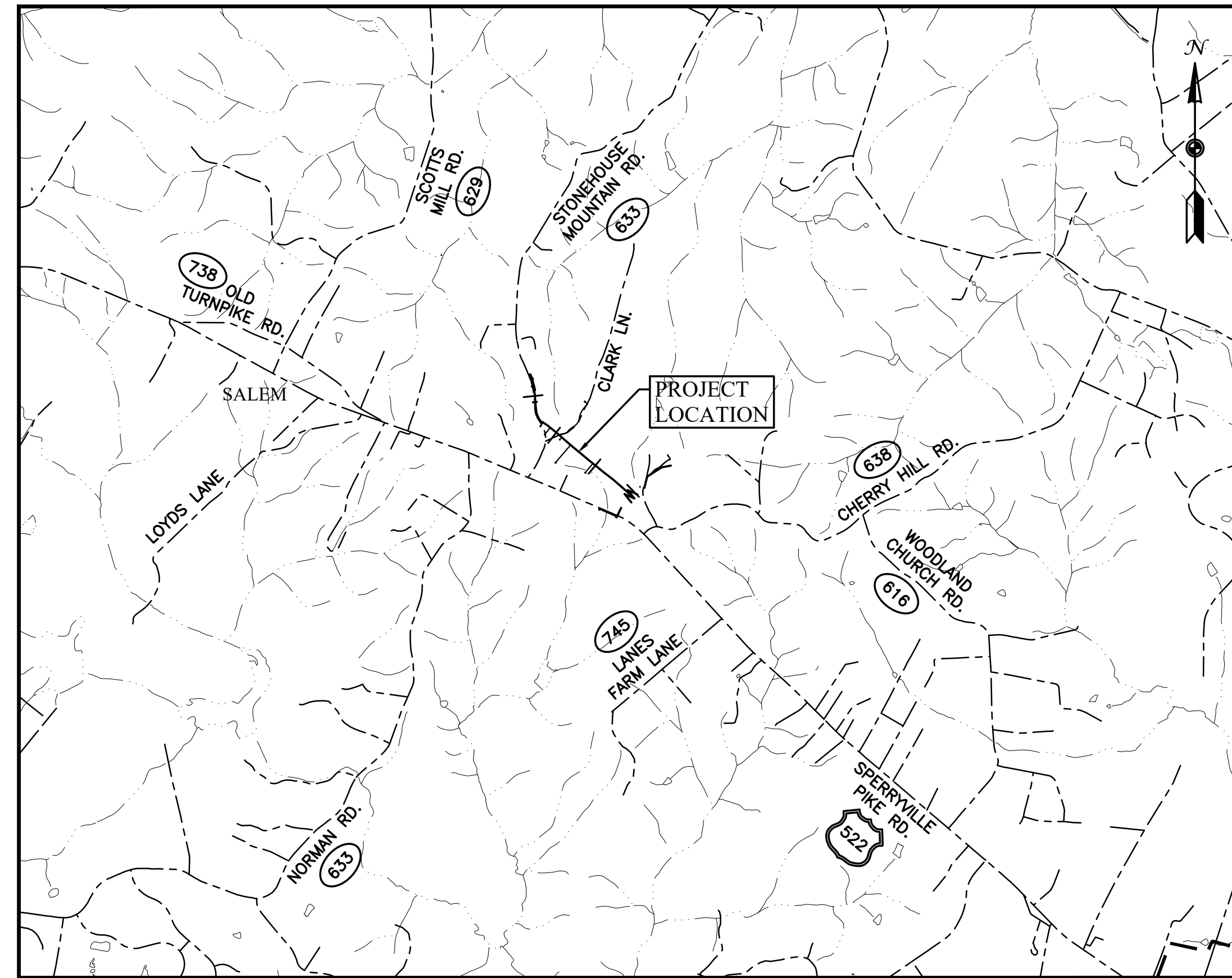


CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA

SHEET NO.	DRAWING NO.	TITLE
1 OF 16	C-1	COVER SHEET
2 OF 16	C-2	ABBREVIATIONS AND LEGEND
3 OF 16	C-3	EXISTING CONDITIONS
4 OF 16	C-4	GENERAL NOTES AND OVERALL LAYOUT
5 OF 16	C-5	NEW 4" WATER LINE-1 PLAN AND PROFILE
6 OF 16	C-6	NEW 4" WATER LINE-1 PLAN AND PROFILE
7 OF 16	C-7	NEW 4" WATER LINE-2 PLAN AND PROFILE
8 OF 16	C-8	NEW 4" WATER LINE-2 PLAN AND PROFILE
9 OF 16	C-9	NEW 4" WATER LINE-2 PLAN AND PROFILE
10 OF 16	C-10	NEW 4" WATER LINE-2 PLAN AND PROFILE
11 OF 16	C-11	DETAILS
12 OF 16	C-12	DETAILS
13 OF 16	C-13	OVERALL TRAFFIC CONTROL PLAN AND NOTES
14 OF 16	C-14	TRAFFIC CONTROL PLAN WORK AREA #1
15 OF 16	C-15	TRAFFIC CONTROL PLAN WORK AREA #2
16 OF 16	C-16	TRAFFIC CONTROL PLAN NOTES AND DETAILS



VICINITY MAP
SCALE: 1"=2000'

SITE DATA

OWNER INFORMATION:
NAME: CULPEPER COUNTY
CONTACT: PAUL HOWARD JR., DIRECTOR OF ENVIRONMENTAL SERVICES
ADDRESS: 118 W DAVIS ST.
 SUITE 101
 CULPEPER, VA 22701
TELEPHONE: (540) 727-3409

ENGINEER INFORMATION:
NAME: WW ASSOCIATES, INC.
CONTACT: HERBERT F. WHITE III, P.E.
ADDRESS: 110 VISTA CENTRE DRIVE, SUITE 1
 FOREST, VA 24551
TELEPHONE: (434) 316-6080
FAX: (434) 978-1444
E-MAIL: HWHITE@WWASSOCIATES.NET

TOWN, STATE: CULPEPER COUNTY, VA

UTILITY CONTACTS

MISS UTILITY DESIGN TICKET NO.: A008402176-00A

GAS: COLUMBIA GAS TRANSMISSION - (CGT908)
 COLUMBIA GAS OF VIRGINIA - (CGV131)
 LOCATOR OR UTILITY OPERATOR MUST CONTACT
 EXCAVATOR AND MUST BE PRESENT DURING EXCAVATION
 FIELD CONTACT: TERRY COLE (304) 357-3468
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 835-7191

ELECTRICITY: DOMINION VA POWER ELEC DI - (DOM410)
 FIELD CONTACT: S & N (804) 608-5640
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (888) 667-3000

RAPPAHANNOCK ELECTRIC - (REC502)
 FIELD CONTACT: UTILIQUEST (703) 754-2116
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540) 891-5945

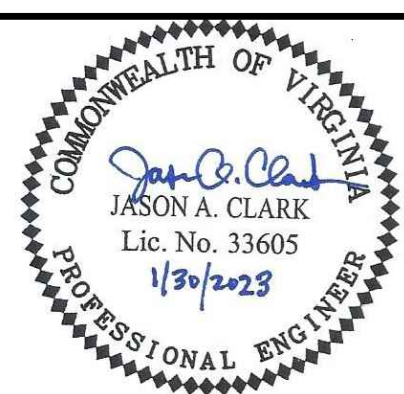
TELEPHONE/FIBER OTIC: VERIZON - (VZN703)
 FIELD CONTACT: UTILIQUEST (703) 754-2116 AND
 DAVE RUSSELL - VERIZON ENGINEERING
 TELEPHONE: (540) 368-8176
 E-MAIL: DAVID.A.RUSSELL@VERIZON.COM
 IN THE EVENT OF DAMAGE TO A FACILITY CALL:
 MIKE JOHNSON - VERIZON CONSTRUCTION
 TELEPHONE: (540) 270-0581
 E-MAIL: MICHAEL.DAVID.JOHNSON@VERIZON.COM

UNITI FIBER - (UNF937)
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (877) 652-2321

CABLE: COMCAST - (CMC502)
 FIELD CONTACT: CABLE PROTECTION SERVICES (804) 562-3861
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 441-6917 EXT. OPT. 1

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NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



BID SET



DESIGNED BY: HFV	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA		SET REV. NO. -
DRAWN BY: KTM	TITLE: COVER SHEET		DRAWING NUMBER: C-1
DIHR BY: JAC	WVA NUMBER: 216038.02E	FILE NAME: 603802EC_CS-1.dwg	SHEET NUMBER: 1 of 16
	DISCIPLINE: CIVIL	SCALE: H: AS SHOWN V: N/A	DATE: 1/30/23

M:\216038 Culpeper County - Cherry Hill Water System\216038.02E Phase 2 Water Line\603802EC_ND-1.dwg

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	HB	HORIZONTAL BEND	RT	RIGHT
AHD	AHEAD	HC	HANDICAP	R/W	RIGHT OF WAY
ARV	AIR RELEASE VALVE	HDPE	HIGH DENSITY POLYETHYLENE	SAN	SANITARY SEWER
BC	BACK OF CURB	HK	HOOK	SBL	SOUTH BOUND LANE
BF	BLIND FLANGE	HWL	HIGH WATER LEVEL	SD	STORM DRAIN
BFF	BASEMENT FINISHED FLOOR	ID	INNER DIAMETER	SDMH	STORM DRAIN MANHOLE
BM	BENCH MARK	INV	INVERT	SL	SLUDGE
BK	BACK	IPF	IRON PIPE FOUND	SQ	SQUARE
BOV	BLOW OFF VALVE	IRF	IRON PIN FOUND	S.S.	STAINLESS STEEL
BW	BOTTOM OF WALL	IRS	IRON PIN SET	SSMH	SANITARY SEWER MANHOLE
CATV	CABLE TELEVISION	JB	JUNCTION BOX	STA	STATION
CG	CURB & GUTTER	LAT	LATERAL	STD	STANDARD
CIP	CAST IRON PIPE	LF	LINEAR FEET	STL	STEEL
CL	CENTER LINE	LP	LAMP POST	SW	SIDEWALK
CMP	CORRUGATED METAL PIPE	LT	LEFT	TBA	TO BE ABANDONED
CO	CLEAN OUT	LWL	LOW WATER LEVEL	TBR	TO BE REMOVED
CONC	CONCRETE	MF	MONUMENT FOUND	TC	TOP OF CURB
COR	BOUNDARY LINE CORNER	MH	MANHOLE	TSV	TAPPING SLEEVE AND VALVE
CPP	CORRUGATED PLASTIC PIPE	NBL	NORTH BOUND LANE	TW	TOP OF WALL
CY	CUBIC YARDS	NC	NORMALLY CLOSED	TYP	TYPICAL
DI	DROP INLET	NF	NAIL FOUND	UG	UNDERGROUND
DIA	DIAMETER	NO	NORMALLY OPEN	UGT	UNDERGROUND TELEPHONE
DIP	DUCTILE IRON PIPE	NS	NAIL SET	UGU	UNDERGROUND UTILITY
EF	EACH FACE	NIC	NOT IN CONTRACT	UON	UNLESS OTHERWISE NOTED
EL	ELEVATION	NTS	NOT TO SCALE	VB	VERTICAL BEND
ELEC	ELECTRIC	OC	ON CENTER	VHD	VEHICLES PER DAY
EOP	EDGE OF PAVEMENT	PE	POLYETHYLENE	W	WATER
EOTL	EDGE OF TRAVEL LANE	PF	PLANT FLOW	WAS	WASTE ACTIVATED SLUDGE
EQPT	EQUIPMENT	PGL	PROFILE GRADE LINE	WL	WATER LINE
EW	EACH WAY	PP	POWER POLE	WM	WATER METER
EX OR EXIST	EXISTING	PROP	PROPOSED	WSE	WATER SURFACE ELEVATION
FF	FINISHED FLOOR	PRV	PRESSURE RELIEF VALVE	WT	WATERTIGHT
FH	FIRE HYDRANT	PS	PLANTED STONE FOUND	WWF	WOVEN WIRE FABRIC
FM	FORCE MAIN	PVC	POLYVINYL CHLORIDE	XING	CROSSING
FL	FLOURIDE	PVMT	PAVEMENT	YDS	YARDS
FOC	FACE OF CURB	RAS	RETURN ACTIVATED SLUDGE	YH	YARD HYDRANT
GALV	GALVANIZED	RCP	REINFORCED CONCRETE PIPE		
GV	GATE VALVE	REQ'D	REQUIRED		

NOTES:
 1. THE SIZE OF THE SYMBOLS MAY VARY FROM THOSE SHOWN.
 2. ALL SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT BE USED.

EX	SYMBOL LEGEND	NEW	EXISTING	LINETYPE LEGEND	NEW
	AIR RELEASE VALVE				BUILDING OVERHEAD
	BENCHMARK/FFE				ADJACENT PROPERTY LINE
	BLOW OFF VALVE				ADJACENT RIGHT-OF-WAY
	BOLLARD				BOUNDARY PROPERTY LINE
	BORE HOLE				BOUNDARY RIGHT-OF-WAY
	BUILDING COLUMN				BUILDING SETBACK
	BUSH				BUSH LINE
	CABLE BOX				CATV OVERHEAD
	CEMETERY				CATV UNDER GROUND
	CONIFEROUS TREE				DRN
	DECIDUOUS TREE				TELEPHONE OVERHEAD
	DRAINAGE INLET GRATE				TELEPHONE UNDER GROUND
	DRILL HOLE				DITCH CENTER LINE
	ELECTRIC PANEL BOX				EASEMENT - CONSTRUCTION AND GRADING
	ELECTRIC PEDESTAL				EASEMENT - SLOPE
	ELECTRIC TRANSFORMER				EASEMENT - SANITARY SEWER
	ELECTRIC MAN HOLE				EASEMENT - STORM
	FIRE DEPARTMENT CONNECTION				EASEMENT - STORMWATER MANAGEMENT
	FIRE HYDRANT				EASEMENT - UTILITIES
	FLAG POLE				EASEMENT - WATER
	GAS MAN HOLE				EFFLUENT OUTFALL
	GAS METER				ELECTRIC OVERHEAD
	GAS VALVE				ELECTRIC UNDER GROUND
	GENERATOR				FENCE BARBED WIRE
	GROUND LIGHT				FENCE CHAIN LINK
	GUY POLE				FENCE WOOD
	HANDICAPPED PARKING				FENCE WOVEN WIRE
	HEAT PUMP				GAS UNDER GROUND
	IRON PIN				GRAVEL
	LIGHT POLE				GUARD RAIL
	MAILBOX				PAVEMENT ASPHALT
	MONITORING WELL				PLANT FLOW
	MONUMENT FOUND				RAILROAD CENTERLINE
	MONUMENT SET				RETURN ACTIVATED SLUDGE
	PANEL POINT				ROAD CENTERLINE
	POWER METER				SANITARY FORCEMAIN
	POWER POLE				SANITARY SEWER
	ROAD SIGN				SLUDGE
	SANITARY CLEAN OUT				STORM SEWER
	SANITARY SEWER MAN HOLE SIGN				STREAM CENTERLINE
	SPRINKLER HEAD				TOP OF BANK
	STORM DRAIN MAN HOLE				TOPO MAJOR CONTOUR
	TRAFFIC LIGHT POLE				TOPO MINOR CONTOUR
	TELEPHONE MAN HOLE				TREELINE
	TELEPHONE PEDESTAL				UTILITY OVERHEAD
	TELEPHONE POLE				UTILITY UNDER GROUND
	TELEPHONE JUNCTION BOX				WASTE ACTIVATED SLUDGE
	TEST PIT				WATER LINE
	TRAFFIC CONTROL BOX				WATER LINE - BACKWASH
	TRAFFIC JUNCTION BOX				WATER LINE - COLD
	TRAVERSE				WATER LINE - DRAIN
	UTILITY MARKER POST				WATER LINE - FILTER BACKWASH WASTE
	UTILITY POLE				WATER LINE - FILTER EFFLUENT
	VENT PIPE				WATER LINE - FILTERED
	WATER MAN HOLE				WATER LINE - HOT
	WATER METER				WATER LINE - NON-POTABLE
	WATER SURFACE ELEVATION				WATER LINE - PRIVATE
	WATER VALVE				WATER LINE - RAW
	WELL				WATER LINE - REVISED
	YARD GRATE				WETLAND LIMITS

NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



DESIGNED BY:	HW
DRAWN BY:	KTM
DIHR BY:	JAC
WVA NUMBER:	216038.02E

PROJECT:	CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA		
TITLE:	ABBREVIATIONS AND LEGEND		
FILE NAME:	603802EC_ND-1.dwg	DISCIPLINE:	CIVIL
SCALE:	H: N/A V: N/A	DATE:	1/30/23

SET REV. NO.	-
DRAWING NUMBER:	C-2
SHEET NUMBER:	2 of 16

LEGEND

EnC3 = SOIL BOUNDARY
MvB

SOIL DESCRIPTIONS

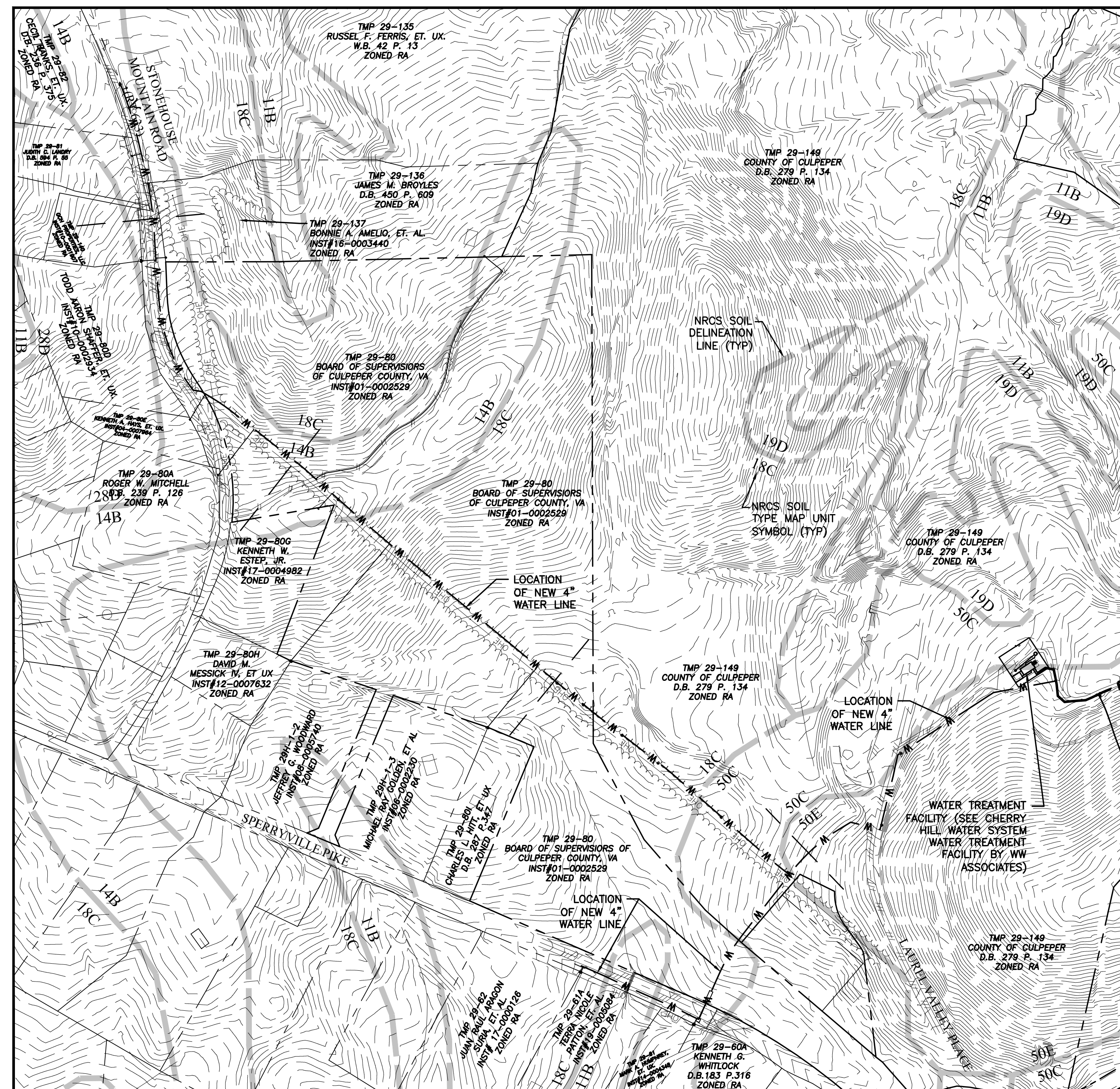
11B - CODORUS AND MEADOWVILLE SOILS,
2 TO 7 PERCENT SLOPES, OCCASIONALLY FLOODED,
K FACTOR, WHOLE SOIL RATING .37
K FACTOR, ROCK FREE RATING .37
HYDROLOGIC SOIL GROUP B/D

14B - CULPEPER SANDY LOAM,
2 TO 7 PERCENT SLOPES,
K FACTOR, WHOLE SOIL RATING .28
K FACTOR, ROCK FREE RATING .28
HYDROLOGIC SOIL GROUP C

18C - EDMONT-CULPEPER COMPLEX,
7 TO 15 PERCENT SLOPES,
K FACTOR, WHOLE SOIL RATING .28
K FACTOR, ROCK FREE RATING .28
HYDROLOGIC SOIL GROUP C

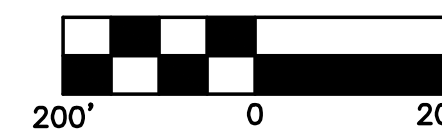
50C - RHODISS-MINE RUN COMPLEX,
7 TO 15 PERCENT SLOPES,
K FACTOR, WHOLE SOIL RATING .24
K FACTOR, ROCK FREE RATING .24
HYDROLOGIC SOIL GROUP A

50E - RHODISS-MINE RUN COMPLEX,
25 TO 45 PERCENT SLOPES,
K FACTOR, WHOLE SOIL RATING .24
K FACTOR, ROCK FREE RATING .24
HYDROLOGIC SOIL GROUP A



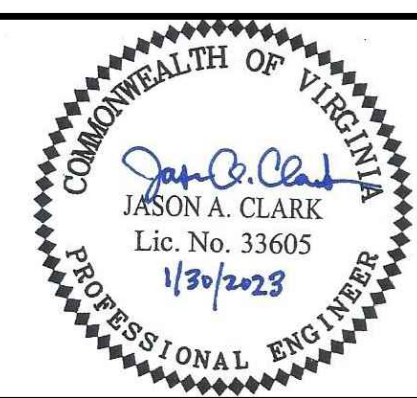
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GRAPHIC SCALE MUST BE USED

SCALE: 1" = 200'



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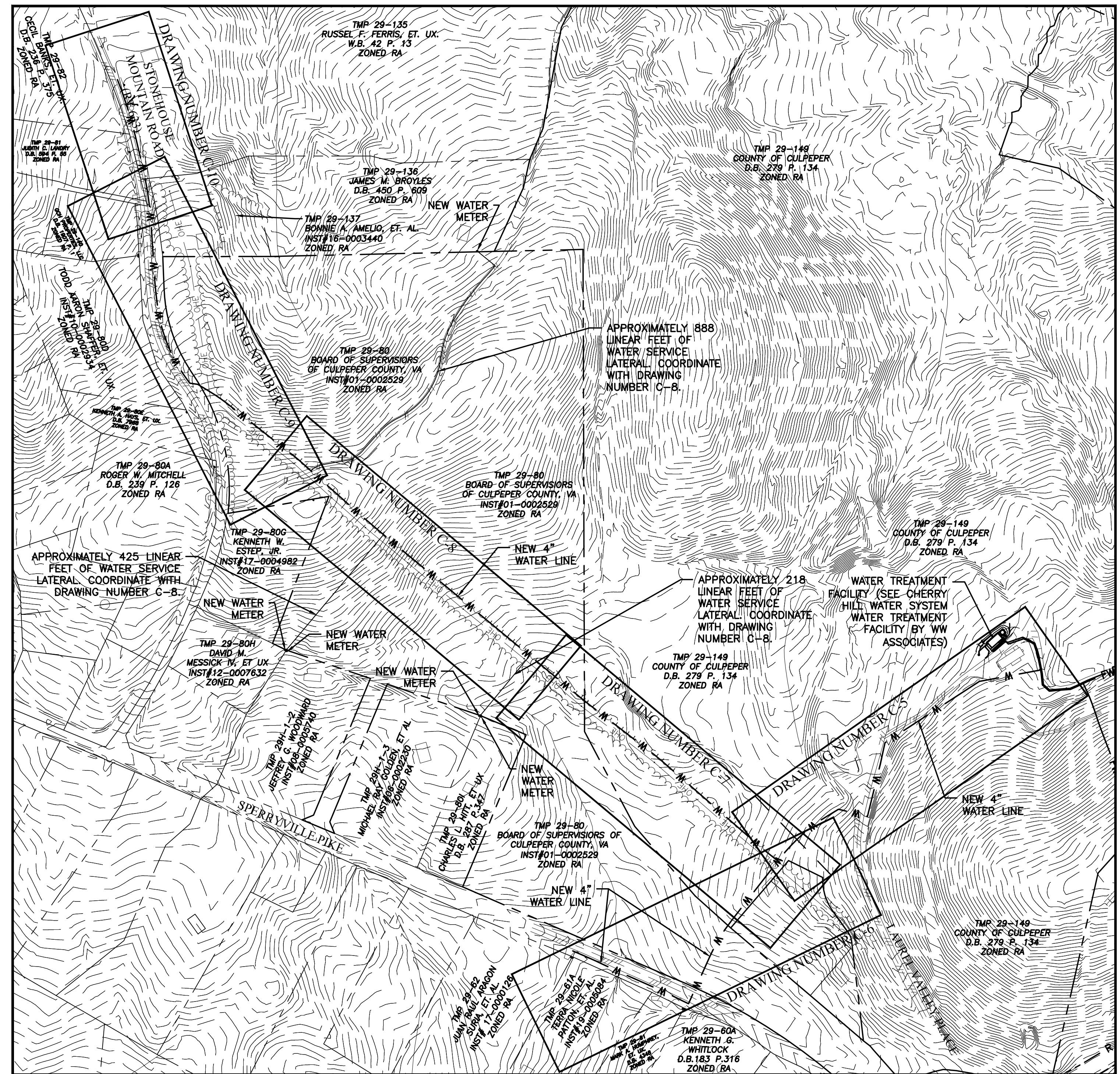
NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



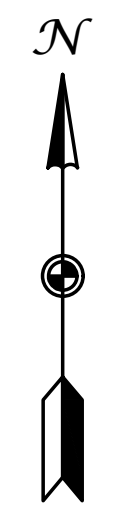
DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA		SET REV. NO. -
DRAWN BY: KTM	TITLE: EXISTING CONDITIONS		DRAWING NUMBER: C-3
DIHR BY: JAC	WVA NUMBER: 216038.02E	FILE NAME: 603802EC_EX-1.dwg	SHEET NUMBER: 3 of 16
DISCIPLINE: CIVIL	SCALE: H: 1"=200' V: N/A	DATE: 1/30/23	

GENERAL NOTES

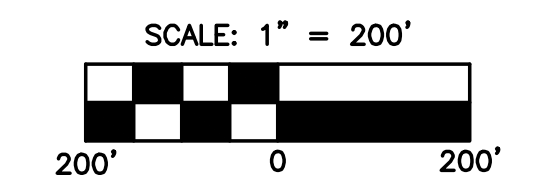
- PHYSICAL FEATURES ARE BASED ON FIELD SURVEY PERFORMED BY WW ASSOCIATES IN APRIL 2020. UNDERGROUND UTILITIES ARE BASED ON MISS UTILITY TICKET #A008402178-00A. HORIZONTAL POSITION IS BASED ON VIRGINIA STATE GRID, NORTH ZONE, NAD-83(93). VERTICAL ELEVATION IS BASED ON NAVD88 DATUM. PROPERTY BOUNDARIES AND RIGHT OF WAYS ARE BASED ON COURTHOUSE RECORD DATA.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE DRAWINGS AND THE LATEST EDITION OF THE VIRGINIA DEPARTMENT OF HEALTH (VDH) WATERWORKS REGULATIONS AND THE CULPEPER COUNTY SERVICE AUTHORITY'S DESIGN AND CONSTRUCTION STANDARDS. ALL WORK IN VDOT RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS. ALL WORK IN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF THE VIRGINIA WORK AREA PROTECTION MANUAL.
- THE LOCATION, DIMENSIONS, AND ELEVATION OF EXISTING STRUCTURES, PIPING, AND UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE DATA AND ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DATA IN THE FIELD PRIOR TO CONSTRUCTION TO HIS OWN SATISFACTION. THE DIAMETERS OF EXISTING PIPING ARE APPROXIMATE AND SHALL BE VERIFIED PRIOR TO PERFORMING FINAL CONNECTIONS. THE CONTRACTOR SHALL PERFORM NON-DESTRUCTIVE AIR VACUUM POTHOLE WORK EVERY 50 FEET AND AT THE DISCRETION OF WW ASSOCIATES, INC. AND PROVIDE LOCATION SERVICE AT NO ADDITIONAL COST TO THE OWNER AS REQUIRED TO AVOID CONFLICTS WITH EXISTING UTILITIES OR STRUCTURES. EXISTING UNDERGROUND UTILITIES ARE BASED ON MARKS PROVIDED BY MISS UTILITY OF VIRGINIA. CONTACT MISS UTILITY (TELEPHONE NO. 811) 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION TO HAVE UTILITIES MARKED.
- THE FLOOD INSURANCE RATE INDEX MAP FOR CULPEPER COUNTY, VIRGINIA (COMMUNITY PANEL No. 510041-0125-C), DATED JUNE 18, 2007, INDICATES THAT THE PROJECT SITE LIES WITHIN FEMA DEFINED FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- CHANGES IN NEW PIPING FROM THAT SHOWN ON THE DRAWINGS, IN ORDER TO AVOID CONFLICTS WITH EXISTING ELECTRICAL SYSTEMS, MECHANICAL SYSTEMS, EQUIPMENT, STRUCTURES, OR EXISTING PIPING AND UTILITIES, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHETHER THE CONFLICTS ARE SHOWN OR ARE DISCOVERED IN THE FIELD. LIKEWISE, ALTERATIONS TO EXISTING ELECTRICAL SYSTEMS, MECHANICAL SYSTEMS, EQUIPMENT, OR EXISTING PIPING IN ORDER TO ACCOMMODATE NEW PIPING AND EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER AND THE ENGINEER MUST APPROVE ALL SUCH CHANGES.
- VALVES OR MANHOLES SHALL NOT BE LOCATED IN GRAVEL SURFACED ROADWAY AREAS.
- MAINTAIN AND PROTECT ALL OVERHEAD AND UNDERGROUND ELECTRICAL, TELEPHONE, CABLE TV, WATER, GAS, AND ALL OTHER UTILITIES DURING ENTIRE CONSTRUCTION PERIOD.
- CONTRACTOR SHALL BE INFORMED AND COMPLY WITH THE VIRGINIA OVERHEAD HIGH VOLTAGE LINE SAFETY ACT. ANY COSTS TO COVER LINES OR DISCONNECT SERVICE TO NEARBY POWER LINES SHALL BE AT THE CONTRACTOR'S EXPENSE.
- PROVIDE RESTRAINING DEVICES FOR BURIED PRESSURE PIPING AT ALL VALVES, FITTINGS, AND DEAD ENDS AS SPECIFIED IN THE PROJECT MANUAL. IF MECHANICAL RESTRAINING DEVICES ARE USED, INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- ALL WATER MAIN PIPING SHALL MAINTAIN A MINIMUM COVER OF 42 INCHES UNLESS OTHERWISE INDICATED. WATER MAIN SHALL BE INSTALLED AS REQUIRED TO ALLOW FOR MINIMUM 18" VERTICAL SEPARATION BETWEEN NEW WATER MAIN PIPING, EXISTING UTILITIES, FOOTINGS, AND STRUCTURES UNLESS OTHERWISE INDICATED. A POSITIVE GRADE SHALL BE MAINTAINED FOR THE VERTICAL ALIGNMENT OF ALL WATER MAIN PIPING TO ELIMINATE THE FORMATION OF AIR POCKETS.
- ISOLATION VALVES AND VALVE BOXES: PROVIDE AN EXTENDED VALVE STEM WHERE DEPTH TO TOP OF VALVE EXCEEDS 5 FEET.
- THE CONTRACTOR SHALL PROVIDE VERTICAL PIPE FITTINGS, CONNECTING PIECES AND TRANSITION PIECES AS REQUIRED FOR COMPLETE AND OPERABLE PIPE INSTALLATIONS AND TO MAKE FINAL PIPING CONNECTIONS. VERTICAL FITTINGS ARE NOT SHOWN ON THE DRAWINGS.
- VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED FOR ALL DISTURBED AREAS IN ACCORDANCE WITH ALL LOCAL REQUIREMENTS AND THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION AND BEFORE EXCAVATION BEGINS.
- DISTURBED AREA FOR THIS PROJECT WILL BE LESS THAN 10,000 SF. INSTALL SILT FENCE AS NEEDED ON DOWNHILL SIDE OF PIPE TRENCHES AND AT OTHER LOCATIONS TO PREVENT SEDIMENT FROM ENTERING DRAINAGEWAYS.
- CONSTRUCTION LIMITS SHALL INCLUDE ALL DISTURBED AREAS. ALL DISTURBED AREAS SHALL BE SEEDED AND PROVIDED WITH EROSION CONTROL DURING AND AT THE END OF CONSTRUCTION.
- UNLESS OTHERWISE NOTED, REMOVE AND DISPOSE OF ALL ITEMS INDICATED TO BE DEMOLISHED OFF THE OWNER'S PROPERTY IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CONFINED SPACE ENTRY REGULATIONS.
- THE CONTRACTOR SHALL BE FULLY LIABLE FOR REPAIR OF ANY DAMAGES ON PUBLIC OR PRIVATE PROPERTY CAUSED BY HIS CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REPLACE ALL DISTURBED SURFACES IN KIND, INCLUDING PAVEMENT, STONE, DITCHES, MAILBOXES, STORM CULVERTS, DRIVEWAY CULVERTS, SIGNS, CURBS, GUARDRAIL, FENCING, STRUCTURES, LANDSCAPING, PLANTERS, SHRUBS, AND OTHER PHYSICAL IMPROVEMENTS, ETC. CONTRACTOR SHALL REPLACE ROADSIDE SHOULDERS, DITCHES, FILL SLOPES/CUTS TO STABILIZED PRECONSTRUCTION CONDITIONS. ROADSIDE TREES SHALL BE PROTECTED AS MUCH AS POSSIBLE. IF TREES ARE DAMAGED, THEY SHALL BE TRIMMED OR REPAIRED TO PRESERVE THEIR LIFE. PRIVATE ENTRANCE CULVERTS SHALL BE MAINTAINED FOR POSITIVE ROADSIDE DRAINAGE. MINIMUM CULVERT SIZE SHALL BE 15" REGARDLESS OF SIZE OF EXISTING CULVERT.
- ALL ASPHALT DRIVEWAYS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SAWCUT AND REPLACED PER RESIDENTIAL DRIVEWAY ASPHALT PAVEMENT REPAIR DETAIL. ALL GRAVEL DRIVEWAYS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED PER GRAVEL DRIVEWAY REPAIR DETAIL.
- THE CONTRACTOR SHALL PROTECT EXISTING PAVED SURFACES. ANY DAMAGED PAVEMENT SHALL BE REPAIRED TO MATCH EXISTING. TRACKED EQUIPMENT WILL NOT BE ALLOWED ON PAVED SURFACES. ANY PAVEMENT MARKINGS DAMAGED BY CONSTRUCTION SHALL BE REPLACED IN KIND BY A PAVEMENT MARKING CONTRACTOR FROM THE VDOT PRE-QUALIFICATION LIST.
- ALL PROPERTY PINS AND VDOT MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A LAND SURVEYOR LICENSED BY THE COMMONWEALTH OF VIRGINIA.
- MAINTAIN TRAFFIC TO ALL PROPERTIES AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. WHENEVER CONSTRUCTION IS IN OR ADJACENT TO VDOT OR LOCAL STREETS, THE CONTRACTOR SHALL PROVIDE TRAFFIC SIGNS, DRUMS, AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS AS PUBLISHED BY THE U.S. DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, THE VIRGINIA SUPPLEMENT TO MUTCD, AND THE VIRGINIA WORK AREA PROTECTION MANUAL.
- CONSTRUCT EXCAVATION SUPPORT SYSTEMS AS REQUIRED BY OSHA AND U.S. ARMY CORPS OF ENGINEERS SAFETY & HEALTH REQUIREMENTS MANUAL EM 385-1-1, SECTIONS 25 A THROUGH E, AND WHERE INDICATED ON THE DRAWINGS TO ADEQUATELY SUPPORT EXISTING SOIL AND ADJACENT STRUCTURES DURING EXCAVATION ACTIVITIES.
- SURFACE DRAINAGE: COMPLETELY DRAIN CONSTRUCTION SITE DURING PERIODS OF CONSTRUCTION TO KEEP SOIL MATERIALS SUFFICIENTLY DRY. PROVIDE TEMPORARY DITCHES, SWALES, AND OTHER DRAINAGE FEATURES AND EQUIPMENT AS REQUIRED TO MAINTAIN DRY SOILS. WHEN UNSUITABLE WORKING PLATFORMS FOR EQUIPMENT OPERATION AND UNSUITABLE SOIL SUPPORT FOR SUBSEQUENT CONSTRUCTION FEATURES DEVELOP, REMOVE UNSUITABLE MATERIAL AND PROVIDE NEW SOIL MATERIAL AS REQUIRED.
- SUBSURFACE DRAINAGE: CONSIDER SITE SURFACE AND SUBSURFACE CONDITIONS, AVAILABLE SOIL, AND HYDROLOGICAL DATA. REMOVE WATER BY BENCHING, SUMP PUMPING, DEEP WELL PUMPING, OR OTHER METHODS TO PREVENT SOFTENING OF SURFACES EXPOSED BY EXCAVATION. USE FILTERS ON DEWATERING DEVICES TO PREVENT REMOVAL OF FINES FROM SOIL. PROVIDE EROSION CONTROL AT OUTLET OR PIPING TO PREVENT EROSION. OPERATE DEWATERING SYSTEM CONTINUOUSLY UNTIL CONSTRUCTION WORK BELOW EXISTING WATER LEVELS IS COMPLETE.
- TREES TO REMAIN IN PLACE SHALL BE ROPED OFF PRIOR TO CONSTRUCTION TO KEEP EQUIPMENT AWAY FROM ROOT SYSTEMS. THE CONTRACTOR SHALL COORDINATE TREE REMOVAL AND DIRECTIONAL DRILLING ACTIVITIES BENEATH TREES WITH INDIVIDUAL PROPERTY OWNERS PRIOR TO CONSTRUCTION. DIRECTIONAL DRILLING SHALL BE PERFORMED AS FAR AWAY FROM TREE TRUNKS AS POSSIBLE, PREFERABLY OUTSIDE THE BRANCHES OR CROWN SPREADS OF TREES, TO REDUCE THE AMOUNT OF ROOT AREA DAMAGED.
- DEFLECT PIPE JOINTS AS REQUIRED TO MAINTAIN WATER LINE ALIGNMENT AS SHOWN.
- WATER METER LOCATIONS AND WATER SERVICE LATERAL SIZES SHOWN ON THE DRAWINGS ARE APPROXIMATE. PROVIDE NEW SERVICE LATERALS AND WATER METERS AS REQUIRED FROM THE NEW MAIN TO PROVIDE COMPLETE AND OPERABLE WATER SERVICES TO ALL CUSTOMERS, WHETHER INDICATED ON THE DRAWINGS OR NOT. NEW WATER METERS SHALL BE PROVIDED BY THE OWNER AND HOUSED INSIDE A METER BOX. ALL WATER SERVICE CONNECTIONS SHALL BE APPROVED BY AND COORDINATED WITH THE PROPERTY OWNER AND THE OWNER. WATER METER AND WATER SERVICE PRODUCTS/APPURTENANCES SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE LATEST COUNTY WATER AND SEWER AUTHORITY STANDARDS UNLESS OTHERWISE INDICATED.
- CONTRACTOR SHALL PROVIDE NEW ASPHALT FOR PATCHING. PROVIDE ADDITIONAL ASPHALT TO MAINTAIN POSITIVE DRAINAGE. PROVIDE MILLED EDGE FOR SMOOTH TRANSITIONS.
- PROPOSED MANHOLE RIM ELEVATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL CONFIRM ACTUAL GRADE ELEVATIONS AND ADJUST RISERS TO SET RIMS TO FINISHED GRADE. MANHOLES NOT IN PAVEMENT SHALL BE LOCATED TO PREVENT INTRUSION OF STORM WATER INTO MANHOLE COVERS. ALL VALVE AND METER BOXES SHALL BE SET TO FINISHED GRADE.
- ALL EXISTING DRAINAGE RELATED FEATURES WITHIN PUBLIC RIGHT-OF-WAY MUST BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF THE DRAINAGE FEATURES TO THE COUNTY'S AND VDOT'S SATISFACTION. REGRADE ALL DITCHES AND LINE THEM WITH SOIL STABILIZATION BLANKETS/MATTING AS SPECIFIED IN SPEC. SECTION 02936.
- THE CONTRACTOR SHALL PROVIDE (5) SAMPLING STATIONS AS PART OF THE BID FOR THE PHASE II WATER LINE IMPROVEMENTS. THE CONTRACTOR SHALL INSTALL SAMPLING STATIONS AT LOCATIONS AS DIRECTED BY THE OWNER.



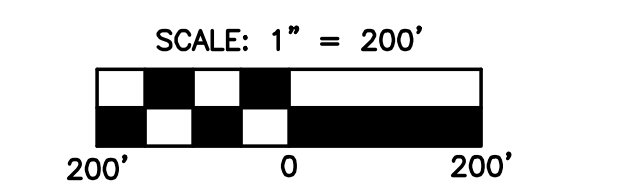
OVERALL LAYOUT



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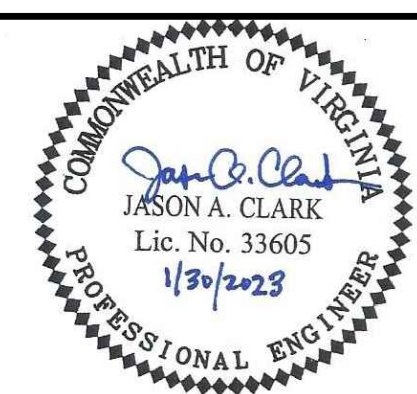


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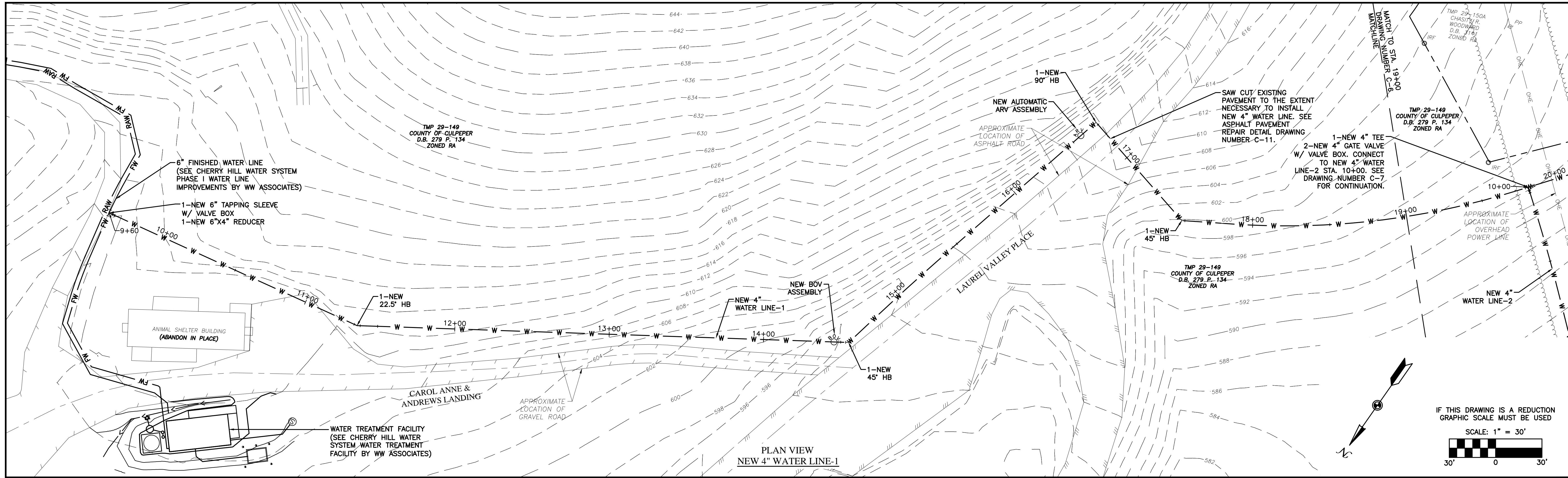


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NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE

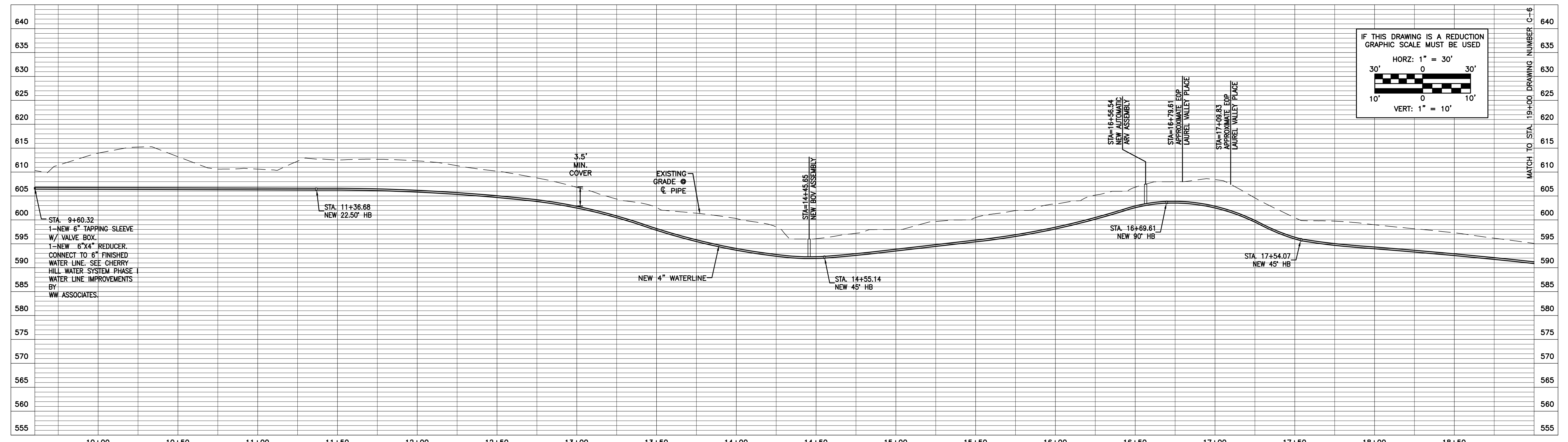


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DRAWN BY: KTM	TITLE: GENERAL NOTES AND OVERALL LAYOUT	DRAWING NUMBER: C-4
DIHR BY: JAC	WVA NUMBER: 216038.02E	SHEET NUMBER: 4 of 16
FILE NAME: 603802EC_OV-1.dwg	DISCIPLINE: CIVIL	DATE: 1/30/23
SCALE: 1"=200'		



PLAN VIEW
NEW 4" WATER LINE-1

IF THIS DRAWING IS A REDUCTION
GRAPHIC SCALE MUST BE USED
SCALE: 1" = 30'

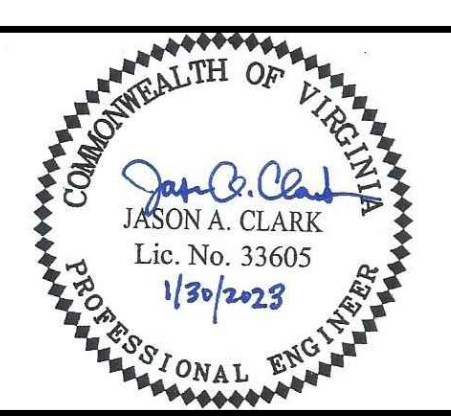


PROFILE VIEW
NEW 4" WATER LINE-1

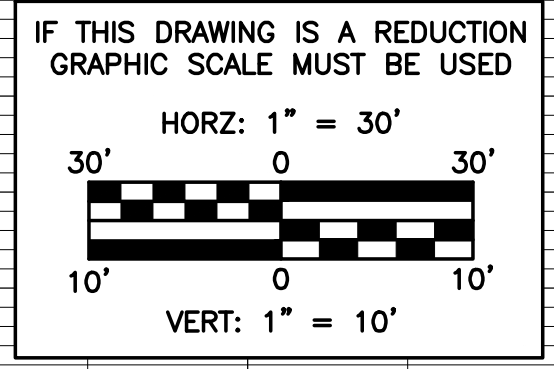
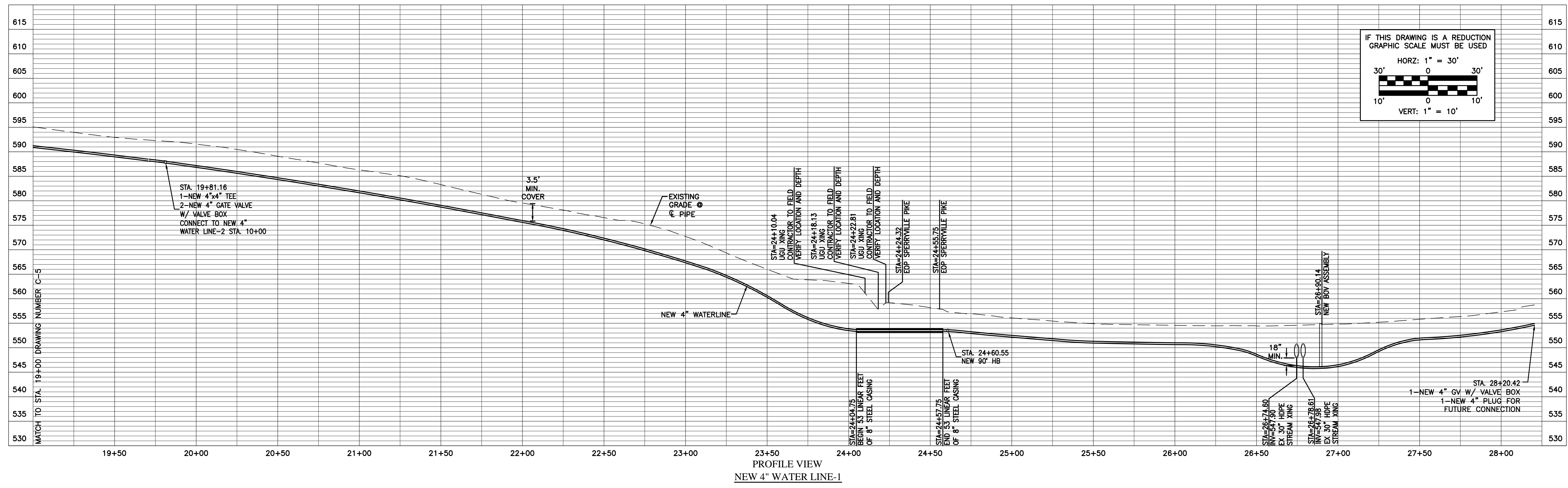
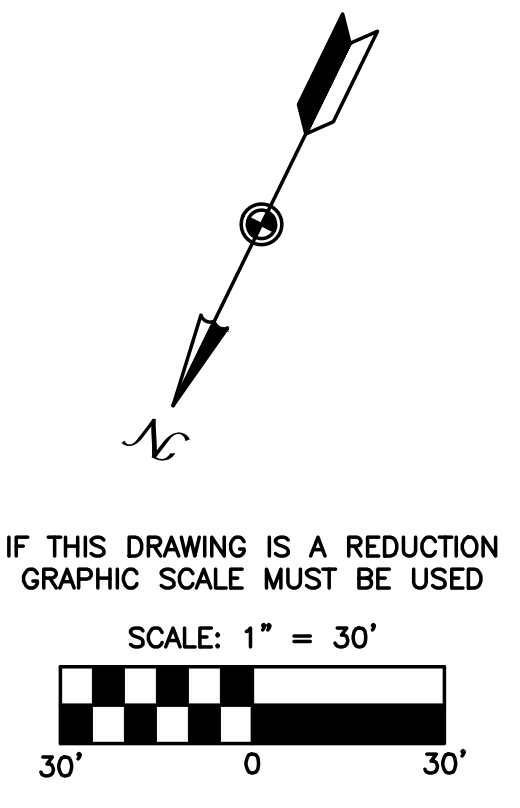
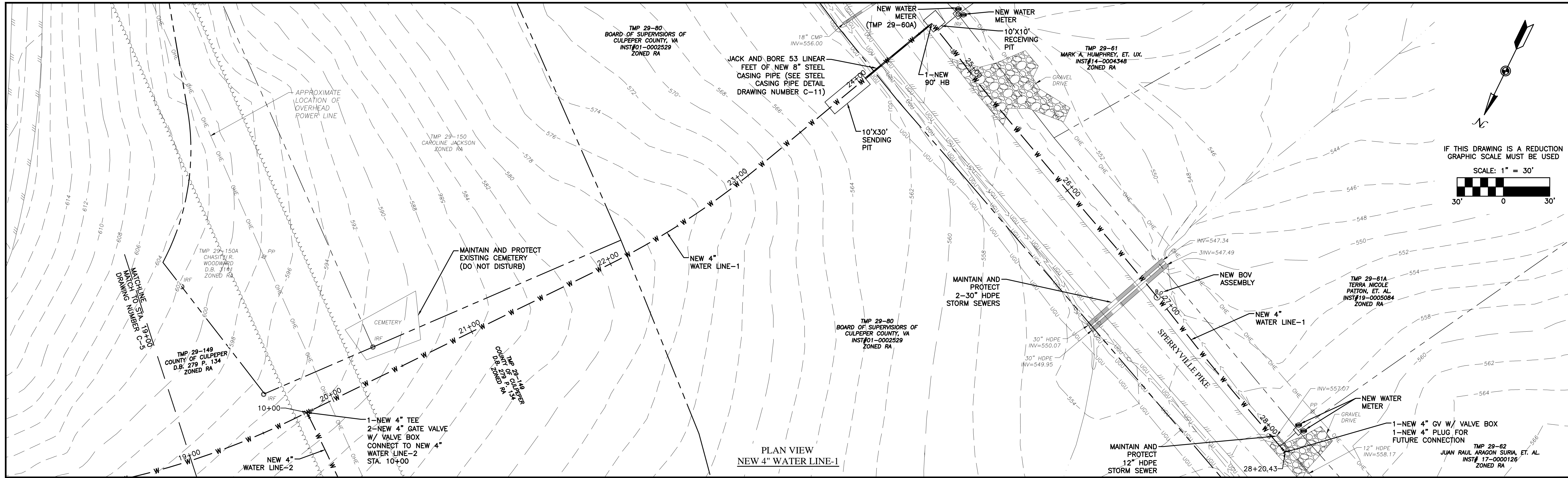
IF THIS DRAWING IS A REDUCTION
GRAPHIC SCALE MUST BE USED
HORIZ: 1" = 30'
VERT: 1" = 10'

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NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: KTM	TITLE: NEW 4" WATER LINE-1 PLAN AND PROFILE	DRAWING NUMBER: C-5
DIHR BY: JAC	WVA NUMBER: 216038.02E	SHEET NUMBER: 5 of 16
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DATE: 1/30/23		



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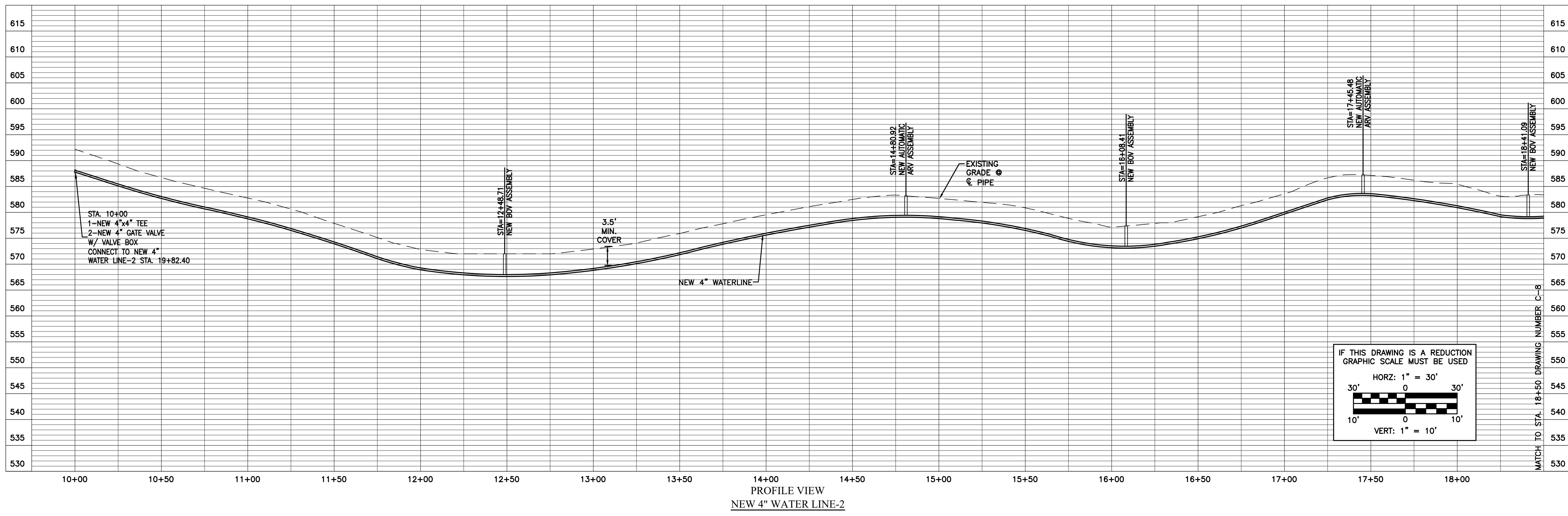
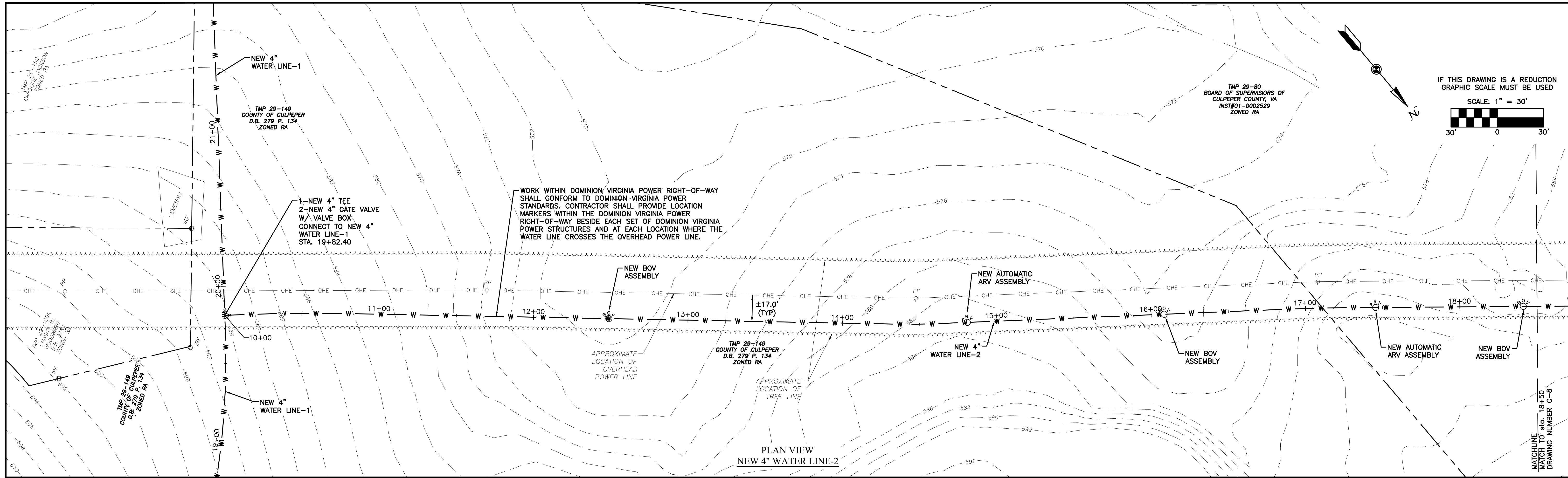


DESIGNED BY:	HFW
DRAWN BY:	KTM
DIHR BY:	JAC
WWA NUMBER:	216038.02E

PROJECT:	CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA		
TITLE:	NEW 4" WATER LINE-1 PLAN AND PROFILE		
FILE NAME:	603802EC_PP-2.dwg	DISCIPLINE:	CIVIL
SCALE:	H: 1"=30' V: 1"=10'	DATE:	1/30/23

SET REV. NO.	-
DRAWING NUMBER:	C-6
SHEET NUMBER:	6 of 16

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NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



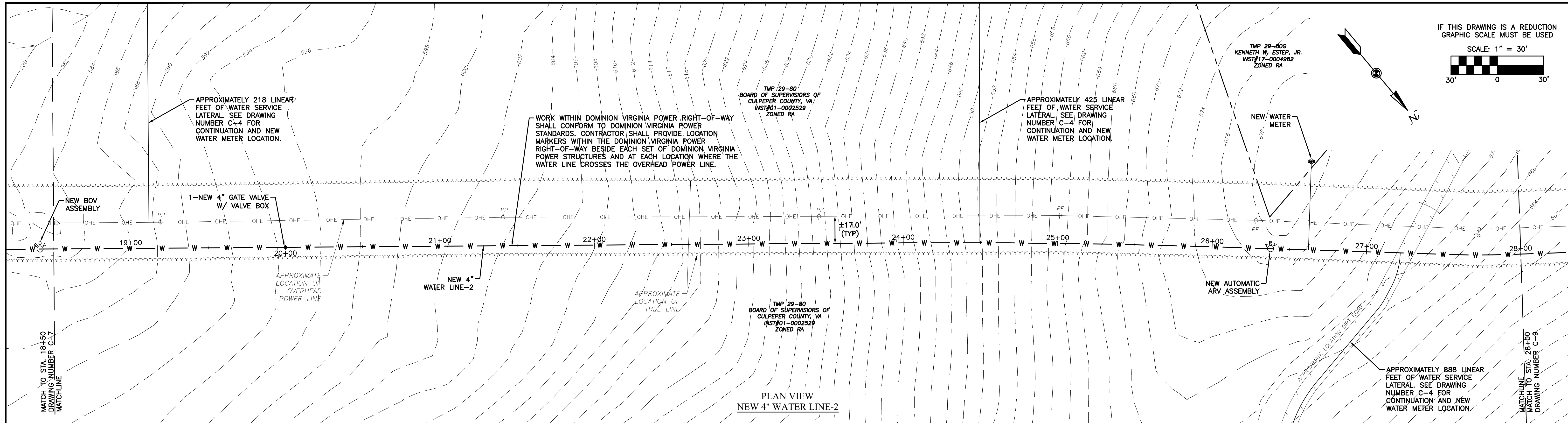
DESIGNED BY: HFW
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 DIHR BY: JAC

PROJECT: CHERRY HILL WATER SYSTEM
 PHASE II WATER LINE IMPROVEMENTS-REBID
 CULPEPER COUNTY, VIRGINIA

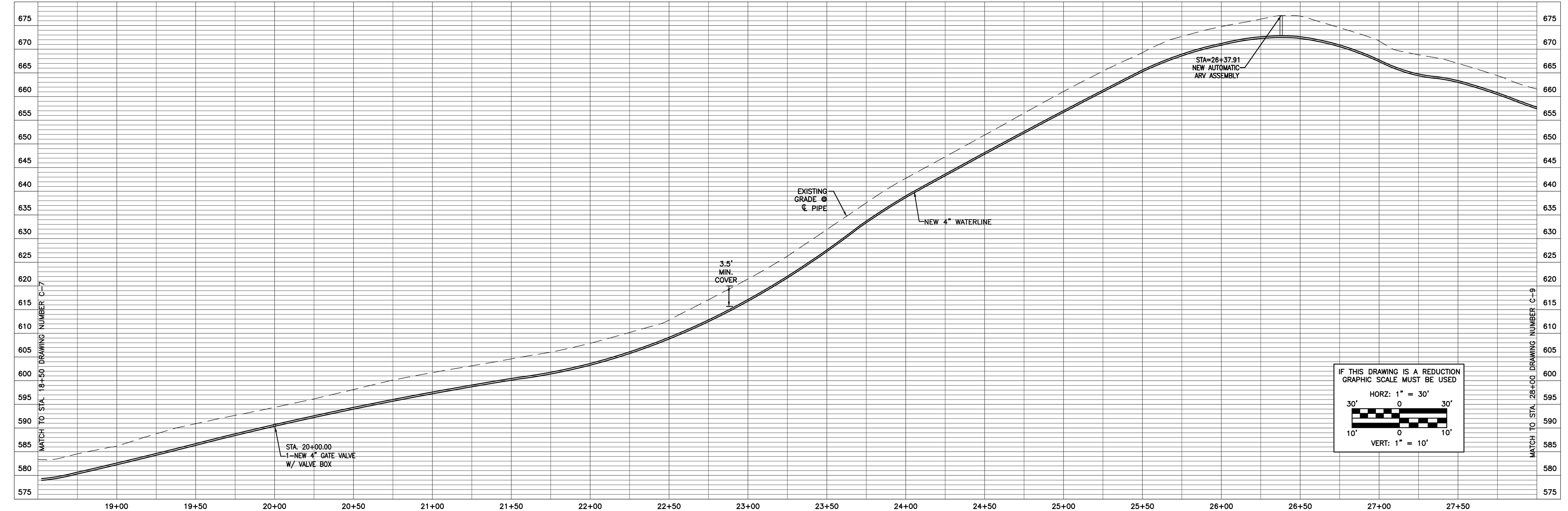
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 V: 1"=10'
 DATE: 1/30/23

SET REV. NO: -
 DRAWING NUMBER: C-7
 SHEET NUMBER: 7 of 16



PLAN VIEW
NEW 4" WATER LINE-2



PROFILE VIEW
NEW 4" WATER LINE-2

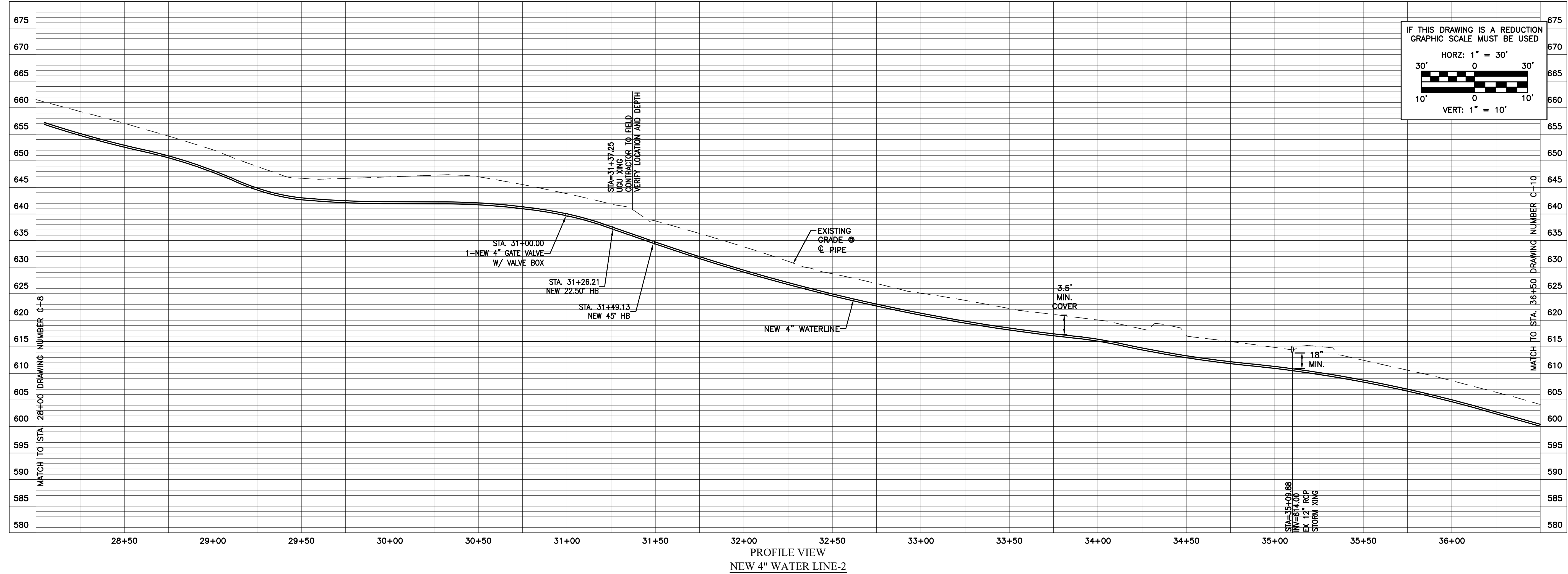
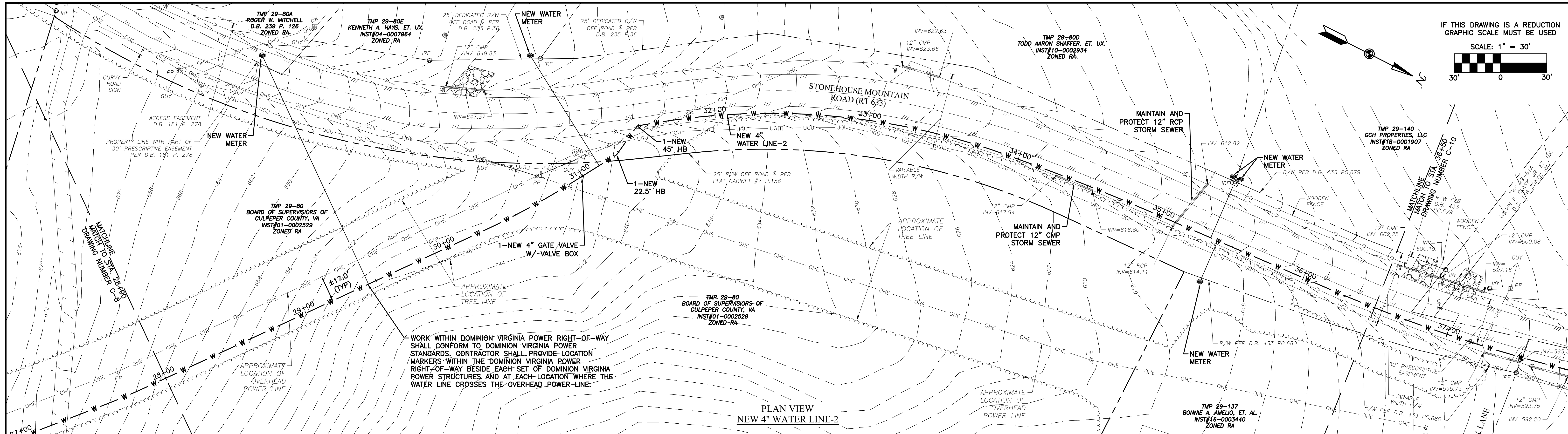
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NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: KTM	TITLE: NEW 4" WATER LINE-2 PLAN AND PROFILE	DRAWING NUMBER: C-8
DIHR BY: JAC	WVA NUMBER: 216038.02E	SHEET NUMBER: 8 of 16
FILE NAME: 603802EC_PP-4.dwg	DISCIPLINE: CIVIL	SCALE: H: 1"=30' V: 1"=10'
DATE: 1/30/23		

IF THIS DRAWING IS A REDUCTION GRAPHIC SCALE MUST BE USED	HORIZ: 1" = 30'	30' 0 30'
	VERT: 1" = 10'	10' 0 10'



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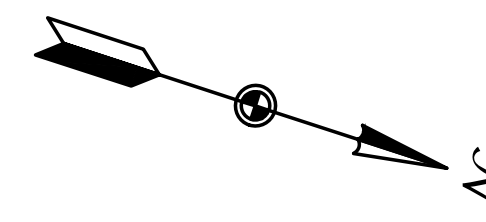
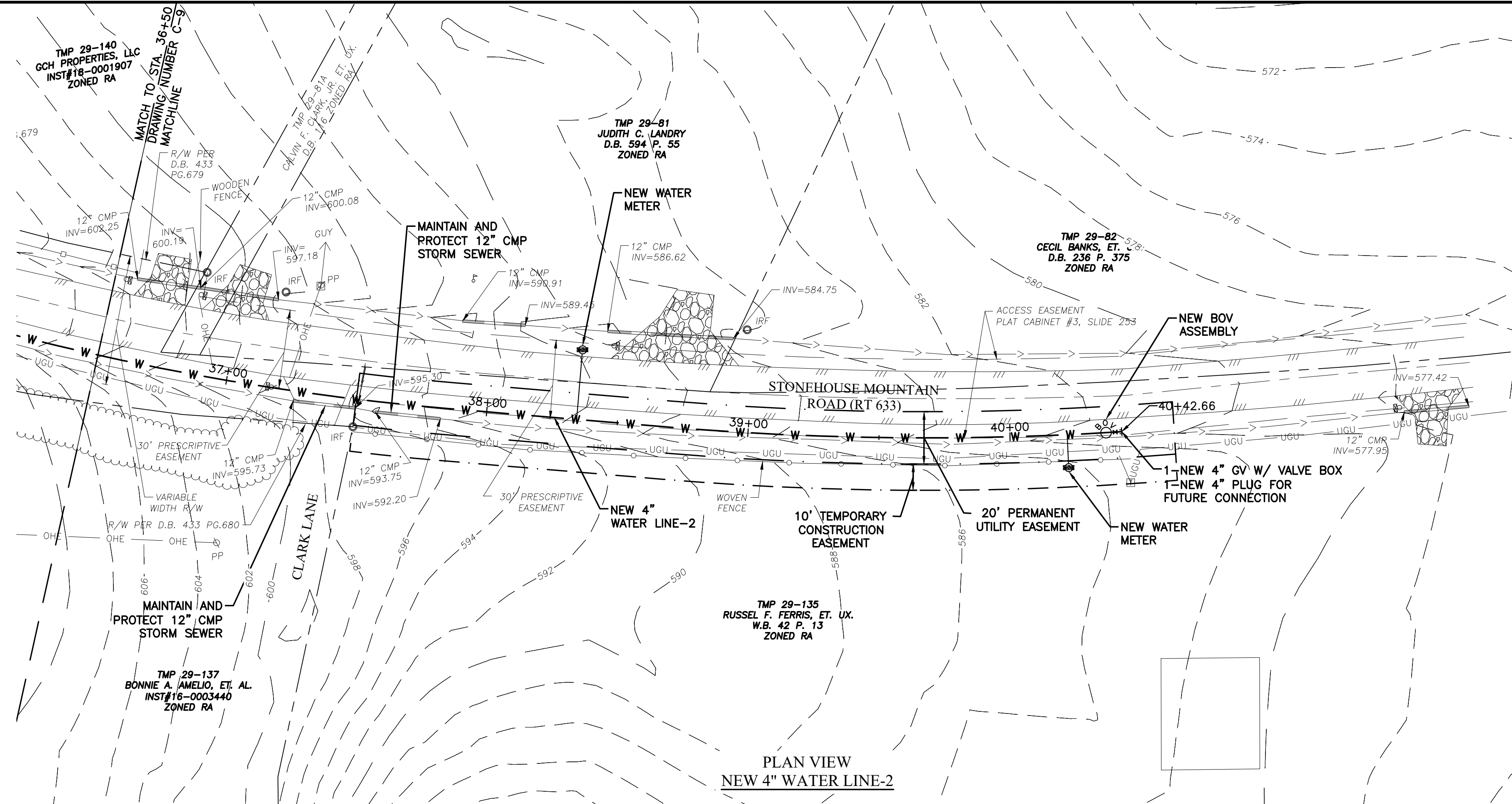
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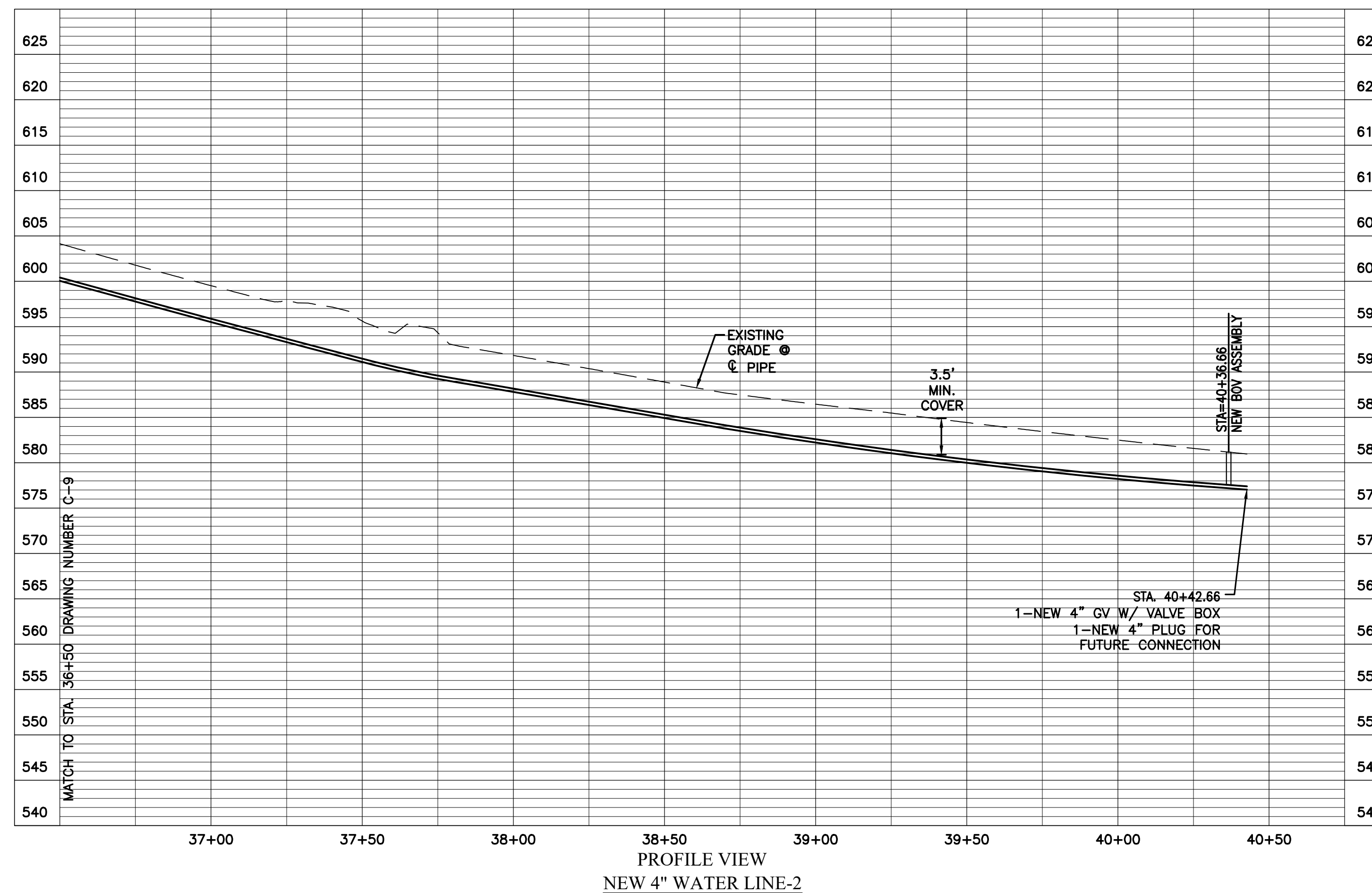
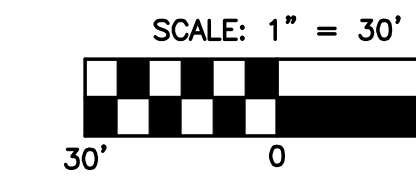
DESIGNED BY: HFW
DRAWN BY: KTM
DIHR BY: JAC



PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO.: -
TITLE: NEW 4" WATER LINE-2 PLAN AND PROFILE	DRAWING NUMBER: C-9
WVA NUMBER: 216038.02E	SHEET NUMBER: 9 of 16
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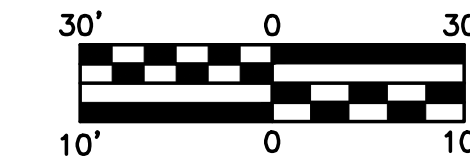


IF THIS DRAWING IS A REDUCTION GRAPHIC SCALE MUST BE USED



IF THIS DRAWING IS A REDUCTION GRAPHIC SCALE MUST BE USED

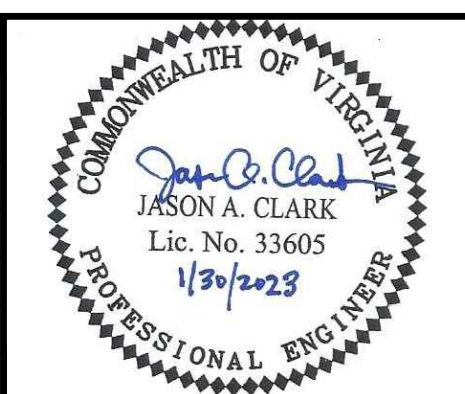
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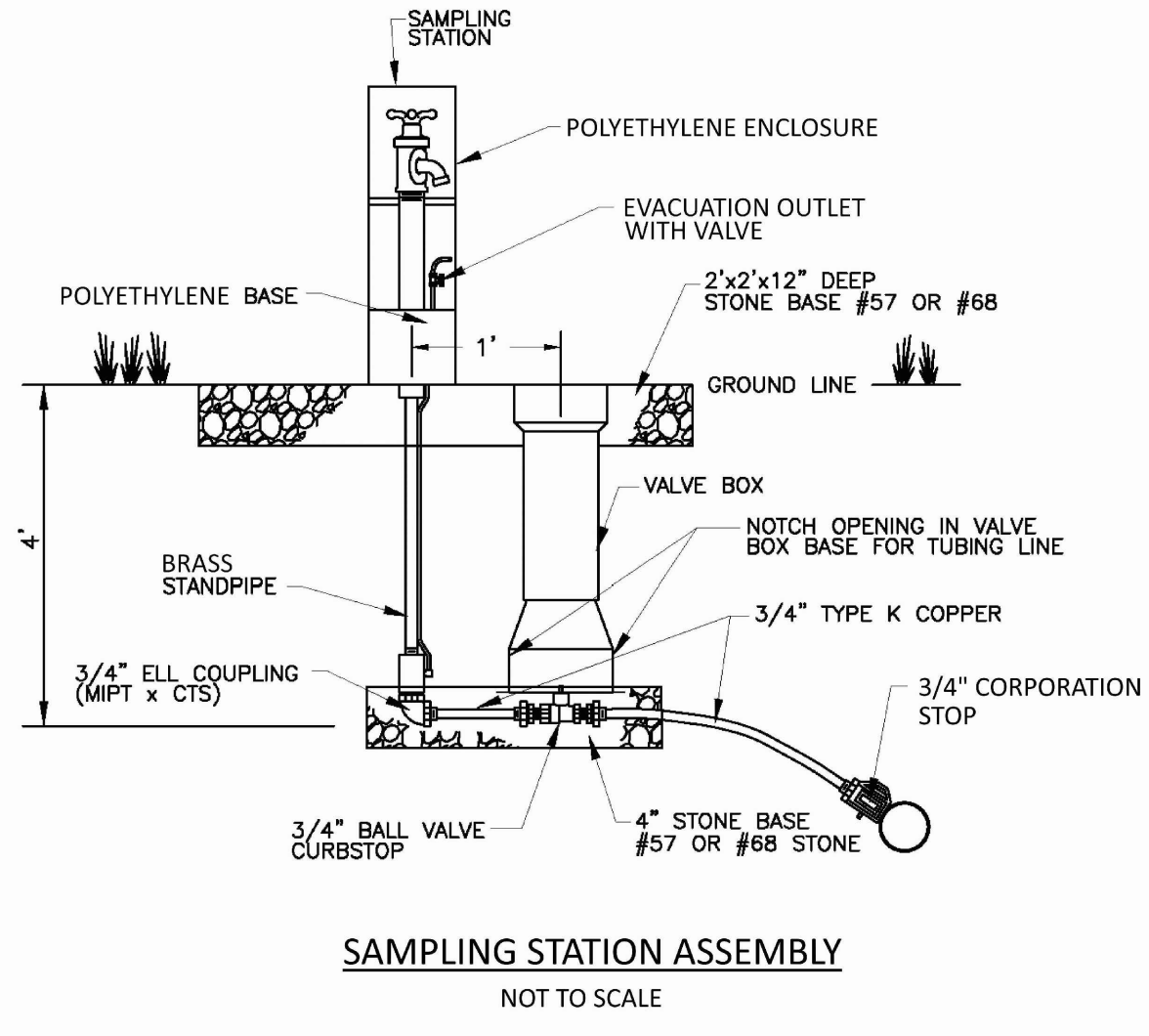
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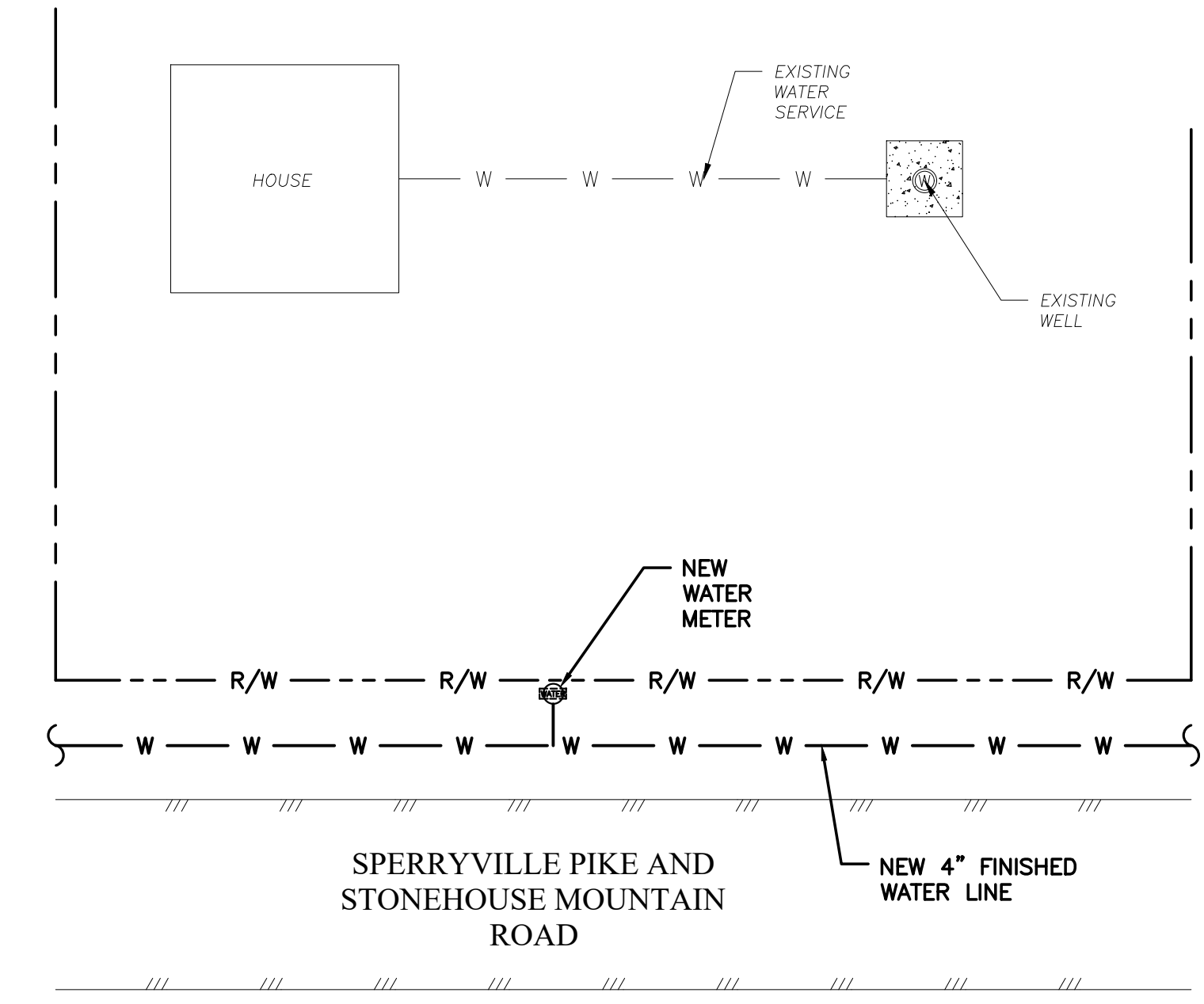


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DRAWN BY: KTM	TITLE: NEW 4" WATER LINE-2 PLAN AND PROFILE	DRAWING NUMBER: C-10
DIHR BY: JAC	WVA NUMBER: 216038.02E	SHEET NUMBER: 10 of 16
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DATE: 1/30/23		

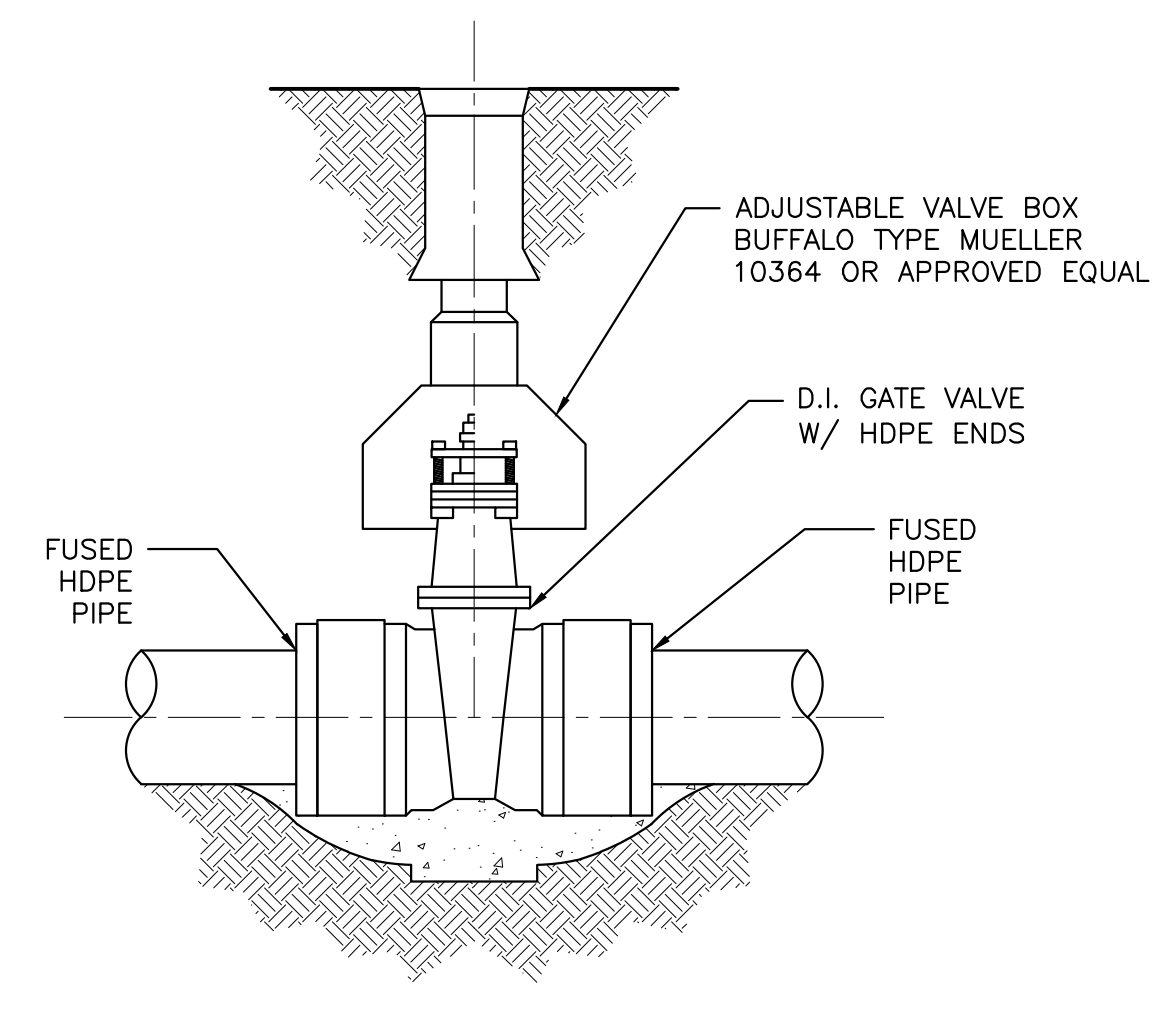
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SAMPLING STATION ASSEMBLY
NOT TO SCALE

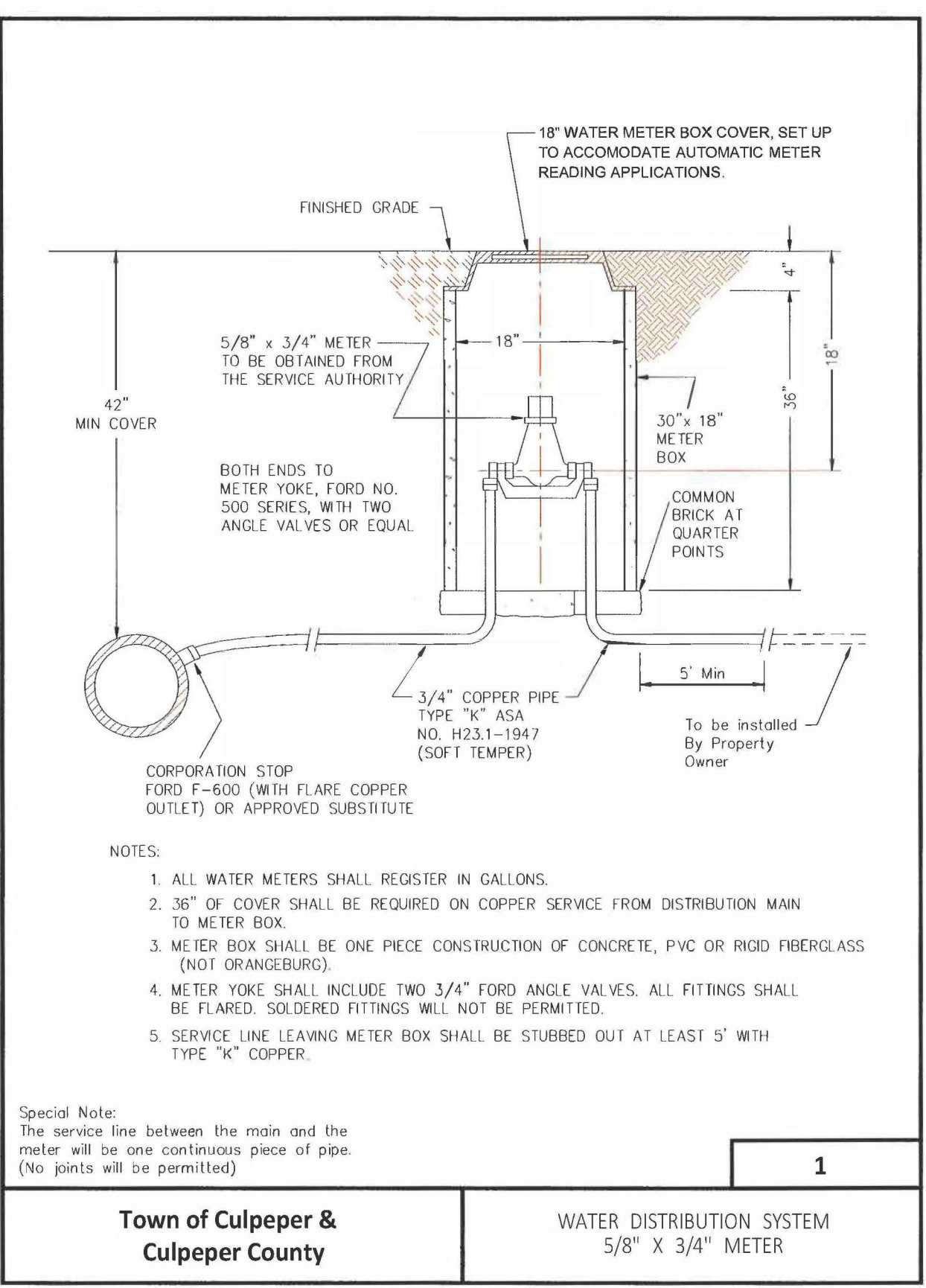


TYPICAL WATER SERVICE CONNECTION
NOT TO SCALE



- NOTES:**
1. VALVE AND PIPE SHALL HAVE SAME NOMINAL DIAMETER.
 2. PROVIDE PIPE JOINT RESTRAINTS AS REQUIRED.

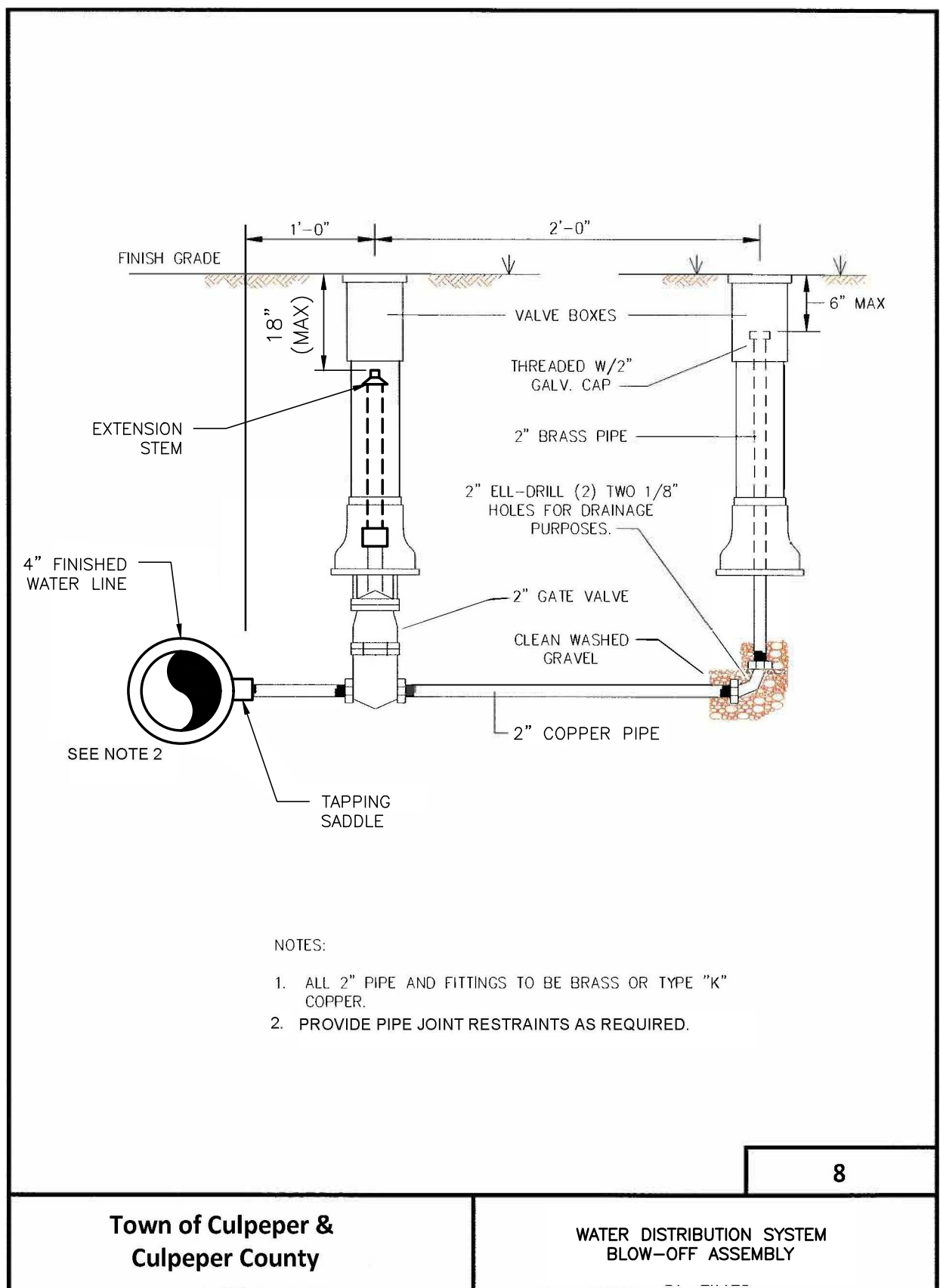
TYPICAL VALVE AND VALVE BOX CONNECTION
NOT TO SCALE



- NOTES:**
1. ALL WATER METERS SHALL REGISTER IN GALLONS.
 2. 36\"/>

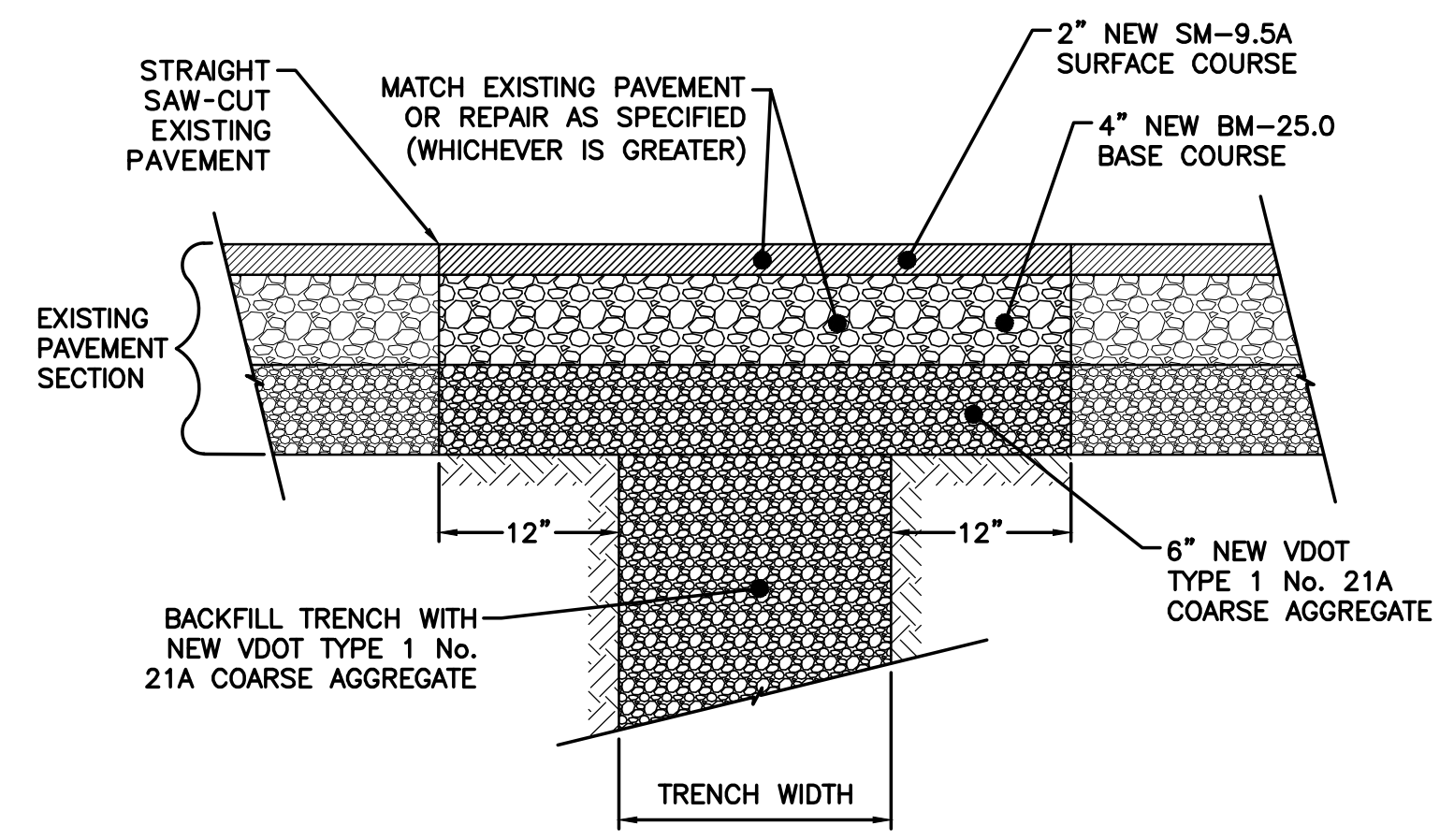
Special Note:
The service line between the main and the meter will be one continuous piece of pipe. (No joints will be permitted)

Town of Culpeper & Culpeper County	WATER DISTRIBUTION SYSTEM 5/8" X 3/4" METER	1
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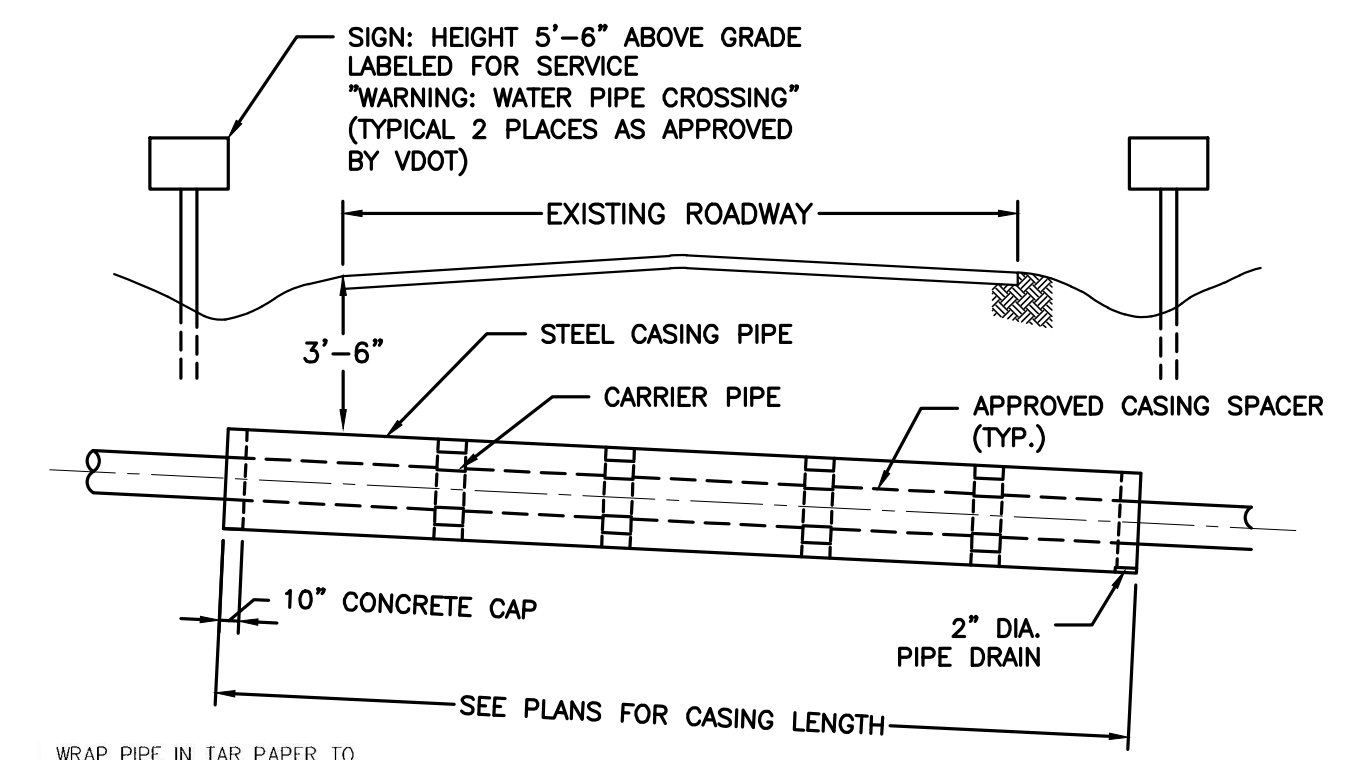


- NOTES:**
1. ALL 2\"/>

Town of Culpeper & Culpeper County	WATER DISTRIBUTION SYSTEM BLOW-OFF ASSEMBLY	8
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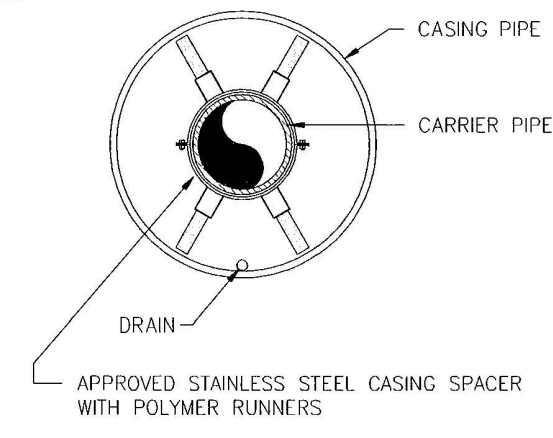


ASPHALT PAVEMENT REPAIR DETAIL
NOT TO SCALE



WRAP PIPE IN TAR PAPER TO BREAK BOND AT PLUGS
SPACE CASING SPACERS ACCORDING TO PIPE OR SPACER MANUFACTURERS' RECOMMENDATIONS OR 2 PER SECTION OF PIPE, WHICHEVER IS GREATER, PLUS 1 WITHIN 2 FEET OF EACH END OF CASING.
FOR GRAVITY SEWER PIPE - PUMP NEAR GROUT TO THE SPRING LINE OF THE CARRIER PIPE.
PUSH OR PULL THE CARRIER PIPE THROUGH THE CASING SO THAT THE CARRIER PIPE JOINTS ARE ALWAYS COMPRESSED.

CARRIER PIPE	CASING PIPE	
	MINIMUM CASING PIPE O.D.	MINIMUM CASING THICKNESS OVER TO 15\"/>
4	B	1/4" - 5/16"



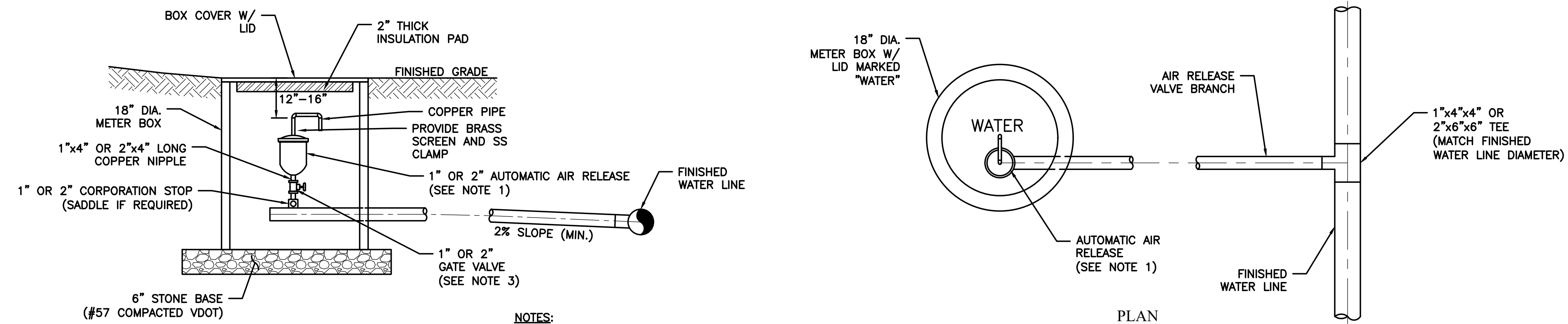
STEEL CASING PIPE DETAIL
NOT TO SCALE

NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: KTM	TITLE: DETAILS	DRAWING NUMBER: C-11
DIHR BY: JAC	FILE NAME: 603802EC_ND-2.dwg	SHEET NUMBER: 11 of 16
WVA NUMBER: 216038.02E	DISCIPLINE: CIVIL	SCALE: H: AS SHOWN V: N/A
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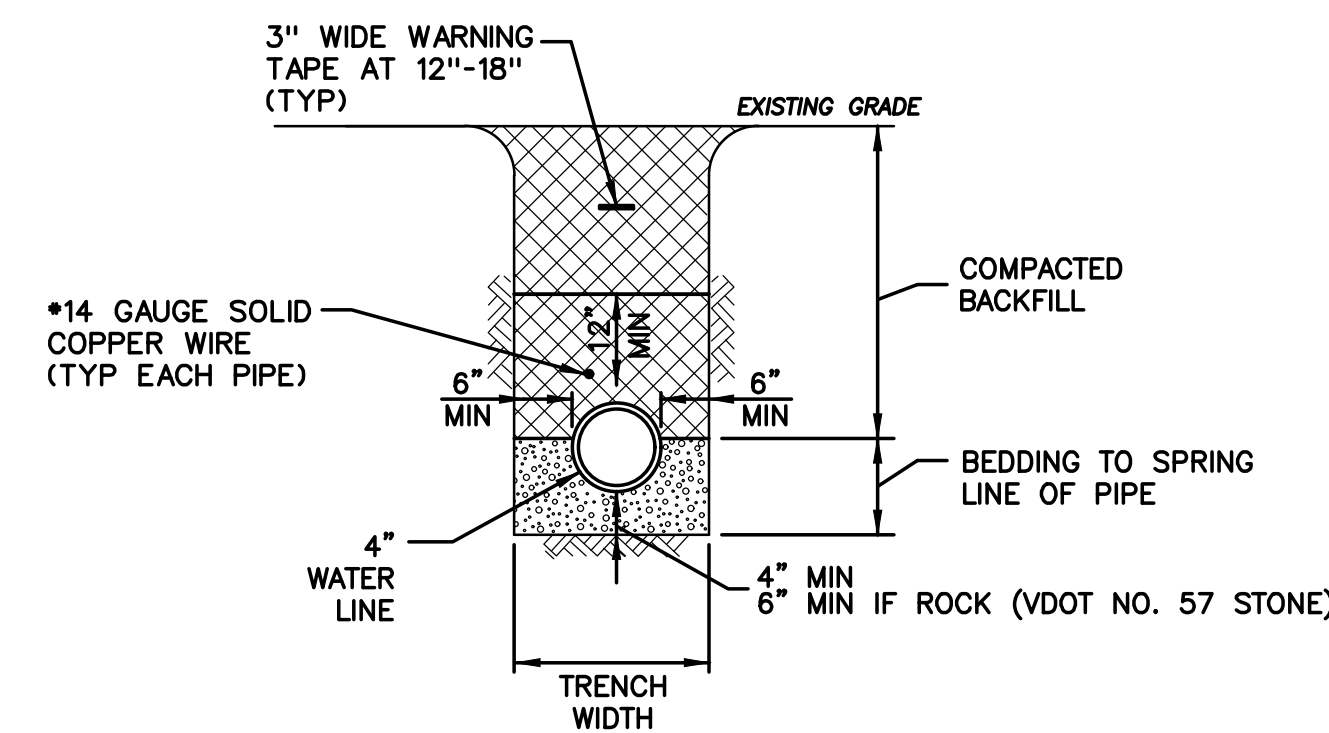


AUTOMATIC AIR RELEASE VALVE ASSEMBLY
NOT TO SCALE

PLAN
NOT TO SCALE

NOTES:

1. COMBINATION AIR RELEASE VALVES SHALL BE PROVIDED AS SPECIFIED IN PROJECT MANUAL SECTION 02660 FOR VALVES LOCATED ON FINISHED WATER LINE. VALVES SHALL BE OF THE COMBINATION TYPE TO RELIEVE LARGE VOLUMES OF AIR AS THE LINES ARE FILLED, RELIEVE VACUUM AS THE LINES ARE EMPTIED, AND ALSO RELEASE SMALL QUANTITIES OF ENTRAINED AIR UNDER PRESSURE.
2. ALL AIR RELEASE VALVES SHALL BE PLACED OUTSIDE OF DITCH LINES.
3. 1" APPURTENANCES SHALL BE PROVIDED & INSTALLED FOR ALL AIR RELEASE VALVES LOCATED ON 4" FINISHED WATER LINES. 2" APPURTENANCES SHALL BE PROVIDED & INSTALLED ON ALL AIR RELEASE VALVES LOCATED ON 6" FINISHED WATER LINE.



OPEN CUT PIPE INSTALLATION DETAIL
NOT TO SCALE

NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA		SET REV. NO. -
DRAWN BY: KTM	TITLE: DETAILS		DRAWING NUMBER: C-12
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DISCIPLINE: CIVIL	SCALE: AS SHOWN V: N/A	DATE: 1/30/23	

TMP LEGEND AND ABBREVIATIONS

WORK AREA #1	WORK AREA BOUNDARY
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ATSSA	AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION
EPA	ENVIRONMENTAL PROTECTION AGENCY
FHWA	FEDERAL HIGHWAY ADMINISTRATION
IM-LD	LOCATION AND DESIGN DIVISION INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM
MASH	MANUAL FOR ACCESSING SAFETY HARDWARE
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
NCHRP	NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM
SHSM	STANDARD HIGHWAY SIGNS AND MARKINGS BOOK
TCP	TRAFFIC CONTROL PLAN
TMP	TRANSPORTATION MANAGEMENT PLAN
TOC	TRANSPORTATION OPERATIONS CENTER
TTC	TEMPORARY TRAFFIC CONTROL
VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
VSHS	VIRGINIA STANDARD HIGHWAY SIGNS BOOK
VSP	VIRGINIA STATE POLICE
VWAPM	VIRGINIA WORK AREA PROTECTION MANUAL
WZTC	WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

- THE ACTIVITY AREA OF THE WORK ZONES OF THE CONTRACT WORK IS ALONG SPERRYVILLE PIKE FROM WATER LINE-1 STATION 24+60.55 TO 28+20.42, AND ALONG STONEHOUSE MOUNTAIN ROAD FROM WATER LINE-2 STATION 31+49.13 TO 40+42.66 IN CULPEPER COUNTY, VIRGINIA. THIS IS A TYPE "A" TRAFFIC MANAGEMENT PLAN. OFF SITE DETOURS ARE NOT NEEDED.
- UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLAN AND PERFORM THE WORK IN ACCORDANCE WITH THE FOLLOWING:
 - GENERALLY, CONSTRUCTION ACTIVITIES WILL BE CONDUCTED WHILE ROADWAY TRAVEL IS TEMPORARILY LIMITED. NOTIFICATION SHALL BE IN ACCORDANCE WITH THE VDOT PERMIT AND THE PUBLIC COMMUNICATIONS PLAN.
 - IT IS ANTICIPATED THAT THE FOLLOWING VIRGINIA WORK AREA PROTECTION MANUAL TYPICAL TRAFFIC CONTROL APPLICATIONS WILL BE USED TO PERFORM THE CONTRACT WORK:
 - SHOULDER OPERATION WITH MINOR ENCROACHMENT TTC-5.2
 - LANE CLOSURE ON A TWO-LANE ROADWAY USING FLAGGERS TTC 23.2
 - COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL ZONE 6C-1 DURING PERIODS THAT OPERATIONS ARE PERFORMED UNDER TRAFFIC, THE SPEED LIMIT SHALL BE, AS POSTED, IN ADDITION ROAD WORK AHEAD SIGNS SHALL BE PLACED IN ADVANCE OF THE WORK ZONE.
 - THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN, INCLUDING ALL PROPOSED LANE AND SHOULDER CLOSURES, AT LEAST TWO WEEKS IN ADVANCE OF THE ACTUAL CLOSURES TO FACILITATE REVIEW AND APPROVAL.
 - THE CONTRACTOR SHALL SUBMIT THE FINAL PLAN OF ALL PROPOSED LANE AND SHOULDER CLOSURES BY CLOSE OF BUSINESS WEDNESDAY FOR WORK IN THE FOLLOWING WEEK REQUIRING THE LANE OR SHOULDER CLOSURES IN ORDER FOR THE DEPARTMENT TO NOTIFY THE GENERAL PUBLIC, APPROPRIATE PUBLIC ENTITIES, TRAFFIC MANAGEMENT CENTER, AND THE REGIONAL TRAFFIC ENGINEER.
 - AN ONSITE REVIEW OF THE PROJECT'S WORK ZONE TRAFFIC CONTROL BY THE PROJECT MANAGEMENT TEAM, REGIONAL TRAFFIC ENGINEER AND CONTRACTOR SHALL BE CONDUCTED WITHIN 24 HOURS OF ANY FATAL INCIDENT/CRASH WITHIN THE WORK ZONE.
 - PERIODIC WORK ZONE REVIEWS SHALL BE CONDUCTED JOINTLY BY THE PROJECT MANAGEMENT TEAM, DISTRICT TRAFFIC ENGINEER AND CONTRACTOR.
 - ALL TRAFFIC CONTROL DEVICES AND SIGNS NECESSARY FOR THE MAINTENANCE OF TRAFFIC ARE TO BE SUPPLIED, INSTALLED, MAINTAINED AND REMOVED BY THE CONTRACTOR.
 - ALL TRAFFIC CONTROL DEVICE LOCATIONS SHALL BE MARKED BY THE CONTRACTOR AND REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.
 - CONSTRUCTION SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION OF THE STANDARD HIGHWAY SIGNS AND MARKINGS MANUAL, VIRGINIA WORK AREA PROTECTION MANUAL 2011 (REVISION 2) EDITION, 2016 VDOT ROAD AND BRIDGE STANDARDS AND 2016 VDOT ROAD AND BRIDGE SPECIFICATIONS.
 - ALL SIGNS WILL BE EITHER REMOVED FROM THE ROADWAY WHEN NOT NEEDED OR COVERED PER SECTION 6F.03 OF THE VIRGINIA WORK AREA PROTECTION MANUAL 2011 (REVISION 2) EDITION, EXCEPT FOR WHEN LANE CLOSURE SET UP IS PERMITTED BY VDOT TO REMAIN OVERNIGHT.
 - SOME SKETCHES AND DRAWINGS ARE NOT TO SCALE AND SHALL BE USED FOR REFERENCE ONLY.
 - TRAFFIC CONSISTS OF COMMUTERS, RESIDENTS AND TRUCKS.
 - DEVICES THAT HAVE LOST SIGNIFICANT LEGIBILITY SHALL BE PROMPTLY REPLACED IN ACCORDANCE WITH THE AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION'S (ATSSA) "QUALITY STANDARDS FOR WORK ZONE TRAFFIC CONTROL DEVICES" PUBLICATION.
 - TEMPORARY TRAFFIC CONTROL DEVICES AND HARDWARE SHALL COMPLY WITH SECTION 6F.01 OF THE VIRGINIA WAPM, 2011 (REVISION 2) EDITION. SIGN SIZE SHALL COMPLY WITH TABLE 6F-1 OF THE VIRGINIA WAPM, 2011 (REVISION 2) EDITION FOR NON-RESTRICTED RIGHT-OF-WAY ROAD.
- GROUP 2 CHANNELIZING DEVICES ARE TO BE PLACED AS DIRECTED BY THE ENGINEER, PER VIRGINIA WAPM, 2011 (REVISION 2) EDITION, APPENDIX A.
- WORK HOURS SHALL GENERALLY BE BETWEEN THE HOURS OF 9:00 A.M. TO 3:30 P.M. MONDAY THROUGH FRIDAY. IF ALTERNATE WORK HOURS ARE NEEDED, THEY WILL BE EVALUATED ON A CASE BY CASE BASIS. SOME NIGHT WORK MAY BE REQUIRED IN AREAS WITH SIGNIFICANT TRAFFIC IMPACTS. HOLIDAY RESTRICTIONS ARE OUTLINED IN THE 2016 ROAD AND BRIDGE SPECIFICATIONS SECTION 108.02. VDOT MAY ALLOW FLEXIBLE WORK HOURS TO THE PREVIOUSLY RECOMMENDED ALLOWABLE WORK HOURS AT THE DISCRETION OF THE RESIDENCY ADMINISTRATOR. AREA LAND USE ENGINEER OR PERMIT INSPECTOR PROVIDING THERE IS NO ADVERSE IMPACT ON TRAVEL FLOW. LANE CLOSURES WILL NOT BE PERMITTED ON A SUNDAY, HOLIDAY OR SPECIAL EVENT WITHOUT WRITTEN PERMISSION FROM VDOT.
- LANE CLOSURES ARE RESTRICTED TO WORK HOURS AS LISTED IN ITEM 4 ABOVE OR AS STATED IN THE VDOT LAND USE PERMIT.
- TEMPORARY LANE WIDTHS NOT TO BE LESS THAN EXISTING LANE WIDTH WITH DESIRABLE BEING 11' MINIMUM, WITHOUT CONCURRENCE OF THE REGIONAL TRAFFIC ENGINEER.
- NO OBSTACLE WILL INTERFERE WITH SIGHT DISTANCES OF ENTRANCES AND INTERSECTIONS. MATERIALS AND EQUIPMENT SHALL BE STORED OUTSIDE OF THE DESIGNATED CLEAR ZONE WITHIN STATE R/W AND BEYOND THE DYNAMIC DEFLECTION AREA OF ANY PHYSICAL BARRIERS.
- PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED PER THE VIRGINIA WORK AREA PROTECTION MANUAL 2011 (REVISION 2) EDITION, OR AS DIRECTED BY THE ENGINEER.
- VDOT WILL NOT ASSIST CONTRACTOR IN SECURING STAGING AREA FOR EQUIPMENT AND MATERIALS WITHIN THE STATE R/W.
- CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE ENTRANCES DURING OPERATIONS.
- ALL AREAS EXCAVATED BELOW EXISTING PAVEMENT SURFACES AT THE CONCLUSION OF EACH WORKDAY SHALL BE BACKFILLED TO FORM AN APPROXIMATE 6:1 ASPHALT WEDGE AGAINST THE EXISTING PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC. IF 6:1 ASPHALT WEDGE IS NOT PERMITTED BY VDOT, BASE ASPHALT PATCH SHALL BE IN PLACE PRIOR TO OPENING LANE TO TRAFFIC AND SHALL BE FLUSH WITH TOP OF ADJACENT ASPHALT SURFACE. ALL COSTS FOR PLACING, MAINTAINING AND REMOVING THE 6:1 ASPHALT WEDGE OR BASE ASPHALT SHALL BE INCLUDED IN THE PRICE BID AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE AS REQUIRED TO PREVENT PONDING OF WATER ON THE ROADWAY AND ADJACENT PROPERTIES AT NO ADDITIONAL COST.
- CONTRACTOR SHALL PROTECT ANY EXISTING GUARDRAIL AND SUPPORTS WITHIN CONSTRUCTION AREA FROM DAMAGE. ANY GUARDRAIL OR SUPPORTS DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO PRE-CONSTRUCTION CONDITIONS BY THE CONTRACTOR.
- ALL TRENCH EXCAVATIONS LOCATED WITHIN THE CLEAR ZONE THAT ARE NOT PROTECTED SHALL BE BACKFILLED AT THE CONCLUSION OF EACH WORK DAY.
- MAINTENANCE OF TRAFFIC SHALL BE DONE IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL 2011 (REVISION 2) EDITION AND ANY REVISIONS AND WITH CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL COORDINATION FOR MAINTENANCE OF TRAFFIC SHALL BE PERFORMED BY THE CULPEPER DISTRICT LAND USE PERMITS OFFICE. THE CONTACT NUMBERS ARE:
 - CULPEPER DISTRICT TRANSPORTATION AND LAND USE - 540-829-7500
 - VDOT PERMIT INSPECTOR: JIMMY TERRELL - 540-717-1397
 - CULPEPER DISTRICT TRAFFIC ENGINEER: TROY AUSTIN - 540-727-7012
 - VDOT WORK ZONE INSPECTOR: ADRIAN BLACKSTONE - 540-718-0957
- MODIFICATIONS OF PLAN MAY BE REQUIRED BY VDOT PERSONNEL BASED ON CHANGED CONDITIONS OR CONCERN FOR SAFETY AND HANDLING OF TRAFFIC. LOCATIONS OF TEMPORARY TRAFFIC CONTROLS SHOWN ARE BASED ON CURRENT DESIGN PLANS. ACTUAL LIMITS OF TEMPORARY TRAFFIC CONTROLS MAY BE ADJUSTED BASED ON FIELD REVISIONS, IF NECESSARY.

VWAPM SECTION 6F.7B DRUMS

STANDARD:
DRUMS (SEE FIGURE 6F-9) USED FOR ROAD USER WARNING OR CHANNELIZATION SHALL BE CONSTRUCTED OF LIGHTWEIGHT, DEFORMABLE MATERIALS. THEY SHALL BE A MINIMUM OF 36 INCH IN HEIGHT AND HAVE AT LEAST AN 18 INCH MINIMUM WIDTH REGARDLESS OF ORIENTATION. METAL DRUMS SHALL NOT BE USED. THE MARKINGS ON DRUMS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 6 INCHES WIDE. ALL DRUMS SHALL MEET THE RETROREFLECTIVE SHEETING REQUIREMENTS OF SECTION 247. ANY NON-RETRO-REFLECTORIZED SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 3 INCHES WIDE. DRUMS SHALL HAVE CLOSED TOPS THAT WILL NOT ALLOW COLLECTION OF CONSTRUCTION DEBRIS OR OTHER DEBRIS.

SUPPORT:
DRUMS ARE HIGHLY VISIBLE, HAVE GOOD TARGET VALUE, GIVE THE APPEARANCE OF BEING FORMIDABLE OBSTACLES AND, THEREFORE, COMMAND THE RESPECT OF ROAD USERS. THEY ARE PORTABLE ENOUGH TO BE SHIFTED FROM PLACE TO PLACE WITHIN A TTC ZONE IN ORDER TO ACCOMMODATE CHANGING CONDITIONS, BUT ARE GENERALLY USED IN SITUATIONS WHERE THEY WILL REMAIN IN PLACE FOR A PROLONGED PERIOD OF TIME.

OPTION:
ALTHOUGH DRUMS ARE MOST COMMONLY USED TO CHANNELIZE OR DELINEATE ROAD USER FLOW, THEY MAY ALSO BE USED ALONE OR IN GROUPS TO MARK SPECIFIC LOCATIONS.

GUIDANCE:
DRUMS SHALL NOT BE WEIGHTED WITH SAND, WATER, OR ANY MATERIAL TO THE EXTENT THAT WOULD MAKE THEM HAZARDOUS TO ROAD USERS OR WORKERS WHEN STRUCK. DRUMS USED IN REGIONS SUSCEPTIBLE TO FREEZING SHALL HAVE DRAIN HOLES IN THE BOTTOM SO THAT WATER WILL NOT ACCUMULATE AND FREEZE CAUSING A HAZARD IF STRUCK BY A ROAD USER.

STANDARD:
BALLAST SHALL NOT BE PLACED ON THE TOP OF A DRUM. DRUMS SHALL BE ADEQUATELY BALLASTED TO PREVENT MOVEMENT BY PASSING VEHICLES. WEIGHTED COLLARS SHALL LAY FLAT ON THE GROUND OR ROADWAY AROUND THE BOTTOM OF DRUMS, AND SHALL BE THE APPROVED TYPE AND SIZE FOR THAT PARTICULAR DEVICE.

GUIDANCE:
DRUMS THAT USE WEIGHTED COLLARS FOR BALLAST SHALL USE A MINIMUM OF 2 DRUM COLLARS WHEN PLACED WITHIN 12 FEET OF ACTIVE TRAVEL LANES TO ENSURE STABILITY.

STANDARD:
DRUMS SHALL BE USED IN ALL UNMANNED WORK ZONE LOCATIONS, IN ALL MERGING AND SHIFTING TAPERS INCLUDING TAPERS FOR OFF RAMP GORE AREAS ON LIMITED ACCESS HIGHWAYS DURING NIGHTTIME OPERATIONS, AND IN TAPERS PROVIDING DELINEATION FOR NON-CRASHWORTHY TRAILER MOUNTED DEVICES SUCH AS BUT NOT LIMITED TO INTELLIGENT TRANSPORTATION SYSTEMS (ITS) POLES, HIGHWAY ADVISORY RADIO, SPEED TRAILERS, CB WIZARDS, ITS CAMERAS, PORTABLE TRAFFIC CONTROL SIGNALS, AFD UNITS, LIGHT TOWERS, ETC. ON LONG-TERM STATIONARY TTC ZONES, DRUMS SHALL BE USED IN TAPERS PROVIDING DELINEATION OF THE ARROW BOARD.

OPTION:
DRUMS MAY BE LEFT ON THE SHOULDER BETWEEN WORK OPERATIONS BUT MUST NOT INTERFERE WITH THE ROAD USER'S USE OF THE SHOULDER OR TRAVEL WAY.

TEMPORARY TRAFFIC CONTROL/MAINTENANCE OF TRAFFIC PLAN NARRATIVE

THE CHERRY HILL WATER SYSTEM PHASE II WATER LINE PROJECT IN CULPEPER COUNTY, VIRGINIA CONSISTS OF CONSTRUCTION OF APPROXIMATELY 360 LINEAR FEET OF NEW 4-INCH DIAMETER WATER LINE ALONG THE SOUTH SHOULDER OF THE EAST BOUND LANE OF SPERRYVILLE PIKE, AND APPROXIMATELY 894 LINEAR FEET OF NEW 4-INCH DIAMETER WATER LINE ALONG THE EAST SHOULDER OF THE NORTH BOUND LANE OF STONEHOUSE MOUNTAIN ROAD. THE NEW 4-INCH WATER LINES WILL BE LOCATED APPROXIMATELY 5 FEET OFF THE EXISTING PAVED ROAD SURFACE.

SPERRYVILLE PIKE AND STONEHOUSE MOUNTAIN ROAD ARE TWO-LANE ROADS WITHIN THE WORK ZONES. THE CONTRACTOR'S MEANS AND METHODS SHALL PROVIDE SAFE AND CONVENIENT VEHICULAR AND PEDESTRIAN ACCESS IN THE WORK AREAS AND AT ALL TIMES TO PERMIT ACCESS TO ADJACENT PROPERTIES AND INTERSECTING STREETS.

APPROXIMATE DURATION OF THE PROJECT IS ESTIMATED TO BE 240 CALENDAR DAYS. ESTIMATED START DATE FOR THIS PROJECT WILL BE SEPTEMBER, 2020.

THIS PROJECT CONSISTS OF 1 WORK AREA ALONG SPERRYVILLE PIKE AND 1 WORK AREA ALONG STONEHOUSE MOUNTAIN ROAD. LANE CLOSURES ARE TO BE MINIMIZED TO THE EXTENT FEASIBLE. TAPER LANES ARE TO BE IN THE SAME WORK AREA AS CLOSURE UNLESS WITHIN 100 FEET OF A STREET INTERSECTION.

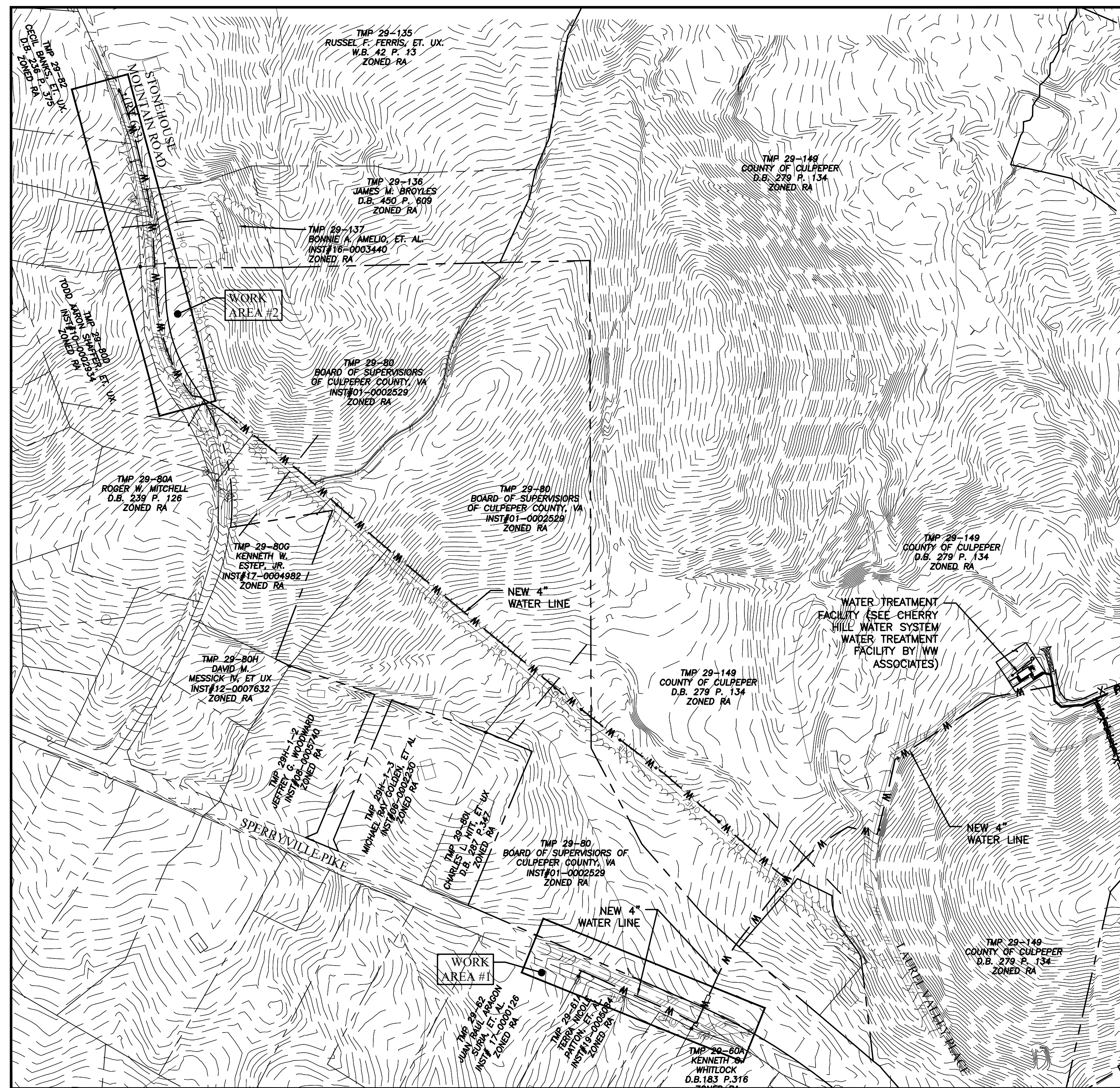
THIS NARRATIVE, TEMPORARY TRAFFIC CONTROL PLAN-WORK AREAS, TEMPORARY TRAFFIC CONTROL GENERAL NOTES AND DETAILS AND THE PROJECT MANUAL, ESTABLISHES THE BASIC CONCEPTS THAT THE CONTRACTOR'S TEMPORARY TRAFFIC CONTROL PLAN MUST ADDRESS. THE CONTRACTOR WILL BE REQUIRED TO PREPARE AND SUBMIT A TEMPORARY TRAFFIC CONTROL PLAN TO VDOT CULPEPER DISTRICT AND CONFORM TO THE LAND USE PERMIT REQUIREMENTS.

PUBLIC COMMUNICATIONS PLAN

NOTIFICATION OF CONSTRUCTION START/END DATES AND WORK ZONE INFORMATION WILL BE ENTERED INTO THE VA TRAFFIC SYSTEM.

TRANSPORTATION OPERATIONS PLAN

- CONTRACTOR SHALL PROVIDE CONTRACT INFORMATION, INCLUDING A 2-WEEK LOOK-AHEAD SCHEDULE (TWLA), TO THE VDOT INSPECTOR AT LEAST 1 WEEK IN ADVANCE OF THE START OF CONSTRUCTION.
- THE PROCESS TO NOTIFY THE REGIONAL TRAFFIC OPERATION CENTER (TOC) TO PLACE LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA TRAFFIC WILL BE:
 - CONTRACTOR IS TO ADVISE THE VDOT'S CULPEPER DISTRICT PERMITS OFFICE 48 HOURS IN ADVANCE OF PROPOSED ROAD/LANE CLOSURES.
 - CULPEPER DISTRICT PERMITS OFFICE IS TO ADVISE TOC TO HAVE THE INFORMATION ENTERED INTO THE VIRGINIA TRAFFIC AND 511 SYSTEMS.
 - CONTRACTOR IS TO CALL THE TOC WHEN LAND/ROAD CLOSURES ARE INSTALLED AND WHEN THEY ARE REMOVED FROM THE ROADWAYS.
- THE FOLLOWING IS A LIST OF LOCAL EMERGENCY CONTACT AGENCIES: VIRGINIA STATE POLICE - (540) 829-7541 (AREA 20 OFFICE) OR 1-800-572-2260 OR *77, CELLULAR HAZ-MAT CENTER (IF SPILLED) - 911.
- PROCEDURES TO RESPOND TO TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE:
 - CONTRACTOR TO NOTIFY VIRGINIA STATE POLICE AND VDOT'S CULPEPER DISTRICT PERMITS OFFICE AND THE REGIONAL TRAFFIC OPERATIONS CENTER.
 - DEPENDING UPON THE SEVERITY OF THE INCIDENT, THE CONTRACTOR MAY HAVE TO SHUT DOWN WORK.
 - UPON ARRIVAL AT THE SCENE, VIRGINIA STATE POLICE WILL DETERMINE THE RESPONSE NECESSARY TO ALLOW TRAVELING PUBLIC AROUND INCIDENT.
 - CONTRACTOR SHOULD TAKE PICTURES AS NECESSARY, ESPECIALLY PICTURES OF WORK ZONE TO VERIFY THE PROPER SETUP.
- PROCESS OF NOTIFICATION OF INCIDENT TO BE FOLLOWED IS: CONTRACTOR TO CALL:
 - CULPEPER DISTRICT TRANSPORTATION AND LAND USE - 540-829-7500
 - VDOT PERMIT INSPECTOR: JIMMY TERRELL - 540-717-1397
 - CULPEPER DISTRICT TRAFFIC ENGINEER: TROY AUSTIN - 540-727-7012
 - VDOT WORK ZONE INSPECTOR: ADRIAN BLACKSTONE - 540-718-0957
- THE VIRGINIA STATE POLICE WILL TAKE CONTROL OF THE INCIDENT AND DIRECT ITS CLEARING AND RESTORATION OF NORMAL TRAFFIC CONDITIONS.
- THE VIRGINIA STATE POLICE REPORT OF THE INCIDENT WILL BE REVIEWED BY THE AREA CONSTRUCTION ENGINEER TO DETERMINE IF ANY MODIFICATION OF THE TEMPORARY TRAFFIC CONTROL PLAN IS NECESSARY. IF IT IS DETERMINED THAT IT IS NECESSARY TO ALTER THE PLAN, THEN A MEETING WILL BE CALLED WITH CONTRACTOR, VDOT, PROJECT PERSONNEL, VDOT TRAFFIC SAFETY REPRESENTATIVES AND THE VIRGINIA STATE POLICE (IF NECESSARY) TO DISCUSS MODIFICATION AND IMPLEMENTATION OF AN IMPROVED TRAFFIC CONTROL PLAN.
- CULPEPER COUNTY SHERIFF DEPARTMENT: PHONE (540) 727-7520 NON EMERGENCY
CULPEPER COUNTY PUBLIC SAFETY: PHONE (540) 727-7900 NON EMERGENCY

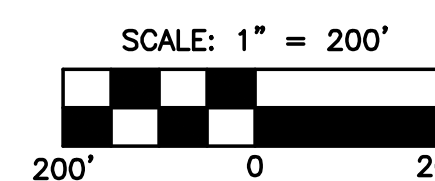


OVERALL TRAFFIC CONTROL PLAN

NOTE:

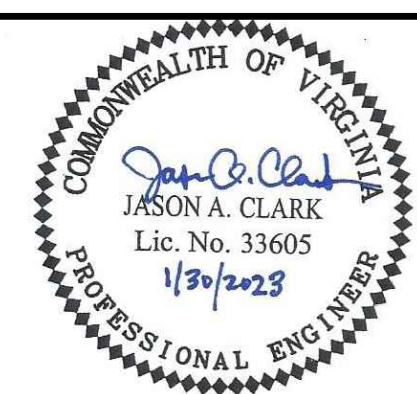
SPERRYVILLE PIKE IS CLASSIFIED AS A MINOR ARTERIAL ROAD ACCORDING TO THE VDOT 2014 APPROVED FUNCTIONAL CLASSIFICATION MAP. THE WORK AREA OF SPERRYVILLE PIKE IS LOCATED BETWEEN THE INTERSECTIONS OF CHERRY HILL ROAD (RURAL LOCAL ROAD) TO THE SOUTH AND STONEHOUSE MOUNTAIN ROAD (RURAL LOCAL ROAD) TO THE NORTHWEST.

IF THIS DRAWING IS A REDUCTION GRAPHIC SCALE MUST BE USED



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NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE

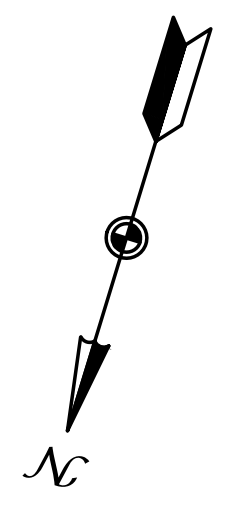
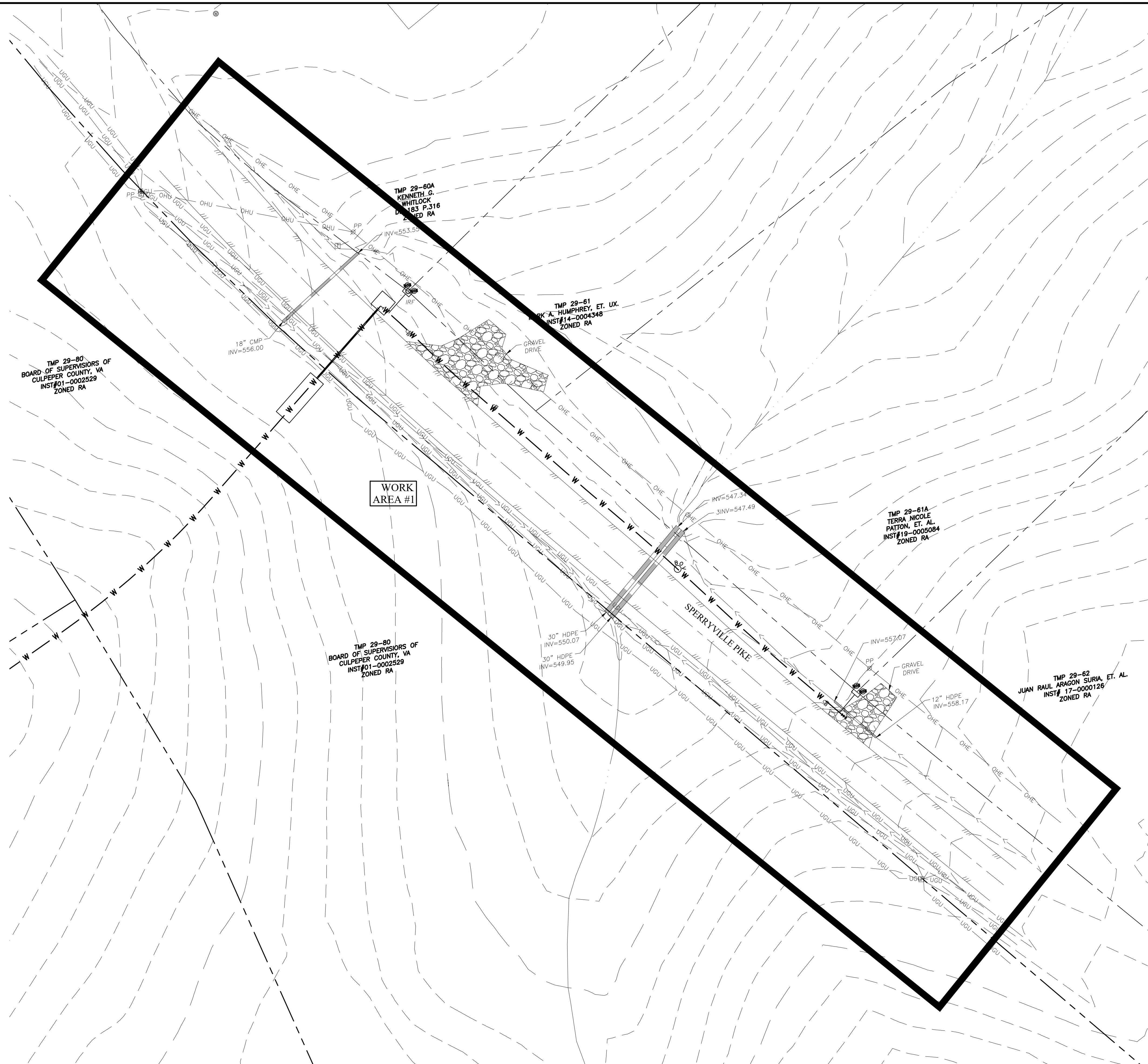


WV ASSOCIATES
ENGINEERS SURVEYORS PLANNERS

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www.wvassociates.net

DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO.: -
DRAWN BY: KTM	TITLE: OVERALL TRAFFIC CONTROL PLAN AND NOTES	DRAWING NUMBER: C-13
DIHR BY: JAC	FILE NAME: 603802EC-TCP-2.dwg	SHEET NUMBER: 13 of 16
WVA NUMBER: 216038.02E	DISCIPLINE: CIVIL	SCALE: H: 1"=200' V: N/A
DATE: 1/30/23	DATE: 1/30/23	DATE: 1/30/23

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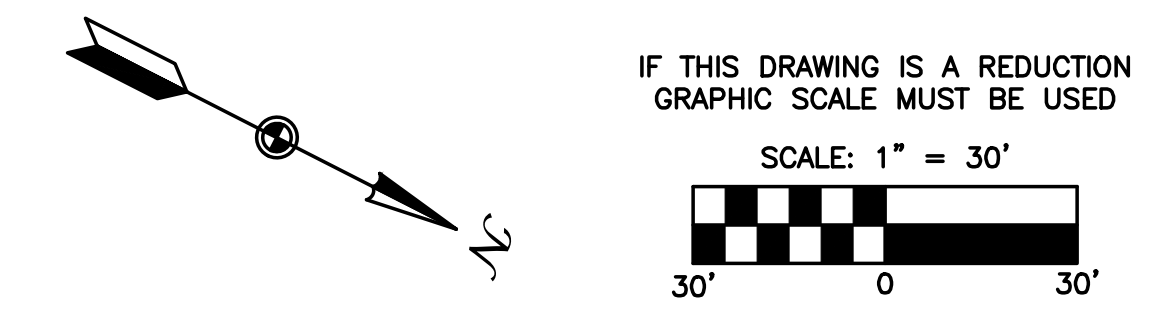
SCALE: 1" = 30'

NOTE:
THE POSTED SPEED LIMIT WITHIN
WORK AREA #1 ALONG SPERRYVILLE
PIKE IS 55 MPH ACCORDING TO THE
VDOT JANUARY 22, 2020 SPEED
LIMITS MAP.

NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE

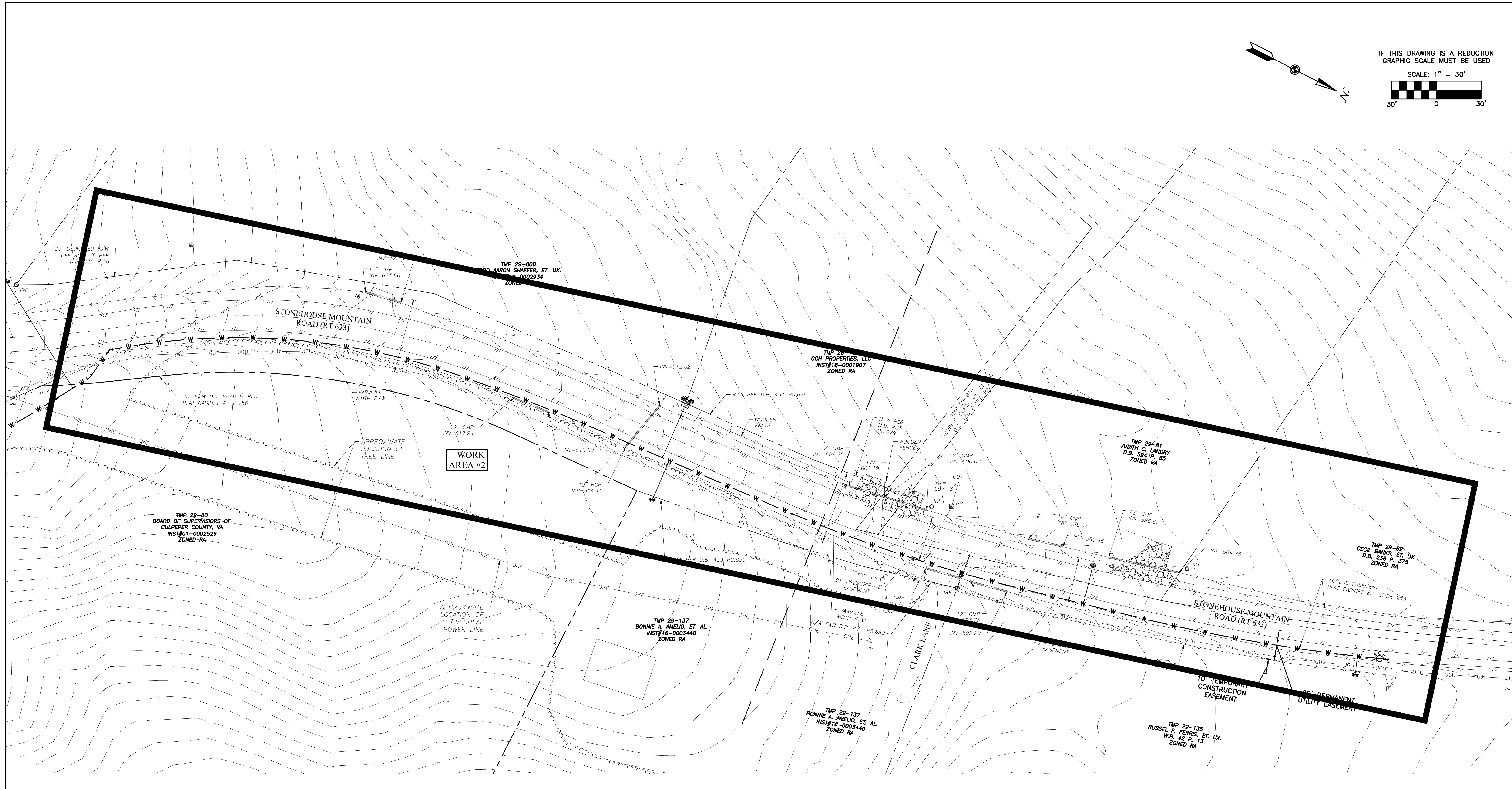


DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: KTM	TITLE: TRAFFIC CONTROL PLAN WORK AREA #1	DRAWING NUMBER: C-14
DIHR BY: JAC	FILE NAME: 603802EC_TCP-3.dwg	SHEET NUMBER: 14 of 16
WVA NUMBER: 216038.02E	DISCIPLINE: CIVIL	SCALE: H: 1"=30' V: N/A
	DATE: 1/30/23	



IF THIS DRAWING IS A REDUCTION
GRAPHIC SCALE MUST BE USED

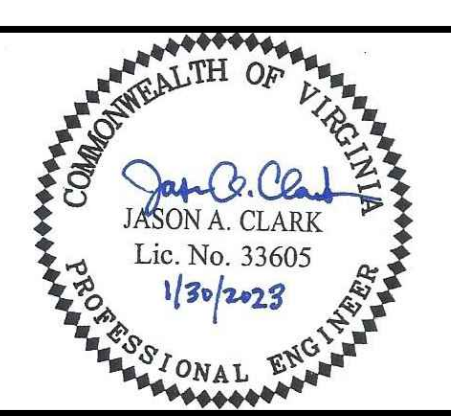
SCALE: 1" = 30'



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NOTE:
THE POSTED SPEED LIMIT WITHIN
WORK AREA #2 ALONG STONEHOUSE
MOUNTAIN ROAD IS 45 MPH
ACCORDING TO THE VDOT JANUARY
22, 2020 SPEED LIMITS MAP.

NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



DESIGNED BY: HFW	PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: KTM	TITLE: TRAFFIC CONTROL PLAN WORK AREA #2	DRAWING NUMBER: C-15
DIHR BY: JAC	FILE NAME: 603802EC_TCP-4.dwg	SHEET NUMBER: 15 of 16
WWA NUMBER: 216038.02E	DISCIPLINE: CIVIL	SCALE: H: 1"=30' V: N/A
	DATE: 1/30/23	

Typical Traffic Control
Shoulder Operation with Minor Encroachment
(Figure TTC-5.2)

NOTES

- Standard
1. For required sign assemblies for multi-lane roadways see Note 1, TTC-4.1.
Guidance:
2. Sign spacing should be 1300'-1500' for Limited Access highways.
3. When work takes up part of a lane on a high volume roadway...
Option:
4. The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway...
Standard:
5. A shadow vehicle with either an arrow board operating in the caution mode...
6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights.
7. Taper length (L) and channelizing device spacing shall be at the following:
Channelizing Device Spacing Table
8. Channelizing device spacing shall be at the following:
Channelizing Device Spacing Table
9. On roadways with paved shoulders having a width of 8 feet or more...
10. The buffer space length...
11. A truck-mounted attenuator (TMA) shall be used on Limited Access highways...
12. When a side road intersects the highway within the temporary traffic control zone...
1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

Typical Traffic Control
Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.2)

NOTES

- Guidance:
1. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less...
2. Care should be exercised when establishing the limits of the work zone...
3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway...
Standard:
4. Portable Temporary Rumble Strips (PTRS) shall be used as noted in Section 6F.09.2.
5. Flagging stations shall be located far enough in advance of the work space...
6. All flaggers shall be state certified and have their certification card...
7. Cone spacing shall be based on the posted speed and the values in Table 6H-4...
8. A shadow vehicle with at least one high intensity amber rotating, flashing, or oscillating light...
Option:
8. A SLOW (W21-V10) sign may be required in this area to give advance warning...
Guidance:
9. If the queue of traffic reaches the BE PREPARED TO STOP (W3-4) sign...
10. When a highway-rail crossing exists within or upstream of the transition area...
Standard:
11. At night, flagger stations shall be illuminated...
Option:
12. Cones may be eliminated when using a pilot vehicle operation...
13. For low-volume situations with short work zones on straight roadways...
Standard:
14. When used, three portable temporary rumble (PTRS) strips shall be installed...
1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

NOTES:

- 1. ALL WORK ZONES SHALL BE IN COMPLIANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL 2011 (REVISION 2) EDITION.
2. THIS PROJECT WILL REQUIRE A PRECONSTRUCTION MEETING WITH VDOT.
3. ADVANCED WARNING SIGNS FOR A LANE CLOSURE SHALL BE PROVIDED IN EACH DIRECTION...
4. THE COUNTY AND THE CONTRACTOR MUST ADHERE TO THE REQUIREMENTS OF VDOT'S CURRENT ROAD AND BRIDGE SPECIFICATIONS...
5. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING AND REINSTALLING ALL HIGHWAY SIGNS...
6. GROUP 2 CHANNELIZING DEVICES SHALL DELINEATE ALL WORK AREAS LOCATED INSIDE THE CLEAR ZONE...
7. ALL AREAS EXCAVATED BELOW THE PAVEMENT SURFACE AND LOCATED WITHIN THE CLEAR ZONE...
8. ALL CONSTRUCTION EQUIPMENT MUST BE REMOVED FROM THE CLEAR ZONE...
9. 24VAC30-151-90. HOURS AND DAYS WORK AUTHORIZED: HOLIDAY SCHEDULE...
PERMITTED NONEMERGENCY WORK WILL NOT BE ALLOWED ON ARTERIAL AND COLLECTOR HIGHWAY CLASSIFICATIONS...
10. ANY EXPOSED END OF CONCRETE BARRIER WITHIN CLEAR ZONE SHALL BE PROTECTED...
11. ALL TRAFFIC DEVICES SHALL BE NCHRP 350 APPROVED...
12. TTC 26.2, 27.2, 28.2, AND 29.2 SHALL BE USED AS NEEDED...
13. ALL FLAGGERS SHALL BE CERTIFIED WITH CURRENT CARD...

GENERAL TRAFFIC CONTROL NOTES:

- 1. AT THE CONCLUSION OF EACH WORK DAY, THE CONTRACTOR SHALL REMOVE ALL CHANNELIZING DEVICES FROM THE TRAVEL LANES...
2. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)...
3. WORK SHALL BE SCHEDULED SO AS TO NOT BLOCK ACCESS TO ADJACENT PROPERTIES...
4. LANE CLOSURES OVER HOLIDAYS AND WEEKENDS WILL NOT BE PERMITTED...

WORK AREA RESTRICTIONS:

- 1. CONTRACTOR SHALL ADHERE TO ALL DAYTIME TRAFFIC WORK HOUR LIMITATIONS AS REQUIRED BY CULPEPER COUNTY AND THE VDOT LAND USE PERMIT.

TYPICAL TRAFFIC CONTROL

- 1. SIGN SPACING DISTANCE SHALL BE 350'-500' WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS.
2. ALL VEHICLES, EQUIPMENT, WORKERS, AND THEIR ACTIVITIES SHALL BE RESTRICTED TO ONE SIDE OF THE PAVEMENT.
3. GROUP 2 DEVICE SPACING SHALL BE AT THE FOLLOWING DISTANCES:
LOCATION SPEED (MPH)
0-35
TRANSITION SPACING 20'
TRAVELWAY SPACING 40'
4. MERGING TAPER LENGTHS (L) SHALL BE AS FOLLOWS:

Table 6H-2, Taper Length Criteria and Taper Length Chart. Table with columns: Type of Taper, Taper Length (L). Rows: Merging, Shifting, Shoulder, Two-Way Traffic, Downstream.

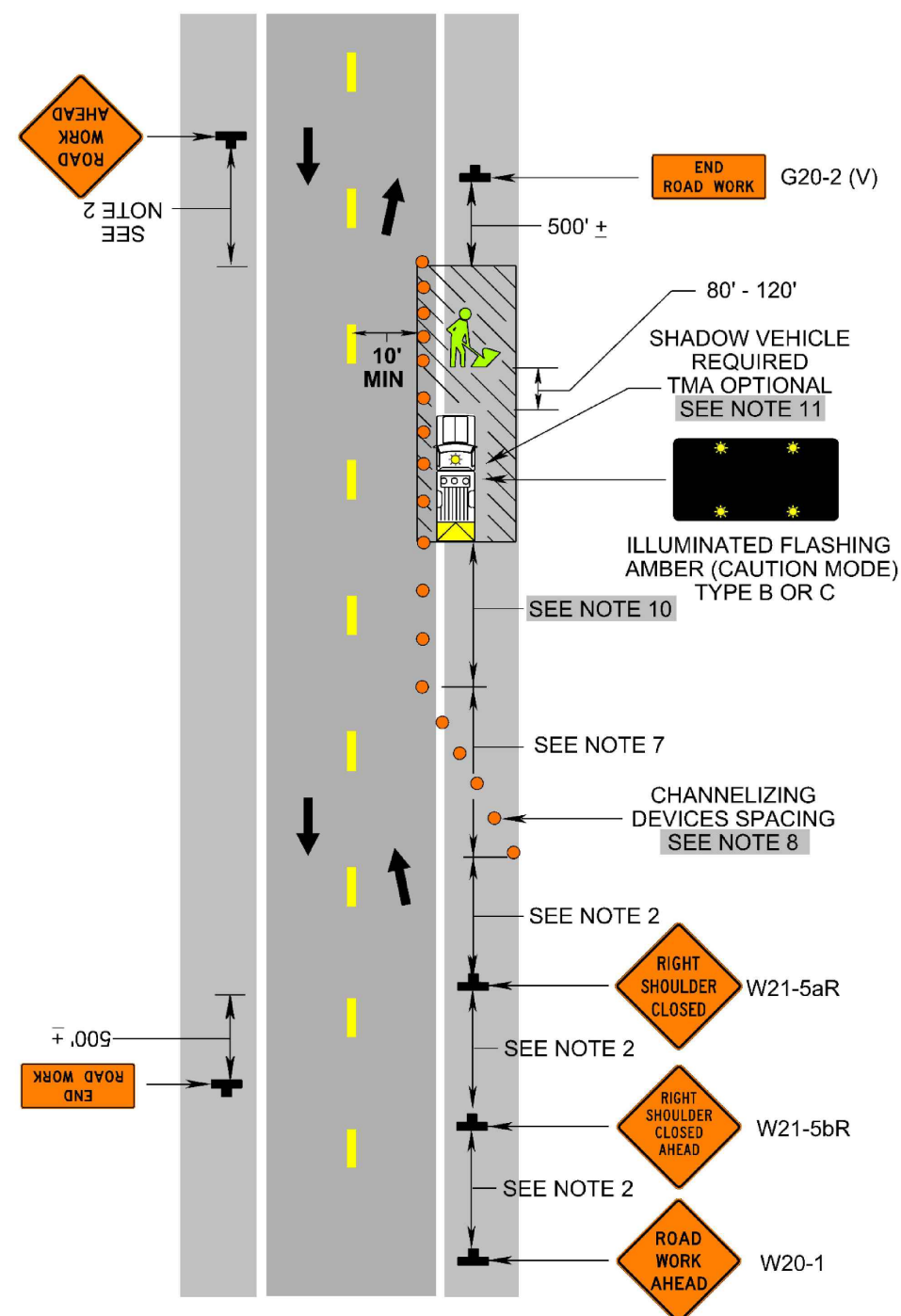
Table with columns: Posted Speed Limit (mph), Width of Offset (Feet), Remarks. Rows: 25, 30, 35, 40, 45, 50, 55, 60, 65, 70.

- 5. THE MINIMUM LENGTH FOR A SHOULDER TAPER IS 1/3 L (SEE NOTE 4 ABOVE FOR THE VALUE OF L).
6. THE BUFFER SPACE LENGTH SHALL BE AS FOLLOWS:

Table 6H-3, Length of the Longitudinal Buffer Space. Table with columns: Posted Speed Limit (mph), Distance (Feet). Rows: <20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70.

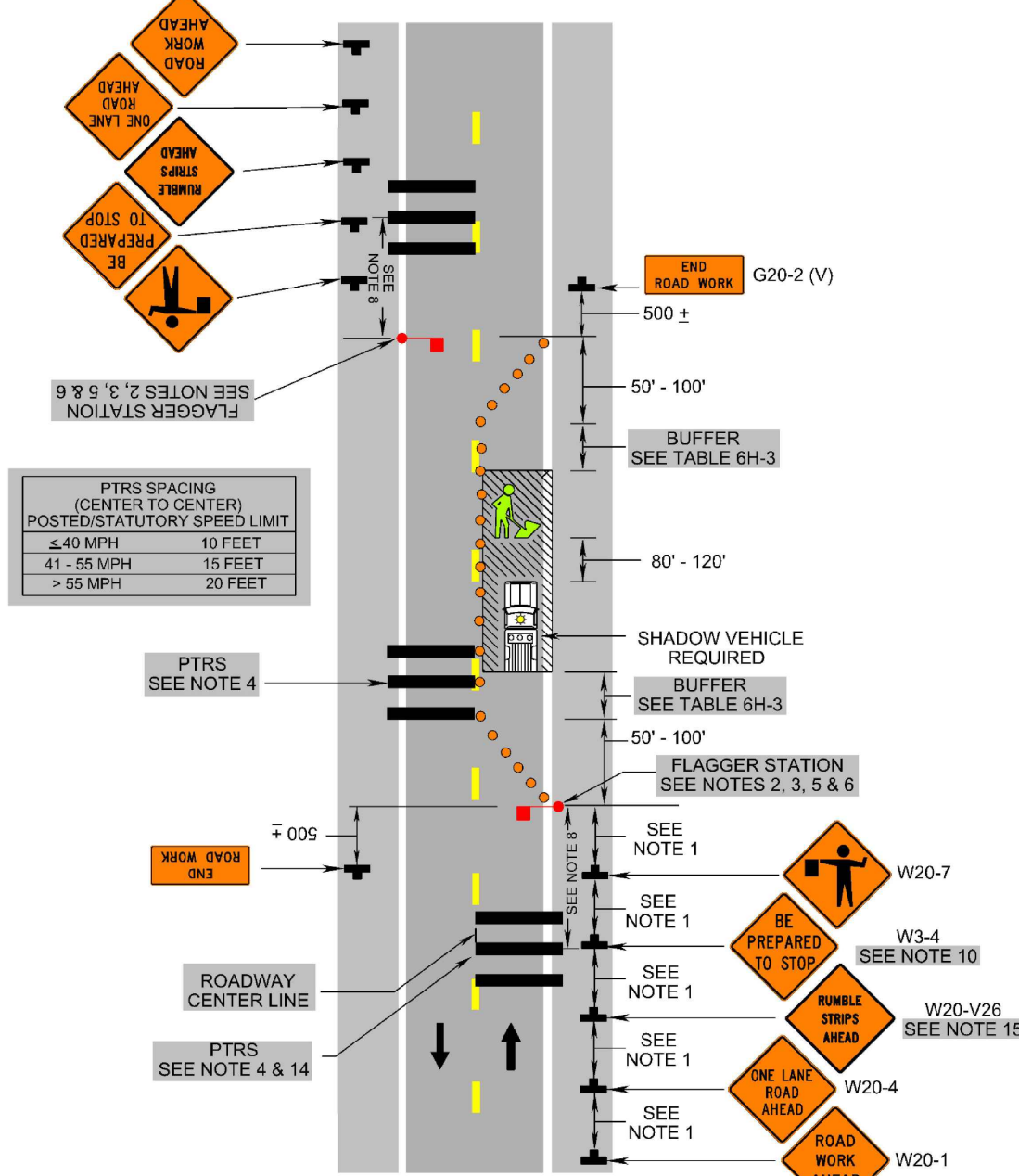
- 7. WHEN A SIDE ROAD OR ENTRANCE INTERSECTS THE ROADWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE PLACED AS NEEDED TO ALLOW FOR INGRESS AND EGRESS AT THE ENTRANCE.

Shoulder Operation with Minor Encroachment
(Figure TTC-5.2)



1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.2)



1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

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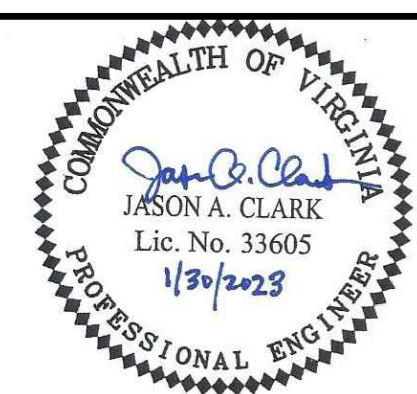


Table with project details: DESIGNED BY: HFW, DRAWN BY: KTM, DIHR BY: JAC, PROJECT: CHERRY HILL WATER SYSTEM PHASE II WATER LINE IMPROVEMENTS-REBID CULPEPER COUNTY, VIRGINIA, TITLE: TRAFFIC CONTROL PLAN NOTES AND DETAILS, SHEET NUMBER: 16 of 16.

Table with columns: NO., SHEET REVISION, BY, DATE, NO. for tracking revisions.

Table with columns: SHEET REVISION, BY, DATE for tracking revisions.