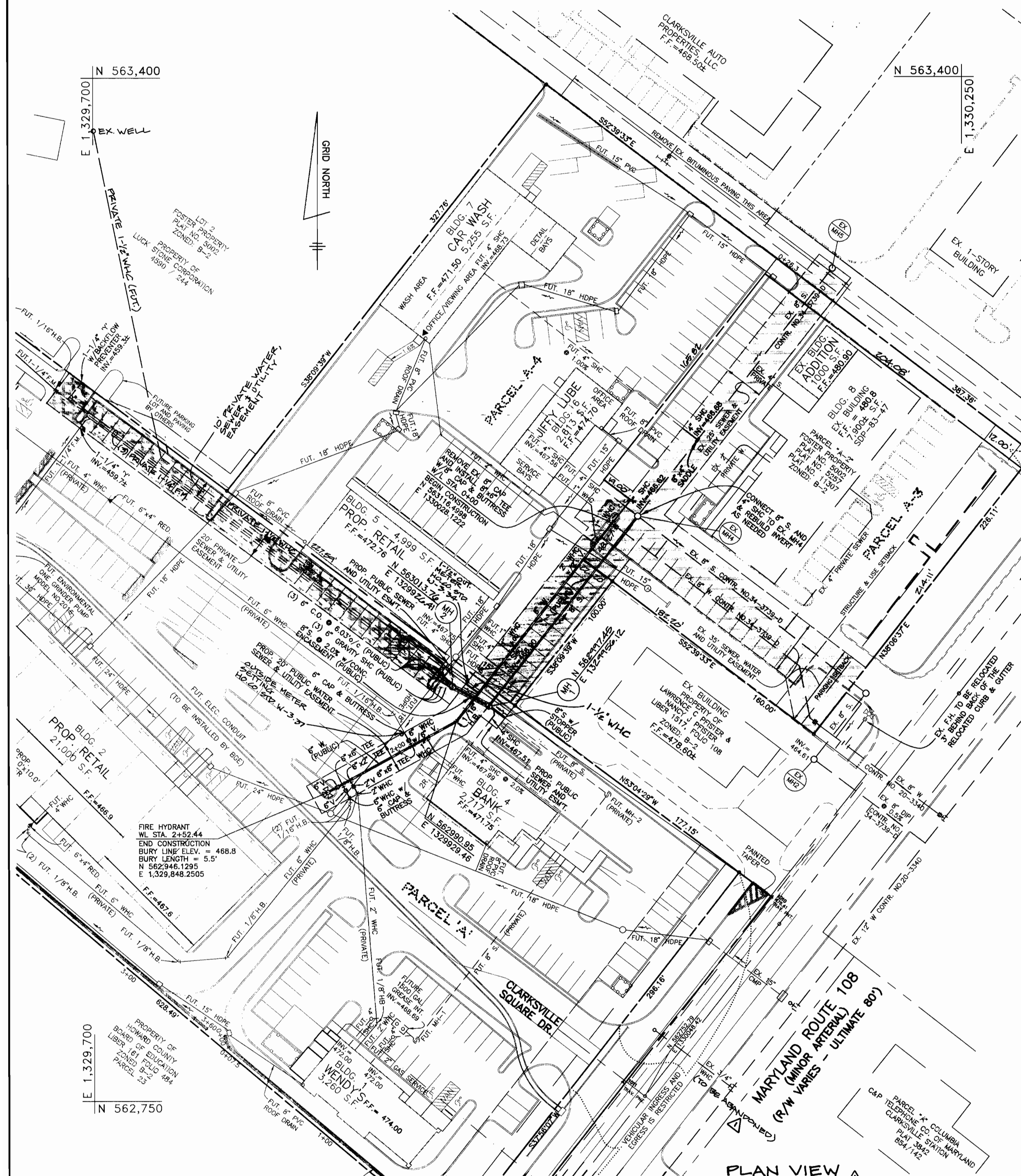


QUANTITIES				
ITEM	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" x 8" TEE	2 EA.			
6" x 6" TEE	2 EA.			
6" x 4" TEE	1 EA.			
6" VALVES	1 EA.			
6" VALVES	4 EA.			
6" WATER	282 L.F.			
FIRE HYDRANTS	1 EA.			
1" W/C	32 L.F.			
1" W/C	10 L.F.			
1" W/C	20 L.F.			
1" W/C	10 L.F.			
1" W/C	191 L.F.			
MANHOLES	30 EA.			
6" S.C.	3 EA.			
6" S.C.	54 EA.			
8" x 4" SADDLE	1 EA.			
OUTSIDE METER	1 EA.			



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

John R. Robertson 7/9/99
HOWARD SOIL CONSERVATION DISTRICT

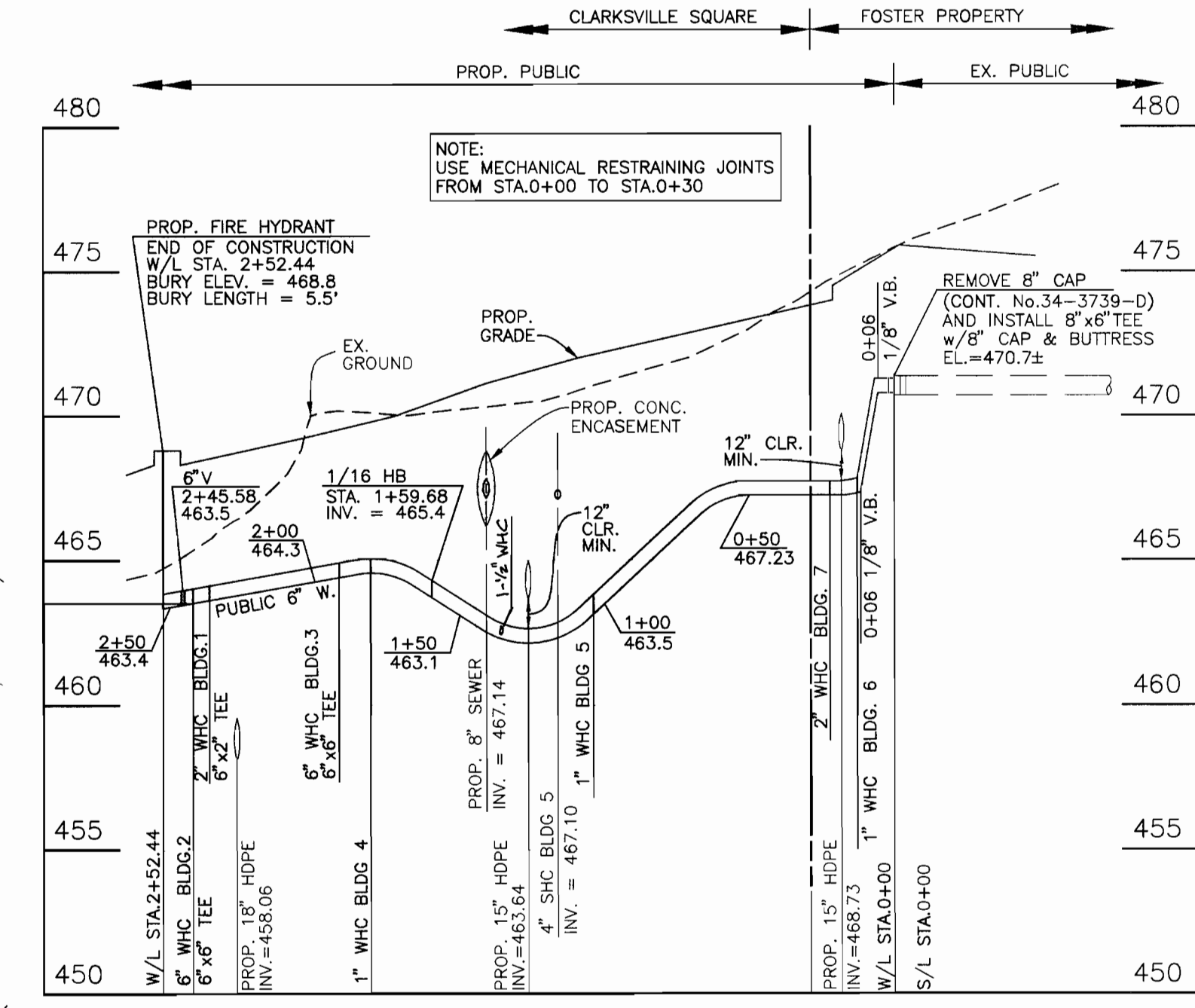
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER SITE DEVELOPMENT PLAN SDP-99-69

HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

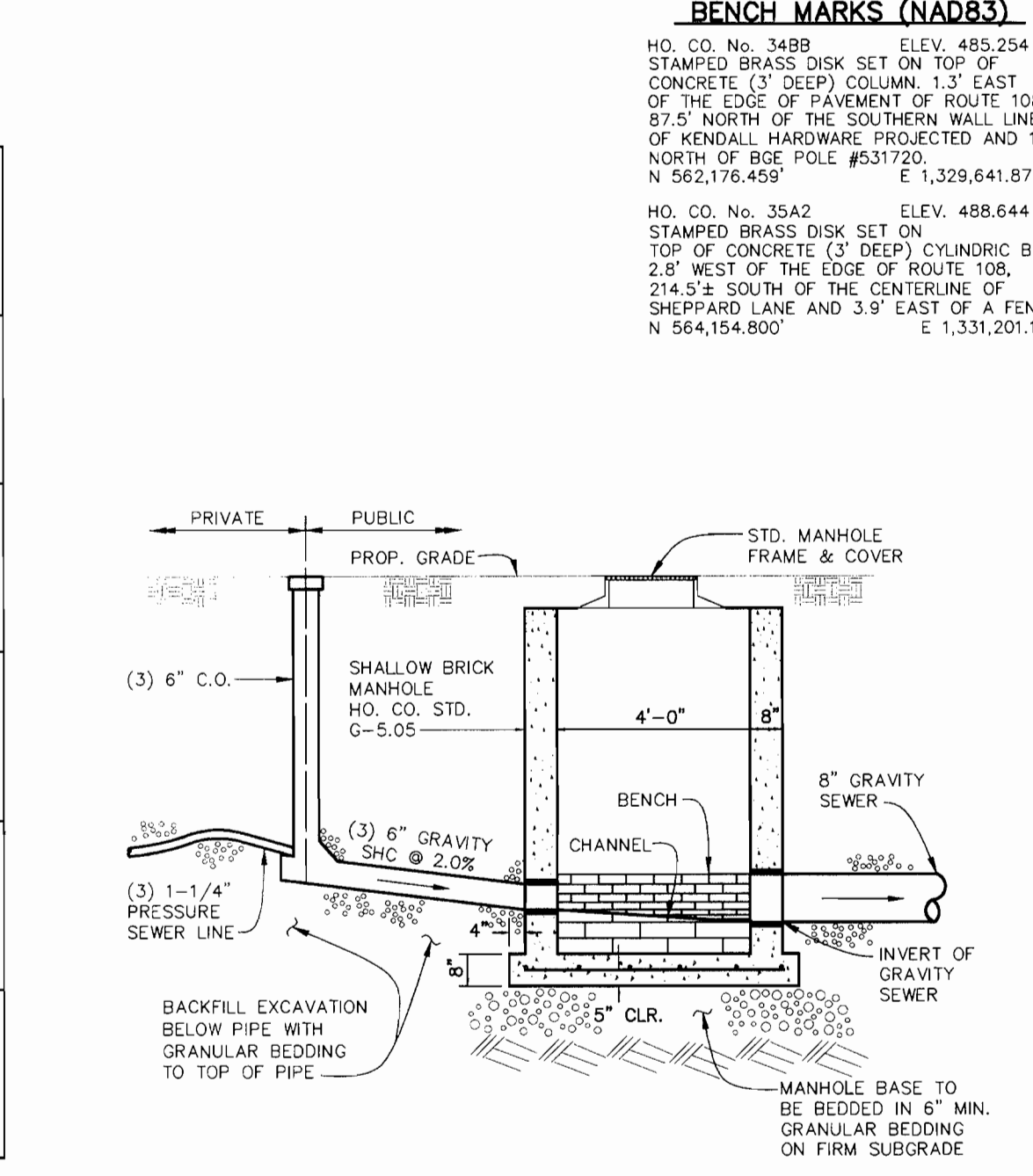
Royl Simmons 7/9/99
NATURAL RESOURCES CONSERVATION SERVICE

OWNER/DEVELOPER:
CLARKSVILLE SQUARE, L.C.
P.O. BOX 417
ELLCOTT CITY, MARYLAND 21041
410-465-4244

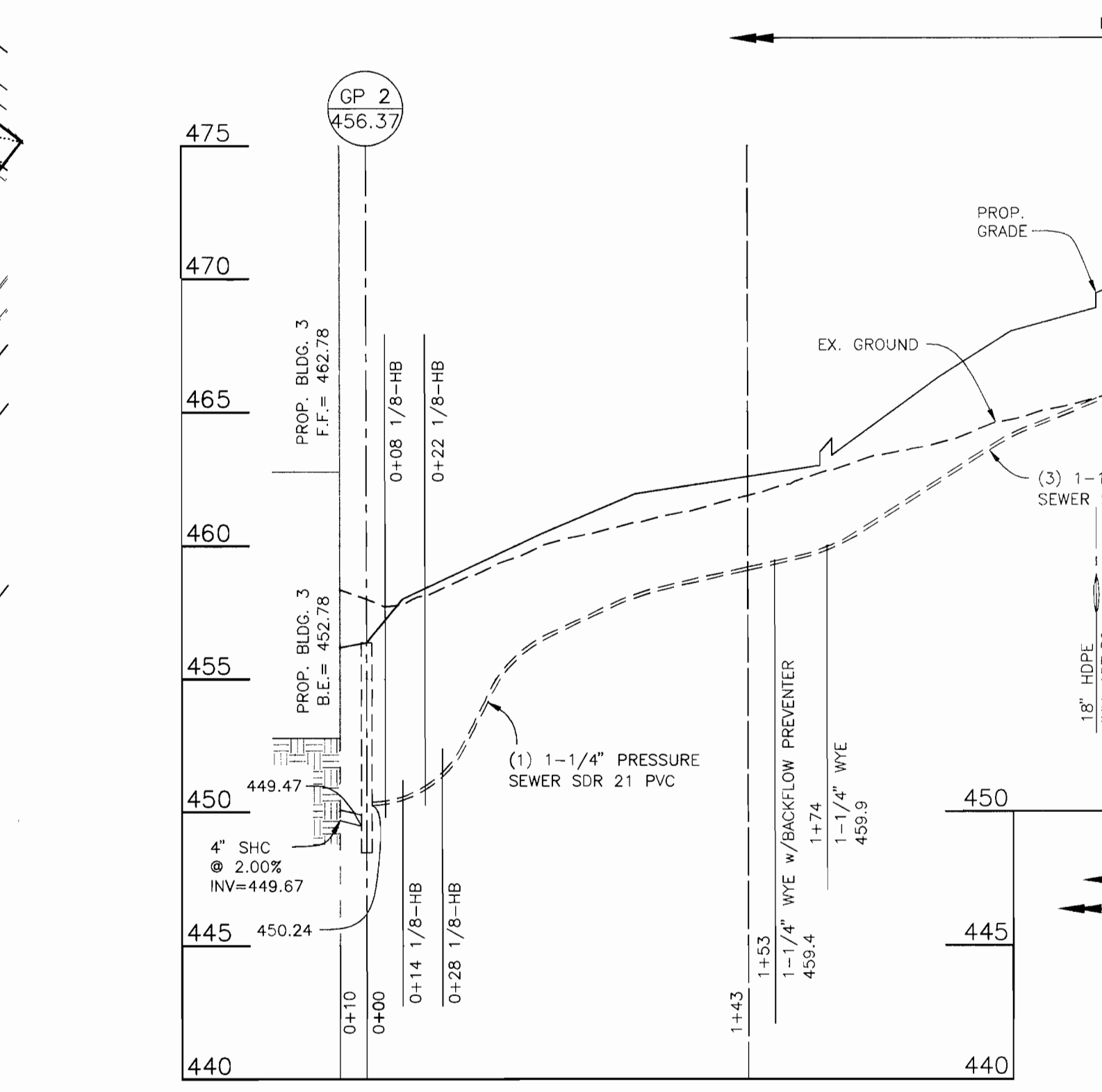
LEGEND	
	EXIST. WATER MAIN
	EXIST. SEWER MAIN
	EXIST. SEWER MANHOLE
	PROP. WATER MAIN
	PROP. SEWER MAIN
	PROP. STORM DRAIN (BY OTHERS)
	PROP. SEWER MANHOLE
	PROP. TERMINAL MANHOLE
	PROP. MAINS HOUSE CONNECTION
	PROP. WATER HOUSE CONNECTION (DOUBLE - 1 1/2")
	PROP. WATER HOUSE CONNECTION (SINGLE - 1")
	PROP. FIRE HYDRANT
	PROP. VALVE
	PROP. PLUG & BUTTRISS



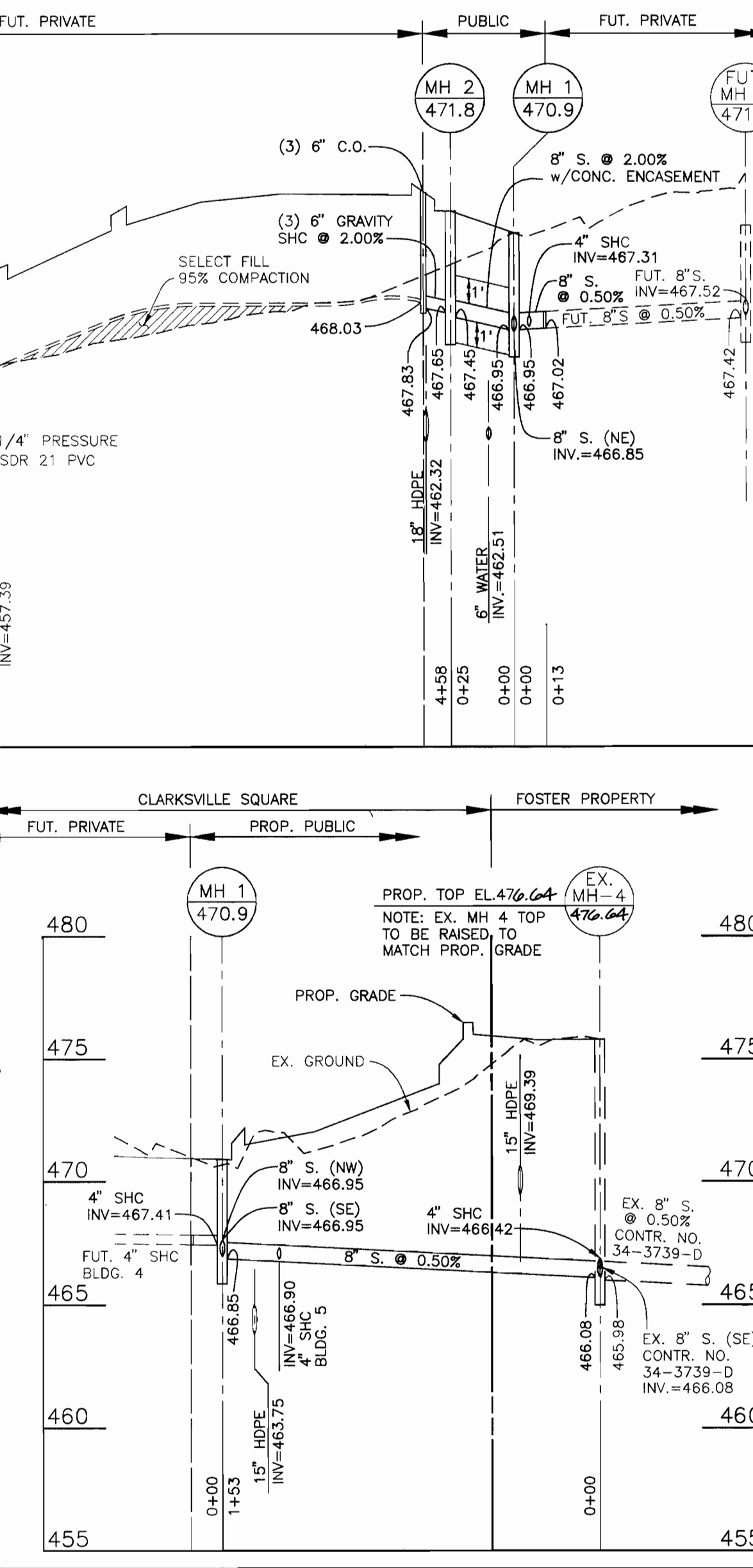
WATER PROFILE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



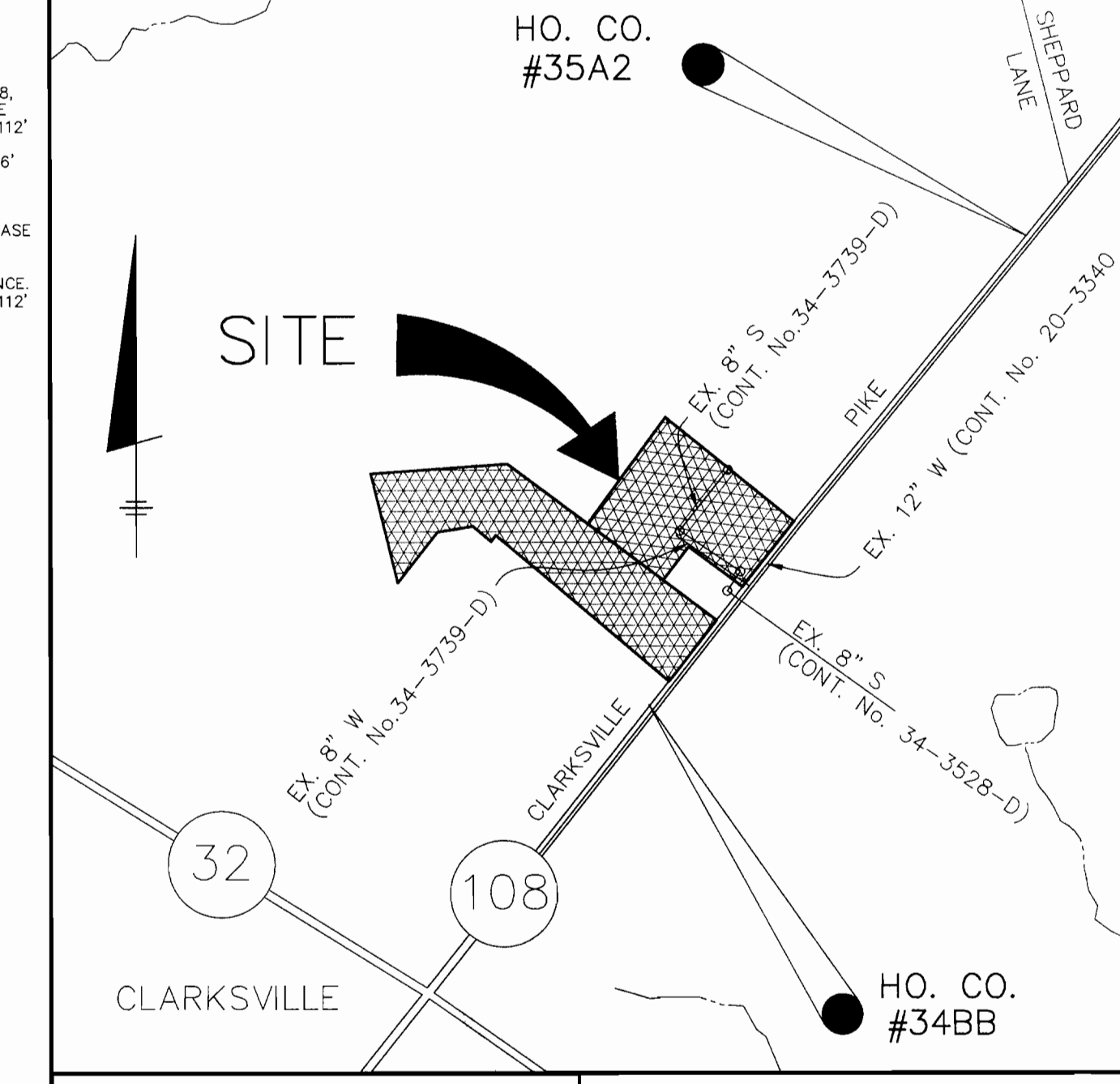
TRANSITION FROM PRESSURE SEWER TO GRAVITY SEWER
NOT TO SCALE



SEWER PROFILES
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



WATER & SEWER PLAN AND PROFILE
600 SCALE MAP NO. 34
BLOCK 6



WATER AND SEWER COUNTY CODE		TYPE OF BUILDING :	
WATER CODE:	1-10	NUMBER OF PARCELS:	2 (7 BUILDINGS)
SEWER CODE:	665350	NUMBER OF SHCS:	7
TEST GRADIENT:	780	NUMBER OF MHCS:	7
		DRAINAGE AREA :	MIDDLE PATUXENT
		TREATMENT PLANT :	LITTLE PATUXENT

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 (NAD-83) AS BASED ON U.S.G.S. DATA.
 - 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 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. 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 MADE SHALL BE LOCATED BY THE CONTRACTOR. NO NEED 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: 410-531-5533
BALTIMORE GAS & ELECTRIC CO.: 410-850-4620
CONTRACTOR SERVICES: 410-850-4620
BALTIMORE GAS & ELECTRIC CO.: 410-850-4620
UNDERGROUND DAMAGE CONTROL: 410-787-9068
MISS UTILITY: 1-800-297-7777
COLONIAL PIPELINE CO.: 410-95-1390
BUREAU OF UTILITIES:
HOWARD CO. DEPT. OF PUBLIC WORKS: 410-313-4900
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR. THE 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.
 - PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
 - ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
 - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" TO 4'-0" COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT 410-313-2659 AT LEAST FIVE 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 18.314 (b) OF THE HOWARD COUNTY CODE.
 - CONTRACT NO. 44-3963-D IS APPROVED AND NOT YET CONSTRUCTED. CONTRACT NO. 44-3963-D WILL NEED TO BE CONSTRUCTED PRIOR TO THIS WATER AND SEWER CONTRACT.
- PART 2 - WATER**
- ALL WATER MAINS TO BE D.I.P. CLASS 90 UNLESS OTHERWISE NOTED.
 - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" TO 4'-0" COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - ALL FITTINGS SHALL BE BUTTRISSED 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 BUTTRISSED 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.
- PART 3 - SEWER**
- ALL SEWER MAINS SHALL BE DIP. AND P.V.C.
 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER. STANDARD DETAIL: 05.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

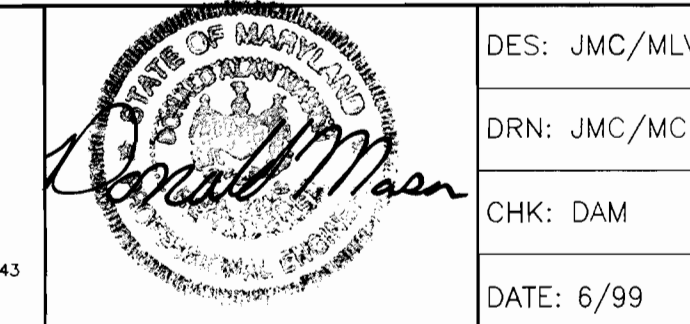
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. M. Beiner 6-29-98
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Royl Simmons 7/9/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS
8480 BALTIMORE NATIONAL PIKE • SUITE 410 • ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-8105 FAX: 410-465-6844



DES:	JMC/MLV	DATE:	6/99
DRN:	JMC/MCR <td></td> <td></td>		
CHK:	DAM <td></td> <td></td>		
DATE:	6/99		
REVISIONS		DATE	
MCR	2	ADDED 1-1/2" W/C & METER FOR WALK STONE	11-9-99
MCR	1	LABEL EX. W/C'S "TO BE ABANDONED"	7-28-99
BY	NO.		

CLARKSVILLE SQUARE PARCEL "A" AND FOSTER PROPERTY PARCELS A-3 & A-4
ELECTION DISTRICT NO. 5

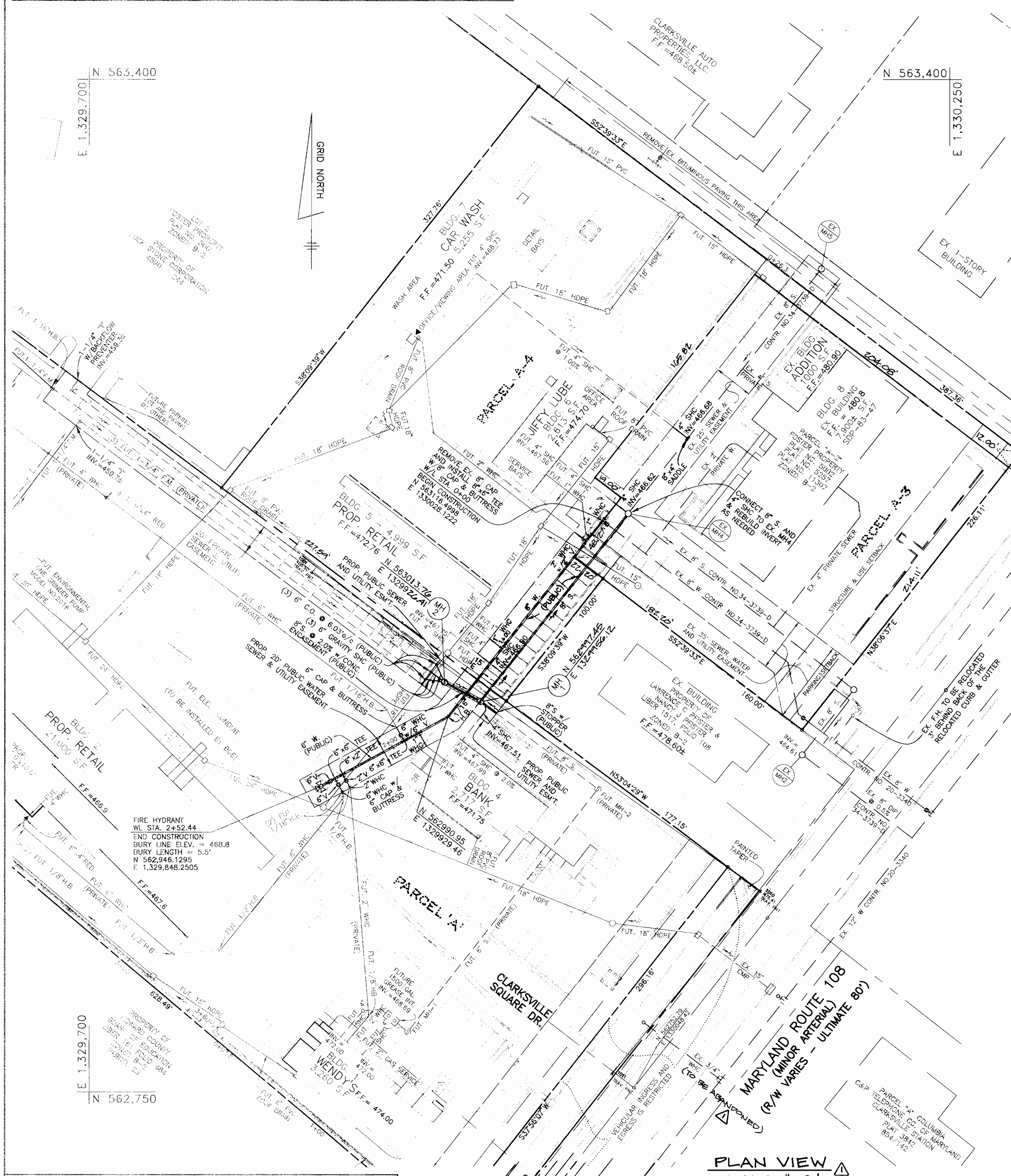
SCALE AS SHOWN

SHEET 1 OF 1

CONTRACT NO. 34-3771-D

QUANTITIES			
ITEM	QUANTITIES ESTIMATED	AS-BUILT	
		QUANTITIES	TYPE MANUFACTURER/SUPPLIER
6" x 6" TEE	2 EA		
6" x 6" TEE	2 EA		
6" VALVES	2 EA		
6" WATER	252 L.F.		
FIRE HYDRANTS	1 EA		
1" W/C	32 L.F.		
2" W/C	10 L.F.		
6" W/C	20 L.F.		
8" S.W.C. (PVC)	191 L.F.		
MANHOLES	2 EA		
6" SHC	30 L.F.		
3" C.C.	3 EA		
4" SHC	1/4 L.F.		
9" x 4" SADDLE	1 EA		

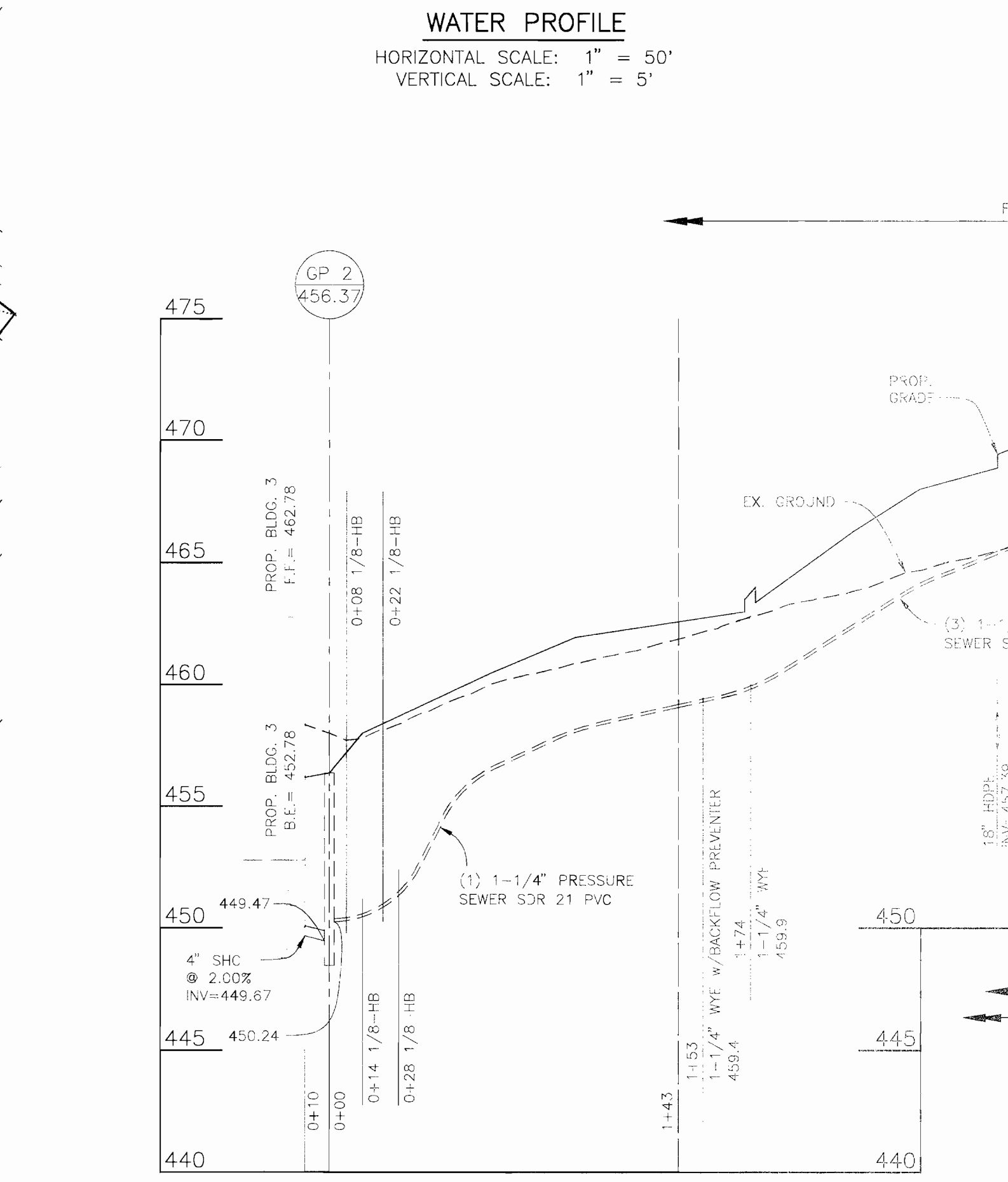
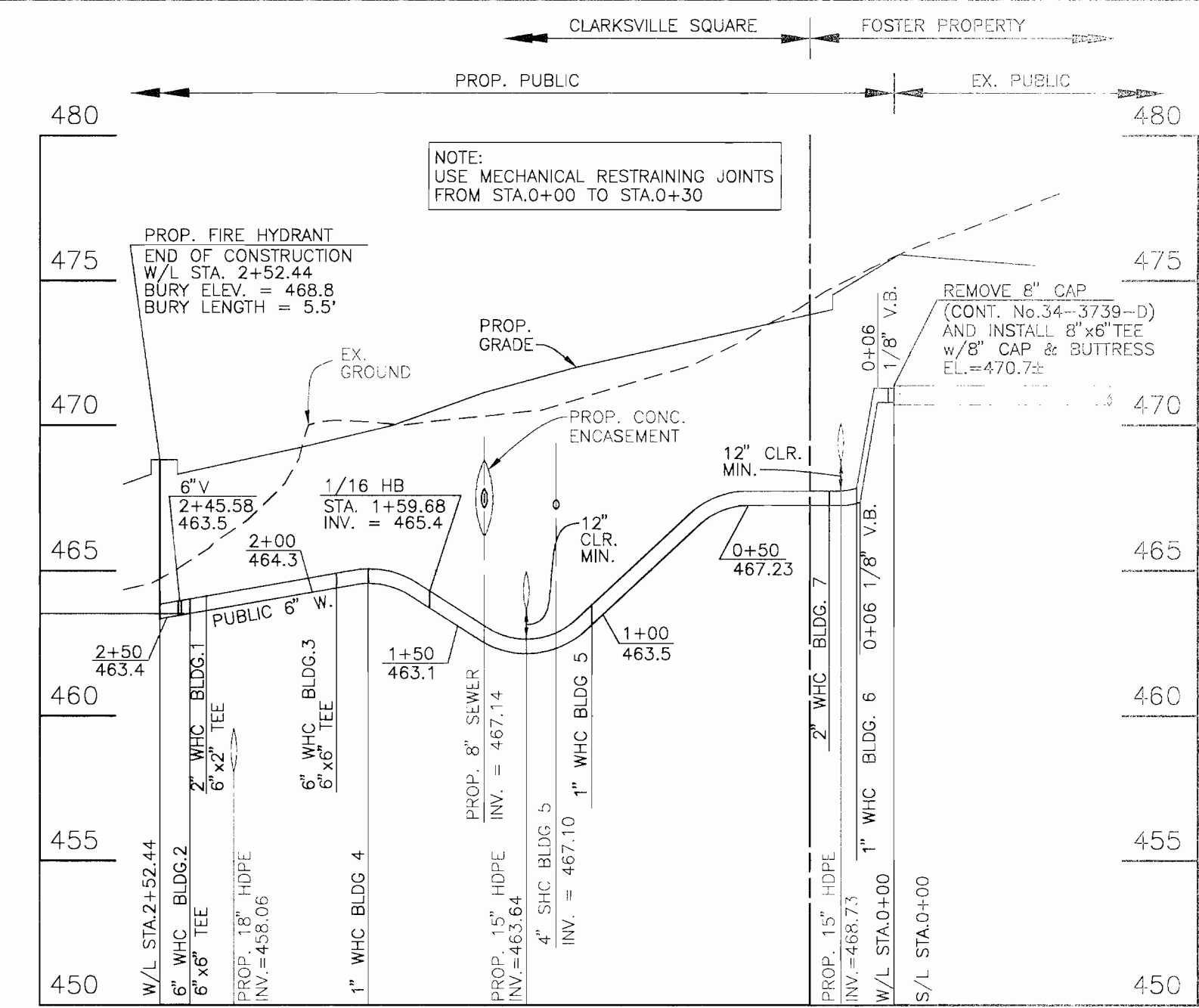
NAME OF UTILITY CONTRACTOR: _____
 SURVEY AND DRAFTING AS-BUILT DATE: _____



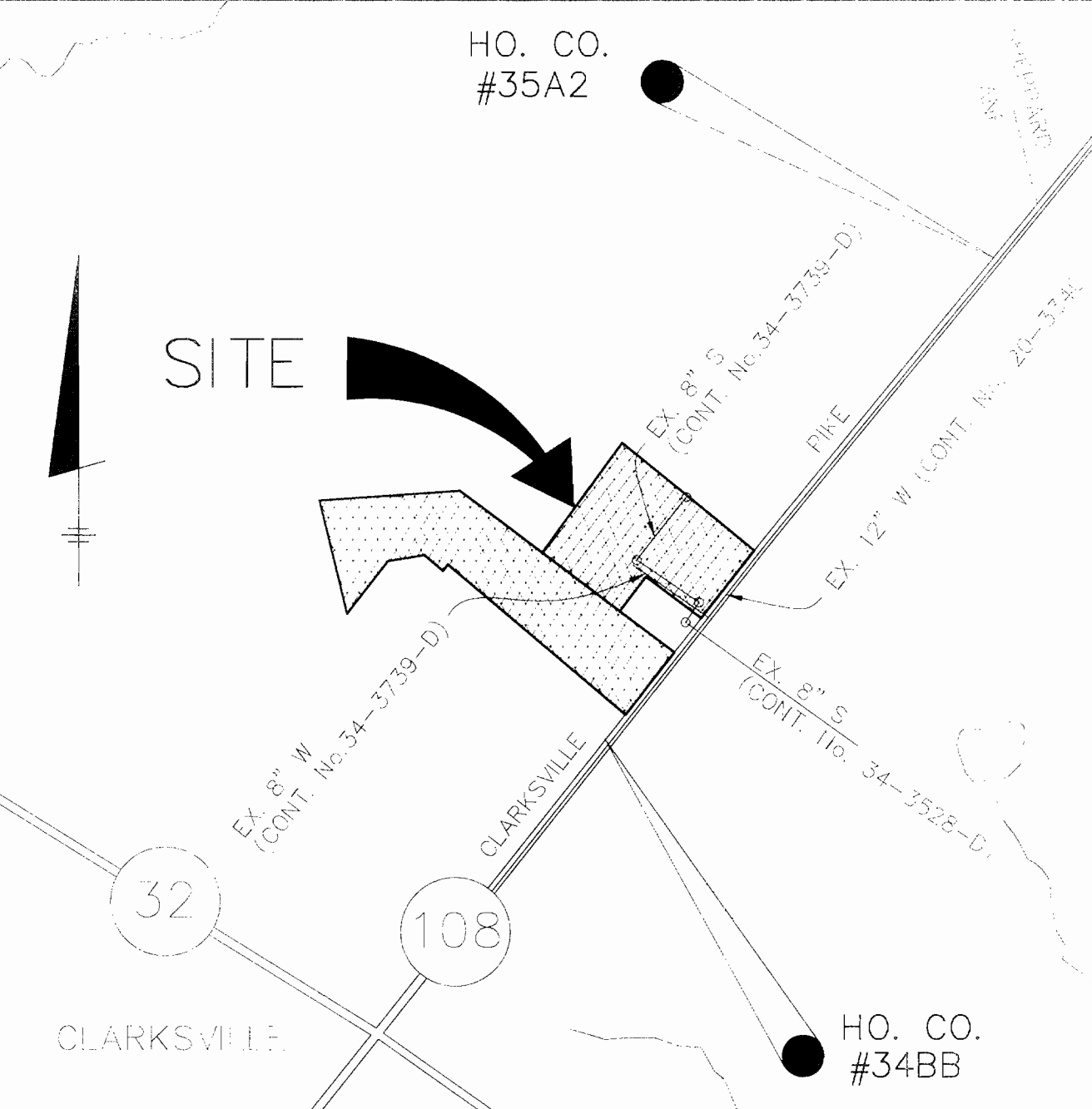
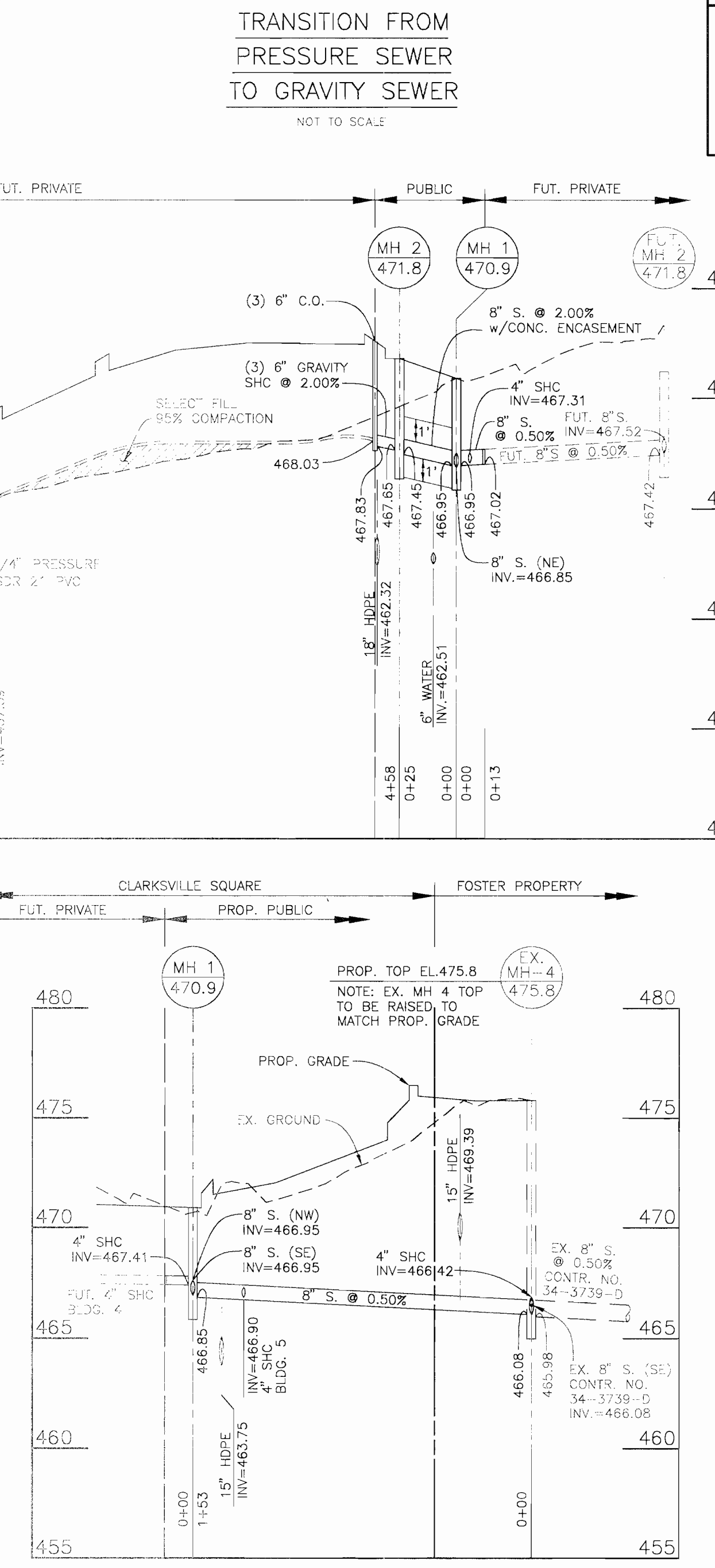
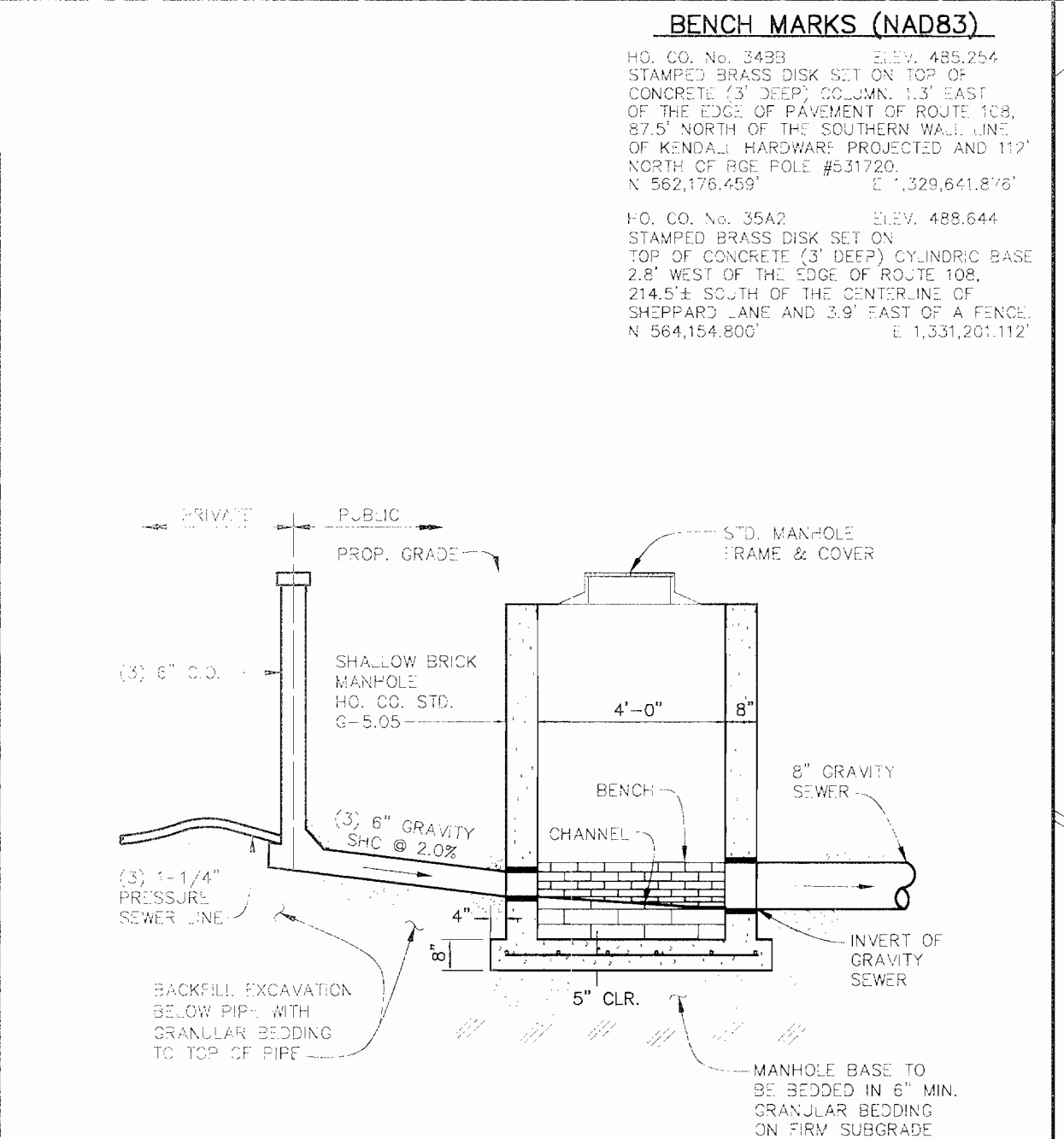
John R. Robertson 7/9/99
 HOWARD SOIL CONSERVATION DISTRICT
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND METS TECHNICAL REQUIREMENTS

DeeL Simmons 7/9/99
 NATURAL RESOURCES CONSERVATION SERVICE

OWNER/DEVELOPER:
 CLARKSVILLE SQUARE, L.C.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21041
 410-465-4244



NO.	REVISIONS	DATE
1	BY JMC/MLV	6/99
2	DRN: JMC/MCR	
3	CHK: DAM	
4	DATE: 6/99	
5	MCR LABEL EX. W/C'S TO BE ABANDONED	7-28-99



WATER AND SEWER COUNTY CODE		TYPE OF BUILDING :	
WATER CODE:	1-10	NUMBER OF PARCELS:	2 (7 BUILDINGS)
SEWER CODE:	6653500	NUMBER OF SHCs:	2
TEST GRADIENT:	780	NUMBER OF W/C'S:	7
		DRAINAGE AREA:	MIDDLE PATUXENT
		TREATMENT PLANT:	LITTLE PATUXENT

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 SERVICE. 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 (NAD 83).
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- ALL UTILITIES BY A MINIMUM OF 6" CLEAR ALL POLLS 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. FOR MONEY AND THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES. ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY AND. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE EXISTING UTILITIES. THEY ARE NOTED BY THE SYMBOL (C.N.S.) 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 TESTED 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 410-531-5533
 - BALTIMORE GAS & ELECTRIC CO. 410-650-4920
 - UNDERGROUND DAMAGE CONTROL 410-787-9068
 - MESS UTILITY 410-650-7777
 - COLONIAL PIPELINE CO. 410-313-0800
 - BUREAU OF UTILITIES
 - HOWARD EQ. DEPT. OF PUBLIC WORKS 410-313-6800
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS A LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR 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 MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE 3" P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" TO 4' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT 410-313-2400 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/WORKING OPERATION IN ANY COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH ALL REQUIREMENTS PER SECTION 18.114 (b) OF THE HOWARD COUNTY CODE. CONTRACT NO. 44-3563-D IS APPROVED BUT NOT YET CONSTRUCTED. CONTRACT NO. 44-3563-D WILL BE USED TO BE CONSTRUCTED PRIOR TO THIS WATER AND SEWER CONTRACT.

PART 2 - WATER	
1.	ALL WATER MAINS TO BE D.I.P. CLASS 50 UNLESS OTHERWISE NOTED.
2.	TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" TO 4' COVER UNLESS OTHERWISE NOTED.
3.	VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
4.	FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
5.	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 5000 AND 1000 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
6.	WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE WATER SERVING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 R. H. M. BEINER 6-29-99

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 DONALD MANN 7/6/99

BENCHMARK ENGINEERING, INC.
 8450 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644

DES: JMC/MLV
 DRN: JMC/MCR
 CHK: DAM
 DATE: 6/99

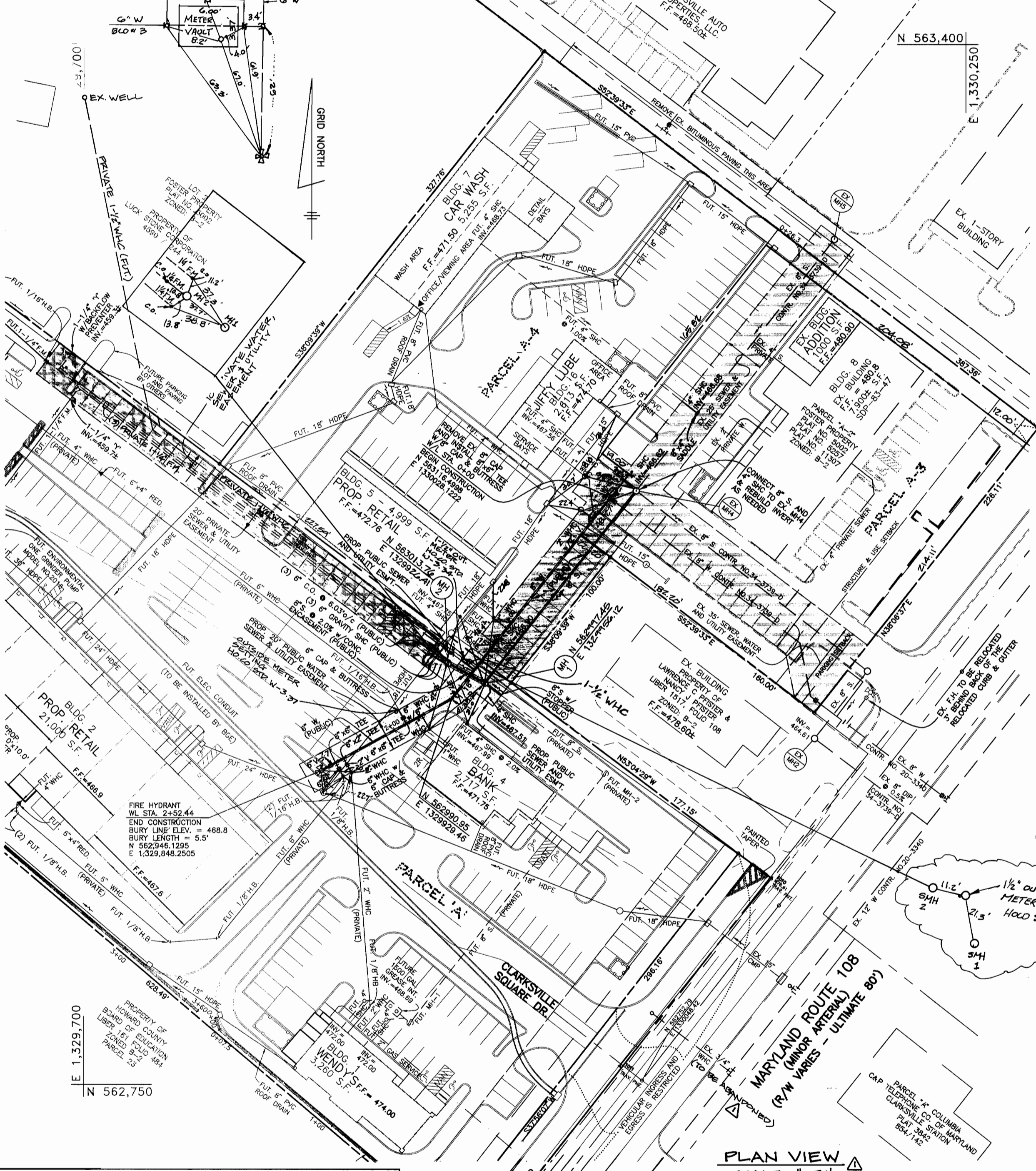
WATER & SEWER PLAN AND PROFILE
 600 SCALE MAP NO. 34 BLOCK 6

CLARKSVILLE SQUARE PARCEL "A" AND FOSTER PROPERTY PARCELS A-3 & A-4
 ELECTION DISTRICT NO. 5
 CONTRACT NO. 34-3771-D

SCA-1 AS S-CWN S-117 1 OF 1

QUANTITIES				
ITEM	QUANTITIES		AS-BUILT	
	ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" x 8" TEE	2 EA	0	0	UNION BRONZE / U.S. FICTER
6" x 8" TEE	2 EA	2 EA	M.J. HYDRO	UNION BRONZE / U.S. FICTER
6" x 2" TEE	1 EA	1 EA	M.J. HYDRO	UNION BRONZE / U.S. FICTER
6" VALVES	4 EA	4 EA	KEY WEDGE GATE	MUELLER / U.S. FICTER
2" VALVES	4 EA	4 EA	M.J. HYDRO	MUELLER / U.S. FICTER
6" WATER	250 L.F.	250 L.F.	CL. 15" STD.	MUELLER / U.S. FICTER
FIRE HYDRANTS	1 EA	1 EA	A483 CENTURION	MUELLER / U.S. FICTER
1" W.C.	35 L.F.	35 L.F.	TYPE K	READING TUBE / U.S. FICTER
2" W.C.	10 L.F.	10 L.F.	TYPE K	READING TUBE / U.S. FICTER
3" W.C.	20 L.F.	20 L.F.	TYPE K	READING TUBE / U.S. FICTER
4" W.C.	20 L.F.	20 L.F.	TYPE K	READING TUBE / U.S. FICTER
1 1/2" W.C. HOPE	1 EA	1 EA	TYPE K	READING TUBE / U.S. FICTER
8" SDR 35	191 L.F.	191 L.F.	SDR 35	U.M.M.R. / U.S. FICTER
6" SDR 35	2 EA	2 EA	PRECAST	ATLANTIC CONCRETE
4" SDR 35	30 L.F.	30 L.F.	SDR 35	U.M.M.R. / U.S. FICTER
2" SDR 35	3 EA	3 EA	SDR 35	U.M.M.R. / U.S. FICTER
4" SDR 35	84 L.F.	84 L.F.	SDR 35	U.M.M.R. / U.S. FICTER
6" SDR 35	1 EA	1 EA	SDR 35	U.M.M.R. / U.S. FICTER
2" SDR 35	1 EA	1 EA	SDR 35	U.M.M.R. / U.S. FICTER

NAME OF UTILITY CONTRACTOR:
SURVEY AND DRAFTING AS-BUILT DATE:



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

John R. Robertson 7/9/99
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER SITE DEVELOPMENT PLAN SDP-99-69

HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Deepl Simmons 7/9/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

OWNER/DEVELOPER:
CLARKVILLE SQUARE, L.C.
P.O. BOX 417
ELLCOTT CITY, MARYLAND 21041
410-465-4244

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

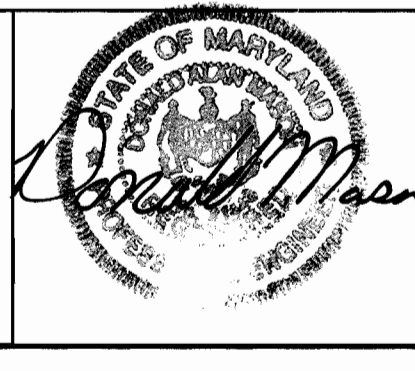
R. M. Beaman 6-29-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

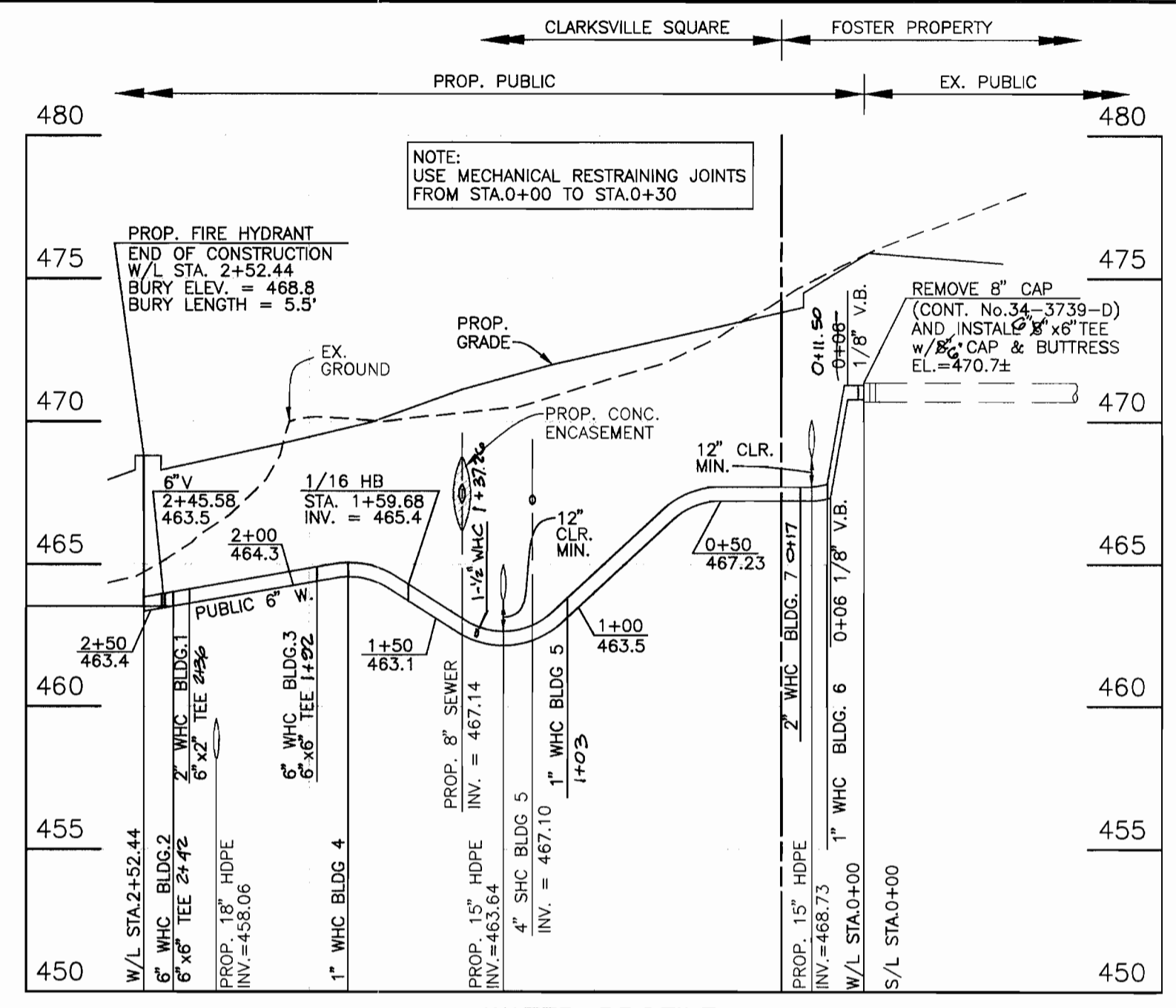
Deepl Simmons 7/9/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

BENCHMARK
ENGINEERS - LAND SURVEYORS - PLANNERS

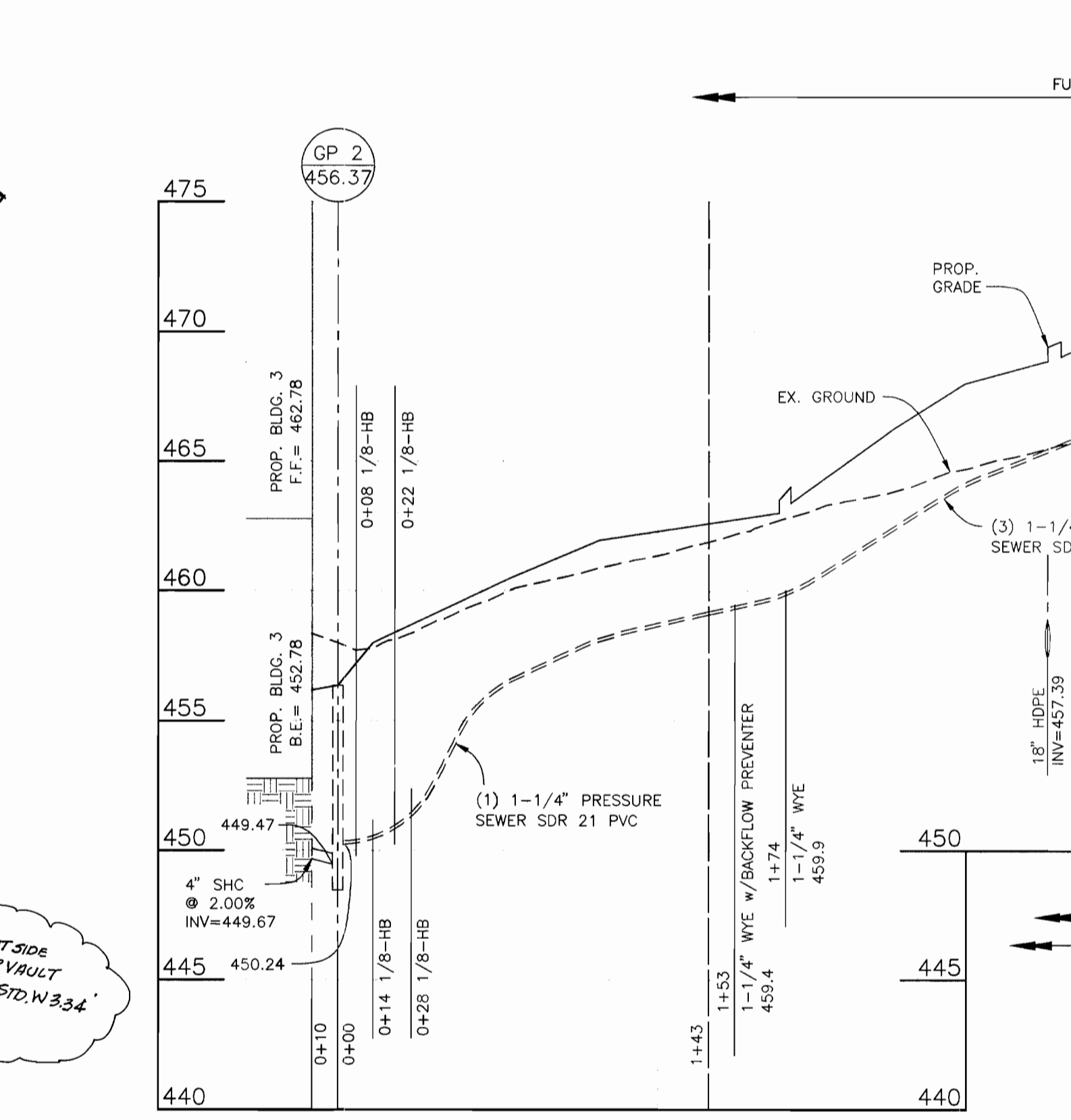
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6844



DES:	JMC/MLV			
DRN:	JMC/MCR			
CHK:	DAM			
DATE:	6/99			
BY:	NO.	REVISIONS	DATE	
	K.C.I.	3	AS BUILT CONDITIONS ADDED TO PLAN	03/10/00
	MCR	2	ADDED 1-1/2" W.C. & METER FOR WORK STONE	11-3-99
	MCR	1	LABEL EX. W.C.'S "TO BE ABANDONED" (2)	7-28-79



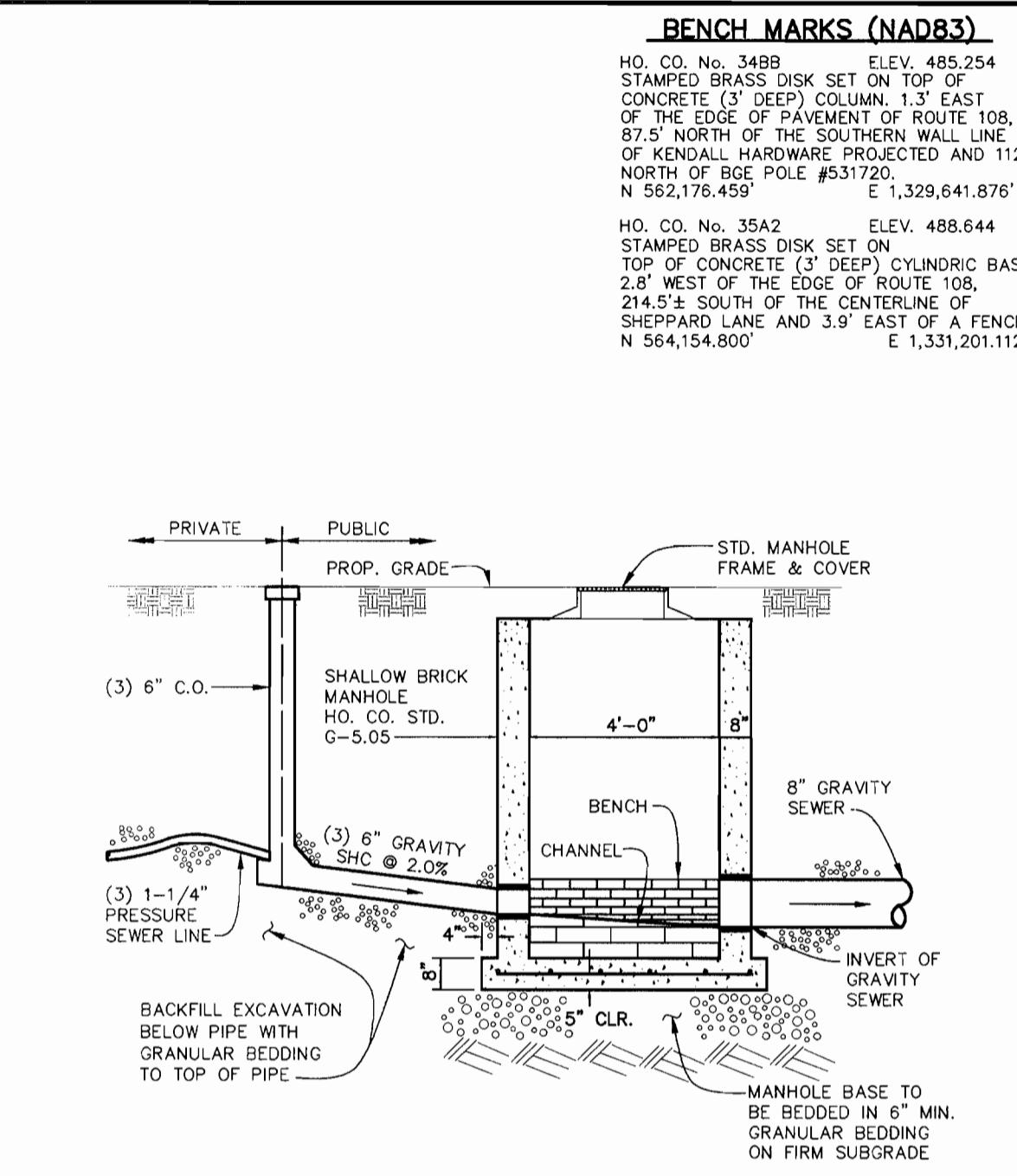
WATER PROFILE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



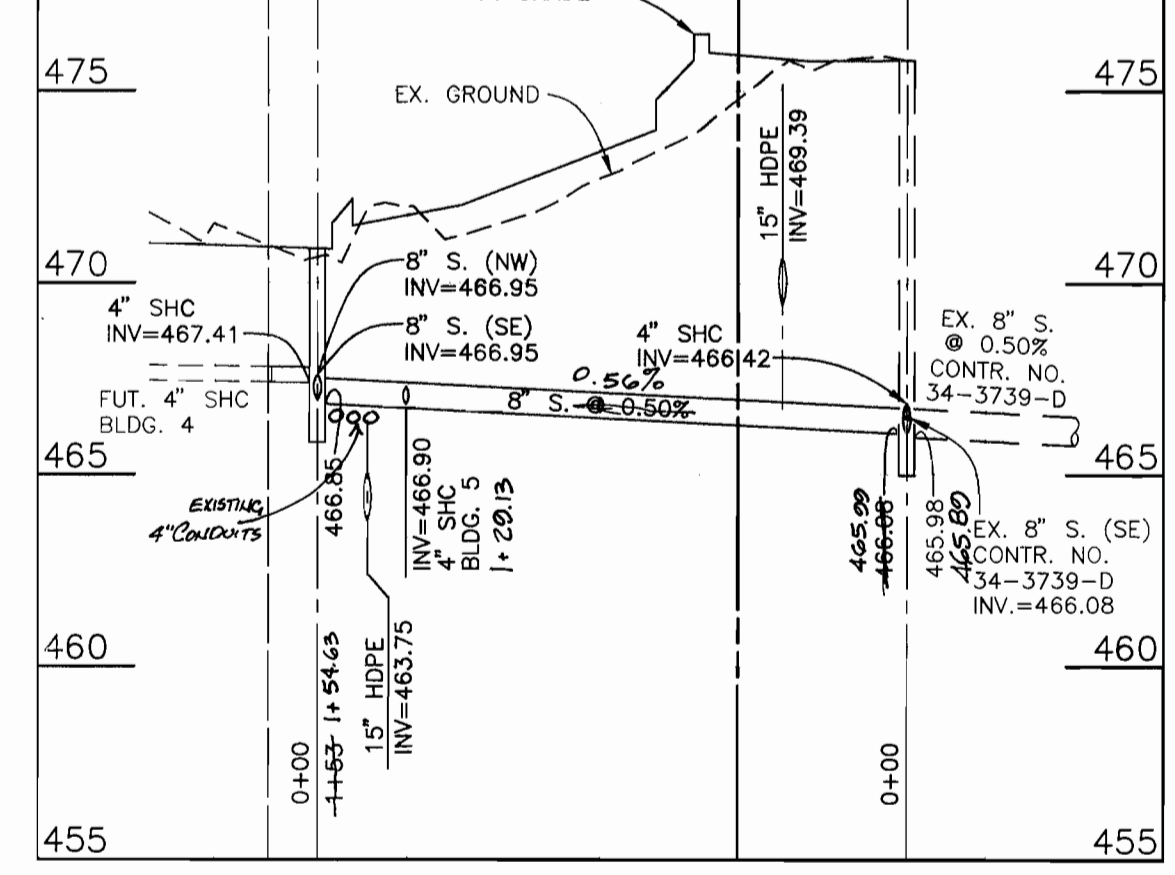
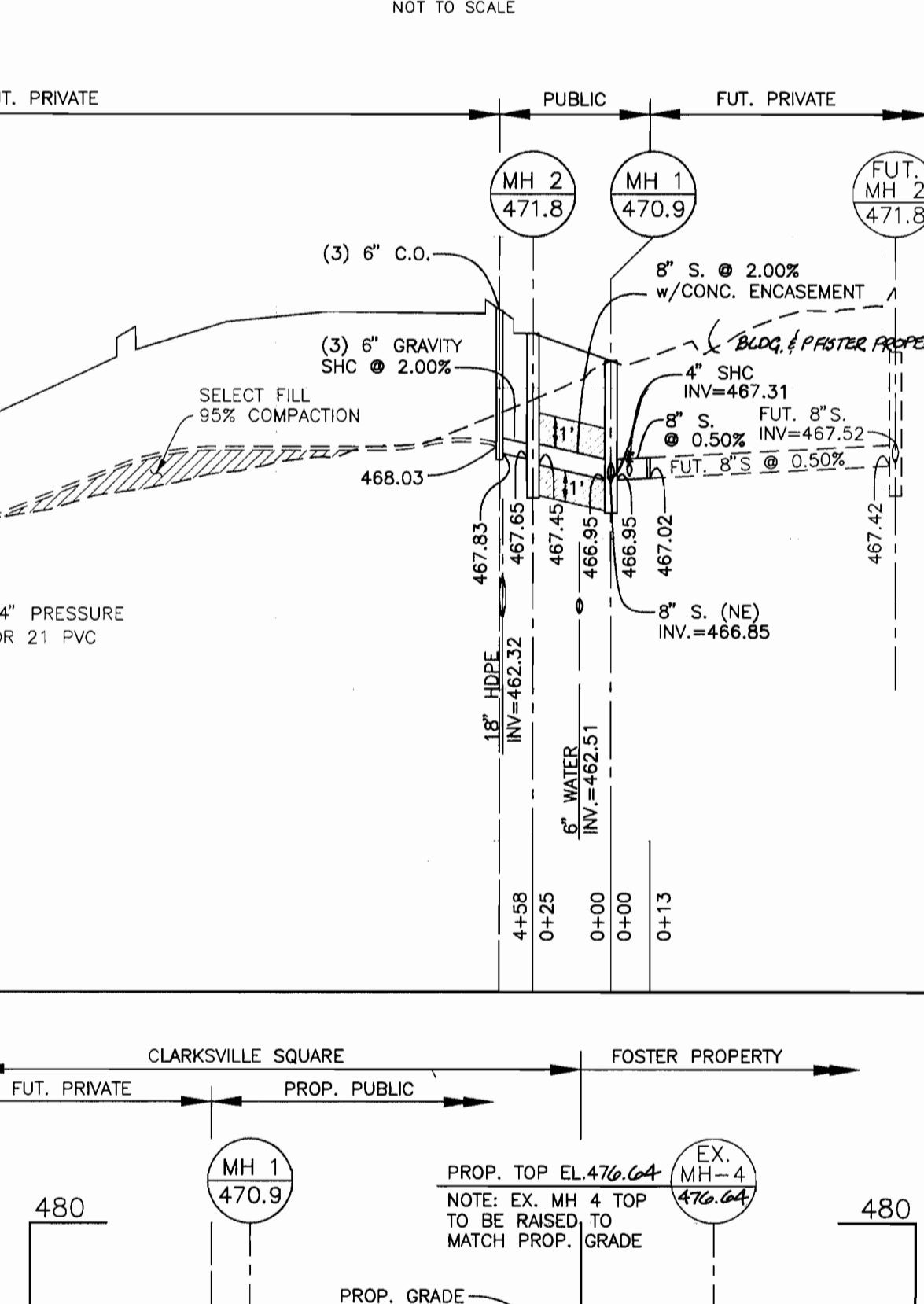
SEWER PROFILES
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

LEGEND

EXIST. WATER MAIN	=====
EXIST. SEWER MAIN	-----
EXIST. SEWER MANHOLE	○
PROP. WATER MAIN	=====
PROP. SEWER MAIN	-----
PROP. STORM DRAIN (BY OTHERS)	-----
PROP. SEWER MANHOLE	○
PROP. TERMINAL MANHOLE	○
PROP. SEWER HOUSE CONNECTION	Y
PROP. WATER HOUSE CONNECTION (DOUBLE - 1 1/2")	Y
PROP. WATER HOUSE CONNECTION (SINGLE - 1")	Y
PROP. FIRE HYDRANT	○
PROP. VALVE	○
PROP. PLUG & BUTTRESS	○

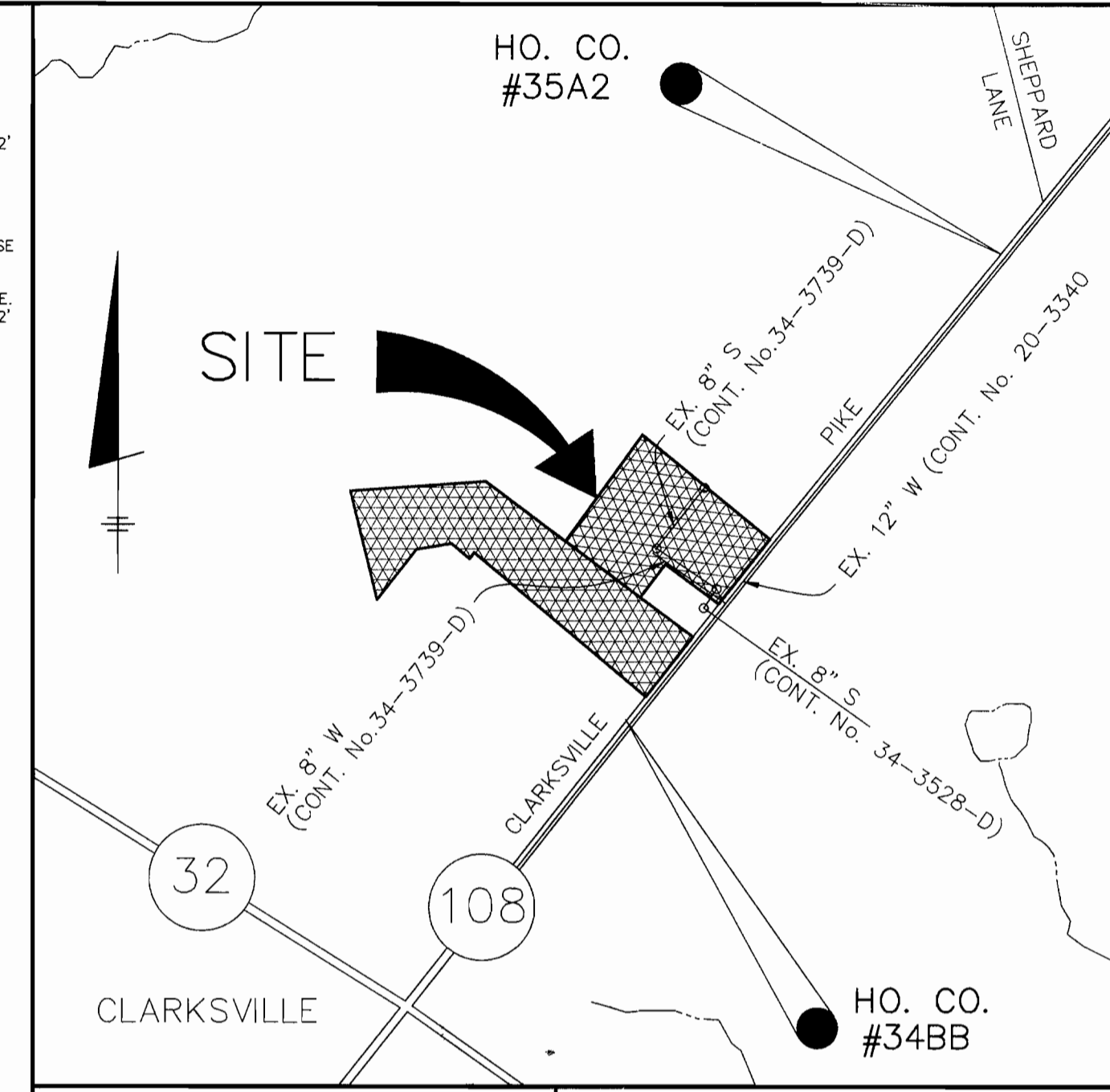


TRANSITION FROM PRESSURE SEWER TO GRAVITY SEWER
NOT TO SCALE



WATER & SEWER PLAN AND PROFILE

600 SCALE MAP NO. 34 BLOCK 6



WATER AND SEWER COUNTY CODE

WATER CODE:	1-10
SEWER CODE:	6653500
TEST GRADIENT:	780

TYPE OF BUILDING: COMMERCIAL
NUMBER OF PARCELS: 2 (7 BUILDINGS)
NUMBER OF SHCs: 2
NUMBER OF W.C.'S: 7
DRAINAGE AREA: MIDDLE PATUXENT
TREATMENT PLANT: LITTLE PATUXENT

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 (NAD 83).
 - ALL VERTICAL CONTROLS ARE BASED ON U.S.S. DATA.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 12"-20" MINIMUM OR TUNNEL AS PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE TREES AND SHRUBS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR 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 MAINTENANCE OPERATIONS.
 - ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
 - TOP OF ALL WATER MAINS TO BE A MINIMUM OF 3'-6" TO 4' COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - 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 WATER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- PART 2 - 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' TO 4' 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 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 WATER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- PART 3 - SEWER**
- ALL SEWER MAINS SHALL BE O.D.P. AND P.V.C. UNLESS OTHERWISE NOTED.
 - ALL MANHOLES SHALL BE 18" - 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER TIGHT FRAME AND COVERS. STANDARD DETAIL 05.52 WHERE WATER TIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1" - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE IS WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

CLARKVILLE SQUARE PARCEL "A" AND FOSTER PROPERTY PARCELS A-3 & A-4
ELECTION DISTRICT NO. 5

CONTRACT NO. 34-3771-D

SCALE: AS SHOWN
SHEET: 1 OF 1