

BENCHMARK INFORMATION

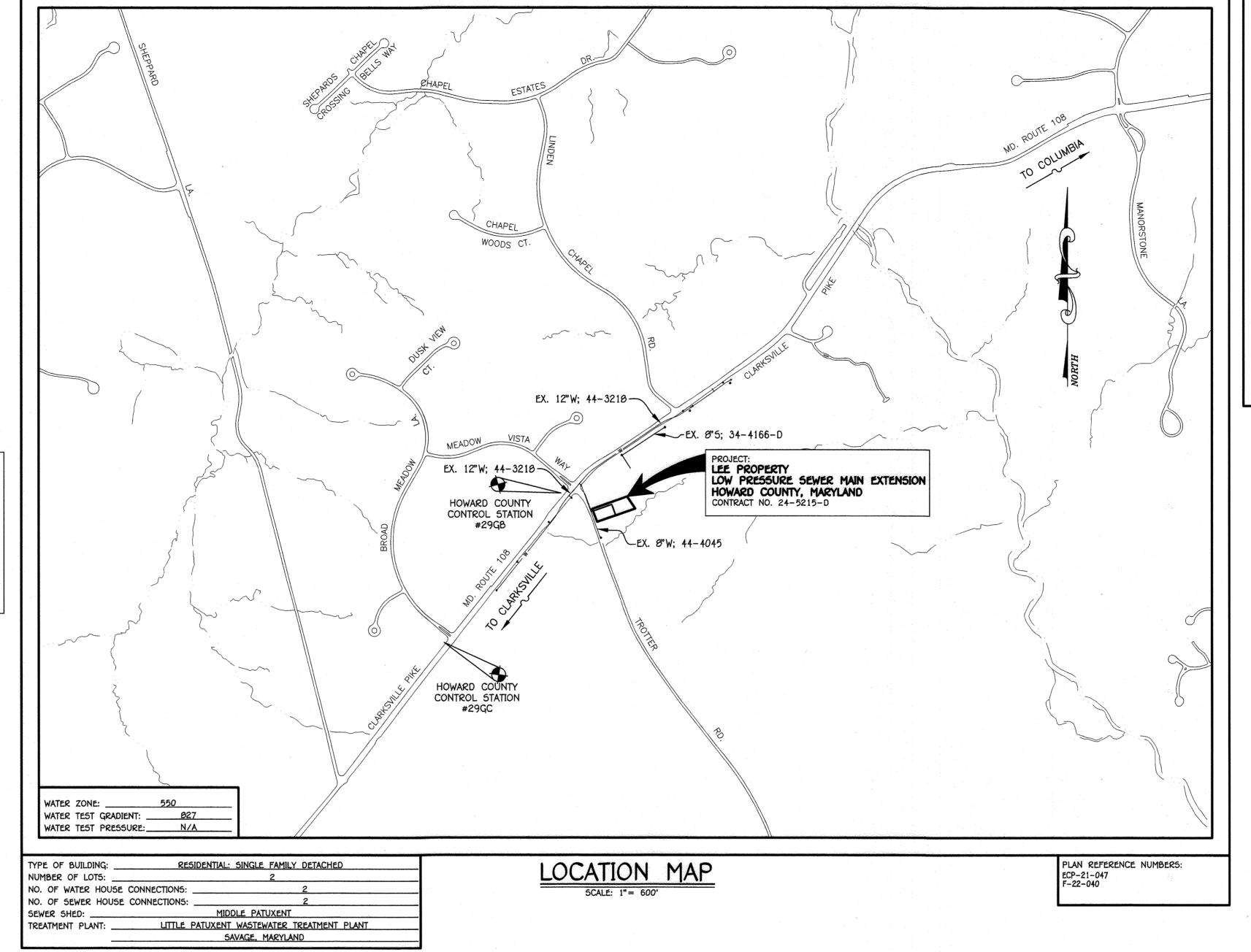
B.M.#1 - HOWARD COUNTY CONTROL STATION #29GB - HORIZONTAL - NAD '83) (LOCATED ALONG THE EAST SIDE OF CLARKSVILLE PIKE (RT. 100) APPROX. 56.5' FROM THE END OF THE CURB AND APPROX. 28' FROM THE BACK OF CURB). N 566,826.147

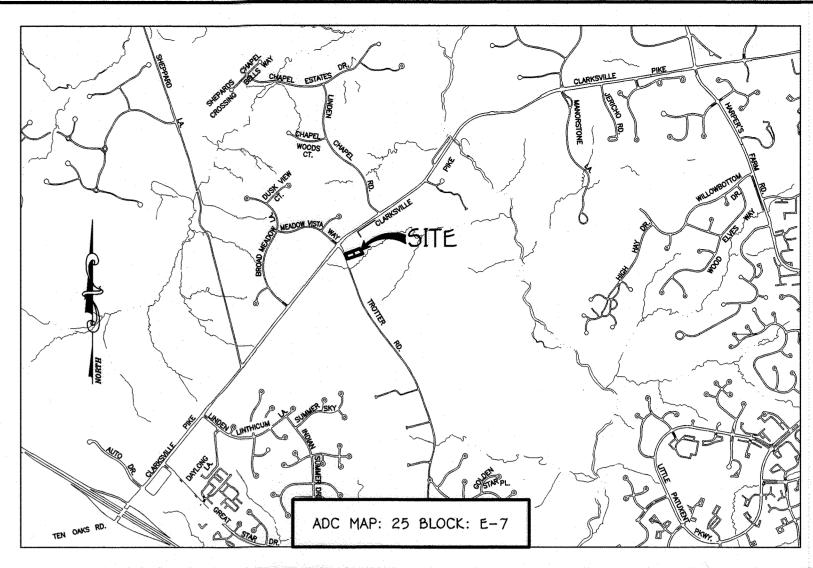
E 1,333,265.923 ELEVATION = 455.96 - VERTICAL - (NAVD '86)

B.M.#2 - HOWARD COUNTY CONTROL STATION #29GC - HORIZONTAL - (NAD '93) (LOCATED ALONG THE EAST SIDE OF CLARKSVILLE PIKE (RT. 100), APPROX. 39.7' FROM G&E POLE #163724 AND APPROX. 15.3' FROM THE BACK OF CURB.).

E 1,332,248.776 ELEVATION = 490.71 - VERTICAL - (NAVD '88)

WAIVER NOTES: 1. DMV2-23-004 APPROVED ON SEPTEMBER 13. 2022 FOR A PUBLIC LPSS FROM THE SUBJECT PROPERTY TO THE PUBLIC GRAVITY SEWER SYSTEM 2. DMV2-24-008 APPROVED ON DECEMBER 1, 2023 FOR THE USE OF DIRECTIONAL DRILLING AND JACK AND BORE TRENCHLESS TECHNOLOGIES TO INSTALL THE LPSS ACROSS MD RT #108 IN TWO CROSSING





## 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 OR ABOUT SEPTEMBER 2020 BY FISHER, COLLINS & CARTER, INC. AND OFFSITE TOPOGRAPHY IS TAKEN FROM HOWARD COUNTY GIS DATA.

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. 24FB & NO. 2413. ALL VERTICAL CONTROLS ARE BASED ON NAVD '80. VERTICAL CONTROLS PROVIDED

ON THE DRAWINGS. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE 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.

VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV 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

6. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL,

CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.

9. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK

. . . . . . . . . . . . . . . . 410-313-4900 .410-795-1390 1-800-257-7777 

STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR. 10. 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 THE 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.

PART B: <u>SEWER MAIN GENERAL NOTES</u>

1. ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.

2. ALL MANHOLES SHALL BE 4'-O" 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(5) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED. 7. SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH THE HOWARD SOIL CONSERVATION DISTRICT

STANDARD EROSION AND SEDIMENT CONTROL PLAN FOR MINOR EARTH DISTURBANCES UNDER 30,000 SQUARE FEET.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, AS SHOWN ON THESE PLANS AND IN ACCORDANCE WITH THE HOWARD SOIL CONSERVATION DISTRICT STANDARD EROSION AND SEDIMENT CONTROL PLAN FOR MINOR EARTH DISTURBANCES UNDER 30,000 SQUARE FEET.

EX. SEWER MANHOLE ---- EX. SEWER, WATER & UTILITY EASEMENT EX. FIRE HYDRANT EX. VALVE PROP. WATER MAIN PROP. SEWER MAIN PROP. SEWER MANHOLE THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT PROP. SEWER, WATER & UTILITY EASEMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT. ----- PROP. WHC PROP. SHC PROP. FIRE HYDRANT

CONTRACT NO. 24-5215-D

## LEE PROPERTY

LOW PRESSURE SEWER MAIN EXTENSION HOWARD COUNTY, MARYLAND

> OWNER/DEVELOPER SANGJAE LEE 5765 WESTERN SEA RUN

CLARKSVILLE, MD 21029

410-302-8356

FILE NAME : LOW PRESSURE SEWER MAIN EXTENSION PLAN

CONTRACT NO. 24-5215-D LEE PROPERTY LOW PRESSURE SEWER MAIN EXTENSION HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

LEGEND

EX. WATER MAIN

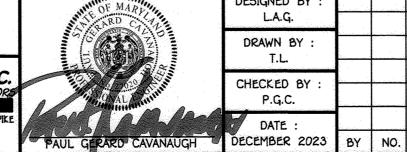
PROP. VALVE

---- EX. SEWER MAIN

SYMBOL

DESCRIPTION

PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 27020 EXPIRATION DATE IS 1/25/26. FISHER, COLLINS & CARTER, INC VIL ENGINEERING CONSULTANTS & LAND SURVEYOR

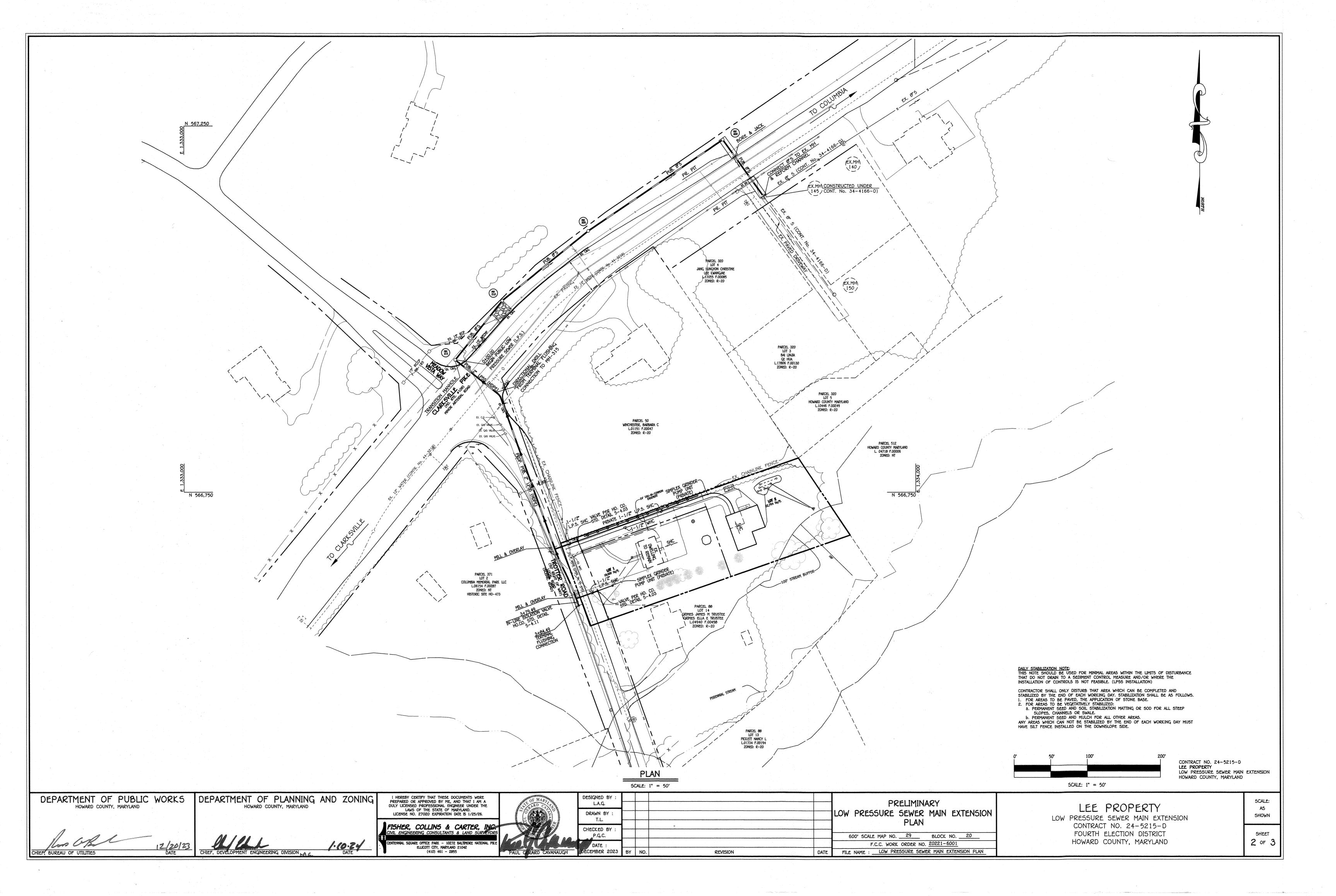


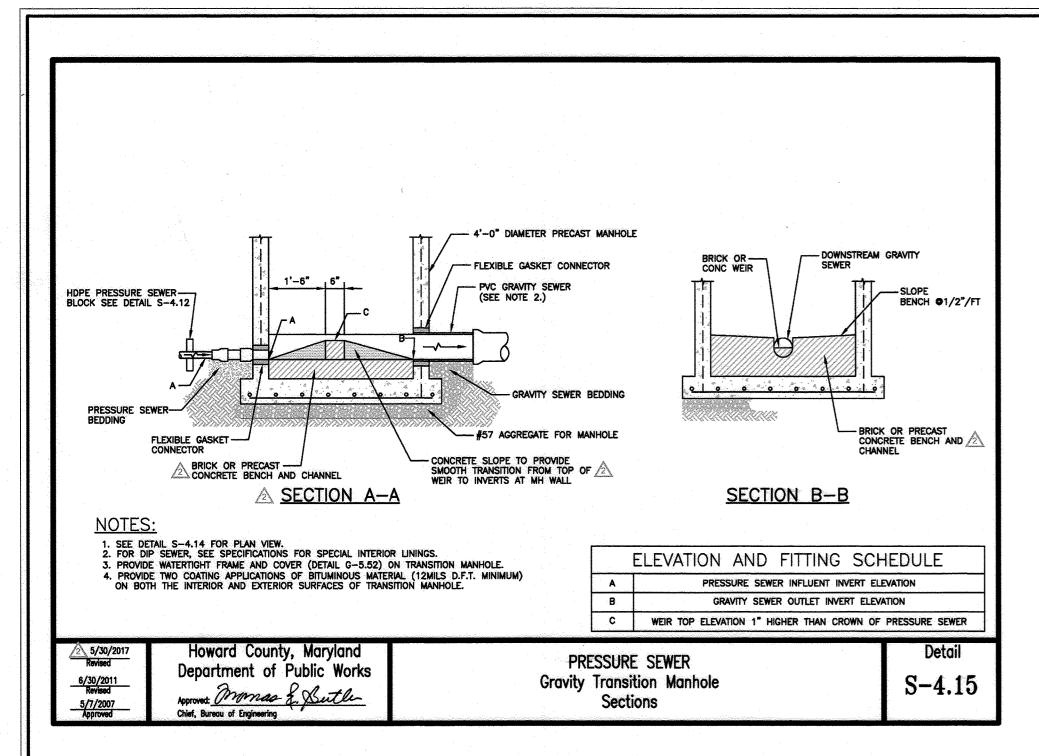
FINAL LOW PRESSURE SEWER MAIN EXTENSION DRAWN BY T.L. TITLE SHEET CHECKED BY P.G.C. F.C.C. WORK ORDER NO. 20221-6001

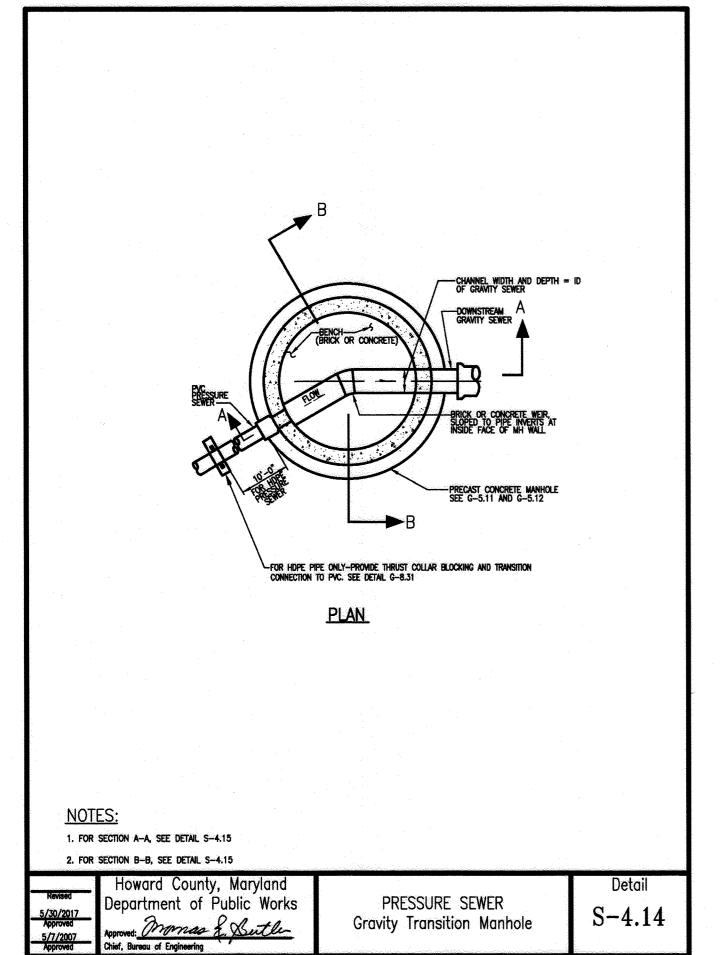
REVISION

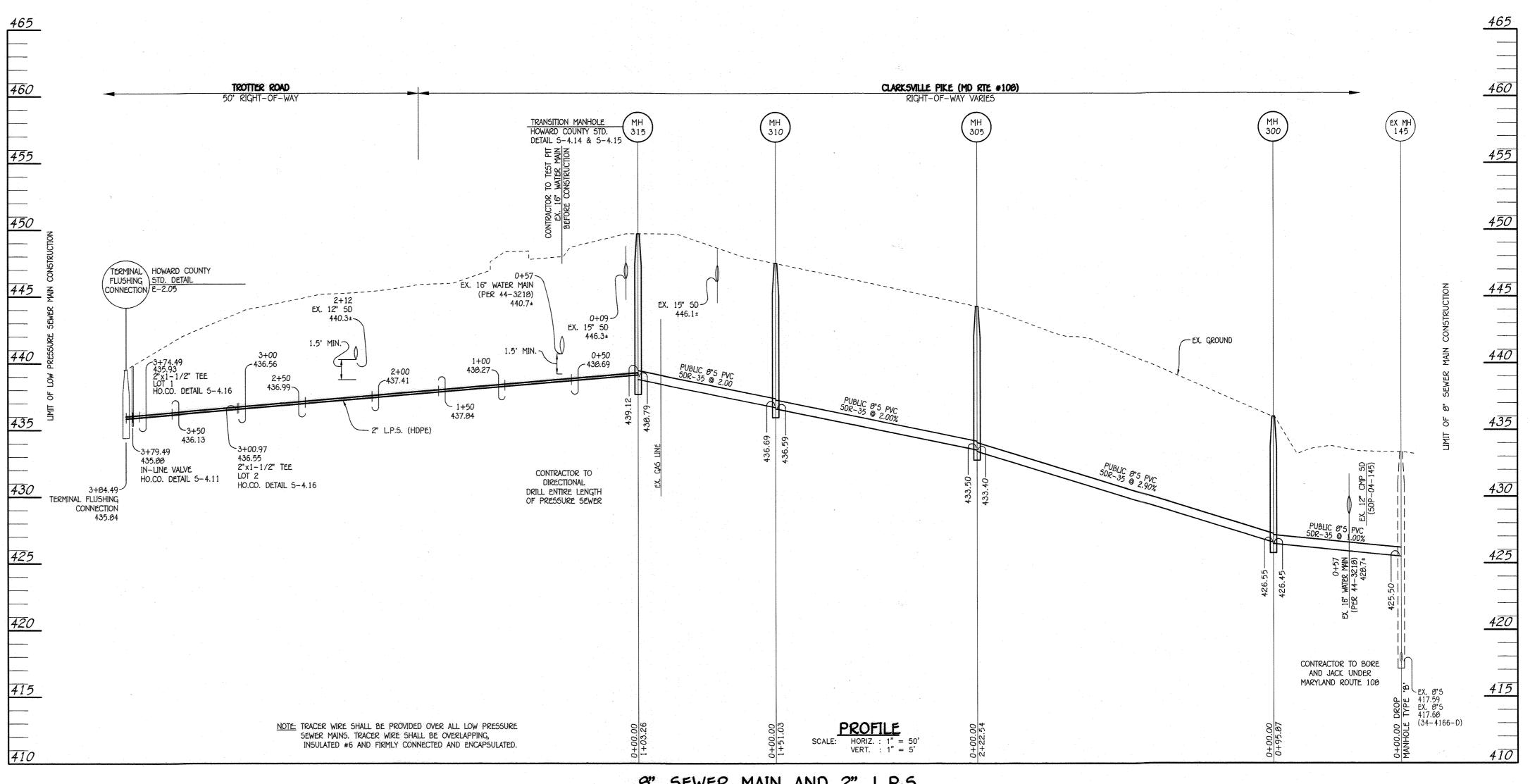
LEE PROPERTY LOW PRESSURE SEWER MAIN EXTENSION CONTRACT NO. 24-5215-D FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: SHOWN 1 of 3









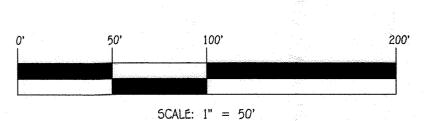
## 8" SEWER MAIN AND 2" L.P.S.

LO	V PRESSURE SEWI	ER MAIN TA	BULATION C	HART
L.P.S. STA.	APPURTENANCE	NORTHING	EASTING	RIM ELEVATION
	LOW PRESSURE SEWER MAIN:	TRANSITION MANHOL	LE TO LOT 1	
0+00.00	TRANSITION MANHOLE	566,930.89	1,333,370.75	449.80
0+73.77	PC (CRIMP RADIUS 15')	566,884.98	1,333,428.48	
0+82.13	PT (CRIMP RADIUS 15')	566,878.26	1,333,433.28	
3+00.97	2"X1 1/2" TEE	566,672.06	1,333,506.59	
3+01.31	PC (CRIMP RADIUS 300')	566,671.74	1,333,506.71	
3+35.41	PRC (CRIMP RADIUS 300')	566,640.49	1,333,520.27	
3+69.49	PT (CRIMP RADIUS 300')	566,609.24	1,333,533.84	
3+74.49	2"X1 1/2" TEE	566,604.54	1,333,535.53	
3+79.49	PRESSURE SEWER IN-LINE VALVE	566,599.83	1,333,537.23'	439.81
3+84.49	TERMINAL FLUSHING CONNECTION	566,595.13	1,333,538.93'	439.52

NO.	NORTHING	EASTING	RIM ELEVATION
300 (PUBLIC)	567,231.22	1,333,736.90	436.0
305 (PUBLIC)	567,106.59	1,333,552.53	444.2
310 (PUBLIC)	567,011.71	1,333,435.02	447.8
315 (PUBLIC)	566,930.89	1,333,370.75	449.8

NOTE: SET MH RIMS FLUSH W/EXISTING GRADE AND SLOPE.

OWNER/DEVELOPER SANGJAE LEE 5765 WESTERN SEA RUN CLARKSVILLE, MD 21029 410-302-8356

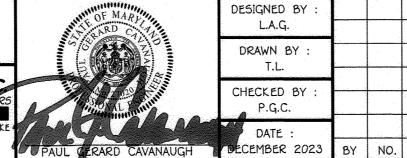


CONTRACT NO. 24-5215-D LEE PROPERTY LOW PRESSURE SEWER MAIN EXTENSION HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

! HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 27020 EXPIRATION DATE IS 1/25/26. FISHER, COLLINS & CARTER, INC CIVIL ENGINEERING CONSULTANTS & LAND SURVEYO NNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2055



L.A.G. DRAWN BY : T.L. CHECKED BY REVISION

FINAL LOW PRESSURE SEWER MAIN EXTENSION PROFILE SHEET 600' SCALE MAP NO. 29 BLOCK NO. 20 F.C.C. WORK ORDER NO. 20221-6001 FILE NAME : LOW PRESSURE SEWER MAIN EXTENSION PLAN

LEE PROPERTY LOW PRESSURE SEWER MAIN EXTENSION CONTRACT NO. 24-5215-D FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

5CALE: SHOWN SHEET 3 of 3