

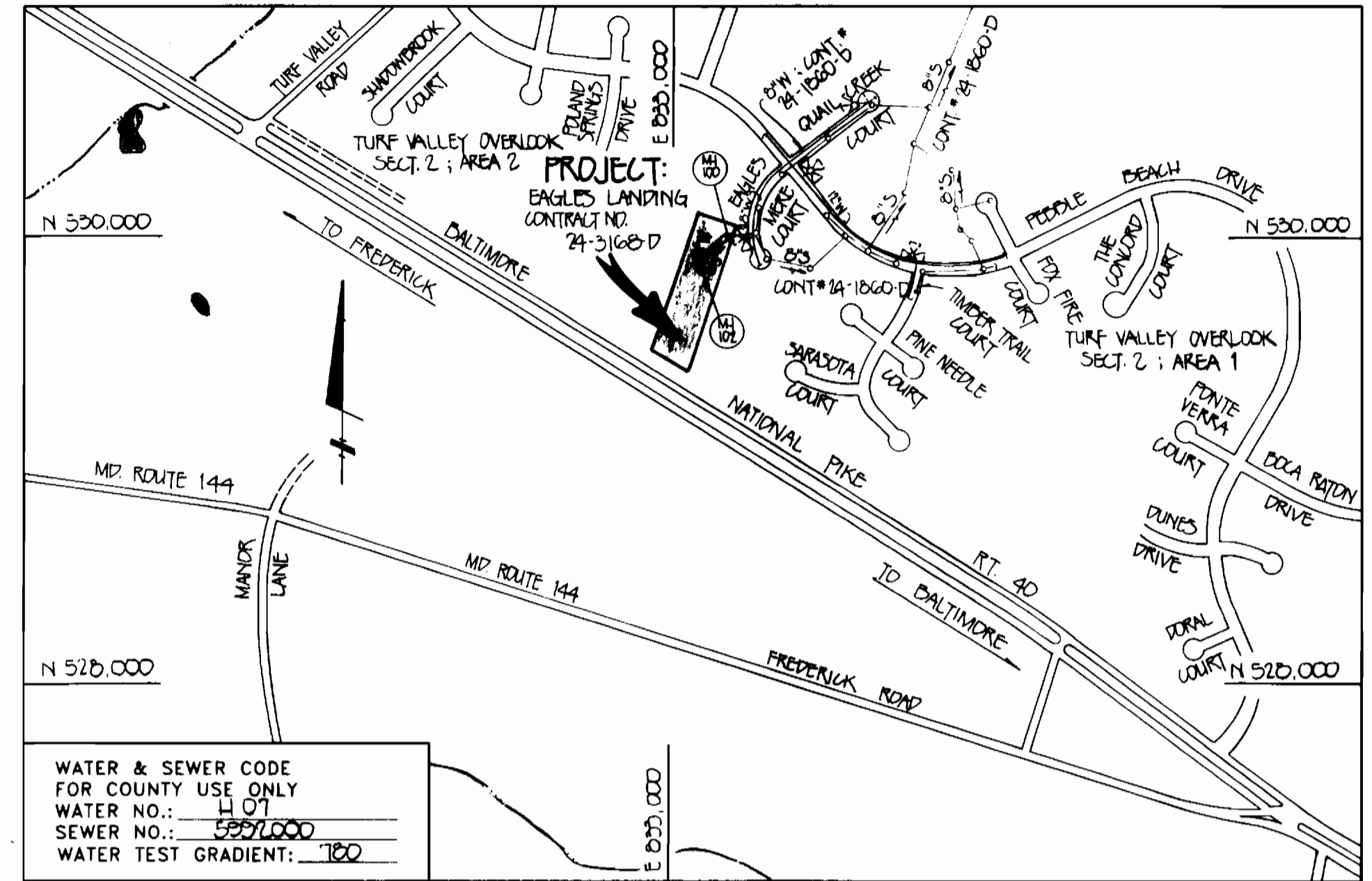
**BENCHMARKS**

BM 'A' ROAD SIDE BONNET BOLT ON FIRE HYDRANT LOCATED OFF OF FRONT RIGHT CORNER OF LOT 240 ELEV. 460.56  
 BM 'B' RAILROAD SPIKE SET IN 10' CHERRY TREE APPROX. 100' S. SOUTH OF PROPERTY CORNER #1566 ELEV. 459.14

M.C.E. DENOTES MINIMUM CELLAR ELEVATION

**QUANTITIES**

ITEM	ESTIMATED QUANTITIES	AS-BUILT QUANTITIES	TYPE	SUPPLIER
MANHOLES	3 EACH	3 EACH	PRECAST	ATLANTIC CONCRETE
8" SEWER	207 LF	317.2 LF	PVC	J.M.
4" SEWER	113 LF	153 LF	PVC	J.M.
6" WATER	300 LF	300 LF	D.I.	ATLANTIC STATES
3/4" WATER	115 LF	184 LF	COPPER	CAMBRIDGE LEE
BLOWOFF ASSEMBLY	1 EACH	1 EACH	FLUSH HYDRANT	MUELLER



WATER & SEWER CODE FOR COUNTY USE ONLY  
 WATER NO.: 1401  
 SEWER NO.: 5971000  
 WATER TEST GRADIENT: 100

**VICINITY MAP**

SCALE: 1"=600'

**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. DATUM.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
- 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 (1989 AMENDMENTS) 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 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 - 850-4620
  - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9068
  - MISS UTILITY - 1-800-257-7777
  - COLONIAL PIPELINE CO. - 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 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 THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL SEWER MAINS SHALL BE D.I.P., R.C.P., C.S.P.X., R.C.P.F., V.C.P.X., OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- 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 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.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G5.51.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL WATER MAINS SHALL 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 ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. 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.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-153; DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.

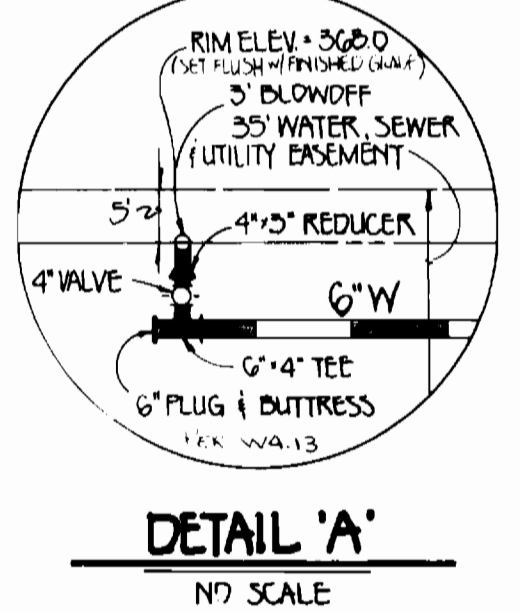
SEE THIS SHEET FOR PROFILE OF 6" W & S

**PLAN**  
SCALE: 1" = 50'

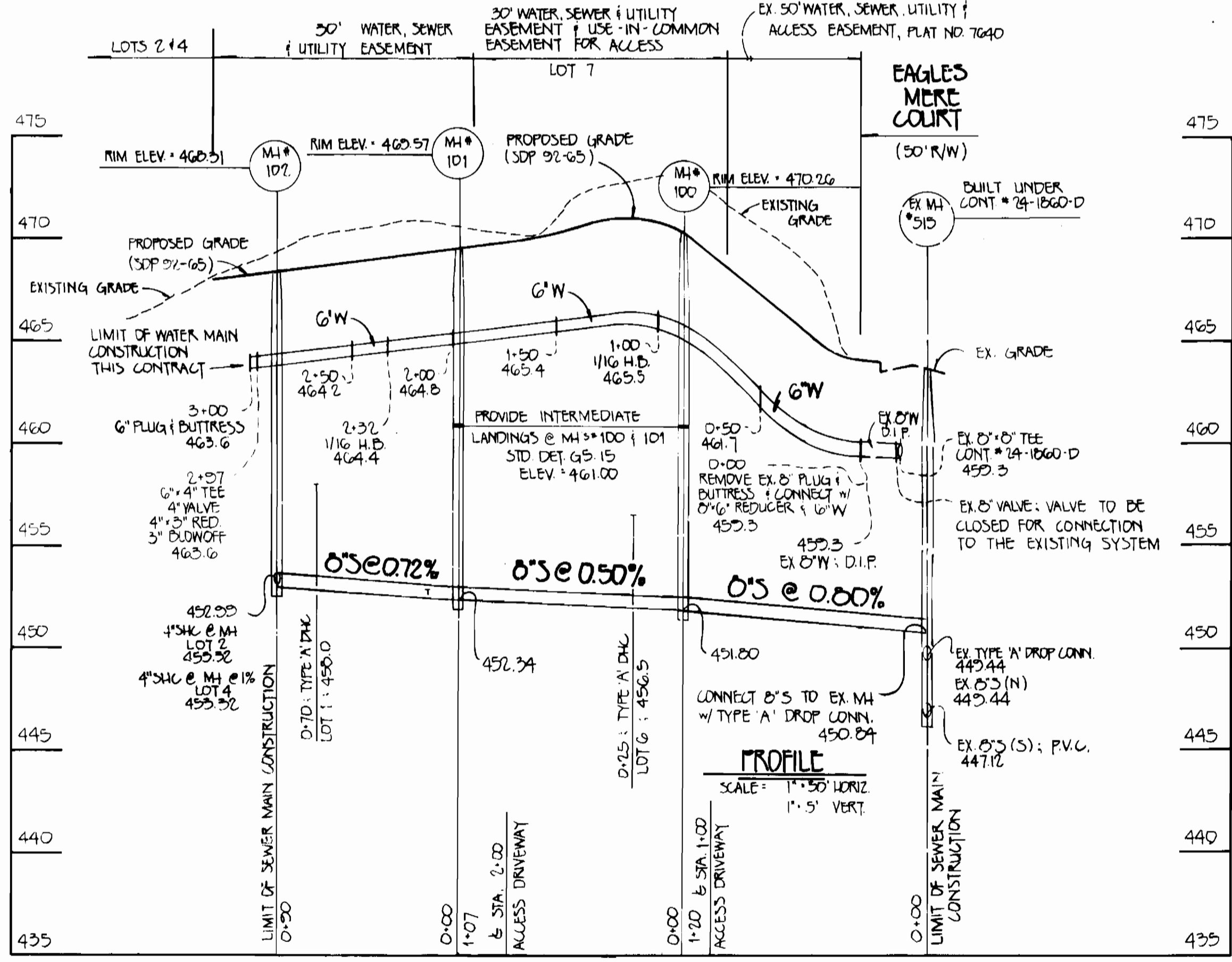
SEE THIS SHEET FOR PLAN OF 6" W & S

**S.H.C. INVERT ELEVATIONS @ PROPERTY LINE**

STATION	LOT	ELEVATION
EX. MH # 515 TO MH # 100		
NO CONNECTIONS		
MH # 100 TO MH # 101		
0+25 RT.	6	D.H.C. 456.56
MH # 101 TO MH # 102		
D+15 RT.	5	D.H.C. 455.06
D+70 LT.	1	D.H.C. 450.16
@ MH # 102 LT.	2	D.H.C. 455.56
@ MH # 102 RT.	4	(1.00%) 455.67



**DETAIL 'A'**  
1/4" = 1'-0"



**PROFILE**  
SCALE: 1" = 50' HORIZ  
1" = 5' VERT

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

APPROVED: 2/1/92  
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE SITE DEVELOPMENT PLAN SDP-92-65 REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

APPROVED: 2/1/92  
 H.S. SOIL CONSERVATION SERVICE DATE

PLAN REFERENCE NUMBERS:  
 S-92-00  
 SDP-92-65

CONTRACT NO. 24-3168-D  
 EAGLES LANDING  
 LOTS 1-7  
 WATER AND SEWER EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

2-1-92  
 DIRECTOR OF PUBLIC WORKS DATE

2-12-92  
 CHIEF, BUREAU OF ENGINEERING DATE

2-4-92  
 CHIEF, BUREAU OF UTILITIES DATE

2/1/92  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS &  
 LAND SURVEYORS  
 SUITE 100, 9171 BALTIMORE NATIONAL PIKE  
 ELIJACOTT CITY, MARYLAND 21042  
 (301) 461-2855

#9757

DES: MJM  
 DRWN: MJM  
 CHK: P.W.K.  
 DATE: \_\_\_\_\_

TERRELL A. FISHER

BY	NO.	REVISION	DATE

PLAN AND PROFILE  
 WATER AND SEWER MAINS

600' SCALE MAP NO. 16 BLOCK NO. \_\_\_\_\_

**EAGLES LANDING**  
 LOTS 1-7  
 CONTRACT NO. 24-3168-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 1 OF 1  
 UT SHEET DWG

AS-BUILT 1/21/93