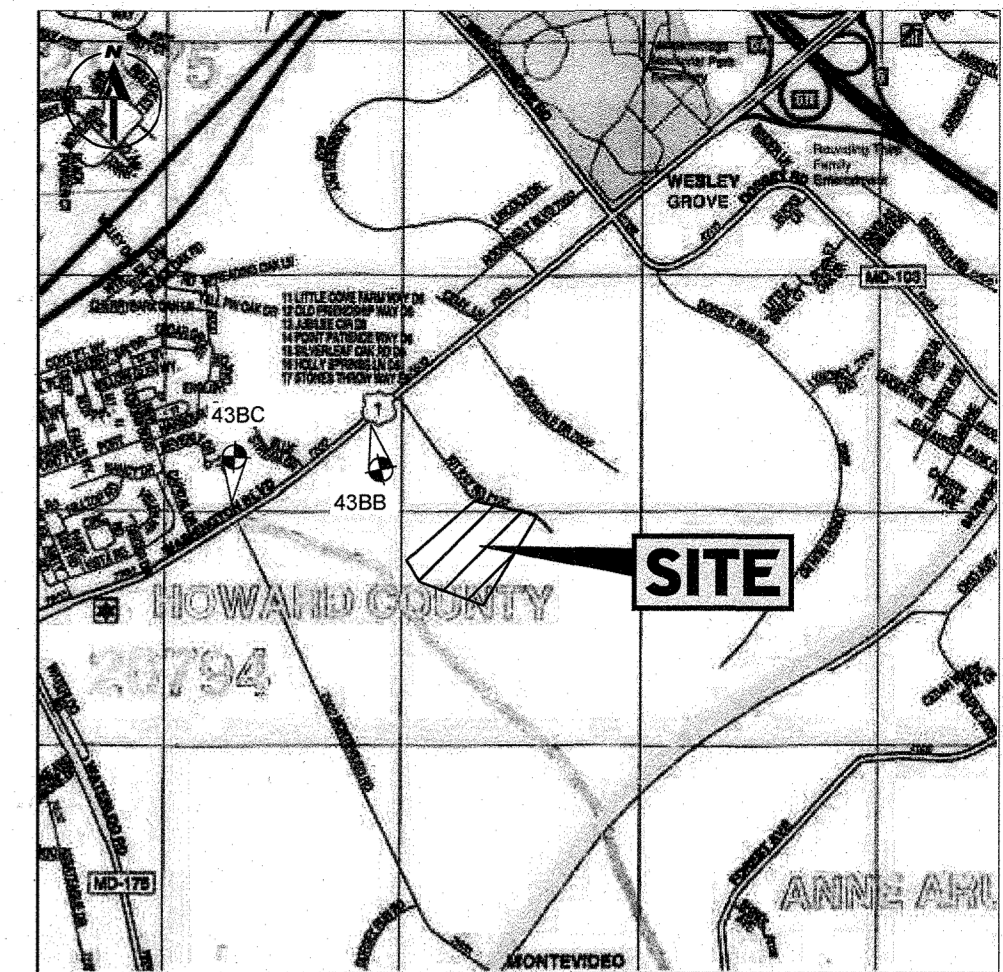


GRAND VIEW - KIT KAT FINAL PUBLIC WATER PLAN

LOCATION OF SITE
7130 & 7140 KIT KAT ROAD
TAX MAP 43, GRID 10, PARCEL A
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT No. 44-5218-D



BENCHMARK

GEODETIC SURVEY CONTROL - 43BC ELEV. 214.124' N 549592.070 E 1,375,468.711 GEODETIC SURVEY CONTROL - 43BB ELEV. 209.012' N 550,534.184 E 1,376,905.389

VICINITY MAP
 COPYRIGHT ADC THE MAP PEOPLE
 PERMIT USE NO. 20602153-5
 SCALE: 1"=2000'
 ADC MAP COORDINATES: 24/85

LEGEND

	PROPOSED FIRE HYDRANT
	PROPOSED WATER MAIN
	EXISTING WATER MAIN
	EXISTING SEWER MAIN
	EXISTING SEWER MANHOLE
	PROPOSED WATER VALVE
	EXISTING WATER VALVE
	PROPOSED WATER BEND
	PROPOSED SHC'S
	PROPOSED WHC'S
	SEWER CLEANOUT
	UTILITY TEST PIT LOCATION
	PROPOSED WATER VALVE, TEE & CROSS
	100 YR. FLOODPLAIN
	STREAM BUFFER
	WETLAND BUFFER

SHEET INDEX

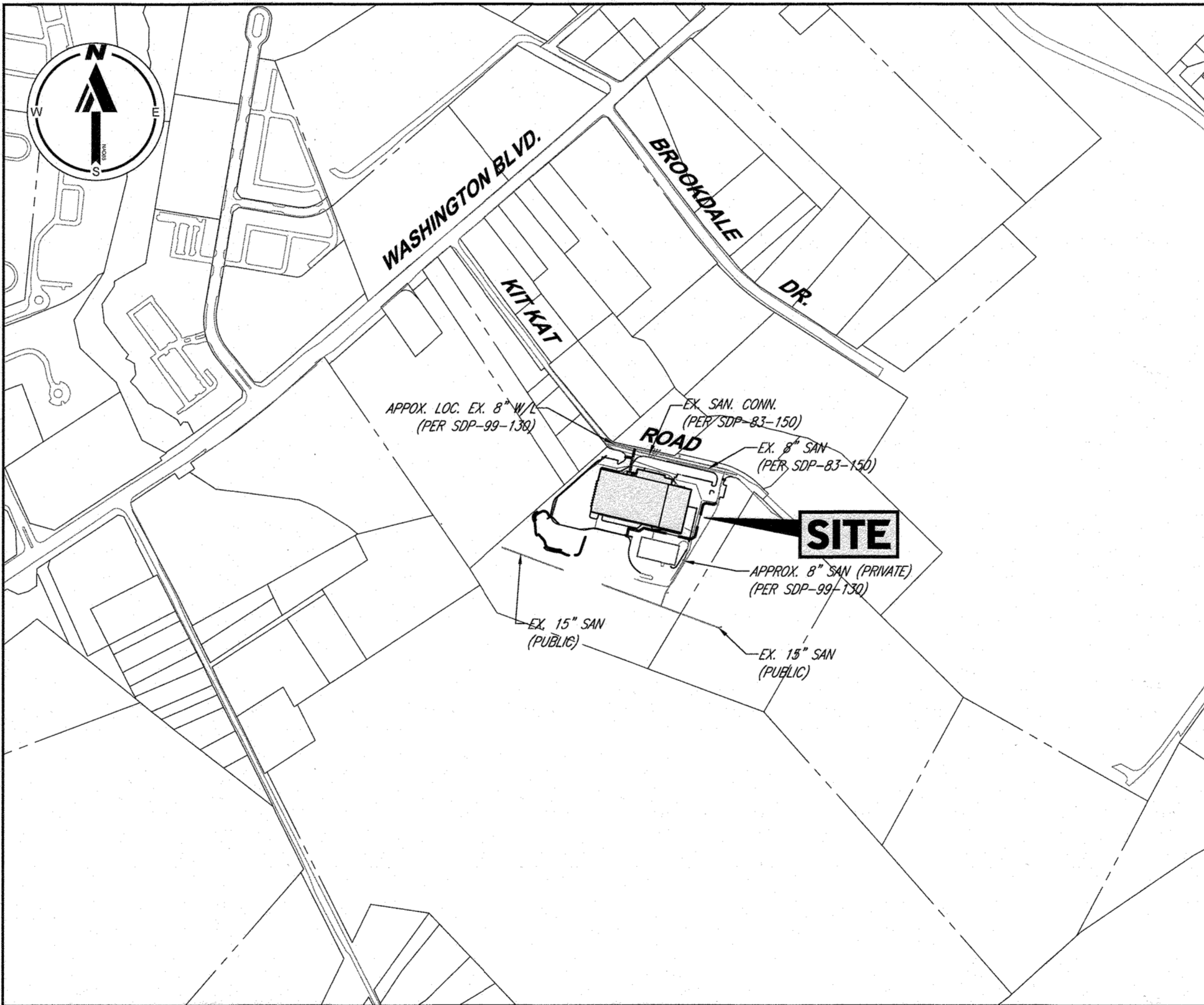
SHEET TITLE	SHEET NUMBER
TITLE SHEET	1
FINAL PUBLIC WATER PLAN	2
FINAL PUBLIC WATER PROFILES	3
EXISTING CONDITIONS AND ABANDONMENT PLAN	4

QUANTITIES TABLE

ITEMS	QUANTITIES ESTIMATED	QUANTITIES	AS-BUILT TYPE	MANUFACTURER / SUPPLIER
1/8 BEND	8			
1/32 BEND	2			
8" WATER PVC - C900 DR-18 (235 PSI)	709 LF			
6" WATER PVC - C900 DR-18 (235 PSI)	34 LF			
8" VALVE	3			
FIRE HYDRANT, FH TEE & VALVE	3			
8"x8" TAPPING SLEEVE	2			
8" 3" HIGH DEFLECTION COUPLING	1			
8" CAP & BUTTRESS	2			
NAME OF UTILITY CONTRACTOR				
			CHECK BOX	
			AS-BUILT DATE	
			SURVEY AND DRAFTING DIVISION	

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.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON 08/25/21 BY BOHLER ENGINEERING.
- 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. 43BC AND NO. 43BB. (ENGINEERING/SURVEY FIRM SHALL PROVIDE DESCRIPTIONS OF VERTICAL CONTROL POINTS, I.E., IRON BARS, CROSS CUTS ON CONCRETE STRUCTURES)
 HOWARD COUNTY MONUMENT NO. 43BC ELEV. = 214.124'
 HOWARD COUNTY MONUMENT NO. 43BB ELEV. = 209.012'
- 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 BY 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.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 AT & T 1-800-252-1133
 BGE (CONSTRUCTION SERVICES) 410-637-8713
 BGE (EMERGENCY) 410-685-0123
 BUREAU OF UTILITIES 410-313-4900
 COLONIAL PIPELINES COMPANY 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/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.
- REFER TO SHEET 11 FOR STRUCTURE SCHEDULES.
- SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND AS SHOWN ON SDP-_____.



LOCATION MAP
 SCALE: 1"=600'

REFERENCE DRAWINGS

- SDP-84-222
- SDP-83-150
- SDP-99-130
- SDP-23-003

DESIGN MANUAL WAIVERS

2-23-013

TYPE OF BUILDING: INDUSTRIAL
 DRAINAGE AREA: PATAPSCO
 NUMBER OF LOTS/PARCELS/UNITS: 1
 AREA OF LOT/PARCEL: 12.59 +/- AC
 NUMBER OF W.H.C.'S: 1 (PROPOSED)
 NUMBER OF S.H.C.'S: 1 (PROPOSED)
 WATER ZONE: 400
 TEST GRADIENT: 6/77
 TEST PRESSURE: 216 PSI
 TREATMENT PLANT: PATAPSCO

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND AS SHOWN ON SDP-23-003

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

 7/27/23
 DATE

OWNERS:
 PARCEL 46
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 PHONE: (703) 522-9502
 PARCEL 681
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 PHONE: (703) 522-9502
DEVELOPER:
 GRANDVIEW PARTNERS
 1530 WILSON BLVD., SUITE 450
 ARLINGTON, VA 22209
 CONTACT: JEFF USAS
 PHONE: (703) 522-9502

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

 CHIEF, BUREAU OF UTILITIES
 DATE: 7/19/23

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 7/19/23

BOHLER //
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

BR. ROWE

 PROFESSIONAL ENGINEER
 MARYLAND LICENSE NO. 4086
 PROFESSIONAL CERTIFICATION
 I, BRANDY ROWE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 4086, EXPIRATION DATE: 03/03/25

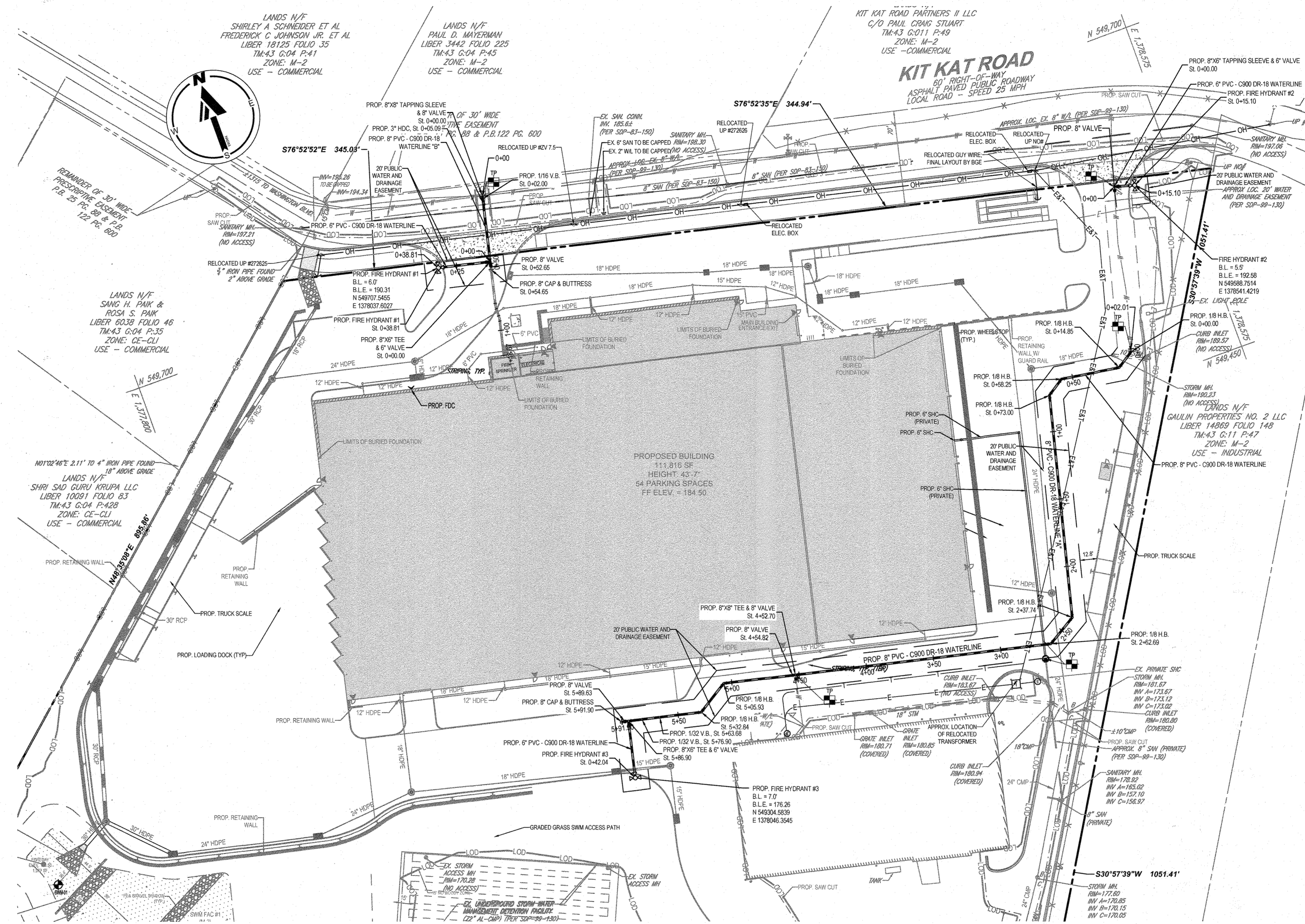
DES:	
DRN:	
CK, M.P.:	
DATE: 03/23/23	
REV.	DATE
	DESCRIPTION
BY	

TITLE SHEET

PARCEL NO.	A
600' SCALE MAP NO.	43
BLOCK NO.	

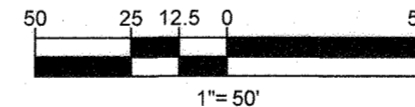
GRANDVIEW KIT KAT PARCELS A
 7130 & 7140 KIT KAT ROAD, ELK RIDGE, MD
 TAX MAP 43, GRID 10, PARCEL A
 1ST ELECTION DISTRICT
 HOWARD COUNTY
 CONTRACT NO. :
 SCALE: AS SHOWN
 SHEET: 1 OF 4

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE OF VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL: 311
 (WV 1-800-245-4648) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-952-7051) (MD 1-800-257-7777) (DE 1-800-368-6869)



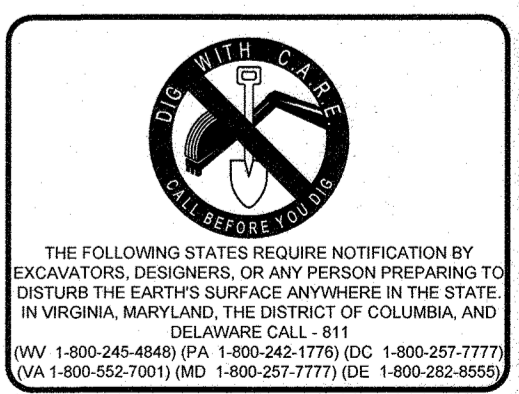
PUBLIC WATER PLAN

SCALE: 1" = 50'



NOTE:
CONTRACTOR TO VERIFY ALL STRUCTURES SIZES PRIOR TO ORDERING.

TEST PIT NOTE
CONTRACTOR TO TEST PIT 2 FEET BELOW PROPOSED UTILITY OR UNTIL EXACT LOCATION OF EXISTING UTILITY IS IDENTIFIED AND SUBMIT ANY DISCREPANCIES TO BOHLER ENGINEERING IN WRITING.



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND
 Chief, Bureau of Utilities
 Date: 7/19/23

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND
 Chief, Development Engineering Division
 Date: 7/19/23

BOHLER
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

B.R. ROWE
 PROFESSIONAL ENGINEER
 MARYLAND LICENSE NO. 40809
 EXPIRES 07/31/2025

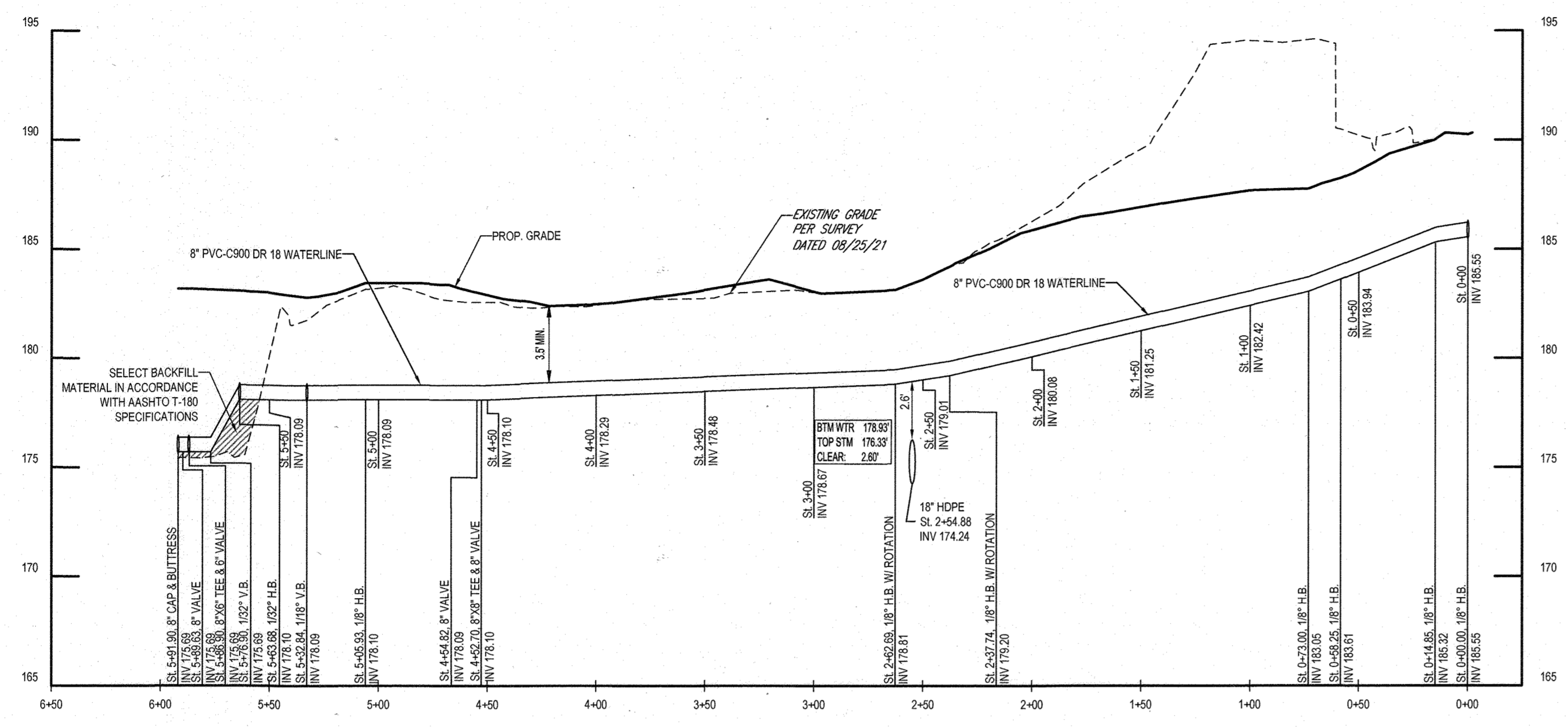
DES:	
DRN:	
CK M.P.:	
DATE:	03/23/23
REV.	
DATE	
DESCRIPTION	
BY	

FINAL PUBLIC WATER PLAN

PARCEL NO. A
 BLOCK NO. 43

GRANDVIEW KIT KAT PARCELS A
 7130 & 7140 KIT KAT ROAD, ELKRIDGE, MD
 TAX MAP 43, GRID 10, PARCEL A
 1ST ELECTION DISTRICT
 HOWARD COUNTY
 CONTRACT NO.:

SCALE: 1" = 50' HORIZ.
 SHEET: 2 OF 4



WATERLINE "A" PROFILE - 8" WATER RELOCATION
SCALE: 1"=50' HORIZONTAL
1"=5' VERTICAL

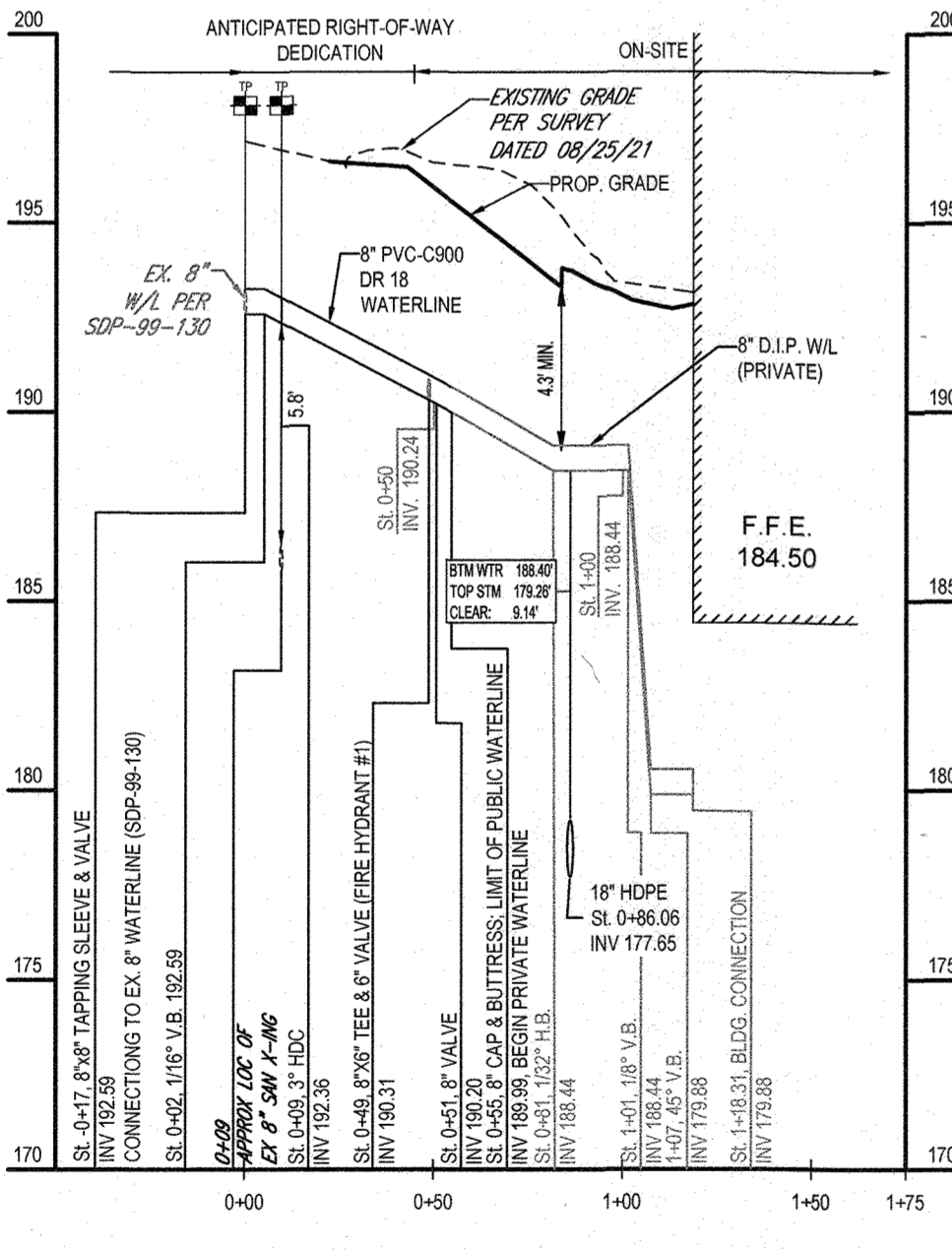
WATER MAIN CL STATION	FITTINGS	COORDINATES
STA 0+00	18\"/>	N 549474.350 E 1379497.388
STA 0+15	18\"/>	N 549468.257 E 1379494.912
STA 0+58	18\"/>	N 549473.064 E 1379442.051
STA 0+73	18\"/>	N 549464.933 E 1379429.742
STA 2+38	18\"/>	N 549305.144 E 1379389.656
STA 2+63	18\"/>	N 549292.328 E 1379389.258
STA 4+43	6\"/>	N 549335.457 E 1379183.200
STA 4+45	6\"/>	N 549335.598 E 1379181.142
STA 4+06	18\"/>	N 549347.538 E 1379131.362
STA 5+13	18\"/>	N 549333.307 E 1379108.520
STA 5+64	102\"/>	N 549340.284 E 1379078.485
STA 5+77	102\"/>	N 549343.275 E 1379065.608
STA 5+67	6\"/>	N 549345.538 E 1379025.867
STA 5+90	6\"/>	N 549346.155 E 1379033.210
STA 5+92	6\"/>	N 549346.989 E 1379030.997

WATER MAIN CL STATION	FITTINGS	COORDINATES
STA 0+00	6\"/>	N 549746.123 E 1379288.440
STA 0+53	6\"/>	N 549694.842 E 1379274.489
STA 0+55	6\"/>	N 549692.894 E 1379274.035

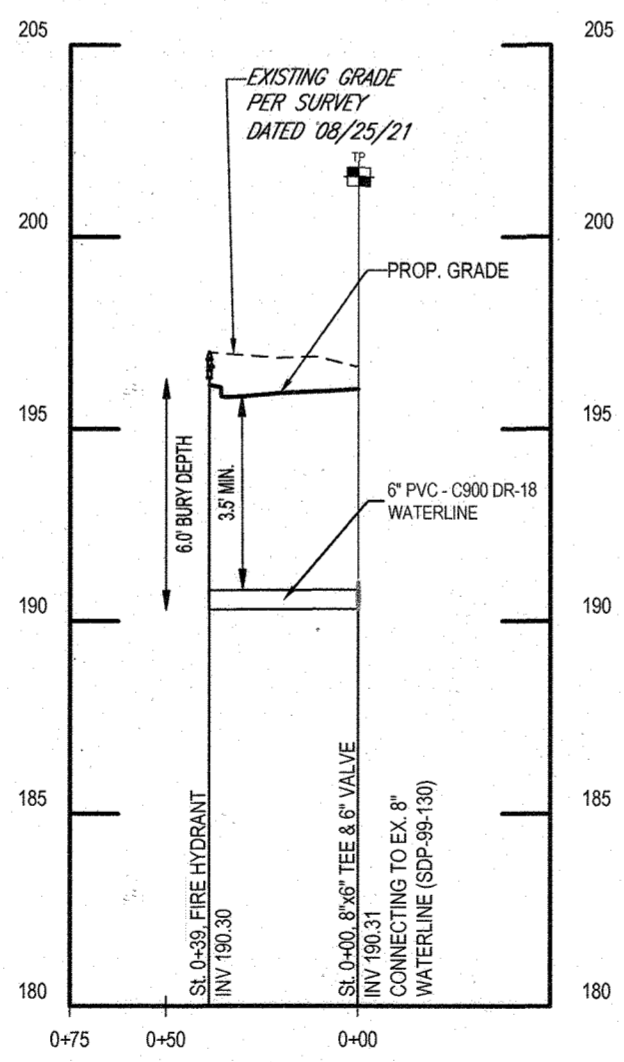
WATER MAIN CL STATION	FITTINGS	COORDINATES
STA 0+00	6\"/>	N 549696.738 E 1379275.587
STA 0+58	6\"/>	N 549707.546 E 1379337.603

WATER MAIN CL STATION	FITTINGS	COORDINATES
STA 0+00	6\"/>	N 549592.942 E 1379528.918
STA 0+15	6\"/>	N 549596.751 E 1379541.422

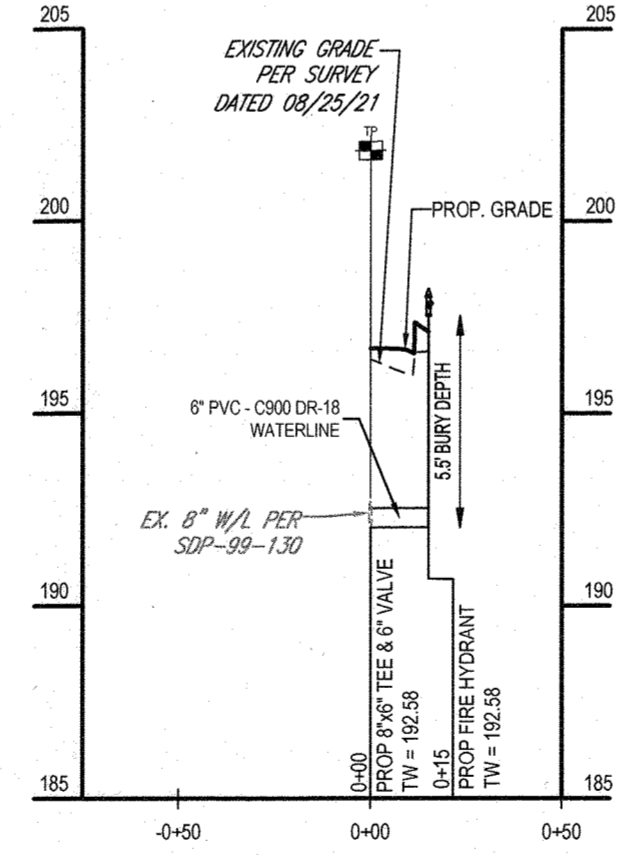
WATER MAIN CL STATION	FITTINGS	COORDINATES
STA 0+00	6\"/>	N 549345.538 E 1379025.867
STA 0+42	6\"/>	N 549304.894 E 1379046.354



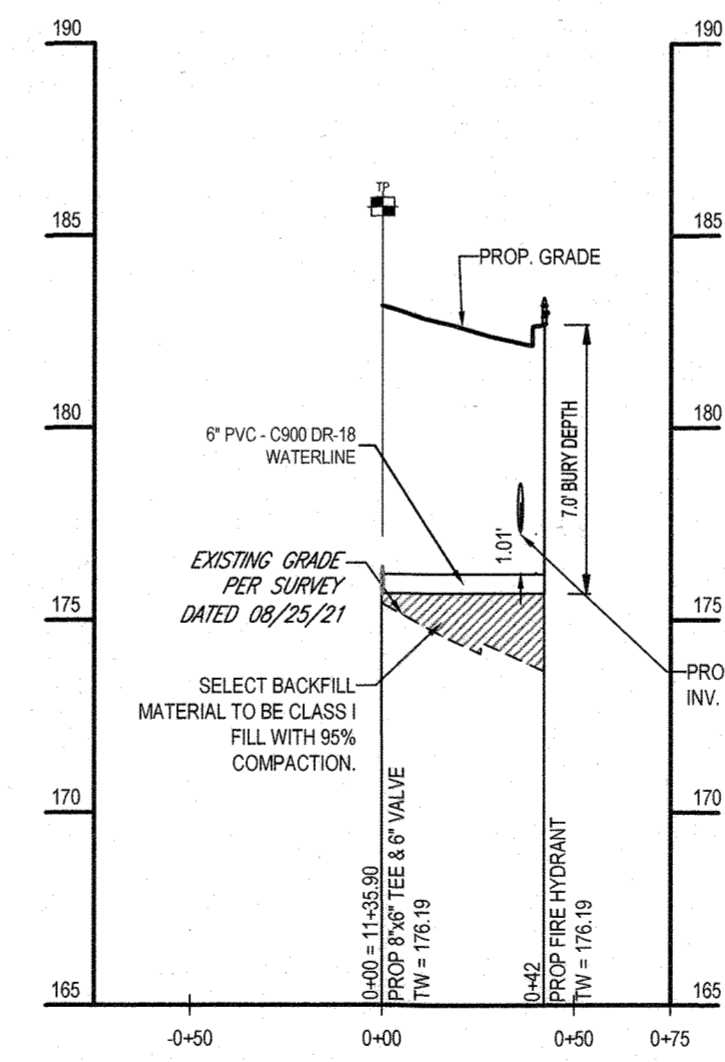
WATERLINE "B" PROFILE - (6" COMBINED FIRE & DOMESTIC CONNECTION)
SCALE: 1"=50' HORIZONTAL
1"=5' VERTICAL



6" FH#1 CONNECTION
SCALE: 1"=50' HORIZONTAL
1"=5' VERTICAL



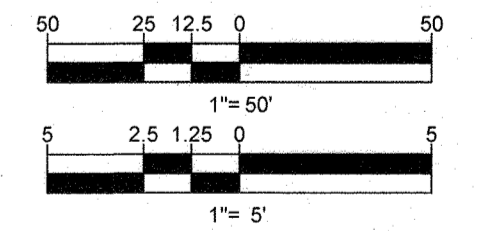
6" FH#2 CONNECTION
SCALE: 1"=50' HORIZONTAL
1"=5' VERTICAL



6" FH#3 CONNECTION
SCALE: 1"=50' HORIZONTAL
1"=5' VERTICAL

NOTE:
CONTRACTOR TO VERIFY ALL STRUCTURES SIZES PRIOR TO ORDERING.

TEST PIT NOTE
CONTRACTOR TO TEST PIT 2 FEET BELOW PROPOSED UTILITY OR UNTIL EXACT LOCATION OF EXISTING UTILITY IS IDENTIFIED AND SUBMIT ANY DISCREPANCIES TO BOHLER ENGINEERING IN WRITING.



THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL 1-811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-652-7001) (MD 1-800-257-7777) (DE 1-800-352-6900)

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND
CHIEF, BUREAU OF UTILITIES
DATE: 7/19/23

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 7/19/23

BOHLER //
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21284
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

B.R. ROWE
PROFESSIONAL ENGINEER
LICENSE NO. 96089
STATE OF MARYLAND
DATE: 03/23/23

DES:	
DRN:	
CK M.P.:	
DATE:	03/23/23
REV.	
DATE	
DESCRIPTION	
BY	

FINAL PUBLIC WATER PROFILES

PARCEL NO. A
600' SCALE MAP NO. 43 BLOCK NO.

GRANDVIEW KIT KAT PARCELS A
7130 & 7140 KIT KAT ROAD, ELK RIDGE, MD
TAX MAP 43, GRID 10, PARCEL A
1ST ELECTION DISTRICT
HOWARD COUNTY
CONTRACT NO.:

SCALE
1"=50' HORIZ
1"=5' VERT.
SHEET
3 OF 4



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

[Signature] 7/19/23
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND

[Signature] 7/19/23
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

BOHLER //

901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

B.R. ROWE

[Signature]

PROFESSIONAL ENGINEER
MARYLAND LICENSE NO. 60836
EXPIRES 07/31/2024
I, BRANDON R. ROWE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME, AND THAT I AM A VALID LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 4088, EXPIRATION DATE: 7/31/2024

DES:	
DRN:	
CK M.P.:	
DATE:	03/23/23
REV.	
DATE	
DESCRIPTION	
BY	

EXISTING CONDITIONS AND ABANDONMENT PLAN

PARCEL NO.	A
800' SCALE MAP NO.	43
BLOCK NO.	

GRANDVIEW KIT KAT PARCELS A

7130 87140 KIT KAT ROAD, ELK RIDGE, MD
TAX MAP 43, GRID 10, PARCEL A
1ST ELECTION DISTRICT
HOWARD COUNTY
CONTRACT NO.:

SCALE
1" = 40' HORIZ
SHEET
4 OF 4

