

SEWER EXTENSION PLAN
SCALE:
HORZ: 1" = 50'

SEWER GENERAL NOTES

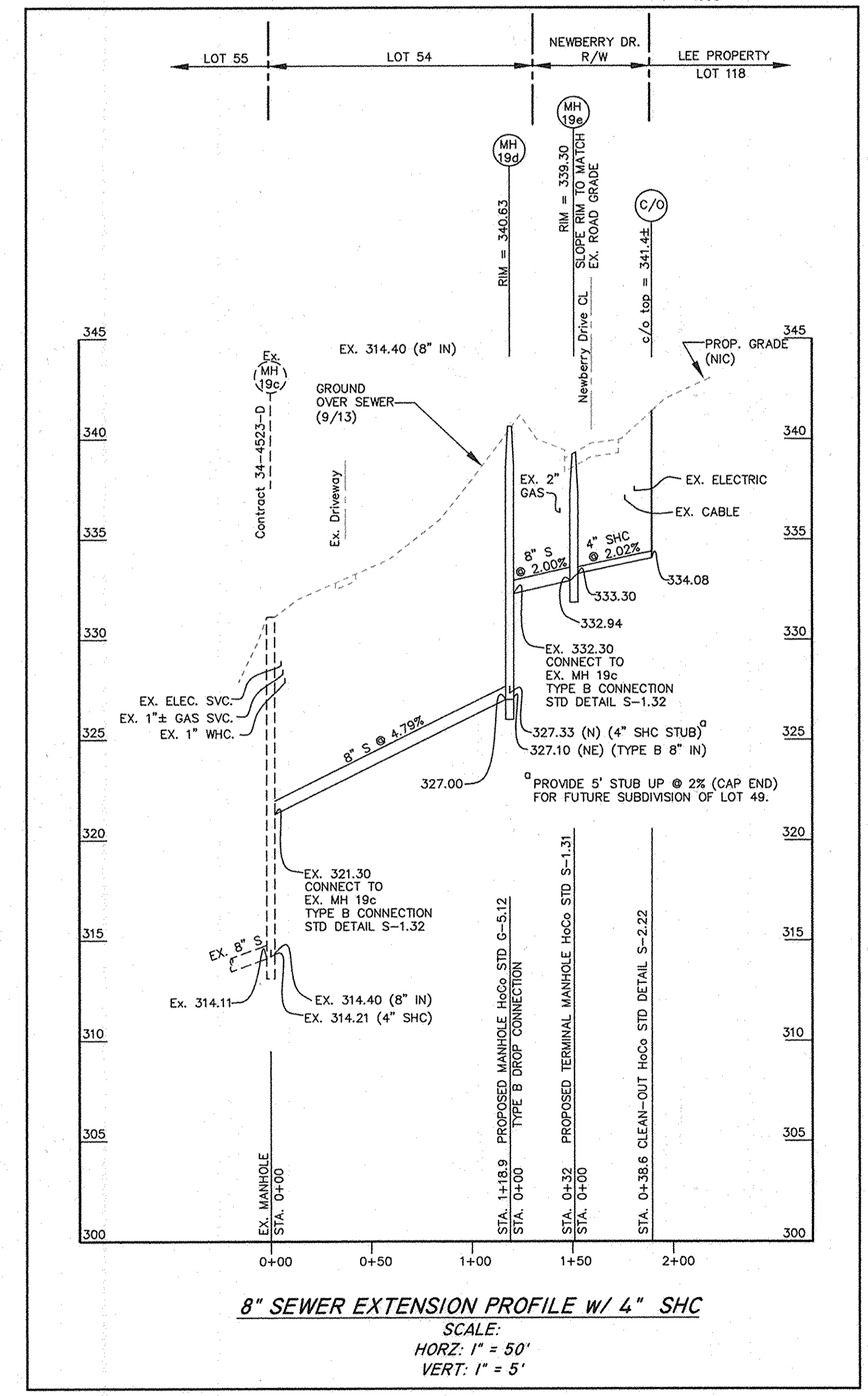
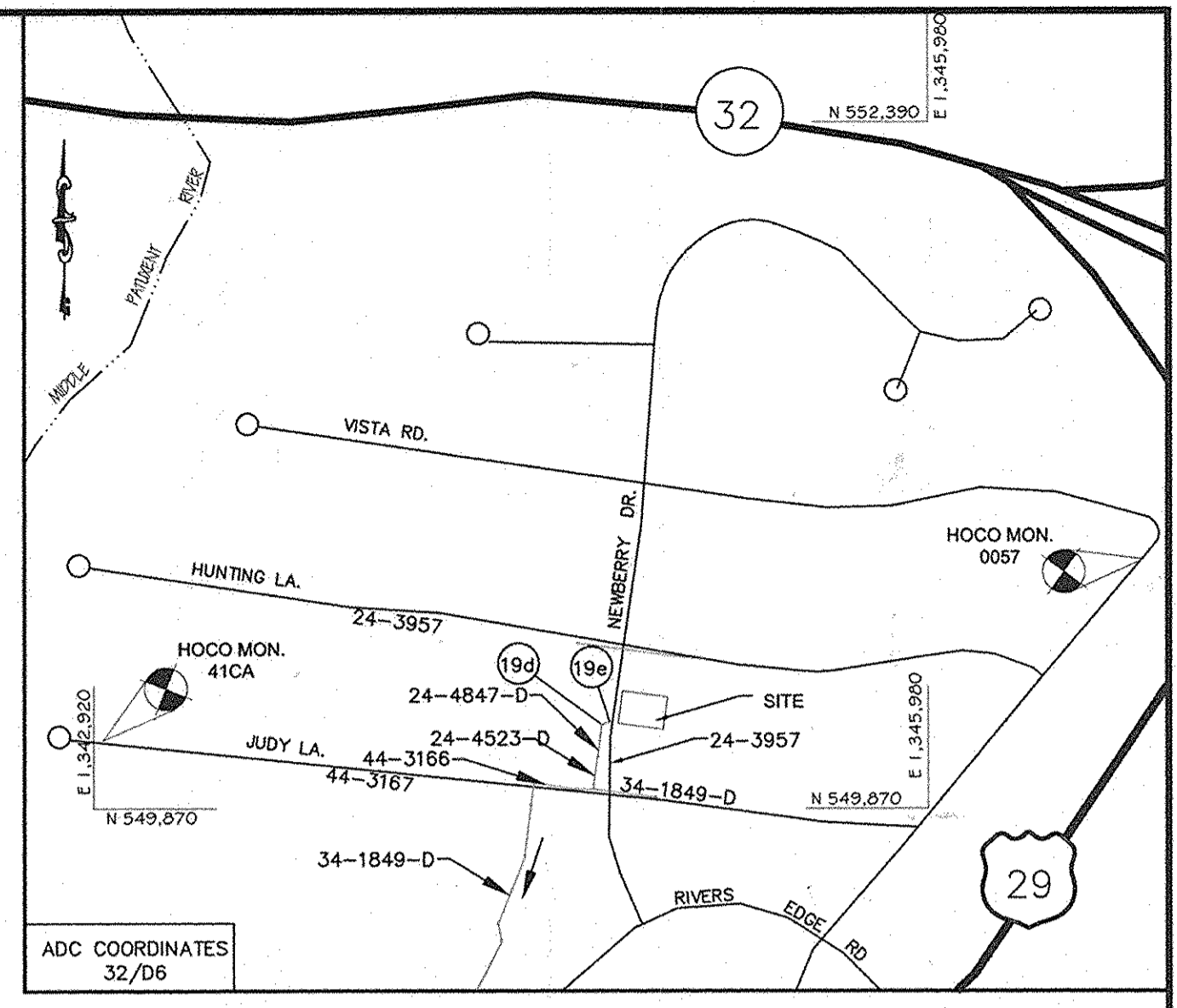
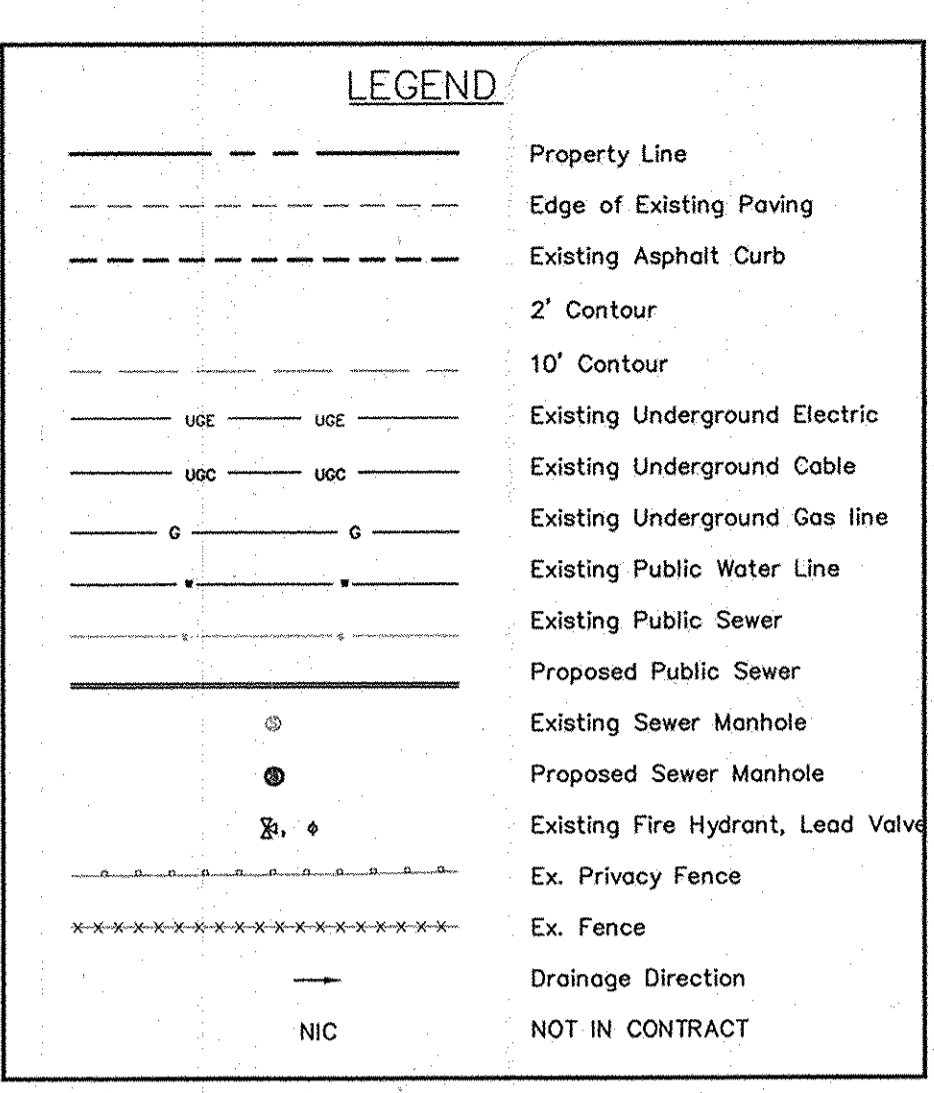
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE BOUNDARY SURVEY WAS PERFORMED IN MARCH 2007 AND THE TOPOGRAPHIC FIELD SURVEY WAS PERFORMED IN MARCH 2007 AND SEPTEMBER 2013 BY SHANABERGER & LANE (ELICOTT CITY, MD).
- 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. 41CA AND NO. 0057. VERTICAL CONTROL IS BASED ON NAVD 88. VERTICAL CONTROLS ARE PROVIDED ON THE DRAWINGS. SHANABERGER & LANE SHALL PROVIDE DESCRIPTION OF VERTICAL CONTROL POINTS, I.E., IRON BARS, CROSS CUTS ON CONCRETE STRUCTURES, ETC.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- 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 OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- 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. 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.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL \square 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.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THIS PLAN:
AT&T @ 1-800-252-1133
BGE (CONTRACTOR SERVICES) @ 410-637-8713
BGE (EMERGENCY) @ 410-685-0123
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
- 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 CONTRACTOR.
- THE 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.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/LACKING 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 18.11(A) OF THE HOWARD COUNTY CODE.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- 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 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.

ADDITIONAL GENERAL NOTES:

- CONSTRUCTION SHALL FOLLOW THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (VOL. IV), WATER & SEWER DESIGN MANUAL (VOL. II), AND OTHER CONSTRUCTION CODES AS APPLICABLE. THE CONTRACTOR SHALL CONSULT THE ENGINEER SHOULD THERE BE ANY DISCREPANCIES.
- THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST 24 HOURS PRIOR TO THE START OF WORK.
- ANY DAMAGE TO THE COUNTY'S PROPERTY IN THE RIGHT-OF-WAY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- CIVIL DESIGN SERVICES, LC HAS NOT PERFORMED A SUBSURFACE INVESTIGATION TO DETERMINE LOCATIONS OF ROCK, SOIL CONDITIONS, WATER TABLE, UTILITY CONDUITS, ETC.
- APPROXIMATE UTILITY LOCATIONS ARE SHOWN FROM AVAILABLE RECORDS AND MISS UTILITY. THE CONTRACTOR SHALL TEST PIT ALL KNOWN EXISTING UTILITIES TO VERIFY SIZE, LOCATION, SHAPE, TYPE TO THEIR SATISFACTION PRIOR TO CONSTRUCTION. UTILITY RELOCATIONS ARE THE RESPONSIBILITY OF THE OWNER WHETHER SHOWN OR NOT. ANY UTILITY DAMAGED DUE TO CONSTRUCTION MUST BE REPAIRED IMMEDIATELY. THE CONTRACTOR SHALL OBSERVE AND TAKE NECESSARY PRECAUTIONS TO AVOID THE OVERHEAD UTILITIES, IF PRESENT.
- SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLAN AND FIELD CONDITIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR ALL FIELD CORRECTIONS IF THE ENGINEER IS NOT IMMEDIATELY NOTIFIED.
- CIVIL DESIGN SERVICES, LC IS NOT RESPONSIBLE FOR THE CONTRACTORS' UTILIZATION OF MEN, MATERIALS, EQUIPMENT, OR SAFETY MEASURES IN THE PERFORMANCE OF ANY WORK FOR THIS PROJECT. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR PERFORMING THE WORK CORRECTLY AND IN CONFORMANCE WITH APPLICABLE CODES AND SPECIFICATIONS.
- OPEN EXCAVATIONS SHALL BE ADEQUATELY PROTECTED FROM TRAFFIC AND SHALL BE SAFELY COVERED OVERNIGHT OR PROPERLY BARRICADED.
- CONTRACTOR SHALL AVOID SPRINKLER PIPING/HEADS WHEN INSTALLING SEWER IN FRONT OF 7090 NEWBERRY DRIVE. SPRINKLER HEADS AND/OR CONDUITS DAMAGED DURING CONSTRUCTION SHALL BE REPAIR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL MAINTAIN AN ACCESSIBLE DRIVEWAY AT LOT 54 (7090 NEWBERRY), HOWEVER, SHOULD IT BE NECESSARY TO TEMPORARILY CLOSE THE DRIVEWAY, THE CONTRACTOR SHALL COORDINATE WITH THE HOMEOWNER SO AS TO MINIMIZE THEIR INCONVENIENCE.
- THE WORK AREA SHALL BE MAINTAINED IN A NEAT AND SAFE CONDITION IN THIS RESIDENTIAL NEIGHBORHOOD ESPECIALLY AT LOT 54 (7090 NEWBERRY DRIVE).



QUANTITIES

ITEM	ESTIMATED QUANTITY	AS-BUILT QUANTITY	TYPE	MANUFACTURER/SUPPLIER
SEWER MANHOLES	2 Ea.			
8" SEWER (PVC)	144 LF			
4" SHC	36 LF			
SHC Cleanout	1 Ea.			
Type B Connection	1 Ea.			

SEWER HOUSE CONNECTION (SHC) AS-BUILT LOCATION TABLE

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
118	Newberry Dr.		

SEDIMENT/EROSION CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH F-15-097, SECTION JOB OF THE SPECIFICATIONS AT FINAL ROAD PLAN STAGE.

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

HOWARD S.C.D. DATE: 6/14/15

SEDIMENT/EROSION CONTROL FOR LINEAR UTILITY CONSTRUCTION:

- SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS.
- ALL EXCAVATED SOIL SHALL BE PLACED ON THE HIGH SIDE OF TRENCH/EXCAVATION.
- CONTRACTOR SHALL USE REASONABLE MEASURES TO KEEP SEDIMENT FROM ENTERING THE EXISTING DRAINAGE SYSTEM/DITCHES AND ROADWAY SURFACE. USE SILT FENCE, INLET PROTECTION, OR OTHER CONTROLS AS NECESSARY.
- ONLY CONSTRUCT THAT PORTION OF UTILITY THAT CAN BE BACKFILLED, SEEDED AND MULCHED IN THAT SAME DAY.
- SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED DAILY AND MAINTAINED IN WORKING CONDITIONS AS PER THE STANDARD DETAILS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE INSPECTOR.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES
DATE: 5/14/15

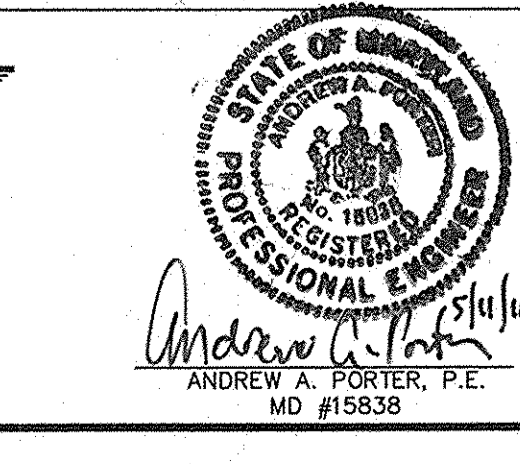
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 6/12/15

CIVIL DESIGN SERVICES, LC
6123 Holly Ridge Court, Columbia, Maryland 21044
240.765.0380
civil@cdsinc.com

I hereby certify that I prepared this plan and the seal signifies that I am a duly licensed professional engineer under the laws of the State of MD, License No. 15,838 w/expiration December 17, 2015.

ANDREW A. PORTER, P.E.
MD #15838



DESIGNED BY: AAP

DRAWN BY: AAP

CHECKED BY: AAP

DATE: May 8, 2015

BY NO. REVISION DATE

SEWER EXTENSION
PLAN & PROFILE

600' SCALE MAP NO. 41 BLOCK NO. 6

HOLIDAY HILLS, SECTION 4, LOT 118
(LEE PROPERTY)
A Re-Subdivision of Holiday Hills, Section 4, Lot 48

SCALE AS SHOWN

TAX MAP NO: 41 PARCEL NO.: 252 GRID NO.: 6
FIFTH ELECTION DISTRICT HOWARD COUNTY, MD

CONTRACT No. 24-4847-D

SHEET 1 OF 1