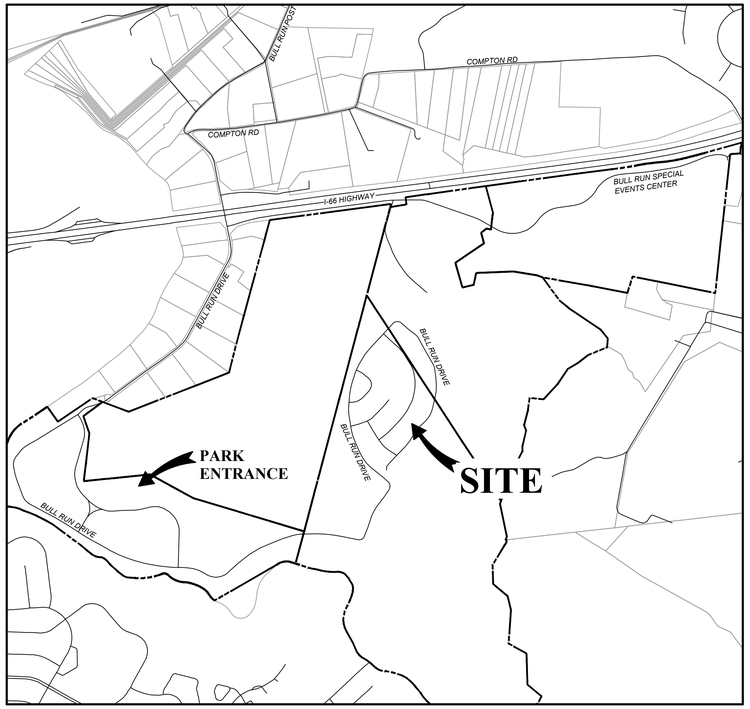
CIVIL ENGINEERING PLAN

BULL RUN REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS

7700 BULL RUN DRIVE
CENTREVILLE, VIRGINIA 20121



VICINITY MAP
SCALE: 1"= 1000'

SHEET INDEX

NOTES:
1. CONTRACTOR TO COORDINATE LOCATING OF EX. U.G. UTILITIES AND TEST PITS.
2. CONTRACTOR IS RESPONSIBLE FOR MOBILIZATION AND PHASING OF PROJECT SUCH THAT NO MORE THAN 2,500 SF OR 250LF OF TRENCHING IS DISTURBED AT ANY POINT IN TIME. PREVIOUS PHASE MUST BE BACKFILLED AND STABILIZED PRIOR TO LAND DISTURBANCE IN SUBSEQUENT PHASE.
3. YARD HYDRANTS PROVIDED ON PLANS ARE FOR DOMESTIC USE ONLY AND SHOULD NOT BE RELIED ON FOR FIRE PROTECTION.

PROJECT DESCRIPTION:
THIS PLAN INVOLVES THE EXTENSION AND CONNECTION TO AN EXISTING WELL OF A NEW 3" HDPE WATERLINE WITH 1" SERVICE CONNECTIONS AND HYDRANTS AT CAMPSITES. THE CAMPGROUND WILL REMAIN OPERATIONAL THROUGH CONSTRUCTION.

DATUM NOTES:
HORIZONTAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE VIRGINIA STATE PLANE NAD83 (2011).

VERTICAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE VERTICAL DATUM OF 1929 PER GPS OBSERVATIONS AND A CORPSCON CONVERSION.

SURVEY INFORMATION:
TOPOGRAPHY SURVEY IS PER FIELD SURVEY BY BOWMAN CONSULTING IN AUGUST 3, 2024.

OWNER/DEVELOPER
NORTHERN VIRGINIA REGIONAL PARK AUTHORITY
5400 OX ROAD,
FAIRFAX STATION, VA 22039
CONTACT: TONY CANONICO

CIVIL ENGINEER
BOWMAN
13461 SUNRISE VALLEY DRIVE
SUITE 500
HERNDON, VIRGINIA 20171
CONTACT: ETHAN PACIFICO, P.E.

Bowman

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COVER SHEET
BULL RUN REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
FAIRFAX COUNTY, VA
SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: AS SHOWN V: N/A
JOB No. 140313-01-003
DATE : OCTOBER, 2025
FILE No. 140313-D-CP-003

SHEET 1 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-COV.dwg

GENERAL NOTES

(THESE GENERAL NOTES SHALL BE USED WHERE THEY ARE APPLICABLE TO THE PROJECT PLANS)

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING A BID FOR THE CONSTRUCTION OF THE PROJECT.
2. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND MAKE ALL INSPECTIONS NECESSARY IN ORDER TO DETERMINE THE FULL EXTENT OF THE WORK REQUIRED TO MAKE THE PROPOSED WORK CONFORM TO THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE NATURE AND LOCATION OF THE WORK, CONDITIONS, AND CONFIRMATION AND CONDITION OF EXISTING GROUND SURFACE AND THE CHARACTER OF THE EQUIPMENT AND FACILITIES NEEDED PRIOR TO AND DURING EXECUTION OF THE WORK. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE CHARACTER, QUANTITY AND QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED. ANY INACCURACIES OR DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS MUST BE BROUGHT TO THE OWNER'S ATTENTION IN ORDER TO CLARIFY THE EXACT NATURE OF THE WORK TO BE PERFORMED PRIOR TO THE COMMENCEMENT OF ANY WORK.
3. THE INSTALLATION OF TRENCH BACKFILL AND THE RESTORATION OF DISTURBED AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS OR AS DIRECTED BY THE OWNER OR OWNER REPRESENTATIVES. ALL COMPACTION SHALL BE AT ±2% OF THE OPTIMUM MOISTURE CONTENT.
4. ALL SUBGRADE, SUBBASE, BASE AND SHOULDER MATERIAL SHALL BE PLACED AND COMPACTED TO THE DENSITY SPECIFIED IN THE PROJECT SPECIFICATIONS OR AS DIRECTED BY THE OWNER OR OWNER REPRESENTATIVES. ALL COMPACTION SHALL BE AT ±2% OF THE OPTIMUM MOISTURE CONTENT.
5. WHERE EXISTING NATURAL DRAINAGE DITCHES OR STREAM BANKS ARE DISTURBED DURING CONSTRUCTION THE CONTRACTOR SHALL RESTORE THIS AREA TO ORIGINAL ALIGNMENT, GRADE AND INVERT.
6. ANY DRAINAGE STRUCTURES OR CULVERTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED TO ORIGINAL GRADE AND ALIGNMENT.
7. THE CONTRACTOR SHALL RESTORE ALL DRIVEWAYS/ROADWAYS DISTURBED DURING CONSTRUCTION. RESTORATION SHALL CONSIST OF THE FOLLOWING:

   GRAVEL DRIVEWAY/ROADWAYS:
   - PROVIDE MINIMUM 6" COMPACTED VDOT 21A

   ASPHALT DRIVEWAY/ROADWAYS:
   - 6" COMPACTED VDOT 21A SUBBASE
   - 2" VDOT IM 19.0 BASE
   - 1 ½" VDOT SM 9.5A SURFACE

8. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING ROADS, TRAILS, BRIDGES, UTILITIES AND OTHER PARK FACILITIES WHICH OCCURS AS A RESULT OF THE PROJECT CONSTRUCTION.
9. ALL STREET CUT AND PATCH WORK IN PUBLIC RIGHT-OF-WAY REQUIRED FOR UTILITIES INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH COUNTY AND/OR PARK STANDARDS AND SPECIFICATIONS.
10. NO BLASTING WILL BE ALLOWED WITHIN THIS PROJECT.
11. THE APPROVAL OF THIS PLAN SHALL IN NO WAY GRANT PERMISSION BY THE OWNER FOR THE CONTRACTOR TO TRESPASS ON OFF-SITE PROPERTIES.
12. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
13. ALL UTILITIES NOTED TO BE RELOCATED OR REMOVED SHALL BE AT THE CONTRACTORS EXPENSE, TO INCLUDE ALL POLES AND STRUCTURES AS REQUIRED. ALL POLES REQUIRED TO BE RELOCATED MUST BE MOVED PRIOR TO CONSTRUCTION.
14. THESE PLANS MAKE NO REPRESENTATION AS TO THE SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES.
15. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING ALL NECESSARY INSPECTIONS.
16. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A SAFE CONSTRUCTION SITE AND COMPLYING WITH ALL OSHA REGULATIONS.
17. EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
18. ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER.
19. THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE SITE FROM UNAUTHORIZED ACCESS AT ALL TIMES DURING CONSTRUCTION.

TRAFFIC MAINTENANCE

1. ALL TRAFFIC MAINTENANCE AS REQUIRED TO ALLOW CONTINUED OPERATIONS OF PARK FACILITIES AND PUBLIC ROADWAYS SHALL CONFORM WITH THE VIRGINIA WORK AREA PROTECTION MANUAL, CURRENT EDITION.

UTILITIES

PRIMARY UTILITY COMPANIES	MISS UTILITY OF VIRGINIA	EMERGENCY
AMERICAN TELEPHONE & TELEGRAPH CO.	811	1-800-241-3624
COLUMBIA GAS OF VIRGINIA	811	1-800-543-8911 – (703) 631-5363 (METRO)
COLUMBIA GAS TRANSMISSION CORP.	811	1-800-835-7191 (24 HRS)
COLONIAL PIPELINE CO.	811	1-800-926-2728
COX COMMUNICATIONS	811	(703) 313-6527 OR (703) 313-6531
DOMINION VIRGINIA POWER	811	(703) 591-2606
FAIRFAX COUNTY WATER AUTHORITY	811	(703) 698-5613
FAIRFAX CO. WASTEWATER COLLECTION DIVISION	811	(703) 323-1211
FAIRFAX CITY WATER SERVICE	811	(703) 385-7915 OR 385-7924 (24 HRS)
FAIRFAX COUNTY PUBLIC SAFETY	811	911
FALLS CHURCH PUBLIC UTILITIES / WATER	811	(703) 248-5044
MCI, INTERNATIONAL	811	1-800-852-6700
MCI, WORLD	811	1-800-624-9675
METROPOLITAN FIBER SYSTEMS	811	(703) 852-6700
NORTHERN VIRGINIA ELEC. CO-OP	811	(703) 335-0500
TRANSCO GAS PIPELINE CO.	811	1-800-440-8475 (24 HRS)
TOWN OF HERNDON PUBLIC WORKS	811	(703) 435-6860 STATION 185 (703) 368-3255
TOWN OF VIENNA WATER SERVICE	811	(703) 255-6381 AFTER 5:00 PM., (703) 255-6385
SPRINT (GLOBAL ONE)	811	1-800-521-0579 (24 HRS)
VERIZON (BELL ATLANTIC)	811	1-800-275-2355 – (703) 954-2222 (24 HRS)
VERIZON SOUTH	811	1-800-745-1944 (EMERGENCY REPAIR)
WASHINGTON GAS	811	(703) 750-1000 (GAS LEAK (703) 750-4831)

FIBER OPTIC UTILITY COMPANES

FIBER OPTIC COMPANIES	MISS UTILITY	EMERGENCY
Abovenet Communications	811	1-888-636-2778
Comcast Communications in Alexandria	811	
Cavalier Telephone Company	811	1-888-662-5700
Comcast Communications in Reston	811	(after hours 703-841-7700)
Cox Communications Fiber Division	811	(703) 313-6527 or (703) 313-6531
Dominion Telecom	811	1-888-854-2138
Level 3 Communications, LLC	811	1-887-366-8344
Lightwave Spectrum, Inc.	811	1-800-388-6460
Looking Glass Network, Inc.	811	1-866-342-7288
MCI	811	(703) 391-5787; (Cell – 703-598-1721)
Verizon South	811	1-800-745-1944 (Emergency Repair)
Qwest Communications Corporation	811	1-800-283-4237
Sprint	811	1-800-521-0579
Star Power Communications	811	
TCG/AT&T	811	1-888-634-1840 (Pager)
WilTel Communications	811	1-888-265-2283
XO Communications	811	
YIPES Communication, Inc.	811	
Xspedius	811	1-800-627-0181

EXISTING UTILITIES

1. THE UTILITY INFORMATION SHOWN ON THESE PLANS IS TAKEN FROM AVAILABLE RECORD AND IN SOME CASES INFORMATION PROVIDED BY AN UNDERGROUND UTILITY DESIGNATING AND LOCATING COMPANY. THE NOVA PARK AUTHORITY DOES NOT GUARANTEE THAT THE UTILITY INFORMATION SHOWN ON THE PLANS IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST VERIFY THE UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
2. ALL EXISTING UNDERGROUND UTILITIES IN THE VICINITY OF PROPOSED IMPROVEMENTS/CONSTRUCTION SHALL BE MARKED IN THE FIELD BY MISS UTILITY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE FIELD MARKING OF UTILITIES WITH "MISS UTILITY".
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT EXISTING UTILITIES ARE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS WITHIN THE LIMITS OF CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS INDICATED ON THE CONSTRUCTION PLANS.
4. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED CONSTRUCTION OR EXCAVATION AT LEAST 3 WORKING DAYS, BUT NOT MORE THAN 10 WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION IN ACCORDANCE WITH CHAPTER 63 OF FAIRFAX COUNTY CODE. NAMES AND TELEPHONE NUMBERS OF THE VARIOUS OPERATORS OF UNDERGROUND UTILITY LINES IN FAIRFAX COUNTY APPEAR ABOVE. THESE NUMBERS WILL ALSO BE USED TO SERVE EMERGENCY CONDITION NOTICE AS REQUIRED BY CHAPTER 63 OF THE FAIRFAX COUNTY CODE.
5. THE CONTRACTOR SHALL CONTACT MISS UTILITY AT 811, UTILITY COMPANY REPRESENTATIVES, PERFORM TEST PITS, REVIEW CURRENT TEST PIT DATA, AND WHATEVER OTHER OPERATIONS AVAILABLE TO INSURE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES IN THE AREA OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE NOVA PARKS OF ANY POTENTIAL CONFLICTS PRIOR TO COMMENCING CONSTRUCTION.

MISS UTILITY

CALL "MISS UTILITY OF VIRGINIA" AT 811, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF FAIRFAX COUNTY CODES AND REGULATIONS.

CAUTION!!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE, THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION

CONTRACTOR CONSTRUCTION NOTES:

1. OVERHEAD WIRES – CONTRACTOR SHALL AVOID CONTACT AND DISRUPTION OF OVERHEAD LINES, AND MAINTAIN HORIZONTAL/VERTICAL CLEARANCE DURING CONSTRUCTION AS REQUIRED BY DOMINION ENERGY, VERIZON, ETC..
2. UNDERGROUND UTILITIES – CONTRACTOR SHALL ENSURE THAT THERE IS NO DISTURBANCE OR DISRUPTION TO THE EXISTING UNDERGROUND SANITARY SEWER LINES BY TREE REMOVAL OPERATIONS WITHIN THE WORK ZONE AND VICINITY.

WATER SUPPLY NOTES

PIPING MATERIAL

MAIN:	3" HDPE PIPE
CAMPSITE SUPPLY LINES:	1" HDPE PIPE
FITTINGS:	HDPE PIPE IN ACCORDANCE WITH AWWA C901. SHALL CONFORM TO PIPE MATERIAL STANDARDS
TRACER WIRE:	COPPERHEAD SOLOSHOT EXTRA HIGH STRENGTH CCS (#14 AWG. TO BE INSTALLED WITH PIPING DURING BORING.
VALVE:	AVK SERIES 66
HYDRANTS:	MODEL S4H BACK FLOW PROTECTED, AUTOMATIC DRAINING,FREEZELESS, SELF CLOSING SANITARY YARD HYDRANT BY WOODFORD MANUFACTURING COMPANY (OR APPROVED EQUAL)

1. PROPOSED WATERLINE AND HYDRANT LOCATION SHOWN ARE APPROXIMATE. ACTUAL ALIGNMENT SHALL BE FIELD ADJUSTED TO AVOID AS MANY TREE ROOTS AS FEASIBLE AND MAINTAIN REQUIRED CLEARANCES FROM OTHER UTILITIES. AFTER THE WATERLINE AND HYDRANTS HAVE BEEN STAKED, AND PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL WALK THE SITE WITH THE OWNER AND MAKE ADJUSTMENTS TO WATERLINE ALIGNMENT OR HYDRANT LOCATIONS TO AVOID IMPACTS TO EXISTING MATURE TREES TO THE GREATEST EXTENT PRACTICAL.
2. THE MAIN 3" HDPE LINE SHALL BE DIRECTIONALLY BORED TO MINIMIZE ENVIRONMENTAL IMPACTS. EACH HYDRANT SERVICE CONNECTION WILL REQUIRE TRENCHING FOR THE 1" HDPE, WHICH WILL ALSO SERVE AS THE RECEIVING PIT FOR THE BORING EQUIPMENT.
3. THE AREA SURROUNDING THE HYDRANTS SHALL BE GRADED TO FLOW AWAY FROM THE HYDRANTS TO AVOID STANDING WATER AND CREATION OF MUDDY CONDITIONS.
4. THE CONNECTION OF WATER PIPES TO INDIVIDUAL CAMP SITES SHALL BE INSTALLED SO THAT IT WILL NOT BE DAMAGED BY THE PARKING OF CAMPING VEHICLES, SOME CAMPSITES WILL REQUIRE BOLLARDS TO PROTECT THE HYDRANTS, AS DIRECTED BY OWNER IN THE FIELD.
5. MINIMUM HORIZONTAL CLEARANCE FROM SEWER CONNECTIONS AND UNDERGROUND ELECTRIC LINES IS 5 FEET.
6. NEW WATER MAINS MUST BE DISINFECTED IN ACCORDANCE WITH SECTION 12VAC5-590-1210 OF THE VIRGINIA WATERWORKS REGULATIONS.
7. FOLLOWING DISINFECTION, WATERLINES MUST BE TESTED FOR BACTERIOLOGICAL QUALITY IN ACCORDANCE WITH SECTION 12VAC5-590-1000 OF THE VIRGINIA WATERWORKS REGULATIONS.
8. CONTRACTOR TO PERFORM TEST PITS IN ORDER TO LOCATE ALL EXISTING UTILITIES BOTH HORIZONTAL AND VERTICAL. IN ORDER TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF A GIVEN UTILITY AND TO ASSIST THE CONTRACTOR AND/OR OWNER IN DETERMINING AREAS OF SPECIAL CONCERN, LOCATIONS WHERE TEST PITS ARE DESIGNATED SHOULD BE EXCAVATED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES THAT OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. THESE INDICATIONS ARE NOT INTENDED TO BE ALL INCLUSIVE AND WILL NOT RELIEVE THE CONTRACTOR AND/OR OWNER OF THE RESPONSIBILITY OF DIGGING ADDITIONAL TEST PITS, AS MIGHT BE REQUIRED BY ACTUAL SITE CONDITIONS. ANY DISCREPANCIES FOUND BETWEEN ACTUAL AND ASSUMED CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
9. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND COORDINATING ALL TEST PITS PRIOR TO CONSTRUCTION. NOTED THAT MISS UTILITY MAY NOT RESPOND TO REQUESTS AND/OR PROVIDE LOCATIONS/MARKINGS ON THIS PROPERTY. CONTRACTOR MAY NEED TO ENGAGE PRIVATE UTILITY LOCATING SERVICE – AT CONTRACTORS EXPENSE.

SURVEY NOTES

1. THE SURVEYED PROPERTY IS CURRENTLY IN THE NAME OF NORTHERN VIRGINIA REGIONAL PARK, RECORDED IN DEED BOOK 1975 PAGE 524 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA. PROPERTY PARCEL ID NUMBER IS 0644-01-0023 AND IS ZONED RC PER COUNTY PARCEL DATABASE.
2. HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE PLANE NAD83 (2011). VERTICAL DATUM IS REFERENCED TO NGVD29 PER GPS OBSERVATIONS AND A CORPSCON CONVERSION.
3. THE PROPERTY AS SHOWN HEREON IS SUBJECT TO ALL COVENANTS AND RESTRICTIONS OF RECORD AND THOSE RECORDED HEREWITH.
4. THE SURVEYED PROPERTY SHOWN HEREON LIES IN BOTH ZONE "A" (NO BASE FLOOD ELEVATIONS DETERMINED) AND ZONE X (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAPS FOR FAIRFAX COUNTY, VIRGINIA, COMMUNITY-PANEL NUMBER 51059C0240E, EFFECTIVE DATE SEPTEMBER 17, 2010.
5. APPROXIMATE LOCATION OF UNDERGROUND UTILITIES ARE SHOWN PER PRIVATE UTILITY MARK OUT PERFORMED BY ARMOUR UTILITY LOCATING ON AUGUST 3, 2024 AND FIELD LOCATED WITH CONVENTIONAL FIELD SURVEY METHODS UNLESS OTHERWISE NOTED.
6. TOPOGRAPHY SURVEY IS PER FIELD SURVEY BY BOWMAN CONSULTING IN AUGUST, 2024.

BENCHMARKS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
BENCHMARK #1				
BENCHMARK #2				
BENCHMARK #3				
BENCHMARK #4				
BENCHMARK #5				
BENCHMARK #6				
BENCHMARK #7				
BENCHMARK #8				

Bowman
13461 Sunrise Valley Drive
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Herndon, VA 20171
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GENERAL NOTES

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

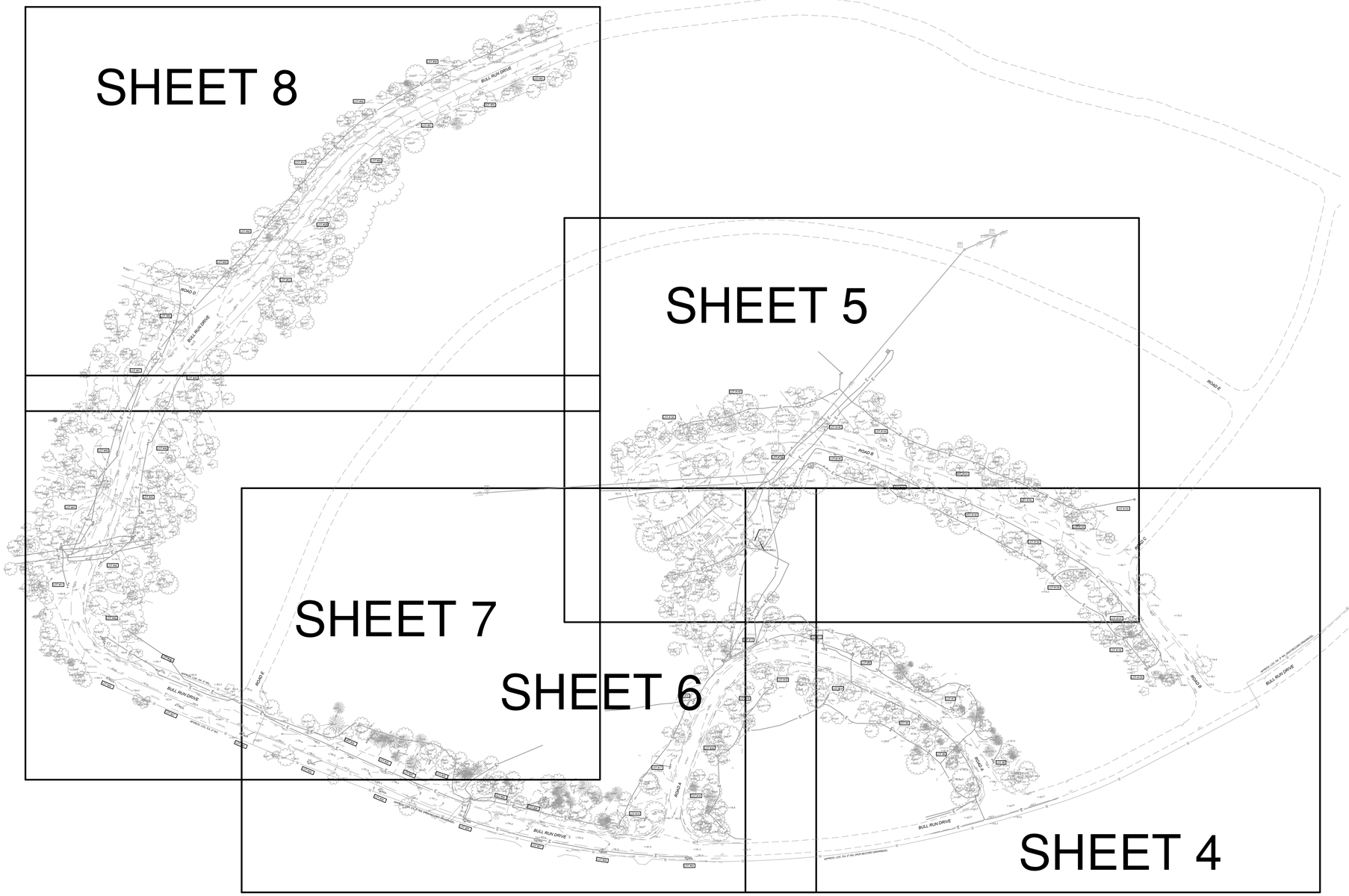
SCALE H: NO SCALE V:

JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-NTS.dwg



LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
DNE	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
18"	TREE W/SIZE
EX 1234	SANITARY ID NUMBER
	WHEEL STOP
LOT #24	CAMPSITE LOT NUMBER
8" PIPE	APPRX. LOC. UNDERGROUND SANITARY
G	APPRX. LOC. UNDERGROUND GAS
W	APPRX. LOC. UNDERGROUND WATER
T	APPRX. LOC. UNDERGROUND TELECOM
E	APPRX. LOC. UNDERGROUND ELECTRIC
UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X	FENCE LINE
OHU	OVERHEAD UTILITY
	APPRX. LOC. UNDERGROUND COMM. UTILITY

STORM SEWER INVERT TABLE:

EX 001	INV IN=179.53 INV OUT=179.22 PIPE HALF FULL OF DEBRIS
EX 002	INV IN=178.85 INV OUT=178.57 PIPE HALF FULL OF DEBRIS
EX 003	INV IN=177.95 INV OUT=177.93 PIPE HALF FULL OF DEBRIS
EX 004	INV IN=178.55 INV OUT=178.42 PIPE HALF FULL OF DEBRIS
EX 005	INV IN=177.33 INV OUT=177.01 PIPE HALF FULL OF DEBRIS
EX 006	INV IN=178.07 INV OUT=177.92 PIPE HALF FULL OF DEBRIS
EX 007	INV IN=177.48 INV OUT=177.11 PIPE HALF FULL OF DEBRIS
EX 008	INV IN=176.44 INV OUT=176.39 PIPE HALF FULL OF DEBRIS
EX 009	INV IN=177.59 INV OUT=177.52 PIPE HALF FULL OF DEBRIS
EX 010	INV IN=182.30 INV OUT=182.10
EX 011	INV IN=180.12 INV OUT=179.87
EX 012	INV IN=179.50 INV OUT=179.06
EX 013	INV IN=178.74 INV OUT=178.01
EX 014	INV IN=177.37 INV OUT=176.83
EX 015	INV IN=175.91 INV OUT=175.44
EX 016	INV IN=178.30 INV OUT=177.99
EX 017	INV IN=176.44 INV OUT=176.39
EX 018	INV IN=177.59 INV OUT=177.52

STORM SEWER INVERT TABLE:

EX 019	INV IN=182.43 INV OUT=182.33
EX 020	INV IN=172.94 INV OUT=172.66
EX 021	INV IN=174.24 INV OUT=173.60
EX 022	RIM=174.49 INV=173.20
EX 023	RIM=184.89 INV=184.26
EX 024	RIM=183.65 INV=183.11

SANITARY SEWER INVERT TABLE:

EX 1043	RIM=178.07 INV IN=170.78 (8" PIPE FRM BUIDLING) INV IN=171.57 (8" PIPE FRM EX2444) INV OUT=170.67 (8" PIPE TO EX6497)
EX 6497	RIM=175.56 INV IN=167.11 (8" PIPE FRM EX1043) INV OUT=167.04 (8" PIPE TO EX6499)
EX 6499	RIM=170.15 INV IN=164.60 (8" PIPE FRM EX6497) INV OUT=164.45 (8" PIPE TO EX6498)
EX 6498	RIM=170.76 INV IN=164.37 (8" PIPE FRM NORTH) INV IN=164.21 (8" PIPE FRM EX6499) INV IN=164.54 (8" PIPE FRM WEST) INV OUT=164.13 (8" PIPE TO SOUTH)
EX 2444	RIM=188.28 INV IN=185.02 (8" PIPE FRM NORTH) INV OUT=180.91 (8" PIPE TO EX1043) PIPE IN IS AN INSIDE DROP

N

GRAPHIC SCALE

75 0 75 150 300

(IN FEET)
1 inch = 75 ft.

Bowman

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bowman.com

OVERALL EXISTING CONDITIONS PLAN
BULL RUN REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD
SCALE	H: 1"=75' V: N/A	
JOB No.	140313-01-003	
DATE :	OCTOBER, 2025	
FILE No.	140313-D-CP-003	
SHEET	3 OF 31	

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-XCD.dwg

LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
	TREE W/SIZE
	SANITARY ID NUMBER
	WHEEL STOP
LOT #24	CAMPSITE LOT NUMBER
	APPRX. LOC. UNDERGROUND SANITARY
	APPRX. LOC. UNDERGROUND GAS
	APPRX. LOC. UNDERGROUND WATER
	APPRX. LOC. UNDERGROUND TELECOM
	APPRX. LOC. UNDERGROUND ELECTRIC
	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
	FENCE LINE
	OVERHEAD UTILITY
	APPRX. LOC. UNDERGROUND COMM. UTILITY

N

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Bowman

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bowman.com

EXISTING CONDITIONS PLAN (1 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1"=25' V: N/A

JOB No. 140313-01-003

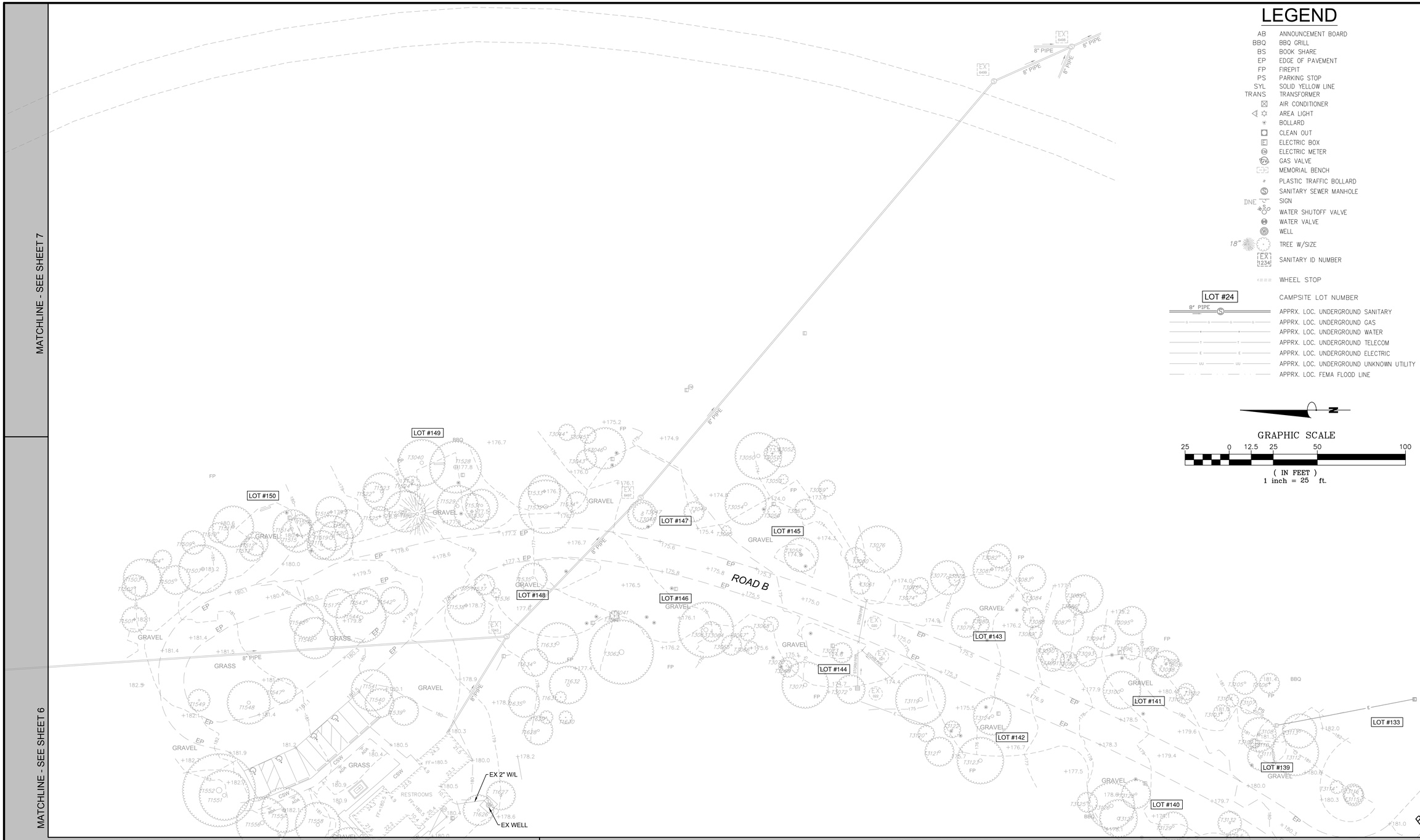
DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 4 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-XCD.dwg

MATCHLINE - SEE SHEET 7



MATCHLINE - SEE SHEET 6

MATCHLINE - SEE SHEET 4

LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
DNE	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
18"	TREE W/SIZE
EX 1234	SANITARY ID NUMBER
	WHEEL STOP
LOT #24	CAMPSITE LOT NUMBER
8" PIPE	APPRX. LOC. UNDERGROUND SANITARY
	APPRX. LOC. UNDERGROUND GAS
	APPRX. LOC. UNDERGROUND WATER
	APPRX. LOC. UNDERGROUND TELECOM
	APPRX. LOC. UNDERGROUND ELECTRIC
	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE

N

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

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EXISTING CONDITIONS PLAN (2 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1"=25'
V: N/A

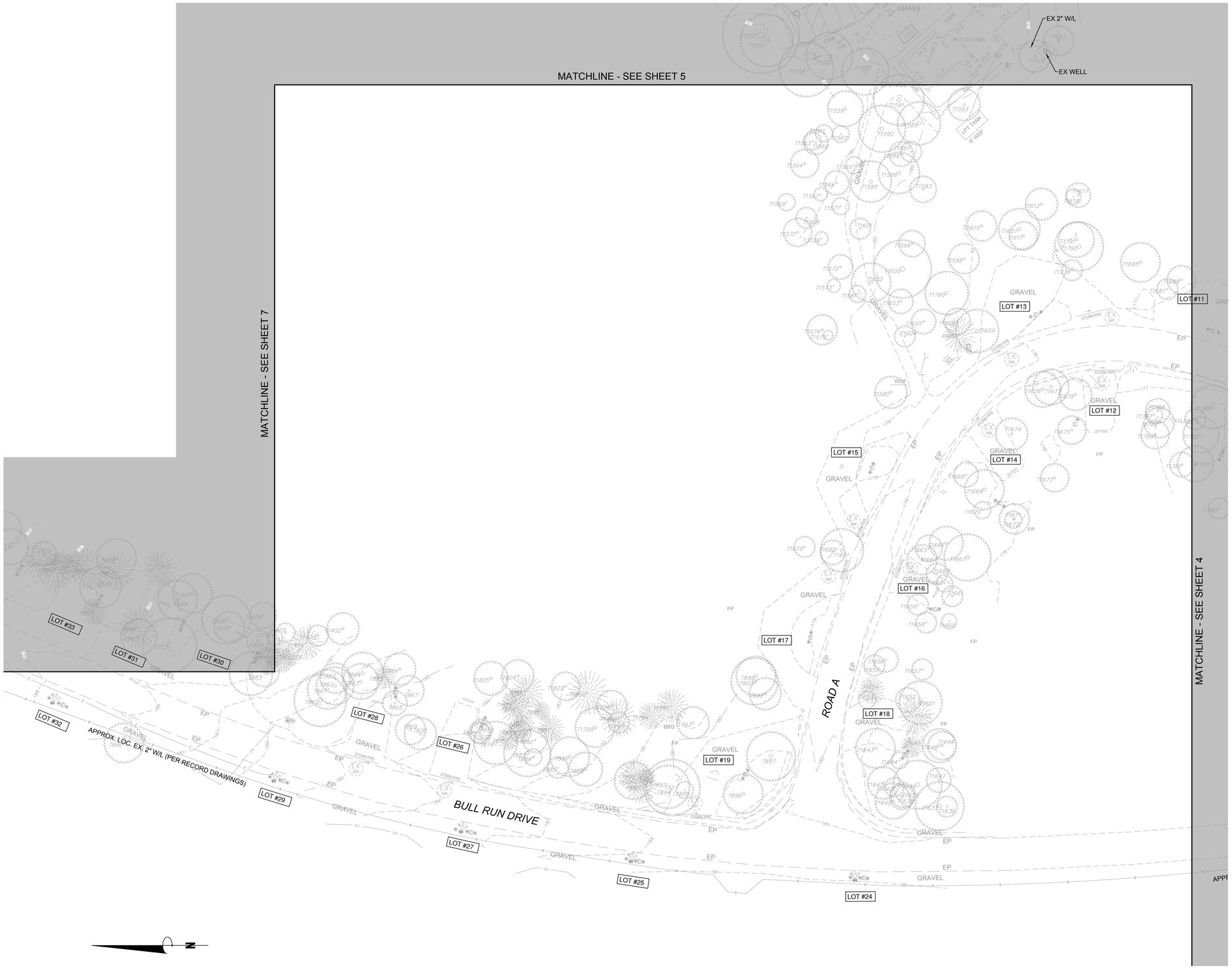
JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 5 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-XCD.dwg



GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
18"	TREE W/SIZE
EX 1234	SANITARY ID NUMBER
	WHEEL STOP
LOT #24	CAMPSITE LOT NUMBER
8" PIPE	APPRX. LOC. UNDERGROUND SANITARY
G	APPRX. LOC. UNDERGROUND GAS
W	APPRX. LOC. UNDERGROUND WATER
T	APPRX. LOC. UNDERGROUND TELECOM
E	APPRX. LOC. UNDERGROUND ELECTRIC
UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X	FENCE LINE
OHU	OVERHEAD UTILITY
	APPRX. LOC. UNDERGROUND COMM. UTILITY

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EXISTING CONDITIONS PLAN (3 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD
SCALE	H: 1"=25' V: N/A	
JOB No. 140313-01-003		
DATE : OCTOBER, 2025		
FILE No. 140313-D-CP-003		
SHEET 6 OF 31		

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-XCD.dwg

MATCHLINE - SEE SHEET 8

LOT #48

LOT #45

LOT #46

GRAVEL

LOT #44

LOT #43

GRAVEL

LOT #42

GRAVEL

LOT #41

GRAVEL

LOT #40

GRAVEL

LOT #38

GRAVEL

LOT #39

APPROX. LOC. EX. 2" W/L

BULL RUN DRIVE

ROAD E

LOT #37

APPROX. LOC. EX. 2" W/L

LOT #36

LOT #35

LOT #34

LOT #33

LOT #31

LOT #30

8" PIPE

MATCHLINE - SEE SHEET 6

LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
	TREE W/SIZE
	SANITARY ID NUMBER
	WHEEL STOP
LOT #24	CAMPSITE LOT NUMBER
	APPRX. LOC. UNDERGROUND SANITARY
	APPRX. LOC. UNDERGROUND GAS
	APPRX. LOC. UNDERGROUND WATER
	APPRX. LOC. UNDERGROUND TELECOM
	APPRX. LOC. UNDERGROUND ELECTRIC
	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
	FENCE LINE
	OVERHEAD UTILITY
	APPRX. LOC. UNDERGROUND COMM. UTILITY

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

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EXISTING CONDITIONS PLAN (4 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

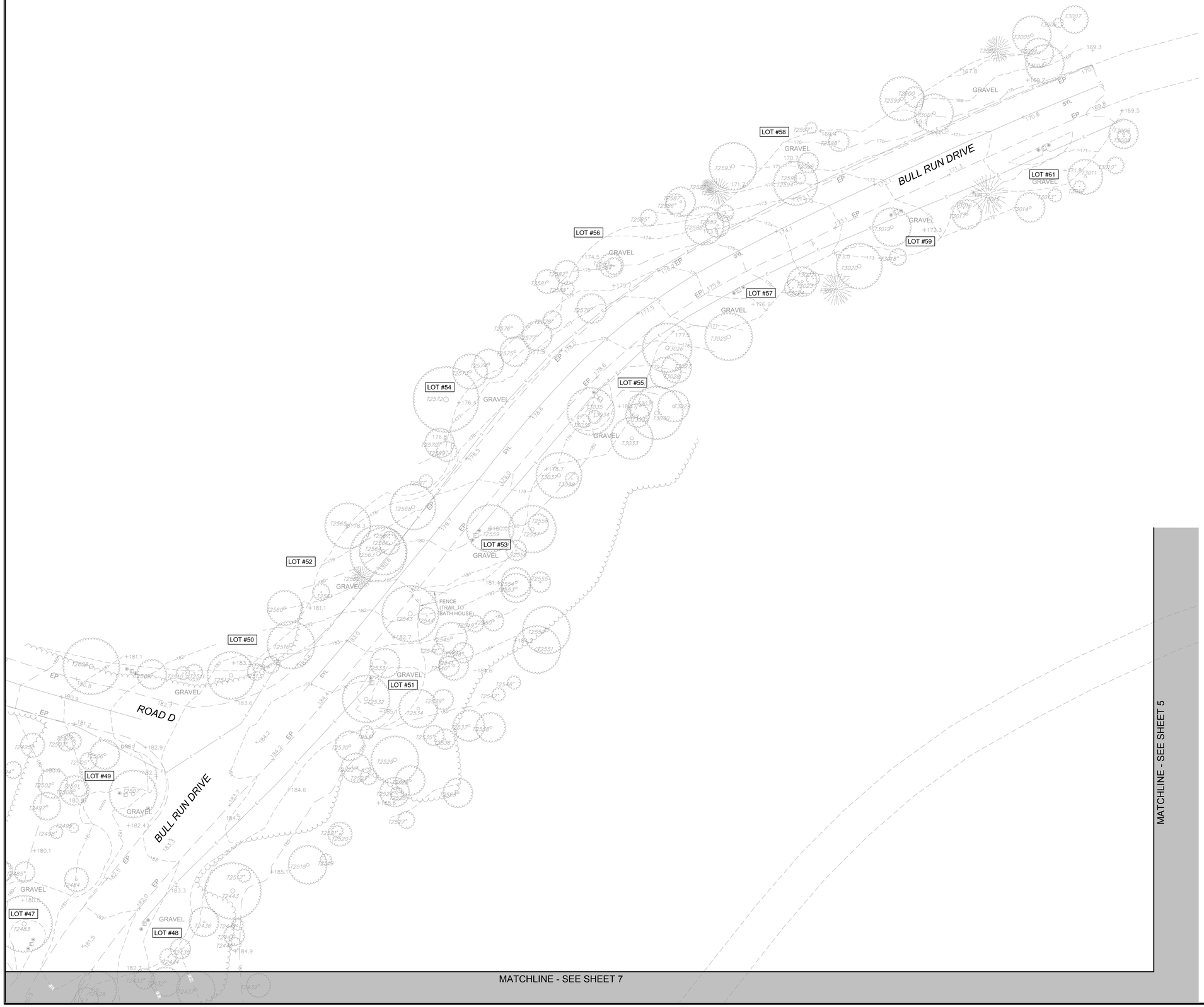
COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	

DATE	DESCRIPTION	
EP DESIGN	EG DRAWN	MT CHKD
SCALE	H: 1"=25' V: N/A	
JOB No. 140313-01-003		
DATE : OCTOBER, 2025		
FILE No. 140313-D-CP-003		
SHEET 7 OF 31		

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-XCD.dwg



LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
DNE	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
18"	TREE W/SIZE
EX 1234	SANITARY ID NUMBER
	WHEEL STOP
LOT #24	CAMPSITE LOT NUMBER
8" PIPE	APPRX. LOC. UNDERGROUND SANITARY
G	APPRX. LOC. UNDERGROUND GAS
W	APPRX. LOC. UNDERGROUND WATER
T	APPRX. LOC. UNDERGROUND TELECOM
E	APPRX. LOC. UNDERGROUND ELECTRIC
UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X	FENCE LINE
OHU	OVERHEAD UTILITY
	APPRX. LOC. UNDERGROUND COMM. UTILITY

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Bowman

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EXISTING CONDITIONS PLAN (5 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

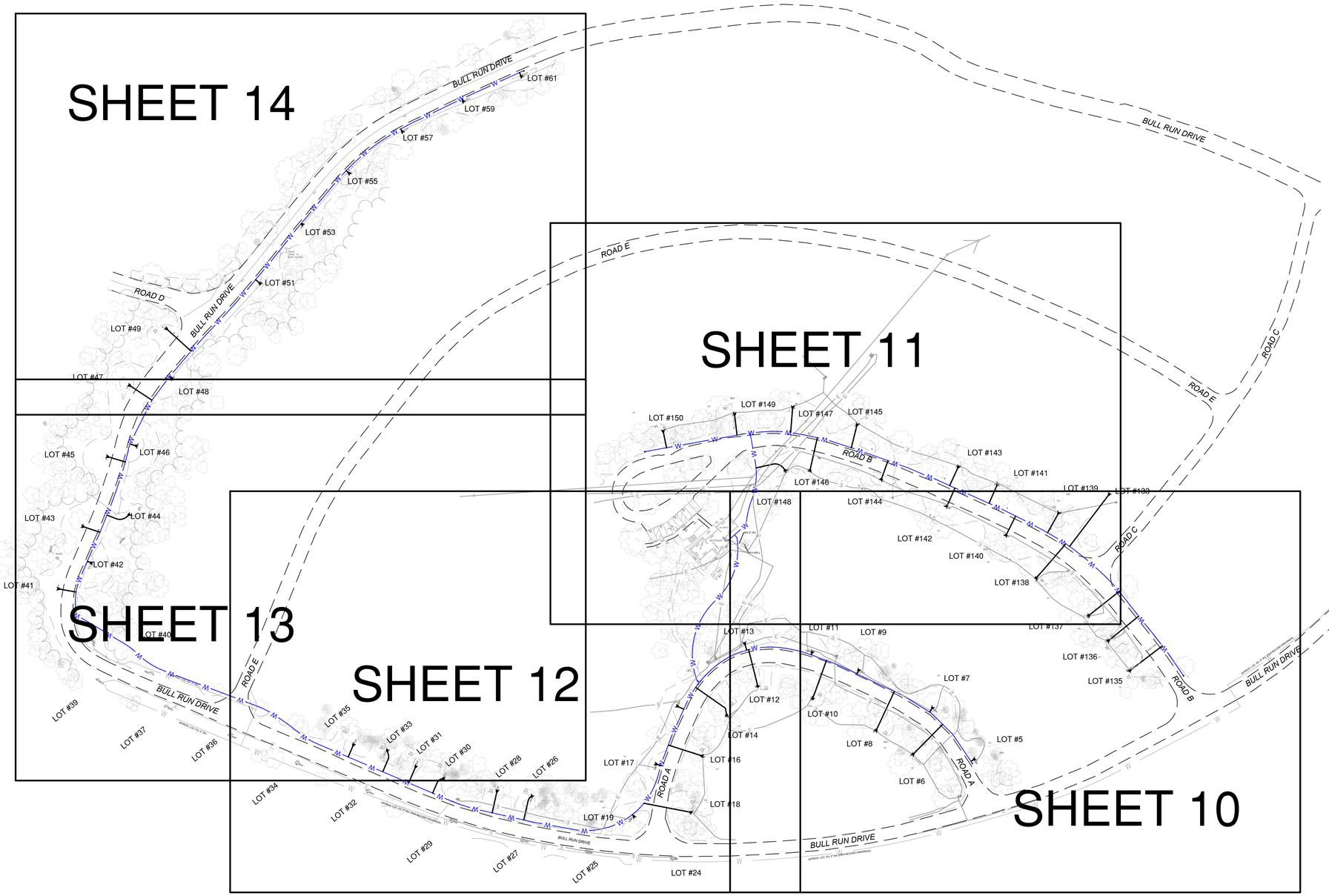
PLAN STATUS

DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE	H: 1"=25' V: N/A
JOB No.	140313-01-003
DATE :	OCTOBER, 2025
FILE No.	140313-D-CP-003
SHEET	8 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-XCD.dwg



LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
EM	ELECTRIC METER
GV	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
S	SANITARY SEWER MANHOLE
DNE	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
W	WELL
18"	TREE W/SIZE
EX 1234	SANITARY ID NUMBER
S — S	APPRX. LOC. UNDERGROUND SANITARY
G — G	APPRX. LOC. UNDERGROUND GAS
W — W	APPRX. LOC. UNDERGROUND WATER
T — T	APPRX. LOC. UNDERGROUND TELECOM
E — E	APPRX. LOC. UNDERGROUND ELECTRIC
UU — UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X — X	FENCE LINE
OHU — OHU	OVERHEAD UTILITY
W	PROP. 3" HDPE MAIN W/L
	PROP. 1" HDPE SERVICE W/L
	PROP. YARD HYDRANT

WATER SUPPLY NOTES

WATER SUPPLY TO CAMPSITES: INSTALL ±3,825 LINEAR FEET OF 3" DIAMETER HDPE WATER MAIN FROM EXISTING 2" WATERLINE AT THE EXISTING BATHHOUSE. INSTALL ANTI-SIPHON, FROST-FREE HYDRANT WITH SEPARATE SHUT OFF VALVE AT EACH CAMPSITE USING 1" DIAMETER HDPE WATERLINE. INSTALL TRACER TAPE ABOVE THE ALL LINES.

PIPE MATERIAL:
MAIN LINE – ±3,825' OF 3" DIAMETER HDPE.
HYDRANT SUPPLY LINES – ±1,580 OF 1" DIAMETER HDPE.

HYDRANT: ANTI-SIPHON, FREEZELESS YARD HDRANT MODEL S4H WOODFORD MANUFACTURING COMPANY OR APPROVED EQUAL. HYDRANTS SHALL BE CONNECTED TO THE PIPE USING BRASS HYDRANTS ELLS, AND PER MANUFACTURER'S SPECIFICATIONS. PROVIDE SHUT OFF VALVE AT/NEAR HYDRANT LOCATION.

GRAPHIC SCALE
75 0 75 150 300
(IN FEET)
1 inch = 75 ft.

Bowman

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OVERALL SITE PLAN
BULL RUN REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
FAIRFAX COUNTY, VA
SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 75'
V: N/A

JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 9 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-GEO.dwg

PROPOSED HYDRANT AND
1" HDPE SERVICE W/L (TYP.)

PROPOSED 3" HDPE WATERLINE "A"

EX 2" W/L

EX WELL

MATCHLINE - SEE SHEET 12

MATCHLINE - SEE SHEET 11

PROPOSED 3" HDPE WATERLINE "B"

LOT #142

LOT #141

LOT #140

LOT #139

LOT #133

ROAD C

LOT #138

PROP. HYDRANT
(TYP)

LOT #137

PROP. 3" HDPE SERVICE W/L

PROP. 3"X1" TEE. EXTEND 1"
SERVICE LINE TO HYDRANT
(TYPICAL TO ALL HYDRANTS)

LOT #136

PROP. 1" HDPE
SERVICE W/L (TYP)

LOT #135

PROP. 3" BLOW-OFF
VALVE

ROAD B

APPROX. LOC. EX. 2" W/L (PER RECORD DRAWINGS)

BULL RUN DRIVE

LOT #11

LOT #9

LOT #12

LOT #10

PROPOSED 3" HDPE
WATERLINE "C"

LOT #7

LOT #8

LOT #6

PROP. 3" HDPE W/L

ROAD A

LOT #5

PROP. 3" BLOW-OFF
VALVE

EXISTING 2" W/L TO
REMAIN(PER RECORD
DRAWINGS)

BULL RUN DRIVE

APPROX. LOC. EX. 2" W/L (PER RECORD DRAWINGS)

LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
GV	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
DNE	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
W	WELL
18"	TREE W/SIZE
EX 1234	SANITARY ID NUMBER
S S	APPRX. LOC. UNDERGROUND SANITARY
G G	APPRX. LOC. UNDERGROUND GAS
W W	APPRX. LOC. UNDERGROUND WATER
T T	APPRX. LOC. UNDERGROUND TELECOM
E E	APPRX. LOC. UNDERGROUND ELECTRIC
UU UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X	FENCE LINE
OHU	OVERHEAD UTILITY
W	PROP. 3" HDPE MAIN W/L
	PROP. 1" HDPE SERVICE W/L
	PROP. YARD HYDRANT

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-GEO.dwg

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SITE PLAN (1 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1"=25'
V: N/A

JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 10 OF 31

MATCHLINE - SEE SHEET 13

MATCHLINE - SEE SHEET 12

MATCHLINE - SEE SHEET 12

MATCHLINE - SEE SHEET 10

LOT #149

LOT #150

LOT #148

LOT #147

LOT #146

LOT #145

LOT #144

LOT #143

LOT #142

LOT #141

LOT #140

LOT #139

LOT #138

LOT #133

3"X3" TEE
(3)3" VALVE

PROP. HYDRANT
(TYP)

PROP. 3" BLOW-OFF
VALVE

PROP. 3"X1" TEE. EXTEND 1"
SERVICE LINE TO HYDRANT
(TYPICAL TO ALL HYDRANTS)

PROP. 1" HDPE
SERVICE W/L (TYP)

PROPOSED HYDRANT AND
1" HDPE SERVICE W/L (TYP.)

3"X3" TEE
(3)3" VALVE

CONNECT TO EX. 2" W/L INSIDE
EX. BUILDING W/ A TAP TEE

EX. S3829-MF350B PUMP
SET FROM VALLEY DRILLING CORP.
MOTOR: M50412/500C311

EX. (3) WX 252
BLADDER TANKS

EX 2" W/L

EX WELL

PROPOSED 3" HDPE
WATERLINE "A"

PROPOSED 3" HDPE WATERLINE "B"

ROAD B

10+00

11+00

12+00

13+00

14+00

15+00

16+00

17+00

8" PIPE

GRAVEL

GRASS

RESTROOMS

LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
	TREE W/SIZE
	SANITARY ID NUMBER
	APPRX. LOC. UNDERGROUND SANITARY
	APPRX. LOC. UNDERGROUND GAS
	APPRX. LOC. UNDERGROUND WATER
	APPRX. LOC. UNDERGROUND TELECOM
	APPRX. LOC. UNDERGROUND ELECTRIC
	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
	FENCE LINE
	OVERHEAD UTILITY
	PROP. 3" HDPE MAIN W/L
	PROP. 1" HDPE SERVICE W/L
	PROP. YARD HYDRANT

N

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

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SITE PLAN (2 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION
EP	EG MT
DESIGN	DRAWN CHKD
SCALE	H: 1"=25' V: N/A
JOB No.	140313-01-003
DATE :	OCTOBER, 2025
FILE No.	140313-D-CP-003

SHEET 11 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-GEO.dwg

LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
GV	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
DNE	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
18"	TREE W/SIZE
[EX] [1234]	SANITARY ID NUMBER
S S	APPRX. LOC. UNDERGROUND SANITARY
G G	APPRX. LOC. UNDERGROUND GAS
W W	APPRX. LOC. UNDERGROUND WATER
T T	APPRX. LOC. UNDERGROUND TELECOM
E E	APPRX. LOC. UNDERGROUND ELECTRIC
UU UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X	FENCE LINE
OHU	OVERHEAD UTILITY
W	PROP. 3" HDPE MAIN W/L
	PROP. 1" HDPE SERVICE W/L
	PROP. YARD HYDRANT

N

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

MATCHLINE - SEE SHEET 11

MATCHLINE - SEE SHEET 13

MATCHLINE - SEE SHEET 10

8" PIPE

3"X3" TEE (3)3" VALVE

CONNECT TO EX. 2" W/L INSIDE EX. BUILDING W/ A TAP TEE

EX. S3829-MF350B PUMP SET FROM VALLEY DRILLING CORP. MOTOR: M50412/500C311

EX. (3) WX 252 BLADDER TANKS

PROPOSED 3" HDPE WATERLINE "A"

PROPOSED HYDRANT AND 1" HDPE SERVICE W/L (TYP.)

EX 2" W/L

EX WELL

10+00

10+50

11+00

PROPOSED 3" HDPE WATERLINE "D"

12+00

12+50

13+00

14+00

(1)3"x3" TEE (3)-3" VALVE

15+00

16+00

17+00

18+00

19+00

20+00

21+00

PROPOSED 3" HDPE WATERLINE "C"

PROP. 3"X1" TEE. EXTEND 1" SERVICE LINE TO HYDRANT (TYPICAL TO ALL HYDRANTS)

PROP. HYDRANT (TYP)

PROP. 1" HDPE SERVICE W/L (TYP)

PROP. HYDRANT (TYP)

PROP. 1" HDPE SERVICE W/L (TYP)

ROAD A

BULL RUN DRIVE

APPROX. LOC. EX. 2" W/L (PER RECORD DRAWINGS)

APPROX. LOC. E

LOT #10
LOT #11
LOT #12
LOT #13
LOT #14
LOT #15
LOT #16
LOT #17
LOT #18
LOT #19
LOT #24
LOT #25
LOT #26
LOT #27
LOT #28
LOT #29
LOT #30
LOT #31
LOT #32
LOT #33
LOT #35

GRAVEL
LFT TANK 6" HDPE
RESTROOMS
STORM PIPE
WDF
BBQ
PS
FP
EP

Bowman
13461 Sunrise Valley Drive
Suite 500
Herndon, VA 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
bowman.com

SITE PLAN (3 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

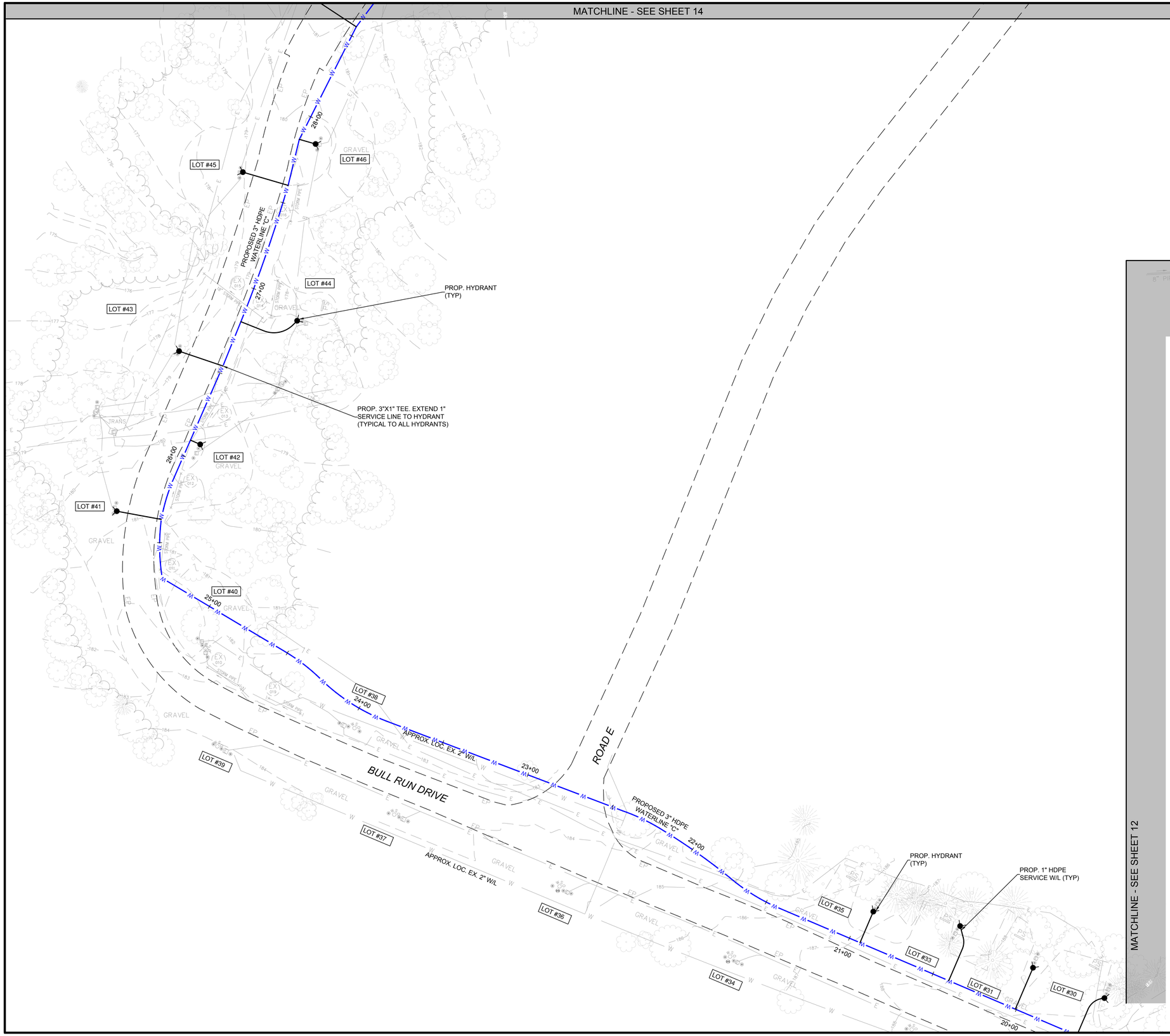
EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE	H: 1"=25' V: N/A
JOB No.	140313-01-003
DATE :	OCTOBER, 2025
FILE No.	140313-D-CP-003

SHEET 12 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-GEO.dwg

MATCHLINE - SEE SHEET 14



LEGEND

AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
GV	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
S	SANITARY SEWER MANHOLE
DNE	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
W	WELL
18"	TREE W/SIZE
EX 1234	SANITARY ID NUMBER
S — S	APPRX. LOC. UNDERGROUND SANITARY
G — G	APPRX. LOC. UNDERGROUND GAS
W — W	APPRX. LOC. UNDERGROUND WATER
T — T	APPRX. LOC. UNDERGROUND TELECOM
E — E	APPRX. LOC. UNDERGROUND ELECTRIC
UU — UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X — X	FENCE LINE
OHU — OHU	OVERHEAD UTILITY
W	PROP. 3" HDPE MAIN W/L
	PROP. 1" HDPE SERVICE W/L
	PROP. YARD HYDRANT

N

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

Bowman

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SITE PLAN (4 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE	H: 1"=25' V: N/A
JOB No.	140313-01-003
DATE :	OCTOBER, 2025
FILE No.	140313-D-CP-003
SHEET	13 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-GEO.dwg

LEGEND

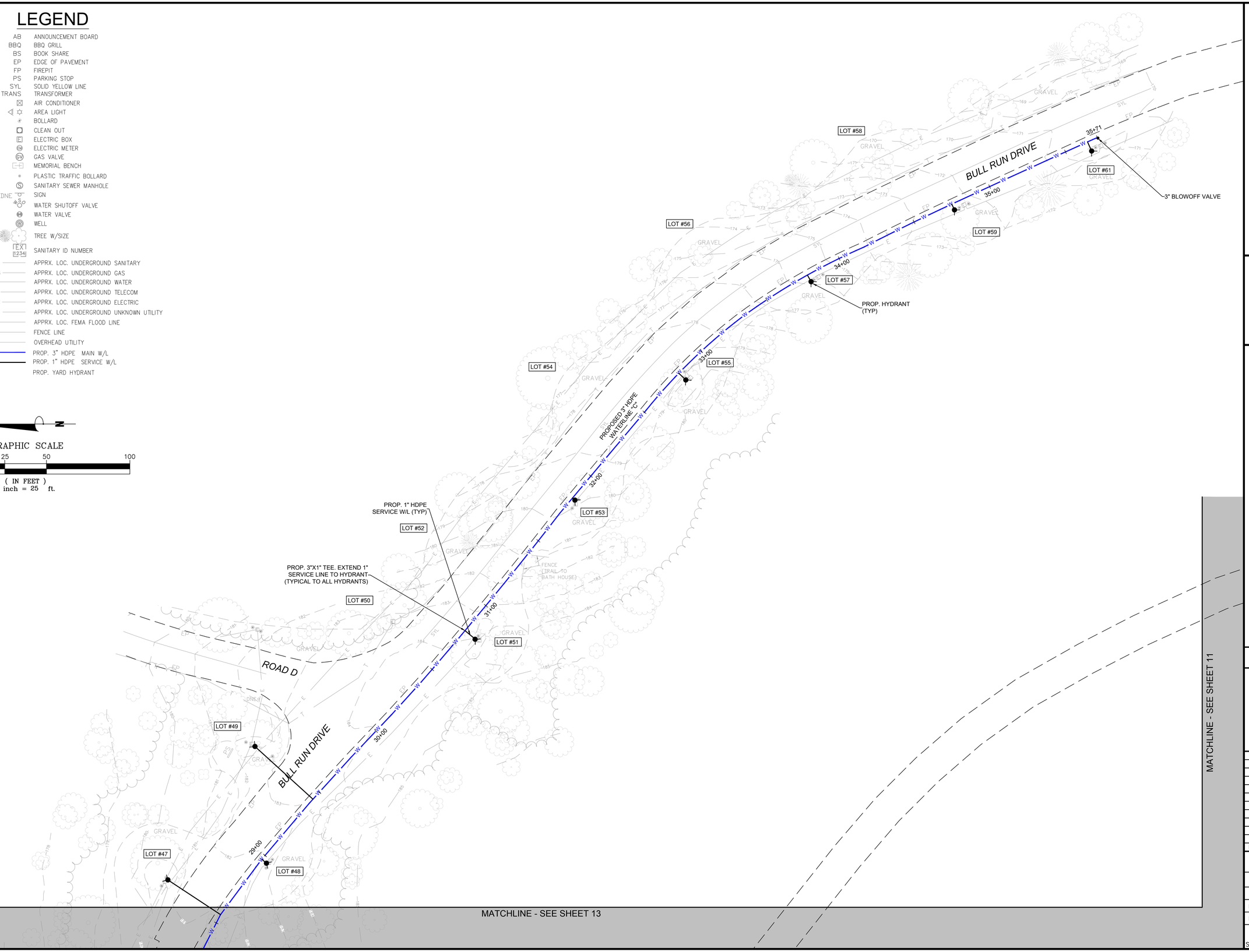
AB	ANNOUNCEMENT BOARD
BBQ	BBQ GRILL
BS	BOOK SHARE
EP	EDGE OF PAVEMENT
FP	FIREPIT
PS	PARKING STOP
SYL	SOLID YELLOW LINE
TRANS	TRANSFORMER
	AIR CONDITIONER
	AREA LIGHT
	BOLLARD
	CLEAN OUT
	ELECTRIC BOX
	ELECTRIC METER
	GAS VALVE
	MEMORIAL BENCH
	PLASTIC TRAFFIC BOLLARD
	SANITARY SEWER MANHOLE
	SIGN
	WATER SHUTOFF VALVE
	WATER VALVE
	WELL
18"	TREE W/SIZE
EX 1 2 3 4	SANITARY ID NUMBER
S S	APPRX. LOC. UNDERGROUND SANITARY
G G	APPRX. LOC. UNDERGROUND GAS
W	APPRX. LOC. UNDERGROUND WATER
T T	APPRX. LOC. UNDERGROUND TELECOM
E E	APPRX. LOC. UNDERGROUND ELECTRIC
UU UU	APPRX. LOC. UNDERGROUND UNKNOWN UTILITY
	APPRX. LOC. FEMA FLOOD LINE
X	FENCE LINE
OHU	OVERHEAD UTILITY
W	PROP. 3" HDPE MAIN W/L
	PROP. 1" HDPE SERVICE W/L
	PROP. YARD HYDRANT

N

GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.



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SITE PLAN (5 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1"=25'
V: N/A

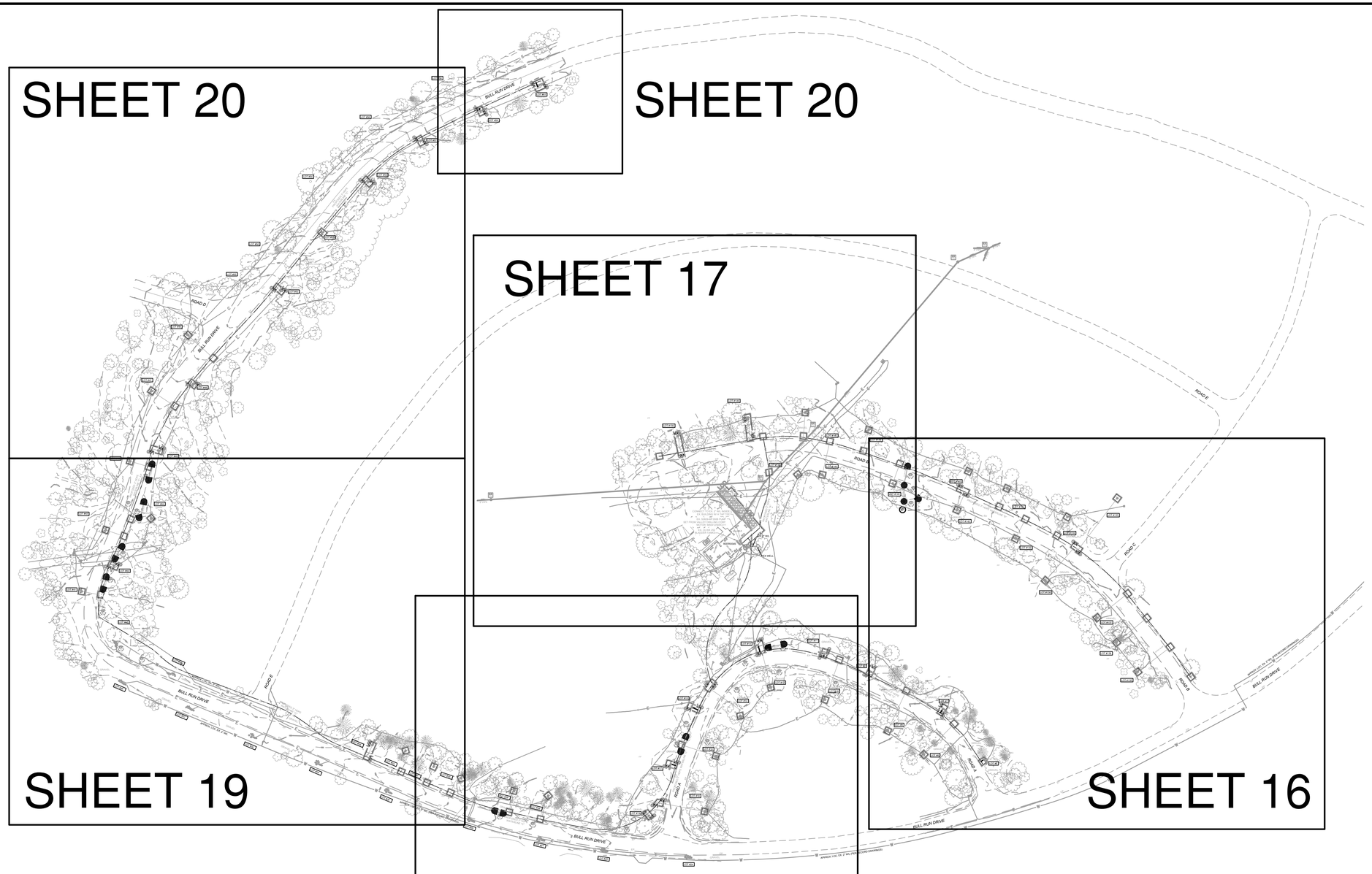
JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 14 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-GEO.dwg



EROSION AND SEDIMENT CONTROL LEGEND

NO.	TITLE	KEY	SYMBOL
3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	MODIFIED SUPER SILT FENCE/ SUPER SILT FENCE	SSF	
3.07	STORM DRAIN INLET PROTECTION	IP	
3.08	CULVERT INLET PROTECTION	CIP	

SILT FENCE NOTE:

*MODIFIED SUPER SILT FENCE TO SERVE AS PERIMETER EROSION CONTROL AND TREE PROTECTION. TRENCHLESS FENCE INSTALLATION IS BEING USED WHERE POSSIBLE IN ORDER TO NOT IMPACT THE ADJACENT TREE ROOTS.

*BORE PITS TO BE SURROUNDED BY SILT FENCE.

GRAPHIC SCALE

75 0 75 150 300

(IN FEET)
1 inch = 75 ft.

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OVERALL EROSION & SEDIMENT CONTROL PLAN

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	

DATE	DESCRIPTION	
EP	EG	MT
DESIGN	DRAWN	CHKD
SCALE	H: 1" = 75' V:	
JOB No.	140313-01-003	
DATE :	OCTOBER, 2025	
FILE No.	140313-D-CP-003	

SHEET 15 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESP.dwg

EROSION AND SEDIMENT CONTROL LEGEND

NO.	TITLE	KEY	SYMBOL
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GRAPHIC SCALE

25 0 12.5 25 50 100

(IN FEET)
1 inch = 25 ft.

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EROSION & SEDIMENT CONTROL PLAN (1 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS

DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25'
V:

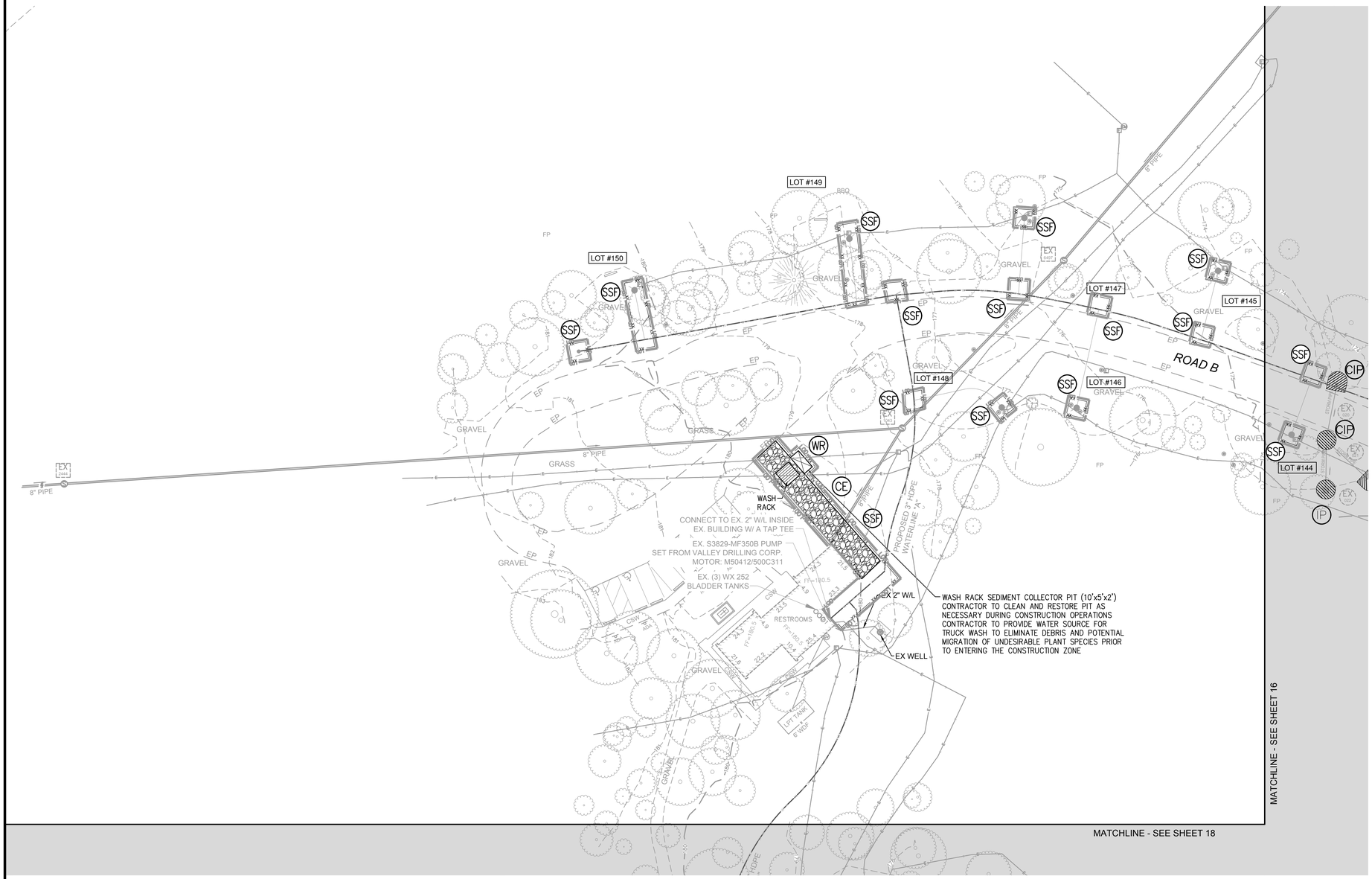
JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 16 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESP.dwg



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GRAPHIC SCALE

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(IN FEET)
1 inch = 25 ft.

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EROSION & SEDIMENT CONTROL PLAN (2 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS

DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25'
V:

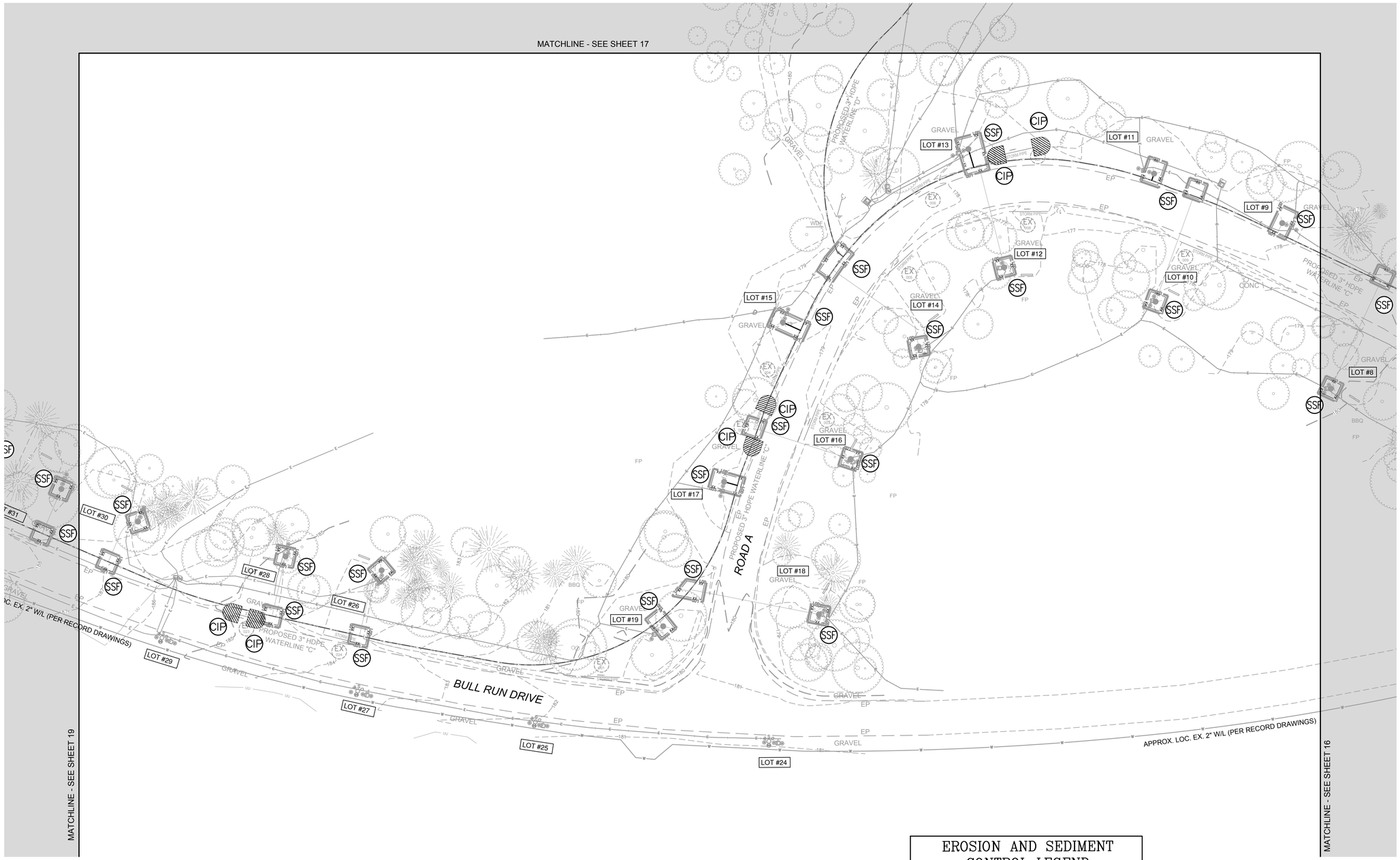
JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 17 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESP.dwg



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EROSION & SEDIMENT CONTROL PLAN (3 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS

DATE	DESCRIPTION	
EP DESIGN	EG DRAWN	MT CHKD

SCALE H: 1" = 25'
V:

JOB No. 140313-01-003

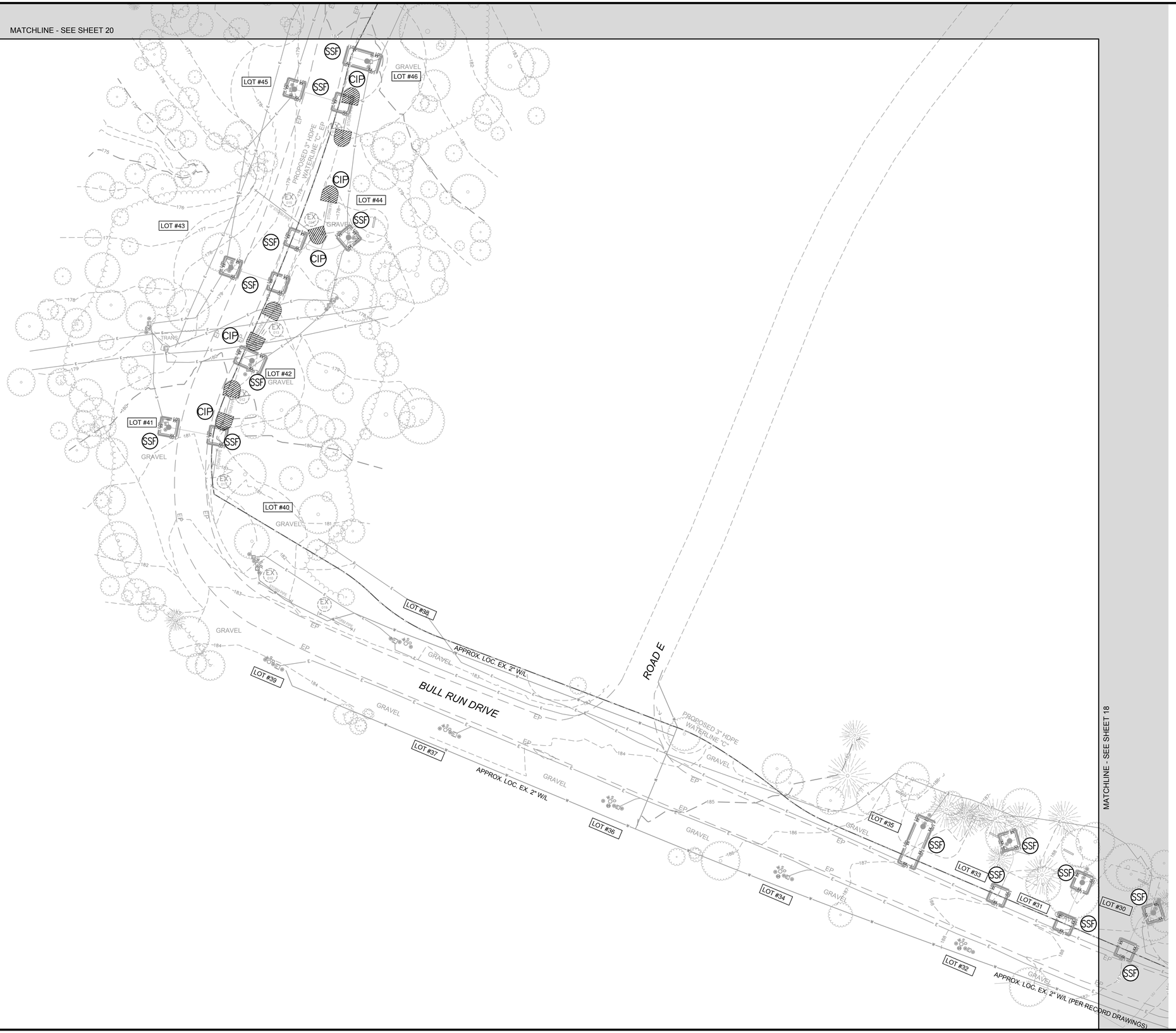
DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 18 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESP.dwg

MATCHLINE - SEE SHEET 20



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(IN FEET)
1 inch = 25 ft.

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EROSION & SEDIMENT CONTROL PLAN (4 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS

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EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25'
V:

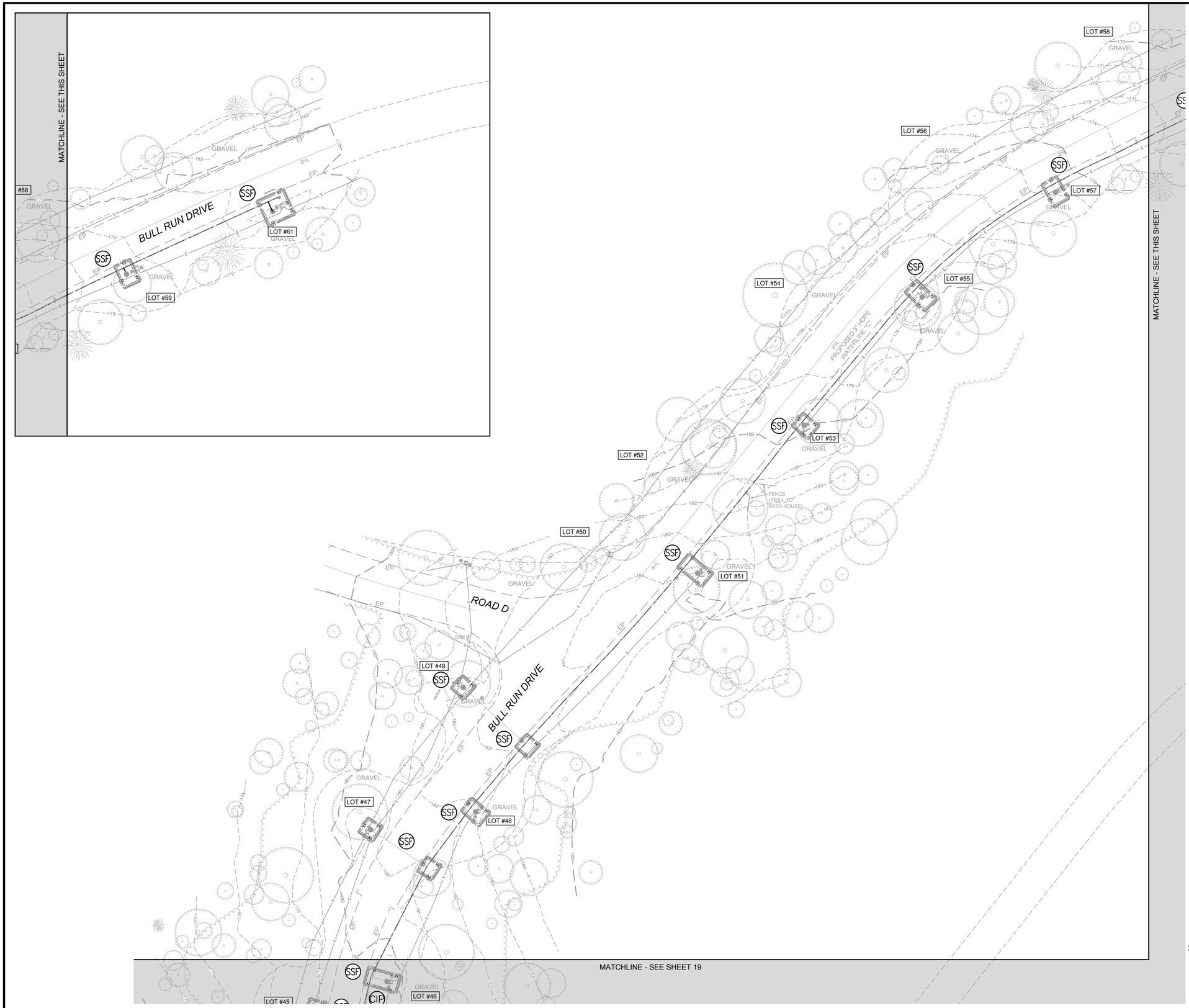
JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 19 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESP.dwg



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N

GRAPHIC SCALE

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(IN FEET)
1 inch = 25 ft.

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EROSION & SEDIMENT CONTROL PLAN (5 OF 5)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25'
V:

JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 20 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESP.dwg

LAND CONSERVATION NOTES

1. MEASURES TO CONTROL EROSION AND SILTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT FEDERAL, STATE AND LOCAL REGULATIONS. THE INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND/OR THE APPROVAL OF THE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY THE COUNTY OF FAIRFAX.

2. ALL AREAS, ON OR OFF–SITE, WHICH ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS SEED MIXTURE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL SLOPES 2:1 AND GREATER SHALL BE SODDED AND STAKED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE OWNER'S REPRESENTATIVE.

3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE. STOCKPILES SHALL ALSO BE APPROVED BY PARK AUTHORITY OR ENGINEER OF RECORD.

5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR HIS DESIGNATED AGENT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.

6. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND–DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

7. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

8. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FROM THE LAND–DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DESIGN SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.

9. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.

10. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.

11. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

12. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT–LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

13. BEFORE NEWLY CONSTRUCTED STORM WATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.

14. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.

15. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX–MONTH PERIOD, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.

16. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE ADHERED TO.

17. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN A WATERCOURSE IS COMPLETED.

18. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.

19. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

20. REFER TO THIS SHEET FOR EROSION & SEDIMENT CONTROL NARRATIVE.

21. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE REQUIREMENTS, STANDARDS AND SPECIFICATIONS:

    a. NO MORE THAN 250 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
    b. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
    c. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF–SITE PROPERTY.
    d. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
    e. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND REQUIREMENTS.
    f. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN HEREON THAT ARE DEEMED NECESSARY BY THE APPROVING AUTHORITY AND/OR THE SITE INSPECTOR.

23. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES DAILY. ANY DAMAGED CONTROLS SHALL BE REPAIRED OR REPLACED BY THE CLOSE OF EACH WORKING DAY.

EROSION & SEDIMENT CONTROL NARRATIVE:

PROJECT DESCRIPTION

THIS SITE, LOCATED IN FAIRFAX COUNTY IS PROPOSED TO CONSTRUCT A 3" HDPE WATERLINE TO PROVIDE SERVICE TO THE CAMPSITES. THER ARE 4 MAIN LINES, WHICH PULL SERVICE FROM THE EXISTING BATH HOUSE AND WELL. IMPROVEMENTS CONSIST OF THE ADDITION OF NEW 3" HDPE WATERLINE, 1" SERVICE LATERALS AND ASSOCIATED APPURTENANCES AND YARD HYDRANTS AT EACH CAMPSITE. THE MAJORITY OF THE CONSTRUCTION SHALL BE DIRECTIONALLY BORED SO AS TO LIMIT THE DISTURBED AREA. THE DISTURBED AREA IS NOT TO EXCEED 2,500 SF AT ANY ONE TIME.

EXISTING SITE CONDITIONS

THE EXISTING TOPOGRAPHY CONSISTS OF SLOPES RANGING FROM 3:1 TO 20:1. THE MAJORITY OF THE SITE IS WOODED.

ADJACENT PROPERTY

THE BULL RUN CAMPGROUND IS BOUNDED ON THE NORTH BY THE BULL RUN SHOOTING CENTER, WEST BY BULL RUN PARK, EAST BY FORESTED LAND, AND BULL RUN WATER PARK TO THE SOUTH.

OFF–SITE AREAS

THERE ARE NO OFFSITE AREAS THAT WILL BE NEGATIVELY IMPACTED BY THIS DEVELOPMENT. APPROVED EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN SPECIFIED AT THE PERIPHERAL BOUNDARIES OF THE PROPOSED LIMITS OF DISTURBANCE.

SOILS

(SEE SOILS MAP, LOCATED ON THIS SHEET)

CRITICAL EROSION AREAS

THERE ARE NO CRITICAL AREAS IDENTIFIED ON SITE WITHIN THE LIMITS OF DISTURBANCE.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

STRUCTURAL PRACTICES

1. TEMPORARY CONSTRUCTION ENTRANCE – 3.02
   CONSTRUCTION ENTRANCE IS PROVIDED OFF OF THE CAMP LOOP ROAD TO THE IMPROVEMENTS AREA. DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE LEAVING THE IMPROVED AREA. IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT THERE IS AN ADEQUATE WATER SOURCE TO PERFORM SUCH WASHING.
2. SUPER SILT FENCE/TREE PROTECTION BARRIER–3.05
   SUPER SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT–LADEN RUNOFF FROM SHEET FLOW AS INDICATED ON THE GRADING AND EROSION AND SEDIMENT CONTROL PLAN. THE SUPER SILT FENCE WILL ALSO SERVE AS TREE PROTECTION DEVICE FOR THESE AREAS AS SHOWN ON THE PLAN.
3. STORM INLET PROTECTION 3.07
   STORM INLET PROTECTION WILL BE INSTALLED AS INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
4. CULVERT INLET PROTECTION 3.08
   CULVERT INLET PROTECTION WILL BE INSTALLED AS INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
5. STABILIZATION MEASURES
   STABILIZE AREAS WHICH ARE TO REMAIN UNWORKED SHALL BE VEGETATED AS EARLY AS POSSIBLE. AREAS BROUGHT TO FINISHED GRADE MUST BE SEEDED WITHIN 7 DAYS. LIKEWISE, AREAS THAT WILL NOT BE WORKED LONGER THAN 30 DAYS MUST ALSO BE SEEDED WITHIN 7 DAYS PRIOR TO END OF WORK.

VEGETATIVE PRACTICES

1. TEMPORARY SEEDING – 3.31
   ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME, SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SEE THIS SHEET FOR SEEDING NOTES. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS.

MANAGEMENT STRATEGIES

1. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
3. TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING.
4. AREAS, WHICH ARE NOT TO BE DISTURBED, WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
5. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
6. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY E&S CONTROLS WILL BE CLEANED UP AND REMOVED.

PERMANENT STABILIZATION 3.32

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING. SEEDING SHALL BE PREFORMED AS OUTLINED IN THE SEEDING NOTES, SEE THIS SHEET.

MAINTENANCE

THE SITE SUPERINTENDENT, OR HIS/HER REPRESENTATIVE, SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E., SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS, ESPECIALLY AFTER A HEAVY RAINFALL EVEN TO INSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE DAY INCLUDING RE–SEEDING AND MULCHING OR RESODDING IF NECESSARY.

THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

1. THE SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.
2. THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.
3. NO UNPROTECTED, DISTURBED AREA SHALL DRAIN TO ROADWAY PAVEMENTS SUCH THAT THE SUBBASE, BASE, OR WEARING SURFACE ARE CONTAMINATED BY SILT TRAPPED AT LOW POINTS OR INLETS.

SODDING – 3.33

ALL SODDED AREAS, IF PROPOSED, SHALL BE CONDUCTED IN ACCORDANCE OF SECTION 3.33 OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.

DUST CONTROL

CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE ENTIRE CONSTRUCTION PHASE BY THE APPLICATION OF WATER AND/OR APPROVED ADHESIVES PER STD. 3.39 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (CURRENT EDITION).

SEQUENCE OF CONSTRUCTION

SEDIMENT CONTROL PLAN (PHASE I & II):

1. SCHEDULE AND ATTEND PRE–CONSTRUCTION MEETING WITH OWNER. WORK AREA LIMITS ARE TO BE FLAGGED IN THE FIELD PRIOR TO MEETING DATE.
2. INSTALL TREE PROTECTION FENCING/SUPER SILT FENCE PRIOR TO INSTALLING BORE PITS.
3. INSTALL PERIMETER SEDIMENT CONTROLS INCLUDING CONSTRUCTION ENTRANCE AND SUPER SILT FENCE, AS APPROPRIATE AND AS ROOM ALLOWS FOR CLEARING OPERATIONS, AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.

   A. CONSTRUCTION OF THE PROPOSED WATERLINE SHALL BE DONE IN SEGMENTS WITH NO MORE THAN 250 LF OR 2,500 SF OF DISTURBANCE AT ANY ONE TIME. THE MAJORITY OF THE CONSTRUCTION SHALL BE DIRECTIONALLY BORED.

   B. THE BEGINNING OF CONSTRUCTION SHALL BE TRENCHED UP TO THE EXISTING BATH HOUSE AS SHOWN ON THE PLANS ON SHEET 11. THE EXTENTS OF THE TRENCH SHALL HAVE SUPER SILT FENCE.

   C. AT EACH BORE PIT (STARTING AND RECEIVING) THERE SHALL BE SUPER SILT FENCE AROUND THE EXTENTS OF THE PIT TO ENSURE SEDIMENT DOES NOT LEAVE THE PIT.

   D. FOR EACH CAMPSITE THE 1" SERVICE LINE SHALL BE DIRECTIONALLY BURIED. THE TRENCH SHALL BE LINED WITH SUPER SILT FENCE DURING CONSTRUCTION AND REMOVED ONCE THE GROUND IS STABILIZED AND THE INSTALLATION OF THE SERVICE LINE AND HYDRANT ARE COMPLETE.

   E. SINCE THIS WILL BE PHASED CONSTRUCTION AND CAMPGROUND WILL REMAIN OPEN, IT IS NOT RECOMMENDED TO INSTALL ALL THE EROSION AND SEDIMENT MEASURES AT ONCE.

   F. STOCKPILE AREAS SHALL BE LOCATED UPHILL OF THE BORE PITS AND WILL BE ADEQUATELY PROTECTED WITH SUPER SILT FENCE.

   G. AFTER CONSTRUCTION OPERATIONS HAVE ENDED AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.

EXCESS HAULING MATERIAL NOTE:

ANY EXCESS GRADING SHALL BE LOCATED WITHIN THE LIMITS OF THE SITE AT A LOCATION APPROVED BY THE OWNER OR THE ENGINEER OF RECORD.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

1. UNLESS OTHERWISE NOTED, ALL VEGETATIVE AND EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE TO THE LATEST EDITION OF MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
2. FOR ADDITIONAL DETAILS AND SPECIFICATIONS NOT SHOWN HEREON, REFER TO THE LATEST EDITION OF VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
3. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ONSITE AT ALL TIMES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN HEREON THAT ARE DEEMED NECESSARY BY THE APPROVING AUTHORITY AND/OR THE SITE INSPECTOR.
5. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES DAILY. ANY DAMAGED CONTROLS SHALL BE REPAIRED OR REPLACED BY THE CLOSE OF EACH WORKING DAY.

TABLE 3.32-D

SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

	Total Lbs. Per Acre
Minimum Care Lawn	
- Commercial or Residential	
- Kentucky 31 or Turf-Type Tall Fescue	175-200 lbs.
or	
- Common Bermudagrass **	75 lbs.
High-Maintenance Lawn	
- Kentucky 31 or Turf-Type Tall Fescue	200-250 lbs.
or	
- Hybrid Bermudagrass (seed) **	40 lbs. (unhulled)
or	30 lbs. (hulled)
- Hybrid Bermudagrass (by other vegetative establishment method, see Std. & Spec. 3.34)	
General Slope (3:1 or less)	
- Kentucky 31 Fescue	128 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
	150 lbs.
Low Maintenance Slope (Steeper than 3:1)	
- Kentucky 31 Tall Fescue	93-108 lbs.
- Common Bermudagrass **	0-15 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
- Sericea Lespedeza **	20 lbs.
	150 lbs.

* Use seasonal nurse crop in accordance with seeding dates as stated below:
February, March through April ..... Annual Rye
May 1st through August ..... Foxtail Millet
September, October through November 15th ..... Annual Rye
November 16th through January ..... Winter Rye

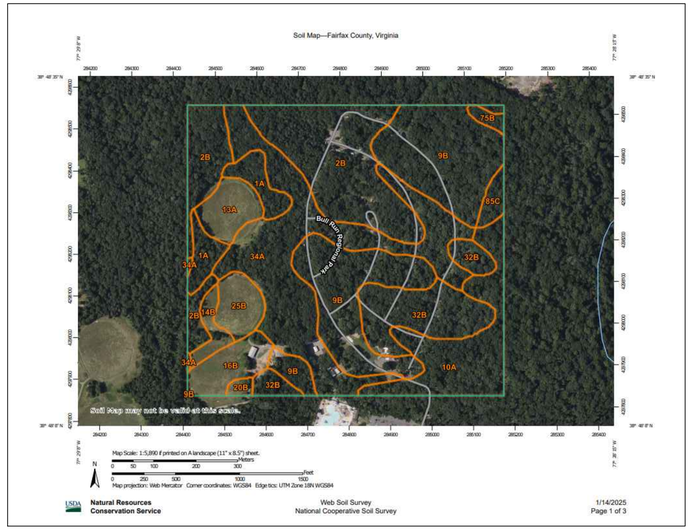
** May through October, use hulled seed. All other seeding periods, use unhulled seed. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

TABLE 3.31-B

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS

"QUICK REFERENCE FOR ALL REGIONS"

Planting Dates	Species	Rate (lbs./acre)
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (Lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 - 100
Feb. 16 - Apr. 30	Annual Ryegrass (Lolium multi-florum)	60 - 100
May 1 - Aug 31	German Millet (Setaria italica)	50



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EROSION & SEDIMENT CONTROL NOTES
BULL RUN REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
SULLY DISTRICT
FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: NTS V:

JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

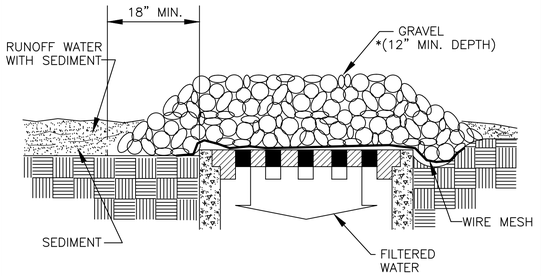
SHEET 21 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESN.dwg

STORM DRAIN INLET PROTECTION 3.07-2

IP

GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER



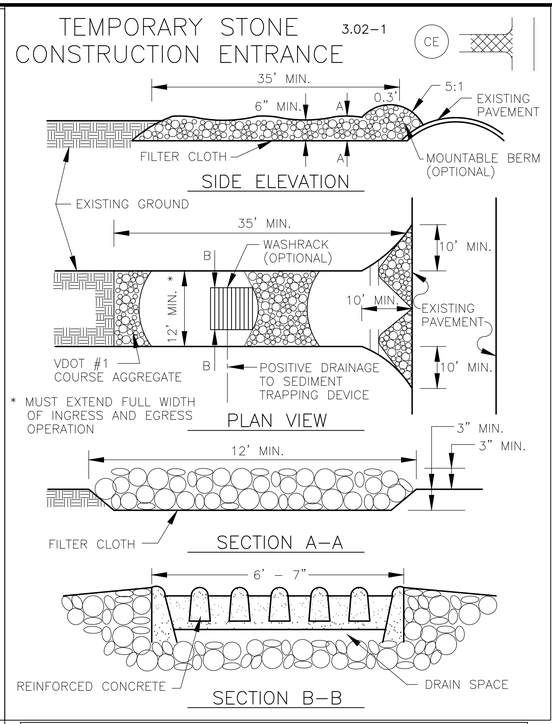
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

*GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE AGGREGATE.

TEMPORARY STONE CONSTRUCTION ENTRANCE 3.02-1

CE



SILT FENCE CULVERT INLET PROTECTION 3.08-1

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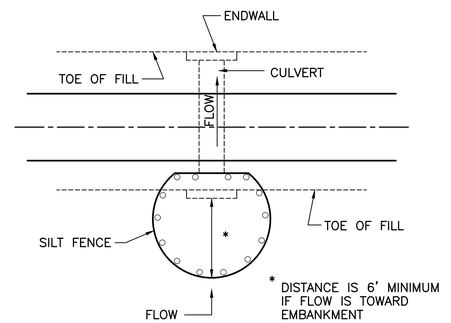
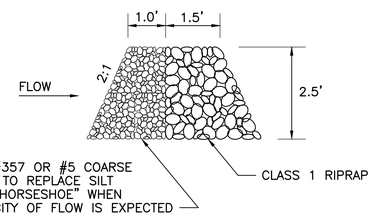
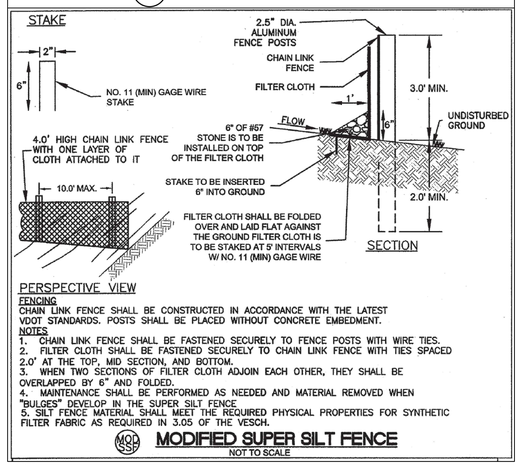


OPTIONAL STONE COMBINATION **



** VDOT #3, #357 OR #5 COARSE AGGREGATE TO REPLACE SILT FENCE IN "HORSESHOE" WHEN HIGH VELOCITY OF FLOW IS EXPECTED

SSF — XX — XX —



FENCING
CHAIN LINK FENCE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VDOT STANDARDS. POSTS SHALL BE PLACED WITHOUT CONCRETE EMBEDMENT.

NOTES
1. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
2. FILTER CLOTH SHALL BE FASTENED SECURELY TO CHAIN LINK FENCE WITH TIES SPACED 2.0' AT THE TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SUPER SILT FENCE
5. SILT FENCE MATERIAL SHALL MEET THE REQUIRED PHYSICAL PROPERTIES FOR SYNTHETIC FILTER FABRIC AS REQUIRED IN 3.05 OF THE VESCH.

MOD SSF **MODIFIED SUPER SILT FENCE**
NOT TO SCALE

NOTE:
SUPER SILT FENCE SHALL SERVE AS TREE PROTECTION FENCING WHERE INDICATED ON THE PLAN.

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EROSION & SEDIMENT CONTROL DETAILS

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: NTS V:

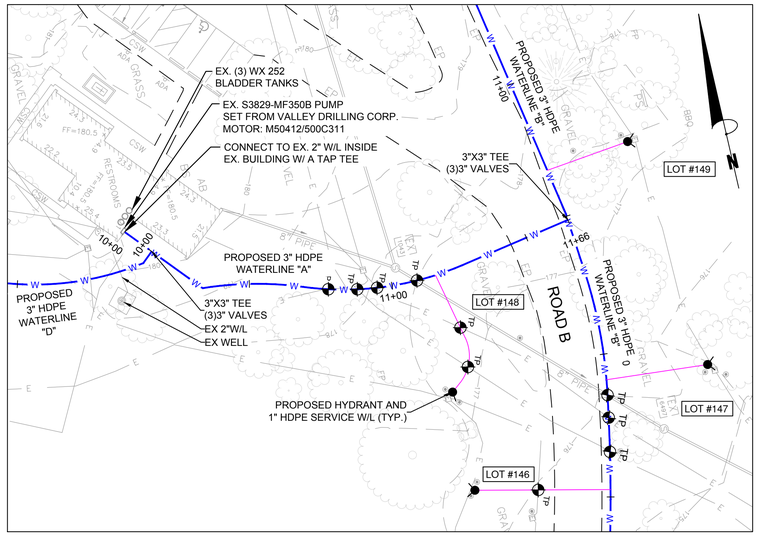
JOB No. 140313-01-003

DATE : OCTOBER, 2025

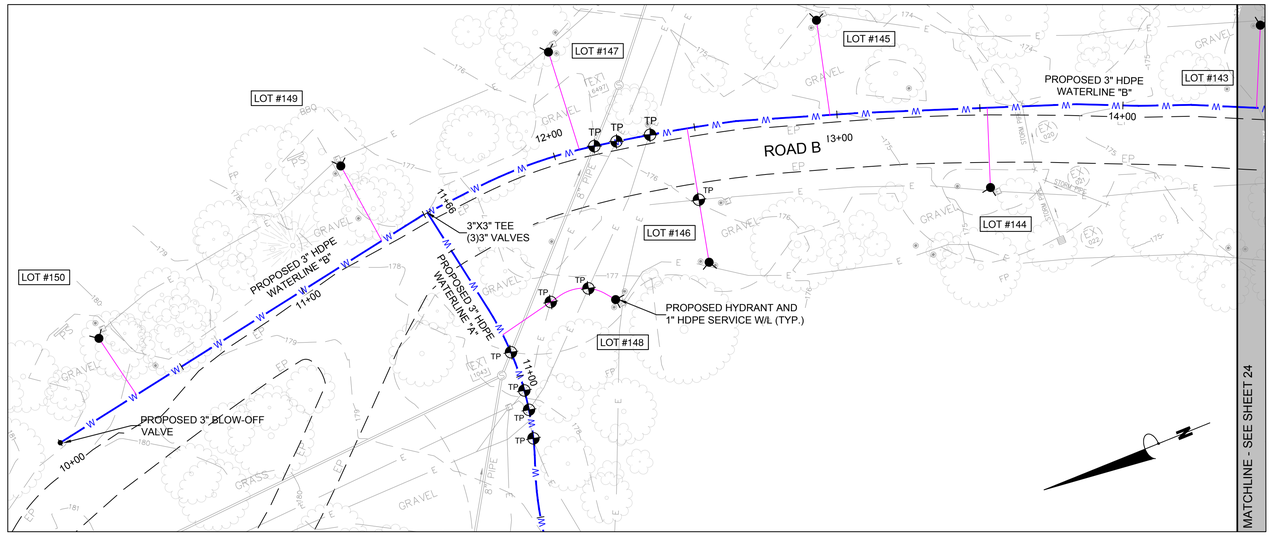
FILE No. 140313-D-CP-003

SHEET 22 OF 31

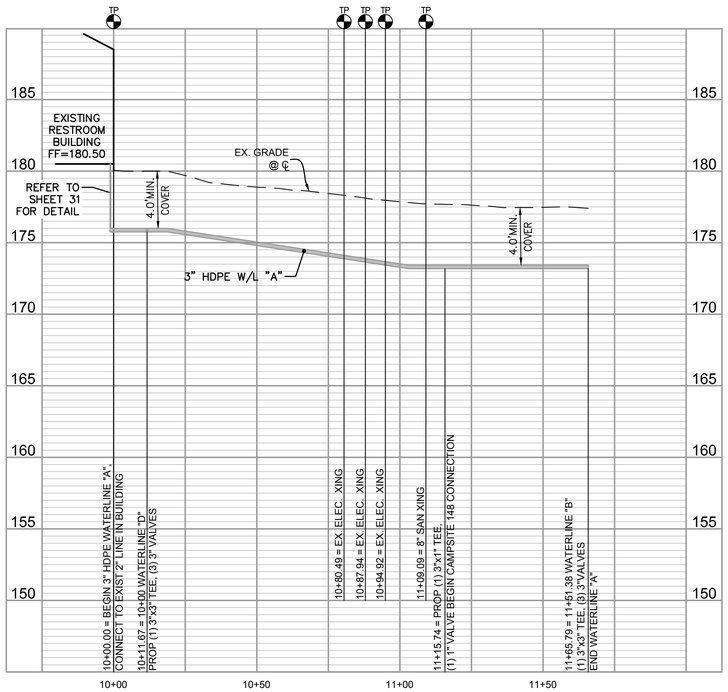
Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-ESN.dwg



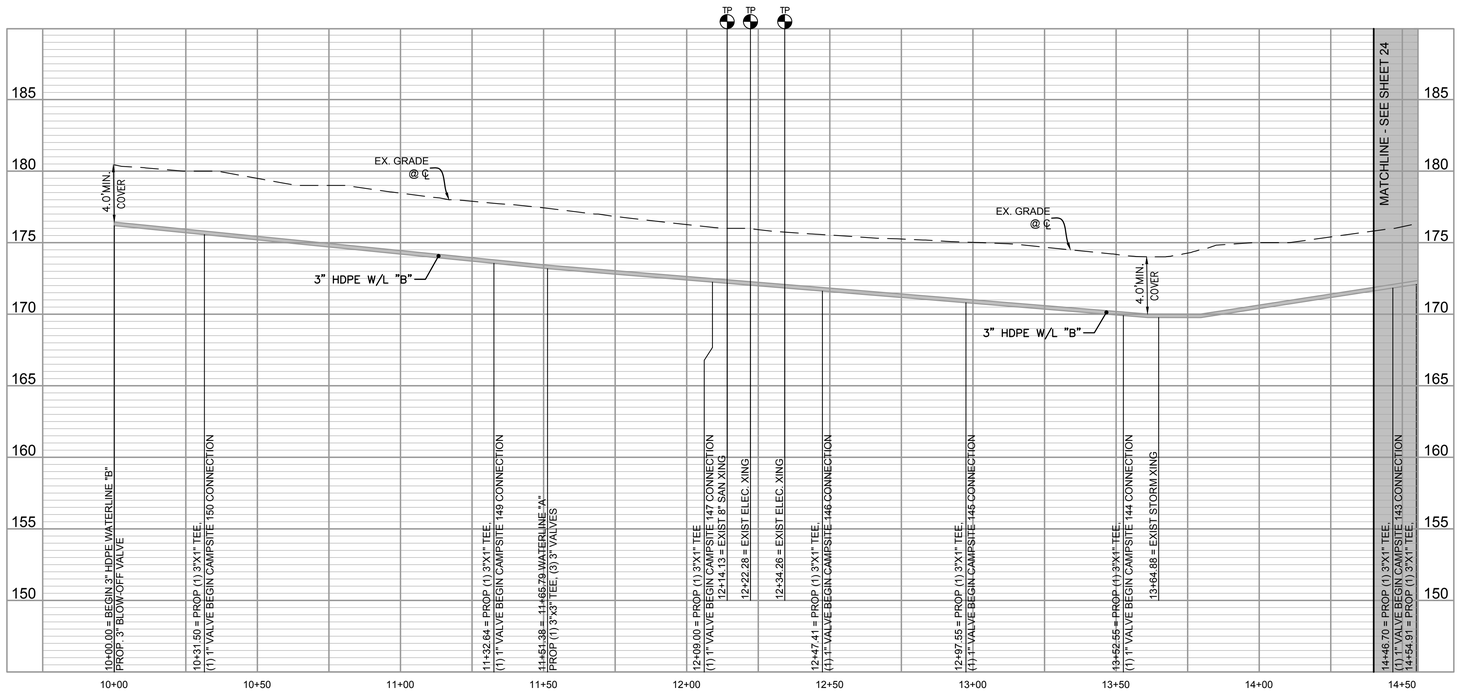
3" WATERLINE "A" PLAN



3" WATERLINE "B" PLAN



3" WATERLINE "A" PROFILE



3" WATERLINE "B" PROFILE

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WATERLINE PLAN & PROFILE (1 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1"=25'
V: 1"=5'

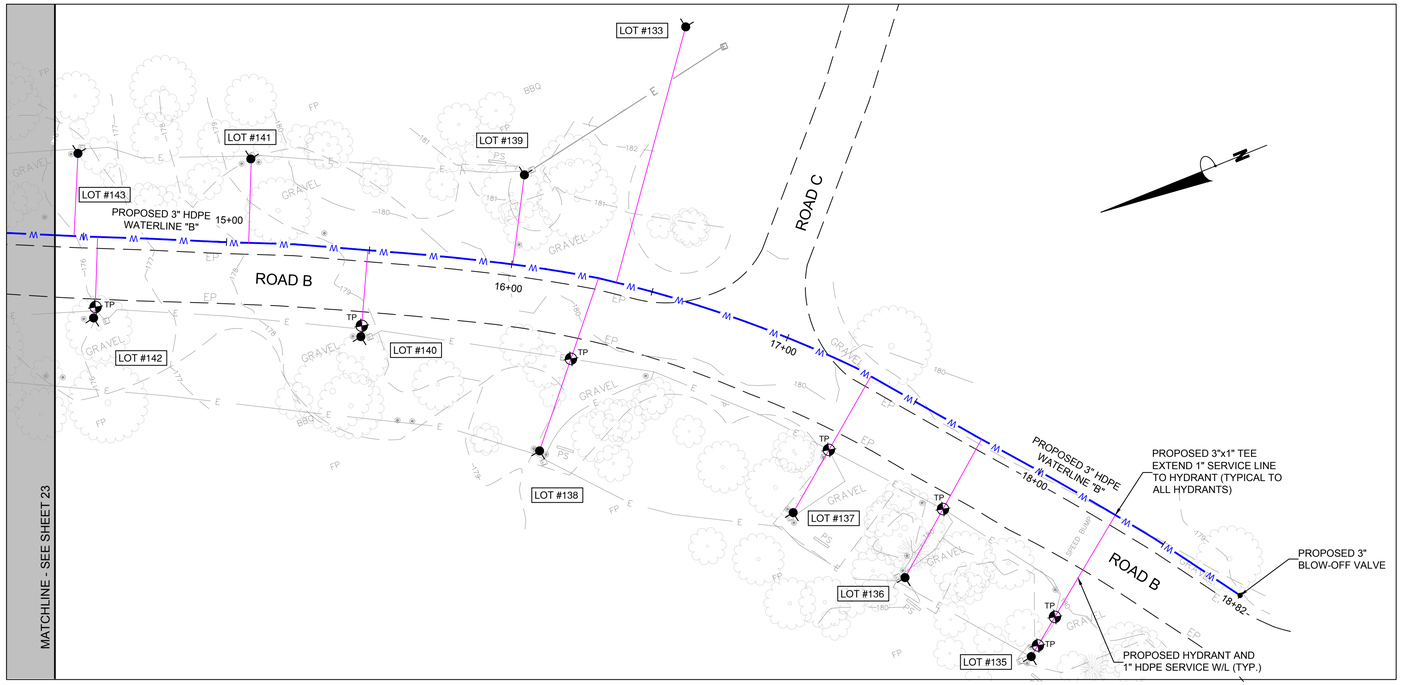
JOB No. 140313-01-003

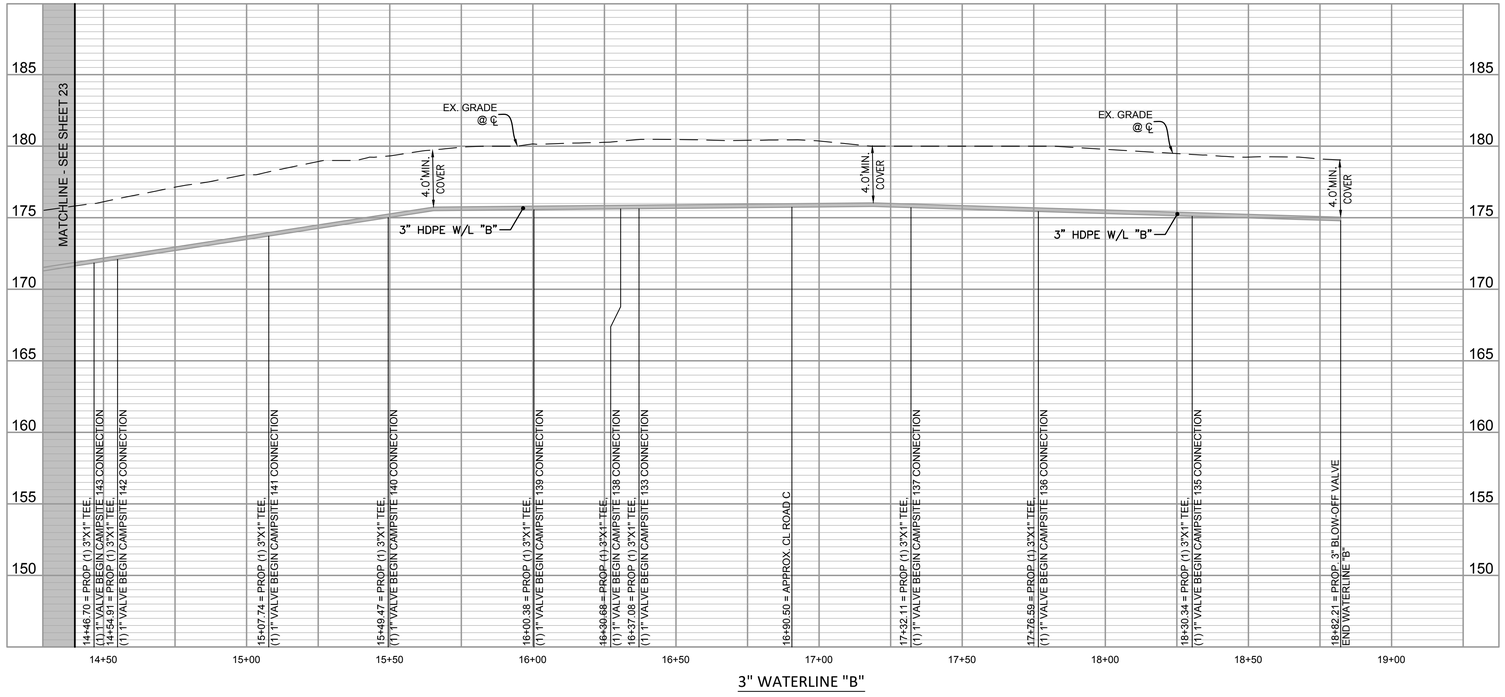
DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 23 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-PNP.dwg





3" WATERLINE "B"

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WATERLINE PLAN & PROFILE (2 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

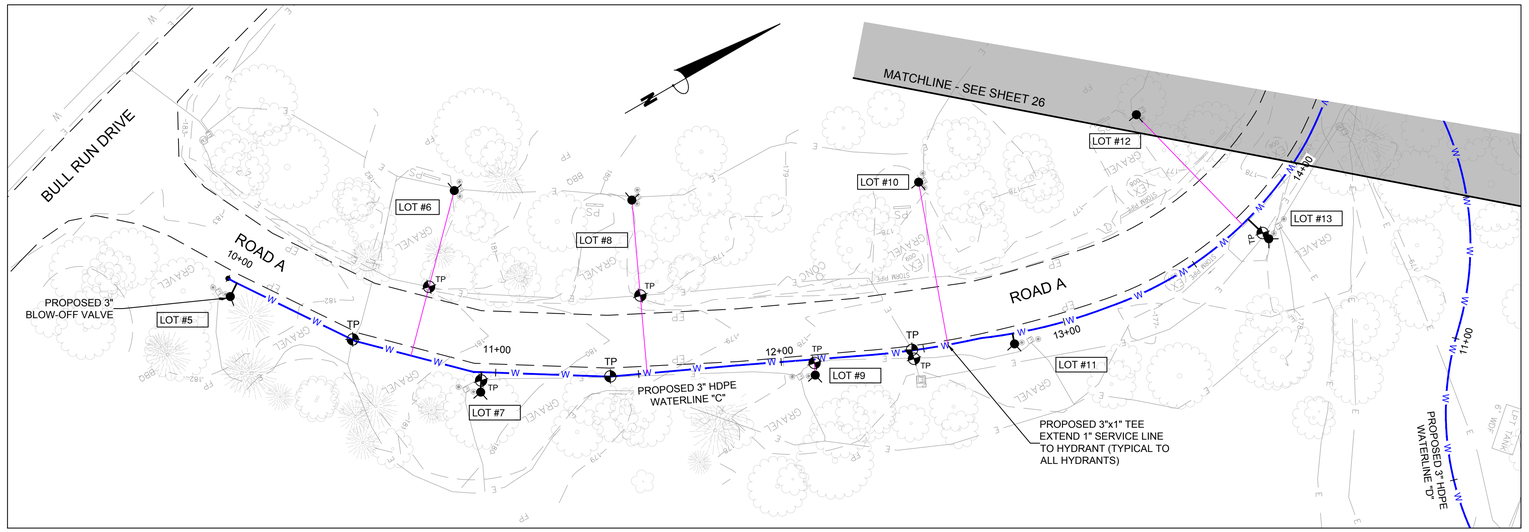
COUNTY PROJECT NUMBER

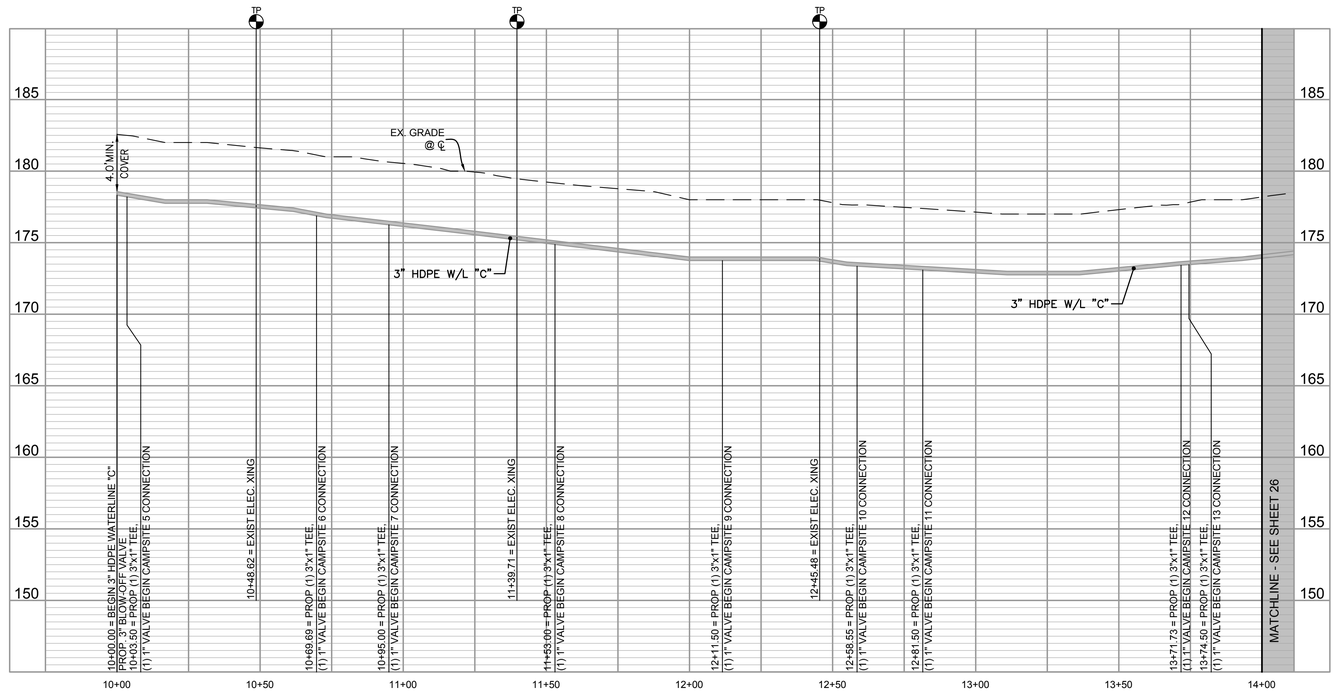
DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION
EP DESIGN	EG DRAWN / MT CHKD
SCALE	H: 1"=25' V: 1"=5'
JOB No.	140313-01-003
DATE :	OCTOBER, 2025
FILE No.	140313-D-CP-003

SHEET 24 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-PNP.dwg





3" WATERLINE "C"

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WATERLINE PLAN & PROFILE (3 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

SULLY DISTRICT

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
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DESIGN	DRAWN	CHKD

SCALE H: 1"=25'
V: 1"=5'

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DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 25 OF 31

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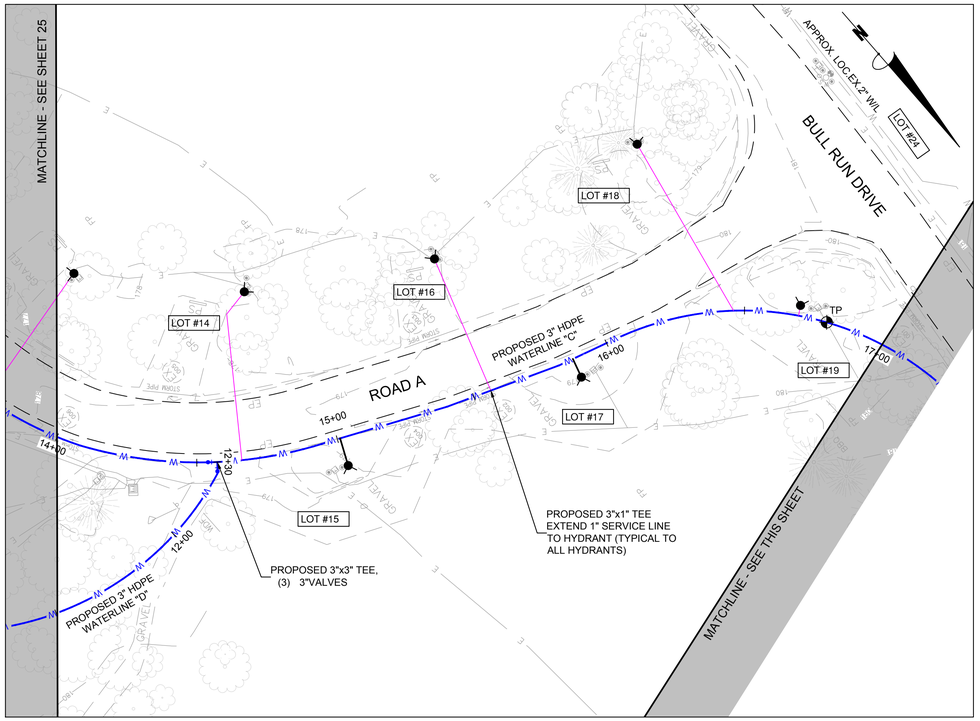
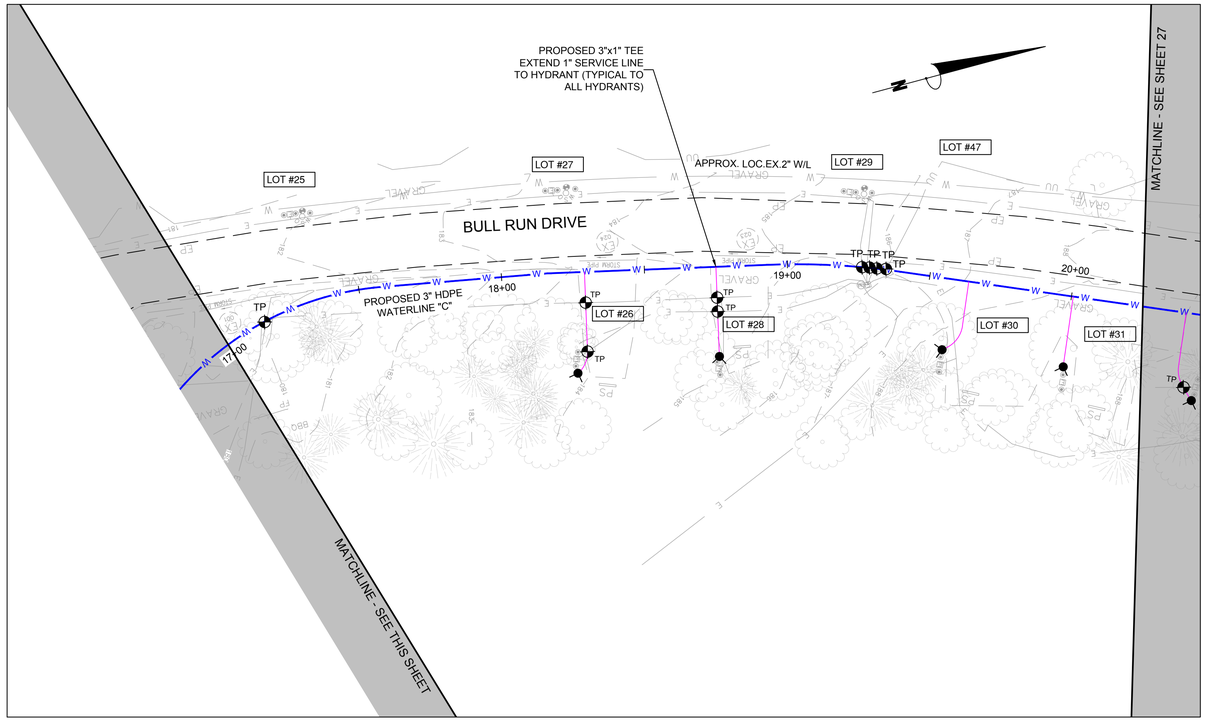
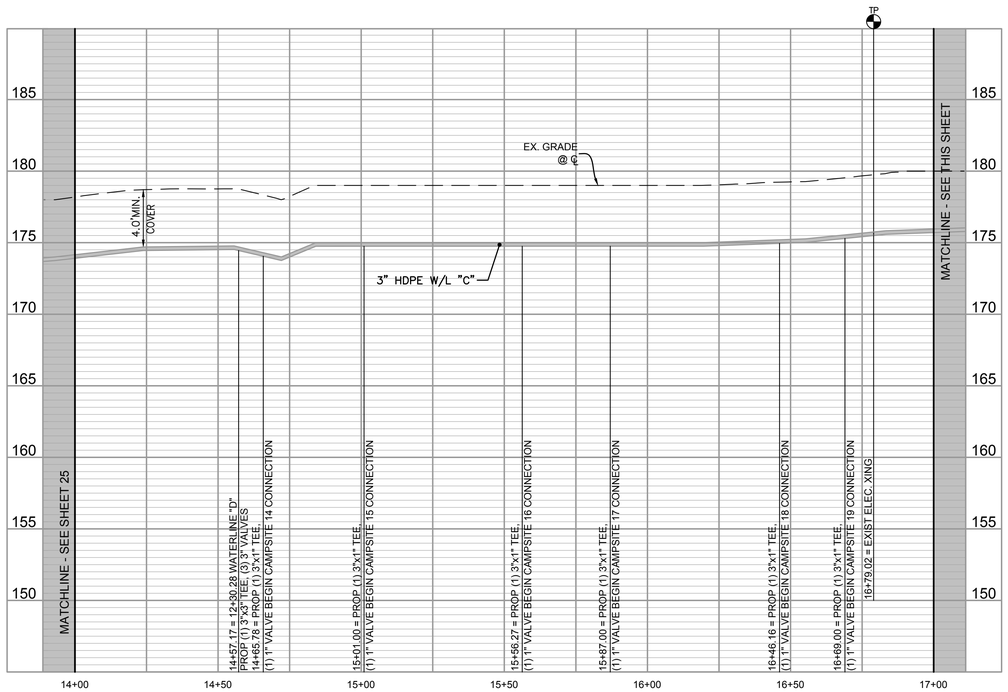
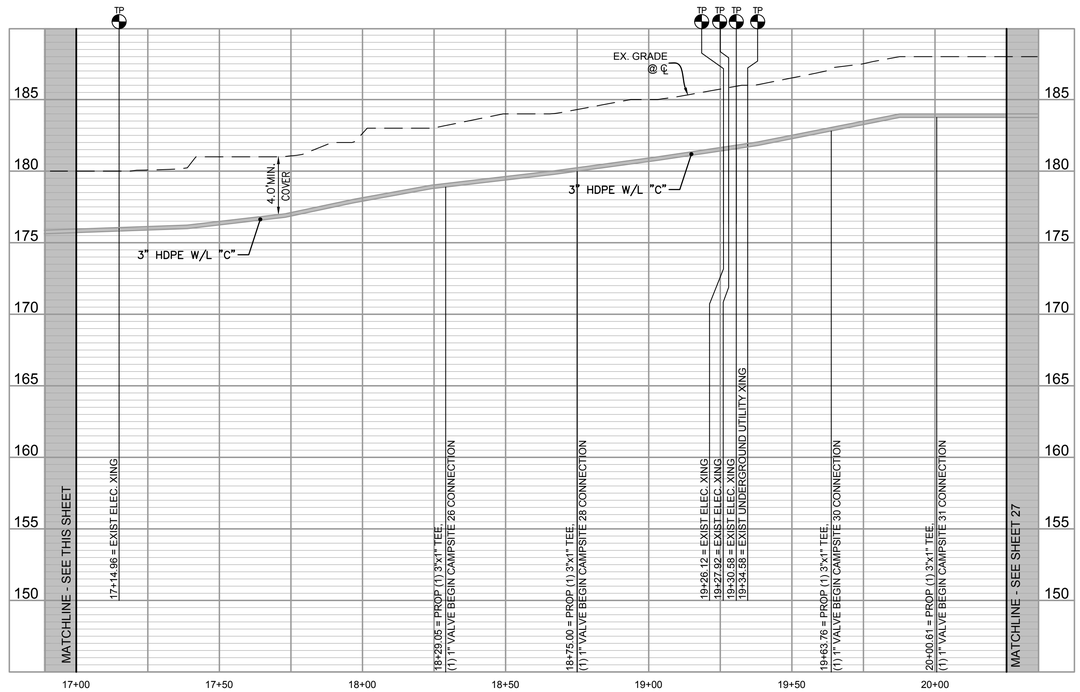






3" WATERLINE "C"



3" WATERLINE "C"

Bowman

Bowman
13461 Sunrise Valley Drive
Suite 500
Herndon, VA 20171
Phone: (703) 464-1000
Fax: (703) 481-9720
bowman.com

WATERLINE PLAN & PROFILE (4 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE	H:	1"=25'
	V:	1"=5'

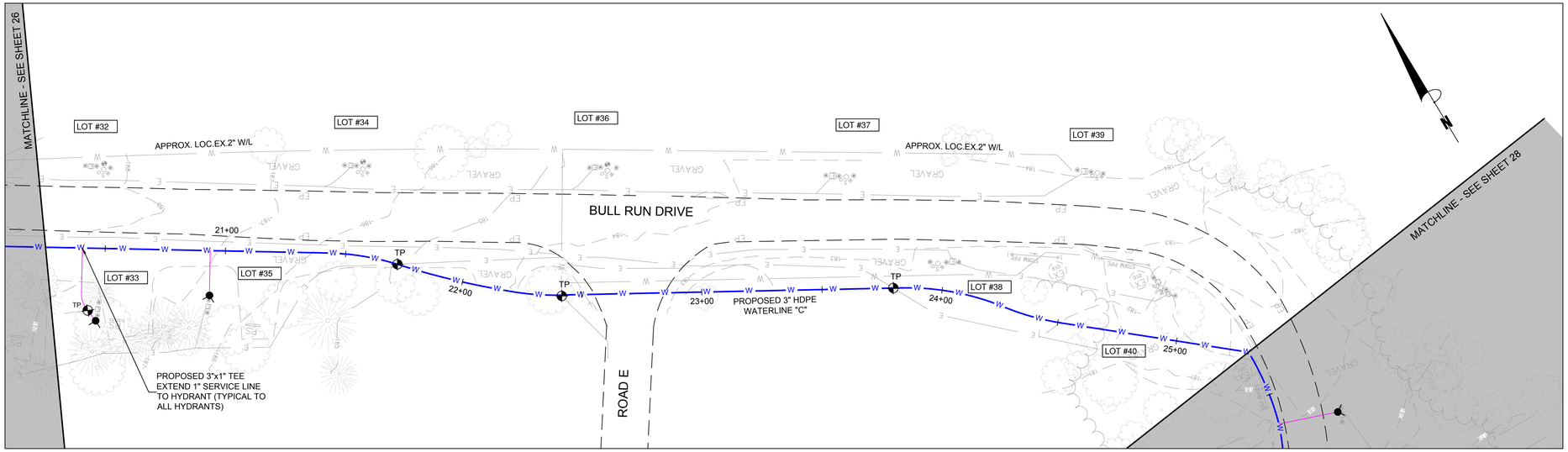
JOB No. 140313-01-003

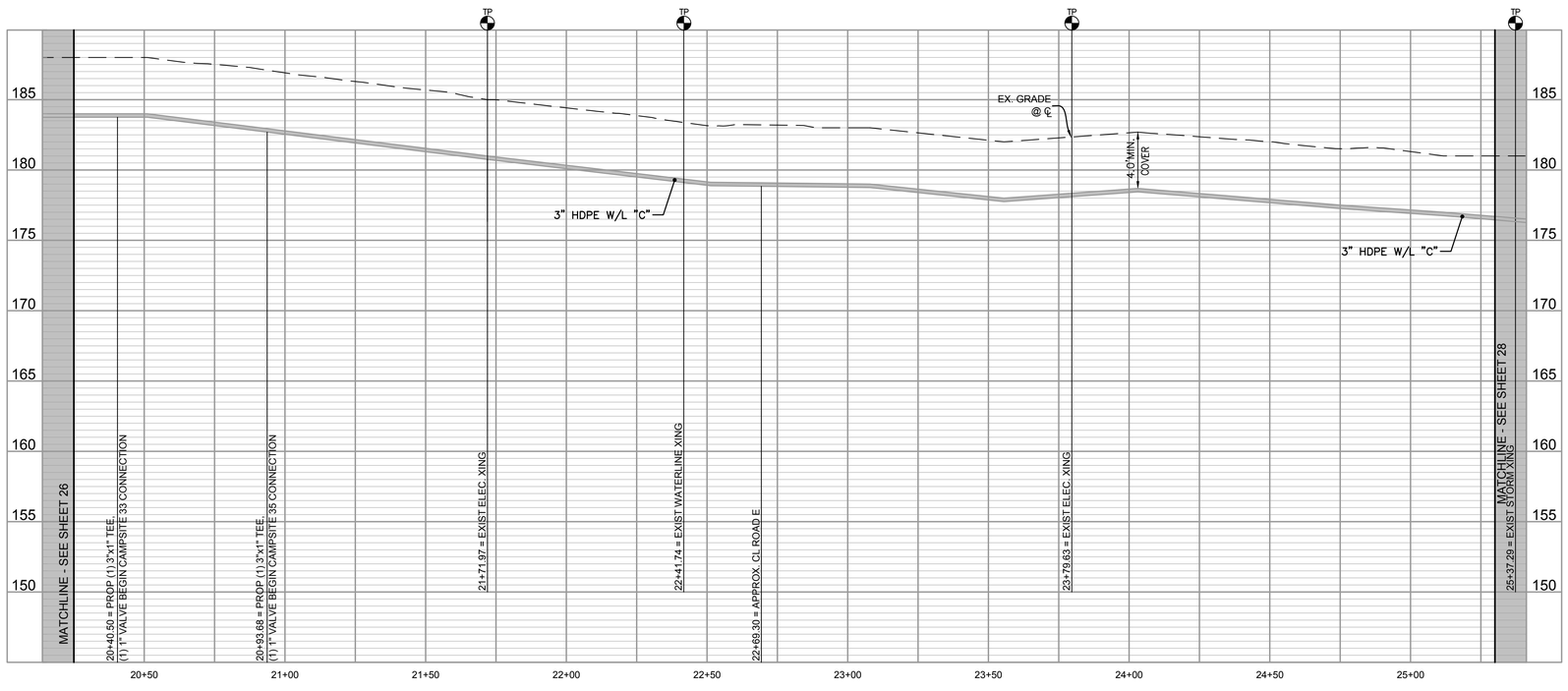
DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 26 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-PNP.dwg





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WATERLINE PLAN & PROFILE (5 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
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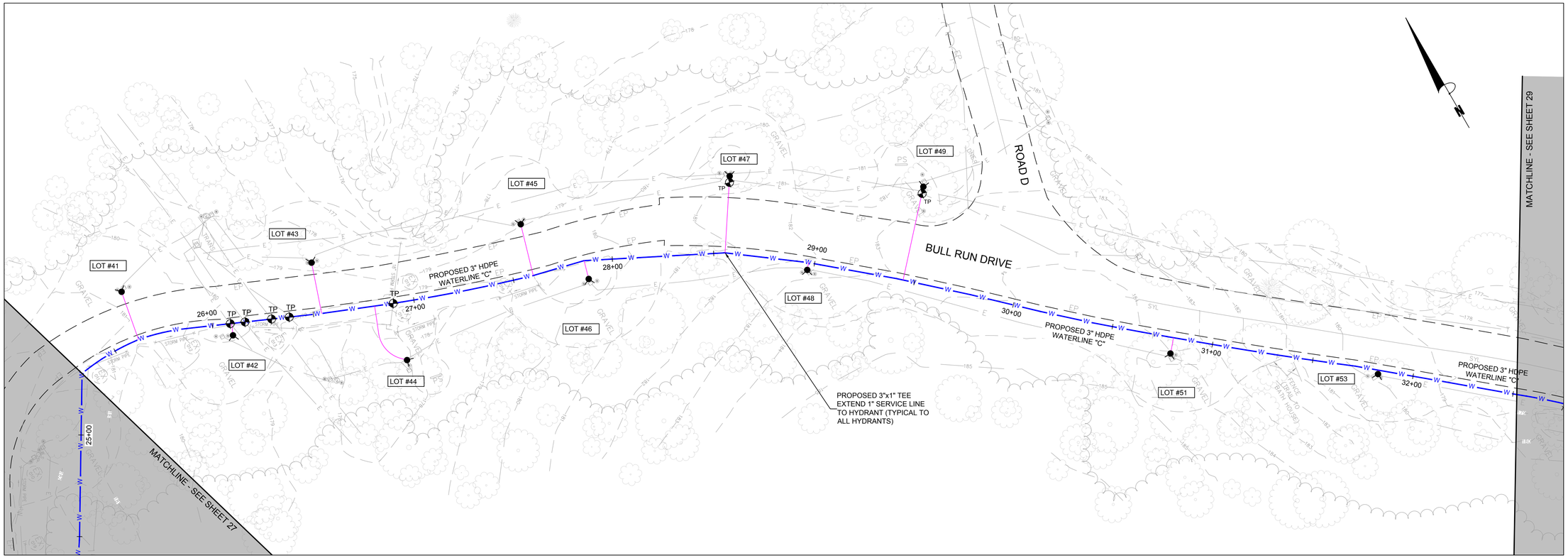
PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE	H: 1"=25' V: 1"=5'
JOB No.	140313-01-003
DATE :	OCTOBER, 2025
FILE No.	140313-D-CP-003
SHEET	27 OF 31

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-PNP.dwg



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WATERLINE PLAN & PROFILE (6 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

FAIRFAX COUNTY, VA

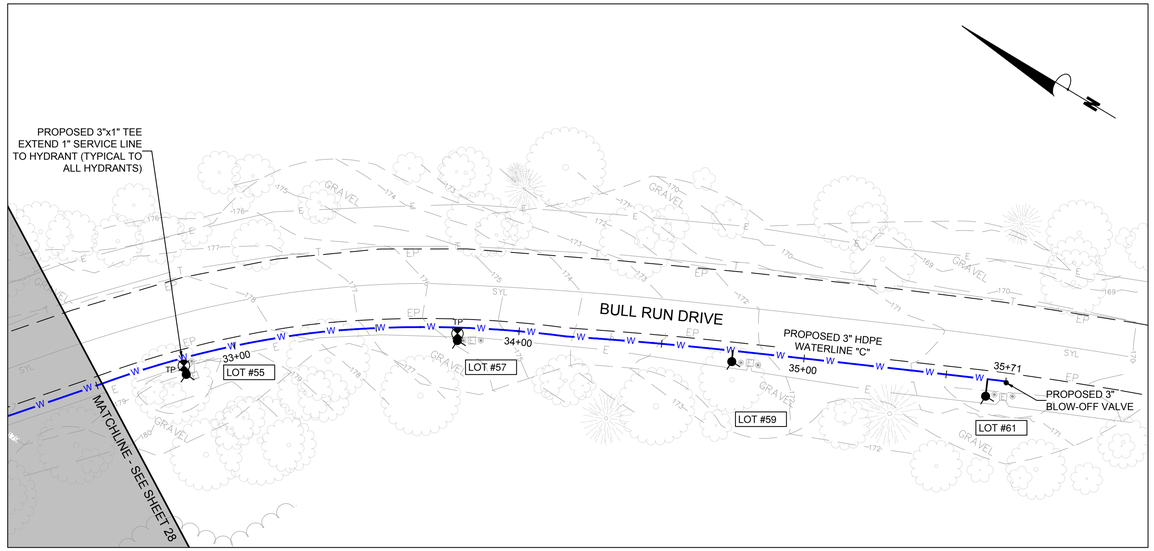
SULLY DISTRICT

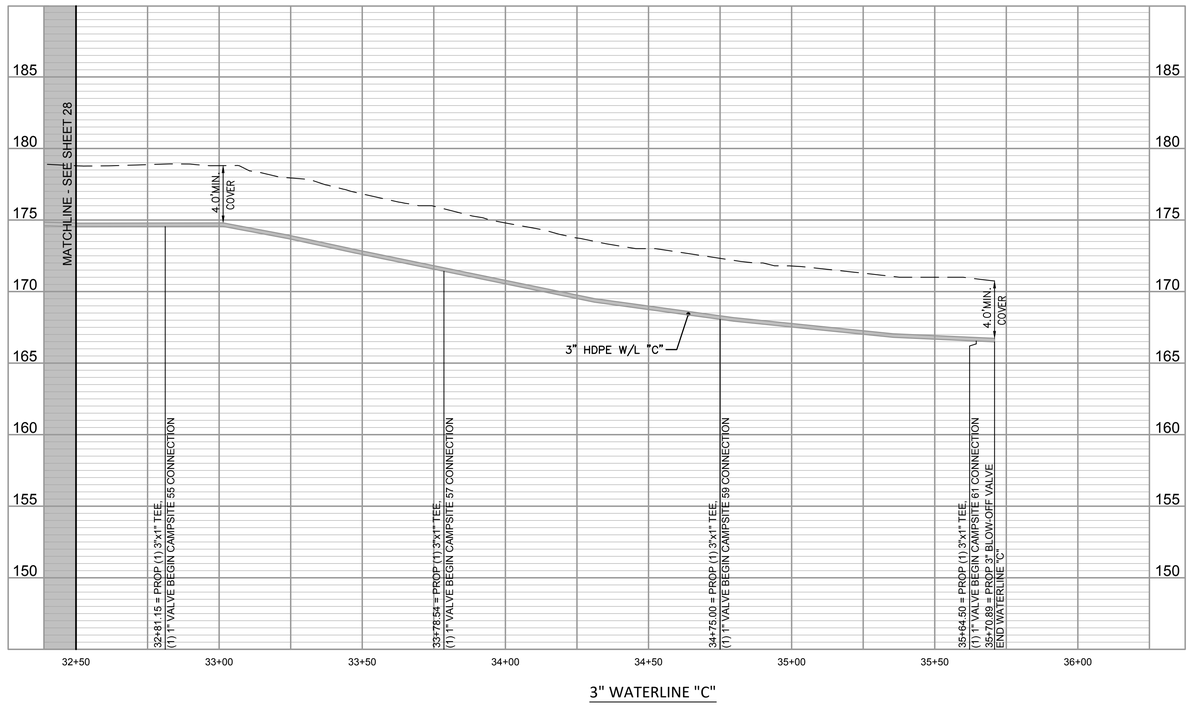
COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION
EP DESIGN	EG DRAWN / MT CHKD
SCALE	H: 1"=25' V: 1"=5'
JOB No. 140313-01-003	
DATE : OCTOBER, 2025	
FILE No. 140313-D-CP-003	
SHEET 28 OF 31	

Cad file name : V:\140313 - Bull Run Campground Waterline Improvemen\140313-01-003 (ENG) - Bull Run Regional Park- Campground Water\Engineering\Engineering Plans\Sheets\140313-D-CP-003-PNP.dwg





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WATERLINE PLAN & PROFILE (7 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
10/20/2025

PLAN STATUS	
DATE	DESCRIPTION

EP	EG	MT
DESIGN	DRAWN	CHKD

SCALE H: 1"=25'
V: 1"=5'

JOB No. 140313-01-003

DATE : OCTOBER, 2025

FILE No. 140313-D-CP-003

SHEET 29 OF 31

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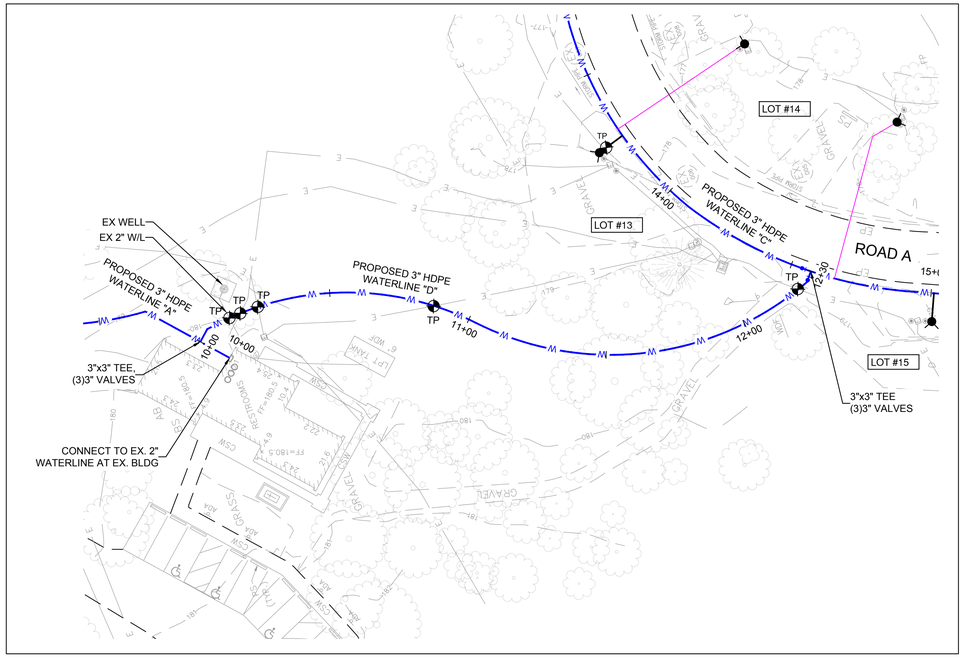

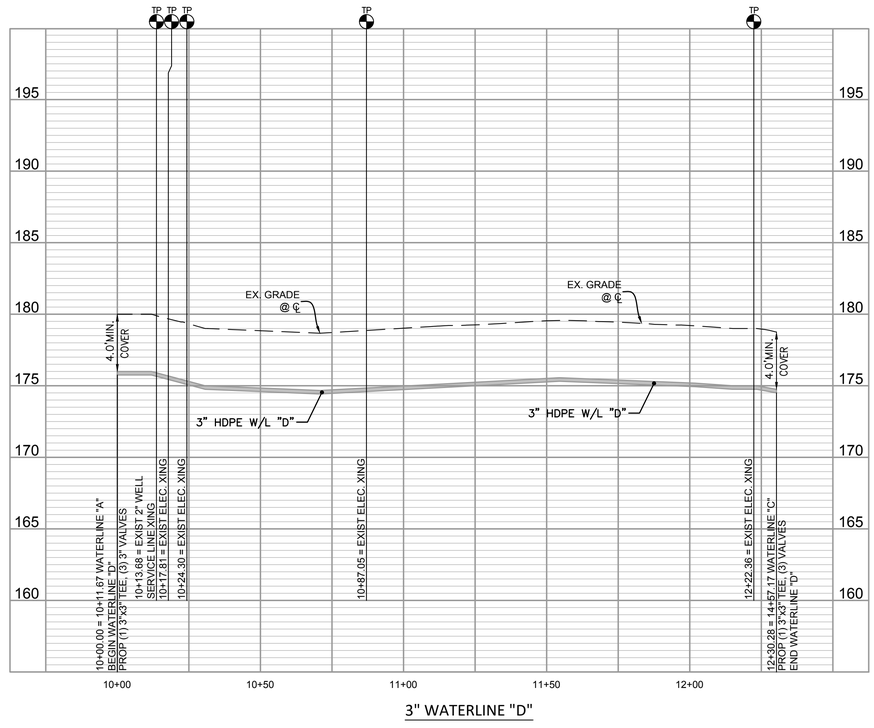

3" WATERLINE "D"

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13461 Sunrise Valley Drive
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Herndon, VA 20171
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Fax: (703) 481-9720
bowman.com

WATERLINE PLAN & PROFILE (8 OF 8)

BULL RUN REGIONAL PARK

CAMPGROUND WATERLINE IMPROVEMENTS

SULLY DISTRICT

FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

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SHEET 30 OF 31

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ADA Compliant
Self-Closing

The Model S4H is an automatic draining, sanitary, frost proof Yard Hydrant, with ASSE 1052 double check backflow preventer. This hydrant is designed for use in public areas such as campgrounds and parks or any location were potable water is required.

Unlike conventional hydrants which drain the water into the ground, the Model S4H employs a reservoir below frost line to contain the water. The hydrant is completely sealed to prevent surface and ground water from entering reservoir or service line. The valve, with it's unique venturi design, removes the stored water along with the water being used.

The Model S4H is equipped with a diverter spout, which allows the hydrant to be operated independently from the backflow preventer. When the hydrant is to be used with a hose, the diverter sleeve is pulled down during flow and water is automatically diverted to the backflow preventer hose connection. The diverter will work with or without a hose attached to the backflow preventer and will automatically release any time the hydrant is shut off.

An important feature of the S4H is easy maintenance. The entire working portion of the hydrant can be removed from the reservoir without any excavation.

SPECIFICATIONS:
HOSE CONNECTION BACKFLOW PREVENTER (BFP)

- NIDEL® Model 37HF
- ASSE 1052 Approved
- Field Testable (see instruction sheet)
- Two Check Valves

OPTIONAL: ASSE 1057 listed - Consists of NIDEL® Model 34HF Single Check Vacuum Breaker
Order example: S4H-Bury Depth-SC

ADA COMPLIANT - Meets ADA requirements for height and 5 lbs. Max operating force.
PATENT - See website for more information: http://www.WoodfordMfg.com/Woodford/patents/
FEMALE INLET - 1" N.P.T.
FINISH - Painted Forest Service brown.
MIN PRESSURE - 20 psi
MAX PRESSURE - 100 psi
MAX TEMPERATURE - 120° F
FLOW RATES (GPM)

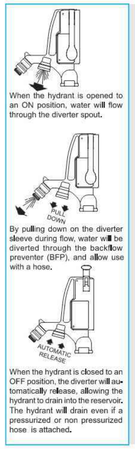
PSI	DIVERTER	BFP
20	7.0	1.5
30	9.0	3.0
40	10.0	5.0
50	11.0	6.0
60	12.0	7.0
70	13.0	8.0
80	14.0	9.0
90	14.5	9.5
100	15.0	10.0

When ordering, specify bury depth.

Rev. 06/16 Form No. S4H.112

WOODFORD

Backflow Protected
Automatic Draining
Freezeless, Self Closing
Sanitary Yard Hydrant
Model S4H



NOTICE
FOR WINTER USE: The hydrant must be operated at full flow, through the diverter, for a minimum of 30 seconds before and after each use to drain the hydrant and prevent freezing.

For Installation / Troubleshooting Instructions go to www.woodfordmfg.com or call 1-800-621-6032

OR APPROVED EQUAL

INSTALLATION, MAINTENANCE AND TROUBLE SHOOTING OF THE WOODFORD MODEL S4H HYDRANT

www.woodfordmfg.com or call 1-800-621-6032

WOODFORD

INSTALLATION
The S4H is designed to be 28 1/2" from grade to the hose connection outlet. The reservoir of the S4H extends below bury depth (frostline). The supply line should be installed deeper than normal bury depth (see overall bury depth schedule).

For convenient maintenance, a shut-off valve ahead of each hydrant is recommended.

WARNING: FLUSH SUPPLY LINE BEFORE CONNECTING HYDRANT.

With the hydrant completely assembled, make the connection to the supply line, tightening with a pipe wrench on the inlet casting (#32).

The bottom of the casing cover (#25) must be 4 1/2" above grade to allow easy access to remove the three nuts.

MAINTENANCE
To remove hydrant from reservoir:
1. Turn off water supply.
2. Remove the three nuts located under the casing cover (#25).
3. Pull hydrant straight up and remove from the reservoir.

To reinstall:
1. Clean and inspect the two venturi O-rings (#36). Replace O-rings if damaged. Lubricate with silicone grease or other non-toxic lubricant that is safe for rubber.
2. Clean cup gasket (#26). Replace if damaged.
3. Insert hydrant in the reservoir. Align the studs with the holes in the flange. Replace and tighten the nuts.
4. Turn on water supply and check for leaks.

TROUBLE SHOOTING
1. WATER LEAKS FROM UNDERNEATH CASING COVER WHILE HYDRANT IS ON.
Tighten nuts (#30) under casing cover (#25). If leak persists, remove hydrant from reservoir and inspect cup gasket (#26) for cracks or damage. Remove cup gasket and measure from top of reservoir flange (#28) to top of reservoir (#31). Dimension should be 1/2". If necessary, adjust flange by threading flange on reservoir. Reinstall hydrant.

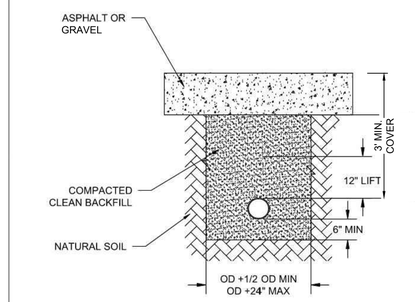
2. WATER LEAKS FROM DIVERTER, OR FILLS RESERVOIR, WHILE HYDRANT IS OFF.
Check linkage adjustment. With the head cover off, lift handle and check if the linkage (#1-5) has a small amount of play and is not binding. Adjust lock nut (#15) and swivel nut (#14) down to increase play. If hydrant continues to leak, valve plug (#37) may be fouled or damaged. Remove hydrant from the reservoir. Hold or lock the handle down in an open position. Remove snap ring (#40), screen (#39) and valve plug guide (#38). Unthread valve plug (#37) with screwdriver. Check for damage or obstruction. Check venturi O-rings (#36) for damage. Reinstall parts and hydrant.

CAUTION
A compressed spring can be dangerous. Be careful not to get fingers caught in linkage parts if spring were to suddenly expand.

OPERATION
The hydrant shall be run for a minimum of 30 seconds before user draws for drinking water.

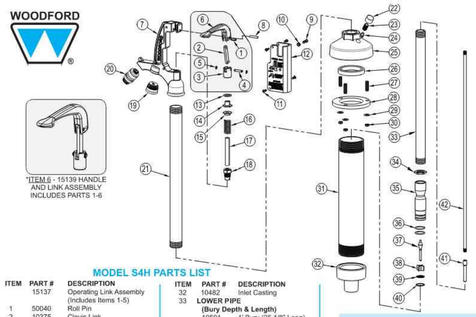
FOR WINTER USE: The hydrant must be operated at full flow, through the diverter, for a minimum of 30 seconds before and after each use to drain the hydrant and prevent freezing.

Rev. 08/10 Form No. S4HINSTAL.104.doc



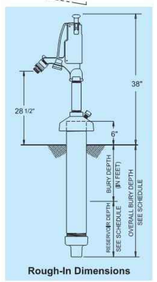
SECTION VIEW

PIPE BEDDING DETAIL	ALLIANCE FOR pepipe
ALLIANCE FOR PE PIPE	Standard Detail INST-1A Scale: NTS REV 5/2020



MODEL S4H PARTS LIST

ITEM	PART #	DESCRIPTION
	15137	Operating Link Assembly (Includes Items 1-5)
1	50040	Roll Pin
2	10375	Cleve Link
3	10376	Clevis
4	10377	Clevis Pin
5	10319	E-Ring (2)
6	15139	*Handle & Link Assembly
7	10552	S4H Head
8	10551	Handle Pin
9	10328	Stop Screw
10	10329	Jam Nut
11	10336	Head Cover Screws (4)
12	15240	Head Cover
13	10307	Washer
14	10308	Swivel Nut
15	10494	Lock Nut
16	10489	Spring
17	10465	Operating Rod Extension
18	15232	Packing Nut Assembly (Includes 10464 Internal & 10537 External O-Rings)
19	15220	Diverter Assembly
20	37HF-BR	37HF Backflow Preventer
21	10496	Upper Pipe
22	10555	Vent Cap
23	10556	3/8" Pipe Nipple
24	15136	Snifter Valve
25	10554	Casing Cover
26	10491	Cup Gasket
27	10534	Threaded Stud (3)
28	10483	Reservoir Flange
29	10332	Flat Washer (3)
30	10331	Hex Nut (3)
31		**RESERVOIR PIPE (Bury Depth & Length)**
	10511	1' Bury (27 7/16" Long)
	10512	2' Bury (41 1/16" Long)
	10513	3' Bury (54 13/16" Long)
	10514	4' Bury (68 7/16" Long)
	10515	5' Bury (82 5/16" Long)
	10516	6' Bury (95 15/16" Long)
	10517	7' Bury (109 11/16" Long)
32	10482	Inlet Casting
33		**LOWER PIPE (Bury Depth & Length)**
	10501	1' Bury (25 1/8" Long)
	10502	2' Bury (38 ½" Long)
	10503	3' Bury (52 ½" Long)
	10504	4' Bury (66 1/8" Long)
	10505	5' Bury (80" Long)
	10506	6' Bury (93 5/8" Long)
	10507	7' Bury (107 3/8" Long)
34	10334	1" Lock Nut
35	15233	Venturi Assembly
36	10321	Venturi O-Rings (2)
37	15134	Valve Plug
38	10322	Valve Plug Guide
39	10469	Inlet Screen
40	10323	Snap Ring #3000
41	10497	Coupling
42		**OPERATING ROD (Bury Depth & Length)**
	10521	1' Bury (47 1/8" Long)
	10522	2' Bury (60 3/4" Long)
	10523	3' Bury (74 1/2" Long)
	10524	4' Bury (88 1/8" Long)
	10525	5' Bury (102" Long)
	10526	6' Bury (115 5/8" Long)
	10527	7' Bury (129 3/8" Long)



Rough-In Dimensions

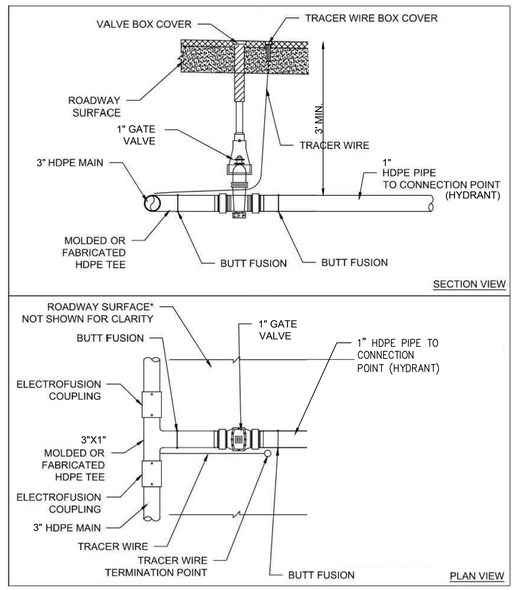
Bury Depth	1'	2'	3'	4' *	5' *	6' *	7' *
Reservoir Depth	12"	13 5/8"	15 3/8"	17"	18 7/8"	20 1/2"	22 1/4"
Overall Bury Depth	24"	37 5/8"	51 3/8"	65"	78 7/8"	92 1/2"	106 1/4"
Weight (lbs)	36	40	45	49	54	58	62

* Must ship by truck line due to length.

For more information contact...
WOODFORD MANUFACTURING COMPANY, LLC.
2121 Waynoka Road, Colorado Springs, Colorado 80915 • **Phone:** (800) 621-6032 • **Fax:** (800) 765-4115
To view our complete product line visit: ***www.woodfordmfg.com*** *or email:* ***sales@woodfordmfg.com***

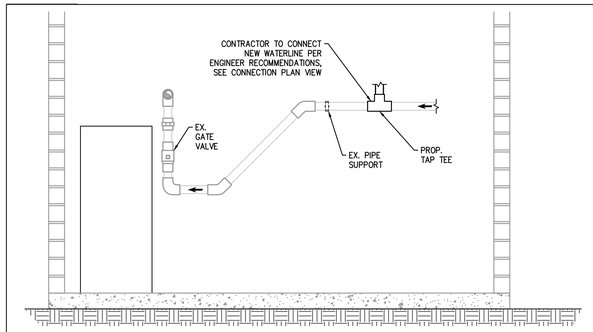
Rev. 06/16 Form No. S4H.112

OR APPROVED EQUAL

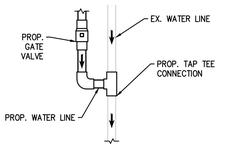


HYDRANT SERVICE CONNECTION DETAIL

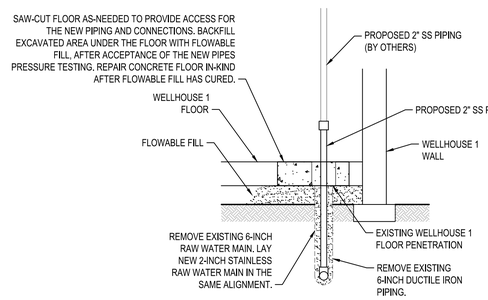
NOTE:
1. CONTRACTOR TO PROVIDE COMPLETE SHOP DRAWING OF PIPE AND APPURTENANCES, MATERIALS, ASSEMBLY, OPERATION OF HYDRANT SERVICE LINE, VALVES, ETC.



WELLHOUSE SECTION VIEW
SCALE: NTS



WELLHOUSE CONNECTION PLAN VIEW
SCALE: NTS



WELLHOUSE CONNECTION SECTION VIEW
SCALE: NTS

NOTE:
CONTRACTOR IS RESPONSIBLE FOR PLUMBING CONNECTIONS WITHIN THE BUILDING. ENGINEERING DETAILS RELATED TO THE PLUMBING CONNECTIONS ARE A RECOMMENDATION NOT REQUIREMENT. THEREFORE THE ENGINEER HOLDS NO RESPONSIBILITY FOR IMPROPER INSTALLATION OF PLUMBING CONNECTIONS. THIS PLAN EXCLUDES MEP SERVICES AND THESE DETAILS ARE PROVIDED FOR ILLUSTRATIVE PURPOSES.

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WATER LINE DETAILS
BULL RUN REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
SULLY DISTRICT
FAIRFAX COUNTY, VA

COUNTY PROJECT NUMBER

DRAFT
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