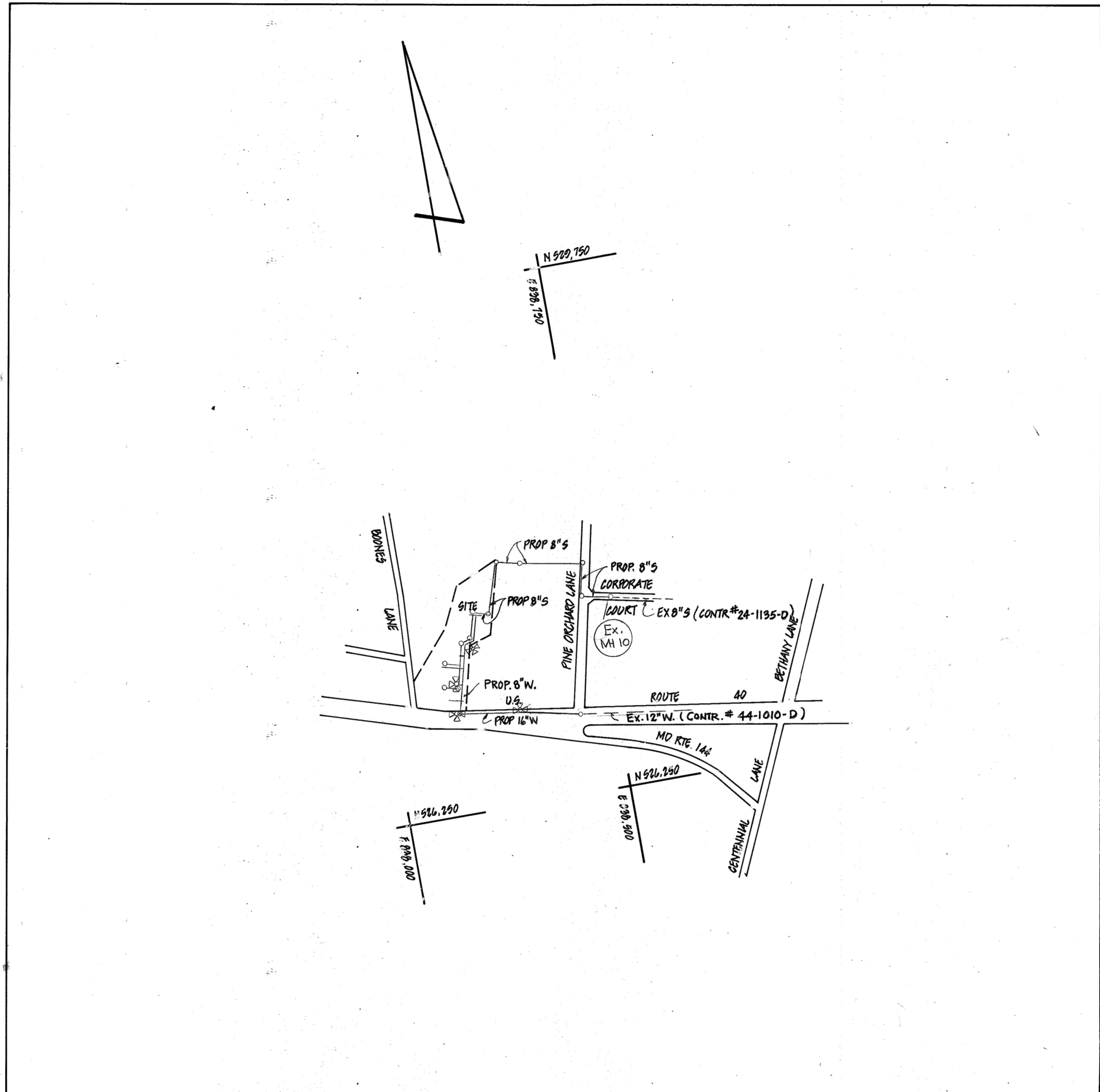


TYPE OF BUILDING	TOWNHOUSE OFFICE
NUMBER OF LOTS	1
NUMBER OF SHC'S	29
NUMBER OF WHC'S	29
DRAINAGE AREA	LITTLE PATUXENT



SEWER CODE: 5590200
 WATER CODE: 408
VICINITY MAP
 SCALE: 1"=100'

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 MIN. OF 6" CLEAR ALL POLES BY 2'-0" MIN. OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HO. CO. STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HO. CO. STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MIN. OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES OR UTILITIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTO. GAS & ELECTRIC CO. - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0123
 - BALTO. GAS & ELECTRIC CO. - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123
 - ENGINEERING - "DAMAGE CONTROL" - 234-5621
 - "MISS UTILITY" - 1-559-0100
 - CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - 725-9976
 - AMERICAN TELEPHONE & TELEGRAPH - CABLE LOCATION DIVISION - 393-3553
 - COLONIAL PIPELINE COMPANY - 795-1390
 - BUREAU OF UTILITIES HOWARD COUNTY - 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAX. 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 CONSTRUCTION OF THE MAIN.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED. ALL FITTINGS AND PLUGS SHALL BE CAST IRON.
- TOP OF ALL WATER MAINS TO HAVE A MIN. OF 3-1/2" 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 10.03 AND 10.08 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR PVC 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 G.5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE, STANDARD DETAIL G.5.41.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE NO. 15 OF THE SPECIFICATIONS AND WITH SDP 86-137

SEDIMENT & EROSION CONTROL

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Joseph Helms 4/30/86
 U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED:
Stephen L. Hush 4/30/86
 HOWARD SCD DATE

QUANTITIES			
ITEM	ESTIMATED	AS BUILT	MATERIAL/SUPPLIER
16" W	774 LF	760.5	D.I.P. / ARP Water and Sewer Suppl. Inc
8" W	794 LF	795	D.I.P. / Waterworks Inc., Belair RC
6" W	125 LF	103	D.I.P. / Waterworks Inc., Belair RC Inc
3" W	6 LF	15	D.I.P. / Belair Road Supply Co.
3" W.M. VAULT	1	1	BRASS COPPER "K" Waterworks, Inc.
2" W	10	10	COPPER "K" Waterworks, Inc.
16" V. VAULT	1	1	C.I. / Waterworks, Inc.
8" V	3	3	C.I. / Waterworks, Inc.
6" V (NOT EX. V. 9)	1	1	C.I. / Waterworks, Inc.
FIRE HYDRANT	5	5	C.I. / Waterworks, Inc.
6" x 6" TEE	1	1	C.I. / Belair R.S., Inc., Waterworks
16" x 6" TEE	2	2	C.I. / Belair R.S., Waterworks
12" x 8" TEE	1	1	C.I. / Belair R.S., Waterworks
8" x 6" TEE	3	3	C.I. / Belair R.S., Waterworks
8" x 3" TEE	1	1	C.I. / Belair R.S., Waterworks
1 1/2" WHG 1/11	150 LF	315	COPPER "K" Belair Waterworks
1 1/2" WHG 3/11	150 LF		
8" 9	1835 LF	1835	PVC / Belair, Waterworks, Inc.
MANHOLES	12	13	PRECAST CONC./Atlantic Concrete Prod. Inc.
DRIP CONNECTIONS	5	7	MIX NO. 1 / The Prundel Co.
6" 9 HG	200 LF	52	P.V.C. / Waterworks, Belair
1 1/2" W VAULT	1	1	BRASS COPPER / Waterworks, Belair

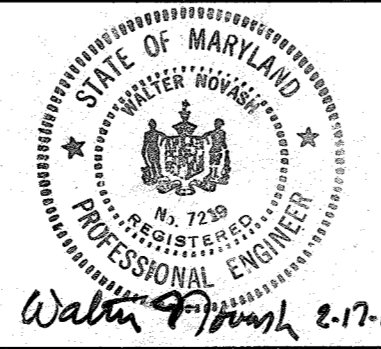
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Joseph Helms 5-1-86
 DIRECTOR OF PUBLIC WORKS DATE

Robert Beaman 4-29-86
 CHIEF, BUREAU OF UTILITIES DATE

Michelle L. ... 5-1-86
 CHIEF, LAND DEVELOPMENT DIV. DATE

BOENDER ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 3565 ELLICOTT MILLS DRIVE
 ELLICOTT CITY, MARYLAND 21043
 465-7777



DES:	(C)	CHANGE SHC ON SITE M.A.S. 13, 6 40 FT	12-9-80
DRN:	(C)	CORRECT INV. ELEV. SEWER MAIN SHEET 3 OF 4	
CHK:			
DATE:			
BY	NO.	REVISION	DATE

TITLE SHEET

CENTENNIAL SQUARE OFFICE PARK
 2ND ELECTION DISTRICT
 CONTRACT NO. 24-1462-D MW

SCALE AS SHOWN
 SHEET 1 OF 4

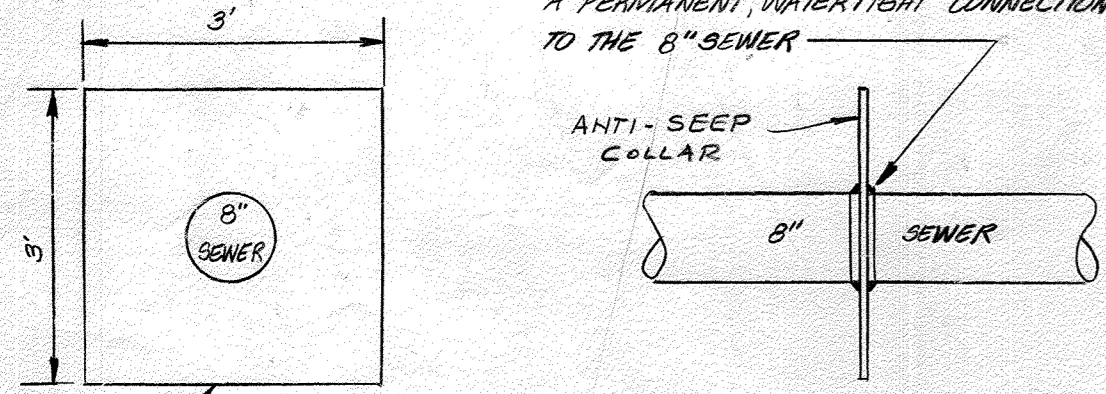
John ... 2/10/87
 AS-BUILT

PROVIDE SILT FENCE (S.F.) PRIOR TO BEGINNING EXCAVATION. FILL EXCAVATED DIRT ON HIGH SIDE OF TRENCH. BACKFILL DAILY AND STABILIZE DISTURBED AREAS AT THE END OF EACH DAY'S WORK.

THE CONTRACTOR WILL LIMIT HIS EXCAVATION WIDTH IN THE AREA NEAR THE EXISTING ROAD TO PREVENT ANY DISTURBANCE TO THE ROAD.

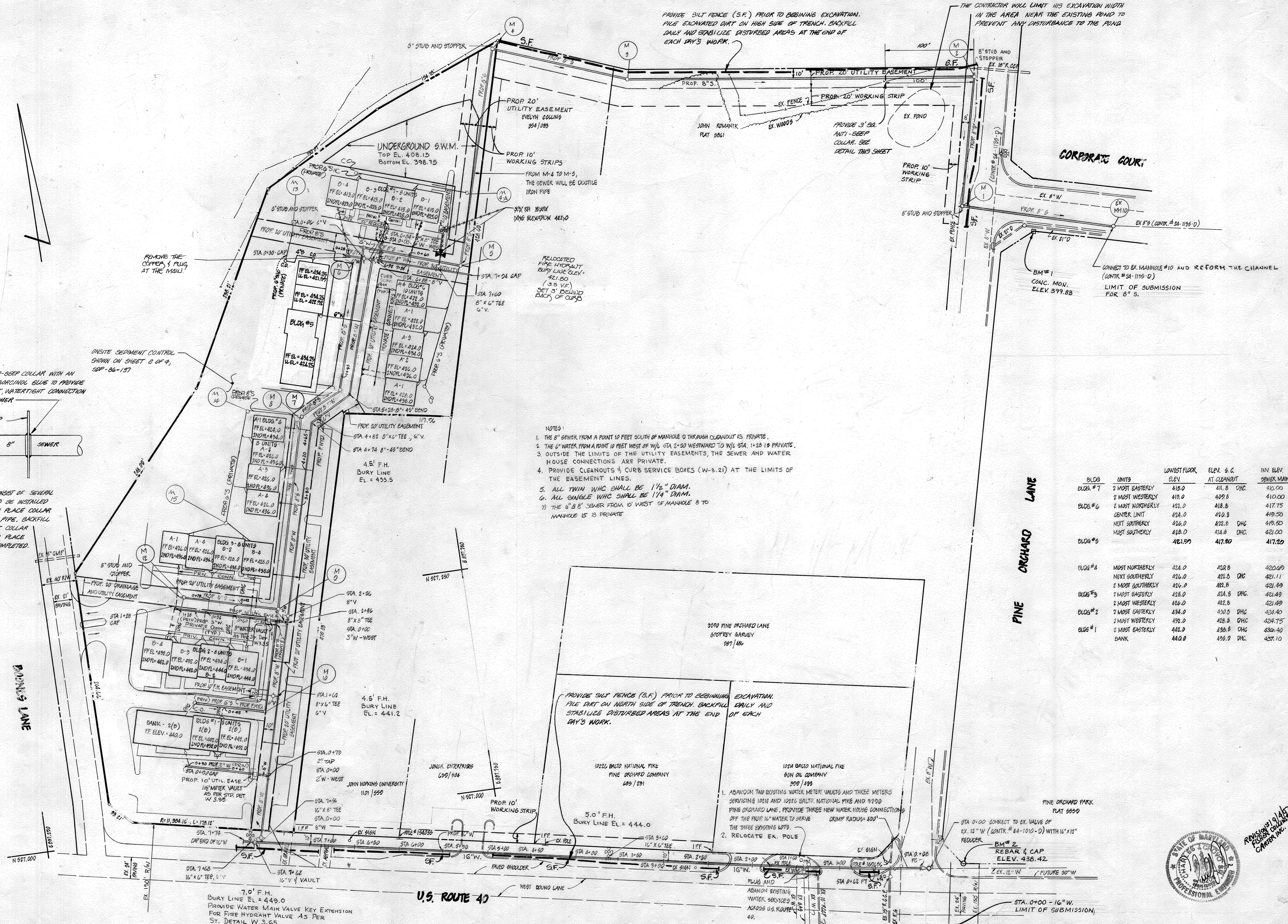
ANTI-SEEP COLLAR
NOT TO SCALE

ATTACH THE ANTI-SEEP COLLAR WITH AN EPDM OR RESORCINOL GLUE TO PROVIDE A PERMANENT, WATER-TIGHT CONNECTION TO THE 8" SEWER.

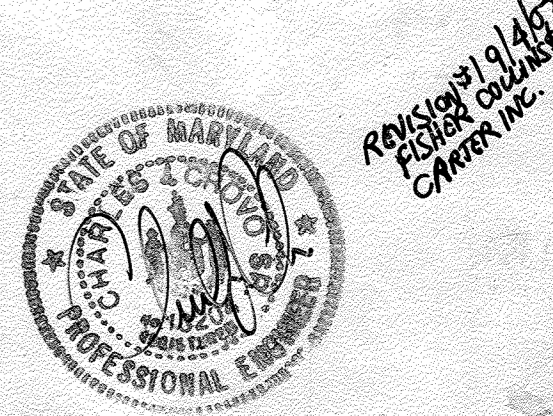


ANTI-SEEP COLLAR SHALL CONSIST OF SEVERAL LAYERS OF FILTER CLOTH TO BE INSTALLED TO PROVIDE A VERTICALLY IN PLACE COLLAR ALL AROUND THE 8" SEWER PIPE. BACKFILL AND TAMP CAREFULLY SO THAT COLLAR WILL REMAIN VERTICALLY IN PLACE AFTER BACKFILLING IS COMPLETED.

- NOTES:
- THE 8" SEWER FROM A POINT 10 FEET SOUTH OF MANHOLE 9 THROUGH CLEANOUT IS PRIVATE.
 - THE 4" WATER FROM A POINT 10 FEET WEST OF W/L STA 2+30 WESTWARD TO W/L STA 1+28 IS PRIVATE.
 - OUTSIDE THE LIMITS OF THE UTILITY EASEMENTS, THE SEWER AND WATER HOUSE CONNECTIONS ARE PRIVATE.
 - PROVIDE CLEANOUTS & CURB SERVICE BOXES (W-3.2) AT THE LIMITS OF THE EASEMENT LINES.
 - ALL TWIN WHC SHALL BE 1 1/2" DIAM.
 - ALL SINGLE WHC SHALL BE 1 1/4" DIAM.
 - THE 6" 8" SEWER FROM 10' WEST OF MANHOLE 8 TO MANHOLE 15 IS PRIVATE.



BLDG	UNITS	LOWEST FLOOR ELEV.	ELEV. 5' G. AT CLEANOUT	MIN. ELEV. SEWER MAIN
BLDG #7	2 MOST EASTERLY	415.0	411.5 DHC	410.00
	2 MOST WESTERLY	415.0	409.5	410.00
BLDG #6	2 MOST NORTHERLY	424.0	418.5	417.75
	CENTER UNIT	424.0	424.0	419.50
	2 MOST SOUTHERLY	424.0	422.5 DHC	419.50
BLDG #5	2 MOST SOUTHERLY	421.0	418.0 DHC	421.00
	2 MOST NORTHERLY	424.0	417.50	417.20
BLDG #4	2 MOST NORTHERLY	424.0	424.0	420.00
	2 MOST SOUTHERLY	424.0	422.0 DHC	421.11
BLDG #3	2 MOST EASTERLY	424.0	424.0 DHC	421.49
	2 MOST WESTERLY	424.0	424.0	421.49
BLDG #2	2 MOST EASTERLY	424.0	420.0 DHC	421.40
	2 MOST WESTERLY	424.0	423.5 DHC	424.75
BLDG #1	2 MOST EASTERLY	424.0	420.0 DHC	420.40
	2 MOST WESTERLY	424.0	424.0 DHC	429.10



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

5-1-86 DATE
4-29-86 DATE

Robert M. Bauman
CHIEF, BUREAU OF UTILITIES

5-1-86 DATE
5-1-86 DATE

William J. Lepore
CHIEF, LAND DEVELOPMENT DIV.

BOENDER ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS

3565 ELLICOTT MILLS DR.
ELLICOTT CITY, MARYLAND 21043
(301)465-7777

STATE OF MARYLAND
PROFESSIONAL ENGINEER
Walter J. Boender
2-17-86

DES	DRN	CHK	DATE

PLAN AND PROFILES

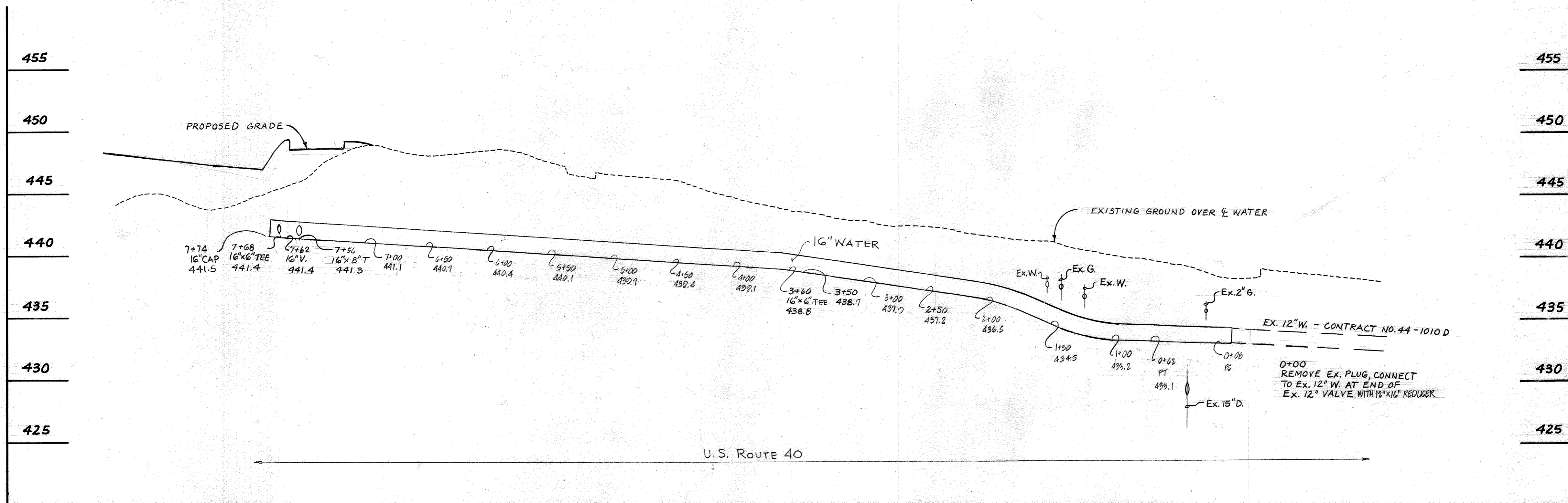
REVERSE FLOOR ELEVATIONS ON BLDG #5 AND REVERSE WATER & SEWER CONNECTIONS ALONG WITH ADJACENT CLEANOUTS

9/4/07 DATE

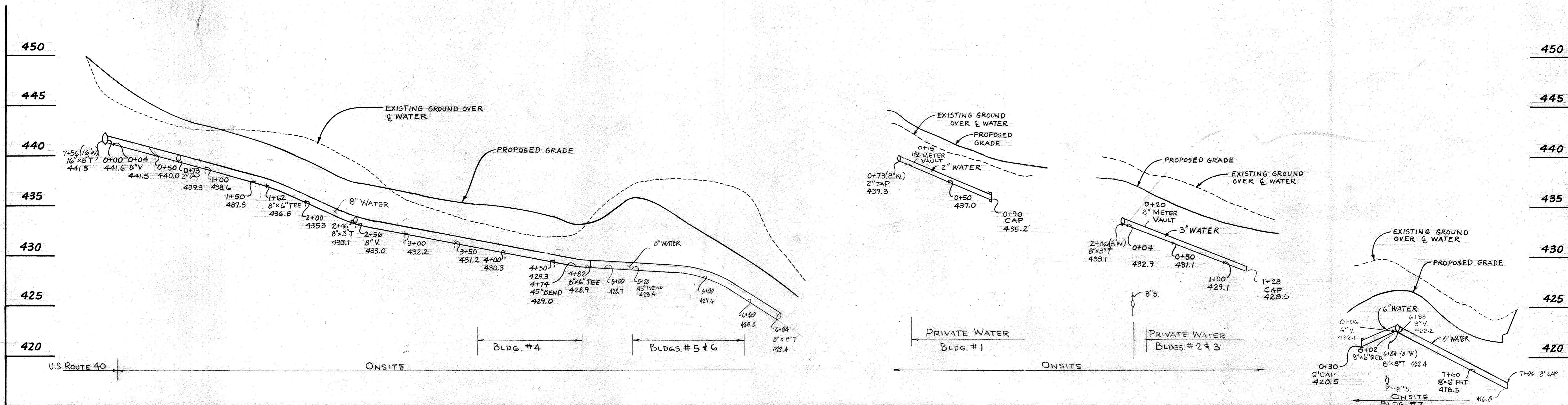
CENTENNIAL SQUARE OFFICE PARK
2ND ELECTION DISTRICT
CONTRACT NO. 24-1462-DMW

SCALE
1" = 50'

SHEET
2 OF 4



PROFILES: SCALES: HORIZ.-1"=50'; VERT.-1"=5'



PROFILES: SCALES: HORIZ.-1"=50'; VERT.-1"=5'

DEPARTMENT OF PUBLIC WORKS
 DIRECTOR OF PUBLIC WORKS
 DATE: 5-1-86
 CHIEF, BUREAU OF ENGINEERING
 DATE: 5-1-86
 CHIEF, BUREAU OF UTILITIES
 DATE: 4-29-86
 CHIEF, LAND DEVELOPMENT DIV.
 DATE: 5-1-86

BOENDER ASSOCIATES, INC.
 ENGINEERS · PLANNERS · SURVEYORS
 3565 ELLICOTT MILLS DR.
 ELLICOTT CITY, MARYLAND 21043
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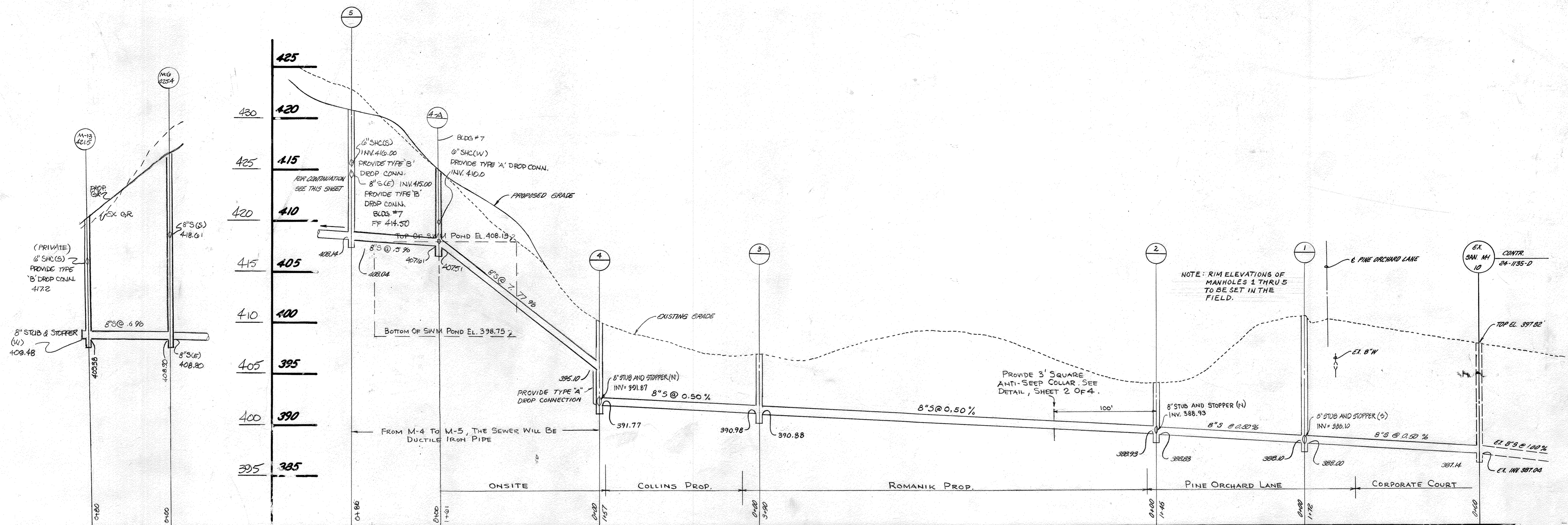


DES:	W.N.				
DRN:	A.R.R.				
CHK:					
DATE:					
BY:	NO.	REVISION		DATE	

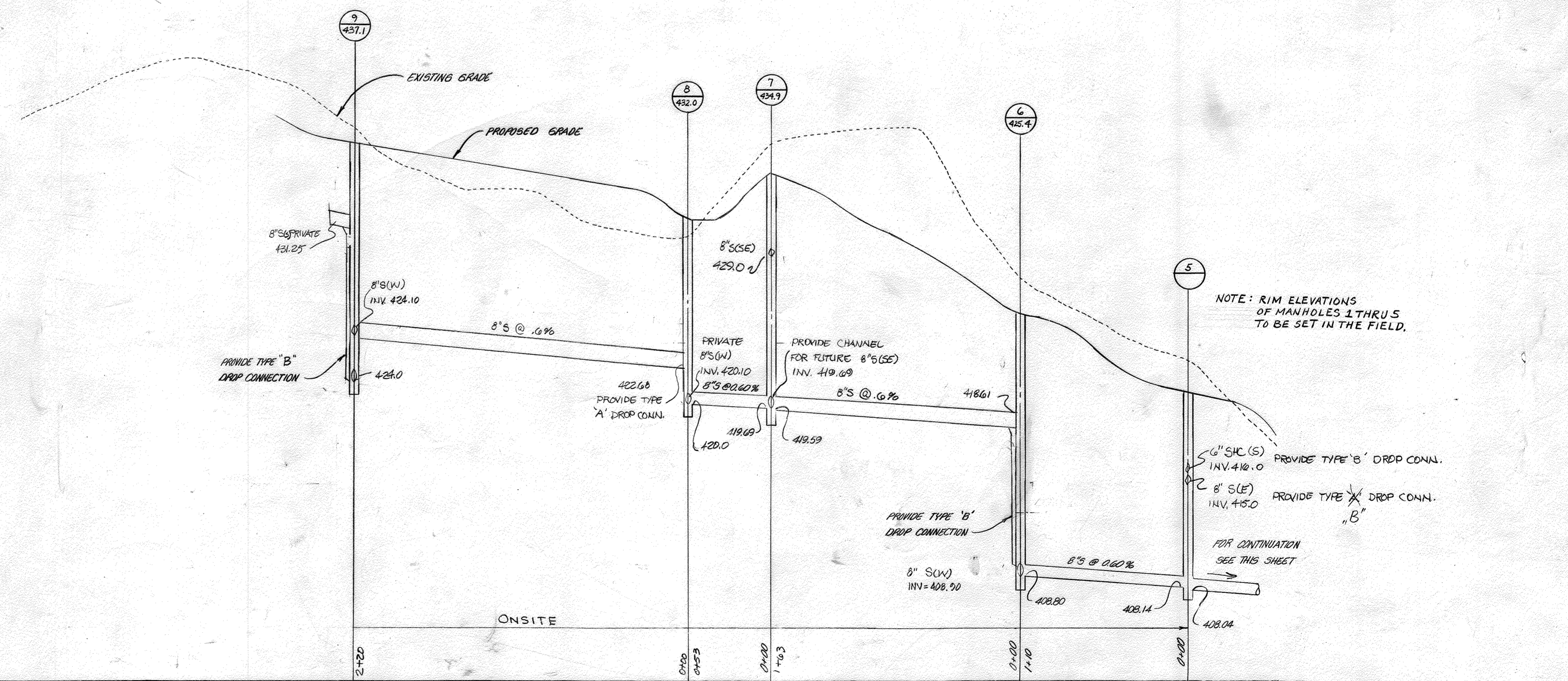
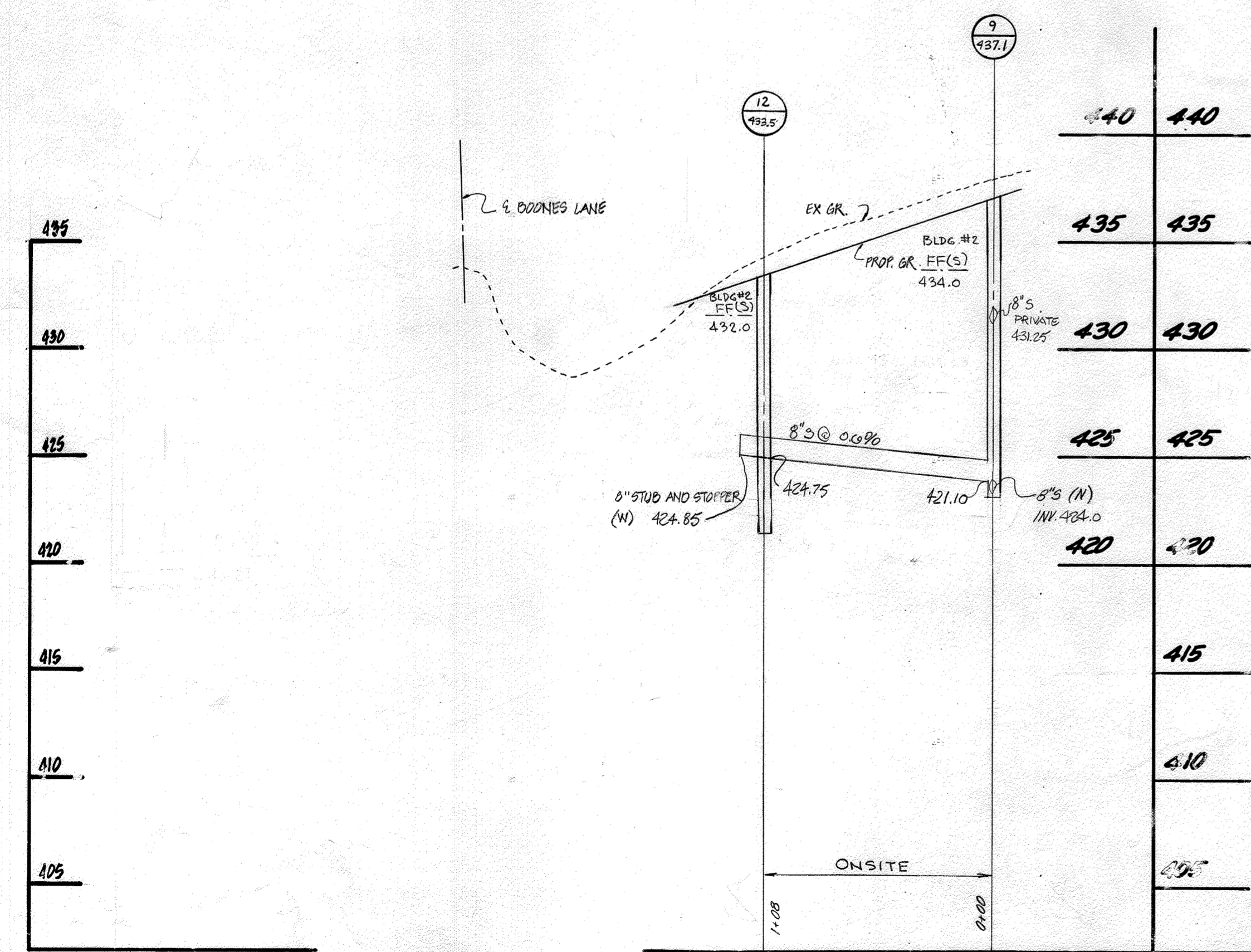
PLAN AND PROFILES

CENTENNIAL SQUARE OFFICE PARK
 2ND. ELECTION DISTRICT
 CONTRACT NO. 24-1462-DMW

SCALE
 SHEET
 3 OF 4



PROFILES SCALES: HOR. 1"=50' VERT. 1"=5'



PROFILES: SCALES: HOR. 1"=50' VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

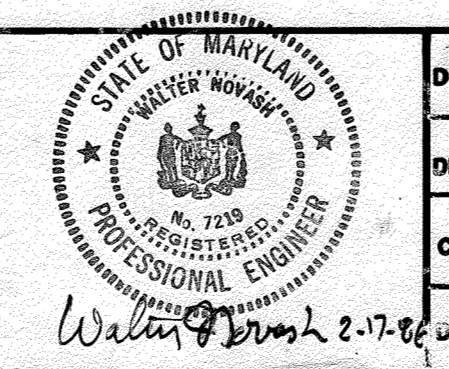
Robert M. Beninger
DIRECTOR OF PUBLIC WORKS
DATE: 4-29-86

William J. Beninger
CHIEF, BUREAU OF ENGINEERING
DATE: 5-1-86

William J. Beninger
CHIEF, LAND DEVELOPMENT DIV.
DATE: 5-1-86

BOENDER ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS

3565 ELLICOTT MILLS DR.
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DES			
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PLAN AND PROFILES

CENTENNIAL SQUARE OFFICE PARK
2ND. ELECTION DISTRICT
CONTRACT NO. 24-1462-DMW

SCALE: AS SHOWN
SHEET 4 OF 4