



**Howard County
Health Department**

Bureau of Environmental Health
8930 Stanford Boulevard, Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 6/23/22 **ONSITE SEWAGE DISPOSAL SYSTEM** P 572051
APPROVAL DATE: 7/29/22 **PERMIT: CONSTRUCTION** A _____
PROPERTY ADDRESS: 7025 COLT PLACE, CLARKSVILLE, MD 21029
SUBDIVISION: WILLOWSHIRE LOT: 41 TAX ID: 05-603029
CONTRACTOR: CHAVIS ENTERPRISES & SEPTIC SERVICES EMAIL: sedrick@chavisenterprisesllc.com
CONTRACTOR ADDRESS: 23 EAST ELLENDALE, BEL AIR, MD 21014 PHONE: (410)872-9165

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: TOLL MID-ATLANTIC LP COMPANY, INC EMAIL: nbrandenburg@tollbrothers.com
OWNER ADDRESS: 250 GIBRALTER ROAD, HORSHAM, PA 19044 PHONE: (410)872-9165

BAT UNIT MODEL: NORWECO TNTLP 1000 PUMP SIZE: 0.5 PUMP TANK CAPACITY: 2000

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 04/08/2022 DATE RECORDED: 7/21/2022

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 7 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>123</u>	INLET DEPTH: <u>2.0</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>2.0</u>

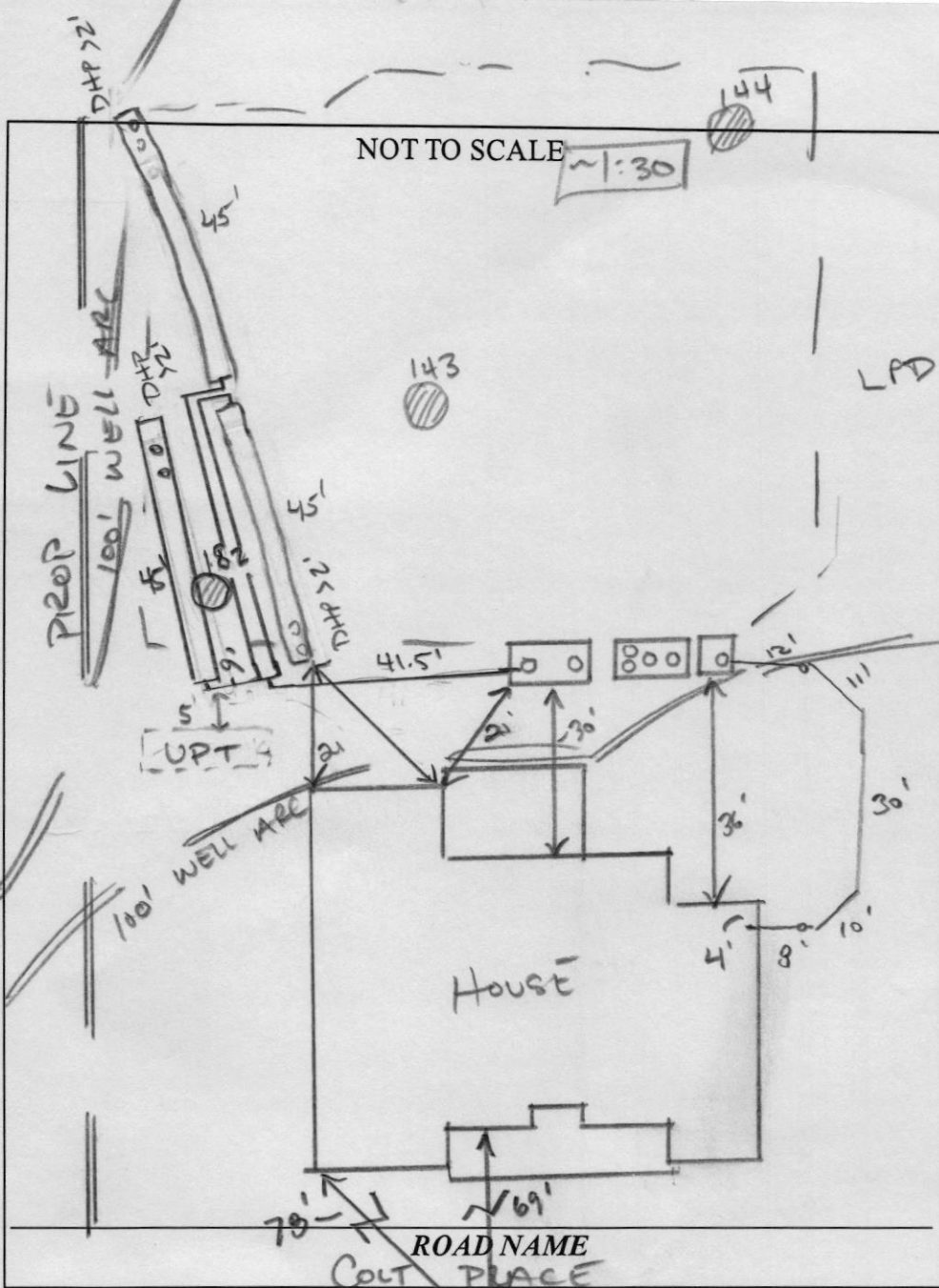
LOCATION: PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.

NOTES: **Install at least four (4) cleanouts on SHC.**
BAT unit installation must be certified by manufacturer prior to Final Approval of this permit.
The installed septic system must pass a Pump & Alarm test prior to Health Department release of Use and Occupancy. Ashland EP50M1-20 pump, or equivalent, is recommended.

ISSUED BY: R BRICKER ISSUE DATE: 6/23/22 EXPIRATION DATE: 6/23/23

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 ELECTRICAL PERMIT ISSUED E 22003214
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
CALL 410-313-1771 TO SCHEDULE INSPECTIONS.



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3	2	6
NUMBER OF TRENCHES _____		
TOTAL LENGTH _____		
ABSORPTION AREA _____		
DISTRIBUTION BOX LEVEL <u>N/A</u>		
DISTRIBUTION BOX BAFFLE <u>N/A</u>		
DISTRIBUTION BOX PORT <u>N/A</u>		

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Yes

MANUFACTURER BACK RIVER 1000GAL

CAPACITY TNT 1000 GAL

SEAM LOC TOP

TANK LID DEPTH Need to verify

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC Front/center/RCS

6" PORT LOC none

WATERTIGHT TEST _____

SLOTTED BAT

DATE ON LID 03/31/2022 (BAT)

PUMP/SEPTIC TANK LEVEL Yes 07/08/2022

MANUFACTURER Back River

CAPACITY 2000 GAL

SEAM LOC TP

TANK LID DEPTH *

BAFFLES NO

BAFFLE FILTER _____

MANHOLE LOC Front/Rear

6" PORT LOC none

WATERTIGHT TEST _____

SLOTTED no

DATE ON LID 06/05/2022

CONTROL PANEL DATA

CONTROL PANEL HEIGHT _____ (MIN 30")

INSPECTION DATE _____

INSPECTION: PASS/FAIL (CIRCLE ONE)

PRE-CONSTRUCTION NOTES:

07/14/2022 SDA APPEARS CUT AT T. CORNER, ~3' PIT AT T1 DISTAL END. RESTAKE. (JP)

07/20/2022 LAD OUT 2x42' TRS LAZER LEVEL FROM INSTALLATION NOTES: CENTER. (JP)

07/20/2022 SET. TANK, BAT, PUMP TANK SET. (JP)

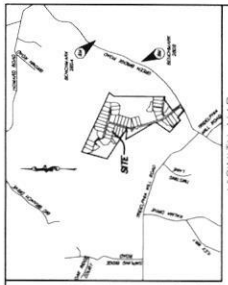
7/22/22 Upon arrival, pump tank was set w/ pump installed (Ashland 1/2 HP) No FM ykt. SHC installed per plan. Lower 2 trenches installed stored. Soil looks consistent w/ perc data. OK to continue. (JP)

08/02/2022 UPPER TR COMPLETE; Fix MANIFOLD, 1/2 HOLE SPACE TO END OF TR. 08/04/2022 CORRECTIONS COMPLETE. VERIFY TANK DEPTH AT T1A (JP) 09/23/2022 TANK DEPTH ~3'. TURN UPS

NEEDS CAP
 FINAL INSPECTOR J. Calabrese DATE OF APPROVAL 9/29/2022

Protective pipes fixed, worked in field (JC)

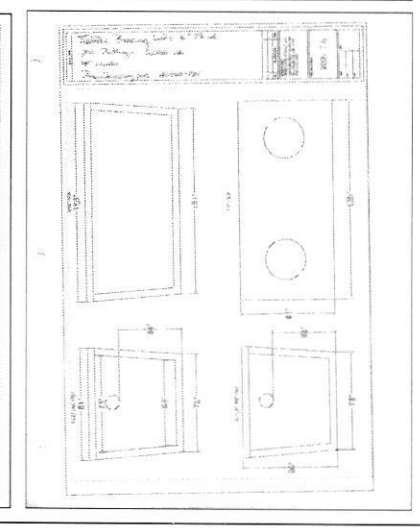
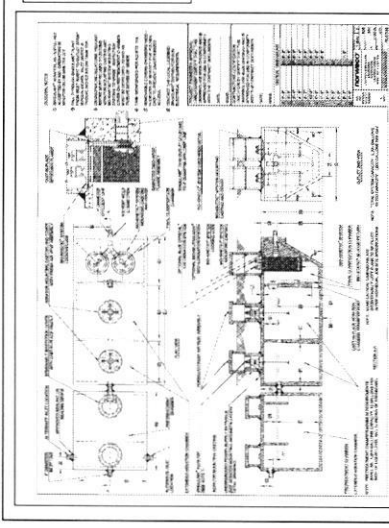
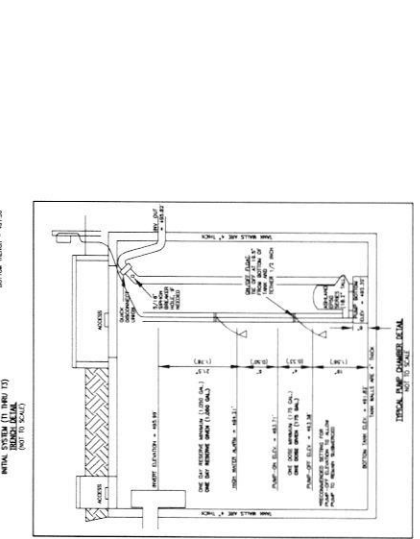
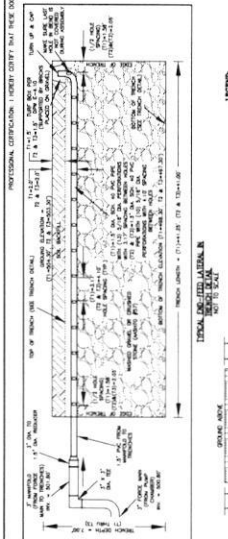
WS-SP-APP-22-00163



VICINITY MAP
 DATE: 07/18/22
 SHEET NO.: 1 OF 1
 PROJECT NO.: 22-00163

GENERAL NOTES

- EXISTING UTILITIES, INCLUDING BUT NOT LIMITED TO, WATER, SEWER, GAS, AND TELEPHONE, SHALL BE SHOWN AS NOTED ON THE PLANS AND FIELD SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL UTILITIES SHALL BE PROTECTED AND DEEPER THAN THE PROPOSED SEWER MAINS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPROPRIATE AGENCIES.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS OF ALL WORK DONE.
- ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPROPRIATE AGENCIES.
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SOILS LEGEND

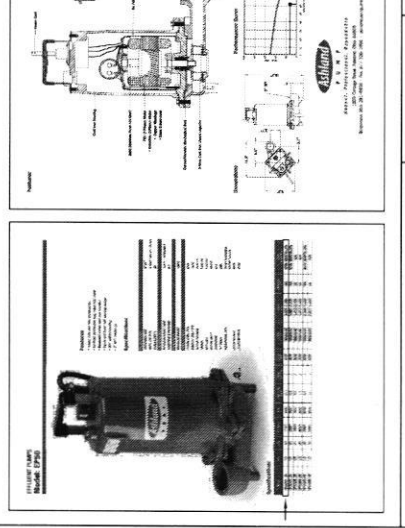
NO.	NAME	CLASS.	PERCENT
1	MAJOR COME IN TO PRESENT SURFACE	CLAY	100
2	MAJOR COME IN TO PRESENT SURFACE	SAND	100
3	MAJOR COME IN TO PRESENT SURFACE	SILT	100

SEPTIC TRENCH SIZE CALCULATIONS

ITEM	DESCRIPTION	UNIT	AMOUNT
1	SEPTIC TANK	CU YD	1.00
2	DISTRIBUTION BOX	CU YD	0.50
3	SEPTIC TRENCH	CU YD	1.00
4	ABSORPTION UNITS	CU YD	1.00
5	MAIN LINE	CU YD	1.00
6	ADDITIONAL ITEMS	CU YD	0.50
7	TOTAL	CU YD	5.00

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5	MAIN LINE	CU YD	1.00
6	ADDITIONAL ITEMS	CU YD	0.50
7	TOTAL	CU YD	5.00



SE CONSULTANTS
 ENGINEERING - PLANNING - SURVEYING - ENVIRONMENTAL
 11000 Columbia, Inc.
 11000 Columbia Drive, Suite 100, Columbia, MD 21046
 TEL: 410-271-1100
 FAX: 410-271-1101
 WWW: www.seconsultants.com

SE PLAN FOR LOT 41
 WILLOWSHIRE
 11000 COLUMBIA DRIVE, SUITE 100, COLUMBIA, MD 21046
 TEL: 410-271-1100
 FAX: 410-271-1101
 WWW: www.seconsultants.com

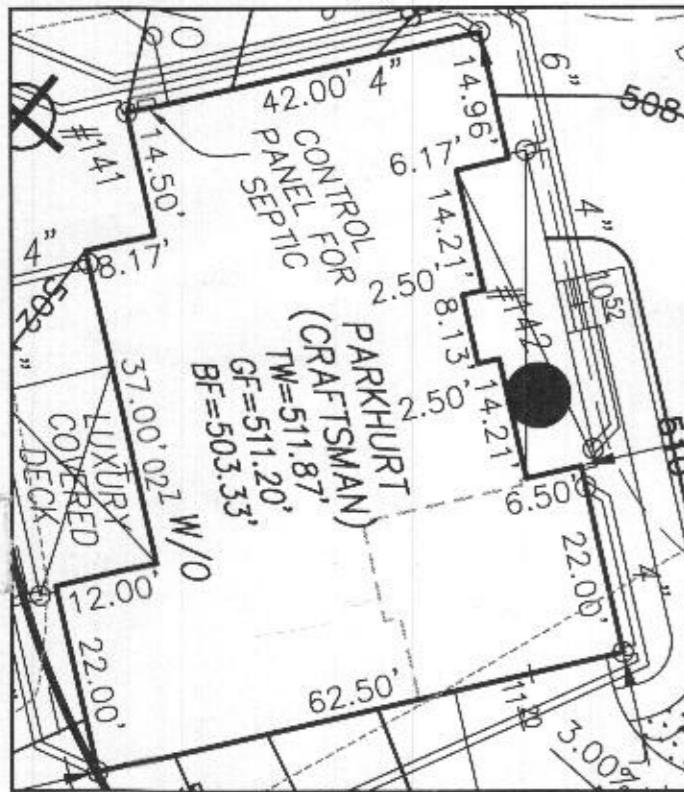
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LEGEND:

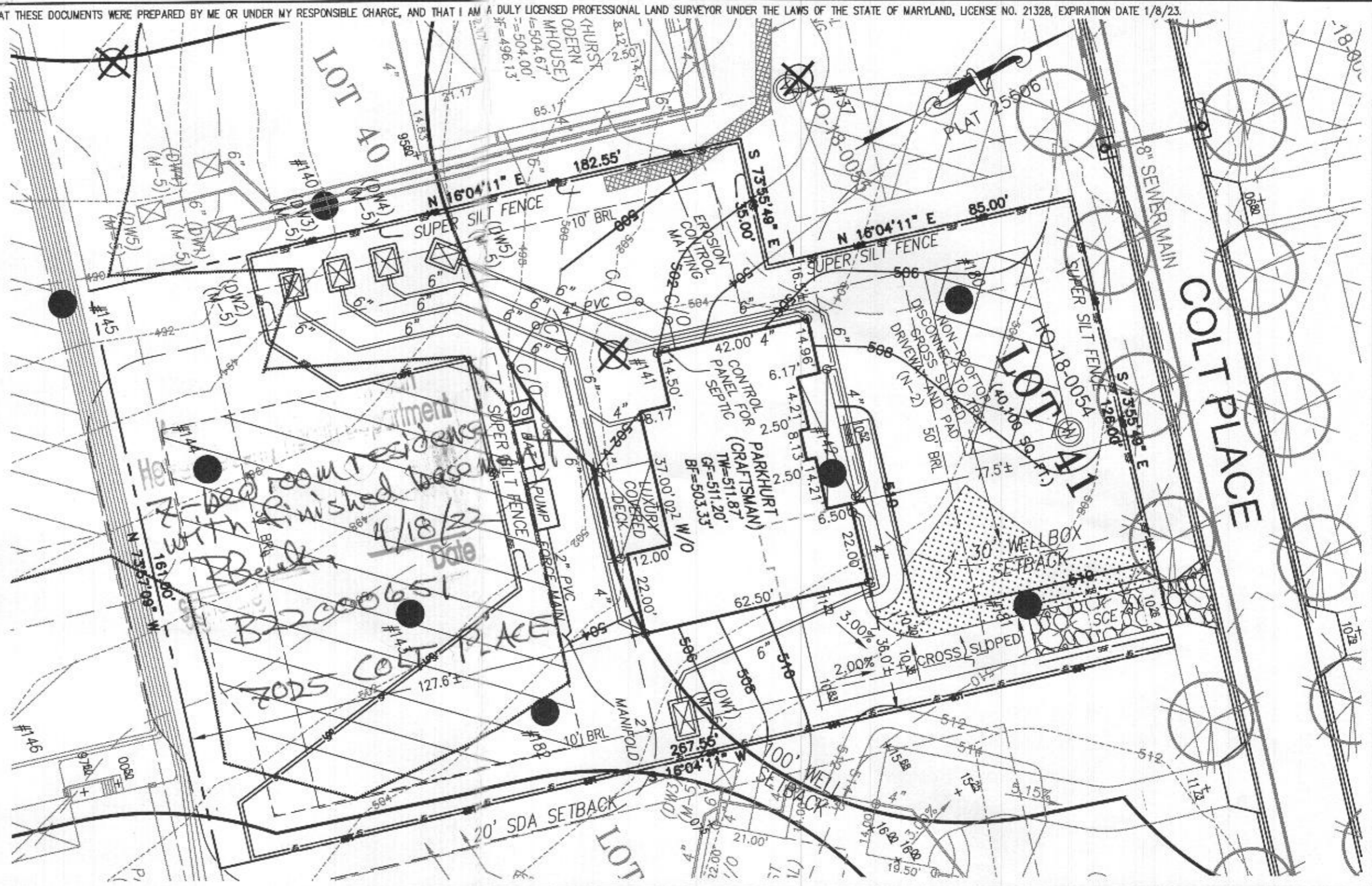
- BRL BUILDING RESTRICTION LINE
- WELL LOCATION
- T.W. TOP OF WALL
- G.F. GARAGE FLOOR
- B.F. BASEMENT FLOOR
- Passed PERC LOCATION
- Failed PERC LOCATION
- SEWAGE DISPOSAL AREA
- WELL BOX AREA
- PROPOSED TREES
- SCE STONE CONSTRUCTION ENTRANCE
- DW DRYWELL
- SILT FENCE
- SUPER SILT FENCE
- LIMITS OF DISTURBANCE

NOTE:
TOTAL LIMITS OF DISTURBANCE (LOD) = 29,805 SQ. FT.



HOUSE ENLARGEMENT
NOT TO SCALE

BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN
SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.



HOUSE TYPE: PARKHURST (CRAFTSMAN)

- FINISHED LOFT
- TWO CAR SIDE ENTRY GARAGE ILO STANDARD GARAGE CONFIG.
- FINISHED LOWER LEVEL
- WALK OUT BASEMENT
- MEDIA ROOM - FINISHED BASEMENT
- ADD'L REAR WALL WINDOW - WALKOUT BASEMENT
- POWDER ROOM - FINISHED BASEMENT
- GRAND MULTI-GENERATIONAL SUITE ADDITION
- LUXURY WALK-OUT DECK
- ADDITIONAL BEDROOM - FINISHED BASEMENT
- FINISHED BASEMENT WITH GRAND MULTI-GEN

- OPTION No. 007
- OPTION No. 012
- OPTION No. 013
- OPTION No. 017
- OPTION No. 562
- OPTION No. 026557
- OPTION No. 263036
- OPTION No. 263075
- OPTION No. 263169
- OPTION No. 263216
- OPTION No. 263386

WELL NUMBER: HO-18-0054

ADDRESS: 7025 COLT PLACE
DAYTON, MD 21036

PERMIT PLOT PLAN
LOT 41
WILLOWSHIRE
LIBER 18479, FOLIO 296
PLAT NO. 25506
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

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ESE Consultants, Inc.

6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046

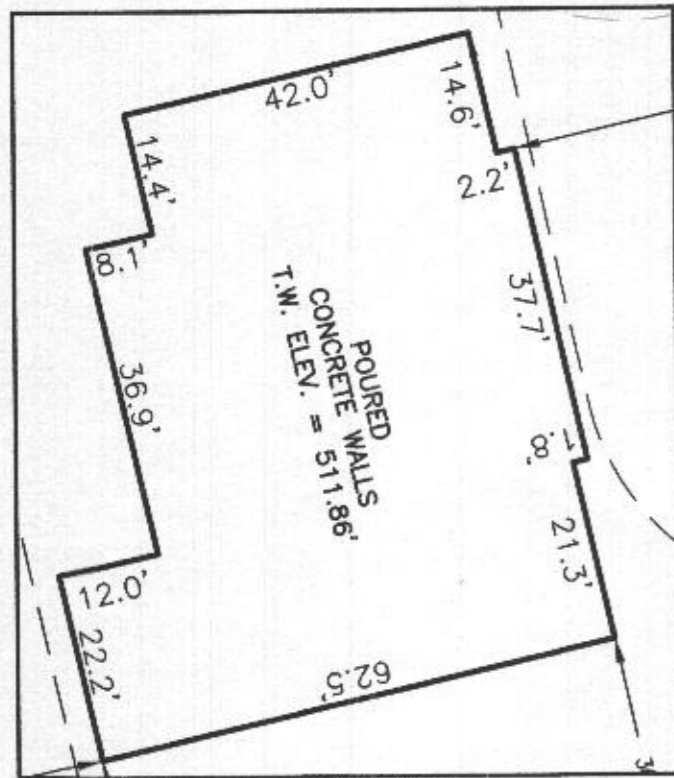
T: 410-872-9105

DATE: 02/18/2022 SCALE: 1" = 30' FILE: PP LOT 41 - PARKHURST CRAFTS.
CHK'D: M.J.B. JOB NO: 4520 DRAWN: R.C.K.



LEGEND:

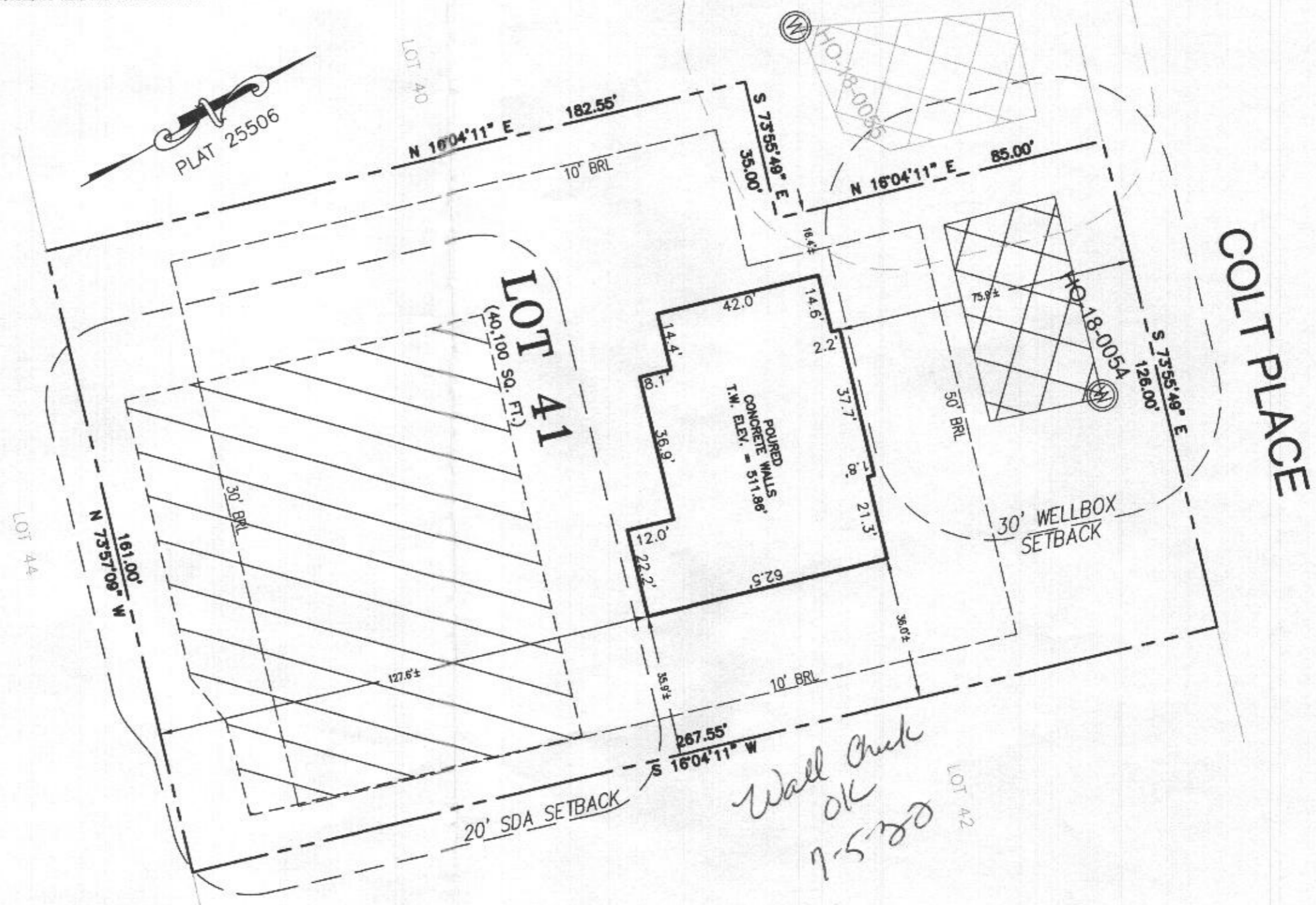
- BRL BUILDING RESTRICTION LINE
- ⊙ WELL LOCATION
- T.W. TOP OF WALL
- ELEV. ELEVATION
- SEWAGE DISPOSAL AREA
- WELL BOX AREA



HOUSE ENLARGEMENT
NOT TO SCALE

WELL NUMBER: HO-18-0054
 ADDRESS: 7025 COLT PLACE
 DAYTON, MD 21036
 PERMIT NO.: B22000651

BUILDING SETBACKS (B.R.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN
 SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.



*Wall Check
OK
7-5-20*

SURVEYOR'S CERTIFICATE

THIS WALLCHECK WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT-OF-WAYS, COVENANTS, AND RESTRICTIONS, ETC. OF RECORD, SOME OR ALL OF WHICH MAY OR MAY NOT BE SHOWN AND/OR REFERENCED HEREON. BEARINGS AND DISTANCES OF THE PROPERTY BOUNDARY LINES SHOWN HEREON ARE PER AVAILABLE RECORDS AND HAVE NOT BEEN FIELD VERIFIED. THIS IS NOT A "LOCATION DRAWING" AND IS NOT TO BE USED FOR SETTLEMENT PURPOSES.

Michael Joe Boyce 21328 04/30/22
 SIGNATURE: MICHAEL JOE BOYCE MD. LIC NO. DATE

WALLCHECK
 LOT 41
WILLOWSHIRE
 LIBER 18479, FOLIO 296
 PLAT NO. 25506
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

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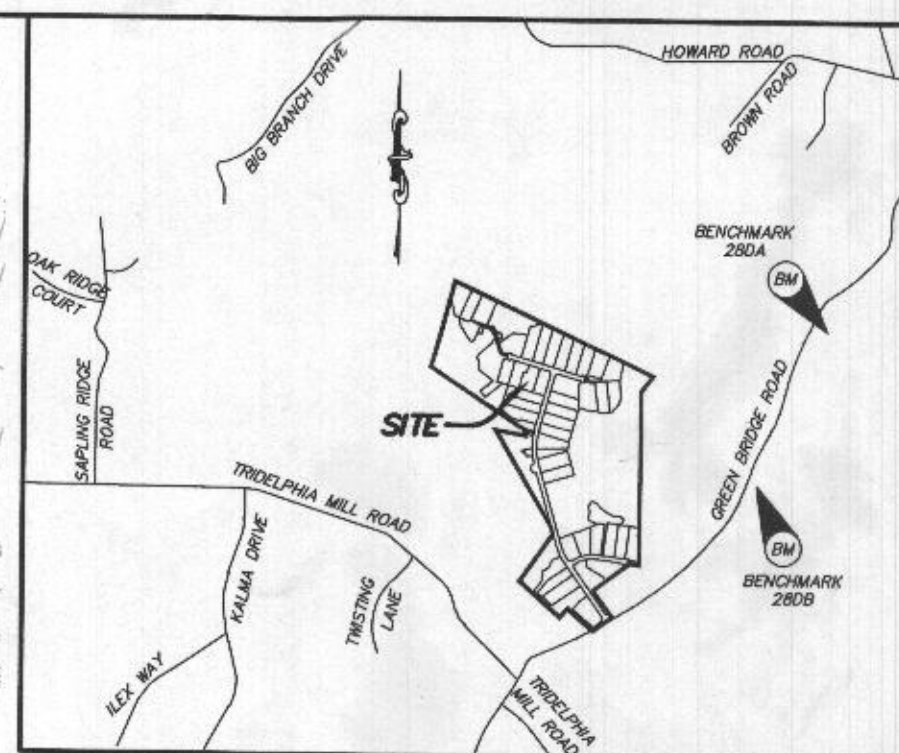
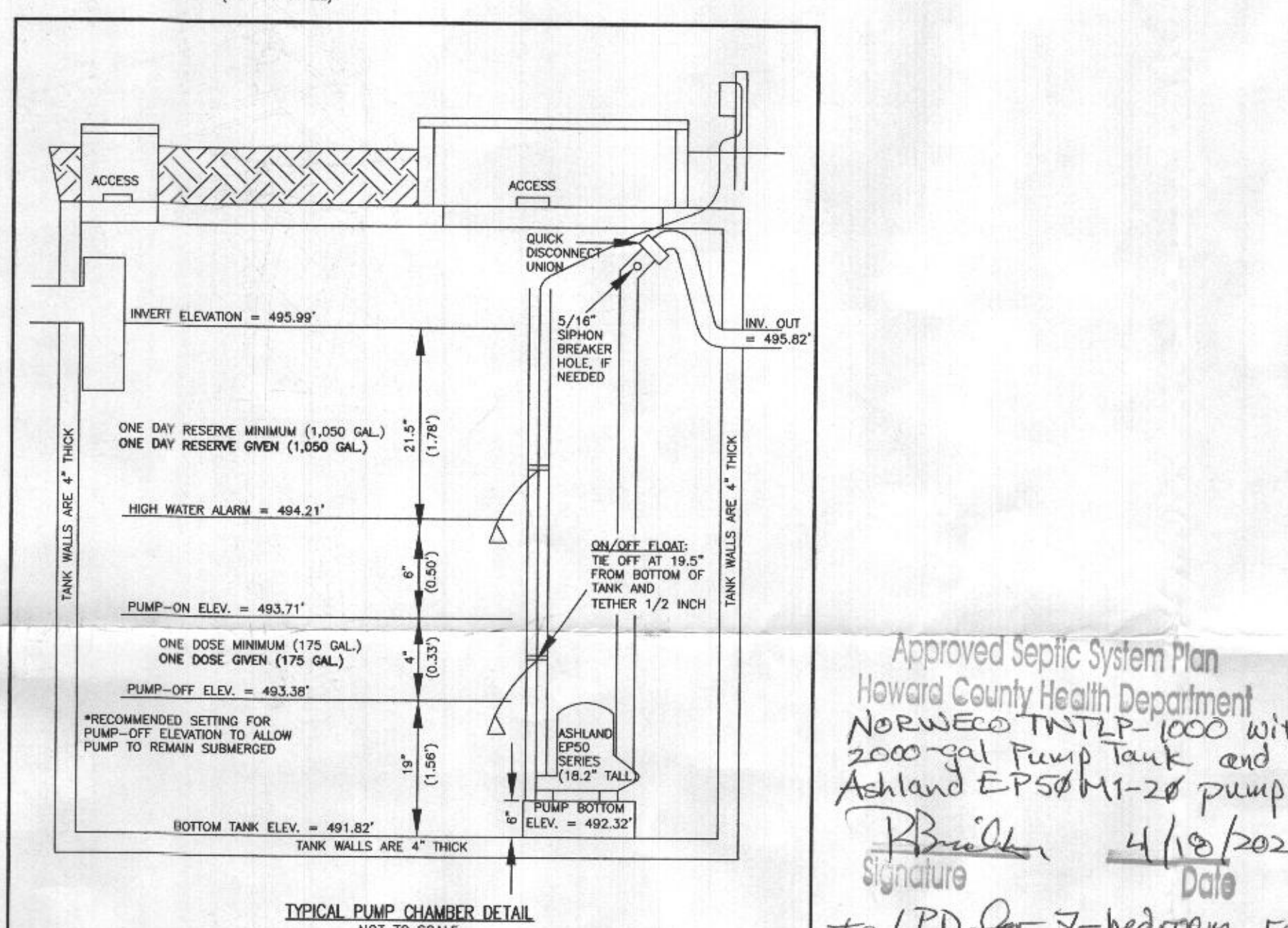
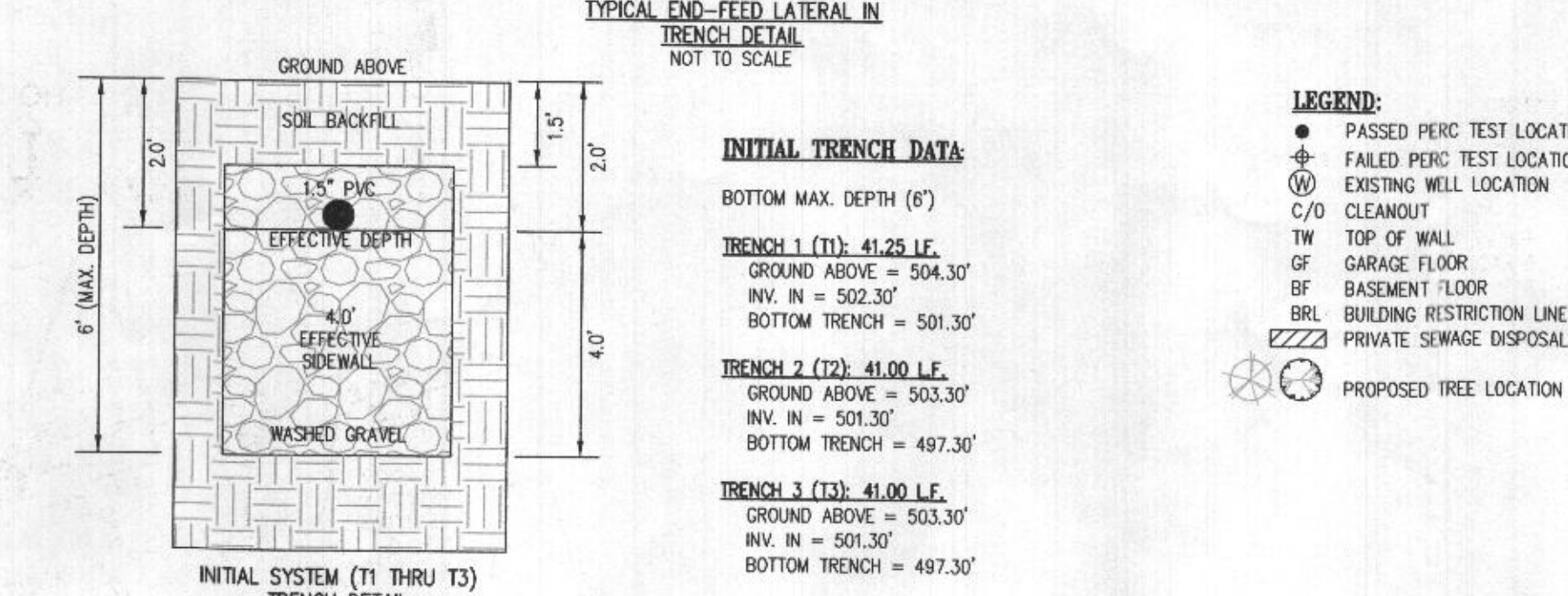
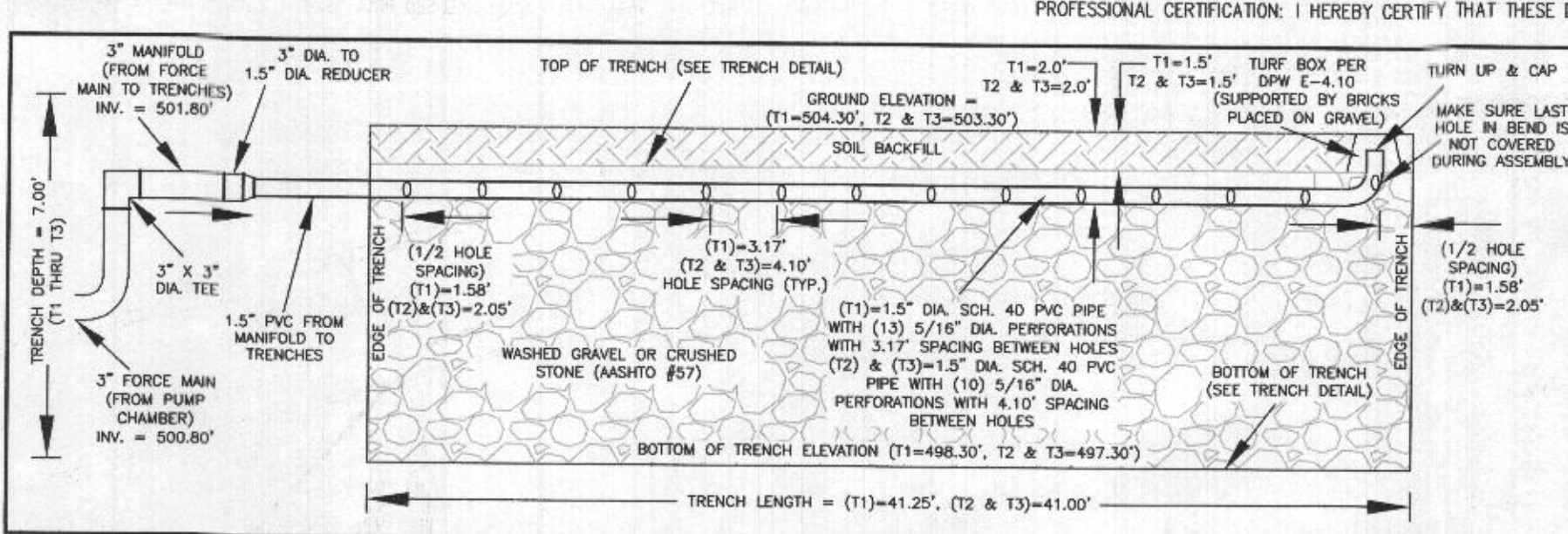
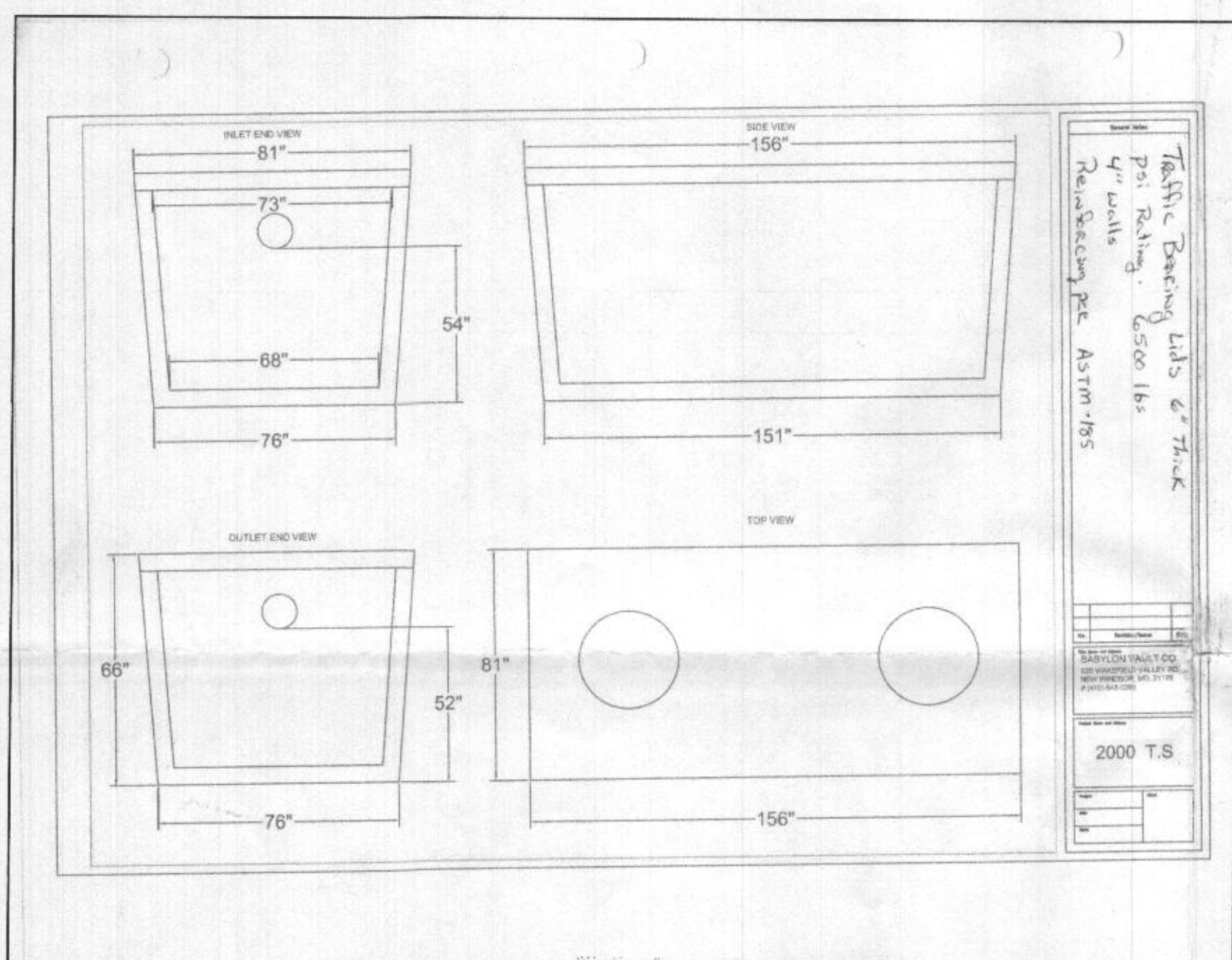
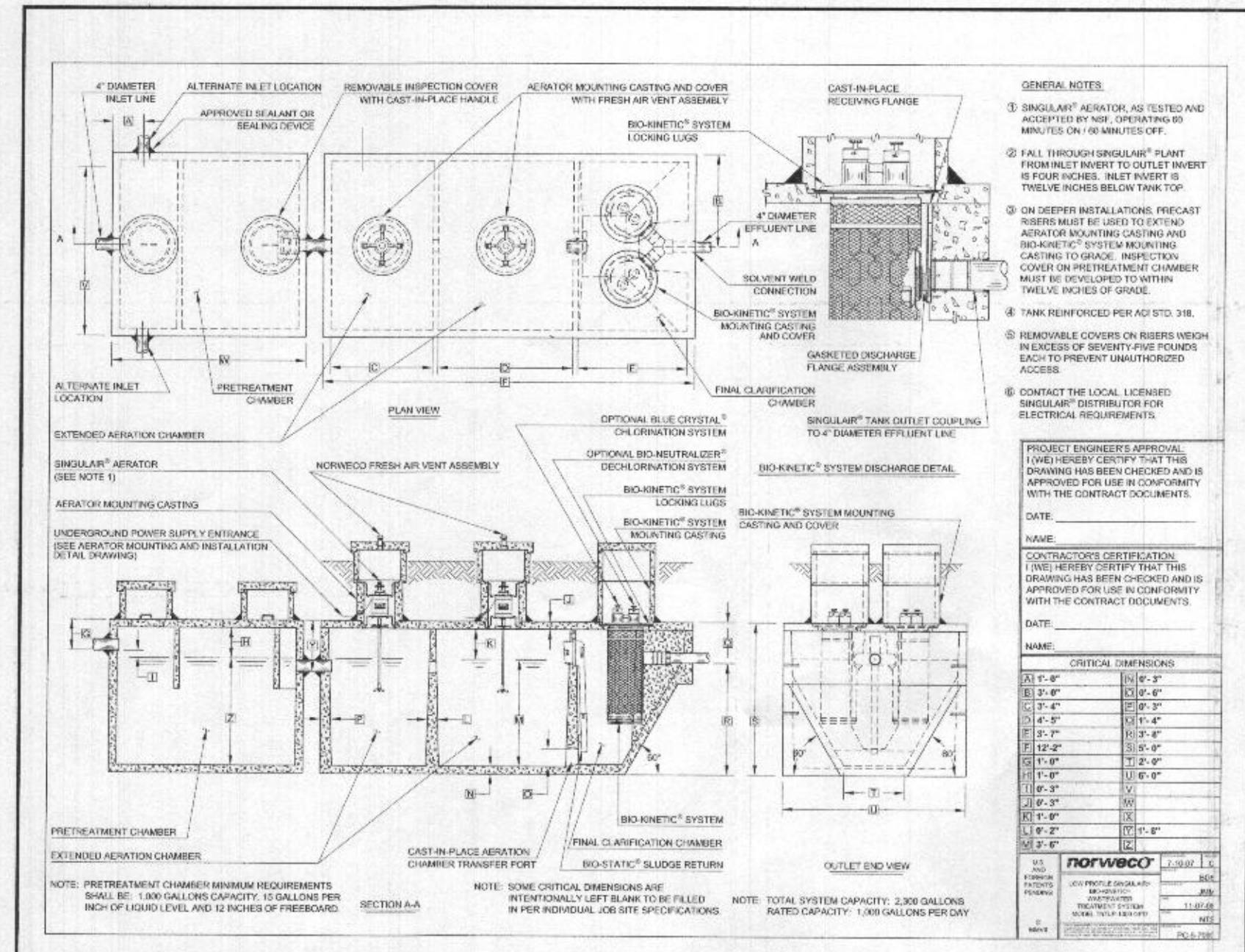
ESE Consultants, Inc.
 6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046
 T: 410-872-9105

DATE: 04/30/2022
 CHK'D: M.J.B.

SCALE: 1" = 30'
 JOB NO: 4520

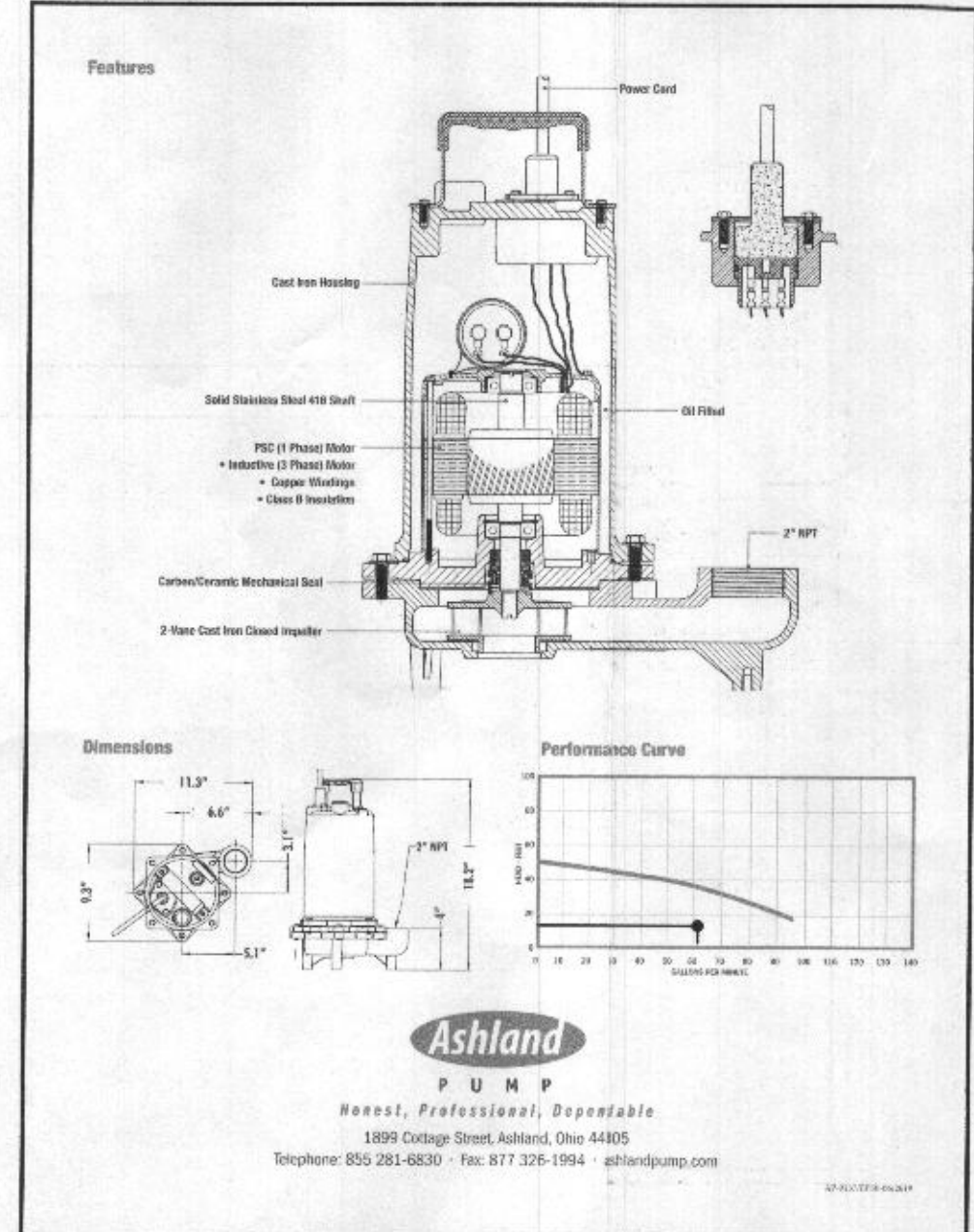
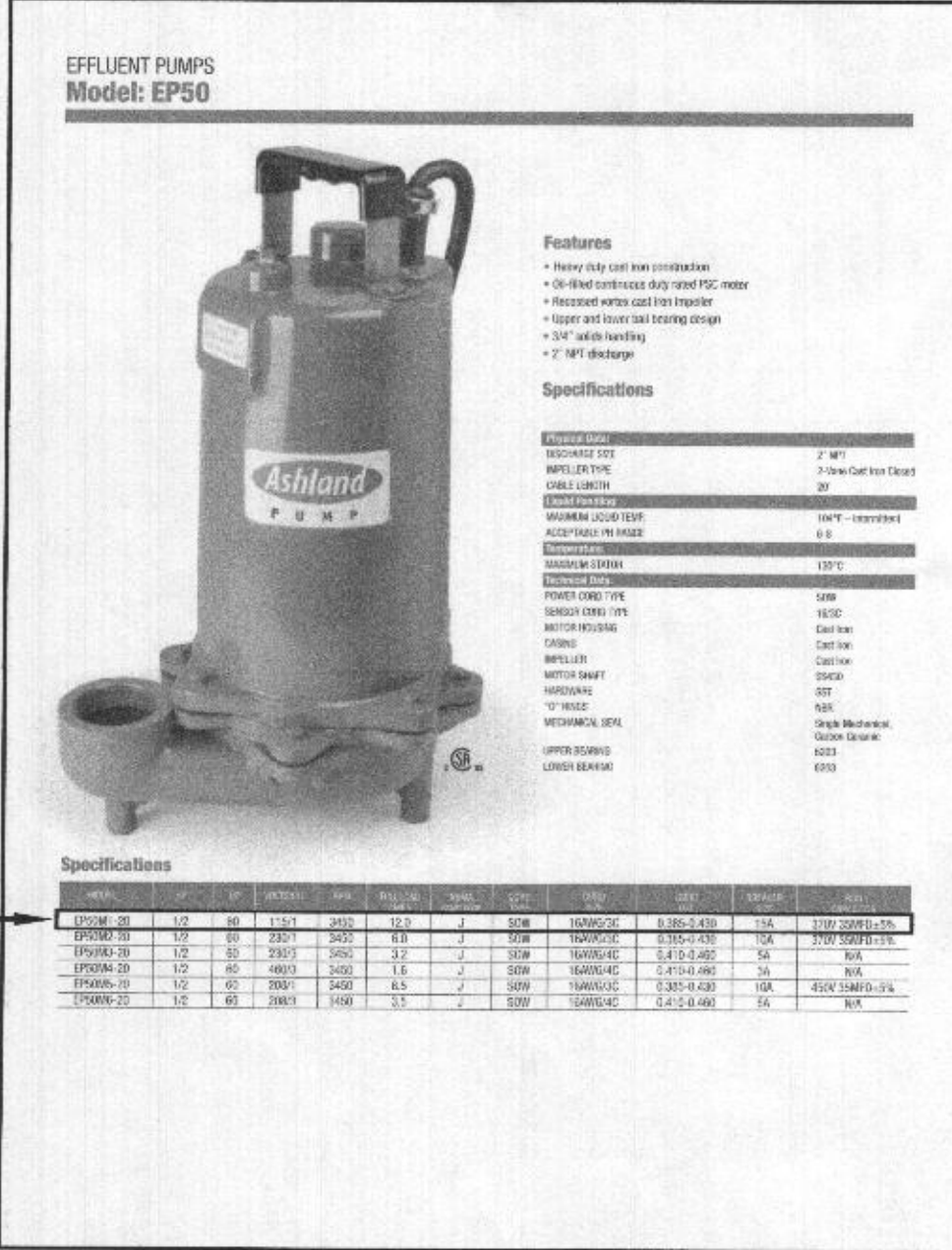
FILE: WC LOT 41
 DRAWN: V.X.P.





VICINITY MAP
1" = 200'
TAX MAP 27, GRID 18
BENCHMARK 280A
N: 570,624.997, E: 1,313,434.228, EL: 564.389'
BENCHMARK 280B
N: 569,055.561, E: 1,313,795.348, EL: 537.361'

- GENERAL NOTES:**
- THESE AREAS DESIGNATE A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWAGE AREA. RECORDATION OF MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
 - EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL ARE WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
 - ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - BUILDING SETBACKS (B.L.'S) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "2" HAVE AN ACCURACY OF ±0.1' FOOT.
 - ANY CHANGES TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
 - THE MAXIMUM EARTH COVER OVER THE TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 - THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY BOWLER ENGINEERING ON 9/03/15, AND HOWARD COUNTY GIS.
 - THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE BAT SYSTEM.
 - THE BAT SYSTEM SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
 - WITHIN ONE (1) MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
 - ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY.
 - THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO THE FINAL APPROVAL OF THE BAT INSTALLATION.
 - AFTER PRESSURE TESTING THE DISTRIBUTION SYSTEM, THE PIPE TURN-UPS AT THE ENDS OF THE LATERALS ARE TO BE CUT BELOW GRADE AND CAPPED. THE TRUNCATED LATERAL TURN-UPS SHOULD BE PROTECTED BY TURF BOXES.
 - THE EXISTING WELL FOR LOT 41 (TAG NO. HO-18-0054) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN HEREON.



LOW PRESSURE DISTRIBUTION SYSTEM CALCULATIONS

NUMBER OF MANIFOLDS = 1
MANIFOLD TYPE = END FEED

TRENCH 1 (T1) ELEV.=504.30' LENGTH=41.25'
TRENCH 2 (T2) ELEV.=503.30' LENGTH=41.00'
TRENCH 3 (T3) ELEV.=503.30' LENGTH=41.00'

MANIFOLD LENGTH = 3.00' TYPE=SCH40
FORCEMAIN LENGTH = 31.00' TYPE=SCH40

TRENCH	FEED	PIPE DIA. (IN.)	HOLE DIA. (IN.)	HOLE FLOW RATE (GPM)	HOLE SPACING (FT.)	HOLES	TRENCH FLOW RATE (GPM)	LATERAL LENGTH (FT.)	FLOW PER GAL. PER LF TRENCH (GPM)	LATERAL DIA. (IN.)	TYPE
1	41.25	END	5/8"	1.63	3.17	13	21.19	38.67	0.534	1.5	SCH40
2	41.00	END	5/8"	1.99	4.10	10	19.90	38.95	0.511	1.5	SCH40
3	41.00	END	5/8"	1.99	4.10	10	19.90	38.95	0.511	1.5	SCH40

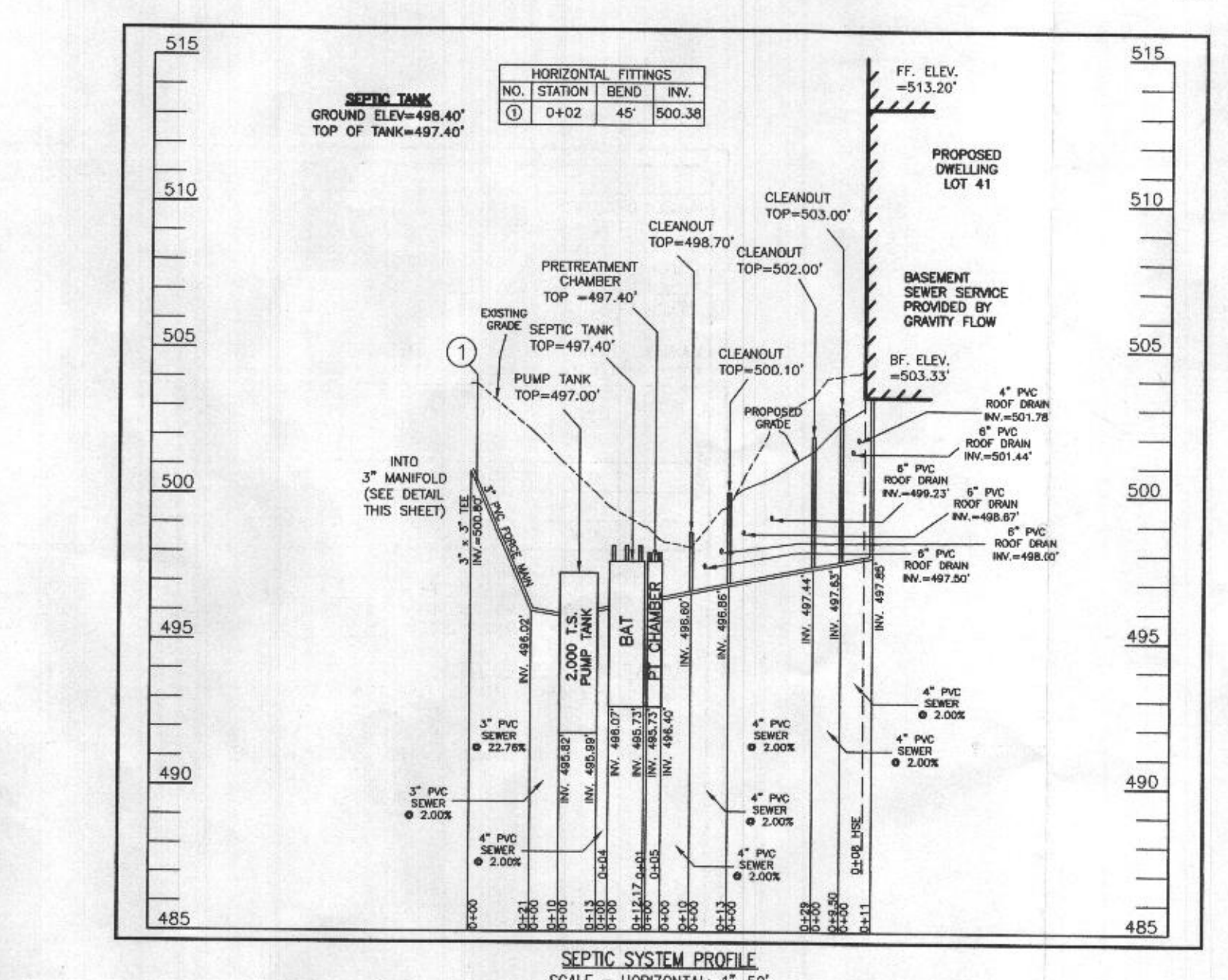
MIN. SYSTEM DISCHARGE RATE = 60.99 GPM
MANIFOLD DIAMETER = 3" IN.
FORCE MAIN DIAMETER = 3" IN.
MINIMUM DOSE = 175 GAL.

VELOCITY = 2.64 FPS
VELOCITY = 2.64 FPS
VOL. IN FM, MAN. 5x LATERAL=104.76 GAL > 1/8 DESIGN FLOW=100.5475 GAL.
1.5" PVC FROM MANIFOLD TO TRENCH IN LF: (T1)=8.50', (T2)=48.70', (T3)=50.00'

ADD 6' PER BEND = 6'
ADD 10' PER BEND = 10'
3.00' MANIFOLD + 50.00' LONGEST 1.5" PIPE FROM MANIFOLD TO TRENCH (3)
1.5" PVC PER BEND = 18'
ADD 6' PER BEND = 18'
ADD 10' PER BEND = 10'
ADD 3' PER COUPLING = 3'
TOTAL ADJ. LENGTHS = 47'
TOTAL LENGTHS = 84.00'

FRICITION HEAD = 1.06' FT. (PER ABOVE CALCULATION)
OPERATING HEAD = 2.00' FT.
STATIC HEAD = 8.92' FT. (HIGHEST POINT IN DISTRIBUTION SYSTEM - PUMP OFF FLOAT ELEVATION)
TOTAL DYNAMIC HEAD = 11.98' FT. (FRICITION HEAD + OPERATING HEAD + STATIC HEAD)

THEFORE A PUMP CAPABLE OF DELIVERING AT LEAST 60.99 GPM AGAINST 11.98' OF HEAD IS REQUIRED.
EPS0M-20, 1/2 HP, IS EFFICIENT



SOILS LEGEND

SOIL	NAME	CLASS	K _{sv}
MacC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	28
MacD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	28

SEPTIC TRENCH SIZE CALCULATIONS

SYSTEM INPUT INFORMATION	INITIAL SYSTEM	1ST REPLACEMENT SYSTEM	2ND REPLACEMENT SYSTEM
APPLICATION RATE (GPM)	1.2	1.2	0.8
EFFECTIVE AREA BEGINNING DEPTH (GIVEN)	2	2	5
BOTTOM MAXIMUM DEPTH (GIVEN)	6	6	6
NUMBER OF BEDROOMS	7	7	7
DESIGN FLOW (150 GAL./DAY/BEDROOM)	1,050	1,050	1,050
ABSORPTION TRENCH CALCULATIONS			
DRAINFIELD AREA REQUIRED (DESIGN FLOW/APP. RATE)	875	875	1,312.50
EFFECTIVE SIDEWALL DEPTH "D"	4.0	4.0	1.0
(DEPTH BETWEEN THE EFFECTIVE BEGINNING DEPTH OR PIPE DEPTH (WHICHEVER IS DEEPER) AND MAX. TRENCH BOTTOM)			
TRENCH WIDTH "W" (2 OR 3 FEET)	3	3	3
SIDEWALL REDUCTION (W+2)/(W+10)	0.42	0.42	0.83
LINEAR FEET OF TRENCH REQUIRED (DRAINFIELD AREA X SIDEWALL REDUCTION)/W	122.50	122.50	363.12
TRENCH LAYOUT INFORMATION			
NUMBER OF TRENCHES USED	3	3	8
TOTAL LINEAR FEET USED	123.25	123.00	364.00
MINIMUM TRENCH SPACING	11	11	10

FOR TRENCHES WITH NO SIDEWALL REDUCTION, THE SPACING IS 6' FOR A 2' WIDE TRENCH AND 9' FOR A 3' WIDE TRENCH (MEASURED EDGE TO EDGE). ALL TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT MUST BE SPACED A MIN. OF 10' FOR EFFECTIVE SIDEWALL NOT OVER 3.5'. IF MORE THAN 3.5' THEN SPACING FORMULA IS (20+W) UP TO A MAX. OF 18'

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/23.

Michael Joe Boyce
03/28/22
DATE



DESIGNED BY:	DATE	REVISION	BY	APPROVED
R.C.K.				
DRAWN BY:				
R.C.K.				
CHECKED BY:				
M.J.B.				

SITE PLAN FOR BAT INSTALLATION
LOT 41
WILLOWSHIRE
LIBER 18479, FOLIO 311
PLAT NO. 25506
TAX NO. 05-603029
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ADDRESS: 7025 COLT PLACE
DAYTON, MARYLAND 21036

ESE CONSULTANTS
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL

ESE Consultants, Inc.
6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046
T: 410-872-9105

DATE: 03/25/2022 SCALE: 1"=30' FILE: 4520 OSDS LOT 41
CHK'D: M.J.B. JOB NO: 4520 DRAWN: R.C.K.

SHEET 1 OF 1

