

PROJECT INFORMATION:

PROJECT LOCATION

WINDING WAY RD SW AND DOGWOOD LN SW RIGHTS-OF-WAY

LINEAR FEET PROPOSED

4,610-LF± WATER MAIN ON WINDING WAY RD
905-LF ± WATER MAIN ON DOGWOOD LN

SERVICE CONNECTIONS

72

HYDRANTS PROPOSED

7

LINEAR FEET > 6" DEPTH

180-LF ±

EASEMENTS REQUIRED

NO

WESTERN VIRGINIA WATER AUTHORITY NOTES:

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY (WVWA) AVAILABLE AT WWW.WESTERNVIAWATER.ORG OR BY CONTACTING THE AUTHORITY 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.
2. PRIOR TO CONSTRUCTION IN THE RIGHT-OF-WAY, ALL APPLICABLE PERMIT(S) FROM THE GOVERNING JURISDICTION AND/OR AGENCY MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE.
3. FOR PROJECTS REQUIRING TRAFFIC CONTROL IN THE CITY OF ROANOKE, NOTIFY MANAGER OF TRANSPORTATION, MARK JAMISON, AT 540-853-5471 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 540-853-2886. 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.
4. THE CONTRACTOR SHALL NOTIFY THE WVWA ENGINEERING COORDINATOR, MARK SINK, AT 540-537-3460 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
5. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
7. ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL LOCATE ALL UTILITIES AND DETERMINE ALL INVERTS PRIOR TO CONSTRUCTION TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH OTHER UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA STATE WATER WORKS REGULATIONS, SECTION 12VAC5-590-1150, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
8. AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
9. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
10. THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER SHALL BE RESPONSIBLE TO IMPLEMENT ALL EROSION & SEDIMENT CONTROLS REQUIRED. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF 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.
11. 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.
12. FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION. NO ADDITIONAL PAYMENTS SHALL BE MADE TO CONTRACTOR FOR WORK PERFORMED WITHOUT PRIOR APPROVAL FROM AUTHORITY'S PROJECT MANAGER.
13. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
14. 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.
15. 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. SOME AREAS MAY REQUIRE A TEMPORARY PATCH UNTIL FINAL PAVING CAN BE COMPLETED.
16. 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.
17. THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.
18. HORIZONTAL & VERTICAL BENDS SHOWN IN THE PLAN ARE APPROXIMATE. CONTRACTOR TO BE AWARE THAT ALL HORIZONTAL AND/OR VERTICAL BEND FITTINGS MAY NOT BE SHOWN IN THE PLANS.
19. VIRGINIA DEPARTMENT OF TRANSPORTATION WILL REQUIRE COMPACTION TESTS EVERY 500 LINEAR FEET WHERE PAVEMENT (ROADWAY) IS CUT AND REPLACED.

CONSTRUCTION NOTES:

1. ALL WATER FACILITIES SHALL BE INSTALLED ACCORDING TO THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS, LATEST EDITION, AND THE GENERAL EROSION AND SEDIMENT CONTROL PLAN ANNUAL STANDARDS & SPECIFICATIONS, LATEST EDITION..
2. WORK OCCURRING IN ROANOKE CITY RIGHT OF WAY IS TO BE PERFORMED PER THE CITY OF ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS.
3. ANY AFFECTED DRIVEWAYS MUST BE REPAIRED/REPLACED WITH NO CHANGE IN LOCATION OR INCREASE IN WIDTH, SIZE; OTHERWISE, FURTHER REVIEW WILL BE REQUIRED.
4. A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.
6. ALL EXISTING UTILITIES MAY NOT BE SHOWN IN THEIR EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH THE (STATE WATER WORKS REGULATIONS, SECTION 12VAC5-590-1150, WHERE LINES CROSS.)
7. ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHT-OF-WAYS SHALL BE COMPACTED ACCORDING TO VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS.
8. LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.
9. WATER MAIN SHALL BE MINIMUM CLASS 350 DUCTILE IRON IN ACCORDANCE TO AWWA C151 OR DR-14 PVC IN ACCORDANCE WITH AWWA C-900.
10. DUCTILE IRON PIPE IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS SHALL BE REQUIRED FOR ALL PIPE WITH A WORKING PRESSURE EQUAL TO OR GREATER THAN 100 P.S.I.

WINDING WAY RD & DOGWOOD LN

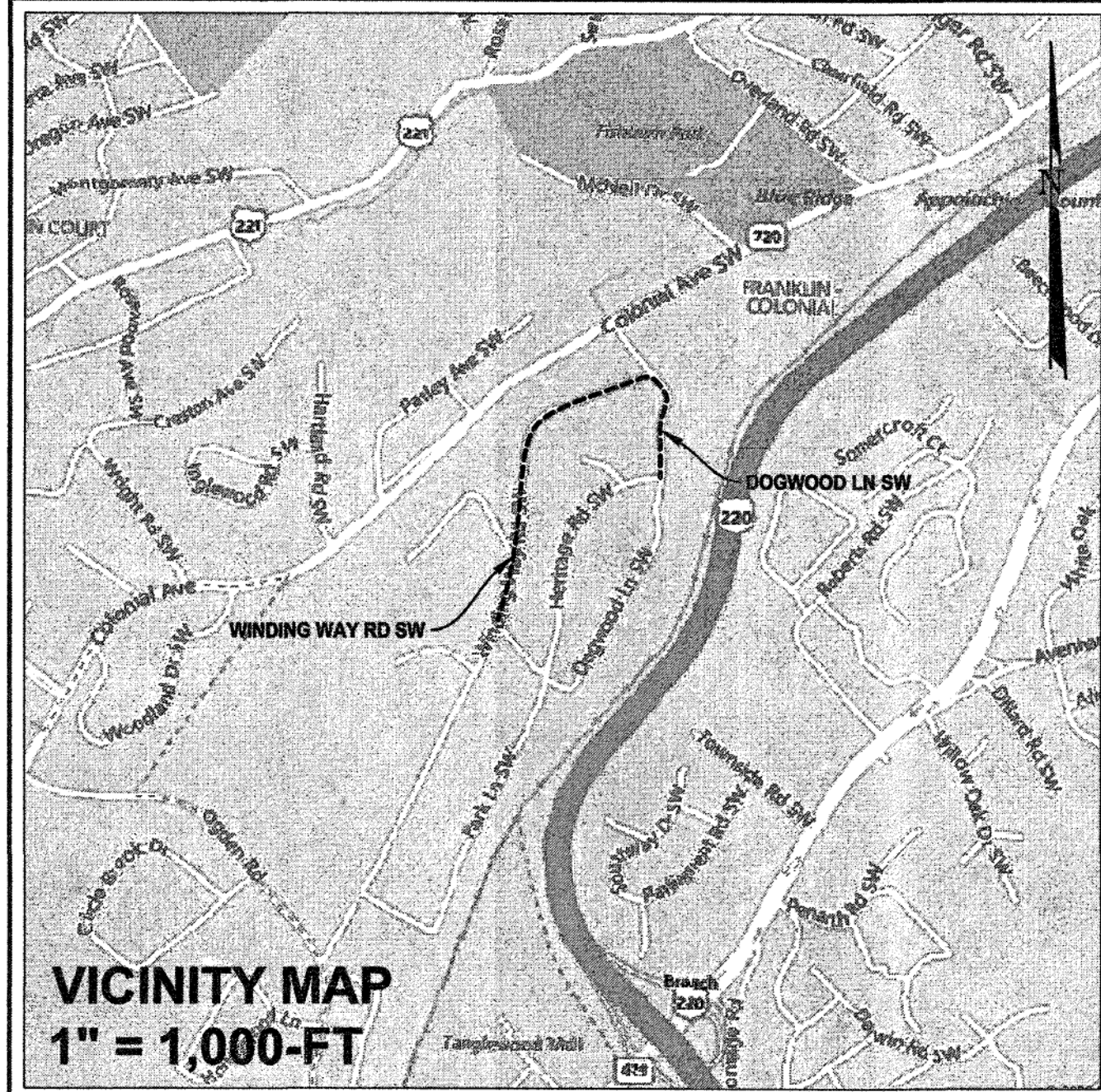
WATER MAIN REPLACEMENT PLAN



WESTERN VIRGINIA
WATER AUTHORITY

CITY OF ROANOKE, VIRGINIA

JUNE 17, 2020



PROJECT APPROVALS:

1. ALL WATER FACILITIES SHALL BE INSTALLED ACCORDING TO THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS, LATEST EDITION, AND THE GENERAL EROSION AND SEDIMENT CONTROL PLAN ANNUAL STANDARDS & SPECIFICATIONS, LATEST EDITION..

2. WORK OCCURRING IN ROANOKE CITY RIGHT OF WAY IS TO BE PERFORMED PER THE CITY OF ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS.

3. ANY AFFECTED DRIVEWAYS MUST BE REPAIRED/REPLACED WITH NO CHANGE IN LOCATION OR INCREASE IN WIDTH, SIZE; OTHERWISE, FURTHER REVIEW WILL BE REQUIRED.

4. A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.

6. ALL EXISTING UTILITIES MAY NOT BE SHOWN IN THEIR EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH THE (STATE WATER WORKS REGULATIONS, SECTION 12VAC5-590-1150, WHERE LINES CROSS.)

7. ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHT-OF-WAYS SHALL BE COMPACTED ACCORDING TO VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS.

8. LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.

9. WATER MAIN SHALL BE MINIMUM CLASS 350 DUCTILE IRON IN ACCORDANCE TO AWWA C151 OR DR-14 PVC IN ACCORDANCE WITH AWWA C-900.

10. DUCTILE IRON PIPE IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS SHALL BE REQUIRED FOR ALL PIPE WITH A WORKING PRESSURE EQUAL TO OR GREATER THAN 100 P.S.I.

CONTACT INFORMATION:


ENGINEER/
SURVEYOR:

PARKER DESIGN GROUP, INC
2122 CAROLINA AVE. SW
ROANOKE, VA 24014
PHONE: (540) 387-1153
FAX: (540) 389-5767

OWNER/DEVELOPER

WESTERN VIRGINIA WATER AUTHORITY
601 SOUTH JEFFERSON STREET, SUITE 300
ROANOKE, VA 24011

Miss Utility of Virginia
204 RIVERS BEND BOULEVARD
CHESTER, VIRGINIA 23831



VIRGINIA LAW REQUIRES CONTRACTOR TO
CONTACT MISS UTILITY (811) IN ADVANCE OF
PLANNED WORK.

ADVANCE TIME PERIOD SHALL BE AT LEAST
48 HOURS
(www.missutilityofvirginia.com)

SHEET INDEX:	
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C0.0	COVER
C1.1	EXISTING CONDITIONS
C1.2	EXISTING CONDITIONS
C1.3	EXISTING CONDITIONS
C1.4	EXISTING CONDITIONS
C1.5	EXISTING CONDITIONS
C1.6	EXISTING CONDITIONS
C1.7	EXISTING CONDITIONS
C1.8	EXISTING CONDITIONS
C1.9	EXISTING CONDITIONS
C2.0	PLAN & PROFILE KEY SHEET
C2.1	PLAN AND PROFILE - STA 0+00 to STA 4+00
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C2.10	PLAN AND PROFILE - STA 54+00 to STA 58+13
C3.1	DETAILS
C3.2	DETAILS

EROSION & SEDIMENT CONTROL NARRATIVE

1. PROJECT DESCRIPTION:

1.1. THE PURPOSE OF THIS PROJECT IS TO REPLACE AN AGED WATER MAIN WITHIN THE ROANOKE CITY SERVICE AREA ALONG WINDING WAY ROAD AND DOGWOOD LANE. THE TOTAL ESTIMATED PROJECT DISTURBANCE AREA IS 27,575-SF (0.82 AC). THE AREA CALCULATION IS BASED ON THE INSTALLATION OF 5,515-LF OF WATER MAIN WITHIN A 5-FOOT WIDE DISTURBANCE. SPECIFICALLY, 26,735-SF (0.61-AC) IS WITHIN THE EXISTING HARD SURFACE AND 1,200-SF (0.03 AC) IS OUTSIDE THE EXISTING HARD SURFACE. THEREFORE, THE PROJECT'S LAND DISTURBING ACTIVITIES HAVE BEEN DETERMINED TO BE EXEMPTED FROM THE VA ESC LAW (§§2.1-44.15-18.55) AS A REPLACEMENT OF AN EXISTING UNDERGROUND PUBLIC UTILITY LINE THAT IS CONFINED TO AN EXISTING HARD-SURFACED URBAN STREET.

1.2. THE ENTIRETY OF THE PROPOSED WORK IS LOCATED WITHIN ROANOKE CITY RIGHTS OF WAY, AND SHALL BE CONDUCTED IN ACCORDANCE WITH ALL PERMIT REQUIREMENTS, RIGHT OF WAY DEVELOPMENT STANDARDS, WESTERN VIRGINIA WATER AUTHORITY (WVWA) DESIGN & CONSTRUCTION STANDARDS, AND THE APPROVED WVWA ANNUAL E&SC STANDARDS & SPECIFICATIONS.

2. MINIMUM STANDARDS:

THE FOLLOWING STATE MINIMUM STANDARDS APPLY AND WILL BE MET AS FOLLOWS:
(NON APPLICABLE STANDARDS ARE NOT LISTED)

2.1. MS-1 - ALL DISTURBED AREAS NOT BEING STABILIZED WITH PAVEMENT SHALL RECEIVE PERMANENT SOIL STABILIZATION MEASURES WITHIN SEVEN DAYS.

2.2. MS-3 - PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL DISTURBED AREAS OUTSIDE OF PAVEMENT, INCLUDING BUT NOT LIMITED TO THOSE AREAS DISTURBED TO INSTALL WATER METERS, FIRE HYDRANTS, ETC. PERMANENT SEEDING SHALL BE APPLIED IN ACCORDANCE WITH DEQ'S ESC TECHNICAL BULLETIN #4, AND MULCHED APPLIED IN ACCORDANCE WITH VESCH STD & SPEC 3.35.

2.3. MS-16
- NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME FOR INSTALLATION OF WATER LINES AND APPURTENANCES.
- EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
- APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

2.1. MS-17 - PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY WHERE SEDIMENT IS TRANSPORTED ONTO PAVED OR PUBLIC ROAD SURFACES. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.

2.2. MS-18 - ALL TEMPORARY E&SC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS SHALL BE PERMANENTLY STABILIZED.

2.3. MS-19 - NO CHANGES IN LAND COVER CONDITIONS, DRAINAGE PATTERNS, RUNOFF VOLUMES, OR RUNOFF FLOW RATES WILL RESULT FROM THIS PROJECT, THUS NO DOWNSTREAM ANALYSIS IS REQUIRED.

3. CERTIFICATION, INSPECTIONS, TRAINING, AND REPORTING:

3.1. DEQ CERTIFIED ESC INSPECTOR SHALL PROVIDE FOR, AND DOCUMENT, INSPECTIONS AT THE FOLLOWING FREQUENCY: DURING AND/OR IMMEDIATELY FOLLOWING INITIAL INSTALLATION OF EROSION AND SEDIMENT CONTROLS, AT LEAST ONCE IN EVERY 14 DAYS, WITHIN 48 HOURS FOLLOWING ANY RUNOFF PRODUCING STORM EVENT, AND AT THE COMPLETION OF THE PROJECT. ALL PROJECTS THAT REQUIRE AN ESC PLAN SHALL REQUIRE A DEQ CERTIFIED ESC RESPONSIBLE LAND DISTURBER. THE RLD WILL BE RESPONSIBLE FOR INSPECTING EACH ESC CONTROL MEASURE IN ACCORDANCE WITH THE VESCH. WVWA EMPLOYEES, INSPECTORS, AND CONTRACTORS ARE DIRECTED TO PERFORM ALL WORK TO MINIMUM OSHA SAFETY STANDARDS. ADDITIONALLY, THEY ARE DIRECTED TO PROTECT THE ENVIRONMENT AT ALL TIMES AND TO REPORT ANY VIOLATIONS OF ENVIRONMENTAL RULES, INCLUDING ESC ISSUES, TO THEIR RESPECTIVE SUPERVISOR IMMEDIATELY.

3.3. THE AS&S HOLDER (WVWA) SHALL MAINTAIN, BOTH ON-SITE AND IN AS&S FILES, A COPY OF THE APPROVED ESC PLAN AND A RECORD OF INSPECTIONS FOR EACH ACTIVE LAND-DISTURBING ACTIVITY.

3.4. THE CONTRACTOR SHALL NOTIFY THE WVWA ENGINEERING COORDINATOR, MARK SINK, AT 540-537-3460 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.

3.5. ANY ADDITIONAL OFF-SITE AREAS USED FOR BORROW OR WASTE MATERIALS SHALL BE APPROPRIATELY PERMITTED.

4. STORMWATER MANAGEMENT


4.1. AS THE PROJECT WILL BE COMPLETED IN ACCORDANCE WITH DEQ GUIDANCE MEMO NO. 15-2003, THE PREPARATION AND IMPLEMENTATION OF A STORMWATER MANAGEMENT PLAN AND THE CONSTRUCTION GENERAL PERMIT ARE NOT ANTICIPATED.


Contractor: Wells Construction


Inspector: Bruce Peters


10-6-2020

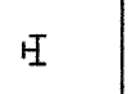
PROPOSED FEATURES LEGEND


 GATE VALVE


 BLOW OFF VALVE


 AIR RELEASE VALVE


 DOMESTIC WATER METER

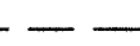
 FITTINGS

 FIRE HYDRANT ASSEMBLY

 WATER LINE - GENERIC/LATERAL < 1"

 WATER LINE - 6" DIA

 WATER LINE - 8" DIA

 UTILITY EASEMENT

DESIGNED BY: CEP

DRAWN BY: CEP

CHECKED BY: SLR

SCALE: N/A

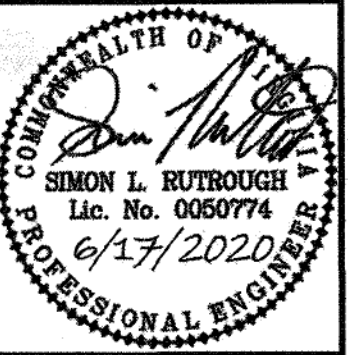
DATE: JUNE 17, 2020

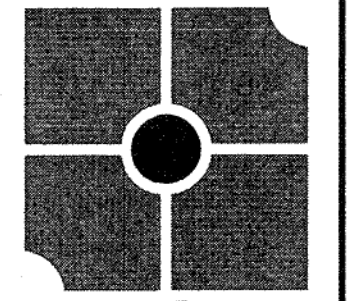
PROJECT NUMBER: 20-0034

SHEET TITLE: COVER

C0.0

01 OF 23





2122 Carolina Ave, SW
Roanoke, VA 24014
(540)-387-1153

1915-B W. Cary Street
Richmond, VA 23220
(804)-358-2947

www.parkerdgd.com

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WINDING WAY RD & DOGWOOD LN
WATER MAIN REPLACEMENT PLAN
WESTERN VIRGINIA WATER AUTHORITY

CITY OF ROANOKE, VIRGINIA

REVISIONS

DESIGNED BY: CEP

DRAWN BY: CEP

CHECKED BY: SLR

SCALE: N/A

DATE: JUNE 17, 2020

PROJECT NUMBER: 20-0034

SHEET TITLE: COVER

C0.0

01 OF 23

As Built's
Winding Way to Dogwood

06-10-20