

STANDARD CITY OF ROANOKE  
CONSTRUCTION PROCEDURE REQUIREMENTS

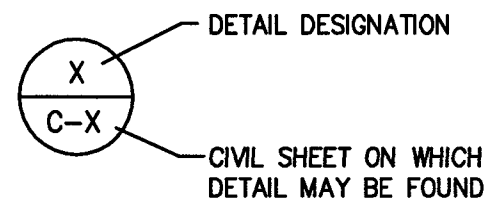
NOTICE: ALL LANDOWNERS, DEVELOPERS AND CONTRACTORS

FAILURE TO COMPLY WITH THE CONSTRUCTION PROCEDURE REQUIREMENTS LISTED BELOW MAY RESULT IN THE COSTLY REMOVAL OF STRUCTURES, TIME DELAYS OR THE ISSUANCE OF A STOP WORK ORDER.

CONSTRUCTION PROCEDURE REQUIREMENTS

- RIGHT-OF-WAY EXCAVATION PERMIT** -PRIOR TO THE COMMENCEMENT OF ANY DIGGING, ALTERATION OR CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY (STREETS, ALLEYS, PUBLIC EASEMENTS), A RIGHT-OF-WAY EXCAVATION PERMIT SHALL BE APPLIED FOR AND OBTAINED BY THE CONTRACTOR FROM THE CITY OF ROANOKE.
- LAND DISTURBANCE PERMIT** -AN APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR ANY BORROW/FILL SITES ASSOCIATED WITH THE PROJECT MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A LAND DISTURBANCE PERMIT.
- PLANS AND PERMITS** -A COPY OF THE PLANS AS APPROVED BY THE CITY (SIGNED BY THE PROPER CITY OFFICIALS) AND ALL PERMITS ISSUED BY THE CITY SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES OF ONGOING CONSTRUCTION.
- LOCATION OF UTILITIES** -THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- CONSTRUCTION ENTRANCE** -THE CONTRACTOR SHALL INSTALL AN ADEQUATE CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION RELATED EGRESS FROM THE SITE. SIZE AND COMPOSITION OF CONSTRUCTION ENTRANCE SHALL BE AS SHOWN ON THE PLANS.
- STREETS TO REMAIN CLEAN** -IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT THE PUBLIC STREET ADJACENT TO THE CONSTRUCTION ENTRANCE REMAINS FREE OF MUD, DIRT, DUST, AND/OR ANY TYPE OF CONSTRUCTION MATERIALS OR LITTER AT ALL TIMES.
- BARRICADES/DITCHES** -THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL EXCAVATED DITCHES AND SHALL FURNISH AND ENSURE THAT ALL BARRICADES PROPER AND NECESSARY FOR THE SAFETY OF THE PUBLIC ARE IN PLACE.
- SEWER AND PAVEMENT REPLACEMENT** -CONSTRUCTION OF SANITARY SEWERS AND THE REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS OF THE CITY OF ROANOKE AND THE WESTERN VIRGINIA WATER AUTHORITY.
- APPROVED PLANS/CONSTRUCTION CHANGES** -ANY CHANGE OR VARIATION FROM CONSTRUCTION DESIGN AS SHOWN ON THE OFFICIALLY APPROVED PLANS SHALL BE APPROVED BY THE EROSION AND SEDIMENT CONTROL AGENT PRIOR TO SAID CHANGES OR VARIATION IN CONSTRUCTION BEING MADE.

DETAIL BUBBLE



SYMBOLS

EXISTING	NEW	
1020		CONTOUR
SAN		SANITARY SEWER LINE
6"W	6"W	WATERLINE
8"SD	8"SD	STORM DRAIN
GAS		GAS LINE
OHC		OVERHEAD UTILITY LINE
UE	UT	UNDERGROUND TEL OR ELEC LINE
	W	WATER OR GAS METER
	ARV	WATER VALVE
	BO	AIR RELEASE VALVE
		BLOW-OFF ASSEMBLY
		GAS VALVE
		FIRE HYDRANT
		MANHOLE
		CLEANOUT
		DROP INLET (CURB OR GRATE)
		UTILITY POLE, GUY & ANCHOR
		PROPERTY LINE
		FENCE
		BENCHMARK
		TREE LINE

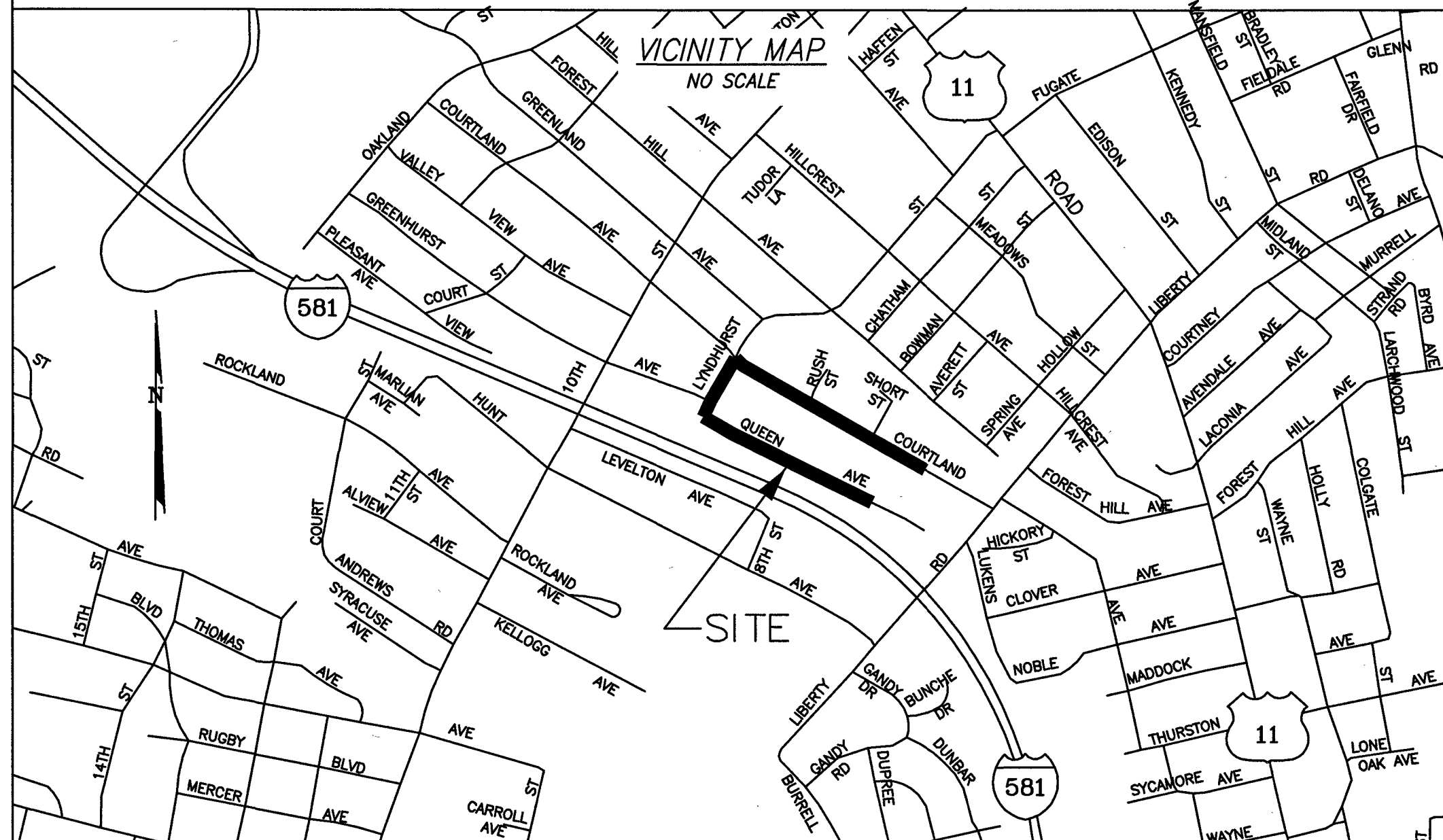
ABBREVIATIONS

AHFH	ARROW HEAD TOP OF FIRE HYDRANT	MON	MONUMENT
APPROX	APPROXIMATE	N-S	NORFOLK SOUTHERN
ASPH	ASPHALT	NBL	NORTH BOUND LANE
BC	BOTTOM OF CURB	PROP	PROPOSED
BIT	BITUMINOUS	PUE	PUBLIC UTILITY EASEMENT
BLDG	BUILDING	PMT	PAVEMENT
BLK	BLOCK	R	RADIUS
BM	BENCHMARK	RT	RIGHT
BW	BOTTOM OF WALL	R/W	RIGHT OF WAY
CB	CINDER BLOCK	REQD	REQUIRED
C&G	CURB & GUTTER	RR	RAILROAD
CMP	CORRUGATED METAL PIPE	RYS	REAR YARD SETBACK
CONC	CONCRETE	SAN	SANITARY
COR	CORNER	SBL	SOUTH BOUND LANE
DBL	DOUBLE	SD	STORM DRAIN
DEFL	DEFLECTION	SDMH	STORM DRAIN MANHOLE
DI	DROP INLET	SECT	SECTION
DIA	DIAMETER	SE	SLOPE EASEMENT
DE	DRAINAGE EASEMENT	SS	SANITARY SEWER
EBL	EAST BOUND LINE	SSMH	SANITARY SEWER MANHOLE
EG	EDGE OF GRAVEL	STA	STATION
EP	EDGE OF PAVEMENT	STD	STANDARD
ELEC	ELECTRIC	STO	STORAGE
ELEV	ELEVATION	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
ENTR	ENTRANCE	SYS	SIDE YARD SETBACK
EW	ENDWALL	TBM	TEMPORARY BENCHMARK
EX	EXISTING	TC	TOP OF CURB
FDN	FOUNDATION	TEL	TELEPHONE
FF	FINISHED FLOOR	TRANS	TRANSFORMER
FG	FINISH GRADE	TW	TOP OF WALL
HPT	HIGH POINT	TY	TYPICAL
INV	INVERT	VESCH	VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK
IP	IRON PIN	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
LT	LEFT	VERT	VERTICAL
MBL	MINIMUM BUILDING LINE	WBL	WEST BOUND LANE
MH	MANHOLE	YD	YARD
MIN	MINIMUM		

CIVIL SHEET INDEX

SHEET #	TITLE
C-1	CIVIL TITLE SHEET
C-2	VIRGINIA E.S.C. NOTES & DETAILS
C-3 THROUGH C-6	EROSION AND SEDIMENT CONTROL PLAN
C-7 THROUGH C-16	UTILITY PLAN
C-17 AND C-18	WESTERN VIRGINIA REGIONAL DETAILS

ANY VARIATION FROM APPROVED PLANS MUST BE APPROVED BY THE CITY OF ROANOKE



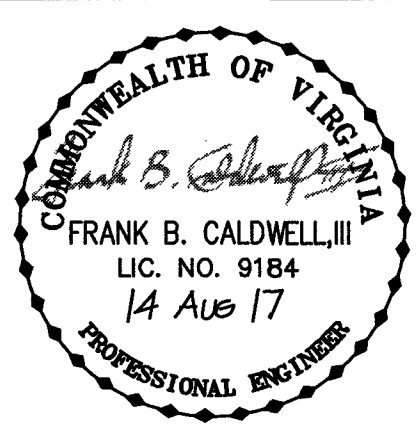
CITY OF ROANOKE APPROVALS  
Permit # :

WESTERN VIRGINIA WATER AUTHORITY GENERAL NOTES:

- 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.WESTERNVAVATER.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.
- WHILE NOT REQUIRED ON EVERY WVWA PROJECTS, WATER SERVICE AND METER REPLACEMENT SHOULD BE DISCUSSED PRIOR TO CONSTRUCTION. THE AUTHORITY 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. CONTRACTOR SHALL CONFIRM AND VERIFY THE EXISTING METER SIZE AND SETTER TYPE. (CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING CORRECT METER SETTER TO MATCH EXISTING METER SIZE AND TYPE). FOLLOWING METER REPLACEMENT BY THE AUTHORITY, 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 AUTHORITY. THE CONTRACTOR SHALL PROVIDE AT LEAST THREE (3) BUSINESS DAYS ADVANCE NOTICE TO THE AUTHORITY PRIOR TO NEEDING METER INSTALLATIONS. THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION ACTIVITY TO RECEIVE NEW METERS BEFORE CONTACTING THE AUTHORITY FOR WATER METER REPLACEMENT.
- ALL CONNECTIONS TO EXISTING WATERLINES SHALL BE PERFORMED BY THE WVWA. THE CONTRACTOR SHALL PROVIDE FULL STAINLESS STEEL TAPPING SLEEVE(S) AND VALVE(S). THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING WATERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, CLEAN THE EXISTING WATERLINE, AND INSTALL THE TAPPING SLEEVE AND VALVE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE WVWA INSPECTOR AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
- ALL CONNECTIONS TO EXISTING SANITARY SEWERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING SEWERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, AND CLEAN THE EXISTING SEWERLINE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE WVWA INSPECTOR AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
- THE CONTRACTOR SHALL PERFORM ALL MANHOLE CONNECTIONS. THE CORING AND BOOT INSTALLATION SHALL BE INSPECTED AND APPROVED BY AN AUTHORITY CONSTRUCTION INSPECTOR PRIOR TO ACTIVATING SEWER SERVICE. THE CONTRACTOR SHALL CONTACT THE AUTHORITY'S CONSTRUCTION INSPECTOR RESPONSIBLE FOR THE PROJECT AT LEAST ONE (1) DAY PRIOR TO INITIATING THE MANHOLE CONNECTION.
- 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.
- 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 540-853-2686. 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.
- THE CONTRACTOR SHALL NOTIFY THE WVWA ENGINEERING COORDINATOR, MARK SINK, AT 540-537-3460 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
- 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.
- AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.
- 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.
- ANY PROJECTS WITHIN VDOT JURISDICTION WILL REQUIRE COMPACTION TESTS EVERY 500 LINEAR FEET WHERE PAVEMENT (ROADWAY) IS CUT AND REPLACED.

**CWA**  
**CALDWELL WHITE ASSOCIATES**  
ENGINEERS / SURVEYORS / PLANNERS  
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DATE AUGUST 14, 2017  
PROJECT 17-0007  
DESIGNED CLH  
DRAWN CLH  
CHECKED FBC  
FIELD BOOK WVWA #1  
SCALE 1"=20'



REV.	DATE	BY	DESCRIPTION

QUEEN AVENUE, N.W. - COURTLAND ROAD, N.W.  
WATERLINE REPLACEMENT PROJECT

TITLE SHEET

sheet

C-1

OF 18

CHARLES CRUSH  
AS-BUILTS  
5-21-18