

GENERAL INFORMATION

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 RICHMOND, VA 23235  
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**DISTURBED AREA:**

**ZONING:** N/A

**MAGISTERIAL DISTRICT:** SCOTTSVILLE, VA

**USGS DATUM:** HORIZONTAL DATUM--VA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NAD 83

VERTICAL DATUM - NGVD 29

**SOURCE OF TOPOGRAPHY:** CONVENTIONAL INSTRUMENT SURVEY AND MAPPING SURVEY BY LINCOLN SURVEYING INC.

**SOURCE OF SURVEY:** LINCOLN SURVEYING

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# ALBEMARLE COUNTY SERVICE AUTHORITY

# SCOTTSVILLE PHASE 4A WATER MAIN REPLACEMENT

**SHEET INDEX**

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6.	JAMES RIVER ROAD <b>NITC</b> PLAN AND PROFILE - STA. 28+00 TO STA. 38+50
7.	JAMES RIVER ROAD PLAN AND PROFILE - STA. 38+50 TO STA. 49+50
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13.	PLAN AND PROFILE - PAGE STREET STA. 102+50 TO STA. 106+00, WEST MAIN STREET STA. 114+00 TO STA. 115+00
14.	PAGE STREET TO FLEET STREET PLAN AND PROFILE - STA. 106+00 TO STA. 111+50
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16.	JAMES RIVER ROAD <b>NITC</b> PLAN AND PROFILE - STA. 140+00 TO STA. 148+50
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20.	JAMES RIVER ROAD <b>NITC</b> PLAN AND PROFILE - STA. 176+50 TO STA. 184+00
21.	SCOTTSVILLE TANK AND PUMP STATION SITE <b>NITC</b>
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32.	DETAILS
33.	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS



**LOCATION MAP**

SCALE: 1" = 1000'

**JUNE, 2026**



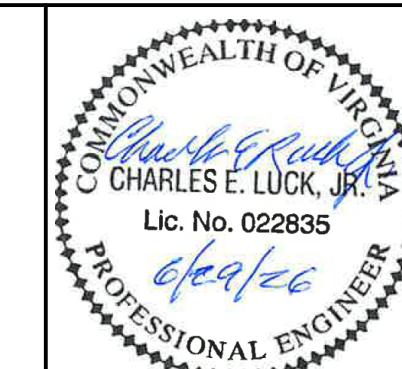
**LOCATION PLAN**

NO SCALE

**NITC = NOT IN THIS CONTRACT**

NA 46480-025\CADD\46480025G1-01.DWG

NO.	DATE	BY	REVISIONS



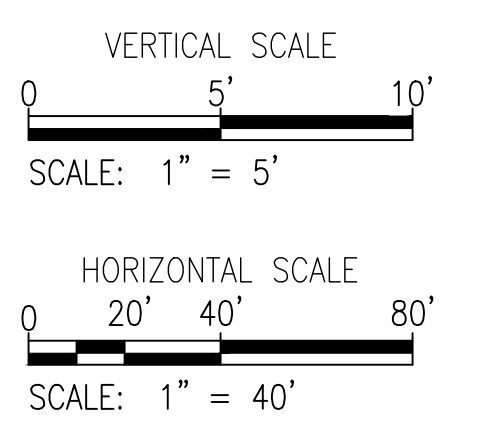
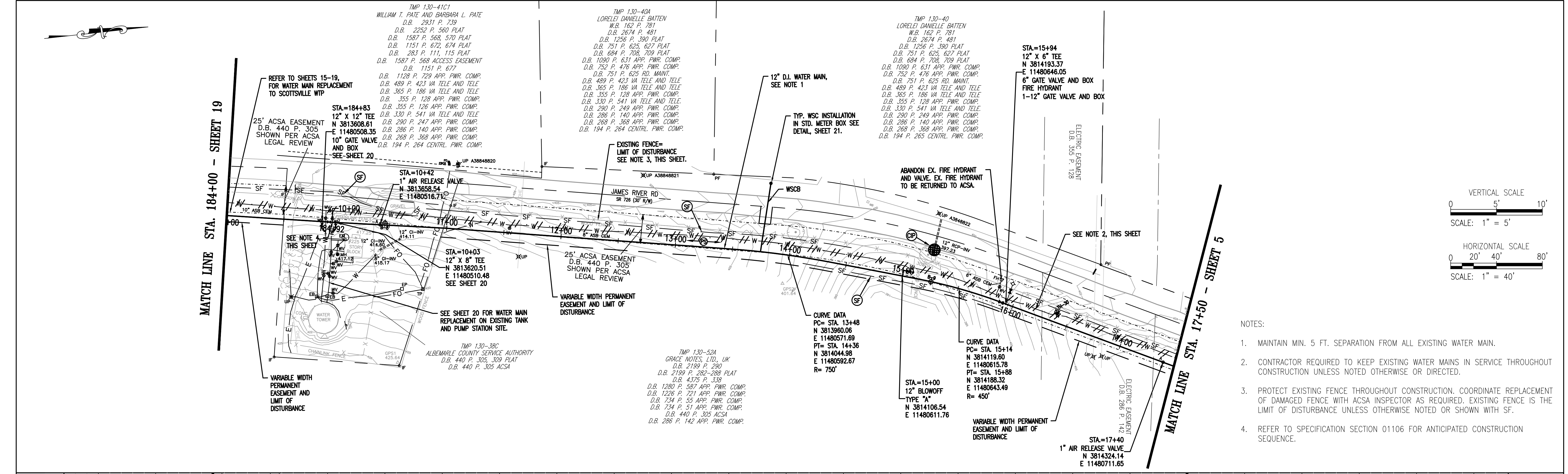
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 HORIZ: N/A  
 VERT.: N/A  
 DATE: JUNE 2026  
 DESIGNED: E.E.B.  
 DRAWN: E.E.B.  
 CHECKED: C.E.L.  
 PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY  
 168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
 SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
 TITLE SHEET, VICINITY MAP AND SHEET INDEX

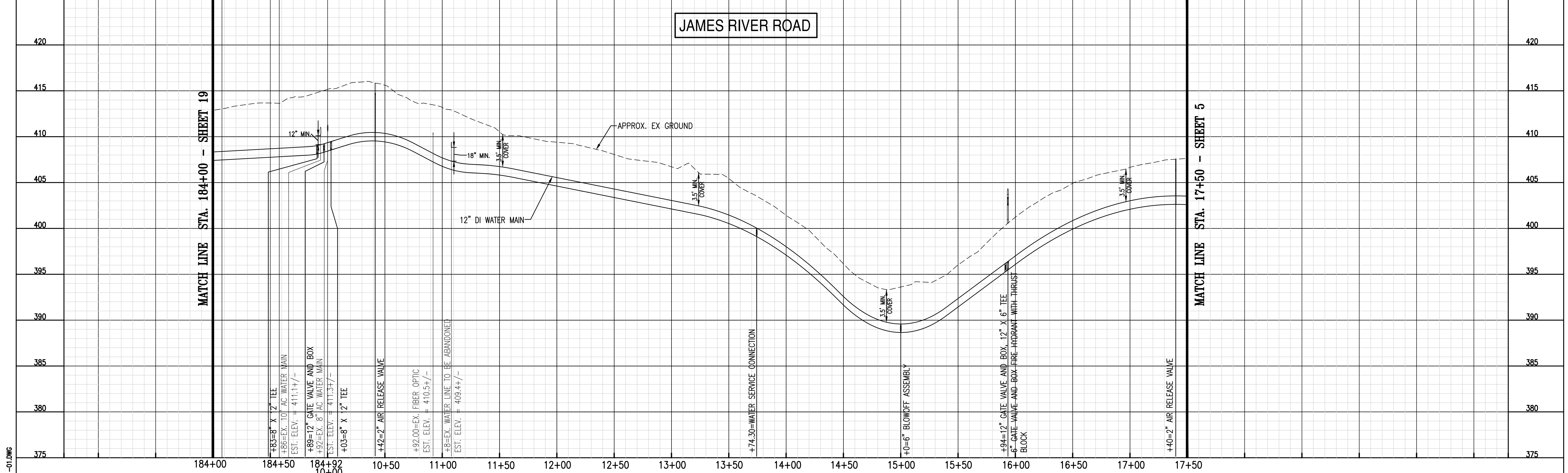
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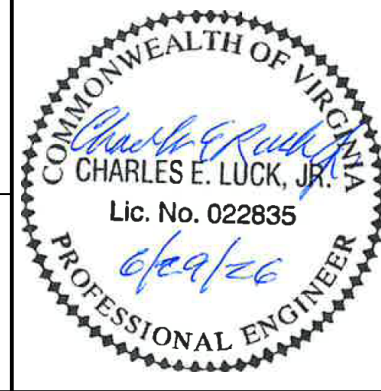
- NOTES:
1. MAINTAIN MIN. 5 FT. SEPARATION FROM ALL EXISTING WATER MAIN.
  2. CONTRACTOR REQUIRED TO KEEP EXISTING WATER MAINS IN SERVICE THROUGHOUT CONSTRUCTION UNLESS NOTED OTHERWISE OR DIRECTED.
  3. PROTECT EXISTING FENCE THROUGHOUT CONSTRUCTION. COORDINATE REPLACEMENT OF DAMAGED FENCE WITH ACSA INSPECTOR AS REQUIRED. EXISTING FENCE IS THE LIMIT OF DISTURBANCE UNLESS OTHERWISE NOTED OR SHOWN WITH SF.
  4. REFER TO SPECIFICATION SECTION 01106 FOR ANTICIPATED CONSTRUCTION SEQUENCE.



NO.	DATE	BY	REVISIONS



**PHASE 4B - NOT IN THIS CONTRACT**



SCALE:  
 HORIZ.: 1"=40'  
 VERT.: 1"=5'  
 DATE: JUNE 2026  
 DESIGNED: E.E.B.  
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ALBEMARLE COUNTY SERVICE AUTHORITY  
 168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
 SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
 JAMES RIVER ROAD PLAN AND PROFILE - STA. 10+00 TO STA. 17+50, STA. 184+00 TO STA. 184+92

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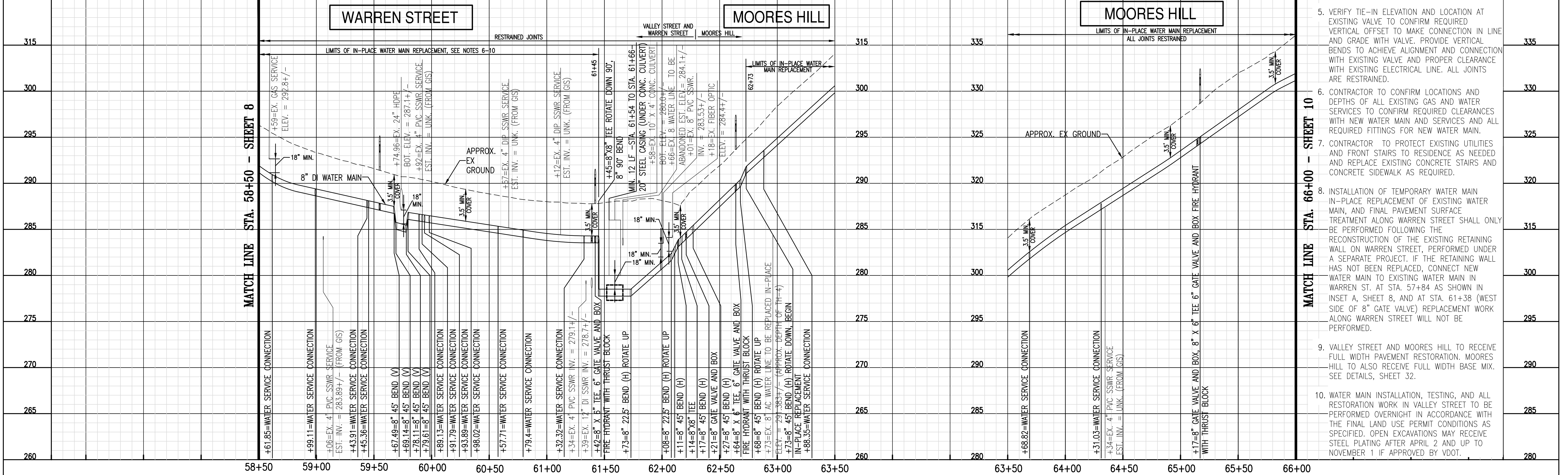
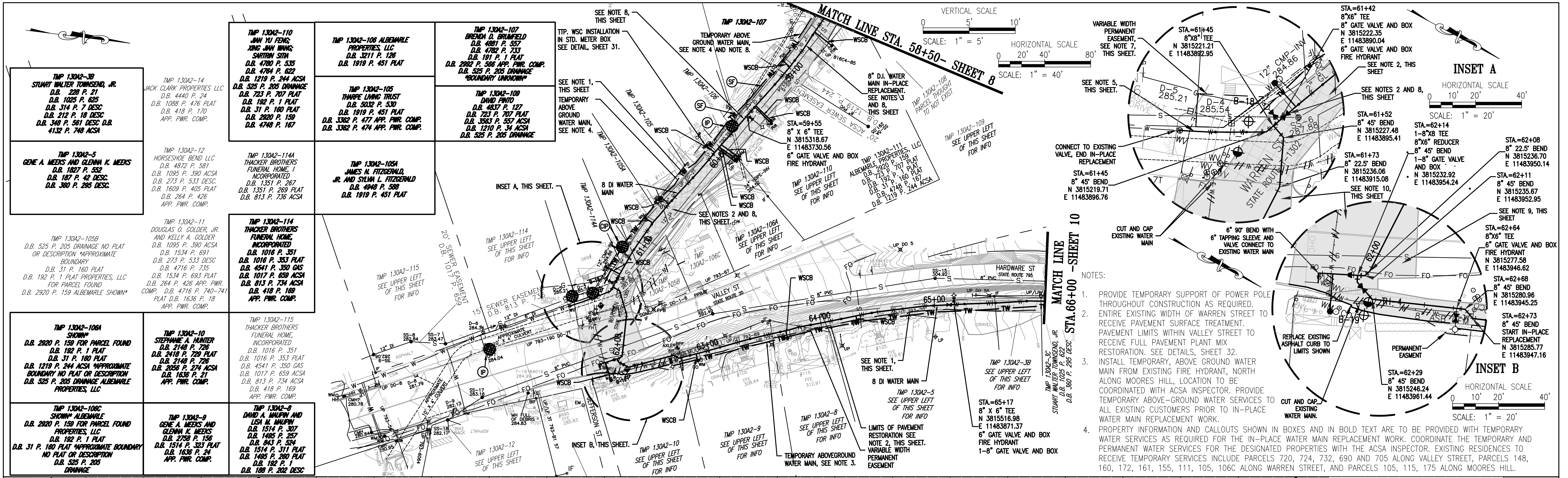
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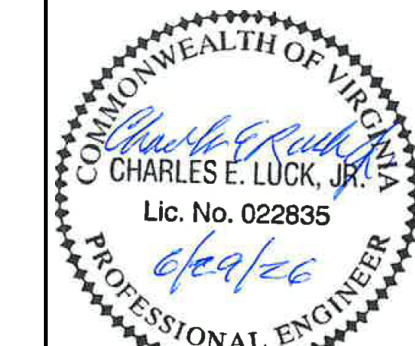








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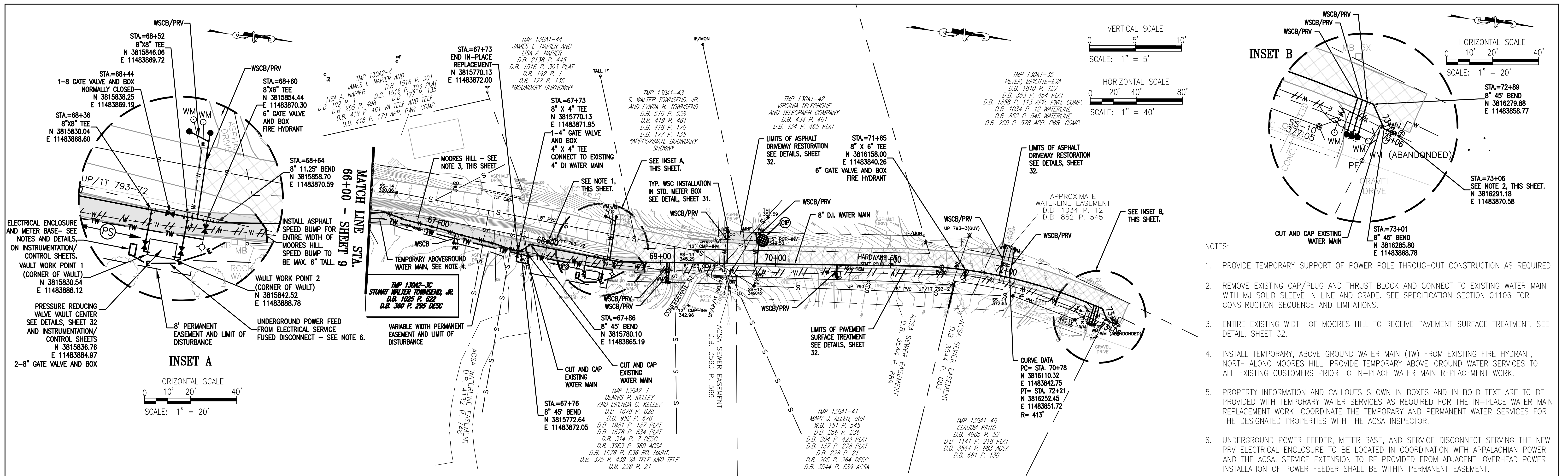


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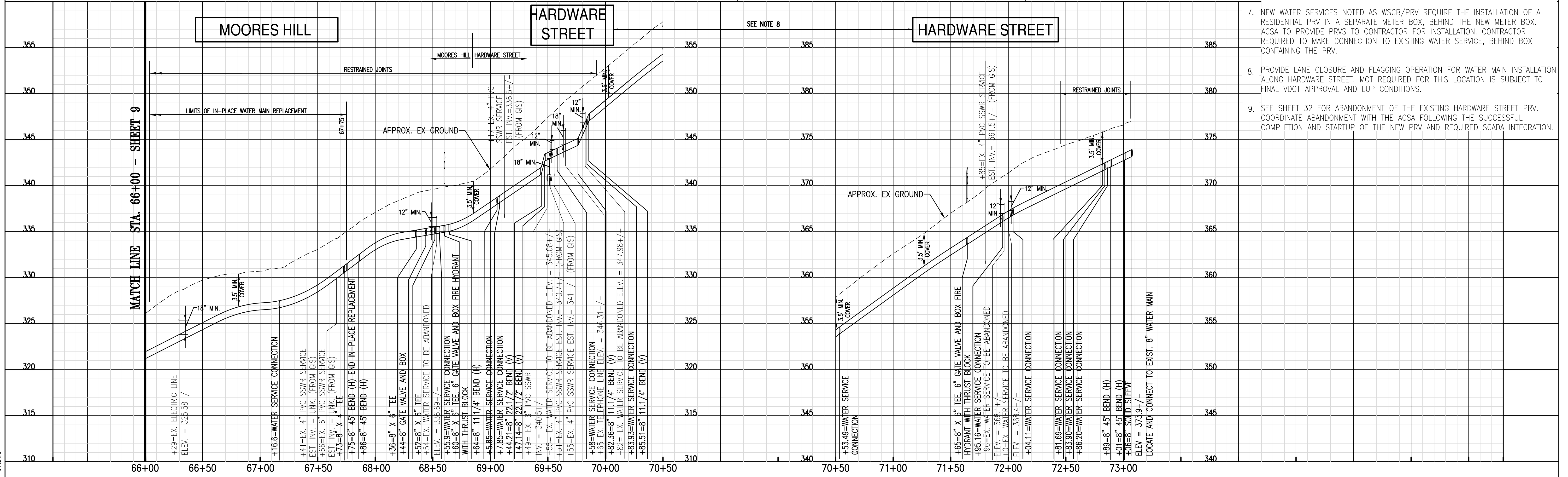
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ALBEMARLE COUNTY SERVICE AUTHORITY  
168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
SCOTTSDALE PHASE 4A - WATER MAIN REPLACEMENT  
JAMES RIVER ROAD TO MOORES HILL  
PLAN AND PROFILE - STA. 58+50 TO STA. 66+00

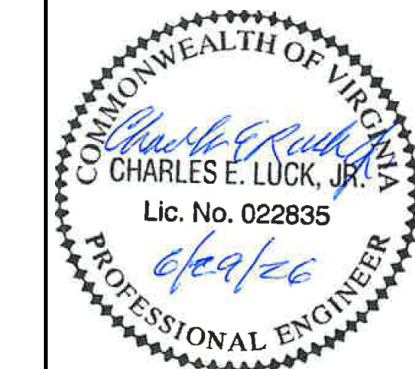
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- NOTES:
1. PROVIDE TEMPORARY SUPPORT OF POWER POLE THROUGHOUT CONSTRUCTION AS REQUIRED.
  2. REMOVE EXISTING CAP/PLUG AND THRUST BLOCK AND CONNECT TO EXISTING WATER MAIN WITH MJ SOLID SLEEVE IN LINE AND GRADE. SEE SPECIFICATION SECTION 01106 FOR CONSTRUCTION SEQUENCE AND LIMITATIONS.
  3. ENTIRE EXISTING WIDTH OF MOORES HILL TO RECEIVE PAVEMENT SURFACE TREATMENT. SEE DETAIL, SHEET 32.
  4. INSTALL TEMPORARY, ABOVE GROUND WATER MAIN (TW) FROM EXISTING FIRE HYDRANT, NORTH ALONG MOORES HILL. PROVIDE TEMPORARY ABOVE-GROUND WATER SERVICES TO ALL EXISTING CUSTOMERS PRIOR TO IN-PLACE WATER MAIN REPLACEMENT WORK.
  5. PROPERTY INFORMATION AND CALLOUTS SHOWN IN BOXES AND IN BOLD TYPE ARE TO BE PROVIDED WITH TEMPORARY WATER SERVICES AS REQUIRED FOR THE IN-PLACE WATER MAIN REPLACEMENT WORK. COORDINATE THE TEMPORARY AND PERMANENT WATER SERVICES FOR THE DESIGNATED PROPERTIES WITH THE ACSA INSPECTOR.
  6. UNDERGROUND POWER FEEDER, METER BASE, AND SERVICE DISCONNECT SERVING THE NEW PRV ELECTRICAL ENCLOSURE TO BE LOCATED IN COORDINATION WITH APPALACHIAN POWER AND THE ACSA. SERVICE EXTENSION TO BE PROVIDED FROM ADJACENT, OVERHEAD POWER. INSTALLATION OF POWER FEEDER SHALL BE WITHIN PERMANENT EASEMENT.
  7. NEW WATER SERVICES NOTED AS WSCB/PRV REQUIRE THE INSTALLATION OF A RESIDENTIAL PRV IN A SEPARATE METER BOX, BEHIND THE NEW METER BOX. ACSA TO PROVIDE PRVS TO CONTRACTOR FOR INSTALLATION. CONTRACTOR REQUIRED TO MAKE CONNECTION TO EXISTING WATER SERVICE, BEHIND BOX CONTAINING THE PRV.
  8. PROVIDE LANE CLOSURE AND FLAGGING OPERATION FOR WATER MAIN INSTALLATION ALONG HARDWARE STREET. NOT REQUIRED FOR THIS LOCATION IS SUBJECT TO FINAL VDOT APPROVAL AND LUP CONDITIONS.
  9. SEE SHEET 32 FOR ABANDONMENT OF THE EXISTING HARDWARE STREET PRV. COORDINATE ABANDONMENT WITH THE ACSA FOLLOWING THE SUCCESSFUL COMPLETION AND STARTUP OF THE NEW PRV AND REQUIRED SCADA INTEGRATION.



NO.	DATE	BY	REVISIONS

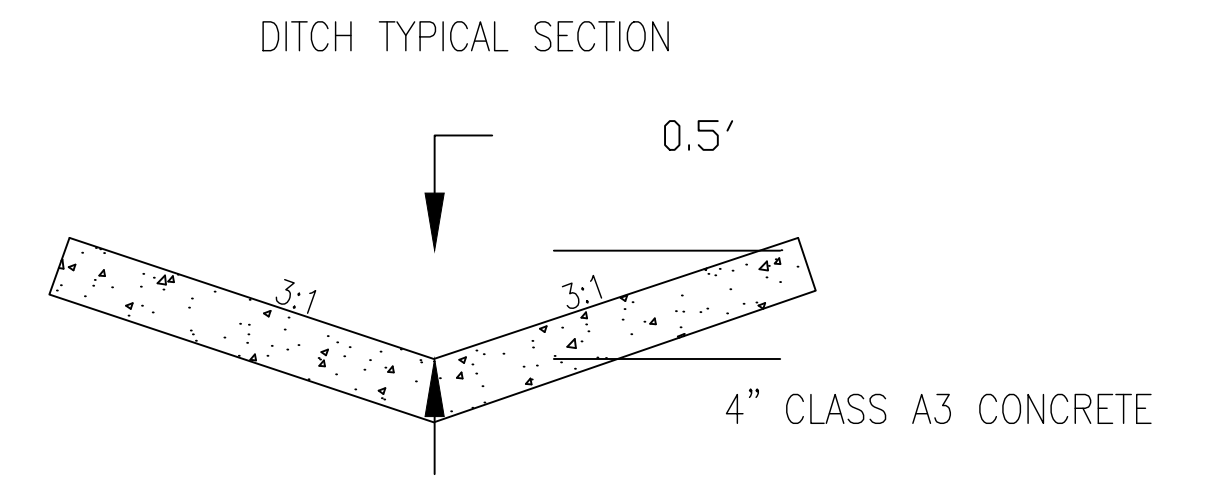
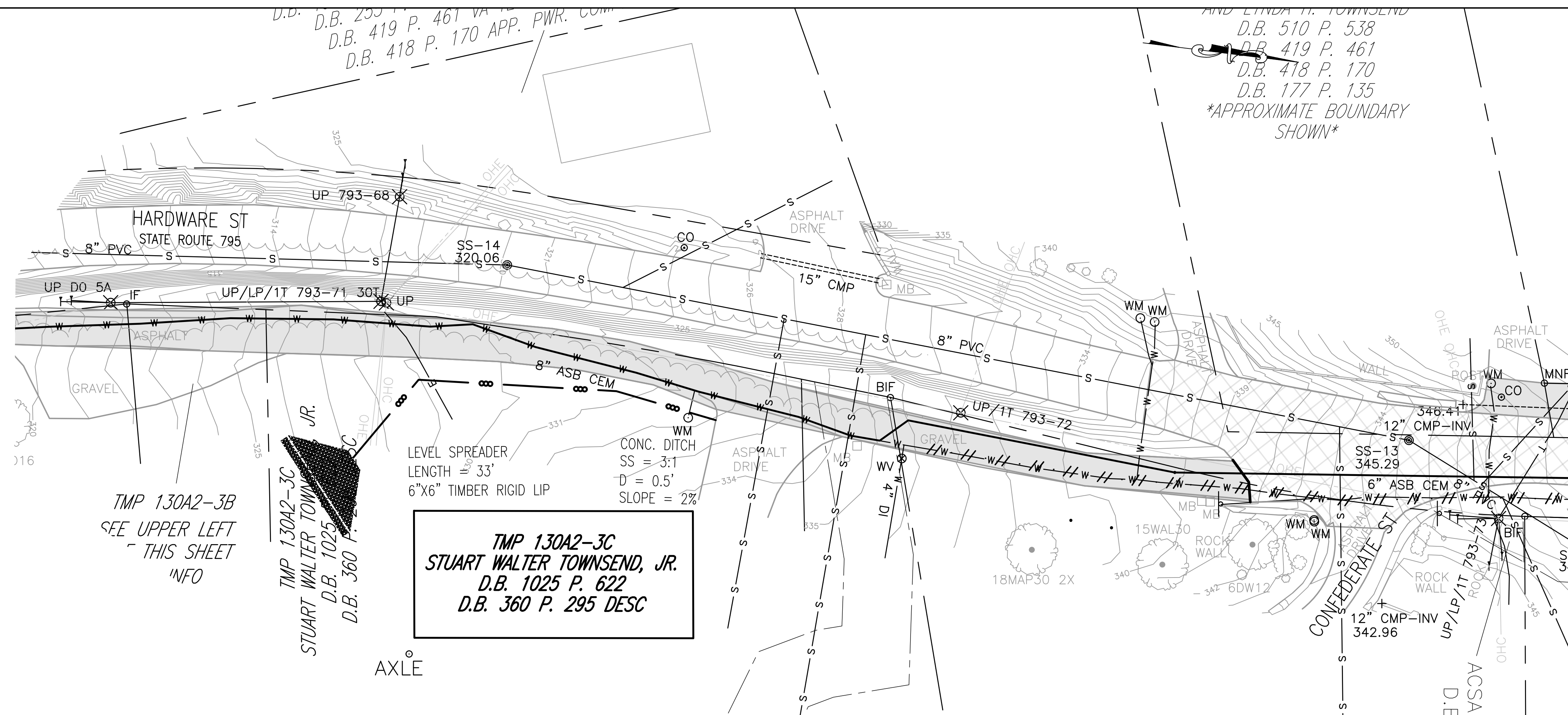


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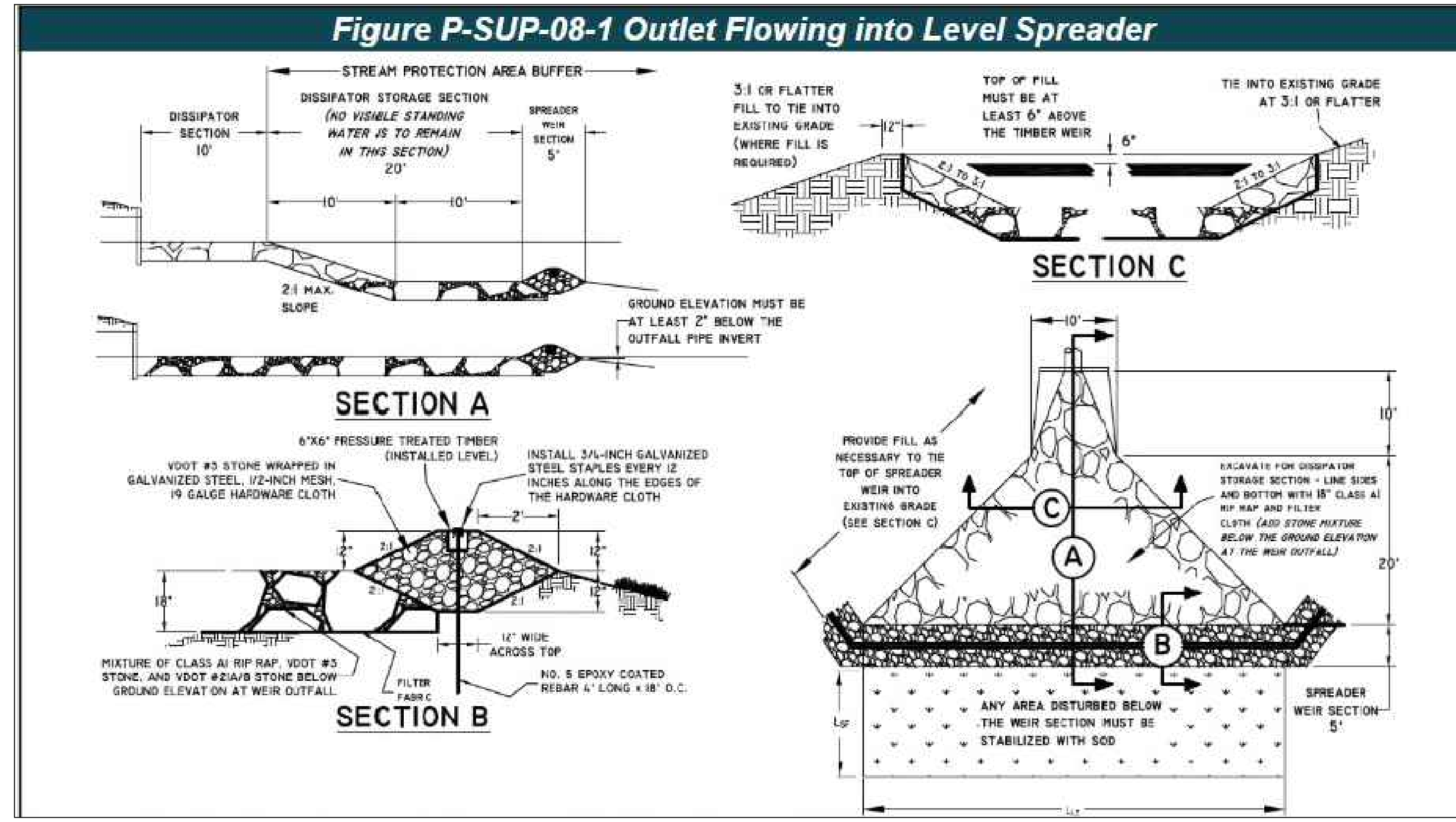
ALBEMARLE COUNTY SERVICE AUTHORITY  
 168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
 SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
 MOORES HILL TO HARDWARE STREET  
 PLAN AND PROFILE - STA. 66+00 TO STA. 73+06

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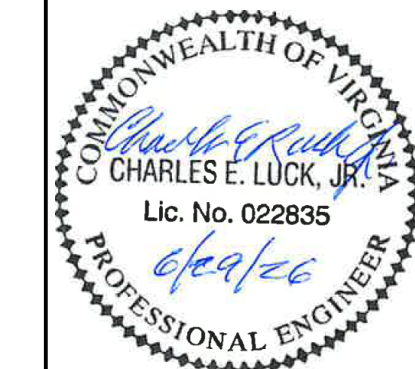
- NOTES:
1. CONCRETE CHANNEL AND LEVEL SPREADER TO BE INSTALLED FOLLOWING INSTALLATION, TESTING, AND ACCEPTANCE OF WATER MAIN ALONG MOORES HILL AND PRIOR TO ANY PAVEMENT RESTORATION WORK. FINAL PAVEMENT RESTORATION AND OVERLAY LIMITS TO TIE INTO TOP EDGE OF CONCRETE CHANNEL.
  2. PERFORM FINE GRADING, SEEDING, STABILIZATION AND RESTORATION WORK ON THE TOWNSEND PARCEL FOLLOWING THE CONSTRUCTION OF THE CONCRETE CHANNEL AND LEVEL SPREADER AND PRIOR TO FINAL PAVEMENT RESTORATION ALONG MOORES HILL. LIMIT OF RESTORATION WORK TO BE COORDINATED WITH THE ACSA INSPECTOR OR ENGINEER AND PROPERTY OWNER AS REQUIRED.



DEQ STANDARD FOR PERMANENT LEVEL SPREADER

NA 46480-025\CADD\46480025C1-07A.DWG

NO.	DATE	BY	REVISIONS



SCALE:  
 HORIZ: 1"=20'  
 VERT: NA  
 DATE: JUNE 2026  
 DESIGNED: E.E.B.  
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 PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY  
 168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
 SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
 MOORES HILL  
 DRAINAGE IMPROVEMENTS

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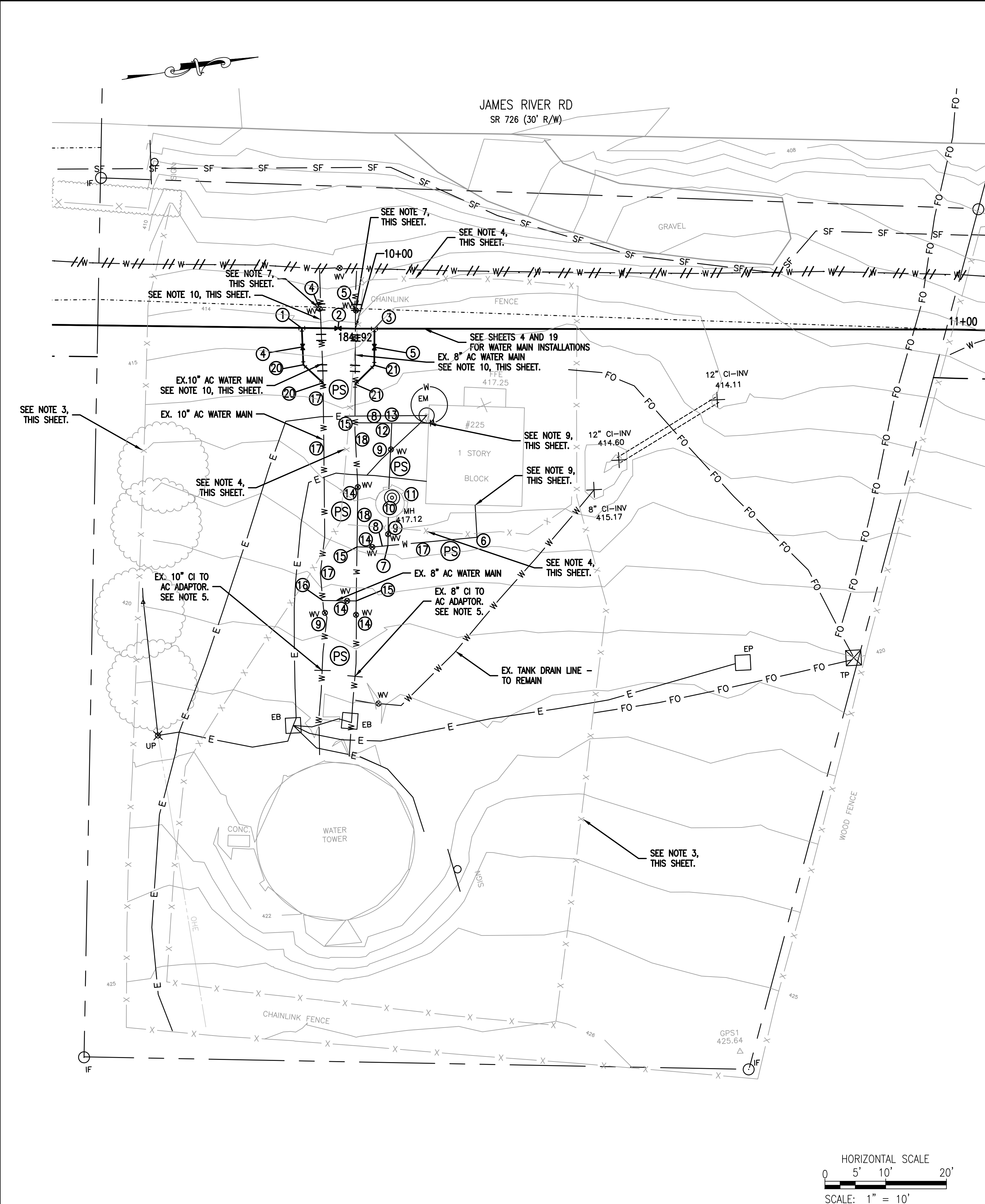












**NEW EQUIPMENT TO BE INSTALLED WITH 10" WATER MAIN INSTALLATION (ALL JOINTS RESTRAINED)**

- ① 10" X 10" DI TEE
- ② 10" GATE VALVE AND BOX (NORMALLY CLOSED)
- ③ 10" X 8" DI TEE
- ④ 10" GATE VALVE AND BOX (CLOSED VALVE WITH RESTRAINED CAP/PLUG)
- ⑤ 8" GATE VALVE AND BOX (CLOSED VALVE WITH RESTRAINED CAP/PLUG)

**EXISTING EQUIPMENT TO BE REPLACED IN-PLACE (ALL JOINTS RESTRAINED)**

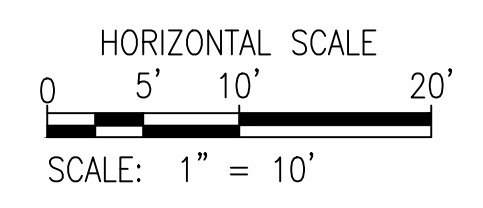
- ⑥ 10" 90° BEND
- ⑦ 10" X 10" TEE WITH THRUST BLOCK
- ⑧ 8" X 10" INCREASER
- ⑨ 10" GATE VALVE AND BOX
- ⑩ 10" CHECK VALVE
- ⑪ 4 FT. DIAMETER PRECAST CONCRETE MANHOLE WITH MIN. 24" FRAME AND COVER. SEE NOTE 8.
- ⑫ 10" X 10" CROSS
- ⑬ 10" GATE VALVE AND BOX AND 10" PLUG WITH THRUST BLOCK
- ⑭ 8" GATE VALVE AND BOX
- ⑮ 8" X 8" TEE WITH THRUST BLOCK
- ⑯ 10" X 8" TEE WITH THRUST BLOCK
- ⑰ 10" WATER MAIN (AC TO DI). SEE NOTE 9.
- ⑱ 8" WATER MAIN (AC TO DI). SEE NOTE 9.
- ⑲ 8" 90° BEND

**NEW EQUIPMENT TO BE INSTALLED (ALL JOINTS RESTRAINED)**

- ⑳ 10" 45° BEND (ROTATE TO CONNECT TO NEW 10" GATE VALVE)
- ㉑ 8" 45° BEND (ROTATE TO CONNECT TO NEW 8" GATE VALVE)

**NOTES:**

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING MATERIALS, LOCATIONS, AND SIZES TO BE REMOVED, ABANDONED, AND REPLACED AND ALL EXISTING UTILITIES PRIOR TO STARTING WORK AT THE SITE. COORDINATE SHUTDOWN OF PUMP STATION AND TANK WITH THE ACSA AND RWSA.
2. CONTRACTOR REQUIRED TO KEEP EXISTING WATER MAINS IN SERVICE THROUGHOUT CONSTRUCTION UNLESS NOTED OTHERWISE OR DIRECTED. TANK AND PUMP STATION MAY BE TAKEN OFFLINE FOLLOWING PHASED INSTALLATION AND STARTUP OF NEW, OFFSITE WATER MAINS. REFER TO SPECIFICATION SECTION 01106 FOR CONSTRUCTION SEQUENCE REQUIREMENTS.
3. PROTECT EXISTING FENCE THROUGHOUT CONSTRUCTION. COORDINATE REPLACEMENT OF DAMAGED FENCE WITH ACSA INSPECTOR AS REQUIRED.
4. REMOVE PORTION OF EXISTING CHAIN LINK FENCE AND GATES AS REQUIRED TO REPLACE EXISTING VALVES AND WATER MAINS. PROVIDE TEMPORARY FENCING AS NEEDED DURING CONSTRUCTION. COORDINATE PLACEMENT OF TEMPORARY FENCING WITH THE ACSA INSPECTOR. REPLACE EXISTING FENCING AND GATES IN KIND AT THE COMPLETION OF CONSTRUCTION.
5. LOCATE EXISTING CI TO AC ADAPTORS ALONG EXISTING WATER MAINS PRIOR TO BEGINNING WATER MAIN REPLACEMENT WORK. CONFIRM CONDITION OF ADAPTORS AND SUITABILITY FOR CONNECTION OF NEW DI WATER MAINS. REPLACE EXISTING ADAPTORS IF NEEDED AND MAINTAIN CONDITION OF EXISTING AC PIPES TO TANK.
6. PRIOR TO BEGINNING REPLACEMENT OF ALL IDENTIFIED YARD PIPING AND VALVES, COORDINATE THE EMPTYING OF THE EXISTING TANK AND THE TEMPORARY SHUTDOWN OF THE EXISTING PUMP STATION WITH THE ACSA INSPECTOR AND RWSA.
7. COORDINATE CLOSURE OF EXISTING GATE VALVES WITH ACSA INSPECTOR TO ISOLATE YARD PIPING AND TO ALLOW FOR CUT/CAP OF EXISTING AC PIPING AND INSTALLATION OF CAP/PLUG AND THRUST BLOCK AT EACH EXISTING GATE VALVE.
8. CONTRACTOR TO CONFIRM DIAMETER AND OVERALL DEPTH OF EXISTING MANHOLE TO CONFIRM DIMENSIONS OF REPLACEMENT MANHOLE PRIOR TO PROVIDING SUBMITTAL FOR REVIEW/APPROVAL AND ORDERING THE STRUCTURE.
9. WATER MAIN REPLACEMENT SHALL EXTEND UP TO FIRST PIPE JOINT OUTSIDE OF PUMP STATION OR TO LOCATION IDENTIFIED BY ACSA INSPECTOR. PROVIDE DI TO AC TRANSITION COUPLING OR SUITABLE ADAPTER FOR CONNECTION TO EXISTING AC SUCTION AND DISCHARGE PIPING ADJACENT TO THE PUMP STATION EXTERIOR WALL PENETRATIONS.
10. EXISTING 10" AND 8" AC WATER MAINS FROM EXISTING VALVES TO NEW 10" AND 8" 45 DEGREE BENDS MAY BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ACSA STANDARDS AND SPECIFICATIONS FOLLOWING THE WORK OUTLINED UNDER NOTE 7.

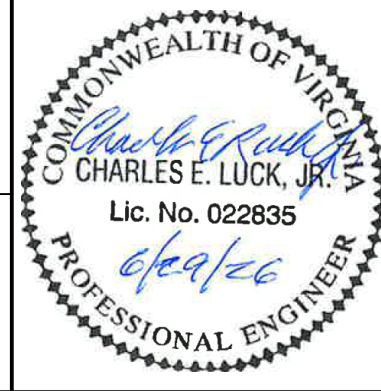


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NO.	DATE	BY	REVISIONS



**PHASE 4B - NOT IN THIS CONTRACT**



SCALE:  
HORIZ: 1" = 10'  
VERT: N/A  
DATE: JUNE 2026  
DESIGNED: E.E.B.  
DRAWN: E.E.B.  
CHECKED: C.E.L.  
PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY  
168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
SCOTTSDALE PHASE 4A - WATER MAIN REPLACEMENT  
SCOTTSDALE TANK AND PUMP STATION SITE

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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. For all other roadways, the sign spacing should be 500'-500' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
3. When work takes up part of a lane on a high volume roadway, vehicular traffic volumes, vehicle mix, speed and capacity should be analyzed to determine whether the affected lane should be closed. Unless the lane encroachment analysis permits a remaining lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.
Option:
4. The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
Standard:
5. A shadow vehicle with either an arrow board operating in the caution mode, or at least one high-intensity amber rotating, flashing, or oscillating light shall be parked 80' - 120' in advance of the first work crew.
6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating lights.
7. Taper length (L) and channelizing device spacing shall be at the following:
Table: Speed Limit (mph) vs Lane Width (Feet) and Remarks
Table: Channelizing Device Spacing vs Location Spacing and Speed Limit (mph)
9. On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.
10. The buffer space length The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.
11. A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph.
12. When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.
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

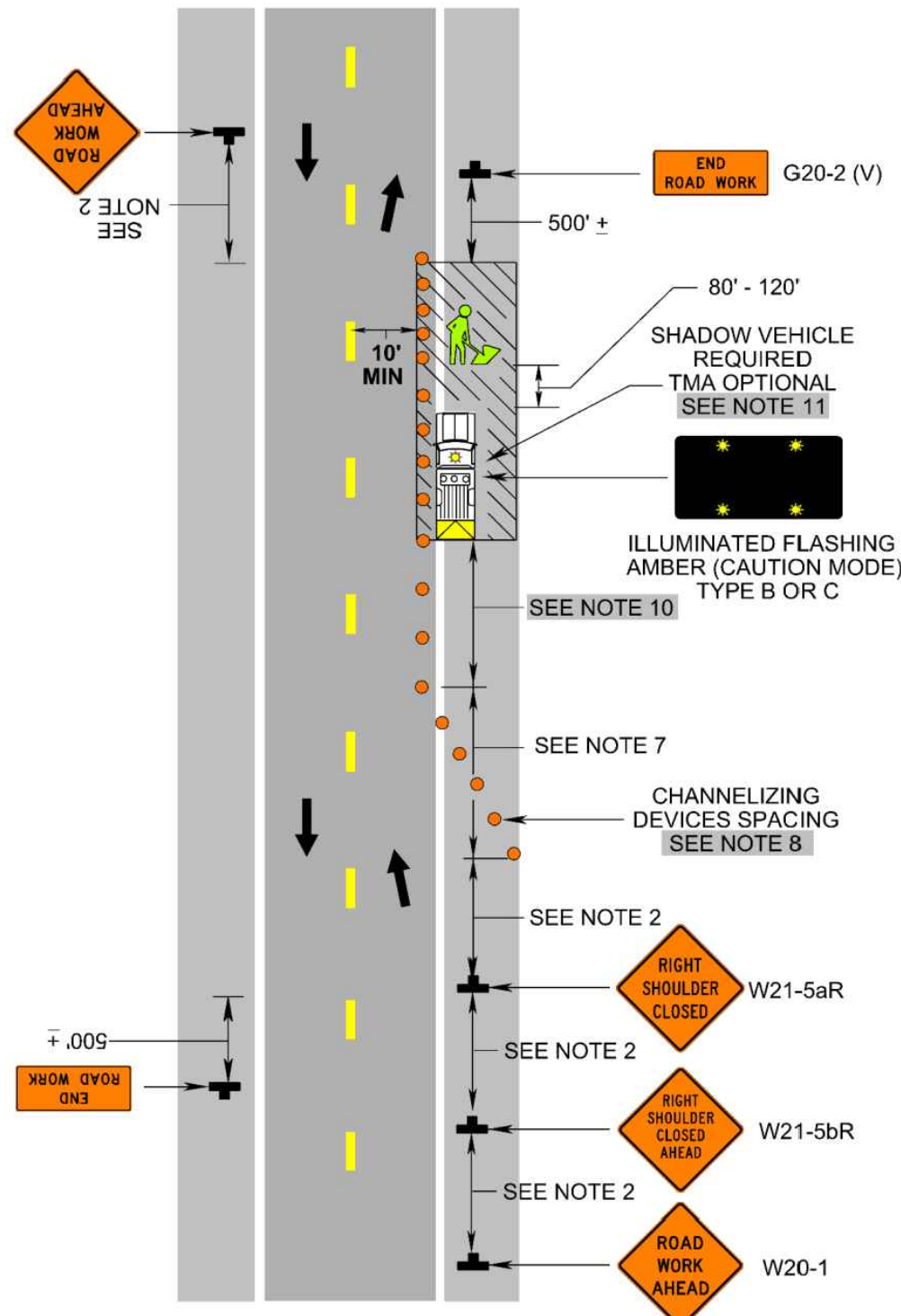
- Guidance:
1. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, and 500'-800' where the posted speed limit is greater than 45 mph.
2. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the flagger station and transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. Generally speaking, motorists should have a clear line of sight from the graphic flagger symbol sign to the flagger.
3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway, the maximum time motorists should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.2.
Standard:
4. Portable Temporary Rumble Strips (PTRS) shall be used as noted in Section 6E.99.2
5. Flagging stations shall be located far enough in advance of the work space to permit approaching traffic to reduce speed and/or stop before passing the work space and allow sufficient distance for departing traffic in the left lane to return to the right lane before reaching opposing traffic (see Table 6H-3 on Page 6H-5).
6. All flaggers shall be state certified and have their certification card in their possession when performing flagging duties (see Section 6E.01, Qualifications for Flaggers).
7. Cone spacing shall be based on the posted speed and the values in Table 6H-4 on Page 6H-6.1
8. A shadow vehicle with at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew.
Option:
8. A SLOW (W21-V10) sign may be required in this area to give advance warning of the operation ahead by slowing approaching traffic prior to reaching the flagger station or queued traffic.
Guidance:
9. If the queue of traffic reaches the BE PREPARED TO STOP (W3-4) sign then the signs, and if used the PTRS, should be readjusted at greater distances.
10. When a highway-rail crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the highway-rail grade crossing, the temporary traffic control zone should be extended so that the transition area precedes the highway-rail crossing (see Figure TTC-56 for additional information on highway-rail crossings).
Standard:
11. At night, flagger stations shall be illuminated, except in emergencies (see Section 6E.08).
Option:
12. Cones may be eliminated when using a pilot vehicle operation or when the total roadway width is 20 feet or less.
13. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6E).
Standard:
14. When used, three portable temporary rumble (PTRS) strips shall be installed across the entire travel lane adjacent to the BE PREPARED TO STOP (W3-4) sign. The portable temporary rumble strips shall be monitored and adjusted as necessary during the work shift to ensure proper placement on the roadway. When the PTRS are installed, the RUMBLE STRIPS AHEAD (W20-V26) sign shall also be utilized.
1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

Typical Traffic Control  
Lane Closure Operation in an Intersection  
(Figure TTC-28.2)

NOTES

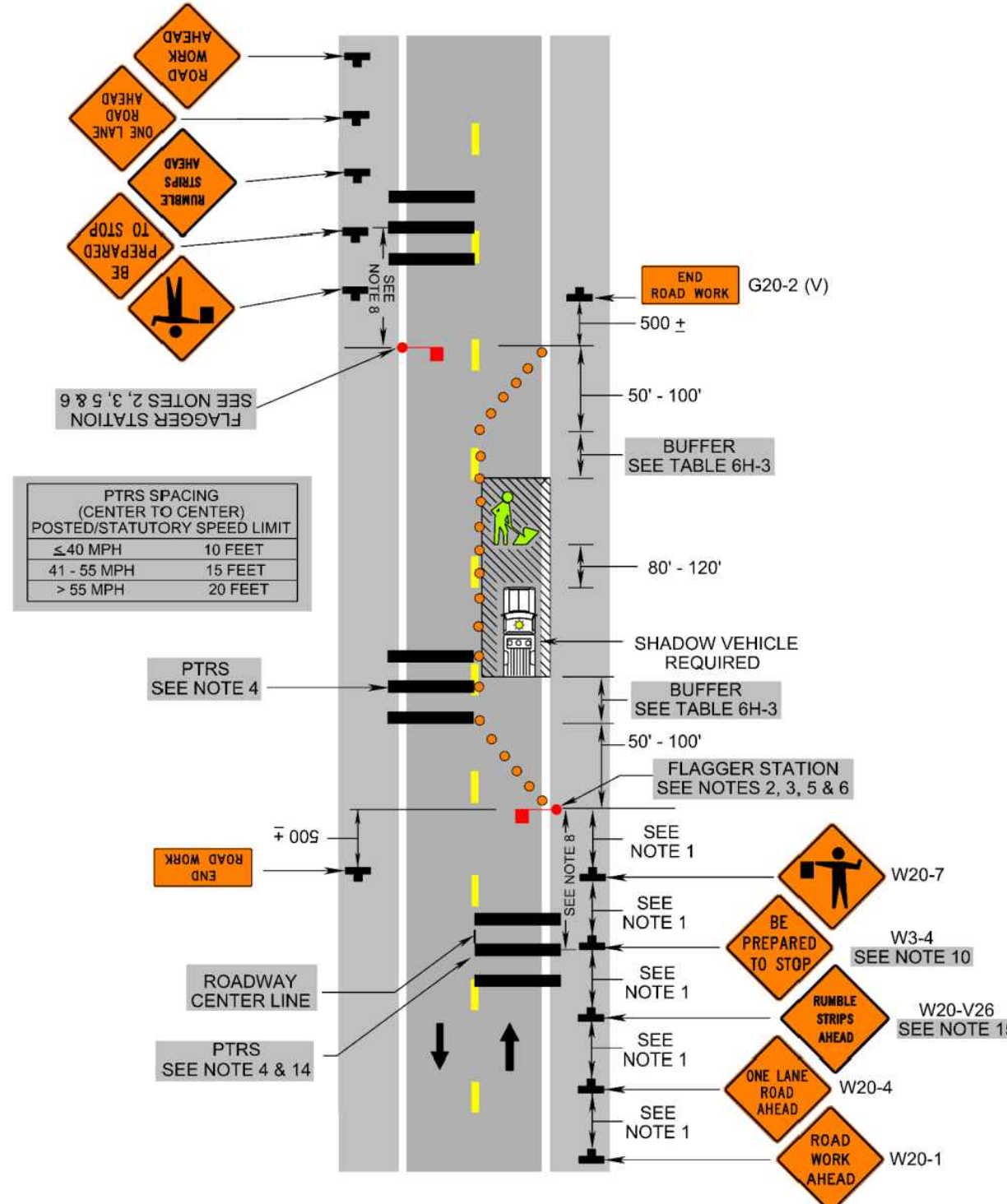
- Guidance:
1. The control of traffic through the intersection in order of preference should be:
a. Obtain the services of law enforcement personnel.
b. Detour the effective routes to other roads and streets as approved and directed by the District Traffic Engineer.
c. Place a state certified flagger on each leg of the intersection controlling a single lane of traffic. Appropriate signing as shown should be used for law enforcement and flagging operations. For detour signs see Figure TTC-34.
2. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph.
3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway the maximum time motorists should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.2.
Standard:
4. Channelizing device spacing shall be on 20' centers or less.
5. PTRS shall be used as noted in Section 6E.99.
Guidance:
6. If room permits, a shadow vehicle with at least one rotating amber light or high intensity amber flashing or oscillating light should be parked 80'-120' in advance of the first work crew.
Standard:
7. For emergency situations (any non-planned operation) of 30 minutes or less duration, two rotating amber lights or high intensity amber flashing or oscillating lights mounted on the vehicle and visible for 360° shall be required in addition to the channelizing devices shown around the vehicle. Also, vehicle hazard warning signals shall be used.
Guidance:
8. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-36.
Support:
9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.
1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

Shoulder Operation with Minor Encroachment  
(Figure TTC-5.2)



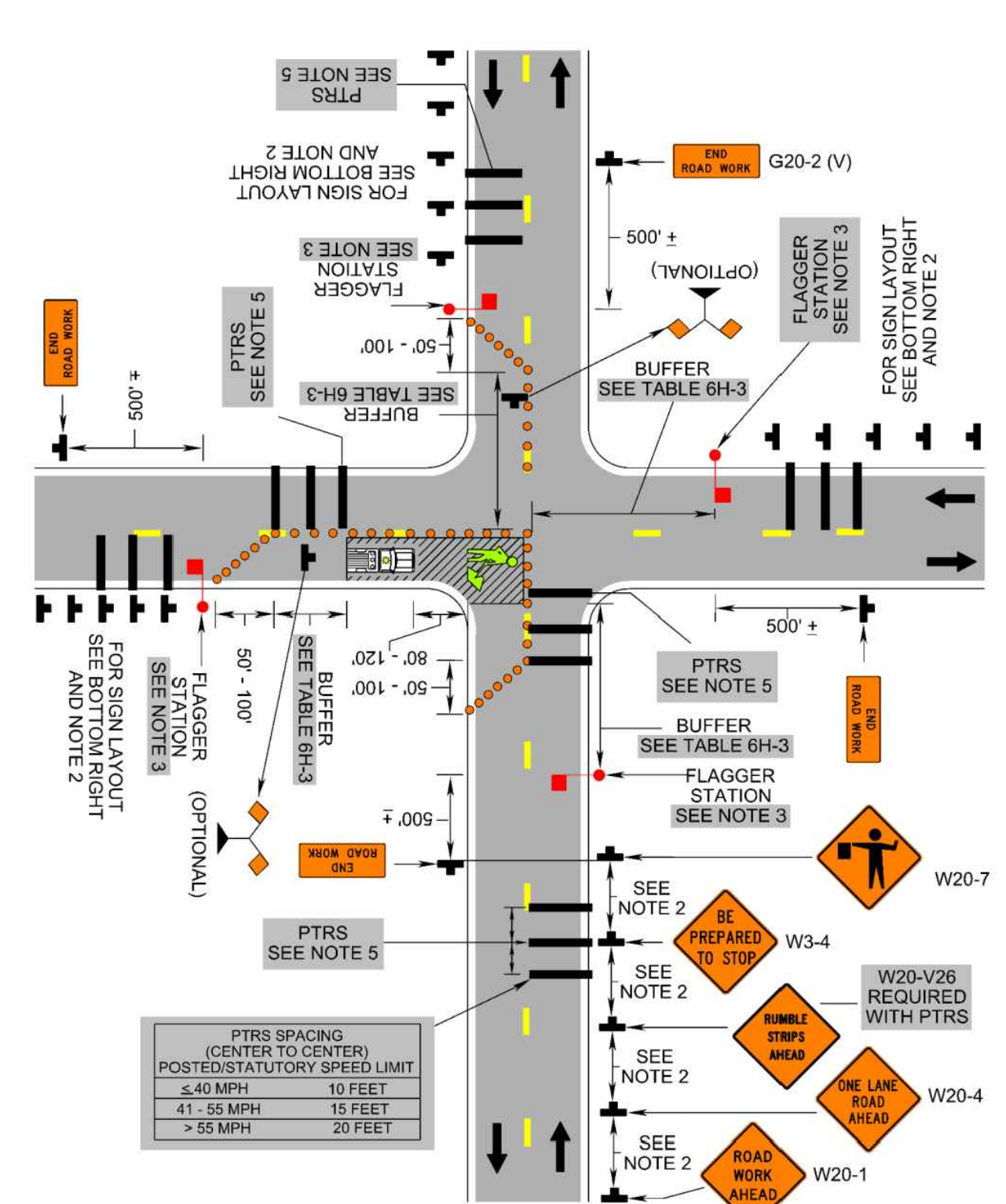
1: Revision 1 - 4/1/2015
2: Revision 2 - 9/1/2019

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

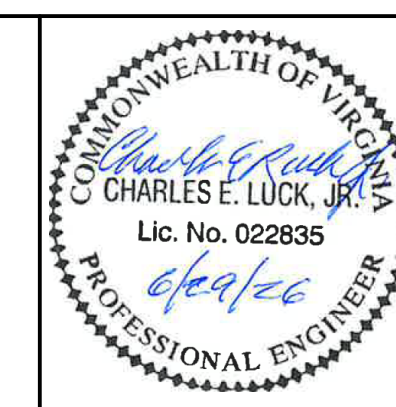
Lane Closure Operation in an Intersection  
(Figure TTC-28.2)



2: Revision 2 - 9/1/2019

NA 46480-025\CAD\46480025C1-22.DWG

Table with columns: NO., DATE, BY, REVISIONS



SCALE: HORIZ: N/A, VERT: N/A
DATE: JUNE 2026
DESIGNED: E.E.B.
DRAWN: E.E.B.
CHECKED: C.E.L.
PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY
168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911
SCOTTSDALE PHASE 4A - WATER MAIN REPLACEMENT
MAINTENANCE OF TRAFFIC NOTES/PLANS

SHEET 23 OF 33



### ABBREVIATIONS

AC	AIR COMPRESSOR
ACSA	ALBEMARLE COUNTY SERVICE AUTHORITY
AI	ANALOG INPUT
AO	ANALOG OUTPUT
A/M	AUTO/MANUAL
ATL	ACROSS THE LINE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
CB	CIRCUIT BREAKER
CCS	CENTRAL CONTROL STATION
CP	CONTROL PANEL
C/P	CONTROL POWER
CR#-#	CONTROL RELAY (W/ # DESIGNATION)
D.I.	DUCTILE IRON
DI	DISCRETE INPUT
DO	DISCRETE OUTPUT
DIS	DISCONNECT SWITCH
EA	EACH
ECD	ELECTRICAL CONTROL DIAGRAM
EF-#	EXHAUST FAN W/ DESIGNATION
E-STOP	EMERGENCY STOP
ETR	EXISTING TO REMAIN
EX	EXISTING
FET	FLOW ELEMENT
FT	FLOW TRANSMITTER
F.O. or FO	FIBER OPTIC
FR	FAULT RESET
GND	GROUND
HCP	HYDRAULIC CONTROL PANEL
HMI	HUMAN MACHINE INTERFACE
HNPT	HYDRO PNEUMATIC TANK
H/O/A	HAND/OFF/AUTOMATIC
I/O	INPUT/OUTPUT
ISBR	INTRINSICALLY SAFE BARRIER RELAY
JB-##	JUNCTION BOX w/ DESIGNATION
LIT	LEVEL TRANSMITTER
mA	MILLIAMPER
MCC	MOTOR CONTROL CENTER
MMS	MANUAL MOTOR STARTER
MOD	MOTOR OPERATED DAMPER
MS	MOTOR STARTER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN OR NUMBER
NSF	NATIONAL SANITATION FOUNDATION
OIT	OPERATOR INTERFACE TERMINAL
OL	OVERLOAD
P	PUMP
P&ID	PROCESS & INSTRUMENTATION DIAGRAM
PB	PULLBOX
PCP	PUMP CONTROL PANEL
PLC	PROGRAMMABLE LOGIC CONTROLLER
P/S	POWER SUPPLY
PT	PRESSURE TRANSMITTER
RSP-#	RAW SEWAGE PUMP w/ DESIGNATION
RVSS	REDUCED VOLTAGE SOFT START
RTD	TEMPERATURE DETECTOR
SF-#	SUPPLY FAN w/ DESIGNATION
SPD	SURGE PROTECTION DEVICE
SS/O/ATL	SOFT START/OFF/ACROSS THE LINE
TB	TERMINATION BOX
TEMP	TEMPERATURE
TR#	TIMING RELAY (W/ # DESIGNATION)
TSP	TWISTED SHIELDED PAIR
TSTAT	THERMOSTAT
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UPS	UNINTERRUPTIBLE POWER SUPPLY
VAC	VOLTS ALTERNATING CURRENT
VDC	VOLTS DIRECT CURRENT
VFD	VARIABLE FREQUENCY DRIVE
VIB	VIBRATION
VS	VIBRATION SENSOR
W/	WITH

### ELEMENTARY SYMBOLS

	CIRCUIT BREAKER
	FUSE
	MOTOR OVERLOAD CONTACT
	CONTROL RELAY W/DESIGNATION
	TIMING RELAY W/DESIGNATION
	NORMALLY OPEN CONTACT W/DESIGNATION
	NORMALLY CLOSED CONTACT W/DESIGNATION
	SELECTOR SWITCH
	HAND AUTO OFF
	NORMALLY OPEN PUSH BUTTON (MOMENTARY)
	NORMALLY CLOSED PUSH BUTTON (MOMENTARY)
	EMERGENCY STOP PUSH BUTTON (MAINTAINED)
	PUSH-TO-TEST PILOT LIGHT
	ELAPSE TIME METER
	NORMALLY OPEN TIME CLOSE
	NORMALLY CLOSE TIME OPEN
	NORMALLY OPEN LIMIT SWITCH
	NORMALLY CLOSED LIMIT SWITCH
	TEMPERATURE SWITCH (OPEN ON RISING TEMPERATURE)
	TEMPERATURE SWITCH (CLOSED ON RISING TEMPERATURE)
	PRESSURE SWITCH
	NORMALLY CLOSED FLOW SWITCH
	PLC-DO
	TERMINAL BLOCK
	MOTOR
	PUMP
	GROUND
	SOLENOID OPERATED VALVE
	FIELD WIRE
	CONTROL WIRE

### INSTRUMENT IDENTIFICATION SCHEDULE

	FIRST LETTER		SUCCEEDING LETTER		
	VARIABLE	MODIFIER	PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		AUTOMATIC
B	BREAKER		USER'S CHOICE		BYPASS
C	COMMUNICATIONS			CONTROL	CLOSE
D	DENSITY	DIFFERENTIAL	DIESEL	OPEN OR START	
E	VOLTAGE (EMF)		PRIMARY ELEMENT	SENSOR	
F	FLOW RATE	RATIO	FAIL	FAIL	FAIL
G			GAUGE		LOCAL/MANUAL/HAND
H	HAND				HIGH
I	CURRENT		INDICATE		INTERMEDIATE
J	POWER	SCAN			
K	TIME	TIME RATE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOTION	MOMENTARY		MOTOR	MIDDLE
N	TORQUE			FORWARD	ON OR OPERATE
O				OFF	OVERLOAD OR OPEN
P	PRESSURE	PNEUMATIC		POSITION	
Q	QUANTITY OR EVENT	TOTALIZE		EMERGENCY/ABNORMAL	
R	RAIN		RECORD OR PRINT	REMOTE	RUN
S	SPEED OR FREQUENCY	SAFETY	SWITCH	SWITCH	STOP
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VARIABLE OR VISCOSITY		VFD	VALVE OR DAMPER	VALVE
W	WEIGHT OR FORCE		WELL		
X	MOD, LIGHT OR VALVE		UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT STATE			RELAY OR COMPUTE	RESET
Z	POSITION			DRIVE OR ACTUATOR	

**EXAMPLES:** FE = FLOW ELEMENT PSL = PRESSURE SWITCH LOW  
 FIT = FLOW INDICATING TRANSMITTER ZSC = POSITION SWITCH CLOSED

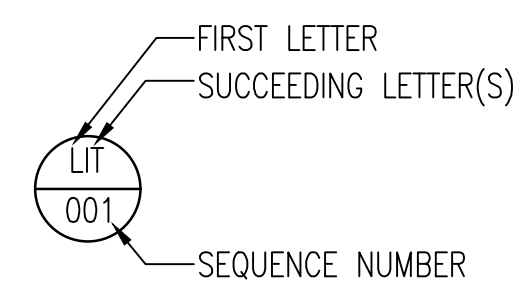
### GENERAL NOTES

- ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED AS EXISTING.
- MOTOR STARTER ELEMENTARY DIAGRAMS SHOWN ARE INTENDED TO DEPICT THE GENERAL CONTROLS REQUIREMENT FOR THAT PARTICULAR PIECE OF EQUIPMENT AND DO NOT NECESSARILY INDICATE ALL OF THE REQUIREMENTS OF THE MOTOR STARTER. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR SPECIFIC MOTOR STARTER REQUIREMENTS.
- SEE LAYOUT DRAWINGS FOR CONTROL PANEL AND FIELD INSTRUMENT LOCATIONS.
- ENCLOSURE DIMENSIONS SHOWN ARE MINIMUM REQUIREMENTS. ENCLOSURES SHALL BE SIZED TO ACCOMMODATE EQUIPMENT, CONTROLS AND COMPONENTS AS SHOWN, SPECIFIED AND REQUIRED FOR AN OPERABLE SYSTEM. CONTRACTOR SHALL COORDINATE SIZE REQUIREMENTS WITH SPACE CONSTRAINTS OF EXISTING CONDITIONS.
- CIRCUITS SHOWN SHALL BE INSTALLED IN 3/4" CONDUITS UNLESS INDICATED OTHERWISE.
- ALL PENETRATIONS THROUGH EXISTING SOLID CONCRETE STRUCTURES WHERE SLEEVES HAVE NOT BEEN PROVIDED SHALL BE CORE DRILLED AND SIZED TO ACCEPT MECHANICAL LINK SEALS. THROUGH NON-FIRE RATED WALLS, CORE HOLES AND SEAL AROUND CONDUIT WITH NON-SHRINK GROUT. THROUGH EXTERIOR WALLS, SEAL WATERTIGHT WITH SILICONE MASONRY SEALANT.
- CONDUITS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS OF CONDUIT RUNS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- EXISTING UTILITIES AT THE PROJECT SITES HAVE NOT BEEN LOCATED OR MAPPED. CONFIRM LOCATIONS OF ALL EXISTING UTILITIES AS NECESSARY. CONTRACTOR SHALL CALL MISS UTILITY @ 811 PRIOR TO CONSTRUCTION AT EACH SITE. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DRAINAGE AND REPAIR TO ANY UTILITY LINES OR STRUCTURES BY COMPLYING WITH THE REQUIREMENTS OF THE UTILITY OWNERS.
- ALL CONTROL, MONITORING, INSTRUMENTATION, AND SIGNAL CONDUCTORS SHALL BE STRANDED COPPER.

### GENERAL INSTRUMENT AND FUNCTION SYMBOLS

	FIELD MOUNTED DEVICE
	PANEL MOUNTED DEVICE
	PANEL MOUNTED INDICATING LAMP
	INTERLOCK

#### EXAMPLE



#### P&ID LINE TYPES

	DATA SIGNAL
	ANALOG SIGNAL
	DISCRETE SIGNAL
	PNEUMATIC

#### SIGNAL INTERFACES

	ANALOG INPUT
	ANALOG OUTPUT
	DISCRETE INPUT
	DISCRETE OUTPUT

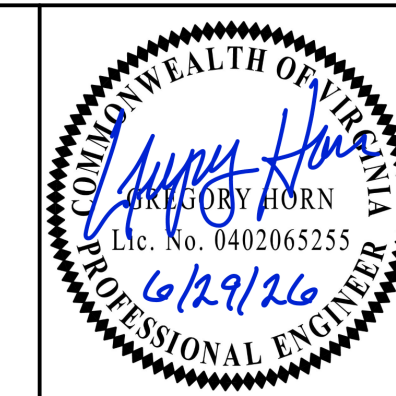
### GENERAL CIRCUIT/CONDUIT TAG IDENTIFICATION

TAG	CONDUIT SIZE	CONDUCTORS	NOTES
C-X (Y)	3/4" (X=2 THRU 18) 1" (X=19 THRU 30) 2" (X=31 THRU 100)	X-#16, 1-#16G	(Y) DENOTES ADDITIONAL SPARES
P-X (Y)	3/4" (X=2 THRU 14) 1" (X=15 THRU 24) 2" (X=25 THRU 80)	X-#12, 1-#12G	(Y) DENOTES ADDITIONAL SPARES
TSP-X (Y)	3/4" (X=1,2) 1" (X=3,4) 2" (X=5 THRU 16)	X-#18 TWISTED SHIELDED PAIR	(Y) DENOTES ADDITIONAL SPARES
AC-X (Y)	1" (X=1,2)	X-ANTENNA CABLE	
PH-X (Y)	1" (X=1,2)	X-TELEPHONE CABLE	
MAN-1	1" (X=1,2)	X-MANUFACTURER SUPPLIED CABLE	
BT-1	1" (X=1,2)	X-NYLON BUBBLER TUBING	

TOTAL CONDUCTORS REQUIRED = X + Y

NA 46480-025 (CADD) 464800251-01 - LEGENDS.DWG

NO.	DATE	BY	REVISIONS

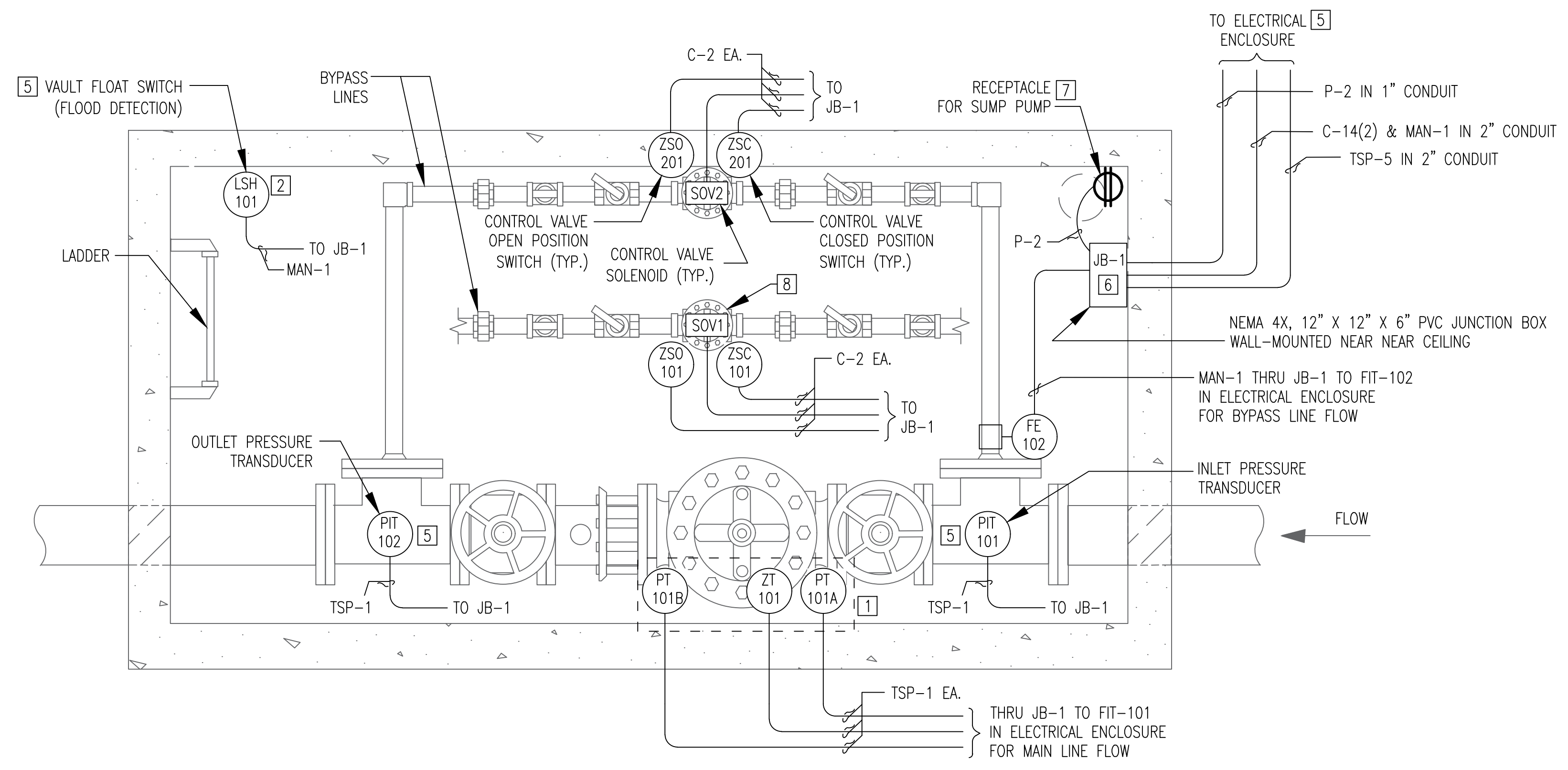


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 DATE: JUNE 2026  
 DESIGNED: HDL  
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 PROJECT NO.: 46480-025

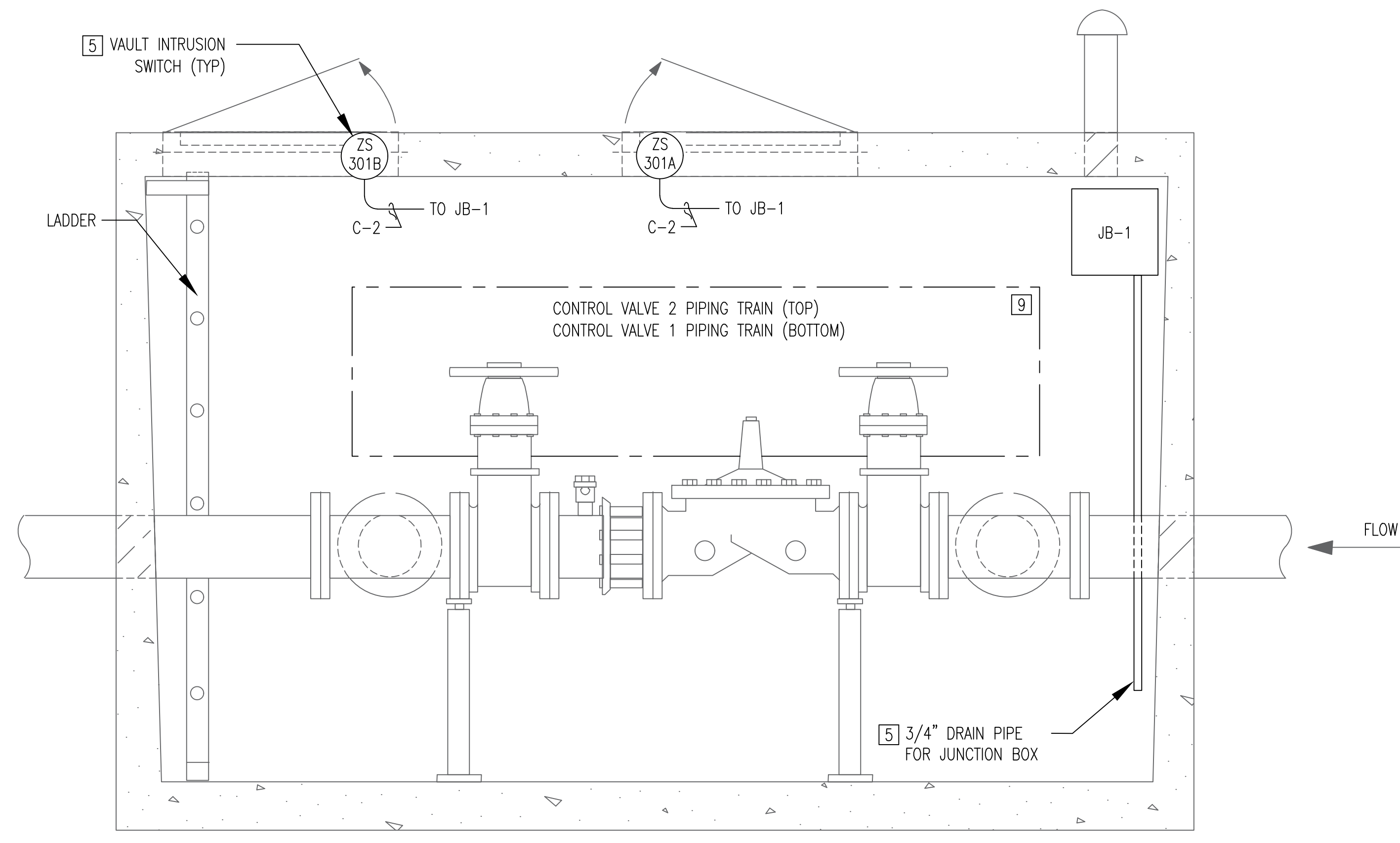
ALBEMARLE COUNTY SERVICE AUTHORITY  
 168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
 SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
 LEGEND, ABBREVIATIONS AND GENERAL NOTES

SHEET  
 25  
 OF  
 33





**DETAIL 1 - PRV PLANVIEW**  
NO SCALE



**DETAIL 2 - PRV SECTION VIEW**  
NO SCALE

**GENERAL NOTES**

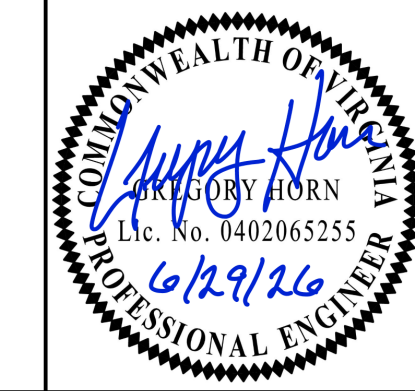
1. VAULT LAYOUT AND BASE INFORMATION SHOWN GENERIC. REFER TO SHEETS 10 INSET "A" FOR VAULT AND ELECTRICAL ENCLOSURE LOCATION. REFER TO SHEET 22 FOR VAULT PIPING DETAILS.
2. SEE 1 SHEETS FOR SYMBOLS, ABBREVIATIONS AND LEGENDS, ELECTRICAL CONNECTION DETAILS, AND TYPICAL CONDUIT/CABLE SCHEDULE.
3. SEE I/O LIST FOR ALL REQUIRED I/O.
4. REFER TO SPECIFICATION SECTION 01106 FOR SEQUENCING AND SHUT DOWN REQUIREMENTS

**SPECIFIC NOTES**

1. PT-101A IS VALVE UPSTREAM PRESSURE TRANSDUCER, ZT-101 IS VALVE POSITION TRANSDUCER, PT-101B IS VALVE DOWNSTREAM PRESSURE TRANSDUCER. PANEL-MOUNTED FLOW CALCULATOR/TRANSMITTER FIT-101 COMPATIBLE WITH FIELD INSTRUMENTS.
2. INSTALL FLOAT SWITCH ADJACENT TO LADDER TO PROVIDE ACCESS FOR TESTING OPERATION FROM MANWAY ABOVE.
3. PROVIDE NEW SINGLE PHASE, 3 WIRE, 120/240 VAC, 100 AMP, UNDERGROUND ELECTRICAL SERVICE. INSTALL METER BASE, CONDUIT AND WIRE AS REQUIRED BY APPALACHIAN POWER (AP) REGULATIONS. COORDINATE ALL WORK WITH AP. AP WORK REQUEST # PENDING. WORK SHALL MEET ALL AP AND LOCAL CODE REQUIREMENTS.
4. INSTALL GROUNDING ELECTRODE SYSTEM AND ALL NECESSARY CONDUIT AND WIRE FROM METER TO SERVICE DISCONNECT
5. SEE 1 DETAIL SHEETS.
6. NO SPLICES OR TERMINATIONS PERMITTED IN JUNCTION BOX. FOR ALL CABLES AND WIRING IN JUNCTION BOX, PROVIDE 12" OF SLACK, COILED AND SECURED WITH NYLON CABLE TIES.
7. PROVIDE SINGLE DEDICATED 20 AMPERE RECEPTACLE WITH WEATHERPROOF "WHILE IN USE" TYPE COVER.
8. CONTROL VALVE 1 PIPING TRAIN IS BELOW CONTROL VALVE 2 PIPING TRAIN, SHOWN REMOVED FOR ASSOCIATED INSTRUMENT CLARITY.
9. CONTROL VALVES 1 AND 2 PIPING TRAINS (BYPASS LINE) NOT SHOWN FOR CLARITY.

NA 46480-025\CADD\464800251-03 - PLANVIEW.DWG

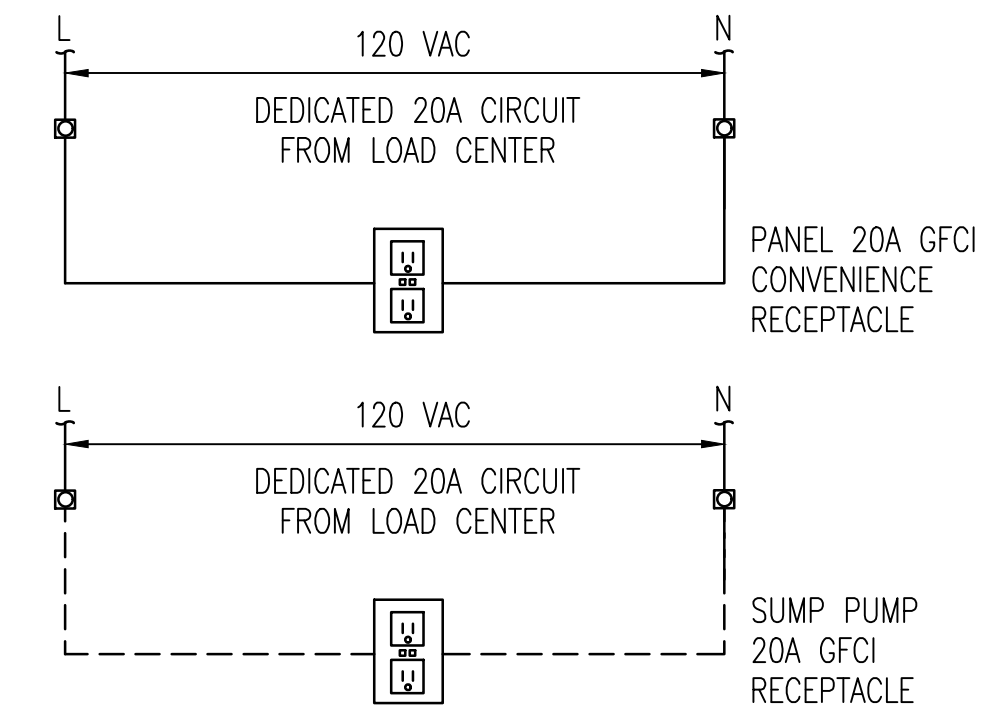
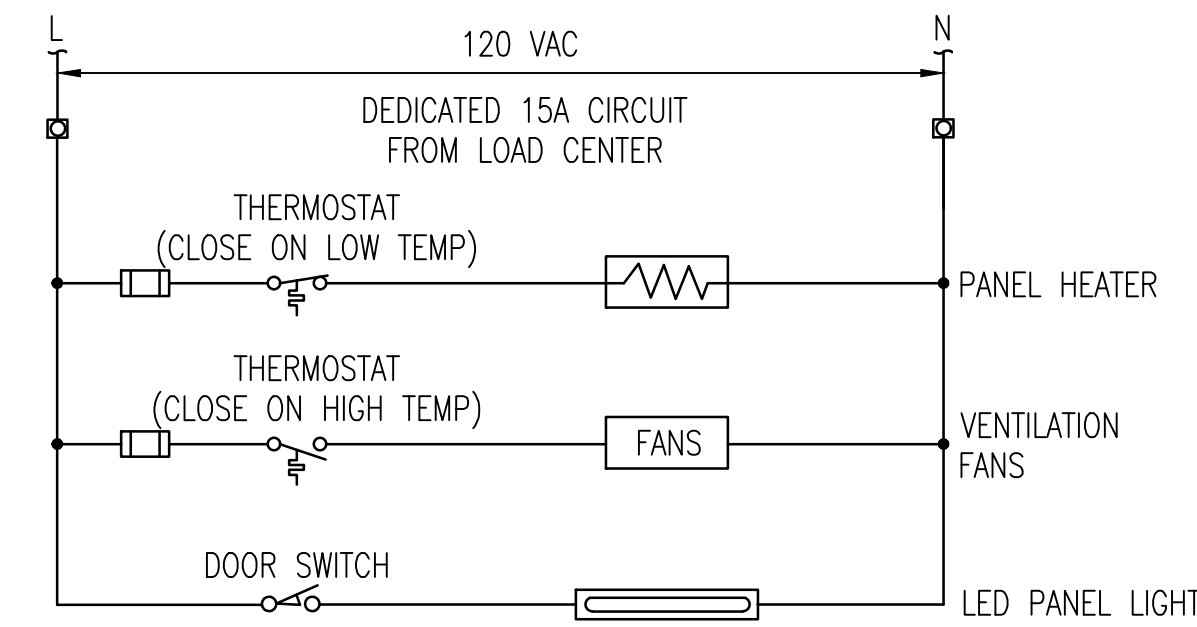
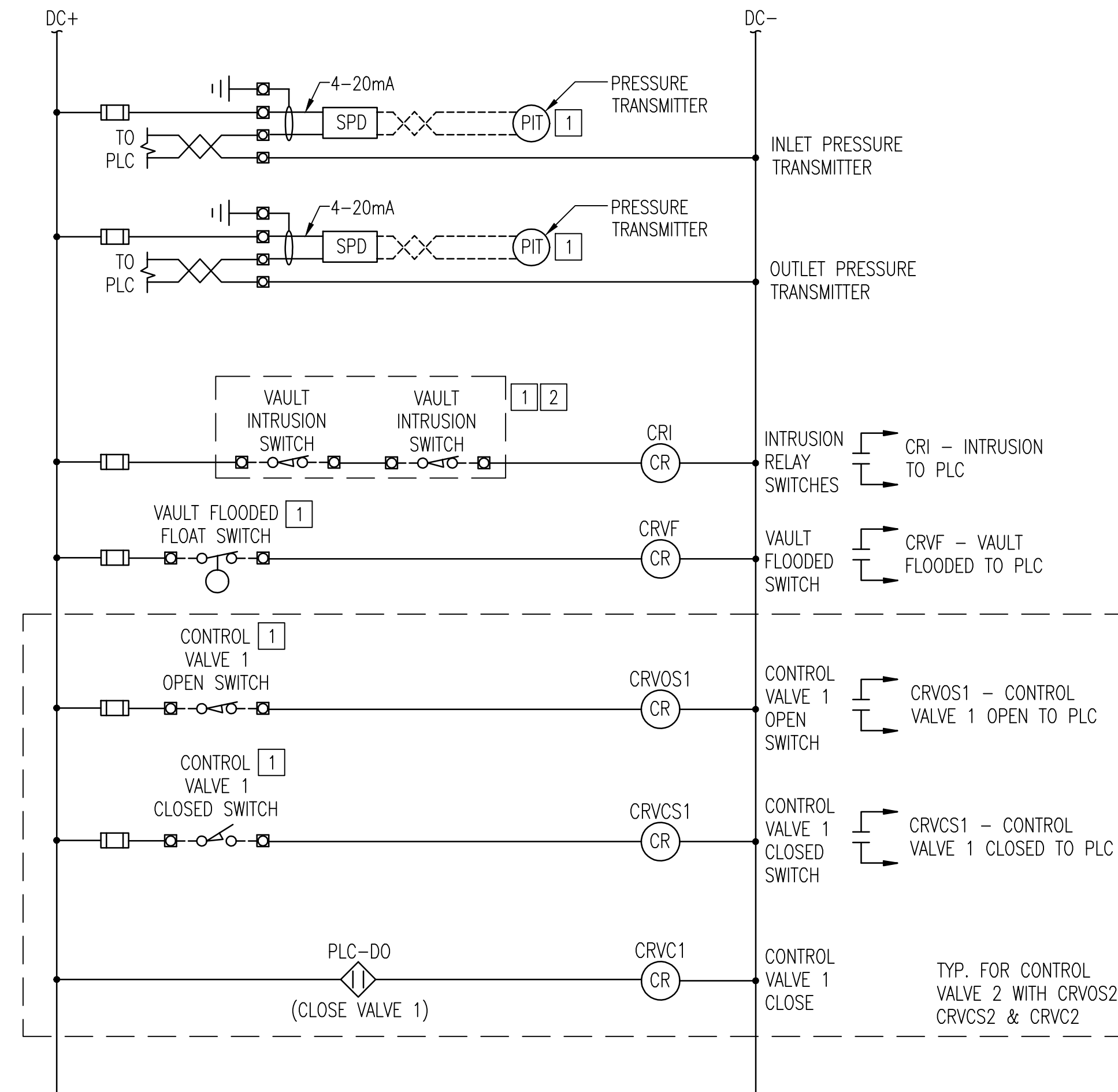
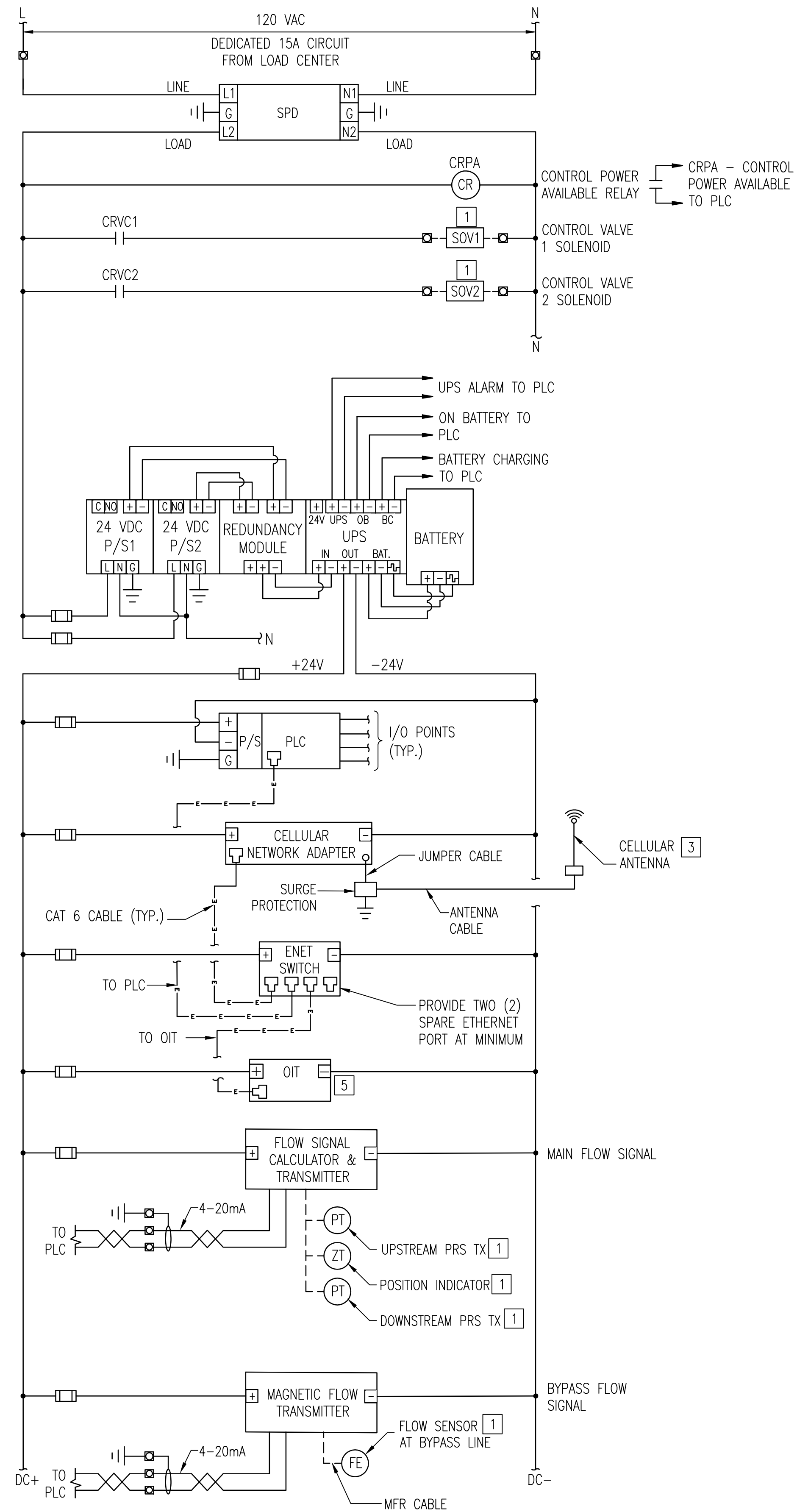
NO.	DATE	BY	REVISIONS



SCALE:  
HORIZ: N/A  
VERT: N/A  
DATE: JUNE 2026  
DESIGNED: HDL  
DRAWN: HDL  
CHECKED: GAH  
PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY  
168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
PRV VAULT PLANVIEW

SHEET  
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OF  
33



4 DETAIL 1 - PRV VAULT RTU AND ELECTRICAL CONTROL DIAGRAM  
NO SCALE

**GENERAL NOTES**

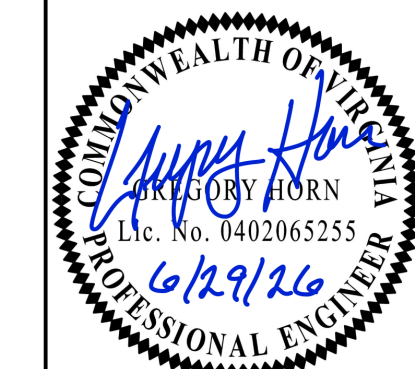
- SEE LAYOUT PLANS AND I/O LIST FOR REQUIRED I/O.
- SEE 1 SHEET FOR SYMBOLS, ABBREVIATIONS AND LEGENDS.

**SPECIFIC NOTES**

- FIELD MOUNTED DEVICES. SEE LAYOUT PLAN DRAWINGS FOR LOCATION.
- WIRE MULTIPLE SWITCHES IN SERIES. INSTALL SWITCHES ON ACTIVE DOOR
- EXTERNAL CELLULAR ANTENNA. MOUNTED ON ELECTRICAL ENCLOSURE. IF ADDITIONAL HEIGHT IS REQUIRED, SEE 1 DETAIL SHEETS FOR ANTENNA AND CABLE MOUNTING DETAILS.
- UNLESS OTHERWISE NOTED, ALL COMPONENTS, WIRING AND HARDWARE SHALL BE MOUNTED ON BACK PANEL IN ELECTRICAL ENCLOSURE
- MOUNT OIT INSIDE THE ELECTRICAL ENCLOSURE ON BACKPANEL ON A FABRICATED ALUMINUM ANGLE BRACKET. OFFSET BRACKET AND OIT FROM BACKPANEL TO ALLOW FOR ACCESS TO WIRE AND NETWORK CABLE CONNECTIONS.

NA 46480-025 (CAD) 464800251-04 - PLC DIA.DWG

NO.	DATE	BY	REVISIONS



SCALE: HORIZ: N/A  
VERT.: N/A  
DATE: JUNE 2026  
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DRAWN: HDL  
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PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY  
168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
SCOTTVILLE PHASE 4A - WATER MAIN REPLACEMENT  
PRV VAULT RTU AND ECD

SHEET 28 OF 33

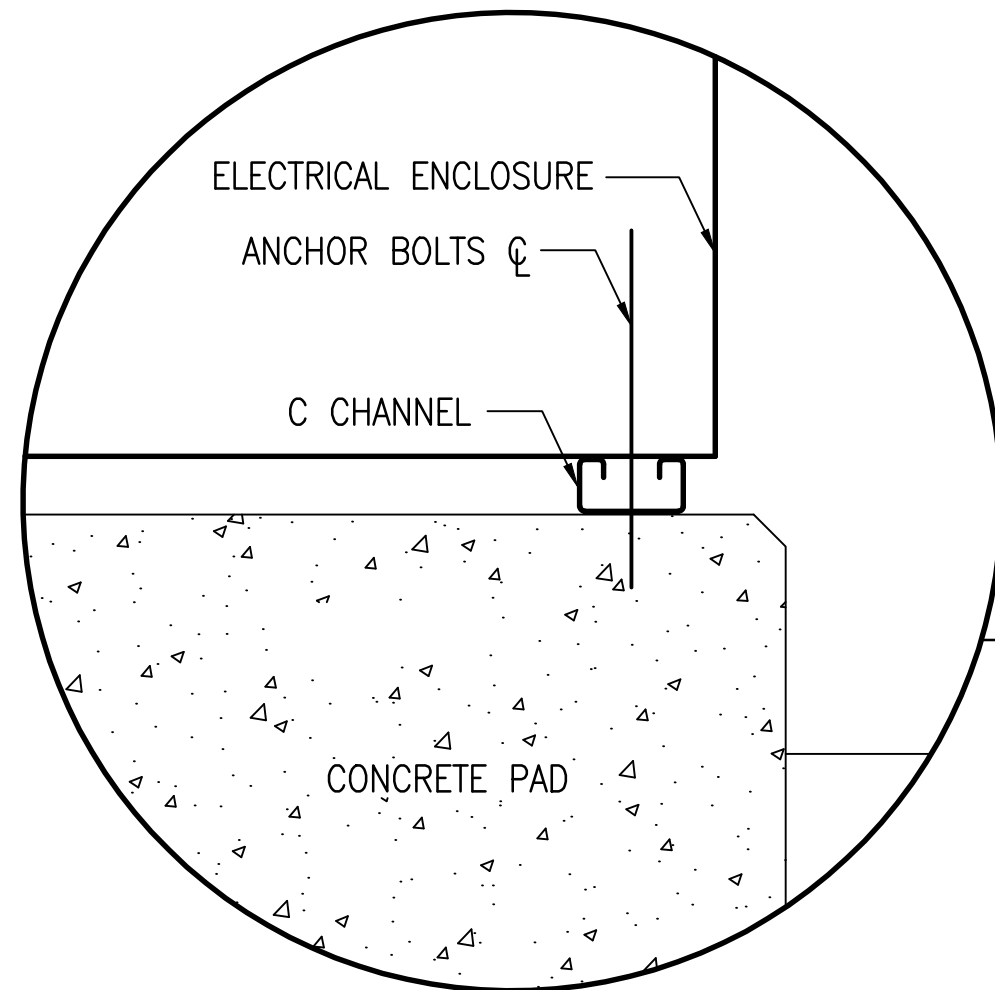
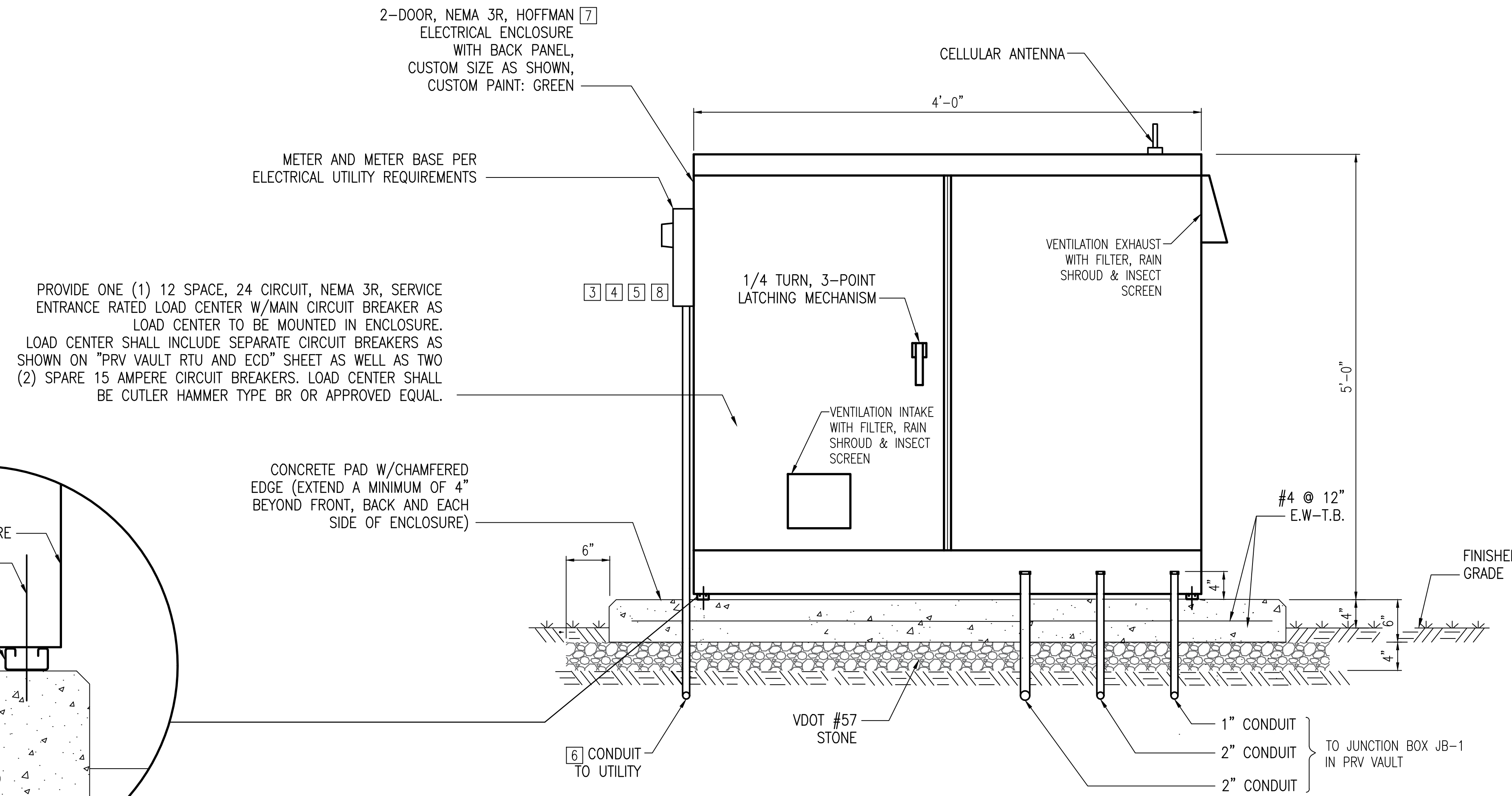


**GENERAL NOTES**

- SEE I SHEETS FOR SYMBOLS, ABBREVIATIONS AND LEGENDS.

**SPECIFIC NOTES**

- PLC, COMMUNICATION EQUIPMENT, CONTROLS, INSTRUMENTATION AND ELECTRICAL EQUIPMENT SHALL BE MOUNTED IN AN OUTDOOR RATED DOUBLE DOOR ELECTRICAL ENCLOSURE. THE CONTRACTOR SHALL PROVIDE ENCLOSURE AND ALL CONDUIT AND CONDUCTORS REQUIRED BETWEEN THE ELECTRICAL ENCLOSURE AND FIELD EQUIPMENT
- COORDINATE EXACT LOCATION OF CABINET WITH ACSA. DO NOT INSTALL ON TOP OF EXISTING PIPING OR UTILITIES.
- PROVIDE NEW SINGLE PHASE, 3 WIRE, 120/240 VAC, 100 AMP, UNDERGROUND ELECTRICAL SERVICE. INSTALL METER BASE, CONDUIT AND WIRE AS REQUIRED BY POWER UTILITY REGULATIONS. COORDINATE ALL WORK WITH POWER UTILITY. REFERENCE APPROPRIATE POWER UTILITY WORK ORDER FOR EACH SITE. WORK SHALL MEET ALL POWER UTILITY, NEC AND LOCAL CODE REQUIREMENTS.
- INSTALL GROUNDING ELECTRODE SYSTEM AND ALL NECESSARY CONDUIT AND WIRE FROM METER TO SERVICE DISCONNECT
- METER MAY BE INSTALLED ON EITHER SIDE OF ELECTRICAL ENCLOSURE METER LOCATION IS DETERMINED BY PATH OF POWER UTILITY UNDERGROUND SERVICE FEEDERS.
- CONDUIT INSTALLATION TYPE AND SIZE PER ELECTRIC UTILITY REQUIREMENTS
- ENCLOSURE SHOWN IS BASED ON MANUFACTURERS STANDARD DIMENSIONS. CONTRACTOR TO PROVIDE ENCLOSURE OF THE MINIMUM SIZE ALLOWABLE BY APPLICABLE CODES AND REGULATIONS WHILE MEETING THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS.
- ELECTRICAL SERVICE EXTENSION AND METER BASE LOCATION TO BE COORDINATED WITH APPALACHIAN POWER AND ACSA INSPECTOR.

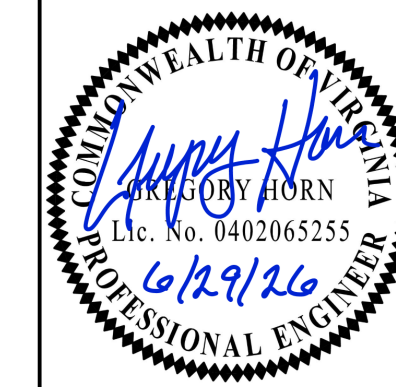


**DETAIL 2 - ENLARGED VIEW**  
NO SCALE

**DETAIL 1 - PRV ELECTRICAL ENCLOSURE**  
NO SCALE

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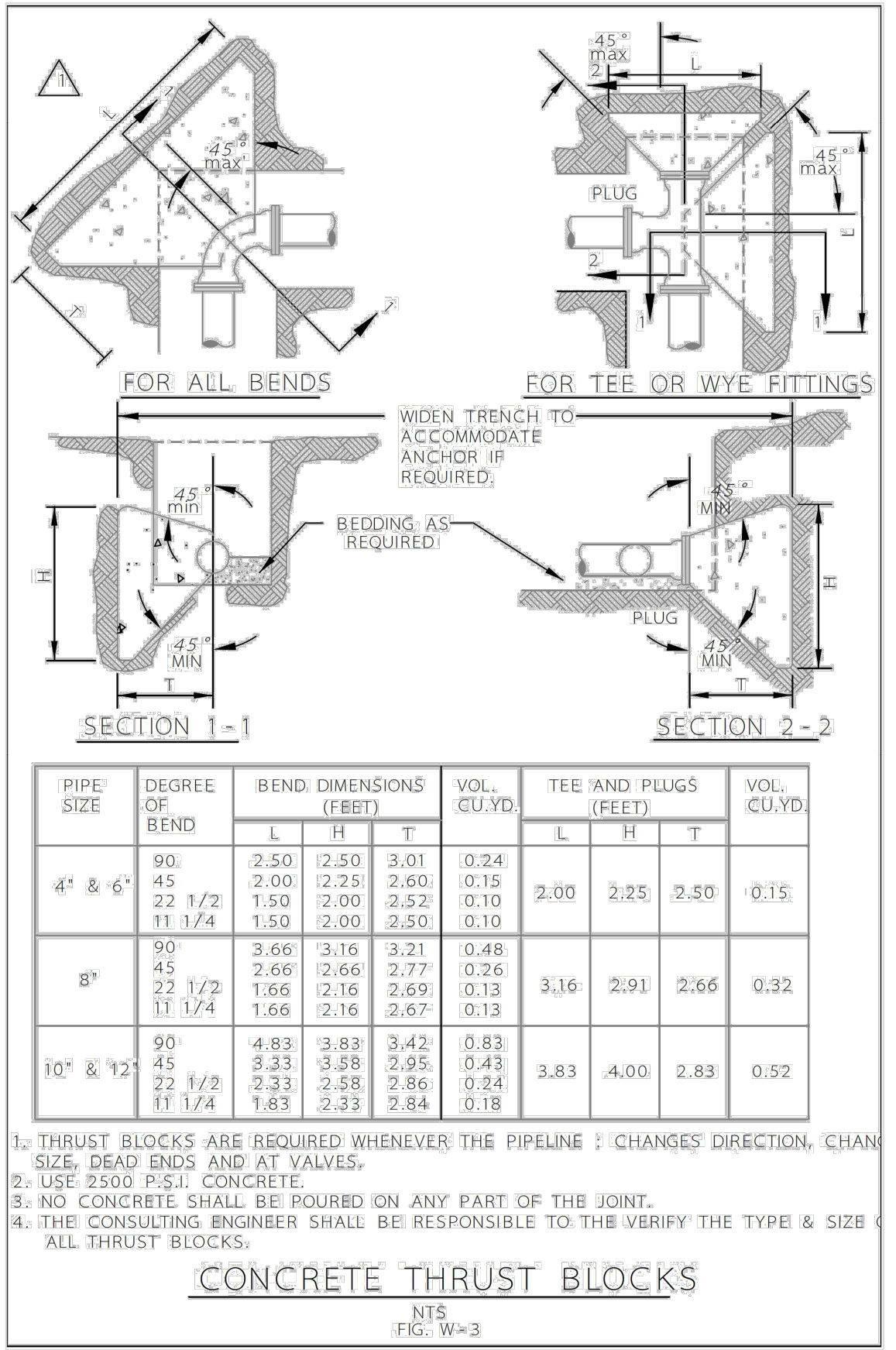
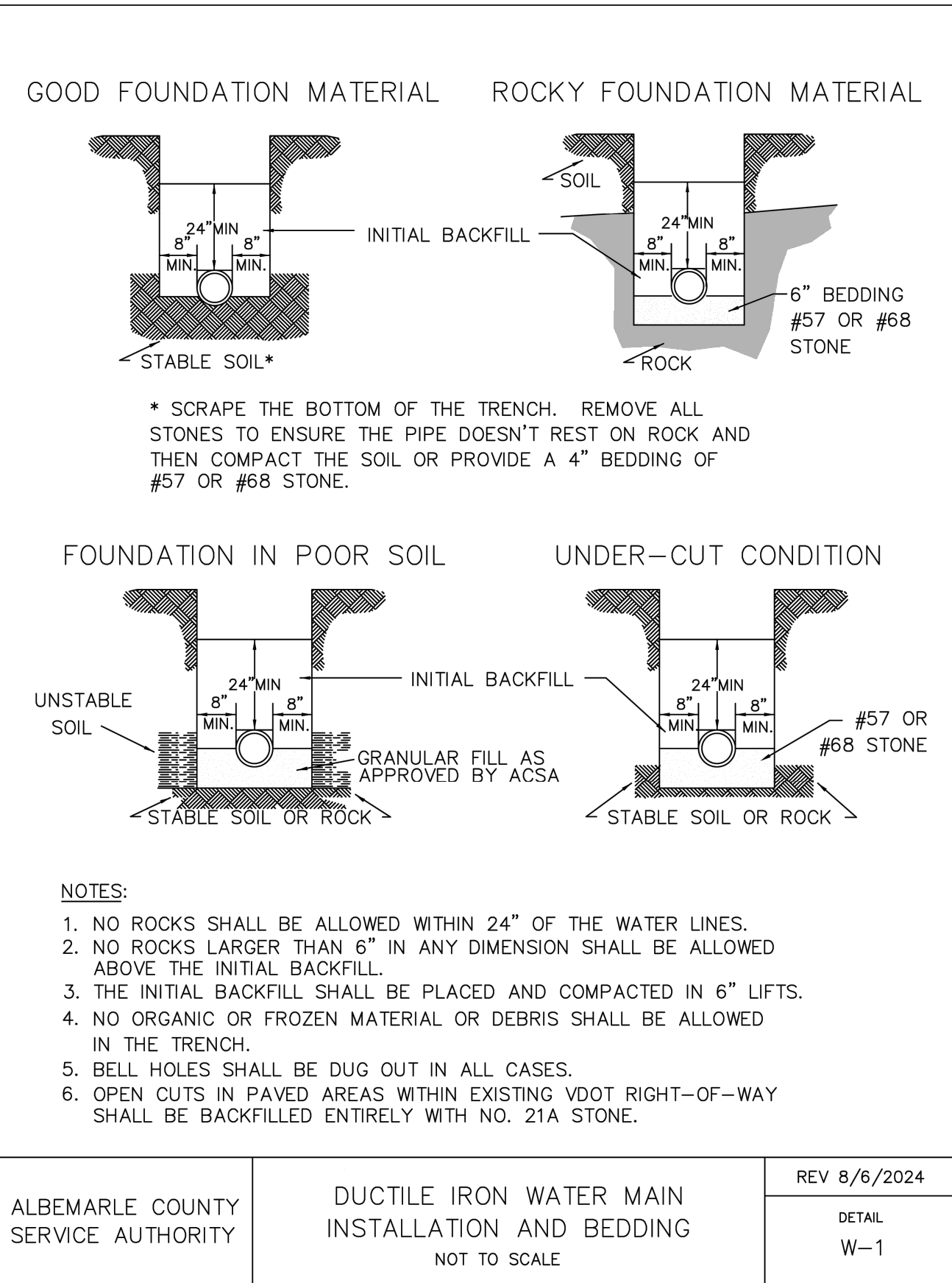
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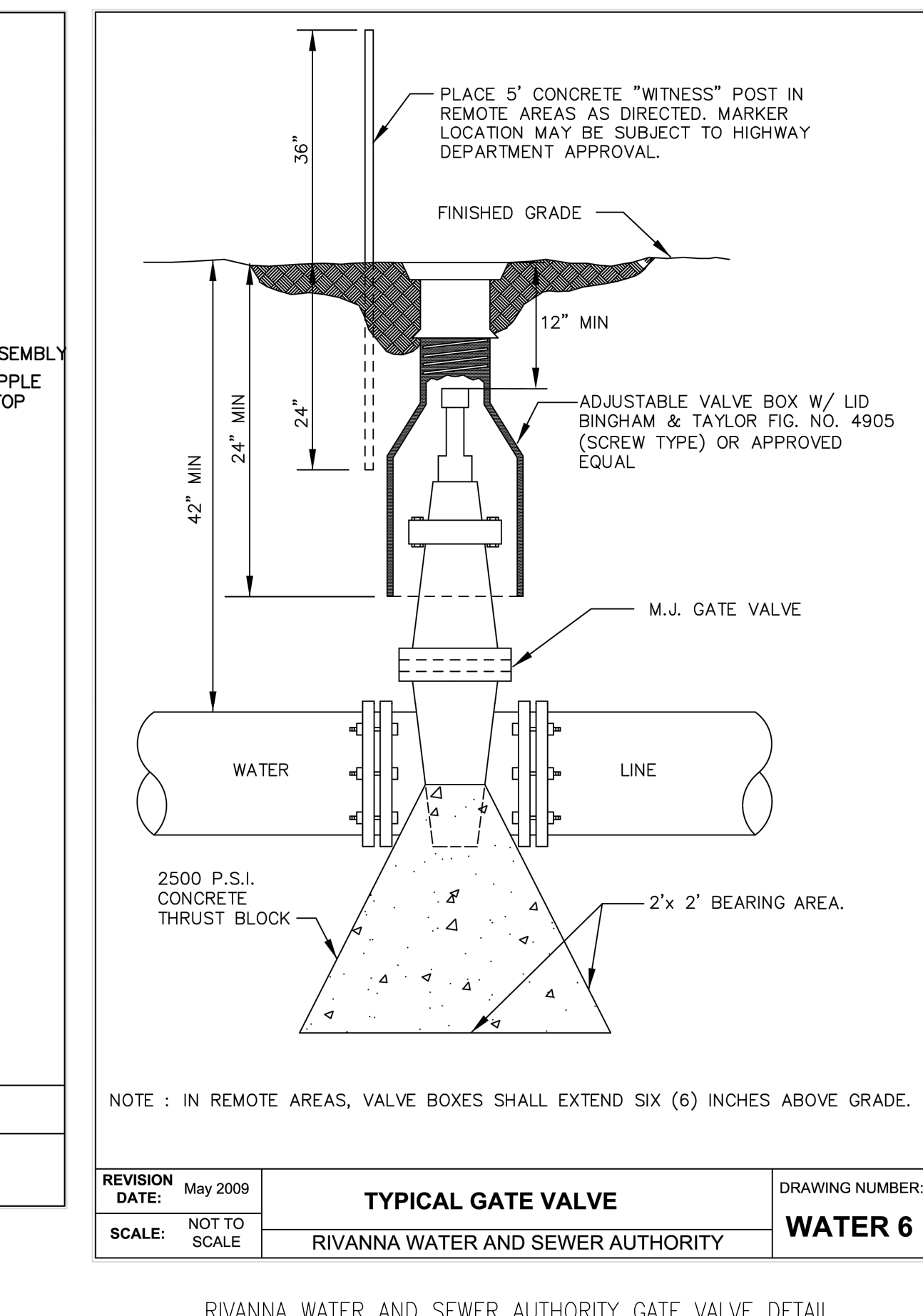
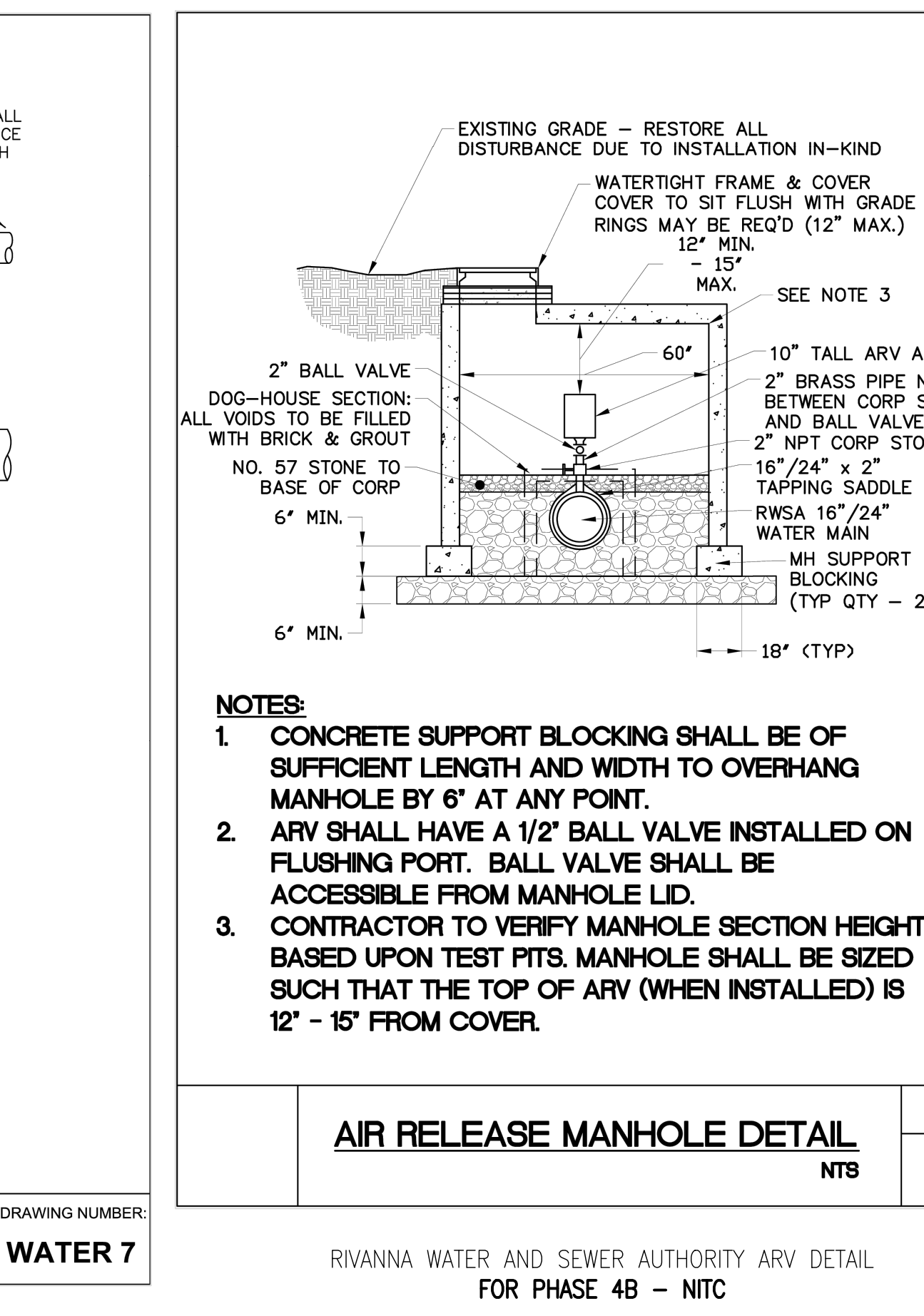
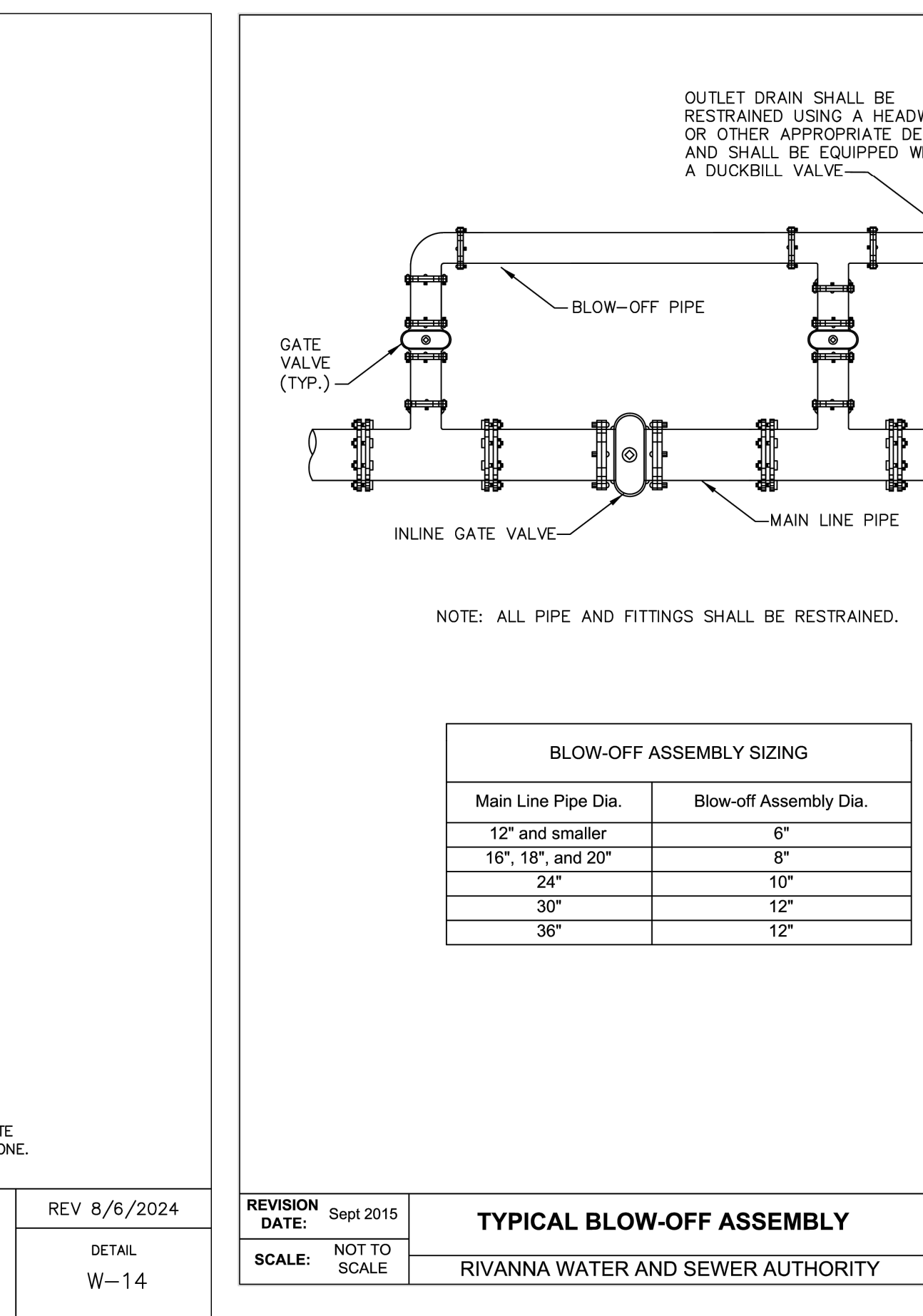
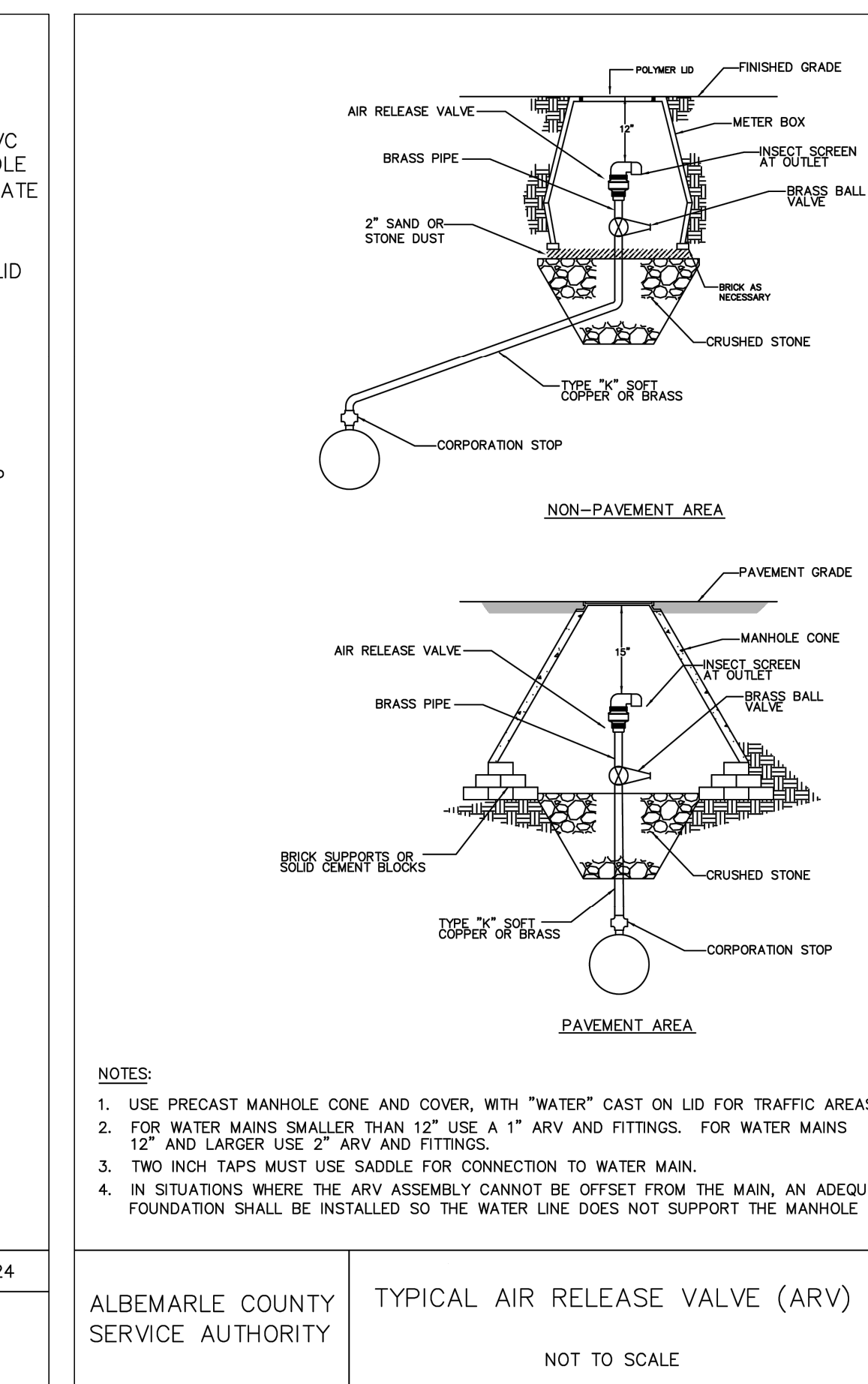
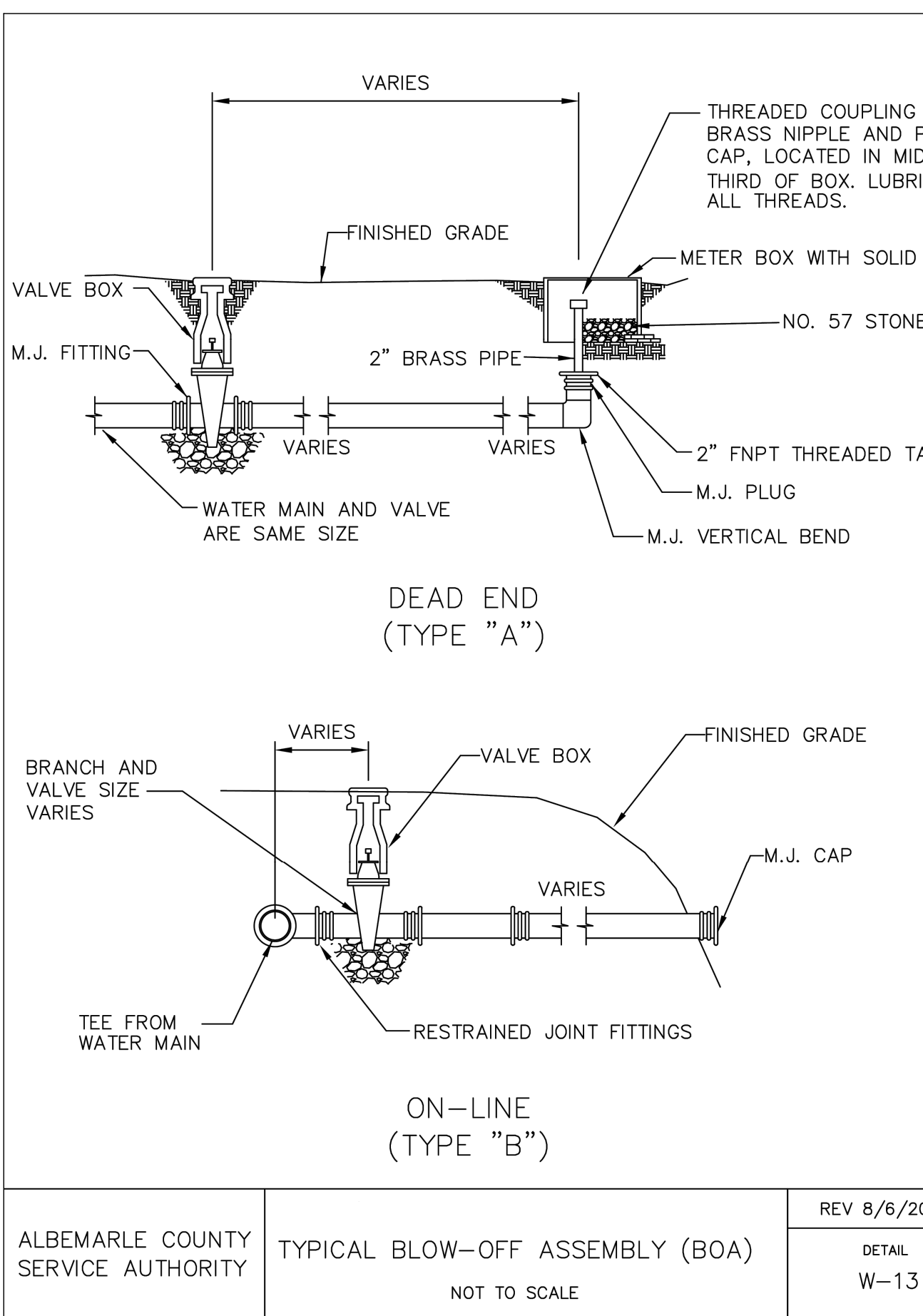
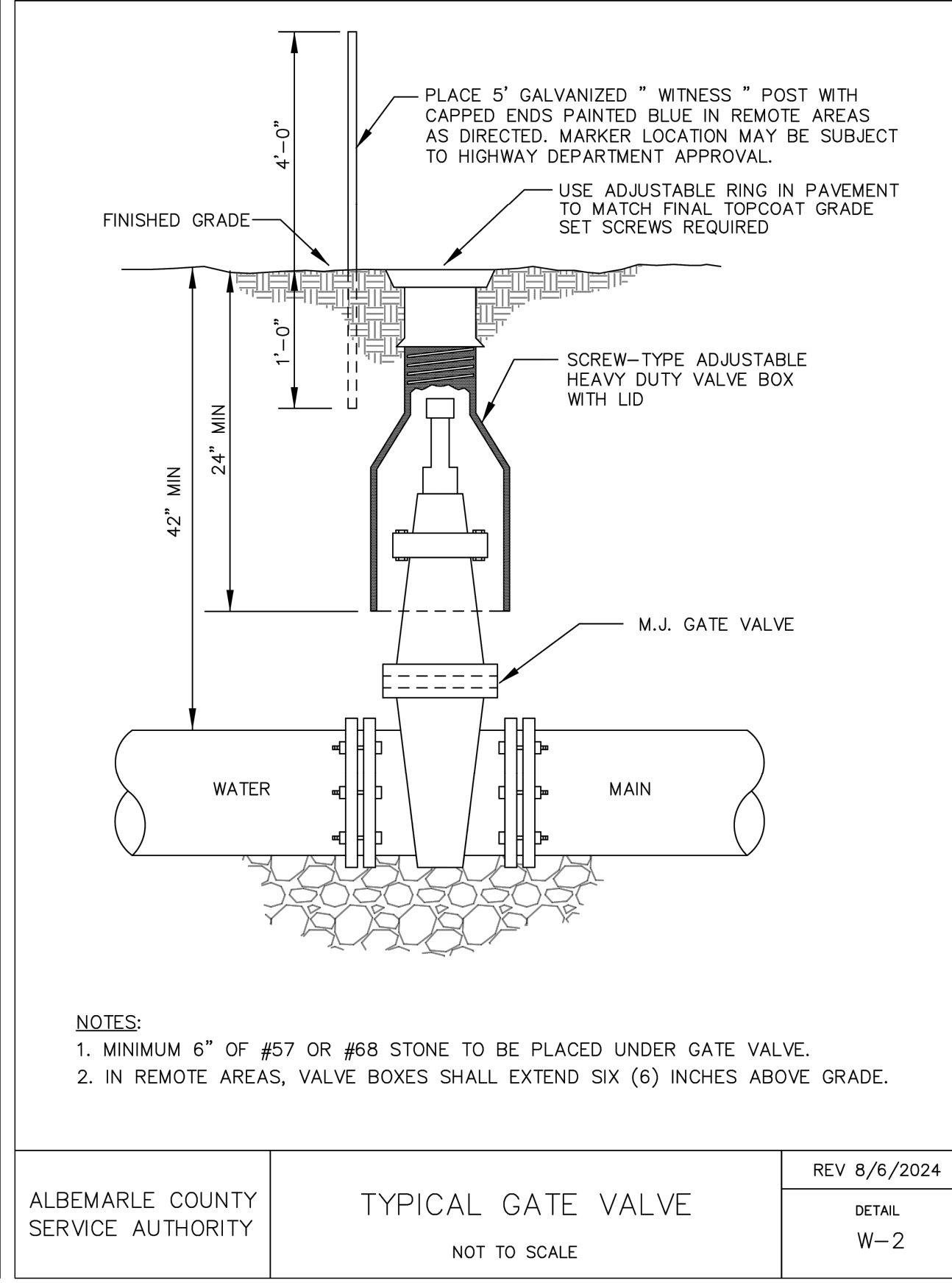
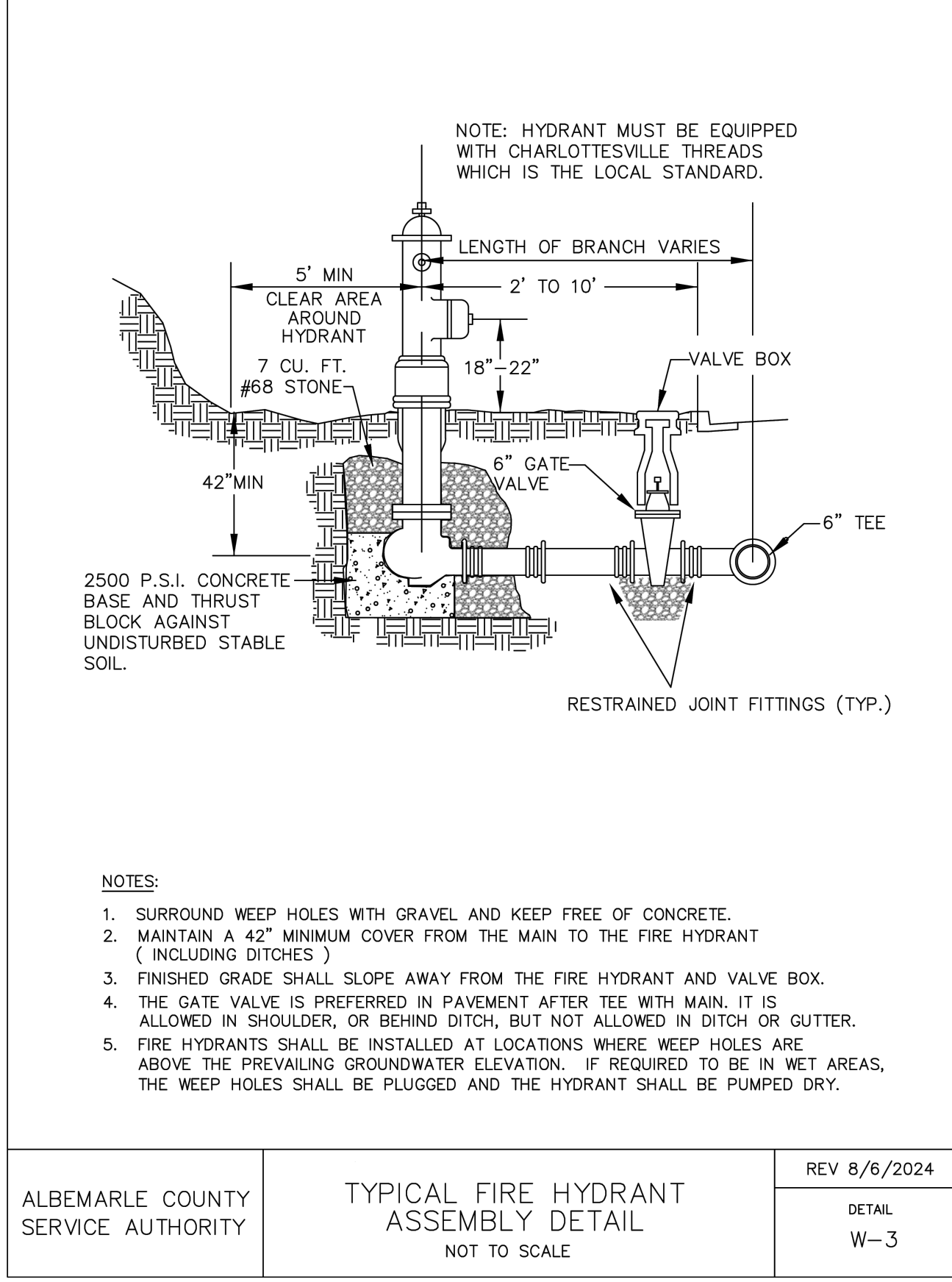
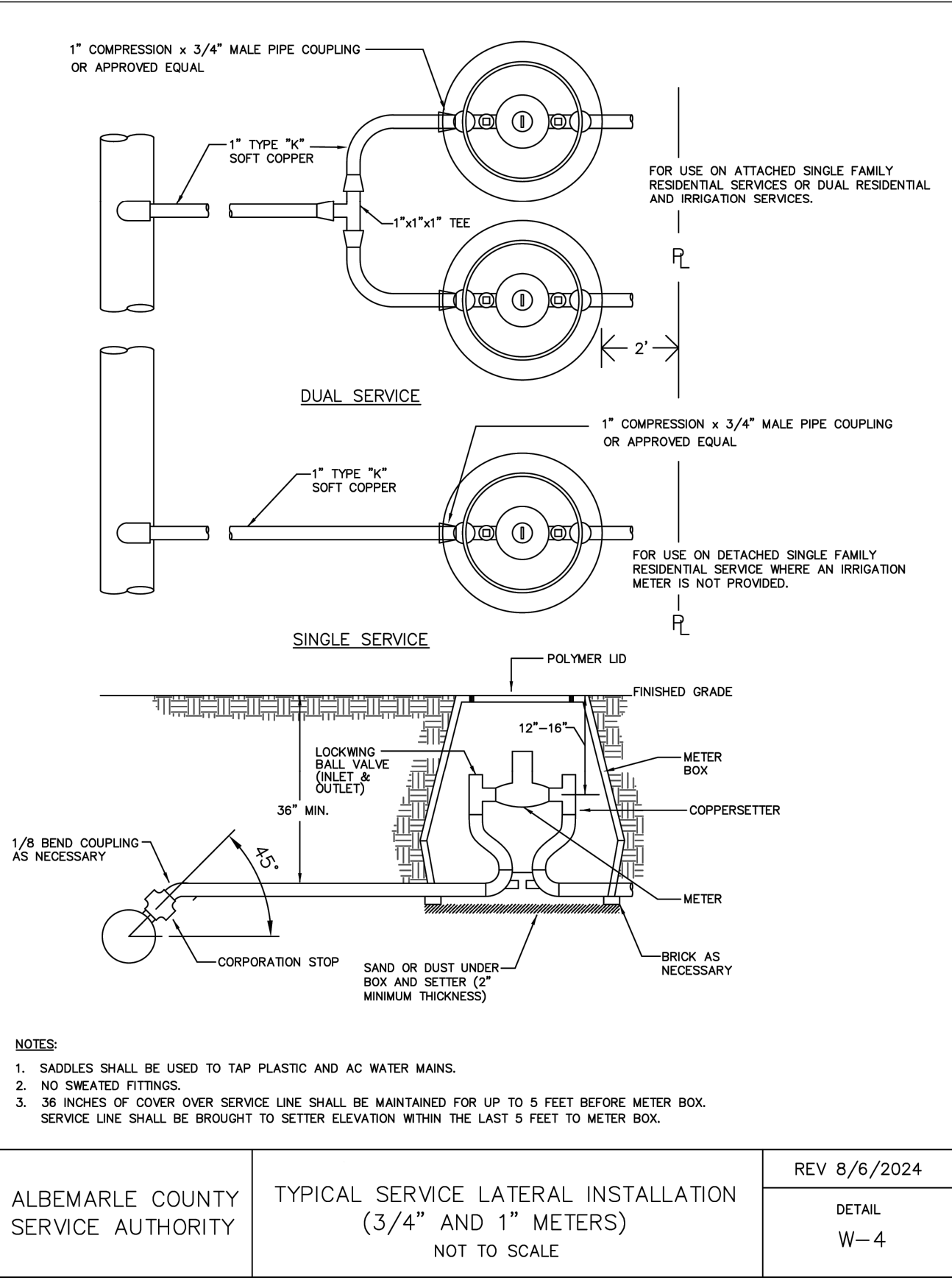
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VERT: N/A  
DATE: JUNE 2026  
DESIGNED: HDL  
DRAWN: HDL  
CHECKED: GAH  
PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY  
168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
I&C INSTALLATION DETAILS

SHEET  
30  
OF  
33



PIPE SIZE	DEGREE OF BEND	BEND DIMENSIONS (FEET)			VOL. CU.YD.	TEE AND PLUGS (FEET)			VOL. CU.YD.
		L	H	T		L	H	T	
4" & 6"	90	2.50	2.50	3.01	0.24	2.00	2.25	2.50	0.15
	45	2.00	2.25	2.60	0.15				
	22 1/2	1.50	2.00	2.52	0.10				
8"	90	3.66	3.16	3.21	0.48	3.16	2.91	2.66	0.32
	45	2.66	2.66	2.77	0.26				
	22 1/2	1.66	2.16	2.69	0.13				
10" & 12"	90	4.83	3.83	3.42	0.83	3.83	4.00	2.83	0.52
	45	3.33	3.88	2.95	0.43				
	22 1/2	2.33	2.58	2.86	0.24				



NO.	DATE	BY	REVISIONS

ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL BLOW-OFF ASSEMBLY (BOA)	REV 8/6/2024	DETAIL W-13
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ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL AIR RELEASE VALVE (ARV)	REV 8/6/2024	DETAIL W-14
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ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL BLOW-OFF ASSEMBLY (3/4" AND 1" METERS)	REV 8/6/2024	DETAIL W-4
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ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL GATE VALVE	REV 8/6/2024	DETAIL W-2
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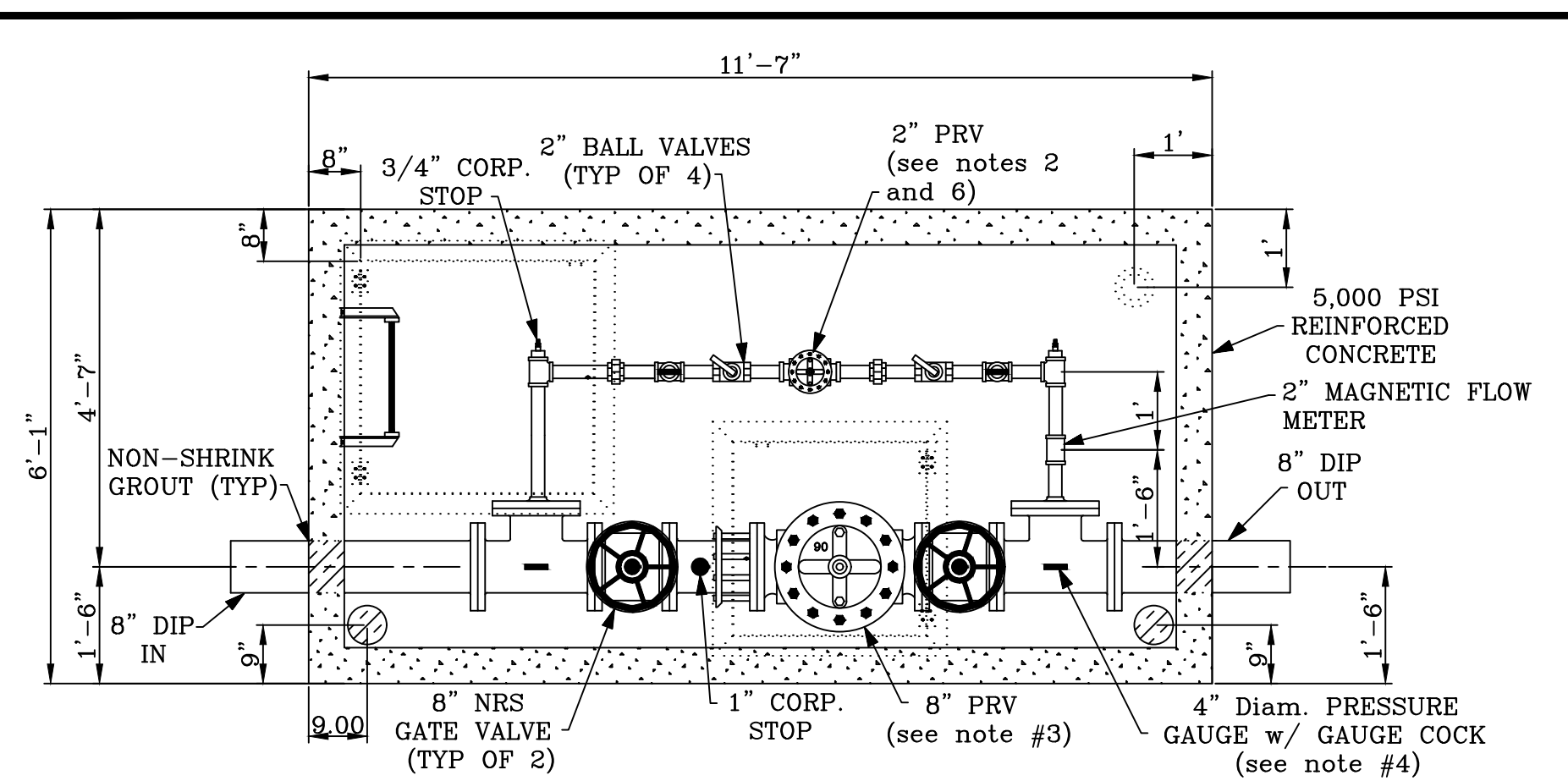
NO: 46480-025 CADD V6480025C1-17.DWG



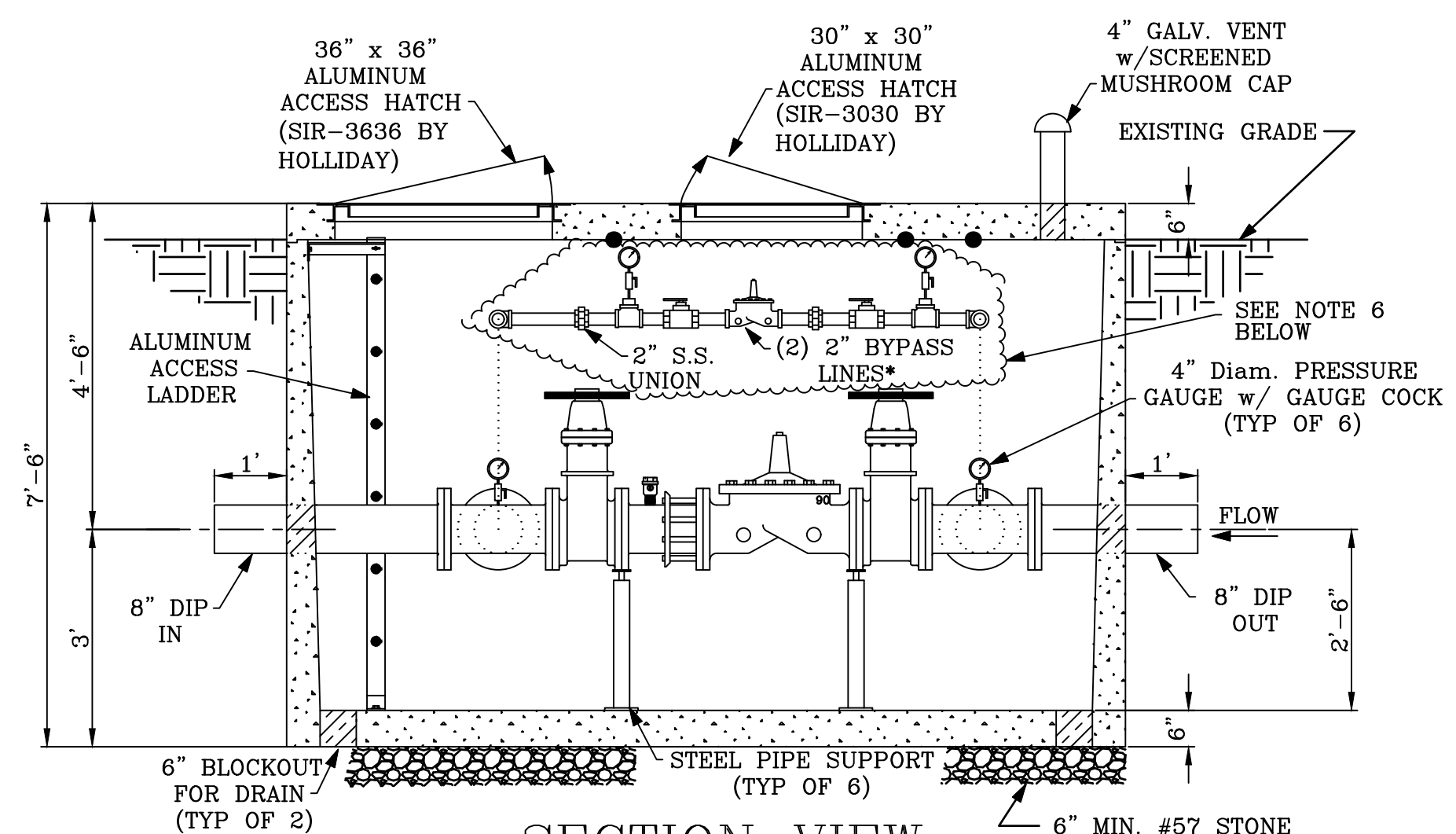
SCALE: HORIZ: N/A  
VERT: N/A  
DATE: JUNE 2026  
DESIGNED: E.E.B.  
DRAWN: E.E.B.  
CHECKED: C.E.L.  
PROJECT NO.: 46480-025

ALBEMARLE COUNTY SERVICE AUTHORITY  
168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
SCOTTSVILLE PHASE 4A - WATER MAIN REPLACEMENT  
DETAILS

SHEET 31 OF 33



**PLAN VIEW**



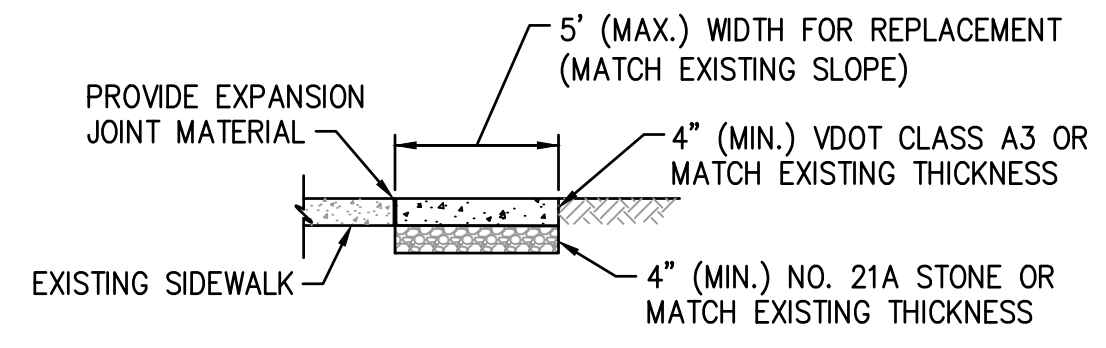
**SECTION VIEW**

\* 2" BY-PASS SHOWN OUT OF SECTION FOR CLARITY \*

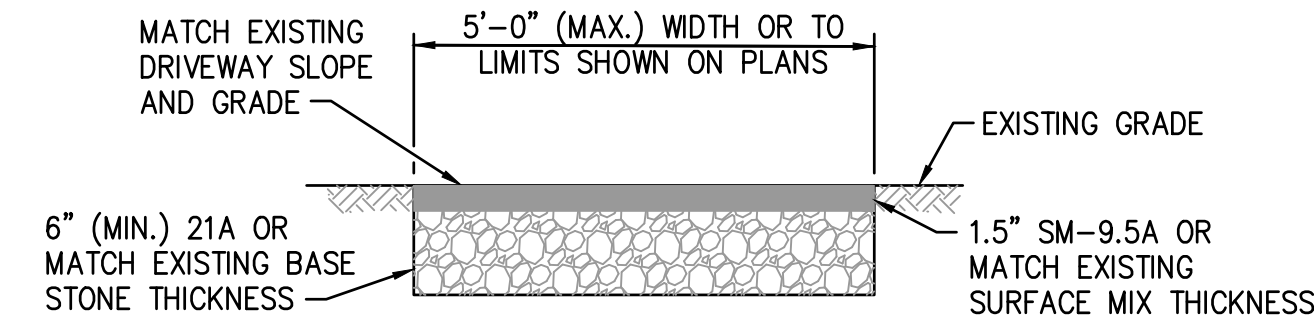
**NOTES:**

- 2" LINES ARE STACKED AND PIPED VERTICALLY AND EQUIPPED WITH SAME FITTINGS AND LAYOUT.
- 1. 2" LINES PIPED WITH 2" S.S. PIPE & FITTINGS EXCEPT BALL VALVES & PRVs.
- 2. 2" PRV's SHALL BE CLA-VAL MODEL 90G-01ASKC (30-300psi RANGE).
- 3. 8" PRV SHALL BE CLA-VAL MODEL 90G-01ABKC (30-300psi RANGE).
- 4. SIX (6) 4" ASHCROFT #1008 LIQUID FILLED PRESSURE GAUGES (0-300psi) w/GAUGE COCKS, OR APPROVED EQUAL.
- 5. EXTEND 6" DIAMETER, SCHEDULE 40 DRAIN TO DAYLIGHT AND TERMINATE WITH FLAP VALVE.
- 6. LOWER 2" BY-PASS LINE TO CONNECT TO 8" TEE AND THREADED FLANGE AS SHOWN IN PLAN VIEW LAYOUT. MAGNETIC FLOW METER TO BE INSTALLED ON LOWER 2" PIPING FROM THREADED FLANGE CONNECTION.

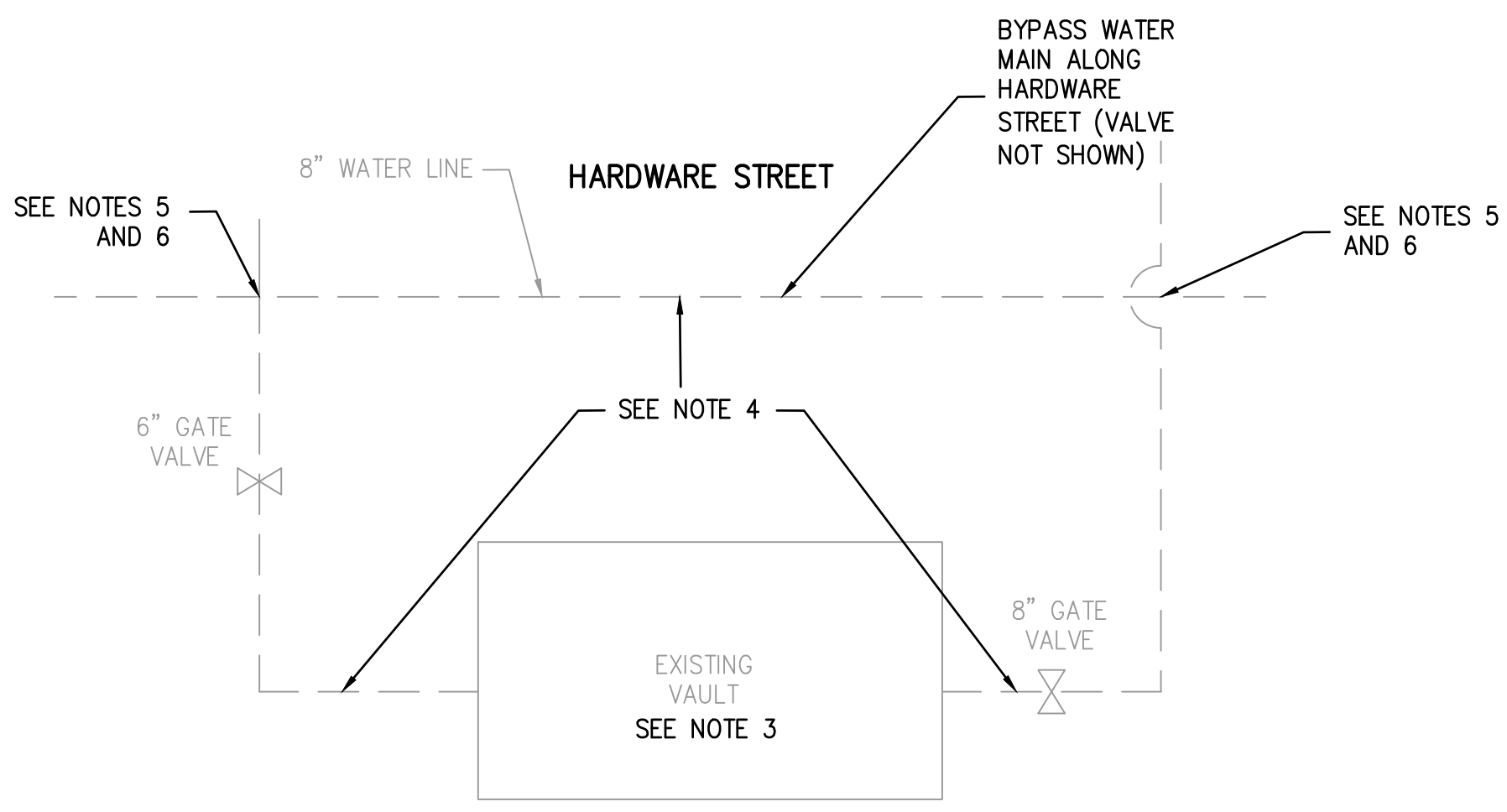
**PRESSURE REDUCING VALVE VAULT**  
N.T.S.



**SIDEWALK REPAIR DETAIL**  
SCALE: NOT TO SCALE



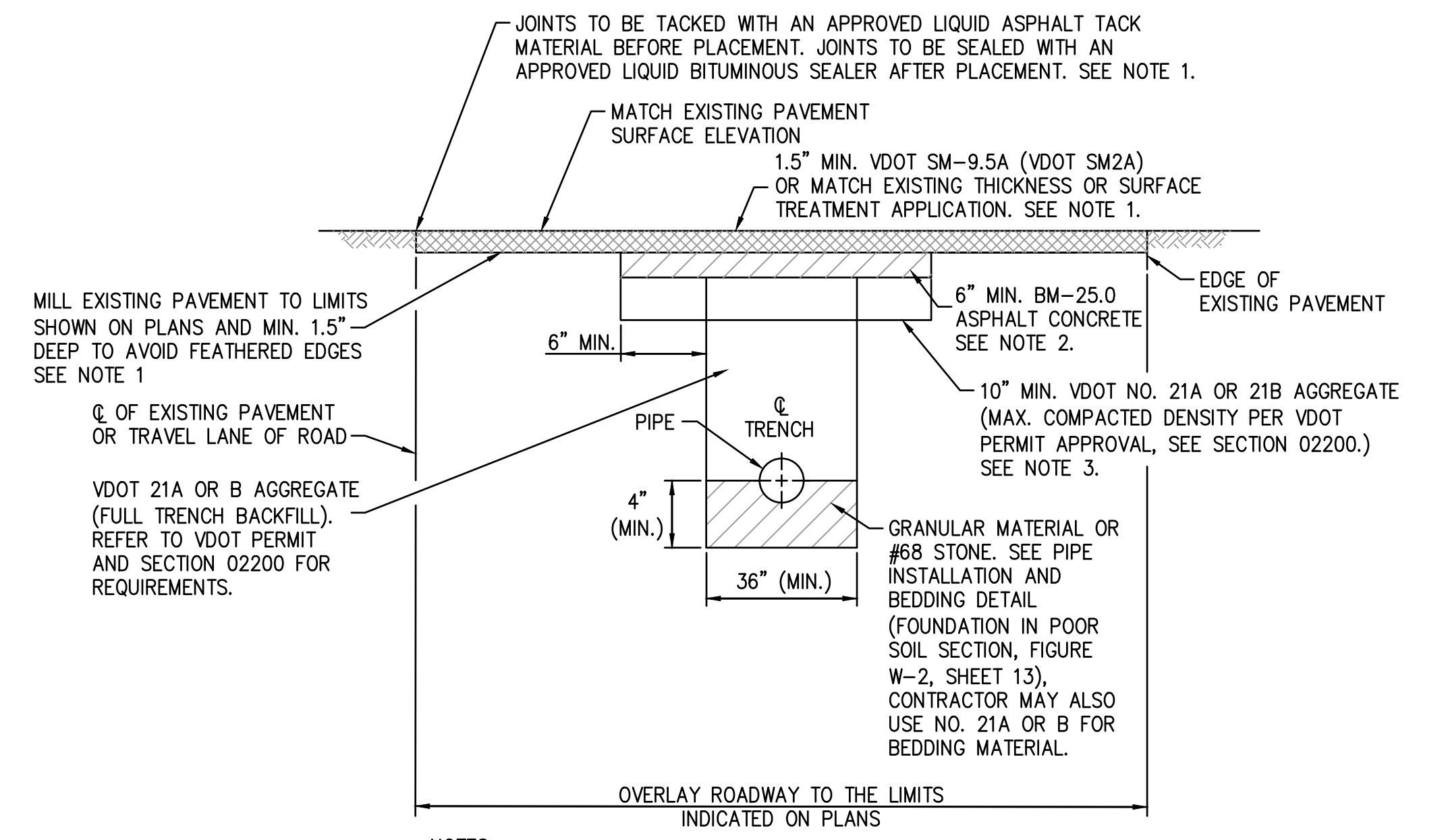
**ASPHALT DRIVE RESTORATION - TYPICAL SECTION**  
SCALE: NOT TO SCALE



**NOTES:**

- 1. EXISTING PRV VAULT IS LOCATED JUST SOUTH OF HARDWARE STREET (RTE. 795) AND JAMES RIVER ROAD (RTE. 726) INTERSECTION, AND ON THE ADJACENT CEMETERY PROPERTY (APPROXIMATELY 0.8 MILE NORTH OF HARDWARE STREET AND VALLEY STREET (RTE. 20) INTERSECTION).
- 2. PRV, PIPING LAYOUT IS SHOWN SCHEMATICALLY. AS-BUILT LOCATIONS AND CONDITIONS OF VAULT TO BE FIELD VERIFIED BY CONTRACTOR.
- 3. CONTRACTOR TO REMOVE VERTICAL RISER SECTIONS ON PRV VAULT FOLLOWING THE ASCA'S REMOVAL OF THE MAIN PRV, OTHER INTERNAL VAULT PIPING, AND SCADA RTU CABINET AS REQUIRED. REPLACE REMOVED MATERIAL WITH SUITABLE COMPACTED BACKFILL MATERIAL AS SPECIFIED IN SECTION 02200.
- 4. CONTRACTOR TO COORDINATE WITH THE ASCA TO CONFIRM THE BYPASS WATER MAIN VALVE IS OPEN AND THAT THE GATE VALVES SERVING THE PRV VAULT ARE CLOSED. CONTRACTOR TO DISCONNECT THE PIPING OUTSIDE OF THE PRV VAULT.
- 5. PIPING DISCONNECTION LOCATIONS MAY BE PERFORMED AT EXISTING TEES AT THE BYPASS MAIN CONNECTION. EXISTING TEES TO RECEIVE RESTRAINED CAPS OR PLUGS. CONFIRM PIPING DISCONNECTION LOCATION WITH THE ASCA PRIOR TO START OF WORK.
- 6. CONTRACTOR REQUIRED TO PROVIDE TRAFFIC CONTROL MEASURES ALONG HARDWARE STREET AS REQUIRED FOR PRV ABANDONMENT WORK.

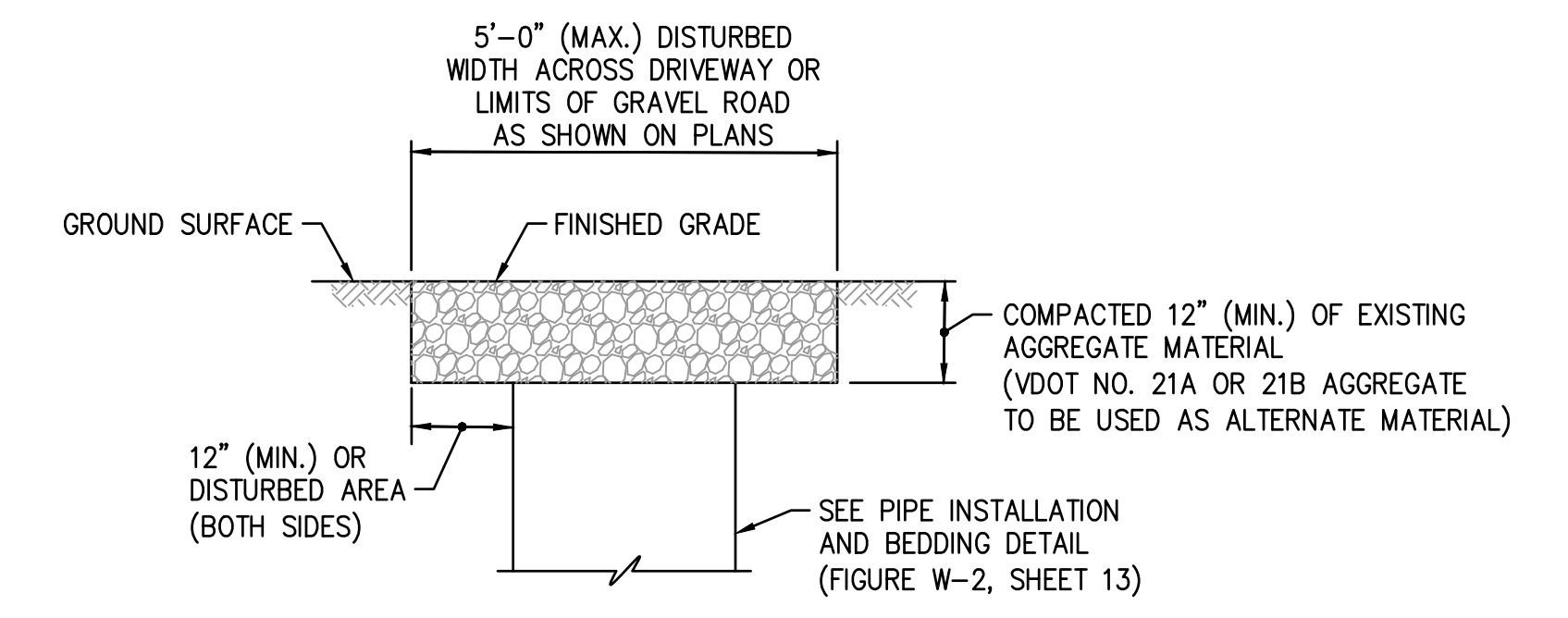
**HARDWARE STREET PRV ABANDONMENT**  
SCALE: NOT TO SCALE



**NOTES:**

- 1. MILLING AND OVERLAY INSTALLATION TO BE PERFORMED BY VDOT UNDER SEPARATE CONTRACT UNLESS OTHERWISE NOTED. MILLING AND OVERLAY WORK TO BE PERFORMED IF AUTHORIZED BY ASCA.
- MILLING AN OVERLAY TO BE PERFORMED AT FOLLOWING LOCATIONS:  
ALL OF FLEET STREET  
VALLEY STREET - FROM W. MAIN STREET SOUTH TO FLEET STREET
- THE CONTRACT DRAWINGS REFLECT THE STREETS TO RECEIVE SURFACE TREATMENT APPLICATION PER VDOT STANDARD SPECIFICATION 314 AND THE SPECIAL PROVISIONS INCLUDED WITH THE CONTRACT DOCUMENTS. SURFACE TREATMENT INSTALLATION TO BE PERFORMED BY VDOT UNDER SEPARATE CONTRACT UNLESS OTHERWISE NOTED OR AUTHORIZED BY THE ASCA.
- 2. BASE MIX TO BE EXTENDED TO EXISTING GRADE FOLLOWING WATER MAIN INSTALLATION, BACKFILLING, AND TESTING. MOORES HILL TO RECEIVE FULL WIDTH BASE MIX LAYER.
- 3. IF EXISTING BASE MIX IS NOT PRESENT, INSTALL 21 AGGREGATE TO EXISTING GRADE FOLLOWING WATER MAIN INSTALLATION, BACKFILLING, AND TESTING.

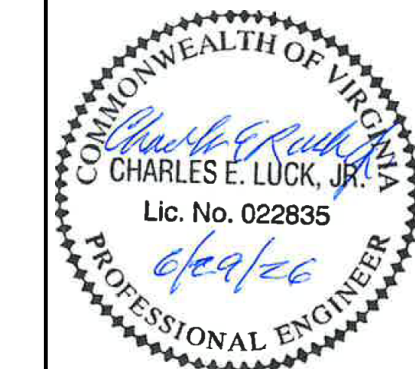
**PAVEMENT RESTORATION AND TRENCH DETAIL**  
(FOR INSTALLATIONS WITHIN EXISTING PAVED ROADS)  
SCALE: NOT TO SCALE



**GRAVEL DRIVE RESTORATION - TYPICAL SECTION**  
SCALE: NOT TO SCALE

NA 46480-025 (CADD) 46480025C1-1B.DWG

NO.	DATE	BY	REVISIONS



SCALE:  
HORIZ: N/A  
VERT: N/A  
DATE: JUNE 2026  
DESIGNED: F.E.B.  
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168 SPOTNAP ROAD CHARLOTTESVILLE, VIRGINIA 22911  
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SHEET  
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