

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" D.I.P.	2256'			
8" D.I.P.	260'			
6" D.I.P.	178'			
2" COPPER	12'			
12" X 6" TEE	7			
12" X 8" TEE	2			
12" X 12" TEE	2			
8" X 6" TEE	2			
6" X 2" TEE	1			
12" VALVE	5			
8" VALVE	2			
6" VALVE	10			
12" CAP	4			
8" CAP	1			
6" CAP	5			
6" FIRE HYDRANT	5			
12" X 12" TAPPING SLEEVE, VALVE	2			
1/2" BEND	8			
1/2" BEND	1			
8" X 6" REDUCER	1			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				

SHEET INDEX	
NO.	DESCRIPTION
1 OF 4	TITLE SHEET
2 OF 4	WATER PLAN
3 OF 4	WATER MAIN - PROFILES
4 OF 4	WATER MAIN PLAN & PROFILE

12" WATER MAIN PHASE 1 COLUMBIA ROUTE 175 COMMERCIAL

SECTION 1 AREA 2

PARCEL A & O.S. LOT 3

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 44 - 3846 - D

GENERAL NOTES

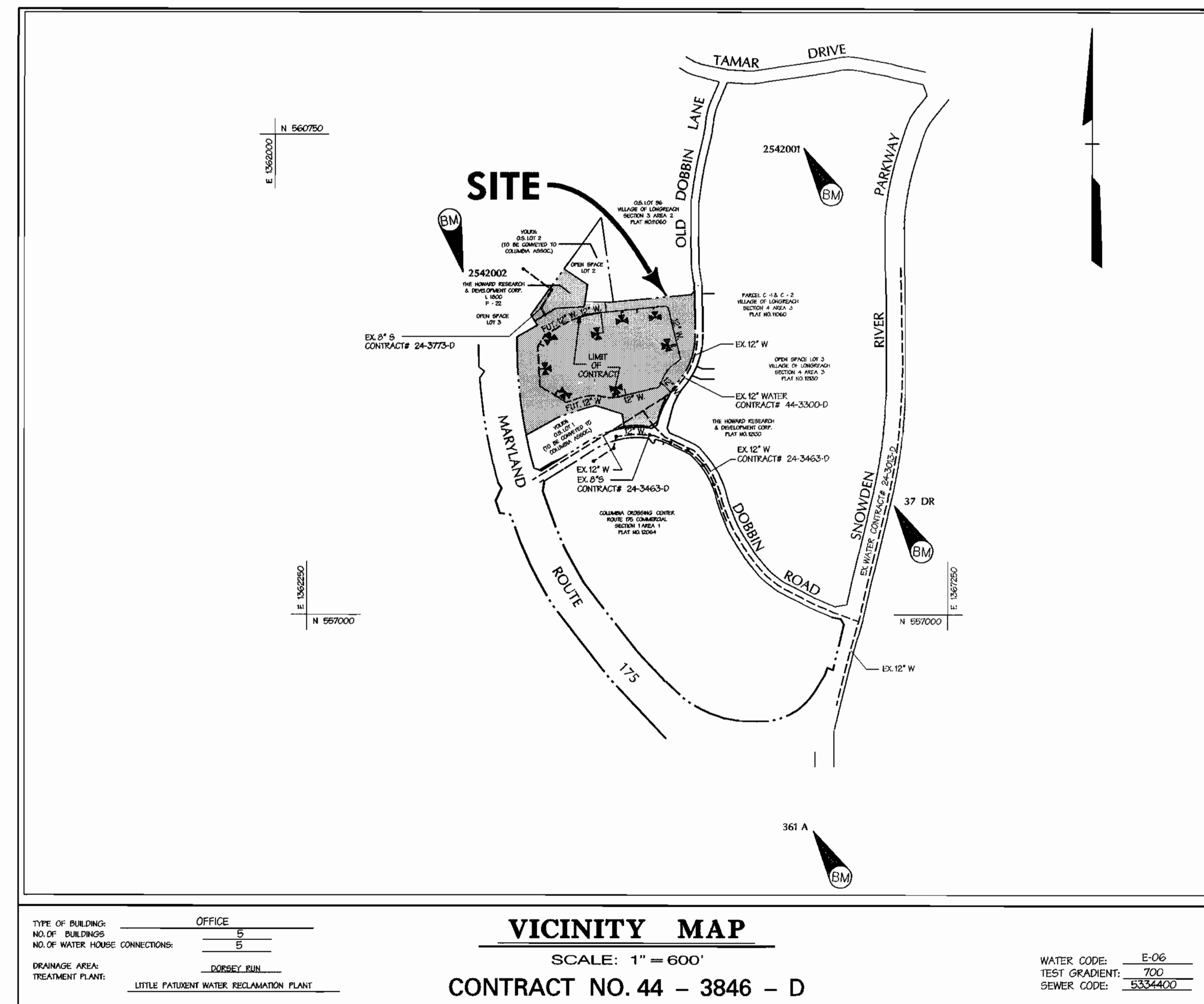
- PART I - GENERAL**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S 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 FITS 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 FITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST FITS 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) 531-2633
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - (410) 250-4620
 - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL - (410) 787-9068
 - MISS UTILITY - 1-800-227-7777
 - BELL ATLANTIC - 1-800-446-9266
 - COLONIAL PIPELINE CO. - (410) 795-1390
 - 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 18.14(a) OF THE HOWARD COUNTY CODE.

- 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

- STATION 2542001 (CONCRETE MONUMENT)
ELEV. 426571 (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED 1000'+ WEST OF RT. 175
ON TRANSMISSION LINE AT G&E TOWER 19-E
NEAR HANOVERS RESTAURANT ENTRANCE
- STATION 2542002 (CONCRETE MONUMENT)
ELEV. 363.638 (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED 1000'+ WEST OF RT. 175
ON TRANSMISSION LINE AT G&E TOWER 19-E
NEAR HANOVERS RESTAURANT ENTRANCE
- STATION 37 DR (11/4" REBAR)
N.1698811794, E.416566.725' (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED 0.45+ MILES NORTH OF RT. 175
AND 46'+ EAST OF THE EAST CURB OF SNOWDEN
RIVER PARKWAY
- STATION 361A (CONCRETE MONUMENT)
N.169205.9263, E.416313.5119 (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE
INTERSECTION OF SNOWDEN RIVER PARKWAY AND RT. 175
3'+ FROM CURB AND 57'+ FROM END OF GUARDRAIL



VICINITY MAP
SCALE: 1" = 600'
CONTRACT NO. 44 - 3846 - D

TYPE OF BUILDING: OFFICE
NO. OF BUILDINGS: 5
NO. OF WATER HOUSE CONNECTIONS: 5

DRAINAGE AREA: DORSEY RUN
TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT

WATER CODE: E-06
TEST GRADIENT: 700
SEWER CODE: 5334400

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-00-75

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Signature: Cheryl Simmons, Date: 3/31/00

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

APPROVED: John J. Robertson, Date: 3/31/00

HOWARD S.C.D. DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Signature: Robert J. Reardon, Date: 3-23-00
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Signature: [Signature], Date: 4/2/00
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: SDS						
DRAWN BY: ADL						
CHECKED BY: JWR						
DATE: MAR. 1, 2000						
BY	NO.	REVISION	DATE	600 SCALE MAP NO.	36	BLOCK NO. 18

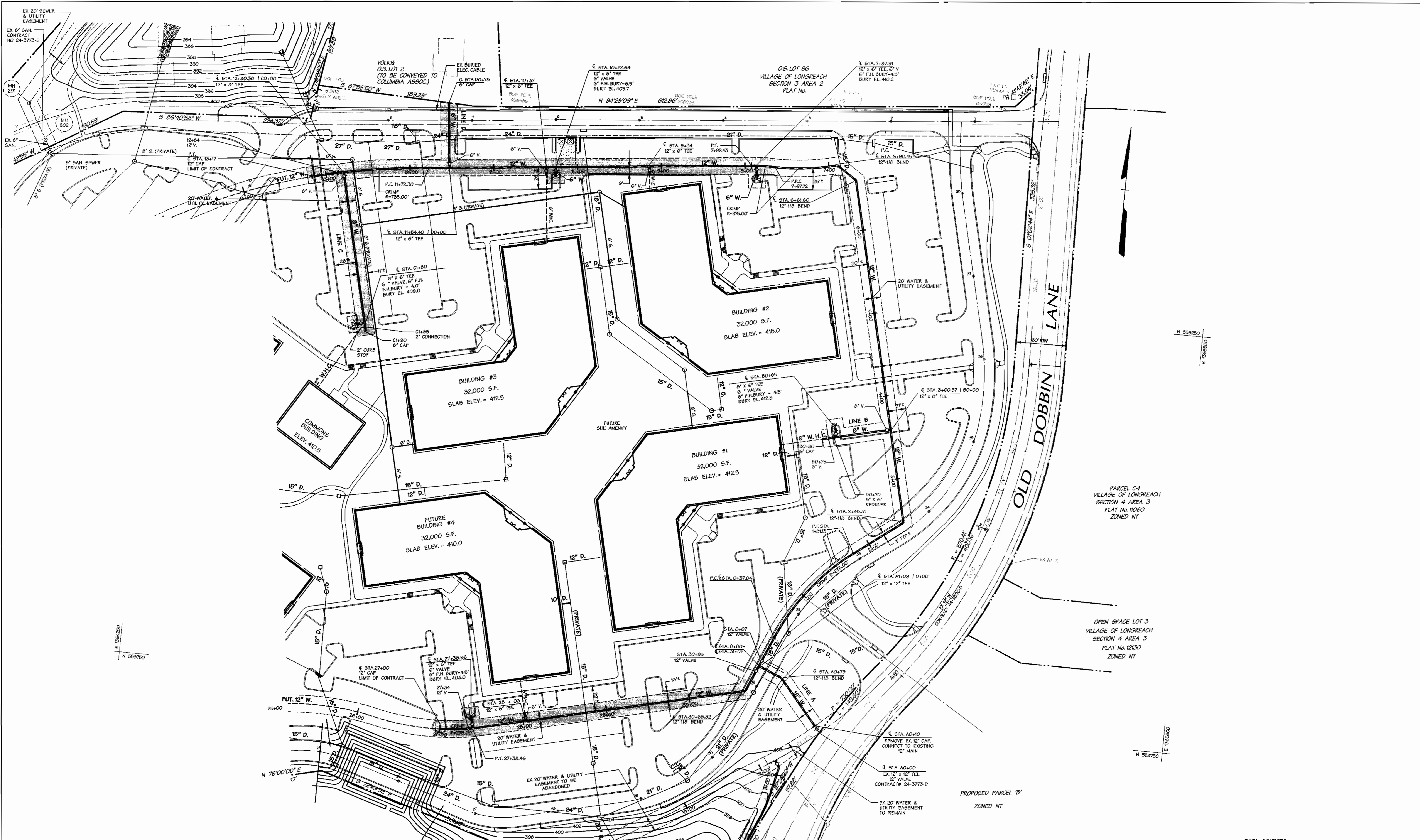
TITLE SHEET

**PHASE I
COLUMBIA
ROUTE 175 COMMERCIAL**

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

OWNER / PURCHASER: LIBERTY PROPERTY LTD. PTNP.
2145 GUILDFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

SCALE AS SHOWN
SHEET 1 OF 4



SEE SHEET 4 OF 4

DATA SOURCES:
TOPOGRAPHY & BOUNDARY TAKEN FROM PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

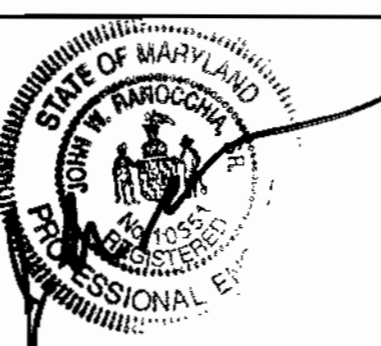
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Robert W. Bainger 3-23-00
CHIEF - BUREAU OF UTILITIES - DATE

John P. Dainger 4/3/00
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
Daft · McCune · Walker, Inc.

A Team of Land Planners, 200 East Pennsylvania Avenue
Townson, Maryland 21286
Engineers, Surveyors &
Environmental Professionals 410 296 3333 Fax 296 4705



DESIGN BY: SDS
DRAWN BY: ADL
CHECKED BY: JWR
DATE: MAR 1, 2000

BY	NO.	REVISION	DATE

WATER MAIN PLAN

600 SCALE MAP NO. 36 BLOCK NO. 18

**PHASE I
ROUTE 175 COMMERCIAL**

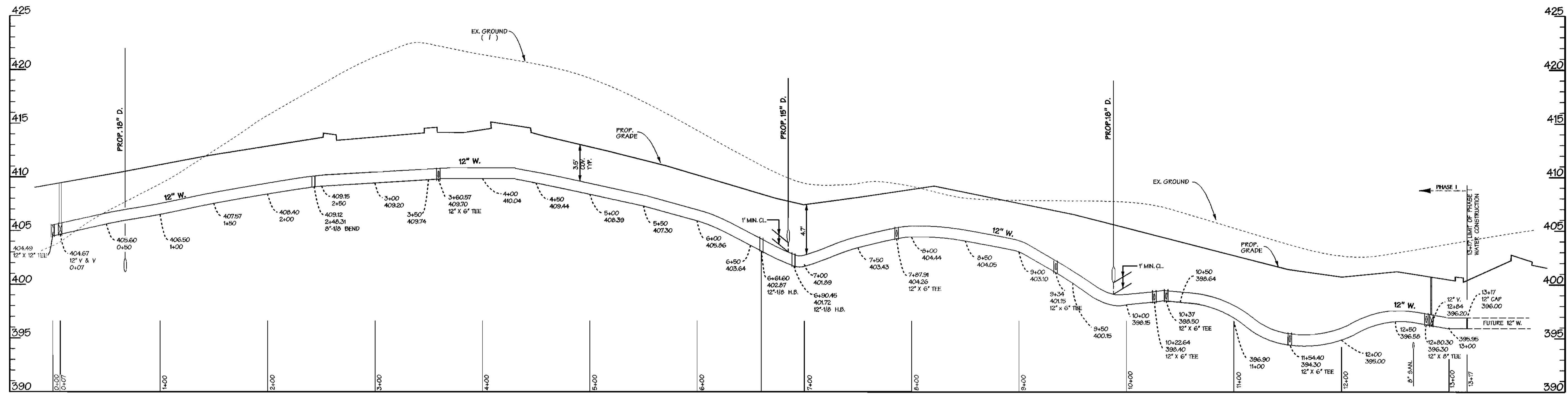
SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
9145 GUILFORD ROAD
SUITE 100 COLUMBIA, MD 21046

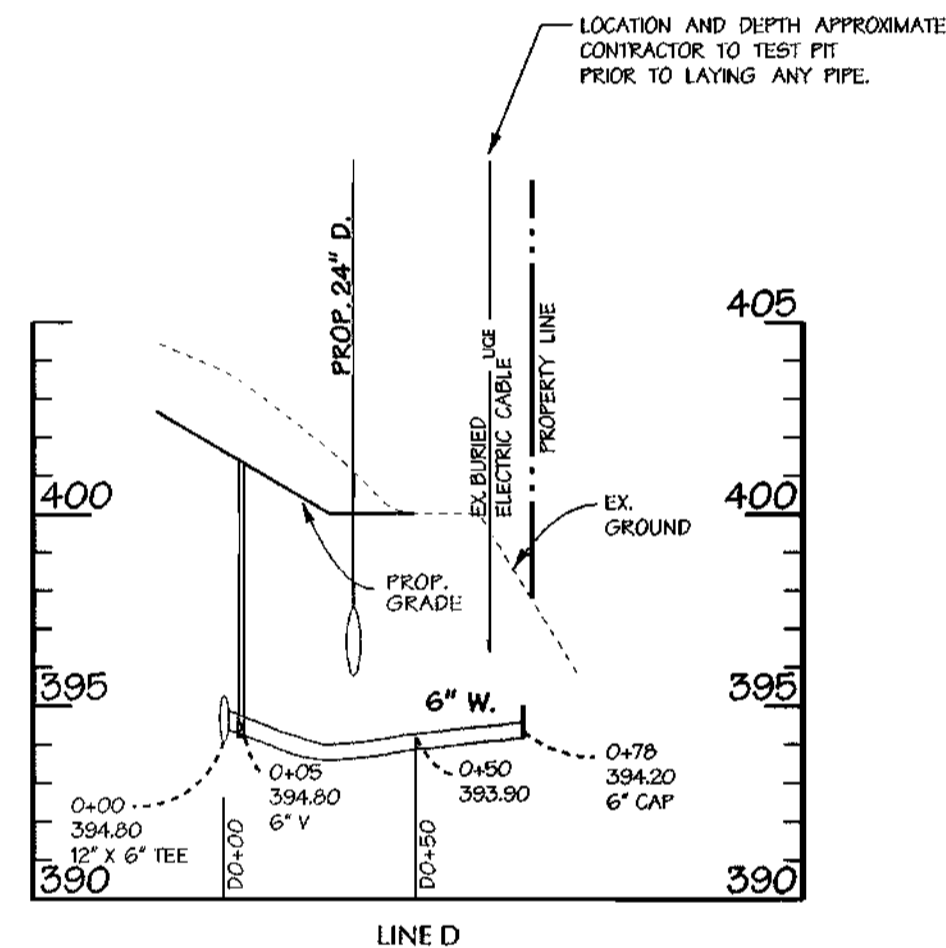
CONTRACT NO. 44-3846-D

SCALE
1" = 50'

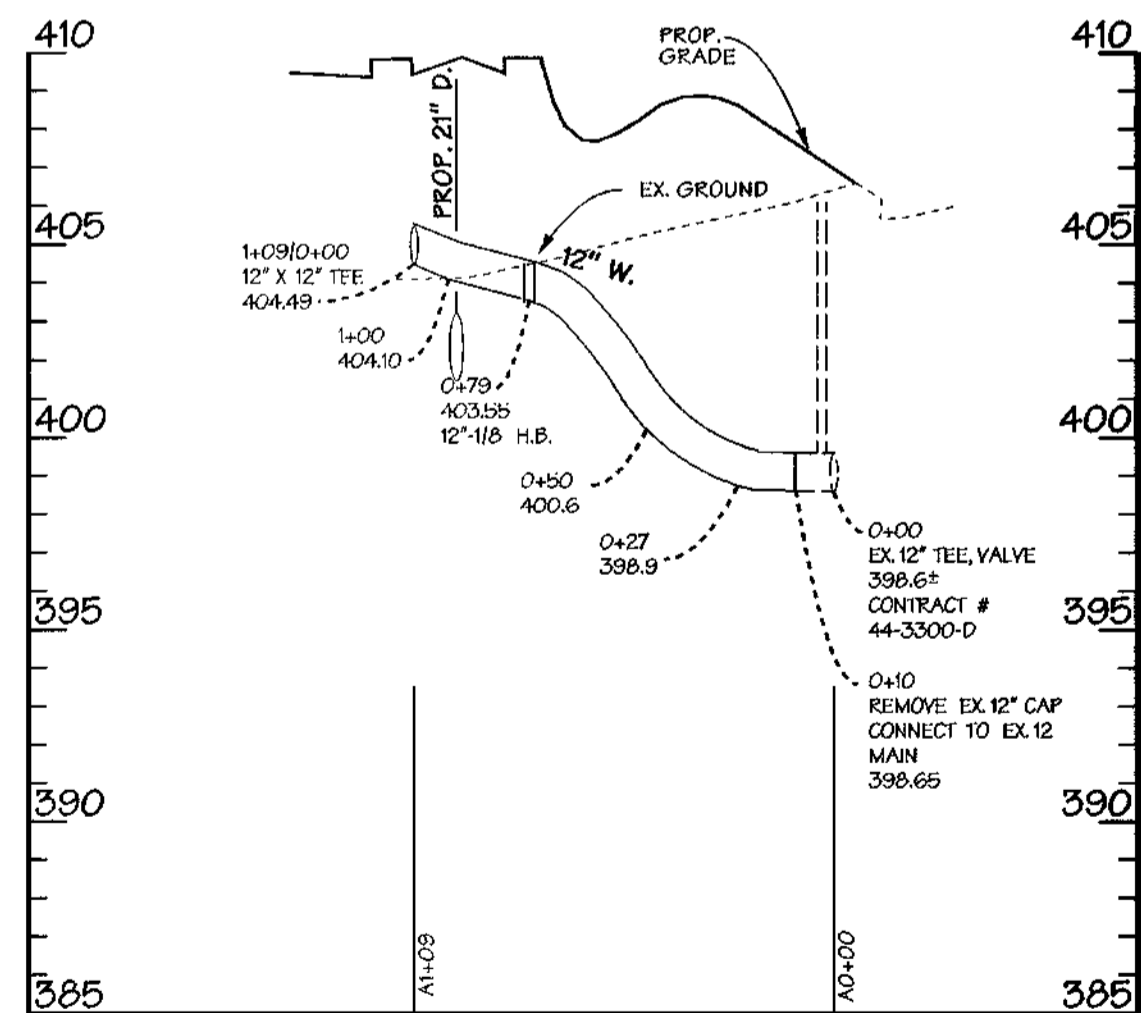
SHEET
2 OF 4



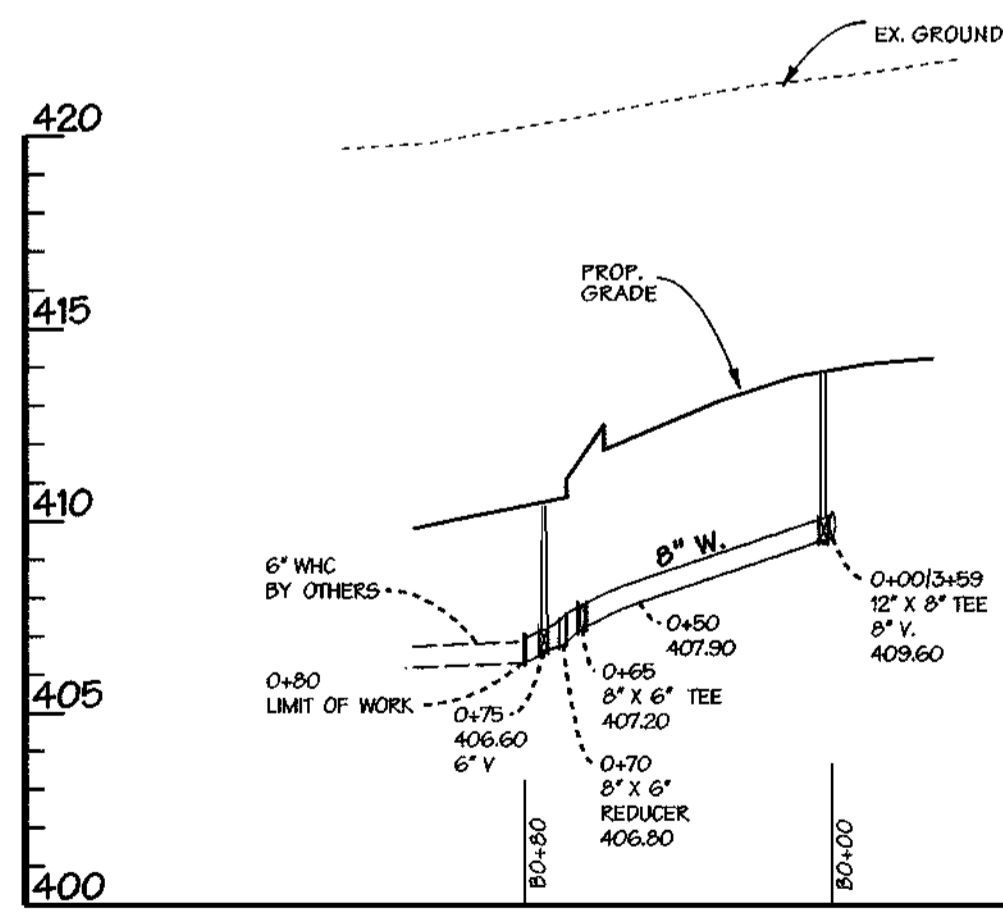
12" WATER PROFILE
SCALE: 1"=50' HORZ.
1"=5' VERT.



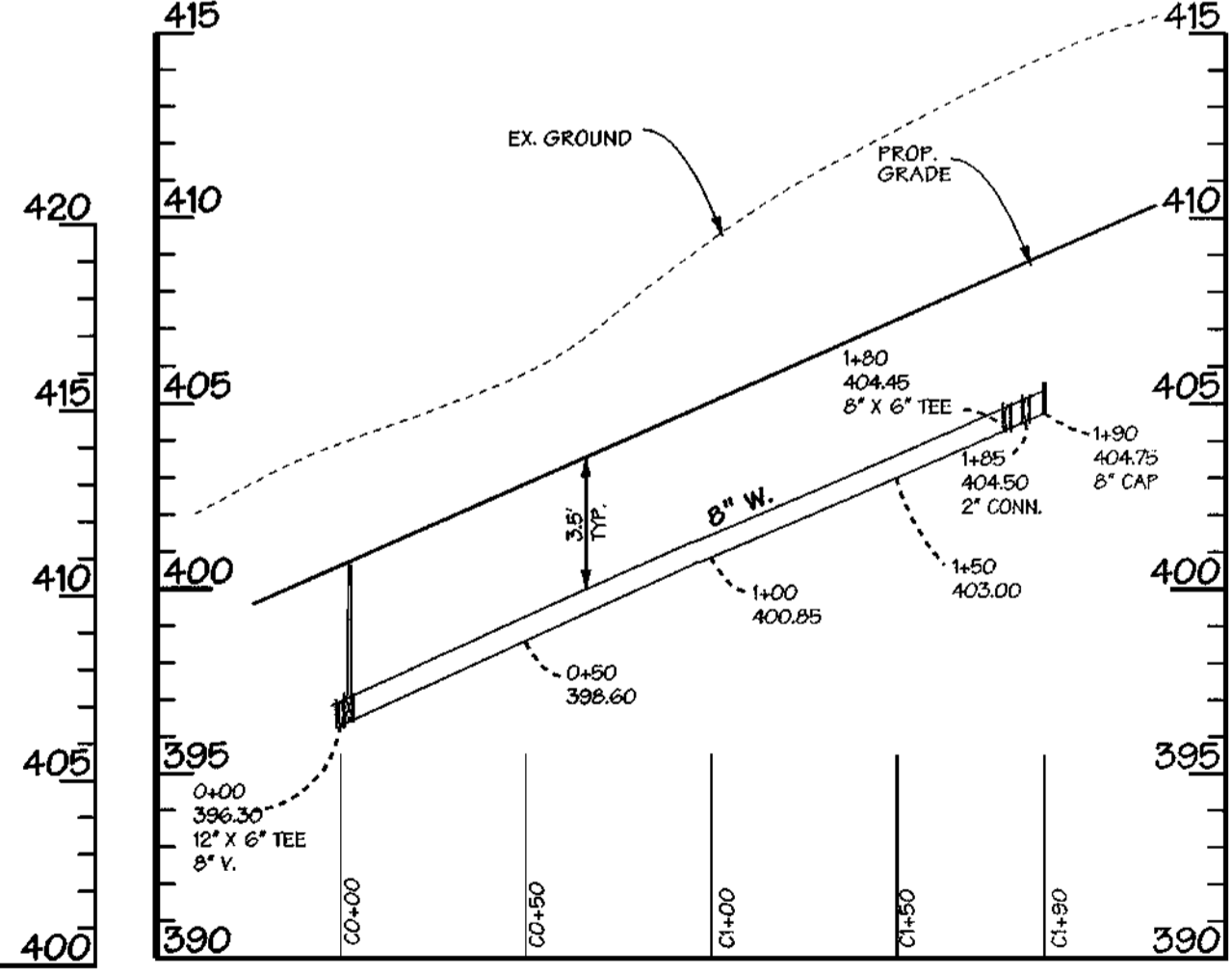
6" WATER PROFILE
SCALE: 1"=50' HORZ.
1"=5' VERT.



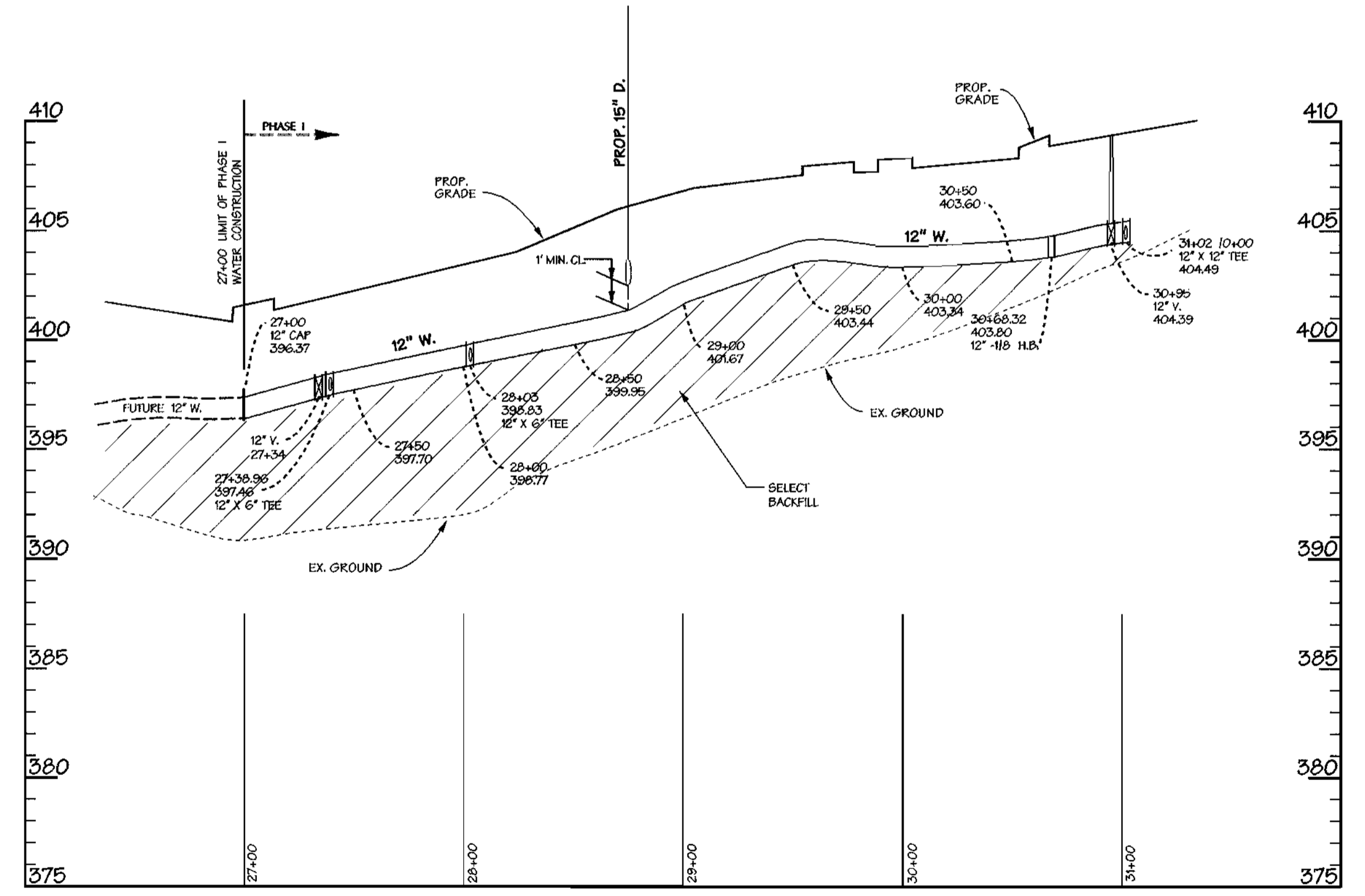
12" WATER PROFILE
SCALE: 1"=50' HORZ.
1"=5' VERT.



LINE B



LINE C



12" WATER PROFILE
SCALE: 1"=50' HORZ.
1"=5' VERT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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

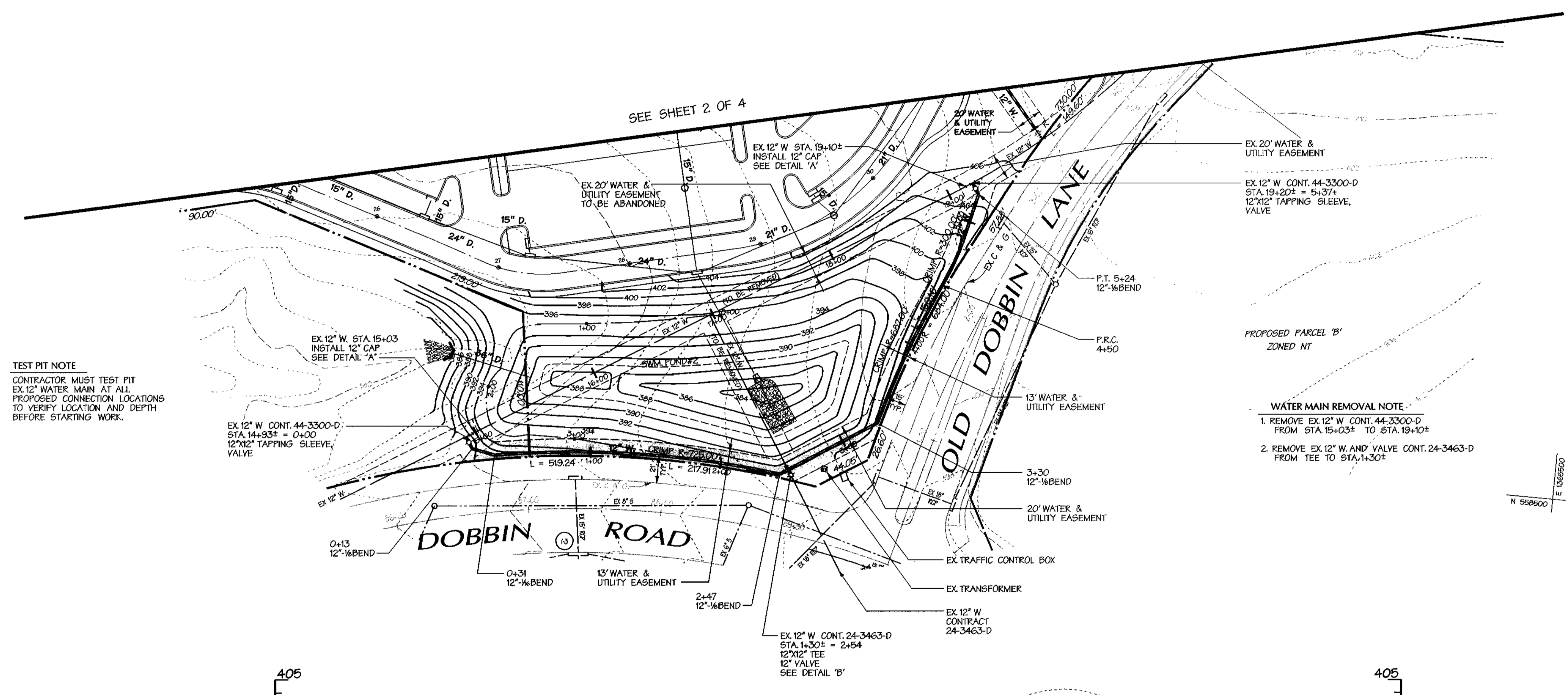


DESIGN BY: SDS
DRAWN BY: ADL
CHECKED BY: JWR
DATE: MAR. 1, 2000

WATER MAIN - PROFILES

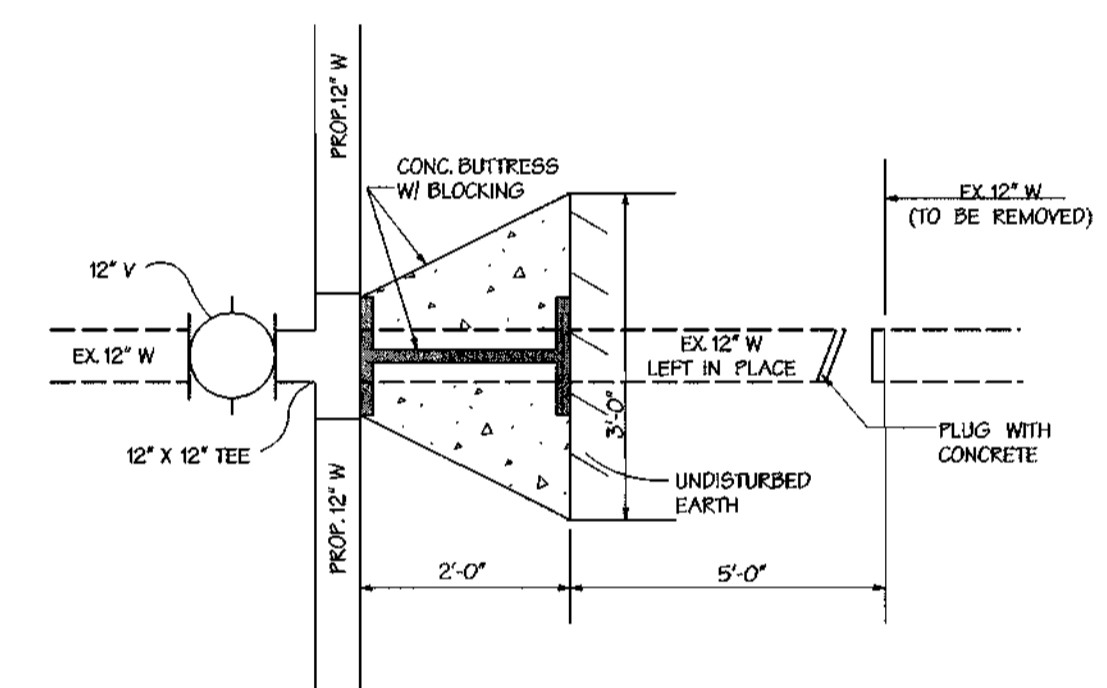
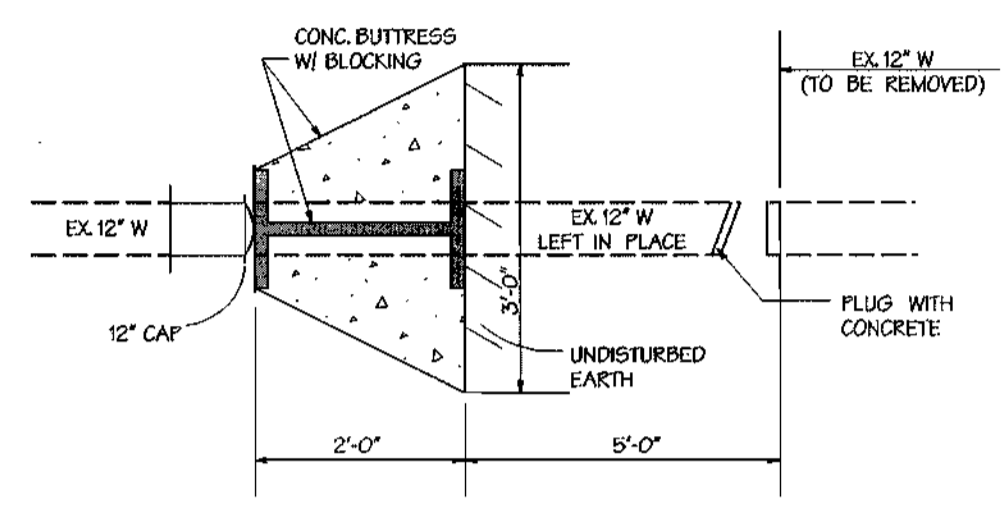
**PHASE I
ROUTE 175 COLUMBIA
SECTION 1 AREA 2**
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
9145 GULFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44-3846-D

AS
SHOWN
SHEET
3 OF 4



TEST PIT NOTE
CONTRACTOR MUST TEST PIT EX 12" WATER MAIN AT ALL PROPOSED CONNECTION LOCATIONS TO VERIFY LOCATION AND DEPTH BEFORE STARTING WORK.

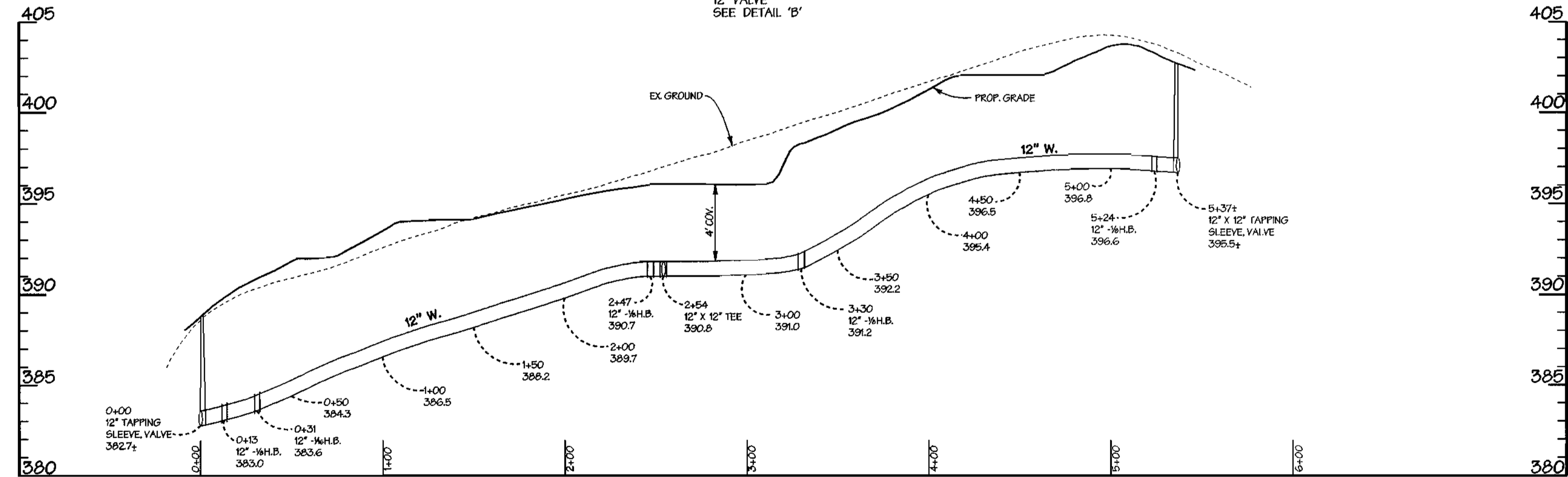
WATER MAIN REMOVAL NOTE
1. REMOVE EX 12" W CONT. 44-3300-D FROM STA. 15+03± TO STA. 19+10±
2. REMOVE EX 12" W AND VALVE CONT. 24-3463-D FROM TEE TO STA. 1+30±



SEQUENCE OF CONSTRUCTION FOR 12" WATER MAIN RELOCATION

1. INSTALL 12" TAPPING SLEEVE AND VALVE AT STA. 0+00 AND STA. 5+34.
2. CONSTRUCT 12" WATER MAIN RELOCATION FROM EACH TAPPING TEE TO VICINITY OF PROPOSED 12"X12" TEE.
3. CAP BOTH ENDS OF 12" WATER. FLUSH, CHLORINATE AND PRESSURE TEST 12" WATER.
4. SHUT DOWN NECESSARY VALVES, CUT IN 12"X12" TEE AND 12" VALVE AND CONNECT TO EXIST 12" WATER. BLOCK AND BUTTRESS IN ACCORDANCE WITH DETAIL 'B'.
5. WITH APPROPRIATE VALVES SHUT DOWN, INSTALL 12" CAPS ON EXIST 12" WATER. BLOCK AND BUTTRESS IN ACCORDANCE WITH DETAIL 'A'.
6. REMOVE EXIST. VALVES AND 12" WATER WHERE NOTED ON PLAN.

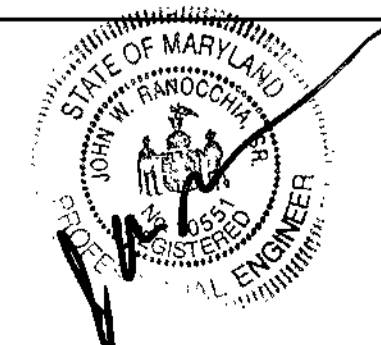
DATA SOURCES:
TOPOGRAPHY & BOUNDARY TAKEN FROM PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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



DESIGN BY:	SDS				
DRAWN BY:	ADL				
CHECKED BY:	JWR				
DATE:	MAR. 1, 2000	BY	NO.	REVISION	DATE

WATER MAIN PLAN & PROFILE

PHASE I COLUMBIA ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
9145 GUILFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

SCALE
1" = 50'
SHEET
4 OF 4

The Map 9 08/27/24 2000 p10000m10000m.dwg

The Map 9 08/27/24 2000 p10000m10000m.dwg

QUANTITIES				
AS-BUILT				
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" D.I.P.	109'			
8" D.I.P.	2396'			
6" D.I.P.	170'			
2" COPPER	12'			
8" X 6" TEE	9'			
8" X 8" TEE	2			
12" X 12" TEE	2			
12" X 8" REDUCER	2			
6" X 2" TEE	1			
12" VALVE	1			
8" VALVE	6			
6" VALVE	10			
12" CAP	2			
8" CAP	9			
6" CAP	5			
6" FIRE HYDRANT	5			
12" X 12" TAPPING SLEEVE, VALVE	2			
1/2" BEND	8			
1/4" BEND	1			
8" X 6" REDUCER	1			

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

8" WATER MAIN PHASE 1 COLUMBIA ROUTE 175 COMMERCIAL

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
 HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

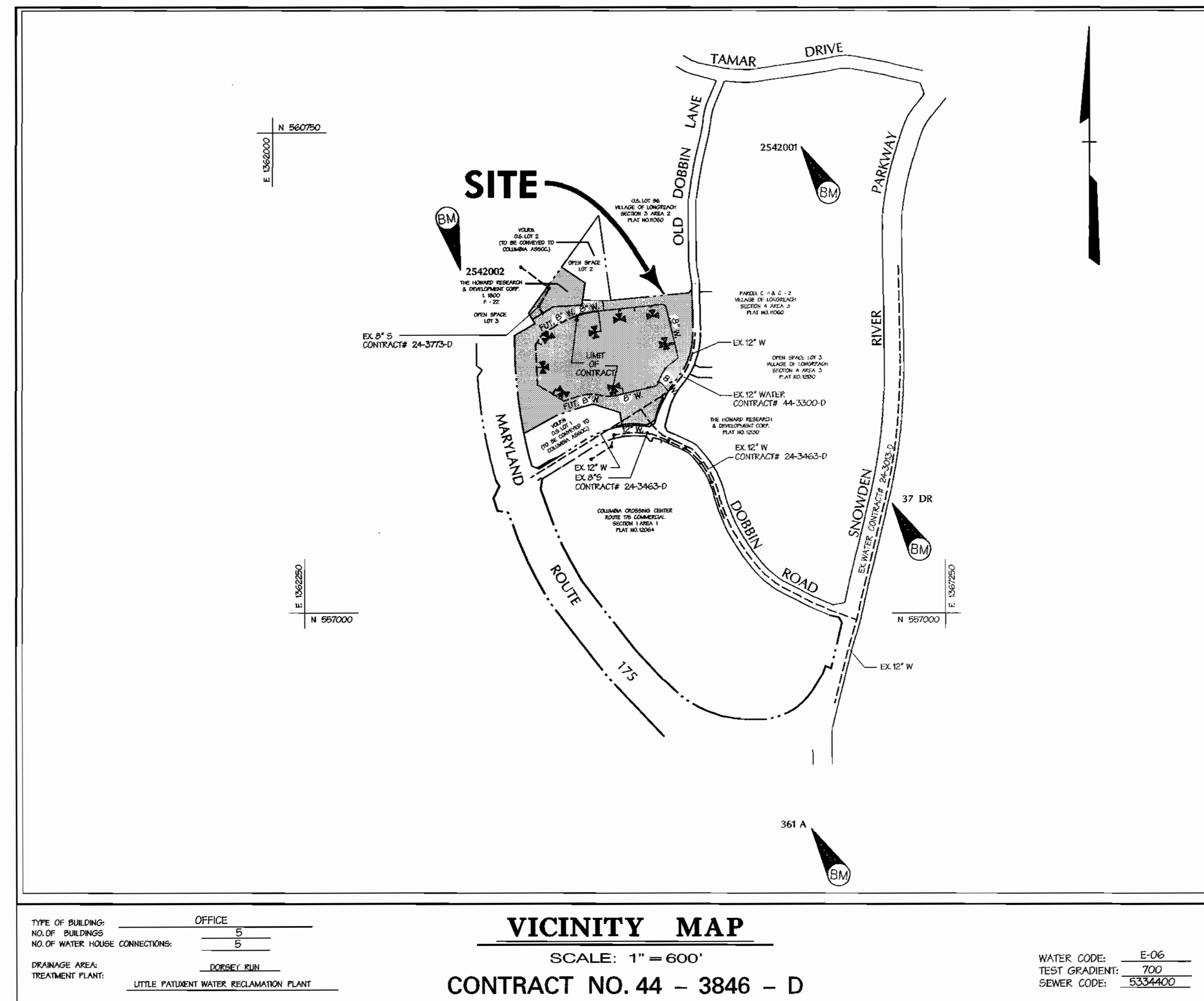
CONTRACT NO. 44 - 3846 - D

GENERAL NOTES

- PART I - GENERAL
- 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'.
 - 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
 - MESS UTILITY - 1-800-257-7777
 - BELL ATLANTIC - 1-800-446-5266
 - COLONIAL PIPELINE CO. - (410) 795-1390
 - BUREAU OF UTILITIES HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - (410) 313-4900
 - 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 IS 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 ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATERSEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 16.114(a) OF THE HOWARD COUNTY CODE.

- 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'-12" 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.

SHEET INDEX	
NO.	DESCRIPTION
1 OF 4	TITLE SHEET
2 OF 4	WATER PLAN
3 OF 4	WATER MAIN - PROFILES
4 OF 4	WATER MAIN PLAN & PROFILE



BENCHMARK

STATION	DESCRIPTION
STATION 2542001 (CONCRETE MONUMENT) ELEV. 426.971 (FOR VERTICAL CONTROL ONLY) STATION IS LOCATED ON DGE TRANSMISSION LINES 1060' ± S.W. OF DOBBIN ROAD	
STATION 2542002 (CONCRETE MONUMENT) ELEV. 363.638 (FOR VERTICAL CONTROL ONLY) STATION IS LOCATED 1000' ± WEST OF RT. 175 ON TRANSMISSION LINE AT GSE TOWER 19-E NEAR HANOVERS RESTAURANT ENTRANCE	
STATION 37 DR (114" REBAR) N169881.794, E416566.7165 (FOR HORIZONTAL CONTROL ONLY) STATION IS LOCATED 0.45± MILES NORTH OF RT. 175 AND 46± EAST OF THE EAST CURB OF SNOWDEN RIVER PARKWAY	
STATION 361A (CONCRETE MONUMENT) N169205.9263, E416313.5119 (FOR HORIZONTAL CONTROL ONLY) STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF SNOWDEN RIVER PARKWAY AND RT. 175 3± FROM CURB AND 57± FROM END OF GUARDRAIL	

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-00-75

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Cheyl Simmons 3/3/00
 SIGNATURE DATE

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

John Robertson 3/3/00
 APPROVE DATE

HOWARD S.C.D.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

Robert Reinger 3-23-00
 CHIEF - BUREAU OF UTILITIES - DATE

John Robertson 4/3/00
 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
 Daft · McCune · Walker, Inc.

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: SDS	DATE: MAR. 1, 2000
DRAWN BY: ADL	
CHECKED BY: JWR	
BY NO.	REVISION
1	CHANGE FROM 12" LI TO 8" LI FOR LOOP MAIN.

DATE	600 SCALE MAP NO.	36	BLOCK NO.	18
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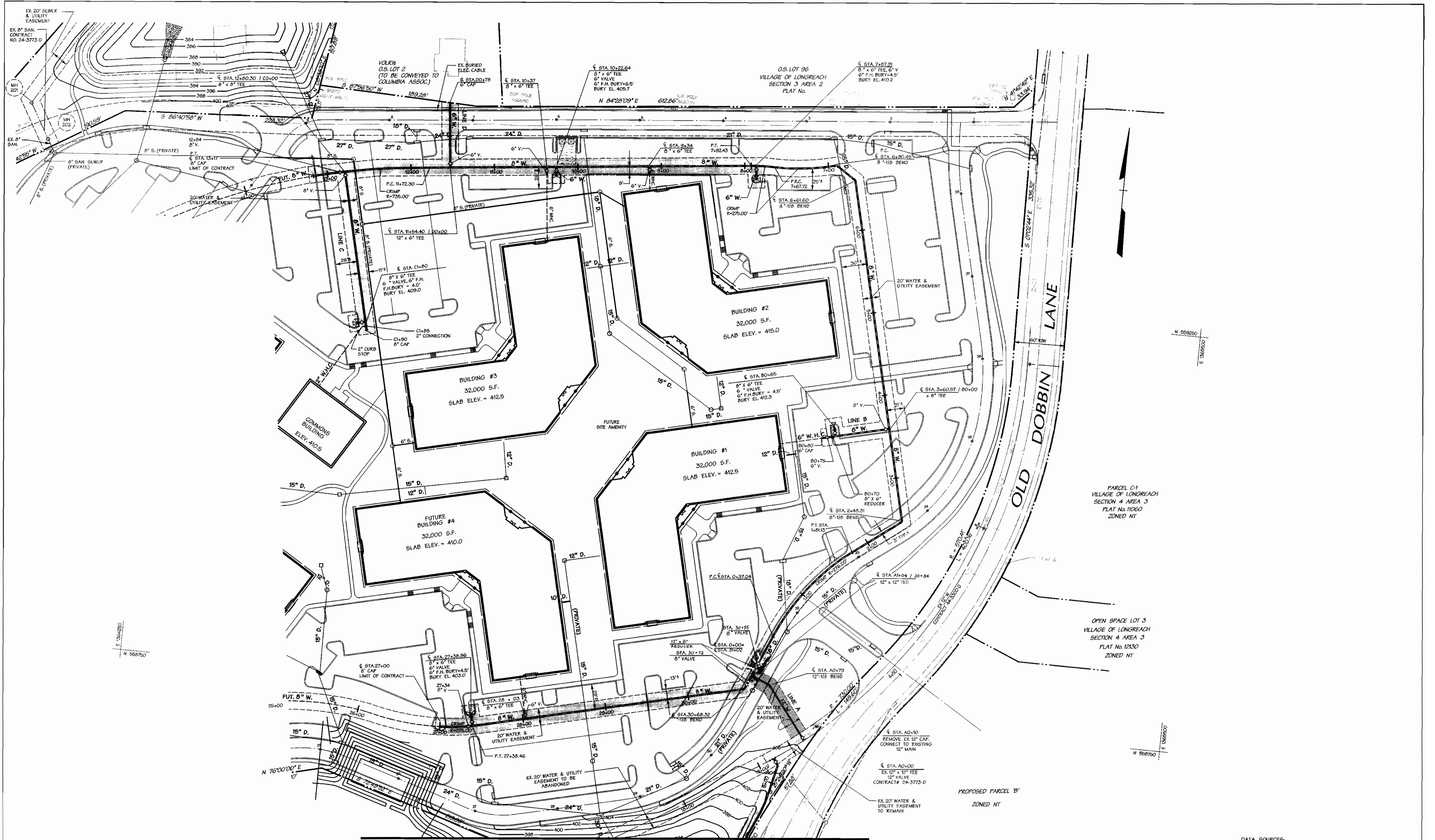
TITLE SHEET

**PHASE I
 COLUMBIA
 ROUTE 175 COMMERCIAL**

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
 6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP
 9145 GUILFORD ROAD
 SUITE 100 COLUMBIA MD 21046
 CONTRACT NO. 44 - 3846 - D

SCALE AS SHOWN
 SHEET 1 OF 4



SEE SHEET 4 OF 4

DATA SOURCES:
 TOPOGRAPHY & BOUNDARY TAKEN FROM PLANS PREPARED
 BY GUTSCHICK, LITTLE & WEBER.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

DMW
Daft · McCune · Walker, Inc.

A Team of Land Planners, 200 East Pennsylvania Avenue
 Landscape Architects, Towson, Maryland 21286
 Engineers, Surveyors & 410 296 3333
 Environmental Professionals Fax 296 4705



DESIGN BY: SDS	DMW	CHANGED FROM 12" H TO 8" H FOR LOOP MAIN. RELOCATED BY 12" CAP AS PER TEST PIT LOCATION.	6-17-00
DRAWN BY: ADL			
CHECKED BY: JWR			
DATE: MAR. 1, 2000	BY NO.	REVISION	DATE

WATER MAIN PLAN

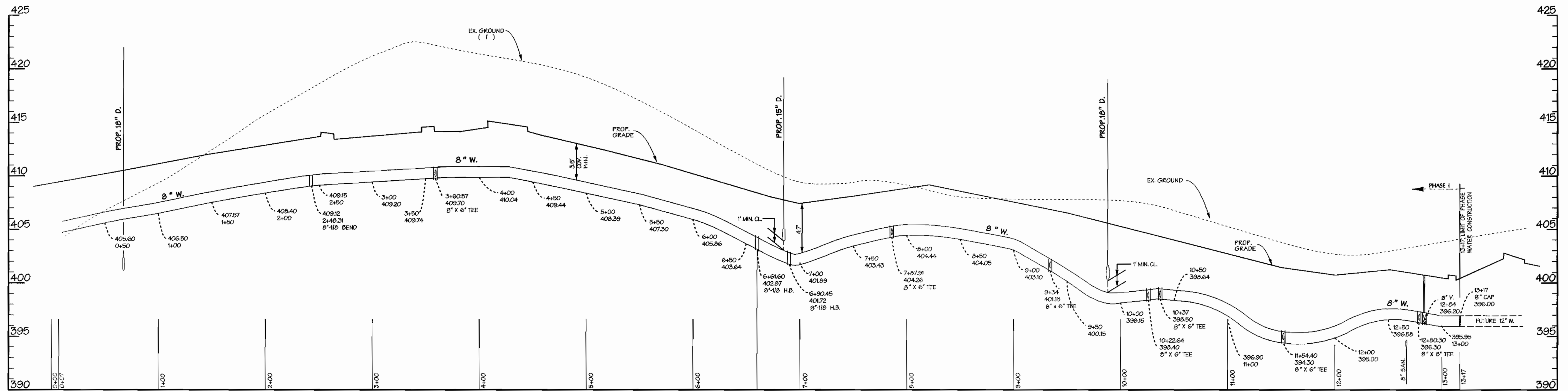
PHASE I COLUMBIA
ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
 6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
 OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
 9145 GULFORD ROAD
 SUITE 100 COLUMBIA, MD 21046
 CONTRACT NO. 44 - 3846 - D

SCALE
 1" = 50'
 SHEET
 2 OF 4

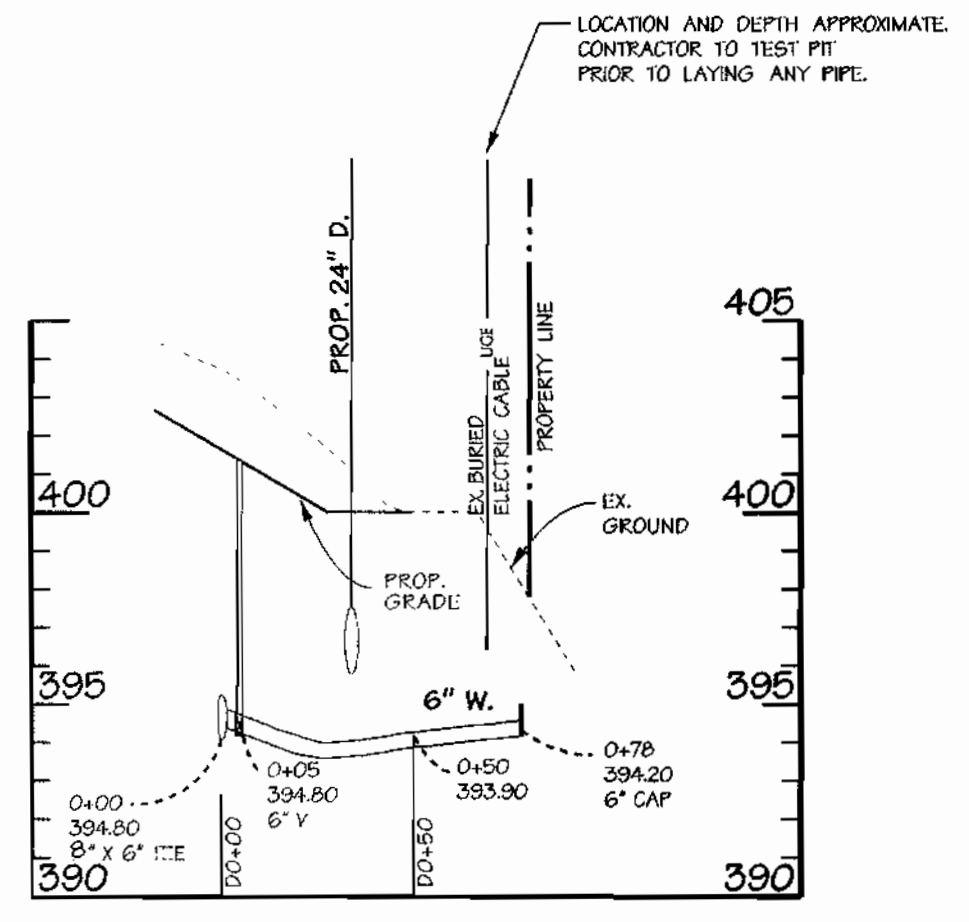
Robert W. Bainger 3-23-00
 CHIEF - BUREAU OF UTILITIES - DATE

4/2/00
 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

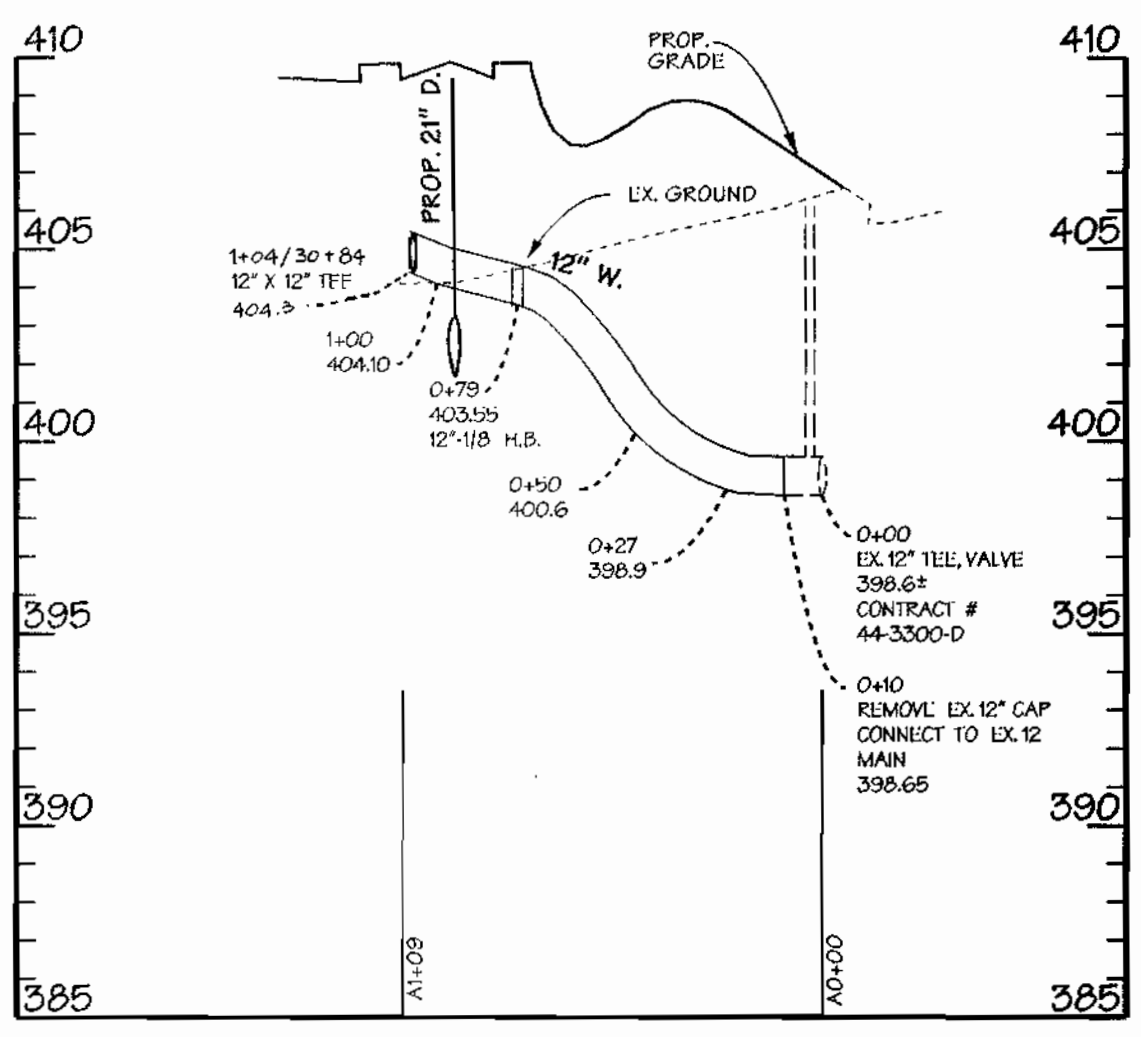
600 SCALE MAP NO. 36 BLOCK NO. 18



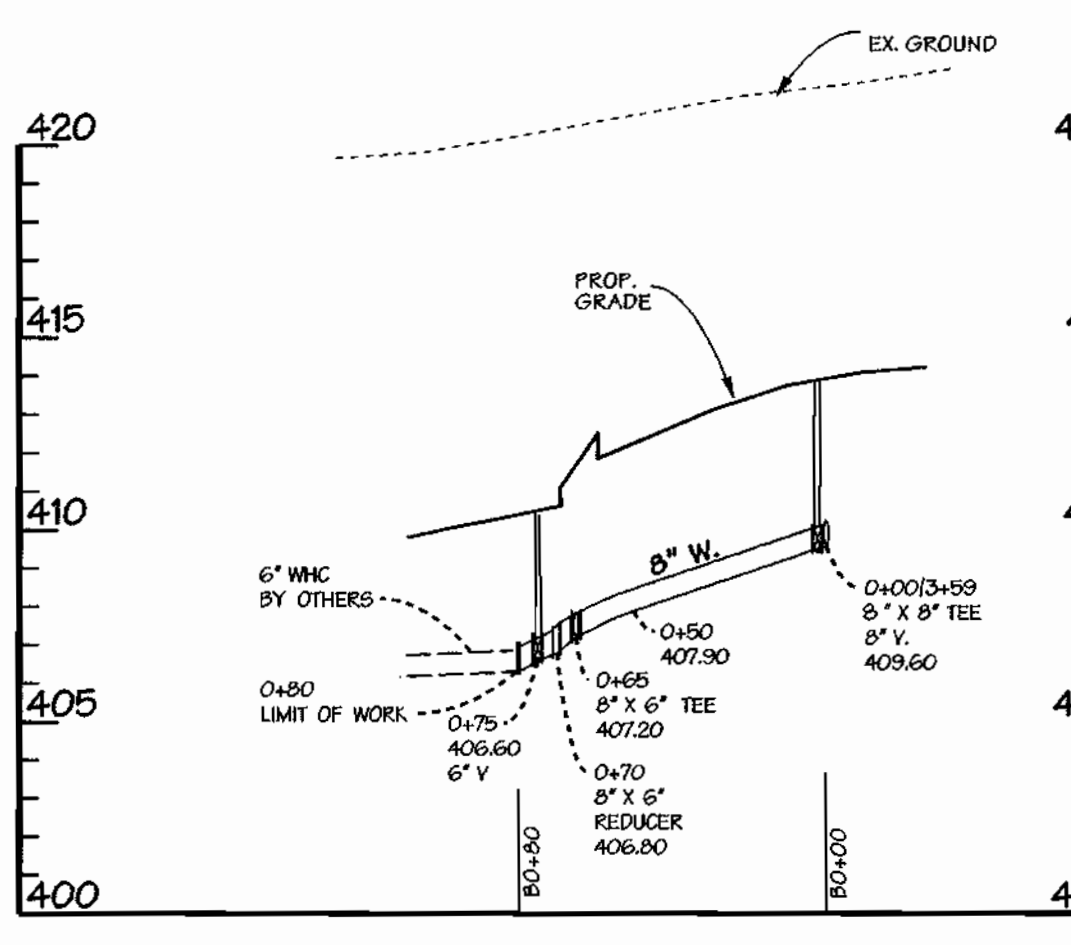
8" WATER PROFILE
 SCALE: 1"=50' HORIZ.
 1"=5' VERT.



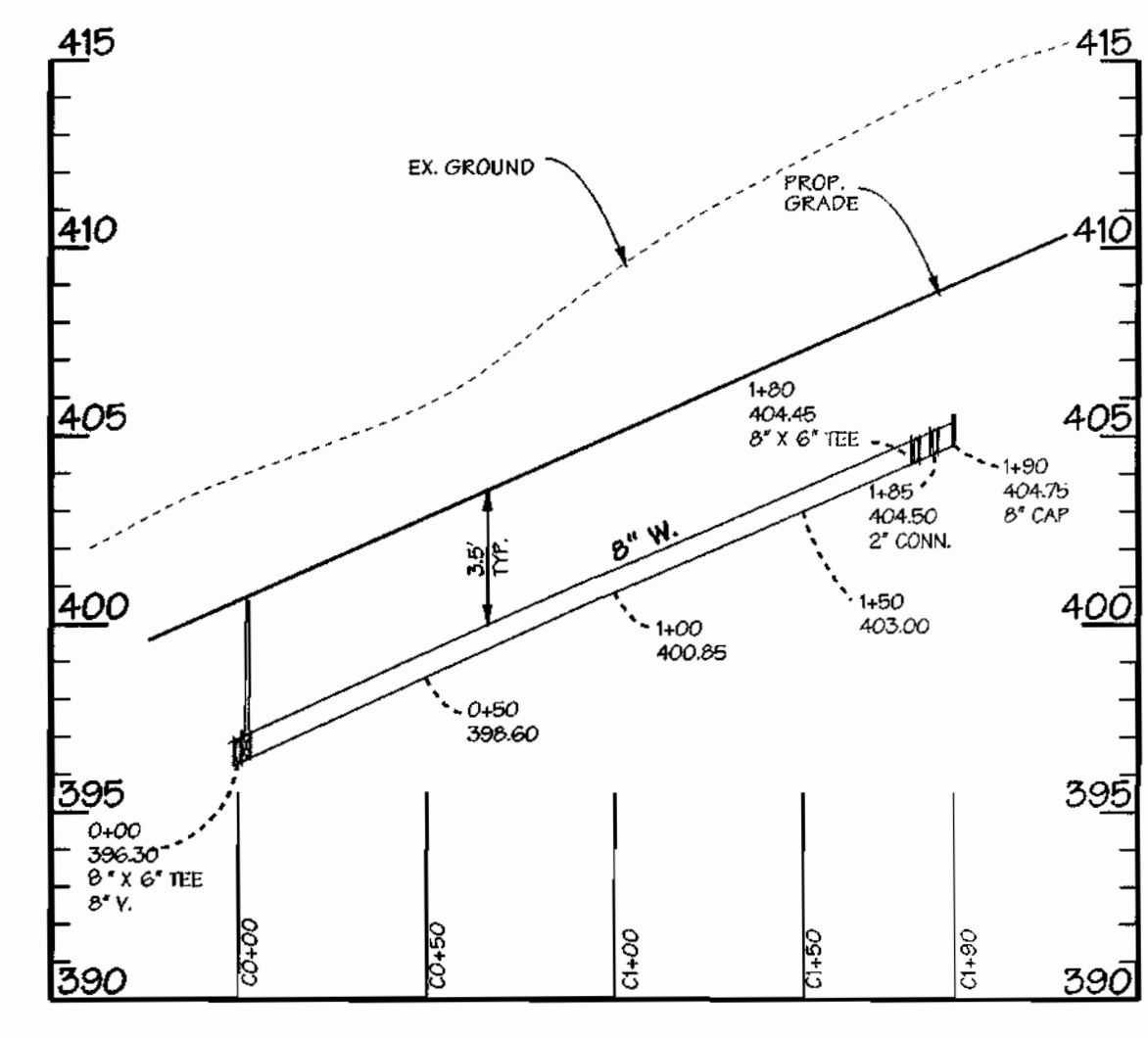
6" WATER PROFILE
 SCALE: 1"=50' HORIZ.
 1"=5' VERT.



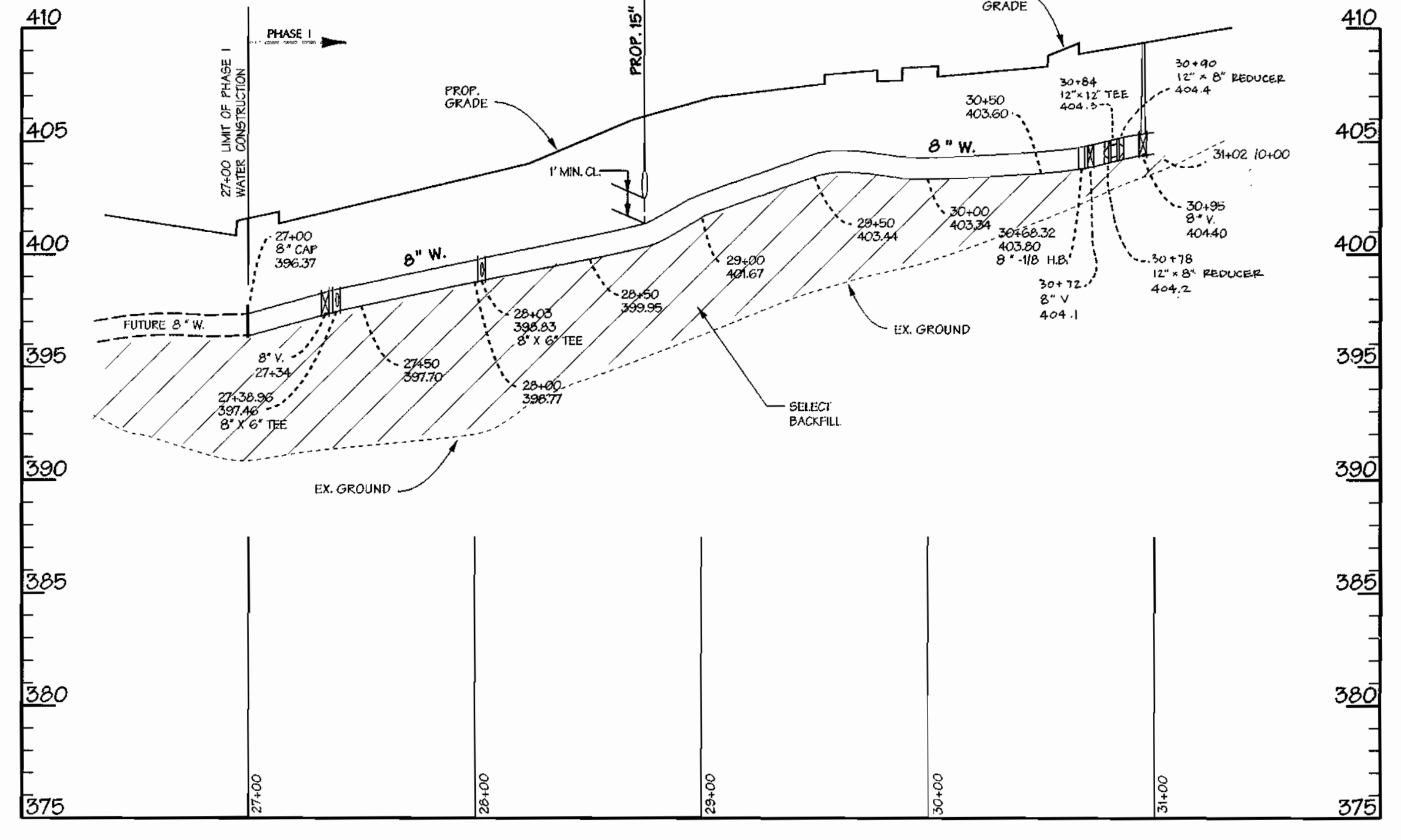
12" WATER PROFILE
 SCALE: 1"=50' HORIZ.
 1"=5' VERT.



LINE B



8" WATER PROFILES
 SCALE: 1"=50' HORIZ.
 1"=5' VERT.

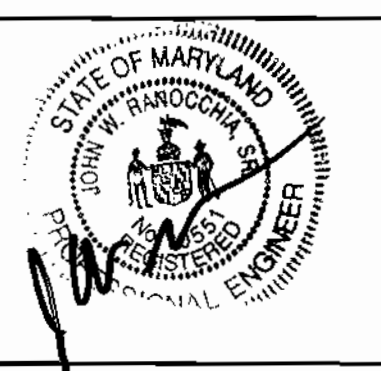


12" WATER PROFILE
 SCALE: 1"=50' HORIZ.
 1"=5' VERT.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 3-23-00
 CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 4/3/00
 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
 Daft · McCune · Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 236 4705



DESIGN BY: SDS	DMW	CHANGED FROM 12" L TO 8" L FOR LOOP MAIN.	10-17-00
DRAWN BY: ADL			
CHECKED BY: JWR			
DATE: MAR 1, 2000	BY NO.	REVISION	DATE

WATER MAIN - PROFILES

600 SCALE MAP NO. 36 BLOCK NO. 18

PHASE I COLUMBIA ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
 6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
 OWNER/PURCHASER: LIBERTY PROPERTY LTD. PTNP.
 8145 GUILFORD ROAD
 SUITE 100 COLUMBIA, MD 21046
 CONTRACT NO. 44 - 3846 - D

AS SHOWN SHEET 3 OF 4

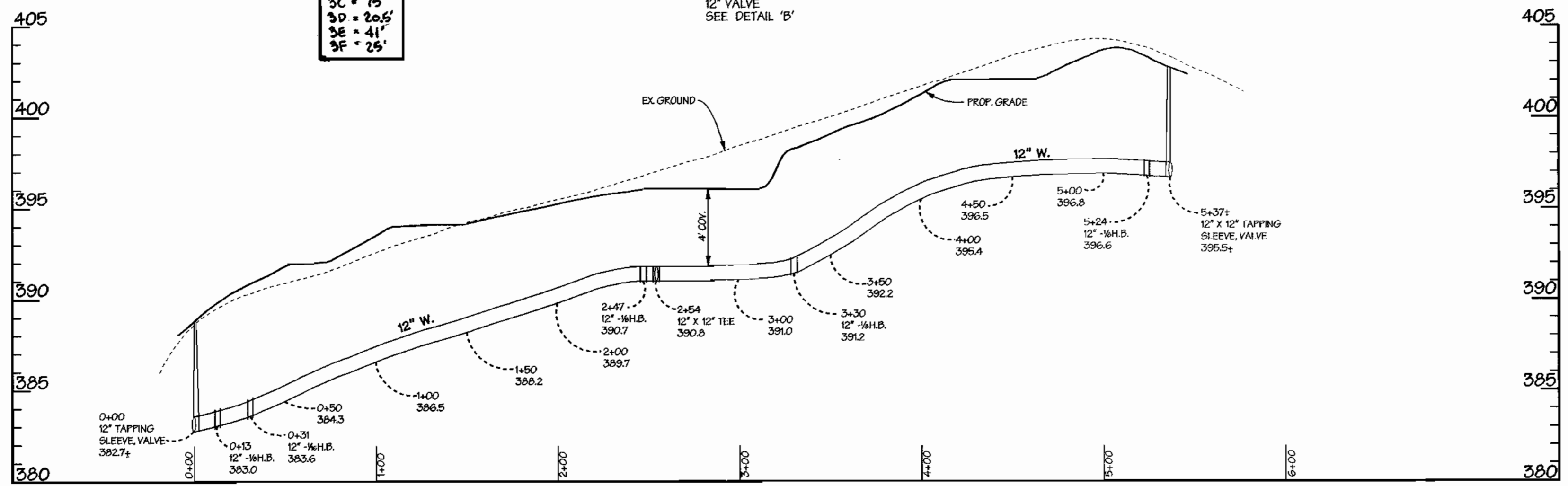


TEST PIT NOTE
 CONTRACTOR MUST TEST PIT EX. 12" WATER MAIN AT ALL PROPOSED CONNECTION LOCATIONS TO VERIFY LOCATION AND DEPTH BEFORE STARTING WORK.

EX. 12" W. CONT. 44-3300-D STA. 14+93.5 = 0+00 12"x12" TAPPING SLEEVE, VALVE

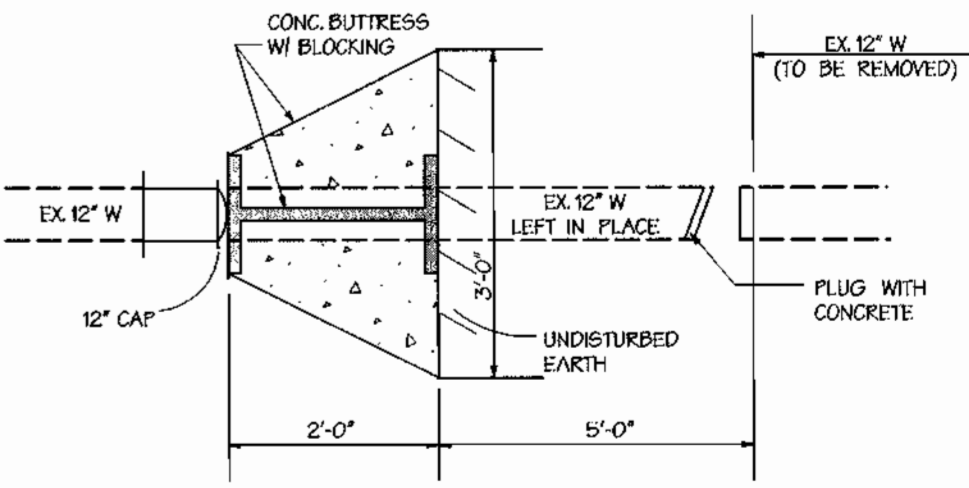
EX. 12" W. STA. 15+03 INSTALL 12" CAP SEE DETAIL 'A'

3A = 21'
3B = 82'
3C = 75'
3D = 20.6'
3E = 41'
3F = 25'



12" WATER PROFILE
 SCALE: 1"=50' HORZ
 1"=5' VERT.

WATER MAIN REMOVAL NOTE
 1. REMOVE EX. 12" W. CONT. 44-3300-D FROM STA. 15+03.5' TO STA. 19+10.5'
 2. REMOVE EX. 12" W. AND VALVE CONT. 24-3463-D FROM TEE TO STA. 1+30.5'

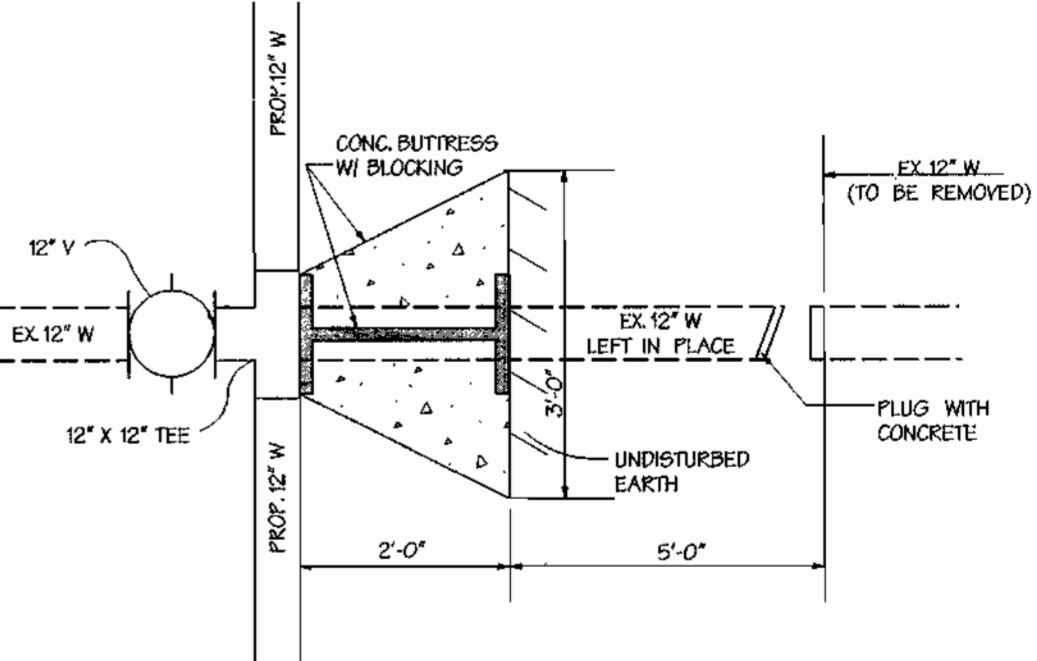


DETAIL A

(NO SCALE)

CONSTRUCTION SEQUENCE

1. CUT EX. 12" W. 2' CLEAR FROM PROP. CAP
2. INSTALL CAP AND BLOCK AGAINST END OF EX. 12" W.
3. POUR BUTTRESS
4. PLUG END OF 12" W. LEFT IN PLACE



DETAIL B

(NO SCALE)

CONSTRUCTION SEQUENCE

1. CUT EX. 12" W. 2' CLEAR FROM PROP. TEE
2. INSTALL TEE AND VALVE AND BLOCK TEE AGAINST END OF EX. 12" W.
3. POUR BUTTRESS
4. PLUG END OF 12" W. LEFT IN PLACE

SEQUENCE OF CONSTRUCTION FOR 12" WATER MAIN RELOCATION

1. INSTALL 12" TAPPING SLEEVE AND VALVE AT STA. 0+00 AND STA. 5+34.
2. CONSTRUCT 12" WATER MAIN RELOCATION FROM EACH TAPPING TEE TO VICINITY OF PROPOSED 12"x12" TEE.
3. CAP BOTH ENDS OF 12" WATER. FLUSH, CHLORINATE AND PRESSURE TEST 12" WATER.
4. SHUT DOWN NECESSARY VALVES, CUT IN 12"x12" TEE AND 12" VALVE AND CONNECT TO EXIST. 12" WATER. BLOCK AND BUTTRESS IN ACCORDANCE WITH DETAIL 'B'.
5. WITH APPROPRIATE VALVES SHUT DOWN, INSTALL 12" CAPS ON EXIST. 12" WATER. BLOCK AND BUTTRESS IN ACCORDANCE WITH DETAIL 'A'.
6. REMOVE EXIST. VALVES AND 12" WATER WHERE NOTED ON PLAN.

DATA SOURCES:
 TOPOGRAPHY & BOUNDARY TAKEN FROM PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Robert S. ... 3-23-00
 CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 ... 4/3/00
 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 & 410 296 3333
 Environmental Professionals Fax 296 4705



DESIGN BY:	JMT	I	AS-BUILT	11-17-00
DRAWN BY:	ADL			
CHECKED BY:	JWR			
DATE:	MAR. 1, 2000	BY	NO.	REVISION

WATER MAIN PLAN & PROFILE
 600 SCALE MAP NO. 36 BLOCK NO. 18

PHASE I COLUMBIA ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2
 6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
 OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
 9145 GUILFORD ROAD SUITE 100 COLUMBIA, MD 21046
 CONTRACT NO. 44 - 3846 - D

SCALE 1" = 50'
 SHEET 4 OF 4

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" D.I.P.	109			
8" D.I.P.	2646	1945	CLASS 52	U.S. PIPE
6" D.I.P.	178	336	CLASS 52	U.S. PIPE
2" COPPER	0			
8" X 6" TEE	3	3		U.S. PIPE
8" X 8" TEE	2	2		U.S. PIPE
12" X 12" TEE	2			
12" X 8" REDUCER	2			
6" X 2" TEE	1			
12" VALVE	1			
8" VALVE	6	6		U.S. PIPE
6" VALVE	10	9		U.S. PIPE
12" CAP	2	2		U.S. PIPE
8" CAP	3	3		U.S. PIPE
6" CAP	5	1		U.S. PIPE
6" FIRE HYDRANT	5	5		U.S. PIPE
12" X 12" TAPPING SLEEVE, VALVE	2	2		U.S. PIPE
1/2" BEND	8			U.S. PIPE
1/4" BEND	1			U.S. PIPE
8" X 6" REDUCER	1	1		U.S. PIPE

NAME OF UTILITY CONTRACTOR: T.C. SIMONS
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:

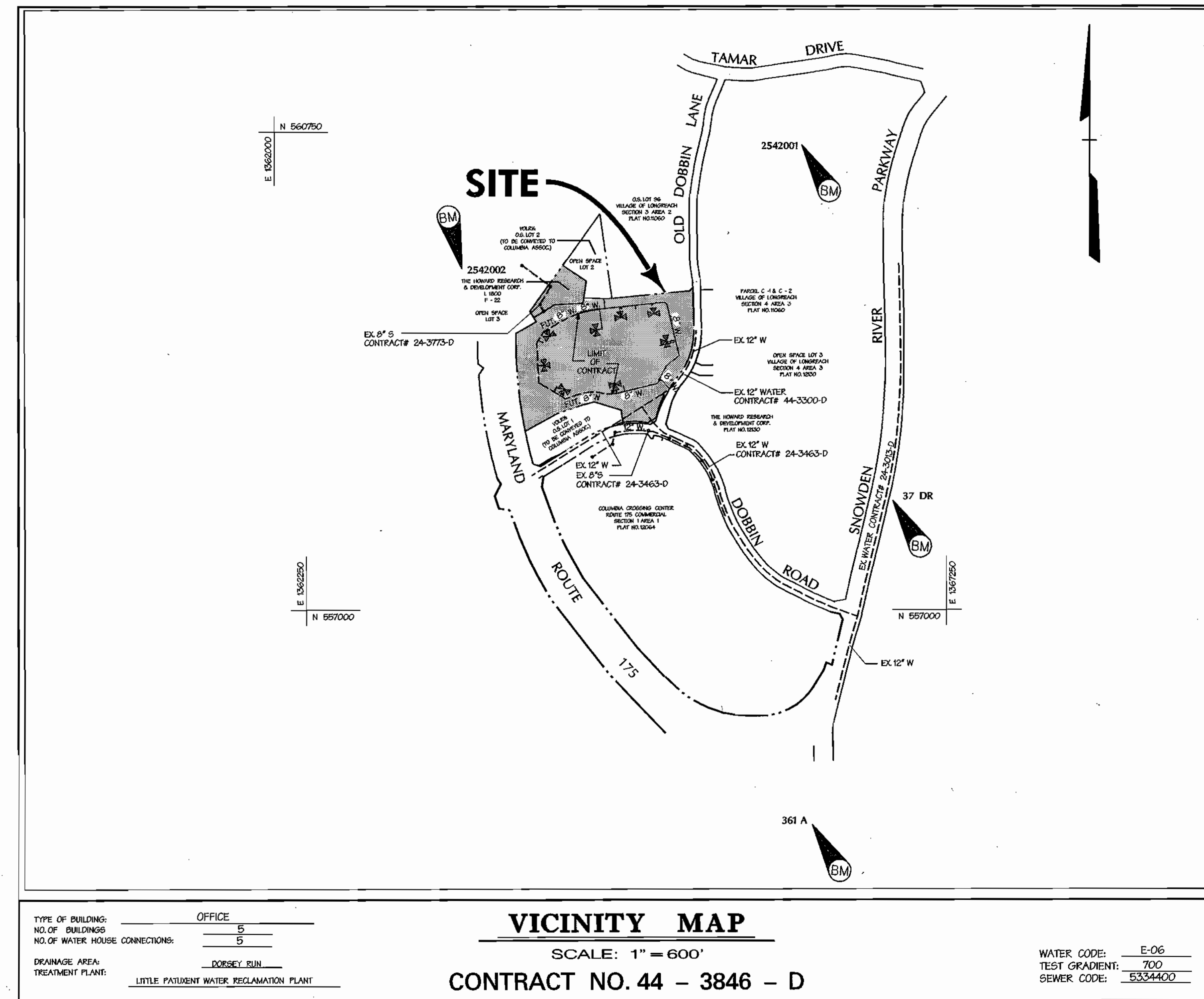
8" WATER MAIN PHASE 1 COLUMBIA ROUTE 175 COMMERCIAL

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 44 - 3846 - D

SHEET INDEX	
NO.	DESCRIPTION
1 OF 4	TITLE SHEET
2 OF 4	WATER PLAN
3 OF 4	WATER MAIN - PROFILES
4 OF 4	WATER MAIN PLAN & PROFILE



GENERAL NOTES

- PART I - GENERAL**
- 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.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 10 FEET.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - 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 FITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST FIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST FIT OR FITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST FITS 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
 - BELL ATLANTIC - 1-800-446-5266
 - COLONIAL PIPELINE CO. - (410) 798-1390
 - 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 18.14(a) OF THE HOWARD COUNTY CODE.

- 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

- STATION 2542001 (CONCRETE MONUMENT)
ELEV. 426.971 (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED ON BGE TRANSMISSION LINES 1060'± S.W. OF DOBBIN ROAD
- STATION 2542002 (CONCRETE MONUMENT)
ELEV. 363.636 (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED 1000'± WEST OF RT. 175 ON TRANSMISSION LINE AT GAS TOWER 19-2 NEAR HANOVER'S RESTAURANT ENTRANCE
- STATION 37 DR (11" REBAR)
N: 1628201.794, E: 416566.795 (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED 0.45± MILES NORTH OF RT. 175 AND 46± EAST OF THE EAST CURB OF SNOWDEN RIVER PARKWAY
- STATION 361A (CONCRETE MONUMENT)
N: 1628205.9263, E: 416313.5119 (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF SNOWDEN RIVER PARKWAY AND RT. 175 3'± FROM CURB AND 57'± FROM END OF GUARDRAIL

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-00-75

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Cheryl Simmons 3/3/00
SIGNATURE DATE

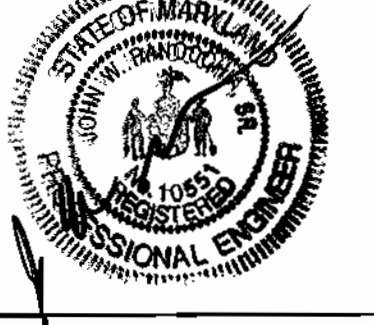
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT

John D. Roberts 3/3/00
APPROVED DATE

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

Robert Reimer 3-23-00 CHIEF - BUREAU OF UTILITIES - DATE *Cheryl Simmons* 4/3/00 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:	DMW	CHANGE FROM 12" W. TO 8" W. FOR LOOP MAIN.	11-17-00
SDS	JMW	AS-BUILT	11-17-00
DRAWN BY:	ADL	DELETE THE 12' OF 2" COPPER PIPE FROM QUANTITIES CHART	10-23-00
CHECKED BY:	JWR	REVISED 8" D.I.P. QUANTITY	11-21-00
DATE:	MAR. 1, 2000		
BY NO.		REVISION	DATE

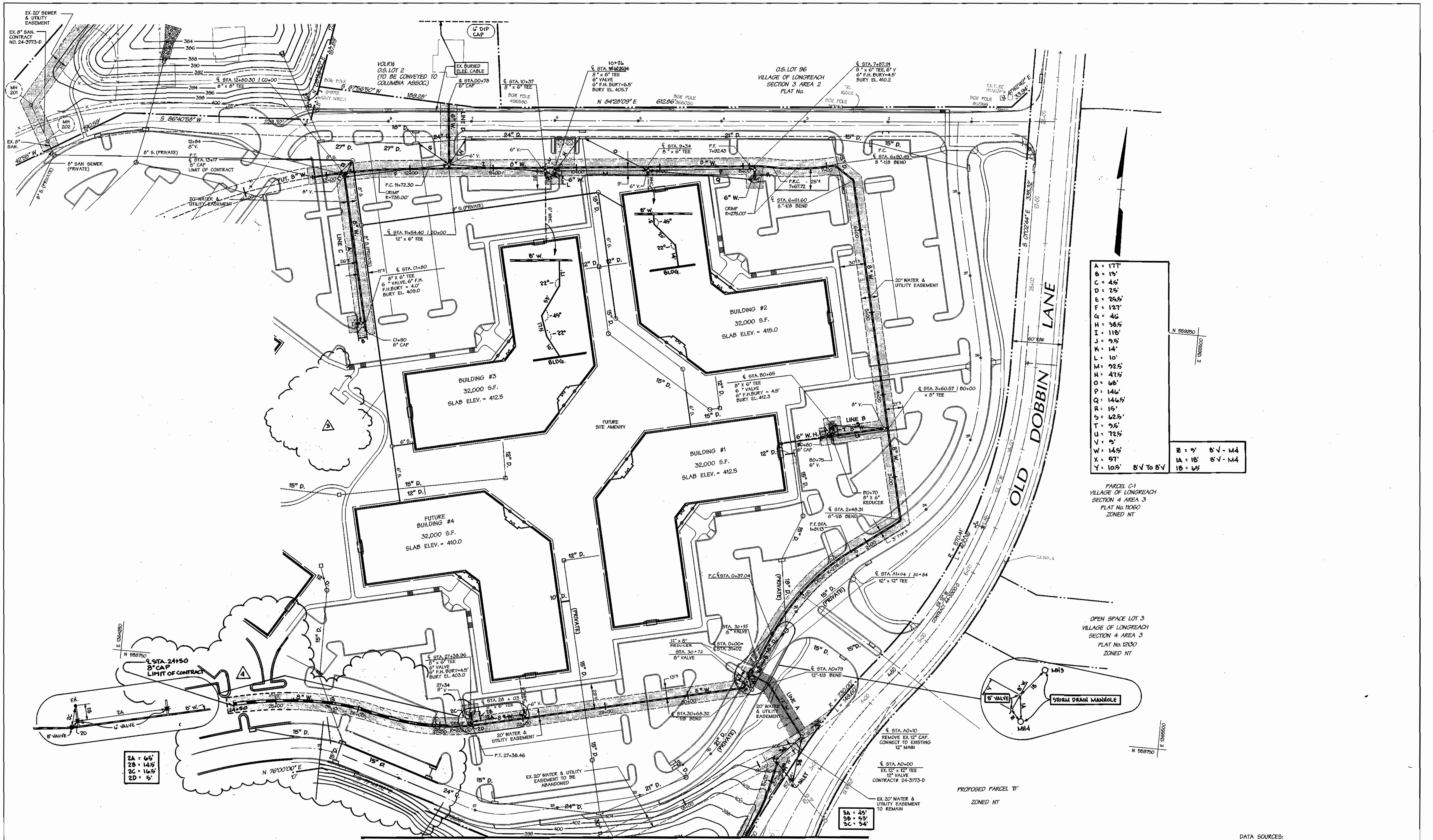
600 SCALE MAP NO.	36	BLOCK NO.	19
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**PHASE I
ROUTE 175 COMMERCIAL**

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
5TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

OWNER / PURCHASER: LIBERTY PROPERTY LTD. P.I.P.
9146 GULFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

SCALE AS SHOWN
SHEET 1 OF 4



A	= 177'
B	= 19'
C	= 45'
D	= 25'
E	= 26.5'
F	= 127'
G	= 46'
H	= 38.5'
I	= 118'
J	= 9.5'
K	= 14'
L	= 10'
M	= 92.5'
N	= 47.5'
O	= 66'
P	= 146'
Q	= 146.5'
R	= 15'
S	= 62.5'
T	= 9.5'
U	= 72.5'
V	= 9'
W	= 14.5'
X	= 57'
Y	= 10.5'

Z	= 9'	B.V. - M4
1A	= 18'	B.V. - M4
1B	= 6.5'	

PARCEL C-1
VILLAGE OF LONGREACH
SECTION 4 AREA 3
PLAT No. 11090
ZONED NT

OPEN SPACE LOT 3
VILLAGE OF LONGREACH
SECTION 4 AREA 3
PLAT No. 12130
ZONED NT

2A	= 65'
2B	= 14.5'
2C	= 16.5'
2D	= 5'

3A	= 45'
3B	= 5.5'
3C	= 54'

SEE SHEET 4 OF 4

DATA SOURCES:
TOPOGRAPHY & BOUNDARY TAKEN FROM PLANS PREPARED
BY GUTSCHICK, LITTLE & WEBER.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

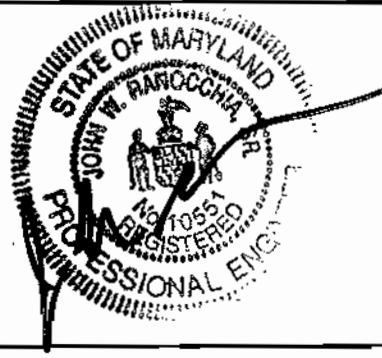
Robert W. Bauman 3-23-00
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Walter D. ... 4/3/00
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:	SDS	DATE:	MAR. 1, 2000
DRAWN BY:	ADL	BY NO.	
CHECKED BY:	JWR	REVISION	
DATE:	MAR. 1, 2000	DATE	
DMW 1	CHANGED FROM 12" 4" TO 8" 4" FOR LOOP MAIN. RELOCATED	DATE	6-17-02
DMW 2	EX. 12" CAP AS PER TENT PIT LOCATION.		
DMW 3	AS-BUILT		11-17-00
DMW 4	DELETE COMMONS BUILDING & THE 2" M.H.C.		10-23-02
DMW 5	EXTEND W. FROM 27+00 TO 24+50		11-27-02

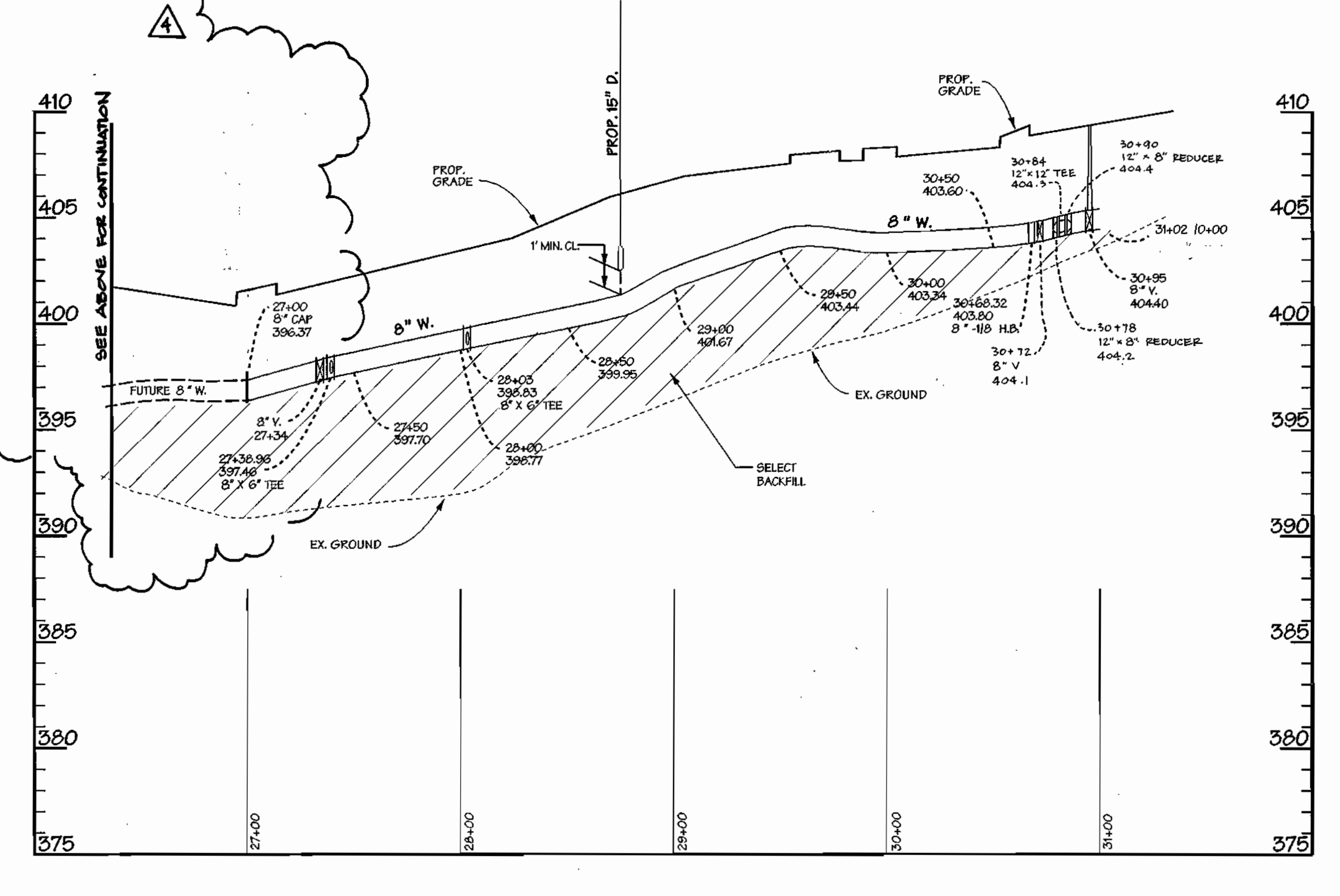
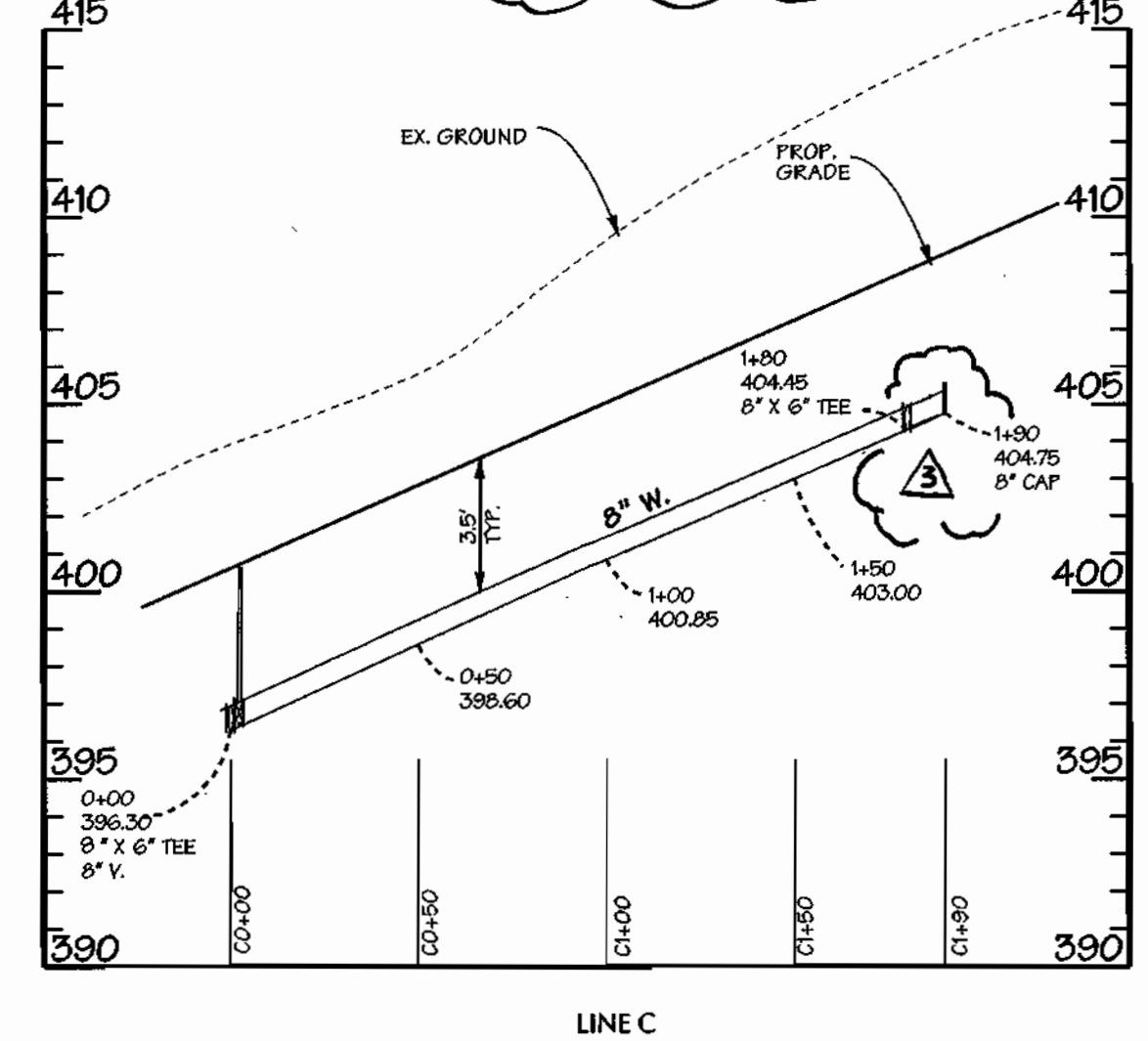
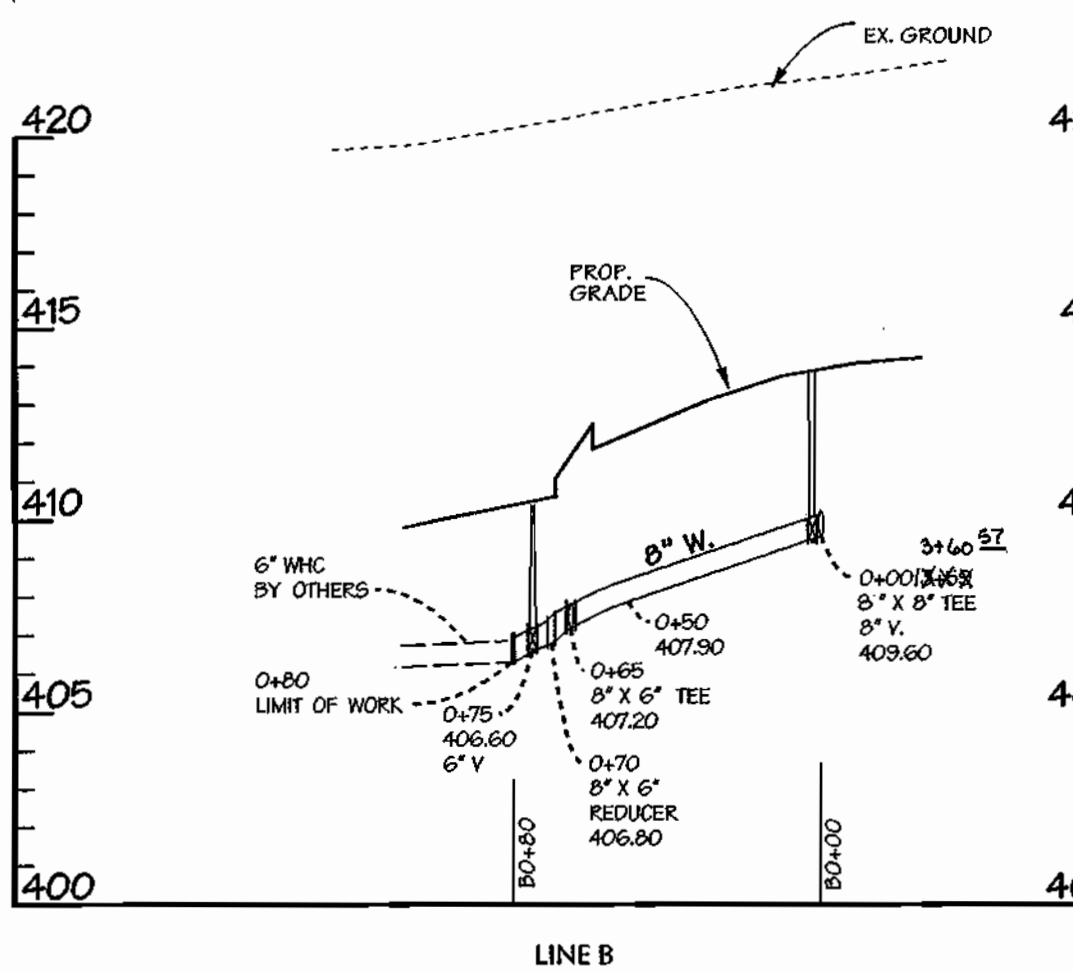
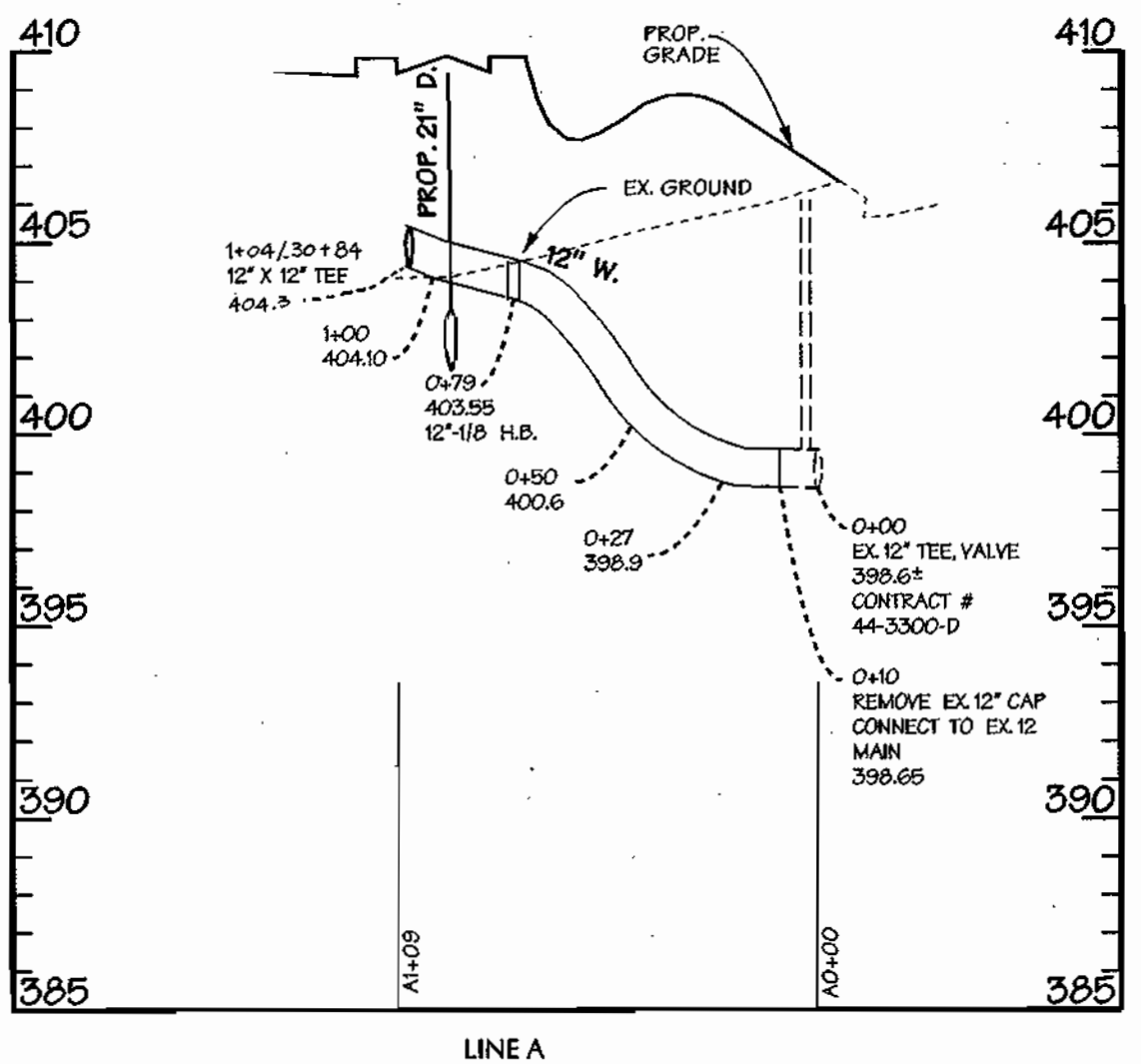
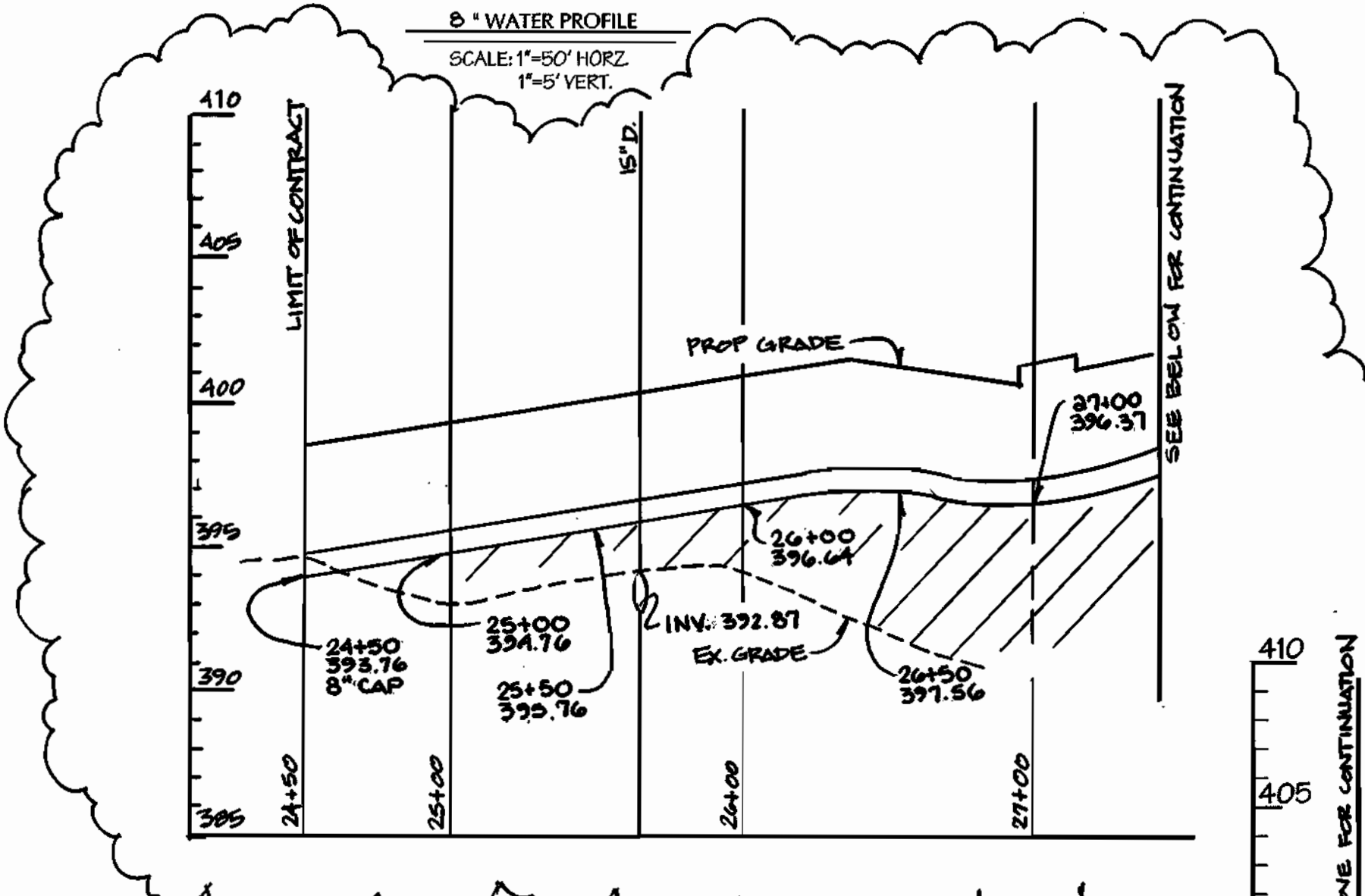
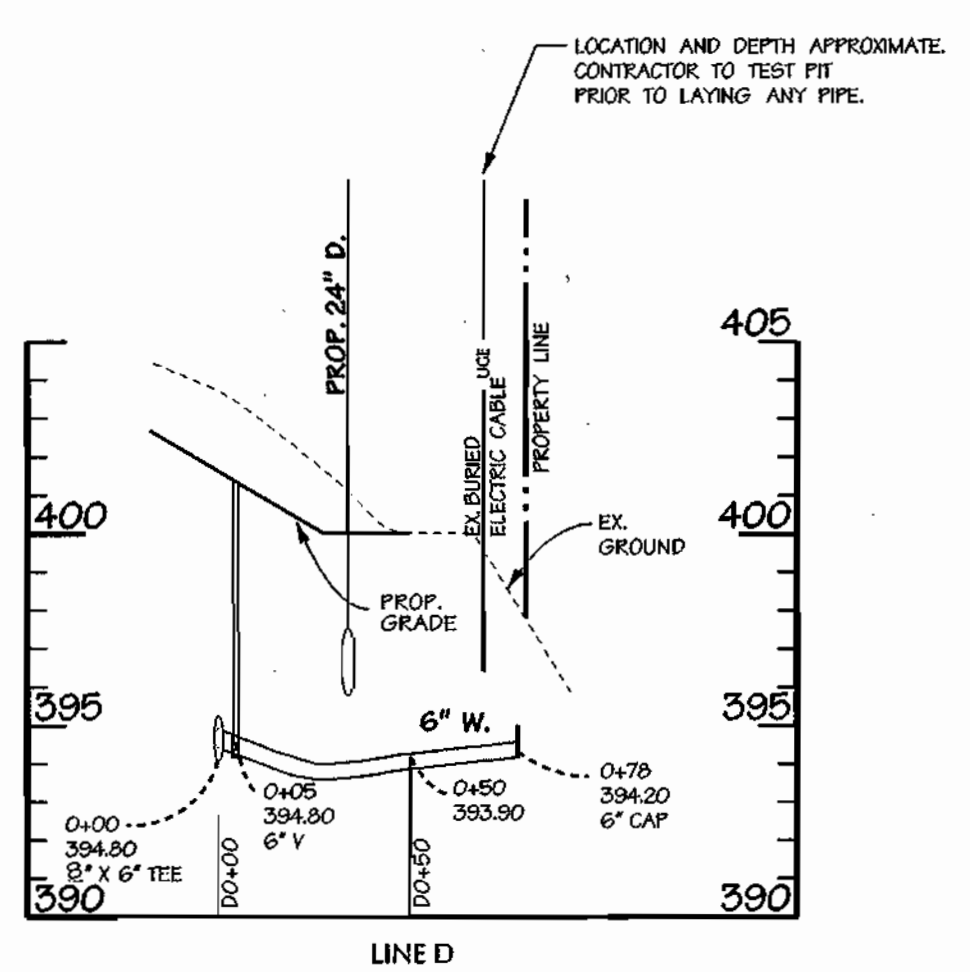
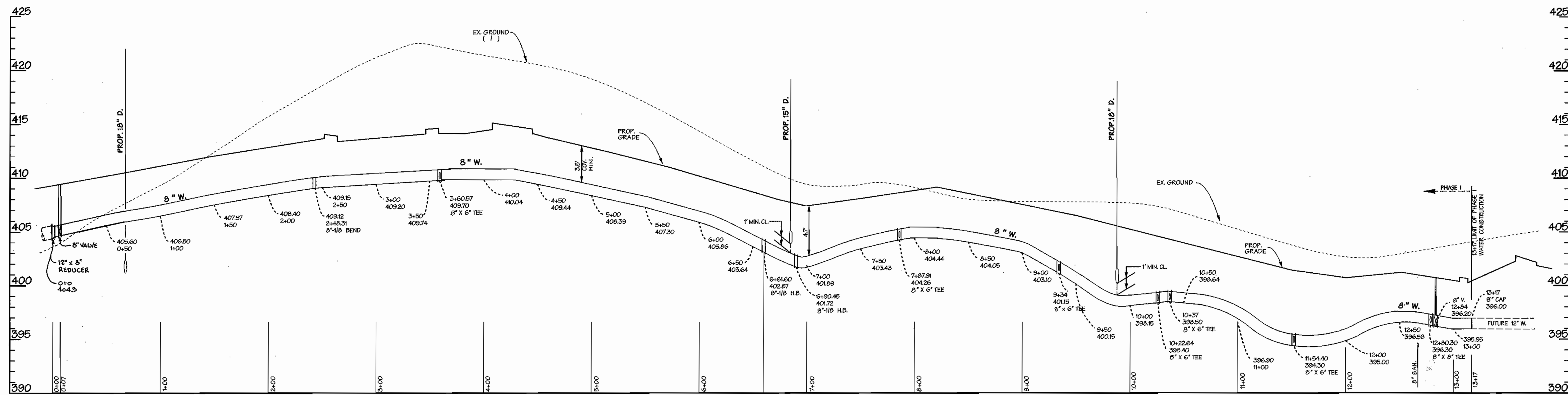
WATER MAIN PLAN

PHASE I
ROUTE COLUMBIA
COMMERCIAL

SECTION 1 AREA 2
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTIP.
9145 GUILFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

SCALE
1" = 50'

SHEET
2 OF 4



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

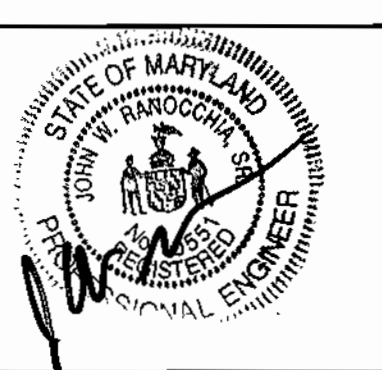
3-23-00
CHIEF - BUREAU OF UTILITIES - DATE

4/3/00
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
Daft · McCune · Walker, Inc.

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:	SDS	DMW	CHANGED FROM 12" W TO 8" W FOR LOOP MAIN.	10-17-00
DRAWN BY:	ADL	JMT	AS-BUILT	11-17-00
CHECKED BY:	JWR	PHW	DELETE 2' CONN. FROM LINE C	10-23-00
DATE:	MAR. 1, 2000	DMW	EXTEND W. FROM 27+00 TO 24+50	11-27-02
BY	NO.	REVISION	DATE	600 SCALE MAP NO. 38 BLOCK NO. 18

WATER MAIN - PROFILES

**PHASE I
COLUMBIA
ROUTE 175 COMMERCIAL**

SECTION 1 AREA 2
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
5146 GUILFORD ROAD
SUITE 100 COLUMBIA, MD 21046

CONTRACT NO. 44 - 3846 - D

AS SHOWN
SHEET 3 OF 4

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" D.I.P.	109'			
8" D.I.P.	2396'	1945'	CLASS 52	U.S. PIPE
6" D.I.P.	178'	338'	CLASS 52	U.S. PIPE
2" COPPER	12'			
8" X 6" TEE	9'	9'		U.S. PIPE
8" X 8" TEE	2	2'		U.S. PIPE
12" X 12" TEE	2			
12" X 8" REDUCER	2			
6" X 2" TEE	1			
12" VALVE	1			
8" VALVE	6	6		U.S. PIPE
6" VALVE	10	9		U.S. PIPE
12" CAP	2	2		U.S. PIPE
8" CAP	3	3		U.S. PIPE
6" CAP	5	1		U.S. PIPE
6" FIRE HYDRANT	5	5		U.S. PIPE
12" X 12" TAPPING SLEEVE, VALVE	2	2		U.S. PIPE
1/2" BEND	8			U.S. PIPE
3/4" BEND	1			U.S. PIPE
8" X 6" REDUCER	1	1		U.S. PIPE

NAME OF UTILITY CONTRACTOR: T.C. SIMMONS
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:

SHEET INDEX	
NO.	DESCRIPTION
1 OF 4	TITLE SHEET
2 OF 4	WATER PLAN
3 OF 4	WATER MAIN - PROFILES
4 OF 4	WATER MAIN PLAN & PROFILE

8" WATER MAIN PHASE 1 COLUMBIA ROUTE 175 COMMERCIAL

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 44 - 3846 - D

GENERAL NOTES

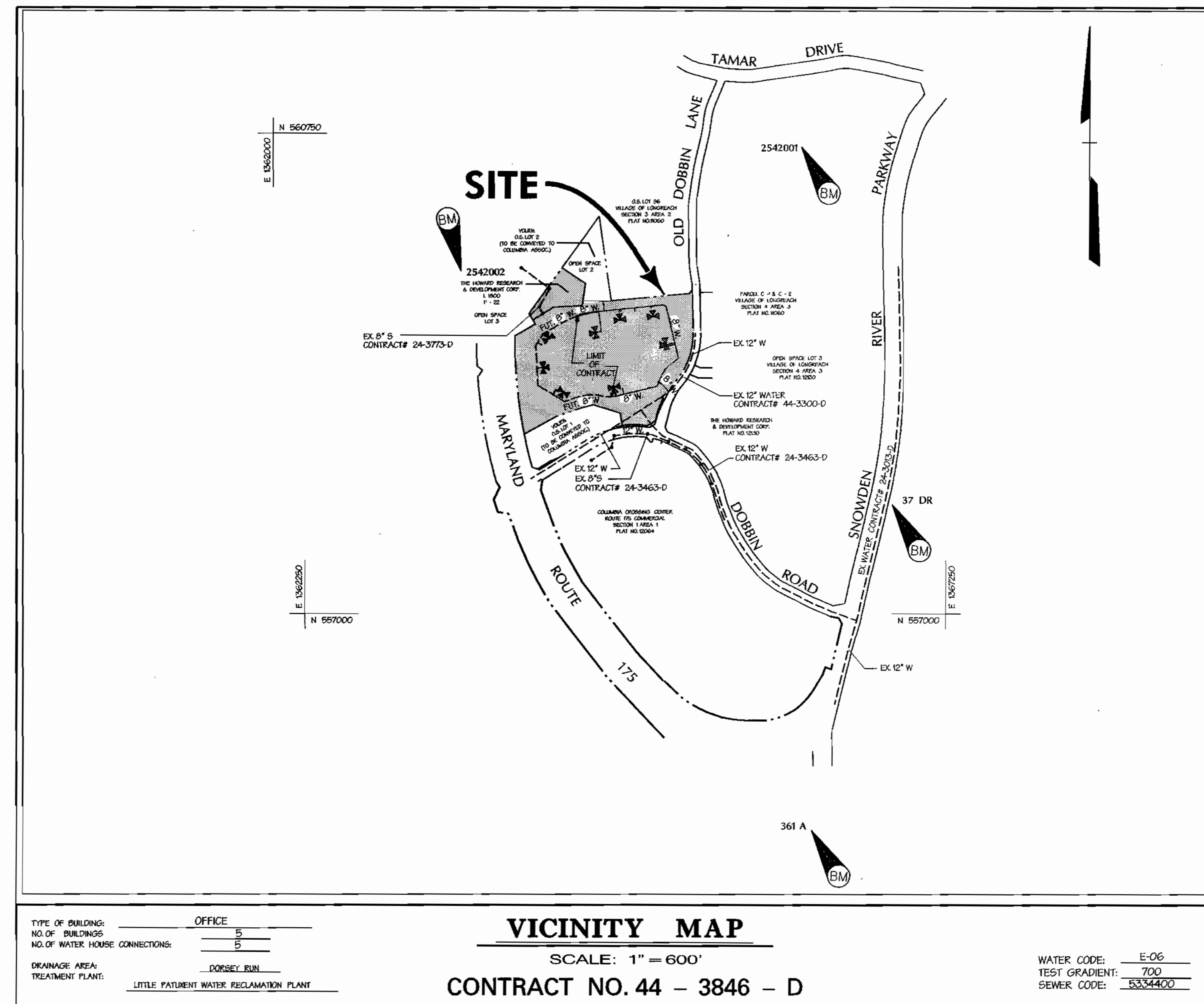
- PART I - GENERAL
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S 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 12" FOR 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 IS 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 CONTRACTOR SERVICES - (410) 850-4620
BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL - (410) 787-9068
MISS UTILITY - 1-800-257-7777
BELL ATLANTIC - 1-800-446-2666
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 WATERSEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

- 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

- STATION 2542001 (CONCRETE MONUMENT)
ELEV. 426.971 (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED ON EGE TRANSMISSION LINES 1060' ± S.W. OF DOBBIN ROAD
- STATION 2542002 (CONCRETE MONUMENT)
ELEV. 363.639 (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED 1000' ± WEST OF RT. 175 ON TRANSMISSION LINE AT G&E TOWER 19-E NEAR HANOVERS RESTAURANT ENTRANCE
- STATION 37 DR (1/4" REBAR)
N: 1628211794, E: 4165566.7155 (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED 0.48± MILES NORTH OF RT. 175 AND 46± EAST OF THE EAST CURB OF SNOWDEN RIVER PARKWAY
- STATION 361A (CONCRETE MONUMENT)
N: 1628205.9263, E: 416315.5119 (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF SNOWDEN RIVER PARKWAY AND RT. 175 3± FROM CURB AND 57± FROM END OF GUARDRAIL



VICINITY MAP
SCALE: 1" = 600'
CONTRACT NO. 44 - 3846 - D

TYPE OF BUILDING: OFFICE
NO. OF BUILDINGS: 5
NO. OF WATER HOUSE CONNECTIONS: 5
DRAINAGE AREA: DORSLEY RUN
TREATMENT PLANT: LITTLE PATIENT WATER RECLAMATION PLANT

WATER CODE: E-06
TEST GRADIENT: 700
SEWER CODE: 5334400

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-00-75

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Signature: Cheryl Simmons
Date: 3/31/00

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

Signature: John D. Robinson
Date: 3/31/00

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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

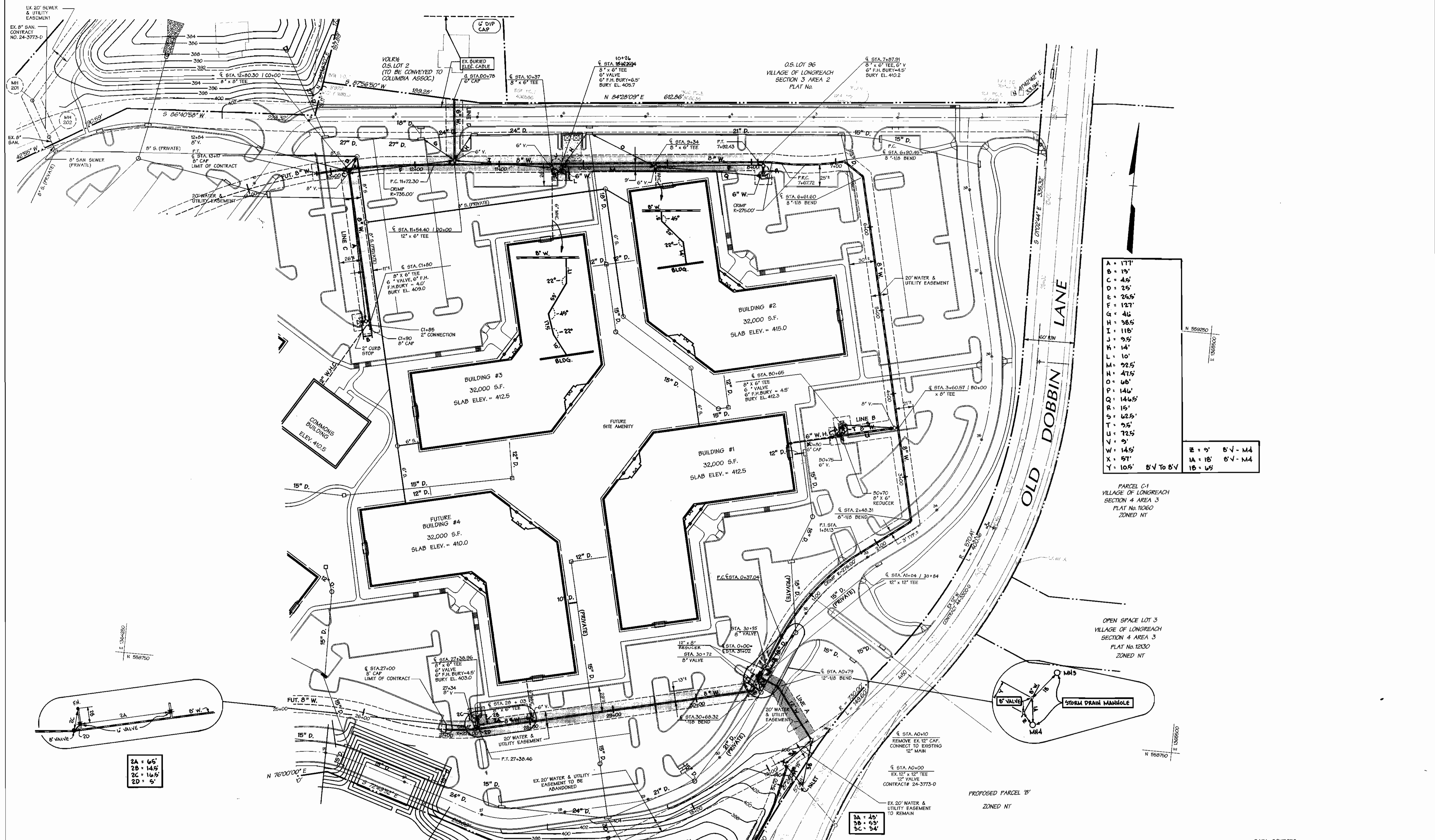


DESIGN BY: SDS	DATE: MAR. 1, 2000	BY: JMW	NO.:	REVISION:	DATE:	600 SCALE MAP NO.:	36	BLOCK NO.:	18
DRAWN BY: ADL		CHECKED BY: JWR							
CHANGE FROM 12" W TO 8" W FOR LOOP MAIN.	11-17-00								
AS-BUILT									

TITLE SHEET

PHASE I
COLUMBIA
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
OWNER /PURCHASER: LIBERTY PROPERTY LTD. P.T.P.P.
9145 GUILFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

SCALE AS SHOWN
SHEET 1 OF 4



A = 177'
B = 15'
C = 45'
D = 25'
E = 26.5'
F = 127'
G = 46'
H = 38.5'
I = 116'
J = 9.5'
K = 14'
L = 10'
M = 22.5'
N = 47.5'
O = 66'
P = 146'
Q = 146.5'
R = 15'
S = 62.5'
T = 9.5'
U = 72.5'
V = 9'
W = 14.5'
X = 57'
Y = 10.5'

Z = 9' 8" V - M4
 AA = 18' 8" V - M4
 BB = 6.5'

PARCEL C-1
VILLAGE OF LONGREACH
SECTION 4 AREA 3
PLAT No. 11060
ZONED NT

OPEN SPACE LOT 3
VILLAGE OF LONGREACH
SECTION 4 AREA 3
PLAT No. 12130
ZONED NT

PROPOSED PARCEL 'B'
ZONED NT

2A = 65'
2B = 14.5'
2C = 16.5'
2D = 5'

3A = 45'
3B = 5.5'
3C = 3.4'

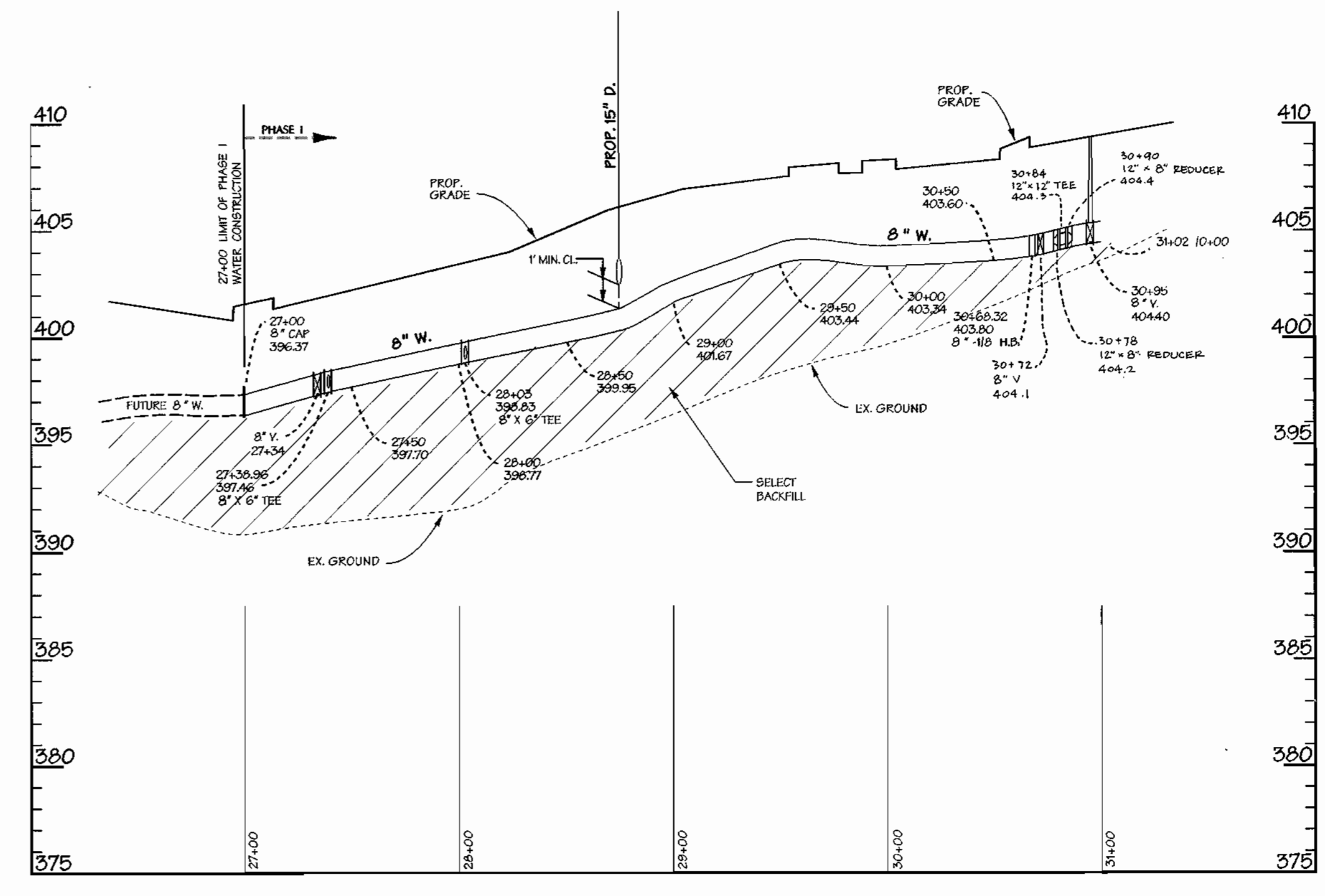
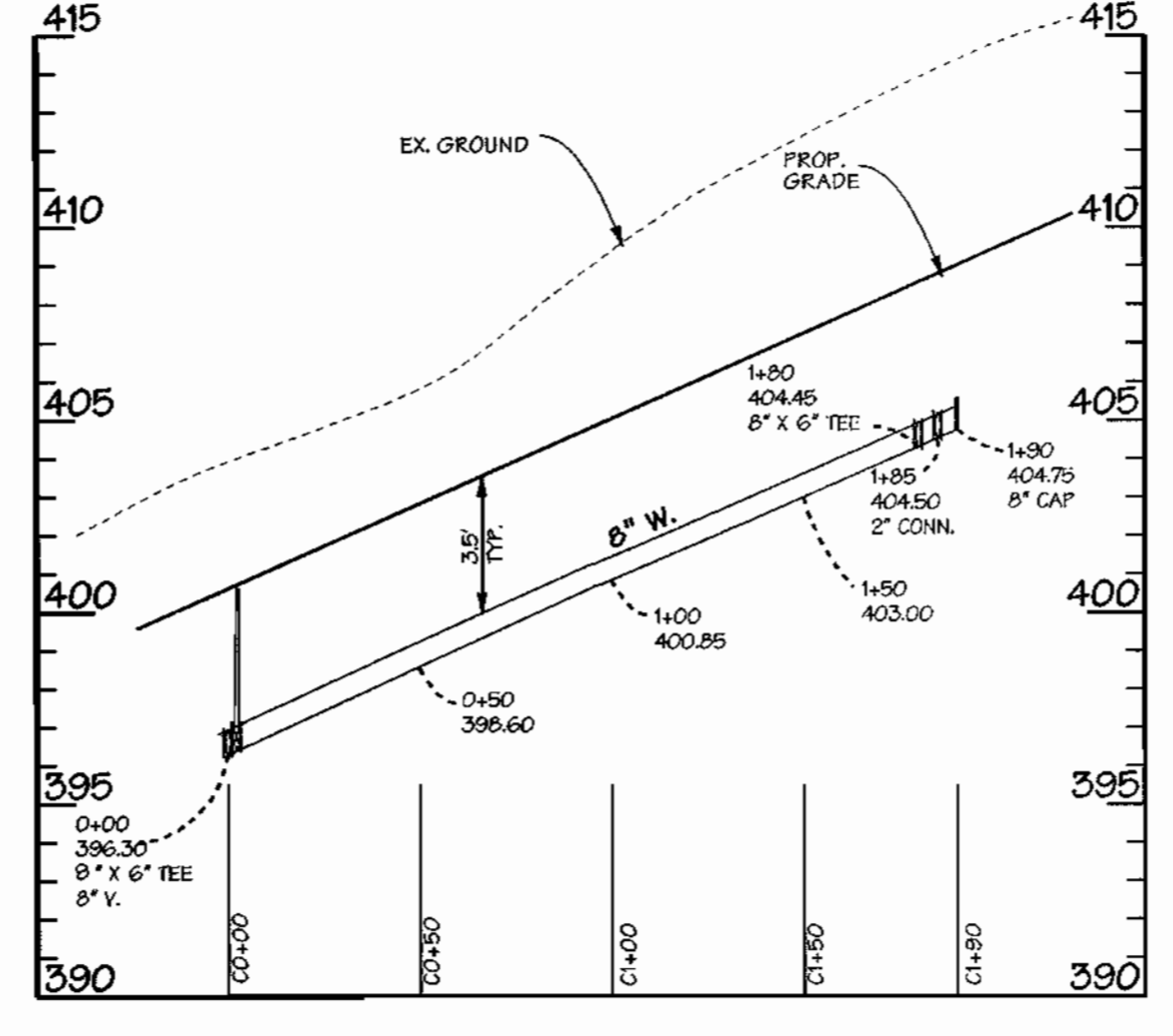
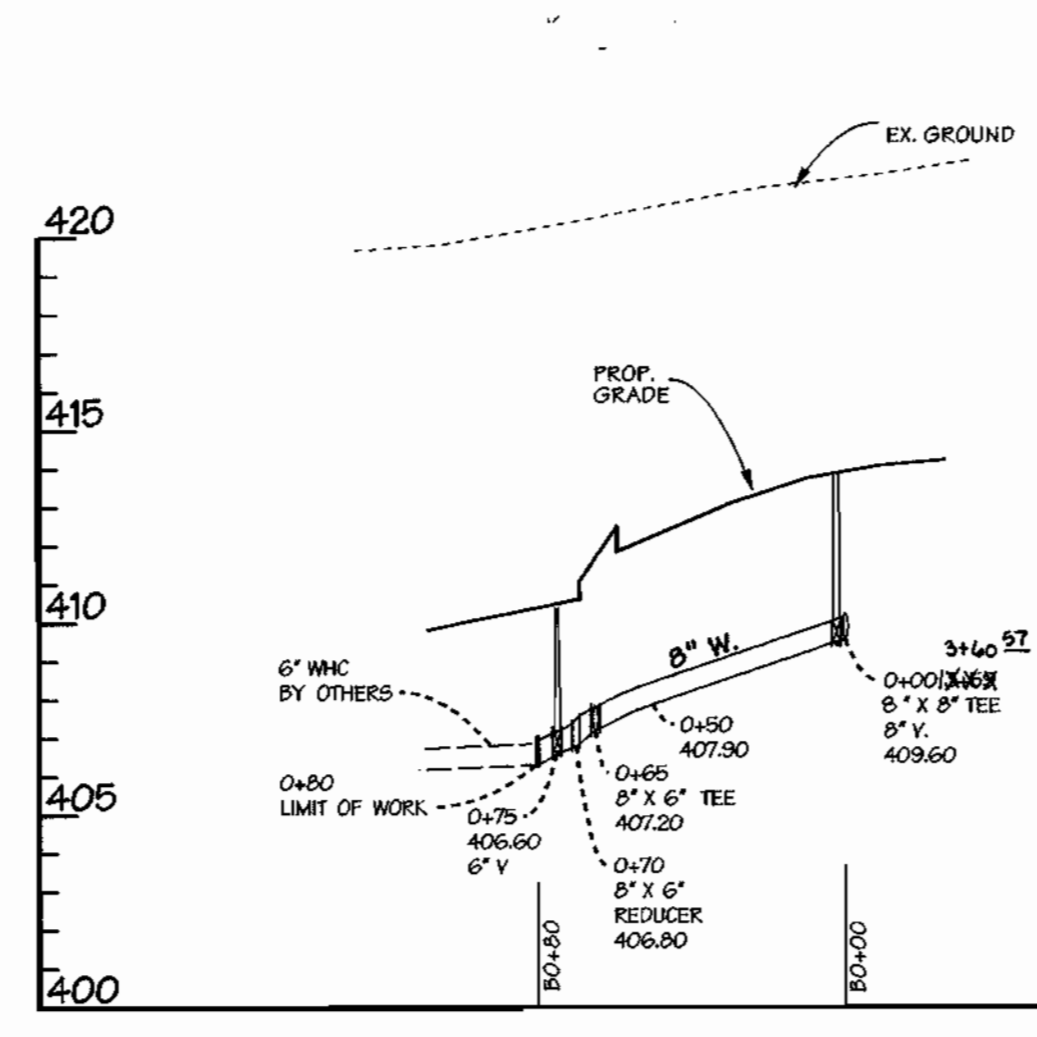
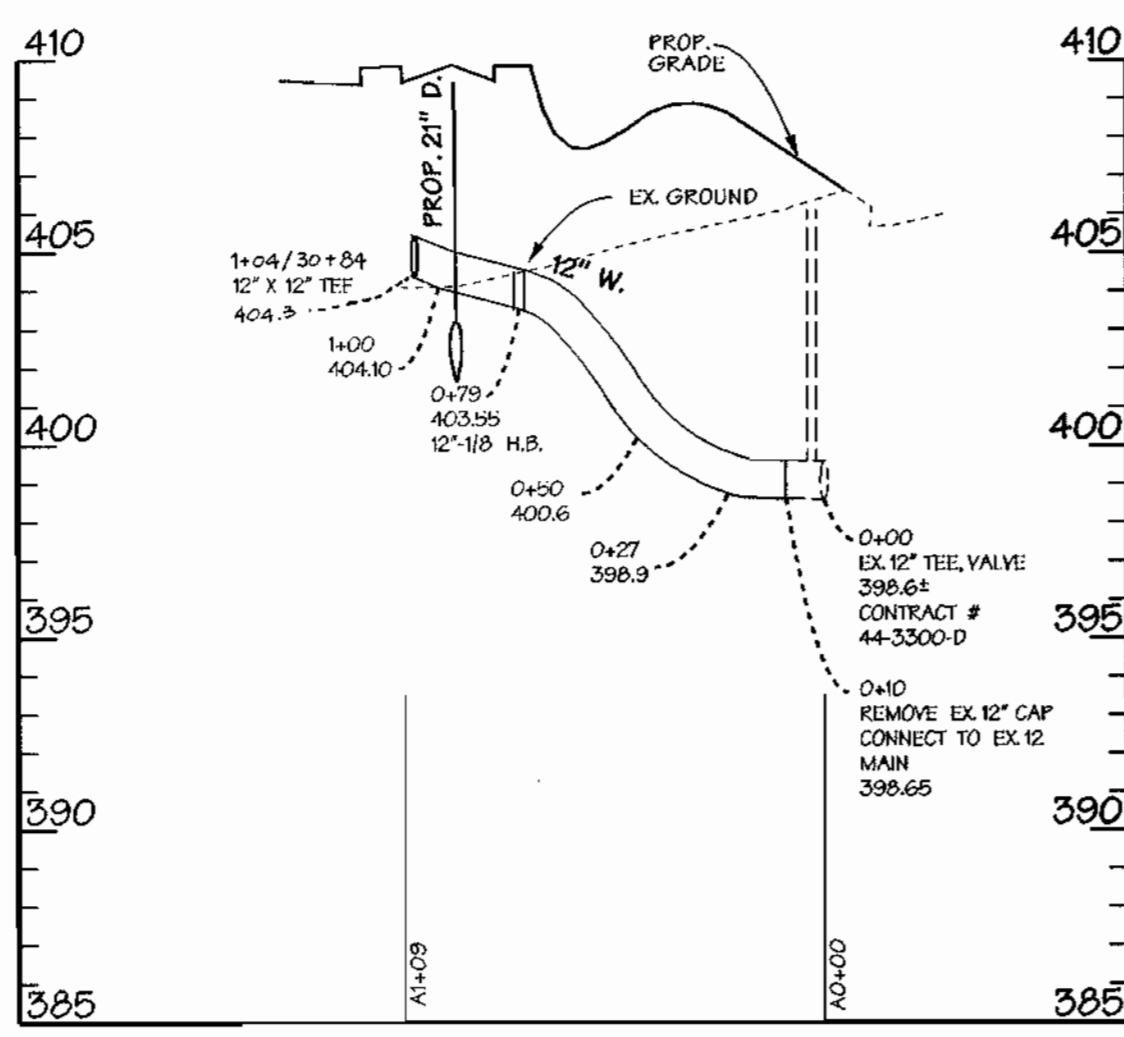
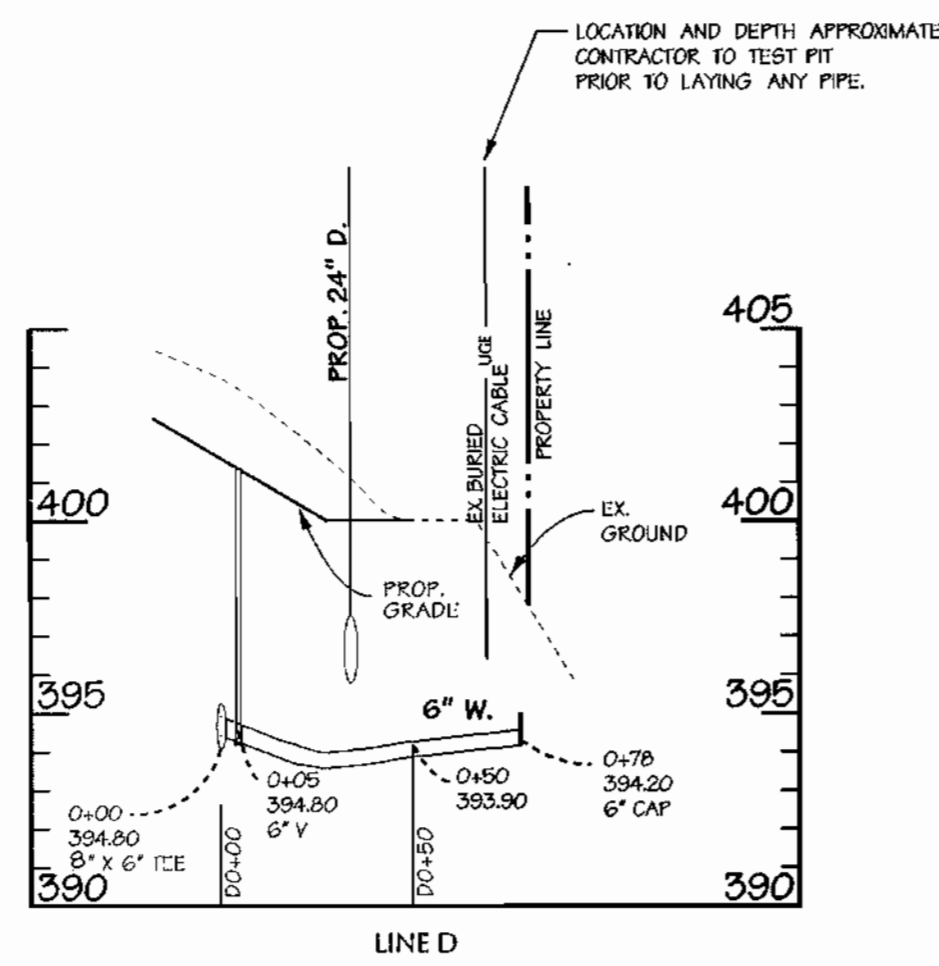
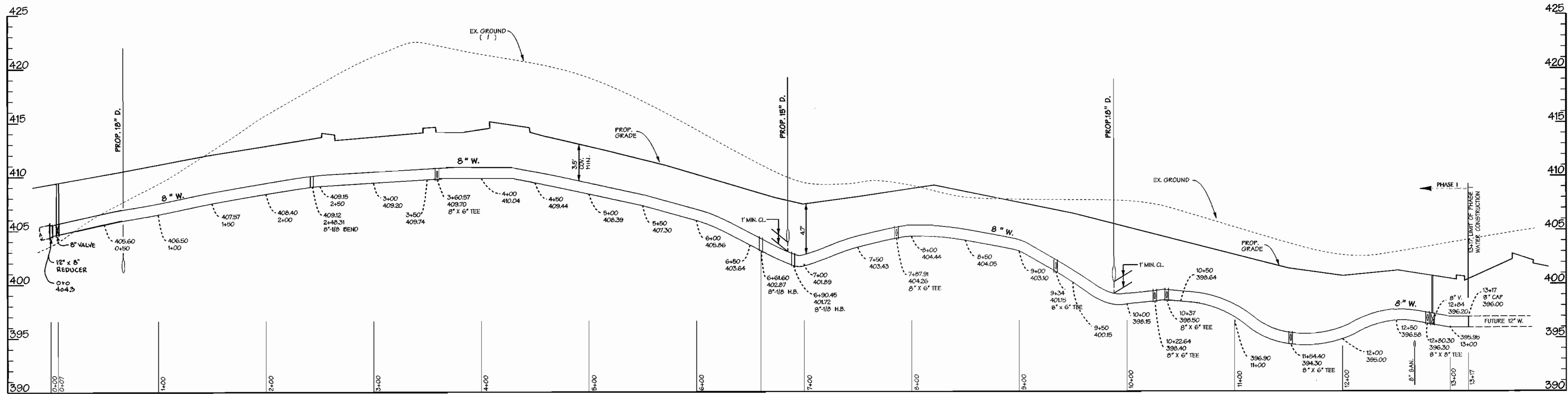
SEE SHEET 4 OF 4

DATA SOURCES:
TOPOGRAPHY & BOUNDARY TAKEN FROM PLANS PREPARED
BY GUTSCHICK, LITTLE & WEBER.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert W. Bauman</i> 3-23-00 CHIEF - BUREAU OF UTILITIES - DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>Alfred D. ...</i> 4/3/00 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE	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: SDS DRAWN BY: ADL CHECKED BY: JWR DATE: MAR 1, 2000	<table border="1"> <tr><td>DMH</td><td>1</td><td>CHANGED FROM 12" W TO 8" W FOR LOOP MAIN. DELOCATED</td><td>10-17-00</td></tr> <tr><td>JMT</td><td>2</td><td>BY 12" CAP AS PER TEXT FIT LOCATION.</td><td>11-17-00</td></tr> </table>	DMH	1	CHANGED FROM 12" W TO 8" W FOR LOOP MAIN. DELOCATED	10-17-00	JMT	2	BY 12" CAP AS PER TEXT FIT LOCATION.	11-17-00	<h2 style="text-align: center;">WATER MAIN PLAN</h2>	PHASE I ROUTE 175 COMMERCIAL SECTION 1 AREA 2 PARCEL A & O.S. LOT 3 6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND OWNER /PURCHASER: LIBERTY PROPERTY LTA P.T.P. 9145 GUILFORD ROAD SUITE 100 COLUMBIA, MD 21046 CONTRACT NO. 44 - 3846 - D	SCALE 1" = 50' SHEET 2 OF 4
DMH	1	CHANGED FROM 12" W TO 8" W FOR LOOP MAIN. DELOCATED	10-17-00												
JMT	2	BY 12" CAP AS PER TEXT FIT LOCATION.	11-17-00												

MAR 23 11:42:09 2000...

MAR 23 11:42:09 2000...



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert S. ...
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
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:	DMW	CHANGED FROM 12" W TO 8" W FOR LOOP MAIN.	11-17-00
DRAWN BY:	JMT	AS-BUILT	
CHECKED BY:			
DATE:	MAR 1, 2000		
BY NO.		REVISION	DATE

WATER MAIN - PROFILES

600 SCALE MAP NO. 36 BLOCK NO. 18

PHASE I
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
9145 GUILFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

AS SHOWN
SHEET 3 OF 4

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
12" D.I.P.	109			
8" D.I.P.	264	1945'	CLASS 52	U.S. PIPE
6" D.I.P.	188	335'	CLASS 52	U.S. PIPE
2" COPPER				
8" x 6" TEE	3	2'		U.S. PIPE
8" x 8" TEE	2	2'		U.S. PIPE
12" x 12" TEE	2			
12" x 8" REDUCER	2			
6" x 2" TEE	1			
12" VALVE	1			
8" VALVE	6	6		U.S. PIPE
6" VALVE	10	9		U.S. PIPE
12" CAP	2	2		U.S. PIPE
6" CAP	3	3		U.S. PIPE
6" CAP	5	1		U.S. PIPE
6" FIRE HYDRANT	5	5		U.S. PIPE
12" x 12" TAPPING SLEEVE, VALVE	2	2		U.S. PIPE
1/2" BEND	8			U.S. PIPE
1/4" BEND	1			U.S. PIPE
8" x 6" REDUCER	1	1		U.S. PIPE
8" x 6" TAPPING SLEEVE & VALVE	1			

NAME OF UTILITY CONTRACTOR: T.C. SIMONS
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:

SHEET INDEX	
NO.	DESCRIPTION
1 OF 4	TITLE SHEET
2 OF 4	WATER PLAN
3 OF 4	WATER MAIN - PROFILES
4 OF 4	WATER MAIN PLAN & PROFILE

8" WATER MAIN PHASE 1 COLUMBIA ROUTE 175 COMMERCIAL

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 44 - 3846 - D

GENERAL NOTES

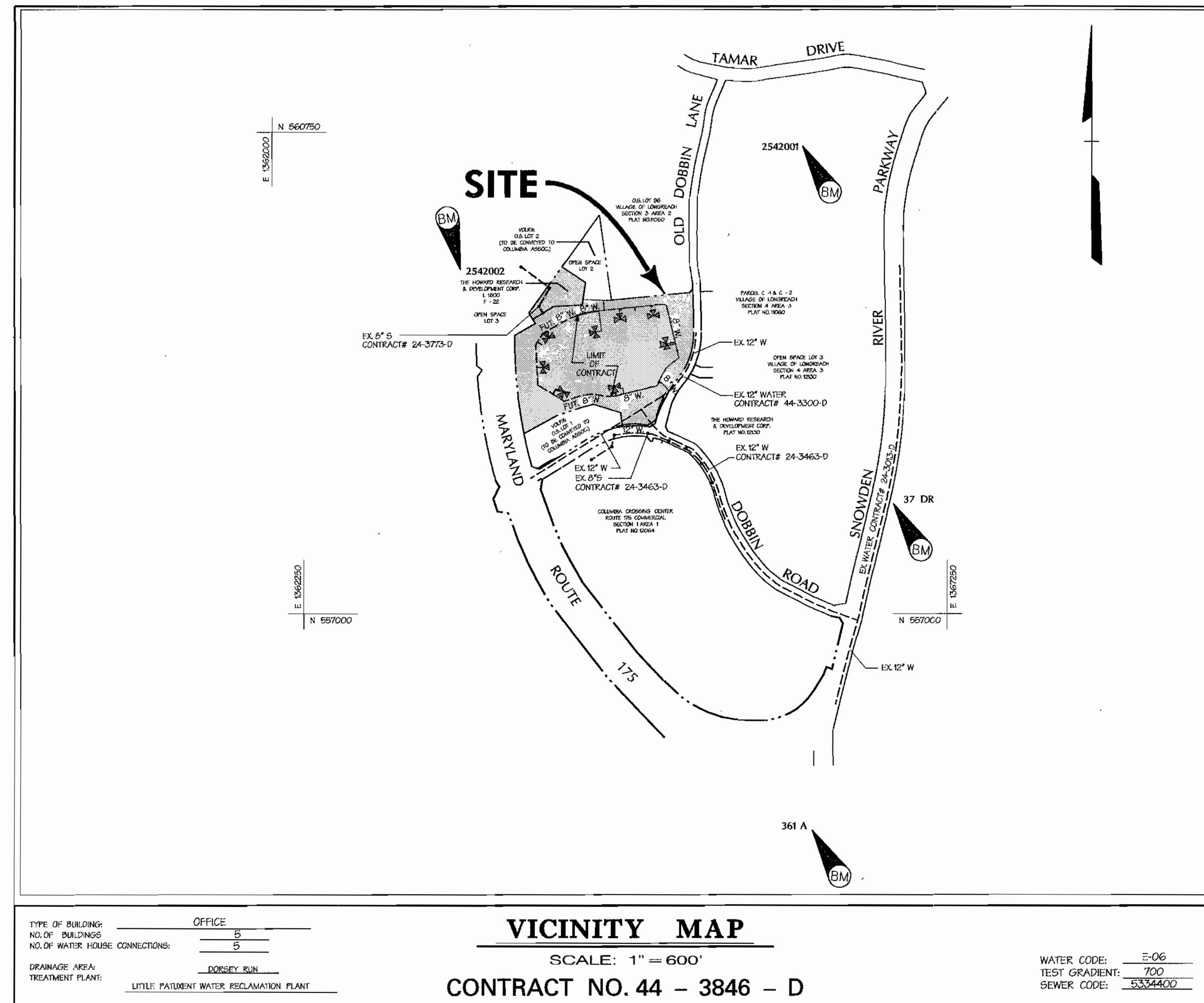
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 - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
 - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 18" FROM THE PROPOSED MAINS.
 - FOR 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 IS 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.
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 - STATE HIGHWAY ADMINISTRATION - (410) 521-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - (410) 850-4620
 - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL - (410) 787-9068
 - MESSE UTILITY - 1-800-257-7777
 - BELL ATLANTIC - 1-800-446-5266
 - COLONIAL PIPELINE CO. - (410) 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - (410) 313-4900
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 - 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.
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- 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'-12" 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.
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 - 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

- STATION 2542001 (CONCRETE MONUMENT)
ELEV. 426.97' (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED ON BGE TRANSMISSION LINES 1060' ± SW. OF DOBBIN ROAD
- STATION 2542002 (CONCRETE MONUMENT)
ELEV. 363.636' (FOR VERTICAL CONTROL ONLY)
STATION IS LOCATED 1000' ± WEST OF RT. 175 ON TRANSMISSION LINE AT G&E TOWER 19-E NEAR HANOVERS RESTAURANT ENTRANCE
- STATION 37 DR (114" REBAR)
N. 169281.1794, E. 416566.7195 (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED 0.45± MILES NORTH OF RT. 175 AND 46± EAST OF THE EAST CURB OF SNOWDEN RIVER PARKWAY
- STATION 361A (CONCRETE MONUMENT)
N. 169205.9263, E. 416313.5119 (FOR HORIZONTAL CONTROL ONLY)
STATION IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF SNOWDEN RIVER PARKWAY AND RT. 175 3± FROM CURB AND 57± FROM END OF GUARDRAIL



SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SITE DEVELOPMENT PLAN SDP-00-75

REVIEWED FOR NATURAL RESOURCE CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Cleyle Simmons 3/31/00
SIGNATURE DATE

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

John Robertson 3/31/00
APPROVED DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Robert Reimer 3-23-00
CHIEF - BUREAU OF UTILITIES - DATE

John Simmons 4/3/00
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW
Daft · McCune · Walker, Inc.
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:	NO.	REVISION	DATE
SDS	1	CHANGE FROM 12" W TO 8" W FOR LOOP MAIN.	10-17-00
JMT	2	AS-BUILT	11-17-00
ADL	3	DELETE THE 12' OF 2" COPPER PIPE FROM QUANTITIES CHART	10-23-00
JWR	4	REVISED 8" D.I.P. QUANTITY	11-27-02
DMW	5	8" x 6" TAPPING SLEEVE, VALVE TO LINE C	12-12-03

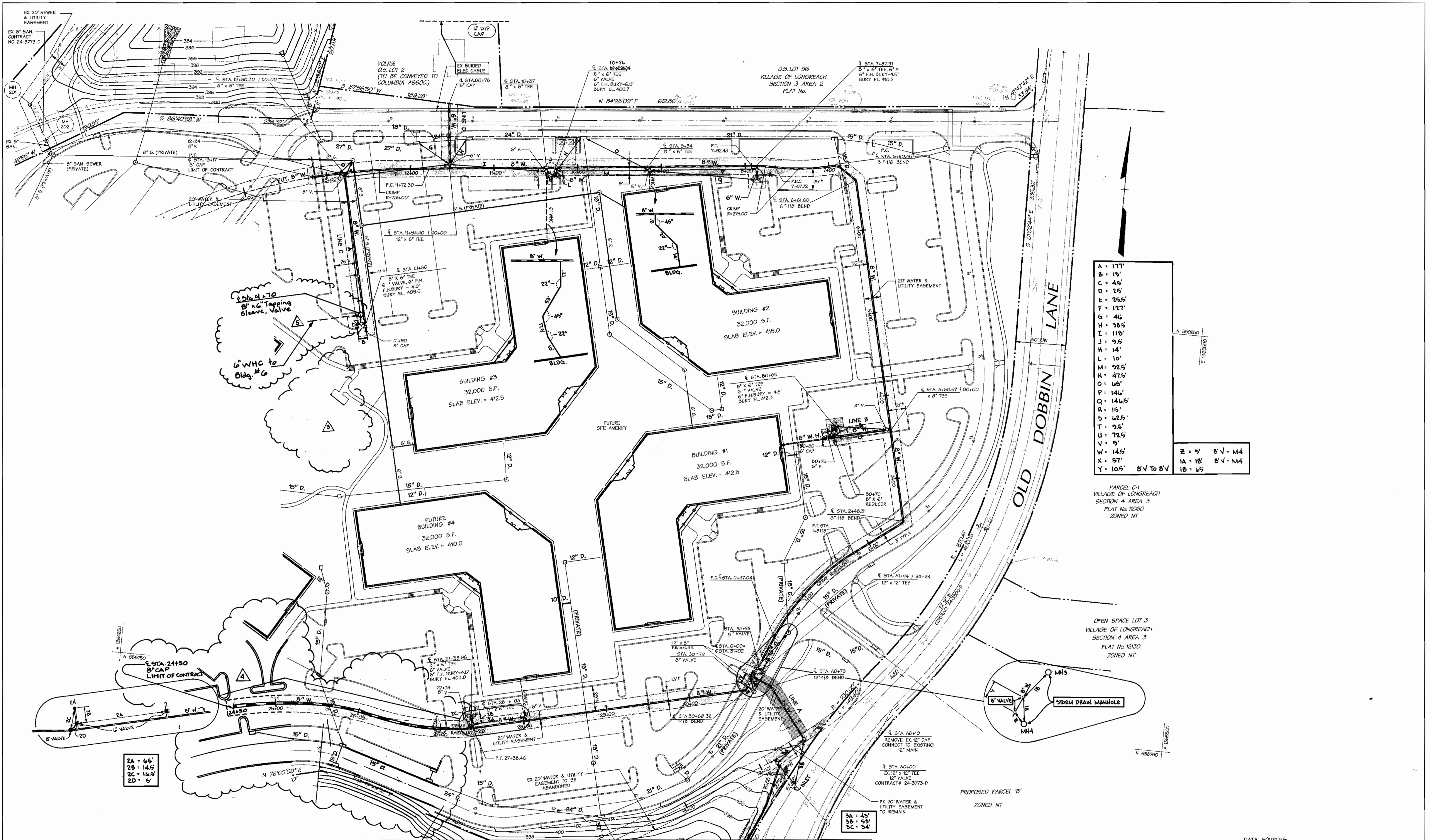
WATER CODE: E-06
TEST GRADIENT: 700
SEWER CODE: 5334400

VICINITY MAP
SCALE: 1" = 600'
CONTRACT NO. 44 - 3846 - D

TITLE SHEET

**PHASE I
COLUMBIA
ROUTE 175 COMMERCIAL**
SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
OWNER /PURCHASER: LIBERTY PROPERTY LTD. P.T.P.
8945 GULFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

SCALE AS SHOWN
SHEET 1 OF 4



SEE SHEET 4 OF 4

DATA SOURCES:
TOPOGRAPHY & BOUNDARY TAKEN FROM PLANS PREPARED BY GUTSCHICK, LITTLE & WEBER.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

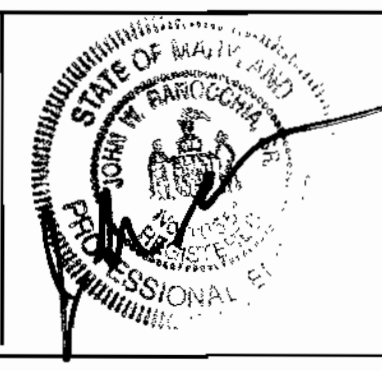
Robert M. Beaman 3-23-00
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Adrian D. ... 4/3/00
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:	DATE	REVISION	DATE
SDS	10-17-00	CHANGED FROM 12" H TO 8" H FOR LOOP MAIN. RELOCATED EX. 12" CAP AS PER TEXT PIT LOCATION.	
ADL	11-17-00	A5-BUILT	
JMT	10-23-00	3 DELETE COMMONS BUILDING & THE 2" A.H.C.	
JWR	11-23-02	4 EXTEND W. FROM 27+00 TO 24+50	
JWR	12-12-03	5 8" x 6" Tapping Sleeve, Valve to Line C	
JWR	MAR. 1, 2000		

WATER MAIN PLAN

600 SCALE MAP NO. 36 BLOCK NO. 18

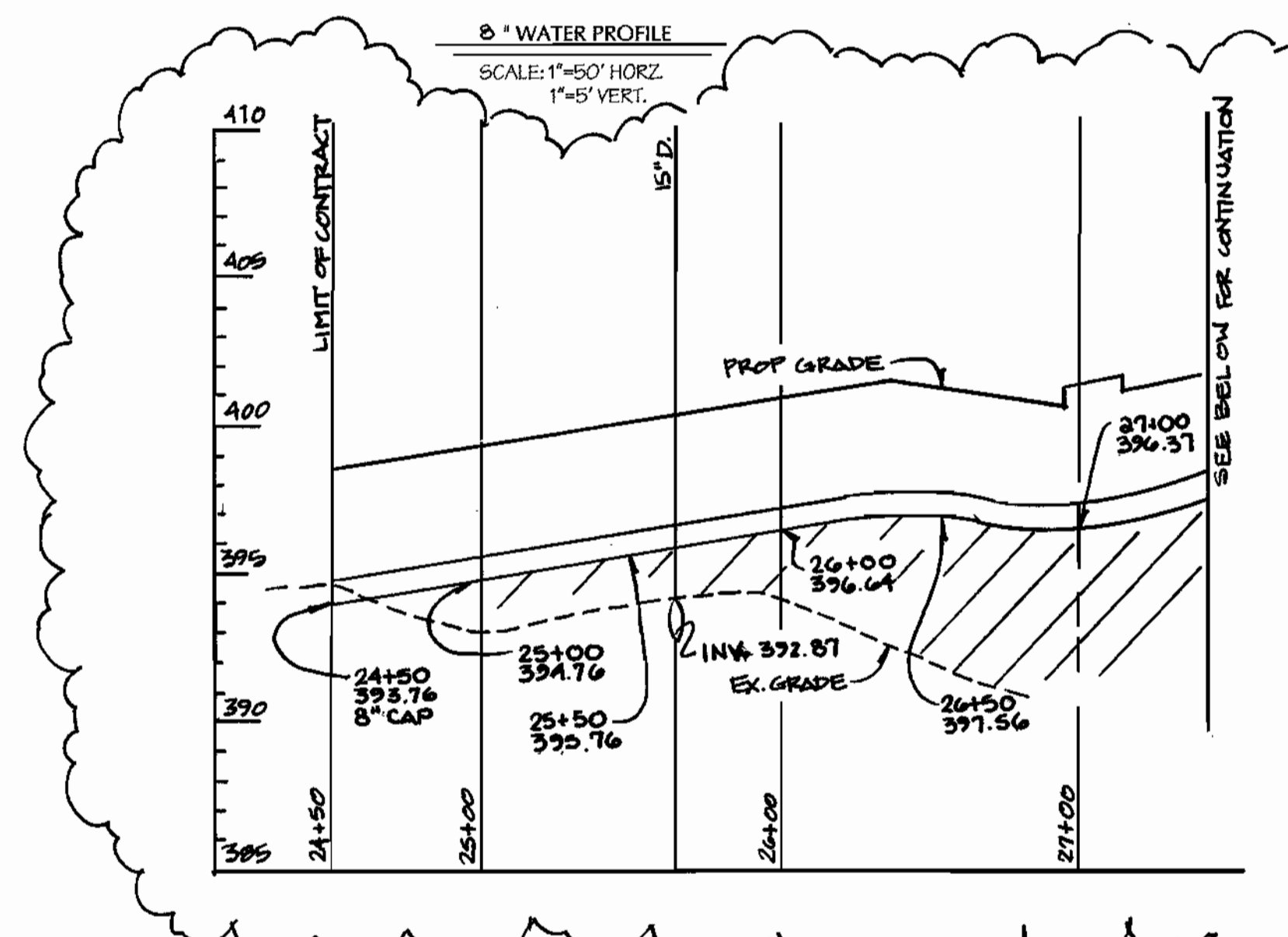
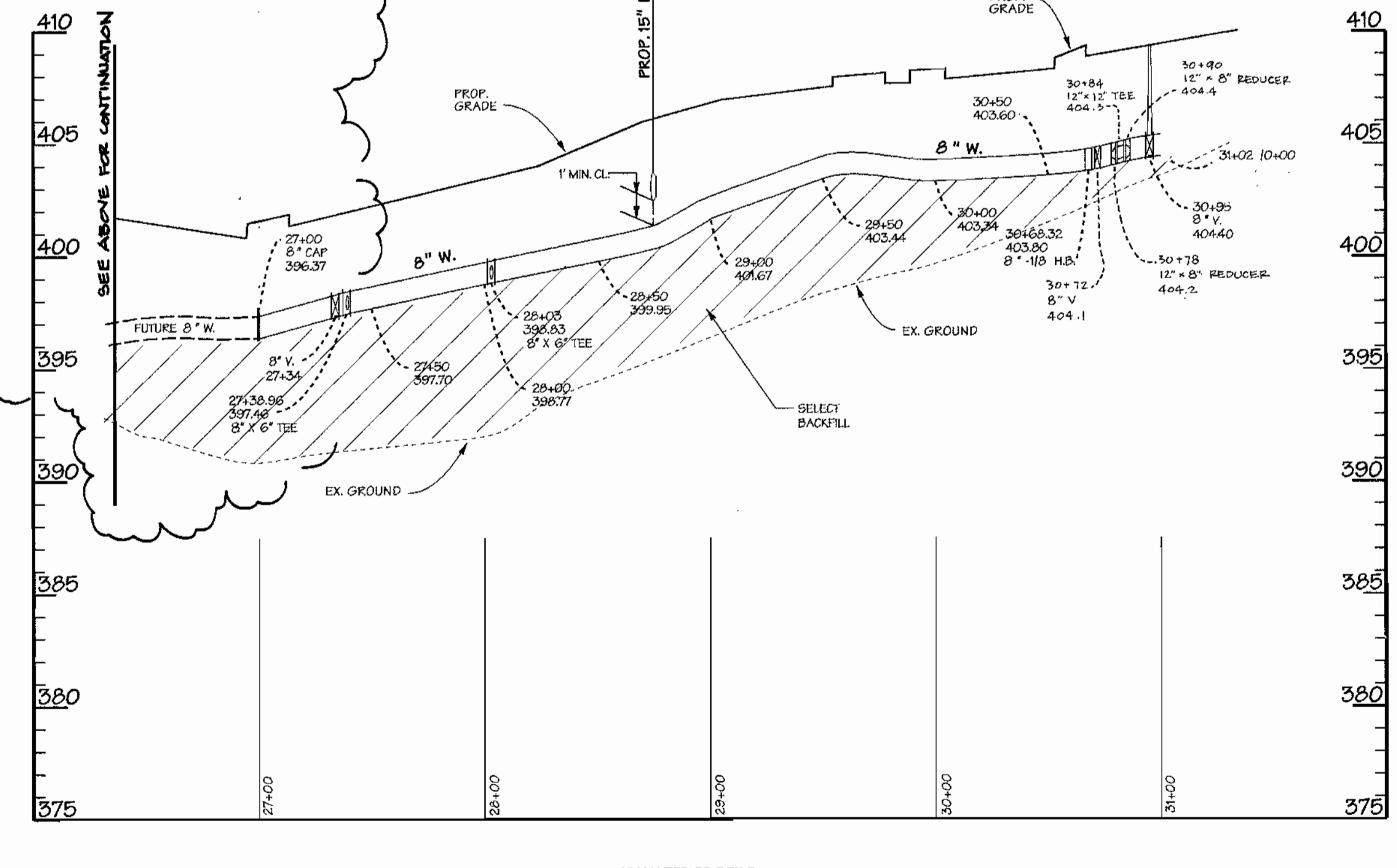
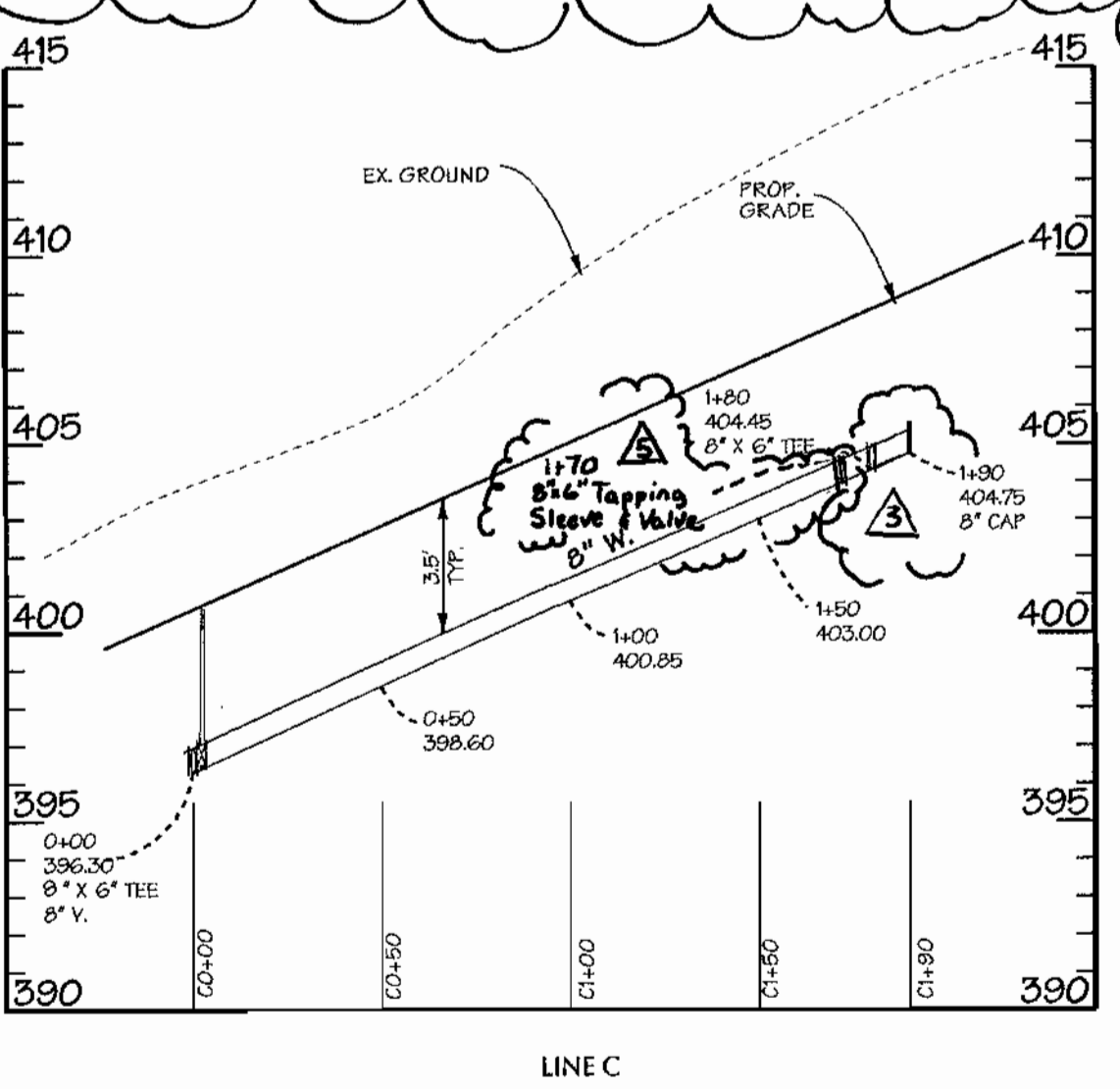
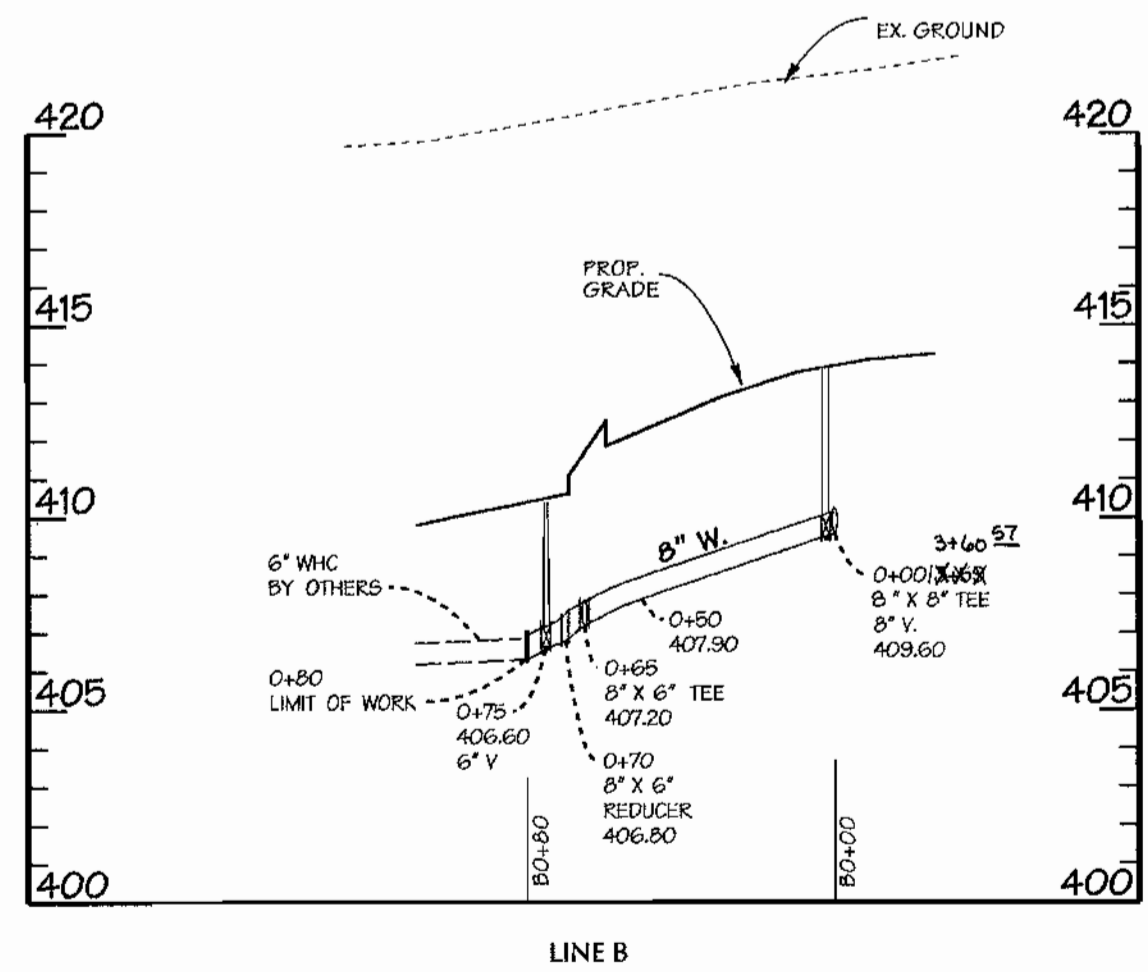
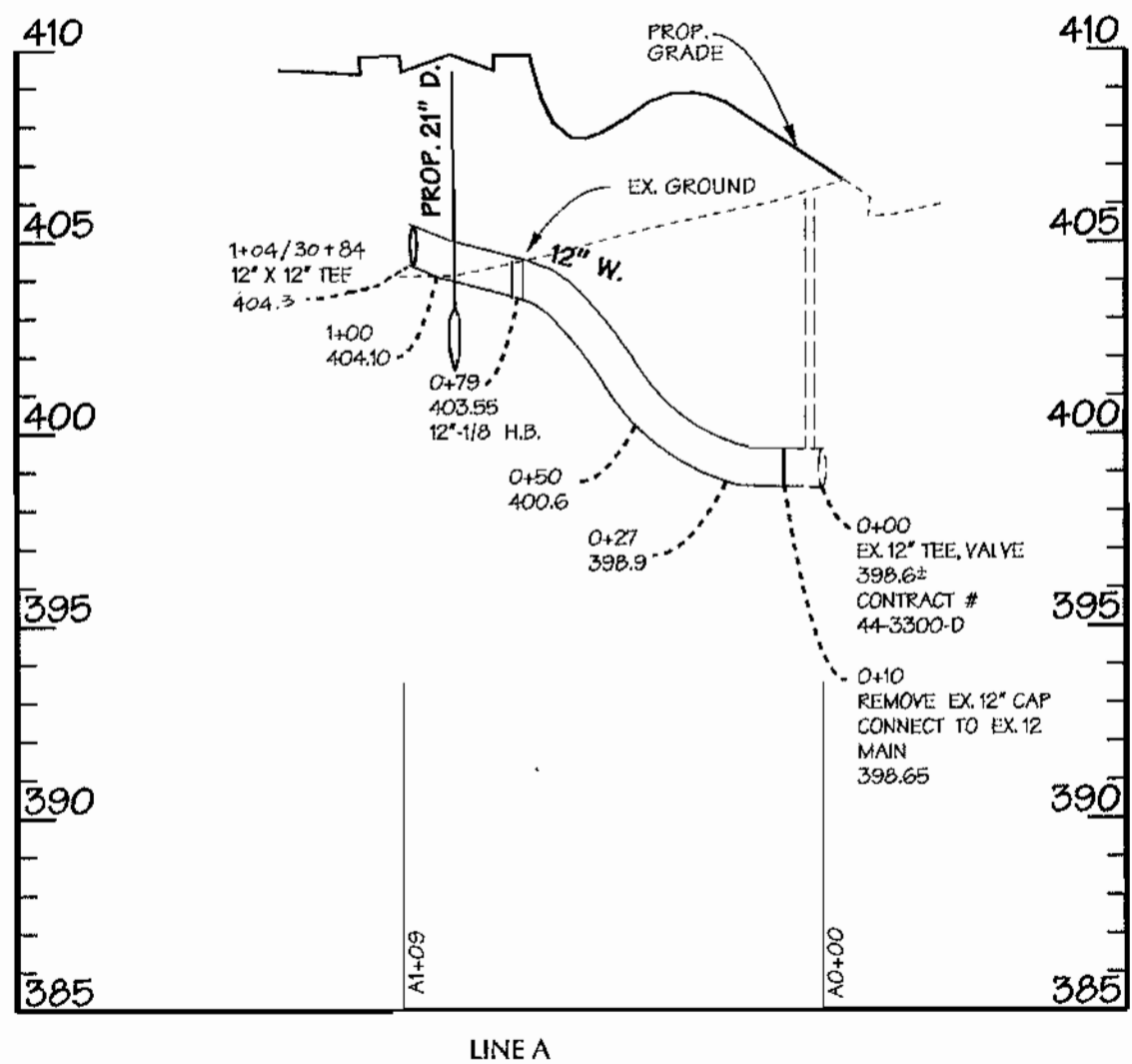
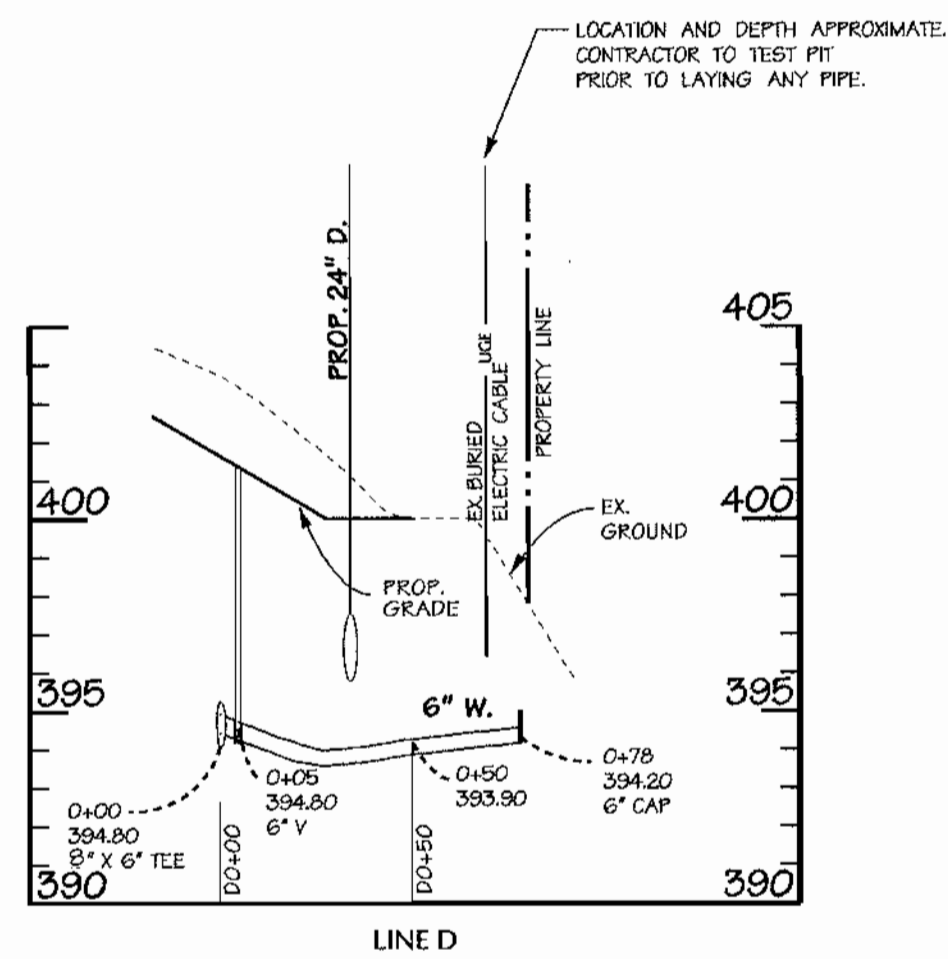
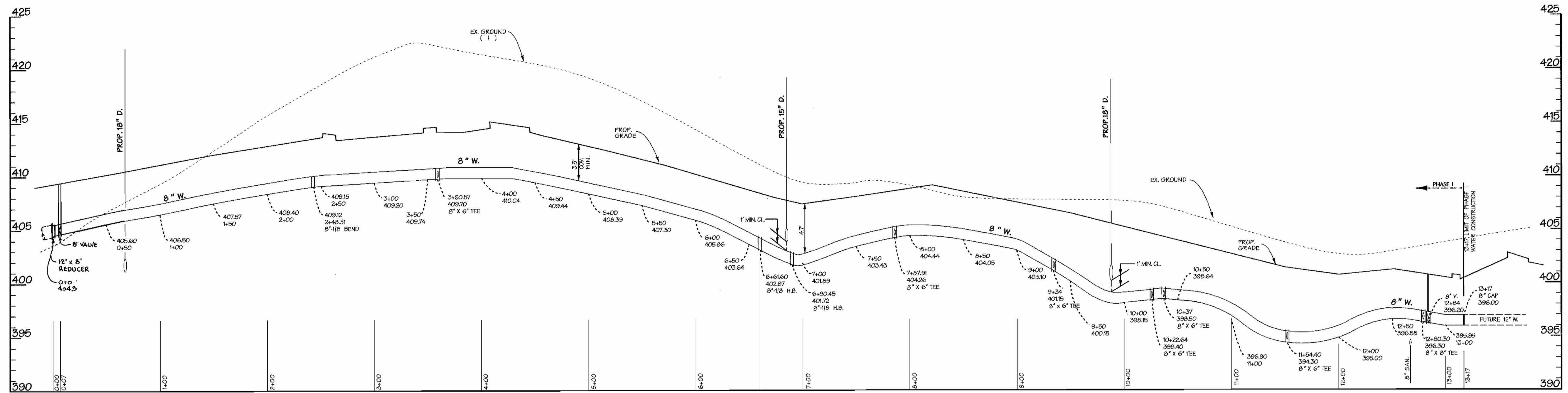
PHASE I COLUMBIA ROUTE 175 COMMERCIAL

SECTION 1 AREA 2 PARCEL A & O.S. LOT 3
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

OWNER /PURCHASER: LIBERTY PROPERTY LTD. PT.NP.
9145 GUILFORD ROAD
SUITE 100 COLUMBIA, MD 21046

CONTRACT NO. 44 - 3846 - D

SCALE 1" = 50'
SHEET 2 OF 4



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. L. ... 3-23-00
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

M. ... 4/3/00
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: SDS	DMW	CHANGED FROM 12" LI TO 8" LI FOR LOOP MAIN.	11-17-00
DRAWN BY: ADL	JMT	AS-BUILT	11-17-00
CHECKED BY: JWR	PMW	DELETE 2' CONN. FROM LINE C	10-23-01
DATE: MAR. 1, 2000	DMW	EXTEND W. FROM 27+00 TO 24+50	11-17-02
	DMW	8 1/2" TAPPING SLEEVE TO VAULT LINE C	12-12-03
BY	NO.	REVISION	DATE

WATER MAIN - PROFILES

600 SCALE MAP NO. 36 BLOCK NO. 18

**PHASE I
COLUMBIA
ROUTE 175 COMMERCIAL**
SECTION 1 AREA 2
6TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
OWNER /PURCHASER: LIBERTY PROPERTY LTD. PTNP.
9145 GULFORD ROAD
SUITE 100 COLUMBIA, MD 21046
CONTRACT NO. 44 - 3846 - D

AS SHOWN
SHEET 3 OF 4