

### BENCH MARKS

B.M.#1	ELEV. 235.23
X-OUT DIM OF EX. M.H. 2, BRASS OF LOTS 13 & 21	
B.M.#2	ELEV. 238.41
TOP OF EX. FIRE HYDRANT 245' SOUTHWEST OF EX. M.H. 5 IN FRONT OF LOTS 15 & 17. SEE C NORTH RIDGE	

PROPERTY OF U.S. JOINT VENTURE  
 PLAT NO. 2588  
 T.M.#47 P.#10

### SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE

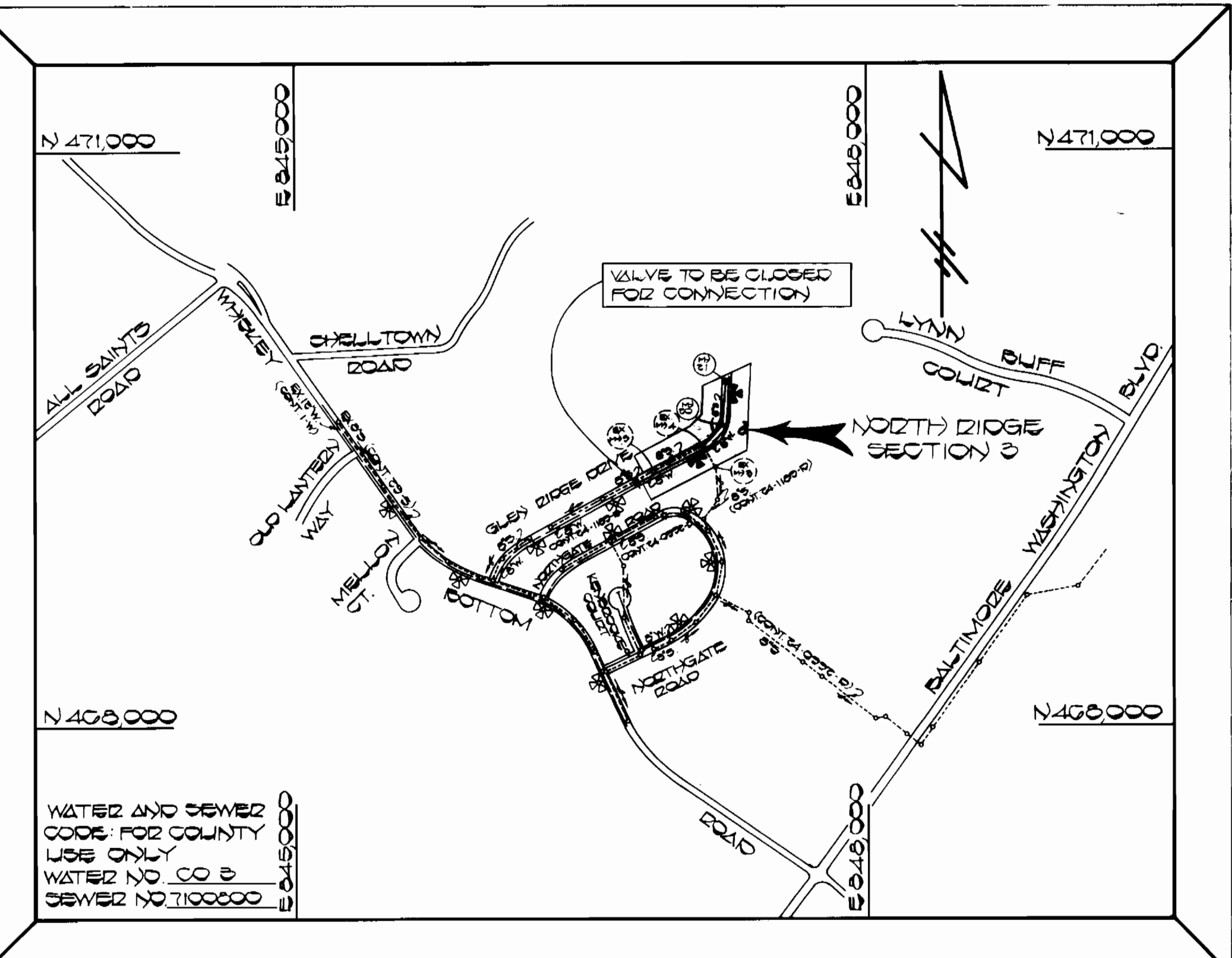
STATION	LOT	ELEV.
EX. M.H. 4 TO EX. M.H. 5		
0+00	LOT 10	257.10
1+00	LOT 11	257.00
1+20	LOT 5	256.00
1+30	LOT 24	254.84
1+40	LOT 24	254.84
1+50	LOT 24	254.84
1+60	LOT 24	254.84
1+70	LOT 24	254.84
1+80	LOT 24	254.84
EX. M.H. 5 TO EX. M.H. 6		
0+00	LOT 20	256.80
0+50	LOT 1	257.01
EX. M.H. 4 TO M.H. 20		
0+00	LOT 9	256.00
1+00	LOT 10	256.00
1+20	LOT 10	256.00
1+30	LOT 17	256.00
M.H. 20 TO M.H. 21		
0+00	LOT 9	251.55
1+11	LOT 9	251.55
1+40	LOT 14	251.15
1+50	LOT 11	252.02
1+51	LOT 18	252.10
1+60	LOT 18	252.02

### MINIMUM CELLAR ELEVATION

LOT 1	231.5	LOT 14	250.0
LOT 2	230.5	LOT 15	256.0
LOT 3	258.0	LOT 16	256.0
LOT 4	258.0	LOT 17	256.0
LOT 5	258.0	LOT 18	254.0
LOT 6	257.0	LOT 19	254.0
LOT 7	254.0	LOT 20	256.0
LOT 8	255.0	LOT 21	256.0
LOT 9	256.0	LOT 22	257.0
LOT 10	256.0	LOT 23	257.0
LOT 11	257.0	LOT 24	257.0
LOT 12	257.5	LOT 25	250.0
LOT 13	257.0	LOT 26	251.0

### MANHOLE TABLE

NO.	COORDINATES	DIST.	DIM.	SLOPE
20	14+00 STA	3' LT	304.55	+0.75%
21	17+12	0' LT	256.00	+1.00%



### VICINITY MAP

### 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 6".
- 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.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
  - STATE HIGHWAY ADMINISTRATION : 531-5533
  - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES : 561-2585
  - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL : 234-5621
  - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING : 298-9013
  - MISS UTILITY : 1-559-0100
  - COLONIAL PIPELINE COMPANY : 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS : 992-2366
- 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.
- 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 AND 1008 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPED FITTINGS ONLY.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W. 321).
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT MANHOLE FRAME AND COVERS STANDARD DETAIL G.5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR P.V.C. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G.5.1

### QUANTITIES

ITEM	EST'D	AS-BUILT	SUPPLIER
8" SEWER	304 LF		
6" SEWER	570 LF		
MANHOLES	2 EA		
6" WATER	702 LF		
6" WATER	591 LF		
FIRE HYD.	2 EA		
1" W.H.C.	100 LF		
3/4" W.H.C.	300 LF		
6" SEWER SADDLES	10 EA		

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING & SEDIMENT CONTROL PLAN FOR 20-20.

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

APPROVED: *[Signature]* 12-12-85  
 HOWARD COUNTY CONSERVATION DISTRICT

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

*[Signature]* 12/19/85  
 U.S. SOIL CONSERVATION SERVICE DATE

CONTRACT NO. 24-1421-D  
 NORTH RIDGE (SECTION THREE)  
 WATER AND SEWER EXTENSION  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*[Signature]* 12-31-85  
 DIRECTOR OF PUBLIC WORKS DATE

*[Signature]* 12-31-85  
 CHIEF, BUREAU OF UTILITIES DATE

*[Signature]* 12-31-85  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC.  
 CONSULTING ENGINEERS AND LAND SURVEYORS  
 8388 COURT AVENUE  
 ELLICOTT CITY, MARYLAND 21043

*[Signature]* DATE

STATE OF MARYLAND  
 TERRILL & FISHER  
 PROFESSIONAL SURVEYORS

CLS: D.B.S.  
 DRN: D.B.S.  
 CHK: T.A.F.

BY NO. DATE REVISION DATE

PLAN & PROFILE  
 WATER AND SEWER MAINS

600' SCALE MAP NO. 47 BLOCK NO.

NORTH RIDGE  
 SECTION THREE

CONTRACT NO. 24-1421-D  
 6 TH. ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 1 OF 1