

QUANTITIES					
ITEM	ESTIMATED QUANTITIES	ASBUILT QUANTITIES	SUPPLIER	COORDINATES	
				X	Y
WATER					
8" WATER	258 L.F.	258 L.F.	DUCTILE	US PIPE	
8" 1/2" BEND	2 EACH	2 EA	DUCTILE	SIGMA	
8" CAP	1 EACH	1 EA	DUCTILE	SIGMA	1362184.3 529988.3
6" WATER	10 L.F.	10 L.F.	DUCTILE	US PIPE	
6" FIRE HYDRANT	1 EACH	1 EA	DUCTILE	KENNEDY	1362161.9 529975.0
8" VALVE & ROADWAY	1 EACH	1 EA	DUCTILE	KENNEDY	1362179.9 529982.2
VALVE BOX	1 EACH	1 EA	DUCTILE	SIGMA	
8" VALVE & ROADWAY	1 EACH	1 EA	DUCTILE	KENNEDY	1362167.7 529970.8
VALVE BOX	1 EACH	1 EA	DUCTILE	SIGMA	
8"x6" TEE	1 EACH	1 EA	DUCTILE	SIGMA	1362170.0 529976.0
SANITARY MANHOLE	1 EACH	1 EA	DUCTILE	SIGMA	1362170.0 529976.0
6" PVC (s/wer)	10 L.F.	28.5 L.F.	SDR-35	PLASTIC TRENDS	
NAME OF UTILITY CONTRACTOR: HIGHLAND TURF					
SURVEY & DRAFTING DIVISION AS-BUILT DATE: 4-26-11					
TYPE 'A' DROP CONN.: 1 EACH					

A.C. MILLER PROPERTY

AT MAIER PLACE AND BURSA ROAD
HOWARD COUNTY, MARYLAND
PARCEL 'A'

CONTRACT NO. 24-4047-D

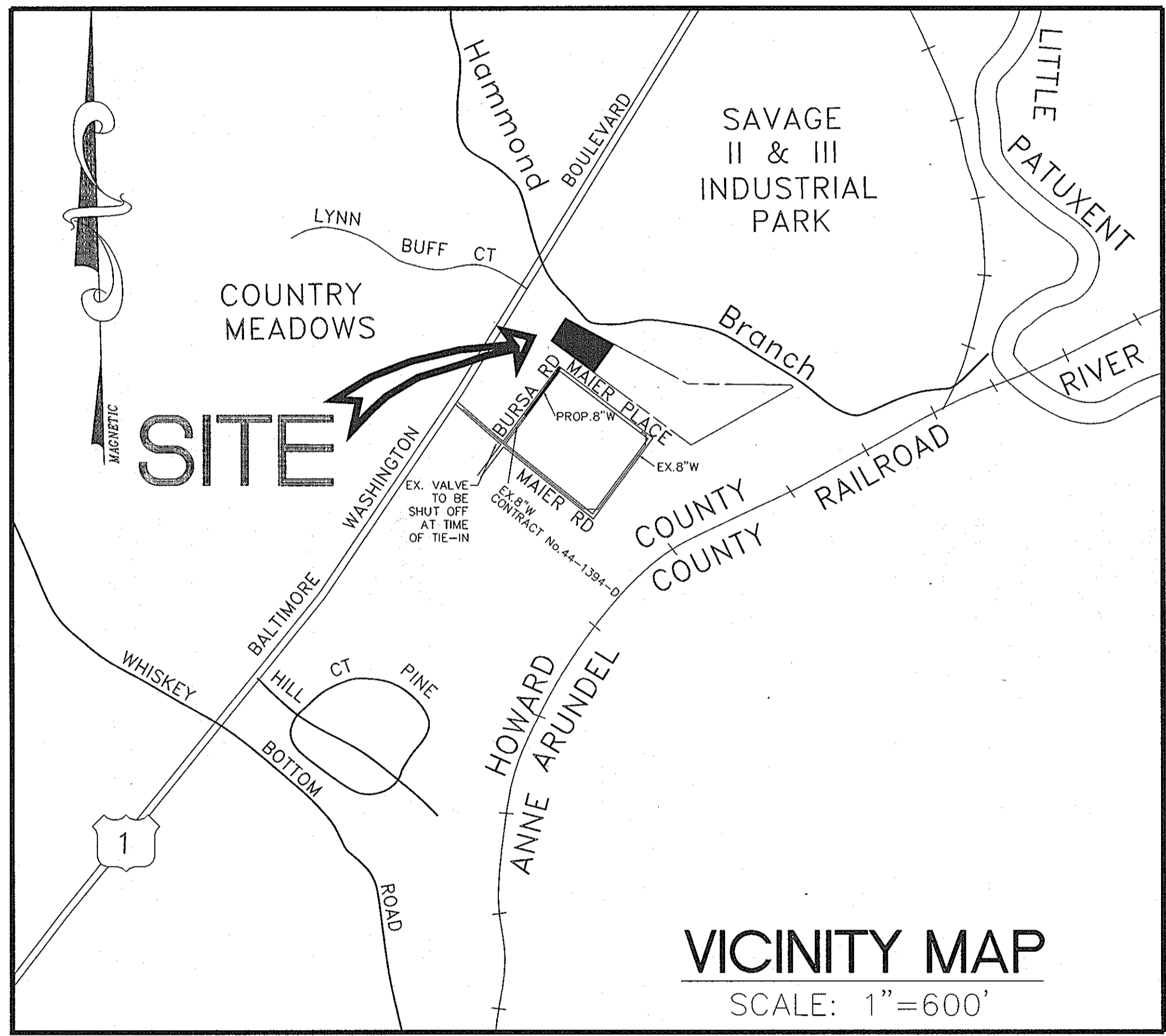
LIST OF DRAWINGS
SHEET 1 TITLE SHEET
SHEET 2 PLAN AND PROFILE

GENERAL CONSTRUCTION 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 83/91.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL, AS REQUIRED UNLESS OTHERWISE NOTED. 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 MONIES OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARDS 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 AT THE LOCATIONS OF THE TEST PITS. 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.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

AT&T	1-800-252-1133
BCE (CONTRACTOR SERVICES)	410-850-4620
BCE (UNDERGROUND DAMAGE CONTROL)	410-787-9068
BUREAU OF UTILITIES	410-313-4900
COLONIA PIPELINE CO	410-795-1390
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERICON	1-800-743-0033/410-224-9210
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE 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 THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
 - CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT 410-313-7450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(c) OF THE HOWARD COUNTY CODE.
- WATER**
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE 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.
- SEWER**
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - MANHOLES SHOWN WITH 12" AND 16" 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 FRAMES AND COVERS ARE USED, SET TOP FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.



- SEQUENCE OF CONSTRUCTION**
- NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT 410-213-1800 AT LEAST 24 HOURS PRIOR TO COMMENCING ANY WORK.
 - PLACE SILT FENCE AS SHOWN ON THESE PLANS.
 - WITH SEDIMENT CONTROL DEVICES IN PLACE AND WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, BEGIN CONSTRUCTING 8" WATER AND 6" SANITARY PER THESE PLANS. DISTURB ONLY THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORKING DAY.
 - UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE AND VEGETATIVELY STABILIZE THE AREA DISTURBED BY THIS PROCESS.

DEVELOPER'S CERTIFICATION

"I/WE HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AGENTS, AS ARE DEEMED NECESSARY."

Arthur C. Miller 01/31/03
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Douglas Kennedy PE#10718 JAN. 31, 2003
SIGNATURE OF ENGINEER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Jim Meyer 3/1/03
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
Jeff 3/10/03
APPROVED: HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL DEVICES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS.
Arthur C. Miller 01/31/03
SIGNATURE OF DEVELOPER DATE

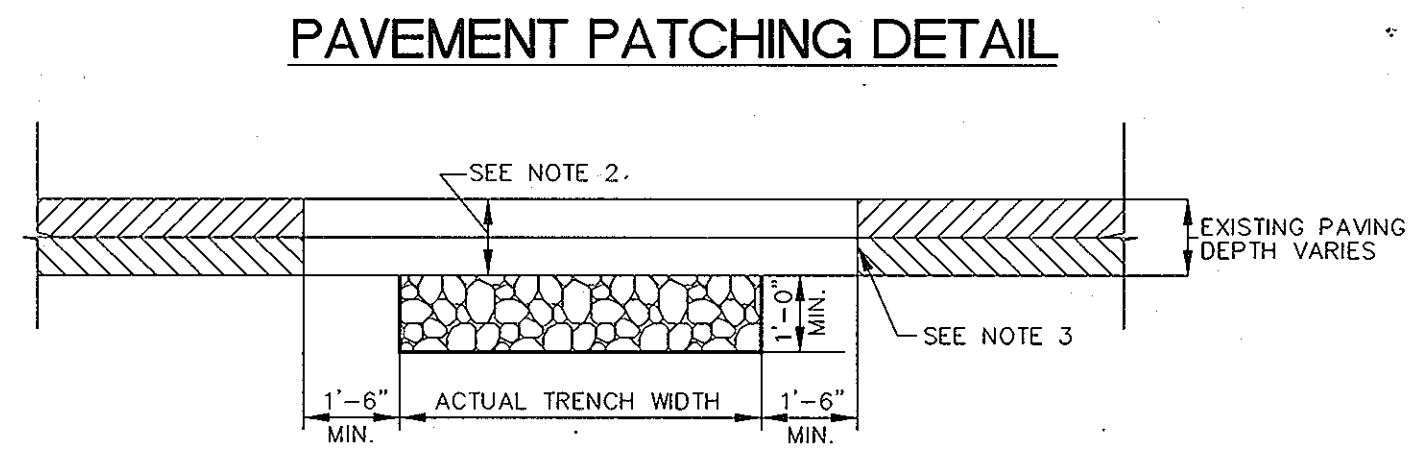
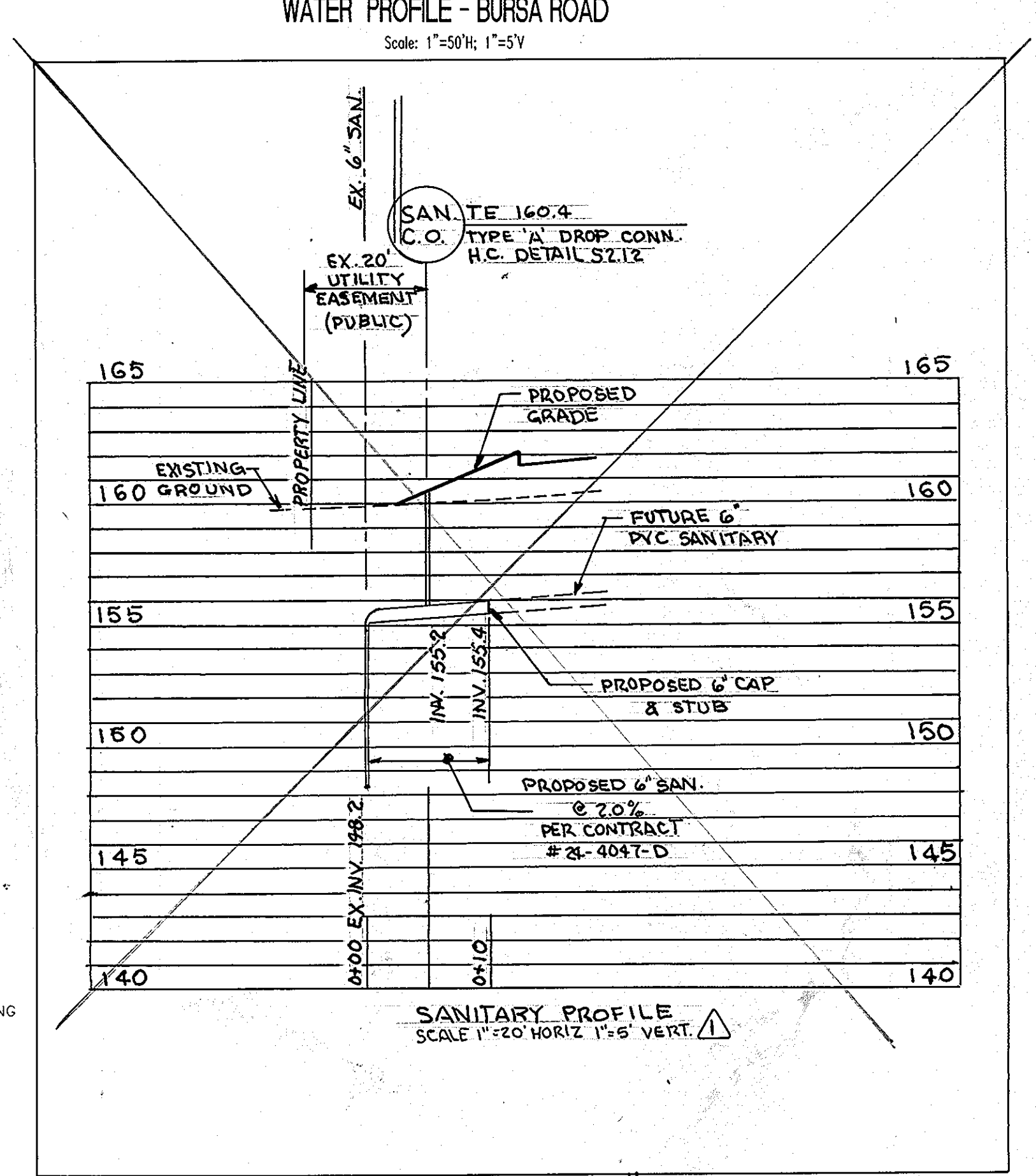
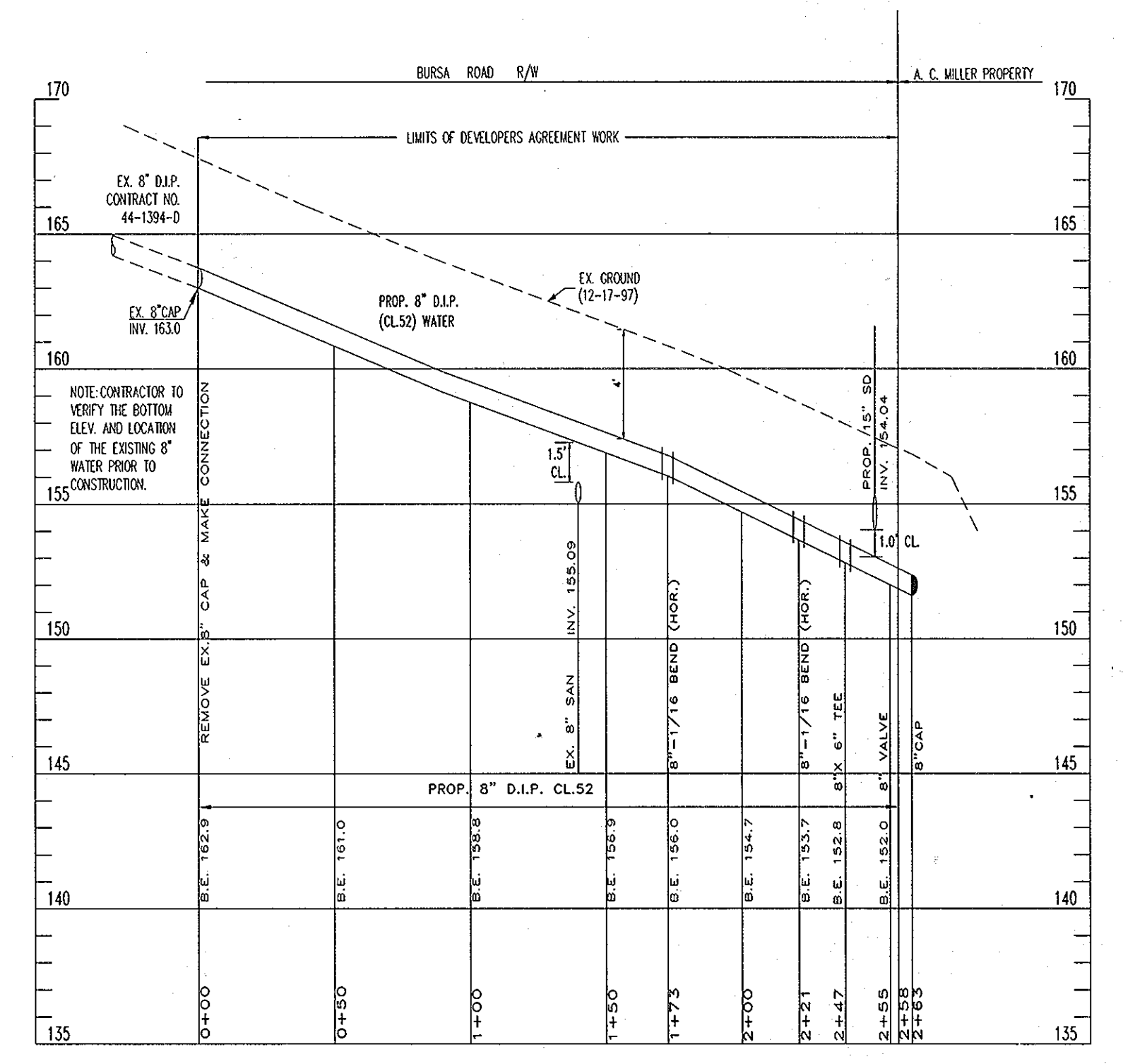
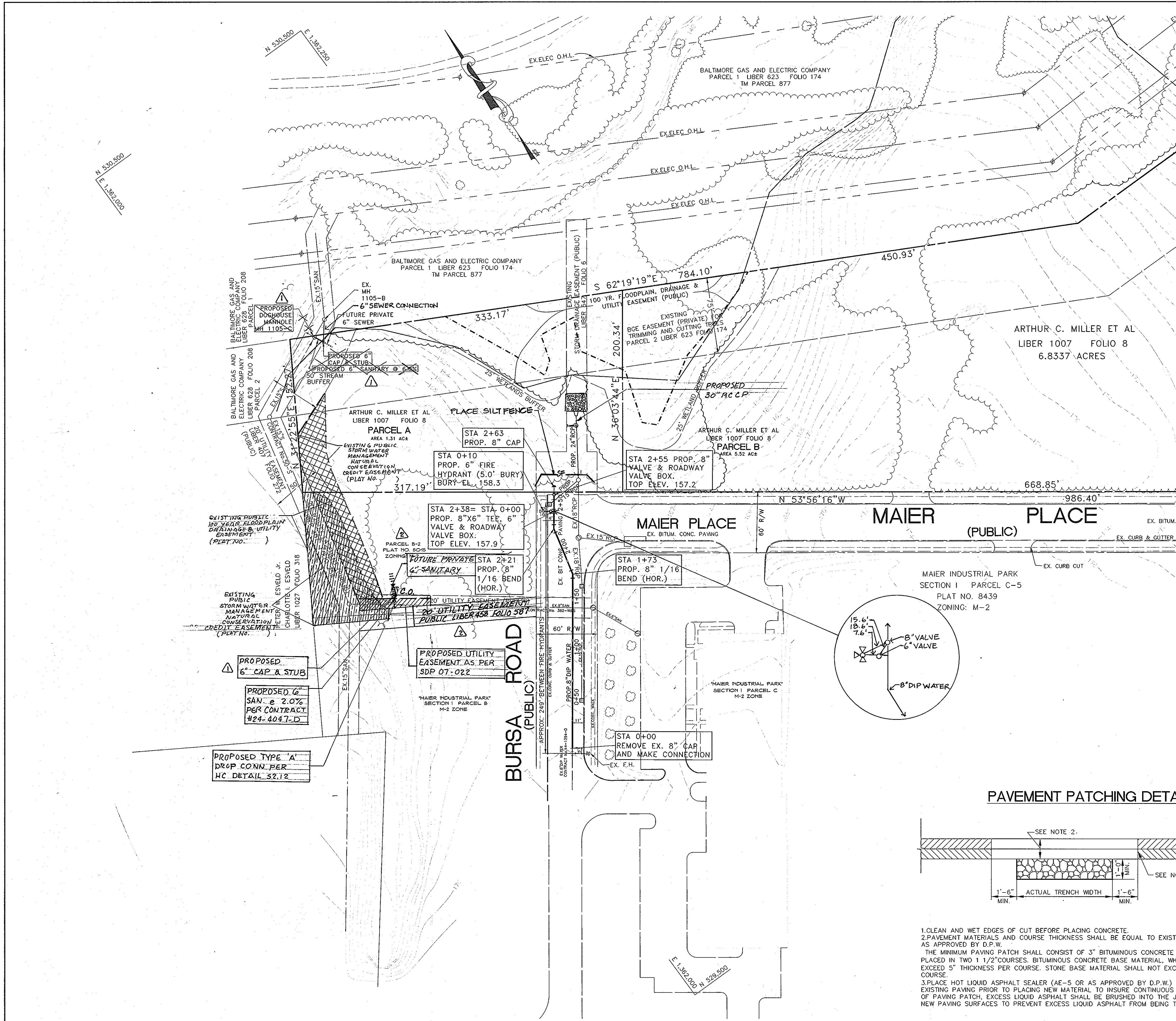
BENCHMARKS

HOWARD CO. HUB NO. 471C, FL. 189.05
N 532036.885 E 1362819.058
A BRASS DISC (1" TO 2" BELOW TERRAIN SURFACE) SET ON TOP OF CONCRETE CYLINDRIC BASE.

HOWARD CO. HUB NO. 471B, FL. 180.71
N 529701.579 E 1361469.758
3/4" IRON ROD WITH STAMPED ALUMINUM CAP.

WATER & SEWER CODE FOR COUNTY USE ONLY
WATER No.: C-04
SEWER No.: 7100400
WATER TEST GRADIENT: 550
DRAINAGE AREA: LITTLE PATUXENT

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>John Beaman</i> 2-10-03 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND <i>Chris</i> 2/12/03 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	 KCW ENGINEERING TECHNOLOGIES 3104 Timanus Lane, Suite 101 Baltimore, MD 21244 (410) 281-0033 Fax (410) 281-1065 www.KCW-ET.com	 DESIGNED BY: R.D./K.M.W. DATE: JAN. 31, 2003 DRAWN BY: K.C.W. DATE: CHECKED BY: D.L.K. DATE: DATE: JAN. 31, 2003 BY: No: REVISION DATE:	REDLINE REVISION PER SDP-07-022 3/2/07 REDLINE REVISION RESPONSE TO 3-12-07 4/24/07 LETTER AS-BUILT REVISIONS 5-4-11	TITLE SHEET 600' SCALE MAP No.47 GRID 23 PARCEL No.540	A.C. MILLER PROPERTY PARCEL 'A' WATER AND SEWER SERVICE CONTRACT No. 24-4047-D HOWARD COUNTY, MARYLAND ELECTION DISTRICT - 6	SCALE 1"=50' HOR. 1"= 5' VER. SHEET 1 OF 2
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1. CLEAN AND WET EDGES OF CUT BEFORE PLACING CONCRETE.
 2. PAVEMENT MATERIALS AND COURSE THICKNESS SHALL BE EQUAL TO EXISTING PAVING SECTION OR AS APPROVED BY D.P.W.
 3. THE MINIMUM PAVING PATCH SHALL CONSIST OF 3\"/>

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND R. J. ... CHIEF, BUREAU OF UTILITIES 2-10-03	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND ... CHIEF, DEVELOPMENT ENGINEERING DIVISION 3/12/03	KCW ENGINEERING TECHNOLOGIES	KCW Engineering Technologies, Inc. 3104 Timanus Lane, Suite 101 Baltimore, MD 21244 (410) 281-0033 Fax (410) 281-1065 www.KCW-ET.com	DESIGNED BY: R.D./K.M.W. DRAWN BY: K.C.W. CHECKED BY: D.L.K. DATE: 31. 2003	REDLINE REVISION PER SDP-07-022 REDLINE REVISION RESPONSE TO 8-12-07 LETTER AS-BUILT REVISIONS 3/9/07 8/24/07 5-5-11	WATER AND SEWER PLAN AND PROFILE 600' SCALE MAP No. 47 GRID 23 PARCEL No. 540	A.C. MILLER PROPERTY PARCEL 'A' 8" WATER MAIN EXTENSION - BURSA ROAD CONTRACT No. 24-4047-D HOWARD COUNTY, MARYLAND ELECTION DISTRICT -- 6	SCALE 1"=50' HOR. 1"= 5' VER. SHEET 2 OF 2
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