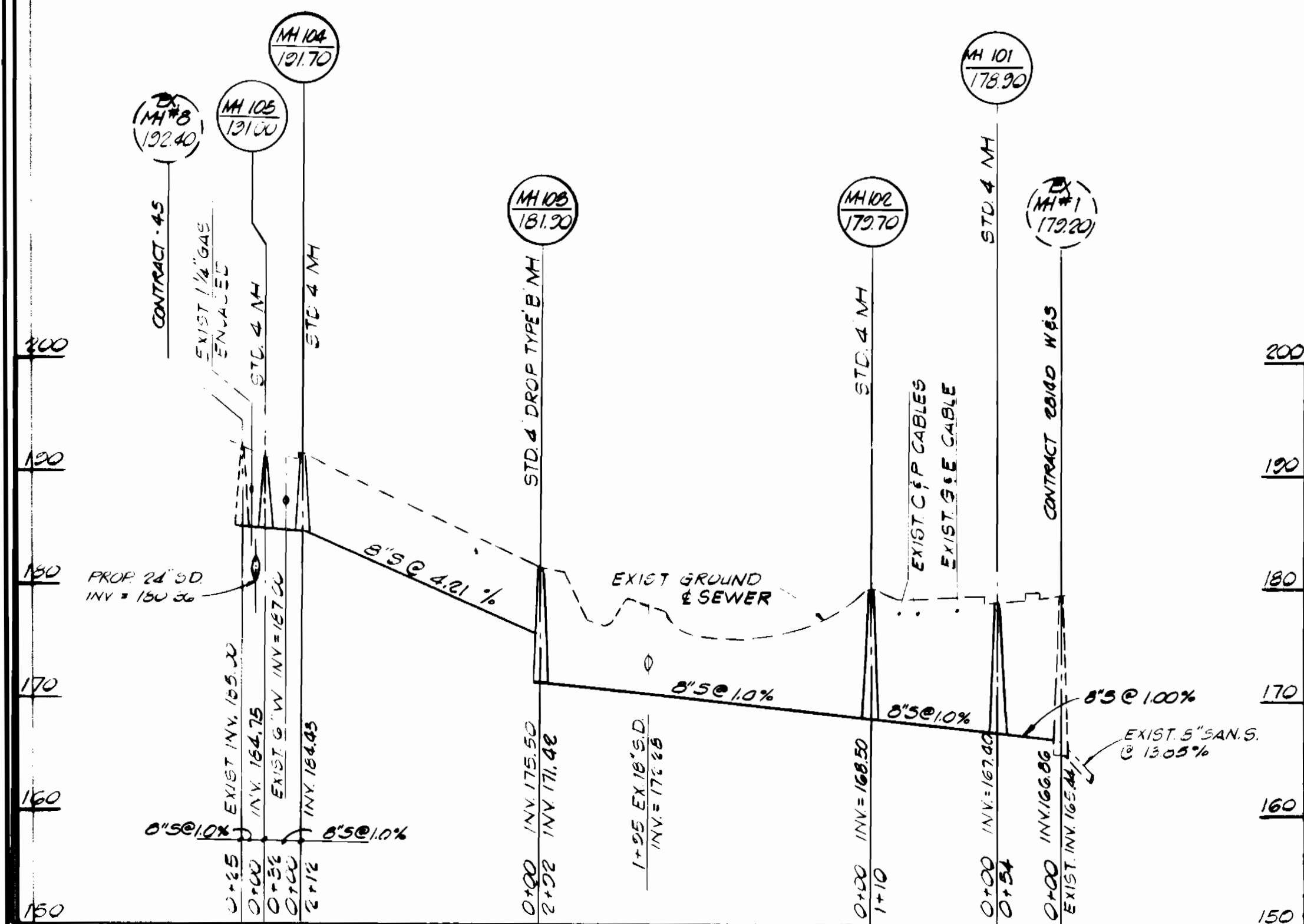
CONTRACT NO. 24-1060-D

PLAN OF  
WATER AND SEWER MAINS

HOWARD HILLS  
SECTION III PARCELS A, B & C  
SIXTH ELECTION DISTRICT

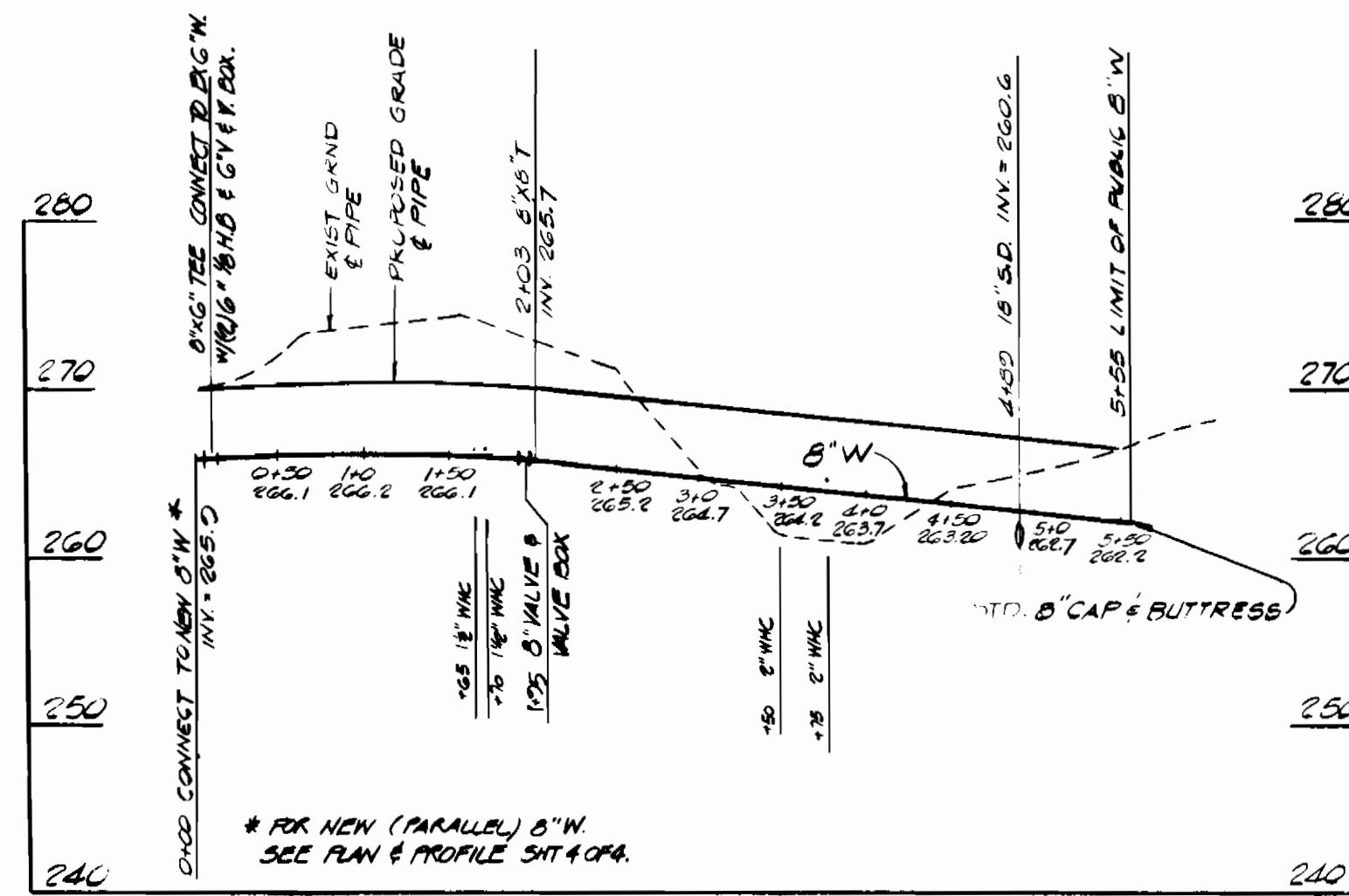
DRAWINGS  
NO. 2  
OF 4  
SCALE: 1"=50'

AD BUILT JULY, 1984



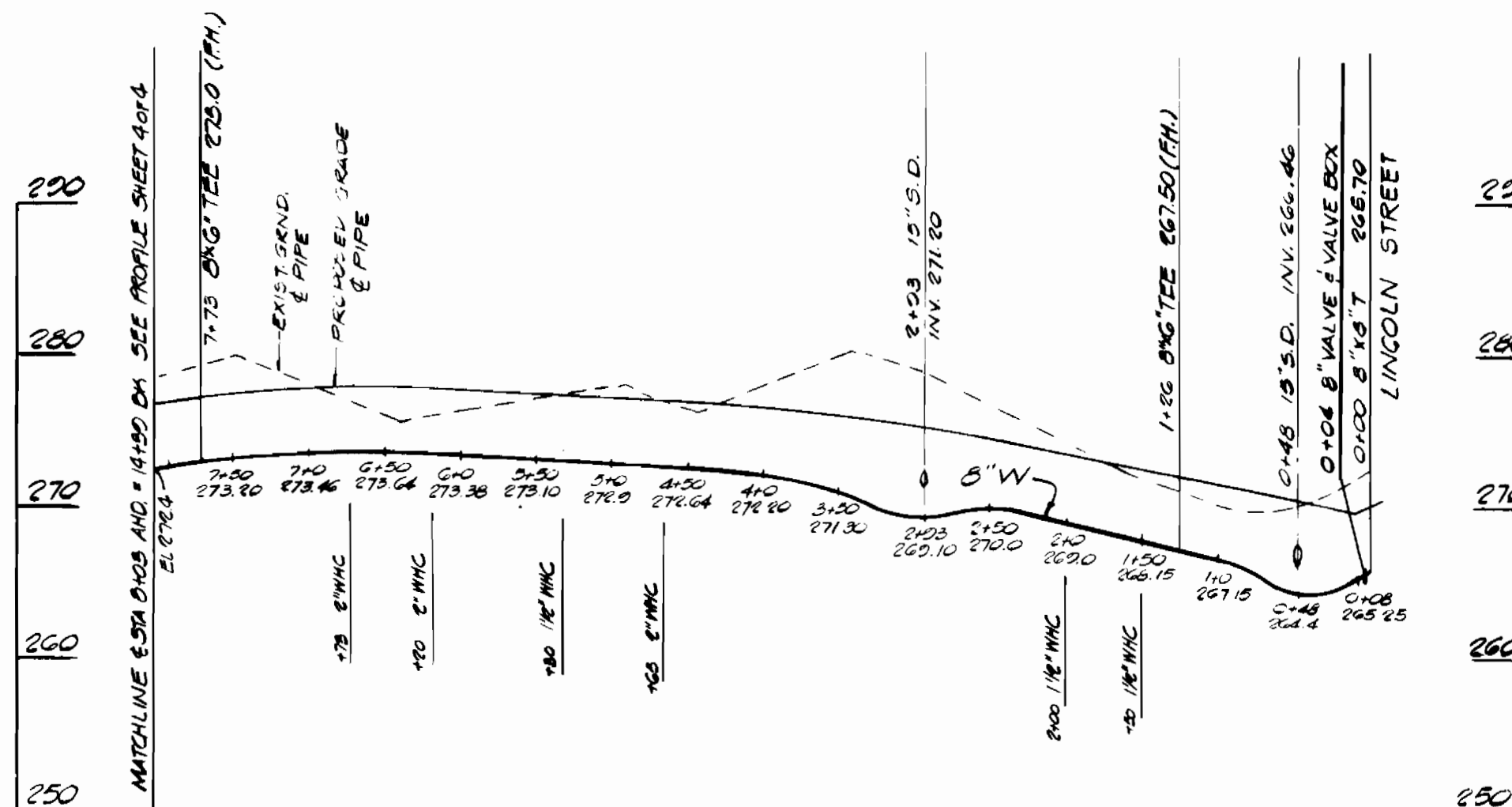
WOODWARD ST. RELIEF SEWER

SCALE: 1"=100' HOR.  
1"=10' VER.



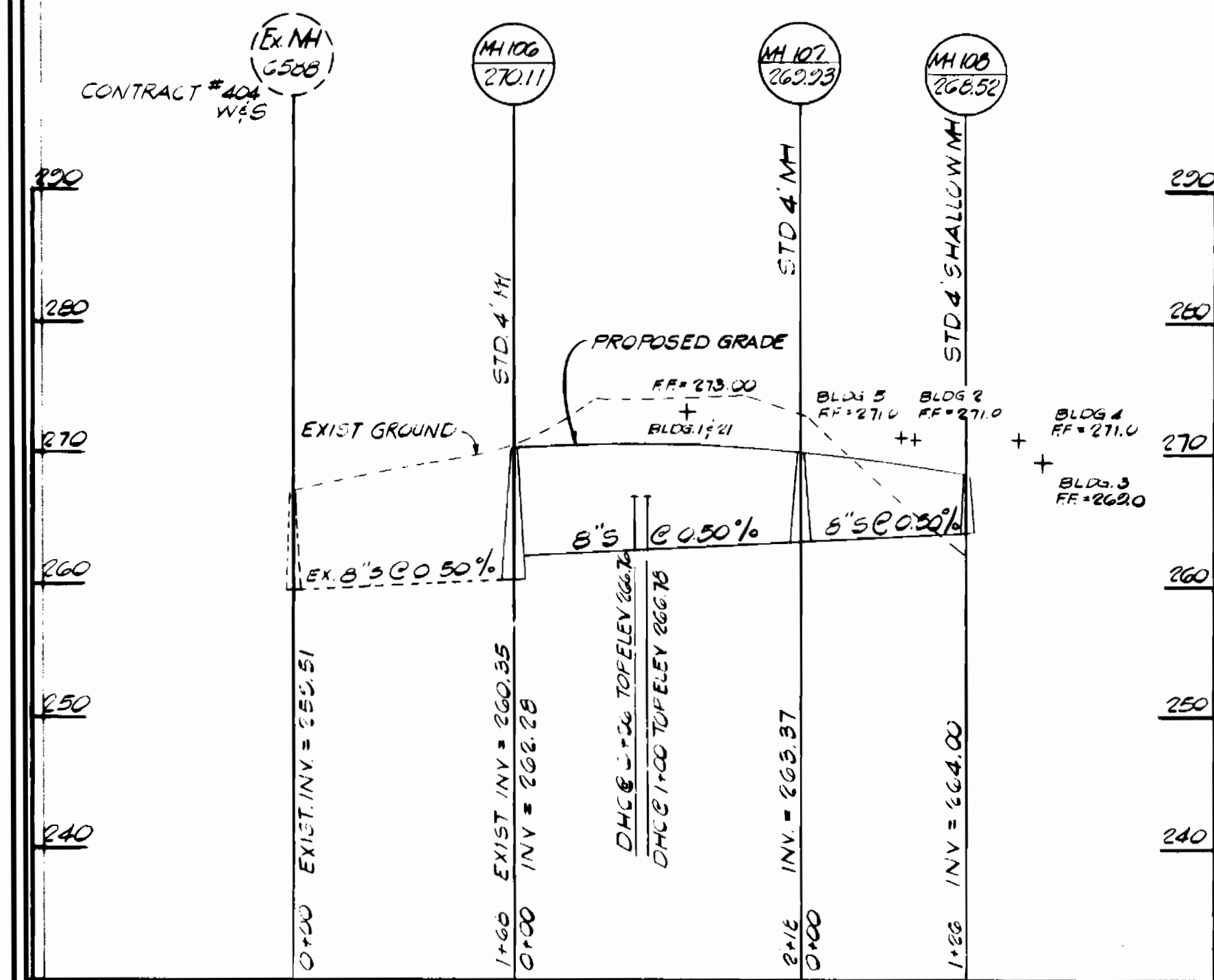
LINCOLN STREET WATER MAIN

SCALE: 1"=100' HOR.  
1"=10' VER.



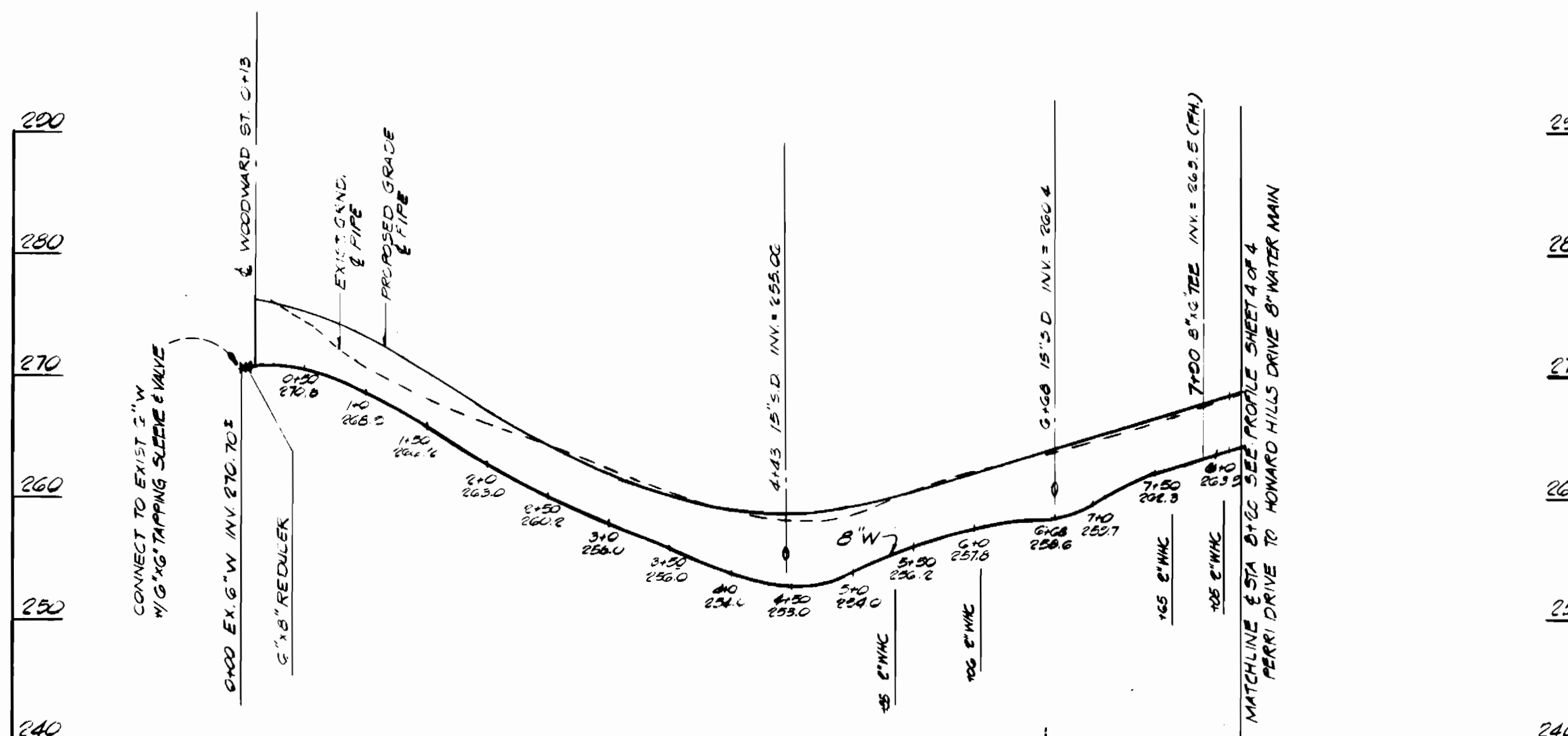
HOWARD HILLS DRIVE WATER MAIN

SCALE: 1"=100' HOR.  
1"=10' VER.



LINCOLN ST. SEWER EXTENSION

SCALE: 1"=100' HOR.  
1"=10' VER.



PERRY DRIVE WATER MAIN

SCALE: 1"=100' HOR.  
1"=10' VER.



Charles R. Coakley  
PROFESSIONAL ENGR. NO. 16,780

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

M. F. N. [Signature]  
DIRECTOR OF PUBLIC WORKS DATE  
BUREAU OF UTILITIES - DATE

CHIEF BUREAU OF ENGINEERING - DATE  
CHIEF LAND DEVELOPMENT DIVISION - DATE

TYDINGS - OHEIM & ASSOCIATES  
SURVEYORS - ENGINEERS  
8370 COURT AVENUE  
ELLCOTT CITY, MARYLAND

CONTRACT NO. 24-1000-0

PROFILE OF  
WATER AND SEWER MAINS

HOWARD HILLS  
SECTION III PARCELS A, B & C  
6TH ELECTION DISTRICT

DRAWING  
NO. 5  
OF 4

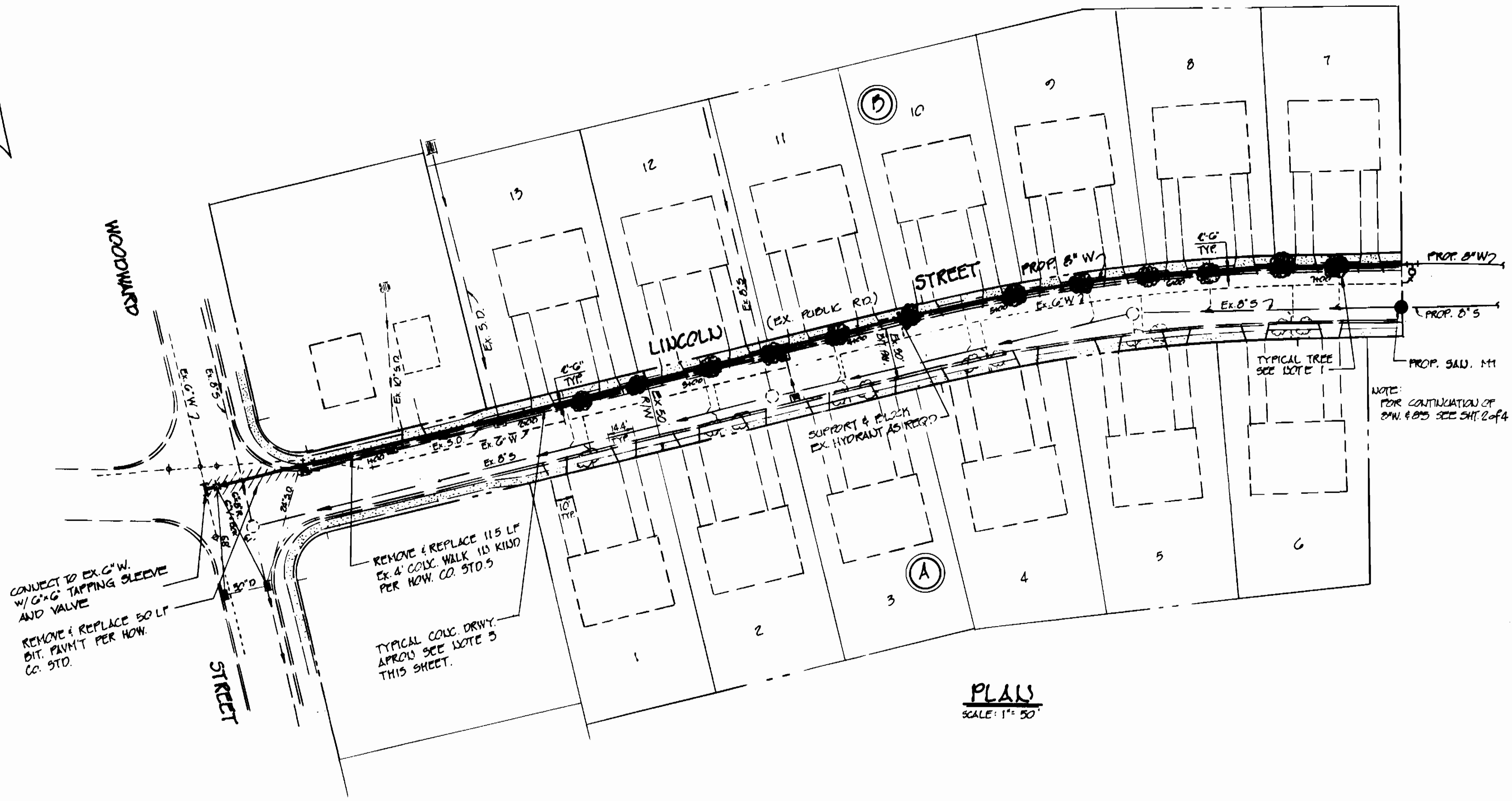
SCALE: AS SHOWN  
REVISED 12/20/82 PER COUNTY COMMENTS

AS BUILT JULY 1984

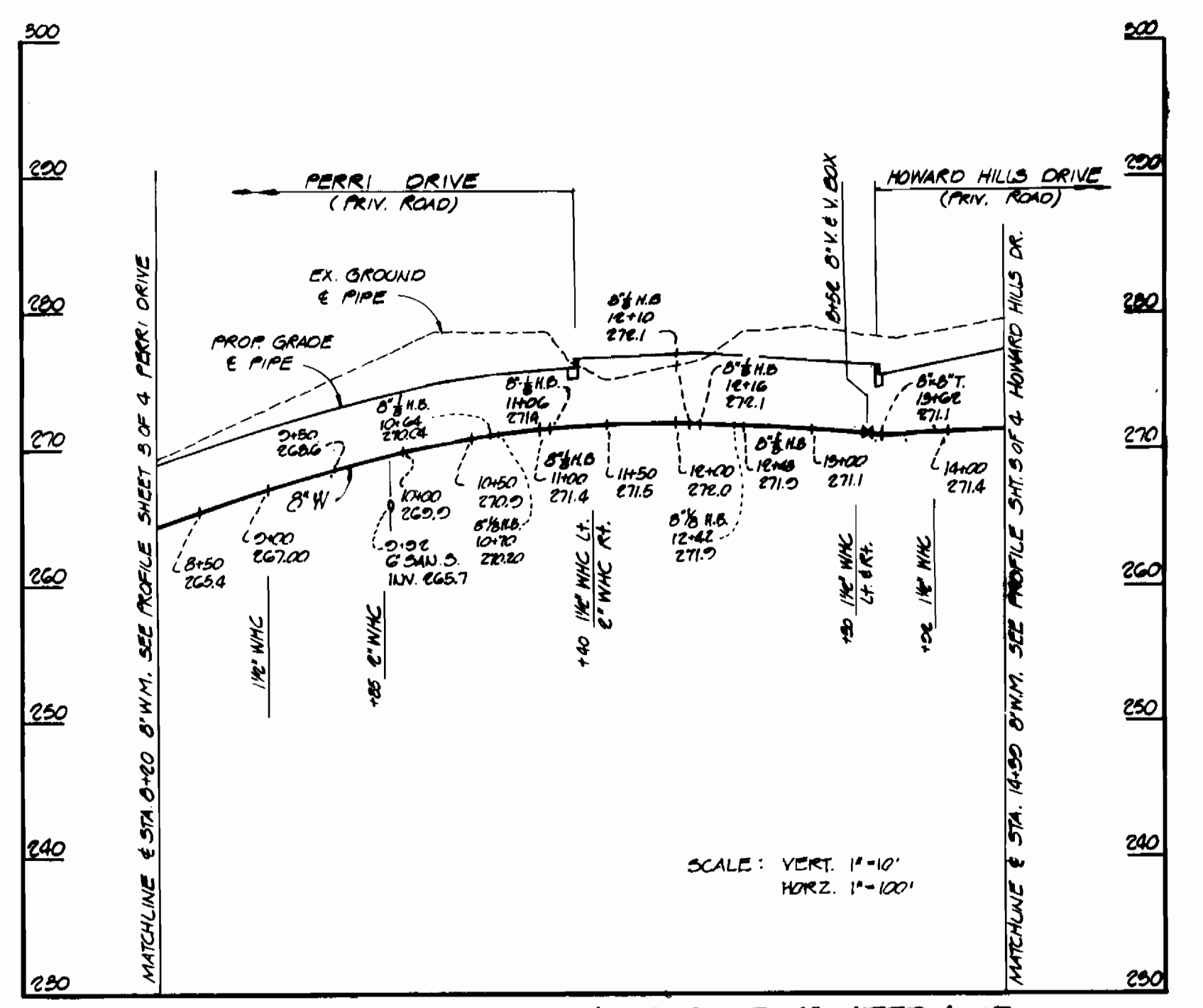


**CONSTRUCTION NOTES**

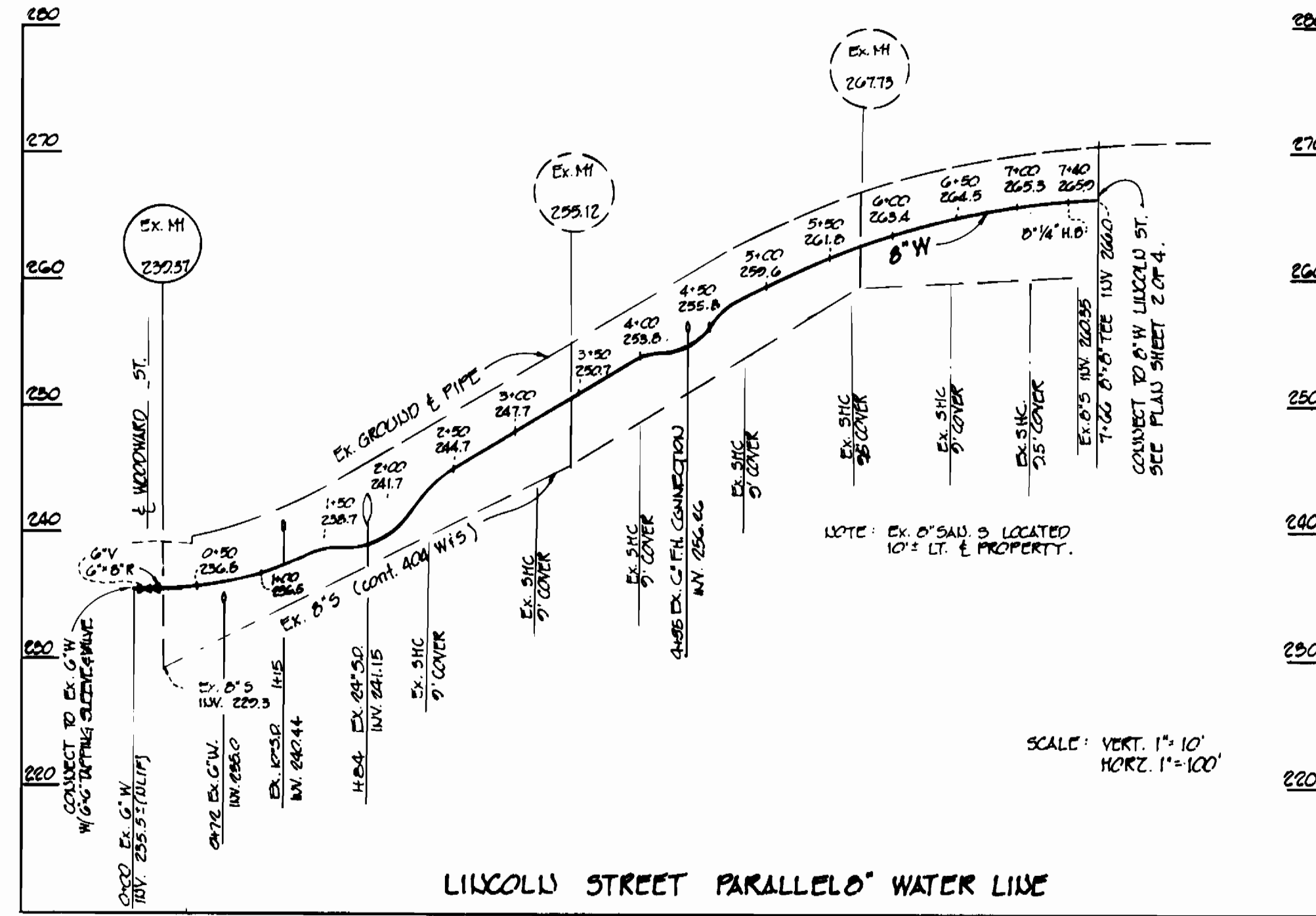
- CONTRACTOR SHALL REPLACE EXISTING TREES IN KIND WITH STD. 6" CALIBER TREES SEE DETAIL S.D.P. 06-104 SHEET 15 OF 15.
- CONTRACTOR SHALL REMOVE & REPLACE EXISTING CONC. DRIVEY APRONS IN KIND PER HOW. CO. STD.'S.
- CONTRACTOR SHALL BACKFILL ALL OPEN TRENCHES AT END OF NORMAL WORK DAY AND SHALL MAINTAIN ACCESS TO DRIVEYS WHEN EVER PRACTICAL AS DIRECTED BY EUGR.



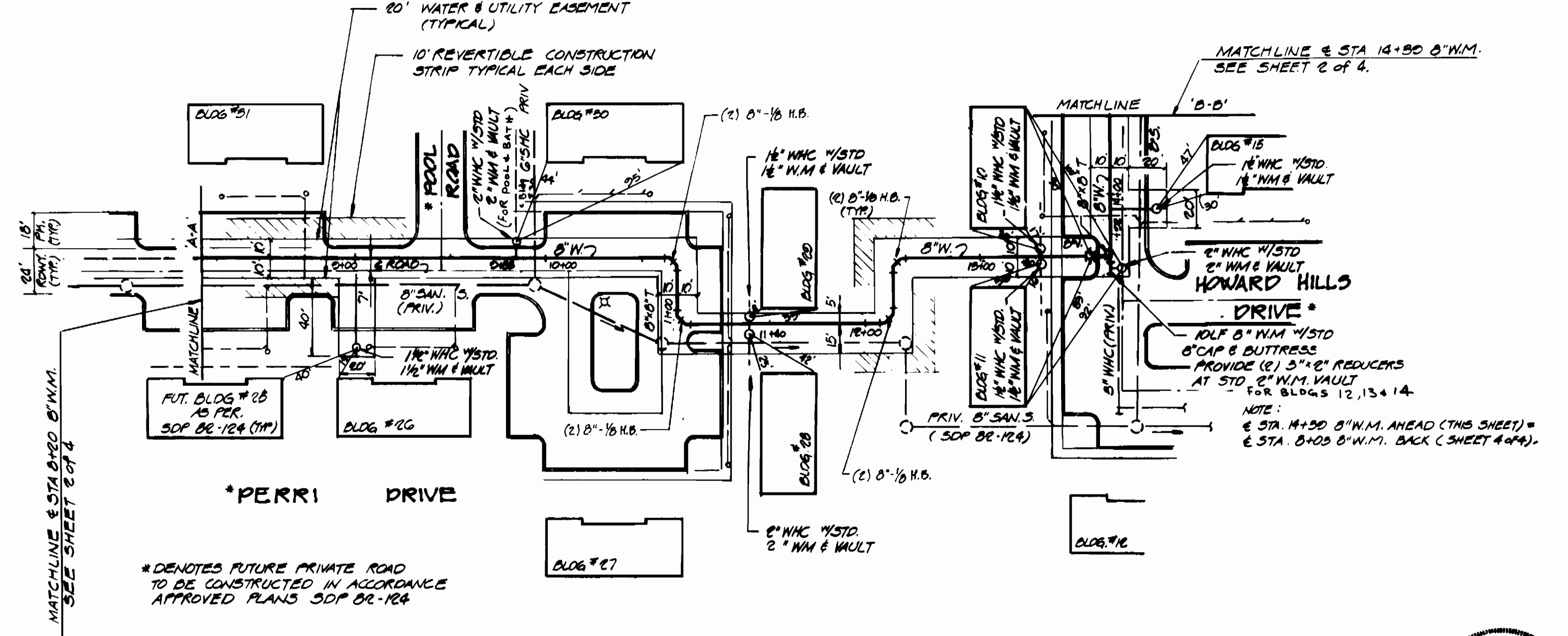
**PLAN**  
SCALE: 1" = 50'



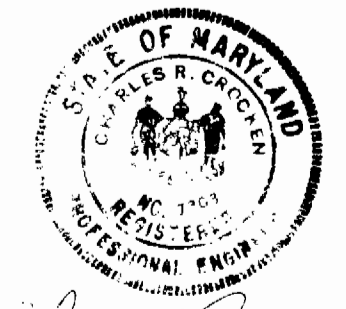
**PERRI DRIVE TO HOWARD HILLS DRIVE 8" WATER LINE**



**LINCOLN STREET PARALLELO' WATER LINE**



**PLAN**  
SCALE: 1" = 50'



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MD.

*John E. Neman* 11-16-82 DIRECTOR OF PUBLIC WORKS DATE  
*Richard A. Benning* 11-15-82 CHIEF BUREAU OF UTILITIES DATE

*William E. Kelly* 11-16-82 CHIEF BUREAU OF ENGINEERING DATE  
*William J. F.* 11-16-82 CHIEF LAND DEVELOPMENT DIVISION DATE

**TYDINGS - OHEIM**  
ASSOCIATES INC.  
6370 COURT AVENUE ELLICOTT CITY, MD. 21045 465-6346

CONTRACT NO. **04-1060-D**

PLAN AND PROFILE 8" WATER MAINS

**HOWARD HILLS**  
SECTION III PARCELS A, B & C  
SIXTH ELECTION DISTRICT

REVISION 1-11-83 AS PER DPW COMMENTS

DRAWING NO. **4** OF **4**  
SCALE: **AS SHOWN**  
REVISED 12/27/82 PER COUNTY COMMENTS

AS BUILT JULY, 1984