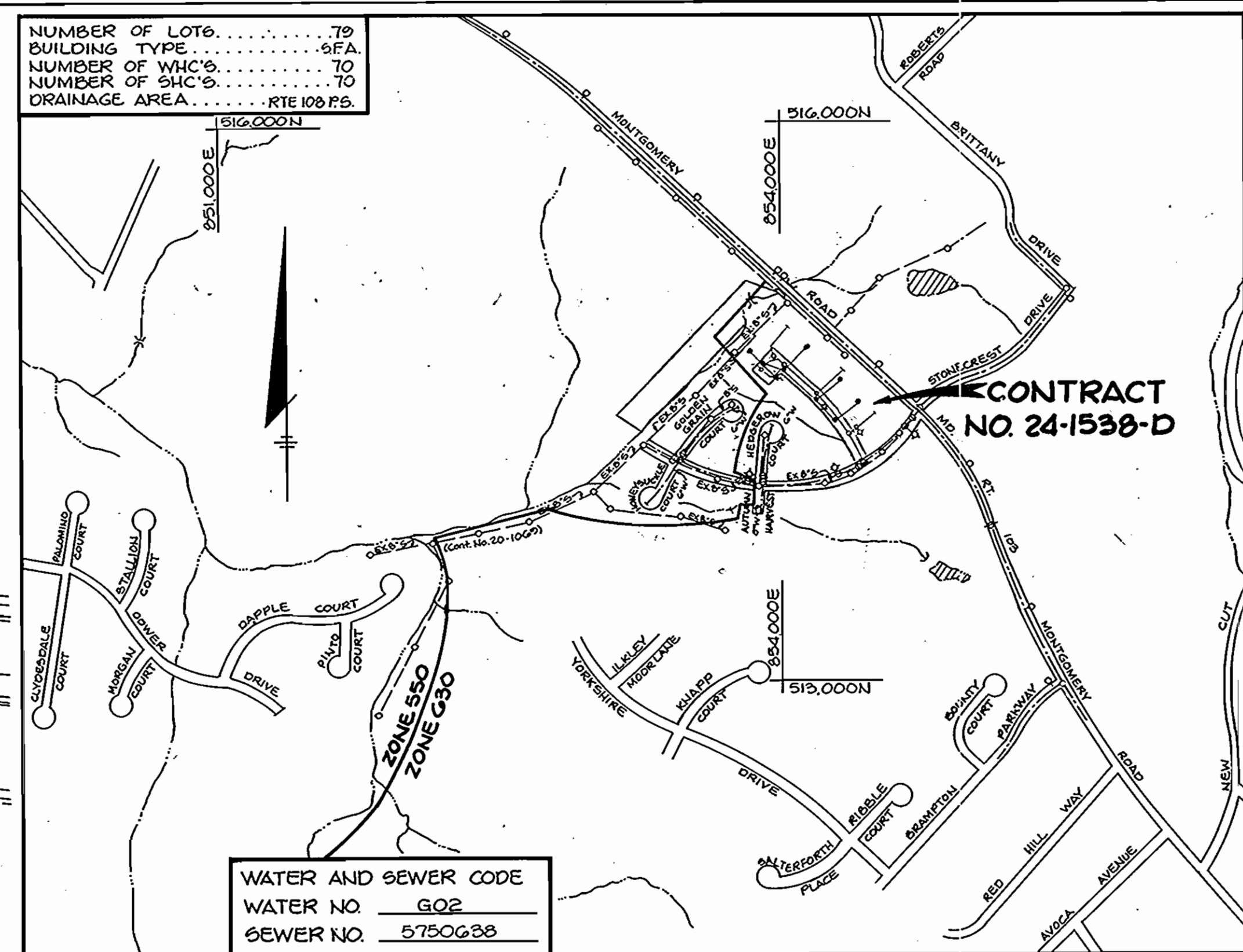


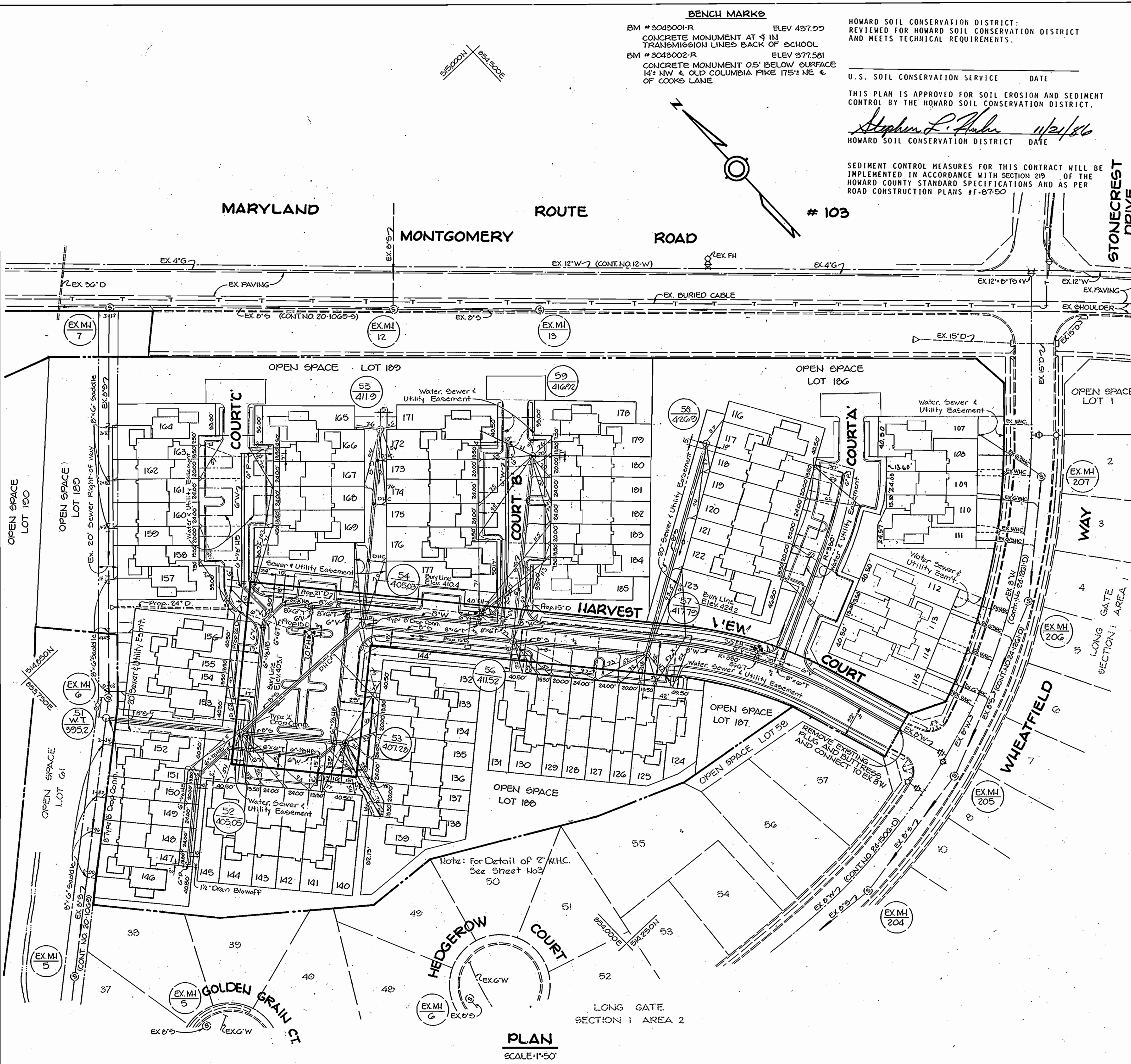
BENCH MARKS
 BM #3042001-R ELEV 437.99
 CONCRETE MONUMENT AT 4 IN
 TRANSMISSION LINES BACK OF SCHOOL
 BM #3043002-R ELEV 377.581
 CONCRETE MONUMENT 0.5' BELOW SURFACE
 14 1/2' NW & OLD COLUMBIA PIKE 175' NE &
 OF COOKS LANE

HOWARD SOIL CONSERVATION DISTRICT:
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT
 AND MEETS TECHNICAL REQUIREMENTS.
 U.S. SOIL CONSERVATION SERVICE DATE _____
 THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT
 CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Stephen L. Fisher 11/21/86
 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
 ROAD CONSTRUCTION PLANS #1-87-50



- 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.C. 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 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 DETAILS 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 [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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN 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 & ELECTRIC CO. CONTRACTOR SERVICES - 850-4620
 BALTIMORE GAS & ELECTRIC CO. UNDER GROUND DAMAGE CONTROL - 859-9004
 BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING - 298-9001
 MISS UTILITY - 1-859-0100
 COLONIAL PIPELINE CO. - 795-1390
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 992-2366
 C.P. TELEPHONE - 1-800-251-7777
 - TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES 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 AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EXCAVATION AND BACKFILL.
 - PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
 - ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
 - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3/4" COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - BLOCK ALL FITTINGS WITH CONCRETE.
 - BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE 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 TO BE COMPACTED IN ACCORDANCE WITH SECTIONS 1003 AND 1008 OF THE GENERAL REQUIREMENTS FOR WATER AND SEWER.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
 - FOR ALL COPPER WATER HOUSE CONNECTIONS UTILIZE FLARED TYPE FITTINGS ONLY.
 - THE SERVICE CLAMPS ARE TO HAVE STAINLESS STEEL STRAPS.
 - ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X., P.V.C. OR A.C.P. CLASS 2400 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 BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65.52 VOLUME I; WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE.
 - HOUSE(S) WITH THE SYMBOL "C.H.S." INDICATES THE CELLAR CANNOT BE SERVED.
 - ALL WATER HOUSE CONNECTIONS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 12" ABOVE ALL SANITARY SEWER CROSSINGS.
 - ALL SANITARY SEWER HOUSE CONNECTIONS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 12" BELOW ALL WATER MAIN CROSSINGS.
 - PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
 - NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.



PLAN
 SCALE: 1" = 50'

ITEM	PROPOSED	AS-BUILT	SUPPLIER
12" Drain Blowoff	1EA	1EA	A+P
8" Water	325 LF	625 D.I.P.	A+P
6" Water	1561 LF	1060 D.I.P.	A+P
8" Sewer	1281 LF	1097 P.V.C.	A+P
6" (exc. ELV's)	6EA	3EA	A+P
Fire Hydrants	0EA	796	A+P
1/2" W.H.C.	481 LF	12.11	A+P
1" W.H.C.	880 LF	1050 P.V.C.	A+P
6" S.H.C.	745 LF	8 H.H. Manholes	Hydrex Brass Inc.
Manholes	22 V.F.	48 LF	A+P

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *John F. Nemy* 11-16-86
 Chief, Bureau of Engineering: *Robert M. Beaman* 11-25-86
 Chief, Bureau of Utilities: *Robert M. Beaman* 11-25-86

TRACY, SCHULTE & ASSOCIATES INC.
 planning architecture engineering
 8450 Baltimore National Pike Suite 34
 Ellicott City, Maryland 21043

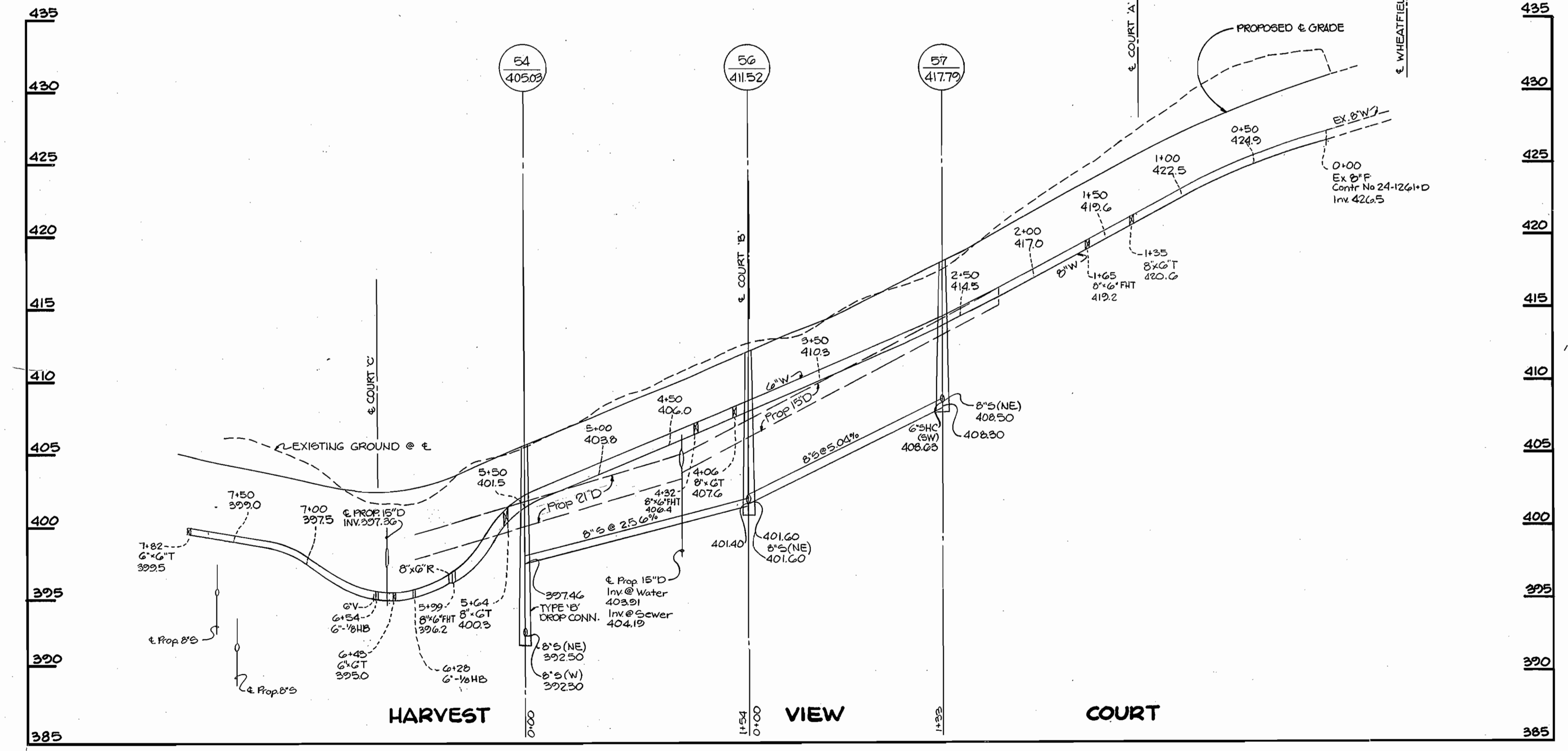
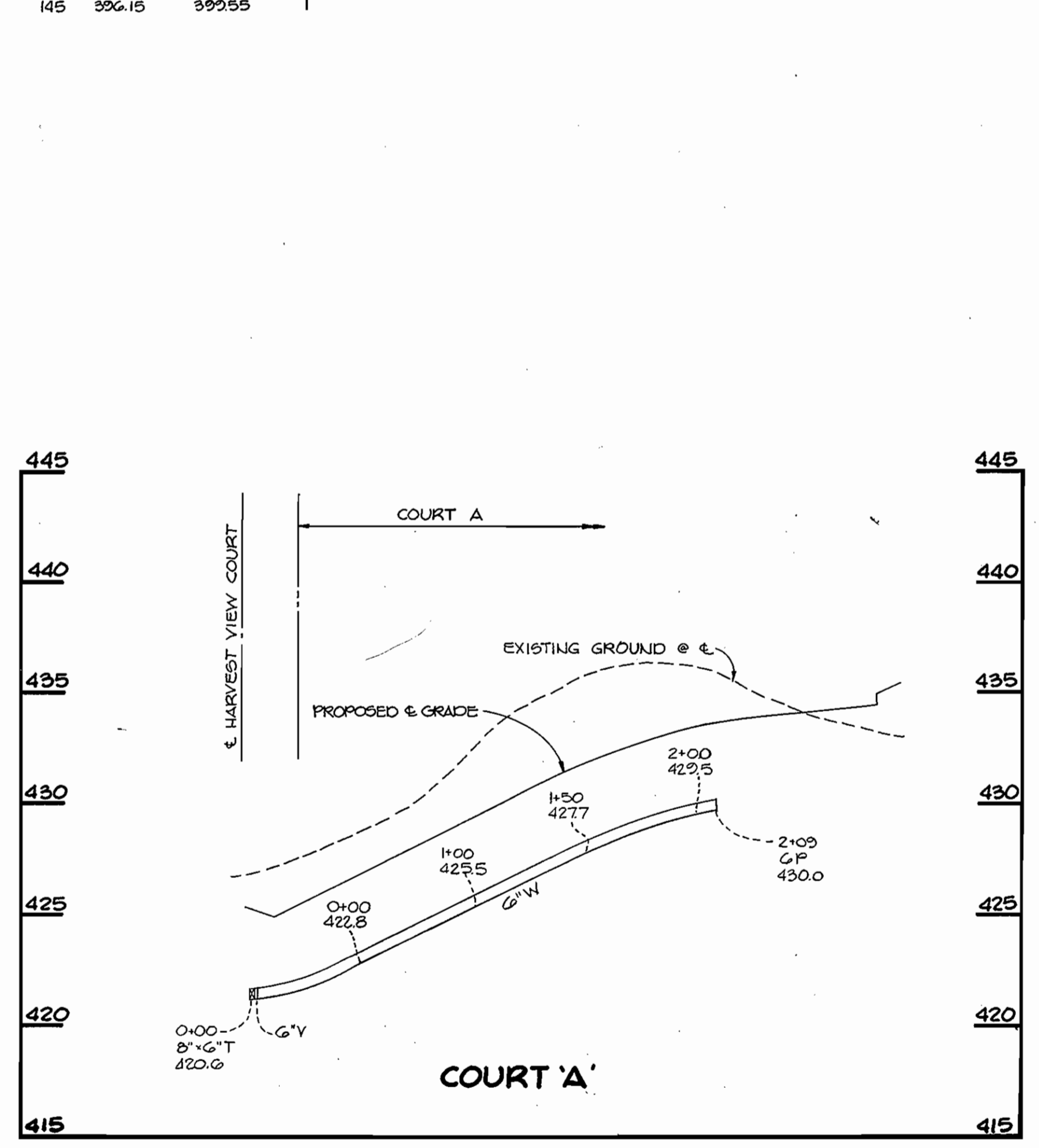
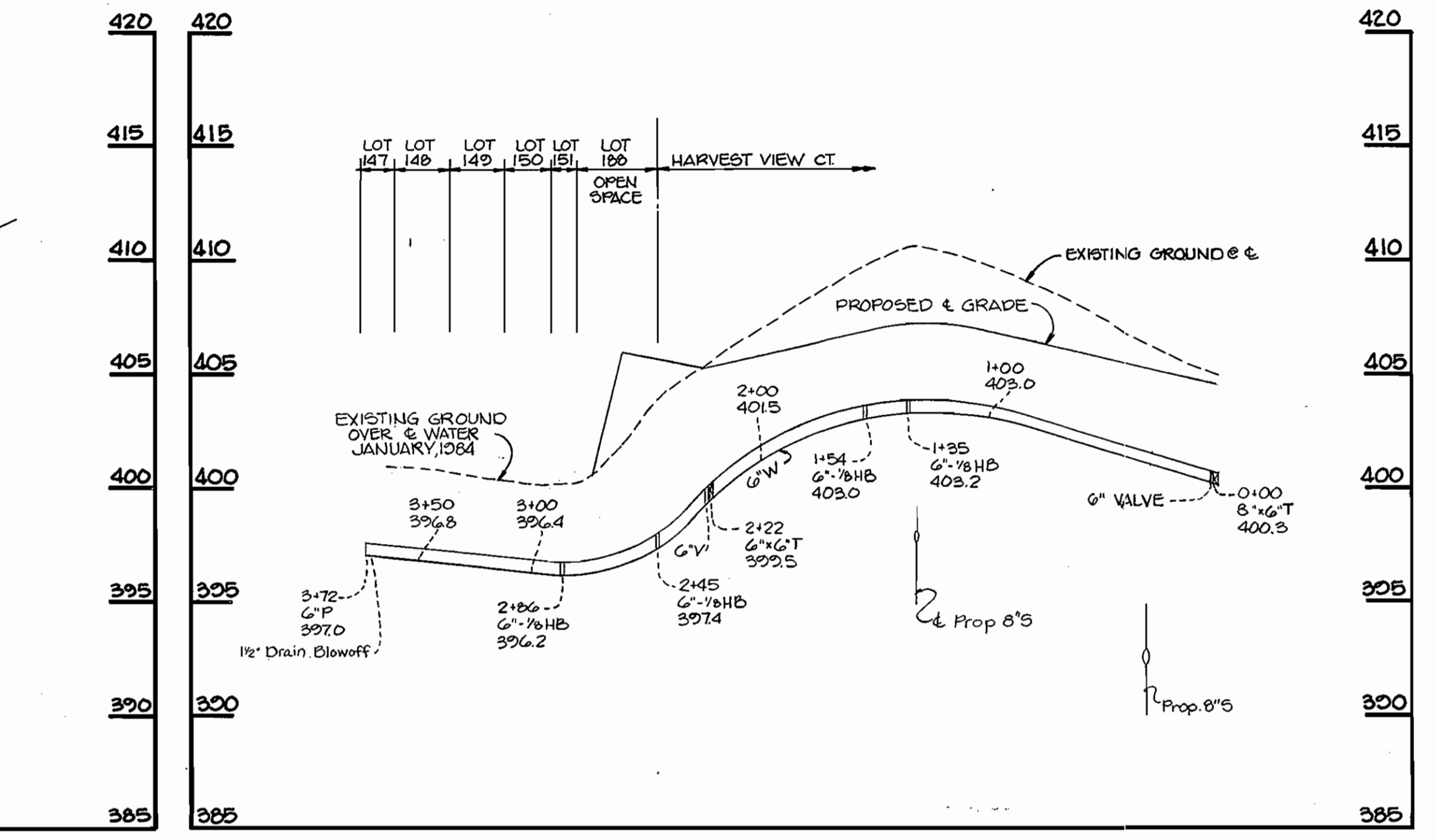
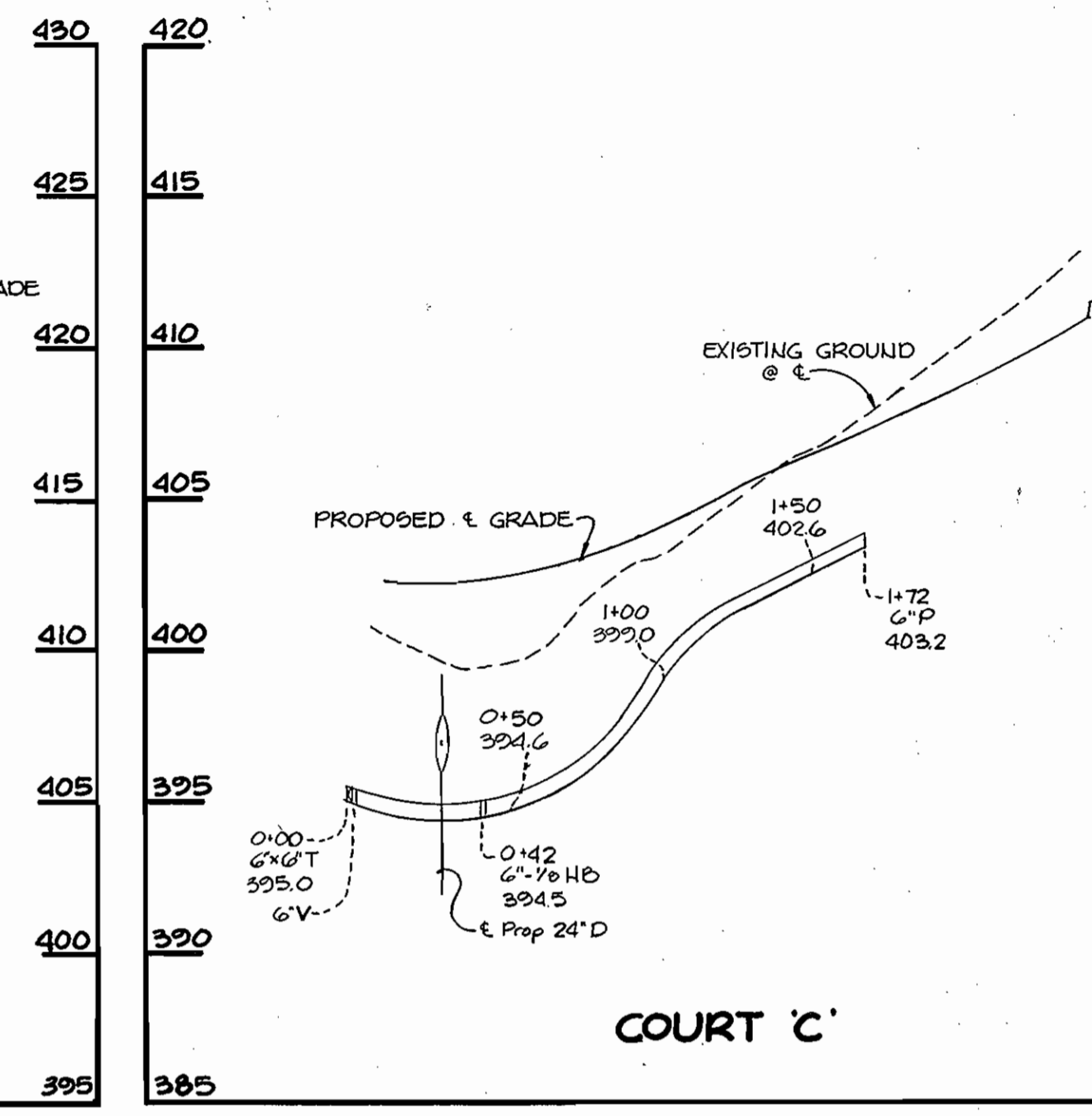
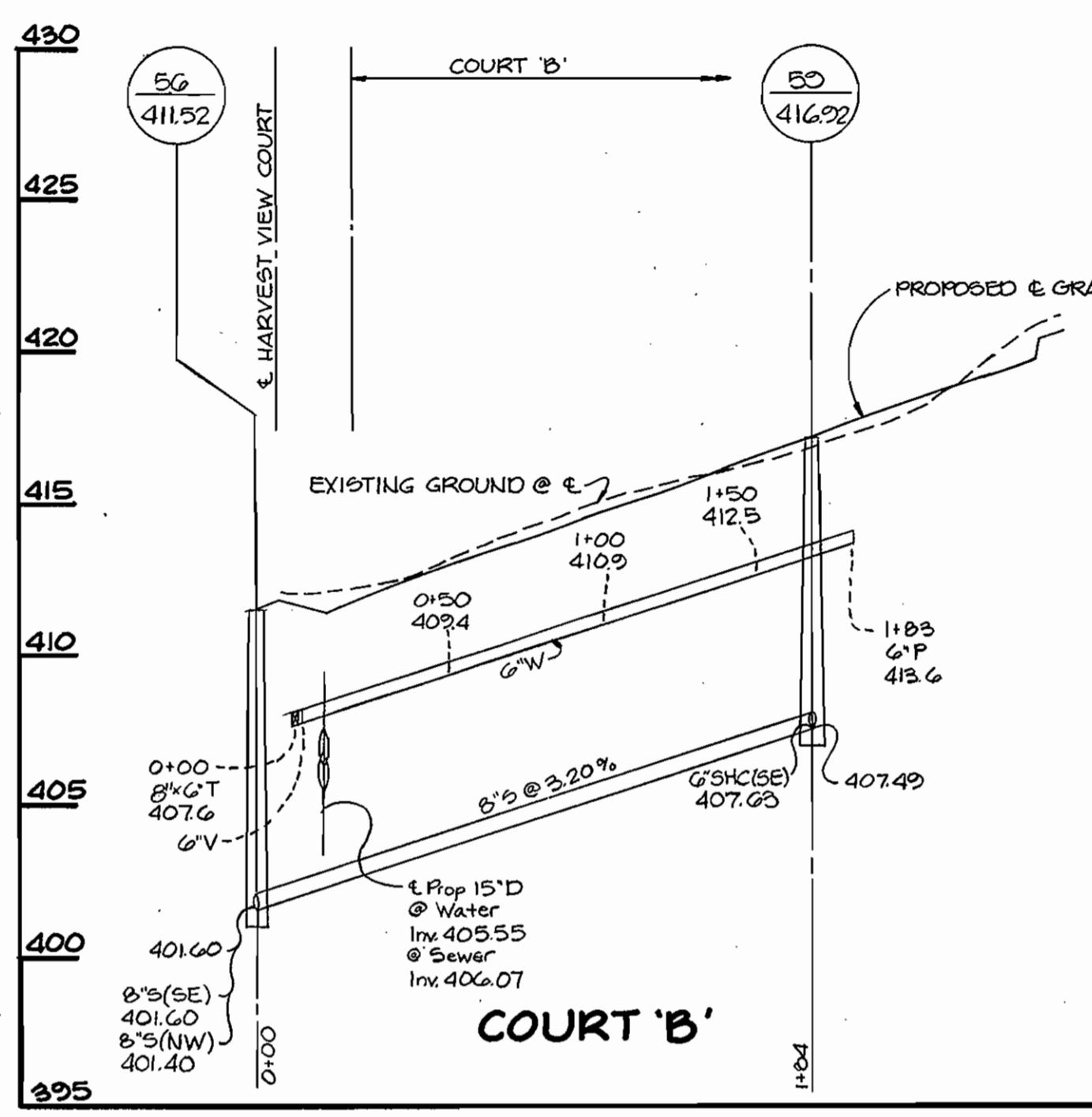


DES: DAM			
DRN: CDT			
CHK: JKT			
DATE: 8-1-86	BY: SLS	NO: 1	REVISION: DHC ADDED

LONG GATE SECTION 1, AREA 4
 LOTS 107 THRU 190
 ELECTION DISTRICT NO. 2
 CONTRACT NO. 24-1538-D
 SCALE AS SHOWN
 SHEET 1 OF 3

SEWER HOUSE CONNECTIONS
INVERT ELEVATION AT PROPERTY LINE

STATION	LOT	INV @ R	MIN CELLAR	STATION	LOT	INV @ R	MIN CELLAR
EX MH	EX MH			EX MH 55	EX MH 56		
107	430.98	434.78		146	378.98	382.38	
EX MH	EX MH			147	378.98	382.38	
108	430.98	434.78		148	379.90	382.82	
EX MH	EX MH			149	380.62	383.82	
109	429.98	432.28		150	380.62	383.82	
EX MH	EX MH			2+34R	151	381.66	385.06
110	429.98	432.28		152	381.66	385.06	
EX MH	EX MH 56			EX MH 56	EX MH 57		
111	429.18	432.88		0+08R	153	382.71	386.31
EX MH	EX MH			154	382.71	386.31	
112	427.22	430.32		0+66R	155	384.53	388.13
EX MH	EX MH			156	384.53	388.13	
113	427.22	430.42		1+18R	157	386.23	389.63
EX MH	EX MH			158	386.23	389.63	
114	426.08	429.58		1+71R	159	387.92	391.52
EX MH	EX MH			160	387.92	391.52	
115	426.08	429.28		2+19R	161	389.45	392.43
MH 56	MH 57			162	389.45	392.43	
EX MH 56	EX MH 56			2+72R	163	391.09	394.49
116	419.56	423.36		164	391.09	394.49	
EX MH 56	EX MH 56			MH 56	MH 54		
117	419.56	423.36		EX MH 5	EX MH 5		
EX MH	EX MH			165	397.34	401.34	
118	417.82	421.32		166	397.34	401.34	
EX MH	EX MH			1+38L	167	394.86	398.76
119	417.82	421.32		168	394.86	398.76	
1+43R	EX MH			0+80L	169	392.42	396.22
120	415.51	419.01		170	392.42	396.22	
EX MH	EX MH			MH 55	MH 54		
121	415.51	419.01		EX MH 5	EX MH 5		
EX MH	EX MH			171	397.16	401.16	
122	416.56	420.36		1+67R	172	400.68	404.68
EX MH	EX MH			173	400.68	404.68	
123	416.56	420.36		1+23R	174	399.74	403.74
MH 56	MH 57			175	399.74	403.74	
EX MH 56	EX MH 56			0+66R	176	398.86	403.06
124	409.33	412.53		177	398.86	403.06	
EX MH 56	EX MH 56			MH 55	MH 54		
125	409.33	412.53		EX MH 5	EX MH 5		
2+60R	EX MH			178	408.16	411.26	
126	407.54	410.94		179	408.16	411.26	
EX MH	EX MH			1+63R	180	407.25	410.25
127	407.54	410.94		181	407.25	410.25	
EX MH	EX MH			1+19R	182	406.67	409.77
128	405.12	408.52		183	406.67	409.77	
EX MH	EX MH			0+84R	184	404.79	407.79
129	405.12	408.52		185	404.79	407.79	
1+78R	EX MH						
130	403.45	406.85					
EX MH	EX MH						
131	403.45	406.85					
MH 56	MH 54						
EX MH 56	EX MH 56						
132	395.76	399.56					
EX MH 56	EX MH 56						
133	395.76	399.56					
EX MH 56	EX MH 56						
134	396.81	402.21					
EX MH 56	EX MH 56						
135	396.81	402.21					
EX MH 56	EX MH 56						
136	399.09	402.49					
EX MH 56	EX MH 56						
137	399.09	402.49					
EX MH 56	EX MH 56						
138	399.49	402.69					
EX MH 56	EX MH 56						
139	399.49	402.69					
EX MH 56	EX MH 56						
140	398.45	401.85					
EX MH 56	EX MH 56						
141	398.45	401.85					
EX MH 56	EX MH 56						
142	397.28	400.68					
EX MH 56	EX MH 56						
143	397.28	400.68					
EX MH 56	EX MH 56						
144	396.15	399.55					
EX MH 56	EX MH 56						
145	396.15	399.55					



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Berman
DIRECTOR OF PUBLIC WORKS
DATE: 11-25-86

Robert M. Berman
CHIEF, BUREAU OF UTILITIES
DATE: 11-25-86

TRACY, SCHULTE & ASSOCIATES, INC.
planning architecture engineering

8450 Baltimore National Pike
Ellicott City, Maryland 21043

Tracy Schulte
REGISTERED PROFESSIONAL ENGINEER

DES: DAM			
DRN: CDT			
CHK: JKT	S.L.S. 2	D.H.C. 4000	8/18/87
DATE: 8-1-86	S.L.S. 1	CORRECT PIPE LOCATION + SIZES	1/23/87
BY NO.		REVISION	DATE

PROFILES OF WATER & SEWER MAINS

600' SCALE MAP NO. 30 & 31 BLOCK NO. G & I

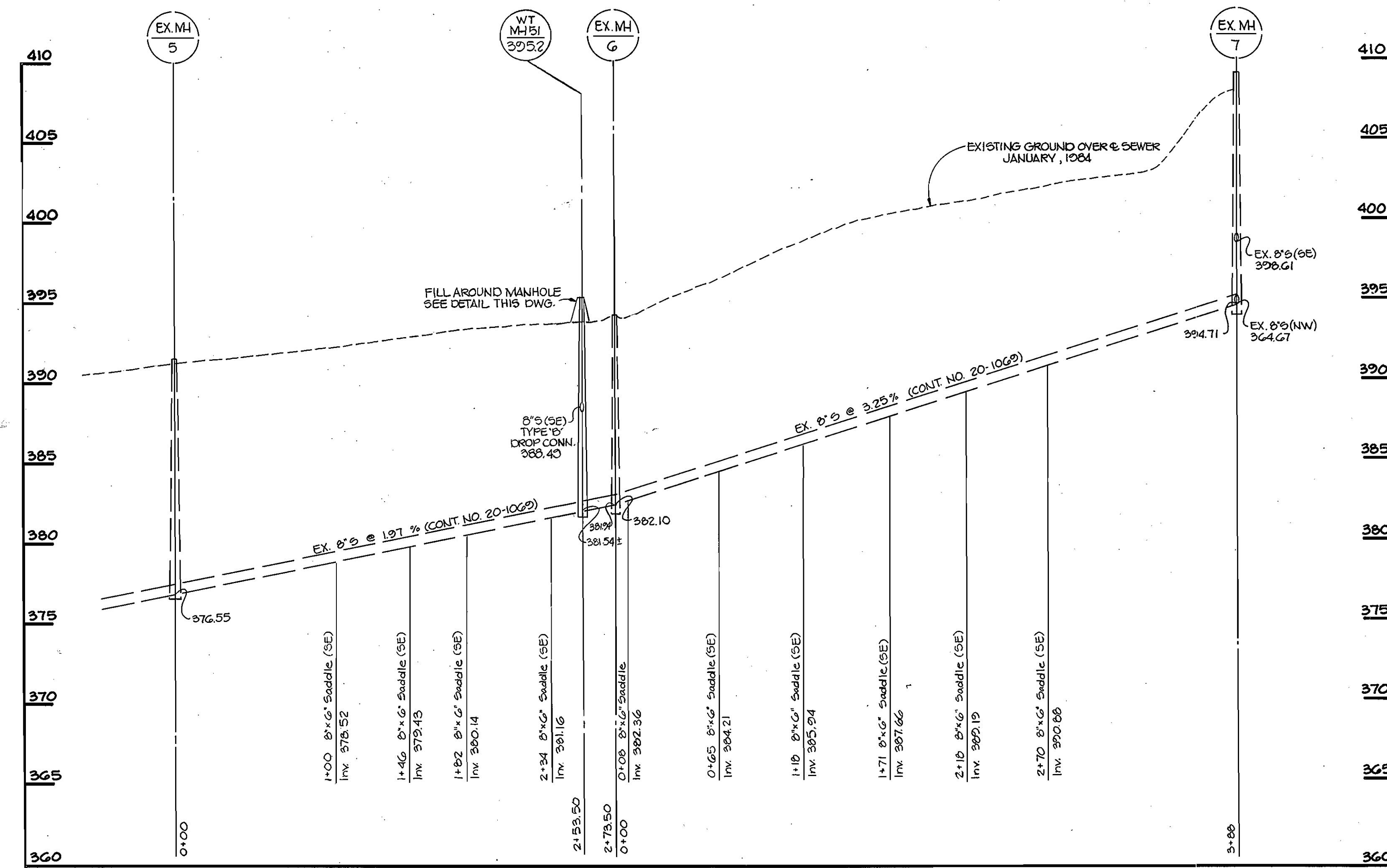
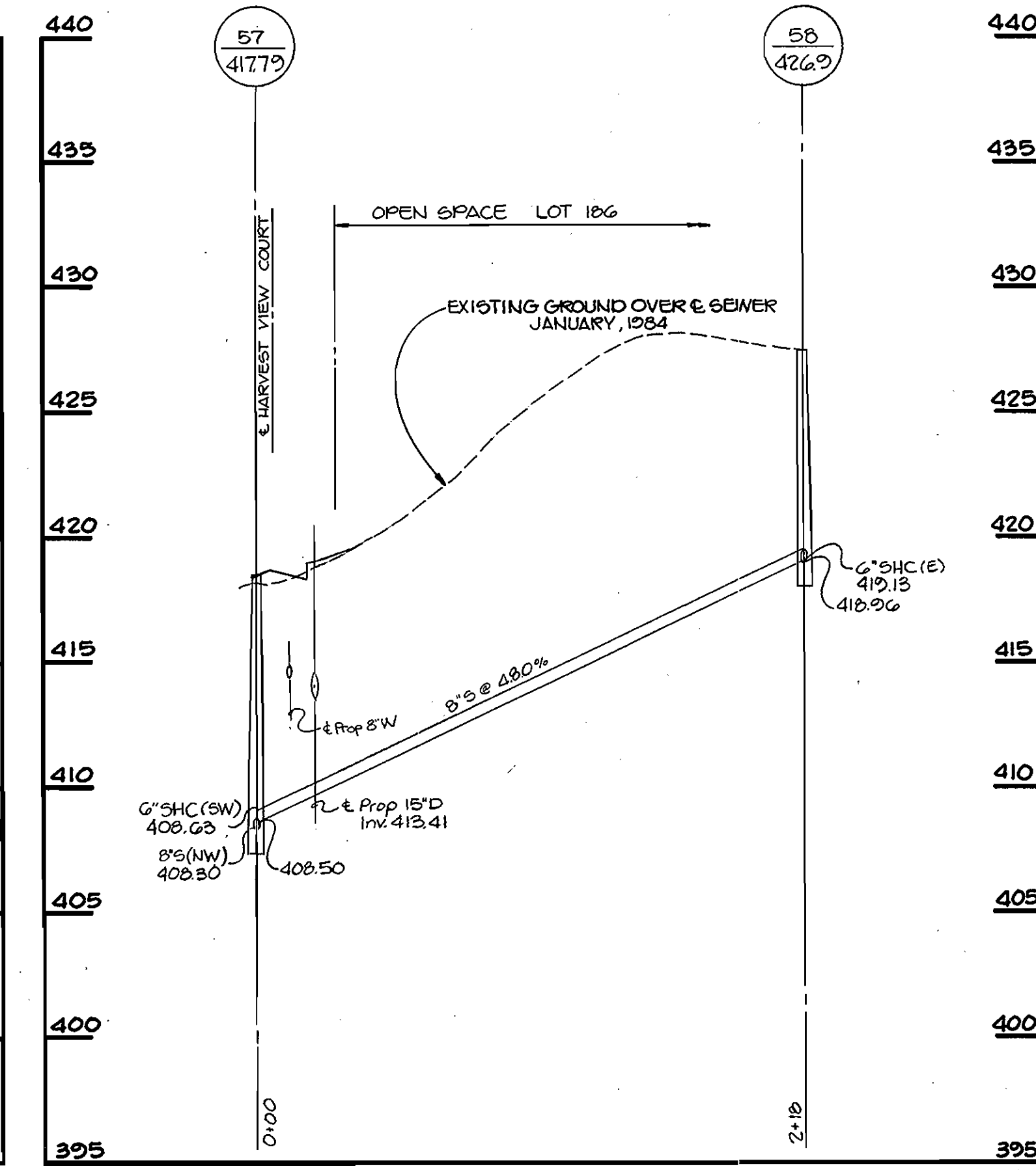
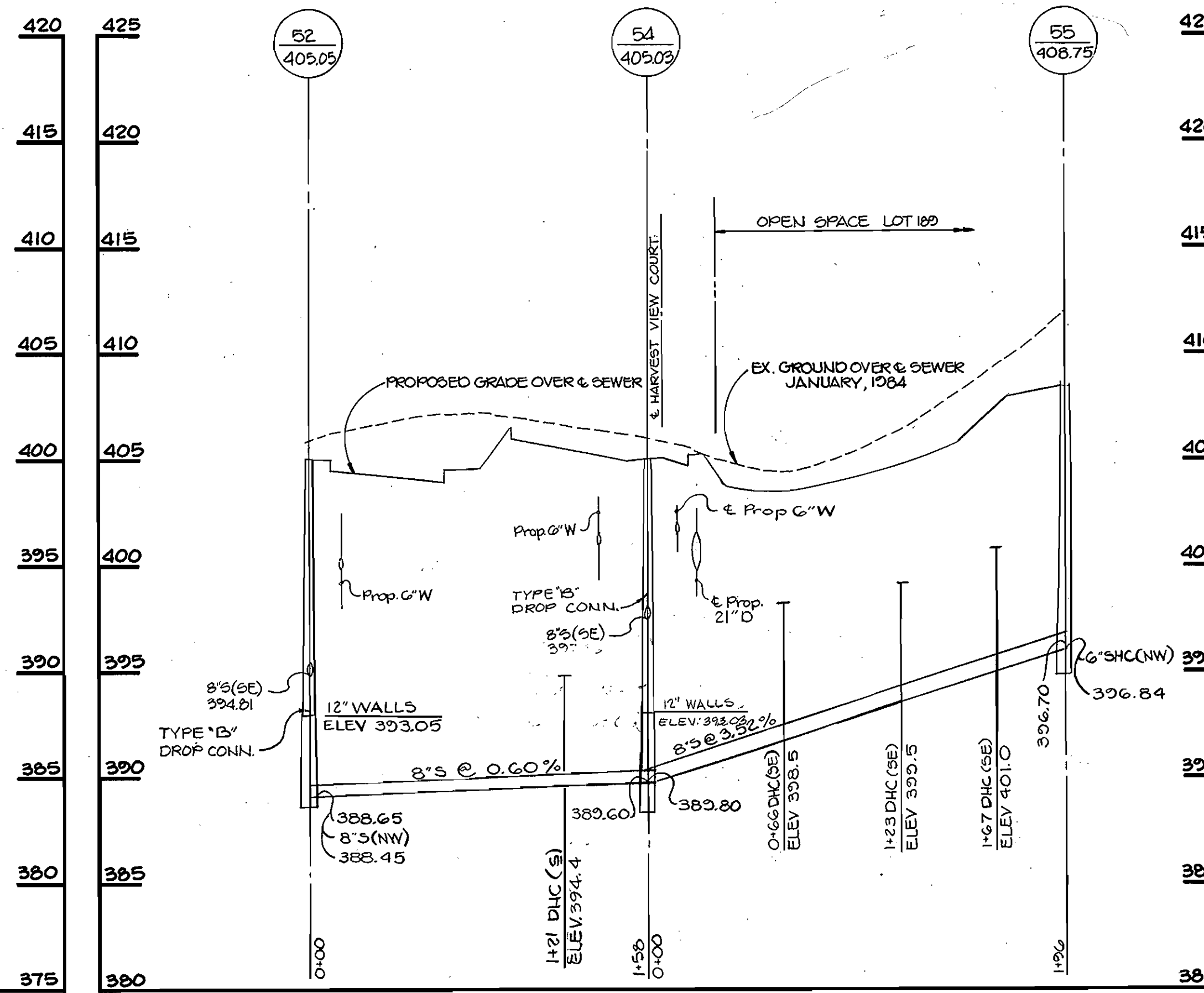
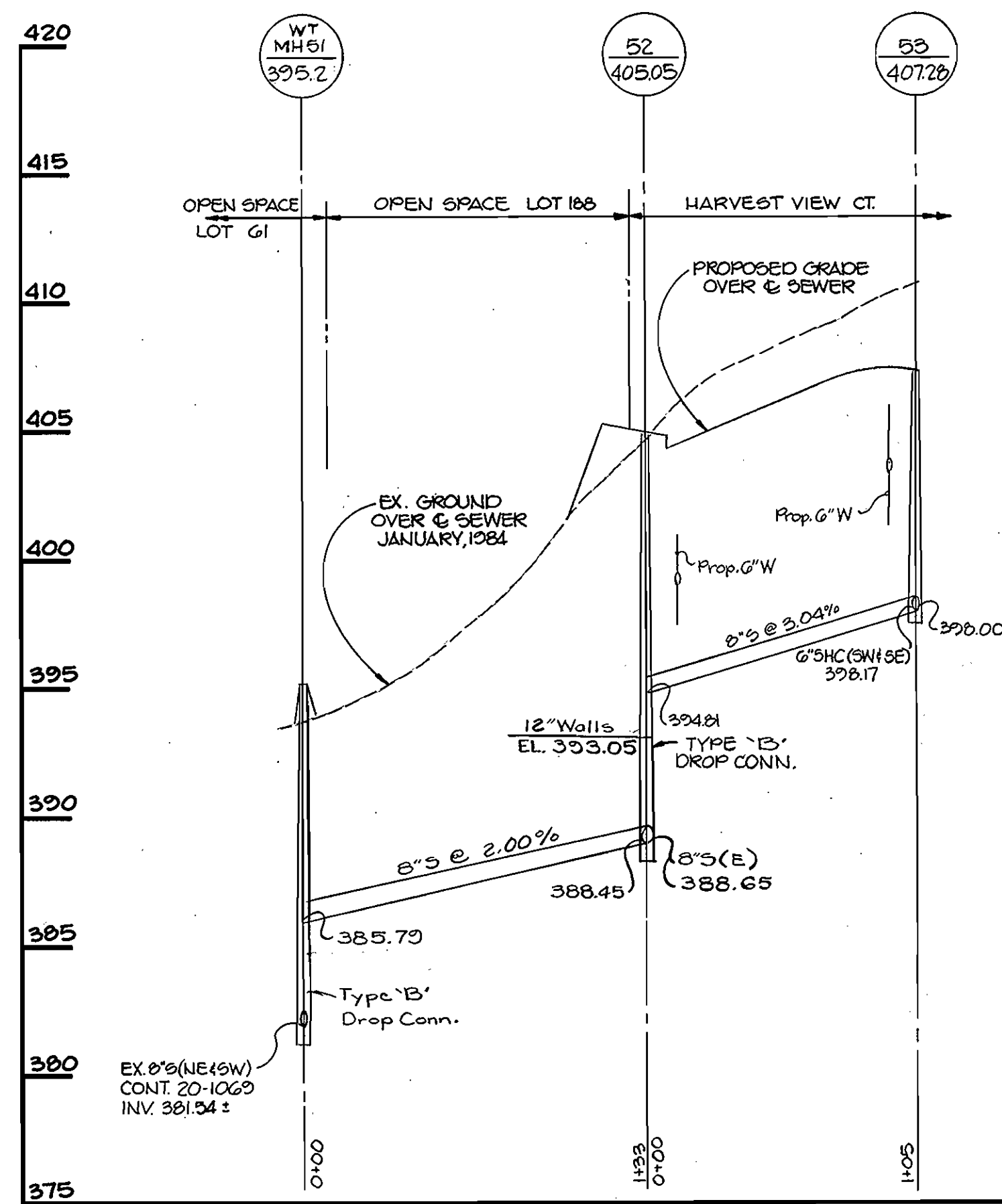
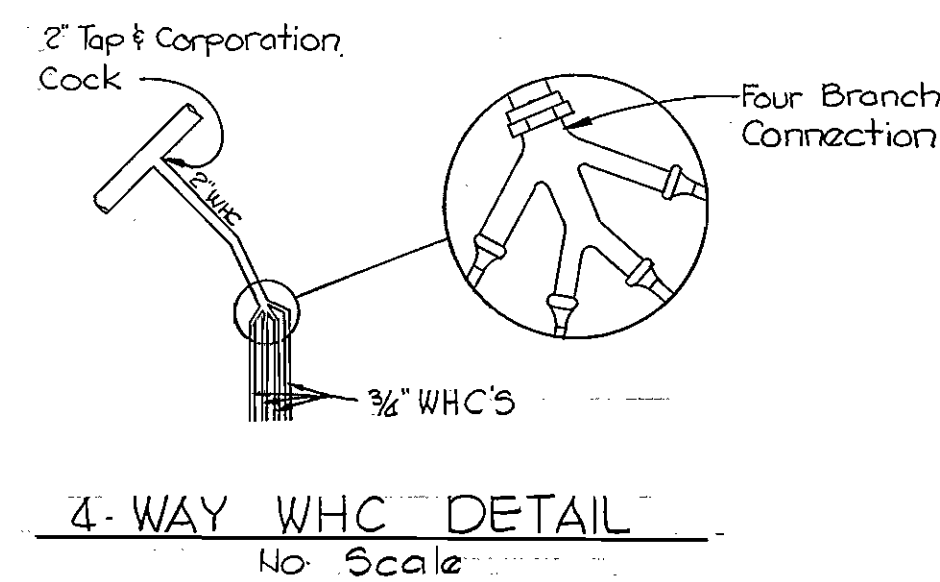
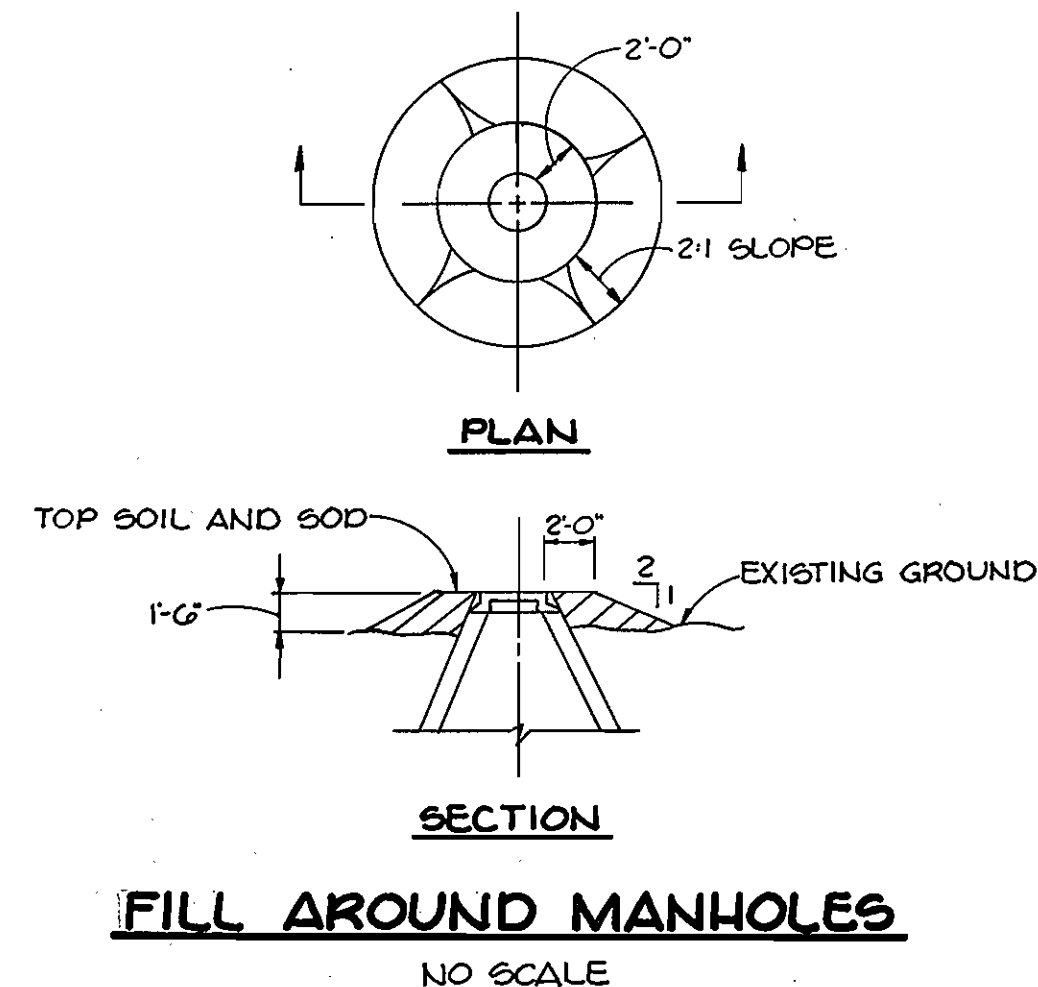
LONG GATE SECTION I, AREA 4
ELECTION DISTRICT NO. 2

CONTRACT NO. 24-1538-D

SCALE: H: 1"=50'
V: 1"=5'

SHEET 2 OF 3

AS-BUILT 7/31/87

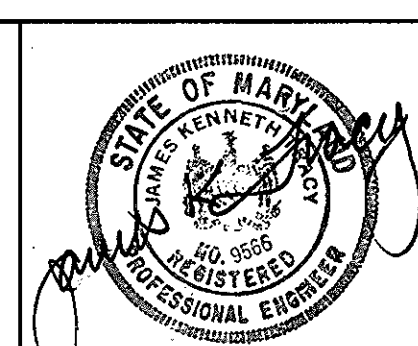


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Bennett
DIRECTOR OF PUBLIC WORKS
DATE: 11-25-86

Robert M. Bennett
CHIEF, BUREAU OF UTILITIES
DATE: 11-25-86

TRACY, SCHULTE & ASSOCIATES, INC.
planning architecture engineering
8450 Baltimore National Pike
Ellicott City, Maryland, 21043



DES: DAM			
DRN: CDT			
CHK: JKT			
DATE: 8-1-86			
BY: NO.		REVISION	DATE

PROFILES OF WATER & SEWER MAINS

600' SCALE MAP NO. 30.8.31 BLOCK NO. 4 & 1

LONG GATE SECTION 1, AREA 4
ELECTION DISTRICT NO. 2
CONTRACT NO. 24-1538-D

SCALE H:V=50'
V:1"=5'

SHEET 3 OF 3

AS-BUILT 7/31/87