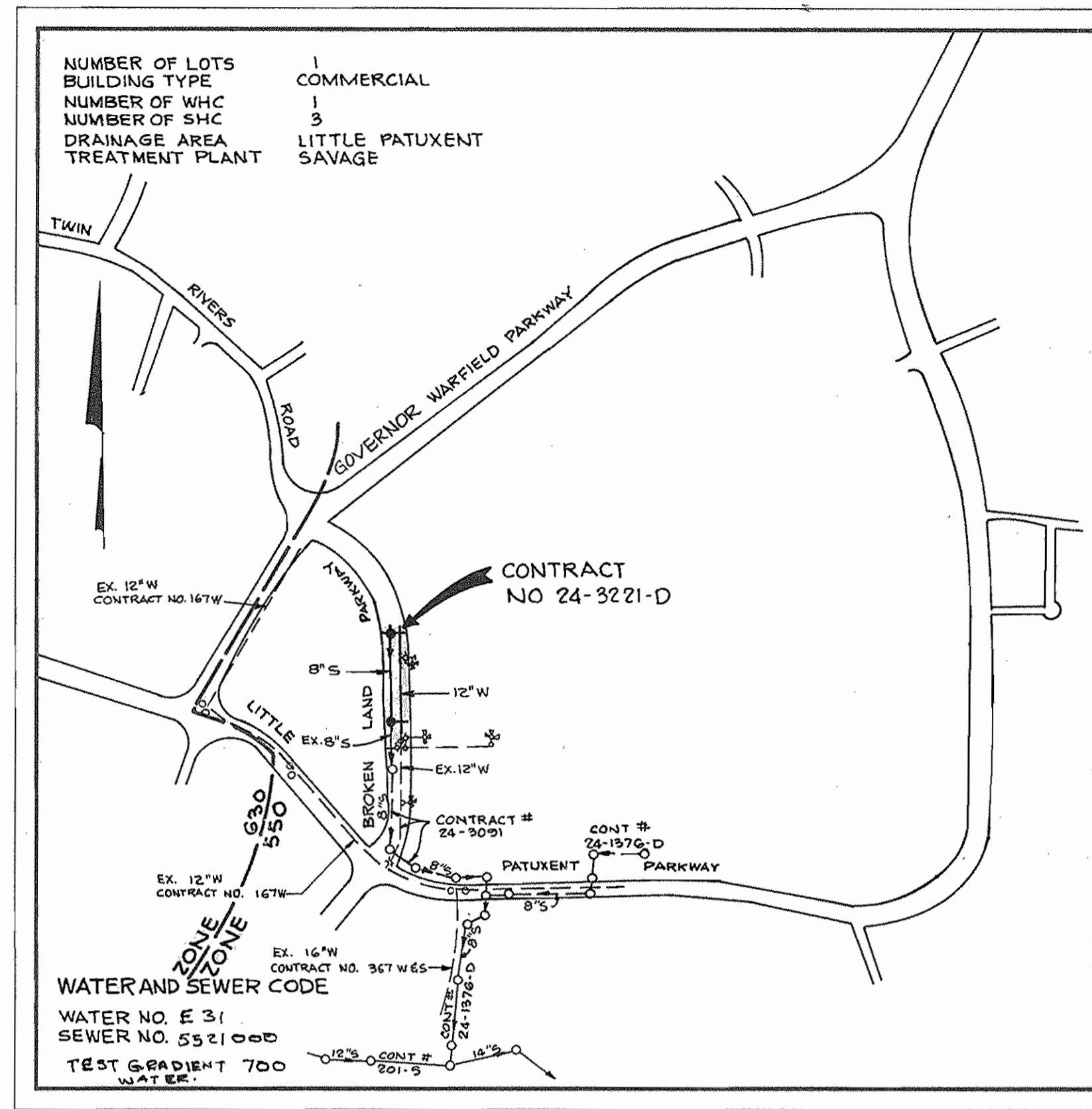


QUANTITIES				
ITEM	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
12" WATER	515 LF	511'	DIP CLASS 52	ATLANTIC STATES / WATER PRO
12" SOLID SLEEVE	1 EA	1	DIP	ATLANTIC STATES / WATER PRO
8" WATER	33 LF	33'	DIP CLASS 52	ATLANTIC STATES / WATER PRO
6" WATER	5 LF	5'	DIP CLASS 52	ATLANTIC STATES / WATER PRO
6" VALVE (EXCL. FH. VALVE)	0	0		
8" VALVE	1 EA	1	MODEL A2370-20	MULLER CO. / WATER PRO
FIRE HYDRANT	1 EA	1	MODEL A# 423	MULLER CO. / WATER PRO
8" SEWER	680 LF	675'	PVC 20R 35	PERKINS / WATER PRO
4' DIA. MANHOLE	2 EA	2	PRECAST	ATLANTIC CORR.
18" STEEL CASING PIPE 3/8" THICK	160 LF	160'	STEEL	SEVERN STEEL & EQUIPMENT, INC.

UTILITY CONTRACTOR :
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE



VICINITY MAP

SCALE: 1" = 600'

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 VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT (I) ELEVATIONS.
- 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 (P) 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 FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 STATE HIGHWAY ADMINISTRATION..... 651-6533
 BG&E CO. CONTRACTOR SERVICES..... 650-4620
 BG&E CO. UNDER GROUND DAMAGE CONTROL..... 787-8068
 MESS UTILITY..... 1-800-257-7777
 COLONIAL PIPELINE COMPANY..... 795-1390
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.....
 BUREAU OF UTILITIES..... 313-4800
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN 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 BID FOR CONSTRUCTION OF THE MAIN.
- 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 TREES SHALL BE STRAPPED TO TREES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON 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 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.
- ALL SEWER MAINS SHALL BE DIP, RCP, VCPX, CSPX, RCCP AND 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 FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT MANHOLE FRAME AND COVERS, STANDARD DETAIL G5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.

CONTRACT NO. 24-3221-D

BROKEN LAND PARKWAY

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

BM # 13 ELEV. 343.930
 CUT IN CONCRETE HEADWALL WEST OF B.L.P. STA. 151+70

BM # 1 ELEV. 375.295
 PK NAIL SET IN PAVEMENT AT B.L.P. CENTERLINE STA. 166+00

BM # 2 ELEV. 405.53
 REBAR AND CAP AT B.L.P. CENTERLINE STA. 171+43.22
 CORNER OF PROPERTY 33' WEST OF BG&E POLE # 170217

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS # P-93-03

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

James M. Helms 9/8/92
 U.S. SOIL CONSERVATION SERVICE DATE

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

John R. Robertson 9/9/92
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. Helms 9/8/92
 DIRECTOR OF PUBLIC WORKS DATE
Robert M. Berman 8-31-92
 CHIEF-BUREAU OF UTILITIES DATE

PREPARED BY:

PHOENIX ENGINEERING, INC.
 817 MAIDEN CHOICE LANE, SUITE 300
 BALTIMORE, MARYLAND 21228

(410)247-8833

FAX: 247-8397

DES: R.J.W.	
DRN: A.J.R.	
CHK: H.R.P.	
DATE: 7/92	
BY NO.	REVISION
DATE	600' SCALE MAP NO.
	BLOCK NO.

PLAN OF
 WATER AND
 SEWER MAINS

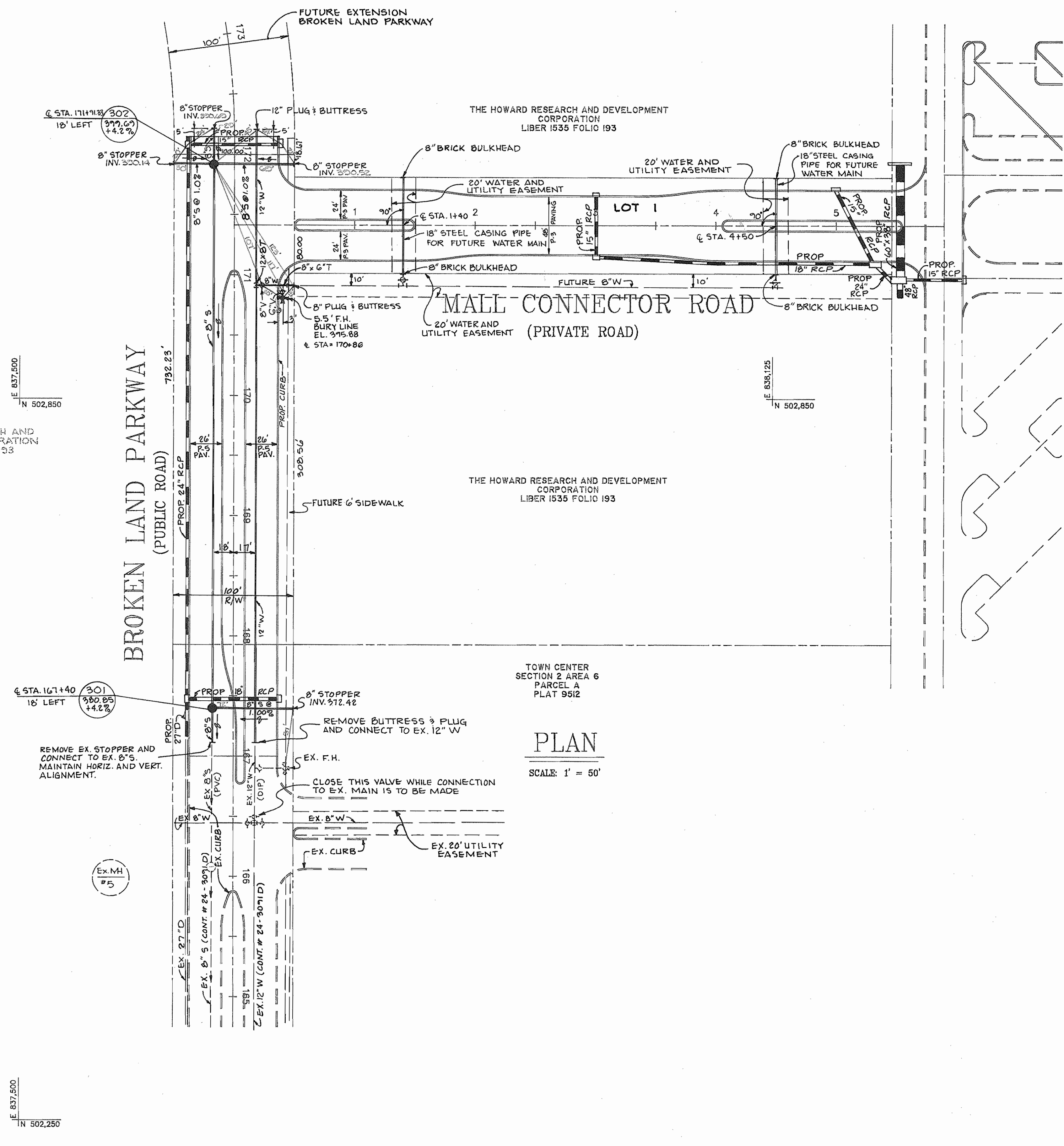
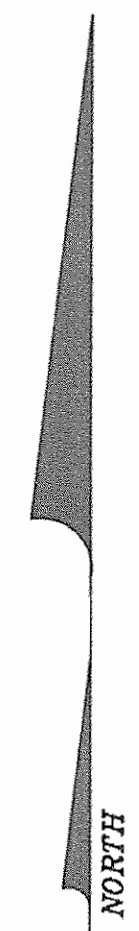
COLUMBIA
 TOWN CENTER
 SECTION 2, AREA 6 & 7 LOT 1
 ELECTION DISTRICT 5
 CONTRACT NO. 24-3221-D

SCALE: AS SHOWN

DRAWING NO. 1 OF 3



AS-BUILT 11-5-92

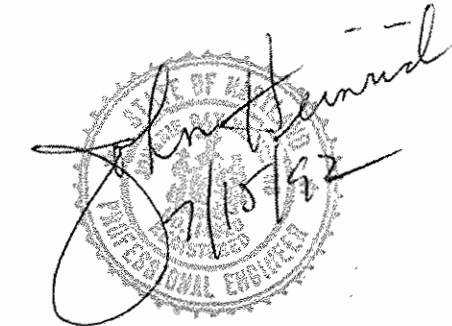


THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
LIBER 1535 FOLIO 193

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
LIBER 1535 FOLIO 193

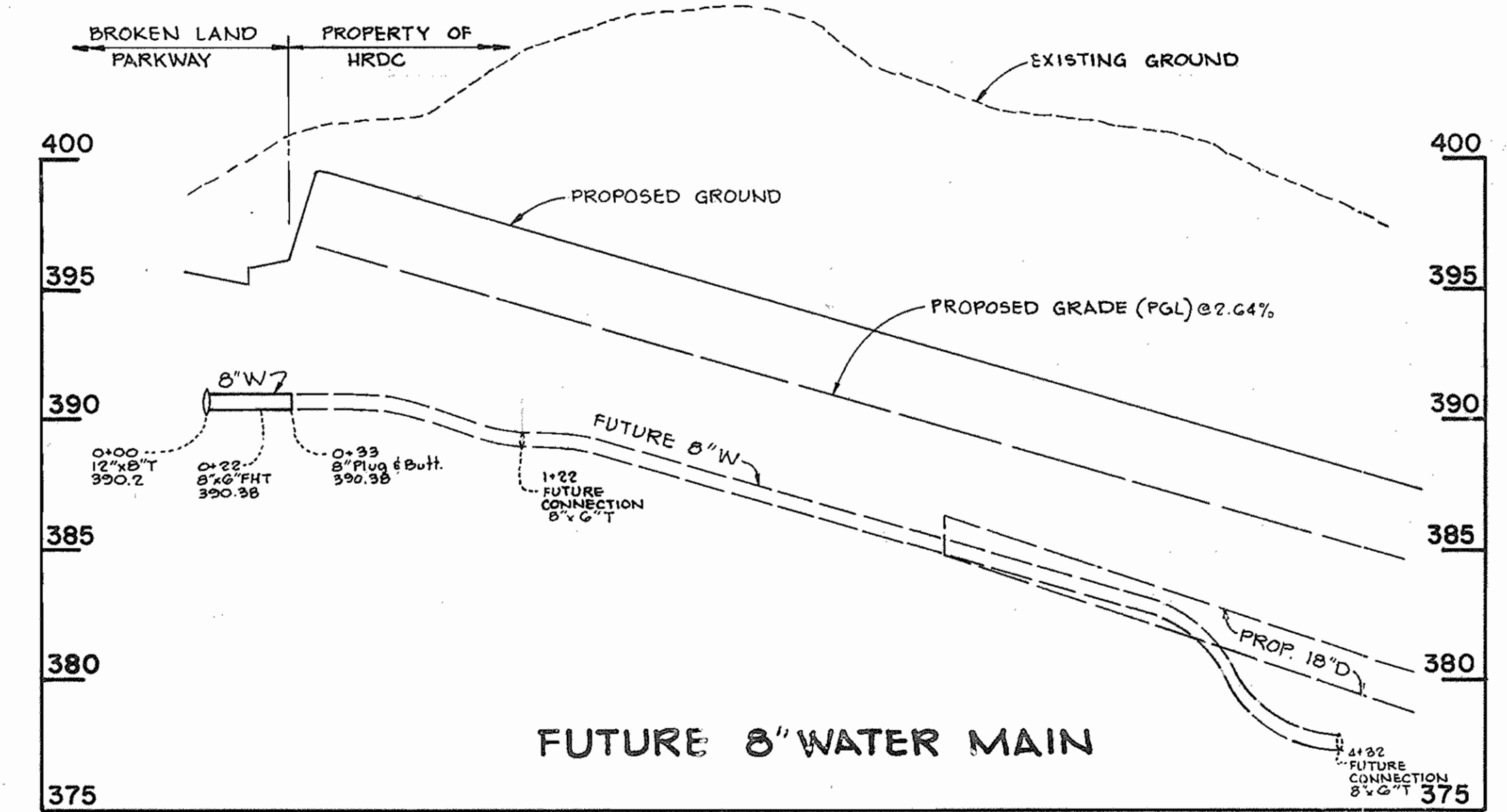
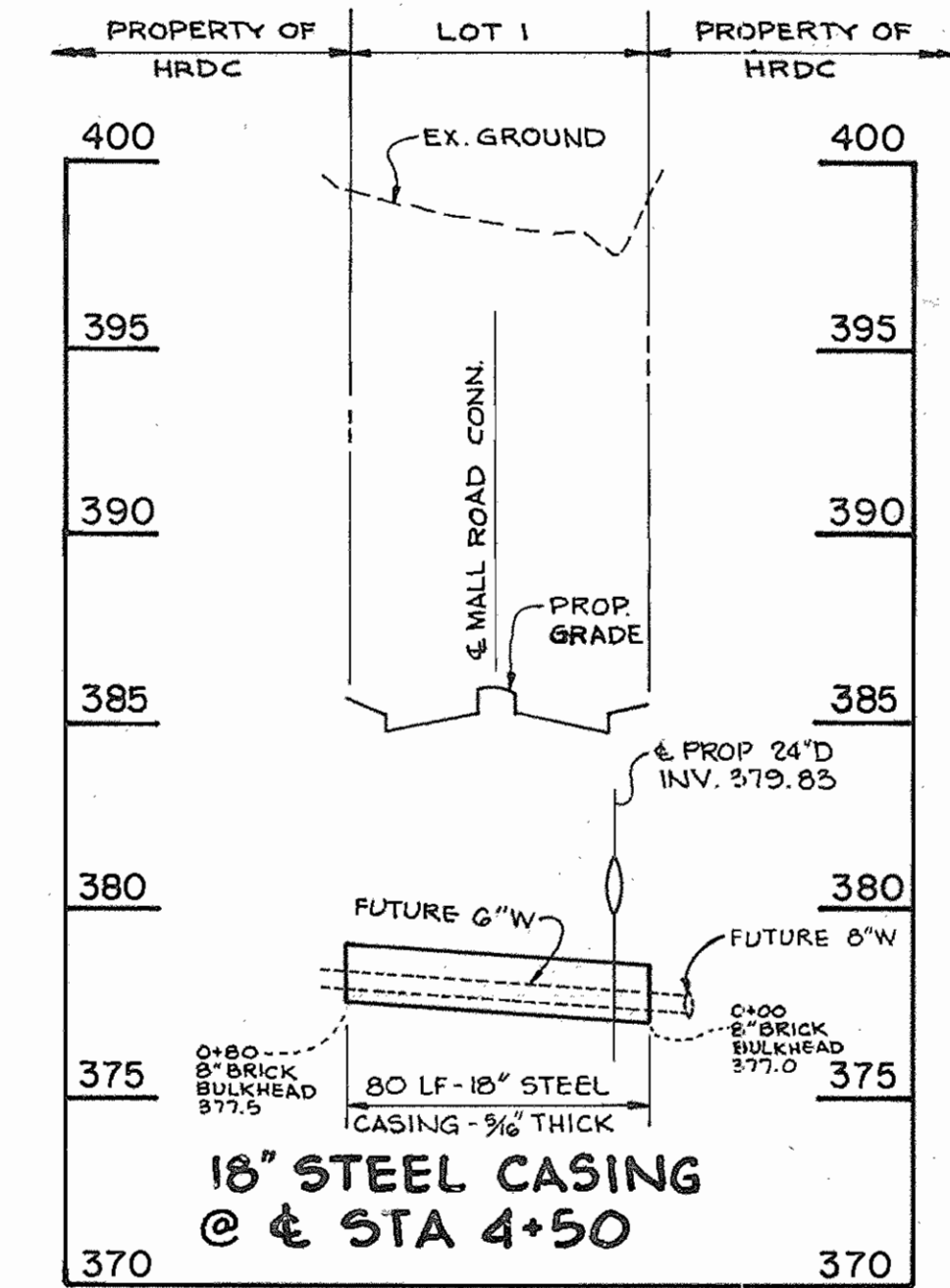
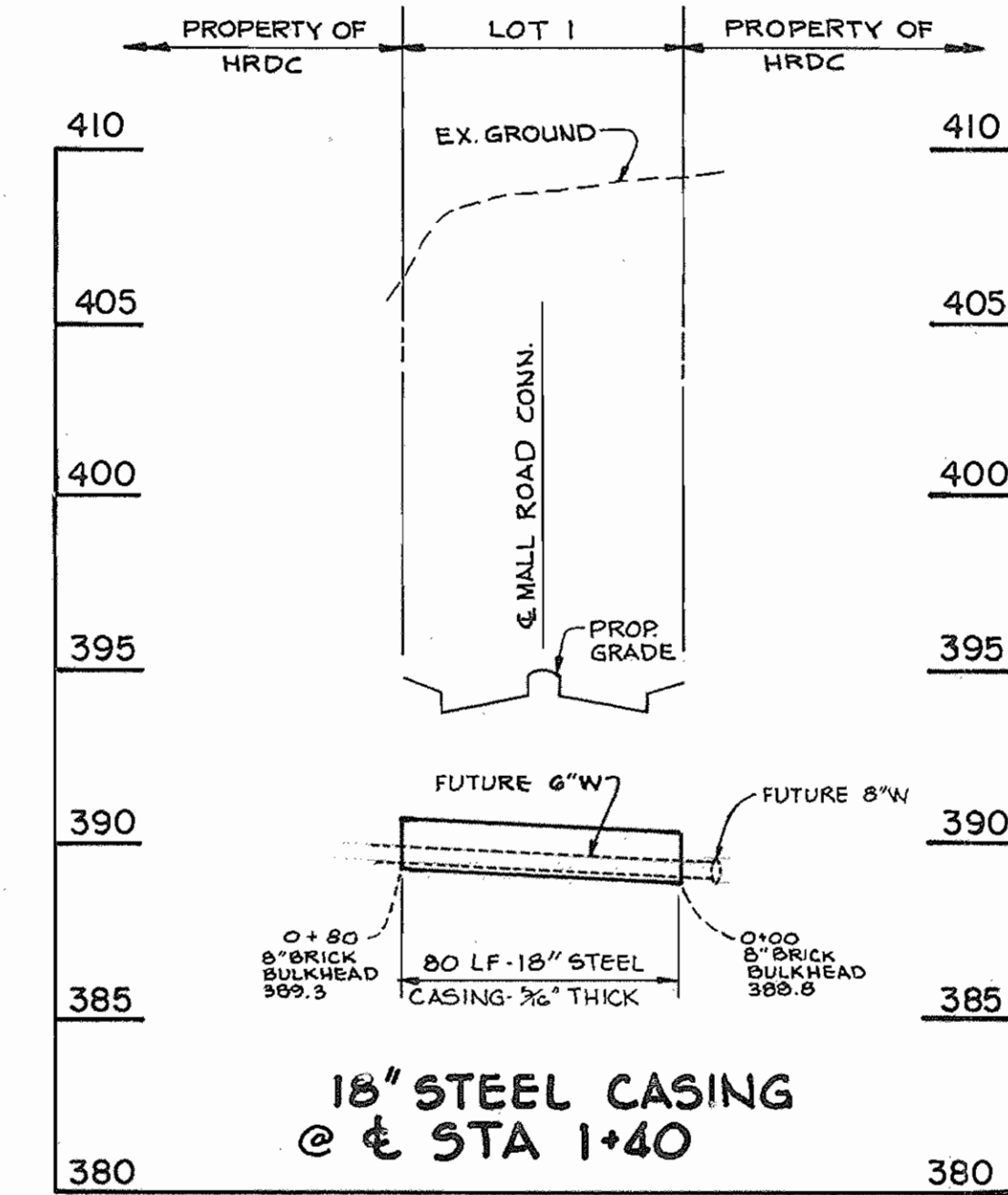
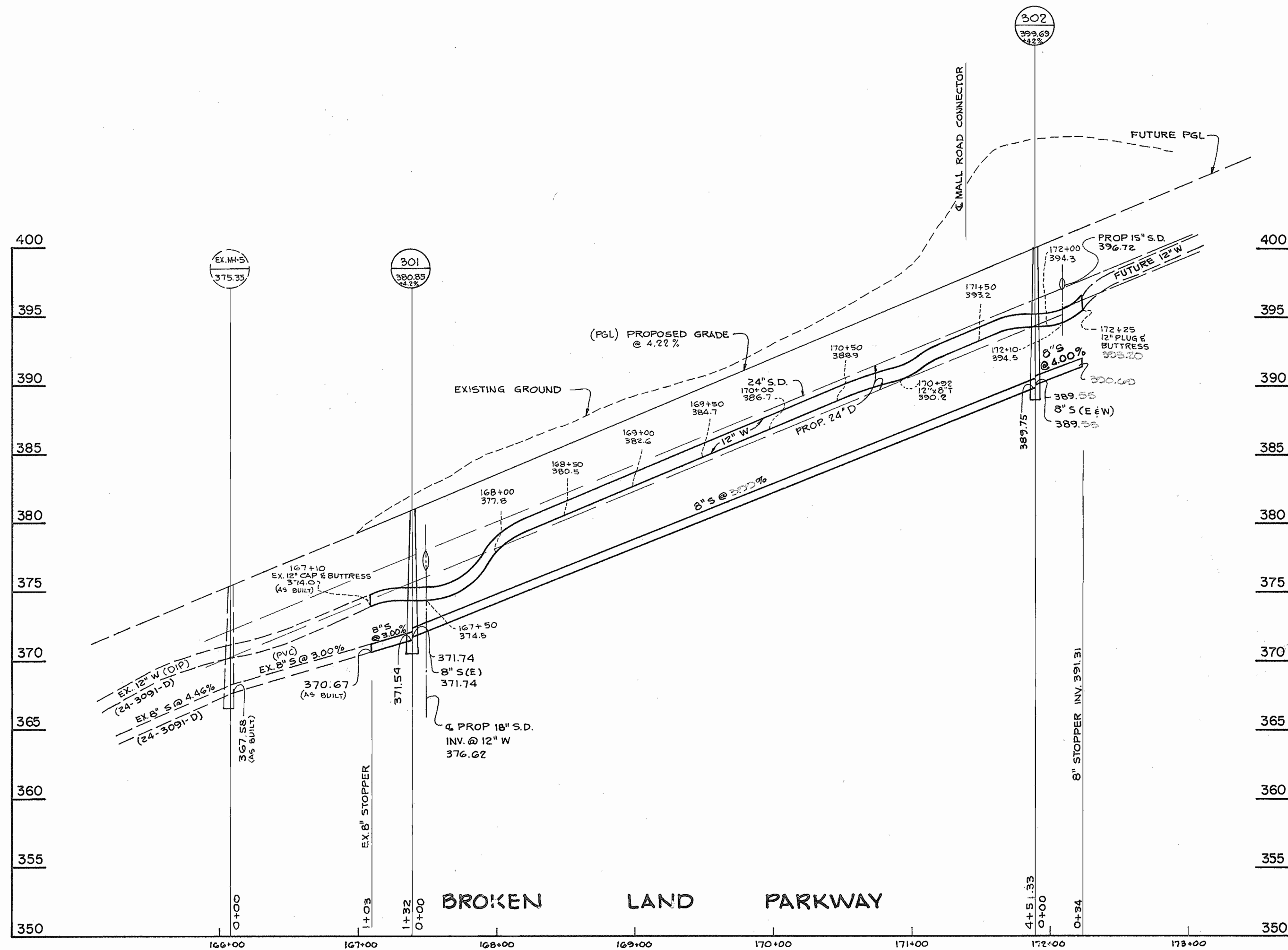
TOWN CENTER
SECTION 2 AREA 6
PARCEL A
PLAT 9512

PLAN
SCALE: 1" = 50'



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>James M. ...</i> DIRECTOR OF PUBLIC WORKS <i>Robert ...</i> CHIEF - BUREAU OF UTILITIES	PREPARED BY: PHOENIX ENGINEERING, INC. 817 MAIDEN CHOICE LANE, SUITE 300 BALTIMORE, MARYLAND 21228 (410)247-8833 FAX: 247-9397	DES: R.J.W.				PLAN OF WATER AND SEWER MAINS	COLUMBIA TOWN CENTER SECTION 2, AREA 6 & 7 LOT 1 ELECTION DISTRICT 5 CONTRACT NO. 24-3221-D	SCALE: AS SHOWN
		DRN: A.J.R.						DRAWING NO. 2 OF 3
DATE: 8-1-92 CHIEF - BUREAU OF UTILITIES	DATE: 8-1-92 CHIEF - LAND DEVELOPMENT DIVISION	DATE: 7/92	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 38	BLOCK NO. 1	

AS-BUILT 11-5-92



Handwritten notes:
 1/12/92
 1/12/92



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director: <i>John A. ...</i> Date: <i>8-31-92</i> Chief-Bureau of Utilities		PREPARED BY: PHOENIX ENGINEERING, INC. 817 MAIDEN CHOICE LANE, SUITE 300 BALTIMORE, MARYLAND 21228 (410)247-8833 FAX: 247-9397		DES: R.J.W. DRN: A.J.R. CHK: H.R.P. DATE: 7/92		PROFILES OF WATER AND SEWER MAINS		COLUMBIA TOWN CENTER SECTION 2, AREA 6 & 7 LOT 1 ELECTION DISTRICT 5 CONTRACT NO. 24-3221-D		SCALE: H:1"=50' V:1"=5' DRAWING NO. 3 OF 3
Chief-Land Development Division		(410)247-8833		BY NO. REVISION DATE		38 1		AS-BUILT 11-5-92		