BENCHMARK INFORMATION

LEVATION = 300.053 (NGVD '03)

SURVEY & DRAFTING DIMSION AS-BUILT DATE:

B.M.#1 - HOWARD COUNTY CONTROL STATION #BASE B (LOCATED IN THE PARKING LOT OF THE HOWARD COUNTY DORSEY BUILDING. IN A GRASS STRIP APPROX. 30' SOUTH OF LIGHT POLE)
N 571,690.1119 (NAD '03) E 1,361,151.4766 (NAD '03)

ELEVATION = 411.050 (NGVD '00) B.M.#2 - HOWARD COUNTY CONTROL STATION #30EB (LOCATED ALONG THE SOUTH SIDE OF DIAMONDBACK DRIVE, APPROX. 2' OFF EDGE OF PAVING BETWEEN HOUSE NOS. 9401 & 9405) 555,897.3242 (NAD '83)

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 THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS

Paul W. Kaiebel; FOR:

LAND DESIGN & DEVELOPMENT, INC. 12-07-11

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 CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 300 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THE ROAD CONSTRUCTION PLANS, F-11-041.

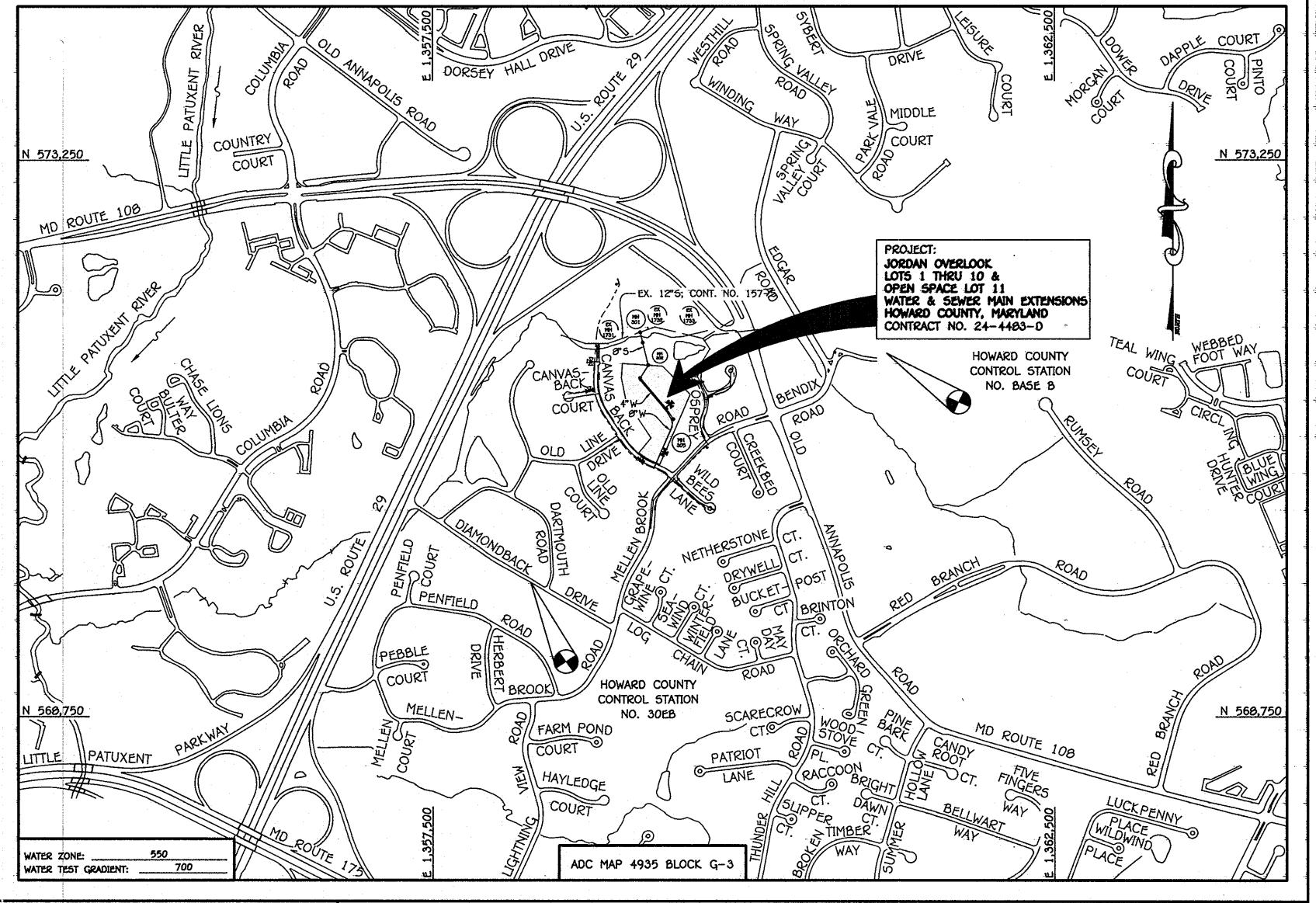
FOR:

LAND DESIGN & DEVELOPMENT, INC. 12-07-11
SIGNATURE OF DEVELOPER

DATE

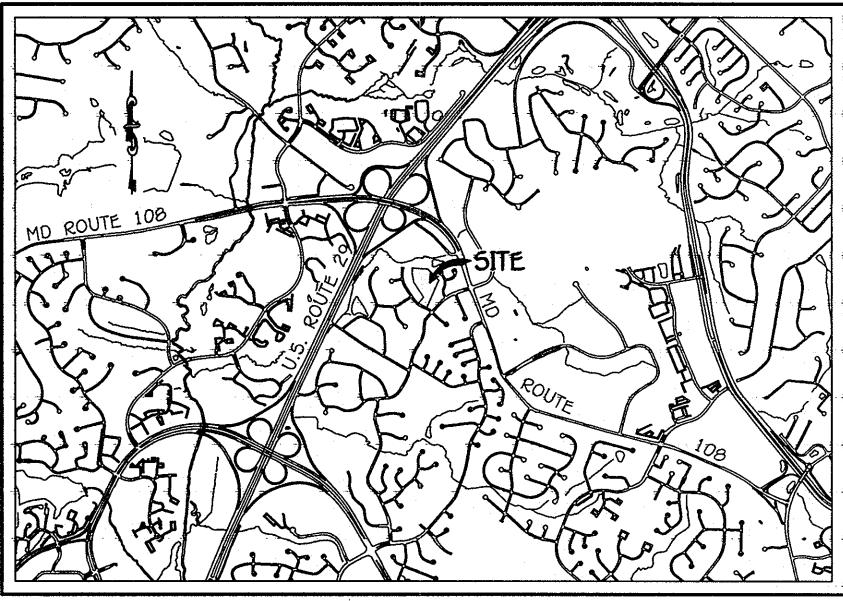
GP-09-041

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



CONTRACT NO. 24-4483-D JORDAN OVERLOOK

LOTS 1 THRU 10 & OPEN SPACE LOT 11 WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND



GENERAL NOTES

APPROXIMATE LOCATIONS 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.

. Topographic field surveys were performed on or about december, 2006 by fisher, collins & carter, inc. HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '03/91' AS PROJECTED

BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. B & NO. 30EB. ALL VERTICAL CONTROLS ARE BASED ON NAVO '80. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS . All pipe elevations shown are invert elevations unless otherwise noted on the plans. 5. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF

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 (LATEST EDITION). THE CONTRACTOR SHALL

HAVE A COPY OF VOLUME IV ON THE JOB SITE. 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 WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

410-313-4900 410-795-1390 STATE HIGHWAY ADMINISTRATION 410-531-5533

) 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. 10. 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 THE CONSTRUCTION OF THE MAIN.

THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE 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 10.114(a) OF THE HOWARD

PART B: WATER MAIN GENERAL NOTES

PLAN REFERENCE NUMBERS:

F-11-041

5P-09-010

1. ALL WATER MAINS SHALL BE AWWA C900 PVC; DR-15.
2. TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED. 3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.

4. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.

6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
7. TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL D.I.P. AND PVC WATER MAINS IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL.

8. FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.

9. UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TEES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.

PART C: SEWER MAIN GENERAL NOTES

1. ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED. 2. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.

3. FORCE MAINS SHALL BE D.I.P. ONLY.

4. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY. 5. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS

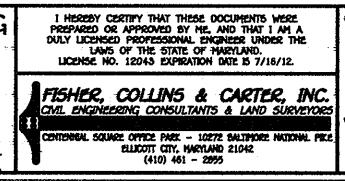
OTHERWISE NOTED ON THE DRAWINGS. 6. HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

> DEVELOPER LAND DESIGN & DEVELOPMENT, INC. 5300 DORSEY HALL DRIVE **SUITE 102** ELLICOTT CITY, MARYLAND 21042

CONTRACT NO. 24-4483-D JORDAN OVERLOOK LOTS 1 THRU 10 & OPEN SPACE LOT 11 WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING



TYPE OF BUILDING: RESIDENTIAL: SINGLE FAMILY DETACHED

TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION

CENTER: SAVAGE, MD

NUMBER OF LOTS: _

NO. OF WATER HOUSE CONNECTIONS:

NO. OF SEWER HOUSE CONNECTIONS:_

DRAINAGE AREA: LITTLE PATUXENT

*12043	TE	OF M	RE	•
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tout	20	MX	TO	<u>NO</u>
	PAUL	. W. I	सिटिश	<u>.</u>

B.C.R.					WATER AND SEWER MAINS
DRAWN BY : B.C.R.					TITLE SHEET
CHECKED BY : P.W.K.					600° 5CALE MAP NO. 30 BLOCK NO. 10
DATE :					F.C.C. WORK ORDER NO06043
DECEMBER, 2011	BY	NO.	REVISION	DATE	FILE NAME :WATER AND SEWER MAIN EXTENSION TITLE SHEET

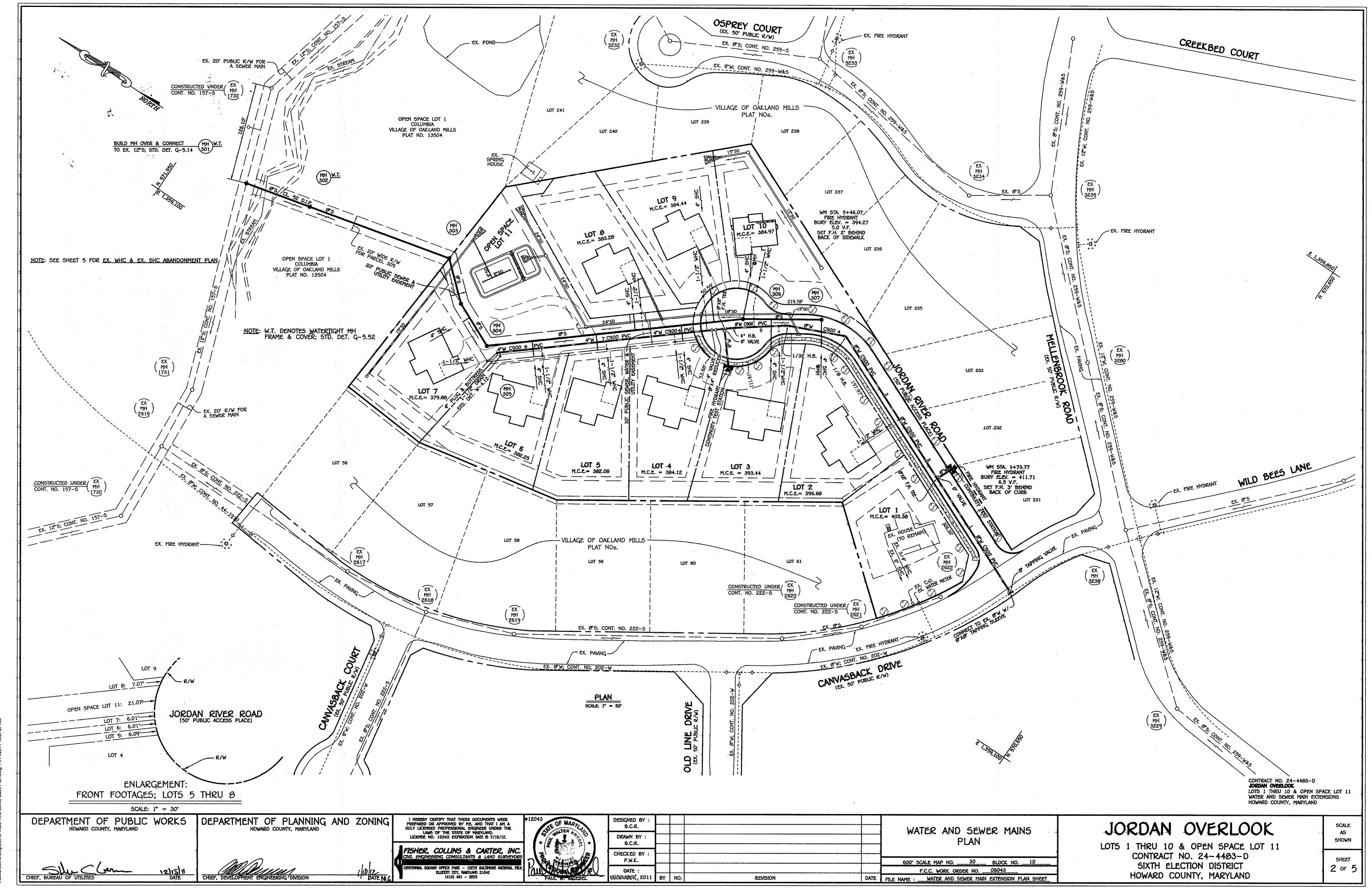
JORDAN OVERLOOK

LOTS 1 THRU 10 & OPEN SPACE LOT 11 CONTRACT NO. 24-4483-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

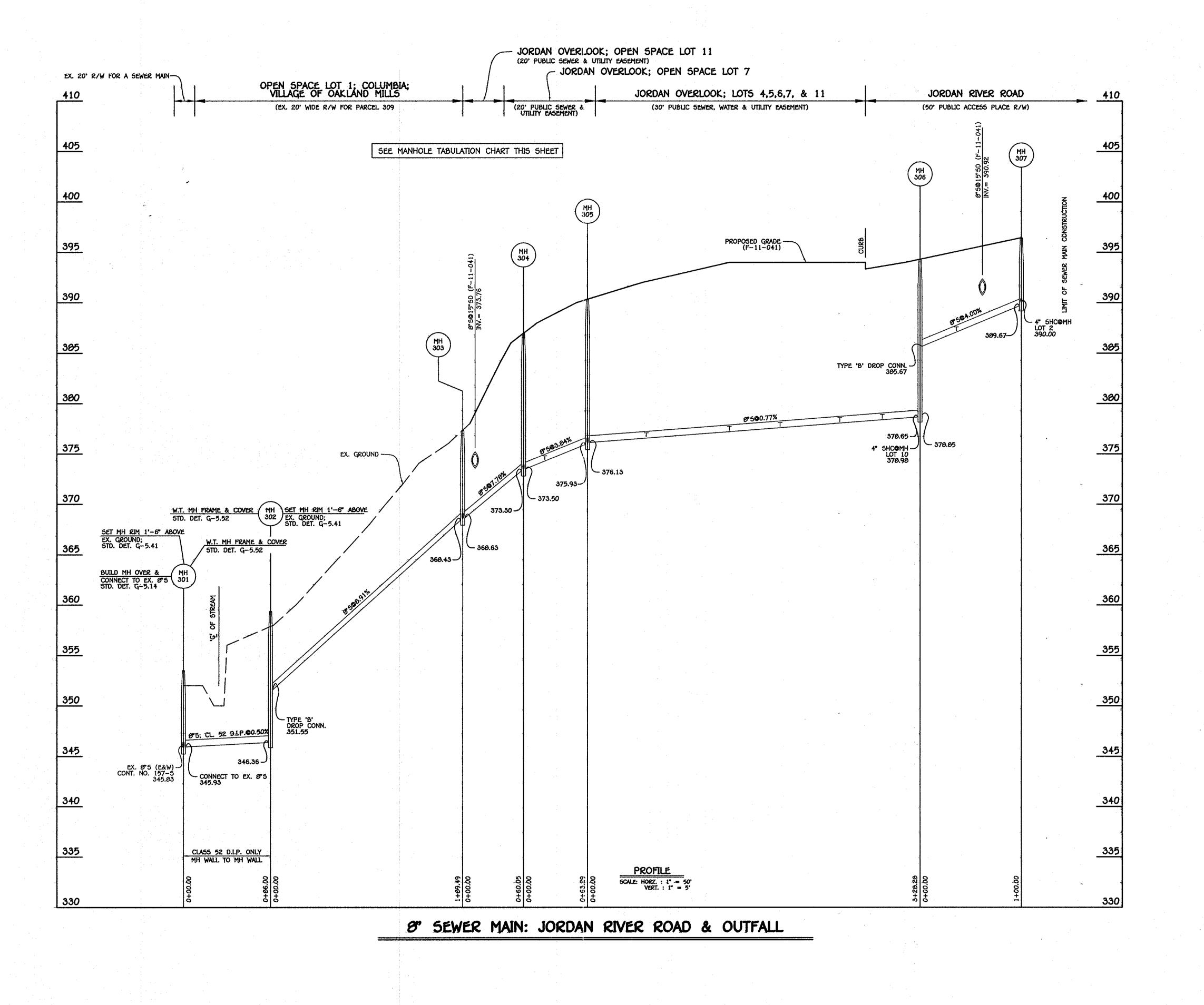
SHEET of 5

SCALE

SHOWN



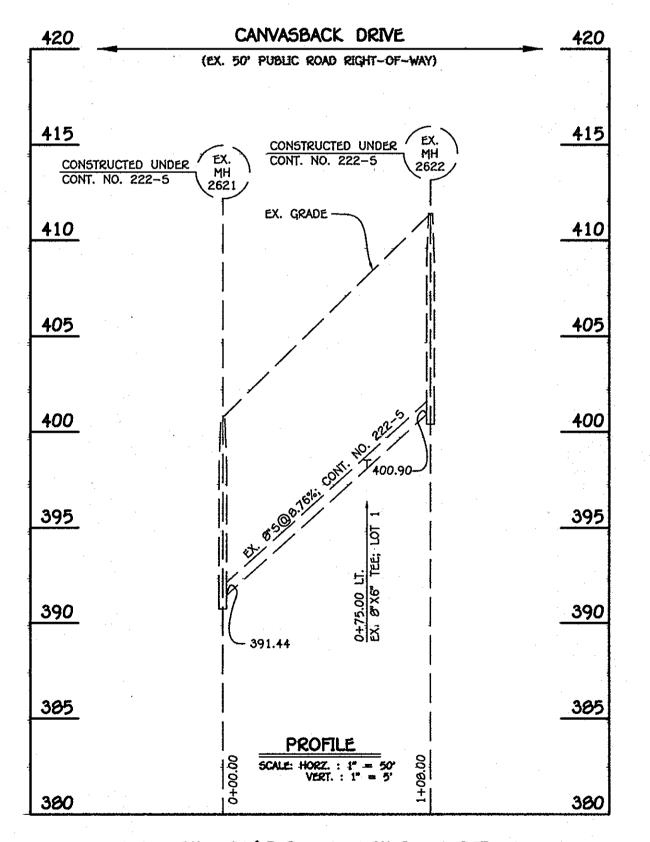
1:\2006\06043\dwh\06043 \Water And Sewer Bake Plan.dwg, 11/11/2011 10:\$7:



	MANHOLE TABULATION CHART					
NO.	NORTHING	EASTING	RIM ELEVATION			
301	571060.92	1359160.93	353.50*			
302	571777.36	1359109.20	359.50*			
303	571593.25	1359234.11	377.35**			
304	571540.29	1359194.31	307.00**			
305	571490.66	1359160.12	390.33**			
306	571239.38	1359379.36	394.30**			
307	571156.03	1359434.62	396.44**			

NOTES: 1.* SET MH RIMS 1'-6" ABOVE EX. GROUND: STD. DET. G-5.41 2** SET MH RIMS FLUSH W/ PROPOSED FINISHED GRADE

5HC IN\	ERT@PROPERTY LINE	CHART
STATION	LOT	ELEVATION
	MH 304 TO MH 305	
0+21 RT.	7	374.60
	MH 305 TO MH 306	
0+50 RT.	6	377.15
1+40 RT.	5	377.78
1+90 LT.	8	376.16
2+49 RT.	4	370.62
2+91 LT.	9	379.30
@MH 306 RT.	10	379.93
	MH 306 TO MH 307	
0+36 RT.	3	386.04
O MH 307 RT.	2	390.68
	EX. MH 2621 TO EX. MH 2622	
0+75 LT.	1	398.28



EX. 6" 5HC@EX. 8"5: LOT 1

CONTRACT NO. 24-4483-D
JORDAN OVERLOOK
LOTS 1 THRU 10 & OPEN SPACE LOT 11
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I AM A
DULY LICENSED PROFESSIONAL ENGINEER UNDER THE
LAWS OF THE STATE OF MARYLAND,
LICENSE NO. 12043 EXPIRATION DATE IS 7/16/12.

FISHER, COLLINS & CARTIER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNAL SQUARE OFFICE PARK - 10272 BALTMORE NATIONAL PIKE,
ELLICOTT CITY, HARYLAND 21042
(410) 461 - 2075

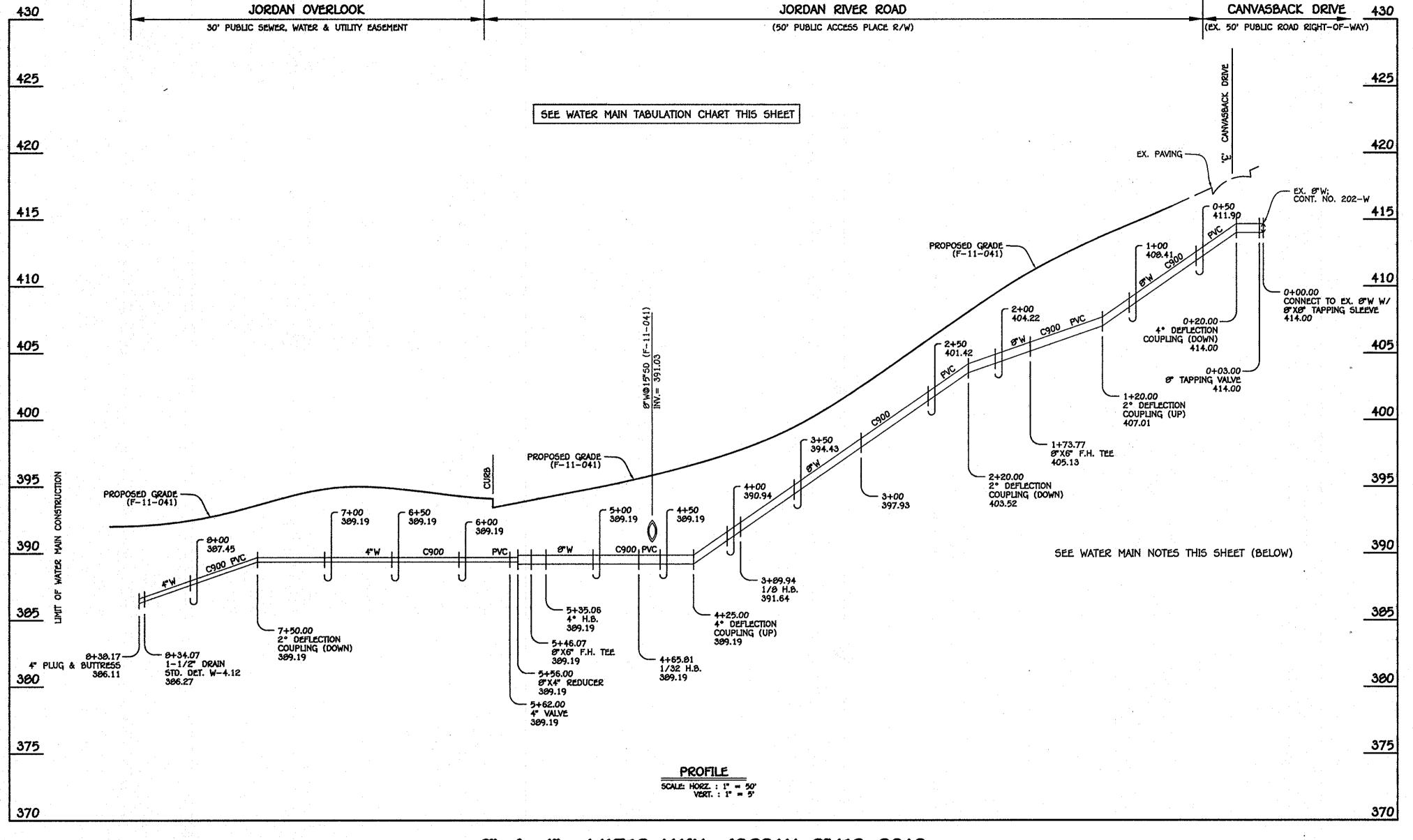
Park

	DESIGNED BY :				•		,
_	B.C.R.						SEWER MAINS
1	DRAWN BY : B.C.R.						PROFILES & CHARTS
	CHECKED BY :					-	-
Λ	P.W.K.						600' SCALE MAP NO. 30 BLOCK NO. 10
W	DATE :					-	F.C.C. WORK ORDER NO. 06043
	DECEMBER, 2011	BY	NO.	REVISION		DATE	FILE NAME . WATER AND SEWER MAIN EXTENSION PROFILE SHEET

JORDAN OVERLOOK

LOTS 1 THRU 10 & OPEN SPACE LOT 11
CONTRACT NO. 24-4483-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
3 OF 5



WATER MAIN TABULATION CHART					
W.M. STA.	APPURTENANCE	northing	EASTING		
	8" & 4" WATER MAIN: JO	rdan river road			
0+00.00	O"XO" TAPPING SLEEVE	570760.62	1359279.40		
0+03.00	O' TAPPING VALVE	570763.37	1359200.59		
1+73.77	Ø"X6" F.H. TEE	570920.07	1359340.40		
3+09.94	1/0 H.B.	571118.42	1359434.41		
4+65.01	1/32 H.B.	571107.93	1359403.99		
5+35.06	4* H.B.	571243.57	1359362.75		
5+46.07	Ø'X6" F.H. TEE	571251.99	1359355.67		
5+56.00	8"X4" REDUCER	571259.59	1359349.28		
5+62.00	4" VALVE	571264.10	1359345.42		
Ø+34.07	1-1/2" DRAIN	571472.46	1359170.36		
0+30.17	4" PLUG & BUTTRESS	571475.60	1359167.73		

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE				
LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2	

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE				
LOT NUMBER	ADDRE55	LOCATION DIMENSION 1	LOCATION DIMENSION 2	
<u> </u>				

WATER MAIN: JORDAN RIVER ROAD

- WATER MAIN NOTES: 1. EXCEPT FOR THE 8"X8" TAPPING SLEEVE & VALVE (WM STA. 0+00.00 TO WM STA. 0+03.00; JORDAN RIVER ROAD), ALL WATER MAINS SHALL BE
 - AWA C900 PVC PIPE.

 2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.

 3. DEFLECTION COUPLINGS SHALL BE CERTAIN—TEED PVC HIGH DEFLECTION COUPLINGS.

 - 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING

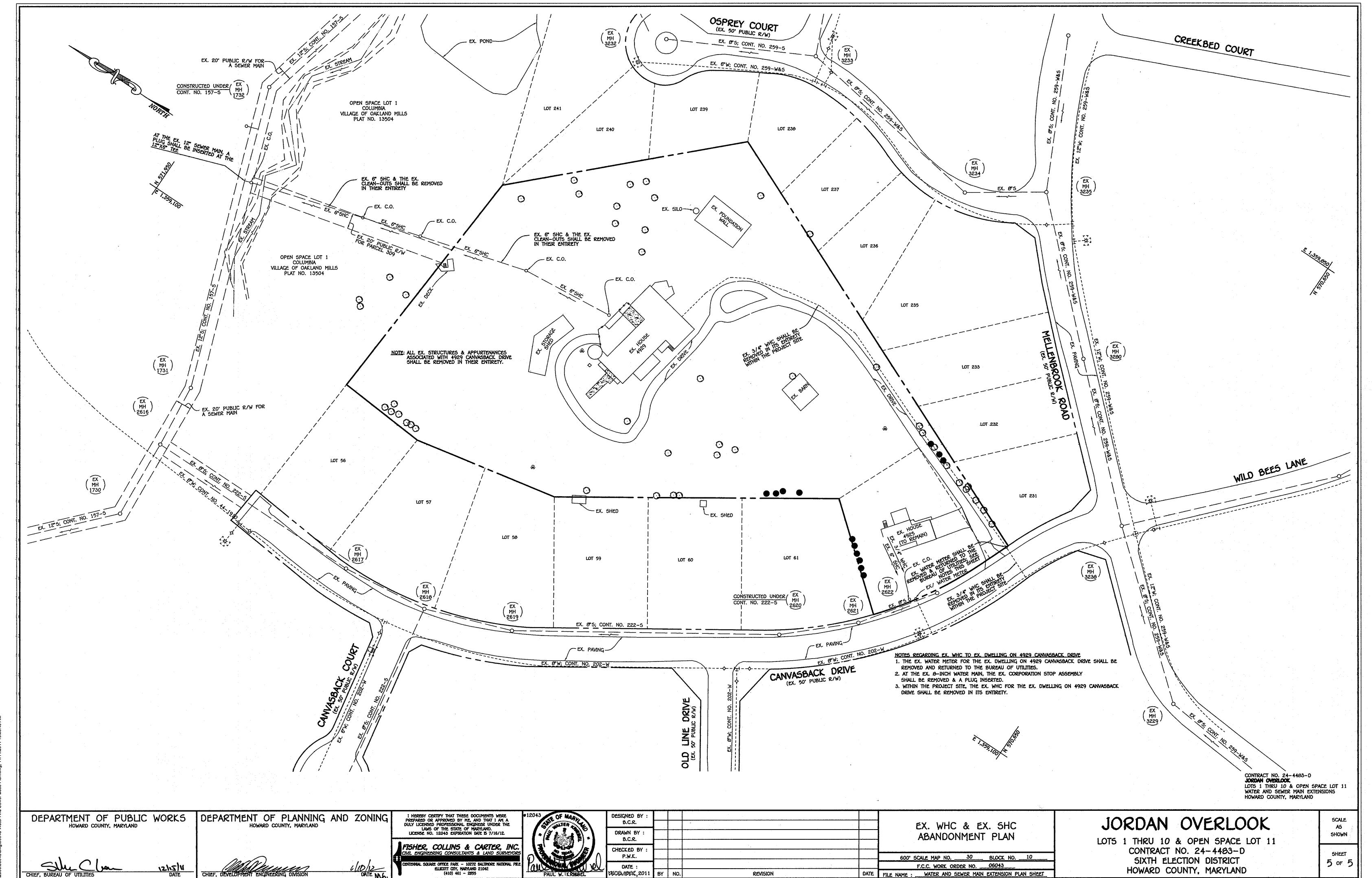
CONTRACT NO. 24-4403-D
JORDAN OVERLOOK
LOTS 1 THRU 10 & OPEN SPACE LOT 11
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROPESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO, 12043 EXPIRATION DATE IS 7/16/12. DEPARTMENT OF PUBLIC WORKS DEPARTMENT OF PLANNING AND ZONING B.C.R. WATER MAIN HOWARD COUNTY, MARYLAND HOWARD COUNTY, MARYLAND DRAWN BY : PROFILE & CHART B.C.R. FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CHECKED BY : P.W.K. 600' SCALE MAP NO. 30 BLOCK NO. 10 F.C.C. WORK ORDER NO. 06043 DATE FILE NAME : WATER AND SEWER MAIN EXTENSION PROFILE SHEET DECEMBER, 2011 BY NO. REVISION

JORDAN OVERLOOK

LOTS 1 THRU 10 & OPEN SPACE LOT 11 CONTRACT NO. 24-4463-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

5CALE SHOWN SHEET



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