

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. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 1'.
- 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 AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - (410) 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - (410) 850-4620
 - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL - (410) 787-9068
 - MISS. UTILITY - 1-800-257-7777
 - CHESAPEAKE AND POTOMAC TELEPHONE CO. (410) 795-1390
 - COLONIAL PIPELINE CO. - (410) 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT 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.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT 410-313-2450 AT LEAST FIVE (5) 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 18.141(G) OF THE HOWARD COUNTY CODE.

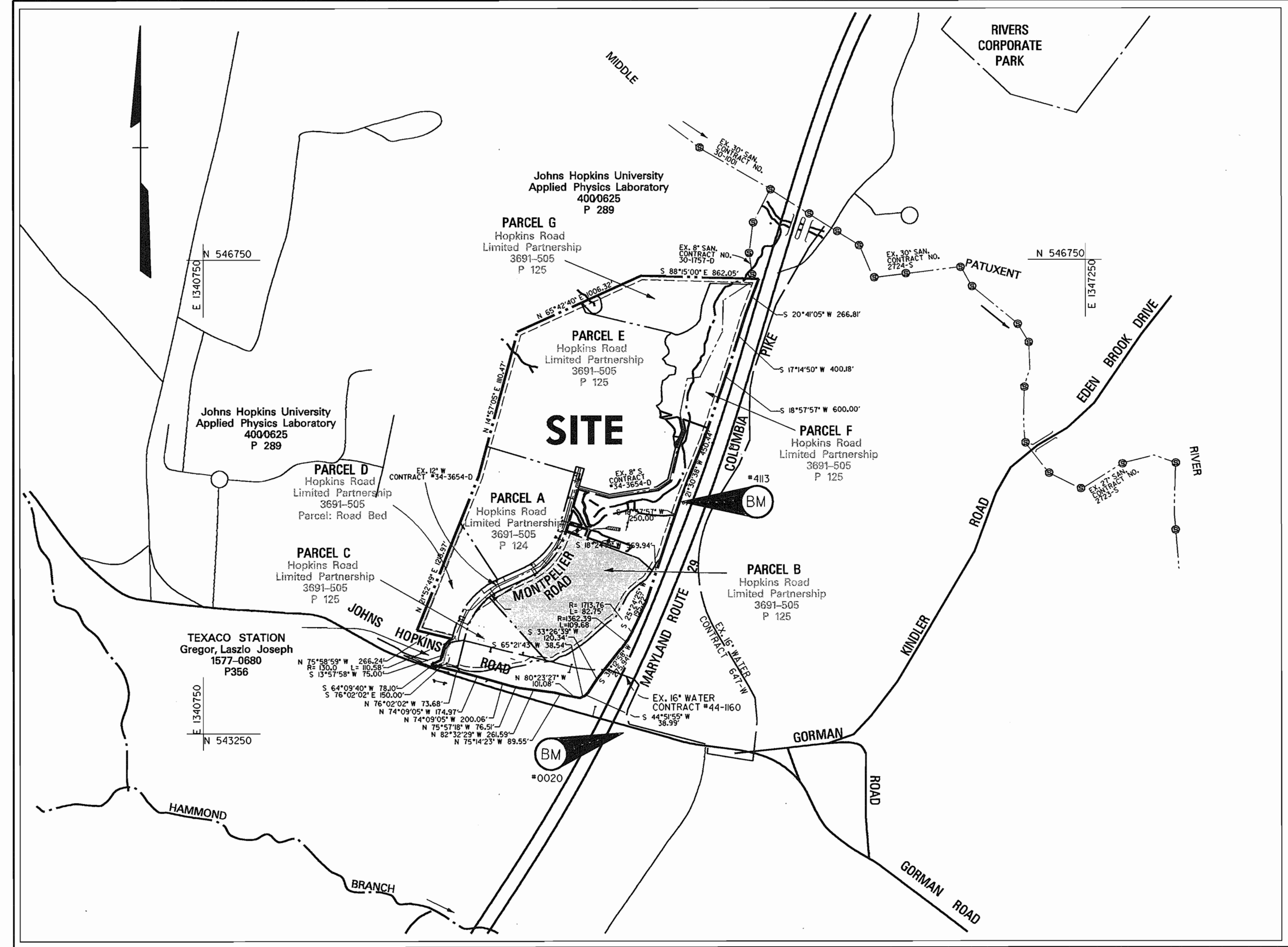
Contract No. 44-3702-D

Trammell Crow
Office Building

at Montpelier Research Park - Parcel B
WATER CONSTRUCTION PLANS
Howard County, Maryland Department of Public Works

QUANTITIES					
AS-BUILT					
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER / SUPPLIER	
8" W. D.I.P	625 LF	508 LF	Tyton Joint Class 52	Griffin Pipe Products Co.	
6" W. D.I.P	160 LF	155 LF	Tyton Joint Class 52	Griffin Pipe Products Co.	
16" x 8" TAPPING SLEEVE & VALVE	1	1	5" angleless steel	Mueller Co.	
18 HB	1	1	Ductile Iron	Tyler/Union	
8" x 8" TEE	1	1	Radiant Seal Guts Y.	Tyler/Union	
8" x 6" TEE	1	1	Ductile Iron	Tyler/Union	
6" x 6" TEE	1	1	Ductile Iron	Tyler/Union	
6" CAP	1	1	Ductile Iron	Tyler/Union	
6" CAP	2	1	Ductile Iron	Tyler/Union	
FIRE HYDRANT	2	2	Ductile Iron	Mueller Co.	

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



PART II - 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' 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 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 THE PLANS OR IN THE SPECIFICATIONS.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3 INCH THROUGH 12 INCH FOR WATER AND OTHER LIQUIDS.
- ALL EXISTING VALVES TO BE CLOSED WHEN CONNECTION TO THE SYSTEM IS MADE.

BENCHMARK

DESCRIPTION

#413	N 544492.88 E 134417.32 ELEVATION = 391.65
	CONCRETE MONUMENT 4' WEST OF TOP OF BANK OFF SOUTH BOUND LANE OF MARYLAND ROUTE 29 AT SURFACE.
#0020	N 543170.96 E 1343822.16 ELEVATION = 403.62
	STANDARD MBCS SURVEY DISC SET ON CONCRETE MONUMENT, FLUSH WITH THE GROUND.

VICINITY MAP

SCALE: 1" = 600'
CONTRACT NO. 44-3702-D

WATER CODE:	E21
TEST GRADIENT:	700
SEWER CODE:	6440000

SHEET INDEX	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	WATER PLAN
3	WATER PROFILE

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT
Cheryl Simmons 7/14/98
SIGNATURE DATE

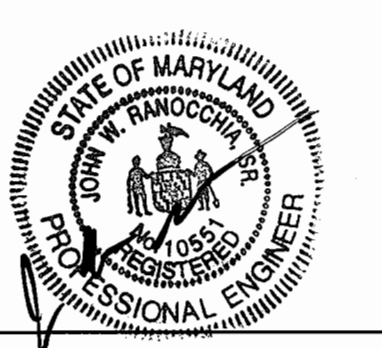
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
APPROVED *John R. Rehnert* 7/14/98
HOWARD S.C.D. DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-98-137.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert M. Benner 7-8-98
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John R. Rehnert 7/16/98
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, 200 East Pennsylvania Avenue
Landscape Architects, Towson, Maryland 21286
Engineers, Surveyors & Environmental Professionals 410 296 3333
Fax 296 4705



DESIGN BY:	JLS	RFW	As-Built	6/10/98
DRAWN BY:	JMH			
CHECKED BY:	JWR			
DATE:	May 15, 1998	BY	NO.	REVISION

600 SCALE MAP NO. 41	BLOCK NO. 17
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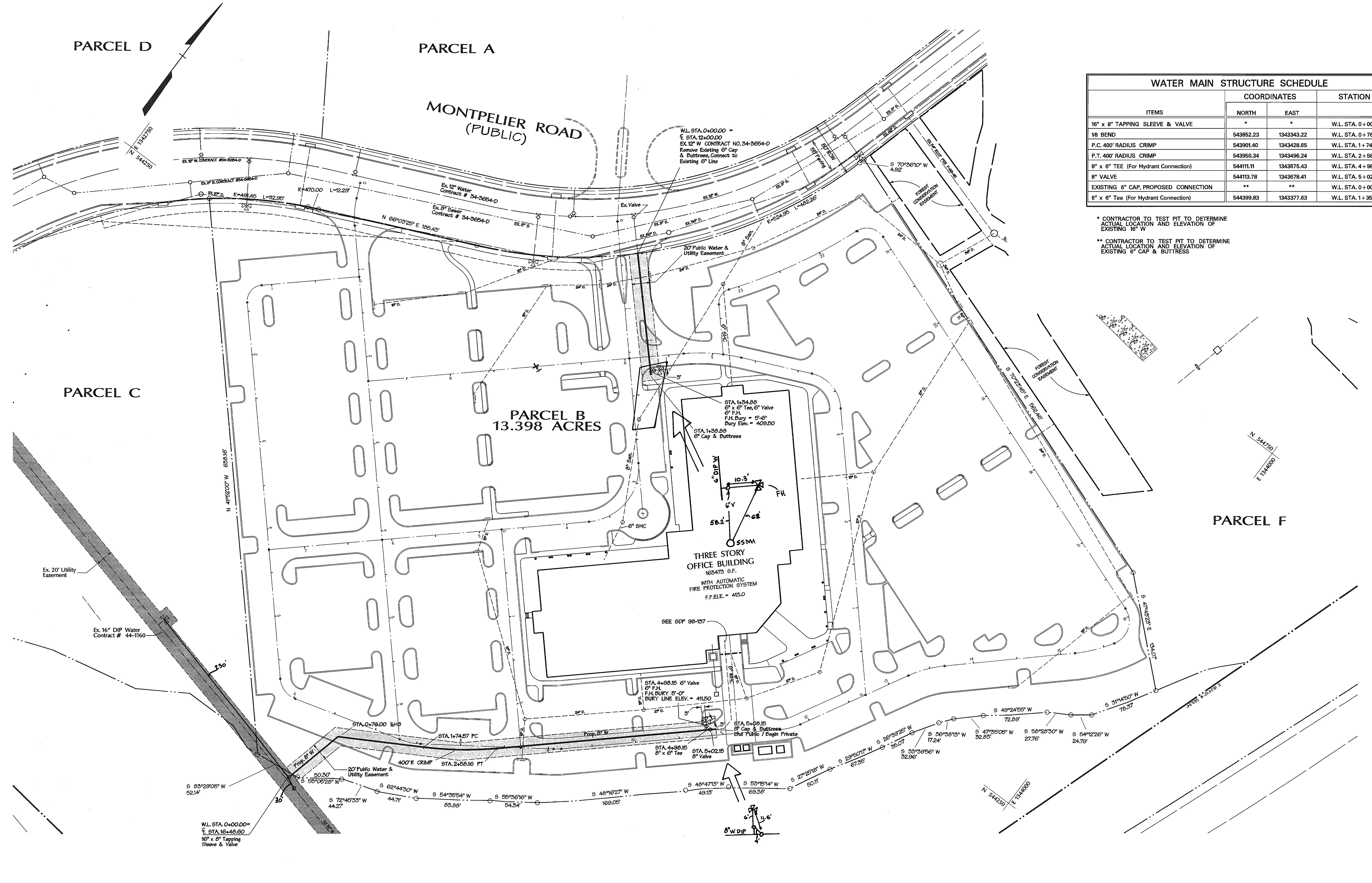
WATER AS-BUILTS

Trammell Crow
Office Building
at Montpelier Research Park - Parcel B
HOWARD COUNTY MARYLAND 5th Elec. Dist.

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH RD, STE 200, COLUMBIA, MD 21045
CONTRACT NO. 44-3702-D

DEVELOPER: TRAMMELL CROW COMPANY
6701 DEMOCRACY BLVD., STE. 410, BETHESDA, MD 20871

AS SHOWN
SHEET
1 OF 3



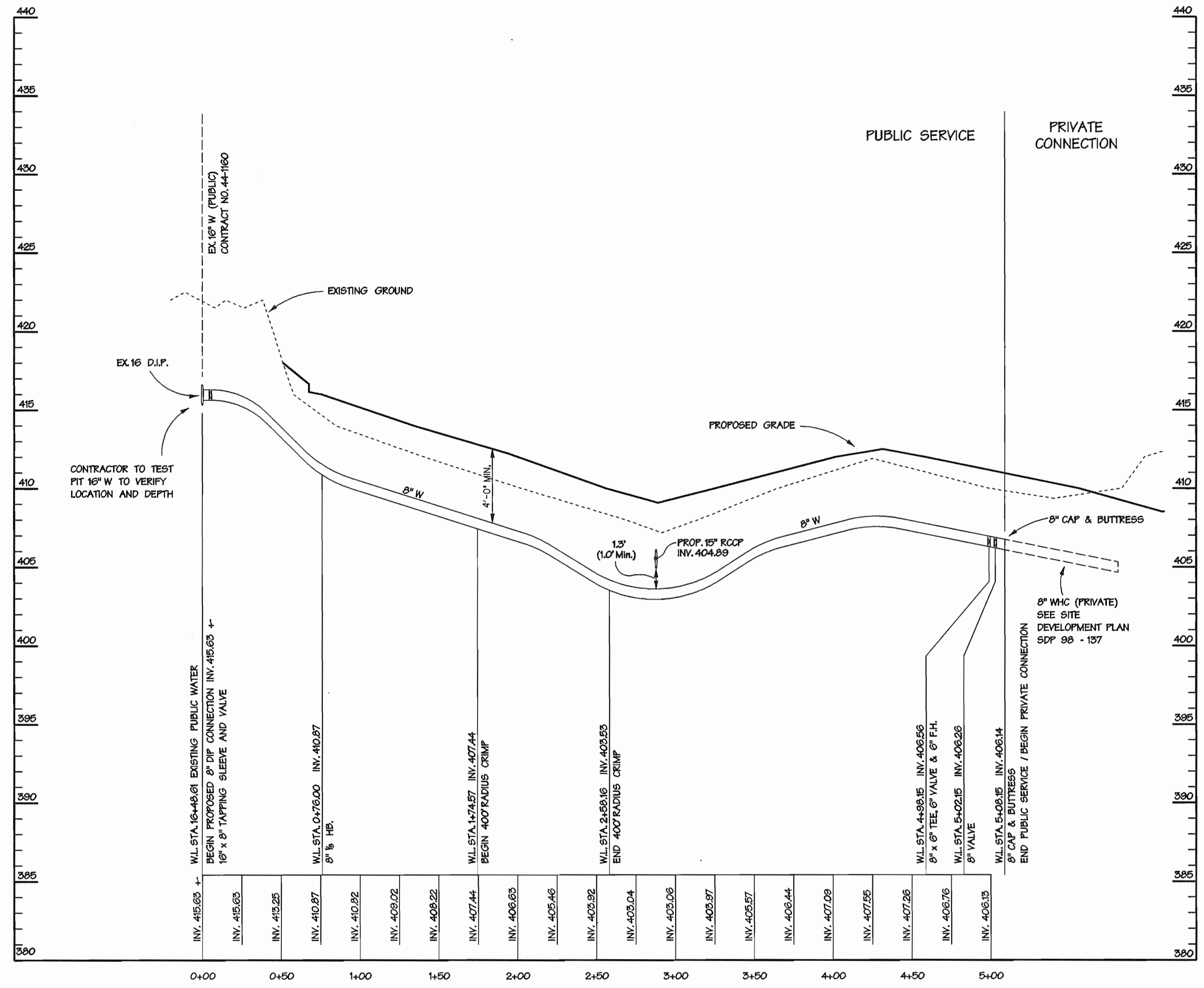
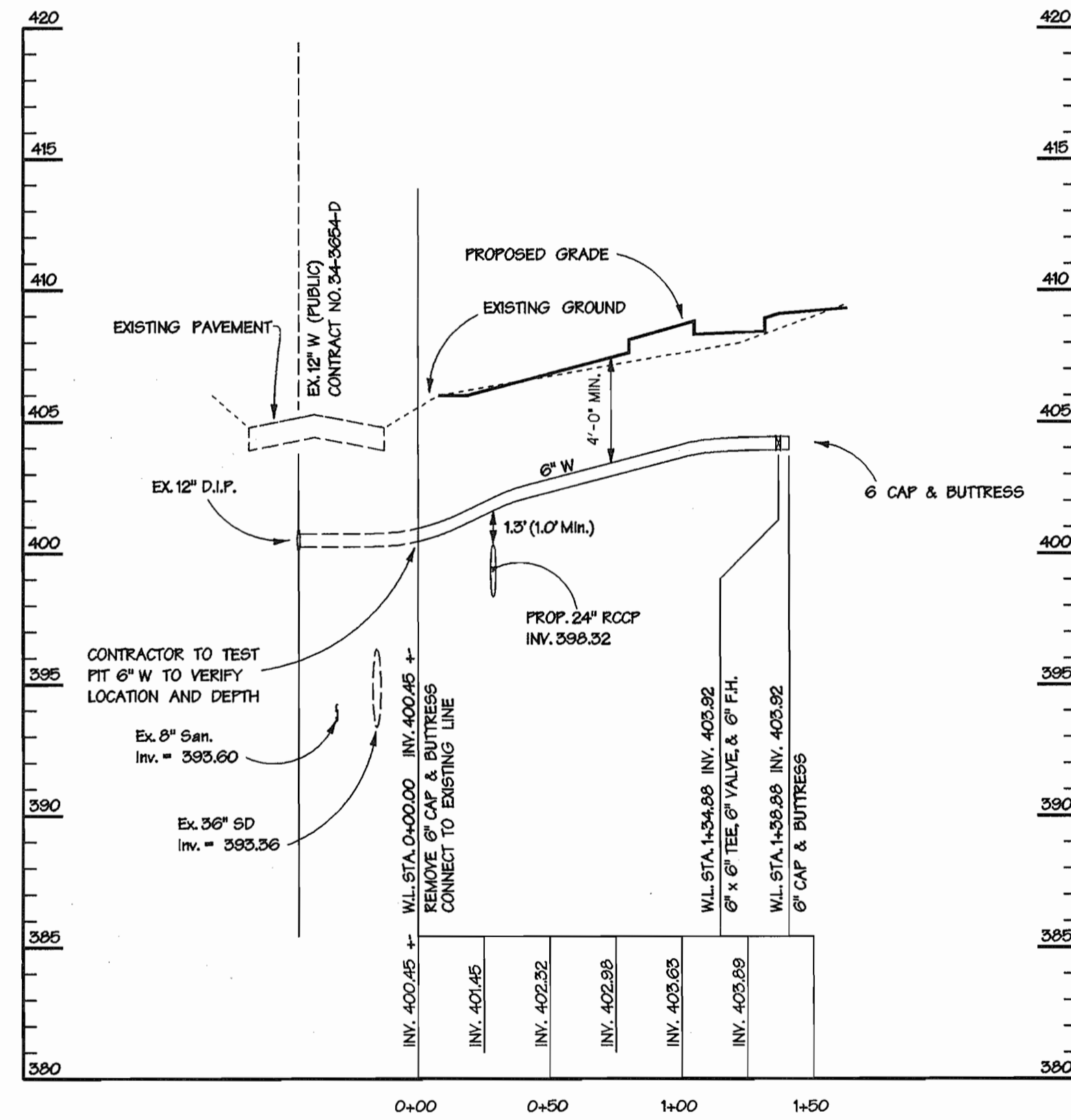
ITEMS	COORDINATES		STATION
	NORTH	EAST	
16" x 8" TAPPING SLEEVE & VALVE	*	*	W.L. STA. 0+00.00
18 BEND	543852.23	1343343.22	W.L. STA. 0+76.00
P.C. 400' RADIUS CRIMP	543901.40	1343428.65	W.L. STA. 1+74.57
P.T. 400' RADIUS CRIMP	543950.34	1343496.24	W.L. STA. 2+58.16
8" x 6" TEE (For Hydrant Connection)	544111.11	1343675.43	W.L. STA. 4+98.90
8" VALVE	544113.78	1343678.41	W.L. STA. 5+02.90
EXISTING 6" CAP, PROPOSED CONNECTION	**	**	W.L. STA. 0+00.00
6" x 6" Tee (For Hydrant Connection)	544399.83	1343377.83	W.L. STA. 1+35.85

* CONTRACTOR TO TEST PIT TO DETERMINE ACTUAL LOCATION AND ELEVATION OF EXISTING 16" W

** CONTRACTOR TO TEST PIT TO DETERMINE ACTUAL LOCATION AND ELEVATION OF EXISTING 6" CAP & BUTTRESS

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF - BUREAU OF UTILITIES - DATE <i>R. B. B. 7-8-98</i>	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE <i>M. P. 7/16/98</i>	DMW Daft · McCune · Walker, Inc. A Team of Land Planners, 200 East Pennsylvania Avenue Landscape Architects, Towson, Maryland 21286 Engineers, Surveyors & Environmental Professionals 410 296 3333 Fax 296 4705	DESIGN BY: JLS DRAWN BY: JMH CHECKED BY: JWR DATE: May 15, 1998	REVISION As-Built 6/19/98	WATER PLAN	Trammell Crow Office Building at Montpelier Research Park - Parcel B HOWARD COUNTY MARYLAND OWNER: HOPKINS ROAD LIMITED PARTNERSHIP 9030 RED BRANCH RD., STE 200, COLUMBIA, MD 21045 CONTRACT NO. 44-3702-D DEVELOPER: TRAMMELL CROW COMPANY 6701 DEMOCRACY BLVD., STE. 410, BETHESDA, MD 20817	1" = 50' SHEET 2 OF 3
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Mon Jun 29 13:55:55 1998 d:\p17\171677167.dwg



MD DEP. OF PUBLIC WORKS 1719339-1 1998 (03/07/97) (04/7/98)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John Brown 7-8-98
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John Brown 7/10/98
CHIEF - DEVELOPMENT ENGINEERING DIVISION I DATE

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A Team of Land Planners, Landscape Architects, Engineers, Surveyors, & Environmental Professionals

200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax 296 4705



DESIGN BY:	JLS
DRAWN BY:	JMH
CHECKED BY:	JWR
DATE:	May 15, 1998

BY	NO.	REVISION	DATE

WATER PROFILE

600 SCALE MAP NO. 41 BLOCK NO. 17

Trammell Crow
Office Building
at Montpelier Research Park - Parcel B
HOWARD COUNTY MARYLAND

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH RD., STE 200, COLUMBIA, MD 21045

DEVELOPER: TRAMMELL CROW COMPANY
6701 DEMOCRACY BLVD., STE 410, BETHESDA, MD 20817

CONTRACT NO. 44-3702-D

SCALE:
AS SHOWN

SHEET
3 OF 3