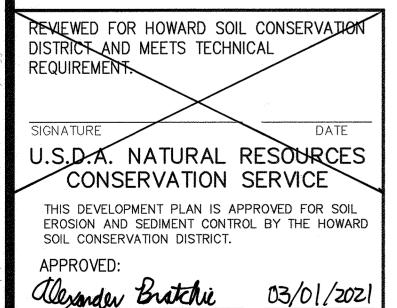


SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH F-17-001, SECTION 308 OF THE SPECIFICATIONS AT FINAL ROAD PLAN STAGE.

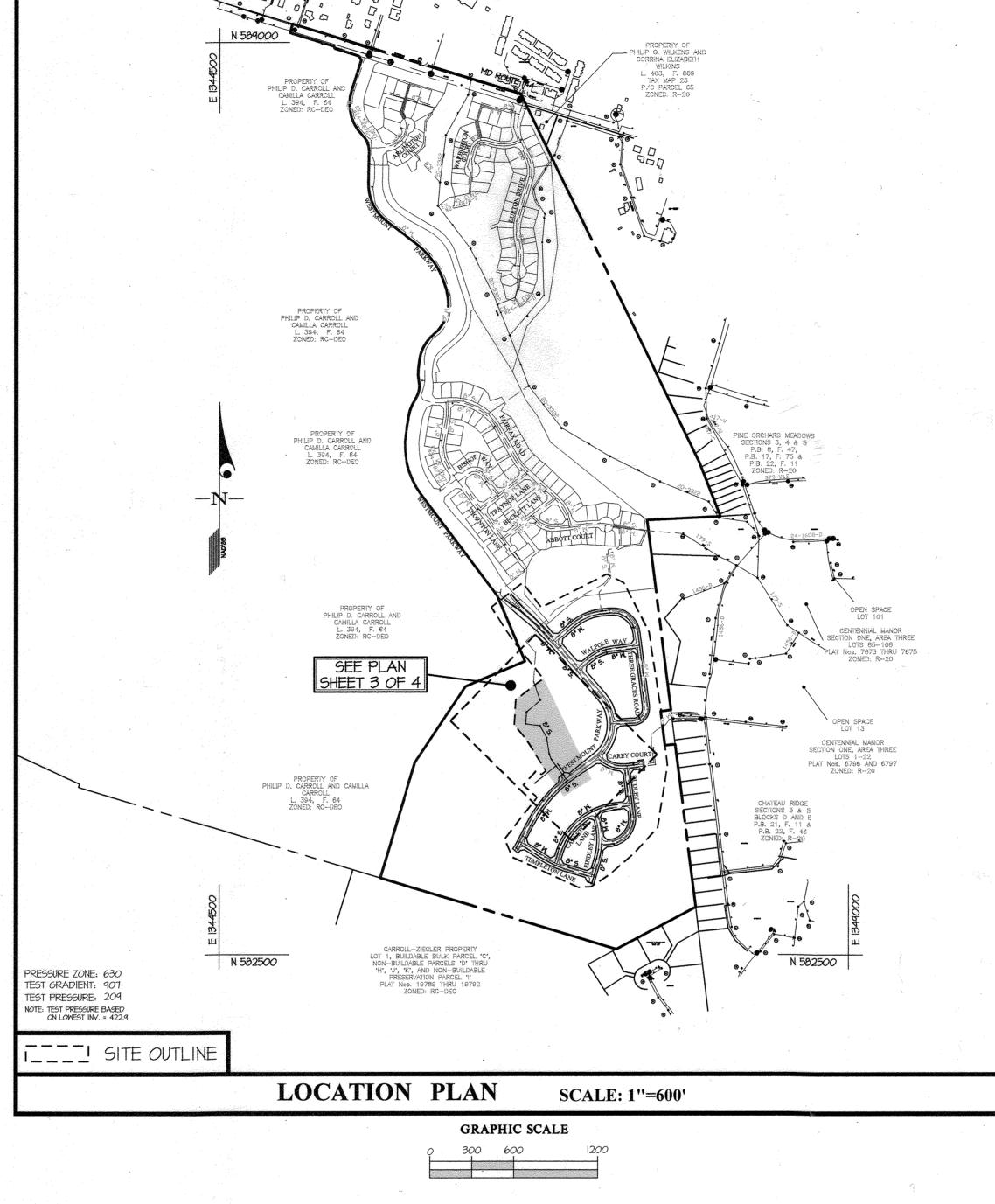


CURB STOP TO BE LOCATED WITHIN THE 16" FROM BACK OF SIDEWALK AND RIGHT-OF-WAY LINE 4' SIDEWALK-SERVICE CONNECTION DETAIL

SHEET INDEX

- COVER SHEET
- 2. PHASING KEY MAP
- 3. SEWER PLAN (I"=50')
- 4. SEWER PROFILES

OWNER/DEVELOPER WESTMOUNT DEVELOPMENT CORP. 307 INTERNATIONAL CIRCLE SUITE 130 HUNT VALLEY, MD 21030 410-489-4489 ATTN: ROBERT GOODIER



CONTRACT No. 20-5167-D

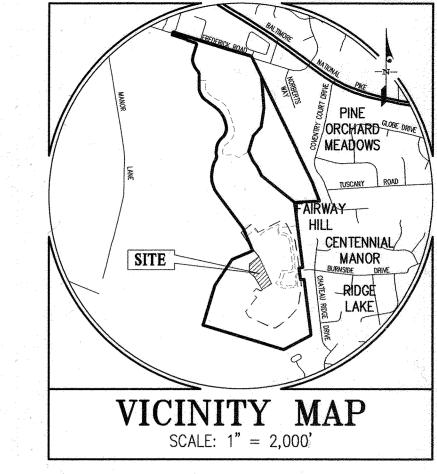
WESTMOUNT

PHASE 3B LOT 206 & 258 AND FUTURE LOTS 351, 352 & 355-363

> HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

	TYPE OF BUILDINGRESIDENTIAL
	NUMBER OF UNITS2
	NUMBER OF S.H.C.'s
o de la companya de l	NUMBER OF W.H.C.'s
and the second	AREA OF COMMERCIAL LOT/PARCEL OO AC.
	SEWER WATERSHED MIDDLE PATUXENT
	PUMPING STATIONNA

NOTE: THE II ADDITIONAL S.H.C.'S ARE BEING CONSTRUCTED UNDER THIS CONTRACT TO SERVE FUTURE LOTS.



BENCHMARKS

EASTING: 1,341,530.147

16HC: NORTHING: 589,780.908 16HD: NORTHING: 590,674.171 EASTING: 1,340,043.586

ADC MAP COORDINATES: MAP 4814 GRID J5 THRU J8

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

- 2. Topographic field surveys were performed on March, 1997 by 3DI and then updated by grade checks performed by Gutschick, Little & Weber, PA and based on F 13-008. The boundary information is based upon a field survey prepared by Gutschick, Little & Weber, PA on or about June,
- 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. 46BC and No. 41EA. All vertical controls are based on NAVD '88. Vertical controls provided on the drawings are standard discs on concrete monuments. 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 owed 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 dua 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:
- BGE (Construction Services). .. 410-637-8713 . 410-685-0123 BGE (Emergencu) .. 410-313-4900 Bureau of Utilities Colonial Pipeline Co.. 410-795-1390 1-800-257-7777 Miss Utilitu...410-531-5533 State Highway Administration...
- 1-800-743-0033 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
- 10. 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.
- 1. The contractor shall notify the Bureau of Highways, Howard County, at (410)-313-7450 at least five working days before open cutting 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 II WATER

- I. All water mains shall be D.I.P. Class 54 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. 7. Tracer wires and continuity test stations shall be installed on all DIP and PVC water mains in accordance with the Howard County Design Manual. 8. For PVC water mains, all records for the Quality Control and Qualification Test Requirements noted in Section 5.1 of the AWWA Standard C900 for PVC pressure pipe shall be submitted with the pipe material certifications or shop drawings prior to approval of the material for use. The test records shall be for the pipe to be installed under this contract. All PVC pipe shall contain markings to allow cross referencing of the
- pipe supplied to the test records received. 9. Unless otherwise noted on the plans or in the specifications sacrificial anodes shall be installed on all valves and metallic fittings used with PVC water mains in accordance with Volume IV, Standard Specifications and Details for Construction. Seventeen (17) pound Magnesium anodes shall be installed on all valves and ductile iron fittings including restraints and harnesses. Twelve (12) pound Zinc anodes shall be installed on all stainless steel fittings and saddles used with PVC mains. All "tees" used with PVC mains shall be ductile iron.
- 10. Proper Assembly of Gasketed PVC Pipe Joints: The manufacturer's insertion line of gasketed PVC pipe joints indicates the maximum depth of insertion of the spigot into the bell. After assembly of the joint, the insertion line shall remain visible. Dual insertion lines on gasketed PVC pipe indicate the maximum and minimum depth of insertion of the spigot into the bell. The contractor shall not over insert or over home the spigot
- II. All changes in horizontal or vertical direction of PVC water pipe shall be made with standard bends, 5-degree sweeps or high deflection (HD) couplings. No bending of the pipe or deflecting of PVC pipe joints is permitted. Where high defection couplings or 5-degree sweeps are permitted, the contractor shall provide one full pipe length (20-foot long) on either side of the high deflection coupling or 5-degree sweep. The contractor shall use a vibratory plate compactor or other approved means to thoroughly compact the #57 stone on both sides of the high defection coupling or 5-degree sweep, taking care not to use compaction equipment directly over the fitting.
- PVC high deflection couplings shall be limited to a total defection of 3-degrees (1½-degree on either end of the coupling), shall be rated for a minimum 200 psi meeting the requirements of ANNA C900, shall have a minimum lay length of 9-inches and shall have center stops. PVC High deflection couplings shall be CertainTeed PVC High Deflection (HD) Stop Couplings or equal. Five degree sweeps shall be bell by spigot, rated for a minimum 225 psi, DR18 meeting the requirements of AWWA C900 and shall be Multi Fittings (Ipex) Blue Brute DR18 or equal.
- 12. When PVC high defection couplings or PVC 5-degree sweeps are used to facilitate changes in horizontal or vertical alignments of AWWA C-900 PVC pipelines, the contractor shall install devices for the prevention of over-insertion of the PVC pipe spigots or plain ends into the push on bell joint on both sides of the high defection couplings and 5 degree sweeps. Bell stops shall be placed at the proper insertion line for the fitting. The bell stop shall be manufactured of ductile iron and incorporate an expansion retention spring to allow for pipe expansion and contraction. The bell stops shall be Series 5000 Mega-Stop, as manufactured by EBAA Iron, Inc. or approved equal.
- 13. Per the Fire Sprinkler Code all residential single family dwellings will have a minimum 1-1/2" WHC with 1" meter, outside setting.

Part III SEWER I. 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.

DATE 600' SCALE MAP NO. 23

04-02-22

- 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 65.52. 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." indicates that the cellar cannot be served.

NOTE: CONTRACT 24-4878-D (WESTMOUNT - PHASE 3A) MUST BE PLACED IN-SERVICE TO ALLOW THIS CONTRACT TO BE PLACED IN-SERVICE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

3.11.21 3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM

PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

JRD/AWI HEREBY CERTIFY THAT THESE PLANS 2021 WERE PREPARED OR APPROVED BY ME, DRAWN BY: AND THAT I AM A DULY LICENSED AWL PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, CHECKED BY LICENSE NO. EXP. DATE: MAY 26, DEV 13013

BY NO

INCLUDE IT IN CONT. #24-5170-D

REMOVE PAR OF 8"S FROM CONT. # 20-5167-D AND

REVISION

COVER SHEET

BLOCK NO. 6 & 12

WESTMOUNT CONTRACT No. 20-5167-D PHASE 3B

LOT 206 & 258 AND FUTURE LOTS 351, 352 & 355-363

ELECTION DISTRICT No. 2

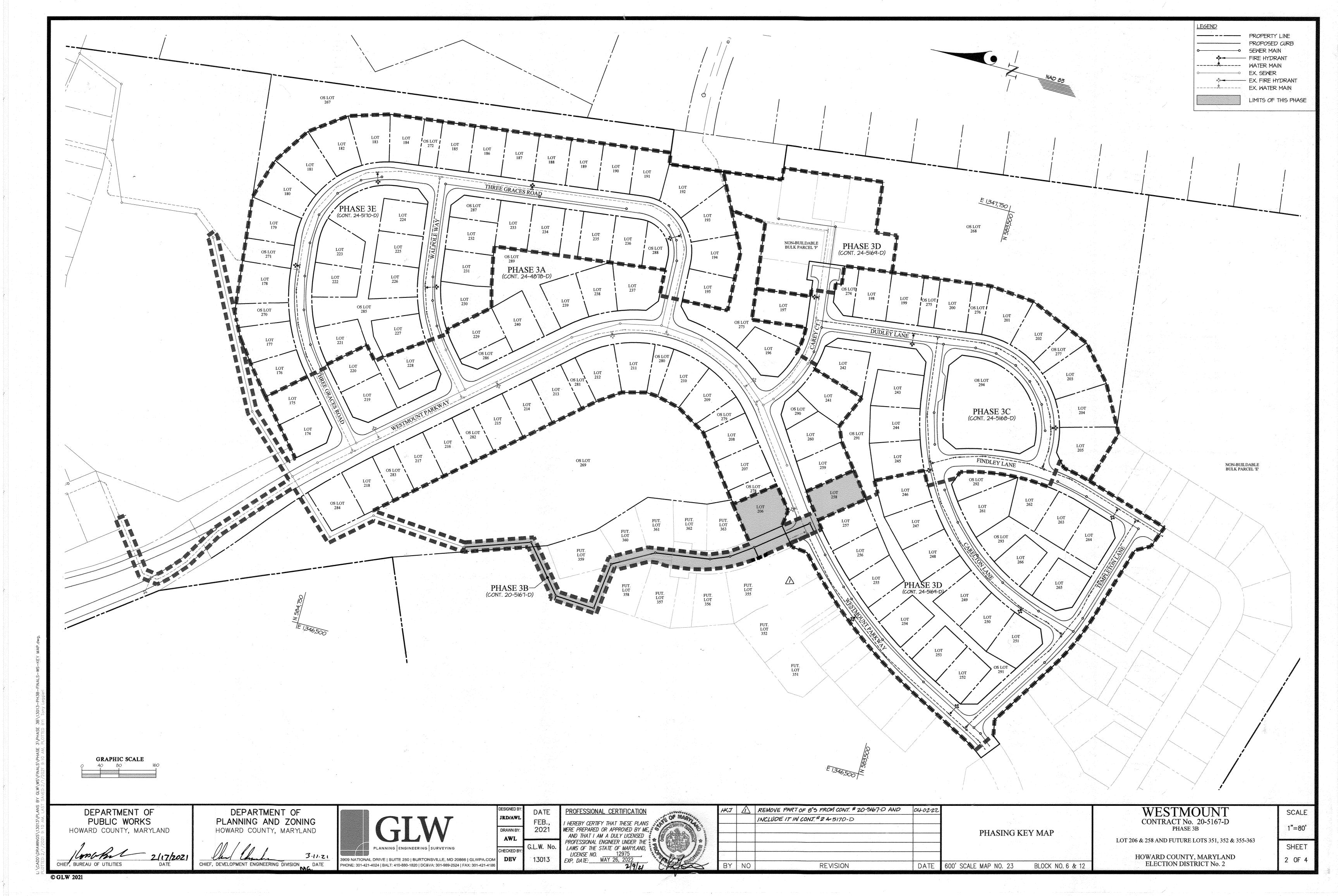
HOWARD COUNTY, MARYLAND

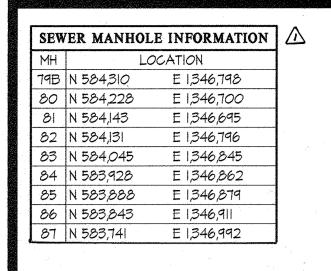
1 OF 4

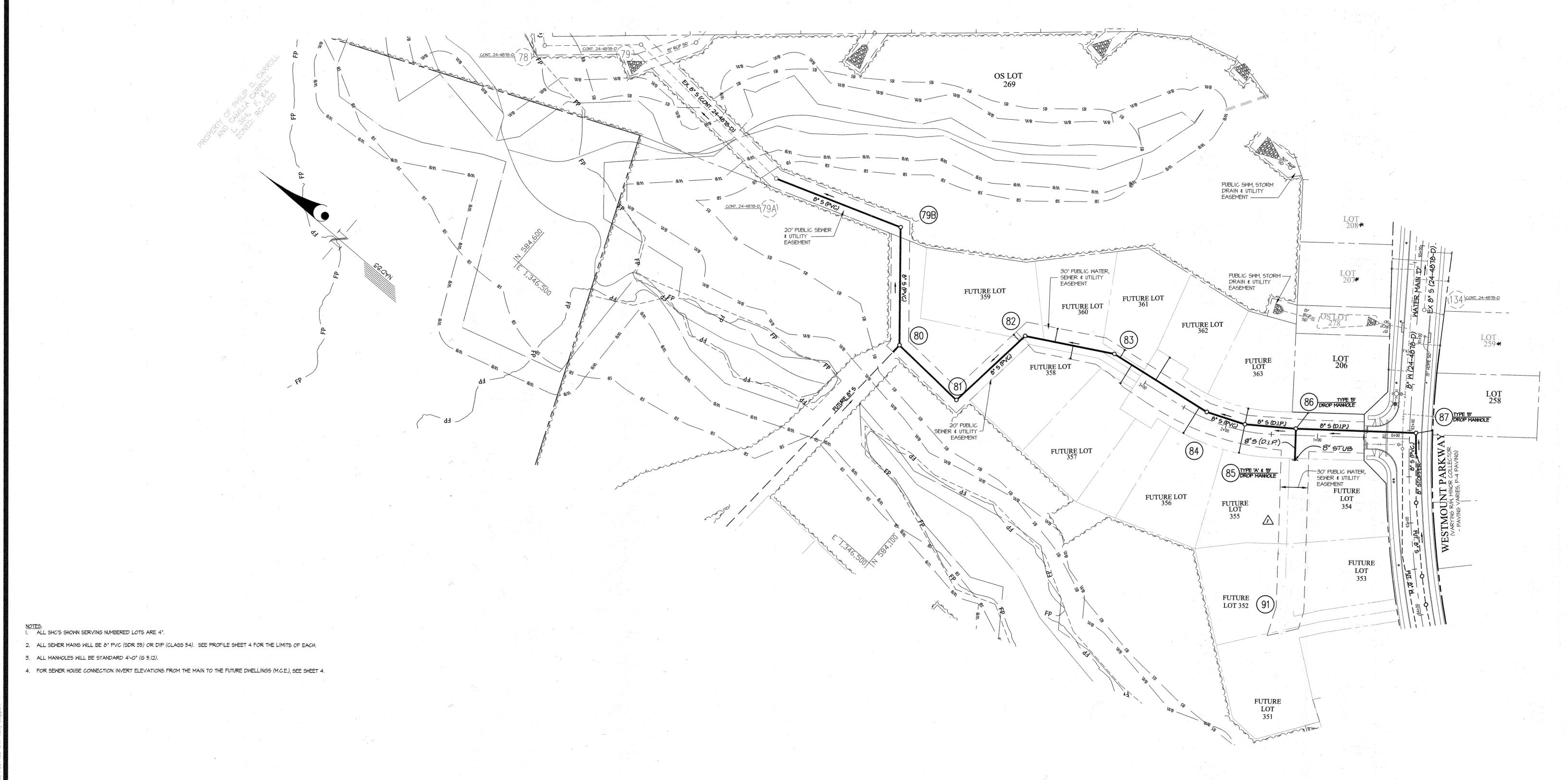
SHEET

SCALE

AS SHOWN







JRD

DRAWN BY:

AWL

CHECKED BY:

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM | DEV

PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

FEB., 2021

13013

I HEREBY CERTIFY THAT THESE PLANS
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. 12975
EXP. DATE: MAY 26, 2022
2 12

HKJ REMOVE PART OF 8"S FROM CONT. # 20-5167-D AND

REVISION

INCLUDE IT IN CONT. #24-5170-D

NOTE: LOTS SHOWN WITH AN ASTERISK (*)
INDICATES LOTS ASSOCIATED WITH FITTON,
BUT ARE NOT IN THIS CONTRACT. LOTS
SHOWN AS "FUTURE" ARE PART OF
F 21-032.

1"=50'

SHEET

3 OF 4

WESTMOUNT CONTRACT No. 20-5167-D PHASE 3B

LOT 206 & 258 AND FUTURE LOTS 351, 352 & 355-363

HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 2

SEWER

PLAN

BLOCK NO. 6 & 12

DATE 600' SCALE MAP NO. 23

CHIEF, BUREAU OF UTILITIES
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DEPARTMENT OF

PUBLIC WORKS

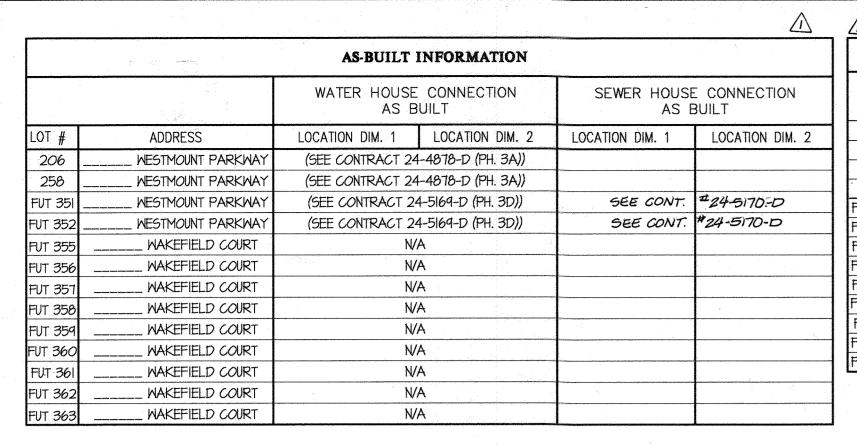
HOWARD COUNTY, MARYLAND

DEPARTMENT OF

PLANNING AND ZONING

HOWARD COUNTY, MARYLAND

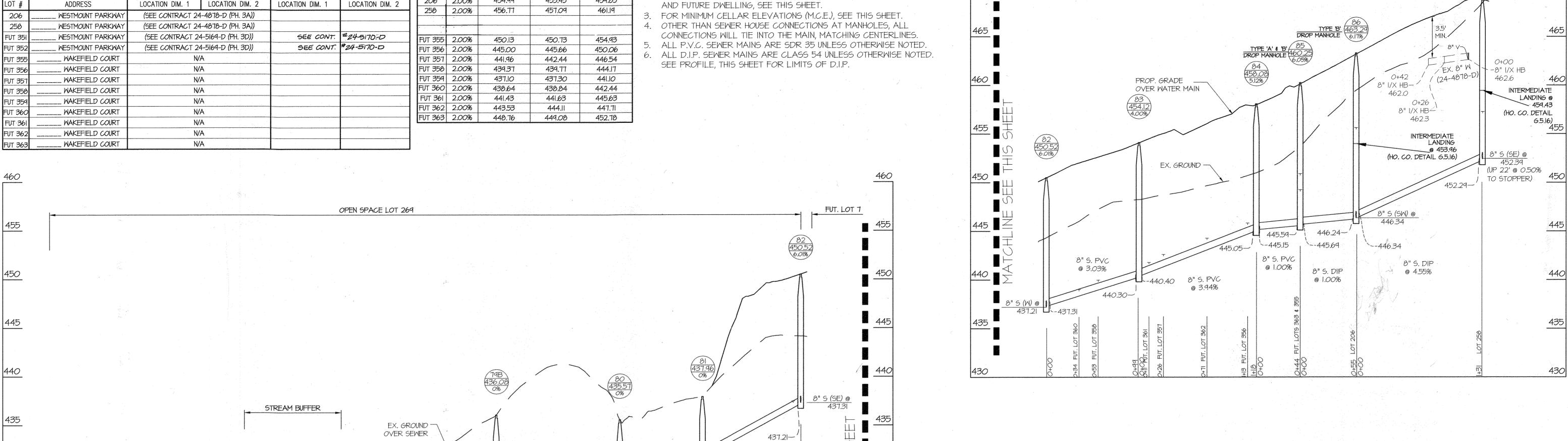
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

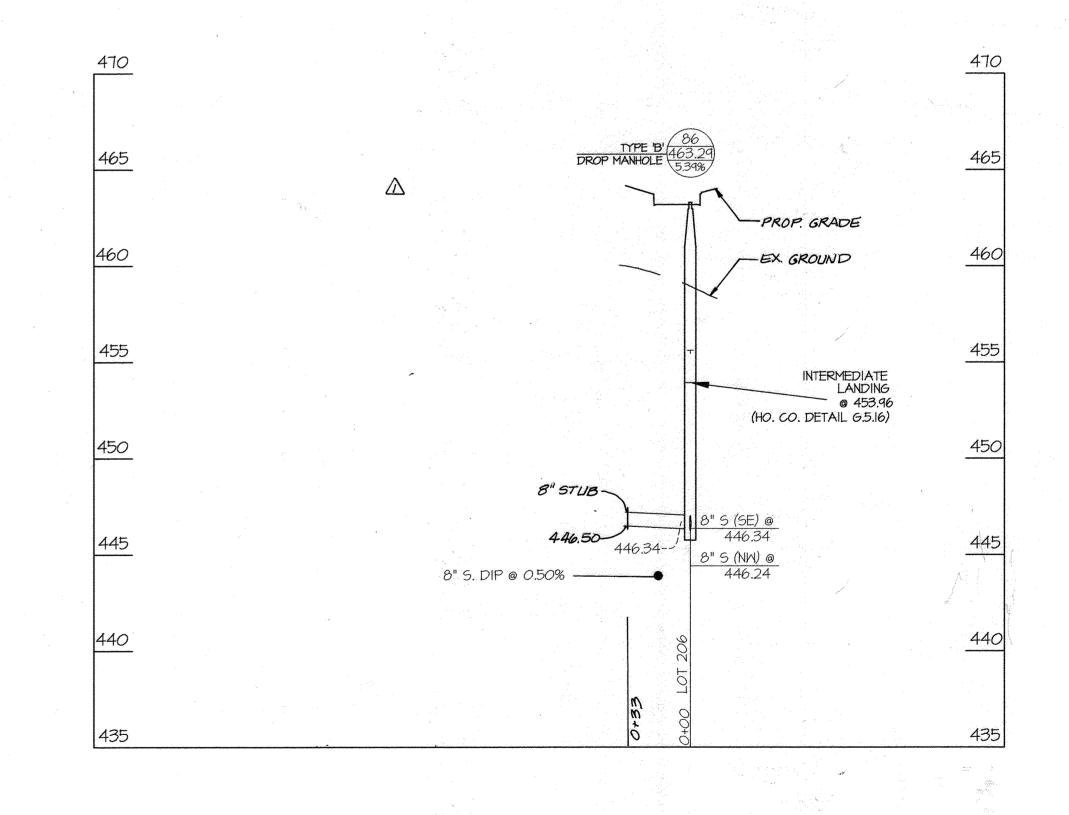


LOT	SL0PE	INV. @ MAIN/MH	INV. @ R/W	M.C.E.
LUI	OF SHC	SEE NOTE 1	SEE NOTE	
206	2.00%	454.99	455.45	459.85
258	2.00%	456.77	457.09	461.19
FUT 355	2.00%	450.13	450.73	454.93
FUT 356	2.00%	445.00	445.66	450.06
FUT 357	2.00%	441.96	442.44	446.54
FUT 358	2.00%	439.37	439.77	444.17
FUT 359	2.00%	437.10	437.30	441.10
FUT 360	2.00%	438.64	438.84	442.44
FUT 361	2.00%	441.43	441.63	445.63
FUT 362	2.00%	443.53	444.11	447.71
FUT 363	2.00%	448.76	449.08	452.78

I. THE SYMBOL THAT REPRESENTS THE LOCATION OF A SEWER HOUSE CONNECTION IS SHOWN AT THE ELEVATION OF THE CONNECTION AT EITHER THE EDGE OF THE RIGHT-OF-WAY LINE OR EASEMENT LINE. 2. FOR SEWER HOUSE CONNECTION INVERTS AT POINTS BETWEEN THE MAIN

470





455 NOTE: REFER TO HOWARD CO. DETAIL 5 3.11 FOR CONSTRUCTION AT 430 THE STREAM CROSSING CONT. 24-4878-D (423.01) 425.20 8" S. PVC ~-423.83 @ 1.00% 425.10-/ UP 10' @ 1.00% 79 418.60 CONT. 24-4878-D STREAM CENTERLINE -425.20 8" S. P.VC @ 7.47% 8" S. PVC @ 8.26% 410 EX. 8" S. DIP @ 1.00% 409.49-EX. 8" S. PVC @ 1.00%

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

JRD DRAWN BY: AWL

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE PLA WERE PREPARED OR APPROVED BY AND THAT I AM A DULY LICENSE PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MARYLAN LICENSE NO. 12975, EXP. DATE: MAY 26, 2022

<u>ON</u>	3 6 04
ANC 3 6	N. C.
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ME,	
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ND,	
-)	2111
3/6/2.20	
2/9/21	U Les to

HUJ [REMOVE PART OF 8"S FROM CONT. # 20-5167-D AND 04-02-22 INCLUDE IT IN CONT. # 24-5170-D DATE 600' SCALE MAP NO. 23 BLOCK NO. 6 & 12 BY NO REVISION

WESTMOUNT CONTRACT No. 20-5167-D **SEWER** PHASE 3B **PROFILES** LOT 206 & 258 AND FUTURE LOTS 351, 352 & 355-363 HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 2

SCALE 1"=50'(H 1"=5'(V)SHEET 4 OF 4

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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PHONE; 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

CHECKED BY 13013