

GENERAL NOTES:

1. THE "OWNER" IS THE WESTERN VIRGINIA WATER AUTHORITY (AUTHORITY OR WVWA). THE TERMS "OWNER", "AUTHORITY", AND "WVWA" ARE USED INTERCHANGEABLY IN THE CONTRACT DOCUMENTS.
2. THE PLANS AND PROJECT MANUAL SHALL GOVERN FOR THIS PROJECT; HOWEVER, IF THESE DOCUMENTS DO NOT COVER A PARTICULAR ITEM OR PORTION OF THE WORK, THE WVWA STANDARDS, LATEST EDITION, SHALL GOVERN.
3. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM AT A MINIMUM TO THE LATEST EDITION OF THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS (WVWA STANDARDS) AVAILABLE AT WWW.WESTERNVWATER.ORG OR BY CONTACTING THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE APPLICABLE.
4. THE CONTRACTOR SHALL NOTIFY THE WVWA CONSTRUCTION INSPECTION COORDINATOR, BRIAN WHITENACK, AT 540-400-4079 AT LEAST FIVE BUSINESS (5) DAYS PRIOR TO CONSTRUCTION.
5. THE WVWA WILL SCHEDULE A PRE-CONSTRUCTION CONFERENCE AT LEAST FIVE BUSINESS (5) DAYS PRIOR TO ANY CONSTRUCTION.
6. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY AND FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL HEALTH AND SAFETY CODES, LAWS, REGULATIONS, AND ORDINANCES INCLUDING, BUT NOT LIMITED TO, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
7. THE CONTRACTOR SHALL FIELD VERIFY ALL SITE CONDITIONS PRIOR TO COMMENCING WORK AND SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL LOCATE ALL UTILITIES AND DETERMINE ALL INVERT ELEVATIONS PRIOR TO CONSTRUCTION TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH OTHER UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA STATE WATERWORKS REGULATIONS, SECTION 12VACS-590-1150, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT (SC&T) REGULATIONS WHERE LINES CROSS.
9. THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
10. PRIOR TO CONSTRUCTION, ALL APPLICABLE PERMIT(S) FROM THE GOVERNING JURISDICTIONS AND/OR AGENCIES MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND PAY ALL FEES OF SUCH, PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL OBTAIN REQUIRED PERMITS FROM THE CITY OF ROANOKE, ROANOKE COUNTY, BOTETOURT COUNTY, FRANKLIN COUNTY AND/OR VDOT.
12. ALL WORK SHALL BE CONTAINED WITHIN THE EXISTING RIGHT OF WAY AND/OR PROPOSED OR EXISTING EASEMENTS.
13. CONTRACTOR SHALL PROVIDE ANY SHORING REQUIRED TO PROTECT PERSONNEL AND EXISTING FACILITIES DURING EXCAVATION FOR INSTALLATION OF PROPOSED STRUCTURES AND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING DESIGN. DESIGN SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE COMMONWEALTH OF VIRGINIA WHEN REQUIRED BY REGULATIONS. ALL ANTICIPATED COSTS FOR SHORING AND DESIGN SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
14. FOR PROJECTS REQUIRING TRAFFIC CONTROL IN THE CITY OF ROANOKE, NOTIFY MANAGER OF TRANSPORTATION, DWAYNE D'ARDEINNE, AT 540-853-2676 AT LEAST TWO WEEKS IN ADVANCE OF REQUIRING TRAFFIC CONTROL. FOR A LANE CLOSURE PERMIT IN THE CITY OF ROANOKE, CONTACT THE TRAFFIC ENGINEER, HONG LIU, AT 540-853-2686. IN ROANOKE, BOTETOURT OR FRANKLIN COUNTIES, TRAFFIC CONTROL REQUIREMENTS ARE APPROVED BY VDOT, PLEASE CONTACT THE LOCAL VDOT OFFICE FOR ADDITIONAL REQUIREMENTS. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED BY THE CITY.
15. AN APPROVED SIGNED SET OF CONSTRUCTION PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
16. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
17. THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER SHALL BE RESPONSIBLE TO IMPLEMENT ALL EROSION AND SEDIMENT CONTROLS REQUIRED. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE WESTERN VIRGINIA WATER AUTHORITY'S GENERAL EROSION AND SEDIMENT CONTROL ANNUAL STANDARDS AND SPECIFICATIONS AND THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE INSTALLED PRIOR TO CONSTRUCTION. THE WVWA MAY REQUIRE CHANGES TO AN APPROVED PLAN IN THE FOLLOWING CASES WHERE INSPECTION HAS REVEALED THAT THE PLAN IS INADEQUATE TO SATISFY APPLICABLE REGULATIONS. CONTRACTOR SHALL PROVIDE A COPY OF THE CONTRACTOR'S DESIGNATED CERTIFIED VIRGINIA RESPONSIBLE LAND DISTURBER (RLD) CERTIFICATE TO THE OWNER PRIOR TO CONSTRUCTION.
18. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING ALL VEHICLES AND EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STREETS ARE KEPT IN A CLEAN, MUD- AND DUST-FREE CONDITION AT ALL TIMES.
19. FIELD CHANGES SHALL BE APPROVED BY THE WVWA'S CONSTRUCTION MANAGER PRIOR TO SUCH CONSTRUCTION. NO ADDITIONAL PAYMENTS SHALL BE MADE TO CONTRACTOR FOR WORK PERFORMED WITHOUT PRIOR APPROVAL FROM WVWA'S CONSTRUCTION MANAGER.
20. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE RIMS SHALL BE INSTALLED TO GRADE AND FLUSH WITH THE FINAL PAVEMENT.
22. UNREPAIRED ROADWAYS OPENED TO TRAFFIC SHALL HAVE, AT A MINIMUM, COMPACTED AGGREGATE MATERIAL VDOT 21A OR 21B FLUSH WITH THE ADJACENT ROADWAY SURFACE AND SHALL BE INSPECTED AND REPAIRED ON A DAILY BASIS.
23. THE CONTRACTOR SHALL NOT EXCAVATE MORE TRENCH LENGTH THAN CAN BE RESTORED WITHIN THE SAME WORK DAY. ALL TRENCHES SHALL BE BACKFILLED OR PLATED AT THE END OF EACH WORK DAY OR WHEN THE CONTRACTOR IS NOT ON SITE.
24. CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION; INCLUDING ACCESS AND SITE ROADWAYS, DITCHES, DRAINAGE STRUCTURES AND OTHER EXISTING FEATURES TO THEIR ORIGINAL CONDITION OR TO A CONDITION SATISFACTORY TO THE CONSTRUCTION MANAGER.
25. THE CONTRACTOR SHALL SUPPLY THE WVWA WITH RECORD DRAWING(S) (AS-BUILTS) BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED. CONTRACTOR SHALL RECORD VERTICAL AS-BUILT DATA TO INCLUDE DEPTH OF WATER MAIN, WATER MAIN FEATURES AND ALL UTILITY CROSSINGS. SEE SPECIFICATION SECTION 01700.
26. HORIZONTAL AND VERTICAL BENDS SHOWN IN THE PLAN ARE APPROXIMATE. CONTRACTOR SHALL BE AWARE THAT ALL HORIZONTAL AND/OR VERTICAL BEND FITTINGS MAY NOT BE SHOWN IN THE PLANS BUT ARE REQUIRED AND SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
27. COMPACTION TESTS SHALL BE REQUIRED EVERY 500- FEET WITHIN STATE MAINTAINED ROADWAYS FOR LONGITUDINAL INSTALLATIONS UNDER PAVEMENT OR WHERE PAVEMENT IS OTHERWISE CUT AND REPLACED. THREE COMPACTION TESTS MUST BE TAKEN AT A MINIMUM.
28. EXISTING PIPING THAT IS NOT TO BE REUSED MAY BE ABANDONED IN PLACE, EXCEPT WHEN OTHERWISE SPECIFIED ON THE PLANS AND/OR THE PROJECT MANUAL.
29. ALL DRIVEWAYS, SIDEWALK, CURBING, FENCING, CULVERTS AND MAILBOXES SHALL BE RESTORED TO EXISTING CONDITIONS AFTER CONSTRUCTION IS COMPLETED. ANY CHANGES TO EXISTING CONDITIONS MUST BE APPROVED BY WVWA.
30. CONTRACTOR SHALL PROTECT SHRUBS AND LANDSCAPING DURING CONSTRUCTION. CONTRACTOR SHALL RELOCATE/REESTABLISH SHRUBS AS NEEDED.
31. CONTRACTOR SHALL PROTECT PROPERTY PINS. PROPERTY PINS SHALL NOT BE DISTURBED DURING CONSTRUCTION. ANY DAMAGED PROPERTY PINS SHALL BE REPLACED BY A LAND SURVEYOR LICENSED IN VIRGINIA.
32. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING POLE/GUY WIRE PROTECTION AS NEEDED FOR CONSTRUCTION.
33. ALL PAVEMENT CUTS SHALL BE SAW CUT AND EDGES TACK COATED PRIOR TO PAVING.
34. UTILITY INSTALLATIONS ALONG THE ROADWAY SHOULDER SHALL MAINTAIN A MINIMUM OF TWO FEET FROM EDGE OF TRENCH TO EDGE OF PAVEMENT.

WATER NOTES:

1. WATER MAINS SHALL NOT BE PLACED WITHIN 10 HORIZONTAL FEET OF EXISTING OR PROPOSED SANITARY SEWER MAINS, DRAIN FIELDS AND/OR SEPTIC TANKS.
2. ALL VALVES, BENDS, TEES, PLUGS, AND CAPS SHALL BE RESTRAINED WITH MECHANICAL RESTRAINING DEVICES IN ACCORDANCE WITH THE PROJECT MANUAL AND DETAILS. CONCRETE ANCHORS IN LIEU OF MECHANICAL RESTRAINTS, IF APPROVED BY THE OWNER, SHALL BE IN ACCORDANCE WITH THE PROJECT MANUAL AND DETAILS.
3. WHEN LOCATED IN A VDOT RIGHT-OF-WAY, VALVE VAULT/BOX COVERS SHALL BE BURIED 2' BELOW GRADE WHEN IN THE SHOULDER, AND FLUSH WITH PAVEMENT IF LOCATED IN THE PAVEMENT. FIRE HYDRANTS SHALL BE LOCATED BEHIND THE DITCH LINE AND WATER MAINS SHALL BE CONSTRUCTED IN THE LOCATIONS SHOWN ON THE PLANS.
4. ALL UTILITY CROSSINGS SHALL BE POTHOLED AHEAD OF CONSTRUCTION TO VERIFY CROSSING ELEVATIONS.
5. MINIMUM COVER ON ALL WATER MAINS SHALL BE 36" UNLESS OTHERWISE SPECIFIED.
6. COMBINATION AIR VALVES SHOWN ON THE PLANS SHALL BE FIELD LOCATED AT THE HIGH POINT IN THE WATER MAIN.
7. NO BLOW-OFF VALVE, AIR RELEASE VALVE, VACUUM BREAKER, OR OTHER FLUSHING DEVICE SHALL BE DIRECTLY CONNECTED TO ANY SANITARY SEWER OR STORM DRAIN SEWER.
8. ALL WATER MAINS SHALL BE PRESSURE TESTED AND DISINFECTED IN ACCORDANCE WITH THE WVWA STANDARDS.
9. ALL UTILITY CROSSINGS SHALL HAVE 18" MIN. SEPARATION OR CONTRACTOR SHALL UTILIZE WVWA STANDARD G-8 CONCRETE PIER DETAIL.
10. WATER SERVICE AND METER REPLACEMENT SHALL BE DISCUSSED PRIOR TO CONSTRUCTION. THE WVWA WILL INSTALL ALL NEW WATER METERS AND REMOVE ALL EXISTING WATER METERS. THE CONTRACTOR SHALL INSTALL COMPLETE NEW WATER SERVICES INCLUDING THE METER SETTER AND BOX IN CONFORMANCE WITH THE WVWA'S STANDARDS. FOLLOWING METER REPLACEMENT BY THE WVWA, THE CONTRACTOR SHALL DEMOLISH THE EXISTING WATER METER SETTER AND BOX. THE CONTRACTOR SHALL COORDINATE EXISTING METER REMOVAL AND NEW METER INSTALLATION DIRECTLY WITH THE WVWA. THE CONTRACTOR SHALL PROVIDE AT LEAST THREE (3) BUSINESS DAYS ADVANCE NOTICE TO THE WVWA PRIOR TO NEEDING METER INSTALLATIONS. THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION ACTIVITY AND BE PREPARED TO RECEIVE NEW METERS BEFORE CONTACTING THE WVWA FOR WATER METER REPLACEMENT.
11. ALL WATER SERVICES SHALL BE BORED UNLESS OTHERWISE NOTED.
12. CONTRACTOR SHALL INSTALL 2' SLEEVE AT LOCATIONS WHERE SERVICE LATERALS CROSS UNDER EXISTING RETAINING WALLS.
13. ALL LIVE CONNECTIONS TO EXISTING WATER MAINS SHALL BE PERFORMED BY THE WVWA. THE CONTRACTOR SHALL PROVIDE TAPPING SLEEVE(S) AND VALVE(S). THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING WATER MAIN, SHORE THE TRENCH PER OSHA REQUIREMENTS, CLEAN THE EXISTING WATER MAIN, AND INSTALL THE TAPPING SLEEVE AND VALVE PRIOR TO THE WVWA PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE WVWA INSPECTOR AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
14. UNDER CERTAIN CONDITIONS, WHEN CALLED FOR ON THE PLANS AND PROJECT MANUAL, CONTRACTOR SHALL CONNECT NEW WATER SERVICE LATERALS TO EXISTING SERVICE LATERAL AFTER CONTRACTOR GAINS APPROVAL FROM REQUIRED TESTING ON NEW WATER MAINS (WORK TO BE COORDINATED WITH WVWA).
15. CONTRACTOR SHALL COORDINATE ALL WATER ABANDONMENT AND SUBSEQUENT WATER OUTAGES WITH WVWA INSPECTOR.
16. OUT-OF-SERVICE GATE VALVE BOXES AND METER BOXES SHALL BE REMOVED A MINIMUM OF 1' BELOW GRADE AND FILLED WITH STONE (WHEN IN THE ROADWAY) OR TOP SOIL (WHEN IN A YARD).
17. OUT-OF-SERVICE WATER MAINS SHALL BE CAPPED ON BOTH ENDS.
18. THE CONTRACTOR SHALL FLUSH AND DISINFECT IN ACCORDANCE WITH WVWA STANDARD C651, LATEST REVISION. FOR THE TABLET METHOD OF DISINFECTION, A MINIMUM OF FOURTEEN (14) 5 GRAM CALCIUM HYPOCHLORITE TABLETS WITH 3.25 GRAMS OF AVAILABLE CHLORINE PER TABLET SHALL BE USED PER 20-FOOT LENGTH OF PIPE. THIS METHOD MAY BE USED ONLY IF THE PIPES AND APPURTENANCES ARE KEPT CLEAN AND DRY DURING CONSTRUCTION. SCOUR VELOCITY IS NOT ACHIEVABLE USING FLOW PROVIDED BY THE EXISTING WATER SYSTEM. IN THE EVENT THE PIPE REQUIRES CLEANING OR REMOVAL OF MATERIAL ACCUMULATED INSIDE THE PIPE, THE CONTRACTOR SHALL USE AN ALTERNATIVE CLEANING METHOD SUBJECT TO APPROVAL OF THE OWNER.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.
20. ANY FIRE HYDRANT TAKEN OUT-OF-SERVICE AND NOT REUSED SHALL BE PROPERTY OF THE WVWA. THE INSPECTOR WILL CONTACT FIELD OPERATIONS AND COORDINATE FIELD OPERATIONS PICK UP OF THE HYDRANT.
21. CONTRACTOR SHALL CONFIRM EXISTING SERVICES/STRUCTURES MARKED FOR DEMOLITION ARE INACTIVE PRIOR TO DEMOLITION. OWNER WILL ASSIST CONTRACTOR WITH CONFIRMATION.

SYMBOL LEGEND (PROPOSED)

	W	W	W	WATER MAIN
	W	W	W	WATER MAIN TO BE ABANDONED
	W	W	W	WATER MAIN TO BE REMOVED
	E	E	E	ELECTRICAL CONDUIT
				FIRE HYDRANT
				WATER VALVE & BOX
				WATER VALVE & VAULT
				BLOW-OFF VALVE
				AIR RELEASE VALVE
	WSC, O	WM		WATER SERVICE CONNECTION
	W		W	REDUCER
				CASING PIPE
				SAMPLE STATION
				CONCRETE ENCASEMENT
				PAVEMENT RESTORATION
				CONCRETE RESTORATION

PROJECT NOTES:

1. THE WATER MAIN TEST PRESSURE SHALL BE 210 PSI.
2. ALL JOINTS ON THE PROPOSED WATER MAIN SHALL BE RESTRAINED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A VDOT LAND USE PERMIT PRIOR TO ANY CONSTRUCTION WITHIN THE VDOT RIGHT-OF-WAY.



WESTERN VIRGINIA WATER AUTHORITY
601 South Jefferson Street, Suite 300
Roanoke, Virginia 24011

DES: BF	SCALE: N/A
DRAWN: JES	HORIZ: N/A
CHECK: PJM	VERT: N/A
DATE: 6/20/23	

ANGEL LANE INTERCONNECTION

GENERAL NOTES & PROPOSED LEGEND

DRAWING

C1.03

SHEET

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