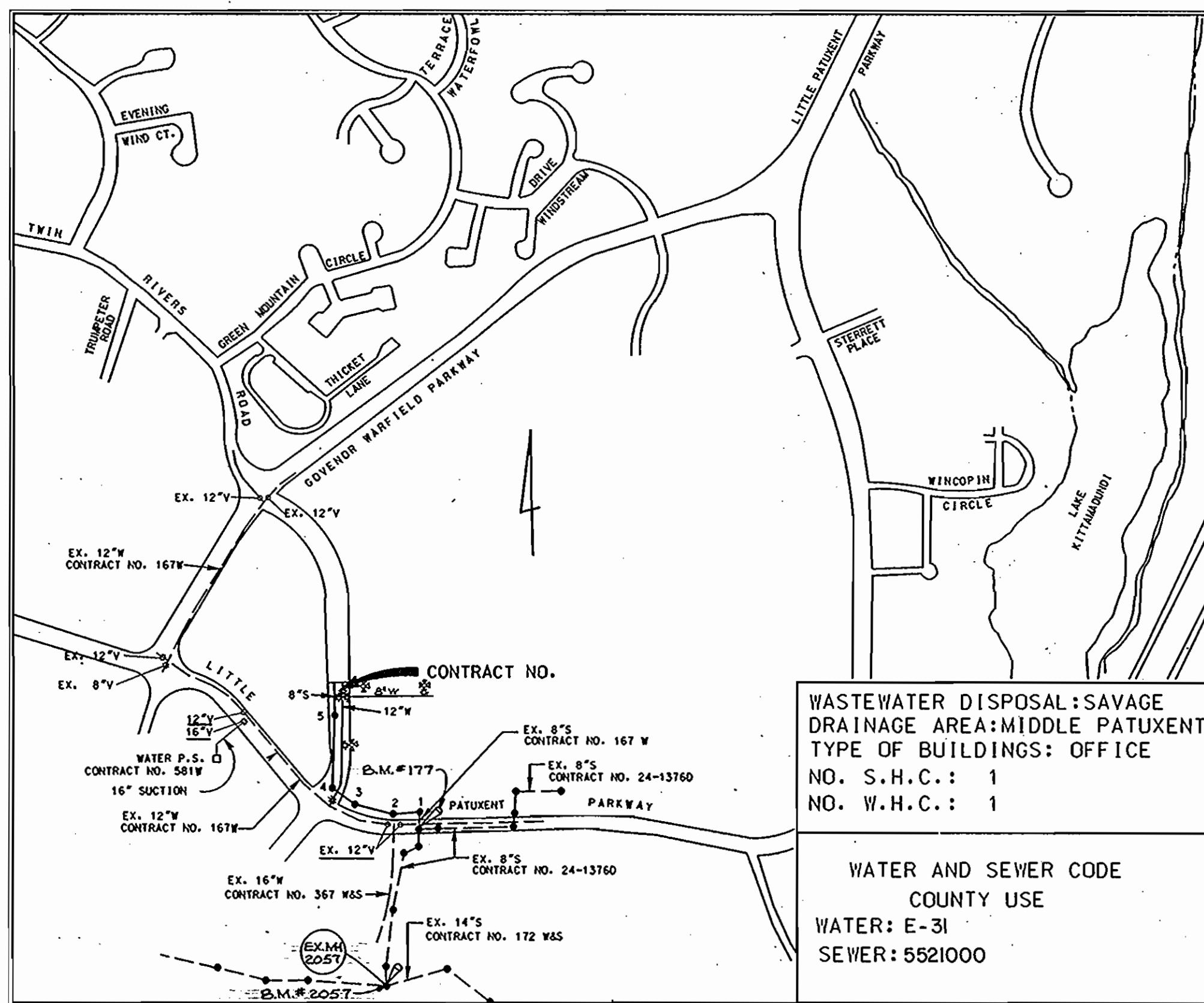


QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
12" WATER L.F.	610'	609'	ATLANTIC STATES
6" WATER L.F.	55'	59	"
12" VALVE EA.	2	2	MUELLER CO.
6" VALVE EA.	1	1	"
FIRE HYDRANT EA.	4	4	"
8" WATER L.F.	510'	446	ATLANTIC STATES
8" VALVE EA.	2	2	MUELLER
8" SEWER L.F.	1050	1041	
MANHOLES EA.	5	5	
12"x8" SLEEVE	1	1	MUELLER
8" VALVE EA.	1	1	"
12"x12" T SLEEVE	1	1	"
12" GATE VALVE	1	1	"



LOCATION MAP
SCALE: 1" = 600'

CONTRACT NO.24-3091-D
BROKEN LAND PARKWAY (EXTENDED)
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

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. DATUM.
- 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.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USED HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 1989 ADDENDUM 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 [] 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 VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS AND ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS AND ELECTRIC CO. - UNDERGROUND DAMAGE CONTROL - 859-9004
 - BALTIMORE GAS AND ELECTRIC CO. - TROUBLE SHOOTING - 298-9001
 - MISS UTILITY - 1-800-257-7777
 - COLONIAL PIPELINE CO. - 795-1390/C&P TELEPHONE CO. - 1-800-257-7777
 - BUREAU OF UTILITIES HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO A MAXIMUM EXTENT. TREES AND SHRUBS, 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.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-158 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- 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 AND 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P.X..D.I.P..V.C.P.X. 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.
- STRAW BALE DIKE AND SILT FENCE ARE INTERCHANGEABLE.
- FOR MANHOLES IN OPEN SPACE OR OUTFALL, SET TOP OF FRAME 1.5' ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- AREAS WHERE WATER AND SEWER MAINS ARE TO BE CONSTRUCTED ARE WITHIN THE AREA OF B.L.P. CONSTRUCTION OR TOWN CENTER, SECTION 2, AREA 6 CONSTRUCTION SEDIMENT CONTROL MEASURES FOR THESE AREAS IS PROVIDED UNDER SDP-90-213.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
James M. Tolson 3/15/91
U.S. SOIL CONSERVATION SERVICE

This Development plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District
John Robertson 3/15/91
HOWARD S.C.D.

Sediment Control Measures for this Contract will be implemented in accordance with Section 219 of the Standard Specifications, F-91-57

Thomas J. Shafer

Town Center Section 2, Area 6, Broken Land Parkway Extension and Ryland Headquarters F-91-57

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James M. Tolson 3/15/91
DIRECTOR OF PUBLIC WORKS - DATE
Robert D. Bennett 3-13-91
CHIEF-BUREAU OF UTILITIES - DATE
Thomas J. Shafer 3/15/91
CHIEF-LAND DEVELOPMENT DIVISION - DATE

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
2315 ST. PAUL ST.
BALTIMORE, MARYLAND



DES: M.D.					
DRN: R.H.					
CHK: M.D.					
DATE: 1-17-91	BY	NO.	REVISION	DATE	

AS-BUILT
10-11-91
AUG 11 1991

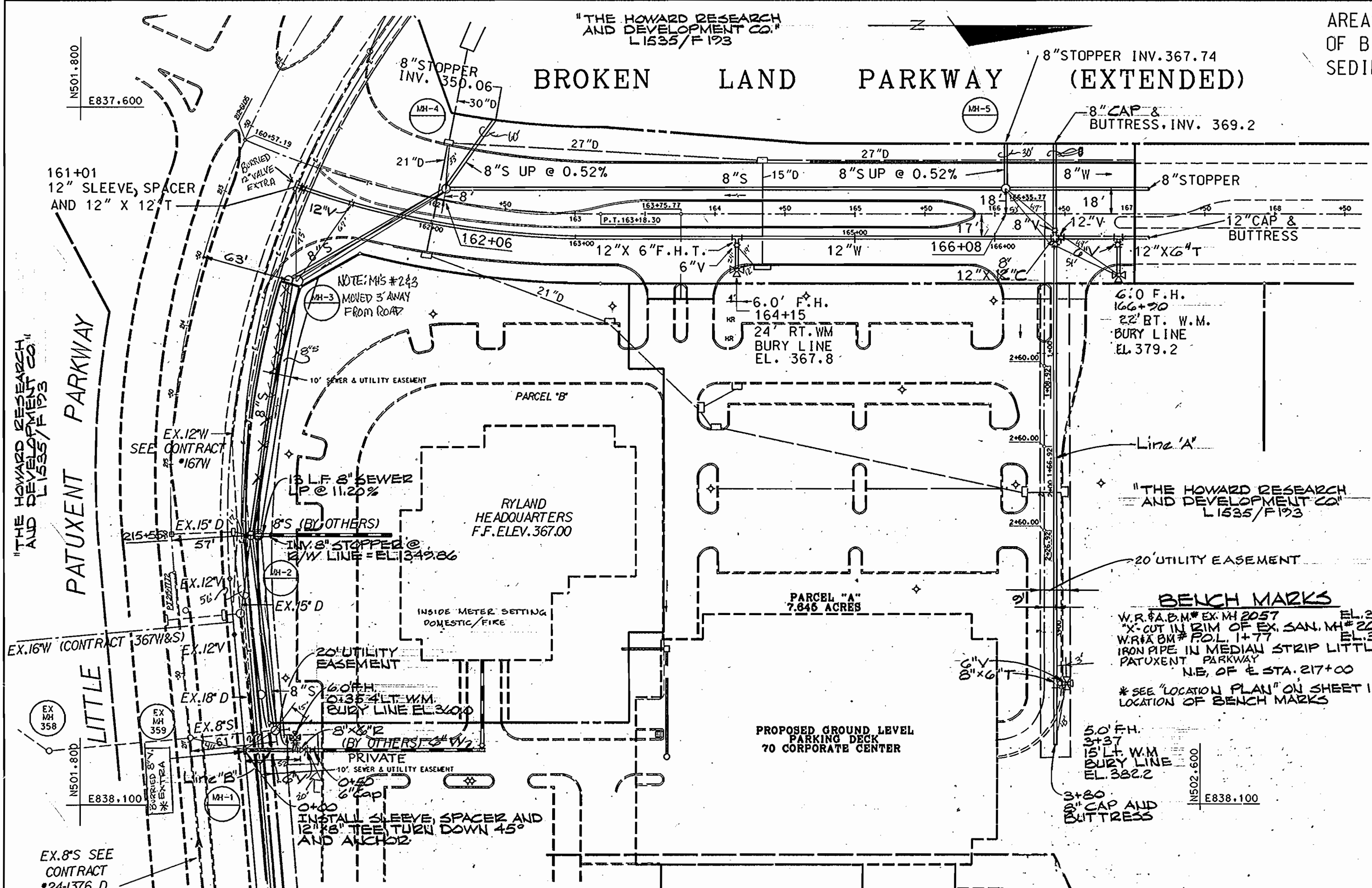
COLUMBIA TOWN CENTER
BROKEN LAND PARKWAY WATER AND SEWER MAINS
ELECTION DISTRICT NO. 5
CONTRACT NO.24-3091-D

SCALE AS SHOWN
SHEET 1 OF 2

"THE HOWARD RESEARCH AND DEVELOPMENT CO." L1535/F123

AREAS WHERE WATER AND SEWER MAINS ARE TO BE CONSTRUCTED ARE WITHIN THE AREA OF B.L.P. CONSTRUCTION OR TOWN CENTER, SECTION 2, AREA 6 CONSTRUCTION. SEDIMENT CONTROL MEASURES FOR THESE AREAS IS PROVIDED UNDER SDP-90-213.

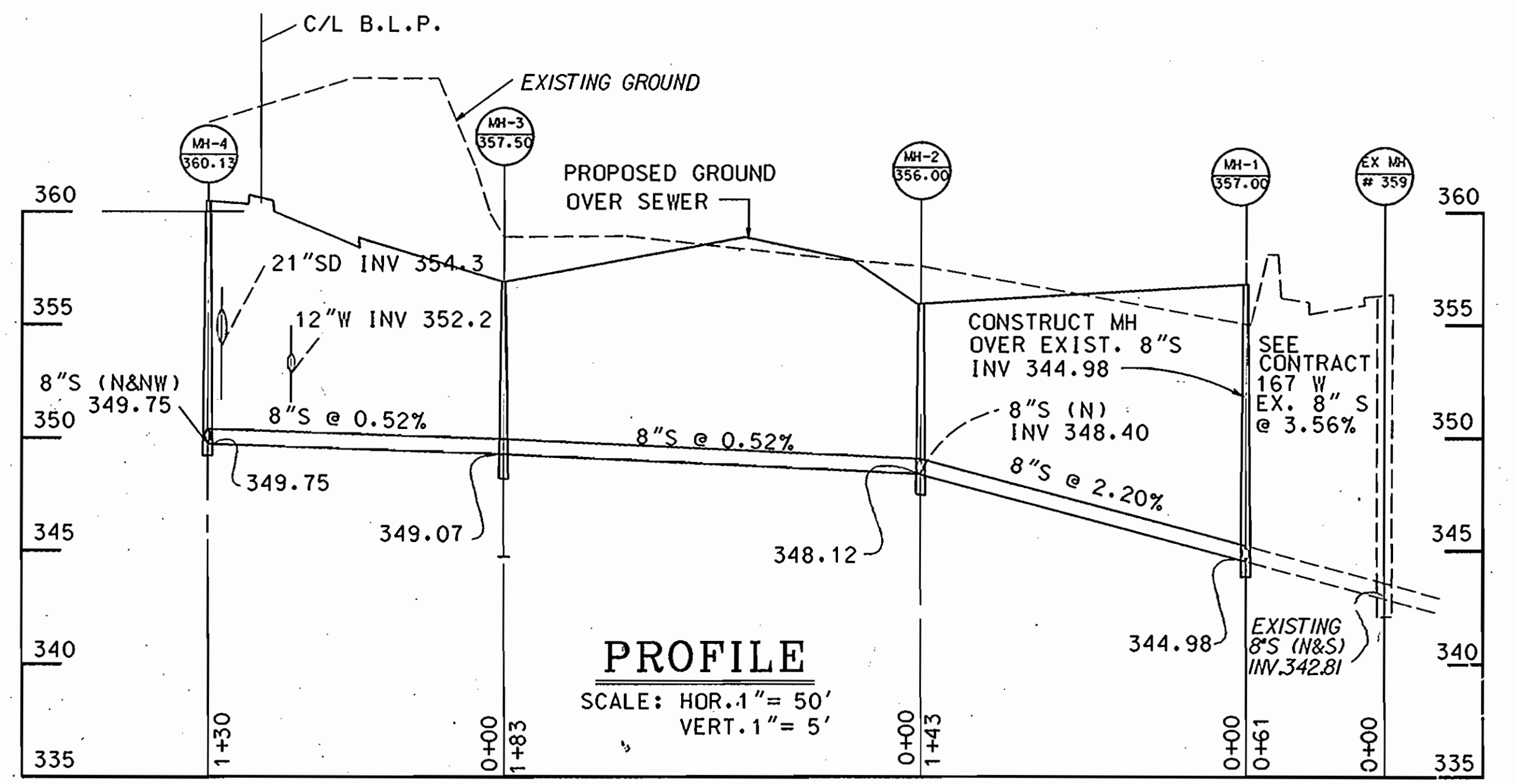
BROKEN LAND PARKWAY (EXTENDED)



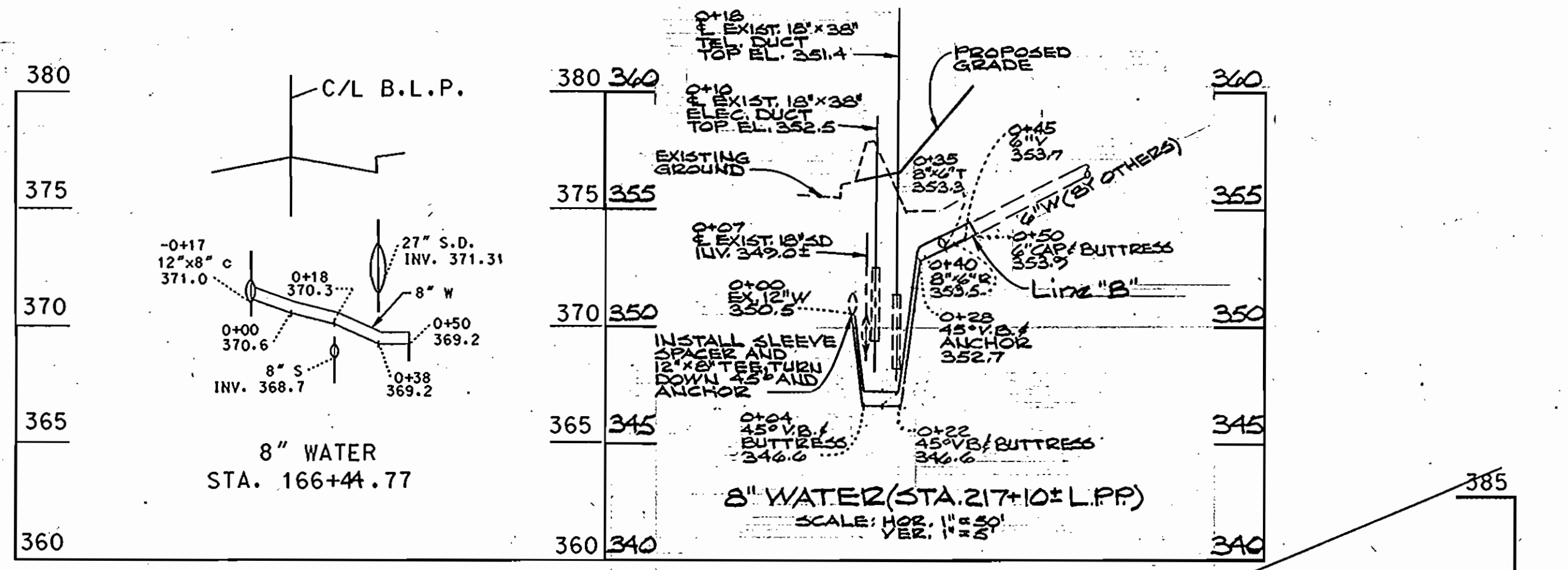
PLAN
SCALE: 1" = 50'

NOTE: CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 5 WORKING DAYS PRIOR TO COMMENCING ANY WORK RELATED TO THE SHUT DOWN OF WATER MAINS.

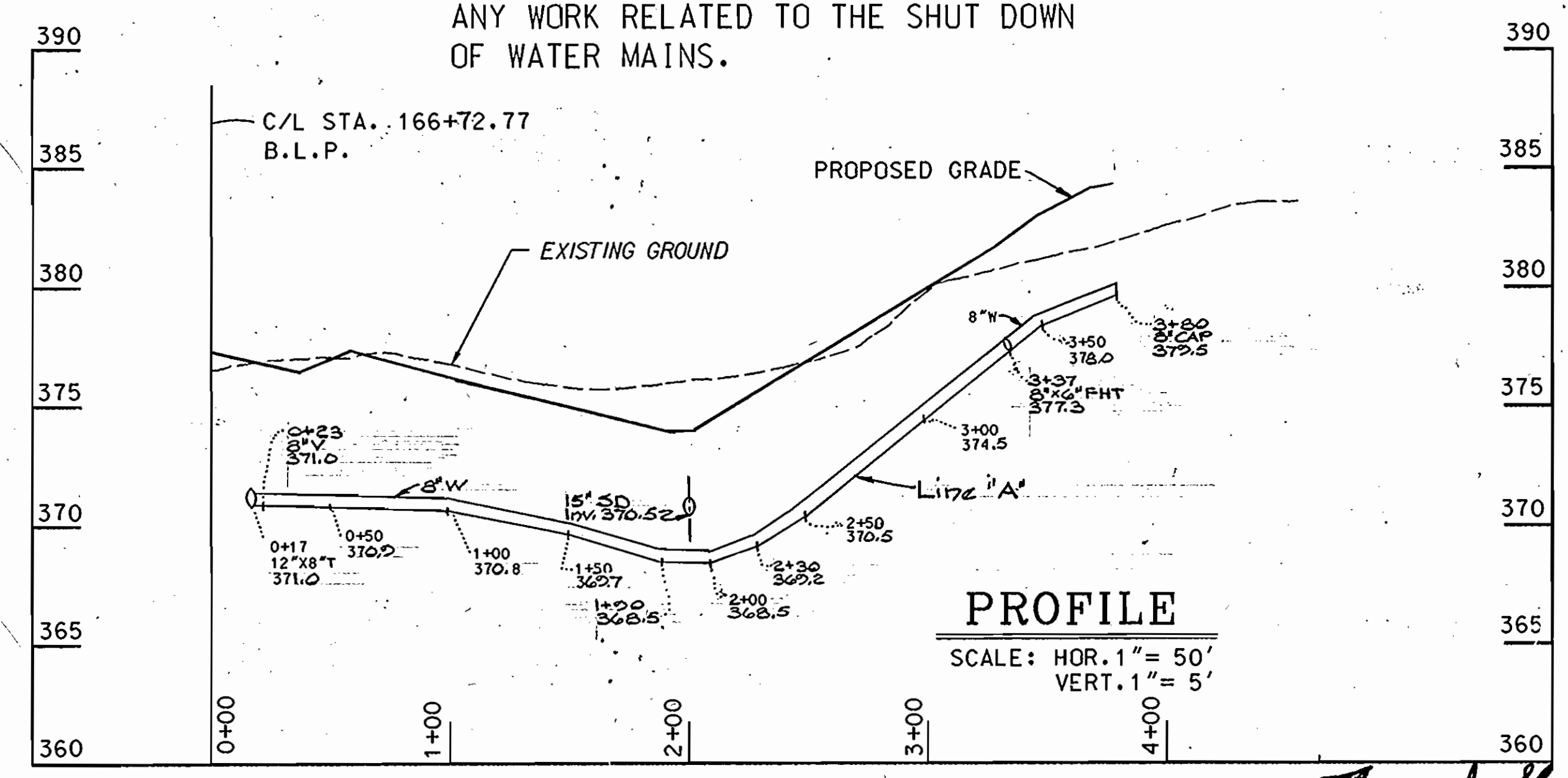
BENCH MARKS
W.R. #A.B.M. # EX. MH 2057 EL. 327.47
X-CUT IN RIM OF EX. SAN. MH # 2057 EL. 356.22
W.R. #A.B.M. # P.O.L. 1+77 EL. 356.22
IRON PIPE IN MEDIAN STRIP LITTLE PATUXENT PARKWAY
N.E. OF STA. 217+00
* SEE "LOCATION PLAN" ON SHEET 1 FOR LOCATION OF BENCH MARKS



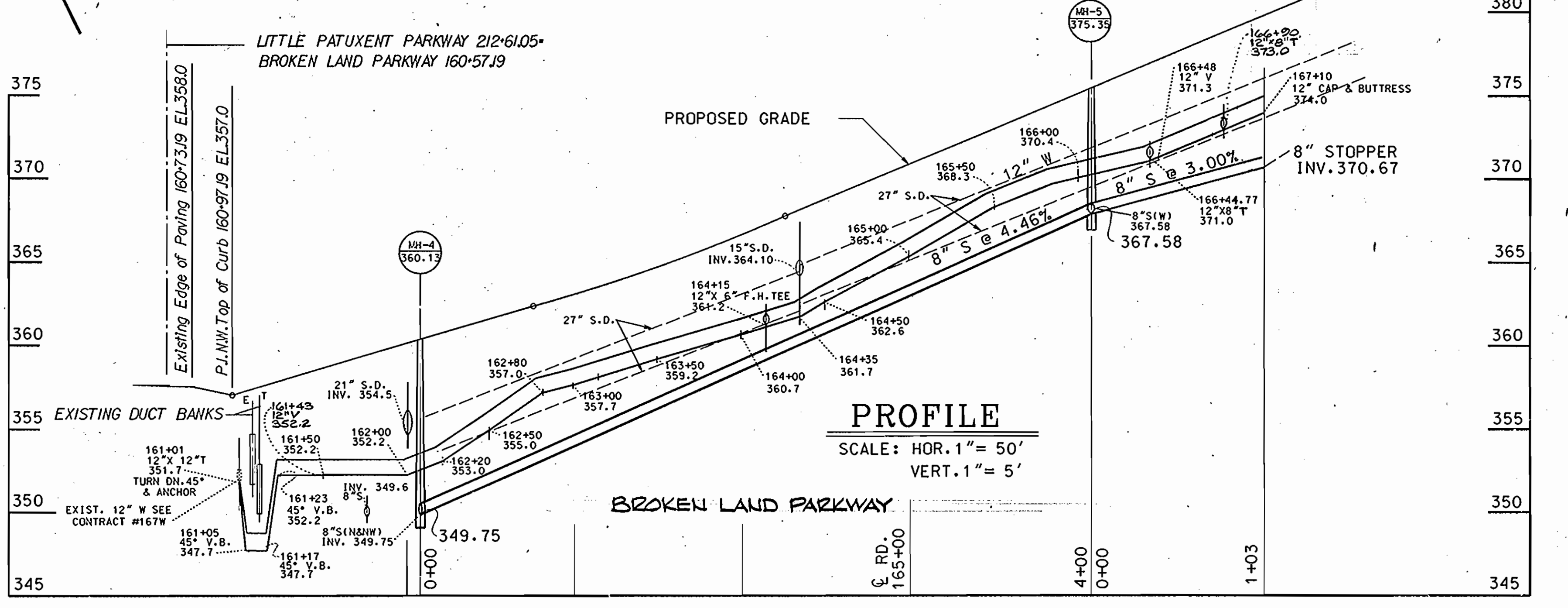
PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

Thomas J. Shafer

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
3/10/91
3/13/91

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
2315 ST. PAUL ST. BALTIMORE, MARYLAND



DES: M.D.	
DRN: H.R.H.	
CHK: M.D.	
DATE: 1-17-91	
BY: J.B.	1
NO.	Revise Water Line on Plan & Profile (Line A) 1/11/91
REVISION	
DATE:	

AS-BUILT
10-11-91
PLAN AND PROFILE

COLUMBIA TOWN CENTER
BROKEN LAND PARKWAY WATER AND SEWER MAINS
ELECTION DISTRICT NO. 5
CONTRACT NO. 24-3091-D

SCALE AS SHOWN
SHEET 2 OF 2