

GENERAL NOTES

- 1. 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.
2. TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON FEBRUARY 2003 BY WINGS AERIAL MAPPING SUPPLEMENTED BY TOPOGRAPHIC SURVEY PERFORMED BY MILDENBERG BOENDER & ASSOCIATES IN AUGUST 2004.
3. HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 43R1 AND NO. 43B2. ALL VERTICAL CONTROLS ARE BASED ON NAVD '29. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE HO.CO. GEODETIC CONTROL STA. 43R1 & 43B2.
4. 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 THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWNED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
6. FOR DETAILS NOT SHOWN ON THE DRAWING, 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.
7. 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.
8. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T1-800-252-1133
BGE(CONSTRUCTION SERVICES).....410-850-4620
BGE(EMERGENCY).....410-685-1400
BUREAU OF UTILITIES.....410-313-4900
COLONIAL PIPELINE CO.....410-795-1390
MISS UTILITY.....1-800-257-7777
STATE HIGHWAY ADMINISTRATION.....410-531-5533
VERIZON.....1-800-743-0033/410-224-9210
9. 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 CONSTRUCTOR.
10. THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATED. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
11. 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 18.114(a) OF THE HOWARD COUNTY CODE.
12. PLEASE USE CAUTION WHEN EXCAVATING IN THE VICINITY OF OVERHEAD ELECTRIC LINES.

- WATER
1. ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
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.

- SEWER
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." INDICATED THAT THE CELLAR CANNOT BE SERVED.
7. THE REQUEST FOR A WAIVER OF THE MINIMUM WIDTH OF A PRIVATE EASEMENT WAS APPROVED BY THE BUREAU OF ENGINEERING ON OCTOBER 8 2004.
8. THE REQUEST FOR A WAIVER OF GRAVITY SEWER SERVICE AND THE USE OF PRIVATE ON-SITE PUMPS AND PRIVATE LOW PRESSURE SEWERS TO SERVE LOTS 1 - 4 WAS APPROVED BY THE BUREAU OF ENGINEERING ON JUNE 18 2004.
9. THE REQUEST FOR A WAIVER OF THE 10' CLEARANCE REQUIREMENTS BETWEEN A STRUCTURE AND THE EDGE OF A UTILITY EASEMENT WAS APPROVED BY THE BUREAU OF ENGINEERING ON DECEMBER 17 2003. (MOORES' ESTATE)

DEVELOPER
DORSEY FAMILY HOMES
10717-B BIRMINGHAM WAY
WOODSTOCK, MD 21163
(410)465-7200

QUANTITY TABLE

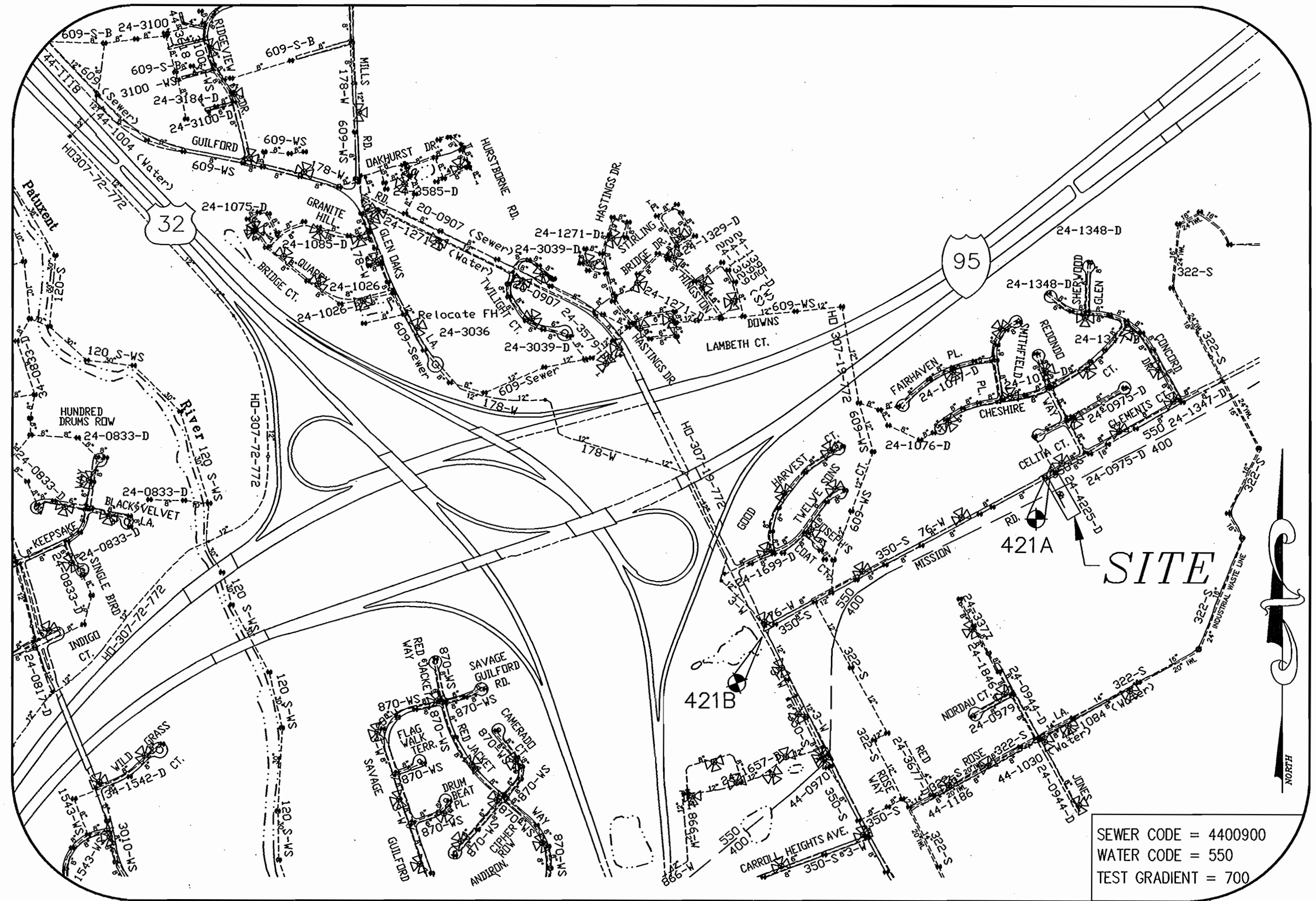
Table with columns: ITEMS, QUANTITIES ESTIMATED, QUANTITIES, TYPE, MANUFACTURER/SUPPLIER. Lists items like STANDARD MH, 8" SEWER MAIN, 4" SHC, 8" WATER MAIN, etc.

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

INDEX OF DRAWINGS

Table with columns: NO., DESCRIPTION. Lists drawing numbers 1 through 4 and their descriptions.

EROSION AND SEDIMENT CONTROL FOR THIS CONTRACT IS PROVIDED UNDER F-03-060



VICINITY MAP
SCALE: 1"=600'

Table showing utility counts: TYPE OF BUILDING (SFD), No. OF UNITS (4), No. OF WATER HOUSE CONNECTION (4), No. OF SEWER HOUSE CONNECTIONS (4), DRAINAGE AREA (PATUXENT), TREATMENT PLANT (LITTLE PATUXENT WRP).

CONTRACT NO.: 24-4225-D
MOORES' II ESTATE
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 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.
Developer Signature: Robert L. Deschler, Date: 9-26-06
Engineer Signature: John Miltenberg, Date: 9/26/06
Reviewed for Howard SCD and Meets Technical Requirements: Jim Maguire, Date: 10/10/06
Approved for Howard SCD: John K. Roberts, Date: 10/10/06

PLAN REFERENCE NUMBERS: F-03-060

02031.DWG WATER-PLANS 02031-FINAL.WS.DWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
R. M. Banning, 10-2-06, CHIEF, BUREAU OF UTILITIES

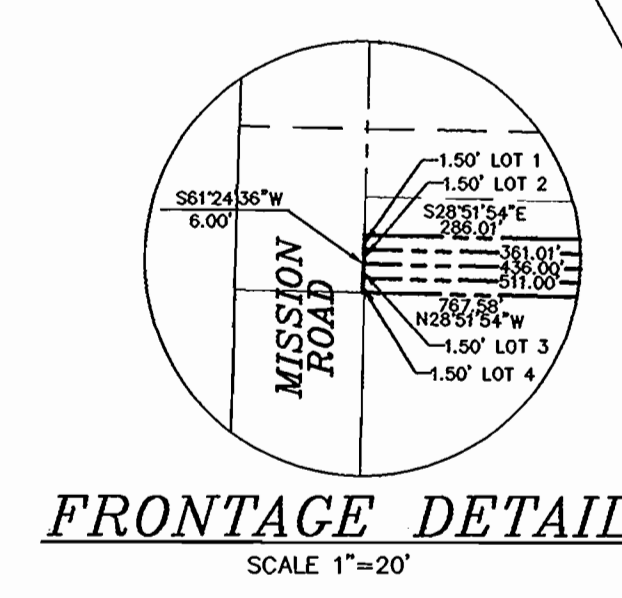
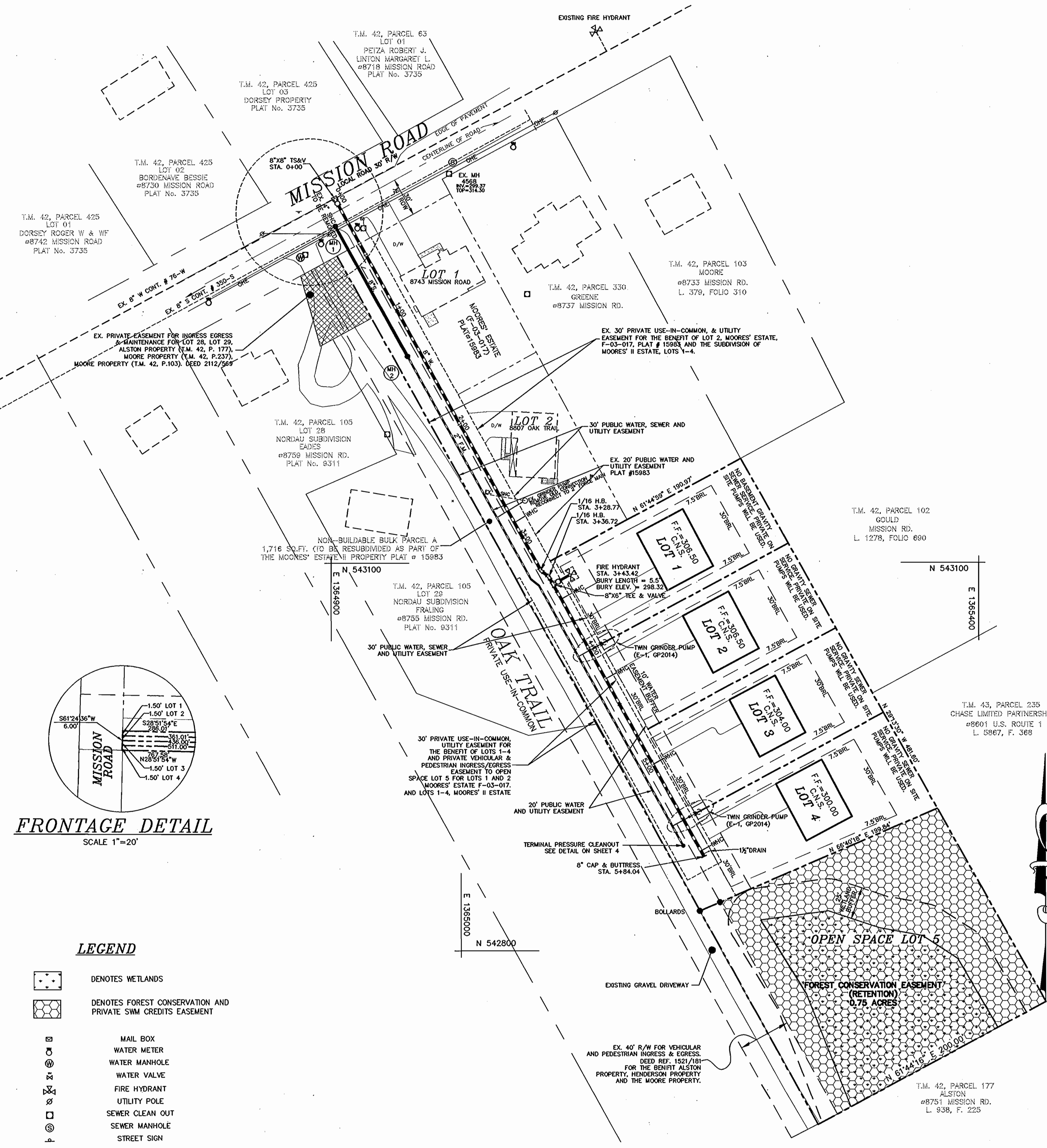
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
W. J. P... 10/16/06, CHIEF, DEVELOPMENT ENGINEERING DIVISION

MILDENBERG, BOENDER & ASSOC., INC
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21114
(410) 997-0286 Fax (301) 621-5521 Wash (410) 997-0288 Fax

engineering HSP
illustration HSP
approval RJH
project 02-031
date SEPT 2006 BY NO. REVISION DATE

COVER SHEET
600' SCALE MAP NO. 42 BLOCK NO. 24

MOORES' II ESTATE
LOTS 1 THRU 4
CONTRACT NO.: 24-4225-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
scale AS SHOWN 1 of 4



- LEGEND**
- DENOTES WETLANDS
 - DENOTES FOREST CONSERVATION AND PRIVATE SWM CREDITS EASEMENT
 - MAIL BOX
 - WATER METER
 - WATER MANHOLE
 - WATER VALVE
 - FIRE HYDRANT
 - UTILITY POLE
 - SEWER CLEANOUT
 - SEWER MANHOLE
 - STREET SIGN

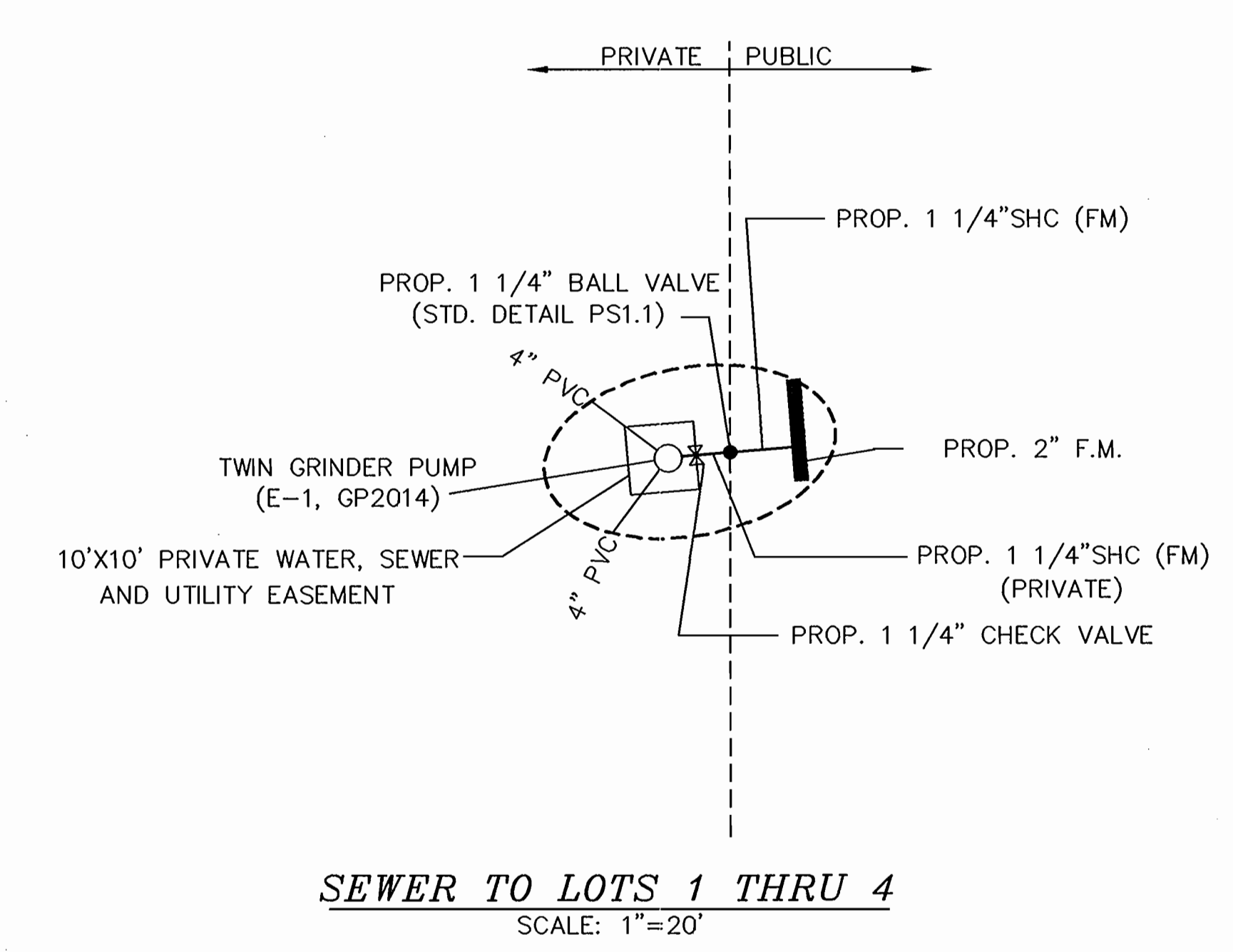
WATER PLAN
SCALE: 1"=50'

MANHOLE LOCATION CHART

MANHOLE NUMBER	NORTHING	EASTING
MH-1	543360.65	1364903.49
MH-2	543259.59	1364959.19

8" WATER MAIN TABULATION CHART

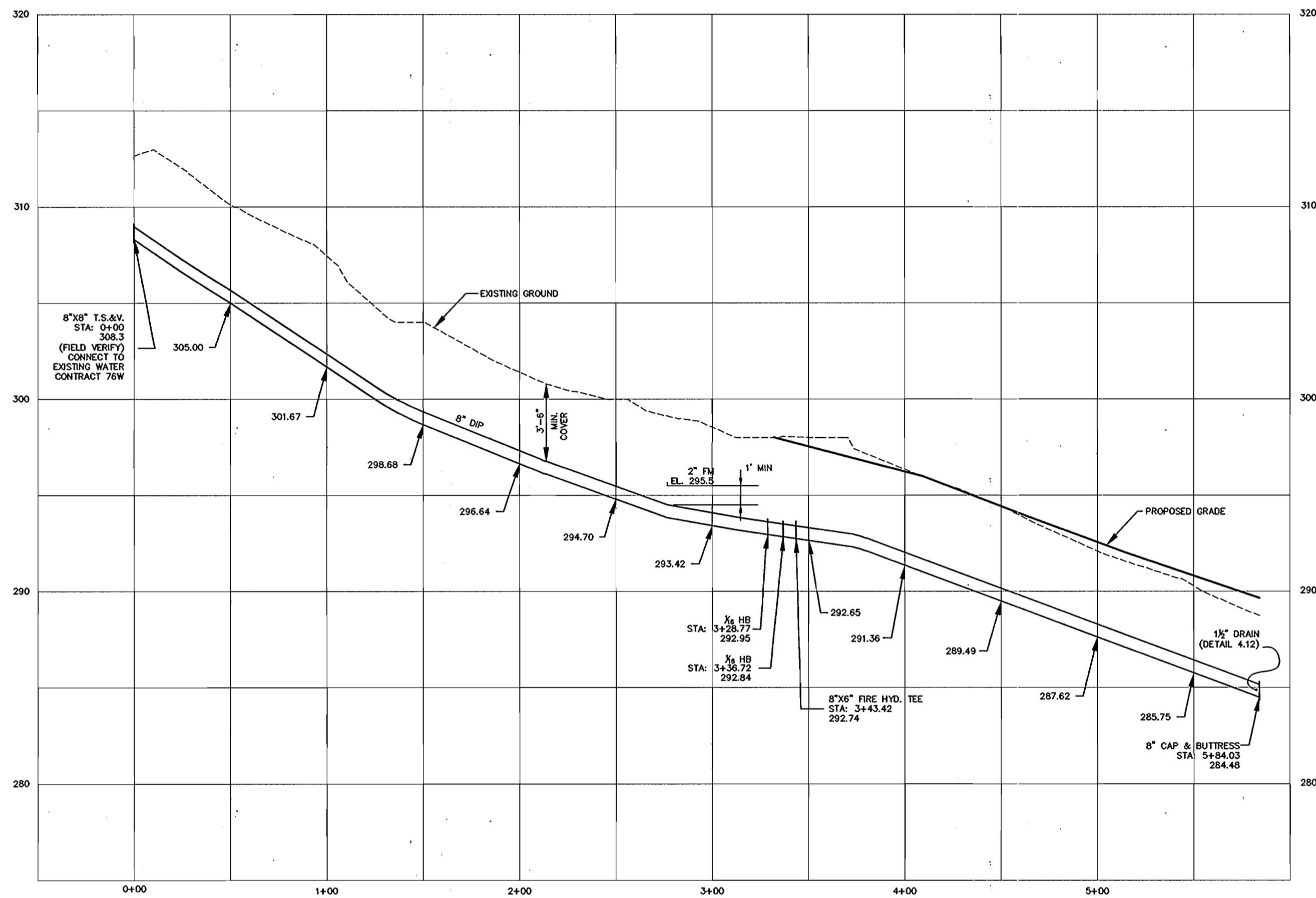
APPURTENANCE	NORTHING	EASTING
8"x8" T. S. & V.	543382.04	1364903.12
1/16 H.B. (8")	543094.12	1365061.83
1/16 H.B. (8")	543089.22	1365068.09
8"x6" F.H.T. & V.	543083.36	1365071.33
FIRE HYDRANT	543090.54	1365084.36
8" CAP & BUTTRESS	542872.64	1365187.48



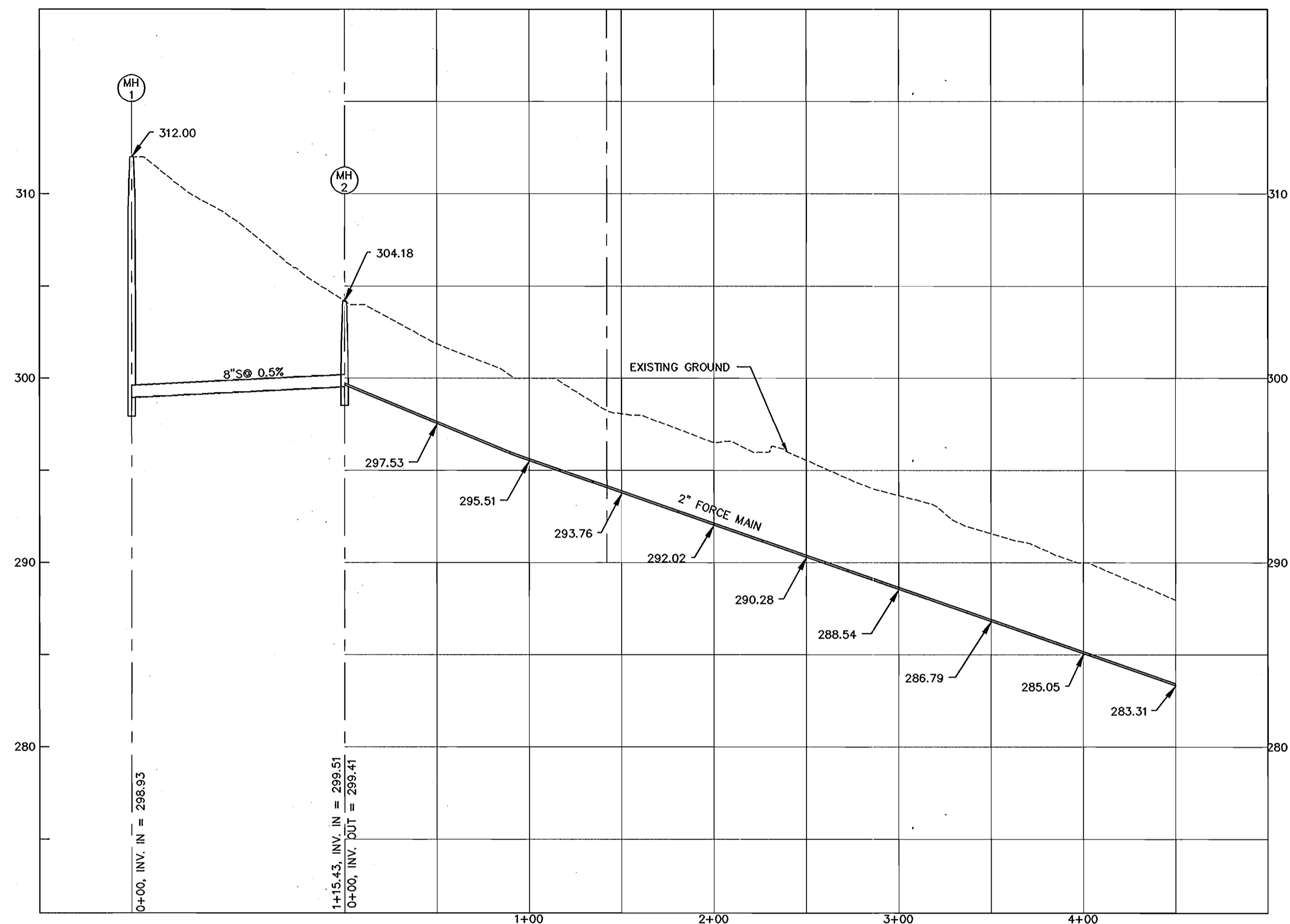
02031.DWG WATER-PLANS 1031-NSPLAND.DWG

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND R. H. DENNIS CHIEF, BUREAU OF UTILITIES 10-2-06 DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND [Signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION 10/10/06 DATE	MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042 (410) 987-0286 Balt. (301) 621-5521 Wash. (410) 987-0288 Fax	engineering HSP illustration HSP approval RJH project 02-031 date SEPT 2006 BY NO. REVISION DATE	WATER AND SEWER PLAN 600' SCALE MAP NO. 42 BLOCK NO. 24	MOORES' II ESTATE LOTS 1 THRU 4 CONTRACT NO.: 24-4225-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	scale 1"=50' 2 OF 4
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WATER PROFILE
 SCALE HOR. 1"=50'
 SCALE VER. 1"=5'



SEWER PROFILE
 SCALE HOR. 1"=50'
 SCALE VER. 1"=5'

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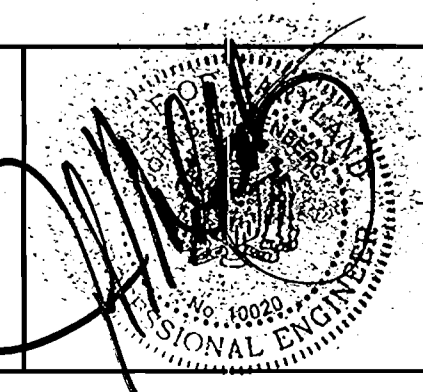
02031 DWS WATER-PLANS.DWG - HSP/LAND/DWG

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

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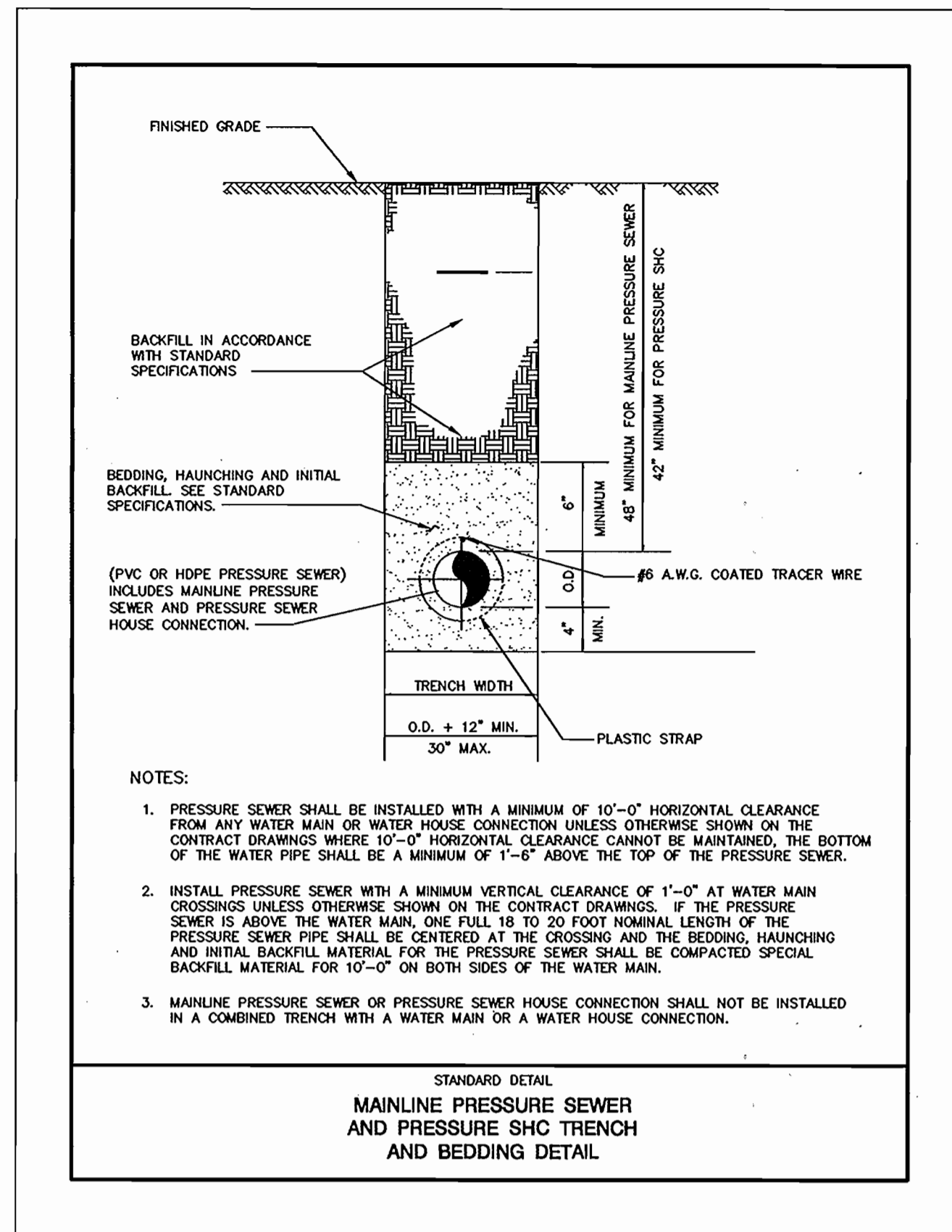
engineering HSP					
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WATER AND SEWER PROFILES

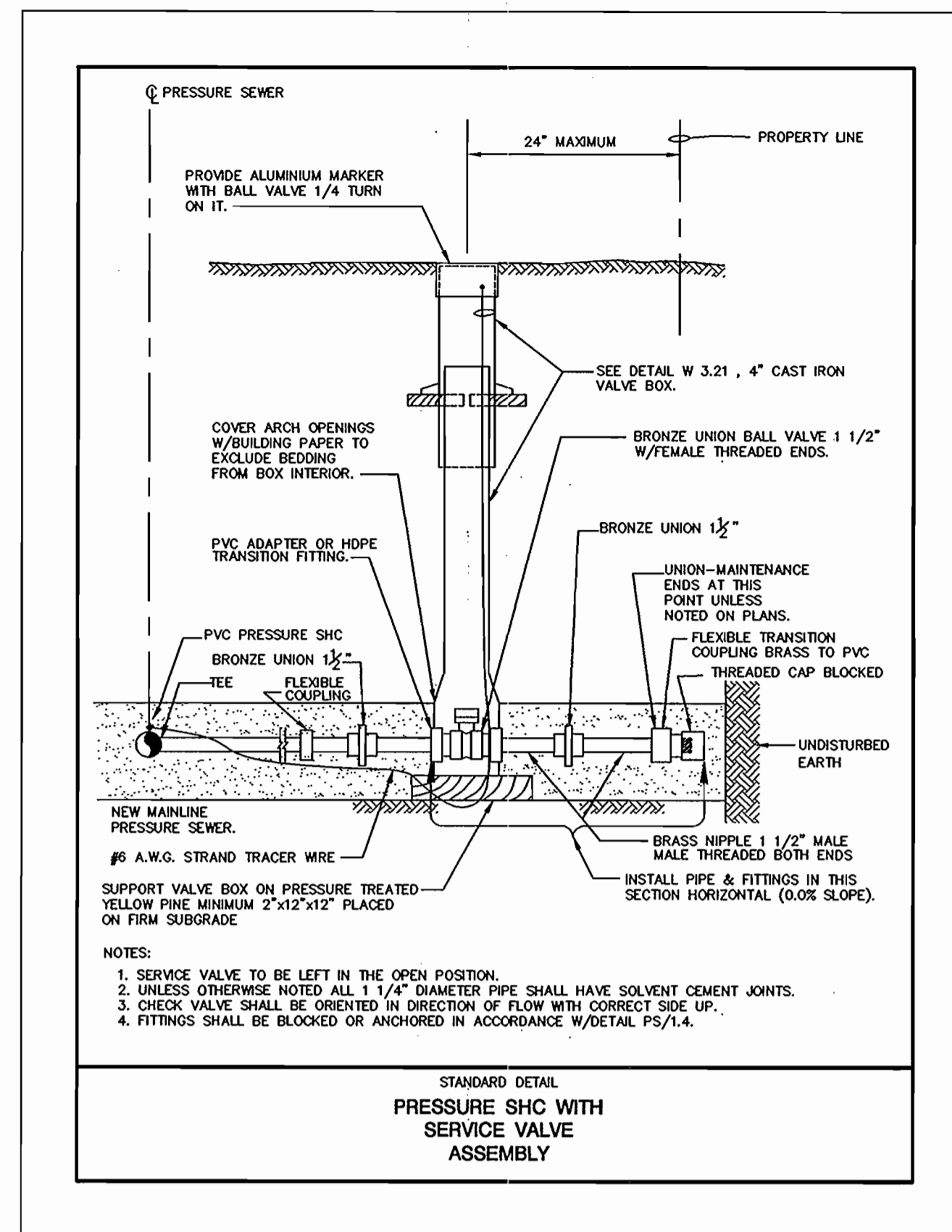
600' SCALE MAP NO. 42 BLOCK NO. 24

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LOTS 1 THRU 4
 CONTRACT NO.: 24-4225-D
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

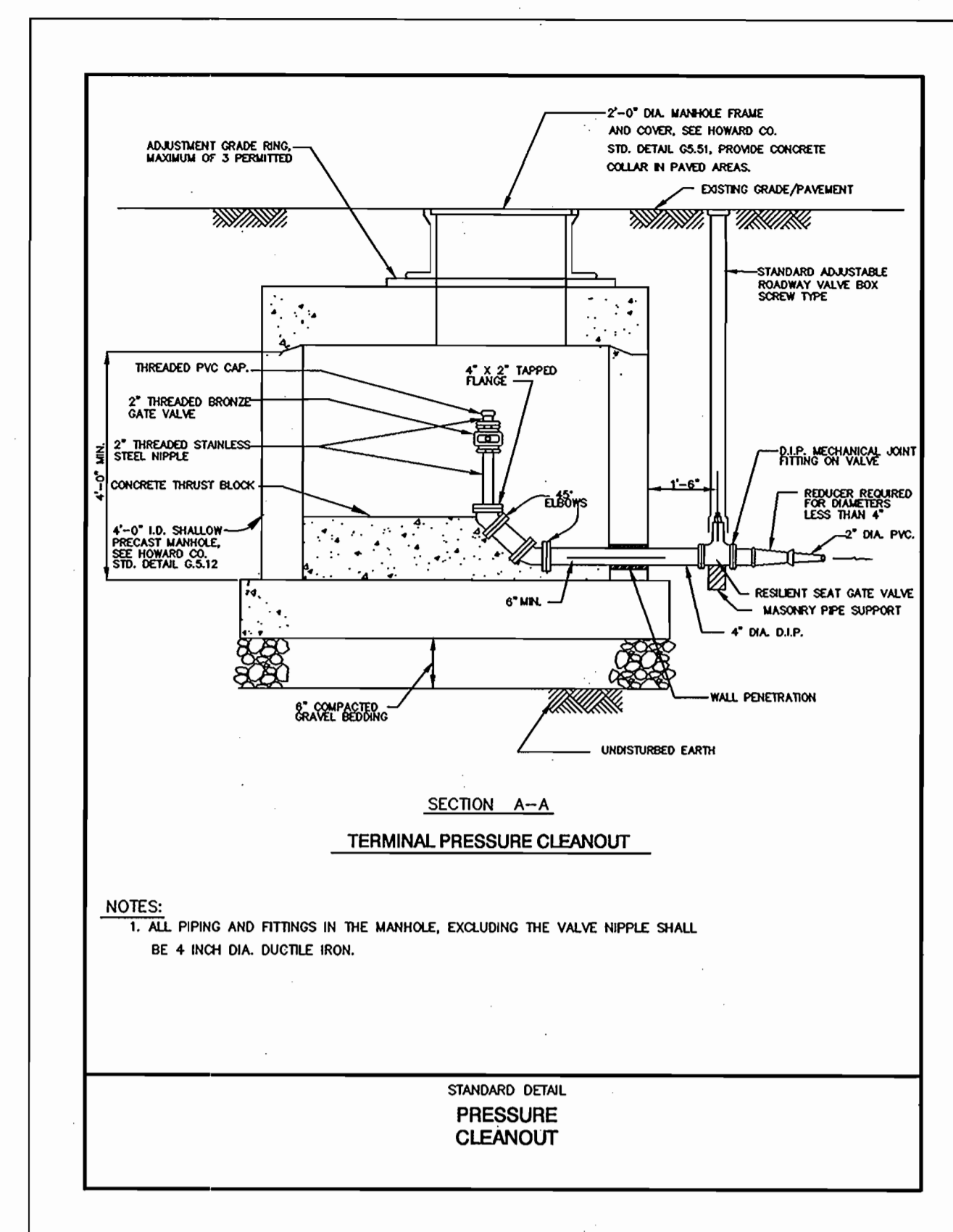
scale
 1"=50'



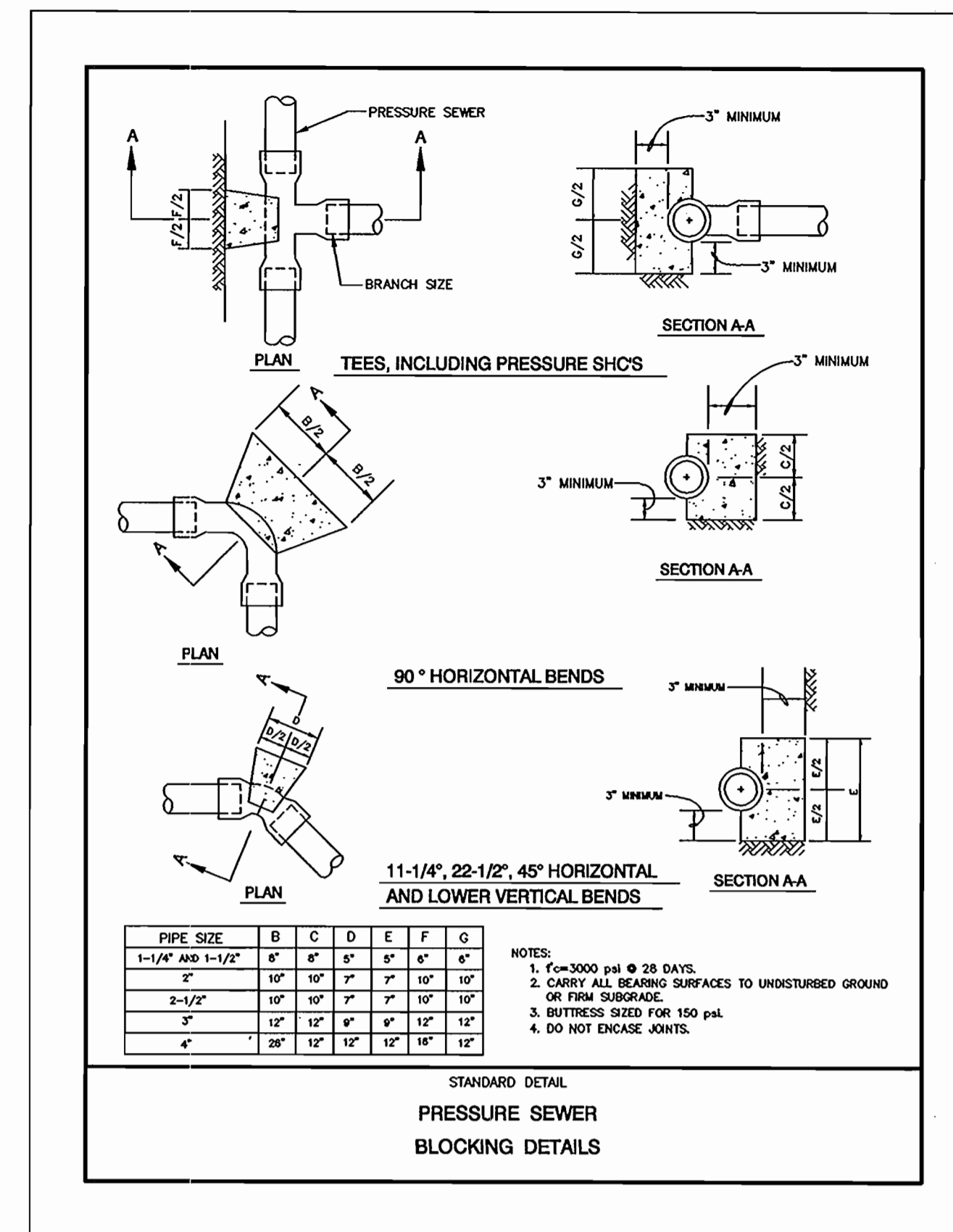
DETAIL PS 1.0



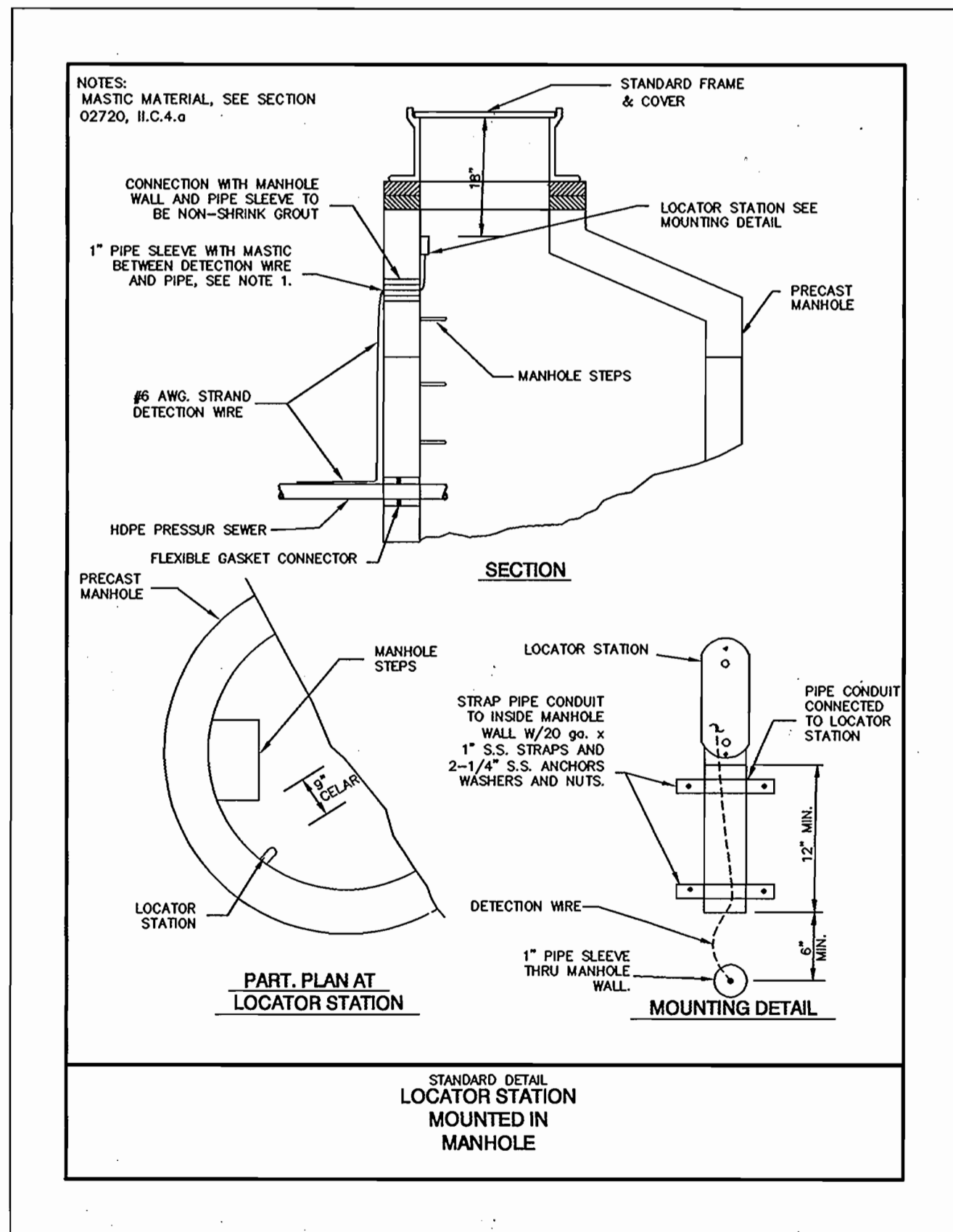
DETAIL PS 1.1



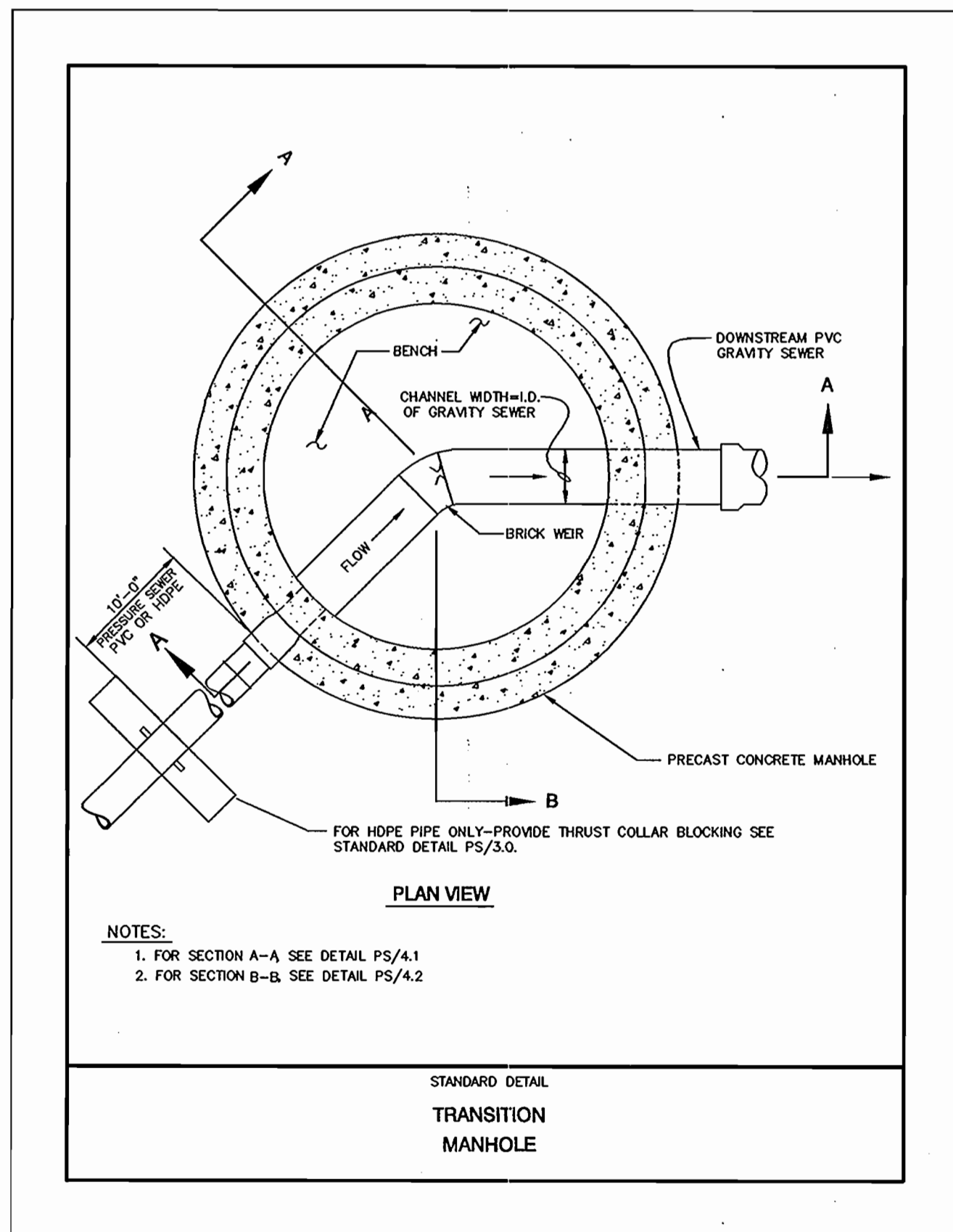
STANDARD DETAIL PRESSURE SHC WITH CLEANOUT



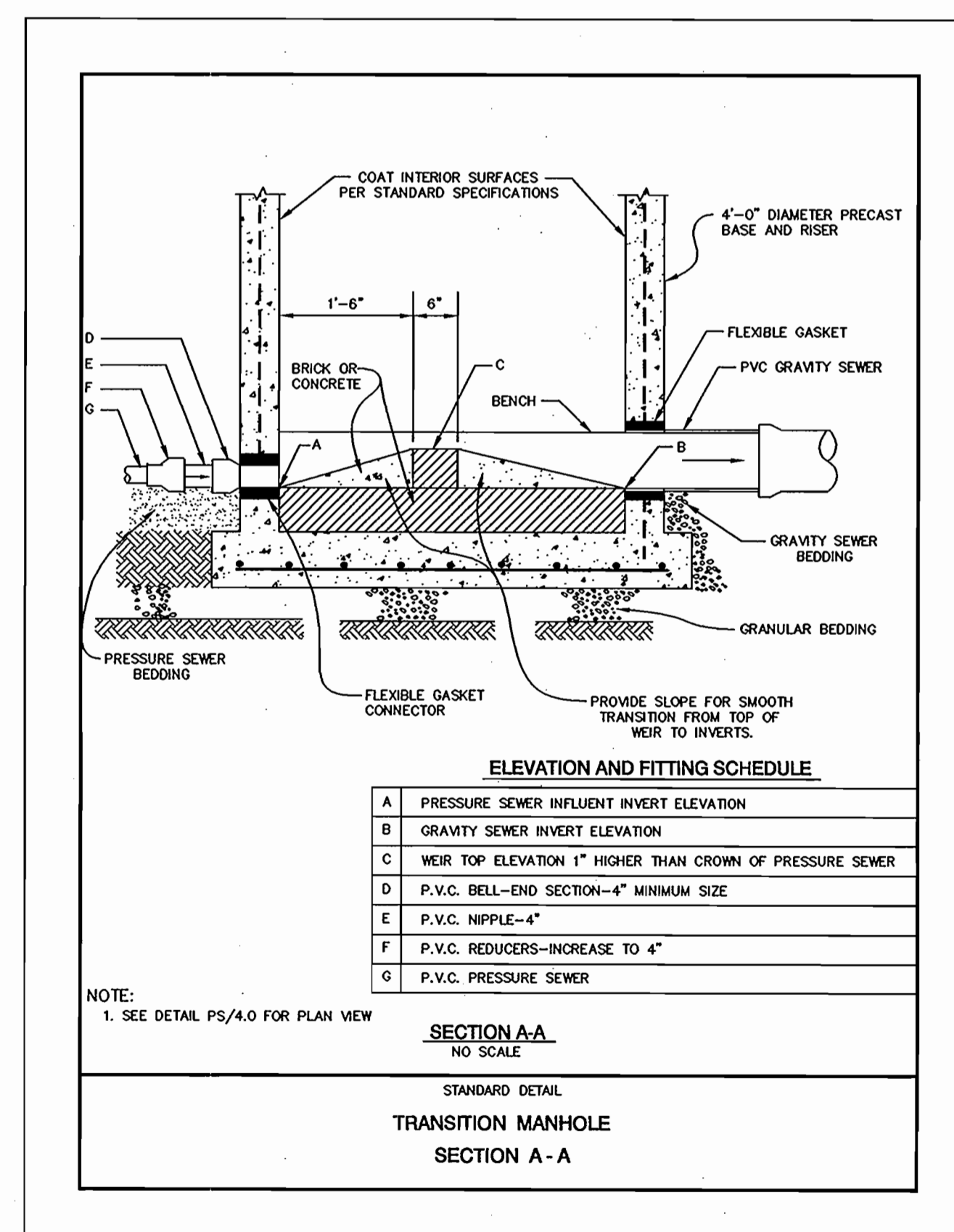
DETAIL PS 1.4



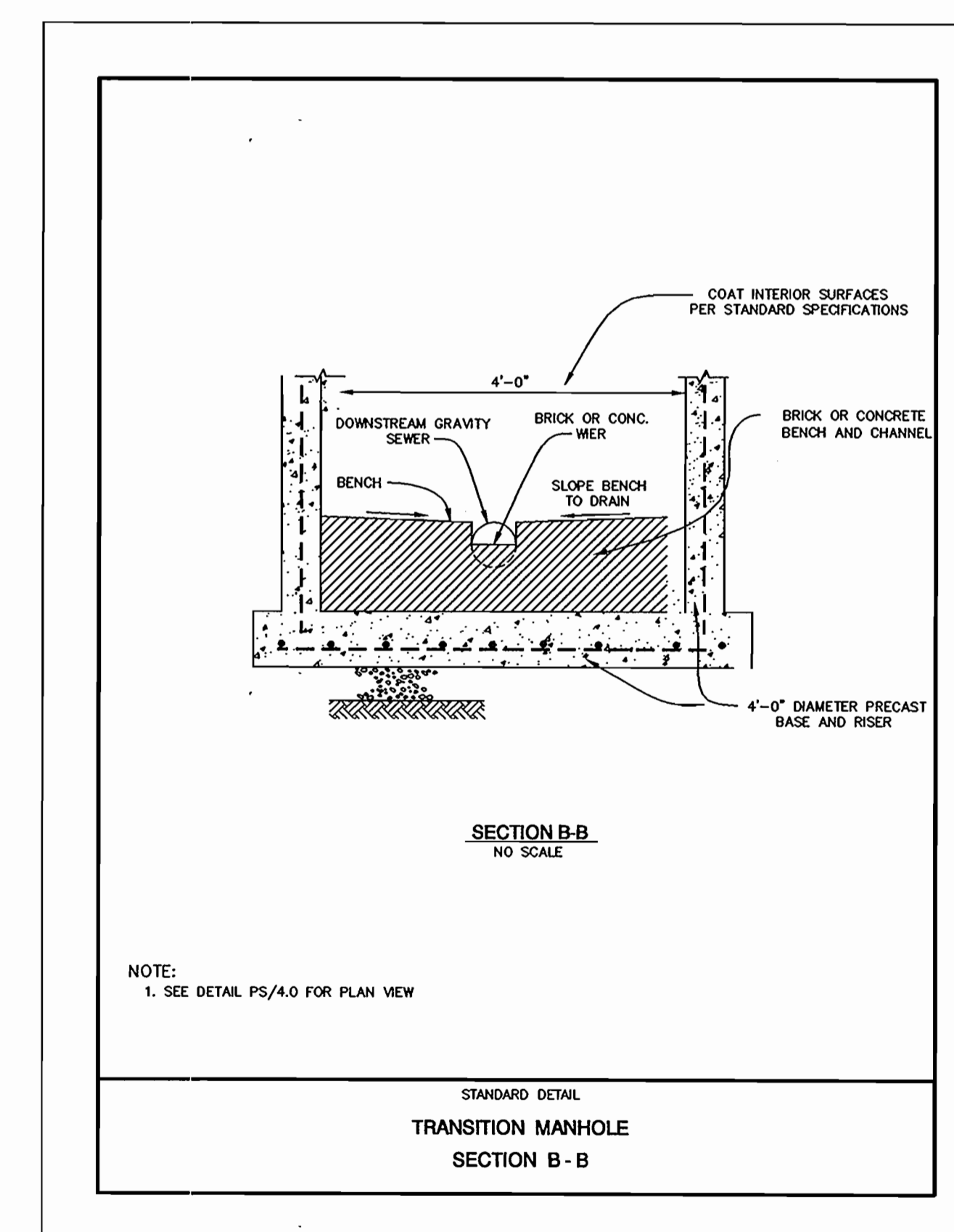
DETAIL PS 8.0



DETAIL PS 4.0



DETAIL PS 4.1



DETAIL PS 4.2

02031 DWG WATER-PLANS 031-NSPLANDWG

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Ruth B... 10-2-06
CHIEF, BUREAU OF UTILITIES

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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engineering	HSP				
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SEWER DETAILS

600' SCALE MAP NO. 42 BLOCK NO. 24

MOORES' II ESTATE
LOTS 1 THRU 4

CONTRACT NO.: 24-4225-D
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HOWARD COUNTY, MARYLAND

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1"=50'

4 of 4

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